ALMANAC XXXII TRANSITS OF VENUS IN CE

The almanac XXXII contains a list of transits of Venus from the 1st millennium CE to the 125th millennium CE.

During the period of 250 000 years, the total number of transits of Venus is 248 756 transits of Venus (2 964 transits of Venus visible from Earth, 2 984 transits of Venus visible from Moon, 13 099 transits of Venus visible from Mars, 49 274 transits of Venus visible from Jupiter, 55 349 transits of Venus visible from Saturn, 55 766 transits of Venus visible from Uranus, 63 576 transits of Venus visible from Neptune, 5 744 transits of Venus visible from Pluto).

1ST MILLENNIUM CE

This is a list of transits of Venus in the 1st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**2-07-14 21:21**	**J**	**1721983.20**	**1721983.39**	**1721983.59**	**0.0502**	**0.0157**	
Jupiter	**8-05-23 22:47**	**J**	**1724123.28**	**1724123.45**	**1724123.62**	**0.0523**	**0.0273**	
Saturn	**9-11-08 10:04**	**J**	**1724656.74**	**1724656.92**	**1724657.12**	**0.0269**	**0.0116**	
Saturn	**10-06-25 12:43**	**J**	**1724885.83**	**1724886.03**	**1724886.23**	**0.0268**	**0.0082**	
Uranus	**13-04-25 18:28**	**J**	**1725921.24**	**1725921.27**	**1725921.32**	**0.0139**	**0.0136**	
Uranus	**13-12-08 02:09**	**J**	**1726147.44**	**1726147.59**	**1726147.77**	**0.0139**	**0.0090**	
Jupiter	**14-03-19 21:50**	**J**	**1726249.34**	**1726249.41**	**1726249.50**	**0.0500**	**0.0458**	
Uranus	**14-07-22 10:47**	**J**	**1726373.74**	**1726373.95**	**1726374.15**	**0.0139**	**0.0043**	
Uranus	**15-03-05 18:57**	**J**	**1726600.08**	**1726600.29**	**1726600.51**	**0.0140**	**0.0005**	
Uranus	**15-10-18 03:21**	**J**	**1726826.45**	**1726826.64**	**1726826.85**	**0.0140**	**0.0053**	
Uranus	**16-05-31 12:00**	**J**	**1727052.85**	**1727053.00**	**1727053.15**	**0.0140**	**0.0101**	
Jupiter	**20-01-27 14:52**	**J**	**1728388.92**	**1728389.12**	**1728389.32**	**0.0525**	**0.0083**	
Saturn	**25-07-19 07:12**	**J**	**1730388.60**	**1730388.80**	**1730389.01**	**0.0292**	**0.0079**	
Saturn	**26-03-06 06:14**	**J**	**1730618.60**	**1730618.76**	**1730618.93**	**0.0294**	**0.0181**	
Jupiter	**26-07-17 11:02**	**J**	**1730751.81**	**1730751.96**	**1730752.11**	**0.0505**	**0.0339**	
Mars	**27-07-10 06:00**	**J**	**1731109.58**	**1731109.75**	**1731109.92**	**0.1635**	**0.0269**	
Jupiter	**31-10-02 07:12**	**J**	**1732654.69**	**1732654.80**	**1732654.91**	**0.0527**	**0.0440**	
Jupiter	**38-03-22 09:07**	**J**	**1735017.68**	**1735017.88**	**1735018.09**	**0.0502**	**0.0024**	
Saturn	**39-05-21 17:02**	**J**	**1735443.01**	**1735443.21**	**1735443.41**	**0.0269**	**0.0084**	
Saturn	**40-01-05 19:26**	**J**	**1735672.13**	**1735672.31**	**1735672.51**	**0.0268**	**0.0115**	
Pluto	**41-05-16 01:12**	**J**	**1736168.40**	**1736168.55**	**1736168.72**	**0.0078**	**0.0054**	
Pluto	**41-12-27 10:47**	**J**	**1736393.74**	**1736393.95**	**1736394.18**	**0.0077**	**0.0008**	
Pluto	**42-08-09 19:55**	**J**	**1736619.25**	**1736619.33**	**1736619.46**	**0.0077**	**0.0067**	
Jupiter	**44-01-30 10:33**	**J**	**1737157.85**	**1737157.94**	**1737158.03**	**0.0522**	**0.0464**	
Jupiter	**49-11-25 08:24**	**J**	**1739283.68**	**1739283.85**	**1739284.02**	**0.0500**	**0.0284**	
Uranus	**52-12-29 07:26**	**J**	**1740413.74**	**1740413.81**	**1740413.91**	**0.0140**	**0.0129**	

Uranus	**53-08-12 16:47 J**	**1740640.03**	**1740640.20**	**1740640.39**	**0.0139**	**0.0081**	
Uranus	**54-03-27 02:24 J**	**1740866.38**	**1740866.60**	**1740866.81**	**0.0139**	**0.0032**	
Uranus	**54-11-08 11:16 J**	**1741092.75**	**1741092.97**	**1741093.19**	**0.0139**	**0.0015**	
Saturn	**55-01-29 18:14 J**	**1741175.05**	**1741175.26**	**1741175.47**	**0.0292**	**0.0038**	
Uranus	**55-06-22 19:40 J**	**1741319.14**	**1741319.32**	**1741319.53**	**0.0139**	**0.0063**	
Saturn	**55-09-16 17:16 J**	**1741405.09**	**1741405.22**	**1741405.37**	**0.0293**	**0.0223**	
Jupiter	**55-10-05 04:47 J**	**1741423.50**	**1741423.70**	**1741423.90**	**0.0524**	**0.0120**	
Uranus	**56-02-04 04:19 J**	**1741545.56**	**1741545.68**	**1741545.83**	**0.0138**	**0.0109**	
Mars	**56-09-28 12:57 J**	**1741782.86**	**1741783.04**	**1741783.22**	**0.1895**	**0.0107**	
Mars	**59-07-08 23:02 J**	**1742796.30**	**1742796.46**	**1742796.61**	**0.1629**	**0.0703**	
Moon	**60-05-23 01:12 J**	**1743115.40**	**1743115.55**	**1743115.70**	**0.2624**	**0.0550**	
Earth	**60-05-23 05:45 J**	**1743115.58**	**1743115.74**	**1743115.90**	**0.2620**	**0.0239**	*
Mars	**61-05-08 00:57 J**	**1743465.45**	**1743465.54**	**1743465.63**	**0.1643**	**0.1382**	
Jupiter	**67-06-09 22:19 J**	**1745689.25**	**1745689.43**	**1745689.62**	**0.0526**	**0.0231**	
Saturn	**68-04-15 17:31 J**	**1746000.18**	**1746000.23**	**1746000.30**	**0.0271**	**0.0259**	
Neptune	**68-08-17 04:04 J**	**1746123.60**	**1746123.67**	**1746123.79**	**0.0089**	**0.0081**	
Saturn	**68-11-30 21:07 J**	**1746229.17**	**1746229.38**	**1746229.59**	**0.0269**	**0.0057**	
Neptune	**69-03-30 17:31 J**	**1746349.10**	**1746349.23**	**1746349.40**	**0.0089**	**0.0065**	
Saturn	**69-07-17 23:16 J**	**1746458.29**	**1746458.47**	**1746458.65**	**0.0267**	**0.0140**	
Neptune	**69-11-11 07:12 J**	**1746574.62**	**1746574.80**	**1746574.98**	**0.0089**	**0.0049**	
Neptune	**70-06-24 20:09 J**	**1746800.15**	**1746800.34**	**1746800.56**	**0.0089**	**0.0034**	
Neptune	**71-02-05 09:50 J**	**1747025.70**	**1747025.91**	**1747026.13**	**0.0089**	**0.0017**	
Neptune	**71-09-18 23:16 J**	**1747251.25**	**1747251.47**	**1747251.69**	**0.0089**	**0.0002**	
Neptune	**72-05-01 12:14 J**	**1747476.80**	**1747477.01**	**1747477.23**	**0.0089**	**0.0014**	
Neptune	**72-12-13 01:26 J**	**1747702.36**	**1747702.56**	**1747702.78**	**0.0089**	**0.0030**	
Neptune	**73-07-26 14:38 J**	**1747927.94**	**1747928.11**	**1747928.31**	**0.0089**	**0.0046**	
Jupiter	**73-11-27 19:55 J**	**1748052.14**	**1748052.33**	**1748052.52**	**0.0504**	**0.0204**	
Neptune	**74-03-09 04:04 J**	**1748153.52**	**1748153.67**	**1748153.84**	**0.0089**	**0.0061**	
Neptune	**74-10-20 17:02 J**	**1748379.12**	**1748379.21**	**1748379.34**	**0.0089**	**0.0077**	
Saturn	**83-12-25 02:24 J**	**1751731.51**	**1751731.60**	**1751731.70**	**0.0291**	**0.0257**	

Saturn	84-08-11 00:43 J	1751961.32	1751961.53	1751961.75	0.0293	0.0005
Saturn	85-03-29 00:00 J	1752191.41	1752191.50	1752191.61	0.0294	0.0261
Jupiter	85-08-02 19:26 J	1752318.11	1752318.31	1752318.51	0.0502	0.0106
Jupiter	91-06-12 18:00 J	1754458.10	1754458.25	1754458.42	0.0523	0.0318
Mars	93-05-06 18:28 J	1755152.10	1755152.27	1755152.44	0.1637	0.0386
Jupiter	97-04-07 18:57 J	1756584.18	1756584.29	1756584.41	0.0499	0.0410
Uranus	97-08-07 09:50 J	1756705.79	1756705.91	1756706.04	0.0139	0.0112
Saturn	97-10-27 00:28 J	1756786.41	1756786.52	1756786.64	0.0270	0.0227
Uranus	98-03-21 18:00 J	1756932.06	1756932.25	1756932.44	0.0139	0.0065
Saturn	98-06-13 03:50 J	1757015.45	1757015.66	1757015.88	0.0269	0.0026
Uranus	98-11-03 02:09 J	1757158.38	1757158.59	1757158.81	0.0139	0.0019
Saturn	99-01-28 06:14 J	1757244.60	1757244.76	1757244.93	0.0267	0.0172
Uranus	99-06-17 10:19 J	1757384.73	1757384.93	1757385.15	0.0140	0.0030
Uranus	100-01-29 18:57 J	1757611.11	1757611.29	1757611.47	0.0140	0.0077
Uranus	100-09-12 03:21 J	1757837.56	1757837.64	1757837.75	0.0140	0.0126
Jupiter	103-02-15 10:04 J	1758723.71	1758723.92	1758724.12	0.0525	0.0040
Jupiter	109-08-05 06:43 J	1761086.65	1761086.78	1761086.92	0.0504	0.0383
Saturn	113-07-06 14:38 J	1762517.98	1762518.11	1762518.26	0.0290	0.0214
Saturn	114-02-21 13:12 J	1762747.84	1762748.05	1762748.26	0.0292	0.0043
Jupiter	114-10-21 02:52 J	1762989.49	1762989.62	1762989.76	0.0527	0.0393
Jupiter	121-04-10 04:33 J	1765352.49	1765352.69	1765352.89	0.0503	0.0067
Mars	122-07-26 15:21 J	1765824.97	1765825.14	1765825.32	0.1892	0.0484
Mars	125-05-05 11:16 J	1766838.81	1766838.97	1766839.13	0.1631	0.0588
Jupiter	127-02-18 08:24 J	1767492.83	1767492.85	1767492.86	0.0521	0.0519
Mars	127-03-05 12:43 J	1767507.96	1767508.03	1767508.09	0.1645	0.1514
Saturn	127-05-09 06:14 J	1767572.62	1767572.76	1767572.90	0.0270	0.0196
Saturn	127-12-24 09:07 J	1767801.67	1767801.88	1767802.10	0.0268	0.0005
Saturn	128-08-09 11:02 J	1768030.82	1768030.96	1768031.10	0.0267	0.0199
Jupiter	132-12-14 04:19 J	1769618.50	1769618.68	1769618.86	0.0501	0.0240
Uranus	137-04-11 23:02 J	1771198.33	1771198.46	1771198.61	0.0140	0.0105

Uranus	137-11-24 08:24 J	1771424.65	1771424.85	1771425.05	0.0139	0.0056
Uranus	138-07-08 17:31 J	1771651.01	1771651.23	1771651.45	0.0139	0.0009
Jupiter	138-10-24 01:12 J	1771758.36	1771758.55	1771758.75	0.0523	0.0169
Uranus	139-02-20 02:24 J	1771877.39	1771877.60	1771877.81	0.0139	0.0039
Uranus	139-10-04 11:02 J	1772103.79	1772103.96	1772104.13	0.0138	0.0086
Uranus	140-05-17 19:26 J	1772330.26	1772330.31	1772330.38	0.0138	0.0132
Saturn	143-01-16 20:24 J	1773304.18	1773304.35	1773304.51	0.0291	0.0180
Saturn	143-09-03 18:57 J	1773534.09	1773534.29	1773534.50	0.0293	0.0079
Jupiter	150-06-28 17:31 J	1776024.04	1776024.23	1776024.42	0.0526	0.0189
Neptune	150-10-02 10:19 J	1776119.87	1776119.93	1776120.05	0.0088	0.0080
Neptune	151-05-15 23:16 J	1776345.34	1776345.47	1776345.64	0.0088	0.0065
Neptune	151-12-27 12:00 J	1776570.83	1776571.00	1776571.20	0.0088	0.0050
Neptune	152-08-09 00:43 J	1776796.34	1776796.53	1776796.75	0.0088	0.0035
Neptune	153-03-22 13:40 J	1777021.86	1777022.07	1777022.29	0.0088	0.0020
Neptune	153-11-03 02:24 J	1777247.38	1777247.60	1777247.82	0.0088	0.0005
Neptune	154-06-16 15:07 J	1777472.91	1777473.13	1777473.35	0.0088	0.0010
Mars	154-07-26 16:47 J	1777513.10	1777513.20	1777513.30	0.1901	0.1565
Neptune	155-01-28 03:50 J	1777698.46	1777698.66	1777698.88	0.0088	0.0025
Neptune	155-09-10 16:33 J	1777924.00	1777924.19	1777924.40	0.0088	0.0040
Neptune	156-04-23 05:16 J	1778149.56	1778149.72	1778149.90	0.0088	0.0055
Saturn	156-11-18 12:57 J	1778358.88	1778359.04	1778359.21	0.0270	0.0165
Neptune	156-12-04 18:00 J	1778375.13	1778375.25	1778375.39	0.0088	0.0070
Jupiter	156-12-16 16:33 J	1778387.02	1778387.19	1778387.37	0.0503	0.0252
Mars	157-05-04 03:35 J	1778525.61	1778525.65	1778525.71	0.1626	0.1543
Saturn	157-07-05 15:50 J	1778587.96	1778588.16	1778588.38	0.0268	0.0036
Neptune	157-07-18 06:28 J	1778600.74	1778600.77	1778600.85	0.0088	0.0085
Saturn	158-02-19 17:45 J	1778817.15	1778817.24	1778817.36	0.0267	0.0231
Mars	159-03-04 06:28 J	1779194.60	1779194.77	1779194.93	0.1639	0.0513
Jupiter	168-08-21 15:21 J	1782652.94	1782653.14	1782653.34	0.0501	0.0062
Saturn	172-07-29 08:52 J	1784090.69	1784090.87	1784091.06	0.0291	0.0136

Saturn	**173-03-16 07:40 J**	**1784320.63**	**1784320.82**	**1784321.02**	**0.0293**	**0.0124**
Jupiter	**174-07-01 13:40 J**	**1784792.92**	**1784793.07**	**1784793.21**	**0.0523**	**0.0365**
Jupiter	**180-04-26 13:26 J**	**1786918.93**	**1786919.06**	**1786919.20**	**0.0500**	**0.0373**
Uranus	**181-04-06 17:02 J**	**1787264.18**	**1787264.21**	**1787264.28**	**0.0139**	**0.0135**
Uranus	**181-11-19 01:12 J**	**1787490.39**	**1787490.55**	**1787490.72**	**0.0139**	**0.0088**
Earth	**181-11-23 01:40 J**	**1787494.41**	**1787494.57**	**1787494.73**	**0.2712**	**0.0311**
Moon	**181-11-23 03:21 J**	**1787494.49**	**1787494.64**	**1787494.78**	**0.2718**	**0.0681** *
Uranus	**182-07-03 09:21 J**	**1787716.69**	**1787716.89**	**1787717.10**	**0.0139**	**0.0041**
Uranus	**183-02-14 17:45 J**	**1787943.02**	**1787943.24**	**1787943.45**	**0.0139**	**0.0006**
Uranus	**183-09-29 02:09 J**	**1788169.39**	**1788169.59**	**1788169.79**	**0.0140**	**0.0054**
Uranus	**184-05-12 10:19 J**	**1788395.80**	**1788395.93**	**1788396.10**	**0.0140**	**0.0102**
Jupiter	**186-03-06 08:09 J**	**1789058.64**	**1789058.84**	**1789059.05**	**0.0525**	**0.0021**
Saturn	**186-05-31 19:12 J**	**1789145.12**	**1789145.30**	**1789145.49**	**0.0269**	**0.0133**
Saturn	**187-01-15 22:04 J**	**1789374.21**	**1789374.42**	**1789374.62**	**0.0268**	**0.0066**
Saturn	**187-09-01 23:31 J**	**1789603.44**	**1789603.48**	**1789603.53**	**0.0267**	**0.0260**
Mars	**188-05-22 17:31 J**	**1789867.08**	**1789867.23**	**1789867.39**	**0.1889**	**0.0866**
Mars	**191-03-02 23:45 J**	**1790881.32**	**1790881.49**	**1790881.65**	**0.1633**	**0.0475**
Jupiter	**192-08-24 02:38 J**	**1791421.50**	**1791421.61**	**1791421.72**	**0.0505**	**0.0429**
Mars	**192-12-31 00:43 J**	**1791550.53**	**1791550.53**	**1791550.53**	**0.1647**	**0.1645**
Jupiter	**197-11-09 00:14 J**	**1793324.36**	**1793324.51**	**1793324.66**	**0.0526**	**0.0343**
Pluto	**201-08-18 18:14 J**	**1794703.17**	**1794703.26**	**1794703.38**	**0.0066**	**0.0059**
Saturn	**202-02-08 14:24 J**	**1794876.90**	**1794877.10**	**1794877.30**	**0.0292**	**0.0101**
Pluto	**202-03-31 23:16 J**	**1794928.27**	**1794928.47**	**1794928.69**	**0.0067**	**0.0021**
Saturn	**202-09-26 13:26 J**	**1795106.88**	**1795107.06**	**1795107.23**	**0.0294**	**0.0159**
Pluto	**202-11-12 04:33 J**	**1795153.48**	**1795153.69**	**1795153.90**	**0.0067**	**0.0017**
Pluto	**203-06-25 09:07 J**	**1795378.78**	**1795378.88**	**1795379.02**	**0.0067**	**0.0056**
Jupiter	**204-04-29 01:55 J**	**1795687.38**	**1795687.58**	**1795687.78**	**0.0503**	**0.0117**
Saturn	**215-12-12 01:26 J**	**1799931.37**	**1799931.56**	**1799931.76**	**0.0269**	**0.0103**
Jupiter	**216-01-03 01:26 J**	**1799953.38**	**1799953.56**	**1799953.75**	**0.0501**	**0.0192**
Saturn	**216-07-28 04:04 J**	**1800160.47**	**1800160.67**	**1800160.87**	**0.0268**	**0.0096**

Mars 220-05-22 19:12 J 1801555.17 1801555.30 1801555.44 0.1898 0.1188

Uranus 220-12-10 04:19 J 1801756.62 1801756.68 1801756.78 0.0140 0.0130

Uranus 221-07-24 13:40 J 1801982.91 1801983.07 1801983.26 0.0140 0.0082

Jupiter 221-11-11 19:26 J 1802093.12 1802093.31 1802093.50 0.0524 0.0210

Uranus 222-03-07 23:16 J 1802209.26 1802209.47 1802209.69 0.0139 0.0033

Uranus 222-10-20 08:09 J 1802435.63 1802435.84 1802436.07 0.0139 0.0015

Mars 223-03-01 16:04 J 1802568.09 1802568.17 1802568.25 0.1627 0.1431

Uranus 223-06-03 17:02 J 1802662.02 1802662.21 1802662.41 0.0139 0.0062

Uranus 224-01-16 01:26 J 1802888.44 1802888.56 1802888.71 0.0138 0.0109

Mars 224-12-29 18:43 J 1803237.13 1803237.28 1803237.44 0.1640 0.0633

Jupiter 227-09-08 01:12 J 1804219.54 1804219.55 1804219.58 0.0499 0.0496

Saturn 231-08-22 02:24 J 1805663.39 1805663.60 1805663.81 0.0292 0.0058

Saturn 232-04-08 01:26 J 1805893.41 1805893.56 1805893.72 0.0293 0.0203

Neptune 232-11-18 15:21 J 1806118.10 1806118.14 1806118.20 0.0089 0.0087

Neptune 233-07-02 05:02 J 1806343.58 1806343.71 1806343.85 0.0089 0.0071

Jupiter 233-07-17 12:43 J 1806358.84 1806359.03 1806359.23 0.0526 0.0144

Neptune 234-02-12 18:00 J 1806569.10 1806569.25 1806569.44 0.0089 0.0056

Neptune 234-09-26 07:40 J 1806794.63 1806794.82 1806795.03 0.0089 0.0040

Neptune 235-05-09 21:07 J 1807020.17 1807020.38 1807020.60 0.0089 0.0024

Neptune 235-12-21 10:33 J 1807245.72 1807245.94 1807246.16 0.0089 0.0008

Neptune 236-08-02 23:45 J 1807471.28 1807471.49 1807471.72 0.0089 0.0009

Neptune 237-03-16 13:12 J 1807696.84 1807697.05 1807697.26 0.0089 0.0024

Neptune 237-10-28 02:09 J 1807922.41 1807922.59 1807922.80 0.0089 0.0040

Neptune 238-06-10 15:21 J 1808147.98 1808148.14 1808148.33 0.0089 0.0056

Neptune 239-01-22 05:02 J 1808373.57 1808373.71 1808373.84 0.0089 0.0071

Neptune 239-09-04 18:00 J 1808599.21 1808599.25 1808599.31 0.0089 0.0087

Jupiter 240-01-05 11:02 J 1808721.79 1808721.96 1808722.12 0.0504 0.0291

Saturn 244-11-06 04:47 J 1810488.70 1810488.70 1810488.73 0.0271 0.0270

Jupiter 245-03-22 06:28 J 1810624.71 1810624.77 1810624.84 0.0528 0.0499

Saturn 245-06-23 08:09 J 1810717.64 1810717.84 1810718.05 0.0269 0.0069

Saturn	**246-02-07 10:33 J**	**1810946.76**	**1810946.94**	**1810947.13**	**0.0267**	**0.0128**
Jupiter	**251-09-10 10:33 J**	**1812987.74**	**1812987.94**	**1812988.15**	**0.0502**	**0.0021**
Mars	**254-03-19 20:38 J**	**1813909.23**	**1813909.36**	**1813909.49**	**0.1886**	**0.1231**
Mars	**256-12-28 11:45 J**	**1814923.83**	**1814923.99**	**1814924.16**	**0.1634**	**0.0356**
Jupiter	**257-07-20 11:02 J**	**1815127.85**	**1815127.96**	**1815128.09**	**0.0522**	**0.0418**
Saturn	**260-07-16 08:38 J**	**1816219.81**	**1816219.86**	**1816219.91**	**0.0290**	**0.0280**
Saturn	**261-03-03 06:43 J**	**1816449.57**	**1816449.78**	**1816449.99**	**0.0292**	**0.0025**
Saturn	**261-10-19 06:00 J**	**1816679.63**	**1816679.75**	**1816679.88**	**0.0294**	**0.0236**
Jupiter	**263-05-16 11:02 J**	**1817253.81**	**1817253.96**	**1817254.12**	**0.0500**	**0.0326**
Uranus	**265-07-19 08:52 J**	**1818048.75**	**1818048.87**	**1818049.01**	**0.0139**	**0.0111**
Uranus	**266-03-02 17:02 J**	**1818275.02**	**1818275.21**	**1818275.41**	**0.0139**	**0.0064**
Uranus	**266-10-15 01:26 J**	**1818501.34**	**1818501.56**	**1818501.78**	**0.0139**	**0.0017**
Uranus	**267-05-29 09:35 J**	**1818727.70**	**1818727.90**	**1818728.12**	**0.0139**	**0.0031**
Uranus	**268-01-10 18:00 J**	**1818954.08**	**1818954.25**	**1818954.44**	**0.0140**	**0.0079**
Uranus	**268-08-24 02:38 J**	**1819180.54**	**1819180.61**	**1819180.71**	**0.0140**	**0.0127**
Jupiter	**269-03-25 04:04 J**	**1819393.47**	**1819393.67**	**1819393.88**	**0.0524**	**0.0065**
Saturn	**274-05-19 10:04 J**	**1821274.83**	**1821274.92**	**1821275.01**	**0.0270**	**0.0242**
Saturn	**275-01-03 13:26 J**	**1821503.85**	**1821504.06**	**1821504.27**	**0.0269**	**0.0041**
Saturn	**275-08-20 15:21 J**	**1821732.98**	**1821733.14**	**1821733.32**	**0.0267**	**0.0156**
Jupiter	**275-09-13 00:14 J**	**1821756.46**	**1821756.51**	**1821756.58**	**0.0505**	**0.0483**
Jupiter	**280-11-27 18:28 J**	**1823659.11**	**1823659.27**	**1823659.44**	**0.0527**	**0.0303**
Mars	**286-03-19 21:35 J**	**1825597.24**	**1825597.40**	**1825597.56**	**0.1895**	**0.0796**
Jupiter	**287-05-18 22:47 J**	**1826022.25**	**1826022.45**	**1826022.64**	**0.0503**	**0.0165**
Pluto	**288-09-05 21:35 J**	**1826498.23**	**1826498.40**	**1826498.58**	**0.0078**	**0.0049**
Mars	**288-12-27 04:33 J**	**1826610.59**	**1826610.69**	**1826610.79**	**0.1629**	**0.1321**
Pluto	**289-04-19 07:12 J**	**1826723.59**	**1826723.80**	**1826724.03**	**0.0077**	**0.0013**
Pluto	**289-11-30 16:19 J**	**1826949.13**	**1826949.18**	**1826949.29**	**0.0077**	**0.0072**
Saturn	**290-01-26 19:26 J**	**1827006.20**	**1827006.31**	**1827006.44**	**0.0291**	**0.0239**
Saturn	**290-09-13 18:00 J**	**1827236.04**	**1827236.25**	**1827236.47**	**0.0292**	**0.0019**
Mars	**290-10-27 06:57 J**	**1827279.64**	**1827279.79**	**1827279.94**	**0.1642**	**0.0757**

Saturn	**291-05-01 17:31 J**	**1827466.18**	**1827466.23**	**1827466.30**	**0.0294**	**0.0279**	
Jupiter	**299-01-21 19:55 J**	**1830288.14**	**1830288.33**	**1830288.53**	**0.0501**	**0.0154**	
Earth	**303-05-24 09:07 J**	**1831871.72**	**1831871.88**	**1831872.04**	**0.2621**	**0.0433**	
Moon	**303-05-24 14:38 J**	**1831871.97**	**1831872.11**	**1831872.25**	**0.2620**	**0.1180**	*****
Saturn	**303-11-29 17:02 J**	**1832061.09**	**1832061.21**	**1832061.36**	**0.0270**	**0.0208**	
Saturn	**304-07-15 20:09 J**	**1832290.13**	**1832290.34**	**1832290.55**	**0.0268**	**0.0007**	
Jupiter	**304-11-30 18:57 J**	**1832428.12**	**1832428.29**	**1832428.46**	**0.0524**	**0.0272**	
Saturn	**305-03-01 22:04 J**	**1832519.27**	**1832519.42**	**1832519.57**	**0.0267**	**0.0188**	
Uranus	**305-03-23 19:26 J**	**1832541.19**	**1832541.31**	**1832541.47**	**0.0140**	**0.0107**	
Uranus	**305-11-05 04:47 J**	**1832767.51**	**1832767.70**	**1832767.91**	**0.0139**	**0.0059**	
Uranus	**306-06-19 13:55 J**	**1832993.87**	**1832994.08**	**1832994.31**	**0.0139**	**0.0011**	
Uranus	**307-01-31 23:02 J**	**1833220.25**	**1833220.46**	**1833220.67**	**0.0139**	**0.0037**	
Uranus	**307-09-15 07:26 J**	**1833446.65**	**1833446.81**	**1833447.00**	**0.0138**	**0.0085**	
Uranus	**308-04-28 16:04 J**	**1833673.12**	**1833673.17**	**1833673.25**	**0.0138**	**0.0131**	
Jupiter	**310-09-26 20:38 J**	**1834554.28**	**1834554.36**	**1834554.44**	**0.0499**	**0.0457**	
Neptune	**315-01-03 23:02 J**	**1836114.42**	**1836114.46**	**1836114.52**	**0.0088**	**0.0085**	
Neptune	**315-08-17 12:00 J**	**1836339.87**	**1836340.00**	**1836340.13**	**0.0088**	**0.0070**	
Neptune	**316-03-30 00:00 J**	**1836565.35**	**1836565.50**	**1836565.69**	**0.0088**	**0.0056**	
Jupiter	**316-08-05 12:00 J**	**1836693.80**	**1836694.00**	**1836694.20**	**0.0525**	**0.0085**	
Neptune	**316-11-10 12:43 J**	**1836790.85**	**1836791.03**	**1836791.24**	**0.0088**	**0.0041**	
Neptune	**317-06-24 01:26 J**	**1837016.37**	**1837016.56**	**1837016.79**	**0.0088**	**0.0026**	
Neptune	**318-02-04 14:24 J**	**1837241.89**	**1837242.10**	**1837242.33**	**0.0088**	**0.0011**	
Neptune	**318-09-18 03:21 J**	**1837467.42**	**1837467.64**	**1837467.86**	**0.0088**	**0.0005**	
Neptune	**319-05-01 15:50 J**	**1837692.95**	**1837693.16**	**1837693.38**	**0.0088**	**0.0020**	
Saturn	**319-08-08 22:33 J**	**1837792.30**	**1837792.44**	**1837792.59**	**0.0291**	**0.0210**	
Neptune	**319-12-13 04:19 J**	**1837918.49**	**1837918.68**	**1837918.90**	**0.0088**	**0.0035**	
Mars	**320-01-14 23:02 J**	**1837951.37**	**1837951.46**	**1837951.55**	**0.1883**	**0.1601**	
Saturn	**320-03-25 21:07 J**	**1838022.17**	**1838022.38**	**1838022.59**	**0.0293**	**0.0048**	
Neptune	**320-07-25 17:02 J**	**1838144.04**	**1838144.21**	**1838144.41**	**0.0088**	**0.0050**	
Neptune	**321-03-08 05:45 J**	**1838369.61**	**1838369.74**	**1838369.91**	**0.0088**	**0.0065**	

Neptune	**321-10-19 18:28 J**	**1838595.20**	**1838595.27**	**1838595.38**	**0.0088**	**0.0080**
Mars	**322-10-26 00:14 J**	**1838966.34**	**1838966.51**	**1838966.69**	**0.1636**	**0.0245**
Jupiter	**323-01-24 09:35 J**	**1839056.75**	**1839056.90**	**1839057.05**	**0.0504**	**0.0346**
Jupiter	**328-04-10 03:35 J**	**1840959.56**	**1840959.65**	**1840959.77**	**0.0527**	**0.0449**
Saturn	**333-06-10 20:52 J**	**1842847.22**	**1842847.37**	**1842847.53**	**0.0270**	**0.0182**
Saturn	**334-01-26 00:00 J**	**1843076.29**	**1843076.50**	**1843076.71**	**0.0268**	**0.0018**
Saturn	**334-09-12 01:55 J**	**1843305.45**	**1843305.58**	**1843305.71**	**0.0267**	**0.0213**
Jupiter	**334-09-29 09:21 J**	**1843322.69**	**1843322.89**	**1843323.10**	**0.0502**	**0.0037**
Jupiter	**340-08-08 06:57 J**	**1845462.70**	**1845462.79**	**1845462.88**	**0.0522**	**0.0465**
Jupiter	**346-06-04 08:52 J**	**1847588.70**	**1847588.87**	**1847589.04**	**0.0500**	**0.0274**
Saturn	**349-02-18 08:09 J**	**1848578.68**	**1848578.84**	**1848579.02**	**0.0291**	**0.0170**
Uranus	**349-03-18 16:47 J**	**1848607.16**	**1848607.20**	**1848607.27**	**0.0138**	**0.0133**
Saturn	**349-10-06 07:12 J**	**1848808.59**	**1848808.80**	**1848809.00**	**0.0293**	**0.0088**
Uranus	**349-10-31 01:12 J**	**1848833.38**	**1848833.55**	**1848833.72**	**0.0139**	**0.0086**
Uranus	**350-06-14 09:07 J**	**1849059.68**	**1849059.88**	**1849060.09**	**0.0139**	**0.0039**
Uranus	**351-01-26 17:31 J**	**1849286.02**	**1849286.23**	**1849286.45**	**0.0139**	**0.0008**
Uranus	**351-09-10 02:09 J**	**1849512.39**	**1849512.59**	**1849512.79**	**0.0140**	**0.0056**
Mars	**352-01-15 00:28 J**	**1849639.35**	**1849639.52**	**1849639.69**	**0.1893**	**0.0429**
Jupiter	**352-04-13 01:12 J**	**1849728.35**	**1849728.55**	**1849728.75**	**0.0525**	**0.0117**
Uranus	**352-04-23 10:33 J**	**1849738.81**	**1849738.94**	**1849739.09**	**0.0140**	**0.0104**
Mars	**354-10-24 17:16 J**	**1850653.11**	**1850653.22**	**1850653.33**	**0.1630**	**0.1214**
Mars	**356-08-23 18:57 J**	**1851322.15**	**1851322.29**	**1851322.44**	**0.1644**	**0.0881**
Saturn	**362-12-22 03:35 J**	**1853633.49**	**1853633.65**	**1853633.84**	**0.0270**	**0.0148**
Saturn	**363-08-08 06:28 J**	**1853862.56**	**1853862.77**	**1853862.98**	**0.0268**	**0.0052**
Jupiter	**363-12-17 19:40 J**	**1853994.14**	**1853994.32**	**1853994.50**	**0.0527**	**0.0236**
Saturn	**364-03-24 07:40 J**	**1854091.75**	**1854091.82**	**1854091.91**	**0.0267**	**0.0246**
Jupiter	**370-06-06 18:43 J**	**1856357.10**	**1856357.28**	**1856357.47**	**0.0503**	**0.0210**
Saturn	**378-08-31 10:33 J**	**1859364.76**	**1859364.94**	**1859365.13**	**0.0291**	**0.0142**
Saturn	**379-04-18 09:07 J**	**1859594.69**	**1859594.88**	**1859595.08**	**0.0293**	**0.0116**
Jupiter	**382-02-09 19:26 J**	**1860623.11**	**1860623.31**	**1860623.51**	**0.0501**	**0.0098**

Jupiter	387-12-20 17:31 J	1862763.07	1862763.23	1862763.39	0.0523	0.0328
Mars	388-08-22 12:28 J	1863008.84	1863009.02	1863009.19	0.1638	0.0126
Uranus	388-11-21 01:55 J	1863099.52	1863099.58	1863099.67	0.0140	0.0131
Uranus	389-07-05 11:16 J	1863325.80	1863325.97	1863326.16	0.0140	0.0083
Uranus	390-02-16 20:38 J	1863552.15	1863552.36	1863552.58	0.0139	0.0034
Uranus	390-10-01 05:45 J	1863778.52	1863778.74	1863778.96	0.0139	0.0013
Uranus	391-05-15 14:24 J	1864004.91	1864005.10	1864005.30	0.0139	0.0061
Uranus	391-12-27 23:16 J	1864231.33	1864231.47	1864231.60	0.0138	0.0108
Saturn	392-07-03 05:45 J	1864419.56	1864419.74	1864419.94	0.0269	0.0126
Saturn	393-02-17 08:38 J	1864648.66	1864648.86	1864649.07	0.0268	0.0074
Jupiter	393-10-15 20:24 J	1864889.23	1864889.35	1864889.48	0.0499	0.0400
Neptune	397-10-03 15:50 J	1866338.07	1866338.16	1866338.29	0.0089	0.0078
Neptune	398-05-17 05:16 J	1866563.58	1866563.72	1866563.90	0.0089	0.0062
Neptune	398-12-28 18:57 J	1866789.11	1866789.29	1866789.48	0.0089	0.0046
Neptune	399-08-11 08:24 J	1867014.65	1867014.85	1867015.06	0.0089	0.0030
Jupiter	399-08-25 09:07 J	1867028.67	1867028.88	1867029.08	0.0525	0.0033
Neptune	400-03-23 21:35 J	1867240.19	1867240.40	1867240.63	0.0089	0.0015
Neptune	400-11-04 11:16 J	1867465.75	1867465.97	1867466.19	0.0089	0.0003
Neptune	401-06-18 00:28 J	1867691.31	1867691.52	1867691.74	0.0089	0.0018
Neptune	402-01-29 13:40 J	1867916.87	1867917.07	1867917.28	0.0089	0.0034
Neptune	402-09-12 02:52 J	1868142.45	1868142.62	1868142.81	0.0089	0.0050
Neptune	403-04-25 16:04 J	1868368.03	1868368.17	1868368.33	0.0089	0.0066
Neptune	403-12-07 05:02 J	1868593.64	1868593.71	1868593.82	0.0089	0.0082
Jupiter	406-02-12 08:38 J	1869391.74	1869391.86	1869391.98	0.0504	0.0404
Saturn	408-03-12 18:43 J	1870151.08	1870151.28	1870151.48	0.0292	0.0105
Saturn	408-10-28 17:31 J	1870381.06	1870381.23	1870381.42	0.0293	0.0154
Jupiter	411-04-30 01:55 J	1871294.45	1871294.58	1871294.72	0.0527	0.0392
Jupiter	417-10-18 05:16 J	1873657.52	1873657.72	1873657.92	0.0502	0.0078
Mars	417-11-11 03:07 J	1873681.45	1873681.63	1873681.81	0.1890	0.0048
Mars	420-08-21 05:16 J	1874695.60	1874695.72	1874695.85	0.1632	0.1099

Saturn	**422-01-13 12:14**	**J**	**1875205.82**	**1875206.01**	**1875206.22**	**0.0269**	**0.0092**
Mars	**422-06-21 06:43**	**J**	**1875364.65**	**1875364.78**	**1875364.92**	**0.1646**	**0.1014**
Saturn	**422-08-30 14:38**	**J**	**1875434.92**	**1875435.11**	**1875435.31**	**0.0268**	**0.0107**
Earth	**424-11-23 00:28**	**J**	**1876250.36**	**1876250.52**	**1876250.68**	**0.2711**	**0.0030**
Moon	**424-11-23 01:12**	**J**	**1876250.38**	**1876250.55**	**1876250.72**	**0.2705**	**0.0224** *
Jupiter	**429-06-23 05:45**	**J**	**1877923.56**	**1877923.74**	**1877923.92**	**0.0500**	**0.0229**
Uranus	**433-06-30 08:52**	**J**	**1879391.75**	**1879391.87**	**1879392.01**	**0.0139**	**0.0109**
Uranus	**434-02-11 17:02**	**J**	**1879618.02**	**1879618.21**	**1879618.41**	**0.0139**	**0.0062**
Uranus	**434-09-26 01:40**	**J**	**1879844.35**	**1879844.57**	**1879844.78**	**0.0139**	**0.0015**
Jupiter	**435-05-03 03:21**	**J**	**1880063.45**	**1880063.64**	**1880063.82**	**0.0524**	**0.0188**
Uranus	**435-05-10 09:50**	**J**	**1880070.71**	**1880070.91**	**1880071.13**	**0.0139**	**0.0033**
Uranus	**435-12-22 18:28**	**J**	**1880297.10**	**1880297.27**	**1880297.45**	**0.0140**	**0.0081**
Uranus	**436-08-05 03:07**	**J**	**1880523.56**	**1880523.63**	**1880523.72**	**0.0140**	**0.0129**
Saturn	**437-09-22 19:55**	**J**	**1880937.13**	**1880937.33**	**1880937.54**	**0.0291**	**0.0080**
Saturn	**438-05-10 18:43**	**J**	**1881167.12**	**1881167.28**	**1881167.45**	**0.0293**	**0.0180**
Jupiter	**447-01-05 19:55**	**J**	**1884329.14**	**1884329.33**	**1884329.52**	**0.0526**	**0.0171**
Pluto	**448-12-09 12:14**	**J**	**1885032.95**	**1885033.01**	**1885033.10**	**0.0066**	**0.0062**
Pluto	**449-07-22 17:16**	**J**	**1885258.02**	**1885258.22**	**1885258.43**	**0.0067**	**0.0024**
Pluto	**450-03-04 22:19**	**J**	**1885483.22**	**1885483.43**	**1885483.65**	**0.0067**	**0.0014**
Pluto	**450-10-16 03:07**	**J**	**1885708.51**	**1885708.63**	**1885708.78**	**0.0067**	**0.0053**
Saturn	**451-07-26 13:12**	**J**	**1885991.85**	**1885992.05**	**1885992.25**	**0.0269**	**0.0072**
Saturn	**452-03-11 15:35**	**J**	**1886220.97**	**1886221.15**	**1886221.34**	**0.0268**	**0.0126**
Jupiter	**453-06-25 19:55**	**J**	**1886692.17**	**1886692.33**	**1886692.51**	**0.0503**	**0.0277**
Mars	**454-06-20 00:28**	**J**	**1887051.35**	**1887051.52**	**1887051.70**	**0.1640**	**0.0039**
Jupiter	**465-02-28 19:40**	**J**	**1890958.11**	**1890958.32**	**1890958.52**	**0.0501**	**0.0038**
Saturn	**467-04-05 02:38**	**J**	**1891723.41**	**1891723.61**	**1891723.82**	**0.0292**	**0.0046**
Saturn	**467-11-21 01:55**	**J**	**1891953.44**	**1891953.58**	**1891953.72**	**0.0294**	**0.0215**
Jupiter	**471-01-08 17:02**	**J**	**1893098.08**	**1893098.21**	**1893098.34**	**0.0523**	**0.0392**
Uranus	**473-03-04 18:57**	**J**	**1893884.15**	**1893884.29**	**1893884.44**	**0.0140**	**0.0106**
Uranus	**473-10-17 04:04**	**J**	**1894110.48**	**1894110.67**	**1894110.88**	**0.0139**	**0.0058**

Uranus	474-05-31 13:12 J	1894336.83	1894337.05	1894337.27	0.0139	0.0010
Uranus	475-01-12 22:04 J	1894563.21	1894563.42	1894563.63	0.0139	0.0038
Uranus	475-08-27 06:28 J	1894789.61	1894789.77	1894789.96	0.0138	0.0086
Uranus	476-04-09 15:07 J	1895016.09	1895016.13	1895016.21	0.0138	0.0132
Jupiter	476-11-03 17:16 J	1895224.08	1895224.22	1895224.37	0.0499	0.0356
Neptune	479-11-18 23:45 J	1896334.39	1896334.49	1896334.61	0.0088	0.0076
Saturn	480-06-20 15:07 J	1896549.05	1896549.13	1896549.24	0.0271	0.0241
Neptune	480-07-01 12:28 J	1896559.87	1896560.02	1896560.18	0.0088	0.0061
Saturn	481-02-04 18:57 J	1896778.08	1896778.29	1896778.50	0.0269	0.0039
Neptune	481-02-12 01:26 J	1896785.37	1896785.56	1896785.75	0.0088	0.0046
Saturn	481-09-21 21:07 J	1897007.22	1897007.38	1897007.56	0.0268	0.0158
Neptune	481-09-25 13:55 J	1897010.88	1897011.08	1897011.29	0.0088	0.0031
Neptune	482-05-09 02:38 J	1897236.40	1897236.61	1897236.83	0.0088	0.0016
Jupiter	482-09-13 12:28 J	1897363.81	1897364.02	1897364.22	0.0525	0.0044
Neptune	482-12-20 15:21 J	1897461.92	1897462.14	1897462.36	0.0088	0.0001
Neptune	483-08-03 04:04 J	1897687.45	1897687.67	1897687.89	0.0088	0.0014
Mars	483-09-08 05:45 J	1897723.57	1897723.74	1897723.92	0.1887	0.0326
Neptune	484-03-15 16:47 J	1897912.99	1897913.20	1897913.41	0.0088	0.0029
Neptune	484-10-27 05:31 J	1898138.54	1898138.73	1898138.92	0.0088	0.0044
Neptune	485-06-09 17:45 J	1898364.10	1898364.24	1898364.42	0.0088	0.0060
Neptune	486-01-21 06:28 J	1898589.68	1898589.77	1898589.91	0.0088	0.0075
Mars	486-06-18 18:00 J	1898738.11	1898738.25	1898738.39	0.1633	0.0987
Mars	488-04-17 18:57 J	1899407.17	1899407.29	1899407.41	0.1648	0.1142
Jupiter	489-03-03 06:28 J	1899726.69	1899726.77	1899726.86	0.0504	0.0455
Jupiter	494-05-19 05:31 J	1901629.57	1901629.73	1901629.90	0.0527	0.0316
Saturn	496-02-28 06:00 J	1902279.69	1902279.75	1902279.83	0.0290	0.0274
Saturn	496-10-15 03:50 J	1902509.45	1902509.66	1902509.87	0.0292	0.0021
Saturn	497-06-02 02:38 J	1902739.49	1902739.61	1902739.73	0.0293	0.0239
Jupiter	500-11-06 06:43 J	1903992.59	1903992.78	1903992.98	0.0503	0.0145
Saturn	509-12-31 14:52 J	1907335.01	1907335.12	1907335.24	0.0271	0.0224

Saturn	**510-08-17 18:28 J**	**1907564.06**	**1907564.27**	**1907564.48**	**0.0269**	**0.0022**	
Saturn	**511-04-03 20:38 J**	**1907793.21**	**1907793.36**	**1907793.53**	**0.0267**	**0.0176**	
Jupiter	**512-07-12 07:40 J**	**1908258.63**	**1908258.82**	**1908259.02**	**0.0501**	**0.0162**	
Mars	**515-09-08 06:28 J**	**1909411.70**	**1909411.77**	**1909411.85**	**0.1897**	**0.1720**	
Uranus	**517-02-27 16:19 J**	**1909950.13**	**1909950.18**	**1909950.26**	**0.0139**	**0.0132**	
Uranus	**517-10-12 00:43 J**	**1910176.37**	**1910176.53**	**1910176.71**	**0.0139**	**0.0085**	
Jupiter	**518-05-22 02:52 J**	**1910398.44**	**1910398.62**	**1910398.80**	**0.0524**	**0.0251**	
Uranus	**518-05-26 08:52 J**	**1910402.67**	**1910402.87**	**1910403.09**	**0.0139**	**0.0038**	
Uranus	**519-01-07 17:16 J**	**1910629.01**	**1910629.22**	**1910629.44**	**0.0139**	**0.0011**	
Uranus	**519-08-22 01:55 J**	**1910855.39**	**1910855.58**	**1910855.78**	**0.0140**	**0.0058**	
Uranus	**520-04-04 10:19 J**	**1911081.81**	**1911081.93**	**1911082.09**	**0.0140**	**0.0106**	
Mars	**520-04-16 12:43 J**	**1911093.86**	**1911094.03**	**1911094.21**	**0.1641**	**0.0130**	
Jupiter	**524-03-17 08:24 J**	**1912524.79**	**1912524.85**	**1912524.93**	**0.0499**	**0.0467**	
Saturn	**525-09-09 11:16 J**	**1913065.85**	**1913065.97**	**1913066.08**	**0.0290**	**0.0242**	
Saturn	**526-04-27 09:07 J**	**1913295.67**	**1913295.88**	**1913296.09**	**0.0292**	**0.0012**	
Saturn	**526-12-13 08:09 J**	**1913525.77**	**1913525.84**	**1913525.93**	**0.0294**	**0.0272**	
Jupiter	**530-01-24 20:24 J**	**1914664.16**	**1914664.35**	**1914664.55**	**0.0526**	**0.0106**	
Pluto	**535-12-28 14:24 J**	**1916827.96**	**1916828.10**	**1916828.26**	**0.0078**	**0.0056**	
Jupiter	**536-07-14 17:45 J**	**1917027.09**	**1917027.24**	**1917027.40**	**0.0503**	**0.0327**	
Pluto	**536-08-10 00:14 J**	**1917053.29**	**1917053.51**	**1917053.73**	**0.0077**	**0.0005**	
Pluto	**537-03-23 09:21 J**	**1917278.79**	**1917278.89**	**1917279.03**	**0.0077**	**0.0065**	
Saturn	**539-07-13 19:55 J**	**1918121.20**	**1918121.33**	**1918121.49**	**0.0271**	**0.0193**	
Saturn	**540-02-27 23:45 J**	**1918350.28**	**1918350.49**	**1918350.70**	**0.0269**	**0.0010**	
Saturn	**540-10-14 01:55 J**	**1918579.45**	**1918579.58**	**1918579.72**	**0.0268**	**0.0206**	
Jupiter	**541-09-29 14:09 J**	**1918930.01**	**1918930.09**	**1918930.19**	**0.0528**	**0.0466**	
Moon	**546-05-24 06:57 J**	**1920627.63**	**1920627.79**	**1920627.95**	**0.2621**	**0.0096**	
Earth	**546-05-24 12:28 J**	**1920627.87**	**1920628.02**	**1920628.18**	**0.2622**	**0.0644**	*
Jupiter	**548-03-19 18:14 J**	**1921293.05**	**1921293.26**	**1921293.46**	**0.0501**	**0.0017**	
Mars	**549-07-05 08:38 J**	**1921765.70**	**1921765.86**	**1921766.03**	**0.1884**	**0.0698**	
Mars	**552-04-15 06:00 J**	**1922780.61**	**1922780.75**	**1922780.90**	**0.1635**	**0.0867**	

Jupiter	554-01-27 21:07 J	1923433.30	1923433.38	1923433.47	0.0523	0.0472
Mars	554-02-13 06:14 J	1923449.66	1923449.76	1923449.87	0.1651	0.1283
Earth	554-05-22 06:00 J	1923547.73	1923547.75	1923547.76	0.2622	0.2600
Saturn	555-03-22 12:14 J	1923851.88	1923852.01	1923852.15	0.0290	0.0219
Saturn	555-11-07 09:50 J	1924081.71	1924081.91	1924082.13	0.0292	0.0036
Uranus	556-11-02 02:52 J	1924442.53	1924442.62	1924442.70	0.0140	0.0128
Uranus	557-06-16 12:00 J	1924668.82	1924669.00	1924669.18	0.0139	0.0080
Uranus	558-01-28 21:07 J	1924895.17	1924895.38	1924895.60	0.0139	0.0032
Uranus	558-09-12 06:14 J	1925121.54	1925121.76	1925121.97	0.0139	0.0016
Uranus	559-04-26 14:52 J	1925347.93	1925348.12	1925348.32	0.0139	0.0064
Jupiter	559-11-23 19:12 J	1925559.14	1925559.30	1925559.47	0.0500	0.0290
Uranus	559-12-08 23:31 J	1925574.36	1925574.48	1925574.62	0.0138	0.0110
Neptune	562-01-05 03:35 J	1926332.59	1926332.65	1926332.74	0.0089	0.0084
Neptune	562-08-18 17:02 J	1926558.08	1926558.21	1926558.37	0.0089	0.0068
Neptune	563-04-01 06:28 J	1926783.60	1926783.77	1926783.96	0.0089	0.0052
Neptune	563-11-12 19:55 J	1927009.13	1927009.33	1927009.53	0.0089	0.0036
Neptune	564-06-25 09:21 J	1927234.68	1927234.89	1927235.11	0.0089	0.0020
Neptune	565-02-05 22:47 J	1927460.23	1927460.45	1927460.67	0.0089	0.0004
Neptune	565-09-19 12:00 J	1927685.79	1927686.00	1927686.23	0.0089	0.0012
Jupiter	565-10-02 15:07 J	1927698.93	1927699.13	1927699.32	0.0525	0.0118
Neptune	566-05-03 01:12 J	1927911.35	1927911.55	1927911.77	0.0089	0.0028
Neptune	566-12-14 14:52 J	1928136.92	1928137.12	1928137.31	0.0089	0.0044
Neptune	567-07-28 04:04 J	1928362.51	1928362.67	1928362.84	0.0089	0.0060
Neptune	568-03-09 17:16 J	1928588.11	1928588.22	1928588.34	0.0089	0.0076
Saturn	569-01-22 18:57 J	1928907.14	1928907.29	1928907.46	0.0271	0.0177
Saturn	569-09-08 22:33 J	1929136.23	1929136.44	1929136.65	0.0269	0.0025
Saturn	570-04-26 00:57 J	1929365.42	1929365.54	1929365.66	0.0267	0.0222
Jupiter	577-06-07 06:14 J	1931964.58	1931964.76	1931964.94	0.0527	0.0250
Mars	581-07-05 08:52 J	1933453.74	1933453.87	1933453.99	0.1894	0.1324
Jupiter	583-11-26 08:38 J	1934327.68	1934327.86	1934328.05	0.0503	0.0213

Saturn	584-10-01 16:47 J	1934638.04	1934638.20	1934638.36	0.0290	0.0189
Saturn	585-05-19 14:38 J	1934867.90	1934868.11	1934868.32	0.0292	0.0067
Mars	586-02-12 00:28 J	1935136.35	1935136.52	1935136.69	0.1644	0.0256
Jupiter	595-08-01 06:14 J	1938593.57	1938593.76	1938593.97	0.0500	0.0111
Saturn	598-08-05 00:00 J	1939693.32	1939693.50	1939693.68	0.0271	0.0146
Saturn	599-03-22 03:07 J	1939922.43	1939922.63	1939922.84	0.0269	0.0056
Saturn	599-11-06 05:31 J	1940151.66	1940151.73	1940151.80	0.0268	0.0252
Jupiter	601-06-10 07:12 J	1940733.64	1940733.80	1940733.95	0.0524	0.0332
Uranus	601-06-11 07:40 J	1940734.70	1940734.82	1940734.97	0.0139	0.0108
Uranus	602-01-23 15:50 J	1940960.98	1940961.16	1940961.37	0.0139	0.0061
Uranus	602-09-07 00:28 J	1941187.31	1941187.52	1941187.74	0.0139	0.0014
Uranus	603-04-21 08:52 J	1941413.66	1941413.87	1941414.08	0.0140	0.0034
Uranus	603-12-03 17:16 J	1941640.05	1941640.22	1941640.40	0.0140	0.0082
Uranus	604-07-17 01:40 J	1941866.51	1941866.57	1941866.67	0.0140	0.0131
Jupiter	607-04-06 07:40 J	1942859.71	1942859.82	1942859.94	0.0499	0.0413
Jupiter	613-02-13 01:12 J	1944999.35	1944999.55	1944999.76	0.0526	0.0024
Saturn	614-04-13 18:28 J	1945424.09	1945424.27	1945424.44	0.0290	0.0164
Saturn	614-11-29 16:04 J	1945653.97	1945654.17	1945654.37	0.0292	0.0091
Mars	615-05-02 11:02 J	1945807.81	1945807.96	1945808.10	0.1881	0.1079
Mars	618-02-10 18:14 J	1946823.11	1946823.26	1946823.41	0.1637	0.0749
Jupiter	619-08-03 20:24 J	1947362.23	1947362.35	1947362.48	0.0504	0.0399
Mars	619-12-11 18:14 J	1947492.17	1947492.26	1947492.34	0.1653	0.1418
Jupiter	624-10-18 18:00 J	1949265.12	1949265.25	1949265.39	0.0528	0.0386
Saturn	628-02-14 22:19 J	1950479.25	1950479.43	1950479.62	0.0270	0.0131
Saturn	628-10-01 01:40 J	1950708.37	1950708.57	1950708.78	0.0269	0.0071
Saturn	629-05-18 03:50 J	1950937.66	1950937.66	1950937.69	0.0267	0.0267
Jupiter	631-04-08 21:21 J	1951628.18	1951628.39	1951628.59	0.0502	0.0089
Uranus	641-02-13 19:12 J	1955227.16	1955227.30	1955227.46	0.0140	0.0103
Uranus	641-09-28 04:33 J	1955453.49	1955453.69	1955453.89	0.0139	0.0054
Uranus	642-05-12 13:40 J	1955679.85	1955680.07	1955680.29	0.0139	0.0006

Jupiter 642-12-12 21:35 J 1955894.22 1955894.40 1955894.59 0.0500 0.0222

Uranus 642-12-24 22:19 J 1955906.23 1955906.43 1955906.65 0.0139 0.0042

Uranus 643-08-08 07:12 J 1956132.64 1956132.80 1956132.98 0.0138 0.0089

Saturn 643-10-24 21:50 J 1956210.23 1956210.41 1956210.60 0.0290 0.0135

Neptune 644-02-20 12:14 J 1956328.94 1956329.01 1956329.09 0.0088 0.0082

Uranus 644-03-21 15:50 J 1956359.13 1956359.16 1956359.22 0.0138 0.0135

Saturn 644-06-10 19:55 J 1956440.14 1956440.33 1956440.52 0.0292 0.0121

Neptune 644-10-03 00:43 J 1956554.40 1956554.53 1956554.68 0.0088 0.0067

Neptune 645-05-16 13:26 J 1956779.89 1956780.06 1956780.24 0.0088 0.0052

Neptune 645-12-28 01:55 J 1957005.40 1957005.58 1957005.79 0.0088 0.0037

Neptune 646-08-10 14:38 J 1957230.91 1957231.11 1957231.34 0.0088 0.0022

Neptune 647-03-24 03:35 J 1957456.43 1957456.65 1957456.87 0.0088 0.0006

Mars 647-05-02 11:31 J 1957495.83 1957495.98 1957496.13 0.1891 0.0946

Neptune 647-11-04 16:04 J 1957681.96 1957682.17 1957682.40 0.0088 0.0009

Neptune 648-06-17 04:47 J 1957907.49 1957907.70 1957907.92 0.0088 0.0024

Jupiter 648-10-21 16:33 J 1958034.00 1958034.19 1958034.38 0.0525 0.0188

Neptune 649-01-28 17:31 J 1958133.04 1958133.23 1958133.44 0.0088 0.0039

Neptune 649-09-11 06:14 J 1958358.59 1958358.76 1958358.94 0.0088 0.0054

Neptune 650-04-24 18:57 J 1958584.16 1958584.29 1958584.43 0.0088 0.0069

Neptune 650-12-06 06:57 J 1958809.76 1958809.79 1958809.88 0.0088 0.0085

Mars 651-12-10 12:43 J 1959178.87 1959179.03 1959179.20 0.1645 0.0381

Saturn 657-08-27 03:07 J 1961265.44 1961265.63 1961265.83 0.0271 0.0101

Saturn 658-04-13 06:28 J 1961494.58 1961494.77 1961494.97 0.0269 0.0101

Jupiter 660-06-26 10:19 J 1962299.73 1962299.93 1962300.12 0.0527 0.0171

Jupiter 666-12-15 08:09 J 1964662.67 1964662.84 1964663.01 0.0502 0.0270

Moon 667-11-23 20:09 J 1965006.19 1965006.34 1965006.49 0.2716 0.0347

Earth 667-11-23 23:16 J 1965006.31 1965006.47 1965006.63 0.2711 0.0285 *

Saturn 673-05-06 00:43 J 1966996.34 1966996.53 1966996.73 0.0290 0.0109

Saturn 673-12-21 22:33 J 1967226.26 1967226.44 1967226.62 0.0292 0.0147

Jupiter 678-08-20 08:52 J 1968928.67 1968928.87 1968929.08 0.0501 0.0041

Mars	**681-02-26 14:09 J**	**1969849.98**	**1969850.09**	**1969850.21**	**0.1878**	**0.1435**
Mars	**683-12-09 06:14 J**	**1970865.60**	**1970865.76**	**1970865.92**	**0.1639**	**0.0628**
Jupiter	**684-06-29 10:19 J**	**1971068.81**	**1971068.93**	**1971069.06**	**0.0524**	**0.0410**
Uranus	**685-02-08 14:38 J**	**1971293.05**	**1971293.11**	**1971293.19**	**0.0138**	**0.0131**
Uranus	**685-09-22 22:47 J**	**1971519.29**	**1971519.45**	**1971519.63**	**0.0139**	**0.0085**
Mars	**685-10-08 06:00 J**	**1971534.70**	**1971534.75**	**1971534.81**	**0.1655**	**0.1555**
Uranus	**686-05-07 07:12 J**	**1971745.59**	**1971745.80**	**1971746.01**	**0.0139**	**0.0037**
Uranus	**686-12-19 15:21 J**	**1971971.93**	**1971972.14**	**1971972.36**	**0.0139**	**0.0011**
Saturn	**687-03-09 01:26 J**	**1972051.36**	**1972051.56**	**1972051.76**	**0.0270**	**0.0085**
Uranus	**687-08-03 00:00 J**	**1972198.30**	**1972198.50**	**1972198.70**	**0.0140**	**0.0058**
Saturn	**687-10-24 04:47 J**	**1972280.51**	**1972280.70**	**1972280.90**	**0.0269**	**0.0116**
Uranus	**688-03-16 08:24 J**	**1972424.72**	**1972424.85**	**1972425.00**	**0.0140**	**0.0106**
Jupiter	**690-04-25 10:19 J**	**1973194.79**	**1973194.93**	**1973195.08**	**0.0499**	**0.0345**
Jupiter	**696-03-04 02:38 J**	**1975334.41**	**1975334.61**	**1975334.81**	**0.0526**	**0.0046**
Pluto	**696-11-12 07:40 J**	**1975587.66**	**1975587.82**	**1975588.03**	**0.0067**	**0.0037**
Pluto	**697-06-25 13:12 J**	**1975812.83**	**1975813.05**	**1975813.27**	**0.0067**	**0.0002**
Pluto	**698-02-05 17:31 J**	**1976038.08**	**1976038.23**	**1976038.43**	**0.0067**	**0.0042**
Jupiter	**702-08-22 23:02 J**	**1977697.39**	**1977697.46**	**1977697.53**	**0.0504**	**0.0469**
Saturn	**702-11-16 04:19 J**	**1977782.49**	**1977782.68**	**1977782.89**	**0.0290**	**0.0080**
Saturn	**703-07-04 02:38 J**	**1978012.44**	**1978012.61**	**1978012.78**	**0.0292**	**0.0178**
Jupiter	**707-11-07 19:12 J**	**1979600.14**	**1979600.30**	**1979600.46**	**0.0528**	**0.0319**
Mars	**713-02-26 13:55 J**	**1981537.91**	**1981538.08**	**1981538.25**	**0.1888**	**0.0560**
Jupiter	**714-04-27 20:38 J**	**1981963.16**	**1981963.36**	**1981963.55**	**0.0501**	**0.0145**
Mars	**715-12-07 23:16 J**	**1982552.45**	**1982552.47**	**1982552.50**	**0.1633**	**0.1613**
Saturn	**716-02-02 01:26 J**	**1982608.52**	**1982608.56**	**1982608.63**	**0.0272**	**0.0262**
Saturn	**716-09-18 06:28 J**	**1982837.56**	**1982837.77**	**1982837.98**	**0.0271**	**0.0056**
Saturn	**717-05-05 09:35 J**	**1983066.73**	**1983066.90**	**1983067.09**	**0.0269**	**0.0146**
Mars	**717-10-07 00:43 J**	**1983221.36**	**1983221.53**	**1983221.69**	**0.1648**	**0.0513**
Uranus	**724-10-14 01:12 J**	**1985785.48**	**1985785.55**	**1985785.66**	**0.0140**	**0.0127**
Uranus	**725-05-28 10:47 J**	**1986011.78**	**1986011.95**	**1986012.14**	**0.0139**	**0.0078**

Jupiter	725-12-31 21:07 J	1986229.19	1986229.38	1986229.58	0.0499	0.0166
Uranus	726-01-09 19:55 J	1986238.13	1986238.33	1986238.55	0.0139	0.0031
Uranus	726-08-24 05:02 J	1986464.50	1986464.71	1986464.93	0.0139	0.0018
Neptune	726-11-20 04:04 J	1986552.57	1986552.67	1986552.82	0.0089	0.0075
Uranus	727-04-07 13:55 J	1986690.90	1986691.08	1986691.29	0.0139	0.0066
Neptune	727-07-03 17:31 J	1986778.09	1986778.23	1986778.42	0.0089	0.0059
Uranus	727-11-19 22:33 J	1986917.33	1986917.44	1986917.58	0.0138	0.0113
Neptune	728-02-14 06:57 J	1987003.62	1987003.79	1987004.00	0.0089	0.0043
Neptune	728-09-26 20:24 J	1987229.16	1987229.35	1987229.58	0.0089	0.0027
Neptune	729-05-10 09:50 J	1987454.70	1987454.91	1987455.14	0.0089	0.0011
Neptune	729-12-21 23:16 J	1987680.26	1987680.47	1987680.69	0.0089	0.0006
Neptune	730-08-04 12:43 J	1987905.82	1987906.03	1987906.25	0.0089	0.0022
Neptune	731-03-18 01:55 J	1988131.39	1988131.58	1988131.79	0.0089	0.0038
Neptune	731-10-29 15:07 J	1988356.97	1988357.13	1988357.32	0.0089	0.0055
Jupiter	731-11-10 20:09 J	1988369.17	1988369.34	1988369.52	0.0525	0.0269
Saturn	732-05-28 08:24 J	1988568.64	1988568.85	1988569.06	0.0290	0.0051
Neptune	732-06-11 04:19 J	1988582.57	1988582.68	1988582.84	0.0089	0.0071
Saturn	733-01-13 06:00 J	1988798.61	1988798.75	1988798.91	0.0292	0.0205
Neptune	733-01-22 18:14 J	1988808.20	1988808.26	1988808.31	0.0089	0.0086
Jupiter	737-09-05 22:33 J	1990495.38	1990495.44	1990495.51	0.0498	0.0468
Jupiter	743-07-16 13:40 J	1992634.87	1992635.07	1992635.27	0.0527	0.0093
Saturn	745-08-14 00:28 J	1993394.44	1993394.52	1993394.62	0.0272	0.0244
Saturn	746-03-31 05:16 J	1993623.51	1993623.72	1993623.93	0.0270	0.0039
Saturn	746-11-15 08:38 J	1993852.69	1993852.86	1993853.03	0.0269	0.0162
Mars	746-12-24 17:16 J	1993892.17	1993892.22	1993892.26	0.1874	0.1798
Mars	749-10-05 18:28 J	1994908.11	1994908.27	1994908.44	0.1641	0.0508
Jupiter	750-01-03 10:47 J	1994997.80	1994997.95	1994998.10	0.0503	0.0342
Jupiter	755-03-21 04:19 J	1996900.60	1996900.68	1996900.78	0.0529	0.0467
Saturn	761-04-22 15:35 J	1999125.09	1999125.15	1999125.23	0.0289	0.0271
Jupiter	761-09-08 11:02 J	1999263.75	1999263.96	1999264.16	0.0501	0.0029

Saturn	**761-12-08 12:28 J**	**1999354.81**	**1999355.02**	**1999355.23**	**0.0291**	**0.0021**
Saturn	**762-07-26 10:33 J**	**1999584.82**	**1999584.94**	**1999585.06**	**0.0292**	**0.0237**
Jupiter	**767-07-19 11:02 J**	**2001403.88**	**2001403.96**	**2001404.04**	**0.0524**	**0.0476**
Uranus	**769-05-23 05:45 J**	**2002077.62**	**2002077.74**	**2002077.89**	**0.0139**	**0.0108**
Uranus	**770-01-04 13:55 J**	**2002303.90**	**2002304.08**	**2002304.29**	**0.0139**	**0.0061**
Uranus	**770-08-18 22:33 J**	**2002530.22**	**2002530.44**	**2002530.66**	**0.0139**	**0.0013**
Uranus	**771-04-02 06:43 J**	**2002756.58**	**2002756.78**	**2002757.00**	**0.0139**	**0.0035**
Uranus	**771-11-14 14:52 J**	**2002982.96**	**2002983.12**	**2002983.31**	**0.0140**	**0.0083**
Uranus	**772-06-27 23:45 J**	**2003209.42**	**2003209.49**	**2003209.57**	**0.0140**	**0.0130**
Jupiter	**773-05-14 10:04 J**	**2003529.75**	**2003529.92**	**2003530.08**	**0.0499**	**0.0288**
Saturn	**775-02-24 05:45 J**	**2004180.61**	**2004180.74**	**2004180.87**	**0.0272**	**0.0215**
Saturn	**775-10-11 10:19 J**	**2004409.72**	**2004409.93**	**2004410.15**	**0.0271**	**0.0010**
Saturn	**776-05-27 13:40 J**	**2004638.93**	**2004639.07**	**2004639.23**	**0.0269**	**0.0192**
Mars	**778-12-24 17:16 J**	**2005580.05**	**2005580.22**	**2005580.40**	**0.1885**	**0.0201**
Jupiter	**779-03-24 04:33 J**	**2005669.49**	**2005669.69**	**2005669.89**	**0.0526**	**0.0119**
Mars	**781-10-04 11:45 J**	**2006594.93**	**2006594.99**	**2006595.06**	**0.1634**	**0.1499**
Pluto	**783-04-20 04:33 J**	**2007157.64**	**2007157.69**	**2007157.79**	**0.0078**	**0.0073**
Mars	**783-08-04 12:28 J**	**2007263.86**	**2007264.02**	**2007264.18**	**0.1650**	**0.0643**
Pluto	**783-12-01 14:38 J**	**2007382.90**	**2007383.11**	**2007383.34**	**0.0077**	**0.0011**
Pluto	**784-07-14 00:00 J**	**2007608.34**	**2007608.50**	**2007608.68**	**0.0077**	**0.0049**
Earth	**789-05-24 16:04 J**	**2009384.02**	**2009384.17**	**2009384.32**	**0.2622**	**0.0849**
Moon	**789-05-24 20:38 J**	**2009384.22**	**2009384.36**	**2009384.51**	**0.2626**	**0.1064** *
Saturn	**790-11-02 21:50 J**	**2009911.30**	**2009911.41**	**2009911.53**	**0.0288**	**0.0239**
Jupiter	**790-11-26 21:35 J**	**2009935.23**	**2009935.40**	**2009935.59**	**0.0528**	**0.0245**
Saturn	**791-06-20 18:28 J**	**2010141.05**	**2010141.27**	**2010141.48**	**0.0290**	**0.0012**
Saturn	**792-02-05 16:04 J**	**2010371.09**	**2010371.17**	**2010371.26**	**0.0292**	**0.0267**
Jupiter	**797-05-16 21:35 J**	**2012298.22**	**2012298.40**	**2012298.59**	**0.0502**	**0.0211**
Earth	**797-05-22 09:07 J**	**2012303.82**	**2012303.88**	**2012303.94**	**0.2623**	**0.2413**
Moon	**797-05-22 14:38 J**	**2012304.01**	**2012304.11**	**2012304.21**	**0.2621**	**0.1997**
Saturn	**804-09-05 05:31 J**	**2014966.59**	**2014966.73**	**2014966.88**	**0.0272**	**0.0196**

Saturn 805-04-22 10:04 J 2015195.71 2015195.92 2015196.13 0.0270 0.0009

Saturn 805-12-07 13:26 J 2015424.93 2015425.06 2015425.19 0.0269 0.0209

Neptune 809-01-04 12:43 J 2016548.92 2016549.03 2016549.16 0.0088 0.0073

Jupiter 809-01-19 22:33 J 2016564.24 2016564.44 2016564.64 0.0500 0.0100

Uranus 809-01-25 16:47 J 2016570.06 2016570.20 2016570.35 0.0140 0.0103

Neptune 809-08-18 01:26 J 2016774.41 2016774.56 2016774.74 0.0088 0.0058

Uranus 809-09-09 02:09 J 2016796.39 2016796.59 2016796.79 0.0139 0.0054

Neptune 810-03-31 14:09 J 2016999.91 2017000.09 2017000.29 0.0088 0.0043

Uranus 810-04-23 11:16 J 2017022.76 2017022.97 2017023.19 0.0139 0.0007

Neptune 810-11-12 03:07 J 2017225.42 2017225.63 2017225.84 0.0088 0.0027

Uranus 810-12-05 20:09 J 2017249.14 2017249.34 2017249.56 0.0139 0.0042

Neptune 811-06-25 15:50 J 2017450.94 2017451.16 2017451.38 0.0088 0.0012

Uranus 811-07-20 05:02 J 2017475.55 2017475.71 2017475.88 0.0138 0.0089

Neptune 812-02-06 04:33 J 2017676.47 2017676.69 2017676.91 0.0088 0.0004

Uranus 812-03-02 13:40 J 2017702.04 2017702.07 2017702.12 0.0138 0.0136

Neptune 812-09-18 17:02 J 2017902.01 2017902.21 2017902.44 0.0088 0.0019

Neptune 813-05-02 05:45 J 2018127.55 2018127.74 2018127.95 0.0088 0.0034

Neptune 813-12-13 18:14 J 2018353.09 2018353.26 2018353.46 0.0088 0.0049

Neptune 814-07-27 06:57 J 2018578.65 2018578.79 2018578.95 0.0088 0.0064

Jupiter 814-11-29 20:24 J 2018704.19 2018704.35 2018704.50 0.0524 0.0333

Neptune 815-03-09 20:09 J 2018804.25 2018804.34 2018804.43 0.0088 0.0079

Mars 815-08-03 06:14 J 2018950.59 2018950.76 2018950.93 0.1643 0.0381

Saturn 820-05-15 01:40 J 2020697.43 2020697.57 2020697.72 0.0289 0.0209

Jupiter 820-09-24 23:45 J 2020830.38 2020830.49 2020830.61 0.0498 0.0406

Saturn 820-12-30 22:19 J 2020927.23 2020927.43 2020927.64 0.0291 0.0043

Jupiter 826-08-04 13:12 J 2022969.84 2022970.05 2022970.25 0.0527 0.0032

Jupiter 833-01-22 09:21 J 2025332.77 2025332.89 2025333.02 0.0502 0.0398

Saturn 834-03-18 11:02 J 2025752.80 2025752.96 2025753.13 0.0272 0.0166

Saturn 834-11-02 15:35 J 2025981.94 2025982.15 2025982.36 0.0270 0.0040

Saturn 835-06-19 18:57 J 2026211.20 2026211.29 2026211.39 0.0269 0.0240

Jupiter	**838-04-09 04:19 J**	**2027235.55**	**2027235.68**	**2027235.81**	**0.0529**	**0.0404**
Jupiter	**844-09-27 09:21 J**	**2029598.69**	**2029598.89**	**2029599.10**	**0.0500**	**0.0082**
Mars	**844-10-20 20:09 J**	**2029622.16**	**2029622.34**	**2029622.51**	**0.1882**	**0.0179**
Mars	**847-08-01 23:45 J**	**2030637.40**	**2030637.49**	**2030637.58**	**0.1636**	**0.1378**
Mars	**849-06-01 00:14 J**	**2031306.36**	**2031306.51**	**2031306.66**	**0.1652**	**0.0781**
Saturn	**849-11-25 09:35 J**	**2031483.73**	**2031483.90**	**2031484.07**	**0.0288**	**0.0174**
Saturn	**850-07-13 06:14 J**	**2031713.55**	**2031713.76**	**2031713.96**	**0.0290**	**0.0077**
Uranus	**853-01-20 13:26 J**	**2032635.99**	**2032636.06**	**2032636.14**	**0.0138**	**0.0130**
Uranus	**853-09-03 21:21 J**	**2032862.23**	**2032862.39**	**2032862.58**	**0.0139**	**0.0084**
Uranus	**854-04-18 05:45 J**	**2033088.53**	**2033088.74**	**2033088.95**	**0.0139**	**0.0036**
Uranus	**854-11-30 13:55 J**	**2033314.87**	**2033315.08**	**2033315.30**	**0.0139**	**0.0011**
Uranus	**855-07-14 22:04 J**	**2033541.23**	**2033541.42**	**2033541.63**	**0.0140**	**0.0059**
Uranus	**856-02-26 06:28 J**	**2033767.65**	**2033767.77**	**2033767.92**	**0.0140**	**0.0107**
Jupiter	**856-06-02 09:35 J**	**2033864.72**	**2033864.90**	**2033865.09**	**0.0499**	**0.0229**
Jupiter	**862-04-12 06:00 J**	**2036004.56**	**2036004.75**	**2036004.94**	**0.0526**	**0.0190**
Saturn	**863-09-28 12:00 J**	**2036538.83**	**2036539.00**	**2036539.18**	**0.0272**	**0.0145**
Saturn	**864-05-14 16:19 J**	**2036767.98**	**2036768.18**	**2036768.39**	**0.0270**	**0.0060**
Saturn	**864-12-29 19:40 J**	**2036997.27**	**2036997.32**	**2036997.38**	**0.0269**	**0.0259**
Jupiter	**873-12-15 21:07 J**	**2040270.19**	**2040270.38**	**2040270.57**	**0.0527**	**0.0183**
Mars	**876-10-20 19:55 J**	**2041310.30**	**2041310.33**	**2041310.36**	**0.1893**	**0.1858**
Saturn	**879-06-07 14:24 J**	**2042269.92**	**2042270.10**	**2042270.28**	**0.0289**	**0.0142**
Saturn	**880-01-23 11:02 J**	**2042499.77**	**2042499.96**	**2042500.16**	**0.0291**	**0.0111**
Jupiter	**880-06-04 22:04 J**	**2042633.25**	**2042633.42**	**2042633.59**	**0.0502**	**0.0273**
Mars	**881-05-30 18:28 J**	**2042993.10**	**2042993.27**	**2042993.44**	**0.1645**	**0.0255**
Neptune	**891-02-21 16:04 J**	**2046547.09**	**2046547.17**	**2046547.28**	**0.0089**	**0.0081**
Neptune	**891-10-05 05:16 J**	**2046772.59**	**2046772.72**	**2046772.89**	**0.0089**	**0.0065**
Jupiter	**892-02-08 21:07 J**	**2046899.18**	**2046899.38**	**2046899.59**	**0.0499**	**0.0045**
Neptune	**892-05-17 18:43 J**	**2046998.11**	**2046998.28**	**2046998.47**	**0.0089**	**0.0048**
Uranus	**892-09-24 22:47 J**	**2047128.38**	**2047128.45**	**2047128.55**	**0.0140**	**0.0128**
Neptune	**892-12-29 07:55 J**	**2047223.64**	**2047223.83**	**2047224.05**	**0.0089**	**0.0033**

Saturn 893-04-09 18:14 J 2047325.07 2047325.26 2047325.45 0.0272 0.0114

Uranus 893-05-09 08:24 J 2047354.68 2047354.85 2047355.04 0.0140 0.0079

Neptune 893-08-11 21:35 J 2047449.19 2047449.40 2047449.62 0.0089 0.0016

Saturn 893-11-24 22:19 J 2047554.24 2047554.43 2047554.64 0.0270 0.0091

Uranus 893-12-21 17:45 J 2047581.02 2047581.24 2047581.45 0.0139 0.0031

Neptune 894-03-25 11:02 J 2047674.74 2047674.96 2047675.18 0.0089 0.0001

Uranus 894-08-05 02:38 J 2047807.40 2047807.61 2047807.83 0.0139 0.0018

Neptune 894-11-06 00:00 J 2047900.29 2047900.50 2047900.73 0.0089 0.0016

Uranus 895-03-19 11:45 J 2048033.80 2048033.99 2048034.19 0.0139 0.0065

Neptune 895-06-19 13:12 J 2048125.86 2048126.05 2048126.27 0.0089 0.0033

Uranus 895-10-31 20:24 J 2048260.23 2048260.35 2048260.48 0.0138 0.0112

Neptune 896-01-31 02:24 J 2048351.43 2048351.60 2048351.80 0.0089 0.0049

Neptune 896-09-12 15:50 J 2048577.03 2048577.16 2048577.33 0.0089 0.0065

Neptune 897-04-26 05:02 J 2048802.64 2048802.71 2048802.82 0.0089 0.0081

Jupiter 897-12-18 18:43 J 2049039.16 2049039.28 2049039.42 0.0525 0.0393

Jupiter 903-10-14 21:50 J 2051165.27 2051165.41 2051165.55 0.0498 0.0354

Saturn 908-12-17 23:45 J 2053056.29 2053056.49 2053056.68 0.0289 0.0105

Saturn 909-08-04 20:38 J 2053286.18 2053286.36 2053286.54 0.0291 0.0148

Jupiter 909-08-23 12:28 J 2053304.81 2053305.02 2053305.22 0.0527 0.0034

Mars 910-08-17 23:16 J 2053664.30 2053664.47 2053664.64 0.1879 0.0541

Earth 910-11-23 21:50 J 2053762.26 2053762.41 2053762.57 0.2710 0.0587

Moon 910-11-24 02:52 J 2053762.46 2053762.62 2053762.79 0.2707 0.0052 *

Mars 913-05-29 12:14 J 2054679.90 2054680.01 2054680.12 0.1638 0.1264

Mars 915-03-29 12:00 J 2055348.86 2055349.00 2055349.14 0.1654 0.0916

Jupiter 916-02-11 08:09 J 2055667.76 2055667.84 2055667.93 0.0503 0.0455

Jupiter 921-04-28 05:02 J 2057570.56 2057570.71 2057570.87 0.0529 0.0336

Saturn 922-10-20 20:24 J 2058111.15 2058111.35 2058111.55 0.0272 0.0090

Saturn 923-06-07 00:28 J 2058340.34 2058340.52 2058340.72 0.0270 0.0114

Jupiter 927-10-17 08:24 J 2059933.65 2059933.85 2059934.04 0.0501 0.0140

Uranus 937-05-04 05:16 J 2063420.59 2063420.72 2063420.87 0.0139 0.0106

Uranus	**937-12-16 13:26 J**	**2063646.86**	**2063647.06**	**2063647.26**	**0.0139**	**0.0059**
Saturn	**938-06-30 04:47 J**	**2063842.50**	**2063842.70**	**2063842.91**	**0.0290**	**0.0072**
Uranus	**938-07-30 21:35 J**	**2063873.19**	**2063873.40**	**2063873.62**	**0.0139**	**0.0012**
Saturn	**939-02-15 01:55 J**	**2064072.42**	**2064072.58**	**2064072.75**	**0.0291**	**0.0183**
Uranus	**939-03-14 06:00 J**	**2064099.54**	**2064099.75**	**2064099.96**	**0.0139**	**0.0036**
Jupiter	**939-06-22 08:52 J**	**2064199.68**	**2064199.87**	**2064200.06**	**0.0499**	**0.0173**
Uranus	**939-10-26 14:09 J**	**2064325.93**	**2064326.09**	**2064326.28**	**0.0140**	**0.0084**
Uranus	**940-06-08 23:02 J**	**2064552.39**	**2064552.46**	**2064552.53**	**0.0140**	**0.0132**
Mars	**942-08-17 22:47 J**	**2065352.34**	**2065352.45**	**2065352.56**	**0.1890**	**0.1478**
Pluto	**944-03-04 21:07 J**	**2065917.28**	**2065917.38**	**2065917.55**	**0.0067**	**0.0053**
Pluto	**944-10-16 02:52 J**	**2066142.41**	**2066142.62**	**2066142.84**	**0.0067**	**0.0014**
Jupiter	**945-05-01 02:52 J**	**2066339.44**	**2066339.62**	**2066339.80**	**0.0526**	**0.0242**
Pluto	**945-05-29 07:26 J**	**2066367.63**	**2066367.81**	**2066368.04**	**0.0067**	**0.0025**
Pluto	**946-01-09 12:14 J**	**2066592.98**	**2066593.01**	**2066593.11**	**0.0067**	**0.0065**
Mars	**947-03-28 06:14 J**	**2067035.59**	**2067035.76**	**2067035.94**	**0.1647**	**0.0133**
Jupiter	**951-02-25 09:35 J**	**2068465.85**	**2068465.90**	**2068465.95**	**0.0497**	**0.0479**
Saturn	**951-09-15 21:35 J**	**2068668.36**	**2068668.40**	**2068668.45**	**0.0273**	**0.0266**
Saturn	**952-05-02 03:07 J**	**2068897.42**	**2068897.63**	**2068897.84**	**0.0271**	**0.0059**
Saturn	**952-12-17 07:12 J**	**2069126.63**	**2069126.80**	**2069126.98**	**0.0270**	**0.0145**
Jupiter	**957-01-03 17:31 J**	**2070605.04**	**2070605.23**	**2070605.43**	**0.0528**	**0.0133**
Jupiter	**963-06-24 18:57 J**	**2072968.13**	**2072968.29**	**2072968.45**	**0.0501**	**0.0322**
Saturn	**967-05-25 19:55 J**	**2074399.29**	**2074399.33**	**2074399.39**	**0.0287**	**0.0278**
Saturn	**968-01-10 15:50 J**	**2074628.95**	**2074629.16**	**2074629.37**	**0.0289**	**0.0031**
Saturn	**968-08-27 12:57 J**	**2074858.91**	**2074859.04**	**2074859.18**	**0.0291**	**0.0223**
Jupiter	**968-09-08 09:35 J**	**2074870.84**	**2074870.90**	**2074870.97**	**0.0530**	**0.0503**
Neptune	**973-04-08 00:43 J**	**2076543.44**	**2076543.53**	**2076543.63**	**0.0088**	**0.0079**
Neptune	**973-11-19 13:12 J**	**2076768.91**	**2076769.05**	**2076769.21**	**0.0088**	**0.0064**
Neptune	**974-07-03 01:55 J**	**2076994.41**	**2076994.58**	**2076994.77**	**0.0088**	**0.0049**
Neptune	**975-02-13 14:38 J**	**2077219.92**	**2077220.11**	**2077220.33**	**0.0088**	**0.0034**
Jupiter	**975-02-27 18:14 J**	**2077234.05**	**2077234.26**	**2077234.46**	**0.0500**	**0.0011**

Neptune 975-09-27 03:35 J 2077445.44 2077445.65 2077445.87 0.0088 0.0018

Neptune 976-05-09 16:19 J 2077670.96 2077671.18 2077671.41 0.0088 0.0003

Mars 976-06-14 02:24 J 2077706.44 2077706.60 2077706.75 0.1876 0.0908

Neptune 976-12-21 05:02 J 2077896.49 2077896.71 2077896.93 0.0088 0.0013

Uranus 977-01-06 15:21 J 2077913.01 2077913.14 2077913.30 0.0140 0.0103

Neptune 977-08-03 17:45 J 2078122.03 2078122.24 2078122.45 0.0088 0.0028

Uranus 977-08-21 00:43 J 2078139.34 2078139.53 2078139.74 0.0139 0.0054

Neptune 978-03-17 06:14 J 2078347.58 2078347.76 2078347.97 0.0088 0.0044

Uranus 978-04-04 10:04 J 2078365.70 2078365.92 2078366.14 0.0139 0.0006

Neptune 978-10-28 18:57 J 2078573.14 2078573.29 2078573.47 0.0088 0.0059

Uranus 978-11-16 18:57 J 2078592.09 2078592.29 2078592.50 0.0139 0.0042

Mars 979-03-27 00:00 J 2078722.38 2078722.50 2078722.63 0.1640 0.1140

Neptune 979-06-11 07:40 J 2078798.72 2078798.82 2078798.95 0.0088 0.0074

Uranus 979-07-01 03:35 J 2078818.49 2078818.65 2078818.83 0.0139 0.0089

Uranus 980-02-12 12:14 J 2079044.98 2079045.01 2079045.06 0.0138 0.0136

Jupiter 981-01-06 18:14 J 2079374.16 2079374.26 2079374.36 0.0525 0.0456

Mars 981-01-23 23:16 J 2079391.34 2079391.47 2079391.60 0.1656 0.1060

Saturn 981-03-28 01:40 J 2079454.48 2079454.57 2079454.68 0.0273 0.0238

Saturn 981-11-12 06:43 J 2079683.57 2079683.78 2079683.99 0.0271 0.0032

Saturn 982-06-29 10:33 J 2079912.78 2079912.94 2079913.11 0.0269 0.0171

Jupiter 986-11-02 18:57 J 2081500.13 2081500.29 2081500.45 0.0498 0.0305

Jupiter 992-09-11 10:04 J 2083639.72 2083639.92 2083640.12 0.0526 0.0087

Saturn 996-12-05 00:57 J 2085185.44 2085185.54 2085185.66 0.0288 0.0246

Saturn 997-07-22 21:21 J 2085415.18 2085415.39 2085415.60 0.0290 0.0005

Saturn 998-03-09 18:43 J 2085645.19 2085645.28 2085645.38 0.0292 0.0259

2ND MILLENNIUM CE

This is a list of transits of Venus in the 2nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**1004-05-17 00:57**	**J**	**2087905.38**	**2087905.54**	**2087905.71**	**0.0529**	**0.0289**	
Mars	**1008-06-14 01:12**	**J**	**2089394.41**	**2089394.55**	**2089394.69**	**0.1887**	**0.1086**	
Saturn	**1010-10-08 08:24**	**J**	**2090240.72**	**2090240.85**	**2090240.99**	**0.0273**	**0.0207**	
Jupiter	**1010-11-05 05:31**	**J**	**2090268.55**	**2090268.73**	**2090268.92**	**0.0501**	**0.0191**	
Saturn	**1011-05-25 13:26**	**J**	**2090469.85**	**2090470.06**	**2090470.28**	**0.0271**	**0.0005**	
Saturn	**1012-01-09 17:16**	**J**	**2090699.09**	**2090699.22**	**2090699.37**	**0.0269**	**0.0202**	
Mars	**1013-01-22 18:00**	**J**	**2091078.08**	**2091078.25**	**2091078.43**	**0.1649**	**0.0035**	
Uranus	**1021-01-01 12:43**	**J**	**2093978.96**	**2093979.03**	**2093979.12**	**0.0139**	**0.0129**	
Uranus	**1021-08-15 20:38**	**J**	**2094205.20**	**2094205.36**	**2094205.55**	**0.0139**	**0.0083**	
Uranus	**1022-03-30 05:02**	**J**	**2094431.50**	**2094431.71**	**2094431.92**	**0.0139**	**0.0035**	
Jupiter	**1022-07-11 05:31**	**J**	**2094534.53**	**2094534.73**	**2094534.92**	**0.0499**	**0.0125**	
Uranus	**1022-11-11 13:26**	**J**	**2094657.84**	**2094658.06**	**2094658.27**	**0.0139**	**0.0012**	
Uranus	**1023-06-25 21:35**	**J**	**2094884.21**	**2094884.40**	**2094884.60**	**0.0140**	**0.0060**	
Uranus	**1024-02-07 06:00**	**J**	**2095110.62**	**2095110.75**	**2095110.90**	**0.0140**	**0.0108**	
Saturn	**1026-06-17 12:57**	**J**	**2095971.90**	**2095972.04**	**2095972.20**	**0.0288**	**0.0204**	
Saturn	**1027-02-02 09:21**	**J**	**2096201.68**	**2096201.89**	**2096202.10**	**0.0290**	**0.0046**	
Jupiter	**1028-05-19 23:02**	**J**	**2096674.30**	**2096674.46**	**2096674.63**	**0.0526**	**0.0295**	
Pluto	**1031-03-24 01:55**	**J**	**2097712.41**	**2097712.58**	**2097712.79**	**0.0077**	**0.0039**	
Pluto	**1031-11-04 11:45**	**J**	**2097937.78**	**2097937.99**	**2097938.21**	**0.0077**	**0.0023**	
Moon	**1032-05-24 15:50**	**J**	**2098140.01**	**2098140.16**	**2098140.32**	**0.2618**	**0.1014**	
Earth	**1032-05-24 19:26**	**J**	**2098140.16**	**2098140.31**	**2098140.45**	**0.2623**	**0.1032**	*
Jupiter	**1034-03-16 04:48**	**J**	**2098800.61**	**2098800.70**	**2098800.80**	**0.0497**	**0.0438**	

Jupiter 1040-01-23 16:19 J 2100939.98 2100940.18 2100940.39 0.0528 0.0072

Saturn 1040-04-19 13:55 J 2101026.92 2101027.08 2101027.25 0.0272 0.0176

Earth 1040-05-22 12:43 J 2101059.95 2101060.03 2101060.11 0.2624 0.2205

Saturn 1040-12-04 18:43 J 2101256.07 2101256.28 2101256.49 0.0271 0.0030

Saturn 1041-07-21 22:04 J 2101485.32 2101485.42 2101485.53 0.0269 0.0230

Mars 1042-04-11 05:02 J 2101748.59 2101748.71 2101748.84 0.1872 0.1280

Mars 1045-01-21 12:14 J 2102764.88 2102765.01 2102765.15 0.1642 0.1020

Jupiter 1046-07-13 15:07 J 2103303.00 2103303.13 2103303.28 0.0502 0.0372

Mars 1046-11-21 11:02 J 2103433.84 2103433.96 2103434.08 0.1659 0.1197

Jupiter 1051-09-28 07:11 J 2105205.70 2105205.80 2105205.91 0.0529 0.0449

Neptune 1055-05-26 03:35 J 2106541.60 2106541.65 2106541.70 0.0089 0.0087

Saturn 1055-12-28 18:14 J 2106758.09 2106758.26 2106758.43 0.0289 0.0171

Neptune 1056-01-06 16:48 J 2106767.08 2106767.20 2106767.34 0.0089 0.0071

Saturn 1056-08-14 14:38 J 2106987.91 2106988.11 2106988.32 0.0291 0.0081

Neptune 1056-08-19 06:14 J 2106992.59 2106992.76 2106992.94 0.0089 0.0055

Neptune 1057-04-01 19:26 J 2107218.12 2107218.31 2107218.52 0.0089 0.0039

Neptune 1057-11-13 08:52 J 2107443.66 2107443.87 2107444.09 0.0089 0.0022

Jupiter 1058-03-18 15:35 J 2107568.95 2107569.15 2107569.36 0.0500 0.0056

Neptune 1058-06-26 22:19 J 2107669.21 2107669.43 2107669.65 0.0089 0.0006

Neptune 1059-02-07 11:31 J 2107894.76 2107894.98 2107895.20 0.0089 0.0010

Neptune 1059-09-21 00:43 J 2108120.33 2108120.53 2108120.75 0.0089 0.0026

Neptune 1060-05-03 13:55 J 2108345.90 2108346.08 2108346.28 0.0089 0.0042

Uranus 1060-09-05 23:31 J 2108471.39 2108471.48 2108471.58 0.0140 0.0125

Neptune 1060-12-15 03:07 J 2108571.48 2108571.63 2108571.81 0.0089 0.0059

Uranus 1061-04-20 08:52 J 2108697.69 2108697.87 2108698.06 0.0140 0.0077

Neptune 1061-07-28 16:33 J 2108797.08 2108797.19 2108797.32 0.0089 0.0075

Uranus 1061-12-02 18:00 J 2108924.04 2108924.25 2108924.47 0.0139 0.0029

Uranus 1062-07-17 03:07 J 2109150.41 2109150.63 2109150.85 0.0139 0.0019

Uranus 1063-02-28 12:00 J 2109376.81 2109377.00 2109377.19 0.0139 0.0067

Uranus 1063-10-12 20:38 J 2109603.24 2109603.36 2109603.48 0.0138 0.0114

Jupiter	**1064-01-26 13:11 J**	**2109709.00**	**2109709.05**	**2109709.12**	**0.0524**	**0.0501**
Saturn	**1069-10-30 20:24 J**	**2111813.18**	**2111813.35**	**2111813.54**	**0.0272**	**0.0145**
Jupiter	**1069-11-21 16:04 J**	**2111835.00**	**2111835.17**	**2111835.35**	**0.0498**	**0.0255**
Saturn	**1070-06-17 01:11 J**	**2112042.35**	**2112042.55**	**2112042.76**	**0.0270**	**0.0061**
Saturn	**1071-02-01 04:48 J**	**2112271.66**	**2112271.70**	**2112271.76**	**0.0269**	**0.0261**
Mars	**1074-04-11 04:19 J**	**2113436.52**	**2113436.68**	**2113436.85**	**0.1883**	**0.0715**
Jupiter	**1075-10-01 04:04 J**	**2113974.48**	**2113974.67**	**2113974.87**	**0.0527**	**0.0130**
Mars	**1078-11-20 06:14 J**	**2115120.59**	**2115120.76**	**2115120.93**	**0.1651**	**0.0133**
Saturn	**1085-07-10 06:43 J**	**2117544.59**	**2117544.78**	**2117544.97**	**0.0289**	**0.0127**
Saturn	**1086-02-25 03:21 J**	**2117774.45**	**2117774.64**	**2117774.83**	**0.0290**	**0.0125**
Jupiter	**1087-06-05 20:09 J**	**2118240.16**	**2118240.34**	**2118240.52**	**0.0529**	**0.0242**
Jupiter	**1093-11-24 00:14 J**	**2120603.33**	**2120603.51**	**2120603.69**	**0.0501**	**0.0232**
Saturn	**1099-05-13 03:07 J**	**2122599.44**	**2122599.63**	**2122599.82**	**0.0272**	**0.0111**
Saturn	**1099-12-28 07:11 J**	**2122828.61**	**2122828.80**	**2122829.01**	**0.0270**	**0.0093**
Uranus	**1105-04-15 04:04 J**	**2124763.55**	**2124763.67**	**2124763.83**	**0.0139**	**0.0106**
Jupiter	**1105-07-30 00:43 J**	**2124869.33**	**2124869.53**	**2124869.73**	**0.0499**	**0.0082**
Uranus	**1105-11-27 12:14 J**	**2124989.82**	**2124990.01**	**2124990.22**	**0.0139**	**0.0059**
Uranus	**1106-07-11 20:38 J**	**2125216.14**	**2125216.36**	**2125216.58**	**0.0139**	**0.0011**
Uranus	**1107-02-23 04:48 J**	**2125442.50**	**2125442.70**	**2125442.92**	**0.0140**	**0.0037**
Uranus	**1107-10-07 13:11 J**	**2125668.89**	**2125669.05**	**2125669.24**	**0.0140**	**0.0085**
Mars	**1108-02-06 08:52 J**	**2125790.78**	**2125790.87**	**2125790.95**	**0.1869**	**0.1626**
Uranus	**1108-05-20 22:04 J**	**2125895.36**	**2125895.42**	**2125895.49**	**0.0140**	**0.0133**
Mars	**1110-11-19 00:14 J**	**2126807.37**	**2126807.51**	**2126807.66**	**0.1644**	**0.0897**
Jupiter	**1111-06-08 20:24 J**	**2127009.20**	**2127009.35**	**2127009.50**	**0.0525**	**0.0347**
Mars	**1112-09-17 22:48 J**	**2127476.35**	**2127476.45**	**2127476.55**	**0.1661**	**0.1340**
Saturn	**1115-01-20 11:16 J**	**2128330.78**	**2128330.97**	**2128331.18**	**0.0289**	**0.0095**
Saturn	**1115-09-07 08:09 J**	**2128560.67**	**2128560.84**	**2128561.02**	**0.0291**	**0.0159**
Jupiter	**1117-04-04 01:55 J**	**2129135.46**	**2129135.58**	**2129135.71**	**0.0498**	**0.0391**
Jupiter	**1123-02-11 11:45 J**	**2131274.79**	**2131274.99**	**2131275.20**	**0.0527**	**0.0028**
Saturn	**1128-11-22 09:07 J**	**2133385.68**	**2133385.88**	**2133386.09**	**0.0271**	**0.0082**

Saturn 1129-07-09 13:26 J 2133614.87 2133615.06 2133615.25 0.0270 0.0122

Jupiter 1129-08-01 12:14 J 2133637.91 2133638.01 2133638.13 0.0502 0.0424

Jupiter 1134-10-17 00:57 J 2135540.41 2135540.54 2135540.67 0.0530 0.0411

Neptune 1137-07-10 12:00 J 2136537.98 2136538.00 2136538.07 0.0088 0.0086

Neptune 1138-02-21 01:11 J 2136763.43 2136763.55 2136763.69 0.0088 0.0070

Neptune 1138-10-04 13:40 J 2136988.92 2136989.07 2136989.26 0.0088 0.0055

Neptune 1139-05-18 02:24 J 2137214.42 2137214.60 2137214.81 0.0088 0.0040

Neptune 1139-12-29 15:21 J 2137439.93 2137440.14 2137440.36 0.0088 0.0024

Mars 1140-02-06 07:11 J 2137478.63 2137478.80 2137478.98 0.1880 0.0339

Neptune 1140-08-11 04:04 J 2137665.46 2137665.67 2137665.89 0.0088 0.0009

Neptune 1141-03-24 16:48 J 2137890.99 2137891.20 2137891.43 0.0088 0.0007

Jupiter 1141-04-06 12:00 J 2137903.80 2137904.00 2137904.20 0.0500 0.0104

Neptune 1141-11-05 05:31 J 2138116.52 2138116.73 2138116.95 0.0088 0.0022

Neptune 1142-06-18 18:00 J 2138342.07 2138342.25 2138342.46 0.0088 0.0038

Neptune 1143-01-30 06:57 J 2138567.63 2138567.79 2138567.98 0.0088 0.0053

Neptune 1143-09-12 19:26 J 2138793.19 2138793.31 2138793.47 0.0088 0.0069

Neptune 1144-04-25 08:09 J 2139018.79 2139018.84 2139018.92 0.0088 0.0084

Saturn 1144-08-01 23:31 J 2139117.27 2139117.48 2139117.69 0.0289 0.0051

Mars 1144-09-16 18:00 J 2139163.08 2139163.25 2139163.42 0.1653 0.0272

Uranus 1144-12-18 16:48 J 2139256.06 2139256.20 2139256.37 0.0140 0.0099

Saturn 1145-03-19 20:38 J 2139347.21 2139347.36 2139347.51 0.0291 0.0203

Uranus 1145-08-02 02:09 J 2139482.40 2139482.59 2139482.80 0.0139 0.0051

Uranus 1146-03-16 11:31 J 2139708.76 2139708.98 2139709.20 0.0139 0.0003

Uranus 1146-10-28 20:09 J 2139935.15 2139935.34 2139935.56 0.0139 0.0046

Uranus 1147-06-12 04:48 J 2140161.55 2140161.70 2140161.87 0.0139 0.0093

Jupiter 1152-12-10 10:19 J 2142169.75 2142169.93 2142170.11 0.0498 0.0219

Moon 1153-11-23 15:07 J 2142518.01 2142518.13 2142518.25 0.2711 0.1724

Earth 1153-11-23 20:52 J 2142518.22 2142518.37 2142518.52 0.2709 0.0862 *

Saturn 1157-10-18 11:45 J 2143942.91 2143942.99 2143943.06 0.0273 0.0252

Saturn 1158-06-04 16:33 J 2144171.98 2144172.19 2144172.40 0.0271 0.0046

Jupiter	**1158-10-20 02:52 J**	**2144309.43**	**2144309.62**	**2144309.81**	**0.0527**	**0.0190**
Saturn	**1159-01-19 20:24 J**	**2144401.19**	**2144401.35**	**2144401.53**	**0.0270**	**0.0156**
Jupiter	**1170-06-24 18:28 J**	**2148575.08**	**2148575.27**	**2148575.46**	**0.0528**	**0.0185**
Saturn	**1173-06-27 07:40 J**	**2149673.75**	**2149673.82**	**2149673.90**	**0.0288**	**0.0268**
Saturn	**1174-02-12 03:50 J**	**2149903.45**	**2149903.66**	**2149903.87**	**0.0290**	**0.0020**
Saturn	**1174-09-30 00:57 J**	**2150133.42**	**2150133.54**	**2150133.67**	**0.0292**	**0.0236**
Mars	**1176-09-15 12:28 J**	**2150849.86**	**2150850.02**	**2150850.17**	**0.1646**	**0.0774**
Jupiter	**1176-12-12 21:50 J**	**2150938.24**	**2150938.41**	**2150938.58**	**0.0501**	**0.0284**
Mars	**1178-07-16 10:04 J**	**2151518.85**	**2151518.92**	**2151518.99**	**0.1664**	**0.1488**
Saturn	**1187-04-30 16:33 J**	**2154729.08**	**2154729.19**	**2154729.32**	**0.0273**	**0.0225**
Saturn	**1187-12-15 21:50 J**	**2154958.20**	**2154958.41**	**2154958.62**	**0.0271**	**0.0018**
Saturn	**1188-08-01 01:40 J**	**2155187.42**	**2155187.57**	**2155187.72**	**0.0269**	**0.0184**
Jupiter	**1188-08-17 22:33 J**	**2155204.23**	**2155204.44**	**2155204.64**	**0.0499**	**0.0032**
Uranus	**1188-12-13 10:48 J**	**2155321.89**	**2155321.95**	**2155322.05**	**0.0138**	**0.0129**
Uranus	**1189-07-27 18:57 J**	**2155548.13**	**2155548.29**	**2155548.48**	**0.0139**	**0.0082**
Uranus	**1190-03-11 03:21 J**	**2155774.43**	**2155774.64**	**2155774.85**	**0.0139**	**0.0035**
Uranus	**1190-10-23 11:45 J**	**2156000.77**	**2156000.99**	**2156001.20**	**0.0139**	**0.0013**
Uranus	**1191-06-06 19:55 J**	**2156227.14**	**2156227.33**	**2156227.53**	**0.0140**	**0.0061**
Uranus	**1192-01-19 04:19 J**	**2156453.56**	**2156453.68**	**2156453.83**	**0.0140**	**0.0109**
Pluto	**1192-02-06 13:40 J**	**2156471.91**	**2156472.07**	**2156472.27**	**0.0067**	**0.0038**
Pluto	**1192-09-18 19:11 J**	**2156697.08**	**2156697.30**	**2156697.52**	**0.0067**	**0.0001**
Pluto	**1193-05-01 23:45 J**	**2156922.34**	**2156922.49**	**2156922.69**	**0.0067**	**0.0040**
Jupiter	**1194-06-27 14:24 J**	**2157343.97**	**2157344.10**	**2157344.24**	**0.0526**	**0.0391**
Jupiter	**1200-04-22 23:02 J**	**2159470.31**	**2159470.46**	**2159470.60**	**0.0497**	**0.0343**
Saturn	**1203-01-07 18:43 J**	**2160460.15**	**2160460.28**	**2160460.41**	**0.0288**	**0.0226**
Saturn	**1203-08-25 15:07 J**	**2160689.92**	**2160690.13**	**2160690.34**	**0.0290**	**0.0023**
Saturn	**1204-04-11 12:28 J**	**2160919.97**	**2160920.02**	**2160920.09**	**0.0292**	**0.0279**
Mars	**1205-12-03 11:16 J**	**2161520.79**	**2161520.97**	**2161521.15**	**0.1877**	**0.0012**
Jupiter	**1206-03-02 07:26 J**	**2161609.60**	**2161609.81**	**2161610.01**	**0.0528**	**0.0023**
Mars	**1210-07-15 05:45 J**	**2163205.57**	**2163205.74**	**2163205.91**	**0.1655**	**0.0404**

Jupiter	1212-08-20 06:43 J	2163972.71	2163972.78	2163972.86	0.0502	0.0462
Saturn	1216-11-10 00:43 J	2165515.38	2165515.53	2165515.68	0.0272	0.0188
Saturn	1217-06-27 05:16 J	2165744.51	2165744.72	2165744.93	0.0271	0.0018
Jupiter	1217-11-05 00:28 J	2165875.37	2165875.52	2165875.67	0.0530	0.0349
Saturn	1218-02-11 08:38 J	2165973.75	2165973.86	2165974.00	0.0269	0.0218
Neptune	1220-04-09 03:50 J	2166761.57	2166761.66	2166761.78	0.0089	0.0078
Neptune	1220-11-20 17:02 J	2166987.07	2166987.21	2166987.39	0.0089	0.0062
Neptune	1221-07-04 06:28 J	2167212.60	2167212.77	2167212.97	0.0089	0.0046
Neptune	1222-02-14 20:09 J	2167438.13	2167438.34	2167438.55	0.0089	0.0029
Neptune	1222-09-28 09:21 J	2167663.68	2167663.89	2167664.11	0.0089	0.0013
Neptune	1223-05-11 22:33 J	2167889.22	2167889.44	2167889.66	0.0089	0.0004
Neptune	1223-12-23 11:45 J	2168114.78	2168114.99	2168115.21	0.0089	0.0020
Jupiter	1224-04-25 06:57 J	2168238.60	2168238.79	2168238.99	0.0500	0.0145
Neptune	1224-08-05 00:57 J	2168340.35	2168340.54	2168340.76	0.0089	0.0036
Neptune	1225-03-18 14:09 J	2168565.93	2168566.09	2168566.29	0.0089	0.0053
Neptune	1225-10-30 03:21 J	2168791.52	2168791.64	2168791.80	0.0089	0.0069
Neptune	1226-06-12 16:33 J	2169017.14	2169017.19	2169017.28	0.0089	0.0085
Uranus	1228-08-18 00:43 J	2169814.43	2169814.53	2169814.64	0.0140	0.0121
Uranus	1229-04-01 10:04 J	2170040.74	2170040.92	2170041.11	0.0140	0.0073
Uranus	1229-11-13 19:11 J	2170267.09	2170267.30	2170267.52	0.0139	0.0025
Uranus	1230-06-28 04:04 J	2170493.46	2170493.67	2170493.89	0.0139	0.0024
Uranus	1231-02-09 12:57 J	2170719.86	2170720.04	2170720.23	0.0139	0.0071
Uranus	1231-09-23 21:21 J	2170946.29	2170946.39	2170946.52	0.0138	0.0118
Saturn	1232-07-19 21:35 J	2171246.26	2171246.40	2171246.57	0.0288	0.0199
Saturn	1233-03-06 18:14 J	2171476.05	2171476.26	2171476.47	0.0290	0.0053
Jupiter	1235-12-30 08:09 J	2172504.65	2172504.84	2172505.03	0.0499	0.0168
Jupiter	1241-11-07 23:45 J	2174644.31	2174644.49	2174644.67	0.0526	0.0242
Mars	1242-07-14 00:14 J	2174892.35	2174892.51	2174892.66	0.1648	0.0644
Mars	1244-05-12 21:50 J	2175561.38	2175561.41	2175561.44	0.1666	0.1632
Saturn	1246-05-23 04:48 J	2176301.53	2176301.70	2176301.87	0.0272	0.0161

Saturn 1247-01-07 09:35 J 2176530.69 2176530.90 2176531.11 0.0270 0.0044

Saturn 1247-08-24 12:43 J 2176759.96 2176760.03 2176760.13 0.0269 0.0244

Jupiter 1247-09-04 10:04 J 2176770.87 2176770.92 2176770.99 0.0497 0.0472

Jupiter 1253-07-13 13:26 J 2178909.87 2178910.06 2178910.26 0.0528 0.0141

Jupiter 1260-01-01 19:11 J 2181273.16 2181273.30 2181273.46 0.0501 0.0337

Saturn 1262-01-30 07:55 J 2182032.65 2182032.83 2182033.00 0.0289 0.0158

Saturn 1262-09-17 04:33 J 2182262.49 2182262.69 2182262.89 0.0291 0.0094

Jupiter 1265-03-18 05:02 J 2183175.67 2183175.71 2183175.75 0.0530 0.0519

Jupiter 1271-09-06 17:02 J 2185539.01 2185539.21 2185539.42 0.0499 0.0014

Mars 1271-09-30 14:24 J 2185562.92 2185563.10 2185563.27 0.1874 0.0383

Uranus 1273-03-27 02:09 J 2186106.47 2186106.59 2186106.75 0.0139 0.0105

Uranus 1273-11-08 10:19 J 2186332.74 2186332.93 2186333.14 0.0139 0.0058

Uranus 1274-06-22 18:43 J 2186559.06 2186559.28 2186559.50 0.0139 0.0011

Uranus 1275-02-04 02:52 J 2186785.42 2186785.62 2186785.83 0.0139 0.0037

Earth 1275-05-25 22:48 J 2186896.31 2186896.45 2186896.59 0.2624 0.1231

Moon 1275-05-25 23:45 J 2186896.36 2186896.49 2186896.63 0.2630 0.1143 *

Uranus 1275-09-18 11:31 J 2187011.81 2187011.98 2187012.16 0.0140 0.0085

Saturn 1275-12-03 12:28 J 2187087.83 2187088.02 2187088.21 0.0272 0.0125

Uranus 1276-05-01 19:55 J 2187238.28 2187238.33 2187238.41 0.0140 0.0133

Mars 1276-05-11 17:16 J 2187248.06 2187248.22 2187248.39 0.1658 0.0546

Saturn 1276-07-19 16:33 J 2187317.00 2187317.19 2187317.40 0.0270 0.0080

Jupiter 1277-07-16 14:52 J 2187679.03 2187679.12 2187679.23 0.0525 0.0458

Pluto 1278-07-14 11:16 J 2188041.92 2188041.97 2188042.07 0.0078 0.0073

Pluto 1279-02-24 21:21 J 2188267.17 2188267.39 2188267.61 0.0077 0.0011

Pluto 1279-10-08 06:28 J 2188492.61 2188492.77 2188492.95 0.0077 0.0049

Jupiter 1283-05-12 18:28 J 2189805.11 2189805.27 2189805.43 0.0498 0.0302

Earth 1283-05-23 15:50 J 2189816.06 2189816.16 2189816.26 0.2624 0.2044

Moon 1283-05-23 20:09 J 2189816.21 2189816.34 2189816.48 0.2628 0.1317 *

Jupiter 1289-03-21 07:55 J 2191944.63 2191944.83 2191945.03 0.0527 0.0089

Saturn 1291-08-12 10:19 J 2192818.75 2192818.93 2192819.12 0.0289 0.0131

Saturn 1292-03-29 06:57 J 2193048.60 2193048.79 2193048.99 0.0291 0.0122

Jupiter 1300-11-23 23:02 J 2196210.29 2196210.46 2196210.63 0.0529 0.0291

Neptune 1302-05-25 12:14 J 2196757.92 2196758.01 2196758.13 0.0088 0.0077

Neptune 1303-01-06 00:43 J 2196983.40 2196983.53 2196983.71 0.0088 0.0062

Neptune 1303-08-19 13:55 J 2197208.90 2197209.08 2197209.27 0.0088 0.0046

Mars 1303-09-30 12:57 J 2197250.96 2197251.04 2197251.13 0.1885 0.1628

Neptune 1304-04-01 02:24 J 2197434.41 2197434.60 2197434.82 0.0088 0.0031

Neptune 1304-11-12 15:21 J 2197659.92 2197660.14 2197660.36 0.0088 0.0015

Saturn 1305-06-14 15:07 J 2197873.93 2197874.13 2197874.32 0.0272 0.0102

Neptune 1305-06-26 04:04 J 2197885.45 2197885.67 2197885.89 0.0088 0.0001

Saturn 1306-01-29 19:40 J 2198103.12 2198103.32 2198103.51 0.0270 0.0102

Neptune 1306-02-06 16:48 J 2198110.99 2198111.20 2198111.42 0.0088 0.0016

Neptune 1306-09-20 05:16 J 2198336.53 2198336.72 2198336.94 0.0088 0.0032

Neptune 1307-05-03 18:14 J 2198562.08 2198562.26 2198562.45 0.0088 0.0047

Jupiter 1307-05-15 06:28 J 2198573.59 2198573.77 2198573.96 0.0500 0.0205

Neptune 1307-12-15 06:28 J 2198787.64 2198787.77 2198787.95 0.0088 0.0063

Mars 1308-05-10 12:14 J 2198934.84 2198935.01 2198935.17 0.1650 0.0516

Neptune 1308-07-27 19:26 J 2199013.23 2199013.31 2199013.43 0.0088 0.0078

Uranus 1312-11-29 16:48 J 2200599.05 2200599.20 2200599.36 0.0140 0.0096

Uranus 1313-07-14 01:55 J 2200825.38 2200825.58 2200825.80 0.0140 0.0048

Uranus 1314-02-25 11:16 J 2201051.75 2201051.97 2201052.19 0.0139 0.0001

Uranus 1314-10-09 19:55 J 2201278.14 2201278.33 2201278.55 0.0139 0.0049

Uranus 1315-05-24 04:48 J 2201504.55 2201504.70 2201504.86 0.0139 0.0096

Jupiter 1319-01-18 06:57 J 2202839.59 2202839.79 2202839.99 0.0499 0.0113

Saturn 1321-02-21 18:28 J 2203605.08 2203605.27 2203605.48 0.0289 0.0094

Saturn 1321-10-09 15:35 J 2203834.97 2203835.15 2203835.33 0.0291 0.0160

Jupiter 1324-11-26 21:07 J 2204979.22 2204979.38 2204979.55 0.0526 0.0298

Jupiter 1330-09-23 05:31 J 2207105.64 2207105.73 2207105.84 0.0497 0.0433

Saturn 1334-12-25 22:19 J 2208660.23 2208660.43 2208660.64 0.0272 0.0066

Saturn 1335-08-12 02:24 J 2208889.42 2208889.60 2208889.79 0.0270 0.0137

Jupiter	**1336-08-01 15:07 J**	**2209244.93**	**2209245.13**	**2209245.33**	**0.0528**	**0.0070**
Mars	**1337-07-27 18:00 J**	**2209605.09**	**2209605.25**	**2209605.42**	**0.1871**	**0.0731**
Mars	**1340-05-09 06:28 J**	**2210621.72**	**2210621.77**	**2210621.83**	**0.1643**	**0.1547**
Mars	**1342-03-09 04:48 J**	**2211290.55**	**2211290.70**	**2211290.86**	**0.1660**	**0.0688**
Jupiter	**1343-01-20 15:50 J**	**2211608.03**	**2211608.16**	**2211608.29**	**0.0501**	**0.0383**
Jupiter	**1348-04-06 07:11 J**	**2213510.69**	**2213510.80**	**2213510.91**	**0.0530**	**0.0447**
Saturn	**1350-09-03 20:38 J**	**2214391.15**	**2214391.36**	**2214391.56**	**0.0289**	**0.0067**
Saturn	**1351-04-21 17:16 J**	**2214621.06**	**2214621.22**	**2214621.38**	**0.0291**	**0.0186**
Jupiter	**1354-09-25 17:02 J**	**2215874.01**	**2215874.21**	**2215874.41**	**0.0500**	**0.0069**
Uranus	**1356-11-24 09:21 J**	**2216664.82**	**2216664.89**	**2216664.99**	**0.0138**	**0.0127**
Uranus	**1357-07-08 17:31 J**	**2216891.06**	**2216891.23**	**2216891.41**	**0.0139**	**0.0081**
Uranus	**1358-02-20 01:40 J**	**2217117.36**	**2217117.57**	**2217117.78**	**0.0139**	**0.0034**
Uranus	**1358-10-04 10:04 J**	**2217343.71**	**2217343.92**	**2217344.14**	**0.0139**	**0.0014**
Uranus	**1359-05-18 18:28 J**	**2217570.08**	**2217570.27**	**2217570.47**	**0.0139**	**0.0062**
Uranus	**1359-12-31 02:38 J**	**2217796.50**	**2217796.61**	**2217796.76**	**0.0140**	**0.0110**
Jupiter	**1360-08-04 14:38 J**	**2218014.10**	**2218014.11**	**2218014.14**	**0.0525**	**0.0521**
Saturn	**1363-11-20 18:00 J**	**2219217.18**	**2219217.25**	**2219217.33**	**0.0273**	**0.0253**
Saturn	**1364-07-06 23:31 J**	**2219446.27**	**2219446.48**	**2219446.69**	**0.0271**	**0.0046**
Saturn	**1365-02-21 03:35 J**	**2219675.49**	**2219675.65**	**2219675.83**	**0.0270**	**0.0158**
Jupiter	**1366-05-31 18:43 J**	**2220140.11**	**2220140.28**	**2220140.46**	**0.0498**	**0.0241**
Mars	**1369-07-27 16:33 J**	**2221293.06**	**2221293.19**	**2221293.32**	**0.1882**	**0.1260**
Jupiter	**1372-04-09 05:45 J**	**2222279.54**	**2222279.74**	**2222279.93**	**0.0527**	**0.0145**
Mars	**1374-03-07 23:45 J**	**2222977.33**	**2222977.49**	**2222977.66**	**0.1652**	**0.0382**
Saturn	**1379-07-30 07:40 J**	**2224947.78**	**2224947.82**	**2224947.88**	**0.0287**	**0.0279**
Saturn	**1380-03-16 03:35 J**	**2225177.44**	**2225177.65**	**2225177.86**	**0.0289**	**0.0032**
Saturn	**1380-11-01 00:43 J**	**2225407.40**	**2225407.53**	**2225407.67**	**0.0291**	**0.0222**
Jupiter	**1383-12-13 21:50 J**	**2226545.22**	**2226545.41**	**2226545.59**	**0.0529**	**0.0231**
Neptune	**1384-07-11 14:38 J**	**2226756.06**	**2226756.11**	**2226756.19**	**0.0089**	**0.0085**
Neptune	**1385-02-22 03:50 J**	**2226981.54**	**2226981.66**	**2226981.82**	**0.0089**	**0.0069**
Neptune	**1385-10-05 17:16 J**	**2227207.06**	**2227207.22**	**2227207.42**	**0.0089**	**0.0053**

Neptune 1386-05-19 06:57 J 2227432.59 2227432.79 2227432.99 0.0089 0.0036

Neptune 1386-12-30 20:09 J 2227658.13 2227658.34 2227658.56 0.0089 0.0020

Neptune 1387-08-13 09:50 J 2227883.69 2227883.91 2227884.13 0.0089 0.0003

Neptune 1388-03-25 23:02 J 2228109.24 2228109.46 2228109.68 0.0089 0.0013

Neptune 1388-11-06 12:14 J 2228334.80 2228335.01 2228335.22 0.0089 0.0030

Neptune 1389-06-20 01:26 J 2228560.37 2228560.56 2228560.75 0.0089 0.0046

Neptune 1390-01-31 14:24 J 2228785.96 2228786.10 2228786.27 0.0089 0.0062

Jupiter 1390-06-03 02:52 J 2228908.45 2228908.62 2228908.80 0.0500 0.0251

Neptune 1390-09-14 03:35 J 2229011.57 2229011.65 2229011.77 0.0089 0.0079

Saturn 1393-06-02 00:43 J 2230003.41 2230003.53 2230003.66 0.0273 0.0219

Saturn 1394-01-17 06:14 J 2230232.55 2230232.76 2230232.97 0.0271 0.0011

Saturn 1394-09-03 10:04 J 2230461.78 2230461.92 2230462.07 0.0270 0.0191

Uranus 1396-07-29 23:16 J 2231157.37 2231157.47 2231157.60 0.0140 0.0120

Earth 1396-11-23 19:26 J 2231274.17 2231274.31 2231274.45 0.2708 0.1186

Moon 1396-11-24 01:26 J 2231274.40 2231274.56 2231274.71 0.2710 0.0153 *

Uranus 1397-03-13 08:52 J 2231383.69 2231383.87 2231384.07 0.0140 0.0072

Uranus 1397-10-25 18:14 J 2231610.05 2231610.26 2231610.48 0.0139 0.0023

Uranus 1398-06-09 03:07 J 2231836.42 2231836.63 2231836.85 0.0139 0.0025

Uranus 1399-01-21 11:45 J 2232062.82 2232062.99 2232063.19 0.0139 0.0073

Uranus 1399-09-04 20:38 J 2232289.26 2232289.36 2232289.48 0.0138 0.0120

Jupiter 1402-02-06 04:19 J 2233174.47 2233174.68 2233174.88 0.0499 0.0064

Mars 1403-05-24 21:35 J 2233647.26 2233647.40 2233647.54 0.1867 0.1086

Mars 1406-03-06 18:14 J 2234664.17 2234664.26 2234664.34 0.1645 0.1417

Jupiter 1407-12-17 00:14 J 2235314.37 2235314.51 2235314.66 0.0526 0.0376

Mars 1408-01-04 16:19 J 2235333.03 2235333.18 2235333.33 0.1663 0.0834

Saturn 1409-02-08 09:21 J 2235733.80 2235733.89 2235733.99 0.0287 0.0254

Saturn 1409-09-26 04:48 J 2235963.49 2235963.70 2235963.92 0.0289 0.0010

Saturn 1410-05-14 01:40 J 2236193.46 2236193.57 2236193.69 0.0291 0.0246

Jupiter 1413-10-12 06:14 J 2237440.63 2237440.76 2237440.90 0.0497 0.0372

Jupiter 1419-08-21 16:48 J 2239580.00 2239580.20 2239580.40 0.0528 0.0003

Saturn	1422-12-13 00:28 J	2240789.39	2240789.52	2240789.67	0.0273	0.0201
Saturn	1423-07-30 06:00 J	2241018.54	2241018.75	2241018.97	0.0271	0.0008
Saturn	1424-03-15 10:04 J	2241247.79	2241247.92	2241248.06	0.0269	0.0209
Jupiter	1426-02-08 17:16 J	2241943.15	2241943.22	2241943.32	0.0502	0.0454
Jupiter	1431-04-26 06:28 J	2243845.63	2243845.77	2243845.91	0.0530	0.0385
Mars	1435-05-24 19:11 J	2245335.14	2245335.30	2245335.46	0.1878	0.0876
Jupiter	1437-10-14 17:45 J	2246209.05	2246209.24	2246209.44	0.0500	0.0133
Saturn	1438-08-21 14:38 J	2246519.98	2246520.11	2246520.25	0.0288	0.0222
Saturn	1439-04-08 10:33 J	2246749.73	2246749.94	2246750.15	0.0290	0.0026
Pluto	1439-05-30 00:00 J	2246801.47	2246801.50	2246801.56	0.0066	0.0065
Saturn	1439-11-24 07:40 J	2246979.77	2246979.82	2246979.88	0.0291	0.0280
Mars	1440-01-03 11:31 J	2247019.81	2247019.98	2247020.16	0.1654	0.0248
Pluto	1440-01-10 04:48 J	2247026.52	2247026.70	2247026.92	0.0067	0.0027
Pluto	1440-08-22 10:04 J	2247251.71	2247251.92	2247252.14	0.0067	0.0012
Uranus	1441-03-08 01:40 J	2247449.44	2247449.57	2247449.73	0.0138	0.0103
Pluto	1441-04-04 14:52 J	2247476.99	2247477.12	2247477.27	0.0067	0.0052
Uranus	1441-10-20 09:50 J	2247675.72	2247675.91	2247676.12	0.0139	0.0056
Uranus	1442-06-03 18:14 J	2247902.04	2247902.26	2247902.48	0.0139	0.0008
Uranus	1443-01-16 02:24 J	2248128.40	2248128.60	2248128.82	0.0139	0.0039
Uranus	1443-08-30 10:48 J	2248354.80	2248354.95	2248355.14	0.0140	0.0088
Uranus	1444-04-12 19:40 J	2248581.28	2248581.32	2248581.38	0.0140	0.0135
Jupiter	1449-06-19 16:19 J	2250475.00	2250475.18	2250475.37	0.0498	0.0192
Saturn	1452-06-24 06:43 J	2251575.62	2251575.78	2251575.95	0.0273	0.0167
Saturn	1453-02-08 12:00 J	2251804.79	2251805.00	2251805.21	0.0271	0.0040
Saturn	1453-09-25 15:35 J	2252034.07	2252034.15	2252034.26	0.0270	0.0242
Jupiter	1455-04-29 09:07 J	2252614.70	2252614.88	2252615.06	0.0527	0.0225
Neptune	1466-08-26 23:16 J	2256752.44	2256752.47	2256752.56	0.0088	0.0084
Jupiter	1467-01-02 01:55 J	2256880.39	2256880.58	2256880.78	0.0529	0.0148
Neptune	1467-04-09 12:14 J	2256977.89	2256978.01	2256978.16	0.0088	0.0068
Neptune	1467-11-21 00:43 J	2257203.37	2257203.53	2257203.72	0.0088	0.0053

Saturn 1468-03-02 16:19 J 2257306.04 2257306.18 2257306.34 0.0287 0.0199

Neptune 1468-07-03 13:40 J 2257428.87 2257429.07 2257429.27 0.0088 0.0037

Saturn 1468-10-18 12:00 J 2257535.80 2257536.00 2257536.21 0.0289 0.0050

Neptune 1469-02-14 02:24 J 2257654.39 2257654.60 2257654.82 0.0088 0.0022

Mars 1469-03-21 01:11 J 2257689.44 2257689.55 2257689.66 0.1863 0.1444

Neptune 1469-09-27 15:07 J 2257879.92 2257880.13 2257880.36 0.0088 0.0007

Neptune 1470-05-11 03:50 J 2258105.44 2258105.66 2258105.88 0.0088 0.0009

Neptune 1470-12-22 16:19 J 2258330.98 2258331.18 2258331.40 0.0088 0.0025

Neptune 1471-08-05 04:48 J 2258556.52 2258556.70 2258556.91 0.0088 0.0041

Mars 1472-01-02 06:28 J 2258706.66 2258706.77 2258706.87 0.1647 0.1296

Neptune 1472-03-17 17:45 J 2258782.08 2258782.24 2258782.42 0.0088 0.0056

Neptune 1472-10-29 06:14 J 2259007.66 2259007.76 2259007.91 0.0088 0.0072

Neptune 1473-06-11 19:11 J 2259233.29 2259233.30 2259233.34 0.0088 0.0087

Jupiter 1473-06-22 04:33 J 2259243.54 2259243.69 2259243.85 0.0501 0.0320

Mars 1473-11-01 04:04 J 2259375.53 2259375.67 2259375.80 0.1665 0.0976

Jupiter 1478-09-06 17:31 J 2261146.22 2261146.23 2261146.23 0.0531 0.0530

Uranus 1480-11-10 15:50 J 2261942.01 2261942.16 2261942.33 0.0140 0.0095

Uranus 1481-06-25 01:11 J 2262168.35 2262168.55 2262168.77 0.0140 0.0047

Saturn 1482-01-04 05:45 J 2262361.56 2262361.74 2262361.91 0.0273 0.0151

Uranus 1482-02-06 10:33 J 2262394.72 2262394.94 2262395.16 0.0139 0.0002

Saturn 1482-08-21 11:02 J 2262590.75 2262590.96 2262591.16 0.0271 0.0056

Uranus 1482-09-20 19:26 J 2262621.11 2262621.31 2262621.52 0.0139 0.0050

Saturn 1483-04-07 14:38 J 2262820.06 2262820.11 2262820.18 0.0269 0.0257

Uranus 1483-05-05 04:04 J 2262847.53 2262847.67 2262847.84 0.0139 0.0098

Jupiter 1485-02-25 06:28 J 2263509.56 2263509.77 2263509.97 0.0499 0.0007

Jupiter 1491-01-05 00:28 J 2265649.41 2265649.52 2265649.63 0.0526 0.0442

Jupiter 1496-10-31 07:55 J 2267775.67 2267775.83 2267775.99 0.0497 0.0306

Saturn 1497-09-12 20:38 J 2268092.19 2268092.36 2268092.53 0.0288 0.0168

Saturn 1498-04-30 16:19 J 2268321.98 2268322.18 2268322.39 0.0290 0.0082

Mars 1501-03-20 23:02 J 2269377.29 2269377.46 2269377.63 0.1875 0.0519

Jupiter 1502-09-09 17:31 J 2269915.03 2269915.23 2269915.43 0.0528 0.0071

Mars 1505-10-30 23:45 J 2271062.32 2271062.49 2271062.66 0.1657 0.0116

Saturn 1511-07-17 11:02 J 2273147.77 2273147.96 2273148.15 0.0273 0.0120

Saturn 1512-03-02 16:19 J 2273376.98 2273377.18 2273377.38 0.0271 0.0088

Jupiter 1514-05-15 09:50 J 2274180.75 2274180.91 2274181.08 0.0530 0.0307

Earth 1518-05-26 01:55 J 2275652.45 2275652.58 2275652.71 0.2624 0.1398

Moon 1518-05-26 03:21 J 2275652.50 2275652.64 2275652.78 0.2618 0.1470 *

Jupiter 1520-11-02 16:48 J 2276544.01 2276544.20 2276544.39 0.0500 0.0189

Uranus 1524-11-05 09:50 J 2278007.83 2278007.91 2278008.01 0.0138 0.0125

Uranus 1525-06-19 17:45 J 2278234.07 2278234.24 2278234.43 0.0139 0.0078

Uranus 1526-02-01 02:09 J 2278460.38 2278460.59 2278460.80 0.0139 0.0031

Moon 1526-05-23 16:19 J 2278572.12 2278572.18 2278572.24 0.2620 0.2426

Earth 1526-05-23 19:11 J 2278572.19 2278572.30 2278572.41 0.2625 0.1858 *

Pluto 1526-06-17 03:35 J 2278596.52 2278596.65 2278596.83 0.0077 0.0057

Uranus 1526-09-15 10:33 J 2278686.73 2278686.94 2278687.16 0.0139 0.0017

Pluto 1527-01-28 13:26 J 2278821.85 2278822.06 2278822.29 0.0077 0.0006

Saturn 1527-03-25 22:33 J 2278878.26 2278878.44 2278878.63 0.0287 0.0144

Uranus 1527-04-29 18:57 J 2278913.10 2278913.29 2278913.49 0.0139 0.0064

Pluto 1527-09-10 22:33 J 2279047.34 2279047.44 2279047.57 0.0077 0.0065

Saturn 1527-11-10 18:00 J 2279108.06 2279108.25 2279108.46 0.0289 0.0106

Uranus 1527-12-12 03:07 J 2279139.53 2279139.63 2279139.78 0.0140 0.0113

Jupiter 1532-07-08 18:14 J 2280810.07 2280810.26 2280810.46 0.0498 0.0124

Mars 1535-01-16 05:16 J 2281731.67 2281731.72 2281731.77 0.1860 0.1779

Mars 1537-10-29 18:14 J 2282749.14 2282749.26 2282749.38 0.1649 0.1170

Jupiter 1538-05-18 12:28 J 2282949.85 2282950.02 2282950.18 0.0527 0.0305

Mars 1539-08-29 15:21 J 2283418.01 2283418.14 2283418.27 0.1667 0.1123

Saturn 1541-01-26 09:21 J 2283933.70 2283933.89 2283934.09 0.0273 0.0104

Saturn 1541-09-12 14:38 J 2284162.92 2284163.11 2284163.31 0.0271 0.0103

Jupiter 1544-03-13 20:52 J 2285076.28 2285076.37 2285076.48 0.0497 0.0430

Neptune 1549-05-26 14:09 J 2286975.99 2286976.09 2286976.22 0.0089 0.0076

Neptune 1550-01-07 03:21 J 2287201.50 2287201.64 2287201.82 0.0089 0.0060

Jupiter 1550-01-21 03:07 J 2287215.43 2287215.63 2287215.83 0.0529 0.0079

Neptune 1550-08-20 16:48 J 2287427.03 2287427.20 2287427.41 0.0089 0.0044

Neptune 1551-04-03 06:28 J 2287652.57 2287652.77 2287652.99 0.0089 0.0027

Neptune 1551-11-14 19:55 J 2287878.11 2287878.33 2287878.55 0.0089 0.0010

Neptune 1552-06-27 09:21 J 2288103.67 2288103.89 2288104.11 0.0089 0.0006

Neptune 1553-02-07 22:33 J 2288329.23 2288329.44 2288329.65 0.0089 0.0023

Neptune 1553-09-21 11:31 J 2288554.80 2288554.98 2288555.19 0.0089 0.0040

Neptune 1554-05-05 00:57 J 2288780.38 2288780.54 2288780.72 0.0089 0.0056

Neptune 1554-12-16 14:24 J 2289005.97 2289006.10 2289006.23 0.0089 0.0072

Neptune 1555-07-30 03:07 J 2289231.62 2289231.63 2289231.69 0.0089 0.0089

Jupiter 1556-07-11 06:43 J 2289578.66 2289578.78 2289578.91 0.0501 0.0390

Saturn 1556-10-05 02:24 J 2289664.40 2289664.60 2289664.79 0.0288 0.0114

Saturn 1557-05-22 22:04 J 2289894.24 2289894.42 2289894.61 0.0290 0.0136

Jupiter 1561-09-25 18:14 J 2291481.17 2291481.26 2291481.37 0.0531 0.0462

Uranus 1564-07-11 00:14 J 2292500.40 2292500.51 2292500.64 0.0140 0.0117

Uranus 1565-02-22 09:35 J 2292726.72 2292726.90 2292727.10 0.0140 0.0069

Uranus 1565-10-06 18:57 J 2292953.08 2292953.29 2292953.51 0.0139 0.0020

Uranus 1566-05-21 04:04 J 2293179.46 2293179.67 2293179.89 0.0139 0.0028

Uranus 1567-01-02 12:43 J 2293405.86 2293406.03 2293406.22 0.0139 0.0076

Mars 1567-01-16 02:24 J 2293419.42 2293419.60 2293419.77 0.1872 0.0157

Uranus 1567-08-16 21:50 J 2293632.31 2293632.41 2293632.51 0.0138 0.0123

Jupiter 1568-03-16 05:31 J 2293844.53 2293844.73 2293844.94 0.0499 0.0063

Saturn 1570-08-08 14:24 J 2294719.90 2294720.10 2294720.31 0.0273 0.0074

Saturn 1571-03-25 19:40 J 2294949.14 2294949.32 2294949.51 0.0271 0.0133

Mars 1571-08-28 11:16 J 2295104.79 2295104.97 2295105.14 0.1659 0.0042

Jupiter 1574-01-24 04:19 J 2295984.67 2295984.68 2295984.69 0.0526 0.0524

Jupiter 1579-11-20 07:11 J 2298110.63 2298110.80 2298110.98 0.0497 0.0249

Jupiter 1585-10-08 21:50 G 2300250.22 2300250.41 2300250.61 0.0528 0.0157

Saturn 1586-04-27 05:02 G 2300450.51 2300450.71 2300450.92 0.0287 0.0089

Saturn 1586-12-13 00:43 G 2300680.36 2300680.53 2300680.71 0.0289 0.0160

Jupiter 1597-06-13 13:55 G 2304515.90 2304516.08 2304516.27 0.0530 0.0223

Saturn 1599-07-14 06:00 G 2305276.72 2305276.75 2305276.79 0.0275 0.0270

Saturn 1600-02-28 12:43 G 2305505.82 2305506.03 2305506.24 0.0273 0.0059

Saturn 1600-10-14 17:45 G 2305735.07 2305735.24 2305735.42 0.0271 0.0148

Mars 1603-09-06 06:14 G 2306791.63 2306791.76 2306791.89 0.1651 0.1043

Jupiter 1603-12-02 19:26 G 2306879.14 2306879.31 2306879.48 0.0500 0.0263

Mars 1605-07-06 02:38 G 2307460.50 2307460.61 2307460.72 0.1670 0.1275

Uranus 1609-02-27 02:38 G 2308792.47 2308792.61 2308792.77 0.0138 0.0100

Uranus 1609-10-11 10:48 G 2309018.76 2309018.95 2309019.16 0.0139 0.0053

Uranus 1610-05-25 19:11 G 2309245.09 2309245.30 2309245.52 0.0139 0.0006

Uranus 1611-01-07 03:35 G 2309471.44 2309471.65 2309471.86 0.0139 0.0042

Uranus 1611-08-21 11:45 G 2309697.84 2309697.99 2309698.17 0.0140 0.0091

Uranus 1612-04-03 20:24 G 2309924.34 2309924.35 2309924.40 0.0140 0.0139

Jupiter 1615-08-07 20:38 G 2311145.15 2311145.36 2311145.56 0.0498 0.0055

Saturn 1615-11-07 08:24 G 2311236.64 2311236.85 2311237.06 0.0288 0.0060

Saturn 1616-06-24 04:19 G 2311466.52 2311466.68 2311466.84 0.0290 0.0190

Jupiter 1621-06-16 13:26 G 2313284.92 2313285.06 2313285.20 0.0527 0.0376

Jupiter 1627-04-12 20:38 G 2315411.23 2315411.36 2315411.50 0.0496 0.0371

Saturn 1629-01-23 11:16 G 2316062.87 2316062.97 2316063.07 0.0275 0.0240

Saturn 1629-09-09 17:45 G 2316292.03 2316292.24 2316292.45 0.0273 0.0029

Saturn 1630-04-26 22:48 G 2316521.30 2316521.45 2316521.62 0.0271 0.0178

Neptune 1631-07-21 23:02 G 2316972.35 2316972.46 2316972.58 0.0088 0.0075

Moon 1631-12-07 03:21 G 2317110.55 2317110.64 2317110.73 0.2701 0.2295

Earth 1631-12-07 05:16 G 2317110.68 2317110.72 2317110.76 0.2708 0.2603 *

Neptune 1632-03-03 11:31 G 2317197.84 2317197.98 2317198.16 0.0088 0.0060

Neptune 1632-10-15 00:28 G 2317423.33 2317423.52 2317423.71 0.0088 0.0044

Mars 1632-11-22 06:57 G 2317461.61 2317461.79 2317461.96 0.1868 0.0192

Jupiter 1633-02-19 05:45 G 2317550.54 2317550.74 2317550.95 0.0529 0.0013

Neptune 1633-05-28 12:57 G 2317648.84 2317649.04 2317649.26 0.0088 0.0029

Neptune 1634-01-09 01:40 G 2317874.36 2317874.57 2317874.79 0.0088 0.0013

Neptune 1634-08-22 14:24 G 2318099.88 2318100.10 2318100.32 0.0088 0.0003

Neptune 1635-04-05 03:07 G 2318325.42 2318325.63 2318325.85 0.0088 0.0018

Neptune 1635-11-16 15:35 G 2318550.96 2318551.15 2318551.36 0.0088 0.0034

Neptune 1636-06-29 04:04 G 2318776.51 2318776.67 2318776.87 0.0088 0.0050

Neptune 1637-02-09 17:16 G 2319002.08 2319002.22 2319002.37 0.0088 0.0065

Mars 1637-07-04 23:02 G 2319147.29 2319147.46 2319147.63 0.1661 0.0162

Neptune 1637-09-23 05:31 G 2319227.67 2319227.73 2319227.84 0.0088 0.0081

Jupiter 1639-08-10 06:14 G 2319913.67 2319913.76 2319913.85 0.0501 0.0449

Moon 1639-12-04 12:43 G 2320029.96 2320030.03 2320030.10 0.2704 0.2419

Earth 1639-12-04 18:14 G 2320030.13 2320030.26 2320030.40 0.2708 0.1463

Saturn 1644-10-01 18:00 G 2321793.21 2321793.25 2321793.32 0.0285 0.0276

Jupiter 1644-10-24 22:19 G 2321816.29 2321816.43 2321816.57 0.0531 0.0379

Saturn 1645-05-19 12:28 G 2322022.81 2322023.02 2322023.23 0.0287 0.0033

Saturn 1646-01-04 07:55 G 2322252.70 2322252.83 2322252.98 0.0289 0.0217

Uranus 1648-03-20 09:35 G 2323058.87 2323058.90 2323058.93 0.0140 0.0139

Uranus 1648-11-01 18:43 G 2323285.13 2323285.28 2323285.46 0.0140 0.0090

Uranus 1649-06-16 04:04 G 2323511.47 2323511.67 2323511.89 0.0140 0.0041

Uranus 1650-01-28 13:26 G 2323737.84 2323738.06 2323738.28 0.0139 0.0007

Uranus 1650-09-11 22:19 G 2323964.23 2323964.43 2323964.63 0.0139 0.0055

Jupiter 1651-04-15 07:26 G 2324179.61 2324179.81 2324180.00 0.0499 0.0133

Uranus 1651-04-26 07:11 G 2324190.66 2324190.80 2324190.95 0.0139 0.0103

Saturn 1658-08-05 09:50 G 2326848.79 2326848.91 2326849.04 0.0274 0.0223

Saturn 1659-03-22 16:19 G 2327077.97 2327078.18 2327078.39 0.0273 0.0013

Saturn 1659-11-06 21:21 G 2327307.25 2327307.39 2327307.54 0.0271 0.0194

Jupiter 1662-12-19 09:21 G 2328445.70 2328445.89 2328446.08 0.0497 0.0179

Mars 1664-11-22 05:02 G 2329149.67 2329149.71 2329149.75 0.1880 0.1815

Jupiter 1668-10-27 23:02 G 2330585.28 2330585.46 2330585.65 0.0527 0.0228

Mars 1669-07-03 18:00 G 2330834.11 2330834.25 2330834.39 0.1653 0.0910

Mars 1671-05-03 14:24 G 2331503.01 2331503.10 2331503.19 0.1672 0.1424

Saturn 1674-04-13 21:21 G 2332579.29 2332579.39 2332579.50 0.0286 0.0247

Jupiter 1674-08-24 11:31 G 2332711.95 2332711.98 2332712.02 0.0496 0.0488

Saturn 1674-11-29 15:50 G 2332808.95 2332809.16 2332809.37 0.0288 0.0005

Saturn 1675-07-17 11:45 G 2333038.88 2333038.99 2333039.10 0.0290 0.0247

Jupiter 1680-07-02 14:38 G 2334850.92 2334851.11 2334851.30 0.0530 0.0154

Jupiter 1686-12-21 18:43 G 2337214.13 2337214.28 2337214.44 0.0500 0.0323

Pluto 1687-05-12 12:28 G 2337355.97 2337356.02 2337356.13 0.0067 0.0062

Pluto 1687-12-23 18:00 G 2337581.05 2337581.25 2337581.46 0.0067 0.0023

Saturn 1688-02-15 15:07 G 2337634.98 2337635.13 2337635.28 0.0274 0.0194

Pluto 1688-08-04 22:48 G 2337806.25 2337806.45 2337806.67 0.0067 0.0016

Saturn 1688-10-01 21:35 G 2337864.19 2337864.40 2337864.61 0.0273 0.0017

Pluto 1689-03-18 03:35 G 2338031.55 2338031.65 2338031.79 0.0067 0.0056

Saturn 1689-05-19 02:24 G 2338093.49 2338093.60 2338093.73 0.0271 0.0223

Uranus 1692-10-27 10:48 G 2339350.86 2339350.95 2339351.06 0.0138 0.0122

Uranus 1693-06-10 18:28 G 2339577.11 2339577.27 2339577.47 0.0139 0.0076

Uranus 1694-01-23 03:07 G 2339803.41 2339803.63 2339803.84 0.0139 0.0028

Uranus 1694-09-06 11:31 G 2340029.76 2340029.98 2340030.19 0.0139 0.0020

Uranus 1695-04-20 19:40 G 2340256.14 2340256.32 2340256.52 0.0140 0.0068

Uranus 1695-12-03 04:04 G 2340482.56 2340482.67 2340482.81 0.0140 0.0116

Jupiter 1698-08-26 20:09 G 2341480.13 2341480.34 2341480.54 0.0498 0.0010

Mars 1698-09-19 10:19 G 2341503.76 2341503.93 2341504.10 0.1865 0.0547

Mars 1703-05-03 10:33 G 2343189.77 2343189.94 2343190.11 0.1664 0.0308

Saturn 1703-10-26 02:52 G 2343365.50 2343365.62 2343365.77 0.0285 0.0218

Saturn 1704-06-11 21:21 G 2343595.18 2343595.39 2343595.60 0.0287 0.0026

Jupiter 1704-07-06 16:04 G 2343620.08 2343620.17 2343620.28 0.0527 0.0456

Saturn 1705-01-27 16:48 G 2343825.15 2343825.20 2343825.27 0.0289 0.0277

Jupiter 1710-05-02 21:35 G 2345746.24 2345746.40 2345746.56 0.0496 0.0307

Neptune 1713-09-08 00:00 G 2346970.45 2346970.50 2346970.60 0.0089 0.0084

Neptune 1714-04-21 13:11 G 2347195.93 2347196.05 2347196.22 0.0089 0.0068

Neptune 1714-12-03 02:52 G 2347421.45 2347421.62 2347421.82 0.0089 0.0051

Neptune 1715-07-16 16:19 G 2347646.99 2347647.18 2347647.40 0.0089 0.0034

Neptune 1716-02-27 06:00 G 2347872.54 2347872.75 2347872.97 0.0089 0.0017

Jupiter 1716-03-11 09:07 G 2347885.68 2347885.88 2347886.08 0.0529 0.0081

Neptune 1716-10-09 19:26 G 2348098.09 2348098.31 2348098.53 0.0089 0.0001

Neptune 1717-05-23 08:38 G 2348323.65 2348323.86 2348324.08 0.0089 0.0016

Saturn 1717-08-28 14:24 G 2348420.95 2348421.10 2348421.27 0.0274 0.0176

Neptune 1718-01-03 21:35 G 2348549.21 2348549.40 2348549.62 0.0089 0.0033

Saturn 1718-04-14 20:52 G 2348650.16 2348650.37 2348650.58 0.0272 0.0035

Neptune 1718-08-17 11:16 G 2348774.79 2348774.97 2348775.16 0.0089 0.0049

Saturn 1718-11-30 01:55 G 2348879.48 2348879.58 2348879.68 0.0271 0.0240

Neptune 1719-03-31 00:14 G 2349000.38 2349000.51 2349000.68 0.0089 0.0065

Neptune 1719-11-11 13:26 G 2349225.99 2349226.06 2349226.17 0.0089 0.0082

Jupiter 1727-11-14 23:16 G 2352151.31 2352151.47 2352151.63 0.0530 0.0309

Mars 1730-09-20 07:55 G 2353191.72 2353191.83 2353191.94 0.1877 0.1432

Uranus 1732-07-03 04:19 G 2353843.55 2353843.68 2353843.82 0.0140 0.0110

Uranus 1733-02-14 13:40 G 2354069.88 2354070.07 2354070.28 0.0140 0.0062

Saturn 1733-05-07 06:00 G 2354151.60 2354151.75 2354151.92 0.0286 0.0190

Uranus 1733-09-28 23:02 G 2354296.25 2354296.46 2354296.68 0.0139 0.0013

Saturn 1733-12-23 00:43 G 2354381.33 2354381.53 2354381.74 0.0288 0.0057

Jupiter 1734-05-05 08:52 G 2354514.68 2354514.87 2354515.05 0.0499 0.0201

Uranus 1734-05-13 08:09 G 2354522.63 2354522.84 2354523.06 0.0139 0.0036

Uranus 1734-12-25 17:02 G 2354749.04 2354749.21 2354749.39 0.0139 0.0083

Mars 1735-05-02 05:45 G 2354876.59 2354876.74 2354876.90 0.1656 0.0779

Uranus 1735-08-09 01:26 G 2354975.51 2354975.56 2354975.66 0.0139 0.0131

Mars 1737-03-01 01:11 G 2355545.50 2355545.55 2355545.60 0.1675 0.1587

Jupiter 1746-01-08 08:52 G 2358780.67 2358780.87 2358781.07 0.0497 0.0120

Saturn 1747-03-10 20:09 G 2359207.16 2359207.34 2359207.52 0.0274 0.0145

Saturn 1747-10-26 02:24 G 2359436.40 2359436.60 2359436.81 0.0272 0.0066

Saturn 1748-06-11 07:26 G 2359665.81 2359665.81 2359665.83 0.0271 0.0270

Jupiter 1751-11-17 23:31 G 2360920.31 2360920.48 2360920.64 0.0528 0.0298

Jupiter 1757-09-13 10:48 G 2363046.86 2363046.95 2363047.06 0.0495 0.0430

Moon 1761-06-06 01:40 G 2364408.45 2364408.57 2364408.70 0.2630 0.1512

Earth 1761-06-06 05:16 G 2364408.59 2364408.72 2364408.84 0.2625 0.1579 *

Saturn 1762-11-17 13:40 G 2364937.90 2364938.07 2364938.25 0.0286 0.0156

Saturn 1763-07-05 08:09 G 2365167.64 2365167.84 2365168.05 0.0288 0.0090

Jupiter 1763-07-23 15:50 G 2365185.96 2365186.16 2365186.36 0.0530 0.0081

Mars 1764-07-17 14:38 G 2365545.96 2365546.11 2365546.27 0.1861 0.0887

Mars 1769-02-27 21:50 G 2367232.24 2367232.41 2367232.57 0.1667 0.0455

Earth 1769-06-03 22:19 G 2367328.31 2367328.43 2367328.55 0.2626 0.1699

Moon 1769-06-03 22:48 G 2367328.33 2367328.45 2367328.57 0.2632 0.1576 *

Jupiter 1770-01-10 18:57 G 2367549.16 2367549.29 2367549.42 0.0500 0.0386

Pluto 1774-05-31 18:00 G 2369151.09 2369151.25 2369151.45 0.0077 0.0046

Pluto 1775-01-12 03:50 G 2369376.45 2369376.66 2369376.88 0.0077 0.0015

Jupiter 1775-03-28 07:26 G 2369451.72 2369451.81 2369451.92 0.0532 0.0466

Pluto 1775-08-25 12:28 G 2369602.00 2369602.02 2369602.10 0.0077 0.0075

Saturn 1776-09-19 20:52 G 2369993.18 2369993.37 2369993.56 0.0274 0.0124

Uranus 1777-02-09 03:07 G 2370135.49 2370135.63 2370135.80 0.0138 0.0097

Saturn 1777-05-07 02:52 G 2370222.42 2370222.62 2370222.83 0.0272 0.0086

Uranus 1777-09-23 11:31 G 2370361.78 2370361.98 2370362.19 0.0139 0.0050

Uranus 1778-05-07 19:40 G 2370588.11 2370588.32 2370588.54 0.0139 0.0003

Uranus 1778-12-20 03:50 G 2370814.46 2370814.66 2370814.87 0.0139 0.0045

Uranus 1779-08-03 12:28 G 2371040.86 2371041.02 2371041.18 0.0140 0.0093

Jupiter 1781-09-15 20:24 G 2371815.15 2371815.35 2371815.55 0.0498 0.0069

Jupiter 1787-07-26 16:04 G 2373955.14 2373955.17 2373955.19 0.0526 0.0521

Saturn 1792-05-29 17:31 G 2375724.04 2375724.23 2375724.42 0.0287 0.0126

Saturn 1793-01-14 12:14 G 2375953.82 2375954.01 2375954.21 0.0289 0.0121

Jupiter 1793-05-21 22:04 G 2376081.24 2376081.42 2376081.60 0.0497 0.0245

Neptune 1795-10-24 08:52 G 2376966.82 2376966.87 2376966.96 0.0088 0.0083

Neptune 1796-06-05 21:21 G 2377192.28 2377192.39 2377192.55 0.0088 0.0068

Mars 1796-07-17 11:45 G 2377233.85 2377233.99 2377234.13 0.1873 0.1070

Neptune 1797-01-17 10:19 G 2377417.77 2377417.93 2377418.12 0.0088 0.0052

Neptune 1797-08-30 23:02 G 2377643.27 2377643.46 2377643.67 0.0088 0.0036

Neptune 1798-04-13 11:31 G 2377868.78 2377868.98 2377869.21 0.0088 0.0021

Neptune 1798-11-25 00:28 G 2378094.30 2378094.52 2378094.74 0.0088 0.0005

Jupiter 1799-03-31 07:40 G 2378220.63 2378220.82 2378221.02 0.0529 0.0142

Neptune 1799-07-08 12:57 G 2378319.83 2378320.04 2378320.27 0.0088 0.0011

Neptune 1800-02-19 01:40 G 2378545.37 2378545.57 2378545.79 0.0088 0.0027

Neptune 1800-10-02 14:24 G 2378770.91 2378771.10 2378771.30 0.0088 0.0042

Mars 1801-02-27 17:16 G 2378919.07 2378919.22 2378919.38 0.1658 0.0642

Neptune 1801-05-16 02:52 G 2378996.47 2378996.62 2378996.80 0.0088 0.0058

Neptune 1801-12-27 15:21 G 2379222.04 2379222.14 2379222.28 0.0088 0.0074

Saturn 1806-04-03 02:52 G 2380779.42 2380779.62 2380779.82 0.0274 0.0094

Saturn 1806-11-18 08:52 G 2381008.68 2381008.87 2381009.07 0.0272 0.0116

Jupiter 1810-12-04 21:21 G 2382486.22 2382486.39 2382486.57 0.0531 0.0250

Uranus 1816-03-03 12:57 G 2384401.97 2384402.04 2384402.12 0.0140 0.0132

Uranus 1816-10-15 22:19 G 2384628.27 2384628.43 2384628.62 0.0140 0.0083

Jupiter 1817-05-25 06:57 G 2384849.62 2384849.79 2384849.97 0.0499 0.0256

Uranus 1817-05-30 07:55 G 2384854.62 2384854.83 2384855.04 0.0140 0.0034

Uranus 1818-01-11 17:02 G 2385081.00 2385081.21 2385081.43 0.0139 0.0015

Uranus 1818-08-26 01:55 G 2385307.40 2385307.58 2385307.79 0.0139 0.0063

Uranus 1819-04-09 11:02 G 2385533.84 2385533.96 2385534.10 0.0139 0.0110

Saturn 1821-12-11 02:09 G 2386510.40 2386510.59 2386510.80 0.0286 0.0091

Saturn 1822-07-28 21:07 G 2386740.21 2386740.38 2386740.56 0.0288 0.0157

Jupiter 1829-01-28 07:26 G 2389115.61 2389115.81 2389116.02 0.0497 0.0064

Mars 1830-05-15 18:28 G 2389588.14 2389588.27 2389588.40 0.1858 0.1239

Jupiter 1834-12-08 00:28 G 2391255.37 2391255.52 2391255.66 0.0528 0.0370

Mars 1834-12-27 09:07 G 2391274.72 2391274.88 2391275.04 0.1669 0.0605

Saturn 1835-10-14 05:16 G 2391565.52 2391565.72 2391565.93 0.0274 0.0069

Saturn 1836-05-30 11:02 G 2391794.78 2391794.96 2391795.15 0.0272 0.0140

Jupiter 1840-10-03 09:35 G 2393381.77 2393381.90 2393382.04 0.0496 0.0375

Jupiter 1846-08-12 15:07 G 2395520.93 2395521.13 2395521.33 0.0529 0.0018

Saturn 1851-06-23 06:43 G 2397296.58 2397296.78 2397296.99 0.0287 0.0059

Saturn 1852-02-08 01:40 G 2397526.42 2397526.57 2397526.74 0.0289 0.0190

Jupiter 1853-01-30 18:28 G 2397884.19 2397884.27 2397884.36 0.0500 0.0448

Jupiter 1858-04-17 05:16 G 2399786.59 2399786.72 2399786.85 0.0531 0.0410

Uranus 1860-10-10 11:16 G 2400693.87 2400693.97 2400694.09 0.0138 0.0118

Uranus 1861-05-24 19:26 G 2400920.13 2400920.31 2400920.50 0.0138 0.0072

Uranus 1862-01-06 03:21 G 2401146.43 2401146.64 2401146.86 0.0139 0.0025

Mars 1862-05-15 14:38 G 2401275.95 2401276.11 2401276.28 0.1870 0.0693

Uranus 1862-08-20 11:31 G 2401372.77 2401372.98 2401373.20 0.0139 0.0023

Uranus 1863-04-03 19:40 G 2401599.15 2401599.32 2401599.52 0.0139 0.0071

Uranus 1863-11-16 04:04 G 2401825.57 2401825.67 2401825.80 0.0140 0.0119

Saturn 1864-09-08 04:19 G 2402122.60 2402122.68 2402122.77 0.0275 0.0251

Jupiter 1864-10-05 18:57 G 2402150.09 2402150.29 2402150.48 0.0498 0.0127

Saturn 1865-04-25 11:31 G 2402351.77 2402351.98 2402352.19 0.0273 0.0038

Saturn 1865-12-10 17:16 G 2402581.06 2402581.22 2402581.39 0.0272 0.0170

Mars 1866-12-26 05:02 G 2402961.55 2402961.71 2402961.88 0.1660 0.0502

Earth 1874-12-09 04:04 G 2405866.59 2405866.67 2405866.75 0.2707 0.2299

Moon 1874-12-09 03:50 G 2405866.62 2405866.66 2405866.70 0.2715 0.2604 *

Jupiter 1876-06-10 19:55 G 2406416.15 2406416.33 2406416.52 0.0496 0.0191

Neptune 1878-07-24 22:33 G 2407190.35 2407190.44 2407190.59 0.0089 0.0076

Neptune 1879-03-07 12:14 G 2407415.86 2407416.01 2407416.19 0.0089 0.0059

Neptune 1879-10-19 01:26 G 2407641.39 2407641.56 2407641.78 0.0089 0.0043

Saturn 1880-05-17 23:31 G 2407853.41 2407853.48 2407853.58 0.0285 0.0260

Neptune 1880-05-31 15:07 G 2407866.93 2407867.13 2407867.35 0.0089 0.0025

Saturn 1881-01-02 17:31 G 2408083.02 2408083.23 2408083.44 0.0287 0.0019

Neptune 1881-01-12 04:33 G 2408092.47 2408092.69 2408092.91 0.0089 0.0009

Saturn 1881-08-20 12:28 G 2408312.90 2408313.02 2408313.15 0.0289 0.0229

Neptune 1881-08-25 18:00 G 2408318.04 2408318.25 2408318.48 0.0089 0.0008

Neptune 1882-04-08 07:26 G 2408543.60 2408543.81 2408544.02 0.0089 0.0024

Jupiter 1882-04-20 05:45 G 2408555.55 2408555.74 2408555.92 0.0529 0.0203

Neptune 1882-11-19 20:24 G 2408769.17 2408769.35 2408769.56 0.0089 0.0042

Earth 1882-12-06 17:02 G 2408786.09 2408786.21 2408786.33 0.2706 0.1777

Moon 1882-12-06 21:07 G 2408786.25 2408786.38 2408786.52 0.2712 0.1195 *

Neptune 1883-07-03 09:50 G 2408994.76 2408994.91 2408995.09 0.0089 0.0058

Neptune 1884-02-13 22:48 G 2409220.36 2409220.45 2409220.60 0.0089 0.0075

Jupiter 1893-12-23 21:50 G 2412821.22 2412821.41 2412821.60 0.0531 0.0181

Saturn 1894-03-21 08:38 G 2412908.74 2412908.86 2412908.98 0.0275 0.0223

Saturn 1894-11-05 15:21 G 2413137.93 2413138.14 2413138.35 0.0273 0.0011

Saturn 1895-06-22 20:38 G 2413367.23 2413367.36 2413367.52 0.0272 0.0197

Mars 1896-03-11 22:19 G 2413630.35 2413630.43 2413630.53 0.1854 0.1582

Mars 1898-12-25 00:28 G 2414648.47 2414648.52 2414648.57 0.1652 0.1578

Jupiter 1900-06-14 04:48 G 2415184.54 2415184.70 2415184.86 0.0499 0.0311

Uranus 1900-06-16 06:28 G 2415186.64 2415186.77 2415186.93 0.0140 0.0105

Mars 1900-10-24 20:38 G 2415317.20 2415317.36 2415317.51 0.1672 0.0755

Uranus 1901-01-28 16:04 G 2415412.98 2415413.17 2415413.38 0.0140 0.0056

Uranus 1901-09-12 01:40 G 2415639.35 2415639.57 2415639.79 0.0140 0.0007

Uranus 1902-04-26 10:48 G 2415865.75 2415865.95 2415866.17 0.0139 0.0042

Uranus 1902-12-08 19:40 G 2416092.17 2416092.32 2416092.50 0.0139 0.0089

Uranus 1903-07-23 04:19 G 2416318.66 2416318.68 2416318.74 0.0139 0.0137

Saturn 1909-11-29 03:50 G 2418639.54 2418639.66 2418639.79 0.0286 0.0230

Saturn 1910-07-16 22:04 G 2418869.20 2418869.42 2418869.63 0.0288 0.0014

Saturn 1911-03-03 17:16 G 2419099.14 2419099.22 2419099.31 0.0289 0.0263

Jupiter 1912-02-18 06:14 G 2419450.55 2419450.76 2419450.96 0.0497 0.0013

Jupiter 1917-12-27 20:52 G 2421590.25 2421590.37 2421590.49 0.0527 0.0421

Saturn 1923-10-02 15:07 G 2423694.99 2423695.13 2423695.29 0.0275 0.0192

Jupiter 1923-10-24 07:40 G 2423716.67 2423716.82 2423716.98 0.0495 0.0321

Saturn 1924-05-18 22:04 G 2423924.21 2423924.42 2423924.63 0.0273 0.0021

Saturn 1925-01-03 03:35 G 2424153.54 2424153.65 2424153.77 0.0271 0.0227

Mars 1928-03-12 18:57 G 2425318.12 2425318.29 2425318.47 0.1866 0.0345

Jupiter 1929-09-01 10:19 G 2425855.73 2425855.93 2425856.14 0.0530 0.0032

Mars 1932-10-23 17:02 G 2427004.04 2427004.21 2427004.38 0.1663 0.0367

Pluto 1935-04-17 23:45 G 2427910.43 2427910.49 2427910.57 0.0067 0.0063

Pluto 1935-11-29 04:33 G 2428135.51 2428135.69 2428135.92 0.0067 0.0025

Jupiter 1936-02-20 15:21 G 2428219.14 2428219.14 2428219.15 0.0500 0.0500

Pluto 1936-07-11 09:35 G 2428360.70 2428360.90 2428361.13 0.0067 0.0015

Pluto 1937-02-21 14:24 G 2428586.00 2428586.10 2428586.26 0.0067 0.0055

Saturn 1939-06-11 15:21 G 2429425.99 2429426.14 2429426.31 0.0285 0.0189

Saturn 1940-01-27 09:35 G 2429655.70 2429655.90 2429656.11 0.0287 0.0056

Jupiter 1941-05-07 01:26 G 2430121.41 2430121.56 2430121.71 0.0532 0.0359

Uranus 1945-01-23 04:19 G 2431478.53 2431478.68 2431478.85 0.0138 0.0093

Uranus 1945-09-06 12:28 G 2431704.82 2431705.02 2431705.23 0.0139 0.0046

Uranus 1946-04-20 20:38 G 2431931.15 2431931.36 2431931.58 0.0139 0.0003

Uranus 1946-12-03 04:48 G 2432157.50 2432157.70 2432157.91 0.0139 0.0049

Uranus 1947-07-17 12:57 G 2432383.90 2432384.04 2432384.21 0.0139 0.0097

Jupiter 1947-10-26 14:52 G 2432484.93 2432485.12 2432485.31 0.0498 0.0173

Saturn 1953-04-13 20:38 G 2434481.20 2434481.36 2434481.54 0.0275 0.0160

Saturn 1953-11-29 03:07 G 2434710.43 2434710.63 2434710.84 0.0273 0.0052

Saturn 1954-07-16 08:24 G 2434939.79 2434939.85 2434939.92 0.0271 0.0256

Jupiter 1959-07-01 16:19 G 2436750.98 2436751.18 2436751.37 0.0497 0.0145

Neptune 1960-09-09 07:40 G 2437186.71 2437186.82 2437186.93 0.0088 0.0075

Neptune 1961-04-22 19:55 G 2437412.19 2437412.33 2437412.51 0.0088 0.0060

Neptune 1961-12-04 08:38 G 2437637.68 2437637.86 2437638.06 0.0088 0.0044

Neptune 1962-07-17 21:35 G 2437863.19 2437863.40 2437863.61 0.0088 0.0028

Neptune 1963-02-28 10:19 G 2438088.72 2438088.93 2438089.15 0.0088 0.0013

Neptune 1963-10-11 23:02 G 2438314.24 2438314.46 2438314.68 0.0088 0.0003

Neptune 1964-05-24 11:31 G 2438539.77 2438539.98 2438540.20 0.0088 0.0019

Mars 1964-10-22 12:00 G 2438690.92 2438691.00 2438691.09 0.1655 0.1445

Neptune 1965-01-05 00:00 G 2438765.31 2438765.50 2438765.71 0.0088 0.0035

Jupiter 1965-05-10 03:21 G 2438890.47 2438890.64 2438890.82 0.0528 0.0260

Neptune	1965-08-18 12:28 G	2438990.86	2438991.02	2438991.22	0.0088	0.0051
Neptune	1966-04-01 01:40 G	2439216.43	2439216.57	2439216.71	0.0088	0.0066
Mars	1966-08-22 07:40 G	2439359.67	2439359.82	2439359.96	0.1674	0.0910
Neptune	1966-11-12 13:55 G	2439442.02	2439442.08	2439442.17	0.0088	0.0082
Saturn	1968-12-21 19:55 G	2440212.16	2440212.33	2440212.52	0.0286	0.0157
Saturn	1969-08-08 14:38 G	2440441.91	2440442.11	2440442.31	0.0288	0.0089
Jupiter	1971-03-06 18:28 G	2441017.20	2441017.27	2441017.35	0.0495	0.0455
Jupiter	1977-01-12 17:45 G	2443156.04	2443156.24	2443156.43	0.0530	0.0132
Saturn	1982-10-25 03:21 G	2445267.46	2445267.64	2445267.83	0.0274	0.0128
Saturn	1983-06-11 09:35 G	2445496.71	2445496.90	2445497.11	0.0272	0.0083
Jupiter	1983-07-04 02:09 G	2445519.46	2445519.59	2445519.73	0.0499	0.0365
Uranus	1984-02-14 14:38 G	2445745.03	2445745.11	2445745.21	0.0140	0.0127
Uranus	1984-09-28 00:14 G	2445971.34	2445971.51	2445971.70	0.0140	0.0078
Uranus	1985-05-12 09:50 G	2446197.70	2446197.91	2446198.13	0.0140	0.0029
Uranus	1985-12-24 19:11 G	2446424.08	2446424.30	2446424.52	0.0139	0.0019
Uranus	1986-08-08 04:19 G	2446650.49	2446650.68	2446650.87	0.0139	0.0067
Uranus	1987-03-22 13:11 G	2446876.94	2446877.05	2446877.18	0.0139	0.0115
Mars	1994-01-07 22:48 G	2449360.27	2449360.45	2449360.63	0.1862	0.0017
Jupiter	1995-03-09 02:52 G	2449785.41	2449785.62	2449785.82	0.0497	0.0043
Saturn	1998-07-04 07:55 G	2450998.64	2450998.83	2450999.03	0.0286	0.0115
Mars	1998-08-21 04:04 G	2451046.50	2451046.67	2451046.84	0.1665	0.0218
Saturn	1999-02-19 02:38 G	2451228.43	2451228.61	2451228.80	0.0288	0.0132

3RD MILLENNIUM CE

This is a list of transits of Venus in the 3rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**2001-01-15 16:19**	**G**	**2451925.09**	**2451925.18**	**2451925.27**	**0.0528**	**0.0472**	
Earth	**2004-06-08 08:09**	**G**	**2453164.73**	**2453164.84**	**2453164.96**	**0.2626**	**0.1736**	
Moon	**2004-06-08 13:26**	**G**	**2453164.95**	**2453165.06**	**2453165.16**	**0.2624**	**0.1939**	*****
Jupiter	**2006-11-12 02:24**	**G**	**2454051.44**	**2454051.60**	**2454051.77**	**0.0496**	**0.0281**	
Saturn	**2012-05-06 10:04**	**G**	**2456053.73**	**2456053.92**	**2456054.13**	**0.0274**	**0.0094**	
Earth	**2012-06-06 01:26**	**G**	**2456084.43**	**2456084.56**	**2456084.69**	**0.2627**	**0.1546**	
Moon	**2012-06-06 03:21**	**G**	**2456084.49**	**2456084.64**	**2456084.79**	**0.2621**	**0.1160**	*****
Jupiter	**2012-09-20 09:21**	**G**	**2456190.69**	**2456190.89**	**2456191.09**	**0.0530**	**0.0094**	
Saturn	**2012-12-21 16:04**	**G**	**2456282.98**	**2456283.17**	**2456283.37**	**0.0272**	**0.0116**	
Pluto	**2022-05-06 04:48**	**G**	**2459705.55**	**2459705.70**	**2459705.89**	**0.0077**	**0.0050**	
Pluto	**2022-12-17 14:38**	**G**	**2459930.90**	**2459931.11**	**2459931.34**	**0.0077**	**0.0012**	
Pluto	**2023-07-30 23:16**	**G**	**2460156.42**	**2460156.47**	**2460156.58**	**0.0077**	**0.0072**	
Jupiter	**2024-05-25 23:31**	**G**	**2460456.32**	**2460456.48**	**2460456.65**	**0.0531**	**0.0300**	
Saturn	**2028-01-14 12:28**	**G**	**2461784.81**	**2461785.02**	**2461785.22**	**0.0287**	**0.0083**	
Saturn	**2028-08-31 07:11**	**G**	**2462014.63**	**2462014.80**	**2462014.98**	**0.0289**	**0.0164**	
Uranus	**2028-09-22 13:26**	**G**	**2462036.95**	**2462037.06**	**2462037.19**	**0.0138**	**0.0113**	
Uranus	**2029-05-06 21:07**	**G**	**2462263.21**	**2462263.38**	**2462263.59**	**0.0138**	**0.0068**	
Uranus	**2029-12-19 05:16**	**G**	**2462489.51**	**2462489.72**	**2462489.94**	**0.0139**	**0.0020**	
Uranus	**2030-08-02 13:26**	**G**	**2462715.85**	**2462716.06**	**2462716.27**	**0.0139**	**0.0027**	
Mars	**2030-08-19 23:45**	**G**	**2462733.38**	**2462733.49**	**2462733.59**	**0.1657**	**0.1311**	
Jupiter	**2030-11-14 12:14**	**G**	**2462819.83**	**2462820.01**	**2462820.19**	**0.0498**	**0.0225**	
Uranus	**2031-03-16 21:35**	**G**	**2462942.22**	**2462942.40**	**2462942.59**	**0.0139**	**0.0075**	
Uranus	**2031-10-29 05:45**	**G**	**2463168.66**	**2463168.74**	**2463168.86**	**0.0140**	**0.0123**	
Mars	**2032-06-18 18:43**	**G**	**2463402.15**	**2463402.28**	**2463402.42**	**0.1677**	**0.1069**	
Saturn	**2041-11-16 16:19**	**G**	**2466839.97**	**2466840.18**	**2466840.39**	**0.0274**	**0.0063**	
Saturn	**2042-07-03 22:19**	**G**	**2467069.25**	**2467069.43**	**2467069.61**	**0.0272**	**0.0145**	
Jupiter	**2042-07-20 13:40**	**G**	**2467085.87**	**2467086.07**	**2467086.27**	**0.0496**	**0.0092**	

Neptune 2042-10-27 07:55 G 2467184.77 2467184.83 2467184.92 0.0089 0.0084

Neptune 2043-06-09 20:52 G 2467410.25 2467410.37 2467410.54 0.0089 0.0068

Neptune 2044-01-21 10:33 G 2467635.77 2467635.94 2467636.13 0.0089 0.0051

Neptune 2044-09-03 00:14 G 2467861.31 2467861.51 2467861.71 0.0089 0.0034

Neptune 2045-04-16 13:26 G 2468086.85 2468087.06 2468087.28 0.0089 0.0017

Neptune 2045-11-28 02:52 G 2468312.40 2468312.62 2468312.84 0.0089 0.0000

Neptune 2046-07-11 16:04 G 2468537.96 2468538.17 2468538.39 0.0089 0.0016

Neptune 2047-02-22 05:31 G 2468763.53 2468763.73 2468763.94 0.0089 0.0033

Neptune 2047-10-05 18:43 G 2468989.11 2468989.28 2468989.47 0.0089 0.0050

Neptune 2048-05-18 07:40 G 2469214.70 2469214.82 2469214.99 0.0089 0.0067

Jupiter 2048-05-28 21:07 G 2469225.22 2469225.38 2469225.55 0.0529 0.0302

Neptune 2048-12-29 21:21 G 2469440.32 2469440.39 2469440.48 0.0089 0.0083

Jupiter 2054-03-25 15:07 G 2471352.02 2471352.13 2471352.25 0.0495 0.0407

Saturn 2056-12-09 06:28 G 2472341.74 2472341.77 2472341.81 0.0285 0.0280

Saturn 2057-07-27 00:28 G 2472571.31 2472571.52 2472571.73 0.0287 0.0040

Saturn 2058-03-13 19:26 G 2472801.18 2472801.31 2472801.47 0.0289 0.0209

Mars 2059-11-05 03:35 G 2473402.47 2473402.65 2473402.82 0.1859 0.0349

Jupiter 2060-02-01 12:28 G 2473490.82 2473491.02 2473491.22 0.0531 0.0086

Mars 2064-06-17 15:50 G 2475088.99 2475089.16 2475089.33 0.1668 0.0076

Jupiter 2066-07-22 20:24 G 2475854.24 2475854.35 2475854.47 0.0499 0.0405

Uranus 2068-05-28 08:52 G 2476529.74 2476529.87 2476530.04 0.0140 0.0101

Uranus 2069-01-09 18:43 G 2476756.08 2476756.28 2476756.49 0.0140 0.0051

Uranus 2069-08-24 04:04 G 2476982.46 2476982.67 2476982.89 0.0140 0.0003

Uranus 2070-04-07 13:26 G 2477208.86 2477209.06 2477209.27 0.0139 0.0046

Saturn 2070-10-12 17:02 G 2477397.11 2477397.21 2477397.32 0.0275 0.0239

Uranus 2070-11-19 22:19 G 2477435.28 2477435.43 2477435.60 0.0139 0.0094

Saturn 2071-05-30 00:00 G 2477626.29 2477626.50 2477626.71 0.0273 0.0027

Jupiter 2071-10-07 04:19 G 2477756.60 2477756.68 2477756.78 0.0532 0.0475

Saturn 2072-01-14 05:31 G 2477855.58 2477855.73 2477855.89 0.0272 0.0180

Jupiter 2078-03-27 21:50 G 2480120.20 2480120.41 2480120.61 0.0497 0.0084

Saturn 2086-06-21 10:19 G 2483127.84 2483127.93 2483128.04 0.0285 0.0251

Saturn 2087-02-06 04:19 G 2483357.47 2483357.68 2483357.90 0.0287 0.0011

Saturn 2087-09-23 23:31 G 2483587.37 2483587.48 2483587.60 0.0289 0.0240

Jupiter 2089-11-30 23:31 G 2484386.30 2484386.48 2484386.66 0.0496 0.0232

Mars 2091-11-05 00:14 G 2485090.43 2485090.51 2485090.60 0.1871 0.1624

Jupiter 2095-10-10 05:16 G 2486525.53 2486525.72 2486525.92 0.0529 0.0144

Mars 2096-06-16 11:16 G 2486775.85 2486775.97 2486776.09 0.1659 0.1175

Mars 2098-04-16 06:00 G 2487444.64 2487444.75 2487444.87 0.1679 0.1225

Saturn 2100-04-24 22:19 G 2488183.30 2488183.43 2488183.57 0.0275 0.0211

Saturn 2100-12-10 05:16 G 2488412.50 2488412.72 2488412.93 0.0273 0.0004

Saturn 2101-07-27 10:48 G 2488641.82 2488641.95 2488642.08 0.0271 0.0208

Jupiter 2107-06-15 17:31 G 2490791.05 2490791.23 2490791.40 0.0531 0.0260

Uranus 2112-05-23 23:31 G 2492595.44 2492595.48 2492595.55 0.0138 0.0133

Uranus 2113-01-05 07:11 G 2492821.65 2492821.80 2492821.98 0.0138 0.0087

Uranus 2113-08-19 15:21 G 2493047.94 2493048.14 2493048.35 0.0139 0.0040

Jupiter 2113-12-04 08:52 G 2493154.70 2493154.87 2493155.04 0.0498 0.0275

Uranus 2114-04-02 23:31 G 2493274.26 2493274.48 2493274.70 0.0139 0.0007

Uranus 2114-11-15 07:40 G 2493500.62 2493500.82 2493501.02 0.0139 0.0054

Uranus 2115-06-29 15:35 G 2493727.02 2493727.15 2493727.31 0.0139 0.0103

Saturn 2116-01-02 21:21 G 2493914.25 2493914.39 2493914.54 0.0286 0.0210

Saturn 2116-08-19 15:50 G 2494143.95 2494144.16 2494144.37 0.0287 0.0034

Saturn 2117-04-06 11:16 G 2494373.93 2494373.97 2494374.02 0.0289 0.0282

Earth 2117-12-11 02:38 G 2494622.51 2494622.61 2494622.72 0.2706 0.2005

Moon 2117-12-11 05:02 G 2494622.60 2494622.71 2494622.83 0.2700 0.1893 *

Neptune 2124-12-12 16:04 G 2497181.13 2497181.17 2497181.25 0.0088 0.0084

Neptune 2125-07-26 05:02 G 2497406.58 2497406.71 2497406.86 0.0088 0.0068

Jupiter 2125-08-09 07:40 G 2497420.62 2497420.82 2497421.03 0.0496 0.0056

Mars 2125-09-02 07:26 G 2497444.64 2497444.81 2497444.97 0.1855 0.0699

Moon 2125-12-08 13:11 G 2497541.96 2497542.05 2497542.15 0.2699 0.2224

Earth 2125-12-08 16:04 G 2497542.06 2497542.17 2497542.27 0.2706 0.2053 *

Neptune 2126-03-08 18:00 G 2497632.08 2497632.25 2497632.43 0.0088 0.0052

Neptune 2126-10-20 06:28 G 2497857.58 2497857.77 2497857.98 0.0088 0.0037

Neptune 2127-06-02 19:11 G 2498083.09 2498083.30 2498083.52 0.0088 0.0021

Neptune 2128-01-14 07:55 G 2498308.61 2498308.83 2498309.05 0.0088 0.0005

Neptune 2128-08-26 20:38 G 2498534.14 2498534.36 2498534.58 0.0088 0.0011

Neptune 2129-04-09 09:07 G 2498759.68 2498759.88 2498760.10 0.0088 0.0027

Saturn 2129-11-05 06:43 G 2498969.62 2498969.78 2498969.95 0.0275 0.0173

Neptune 2129-11-20 21:35 G 2498985.22 2498985.40 2498985.61 0.0088 0.0043

Mars 2130-04-16 02:52 G 2499131.45 2499131.62 2499131.79 0.1670 0.0080

Saturn 2130-06-22 13:11 G 2499198.84 2499199.05 2499199.26 0.0273 0.0038

Neptune 2130-07-04 10:04 G 2499210.78 2499210.92 2499211.11 0.0088 0.0059

Saturn 2131-02-06 18:28 G 2499428.18 2499428.27 2499428.36 0.0271 0.0244

Neptune 2131-02-14 23:16 G 2499436.36 2499436.47 2499436.59 0.0088 0.0074

Jupiter 2131-06-18 20:24 G 2499560.21 2499560.35 2499560.50 0.0529 0.0367

Jupiter 2137-04-14 09:50 G 2501686.78 2501686.91 2501687.05 0.0495 0.0369

Jupiter 2143-02-21 11:45 G 2503825.79 2503825.99 2503826.20 0.0530 0.0025

Saturn 2145-07-15 00:43 G 2504700.38 2504700.53 2504700.70 0.0286 0.0182

Saturn 2146-03-01 19:11 G 2504930.09 2504930.30 2504930.51 0.0288 0.0063

Jupiter 2149-08-11 18:14 G 2506189.19 2506189.26 2506189.34 0.0500 0.0459

Uranus 2152-01-27 18:28 G 2507088.18 2507088.27 2507088.40 0.0140 0.0122

Uranus 2152-09-10 04:19 G 2507314.50 2507314.68 2507314.88 0.0140 0.0072

Uranus 2153-04-24 13:55 G 2507540.87 2507541.08 2507541.30 0.0140 0.0023

Uranus 2153-12-06 23:16 G 2507767.25 2507767.47 2507767.68 0.0140 0.0026

Uranus 2154-07-21 07:55 G 2507993.66 2507993.83 2507994.03 0.0139 0.0075

Jupiter 2154-10-27 01:40 G 2508091.45 2508091.57 2508091.70 0.0532 0.0420

Uranus 2155-03-04 17:16 G 2508220.11 2508220.22 2508220.32 0.0139 0.0121

Mars 2157-09-02 03:35 G 2509132.52 2509132.65 2509132.78 0.1868 0.1247

Saturn 2159-05-18 10:48 G 2509755.78 2509755.95 2509756.14 0.0274 0.0147

Saturn 2160-01-02 17:16 G 2509985.02 2509985.22 2509985.43 0.0273 0.0065

Saturn 2160-08-18 22:33 G 2510214.42 2510214.44 2510214.47 0.0271 0.0269

Jupiter 2161-04-16 19:55 G 2510455.14 2510455.33 2510455.53 0.0498 0.0140

Mars 2162-04-14 22:48 G 2510818.32 2510818.45 2510818.59 0.1662 0.1034

Mars 2164-02-12 16:33 G 2511487.10 2511487.19 2511487.29 0.1683 0.1397

Jupiter 2172-12-20 20:52 G 2514721.19 2514721.37 2514721.57 0.0496 0.0181

Saturn 2175-01-25 10:48 G 2515486.76 2515486.95 2515487.13 0.0286 0.0141

Saturn 2175-09-12 05:16 G 2515716.53 2515716.72 2515716.92 0.0288 0.0104

Jupiter 2178-10-30 01:11 G 2516860.36 2516860.55 2516860.74 0.0529 0.0194

Pluto 2183-11-02 13:11 G 2518689.88 2518690.05 2518690.26 0.0067 0.0034

Pluto 2184-06-14 18:43 G 2518915.06 2518915.28 2518915.50 0.0067 0.0005

Pluto 2185-01-25 23:02 G 2519140.33 2519140.46 2519140.65 0.0067 0.0046

Saturn 2188-11-27 18:57 G 2520542.10 2520542.29 2520542.49 0.0274 0.0109

Saturn 2189-07-15 01:11 G 2520771.35 2520771.55 2520771.75 0.0273 0.0101

Jupiter 2190-07-04 17:31 G 2521126.04 2521126.23 2521126.42 0.0532 0.0193

Mars 2191-06-30 12:00 G 2521486.85 2521487.00 2521487.14 0.1852 0.1033

Mars 2196-02-11 13:55 G 2523173.91 2523174.08 2523174.26 0.1673 0.0236

Uranus 2196-09-04 17:02 G 2523380.08 2523380.21 2523380.35 0.0138 0.0108

Jupiter 2196-12-23 04:04 G 2523489.52 2523489.67 2523489.83 0.0498 0.0318

Uranus 2197-04-19 00:43 G 2523606.34 2523606.53 2523606.73 0.0138 0.0061

Uranus 2197-12-01 08:38 G 2523832.65 2523832.86 2523833.08 0.0139 0.0015

Uranus 2198-07-15 16:33 G 2524058.99 2524059.19 2524059.41 0.0139 0.0033

Uranus 2199-02-27 00:43 G 2524285.36 2524285.53 2524285.72 0.0139 0.0081

Uranus 2199-10-11 09:07 G 2524511.81 2524511.88 2524511.98 0.0140 0.0129

Saturn 2204-08-07 13:26 G 2526272.87 2526273.06 2526273.26 0.0286 0.0114

Saturn 2205-03-25 07:55 G 2526502.65 2526502.83 2526503.02 0.0288 0.0132

Neptune 2207-09-13 06:00 G 2527404.64 2527404.75 2527404.87 0.0089 0.0076

Neptune 2208-04-25 18:57 G 2527630.14 2527630.29 2527630.47 0.0089 0.0060

Jupiter 2208-08-29 06:00 G 2527755.55 2527755.75 2527755.96 0.0497 0.0005

Neptune 2208-12-07 08:24 G 2527855.67 2527855.85 2527856.06 0.0089 0.0043

Neptune 2209-07-20 22:04 G 2528081.21 2528081.42 2528081.63 0.0089 0.0026

Neptune 2210-03-03 11:16 G 2528306.76 2528306.97 2528307.20 0.0089 0.0009

Neptune 2210-10-15 00:43 G 2528532.31 2528532.53 2528532.75 0.0089 0.0008

Neptune 2211-05-28 13:55 G 2528757.87 2528758.08 2528758.30 0.0089 0.0024

Neptune 2212-01-09 02:52 G 2528983.45 2528983.62 2528983.84 0.0089 0.0042

Neptune 2212-08-21 16:48 G 2529209.04 2529209.20 2529209.37 0.0089 0.0058

Neptune 2213-04-04 05:45 G 2529434.64 2529434.74 2529434.88 0.0089 0.0075

Jupiter 2214-07-08 18:43 G 2529895.16 2529895.28 2529895.40 0.0528 0.0425

Saturn 2218-06-10 21:50 G 2531328.21 2531328.41 2531328.62 0.0274 0.0085

Saturn 2219-01-26 04:04 G 2531557.49 2531557.67 2531557.86 0.0272 0.0125

Jupiter 2220-05-04 08:52 G 2532021.71 2532021.87 2532022.02 0.0495 0.0313

Mars 2223-07-01 07:26 G 2533174.66 2533174.81 2533174.97 0.1864 0.0890

Jupiter 2226-03-13 07:55 G 2534160.62 2534160.83 2534161.03 0.0530 0.0029

Mars 2228-02-11 10:04 G 2534860.78 2534860.92 2534861.07 0.1664 0.0892

Mars 2229-12-11 03:50 G 2535529.60 2535529.66 2535529.73 0.1685 0.1556

Saturn 2234-02-17 21:50 G 2537059.21 2537059.41 2537059.62 0.0287 0.0077

Saturn 2234-10-05 16:33 G 2537289.03 2537289.19 2537289.37 0.0289 0.0171

Uranus 2236-05-11 14:52 G 2537872.96 2537873.12 2537873.29 0.0140 0.0092

Uranus 2236-12-24 00:28 G 2538099.31 2538099.52 2538099.73 0.0140 0.0042

Uranus 2237-08-07 09:50 G 2538325.69 2538325.91 2538326.13 0.0140 0.0007

Jupiter 2237-11-15 22:19 G 2538426.29 2538426.43 2538426.58 0.0532 0.0369

Uranus 2238-03-21 18:57 G 2538552.09 2538552.29 2538552.49 0.0139 0.0055

Uranus 2238-11-03 03:50 G 2538778.52 2538778.66 2538778.81 0.0139 0.0103

Jupiter 2244-05-06 15:07 G 2540789.94 2540790.13 2540790.32 0.0497 0.0181

Saturn 2247-05-06 22:33 G 2541885.38 2541885.44 2541885.51 0.0276 0.0261

Moon 2247-06-11 06:14 G 2541920.63 2541920.76 2541920.88 0.2627 0.1524

Earth 2247-06-11 11:31 G 2541920.88 2541920.98 2541921.09 0.2627 0.1915 *

Saturn 2247-12-22 05:45 G 2542114.54 2542114.74 2542114.95 0.0274 0.0048

Saturn 2248-08-07 11:31 G 2542343.82 2542343.98 2542344.16 0.0272 0.0161

Moon 2255-06-09 00:57 G 2544840.45 2544840.54 2544840.63 0.2632 0.2083

Earth 2255-06-09 04:48 G 2544840.56 2544840.70 2544840.83 0.2628 0.1374 *

Jupiter 2256-01-10 17:02 G 2545056.01 2545056.21 2545056.41 0.0496 0.0137

Mars	2257-04-27 16:04 G	2545529.05	2545529.17	2545529.28	0.1848	0.1377
Jupiter	2261-11-19 02:52 G	2547195.44	2547195.62	2547195.79	0.0529	0.0268
Mars	2261-12-10 01:11 G	2547216.38	2547216.55	2547216.71	0.1676	0.0388
Saturn	2263-08-31 00:14 G	2547845.30	2547845.51	2547845.72	0.0286	0.0051
Saturn	2264-04-16 18:57 G	2548075.14	2548075.29	2548075.44	0.0288	0.0196
Jupiter	2267-09-15 19:55 G	2549322.25	2549322.33	2549322.41	0.0495	0.0448
Pluto	2270-04-10 13:26 G	2550259.94	2550260.06	2550260.22	0.0077	0.0059
Pluto	2270-11-21 23:16 G	2550485.25	2550485.47	2550485.70	0.0077	0.0002
Pluto	2271-07-05 08:09 G	2550710.73	2550710.84	2550710.99	0.0077	0.0062
Jupiter	2273-07-24 17:31 G	2551461.03	2551461.23	2551461.43	0.0531	0.0126
Saturn	2276-11-15 23:31 G	2552671.39	2552671.48	2552671.59	0.0276	0.0240
Saturn	2277-07-03 06:57 G	2552900.58	2552900.79	2552901.01	0.0274	0.0028
Saturn	2278-02-17 13:11 G	2553129.89	2553130.05	2553130.21	0.0272	0.0181
Jupiter	2280-01-13 04:19 G	2553824.55	2553824.68	2553824.81	0.0499	0.0382
Uranus	2280-05-06 02:52 G	2553938.55	2553938.62	2553938.72	0.0138	0.0127
Uranus	2280-12-18 10:33 G	2554164.78	2554164.94	2554165.13	0.0138	0.0081
Uranus	2281-08-01 18:28 G	2554391.07	2554391.27	2554391.49	0.0139	0.0035
Uranus	2282-03-16 02:38 G	2554617.39	2554617.61	2554617.83	0.0139	0.0013
Uranus	2282-10-28 10:48 G	2554843.76	2554843.95	2554844.15	0.0139	0.0060
Uranus	2283-06-11 18:43 G	2555070.16	2555070.28	2555070.44	0.0139	0.0109
Mars	2289-04-27 11:02 G	2557216.79	2557216.96	2557217.12	0.1860	0.0518
Neptune	2289-10-28 13:40 G	2557400.99	2557401.07	2557401.19	0.0088	0.0077
Neptune	2290-06-11 02:24 G	2557626.46	2557626.60	2557626.77	0.0088	0.0061
Neptune	2291-01-22 15:21 G	2557851.96	2557852.14	2557852.33	0.0088	0.0045
Neptune	2291-09-05 04:04 G	2558077.47	2558077.67	2558077.88	0.0088	0.0029
Jupiter	2291-09-18 05:31 G	2558090.52	2558090.73	2558090.93	0.0497	0.0059
Neptune	2292-04-17 16:48 G	2558302.98	2558303.20	2558303.42	0.0088	0.0013
Saturn	2292-07-25 13:26 G	2558401.97	2558402.06	2558402.16	0.0285	0.0256
Neptune	2292-11-29 05:31 G	2558528.51	2558528.73	2558528.95	0.0088	0.0003
Saturn	2293-03-12 07:11 G	2558631.59	2558631.80	2558632.01	0.0287	0.0015

Neptune 2293-07-12 17:45 G 2558754.04 2558754.24 2558754.47 0.0088 0.0019

Saturn 2293-10-28 02:24 G 2558861.47 2558861.60 2558861.72 0.0289 0.0232

Mars 2293-12-08 21:35 G 2558903.25 2558903.40 2558903.56 0.1667 0.0749

Neptune 2294-02-23 06:28 G 2558979.58 2558979.77 2558979.99 0.0088 0.0035

Neptune 2294-10-06 19:26 G 2559205.13 2559205.31 2559205.49 0.0088 0.0050

Neptune 2295-05-20 07:55 G 2559430.69 2559430.83 2559430.98 0.0088 0.0066

Neptune 2295-12-31 20:24 G 2559656.29 2559656.35 2559656.44 0.0088 0.0082

Jupiter 2297-07-27 16:33 G 2560230.12 2560230.19 2560230.28 0.0528 0.0485

Jupiter 2303-05-25 05:02 G 2562356.54 2562356.71 2562356.88 0.0495 0.0268

Saturn 2306-05-30 07:26 G 2563457.67 2563457.81 2563457.95 0.0275 0.0204

Saturn 2307-01-14 14:24 G 2563686.89 2563687.10 2563687.32 0.0274 0.0011

Saturn 2307-08-31 20:09 G 2563916.22 2563916.34 2563916.47 0.0272 0.0216

Jupiter 2309-04-02 09:50 G 2564495.71 2564495.91 2564496.11 0.0530 0.0103

Uranus 2320-01-11 00:43 G 2568431.41 2568431.53 2568431.68 0.0141 0.0112

Uranus 2320-08-24 10:19 G 2568657.75 2568657.93 2568658.14 0.0140 0.0063

Jupiter 2320-12-06 01:26 G 2568761.39 2568761.56 2568761.73 0.0532 0.0289

Uranus 2321-04-07 20:09 G 2568884.13 2568884.34 2568884.56 0.0140 0.0013

Uranus 2321-11-20 05:16 G 2569110.52 2569110.72 2569110.94 0.0140 0.0036

Saturn 2322-02-05 15:07 G 2569188.02 2569188.13 2569188.26 0.0285 0.0233

Uranus 2322-07-04 14:24 G 2569336.93 2569337.10 2569337.28 0.0139 0.0084

Saturn 2322-09-23 08:52 G 2569417.66 2569417.87 2569418.08 0.0287 0.0009

Uranus 2323-02-15 23:16 G 2569563.41 2569563.47 2569563.55 0.0139 0.0131

Mars 2323-02-23 20:24 G 2569571.28 2569571.35 2569571.41 0.1844 0.1713

Saturn 2323-05-11 03:35 G 2569647.56 2569647.65 2569647.75 0.0289 0.0256

Jupiter 2327-05-27 15:21 G 2571124.96 2571125.14 2571125.32 0.0498 0.0245

Mars 2327-10-08 12:14 G 2571258.85 2571259.01 2571259.17 0.1679 0.0545

Saturn 2335-12-10 07:26 G 2574243.66 2574243.81 2574243.97 0.0275 0.0185

Saturn 2336-07-26 14:38 G 2574472.90 2574473.11 2574473.32 0.0273 0.0028

Saturn 2337-03-12 20:24 G 2574702.25 2574702.35 2574702.46 0.0272 0.0235

Jupiter 2339-01-30 17:45 G 2575391.04 2575391.24 2575391.45 0.0496 0.0072

Jupiter 2344-12-09 01:26 G 2577530.40 2577530.56 2577530.72 0.0529 0.0329

Jupiter 2350-10-05 20:09 G 2579657.22 2579657.34 2579657.47 0.0495 0.0387

Saturn 2351-08-18 20:38 G 2579974.22 2579974.36 2579974.52 0.0285 0.0201

Saturn 2352-04-04 14:38 G 2580203.90 2580204.11 2580204.32 0.0287 0.0042

Mars 2355-02-23 15:21 G 2581258.96 2581259.14 2581259.32 0.1857 0.0175

Jupiter 2356-08-13 16:48 G 2581796.00 2581796.20 2581796.40 0.0531 0.0063

Mars 2359-10-07 09:07 G 2582945.72 2582945.88 2582946.05 0.1669 0.0606

Moon 2360-12-12 21:50 G 2583378.29 2583378.41 2583378.54 0.2710 0.1539

Earth 2360-12-13 01:55 G 2583378.46 2583378.58 2583378.70 0.2705 0.1731 *

Jupiter 2363-02-02 01:26 G 2584159.46 2584159.56 2584159.66 0.0499 0.0432

Uranus 2364-08-18 19:55 G 2584723.19 2584723.33 2584723.48 0.0138 0.0101

Uranus 2365-04-02 03:35 G 2584949.46 2584949.65 2584949.86 0.0138 0.0055

Saturn 2365-06-21 13:55 G 2585029.92 2585030.08 2585030.27 0.0275 0.0152

Uranus 2365-11-14 11:45 G 2585175.77 2585175.99 2585176.21 0.0139 0.0008

Saturn 2366-02-05 21:21 G 2585259.18 2585259.39 2585259.59 0.0273 0.0062

Uranus 2366-06-28 19:40 G 2585402.11 2585402.32 2585402.53 0.0139 0.0039

Saturn 2366-09-23 02:52 G 2585488.59 2585488.62 2585488.65 0.0272 0.0268

Uranus 2367-02-10 03:35 G 2585628.50 2585628.65 2585628.83 0.0139 0.0087

Uranus 2367-09-24 12:14 G 2585854.96 2585855.01 2585855.07 0.0139 0.0135

Jupiter 2368-04-18 08:09 G 2586061.74 2586061.84 2586061.95 0.0533 0.0458

Earth 2368-12-10 14:52 G 2586298.04 2586298.12 2586298.20 0.2704 0.2330

Moon 2368-12-10 15:21 G 2586298.11 2586298.14 2586298.18 0.2711 0.2617 *

Neptune 2371-12-16 13:26 G 2587399.01 2587399.06 2587399.14 0.0089 0.0086

Neptune 2372-07-29 02:52 G 2587624.50 2587624.62 2587624.77 0.0089 0.0069

Neptune 2373-03-11 16:33 G 2587850.01 2587850.19 2587850.37 0.0089 0.0052

Neptune 2373-10-23 05:31 G 2588075.54 2588075.73 2588075.95 0.0089 0.0036

Neptune 2374-06-05 18:57 G 2588301.08 2588301.29 2588301.51 0.0089 0.0019

Jupiter 2374-10-08 03:21 G 2588425.44 2588425.64 2588425.84 0.0497 0.0112

Neptune 2375-01-17 08:24 G 2588526.63 2588526.85 2588527.07 0.0089 0.0002

Neptune 2375-08-30 21:50 G 2588752.20 2588752.41 2588752.63 0.0089 0.0015

Neptune 2376-04-12 10:48 G 2588977.76 2588977.95 2588978.17 0.0089 0.0033

Neptune 2376-11-24 00:14 G 2589203.34 2589203.51 2589203.71 0.0089 0.0049

Neptune 2377-07-07 13:26 G 2589428.93 2589429.06 2589429.22 0.0089 0.0066

Neptune 2378-02-18 02:38 G 2589654.55 2589654.61 2589654.72 0.0089 0.0083

Saturn 2381-02-27 23:02 G 2590760.29 2590760.46 2590760.63 0.0285 0.0176

Saturn 2381-10-15 16:33 G 2590989.98 2590990.19 2590990.39 0.0287 0.0066

Jupiter 2386-06-13 06:00 G 2592691.56 2592691.75 2592691.94 0.0495 0.0204

Jupiter 2392-04-21 12:28 G 2594830.83 2594831.02 2594831.21 0.0530 0.0182

Mars 2393-08-04 23:02 G 2595301.30 2595301.46 2595301.62 0.1681 0.0709

Saturn 2395-01-01 13:11 G 2595815.87 2595816.05 2595816.24 0.0275 0.0134

Saturn 2395-08-18 20:24 G 2596045.15 2596045.35 2596045.55 0.0273 0.0078

Uranus 2403-09-10 09:35 G 2598989.85 2598989.90 2598990.00 0.0141 0.0133

Jupiter 2403-12-26 01:26 G 2599096.38 2599096.56 2599096.75 0.0532 0.0222

Uranus 2404-04-23 19:55 G 2599216.16 2599216.33 2599216.51 0.0141 0.0083

Uranus 2404-12-06 05:31 G 2599442.52 2599442.73 2599442.95 0.0140 0.0034

Uranus 2405-07-20 14:52 G 2599668.91 2599669.12 2599669.34 0.0140 0.0016

Uranus 2406-03-04 00:14 G 2599895.32 2599895.51 2599895.71 0.0140 0.0064

Uranus 2406-10-16 08:52 G 2600121.76 2600121.87 2600122.02 0.0139 0.0113

Jupiter 2410-06-15 16:33 G 2601460.03 2601460.19 2601460.35 0.0498 0.0313

Saturn 2410-09-10 02:52 G 2601546.44 2601546.62 2601546.81 0.0285 0.0146

Saturn 2411-04-27 20:38 G 2601776.17 2601776.36 2601776.57 0.0287 0.0097

Mars 2420-12-20 19:40 G 2605301.14 2605301.32 2605301.49 0.1853 0.0178

Jupiter 2422-02-18 16:19 G 2605725.98 2605726.18 2605726.39 0.0496 0.0017

Saturn 2424-07-13 19:26 G 2606602.12 2606602.31 2606602.51 0.0275 0.0101

Saturn 2425-02-28 02:38 G 2606831.42 2606831.61 2606831.80 0.0273 0.0111

Mars 2425-08-03 20:09 G 2606988.17 2606988.34 2606988.51 0.1672 0.0449

Jupiter 2427-12-29 04:33 G 2607865.57 2607865.69 2607865.82 0.0529 0.0411

Pluto 2431-10-07 19:55 G 2609244.19 2609244.33 2609244.48 0.0067 0.0049

Pluto 2432-05-20 00:57 G 2609469.33 2609469.54 2609469.76 0.0067 0.0010

Pluto 2432-12-31 05:45 G 2609694.56 2609694.74 2609694.95 0.0067 0.0029

Jupiter 2433-10-24 19:11 G 2609992.15 2609992.30 2609992.45 0.0494 0.0331

Jupiter 2439-09-02 21:07 G 2612131.18 2612131.38 2612131.58 0.0531 0.0025

Saturn 2440-03-22 05:31 G 2612332.54 2612332.73 2612332.92 0.0285 0.0122

Saturn 2440-11-06 23:02 G 2612562.27 2612562.46 2612562.66 0.0287 0.0121

Uranus 2448-04-18 06:14 G 2615281.67 2615281.76 2615281.88 0.0138 0.0120

Uranus 2448-11-30 13:55 G 2615507.91 2615508.08 2615508.27 0.0138 0.0074

Uranus 2449-07-14 21:50 G 2615734.20 2615734.41 2615734.62 0.0138 0.0027

Uranus 2450-02-26 05:45 G 2615960.53 2615960.74 2615960.96 0.0139 0.0020

Uranus 2450-10-10 13:55 G 2616186.90 2616187.08 2616187.28 0.0139 0.0067

Jupiter 2451-05-08 12:00 G 2616396.86 2616397.00 2616397.15 0.0533 0.0373

Uranus 2451-05-24 22:19 G 2616413.31 2616413.43 2616413.55 0.0139 0.0114

Mars 2452-12-20 16:04 G 2616989.13 2616989.17 2616989.22 0.1866 0.1796

Saturn 2454-01-23 18:00 G 2617388.05 2617388.25 2617388.45 0.0275 0.0085

Neptune 2454-01-30 22:04 G 2617395.40 2617395.42 2617395.49 0.0088 0.0086

Saturn 2454-09-10 00:57 G 2617617.36 2617617.54 2617617.73 0.0273 0.0127

Neptune 2454-09-13 10:48 G 2617620.84 2617620.95 2617621.10 0.0088 0.0070

Neptune 2455-04-26 23:31 G 2617846.32 2617846.48 2617846.67 0.0088 0.0054

Neptune 2455-12-08 12:14 G 2618071.82 2618072.01 2618072.22 0.0088 0.0038

Neptune 2456-07-21 01:11 G 2618297.33 2618297.55 2618297.76 0.0088 0.0022

Neptune 2457-03-03 13:55 G 2618522.86 2618523.08 2618523.30 0.0088 0.0006

Mars 2457-08-02 16:19 G 2618675.13 2618675.18 2618675.24 0.1663 0.1571

Neptune 2457-10-15 02:38 G 2618748.39 2618748.61 2618748.83 0.0088 0.0010

Jupiter 2457-10-27 05:31 G 2618760.54 2618760.73 2618760.92 0.0497 0.0184

Neptune 2458-05-28 15:07 G 2618973.92 2618974.13 2618974.35 0.0088 0.0026

Neptune 2459-01-09 03:35 G 2619199.47 2619199.65 2619199.86 0.0088 0.0042

Mars 2459-06-02 09:50 G 2619343.77 2619343.91 2619344.06 0.1684 0.0876

Neptune 2459-08-22 16:04 G 2619425.02 2619425.17 2619425.36 0.0088 0.0058

Neptune 2460-04-04 04:48 G 2619650.60 2619650.70 2619650.84 0.0088 0.0074

Jupiter 2469-07-02 07:40 G 2623026.62 2623026.82 2623027.02 0.0496 0.0135

Saturn 2469-10-02 08:52 G 2623118.67 2623118.87 2623119.08 0.0285 0.0093

Saturn	**2470-05-20 02:38**	**G**	**2623348.44**	**2623348.61**	**2623348.80**	**0.0287**	**0.0151**
Jupiter	**2475-05-11 13:11**	**G**	**2625165.87**	**2625166.05**	**2625166.23**	**0.0530**	**0.0253**
Jupiter	**2481-03-07 08:52**	**G**	**2627292.80**	**2627292.87**	**2627292.95**	**0.0494**	**0.0454**
Saturn	**2482-12-19 15:21**	**G**	**2627945.10**	**2627945.14**	**2627945.18**	**0.0277**	**0.0270**
Saturn	**2483-08-05 23:31**	**G**	**2628174.28**	**2628174.48**	**2628174.69**	**0.0275**	**0.0054**
Saturn	**2484-03-22 06:28**	**G**	**2628403.61**	**2628403.77**	**2628403.95**	**0.0273**	**0.0158**
Mars	**2486-10-18 00:28**	**G**	**2629343.35**	**2629343.52**	**2629343.69**	**0.1849**	**0.0506**
Jupiter	**2487-01-14 04:19**	**G**	**2629431.49**	**2629431.68**	**2629431.88**	**0.0532**	**0.0142**
Uranus	**2487-12-23 04:19**	**G**	**2629774.55**	**2629774.68**	**2629774.84**	**0.0141**	**0.0105**
Uranus	**2488-08-05 14:24**	**G**	**2630000.90**	**2630001.10**	**2630001.30**	**0.0140**	**0.0055**
Uranus	**2489-03-20 00:00**	**G**	**2630227.28**	**2630227.50**	**2630227.72**	**0.0140**	**0.0006**
Uranus	**2489-11-01 09:21**	**G**	**2630453.68**	**2630453.89**	**2630454.10**	**0.0140**	**0.0043**
Earth	**2490-06-12 14:38**	**G**	**2630677.01**	**2630677.11**	**2630677.20**	**0.2628**	**0.2053**
Uranus	**2490-06-15 18:14**	**G**	**2630680.11**	**2630680.26**	**2630680.44**	**0.0139**	**0.0092**
Mars	**2491-06-01 07:40**	**G**	**2631030.65**	**2631030.82**	**2631030.99**	**0.1675**	**0.0301**
Jupiter	**2493-07-04 15:50**	**G**	**2631795.03**	**2631795.16**	**2631795.30**	**0.0498**	**0.0372**
Earth	**2498-06-10 07:40**	**G**	**2633596.68**	**2633596.82**	**2633596.96**	**0.2629**	**0.1236**
Moon	**2498-06-10 12:57**	**G**	**2633596.88**	**2633597.04**	**2633597.20**	**0.2627**	**0.0442** *****
Saturn	**2499-04-14 12:00**	**G**	**2633904.79**	**2633905.00**	**2633905.20**	**0.0285**	**0.0068**
Saturn	**2499-11-30 05:31**	**G**	**2634134.56**	**2634134.73**	**2634134.90**	**0.0287**	**0.0175**
Jupiter	**2505-03-10 18:00**	**G**	**2636061.05**	**2636061.25**	**2636061.46**	**0.0496**	**0.0054**
Jupiter	**2511-01-18 08:24**	**G**	**2638200.79**	**2638200.85**	**2638200.92**	**0.0529**	**0.0496**
Saturn	**2512-07-01 13:40**	**G**	**2638730.99**	**2638731.07**	**2638731.15**	**0.0277**	**0.0254**
Saturn	**2513-02-15 22:04**	**G**	**2638960.21**	**2638960.42**	**2638960.63**	**0.0275**	**0.0038**
Saturn	**2513-10-03 05:02**	**G**	**2639189.55**	**2639189.71**	**2639189.87**	**0.0273**	**0.0173**
Jupiter	**2516-11-13 21:07**	**G**	**2640327.21**	**2640327.38**	**2640327.55**	**0.0495**	**0.0261**
Mars	**2518-10-18 19:40**	**G**	**2641031.21**	**2641031.32**	**2641031.44**	**0.1862**	**0.1430**
Pluto	**2518-10-27 03:21**	**G**	**2641039.44**	**2641039.64**	**2641039.86**	**0.0077**	**0.0024**
Pluto	**2519-06-09 12:43**	**G**	**2641264.85**	**2641265.03**	**2641265.24**	**0.0077**	**0.0037**
Jupiter	**2522-09-22 22:33**	**G**	**2642466.24**	**2642466.44**	**2642466.64**	**0.0531**	**0.0099**

Mars 2523-06-01 03:35 G 2642717.57 2642717.65 2642717.74 0.1666 0.1426

Mars 2525-03-30 20:38 G 2643386.23 2643386.36 2643386.50 0.1687 0.1044

Saturn 2528-03-09 22:19 G 2644461.40 2644461.43 2644461.49 0.0284 0.0277

Saturn 2528-10-25 14:52 G 2644690.91 2644691.12 2644691.33 0.0286 0.0040

Saturn 2529-06-12 08:38 G 2644920.72 2644920.86 2644921.01 0.0288 0.0205

Uranus 2532-07-31 23:45 G 2646066.35 2646066.49 2646066.66 0.0138 0.0094

Uranus 2533-03-15 07:40 G 2646292.62 2646292.82 2646293.03 0.0138 0.0047

Uranus 2533-10-27 15:50 G 2646518.94 2646519.16 2646519.37 0.0138 0.0002

Jupiter 2534-05-28 12:57 G 2646731.88 2646732.04 2646732.21 0.0533 0.0302

Uranus 2534-06-10 23:31 G 2646745.29 2646745.48 2646745.69 0.0139 0.0047

Uranus 2535-01-23 07:40 G 2646971.67 2646971.82 2646971.99 0.0139 0.0094

Neptune 2536-10-31 10:19 G 2647618.84 2647618.93 2647619.05 0.0089 0.0079

Neptune 2537-06-13 23:45 G 2647844.34 2647844.49 2647844.66 0.0089 0.0062

Neptune 2538-01-25 13:26 G 2648069.87 2648070.06 2648070.25 0.0089 0.0045

Neptune 2538-09-08 02:24 G 2648295.41 2648295.60 2648295.83 0.0089 0.0029

Neptune 2539-04-21 16:04 G 2648520.95 2648521.17 2648521.39 0.0089 0.0011

Neptune 2539-12-03 05:31 G 2648746.51 2648746.73 2648746.95 0.0089 0.0006

Neptune 2540-07-15 18:28 G 2648972.07 2648972.27 2648972.49 0.0089 0.0023

Jupiter 2540-11-16 05:16 G 2649095.54 2649095.72 2649095.89 0.0497 0.0245

Neptune 2541-02-26 07:40 G 2649197.64 2649197.82 2649198.03 0.0089 0.0040

Neptune 2541-10-09 20:52 G 2649423.22 2649423.37 2649423.56 0.0089 0.0057

Saturn 2542-01-11 18:57 G 2649517.17 2649517.29 2649517.42 0.0277 0.0224

Neptune 2542-05-23 10:04 G 2649648.82 2649648.92 2649649.07 0.0089 0.0074

Saturn 2542-08-29 03:21 G 2649746.43 2649746.64 2649746.85 0.0275 0.0008

Saturn 2543-04-15 10:04 G 2649975.79 2649975.92 2649976.07 0.0273 0.0204

Jupiter 2552-07-22 07:26 G 2653361.61 2653361.81 2653362.01 0.0495 0.0074

Mars 2552-08-15 04:48 G 2653385.54 2653385.70 2653385.85 0.1845 0.0845

Mars 2557-03-29 18:14 G 2655073.09 2655073.26 2655073.43 0.1678 0.0137

Saturn 2557-09-20 02:52 G 2655247.53 2655247.62 2655247.73 0.0283 0.0249

Saturn 2558-05-07 19:11 G 2655477.09 2655477.30 2655477.51 0.0285 0.0013

Jupiter	**2558-05-31 17:02 G**	**2655501.05**	**2655501.21**	**2655501.36**	**0.0530**	**0.0340**	
Saturn	**2558-12-23 12:43 G**	**2655706.91**	**2655707.03**	**2655707.16**	**0.0287**	**0.0231**	
Jupiter	**2564-03-27 10:04 G**	**2657627.80**	**2657627.92**	**2657628.05**	**0.0494**	**0.0388**	
Jupiter	**2570-02-03 08:38 G**	**2659766.66**	**2659766.86**	**2659767.06**	**0.0532**	**0.0053**	
Saturn	**2571-07-24 17:16 G**	**2660303.10**	**2660303.22**	**2660303.37**	**0.0277**	**0.0208**	
Uranus	**2571-08-23 12:28 G**	**2660332.95**	**2660333.02**	**2660333.13**	**0.0141**	**0.0127**	
Saturn	**2572-03-10 01:55 G**	**2660532.37**	**2660532.58**	**2660532.79**	**0.0275**	**0.0009**	
Uranus	**2572-04-05 22:48 G**	**2660559.27**	**2660559.45**	**2660559.64**	**0.0141**	**0.0077**	
Saturn	**2572-10-25 08:38 G**	**2660761.74**	**2660761.86**	**2660761.99**	**0.0273**	**0.0219**	
Uranus	**2572-11-18 08:38 G**	**2660785.64**	**2660785.86**	**2660786.07**	**0.0140**	**0.0028**	
Uranus	**2573-07-02 18:00 G**	**2661012.04**	**2661012.25**	**2661012.47**	**0.0140**	**0.0022**	
Uranus	**2574-02-14 03:07 G**	**2661238.46**	**2661238.63**	**2661238.83**	**0.0140**	**0.0071**	
Uranus	**2574-09-28 12:28 G**	**2661464.92**	**2661465.02**	**2661465.14**	**0.0139**	**0.0119**	
Jupiter	**2576-07-24 18:00 G**	**2662130.16**	**2662130.25**	**2662130.34**	**0.0498**	**0.0446**	
Jupiter	**2581-10-08 21:35 G**	**2664032.31**	**2664032.40**	**2664032.51**	**0.0533**	**0.0462**	
Mars	**2584-08-14 23:31 G**	**2665073.34**	**2665073.48**	**2665073.63**	**0.1858**	**0.1063**	
Saturn	**2587-04-02 05:31 G**	**2666033.61**	**2666033.73**	**2666033.87**	**0.0284**	**0.0222**	
Saturn	**2587-11-17 22:04 G**	**2666263.21**	**2666263.42**	**2666263.63**	**0.0286**	**0.0016**	
Jupiter	**2588-03-29 19:55 G**	**2666396.14**	**2666396.33**	**2666396.53**	**0.0497**	**0.0124**	
Saturn	**2588-07-04 15:35 G**	**2666493.08**	**2666493.15**	**2666493.25**	**0.0288**	**0.0261**	
Mars	**2589-03-28 14:52 G**	**2666760.01**	**2666760.12**	**2666760.23**	**0.1669**	**0.1278**	
Mars	**2591-01-26 07:11 G**	**2667428.68**	**2667428.80**	**2667428.92**	**0.1690**	**0.1223**	
Jupiter	**2599-12-03 21:07 G**	**2670662.20**	**2670662.38**	**2670662.57**	**0.0494**	**0.0198**	
Saturn	**2601-02-03 23:02 G**	**2671089.30**	**2671089.46**	**2671089.62**	**0.0277**	**0.0178**	
Saturn	**2601-09-21 07:11 G**	**2671318.59**	**2671318.80**	**2671319.01**	**0.0275**	**0.0039**	
Saturn	**2602-05-08 14:09 G**	**2671548.01**	**2671548.09**	**2671548.17**	**0.0273**	**0.0249**	
Earth	**2603-12-16 00:43 G**	**2672134.39**	**2672134.53**	**2672134.66**	**0.2704**	**0.1431**	
Moon	**2603-12-16 06:00 G**	**2672134.65**	**2672134.75**	**2672134.85**	**0.2702**	**0.2082**	*****
Jupiter	**2605-10-13 00:00 G**	**2672801.31**	**2672801.50**	**2672801.70**	**0.0531**	**0.0176**	
Earth	**2611-12-13 13:55 G**	**2675054.04**	**2675054.08**	**2675054.12**	**0.2703**	**0.2604**	

Moon 2611-12-13 15:50 G 2675054.06 2675054.16 2675054.27 0.2697 0.2062 *

Uranus 2616-04-01 11:16 G 2676624.85 2676624.97 2676625.10 0.0138 0.0112

Saturn 2616-10-13 11:02 G 2676819.82 2676819.96 2676820.13 0.0283 0.0194

Uranus 2616-11-13 18:57 G 2676851.11 2676851.29 2676851.49 0.0138 0.0066

Saturn 2617-05-31 03:35 G 2677049.44 2677049.65 2677049.86 0.0285 0.0045

Jupiter 2617-06-17 15:35 G 2677066.97 2677067.15 2677067.34 0.0533 0.0220

Uranus 2617-06-28 02:52 G 2677077.41 2677077.62 2677077.84 0.0138 0.0019

Uranus 2618-02-09 10:48 G 2677303.74 2677303.95 2677304.16 0.0138 0.0028

Mars 2618-06-13 09:35 G 2677427.76 2677427.90 2677428.03 0.1842 0.1173

Uranus 2618-09-23 18:57 G 2677530.11 2677530.29 2677530.47 0.0139 0.0075

Neptune 2618-12-17 19:26 G 2677615.22 2677615.31 2677615.41 0.0088 0.0079

Uranus 2619-05-08 02:52 G 2677756.54 2677756.62 2677756.74 0.0139 0.0123

Neptune 2619-07-31 08:09 G 2677840.69 2677840.84 2677840.99 0.0088 0.0063

Neptune 2620-03-12 20:52 G 2678066.19 2678066.37 2678066.56 0.0088 0.0047

Neptune 2620-10-24 09:07 G 2678291.69 2678291.88 2678292.10 0.0088 0.0032

Neptune 2621-06-06 21:50 G 2678517.20 2678517.41 2678517.64 0.0088 0.0016

Neptune 2622-01-18 10:33 G 2678742.73 2678742.94 2678743.17 0.0088 0.0002

Neptune 2622-08-31 23:16 G 2678968.26 2678968.47 2678968.69 0.0088 0.0017

Mars 2623-01-26 05:16 G 2679115.55 2679115.72 2679115.89 0.1680 0.0025

Neptune 2623-04-14 11:45 G 2679193.80 2679193.99 2679194.21 0.0088 0.0033

Neptune 2623-11-26 00:28 G 2679419.35 2679419.52 2679419.71 0.0088 0.0049

Jupiter 2623-12-07 06:14 G 2679430.60 2679430.76 2679430.92 0.0497 0.0314

Neptune 2624-07-08 12:57 G 2679644.91 2679645.04 2679645.20 0.0088 0.0065

Neptune 2625-02-19 01:40 G 2679870.51 2679870.57 2679870.67 0.0088 0.0081

Saturn 2630-08-16 22:19 G 2681875.26 2681875.43 2681875.61 0.0277 0.0159

Saturn 2631-04-03 06:28 G 2682104.56 2682104.77 2682104.98 0.0275 0.0057

Saturn 2631-11-18 12:57 G 2682334.01 2682334.04 2682334.09 0.0273 0.0267

Jupiter 2635-08-12 08:38 G 2683696.66 2683696.86 2683697.06 0.0496 0.0005

Jupiter 2641-06-20 18:00 G 2685836.13 2685836.25 2685836.38 0.0529 0.0413

Saturn 2646-04-25 13:55 G 2687605.91 2687606.08 2687606.26 0.0284 0.0166

Saturn	**2646-12-11 06:28 G**	**2687835.57**	**2687835.77**	**2687835.98**	**0.0286**	**0.0074**
Jupiter	**2647-04-17 11:31 G**	**2687962.83**	**2687962.98**	**2687963.14**	**0.0494**	**0.0321**
Mars	**2650-06-13 03:35 G**	**2689115.49**	**2689115.65**	**2689115.82**	**0.1854**	**0.0712**
Jupiter	**2653-02-23 08:38 G**	**2690101.66**	**2690101.86**	**2690102.06**	**0.0532**	**0.0015**
Mars	**2655-01-25 02:09 G**	**2690802.46**	**2690802.59**	**2690802.71**	**0.1671**	**0.1129**
Uranus	**2655-12-06 08:24 G**	**2691117.69**	**2691117.85**	**2691118.00**	**0.0141**	**0.0098**
Uranus	**2656-07-19 18:00 G**	**2691344.05**	**2691344.25**	**2691344.46**	**0.0141**	**0.0049**
Mars	**2656-11-23 18:14 G**	**2691471.16**	**2691471.26**	**2691471.35**	**0.1693**	**0.1389**
Uranus	**2657-03-03 03:50 G**	**2691570.44**	**2691570.66**	**2691570.88**	**0.0140**	**0.0002**
Uranus	**2657-10-15 13:11 G**	**2691796.85**	**2691797.05**	**2691797.26**	**0.0140**	**0.0050**
Uranus	**2658-05-29 22:19 G**	**2692023.29**	**2692023.43**	**2692023.60**	**0.0140**	**0.0099**
Saturn	**2660-02-27 03:50 G**	**2692661.48**	**2692661.66**	**2692661.85**	**0.0276**	**0.0129**
Saturn	**2660-10-13 12:00 G**	**2692890.80**	**2692891.00**	**2692891.20**	**0.0275**	**0.0087**
Jupiter	**2664-10-28 21:21 G**	**2694367.26**	**2694367.39**	**2694367.53**	**0.0534**	**0.0394**
Jupiter	**2671-04-19 19:26 G**	**2696731.12**	**2696731.31**	**2696731.50**	**0.0496**	**0.0185**
Saturn	**2675-11-05 21:07 G**	**2698392.20**	**2698392.38**	**2698392.58**	**0.0283**	**0.0134**
Saturn	**2676-06-22 13:40 G**	**2698621.88**	**2698622.07**	**2698622.27**	**0.0285**	**0.0106**
Pluto	**2680-04-24 04:48 G**	**2700023.53**	**2700023.70**	**2700023.91**	**0.0067**	**0.0033**
Pluto	**2680-12-05 10:19 G**	**2700248.72**	**2700248.93**	**2700249.15**	**0.0067**	**0.0007**
Pluto	**2681-07-18 15:07 G**	**2700473.99**	**2700474.13**	**2700474.30**	**0.0067**	**0.0047**
Jupiter	**2682-12-23 21:07 G**	**2700997.18**	**2700997.38**	**2700997.58**	**0.0495**	**0.0135**
Mars	**2684-04-09 14:09 G**	**2701469.99**	**2701470.09**	**2701470.19**	**0.1838**	**0.1507**
Jupiter	**2688-11-01 02:52 G**	**2703136.44**	**2703136.62**	**2703136.80**	**0.0531**	**0.0258**
Mars	**2688-11-22 16:04 G**	**2703158.00**	**2703158.17**	**2703158.34**	**0.1683**	**0.0185**
Saturn	**2689-09-08 04:19 G**	**2703447.49**	**2703447.68**	**2703447.88**	**0.0276**	**0.0108**
Saturn	**2690-04-25 12:14 G**	**2703676.82**	**2703677.01**	**2703677.21**	**0.0274**	**0.0107**
Jupiter	**2694-08-29 00:14 G**	**2705263.43**	**2705263.51**	**2705263.59**	**0.0493**	**0.0449**
Uranus	**2699-11-30 22:33 G**	**2707183.37**	**2707183.44**	**2707183.51**	**0.0137**	**0.0130**
Jupiter	**2700-07-07 16:19 G**	**2707401.99**	**2707402.18**	**2707402.38**	**0.0532**	**0.0149**
Uranus	**2700-07-15 05:45 G**	**2707409.58**	**2707409.74**	**2707409.92**	**0.0138**	**0.0084**

Neptune 2701-02-03 17:02 G 2707613.21 2707613.21 2707613.24 0.0089 0.0089

Uranus 2701-02-26 13:40 G 2707635.86 2707636.07 2707636.28 0.0138 0.0038

Neptune 2701-09-17 06:28 G 2707838.66 2707838.77 2707838.92 0.0089 0.0073

Uranus 2701-10-10 21:35 G 2707862.19 2707862.40 2707862.62 0.0138 0.0009

Neptune 2702-04-30 19:55 G 2708064.17 2708064.33 2708064.52 0.0089 0.0056

Uranus 2702-05-25 05:31 G 2708088.54 2708088.73 2708088.93 0.0139 0.0056

Neptune 2702-12-12 09:21 G 2708289.70 2708289.89 2708290.10 0.0089 0.0039

Uranus 2703-01-06 13:26 G 2708314.93 2708315.06 2708315.22 0.0139 0.0103

Neptune 2703-07-25 22:48 G 2708515.25 2708515.45 2708515.67 0.0089 0.0022

Neptune 2704-03-07 12:28 G 2708740.80 2708741.02 2708741.24 0.0089 0.0004

Neptune 2704-10-19 01:40 G 2708966.36 2708966.57 2708966.79 0.0089 0.0013

Saturn 2705-05-19 00:00 G 2709178.31 2709178.50 2709178.71 0.0284 0.0106

Neptune 2705-06-01 14:52 G 2709191.92 2709192.12 2709192.34 0.0089 0.0030

Saturn 2706-01-03 16:48 G 2709408.02 2709408.20 2709408.39 0.0286 0.0136

Neptune 2706-01-13 04:04 G 2709417.50 2709417.67 2709417.87 0.0089 0.0047

Neptune 2706-08-26 17:31 G 2709643.09 2709643.23 2709643.40 0.0089 0.0064

Jupiter 2706-12-27 06:57 G 2709765.66 2709765.79 2709765.92 0.0497 0.0381

Neptune 2707-04-09 06:43 G 2709868.70 2709868.78 2709868.89 0.0089 0.0081

Mars 2716-04-10 07:40 G 2713157.64 2713157.82 2713157.99 0.1850 0.0350

Jupiter 2718-09-01 08:09 G 2714031.64 2714031.84 2714032.04 0.0495 0.0057

Saturn 2719-03-22 10:04 G 2714233.72 2714233.92 2714234.13 0.0276 0.0078

Saturn 2719-11-06 18:00 G 2714463.07 2714463.25 2714463.44 0.0274 0.0137

Mars 2720-11-22 13:11 G 2714844.92 2714845.05 2714845.19 0.1674 0.0980

Mars 2722-09-22 04:19 G 2715513.62 2715513.68 2715513.75 0.1696 0.1572

Jupiter 2724-07-10 16:33 G 2716171.11 2716171.19 2716171.28 0.0530 0.0479

Jupiter 2730-05-07 10:33 G 2718297.77 2718297.94 2718298.12 0.0494 0.0261

Moon 2733-06-15 13:55 G 2719432.95 2719433.08 2719433.21 0.2624 0.1533

Earth 2733-06-15 18:00 G 2719433.17 2719433.25 2719433.33 0.2629 0.2240 *

Saturn 2734-11-29 08:52 G 2719964.67 2719964.87 2719965.08 0.0284 0.0070

Saturn 2735-07-17 01:40 G 2720194.41 2720194.57 2720194.74 0.0286 0.0171

Jupiter 2736-03-15 08:24 G 2720436.65 2720436.85 2720437.05 0.0532 0.0086

Uranus 2739-08-06 17:31 G 2721676.13 2721676.23 2721676.36 0.0141 0.0119

Uranus 2740-03-20 03:50 G 2721902.47 2721902.66 2721902.85 0.0141 0.0069

Uranus 2740-11-01 13:40 G 2722128.85 2722129.07 2722129.29 0.0140 0.0020

Moon 2741-06-13 05:16 G 2722352.60 2722352.72 2722352.84 0.2630 0.1730

Earth 2741-06-13 10:48 G 2722352.81 2722352.95 2722353.10 0.2630 0.1079 *

Uranus 2741-06-15 23:02 G 2722355.25 2722355.46 2722355.68 0.0140 0.0030

Uranus 2742-01-28 08:24 G 2722581.68 2722581.85 2722582.04 0.0140 0.0079

Uranus 2742-09-11 17:45 G 2722808.16 2722808.24 2722808.33 0.0139 0.0127

Jupiter 2747-11-18 23:31 G 2724702.32 2724702.48 2724702.65 0.0534 0.0315

Saturn 2748-02-15 03:21 G 2724790.61 2724790.64 2724790.69 0.0278 0.0272

Saturn 2748-10-01 12:14 G 2725019.81 2725020.01 2725020.22 0.0276 0.0054

Saturn 2749-05-18 19:55 G 2725249.16 2725249.33 2725249.50 0.0274 0.0160

Mars 2750-02-05 18:43 G 2725512.28 2725512.28 2725512.28 0.1834 0.1833

Jupiter 2754-05-09 18:28 G 2727066.09 2727066.27 2727066.45 0.0496 0.0246

Mars 2754-09-21 02:52 G 2727200.45 2727200.62 2727200.79 0.1686 0.0352

Saturn 2763-10-24 20:52 G 2730521.33 2730521.37 2730521.42 0.0283 0.0275

Saturn 2764-06-10 12:28 G 2730750.81 2730751.02 2730751.23 0.0285 0.0040

Saturn 2765-01-26 05:16 G 2730980.58 2730980.72 2730980.88 0.0287 0.0202

Jupiter 2766-01-12 20:38 G 2731332.16 2731332.36 2731332.57 0.0495 0.0075

Pluto 2766-10-01 06:14 G 2731593.61 2731593.76 2731593.92 0.0077 0.0055

Pluto 2767-05-14 15:50 G 2731818.94 2731819.16 2731819.39 0.0077 0.0006

Pluto 2767-12-26 00:43 G 2732044.44 2732044.53 2732044.66 0.0076 0.0066

Jupiter 2771-11-22 00:57 G 2733471.38 2733471.54 2733471.70 0.0531 0.0318

Saturn 2777-08-27 09:07 G 2735576.79 2735576.88 2735576.99 0.0277 0.0242

Jupiter 2777-09-17 23:16 G 2735598.35 2735598.47 2735598.60 0.0493 0.0389

Saturn 2778-04-13 18:14 G 2735806.05 2735806.26 2735806.47 0.0276 0.0023

Saturn 2778-11-29 01:55 G 2736035.43 2736035.58 2736035.73 0.0274 0.0190

Mars 2782-02-05 12:28 G 2737199.84 2737200.02 2737200.19 0.1847 0.0033

Jupiter 2783-07-27 13:11 G 2737736.85 2737737.05 2737737.25 0.0533 0.0092

Neptune 2783-11-02 16:48 G 2737835.08 2737835.20 2737835.32 0.0088 0.0072

Uranus 2784-03-14 17:02 G 2737968.08 2737968.21 2737968.37 0.0138 0.0103

Neptune 2784-06-15 04:48 G 2738060.55 2738060.70 2738060.89 0.0088 0.0057

Uranus 2784-10-27 01:11 G 2738194.35 2738194.55 2738194.75 0.0138 0.0056

Neptune 2785-01-26 17:31 G 2738286.05 2738286.23 2738286.44 0.0088 0.0041

Uranus 2785-06-10 08:52 G 2738420.65 2738420.87 2738421.09 0.0138 0.0010

Neptune 2785-09-09 06:14 G 2738511.56 2738511.76 2738511.98 0.0088 0.0025

Uranus 2786-01-22 16:33 G 2738646.99 2738647.19 2738647.40 0.0138 0.0037

Neptune 2786-04-22 19:11 G 2738737.08 2738737.30 2738737.52 0.0088 0.0008

Uranus 2786-09-06 00:43 G 2738873.36 2738873.53 2738873.70 0.0139 0.0084

Mars 2786-09-20 00:28 G 2738887.37 2738887.52 2738887.67 0.1676 0.0830

Neptune 2786-12-04 07:40 G 2738962.60 2738962.82 2738963.04 0.0088 0.0008

Uranus 2787-04-20 08:52 G 2739099.81 2739099.87 2739099.94 0.0139 0.0132

Neptune 2787-07-17 20:09 G 2739188.14 2739188.34 2739188.56 0.0088 0.0024

Neptune 2788-02-28 08:52 G 2739413.68 2739413.87 2739414.08 0.0088 0.0040

Neptune 2788-10-10 21:35 G 2739639.24 2739639.40 2739639.58 0.0088 0.0056

Neptune 2789-05-24 10:04 G 2739864.81 2739864.92 2739865.06 0.0088 0.0072

Jupiter 2790-01-15 04:48 G 2740100.61 2740100.70 2740100.80 0.0497 0.0438

Saturn 2793-05-06 06:43 G 2741307.67 2741307.78 2741307.90 0.0282 0.0238

Saturn 2793-12-21 22:33 G 2741537.23 2741537.44 2741537.65 0.0284 0.0003

Saturn 2794-08-08 15:35 G 2741767.04 2741767.15 2741767.27 0.0286 0.0240

Jupiter 2795-04-01 03:21 G 2742002.57 2742002.64 2742002.72 0.0535 0.0498

Jupiter 2801-09-20 05:45 G 2744366.54 2744366.74 2744366.94 0.0495 0.0110

Saturn 2807-03-09 13:26 G 2746362.93 2746363.06 2746363.20 0.0277 0.0213

Saturn 2807-10-24 22:04 G 2746592.21 2746592.42 2746592.63 0.0275 0.0005

Saturn 2808-06-10 05:16 G 2746821.60 2746821.72 2746821.85 0.0274 0.0217

Jupiter 2813-05-26 08:09 G 2748632.66 2748632.84 2748633.03 0.0494 0.0209

Jupiter 2819-04-04 07:40 G 2750771.62 2750771.82 2750772.01 0.0531 0.0151

Mars 2820-07-18 13:26 G 2751242.90 2751243.06 2751243.23 0.1689 0.0522

Saturn 2822-11-16 10:19 G 2752093.79 2752093.93 2752094.08 0.0283 0.0209

Uranus	**2823-04-06 04:19 G**	**2752234.66**	**2752234.68**	**2752234.74**	**0.0141**	**0.0139**
Saturn	**2823-07-04 02:24 G**	**2752323.39**	**2752323.60**	**2752323.81**	**0.0285**	**0.0028**
Uranus	**2823-11-18 14:38 G**	**2752460.94**	**2752461.11**	**2752461.28**	**0.0141**	**0.0088**
Saturn	**2824-02-18 19:26 G**	**2752553.26**	**2752553.31**	**2752553.39**	**0.0287**	**0.0271**
Uranus	**2824-07-02 00:28 G**	**2752687.31**	**2752687.52**	**2752687.73**	**0.0141**	**0.0039**
Uranus	**2825-02-13 10:04 G**	**2752913.71**	**2752913.92**	**2752914.14**	**0.0140**	**0.0011**
Uranus	**2825-09-27 19:40 G**	**2753140.13**	**2753140.32**	**2753140.52**	**0.0140**	**0.0060**
Uranus	**2826-05-12 04:48 G**	**2753366.58**	**2753366.70**	**2753366.85**	**0.0140**	**0.0109**
Jupiter	**2830-12-07 20:52 G**	**2755037.19**	**2755037.37**	**2755037.54**	**0.0533**	**0.0259**
Saturn	**2836-09-18 19:40 G**	**2757149.17**	**2757149.32**	**2757149.49**	**0.0277**	**0.0182**
Saturn	**2837-05-06 04:19 G**	**2757378.48**	**2757378.68**	**2757378.90**	**0.0275**	**0.0036**
Jupiter	**2837-05-28 16:48 G**	**2757401.04**	**2757401.20**	**2757401.36**	**0.0496**	**0.0305**
Saturn	**2837-12-21 11:45 G**	**2757607.90**	**2757607.99**	**2757608.08**	**0.0274**	**0.0247**
Moon	**2846-12-16 18:28 G**	**2760890.11**	**2760890.27**	**2760890.43**	**0.2703**	**0.0300**
Earth	**2846-12-17 00:00 G**	**2760890.36**	**2760890.50**	**2760890.64**	**0.2703**	**0.1194** *
Mars	**2847-12-03 17:02 G**	**2761242.04**	**2761242.21**	**2761242.39**	**0.1843**	**0.0327**
Jupiter	**2849-01-31 18:28 G**	**2761667.07**	**2761667.27**	**2761667.48**	**0.0494**	**0.0020**
Saturn	**2852-05-28 21:35 G**	**2762880.23**	**2762880.40**	**2762880.57**	**0.0283**	**0.0169**
Mars	**2852-07-17 11:31 G**	**2762929.82**	**2762929.98**	**2762930.13**	**0.1679**	**0.0671**
Saturn	**2853-01-13 13:40 G**	**2763109.87**	**2763110.07**	**2763110.28**	**0.0285**	**0.0069**
Jupiter	**2854-12-10 21:35 G**	**2763806.26**	**2763806.40**	**2763806.54**	**0.0531**	**0.0375**
Jupiter	**2860-10-06 19:40 G**	**2765933.17**	**2765933.32**	**2765933.46**	**0.0493**	**0.0343**
Neptune	**2865-12-19 13:26 G**	**2767832.98**	**2767833.06**	**2767833.14**	**0.0089**	**0.0083**
Saturn	**2866-04-01 01:26 G**	**2767935.39**	**2767935.56**	**2767935.74**	**0.0277**	**0.0149**
Neptune	**2866-08-02 02:52 G**	**2768058.48**	**2768058.62**	**2768058.78**	**0.0089**	**0.0066**
Jupiter	**2866-08-15 13:11 G**	**2768071.85**	**2768072.05**	**2768072.25**	**0.0533**	**0.0023**
Saturn	**2866-11-16 09:35 G**	**2768164.70**	**2768164.90**	**2768165.11**	**0.0275**	**0.0067**
Neptune	**2867-03-15 16:19 G**	**2768284.00**	**2768284.18**	**2768284.37**	**0.0089**	**0.0049**
Neptune	**2867-10-27 05:45 G**	**2768509.54**	**2768509.74**	**2768509.95**	**0.0089**	**0.0032**
Uranus	**2867-11-13 04:04 G**	**2768526.58**	**2768526.67**	**2768526.79**	**0.0137**	**0.0120**

Neptune	**2868-06-08 19:11 G**	**2768735.08**	**2768735.30**	**2768735.52**	**0.0089**	**0.0015**
Uranus	**2868-06-26 11:45 G**	**2768752.81**	**2768752.99**	**2768753.18**	**0.0138**	**0.0075**
Neptune	**2869-01-20 08:38 G**	**2768960.64**	**2768960.86**	**2768961.08**	**0.0089**	**0.0002**
Uranus	**2869-02-07 19:11 G**	**2768979.10**	**2768979.30**	**2768979.52**	**0.0138**	**0.0029**
Neptune	**2869-09-02 21:50 G**	**2769186.21**	**2769186.41**	**2769186.64**	**0.0089**	**0.0020**
Uranus	**2869-09-22 03:07 G**	**2769205.42**	**2769205.63**	**2769205.85**	**0.0138**	**0.0018**
Neptune	**2870-04-16 11:16 G**	**2769411.78**	**2769411.97**	**2769412.18**	**0.0090**	**0.0037**
Uranus	**2870-05-06 11:02 G**	**2769431.77**	**2769431.96**	**2769432.16**	**0.0139**	**0.0065**
Neptune	**2870-11-28 00:28 G**	**2769637.35**	**2769637.52**	**2769637.71**	**0.0090**	**0.0054**
Uranus	**2870-12-18 18:57 G**	**2769658.17**	**2769658.29**	**2769658.42**	**0.0139**	**0.0112**
Neptune	**2871-07-11 13:40 G**	**2769862.95**	**2769863.07**	**2769863.22**	**0.0090**	**0.0071**
Neptune	**2872-02-22 02:52 G**	**2770088.59**	**2770088.62**	**2770088.68**	**0.0090**	**0.0088**
Jupiter	**2873-02-03 01:26 G**	**2770435.54**	**2770435.56**	**2770435.61**	**0.0497**	**0.0490**
Jupiter	**2878-04-20 02:24 G**	**2772337.49**	**2772337.60**	**2772337.72**	**0.0534**	**0.0434**
Mars	**2879-12-03 12:14 G**	**2772929.93**	**2772930.01**	**2772930.10**	**0.1856**	**0.1612**
Saturn	**2881-12-09 01:11 G**	**2773666.38**	**2773666.55**	**2773666.74**	**0.0284**	**0.0140**
Saturn	**2882-07-26 18:00 G**	**2773896.05**	**2773896.25**	**2773896.45**	**0.0286**	**0.0100**
Jupiter	**2884-10-09 03:35 G**	**2774701.46**	**2774701.65**	**2774701.85**	**0.0496**	**0.0166**
Mars	**2886-05-16 00:14 G**	**2775285.35**	**2775285.51**	**2775285.67**	**0.1692**	**0.0694**
Saturn	**2895-10-12 07:55 G**	**2778721.64**	**2778721.83**	**2778722.02**	**0.0276**	**0.0118**
Saturn	**2896-05-28 16:04 G**	**2778950.97**	**2778951.17**	**2778951.37**	**0.0275**	**0.0097**
Jupiter	**2896-06-14 06:14 G**	**2778967.56**	**2778967.76**	**2778967.95**	**0.0494**	**0.0153**
Jupiter	**2902-04-24 01:55 G**	**2781106.39**	**2781106.58**	**2781106.77**	**0.0532**	**0.0196**
Uranus	**2907-07-19 23:31 G**	**2783019.36**	**2783019.48**	**2783019.63**	**0.0141**	**0.0109**
Jupiter	**2908-02-19 08:38 G**	**2783233.81**	**2783233.86**	**2783233.92**	**0.0492**	**0.0470**
Uranus	**2908-03-02 09:50 G**	**2783245.72**	**2783245.91**	**2783246.11**	**0.0141**	**0.0059**
Uranus	**2908-10-14 19:40 G**	**2783472.11**	**2783472.32**	**2783472.54**	**0.0141**	**0.0010**
Uranus	**2909-05-29 05:31 G**	**2783698.52**	**2783698.73**	**2783698.94**	**0.0140**	**0.0040**
Uranus	**2910-01-10 14:52 G**	**2783924.96**	**2783925.12**	**2783925.29**	**0.0140**	**0.0089**
Uranus	**2910-08-25 00:00 G**	**2784151.48**	**2784151.50**	**2784151.55**	**0.0140**	**0.0138**

Saturn 2911-06-22 12:43 G 2784452.84 2784453.03 2784453.24 0.0284 0.0098

Saturn 2912-02-07 05:31 G 2784682.55 2784682.73 2784682.92 0.0286 0.0142

Mars 2913-09-30 22:19 G 2785284.27 2785284.43 2785284.59 0.1839 0.0644

Jupiter 2913-12-27 15:50 G 2785371.98 2785372.16 2785372.35 0.0534 0.0211

Mars 2918-05-15 22:48 G 2786972.28 2786972.45 2786972.61 0.1682 0.0518

Jupiter 2920-06-17 11:45 G 2787735.85 2787735.99 2787736.14 0.0496 0.0349

Saturn 2925-04-24 15:07 G 2789507.93 2789508.13 2789508.33 0.0276 0.0082

Saturn 2925-12-09 22:48 G 2789737.27 2789737.45 2789737.64 0.0274 0.0132

Pluto 2928-03-29 07:11 G 2790577.73 2790577.80 2790577.91 0.0067 0.0061

Pluto 2928-11-09 12:28 G 2790802.83 2790803.02 2790803.24 0.0067 0.0022

Pluto 2929-06-22 17:31 G 2791028.03 2791028.23 2791028.46 0.0067 0.0018

Pluto 2930-02-02 22:48 G 2791253.35 2791253.45 2791253.57 0.0067 0.0058

Jupiter 2932-02-21 14:09 G 2792001.88 2792002.09 2792002.29 0.0495 0.0027

Jupiter 2937-12-30 19:40 G 2794141.21 2794141.32 2794141.44 0.0530 0.0436

Saturn 2941-01-01 17:02 G 2795239.00 2795239.21 2795239.41 0.0284 0.0068

Saturn 2941-08-19 09:50 G 2795468.75 2795468.91 2795469.08 0.0286 0.0174

Jupiter 2943-10-27 16:48 G 2796268.04 2796268.20 2796268.37 0.0493 0.0294

Mars 2945-09-30 16:19 G 2796972.06 2796972.18 2796972.31 0.1852 0.1256

Neptune 2948-02-05 00:43 G 2797829.48 2797829.53 2797829.64 0.0088 0.0082

Neptune 2948-09-17 13:26 G 2798054.93 2798055.06 2798055.23 0.0088 0.0066

Neptune 2949-05-01 01:55 G 2798280.42 2798280.58 2798280.78 0.0088 0.0050

Jupiter 2949-09-04 09:21 G 2798406.69 2798406.89 2798407.10 0.0532 0.0030

Neptune 2949-12-12 14:52 G 2798505.92 2798506.12 2798506.33 0.0088 0.0033

Mars 2950-05-14 19:26 G 2798659.31 2798659.31 2798659.31 0.1673 0.1672

Neptune 2950-07-26 03:35 G 2798731.43 2798731.65 2798731.86 0.0088 0.0017

Neptune 2951-03-08 16:19 G 2798956.96 2798957.18 2798957.40 0.0088 0.0002

Neptune 2951-10-20 04:48 G 2799182.48 2799182.70 2799182.92 0.0088 0.0015

Uranus 2952-02-25 22:19 G 2799311.29 2799311.43 2799311.60 0.0137 0.0093

Mars 2952-03-13 10:48 G 2799327.80 2799327.95 2799328.09 0.1695 0.0871

Neptune 2952-06-01 17:16 G 2799408.02 2799408.22 2799408.43 0.0088 0.0031

Uranus 2952-10-09 06:14 G 2799537.56 2799537.76 2799537.97 0.0138 0.0047

Neptune 2953-01-13 06:00 G 2799633.56 2799633.75 2799633.93 0.0088 0.0047

Uranus 2953-05-23 13:55 G 2799763.86 2799764.08 2799764.30 0.0138 0.0001

Neptune 2953-08-26 18:00 G 2799859.12 2799859.25 2799859.43 0.0088 0.0064

Uranus 2954-01-04 21:35 G 2799990.19 2799990.40 2799990.60 0.0138 0.0046

Saturn 2954-03-20 12:00 G 2800064.96 2800065.00 2800065.05 0.0278 0.0271

Neptune 2954-04-09 06:43 G 2800084.72 2800084.78 2800084.90 0.0088 0.0080

Uranus 2954-08-19 05:16 G 2800216.57 2800216.72 2800216.89 0.0139 0.0093

Saturn 2954-11-04 21:07 G 2800294.17 2800294.38 2800294.59 0.0276 0.0053

Saturn 2955-06-22 04:48 G 2800523.53 2800523.70 2800523.87 0.0274 0.0161

Jupiter 2961-05-09 19:55 G 2802672.20 2802672.33 2802672.47 0.0534 0.0394

Jupiter 2967-10-30 00:28 G 2805036.34 2805036.52 2805036.71 0.0495 0.0217

Saturn 2969-11-27 12:43 G 2805795.95 2805796.03 2805796.12 0.0283 0.0260

Saturn 2970-07-15 04:48 G 2806025.49 2806025.70 2806025.91 0.0285 0.0025

Saturn 2971-03-01 21:50 G 2806255.28 2806255.41 2806255.55 0.0286 0.0217

Earth 2976-06-16 20:52 G 2808189.30 2808189.37 2808189.43 0.2630 0.2357

Jupiter 2979-07-05 00:43 G 2809302.33 2809302.53 2809302.72 0.0494 0.0115

Mars 2979-07-29 03:07 G 2809326.49 2809326.63 2809326.78 0.1835 0.0974

Saturn 2983-09-30 20:24 G 2810851.25 2810851.35 2810851.48 0.0277 0.0233

Mars 2984-03-12 09:07 G 2811014.71 2811014.88 2811015.05 0.1685 0.0347

Saturn 2984-05-17 05:16 G 2811080.51 2811080.72 2811080.93 0.0276 0.0015

Earth 2984-06-14 13:55 G 2811108.93 2811109.08 2811109.23 0.2631 0.0941

Moon 2984-06-14 19:11 G 2811109.15 2811109.30 2811109.45 0.2633 0.0602 *

Saturn 2985-01-01 12:28 G 2811309.88 2811310.02 2811310.17 0.0274 0.0197

Jupiter 2985-05-13 00:57 G 2811441.36 2811441.54 2811441.71 0.0532 0.0261

Jupiter 2991-03-10 03:21 G 2813568.55 2813568.64 2813568.75 0.0493 0.0432

Uranus 2991-03-19 08:38 G 2813577.80 2813577.86 2813577.96 0.0141 0.0130

Uranus 2991-10-31 18:57 G 2813804.12 2813804.29 2813804.48 0.0141 0.0080

Uranus 2992-06-14 05:02 G 2814030.50 2814030.71 2814030.93 0.0141 0.0030

Uranus 2993-01-26 14:52 G 2814256.91 2814257.12 2814257.34 0.0140 0.0020

Uranus	**2993-09-10 00:28**	**G**	**2814483.34**	**2814483.52**	**2814483.71**	**0.0140**	**0.0069**	
Uranus	**2994-04-24 09:50**	**G**	**2814709.81**	**2814709.91**	**2814710.04**	**0.0140**	**0.0118**	
Jupiter	**2997-01-15 14:52**	**G**	**2815706.92**	**2815707.12**	**2815707.31**	**0.0533**	**0.0147**	
Saturn	**2999-06-09 16:04**	**G**	**2816582.06**	**2816582.17**	**2816582.30**	**0.0283**	**0.0232**	
Saturn	**3000-01-25 08:09**	**G**	**2816811.63**	**2816811.84**	**2816812.06**	**0.0285**	**0.0006**	
Saturn	**3000-09-12 01:26**	**G**	**2817041.46**	**2817041.56**	**2817041.67**	**0.0287**	**0.0247**	

4TH MILLENNIUM CE

This is a list of transits of Venus in the 4th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**3003-07-08 09:07**	**G**	**2818070.77**	**2818070.88**	**2818071.00**	**0.0497**	**0.0401**	
Mars	**3011-07-29 20:38**	**G**	**2821014.21**	**2821014.36**	**2821014.51**	**0.1848**	**0.0899**	
Saturn	**3013-04-13 01:55**	**G**	**2821637.45**	**2821637.58**	**2821637.73**	**0.0277**	**0.0203**	
Saturn	**3013-11-28 10:48**	**G**	**2821866.73**	**2821866.95**	**2821867.16**	**0.0275**	**0.0015**	
Saturn	**3014-07-15 17:45**	**G**	**2822096.13**	**2822096.24**	**2822096.37**	**0.0274**	**0.0226**	
Jupiter	**3015-03-13 11:45**	**G**	**2822336.79**	**2822336.99**	**2822337.19**	**0.0495**	**0.0080**	
Pluto	**3015-04-18 14:09**	**G**	**2822372.91**	**2822373.09**	**2822373.29**	**0.0077**	**0.0041**	
Pluto	**3015-11-29 23:31**	**G**	**2822598.27**	**2822598.48**	**2822598.70**	**0.0077**	**0.0020**	
Mars	**3016-03-12 06:28**	**G**	**2822701.70**	**2822701.77**	**2822701.84**	**0.1676**	**0.1520**	
Mars	**3018-01-09 21:07**	**G**	**2823370.24**	**2823370.38**	**2823370.51**	**0.1698**	**0.1054**	
Jupiter	**3021-01-19 13:26**	**G**	**2824475.98**	**2824476.06**	**2824476.15**	**0.0531**	**0.0478**	
Jupiter	**3026-11-16 13:40**	**G**	**2826602.90**	**2826603.07**	**2826603.25**	**0.0493**	**0.0244**	
Saturn	**3028-12-21 03:07**	**G**	**2827368.48**	**2827368.63**	**2827368.79**	**0.0283**	**0.0190**	

Saturn	3029-08-07 19:40 G	2827598.11	2827598.32	2827598.53	0.0285	0.0047
Neptune	3030-11-05 09:21 G	2828052.79	2828052.89	2828053.02	0.0089	0.0077
Neptune	3031-06-18 22:33 G	2828278.30	2828278.44	2828278.63	0.0089	0.0060
Neptune	3032-01-30 12:14 G	2828503.83	2828504.01	2828504.22	0.0089	0.0042
Neptune	3032-09-12 01:55 G	2828729.38	2828729.58	2828729.80	0.0089	0.0025
Jupiter	3032-09-24 04:04 G	2828741.47	2828741.67	2828741.87	0.0533	0.0075
Neptune	3033-04-25 15:35 G	2828954.93	2828955.15	2828955.37	0.0089	0.0008
Neptune	3033-12-07 04:48 G	2829180.49	2829180.70	2829180.92	0.0089	0.0009
Neptune	3034-07-20 18:00 G	2829406.05	2829406.25	2829406.47	0.0089	0.0027
Neptune	3035-03-03 07:26 G	2829631.63	2829631.81	2829632.01	0.0089	0.0044
Neptune	3035-10-14 20:52 G	2829857.22	2829857.37	2829857.54	0.0089	0.0061
Uranus	3035-10-27 09:21 G	2829869.78	2829869.89	2829870.03	0.0137	0.0111
Neptune	3036-05-27 10:04 G	2830082.83	2830082.92	2830083.04	0.0090	0.0078
Uranus	3036-06-09 16:48 G	2830096.02	2830096.20	2830096.40	0.0137	0.0066
Uranus	3037-01-22 00:14 G	2830322.30	2830322.51	2830322.73	0.0138	0.0020
Uranus	3037-09-05 07:55 G	2830548.62	2830548.83	2830549.05	0.0138	0.0027
Uranus	3038-04-19 15:50 G	2830774.98	2830775.16	2830775.34	0.0138	0.0074
Uranus	3038-12-01 23:31 G	2831001.39	2831001.48	2831001.60	0.0139	0.0121
Saturn	3042-10-24 10:48 G	2832423.79	2832423.95	2832424.13	0.0277	0.0164
Saturn	3043-06-10 19:11 G	2832653.10	2832653.30	2832653.51	0.0275	0.0053
Saturn	3044-01-26 02:09 G	2832882.54	2832882.59	2832882.65	0.0273	0.0262
Jupiter	3044-05-29 19:11 G	2833007.14	2833007.30	2833007.46	0.0534	0.0330
Mars	3045-05-26 08:24 G	2833368.73	2833368.85	2833368.97	0.1831	0.1291
Mars	3050-01-08 19:55 G	2835057.16	2835057.33	2835057.51	0.1688	0.0186
Jupiter	3050-11-18 19:11 G	2835371.13	2835371.30	2835371.48	0.0496	0.0258
Saturn	3058-07-03 06:43 G	2838154.61	2838154.78	2838154.96	0.0283	0.0162
Saturn	3059-02-17 23:02 G	2838384.26	2838384.46	2838384.67	0.0285	0.0076
Jupiter	3062-07-24 21:50 G	2839637.21	2839637.41	2839637.61	0.0494	0.0064
Jupiter	3068-06-01 21:50 G	2841776.25	2841776.41	2841776.58	0.0531	0.0317
Saturn	3072-05-05 15:21 G	2843209.96	2843210.14	2843210.33	0.0277	0.0137

Saturn 3072-12-20 23:31 G 2843439.28 2843439.48 2843439.69 0.0275 0.0079

Jupiter 3074-03-30 01:11 G 2843903.43 2843903.55 2843903.69 0.0493 0.0379

Uranus 3075-07-02 02:24 G 2844362.47 2844362.60 2844362.76 0.0141 0.0103

Uranus 3076-02-13 12:28 G 2844588.83 2844589.02 2844589.24 0.0141 0.0053

Uranus 3076-09-26 22:48 G 2844815.23 2844815.45 2844815.67 0.0141 0.0003

Uranus 3077-05-11 08:24 G 2845041.65 2845041.85 2845042.06 0.0140 0.0047

Mars 3077-05-26 01:11 G 2845056.38 2845056.55 2845056.72 0.1844 0.0556

Uranus 3077-12-23 17:45 G 2845268.10 2845268.24 2845268.41 0.0140 0.0096

Jupiter 3080-02-05 09:21 G 2846041.69 2846041.89 2846042.09 0.0533 0.0104

Mars 3082-01-07 17:31 G 2846744.14 2846744.23 2846744.33 0.1678 0.1368

Mars 3083-11-07 07:55 G 2847412.71 2847412.83 2847412.95 0.1701 0.1229

Jupiter 3086-07-27 06:28 G 2848405.69 2848405.77 2848405.85 0.0497 0.0454

Saturn 3088-01-13 16:19 G 2848941.00 2848941.18 2848941.38 0.0284 0.0123

Saturn 3088-08-30 09:07 G 2849170.69 2849170.88 2849171.08 0.0286 0.0117

Earth 3089-12-18 22:48 G 2849646.30 2849646.45 2849646.60 0.2702 0.0884

Moon 3089-12-19 03:35 G 2849646.54 2849646.65 2849646.77 0.2705 0.1782 *

Jupiter 3091-10-10 22:19 G 2850307.39 2850307.43 2850307.49 0.0535 0.0518

Jupiter 3098-04-01 06:14 G 2852671.56 2852671.76 2852671.95 0.0495 0.0118

Saturn 3101-11-17 00:28 G 2853996.32 2853996.52 2853996.72 0.0276 0.0097

Saturn 3102-07-04 08:24 G 2854225.66 2854225.85 2854226.04 0.0275 0.0118

Jupiter 3109-12-06 08:38 G 2856937.68 2856937.86 2856938.05 0.0493 0.0204

Mars 3111-03-24 13:40 G 2857410.99 2857411.07 2857411.15 0.1827 0.1609

Neptune 3112-12-21 22:48 G 2858049.34 2858049.45 2858049.57 0.0088 0.0074

Neptune 3113-08-04 11:16 G 2858274.81 2858274.97 2858275.14 0.0088 0.0058

Neptune 3114-03-18 00:00 G 2858500.31 2858500.50 2858500.70 0.0088 0.0042

Neptune 3114-10-29 12:28 G 2858725.82 2858726.02 2858726.24 0.0088 0.0026

Neptune 3115-06-12 00:57 G 2858951.33 2858951.54 2858951.77 0.0088 0.0010

Jupiter 3115-10-15 04:19 G 2859076.49 2859076.68 2859076.88 0.0532 0.0147

Mars 3115-11-07 06:43 G 2859099.61 2859099.78 2859099.95 0.1691 0.0018

Neptune 3116-01-23 13:40 G 2859176.85 2859177.07 2859177.29 0.0088 0.0006

Neptune 3116-09-05 02:09 G 2859402.38 2859402.59 2859402.81 0.0088 0.0023

Neptune 3117-04-18 14:38 G 2859627.92 2859628.11 2859628.32 0.0088 0.0039

Saturn 3117-07-26 19:26 G 2859727.12 2859727.31 2859727.52 0.0284 0.0096

Neptune 3117-11-30 03:07 G 2859853.47 2859853.63 2859853.82 0.0088 0.0055

Saturn 3118-03-13 12:14 G 2859956.83 2859957.01 2859957.19 0.0286 0.0144

Neptune 3118-07-13 15:50 G 2860079.04 2860079.16 2860079.30 0.0088 0.0071

Neptune 3119-02-24 04:48 G 2860304.68 2860304.70 2860304.72 0.0088 0.0087

Uranus 3119-06-27 20:24 G 2860428.30 2860428.35 2860428.44 0.0137 0.0129

Uranus 3120-02-09 03:35 G 2860654.50 2860654.65 2860654.84 0.0137 0.0084

Uranus 3120-09-22 11:16 G 2860880.77 2860880.97 2860881.19 0.0138 0.0038

Uranus 3121-05-06 18:57 G 2861107.07 2861107.29 2861107.51 0.0138 0.0008

Uranus 3121-12-19 02:38 G 2861333.41 2861333.61 2861333.81 0.0138 0.0055

Uranus 3122-08-02 10:04 G 2861559.78 2861559.92 2861560.08 0.0138 0.0101

Jupiter 3127-06-19 17:45 G 2863342.07 2863342.24 2863342.42 0.0534 0.0268

Saturn 3131-05-30 03:21 G 2864782.44 2864782.64 2864782.85 0.0276 0.0073

Saturn 3132-01-14 11:16 G 2865011.80 2865011.97 2865012.16 0.0274 0.0142

Jupiter 3133-12-08 18:00 G 2865706.09 2865706.25 2865706.41 0.0496 0.0317

Mars 3143-03-24 05:45 G 2869098.56 2869098.74 2869098.91 0.1840 0.0210

Jupiter 3145-08-13 19:55 G 2869972.12 2869972.33 2869972.53 0.0494 0.0010

Saturn 3147-02-06 04:04 G 2870513.47 2870513.67 2870513.88 0.0284 0.0058

Saturn 3147-09-23 21:07 G 2870743.22 2870743.38 2870743.55 0.0286 0.0183

Mars 3147-11-06 04:48 G 2870786.58 2870786.70 2870786.81 0.1681 0.1212

Mars 3149-09-04 17:45 G 2871455.15 2871455.24 2871455.34 0.1704 0.1420

Jupiter 3151-06-22 18:14 G 2872111.11 2872111.26 2872111.40 0.0531 0.0370

Jupiter 3157-04-18 20:24 G 2874238.21 2874238.35 2874238.50 0.0493 0.0338

Uranus 3159-03-02 10:48 G 2874920.87 2874920.95 2874921.07 0.0141 0.0126

Uranus 3159-10-14 21:07 G 2875147.21 2875147.38 2875147.58 0.0141 0.0075

Saturn 3160-04-24 02:52 G 2875339.54 2875339.62 2875339.71 0.0278 0.0252

Uranus 3160-05-28 07:26 G 2875373.60 2875373.81 2875374.03 0.0141 0.0025

Saturn 3160-12-09 12:00 G 2875568.79 2875569.00 2875569.21 0.0276 0.0034

Uranus 3161-01-09 17:02 G 2875600.00 2875600.21 2875600.43 0.0141 0.0026

Saturn 3161-07-26 19:40 G 2875798.16 2875798.32 2875798.48 0.0274 0.0180

Uranus 3161-08-24 02:52 G 2875826.44 2875826.62 2875826.81 0.0140 0.0074

Uranus 3162-04-07 12:14 G 2876052.92 2876053.01 2876053.12 0.0140 0.0123

Jupiter 3163-02-25 09:50 G 2876376.70 2876376.91 2876377.11 0.0533 0.0034

Jupiter 3174-10-31 00:00 G 2880642.40 2880642.50 2880642.62 0.0535 0.0443

Saturn 3176-01-01 15:07 G 2881070.07 2881070.13 2881070.21 0.0282 0.0265

Saturn 3176-08-18 06:43 G 2881299.57 2881299.78 2881300.00 0.0284 0.0032

Pluto 3176-10-14 13:55 G 2881356.96 2881357.08 2881357.22 0.0067 0.0053

Saturn 3177-04-04 23:16 G 2881529.34 2881529.47 2881529.63 0.0286 0.0209

Pluto 3177-05-27 18:57 G 2881582.08 2881582.29 2881582.51 0.0067 0.0014

Pluto 3178-01-07 23:45 G 2881807.31 2881807.49 2881807.71 0.0067 0.0026

Pluto 3178-08-21 04:33 G 2882032.68 2882032.69 2882032.76 0.0067 0.0067

Jupiter 3181-04-21 04:48 G 2883006.51 2883006.70 2883006.89 0.0495 0.0176

Mars 3181-09-03 17:16 G 2883142.04 2883142.22 2883142.39 0.1694 0.0163

Saturn 3189-11-04 04:19 G 2886125.57 2886125.68 2886125.80 0.0278 0.0231

Saturn 3190-06-21 13:40 G 2886354.85 2886355.07 2886355.28 0.0276 0.0013

Saturn 3191-02-05 21:21 G 2886584.25 2886584.39 2886584.54 0.0274 0.0201

Jupiter 3192-12-25 07:55 G 2887272.64 2887272.83 2887273.03 0.0494 0.0143

Neptune 3195-02-07 16:19 G 2888047.14 2888047.18 2888047.24 0.0089 0.0087

Neptune 3195-09-21 05:45 G 2888272.62 2888272.74 2888272.89 0.0089 0.0070

Neptune 3196-05-03 19:11 G 2888498.14 2888498.30 2888498.49 0.0089 0.0053

Neptune 3196-12-15 08:38 G 2888723.67 2888723.86 2888724.07 0.0089 0.0036

Neptune 3197-07-28 22:04 G 2888949.22 2888949.42 2888949.65 0.0089 0.0019

Neptune 3198-03-11 11:45 G 2889174.77 2889174.99 2889175.21 0.0089 0.0001

Neptune 3198-10-23 01:11 G 2889400.34 2889400.55 2889400.77 0.0089 0.0016

Jupiter 3198-11-03 01:26 G 2889411.37 2889411.56 2889411.74 0.0532 0.0201

Neptune 3199-06-05 14:24 G 2889625.91 2889626.10 2889626.31 0.0089 0.0034

Neptune 3200-01-17 03:50 G 2889851.49 2889851.66 2889851.85 0.0089 0.0051

Neptune 3200-08-29 17:31 G 2890077.09 2890077.23 2890077.37 0.0089 0.0068

Neptune 3201-04-12 06:14 G 2890302.72 2890302.76 2890302.85 0.0089 0.0086

Uranus 3203-10-09 15:07 G 2891213.00 2891213.13 2891213.29 0.0137 0.0102

Uranus 3204-05-22 22:33 G 2891439.25 2891439.44 2891439.64 0.0137 0.0056

Jupiter 3204-08-30 11:02 G 2891538.89 2891538.96 2891539.03 0.0492 0.0461

Uranus 3205-01-04 06:00 G 2891665.53 2891665.75 2891665.97 0.0138 0.0010

Saturn 3205-07-13 22:04 G 2891856.30 2891856.42 2891856.54 0.0283 0.0231

Uranus 3205-08-18 13:26 G 2891891.86 2891892.06 2891892.27 0.0138 0.0036

Saturn 3206-02-28 13:55 G 2892085.87 2892086.08 2892086.29 0.0285 0.0005

Uranus 3206-04-01 21:07 G 2892118.21 2892118.38 2892118.56 0.0138 0.0083

Saturn 3206-10-16 06:43 G 2892315.69 2892315.78 2892315.90 0.0287 0.0246

Uranus 3206-11-14 04:48 G 2892344.64 2892344.70 2892344.79 0.0139 0.0130

Mars 3209-01-18 11:16 G 2893140.79 2893140.97 2893141.14 0.1836 0.0110

Jupiter 3210-07-08 15:07 G 2893676.94 2893677.13 2893677.32 0.0534 0.0211

Mars 3213-09-02 15:35 G 2894829.02 2894829.15 2894829.29 0.1684 0.1057

Mars 3215-07-03 04:19 G 2895497.63 2895497.68 2895497.74 0.1708 0.1605

Jupiter 3216-12-27 13:40 G 2896040.94 2896041.07 2896041.22 0.0496 0.0363

Saturn 3219-05-17 12:28 G 2896911.88 2896912.02 2896912.18 0.0278 0.0194

Moon 3219-06-19 23:31 G 2896945.41 2896945.48 2896945.56 0.2624 0.2298

Earth 3219-06-19 23:45 G 2896945.45 2896945.49 2896945.54 0.2631 0.2518 *

Saturn 3220-01-01 21:35 G 2897141.19 2897141.40 2897141.61 0.0276 0.0025

Saturn 3220-08-18 05:02 G 2897370.61 2897370.71 2897370.82 0.0274 0.0237

Moon 3227-06-17 12:28 G 2899864.86 2899865.02 2899865.17 0.2628 0.0939

Earth 3227-06-17 16:48 G 2899865.05 2899865.20 2899865.35 0.2632 0.0821 *

Jupiter 3228-09-01 16:33 G 2900306.98 2900307.19 2900307.39 0.0494 0.0039

Jupiter 3234-07-11 20:38 G 2902446.26 2902446.36 2902446.47 0.0531 0.0450

Saturn 3235-01-24 00:43 G 2902642.39 2902642.53 2902642.67 0.0282 0.0206

Saturn 3235-09-10 16:19 G 2902871.97 2902872.18 2902872.39 0.0284 0.0029

Saturn 3236-04-27 09:07 G 2903101.82 2903101.88 2903101.95 0.0286 0.0269

Jupiter 3240-05-07 19:40 G 2904573.16 2904573.32 2904573.50 0.0493 0.0279

Mars 3241-01-18 05:16 G 2904828.69 2904828.72 2904828.76 0.1850 0.1808

Uranus 3243-06-14 05:16 G 2905705.56 2905705.72 2905705.88 0.0141 0.0098

Uranus 3244-01-26 15:07 G 2905931.93 2905932.13 2905932.34 0.0141 0.0048

Uranus 3244-09-09 01:11 G 2906158.33 2906158.55 2906158.77 0.0141 0.0002

Uranus 3245-04-23 11:02 G 2906384.76 2906384.96 2906385.16 0.0140 0.0052

Uranus 3245-12-05 20:09 G 2906611.21 2906611.34 2906611.51 0.0140 0.0102

Jupiter 3246-03-16 11:02 G 2906711.76 2906711.96 2906712.16 0.0533 0.0043

Mars 3247-07-02 03:50 G 2907184.49 2907184.66 2907184.83 0.1697 0.0335

Saturn 3248-11-26 12:43 G 2907697.87 2907698.03 2907698.20 0.0277 0.0174

Saturn 3249-07-13 21:50 G 2907927.20 2907927.41 2907927.62 0.0276 0.0044

Saturn 3250-02-28 05:31 G 2908156.66 2908156.73 2908156.81 0.0274 0.0256

Jupiter 3257-11-18 22:48 G 2910977.31 2910977.45 2910977.59 0.0534 0.0380

Pluto 3263-11-02 22:19 G 2913152.22 2913152.43 2913152.64 0.0077 0.0027

Jupiter 3264-05-10 04:33 G 2913341.52 2913341.69 2913341.87 0.0495 0.0240

Pluto 3264-06-15 07:11 G 2913377.62 2913377.80 2913378.02 0.0077 0.0034

Saturn 3264-08-05 06:14 G 2913428.59 2913428.76 2913428.92 0.0283 0.0174

Saturn 3265-03-22 22:04 G 2913658.21 2913658.42 2913658.62 0.0285 0.0062

Mars 3274-11-15 16:19 G 2917183.01 2917183.18 2917183.35 0.1832 0.0437

Jupiter 3276-01-14 05:16 G 2917607.52 2917607.72 2917607.92 0.0493 0.0093

Neptune 3277-03-25 07:40 G 2918043.76 2918043.82 2918043.90 0.0088 0.0083

Neptune 3277-11-05 20:09 G 2918269.21 2918269.34 2918269.50 0.0088 0.0067

Saturn 3278-06-08 20:24 G 2918484.17 2918484.35 2918484.53 0.0277 0.0139

Neptune 3278-06-19 08:38 G 2918494.70 2918494.86 2918495.06 0.0088 0.0051

Saturn 3279-01-24 05:02 G 2918713.51 2918713.71 2918713.92 0.0276 0.0080

Neptune 3279-01-30 21:21 G 2918720.20 2918720.39 2918720.61 0.0088 0.0035

Mars 3279-07-01 02:38 G 2918871.46 2918871.61 2918871.75 0.1687 0.0893

Neptune 3279-09-13 10:19 G 2918945.71 2918945.93 2918946.14 0.0088 0.0018

Neptune 3280-04-25 22:48 G 2919171.23 2919171.45 2919171.67 0.0088 0.0002

Neptune 3280-12-07 11:16 G 2919396.76 2919396.97 2919397.19 0.0088 0.0015

Neptune 3281-07-20 23:45 G 2919622.29 2919622.49 2919622.71 0.0088 0.0031

Jupiter 3281-11-22 03:21 G 2919746.47 2919746.64 2919746.82 0.0532 0.0280

Neptune	3282-03-03 12:28 G	2919847.84	2919848.02	2919848.22	0.0088	0.0047
Neptune	3282-10-15 00:57 G	2920073.40	2920073.54	2920073.71	0.0088	0.0063
Neptune	3283-05-28 13:40 G	2920298.98	2920299.07	2920299.17	0.0088	0.0079
Uranus	3287-06-09 02:09 G	2921771.50	2921771.59	2921771.71	0.0137	0.0120
Jupiter	3287-09-19 08:52 G	2921873.76	2921873.87	2921873.98	0.0492	0.0409
Uranus	3288-01-21 09:21 G	2921997.72	2921997.89	2921998.08	0.0137	0.0075
Uranus	3288-09-03 16:48 G	2922224.00	2922224.20	2922224.42	0.0138	0.0030
Uranus	3289-04-18 00:28 G	2922450.31	2922450.52	2922450.74	0.0138	0.0017
Uranus	3289-11-30 08:09 G	2922676.65	2922676.84	2922677.03	0.0138	0.0063
Uranus	3290-07-14 15:35 G	2922903.03	2922903.15	2922903.29	0.0138	0.0111
Jupiter	3293-07-27 18:28 G	2924012.08	2924012.27	2924012.47	0.0534	0.0126
Saturn	3294-02-15 08:24 G	2924214.68	2924214.85	2924215.04	0.0282	0.0151
Saturn	3294-10-03 00:00 G	2924444.30	2924444.50	2924444.71	0.0284	0.0086
Jupiter	3300-01-16 14:24 G	2926376.00	2926376.10	2926376.20	0.0496	0.0429
Mars	3306-11-16 10:04 G	2928870.82	2928870.92	2928871.03	0.1846	0.1464
Saturn	3307-12-20 19:26 G	2929270.12	2929270.31	2929270.50	0.0277	0.0121
Saturn	3308-08-06 04:19 G	2929499.48	2929499.68	2929499.88	0.0275	0.0096
Jupiter	3311-09-22 17:31 G	2930642.03	2930642.23	2930642.43	0.0495	0.0108
Mars	3313-04-29 14:09 G	2931226.93	2931227.09	2931227.26	0.1700	0.0516
Jupiter	3317-07-31 20:09 G	2932781.30	2932781.34	2932781.39	0.0531	0.0518
Jupiter	3323-05-28 20:38 G	2934908.17	2934908.36	2934908.54	0.0493	0.0214
Saturn	3323-08-29 12:43 G	2935000.84	2935001.03	2935001.22	0.0283	0.0120
Saturn	3324-04-15 04:33 G	2935230.50	2935230.69	2935230.89	0.0285	0.0117
Uranus	3327-02-12 14:38 G	2936264.00	2936264.11	2936264.24	0.0142	0.0119
Uranus	3327-09-27 00:57 G	2936490.35	2936490.54	2936490.73	0.0141	0.0068
Uranus	3328-05-10 11:02 G	2936716.74	2936716.96	2936717.18	0.0141	0.0018
Uranus	3328-12-22 20:38 G	2936943.15	2936943.36	2936943.58	0.0141	0.0032
Jupiter	3329-04-05 10:48 G	2937046.75	2937046.95	2937047.15	0.0533	0.0111
Uranus	3329-08-06 06:14 G	2937169.59	2937169.76	2937169.95	0.0140	0.0081
Uranus	3330-03-20 15:50 G	2937396.08	2937396.16	2937396.24	0.0140	0.0129

Moon 3332-12-20 18:14 G 2938402.10 2938402.26 2938402.43 0.2695 0.0057

Earth 3332-12-20 22:04 G 2938402.27 2938402.42 2938402.58 0.2701 0.0648 *

Saturn 3337-07-02 02:09 G 2940056.39 2940056.59 2940056.80 0.0277 0.0088

Saturn 3338-02-16 11:02 G 2940285.78 2940285.96 2940286.15 0.0275 0.0130

Mars 3340-09-12 22:04 G 2941225.26 2941225.42 2941225.58 0.1829 0.0743

Jupiter 3340-12-09 00:57 G 2941312.37 2941312.54 2941312.71 0.0535 0.0302

Mars 3345-04-28 13:40 G 2942913.91 2942914.07 2942914.22 0.1690 0.0734

Jupiter 3347-05-31 03:07 G 2943676.47 2943676.63 2943676.80 0.0495 0.0297

Saturn 3353-03-10 15:35 G 2945786.95 2945787.15 2945787.35 0.0282 0.0096

Saturn 3353-10-26 07:11 G 2946016.62 2946016.80 2946016.99 0.0284 0.0140

Jupiter 3359-02-03 06:14 G 2947942.55 2947942.76 2947942.96 0.0494 0.0025

Neptune 3359-12-24 13:26 G 2948266.97 2948267.06 2948267.17 0.0089 0.0080

Neptune 3360-08-06 02:52 G 2948492.48 2948492.62 2948492.79 0.0089 0.0063

Neptune 3361-03-19 16:19 G 2948718.00 2948718.18 2948718.38 0.0089 0.0045

Neptune 3361-10-31 06:00 G 2948943.54 2948943.75 2948943.96 0.0089 0.0028

Neptune 3362-06-13 19:11 G 2949169.09 2949169.30 2949169.53 0.0089 0.0011

Neptune 3363-01-25 08:52 G 2949394.65 2949394.87 2949395.08 0.0089 0.0007

Neptune 3363-09-07 22:04 G 2949620.22 2949620.42 2949620.64 0.0089 0.0024

Neptune 3364-04-20 11:16 G 2949845.79 2949845.97 2949846.18 0.0089 0.0042

Neptune 3364-12-02 00:43 G 2950071.38 2950071.53 2950071.71 0.0089 0.0059

Jupiter 3364-12-12 06:57 G 2950081.64 2950081.79 2950081.93 0.0532 0.0366

Neptune 3365-07-15 14:09 G 2950296.99 2950297.09 2950297.22 0.0089 0.0076

Saturn 3367-01-12 00:28 G 2950842.32 2950842.52 2950842.73 0.0277 0.0072

Saturn 3367-08-29 09:07 G 2951071.71 2951071.88 2951072.07 0.0275 0.0146

Jupiter 3370-10-09 10:04 G 2952208.78 2952208.92 2952209.07 0.0493 0.0342

Uranus 3371-09-21 20:24 G 2952556.20 2952556.35 2952556.52 0.0137 0.0094

Uranus 3372-05-05 03:50 G 2952782.46 2952782.66 2952782.87 0.0137 0.0048

Mars 3372-09-12 14:52 G 2952912.98 2952913.12 2952913.26 0.1842 0.1121

Uranus 3372-12-17 11:16 G 2953008.76 2953008.97 2953009.19 0.0138 0.0002

Uranus 3373-07-31 18:43 G 2953235.08 2953235.28 2953235.49 0.0138 0.0045

Uranus 3374-03-15 02:24 G 2953461.44 2953461.60 2953461.77 0.0138 0.0091

Uranus 3374-10-27 10:19 G 2953687.93 2953687.93 2953687.95 0.0139 0.0138

Jupiter 3376-08-16 19:26 G 2954347.11 2954347.31 2954347.52 0.0534 0.0054

Mars 3379-02-25 00:43 G 2955269.37 2955269.53 2955269.68 0.1703 0.0697

Saturn 3382-09-20 18:43 G 2956573.08 2956573.28 2956573.49 0.0283 0.0068

Saturn 3383-05-08 10:33 G 2956802.78 2956802.94 2956803.11 0.0285 0.0170

Jupiter 3388-04-21 08:38 G 2958612.77 2958612.86 2958612.96 0.0535 0.0471

Jupiter 3394-10-11 16:48 G 2960977.01 2960977.20 2960977.39 0.0494 0.0168

Saturn 3395-12-07 20:24 G 2961399.29 2961399.35 2961399.43 0.0279 0.0262

Saturn 3396-07-24 06:43 G 2961628.57 2961628.78 2961628.99 0.0277 0.0040

Saturn 3397-03-10 15:21 G 2961857.99 2961858.14 2961858.31 0.0275 0.0177

Jupiter 3406-06-17 20:09 G 2965243.14 2965243.34 2965243.53 0.0493 0.0153

Mars 3406-07-12 03:35 G 2965267.50 2965267.65 2965267.79 0.1825 0.1062

Uranus 3410-10-13 23:02 G 2966822.45 2966822.46 2966822.49 0.0142 0.0141

Mars 3411-02-24 23:45 G 2966956.33 2966956.49 2966956.66 0.1693 0.0560

Uranus 3411-05-28 09:07 G 2967048.73 2967048.88 2967049.06 0.0141 0.0091

Saturn 3411-08-17 07:55 G 2967129.78 2967129.83 2967129.87 0.0281 0.0273

Uranus 3412-01-09 19:26 G 2967275.10 2967275.31 2967275.52 0.0141 0.0040

Saturn 3412-04-02 22:04 G 2967359.21 2967359.42 2967359.63 0.0283 0.0043

Jupiter 3412-04-25 14:52 G 2967381.93 2967382.12 2967382.31 0.0533 0.0201

Uranus 3412-08-23 05:16 G 2967501.51 2967501.72 2967501.94 0.0141 0.0010

Saturn 3412-11-18 13:40 G 2967588.92 2967589.07 2967589.23 0.0284 0.0194

Uranus 3413-04-06 15:07 G 2967727.94 2967728.13 2967728.33 0.0141 0.0059

Uranus 3413-11-19 00:28 G 2967954.40 2967954.52 2967954.67 0.0140 0.0109

Jupiter 3418-02-20 23:45 G 2969509.43 2969509.49 2969509.55 0.0492 0.0469

Jupiter 3423-12-30 05:16 G 2971647.53 2971647.72 2971647.91 0.0535 0.0211

Pluto 3425-05-01 18:43 G 2972136.15 2972136.28 2972136.44 0.0067 0.0050

Saturn 3425-06-19 18:57 G 2972185.20 2972185.29 2972185.39 0.0279 0.0245

Pluto 3425-12-13 00:14 G 2972361.30 2972361.51 2972361.73 0.0067 0.0010

Saturn 3426-02-04 05:02 G 2972414.50 2972414.71 2972414.93 0.0277 0.0024

Pluto 3426-07-26 05:16 G 2972586.53 2972586.72 2972586.92 0.0067 0.0029

Saturn 3426-09-21 13:40 G 2972643.93 2972644.07 2972644.23 0.0275 0.0193

Jupiter 3430-06-20 05:02 G 2974011.58 2974011.71 2974011.85 0.0496 0.0370

Mars 3438-07-11 19:40 G 2976955.16 2976955.32 2976955.48 0.1838 0.0776

Saturn 3441-02-26 10:04 G 2977915.83 2977915.92 2977916.03 0.0281 0.0247

Saturn 3441-10-14 00:43 G 2978145.32 2978145.53 2978145.74 0.0283 0.0016

Neptune 3442-02-09 06:00 G 2978263.64 2978263.75 2978263.86 0.0088 0.0075

Jupiter 3442-02-23 08:09 G 2978277.63 2978277.84 2978278.04 0.0494 0.0047

Saturn 3442-05-31 16:33 G 2978375.06 2978375.19 2978375.33 0.0285 0.0223

Neptune 3442-09-22 18:14 G 2978489.11 2978489.26 2978489.44 0.0088 0.0059

Neptune 3443-05-06 06:43 G 2978714.61 2978714.78 2978714.99 0.0088 0.0043

Neptune 3443-12-17 19:26 G 2978940.11 2978940.31 2978940.53 0.0088 0.0027

Neptune 3444-07-30 08:24 G 2979165.63 2979165.85 2979166.07 0.0088 0.0010

Mars 3444-12-23 10:48 G 2979311.81 2979311.95 2979312.10 0.1706 0.0884

Neptune 3445-03-12 20:52 G 2979391.16 2979391.37 2979391.60 0.0088 0.0007

Neptune 3445-10-24 09:21 G 2979616.69 2979616.89 2979617.11 0.0088 0.0023

Neptune 3446-06-06 21:50 G 2979842.23 2979842.41 2979842.62 0.0088 0.0039

Neptune 3447-01-18 10:33 G 2980067.77 2980067.94 2980068.12 0.0088 0.0055

Neptune 3447-08-31 22:33 G 2980293.34 2980293.44 2980293.60 0.0088 0.0072

Jupiter 3448-01-02 07:26 G 2980416.70 2980416.81 2980416.93 0.0532 0.0439

Neptune 3448-04-13 11:45 G 2980518.99 2980518.99 2980519.01 0.0088 0.0088

Jupiter 3453-10-29 10:19 G 2982543.76 2982543.93 2982544.10 0.0492 0.0278

Saturn 3454-12-31 00:28 G 2982971.39 2982971.52 2982971.66 0.0279 0.0215

Uranus 3455-05-23 06:43 G 2983114.67 2983114.78 2983114.91 0.0137 0.0112

Saturn 3455-08-17 10:33 G 2983200.73 2983200.94 2983201.15 0.0277 0.0008

Uranus 3456-01-04 13:55 G 2983340.90 2983341.08 2983341.28 0.0137 0.0067

Saturn 3456-04-02 19:11 G 2983430.19 2983430.30 2983430.43 0.0275 0.0223

Uranus 3456-08-17 21:21 G 2983567.18 2983567.39 2983567.61 0.0137 0.0021

Uranus 3457-04-01 04:48 G 2983793.49 2983793.70 2983793.92 0.0138 0.0025

Uranus 3457-11-13 12:14 G 2984019.84 2984020.01 2984020.21 0.0138 0.0072

Uranus 3458-06-27 20:09 G 2984246.24 2984246.34 2984246.46 0.0138 0.0118

Jupiter 3459-09-06 21:35 G 2984682.19 2984682.40 2984682.60 0.0534 0.0030

Moon 3462-06-22 00:57 G 2985701.48 2985701.54 2985701.60 0.2638 0.2394

Earth 3462-06-22 02:38 G 2985701.61 2985701.61 2985701.62 0.2632 0.2628

Earth 3470-06-19 19:40 G 2988621.17 2988621.32 2988621.47 0.2633 0.0695

Moon 3470-06-19 22:04 G 2988621.27 2988621.42 2988621.56 0.2639 0.0750 *

Saturn 3470-09-08 14:38 G 2988701.99 2988702.11 2988702.25 0.0281 0.0220

Saturn 3471-04-26 05:02 G 2988931.50 2988931.71 2988931.92 0.0283 0.0011

Jupiter 3471-05-12 12:00 G 2988947.87 2988948.00 2988948.15 0.0536 0.0385

Saturn 3471-12-11 20:38 G 2989161.26 2989161.36 2989161.47 0.0285 0.0248

Mars 3472-05-08 09:21 G 2989309.77 2989309.89 2989310.00 0.1821 0.1370

Mars 3476-12-22 10:48 G 2990998.78 2990998.95 2990999.12 0.1696 0.0394

Jupiter 3477-10-31 18:00 G 2991312.08 2991312.25 2991312.43 0.0495 0.0239

Saturn 3484-07-11 23:02 G 2993757.32 2993757.46 2993757.62 0.0279 0.0198

Saturn 3485-02-26 09:21 G 2993986.68 2993986.89 2993987.10 0.0277 0.0024

Saturn 3485-10-13 17:31 G 2994216.14 2994216.23 2994216.35 0.0275 0.0240

Jupiter 3489-07-06 21:35 G 2995578.20 2995578.40 2995578.60 0.0493 0.0083

Uranus 3495-01-25 18:00 G 2997607.12 2997607.25 2997607.39 0.0142 0.0112

Jupiter 3495-05-15 16:33 G 2997717.02 2997717.19 2997717.36 0.0533 0.0279

Uranus 3495-09-09 04:04 G 2997833.48 2997833.67 2997833.88 0.0141 0.0062

Uranus 3496-04-22 14:24 G 2998059.88 2998060.10 2998060.32 0.0141 0.0011

Uranus 3496-12-05 00:00 G 2998286.30 2998286.50 2998286.72 0.0141 0.0039

Uranus 3497-07-19 09:50 G 2998512.74 2998512.91 2998513.08 0.0140 0.0088

Uranus 3498-03-02 19:26 G 2998739.26 2998739.31 2998739.35 0.0140 0.0137

Saturn 3500-03-21 16:19 G 2999488.04 2999488.18 2999488.35 0.0282 0.0196

Saturn 3500-11-06 07:11 G 2999717.59 2999717.80 2999718.01 0.0283 0.0038

Jupiter 3501-03-13 01:26 G 2999844.44 2999844.56 2999844.68 0.0492 0.0400

Saturn 3501-06-23 23:02 G 2999947.41 2999947.46 2999947.52 0.0285 0.0276

Mars 3504-05-09 00:43 G 3000997.36 3000997.53 3000997.70 0.1834 0.0443

Jupiter 3507-01-19 06:00 G 3001982.55 3001982.75 3001982.95 0.0534 0.0138

Mars 3508-12-22 09:07 G 3002685.83 3002685.88 3002685.93 0.1685 0.1611

Mars 3510-10-21 21:35 G 3003354.26 3003354.40 3003354.53 0.1710 0.1067

Pluto 3512-05-21 02:52 G 3003931.43 3003931.62 3003931.85 0.0077 0.0025

Pluto 3513-01-01 12:28 G 3004156.83 3004157.02 3004157.22 0.0077 0.0036

Jupiter 3513-07-10 05:02 G 3004346.62 3004346.71 3004346.81 0.0495 0.0435

Saturn 3514-01-23 04:48 G 3004543.54 3004543.70 3004543.87 0.0279 0.0168

Saturn 3514-09-09 14:52 G 3004772.91 3004773.12 3004773.33 0.0277 0.0054

Saturn 3515-04-26 23:02 G 3005002.43 3005002.46 3005002.52 0.0275 0.0270

Neptune 3524-03-28 21:35 G 3008261.40 3008261.40 3008261.43 0.0089 0.0089

Neptune 3524-11-09 11:02 G 3008486.84 3008486.96 3008487.10 0.0089 0.0072

Jupiter 3525-03-15 08:09 G 3008612.64 3008612.84 3008613.04 0.0493 0.0111

Neptune 3525-06-23 00:14 G 3008712.35 3008712.51 3008712.70 0.0089 0.0055

Neptune 3526-02-03 13:40 G 3008937.88 3008938.07 3008938.28 0.0089 0.0038

Neptune 3526-09-17 03:07 G 3009163.43 3009163.63 3009163.86 0.0089 0.0021

Neptune 3527-04-30 16:48 G 3009388.98 3009389.20 3009389.42 0.0089 0.0003

Neptune 3527-12-12 06:14 G 3009614.54 3009614.76 3009614.97 0.0089 0.0015

Neptune 3528-07-24 19:11 G 3009840.11 3009840.30 3009840.52 0.0089 0.0033

Neptune 3529-03-07 08:38 G 3010065.69 3010065.86 3010066.06 0.0089 0.0050

Saturn 3529-10-01 22:19 G 3010274.27 3010274.43 3010274.61 0.0281 0.0166

Neptune 3529-10-18 22:04 G 3010291.29 3010291.42 3010291.58 0.0089 0.0067

Saturn 3530-05-19 12:43 G 3010503.83 3010504.03 3010504.24 0.0283 0.0066

Neptune 3530-06-01 11:45 G 3010516.92 3010516.99 3010517.07 0.0089 0.0084

Jupiter 3531-01-22 10:19 G 3010751.91 3010751.93 3010751.96 0.0532 0.0526

Jupiter 3536-11-18 11:02 G 3012878.78 3012878.96 3012879.15 0.0492 0.0211

Mars 3538-03-06 14:52 G 3013352.06 3013352.12 3013352.19 0.1817 0.1675

Uranus 3539-01-21 16:48 G 3013673.16 3013673.20 3013673.28 0.0137 0.0131

Uranus 3539-09-05 00:00 G 3013899.35 3013899.50 3013899.69 0.0137 0.0086

Uranus 3540-04-18 07:26 G 3014125.61 3014125.81 3014126.03 0.0137 0.0041

Uranus 3540-11-30 15:07 G 3014351.91 3014352.13 3014352.35 0.0138 0.0006

Uranus 3541-07-14 22:33 G 3014578.24 3014578.44 3014578.64 0.0138 0.0052

Uranus	**3542-02-26 06:00 G**	**3014804.61**	**3014804.75**	**3014804.91**	**0.0138**	**0.0099**
Jupiter	**3542-09-27 01:40 G**	**3015017.37**	**3015017.57**	**3015017.77**	**0.0534**	**0.0119**
Mars	**3542-10-20 21:07 G**	**3015041.21**	**3015041.38**	**3015041.55**	**0.1699**	**0.0216**
Saturn	**3543-08-05 04:04 G**	**3015329.50**	**3015329.67**	**3015329.85**	**0.0279**	**0.0149**
Saturn	**3544-03-21 13:55 G**	**3015558.88**	**3015559.08**	**3015559.29**	**0.0277**	**0.0072**
Jupiter	**3554-06-01 14:09 G**	**3019282.93**	**3019283.09**	**3019283.26**	**0.0535**	**0.0305**
Saturn	**3559-04-14 00:28 G**	**3021060.34**	**3021060.52**	**3021060.71**	**0.0282**	**0.0140**
Saturn	**3559-11-29 15:07 G**	**3021289.94**	**3021290.13**	**3021290.34**	**0.0284**	**0.0094**
Jupiter	**3560-11-20 19:40 G**	**3021647.16**	**3021647.32**	**3021647.48**	**0.0495**	**0.0309**
Mars	**3570-03-06 05:45 G**	**3025039.56**	**3025039.74**	**3025039.91**	**0.1830**	**0.0117**
Jupiter	**3572-07-26 21:50 G**	**3025913.21**	**3025913.41**	**3025913.61**	**0.0493**	**0.0016**
Saturn	**3573-02-14 09:35 G**	**3026115.72**	**3026115.90**	**3026116.10**	**0.0278**	**0.0119**
Saturn	**3573-10-01 19:26 G**	**3026345.12**	**3026345.31**	**3026345.51**	**0.0277**	**0.0102**
Mars	**3574-10-19 19:55 G**	**3026728.24**	**3026728.33**	**3026728.42**	**0.1689**	**0.1449**
Earth	**3575-12-23 21:07 G**	**3027158.22**	**3027158.38**	**3027158.54**	**0.2699**	**0.0360**
Moon	**3575-12-23 23:02 G**	**3027158.31**	**3027158.46**	**3027158.60**	**0.2706**	**0.0522** *
Mars	**3576-08-18 07:11 G**	**3027396.69**	**3027396.80**	**3027396.92**	**0.1713**	**0.1266**
Jupiter	**3578-06-04 16:33 G**	**3028052.04**	**3028052.19**	**3028052.34**	**0.0533**	**0.0353**
Uranus	**3578-09-26 00:28 G**	**3028165.47**	**3028165.52**	**3028165.59**	**0.0142**	**0.0136**
Uranus	**3579-05-10 10:48 G**	**3028391.79**	**3028391.95**	**3028392.13**	**0.0141**	**0.0086**
Uranus	**3579-12-22 20:52 G**	**3028618.17**	**3028618.37**	**3028618.59**	**0.0141**	**0.0036**
Uranus	**3580-08-05 06:57 G**	**3028844.58**	**3028844.79**	**3028845.01**	**0.0141**	**0.0015**
Uranus	**3581-03-19 16:48 G**	**3029071.01**	**3029071.20**	**3029071.40**	**0.0141**	**0.0065**
Uranus	**3581-11-01 02:09 G**	**3029297.48**	**3029297.59**	**3029297.73**	**0.0140**	**0.0114**
Jupiter	**3584-04-01 01:26 G**	**3030179.42**	**3030179.56**	**3030179.71**	**0.0491**	**0.0335**
Saturn	**3588-10-24 07:26 G**	**3031846.62**	**3031846.81**	**3031847.01**	**0.0281**	**0.0109**
Saturn	**3589-06-10 21:50 G**	**3032076.23**	**3032076.41**	**3032076.61**	**0.0283**	**0.0125**
Jupiter	**3590-02-07 07:26 G**	**3032317.60**	**3032317.81**	**3032318.01**	**0.0535**	**0.0059**
Jupiter	**3601-10-12 21:35 G**	**3036583.31**	**3036583.40**	**3036583.50**	**0.0536**	**0.0476**
Saturn	**3602-08-27 10:19 G**	**3036901.74**	**3036901.93**	**3036902.13**	**0.0278**	**0.0097**

Saturn 3603-04-13 19:55 G 3037131.14 3037131.33 3037131.52 0.0277 0.0123

Neptune 3606-05-14 15:07 G 3038258.09 3038258.13 3038258.22 0.0088 0.0084

Neptune 3606-12-26 04:04 G 3038483.54 3038483.67 3038483.82 0.0088 0.0067

Neptune 3607-08-08 16:33 G 3038709.03 3038709.19 3038709.38 0.0088 0.0051

Neptune 3608-03-21 05:16 G 3038934.54 3038934.72 3038934.94 0.0088 0.0035

Jupiter 3608-04-03 08:24 G 3038947.66 3038947.85 3038948.04 0.0494 0.0177

Mars 3608-08-17 07:26 G 3039083.64 3039083.81 3039083.98 0.1702 0.0038

Neptune 3608-11-01 18:14 G 3039160.05 3039160.26 3039160.48 0.0088 0.0018

Neptune 3609-06-15 06:57 G 3039385.57 3039385.79 3039386.01 0.0088 0.0002

Neptune 3610-01-26 19:26 G 3039611.10 3039611.31 3039611.53 0.0088 0.0015

Neptune 3610-09-09 08:09 G 3039836.64 3039836.84 3039837.05 0.0088 0.0031

Neptune 3611-04-22 20:24 G 3040062.18 3040062.35 3040062.55 0.0088 0.0048

Neptune 3611-12-04 09:07 G 3040287.74 3040287.88 3040288.04 0.0088 0.0064

Neptune 3612-07-16 21:21 G 3040513.33 3040513.39 3040513.50 0.0088 0.0081

Saturn 3618-05-06 09:50 G 3042632.70 3042632.91 3042633.11 0.0282 0.0082

Saturn 3618-12-22 00:28 G 3042862.35 3042862.52 3042862.71 0.0284 0.0153

Jupiter 3619-12-08 11:45 G 3043213.79 3043213.99 3043214.18 0.0493 0.0145

Uranus 3623-05-05 10:19 G 3044457.80 3044457.93 3044458.07 0.0137 0.0105

Uranus 3623-12-17 17:16 G 3044684.04 3044684.22 3044684.43 0.0137 0.0060

Uranus 3624-07-31 00:43 G 3044910.32 3044910.53 3044910.75 0.0137 0.0014

Uranus 3625-03-14 08:09 G 3045136.64 3045136.84 3045137.06 0.0138 0.0033

Jupiter 3625-10-16 01:11 G 3045352.36 3045352.55 3045352.74 0.0534 0.0187

Uranus 3625-10-26 15:50 G 3045362.99 3045363.16 3045363.35 0.0138 0.0079

Uranus 3626-06-09 23:31 G 3045589.41 3045589.48 3045589.59 0.0138 0.0125

Jupiter 3631-08-13 15:07 G 3047480.07 3047480.13 3047480.20 0.0491 0.0461

Saturn 3632-03-08 15:50 G 3047687.96 3047688.16 3047688.37 0.0278 0.0068

Saturn 3632-10-24 01:40 G 3047917.39 3047917.57 3047917.74 0.0276 0.0152

Mars 3636-01-01 11:45 G 3049081.82 3049081.99 3049082.16 0.1826 0.0199

Jupiter 3637-06-20 12:28 G 3049617.84 3049618.02 3049618.20 0.0536 0.0241

Mars 3640-08-16 06:43 G 3050770.67 3050770.78 3050770.89 0.1691 0.1288

Mars	3642-06-15 17:31 G	3051439.14	3051439.23	3051439.32	0.1716	0.1459
Jupiter	3643-12-10 18:57 G	3051982.15	3051982.29	3051982.42	0.0494	0.0373
Saturn	3647-04-01 04:48 G	3053189.67	3053189.70	3053189.74	0.0280	0.0275
Saturn	3647-11-16 18:28 G	3053419.06	3053419.27	3053419.48	0.0282	0.0048
Saturn	3648-07-03 09:21 G	3053648.73	3053648.89	3053649.04	0.0283	0.0187
Jupiter	3655-08-15 20:52 G	3056248.16	3056248.37	3056248.57	0.0493	0.0045
Saturn	3661-02-01 07:11 G	3058244.75	3058244.80	3058244.88	0.0280	0.0266
Jupiter	3661-06-23 18:57 G	3058387.18	3058387.29	3058387.41	0.0533	0.0436
Saturn	3661-09-18 18:00 G	3058474.05	3058474.25	3058474.46	0.0278	0.0043
Saturn	3662-05-06 03:07 G	3058703.48	3058703.63	3058703.80	0.0276	0.0176
Uranus	3663-01-07 17:45 G	3058950.11	3058950.24	3058950.39	0.0142	0.0110
Uranus	3663-08-22 03:50 G	3059176.48	3059176.66	3059176.87	0.0141	0.0060
Uranus	3664-04-04 14:24 G	3059402.88	3059403.10	3059403.32	0.0141	0.0009
Uranus	3664-11-17 00:00 G	3059629.30	3059629.50	3059629.72	0.0141	0.0042
Uranus	3665-07-01 10:04 G	3059855.75	3059855.92	3059856.08	0.0140	0.0091
Uranus	3666-02-12 19:11 G	3060082.30	3060082.30	3060082.33	0.0140	0.0140
Jupiter	3667-04-21 00:28 G	3060514.35	3060514.52	3060514.69	0.0492	0.0276
Mars	3668-01-01 04:33 G	3060769.62	3060769.69	3060769.75	0.1840	0.1681
Jupiter	3673-02-26 08:09 G	3062652.64	3062652.84	3062653.04	0.0534	0.0016
Pluto	3673-11-16 00:14 G	3062915.35	3062915.51	3062915.67	0.0067	0.0046
Mars	3674-06-14 18:00 G	3063126.07	3063126.25	3063126.42	0.1705	0.0153
Pluto	3674-06-29 05:16 G	3063140.50	3063140.72	3063140.94	0.0067	0.0007
Pluto	3675-02-09 10:04 G	3063365.74	3063365.92	3063366.12	0.0067	0.0034
Saturn	3676-10-11 06:57 G	3063975.71	3063975.79	3063975.89	0.0281	0.0250
Saturn	3677-05-28 20:52 G	3064205.16	3064205.37	3064205.58	0.0282	0.0020
Saturn	3678-01-13 12:00 G	3064434.86	3064435.00	3064435.14	0.0284	0.0216
Jupiter	3684-10-31 20:24 G	3066918.23	3066918.35	3066918.48	0.0536	0.0411
Neptune	3689-02-10 19:55 G	3068481.25	3068481.33	3068481.44	0.0089	0.0081
Neptune	3689-09-24 09:07 G	3068706.75	3068706.88	3068707.06	0.0089	0.0064
Neptune	3690-05-07 23:02 G	3068932.27	3068932.46	3068932.65	0.0089	0.0046

Saturn 3690-08-14 13:11 G 3069030.94 3069031.05 3069031.16 0.0279 0.0236

Neptune 3690-12-19 12:14 G 3069157.80 3069158.01 3069158.22 0.0090 0.0029

Saturn 3691-04-01 00:00 G 3069260.29 3069260.50 3069260.71 0.0278 0.0013

Jupiter 3691-04-23 07:40 G 3069282.65 3069282.82 3069283.00 0.0494 0.0242

Neptune 3691-08-02 01:40 G 3069383.35 3069383.57 3069383.79 0.0090 0.0011

Saturn 3691-11-16 09:07 G 3069489.75 3069489.88 3069490.03 0.0276 0.0205

Neptune 3692-03-14 14:52 G 3069608.91 3069609.12 3069609.35 0.0090 0.0007

Neptune 3692-10-26 04:19 G 3069834.47 3069834.68 3069834.90 0.0090 0.0024

Neptune 3693-06-08 17:45 G 3070060.04 3070060.24 3070060.43 0.0090 0.0041

Neptune 3694-01-20 06:43 G 3070285.63 3070285.78 3070285.96 0.0090 0.0059

Neptune 3694-09-02 20:09 G 3070511.24 3070511.34 3070511.47 0.0089 0.0076

Mars 3701-10-29 17:02 G 3073124.04 3073124.21 3073124.38 0.1822 0.0519

Jupiter 3702-12-28 10:33 G 3073548.74 3073548.94 3073549.14 0.0492 0.0084

Saturn 3706-04-24 16:48 G 3074762.07 3074762.20 3074762.34 0.0280 0.0212

Mars 3706-06-14 17:31 G 3074813.10 3074813.23 3074813.36 0.1694 0.1118

Saturn 3706-12-10 06:43 G 3074991.57 3074991.78 3074991.99 0.0282 0.0017

Uranus 3707-01-03 20:38 G 3075016.27 3075016.36 3075016.45 0.0137 0.0124

Saturn 3707-07-27 21:50 G 3075221.32 3075221.41 3075221.51 0.0284 0.0253

Uranus 3707-08-18 03:35 G 3075242.48 3075242.65 3075242.83 0.0137 0.0079

Uranus 3708-03-31 11:02 G 3075468.75 3075468.96 3075469.17 0.0137 0.0033

Mars 3708-04-13 03:07 G 3075481.59 3075481.63 3075481.67 0.1720 0.1665

Jupiter 3708-11-04 23:16 G 3075687.30 3075687.47 3075687.65 0.0534 0.0254

Uranus 3708-11-12 18:28 G 3075695.06 3075695.27 3075695.49 0.0137 0.0013

Uranus 3709-06-27 01:55 G 3075921.39 3075921.58 3075921.78 0.0138 0.0059

Uranus 3710-02-08 09:35 G 3076147.77 3076147.90 3076148.05 0.0138 0.0105

Moon 3713-06-21 22:04 G 3077377.26 3077377.42 3077377.59 0.2628 0.0539

Earth 3713-06-21 22:19 G 3077377.28 3077377.43 3077377.59 0.2634 0.0604 *

Jupiter 3714-09-02 12:43 G 3077814.93 3077815.03 3077815.15 0.0491 0.0409

Saturn 3720-02-25 17:31 G 3079817.09 3079817.23 3079817.37 0.0279 0.0206

Jupiter 3720-07-10 13:55 G 3079952.89 3079953.08 3079953.28 0.0536 0.0162

Saturn 3720-10-12 03:35 G 3080046.44 3080046.65 3080046.87 0.0278 0.0017

Saturn 3721-05-29 12:14 G 3080275.91 3080276.01 3080276.14 0.0276 0.0233

Jupiter 3726-12-30 16:48 G 3082317.11 3082317.20 3082317.30 0.0495 0.0430

Mars 3733-10-29 09:35 G 3084811.78 3084811.90 3084812.01 0.1836 0.1345

Saturn 3735-11-04 19:55 G 3085548.17 3085548.33 3085548.49 0.0281 0.0185

Saturn 3736-06-21 09:50 G 3085777.71 3085777.91 3085778.12 0.0283 0.0046

Saturn 3737-02-06 01:11 G 3086007.54 3086007.55 3086007.58 0.0285 0.0283

Jupiter 3738-09-04 19:40 G 3086583.13 3086583.32 3086583.53 0.0493 0.0105

Mars 3740-04-12 03:50 G 3087168.49 3087168.66 3087168.83 0.1709 0.0338

Jupiter 3744-07-13 16:33 G 3088722.12 3088722.19 3088722.26 0.0532 0.0496

Uranus 3746-09-07 23:45 G 3089508.44 3089508.49 3089508.57 0.0142 0.0135

Uranus 3747-04-22 10:04 G 3089734.76 3089734.92 3089735.11 0.0141 0.0085

Uranus 3747-12-04 20:38 G 3089961.15 3089961.36 3089961.57 0.0141 0.0034

Uranus 3748-07-18 06:28 G 3090187.56 3090187.77 3090187.99 0.0141 0.0017

Uranus 3749-03-01 16:04 G 3090413.99 3090414.17 3090414.38 0.0141 0.0067

Saturn 3749-09-06 23:16 G 3090603.31 3090603.47 3090603.64 0.0279 0.0176

Uranus 3749-10-14 02:09 G 3090640.47 3090640.59 3090640.71 0.0140 0.0116

Saturn 3750-04-24 09:35 G 3090832.69 3090832.90 3090833.11 0.0277 0.0046

Jupiter 3750-05-10 23:16 G 3090849.29 3090849.47 3090849.66 0.0492 0.0216

Saturn 3750-12-09 18:28 G 3091062.21 3091062.27 3091062.34 0.0276 0.0262

Jupiter 3756-03-18 03:35 G 3092987.45 3092987.65 3092987.85 0.0535 0.0068

Pluto 3760-12-05 09:21 G 3094710.68 3094710.89 3094711.12 0.0077 0.0017

Pluto 3761-07-18 18:28 G 3094936.10 3094936.27 3094936.46 0.0076 0.0044

Saturn 3765-05-17 06:14 G 3096334.59 3096334.76 3096334.95 0.0281 0.0146

Saturn 3766-01-01 20:38 G 3096564.16 3096564.36 3096564.57 0.0283 0.0086

Mars 3767-08-26 23:31 G 3097166.32 3097166.48 3097166.63 0.1818 0.0815

Jupiter 3767-11-21 16:48 G 3097253.06 3097253.20 3097253.36 0.0536 0.0356

Neptune 3771-03-30 14:09 G 3098477.99 3098478.09 3098478.22 0.0088 0.0075

Neptune 3771-11-11 02:38 G 3098703.47 3098703.61 3098703.79 0.0088 0.0059

Mars 3772-04-11 04:04 G 3098855.53 3098855.67 3098855.81 0.1698 0.0948

Neptune 3772-06-23 15:35 G 3098928.96 3098929.15 3098929.35 0.0088 0.0042

Neptune 3773-02-04 04:04 G 3099154.47 3099154.67 3099154.89 0.0088 0.0026

Neptune 3773-09-17 17:02 G 3099379.99 3099380.21 3099380.43 0.0088 0.0009

Neptune 3774-05-01 05:31 G 3099605.52 3099605.73 3099605.96 0.0088 0.0008

Jupiter 3774-05-13 04:19 G 3099617.52 3099617.68 3099617.84 0.0494 0.0292

Neptune 3774-12-12 18:00 G 3099831.05 3099831.25 3099831.47 0.0088 0.0024

Neptune 3775-07-26 06:57 G 3100056.59 3100056.79 3100056.98 0.0088 0.0040

Neptune 3776-03-07 19:26 G 3100282.15 3100282.31 3100282.49 0.0088 0.0057

Neptune 3776-10-19 08:09 G 3100507.73 3100507.84 3100507.97 0.0088 0.0073

Saturn 3779-03-20 05:02 G 3101389.53 3101389.71 3101389.90 0.0279 0.0143

Saturn 3779-11-04 14:52 G 3101618.92 3101619.12 3101619.33 0.0277 0.0078

Jupiter 3786-01-16 07:11 G 3103883.60 3103883.80 3103884.01 0.0492 0.0035

Uranus 3791-04-17 13:26 G 3105800.93 3105801.06 3105801.22 0.0137 0.0099

Jupiter 3791-11-24 22:48 G 3106022.29 3106022.45 3106022.61 0.0533 0.0322

Uranus 3791-11-29 21:07 G 3106027.18 3106027.38 3106027.58 0.0137 0.0053

Uranus 3792-07-13 04:19 G 3106253.47 3106253.68 3106253.90 0.0137 0.0008

Uranus 3793-02-24 11:45 G 3106479.79 3106479.99 3106480.20 0.0138 0.0039

Uranus 3793-10-08 19:26 G 3106706.15 3106706.31 3106706.49 0.0138 0.0085

Uranus 3794-05-23 03:07 G 3106932.58 3106932.63 3106932.71 0.0138 0.0132

Saturn 3794-11-27 09:35 G 3107120.71 3107120.90 3107121.10 0.0282 0.0118

Saturn 3795-07-15 00:14 G 3107350.31 3107350.51 3107350.70 0.0283 0.0115

Jupiter 3797-09-21 11:02 G 3108149.82 3108149.96 3108150.10 0.0491 0.0355

Mars 3799-08-26 14:52 G 3108853.97 3108854.12 3108854.26 0.1832 0.1014

Jupiter 3803-07-31 11:16 G 3110287.77 3110287.97 3110288.16 0.0535 0.0106

Mars 3806-02-08 14:09 G 3111210.92 3111211.09 3111211.25 0.1712 0.0529

Saturn 3808-09-30 11:16 G 3112175.78 3112175.97 3112176.16 0.0278 0.0112

Saturn 3809-05-17 21:07 G 3112405.18 3112405.38 3112405.57 0.0277 0.0108

Jupiter 3810-01-19 15:07 G 3112652.11 3112652.13 3112652.16 0.0495 0.0490

Moon 3818-12-25 20:24 G 3115914.18 3115914.35 3115914.51 0.2691 0.0384

Earth 3818-12-25 20:24 G 3115914.19 3115914.35 3115914.51 0.2698 0.0112 *

Jupiter 3821-09-24 17:31 G 3116918.03 3116918.23 3116918.42 0.0493 0.0160

Saturn 3824-06-09 20:52 G 3117907.17 3117907.37 3117907.57 0.0282 0.0077

Saturn 3825-01-25 11:45 G 3118136.81 3118136.99 3118137.16 0.0283 0.0157

Uranus 3830-12-21 17:45 G 3120293.11 3120293.24 3120293.39 0.0142 0.0108

Uranus 3831-08-05 03:50 G 3120519.47 3120519.66 3120519.87 0.0141 0.0058

Uranus 3832-03-18 14:24 G 3120745.88 3120746.10 3120746.32 0.0141 0.0007

Uranus 3832-10-31 00:00 G 3120972.30 3120972.50 3120972.72 0.0141 0.0044

Jupiter 3833-05-30 18:43 G 3121184.09 3121184.28 3121184.48 0.0492 0.0172

Uranus 3833-06-14 10:04 G 3121198.76 3121198.92 3121199.08 0.0140 0.0093

Mars 3833-06-24 05:02 G 3121208.57 3121208.71 3121208.85 0.1814 0.1124

Mars 3838-02-07 14:09 G 3122897.94 3122898.09 3122898.25 0.1701 0.0767

Saturn 3838-04-12 18:14 G 3122962.06 3122962.26 3122962.47 0.0278 0.0077

Saturn 3838-11-28 03:50 G 3123191.48 3123191.66 3123191.84 0.0277 0.0143

Jupiter 3839-04-08 03:21 G 3123322.44 3123322.64 3123322.84 0.0535 0.0138

Jupiter 3850-12-11 16:19 G 3127588.01 3127588.18 3127588.35 0.0536 0.0288

Saturn 3853-05-05 10:48 G 3128463.92 3128463.95 3128463.98 0.0280 0.0277

Neptune 3853-05-17 05:16 G 3128475.72 3128475.72 3128475.75 0.0089 0.0089

Saturn 3853-12-21 00:28 G 3128693.31 3128693.52 3128693.73 0.0282 0.0049

Neptune 3853-12-28 18:43 G 3128701.16 3128701.28 3128701.42 0.0089 0.0072

Saturn 3854-08-07 15:21 G 3128922.99 3128923.14 3128923.30 0.0284 0.0186

Neptune 3854-08-11 08:09 G 3128926.68 3128926.84 3128927.03 0.0089 0.0055

Neptune 3855-03-24 21:50 G 3129152.21 3129152.41 3129152.61 0.0089 0.0037

Neptune 3855-11-05 11:02 G 3129377.75 3129377.96 3129378.18 0.0089 0.0020

Neptune 3856-06-18 00:28 G 3129603.30 3129603.52 3129603.74 0.0089 0.0002

Neptune 3857-01-29 13:40 G 3129828.86 3129829.07 3129829.30 0.0089 0.0016

Jupiter 3857-06-02 01:55 G 3129952.43 3129952.58 3129952.72 0.0494 0.0346

Neptune 3857-09-12 03:21 G 3130054.44 3130054.64 3130054.85 0.0089 0.0033

Neptune 3858-04-25 16:19 G 3130280.02 3130280.18 3130280.38 0.0089 0.0051

Neptune 3858-12-07 05:45 G 3130505.61 3130505.74 3130505.89 0.0089 0.0068

Neptune 3859-07-20 18:43 G 3130731.24 3130731.28 3130731.37 0.0089 0.0086

Mars	3865-06-23 19:40 G	3132896.16	3132896.32	3132896.48	0.1828	0.0675
Saturn	3867-03-08 13:11 G	3133519.01	3133519.05	3133519.11	0.0280	0.0270
Saturn	3867-10-24 00:14 G	3133748.30	3133748.51	3133748.72	0.0278	0.0047
Saturn	3868-06-09 09:35 G	3133977.74	3133977.90	3133978.07	0.0276	0.0171
Jupiter	3869-02-05 05:02 G	3134218.51	3134218.71	3134218.92	0.0492	0.0025
Mars	3871-12-07 00:00 G	3135253.35	3135253.50	3135253.66	0.1715	0.0724
Jupiter	3874-12-14 16:19 G	3136357.04	3136357.18	3136357.34	0.0534	0.0366
Uranus	3874-12-16 23:16 G	3136359.39	3136359.47	3136359.60	0.0137	0.0119
Uranus	3875-07-31 06:57 G	3136585.61	3136585.79	3136585.97	0.0137	0.0073
Uranus	3876-03-13 14:09 G	3136811.88	3136812.09	3136812.31	0.0137	0.0028
Uranus	3876-10-25 21:35 G	3137038.19	3137038.40	3137038.62	0.0137	0.0019
Uranus	3877-06-09 05:02 G	3137264.53	3137264.71	3137264.91	0.0138	0.0065
Uranus	3878-01-21 12:43 G	3137490.91	3137491.03	3137491.17	0.0138	0.0111
Jupiter	3880-10-11 08:09 G	3138484.68	3138484.84	3138485.00	0.0491	0.0302
Saturn	3882-11-15 21:50 G	3139250.29	3139250.41	3139250.52	0.0281	0.0236
Saturn	3883-07-03 11:45 G	3139479.78	3139479.99	3139480.20	0.0282	0.0008
Saturn	3884-02-18 02:52 G	3139709.50	3139709.62	3139709.75	0.0284	0.0228
Jupiter	3886-08-19 05:45 G	3140622.54	3140622.74	3140622.94	0.0535	0.0058
Saturn	3896-09-17 22:04 G	3144305.31	3144305.42	3144305.54	0.0280	0.0230
Saturn	3897-05-05 08:24 G	3144534.64	3144534.85	3144535.06	0.0278	0.0009
Saturn	3897-12-20 17:31 G	3144764.09	3144764.23	3144764.37	0.0276	0.0209
Jupiter	3898-04-23 19:55 G	3144888.24	3144888.33	3144888.42	0.0537	0.0480
Mars	3899-04-21 11:16 G	3145250.86	3145250.97	3145251.07	0.1810	0.1423
Mars	3903-12-07 00:43 G	3146940.37	3146940.53	3146940.70	0.1704	0.0595
Jupiter	3904-10-14 12:28 G	3147252.84	3147253.02	3147253.21	0.0493	0.0203
Saturn	3912-05-29 00:57 G	3150036.41	3150036.54	3150036.69	0.0281	0.0209
Saturn	3913-01-13 15:07 G	3150265.92	3150266.13	3150266.34	0.0283	0.0022
Saturn	3913-08-31 06:28 G	3150495.69	3150495.77	3150495.87	0.0284	0.0257
Uranus	3914-08-22 01:11 G	3150851.47	3150851.55	3150851.63	0.0142	0.0131
Uranus	3915-04-05 11:31 G	3151077.81	3151077.98	3151078.17	0.0141	0.0081

Uranus 3915-11-17 21:50 G 3151304.20 3151304.41 3151304.62 0.0141 0.0030

Jupiter 3916-06-19 15:50 G 3151518.96 3151519.16 3151519.36 0.0492 0.0122

Uranus 3916-07-01 07:40 G 3151530.61 3151530.82 3151531.04 0.0141 0.0020

Uranus 3917-02-12 17:31 G 3151757.04 3151757.23 3151757.42 0.0141 0.0070

Uranus 3917-09-27 02:52 G 3151983.53 3151983.62 3151983.75 0.0140 0.0119

Jupiter 3922-04-28 00:14 G 3153657.32 3153657.51 3153657.70 0.0534 0.0194

Pluto 3922-06-04 03:35 G 3153694.51 3153694.65 3153694.82 0.0067 0.0047

Pluto 3923-01-15 09:07 G 3153919.66 3153919.88 3153920.10 0.0067 0.0007

Pluto 3923-08-28 14:09 G 3154144.90 3154145.09 3154145.28 0.0067 0.0033

Saturn 3926-04-01 03:07 G 3155091.50 3155091.63 3155091.79 0.0279 0.0202

Saturn 3926-11-16 13:40 G 3155320.86 3155321.07 3155321.29 0.0277 0.0021

Saturn 3927-07-03 22:33 G 3155550.35 3155550.44 3155550.56 0.0276 0.0237

Jupiter 3928-02-23 19:55 G 3155785.25 3155785.33 3155785.42 0.0491 0.0439

Mars 3931-04-22 01:11 G 3156938.38 3156938.55 3156938.73 0.1824 0.0353

Jupiter 3933-12-31 10:04 G 3157922.74 3157922.92 3157923.10 0.0536 0.0247

Neptune 3935-07-04 00:28 G 3158472.48 3158472.52 3158472.62 0.0088 0.0083

Neptune 3936-02-14 13:26 G 3158697.93 3158698.06 3158698.22 0.0088 0.0066

Neptune 3936-09-27 01:55 G 3158923.42 3158923.58 3158923.78 0.0088 0.0050

Neptune 3937-05-10 14:52 G 3159148.92 3159149.12 3159149.33 0.0088 0.0033

Mars 3937-10-04 10:19 G 3159295.78 3159295.93 3159296.07 0.1718 0.0916

Neptune 3937-12-22 03:21 G 3159374.44 3159374.64 3159374.87 0.0088 0.0017

Neptune 3938-08-04 16:19 G 3159599.96 3159600.18 3159600.40 0.0088 0.0000

Neptune 3939-03-18 05:02 G 3159825.50 3159825.71 3159825.93 0.0088 0.0017

Neptune 3939-10-29 17:45 G 3160051.04 3160051.24 3160051.44 0.0088 0.0033

Neptune 3940-06-11 06:00 G 3160276.58 3160276.75 3160276.95 0.0088 0.0050

Jupiter 3940-06-21 22:48 G 3160287.34 3160287.45 3160287.57 0.0494 0.0399

Neptune 3941-01-22 18:57 G 3160502.15 3160502.29 3160502.43 0.0088 0.0066

Neptune 3941-09-05 07:11 G 3160727.75 3160727.80 3160727.89 0.0088 0.0083

Saturn 3941-12-09 11:31 G 3160822.82 3160822.98 3160823.16 0.0281 0.0169

Saturn 3942-07-27 02:09 G 3161052.39 3161052.59 3161052.80 0.0283 0.0064

Moon	**3948-06-26 03:21 G**	**3163213.55**	**3163213.64**	**3163213.74**	**0.2636**	**0.2068**	
Jupiter	**3952-02-25 23:31 G**	**3164553.28**	**3164553.48**	**3164553.68**	**0.0492**	**0.0061**	
Saturn	**3955-10-12 12:43 G**	**3165877.86**	**3165878.03**	**3165878.20**	**0.0279**	**0.0161**	
Saturn	**3956-05-28 22:33 G**	**3166107.24**	**3166107.44**	**3166107.65**	**0.0277**	**0.0060**	
Moon	**3956-06-23 23:02 G**	**3166133.31**	**3166133.46**	**3166133.61**	**0.2641**	**0.0544**	
Earth	**3956-06-24 01:11 G**	**3166133.39**	**3166133.55**	**3166133.71**	**0.2635**	**0.0493**	*****
Saturn	**3957-01-13 06:57 G**	**3166336.79**	**3166336.79**	**3166336.82**	**0.0276**	**0.0275**	
Jupiter	**3958-01-03 15:35 G**	**3166692.04**	**3166692.15**	**3166692.27**	**0.0534**	**0.0432**	
Uranus	**3959-03-31 16:04 G**	**3167144.02**	**3167144.17**	**3167144.34**	**0.0137**	**0.0094**	
Uranus	**3959-11-12 23:31 G**	**3167370.28**	**3167370.48**	**3167370.69**	**0.0137**	**0.0048**	
Uranus	**3960-06-26 06:57 G**	**3167596.57**	**3167596.79**	**3167597.01**	**0.0137**	**0.0003**	
Uranus	**3961-02-07 14:09 G**	**3167822.89**	**3167823.09**	**3167823.30**	**0.0138**	**0.0044**	
Uranus	**3961-09-21 21:50 G**	**3168049.25**	**3168049.41**	**3168049.58**	**0.0138**	**0.0090**	
Uranus	**3962-05-06 05:31 G**	**3168275.71**	**3168275.73**	**3168275.77**	**0.0138**	**0.0137**	
Jupiter	**3963-11-01 03:07 G**	**3168819.46**	**3168819.63**	**3168819.80**	**0.0491**	**0.0263**	
Mars	**3965-02-16 17:16 G**	**3169293.17**	**3169293.22**	**3169293.27**	**0.1806**	**0.1721**	
Jupiter	**3969-09-08 05:31 G**	**3170957.53**	**3170957.73**	**3170957.93**	**0.0535**	**0.0012**	
Mars	**3969-10-03 10:48 G**	**3170982.78**	**3170982.95**	**3170983.12**	**0.1707**	**0.0406**	
Saturn	**3971-06-21 15:07 G**	**3171608.95**	**3171609.13**	**3171609.31**	**0.0281**	**0.0141**	
Saturn	**3972-02-06 05:31 G**	**3171838.53**	**3171838.73**	**3171838.93**	**0.0283**	**0.0091**	
Jupiter	**3981-05-13 17:31 G**	**3175223.11**	**3175223.23**	**3175223.36**	**0.0536**	**0.0421**	
Saturn	**3985-04-23 16:48 G**	**3176664.03**	**3176664.20**	**3176664.40**	**0.0279**	**0.0135**	
Saturn	**3985-12-09 02:52 G**	**3176893.43**	**3176893.62**	**3176893.83**	**0.0277**	**0.0087**	
Jupiter	**3987-11-03 10:19 G**	**3177587.76**	**3177587.93**	**3177588.11**	**0.0493**	**0.0260**	
Mars	**3997-02-16 06:28 G**	**3180980.60**	**3180980.77**	**3180980.95**	**0.1820**	**0.0036**	
Uranus	**3998-12-03 19:11 G**	**3181636.17**	**3181636.30**	**3181636.46**	**0.0142**	**0.0104**	
Jupiter	**3999-07-09 13:11 G**	**3181853.84**	**3181854.05**	**3181854.25**	**0.0492**	**0.0070**	
Uranus	**3999-07-18 05:45 G**	**3181862.54**	**3181862.74**	**3181862.94**	**0.0141**	**0.0053**	
Uranus	**4000-02-29 15:50 G**	**3182088.94**	**3182089.16**	**3182089.38**	**0.0141**	**0.0002**	
Uranus	**4000-10-13 01:40 G**	**3182315.37**	**3182315.57**	**3182315.78**	**0.0141**	**0.0048**	

5TH MILLENNIUM CE

This is a list of transits of Venus in the 5th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**4001-01-01 00:28**	**G**	**3182395.33**	**3182395.52**	**3182395.72**	**0.0282**	**0.0102**	
Uranus	**4001-05-27 11:16**	**G**	**3182541.83**	**3182541.97**	**3182542.14**	**0.0140**	**0.0098**	
Saturn	**4001-08-18 15:35**	**G**	**3182624.96**	**3182625.15**	**3182625.34**	**0.0284**	**0.0132**	
Mars	**4001-10-02 10:19**	**G**	**3182669.91**	**3182669.93**	**3182669.95**	**0.1696**	**0.1674**	
Mars	**4003-08-01 19:40**	**G**	**3183338.19**	**3183338.32**	**3183338.45**	**0.1722**	**0.1126**	
Jupiter	**4005-05-16 18:57**	**G**	**3183992.11**	**3183992.29**	**3183992.47**	**0.0534**	**0.0241**	
Pluto	**4009-06-22 12:57**	**G**	**3185489.83**	**3185490.04**	**3185490.26**	**0.0077**	**0.0019**	
Pluto	**4010-02-02 21:50**	**G**	**3185715.24**	**3185715.41**	**3185715.61**	**0.0076**	**0.0042**	
Jupiter	**4011-03-14 14:38**	**G**	**3186119.99**	**3186120.11**	**3186120.23**	**0.0490**	**0.0401**	
Saturn	**4014-11-04 02:38**	**G**	**3187450.42**	**3187450.61**	**3187450.82**	**0.0279**	**0.0094**	
Saturn	**4015-06-21 12:14**	**G**	**3187679.83**	**3187680.01**	**3187680.20**	**0.0277**	**0.0127**	
Jupiter	**4017-01-19 09:21**	**G**	**3188257.70**	**3188257.89**	**3188258.08**	**0.0536**	**0.0180**	
Neptune	**4018-04-02 04:48**	**G**	**3188695.62**	**3188695.70**	**3188695.81**	**0.0089**	**0.0080**	
Neptune	**4018-11-13 18:00**	**G**	**3188921.11**	**3188921.25**	**3188921.43**	**0.0089**	**0.0063**	
Neptune	**4019-06-27 07:40**	**G**	**3189146.64**	**3189146.82**	**3189147.02**	**0.0089**	**0.0045**	
Neptune	**4020-02-07 20:52**	**G**	**3189372.17**	**3189372.37**	**3189372.59**	**0.0089**	**0.0028**	
Neptune	**4020-09-20 10:33**	**G**	**3189597.73**	**3189597.94**	**3189598.17**	**0.0089**	**0.0010**	
Neptune	**4021-05-04 00:00**	**G**	**3189823.28**	**3189823.50**	**3189823.72**	**0.0089**	**0.0008**	
Neptune	**4021-12-15 13:11**	**G**	**3190048.84**	**3190049.05**	**3190049.27**	**0.0089**	**0.0026**	

Neptune 4022-07-29 02:38 G 3190274.42 3190274.61 3190274.80 0.0089 0.0043

Neptune 4023-03-11 15:35 G 3190500.00 3190500.15 3190500.33 0.0090 0.0061

Jupiter 4023-07-11 17:45 G 3190622.16 3190622.24 3190622.33 0.0494 0.0441

Neptune 4023-10-23 05:02 G 3190725.62 3190725.71 3190725.83 0.0090 0.0078

Saturn 4030-07-14 03:50 G 3193181.46 3193181.66 3193181.87 0.0282 0.0076

Saturn 4031-02-28 18:28 G 3193411.11 3193411.27 3193411.46 0.0283 0.0159

Jupiter 4035-03-16 21:07 G 3194888.18 3194888.38 3194888.58 0.0493 0.0115

Mars 4035-07-31 20:52 G 3195025.20 3195025.37 3195025.54 0.1711 0.0218

Jupiter 4041-01-22 13:55 G 3197027.01 3197027.08 3197027.15 0.0533 0.0494

Uranus 4042-11-29 01:11 G 3197702.44 3197702.55 3197702.68 0.0137 0.0114

Uranus 4043-07-13 08:09 G 3197928.67 3197928.84 3197929.04 0.0137 0.0069

Uranus 4044-02-24 15:35 G 3198154.94 3198155.15 3198155.37 0.0137 0.0024

Saturn 4044-05-16 05:45 G 3198236.54 3198236.74 3198236.95 0.0278 0.0069

Uranus 4044-10-07 23:16 G 3198381.26 3198381.47 3198381.68 0.0137 0.0023

Saturn 4044-12-31 15:21 G 3198465.97 3198466.14 3198466.32 0.0276 0.0150

Uranus 4045-05-22 06:43 G 3198607.59 3198607.78 3198607.97 0.0138 0.0069

Uranus 4046-01-03 14:09 G 3198833.98 3198834.09 3198834.22 0.0138 0.0115

Jupiter 4046-11-20 00:57 G 3199154.36 3199154.54 3199154.73 0.0491 0.0208

Jupiter 4052-09-27 00:43 G 3201292.33 3201292.53 3201292.73 0.0535 0.0061

Saturn 4059-06-08 22:33 G 3203738.38 3203738.44 3203738.52 0.0280 0.0265

Saturn 4060-01-24 12:28 G 3203967.81 3203968.02 3203968.23 0.0282 0.0037

Saturn 4060-09-10 03:50 G 3204197.51 3204197.66 3204197.81 0.0284 0.0197

Moon 4061-12-26 18:00 G 3204670.10 3204670.25 3204670.39 0.2704 0.0713

Earth 4061-12-26 19:40 G 3204670.16 3204670.32 3204670.48 0.2697 0.0133 *

Mars 4062-12-14 12:57 G 3205022.87 3205023.04 3205023.21 0.1816 0.0276

Jupiter 4064-06-01 13:11 G 3205557.90 3205558.05 3205558.19 0.0537 0.0372

Mars 4067-07-30 21:07 G 3206712.30 3206712.38 3206712.45 0.1699 0.1507

Mars 4069-05-29 05:45 G 3207380.63 3207380.74 3207380.85 0.1725 0.1329

Jupiter 4070-11-22 05:16 G 3207922.56 3207922.72 3207922.88 0.0493 0.0301

Saturn 4073-04-11 04:19 G 3208793.60 3208793.68 3208793.78 0.0280 0.0252

Saturn 4073-11-26 15:07 G 3209022.92 3209023.13 3209023.34 0.0278 0.0029

Saturn 4074-07-14 00:28 G 3209252.37 3209252.52 3209252.68 0.0276 0.0190

Jupiter 4082-07-28 08:38 G 3212188.66 3212188.86 3212189.07 0.0492 0.0026

Uranus 4082-08-03 01:40 G 3212194.49 3212194.57 3212194.68 0.0142 0.0128

Uranus 4083-03-17 12:14 G 3212420.84 3212421.01 3212421.20 0.0141 0.0077

Uranus 4083-10-29 22:33 G 3212647.23 3212647.44 3212647.66 0.0141 0.0026

Uranus 4084-06-12 08:38 G 3212873.65 3212873.86 3212874.08 0.0141 0.0024

Uranus 4085-01-24 18:28 G 3213100.09 3213100.27 3213100.46 0.0141 0.0074

Uranus 4085-09-08 03:50 G 3213326.57 3213326.66 3213326.78 0.0140 0.0123

Jupiter 4088-06-04 20:09 G 3214327.18 3214327.34 3214327.51 0.0534 0.0319

Saturn 4088-12-19 01:40 G 3214524.46 3214524.57 3214524.68 0.0280 0.0240

Saturn 4089-08-05 15:21 G 3214753.93 3214754.14 3214754.35 0.0282 0.0012

Saturn 4090-03-23 06:14 G 3214983.63 3214983.76 3214983.89 0.0284 0.0222

Jupiter 4094-04-02 12:28 G 3216454.88 3216455.02 3216455.17 0.0491 0.0347

Mars 4094-12-14 04:04 G 3216710.58 3216710.67 3216710.76 0.1829 0.1565

Jupiter 4100-02-08 09:07 G 3218592.68 3218592.88 3218593.08 0.0536 0.0110

Neptune 4100-05-19 00:28 G 3218692.41 3218692.52 3218692.65 0.0088 0.0073

Neptune 4100-12-30 12:57 G 3218917.89 3218918.04 3218918.22 0.0088 0.0057

Mars 4101-05-29 06:57 G 3219067.61 3219067.79 3219067.96 0.1714 0.0032

Neptune 4101-08-13 01:40 G 3219143.39 3219143.57 3219143.78 0.0088 0.0040

Neptune 4102-03-26 14:24 G 3219368.90 3219369.10 3219369.33 0.0088 0.0024

Saturn 4102-10-23 06:14 G 3219579.65 3219579.76 3219579.88 0.0280 0.0230

Neptune 4102-11-07 03:21 G 3219594.42 3219594.64 3219594.86 0.0088 0.0007

Saturn 4103-06-09 17:02 G 3219809.00 3219809.21 3219809.43 0.0278 0.0009

Neptune 4103-06-20 15:50 G 3219819.95 3219820.16 3219820.38 0.0088 0.0010

Saturn 4104-01-25 02:38 G 3220038.48 3220038.61 3220038.74 0.0276 0.0211

Neptune 4104-02-01 04:19 G 3220045.48 3220045.68 3220045.90 0.0088 0.0027

Neptune 4104-09-13 17:02 G 3220271.03 3220271.21 3220271.41 0.0088 0.0043

Neptune 4105-04-27 05:31 G 3220496.59 3220496.73 3220496.91 0.0088 0.0060

Neptune 4105-12-08 18:28 G 3220722.17 3220722.27 3220722.39 0.0088 0.0076

Jupiter	4118-04-05 19:40 G	3225223.13	3225223.32	3225223.51	0.0493	0.0173
Saturn	4118-07-02 08:24 G	3225310.71	3225310.85	3225311.00	0.0281	0.0206
Saturn	4119-02-16 22:33 G	3225540.23	3225540.44	3225540.65	0.0283	0.0024
Saturn	4119-10-04 13:40 G	3225770.00	3225770.07	3225770.17	0.0284	0.0259
Uranus	4126-07-30 09:35 G	3228260.89	3228260.90	3228260.96	0.0136	0.0135
Uranus	4127-03-13 16:48 G	3228487.05	3228487.20	3228487.38	0.0137	0.0090
Uranus	4127-10-26 00:28 G	3228713.31	3228713.52	3228713.72	0.0137	0.0044
Uranus	4128-06-08 07:40 G	3228939.60	3228939.82	3228940.04	0.0137	0.0001
Mars	4128-10-11 18:28 G	3229065.10	3229065.27	3229065.43	0.1811	0.0591
Uranus	4129-01-20 14:52 G	3229165.92	3229166.12	3229166.33	0.0138	0.0047
Uranus	4129-09-03 22:04 G	3229392.28	3229392.42	3229392.60	0.0138	0.0094
Jupiter	4129-12-09 21:07 G	3229489.19	3229489.38	3229489.57	0.0491	0.0161
Saturn	4132-05-04 15:07 G	3230365.99	3230366.13	3230366.29	0.0280	0.0191
Saturn	4132-12-20 01:55 G	3230595.37	3230595.58	3230595.79	0.0278	0.0032
Mars	4133-05-28 07:11 G	3230754.70	3230754.80	3230754.91	0.1703	0.1327
Saturn	4133-08-06 11:02 G	3230824.88	3230824.96	3230825.05	0.0276	0.0249
Mars	4135-03-27 14:38 G	3231423.04	3231423.11	3231423.19	0.1729	0.1552
Jupiter	4135-10-18 01:26 G	3231627.36	3231627.56	3231627.76	0.0535	0.0134
Jupiter	4141-08-15 01:11 G	3233755.52	3233755.55	3233755.59	0.0490	0.0481
Jupiter	4147-06-22 15:07 G	3235892.97	3235893.13	3235893.31	0.0537	0.0291
Saturn	4148-01-12 11:31 G	3236096.82	3236096.98	3236097.14	0.0280	0.0181
Saturn	4148-08-29 01:26 G	3236326.35	3236326.56	3236326.77	0.0282	0.0048
Saturn	4149-04-15 16:19 G	3236556.18	3236556.18	3236556.21	0.0284	0.0283
Jupiter	4153-12-12 04:19 G	3238257.54	3238257.68	3238257.82	0.0494	0.0362
Mars	4160-10-11 09:21 G	3240752.77	3240752.89	3240753.02	0.1825	0.1236
Saturn	4161-11-14 15:50 G	3241151.99	3241152.16	3241152.33	0.0280	0.0171
Saturn	4162-07-02 02:24 G	3241381.39	3241381.60	3241381.81	0.0278	0.0052
Saturn	4163-02-16 11:45 G	3241610.95	3241610.99	3241611.04	0.0276	0.0268
Jupiter	4165-08-17 08:09 G	3242523.64	3242523.84	3242524.05	0.0492	0.0038
Uranus	4166-11-15 18:14 G	3242979.13	3242979.26	3242979.43	0.0142	0.0102

Mars 4167-03-26 16:19 G 3243110.01 3243110.18 3243110.36 0.1717 0.0183

Uranus 4167-06-30 04:33 G 3243205.50 3243205.69 3243205.91 0.0141 0.0052

Uranus 4168-02-11 14:52 G 3243431.90 3243432.12 3243432.34 0.0141 0.0002

Uranus 4168-09-25 00:43 G 3243658.33 3243658.53 3243658.74 0.0141 0.0050

Uranus 4169-05-09 10:48 G 3243884.80 3243884.95 3243885.11 0.0141 0.0099

Pluto 4170-12-19 08:09 G 3244473.68 3244473.84 3244474.00 0.0067 0.0046

Jupiter 4171-06-25 18:14 G 3244662.12 3244662.26 3244662.40 0.0534 0.0380

Pluto 4171-08-01 13:11 G 3244698.83 3244699.05 3244699.27 0.0067 0.0007

Pluto 4172-03-13 18:14 G 3244924.07 3244924.26 3244924.45 0.0067 0.0034

Jupiter 4177-04-22 12:00 G 3246789.83 3246790.00 3246790.16 0.0491 0.0287

Saturn 4177-07-24 16:48 G 3246883.03 3246883.20 3246883.39 0.0281 0.0149

Saturn 4178-03-11 06:57 G 3247112.59 3247112.79 3247113.00 0.0283 0.0082

Neptune 4182-07-05 14:52 G 3248690.10 3248690.12 3248690.19 0.0089 0.0088

Neptune 4183-02-16 04:48 G 3248915.57 3248915.70 3248915.84 0.0089 0.0070

Jupiter 4183-02-28 07:11 G 3248927.60 3248927.80 3248928.00 0.0536 0.0049

Neptune 4183-09-29 18:00 G 3249141.09 3249141.25 3249141.45 0.0089 0.0053

Neptune 4184-05-12 07:40 G 3249366.63 3249366.82 3249367.03 0.0089 0.0035

Neptune 4184-12-23 21:21 G 3249592.17 3249592.39 3249592.60 0.0089 0.0017

Neptune 4185-08-06 10:48 G 3249817.73 3249817.95 3249818.17 0.0089 0.0002

Neptune 4186-03-20 00:00 G 3250043.29 3250043.50 3250043.72 0.0089 0.0018

Neptune 4186-10-31 13:26 G 3250268.86 3250269.06 3250269.26 0.0089 0.0036

Neptune 4187-06-14 02:24 G 3250494.44 3250494.60 3250494.79 0.0089 0.0054

Neptune 4188-01-25 16:04 G 3250720.04 3250720.17 3250720.30 0.0089 0.0071

Neptune 4188-09-07 05:02 G 3250945.70 3250945.71 3250945.76 0.0090 0.0089

Saturn 4191-05-28 00:14 G 3251938.32 3251938.51 3251938.69 0.0279 0.0134

Saturn 4192-01-12 10:33 G 3252167.74 3252167.94 3252168.14 0.0278 0.0089

Mars 4194-08-09 01:11 G 3253107.40 3253107.55 3253107.70 0.1807 0.0879

Jupiter 4194-11-02 20:09 G 3253193.26 3253193.34 3253193.44 0.0538 0.0479

Mars 4199-03-25 17:31 G 3254797.10 3254797.23 3254797.35 0.1706 0.1148

Earth 4199-06-26 03:50 G 3254889.50 3254889.66 3254889.81 0.2636 0.0408

Moon	4199-06-26 08:09 G	3254889.68	3254889.84	3254890.00	0.2633	0.0281 *
Jupiter	4201-04-25 17:02 G	3255558.03	3255558.21	3255558.39	0.0492	0.0226
Saturn	4207-02-04 19:55 G	3257669.14	3257669.33	3257669.52	0.0280	0.0125
Saturn	4207-09-22 09:50 G	3257898.72	3257898.91	3257899.11	0.0282	0.0106
Uranus	4210-11-12 01:26 G	3259045.45	3259045.56	3259045.71	0.0137	0.0111
Uranus	4211-06-26 08:38 G	3259271.68	3259271.86	3259272.06	0.0137	0.0066
Uranus	4212-02-07 16:04 G	3259497.95	3259498.17	3259498.38	0.0137	0.0020
Uranus	4212-09-20 23:31 G	3259724.26	3259724.48	3259724.69	0.0137	0.0026
Jupiter	4212-12-29 20:38 G	3259824.16	3259824.36	3259824.56	0.0491	0.0098
Uranus	4213-05-05 06:43 G	3259950.60	3259950.78	3259950.97	0.0138	0.0072
Uranus	4213-12-17 14:09 G	3260176.99	3260177.09	3260177.21	0.0138	0.0118
Jupiter	4218-11-07 03:50 G	3261962.47	3261962.66	3261962.84	0.0535	0.0218
Saturn	4220-12-07 23:31 G	3262724.29	3262724.48	3262724.67	0.0279	0.0115
Saturn	4221-07-25 10:04 G	3262953.72	3262953.92	3262954.11	0.0278	0.0107
Jupiter	4224-09-04 01:11 G	3264090.45	3264090.55	3264090.66	0.0490	0.0418
Mars	4226-08-09 15:07 G	3264794.98	3264795.13	3264795.28	0.1821	0.0911
Jupiter	4230-07-12 14:52 G	3266227.94	3266228.12	3266228.31	0.0536	0.0221
Mars	4233-01-22 02:24 G	3267152.43	3267152.60	3267152.77	0.1721	0.0379
Saturn	4236-08-17 00:28 G	3268455.32	3268455.52	3268455.72	0.0281	0.0094
Jupiter	4237-01-01 04:33 G	3268592.60	3268592.69	3268592.79	0.0494	0.0429
Saturn	4237-04-03 14:38 G	3268684.92	3268685.11	3268685.29	0.0283	0.0137
Jupiter	4248-09-06 06:14 G	3272858.56	3272858.76	3272858.96	0.0492	0.0094
Saturn	4250-06-20 06:57 G	3273510.59	3273510.79	3273510.99	0.0279	0.0081
Uranus	4250-07-16 23:45 G	3273537.41	3273537.49	3273537.60	0.0142	0.0128
Saturn	4251-02-04 17:16 G	3273740.05	3273740.22	3273740.41	0.0278	0.0142
Uranus	4251-02-28 10:19 G	3273763.75	3273763.93	3273764.12	0.0141	0.0077
Uranus	4251-10-12 20:24 G	3273990.14	3273990.35	3273990.57	0.0141	0.0027
Uranus	4252-05-26 06:28 G	3274216.56	3274216.77	3274216.99	0.0141	0.0024
Uranus	4253-01-07 16:19 G	3274443.00	3274443.18	3274443.37	0.0141	0.0074
Uranus	4253-08-22 01:55 G	3274669.48	3274669.58	3274669.69	0.0140	0.0123

Jupiter 4254-07-15 19:55 G 3274997.23 3274997.33 3274997.43 0.0534 0.0462

Pluto 4257-05-27 08:52 G 3276043.85 3276043.87 3276043.90 0.0077 0.0076

Pluto 4258-01-07 18:14 G 3276269.05 3276269.26 3276269.48 0.0077 0.0015

Pluto 4258-08-21 03:07 G 3276494.46 3276494.63 3276494.82 0.0076 0.0046

Jupiter 4260-05-12 10:33 G 3277124.76 3277124.94 3277125.12 0.0490 0.0229

Mars 4260-06-06 06:57 G 3277149.66 3277149.79 3277149.92 0.1803 0.1184

Neptune 4264-08-21 12:00 G 3278686.93 3278687.00 3278687.10 0.0088 0.0080

Mars 4265-01-21 03:21 G 3278839.50 3278839.64 3278839.78 0.1709 0.0958

Neptune 4265-04-04 00:28 G 3278912.39 3278912.52 3278912.70 0.0088 0.0064

Neptune 4265-11-15 13:11 G 3279137.88 3279138.05 3279138.25 0.0088 0.0047

Saturn 4266-02-27 03:21 G 3279241.44 3279241.64 3279241.85 0.0280 0.0071

Jupiter 4266-03-20 10:33 G 3279262.74 3279262.94 3279263.15 0.0536 0.0042

Neptune 4266-06-29 02:09 G 3279363.38 3279363.59 3279363.80 0.0088 0.0030

Saturn 4266-10-14 17:16 G 3279471.05 3279471.22 3279471.40 0.0282 0.0161

Neptune 4267-02-09 14:38 G 3279588.90 3279589.11 3279589.33 0.0088 0.0014

Neptune 4267-09-23 03:21 G 3279814.42 3279814.64 3279814.86 0.0088 0.0003

Neptune 4268-05-05 15:50 G 3280039.95 3280040.16 3280040.38 0.0088 0.0020

Neptune 4268-12-17 04:19 G 3280265.49 3280265.68 3280265.89 0.0088 0.0037

Neptune 4269-07-30 17:02 G 3280491.04 3280491.21 3280491.39 0.0088 0.0053

Neptune 4270-03-13 05:31 G 3280716.62 3280716.73 3280716.88 0.0088 0.0070

Neptune 4270-10-24 18:00 G 3280942.24 3280942.25 3280942.31 0.0088 0.0087

Jupiter 4277-11-23 00:00 G 3283528.36 3283528.50 3283528.64 0.0537 0.0389

Saturn 4279-12-31 05:45 G 3284296.53 3284296.74 3284296.94 0.0279 0.0064

Saturn 4280-08-16 16:04 G 3284526.00 3284526.17 3284526.35 0.0277 0.0158

Jupiter 4284-05-14 18:00 G 3285893.09 3285893.25 3285893.41 0.0493 0.0297

Mars 4292-06-05 20:09 G 3288837.18 3288837.34 3288837.51 0.1817 0.0578

Uranus 4294-07-12 10:04 G 3289603.88 3289603.92 3289603.99 0.0136 0.0132

Saturn 4295-01-22 17:31 G 3289798.19 3289798.23 3289798.30 0.0279 0.0268

Uranus 4295-02-23 17:16 G 3289830.06 3289830.22 3289830.39 0.0137 0.0087

Saturn 4295-09-09 06:43 G 3290027.57 3290027.78 3290027.99 0.0281 0.0042

Uranus 4295-10-08 00:28 G 3290056.32 3290056.52 3290056.73 0.0137 0.0042

Jupiter 4296-01-18 21:35 G 3290159.20 3290159.40 3290159.61 0.0492 0.0031

Saturn 4296-04-25 20:52 G 3290257.21 3290257.37 3290257.53 0.0283 0.0190

Uranus 4296-05-21 07:55 G 3290282.61 3290282.83 3290283.05 0.0137 0.0004

Uranus 4297-01-02 15:07 G 3290508.93 3290509.13 3290509.34 0.0137 0.0050

Uranus 4297-08-16 22:33 G 3290735.29 3290735.44 3290735.60 0.0138 0.0096

Mars 4298-11-19 12:00 G 3291194.84 3291195.00 3291195.16 0.1724 0.0588

Jupiter 4301-11-27 03:35 G 3292297.49 3292297.65 3292297.83 0.0535 0.0290

Earth 4304-12-29 19:11 G 3293426.14 3293426.30 3293426.46 0.2696 0.0373

Moon 4304-12-29 22:48 G 3293426.29 3293426.45 3293426.62 0.2690 0.0316 *

Jupiter 4307-09-25 00:28 G 3294425.39 3294425.52 3294425.67 0.0490 0.0357

Saturn 4308-11-26 00:28 G 3294853.44 3294853.52 3294853.61 0.0281 0.0257

Saturn 4309-07-13 12:14 G 3295082.80 3295083.01 3295083.23 0.0279 0.0031

Saturn 4310-02-27 22:48 G 3295312.30 3295312.45 3295312.61 0.0277 0.0191

Jupiter 4313-08-01 16:33 G 3296562.99 3296563.19 3296563.38 0.0537 0.0142

Jupiter 4320-01-22 03:35 G 3298927.64 3298927.65 3298927.67 0.0493 0.0491

Saturn 4324-08-04 21:50 G 3300584.32 3300584.41 3300584.53 0.0279 0.0242

Saturn 4325-03-22 10:33 G 3300813.73 3300813.94 3300814.16 0.0280 0.0018

Saturn 4325-11-07 00:28 G 3301043.39 3301043.52 3301043.66 0.0282 0.0214

Mars 4326-04-04 13:26 G 3301191.97 3301192.06 3301192.16 0.1799 0.1473

Mars 4330-11-19 13:40 G 3302881.91 3302882.07 3302882.22 0.1713 0.0772

Jupiter 4331-09-27 07:11 G 3303193.61 3303193.80 3303193.99 0.0492 0.0163

Uranus 4334-10-29 15:50 G 3304322.03 3304322.16 3304322.33 0.0142 0.0103

Uranus 4335-06-13 02:24 G 3304548.40 3304548.60 3304548.80 0.0141 0.0052

Uranus 4336-01-25 12:28 G 3304774.80 3304775.02 3304775.24 0.0141 0.0002

Uranus 4336-09-07 22:04 G 3305001.23 3305001.42 3305001.64 0.0141 0.0049

Uranus 4337-04-22 08:09 G 3305227.69 3305227.84 3305228.00 0.0141 0.0098

Saturn 4338-06-07 23:02 G 3305639.36 3305639.46 3305639.57 0.0281 0.0240

Saturn 4339-01-23 10:48 G 3305868.74 3305868.95 3305869.16 0.0279 0.0014

Saturn 4339-09-09 20:52 G 3306098.24 3306098.37 3306098.52 0.0277 0.0207

Jupiter 4343-06-02 11:31 G 3307459.79 3307459.98 3307460.18 0.0491 0.0160

Neptune 4347-05-22 15:07 G 3308910.05 3308910.13 3308910.27 0.0089 0.0078

Neptune 4348-01-03 04:48 G 3309135.55 3309135.70 3309135.88 0.0089 0.0060

Neptune 4348-08-15 18:28 G 3309361.08 3309361.27 3309361.47 0.0089 0.0042

Neptune 4349-03-29 07:55 G 3309586.62 3309586.83 3309587.05 0.0089 0.0024

Jupiter 4349-04-09 12:14 G 3309597.82 3309598.01 3309598.21 0.0535 0.0121

Neptune 4349-11-09 21:21 G 3309812.18 3309812.39 3309812.62 0.0089 0.0007

Neptune 4350-06-23 10:48 G 3310037.73 3310037.95 3310038.17 0.0089 0.0011

Neptune 4351-02-04 00:14 G 3310263.30 3310263.51 3310263.72 0.0089 0.0029

Neptune 4351-09-17 13:26 G 3310488.89 3310489.06 3310489.26 0.0089 0.0047

Neptune 4352-04-30 02:38 G 3310714.48 3310714.61 3310714.78 0.0089 0.0065

Neptune 4352-12-11 16:04 G 3310940.10 3310940.17 3310940.27 0.0089 0.0082

Saturn 4354-02-15 00:00 G 3311370.37 3311370.50 3311370.64 0.0279 0.0216

Saturn 4354-10-02 12:57 G 3311599.83 3311600.04 3311600.25 0.0281 0.0011

Jupiter 4355-02-05 16:04 G 3311726.13 3311726.17 3311726.21 0.0490 0.0480

Saturn 4355-05-20 03:07 G 3311829.52 3311829.63 3311829.74 0.0283 0.0242

Mars 4358-04-04 02:09 G 3312879.42 3312879.59 3312879.76 0.1813 0.0265

Jupiter 4360-12-13 00:28 G 3313863.36 3313863.52 3313863.69 0.0537 0.0316

Mars 4364-09-16 21:35 G 3315237.25 3315237.40 3315237.56 0.1728 0.0794

Jupiter 4367-06-04 17:45 G 3316228.10 3316228.24 3316228.38 0.0493 0.0362

Saturn 4367-12-19 04:48 G 3316425.57 3316425.70 3316425.85 0.0281 0.0210

Saturn 4368-08-04 16:33 G 3316654.98 3316655.19 3316655.41 0.0279 0.0018

Saturn 4369-03-22 02:52 G 3316884.53 3316884.62 3316884.74 0.0277 0.0238

Uranus 4378-10-25 01:40 G 3320388.46 3320388.57 3320388.72 0.0137 0.0109

Jupiter 4379-02-07 21:35 G 3320494.20 3320494.40 3320494.60 0.0491 0.0035

Uranus 4379-06-08 09:07 G 3320614.69 3320614.88 3320615.07 0.0137 0.0063

Uranus 4380-01-20 16:19 G 3320840.96 3320841.18 3320841.39 0.0137 0.0018

Uranus 4380-09-02 23:31 G 3321067.27 3321067.48 3321067.70 0.0137 0.0028

Uranus 4381-04-17 06:57 G 3321293.61 3321293.79 3321293.98 0.0138 0.0074

Uranus 4381-11-29 14:09 G 3321520.01 3321520.09 3321520.22 0.0138 0.0121

Saturn 4383-08-28 05:02 G 3322156.56 3322156.71 3322156.87 0.0279 0.0189

Saturn 4384-04-13 17:31 G 3322386.02 3322386.23 3322386.45 0.0281 0.0037

Saturn 4384-11-29 07:26 G 3322615.75 3322615.81 3322615.88 0.0282 0.0267

Jupiter 4384-12-16 06:57 G 3322632.65 3322632.79 3322632.94 0.0535 0.0380

Jupiter 4390-10-14 01:26 G 3324760.40 3324760.56 3324760.73 0.0490 0.0289

Mars 4392-01-30 19:55 G 3325234.30 3325234.33 3325234.36 0.1795 0.1760

Jupiter 4396-08-20 21:07 G 3326898.18 3326898.38 3326898.58 0.0537 0.0046

Mars 4396-09-15 23:02 G 3326924.30 3326924.46 3326924.63 0.1716 0.0574

Saturn 4397-06-30 03:50 G 3327211.51 3327211.66 3327211.81 0.0281 0.0191

Saturn 4398-02-14 15:21 G 3327440.93 3327441.14 3327441.35 0.0279 0.0035

Saturn 4398-10-02 01:40 G 3327670.49 3327670.57 3327670.65 0.0277 0.0254

Jupiter 4408-04-25 08:38 G 3331163.78 3331163.86 3331163.95 0.0538 0.0487

Saturn 4413-03-09 06:28 G 3332942.61 3332942.77 3332942.95 0.0280 0.0165

Saturn 4413-10-24 19:26 G 3333172.11 3333172.31 3333172.52 0.0281 0.0063

Jupiter 4414-10-16 08:38 G 3333528.69 3333528.86 3333529.05 0.0492 0.0237

Uranus 4418-06-28 22:04 G 3334880.35 3334880.42 3334880.53 0.0142 0.0128

Uranus 4419-02-10 08:38 G 3335106.68 3335106.86 3335107.05 0.0142 0.0077

Pluto 4419-07-06 10:19 G 3335252.81 3335252.93 3335253.09 0.0067 0.0051

Uranus 4419-09-24 18:43 G 3335333.07 3335333.28 3335333.50 0.0141 0.0027

Pluto 4420-02-16 15:35 G 3335477.94 3335478.15 3335478.37 0.0067 0.0011

Uranus 4420-05-08 04:48 G 3335559.49 3335559.70 3335559.92 0.0141 0.0024

Pluto 4420-09-28 20:24 G 3335703.17 3335703.35 3335703.56 0.0067 0.0030

Uranus 4420-12-20 14:38 G 3335785.93 3335786.11 3335786.30 0.0141 0.0073

Uranus 4421-08-03 23:45 G 3336012.41 3336012.49 3336012.62 0.0140 0.0123

Mars 4424-01-30 07:55 G 3336921.65 3336921.83 3336922.00 0.1809 0.0055

Jupiter 4426-06-21 12:00 G 3337794.80 3337795.00 3337795.20 0.0491 0.0092

Saturn 4427-01-10 09:21 G 3337997.72 3337997.89 3337998.06 0.0281 0.0162

Saturn 4427-08-27 20:52 G 3338227.17 3338227.37 3338227.58 0.0279 0.0064

Neptune 4428-11-23 23:31 G 3338681.47 3338681.48 3338681.54 0.0088 0.0087

Neptune 4429-07-07 12:28 G 3338906.90 3338907.02 3338907.16 0.0088 0.0070

Neptune 4430-02-18 01:26 G 3339132.38 3339132.56 3339132.73 0.0088 0.0053

Mars 4430-07-15 06:57 G 3339279.65 3339279.79 3339279.93 0.1731 0.1014

Neptune 4430-10-01 13:40 G 3339357.88 3339358.07 3339358.28 0.0088 0.0037

Neptune 4431-05-15 02:24 G 3339583.39 3339583.60 3339583.82 0.0088 0.0020

Neptune 4431-12-26 15:07 G 3339808.91 3339809.13 3339809.35 0.0088 0.0003

Jupiter 4432-04-28 12:57 G 3339932.86 3339933.04 3339933.23 0.0536 0.0200

Neptune 4432-08-08 03:35 G 3340034.44 3340034.65 3340034.88 0.0088 0.0014

Neptune 4433-03-21 16:33 G 3340259.98 3340260.19 3340260.40 0.0088 0.0030

Neptune 4433-11-02 04:48 G 3340485.53 3340485.70 3340485.90 0.0088 0.0047

Neptune 4434-06-15 17:16 G 3340711.09 3340711.22 3340711.39 0.0088 0.0064

Neptune 4435-01-27 05:45 G 3340936.68 3340936.74 3340936.85 0.0088 0.0081

Jupiter 4438-02-24 16:33 G 3342061.08 3342061.19 3342061.30 0.0489 0.0412

Moon 4442-06-28 01:11 G 3343645.40 3343645.55 3343645.71 0.2639 0.0585

Earth 4442-06-28 06:28 G 3343645.62 3343645.77 3343645.93 0.2638 0.0311 *

Saturn 4442-09-19 12:28 G 3343728.84 3343729.02 3343729.21 0.0279 0.0136

Saturn 4443-05-07 01:11 G 3343958.35 3343958.55 3343958.75 0.0281 0.0091

Jupiter 4444-01-02 02:52 G 3344198.44 3344198.62 3344198.80 0.0538 0.0230

Jupiter 4450-06-23 18:28 G 3346563.17 3346563.27 3346563.37 0.0493 0.0432

Mars 4456-01-29 22:33 G 3348609.41 3348609.44 3348609.48 0.1823 0.1786

Saturn 4456-07-22 08:38 G 3348783.68 3348783.86 3348784.05 0.0281 0.0142

Saturn 4457-03-08 20:09 G 3349013.14 3349013.34 3349013.55 0.0279 0.0083

Jupiter 4462-02-26 22:33 G 3350829.24 3350829.44 3350829.64 0.0492 0.0105

Uranus 4462-06-24 10:04 G 3350946.87 3350946.92 3350947.00 0.0137 0.0130

Mars 4462-07-14 08:52 G 3350966.70 3350966.87 3350967.04 0.1720 0.0376

Uranus 4463-02-05 17:16 G 3351173.05 3351173.22 3351173.39 0.0137 0.0085

Uranus 4463-09-20 00:14 G 3351399.32 3351399.51 3351399.73 0.0137 0.0041

Uranus 4464-05-03 07:55 G 3351625.61 3351625.83 3351626.04 0.0137 0.0006

Uranus 4464-12-15 14:52 G 3351851.94 3351852.12 3351852.34 0.0138 0.0053

Uranus 4465-07-29 22:19 G 3352078.30 3352078.43 3352078.60 0.0138 0.0099

Jupiter 4468-01-05 08:52 G 3352967.78 3352967.87 3352967.98 0.0535 0.0462

Saturn	4472-03-31 13:55 G	3354514.89	3354515.08	3354515.28	0.0280	0.0112
Saturn	4472-11-16 03:07 G	3354744.43	3354744.63	3354744.82	0.0282	0.0117
Jupiter	4473-11-02 02:38 G	3355095.43	3355095.61	3355095.80	0.0490	0.0220
Jupiter	4479-09-09 21:35 G	3357233.20	3357233.40	3357233.61	0.0536	0.0029
Saturn	4486-02-01 14:09 G	3359569.90	3359570.09	3359570.29	0.0280	0.0113
Saturn	4486-09-19 01:40 G	3359799.38	3359799.57	3359799.76	0.0279	0.0112
Mars	4489-11-26 14:24 G	3360963.93	3360964.10	3360964.27	0.1805	0.0347
Jupiter	4491-05-15 07:55 G	3361498.71	3361498.83	3361498.97	0.0538	0.0418
Mars	4494-07-13 09:50 G	3362653.91	3362653.91	3362653.92	0.1708	0.1705
Mars	4496-05-11 16:19 G	3363322.06	3363322.18	3363322.31	0.1735	0.1229
Jupiter	4497-11-04 08:52 G	3363863.71	3363863.87	3363864.03	0.0492	0.0304
Saturn	4501-10-12 20:52 G	3365301.17	3365301.37	3365301.58	0.0279	0.0080
Saturn	4502-05-30 09:50 G	3365530.73	3365530.91	3365531.09	0.0281	0.0147
Uranus	4502-10-11 15:35 G	3365665.01	3365665.15	3365665.31	0.0142	0.0101
Uranus	4503-05-26 01:40 G	3365891.38	3365891.57	3365891.79	0.0141	0.0051
Uranus	4504-01-07 12:00 G	3366117.78	3366118.00	3366118.21	0.0141	0.0002
Uranus	4504-08-20 21:35 G	3366344.20	3366344.40	3366344.61	0.0141	0.0050
Uranus	4505-04-04 07:11 G	3366570.66	3366570.80	3366570.97	0.0141	0.0099
Pluto	4506-07-25 20:24 G	3367048.14	3367048.35	3367048.57	0.0077	0.0022
Pluto	4507-03-08 05:16 G	3367273.55	3367273.72	3367273.93	0.0076	0.0039
Jupiter	4509-07-11 12:00 G	3368129.80	3368130.00	3368130.21	0.0491	0.0027
Neptune	4511-08-25 02:24 G	3368904.56	3368904.60	3368904.70	0.0089	0.0085
Neptune	4512-04-06 16:04 G	3369130.04	3369130.17	3369130.34	0.0089	0.0067
Neptune	4512-11-18 05:45 G	3369355.56	3369355.74	3369355.93	0.0089	0.0049
Neptune	4513-07-01 18:57 G	3369581.10	3369581.29	3369581.51	0.0089	0.0031
Neptune	4514-02-12 08:24 G	3369806.64	3369806.85	3369807.08	0.0089	0.0014
Neptune	4514-09-25 22:04 G	3370032.20	3370032.42	3370032.64	0.0089	0.0005
Neptune	4515-05-09 11:16 G	3370257.77	3370257.97	3370258.20	0.0089	0.0023
Jupiter	4515-05-19 16:48 G	3370268.03	3370268.20	3370268.37	0.0536	0.0291
Saturn	4515-08-15 14:52 G	3370355.92	3370356.12	3370356.32	0.0280	0.0091

Neptune 4515-12-21 00:57 G 3370483.34 3370483.54 3370483.74 0.0089 0.0040

Saturn 4516-04-01 01:55 G 3370585.40 3370585.58 3370585.77 0.0279 0.0133

Neptune 4516-08-02 14:09 G 3370708.93 3370709.09 3370709.26 0.0089 0.0058

Neptune 4517-03-16 03:07 G 3370934.54 3370934.63 3370934.77 0.0089 0.0076

Jupiter 4521-03-16 16:33 G 3372396.05 3372396.19 3372396.34 0.0490 0.0348

Mars 4521-11-27 04:19 G 3372651.57 3372651.68 3372651.78 0.1818 0.1457

Jupiter 4527-01-22 05:02 G 3374533.51 3374533.71 3374533.90 0.0537 0.0147

Mars 4528-05-11 18:28 G 3375009.10 3375009.27 3375009.45 0.1723 0.0174

Saturn 4530-09-07 10:48 G 3375857.95 3375857.95 3375857.96 0.0278 0.0278

Saturn 4531-04-24 22:48 G 3376087.24 3376087.45 3376087.66 0.0280 0.0055

Saturn 4531-12-10 11:45 G 3376316.83 3376316.99 3376317.16 0.0282 0.0174

Moon 4540-01-02 23:31 G 3379262.42 3379262.48 3379262.55 0.2694 0.2463

Saturn 4545-02-24 20:09 G 3381142.13 3381142.34 3381142.55 0.0280 0.0062

Jupiter 4545-03-18 22:48 G 3381164.26 3381164.45 3381164.64 0.0491 0.0174

Saturn 4545-10-12 07:26 G 3381371.64 3381371.81 3381371.98 0.0278 0.0162

Uranus 4546-10-07 01:11 G 3381731.43 3381731.55 3381731.70 0.0137 0.0107

Uranus 4547-05-21 08:38 G 3381957.67 3381957.86 3381958.06 0.0137 0.0061

Moon 4547-12-31 13:55 G 3382181.94 3382182.08 3382182.22 0.2698 0.1182

Earth 4547-12-31 18:43 G 3382182.13 3382182.28 3382182.44 0.2694 0.0585 *

Uranus 4548-01-02 15:50 G 3382183.95 3382184.16 3382184.38 0.0137 0.0016

Uranus 4548-08-15 23:02 G 3382410.25 3382410.46 3382410.68 0.0137 0.0030

Uranus 4549-03-30 06:14 G 3382636.60 3382636.76 3382636.96 0.0138 0.0077

Uranus 4549-11-11 13:55 G 3382863.01 3382863.08 3382863.20 0.0138 0.0123

Jupiter 4551-01-25 07:26 G 3383302.79 3383302.81 3383302.84 0.0535 0.0531

Mars 4555-09-24 20:24 G 3385006.19 3385006.35 3385006.52 0.1801 0.0651

Jupiter 4556-11-22 02:52 G 3385430.42 3385430.62 3385430.81 0.0490 0.0152

Saturn 4560-03-19 18:57 G 3386644.19 3386644.29 3386644.39 0.0278 0.0244

Mars 4560-05-10 19:55 G 3386696.25 3386696.33 3386696.41 0.1711 0.1516

Saturn 4560-11-04 06:57 G 3386873.58 3386873.79 3386874.00 0.0280 0.0021

Saturn 4561-06-21 19:55 G 3387103.20 3387103.33 3387103.48 0.0281 0.0207

Mars 4562-03-10 01:11 G 3387364.46 3387364.55 3387364.64 0.1739 0.1463

Jupiter 4562-09-29 21:35 G 3387568.20 3387568.40 3387568.60 0.0537 0.0104

Jupiter 4568-07-28 06:14 G 3389696.72 3389696.76 3389696.80 0.0489 0.0478

Saturn 4574-01-20 09:50 G 3391698.85 3391698.91 3391698.99 0.0282 0.0264

Jupiter 4574-06-04 11:16 G 3391833.81 3391833.97 3391834.13 0.0538 0.0329

Saturn 4574-09-06 22:19 G 3391928.22 3391928.43 3391928.64 0.0280 0.0037

Saturn 4575-04-24 09:07 G 3392157.73 3392157.88 3392158.04 0.0278 0.0186

Jupiter 4580-11-24 08:09 G 3394198.71 3394198.84 3394198.98 0.0492 0.0367

Uranus 4586-06-10 22:04 G 3396223.34 3396223.42 3396223.54 0.0142 0.0125

Uranus 4587-01-23 08:24 G 3396449.68 3396449.85 3396450.05 0.0141 0.0075

Uranus 4587-09-06 18:43 G 3396676.07 3396676.28 3396676.50 0.0141 0.0024

Mars 4587-09-24 10:04 G 3396693.79 3396693.92 3396694.06 0.1815 0.1140

Uranus 4588-04-20 04:48 G 3396902.49 3396902.70 3396902.92 0.0141 0.0026

Uranus 4588-12-02 14:24 G 3397128.93 3397129.10 3397129.29 0.0141 0.0076

Uranus 4589-07-17 00:14 G 3397355.41 3397355.51 3397355.61 0.0140 0.0125

Saturn 4589-09-29 20:24 G 3397430.23 3397430.35 3397430.49 0.0279 0.0221

Saturn 4590-05-17 08:52 G 3397659.65 3397659.87 3397660.08 0.0280 0.0006

Saturn 4591-01-01 22:04 G 3397889.31 3397889.42 3397889.54 0.0282 0.0234

Jupiter 4592-07-30 12:00 G 3398464.80 3398465.00 3398465.21 0.0491 0.0040

Neptune 4593-10-10 00:14 G 3398901.42 3398901.51 3398901.63 0.0088 0.0077

Mars 4594-03-09 03:50 G 3399051.49 3399051.66 3399051.83 0.1727 0.0044

Neptune 4594-05-23 12:57 G 3399126.89 3399127.04 3399127.21 0.0088 0.0060

Neptune 4595-01-04 01:40 G 3399352.39 3399352.57 3399352.77 0.0088 0.0043

Neptune 4595-08-17 14:24 G 3399577.89 3399578.10 3399578.31 0.0088 0.0026

Neptune 4596-03-30 03:07 G 3399803.42 3399803.63 3399803.85 0.0088 0.0010

Neptune 4596-11-10 15:50 G 3400028.94 3400029.16 3400029.38 0.0088 0.0007

Neptune 4597-06-24 04:19 G 3400254.47 3400254.68 3400254.89 0.0088 0.0024

Neptune 4598-02-04 16:33 G 3400480.01 3400480.19 3400480.40 0.0088 0.0041

Jupiter 4598-06-07 15:50 G 3400603.02 3400603.16 3400603.31 0.0535 0.0360

Neptune 4598-09-18 05:02 G 3400705.57 3400705.71 3400705.90 0.0088 0.0058

Neptune	4599-05-01 18:14 G	3400931.15	3400931.26	3400931.38	0.0088	0.0074
Saturn	4603-08-03 15:21 G	3402485.04	3402485.14	3402485.27	0.0281	0.0235
Saturn	4604-03-20 04:04 G	3402714.46	3402714.67	3402714.88	0.0280	0.0008
Jupiter	4604-04-05 16:33 G	3402731.02	3402731.19	3402731.35	0.0489	0.0283
Saturn	4604-11-04 14:38 G	3402943.99	3402944.11	3402944.26	0.0278	0.0215
Jupiter	4610-02-11 01:55 G	3404868.38	3404868.58	3404868.78	0.0538	0.0088
Saturn	4619-04-13 05:45 G	3408216.59	3408216.74	3408216.91	0.0279	0.0185
Saturn	4619-11-28 18:14 G	3408446.05	3408446.26	3408446.47	0.0280	0.0041
Saturn	4620-07-15 07:40 G	3408675.77	3408675.82	3408675.89	0.0282	0.0270
Mars	4621-07-23 03:35 G	3409048.50	3409048.65	3409048.79	0.1797	0.0932
Jupiter	4621-10-16 14:24 G	3409134.06	3409134.10	3409134.14	0.0539	0.0526
Mars	4626-03-09 05:45 G	3410738.63	3410738.74	3410738.85	0.1715	0.1328
Mars	4628-01-06 10:04 G	3411406.89	3411406.92	3411406.96	0.1743	0.1694
Jupiter	4628-04-07 20:52 G	3411499.19	3411499.37	3411499.55	0.0491	0.0231
Uranus	4630-06-07 09:07 G	3412289.82	3412289.88	3412289.96	0.0137	0.0128
Uranus	4631-01-19 16:19 G	3412516.01	3412516.18	3412516.35	0.0137	0.0083
Uranus	4631-09-02 23:16 G	3412742.27	3412742.47	3412742.69	0.0137	0.0038
Uranus	4632-04-16 06:43 G	3412968.57	3412968.78	3412969.00	0.0137	0.0008
Uranus	4632-11-28 14:24 G	3413194.90	3413195.10	3413195.30	0.0138	0.0054
Saturn	4633-02-12 19:40 G	3413271.18	3413271.32	3413271.47	0.0281	0.0204
Uranus	4633-07-12 21:50 G	3413421.27	3413421.41	3413421.56	0.0138	0.0100
Saturn	4633-09-30 07:40 G	3413500.61	3413500.82	3413501.03	0.0280	0.0022
Saturn	4634-05-17 18:14 G	3413730.16	3413730.26	3413730.36	0.0278	0.0242
Jupiter	4639-12-13 00:43 G	3415765.33	3415765.53	3415765.73	0.0490	0.0097
Jupiter	4645-10-19 22:19 G	3417903.24	3417903.43	3417903.62	0.0536	0.0180
Saturn	4648-10-23 08:09 G	3419002.67	3419002.84	3419003.02	0.0279	0.0159
Saturn	4649-06-09 20:38 G	3419232.16	3419232.36	3419232.57	0.0281	0.0067
Jupiter	4651-08-18 05:02 G	3420031.61	3420031.71	3420031.82	0.0489	0.0419
Mars	4653-07-22 16:04 G	3420736.01	3420736.17	3420736.32	0.1810	0.0823
Jupiter	4657-06-24 09:35 G	3422168.73	3422168.90	3422169.08	0.0538	0.0264

Mars 4660-01-05 13:26 G 3423093.89 3423094.06 3423094.23 0.1730 0.0251

Saturn 4662-08-26 01:26 G 3424057.40 3424057.56 3424057.73 0.0281 0.0175

Saturn 4663-04-12 13:26 G 3424286.85 3424287.06 3424287.27 0.0279 0.0051

Saturn 4663-11-28 00:00 G 3424516.46 3424516.50 3424516.54 0.0278 0.0271

Jupiter 4663-12-15 07:26 G 3424533.71 3424533.81 3424533.91 0.0492 0.0431

Pluto 4668-01-21 13:40 G 3426031.95 3426032.07 3426032.22 0.0067 0.0053

Pluto 4668-09-02 18:43 G 3426257.08 3426257.28 3426257.51 0.0067 0.0013

Pluto 4669-04-15 23:45 G 3426482.30 3426482.49 3426482.70 0.0067 0.0028

Uranus 4670-09-23 14:38 G 3427007.96 3427008.11 3427008.27 0.0142 0.0099

Uranus 4671-05-08 00:57 G 3427234.34 3427234.54 3427234.75 0.0141 0.0048

Uranus 4671-12-20 11:02 G 3427460.75 3427460.96 3427461.18 0.0141 0.0003

Uranus 4672-08-02 20:52 G 3427687.17 3427687.37 3427687.58 0.0141 0.0052

Uranus 4673-03-17 06:28 G 3427913.63 3427913.77 3427913.93 0.0141 0.0101

Jupiter 4675-08-20 10:48 G 3428799.75 3428799.95 3428800.15 0.0491 0.0101

Neptune 4676-07-10 03:21 G 3429124.53 3429124.64 3429124.78 0.0089 0.0074

Neptune 4677-02-20 16:48 G 3429350.04 3429350.20 3429350.39 0.0089 0.0056

Neptune 4677-10-04 06:28 G 3429575.58 3429575.77 3429575.98 0.0089 0.0038

Saturn 4678-05-05 18:00 G 3429789.07 3429789.25 3429789.45 0.0279 0.0122

Neptune 4678-05-17 19:40 G 3429801.12 3429801.32 3429801.55 0.0089 0.0021

Saturn 4678-12-21 06:57 G 3430018.59 3430018.79 3430018.99 0.0281 0.0106

Neptune 4678-12-29 09:21 G 3430026.67 3430026.89 3430027.11 0.0089 0.0002

Neptune 4679-08-11 22:48 G 3430252.23 3430252.45 3430252.67 0.0089 0.0016

Neptune 4680-03-24 12:00 G 3430477.80 3430478.00 3430478.21 0.0089 0.0033

Neptune 4680-11-05 01:11 G 3430703.39 3430703.55 3430703.75 0.0089 0.0052

Neptune 4681-06-18 14:52 G 3430928.99 3430929.12 3430929.26 0.0089 0.0069

Jupiter 4681-06-27 12:43 G 3430937.91 3430938.03 3430938.16 0.0536 0.0421

Neptune 4682-01-30 04:04 G 3431154.63 3431154.67 3431154.73 0.0089 0.0087

Earth 4685-06-30 08:52 G 3432401.72 3432401.87 3432402.03 0.2639 0.0252

Moon 4685-06-30 14:24 G 3432401.95 3432402.10 3432402.26 0.2640 0.0306 *

Jupiter 4687-04-25 13:26 G 3433065.88 3433066.06 3433066.24 0.0489 0.0232

Mars	4687-05-20 09:50 G	3433090.78	3433090.91	3433091.03	0.1792	0.1229
Mars	4692-01-04 15:35 G	3434781.02	3434781.15	3434781.28	0.1718	0.1133
Saturn	4692-03-07 07:26 G	3434843.63	3434843.81	3434844.00	0.0281	0.0141
Saturn	4692-10-22 18:57 G	3435073.09	3435073.29	3435073.49	0.0279	0.0084
Jupiter	4693-03-02 02:52 G	3435203.41	3435203.62	3435203.82	0.0537	0.0011
Jupiter	4704-11-05 14:52 G	3439469.02	3439469.12	3439469.23	0.0538	0.0452
Saturn	4707-11-16 20:52 G	3440575.18	3440575.37	3440575.58	0.0280	0.0095
Saturn	4708-07-03 09:50 G	3440804.73	3440804.91	3440805.10	0.0281	0.0133
Jupiter	4711-04-28 19:11 G	3441834.14	3441834.30	3441834.47	0.0492	0.0290
Uranus	4714-09-20 00:00 G	3443074.37	3443074.50	3443074.65	0.0137	0.0105
Uranus	4715-05-04 07:11 G	3443300.61	3443300.80	3443301.00	0.0137	0.0060
Uranus	4715-12-16 14:38 G	3443526.89	3443527.11	3443527.32	0.0137	0.0014
Uranus	4716-07-29 21:50 G	3443753.20	3443753.41	3443753.63	0.0137	0.0032
Uranus	4717-03-13 05:16 G	3443979.55	3443979.72	3443979.91	0.0138	0.0078
Uranus	4717-10-25 12:57 G	3444205.96	3444206.04	3444206.15	0.0138	0.0124
Mars	4719-05-20 21:35 G	3444778.23	3444778.40	3444778.57	0.1806	0.0498
Saturn	4721-09-18 13:11 G	3445629.86	3445630.05	3445630.25	0.0280	0.0111
Saturn	4722-05-06 00:28 G	3445859.34	3445859.52	3445859.72	0.0279	0.0114
Jupiter	4723-01-01 23:16 G	3446100.27	3446100.47	3446100.68	0.0490	0.0036
Mars	4725-11-02 22:48 G	3447136.28	3447136.45	3447136.62	0.1734	0.0468
Jupiter	4728-11-08 16:48 G	3448238.02	3448238.20	3448238.39	0.0536	0.0229
Jupiter	4734-09-07 03:07 G	3450366.50	3450366.63	3450366.77	0.0489	0.0362
Saturn	4736-10-11 19:55 G	3451132.31	3451132.33	3451132.36	0.0278	0.0276
Saturn	4737-05-29 07:55 G	3451361.62	3451361.83	3451362.04	0.0280	0.0054
Saturn	4738-01-13 20:52 G	3451591.21	3451591.37	3451591.54	0.0281	0.0174
Jupiter	4740-07-14 05:02 G	3452503.53	3452503.71	3452503.90	0.0538	0.0212
Jupiter	4747-01-04 03:07 G	3454868.59	3454868.63	3454868.68	0.0492	0.0479
Saturn	4751-03-31 20:38 G	3456416.16	3456416.36	3456416.57	0.0280	0.0074
Saturn	4751-11-16 07:40 G	3456645.64	3456645.82	3456646.00	0.0279	0.0149
Mars	4753-03-17 16:48 G	3457133.11	3457133.20	3457133.29	0.1789	0.1504

Uranus 4754-05-24 20:24 G 3457566.25 3457566.35 3457566.46 0.0142 0.0124

Uranus 4755-01-06 06:28 G 3457792.60 3457792.77 3457792.97 0.0141 0.0074

Pluto 4755-02-10 00:14 G 3457827.31 3457827.51 3457827.73 0.0077 0.0022

Uranus 4755-08-20 16:48 G 3458018.99 3458019.20 3458019.42 0.0141 0.0023

Pluto 4755-09-23 09:35 G 3458052.71 3458052.90 3458053.09 0.0076 0.0039

Uranus 4756-04-03 02:52 G 3458245.41 3458245.62 3458245.84 0.0141 0.0027

Uranus 4756-11-15 12:28 G 3458471.85 3458472.02 3458472.21 0.0141 0.0077

Uranus 4757-06-29 22:19 G 3458698.34 3458698.43 3458698.53 0.0140 0.0126

Mars 4757-11-02 01:26 G 3458823.42 3458823.56 3458823.71 0.1722 0.0939

Neptune 4758-01-13 12:28 G 3458895.96 3458896.02 3458896.10 0.0088 0.0083

Neptune 4758-08-27 01:11 G 3459121.41 3459121.55 3459121.70 0.0088 0.0066

Jupiter 4758-09-09 06:43 G 3459134.58 3459134.78 3459134.97 0.0491 0.0148

Neptune 4759-04-09 13:40 G 3459346.91 3459347.07 3459347.27 0.0088 0.0050

Neptune 4759-11-21 02:24 G 3459572.41 3459572.60 3459572.82 0.0088 0.0033

Neptune 4760-07-03 15:07 G 3459797.92 3459798.13 3459798.36 0.0088 0.0016

Neptune 4761-02-14 04:04 G 3460023.45 3460023.67 3460023.89 0.0088 0.0001

Neptune 4761-09-27 16:33 G 3460248.98 3460249.19 3460249.41 0.0088 0.0018

Neptune 4762-05-11 05:02 G 3460474.52 3460474.71 3460474.92 0.0088 0.0035

Neptune 4762-12-22 17:31 G 3460700.07 3460700.23 3460700.42 0.0088 0.0052

Neptune 4763-08-05 06:00 G 3460925.64 3460925.75 3460925.91 0.0088 0.0069

Neptune 4764-03-17 18:28 G 3461151.25 3461151.27 3461151.35 0.0088 0.0086

Jupiter 4764-07-17 12:14 G 3461272.94 3461273.01 3461273.09 0.0535 0.0492

Saturn 4766-04-23 22:33 G 3461918.36 3461918.44 3461918.54 0.0278 0.0251

Saturn 4766-12-09 10:48 G 3462147.74 3462147.95 3462148.16 0.0280 0.0028

Saturn 4767-07-27 00:00 G 3462377.36 3462377.50 3462377.65 0.0282 0.0202

Jupiter 4770-05-15 10:48 G 3463400.76 3463400.95 3463401.14 0.0490 0.0179

Jupiter 4776-03-22 00:14 G 3465538.31 3465538.51 3465538.71 0.0537 0.0051

Saturn 4780-02-24 13:55 G 3466973.04 3466973.08 3466973.14 0.0282 0.0272

Saturn 4780-10-11 02:24 G 3467202.39 3467202.60 3467202.81 0.0280 0.0045

Saturn 4781-05-28 13:11 G 3467431.90 3467432.05 3467432.22 0.0278 0.0178

Mars 4785-03-17 04:04 G 3468820.49 3468820.67 3468820.84 0.1802 0.0198

Jupiter 4787-11-25 08:52 G 3469803.74 3469803.87 3469804.00 0.0538 0.0408

Earth 4791-01-02 18:14 G 3470938.11 3470938.26 3470938.42 0.2693 0.0805

Moon 4791-01-03 00:00 G 3470938.34 3470938.50 3470938.66 0.2692 0.0411 *

Mars 4791-08-31 08:09 G 3471178.69 3471178.84 3471179.00 0.1737 0.0685

Jupiter 4794-05-17 16:33 G 3472169.05 3472169.19 3472169.34 0.0491 0.0346

Saturn 4795-11-04 09:21 G 3472704.76 3472704.89 3472705.03 0.0279 0.0210

Saturn 4796-06-20 21:50 G 3472934.20 3472934.41 3472934.62 0.0280 0.0014

Saturn 4797-02-05 11:16 G 3473163.87 3473163.97 3473164.08 0.0282 0.0243

Uranus 4798-05-20 07:40 G 3473632.76 3473632.82 3473632.91 0.0136 0.0127

Uranus 4799-01-01 14:52 G 3473858.95 3473859.12 3473859.30 0.0137 0.0082

Uranus 4799-08-15 22:04 G 3474085.22 3474085.42 3474085.64 0.0137 0.0037

Uranus 4800-03-29 05:31 G 3474311.51 3474311.73 3474311.95 0.0137 0.0009

Uranus 4800-11-10 12:57 G 3474537.85 3474538.04 3474538.25 0.0137 0.0055

Uranus 4801-06-24 20:24 G 3474764.22 3474764.35 3474764.51 0.0138 0.0102

Jupiter 4806-01-20 18:14 G 3476435.06 3476435.26 3476435.47 0.0490 0.0011

Saturn 4809-09-05 23:02 G 3477759.34 3477759.46 3477759.58 0.0281 0.0232

Saturn 4810-04-23 11:02 G 3477988.75 3477988.96 3477989.17 0.0280 0.0007

Saturn 4810-12-08 21:35 G 3478218.27 3478218.40 3478218.53 0.0278 0.0215

Jupiter 4811-11-28 16:04 G 3478573.01 3478573.17 3478573.35 0.0537 0.0300

Jupiter 4817-09-25 22:33 G 3480701.28 3480701.44 3480701.59 0.0489 0.0320

Mars 4819-01-12 23:45 G 3481175.49 3481175.49 3481175.50 0.1784 0.1780

Jupiter 4823-08-03 04:48 G 3482838.51 3482838.70 3482838.90 0.0538 0.0141

Mars 4823-08-30 10:48 G 3482865.79 3482865.95 3482866.11 0.1725 0.0732

Saturn 4825-05-16 12:43 G 3483490.88 3483491.03 3483491.19 0.0279 0.0184

Saturn 4826-01-01 01:11 G 3483720.34 3483720.55 3483720.76 0.0281 0.0041

Saturn 4826-08-18 14:38 G 3483950.07 3483950.11 3483950.18 0.0282 0.0272

Uranus 4838-09-05 11:45 G 3488350.85 3488350.99 3488351.16 0.0142 0.0100

Saturn 4839-03-19 04:04 G 3488545.53 3488545.67 3488545.82 0.0281 0.0203

Uranus 4839-04-19 22:19 G 3488577.23 3488577.43 3488577.64 0.0141 0.0049

Saturn 4839-11-03 16:04 G 3488774.96 3488775.17 3488775.38 0.0279 0.0023

Uranus 4839-12-02 08:38 G 3488803.64 3488803.86 3488804.08 0.0141 0.0002

Saturn 4840-06-20 02:38 G 3489004.52 3489004.61 3489004.72 0.0278 0.0243

Uranus 4840-07-15 18:28 G 3489030.07 3489030.27 3489030.47 0.0141 0.0051

Neptune 4840-10-12 14:52 G 3489119.05 3489119.12 3489119.24 0.0089 0.0081

Uranus 4841-02-27 04:04 G 3489256.53 3489256.67 3489256.83 0.0141 0.0101

Neptune 4841-05-26 04:19 G 3489344.55 3489344.68 3489344.86 0.0089 0.0063

Jupiter 4841-09-28 04:19 G 3489469.50 3489469.68 3489469.87 0.0491 0.0205

Neptune 4842-01-06 18:00 G 3489570.07 3489570.25 3489570.45 0.0089 0.0045

Neptune 4842-08-20 07:26 G 3489795.60 3489795.81 3489796.02 0.0089 0.0027

Neptune 4843-04-02 20:52 G 3490021.15 3490021.37 3490021.59 0.0089 0.0009

Neptune 4843-11-14 10:04 G 3490246.71 3490246.92 3490247.15 0.0089 0.0009

Neptune 4844-06-26 23:31 G 3490472.27 3490472.48 3490472.69 0.0089 0.0027

Neptune 4845-02-07 12:43 G 3490697.85 3490698.03 3490698.23 0.0089 0.0045

Neptune 4845-09-21 02:09 G 3490923.44 3490923.59 3490923.76 0.0089 0.0063

Neptune 4846-05-04 15:21 G 3491149.06 3491149.14 3491149.25 0.0089 0.0081

Mars 4851-01-12 10:19 G 3492862.76 3492862.93 3492863.11 0.1798 0.0115

Jupiter 4853-06-03 07:55 G 3493735.64 3493735.83 3493736.03 0.0490 0.0126

Saturn 4854-11-26 23:02 G 3494277.28 3494277.46 3494277.64 0.0279 0.0143

Saturn 4855-07-14 11:45 G 3494506.79 3494506.99 3494507.19 0.0281 0.0083

Mars 4857-06-27 17:16 G 3495221.08 3495221.22 3495221.37 0.1741 0.0913

Jupiter 4859-04-10 18:28 G 3495873.07 3495873.27 3495873.47 0.0537 0.0097

Jupiter 4865-02-06 10:19 G 3498001.87 3498001.93 3498002.00 0.0489 0.0460

Saturn 4868-09-28 13:40 G 3499331.91 3499332.07 3499332.25 0.0281 0.0162

Saturn 4869-05-16 01:26 G 3499561.36 3499561.56 3499561.77 0.0279 0.0063

Jupiter 4870-12-14 07:40 G 3500138.67 3500138.82 3500138.99 0.0539 0.0343

Jupiter 4877-06-05 11:31 G 3502503.86 3502503.98 3502504.10 0.0492 0.0388

Uranus 4882-08-31 22:48 G 3504417.32 3504417.45 3504417.61 0.0137 0.0104

Mars 4883-01-11 23:45 G 3504550.44 3504550.49 3504550.55 0.1812 0.1695

Uranus 4883-04-15 06:00 G 3504643.57 3504643.75 3504643.96 0.0137 0.0059

Uranus 4883-11-27 13:40 G 3504869.85 3504870.07 3504870.29 0.0137 0.0013

Saturn 4884-06-08 02:09 G 3505063.41 3505063.59 3505063.79 0.0279 0.0118

Uranus 4884-07-10 20:52 G 3505096.17 3505096.37 3505096.59 0.0137 0.0033

Saturn 4885-01-23 14:52 G 3505292.94 3505293.12 3505293.33 0.0281 0.0110

Uranus 4885-02-22 04:33 G 3505322.51 3505322.69 3505322.87 0.0138 0.0079

Uranus 4885-10-06 12:14 G 3505548.92 3505549.01 3505549.10 0.0138 0.0125

Jupiter 4889-02-08 15:07 G 3506769.93 3506770.13 3506770.34 0.0490 0.0059

Mars 4889-06-26 20:24 G 3506908.19 3506908.35 3506908.52 0.1729 0.0526

Jupiter 4894-12-17 13:55 G 3508907.93 3508908.08 3508908.23 0.0536 0.0361

Saturn 4898-04-10 18:14 G 3510118.07 3510118.26 3510118.44 0.0281 0.0135

Saturn 4898-11-26 05:45 G 3510347.54 3510347.74 3510347.94 0.0279 0.0090

Jupiter 4900-10-15 19:55 G 3511036.16 3511036.33 3511036.50 0.0489 0.0266

Jupiter 4906-08-22 23:02 G 3513173.26 3513173.46 3513173.66 0.0537 0.0097

Saturn 4913-12-20 12:00 G 3515849.80 3515850.00 3515850.20 0.0280 0.0078

Saturn 4914-08-07 00:57 G 3516079.37 3516079.54 3516079.73 0.0282 0.0151

Pluto 4916-08-07 14:38 G 3516811.05 3516811.11 3516811.24 0.0067 0.0061

Mars 4916-11-09 17:16 G 3516905.05 3516905.22 3516905.39 0.1794 0.0390

Pluto 4917-03-20 20:24 G 3517036.14 3517036.35 3517036.56 0.0067 0.0020

Pluto 4917-11-01 01:11 G 3517261.36 3517261.55 3517261.78 0.0067 0.0021

Pluto 4918-06-14 06:14 G 3517486.69 3517486.76 3517486.87 0.0068 0.0062

Uranus 4922-05-06 18:00 G 3518909.16 3518909.25 3518909.36 0.0142 0.0125

Neptune 4922-11-29 12:57 G 3519115.93 3519116.04 3519116.17 0.0088 0.0073

Uranus 4922-12-19 04:04 G 3519135.50 3519135.67 3519135.87 0.0142 0.0075

Mars 4923-04-26 02:24 G 3519263.47 3519263.60 3519263.73 0.1745 0.1140

Neptune 4923-07-13 01:40 G 3519341.41 3519341.57 3519341.75 0.0088 0.0056

Uranus 4923-08-02 14:24 G 3519361.89 3519362.10 3519362.32 0.0141 0.0024

Neptune 4924-02-23 14:24 G 3519566.91 3519567.10 3519567.31 0.0088 0.0039

Uranus 4924-03-16 00:28 G 3519588.31 3519588.52 3519588.74 0.0141 0.0026

Neptune 4924-10-06 03:07 G 3519792.42 3519792.63 3519792.85 0.0088 0.0022

Jupiter 4924-10-17 22:48 G 3519804.28 3519804.45 3519804.63 0.0491 0.0246

Uranus 4924-10-28 10:19 G 3519814.75 3519814.93 3519815.12 0.0141 0.0076

Neptune 4925-05-19 15:50 G 3520017.95 3520018.16 3520018.38 0.0088 0.0006

Uranus 4925-06-11 19:55 G 3520041.25 3520041.33 3520041.44 0.0140 0.0126

Neptune 4925-12-31 04:33 G 3520243.47 3520243.69 3520243.91 0.0088 0.0012

Neptune 4926-08-13 17:02 G 3520469.01 3520469.21 3520469.43 0.0088 0.0029

Neptune 4927-03-27 05:45 G 3520694.57 3520694.74 3520694.94 0.0088 0.0046

Saturn 4927-10-23 04:04 G 3520904.48 3520904.67 3520904.88 0.0280 0.0094

Neptune 4927-11-07 18:14 G 3520920.13 3520920.26 3520920.43 0.0088 0.0063

Saturn 4928-06-08 15:21 G 3521133.96 3521134.14 3521134.33 0.0279 0.0131

Neptune 4928-06-20 06:43 G 3521145.71 3521145.78 3521145.89 0.0088 0.0080

Moon 4928-07-02 06:43 G 3521157.63 3521157.78 3521157.93 0.2637 0.0851

Earth 4928-07-02 11:31 G 3521157.83 3521157.98 3521158.14 0.2640 0.0169 *

Jupiter 4936-06-23 03:07 G 3524070.42 3524070.63 3524070.83 0.0490 0.0084

Jupiter 4942-04-30 18:57 G 3526208.10 3526208.29 3526208.48 0.0537 0.0172

Saturn 4942-11-15 03:21 G 3526406.61 3526406.64 3526406.69 0.0278 0.0273

Saturn 4943-07-02 15:21 G 3526635.93 3526636.14 3526636.35 0.0280 0.0052

Saturn 4944-02-17 04:04 G 3526865.52 3526865.67 3526865.85 0.0281 0.0177

Jupiter 4948-02-27 07:26 G 3528336.70 3528336.81 3528336.92 0.0489 0.0409

Mars 4948-11-09 05:45 G 3528592.63 3528592.74 3528592.85 0.1808 0.1376

Jupiter 4954-01-03 06:43 G 3530473.60 3530473.78 3530473.95 0.0538 0.0275

Mars 4955-04-25 05:45 G 3530950.57 3530950.74 3530950.91 0.1732 0.0313

Saturn 4957-05-04 07:11 G 3531690.60 3531690.80 3531691.01 0.0280 0.0069

Saturn 4957-12-19 18:28 G 3531920.10 3531920.27 3531920.45 0.0279 0.0156

Jupiter 4960-06-25 09:21 G 3532838.81 3532838.89 3532838.98 0.0492 0.0447

Uranus 4966-05-02 06:43 G 3534975.72 3534975.78 3534975.88 0.0136 0.0126

Uranus 4966-12-14 13:55 G 3535201.92 3535202.08 3535202.27 0.0137 0.0081

Uranus 4967-07-28 21:21 G 3535428.19 3535428.39 3535428.61 0.0137 0.0035

Uranus 4968-03-11 04:48 G 3535654.48 3535654.70 3535654.92 0.0137 0.0011

Uranus 4968-10-23 12:14 G 3535880.82 3535881.01 3535881.22 0.0137 0.0057

Uranus 4969-06-06 19:40 G 3536107.19 3536107.32 3536107.48 0.0138 0.0103

Jupiter	**4972-02-29 12:57**	**G**	**3537104.84**	**3537105.04**	**3537105.24**	**0.0491**	**0.0113**	
Saturn	**4972-05-27 11:31**	**G**	**3537192.87**	**3537192.98**	**3537193.09**	**0.0279**	**0.0237**	
Saturn	**4973-01-11 23:45**	**G**	**3537422.28**	**3537422.49**	**3537422.70**	**0.0280**	**0.0014**	
Saturn	**4973-08-29 12:57**	**G**	**3537651.92**	**3537652.04**	**3537652.19**	**0.0282**	**0.0215**	
Jupiter	**4978-01-06 09:07**	**G**	**3539242.75**	**3539242.88**	**3539243.01**	**0.0536**	**0.0411**	
Mars	**4982-09-07 00:00**	**G**	**3540947.34**	**3540947.50**	**3540947.66**	**0.1790**	**0.0680**	
Jupiter	**4983-11-04 15:07**	**G**	**3541370.95**	**3541371.13**	**3541371.32**	**0.0489**	**0.0224**	
Saturn	**4986-03-30 04:48**	**G**	**3542247.62**	**3542247.70**	**3542247.80**	**0.0282**	**0.0255**	
Saturn	**4986-11-14 17:31**	**G**	**3542477.02**	**3542477.23**	**3542477.44**	**0.0280**	**0.0027**	
Mars	**4987-04-24 07:55**	**G**	**3542637.81**	**3542637.83**	**3542637.85**	**0.1720**	**0.1701**	
Saturn	**4987-07-02 04:19**	**G**	**3542706.54**	**3542706.68**	**3542706.84**	**0.0278**	**0.0196**	
Mars	**4989-02-20 11:02**	**G**	**3543305.85**	**3543305.96**	**3543306.06**	**0.1749**	**0.1384**	
Jupiter	**4989-09-10 22:33**	**G**	**3543508.24**	**3543508.44**	**3543508.65**	**0.0538**	**0.0027**	

6TH MILLENNIUM CE

This is a list of transits of Venus in the 6th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**5001-05-17 11:31**	**G**	**3547773.88**	**3547773.98**	**3547774.08**	**0.0539**	**0.0468**	
Saturn	**5001-12-08 14:52**	**G**	**3547978.99**	**3547979.12**	**3547979.26**	**0.0278**	**0.0212**	
Saturn	**5002-07-26 03:07**	**G**	**3548208.41**	**3548208.63**	**3548208.84**	**0.0280**	**0.0012**	
Saturn	**5003-03-12 16:04**	**G**	**3548438.07**	**3548438.17**	**3548438.29**	**0.0282**	**0.0240**	
Pluto	**5003-08-28 01:11**	**G**	**3548606.37**	**3548606.55**	**3548606.77**	**0.0077**	**0.0033**	
Pluto	**5004-04-09 10:33**	**G**	**3548831.74**	**3548831.94**	**3548832.15**	**0.0076**	**0.0029**	

Neptune 5005-01-16 02:52 G 3549113.58 3549113.62 3549113.68 0.0089 0.0087

Neptune 5005-08-29 16:04 G 3549339.05 3549339.17 3549339.33 0.0089 0.0069

Neptune 5006-04-12 05:31 G 3549564.57 3549564.73 3549564.93 0.0089 0.0052

Uranus 5006-08-19 10:48 G 3549693.81 3549693.95 3549694.12 0.0142 0.0099

Neptune 5006-11-23 18:57 G 3549790.10 3549790.29 3549790.51 0.0089 0.0034

Uranus 5007-04-02 21:07 G 3549920.19 3549920.38 3549920.60 0.0141 0.0049

Neptune 5007-07-07 08:24 G 3550015.64 3550015.85 3550016.07 0.0089 0.0016

Jupiter 5007-11-07 20:52 G 3550139.21 3550139.37 3550139.53 0.0491 0.0302

Uranus 5007-11-15 07:26 G 3550146.59 3550146.81 3550147.03 0.0141 0.0003

Neptune 5008-02-17 21:50 G 3550241.19 3550241.41 3550241.63 0.0089 0.0002

Uranus 5008-06-28 17:16 G 3550373.02 3550373.22 3550373.43 0.0141 0.0052

Neptune 5008-09-30 11:02 G 3550466.76 3550466.96 3550467.19 0.0089 0.0021

Uranus 5009-02-10 02:52 G 3550599.48 3550599.62 3550599.78 0.0141 0.0102

Neptune 5009-05-14 00:14 G 3550692.33 3550692.51 3550692.73 0.0089 0.0039

Neptune 5009-12-25 13:26 G 3550917.91 3550918.06 3550918.25 0.0089 0.0057

Neptune 5010-08-08 03:07 G 3551143.52 3551143.63 3551143.76 0.0089 0.0074

Mars 5014-09-07 12:14 G 3552634.87 3552635.01 3552635.15 0.1804 0.1074

Saturn 5015-10-11 06:43 G 3553033.67 3553033.78 3553033.91 0.0282 0.0232

Saturn 5016-05-27 19:11 G 3553263.09 3553263.30 3553263.52 0.0280 0.0007

Saturn 5017-01-12 06:14 G 3553492.64 3553492.76 3553492.90 0.0278 0.0218

Jupiter 5019-07-14 01:26 G 3554405.35 3554405.56 3554405.76 0.0490 0.0028

Mars 5021-02-20 14:52 G 3554992.94 3554993.12 3554993.29 0.1736 0.0097

Jupiter 5025-05-20 15:21 G 3556542.96 3556543.14 3556543.32 0.0537 0.0227

Moon 5026-01-07 01:55 G 3556774.52 3556774.58 3556774.63 0.2687 0.2534

Jupiter 5031-03-19 05:31 G 3558671.60 3558671.73 3558671.87 0.0489 0.0354

Saturn 5031-06-20 21:50 G 3558765.25 3558765.41 3558765.57 0.0279 0.0177

Saturn 5032-02-05 10:04 G 3558994.71 3558994.92 3558995.13 0.0281 0.0047

Saturn 5032-09-21 23:45 G 3559224.46 3559224.49 3559224.54 0.0282 0.0276

Moon 5034-01-04 12:28 G 3559693.88 3559694.02 3559694.16 0.2690 0.1270

Earth 5034-01-04 18:00 G 3559694.10 3559694.25 3559694.40 0.2692 0.1021 *

Jupiter	5037-01-23 02:52 G	3560808.44	3560808.62	3560808.81	0.0538	0.0222
Saturn	5045-04-22 16:19 G	3563820.03	3563820.18	3563820.34	0.0281	0.0192
Saturn	5045-12-08 04:33 G	3564049.49	3564049.69	3564049.91	0.0280	0.0036
Saturn	5046-07-25 15:21 G	3564279.07	3564279.14	3564279.23	0.0278	0.0256
Mars	5048-07-05 07:26 G	3564989.66	3564989.81	3564989.96	0.1786	0.0950
Uranus	5050-08-14 22:19 G	3565760.29	3565760.43	3565760.58	0.0137	0.0102
Uranus	5051-03-29 05:31 G	3565986.54	3565986.73	3565986.93	0.0137	0.0057
Uranus	5051-11-10 12:57 G	3566212.82	3566213.04	3566213.26	0.0137	0.0012
Uranus	5052-06-23 20:09 G	3566439.14	3566439.34	3566439.56	0.0137	0.0034
Uranus	5053-02-05 03:21 G	3566665.48	3566665.64	3566665.83	0.0138	0.0081
Mars	5053-02-19 17:45 G	3566680.16	3566680.24	3566680.33	0.1724	0.1508
Uranus	5053-09-19 10:48 G	3566891.89	3566891.95	3566892.06	0.0138	0.0127
Mars	5054-12-19 19:55 G	3567348.27	3567348.33	3567348.39	0.1752	0.1621
Jupiter	5055-03-21 09:21 G	3567439.69	3567439.89	3567440.08	0.0490	0.0163
Saturn	5060-12-31 00:57 G	3569551.37	3569551.54	3569551.73	0.0278	0.0153
Jupiter	5061-01-26 10:48 G	3569577.88	3569577.95	3569578.03	0.0536	0.0494
Saturn	5061-08-17 13:26 G	3569780.85	3569781.06	3569781.26	0.0280	0.0071
Jupiter	5066-11-24 13:26 G	3571705.87	3571706.06	3571706.26	0.0489	0.0167
Jupiter	5072-09-30 23:45 G	3573843.29	3573843.49	3573843.69	0.0537	0.0053
Saturn	5074-11-02 17:16 G	3574606.05	3574606.22	3574606.39	0.0281	0.0172
Saturn	5075-06-20 05:16 G	3574835.52	3574835.72	3574835.93	0.0280	0.0056
Saturn	5076-02-04 16:04 G	3575065.16	3575065.17	3575065.21	0.0278	0.0276
Jupiter	5078-07-30 18:43 G	3575972.28	3575972.28	3575972.28	0.0489	0.0489
Mars	5080-07-04 18:43 G	3576677.12	3576677.28	3576677.43	0.1800	0.0770
Jupiter	5084-06-05 09:35 G	3578108.77	3578108.90	3578109.03	0.0538	0.0405
Mars	5086-12-19 00:14 G	3579035.34	3579035.51	3579035.69	0.1740	0.0132
Neptune	5087-03-04 01:26 G	3579110.47	3579110.56	3579110.65	0.0088	0.0079
Neptune	5087-10-15 13:26 G	3579335.93	3579336.06	3579336.24	0.0088	0.0063
Neptune	5088-05-28 02:09 G	3579561.42	3579561.59	3579561.80	0.0088	0.0046
Neptune	5089-01-08 14:52 G	3579786.93	3579787.12	3579787.35	0.0088	0.0029

Neptune 5089-08-22 03:50 G 3580012.45 3580012.66 3580012.88 0.0088 0.0012

Neptune 5090-04-04 16:48 G 3580237.98 3580238.20 3580238.42 0.0088 0.0006

Uranus 5090-04-18 18:14 G 3580252.16 3580252.26 3580252.38 0.0142 0.0122

Saturn 5090-07-13 06:28 G 3580337.58 3580337.77 3580337.96 0.0279 0.0121

Neptune 5090-11-16 05:16 G 3580463.52 3580463.72 3580463.94 0.0088 0.0023

Jupiter 5090-11-26 19:55 G 3580474.20 3580474.33 3580474.47 0.0491 0.0364

Uranus 5090-12-01 04:33 G 3580478.51 3580478.69 3580478.89 0.0141 0.0072

Saturn 5091-02-27 18:57 G 3580567.10 3580567.29 3580567.49 0.0281 0.0104

Neptune 5091-06-29 17:45 G 3580689.06 3580689.24 3580689.45 0.0088 0.0040

Uranus 5091-07-15 14:52 G 3580704.90 3580705.12 3580705.33 0.0141 0.0021

Neptune 5092-02-10 06:14 G 3580914.61 3580914.76 3580914.95 0.0088 0.0057

Uranus 5092-02-27 00:43 G 3580931.32 3580931.53 3580931.75 0.0141 0.0029

Neptune 5092-09-22 18:43 G 3581140.19 3581140.28 3581140.43 0.0088 0.0074

Uranus 5092-10-10 10:33 G 3581157.77 3581157.94 3581158.13 0.0141 0.0079

Uranus 5093-05-24 20:24 G 3581384.27 3581384.35 3581384.44 0.0140 0.0128

Jupiter 5102-08-02 22:19 G 3584740.22 3584740.43 3584740.63 0.0490 0.0027

Saturn 5104-05-16 02:09 G 3585392.41 3585392.59 3585392.78 0.0281 0.0134

Saturn 5104-12-31 14:09 G 3585621.89 3585622.09 3585622.29 0.0280 0.0093

Jupiter 5108-06-09 15:50 G 3586877.99 3586878.16 3586878.33 0.0537 0.0304

Jupiter 5114-04-08 03:07 G 3589006.47 3589006.63 3589006.79 0.0489 0.0300

Mars 5114-05-03 14:09 G 3589031.97 3589032.09 3589032.22 0.1782 0.1235

Mars 5118-12-19 03:21 G 3590722.53 3590722.64 3590722.76 0.1727 0.1307

Saturn 5120-01-24 10:04 G 3591123.72 3591123.92 3591124.12 0.0278 0.0097

Jupiter 5120-02-13 05:16 G 3591143.52 3591143.72 3591143.92 0.0539 0.0135

Saturn 5120-09-09 22:19 G 3591353.25 3591353.43 3591353.62 0.0280 0.0128

Saturn 5133-11-26 01:40 G 3596178.38 3596178.57 3596178.76 0.0281 0.0115

Uranus 5134-04-15 06:00 G 3596318.67 3596318.75 3596318.84 0.0136 0.0124

Saturn 5134-07-13 13:40 G 3596407.88 3596408.07 3596408.27 0.0279 0.0111

Uranus 5134-11-27 13:11 G 3596544.88 3596545.05 3596545.23 0.0137 0.0079

Uranus 5135-07-11 20:09 G 3596771.14 3596771.34 3596771.56 0.0137 0.0034

Uranus 5136-02-23 03:35 G 3596997.44 3596997.65 3596997.87 0.0137 0.0012

Uranus 5136-10-06 11:02 G 3597223.77 3597223.96 3597224.16 0.0138 0.0058

Uranus 5137-05-20 18:28 G 3597450.14 3597450.27 3597450.42 0.0138 0.0104

Jupiter 5138-04-10 09:07 G 3597774.70 3597774.88 3597775.06 0.0491 0.0228

Mars 5146-05-03 00:57 G 3600719.37 3600719.54 3600719.71 0.1796 0.0460

Saturn 5149-08-05 14:09 G 3601909.89 3601910.09 3601910.30 0.0279 0.0067

Jupiter 5149-12-14 13:26 G 3602040.86 3602041.06 3602041.26 0.0490 0.0102

Saturn 5150-03-23 02:52 G 3602139.44 3602139.62 3602139.79 0.0281 0.0159

Mars 5152-10-16 09:21 G 3603077.72 3603077.89 3603078.06 0.1743 0.0352

Jupiter 5155-10-21 22:19 G 3604178.24 3604178.43 3604178.63 0.0537 0.0120

Jupiter 5161-08-19 16:48 G 3606307.11 3606307.20 3606307.29 0.0488 0.0431

Saturn 5163-06-08 09:35 G 3606964.70 3606964.90 3606965.11 0.0281 0.0080

Saturn 5164-01-23 21:35 G 3607194.23 3607194.40 3607194.58 0.0279 0.0146

Pluto 5165-02-22 17:45 G 3607590.20 3607590.24 3607590.32 0.0067 0.0064

Pluto 5165-10-05 22:48 G 3607815.26 3607815.45 3607815.67 0.0067 0.0024

Pluto 5166-05-19 04:19 G 3608040.47 3608040.68 3608040.89 0.0067 0.0017

Pluto 5166-12-30 08:52 G 3608265.79 3608265.87 3608266.01 0.0068 0.0059

Jupiter 5167-06-26 10:04 G 3608443.76 3608443.92 3608444.08 0.0539 0.0329

Neptune 5169-12-02 03:21 G 3609333.55 3609333.64 3609333.78 0.0089 0.0077

Neptune 5170-07-15 16:48 G 3609559.05 3609559.20 3609559.38 0.0089 0.0059

Neptune 5171-02-26 06:14 G 3609784.58 3609784.76 3609784.97 0.0089 0.0041

Earth 5171-07-05 13:40 G 3609913.92 3609914.07 3609914.23 0.2641 0.0148

Moon 5171-07-05 17:16 G 3609914.07 3609914.22 3609914.36 0.2647 0.0576 *

Neptune 5171-10-09 19:55 G 3610010.12 3610010.33 3610010.55 0.0089 0.0022

Neptune 5172-05-22 09:21 G 3610235.67 3610235.89 3610236.11 0.0089 0.0004

Neptune 5173-01-02 22:33 G 3610461.23 3610461.44 3610461.66 0.0089 0.0014

Neptune 5173-08-16 11:45 G 3610686.79 3610686.99 3610687.20 0.0089 0.0032

Jupiter 5173-12-16 18:00 G 3610809.15 3610809.25 3610809.36 0.0491 0.0423

Neptune 5174-03-30 00:57 G 3610912.37 3610912.54 3610912.74 0.0089 0.0050

Uranus 5174-08-01 11:45 G 3611036.83 3611036.99 3611037.15 0.0142 0.0095

Neptune	5174-11-10 14:09 G	3611137.97	3611138.09	3611138.25	0.0089	0.0068
Uranus	5175-03-15 21:50 G	3611263.21	3611263.41	3611263.63	0.0141	0.0045
Neptune	5175-06-24 03:21 G	3611363.60	3611363.64	3611363.73	0.0089	0.0086
Uranus	5175-10-28 08:09 G	3611489.62	3611489.84	3611490.06	0.0141	0.0006
Uranus	5176-06-10 18:00 G	3611716.06	3611716.25	3611716.46	0.0141	0.0056
Uranus	5177-01-23 03:21 G	3611942.52	3611942.64	3611942.81	0.0141	0.0106
Saturn	5178-07-01 06:28 G	3612466.71	3612466.77	3612466.85	0.0277	0.0262
Saturn	5179-02-15 17:45 G	3612696.03	3612696.24	3612696.45	0.0278	0.0043
Saturn	5179-10-03 06:00 G	3612925.60	3612925.75	3612925.92	0.0280	0.0183
Mars	5180-02-28 21:50 G	3613074.31	3613074.41	3613074.50	0.1778	0.1498
Mars	5184-10-15 12:57 G	3614764.91	3614765.04	3614765.18	0.1731	0.1105
Jupiter	5185-08-21 22:04 G	3615075.22	3615075.42	3615075.62	0.0490	0.0092
Jupiter	5191-06-29 18:57 G	3617213.16	3617213.29	3617213.43	0.0537	0.0395
Saturn	5192-12-18 08:38 G	3617750.66	3617750.86	3617751.07	0.0281	0.0062
Saturn	5193-08-04 20:24 G	3617980.19	3617980.35	3617980.53	0.0279	0.0165
Jupiter	5197-04-27 03:07 G	3619341.46	3619341.63	3619341.82	0.0489	0.0234
Jupiter	5203-03-04 06:00 G	3621478.55	3621478.75	3621478.96	0.0538	0.0059
Saturn	5208-01-11 09:21 G	3623252.79	3623252.89	3623253.01	0.0278	0.0236
Saturn	5208-08-27 20:52 G	3623482.16	3623482.37	3623482.59	0.0279	0.0016
Saturn	5209-04-14 09:21 G	3623711.76	3623711.89	3623712.04	0.0281	0.0212
Mars	5212-02-28 07:55 G	3624761.65	3624761.83	3624762.00	0.1791	0.0178
Jupiter	5214-11-06 17:16 G	3625744.17	3625744.22	3625744.29	0.0539	0.0511
Uranus	5218-07-27 20:38 G	3627103.23	3627103.36	3627103.52	0.0137	0.0101
Mars	5218-08-13 18:43 G	3627120.11	3627120.28	3627120.44	0.1747	0.0576
Uranus	5219-03-11 03:50 G	3627329.47	3627329.66	3627329.87	0.0137	0.0056
Uranus	5219-10-23 11:31 G	3627555.76	3627555.98	3627556.19	0.0137	0.0011
Uranus	5220-06-05 18:43 G	3627782.07	3627782.28	3627782.49	0.0137	0.0035
Uranus	5221-01-18 01:40 G	3628008.41	3628008.57	3628008.76	0.0138	0.0082
Jupiter	5221-04-29 07:55 G	3628109.67	3628109.83	3628110.00	0.0490	0.0291
Uranus	5221-09-01 09:07 G	3628234.82	3628234.88	3628234.98	0.0138	0.0128

Saturn 5221-11-13 02:24 G 3628307.53 3628307.60 3628307.69 0.0283 0.0259

Saturn 5222-06-30 15:50 G 3628536.95 3628537.16 3628537.37 0.0281 0.0029

Saturn 5223-02-15 03:35 G 3628766.51 3628766.65 3628766.81 0.0279 0.0197

Jupiter 5233-01-02 12:43 G 3632375.82 3632376.03 3632376.23 0.0489 0.0038

Saturn 5237-07-23 13:55 G 3634038.95 3634039.08 3634039.22 0.0277 0.0210

Saturn 5238-03-10 01:11 G 3634268.34 3634268.55 3634268.76 0.0279 0.0011

Saturn 5238-10-25 13:11 G 3634497.95 3634498.05 3634498.18 0.0280 0.0237

Jupiter 5238-11-10 01:26 G 3634513.37 3634513.56 3634513.75 0.0538 0.0211

Jupiter 5244-09-07 17:02 G 3636642.08 3636642.21 3636642.35 0.0488 0.0365

Mars 5245-12-26 05:16 G 3637116.71 3637116.72 3637116.74 0.1774 0.1764

Jupiter 5250-07-15 14:24 G 3638778.92 3638779.10 3638779.28 0.0539 0.0233

Mars 5250-08-12 22:19 G 3638807.28 3638807.43 3638807.58 0.1735 0.0891

Saturn 5251-05-26 01:11 G 3639093.45 3639093.55 3639093.67 0.0283 0.0240

Neptune 5251-06-06 12:57 G 3639105.01 3639105.04 3639105.10 0.0088 0.0086

Saturn 5252-01-10 14:24 G 3639322.89 3639323.10 3639323.31 0.0281 0.0012

Neptune 5252-01-18 01:40 G 3639330.45 3639330.57 3639330.71 0.0088 0.0069

Pluto 5252-03-13 04:19 G 3639385.50 3639385.68 3639385.89 0.0077 0.0036

Saturn 5252-08-27 02:09 G 3639552.46 3639552.59 3639552.73 0.0279 0.0214

Neptune 5252-08-30 14:24 G 3639555.93 3639556.10 3639556.28 0.0088 0.0052

Pluto 5252-10-24 13:40 G 3639610.87 3639611.07 3639611.28 0.0076 0.0026

Neptune 5253-04-13 03:07 G 3639781.44 3639781.63 3639781.84 0.0088 0.0035

Neptune 5253-11-24 15:50 G 3640006.95 3640007.16 3640007.38 0.0088 0.0018

Neptune 5254-07-08 04:33 G 3640232.47 3640232.69 3640232.91 0.0088 0.0001

Neptune 5255-02-18 17:16 G 3640458.00 3640458.22 3640458.43 0.0088 0.0016

Neptune 5255-10-02 05:45 G 3640683.54 3640683.74 3640683.95 0.0088 0.0033

Neptune 5256-05-14 18:43 G 3640909.10 3640909.28 3640909.46 0.0088 0.0050

Neptune 5256-12-26 06:43 G 3641134.67 3641134.78 3641134.94 0.0088 0.0068

Neptune 5257-08-08 19:26 G 3641360.28 3641360.31 3641360.39 0.0088 0.0085

Uranus 5258-03-31 18:14 G 3641595.15 3641595.26 3641595.38 0.0142 0.0119

Uranus 5258-11-13 04:33 G 3641821.51 3641821.69 3641821.89 0.0142 0.0068

Uranus	5259-06-27 14:38 G	3642047.90	3642048.11	3642048.34	0.0141	0.0019	
Uranus	5260-02-09 00:43 G	3642274.32	3642274.53	3642274.75	0.0141	0.0032	
Uranus	5260-09-22 10:33 G	3642500.77	3642500.94	3642501.12	0.0141	0.0082	
Uranus	5261-05-06 20:24 G	3642727.28	3642727.35	3642727.43	0.0140	0.0131	
Saturn	5267-02-02 15:21 G	3644825.00	3644825.14	3644825.31	0.0278	0.0186	
Saturn	5267-09-20 03:07 G	3645054.42	3645054.63	3645054.84	0.0279	0.0037	
Saturn	5268-05-06 15:35 G	3645284.09	3645284.15	3645284.23	0.0281	0.0263	
Jupiter	5268-09-09 23:16 G	3645410.27	3645410.47	3645410.66	0.0490	0.0163	
Moon	5269-01-08 03:50 G	3645530.63	3645530.66	3645530.70	0.2698	0.2597	
Jupiter	5274-07-18 19:26 G	3647548.21	3647548.31	3647548.40	0.0537	0.0470	
Earth	5277-01-05 17:45 G	3648450.10	3648450.24	3648450.38	0.2690	0.1216	
Moon	5277-01-05 21:50 G	3648450.27	3648450.41	3648450.55	0.2695	0.1040	*
Mars	5277-12-25 14:38 G	3648803.94	3648804.11	3648804.29	0.1787	0.0125	
Jupiter	5280-05-16 03:07 G	3649676.44	3649676.63	3649676.83	0.0489	0.0167	
Saturn	5280-12-05 07:26 G	3649879.68	3649879.81	3649879.96	0.0282	0.0210	
Saturn	5281-07-22 20:52 G	3650109.16	3650109.37	3650109.58	0.0281	0.0021	
Saturn	5282-03-09 08:38 G	3650338.77	3650338.86	3650338.97	0.0279	0.0245	
Mars	5284-06-10 03:35 G	3651162.49	3651162.65	3651162.80	0.1751	0.0814	
Jupiter	5286-03-23 06:43 G	3651813.58	3651813.78	3651813.99	0.0539	0.0022	
Saturn	5296-08-14 20:52 G	3655611.20	3655611.37	3655611.55	0.0277	0.0158	
Saturn	5297-04-01 08:09 G	3655840.63	3655840.84	3655841.05	0.0279	0.0063	
Jupiter	5297-11-25 19:55 G	3656079.21	3656079.33	3656079.45	0.0540	0.0423	
Uranus	5302-03-28 04:04 G	3657661.59	3657661.67	3657661.78	0.0136	0.0123	
Uranus	5302-11-09 11:31 G	3657887.81	3657887.98	3657888.16	0.0137	0.0078	
Uranus	5303-06-23 18:28 G	3658114.07	3658114.27	3658114.49	0.0137	0.0033	
Uranus	5304-02-05 01:55 G	3658340.36	3658340.58	3658340.80	0.0137	0.0013	
Jupiter	5304-05-19 08:38 G	3658444.73	3658444.86	3658445.00	0.0490	0.0361	
Uranus	5304-09-18 09:07 G	3658566.69	3658566.88	3658567.08	0.0137	0.0059	
Uranus	5305-05-02 16:19 G	3658793.06	3658793.18	3658793.34	0.0138	0.0105	
Mars	5309-12-26 02:38 G	3660491.55	3660491.61	3660491.68	0.1801	0.1645	

Saturn	5310-06-18 06:43 G	3660665.63	3660665.78	3660665.94	0.0282	0.0190
Saturn	5311-02-02 19:40 G	3660895.11	3660895.32	3660895.53	0.0281	0.0039
Saturn	5311-09-20 07:11 G	3661124.74	3661124.80	3661124.88	0.0279	0.0262
Jupiter	5316-01-23 13:26 G	3662710.85	3662711.06	3662711.26	0.0489	0.0032
Mars	5316-06-10 07:40 G	3662849.66	3662849.82	3662849.98	0.1738	0.0678
Jupiter	5321-11-30 03:35 G	3664848.49	3664848.65	3664848.82	0.0537	0.0297
Saturn	5326-02-25 22:19 G	3666397.25	3666397.43	3666397.62	0.0278	0.0134
Saturn	5326-10-13 09:50 G	3666626.71	3666626.91	3666627.11	0.0280	0.0088
Jupiter	5327-09-28 18:14 G	3666977.10	3666977.26	3666977.43	0.0489	0.0295
Jupiter	5333-08-04 15:07 G	3669113.94	3669114.13	3669114.33	0.0539	0.0156
Neptune	5334-03-06 14:38 G	3669328.06	3669328.11	3669328.21	0.0089	0.0084
Neptune	5334-10-18 04:19 G	3669553.55	3669553.68	3669553.85	0.0089	0.0065
Neptune	5335-05-31 17:45 G	3669779.07	3669779.24	3669779.44	0.0089	0.0047
Neptune	5336-01-12 07:11 G	3670004.60	3670004.80	3670005.02	0.0089	0.0029
Neptune	5336-08-24 20:38 G	3670230.15	3670230.36	3670230.59	0.0089	0.0012
Neptune	5337-04-07 10:04 G	3670455.71	3670455.92	3670456.14	0.0089	0.0007
Neptune	5337-11-18 23:16 G	3670681.27	3670681.47	3670681.69	0.0089	0.0025
Neptune	5338-07-02 12:28 G	3670906.84	3670907.02	3670907.23	0.0089	0.0043
Neptune	5339-02-13 01:55 G	3671132.43	3671132.58	3671132.75	0.0089	0.0061
Neptune	5339-09-26 15:21 G	3671358.05	3671358.14	3671358.25	0.0089	0.0079
Saturn	5339-12-29 12:14 G	3671451.84	3671452.01	3671452.19	0.0282	0.0161
Saturn	5340-08-15 01:26 G	3671681.35	3671681.56	3671681.76	0.0281	0.0068
Uranus	5342-07-14 10:33 G	3672379.79	3672379.94	3672380.12	0.0142	0.0094
Uranus	5343-02-25 21:07 G	3672606.17	3672606.38	3672606.58	0.0141	0.0043
Uranus	5343-10-10 07:11 G	3672832.58	3672832.80	3672833.02	0.0141	0.0008
Mars	5343-10-23 21:50 G	3672846.24	3672846.41	3672846.59	0.1783	0.0398
Uranus	5344-05-23 16:48 G	3673059.02	3673059.20	3673059.42	0.0141	0.0058
Uranus	5345-01-05 02:38 G	3673285.48	3673285.61	3673285.76	0.0141	0.0107
Mars	5350-04-08 12:14 G	3675204.88	3675205.01	3675205.15	0.1755	0.1053
Jupiter	5351-09-30 23:31 G	3675745.30	3675745.48	3675745.66	0.0490	0.0233

Saturn	**5355-09-08 04:19 G**	**3677183.48**	**3677183.68**	**3677183.88**	**0.0277**	**0.0105**	
Saturn	**5356-04-24 15:21 G**	**3677412.96**	**3677413.14**	**3677413.34**	**0.0279**	**0.0117**	
Jupiter	**5363-06-06 03:35 G**	**3680011.45**	**3680011.65**	**3680011.85**	**0.0489**	**0.0099**	
Jupiter	**5369-04-12 11:16 G**	**3682148.78**	**3682148.97**	**3682149.17**	**0.0538**	**0.0120**	
Saturn	**5369-07-10 12:00 G**	**3682237.82**	**3682238.00**	**3682238.19**	**0.0282**	**0.0140**	
Saturn	**5370-02-25 00:57 G**	**3682467.34**	**3682467.54**	**3682467.74**	**0.0281**	**0.0089**	
Jupiter	**5375-02-09 08:52 G**	**3684277.77**	**3684277.87**	**3684277.97**	**0.0488**	**0.0423**	
Mars	**5375-10-23 09:07 G**	**3684533.76**	**3684533.88**	**3684533.99**	**0.1797**	**0.1338**	
Jupiter	**5380-12-15 22:48 G**	**3686414.29**	**3686414.45**	**3686414.61**	**0.0539**	**0.0335**	
Mars	**5382-04-07 16:33 G**	**3686892.02**	**3686892.19**	**3686892.36**	**0.1742**	**0.0450**	
Saturn	**5385-03-20 05:16 G**	**3687969.52**	**3687969.72**	**3687969.93**	**0.0278**	**0.0082**	
Saturn	**5385-11-04 16:48 G**	**3688199.02**	**3688199.20**	**3688199.39**	**0.0280**	**0.0141**	
Uranus	**5386-07-09 19:11 G**	**3688446.17**	**3688446.30**	**3688446.47**	**0.0136**	**0.0100**	
Uranus	**5387-02-21 02:24 G**	**3688672.41**	**3688672.60**	**3688672.81**	**0.0137**	**0.0055**	
Jupiter	**5387-06-08 09:50 G**	**3688779.82**	**3688779.91**	**3688780.01**	**0.0491**	**0.0434**	
Uranus	**5387-10-05 09:50 G**	**3688898.69**	**3688898.91**	**3688899.13**	**0.0137**	**0.0009**	
Uranus	**5388-05-18 17:02 G**	**3689125.00**	**3689125.21**	**3689125.42**	**0.0137**	**0.0036**	
Uranus	**5388-12-31 00:14 G**	**3689351.35**	**3689351.51**	**3689351.70**	**0.0138**	**0.0082**	
Uranus	**5389-08-14 07:55 G**	**3689577.76**	**3689577.83**	**3689577.91**	**0.0138**	**0.0128**	
Saturn	**5399-01-20 17:31 G**	**3693024.03**	**3693024.23**	**3693024.42**	**0.0282**	**0.0111**	
Jupiter	**5399-02-11 13:55 G**	**3693045.88**	**3693046.08**	**3693046.28**	**0.0489**	**0.0103**	
Saturn	**5399-09-07 06:14 G**	**3693253.57**	**3693253.76**	**3693253.96**	**0.0280**	**0.0117**	
Jupiter	**5404-12-20 03:07 G**	**3695183.49**	**3695183.63**	**3695183.78**	**0.0538**	**0.0372**	
Mars	**5409-08-21 05:16 G**	**3696888.56**	**3696888.72**	**3696888.88**	**0.1779**	**0.0674**	
Jupiter	**5410-10-18 18:57 G**	**3697312.11**	**3697312.29**	**3697312.48**	**0.0488**	**0.0224**	
Saturn	**5414-02-14 01:55 G**	**3698526.54**	**3698526.58**	**3698526.64**	**0.0276**	**0.0268**	
Pluto	**5414-04-23 00:00 G**	**3698594.33**	**3698594.50**	**3698594.71**	**0.0067**	**0.0032**	
Moon	**5414-07-07 14:24 G**	**3698669.94**	**3698670.10**	**3698670.26**	**0.2636**	**0.0538**	
Earth	**5414-07-07 16:19 G**	**3698670.02**	**3698670.18**	**3698670.33**	**0.2643**	**0.0096**	*
Saturn	**5414-10-01 12:28 G**	**3698755.81**	**3698756.02**	**3698756.23**	**0.0278**	**0.0051**	

Pluto 5414-12-04 05:31 G 3698819.52 3698819.73 3698819.95 0.0067 0.0009

Saturn 5415-05-19 00:00 G 3698985.33 3698985.50 3698985.67 0.0279 0.0172

Pluto 5415-07-17 10:19 G 3699044.81 3699044.93 3699045.10 0.0068 0.0051

Mars 5416-02-04 20:38 G 3699247.25 3699247.36 3699247.47 0.1759 0.1307

Neptune 5416-04-22 13:26 G 3699324.97 3699325.06 3699325.19 0.0088 0.0076

Jupiter 5416-08-24 16:04 G 3699448.97 3699449.17 3699449.37 0.0539 0.0074

Neptune 5416-12-04 01:55 G 3699550.44 3699550.58 3699550.76 0.0088 0.0059

Neptune 5417-07-17 14:38 G 3699775.93 3699776.11 3699776.32 0.0088 0.0042

Neptune 5418-02-28 03:21 G 3700001.44 3700001.64 3700001.86 0.0088 0.0025

Neptune 5418-10-11 16:04 G 3700226.96 3700227.17 3700227.40 0.0088 0.0008

Neptune 5419-05-25 04:48 G 3700452.48 3700452.70 3700452.92 0.0088 0.0010

Neptune 5420-01-05 17:16 G 3700678.02 3700678.22 3700678.44 0.0088 0.0027

Neptune 5420-08-18 05:45 G 3700903.56 3700903.74 3700903.94 0.0088 0.0044

Neptune 5421-03-31 18:28 G 3701129.13 3701129.27 3701129.44 0.0088 0.0061

Neptune 5421-11-12 07:11 G 3701354.72 3701354.80 3701354.91 0.0088 0.0078

Uranus 5426-03-14 16:19 G 3702938.08 3702938.18 3702938.32 0.0142 0.0119

Uranus 5426-10-27 03:07 G 3703164.44 3703164.63 3703164.82 0.0142 0.0068

Uranus 5427-06-10 13:26 G 3703390.84 3703391.06 3703391.27 0.0141 0.0017

Uranus 5428-01-22 23:16 G 3703617.26 3703617.47 3703617.69 0.0141 0.0033

Jupiter 5428-04-29 05:16 G 3703714.67 3703714.72 3703714.77 0.0540 0.0522

Saturn 5428-08-02 18:14 G 3703810.06 3703810.26 3703810.46 0.0282 0.0088

Uranus 5428-09-05 09:07 G 3703843.71 3703843.88 3703844.06 0.0141 0.0082

Saturn 5429-03-20 06:43 G 3704039.61 3704039.78 3704039.97 0.0280 0.0140

Uranus 5429-04-19 18:43 G 3704070.22 3704070.28 3704070.37 0.0141 0.0132

Jupiter 5434-10-20 23:45 G 3706080.33 3706080.49 3706080.65 0.0490 0.0301

Mars 5441-08-20 16:04 G 3708576.03 3708576.17 3708576.32 0.1793 0.1048

Saturn 5443-08-27 02:52 G 3709312.53 3709312.62 3709312.73 0.0277 0.0246

Saturn 5444-04-12 13:40 G 3709541.86 3709542.07 3709542.28 0.0278 0.0027

Saturn 5444-11-28 00:57 G 3709771.40 3709771.54 3709771.70 0.0280 0.0197

Jupiter 5446-06-26 04:19 G 3710346.48 3710346.68 3710346.89 0.0489 0.0030

Mars 5448-02-04 01:40 G 3710934.39 3710934.57 3710934.74 0.1746 0.0226

Jupiter 5452-05-02 11:45 G 3712483.80 3712483.99 3712484.18 0.0538 0.0196

Saturn 5458-02-12 23:31 G 3714596.27 3714596.48 3714596.68 0.0282 0.0060

Jupiter 5458-03-01 09:21 G 3714612.76 3714612.89 3714613.04 0.0488 0.0354

Saturn 5458-09-30 12:00 G 3714825.84 3714826.00 3714826.18 0.0280 0.0167

Jupiter 5464-01-05 20:52 G 3716749.19 3716749.37 3716749.55 0.0540 0.0269

Uranus 5470-03-10 03:07 G 3719004.55 3719004.63 3719004.74 0.0136 0.0122

Uranus 5470-10-22 10:19 G 3719230.76 3719230.93 3719231.12 0.0137 0.0077

Uranus 5471-06-05 17:31 G 3719457.02 3719457.23 3719457.45 0.0137 0.0032

Uranus 5472-01-18 00:43 G 3719683.32 3719683.53 3719683.75 0.0137 0.0014

Uranus 5472-08-31 07:55 G 3719909.64 3719909.83 3719910.03 0.0137 0.0060

Saturn 5473-03-08 10:48 G 3720098.83 3720098.95 3720099.09 0.0277 0.0213

Uranus 5473-04-14 15:21 G 3720136.01 3720136.14 3720136.29 0.0138 0.0106

Saturn 5473-10-23 21:35 G 3720328.19 3720328.40 3720328.61 0.0278 0.0007

Saturn 5474-06-10 09:07 G 3720557.77 3720557.88 3720558.01 0.0280 0.0229

Mars 5475-06-18 12:57 G 3720930.89 3720931.04 3720931.19 0.1775 0.0936

Mars 5480-02-03 05:45 G 3722621.70 3722621.74 3722621.77 0.1733 0.1689

Mars 5481-12-02 05:16 G 3723289.64 3723289.72 3723289.80 0.1763 0.1556

Jupiter 5482-03-03 13:26 G 3723380.87 3723381.06 3723381.25 0.0489 0.0167

Saturn 5487-01-08 11:45 G 3725152.93 3725152.99 3725153.07 0.0283 0.0264

Saturn 5487-08-26 01:26 G 3725382.35 3725382.56 3725382.77 0.0282 0.0034

Jupiter 5488-01-09 06:28 G 3725518.67 3725518.77 3725518.87 0.0538 0.0463

Saturn 5488-04-11 13:55 G 3725611.93 3725612.08 3725612.24 0.0280 0.0192

Jupiter 5493-11-06 18:14 G 3727647.07 3727647.26 3727647.46 0.0488 0.0162

Neptune 5499-01-20 15:07 G 3729548.02 3729548.13 3729548.27 0.0089 0.0073

Neptune 5499-09-03 04:33 G 3729773.53 3729773.69 3729773.88 0.0089 0.0055

Jupiter 5499-09-13 18:28 G 3729784.07 3729784.27 3729784.47 0.0539 0.0013

Neptune 5500-04-16 18:14 G 3729999.06 3729999.26 3729999.47 0.0089 0.0036

Pluto 5500-09-29 05:16 G 3730164.57 3730164.72 3730164.92 0.0077 0.0047

Neptune 5500-11-28 07:40 G 3730224.61 3730224.82 3730225.04 0.0089 0.0018

Pluto 5501-05-12 14:38 G 3730389.91 3730390.11 3730390.34 0.0076 0.0016

Neptune 5501-07-11 21:07 G 3730450.16 3730450.38 3730450.60 0.0089 0.0000

Pluto 5501-12-23 23:45 G 3730615.47 3730615.49 3730615.52 0.0076 0.0075

Neptune 5502-02-22 10:19 G 3730675.72 3730675.93 3730676.15 0.0089 0.0018

Saturn 5502-09-19 12:14 G 3730884.86 3730885.01 3730885.17 0.0277 0.0190

Neptune 5502-10-05 23:31 G 3730901.30 3730901.48 3730901.70 0.0089 0.0037

Saturn 5503-05-06 23:16 G 3731114.26 3731114.47 3731114.68 0.0279 0.0031

Neptune 5503-05-19 12:43 G 3731126.88 3731127.03 3731127.23 0.0089 0.0055

Saturn 5503-12-22 11:02 G 3731343.88 3731343.96 3731344.05 0.0280 0.0254

Neptune 5503-12-31 01:55 G 3731352.48 3731352.58 3731352.74 0.0089 0.0073

Mars 5507-06-18 22:48 G 3732618.29 3732618.45 3732618.61 0.1789 0.0750

Uranus 5510-06-27 09:35 G 3733722.75 3733722.90 3733723.08 0.0142 0.0093

Uranus 5511-02-08 19:55 G 3733949.13 3733949.33 3733949.54 0.0142 0.0042

Jupiter 5511-05-20 05:02 G 3734049.61 3734049.71 3734049.83 0.0540 0.0448

Uranus 5511-09-23 06:00 G 3734175.54 3734175.75 3734175.97 0.0141 0.0009

Earth 5512-01-12 03:35 G 3734286.60 3734286.65 3734286.71 0.2690 0.2511

Uranus 5512-05-06 16:04 G 3734401.98 3734402.17 3734402.37 0.0141 0.0058

Uranus 5512-12-19 01:26 G 3734628.44 3734628.56 3734628.72 0.0141 0.0108

Mars 5513-12-02 10:48 G 3734976.78 3734976.95 3734977.12 0.1749 0.0015

Saturn 5516-07-21 16:48 G 3735939.10 3735939.20 3735939.33 0.0283 0.0236

Saturn 5517-03-08 06:57 G 3736168.57 3736168.79 3736169.00 0.0281 0.0007

Saturn 5517-10-23 19:11 G 3736398.18 3736398.30 3736398.43 0.0280 0.0220

Jupiter 5517-11-09 23:45 G 3736415.36 3736415.49 3736415.63 0.0490 0.0370

Moon 5520-01-09 15:07 G 3737205.99 3737206.13 3737206.26 0.2683 0.1646

Earth 5520-01-09 17:31 G 3737206.10 3737206.23 3737206.36 0.2689 0.1428 *

Jupiter 5529-07-16 04:19 G 3740681.47 3740681.68 3740681.88 0.0489 0.0038

Saturn 5532-03-31 21:07 G 3741671.21 3741671.38 3741671.57 0.0277 0.0154

Saturn 5532-11-16 08:09 G 3741900.64 3741900.84 3741901.05 0.0278 0.0066

Jupiter 5535-05-23 10:04 G 3742818.75 3742818.92 3742819.10 0.0539 0.0266

Jupiter 5541-03-21 07:55 G 3744947.67 3744947.83 3744947.99 0.0488 0.0296

Mars 5541-04-15 20:09 G 3744973.21 3744973.34 3744973.47 0.1771 0.1210

Mars 5545-12-01 14:52 G 3746664.04 3746664.12 3746664.21 0.1737 0.1477

Saturn 5546-01-31 21:07 G 3746725.24 3746725.38 3746725.53 0.0283 0.0206

Saturn 5546-09-18 10:33 G 3746954.73 3746954.94 3746955.15 0.0281 0.0024

Jupiter 5547-01-25 23:16 G 3747084.28 3747084.47 3747084.66 0.0540 0.0182

Saturn 5547-05-05 22:33 G 3747184.35 3747184.44 3747184.54 0.0280 0.0248

Uranus 5554-06-22 18:57 G 3749789.14 3749789.29 3749789.44 0.0137 0.0098

Uranus 5555-02-04 01:55 G 3750015.38 3750015.58 3750015.78 0.0137 0.0053

Uranus 5555-09-18 09:07 G 3750241.67 3750241.88 3750242.10 0.0137 0.0008

Uranus 5556-05-01 16:19 G 3750467.98 3750468.18 3750468.40 0.0137 0.0038

Uranus 5556-12-13 23:45 G 3750694.33 3750694.49 3750694.67 0.0138 0.0084

Uranus 5557-07-28 07:11 G 3750920.75 3750920.80 3750920.88 0.0138 0.0130

Saturn 5561-10-11 22:48 G 3752457.27 3752457.45 3752457.65 0.0277 0.0131

Saturn 5562-05-29 10:04 G 3752686.72 3752686.92 3752687.12 0.0279 0.0091

Jupiter 5565-03-23 12:43 G 3753715.85 3753716.03 3753716.21 0.0490 0.0231

Jupiter 5571-01-29 05:16 G 3755853.70 3755853.72 3755853.75 0.0537 0.0533

Mars 5573-04-15 05:31 G 3756660.56 3756660.73 3756660.90 0.1785 0.0451

Saturn 5575-08-14 02:38 G 3757511.44 3757511.61 3757511.77 0.0282 0.0177

Saturn 5576-03-30 16:04 G 3757740.96 3757741.17 3757741.38 0.0281 0.0053

Saturn 5576-11-15 04:04 G 3757970.64 3757970.67 3757970.70 0.0279 0.0276

Jupiter 5576-11-26 17:45 G 3757982.04 3757982.24 3757982.44 0.0488 0.0097

Mars 5579-09-29 19:26 G 3759019.14 3759019.31 3759019.48 0.1753 0.0248

Neptune 5580-07-26 00:43 G 3759319.48 3759319.53 3759319.63 0.0088 0.0083

Neptune 5581-03-08 13:26 G 3759544.94 3759545.06 3759545.23 0.0088 0.0066

Neptune 5581-10-20 02:09 G 3759770.43 3759770.59 3759770.79 0.0088 0.0049

Neptune 5582-06-02 14:52 G 3759995.93 3759996.12 3759996.34 0.0088 0.0032

Jupiter 5582-10-03 14:24 G 3760118.89 3760119.10 3760119.30 0.0539 0.0069

Neptune 5583-01-14 03:50 G 3760221.44 3760221.66 3760221.87 0.0088 0.0014

Neptune 5583-08-27 16:19 G 3760446.96 3760447.18 3760447.40 0.0088 0.0003

Neptune 5584-04-09 05:02 G 3760672.50 3760672.71 3760672.93 0.0088 0.0020

Neptune	5584-11-20 17:31 G	3760898.04	3760898.23	3760898.44	0.0088	0.0037
Neptune	5585-07-04 06:14 G	3761123.59	3761123.76	3761123.94	0.0088	0.0054
Neptune	5586-02-14 18:57 G	3761349.16	3761349.29	3761349.42	0.0088	0.0071
Jupiter	5588-08-01 22:33 G	3762248.35	3762248.44	3762248.54	0.0487	0.0425
Saturn	5591-04-24 08:38 G	3763243.66	3763243.86	3763244.07	0.0278	0.0093
Saturn	5591-12-09 19:55 G	3763473.15	3763473.33	3763473.52	0.0279	0.0129
Uranus	5594-02-24 17:02 G	3764281.09	3764281.21	3764281.34	0.0142	0.0116
Jupiter	5594-06-08 01:40 G	3764384.44	3764384.57	3764384.72	0.0540	0.0390
Uranus	5594-10-09 03:07 G	3764507.45	3764507.63	3764507.84	0.0142	0.0066
Uranus	5595-05-23 13:40 G	3764733.85	3764734.07	3764734.29	0.0141	0.0015
Uranus	5596-01-04 23:31 G	3764960.27	3764960.48	3764960.70	0.0141	0.0035
Uranus	5596-08-18 09:07 G	3765186.72	3765186.88	3765187.07	0.0141	0.0085
Uranus	5597-04-01 18:57 G	3765413.23	3765413.29	3765413.36	0.0141	0.0134
Jupiter	5600-11-28 21:07 G	3766750.28	3766750.38	3766750.48	0.0490	0.0424
Saturn	5605-02-23 08:24 G	3768297.67	3768297.85	3768298.04	0.0282	0.0143
Saturn	5605-10-10 21:21 G	3768527.19	3768527.39	3768527.59	0.0281	0.0085
Mars	5607-02-11 04:04 G	3769015.58	3769015.67	3769015.77	0.1767	0.1464
Mars	5611-09-29 00:14 G	3770706.39	3770706.51	3770706.63	0.1741	0.1263
Jupiter	5612-08-04 01:26 G	3771016.36	3771016.56	3771016.76	0.0489	0.0092
Jupiter	5618-06-11 10:48 G	3773153.80	3773153.95	3773154.11	0.0538	0.0345
Saturn	5620-11-03 11:02 G	3774029.75	3774029.96	3774030.16	0.0278	0.0068
Saturn	5621-06-20 22:19 G	3774259.26	3774259.43	3774259.61	0.0279	0.0155
Jupiter	5624-04-09 06:14 G	3775282.58	3775282.76	3775282.94	0.0488	0.0238
Jupiter	5630-02-13 21:50 G	3777419.21	3777419.41	3777419.61	0.0539	0.0115
Saturn	5634-09-05 13:40 G	3779083.88	3779084.07	3779084.27	0.0282	0.0114
Saturn	5635-04-23 02:52 G	3779313.42	3779313.62	3779313.81	0.0280	0.0114
Uranus	5638-02-20 02:38 G	3780347.52	3780347.61	3780347.73	0.0136	0.0120
Uranus	5638-10-04 09:50 G	3780573.74	3780573.91	3780574.10	0.0137	0.0075
Mars	5639-02-10 12:57 G	3780702.87	3780703.04	3780703.22	0.1781	0.0176
Uranus	5639-05-18 17:02 G	3780800.00	3780800.21	3780800.43	0.0137	0.0030

Uranus 5639-12-31 00:28 G 3781026.30 3781026.52 3781026.73 0.0137 0.0016

Uranus 5640-08-13 07:40 G 3781252.63 3781252.82 3781253.02 0.0137 0.0062

Uranus 5641-03-27 15:07 G 3781479.00 3781479.13 3781479.27 0.0138 0.0108

Mars 5645-07-27 04:33 G 3783061.52 3783061.69 3783061.85 0.1757 0.0481

Jupiter 5648-04-11 11:16 G 3784050.81 3784050.97 3784051.13 0.0489 0.0292

Saturn 5649-09-29 10:33 G 3784586.85 3784586.94 3784587.04 0.0277 0.0246

Saturn 5650-05-16 21:07 G 3784816.17 3784816.38 3784816.60 0.0278 0.0030

Saturn 5651-01-01 08:52 G 3785045.72 3785045.87 3785046.02 0.0280 0.0194

Moon 5657-07-08 18:00 G 3787426.10 3787426.25 3787426.40 0.2651 0.0031

Earth 5657-07-08 18:14 G 3787426.10 3787426.26 3787426.42 0.2644 0.0055 *

Jupiter 5659-12-16 14:09 G 3788316.88 3788317.09 3788317.29 0.0488 0.0049

Pluto 5662-11-07 03:07 G 3789373.46 3789373.63 3789373.84 0.0067 0.0034

Neptune 5663-04-25 01:40 G 3789542.50 3789542.57 3789542.69 0.0089 0.0081

Pluto 5663-06-20 08:38 G 3789598.65 3789598.86 3789599.08 0.0067 0.0007

Neptune 5663-12-06 15:07 G 3789767.99 3789768.13 3789768.31 0.0089 0.0063

Pluto 5664-01-31 13:26 G 3789823.93 3789824.06 3789824.24 0.0068 0.0049

Saturn 5664-03-17 21:21 G 3789870.19 3789870.39 3789870.59 0.0282 0.0077

Neptune 5664-07-19 04:33 G 3789993.52 3789993.69 3789993.90 0.0089 0.0044

Saturn 5664-11-02 09:50 G 3790099.73 3790099.91 3790100.09 0.0280 0.0149

Neptune 5665-03-01 18:14 G 3790219.05 3790219.26 3790219.48 0.0089 0.0026

Neptune 5665-10-13 07:55 G 3790444.61 3790444.83 3790445.05 0.0089 0.0008

Jupiter 5665-10-22 14:38 G 3790453.92 3790454.11 3790454.31 0.0539 0.0144

Neptune 5666-05-26 21:07 G 3790670.17 3790670.38 3790670.61 0.0089 0.0011

Neptune 5667-01-07 10:33 G 3790895.73 3790895.94 3790896.15 0.0089 0.0029

Neptune 5667-08-20 23:45 G 3791121.31 3791121.49 3791121.69 0.0089 0.0047

Neptune 5668-04-02 13:11 G 3791346.91 3791347.05 3791347.21 0.0089 0.0065

Neptune 5668-11-14 02:09 G 3791572.53 3791572.59 3791572.69 0.0089 0.0083

Jupiter 5671-08-21 18:43 G 3792583.16 3792583.28 3792583.41 0.0487 0.0377

Mars 5672-12-08 12:00 G 3793057.97 3793058.00 3793058.03 0.1763 0.1722

Jupiter 5677-06-27 02:24 G 3794719.44 3794719.60 3794719.77 0.0540 0.0312

Mars	**5677-07-26 09:07 G**	**3794748.74**	**3794748.88**	**3794749.02**	**0.1744**	**0.1039**
Uranus	**5677-10-25 00:28 G**	**3794839.50**	**3794839.52**	**3794839.59**	**0.0142**	**0.0140**
Uranus	**5678-06-08 11:16 G**	**3795065.81**	**3795065.97**	**3795066.15**	**0.0142**	**0.0088**
Uranus	**5679-01-20 21:21 G**	**3795292.19**	**3795292.39**	**3795292.61**	**0.0142**	**0.0038**
Saturn	**5679-04-11 12:57 G**	**3795372.93**	**3795373.04**	**3795373.18**	**0.0277**	**0.0222**
Uranus	**5679-09-04 07:40 G**	**3795518.60**	**3795518.82**	**3795519.04**	**0.0141**	**0.0013**
Saturn	**5679-11-26 23:45 G**	**3795602.28**	**3795602.49**	**3795602.71**	**0.0278**	**0.0007**
Uranus	**5680-04-17 17:31 G**	**3795745.04**	**3795745.23**	**3795745.43**	**0.0141**	**0.0063**
Saturn	**5680-07-13 11:31 G**	**3795831.85**	**3795831.98**	**3795832.11**	**0.0280**	**0.0220**
Uranus	**5680-11-30 03:21 G**	**3795971.51**	**3795971.64**	**3795971.78**	**0.0141**	**0.0112**
Jupiter	**5683-12-18 18:43 G**	**3797085.26**	**3797085.28**	**3797085.32**	**0.0490**	**0.0483**
Saturn	**5693-02-10 12:57 G**	**3800427.00**	**3800427.04**	**3800427.07**	**0.0283**	**0.0278**
Saturn	**5693-09-28 02:38 G**	**3800656.40**	**3800656.61**	**3800656.82**	**0.0282**	**0.0048**
Saturn	**5694-05-15 15:07 G**	**3800885.97**	**3800886.13**	**3800886.30**	**0.0280**	**0.0178**
Jupiter	**5695-08-23 23:31 G**	**3801351.29**	**3801351.48**	**3801351.68**	**0.0489**	**0.0152**
Jupiter	**5701-07-01 05:02 G**	**3803488.58**	**3803488.71**	**3803488.85**	**0.0538**	**0.0392**
Mars	**5704-12-08 20:09 G**	**3804745.16**	**3804745.34**	**3804745.51**	**0.1777**	**0.0121**
Jupiter	**5707-04-30 04:04 G**	**3805617.48**	**3805617.67**	**3805617.86**	**0.0488**	**0.0182**
Saturn	**5708-10-22 23:16 G**	**3806159.32**	**3806159.47**	**3806159.63**	**0.0277**	**0.0182**
Saturn	**5709-06-09 10:19 G**	**3806388.72**	**3806388.93**	**3806389.14**	**0.0279**	**0.0038**
Saturn	**5710-01-24 22:19 G**	**3806618.36**	**3806618.43**	**3806618.51**	**0.0280**	**0.0261**
Mars	**5711-05-25 12:43 G**	**3807103.88**	**3807104.03**	**3807104.19**	**0.1761**	**0.0733**
Jupiter	**5713-03-05 16:33 G**	**3807753.98**	**3807754.19**	**3807754.39**	**0.0539**	**0.0067**
Uranus	**5722-06-04 18:28 G**	**3811132.13**	**3811132.27**	**3811132.43**	**0.0136**	**0.0095**
Saturn	**5722-08-24 21:35 G**	**3811213.30**	**3811213.40**	**3811213.53**	**0.0283**	**0.0239**
Uranus	**5723-01-17 01:26 G**	**3811358.37**	**3811358.56**	**3811358.77**	**0.0137**	**0.0051**
Saturn	**5723-04-11 11:16 G**	**3811442.76**	**3811442.97**	**3811443.19**	**0.0281**	**0.0011**
Uranus	**5723-08-31 08:52 G**	**3811584.65**	**3811584.87**	**3811585.09**	**0.0137**	**0.0005**
Saturn	**5723-11-26 23:16 G**	**3811672.35**	**3811672.47**	**3811672.62**	**0.0280**	**0.0216**
Uranus	**5724-04-13 16:04 G**	**3811810.97**	**3811811.17**	**3811811.38**	**0.0137**	**0.0040**

Jupiter 5724-11-08 05:02 G 3812019.66 3812019.71 3812019.76 0.0541 0.0521

Uranus 5724-11-25 23:31 G 3812037.32 3812037.48 3812037.66 0.0137 0.0087

Uranus 5725-07-10 06:57 G 3812263.75 3812263.79 3812263.87 0.0138 0.0133

Jupiter 5731-05-02 06:43 G 3814385.64 3814385.78 3814385.93 0.0489 0.0338

Mars 5736-12-08 06:43 G 3816432.71 3816432.78 3816432.85 0.1790 0.1617

Saturn 5738-05-05 02:24 G 3816945.43 3816945.60 3816945.78 0.0277 0.0157

Saturn 5738-12-20 13:26 G 3817174.86 3817175.06 3817175.27 0.0279 0.0063

Jupiter 5743-01-05 11:02 G 3818651.76 3818651.96 3818652.16 0.0489 0.0005

Mars 5743-05-24 18:14 G 3818791.10 3818791.26 3818791.41 0.1748 0.0814

Neptune 5745-06-11 00:43 G 3819539.42 3819539.53 3819539.66 0.0088 0.0073

Neptune 5746-01-22 13:11 G 3819764.89 3819765.05 3819765.23 0.0088 0.0056

Neptune 5746-09-05 01:40 G 3819990.39 3819990.57 3819990.78 0.0088 0.0039

Neptune 5747-04-18 14:38 G 3820215.91 3820216.11 3820216.33 0.0088 0.0022

Neptune 5747-11-30 03:21 G 3820441.42 3820441.64 3820441.86 0.0088 0.0005

Neptune 5748-07-12 15:50 G 3820666.95 3820667.16 3820667.38 0.0088 0.0013

Jupiter 5748-11-11 12:28 G 3820788.83 3820789.02 3820789.21 0.0539 0.0208

Neptune 5749-02-23 04:19 G 3820892.48 3820892.68 3820892.90 0.0088 0.0030

Pluto 5749-04-15 08:52 G 3820943.71 3820943.87 3820944.05 0.0077 0.0048

Neptune 5749-10-06 17:02 G 3821118.03 3821118.21 3821118.40 0.0088 0.0047

Pluto 5749-11-26 18:14 G 3821169.04 3821169.26 3821169.48 0.0076 0.0014

Neptune 5750-05-20 05:16 G 3821343.60 3821343.72 3821343.89 0.0088 0.0065

Pluto 5750-07-10 02:52 G 3821394.59 3821394.62 3821394.69 0.0076 0.0074

Neptune 5750-12-31 18:00 G 3821569.19 3821569.25 3821569.35 0.0088 0.0082

Saturn 5752-03-06 02:38 G 3821999.48 3821999.61 3821999.76 0.0283 0.0211

Saturn 5752-10-21 16:19 G 3822228.97 3822229.18 3822229.39 0.0281 0.0019

Saturn 5753-06-08 04:19 G 3822458.59 3822458.68 3822458.79 0.0280 0.0244

Jupiter 5754-09-10 16:19 G 3822918.03 3822918.18 3822918.33 0.0488 0.0323

Moon 5755-01-12 23:31 G 3823042.36 3823042.48 3823042.60 0.2694 0.1569

Earth 5755-01-13 03:35 G 3823042.57 3823042.65 3823042.72 0.2689 0.2326 *

Jupiter 5760-07-16 20:24 G 3825054.18 3825054.35 3825054.53 0.0540 0.0268

Uranus 5762-02-06 18:28 G 3825624.15 3825624.27 3825624.42 0.0142 0.0111

Uranus 5762-09-21 04:48 G 3825850.52 3825850.70 3825850.91 0.0142 0.0061

Earth 5763-01-10 17:31 G 3825962.10 3825962.23 3825962.36 0.2687 0.1608

Moon 5763-01-10 17:45 G 3825962.11 3825962.24 3825962.36 0.2694 0.1374 *

Uranus 5763-05-05 15:21 G 3826076.93 3826077.14 3826077.36 0.0141 0.0010

Uranus 5763-12-18 01:26 G 3826303.36 3826303.56 3826303.77 0.0141 0.0040

Uranus 5764-07-31 11:16 G 3826529.81 3826529.97 3826530.14 0.0141 0.0090

Uranus 5765-03-14 20:38 G 3826756.35 3826756.36 3826756.41 0.0141 0.0140

Saturn 5767-11-15 12:00 G 3827731.82 3827732.00 3827732.20 0.0278 0.0118

Saturn 5768-07-01 23:31 G 3827961.29 3827961.48 3827961.68 0.0279 0.0104

Mars 5770-10-06 03:35 G 3828787.48 3828787.65 3828787.83 0.1773 0.0381

Mars 5777-03-21 21:07 G 3831146.24 3831146.38 3831146.53 0.1765 0.0987

Jupiter 5778-09-12 18:28 G 3831686.08 3831686.27 3831686.46 0.0489 0.0194

Saturn 5781-09-16 12:57 G 3832785.88 3832786.04 3832786.22 0.0282 0.0169

Saturn 5782-05-04 02:09 G 3833015.39 3833015.59 3833015.80 0.0281 0.0061

Jupiter 5784-07-20 04:04 G 3833823.57 3833823.67 3833823.78 0.0538 0.0462

Jupiter 5790-05-18 23:16 G 3835952.27 3835952.47 3835952.66 0.0488 0.0138

Jupiter 5796-03-24 16:33 G 3838088.99 3838089.19 3838089.40 0.0539 0.0011

Saturn 5797-05-27 15:35 G 3838517.95 3838518.15 3838518.35 0.0278 0.0092

Saturn 5798-01-12 02:52 G 3838747.44 3838747.62 3838747.81 0.0279 0.0129

Jupiter 5802-01-23 03:50 G 3840218.61 3840218.66 3840218.72 0.0487 0.0467

Mars 5802-10-06 13:26 G 3840474.95 3840475.06 3840475.18 0.1786 0.1321

Uranus 5806-02-03 02:24 G 3841690.50 3841690.60 3841690.72 0.0136 0.0117

Uranus 5806-09-17 09:35 G 3841916.72 3841916.90 3841917.09 0.0136 0.0072

Uranus 5807-05-01 16:48 G 3842142.99 3842143.20 3842143.41 0.0137 0.0027

Jupiter 5807-11-29 03:21 G 3842354.54 3842354.64 3842354.75 0.0540 0.0454

Uranus 5807-12-14 00:00 G 3842369.29 3842369.50 3842369.72 0.0137 0.0019

Uranus 5808-07-27 07:26 G 3842595.62 3842595.81 3842596.01 0.0137 0.0064

Uranus 5809-03-10 14:38 G 3842822.00 3842822.11 3842822.26 0.0138 0.0111

Mars 5809-03-22 02:38 G 3842833.44 3842833.61 3842833.77 0.1752 0.0573

Saturn 5811-03-30 17:16 G 3843572.04 3843572.22 3843572.40 0.0282 0.0141

Saturn 5811-11-15 06:28 G 3843801.57 3843801.77 3843801.97 0.0281 0.0087

Jupiter 5814-05-22 04:04 G 3844720.56 3844720.67 3844720.80 0.0490 0.0396

Jupiter 5826-01-25 08:24 G 3848986.64 3848986.85 3848987.05 0.0489 0.0060

Saturn 5826-04-23 14:24 G 3849075.06 3849075.10 3849075.15 0.0277 0.0270

Saturn 5826-12-09 00:57 G 3849304.34 3849304.54 3849304.75 0.0278 0.0053

Saturn 5827-07-26 12:28 G 3849533.86 3849534.02 3849534.20 0.0280 0.0170

Neptune 5827-07-29 12:00 G 3849536.99 3849537.00 3849537.06 0.0089 0.0088

Neptune 5828-03-11 01:11 G 3849762.44 3849762.55 3849762.71 0.0089 0.0071

Neptune 5828-10-22 15:21 G 3849987.96 3849988.14 3849988.32 0.0089 0.0052

Neptune 5829-06-05 04:33 G 3850213.49 3850213.69 3850213.90 0.0089 0.0034

Neptune 5830-01-16 18:00 G 3850439.04 3850439.25 3850439.47 0.0089 0.0016

Neptune 5830-08-30 07:26 G 3850664.59 3850664.81 3850665.03 0.0089 0.0003

Neptune 5831-04-12 20:38 G 3850890.16 3850890.36 3850890.59 0.0089 0.0022

Neptune 5831-11-24 10:04 G 3851115.74 3851115.92 3851116.13 0.0089 0.0040

Jupiter 5831-12-02 06:43 G 3851123.61 3851123.78 3851123.96 0.0539 0.0255

Neptune 5832-07-06 23:31 G 3851341.32 3851341.48 3851341.66 0.0089 0.0058

Neptune 5833-02-17 12:43 G 3851566.93 3851567.03 3851567.16 0.0089 0.0076

Mars 5836-08-03 11:02 G 3852829.80 3852829.96 3852830.13 0.1769 0.0653

Jupiter 5837-09-30 11:16 G 3853252.80 3853252.97 3853253.14 0.0487 0.0281

Saturn 5840-10-10 03:50 G 3854358.47 3854358.66 3854358.86 0.0282 0.0099

Saturn 5841-05-27 16:33 G 3854588.01 3854588.19 3854588.38 0.0281 0.0129

Mars 5843-01-18 05:16 G 3855188.60 3855188.72 3855188.84 0.1769 0.1251

Jupiter 5843-08-06 19:11 G 3855389.11 3855389.30 3855389.49 0.0540 0.0200

Uranus 5845-10-08 01:55 G 3856182.52 3856182.58 3856182.65 0.0142 0.0135

Uranus 5846-05-22 12:14 G 3856408.85 3856409.01 3856409.20 0.0142 0.0084

Uranus 5847-01-03 22:48 G 3856635.24 3856635.45 3856635.67 0.0142 0.0033

Uranus 5847-08-18 09:07 G 3856861.66 3856861.88 3856862.10 0.0141 0.0018

Uranus 5848-03-31 18:43 G 3857088.11 3857088.28 3857088.49 0.0141 0.0068

Uranus 5848-11-13 04:48 G 3857314.59 3857314.70 3857314.83 0.0141 0.0117

Saturn	5855-11-03 17:31	G	3859861.15	3859861.23	3859861.34	0.0276	0.0246
Saturn	5856-06-20 04:19	G	3860090.47	3860090.68	3860090.89	0.0278	0.0028
Saturn	5857-02-04 15:35	G	3860320.01	3860320.15	3860320.31	0.0279	0.0195
Jupiter	5861-10-02 15:21	G	3862020.97	3862021.14	3862021.32	0.0489	0.0248
Jupiter	5867-08-10 02:52	G	3864158.59	3864158.62	3864158.65	0.0538	0.0530
Mars	5868-08-02 20:38	G	3864517.22	3864517.36	3864517.50	0.1782	0.1035
Saturn	5870-04-22 07:11	G	3865144.60	3865144.80	3865145.01	0.0282	0.0073
Saturn	5870-12-07 20:09	G	3865374.16	3865374.34	3865374.51	0.0280	0.0154
Jupiter	5873-06-07 20:38	G	3866287.16	3866287.36	3866287.56	0.0488	0.0083
Mars	5875-01-17 11:16	G	3866875.80	3866875.97	3866876.14	0.1756	0.0334
Jupiter	5879-04-14 11:45	G	3868423.79	3868423.99	3868424.19	0.0539	0.0059
Jupiter	5885-02-11 01:11	G	3870553.45	3870553.55	3870553.66	0.0487	0.0415
Saturn	5885-05-16 01:40	G	3870647.44	3870647.57	3870647.72	0.0277	0.0210
Saturn	5885-12-31 12:43	G	3870876.82	3870877.03	3870877.24	0.0279	0.0010
Saturn	5886-08-18 00:28	G	3871106.42	3871106.52	3871106.65	0.0280	0.0233
Uranus	5890-05-17 18:28	G	3872475.12	3872475.27	3872475.44	0.0136	0.0092
Jupiter	5890-12-17 22:19	G	3872689.30	3872689.43	3872689.56	0.0540	0.0407
Uranus	5890-12-30 01:26	G	3872701.37	3872701.56	3872701.78	0.0137	0.0048
Uranus	5891-08-13 08:52	G	3872927.65	3872927.87	3872928.09	0.0137	0.0002
Uranus	5892-03-26 16:04	G	3873153.97	3873154.17	3873154.38	0.0137	0.0043
Uranus	5892-11-07 23:31	G	3873380.33	3873380.48	3873380.65	0.0137	0.0089
Uranus	5893-06-22 07:11	G	3873606.77	3873606.80	3873606.84	0.0138	0.0135
Jupiter	5897-06-09 23:02	G	3875055.38	3875055.46	3875055.56	0.0489	0.0440
Saturn	5899-03-18 04:04	G	3875701.60	3875701.67	3875701.75	0.0283	0.0262
Saturn	5899-11-02 17:45	G	3875931.03	3875931.24	3875931.46	0.0282	0.0032
Saturn	5900-06-20 06:14	G	3876160.61	3876160.76	3876160.92	0.0280	0.0195
Earth	5900-07-11 20:24	G	3876182.19	3876182.35	3876182.51	0.2645	0.0031
Moon	5900-07-11 22:48	G	3876182.29	3876182.45	3876182.62	0.2640	0.0417 *
Mars	5902-06-01 18:57	G	3876872.15	3876872.29	3876872.44	0.1765	0.0914
Mars	5908-11-15 13:26	G	3879230.97	3879231.06	3879231.15	0.1773	0.1518

Jupiter 5909-02-14 03:50 G 3879321.46 3879321.66 3879321.86 0.0488 0.0105

Neptune 5909-09-14 11:02 G 3879533.90 3879533.96 3879534.06 0.0088 0.0081

Neptune 5910-04-27 23:45 G 3879759.36 3879759.49 3879759.66 0.0088 0.0064

Neptune 5910-12-09 12:28 G 3879984.85 3879985.02 3879985.22 0.0088 0.0047

Pluto 5911-05-26 05:02 G 3880152.56 3880152.71 3880152.92 0.0067 0.0039

Neptune 5911-07-23 01:26 G 3880210.35 3880210.56 3880210.77 0.0088 0.0029

Pluto 5912-01-06 10:48 G 3880377.73 3880377.95 3880378.17 0.0067 0.0003

Neptune 5912-03-04 14:09 G 3880435.87 3880436.09 3880436.31 0.0088 0.0012

Pluto 5912-08-18 15:50 G 3880603.00 3880603.16 3880603.34 0.0068 0.0044

Neptune 5912-10-16 02:38 G 3880661.40 3880661.61 3880661.84 0.0088 0.0006

Neptune 5913-05-29 15:07 G 3880886.93 3880887.13 3880887.35 0.0088 0.0023

Neptune 5914-01-10 03:35 G 3881112.47 3881112.65 3881112.86 0.0088 0.0040

Neptune 5914-08-23 16:19 G 3881338.02 3881338.18 3881338.36 0.0088 0.0057

Saturn 5914-11-27 05:45 G 3881433.58 3881433.74 3881433.90 0.0277 0.0184

Jupiter 5914-12-22 07:26 G 3881458.66 3881458.81 3881458.98 0.0539 0.0336

Neptune 5915-04-06 05:16 G 3881563.60 3881563.72 3881563.83 0.0088 0.0074

Saturn 5915-07-14 16:19 G 3881662.97 3881663.18 3881663.39 0.0278 0.0035

Saturn 5916-02-29 03:50 G 3881892.59 3881892.66 3881892.75 0.0280 0.0258

Jupiter 5920-10-20 08:24 G 3883587.68 3883587.85 3883588.04 0.0488 0.0228

Jupiter 5926-08-26 19:11 G 3885724.10 3885724.30 3885724.49 0.0540 0.0126

Saturn 5928-09-28 06:00 G 3886487.64 3886487.75 3886487.87 0.0283 0.0239

Saturn 5929-05-15 19:55 G 3886717.12 3886717.33 3886717.54 0.0282 0.0009

Saturn 5929-12-31 08:24 G 3886946.72 3886946.85 3886946.98 0.0280 0.0217

Uranus 5930-01-20 18:57 G 3886967.17 3886967.29 3886967.45 0.0142 0.0108

Uranus 5930-09-04 05:45 G 3887193.54 3887193.74 3887193.94 0.0142 0.0057

Uranus 5931-04-18 16:19 G 3887419.96 3887420.18 3887420.40 0.0141 0.0006

Uranus 5931-12-01 02:24 G 3887646.39 3887646.60 3887646.81 0.0141 0.0044

Uranus 5932-07-14 12:14 G 3887872.86 3887873.01 3887873.18 0.0141 0.0094

Mars 5934-06-01 03:35 G 3888559.50 3888559.65 3888559.81 0.1778 0.0741

Mars 5940-11-14 19:55 G 3890918.16 3890918.33 3890918.51 0.1760 0.0092

Saturn	5944-06-08 12:28 G	3892219.84	3892220.02	3892220.20	0.0277	0.0150
Jupiter	5944-10-22 13:26 G	3892355.90	3892356.06	3892356.22	0.0489	0.0305
Saturn	5945-01-23 23:16 G	3892449.27	3892449.47	3892449.68	0.0279	0.0070
Jupiter	5956-06-27 16:33 G	3896621.98	3896622.19	3896622.39	0.0488	0.0036
Saturn	5958-04-10 16:19 G	3897274.04	3897274.18	3897274.34	0.0283	0.0198
Saturn	5958-11-26 06:14 G	3897503.55	3897503.76	3897503.97	0.0281	0.0033
Saturn	5959-07-13 18:28 G	3897733.19	3897733.27	3897733.35	0.0280	0.0257
Jupiter	5962-05-04 11:02 G	3898758.77	3898758.96	3898759.16	0.0540	0.0132
Jupiter	5968-03-02 21:35 G	3900888.27	3900888.40	3900888.54	0.0487	0.0365
Mars	5968-03-29 02:38 G	3900914.48	3900914.61	3900914.74	0.1760	0.1177
Mars	5972-11-14 01:11 G	3902605.49	3902605.55	3902605.61	0.1747	0.1625
Saturn	5973-12-19 16:19 G	3903005.99	3903006.18	3903006.37	0.0277	0.0125
Jupiter	5974-01-06 23:31 G	3903024.32	3903024.48	3903024.65	0.0541	0.0325
Uranus	5974-01-16 03:07 G	3903033.52	3903033.63	3903033.76	0.0136	0.0113
Saturn	5974-08-06 03:07 G	3903235.43	3903235.63	3903235.83	0.0278	0.0095
Uranus	5974-08-30 10:04 G	3903259.74	3903259.92	3903260.12	0.0136	0.0069
Uranus	5975-04-13 17:16 G	3903486.01	3903486.22	3903486.44	0.0137	0.0024
Uranus	5975-11-26 00:43 G	3903712.31	3903712.53	3903712.74	0.0137	0.0022
Uranus	5976-07-09 07:55 G	3903938.65	3903938.83	3903939.02	0.0137	0.0067
Uranus	5977-02-20 15:07 G	3904165.02	3904165.13	3904165.27	0.0137	0.0113
Saturn	5987-10-21 17:31 G	3908060.06	3908060.23	3908060.39	0.0283	0.0176
Saturn	5988-06-07 06:57 G	3908289.59	3908289.79	3908290.00	0.0281	0.0054
Saturn	5989-01-22 19:11 G	3908519.29	3908519.30	3908519.33	0.0280	0.0278
Jupiter	5992-03-05 02:24 G	3909656.41	3909656.60	3909656.79	0.0489	0.0166
Neptune	5992-06-13 11:16 G	3909756.89	3909756.97	3909757.10	0.0089	0.0079
Neptune	5993-01-25 00:43 G	3909982.39	3909982.53	3909982.71	0.0089	0.0061
Neptune	5993-09-07 14:38 G	3910207.92	3910208.11	3910208.30	0.0089	0.0042
Neptune	5994-04-21 03:50 G	3910433.45	3910433.66	3910433.88	0.0089	0.0024
Neptune	5994-12-02 17:16 G	3910659.00	3910659.22	3910659.44	0.0089	0.0005
Neptune	5995-07-16 06:28 G	3910884.56	3910884.77	3910884.99	0.0089	0.0013

Neptune 5996-02-26 19:40 G 3911110.13 3911110.32 3911110.54 0.0089 0.0032

Neptune 5996-10-09 09:07 G 3911335.71 3911335.88 3911336.08 0.0089 0.0050

Neptune 5997-05-22 22:33 G 3911561.31 3911561.44 3911561.60 0.0089 0.0068

Pluto 5997-10-31 11:02 G 3911722.82 3911722.96 3911723.13 0.0077 0.0054

Neptune 5998-01-03 12:00 G 3911786.95 3911787.00 3911787.07 0.0089 0.0086

Jupiter 5998-01-10 05:16 G 3911793.58 3911793.72 3911793.86 0.0538 0.0398

Earth 5998-01-15 03:21 G 3911798.54 3911798.64 3911798.74 0.2687 0.2120

Pluto 5998-06-13 20:24 G 3911948.14 3911948.35 3911948.58 0.0076 0.0009

Pluto 5999-01-25 05:02 G 3912173.64 3912173.71 3912173.83 0.0076 0.0069

Mars 6000-03-28 10:48 G 3912601.78 3912601.95 3912602.12 0.1774 0.0454

7TH MILLENNIUM CE

This is a list of transits of Venus in the 7th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Saturn 6003-07-01 21:50 G 3913792.21 3913792.41 3913792.61 0.0278 0.0093

Jupiter 6003-11-09 07:11 G 3913922.61 3913922.80 3913922.99 0.0488 0.0168

Saturn 6004-02-16 08:52 G 3914021.68 3914021.87 3914022.06 0.0279 0.0128

Earth 6006-01-12 17:31 G 3914718.11 3914718.23 3914718.35 0.2686 0.1784

Moon 6006-01-12 19:26 G 3914718.20 3914718.31 3914718.43 0.2679 0.1913 *

Mars 6006-09-12 04:04 G 3914960.50 3914960.67 3914960.84 0.1764 0.0166

Jupiter 6009-09-14 16:04 G 3916058.97 3916059.17 3916059.38 0.0540 0.0067

Uranus 6013-09-20 02:38 G 3917525.53 3917525.61 3917525.69 0.0142 0.0132

Uranus 6014-05-04 12:57 G 3917751.88 3917752.04 3917752.24 0.0142 0.0081

Uranus	6014-12-16 23:45 G	3917978.28	3917978.49	3917978.70	0.0142	0.0030
Uranus	6015-07-31 10:04 G	3918204.70	3918204.92	3918205.13	0.0141	0.0021
Uranus	6016-03-13 19:55 G	3918431.15	3918431.33	3918431.53	0.0141	0.0071
Uranus	6016-10-26 05:45 G	3918657.64	3918657.74	3918657.87	0.0141	0.0121
Saturn	6017-05-03 02:52 G	3918846.44	3918846.62	3918846.81	0.0283	0.0138
Saturn	6017-12-18 16:19 G	3919075.98	3919076.18	3919076.38	0.0281	0.0092
Jupiter	6021-05-20 03:07 G	3920324.60	3920324.63	3920324.67	0.0541	0.0531
Jupiter	6027-11-11 10:33 G	3922690.81	3922690.94	3922691.08	0.0489	0.0360
Saturn	6033-01-11 01:40 G	3924578.37	3924578.57	3924578.78	0.0277	0.0068
Saturn	6033-08-28 12:28 G	3924807.85	3924808.02	3924808.21	0.0278	0.0153
Mars	6034-01-24 11:02 G	3924956.86	3924956.96	3924957.06	0.1757	0.1423
Mars	6038-09-11 10:04 G	3926647.82	3926647.92	3926648.02	0.1751	0.1398
Jupiter	6039-07-17 15:07 G	3926956.93	3926957.13	3926957.34	0.0488	0.0027
Jupiter	6045-05-23 13:11 G	3929093.87	3929094.05	3929094.24	0.0539	0.0219
Saturn	6046-11-13 02:52 G	3929632.43	3929632.62	3929632.81	0.0283	0.0118
Saturn	6047-06-30 16:19 G	3929861.99	3929862.18	3929862.38	0.0281	0.0111
Jupiter	6051-03-22 20:38 G	3931223.21	3931223.36	3931223.52	0.0487	0.0304
Jupiter	6057-01-25 22:48 G	3933359.28	3933359.45	3933359.64	0.0540	0.0254
Uranus	6057-09-15 12:43 G	3933592.00	3933592.03	3933592.09	0.0136	0.0133
Uranus	6058-04-29 19:55 G	3933818.17	3933818.33	3933818.50	0.0136	0.0088
Uranus	6058-12-12 02:52 G	3934044.42	3934044.62	3934044.84	0.0137	0.0044
Uranus	6059-07-26 10:04 G	3934270.71	3934270.92	3934271.14	0.0137	0.0003
Uranus	6060-03-08 17:16 G	3934497.02	3934497.22	3934497.43	0.0137	0.0047
Uranus	6060-10-21 00:43 G	3934723.38	3934723.53	3934723.70	0.0137	0.0093
Saturn	6061-12-06 19:40 G	3935135.25	3935135.32	3935135.41	0.0276	0.0255
Saturn	6062-07-24 06:00 G	3935364.54	3935364.75	3935364.96	0.0278	0.0039
Saturn	6063-03-10 17:02 G	3935594.05	3935594.21	3935594.37	0.0279	0.0183
Mars	6066-01-23 18:28 G	3936644.10	3936644.27	3936644.45	0.1770	0.0184
Mars	6072-07-09 12:43 G	3939002.86	3939003.03	3939003.20	0.1767	0.0416
Neptune	6074-07-30 09:50 G	3939753.80	3939753.91	3939754.04	0.0088	0.0072

Neptune 6075-03-12 22:19 G 3939979.28 3939979.43 3939979.62 0.0088 0.0055

Jupiter 6075-03-25 00:00 G 3939991.33 3939991.50 3939991.69 0.0488 0.0224

Neptune 6075-10-24 11:02 G 3940204.78 3940204.96 3940205.18 0.0088 0.0038

Saturn 6076-05-25 11:31 G 3940418.77 3940418.98 3940419.18 0.0283 0.0082

Neptune 6076-06-06 00:00 G 3940430.29 3940430.50 3940430.72 0.0088 0.0020

Saturn 6077-01-10 00:43 G 3940648.35 3940648.53 3940648.71 0.0281 0.0147

Neptune 6077-01-17 12:43 G 3940655.81 3940656.03 3940656.25 0.0088 0.0003

Neptune 6077-08-31 01:11 G 3940881.34 3940881.55 3940881.77 0.0088 0.0015

Neptune 6078-04-13 13:55 G 3941106.89 3941107.08 3941107.29 0.0088 0.0032

Neptune 6078-11-25 02:38 G 3941332.43 3941332.61 3941332.80 0.0088 0.0049

Neptune 6079-07-08 14:52 G 3941558.00 3941558.12 3941558.28 0.0088 0.0067

Neptune 6080-02-19 03:21 G 3941783.60 3941783.64 3941783.73 0.0088 0.0084

Jupiter 6081-01-29 05:16 G 3942128.63 3942128.72 3942128.82 0.0539 0.0476

Jupiter 6086-11-28 05:31 G 3944257.53 3944257.73 3944257.93 0.0487 0.0108

Saturn 6091-06-19 00:14 G 3945921.40 3945921.51 3945921.63 0.0275 0.0228

Saturn 6092-02-03 10:04 G 3946150.71 3946150.92 3946151.14 0.0277 0.0014

Saturn 6092-09-19 21:07 G 3946380.24 3946380.38 3946380.52 0.0278 0.0207

Jupiter 6092-10-03 18:28 G 3946394.07 3946394.27 3946394.47 0.0540 0.0024

Uranus 6098-01-01 20:38 G 3948310.23 3948310.36 3948310.53 0.0142 0.0104

Jupiter 6098-08-03 10:33 G 3948523.85 3948523.94 3948524.02 0.0487 0.0438

Uranus 6098-08-16 07:26 G 3948536.61 3948536.81 3948537.02 0.0142 0.0053

Uranus 6099-03-30 18:00 G 3948763.03 3948763.25 3948763.47 0.0142 0.0003

Uranus 6099-11-12 04:04 G 3948989.47 3948989.67 3948989.88 0.0141 0.0048

Mars 6099-11-21 18:57 G 3948999.24 3948999.29 3948999.34 0.1753 0.1679

Uranus 6100-06-26 13:55 G 3949215.94 3949216.08 3949216.25 0.0141 0.0099

Jupiter 6104-06-09 06:28 G 3950659.65 3950659.77 3950659.89 0.0541 0.0438

Mars 6104-07-09 18:28 G 3950690.15 3950690.27 3950690.40 0.1754 0.1161

Saturn 6105-12-06 10:48 G 3951204.74 3951204.95 3951205.15 0.0283 0.0063

Saturn 6106-07-24 00:00 G 3951434.33 3951434.50 3951434.67 0.0281 0.0165

Jupiter 6110-12-01 10:33 G 3953025.84 3953025.94 3953026.04 0.0489 0.0428

Saturn 6120-12-30 02:52 G 3956707.49 3956707.62 3956707.77 0.0276 0.0203

Saturn 6121-08-16 13:11 G 3956936.84 3956937.05 3956937.26 0.0278 0.0014

Saturn 6122-04-03 00:14 G 3957166.41 3957166.51 3957166.63 0.0279 0.0236

Jupiter 6122-08-06 15:21 G 3957291.94 3957292.14 3957292.34 0.0488 0.0093

Jupiter 6128-06-12 12:28 G 3959428.85 3959429.02 3959429.19 0.0539 0.0290

Mars 6131-11-22 01:40 G 3960686.39 3960686.57 3960686.74 0.1766 0.0101

Jupiter 6134-04-11 19:40 G 3961558.15 3961558.32 3961558.50 0.0487 0.0240

Saturn 6134-11-01 03:35 G 3961761.57 3961761.65 3961761.73 0.0284 0.0262

Saturn 6135-06-18 18:00 G 3961991.04 3961991.25 3961991.47 0.0282 0.0031

Saturn 6136-02-03 07:26 G 3962220.66 3962220.81 3962220.96 0.0281 0.0198

Mars 6138-05-07 20:38 G 3963045.20 3963045.36 3963045.52 0.1771 0.0687

Jupiter 6140-02-15 22:48 G 3963694.26 3963694.45 3963694.65 0.0541 0.0177

Uranus 6141-12-29 05:16 G 3964376.59 3964376.72 3964376.85 0.0136 0.0109

Uranus 6142-08-12 12:00 G 3964602.82 3964603.00 3964603.20 0.0136 0.0064

Uranus 6143-03-26 19:11 G 3964829.09 3964829.30 3964829.52 0.0137 0.0019

Moon 6143-07-13 18:28 G 3964938.12 3964938.27 3964938.42 0.2651 0.0732

Earth 6143-07-13 22:33 G 3964938.28 3964938.44 3964938.60 0.2647 0.0059 *

Uranus 6143-11-08 02:24 G 3965055.39 3965055.60 3965055.82 0.0137 0.0026

Uranus 6144-06-21 09:35 G 3965281.72 3965281.90 3965282.09 0.0137 0.0071

Uranus 6145-02-02 17:02 G 3965508.10 3965508.21 3965508.32 0.0137 0.0117

Saturn 6150-07-12 07:40 G 3967493.67 3967493.82 3967493.99 0.0276 0.0177

Saturn 6151-02-26 17:45 G 3967723.03 3967723.24 3967723.45 0.0277 0.0040

Saturn 6151-10-14 04:33 G 3967952.63 3967952.69 3967952.78 0.0279 0.0260

Neptune 6156-09-15 21:21 G 3969751.35 3969751.39 3969751.45 0.0089 0.0087

Neptune 6157-04-29 10:48 G 3969976.82 3969976.95 3969977.10 0.0089 0.0069

Neptune 6157-12-11 00:00 G 3970202.33 3970202.50 3970202.69 0.0089 0.0051

Jupiter 6158-04-14 00:14 G 3970326.35 3970326.51 3970326.68 0.0488 0.0292

Neptune 6158-07-24 13:11 G 3970427.86 3970428.05 3970428.27 0.0089 0.0033

Neptune 6159-03-07 02:52 G 3970653.40 3970653.62 3970653.84 0.0089 0.0014

Neptune 6159-10-18 16:19 G 3970878.96 3970879.18 3970879.40 0.0089 0.0004

Pluto 6159-12-10 09:50 G 3970931.74 3970931.91 3970932.11 0.0067 0.0036

Neptune 6160-05-31 05:31 G 3971104.52 3971104.73 3971104.95 0.0089 0.0023

Pluto 6160-07-22 15:21 G 3971156.92 3971157.14 3971157.36 0.0067 0.0005

Neptune 6161-01-11 18:28 G 3971330.10 3971330.27 3971330.49 0.0089 0.0042

Pluto 6161-03-04 20:24 G 3971382.20 3971382.35 3971382.51 0.0068 0.0047

Neptune 6161-08-25 07:55 G 3971555.68 3971555.83 3971556.01 0.0089 0.0060

Neptune 6162-04-07 21:21 G 3971781.30 3971781.39 3971781.51 0.0089 0.0078

Mars 6163-11-21 10:48 G 3972373.88 3972373.95 3972374.03 0.1779 0.1594

Saturn 6164-05-13 02:38 G 3972547.51 3972547.61 3972547.72 0.0284 0.0243

Saturn 6164-12-28 17:02 G 3972777.00 3972777.21 3972777.43 0.0283 0.0012

Saturn 6165-08-15 06:00 G 3973006.63 3973006.75 3973006.90 0.0281 0.0217

Jupiter 6169-12-18 05:45 G 3974592.53 3974592.74 3974592.94 0.0488 0.0041

Mars 6170-05-07 02:52 G 3974732.48 3974732.62 3974732.77 0.1759 0.0918

Jupiter 6175-10-24 20:09 G 3976729.14 3976729.34 3976729.54 0.0539 0.0109

Saturn 6180-01-22 09:35 G 3978279.72 3978279.90 3978280.08 0.0276 0.0152

Saturn 6180-09-07 19:55 G 3978509.12 3978509.33 3978509.53 0.0278 0.0065

Jupiter 6181-08-23 10:48 G 3978858.82 3978858.95 3978859.09 0.0487 0.0371

Uranus 6181-09-02 05:45 G 3978868.64 3978868.74 3978868.84 0.0142 0.0126

Uranus 6182-04-16 16:33 G 3979095.00 3979095.19 3979095.37 0.0142 0.0075

Uranus 6182-11-29 02:52 G 3979321.41 3979321.62 3979321.84 0.0142 0.0024

Uranus 6183-07-13 13:11 G 3979547.84 3979548.05 3979548.27 0.0142 0.0027

Uranus 6184-02-24 23:02 G 3979774.29 3979774.46 3979774.65 0.0141 0.0077

Uranus 6184-10-08 09:21 G 3980000.79 3980000.89 3980000.98 0.0141 0.0126

Jupiter 6187-06-29 06:43 G 3980994.63 3980994.78 3980994.93 0.0541 0.0361

Saturn 6193-11-23 09:21 G 3983333.75 3983333.89 3983334.03 0.0284 0.0212

Saturn 6194-07-10 23:45 G 3983563.28 3983563.49 3983563.70 0.0282 0.0020

Saturn 6195-02-25 12:43 G 3983792.95 3983793.03 3983793.14 0.0281 0.0248

Mars 6197-09-18 09:50 G 3984728.74 3984728.91 3984729.08 0.1762 0.0358

Mars 6204-03-05 04:33 G 3987087.54 3987087.69 3987087.83 0.1776 0.0958

Jupiter 6205-08-26 15:07 G 3987626.94 3987627.13 3987627.33 0.0488 0.0163

Saturn 6209-08-04 15:07 G 3989065.94 3989066.13 3989066.32 0.0276 0.0125

Saturn 6210-03-22 00:57 G 3989295.35 3989295.54 3989295.75 0.0277 0.0092

Jupiter 6211-07-03 14:52 G 3989763.98 3989764.12 3989764.26 0.0540 0.0382

Jupiter 6217-05-01 20:09 G 3991893.15 3991893.34 3991893.53 0.0487 0.0172

Jupiter 6223-03-08 03:35 G 3994029.45 3994029.65 3994029.85 0.0541 0.0077

Saturn 6223-06-06 08:24 G 3994119.70 3994119.85 3994120.01 0.0284 0.0193

Saturn 6224-01-21 22:33 G 3994349.24 3994349.44 3994349.65 0.0282 0.0040

Saturn 6224-09-07 11:45 G 3994578.93 3994578.99 3994579.06 0.0281 0.0265

Uranus 6225-08-29 15:21 G 3994935.07 3994935.14 3994935.22 0.0136 0.0127

Uranus 6226-04-12 22:04 G 3995161.26 3995161.42 3995161.60 0.0136 0.0083

Uranus 6226-11-25 05:16 G 3995387.51 3995387.72 3995387.93 0.0137 0.0039

Uranus 6227-07-09 12:14 G 3995613.80 3995614.01 3995614.23 0.0137 0.0007

Uranus 6228-02-20 19:11 G 3995840.11 3995840.30 3995840.51 0.0137 0.0052

Uranus 6228-10-04 02:24 G 3996066.46 3996066.60 3996066.77 0.0137 0.0098

Mars 6229-09-18 18:14 G 3996416.14 3996416.26 3996416.37 0.1775 0.1306

Mars 6236-03-04 11:02 G 3998774.80 3998774.96 3998775.12 0.1762 0.0660

Neptune 6238-11-02 19:11 G 3999748.24 3999748.30 3999748.41 0.0088 0.0081

Saturn 6239-02-14 16:04 G 3999851.98 3999852.17 3999852.37 0.0277 0.0102

Neptune 6239-06-16 08:24 G 3999973.70 3999973.85 3999974.00 0.0088 0.0063

Saturn 6239-10-02 02:24 G 4000081.41 4000081.60 4000081.79 0.0278 0.0116

Neptune 6240-01-27 20:38 G 4000199.19 4000199.36 4000199.56 0.0088 0.0046

Neptune 6240-09-09 09:21 G 4000424.69 4000424.89 4000425.11 0.0088 0.0029

Moon 6241-01-16 21:35 G 4000554.27 4000554.40 4000554.54 0.2687 0.1421

Earth 6241-01-17 03:35 G 4000554.55 4000554.65 4000554.76 0.2686 0.1971

Neptune 6241-04-22 22:19 G 4000650.22 4000650.43 4000650.65 0.0088 0.0011

Jupiter 6241-05-04 01:11 G 4000661.42 4000661.55 4000661.69 0.0489 0.0365

Neptune 6241-12-04 11:02 G 4000875.74 4000875.96 4000876.18 0.0088 0.0006

Neptune 6242-07-17 23:16 G 4001101.27 4001101.47 4001101.70 0.0088 0.0024

Neptune 6243-02-28 12:00 G 4001326.82 4001327.00 4001327.21 0.0088 0.0041

Neptune 6243-10-12 00:43 G 4001552.37 4001552.53 4001552.70 0.0088 0.0058

Neptune 6244-05-24 13:11 G 4001777.96 4001778.05 4001778.18 0.0088 0.0076

Pluto 6246-05-18 16:04 G 4002502.02 4002502.17 4002502.36 0.0077 0.0049

Pluto 6246-12-30 01:26 G 4002727.35 4002727.56 4002727.79 0.0076 0.0013

Pluto 6247-08-12 10:04 G 4002952.89 4002952.92 4002953.00 0.0076 0.0074

Moon 6249-01-14 14:09 G 4003473.99 4003474.09 4003474.19 0.2690 0.2023

Earth 6249-01-14 17:45 G 4003474.13 4003474.24 4003474.35 0.2684 0.1942 *

Saturn 6252-12-16 14:24 G 4004905.92 4004906.10 4004906.27 0.0284 0.0163

Jupiter 6253-01-07 06:00 G 4004927.55 4004927.75 4004927.95 0.0487 0.0031

Saturn 6253-08-03 04:33 G 4005135.49 4005135.69 4005135.90 0.0282 0.0069

Jupiter 6258-11-13 19:55 G 4007064.14 4007064.33 4007064.52 0.0540 0.0186

Mars 6263-07-17 17:16 G 4008771.06 4008771.22 4008771.39 0.1758 0.0626

Jupiter 6264-09-12 11:31 G 4009193.83 4009193.98 4009194.15 0.0487 0.0299

Uranus 6265-12-16 00:57 G 4009653.40 4009653.54 4009653.72 0.0142 0.0097

Uranus 6266-07-30 11:45 G 4009879.79 4009879.99 4009880.20 0.0142 0.0045

Uranus 6267-03-13 22:19 G 4010106.21 4010106.43 4010106.65 0.0142 0.0006

Uranus 6267-10-26 08:24 G 4010332.66 4010332.85 4010333.06 0.0141 0.0056

Uranus 6268-06-08 18:28 G 4010559.14 4010559.27 4010559.42 0.0141 0.0106

Saturn 6268-08-26 22:19 G 4010638.22 4010638.43 4010638.63 0.0276 0.0073

Saturn 6269-04-13 08:09 G 4010867.67 4010867.84 4010868.03 0.0277 0.0144

Mars 6269-12-31 12:14 G 4011129.88 4011130.01 4011130.13 0.1780 0.1236

Jupiter 6270-07-19 08:09 G 4011329.67 4011329.84 4011330.01 0.0541 0.0276

Saturn 6282-06-28 14:09 G 4015691.91 4015692.09 4015692.28 0.0284 0.0142

Saturn 6283-02-13 04:19 G 4015921.48 4015921.68 4015921.88 0.0282 0.0090

Jupiter 6288-09-14 15:35 G 4017961.97 4017962.15 4017962.33 0.0488 0.0232

Jupiter 6294-07-22 17:31 G 4020099.14 4020099.23 4020099.33 0.0539 0.0472

Mars 6295-07-17 01:40 G 4020458.43 4020458.57 4020458.71 0.1772 0.1028

Saturn 6297-07-22 13:26 G 4021195.02 4021195.06 4021195.13 0.0275 0.0265

Saturn 6298-03-08 23:02 G 4021424.25 4021424.46 4021424.67 0.0277 0.0051

Saturn 6298-10-24 09:21 G 4021653.72 4021653.89 4021654.06 0.0278 0.0168

Jupiter 6300-05-21 20:52 G 4022228.17 4022228.37 4022228.57 0.0487 0.0101

Mars 6301-12-31 19:11 G 4022817.13 4022817.30 4022817.47 0.1766 0.0410

Jupiter 6306-03-28 04:33 G 4024364.48 4024364.69 4024364.89 0.0540 0.0012

Uranus 6309-12-12 07:26 G 4025719.68 4025719.81 4025719.97 0.0136 0.0103

Uranus 6310-07-26 14:24 G 4025945.91 4025946.10 4025946.30 0.0136 0.0059

Uranus 6311-03-09 21:21 G 4026172.18 4026172.39 4026172.61 0.0137 0.0014

Uranus 6311-10-22 04:33 G 4026398.48 4026398.69 4026398.90 0.0137 0.0031

Saturn 6312-01-09 19:11 G 4026478.11 4026478.30 4026478.50 0.0283 0.0114

Jupiter 6312-01-26 02:24 G 4026494.51 4026494.60 4026494.70 0.0486 0.0428

Uranus 6312-06-04 11:45 G 4026624.81 4026624.99 4026625.17 0.0137 0.0076

Saturn 6312-08-26 09:21 G 4026707.71 4026707.89 4026708.09 0.0282 0.0118

Uranus 6313-01-16 18:28 G 4026851.20 4026851.27 4026851.39 0.0137 0.0123

Jupiter 6317-11-30 12:43 G 4028629.94 4028630.03 4028630.13 0.0542 0.0476

Neptune 6321-08-02 19:40 G 4029971.22 4029971.32 4029971.43 0.0089 0.0078

Neptune 6322-03-16 08:52 G 4030196.71 4030196.87 4030197.04 0.0089 0.0060

Neptune 6322-10-27 22:04 G 4030422.24 4030422.42 4030422.63 0.0089 0.0042

Neptune 6323-06-10 11:31 G 4030647.78 4030647.98 4030648.21 0.0089 0.0023

Neptune 6324-01-22 01:11 G 4030873.33 4030873.55 4030873.77 0.0089 0.0005

Jupiter 6324-05-24 01:40 G 4030996.49 4030996.57 4030996.67 0.0488 0.0438

Neptune 6324-09-03 14:24 G 4031098.89 4031099.10 4031099.32 0.0089 0.0014

Neptune 6325-04-17 03:35 G 4031324.45 4031324.65 4031324.87 0.0089 0.0032

Neptune 6325-11-28 16:48 G 4031550.04 4031550.20 4031550.40 0.0089 0.0051

Neptune 6326-07-12 06:14 G 4031775.63 4031775.76 4031775.91 0.0089 0.0069

Saturn 6327-02-02 20:38 G 4031981.25 4031981.36 4031981.47 0.0275 0.0233

Neptune 6327-02-22 19:11 G 4032001.28 4032001.30 4032001.37 0.0089 0.0088

Saturn 6327-09-20 06:00 G 4032210.54 4032210.75 4032210.97 0.0276 0.0020

Saturn 6328-05-06 16:04 G 4032440.03 4032440.17 4032440.33 0.0278 0.0198

Mars 6329-05-15 01:40 G 4032813.42 4032813.57 4032813.72 0.1754 0.0879

Mars 6335-10-29 19:55 G 4035172.24 4035172.33 4035172.41 0.1784 0.1518

Jupiter 6336-01-28 06:00 G 4035262.55 4035262.75 4035262.95 0.0487 0.0100

Saturn 6341-07-21 20:24 G 4037264.15 4037264.35 4037264.55 0.0283 0.0090

Jupiter	6341-12-04 00:14 G	4037399.34	4037399.51	4037399.68	0.0540	0.0285
Saturn	6342-03-08 10:19 G	4037493.75	4037493.93	4037494.11	0.0282	0.0140
Jupiter	6347-10-03 11:31 G	4039528.80	4039528.98	4039529.16	0.0487	0.0233
Uranus	6349-08-16 09:50 G	4040211.80	4040211.91	4040212.04	0.0142	0.0118
Uranus	6350-03-30 20:38 G	4040438.17	4040438.36	4040438.56	0.0142	0.0066
Uranus	6350-11-12 07:11 G	4040664.59	4040664.80	4040665.02	0.0142	0.0016
Uranus	6351-06-26 17:31 G	4040891.02	4040891.23	4040891.44	0.0142	0.0035
Uranus	6352-02-08 03:35 G	4041117.48	4041117.65	4041117.83	0.0141	0.0085
Uranus	6352-09-21 13:11 G	4041344.01	4041344.05	4041344.13	0.0141	0.0135
Jupiter	6353-08-08 11:16 G	4041664.78	4041664.97	4041665.17	0.0541	0.0183
Saturn	6356-08-14 20:52 G	4042767.25	4042767.37	4042767.51	0.0275	0.0213
Saturn	6357-04-01 06:28 G	4042996.56	4042996.77	4042996.98	0.0277	0.0003
Saturn	6357-11-16 17:02 G	4043226.08	4043226.21	4043226.33	0.0278	0.0221
Mars	6361-05-14 08:52 G	4044500.72	4044500.87	4044501.03	0.1767	0.0744
Mars	6367-10-29 03:35 G	4046859.48	4046859.65	4046859.82	0.1770	0.0154
Saturn	6371-02-01 01:26 G	4048050.36	4048050.56	4048050.77	0.0283	0.0062
Saturn	6371-09-18 15:21 G	4048279.98	4048280.14	4048280.31	0.0282	0.0168
Jupiter	6371-10-05 16:04 G	4048297.02	4048297.17	4048297.33	0.0488	0.0305
Jupiter	6383-06-10 21:35 G	4052563.20	4052563.40	4052563.61	0.0487	0.0029
Saturn	6386-02-25 04:48 G	4053553.55	4053553.70	4053553.87	0.0275	0.0179
Earth	6386-07-16 00:28 G	4053694.36	4053694.52	4053694.68	0.2648	0.0010
Moon	6386-07-16 05:45 G	4053694.58	4053694.74	4053694.89	0.2647	0.0802 *
Saturn	6386-10-12 14:24 G	4053782.89	4053783.10	4053783.32	0.0277	0.0036
Saturn	6387-05-30 00:43 G	4054012.46	4054012.53	4054012.63	0.0278	0.0253
Jupiter	6389-04-16 04:04 G	4054699.47	4054699.67	4054699.87	0.0541	0.0082
Uranus	6393-08-11 17:45 G	4056278.16	4056278.24	4056278.35	0.0136	0.0121
Uranus	6394-03-26 00:28 G	4056504.35	4056504.52	4056504.71	0.0136	0.0077
Uranus	6394-11-07 07:40 G	4056730.61	4056730.82	4056731.03	0.0136	0.0033
Jupiter	6395-02-14 02:09 G	4056829.45	4056829.59	4056829.72	0.0486	0.0365
Mars	6395-03-12 09:35 G	4056855.76	4056855.90	4056856.03	0.1750	0.1135

Uranus 6395-06-21 14:38 G 4056956.89 4056957.11 4056957.33 0.0137 0.0012

Uranus 6396-02-02 21:35 G 4057183.21 4057183.40 4057183.60 0.0137 0.0057

Uranus 6396-09-16 04:33 G 4057409.56 4057409.69 4057409.85 0.0137 0.0103

Mars 6399-10-28 09:50 G 4058546.90 4058546.91 4058546.93 0.1757 0.1744

Saturn 6399-12-27 12:43 G 4058606.97 4058607.03 4058607.11 0.0285 0.0268

Saturn 6400-08-13 03:35 G 4058836.44 4058836.65 4058836.86 0.0283 0.0035

Jupiter 6400-12-19 16:48 G 4058965.05 4058965.20 4058965.34 0.0542 0.0381

Saturn 6401-03-30 17:16 G 4059066.07 4059066.22 4059066.38 0.0282 0.0193

Neptune 6403-09-18 16:48 G 4059968.11 4059968.20 4059968.35 0.0088 0.0073

Neptune 6404-05-01 06:00 G 4060193.59 4060193.75 4060193.93 0.0088 0.0055

Neptune 6404-12-12 18:28 G 4060419.09 4060419.27 4060419.49 0.0088 0.0038

Neptune 6405-07-26 07:26 G 4060644.60 4060644.81 4060645.03 0.0088 0.0020

Neptune 6406-03-08 20:09 G 4060870.12 4060870.34 4060870.56 0.0088 0.0003

Neptune 6406-10-20 08:38 G 4061095.65 4061095.86 4061096.09 0.0088 0.0015

Neptune 6407-06-02 21:21 G 4061321.19 4061321.39 4061321.60 0.0088 0.0032

Neptune 6408-01-14 09:50 G 4061546.74 4061546.91 4061547.10 0.0088 0.0050

Pluto 6408-06-26 13:55 G 4061710.90 4061711.08 4061711.28 0.0067 0.0034

Neptune 6408-08-26 22:33 G 4061772.31 4061772.44 4061772.59 0.0088 0.0067

Pluto 6409-02-06 19:11 G 4061936.09 4061936.30 4061936.53 0.0067 0.0007

Neptune 6409-04-09 10:48 G 4061997.92 4061997.95 4061998.04 0.0088 0.0085

Pluto 6409-09-20 00:14 G 4062161.37 4062161.51 4062161.67 0.0068 0.0049

Saturn 6415-09-07 05:45 G 4064339.57 4064339.74 4064339.92 0.0276 0.0158

Saturn 6416-04-23 15:21 G 4064568.94 4064569.14 4064569.35 0.0277 0.0059

Saturn 6416-12-09 01:55 G 4064798.57 4064798.58 4064798.61 0.0279 0.0277

Jupiter 6419-02-16 06:14 G 4065597.57 4065597.76 4065597.95 0.0488 0.0168

Jupiter 6424-12-23 00:28 G 4067734.37 4067734.52 4067734.67 0.0540 0.0363

Mars 6427-03-11 16:19 G 4068543.01 4068543.18 4068543.35 0.1763 0.0465

Saturn 6429-07-08 17:45 G 4069393.14 4069393.24 4069393.36 0.0284 0.0240

Saturn 6430-02-23 08:38 G 4069622.65 4069622.86 4069623.07 0.0283 0.0009

Saturn 6430-10-10 22:19 G 4069852.31 4069852.43 4069852.56 0.0281 0.0221

Jupiter	6430-10-22 11:45 G	4069863.80	4069863.99	4069864.19	0.0487	0.0163
Uranus	6433-04-15 18:00 G	4070770.22	4070770.25	4070770.30	0.0143	0.0140
Mars	6433-08-25 11:16 G	4070901.80	4070901.97	4070902.14	0.1774	0.0119
Uranus	6433-11-28 04:48 G	4070996.54	4070996.70	4070996.88	0.0142	0.0089
Uranus	6434-07-12 15:35 G	4071222.94	4071223.15	4071223.36	0.0142	0.0038
Uranus	6435-02-24 01:55 G	4071449.36	4071449.58	4071449.80	0.0142	0.0013
Uranus	6435-10-08 12:00 G	4071675.81	4071676.00	4071676.20	0.0142	0.0064
Uranus	6436-05-21 22:19 G	4071902.31	4071902.43	4071902.57	0.0141	0.0113
Jupiter	6436-08-27 08:24 G	4071999.65	4071999.85	4072000.05	0.0541	0.0121
Saturn	6445-03-19 14:09 G	4075125.91	4075126.09	4075126.29	0.0276	0.0123
Saturn	6445-11-04 00:00 G	4075355.30	4075355.50	4075355.70	0.0277	0.0093
Jupiter	6454-10-24 14:52 G	4078631.99	4078632.12	4078632.26	0.0488	0.0366
Saturn	6459-01-18 22:04 G	4080179.28	4080179.42	4080179.56	0.0284	0.0209
Saturn	6459-09-05 12:28 G	4080408.81	4080409.02	4080409.23	0.0283	0.0023
Saturn	6460-04-22 01:55 G	4080638.49	4080638.58	4080638.68	0.0281	0.0249
Mars	6461-01-06 18:14 G	4080898.16	4080898.26	4080898.37	0.1746	0.1375
Mars	6465-08-24 18:28 G	4082589.18	4082589.27	4082589.36	0.1761	0.1506
Jupiter	6466-06-29 20:09 G	4082898.13	4082898.34	4082898.54	0.0487	0.0032
Jupiter	6472-05-05 06:28 G	4085034.58	4085034.77	4085034.96	0.0540	0.0170
Saturn	6474-09-29 15:35 G	4085911.96	4085912.15	4085912.35	0.0276	0.0101
Saturn	6475-05-17 01:26 G	4086141.37	4086141.56	4086141.76	0.0277	0.0116
Uranus	6477-11-23 10:19 G	4087062.79	4087062.93	4087063.10	0.0136	0.0097
Jupiter	6478-03-05 01:11 G	4087164.40	4087164.55	4087164.72	0.0487	0.0302
Uranus	6478-07-07 17:16 G	4087289.02	4087289.22	4087289.42	0.0136	0.0053
Uranus	6479-02-19 00:00 G	4087515.29	4087515.50	4087515.72	0.0136	0.0009
Uranus	6479-10-03 06:57 G	4087741.59	4087741.79	4087742.01	0.0137	0.0037
Uranus	6480-05-16 13:55 G	4087967.92	4087968.08	4087968.27	0.0137	0.0082
Uranus	6480-12-28 21:21 G	4088194.32	4088194.39	4088194.47	0.0137	0.0127
Jupiter	6484-01-08 16:33 G	4089300.03	4089300.19	4089300.36	0.0541	0.0305
Earth	6484-01-19 03:35 G	4089310.54	4089310.65	4089310.77	0.2684	0.1787

Moon 6484-01-19 09:21 G 4089310.80 4089310.89 4089310.99 0.2686 0.2097

Neptune 6485-11-04 04:04 G 4089965.64 4089965.67 4089965.71 0.0089 0.0088

Neptune 6486-06-17 17:02 G 4090191.09 4090191.21 4090191.37 0.0089 0.0070

Neptune 6487-01-29 06:28 G 4090416.61 4090416.77 4090416.97 0.0089 0.0051

Neptune 6487-09-11 20:09 G 4090642.14 4090642.34 4090642.55 0.0089 0.0033

Neptune 6488-04-24 09:35 G 4090867.69 4090867.90 4090868.12 0.0089 0.0014

Saturn 6488-07-31 02:52 G 4090965.47 4090965.62 4090965.79 0.0284 0.0182

Neptune 6488-12-05 23:02 G 4091093.24 4091093.46 4091093.68 0.0089 0.0004

Saturn 6489-03-17 17:45 G 4091195.03 4091195.24 4091195.45 0.0282 0.0051

Neptune 6489-07-19 12:14 G 4091318.80 4091319.01 4091319.23 0.0089 0.0023

Saturn 6489-11-02 07:11 G 4091424.76 4091424.80 4091424.83 0.0281 0.0276

Neptune 6490-03-02 01:11 G 4091544.37 4091544.55 4091544.76 0.0089 0.0042

Neptune 6490-10-13 14:38 G 4091769.96 4091770.11 4091770.29 0.0089 0.0060

Neptune 6491-05-27 04:04 G 4091995.58 4091995.67 4091995.79 0.0089 0.0078

Earth 6492-01-16 18:00 G 4092230.15 4092230.25 4092230.35 0.2683 0.2095

Moon 6492-01-16 23:02 G 4092230.33 4092230.46 4092230.59 0.2679 0.1631 *

Mars 6493-01-06 00:43 G 4092585.35 4092585.53 4092585.70 0.1759 0.0207

Pluto 6494-12-02 21:07 G 4093281.21 4093281.38 4093281.57 0.0077 0.0044

Pluto 6495-07-16 06:14 G 4093506.56 4093506.76 4093506.99 0.0076 0.0019

Mars 6499-06-22 19:40 G 4094944.15 4094944.32 4094944.49 0.1778 0.0380

Jupiter 6502-03-08 05:45 G 4095932.56 4095932.74 4095932.92 0.0487 0.0235

Saturn 6503-08-26 15:50 G 4096469.16 4096469.16 4096469.17 0.0275 0.0275

Saturn 6504-04-12 00:57 G 4096698.34 4096698.54 4096698.75 0.0276 0.0063

Saturn 6504-11-27 11:02 G 4096927.79 4096927.96 4096928.14 0.0278 0.0154

Jupiter 6508-01-12 21:21 G 4098069.28 4098069.39 4098069.52 0.0540 0.0427

Jupiter 6513-11-11 09:35 G 4100198.71 4100198.90 4100199.10 0.0487 0.0107

Uranus 6517-07-29 12:43 G 4101554.90 4101555.03 4101555.17 0.0143 0.0112

Saturn 6518-02-11 08:52 G 4101751.69 4101751.87 4101752.05 0.0284 0.0148

Uranus 6518-03-12 23:31 G 4101781.28 4101781.48 4101781.68 0.0142 0.0061

Saturn 6518-09-28 23:02 G 4101981.26 4101981.46 4101981.66 0.0282 0.0083

Uranus	6518-10-25 10:04 G	4102007.70	4102007.92	4102008.14	0.0142	0.0010
Uranus	6519-06-08 20:38 G	4102234.15	4102234.36	4102234.57	0.0142	0.0041
Jupiter	6519-09-17 10:19 G	4102334.72	4102334.93	4102335.13	0.0541	0.0036
Uranus	6520-01-21 06:28 G	4102460.62	4102460.77	4102460.95	0.0142	0.0092
Uranus	6520-09-03 16:33 G	4102687.19	4102687.19	4102687.22	0.0141	0.0141
Jupiter	6525-07-17 14:52 G	4104465.04	4104465.12	4104465.21	0.0486	0.0439
Mars	6526-11-05 02:24 G	4104940.54	4104940.60	4104940.67	0.1742	0.1623
Jupiter	6531-05-22 21:21 G	4106600.33	4106600.39	4106600.47	0.0542	0.0506
Mars	6531-06-23 02:38 G	4106631.49	4106631.61	4106631.73	0.1765	0.1257
Saturn	6533-03-07 17:16 G	4107255.15	4107255.22	4107255.31	0.0275	0.0253
Saturn	6533-10-23 02:38 G	4107484.41	4107484.61	4107484.83	0.0276	0.0041
Saturn	6534-06-09 12:57 G	4107713.88	4107714.04	4107714.20	0.0278	0.0177
Jupiter	6537-11-13 13:26 G	4108966.97	4108967.06	4108967.16	0.0488	0.0429
Saturn	6547-08-24 13:55 G	4112537.89	4112538.08	4112538.27	0.0283	0.0119
Saturn	6548-04-10 04:19 G	4112767.48	4112767.68	4112767.87	0.0282	0.0111
Jupiter	6549-07-19 19:11 G	4113233.10	4113233.30	4113233.50	0.0487	0.0096
Jupiter	6555-05-26 01:26 G	4115369.38	4115369.56	4115369.75	0.0540	0.0223
Mars	6558-11-04 08:09 G	4116627.66	4116627.84	4116628.01	0.1755	0.0077
Jupiter	6561-03-25 00:14 G	4117499.34	4117499.51	4117499.69	0.0486	0.0239
Uranus	6561-07-24 21:07 G	4117621.28	4117621.38	4117621.51	0.0136	0.0115
Uranus	6562-03-08 03:50 G	4117847.49	4117847.66	4117847.86	0.0136	0.0071
Saturn	6562-09-18 03:07 G	4118041.50	4118041.63	4118041.76	0.0276	0.0215
Uranus	6562-10-20 11:02 G	4118073.74	4118073.96	4118074.17	0.0136	0.0027
Saturn	6563-05-05 12:43 G	4118270.82	4118271.03	4118271.24	0.0277	0.0002
Uranus	6563-06-03 17:45 G	4118300.03	4118300.24	4118300.46	0.0137	0.0018
Saturn	6563-12-20 23:02 G	4118500.33	4118500.46	4118500.60	0.0278	0.0216
Uranus	6564-01-16 00:57 G	4118526.34	4118526.54	4118526.73	0.0137	0.0063
Uranus	6564-08-29 07:55 G	4118752.70	4118752.83	4118752.96	0.0137	0.0108
Mars	6565-04-20 03:07 G	4118986.47	4118986.63	4118986.79	0.1782	0.0667
Jupiter	6567-01-28 12:14 G	4119634.83	4119635.01	4119635.19	0.0541	0.0251

Neptune 6567-12-22 01:55 G 4119962.52 4119962.58 4119962.68 0.0088 0.0082

Neptune 6568-08-03 14:24 G 4120187.98 4120188.10 4120188.27 0.0088 0.0065

Neptune 6569-03-17 03:21 G 4120413.47 4120413.64 4120413.84 0.0088 0.0047

Neptune 6569-10-28 15:50 G 4120638.97 4120639.16 4120639.38 0.0088 0.0030

Neptune 6570-06-11 04:48 G 4120864.48 4120864.70 4120864.92 0.0088 0.0012

Neptune 6571-01-22 17:16 G 4121090.00 4121090.22 4121090.44 0.0088 0.0006

Neptune 6571-09-05 06:00 G 4121315.54 4121315.75 4121315.96 0.0088 0.0023

Neptune 6572-04-17 18:28 G 4121541.09 4121541.27 4121541.48 0.0088 0.0041

Neptune 6572-11-29 07:11 G 4121766.65 4121766.80 4121766.98 0.0088 0.0058

Neptune 6573-07-12 19:55 G 4121992.22 4121992.33 4121992.45 0.0088 0.0075

Saturn 6577-03-05 21:21 G 4123324.19 4123324.39 4123324.60 0.0283 0.0083

Saturn 6577-10-21 11:16 G 4123553.79 4123553.97 4123554.15 0.0282 0.0147

Jupiter 6585-03-27 02:24 G 4126267.44 4126267.60 4126267.77 0.0487 0.0287

Mars 6590-11-03 16:04 G 4128315.10 4128315.17 4128315.24 0.1769 0.1590

Jupiter 6591-01-31 22:19 G 4128404.37 4128404.43 4128404.50 0.0540 0.0508

Saturn 6592-03-30 05:16 G 4128827.58 4128827.72 4128827.88 0.0275 0.0192

Saturn 6592-11-14 14:52 G 4129056.91 4129057.12 4129057.34 0.0277 0.0024

Saturn 6593-07-02 01:11 G 4129286.46 4129286.55 4129286.67 0.0278 0.0241

Jupiter 6596-11-30 07:26 G 4130533.61 4130533.81 4130534.01 0.0487 0.0050

Mars 6597-04-19 10:33 G 4130673.80 4130673.94 4130674.09 0.1769 0.1001

Uranus 6601-03-29 20:38 G 4132113.31 4132113.36 4132113.45 0.0143 0.0135

Uranus 6601-11-11 07:26 G 4132339.65 4132339.81 4132340.00 0.0143 0.0084

Uranus 6602-06-25 18:14 G 4132566.06 4132566.26 4132566.48 0.0142 0.0033

Jupiter 6602-10-07 09:07 G 4132669.67 4132669.88 4132670.08 0.0541 0.0036

Uranus 6603-02-07 04:48 G 4132792.49 4132792.70 4132792.92 0.0142 0.0019

Uranus 6603-09-21 14:52 G 4133018.95 4133019.12 4133019.33 0.0142 0.0070

Uranus 6604-05-05 01:11 G 4133245.45 4133245.55 4133245.68 0.0141 0.0119

Saturn 6606-09-17 02:24 G 4134110.39 4134110.60 4134110.80 0.0283 0.0055

Saturn 6607-05-04 16:19 G 4134340.02 4134340.18 4134340.35 0.0282 0.0175

Jupiter 6608-08-06 13:11 G 4134799.93 4134800.05 4134800.18 0.0486 0.0380

Jupiter 6614-06-11 16:04 G 4136935.07 4136935.17 4136935.28 0.0541 0.0458

Saturn 6621-10-11 15:07 G 4139613.96 4139614.13 4139614.31 0.0276 0.0153

Saturn 6622-05-29 01:11 G 4139843.34 4139843.55 4139843.75 0.0277 0.0062

Mars 6624-09-01 16:33 G 4140670.02 4140670.19 4140670.37 0.1751 0.0323

Moon 6629-07-17 21:07 G 4142450.22 4142450.38 4142450.54 0.2648 0.0594

Earth 6629-07-18 02:24 G 4142450.44 4142450.60 4142450.76 0.2649 0.0011 *

Mars 6631-02-16 10:48 G 4143028.80 4143028.95 4143029.09 0.1787 0.0951

Jupiter 6632-08-08 14:52 G 4143567.93 4143568.12 4143568.32 0.0487 0.0144

Saturn 6635-08-12 20:38 G 4144667.26 4144667.36 4144667.46 0.0284 0.0247

Saturn 6636-03-29 11:16 G 4144896.76 4144896.97 4144897.18 0.0283 0.0015

Saturn 6636-11-14 00:43 G 4145126.40 4145126.53 4145126.67 0.0282 0.0213

Jupiter 6638-06-15 01:26 G 4145704.39 4145704.56 4145704.73 0.0541 0.0298

Jupiter 6644-04-13 20:09 G 4147834.16 4147834.34 4147834.53 0.0486 0.0192

Uranus 6645-03-25 08:09 G 4148179.80 4148179.84 4148179.88 0.0136 0.0133

Uranus 6645-11-06 14:24 G 4148405.95 4148406.10 4148406.28 0.0136 0.0090

Uranus 6646-06-20 21:21 G 4148632.19 4148632.39 4148632.60 0.0136 0.0046

Uranus 6647-02-02 04:04 G 4148858.46 4148858.67 4148858.89 0.0136 0.0004

Uranus 6647-09-16 11:02 G 4149084.76 4149084.96 4149085.17 0.0137 0.0044

Uranus 6648-04-29 18:00 G 4149311.09 4149311.25 4149311.42 0.0137 0.0089

Uranus 6648-12-12 01:11 G 4149537.52 4149537.55 4149537.60 0.0137 0.0135

Jupiter 6650-02-17 12:57 G 4149969.84 4149970.04 4149970.23 0.0541 0.0172

Neptune 6650-09-21 00:57 G 4150185.45 4150185.54 4150185.65 0.0089 0.0080

Saturn 6651-04-23 18:00 G 4150400.07 4150400.25 4150400.44 0.0276 0.0129

Neptune 6651-05-04 14:09 G 4150410.95 4150411.09 4150411.27 0.0089 0.0062

Saturn 6651-12-09 03:50 G 4150629.46 4150629.66 4150629.87 0.0277 0.0087

Neptune 6651-12-16 04:04 G 4150636.48 4150636.67 4150636.86 0.0089 0.0043

Neptune 6652-07-28 17:16 G 4150862.01 4150862.22 4150862.44 0.0089 0.0024

Neptune 6653-03-11 06:43 G 4151087.56 4151087.78 4151088.00 0.0089 0.0006

Neptune 6653-10-22 20:09 G 4151313.13 4151313.34 4151313.56 0.0089 0.0013

Neptune 6654-06-05 09:21 G 4151538.69 4151538.89 4151539.11 0.0089 0.0031

Neptune 6655-01-16 22:33 G 4151764.27 4151764.44 4151764.64 0.0089 0.0050

Neptune 6655-08-30 11:45 G 4151989.87 4151989.99 4151990.15 0.0089 0.0068

Neptune 6656-04-12 00:57 G 4152215.51 4152215.54 4152215.62 0.0089 0.0087

Pluto 6656-05-31 15:07 G 4152265.10 4152265.13 4152265.20 0.0067 0.0065

Mars 6656-08-31 23:45 G 4152357.38 4152357.49 4152357.61 0.1765 0.1313

Pluto 6657-01-11 20:24 G 4152490.16 4152490.35 4152490.57 0.0067 0.0025

Pluto 6657-08-25 01:55 G 4152715.37 4152715.58 4152715.80 0.0068 0.0018

Pluto 6658-04-07 06:57 G 4152940.70 4152940.79 4152940.90 0.0068 0.0060

Mars 6663-02-15 18:28 G 4154716.11 4154716.27 4154716.43 0.1773 0.0733

Saturn 6665-02-22 00:57 G 4155453.42 4155453.54 4155453.68 0.0284 0.0220

Saturn 6665-10-09 15:50 G 4155682.95 4155683.16 4155683.37 0.0283 0.0013

Saturn 6666-05-27 05:16 G 4155912.62 4155912.72 4155912.84 0.0281 0.0240

Jupiter 6668-04-16 00:14 G 4156602.37 4156602.51 4156602.66 0.0488 0.0346

Jupiter 6679-12-21 05:02 G 4160868.51 4160868.71 4160868.92 0.0487 0.0009

Saturn 6680-11-03 03:35 G 4161186.45 4161186.65 4161186.85 0.0277 0.0090

Saturn 6681-06-20 13:40 G 4161415.89 4161416.07 4161416.27 0.0278 0.0127

Uranus 6685-07-11 16:04 G 4162898.04 4162898.17 4162898.33 0.0143 0.0106

Jupiter 6685-10-26 03:21 G 4163004.44 4163004.64 4163004.84 0.0541 0.0082

Uranus 6686-02-23 02:52 G 4163124.43 4163124.62 4163124.83 0.0143 0.0055

Uranus 6686-10-07 13:40 G 4163350.85 4163351.07 4163351.29 0.0142 0.0003

Uranus 6687-05-22 00:00 G 4163577.30 4163577.50 4163577.72 0.0142 0.0048

Uranus 6688-01-03 10:19 G 4163803.78 4163803.93 4163804.09 0.0142 0.0098

Mars 6690-06-30 00:43 G 4164712.37 4164712.53 4164712.69 0.1747 0.0578

Jupiter 6691-08-26 08:38 G 4165134.71 4165134.86 4165135.01 0.0486 0.0336

Saturn 6694-09-04 11:31 G 4166239.82 4166239.98 4166240.15 0.0284 0.0177

Saturn 6695-04-22 01:55 G 4166469.38 4166469.58 4166469.79 0.0282 0.0054

Saturn 6695-12-07 14:52 G 4166699.12 4166699.12 4166699.15 0.0281 0.0280

Mars 6696-12-13 18:00 G 4167071.13 4167071.25 4167071.38 0.1791 0.1244

Jupiter 6697-06-30 14:52 G 4167269.98 4167270.12 4167270.26 0.0542 0.0389

Saturn 6710-05-17 06:57 G 4171972.59 4171972.79 4171973.00 0.0276 0.0066

Saturn 6711-01-01 17:02 G 4172202.04 4172202.21 4172202.39 0.0278 0.0152

Jupiter 6715-08-29 11:45 G 4173902.80 4173902.99 4173903.18 0.0487 0.0197

Jupiter 6721-07-04 23:45 G 4176039.34 4176039.49 4176039.64 0.0540 0.0367

Mars 6722-06-30 07:40 G 4176399.68 4176399.82 4176399.96 0.1761 0.1044

Saturn 6724-03-17 15:21 G 4177025.97 4177026.14 4177026.32 0.0284 0.0151

Saturn 6724-11-02 05:45 G 4177255.54 4177255.74 4177255.95 0.0282 0.0080

Moon 6727-01-21 23:02 G 4178066.32 4178066.46 4178066.60 0.2680 0.1455

Earth 6727-01-22 04:04 G 4178066.55 4178066.67 4178066.80 0.2683 0.1648 *

Jupiter 6727-05-04 17:31 G 4178169.03 4178169.23 4178169.43 0.0487 0.0137

Mars 6728-12-14 02:38 G 4178758.44 4178758.61 4178758.77 0.1777 0.0469

Uranus 6729-07-08 01:55 G 4178964.46 4178964.58 4178964.73 0.0136 0.0107

Uranus 6730-02-19 08:38 G 4179190.67 4179190.86 4179191.06 0.0136 0.0063

Uranus 6730-10-03 15:35 G 4179416.93 4179417.15 4179417.36 0.0136 0.0019

Uranus 6731-05-17 22:19 G 4179643.22 4179643.43 4179643.65 0.0136 0.0026

Uranus 6731-12-30 05:31 G 4179869.55 4179869.73 4179869.92 0.0137 0.0071

Uranus 6732-08-12 12:28 G 4180095.92 4180096.02 4180096.14 0.0137 0.0116

Neptune 6732-11-06 23:31 G 4180182.38 4180182.48 4180182.62 0.0088 0.0074

Jupiter 6733-03-09 07:26 G 4180304.61 4180304.81 4180305.01 0.0541 0.0123

Neptune 6733-06-20 12:28 G 4180407.85 4180408.02 4180408.19 0.0088 0.0056

Neptune 6734-02-01 00:43 G 4180633.34 4180633.53 4180633.74 0.0088 0.0039

Neptune 6734-09-14 13:11 G 4180858.85 4180859.05 4180859.28 0.0088 0.0022

Earth 6735-01-19 18:28 G 4180986.18 4180986.27 4180986.35 0.2681 0.2228

Neptune 6735-04-28 02:09 G 4181084.38 4181084.59 4181084.82 0.0088 0.0004

Neptune 6735-12-09 14:38 G 4181309.90 4181310.11 4181310.34 0.0088 0.0014

Neptune 6736-07-22 03:21 G 4181535.44 4181535.64 4181535.85 0.0088 0.0031

Neptune 6737-03-04 15:35 G 4181760.98 4181761.15 4181761.35 0.0088 0.0049

Neptune 6737-10-16 04:19 G 4181986.55 4181986.68 4181986.84 0.0088 0.0066

Neptune 6738-05-29 16:48 G 4182212.16 4182212.20 4182212.29 0.0088 0.0084

Jupiter 6739-01-07 22:33 G 4182435.40 4182435.44 4182435.49 0.0486 0.0473

Saturn 6739-04-12 06:14 G 4182529.67 4182529.76 4182529.87 0.0276 0.0241

Saturn	6739-11-27 16:04 G	4182758.96	4182759.17	4182759.38	0.0277	0.0027
Saturn	6740-07-14 02:09 G	4182988.45	4182988.59	4182988.76	0.0278	0.0192
Pluto	6743-06-21 05:16 G	4184060.52	4184060.72	4184060.94	0.0077	0.0028
Pluto	6744-02-01 14:24 G	4184285.91	4184286.10	4184286.31	0.0076	0.0034
Jupiter	6751-05-06 19:26 G	4186937.18	4186937.31	4186937.43	0.0488	0.0390
Saturn	6753-09-28 02:38 G	4187812.41	4187812.61	4187812.80	0.0283	0.0108
Saturn	6754-05-15 16:33 G	4188042.00	4188042.19	4188042.38	0.0282	0.0123
Mars	6756-04-27 09:21 G	4188754.73	4188754.89	4188755.04	0.1743	0.0822
Mars	6762-10-12 01:26 G	4191113.47	4191113.56	4191113.65	0.1795	0.1540
Jupiter	6763-01-10 00:14 G	4191203.31	4191203.51	4191203.72	0.0487	0.0053
Saturn	6768-10-22 09:50 G	4193315.79	4193315.91	4193316.05	0.0275	0.0216
Jupiter	6768-11-15 03:35 G	4193339.46	4193339.65	4193339.85	0.0541	0.0161
Uranus	6769-03-12 01:40 G	4193456.48	4193456.57	4193456.68	0.0143	0.0126
Saturn	6769-06-08 19:26 G	4193545.10	4193545.31	4193545.53	0.0276	0.0005
Uranus	6769-10-24 12:28 G	4193682.84	4193683.02	4193683.21	0.0143	0.0075
Saturn	6770-01-24 05:45 G	4193774.61	4193774.74	4193774.88	0.0278	0.0215
Uranus	6770-06-07 23:31 G	4193909.26	4193909.48	4193909.69	0.0142	0.0024
Uranus	6771-01-20 09:50 G	4194135.70	4194135.91	4194136.13	0.0142	0.0027
Uranus	6771-09-03 19:55 G	4194362.16	4194362.33	4194362.53	0.0142	0.0078
Uranus	6772-04-17 06:14 G	4194588.68	4194588.76	4194588.86	0.0141	0.0128
Jupiter	6774-09-15 05:16 G	4195469.55	4195469.72	4195469.88	0.0486	0.0284
Jupiter	6780-07-20 14:09 G	4197604.93	4197605.09	4197605.26	0.0541	0.0316
Saturn	6783-04-10 05:45 G	4198598.54	4198598.74	4198598.94	0.0283	0.0083
Saturn	6783-11-25 19:55 G	4198828.15	4198828.33	4198828.51	0.0282	0.0147
Mars	6788-04-26 15:36 G	4200441.99	4200442.15	4200442.30	0.1757	0.0773
Mars	6794-10-11 10:19 G	4202800.76	4202800.93	4202801.11	0.1781	0.0201
Saturn	6798-05-04 18:00 G	4204102.09	4204102.25	4204102.41	0.0276	0.0180
Jupiter	6798-09-17 09:07 G	4204237.71	4204237.88	4204238.06	0.0488	0.0253
Saturn	6798-12-20 03:50 G	4204331.45	4204331.66	4204331.87	0.0277	0.0035
Saturn	6799-08-06 14:23 G	4204561.02	4204561.10	4204561.19	0.0279	0.0253

Jupiter 6804-07-23 18:28 G 4206374.14 4206374.27 4206374.40 0.0540 0.0416

Jupiter 6810-05-23 12:43 G 4208503.83 4208504.03 4208504.24 0.0486 0.0092

Saturn 6812-03-05 01:40 G 4209155.52 4209155.57 4209155.63 0.0284 0.0273

Saturn 6812-10-20 16:33 G 4209384.99 4209385.19 4209385.41 0.0283 0.0041

Uranus 6813-03-07 12:43 G 4209522.97 4209523.03 4209523.14 0.0136 0.0125

Saturn 6813-06-07 06:14 G 4209614.61 4209614.76 4209614.93 0.0282 0.0189

Uranus 6813-10-19 19:40 G 4209749.16 4209749.32 4209749.50 0.0136 0.0081

Uranus 6814-06-03 02:23 G 4209975.40 4209975.60 4209975.82 0.0136 0.0037

Uranus 6815-01-15 09:21 G 4210201.67 4210201.89 4210202.11 0.0136 0.0008

Neptune 6815-08-06 21:07 G 4210405.28 4210405.38 4210405.53 0.0089 0.0073

Uranus 6815-08-29 16:04 G 4210427.98 4210428.17 4210428.38 0.0137 0.0053

Neptune 6816-03-19 11:02 G 4210630.79 4210630.96 4210631.14 0.0089 0.0054

Jupiter 6816-03-28 06:00 G 4210639.54 4210639.75 4210639.95 0.0541 0.0056

Uranus 6816-04-11 23:02 G 4210654.32 4210654.46 4210654.62 0.0137 0.0098

Neptune 6816-10-31 00:14 G 4210856.32 4210856.51 4210856.73 0.0089 0.0036

Neptune 6817-06-13 13:55 G 4211081.87 4211082.08 4211082.30 0.0089 0.0017

Neptune 6818-01-25 03:21 G 4211307.42 4211307.64 4211307.86 0.0089 0.0002

Neptune 6818-09-07 16:33 G 4211532.99 4211533.19 4211533.41 0.0089 0.0021

Neptune 6819-04-21 05:45 G 4211758.56 4211758.74 4211758.96 0.0089 0.0040

Neptune 6819-12-02 19:11 G 4211984.15 4211984.30 4211984.48 0.0089 0.0058

Neptune 6820-07-15 08:23 G 4212209.76 4212209.85 4212209.98 0.0089 0.0076

Jupiter 6822-01-26 18:14 G 4212770.17 4212770.26 4212770.36 0.0486 0.0425

Mars 6822-02-22 17:45 G 4212797.11 4212797.24 4212797.38 0.1740 0.1065

Saturn 6827-11-14 21:50 G 4214888.24 4214888.41 4214888.59 0.0275 0.0155

Jupiter 6827-12-01 17:45 G 4214905.19 4214905.24 4214905.28 0.0542 0.0525

Saturn 6828-07-01 07:26 G 4215117.61 4215117.81 4215118.02 0.0277 0.0060

Saturn 6829-02-15 17:45 G 4215347.24 4215347.24 4215347.27 0.0278 0.0277

Jupiter 6834-05-25 16:19 G 4217272.10 4217272.18 4217272.26 0.0488 0.0446

Saturn 6841-09-15 03:36 G 4219941.56 4219941.65 4219941.76 0.0284 0.0250

Saturn 6842-05-02 18:57 G 4220171.08 4220171.29 4220171.50 0.0283 0.0017

Saturn 6842-12-18 08:38 G 4220400.73 4220400.86 4220401.00 0.0282 0.0212

Jupiter 6846-01-28 21:50 G 4221538.21 4221538.41 4221538.61 0.0487 0.0110

Jupiter 6851-12-04 23:45 G 4223674.31 4223674.49 4223674.68 0.0540 0.0219

Uranus 6853-06-23 21:21 G 4224241.24 4224241.39 4224241.56 0.0143 0.0096

Uranus 6854-02-05 08:09 G 4224467.64 4224467.84 4224468.06 0.0143 0.0045

Mars 6854-02-21 23:45 G 4224484.32 4224484.49 4224484.65 0.1753 0.0510

Uranus 6854-09-19 18:57 G 4224694.07 4224694.29 4224694.51 0.0142 0.0007

Uranus 6855-05-04 05:31 G 4224920.54 4224920.73 4224920.94 0.0142 0.0057

Uranus 6855-12-16 15:50 G 4225147.03 4225147.16 4225147.31 0.0142 0.0108

Saturn 6857-05-27 04:19 G 4225674.50 4225674.68 4225674.88 0.0276 0.0123

Jupiter 6857-10-04 02:52 G 4225804.44 4225804.62 4225804.80 0.0487 0.0229

Saturn 6858-01-11 14:23 G 4225903.90 4225904.10 4225904.30 0.0278 0.0094

Mars 6860-08-07 18:00 G 4226843.08 4226843.25 4226843.43 0.1785 0.0089

Jupiter 6863-08-09 09:50 G 4227939.73 4227939.91 4227940.08 0.0541 0.0263

Saturn 6871-03-28 14:52 G 4230727.98 4230728.12 4230728.27 0.0284 0.0208

Saturn 6871-11-13 05:45 G 4230957.53 4230957.74 4230957.95 0.0283 0.0025

Saturn 6872-06-29 19:11 G 4231187.22 4231187.30 4231187.40 0.0281 0.0252

Earth 6872-07-19 04:04 G 4231206.51 4231206.67 4231206.83 0.2651 0.0022

Moon 6872-07-19 08:38 G 4231206.70 4231206.86 4231207.01 0.2655 0.0237 *

Jupiter 6881-10-06 05:16 G 4234572.56 4234572.72 4234572.88 0.0487 0.0303

Saturn 6886-12-07 08:52 G 4236460.67 4236460.87 4236461.07 0.0275 0.0096

Saturn 6887-07-24 18:28 G 4236690.08 4236690.27 4236690.46 0.0277 0.0119

Jupiter 6887-08-12 19:26 G 4236709.24 4236709.31 4236709.38 0.0540 0.0501

Mars 6887-12-21 03:07 G 4236839.51 4236839.63 4236839.74 0.1736 0.1295

Mars 6892-08-07 02:38 G 4238530.54 4238530.61 4238530.68 0.1771 0.1606

Jupiter 6893-06-11 10:19 G 4238838.73 4238838.93 4238839.14 0.0487 0.0035

Neptune 6897-02-08 07:40 G 4240176.78 4240176.82 4240176.91 0.0088 0.0084

Uranus 6897-06-19 07:11 G 4240307.66 4240307.80 4240307.96 0.0136 0.0098

Neptune 6897-09-21 20:38 G 4240402.23 4240402.36 4240402.52 0.0088 0.0066

Uranus 6898-01-31 13:55 G 4240533.88 4240534.08 4240534.28 0.0136 0.0054

Neptune 6898-05-05 09:07 G 4240627.72 4240627.88 4240628.08 0.0088 0.0049

Uranus 6898-09-14 20:38 G 4240760.15 4240760.36 4240760.58 0.0136 0.0010

Neptune 6898-12-16 22:04 G 4240853.22 4240853.42 4240853.63 0.0088 0.0031

Jupiter 6899-04-17 06:57 G 4240974.58 4240974.79 4240974.99 0.0541 0.0030

Uranus 6899-04-29 03:21 G 4240986.44 4240986.64 4240986.86 0.0136 0.0036

Neptune 6899-07-30 10:33 G 4241078.73 4241078.94 4241079.16 0.0088 0.0014

Uranus 6899-12-11 10:48 G 4241212.77 4241212.95 4241213.12 0.0137 0.0080

Neptune 6900-03-12 23:16 G 4241304.25 4241304.47 4241304.69 0.0088 0.0004

Uranus 6900-07-25 17:31 G 4241439.16 4241439.23 4241439.33 0.0137 0.0125

Saturn 6900-10-08 15:50 G 4241514.01 4241514.16 4241514.33 0.0284 0.0186

Neptune 6900-10-24 11:31 G 4241529.78 4241529.98 4241530.21 0.0088 0.0022

Saturn 6901-05-26 06:43 G 4241743.57 4241743.78 4241743.99 0.0283 0.0046

Neptune 6901-06-07 00:14 G 4241755.32 4241755.51 4241755.71 0.0088 0.0039

Saturn 6902-01-10 20:09 G 4241973.30 4241973.34 4241973.40 0.0281 0.0273

Neptune 6902-01-18 12:28 G 4241980.87 4241981.02 4241981.21 0.0088 0.0057

Neptune 6902-09-01 01:26 G 4242206.45 4242206.56 4242206.68 0.0088 0.0074

Pluto 6904-12-16 22:19 G 4243044.30 4243044.43 4243044.56 0.0067 0.0055

Jupiter 6905-02-15 15:50 G 4243105.04 4243105.16 4243105.30 0.0486 0.0369

Pluto 6905-07-30 03:21 G 4243269.43 4243269.64 4243269.86 0.0067 0.0013

Pluto 6906-03-12 08:23 G 4243494.66 4243494.85 4243495.06 0.0068 0.0029

Jupiter 6910-12-21 15:36 G 4245240.05 4245240.15 4245240.26 0.0541 0.0460

Saturn 6916-06-19 14:09 G 4247246.89 4247247.09 4247247.30 0.0276 0.0065

Saturn 6917-02-04 00:14 G 4247476.33 4247476.51 4247476.69 0.0278 0.0152

Mars 6919-12-21 08:09 G 4248526.67 4248526.84 4248527.01 0.1749 0.0256

Mars 6926-06-06 02:09 G 4250885.42 4250885.59 4250885.76 0.1789 0.0356

Jupiter 6929-02-17 18:28 G 4251873.08 4251873.27 4251873.46 0.0487 0.0163

Saturn 6930-04-21 02:09 G 4252300.41 4252300.59 4252300.77 0.0284 0.0147

Saturn 6930-12-06 16:48 G 4252530.00 4252530.20 4252530.40 0.0283 0.0085

Jupiter 6934-12-24 22:48 G 4254009.28 4254009.45 4254009.62 0.0541 0.0292

Uranus 6937-02-22 06:28 G 4254799.65 4254799.77 4254799.90 0.0143 0.0117

Uranus 6937-10-06 17:16 G 4255026.04 4255026.22 4255026.42 0.0143 0.0066

Uranus 6938-05-21 04:19 G 4255252.47 4255252.68 4255252.90 0.0142 0.0015

Uranus 6939-01-02 14:52 G 4255478.92 4255479.12 4255479.34 0.0142 0.0038

Uranus 6939-08-17 01:11 G 4255705.40 4255705.55 4255705.74 0.0142 0.0088

Uranus 6940-03-30 11:31 G 4255931.95 4255931.98 4255932.05 0.0142 0.0138

Jupiter 6940-10-24 00:14 G 4256139.32 4256139.51 4256139.70 0.0486 0.0173

Saturn 6945-05-15 09:50 G 4257803.83 4257803.91 4257804.00 0.0274 0.0251

Saturn 6945-12-30 18:43 G 4258033.07 4258033.28 4258033.49 0.0276 0.0040

Saturn 6946-08-17 04:04 G 4258262.52 4258262.67 4258262.85 0.0277 0.0176

Jupiter 6946-08-29 10:48 G 4258274.76 4258274.95 4258275.15 0.0542 0.0179

Mars 6953-10-18 11:45 G 4260881.91 4260881.99 4260882.07 0.1732 0.1533

Mars 6958-06-05 10:33 G 4262572.83 4262572.94 4262573.05 0.1775 0.1346

Saturn 6959-11-01 02:38 G 4263086.42 4263086.61 4263086.80 0.0284 0.0125

Saturn 6960-06-17 17:02 G 4263316.02 4263316.21 4263316.41 0.0283 0.0106

Jupiter 6964-10-26 03:50 G 4264907.53 4264907.66 4264907.80 0.0487 0.0367

Earth 6970-01-23 04:19 G 4266822.55 4266822.68 4266822.81 0.2682 0.1476

Moon 6970-01-23 07:26 G 4266822.69 4266822.81 4266822.93 0.2687 0.1620 *

Saturn 6974-11-25 13:40 G 4268589.95 4268590.07 4268590.20 0.0275 0.0223

Saturn 6975-07-12 22:48 G 4268819.24 4268819.45 4268819.66 0.0277 0.0011

Saturn 6976-02-27 08:38 G 4269048.73 4269048.86 4269049.01 0.0278 0.0206

Jupiter 6976-07-01 09:07 G 4269173.68 4269173.88 4269174.09 0.0487 0.0030

Earth 6978-01-20 18:43 G 4269742.21 4269742.28 4269742.35 0.2680 0.2387

Moon 6978-01-21 00:14 G 4269742.38 4269742.51 4269742.64 0.2681 0.1460

Neptune 6979-11-09 04:19 G 4270399.62 4270399.68 4270399.77 0.0089 0.0084

Neptune 6980-06-21 17:31 G 4270625.10 4270625.23 4270625.40 0.0089 0.0066

Neptune 6981-02-02 07:11 G 4270850.62 4270850.80 4270851.00 0.0089 0.0047

Uranus 6981-02-17 18:28 G 4270866.17 4270866.27 4270866.40 0.0135 0.0115

Neptune 6981-09-15 20:52 G 4271076.16 4271076.37 4271076.58 0.0089 0.0028

Uranus 6981-10-02 01:11 G 4271092.37 4271092.55 4271092.74 0.0136 0.0071

Neptune 6982-04-29 10:19 G 4271301.71 4271301.93 4271302.15 0.0089 0.0009

Jupiter 6982-05-07 04:48 G 4271309.50 4271309.70 4271309.90 0.0541 0.0094

Uranus 6982-05-16 07:55 G 4271318.62 4271318.83 4271319.04 0.0136 0.0027

Neptune 6982-12-10 23:45 G 4271527.27 4271527.49 4271527.71 0.0089 0.0010

Uranus 6982-12-28 14:38 G 4271544.90 4271545.11 4271545.33 0.0136 0.0018

Neptune 6983-07-24 12:57 G 4271752.84 4271753.04 4271753.26 0.0089 0.0028

Uranus 6983-08-11 21:21 G 4271771.21 4271771.39 4271771.59 0.0136 0.0062

Neptune 6984-03-06 02:23 G 4271978.42 4271978.60 4271978.80 0.0089 0.0047

Uranus 6984-03-25 04:33 G 4271997.56 4271997.69 4271997.83 0.0137 0.0107

Neptune 6984-10-17 15:50 G 4272204.02 4272204.16 4272204.32 0.0089 0.0066

Neptune 6985-05-31 05:31 G 4272429.66 4272429.73 4272429.80 0.0089 0.0084

Mars 6985-10-17 16:04 G 4272569.00 4272569.17 4272569.35 0.1745 0.0048

Jupiter 6988-03-06 13:55 G 4273439.93 4273440.08 4273440.24 0.0486 0.0310

Saturn 6989-05-13 11:31 G 4273872.78 4273872.98 4273873.18 0.0284 0.0089

Saturn 6989-12-29 01:55 G 4274102.41 4274102.58 4274102.77 0.0283 0.0143

Pluto 6991-05-25 04:04 G 4274614.61 4274614.67 4274614.78 0.0077 0.0071

Pluto 6992-01-05 13:40 G 4274839.85 4274840.07 4274840.30 0.0076 0.0008

Mars 6992-04-02 09:07 G 4274927.72 4274927.88 4274928.04 0.1793 0.0658

Pluto 6992-08-17 22:19 G 4275065.30 4275065.43 4275065.61 0.0076 0.0054

Jupiter 6994-01-09 14:23 G 4275574.96 4275575.10 4275575.24 0.0542 0.0389

8TH MILLENNIUM CE

This is a list of transits of Venus in the 8th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Saturn	7004-06-07 18:43 G	4279376.14	4279376.28	4279376.43	0.0274	0.0197
Saturn	7005-01-23 03:36 G	4279605.44	4279605.65	4279605.86	0.0276	0.0015
Saturn	7005-09-09 13:11 G	4279834.95	4279835.05	4279835.18	0.0277	0.0231
Jupiter	7012-03-09 17:31 G	4282208.05	4282208.23	4282208.41	0.0487	0.0227
Mars	7017-10-17 23:02 G	4284256.40	4284256.46	4284256.52	0.1758	0.1625
Jupiter	7018-01-14 01:40 G	4284344.44	4284344.57	4284344.72	0.0541	0.0386
Saturn	7018-11-24 11:16 G	4284658.77	4284658.97	4284659.18	0.0284	0.0069
Saturn	7019-07-12 01:40 G	4284888.40	4284888.57	4284888.74	0.0283	0.0162
Uranus	7020-10-23 13:55 G	4285358.05	4285358.08	4285358.13	0.0143	0.0141
Uranus	7021-06-07 01:26 G	4285584.39	4285584.56	4285584.73	0.0143	0.0088
Uranus	7022-01-19 12:14 G	4285810.80	4285811.01	4285811.23	0.0143	0.0037
Uranus	7022-09-02 23:02 G	4286037.25	4286037.46	4286037.68	0.0142	0.0015
Uranus	7023-04-17 09:50 G	4286263.72	4286263.91	4286264.10	0.0142	0.0066
Jupiter	7023-11-13 23:16 G	4286474.27	4286474.47	4286474.67	0.0486	0.0109
Uranus	7023-11-29 20:09 G	4286490.22	4286490.34	4286490.47	0.0142	0.0116
Mars	7024-04-02 18:14 G	4286615.12	4286615.26	4286615.39	0.1780	0.1076
Jupiter	7029-09-18 11:45 G	4288609.79	4288609.99	4288610.19	0.0541	0.0098
Saturn	7033-12-18 21:21 G	4290162.23	4290162.39	4290162.56	0.0275	0.0171
Saturn	7034-08-05 06:28 G	4290391.56	4290391.77	4290391.98	0.0277	0.0042
Saturn	7035-03-22 16:19 G	4290621.11	4290621.18	4290621.26	0.0278	0.0258
Jupiter	7035-07-20 04:48 G	4290740.62	4290740.70	4290740.78	0.0486	0.0444
Saturn	7047-10-20 03:36 G	4295215.59	4295215.65	4295215.72	0.0285	0.0269
Jupiter	7047-11-16 02:38 G	4295242.52	4295242.61	4295242.71	0.0487	0.0430
Saturn	7048-06-05 19:11 G	4295445.09	4295445.30	4295445.51	0.0284	0.0035
Saturn	7049-01-21 09:36 G	4295674.76	4295674.90	4295675.06	0.0282	0.0196
Mars	7051-08-16 01:11 G	4296611.38	4296611.55	4296611.72	0.1741	0.0244
Mars	7058-01-29 16:48 G	4298970.05	4298970.20	4298970.34	0.1797	0.0950
Jupiter	7059-07-22 08:23 G	4299508.65	4299508.85	4299509.05	0.0486	0.0094
Neptune	7061-12-26 05:16 G	4300396.63	4300396.72	4300396.85	0.0088	0.0076
Neptune	7062-08-08 18:00 G	4300622.10	4300622.25	4300622.42	0.0088	0.0058

Neptune 7063-03-22 06:28 G 4300847.59 4300847.77 4300847.98 0.0088 0.0041

Saturn 7063-07-01 02:23 G 4300948.43 4300948.60 4300948.79 0.0275 0.0145

Neptune 7063-11-02 19:11 G 4301073.09 4301073.30 4301073.52 0.0088 0.0023

Saturn 7064-02-15 11:31 G 4301177.78 4301177.98 4301178.19 0.0276 0.0068

Neptune 7064-06-15 07:55 G 4301298.61 4301298.83 4301299.05 0.0088 0.0006

Uranus 7064-10-19 06:14 G 4301424.73 4301424.76 4301424.83 0.0135 0.0131

Neptune 7065-01-26 20:23 G 4301524.13 4301524.35 4301524.57 0.0088 0.0012

Jupiter 7065-05-27 06:28 G 4301644.58 4301644.77 4301644.96 0.0542 0.0184

Uranus 7065-06-02 12:57 G 4301650.88 4301651.04 4301651.21 0.0135 0.0088

Neptune 7065-09-09 08:38 G 4301749.66 4301749.86 4301750.08 0.0088 0.0030

Uranus 7066-01-14 19:40 G 4301877.11 4301877.32 4301877.52 0.0136 0.0044

Neptune 7066-04-22 21:36 G 4301975.22 4301975.40 4301975.59 0.0088 0.0047

Uranus 7066-08-29 02:09 G 4302103.38 4302103.59 4302103.81 0.0136 0.0002

Neptune 7066-12-04 09:36 G 4302200.78 4302200.90 4302201.07 0.0088 0.0065

Uranus 7067-04-12 08:52 G 4302329.67 4302329.87 4302330.08 0.0136 0.0045

Neptune 7067-07-17 22:33 G 4302426.37 4302426.44 4302426.52 0.0088 0.0082

Uranus 7067-11-24 15:50 G 4302556.01 4302556.16 4302556.33 0.0136 0.0089

Uranus 7068-07-07 22:48 G 4302782.42 4302782.45 4302782.51 0.0137 0.0134

Jupiter 7071-03-27 13:40 G 4303774.89 4303775.07 4303775.25 0.0486 0.0244

Jupiter 7077-01-29 18:28 G 4305910.10 4305910.27 4305910.44 0.0542 0.0291

Saturn 7077-05-01 03:07 G 4306001.54 4306001.63 4306001.74 0.0285 0.0249

Saturn 7077-12-16 18:43 G 4306231.07 4306231.28 4306231.49 0.0284 0.0015

Saturn 7078-08-03 08:52 G 4306460.74 4306460.87 4306461.01 0.0282 0.0214

Mars 7083-08-15 07:11 G 4308298.69 4308298.80 4308298.91 0.1754 0.1359

Mars 7090-01-29 01:55 G 4310657.42 4310657.58 4310657.73 0.1784 0.0802

Saturn 7093-01-10 04:19 G 4311734.49 4311734.68 4311734.87 0.0275 0.0121

Saturn 7093-08-27 13:26 G 4311963.87 4311964.06 4311964.27 0.0277 0.0094

Jupiter 7095-03-29 17:45 G 4312543.08 4312543.24 4312543.40 0.0487 0.0297

Jupiter 7101-02-03 01:40 G 4314679.47 4314679.57 4314679.68 0.0540 0.0462

Uranus 7105-02-05 09:21 G 4316142.77 4316142.89 4316143.04 0.0143 0.0111

Uranus 7105-09-19 20:38 G 4316369.17 4316369.36 4316369.57 0.0143 0.0059

Uranus 7106-05-04 07:55 G 4316595.61 4316595.83 4316596.05 0.0143 0.0007

Saturn 7106-11-12 09:50 G 4316787.79 4316787.91 4316788.06 0.0285 0.0218

Jupiter 7106-12-03 23:02 G 4316809.26 4316809.46 4316809.66 0.0486 0.0040

Uranus 7106-12-16 18:28 G 4316822.07 4316822.27 4316822.48 0.0142 0.0044

Saturn 7107-06-30 01:26 G 4317017.35 4317017.56 4317017.77 0.0284 0.0016

Uranus 7107-07-31 04:48 G 4317048.56 4317048.70 4317048.88 0.0142 0.0095

Saturn 7108-02-14 15:50 G 4317247.06 4317247.16 4317247.27 0.0282 0.0246

Jupiter 7112-10-08 11:02 G 4318944.75 4318944.96 4318945.16 0.0542 0.0023

Moon 7115-07-23 02:23 G 4319962.44 4319962.60 4319962.77 0.2646 0.0058

Earth 7115-07-23 05:45 G 4319962.58 4319962.74 4319962.90 0.2652 0.0054 *

Mars 7117-06-13 09:36 G 4320653.73 4320653.90 4320654.07 0.1737 0.0498

Jupiter 7118-08-09 05:02 G 4321075.59 4321075.71 4321075.85 0.0485 0.0374

Saturn 7122-07-24 10:04 G 4322520.72 4322520.92 4322521.12 0.0275 0.0092

Saturn 7123-03-10 18:57 G 4322750.11 4322750.29 4322750.49 0.0276 0.0121

Mars 7123-11-27 23:45 G 4323012.37 4323012.49 4323012.62 0.1802 0.1256

Jupiter 7124-06-12 22:48 G 4323210.37 4323210.45 4323210.53 0.0543 0.0497

Saturn 7136-05-24 09:36 G 4327573.75 4327573.90 4327574.06 0.0285 0.0197

Saturn 7137-01-09 00:57 G 4327803.33 4327803.54 4327803.75 0.0284 0.0037

Saturn 7137-08-26 14:52 G 4328033.06 4328033.12 4328033.20 0.0282 0.0265

Jupiter 7142-08-11 08:23 G 4329843.66 4329843.85 4329844.05 0.0487 0.0163

Neptune 7144-09-25 00:14 G 4330619.42 4330619.51 4330619.64 0.0089 0.0077

Neptune 7145-05-08 14:09 G 4330844.92 4330845.09 4330845.26 0.0089 0.0058

Neptune 7145-12-20 03:07 G 4331070.45 4331070.63 4331070.84 0.0089 0.0040

Neptune 7146-08-02 16:48 G 4331295.99 4331296.20 4331296.42 0.0089 0.0021

Neptune 7147-03-16 06:14 G 4331521.54 4331521.76 4331521.98 0.0089 0.0002

Neptune 7147-10-27 19:55 G 4331747.11 4331747.33 4331747.54 0.0089 0.0017

Neptune 7148-06-09 09:07 G 4331972.69 4331972.88 4331973.09 0.0089 0.0036

Jupiter 7148-06-16 09:07 G 4331979.71 4331979.88 4331980.06 0.0541 0.0275

Neptune 7149-01-20 22:19 G 4332198.27 4332198.43 4332198.62 0.0089 0.0055

Uranus 7149-02-01 00:43 G 4332209.40 4332209.53 4332209.67 0.0135 0.0105

Mars 7149-06-12 15:36 G 4332341.01 4332341.15 4332341.28 0.1750 0.1098

Neptune 7149-09-03 12:00 G 4332423.88 4332424.00 4332424.13 0.0089 0.0073

Uranus 7149-09-15 06:57 G 4332435.61 4332435.79 4332436.00 0.0135 0.0062

Uranus 7150-04-29 13:40 G 4332661.86 4332662.07 4332662.29 0.0136 0.0018

Uranus 7150-12-11 20:38 G 4332888.15 4332888.36 4332888.57 0.0136 0.0027

Uranus 7151-07-26 03:21 G 4333114.46 4333114.64 4333114.83 0.0136 0.0071

Saturn 7152-02-03 11:02 G 4333306.76 4333306.96 4333307.17 0.0275 0.0070

Uranus 7152-03-08 10:19 G 4333340.82 4333340.93 4333341.04 0.0137 0.0116

Saturn 7152-09-19 20:23 G 4333536.17 4333536.35 4333536.53 0.0277 0.0144

Pluto 7153-07-04 06:57 G 4333823.62 4333823.79 4333823.99 0.0067 0.0036

Pluto 7154-02-14 12:28 G 4334048.81 4334049.02 4334049.24 0.0067 0.0007

Jupiter 7154-04-16 14:09 G 4334109.90 4334110.09 4334110.28 0.0486 0.0173

Pluto 7154-09-27 17:31 G 4334274.09 4334274.23 4334274.39 0.0068 0.0049

Mars 7155-11-27 09:36 G 4334699.73 4334699.90 4334700.06 0.1788 0.0523

Jupiter 7160-02-19 19:11 G 4336245.11 4336245.30 4336245.49 0.0542 0.0209

Saturn 7165-12-04 15:21 G 4338359.98 4338360.14 4338360.32 0.0285 0.0168

Saturn 7166-07-22 06:57 G 4338589.58 4338589.79 4338589.99 0.0283 0.0066

Jupiter 7178-04-18 18:14 G 4342878.13 4342878.26 4342878.39 0.0487 0.0370

Saturn 7180-12-29 09:07 G 4343863.81 4343863.88 4343863.98 0.0274 0.0250

Saturn 7181-08-15 17:31 G 4344093.02 4344093.23 4344093.44 0.0275 0.0041

Saturn 7182-04-02 02:38 G 4344322.44 4344322.61 4344322.77 0.0276 0.0172

Mars 7183-04-10 18:43 G 4344696.12 4344696.28 4344696.43 0.1733 0.0730

Uranus 7188-10-05 16:48 G 4346701.14 4346701.20 4346701.29 0.0143 0.0135

Uranus 7189-05-20 04:19 G 4346927.51 4346927.68 4346927.86 0.0143 0.0083

Mars 7189-09-24 06:43 G 4347054.70 4347054.78 4347054.86 0.1806 0.1569

Jupiter 7189-12-22 23:16 G 4347144.27 4347144.47 4347144.68 0.0486 0.0030

Uranus 7190-01-01 15:21 G 4347153.93 4347154.14 4347154.36 0.0143 0.0031

Uranus 7190-08-16 02:23 G 4347380.38 4347380.60 4347380.81 0.0143 0.0021

Uranus 7191-03-30 12:43 G 4347606.85 4347607.03 4347607.23 0.0142 0.0072

Uranus 7191-11-11 23:31 G 4347833.38 4347833.48 4347833.59 0.0142 0.0122

Saturn 7195-06-16 15:36 G 4349145.97 4349146.15 4349146.34 0.0285 0.0146

Jupiter 7195-10-28 15:36 G 4349279.95 4349280.15 4349280.35 0.0542 0.0081

Saturn 7196-02-01 06:43 G 4349375.58 4349375.78 4349375.98 0.0283 0.0087

Jupiter 7201-08-28 05:16 G 4351410.56 4351410.72 4351410.88 0.0486 0.0306

Jupiter 7207-07-03 02:09 G 4353545.46 4353545.59 4353545.73 0.0542 0.0401

Saturn 7210-07-11 09:21 G 4354649.79 4354649.89 4354650.02 0.0274 0.0230

Saturn 7211-02-25 18:00 G 4354879.04 4354879.25 4354879.46 0.0275 0.0019

Saturn 7211-10-13 03:21 G 4355108.49 4355108.64 4355108.79 0.0277 0.0195

Moon 7213-01-25 03:50 G 4355578.51 4355578.66 4355578.81 0.2674 0.1174

Earth 7213-01-25 04:48 G 4355578.56 4355578.70 4355578.83 0.2680 0.1337 *

Mars 7215-04-09 23:45 G 4356383.34 4356383.49 4356383.64 0.1746 0.0839

Earth 7221-01-22 19:11 G 4358498.25 4358498.30 4358498.36 0.2679 0.2501

Mars 7221-09-23 17:02 G 4358742.04 4358742.21 4358742.38 0.1792 0.0241

Saturn 7224-12-26 20:52 G 4359932.18 4359932.37 4359932.56 0.0284 0.0117

Saturn 7225-08-13 12:00 G 4360161.81 4360162.00 4360162.20 0.0283 0.0115

Jupiter 7225-08-30 08:52 G 4360178.70 4360178.87 4360179.06 0.0486 0.0238

Neptune 7226-03-30 13:40 G 4360391.05 4360391.07 4360391.14 0.0088 0.0086

Neptune 7226-11-11 02:38 G 4360616.48 4360616.61 4360616.76 0.0088 0.0068

Neptune 7227-06-24 15:21 G 4360841.96 4360842.14 4360842.32 0.0088 0.0050

Neptune 7228-02-05 03:36 G 4361067.46 4361067.65 4361067.87 0.0088 0.0033

Neptune 7228-09-17 16:33 G 4361292.97 4361293.19 4361293.41 0.0088 0.0015

Neptune 7229-05-01 05:16 G 4361518.50 4361518.72 4361518.94 0.0088 0.0003

Neptune 7229-12-12 17:45 G 4361744.03 4361744.24 4361744.46 0.0088 0.0020

Neptune 7230-07-26 06:00 G 4361969.56 4361969.75 4361969.96 0.0088 0.0038

Neptune 7231-03-08 18:14 G 4362195.12 4362195.26 4362195.45 0.0088 0.0056

Jupiter 7231-07-06 07:55 G 4362314.68 4362314.83 4362314.98 0.0542 0.0350

Neptune 7231-10-20 07:11 G 4362420.69 4362420.80 4362420.93 0.0088 0.0073

Uranus 7232-10-01 12:43 G 4362767.94 4362768.03 4362768.13 0.0135 0.0121

Uranus 7233-05-15 18:57 G 4362994.13 4362994.29 4362994.48 0.0135 0.0079

Uranus	7233-12-28 01:40 G	4363220.36	4363220.57	4363220.79	0.0136	0.0035
Uranus	7234-08-11 08:23 G	4363446.63	4363446.85	4363447.07	0.0136	0.0010
Uranus	7235-03-25 14:52 G	4363672.93	4363673.12	4363673.33	0.0136	0.0054
Uranus	7235-11-06 21:36 G	4363899.27	4363899.40	4363899.57	0.0136	0.0099
Jupiter	7237-05-05 15:07 G	4364444.93	4364445.13	4364445.33	0.0486	0.0099
Pluto	7239-12-10 15:36 G	4365393.98	4365394.15	4365394.36	0.0077	0.0041
Saturn	7240-01-21 16:33 G	4365436.05	4365436.19	4365436.34	0.0274	0.0198
Pluto	7240-07-23 01:11 G	4365619.34	4365619.55	4365619.77	0.0076	0.0022
Saturn	7240-09-07 01:11 G	4365665.33	4365665.55	4365665.76	0.0275	0.0013
Saturn	7241-04-24 10:04 G	4365894.81	4365894.92	4365895.05	0.0276	0.0225
Jupiter	7243-03-10 19:26 G	4366580.11	4366580.31	4366580.51	0.0542	0.0127
Jupiter	7249-01-08 20:23 G	4368711.26	4368711.35	4368711.43	0.0485	0.0438
Mars	7249-02-05 03:50 G	4368738.51	4368738.66	4368738.80	0.1730	0.0963
Saturn	7254-07-08 21:50 G	4370718.22	4370718.41	4370718.62	0.0285	0.0094
Saturn	7255-02-23 12:57 G	4370947.86	4370948.04	4370948.22	0.0283	0.0138
Jupiter	7261-05-07 18:14 G	4373213.18	4373213.26	4373213.35	0.0487	0.0439
Saturn	7269-08-02 16:48 G	4376222.04	4376222.20	4376222.36	0.0274	0.0178
Saturn	7270-03-20 01:26 G	4376451.35	4376451.56	4376451.77	0.0276	0.0033
Saturn	7270-11-04 10:33 G	4376680.86	4376680.94	4376681.04	0.0277	0.0247
Jupiter	7273-01-10 23:45 G	4377479.29	4377479.49	4377479.69	0.0486	0.0101
Uranus	7273-01-17 13:11 G	4377485.92	4377486.05	4377486.22	0.0143	0.0104
Uranus	7273-09-01 00:28 G	4377712.33	4377712.52	4377712.73	0.0143	0.0052
Uranus	7274-04-15 11:45 G	4377938.77	4377938.99	4377939.20	0.0143	0.0003
Uranus	7274-11-27 22:19 G	4378165.23	4378165.43	4378165.64	0.0142	0.0051
Uranus	7275-07-12 09:07 G	4378391.73	4378391.88	4378392.03	0.0142	0.0102
Jupiter	7278-11-16 16:33 G	4379615.00	4379615.19	4379615.39	0.0541	0.0166
Mars	7281-02-04 08:23 G	4380425.69	4380425.85	4380426.02	0.1743	0.0584
Saturn	7284-01-19 02:52 G	4381504.41	4381504.62	4381504.82	0.0284	0.0066
Saturn	7284-09-04 17:45 G	4381734.07	4381734.24	4381734.41	0.0283	0.0166
Jupiter	7284-09-16 05:45 G	4381745.56	4381745.74	4381745.92	0.0486	0.0233

Mars 7287-07-22 00:28 G 4382784.35 4382784.52 4382784.69 0.1796 0.0057

Jupiter 7290-07-22 00:00 G 4383880.34 4383880.50 4383880.66 0.0543 0.0334

Saturn 7299-02-13 00:28 G 4387008.35 4387008.52 4387008.71 0.0274 0.0145

Saturn 7299-09-30 09:21 G 4387237.68 4387237.89 4387238.09 0.0275 0.0066

Jupiter 7308-09-19 08:38 G 4390513.70 4390513.86 4390514.02 0.0486 0.0304

Neptune 7308-12-28 07:26 G 4390613.78 4390613.81 4390613.86 0.0089 0.0088

Neptune 7309-08-10 20:38 G 4390839.24 4390839.36 4390839.52 0.0089 0.0069

Neptune 7310-03-24 10:04 G 4391064.75 4391064.92 4391065.12 0.0089 0.0051

Neptune 7310-11-04 23:45 G 4391290.29 4391290.49 4391290.70 0.0089 0.0032

Neptune 7311-06-18 13:11 G 4391515.84 4391516.05 4391516.27 0.0089 0.0013

Neptune 7312-01-30 02:38 G 4391741.39 4391741.61 4391741.83 0.0089 0.0006

Neptune 7312-09-11 15:50 G 4391966.96 4391967.16 4391967.38 0.0089 0.0025

Saturn 7312-12-14 13:11 G 4392061.00 4392061.05 4392061.12 0.0285 0.0274

Neptune 7313-04-25 05:16 G 4392192.54 4392192.72 4392192.92 0.0089 0.0043

Saturn 7313-08-01 05:02 G 4392290.50 4392290.71 4392290.92 0.0284 0.0040

Neptune 7313-12-06 18:57 G 4392418.13 4392418.29 4392418.45 0.0089 0.0062

Saturn 7314-03-18 19:40 G 4392520.17 4392520.32 4392520.48 0.0283 0.0191

Neptune 7314-07-20 07:55 G 4392643.76 4392643.83 4392643.94 0.0089 0.0081

Jupiter 7314-07-26 11:45 G 4392649.88 4392649.99 4392650.10 0.0542 0.0448

Mars 7314-12-04 12:57 G 4392780.92 4392781.04 4392781.17 0.1726 0.1188

Uranus 7317-01-14 07:11 G 4393552.65 4393552.80 4393552.96 0.0135 0.0095

Uranus 7317-08-28 13:26 G 4393778.87 4393779.06 4393779.27 0.0135 0.0051

Uranus 7318-04-11 20:09 G 4394005.12 4394005.34 4394005.56 0.0136 0.0008

Uranus 7318-11-24 02:38 G 4394231.41 4394231.61 4394231.83 0.0136 0.0037

Uranus 7319-07-08 09:07 G 4394457.72 4394457.88 4394458.07 0.0136 0.0082

Mars 7319-07-22 10:19 G 4394471.88 4394471.93 4394471.98 0.1782 0.1701

Uranus 7320-02-19 15:50 G 4394684.10 4394684.16 4394684.26 0.0137 0.0126

Jupiter 7320-05-25 14:38 G 4394779.90 4394780.11 4394780.31 0.0486 0.0035

Jupiter 7326-03-30 22:48 G 4396915.25 4396915.45 4396915.65 0.0542 0.0031

Saturn 7328-08-26 00:57 G 4397794.36 4397794.54 4397794.73 0.0275 0.0125

Saturn 7329-04-12 09:36 G 4398023.70 4398023.90 4398024.11 0.0276 0.0087

Jupiter 7332-01-29 20:09 G 4399046.21 4399046.34 4399046.47 0.0486 0.0371

Jupiter 7337-12-03 08:38 G 4401180.81 4401180.86 4401180.92 0.0542 0.0519

Saturn 7342-06-26 18:00 G 4402847.15 4402847.25 4402847.36 0.0285 0.0246

Saturn 7343-02-11 09:50 G 4403076.70 4403076.91 4403077.12 0.0284 0.0012

Saturn 7343-09-29 00:28 G 4403306.39 4403306.52 4403306.66 0.0283 0.0218

Mars 7346-12-03 17:02 G 4404468.04 4404468.21 4404468.38 0.1739 0.0339

Mars 7353-05-19 07:55 G 4406826.66 4406826.83 4406827.01 0.1800 0.0350

Jupiter 7356-02-01 00:14 G 4407814.32 4407814.51 4407814.70 0.0486 0.0173

Uranus 7356-09-17 21:07 G 4408044.30 4408044.38 4408044.50 0.0143 0.0127

Uranus 7357-05-02 08:38 G 4408270.69 4408270.86 4408271.06 0.0143 0.0074

Uranus 7357-12-14 19:55 G 4408497.12 4408497.33 4408497.55 0.0143 0.0022

Saturn 7358-03-08 09:07 G 4408580.69 4408580.88 4408581.09 0.0275 0.0091

Earth 7358-07-24 07:11 G 4408718.64 4408718.80 4408718.96 0.2653 0.0100

Moon 7358-07-24 08:38 G 4408718.71 4408718.86 4408719.01 0.2660 0.0250 *

Uranus 7358-07-29 06:43 G 4408723.57 4408723.78 4408724.00 0.0143 0.0029

Saturn 7358-10-23 18:00 G 4408810.07 4408810.25 4408810.45 0.0276 0.0122

Uranus 7359-03-12 17:16 G 4408950.05 4408950.22 4408950.41 0.0142 0.0080

Uranus 7359-10-25 03:50 G 4409176.59 4409176.66 4409176.75 0.0142 0.0131

Jupiter 7361-12-06 14:52 G 4409949.94 4409950.12 4409950.30 0.0542 0.0236

Jupiter 7367-10-07 04:48 G 4412080.51 4412080.70 4412080.89 0.0485 0.0170

Saturn 7372-01-06 22:04 G 4413633.29 4413633.42 4413633.57 0.0285 0.0216

Saturn 7372-08-23 13:40 G 4413862.86 4413863.07 4413863.28 0.0284 0.0017

Saturn 7373-04-10 04:04 G 4414092.58 4414092.67 4414092.78 0.0283 0.0247

Jupiter 7373-08-11 03:07 G 4414215.45 4414215.63 4414215.81 0.0543 0.0241

Mars 7380-09-30 22:19 G 4416823.33 4416823.43 4416823.52 0.1723 0.1415

Mars 7385-05-18 17:45 G 4418514.14 4418514.24 4418514.34 0.1786 0.1424

Saturn 7387-09-18 10:19 G 4419366.72 4419366.93 4419367.13 0.0275 0.0069

Saturn 7388-05-04 19:11 G 4419596.12 4419596.30 4419596.48 0.0276 0.0143

Neptune 7391-02-13 10:48 G 4420610.87 4420610.95 4420611.08 0.0088 0.0078

Neptune 7391-09-26 23:45 G 4420836.34 4420836.49 4420836.66 0.0088 0.0060

Jupiter 7391-10-09 08:09 G 4420848.71 4420848.84 4420848.97 0.0487 0.0371

Neptune 7392-05-09 12:43 G 4421061.84 4421062.03 4421062.22 0.0088 0.0042

Neptune 7392-12-21 01:11 G 4421287.34 4421287.55 4421287.77 0.0088 0.0025

Neptune 7393-08-03 13:55 G 4421512.86 4421513.08 4421513.30 0.0088 0.0007

Neptune 7394-03-17 02:23 G 4421738.38 4421738.60 4421738.82 0.0088 0.0011

Neptune 7394-10-28 14:52 G 4421963.92 4421964.12 4421964.34 0.0088 0.0029

Neptune 7395-06-11 03:36 G 4422189.47 4422189.65 4422189.84 0.0088 0.0046

Neptune 7396-01-22 15:50 G 4422415.02 4422415.16 4422415.32 0.0088 0.0064

Neptune 7396-09-04 04:04 G 4422640.62 4422640.67 4422640.78 0.0088 0.0082

Jupiter 7397-08-14 12:00 G 4422984.96 4422985.00 4422985.04 0.0541 0.0528

Uranus 7400-09-14 18:43 G 4424111.17 4424111.28 4424111.41 0.0135 0.0111

Uranus 7401-04-29 00:57 G 4424337.37 4424337.54 4424337.74 0.0135 0.0069

Pluto 7401-06-08 10:48 G 4424377.86 4424377.95 4424378.09 0.0067 0.0057

Saturn 7401-07-20 02:38 G 4424419.46 4424419.61 4424419.77 0.0285 0.0189

Uranus 7401-12-11 07:40 G 4424563.61 4424563.82 4424564.04 0.0136 0.0025

Pluto 7402-01-19 16:33 G 4424602.98 4424603.19 4424603.41 0.0067 0.0015

Saturn 7402-03-06 18:14 G 4424649.05 4424649.26 4424649.47 0.0284 0.0044

Uranus 7402-07-25 14:09 G 4424789.88 4424790.09 4424790.31 0.0136 0.0019

Pluto 7402-09-01 21:50 G 4424828.21 4424828.41 4424828.62 0.0068 0.0027

Saturn 7402-10-22 08:38 G 4424878.82 4424878.86 4424878.92 0.0282 0.0273

Uranus 7403-03-08 20:38 G 4425016.18 4425016.36 4425016.56 0.0136 0.0064

Jupiter 7403-06-15 14:23 G 4425114.89 4425115.10 4425115.30 0.0486 0.0036

Uranus 7403-10-21 03:36 G 4425242.52 4425242.65 4425242.78 0.0136 0.0108

Jupiter 7409-04-19 19:11 G 4427250.09 4427250.30 4427250.50 0.0542 0.0030

Mars 7412-10-01 01:40 G 4428510.40 4428510.57 4428510.74 0.1735 0.0087

Jupiter 7415-02-18 20:09 G 4429381.18 4429381.34 4429381.50 0.0485 0.0302

Saturn 7416-08-14 10:48 G 4429923.85 4429923.95 4429924.05 0.0274 0.0242

Saturn 7417-03-31 19:11 G 4430153.09 4430153.30 4430153.51 0.0275 0.0033

Saturn 7417-11-16 04:19 G 4430382.52 4430382.68 4430382.84 0.0276 0.0180

Mars 7419-03-17 14:38 G 4430868.95 4430869.11 4430869.27 0.1804 0.0666

Jupiter 7420-12-23 05:31 G 4431515.62 4431515.73 4431515.84 0.0543 0.0459

Saturn 7431-01-30 08:38 G 4435205.68 4435205.86 4435206.04 0.0285 0.0155

Saturn 7431-09-16 23:45 G 4435435.29 4435435.49 4435435.69 0.0284 0.0077

Jupiter 7439-02-20 22:04 G 4438149.24 4438149.42 4438149.60 0.0486 0.0231

Uranus 7440-12-31 17:45 G 4438829.09 4438829.24 4438829.42 0.0143 0.0095

Uranus 7441-08-15 05:02 G 4439055.51 4439055.71 4439055.92 0.0143 0.0043

Uranus 7442-03-29 16:04 G 4439281.95 4439282.17 4439282.39 0.0143 0.0008

Uranus 7442-11-11 02:38 G 4439508.42 4439508.61 4439508.82 0.0142 0.0060

Uranus 7443-06-25 13:26 G 4439734.93 4439735.06 4439735.20 0.0142 0.0110

Mars 7444-09-30 07:11 G 4440197.76 4440197.80 4440197.85 0.1748 0.1689

Jupiter 7444-12-26 17:02 G 4440285.05 4440285.21 4440285.38 0.0542 0.0327

Saturn 7446-02-24 11:45 G 4440709.87 4440709.99 4440710.12 0.0274 0.0221

Mars 7446-07-30 07:40 G 4440865.77 4440865.82 4440865.87 0.1719 0.1638

Saturn 7446-10-11 20:23 G 4440939.14 4440939.35 4440939.56 0.0275 0.0012

Saturn 7447-05-29 05:31 G 4441168.59 4441168.73 4441168.88 0.0276 0.0202

Jupiter 7450-10-27 03:21 G 4442415.45 4442415.64 4442415.84 0.0486 0.0109

Mars 7451-03-17 00:57 G 4442556.41 4442556.54 4442556.68 0.1791 0.1139

Moon 7456-01-28 03:36 G 4444334.52 4444334.65 4444334.78 0.2685 0.1309

Earth 7456-01-28 05:16 G 4444334.57 4444334.72 4444334.86 0.2679 0.1191 *

Jupiter 7456-08-31 02:52 G 4444550.43 4444550.62 4444550.82 0.0542 0.0163

Saturn 7460-08-11 13:11 G 4445991.87 4445992.05 4445992.24 0.0285 0.0128

Saturn 7461-03-29 04:33 G 4446221.50 4446221.69 4446221.89 0.0283 0.0105

Jupiter 7462-07-02 09:50 G 4446681.83 4446681.91 4446681.99 0.0485 0.0442

Earth 7464-01-25 19:40 G 4447254.30 4447254.32 4447254.34 0.2677 0.2649

Moon 7464-01-25 22:33 G 4447254.36 4447254.44 4447254.52 0.2683 0.2249

Neptune 7473-11-13 03:36 G 4450833.59 4450833.65 4450833.78 0.0089 0.0081

Neptune 7474-06-26 17:16 G 4451059.08 4451059.22 4451059.40 0.0089 0.0062

Jupiter 7474-10-29 07:26 G 4451183.72 4451183.81 4451183.90 0.0486 0.0437

Neptune 7475-02-07 06:57 G 4451284.60 4451284.79 4451284.99 0.0089 0.0043

Saturn 7475-09-06 21:07 G 4451496.23 4451496.38 4451496.54 0.0275 0.0184

Neptune 7475-09-20 20:23 G 4451510.14 4451510.35 4451510.57 0.0089 0.0024

Saturn 7476-04-23 06:00 G 4451725.54 4451725.75 4451725.96 0.0276 0.0027

Neptune 7476-05-03 09:50 G 4451735.69 4451735.91 4451736.13 0.0089 0.0005

Saturn 7476-12-08 15:21 G 4451955.04 4451955.14 4451955.25 0.0277 0.0240

Neptune 7476-12-14 23:16 G 4451961.25 4451961.47 4451961.69 0.0089 0.0014

Neptune 7477-07-28 12:14 G 4452186.82 4452187.01 4452187.23 0.0089 0.0033

Neptune 7478-03-11 01:26 G 4452412.40 4452412.56 4452412.76 0.0089 0.0052

Mars 7478-07-29 10:48 G 4452552.78 4452552.95 4452553.13 0.1731 0.0147

Neptune 7478-10-22 15:36 G 4452638.01 4452638.15 4452638.28 0.0089 0.0070

Neptune 7479-06-05 04:33 G 4452863.68 4452863.69 4452863.73 0.0089 0.0089

Uranus 7484-05-15 06:14 G 4454669.71 4454669.76 4454669.84 0.0135 0.0128

Uranus 7484-12-27 12:28 G 4454895.87 4454896.02 4454896.20 0.0135 0.0085

Mars 7485-01-11 21:50 G 4454911.27 4454911.41 4454911.56 0.1808 0.0971

Uranus 7485-08-10 18:57 G 4455122.09 4455122.29 4455122.50 0.0135 0.0042

Uranus 7486-03-25 01:26 G 4455348.35 4455348.56 4455348.78 0.0136 0.0004

Jupiter 7486-07-04 11:31 G 4455449.78 4455449.98 4455450.18 0.0486 0.0090

Uranus 7486-11-06 08:09 G 4455574.64 4455574.84 4455575.05 0.0136 0.0046

Uranus 7487-06-20 14:38 G 4455800.96 4455801.11 4455801.28 0.0136 0.0090

Pluto 7487-11-14 18:57 G 4455948.20 4455948.29 4455948.39 0.0077 0.0069

Uranus 7488-02-01 21:21 G 4456027.37 4456027.39 4456027.43 0.0136 0.0135

Pluto 7488-06-27 04:19 G 4456173.46 4456173.68 4456173.90 0.0076 0.0007

Pluto 7489-02-07 12:43 G 4456398.90 4456399.03 4456399.20 0.0076 0.0055

Saturn 7490-02-21 20:38 G 4456778.17 4456778.36 4456778.57 0.0284 0.0091

Saturn 7490-10-09 11:31 G 4457007.80 4457007.98 4457008.17 0.0283 0.0140

Jupiter 7492-05-08 20:09 G 4457585.14 4457585.34 4457585.54 0.0542 0.0111

Jupiter 7498-03-09 17:02 G 4459716.04 4459716.21 4459716.39 0.0485 0.0250

Jupiter 7504-01-13 07:11 G 4461850.66 4461850.80 4461850.95 0.0543 0.0372

Saturn 7505-03-19 23:02 G 4462282.30 4462282.46 4462282.64 0.0275 0.0162

Saturn 7505-11-04 07:55 G 4462511.62 4462511.83 4462512.04 0.0276 0.0049

Saturn 7506-06-21 17:16 G 4462741.16 4462741.22 4462741.29 0.0277 0.0263

Mars 7510-07-29 15:36 G 4464240.05 4464240.15 4464240.25 0.1744 0.1429

Mars 7517-01-12 08:23 G 4466598.69 4466598.85 4466599.00 0.1795 0.0850

Saturn 7519-09-05 01:11 G 4467564.35 4467564.55 4467564.76 0.0284 0.0064

Saturn 7520-04-21 16:19 G 4467794.01 4467794.18 4467794.35 0.0283 0.0167

Jupiter 7522-03-12 20:23 G 4468484.19 4468484.35 4468484.52 0.0486 0.0294

Uranus 7524-09-01 00:57 G 4469387.43 4469387.54 4469387.67 0.0143 0.0119

Uranus 7525-04-15 12:14 G 4469613.82 4469614.01 4469614.21 0.0143 0.0067

Uranus 7525-11-27 23:16 G 4469840.26 4469840.47 4469840.69 0.0143 0.0015

Uranus 7526-07-12 10:04 G 4470066.72 4470066.92 4470067.14 0.0143 0.0037

Uranus 7527-02-23 20:52 G 4470293.20 4470293.37 4470293.55 0.0142 0.0088

Uranus 7527-10-08 07:11 G 4470519.77 4470519.80 4470519.86 0.0142 0.0138

Jupiter 7528-01-16 12:00 G 4470619.86 4470620.00 4470620.14 0.0541 0.0378

Jupiter 7533-11-16 02:09 G 4472750.38 4472750.59 4472750.79 0.0486 0.0048

Saturn 7534-09-30 08:23 G 4473068.67 4473068.85 4473069.05 0.0275 0.0124

Saturn 7535-05-17 17:31 G 4473298.03 4473298.23 4473298.43 0.0276 0.0088

Jupiter 7539-09-20 21:50 G 4474885.22 4474885.41 4474885.61 0.0542 0.0113

Mars 7544-05-26 19:26 G 4476595.14 4476595.31 4476595.48 0.1727 0.0394

Jupiter 7545-07-22 06:14 G 4477016.64 4477016.76 4477016.88 0.0485 0.0393

Saturn 7548-07-30 18:43 G 4478121.20 4478121.28 4478121.38 0.0285 0.0257

Saturn 7549-03-17 10:33 G 4478350.73 4478350.94 4478351.15 0.0284 0.0024

Saturn 7549-11-02 00:57 G 4478580.41 4478580.54 4478580.69 0.0283 0.0206

Mars 7550-11-10 04:33 G 4478953.57 4478953.69 4478953.81 0.1813 0.1295

Neptune 7555-05-19 20:09 G 4480605.33 4480605.34 4480605.38 0.0088 0.0087

Neptune 7555-12-31 09:07 G 4480830.75 4480830.88 4480831.01 0.0088 0.0069

Neptune 7556-08-12 21:21 G 4481056.23 4481056.39 4481056.58 0.0088 0.0052

Neptune 7557-03-26 10:04 G 4481281.73 4481281.92 4481282.14 0.0088 0.0034

Neptune 7557-11-06 23:02 G 4481507.24 4481507.46 4481507.68 0.0088 0.0016

Neptune 7558-06-20 11:31 G 4481732.76 4481732.98 4481733.21 0.0088 0.0003

Neptune 7559-02-01 00:00 G 4481958.29 4481958.50 4481958.72 0.0088 0.0020

Neptune 7559-09-14 12:43 G 4482183.84 4482184.03 4482184.23 0.0088 0.0037

Neptune 7560-04-27 01:11 G 4482409.39 4482409.55 4482409.74 0.0088 0.0055

Neptune 7560-12-08 13:40 G 4482634.97 4482635.07 4482635.21 0.0088 0.0073

Saturn 7564-04-11 11:02 G 4483854.77 4483854.96 4483855.16 0.0275 0.0101

Saturn 7564-11-26 20:09 G 4484084.14 4484084.34 4484084.53 0.0276 0.0111

Uranus 7568-08-27 23:45 G 4485454.36 4485454.49 4485454.64 0.0135 0.0102

Uranus 7569-04-11 06:00 G 4485680.56 4485680.75 4485680.96 0.0135 0.0059

Jupiter 7569-07-24 08:38 G 4485784.67 4485784.86 4485785.06 0.0486 0.0146

Uranus 7569-11-23 12:43 G 4485906.81 4485907.03 4485907.25 0.0135 0.0016

Uranus 7570-07-07 19:11 G 4486133.09 4486133.30 4486133.51 0.0136 0.0028

Uranus 7571-02-19 01:26 G 4486359.39 4486359.56 4486359.76 0.0136 0.0072

Uranus 7571-10-03 08:09 G 4486585.74 4486585.84 4486585.96 0.0136 0.0116

Jupiter 7575-05-29 19:11 G 4487920.11 4487920.30 4487920.49 0.0542 0.0184

Mars 7576-05-26 00:14 G 4488282.38 4488282.51 4488282.64 0.1740 0.1175

Saturn 7578-02-09 23:02 G 4488907.34 4488907.46 4488907.58 0.0285 0.0230

Saturn 7578-09-27 14:38 G 4489136.90 4489137.11 4489137.32 0.0284 0.0003

Saturn 7579-05-15 05:16 G 4489366.61 4489366.72 4489366.85 0.0283 0.0232

Jupiter 7581-03-29 14:52 G 4490050.93 4490051.12 4490051.31 0.0486 0.0192

Mars 7582-11-09 15:36 G 4490640.98 4490641.15 4490641.31 0.1799 0.0555

Jupiter 7587-02-01 01:55 G 4492185.42 4492185.58 4492185.75 0.0542 0.0323

Saturn 7593-03-07 11:31 G 4494411.97 4494411.98 4494412.03 0.0275 0.0272

Saturn 7593-10-22 20:23 G 4494641.15 4494641.35 4494641.56 0.0276 0.0063

Saturn 7594-06-09 05:45 G 4494870.56 4494870.74 4494870.92 0.0277 0.0151

Earth 7601-07-26 08:38 G 4497474.70 4497474.86 4497475.02 0.2655 0.0161

Moon 7601-07-26 09:07 G 4497474.71 4497474.88 4497475.05 0.2648 0.0049 *

Jupiter 7605-03-31 16:04 G 4498819.03 4498819.17 4498819.32 0.0486 0.0342

Saturn 7607-08-23 09:36 G 4499693.75 4499693.90 4499694.06 0.0285 0.0188

Saturn 7608-04-09 01:11 G 4499923.34 4499923.55 4499923.76 0.0284 0.0045

Uranus 7608-05-01 08:38 G 4499945.84 4499945.86 4499945.91 0.0144 0.0142

Saturn 7608-11-24 15:07 G 4500153.09 4500153.13 4500153.20 0.0282 0.0273

Uranus 7608-12-13 20:09 G 4500172.17 4500172.34 4500172.51 0.0143 0.0089

Uranus 7609-07-28 07:11 G 4500398.59 4500398.80 4500399.01 0.0143 0.0038

Uranus 7610-03-11 18:14 G 4500625.04 4500625.26 4500625.48 0.0143 0.0014

Mars 7610-03-24 04:48 G 4500637.54 4500637.70 4500637.86 0.1724 0.0619

Uranus 7610-10-24 04:48 G 4500851.52 4500851.70 4500851.90 0.0143 0.0065

Jupiter 7611-02-04 11:02 G 4500954.85 4500954.96 4500955.07 0.0542 0.0451

Uranus 7611-06-07 15:50 G 4501078.03 4501078.16 4501078.28 0.0142 0.0116

Mars 7616-09-06 11:02 G 4502995.88 4502995.96 4502996.03 0.1817 0.1626

Jupiter 7616-12-04 21:50 G 4503085.20 4503085.41 4503085.61 0.0486 0.0006

Saturn 7622-09-17 15:07 G 4505198.05 4505198.13 4505198.23 0.0274 0.0247

Jupiter 7622-10-09 22:33 G 4505220.24 4505220.44 4505220.64 0.0542 0.0030

Saturn 7623-05-04 23:31 G 4505427.28 4505427.48 4505427.70 0.0275 0.0039

Saturn 7623-12-20 08:38 G 4505656.70 4505656.86 4505657.03 0.0276 0.0174

Jupiter 7628-08-10 02:52 G 4507351.48 4507351.62 4507351.77 0.0485 0.0341

Jupiter 7634-06-14 08:23 G 4509485.81 4509485.85 4509485.91 0.0542 0.0521

Saturn 7637-03-04 13:26 G 4510479.89 4510480.06 4510480.23 0.0285 0.0162

Saturn 7637-10-20 04:48 G 4510709.50 4510709.70 4510709.91 0.0284 0.0071

Neptune 7638-09-29 01:26 G 4511053.44 4511053.56 4511053.70 0.0089 0.0072

Neptune 7639-05-12 14:23 G 4511278.95 4511279.10 4511279.30 0.0089 0.0054

Neptune 7639-12-24 03:50 G 4511504.47 4511504.66 4511504.88 0.0089 0.0035

Neptune 7640-08-05 17:31 G 4511730.01 4511730.23 4511730.45 0.0089 0.0015

Neptune 7641-03-19 06:57 G 4511955.57 4511955.79 4511956.01 0.0089 0.0004

Neptune 7641-10-30 20:09 G 4512181.14 4512181.34 4512181.56 0.0089 0.0022

Mars 7642-03-23 08:52 G 4512324.72 4512324.87 4512325.01 0.1736 0.0923

Neptune 7642-06-13 09:36 G 4512406.71 4512406.90 4512407.10 0.0089 0.0041

Neptune 7643-01-24 22:48 G 4512632.30 4512632.45 4512632.62 0.0089 0.0060

Neptune 7643-09-07 12:00 G 4512857.91 4512858.00 4512858.12 0.0089 0.0079

Mars 7648-09-05 22:33 G 4514683.27 4514683.44 4514683.61 0.1803 0.0253

Pluto 7649-12-23 22:33 G 4515157.25 4515157.44 4515157.65 0.0067 0.0029

Pluto 7650-08-06 03:50 G 4515382.45 4515382.66 4515382.89 0.0068 0.0014

Pluto	7651-03-19 09:07 G	4515607.77	4515607.88	4515608.02	0.0068	0.0056
Saturn	7652-03-29 23:45 G	4515984.35	4515984.49	4515984.62	0.0275	0.0211
Uranus	7652-04-27 10:48 G	4516012.87	4516012.95	4516013.07	0.0135	0.0120
Jupiter	7652-08-12 06:14 G	4516119.57	4516119.76	4516119.94	0.0486	0.0202
Saturn	7652-11-14 08:23 G	4516213.64	4516213.85	4516214.06	0.0276	0.0003
Uranus	7652-12-09 17:31 G	4516239.06	4516239.23	4516239.41	0.0135	0.0077
Saturn	7653-07-01 17:45 G	4516443.11	4516443.24	4516443.38	0.0277	0.0213
Uranus	7653-07-23 23:45 G	4516465.28	4516465.49	4516465.71	0.0135	0.0033
Uranus	7654-03-07 06:14 G	4516691.54	4516691.76	4516691.98	0.0136	0.0010
Uranus	7654-10-19 12:43 G	4516917.83	4516918.03	4516918.23	0.0136	0.0054
Uranus	7655-06-02 19:11 G	4517144.16	4517144.30	4517144.46	0.0136	0.0098
Jupiter	7658-06-17 13:26 G	4518254.88	4518255.06	4518255.24	0.0542	0.0231
Jupiter	7664-04-17 10:19 G	4520385.74	4520385.93	4520386.13	0.0485	0.0145
Saturn	7666-09-15 00:43 G	4521266.34	4521266.53	4521266.73	0.0284	0.0119
Saturn	7667-05-02 15:50 G	4521495.97	4521496.16	4521496.36	0.0283	0.0113
Jupiter	7670-02-20 00:14 G	4522520.33	4522520.51	4522520.69	0.0543	0.0254
Jupiter	7675-12-22 16:04 G	4524652.16	4524652.17	4524652.18	0.0485	0.0484
Mars	7676-01-19 14:09 G	4524679.94	4524680.09	4524680.24	0.1720	0.0849
Saturn	7681-10-10 03:36 G	4526770.50	4526770.65	4526770.81	0.0274	0.0187
Saturn	7682-05-27 12:14 G	4526999.80	4527000.01	4527000.22	0.0275	0.0024
Saturn	7683-01-11 21:36 G	4527229.30	4527229.40	4527229.51	0.0277	0.0237
Jupiter	7688-04-19 12:57 G	4529153.92	4529154.04	4529154.16	0.0486	0.0396
Uranus	7692-08-13 02:09 G	4530730.47	4530730.59	4530730.73	0.0143	0.0115
Uranus	7693-03-27 13:40 G	4530956.87	4530957.07	4530957.26	0.0143	0.0063
Uranus	7693-11-09 00:28 G	4531183.31	4531183.52	4531183.74	0.0143	0.0011
Jupiter	7694-02-23 10:19 G	4531289.88	4531289.93	4531289.97	0.0541	0.0526
Uranus	7694-06-23 11:16 G	4531409.77	4531409.97	4531410.19	0.0143	0.0041
Uranus	7695-02-04 22:04 G	4531636.26	4531636.42	4531636.59	0.0142	0.0092
Uranus	7695-09-19 08:52 G	4531862.85	4531862.87	4531862.88	0.0142	0.0142
Saturn	7696-03-27 03:50 G	4532052.46	4532052.66	4532052.86	0.0284	0.0093

Saturn 7696-11-11 18:43 G 4532282.11 4532282.28 4532282.47 0.0283 0.0139

Earth 7699-01-29 05:45 G 4533090.59 4533090.74 4533090.88 0.2677 0.1064

Moon 7699-01-29 09:36 G 4533090.75 4533090.90 4533091.05 0.2673 0.1162 *

Jupiter 7699-12-24 18:57 G 4533420.08 4533420.29 4533420.49 0.0486 0.0057

Jupiter 7705-10-29 18:00 G 4535555.05 4535555.25 4535555.46 0.0542 0.0026

Moon 7707-01-27 19:40 G 4536010.31 4536010.32 4536010.33 0.2669 0.2660

Mars 7708-01-19 17:45 G 4536367.08 4536367.24 4536367.40 0.1733 0.0673

Saturn 7711-04-23 11:16 G 4537556.80 4537556.97 4537557.15 0.0275 0.0151

Jupiter 7711-08-31 00:00 G 4537686.34 4537686.50 4537686.67 0.0486 0.0287

Saturn 7711-12-08 20:09 G 4537786.14 4537786.34 4537786.55 0.0276 0.0060

Saturn 7712-07-25 05:45 G 4538015.72 4538015.74 4538015.77 0.0277 0.0274

Mars 7714-07-05 05:31 G 4538725.56 4538725.73 4538725.90 0.1807 0.0062

Jupiter 7717-07-04 03:21 G 4539820.54 4539820.64 4539820.73 0.0542 0.0472

Neptune 7720-04-03 17:45 G 4540825.17 4540825.24 4540825.36 0.0088 0.0079

Neptune 7720-11-15 06:28 G 4541050.63 4541050.77 4541050.95 0.0088 0.0061

Neptune 7721-06-28 19:11 G 4541276.12 4541276.30 4541276.50 0.0088 0.0043

Neptune 7722-02-09 07:55 G 4541501.63 4541501.83 4541502.05 0.0088 0.0025

Neptune 7722-09-22 20:38 G 4541727.14 4541727.36 4541727.58 0.0088 0.0007

Neptune 7723-05-06 09:21 G 4541952.68 4541952.89 4541953.12 0.0088 0.0011

Neptune 7723-12-17 21:50 G 4542178.21 4542178.41 4542178.63 0.0088 0.0029

Neptune 7724-07-30 10:33 G 4542403.76 4542403.94 4542404.13 0.0088 0.0046

Saturn 7725-02-20 23:31 G 4542609.47 4542609.48 4542609.50 0.0285 0.0284

Neptune 7725-03-12 23:02 G 4542629.32 4542629.46 4542629.62 0.0088 0.0064

Saturn 7725-10-08 15:21 G 4542838.93 4542839.14 4542839.35 0.0284 0.0051

Neptune 7725-10-24 11:31 G 4542854.92 4542854.98 4542855.08 0.0088 0.0082

Saturn 7726-05-26 06:14 G 4543068.60 4543068.76 4543068.92 0.0283 0.0180

Jupiter 7735-09-02 01:40 G 4546454.40 4546454.57 4546454.75 0.0486 0.0252

Pluto 7736-06-01 09:21 G 4546727.69 4546727.89 4546728.11 0.0076 0.0027

Uranus 7736-08-10 04:33 G 4546797.54 4546797.69 4546797.84 0.0135 0.0095

Pluto 7737-01-12 18:14 G 4546953.08 4546953.26 4546953.47 0.0076 0.0036

Uranus	7737-03-24 10:33 G	4547023.75	4547023.94	4547024.15	0.0135	0.0052
Uranus	7737-11-05 17:16 G	4547250.00	4547250.22	4547250.43	0.0135	0.0008
Uranus	7738-06-19 23:31 G	4547476.28	4547476.48	4547476.70	0.0136	0.0036
Uranus	7739-02-01 06:00 G	4547702.59	4547702.75	4547702.94	0.0136	0.0080
Uranus	7739-09-15 12:28 G	4547928.95	4547929.02	4547929.13	0.0136	0.0125
Saturn	7740-11-02 15:36 G	4548342.96	4548343.15	4548343.34	0.0274	0.0126
Saturn	7741-06-20 00:14 G	4548572.31	4548572.51	4548572.72	0.0276	0.0085
Jupiter	7741-07-07 13:40 G	4548589.91	4548590.07	4548590.24	0.0542	0.0314
Mars	7741-11-16 23:31 G	4548722.35	4548722.48	4548722.62	0.1717	0.1071
Mars	7746-07-04 16:33 G	4550413.16	4550413.19	4550413.22	0.1793	0.1765
Jupiter	7747-05-08 07:11 G	4550720.60	4550720.80	4550721.00	0.0486	0.0091
Jupiter	7753-03-12 00:14 G	4552855.32	4552855.51	4552855.70	0.0542	0.0175
Saturn	7754-09-03 01:26 G	4553395.49	4553395.56	4553395.66	0.0285	0.0261
Saturn	7755-04-20 17:45 G	4553625.03	4553625.24	4553625.45	0.0284	0.0027
Saturn	7755-12-06 08:38 G	4553854.71	4553854.86	4553855.00	0.0283	0.0203
Jupiter	7759-01-11 12:57 G	4554986.95	4554987.04	4554987.14	0.0485	0.0430
Saturn	7770-05-15 22:19 G	4559129.23	4559129.43	4559129.63	0.0275	0.0093
Saturn	7770-12-31 07:11 G	4559358.61	4559358.80	4559359.00	0.0276	0.0120
Jupiter	7771-05-10 10:33 G	4559488.87	4559488.94	4559489.01	0.0487	0.0454
Mars	7773-11-16 02:38 G	4560409.44	4560409.61	4560409.78	0.1729	0.0432
Uranus	7776-04-13 09:50 G	4561288.86	4561288.91	4561288.97	0.0144	0.0138
Uranus	7776-11-25 20:52 G	4561515.21	4561515.37	4561515.55	0.0143	0.0086
Uranus	7777-07-10 08:09 G	4561741.63	4561741.84	4561742.05	0.0143	0.0034
Uranus	7778-02-21 19:11 G	4561968.08	4561968.30	4561968.51	0.0143	0.0017
Uranus	7778-10-06 05:31 G	4562194.55	4562194.73	4562194.94	0.0143	0.0069
Uranus	7779-05-20 16:19 G	4562421.08	4562421.18	4562421.31	0.0142	0.0119
Mars	7780-05-01 12:28 G	4562767.85	4562768.02	4562768.19	0.1811	0.0372
Jupiter	7783-01-13 14:38 G	4563754.91	4563755.11	4563755.31	0.0486	0.0107
Saturn	7784-03-15 12:57 G	4564181.92	4564182.04	4564182.18	0.0285	0.0219
Saturn	7784-10-31 04:48 G	4564411.49	4564411.70	4564411.91	0.0284	0.0015

Saturn	7785-06-17 19:26 G	4564641.21	4564641.31	4564641.42	0.0283	0.0244
Jupiter	7788-11-17 16:04 G	4565889.97	4565890.17	4565890.37	0.0543	0.0093
Jupiter	7794-09-18 20:38 G	4568021.18	4568021.36	4568021.54	0.0485	0.0233
Saturn	7799-11-26 02:52 G	4569915.42	4569915.62	4569915.83	0.0275	0.0068
Saturn	7800-07-13 11:45 G	4570144.81	4570144.99	4570145.17	0.0276	0.0144
Jupiter	7800-07-24 03:21 G	4570155.51	4570155.64	4570155.78	0.0543	0.0391
Neptune	7803-01-02 09:36 G	4571047.83	4571047.90	4571048.00	0.0089	0.0082
Neptune	7803-08-15 23:16 G	4571273.31	4571273.47	4571273.62	0.0089	0.0063
Neptune	7804-03-28 12:14 G	4571498.83	4571499.01	4571499.22	0.0089	0.0045
Neptune	7804-11-09 01:55 G	4571724.38	4571724.58	4571724.80	0.0089	0.0025
Neptune	7805-06-22 15:21 G	4571949.92	4571950.14	4571950.36	0.0089	0.0007
Neptune	7806-02-03 04:33 G	4572175.48	4572175.69	4572175.92	0.0089	0.0013
Neptune	7806-09-16 17:45 G	4572401.05	4572401.24	4572401.46	0.0089	0.0032
Neptune	7807-04-30 06:57 G	4572626.63	4572626.79	4572626.99	0.0089	0.0051
Mars	7807-09-15 09:07 G	4572764.77	4572764.88	4572764.99	0.1713	0.1294
Neptune	7807-12-11 20:52 G	4572852.23	4572852.37	4572852.51	0.0089	0.0069
Neptune	7808-07-24 09:50 G	4573077.88	4573077.91	4573077.96	0.0089	0.0088
Mars	7812-05-01 23:16 G	4574455.38	4574455.47	4574455.57	0.1797	0.1470
Saturn	7813-09-26 14:23 G	4574967.95	4574968.10	4574968.25	0.0285	0.0197
Saturn	7814-05-14 06:00 G	4575197.54	4575197.75	4575197.96	0.0284	0.0037
Saturn	7814-12-29 20:38 G	4575427.30	4575427.36	4575427.44	0.0283	0.0266
Jupiter	7818-09-21 23:31 G	4576789.32	4576789.48	4576789.63	0.0486	0.0310
Uranus	7820-04-10 15:21 G	4577356.03	4577356.14	4577356.27	0.0135	0.0112
Uranus	7820-11-22 21:50 G	4577582.23	4577582.41	4577582.60	0.0135	0.0069
Uranus	7821-07-07 04:04 G	4577808.46	4577808.67	4577808.89	0.0135	0.0026
Uranus	7822-02-18 10:33 G	4578034.73	4578034.94	4578035.16	0.0136	0.0018
Uranus	7822-10-02 17:02 G	4578261.02	4578261.21	4578261.41	0.0136	0.0062
Uranus	7823-05-16 23:31 G	4578487.36	4578487.48	4578487.63	0.0136	0.0106
Jupiter	7824-07-27 11:16 G	4578924.83	4578924.97	4578925.11	0.0541	0.0379
Saturn	7828-10-21 23:45 G	4580472.41	4580472.49	4580472.59	0.0274	0.0246

Saturn 7829-06-08 08:23 G 4580701.64 4580701.85 4580702.06 0.0275 0.0037

Saturn 7830-01-23 17:16 G 4580931.06 4580931.22 4580931.39 0.0277 0.0176

Jupiter 7830-05-28 05:02 G 4581055.50 4581055.71 4581055.91 0.0486 0.0034

Jupiter 7836-03-31 20:38 G 4583190.17 4583190.36 4583190.56 0.0542 0.0116

Moon 7836-07-30 13:11 G 4583311.00 4583311.05 4583311.10 0.2657 0.2512

Mars 7839-09-14 11:31 G 4584451.80 4584451.98 4584452.15 0.1725 0.0189

Jupiter 7842-01-31 09:50 G 4585321.78 4585321.91 4585322.04 0.0485 0.0376

Saturn 7843-04-09 00:57 G 4585754.37 4585754.54 4585754.72 0.0285 0.0157

Saturn 7843-11-24 16:33 G 4585983.99 4585984.19 4585984.40 0.0284 0.0076

Moon 7844-07-28 07:40 G 4586230.67 4586230.82 4586230.97 0.2662 0.0328

Earth 7844-07-28 10:04 G 4586230.77 4586230.92 4586231.08 0.2656 0.0217 *

Mars 7846-02-27 18:28 G 4586810.11 4586810.27 4586810.43 0.1815 0.0715

Saturn 7858-05-04 05:02 G 4591258.59 4591258.71 4591258.85 0.0274 0.0219

Saturn 7858-12-19 13:11 G 4591487.84 4591488.05 4591488.27 0.0275 0.0012

Saturn 7859-08-05 22:04 G 4591717.28 4591717.42 4591717.56 0.0276 0.0201

Uranus 7860-07-27 03:36 G 4592073.53 4592073.65 4592073.80 0.0143 0.0111

Uranus 7861-03-10 14:52 G 4592299.93 4592300.12 4592300.33 0.0143 0.0059

Uranus 7861-10-23 01:55 G 4592526.37 4592526.58 4592526.80 0.0143 0.0008

Uranus 7862-06-06 12:57 G 4592752.84 4592753.04 4592753.25 0.0143 0.0045

Uranus 7863-01-18 23:31 G 4592979.33 4592979.48 4592979.65 0.0142 0.0096

Jupiter 7866-02-02 12:28 G 4594089.83 4594090.02 4594090.22 0.0486 0.0167

Jupiter 7871-12-08 17:45 G 4596225.05 4596225.24 4596225.44 0.0542 0.0183

Saturn 7872-10-19 01:40 G 4596540.39 4596540.57 4596540.76 0.0285 0.0135

Saturn 7873-06-05 17:02 G 4596770.02 4596770.21 4596770.41 0.0284 0.0098

Mars 7873-07-12 18:43 G 4596807.20 4596807.28 4596807.35 0.1710 0.1514

Jupiter 7877-10-08 18:28 G 4598356.08 4598356.27 4598356.46 0.0485 0.0174

Mars 7878-02-27 06:14 G 4598497.63 4598497.76 4598497.89 0.1802 0.1163

Jupiter 7883-08-13 02:38 G 4600490.45 4600490.61 4600490.78 0.0542 0.0317

Neptune 7884-07-07 03:50 G 4600819.65 4600819.66 4600819.70 0.0088 0.0087

Neptune 7885-02-17 16:33 G 4601045.06 4601045.19 4601045.33 0.0088 0.0069

Neptune 7885-10-01 04:48 G 4601270.54 4601270.70 4601270.90 0.0088 0.0052

Neptune 7886-05-14 17:45 G 4601496.05 4601496.24 4601496.45 0.0088 0.0034

Neptune 7886-12-26 06:28 G 4601721.56 4601721.77 4601721.99 0.0088 0.0016

Neptune 7887-08-08 19:11 G 4601947.08 4601947.30 4601947.52 0.0088 0.0002

Saturn 7887-11-14 08:52 G 4602044.73 4602044.87 4602045.03 0.0274 0.0192

Neptune 7888-03-21 07:40 G 4602172.61 4602172.82 4602173.04 0.0088 0.0020

Saturn 7888-06-30 17:16 G 4602274.01 4602274.22 4602274.43 0.0276 0.0018

Neptune 7888-11-01 20:09 G 4602398.15 4602398.34 4602398.55 0.0088 0.0038

Saturn 7889-02-15 02:23 G 4602503.49 4602503.60 4602503.72 0.0277 0.0231

Neptune 7889-06-15 08:38 G 4602623.71 4602623.86 4602624.05 0.0088 0.0056

Neptune 7890-01-26 21:07 G 4602849.29 4602849.38 4602849.52 0.0088 0.0074

Pluto 7897-11-28 05:02 G 4605711.54 4605711.71 4605711.88 0.0067 0.0043

Pluto 7898-07-11 10:19 G 4605936.71 4605936.93 4605937.15 0.0068 0.0001

Pluto 7899-02-21 15:50 G 4606161.98 4606162.16 4606162.33 0.0068 0.0042

Jupiter 7901-10-11 20:52 G 4607124.24 4607124.37 4607124.50 0.0486 0.0370

Saturn 7902-05-02 11:02 G 4607326.76 4607326.96 4607327.16 0.0285 0.0099

Saturn 7902-12-18 02:23 G 4607556.42 4607556.60 4607556.79 0.0284 0.0134

Uranus 7903-12-11 02:09 G 4607914.55 4607914.59 4607914.66 0.0135 0.0130

Uranus 7904-07-24 08:23 G 4608140.69 4608140.85 4608141.02 0.0135 0.0087

Uranus 7905-03-07 14:38 G 4608366.91 4608367.11 4608367.32 0.0135 0.0044

Mars 7905-07-12 20:52 G 4608494.19 4608494.37 4608494.54 0.1721 0.0056

Uranus 7905-10-19 21:21 G 4608593.17 4608593.39 4608593.60 0.0135 0.0002

Uranus 7906-06-03 03:36 G 4608819.45 4608819.65 4608819.87 0.0136 0.0044

Uranus 7907-01-15 10:19 G 4609045.77 4609045.93 4609046.10 0.0136 0.0087

Jupiter 7907-08-17 09:50 G 4609259.80 4609259.91 4609260.02 0.0542 0.0454

Uranus 7907-08-29 17:02 G 4609272.16 4609272.21 4609272.27 0.0136 0.0132

Mars 7911-12-27 01:26 G 4610852.42 4610852.56 4610852.70 0.1820 0.1040

Jupiter 7913-06-17 03:07 G 4611390.43 4611390.63 4611390.83 0.0485 0.0030

Saturn 7917-05-27 14:23 G 4612830.94 4612831.10 4612831.28 0.0274 0.0165

Saturn 7918-01-11 22:33 G 4613060.23 4613060.44 4613060.65 0.0275 0.0044

Saturn	7918-08-29 07:11 G	4613289.73	4613289.80	4613289.89	0.0276	0.0256
Jupiter	7919-04-21 21:36 G	4613525.19	4613525.40	4613525.60	0.0543	0.0031
Jupiter	7925-02-20 08:23 G	4615656.70	4615656.85	4615657.01	0.0485	0.0313
Jupiter	7930-12-25 08:52 G	4617790.81	4617790.87	4617790.93	0.0543	0.0517
Saturn	7931-11-12 11:02 G	4618112.76	4618112.96	4618113.17	0.0285	0.0078
Saturn	7932-06-29 02:23 G	4618342.43	4618342.60	4618342.78	0.0284	0.0155
Mars	7937-07-12 00:14 G	4620181.43	4620181.51	4620181.60	0.1734	0.1502
Moon	7942-02-01 01:26 G	4621846.41	4621846.56	4621846.71	0.2679	0.0601
Earth	7942-02-01 06:43 G	4621846.63	4621846.78	4621846.92	0.2676	0.0962 *
Mars	7943-12-26 12:57 G	4622539.89	4622540.04	4622540.20	0.1806	0.0856
Uranus	7944-03-27 11:31 G	4622631.91	4622631.98	4622632.07	0.0144	0.0133
Uranus	7944-11-08 22:33 G	4622858.28	4622858.44	4622858.64	0.0143	0.0082
Uranus	7945-06-23 10:04 G	4623084.71	4623084.92	4623085.13	0.0143	0.0029
Uranus	7946-02-04 20:52 G	4623311.16	4623311.37	4623311.59	0.0143	0.0023
Uranus	7946-09-19 07:40 G	4623537.64	4623537.82	4623538.01	0.0143	0.0074
Saturn	7946-12-07 17:02 G	4623617.02	4623617.21	4623617.39	0.0274	0.0140
Uranus	7947-05-03 18:14 G	4623764.17	4623764.26	4623764.38	0.0142	0.0125
Saturn	7947-07-25 01:11 G	4623846.35	4623846.55	4623846.76	0.0276	0.0070
Jupiter	7949-02-22 11:31 G	4624424.81	4624424.98	4624425.17	0.0486	0.0233
Jupiter	7954-12-28 16:33 G	4626560.01	4626560.19	4626560.37	0.0542	0.0255
Saturn	7960-10-07 03:07 G	4628669.59	4628669.63	4628669.68	0.0286	0.0278
Jupiter	7960-10-28 17:16 G	4628691.02	4628691.22	4628691.42	0.0485	0.0110
Saturn	7961-05-24 19:26 G	4628899.10	4628899.31	4628899.52	0.0285	0.0044
Saturn	7962-01-09 10:48 G	4629128.80	4629128.95	4629129.11	0.0283	0.0188
Jupiter	7966-09-02 01:11 G	4630825.37	4630825.55	4630825.73	0.0543	0.0245
Neptune	7967-11-18 07:40 G	4631267.71	4631267.82	4631267.97	0.0089	0.0073
Neptune	7968-06-30 21:21 G	4631493.22	4631493.39	4631493.57	0.0089	0.0054
Neptune	7969-02-11 10:48 G	4631718.75	4631718.95	4631719.16	0.0089	0.0035
Neptune	7969-09-25 00:14 G	4631944.30	4631944.51	4631944.73	0.0089	0.0016
Neptune	7970-05-08 13:40 G	4632169.85	4632170.07	4632170.29	0.0089	0.0003

Neptune 7970-12-20 02:38 G 4632395.41 4632395.61 4632395.84 0.0089 0.0023

Mars 7971-05-10 05:31 G 4632536.56 4632536.73 4632536.90 0.1717 0.0288

Neptune 7971-08-02 16:19 G 4632620.98 4632621.18 4632621.38 0.0089 0.0041

Neptune 7972-03-15 05:31 G 4632846.57 4632846.73 4632846.90 0.0089 0.0060

Jupiter 7972-07-03 23:31 G 4632957.41 4632957.48 4632957.57 0.0485 0.0447

Neptune 7972-10-26 18:43 G 4633072.19 4633072.28 4633072.40 0.0089 0.0079

Saturn 7976-06-18 22:48 G 4634403.26 4634403.45 4634403.64 0.0274 0.0112

Saturn 7977-02-03 06:57 G 4634632.59 4634632.79 4634632.99 0.0275 0.0097

Mars 7977-10-23 07:11 G 4634894.69 4634894.80 4634894.92 0.1824 0.1388

Pluto 7984-05-06 15:50 G 4637281.98 4637282.16 4637282.35 0.0077 0.0042

Jupiter 7984-10-30 20:09 G 4637459.26 4637459.34 4637459.43 0.0486 0.0436

Pluto 7984-12-18 00:43 G 4637507.32 4637507.53 4637507.75 0.0076 0.0021

Uranus 7988-03-23 18:43 G 4638699.16 4638699.28 4638699.43 0.0135 0.0105

Uranus 7988-11-05 01:11 G 4638925.37 4638925.55 4638925.75 0.0135 0.0062

Uranus 7989-06-19 07:55 G 4639151.61 4639151.83 4639152.04 0.0135 0.0019

Uranus 7990-01-31 14:09 G 4639377.88 4639378.09 4639378.31 0.0136 0.0025

Saturn 7990-04-19 03:07 G 4639455.54 4639455.63 4639455.72 0.0286 0.0257

Uranus 7990-09-14 20:38 G 4639604.18 4639604.36 4639604.56 0.0136 0.0069

Saturn 7990-12-04 19:11 G 4639685.09 4639685.30 4639685.51 0.0285 0.0024

Uranus 7991-04-29 03:21 G 4639830.53 4639830.64 4639830.77 0.0136 0.0113

Saturn 7991-07-22 10:19 G 4639914.79 4639914.93 4639915.07 0.0284 0.0208

Jupiter 7996-07-06 02:23 G 4641725.40 4641725.60 4641725.80 0.0485 0.0096

9TH MILLENNIUM CE

This is a list of transits of Venus in the 9th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**8002-05-10 23:31**	**G**	**4643860.28**	**4643860.48**	**4643860.68**	**0.0542**	**0.0060**	
Mars	**8003-05-09 09:07**	**G**	**4644223.76**	**4644223.88**	**4644224.00**	**0.1730**	**0.1254**	
Saturn	**8005-12-30 00:28**	**G**	**4645189.32**	**4645189.52**	**4645189.72**	**0.0275**	**0.0089**	
Saturn	**8006-08-16 08:38**	**G**	**4645418.67**	**4645418.86**	**4645419.05**	**0.0276**	**0.0122**	
Jupiter	**8008-03-11 07:55**	**G**	**4645991.66**	**4645991.83**	**4645992.01**	**0.0485**	**0.0247**	
Mars	**8009-10-22 19:40**	**G**	**4646582.15**	**4646582.32**	**4646582.48**	**0.1810**	**0.0538**	
Jupiter	**8014-01-13 08:52**	**G**	**4648125.76**	**4648125.87**	**4648125.99**	**0.0543**	**0.0438**	
Saturn	**8019-10-30 10:04**	**G**	**4650241.79**	**4650241.92**	**4650242.05**	**0.0286**	**0.0226**	
Saturn	**8020-06-16 02:09**	**G**	**4650471.38**	**4650471.59**	**4650471.80**	**0.0285**	**0.0009**	
Saturn	**8021-01-31 17:16**	**G**	**4650701.12**	**4650701.22**	**4650701.34**	**0.0283**	**0.0240**	
Uranus	**8028-07-09 05:31**	**G**	**4653416.59**	**4653416.73**	**4653416.88**	**0.0143**	**0.0105**	
Uranus	**8029-02-20 16:33**	**G**	**4653643.00**	**4653643.19**	**4653643.40**	**0.0143**	**0.0053**	
Uranus	**8029-10-05 03:50**	**G**	**4653869.44**	**4653869.66**	**4653869.88**	**0.0143**	**0.0001**	
Uranus	**8030-05-19 14:52**	**G**	**4654095.92**	**4654096.12**	**4654096.32**	**0.0143**	**0.0050**	
Uranus	**8031-01-01 01:11**	**G**	**4654322.42**	**4654322.55**	**4654322.72**	**0.0142**	**0.0102**	
Jupiter	**8032-03-13 11:31**	**G**	**4654759.83**	**4654759.98**	**4654760.14**	**0.0485**	**0.0304**	
Saturn	**8034-11-24 22:33**	**G**	**4655746.41**	**4655746.44**	**4655746.50**	**0.0273**	**0.0266**	
Saturn	**8035-07-12 06:14**	**G**	**4655975.56**	**4655975.76**	**4655975.97**	**0.0274**	**0.0060**	
Saturn	**8036-02-26 14:23**	**G**	**4656204.93**	**4656205.10**	**4656205.28**	**0.0275**	**0.0149**	
Mars	**8037-03-06 15:21**	**G**	**4656578.97**	**4656579.14**	**4656579.30**	**0.1714**	**0.0507**	
Jupiter	**8038-01-16 17:31**	**G**	**4656895.08**	**4656895.23**	**4656895.39**	**0.0543**	**0.0344**	
Mars	**8043-08-20 13:26**	**G**	**4658937.01**	**4658937.06**	**4658937.11**	**0.1828**	**0.1739**	
Jupiter	**8043-11-17 17:02**	**G**	**4659026.01**	**4659026.21**	**4659026.42**	**0.0485**	**0.0042**	
Saturn	**8049-05-11 10:04**	**G**	**4661027.78**	**4661027.92**	**4661028.07**	**0.0286**	**0.0204**	
Neptune	**8049-05-23 02:23**	**G**	**4661039.52**	**4661039.60**	**4661039.72**	**0.0088**	**0.0078**	
Jupiter	**8049-09-21 05:31**	**G**	**4661160.53**	**4661160.73**	**4661160.92**	**0.0543**	**0.0142**	
Saturn	**8049-12-27 02:09**	**G**	**4661257.38**	**4661257.59**	**4661257.80**	**0.0285**	**0.0030**	

Neptune 8050-01-03 15:07 G 4661264.99 4661265.13 4661265.31 0.0088 0.0060

Saturn 8050-08-13 17:16 G 4661487.14 4661487.22 4661487.30 0.0283 0.0260

Neptune 8050-08-17 03:50 G 4661490.48 4661490.66 4661490.86 0.0088 0.0042

Neptune 8051-03-30 16:33 G 4661715.99 4661716.19 4661716.41 0.0088 0.0024

Neptune 8051-11-11 05:16 G 4661941.50 4661941.72 4661941.94 0.0088 0.0006

Neptune 8052-06-23 17:45 G 4662167.03 4662167.24 4662167.47 0.0088 0.0012

Neptune 8053-02-04 06:14 G 4662392.57 4662392.76 4662392.98 0.0088 0.0030

Neptune 8053-09-17 18:43 G 4662618.11 4662618.28 4662618.48 0.0088 0.0048

Neptune 8054-05-01 07:26 G 4662843.69 4662843.81 4662843.98 0.0088 0.0066

Neptune 8054-12-12 19:55 G 4663069.29 4663069.33 4663069.42 0.0088 0.0084

Jupiter 8055-07-23 23:16 G 4663292.35 4663292.47 4663292.60 0.0485 0.0381

Saturn 8064-06-05 23:16 G 4666532.39 4666532.47 4666532.57 0.0274 0.0246

Saturn 8065-01-21 06:57 G 4666761.59 4666761.79 4666762.01 0.0275 0.0040

Saturn 8065-09-07 15:21 G 4666990.98 4666991.14 4666991.31 0.0276 0.0172

Mars 8069-03-05 18:14 G 4668266.12 4668266.26 4668266.40 0.1726 0.1010

Uranus 8071-11-22 05:16 G 4669257.64 4669257.72 4669257.81 0.0135 0.0123

Uranus 8072-07-05 11:02 G 4669483.81 4669483.96 4669484.15 0.0135 0.0081

Uranus 8073-02-16 17:45 G 4669710.03 4669710.24 4669710.45 0.0135 0.0037

Uranus 8073-10-01 00:14 G 4669936.29 4669936.51 4669936.73 0.0135 0.0006

Uranus 8074-05-15 06:43 G 4670162.58 4670162.78 4670162.99 0.0136 0.0050

Uranus 8074-12-27 13:11 G 4670388.91 4670389.05 4670389.22 0.0136 0.0094

Mars 8075-08-20 02:23 G 4670624.42 4670624.60 4670624.77 0.1814 0.0219

Saturn 8078-11-21 16:04 G 4671814.01 4671814.17 4671814.34 0.0285 0.0175

Saturn 8079-07-09 08:09 G 4672043.63 4672043.84 4672044.05 0.0284 0.0059

Jupiter 8079-07-26 02:23 G 4672060.41 4672060.60 4672060.79 0.0485 0.0168

Jupiter 8085-05-29 22:04 G 4674195.22 4674195.42 4674195.62 0.0543 0.0134

Earth 8087-07-30 11:16 G 4674986.82 4674986.97 4674987.13 0.2658 0.0296

Moon 8087-07-30 15:36 G 4674986.99 4674987.15 4674987.32 0.2653 0.0169 *

Jupiter 8091-03-31 08:52 G 4676326.68 4676326.87 4676327.07 0.0485 0.0172

Saturn 8093-12-17 06:00 G 4677318.63 4677318.75 4677318.89 0.0273 0.0215

Saturn	8094-08-03 13:40 G	4677547.86	4677548.07	4677548.28	0.0274	0.0009
Saturn	8095-03-20 22:04 G	4677777.27	4677777.42	4677777.56	0.0275	0.0201
Jupiter	8097-02-01 09:07 G	4678460.73	4678460.88	4678461.04	0.0543	0.0357
Mars	8103-01-03 00:43 G	4680621.37	4680621.53	4680621.69	0.1710	0.0732
Saturn	8108-06-03 16:33 G	4682600.01	4682600.19	4682600.37	0.0286	0.0152
Saturn	8109-01-19 08:23 G	4682829.65	4682829.85	4682830.05	0.0284	0.0081
Uranus	8112-03-09 12:14 G	4683974.92	4683975.01	4683975.11	0.0143	0.0129
Uranus	8112-10-21 23:16 G	4684201.30	4684201.47	4684201.67	0.0143	0.0077
Uranus	8113-06-05 10:48 G	4684427.74	4684427.95	4684428.17	0.0143	0.0025
Uranus	8114-01-17 21:50 G	4684654.20	4684654.41	4684654.63	0.0143	0.0027
Uranus	8114-09-01 08:38 G	4684880.68	4684880.86	4684881.05	0.0143	0.0078
Jupiter	8115-04-03 11:31 G	4685094.86	4685094.98	4685095.11	0.0486	0.0373
Uranus	8115-04-15 19:11 G	4685107.22	4685107.30	4685107.40	0.0142	0.0128
Jupiter	8121-02-05 20:52 G	4687230.26	4687230.37	4687230.49	0.0542	0.0442
Saturn	8123-06-30 06:00 G	4688104.61	4688104.75	4688104.90	0.0274	0.0196
Saturn	8124-02-14 13:55 G	4688333.86	4688334.08	4688334.29	0.0275	0.0013
Saturn	8124-09-30 22:19 G	4688563.31	4688563.43	4688563.56	0.0276	0.0222
Jupiter	8126-12-07 17:31 G	4689361.03	4689361.23	4689361.43	0.0485	0.0031
Neptune	8132-02-20 17:02 G	4691262.15	4691262.21	4691262.32	0.0089	0.0082
Neptune	8132-10-03 06:43 G	4691487.64	4691487.78	4691487.96	0.0089	0.0063
Jupiter	8132-10-11 06:43 G	4691495.58	4691495.78	4691495.99	0.0543	0.0056
Neptune	8133-05-16 20:23 G	4691713.17	4691713.35	4691713.55	0.0089	0.0044
Neptune	8133-12-28 09:50 G	4691938.70	4691938.91	4691939.13	0.0089	0.0025
Neptune	8134-08-10 23:16 G	4692164.25	4692164.47	4692164.69	0.0089	0.0006
Mars	8135-01-02 03:07 G	4692308.48	4692308.63	4692308.79	0.1723	0.0766
Neptune	8135-03-24 12:28 G	4692389.81	4692390.02	4692390.25	0.0089	0.0014
Neptune	8135-11-05 01:55 G	4692615.39	4692615.58	4692615.80	0.0089	0.0033
Neptune	8136-06-17 15:07 G	4692840.97	4692841.13	4692841.33	0.0089	0.0052
Neptune	8137-01-29 04:19 G	4693066.57	4693066.68	4693066.84	0.0089	0.0071
Neptune	8137-09-11 17:45 G	4693292.24	4693292.24	4693292.27	0.0089	0.0089

Saturn	8137-12-14 21:50 G	4693386.22	4693386.41	4693386.60	0.0285	0.0124	
Saturn	8138-08-01 13:40 G	4693615.88	4693616.07	4693616.27	0.0284	0.0110	
Jupiter	8138-08-12 23:45 G	4693627.34	4693627.49	4693627.65	0.0485	0.0307	
Mars	8141-06-17 08:38 G	4694666.69	4694666.86	4694667.03	0.1818	0.0117	
Pluto	8145-11-02 12:57 G	4696265.91	4696266.04	4696266.21	0.0067	0.0049	
Pluto	8146-06-15 18:14 G	4696491.05	4696491.26	4696491.49	0.0067	0.0008	
Pluto	8147-01-26 23:45 G	4696716.31	4696716.49	4696716.68	0.0068	0.0036	
Saturn	8153-01-09 13:11 G	4698890.89	4698891.05	4698891.22	0.0273	0.0164	
Saturn	8153-08-26 20:52 G	4699120.17	4699120.37	4699120.59	0.0274	0.0044	
Saturn	8154-04-13 05:16 G	4699349.64	4699349.72	4699349.81	0.0275	0.0252	
Uranus	8156-03-05 21:21 G	4700042.25	4700042.39	4700042.54	0.0135	0.0099	
Uranus	8156-10-18 03:36 G	4700268.46	4700268.65	4700268.86	0.0135	0.0057	
Uranus	8157-06-01 10:19 G	4700494.71	4700494.93	4700495.15	0.0135	0.0013	
Uranus	8158-01-13 16:48 G	4700720.99	4700721.20	4700721.41	0.0135	0.0031	
Uranus	8158-08-27 23:02 G	4700947.29	4700947.46	4700947.65	0.0136	0.0075	
Uranus	8159-04-11 06:00 G	4701173.65	4701173.75	4701173.86	0.0136	0.0118	
Jupiter	8162-08-15 02:38 G	4702395.43	4702395.61	4702395.79	0.0485	0.0238	
Saturn	8167-06-26 23:02 G	4704172.26	4704172.46	4704172.66	0.0285	0.0100	
Saturn	8168-02-11 14:38 G	4704401.93	4704402.11	4704402.30	0.0284	0.0133	
Jupiter	8168-06-19 02:23 G	4704530.43	4704530.60	4704530.79	0.0543	0.0239	
Mars	8168-10-30 10:33 G	4704663.79	4704663.94	4704664.08	0.1707	0.0948	
Mars	8173-06-16 21:07 G	4706354.36	4706354.38	4706354.40	0.1804	0.1785	
Jupiter	8174-04-20 08:52 G	4706661.67	4706661.87	4706662.07	0.0485	0.0103	
Jupiter	8180-02-22 13:11 G	4708795.87	4708796.05	4708796.23	0.0543	0.0255	
Saturn	8182-07-22 13:11 G	4709676.87	4709677.05	4709677.23	0.0274	0.0145	
Saturn	8183-03-08 21:07 G	4709906.17	4709906.38	4709906.59	0.0275	0.0063	
Saturn	8183-10-24 05:45 G	4710135.72	4710135.74	4710135.77	0.0276	0.0273	
Earth	8185-02-02 07:26 G	4710602.66	4710602.81	4710602.96	0.2675	0.0850	
Moon	8185-02-02 13:11 G	4710602.92	4710603.05	4710603.18	0.2674	0.1573	*
Jupiter	8185-12-24 14:38 G	4710928.03	4710928.11	4710928.19	0.0485	0.0445	

Moon 8193-01-31 01:55 G 4713522.49 4713522.58 4713522.67 0.2668 0.2223

Uranus 8196-06-21 05:16 G 4714759.58 4714759.72 4714759.88 0.0143 0.0102

Saturn 8197-01-06 03:36 G 4714958.45 4714958.65 4714958.86 0.0285 0.0073

Uranus 8197-02-02 16:33 G 4714985.99 4714986.19 4714986.40 0.0143 0.0051

Saturn 8197-08-23 19:26 G 4715188.14 4715188.31 4715188.49 0.0284 0.0160

Uranus 8197-09-17 03:50 G 4715212.44 4715212.66 4715212.88 0.0143 0.0001

Jupiter 8198-04-22 12:14 G 4715429.94 4715430.01 4715430.09 0.0486 0.0449

Uranus 8198-05-01 14:38 G 4715438.92 4715439.11 4715439.32 0.0143 0.0053

Uranus 8198-12-14 01:26 G 4715665.42 4715665.56 4715665.72 0.0142 0.0104

Mars 8200-10-30 12:14 G 4716350.85 4716351.01 4716351.18 0.1719 0.0533

Jupiter 8204-02-26 18:43 G 4717565.23 4717565.28 4717565.35 0.0543 0.0513

Mars 8207-04-15 15:07 G 4718708.96 4718709.13 4718709.30 0.1822 0.0452

Jupiter 8209-12-27 18:28 G 4719696.08 4719696.27 4719696.48 0.0485 0.0108

Saturn 8212-02-02 20:52 G 4720463.18 4720463.37 4720463.56 0.0274 0.0112

Saturn 8212-09-19 04:48 G 4720692.50 4720692.70 4720692.90 0.0275 0.0096

Neptune 8213-08-26 12:57 G 4721034.02 4721034.04 4721034.11 0.0088 0.0086

Neptune 8214-04-09 01:40 G 4721259.45 4721259.57 4721259.73 0.0088 0.0068

Neptune 8214-11-20 14:23 G 4721484.93 4721485.10 4721485.30 0.0088 0.0050

Neptune 8215-07-04 03:07 G 4721710.43 4721710.63 4721710.84 0.0088 0.0032

Jupiter 8215-11-01 06:00 G 4721830.54 4721830.75 4721830.95 0.0543 0.0022

Neptune 8216-02-14 15:50 G 4721935.94 4721936.16 4721936.38 0.0088 0.0014

Neptune 8216-09-27 04:33 G 4722161.47 4722161.69 4722161.91 0.0088 0.0004

Neptune 8217-05-10 17:02 G 4722387.00 4722387.21 4722387.43 0.0088 0.0022

Neptune 8217-12-22 05:31 G 4722612.54 4722612.73 4722612.94 0.0088 0.0040

Neptune 8218-08-04 18:00 G 4722838.10 4722838.25 4722838.43 0.0088 0.0058

Neptune 8219-03-18 06:28 G 4723063.68 4723063.77 4723063.90 0.0088 0.0076

Jupiter 8221-09-01 23:45 G 4723962.32 4723962.49 4723962.67 0.0485 0.0239

Saturn 8225-12-02 13:40 G 4725515.04 4725515.07 4725515.12 0.0286 0.0280

Saturn 8226-07-20 06:14 G 4725744.55 4725744.76 4725744.97 0.0285 0.0046

Saturn 8227-03-06 21:36 G 4725974.25 4725974.40 4725974.57 0.0284 0.0186

Jupiter 8227-07-06 17:45 G 4726096.14 4726096.24 4726096.34 0.0543 0.0468

Pluto 8232-04-10 23:31 G 4727836.33 4727836.48 4727836.66 0.0077 0.0052

Pluto 8232-11-22 08:38 G 4728061.65 4728061.86 4728062.09 0.0076 0.0011

Pluto 8233-07-05 17:02 G 4728287.18 4728287.21 4728287.30 0.0076 0.0073

Mars 8234-08-28 20:09 G 4728706.21 4728706.34 4728706.47 0.1704 0.1167

Mars 8239-04-15 03:21 G 4730396.54 4730396.64 4730396.74 0.1809 0.1466

Uranus 8239-11-05 06:57 G 4730600.70 4730600.79 4730600.91 0.0135 0.0119

Uranus 8240-06-18 13:11 G 4730826.89 4730827.05 4730827.25 0.0135 0.0076

Uranus 8241-01-30 19:55 G 4731053.12 4731053.33 4731053.54 0.0135 0.0032

Saturn 8241-08-14 20:52 G 4731249.17 4731249.37 4731249.57 0.0274 0.0093

Uranus 8241-09-14 02:09 G 4731279.38 4731279.59 4731279.81 0.0135 0.0011

Saturn 8242-04-01 04:48 G 4731478.51 4731478.70 4731478.90 0.0275 0.0116

Uranus 8242-04-28 08:38 G 4731505.67 4731505.86 4731506.07 0.0136 0.0055

Uranus 8242-12-10 15:07 G 4731732.00 4731732.13 4731732.30 0.0136 0.0099

Jupiter 8245-09-04 02:38 G 4732730.45 4732730.61 4732730.77 0.0485 0.0309

Jupiter 8251-07-10 03:50 G 4734865.50 4734865.66 4734865.82 0.0543 0.0324

Saturn 8255-06-14 18:14 G 4736301.16 4736301.26 4736301.36 0.0286 0.0253

Saturn 8256-01-30 10:33 G 4736530.73 4736530.94 4736531.15 0.0285 0.0019

Saturn 8256-09-16 01:55 G 4736760.45 4736760.58 4736760.73 0.0284 0.0213

Jupiter 8257-05-10 09:21 G 4736996.68 4736996.89 4736997.09 0.0485 0.0032

Jupiter 8263-03-14 10:19 G 4739130.74 4739130.93 4739131.12 0.0543 0.0191

Mars 8266-08-27 21:21 G 4740393.22 4740393.39 4740393.57 0.1715 0.0294

Jupiter 8269-01-13 15:36 G 4741263.02 4741263.15 4741263.28 0.0485 0.0372

Saturn 8270-07-10 21:21 G 4741806.35 4741806.39 4741806.46 0.0273 0.0264

Saturn 8271-02-25 05:02 G 4742035.51 4742035.71 4742035.92 0.0274 0.0059

Saturn 8271-10-12 13:26 G 4742264.88 4742265.06 4742265.24 0.0275 0.0150

Mars 8273-02-09 20:52 G 4742751.21 4742751.37 4742751.52 0.1827 0.0807

Uranus 8280-02-20 11:02 G 4745317.88 4745317.96 4745318.08 0.0143 0.0128

Uranus 8280-10-03 22:33 G 4745544.26 4745544.44 4745544.63 0.0143 0.0076

Uranus 8281-05-18 09:50 G 4745770.70 4745770.91 4745771.13 0.0143 0.0024

Uranus 8281-12-30 20:52 G 4745997.16 4745997.37 4745997.59 0.0143 0.0028

Uranus 8282-08-14 07:55 G 4746223.65 4746223.83 4746224.01 0.0143 0.0079

Uranus 8283-03-28 18:28 G 4746450.19 4746450.27 4746450.37 0.0142 0.0129

Saturn 8284-12-24 22:19 G 4747087.30 4747087.43 4747087.56 0.0286 0.0223

Saturn 8285-08-11 14:23 G 4747316.89 4747317.10 4747317.31 0.0285 0.0011

Saturn 8286-03-29 05:45 G 4747546.63 4747546.74 4747546.85 0.0284 0.0241

Jupiter 8293-01-15 17:31 G 4750031.04 4750031.23 4750031.42 0.0485 0.0171

Neptune 8297-01-05 17:02 G 4751482.08 4751482.21 4751482.34 0.0089 0.0071

Neptune 8297-08-19 06:28 G 4751707.59 4751707.77 4751707.94 0.0089 0.0052

Neptune 8298-04-01 19:26 G 4751933.12 4751933.31 4751933.53 0.0089 0.0033

Neptune 8298-11-13 09:21 G 4752158.67 4752158.89 4752159.11 0.0089 0.0014

Jupiter 8298-11-20 09:21 G 4752165.69 4752165.89 4752166.09 0.0543 0.0120

Neptune 8299-06-26 22:48 G 4752384.23 4752384.45 4752384.67 0.0089 0.0005

Saturn 8300-01-20 21:50 G 4752592.33 4752592.41 4752592.51 0.0273 0.0245

Neptune 8300-02-07 11:45 G 4752609.79 4752609.99 4752610.22 0.0089 0.0025

Mars 8300-06-26 06:00 G 4752748.65 4752748.75 4752748.85 0.1700 0.1383

Saturn 8300-09-07 05:31 G 4752821.53 4752821.73 4752821.95 0.0274 0.0040

Neptune 8300-09-21 01:11 G 4752835.37 4752835.55 4752835.76 0.0089 0.0043

Saturn 8301-04-24 13:55 G 4753050.91 4753051.08 4753051.24 0.0275 0.0170

Neptune 8301-05-04 14:23 G 4753060.96 4753061.10 4753061.28 0.0089 0.0063

Neptune 8301-12-16 03:50 G 4753286.59 4753286.66 4753286.77 0.0089 0.0082

Jupiter 8304-09-21 23:02 G 4754297.27 4754297.46 4754297.65 0.0485 0.0173

Mars 8305-02-10 09:50 G 4754438.78 4754438.91 4754439.05 0.1813 0.1151

Jupiter 8310-07-26 18:57 G 4756431.15 4756431.29 4756431.43 0.0543 0.0381

Saturn 8314-07-08 02:09 G 4757873.45 4757873.59 4757873.75 0.0286 0.0198

Saturn 8315-02-22 18:43 G 4758103.07 4758103.28 4758103.49 0.0285 0.0037

Saturn 8315-10-10 09:50 G 4758332.85 4758332.91 4758332.99 0.0283 0.0267

Uranus 8324-02-17 23:02 G 4761385.32 4761385.46 4761385.63 0.0135 0.0095

Uranus 8324-10-01 05:16 G 4761611.53 4761611.72 4761611.93 0.0135 0.0052

Uranus 8325-05-15 12:00 G 4761837.78 4761838.00 4761838.21 0.0135 0.0009

Uranus 8325-12-27 18:28 G 4762064.06 4762064.27 4762064.48 0.0136 0.0035

Uranus 8326-08-11 00:43 G 4762290.36 4762290.53 4762290.72 0.0136 0.0079

Uranus 8327-03-25 07:26 G 4762516.72 4762516.81 4762516.91 0.0136 0.0122

Jupiter 8328-09-24 02:52 G 4763065.50 4763065.62 4763065.75 0.0485 0.0381

Saturn 8329-08-03 06:28 G 4763378.64 4763378.77 4763378.91 0.0274 0.0209

Saturn 8330-03-20 14:23 G 4763607.88 4763608.10 4763608.31 0.0274 0.0004

Moon 8330-08-02 07:40 G 4763742.67 4763742.82 4763742.97 0.2661 0.0589

Earth 8330-08-02 12:57 G 4763742.88 4763743.04 4763743.19 0.2659 0.0362 *

Saturn 8330-11-04 22:48 G 4763837.31 4763837.45 4763837.59 0.0275 0.0206

Mars 8332-06-25 07:11 G 4764435.62 4764435.80 4764435.97 0.1712 0.0073

Jupiter 8334-07-30 00:43 G 4765200.40 4765200.53 4765200.68 0.0543 0.0390

Mars 8338-12-09 03:21 G 4766793.50 4766793.64 4766793.77 0.1831 0.1150

Jupiter 8340-05-30 07:55 G 4767331.62 4767331.83 4767332.03 0.0485 0.0033

Saturn 8344-01-18 08:09 G 4768659.67 4768659.84 4768660.02 0.0285 0.0164

Saturn 8344-09-04 00:14 G 4768889.30 4768889.51 4768889.71 0.0284 0.0070

Jupiter 8346-04-03 12:28 G 4769465.82 4769466.02 4769466.22 0.0543 0.0101

Jupiter 8352-02-03 13:40 G 4771597.92 4771598.07 4771598.23 0.0485 0.0312

Saturn 8359-02-13 07:11 G 4774164.66 4774164.80 4774164.97 0.0274 0.0190

Saturn 8359-09-30 15:21 G 4774393.93 4774394.14 4774394.36 0.0274 0.0019

Saturn 8360-05-16 23:45 G 4774623.38 4774623.49 4774623.61 0.0275 0.0228

Uranus 8364-06-04 04:48 G 4776102.55 4776102.70 4776102.86 0.0143 0.0101

Mars 8364-06-24 09:36 G 4776122.83 4776122.90 4776122.96 0.1723 0.1584

Uranus 8365-01-16 15:50 G 4776328.97 4776329.16 4776329.37 0.0143 0.0049

Uranus 8365-08-31 03:07 G 4776555.41 4776555.63 4776555.85 0.0143 0.0003

Uranus 8366-04-14 13:55 G 4776781.88 4776782.08 4776782.28 0.0143 0.0054

Mars 8366-04-23 15:36 G 4776791.10 4776791.15 4776791.21 0.1697 0.1596

Uranus 8366-11-27 00:28 G 4777008.39 4777008.52 4777008.68 0.0142 0.0105

Mars 8370-12-08 16:19 G 4778481.03 4778481.18 4778481.34 0.1817 0.0823

Saturn 8373-07-30 12:14 G 4779445.83 4779446.01 4779446.20 0.0285 0.0138

Saturn 8374-03-17 04:19 G 4779675.48 4779675.68 4779675.88 0.0284 0.0096

Jupiter 8376-02-05 16:48 G 4780366.02 4780366.20 4780366.38 0.0485 0.0239

Neptune 8378-07-12 13:11 G 4781253.94 4781254.05 4781254.16 0.0088 0.0075

Neptune 8379-02-23 01:40 G 4781479.41 4781479.57 4781479.74 0.0088 0.0057

Neptune 8379-10-06 14:23 G 4781704.90 4781705.10 4781705.30 0.0088 0.0039

Neptune 8380-05-19 03:07 G 4781930.42 4781930.63 4781930.84 0.0088 0.0021

Neptune 8380-12-30 15:36 G 4782155.93 4782156.15 4782156.37 0.0088 0.0004

Neptune 8381-08-13 04:04 G 4782381.46 4782381.67 4782381.89 0.0088 0.0015

Jupiter 8381-12-10 05:16 G 4782500.52 4782500.72 4782500.91 0.0543 0.0177

Neptune 8382-03-26 16:33 G 4782607.00 4782607.19 4782607.41 0.0088 0.0033

Neptune 8382-11-07 05:02 G 4782832.55 4782832.71 4782832.91 0.0088 0.0051

Neptune 8383-06-20 17:31 G 4783058.12 4783058.23 4783058.39 0.0088 0.0069

Neptune 8384-02-01 06:00 G 4783283.75 4783283.75 4783283.81 0.0088 0.0087

Jupiter 8387-10-11 22:48 G 4784632.25 4784632.45 4784632.65 0.0485 0.0106

Saturn 8388-08-25 16:33 G 4784951.01 4784951.19 4784951.36 0.0274 0.0153

Saturn 8389-04-12 00:28 G 4785180.31 4785180.52 4785180.73 0.0275 0.0055

Saturn 8389-11-27 08:52 G 4785409.83 4785409.87 4785409.94 0.0276 0.0265

Jupiter 8393-08-14 14:52 G 4786765.96 4786766.12 4786766.28 0.0543 0.0325

Pluto 8393-10-07 21:21 G 4786820.29 4786820.39 4786820.54 0.0067 0.0055

Pluto 8394-05-21 03:07 G 4787045.41 4787045.63 4787045.85 0.0067 0.0012

Pluto 8395-01-01 08:09 G 4787270.66 4787270.84 4787271.05 0.0068 0.0031

Mars 8398-04-22 16:19 G 4788478.00 4788478.18 4788478.35 0.1708 0.0176

Jupiter 8399-06-17 03:36 G 4788898.59 4788898.65 4788898.72 0.0485 0.0454

Saturn 8403-02-09 19:40 G 4790232.13 4790232.32 4790232.52 0.0285 0.0101

Saturn 8403-09-27 11:16 G 4790461.79 4790461.97 4790462.16 0.0284 0.0131

Mars 8404-10-05 08:38 G 4790835.77 4790835.86 4790835.96 0.1835 0.1519

Uranus 8407-10-18 08:38 G 4791943.75 4791943.86 4791943.98 0.0135 0.0114

Uranus 8408-05-31 14:38 G 4792169.94 4792170.11 4792170.31 0.0135 0.0072

Uranus 8409-01-12 21:21 G 4792396.17 4792396.39 4792396.60 0.0135 0.0029

Uranus 8409-08-27 03:36 G 4792622.43 4792622.65 4792622.87 0.0135 0.0015

Uranus 8410-04-10 09:50 G 4792848.72 4792848.91 4792849.12 0.0136 0.0059

Uranus 8410-11-22 16:33 G 4793075.06 4793075.19 4793075.34 0.0136 0.0102

Jupiter 8411-10-14 00:00 G 4793400.42 4793400.50 4793400.59 0.0485 0.0437

Jupiter 8417-08-18 02:52 G 4795535.53 4795535.62 4795535.71 0.0543 0.0482

Saturn 8418-03-07 18:00 G 4795737.07 4795737.25 4795737.44 0.0274 0.0132

Saturn 8418-10-23 02:09 G 4795966.39 4795966.59 4795966.80 0.0275 0.0077

Jupiter 8423-06-19 05:45 G 4797666.54 4797666.74 4797666.94 0.0485 0.0092

Moon 8428-02-05 02:38 G 4799358.45 4799358.61 4799358.77 0.2672 0.0131

Earth 8428-02-05 08:23 G 4799358.70 4799358.85 4799359.00 0.2673 0.0769 *

Jupiter 8429-04-22 12:43 G 4799800.83 4799801.03 4799801.23 0.0543 0.0020

Mars 8430-04-21 18:43 G 4800165.18 4800165.28 4800165.39 0.1720 0.1349

Saturn 8432-08-21 23:45 G 4801018.29 4801018.49 4801018.70 0.0285 0.0075

Saturn 8433-04-08 15:50 G 4801247.98 4801248.16 4801248.33 0.0284 0.0157

Jupiter 8435-02-22 12:00 G 4801932.83 4801933.00 4801933.18 0.0485 0.0250

Mars 8436-10-04 22:33 G 4802523.27 4802523.44 4802523.60 0.1821 0.0489

Jupiter 8440-12-25 19:11 G 4804066.28 4804066.30 4804066.32 0.0543 0.0538

Saturn 8447-09-18 03:07 G 4806523.43 4806523.63 4806523.83 0.0275 0.0094

Uranus 8448-02-02 11:16 G 4806660.87 4806660.97 4806661.08 0.0143 0.0125

Saturn 8448-05-04 11:16 G 4806752.78 4806752.97 4806753.17 0.0275 0.0115

Uranus 8448-09-15 22:19 G 4806887.25 4806887.43 4806887.63 0.0143 0.0074

Uranus 8449-04-30 09:36 G 4807113.69 4807113.90 4807114.12 0.0143 0.0022

Uranus 8449-12-12 20:38 G 4807340.15 4807340.36 4807340.58 0.0143 0.0030

Uranus 8450-07-27 07:26 G 4807566.64 4807566.81 4807566.99 0.0143 0.0081

Uranus 8451-03-10 17:45 G 4807793.18 4807793.24 4807793.34 0.0142 0.0132

Jupiter 8459-02-24 13:26 G 4810700.90 4810701.06 4810701.22 0.0485 0.0293

Neptune 8461-04-10 03:36 G 4811476.55 4811476.65 4811476.76 0.0089 0.0079

Saturn 8461-07-17 16:48 G 4811575.14 4811575.20 4811575.28 0.0286 0.0269

Neptune 8461-11-21 17:02 G 4811702.05 4811702.21 4811702.38 0.0089 0.0060

Saturn 8462-03-04 09:07 G 4811804.67 4811804.88 4811805.09 0.0285 0.0035

Neptune 8462-07-05 06:28 G 4811927.57 4811927.77 4811927.97 0.0089 0.0041

Saturn 8462-10-20 00:28 G 4812034.37 4812034.52 4812034.67 0.0284 0.0195

Neptune 8463-02-15 19:55 G 4812153.11 4812153.33 4812153.54 0.0089 0.0022

Neptune 8463-09-29 09:07 G 4812378.67 4812378.88 4812379.11 0.0089 0.0004

Mars 8464-02-18 02:23 G 4812520.43 4812520.60 4812520.77 0.1705 0.0380

Neptune 8464-05-11 22:33 G 4812604.23 4812604.44 4812604.66 0.0089 0.0016

Neptune 8464-12-23 11:45 G 4812829.80 4812829.99 4812830.21 0.0089 0.0036

Jupiter 8464-12-29 05:16 G 4812835.54 4812835.72 4812835.90 0.0543 0.0257

Neptune 8465-08-06 01:11 G 4813055.39 4813055.55 4813055.73 0.0089 0.0055

Neptune 8466-03-19 14:23 G 4813280.99 4813281.10 4813281.24 0.0089 0.0074

Jupiter 8470-10-30 19:26 G 4814967.10 4814967.31 4814967.51 0.0485 0.0053

Jupiter 8476-09-02 16:19 G 4817101.00 4817101.18 4817101.36 0.0543 0.0237

Saturn 8477-03-30 05:31 G 4817309.52 4817309.73 4817309.93 0.0274 0.0072

Saturn 8477-11-14 13:40 G 4817538.89 4817539.07 4817539.26 0.0275 0.0137

Pluto 8480-03-15 08:52 G 4818390.74 4818390.87 4818391.04 0.0077 0.0056

Pluto 8480-10-26 18:14 G 4818616.04 4818616.26 4818616.48 0.0076 0.0007

Pluto 8481-06-09 02:52 G 4818841.54 4818841.62 4818841.72 0.0076 0.0069

Jupiter 8482-07-06 00:57 G 4819233.42 4819233.54 4819233.65 0.0485 0.0398

Saturn 8491-01-27 20:23 G 4822361.24 4822361.35 4822361.46 0.0286 0.0243

Uranus 8491-06-17 17:45 G 4822502.23 4822502.24 4822502.29 0.0135 0.0134

Saturn 8491-09-14 12:43 G 4822590.81 4822591.03 4822591.24 0.0285 0.0011

Uranus 8492-01-30 00:00 G 4822728.35 4822728.50 4822728.67 0.0135 0.0091

Saturn 8492-05-01 04:19 G 4822820.55 4822820.68 4822820.81 0.0284 0.0221

Uranus 8492-09-12 06:14 G 4822954.57 4822954.76 4822954.98 0.0135 0.0049

Uranus 8493-04-26 12:43 G 4823180.82 4823181.03 4823181.25 0.0135 0.0006

Uranus 8493-12-08 19:11 G 4823407.10 4823407.30 4823407.52 0.0136 0.0039

Uranus 8494-07-23 01:40 G 4823633.41 4823633.57 4823633.75 0.0136 0.0082

Uranus 8495-03-06 08:09 G 4823859.77 4823859.84 4823859.93 0.0136 0.0126

Mars 8496-02-17 04:19 G 4824207.55 4824207.68 4824207.81 0.1716 0.1113

Jupiter 8500-09-06 21:50 G 4825870.38 4825870.41 4825870.45 0.0542 0.0533

Mars 8502-08-03 04:48 G 4826565.53 4826565.70 4826565.88 0.1825 0.0159

Saturn 8506-02-24 06:14 G 4827866.67 4827866.76 4827866.86 0.0274 0.0242

Jupiter 8506-07-09 03:50 G 4828001.46 4828001.66 4828001.85 0.0485 0.0152

Saturn 8506-10-11 14:38 G 4828095.89 4828096.11 4828096.32 0.0275 0.0035

Saturn 8507-05-28 23:02 G 4828325.30 4828325.46 4828325.63 0.0276 0.0175

Jupiter 8512-05-12 07:26 G 4830135.60 4830135.81 4830136.01 0.0543 0.0032

Jupiter 8518-03-14 08:09 G 4832267.66 4832267.84 4832268.03 0.0485 0.0200

Saturn 8520-08-10 07:11 G 4833147.66 4833147.80 4833147.96 0.0285 0.0201

Saturn 8521-03-27 23:16 G 4833377.26 4833377.47 4833377.68 0.0284 0.0032

Saturn 8521-11-12 14:09 G 4833607.03 4833607.09 4833607.18 0.0283 0.0262

Jupiter 8524-01-15 18:00 G 4834401.15 4834401.25 4834401.35 0.0543 0.0467

Mars 8529-12-16 12:00 G 4836562.84 4836563.00 4836563.17 0.1701 0.0600

Uranus 8532-05-17 04:48 G 4837445.55 4837445.70 4837445.87 0.0143 0.0098

Uranus 8532-12-29 16:04 G 4837671.97 4837672.17 4837672.38 0.0143 0.0046

Uranus 8533-08-13 03:07 G 4837898.42 4837898.63 4837898.85 0.0143 0.0006

Uranus 8534-03-27 13:55 G 4838124.89 4838125.08 4838125.28 0.0143 0.0057

Uranus 8534-11-09 00:28 G 4838351.39 4838351.52 4838351.67 0.0142 0.0108

Saturn 8535-09-06 09:21 G 4838652.77 4838652.89 4838653.03 0.0273 0.0219

Saturn 8536-04-22 17:31 G 4838882.02 4838882.23 4838882.44 0.0274 0.0012

Saturn 8536-12-08 01:55 G 4839111.43 4839111.58 4839111.73 0.0275 0.0197

Jupiter 8542-03-16 10:19 G 4841035.79 4841035.93 4841036.07 0.0485 0.0348

Neptune 8542-10-14 23:45 G 4841248.44 4841248.49 4841248.58 0.0088 0.0083

Neptune 8543-05-28 12:43 G 4841473.89 4841474.03 4841474.19 0.0088 0.0065

Neptune 8544-01-09 01:11 G 4841699.38 4841699.55 4841699.75 0.0088 0.0047

Neptune 8544-08-21 13:55 G 4841924.89 4841925.08 4841925.30 0.0088 0.0029

Neptune 8545-04-04 02:52 G 4842150.40 4842150.62 4842150.84 0.0088 0.0011

Neptune 8545-11-15 15:21 G 4842375.93 4842376.14 4842376.37 0.0088 0.0008

Neptune 8546-06-29 03:50 G 4842601.46 4842601.66 4842601.88 0.0088 0.0026

Neptune 8547-02-09 16:19 G 4842827.01 4842827.18 4842827.39 0.0088 0.0044

Neptune 8547-09-23 04:48 G 4843052.57 4843052.70 4843052.88 0.0088 0.0062

Jupiter 8548-01-19 04:33 G 4843170.54 4843170.69 4843170.86 0.0543 0.0335

Neptune 8548-05-05 17:31 G 4843278.16 4843278.23 4843278.34 0.0088 0.0080

Saturn	8550-02-20 10:33 G	4843933.78	4843933.94	4843934.11	0.0285	0.0176	
Saturn	8550-10-08 02:38 G	4844163.41	4844163.61	4844163.82	0.0284	0.0057	
Jupiter	8553-11-19 16:33 G	4845301.99	4845302.19	4845302.40	0.0485	0.0009	
Jupiter	8559-09-23 11:31 G	4847435.79	4847435.98	4847436.18	0.0543	0.0184	
Mars	8561-12-15 13:40 G	4848249.92	4848250.07	4848250.22	0.1713	0.0878	
Saturn	8565-03-18 17:31 G	4849439.08	4849439.23	4849439.40	0.0274	0.0183	
Jupiter	8565-07-25 22:04 G	4849568.28	4849568.42	4849568.57	0.0485	0.0343	
Saturn	8565-11-03 02:09 G	4849668.37	4849668.59	4849668.80	0.0275	0.0026	
Saturn	8566-06-20 10:33 G	4849897.84	4849897.94	4849898.06	0.0276	0.0236	
Mars	8568-05-30 10:48 G	4850607.78	4850607.95	4850608.12	0.1830	0.0202	
Earth	8573-08-03 13:40 G	4852498.92	4852499.07	4852499.23	0.2660	0.0474	
Moon	8573-08-03 18:57 G	4852499.13	4852499.29	4852499.45	0.2662	0.0029	*
Uranus	8575-09-30 08:38 G	4853286.76	4853286.86	4853287.00	0.0135	0.0111	
Uranus	8576-05-13 15:07 G	4853512.95	4853513.13	4853513.32	0.0135	0.0068	
Uranus	8576-12-25 21:36 G	4853739.19	4853739.40	4853739.62	0.0135	0.0025	
Uranus	8577-08-09 03:50 G	4853965.45	4853965.66	4853965.88	0.0136	0.0019	
Uranus	8578-03-23 10:19 G	4854191.74	4854191.93	4854192.13	0.0136	0.0062	
Uranus	8578-11-04 16:33 G	4854418.08	4854418.19	4854418.35	0.0136	0.0106	
Saturn	8579-09-02 22:04 G	4854720.24	4854720.42	4854720.61	0.0285	0.0133	
Saturn	8580-04-19 14:09 G	4854949.89	4854950.09	4854950.28	0.0284	0.0099	
Jupiter	8589-07-27 23:31 G	4858336.30	4858336.48	4858336.67	0.0485	0.0202	
Saturn	8594-09-28 21:50 G	4860225.24	4860225.41	4860225.59	0.0274	0.0158	
Saturn	8595-05-16 05:45 G	4860454.54	4860454.74	4860454.96	0.0275	0.0050	
Jupiter	8595-06-01 07:40 G	4860470.62	4860470.82	4860471.02	0.0543	0.0114	
Mars	8595-10-13 22:19 G	4860605.28	4860605.43	4860605.58	0.1698	0.0805	
Saturn	8595-12-31 14:23 G	4860684.04	4860684.10	4860684.18	0.0276	0.0259	
Mars	8600-05-31 00:43 G	4862295.50	4862295.53	4862295.56	0.1816	0.1782	
Jupiter	8601-04-03 05:02 G	4862602.51	4862602.71	4862602.90	0.0485	0.0146	
Jupiter	8607-02-04 17:45 G	4864736.10	4864736.24	4864736.38	0.0543	0.0388	
Saturn	8609-03-16 00:57 G	4865506.35	4865506.54	4865506.74	0.0285	0.0108	

Saturn 8609-10-31 16:48 G 4865736.02 4865736.20 4865736.40 0.0284 0.0125

Uranus 8616-01-16 11:02 G 4868003.85 4868003.96 4868004.08 0.0143 0.0122

Uranus 8616-08-29 22:04 G 4868230.24 4868230.42 4868230.62 0.0143 0.0070

Uranus 8617-04-13 09:21 G 4868456.68 4868456.89 4868457.11 0.0143 0.0019

Uranus 8617-11-25 20:09 G 4868683.14 4868683.34 4868683.56 0.0143 0.0033

Uranus 8618-07-10 06:57 G 4868909.62 4868909.79 4868909.98 0.0143 0.0084

Uranus 8619-02-21 17:45 G 4869136.17 4869136.24 4869136.31 0.0142 0.0134

Saturn 8624-04-11 05:02 G 4871011.52 4871011.71 4871011.90 0.0275 0.0125

Saturn 8624-11-26 13:26 G 4871240.86 4871241.06 4871241.26 0.0275 0.0084

Jupiter 8625-04-05 07:40 G 4871370.71 4871370.82 4871370.93 0.0485 0.0405

Neptune 8625-07-14 14:23 G 4871471.06 4871471.10 4871471.17 0.0089 0.0087

Neptune 8626-02-25 03:36 G 4871696.53 4871696.65 4871696.81 0.0089 0.0068

Neptune 8626-10-08 17:16 G 4871922.05 4871922.22 4871922.42 0.0089 0.0049

Neptune 8627-05-22 06:43 G 4872147.58 4872147.78 4872148.00 0.0089 0.0029

Mars 8627-10-13 23:16 G 4872292.31 4872292.47 4872292.63 0.1709 0.0655

Neptune 8628-01-02 20:09 G 4872373.13 4872373.34 4872373.56 0.0089 0.0010

Neptune 8628-08-15 09:21 G 4872598.68 4872598.89 4872599.12 0.0089 0.0010

Neptune 8629-03-28 22:33 G 4872824.25 4872824.44 4872824.67 0.0089 0.0029

Neptune 8629-11-09 12:00 G 4873049.83 4873050.00 4873050.21 0.0089 0.0048

Neptune 8630-06-23 01:26 G 4873275.43 4873275.56 4873275.73 0.0089 0.0067

Neptune 8631-02-03 14:38 G 4873501.07 4873501.11 4873501.20 0.0089 0.0086

Jupiter 8631-02-07 23:02 G 4873505.33 4873505.46 4873505.61 0.0543 0.0385

Mars 8634-03-28 16:48 G 4874650.04 4874650.20 4874650.37 0.1834 0.0556

Jupiter 8636-12-09 12:14 G 4875636.81 4875637.01 4875637.22 0.0485 0.0055

Saturn 8638-09-26 13:11 G 4876292.84 4876293.05 4876293.25 0.0285 0.0065

Saturn 8639-05-14 04:33 G 4876522.53 4876522.69 4876522.87 0.0284 0.0167

Pluto 8641-09-12 08:38 G 4877374.74 4877374.86 4877375.03 0.0067 0.0051

Pluto 8642-04-25 14:09 G 4877599.88 4877600.09 4877600.32 0.0068 0.0009

Jupiter 8642-10-13 09:21 G 4877770.69 4877770.89 4877771.09 0.0543 0.0116

Pluto 8642-12-06 19:11 G 4877825.13 4877825.30 4877825.50 0.0068 0.0035

Jupiter	8648-08-14 18:14 G	4879903.10	4879903.26	4879903.43	0.0485	0.0292
Saturn	8653-10-22 09:50 G	4881797.71	4881797.91	4881798.11	0.0274	0.0099
Saturn	8654-06-08 18:00 G	4882027.05	4882027.25	4882027.44	0.0275	0.0109
Uranus	8659-05-31 17:31 G	4883845.20	4883845.23	4883845.30	0.0135	0.0131
Uranus	8660-01-12 23:45 G	4884071.34	4884071.49	4884071.67	0.0135	0.0088
Uranus	8660-08-26 06:14 G	4884297.56	4884297.76	4884297.97	0.0135	0.0045
Uranus	8661-04-09 12:28 G	4884523.81	4884524.02	4884524.24	0.0135	0.0003
Mars	8661-08-11 08:23 G	4884647.71	4884647.85	4884647.99	0.1694	0.1015
Uranus	8661-11-21 18:57 G	4884750.09	4884750.29	4884750.50	0.0136	0.0041
Uranus	8662-07-06 01:26 G	4884976.40	4884976.56	4884976.74	0.0136	0.0085
Uranus	8663-02-17 07:40 G	4885202.78	4885202.82	4885202.91	0.0136	0.0129
Mars	8666-03-28 06:43 G	4886337.68	4886337.78	4886337.89	0.1820	0.1449
Saturn	8667-08-21 22:48 G	4886849.40	4886849.45	4886849.51	0.0286	0.0274
Saturn	8668-04-07 15:21 G	4887078.93	4887079.14	4887079.35	0.0285	0.0041
Saturn	8668-11-23 06:57 G	4887308.63	4887308.79	4887308.94	0.0284	0.0190
Earth	8671-02-07 09:21 G	4888114.74	4888114.89	4888115.04	0.2672	0.0666
Moon	8671-02-07 14:09 G	4888114.97	4888115.09	4888115.21	0.2676	0.1557 *
Jupiter	8672-08-16 20:23 G	4888671.18	4888671.35	4888671.53	0.0485	0.0259
Jupiter	8678-06-21 04:19 G	4890805.49	4890805.68	4890805.87	0.0543	0.0175
Moon	8679-02-05 06:00 G	4891034.72	4891034.75	4891034.78	0.2669	0.2600
Saturn	8682-09-17 08:23 G	4892354.83	4892354.85	4892354.87	0.0274	0.0272
Saturn	8683-05-04 16:19 G	4892583.98	4892584.18	4892584.39	0.0275	0.0066
Saturn	8683-12-20 00:28 G	4892813.35	4892813.52	4892813.71	0.0276	0.0144
Jupiter	8684-04-22 02:09 G	4892937.39	4892937.59	4892937.79	0.0485	0.0090
Jupiter	8690-02-23 12:57 G	4895070.89	4895071.04	4895071.21	0.0543	0.0335
Mars	8693-08-10 08:52 G	4896334.70	4896334.87	4896335.04	0.1706	0.0424
Jupiter	8695-12-27 06:57 G	4897203.72	4897203.79	4897203.89	0.0485	0.0439
Saturn	8697-03-03 10:48 G	4897635.83	4897635.95	4897636.07	0.0286	0.0233
Saturn	8697-10-19 02:52 G	4897865.41	4897865.62	4897865.83	0.0285	0.0003
Saturn	8698-06-05 18:28 G	4898095.15	4898095.27	4898095.39	0.0284	0.0231

Mars 8700-01-23 22:33 G 4898692.29 4898692.44 4898692.59 0.1838 0.0922

Uranus 8700-04-30 03:50 G 4898788.51 4898788.66 4898788.83 0.0143 0.0095

Uranus 8700-12-12 14:52 G 4899014.93 4899015.12 4899015.34 0.0143 0.0045

Uranus 8701-07-27 02:09 G 4899241.37 4899241.59 4899241.81 0.0143 0.0008

Uranus 8702-03-10 12:43 G 4899467.84 4899468.03 4899468.24 0.0143 0.0059

Uranus 8702-10-22 23:16 G 4899694.35 4899694.47 4899694.62 0.0142 0.0109

Neptune 8707-09-01 00:14 G 4901468.40 4901468.51 4901468.65 0.0088 0.0072

Neptune 8708-04-13 12:57 G 4901693.88 4901694.04 4901694.23 0.0088 0.0054

Jupiter 8708-04-25 03:50 G 4901705.60 4901705.66 4901705.73 0.0485 0.0459

Neptune 8708-11-25 01:40 G 4901919.38 4901919.57 4901919.78 0.0088 0.0036

Neptune 8709-07-08 14:23 G 4902144.89 4902145.10 4902145.32 0.0088 0.0018

Neptune 8710-02-19 03:07 G 4902370.41 4902370.63 4902370.85 0.0088 0.0002

Neptune 8710-10-02 15:36 G 4902595.95 4902596.15 4902596.38 0.0088 0.0019

Neptune 8711-05-16 04:19 G 4902821.49 4902821.68 4902821.89 0.0088 0.0037

Neptune 8711-12-27 16:48 G 4903047.05 4903047.20 4903047.39 0.0088 0.0055

Saturn 8712-03-30 13:40 G 4903140.98 4903141.07 4903141.16 0.0273 0.0246

Neptune 8712-08-09 05:31 G 4903272.62 4903272.73 4903272.86 0.0088 0.0073

Saturn 8712-11-14 21:21 G 4903370.18 4903370.39 4903370.60 0.0274 0.0040

Saturn 8713-07-02 05:16 G 4903599.56 4903599.72 4903599.89 0.0275 0.0168

Jupiter 8714-02-27 23:16 G 4903840.37 4903840.47 4903840.57 0.0543 0.0468

Jupiter 8719-12-30 09:21 G 4905971.69 4905971.89 4905972.09 0.0485 0.0111

Jupiter 8725-11-02 10:04 G 4908105.72 4908105.92 4908106.13 0.0543 0.0032

Saturn 8726-09-14 12:00 G 4908421.87 4908422.00 4908422.16 0.0286 0.0210

Saturn 8727-05-02 04:33 G 4908651.48 4908651.69 4908651.90 0.0285 0.0025

Mars 8727-06-09 18:28 G 4908690.15 4908690.27 4908690.39 0.1691 0.1226

Saturn 8727-12-17 19:55 G 4908881.25 4908881.33 4908881.43 0.0284 0.0254

Pluto 8728-02-19 19:55 G 4908945.19 4908945.33 4908945.50 0.0077 0.0053

Pluto 8728-10-02 05:02 G 4909170.50 4909170.71 4909170.94 0.0076 0.0011

Pluto 8729-05-15 13:55 G 4909396.02 4909396.08 4909396.15 0.0076 0.0072

Jupiter 8731-09-04 15:21 G 4910237.97 4910238.14 4910238.32 0.0485 0.0236

Mars	8732-01-24 13:11 G	4910379.91	4910380.05	4910380.18	0.1824	0.1120
Jupiter	8737-07-07 18:28 G	4912371.26	4912371.27	4912371.28	0.0543	0.0542
Saturn	8741-10-10 18:28 G	4913927.15	4913927.27	4913927.41	0.0274	0.0217
Saturn	8742-05-28 02:38 G	4914156.40	4914156.61	4914156.82	0.0275	0.0010
Saturn	8743-01-12 10:48 G	4914385.82	4914385.95	4914386.11	0.0276	0.0200
Uranus	8743-09-13 07:55 G	4914629.72	4914629.83	4914629.98	0.0135	0.0109
Uranus	8744-04-26 14:23 G	4914855.92	4914856.10	4914856.30	0.0135	0.0066
Uranus	8744-12-08 20:52 G	4915082.16	4915082.37	4915082.59	0.0135	0.0023
Uranus	8745-07-23 03:21 G	4915308.42	4915308.64	4915308.85	0.0135	0.0020
Uranus	8746-03-06 09:36 G	4915534.72	4915534.90	4915535.10	0.0136	0.0064
Uranus	8746-10-18 15:50 G	4915761.05	4915761.16	4915761.31	0.0136	0.0108
Jupiter	8755-09-06 17:02 G	4919006.06	4919006.21	4919006.37	0.0485	0.0314
Saturn	8756-03-26 23:16 G	4919208.30	4919208.47	4919208.64	0.0285	0.0170
Saturn	8756-11-11 15:21 G	4919437.94	4919438.14	4919438.35	0.0285	0.0064
Mars	8759-06-08 18:43 G	4920377.11	4920377.28	4920377.45	0.1702	0.0204
Jupiter	8761-07-11 01:40 G	4921140.39	4921140.57	4921140.75	0.0543	0.0244
Mars	8765-11-21 04:33 G	4922734.57	4922734.69	4922734.81	0.1842	0.1281
Jupiter	8767-05-12 23:16 G	4923272.27	4923272.47	4923272.68	0.0485	0.0034
Saturn	8771-04-23 00:28 G	4924713.37	4924713.52	4924713.68	0.0273	0.0189
Saturn	8771-12-08 08:09 G	4924942.63	4924942.84	4924943.05	0.0274	0.0017
Saturn	8772-07-24 16:19 G	4925172.06	4925172.18	4925172.30	0.0275	0.0225
Jupiter	8773-03-15 12:43 G	4925405.86	4925406.03	4925406.22	0.0544	0.0254
Jupiter	8779-01-16 04:48 G	4927538.58	4927538.70	4927538.83	0.0485	0.0380
Uranus	8783-12-29 09:07 G	4929346.78	4929346.88	4929347.00	0.0143	0.0121
Uranus	8784-08-11 20:09 G	4929573.16	4929573.34	4929573.54	0.0143	0.0070
Uranus	8785-03-26 07:26 G	4929799.59	4929799.81	4929800.03	0.0143	0.0018
Saturn	8785-10-07 00:00 G	4929994.33	4929994.50	4929994.69	0.0286	0.0148
Uranus	8785-11-07 18:14 G	4930026.05	4930026.26	4930026.48	0.0143	0.0033
Saturn	8786-05-24 16:19 G	4930223.98	4930224.18	4930224.38	0.0285	0.0086
Uranus	8786-06-22 05:02 G	4930252.54	4930252.71	4930252.89	0.0143	0.0084

Uranus 8787-02-03 15:50 G 4930479.09 4930479.16 4930479.23 0.0142 0.0134

Neptune 8790-05-30 15:21 G 4931691.03 4931691.14 4931691.27 0.0089 0.0075

Neptune 8791-01-11 04:33 G 4931916.53 4931916.69 4931916.87 0.0089 0.0056

Mars 8791-06-07 20:09 G 4932064.33 4932064.34 4932064.36 0.1714 0.1703

Neptune 8791-08-24 18:00 G 4932142.05 4932142.25 4932142.46 0.0089 0.0037

Neptune 8792-04-06 07:26 G 4932367.59 4932367.81 4932368.03 0.0089 0.0018

Neptune 8792-11-17 20:52 G 4932593.15 4932593.37 4932593.59 0.0089 0.0002

Mars 8793-04-06 04:48 G 4932732.61 4932732.70 4932732.79 0.1688 0.1429

Neptune 8793-07-01 10:04 G 4932818.71 4932818.92 4932819.14 0.0089 0.0021

Neptune 8794-02-11 23:31 G 4933044.28 4933044.48 4933044.68 0.0089 0.0040

Neptune 8794-09-25 12:57 G 4933269.87 4933270.04 4933270.20 0.0089 0.0059

Neptune 8795-05-09 01:40 G 4933495.49 4933495.57 4933495.70 0.0089 0.0079

Jupiter 8797-03-18 22:04 G 4934175.42 4934175.42 4934175.43 0.0542 0.0542

Mars 8797-11-20 19:11 G 4934422.14 4934422.30 4934422.45 0.1828 0.0776

Saturn 8800-11-02 04:19 G 4935499.51 4935499.68 4935499.85 0.0274 0.0162

Saturn 8801-06-19 12:14 G 4935728.80 4935729.01 4935729.22 0.0275 0.0045

Saturn 8802-02-03 20:23 G 4935958.28 4935958.35 4935958.44 0.0276 0.0254

Jupiter 8803-01-18 07:11 G 4936306.62 4936306.80 4936307.00 0.0485 0.0173

Jupiter 8808-11-21 07:26 G 4938440.61 4938440.81 4938441.02 0.0543 0.0036

Jupiter 8814-09-23 12:43 G 4940572.84 4940573.03 4940573.22 0.0485 0.0176

Saturn 8815-04-19 10:04 G 4940780.73 4940780.92 4940781.12 0.0285 0.0110

Saturn 8815-12-05 02:09 G 4941010.40 4941010.59 4941010.79 0.0284 0.0123

Moon 8816-08-05 10:19 G 4941254.78 4941254.93 4941255.08 0.2658 0.1194

Earth 8816-08-05 14:52 G 4941254.97 4941255.12 4941255.28 0.2662 0.0562 *

Jupiter 8820-07-26 15:36 G 4942706.06 4942706.15 4942706.25 0.0543 0.0476

Mars 8825-04-05 04:19 G 4944419.51 4944419.68 4944419.86 0.1699 0.0033

Uranus 8827-05-13 16:48 G 4945188.15 4945188.20 4945188.27 0.0135 0.0129

Uranus 8827-12-25 23:16 G 4945414.30 4945414.47 4945414.64 0.0135 0.0086

Uranus 8828-08-08 05:16 G 4945640.52 4945640.72 4945640.93 0.0135 0.0044

Uranus 8829-03-22 11:45 G 4945866.77 4945866.99 4945867.21 0.0135 0.0001

Uranus 8829-11-03 18:14 G 4946093.05 4946093.26 4946093.47 0.0136 0.0043

Saturn 8830-05-15 10:19 G 4946285.75 4946285.93 4946286.12 0.0273 0.0134

Uranus 8830-06-18 00:28 G 4946319.37 4946319.52 4946319.70 0.0136 0.0087

Saturn 8830-12-30 18:00 G 4946515.04 4946515.25 4946515.45 0.0274 0.0072

Uranus 8831-01-30 07:26 G 4946545.75 4946545.81 4946545.87 0.0136 0.0130

Mars 8831-09-18 09:50 G 4946776.84 4946776.91 4946776.98 0.1846 0.1665

Jupiter 8838-09-25 15:21 G 4949341.01 4949341.14 4949341.27 0.0485 0.0377

Jupiter 8844-07-30 04:04 G 4951475.52 4951475.67 4951475.84 0.0543 0.0339

Saturn 8844-10-29 10:33 G 4951566.74 4951566.94 4951567.15 0.0285 0.0088

Saturn 8845-06-16 02:23 G 4951796.43 4951796.60 4951796.79 0.0285 0.0145

Jupiter 8850-05-31 21:36 G 4953607.20 4953607.40 4953607.61 0.0485 0.0032

Jupiter 8856-04-03 13:26 G 4955740.87 4955741.06 4955741.26 0.0543 0.0169

Mars 8857-04-04 06:00 G 4956106.67 4956106.75 4956106.84 0.1710 0.1480

Mars 8859-02-01 15:07 G 4956775.09 4956775.13 4956775.17 0.1685 0.1634

Saturn 8859-11-25 12:43 G 4957071.84 4957072.03 4957072.23 0.0274 0.0110

Saturn 8860-07-11 20:38 G 4957301.17 4957301.36 4957301.56 0.0275 0.0098

Jupiter 8862-02-04 03:21 G 4957873.48 4957873.64 4957873.79 0.0485 0.0317

Mars 8863-09-18 01:11 G 4958464.38 4958464.55 4958464.71 0.1833 0.0429

Uranus 8868-04-11 01:40 G 4960131.41 4960131.57 4960131.74 0.0143 0.0096

Uranus 8868-11-23 12:43 G 4960357.83 4960358.03 4960358.24 0.0143 0.0044

Uranus 8869-07-07 23:45 G 4960584.28 4960584.49 4960584.71 0.0143 0.0007

Uranus 8870-02-19 10:33 G 4960810.75 4960810.94 4960811.14 0.0143 0.0058

Uranus 8870-10-03 21:07 G 4961037.25 4961037.38 4961037.53 0.0142 0.0109

Neptune 8871-12-03 12:00 G 4961462.92 4961463.00 4961463.10 0.0088 0.0079

Neptune 8872-07-16 00:28 G 4961688.38 4961688.52 4961688.69 0.0088 0.0061

Neptune 8873-02-26 13:11 G 4961913.87 4961914.05 4961914.25 0.0088 0.0043

Neptune 8873-10-10 01:55 G 4962139.38 4962139.58 4962139.80 0.0088 0.0025

Saturn 8874-05-11 19:11 G 4962353.09 4962353.30 4962353.51 0.0285 0.0054

Neptune 8874-05-23 14:52 G 4962364.91 4962365.12 4962365.35 0.0088 0.0007

Saturn 8874-12-27 11:02 G 4962582.80 4962582.96 4962583.13 0.0284 0.0179

Neptune 8875-01-04 03:36 G 4962590.44 4962590.65 4962590.87 0.0088 0.0012

Neptune 8875-08-17 16:04 G 4962815.97 4962816.17 4962816.39 0.0088 0.0030

Neptune 8876-03-30 04:48 G 4963041.52 4963041.70 4963041.89 0.0088 0.0048

Neptune 8876-11-10 17:31 G 4963267.09 4963267.23 4963267.38 0.0088 0.0066

Neptune 8877-06-24 05:45 G 4963492.71 4963492.74 4963492.82 0.0088 0.0085

Jupiter 8886-02-06 06:14 G 4966641.59 4966641.76 4966641.94 0.0485 0.0240

Saturn 8889-06-06 19:11 G 4967858.10 4967858.30 4967858.51 0.0273 0.0081

Pluto 8889-08-16 21:07 G 4967929.23 4967929.38 4967929.57 0.0067 0.0043

Saturn 8890-01-22 02:38 G 4968087.43 4968087.61 4968087.81 0.0274 0.0126

Pluto 8890-03-30 02:52 G 4968154.40 4968154.62 4968154.84 0.0068 0.0001

Pluto 8890-11-10 07:40 G 4968379.67 4968379.82 4968380.01 0.0068 0.0044

Mars 8891-01-31 14:52 G 4968461.95 4968462.12 4968462.30 0.1696 0.0227

Jupiter 8891-12-11 07:40 G 4968775.62 4968775.82 4968776.02 0.0544 0.0120

Jupiter 8897-10-12 12:00 G 4970907.80 4970908.00 4970908.20 0.0485 0.0110

Saturn 8903-04-07 02:38 G 4972909.54 4972909.61 4972909.69 0.0286 0.0266

Jupiter 8903-08-16 18:57 G 4973041.15 4973041.29 4973041.44 0.0544 0.0378

Saturn 8903-11-22 19:26 G 4973139.10 4973139.31 4973139.52 0.0285 0.0033

Saturn 8904-07-09 11:02 G 4973368.82 4973368.96 4973369.12 0.0284 0.0200

Jupiter 8909-06-18 18:14 G 4975174.20 4975174.26 4975174.33 0.0485 0.0455

Uranus 8911-08-26 07:11 G 4975972.68 4975972.80 4975972.94 0.0135 0.0107

Uranus 8912-04-08 13:40 G 4976198.88 4976199.07 4976199.26 0.0135 0.0064

Uranus 8912-11-20 20:09 G 4976425.12 4976425.34 4976425.55 0.0135 0.0021

Uranus 8913-07-05 02:23 G 4976651.39 4976651.60 4976651.82 0.0135 0.0022

Moon 8914-02-09 06:43 G 4976870.62 4976870.78 4976870.95 0.2665 0.0086

Earth 8914-02-09 10:19 G 4976870.78 4976870.93 4976871.09 0.2671 0.0584 *

Uranus 8914-02-16 08:38 G 4976877.69 4976877.86 4976878.07 0.0136 0.0066

Uranus 8914-09-30 15:21 G 4977104.02 4977104.14 4977104.28 0.0136 0.0109

Saturn 8918-05-03 13:26 G 4978415.01 4978415.06 4978415.12 0.0273 0.0262

Saturn 8918-12-18 20:38 G 4978644.16 4978644.36 4978644.57 0.0274 0.0058

Saturn 8919-08-05 04:19 G 4978873.51 4978873.68 4978873.87 0.0275 0.0150

Jupiter 8921-10-15 14:38 G 4979676.03 4979676.11 4979676.19 0.0485 0.0445

Mars 8923-01-31 15:50 G 4980149.05 4980149.16 4980149.28 0.1707 0.1252

Jupiter 8927-08-20 03:50 G 4981810.53 4981810.66 4981810.79 0.0543 0.0418

Mars 8929-07-16 07:11 G 4982506.63 4982506.80 4982506.97 0.1837 0.0073

Saturn 8932-10-17 09:50 G 4983695.80 4983695.91 4983696.04 0.0286 0.0235

Saturn 8933-06-04 02:38 G 4983925.40 4983925.61 4983925.82 0.0285 0.0003

Jupiter 8933-06-20 20:38 G 4983942.17 4983942.36 4983942.57 0.0485 0.0101

Saturn 8934-01-19 18:28 G 4984155.16 4984155.27 4984155.40 0.0284 0.0231

Jupiter 8939-04-24 11:31 G 4986075.78 4986075.98 4986076.18 0.0544 0.0098

Jupiter 8945-02-24 03:21 G 4988208.47 4988208.64 4988208.82 0.0485 0.0245

Saturn 8947-11-13 19:55 G 4989201.23 4989201.33 4989201.45 0.0273 0.0233

Saturn 8948-06-30 03:21 G 4989430.43 4989430.64 4989430.85 0.0273 0.0029

Saturn 8949-02-14 11:02 G 4989659.80 4989659.96 4989660.12 0.0274 0.0178

Uranus 8951-12-11 06:57 G 4990689.69 4990689.79 4990689.92 0.0143 0.0122

Uranus 8952-07-24 18:28 G 4990916.08 4990916.27 4990916.46 0.0143 0.0070

Uranus 8953-03-08 05:31 G 4991142.51 4991142.73 4991142.94 0.0143 0.0018

Uranus 8953-10-20 16:19 G 4991368.97 4991369.18 4991369.39 0.0143 0.0033

Uranus 8954-06-04 03:07 G 4991595.46 4991595.63 4991595.81 0.0143 0.0084

Neptune 8954-09-02 03:07 G 4991685.55 4991685.63 4991685.72 0.0089 0.0082

Uranus 8955-01-16 13:55 G 4991822.01 4991822.08 4991822.15 0.0142 0.0134

Neptune 8955-04-15 16:19 G 4991911.03 4991911.18 4991911.35 0.0089 0.0063

Neptune 8955-11-27 05:45 G 4992136.56 4992136.74 4992136.94 0.0089 0.0044

Neptune 8956-07-09 19:11 G 4992362.09 4992362.30 4992362.51 0.0089 0.0025

Mars 8956-11-29 00:57 G 4992504.37 4992504.54 4992504.71 0.1692 0.0435

Neptune 8957-02-20 08:38 G 4992587.64 4992587.86 4992588.08 0.0089 0.0006

Neptune 8957-10-03 21:50 G 4992813.20 4992813.41 4992813.63 0.0089 0.0014

Neptune 8958-05-17 11:16 G 4993038.76 4993038.97 4993039.17 0.0089 0.0033

Neptune 8958-12-29 00:00 G 4993264.35 4993264.50 4993264.70 0.0089 0.0053

Neptune 8959-08-11 13:11 G 4993489.95 4993490.05 4993490.21 0.0089 0.0072

Saturn 8962-04-29 10:19 G 4994481.80 4994481.93 4994482.08 0.0286 0.0212

Saturn	**8962-12-15 02:52 G**	**4994711.41**	**4994711.62**	**4994711.83**	**0.0285**	**0.0021**
Saturn	**8963-08-01 18:43 G**	**4994941.18**	**4994941.28**	**4994941.37**	**0.0284**	**0.0252**
Jupiter	**8969-02-26 05:45 G**	**4996976.58**	**4996976.74**	**4996976.90**	**0.0485**	**0.0308**
Jupiter	**8974-12-31 10:33 G**	**4999110.75**	**4999110.94**	**4999111.13**	**0.0543**	**0.0218**
Pluto	**8976-01-24 10:33 G**	**4999499.75**	**4999499.94**	**4999500.14**	**0.0077**	**0.0037**
Pluto	**8976-09-05 19:26 G**	**4999725.11**	**4999725.31**	**4999725.53**	**0.0076**	**0.0026**
Saturn	**8977-05-25 20:52 G**	**4999987.24**	**4999987.37**	**4999987.50**	**0.0273**	**0.0213**
Saturn	**8978-01-10 04:04 G**	**5000216.46**	**5000216.67**	**5000216.88**	**0.0274**	**0.0008**
Saturn	**8978-08-27 11:31 G**	**5000445.85**	**5000445.98**	**5000446.14**	**0.0275**	**0.0200**
Jupiter	**8980-11-01 11:31 G**	**5001242.78**	**5001242.98**	**5001243.19**	**0.0485**	**0.0041**
Jupiter	**8986-09-04 19:55 G**	**5003376.16**	**5003376.33**	**5003376.50**	**0.0543**	**0.0292**
Mars	**8988-11-28 01:26 G**	**5004191.43**	**5004191.56**	**5004191.70**	**0.1704**	**0.1026**
Saturn	**8991-11-09 16:19 G**	**5005268.02**	**5005268.18**	**5005268.34**	**0.0286**	**0.0183**
Saturn	**8992-06-26 08:52 G**	**5005497.66**	**5005497.87**	**5005498.08**	**0.0285**	**0.0051**
Jupiter	**8992-07-07 18:00 G**	**5005509.13**	**5005509.25**	**5005509.38**	**0.0485**	**0.0384**
Saturn	**8993-02-11 00:28 G**	**5005727.51**	**5005727.52**	**5005727.56**	**0.0284**	**0.0281**
Uranus	**8995-04-25 16:04 G**	**5006531.10**	**5006531.17**	**5006531.24**	**0.0135**	**0.0127**
Mars	**8995-05-13 12:43 G**	**5006548.86**	**5006549.03**	**5006549.20**	**0.1841**	**0.0297**
Uranus	**8995-12-07 22:04 G**	**5006757.27**	**5006757.42**	**5006757.60**	**0.0135**	**0.0085**
Uranus	**8996-07-21 04:33 G**	**5006983.49**	**5006983.69**	**5006983.90**	**0.0135**	**0.0042**
Uranus	**8997-03-04 11:02 G**	**5007209.74**	**5007209.96**	**5007210.18**	**0.0135**	**0.0001**
Uranus	**8997-10-16 17:16 G**	**5007436.02**	**5007436.22**	**5007436.43**	**0.0136**	**0.0045**
Uranus	**8998-05-30 23:45 G**	**5007662.34**	**5007662.49**	**5007662.67**	**0.0136**	**0.0089**
Uranus	**8999-01-12 06:43 G**	**5007888.74**	**5007888.78**	**5007888.84**	**0.0136**	**0.0132**

10TH MILLENNIUM CE

This is a list of transits of Venus in the 10th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**9006-12-07 03:21**	**G**	**5010773.50**	**5010773.64**	**5010773.81**	**0.0273**	**0.0182**	
Saturn	**9007-07-24 10:48**	**G**	**5011002.74**	**5011002.95**	**5011003.16**	**0.0274**	**0.0023**	
Saturn	**9008-03-09 18:14**	**G**	**5011232.16**	**5011232.26**	**5011232.39**	**0.0274**	**0.0230**	
Jupiter	**9010-09-09 03:50**	**G**	**5012145.59**	**5012145.66**	**5012145.74**	**0.0544**	**0.0504**	
Jupiter	**9016-07-10 20:52**	**G**	**5014277.18**	**5014277.37**	**5014277.56**	**0.0484**	**0.0171**	
Saturn	**9021-05-22 17:02**	**G**	**5016054.05**	**5016054.21**	**5016054.39**	**0.0286**	**0.0160**	
Saturn	**9022-01-07 09:36**	**G**	**5016283.69**	**5016283.90**	**5016284.10**	**0.0285**	**0.0073**	
Jupiter	**9022-05-14 15:50**	**G**	**5016410.96**	**5016411.16**	**5016411.36**	**0.0544**	**0.0007**	
Mars	**9022-09-27 11:31**	**G**	**5016546.82**	**5016546.98**	**5016547.15**	**0.1689**	**0.0635**	
Mars	**9027-05-14 04:04**	**G**	**5018236.63**	**5018236.67**	**5018236.71**	**0.1827**	**0.1772**	
Jupiter	**9028-03-16 03:07**	**G**	**5018543.44**	**5018543.63**	**5018543.82**	**0.0485**	**0.0176**	
Jupiter	**9034-01-17 02:23**	**G**	**5020676.52**	**5020676.60**	**5020676.68**	**0.0543**	**0.0495**	
Neptune	**9036-03-07 23:45**	**G**	**5021457.46**	**5021457.49**	**5021457.55**	**0.0088**	**0.0086**	
Uranus	**9036-03-25 00:14**	**G**	**5021474.36**	**5021474.51**	**5021474.69**	**0.0143**	**0.0094**	
Saturn	**9036-06-18 03:21**	**G**	**5021559.48**	**5021559.64**	**5021559.82**	**0.0273**	**0.0163**	
Neptune	**9036-10-19 12:28**	**G**	**5021682.90**	**5021683.02**	**5021683.17**	**0.0088**	**0.0068**	
Uranus	**9036-11-06 11:31**	**G**	**5021700.78**	**5021700.98**	**5021701.19**	**0.0143**	**0.0043**	
Saturn	**9037-02-02 10:48**	**G**	**5021788.74**	**5021788.95**	**5021789.16**	**0.0274**	**0.0042**	
Neptune	**9037-06-02 01:11**	**G**	**5021908.38**	**5021908.55**	**5021908.75**	**0.0088**	**0.0050**	
Uranus	**9037-06-20 22:48**	**G**	**5021927.23**	**5021927.45**	**5021927.66**	**0.0143**	**0.0009**	
Saturn	**9037-09-19 18:43**	**G**	**5022018.20**	**5022018.28**	**5022018.37**	**0.0275**	**0.0249**	
Neptune	**9038-01-13 13:55**	**G**	**5022133.89**	**5022134.08**	**5022134.30**	**0.0088**	**0.0032**	
Uranus	**9038-02-02 09:21**	**G**	**5022153.70**	**5022153.89**	**5022154.10**	**0.0143**	**0.0060**	
Neptune	**9038-08-27 02:52**	**G**	**5022359.40**	**5022359.62**	**5022359.84**	**0.0088**	**0.0013**	
Uranus	**9038-09-16 20:09**	**G**	**5022380.21**	**5022380.34**	**5022380.48**	**0.0142**	**0.0110**	

Neptune 9039-04-09 15:36 G 5022584.93 5022585.15 5022585.37 0.0088 0.0005

Neptune 9039-11-21 04:04 G 5022810.46 5022810.67 5022810.89 0.0088 0.0023

Neptune 9040-07-03 16:33 G 5023036.01 5023036.19 5023036.40 0.0088 0.0042

Neptune 9041-02-14 05:02 G 5023261.57 5023261.71 5023261.89 0.0088 0.0060

Neptune 9041-09-27 17:45 G 5023487.16 5023487.24 5023487.36 0.0088 0.0078

Saturn 9050-12-02 22:33 G 5026840.25 5026840.44 5026840.62 0.0286 0.0132

Saturn 9051-07-20 14:52 G 5027069.92 5027070.12 5027070.32 0.0285 0.0101

Jupiter 9052-03-18 06:00 G 5027311.63 5027311.75 5027311.88 0.0485 0.0383

Mars 9054-09-26 11:45 G 5028233.84 5028233.99 5028234.14 0.1700 0.0808

Jupiter 9058-01-20 08:38 G 5029445.69 5029445.86 5029446.03 0.0544 0.0290

Earth 9059-08-08 15:36 G 5030011.00 5030011.15 5030011.30 0.2663 0.0719

Moon 9059-08-08 18:28 G 5030011.12 5030011.27 5030011.42 0.2669 0.0084 *

Mars 9061-03-10 18:28 G 5030591.11 5030591.27 5030591.43 0.1845 0.0668

Jupiter 9063-11-22 12:43 G 5031577.83 5031578.03 5031578.24 0.0484 0.0039

Saturn 9065-12-29 10:48 G 5032345.77 5032345.95 5032346.14 0.0273 0.0131

Saturn 9066-08-15 18:14 G 5032575.05 5032575.26 5032575.46 0.0274 0.0074

Jupiter 9069-09-24 19:11 G 5033711.11 5033711.30 5033711.49 0.0544 0.0215

Jupiter 9075-07-28 18:14 G 5035844.11 5035844.26 5035844.42 0.0484 0.0314

Uranus 9079-08-08 06:14 G 5037315.64 5037315.76 5037315.91 0.0135 0.0105

Uranus 9080-03-21 12:43 G 5037541.84 5037542.03 5037542.23 0.0135 0.0062

Saturn 9080-06-13 23:45 G 5037626.30 5037626.49 5037626.69 0.0286 0.0108

Uranus 9080-11-02 19:11 G 5037768.09 5037768.30 5037768.52 0.0135 0.0019

Saturn 9081-01-29 15:50 G 5037855.98 5037856.16 5037856.35 0.0285 0.0125

Uranus 9081-06-17 01:40 G 5037994.36 5037994.57 5037994.79 0.0135 0.0024

Uranus 9082-01-29 08:09 G 5038220.66 5038220.84 5038221.04 0.0136 0.0068

Uranus 9082-09-12 14:52 G 5038447.00 5038447.12 5038447.25 0.0136 0.0111

Mars 9088-07-24 22:04 G 5040589.27 5040589.42 5040589.57 0.1686 0.0837

Mars 9093-03-10 09:50 G 5042278.80 5042278.91 5042279.02 0.1831 0.1420

Saturn 9095-07-11 10:33 G 5043131.75 5043131.94 5043132.13 0.0273 0.0113

Saturn 9096-02-25 17:45 G 5043361.05 5043361.24 5043361.45 0.0274 0.0094

Jupiter 9099-07-30 20:52 G 5044612.20 5044612.37 5044612.55 0.0485 0.0243

Jupiter 9105-06-03 17:31 G 5046746.03 5046746.23 5046746.43 0.0543 0.0098

Saturn 9109-12-26 04:19 G 5048412.48 5048412.68 5048412.89 0.0286 0.0081

Saturn 9110-08-12 20:38 G 5048642.18 5048642.36 5048642.54 0.0285 0.0151

Jupiter 9111-04-06 03:36 G 5048878.45 5048878.65 5048878.85 0.0485 0.0102

Jupiter 9117-02-06 00:00 G 5051011.38 5051011.50 5051011.62 0.0543 0.0429

Neptune 9118-12-06 14:23 G 5051680.10 5051680.10 5051680.13 0.0089 0.0089

Neptune 9119-07-20 03:21 G 5051905.53 5051905.64 5051905.80 0.0089 0.0071

Uranus 9119-11-24 06:28 G 5052032.66 5052032.77 5052032.90 0.0143 0.0118

Neptune 9120-03-01 17:16 G 5052131.04 5052131.22 5052131.40 0.0089 0.0051

Uranus 9120-07-07 17:31 G 5052259.05 5052259.23 5052259.44 0.0143 0.0067

Mars 9120-07-24 21:36 G 5052276.23 5052276.40 5052276.56 0.1697 0.0584

Neptune 9120-10-13 06:43 G 5052356.58 5052356.78 5052356.99 0.0089 0.0032

Uranus 9121-02-19 04:48 G 5052485.49 5052485.70 5052485.92 0.0143 0.0016

Neptune 9121-05-26 20:09 G 5052582.12 5052582.34 5052582.56 0.0089 0.0012

Uranus 9121-10-03 15:36 G 5052711.95 5052712.15 5052712.37 0.0143 0.0036

Neptune 9122-01-07 09:21 G 5052807.67 5052807.89 5052808.11 0.0089 0.0007

Uranus 9122-05-18 02:23 G 5052938.44 5052938.60 5052938.79 0.0142 0.0087

Neptune 9122-08-20 22:19 G 5053033.24 5053033.43 5053033.66 0.0089 0.0027

Jupiter 9122-12-10 10:19 G 5053144.86 5053144.93 5053145.01 0.0485 0.0447

Uranus 9122-12-30 13:11 G 5053165.00 5053165.05 5053165.12 0.0142 0.0136

Neptune 9123-04-03 11:31 G 5053258.81 5053258.98 5053259.19 0.0089 0.0046

Neptune 9123-11-15 00:57 G 5053484.41 5053484.54 5053484.71 0.0089 0.0065

Neptune 9124-06-27 14:23 G 5053710.04 5053710.10 5053710.19 0.0089 0.0084

Saturn 9125-01-21 18:00 G 5053918.05 5053918.25 5053918.46 0.0273 0.0080

Saturn 9125-09-08 01:26 G 5054147.38 5054147.56 5054147.75 0.0274 0.0126

Mars 9127-01-06 23:45 G 5054633.35 5054633.49 5054633.63 0.1849 0.1055

Jupiter 9135-04-08 06:00 G 5057646.68 5057646.75 5057646.82 0.0484 0.0452

Pluto 9136-12-10 08:09 G 5058258.80 5058258.84 5058258.89 0.0067 0.0066

Pluto 9137-07-23 12:57 G 5058483.85 5058484.04 5058484.27 0.0067 0.0024

Pluto	9138-03-05 18:43 G	5058709.07	5058709.28	5058709.49	0.0068	0.0020
Pluto	9138-10-16 23:31 G	5058934.43	5058934.48	5058934.57	0.0068	0.0064
Saturn	9139-07-08 06:57 G	5059198.58	5059198.79	5059199.00	0.0286	0.0054
Saturn	9140-02-22 22:48 G	5059428.29	5059428.45	5059428.62	0.0285	0.0178
Jupiter	9141-02-09 12:28 G	5059780.89	5059781.02	5059781.17	0.0544	0.0393
Jupiter	9146-12-12 12:28 G	5061912.82	5061913.02	5061913.22	0.0484	0.0105
Jupiter	9152-10-14 23:31 G	5064046.28	5064046.48	5064046.68	0.0544	0.0110
Saturn	9153-12-17 10:33 G	5064474.90	5064474.94	5064475.00	0.0273	0.0265
Mars	9154-05-23 08:23 G	5064631.71	5064631.85	5064631.98	0.1683	0.1042
Saturn	9154-08-03 17:45 G	5064704.04	5064704.24	5064704.45	0.0273	0.0062
Saturn	9155-03-21 01:26 G	5064933.38	5064933.56	5064933.74	0.0274	0.0144
Earth	9157-02-11 11:31 G	5065626.83	5065626.98	5065627.14	0.2669	0.0510
Moon	9157-02-11 12:57 G	5065626.89	5065627.04	5065627.19	0.2675	0.0679 *
Jupiter	9158-08-17 18:14 G	5066179.08	5066179.26	5066179.44	0.0485	0.0244
Mars	9159-01-06 15:50 G	5066321.02	5066321.16	5066321.30	0.1835	0.1073
Uranus	9163-04-08 14:38 G	5067874.05	5067874.11	5067874.20	0.0135	0.0125
Uranus	9163-11-20 21:21 G	5068100.22	5068100.39	5068100.56	0.0135	0.0082
Uranus	9164-07-04 03:36 G	5068326.45	5068326.65	5068326.86	0.0135	0.0040
Uranus	9165-02-15 10:04 G	5068552.70	5068552.92	5068553.14	0.0135	0.0004
Uranus	9165-09-29 16:33 G	5068778.99	5068779.19	5068779.40	0.0136	0.0047
Uranus	9166-05-13 22:48 G	5069005.31	5069005.45	5069005.63	0.0136	0.0091
Uranus	9166-12-26 05:45 G	5069231.72	5069231.74	5069231.79	0.0136	0.0134
Saturn	9168-06-01 18:00 G	5069755.18	5069755.25	5069755.34	0.0286	0.0262
Saturn	9169-01-17 10:48 G	5069984.74	5069984.95	5069985.17	0.0285	0.0029
Saturn	9169-09-04 02:52 G	5070214.48	5070214.62	5070214.78	0.0284	0.0204
Jupiter	9182-08-19 21:50 G	5074947.26	5074947.41	5074947.57	0.0485	0.0319
Saturn	9183-06-29 18:43 G	5075261.17	5075261.28	5075261.39	0.0273	0.0230
Saturn	9184-02-14 01:55 G	5075490.37	5075490.58	5075490.79	0.0274	0.0027
Saturn	9184-09-30 09:36 G	5075719.75	5075719.90	5075720.07	0.0274	0.0179
Mars	9186-05-22 07:40 G	5076318.65	5076318.82	5076318.99	0.1693	0.0372

Jupiter 9188-06-22 15:36 G 5077080.96 5077081.15 5077081.35 0.0544 0.0169

Mars 9192-11-03 05:16 G 5078675.62 5078675.72 5078675.83 0.1853 0.1434

Jupiter 9194-04-25 03:21 G 5079213.44 5079213.64 5079213.84 0.0484 0.0034

Saturn 9197-12-12 22:19 G 5080541.32 5080541.43 5080541.56 0.0286 0.0232

Saturn 9198-07-30 14:52 G 5080770.91 5080771.12 5080771.33 0.0285 0.0002

Saturn 9199-03-17 06:43 G 5081000.66 5081000.78 5081000.90 0.0285 0.0232

Jupiter 9200-02-26 03:07 G 5081346.47 5081346.63 5081346.79 0.0544 0.0332

Neptune 9201-01-22 00:28 G 5081677.42 5081677.52 5081677.65 0.0088 0.0075

Neptune 9201-09-04 12:57 G 5081902.90 5081903.04 5081903.23 0.0088 0.0057

Neptune 9202-04-18 02:09 G 5082128.40 5082128.59 5082128.79 0.0088 0.0038

Neptune 9202-11-29 14:38 G 5082353.91 5082354.11 5082354.34 0.0088 0.0020

Neptune 9203-07-13 03:36 G 5082579.43 5082579.65 5082579.87 0.0088 0.0002

Uranus 9203-07-24 12:28 G 5082591.01 5082591.02 5082591.04 0.0143 0.0143

Neptune 9204-02-23 16:04 G 5082804.96 5082805.17 5082805.39 0.0088 0.0017

Uranus 9204-03-06 23:31 G 5082817.32 5082817.48 5082817.66 0.0143 0.0092

Neptune 9204-10-06 04:33 G 5083030.50 5083030.69 5083030.90 0.0088 0.0035

Uranus 9204-10-19 10:48 G 5083043.75 5083043.95 5083044.16 0.0143 0.0040

Neptune 9205-05-19 17:31 G 5083256.06 5083256.23 5083256.41 0.0088 0.0053

Uranus 9205-06-02 22:04 G 5083270.20 5083270.42 5083270.64 0.0143 0.0011

Jupiter 9205-12-29 09:36 G 5083479.78 5083479.90 5083480.03 0.0485 0.0382

Neptune 9205-12-31 05:45 G 5083481.64 5083481.74 5083481.89 0.0088 0.0072

Uranus 9206-01-15 08:38 G 5083496.68 5083496.86 5083497.07 0.0143 0.0063

Uranus 9206-08-29 19:26 G 5083723.19 5083723.31 5083723.45 0.0142 0.0113

Saturn 9213-01-08 18:28 G 5086047.15 5086047.27 5086047.41 0.0273 0.0213

Saturn 9213-08-26 01:55 G 5086276.37 5086276.58 5086276.79 0.0274 0.0009

Saturn 9214-04-12 09:21 G 5086505.75 5086505.89 5086506.05 0.0274 0.0198

Mars 9220-03-19 18:57 G 5088674.17 5088674.29 5088674.41 0.1680 0.1237

Pluto 9223-05-18 18:00 G 5089829.22 5089829.25 5089829.32 0.0077 0.0075

Pluto 9223-12-30 03:36 G 5090054.43 5090054.65 5090054.87 0.0076 0.0011

Jupiter 9224-02-29 13:55 G 5090115.99 5090116.08 5090116.18 0.0543 0.0482

Pluto	9224-08-11 12:14 G	5090279.87	5090280.01	5090280.19	0.0076	0.0053
Mars	9224-11-02 21:21 G	5090363.23	5090363.39	5090363.55	0.1840	0.0709
Saturn	9227-06-25 02:09 G	5091327.45	5091327.59	5091327.74	0.0286	0.0206
Saturn	9228-02-09 18:43 G	5091557.07	5091557.28	5091557.49	0.0285	0.0027
Saturn	9228-09-26 10:33 G	5091786.87	5091786.94	5091787.04	0.0284	0.0258
Jupiter	9229-12-31 12:28 G	5092247.83	5092248.02	5092248.21	0.0485	0.0177
Jupiter	9235-11-03 20:23 G	5094381.15	5094381.35	5094381.55	0.0543	0.0047
Jupiter	9241-09-05 18:43 G	5096514.09	5096514.28	5096514.48	0.0485	0.0171
Saturn	9242-07-22 02:52 G	5096833.46	5096833.62	5096833.78	0.0273	0.0178
Saturn	9243-03-08 10:19 G	5097062.72	5097062.93	5097063.14	0.0274	0.0027
Saturn	9243-10-23 18:14 G	5097292.16	5097292.26	5097292.38	0.0275	0.0233
Uranus	9247-07-21 05:02 G	5098658.59	5098658.71	5098658.87	0.0135	0.0103
Uranus	9248-03-03 11:31 G	5098884.79	5098884.98	5098885.18	0.0135	0.0060
Uranus	9248-10-15 18:00 G	5099111.04	5099111.25	5099111.47	0.0135	0.0017
Uranus	9249-05-30 00:14 G	5099337.31	5099337.51	5099337.74	0.0135	0.0027
Uranus	9250-01-11 06:57 G	5099563.61	5099563.79	5099563.98	0.0136	0.0070
Uranus	9250-08-25 13:26 G	5099789.96	5099790.06	5099790.19	0.0136	0.0113
Mars	9252-03-18 17:45 G	5100361.07	5100361.24	5100361.41	0.1690	0.0157
Saturn	9257-01-04 07:55 G	5102113.67	5102113.83	5102114.00	0.0286	0.0174
Saturn	9257-08-22 00:14 G	5102343.31	5102343.51	5102343.72	0.0285	0.0059
Mars	9258-08-31 10:19 G	5102717.91	5102717.93	5102717.95	0.1857	0.1838
Jupiter	9265-09-07 20:23 G	5105282.23	5105282.35	5105282.48	0.0484	0.0381
Jupiter	9271-07-12 18:57 G	5107416.12	5107416.29	5107416.47	0.0544	0.0269
Saturn	9272-02-01 03:21 G	5107619.48	5107619.64	5107619.83	0.0273	0.0160
Saturn	9272-09-17 11:02 G	5107848.76	5107848.96	5107849.17	0.0274	0.0047
Saturn	9273-05-04 18:43 G	5108078.22	5108078.28	5108078.38	0.0275	0.0253
Jupiter	9277-05-14 02:09 G	5109548.39	5109548.59	5109548.80	0.0485	0.0032
Jupiter	9283-03-17 04:33 G	5111681.51	5111681.69	5111681.87	0.0543	0.0243
Neptune	9283-10-21 15:07 G	5111900.05	5111900.13	5111900.27	0.0089	0.0078
Mars	9284-03-17 18:28 G	5112048.22	5112048.27	5112048.31	0.1701	0.1633

Neptune 9284-06-03 04:33 G 5112125.55 5112125.69 5112125.88 0.0089 0.0059

Neptune 9285-01-14 18:28 G 5112351.07 5112351.27 5112351.47 0.0089 0.0039

Neptune 9285-08-28 07:40 G 5112576.61 5112576.82 5112577.04 0.0089 0.0020

Mars 9286-01-15 05:31 G 5112716.64 5112716.73 5112716.82 0.1677 0.1439

Neptune 9286-04-10 21:07 G 5112802.16 5112802.38 5112802.60 0.0089 0.0000

Saturn 9286-07-17 11:16 G 5112899.80 5112899.97 5112900.16 0.0286 0.0149

Neptune 9286-11-22 10:19 G 5113027.72 5113027.93 5113028.16 0.0089 0.0019

Saturn 9287-03-04 03:50 G 5113129.46 5113129.66 5113129.87 0.0285 0.0085

Neptune 9287-07-05 23:31 G 5113253.30 5113253.48 5113253.69 0.0089 0.0039

Uranus 9287-11-05 05:16 G 5113375.60 5113375.72 5113375.85 0.0143 0.0117

Neptune 9288-02-16 12:43 G 5113478.88 5113479.03 5113479.22 0.0089 0.0058

Uranus 9288-06-18 16:33 G 5113602.01 5113602.19 5113602.39 0.0143 0.0065

Neptune 9288-09-29 02:09 G 5113704.49 5113704.59 5113704.71 0.0089 0.0077

Jupiter 9289-01-17 08:38 G 5113814.71 5113814.86 5113815.02 0.0485 0.0316

Uranus 9289-01-31 03:50 G 5113828.45 5113828.66 5113828.88 0.0143 0.0014

Uranus 9289-09-14 14:38 G 5114054.91 5114055.11 5114055.33 0.0143 0.0038

Uranus 9290-04-29 01:26 G 5114281.40 5114281.56 5114281.74 0.0142 0.0088

Mars 9290-08-31 02:52 G 5114405.45 5114405.62 5114405.79 0.1844 0.0340

Uranus 9290-12-11 12:00 G 5114507.97 5114508.00 5114508.07 0.0142 0.0139

Saturn 9301-08-14 12:00 G 5118405.81 5118406.00 5118406.19 0.0274 0.0123

Saturn 9302-03-31 19:40 G 5118635.12 5118635.32 5118635.53 0.0274 0.0083

Moon 9302-08-10 15:07 G 5118766.99 5118767.13 5118767.28 0.2657 0.1284

Earth 9302-08-10 16:33 G 5118767.04 5118767.19 5118767.34 0.2664 0.0837 *

Jupiter 9307-03-21 10:04 G 5120450.92 5120450.92 5120450.94 0.0544 0.0543

Jupiter 9313-01-20 10:33 G 5122582.76 5122582.94 5122583.12 0.0484 0.0238

Saturn 9316-01-28 19:11 G 5123686.11 5123686.30 5123686.50 0.0285 0.0112

Saturn 9316-09-14 11:16 G 5123915.78 5123915.97 5123916.16 0.0285 0.0120

Mars 9318-01-15 04:19 G 5124403.51 5124403.68 5124403.86 0.1687 0.0059

Jupiter 9318-11-23 21:36 G 5124716.20 5124716.40 5124716.60 0.0544 0.0041

Jupiter 9324-09-25 16:33 G 5126848.99 5126849.19 5126849.39 0.0484 0.0112

Jupiter 9330-07-29 08:23 G 5128981.75 5128981.85 5128981.96 0.0543 0.0463

Saturn 9331-02-24 13:26 G 5129191.87 5129192.06 5129192.26 0.0273 0.0103

Uranus 9331-03-21 13:40 G 5129216.99 5129217.07 5129217.16 0.0135 0.0123

Saturn 9331-10-11 21:07 G 5129421.19 5129421.38 5129421.58 0.0274 0.0103

Uranus 9331-11-02 19:55 G 5129443.17 5129443.33 5129443.51 0.0135 0.0081

Uranus 9332-06-16 02:23 G 5129669.39 5129669.60 5129669.81 0.0135 0.0038

Uranus 9333-01-28 08:52 G 5129895.65 5129895.87 5129896.09 0.0135 0.0005

Uranus 9333-09-11 15:07 G 5130121.93 5130122.13 5130122.34 0.0136 0.0049

Uranus 9334-04-25 21:36 G 5130348.25 5130348.40 5130348.57 0.0136 0.0092

Uranus 9334-12-08 04:19 G 5130574.67 5130574.68 5130574.71 0.0136 0.0135

Jupiter 9336-05-31 22:19 G 5131115.37 5131115.43 5131115.48 0.0485 0.0463

Saturn 9345-08-09 22:33 G 5134472.24 5134472.44 5134472.64 0.0285 0.0087

Saturn 9346-03-27 14:52 G 5134701.94 5134702.12 5134702.30 0.0285 0.0145

Jupiter 9348-09-27 18:57 G 5135617.22 5135617.29 5135617.37 0.0485 0.0448

Mars 9350-01-14 04:19 G 5136090.59 5136090.68 5136090.78 0.1698 0.1412

Mars 9351-11-13 16:19 G 5136759.14 5136759.18 5136759.22 0.1674 0.1627

Jupiter 9354-08-01 14:38 G 5137750.95 5137751.11 5137751.27 0.0543 0.0326

Mars 9356-06-28 08:23 G 5138447.68 5138447.85 5138448.03 0.1848 0.0045

Saturn 9360-01-20 14:38 G 5139749.08 5139749.11 5139749.15 0.0274 0.0270

Jupiter 9360-06-03 01:11 G 5139883.35 5139883.55 5139883.75 0.0485 0.0097

Saturn 9360-09-05 22:19 G 5139978.22 5139978.43 5139978.63 0.0274 0.0066

Saturn 9361-04-23 06:14 G 5140207.58 5140207.76 5140207.94 0.0275 0.0140

Neptune 9365-04-26 12:57 G 5141671.96 5141672.04 5141672.12 0.0088 0.0082

Neptune 9365-12-08 01:26 G 5141897.42 5141897.56 5141897.72 0.0088 0.0063

Jupiter 9366-04-05 23:45 G 5142016.31 5142016.49 5142016.69 0.0543 0.0189

Neptune 9366-07-21 13:55 G 5142122.90 5142123.08 5142123.28 0.0088 0.0045

Neptune 9367-03-04 02:23 G 5142348.41 5142348.60 5142348.82 0.0088 0.0027

Neptune 9367-10-15 15:21 G 5142573.92 5142574.14 5142574.36 0.0088 0.0008

Neptune 9368-05-28 04:04 G 5142799.45 5142799.67 5142799.89 0.0088 0.0010

Neptune 9369-01-08 16:33 G 5143024.99 5143025.19 5143025.41 0.0088 0.0028

Neptune 9369-08-22 04:48 G 5143250.54 5143250.70 5143250.91 0.0088 0.0047

Neptune 9370-04-04 17:31 G 5143476.10 5143476.23 5143476.40 0.0088 0.0065

Neptune 9370-11-16 06:14 G 5143701.71 5143701.76 5143701.85 0.0088 0.0083

Uranus 9371-07-06 11:02 G 5143933.93 5143933.96 5143933.99 0.0144 0.0142

Jupiter 9372-02-07 06:14 G 5144149.59 5144149.76 5144149.93 0.0485 0.0258

Uranus 9372-02-17 22:04 G 5144160.27 5144160.42 5144160.60 0.0143 0.0091

Uranus 9372-10-01 09:21 G 5144386.69 5144386.89 5144387.11 0.0143 0.0039

Uranus 9373-05-15 20:38 G 5144613.15 5144613.36 5144613.58 0.0143 0.0012

Uranus 9373-12-28 07:26 G 5144839.62 5144839.81 5144840.01 0.0143 0.0063

Saturn 9374-07-05 15:21 G 5145029.11 5145029.14 5145029.18 0.0286 0.0280

Uranus 9374-08-11 18:14 G 5145066.14 5145066.26 5145066.40 0.0142 0.0114

Saturn 9375-02-20 07:55 G 5145258.62 5145258.83 5145259.03 0.0285 0.0048

Saturn 9375-10-07 23:45 G 5145488.33 5145488.49 5145488.65 0.0284 0.0183

Mars 9383-11-12 14:38 G 5148445.94 5148446.11 5148446.28 0.1684 0.0251

Pluto 9384-11-14 01:26 G 5148813.41 5148813.56 5148813.76 0.0067 0.0040

Pluto 9385-06-27 07:11 G 5149038.58 5149038.80 5149039.02 0.0068 0.0004

Pluto 9386-02-07 12:14 G 5149263.87 5149264.01 5149264.18 0.0068 0.0048

Saturn 9389-08-01 17:02 G 5150535.13 5150535.21 5150535.30 0.0273 0.0248

Saturn 9390-03-19 00:28 G 5150764.31 5150764.52 5150764.73 0.0274 0.0045

Saturn 9390-11-03 08:23 G 5150993.68 5150993.85 5150994.02 0.0274 0.0161

Jupiter 9396-02-09 07:55 G 5152917.67 5152917.83 5152917.99 0.0485 0.0298

Earth 9400-02-13 12:43 G 5154382.87 5154383.03 5154383.19 0.2668 0.0422

Moon 9400-02-13 13:40 G 5154382.91 5154383.07 5154383.23 0.2662 0.0749 *

Jupiter 9401-12-13 21:50 G 5155051.21 5155051.41 5155051.61 0.0543 0.0124

Saturn 9404-01-16 18:28 G 5155815.18 5155815.27 5155815.36 0.0286 0.0255

Saturn 9404-09-02 11:02 G 5156044.75 5156044.96 5156045.17 0.0285 0.0023

Saturn 9405-04-20 03:07 G 5156274.49 5156274.63 5156274.78 0.0284 0.0208

Jupiter 9407-10-16 14:23 G 5157183.90 5157184.10 5157184.30 0.0485 0.0051

Jupiter 9413-08-18 04:19 G 5159316.55 5159316.68 5159316.82 0.0543 0.0405

Uranus 9415-07-04 03:50 G 5160001.54 5160001.66 5160001.82 0.0135 0.0102

Mars 9415-11-12 14:23 G 5160132.98 5160133.10 5160133.22 0.1695 0.1190

Uranus 9416-02-15 10:19 G 5160227.74 5160227.93 5160228.13 0.0135 0.0059

Uranus 9416-09-28 16:48 G 5160453.98 5160454.20 5160454.42 0.0135 0.0016

Uranus 9417-05-12 23:02 G 5160680.25 5160680.46 5160680.68 0.0135 0.0027

Uranus 9417-12-25 05:31 G 5160906.56 5160906.73 5160906.93 0.0136 0.0071

Uranus 9418-08-08 12:00 G 5161132.90 5161133.00 5161133.13 0.0136 0.0114

Saturn 9419-02-13 00:57 G 5161321.42 5161321.54 5161321.69 0.0274 0.0214

Jupiter 9419-06-21 20:09 G 5161450.23 5161450.34 5161450.46 0.0485 0.0403

Saturn 9419-09-30 09:07 G 5161550.67 5161550.88 5161551.09 0.0275 0.0008

Saturn 9420-05-16 17:16 G 5161780.07 5161780.22 5161780.36 0.0275 0.0199

Mars 9422-04-26 13:26 G 5162489.89 5162490.06 5162490.23 0.1852 0.0431

Saturn 9433-07-29 05:16 G 5166601.59 5166601.72 5166601.87 0.0286 0.0215

Saturn 9434-03-15 21:50 G 5166831.20 5166831.41 5166831.62 0.0285 0.0018

Saturn 9434-10-31 13:26 G 5167060.96 5167061.06 5167061.16 0.0284 0.0248

Jupiter 9437-08-21 13:40 G 5168085.94 5168086.07 5168086.21 0.0544 0.0404

Jupiter 9443-06-23 21:36 G 5170218.21 5170218.40 5170218.60 0.0484 0.0152

Neptune 9448-01-25 02:38 G 5171894.56 5171894.61 5171894.69 0.0089 0.0085

Saturn 9448-08-25 04:33 G 5172107.54 5172107.69 5172107.85 0.0273 0.0190

Neptune 9448-09-06 15:50 G 5172120.03 5172120.16 5172120.33 0.0089 0.0066

Saturn 9449-04-11 12:14 G 5172336.80 5172337.01 5172337.22 0.0274 0.0014

Neptune 9449-04-20 05:16 G 5172345.55 5172345.72 5172345.93 0.0089 0.0047

Jupiter 9449-04-26 00:43 G 5172351.33 5172351.53 5172351.73 0.0544 0.0102

Mars 9449-09-10 01:26 G 5172488.39 5172488.56 5172488.73 0.1681 0.0447

Saturn 9449-11-26 20:09 G 5172566.22 5172566.34 5172566.47 0.0275 0.0221

Neptune 9449-12-01 19:11 G 5172571.09 5172571.30 5172571.51 0.0089 0.0027

Neptune 9450-07-15 08:38 G 5172796.64 5172796.86 5172797.08 0.0089 0.0008

Neptune 9451-02-25 21:50 G 5173022.20 5173022.41 5173022.63 0.0089 0.0012

Neptune 9451-10-09 11:02 G 5173247.77 5173247.96 5173248.18 0.0089 0.0032

Neptune 9452-05-22 00:28 G 5173473.35 5173473.52 5173473.71 0.0089 0.0051

Neptune 9453-01-02 13:55 G 5173698.95 5173699.08 5173699.22 0.0089 0.0070

Neptune 9453-08-16 03:21 G 5173924.62 5173924.64 5173924.66 0.0089 0.0089

Mars 9454-04-26 06:14 G 5174177.70 5174177.76 5174177.81 0.1838 0.1722

Jupiter 9455-02-27 02:52 G 5174484.44 5174484.62 5174484.81 0.0485 0.0203

Uranus 9455-10-19 03:50 G 5174718.54 5174718.66 5174718.80 0.0143 0.0116

Uranus 9456-06-01 15:21 G 5174944.95 5174945.14 5174945.34 0.0143 0.0064

Uranus 9457-01-14 02:38 G 5175171.39 5175171.61 5175171.82 0.0143 0.0013

Uranus 9457-08-28 13:26 G 5175397.85 5175398.06 5175398.27 0.0143 0.0038

Uranus 9458-04-12 00:14 G 5175624.34 5175624.51 5175624.68 0.0143 0.0089

Uranus 9458-11-24 11:02 G 5175850.92 5175850.96 5175851.01 0.0142 0.0139

Saturn 9463-02-08 08:09 G 5177387.69 5177387.84 5177388.00 0.0286 0.0189

Saturn 9463-09-26 00:43 G 5177617.32 5177617.53 5177617.74 0.0285 0.0043

Saturn 9464-05-12 16:33 G 5177847.14 5177847.19 5177847.25 0.0284 0.0272

Pluto 9471-04-23 16:04 G 5180383.97 5180384.17 5180384.37 0.0077 0.0030

Pluto 9471-12-05 00:43 G 5180609.35 5180609.53 5180609.74 0.0076 0.0034

Saturn 9478-03-07 12:14 G 5182893.85 5182894.01 5182894.20 0.0274 0.0156

Saturn 9478-10-22 20:23 G 5183123.15 5183123.35 5183123.56 0.0275 0.0051

Jupiter 9479-03-01 05:31 G 5183252.60 5183252.73 5183252.87 0.0485 0.0357

Saturn 9479-06-09 04:48 G 5183352.63 5183352.70 5183352.77 0.0275 0.0258

Mars 9481-09-09 00:43 G 5184175.39 5184175.53 5184175.67 0.1691 0.0977

Jupiter 9485-01-01 16:19 G 5185385.99 5185386.18 5185386.38 0.0543 0.0175

Mars 9488-02-21 18:43 G 5186532.12 5186532.28 5186532.44 0.1856 0.0823

Jupiter 9490-11-04 10:19 G 5187518.73 5187518.93 5187519.14 0.0485 0.0012

Saturn 9492-08-20 19:55 G 5188174.16 5188174.33 5188174.52 0.0285 0.0148

Saturn 9493-04-07 12:14 G 5188403.81 5188404.01 5188404.21 0.0285 0.0085

Jupiter 9496-09-06 02:09 G 5189651.44 5189651.59 5189651.75 0.0544 0.0336

Uranus 9499-03-03 12:28 G 5190559.95 5190560.02 5190560.13 0.0135 0.0122

Uranus 9499-10-15 18:57 G 5190786.12 5190786.29 5190786.47 0.0135 0.0079

Uranus 9500-05-30 01:11 G 5191012.35 5191012.55 5191012.77 0.0135 0.0037

Uranus 9501-01-11 07:40 G 5191238.60 5191238.82 5191239.04 0.0135 0.0006

Uranus 9501-08-25 13:55 G 5191464.89 5191465.08 5191465.29 0.0136 0.0050

Uranus 9502-04-08 20:23 G 5191691.20 5191691.35 5191691.52 0.0136 0.0093

Jupiter 9502-07-11 16:33 G 5191785.05 5191785.19 5191785.33 0.0485 0.0350

Saturn 9507-09-18 16:33 G 5193680.01 5193680.19 5193680.38 0.0273 0.0132

Saturn 9508-05-05 00:28 G 5193909.31 5193909.52 5193909.72 0.0274 0.0074

Mars 9515-07-09 12:00 G 5196530.84 5196531.00 5196531.16 0.1677 0.0650

Mars 9520-02-22 11:31 G 5198219.86 5198219.98 5198220.10 0.1842 0.1352

Jupiter 9520-09-10 13:40 G 5198420.98 5198421.07 5198421.16 0.0543 0.0485

Saturn 9522-03-03 22:33 G 5198960.26 5198960.44 5198960.64 0.0285 0.0123

Saturn 9522-10-19 14:52 G 5199189.93 5199190.12 5199190.32 0.0285 0.0109

Jupiter 9526-07-13 18:28 G 5200553.09 5200553.27 5200553.46 0.0485 0.0208

Neptune 9530-03-13 13:11 G 5201891.93 5201892.05 5201892.20 0.0088 0.0070

Neptune 9530-10-25 01:55 G 5202117.42 5202117.58 5202117.77 0.0088 0.0052

Neptune 9531-06-07 14:38 G 5202342.92 5202343.11 5202343.33 0.0088 0.0034

Neptune 9532-01-19 03:36 G 5202568.43 5202568.65 5202568.87 0.0088 0.0015

Jupiter 9532-05-15 21:07 G 5202686.17 5202686.38 5202686.58 0.0543 0.0043

Neptune 9532-08-31 16:04 G 5202793.95 5202794.17 5202794.39 0.0088 0.0003

Neptune 9533-04-14 04:33 G 5203019.49 5203019.69 5203019.91 0.0088 0.0022

Neptune 9533-11-25 17:02 G 5203245.03 5203245.21 5203245.42 0.0088 0.0040

Neptune 9534-07-09 05:45 G 5203470.59 5203470.74 5203470.92 0.0088 0.0058

Neptune 9535-02-19 18:00 G 5203696.17 5203696.25 5203696.38 0.0088 0.0077

Saturn 9537-03-30 23:45 G 5204466.29 5204466.49 5204466.69 0.0274 0.0098

Moon 9537-08-14 21:21 G 5204603.35 5204603.39 5204603.44 0.2669 0.2541

Saturn 9537-11-15 07:40 G 5204695.64 5204695.82 5204696.02 0.0275 0.0110

Jupiter 9538-03-19 00:00 G 5204819.31 5204819.50 5204819.70 0.0485 0.0147

Uranus 9539-06-19 09:50 G 5205276.89 5205276.91 5205276.98 0.0144 0.0141

Uranus 9540-01-31 21:36 G 5205503.23 5205503.40 5205503.57 0.0143 0.0089

Uranus 9540-09-14 08:38 G 5205729.66 5205729.86 5205730.08 0.0143 0.0038

Uranus 9541-04-28 19:40 G 5205956.11 5205956.32 5205956.54 0.0143 0.0014

Uranus 9541-12-11 06:28 G 5206182.59 5206182.77 5206182.97 0.0143 0.0065

Uranus 9542-07-25 17:31 G 5206409.10 5206409.23 5206409.36 0.0142 0.0115

Moon	**9545-08-12 16:33 G**	**5207523.04**	**5207523.19**	**5207523.33**	**0.2673**	**0.0917**
Earth	**9545-08-12 17:02 G**	**5207523.07**	**5207523.21**	**5207523.36**	**0.2665**	**0.0998 ***
Mars	**9547-07-08 10:33 G**	**5208217.79**	**5208217.94**	**5208218.10**	**0.1688**	**0.0753**
Saturn	**9551-09-14 10:48 G**	**5209746.75**	**5209746.95**	**5209747.16**	**0.0285**	**0.0080**
Saturn	**9552-05-01 02:52 G**	**5209976.45**	**5209976.62**	**5209976.80**	**0.0284**	**0.0151**
Mars	**9553-12-19 23:31 G**	**5210574.35**	**5210574.48**	**5210574.61**	**0.1860**	**0.1234**
Jupiter	**9562-03-21 01:26 G**	**5213587.46**	**5213587.56**	**5213587.67**	**0.0484**	**0.0410**
Saturn	**9566-10-11 04:48 G**	**5215252.50**	**5215252.70**	**5215252.91**	**0.0274**	**0.0072**
Saturn	**9567-05-28 12:43 G**	**5215481.84**	**5215482.03**	**5215482.21**	**0.0274**	**0.0134**
Jupiter	**9568-01-22 16:19 G**	**5215721.00**	**5215721.18**	**5215721.36**	**0.0544**	**0.0258**
Jupiter	**9573-11-24 07:11 G**	**5217853.59**	**5217853.80**	**5217854.00**	**0.0485**	**0.0056**
Jupiter	**9579-09-27 02:38 G**	**5219986.43**	**5219986.61**	**5219986.79**	**0.0543**	**0.0253**
Saturn	**9581-03-26 12:57 G**	**5220532.83**	**5220533.04**	**5220533.25**	**0.0285**	**0.0056**
Mars	**9581-05-05 22:19 G**	**5220573.29**	**5220573.43**	**5220573.58**	**0.1674**	**0.0853**
Saturn	**9581-11-11 05:02 G**	**5220762.55**	**5220762.71**	**5220762.88**	**0.0285**	**0.0175**
Uranus	**9583-06-16 03:07 G**	**5221344.50**	**5221344.63**	**5221344.79**	**0.0135**	**0.0100**
Uranus	**9584-01-28 09:36 G**	**5221570.70**	**5221570.90**	**5221571.10**	**0.0135**	**0.0057**
Uranus	**9584-09-10 15:50 G**	**5221796.94**	**5221797.16**	**5221797.38**	**0.0135**	**0.0014**
Uranus	**9585-04-24 22:04 G**	**5222023.21**	**5222023.42**	**5222023.64**	**0.0135**	**0.0029**
Jupiter	**9585-07-30 13:11 G**	**5222119.89**	**5222120.05**	**5222120.21**	**0.0485**	**0.0296**
Uranus	**9585-12-07 04:33 G**	**5222249.51**	**5222249.69**	**5222249.88**	**0.0136**	**0.0072**
Mars	**9585-12-19 17:02 G**	**5222262.06**	**5222262.21**	**5222262.35**	**0.1847**	**0.0981**
Uranus	**9586-07-21 11:02 G**	**5222475.86**	**5222475.96**	**5222476.08**	**0.0136**	**0.0115**
Saturn	**9595-09-06 03:21 G**	**5225809.55**	**5225809.64**	**5225809.73**	**0.0274**	**0.0245**
Saturn	**9596-04-22 11:02 G**	**5226038.75**	**5226038.96**	**5226039.17**	**0.0274**	**0.0041**
Saturn	**9596-12-07 19:11 G**	**5226268.13**	**5226268.30**	**5226268.47**	**0.0275**	**0.0167**
Jupiter	**9603-09-30 08:38 G**	**5228755.85**	**5228755.86**	**5228755.89**	**0.0543**	**0.0539**
Jupiter	**9609-08-01 14:23 G**	**5230887.93**	**5230888.10**	**5230888.27**	**0.0485**	**0.0261**
Saturn	**9610-02-19 08:09 G**	**5231089.75**	**5231089.84**	**5231089.96**	**0.0286**	**0.0248**
Saturn	**9610-10-07 00:57 G**	**5231319.33**	**5231319.54**	**5231319.75**	**0.0285**	**0.0015**

Saturn 9611-05-24 17:02 G 5231549.07 5231549.21 5231549.35 0.0284 0.0216

Neptune 9612-12-10 03:36 G 5232114.53 5232114.65 5232114.78 0.0089 0.0073

Mars 9613-05-04 20:52 G 5232260.21 5232260.37 5232260.53 0.1685 0.0544

Neptune 9613-07-23 16:48 G 5232340.03 5232340.20 5232340.38 0.0089 0.0054

Neptune 9614-03-06 06:00 G 5232565.56 5232565.75 5232565.97 0.0089 0.0035

Neptune 9614-10-17 19:26 G 5232791.11 5232791.31 5232791.54 0.0089 0.0016

Neptune 9615-05-31 09:07 G 5233016.66 5233016.88 5233017.10 0.0089 0.0004

Jupiter 9615-06-04 18:00 G 5233021.05 5233021.25 5233021.45 0.0544 0.0025

Neptune 9616-01-11 22:33 G 5233242.23 5233242.44 5233242.65 0.0089 0.0024

Neptune 9616-08-24 11:31 G 5233467.80 5233467.98 5233468.19 0.0089 0.0043

Neptune 9617-04-07 00:43 G 5233693.39 5233693.53 5233693.71 0.0089 0.0063

Neptune 9617-11-18 14:23 G 5233919.02 5233919.10 5233919.20 0.0089 0.0082

Mars 9619-10-17 04:33 G 5234616.61 5234616.69 5234616.77 0.1864 0.1641

Jupiter 9621-04-06 20:38 G 5235154.16 5235154.36 5235154.56 0.0485 0.0091

Uranus 9623-10-01 03:50 G 5236061.54 5236061.66 5236061.81 0.0143 0.0113

Uranus 9624-05-14 15:07 G 5236287.95 5236288.13 5236288.34 0.0143 0.0062

Uranus 9624-12-27 02:23 G 5236514.39 5236514.60 5236514.82 0.0143 0.0011

Saturn 9625-03-18 08:52 G 5236595.75 5236595.87 5236596.00 0.0273 0.0218

Uranus 9625-08-10 13:26 G 5236740.85 5236741.06 5236741.27 0.0143 0.0041

Saturn 9625-11-02 16:33 G 5236824.98 5236825.19 5236825.40 0.0274 0.0014

Uranus 9626-03-25 00:00 G 5236967.34 5236967.50 5236967.68 0.0143 0.0092

Saturn 9626-06-20 00:00 G 5237054.36 5237054.50 5237054.67 0.0274 0.0193

Uranus 9626-11-06 10:33 G 5237193.93 5237193.94 5237193.98 0.0142 0.0142

Jupiter 9627-02-07 04:48 G 5237286.62 5237286.70 5237286.80 0.0543 0.0482

Pluto 9632-03-08 17:16 G 5239143.07 5239143.22 5239143.39 0.0067 0.0046

Pluto 9632-10-19 22:33 G 5239368.23 5239368.44 5239368.67 0.0068 0.0003

Jupiter 9632-12-11 02:09 G 5239420.52 5239420.59 5239420.67 0.0485 0.0445

Pluto 9633-06-02 04:04 G 5239593.49 5239593.67 5239593.84 0.0068 0.0041

Saturn 9639-09-01 10:19 G 5241875.80 5241875.93 5241876.06 0.0286 0.0223

Saturn 9640-04-18 02:52 G 5242105.41 5242105.62 5242105.83 0.0285 0.0010

Saturn 9640-12-03 18:28 G 5242335.17 5242335.27 5242335.39 0.0284 0.0239

Moon 9643-02-15 11:02 G 5243138.81 5243138.96 5243139.11 0.2672 0.0274

Earth 9643-02-15 14:09 G 5243138.93 5243139.09 5243139.25 0.2667 0.0387 *

Jupiter 9645-04-08 22:33 G 5243922.39 5243922.44 5243922.49 0.0485 0.0468

Mars 9647-03-03 09:21 G 5244615.75 5244615.89 5244616.02 0.1671 0.1045

Jupiter 9651-02-10 14:09 G 5246055.93 5246056.09 5246056.25 0.0543 0.0328

Mars 9651-10-16 21:50 G 5246304.25 5246304.41 5246304.58 0.1851 0.0590

Saturn 9654-09-28 13:55 G 5247381.93 5247382.08 5247382.24 0.0274 0.0190

Saturn 9655-05-15 21:50 G 5247611.19 5247611.41 5247611.62 0.0275 0.0017

Saturn 9655-12-31 05:31 G 5247840.62 5247840.73 5247840.86 0.0275 0.0223

Jupiter 9656-12-13 04:19 G 5248188.48 5248188.68 5248188.88 0.0485 0.0114

Jupiter 9662-10-15 22:48 G 5250321.26 5250321.45 5250321.64 0.0543 0.0192

Uranus 9667-02-13 12:00 G 5251902.91 5251903.00 5251903.11 0.0135 0.0119

Uranus 9667-09-27 18:00 G 5252129.08 5252129.25 5252129.44 0.0135 0.0077

Uranus 9668-05-11 00:28 G 5252355.31 5252355.52 5252355.73 0.0135 0.0035

Jupiter 9668-08-18 09:36 G 5252454.73 5252454.90 5252455.08 0.0485 0.0240

Uranus 9668-12-23 06:57 G 5252581.57 5252581.79 5252582.00 0.0135 0.0009

Saturn 9669-03-13 21:07 G 5252662.23 5252662.38 5252662.55 0.0286 0.0185

Uranus 9669-08-06 12:57 G 5252807.85 5252808.04 5252808.25 0.0136 0.0052

Saturn 9669-10-29 13:40 G 5252891.87 5252892.07 5252892.28 0.0285 0.0049

Uranus 9670-03-20 19:11 G 5253034.17 5253034.30 5253034.48 0.0136 0.0095

Saturn 9670-06-16 05:45 G 5253121.70 5253121.74 5253121.78 0.0284 0.0278

Mars 9679-03-02 07:11 G 5256302.63 5256302.80 5256302.97 0.1681 0.0334

Saturn 9684-04-09 20:09 G 5258168.17 5258168.34 5258168.51 0.0273 0.0161

Saturn 9684-11-25 03:36 G 5258397.44 5258397.65 5258397.86 0.0274 0.0044

Saturn 9685-07-12 11:31 G 5258626.89 5258626.98 5258627.07 0.0274 0.0249

Jupiter 9692-08-20 11:45 G 5261222.84 5261222.99 5261223.15 0.0484 0.0320

Neptune 9694-06-15 00:57 G 5261886.45 5261886.54 5261886.65 0.0088 0.0077

Neptune 9695-01-26 13:26 G 5262111.91 5262112.06 5262112.24 0.0088 0.0059

Neptune 9695-09-09 01:55 G 5262337.41 5262337.58 5262337.80 0.0088 0.0041

Neptune 9696-04-21 15:07 G 5262562.92 5262563.13 5262563.34 0.0088 0.0022

Neptune 9696-12-03 03:50 G 5262788.44 5262788.66 5262788.88 0.0088 0.0004

Neptune 9697-07-16 16:04 G 5263013.97 5263014.17 5263014.40 0.0088 0.0015

Neptune 9698-02-27 04:48 G 5263239.50 5263239.70 5263239.91 0.0088 0.0033

Jupiter 9698-06-23 19:26 G 5263356.11 5263356.31 5263356.51 0.0544 0.0115

Saturn 9698-09-23 22:33 G 5263448.27 5263448.44 5263448.62 0.0286 0.0161

Neptune 9698-10-10 17:31 G 5263465.06 5263465.23 5263465.41 0.0088 0.0051

Saturn 9699-05-11 15:07 G 5263677.93 5263678.13 5263678.34 0.0285 0.0071

Neptune 9699-05-24 05:45 G 5263690.63 5263690.74 5263690.90 0.0088 0.0070

Neptune 9700-01-04 18:57 G 5263916.29 5263916.29 5263916.29 0.0088 0.0088

Jupiter 9704-04-26 18:00 G 5265489.05 5265489.25 5265489.46 0.0485 0.0034

Uranus 9707-06-01 10:04 G 5266619.88 5266619.92 5266620.01 0.0144 0.0137

Uranus 9708-01-13 21:50 G 5266846.24 5266846.41 5266846.59 0.0143 0.0085

Uranus 9708-08-27 09:07 G 5267072.67 5267072.88 5267073.09 0.0143 0.0034

Uranus 9709-04-10 19:55 G 5267299.12 5267299.33 5267299.55 0.0143 0.0018

Uranus 9709-11-23 06:57 G 5267525.60 5267525.79 5267525.98 0.0143 0.0068

Jupiter 9710-02-27 04:19 G 5267621.55 5267621.68 5267621.82 0.0543 0.0403

Uranus 9710-07-07 17:31 G 5267752.12 5267752.23 5267752.36 0.0143 0.0119

Mars 9712-12-29 19:55 G 5268658.22 5268658.33 5268658.44 0.1669 0.1244

Saturn 9713-10-21 23:45 G 5268954.31 5268954.49 5268954.68 0.0274 0.0135

Saturn 9714-06-08 07:26 G 5269183.61 5269183.81 5269184.02 0.0275 0.0070

Jupiter 9715-12-31 23:31 G 5269755.36 5269755.48 5269755.60 0.0485 0.0387

Mars 9717-08-14 02:52 G 5270346.45 5270346.62 5270346.80 0.1855 0.0201

Pluto 9718-08-16 06:28 G 5270713.60 5270713.77 5270713.97 0.0077 0.0041

Pluto 9719-03-29 15:36 G 5270938.95 5270939.15 5270939.37 0.0076 0.0024

Saturn 9728-04-06 08:52 G 5274234.68 5274234.87 5274235.07 0.0285 0.0124

Saturn 9728-11-22 01:11 G 5274464.36 5274464.55 5274464.75 0.0285 0.0109

Jupiter 9734-03-02 11:02 G 5276390.83 5276390.96 5276391.10 0.0544 0.0396

Jupiter 9740-01-03 02:23 G 5278523.41 5278523.60 5278523.79 0.0484 0.0178

Saturn 9743-05-04 06:14 G 5279740.57 5279740.76 5279740.96 0.0273 0.0106

Saturn 9743-12-19 13:40 G 5279969.88 5279970.07 5279970.27 0.0274 0.0099

Mars 9744-12-28 18:00 G 5280345.07 5280345.25 5280345.42 0.1678 0.0137

Jupiter 9745-11-04 22:04 G 5280656.22 5280656.42 5280656.62 0.0544 0.0113

Uranus 9751-05-29 02:23 G 5282687.46 5282687.60 5282687.76 0.0135 0.0097

Jupiter 9751-09-08 07:55 G 5282789.64 5282789.83 5282790.02 0.0485 0.0177

Uranus 9752-01-10 08:38 G 5282913.67 5282913.86 5282914.06 0.0135 0.0055

Uranus 9752-08-23 14:52 G 5283139.90 5283140.12 5283140.34 0.0135 0.0012

Uranus 9753-04-06 21:07 G 5283366.17 5283366.38 5283366.60 0.0135 0.0031

Uranus 9753-11-19 03:36 G 5283592.47 5283592.65 5283592.84 0.0136 0.0074

Uranus 9754-07-03 10:04 G 5283818.82 5283818.92 5283819.04 0.0136 0.0117

Saturn 9757-10-17 09:36 G 5285020.71 5285020.90 5285021.10 0.0286 0.0101

Saturn 9758-06-04 01:55 G 5285250.40 5285250.58 5285250.77 0.0285 0.0131

Saturn 9772-11-13 08:52 G 5290526.67 5290526.87 5290527.08 0.0274 0.0082

Saturn 9773-06-30 16:33 G 5290756.00 5290756.19 5290756.38 0.0274 0.0124

Jupiter 9775-09-10 10:04 G 5291557.80 5291557.92 5291558.04 0.0485 0.0384

Mars 9776-12-27 17:02 G 5292032.14 5292032.21 5292032.27 0.1689 0.1569

Neptune 9777-03-14 14:23 G 5292109.02 5292109.10 5292109.21 0.0089 0.0081

Neptune 9777-10-26 03:50 G 5292334.51 5292334.66 5292334.83 0.0089 0.0061

Neptune 9778-06-08 17:31 G 5292560.04 5292560.23 5292560.42 0.0089 0.0042

Mars 9778-10-27 06:57 G 5292700.70 5292700.79 5292700.88 0.1666 0.1429

Neptune 9779-01-20 06:43 G 5292785.57 5292785.78 5292786.00 0.0089 0.0023

Neptune 9779-09-02 20:09 G 5293011.12 5293011.34 5293011.56 0.0089 0.0003

Neptune 9780-04-15 09:21 G 5293236.68 5293236.89 5293237.11 0.0089 0.0016

Earth 9780-08-16 02:38 G 5293359.58 5293359.61 5293359.64 0.2665 0.2605

Neptune 9780-11-26 22:48 G 5293462.26 5293462.45 5293462.66 0.0089 0.0036

Neptune 9781-07-10 12:00 G 5293687.84 5293688.00 5293688.19 0.0089 0.0055

Jupiter 9781-07-13 17:45 G 5293691.05 5293691.24 5293691.43 0.0543 0.0189

Neptune 9782-02-21 01:11 G 5293913.45 5293913.55 5293913.69 0.0089 0.0075

Mars 9783-06-11 07:40 G 5294388.65 5294388.82 5294389.00 0.1859 0.0210

Saturn 9787-04-29 18:28 G 5295807.07 5295807.27 5295807.48 0.0285 0.0067

Jupiter 9787-05-16 16:04 G 5295823.97 5295824.17 5295824.38 0.0485 0.0033

Saturn 9787-12-15 11:02 G 5296036.79 5296036.96 5296037.13 0.0285 0.0165

Earth 9788-08-13 17:45 G 5296279.10 5296279.24 5296279.39 0.2667 0.1142

Moon 9788-08-13 20:23 G 5296279.19 5296279.35 5296279.51 0.2660 0.0768 *

Uranus 9791-09-13 04:19 G 5297404.54 5297404.68 5297404.82 0.0144 0.0109

Uranus 9792-04-26 15:21 G 5297630.95 5297631.14 5297631.35 0.0143 0.0058

Uranus 9792-12-09 02:38 G 5297857.39 5297857.61 5297857.83 0.0143 0.0006

Jupiter 9793-03-18 01:11 G 5297956.39 5297956.55 5297956.71 0.0543 0.0338

Uranus 9793-07-23 13:26 G 5298083.86 5298084.06 5298084.28 0.0143 0.0045

Uranus 9794-03-07 00:14 G 5298310.36 5298310.51 5298310.68 0.0143 0.0095

Jupiter 9799-01-19 22:48 G 5300090.30 5300090.45 5300090.60 0.0485 0.0318

Saturn 9801-10-10 08:38 G 5301083.79 5301083.86 5301083.94 0.0273 0.0254

Saturn 9802-05-27 15:36 G 5301312.95 5301313.15 5301313.36 0.0273 0.0053

Saturn 9803-01-11 23:02 G 5301542.29 5301542.46 5301542.64 0.0274 0.0152

Mars 9810-10-27 04:19 G 5304387.51 5304387.68 5304387.86 0.1675 0.0075

Saturn 9816-03-25 02:23 G 5306363.56 5306363.60 5306363.67 0.0286 0.0276

Saturn 9816-11-09 19:26 G 5306593.10 5306593.31 5306593.51 0.0286 0.0044

Jupiter 9817-03-22 14:09 G 5306726.01 5306726.09 5306726.17 0.0544 0.0495

Saturn 9817-06-27 11:16 G 5306822.82 5306822.97 5306823.14 0.0285 0.0188

Jupiter 9823-01-23 00:57 G 5308858.36 5308858.54 5308858.72 0.0484 0.0243

Jupiter 9828-11-25 00:00 G 5310991.30 5310991.50 5310991.71 0.0543 0.0020

Saturn 9831-04-22 09:50 G 5311869.81 5311869.91 5311870.02 0.0273 0.0233

Saturn 9831-12-07 17:02 G 5312099.00 5312099.21 5312099.43 0.0274 0.0031

Saturn 9832-07-24 00:28 G 5312328.37 5312328.52 5312328.69 0.0274 0.0176

Jupiter 9834-09-28 06:28 G 5313124.57 5313124.77 5313124.97 0.0485 0.0112

Uranus 9835-01-27 11:02 G 5313245.87 5313245.96 5313246.08 0.0135 0.0117

Uranus 9835-09-10 17:16 G 5313472.05 5313472.22 5313472.41 0.0135 0.0075

Uranus 9836-04-23 23:31 G 5313698.27 5313698.48 5313698.69 0.0135 0.0032

Uranus 9836-12-06 06:00 G 5313924.53 5313924.75 5313924.97 0.0135 0.0010

Uranus 9837-07-20 12:14 G 5314150.81 5314151.01 5314151.21 0.0135 0.0053

Uranus 9838-03-03 18:28 G 5314377.13 5314377.27 5314377.44 0.0136 0.0097

Jupiter 9840-07-30 08:52 G 5315256.86 5315256.87 5315256.91 0.0543 0.0538

Mars 9842-10-26 03:07 G 5316074.53 5316074.63 5316074.74 0.1686 0.1355

Mars 9844-08-24 17:31 G 5316743.20 5316743.23 5316743.27 0.1663 0.1625

Saturn 9845-10-05 09:36 G 5317149.81 5317149.90 5317150.02 0.0286 0.0245

Saturn 9846-05-23 02:52 G 5317379.40 5317379.62 5317379.83 0.0285 0.0013

Jupiter 9846-06-03 12:57 G 5317390.98 5317391.04 5317391.10 0.0485 0.0462

Saturn 9847-01-07 18:57 G 5317609.16 5317609.29 5317609.43 0.0285 0.0219

Mars 9849-04-08 12:00 G 5318430.84 5318431.00 5318431.17 0.1863 0.0634

Neptune 9858-09-18 12:00 G 5321880.96 5321881.00 5321881.07 0.0088 0.0085

Jupiter 9858-09-30 09:50 G 5321892.85 5321892.91 5321892.98 0.0484 0.0456

Neptune 9859-05-02 01:11 G 5322106.41 5322106.55 5322106.69 0.0088 0.0066

Neptune 9859-12-13 13:40 G 5322331.89 5322332.07 5322332.26 0.0088 0.0048

Neptune 9860-07-26 02:09 G 5322557.40 5322557.59 5322557.81 0.0088 0.0030

Saturn 9860-11-01 17:02 G 5322656.08 5322656.21 5322656.36 0.0273 0.0202

Neptune 9861-03-08 15:07 G 5322782.91 5322783.13 5322783.35 0.0088 0.0011

Saturn 9861-06-19 00:14 G 5322885.30 5322885.51 5322885.73 0.0273 0.0003

Neptune 9861-10-20 03:50 G 5323008.44 5323008.66 5323008.88 0.0088 0.0007

Saturn 9862-02-03 07:26 G 5323114.68 5323114.81 5323114.96 0.0274 0.0205

Neptune 9862-06-02 16:19 G 5323233.98 5323234.18 5323234.40 0.0088 0.0026

Neptune 9863-01-14 04:48 G 5323459.52 5323459.70 5323459.90 0.0088 0.0044

Neptune 9863-08-27 17:02 G 5323685.08 5323685.21 5323685.39 0.0088 0.0063

Neptune 9864-04-09 05:45 G 5323910.68 5323910.74 5323910.85 0.0088 0.0081

Jupiter 9864-08-02 17:16 G 5324026.05 5324026.22 5324026.40 0.0544 0.0271

Jupiter 9870-06-05 15:36 G 5326158.96 5326159.15 5326159.35 0.0484 0.0102

Saturn 9875-04-17 10:48 G 5327935.82 5327935.95 5327936.08 0.0286 0.0221

Uranus 9875-05-14 10:04 G 5327962.86 5327962.92 5327963.01 0.0144 0.0134

Saturn 9875-12-03 03:21 G 5328165.43 5328165.64 5328165.85 0.0286 0.0011

Uranus 9875-12-26 21:21 G 5328189.23 5328189.39 5328189.58 0.0143 0.0083

Jupiter 9876-04-07 04:48 G 5328291.52 5328291.70 5328291.88 0.0544 0.0236

Saturn 9876-07-19 19:26 G 5328395.20 5328395.31 5328395.42 0.0285 0.0241

Uranus 9876-08-09 08:38 G 5328415.66 5328415.86 5328416.08 0.0143 0.0032

Mars 9876-08-23 15:21 G 5328429.97 5328430.14 5328430.31 0.1672 0.0261

Uranus 9877-03-23 19:55 G 5328642.11 5328642.33 5328642.54 0.0143 0.0020

Uranus 9877-11-05 06:43 G 5328868.60 5328868.78 5328868.97 0.0143 0.0071

Uranus 9878-06-19 17:45 G 5329095.13 5329095.24 5329095.35 0.0143 0.0121

Pluto 9879-07-02 10:19 G 5329472.79 5329472.93 5329473.12 0.0067 0.0045

Pluto 9880-02-12 16:19 G 5329697.96 5329698.18 5329698.40 0.0068 0.0001

Pluto 9880-09-24 21:21 G 5329923.23 5329923.39 5329923.57 0.0068 0.0043

Mars 9881-04-08 06:14 G 5330118.68 5330118.76 5330118.85 0.1849 0.1612

Jupiter 9882-02-08 21:50 G 5330425.24 5330425.41 5330425.59 0.0485 0.0251

Earth 9886-02-17 15:36 G 5331894.99 5331895.15 5331895.30 0.2665 0.0321

Moon 9886-02-17 20:23 G 5331895.20 5331895.35 5331895.50 0.2663 0.1050 *

Saturn 9890-05-14 17:16 G 5333442.08 5333442.22 5333442.39 0.0273 0.0183

Saturn 9890-12-30 00:43 G 5333671.32 5333671.53 5333671.74 0.0274 0.0021

Saturn 9891-08-16 08:09 G 5333900.72 5333900.84 5333900.96 0.0274 0.0226

Saturn 9904-10-28 16:48 G 5338722.05 5338722.20 5338722.36 0.0286 0.0192

Saturn 9905-06-15 09:36 G 5338951.70 5338951.90 5338952.11 0.0285 0.0041

Saturn 9906-01-31 01:40 G 5339181.52 5339181.57 5339181.65 0.0285 0.0271

Jupiter 9906-02-12 00:28 G 5339193.37 5339193.52 5339193.67 0.0484 0.0315

Mars 9908-08-23 13:40 G 5340116.94 5340117.07 5340117.20 0.1683 0.1146

Jupiter 9911-12-15 21:36 G 5341326.20 5341326.40 5341326.60 0.0544 0.0051

Mars 9915-02-04 17:02 G 5342473.06 5342473.21 5342473.35 0.1867 0.1045

Jupiter 9917-10-18 07:11 G 5343459.60 5343459.80 5343460.01 0.0484 0.0036

Uranus 9919-05-12 01:55 G 5344030.42 5344030.58 5344030.73 0.0135 0.0095

Saturn 9919-11-26 00:43 G 5344228.36 5344228.53 5344228.72 0.0273 0.0151

Uranus 9919-12-24 07:55 G 5344256.64 5344256.83 5344257.04 0.0135 0.0053

Saturn 9920-07-12 07:55 G 5344457.62 5344457.83 5344458.04 0.0273 0.0052

Uranus 9920-08-06 14:09 G 5344482.88 5344483.09 5344483.31 0.0135 0.0011

Saturn 9921-02-26 15:07 G 5344687.07 5344687.13 5344687.22 0.0274 0.0256

Uranus 9921-03-20 20:23 G 5344709.14 5344709.35 5344709.57 0.0135 0.0033

Uranus 9921-11-02 02:38 G 5344935.44 5344935.61 5344935.80 0.0135 0.0076

Uranus 9922-06-16 09:07 G 5345161.79 5345161.88 5345162.00 0.0136 0.0119

Jupiter 9923-08-20 07:55 G 5345591.73 5345591.83 5345591.94 0.0544 0.0462

Jupiter 9929-06-23 13:11 G 5347725.93 5347726.05 5347726.17 0.0485 0.0391

Saturn 9934-05-10 18:14 G 5349508.09 5349508.26 5349508.43 0.0286 0.0169

Saturn 9934-12-26 10:33 G 5349737.74 5349737.94 5349738.15 0.0285 0.0064

Neptune 9941-06-18 01:11 G 5352103.54 5352103.55 5352103.60 0.0089 0.0089

Neptune 9942-01-29 14:23 G 5352328.98 5352329.10 5352329.26 0.0089 0.0070

Mars 9942-06-22 01:55 G 5352472.41 5352472.58 5352472.75 0.1669 0.0464

Neptune 9942-09-12 04:04 G 5352554.49 5352554.67 5352554.85 0.0089 0.0050

Neptune 9943-04-25 17:16 G 5352780.02 5352780.22 5352780.43 0.0089 0.0031

Neptune 9943-12-07 06:43 G 5353005.57 5353005.78 5353006.00 0.0089 0.0011

Neptune 9944-07-19 20:09 G 5353231.12 5353231.34 5353231.56 0.0089 0.0008

Neptune 9945-03-02 09:21 G 5353456.69 5353456.89 5353457.10 0.0089 0.0028

Neptune 9945-10-13 22:33 G 5353682.27 5353682.44 5353682.64 0.0089 0.0047

Neptune 9946-05-27 12:00 G 5353907.86 5353908.00 5353908.16 0.0089 0.0067

Neptune 9947-01-08 01:40 G 5354133.51 5354133.57 5354133.63 0.0089 0.0086

Mars 9947-02-04 11:16 G 5354160.84 5354160.97 5354161.10 0.1854 0.1223

Jupiter 9947-08-23 20:52 G 5354361.23 5354361.37 5354361.52 0.0544 0.0375

Saturn 9949-06-07 00:57 G 5355014.35 5355014.54 5355014.72 0.0273 0.0132

Saturn 9950-01-22 07:55 G 5355243.63 5355243.83 5355244.04 0.0274 0.0072

Jupiter 9953-06-25 15:21 G 5356493.95 5356494.14 5356494.33 0.0485 0.0173

Jupiter 9959-04-28 06:14 G 5358626.57 5358626.76 5358626.96 0.0543 0.0146

Uranus 9959-08-27 03:50 G 5358747.52 5358747.66 5358747.81 0.0144 0.0107

Uranus 9960-04-09 15:07 G 5358973.93 5358974.13 5358974.33 0.0143 0.0056

Uranus 9960-11-22 02:23 G 5359200.38 5359200.60 5359200.81 0.0143 0.0005

Uranus 9961-07-06 13:11 G 5359426.85 5359427.05 5359427.27 0.0143 0.0047

Uranus 9962-02-18 00:14 G 5359653.36 5359653.51 5359653.67 0.0143 0.0097

Saturn 9963-11-20 23:02 G 5360294.28 5360294.46 5360294.65 0.0286 0.0141

Saturn	**9964-07-07 15:50 G**	**5360523.96**	**5360524.16**	**5360524.36**	**0.0285**	**0.0091**		
Jupiter	**9965-02-28 21:50 G**	**5360760.22**	**5360760.41**	**5360760.60**	**0.0485**	**0.0178**		
Pluto	**9965-12-09 01:40 G**	**5361043.37**	**5361043.57**	**5361043.77**	**0.0077**	**0.0033**		
Pluto	**9966-07-22 10:33 G**	**5361268.74**	**5361268.94**	**5361269.15**	**0.0076**	**0.0031**		
Mars	**9974-06-20 23:45 G**	**5364159.34**	**5364159.49**	**5364159.63**	**0.1679**	**0.0923**		
Saturn	**9978-12-18 08:23 G**	**5365800.65**	**5365800.85**	**5365801.05**	**0.0273**	**0.0100**		
Saturn	**9979-08-04 15:21 G**	**5366029.95**	**5366030.14**	**5366030.34**	**0.0274**	**0.0104**		
Mars	**9980-12-01 21:07 G**	**5366515.27**	**5366515.38**	**5366515.48**	**0.1871**	**0.1481**		
Jupiter	**9989-03-03 00:28 G**	**5369528.41**	**5369528.52**	**5369528.65**	**0.0484**	**0.0387**		
Saturn	**9993-06-02 00:57 G**	**5371080.35**	**5371080.54**	**5371080.73**	**0.0286**	**0.0116**		
Saturn	**9994-01-17 17:16 G**	**5371310.03**	**5371310.22**	**5371310.41**	**0.0285**	**0.0116**		
Jupiter	**9995-01-04 01:40 G**	**5371661.38**	**5371661.57**	**5371661.76**	**0.0544**	**0.0156**		
Jupiter	**10000-11-06 06:57 G**	**5373794.59**	**5373794.79**	**5373795.00**	**0.0484**	**0.0035**		

11TH MILLENNIUM CE

This is a list of transits of Venus in the 11th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Uranus	**10003-01-09 10:48 G**	**5374588.85**	**5374588.95**	**5374589.08**	**0.0135**	**0.0115**		
Uranus	**10003-08-23 16:48 G**	**5374815.03**	**5374815.20**	**5374815.40**	**0.0135**	**0.0073**		
Uranus	**10004-04-05 23:16 G**	**5375041.26**	**5375041.47**	**5375041.68**	**0.0135**	**0.0030**		
Uranus	**10004-11-18 05:31 G**	**5375267.52**	**5375267.73**	**5375267.95**	**0.0135**	**0.0013**		
Uranus	**10005-07-02 12:00 G**	**5375493.80**	**5375494.00**	**5375494.20**	**0.0135**	**0.0056**		
Uranus	**10006-02-13 18:14 G**	**5375720.13**	**5375720.26**	**5375720.42**	**0.0136**	**0.0099**		

Jupiter 10006-09-08 12:28 G 5375926.87 5375927.02 5375927.17 0.0543 0.0355

Mars 10008-04-18 12:43 G 5376514.87 5376515.03 5376515.19 0.1666 0.0660

Saturn 10008-06-29 07:55 G 5376586.63 5376586.83 5376587.03 0.0273 0.0082

Saturn 10009-02-13 14:52 G 5376815.94 5376816.12 5376816.32 0.0274 0.0122

Jupiter 10012-07-12 12:43 G 5378060.88 5378061.03 5378061.19 0.0485 0.0321

Mars 10012-12-01 16:04 G 5378203.01 5378203.17 5378203.33 0.1858 0.0827

Saturn 10022-12-13 05:16 G 5381866.52 5381866.72 5381866.92 0.0286 0.0090

Saturn 10023-07-30 21:36 G 5382096.22 5382096.40 5382096.59 0.0285 0.0142

Neptune 10023-08-04 11:45 G 5382100.88 5382100.99 5382101.11 0.0088 0.0074

Moon 10023-08-18 21:50 G 5382115.32 5382115.41 5382115.50 0.2667 0.2146

Earth 10023-08-19 03:36 G 5382115.59 5382115.65 5382115.70 0.2667 0.2464

Neptune 10024-03-17 00:14 G 5382326.35 5382326.51 5382326.69 0.0088 0.0056

Neptune 10024-10-28 13:11 G 5382551.85 5382552.05 5382552.25 0.0088 0.0037

Neptune 10025-06-11 01:55 G 5382777.37 5382777.58 5382777.80 0.0088 0.0019

Neptune 10026-01-22 14:38 G 5383002.89 5383003.11 5383003.33 0.0088 0.0002

Neptune 10026-09-05 03:21 G 5383228.42 5383228.64 5383228.86 0.0088 0.0018

Neptune 10027-04-18 15:36 G 5383453.97 5383454.15 5383454.37 0.0088 0.0037

Neptune 10027-11-30 04:33 G 5383679.53 5383679.69 5383679.87 0.0088 0.0055

Neptune 10028-07-12 16:48 G 5383905.11 5383905.20 5383905.34 0.0088 0.0074

Jupiter 10030-09-11 18:43 G 5384696.16 5384696.28 5384696.39 0.0544 0.0445

Moon 10031-08-16 14:38 G 5385035.01 5385035.11 5385035.21 0.2673 0.2011

Earth 10031-08-16 18:28 G 5385035.13 5385035.27 5385035.41 0.2668 0.1296 *

Jupiter 10036-07-14 16:33 G 5386829.02 5386829.19 5386829.37 0.0484 0.0252

Saturn 10037-05-25 08:38 G 5387143.78 5387143.86 5387143.95 0.0273 0.0250

Saturn 10038-01-09 15:36 G 5387372.94 5387373.15 5387373.36 0.0273 0.0049

Saturn 10038-08-26 22:48 G 5387602.28 5387602.45 5387602.63 0.0274 0.0155

Mars 10040-04-17 10:19 G 5388201.77 5388201.93 5388202.09 0.1676 0.0722

Jupiter 10042-05-17 04:48 G 5388961.50 5388961.70 5388961.91 0.0544 0.0072

Uranus 10043-04-26 09:50 G 5389305.84 5389305.91 5389306.01 0.0144 0.0132

Uranus 10043-12-08 21:36 G 5389532.22 5389532.40 5389532.58 0.0144 0.0080

Uranus	10044-07-22 08:52 G	5389758.65	5389758.87	5389759.08	0.0143	0.0029
Uranus	10045-03-05 19:55 G	5389985.11	5389985.33	5389985.54	0.0143	0.0023
Uranus	10045-10-18 06:43 G	5390211.60	5390211.78	5390211.97	0.0143	0.0073
Uranus	10046-06-01 17:31 G	5390438.14	5390438.23	5390438.35	0.0143	0.0124
Jupiter	10048-03-19 22:19 G	5391095.23	5391095.43	5391095.63	0.0484	0.0106
Saturn	10052-06-24 07:55 G	5392652.62	5392652.83	5392653.04	0.0286	0.0063
Saturn	10053-02-09 00:00 G	5392882.34	5392882.50	5392882.68	0.0285	0.0168
Jupiter	10059-11-24 04:33 G	5395361.63	5395361.69	5395361.76	0.0485	0.0459
Saturn	10066-12-05 07:55 G	5397929.73	5397929.83	5397929.95	0.0273	0.0234
Saturn	10067-07-22 15:07 G	5398158.92	5398159.13	5398159.34	0.0273	0.0032
Saturn	10068-03-07 22:19 G	5398388.27	5398388.43	5398388.60	0.0274	0.0173
Jupiter	10072-03-22 00:14 G	5399863.46	5399863.51	5399863.58	0.0484	0.0460
Mars	10074-02-13 23:45 G	5400557.34	5400557.49	5400557.64	0.1664	0.0850
Jupiter	10078-01-23 03:50 G	5401996.48	5401996.66	5401996.84	0.0544	0.0251
Mars	10078-09-28 20:38 G	5402245.19	5402245.36	5402245.53	0.1862	0.0415
Saturn	10081-05-19 18:28 G	5403209.21	5403209.27	5403209.34	0.0286	0.0270
Saturn	10082-01-04 11:31 G	5403438.77	5403438.98	5403439.19	0.0286	0.0038
Saturn	10082-08-22 03:50 G	5403668.51	5403668.66	5403668.82	0.0285	0.0193
Jupiter	10083-11-26 07:11 G	5404129.61	5404129.80	5404130.00	0.0484	0.0110
Uranus	10086-09-08 20:09 G	5405147.32	5405147.34	5405147.35	0.0135	0.0134
Uranus	10087-04-23 01:40 G	5405373.43	5405373.57	5405373.74	0.0135	0.0093
Uranus	10087-12-05 08:09 G	5405599.65	5405599.84	5405600.05	0.0135	0.0050
Uranus	10088-07-18 14:23 G	5405825.89	5405826.10	5405826.32	0.0135	0.0008
Uranus	10089-03-01 20:38 G	5406052.16	5406052.36	5406052.58	0.0135	0.0036
Jupiter	10089-09-27 09:50 G	5406261.74	5406261.91	5406262.09	0.0543	0.0288
Uranus	10089-10-14 02:52 G	5406278.46	5406278.62	5406278.81	0.0135	0.0079
Uranus	10090-05-28 09:21 G	5406504.81	5406504.89	5406505.00	0.0136	0.0122
Jupiter	10095-08-01 13:55 G	5408395.91	5408396.08	5408396.26	0.0485	0.0244
Saturn	10096-06-16 16:04 G	5408716.03	5408716.17	5408716.32	0.0273	0.0199
Saturn	10097-01-31 23:16 G	5408945.26	5408945.47	5408945.68	0.0274	0.0004

Saturn 10097-09-18 06:28 G 5409174.64 5409174.77 5409174.91 0.0274 0.0207

Mars 10106-02-13 20:52 G 5412244.21 5412244.37 5412244.54 0.1673 0.0514

Neptune 10106-05-04 00:57 G 5412323.45 5412323.54 5412323.67 0.0089 0.0078

Neptune 10106-12-15 14:23 G 5412548.95 5412549.10 5412549.29 0.0089 0.0058

Neptune 10107-07-29 03:50 G 5412774.47 5412774.66 5412774.87 0.0089 0.0039

Neptune 10108-03-10 17:16 G 5413000.01 5413000.22 5413000.44 0.0089 0.0019

Neptune 10108-10-22 06:43 G 5413225.56 5413225.78 5413226.00 0.0089 0.0001

Neptune 10109-06-04 19:55 G 5413451.12 5413451.33 5413451.55 0.0089 0.0020

Neptune 10110-01-16 09:07 G 5413676.69 5413676.88 5413677.09 0.0089 0.0039

Neptune 10110-08-29 22:19 G 5413902.28 5413902.43 5413902.61 0.0089 0.0059

Saturn 10110-11-30 23:02 G 5413995.35 5413995.46 5413995.58 0.0286 0.0240

Neptune 10111-04-12 12:00 G 5414127.89 5414128.00 5414128.10 0.0089 0.0078

Saturn 10111-07-18 15:36 G 5414224.94 5414225.15 5414225.36 0.0285 0.0009

Saturn 10112-03-04 07:26 G 5414454.69 5414454.81 5414454.96 0.0285 0.0222

Jupiter 10119-08-04 15:50 G 5417164.01 5417164.16 5417164.32 0.0484 0.0320

Jupiter 10125-06-06 09:07 G 5419296.68 5419296.88 5419297.09 0.0544 0.0036

Saturn 10125-12-28 15:50 G 5419502.00 5419502.16 5419502.32 0.0273 0.0182

Saturn 10126-08-14 22:48 G 5419731.24 5419731.45 5419731.67 0.0273 0.0022

Pluto 10126-10-25 06:14 G 5419802.59 5419802.76 5419802.97 0.0067 0.0035

Saturn 10127-04-01 06:14 G 5419960.65 5419960.76 5419960.89 0.0274 0.0224

Pluto 10127-06-07 12:00 G 5420027.78 5420028.00 5420028.22 0.0068 0.0010

Uranus 10127-08-09 04:19 G 5420090.54 5420090.68 5420090.84 0.0144 0.0104

Pluto 10128-01-18 16:48 G 5420253.10 5420253.20 5420253.36 0.0068 0.0054

Uranus 10128-03-22 15:50 G 5420316.96 5420317.16 5420317.36 0.0144 0.0052

Uranus 10128-11-04 03:07 G 5420543.41 5420543.63 5420543.85 0.0143 0.0001

Moon 10129-02-19 11:31 G 5420650.83 5420650.98 5420651.14 0.2665 0.0304

Earth 10129-02-19 17:16 G 5420651.06 5420651.22 5420651.38 0.2664 0.0303 *

Uranus 10129-06-18 14:09 G 5420769.89 5420770.09 5420770.30 0.0143 0.0050

Uranus 10130-01-31 00:57 G 5420996.40 5420996.54 5420996.71 0.0143 0.0101

Jupiter 10131-04-09 21:36 G 5421430.20 5421430.40 5421430.61 0.0485 0.0038

Jupiter 10137-02-08 18:57 G 5423562.20 5423562.29 5423562.38 0.0543 0.0483

Mars 10139-12-13 10:33 G 5424599.80 5424599.94 5424600.07 0.1661 0.1047

Saturn 10140-06-12 02:09 G 5424781.46 5424781.59 5424781.73 0.0286 0.0216

Saturn 10141-01-27 18:57 G 5425011.08 5425011.29 5425011.50 0.0285 0.0016

Saturn 10141-09-14 11:02 G 5425240.87 5425240.96 5425241.08 0.0285 0.0246

Jupiter 10142-12-14 04:19 G 5425696.56 5425696.68 5425696.80 0.0485 0.0389

Mars 10144-07-27 01:11 G 5426287.37 5426287.55 5426287.72 0.1866 0.0009

Saturn 10155-07-10 23:45 G 5430288.32 5430288.49 5430288.68 0.0274 0.0148

Saturn 10156-02-25 07:11 G 5430517.60 5430517.80 5430518.01 0.0274 0.0056

Saturn 10156-10-11 14:38 G 5430747.06 5430747.11 5430747.19 0.0274 0.0260

Jupiter 10161-02-12 00:57 G 5432331.38 5432331.54 5432331.71 0.0544 0.0317

Jupiter 10166-12-16 06:43 G 5434464.59 5434464.78 5434464.97 0.0484 0.0177

Saturn 10169-12-23 08:09 G 5435567.68 5435567.84 5435568.00 0.0286 0.0184

Saturn 10170-08-10 00:28 G 5435797.31 5435797.52 5435797.73 0.0285 0.0048

Uranus 10170-12-22 11:45 G 5435931.88 5435931.99 5435932.13 0.0135 0.0111

Saturn 10171-03-27 16:19 G 5436027.14 5436027.18 5436027.24 0.0285 0.0277

Uranus 10171-08-05 17:45 G 5436158.07 5436158.24 5436158.44 0.0135 0.0069

Mars 10171-12-12 07:40 G 5436286.65 5436286.82 5436286.99 0.1670 0.0319

Uranus 10172-03-19 00:14 G 5436384.30 5436384.51 5436384.73 0.0135 0.0026

Jupiter 10172-10-17 12:14 G 5436596.82 5436597.01 5436597.20 0.0544 0.0194

Uranus 10172-10-31 06:28 G 5436610.56 5436610.77 5436610.99 0.0135 0.0017

Uranus 10173-06-14 12:43 G 5436836.84 5436837.03 5436837.23 0.0135 0.0060

Uranus 10174-01-26 19:11 G 5437063.17 5437063.30 5437063.45 0.0136 0.0103

Jupiter 10178-08-21 12:57 G 5438730.85 5438731.04 5438731.23 0.0485 0.0178

Saturn 10185-01-20 00:14 G 5441074.33 5441074.51 5441074.70 0.0273 0.0130

Saturn 10185-09-06 07:40 G 5441303.61 5441303.82 5441304.02 0.0274 0.0074

Neptune 10187-11-06 21:36 G 5442095.36 5442095.40 5442095.50 0.0088 0.0083

Neptune 10188-06-19 10:48 G 5442320.81 5442320.95 5442321.11 0.0088 0.0064

Neptune 10189-01-30 23:16 G 5442546.30 5442546.47 5442546.67 0.0088 0.0046

Neptune 10189-09-13 12:14 G 5442771.80 5442772.01 5442772.22 0.0088 0.0027

Neptune 10190-04-27 00:57 G 5442997.32 5442997.54 5442997.76 0.0088 0.0009

Neptune 10190-12-08 13:40 G 5443222.85 5443223.07 5443223.29 0.0088 0.0010

Neptune 10191-07-22 02:09 G 5443448.39 5443448.59 5443448.81 0.0088 0.0029

Neptune 10192-03-03 14:38 G 5443673.94 5443674.11 5443674.31 0.0088 0.0047

Neptune 10192-10-15 03:07 G 5443899.51 5443899.63 5443899.80 0.0088 0.0066

Neptune 10193-05-28 16:04 G 5444125.12 5444125.17 5444125.25 0.0088 0.0084

Saturn 10199-07-05 11:02 G 5446353.79 5446353.96 5446354.14 0.0286 0.0160

Saturn 10200-02-20 03:36 G 5446583.45 5446583.65 5446583.86 0.0285 0.0072

Jupiter 10202-08-24 15:21 G 5447499.02 5447499.14 5447499.26 0.0484 0.0390

Mars 10205-10-10 21:50 G 5448642.30 5448642.41 5448642.53 0.1658 0.1227

Jupiter 10208-06-26 06:00 G 5449631.55 5449631.75 5449631.95 0.0543 0.0099

Mars 10210-05-25 05:31 G 5450329.56 5450329.73 5450329.90 0.1870 0.0433

Uranus 10211-04-09 11:02 G 5450648.88 5450648.96 5450649.09 0.0144 0.0127

Uranus 10211-11-21 22:48 G 5450875.27 5450875.45 5450875.65 0.0144 0.0075

Uranus 10212-07-05 10:19 G 5451101.72 5451101.93 5451102.15 0.0143 0.0024

Uranus 10213-02-16 21:36 G 5451328.19 5451328.40 5451328.62 0.0143 0.0028

Pluto 10213-04-02 22:33 G 5451373.24 5451373.44 5451373.67 0.0077 0.0019

Uranus 10213-10-01 08:23 G 5451554.68 5451554.85 5451555.04 0.0143 0.0079

Pluto 10213-11-14 07:26 G 5451598.64 5451598.81 5451599.00 0.0076 0.0045

Jupiter 10214-04-29 21:50 G 5451765.20 5451765.41 5451765.61 0.0485 0.0036

Uranus 10214-05-15 19:26 G 5451781.23 5451781.31 5451781.41 0.0143 0.0129

Saturn 10214-08-03 08:09 G 5451860.65 5451860.84 5451861.05 0.0274 0.0095

Saturn 10215-03-20 15:50 G 5452089.97 5452090.16 5452090.36 0.0274 0.0110

Jupiter 10220-02-29 15:21 G 5453897.01 5453897.14 5453897.26 0.0543 0.0423

Jupiter 10226-01-03 03:07 G 5456031.48 5456031.63 5456031.78 0.0485 0.0324

Saturn 10229-01-15 18:57 G 5457140.10 5457140.29 5457140.48 0.0285 0.0124

Saturn 10229-09-02 11:02 G 5457369.77 5457369.96 5457370.16 0.0285 0.0107

Mars 10237-10-09 18:28 G 5460329.10 5460329.27 5460329.45 0.1667 0.0127

Saturn 10244-02-13 09:36 G 5462646.70 5462646.90 5462647.11 0.0273 0.0075

Jupiter 10244-03-04 03:50 G 5462666.53 5462666.66 5462666.79 0.0544 0.0417

Saturn 10244-09-29 17:02 G 5462876.03 5462876.21 5462876.40 0.0274 0.0129

Jupiter 10250-01-05 05:02 G 5464799.53 5464799.71 5464799.89 0.0484 0.0241

Uranus 10254-08-22 20:52 G 5466490.34 5466490.37 5466490.45 0.0134 0.0130

Uranus 10255-04-06 03:07 G 5466716.48 5466716.63 5466716.81 0.0135 0.0088

Jupiter 10255-11-07 13:40 G 5466931.87 5466932.07 5466932.27 0.0543 0.0104

Uranus 10255-11-18 09:36 G 5466942.70 5466942.90 5466943.11 0.0135 0.0045

Uranus 10256-07-01 15:50 G 5467168.94 5467169.16 5467169.38 0.0135 0.0003

Uranus 10257-02-12 22:04 G 5467395.22 5467395.42 5467395.63 0.0135 0.0040

Uranus 10257-09-27 04:19 G 5467621.52 5467621.68 5467621.86 0.0135 0.0083

Uranus 10258-05-11 10:33 G 5467847.88 5467847.94 5467848.04 0.0136 0.0126

Saturn 10258-07-28 21:21 G 5467926.20 5467926.39 5467926.59 0.0285 0.0100

Saturn 10259-03-15 13:40 G 5468155.89 5468156.07 5468156.27 0.0285 0.0131

Jupiter 10261-09-10 11:31 G 5469065.78 5469065.98 5469066.18 0.0485 0.0113

Earth 10266-08-21 04:04 G 5470871.59 5470871.67 5470871.74 0.2668 0.2303

Mars 10269-10-08 16:33 G 5472016.12 5472016.19 5472016.26 0.1677 0.1530

Neptune 10270-08-06 10:48 G 5472317.92 5472317.95 5472318.03 0.0089 0.0086

Neptune 10271-03-20 00:28 G 5472543.38 5472543.52 5472543.68 0.0089 0.0067

Mars 10271-08-08 08:52 G 5472684.78 5472684.87 5472684.96 0.1655 0.1416

Neptune 10271-10-31 13:40 G 5472768.90 5472769.07 5472769.28 0.0089 0.0048

Neptune 10272-06-13 03:21 G 5472994.44 5472994.64 5472994.85 0.0089 0.0028

Saturn 10273-01-08 10:19 G 5473203.84 5473203.93 5473204.03 0.0274 0.0243

Neptune 10273-01-24 16:33 G 5473219.98 5473220.19 5473220.42 0.0089 0.0009

Jupiter 10273-05-16 17:31 G 5473332.18 5473332.23 5473332.28 0.0486 0.0471

Saturn 10273-08-25 18:00 G 5473433.04 5473433.25 5473433.46 0.0274 0.0040

Neptune 10273-09-07 05:45 G 5473445.53 5473445.74 5473445.97 0.0089 0.0012

Saturn 10274-04-12 01:40 G 5473662.40 5473662.57 5473662.74 0.0275 0.0165

Neptune 10274-04-20 19:11 G 5473671.10 5473671.30 5473671.51 0.0089 0.0031

Earth 10274-08-18 18:57 G 5473791.16 5473791.29 5473791.42 0.2669 0.1484

Moon 10274-08-19 00:00 G 5473791.34 5473791.50 5473791.66 0.2667 0.0589 *

Neptune 10274-12-02 08:23 G 5473896.68 5473896.85 5473897.05 0.0089 0.0050

Neptune 10275-07-15 21:36 G 5474122.28 5474122.40 5474122.56 0.0089 0.0070

Neptune 10276-02-26 11:16 G 5474347.95 5474347.97 5474347.99 0.0089 0.0089

Mars 10276-03-21 09:21 G 5474371.74 5474371.89 5474372.05 0.1874 0.0879

Jupiter 10285-09-12 12:57 G 5477833.97 5477834.04 5477834.12 0.0484 0.0450

Saturn 10288-02-08 06:43 G 5478712.58 5478712.78 5478712.99 0.0285 0.0063

Saturn 10288-09-24 22:48 G 5478942.29 5478942.45 5478942.63 0.0285 0.0168

Jupiter 10291-07-16 06:00 G 5479966.56 5479966.75 5479966.94 0.0544 0.0183

Uranus 10295-07-22 06:14 G 5481433.61 5481433.76 5481433.93 0.0144 0.0098

Uranus 10296-03-04 18:00 G 5481660.04 5481660.25 5481660.45 0.0144 0.0046

Uranus 10296-10-17 05:16 G 5481886.50 5481886.72 5481886.94 0.0143 0.0005

Jupiter 10297-05-18 19:26 G 5482100.11 5482100.31 5482100.51 0.0484 0.0096

Uranus 10297-05-31 16:33 G 5482112.99 5482113.19 5482113.39 0.0143 0.0056

Uranus 10298-01-13 03:21 G 5482339.51 5482339.64 5482339.80 0.0143 0.0107

Saturn 10302-07-22 12:14 G 5483989.90 5483990.01 5483990.15 0.0273 0.0222

Saturn 10303-03-08 19:55 G 5484219.12 5484219.33 5484219.54 0.0274 0.0019

Jupiter 10303-03-21 17:02 G 5484232.05 5484232.21 5484232.38 0.0543 0.0330

Mars 10303-08-08 05:45 G 5484371.57 5484371.74 5484371.92 0.1664 0.0069

Saturn 10303-10-24 03:36 G 5484448.50 5484448.65 5484448.81 0.0274 0.0185

Mars 10308-03-22 05:16 G 5486059.61 5486059.72 5486059.82 0.1861 0.1464

Jupiter 10309-01-23 00:43 G 5486366.36 5486366.53 5486366.70 0.0485 0.0265

Saturn 10317-01-03 17:02 G 5489269.15 5489269.21 5489269.29 0.0286 0.0268

Saturn 10317-08-21 09:36 G 5489498.70 5489498.90 5489499.11 0.0285 0.0038

Saturn 10318-04-08 01:55 G 5489728.43 5489728.58 5489728.74 0.0285 0.0193

Jupiter 10327-03-24 23:45 G 5493001.40 5493001.49 5493001.59 0.0543 0.0477

Saturn 10332-02-01 20:23 G 5494776.20 5494776.35 5494776.51 0.0274 0.0188

Saturn 10332-09-18 04:04 G 5495005.46 5495005.67 5495005.89 0.0274 0.0017

Jupiter 10333-01-25 03:21 G 5495134.49 5495134.64 5495134.80 0.0485 0.0305

Saturn 10333-05-05 12:00 G 5495234.88 5495235.00 5495235.13 0.0275 0.0221

Mars 10335-08-07 03:21 G 5496058.54 5496058.64 5496058.74 0.1674 0.1326

Mars 10337-06-05 20:09 G 5496727.30 5496727.34 5496727.38 0.1653 0.1595

Jupiter 10338-11-27 08:52 G 5497266.67 5497266.87 5497267.08 0.0543 0.0050

Uranus 10338-12-05 13:11 G 5497274.94 5497275.05 5497275.21 0.0134 0.0106

Uranus 10339-07-19 19:26 G 5497501.13 5497501.31 5497501.52 0.0135 0.0064

Uranus 10340-03-02 01:55 G 5497727.37 5497727.58 5497727.80 0.0135 0.0021

Uranus 10340-10-14 08:09 G 5497953.62 5497953.84 5497954.05 0.0135 0.0021

Uranus 10341-05-28 14:09 G 5498179.91 5498180.09 5498180.29 0.0135 0.0064

Uranus 10342-01-09 20:52 G 5498406.24 5498406.37 5498406.51 0.0135 0.0107

Mars 10342-01-17 13:55 G 5498413.96 5498414.08 5498414.21 0.1878 0.1312

Jupiter 10344-09-30 08:23 G 5499400.65 5499400.85 5499401.06 0.0485 0.0056

Saturn 10346-07-17 03:50 G 5500055.54 5500055.66 5500055.79 0.0285 0.0228

Saturn 10347-03-03 20:09 G 5500285.13 5500285.34 5500285.56 0.0285 0.0007

Saturn 10347-10-19 12:00 G 5500514.89 5500515.00 5500515.13 0.0284 0.0232

Neptune 10352-09-22 20:38 G 5502315.25 5502315.36 5502315.50 0.0088 0.0073

Neptune 10353-05-06 09:36 G 5502540.74 5502540.90 5502541.08 0.0088 0.0054

Neptune 10353-12-17 22:04 G 5502766.23 5502766.42 5502766.64 0.0088 0.0036

Neptune 10354-07-31 11:02 G 5502991.75 5502991.96 5502992.18 0.0088 0.0017

Neptune 10355-03-13 23:45 G 5503217.27 5503217.49 5503217.71 0.0088 0.0002

Neptune 10355-10-25 12:14 G 5503442.80 5503443.01 5503443.23 0.0088 0.0020

Jupiter 10356-06-05 14:38 G 5503667.01 5503667.11 5503667.22 0.0485 0.0413

Neptune 10356-06-07 00:43 G 5503668.35 5503668.53 5503668.75 0.0088 0.0039

Neptune 10357-01-18 13:40 G 5503893.91 5503894.07 5503894.24 0.0088 0.0057

Neptune 10357-09-01 01:55 G 5504119.49 5504119.58 5504119.71 0.0088 0.0076

Saturn 10361-08-13 23:45 G 5505562.32 5505562.49 5505562.66 0.0273 0.0165

Saturn 10362-03-31 07:11 G 5505791.59 5505791.80 5505792.01 0.0274 0.0039

Saturn 10362-11-15 15:07 G 5506021.04 5506021.13 5506021.23 0.0274 0.0243

Mars 10369-06-04 16:33 G 5508414.02 5508414.19 5508414.36 0.1661 0.0264

Earth 10372-02-22 18:43 G 5509407.12 5509407.28 5509407.44 0.2663 0.0259

Moon 10372-02-23 00:28 G 5509407.37 5509407.52 5509407.67 0.2665 0.0595 *

Pluto 10373-07-06 23:02 G 5509907.39 5509907.46 5509907.59 0.0067 0.0060

Mars 10374-01-17 09:50 G 5510101.77 5510101.91 5510102.05 0.1865 0.1053

Pluto	10374-02-17 05:02 G	5510132.50	5510132.71	5510132.93	0.0068	0.0016
Jupiter	10374-08-05 06:28 G	5510301.60	5510301.77	5510301.95	0.0544	0.0268
Pluto	10374-09-30 09:50 G	5510357.73	5510357.91	5510358.13	0.0068	0.0029
Saturn	10376-01-27 06:28 G	5510841.63	5510841.77	5510841.92	0.0286	0.0204
Saturn	10376-09-12 22:48 G	5511071.24	5511071.45	5511071.67	0.0285	0.0028
Saturn	10377-04-30 15:07 G	5511301.04	5511301.13	5511301.22	0.0285	0.0256
Uranus	10379-03-22 13:11 G	5511991.95	5511992.05	5511992.19	0.0144	0.0121
Uranus	10379-11-04 01:11 G	5512218.36	5512218.55	5512218.74	0.0144	0.0069
Jupiter	10380-06-07 16:33 G	5512435.00	5512435.19	5512435.39	0.0485	0.0154
Uranus	10380-06-17 12:43 G	5512444.82	5512445.03	5512445.25	0.0143	0.0017
Uranus	10381-01-29 23:45 G	5512671.29	5512671.49	5512671.71	0.0143	0.0035
Uranus	10381-09-13 10:48 G	5512897.79	5512897.95	5512898.14	0.0143	0.0085
Uranus	10382-04-27 21:50 G	5513124.36	5513124.41	5513124.49	0.0143	0.0135
Jupiter	10386-04-09 13:26 G	5514566.89	5514567.06	5514567.24	0.0543	0.0268
Saturn	10391-02-24 07:11 G	5516348.61	5516348.80	5516348.98	0.0274	0.0132
Saturn	10391-10-11 15:07 G	5516577.92	5516578.13	5516578.33	0.0275	0.0074
Jupiter	10392-02-11 22:04 G	5516701.24	5516701.42	5516701.61	0.0485	0.0206
Mars	10401-06-03 13:40 G	5520100.94	5520101.07	5520101.20	0.1671	0.1112
Saturn	10405-08-08 18:28 G	5521628.10	5521628.27	5521628.45	0.0285	0.0162
Saturn	10406-03-26 10:33 G	5521857.74	5521857.94	5521858.15	0.0285	0.0069
Mars	10407-11-14 17:45 G	5522456.18	5522456.24	5522456.30	0.1882	0.1769
Jupiter	10416-02-13 23:45 G	5525469.36	5525469.49	5525469.63	0.0484	0.0361
Saturn	10420-09-05 11:31 G	5527134.79	5527134.98	5527135.18	0.0273	0.0107
Saturn	10421-04-22 19:11 G	5527364.10	5527364.30	5527364.50	0.0274	0.0097
Jupiter	10421-12-16 09:07 G	5527601.68	5527601.88	5527602.08	0.0544	0.0036
Uranus	10422-08-04 23:16 G	5527833.40	5527833.47	5527833.56	0.0134	0.0124
Uranus	10423-03-19 05:02 G	5528059.56	5528059.71	5528059.90	0.0134	0.0083
Uranus	10423-10-31 11:31 G	5528285.77	5528285.98	5528286.19	0.0135	0.0040
Uranus	10424-06-13 17:45 G	5528512.02	5528512.24	5528512.45	0.0135	0.0003
Uranus	10425-01-25 23:45 G	5528738.29	5528738.49	5528738.70	0.0135	0.0045

Uranus 10425-09-09 06:00 G 5528964.59 5528964.75 5528964.92 0.0135 0.0087

Uranus 10426-04-23 12:28 G 5529190.97 5529191.02 5529191.08 0.0136 0.0130

Jupiter 10427-10-20 05:16 G 5529735.51 5529735.72 5529735.92 0.0485 0.0004

Jupiter 10433-08-20 19:11 G 5531867.22 5531867.30 5531867.40 0.0543 0.0482

Saturn 10435-02-18 20:38 G 5532414.18 5532414.36 5532414.55 0.0285 0.0138

Mars 10435-04-02 03:50 G 5532456.49 5532456.66 5532456.83 0.1659 0.0449

Neptune 10435-06-22 10:19 G 5532537.82 5532537.93 5532538.05 0.0089 0.0076

Saturn 10435-10-06 12:57 G 5532643.84 5532644.04 5532644.24 0.0285 0.0093

Neptune 10436-02-02 23:16 G 5532763.32 5532763.47 5532763.66 0.0089 0.0057

Neptune 10436-09-15 12:57 G 5532988.84 5532989.04 5532989.24 0.0089 0.0037

Neptune 10437-04-29 02:09 G 5533214.38 5533214.59 5533214.81 0.0089 0.0017

Neptune 10437-12-10 15:36 G 5533439.93 5533440.15 5533440.37 0.0089 0.0002

Neptune 10438-07-24 04:48 G 5533665.49 5533665.70 5533665.92 0.0089 0.0022

Neptune 10439-03-06 17:45 G 5533891.06 5533891.24 5533891.45 0.0089 0.0042

Jupiter 10439-06-25 11:16 G 5534001.84 5534001.97 5534002.11 0.0485 0.0358

Neptune 10439-10-18 07:11 G 5534116.65 5534116.80 5534116.97 0.0089 0.0061

Mars 10439-11-14 14:23 G 5534143.93 5534144.10 5534144.26 0.1869 0.0639

Neptune 10440-05-30 20:09 G 5534342.27 5534342.34 5534342.46 0.0089 0.0081

Saturn 10450-03-18 18:14 G 5537921.06 5537921.26 5537921.47 0.0274 0.0075

Saturn 10450-11-03 02:23 G 5538150.42 5538150.60 5538150.79 0.0275 0.0131

Jupiter 10457-08-24 01:11 G 5540636.39 5540636.55 5540636.72 0.0543 0.0322

Pluto 10459-12-13 14:38 G 5541477.96 5541478.11 5541478.29 0.0077 0.0051

Pluto 10460-07-26 00:00 G 5541703.28 5541703.50 5541703.72 0.0076 0.0014

Uranus 10462-11-19 20:52 G 5542550.37 5542550.37 5542550.37 0.0144 0.0144

Jupiter 10463-06-27 12:43 G 5542769.84 5542770.03 5542770.21 0.0485 0.0209

Uranus 10463-07-04 08:38 G 5542776.69 5542776.86 5542777.03 0.0144 0.0092

Uranus 10464-02-15 19:55 G 5543003.13 5543003.33 5543003.55 0.0144 0.0041

Saturn 10464-08-31 08:52 G 5543200.68 5543200.87 5543201.08 0.0285 0.0097

Uranus 10464-09-29 07:26 G 5543229.60 5543229.81 5543230.03 0.0143 0.0011

Saturn 10465-04-18 01:11 G 5543430.37 5543430.55 5543430.74 0.0285 0.0134

Uranus 10465-05-13 18:28 G 5543456.09 5543456.27 5543456.48 0.0143 0.0062

Uranus 10465-12-26 06:00 G 5543682.62 5543682.75 5543682.88 0.0143 0.0112

Mars 10467-04-01 00:43 G 5544143.39 5544143.53 5544143.68 0.1668 0.0921

Jupiter 10469-04-28 10:19 G 5544901.75 5544901.93 5544902.13 0.0543 0.0203

Jupiter 10475-03-02 18:43 G 5547036.09 5547036.28 5547036.48 0.0485 0.0149

Saturn 10479-02-11 16:04 G 5548478.09 5548478.17 5548478.26 0.0273 0.0251

Saturn 10479-09-28 23:31 G 5548707.28 5548707.48 5548707.70 0.0274 0.0049

Saturn 10480-05-15 07:11 G 5548936.63 5548936.80 5548936.98 0.0274 0.0156

Saturn 10494-03-13 11:16 G 5553986.77 5553986.97 5553987.17 0.0285 0.0071

Saturn 10494-10-29 03:21 G 5554216.47 5554216.64 5554216.82 0.0285 0.0159

Jupiter 10499-03-04 20:23 G 5555804.25 5555804.35 5555804.46 0.0484 0.0418

Mars 10501-01-28 15:07 G 5556498.97 5556499.13 5556499.29 0.1656 0.0634

Jupiter 10505-01-05 06:14 G 5557936.56 5557936.76 5557936.96 0.0543 0.0104

Mars 10505-09-11 18:43 G 5558186.10 5558186.28 5558186.45 0.1873 0.0210

Uranus 10506-11-17 16:04 G 5558618.03 5558618.17 5558618.32 0.0134 0.0100

Uranus 10507-07-01 22:04 G 5558844.22 5558844.42 5558844.62 0.0135 0.0058

Uranus 10508-02-13 04:04 G 5559070.46 5559070.67 5559070.89 0.0135 0.0016

Saturn 10508-08-24 21:50 G 5559264.29 5559264.41 5559264.54 0.0274 0.0221

Uranus 10508-09-26 10:04 G 5559296.71 5559296.92 5559297.14 0.0135 0.0027

Saturn 10509-04-11 05:31 G 5559493.52 5559493.73 5559493.95 0.0274 0.0018

Uranus 10509-05-10 16:04 G 5559523.00 5559523.17 5559523.37 0.0135 0.0069

Moon 10509-08-23 00:57 G 5559627.40 5559627.54 5559627.67 0.2664 0.1541

Earth 10509-08-23 04:33 G 5559627.59 5559627.69 5559627.78 0.2669 0.2134 *

Saturn 10509-11-26 13:40 G 5559722.92 5559723.07 5559723.23 0.0275 0.0188

Uranus 10509-12-22 22:33 G 5559749.33 5559749.44 5559749.57 0.0135 0.0112

Jupiter 10510-11-09 01:55 G 5560070.38 5560070.58 5560070.78 0.0485 0.0057

Jupiter 10516-09-09 14:52 G 5562202.00 5562202.12 5562202.25 0.0542 0.0424

Neptune 10516-12-26 06:14 G 5562309.70 5562309.76 5562309.86 0.0088 0.0082

Neptune 10517-08-08 19:11 G 5562535.15 5562535.30 5562535.45 0.0088 0.0063

Moon 10517-08-20 13:55 G 5562547.02 5562547.08 5562547.14 0.2671 0.2455

Earth 10517-08-20 19:26 G 5562547.18 5562547.31 5562547.43 0.2670 0.1660

Neptune 10518-03-22 07:26 G 5562760.64 5562760.81 5562761.02 0.0088 0.0045

Neptune 10518-11-02 20:23 G 5562986.14 5562986.35 5562986.56 0.0088 0.0026

Neptune 10519-06-16 09:07 G 5563211.67 5563211.88 5563212.10 0.0088 0.0008

Neptune 10520-01-27 21:50 G 5563437.19 5563437.41 5563437.63 0.0088 0.0011

Neptune 10520-09-09 10:04 G 5563662.73 5563662.92 5563663.14 0.0088 0.0030

Neptune 10521-04-22 23:02 G 5563888.28 5563888.46 5563888.65 0.0088 0.0048

Neptune 10521-12-04 11:16 G 5564113.85 5564113.97 5564114.14 0.0088 0.0067

Jupiter 10522-07-15 07:11 G 5564336.65 5564336.80 5564336.96 0.0485 0.0303

Neptune 10522-07-18 00:14 G 5564339.47 5564339.51 5564339.57 0.0088 0.0085

Saturn 10523-02-07 06:57 G 5564543.71 5564543.79 5564543.87 0.0285 0.0261

Saturn 10523-09-24 23:16 G 5564773.26 5564773.47 5564773.68 0.0285 0.0031

Saturn 10524-05-11 15:21 G 5565003.00 5565003.14 5565003.30 0.0285 0.0199

Mars 10533-01-27 11:31 G 5568185.82 5568185.98 5568186.14 0.1665 0.0718

Saturn 10538-03-07 04:04 G 5570050.52 5570050.67 5570050.82 0.0273 0.0193

Saturn 10538-10-22 11:45 G 5570279.78 5570279.99 5570280.20 0.0274 0.0010

Saturn 10539-06-08 19:26 G 5570509.18 5570509.31 5570509.44 0.0274 0.0214

Jupiter 10540-09-13 00:28 G 5570971.39 5570971.52 5570971.66 0.0544 0.0404

Jupiter 10546-07-17 09:21 G 5573104.72 5573104.89 5573105.06 0.0484 0.0266

Uranus 10547-03-04 15:21 G 5573335.03 5573335.14 5573335.29 0.0144 0.0116

Uranus 10547-10-17 03:07 G 5573561.45 5573561.63 5573561.84 0.0144 0.0064

Uranus 10548-05-30 14:52 G 5573787.91 5573788.12 5573788.34 0.0144 0.0013

Uranus 10549-01-12 02:09 G 5574014.39 5574014.59 5574014.81 0.0143 0.0039

Uranus 10549-08-26 13:11 G 5574240.89 5574241.05 5574241.23 0.0143 0.0090

Uranus 10550-04-10 00:14 G 5574467.48 5574467.51 5574467.56 0.0143 0.0140

Jupiter 10552-05-18 11:16 G 5575236.77 5575236.97 5575237.17 0.0543 0.0115

Saturn 10552-08-19 08:38 G 5575329.75 5575329.86 5575329.99 0.0286 0.0237

Saturn 10553-04-06 01:11 G 5575559.34 5575559.55 5575559.76 0.0285 0.0007

Saturn 10553-11-21 17:02 G 5575789.09 5575789.21 5575789.35 0.0285 0.0223

Jupiter 10558-03-22 15:21 G 5577370.94 5577371.14 5577371.34 0.0485 0.0093

Mars 10566-11-26 02:09 G 5580541.44 5580541.59 5580541.74 0.1654 0.0824

Saturn 10567-09-17 08:52 G 5580836.71 5580836.87 5580837.04 0.0274 0.0165

Saturn 10568-05-03 16:33 G 5581065.99 5581066.19 5581066.41 0.0274 0.0040

Saturn 10568-12-19 00:43 G 5581295.43 5581295.53 5581295.62 0.0275 0.0244

Jupiter 10569-11-25 20:23 G 5581637.29 5581637.35 5581637.42 0.0486 0.0456

Mars 10571-07-09 22:48 G 5582228.28 5582228.45 5582228.63 0.1877 0.0230

Saturn 10582-03-01 19:55 G 5586116.19 5586116.33 5586116.49 0.0285 0.0198

Jupiter 10582-03-24 16:33 G 5586139.16 5586139.19 5586139.24 0.0484 0.0475

Saturn 10582-10-17 12:28 G 5586345.81 5586346.02 5586346.23 0.0285 0.0033

Saturn 10583-06-04 04:33 G 5586575.62 5586575.69 5586575.78 0.0284 0.0262

Jupiter 10588-01-25 02:38 G 5588271.41 5588271.61 5588271.80 0.0544 0.0169

Uranus 10590-07-18 01:55 G 5589176.50 5589176.58 5589176.71 0.0134 0.0119

Uranus 10591-03-01 08:09 G 5589402.67 5589402.84 5589403.03 0.0134 0.0076

Uranus 10591-10-13 14:09 G 5589628.88 5589629.09 5589629.30 0.0135 0.0035

Uranus 10592-05-26 20:09 G 5589855.12 5589855.34 5589855.56 0.0135 0.0008

Uranus 10593-01-08 02:09 G 5590081.40 5590081.59 5590081.80 0.0135 0.0050

Uranus 10593-08-22 08:23 G 5590307.70 5590307.85 5590308.02 0.0135 0.0092

Jupiter 10593-11-27 23:16 G 5590405.27 5590405.47 5590405.67 0.0485 0.0118

Uranus 10594-04-05 14:38 G 5590534.10 5590534.11 5590534.14 0.0135 0.0135

Saturn 10597-03-29 15:36 G 5591622.97 5591623.15 5591623.34 0.0273 0.0136

Saturn 10597-11-13 23:16 G 5591852.26 5591852.47 5591852.68 0.0274 0.0068

Saturn 10598-07-01 06:43 G 5592081.76 5592081.78 5592081.82 0.0274 0.0271

Mars 10598-11-24 22:48 G 5592228.29 5592228.45 5592228.61 0.1662 0.0532

Neptune 10599-09-24 18:43 G 5592532.23 5592532.28 5592532.35 0.0089 0.0086

Jupiter 10599-09-29 13:11 G 5592536.91 5592537.05 5592537.21 0.0543 0.0350

Neptune 10600-05-08 07:55 G 5592757.70 5592757.83 5592758.00 0.0089 0.0067

Neptune 10600-12-19 21:36 G 5592983.22 5592983.40 5592983.60 0.0089 0.0047

Neptune 10601-08-02 11:02 G 5593208.76 5593208.96 5593209.18 0.0089 0.0027

Neptune 10602-03-16 00:28 G 5593434.30 5593434.52 5593434.74 0.0089 0.0008

Neptune 10602-10-27 13:55 G 5593659.86 5593660.08 5593660.30 0.0089 0.0012

Neptune 10603-06-10 03:07 G 5593885.43 5593885.63 5593885.84 0.0089 0.0032

Neptune 10604-01-21 16:19 G 5594111.01 5594111.18 5594111.37 0.0089 0.0051

Neptune 10604-09-03 05:45 G 5594336.61 5594336.74 5594336.88 0.0089 0.0071

Jupiter 10605-08-04 04:33 G 5594671.52 5594671.69 5594671.87 0.0485 0.0244

Saturn 10611-09-12 21:50 G 5596902.24 5596902.41 5596902.57 0.0286 0.0174

Saturn 10612-04-29 14:09 G 5597131.88 5597132.09 5597132.30 0.0285 0.0057

Saturn 10612-12-15 06:14 G 5597361.76 5597361.76 5597361.76 0.0285 0.0285

Moon 10615-02-24 15:21 G 5598162.98 5598163.14 5598163.31 0.2658 0.0066

Earth 10615-02-24 20:38 G 5598163.20 5598163.36 5598163.52 0.2662 0.0237 *

Pluto 10620-10-30 00:28 G 5600237.34 5600237.52 5600237.73 0.0068 0.0032

Pluto 10621-06-12 06:00 G 5600462.54 5600462.75 5600462.97 0.0068 0.0013

Pluto 10622-01-23 11:16 G 5600687.86 5600687.97 5600688.09 0.0068 0.0057

Jupiter 10623-10-03 23:31 G 5601306.39 5601306.48 5601306.58 0.0543 0.0482

Saturn 10626-10-10 19:26 G 5602409.12 5602409.31 5602409.51 0.0274 0.0110

Saturn 10627-05-28 03:07 G 5602638.43 5602638.63 5602638.83 0.0274 0.0095

Jupiter 10629-08-06 06:28 G 5603439.62 5603439.77 5603439.93 0.0485 0.0326

Uranus 10630-11-02 23:16 G 5603893.41 5603893.47 5603893.53 0.0144 0.0139

Uranus 10631-06-17 10:48 G 5604119.79 5604119.95 5604120.13 0.0144 0.0087

Uranus 10632-01-29 22:33 G 5604346.23 5604346.44 5604346.65 0.0144 0.0035

Uranus 10632-09-12 09:50 G 5604572.70 5604572.91 5604573.13 0.0144 0.0017

Mars 10632-09-23 13:55 G 5604583.94 5604584.08 5604584.22 0.1651 0.0999

Uranus 10633-04-26 21:07 G 5604799.19 5604799.38 5604799.58 0.0143 0.0067

Uranus 10633-12-09 07:55 G 5605025.73 5605025.83 5605025.97 0.0143 0.0118

Jupiter 10635-06-08 08:23 G 5605571.65 5605571.85 5605572.06 0.0543 0.0048

Mars 10637-05-07 02:52 G 5606270.46 5606270.62 5606270.78 0.1881 0.0678

Saturn 10641-03-25 07:55 G 5607688.65 5607688.83 5607689.02 0.0285 0.0137

Jupiter 10641-04-11 12:14 G 5607705.81 5607706.01 5607706.22 0.0485 0.0034

Saturn 10641-11-10 00:28 G 5607918.32 5607918.52 5607918.72 0.0285 0.0093

Jupiter 10652-12-15 18:43 G 5611972.17 5611972.28 5611972.41 0.0485 0.0391

Saturn 10656-04-22 02:38 G 5613195.40 5613195.61 5613195.81 0.0273 0.0080

Saturn 10656-12-07 09:50 G 5613424.73 5613424.91 5613425.11 0.0274 0.0124

Mars 10664-09-22 09:50 G 5616270.74 5616270.91 5616271.08 0.1660 0.0341

Mars 10669-05-06 23:02 G 5617958.40 5617958.46 5617958.53 0.1867 0.1709

Saturn 10670-10-05 09:07 G 5618474.69 5618474.88 5618475.08 0.0286 0.0114

Jupiter 10671-02-14 04:33 G 5618606.51 5618606.69 5618606.86 0.0544 0.0263

Saturn 10671-05-23 01:40 G 5618704.37 5618704.57 5618704.76 0.0285 0.0117

Uranus 10674-10-30 19:11 G 5619961.16 5619961.30 5619961.47 0.0134 0.0093

Uranus 10675-06-14 01:11 G 5620187.36 5620187.55 5620187.76 0.0135 0.0052

Uranus 10676-01-26 07:11 G 5620413.59 5620413.80 5620414.02 0.0135 0.0010

Uranus 10676-09-08 13:11 G 5620639.84 5620640.05 5620640.27 0.0135 0.0032

Jupiter 10676-12-17 20:52 G 5620740.18 5620740.37 5620740.56 0.0485 0.0180

Uranus 10677-04-22 19:11 G 5620866.13 5620866.30 5620866.49 0.0135 0.0075

Uranus 10677-12-05 01:11 G 5621092.47 5621092.55 5621092.68 0.0135 0.0118

Neptune 10681-11-11 04:04 G 5622529.57 5622529.67 5622529.82 0.0088 0.0073

Neptune 10682-06-24 17:02 G 5622755.05 5622755.21 5622755.40 0.0088 0.0054

Jupiter 10682-10-19 14:09 G 5622871.91 5622872.09 5622872.27 0.0543 0.0261

Neptune 10683-02-05 05:31 G 5622980.55 5622980.73 5622980.95 0.0088 0.0036

Neptune 10683-09-18 18:28 G 5623206.06 5623206.27 5623206.49 0.0088 0.0017

Neptune 10684-05-01 07:11 G 5623431.58 5623431.80 5623432.02 0.0088 0.0002

Neptune 10684-12-12 19:55 G 5623657.11 5623657.33 5623657.54 0.0088 0.0020

Saturn 10685-03-17 21:21 G 5623752.34 5623752.39 5623752.47 0.0273 0.0259

Neptune 10685-07-26 08:09 G 5623882.65 5623882.84 5623883.05 0.0088 0.0039

Saturn 10685-11-02 05:02 G 5623981.51 5623981.71 5623981.92 0.0274 0.0056

Neptune 10686-03-08 20:23 G 5624108.21 5624108.35 5624108.54 0.0088 0.0058

Saturn 10686-06-19 12:43 G 5624210.85 5624211.03 5624211.21 0.0274 0.0148

Neptune 10686-10-20 09:21 G 5624333.79 5624333.89 5624334.01 0.0088 0.0076

Jupiter 10688-08-23 02:09 G 5625006.40 5625006.59 5625006.78 0.0485 0.0183

Mars 10698-07-22 01:11 G 5628626.43 5628626.55 5628626.67 0.1648 0.1185

Saturn 10700-04-17 18:14 G 5629261.06 5629261.26 5629261.47 0.0285 0.0079

Saturn 10700-12-03 10:33 G 5629490.77 5629490.94 5629491.13 0.0285 0.0151

Mars 10703-03-05 06:28 G 5630312.63 5630312.77 5630312.91 0.1885 0.1143

Pluto 10706-08-26 08:38 G 5631582.85 5631582.86 5631582.93 0.0077 0.0076

Pluto 10707-04-08 18:28 G 5631808.05 5631808.27 5631808.49 0.0077 0.0010

Pluto 10707-11-20 03:07 G 5632033.48 5632033.63 5632033.80 0.0076 0.0054

Jupiter 10712-08-26 05:16 G 5633774.61 5633774.72 5633774.84 0.0484 0.0394

Saturn 10714-09-29 04:48 G 5634538.60 5634538.70 5634538.83 0.0273 0.0227

Uranus 10715-02-15 18:43 G 5634678.16 5634678.28 5634678.44 0.0144 0.0109

Saturn 10715-05-16 12:14 G 5634767.80 5634768.01 5634768.23 0.0273 0.0026

Uranus 10715-09-30 06:43 G 5634904.58 5634904.78 5634904.98 0.0144 0.0057

Saturn 10715-12-31 19:40 G 5634997.16 5634997.32 5634997.48 0.0274 0.0178

Uranus 10716-05-13 18:14 G 5635131.04 5635131.26 5635131.48 0.0144 0.0006

Uranus 10716-12-26 05:31 G 5635357.53 5635357.73 5635357.94 0.0144 0.0046

Uranus 10717-08-09 16:33 G 5635584.04 5635584.19 5635584.36 0.0143 0.0097

Jupiter 10718-06-28 07:11 G 5635906.60 5635906.80 5635907.00 0.0544 0.0031

Jupiter 10724-05-01 11:02 G 5638040.76 5638040.96 5638041.17 0.0485 0.0035

Saturn 10729-03-13 02:52 G 5639817.62 5639817.62 5639817.62 0.0286 0.0286

Saturn 10729-10-28 19:11 G 5640047.10 5640047.30 5640047.51 0.0286 0.0057

Jupiter 10730-03-02 18:28 G 5640172.19 5640172.27 5640172.37 0.0543 0.0484

Saturn 10730-06-15 11:31 G 5640276.82 5640276.98 5640277.15 0.0285 0.0174

Mars 10730-07-21 21:21 G 5640313.22 5640313.39 5640313.57 0.1657 0.0163

Mars 10735-03-05 03:50 G 5642000.54 5642000.66 5642000.78 0.1872 0.1299

Jupiter 10736-01-05 17:02 G 5642307.07 5642307.21 5642307.37 0.0485 0.0328

Saturn 10744-04-10 06:14 G 5645324.63 5645324.76 5645324.91 0.0273 0.0206

Saturn 10744-11-25 13:55 G 5645553.87 5645554.08 5645554.29 0.0274 0.0004

Saturn 10745-07-12 21:07 G 5645783.25 5645783.38 5645783.54 0.0274 0.0201

Earth 10752-08-25 04:48 G 5648383.59 5648383.70 5648383.81 0.2670 0.1941

Moon 10752-08-25 06:00 G 5648383.69 5648383.75 5648383.81 0.2676 0.2417 *

Jupiter 10754-03-06 03:50 G 5648941.51 5648941.66 5648941.82 0.0543 0.0344

Uranus 10758-07-01 06:14 G 5650519.65 5650519.76 5650519.89 0.0134 0.0110

Saturn 10758-09-23 10:04 G 5650603.83 5650603.92 5650604.02 0.0286 0.0255

Uranus 10759-02-12 12:14 G 5650745.82 5650746.01 5650746.19 0.0134 0.0069

Saturn 10759-05-11 02:52 G 5650833.41 5650833.62 5650833.83 0.0285 0.0025

Uranus 10759-09-26 17:45 G 5650972.04 5650972.24 5650972.46 0.0135 0.0028

Saturn 10759-12-26 19:11 G 5651063.16 5651063.30 5651063.45 0.0285 0.0205

Jupiter 10760-01-07 19:26 G 5651075.14 5651075.31 5651075.49 0.0485 0.0248

Uranus 10760-05-09 23:45 G 5651198.28 5651198.49 5651198.71 0.0135 0.0015

Earth 10760-08-22 19:26 G 5651303.20 5651303.31 5651303.42 0.2671 0.1874

Moon 10760-08-23 00:14 G 5651303.38 5651303.51 5651303.64 0.2675 0.1448 *

Uranus 10760-12-22 05:45 G 5651424.56 5651424.74 5651424.95 0.0135 0.0057

Uranus 10761-08-05 11:45 G 5651650.86 5651650.99 5651651.16 0.0135 0.0099

Mars 10762-07-20 18:14 G 5652000.20 5652000.26 5652000.33 0.1666 0.1537

Mars 10764-05-19 12:43 G 5652668.94 5652669.03 5652669.13 0.1646 0.1358

Neptune 10764-08-10 16:19 G 5652752.08 5652752.18 5652752.30 0.0089 0.0077

Neptune 10765-03-24 05:31 G 5652977.57 5652977.73 5652977.91 0.0089 0.0057

Neptune 10765-11-04 19:11 G 5653203.11 5653203.30 5653203.50 0.0089 0.0038

Jupiter 10765-11-08 11:02 G 5653206.77 5653206.96 5653207.14 0.0543 0.0196

Neptune 10766-06-18 08:23 G 5653428.65 5653428.85 5653429.08 0.0089 0.0019

Neptune 10767-01-29 22:04 G 5653654.20 5653654.42 5653654.64 0.0089 0.0002

Neptune 10767-09-12 11:16 G 5653879.76 5653879.97 5653880.19 0.0089 0.0021

Neptune 10768-04-25 00:14 G 5654105.33 5654105.51 5654105.73 0.0089 0.0042

Neptune 10768-12-06 13:55 G 5654330.93 5654331.08 5654331.25 0.0089 0.0061

Mars 10768-12-30 10:48 G 5654354.86 5654354.95 5654355.05 0.1888 0.1594

Neptune 10769-07-20 02:52 G 5654556.55 5654556.62 5654556.74 0.0089 0.0081

Jupiter 10771-09-13 02:09 G 5655341.39 5655341.59 5655341.79 0.0485 0.0109

Saturn 10773-10-21 13:55 G 5656110.93 5656111.08 5656111.26 0.0273 0.0174

Saturn 10774-06-07 21:21 G 5656340.18 5656340.39 5656340.60 0.0273 0.0028

Saturn 10775-01-23 04:19 G 5656569.58 5656569.68 5656569.81 0.0274 0.0231

Jupiter 10783-05-19 07:55 G 5659607.78 5659607.83 5659607.87 0.0486 0.0472

Saturn 10788-04-04 11:31 G 5661389.86 5661389.98 5661390.10 0.0286 0.0231

Saturn 10788-11-20 04:04 G 5661619.46 5661619.67 5661619.88 0.0285 0.0004

Saturn 10789-07-07 20:09 G 5661849.22 5661849.34 5661849.47 0.0285 0.0228

Jupiter 10795-09-15 04:04 G 5664109.62 5664109.67 5664109.74 0.0484 0.0462

Mars 10796-05-18 08:23 G 5664355.68 5664355.85 5664356.03 0.1654 0.0051

Uranus 10798-10-16 02:52 G 5665236.53 5665236.62 5665236.71 0.0144 0.0131

Uranus 10799-05-30 14:23 G 5665462.93 5665463.10 5665463.29 0.0144 0.0079

Uranus 10800-01-12 02:09 G 5665689.38 5665689.59 5665689.81 0.0144 0.0028

Uranus 10800-08-25 13:40 G 5665915.86 5665916.07 5665916.29 0.0144 0.0024

Mars 10800-12-30 08:09 G 5666042.69 5666042.84 5666043.00 0.1875 0.0870

Uranus 10801-04-09 00:57 G 5666142.35 5666142.54 5666142.73 0.0144 0.0075

Jupiter 10801-07-17 10:04 G 5666241.72 5666241.92 5666242.12 0.0543 0.0132

Uranus 10801-11-21 11:45 G 5666368.90 5666368.99 5666369.11 0.0143 0.0126

Saturn 10803-05-03 14:09 G 5666896.93 5666897.09 5666897.28 0.0273 0.0156

Saturn 10803-12-18 21:36 G 5667126.20 5667126.40 5667126.61 0.0274 0.0048

Saturn 10804-08-04 05:02 G 5667355.63 5667355.71 5667355.80 0.0274 0.0251

Jupiter 10807-05-21 10:04 G 5668375.72 5668375.92 5668376.12 0.0485 0.0102

Jupiter 10813-03-21 19:26 G 5670507.17 5670507.31 5670507.45 0.0543 0.0395

Saturn 10817-10-15 17:45 G 5672176.09 5672176.24 5672176.39 0.0286 0.0202

Saturn 10818-06-02 10:19 G 5672405.72 5672405.93 5672406.15 0.0285 0.0029

Saturn 10819-01-18 02:52 G 5672635.53 5672635.62 5672635.70 0.0285 0.0257

Jupiter 10819-01-24 16:19 G 5672642.01 5672642.18 5672642.36 0.0485 0.0257

Mars 10828-05-17 04:48 G 5676042.60 5676042.70 5676042.81 0.1663 0.1332

Mars 10830-03-17 00:28 G 5676711.46 5676711.52 5676711.58 0.1643 0.1533

Saturn 10832-11-12 22:04 G 5677683.24 5677683.42 5677683.62 0.0273 0.0123

Saturn 10833-06-30 05:16 G 5677912.52 5677912.72 5677912.93 0.0274 0.0080

Jupiter 10837-03-25 02:38 G 5679276.49 5679276.61 5679276.74 0.0544 0.0423

Uranus 10842-02-28 17:45 G 5681078.18 5681078.24 5681078.32 0.0134 0.0126

Uranus 10842-10-12 23:16 G 5681304.32 5681304.47 5681304.65 0.0134 0.0086

Jupiter 10843-01-26 19:26 G 5681410.16 5681410.31 5681410.46 0.0484 0.0319

Uranus 10843-05-27 05:31 G 5681530.52 5681530.73 5681530.93 0.0134 0.0044

Uranus 10844-01-08 11:31 G 5681756.76 5681756.98 5681757.19 0.0135 0.0003

Uranus 10844-08-21 17:16 G 5681983.02 5681983.22 5681983.43 0.0135 0.0040

Uranus 10845-04-04 23:16 G 5682209.31 5682209.47 5682209.65 0.0135 0.0082

Uranus 10845-11-17 05:16 G 5682435.65 5682435.72 5682435.82 0.0135 0.0125

Neptune 10846-02-13 13:26 G 5682523.99 5682524.06 5682524.14 0.0088 0.0082

Neptune 10846-09-27 01:40 G 5682749.44 5682749.57 5682749.74 0.0088 0.0064

Saturn 10847-04-27 19:11 G 5682962.13 5682962.30 5682962.46 0.0286 0.0178

Neptune 10847-05-10 14:38 G 5682974.94 5682975.11 5682975.31 0.0088 0.0045

Saturn 10847-12-13 11:31 G 5683191.77 5683191.98 5683192.19 0.0285 0.0052

Neptune 10847-12-22 03:21 G 5683200.44 5683200.64 5683200.86 0.0088 0.0027

Saturn 10848-07-30 03:36 G 5683421.62 5683421.65 5683421.69 0.0285 0.0280

Neptune 10848-08-03 16:04 G 5683425.95 5683426.17 5683426.39 0.0088 0.0008

Jupiter 10848-11-27 14:38 G 5683541.91 5683542.11 5683542.31 0.0544 0.0093

Neptune 10849-03-17 04:33 G 5683651.48 5683651.69 5683651.91 0.0088 0.0011

Neptune 10849-10-28 17:16 G 5683877.01 5683877.22 5683877.43 0.0088 0.0029

Neptune 10850-06-11 05:45 G 5684102.57 5684102.74 5684102.94 0.0088 0.0048

Neptune 10851-01-22 18:00 G 5684328.13 5684328.25 5684328.42 0.0088 0.0067

Neptune 10851-09-05 06:43 G 5684553.75 5684553.78 5684553.85 0.0088 0.0085

Jupiter 10854-10-02 01:40 G 5685676.37 5685676.57 5685676.77 0.0485 0.0040

Earth 10858-02-25 22:04 G 5686919.26 5686919.42 5686919.58 0.2661 0.0188

Moon 10858-02-26 01:40 G 5686919.42 5686919.57 5686919.72 0.2666 0.0275 *

Mars 10862-03-15 20:09 G 5688398.17 5688398.34 5688398.52 0.1652 0.0214

Saturn 10862-05-25 22:04 G 5688469.22 5688469.42 5688469.61 0.0273 0.0105

Saturn 10863-01-10 05:16 G 5688698.52 5688698.72 5688698.92 0.0274 0.0098

Moon 10866-02-23 19:26 G 5689839.28 5689839.31 5689839.35 0.2660 0.2568

Jupiter 10866-06-07 06:57 G 5689942.68 5689942.79 5689942.91 0.0486 0.0403

Mars 10866-10-27 12:14 G 5690084.84 5690085.01 5690085.18 0.1880 0.0435

Pluto 10867-07-11 22:33 G 5690342.27 5690342.44 5690342.63 0.0068 0.0039

Pluto 10868-02-22 04:04 G 5690567.46 5690567.67 5690567.90 0.0068 0.0006

Pluto 10868-10-04 09:21 G 5690792.75 5690792.89 5690793.05 0.0068 0.0050

Saturn 10876-11-07 00:00 G 5693748.33 5693748.50 5693748.68 0.0286 0.0151

Saturn 10877-06-24 16:33 G 5693978.00 5693978.19 5693978.40 0.0285 0.0080

Uranus 10883-01-27 23:02 G 5696021.30 5696021.46 5696021.61 0.0144 0.0101

Uranus 10883-09-11 10:19 G 5696247.74 5696247.93 5696248.15 0.0144 0.0050

Uranus 10884-04-24 22:04 G 5696474.20 5696474.42 5696474.64 0.0144 0.0003

Jupiter 10884-08-05 07:26 G 5696576.62 5696576.81 5696577.00 0.0544 0.0201

Uranus 10884-12-07 09:21 G 5696700.69 5696700.89 5696701.10 0.0144 0.0054

Uranus 10885-07-21 20:38 G 5696927.22 5696927.36 5696927.52 0.0143 0.0104

Jupiter 10890-06-09 11:02 G 5698710.78 5698710.96 5698711.16 0.0485 0.0181

Saturn 10891-04-20 22:04 G 5699026.42 5699026.42 5699026.45 0.0273 0.0273

Saturn 10891-12-06 05:31 G 5699255.53 5699255.73 5699255.94 0.0273 0.0072

Saturn 10892-07-22 12:43 G 5699484.85 5699485.03 5699485.22 0.0274 0.0130

Mars 10894-03-14 16:33 G 5700085.06 5700085.19 5700085.31 0.1661 0.1146

Jupiter 10896-04-09 17:45 G 5700842.08 5700842.24 5700842.41 0.0543 0.0322

Jupiter 10902-02-13 16:48 G 5702977.01 5702977.20 5702977.39 0.0485 0.0183

Saturn 10906-05-21 02:09 G 5704534.41 5704534.59 5704534.79 0.0286 0.0126

Saturn 10907-01-05 18:43 G 5704764.08 5704764.28 5704764.48 0.0285 0.0105

Jupiter 10920-04-14 06:57 G 5709611.75 5709611.79 5709611.83 0.0544 0.0532

Saturn 10920-10-31 21:36 G 5709812.34 5709812.40 5709812.48 0.0273 0.0256

Saturn 10921-06-18 05:02 G 5710041.50 5710041.71 5710041.92 0.0273 0.0055

Saturn 10922-02-02 12:14 G 5710270.84 5710271.01 5710271.19 0.0274 0.0148

Jupiter 10926-02-15 18:57 G 5711745.18 5711745.29 5711745.41 0.0484 0.0392

Uranus 10926-06-13 10:33 G 5711862.82 5711862.94 5711863.10 0.0134 0.0102

Uranus 10927-01-25 16:33 G 5712089.00 5712089.19 5712089.39 0.0134 0.0061

Uranus 10927-09-08 22:19 G 5712315.22 5712315.43 5712315.65 0.0134 0.0019

Mars 10928-01-12 07:40 G 5712440.65 5712440.82 5712440.99 0.1649 0.0394

Uranus 10928-04-22 04:19 G 5712541.47 5712541.68 5712541.90 0.0135 0.0023

Neptune 10928-11-13 00:00 G 5712746.48 5712746.50 5712746.55 0.0089 0.0088

Uranus 10928-12-04 10:19 G 5712767.74 5712767.93 5712768.13 0.0135 0.0065

Neptune 10929-06-26 13:11 G 5712971.93 5712972.05 5712972.21 0.0089 0.0069

Uranus 10929-07-18 16:19 G 5712994.06 5712994.18 5712994.32 0.0135 0.0107

Neptune 10930-02-07 02:52 G 5713197.44 5713197.62 5713197.81 0.0089 0.0049

Neptune 10930-09-20 16:04 G 5713422.97 5713423.17 5713423.39 0.0089 0.0029

Neptune 10931-05-04 05:31 G 5713648.52 5713648.73 5713648.96 0.0089 0.0010

Neptune 10931-12-15 19:11 G 5713874.08 5713874.30 5713874.52 0.0089 0.0010

Jupiter 10931-12-18 16:48 G 5713876.99 5713877.20 5713877.40 0.0543 0.0009

Neptune 10932-07-28 08:23 G 5714099.65 5714099.85 5714100.07 0.0089 0.0030

Mars 10932-08-24 16:19 G 5714127.01 5714127.18 5714127.36 0.1883 0.0044

Neptune 10933-03-10 21:50 G 5714325.23 5714325.41 5714325.60 0.0089 0.0050

Neptune 10933-10-22 11:02 G 5714550.84 5714550.96 5714551.11 0.0089 0.0070

Neptune 10934-06-05 00:14 G 5714776.51 5714776.51 5714776.55 0.0089 0.0089

Saturn 10935-12-01 06:00 G 5715320.56 5715320.75 5715320.96 0.0285 0.0101

Saturn 10936-07-17 22:33 G 5715550.26 5715550.44 5715550.64 0.0285 0.0130

Jupiter 10937-10-22 01:40 G 5716011.37 5716011.57 5716011.77 0.0485 0.0035

Jupiter 10943-08-22 23:02 G 5718142.45 5718142.46 5718142.48 0.0542 0.0540

Jupiter 10949-06-27 08:23 G 5720277.70 5720277.85 5720278.01 0.0486 0.0324

Saturn 10950-05-14 05:45 G 5720598.62 5720598.74 5720598.86 0.0273 0.0222

Saturn 10950-12-29 12:57 G 5720827.83 5720828.04 5720828.25 0.0274 0.0021

Saturn 10951-08-15 20:09 G 5721057.18 5721057.34 5721057.50 0.0274 0.0181

Pluto 10953-12-18 17:02 G 5721913.00 5721913.21 5721913.43 0.0077 0.0017

Pluto 10954-08-01 01:55 G 5722138.42 5722138.58 5722138.76 0.0076 0.0048

Mars 10960-01-11 03:21 G 5724127.50 5724127.64 5724127.78 0.1658 0.0948

Saturn 10965-06-12 09:07 G 5726106.68 5726106.88 5726107.09 0.0285 0.0073

Saturn 10966-01-28 01:26 G 5726336.39 5726336.56 5726336.74 0.0285 0.0156

Uranus 10966-09-28 06:14 G 5726579.66 5726579.76 5726579.88 0.0144 0.0124

Uranus 10967-05-12 18:14 G 5726806.07 5726806.26 5726806.45 0.0144 0.0072

Jupiter 10967-08-26 11:02 G 5726911.80 5726911.96 5726912.13 0.0544 0.0306

Uranus 10967-12-25 05:45 G 5727032.53 5727032.74 5727032.96 0.0144 0.0020

Uranus 10968-08-07 17:16 G 5727259.01 5727259.22 5727259.44 0.0144 0.0031

Uranus 10969-03-22 04:19 G 5727485.52 5727485.68 5727485.87 0.0144 0.0083

Uranus 10969-11-03 15:21 G 5727712.09 5727712.14 5727712.24 0.0143 0.0134

Jupiter	**10973-06-29 11:02**	**G**	**5729045.78**	**5729045.96**	**5729046.13**	**0.0484**	**0.0252**	
Jupiter	**10979-04-30 22:19**	**G**	**5731177.25**	**5731177.43**	**5731177.62**	**0.0543**	**0.0213**	
Saturn	**10979-11-24 04:48**	**G**	**5731384.57**	**5731384.70**	**5731384.85**	**0.0273**	**0.0206**	
Saturn	**10980-07-10 12:14**	**G**	**5731613.80**	**5731614.01**	**5731614.22**	**0.0273**	**0.0005**	
Saturn	**10981-02-24 19:26**	**G**	**5731843.17**	**5731843.31**	**5731843.46**	**0.0274**	**0.0198**	
Jupiter	**10985-03-04 16:19**	**G**	**5733311.99**	**5733312.18**	**5733312.38**	**0.0485**	**0.0112**	
Mars	**10993-11-08 18:57**	**G**	**5736483.13**	**5736483.29**	**5736483.46**	**0.1647**	**0.0580**	
Saturn	**10994-05-07 19:55**	**G**	**5736663.29**	**5736663.33**	**5736663.37**	**0.0286**	**0.0278**	
Saturn	**10994-12-23 12:28**	**G**	**5736892.82**	**5736893.02**	**5736893.23**	**0.0285**	**0.0049**	
Saturn	**10995-08-10 05:02**	**G**	**5737122.55**	**5737122.71**	**5737122.87**	**0.0285**	**0.0181**	
Earth	**10995-08-27 04:48**	**G**	**5737139.58**	**5737139.70**	**5737139.82**	**0.2671**	**0.1732**	
Moon	**10995-08-27 06:00**	**G**	**5737139.61**	**5737139.75**	**5737139.88**	**0.2665**	**0.1591**	*
Jupiter	**10996-11-07 22:48**	**G**	**5737578.41**	**5737578.45**	**5737578.50**	**0.0486**	**0.0471**	
Mars	**10998-06-21 20:09**	**G**	**5738169.17**	**5738169.34**	**5738169.51**	**0.1887**	**0.0481**	

12TH MILLENNIUM CE

This is a list of transits of Venus in the 12th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	**11003-08-25 16:04**	**G**	**5740059.08**	**5740059.17**	**5740059.26**	**0.2668**	**0.2190**	
Earth	**11003-08-25 19:40**	**G**	**5740059.22**	**5740059.32**	**5740059.42**	**0.2673**	**0.2090**	*
Jupiter	**11009-03-07 20:23**	**G**	**5742080.30**	**5742080.35**	**5742080.39**	**0.0484**	**0.0471**	
Saturn	**11009-06-06 12:43**	**G**	**5742170.87**	**5742171.03**	**5742171.20**	**0.0274**	**0.0172**	
Saturn	**11010-01-21 20:09**	**G**	**5742400.13**	**5742400.34**	**5742400.55**	**0.0274**	**0.0030**	

Uranus 11010-02-11 22:19 G 5742421.35 5742421.43 5742421.55 0.0134 0.0118

Saturn 11010-09-08 03:21 G 5742629.54 5742629.64 5742629.76 0.0274 0.0232

Uranus 11010-09-26 04:04 G 5742647.50 5742647.67 5742647.86 0.0134 0.0077

Neptune 11010-12-31 10:33 G 5742743.84 5742743.94 5742744.08 0.0088 0.0074

Uranus 11011-05-10 10:04 G 5742873.71 5742873.92 5742874.13 0.0134 0.0035

Neptune 11011-08-13 23:16 G 5742969.31 5742969.47 5742969.66 0.0088 0.0055

Uranus 11011-12-22 16:04 G 5743099.95 5743100.17 5743100.39 0.0134 0.0006

Neptune 11012-03-26 12:14 G 5743194.81 5743195.01 5743195.21 0.0088 0.0036

Uranus 11012-08-04 22:04 G 5743326.22 5743326.42 5743326.62 0.0135 0.0048

Neptune 11012-11-07 00:43 G 5743420.32 5743420.53 5743420.75 0.0088 0.0018

Uranus 11013-03-19 03:50 G 5743552.51 5743552.66 5743552.83 0.0135 0.0090

Neptune 11013-06-20 13:26 G 5743645.84 5743646.06 5743646.28 0.0088 0.0002

Uranus 11013-10-31 09:50 G 5743778.89 5743778.91 5743778.97 0.0135 0.0133

Neptune 11014-02-01 01:55 G 5743871.37 5743871.58 5743871.80 0.0088 0.0020

Neptune 11014-09-14 14:23 G 5744096.91 5744097.10 5744097.31 0.0088 0.0038

Jupiter 11015-01-07 14:38 G 5744211.91 5744212.11 5744212.31 0.0544 0.0075

Neptune 11015-04-28 02:52 G 5744322.47 5744322.62 5744322.80 0.0088 0.0057

Neptune 11015-12-09 15:36 G 5744548.05 5744548.15 5744548.27 0.0088 0.0075

Jupiter 11020-11-11 01:55 G 5746346.38 5746346.58 5746346.78 0.0485 0.0108

Saturn 11023-11-19 00:28 G 5747449.42 5747449.52 5747449.62 0.0285 0.0248

Saturn 11024-07-05 16:48 G 5747678.99 5747679.20 5747679.41 0.0285 0.0019

Saturn 11025-02-20 08:52 G 5747908.73 5747908.87 5747909.01 0.0285 0.0209

Mars 11025-11-08 14:52 G 5748169.97 5748170.12 5748170.28 0.1655 0.0767

Jupiter 11026-09-12 01:55 G 5748477.47 5748477.58 5748477.70 0.0543 0.0442

Jupiter 11032-07-17 08:09 G 5750612.67 5750612.84 5750613.02 0.0485 0.0253

Saturn 11038-12-17 12:14 G 5752956.85 5752957.01 5752957.19 0.0273 0.0156

Saturn 11039-08-03 19:40 G 5753186.12 5753186.32 5753186.53 0.0274 0.0047

Saturn 11040-03-20 03:07 G 5753415.55 5753415.63 5753415.72 0.0274 0.0249

Jupiter 11050-09-15 13:26 G 5757246.93 5757247.06 5757247.20 0.0544 0.0403

Uranus 11051-01-11 02:23 G 5757364.43 5757364.60 5757364.76 0.0144 0.0094

Uranus 11051-08-25 13:55 G 5757590.87 5757591.08 5757591.29 0.0144 0.0042

Uranus 11052-04-08 01:26 G 5757817.35 5757817.56 5757817.78 0.0144 0.0010

Uranus 11052-11-20 12:43 G 5758043.84 5758044.03 5758044.24 0.0144 0.0061

Saturn 11053-05-31 02:52 G 5758235.50 5758235.62 5758235.75 0.0286 0.0226

Uranus 11053-07-05 00:14 G 5758270.39 5758270.51 5758270.66 0.0144 0.0112

Saturn 11054-01-15 19:40 G 5758465.10 5758465.32 5758465.53 0.0285 0.0007

Saturn 11054-09-02 11:45 G 5758694.88 5758694.99 5758695.12 0.0285 0.0233

Jupiter 11056-07-19 10:48 G 5759380.80 5759380.95 5759381.10 0.0485 0.0325

Mars 11059-09-07 06:57 G 5760525.63 5760525.79 5760525.94 0.1644 0.0750

Jupiter 11062-05-20 19:55 G 5761512.13 5761512.33 5761512.52 0.0543 0.0145

Mars 11064-04-18 23:31 G 5762211.33 5762211.48 5762211.63 0.1891 0.0959

Jupiter 11068-03-24 17:16 G 5763647.02 5763647.22 5763647.42 0.0485 0.0035

Saturn 11068-06-28 20:23 G 5763743.16 5763743.35 5763743.54 0.0274 0.0121

Saturn 11069-02-13 03:50 G 5763972.46 5763972.66 5763972.86 0.0274 0.0082

Jupiter 11079-11-28 22:48 G 5767913.34 5767913.45 5767913.56 0.0486 0.0400

Saturn 11082-12-11 09:07 G 5769021.73 5769021.88 5769022.04 0.0285 0.0193

Saturn 11083-07-29 01:26 G 5769251.35 5769251.56 5769251.77 0.0285 0.0036

Saturn 11084-03-14 17:02 G 5769481.15 5769481.21 5769481.30 0.0285 0.0264

Mars 11091-09-06 02:09 G 5772212.43 5772212.59 5772212.76 0.1652 0.0581

Neptune 11093-09-28 20:23 G 5772966.27 5772966.35 5772966.46 0.0089 0.0080

Uranus 11093-10-12 10:33 G 5772979.94 5772979.94 5772979.94 0.0134 0.0134

Neptune 11094-05-12 09:36 G 5773191.76 5773191.90 5773192.08 0.0089 0.0061

Uranus 11094-05-26 15:50 G 5773206.01 5773206.16 5773206.32 0.0134 0.0093

Neptune 11094-12-23 23:16 G 5773417.28 5773417.47 5773417.68 0.0089 0.0041

Uranus 11095-01-07 21:36 G 5773432.21 5773432.40 5773432.61 0.0134 0.0052

Neptune 11095-08-06 12:43 G 5773642.82 5773643.03 5773643.25 0.0089 0.0021

Uranus 11095-08-22 03:36 G 5773658.43 5773658.65 5773658.87 0.0134 0.0011

Neptune 11096-03-19 02:09 G 5773868.37 5773868.59 5773868.81 0.0089 0.0001

Uranus 11096-04-04 09:21 G 5773884.68 5773884.89 5773885.11 0.0134 0.0031

Mars 11096-04-18 21:07 G 5773899.29 5773899.38 5773899.48 0.1878 0.1528

Neptune 11096-10-30 15:36 G 5774093.94 5774094.15 5774094.37 0.0089 0.0019

Uranus 11096-11-16 15:36 G 5774110.96 5774111.15 5774111.33 0.0135 0.0073

Neptune 11097-06-13 04:48 G 5774319.51 5774319.70 5774319.91 0.0089 0.0039

Uranus 11097-06-30 21:21 G 5774337.29 5774337.39 5774337.51 0.0135 0.0115

Saturn 11098-01-08 20:38 G 5774529.16 5774529.36 5774529.56 0.0273 0.0103

Neptune 11098-01-24 18:00 G 5774545.10 5774545.25 5774545.43 0.0089 0.0059

Jupiter 11098-01-26 18:28 G 5774547.08 5774547.27 5774547.46 0.0544 0.0182

Saturn 11098-08-26 03:50 G 5774758.47 5774758.66 5774758.86 0.0274 0.0100

Neptune 11098-09-07 07:40 G 5774770.72 5774770.82 5774770.93 0.0089 0.0078

Moon 11101-02-28 22:19 G 5775675.26 5775675.43 5775675.59 0.2653 0.0101

Earth 11101-03-01 00:00 G 5775675.34 5775675.50 5775675.66 0.2660 0.0182 *

Jupiter 11103-12-02 00:57 G 5776681.35 5776681.54 5776681.73 0.0485 0.0177

Jupiter 11109-10-02 04:33 G 5778812.53 5778812.69 5778812.84 0.0543 0.0345

Saturn 11112-06-23 11:16 G 5779807.81 5779807.97 5779808.15 0.0285 0.0171

Saturn 11113-02-08 03:50 G 5780037.45 5780037.66 5780037.87 0.0285 0.0059

Pluto 11114-03-25 00:14 G 5780447.32 5780447.51 5780447.70 0.0068 0.0035

Pluto 11114-11-05 05:31 G 5780672.51 5780672.73 5780672.95 0.0068 0.0009

Pluto 11115-06-18 10:19 G 5780897.82 5780897.93 5780898.08 0.0068 0.0055

Jupiter 11115-08-07 07:26 G 5780947.62 5780947.81 5780948.00 0.0485 0.0184

Mars 11125-07-05 18:14 G 5784568.12 5784568.26 5784568.41 0.1642 0.0935

Saturn 11126-12-05 21:07 G 5785086.35 5785086.38 5785086.41 0.0274 0.0270

Saturn 11127-07-23 04:33 G 5785315.49 5785315.69 5785315.90 0.0274 0.0069

Saturn 11128-03-08 12:14 G 5785544.83 5785545.01 5785545.20 0.0274 0.0134

Mars 11130-02-15 02:52 G 5786253.51 5786253.62 5786253.74 0.1895 0.1442

Jupiter 11133-10-05 10:04 G 5787581.82 5787581.92 5787582.03 0.0544 0.0467

Uranus 11134-09-11 09:07 G 5787922.77 5787922.88 5787923.02 0.0145 0.0118

Uranus 11135-04-25 21:07 G 5788149.19 5788149.38 5788149.58 0.0144 0.0065

Uranus 11135-12-08 08:52 G 5788375.65 5788375.87 5788376.09 0.0144 0.0014

Uranus 11136-07-21 20:23 G 5788602.15 5788602.35 5788602.57 0.0144 0.0038

Uranus 11137-03-05 07:55 G 5788828.67 5788828.83 5788829.01 0.0144 0.0089

Uranus 11137-10-17 19:11 G 5789055.26 5789055.30 5789055.36 0.0144 0.0140

Jupiter 11139-08-09 09:36 G 5789715.79 5789715.90 5789716.03 0.0484 0.0393

Saturn 11142-01-03 19:11 G 5790594.12 5790594.30 5790594.49 0.0285 0.0136

Saturn 11142-08-21 11:16 G 5790823.77 5790823.97 5790824.17 0.0285 0.0093

Jupiter 11145-06-09 21:07 G 5791847.18 5791847.38 5791847.59 0.0543 0.0055

Jupiter 11151-04-14 16:04 G 5793981.96 5793982.17 5793982.37 0.0485 0.0033

Saturn 11156-06-16 22:04 G 5795872.35 5795872.42 5795872.51 0.0273 0.0252

Saturn 11157-02-01 05:45 G 5796101.53 5796101.74 5796101.95 0.0274 0.0050

Mars 11157-07-04 13:55 G 5796254.91 5796255.08 5796255.25 0.1650 0.0398

Saturn 11157-09-18 13:11 G 5796330.88 5796331.05 5796331.23 0.0274 0.0153

Mars 11162-02-15 01:40 G 5797941.43 5797941.57 5797941.71 0.1882 0.1100

Jupiter 11162-12-18 21:21 G 5798248.24 5798248.39 5798248.53 0.0486 0.0335

Saturn 11171-07-16 21:07 G 5801380.19 5801380.38 5801380.58 0.0285 0.0113

Saturn 11172-03-02 13:26 G 5801609.87 5801610.06 5801610.26 0.0285 0.0116

Neptune 11175-04-04 18:57 G 5802738.25 5802738.29 5802738.38 0.0088 0.0084

Neptune 11175-11-16 07:55 G 5802963.69 5802963.83 5802963.99 0.0088 0.0065

Neptune 11176-06-28 20:23 G 5803189.19 5803189.35 5803189.56 0.0088 0.0047

Neptune 11177-02-09 09:21 G 5803414.69 5803414.89 5803415.11 0.0088 0.0028

Neptune 11177-09-22 22:04 G 5803640.20 5803640.42 5803640.64 0.0088 0.0009

Uranus 11178-01-25 03:50 G 5803764.55 5803764.66 5803764.80 0.0134 0.0109

Neptune 11178-05-06 10:48 G 5803865.73 5803865.95 5803866.17 0.0088 0.0010

Uranus 11178-09-08 09:36 G 5803990.73 5803990.90 5803991.10 0.0134 0.0068

Neptune 11178-12-17 23:31 G 5804091.27 5804091.48 5804091.68 0.0088 0.0028

Uranus 11179-04-22 15:36 G 5804216.94 5804217.15 5804217.36 0.0134 0.0026

Neptune 11179-07-31 11:45 G 5804316.81 5804316.99 5804317.19 0.0088 0.0047

Uranus 11179-12-04 21:36 G 5804443.18 5804443.40 5804443.62 0.0134 0.0015

Neptune 11180-03-13 00:00 G 5804542.38 5804542.50 5804542.67 0.0088 0.0066

Uranus 11180-07-18 03:21 G 5804669.45 5804669.64 5804669.84 0.0135 0.0057

Neptune 11180-10-24 12:43 G 5804767.99 5804768.03 5804768.11 0.0088 0.0084

Jupiter 11181-02-15 15:21 G 5804881.96 5804882.14 5804882.32 0.0543 0.0247

Uranus	11181-03-01 09:21 G	5804895.75	5804895.89	5804896.05	0.0135	0.0099
Saturn	11185-12-28 05:45 G	5806658.62	5806658.74	5806658.87	0.0274	0.0218
Saturn	11186-08-14 13:40 G	5806887.85	5806888.07	5806888.28	0.0274	0.0016
Jupiter	11186-12-21 00:28 G	5807016.34	5807016.52	5807016.69	0.0485	0.0247
Saturn	11187-03-31 21:07 G	5807117.24	5807117.38	5807117.55	0.0275	0.0189
Mars	11191-05-03 06:00 G	5808610.63	5808610.75	5808610.88	0.1639	0.1105
Jupiter	11192-10-21 00:43 G	5809147.36	5809147.53	5809147.70	0.0542	0.0285
Jupiter	11198-08-26 05:45 G	5811282.54	5811282.74	5811282.93	0.0485	0.0120
Pluto	11200-08-30 18:14 G	5812018.04	5812018.26	5812018.48	0.0077	0.0013
Saturn	11201-01-26 06:43 G	5812166.57	5812166.78	5812166.98	0.0285	0.0076
Pluto	11201-04-13 02:52 G	5812243.47	5812243.62	5812243.80	0.0076	0.0052
Saturn	11201-09-12 22:33 G	5812396.26	5812396.44	5812396.62	0.0285	0.0153
Jupiter	11210-05-01 11:31 G	5815548.97	5815548.98	5815549.00	0.0486	0.0483
Saturn	11215-07-10 07:55 G	5817444.69	5817444.83	5817444.98	0.0274	0.0198
Saturn	11216-02-24 15:36 G	5817673.94	5817674.15	5817674.37	0.0274	0.0006
Saturn	11216-10-10 23:16 G	5817903.34	5817903.47	5817903.61	0.0274	0.0208
Uranus	11218-05-11 17:31 G	5818481.19	5818481.23	5818481.30	0.0145	0.0139
Uranus	11218-12-24 05:45 G	5818707.57	5818707.74	5818707.91	0.0145	0.0087
Uranus	11219-08-07 17:16 G	5818934.02	5818934.22	5818934.44	0.0144	0.0036
Uranus	11220-03-21 05:02 G	5819160.50	5819160.71	5819160.93	0.0144	0.0017
Uranus	11220-11-02 16:33 G	5819387.01	5819387.19	5819387.39	0.0144	0.0068
Uranus	11221-06-17 04:04 G	5819613.56	5819613.67	5819613.80	0.0144	0.0119
Jupiter	11222-08-28 07:40 G	5820050.75	5820050.82	5820050.89	0.0484	0.0456
Mars	11223-05-02 01:11 G	5820297.37	5820297.55	5820297.72	0.1647	0.0215
Mars	11227-12-13 05:31 G	5821983.56	5821983.73	5821983.89	0.1886	0.0643
Jupiter	11228-06-28 22:33 G	5822182.24	5822182.44	5822182.65	0.0543	0.0040
Saturn	11229-12-21 16:19 G	5822723.16	5822723.18	5822723.23	0.0285	0.0281
Saturn	11230-08-08 08:52 G	5822952.66	5822952.87	5822953.08	0.0285	0.0052
Saturn	11231-03-26 00:57 G	5823182.37	5823182.54	5823182.70	0.0285	0.0176
Jupiter	11234-05-03 13:55 G	5824316.88	5824317.08	5824317.28	0.0485	0.0095

Moon 11238-08-29 02:23 G 5825895.47 5825895.60 5825895.73 0.2679 0.1269

Earth 11238-08-29 05:16 G 5825895.59 5825895.72 5825895.85 0.2672 0.1539 *

Jupiter 11240-03-03 06:00 G 5826447.68 5826447.75 5826447.82 0.0542 0.0503

Saturn 11245-01-19 15:21 G 5828230.98 5828231.14 5828231.32 0.0274 0.0165

Saturn 11245-09-05 23:31 G 5828460.27 5828460.48 5828460.69 0.0275 0.0040

Jupiter 11246-01-06 19:40 G 5828583.15 5828583.32 5828583.49 0.0486 0.0271

Saturn 11246-04-23 07:11 G 5828689.71 5828689.80 5828689.91 0.0275 0.0243

Earth 11246-08-26 19:40 G 5828815.25 5828815.32 5828815.40 0.2674 0.2310

Moon 11246-08-26 21:21 G 5828815.34 5828815.39 5828815.44 0.2680 0.2500 *

Mars 11255-04-30 20:52 G 5831984.31 5831984.37 5831984.42 0.1656 0.1565

Mars 11257-02-27 17:45 G 5832653.14 5832653.24 5832653.35 0.1637 0.1282

Neptune 11258-08-14 17:02 G 5833186.09 5833186.21 5833186.35 0.0089 0.0072

Neptune 11259-03-28 06:00 G 5833411.59 5833411.75 5833411.95 0.0089 0.0053

Saturn 11259-07-04 03:21 G 5833509.53 5833509.64 5833509.75 0.0285 0.0241

Neptune 11259-11-08 19:40 G 5833637.13 5833637.32 5833637.54 0.0089 0.0033

Saturn 11260-02-18 19:26 G 5833739.10 5833739.31 5833739.52 0.0285 0.0014

Neptune 11260-06-21 09:21 G 5833862.67 5833862.89 5833863.11 0.0089 0.0013

Saturn 11260-10-05 11:02 G 5833968.83 5833968.96 5833969.11 0.0284 0.0215

Neptune 11261-02-01 22:33 G 5834088.22 5834088.44 5834088.66 0.0089 0.0007

Neptune 11261-09-15 11:45 G 5834313.79 5834313.99 5834314.21 0.0089 0.0027

Uranus 11261-09-24 16:04 G 5834323.11 5834323.17 5834323.27 0.0134 0.0124

Neptune 11262-04-29 00:57 G 5834539.36 5834539.54 5834539.74 0.0089 0.0047

Uranus 11262-05-08 21:50 G 5834549.25 5834549.41 5834549.59 0.0134 0.0083

Neptune 11262-12-10 14:23 G 5834764.97 5834765.10 5834765.26 0.0089 0.0066

Uranus 11262-12-21 03:50 G 5834775.46 5834775.66 5834775.87 0.0134 0.0042

Neptune 11263-07-24 04:04 G 5834990.61 5834990.67 5834990.73 0.0089 0.0086

Uranus 11263-08-04 09:36 G 5835001.69 5835001.90 5835002.12 0.0134 0.0003

Jupiter 11264-03-06 14:23 G 5835216.94 5835217.10 5835217.26 0.0544 0.0326

Uranus 11264-03-17 15:36 G 5835227.94 5835228.15 5835228.36 0.0134 0.0041

Uranus 11264-10-29 21:21 G 5835454.23 5835454.39 5835454.57 0.0135 0.0083

Uranus 11265-06-13 03:07 G 5835680.57 5835680.63 5835680.73 0.0135 0.0125

Jupiter 11270-01-08 21:50 G 5837351.25 5837351.41 5837351.57 0.0485 0.0307

Saturn 11274-08-01 18:43 G 5839017.11 5839017.28 5839017.47 0.0274 0.0142

Saturn 11275-03-19 02:38 G 5839246.40 5839246.61 5839246.82 0.0274 0.0062

Saturn 11275-11-03 10:19 G 5839475.89 5839475.93 5839475.99 0.0274 0.0265

Jupiter 11275-11-10 01:40 G 5839482.38 5839482.57 5839482.76 0.0543 0.0194

Jupiter 11281-09-14 03:07 G 5841617.42 5841617.63 5841617.83 0.0485 0.0060

Saturn 11289-01-13 05:16 G 5844295.60 5844295.72 5844295.87 0.0285 0.0218

Mars 11289-02-26 12:57 G 5844339.87 5844340.04 5844340.21 0.1645 0.0033

Saturn 11289-08-30 21:36 G 5844525.19 5844525.40 5844525.61 0.0285 0.0011

Saturn 11290-04-17 13:40 G 5844754.96 5844755.07 5844755.18 0.0285 0.0238

Jupiter 11293-05-20 08:38 G 5845883.77 5845883.86 5845883.97 0.0486 0.0426

Mars 11293-10-09 09:07 G 5846025.71 5846025.88 5846026.06 0.1890 0.0179

Uranus 11302-08-24 12:43 G 5849265.91 5849266.03 5849266.19 0.0145 0.0110

Uranus 11303-04-08 00:43 G 5849492.34 5849492.53 5849492.74 0.0144 0.0058

Uranus 11303-11-20 12:43 G 5849718.82 5849719.03 5849719.25 0.0144 0.0006

Saturn 11304-02-13 01:55 G 5849803.39 5849803.58 5849803.78 0.0275 0.0109

Uranus 11304-07-04 00:28 G 5849945.32 5849945.52 5849945.73 0.0144 0.0046

Saturn 11304-09-29 09:50 G 5850032.72 5850032.91 5850033.11 0.0275 0.0095

Uranus 11305-02-15 12:14 G 5850171.85 5850172.01 5850172.17 0.0144 0.0097

Jupiter 11311-07-19 18:00 G 5852517.05 5852517.25 5852517.45 0.0543 0.0095

Jupiter 11317-05-23 10:33 G 5854651.75 5854651.94 5854652.14 0.0485 0.0154

Saturn 11318-07-27 17:31 G 5855082.06 5855082.23 5855082.39 0.0285 0.0177

Saturn 11319-03-14 09:21 G 5855311.68 5855311.89 5855312.10 0.0285 0.0051

Saturn 11319-10-30 00:57 G 5855541.51 5855541.54 5855541.59 0.0284 0.0278

Mars 11321-02-26 08:23 G 5856026.76 5856026.85 5856026.95 0.1653 0.1381

Mars 11322-12-27 05:45 G 5856695.66 5856695.74 5856695.82 0.1635 0.1447

Jupiter 11323-03-24 03:36 G 5856782.53 5856782.65 5856782.77 0.0542 0.0434

Jupiter 11329-01-26 16:33 G 5858918.01 5858918.19 5858918.38 0.0486 0.0212

Saturn 11333-08-25 06:14 G 5860589.57 5860589.76 5860589.97 0.0274 0.0085

Saturn 11334-04-11 14:09 G 5860818.90 5860819.09 5860819.28 0.0274 0.0119

Neptune 11340-02-18 15:50 G 5862958.08 5862958.16 5862958.30 0.0088 0.0076

Neptune 11340-10-01 04:48 G 5863183.55 5863183.70 5863183.88 0.0088 0.0057

Neptune 11341-05-14 17:45 G 5863409.05 5863409.24 5863409.44 0.0088 0.0038

Neptune 11341-12-26 06:28 G 5863634.56 5863634.77 5863634.99 0.0088 0.0019

Neptune 11342-08-08 19:11 G 5863860.08 5863860.30 5863860.52 0.0088 0.0002

Neptune 11343-03-22 07:40 G 5864085.61 5864085.82 5864086.04 0.0088 0.0018

Neptune 11343-11-02 20:09 G 5864311.15 5864311.34 5864311.55 0.0088 0.0037

Moon 11344-03-02 01:11 G 5864431.40 5864431.55 5864431.70 0.2665 0.0257

Earth 11344-03-02 01:40 G 5864431.42 5864431.57 5864431.73 0.2659 0.0166 *

Neptune 11344-06-15 08:38 G 5864536.71 5864536.86 5864537.05 0.0088 0.0056

Neptune 11345-01-26 21:21 G 5864762.29 5864762.39 5864762.52 0.0088 0.0074

Uranus 11346-01-07 10:33 G 5865107.80 5865107.94 5865108.09 0.0134 0.0098

Uranus 11346-08-21 16:19 G 5865333.98 5865334.18 5865334.38 0.0134 0.0057

Jupiter 11347-03-27 14:52 G 5865551.99 5865552.12 5865552.25 0.0544 0.0414

Uranus 11347-04-04 22:04 G 5865560.20 5865560.42 5865560.64 0.0134 0.0016

Uranus 11347-11-17 03:50 G 5865786.45 5865786.66 5865786.88 0.0134 0.0026

Saturn 11348-02-06 19:26 G 5865868.13 5865868.31 5865868.49 0.0285 0.0153

Uranus 11348-06-30 09:36 G 5866012.72 5866012.90 5866013.10 0.0134 0.0067

Saturn 11348-09-23 11:31 G 5866097.77 5866097.98 5866098.18 0.0285 0.0075

Uranus 11349-02-11 15:36 G 5866239.04 5866239.15 5866239.29 0.0135 0.0109

Jupiter 11353-01-28 18:28 G 5867686.15 5867686.27 5867686.41 0.0485 0.0366

Mars 11354-12-26 00:28 G 5868382.34 5868382.52 5868382.69 0.1642 0.0150

Jupiter 11358-11-29 23:02 G 5869817.26 5869817.46 5869817.65 0.0542 0.0127

Mars 11359-08-07 12:43 G 5870067.85 5870068.03 5870068.20 0.1893 0.0301

Pluto 11360-12-04 02:52 G 5870552.42 5870552.62 5870552.84 0.0068 0.0024

Pluto 11361-07-17 08:09 G 5870777.64 5870777.84 5870778.06 0.0068 0.0021

Pluto 11362-02-27 13:26 G 5871003.03 5871003.06 5871003.13 0.0068 0.0066

Saturn 11362-07-21 04:48 G 5871146.64 5871146.70 5871146.78 0.0275 0.0257

Saturn 11363-03-07 12:57 G 5871375.83 5871376.04 5871376.25 0.0275 0.0053

Saturn 11363-10-22 20:52 G 5871605.21 5871605.37 5871605.56 0.0275 0.0152

Jupiter 11364-10-04 00:00 G 5871952.29 5871952.50 5871952.70 0.0486 0.0011

Jupiter 11376-06-09 05:02 G 5876218.58 5876218.71 5876218.85 0.0486 0.0369

Saturn 11377-08-19 07:40 G 5876654.63 5876654.82 5876655.02 0.0285 0.0113

Saturn 11378-04-05 23:45 G 5876884.30 5876884.49 5876884.68 0.0284 0.0116

Uranus 11386-04-23 21:36 G 5879824.31 5879824.40 5879824.50 0.0145 0.0130

Uranus 11386-12-06 09:21 G 5880050.72 5880050.89 5880051.09 0.0145 0.0079

Mars 11386-12-24 19:26 G 5880069.19 5880069.31 5880069.43 0.1651 0.1183

Uranus 11387-07-20 21:36 G 5880277.19 5880277.40 5880277.62 0.0144 0.0026

Uranus 11388-03-03 09:36 G 5880503.68 5880503.90 5880504.11 0.0144 0.0026

Uranus 11388-10-15 20:52 G 5880730.20 5880730.37 5880730.57 0.0144 0.0077

Mars 11388-10-23 17:45 G 5880738.22 5880738.24 5880738.26 0.1632 0.1617

Uranus 11389-05-30 08:23 G 5880956.77 5880956.85 5880956.96 0.0144 0.0128

Saturn 11392-01-31 10:33 G 5881932.83 5881932.94 5881933.06 0.0274 0.0229

Saturn 11392-09-16 18:14 G 5882162.05 5882162.26 5882162.48 0.0274 0.0027

Saturn 11393-05-04 02:09 G 5882391.43 5882391.59 5882391.75 0.0274 0.0176

Jupiter 11394-08-07 17:02 G 5882852.02 5882852.21 5882852.41 0.0543 0.0177

Jupiter 11400-06-12 07:26 G 5884986.63 5884986.81 5884987.00 0.0485 0.0211

Jupiter 11406-04-13 03:50 G 5887117.51 5887117.66 5887117.82 0.0542 0.0348

Saturn 11407-03-02 09:50 G 5887440.72 5887440.91 5887441.12 0.0285 0.0088

Saturn 11407-10-18 01:40 G 5887670.40 5887670.57 5887670.76 0.0285 0.0141

Jupiter 11412-02-16 13:11 G 5889252.86 5889253.05 5889253.24 0.0486 0.0156

Mars 11420-10-23 12:00 G 5892424.83 5892425.00 5892425.17 0.1640 0.0331

Saturn 11421-08-13 16:04 G 5892719.03 5892719.17 5892719.32 0.0275 0.0200

Saturn 11422-03-31 00:14 G 5892948.29 5892948.51 5892948.72 0.0275 0.0006

Saturn 11422-11-15 08:09 G 5893177.71 5893177.84 5893177.99 0.0275 0.0208

Neptune 11422-11-17 23:45 G 5893180.44 5893180.49 5893180.59 0.0089 0.0084

Neptune 11423-07-01 13:26 G 5893405.92 5893406.06 5893406.22 0.0089 0.0064

Neptune 11424-02-12 02:23 G 5893631.43 5893631.60 5893631.81 0.0089 0.0045

Neptune 11424-09-24 16:04 G 5893856.96 5893857.17 5893857.39 0.0089 0.0024

Neptune 11425-05-08 05:31 G 5894082.51 5894082.73 5894082.95 0.0089 0.0005

Mars 11425-06-04 15:36 G 5894110.00 5894110.15 5894110.31 0.1897 0.0793

Neptune 11425-12-19 18:43 G 5894308.07 5894308.28 5894308.51 0.0089 0.0015

Neptune 11426-08-02 08:09 G 5894533.64 5894533.84 5894534.05 0.0089 0.0035

Neptune 11427-03-15 21:21 G 5894759.23 5894759.39 5894759.57 0.0089 0.0055

Neptune 11427-10-27 10:33 G 5894984.84 5894984.94 5894985.08 0.0089 0.0075

Uranus 11429-09-07 22:48 G 5895666.34 5895666.45 5895666.57 0.0134 0.0113

Jupiter 11430-04-16 10:19 G 5895886.83 5895886.93 5895887.03 0.0543 0.0472

Uranus 11430-04-22 04:33 G 5895892.51 5895892.69 5895892.88 0.0134 0.0072

Uranus 11430-12-04 10:19 G 5896118.72 5896118.93 5896119.15 0.0134 0.0031

Uranus 11431-07-18 16:19 G 5896344.96 5896345.18 5896345.39 0.0134 0.0010

Uranus 11432-02-29 22:04 G 5896571.22 5896571.42 5896571.62 0.0134 0.0052

Uranus 11432-10-13 03:36 G 5896797.51 5896797.65 5896797.82 0.0135 0.0094

Uranus 11433-05-27 09:50 G 5897023.91 5897023.91 5897023.92 0.0135 0.0135

Saturn 11436-01-26 05:45 G 5897997.70 5897997.74 5897997.80 0.0285 0.0275

Jupiter 11436-02-18 14:38 G 5898021.01 5898021.11 5898021.21 0.0485 0.0422

Saturn 11436-09-11 21:50 G 5898227.21 5898227.41 5898227.62 0.0285 0.0048

Saturn 11437-04-29 13:40 G 5898456.92 5898457.07 5898457.24 0.0284 0.0181

Jupiter 11441-12-19 18:57 G 5900152.09 5900152.29 5900152.49 0.0543 0.0063

Pluto 11446-09-30 14:23 G 5901897.96 5901898.10 5901898.26 0.0077 0.0057

Pluto 11447-05-13 23:31 G 5902123.26 5902123.48 5902123.70 0.0076 0.0008

Jupiter 11447-10-24 20:52 G 5902287.17 5902287.37 5902287.57 0.0485 0.0059

Pluto 11447-12-25 08:09 G 5902348.79 5902348.84 5902348.92 0.0076 0.0072

Saturn 11451-02-23 22:33 G 5903505.29 5903505.44 5903505.62 0.0274 0.0172

Saturn 11451-10-11 06:28 G 5903734.56 5903734.77 5903734.99 0.0274 0.0032

Saturn 11452-05-27 14:09 G 5903963.99 5903964.09 5903964.21 0.0274 0.0235

Mars 11452-10-22 07:11 G 5904111.66 5904111.80 5904111.94 0.1648 0.1004

Mars 11457-06-04 14:23 G 5905798.04 5905798.10 5905798.16 0.1884 0.1759

Jupiter 11459-06-30 02:09 G 5906553.43 5906553.59 5906553.74 0.0486 0.0311

Saturn 11465-08-07 08:09 G 5908783.74 5908783.84 5908783.94 0.0285 0.0251

Saturn 11466-03-25 00:00 G 5909013.29 5909013.50 5909013.71 0.0285 0.0023

Saturn 11466-11-09 15:50 G 5909243.02 5909243.16 5909243.31 0.0285 0.0204

Uranus 11470-08-06 16:48 G 5910609.05 5910609.20 5910609.36 0.0145 0.0101

Uranus 11471-03-21 05:02 G 5910835.50 5910835.71 5910835.91 0.0144 0.0049

Uranus 11471-11-02 16:48 G 5911061.98 5911062.20 5911062.42 0.0144 0.0003

Uranus 11472-06-16 04:33 G 5911288.49 5911288.69 5911288.90 0.0144 0.0055

Uranus 11473-01-28 16:04 G 5911515.04 5911515.17 5911515.33 0.0144 0.0106

Jupiter 11477-08-27 15:21 G 5913186.96 5913187.14 5913187.32 0.0543 0.0252

Saturn 11480-09-05 03:07 G 5914291.46 5914291.63 5914291.82 0.0274 0.0145

Saturn 11481-04-22 11:16 G 5914520.76 5914520.97 5914521.17 0.0275 0.0060

Earth 11481-08-31 05:02 G 5914651.57 5914651.71 5914651.85 0.2674 0.1296

Moon 11481-08-31 09:36 G 5914651.79 5914651.90 5914652.01 0.2669 0.2008 *

Saturn 11481-12-07 19:11 G 5914750.25 5914750.30 5914750.37 0.0275 0.0264

Jupiter 11483-07-02 03:50 G 5915321.50 5915321.66 5915321.84 0.0485 0.0269

Mars 11486-08-21 00:00 G 5916467.33 5916467.50 5916467.66 0.1638 0.0500

Jupiter 11489-05-02 00:14 G 5917452.34 5917452.51 5917452.69 0.0542 0.0283

Moon 11489-08-28 19:55 G 5917571.25 5917571.33 5917571.42 0.2668 0.2277

Earth 11489-08-28 19:40 G 5917571.28 5917571.32 5917571.37 0.2675 0.2548 *

Mars 11491-04-01 18:43 G 5918152.15 5918152.28 5918152.40 0.1901 0.1302

Saturn 11495-02-17 19:26 G 5919570.18 5919570.31 5919570.46 0.0285 0.0212

Jupiter 11495-03-07 09:21 G 5919587.69 5919587.89 5919588.09 0.0486 0.0098

Saturn 11495-10-05 11:31 G 5919799.77 5919799.98 5919800.20 0.0285 0.0017

Saturn 11496-05-22 03:21 G 5920029.55 5920029.64 5920029.76 0.0284 0.0244

Neptune 11504-05-24 00:28 G 5922952.50 5922952.52 5922952.59 0.0088 0.0086

Neptune 11505-01-04 13:26 G 5923177.93 5923178.06 5923178.21 0.0088 0.0067

Neptune 11505-08-18 02:09 G 5923403.42 5923403.59 5923403.78 0.0088 0.0048

Neptune 11506-03-31 14:38 G 5923628.92 5923629.11 5923629.33 0.0088 0.0030

Jupiter 11506-11-11 15:21 G 5923854.09 5923854.14 5923854.20 0.0487 0.0464

Neptune 11506-11-12 03:36 G 5923854.43 5923854.65 5923854.87 0.0088 0.0011

Neptune 11507-06-25 16:19 G 5924079.96 5924080.18 5924080.40 0.0088 0.0008

Neptune 11508-02-06 04:48 G 5924305.50 5924305.70 5924305.92 0.0088 0.0027

Neptune 11508-09-18 17:16 G 5924531.05 5924531.22 5924531.42 0.0088 0.0046

Neptune 11509-05-02 06:14 G 5924756.61 5924756.76 5924756.91 0.0088 0.0064

Neptune 11509-12-13 18:28 G 5924982.22 5924982.27 5924982.36 0.0088 0.0083

Saturn 11510-03-19 10:33 G 5925077.74 5925077.94 5925078.13 0.0274 0.0114

Saturn 11510-11-03 18:14 G 5925307.06 5925307.26 5925307.46 0.0274 0.0089

Uranus 11513-05-09 11:16 G 5926224.91 5926224.97 5926225.03 0.0134 0.0128

Uranus 11513-12-21 16:48 G 5926451.05 5926451.20 5926451.38 0.0134 0.0088

Uranus 11514-08-04 22:33 G 5926677.24 5926677.44 5926677.65 0.0134 0.0047

Uranus 11515-03-19 04:19 G 5926903.47 5926903.68 5926903.90 0.0134 0.0006

Uranus 11515-10-31 09:50 G 5927129.71 5927129.91 5927130.13 0.0134 0.0037

Uranus 11516-06-13 15:36 G 5927355.99 5927356.15 5927356.34 0.0134 0.0078

Uranus 11517-01-25 21:50 G 5927582.32 5927582.41 5927582.52 0.0135 0.0119

Mars 11518-08-20 18:43 G 5928154.13 5928154.28 5928154.43 0.1645 0.0820

Jupiter 11519-03-10 11:45 G 5928355.97 5928355.99 5928356.01 0.0484 0.0481

Mars 11523-04-02 17:31 G 5929840.11 5929840.23 5929840.36 0.1888 0.1283

Saturn 11524-08-30 21:07 G 5930356.23 5930356.38 5930356.55 0.0285 0.0188

Jupiter 11525-01-08 19:55 G 5930487.13 5930487.33 5930487.54 0.0543 0.0028

Saturn 11525-04-17 13:26 G 5930585.85 5930586.06 5930586.27 0.0285 0.0040

Saturn 11525-12-03 05:02 G 5930815.65 5930815.71 5930815.79 0.0285 0.0267

Jupiter 11530-11-13 17:45 G 5932622.04 5932622.24 5932622.44 0.0485 0.0117

Jupiter 11536-09-13 05:45 G 5934752.67 5934752.74 5934752.82 0.0541 0.0501

Saturn 11539-09-29 14:09 G 5935863.89 5935864.09 5935864.29 0.0274 0.0089

Saturn 11540-05-15 21:50 G 5936093.23 5936093.41 5936093.61 0.0275 0.0116

Jupiter 11542-07-19 22:33 G 5936888.27 5936888.44 5936888.62 0.0486 0.0254

Mars 11552-06-18 11:16 G 5940509.81 5940509.97 5940510.13 0.1635 0.0688

Saturn 11554-03-13 07:40 G 5941142.64 5941142.82 5941143.00 0.0285 0.0151

Uranus 11554-04-07 00:43 G 5941167.44 5941167.53 5941167.67 0.0145 0.0123

Saturn 11554-10-28 23:45 G 5941372.29 5941372.49 5941372.70 0.0285 0.0077

Uranus 11554-11-19 12:57 G 5941393.86 5941394.04 5941394.24 0.0145 0.0071

Uranus 11555-07-04 01:26 G 5941620.34 5941620.56 5941620.77 0.0144 0.0019

Uranus 11556-02-15 13:11 G 5941846.84 5941847.05 5941847.26 0.0144 0.0033

Uranus 11556-09-29 00:57 G 5942073.36 5942073.54 5942073.71 0.0144 0.0084

Mars 11557-01-27 21:36 G 5942194.35 5942194.40 5942194.45 0.1904 0.1814

Uranus 11557-05-13 12:28 G 5942299.95 5942300.02 5942300.09 0.0144 0.0135

Jupiter 11560-09-16 11:02 G 5943521.80 5943521.96 5943522.13 0.0543 0.0316

Jupiter 11566-07-22 01:55 G 5945656.43 5945656.58 5945656.73 0.0485 0.0333

Saturn 11568-08-24 13:55 G 5946421.02 5946421.08 5946421.16 0.0274 0.0259

Saturn 11569-04-10 21:36 G 5946650.20 5946650.40 5946650.61 0.0274 0.0057

Saturn 11569-11-26 05:31 G 5946879.55 5946879.73 5946879.91 0.0274 0.0145

Jupiter 11572-05-21 22:04 G 5947787.24 5947787.42 5947787.61 0.0543 0.0211

Jupiter 11578-03-27 07:11 G 5949922.60 5949922.80 5949923.01 0.0485 0.0036

Saturn 11583-09-23 09:21 G 5951928.71 5951928.89 5951929.08 0.0285 0.0127

Saturn 11584-05-10 01:26 G 5952158.37 5952158.56 5952158.76 0.0285 0.0101

Mars 11584-06-17 06:00 G 5952196.59 5952196.75 5952196.91 0.1643 0.0635

Earth 11587-03-05 03:50 G 5953187.50 5953187.66 5953187.82 0.2658 0.0174

Moon 11587-03-05 06:57 G 5953187.63 5953187.79 5953187.96 0.2653 0.0181 *

Neptune 11587-10-03 20:09 G 5953400.24 5953400.34 5953400.48 0.0089 0.0076

Neptune 11588-05-16 09:50 G 5953625.74 5953625.91 5953626.08 0.0089 0.0056

Neptune 11588-12-27 23:02 G 5953851.27 5953851.46 5953851.67 0.0089 0.0036

Mars 11589-01-27 21:36 G 5953882.24 5953882.40 5953882.56 0.1892 0.0825

Neptune 11589-08-10 12:28 G 5954076.81 5954077.02 5954077.24 0.0089 0.0016

Jupiter 11589-11-30 12:57 G 5954188.93 5954189.04 5954189.15 0.0486 0.0404

Neptune 11590-03-24 01:55 G 5954302.36 5954302.58 5954302.80 0.0089 0.0004

Neptune 11590-11-04 15:07 G 5954527.92 5954528.13 5954528.35 0.0089 0.0023

Neptune 11591-06-18 04:04 G 5954753.50 5954753.67 5954753.88 0.0089 0.0044

Neptune 11592-01-29 17:45 G 5954979.09 5954979.24 5954979.40 0.0089 0.0063

Neptune 11592-09-11 06:43 G 5955204.72 5955204.78 5955204.88 0.0089 0.0083

Uranus 11597-08-21 05:16 G 5957009.59 5957009.72 5957009.86 0.0134 0.0103

Saturn 11598-03-06 16:33 G 5957207.08 5957207.19 5957207.29 0.0274 0.0236

Uranus 11598-04-04 11:02 G 5957235.76 5957235.96 5957236.15 0.0134 0.0062

Saturn 11598-10-22 00:14 G 5957436.30 5957436.51 5957436.73 0.0274 0.0035

Uranus 11598-11-16 16:33 G 5957461.98 5957462.19 5957462.41 0.0134 0.0021

Saturn 11599-06-08 07:55 G 5957665.67 5957665.83 5957666.01 0.0274 0.0170

Uranus 11599-06-30 22:19 G 5957688.21 5957688.43 5957688.65 0.0134 0.0020

Uranus 11600-02-12 03:50 G 5957914.48 5957914.66 5957914.87 0.0134 0.0062

Uranus 11600-09-25 09:36 G 5958140.78 5958140.90 5958141.05 0.0134 0.0103

Pluto 11607-01-04 03:50 G 5960432.51 5960432.66 5960432.83 0.0068 0.0046

Pluto 11607-08-17 09:21 G 5960657.67 5960657.89 5960658.11 0.0068 0.0002

Jupiter 11608-01-28 18:14 G 5960822.06 5960822.26 5960822.46 0.0543 0.0103

Pluto 11608-03-29 14:09 G 5960882.95 5960883.09 5960883.28 0.0068 0.0044

Saturn 11613-04-04 18:28 G 5962715.07 5962715.27 5962715.47 0.0285 0.0093

Saturn 11613-11-20 10:33 G 5962944.76 5962944.94 5962945.13 0.0285 0.0135

Jupiter 11613-12-02 15:07 G 5962956.94 5962957.13 5962957.32 0.0485 0.0180

Mars 11618-04-15 23:16 G 5964552.32 5964552.47 5964552.62 0.1633 0.0854

Jupiter 11619-10-03 01:26 G 5965087.45 5965087.56 5965087.68 0.0542 0.0442

Jupiter 11625-08-07 21:36 G 5967223.21 5967223.40 5967223.59 0.0486 0.0184

Saturn 11627-09-17 00:43 G 5967993.39 5967993.53 5967993.67 0.0274 0.0203

Saturn 11628-05-03 08:09 G 5968222.63 5968222.84 5968223.05 0.0274 0.0003

Saturn 11628-12-18 15:50 G 5968452.02 5968452.16 5968452.30 0.0274 0.0200

Uranus 11638-07-19 20:09 G 5971952.18 5971952.34 5971952.50 0.0145 0.0094

Uranus 11639-03-03 07:55 G 5972178.63 5972178.83 5972179.05 0.0145 0.0043

Uranus 11639-10-15 19:55 G 5972405.12 5972405.33 5972405.55 0.0144 0.0010

Uranus 11640-05-29 07:40 G 5972631.63 5972631.82 5972632.02 0.0144 0.0061

Uranus 11641-01-10 19:26 G 5972858.18 5972858.31 5972858.45 0.0144 0.0112

Saturn 11642-10-15 19:55 G 5973501.13 5973501.33 5973501.54 0.0285 0.0069

Saturn 11643-06-02 12:00 G 5973730.83 5973731.00 5973731.18 0.0285 0.0159

Jupiter 11643-10-06 13:26 G 5973856.93 5973857.06 5973857.19 0.0544 0.0412

Jupiter 11649-08-10 00:00 G 5975991.38 5975991.50 5975991.61 0.0485 0.0397

Mars 11650-04-14 17:45 G 5976239.07 5976239.24 5976239.40 0.1640 0.0455

Mars 11654-11-25 00:43 G 5977924.35 5977924.53 5977924.70 0.1896 0.0339

Jupiter 11655-06-11 00:00 G 5978122.30 5978122.50 5978122.70 0.0542 0.0115

Saturn 11657-03-29 01:55 G 5978779.43 5978779.58 5978779.74 0.0274 0.0183

Saturn 11657-11-13 09:50 G 5979008.70 5979008.91 5979009.12 0.0274 0.0020

Saturn 11658-06-30 17:16 G 5979238.11 5979238.22 5979238.35 0.0274 0.0223

Jupiter 11661-04-15 05:02 G 5980257.51 5980257.71 5980257.91 0.0486 0.0029

Neptune 11669-04-07 21:50 G 5983172.32 5983172.41 5983172.53 0.0088 0.0077

Neptune 11669-11-19 10:48 G 5983397.79 5983397.95 5983398.11 0.0088 0.0058

Neptune 11670-07-02 23:16 G 5983623.29 5983623.47 5983623.68 0.0088 0.0040

Neptune 11671-02-13 12:00 G 5983848.79 5983849.00 5983849.22 0.0088 0.0021

Saturn 11671-09-10 11:16 G 5984057.90 5984057.97 5984058.05 0.0285 0.0264

Neptune 11671-09-27 00:43 G 5984074.31 5984074.53 5984074.75 0.0088 0.0002

Saturn 11672-04-27 03:50 G 5984287.45 5984287.66 5984287.87 0.0285 0.0037

Neptune 11672-05-09 13:26 G 5984299.85 5984300.06 5984300.28 0.0088 0.0017

Saturn 11672-12-12 19:55 G 5984517.17 5984517.33 5984517.49 0.0285 0.0191

Jupiter 11672-12-19 11:02 G 5984523.81 5984523.96 5984524.11 0.0486 0.0338

Neptune 11672-12-21 01:55 G 5984525.39 5984525.58 5984525.79 0.0088 0.0036

Neptune 11673-08-03 14:23 G 5984750.95 5984751.10 5984751.29 0.0088 0.0055

Neptune 11674-03-17 03:21 G 5984976.53 5984976.64 5984976.76 0.0088 0.0073

Uranus 11681-04-20 17:02 G 5987568.13 5987568.21 5987568.32 0.0134 0.0119

Uranus 11681-12-02 23:02 G 5987794.28 5987794.46 5987794.64 0.0134 0.0078

Uranus 11682-07-17 04:19 G 5988020.48 5988020.68 5988020.90 0.0134 0.0038

Uranus 11683-02-28 10:19 G 5988246.71 5988246.93 5988247.14 0.0134 0.0004

Uranus 11683-10-12 15:36 G 5988472.96 5988473.15 5988473.37 0.0134 0.0045

Mars 11684-02-11 11:02 G 5988594.83 5988594.96 5988595.09 0.1631 0.1030

Uranus 11684-05-25 21:21 G 5988699.24 5988699.39 5988699.57 0.0134 0.0086

Uranus 11685-01-07 03:07 G 5988925.59 5988925.63 5988925.72 0.0135 0.0128

Saturn 11686-10-09 10:04 G 5989565.75 5989565.92 5989566.10 0.0274 0.0150

Saturn 11687-05-26 17:31 G 5989795.03 5989795.23 5989795.45 0.0274 0.0053

Saturn 11688-01-11 01:11 G 5990024.47 5990024.55 5990024.63 0.0274 0.0253

Jupiter 11691-02-16 16:19 G 5991156.99 5991157.18 5991157.37 0.0543 0.0177

Pluto 11693-06-11 22:19 G 5992003.24 5992003.43 5992003.66 0.0077 0.0026

Pluto 11694-01-23 07:26 G 5992228.63 5992228.81 5992229.01 0.0076 0.0040

Jupiter 11696-12-21 14:23 G 5993291.93 5993292.10 5993292.28 0.0485 0.0250

Saturn 11701-03-23 12:57 G 5994843.94 5994844.04 5994844.16 0.0285 0.0240

Saturn 11701-11-08 05:16 G 5995073.50 5995073.72 5995073.93 0.0285 0.0014

Saturn 11702-06-25 21:07 G 5995303.25 5995303.38 5995303.52 0.0285 0.0214

Jupiter 11702-10-23 04:04 G 5995422.52 5995422.67 5995422.83 0.0542 0.0344

Jupiter 11708-08-27 20:23 G 5997558.15 5997558.35 5997558.55 0.0486 0.0117

Mars 11716-02-11 05:31 G 6000281.56 6000281.73 6000281.90 0.1638 0.0277

Saturn 11716-04-21 10:33 G 6000351.76 6000351.94 6000352.13 0.0274 0.0131

Saturn 11716-12-06 18:14 G 6000581.06 6000581.26 6000581.47 0.0274 0.0072

Saturn 11717-07-24 01:40 G 6000810.57 6000810.57 6000810.60 0.0274 0.0274

Mars 11720-09-22 03:50 G 6001966.49 6001966.66 6001966.84 0.1900 0.0158

Uranus 11722-03-20 04:04 G 6002510.54 6002510.67 6002510.80 0.0145 0.0116

Uranus 11722-11-01 15:50 G 6002736.98 6002737.16 6002737.36 0.0145 0.0065

Uranus 11723-06-16 04:04 G 6002963.45 6002963.67 6002963.89 0.0144 0.0013

Uranus 11724-01-28 15:50 G 6003189.95 6003190.16 6003190.37 0.0144 0.0039

Moon 11724-09-02 00:14 G 6003407.35 6003407.51 6003407.66 0.2678 0.0179

Earth 11724-09-02 05:31 G 6003407.58 6003407.73 6003407.87 0.2674 0.1111 *

Uranus 11724-09-11 03:21 G 6003416.48 6003416.64 6003416.82 0.0144 0.0091

Uranus 11725-04-25 14:52 G 6003643.09 6003643.12 6003643.17 0.0144 0.0141

Jupiter 11726-10-26 13:55 G 6004192.00 6004192.08 6004192.16 0.0543 0.0500

Saturn 11730-10-03 19:11 G 6005630.16 6005630.30 6005630.44 0.0285 0.0211

Saturn 11731-05-21 11:31 G 6005859.77 6005859.98 6005860.19 0.0285 0.0016

Saturn 11732-01-06 03:21 G 6006089.55 6006089.64 6006089.76 0.0285 0.0244

Jupiter 11732-08-29 22:48 G 6006326.40 6006326.45 6006326.50 0.0485 0.0468

Jupiter 11738-06-30 20:38 G 6008457.16 6008457.36 6008457.57 0.0543 0.0051

Jupiter 11744-05-05 05:31 G 6010592.53 6010592.73 6010592.93 0.0485 0.0106

Saturn 11745-11-01 18:57 G 6011138.09 6011138.29 6011138.49 0.0274 0.0097

Saturn 11746-06-19 02:23 G 6011367.40 6011367.60 6011367.80 0.0274 0.0105

Mars 11748-02-10 00:14 G 6011968.48 6011968.51 6011968.55 0.1646 0.1614

Mars 11749-12-09 23:02 G 6012637.34 6012637.46 6012637.58 0.1629 0.1197

Neptune 11752-01-06 03:50 G 6013394.62 6013394.66 6013394.72 0.0089 0.0087

Neptune 11752-08-18 16:48 G 6013620.08 6013620.20 6013620.37 0.0089 0.0068

Neptune 11753-04-01 06:28 G 6013845.60 6013845.77 6013845.97 0.0089 0.0047

Neptune 11753-11-12 19:55 G 6014071.13 6014071.33 6014071.55 0.0089 0.0028

Neptune 11754-06-26 09:36 G 6014296.68 6014296.90 6014297.12 0.0089 0.0008

Neptune 11755-02-06 22:48 G 6014522.23 6014522.45 6014522.67 0.0089 0.0012

Neptune 11755-09-20 11:45 G 6014747.80 6014747.99 6014748.21 0.0089 0.0032

Jupiter 11756-01-09 11:02 G 6014858.80 6014858.96 6014859.14 0.0486 0.0265

Neptune 11756-05-03 01:11 G 6014973.38 6014973.55 6014973.74 0.0089 0.0052

Neptune 11756-12-14 14:23 G 6015198.99 6015199.10 6015199.25 0.0089 0.0072

Saturn 11760-04-14 20:52 G 6016416.22 6016416.37 6016416.53 0.0285 0.0187

Saturn 11760-11-30 12:57 G 6016645.84 6016646.04 6016646.25 0.0285 0.0041

Saturn 11761-07-18 04:48 G 6016875.64 6016875.70 6016875.78 0.0285 0.0267

Uranus 11765-08-03 11:02 G 6018352.81 6018352.96 6018353.12 0.0134 0.0094

Uranus 11766-03-17 16:33 G 6018579.00 6018579.19 6018579.40 0.0134 0.0053

Uranus 11766-10-29 22:04 G 6018805.21 6018805.42 6018805.64 0.0134 0.0013

Uranus 11767-06-13 03:50 G 6019031.45 6019031.66 6019031.87 0.0134 0.0029

Uranus 11768-01-25 09:36 G 6019257.72 6019257.90 6019258.09 0.0134 0.0070

Uranus 11768-09-07 14:52 G 6019484.02 6019484.12 6019484.26 0.0135 0.0112

Jupiter 11774-03-08 19:55 G 6021492.16 6021492.33 6021492.51 0.0543 0.0284

Saturn 11775-05-14 18:28 G 6021924.07 6021924.27 6021924.48 0.0274 0.0080

Saturn 11775-12-30 02:09 G 6022153.40 6022153.59 6022153.78 0.0274 0.0123

Jupiter 11780-01-11 13:26 G 6023626.91 6023627.06 6023627.21 0.0485 0.0320

Mars 11781-12-08 17:02 G 6024324.04 6024324.21 6024324.39 0.1636 0.0099

Jupiter 11785-11-11 05:45 G 6025757.57 6025757.74 6025757.93 0.0542 0.0250

Mars 11786-07-20 06:43 G 6026008.62 6026008.78 6026008.95 0.1903 0.0661

Saturn 11789-10-26 01:40 G 6027202.40 6027202.57 6027202.75 0.0285 0.0161

Saturn 11790-06-12 18:14 G 6027432.05 6027432.26 6027432.46 0.0285 0.0067

Jupiter 11791-09-16 19:40 G 6027893.12 6027893.32 6027893.53 0.0486 0.0046

Jupiter 11803-05-24 02:09 G 6032159.49 6032159.59 6032159.71 0.0487 0.0411

Saturn 11804-04-09 18:43 G 6032481.20 6032481.28 6032481.38 0.0274 0.0247

Saturn 11804-11-25 02:38 G 6032710.40 6032710.61 6032710.82 0.0274 0.0046

Saturn 11805-07-12 10:04 G 6032939.75 6032939.92 6032940.10 0.0274 0.0156

Uranus 11805-11-18 10:19 G 6033068.89 6033068.93 6033069.00 0.0145 0.0140

Uranus 11806-07-02 22:48 G 6033295.28 6033295.45 6033295.63 0.0145 0.0088

Uranus 11807-02-14 10:48 G 6033521.74 6033521.95 6033522.17 0.0145 0.0036

Uranus 11807-09-28 22:33 G 6033748.23 6033748.44 6033748.66 0.0144 0.0016

Uranus 11808-05-12 10:04 G 6033974.74 6033974.92 6033975.13 0.0144 0.0067

Uranus 11808-12-24 21:36 G 6034201.29 6034201.40 6034201.54 0.0144 0.0118

Mars 11813-12-08 11:31 G 6036010.89 6036010.98 6036011.06 0.1644 0.1420

Mars 11815-10-08 11:02 G 6036679.87 6036679.96 6036680.05 0.1626 0.1366

Saturn 11819-05-09 04:19 G 6037988.50 6037988.68 6037988.87 0.0285 0.0135

Saturn 11819-12-24 20:09 G 6038218.15 6038218.34 6038218.55 0.0285 0.0093

Jupiter 11821-07-21 00:14 G 6038792.30 6038792.51 6038792.71 0.0543 0.0054

Jupiter 11827-05-26 05:16 G 6040927.54 6040927.72 6040927.92 0.0485 0.0178

Moon 11830-03-07 01:26 G 6041943.41 6041943.56 6041943.71 0.2660 0.0062

Earth 11830-03-07 06:00 G 6041943.59 6041943.75 6041943.91 0.2657 0.0164 *

Jupiter 11833-03-25 11:45 G 6043057.89 6043057.99 6043058.10 0.0542 0.0467

Neptune 11833-07-12 06:43 G 6043166.77 6043166.78 6043166.84 0.0088 0.0087

Saturn 11833-10-20 18:14 G 6043267.16 6043267.26 6043267.38 0.0274 0.0231

Neptune 11834-02-22 19:26 G 6043392.19 6043392.31 6043392.47 0.0088 0.0068

Saturn 11834-06-07 02:09 G 6043496.38 6043496.59 6043496.80 0.0274 0.0029

Neptune 11834-10-06 08:23 G 6043617.67 6043617.85 6043618.03 0.0088 0.0049

Saturn 11835-01-22 09:21 G 6043725.74 6043725.89 6043726.07 0.0274 0.0173

Neptune 11835-05-19 21:07 G 6043843.18 6043843.38 6043843.59 0.0088 0.0030

Neptune 11835-12-31 09:36 G 6044068.69 6044068.90 6044069.13 0.0088 0.0012

Neptune 11836-08-12 22:19 G 6044294.21 6044294.43 6044294.65 0.0088 0.0007

Neptune 11837-03-26 10:48 G 6044519.75 6044519.95 6044520.17 0.0088 0.0026

Neptune 11837-11-06 23:16 G 6044745.30 6044745.47 6044745.67 0.0088 0.0045

Neptune 11838-06-20 12:00 G 6044970.87 6044971.00 6044971.17 0.0088 0.0064

Jupiter 11839-01-29 10:33 G 6045193.75 6045193.94 6045194.13 0.0486 0.0194

Neptune 11839-02-01 00:57 G 6045196.47 6045196.54 6045196.62 0.0088 0.0082

Mars 11847-10-07 04:48 G 6048366.53 6048366.70 6048366.88 0.1634 0.0089

Saturn 11848-11-18 07:40 G 6048774.63 6048774.82 6048775.02 0.0285 0.0111

Uranus 11849-04-03 22:33 G 6048911.34 6048911.44 6048911.58 0.0134 0.0110

Saturn 11849-07-06 00:00 G 6049004.32 6049004.50 6049004.70 0.0285 0.0118

Uranus 11849-11-16 04:19 G 6049137.50 6049137.68 6049137.87 0.0134 0.0069

Uranus 11850-06-30 10:04 G 6049363.71 6049363.92 6049364.13 0.0134 0.0028

Uranus 11851-02-11 15:36 G 6049589.94 6049590.15 6049590.37 0.0134 0.0013

Uranus 11851-09-25 21:07 G 6049816.19 6049816.38 6049816.59 0.0134 0.0054

Uranus 11852-05-09 02:52 G 6050042.47 6050042.62 6050042.78 0.0134 0.0095

Mars 11852-05-17 09:21 G 6050050.75 6050050.89 6050051.03 0.1907 0.1180

Pluto 11853-02-03 05:45 G 6050312.69 6050312.74 6050312.84 0.0067 0.0064

Pluto 11853-09-16 11:31 G 6050537.77 6050537.98 6050538.20 0.0068 0.0019

Pluto 11854-04-29 16:33 G 6050763.00 6050763.19 6050763.41 0.0068 0.0026

Jupiter 11857-03-28 17:16 G 6051827.07 6051827.22 6051827.38 0.0543 0.0353

Jupiter 11863-01-31 14:52 G 6053962.00 6053962.12 6053962.23 0.0485 0.0400

Saturn 11863-05-03 02:09 G 6054053.46 6054053.59 6054053.75 0.0274 0.0197

Saturn 11863-12-18 10:04 G 6054282.71 6054282.92 6054283.13 0.0274 0.0005

Saturn 11864-08-03 17:31 G 6054512.10 6054512.23 6054512.37 0.0274 0.0206

Jupiter 11868-12-01 03:50 G 6056092.47 6056092.66 6056092.85 0.0542 0.0178

Jupiter 11874-10-06 20:23 G 6058228.15 6058228.35 6058228.55 0.0485 0.0032

Saturn 11878-05-31 11:16 G 6059560.77 6059560.97 6059561.18 0.0285 0.0084

Saturn 11879-01-16 03:07 G 6059790.46 6059790.63 6059790.82 0.0285 0.0144

Mars 11879-10-05 23:16 G 6060053.36 6060053.47 6060053.59 0.1641 0.1243

Mars 11881-08-04 23:31 G 6060722.42 6060722.48 6060722.53 0.1625 0.1529

Mars 11884-05-17 09:21 G 6061738.78 6061738.89 6061739.00 0.1895 0.1470

Jupiter 11886-06-12 02:23 G 6062494.46 6062494.60 6062494.75 0.0486 0.0337

Uranus 11890-03-02 06:28 G 6063853.64 6063853.77 6063853.92 0.0145 0.0110

Uranus 11890-10-14 18:43 G 6064080.08 6064080.28 6064080.48 0.0145 0.0058

Uranus 11891-05-29 06:43 G 6064306.56 6064306.78 6064307.00 0.0145 0.0006

Uranus 11892-01-10 18:14 G 6064533.06 6064533.26 6064533.48 0.0144 0.0046

Uranus 11892-08-24 06:00 G 6064759.59 6064759.75 6064759.92 0.0144 0.0096

Saturn 11892-11-12 01:40 G 6064839.41 6064839.57 6064839.73 0.0274 0.0181

Saturn 11893-06-29 09:21 G 6065068.67 6065068.89 6065069.10 0.0274 0.0021

Saturn 11894-02-13 16:48 G 6065298.08 6065298.20 6065298.32 0.0274 0.0222

Jupiter 11904-08-10 02:52 G 6069127.42 6069127.62 6069127.81 0.0543 0.0154

Saturn 11907-12-12 14:09 G 6070346.89 6070347.09 6070347.30 0.0285 0.0060

Saturn 11908-07-29 06:14 G 6070576.60 6070576.76 6070576.94 0.0285 0.0168

Jupiter 11910-06-15 05:16 G 6071262.55 6071262.72 6071262.90 0.0485 0.0253

Mars 11913-08-04 17:02 G 6072409.03 6072409.21 6072409.38 0.1631 0.0256

Jupiter 11916-04-14 09:36 G 6073392.76 6073392.90 6073393.03 0.0541 0.0397

Neptune 11916-11-22 01:11 G 6073614.44 6073614.55 6073614.66 0.0089 0.0078

Neptune 11917-07-05 14:09 G 6073839.94 6073840.09 6073840.27 0.0089 0.0058

Neptune 11918-02-16 03:36 G 6074065.46 6074065.65 6074065.86 0.0089 0.0039

Mars 11918-03-15 11:45 G 6074092.91 6074092.99 6074093.06 0.1910 0.1716

Neptune 11918-09-29 17:02 G 6074291.00 6074291.21 6074291.43 0.0089 0.0019

Neptune 11919-05-13 06:28 G 6074516.55 6074516.77 6074516.99 0.0089 0.0002

Neptune 11919-12-24 19:40 G 6074742.12 6074742.32 6074742.55 0.0089 0.0022

Neptune 11920-08-06 08:52 G 6074967.69 6074967.87 6074968.08 0.0089 0.0042

Neptune 11921-03-19 22:33 G 6075193.28 6075193.44 6075193.60 0.0089 0.0061

Neptune 11921-10-31 11:31 G 6075418.90 6075418.98 6075419.09 0.0089 0.0081

Jupiter 11922-02-18 11:45 G 6075528.79 6075528.99 6075529.19 0.0486 0.0114

Saturn 11922-05-26 09:21 G 6075625.72 6075625.89 6075626.07 0.0274 0.0147

Saturn 11923-01-10 17:02 G 6075855.01 6075855.21 6075855.42 0.0274 0.0056

Saturn 11923-08-28 00:28 G 6076084.46 6076084.52 6076084.61 0.0274 0.0257

Uranus 11932-12-03 10:48 G 6079469.88 6079469.95 6079470.03 0.0134 0.0125

Uranus 11933-07-17 16:04 G 6079696.01 6079696.17 6079696.35 0.0134 0.0085

Jupiter 11933-10-24 17:02 G 6079795.20 6079795.21 6079795.22 0.0487 0.0485

Uranus 11934-02-28 21:50 G 6079922.20 6079922.41 6079922.62 0.0134 0.0044

Uranus 11934-10-13 03:21 G 6080148.42 6080148.64 6080148.86 0.0134 0.0003

Uranus 11935-05-27 08:52 G 6080374.66 6080374.87 6080375.08 0.0134 0.0038

Uranus 11936-01-08 14:38 G 6080600.94 6080601.11 6080601.29 0.0134 0.0079

Uranus 11936-08-21 20:23 G 6080827.26 6080827.35 6080827.46 0.0134 0.0120

Saturn 11936-11-06 02:38 G 6080903.53 6080903.61 6080903.70 0.0285 0.0257

Saturn 11937-06-23 18:43 G 6081133.07 6081133.28 6081133.49 0.0285 0.0031

Saturn 11938-02-08 10:19 G 6081362.78 6081362.93 6081363.09 0.0285 0.0196

Pluto 11939-07-14 00:14 G 6081883.35 6081883.51 6081883.69 0.0077 0.0047

Pluto 11940-02-24 09:21 G 6082108.68 6082108.89 6082109.11 0.0076 0.0018

Jupiter 11940-04-17 20:23 G 6082162.24 6082162.35 6082162.46 0.0544 0.0456

Mars 11945-08-03 10:48 G 6084095.82 6084095.95 6084096.09 0.1639 0.1058

Jupiter 11946-02-20 14:23 G 6084297.07 6084297.10 6084297.15 0.0485 0.0473

Mars 11950-03-15 12:00 G 6085780.85 6085781.00 6085781.15 0.1898 0.0968

Saturn 11951-12-06 09:07 G 6086411.69 6086411.88 6086412.06 0.0274 0.0131

Jupiter 11951-12-22 08:23 G 6086427.65 6086427.85 6086428.05 0.0543 0.0068

Saturn 11952-07-22 16:48 G 6086640.99 6086641.20 6086641.40 0.0274 0.0071

Saturn 11953-03-09 00:14 G 6086870.50 6086870.51 6086870.54 0.0274 0.0272

Jupiter 11957-10-26 19:55 G 6088563.13 6088563.33 6088563.53 0.0486 0.0104

Saturn 11966-05-19 04:48 G 6091689.59 6091689.70 6091689.82 0.0285 0.0235

Saturn 11967-01-03 20:52 G 6091919.16 6091919.37 6091919.59 0.0285 0.0010

Saturn 11967-08-21 12:43 G 6092148.91 6092149.03 6092149.18 0.0285 0.0219

Earth 11967-09-05 05:16 G 6092163.57 6092163.72 6092163.87 0.2675 0.0847

Moon 11967-09-05 11:02 G 6092163.84 6092163.96 6092164.08 0.2675 0.1807 *

Jupiter 11969-07-02 02:09 G 6092829.42 6092829.59 6092829.76 0.0487 0.0265

Uranus 11973-10-31 12:57 G 6094411.97 6094412.04 6094412.14 0.0145 0.0133

Uranus 11974-06-15 01:26 G 6094638.38 6094638.56 6094638.74 0.0145 0.0081

Uranus 11975-01-27 13:11 G 6094864.84 6094865.05 6094865.27 0.0145 0.0030

Uranus 11975-09-11 00:57 G 6095091.33 6095091.54 6095091.76 0.0144 0.0022

Uranus 11976-04-24 12:28 G 6095317.84 6095318.02 6095318.21 0.0144 0.0073

Uranus 11976-12-07 00:00 G 6095544.40 6095544.50 6095544.62 0.0144 0.0124

Mars 11979-06-02 04:19 G 6096451.51 6096451.68 6096451.85 0.1629 0.0439

Saturn 11981-06-17 16:33 G 6097198.00 6097198.19 6097198.39 0.0274 0.0098

Saturn 11982-02-02 00:28 G 6097427.32 6097427.52 6097427.72 0.0274 0.0105

Jupiter 11987-08-30 00:14 G 6099462.32 6099462.51 6099462.69 0.0543 0.0223

Jupiter 11993-07-04 05:16 G 6101597.57 6101597.72 6101597.87 0.0485 0.0327

Saturn 11995-11-29 11:02 G 6102475.82 6102475.96 6102476.12 0.0284 0.0203

Saturn 11996-07-16 02:52 G 6102705.41 6102705.62 6102705.84 0.0285 0.0024

Saturn 11997-03-02 18:43 G 6102935.18 6102935.28 6102935.38 0.0284 0.0249

Neptune 11998-05-28 05:02 G 6103386.61 6103386.71 6103386.82 0.0088 0.0077

Neptune 11999-01-08 17:16 G 6103612.08 6103612.22 6103612.41 0.0088 0.0059

Jupiter 11999-05-04 11:31 G 6103727.82 6103727.98 6103728.15 0.0542 0.0302

Neptune 11999-08-22 06:00 G 6103837.57 6103837.75 6103837.96 0.0088 0.0040

Neptune 12000-04-03 18:43 G 6104063.08 6104063.28 6104063.50 0.0088 0.0021

Neptune 12000-11-15 07:40 G 6104288.60 6104288.82 6104289.04 0.0088 0.0002

13TH MILLENNIUM CE

This is a list of transits of Venus in the 13th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 12001-06-28 20:09 G 6104514.13 6104514.34 6104514.56 0.0088 0.0017

Neptune 12002-02-09 08:38 G 6104739.67 6104739.86 6104740.08 0.0088 0.0036

Neptune 12002-09-22 21:36 G 6104965.23 6104965.40 6104965.57 0.0088 0.0054

Neptune 12003-05-06 10:04 G 6105190.81 6105190.92 6105191.05 0.0088 0.0073

Jupiter 12005-03-09 11:16 G 6105863.77 6105863.97 6105864.18 0.0486 0.0042

Saturn 12010-12-28 16:48 G 6107984.00 6107984.20 6107984.40 0.0274 0.0080

Mars 12011-05-31 22:33 G 6108138.29 6108138.44 6108138.59 0.1636 0.0878

Saturn 12011-08-15 00:28 G 6108213.33 6108213.52 6108213.71 0.0274 0.0122

Mars 12016-01-10 15:50 G 6109822.99 6109823.16 6109823.33 0.1902 0.0489

Jupiter 12016-11-12 16:04 G 6110130.07 6110130.17 6110130.28 0.0487 0.0416

Uranus 12017-03-17 03:36 G 6110254.51 6110254.65 6110254.79 0.0134 0.0101

Uranus 12017-10-29 08:52 G 6110480.68 6110480.87 6110481.07 0.0134 0.0061

Uranus 12018-06-12 14:38 G 6110706.89 6110707.11 6110707.32 0.0134 0.0020

Uranus 12019-01-24 20:09 G 6110933.13 6110933.34 6110933.56 0.0134 0.0021

Uranus 12019-09-08 01:40 G 6111159.39 6111159.57 6111159.78 0.0134 0.0062

Uranus 12020-04-21 07:11 G 6111385.68 6111385.80 6111385.96 0.0134 0.0104

Saturn 12025-06-10 12:43 G 6113261.87 6113262.03 6113262.20 0.0285 0.0182

Saturn 12026-01-26 04:48 G 6113491.49 6113491.70 6113491.91 0.0285 0.0045

Saturn 12026-09-12 20:38 G 6113721.30 6113721.36 6113721.43 0.0284 0.0271

Jupiter 12035-01-10 06:00 G 6116762.55 6116762.75 6116762.95 0.0542 0.0003

Saturn 12039-11-23 16:19 G 6118541.10 6118541.18 6118541.27 0.0275 0.0249

Saturn 12040-07-10 00:28 G 6118770.31 6118770.52 6118770.73 0.0275 0.0047

Jupiter 12040-11-14 20:09 G 6118898.15 6118898.34 6118898.53 0.0486 0.0179

Saturn 12041-02-24 08:23 G 6118999.68 6118999.85 6119000.03 0.0275 0.0157

Mars 12045-03-29 16:48 G 6120494.04 6120494.20 6120494.36 0.1627 0.0601

Jupiter 12046-09-14 15:50 G 6121028.13 6121028.16 6121028.20 0.0541 0.0529

Jupiter 12052-07-21 01:26 G 6123164.38 6123164.56 6123164.75 0.0486 0.0193

Saturn 12054-12-21 20:38 G 6124048.18 6124048.36 6124048.54 0.0284 0.0147

Saturn 12055-08-08 12:14 G 6124277.81 6124278.01 6124278.22 0.0284 0.0079

Uranus 12058-02-12 08:23 G 6125196.71 6125196.85 6125197.01 0.0145 0.0104

Uranus 12058-09-26 20:23 G 6125423.15 6125423.35 6125423.56 0.0145 0.0052

Uranus 12059-05-11 08:23 G 6125649.63 6125649.85 6125650.07 0.0144 0.0001

Uranus 12059-12-23 20:09 G 6125876.13 6125876.34 6125876.54 0.0144 0.0051

Uranus 12060-08-06 07:26 G 6126102.68 6126102.81 6126102.98 0.0144 0.0102

Saturn 12069-06-04 17:16 G 6129327.11 6129327.22 6129327.34 0.0274 0.0230

Saturn 12070-01-20 01:26 G 6129556.35 6129556.56 6129556.77 0.0274 0.0028

Saturn 12070-09-06 09:07 G 6129785.72 6129785.88 6129786.05 0.0274 0.0174

Jupiter 12070-09-18 03:21 G 6129797.48 6129797.64 6129797.80 0.0543 0.0329

Earth 12073-03-08 08:09 G 6130699.68 6130699.84 6130699.99 0.2656 0.0185

Moon 12073-03-08 13:40 G 6130699.91 6130700.07 6130700.22 0.2656 0.0744 *

Jupiter 12076-07-23 04:04 G 6131932.55 6131932.67 6131932.79 0.0485 0.0394

Mars 12077-03-28 10:33 G 6132180.78 6132180.94 6132181.10 0.1634 0.0701

Neptune 12081-02-23 09:07 G 6133608.87 6133608.88 6133608.94 0.0089 0.0088

Neptune 12081-10-06 22:33 G 6133834.32 6133834.44 6133834.60 0.0089 0.0069

Mars 12081-11-06 18:28 G 6133865.09 6133865.27 6133865.44 0.1905 0.0029

Neptune 12082-05-20 12:00 G 6134059.83 6134060.00 6134060.20 0.0089 0.0049

Jupiter 12082-05-23 13:55 G 6134062.90 6134063.08 6134063.27 0.0542 0.0204

Neptune 12083-01-01 01:40 G 6134285.37 6134285.57 6134285.78 0.0089 0.0029

Neptune 12083-08-14 15:07 G 6134510.91 6134511.13 6134511.35 0.0089 0.0009

Neptune 12084-03-27 04:19 G 6134736.47 6134736.68 6134736.90 0.0089 0.0011

Saturn 12084-07-02 22:04 G 6134834.24 6134834.42 6134834.62 0.0285 0.0126

Neptune 12084-11-07 17:31 G 6134962.04 6134962.23 6134962.45 0.0089 0.0031

Saturn 12085-02-17 13:55 G 6135063.89 6135064.08 6135064.29 0.0285 0.0102

Neptune 12085-06-21 06:57 G 6135187.62 6135187.79 6135187.98 0.0089 0.0051

Neptune 12086-02-01 20:09 G 6135413.22 6135413.34 6135413.49 0.0089 0.0071

Jupiter 12088-03-28 10:04 G 6136198.72 6136198.92 6136199.12 0.0486 0.0027

Saturn 12098-12-16 00:28 G 6140113.38 6140113.52 6140113.67 0.0275 0.0198

Saturn 12099-08-02 08:52 G 6140342.66 6140342.87 6140343.08 0.0275 0.0006

Pluto 12099-10-16 15:50 G 6140417.97 6140418.16 6140418.37 0.0068 0.0029

Jupiter 12099-12-02 15:36 G 6140465.01 6140465.15 6140465.29 0.0487 0.0347

Saturn 12100-03-19 17:02 G 6140572.07 6140572.21 6140572.35 0.0275 0.0208

Pluto 12100-05-29 21:07 G 6140643.18 6140643.38 6140643.61 0.0068 0.0017

Uranus 12100-11-15 14:23 G 6140813.02 6140813.10 6140813.22 0.0134 0.0118

Pluto 12101-01-10 02:23 G 6140868.53 6140868.60 6140868.70 0.0068 0.0063

Uranus 12101-06-29 20:23 G 6141039.17 6141039.35 6141039.53 0.0134 0.0077

Uranus 12102-02-11 01:40 G 6141265.37 6141265.57 6141265.79 0.0134 0.0037

Uranus 12102-09-25 07:26 G 6141491.59 6141491.81 6141492.03 0.0134 0.0004

Uranus 12103-05-09 12:57 G 6141717.84 6141718.04 6141718.25 0.0134 0.0045

Uranus 12103-12-21 18:43 G 6141944.12 6141944.28 6141944.46 0.0134 0.0086

Uranus 12104-08-04 00:28 G 6142170.47 6142170.52 6142170.60 0.0134 0.0128

Mars 12111-01-26 04:33 G 6144536.54 6144536.69 6144536.84 0.1625 0.0775

Saturn 12114-01-14 07:26 G 6145620.61 6145620.81 6145621.02 0.0284 0.0089

Saturn 12114-08-31 23:02 G 6145850.28 6145850.46 6145850.65 0.0284 0.0137

Jupiter 12118-01-30 06:00 G 6147097.55 6147097.75 6147097.95 0.0543 0.0090

Jupiter 12123-12-05 18:28 G 6149233.10 6149233.27 6149233.45 0.0485 0.0246

Saturn 12128-06-28 02:52 G 6150899.47 6150899.62 6150899.79 0.0274 0.0177

Saturn 12129-02-12 11:02 G 6151128.75 6151128.96 6151129.17 0.0274 0.0026

Saturn 12129-09-29 18:43 G 6151358.18 6151358.28 6151358.41 0.0274 0.0228

Jupiter 12129-10-04 17:45 G 6151363.13 6151363.24 6151363.37 0.0541 0.0434

Jupiter 12135-08-10 23:45 G 6153499.29 6153499.49 6153499.68 0.0486 0.0128

Uranus 12141-10-13 14:38 G 6155755.02 6155755.11 6155755.21 0.0145 0.0128

Uranus 12142-05-28 02:23 G 6155981.43 6155981.60 6155981.80 0.0145 0.0077

Uranus 12143-01-09 14:38 G 6156207.89 6156208.11 6156208.32 0.0145 0.0025

Mars 12143-01-24 22:19 G 6156223.27 6156223.43 6156223.60 0.1632 0.0529

Saturn 12143-07-27 09:07 G 6156406.68 6156406.88 6156407.09 0.0284 0.0066

Uranus 12143-08-24 02:23 G 6156434.39 6156434.60 6156434.81 0.0144 0.0027

Saturn 12144-03-13 00:43 G 6156636.36 6156636.53 6156636.71 0.0284 0.0160

Uranus 12144-04-06 13:40 G 6156660.90 6156661.07 6156661.27 0.0144 0.0078

Uranus 12144-11-19 01:40 G 6156887.47 6156887.57 6156887.67 0.0144 0.0128

Mars 12147-09-04 21:36 G 6157907.23 6157907.40 6157907.56 0.1909 0.0540

Jupiter 12153-10-08 00:43 G 6160132.39 6160132.53 6160132.67 0.0543 0.0397

Saturn 12158-01-08 09:50 G 6161685.73 6161685.91 6161686.09 0.0275 0.0145

Saturn 12158-08-25 18:14 G 6161915.05 6161915.26 6161915.47 0.0275 0.0059

Saturn 12159-04-12 02:09 G 6162144.54 6162144.59 6162144.67 0.0275 0.0263

Jupiter 12159-08-13 02:38 G 6162267.55 6162267.61 6162267.67 0.0485 0.0463

Neptune 12162-08-30 13:55 G 6163381.07 6163381.08 6163381.14 0.0088 0.0087

Neptune 12163-04-13 02:38 G 6163606.50 6163606.61 6163606.77 0.0088 0.0069

Neptune 12163-11-24 15:36 G 6163831.98 6163832.15 6163832.35 0.0088 0.0049

Neptune 12164-07-07 04:19 G 6164057.49 6164057.68 6164057.90 0.0088 0.0030

Neptune 12165-02-17 17:16 G 6164283.00 6164283.22 6164283.44 0.0088 0.0011

Jupiter 12165-06-12 10:04 G 6164397.73 6164397.92 6164398.12 0.0541 0.0142

Neptune 12165-10-01 05:45 G 6164508.52 6164508.74 6164508.96 0.0088 0.0008

Neptune 12166-05-14 18:14 G 6164734.06 6164734.26 6164734.48 0.0088 0.0027

Neptune 12166-12-26 06:43 G 6164959.61 6164959.78 6164959.98 0.0088 0.0046

Neptune 12167-08-08 19:40 G 6165185.17 6165185.32 6165185.47 0.0088 0.0064

Neptune 12168-03-21 08:09 G 6165410.78 6165410.84 6165410.92 0.0088 0.0083

Jupiter 12171-04-18 07:40 G 6166533.62 6166533.82 6166534.03 0.0486 0.0092

Saturn 12172-06-21 04:19 G 6166963.59 6166963.68 6166963.78 0.0284 0.0253

Saturn 12173-02-05 19:40 G 6167193.11 6167193.32 6167193.54 0.0284 0.0029

Saturn 12173-09-23 11:02 G 6167422.82 6167422.96 6167423.12 0.0284 0.0197

Mars 12176-11-22 16:48 G 6168579.06 6168579.20 6168579.34 0.1623 0.0936

Jupiter 12182-12-22 13:40 G 6170799.90 6170800.07 6170800.24 0.0487 0.0281

Uranus 12185-02-27 06:43 G 6171597.64 6171597.78 6171597.95 0.0134 0.0095

Pluto 12185-08-12 04:04 G 6171763.55 6171763.67 6171763.81 0.0077 0.0061

Uranus 12185-10-11 12:28 G 6171823.83 6171824.02 6171824.22 0.0134 0.0054

Pluto 12186-03-25 13:26 G 6171988.84 6171989.06 6171989.28 0.0077 0.0005

Uranus 12186-05-25 18:00 G 6172050.04 6172050.25 6172050.47 0.0134 0.0014

Pluto 12186-11-05 22:04 G 6172214.34 6172214.42 6172214.52 0.0076 0.0070

Uranus 12187-01-06 23:45 G 6172276.28 6172276.49 6172276.71 0.0134 0.0028

Saturn 12187-07-21 13:11 G 6172471.87 6172472.05 6172472.25 0.0274 0.0123

Uranus 12187-08-21 05:45 G 6172502.55 6172502.74 6172502.92 0.0134 0.0069

Saturn 12188-03-06 21:21 G 6172701.19 6172701.39 6172701.60 0.0274 0.0081

Uranus 12188-04-03 11:31 G 6172728.86 6172728.98 6172729.10 0.0134 0.0110

Jupiter 12201-02-19 07:26 G 6177432.62 6177432.81 6177433.00 0.0543 0.0182

Saturn 12202-01-02 06:00 G 6177749.63 6177749.75 6177749.88 0.0284 0.0230

Saturn 12202-08-19 21:36 G 6177979.19 6177979.40 6177979.61 0.0284 0.0005

Saturn 12203-04-06 12:57 G 6178208.92 6178209.04 6178209.18 0.0284 0.0220

Jupiter 12206-12-25 16:04 G 6179568.02 6179568.17 6179568.33 0.0486 0.0308

Mars 12208-11-22 10:19 G 6180265.76 6180265.93 6180266.10 0.1630 0.0356

Moon 12210-09-07 00:00 G 6180919.34 6180919.50 6180919.66 0.2675 0.0151

Earth 12210-09-07 05:31 G 6180919.57 6180919.73 6180919.88 0.2676 0.0641 *

Jupiter 12212-10-24 15:36 G 6181698.00 6181698.15 6181698.30 0.0541 0.0362

Mars 12213-07-03 00:00 G 6181949.35 6181949.50 6181949.64 0.1912 0.1068

Saturn 12217-01-31 20:09 G 6183258.14 6183258.34 6183258.54 0.0275 0.0091

Saturn 12217-09-18 04:33 G 6183487.50 6183487.69 6183487.88 0.0275 0.0114

Jupiter 12218-08-30 21:07 G 6183834.18 6183834.38 6183834.58 0.0487 0.0066

Uranus 12226-01-26 09:07 G 6186539.74 6186539.88 6186540.05 0.0145 0.0101

Uranus 12226-09-09 21:07 G 6186766.18 6186766.38 6186766.59 0.0145 0.0049

Uranus 12227-04-24 09:07 G 6186992.66 6186992.88 6186993.10 0.0144 0.0003

Uranus 12227-12-06 20:38 G 6187219.17 6187219.36 6187219.57 0.0144 0.0054

Uranus 12228-07-20 08:23 G 6187445.71 6187445.85 6187446.01 0.0144 0.0105

Jupiter 12230-05-06 01:55 G 6188100.50 6188100.58 6188100.67 0.0488 0.0442

Saturn 12231-07-15 17:31 G 6188536.08 6188536.23 6188536.39 0.0284 0.0191

Saturn 12232-03-01 09:07 G 6188765.67 6188765.88 6188766.09 0.0284 0.0034

Saturn 12232-10-17 00:14 G 6188995.44 6188995.51 6188995.61 0.0284 0.0259

Jupiter 12236-10-27 22:33 G 6190467.35 6190467.44 6190467.54 0.0543 0.0472

Mars 12242-09-21 05:02 G 6192621.58 6192621.71 6192621.84 0.1621 0.1100

Mars 12245-07-03 00:14 G 6193637.42 6193637.51 6193637.60 0.1901 0.1631

Saturn 12245-12-27 16:33 G 6193815.15 6193815.19 6193815.23 0.0275 0.0268

Neptune 12246-01-10 07:26 G 6193828.73 6193828.81 6193828.94 0.0089 0.0078

Saturn 12246-08-14 00:43 G 6194044.33 6194044.53 6194044.74 0.0274 0.0066

Neptune 12246-08-23 20:52 G 6194054.22 6194054.37 6194054.55 0.0089 0.0059

Saturn 12247-03-31 08:52 G 6194273.69 6194273.87 6194274.06 0.0274 0.0138

Neptune 12247-04-06 10:19 G 6194279.75 6194279.93 6194280.14 0.0089 0.0039

Neptune 12247-11-18 00:00 G 6194505.29 6194505.50 6194505.72 0.0089 0.0019

Neptune 12248-06-30 13:26 G 6194730.84 6194731.06 6194731.28 0.0089 0.0002

Jupiter 12248-07-02 10:04 G 6194732.72 6194732.92 6194733.13 0.0542 0.0056

Neptune 12249-02-11 02:38 G 6194956.40 6194956.61 6194956.83 0.0089 0.0022

Neptune 12249-09-24 15:50 G 6195181.98 6195182.16 6195182.37 0.0089 0.0042

Neptune 12250-05-08 05:02 G 6195407.57 6195407.71 6195407.89 0.0089 0.0062

Neptune 12250-12-19 18:28 G 6195633.20 6195633.27 6195633.38 0.0089 0.0081

Jupiter 12254-05-08 05:02 G 6196868.52 6196868.71 6196868.90 0.0486 0.0151

Saturn 12261-01-24 19:26 G 6199322.15 6199322.31 6199322.49 0.0284 0.0168

Saturn 12261-09-11 11:02 G 6199551.75 6199551.96 6199552.17 0.0284 0.0058

Saturn 12262-04-29 02:23 G 6199781.59 6199781.60 6199781.63 0.0284 0.0282

Jupiter 12266-01-11 10:33 G 6201134.76 6201134.94 6201135.12 0.0487 0.0223

Uranus 12268-10-28 17:31 G 6202156.13 6202156.23 6202156.36 0.0134 0.0112

Uranus 12269-06-11 23:16 G 6202382.29 6202382.47 6202382.66 0.0134 0.0071

Uranus 12270-01-24 04:48 G 6202608.50 6202608.70 6202608.92 0.0134 0.0031

Uranus 12270-09-07 10:33 G 6202834.73 6202834.94 6202835.16 0.0134 0.0011

Uranus 12271-04-21 16:19 G 6203060.98 6203061.18 6203061.38 0.0134 0.0051

Uranus 12271-12-03 22:04 G 6203287.27 6203287.42 6203287.58 0.0134 0.0092

Uranus 12272-07-17 03:50 G 6203513.65 6203513.66 6203513.69 0.0134 0.0134

Mars 12274-09-19 22:19 G 6204308.26 6204308.43 6204308.61 0.1628 0.0185

Saturn 12275-07-09 22:19 G 6204601.34 6204601.43 6204601.54 0.0275 0.0239

Saturn 12276-02-24 06:57 G 6204830.58 6204830.79 6204831.00 0.0275 0.0035

Saturn 12276-10-10 15:21 G 6205059.98 6205060.14 6205060.31 0.0275 0.0169

Mars 12279-04-30 02:09 G 6205991.50 6205991.59 6205991.69 0.1916 0.1613

Jupiter 12284-03-10 03:07 G 6207767.45 6207767.63 6207767.81 0.0542 0.0242

Jupiter 12290-01-13 12:28 G 6209902.89 6209903.02 6209903.15 0.0486 0.0367

Saturn 12290-08-07 07:40 G 6210108.63 6210108.82 6210109.01 0.0284 0.0128

Saturn 12291-03-24 23:02 G 6210338.26 6210338.46 6210338.66 0.0284 0.0098

Jupiter 12295-11-13 12:14 G 6212032.84 6212033.01 6212033.18 0.0541 0.0296

Jupiter 12301-09-19 18:28 G 6214169.06 6214169.27 6214169.47 0.0486 0.0009

Saturn 12305-01-20 04:33 G 6215387.55 6215387.69 6215387.82 0.0275 0.0211

Saturn 12305-09-06 12:43 G 6215616.82 6215617.03 6215617.24 0.0275 0.0008

Saturn 12306-04-23 20:52 G 6215846.22 6215846.37 6215846.52 0.0275 0.0195

Mars 12306-09-19 16:19 G 6215995.12 6215995.18 6215995.25 0.1635 0.1500

Mars 12308-07-19 17:31 G 6216664.12 6216664.23 6216664.34 0.1619 0.1262

Uranus 12309-09-26 15:07 G 6217098.03 6217098.13 6217098.25 0.0145 0.0125

Uranus 12310-05-11 03:21 G 6217324.45 6217324.64 6217324.82 0.0145 0.0073

Uranus 12310-12-23 15:07 G 6217550.92 6217551.13 6217551.35 0.0144 0.0022

Mars 12311-05-01 03:36 G 6217679.51 6217679.65 6217679.79 0.1904 0.1139

Uranus 12311-08-07 02:52 G 6217777.41 6217777.62 6217777.84 0.0144 0.0030

Uranus 12312-03-20 14:23 G 6218003.94 6218004.10 6218004.29 0.0144 0.0082

Uranus 12312-11-02 01:55 G 6218230.51 6218230.58 6218230.68 0.0144 0.0132

Jupiter 12313-05-25 23:02 G 6218435.34 6218435.46 6218435.59 0.0487 0.0382

Moon 12316-03-11 04:48 G 6219455.54 6219455.70 6219455.86 0.2653 0.0583

Earth 12316-03-11 10:19 G 6219455.77 6219455.93 6219456.09 0.2655 0.0195 *

Saturn 12320-02-18 09:36 G 6220894.71 6220894.90 6220895.10 0.0284 0.0104

Saturn 12320-10-05 00:57 G 6221124.36 6221124.54 6221124.74 0.0284 0.0122

Neptune 12327-07-17 13:26 G 6223600.95 6223601.06 6223601.17 0.0088 0.0076

Neptune 12328-02-28 01:26 G 6223826.42 6223826.56 6223826.75 0.0088 0.0058

Neptune 12328-10-10 14:23 G 6224051.92 6224052.10 6224052.31 0.0088 0.0039

Neptune 12329-05-24 03:07 G 6224277.43 6224277.63 6224277.86 0.0088 0.0020

Neptune 12330-01-04 16:04 G 6224502.95 6224503.17 6224503.39 0.0088 0.0001

Neptune 12330-08-18 04:33 G 6224728.48 6224728.69 6224728.91 0.0088 0.0018

Neptune 12331-03-31 17:02 G 6224954.02 6224954.21 6224954.42 0.0088 0.0037

Jupiter 12331-07-23 08:23 G 6225067.64 6225067.85 6225068.05 0.0541 0.0023

Neptune 12331-11-12 05:31 G 6225179.58 6225179.73 6225179.92 0.0088 0.0056

Neptune 12332-06-24 18:14 G 6225405.16 6225405.26 6225405.39 0.0088 0.0075

Saturn 12334-08-02 09:36 G 6226173.75 6226173.90 6226174.07 0.0275 0.0184

Saturn	12335-03-19 18:14 G	6226403.05	6226403.26	6226403.48	0.0275	0.0022
Saturn	12335-11-04 02:38 G	6226632.50	6226632.61	6226632.74	0.0275	0.0225
Jupiter	12337-05-28 01:26 G	6227203.38	6227203.56	6227203.74	0.0486	0.0209
Mars	12340-07-18 10:33 G	6228350.77	6228350.94	6228351.12	0.1626	0.0043
Jupiter	12343-03-27 17:31 G	6229333.18	6229333.23	6229333.29	0.0540	0.0518
Pluto	12345-11-16 20:23 G	6230298.18	6230298.35	6230298.54	0.0068	0.0037
Pluto	12346-06-30 01:55 G	6230523.36	6230523.58	6230523.80	0.0068	0.0008
Pluto	12347-02-10 06:43 G	6230748.67	6230748.78	6230748.94	0.0068	0.0054
Jupiter	12349-01-31 06:28 G	6231469.58	6231469.77	6231469.97	0.0487	0.0166
Saturn	12349-08-30 21:36 G	6231681.20	6231681.40	6231681.61	0.0284	0.0065
Saturn	12350-04-17 12:57 G	6231910.88	6231911.04	6231911.22	0.0284	0.0161
Uranus	12352-06-29 04:04 G	6232714.63	6232714.67	6232714.74	0.0134	0.0129
Uranus	12353-02-10 09:36 G	6232940.75	6232940.90	6232941.07	0.0134	0.0089
Uranus	12353-09-24 15:21 G	6233166.94	6233167.14	6233167.34	0.0134	0.0048
Uranus	12354-05-08 20:52 G	6233393.16	6233393.37	6233393.59	0.0134	0.0008
Uranus	12354-12-21 02:38 G	6233619.41	6233619.61	6233619.83	0.0134	0.0034
Uranus	12355-08-04 08:38 G	6233845.68	6233845.86	6233846.04	0.0134	0.0075
Uranus	12356-03-17 14:09 G	6234071.99	6234072.09	6234072.21	0.0134	0.0116
Saturn	12364-02-12 16:33 G	6236960.03	6236960.19	6236960.38	0.0275	0.0154
Saturn	12364-09-29 00:57 G	6237189.33	6237189.54	6237189.75	0.0275	0.0050
Saturn	12365-05-16 08:52 G	6237418.80	6237418.87	6237418.96	0.0275	0.0253
Jupiter	12367-03-31 01:11 G	6238102.39	6238102.55	6238102.72	0.0543	0.0320
Mars	12372-07-17 04:04 G	6240037.57	6240037.67	6240037.77	0.1632	0.1318
Jupiter	12373-02-02 09:21 G	6240237.80	6240237.89	6240237.99	0.0485	0.0425
Mars	12374-05-17 05:31 G	6240706.66	6240706.73	6240706.81	0.1617	0.1428
Mars	12377-02-25 06:14 G	6241721.59	6241721.76	6241721.93	0.1908	0.0623
Saturn	12378-07-26 08:23 G	6242237.78	6242237.85	6242237.94	0.0284	0.0263
Jupiter	12378-12-03 12:57 G	6242367.85	6242368.04	6242368.22	0.0541	0.0209
Saturn	12379-03-12 23:45 G	6242467.28	6242467.49	6242467.70	0.0284	0.0040
Saturn	12379-10-28 15:07 G	6242696.98	6242697.13	6242697.30	0.0284	0.0185

Jupiter 12384-10-08 14:52 G 6244503.92 6244504.12 6244504.33 0.0486 0.0053

Saturn 12393-08-24 21:07 G 6247746.19 6247746.38 6247746.57 0.0275 0.0127

Uranus 12394-01-08 09:36 G 6247882.75 6247882.90 6247883.07 0.0145 0.0097

Saturn 12394-04-11 05:45 G 6247975.53 6247975.74 6247975.94 0.0275 0.0078

Uranus 12394-08-22 21:50 G 6248109.20 6248109.41 6248109.62 0.0145 0.0045

Uranus 12395-04-06 09:36 G 6248335.68 6248335.90 6248336.12 0.0144 0.0007

Uranus 12395-11-18 21:07 G 6248562.19 6248562.38 6248562.59 0.0144 0.0058

Jupiter 12396-06-13 19:11 G 6248770.15 6248770.30 6248770.45 0.0488 0.0327

Uranus 12396-07-02 08:52 G 6248788.74 6248788.87 6248789.03 0.0144 0.0109

Mars 12406-05-15 22:19 G 6252393.26 6252393.43 6252393.60 0.1623 0.0167

Saturn 12408-02-05 19:40 G 6253024.21 6253024.32 6253024.46 0.0284 0.0226

Saturn 12408-09-22 11:16 G 6253253.76 6253253.97 6253254.18 0.0284 0.0004

Saturn 12409-05-10 02:38 G 6253483.49 6253483.61 6253483.75 0.0284 0.0224

Neptune 12410-04-14 17:02 G 6253823.19 6253823.21 6253823.29 0.0089 0.0088

Neptune 12410-11-26 06:43 G 6254048.65 6254048.78 6254048.94 0.0089 0.0068

Neptune 12411-07-09 20:09 G 6254274.17 6254274.34 6254274.54 0.0089 0.0048

Neptune 12412-02-20 09:36 G 6254499.70 6254499.90 6254500.11 0.0089 0.0028

Neptune 12412-10-02 23:02 G 6254725.24 6254725.46 6254725.68 0.0089 0.0008

Neptune 12413-05-16 12:14 G 6254950.79 6254951.01 6254951.23 0.0089 0.0012

Neptune 12413-12-28 01:26 G 6255176.37 6255176.56 6255176.78 0.0089 0.0033

Neptune 12414-08-10 14:38 G 6255401.95 6255402.11 6255402.31 0.0089 0.0053

Jupiter 12414-08-11 03:36 G 6255402.45 6255402.65 6255402.85 0.0542 0.0080

Neptune 12415-03-24 04:33 G 6255627.56 6255627.69 6255627.82 0.0089 0.0072

Jupiter 12420-06-15 22:48 G 6257538.29 6257538.45 6257538.62 0.0486 0.0273

Saturn 12423-03-07 04:48 G 6258532.51 6258532.70 6258532.91 0.0275 0.0096

Saturn 12423-10-22 13:11 G 6258761.85 6258762.05 6258762.24 0.0275 0.0108

Jupiter 12426-04-15 14:52 G 6259668.01 6259668.12 6259668.23 0.0541 0.0448

Pluto 12431-09-12 08:23 G 6261643.79 6261643.85 6261643.96 0.0077 0.0071

Jupiter 12432-02-20 03:50 G 6261804.46 6261804.66 6261804.86 0.0487 0.0105

Pluto 12432-04-24 18:00 G 6261869.03 6261869.25 6261869.48 0.0077 0.0005

Pluto 12432-12-06 02:23 G 6262094.49 6262094.60 6262094.75 0.0076 0.0061

Uranus 12436-10-10 19:55 G 6263499.21 6263499.33 6263499.48 0.0134 0.0106

Uranus 12437-05-25 01:55 G 6263725.39 6263725.58 6263725.77 0.0134 0.0065

Saturn 12437-08-17 21:50 G 6263810.27 6263810.41 6263810.56 0.0284 0.0201

Uranus 12438-01-06 07:26 G 6263951.60 6263951.81 6263952.03 0.0134 0.0025

Saturn 12438-04-04 13:11 G 6264039.84 6264040.05 6264040.26 0.0284 0.0023

Mars 12438-05-14 16:04 G 6264080.05 6264080.17 6264080.29 0.1630 0.1146

Uranus 12438-08-20 13:26 G 6264177.84 6264178.06 6264178.27 0.0134 0.0016

Saturn 12438-11-20 04:33 G 6264269.59 6264269.69 6264269.80 0.0284 0.0247

Uranus 12439-04-03 18:57 G 6264404.10 6264404.29 6264404.49 0.0134 0.0057

Uranus 12439-11-16 00:28 G 6264630.39 6264630.52 6264630.68 0.0134 0.0099

Mars 12440-03-13 18:14 G 6264749.23 6264749.26 6264749.29 0.1616 0.1588

Mars 12442-12-23 09:36 G 6265763.73 6265763.90 6265764.08 0.1911 0.0126

Jupiter 12443-10-26 08:52 G 6266070.84 6266070.87 6266070.90 0.0488 0.0482

Jupiter 12450-04-19 00:43 G 6268437.40 6268437.53 6268437.67 0.0542 0.0403

Saturn 12452-01-31 00:00 G 6269089.49 6269089.50 6269089.52 0.0275 0.0273

Saturn 12452-09-16 08:23 G 6269318.65 6269318.85 6269319.06 0.0275 0.0071

Saturn 12453-05-03 16:48 G 6269548.02 6269548.20 6269548.39 0.0275 0.0133

Earth 12453-09-08 05:02 G 6269675.55 6269675.71 6269675.87 0.2677 0.0356

Moon 12453-09-08 09:07 G 6269675.74 6269675.88 6269676.03 0.2681 0.0702 *

Jupiter 12456-02-22 05:45 G 6270572.73 6270572.74 6270572.76 0.0486 0.0484

Jupiter 12461-12-22 10:04 G 6272702.73 6272702.92 6272703.12 0.0541 0.0138

Saturn 12467-02-28 08:09 G 6274596.68 6274596.84 6274597.02 0.0284 0.0165

Saturn 12467-10-15 23:45 G 6274826.29 6274826.49 6274826.70 0.0284 0.0060

Jupiter 12467-10-28 11:16 G 6274838.77 6274838.97 6274839.17 0.0486 0.0113

Saturn 12468-06-01 15:36 G 6275056.15 6275056.15 6275056.15 0.0284 0.0284

Mars 12472-03-12 11:02 G 6276435.79 6276435.96 6276436.13 0.1622 0.0325

Uranus 12477-09-07 15:50 G 6278441.04 6278441.16 6278441.28 0.0145 0.0120

Uranus 12478-04-22 03:36 G 6278667.47 6278667.65 6278667.85 0.0145 0.0069

Uranus 12478-12-04 15:36 G 6278893.94 6278894.15 6278894.37 0.0144 0.0018

Jupiter 12479-07-03 17:16 G 6279105.05 6279105.22 6279105.40 0.0487 0.0261

Uranus 12479-07-19 03:36 G 6279120.44 6279120.65 6279120.87 0.0144 0.0034

Uranus 12480-03-01 15:07 G 6279346.97 6279347.13 6279347.32 0.0144 0.0085

Uranus 12480-10-14 02:38 G 6279573.56 6279573.61 6279573.70 0.0144 0.0136

Saturn 12481-08-12 08:23 G 6279875.75 6279875.85 6279875.95 0.0275 0.0240

Saturn 12482-03-29 16:33 G 6280104.98 6280105.19 6280105.40 0.0274 0.0038

Saturn 12482-11-14 00:28 G 6280334.36 6280334.52 6280334.70 0.0274 0.0165

Neptune 12491-10-18 23:02 G 6283595.42 6283595.46 6283595.53 0.0088 0.0085

Neptune 12492-05-31 12:00 G 6283820.87 6283821.00 6283821.16 0.0088 0.0066

Neptune 12493-01-12 00:43 G 6284046.36 6284046.53 6284046.73 0.0088 0.0047

Neptune 12493-08-25 13:26 G 6284271.86 6284272.06 6284272.28 0.0088 0.0028

Neptune 12494-04-08 02:09 G 6284497.38 6284497.59 6284497.81 0.0088 0.0009

Neptune 12494-11-19 14:52 G 6284722.91 6284723.12 6284723.34 0.0088 0.0010

Neptune 12495-07-03 03:36 G 6284948.45 6284948.65 6284948.87 0.0088 0.0029

Neptune 12496-02-13 16:04 G 6285174.00 6285174.17 6285174.37 0.0088 0.0048

Saturn 12496-09-09 10:19 G 6285382.75 6285382.93 6285383.12 0.0284 0.0141

Neptune 12496-09-26 04:33 G 6285399.57 6285399.69 6285399.85 0.0088 0.0067

Saturn 12497-04-27 01:55 G 6285612.38 6285612.58 6285612.78 0.0284 0.0084

Neptune 12497-05-09 17:02 G 6285625.19 6285625.21 6285625.28 0.0088 0.0086

Jupiter 12497-08-30 04:48 G 6285737.51 6285737.70 6285737.89 0.0542 0.0172

Jupiter 12503-07-06 20:09 G 6287873.19 6287873.34 6287873.49 0.0486 0.0333

Mars 12504-03-12 04:19 G 6288122.54 6288122.68 6288122.82 0.1628 0.0974

Mars 12508-10-20 12:00 G 6289805.83 6289806.00 6289806.18 0.1914 0.0412

Jupiter 12509-05-05 15:36 G 6290003.00 6290003.15 6290003.30 0.0540 0.0358

Saturn 12511-02-23 10:33 G 6290661.82 6290661.94 6290662.08 0.0275 0.0219

Saturn 12511-10-10 19:11 G 6290891.08 6290891.30 6290891.51 0.0275 0.0016

Saturn 12512-05-27 03:07 G 6291120.49 6291120.63 6291120.79 0.0275 0.0188

Jupiter 12515-03-12 00:28 G 6292139.32 6292139.52 6292139.73 0.0487 0.0046

Uranus 12520-06-11 06:14 G 6294057.68 6294057.76 6294057.84 0.0134 0.0123

Uranus 12521-01-23 11:45 G 6294283.83 6294283.99 6294284.17 0.0134 0.0083

Uranus 12521-09-06 17:16 G 6294510.03 6294510.22 6294510.44 0.0134 0.0043

Uranus 12522-04-20 23:16 G 6294736.25 6294736.47 6294736.69 0.0134 0.0002

Uranus 12522-12-03 05:02 G 6294962.50 6294962.71 6294962.92 0.0134 0.0039

Uranus 12523-07-17 10:33 G 6295188.78 6295188.94 6295189.13 0.0134 0.0080

Uranus 12524-02-28 16:19 G 6295415.11 6295415.18 6295415.29 0.0134 0.0122

Saturn 12526-03-23 19:26 G 6296169.12 6296169.31 6296169.51 0.0284 0.0106

Saturn 12526-11-08 11:02 G 6296398.77 6296398.96 6296399.15 0.0284 0.0118

Jupiter 12526-11-15 05:45 G 6296405.64 6296405.74 6296405.84 0.0488 0.0421

Jupiter 12533-05-08 20:09 G 6298772.24 6298772.34 6298772.45 0.0543 0.0465

Mars 12538-01-08 23:02 G 6300478.29 6300478.46 6300478.62 0.1620 0.0495

Saturn 12540-09-04 19:26 G 6301448.15 6301448.31 6301448.47 0.0275 0.0184

Saturn 12541-04-22 03:36 G 6301677.43 6301677.65 6301677.86 0.0274 0.0019

Saturn 12541-12-07 11:45 G 6301906.86 6301906.99 6301907.11 0.0274 0.0220

Jupiter 12545-01-11 07:26 G 6303037.61 6303037.81 6303038.01 0.0542 0.0069

Jupiter 12550-11-17 09:50 G 6305173.72 6305173.91 6305174.10 0.0486 0.0180

Saturn 12555-10-03 21:21 G 6306955.19 6306955.39 6306955.60 0.0284 0.0082

Saturn 12556-05-20 12:57 G 6307184.86 6307185.04 6307185.22 0.0284 0.0143

Earth 12559-03-13 12:28 G 6308211.86 6308212.02 6308212.17 0.2654 0.0198

Moon 12559-03-13 17:02 G 6308212.07 6308212.21 6308212.35 0.2658 0.1034 *

Uranus 12561-05-08 21:36 G 6308999.39 6308999.40 6308999.44 0.0145 0.0144

Uranus 12561-12-21 09:36 G 6309225.75 6309225.90 6309226.08 0.0145 0.0093

Jupiter 12562-07-23 15:21 G 6309439.95 6309440.14 6309440.33 0.0487 0.0196

Uranus 12562-08-04 22:04 G 6309452.21 6309452.42 6309452.63 0.0144 0.0041

Uranus 12563-03-19 09:50 G 6309678.70 6309678.91 6309679.13 0.0144 0.0011

Uranus 12563-10-31 21:36 G 6309905.21 6309905.40 6309905.60 0.0144 0.0062

Uranus 12564-06-14 09:21 G 6310131.76 6310131.89 6310132.03 0.0144 0.0112

Mars 12570-01-07 16:33 G 6312165.04 6312165.19 6312165.34 0.1626 0.0805

Saturn 12570-03-17 20:23 G 6312234.19 6312234.35 6312234.53 0.0275 0.0165

Saturn 12570-11-02 05:02 G 6312463.50 6312463.71 6312463.92 0.0275 0.0039

Saturn 12571-06-19 12:57 G 6312692.95 6312693.04 6312693.15 0.0275 0.0241

Mars 12574-08-17 14:52 G 6313847.97 6313848.12 6313848.28 0.1918 0.0939

Neptune 12575-02-28 17:16 G 6314043.12 6314043.22 6314043.35 0.0089 0.0076

Neptune 12575-10-12 06:14 G 6314268.61 6314268.76 6314268.96 0.0089 0.0057

Neptune 12576-05-24 19:40 G 6314494.14 6314494.32 6314494.54 0.0089 0.0037

Neptune 12577-01-05 09:21 G 6314719.68 6314719.89 6314720.11 0.0089 0.0016

Neptune 12577-08-18 22:48 G 6314945.23 6314945.45 6314945.67 0.0089 0.0004

Neptune 12578-04-01 12:00 G 6315170.79 6315171.00 6315171.22 0.0089 0.0024

Neptune 12578-11-13 01:11 G 6315396.37 6315396.55 6315396.75 0.0089 0.0044

Neptune 12579-06-26 14:23 G 6315621.96 6315622.10 6315622.27 0.0089 0.0064

Neptune 12580-02-07 03:50 G 6315847.60 6315847.66 6315847.75 0.0089 0.0084

Jupiter 12580-09-19 04:04 G 6316072.49 6316072.67 6316072.85 0.0542 0.0255

Saturn 12584-08-28 13:26 G 6317512.02 6317512.06 6317512.12 0.0284 0.0274

Saturn 12585-04-15 05:16 G 6317741.51 6317741.72 6317741.93 0.0284 0.0050

Saturn 12585-11-30 20:52 G 6317971.20 6317971.37 6317971.54 0.0284 0.0175

Jupiter 12586-07-25 17:45 G 6318208.13 6318208.24 6318208.36 0.0486 0.0399

Pluto 12591-12-17 02:52 G 6320178.46 6320178.62 6320178.82 0.0068 0.0038

Jupiter 12592-05-24 11:16 G 6320337.81 6320337.97 6320338.14 0.0541 0.0299

Pluto 12592-07-29 08:23 G 6320403.64 6320403.85 6320404.08 0.0068 0.0008

Pluto 12593-03-11 13:55 G 6320628.95 6320629.08 6320629.22 0.0068 0.0054

Jupiter 12598-03-31 00:14 G 6322474.30 6322474.51 6322474.71 0.0487 0.0029

Saturn 12599-09-28 05:16 G 6323020.54 6323020.72 6323020.91 0.0275 0.0130

Saturn 12600-05-15 13:26 G 6323249.85 6323250.06 6323250.26 0.0274 0.0073

Saturn 12600-12-30 21:07 G 6323479.38 6323479.38 6323479.41 0.0274 0.0274

Mars 12603-11-07 11:45 G 6324520.83 6324520.99 6324521.15 0.1618 0.0652

Uranus 12604-09-23 21:36 G 6324842.27 6324842.40 6324842.56 0.0134 0.0101

Uranus 12605-05-08 03:21 G 6325068.45 6325068.64 6325068.84 0.0134 0.0060

Uranus 12605-12-20 09:21 G 6325294.67 6325294.89 6325295.10 0.0134 0.0019

Uranus 12606-08-03 15:07 G 6325520.91 6325521.13 6325521.34 0.0134 0.0021

Mars 12606-08-18 15:50 G 6325536.12 6325536.16 6325536.21 0.1907 0.1824

Uranus 12607-03-17 20:38 G 6325747.17 6325747.36 6325747.56 0.0134 0.0062

Uranus 12607-10-30 02:09 G 6325973.47 6325973.59 6325973.74 0.0134 0.0103

Jupiter 12609-12-05 05:16 G 6326740.58 6326740.72 6326740.86 0.0488 0.0350

Saturn 12614-03-11 15:36 G 6328298.05 6328298.15 6328298.25 0.0284 0.0250

Saturn 12614-10-27 06:57 G 6328527.58 6328527.79 6328528.00 0.0284 0.0026

Saturn 12615-06-13 22:19 G 6328757.29 6328757.43 6328757.59 0.0284 0.0199

Jupiter 12628-02-01 10:04 G 6333372.72 6333372.92 6333373.12 0.0542 0.0034

Saturn 12629-04-10 05:45 G 6333806.55 6333806.74 6333806.94 0.0275 0.0111

Saturn 12629-11-25 14:09 G 6334035.89 6334036.09 6334036.29 0.0275 0.0092

Jupiter 12633-12-07 07:40 G 6335508.65 6335508.82 6335509.00 0.0486 0.0246

Mars 12635-11-06 04:48 G 6336207.54 6336207.70 6336207.86 0.1624 0.0636

Jupiter 12639-10-06 20:09 G 6337638.27 6337638.34 6337638.42 0.0540 0.0501

Mars 12640-06-14 17:16 G 6337890.11 6337890.22 6337890.33 0.1921 0.1489

Saturn 12643-09-21 21:36 G 6339084.27 6339084.40 6339084.53 0.0284 0.0221

Saturn 12644-05-08 13:26 G 6339313.84 6339314.06 6339314.27 0.0284 0.0007

Saturn 12644-12-24 05:02 G 6339543.59 6339543.71 6339543.84 0.0284 0.0228

Jupiter 12645-08-12 13:40 G 6339774.87 6339775.07 6339775.27 0.0487 0.0128

Uranus 12645-08-21 15:36 G 6339784.04 6339784.15 6339784.30 0.0145 0.0117

Uranus 12646-04-05 03:36 G 6340010.47 6340010.65 6340010.86 0.0144 0.0066

Uranus 12646-11-17 15:50 G 6340236.94 6340237.16 6340237.38 0.0144 0.0014

Uranus 12647-07-02 03:50 G 6340463.45 6340463.66 6340463.87 0.0144 0.0037

Uranus 12648-02-13 15:21 G 6340689.97 6340690.14 6340690.32 0.0144 0.0088

Uranus 12648-09-27 02:38 G 6340916.57 6340916.61 6340916.68 0.0144 0.0139

Neptune 12656-09-03 22:33 G 6343815.34 6343815.44 6343815.57 0.0088 0.0075

Neptune 12657-04-17 11:31 G 6344040.82 6344040.98 6344041.16 0.0088 0.0055

Neptune 12657-11-29 00:14 G 6344266.32 6344266.51 6344266.72 0.0088 0.0036

Neptune 12658-07-12 13:11 G 6344491.84 6344492.05 6344492.27 0.0088 0.0017

Saturn 12658-10-21 14:23 G 6344592.90 6344593.10 6344593.30 0.0275 0.0076

Neptune 12659-02-23 01:55 G 6344717.36 6344717.58 6344717.80 0.0088 0.0002

Saturn 12659-06-07 22:19 G 6344822.24 6344822.43 6344822.62 0.0274 0.0125

Neptune 12659-10-06 14:23 G 6344942.89 6344943.10 6344943.32 0.0088 0.0021

Neptune 12660-05-19 03:07 G 6345168.44 6345168.63 6345168.83 0.0088 0.0040

Neptune 12660-12-30 15:36 G 6345394.00 6345394.15 6345394.33 0.0088 0.0059

Neptune 12661-08-13 04:19 G 6345619.59 6345619.68 6345619.79 0.0088 0.0078

Jupiter 12663-10-10 01:40 G 6346407.41 6346407.57 6346407.73 0.0543 0.0327

Jupiter 12669-08-14 17:31 G 6348543.19 6348543.23 6348543.28 0.0485 0.0472

Mars 12669-09-04 00:00 G 6348563.35 6348563.50 6348563.65 0.1616 0.0813

Mars 12672-06-14 18:43 G 6349578.15 6349578.28 6349578.41 0.1910 0.1309

Saturn 12673-04-03 00:00 G 6349870.35 6349870.50 6349870.65 0.0284 0.0196

Saturn 12673-11-18 15:21 G 6350099.93 6350100.14 6350100.35 0.0284 0.0028

Saturn 12674-07-06 06:43 G 6350329.70 6350329.78 6350329.89 0.0284 0.0252

Jupiter 12675-06-14 13:55 G 6350672.89 6350673.08 6350673.27 0.0541 0.0200

Pluto 12677-10-12 14:52 G 6351524.09 6351524.12 6351524.21 0.0077 0.0074

Pluto 12678-05-26 00:28 G 6351749.30 6351749.52 6351749.74 0.0077 0.0007

Pluto 12679-01-06 08:52 G 6351974.75 6351974.87 6351975.03 0.0076 0.0059

Jupiter 12681-04-19 23:31 G 6352809.28 6352809.48 6352809.68 0.0486 0.0100

Saturn 12687-09-16 05:45 G 6355149.68 6355149.74 6355149.81 0.0274 0.0261

Saturn 12688-05-02 14:09 G 6355378.88 6355379.09 6355379.30 0.0274 0.0059

Uranus 12688-05-24 06:57 G 6355400.71 6355400.79 6355400.91 0.0134 0.0119

Saturn 12688-12-17 22:19 G 6355608.25 6355608.43 6355608.61 0.0274 0.0143

Uranus 12689-01-05 12:43 G 6355626.87 6355627.03 6355627.22 0.0134 0.0079

Uranus 12689-08-19 18:43 G 6355853.07 6355853.28 6355853.49 0.0134 0.0038

Uranus 12690-04-03 00:28 G 6356079.30 6356079.52 6356079.73 0.0134 0.0003

Uranus 12690-11-15 06:00 G 6356305.55 6356305.75 6356305.96 0.0134 0.0043

Uranus 12691-06-29 11:31 G 6356531.82 6356531.98 6356532.16 0.0134 0.0084

Uranus 12692-02-10 17:45 G 6356758.16 6356758.24 6356758.32 0.0134 0.0125

Jupiter 12692-12-24 03:50 G 6357075.50 6357075.66 6357075.83 0.0488 0.0282

Moon 12696-09-10 02:23 G 6358431.43 6358431.60 6358431.76 0.2673 0.0127

Earth 12696-09-10 04:48 G 6358431.54 6358431.70 6358431.86 0.2678 0.0102 *

Mars 12701-09-03 17:02 G 6360250.04 6360250.21 6360250.38 0.1622 0.0467

Saturn 12702-10-15 04:19 G 6360656.52 6360656.68 6360656.86 0.0284 0.0170

Saturn 12703-06-01 20:09 G 6360886.14 6360886.34 6360886.55 0.0284 0.0055

Saturn 12704-01-17 12:00 G 6361115.97 6361116.00 6361116.04 0.0284 0.0279

Jupiter 12711-02-21 06:57 G 6363707.59 6363707.79 6363707.99 0.0542 0.0101

Jupiter 12716-12-27 08:52 G 6365843.72 6365843.87 6365844.02 0.0486 0.0325

Saturn 12717-03-29 14:23 G 6365935.98 6365936.10 6365936.22 0.0275 0.0226

Saturn 12717-11-13 22:48 G 6366165.23 6366165.45 6366165.66 0.0275 0.0025

Saturn 12718-07-01 06:28 G 6366394.62 6366394.77 6366394.94 0.0275 0.0177

Jupiter 12722-10-26 17:45 G 6367973.13 6367973.24 6367973.37 0.0540 0.0432

Jupiter 12728-09-01 14:09 G 6370109.89 6370110.09 6370110.30 0.0487 0.0051

Uranus 12729-04-21 21:21 G 6370342.36 6370342.39 6370342.45 0.0145 0.0141

Uranus 12729-12-04 09:21 G 6370568.73 6370568.89 6370569.07 0.0145 0.0090

Uranus 12730-07-18 21:36 G 6370795.20 6370795.40 6370795.62 0.0144 0.0038

Uranus 12731-03-02 09:36 G 6371021.68 6371021.90 6371022.12 0.0144 0.0013

Uranus 12731-10-14 20:52 G 6371248.19 6371248.37 6371248.58 0.0144 0.0065

Saturn 12732-04-26 07:26 G 6371442.63 6371442.81 6371442.99 0.0284 0.0144

Uranus 12732-05-28 08:52 G 6371474.74 6371474.87 6371475.00 0.0144 0.0114

Saturn 12732-12-11 22:48 G 6371672.25 6371672.45 6371672.65 0.0284 0.0080

Mars 12735-07-03 12:43 G 6372605.89 6372606.03 6372606.17 0.1614 0.0972

Mars 12738-04-12 21:50 G 6373620.25 6373620.41 6373620.56 0.1913 0.0793

Neptune 12739-06-04 04:04 G 6374037.61 6374037.67 6374037.76 0.0089 0.0084

Neptune 12740-01-15 17:02 G 6374263.08 6374263.21 6374263.39 0.0089 0.0065

Jupiter 12740-05-07 19:40 G 6374376.22 6374376.32 6374376.42 0.0488 0.0428

Neptune 12740-08-28 06:28 G 6374488.60 6374488.77 6374488.98 0.0089 0.0045

Neptune 12741-04-10 19:55 G 6374714.13 6374714.33 6374714.55 0.0089 0.0024

Neptune 12741-11-22 09:21 G 6374939.68 6374939.89 6374940.12 0.0089 0.0005

Neptune 12742-07-05 22:48 G 6375165.23 6375165.45 6375165.67 0.0089 0.0016

Neptune 12743-02-16 12:00 G 6375390.80 6375391.00 6375391.20 0.0089 0.0036

Neptune 12743-09-30 00:57 G 6375616.38 6375616.54 6375616.73 0.0089 0.0056

Neptune 12744-05-12 14:09 G 6375841.99 6375842.09 6375842.22 0.0089 0.0076

Saturn 12746-10-09 13:40 G 6376721.94 6376722.07 6376722.21 0.0274 0.0210

Jupiter 12746-10-30 05:45 G 6376742.63 6376742.74 6376742.87 0.0543 0.0438

Saturn 12747-05-26 21:50 G 6376951.20 6376951.41 6376951.63 0.0274 0.0010

Saturn 12748-01-11 05:45 G 6377180.60 6377180.74 6377180.90 0.0274 0.0194

Jupiter 12758-07-04 16:33 G 6381007.99 6381008.19 6381008.39 0.0541 0.0100

Saturn 12761-11-06 10:33 G 6382228.76 6382228.94 6382229.14 0.0284 0.0121

Saturn 12762-06-24 02:38 G 6382458.41 6382458.61 6382458.80 0.0284 0.0105

Jupiter 12764-05-09 23:02 G 6383144.27 6383144.46 6383144.65 0.0486 0.0173

Mars 12767-07-02 05:16 G 6384292.55 6384292.72 6384292.89 0.1620 0.0301

Uranus 12772-09-05 22:19 G 6386185.29 6386185.43 6386185.59 0.0134 0.0097

Uranus 12773-04-20 03:50 G 6386411.48 6386411.66 6386411.87 0.0134 0.0057

Uranus 12773-12-02 09:50 G 6386637.69 6386637.91 6386638.13 0.0134 0.0016

Uranus 12774-07-16 15:21 G 6386863.93 6386864.14 6386864.36 0.0134 0.0025

Uranus 12775-02-27 21:07 G 6387090.20 6387090.38 6387090.57 0.0134 0.0065

Uranus 12775-10-12 02:38 G 6387316.49 6387316.61 6387316.76 0.0134 0.0106

Jupiter 12776-01-14 05:16 G 6387410.53 6387410.72 6387410.90 0.0488 0.0201

Saturn 12776-04-20 21:50 G 6387508.25 6387508.41 6387508.57 0.0275 0.0176

Saturn 12776-12-06 06:14 G 6387737.55 6387737.76 6387737.97 0.0275 0.0026

Saturn 12777-07-23 13:55 G 6387966.98 6387967.08 6387967.21 0.0275 0.0228

Saturn 12791-05-19 14:23 G 6393014.91 6393015.10 6393015.31 0.0284 0.0093

Saturn 12792-01-04 05:45 G 6393244.56 6393244.74 6393244.93 0.0284 0.0131

Jupiter 12794-03-12 09:50 G 6394042.73 6394042.91 6394043.10 0.0542 0.0204

Mars 12799-06-30 22:19 G 6395979.40 6395979.43 6395979.45 0.1627 0.1600

Jupiter 12800-01-16 08:52 G 6396178.76 6396178.87 6396178.98 0.0486 0.0400

Mars 12801-04-30 00:57 G 6396648.42 6396648.54 6396648.67 0.1612 0.1134

Moon 12802-03-15 11:02 G 6396967.80 6396967.96 6396968.13 0.2648 0.0493

Earth 12802-03-15 14:38 G 6396967.95 6396968.11 6396968.27 0.2653 0.0216 *

Mars 12804-02-08 00:14 G 6397662.33 6397662.51 6397662.68 0.1916 0.0253

Saturn 12805-10-31 21:07 G 6398294.21 6398294.38 6398294.56 0.0274 0.0161

Jupiter 12805-11-14 22:19 G 6398308.27 6398308.43 6398308.59 0.0541 0.0321

Saturn 12806-06-18 05:31 G 6398523.52 6398523.73 6398523.94 0.0274 0.0042

Saturn 12807-02-02 13:11 G 6398752.97 6398753.05 6398753.16 0.0274 0.0244

Jupiter 12811-09-21 13:40 G 6400444.86 6400445.07 6400445.27 0.0487 0.0022

Uranus 12813-08-03 15:21 G 6401127.01 6401127.14 6401127.28 0.0145 0.0114

Uranus 12814-03-18 03:21 G 6401353.44 6401353.64 6401353.84 0.0144 0.0063

Uranus 12814-10-30 15:07 G 6401579.91 6401580.13 6401580.35 0.0144 0.0012

Uranus 12815-06-14 02:52 G 6401806.41 6401806.62 6401806.83 0.0144 0.0039

Uranus 12816-01-26 14:23 G 6402032.94 6402033.10 6402033.28 0.0144 0.0090

Uranus 12816-09-09 01:55 G 6402259.54 6402259.58 6402259.64 0.0144 0.0140

Saturn 12820-11-28 16:48 G 6403801.00 6403801.20 6403801.41 0.0284 0.0071

Neptune 12820-12-07 09:36 G 6403809.84 6403809.90 6403809.99 0.0088 0.0082

Saturn 12821-07-16 08:23 G 6404030.68 6404030.85 6404031.03 0.0284 0.0154

Neptune 12821-07-20 22:19 G 6404035.30 6404035.43 6404035.60 0.0088 0.0063

Neptune 12822-03-03 11:02 G 6404260.79 6404260.96 6404261.17 0.0088 0.0044

Neptune 12822-10-15 00:00 G 6404486.30 6404486.50 6404486.72 0.0088 0.0025

Jupiter 12823-05-27 19:11 G 6404711.17 6404711.30 6404711.45 0.0488 0.0355

Neptune 12823-05-28 12:57 G 6404711.82 6404712.04 6404712.26 0.0088 0.0006

Neptune 12824-01-09 01:40 G 6404937.35 6404937.57 6404937.79 0.0088 0.0013

Neptune 12824-08-21 14:23 G 6405162.90 6405163.10 6405163.31 0.0088 0.0032

Neptune 12825-04-04 02:38 G 6405388.45 6405388.61 6405388.81 0.0088 0.0052

Neptune 12825-11-15 15:07 G 6405614.03 6405614.13 6405614.29 0.0088 0.0071

Jupiter 12829-11-18 03:36 G 6407077.59 6407077.65 6407077.72 0.0542 0.0509

Mars 12833-04-28 17:16 G 6408335.05 6408335.22 6408335.40 0.1618 0.0131

Saturn 12835-05-14 05:02 G 6409080.52 6409080.71 6409080.90 0.0275 0.0127

Saturn 12835-12-29 13:26 G 6409309.86 6409310.06 6409310.27 0.0275 0.0076

Pluto 12838-01-16 10:04 G 6410058.75 6410058.92 6410059.11 0.0068 0.0037

Pluto 12838-08-29 15:36 G 6410283.93 6410284.15 6410284.37 0.0068 0.0008

Pluto 12839-04-11 20:23 G 6410509.24 6410509.35 6410509.51 0.0068 0.0055

Jupiter 12841-07-23 14:09 G 6411342.89 6411343.09 6411343.30 0.0541 0.0030

Jupiter 12847-05-29 23:31 G 6413479.31 6413479.48 6413479.66 0.0486 0.0252

Saturn 12849-10-24 06:28 G 6414357.70 6414357.77 6414357.84 0.0284 0.0264

Saturn 12850-06-10 21:36 G 6414587.19 6414587.40 6414587.61 0.0284 0.0042

Saturn 12851-01-26 12:43 G 6414816.88 6414817.03 6414817.20 0.0284 0.0182

Uranus 12856-05-06 07:11 G 6416743.71 6416743.80 6416743.92 0.0134 0.0116

Uranus 12856-12-18 12:57 G 6416969.87 6416970.04 6416970.23 0.0134 0.0076

Uranus 12857-08-01 18:43 G 6417196.08 6417196.28 6417196.50 0.0134 0.0035

Uranus 12858-03-16 00:28 G 6417422.30 6417422.52 6417422.74 0.0134 0.0005

Uranus 12858-10-28 05:45 G 6417648.55 6417648.74 6417648.96 0.0134 0.0046

Jupiter 12859-02-02 05:31 G 6417745.53 6417745.73 6417745.92 0.0487 0.0125

Uranus 12859-06-11 11:31 G 6417874.82 6417874.98 6417875.16 0.0134 0.0087

Uranus 12860-01-23 17:16 G 6418101.17 6418101.22 6418101.31 0.0134 0.0128

Saturn 12864-11-23 04:33 G 6419866.50 6419866.69 6419866.89 0.0275 0.0111

Mars 12865-04-27 10:33 G 6420021.86 6420021.94 6420022.02 0.1625 0.1436

Saturn 12865-07-10 12:57 G 6420095.84 6420096.04 6420096.24 0.0274 0.0092

Mars 12867-02-25 13:40 G 6420690.97 6420691.07 6420691.17 0.1611 0.1293

Mars 12869-12-05 03:07 G 6421704.46 6421704.63 6421704.81 0.1920 0.0271

Jupiter 12877-03-31 12:57 G 6424377.88 6424378.04 6424378.21 0.0542 0.0307

Saturn 12879-05-06 07:55 G 6425143.73 6425143.83 6425143.94 0.0284 0.0243

Saturn 12879-12-21 23:31 G 6425373.27 6425373.48 6425373.69 0.0284 0.0021

Saturn 12880-08-07 14:52 G 6425602.98 6425603.12 6425603.27 0.0284 0.0204

Jupiter 12883-02-04 08:23 G 6426513.82 6426513.85 6426513.90 0.0486 0.0475

Jupiter 12888-12-03 20:23 G 6428643.18 6428643.35 6428643.54 0.0540 0.0248

Saturn 12894-06-05 12:14 G 6430652.81 6430653.01 6430653.21 0.0275 0.0077

Jupiter 12894-10-10 14:23 G 6430779.91 6430780.10 6430780.31 0.0487 0.0102

Saturn 12895-01-20 20:38 G 6430882.17 6430882.36 6430882.55 0.0275 0.0126

Uranus 12897-04-02 20:23 G 6431685.31 6431685.35 6431685.43 0.0145 0.0139

Uranus 12897-11-15 08:38 G 6431911.69 6431911.86 6431912.04 0.0145 0.0088

Uranus 12898-06-29 20:38 G 6432138.15 6432138.36 6432138.58 0.0144 0.0037

Uranus 12899-02-11 08:23 G 6432364.64 6432364.85 6432365.07 0.0144 0.0015

Mars 12899-02-24 06:00 G 6432377.58 6432377.75 6432377.93 0.1617 0.0043

Uranus 12899-09-25 19:55 G 6432591.14 6432591.33 6432591.53 0.0144 0.0065

Uranus 12900-05-10 07:40 G 6432817.69 6432817.82 6432817.95 0.0144 0.0115

Neptune 12904-04-19 04:48 G 6434257.58 6434257.70 6434257.84 0.0089 0.0071

Neptune 12904-11-30 18:14 G 6434483.09 6434483.26 6434483.45 0.0089 0.0052

Neptune 12905-07-14 07:40 G 6434708.61 6434708.82 6434709.03 0.0089 0.0032

Neptune 12906-02-24 20:52 G 6434934.15 6434934.37 6434934.59 0.0089 0.0012

Jupiter 12906-06-16 19:40 G 6435046.16 6435046.32 6435046.49 0.0488 0.0278

Neptune 12906-10-08 10:04 G 6435159.70 6435159.92 6435160.14 0.0089 0.0008

Neptune 12907-05-21 23:02 G 6435385.26 6435385.46 6435385.68 0.0089 0.0028

Neptune 12908-01-02 12:14 G 6435610.85 6435611.01 6435611.22 0.0089 0.0049

Neptune 12908-08-15 01:55 G 6435836.44 6435836.58 6435836.73 0.0089 0.0068

Saturn 12908-11-16 14:09 G 6435929.96 6435930.09 6435930.24 0.0284 0.0213

Neptune 12909-03-28 14:52 G 6436062.10 6436062.12 6436062.17 0.0089 0.0088

Saturn 12909-07-04 05:31 G 6436159.52 6436159.73 6436159.94 0.0284 0.0011

Saturn 12910-02-18 20:23 G 6436389.24 6436389.35 6436389.48 0.0284 0.0234

Saturn 12923-05-02 03:36 G 6441209.60 6441209.65 6441209.72 0.0275 0.0263

Pluto 12923-11-12 22:33 G 6441404.39 6441404.44 6441404.52 0.0077 0.0073

Saturn 12923-12-17 12:28 G 6441438.81 6441439.02 6441439.23 0.0275 0.0060

Pluto 12924-06-25 07:55 G 6441629.61 6441629.83 6441630.05 0.0077 0.0006

Saturn 12924-08-02 20:38 G 6441668.19 6441668.36 6441668.55 0.0275 0.0143

Jupiter 12924-08-12 18:14 G 6441678.06 6441678.26 6441678.46 0.0542 0.0081

Pluto 12925-02-05 16:19 G 6441855.06 6441855.18 6441855.34 0.0076 0.0060

Jupiter 12930-06-18 23:02 G 6443814.31 6443814.46 6443814.61 0.0486 0.0323

Mars 12931-02-23 22:48 G 6444064.35 6444064.45 6444064.56 0.1623 0.1266

Mars 12932-12-24 02:09 G 6444733.52 6444733.59 6444733.67 0.1609 0.1451

Mars 12935-10-03 05:31 G 6445746.57 6445746.73 6445746.89 0.1922 0.0825

Jupiter 12936-04-17 05:16 G 6445943.62 6445943.72 6445943.84 0.0540 0.0451

Saturn 12938-05-29 15:21 G 6446715.99 6446716.14 6446716.30 0.0284 0.0192

Saturn 12939-01-14 06:43 G 6446945.57 6446945.78 6446945.99 0.0284 0.0032

Saturn 12939-08-31 22:04 G 6447175.33 6447175.42 6447175.52 0.0284 0.0255

Earth 12939-09-13 04:19 G 6447187.52 6447187.68 6447187.84 0.2679 0.0190

Moon 12939-09-13 04:33 G 6447187.54 6447187.69 6447187.83 0.2686 0.0498 *

Uranus 12940-08-18 22:19 G 6447528.29 6447528.43 6447528.59 0.0134 0.0094

Uranus 12941-04-02 03:50 G 6447754.47 6447754.66 6447754.87 0.0134 0.0054

Uranus 12941-11-14 09:36 G 6447980.68 6447980.90 6447981.12 0.0134 0.0013

Jupiter 12942-02-22 04:48 G 6448080.50 6448080.70 6448080.90 0.0487 0.0053

Uranus 12942-06-28 15:07 G 6448206.92 6448207.13 6448207.35 0.0134 0.0027

Uranus 12943-02-09 20:52 G 6448433.19 6448433.37 6448433.56 0.0134 0.0068

Uranus 12943-09-24 02:23 G 6448659.49 6448659.60 6448659.74 0.0134 0.0109

Saturn 12952-11-11 11:02 G 6451995.85 6451995.96 6451996.08 0.0276 0.0231

Saturn 12953-06-28 19:55 G 6452225.12 6452225.33 6452225.54 0.0275 0.0027

Jupiter 12953-10-28 09:36 G 6452346.82 6452346.90 6452347.00 0.0489 0.0434

Saturn 12954-02-13 04:19 G 6452454.52 6452454.68 6452454.85 0.0275 0.0176

Jupiter 12960-04-20 10:04 G 6454712.78 6454712.92 6454713.07 0.0542 0.0376

Mars 12964-12-22 18:14 G 6456420.08 6456420.26 6456420.43 0.1615 0.0203

Saturn 12967-12-09 23:16 G 6457502.30 6457502.47 6457502.65 0.0283 0.0159

Saturn 12968-07-26 14:23 G 6457731.89 6457732.10 6457732.30 0.0284 0.0065

Jupiter 12971-12-24 21:36 G 6458978.21 6458978.40 6458978.60 0.0541 0.0156

Jupiter 12977-10-30 13:55 G 6461114.89 6461115.08 6461115.28 0.0487 0.0175

Uranus 12981-07-16 14:23 G 6462469.97 6462470.10 6462470.24 0.0145 0.0112

Uranus 12982-02-28 02:23 G 6462696.40 6462696.60 6462696.80 0.0144 0.0061

Saturn 12982-05-24 12:00 G 6462781.87 6462782.00 6462782.14 0.0275 0.0212

Uranus 12982-10-12 14:09 G 6462922.87 6462923.09 6462923.31 0.0144 0.0010

Saturn 12983-01-08 20:38 G 6463011.15 6463011.36 6463011.58 0.0275 0.0011

Uranus 12983-05-27 01:40 G 6463149.36 6463149.57 6463149.78 0.0144 0.0041

Saturn 12983-08-26 04:48 G 6463240.56 6463240.70 6463240.86 0.0275 0.0194

Uranus 12984-01-08 13:11 G 6463375.89 6463376.05 6463376.22 0.0144 0.0091

Uranus 12984-08-22 00:57 G 6463602.50 6463602.54 6463602.58 0.0144 0.0141

Neptune 12985-10-23 10:04 G 6464029.79 6464029.92 6464030.05 0.0088 0.0071

Neptune 12986-06-05 22:48 G 6464255.28 6464255.45 6464255.63 0.0088 0.0051

Neptune 12987-01-17 11:31 G 6464480.78 6464480.98 6464481.19 0.0088 0.0032

Neptune 12987-08-31 00:14 G 6464706.29 6464706.51 6464706.73 0.0088 0.0013

Neptune 12988-04-12 12:57 G 6464931.82 6464932.04 6464932.26 0.0088 0.0006

Neptune 12988-11-24 01:26 G 6465157.36 6465157.56 6465157.78 0.0088 0.0025

Jupiter 12989-07-05 18:43 G 6465381.10 6465381.28 6465381.47 0.0488 0.0208

Neptune 12989-07-07 14:09 G 6465382.91 6465383.09 6465383.29 0.0088 0.0044

Neptune 12990-02-18 02:52 G 6465608.48 6465608.62 6465608.79 0.0088 0.0063

Neptune 12990-10-01 15:36 G 6465834.09 6465834.15 6465834.24 0.0088 0.0082

Mars 12996-12-21 11:02 G 6468106.84 6468106.96 6468107.09 0.1621 0.1098

Saturn 12997-06-21 00:14 G 6468288.34 6468288.51 6468288.71 0.0284 0.0138

Saturn 12998-02-05 15:36 G 6468517.95 6468518.15 6468518.35 0.0284 0.0086

14TH MILLENNIUM CE

This is a list of transits of Venus in the 14th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Mars 13001-07-31 07:40 G 6469788.70 6469788.82 6469788.94 0.1925 0.1381

Jupiter 13007-09-02 16:19 G 6472012.98 6472013.18 6472013.37 0.0541 0.0155

Saturn 13011-12-05 18:57 G 6473568.14 6473568.29 6473568.46 0.0276 0.0181

Saturn 13012-07-22 04:04 G 6473797.46 6473797.67 6473797.88 0.0276 0.0023

Saturn 13013-03-08 12:28 G 6474026.91 6474027.02 6474027.15 0.0276 0.0227

Jupiter 13013-07-08 22:33 G 6474149.33 6474149.44 6474149.56 0.0487 0.0397

Jupiter 13019-05-08 02:23 G 6476278.46 6476278.60 6476278.74 0.0539 0.0383

Uranus 13024-04-19 06:57 G 6478086.69 6478086.79 6478086.92 0.0134 0.0113

Uranus 13024-12-01 12:28 G 6478312.85 6478313.02 6478313.22 0.0134 0.0073

Jupiter 13025-03-14 03:36 G 6478415.45 6478415.65 6478415.86 0.0487 0.0019

Uranus 13025-07-15 18:28 G 6478539.06 6478539.27 6478539.48 0.0134 0.0032

Uranus 13026-02-27 00:00 G 6478765.28 6478765.50 6478765.72 0.0134 0.0008

Uranus 13026-10-11 05:31 G 6478991.53 6478991.73 6478991.94 0.0134 0.0049

Saturn 13027-01-02 09:36 G 6479074.70 6479074.90 6479075.10 0.0283 0.0102

Uranus 13027-05-25 11:02 G 6479217.81 6479217.96 6479218.14 0.0134 0.0090

Saturn 13027-08-20 00:28 G 6479304.33 6479304.52 6479304.71 0.0283 0.0120

Uranus 13028-01-06 17:16 G 6479444.17 6479444.22 6479444.28 0.0135 0.0130

Mars 13030-10-21 06:57 G 6480462.62 6480462.79 6480462.96 0.1613 0.0356

Mars 13033-07-31 09:50 G 6481476.80 6481476.91 6481477.02 0.1916 0.1474

Jupiter 13036-11-17 08:52 G 6482681.74 6482681.87 6482682.01 0.0489 0.0362

Saturn 13041-06-16 21:21 G 6484354.22 6484354.39 6484354.56 0.0275 0.0160

Saturn 13042-02-01 06:00 G 6484583.54 6484583.75 6484583.96 0.0275 0.0044

Saturn 13042-09-18 14:23 G 6484813.01 6484813.10 6484813.20 0.0275 0.0246

Jupiter 13043-05-11 12:28 G 6485047.93 6485048.02 6485048.12 0.0542 0.0477

Earth 13045-03-17 16:48 G 6485724.05 6485724.20 6485724.36 0.2652 0.0229

Moon 13045-03-17 18:28 G 6485724.13 6485724.27 6485724.42 0.2659 0.0538 *

Jupiter 13055-01-14 00:00 G 6489313.29 6489313.50 6489313.70 0.0541 0.0059

Saturn 13056-07-14 10:48 G 6489860.75 6489860.95 6489861.16 0.0284 0.0080

Saturn 13057-03-01 01:40 G 6490090.39 6490090.57 6490090.76 0.0284 0.0143

Jupiter 13060-11-19 12:14 G 6491449.83 6491450.01 6491450.19 0.0487 0.0242

Mars 13062-10-19 23:31 G 6492149.34 6492149.48 6492149.62 0.1619 0.0930

Uranus 13065-03-16 19:40 G 6493028.25 6493028.32 6493028.40 0.0145 0.0136

Uranus 13065-10-29 07:11 G 6493254.64 6493254.80 6493254.99 0.0145 0.0086

Uranus 13066-06-12 19:26 G 6493481.10 6493481.31 6493481.52 0.0144 0.0034

Uranus 13067-01-25 07:11 G 6493707.58 6493707.80 6493708.02 0.0144 0.0017

Uranus 13067-09-08 18:43 G 6493934.09 6493934.28 6493934.48 0.0144 0.0067

Uranus 13068-04-22 06:14 G 6494160.64 6494160.76 6494160.89 0.0144 0.0117

Neptune 13068-07-22 15:50 G 6494252.09 6494252.16 6494252.29 0.0089 0.0080

Neptune 13069-03-05 05:16 G 6494477.57 6494477.72 6494477.90 0.0089 0.0060

Neptune 13069-10-16 18:43 G 6494703.09 6494703.28 6494703.49 0.0089 0.0039

Neptune 13070-05-30 08:09 G 6494928.63 6494928.84 6494929.06 0.0089 0.0019

Saturn 13070-12-28 03:36 G 6495140.47 6495140.65 6495140.85 0.0276 0.0130

Neptune 13071-01-10 21:36 G 6495154.18 6495154.40 6495154.62 0.0089 0.0001

Saturn 13071-08-14 12:43 G 6495369.83 6495370.03 6495370.24 0.0276 0.0075

Neptune 13071-08-24 10:48 G 6495379.74 6495379.95 6495380.17 0.0089 0.0021

Neptune 13072-04-06 00:00 G 6495605.31 6495605.50 6495605.70 0.0089 0.0041

Jupiter 13072-07-25 17:02 G 6495716.02 6495716.21 6495716.41 0.0488 0.0140

Neptune 13072-11-17 13:11 G 6495830.90 6495831.05 6495831.22 0.0089 0.0061

Neptune 13073-07-01 02:23 G 6496056.52 6496056.60 6496056.71 0.0089 0.0081

Pluto 13084-02-16 19:55 G 6499939.14 6499939.33 6499939.55 0.0068 0.0027

Pluto 13084-09-29 01:11 G 6500164.35 6500164.55 6500164.78 0.0068 0.0019

Pluto 13085-05-12 06:14 G 6500389.73 6500389.76 6500389.86 0.0068 0.0065

Saturn 13085-06-09 06:43 G 6500417.71 6500417.78 6500417.85 0.0283 0.0264

Saturn 13086-01-24 21:21 G 6500647.18 6500647.39 6500647.60 0.0283 0.0044

Saturn 13086-09-11 12:14 G 6500876.84 6500877.01 6500877.17 0.0283 0.0179

Jupiter 13090-09-21 15:07 G 6502347.95 6502348.13 6502348.31 0.0542 0.0236

Jupiter 13096-07-27 20:52 G 6504484.31 6504484.37 6504484.43 0.0486 0.0465

Mars 13096-08-17 19:26 G 6504505.15 6504505.31 6504505.48 0.1611 0.0517

Mars 13099-05-28 12:14 G 6505518.86 6505519.01 6505519.16 0.1919 0.0932

Saturn 13100-07-10 07:26 G 6505926.62 6505926.81 6505927.01 0.0275 0.0106

Saturn 13101-02-24 16:04 G 6506155.98 6506156.17 6506156.37 0.0275 0.0098

Jupiter 13102-05-28 03:21 G 6506613.47 6506613.64 6506613.81 0.0540 0.0292

Uranus 13107-12-19 16:04 G 6508645.14 6508645.17 6508645.23 0.0134 0.0131

Jupiter 13108-04-03 01:26 G 6508750.36 6508750.56 6508750.76 0.0487 0.0084

Uranus 13108-08-01 21:50 G 6508871.25 6508871.41 6508871.57 0.0134 0.0091

Uranus 13109-03-16 03:21 G 6509097.44 6509097.64 6509097.84 0.0134 0.0051

Uranus 13109-10-28 08:52 G 6509323.65 6509323.87 6509324.09 0.0134 0.0011

Uranus 13110-06-11 14:23 G 6509549.89 6509550.10 6509550.32 0.0134 0.0030

Uranus 13111-01-23 20:09 G 6509776.17 6509776.34 6509776.54 0.0134 0.0071

Uranus 13111-09-07 01:40 G 6510002.47 6510002.57 6510002.71 0.0134 0.0112

Saturn 13114-12-21 07:55 G 6511203.73 6511203.83 6511203.94 0.0283 0.0242

Saturn 13115-08-07 22:33 G 6511433.23 6511433.44 6511433.65 0.0283 0.0022

Saturn 13116-03-24 13:11 G 6511662.92 6511663.05 6511663.21 0.0284 0.0202

Jupiter 13119-12-08 06:28 G 6513016.61 6513016.77 6513016.93 0.0489 0.0299

Mars 13128-08-17 12:00 G 6516191.84 6516192.00 6516192.15 0.1617 0.0761

Saturn 13130-01-20 13:40 G 6516712.87 6516713.07 6516713.28 0.0276 0.0076

Saturn 13130-09-06 22:33 G 6516942.26 6516942.44 6516942.64 0.0276 0.0129

Jupiter 13138-02-02 20:09 G 6519648.13 6519648.34 6519648.54 0.0540 0.0011

Jupiter 13143-12-10 09:21 G 6521784.74 6521784.89 6521785.05 0.0487 0.0305

Saturn 13144-07-02 19:26 G 6521990.17 6521990.31 6521990.46 0.0283 0.0204

Saturn 13145-02-17 10:04 G 6522219.71 6522219.92 6522220.13 0.0283 0.0017

Saturn 13145-10-05 00:57 G 6522449.43 6522449.54 6522449.65 0.0283 0.0239

Uranus 13149-06-29 12:43 G 6523812.91 6523813.03 6523813.19 0.0145 0.0110

Jupiter 13149-10-08 06:00 G 6523913.72 6523913.75 6523913.79 0.0539 0.0529

Neptune 13150-01-26 21:21 G 6524024.32 6524024.39 6524024.52 0.0088 0.0078

Uranus 13150-02-11 00:57 G 6524039.34 6524039.54 6524039.74 0.0144 0.0059

Neptune 13150-09-09 10:04 G 6524249.78 6524249.92 6524250.11 0.0088 0.0059

Uranus 13150-09-25 12:43 G 6524265.81 6524266.03 6524266.24 0.0144 0.0008

Neptune 13151-04-22 23:16 G 6524475.28 6524475.47 6524475.67 0.0088 0.0039

Uranus 13151-05-10 00:00 G 6524492.30 6524492.50 6524492.72 0.0144 0.0043

Neptune 13151-12-04 12:00 G 6524700.79 6524701.00 6524701.22 0.0088 0.0020

Uranus 13151-12-22 11:31 G 6524718.83 6524718.98 6524719.16 0.0144 0.0093

Neptune 13152-07-17 00:43 G 6524926.31 6524926.53 6524926.76 0.0088 0.0002

Uranus 13152-08-04 23:16 G 6524945.46 6524945.47 6524945.50 0.0144 0.0143

Neptune 13153-02-27 13:26 G 6525151.85 6525152.06 6525152.28 0.0088 0.0018

Neptune 13153-10-11 01:55 G 6525377.39 6525377.58 6525377.79 0.0088 0.0037

Neptune 13154-05-24 14:38 G 6525602.95 6525603.11 6525603.29 0.0088 0.0056

Neptune 13155-01-05 03:21 G 6525828.54 6525828.64 6525828.77 0.0088 0.0075

Jupiter 13155-08-15 15:07 G 6526050.93 6526051.13 6526051.33 0.0488 0.0073

Saturn 13158-12-16 09:07 G 6527269.81 6527269.88 6527269.97 0.0276 0.0255

Saturn 13159-08-02 18:14 G 6527499.06 6527499.26 6527499.48 0.0275 0.0052

Saturn 13160-03-19 03:07 G 6527728.46 6527728.63 6527728.81 0.0275 0.0153

Mars 13162-06-16 07:55 G 6528547.67 6528547.83 6528547.98 0.1610 0.0680

Mars 13165-03-25 14:38 G 6529560.94 6529561.11 6529561.28 0.1922 0.0387

Jupiter 13167-04-20 18:57 G 6530317.24 6530317.29 6530317.37 0.0489 0.0462

Pluto 13169-12-13 08:09 G 6531284.74 6531284.84 6531285.01 0.0077 0.0061

Pluto 13170-07-26 17:45 G 6531510.02 6531510.24 6531510.47 0.0077 0.0007

Pluto 13171-03-09 02:09 G 6531735.55 6531735.59 6531735.69 0.0076 0.0072

Jupiter 13173-10-11 16:19 G 6532683.02 6532683.18 6532683.34 0.0542 0.0329

Saturn 13174-01-12 21:07 G 6532776.23 6532776.38 6532776.55 0.0283 0.0181

Saturn 13174-08-30 11:45 G 6533005.79 6533005.99 6533006.20 0.0283 0.0041

Saturn 13175-04-17 02:23 G 6533235.54 6533235.60 6533235.69 0.0284 0.0263

Earth 13182-09-15 04:04 G 6535943.51 6535943.67 6535943.83 0.2680 0.0463

Moon 13182-09-15 06:14 G 6535943.59 6535943.76 6535943.93 0.2674 0.0100 *

Jupiter 13185-06-16 01:40 G 6536948.39 6536948.57 6536948.76 0.0539 0.0215

Saturn 13188-06-27 14:52 G 6538056.00 6538056.12 6538056.24 0.0276 0.0227

Saturn 13189-02-12 00:14 G 6538285.30 6538285.51 6538285.72 0.0276 0.0021

Saturn 13189-09-29 09:07 G 6538514.73 6538514.88 6538515.04 0.0276 0.0183

Jupiter 13191-04-22 22:19 G 6539085.23 6539085.43 6539085.62 0.0488 0.0144

Uranus 13192-04-01 06:14 G 6539429.64 6539429.76 6539429.89 0.0134 0.0110

Uranus 13192-11-13 11:45 G 6539655.81 6539655.99 6539656.18 0.0134 0.0070

Uranus 13193-06-27 17:16 G 6539882.01 6539882.22 6539882.44 0.0134 0.0030

Uranus 13194-02-08 23:02 G 6540108.25 6540108.46 6540108.68 0.0134 0.0011

Mars 13194-06-15 00:00 G 6540234.34 6540234.50 6540234.66 0.1615 0.0592

Uranus 13194-09-23 04:33 G 6540334.50 6540334.69 6540334.90 0.0134 0.0052

Uranus 13195-05-07 10:33 G 6540560.79 6540560.94 6540561.10 0.0134 0.0092

Uranus 13195-12-19 16:04 G 6540787.16 6540787.17 6540787.23 0.0134 0.0133

Jupiter 13202-12-27 03:07 G 6543351.45 6543351.63 6543351.80 0.0489 0.0239

Saturn 13203-07-26 08:52 G 6543562.69 6543562.87 6543563.06 0.0283 0.0142

Saturn 13204-03-11 23:45 G 6543792.28 6543792.49 6543792.69 0.0283 0.0080

Saturn 13218-01-07 21:07 G 6548842.24 6548842.38 6548842.53 0.0276 0.0198

Saturn 13218-08-25 06:14 G 6549071.55 6549071.76 6549071.98 0.0275 0.0007

Saturn 13219-04-11 14:52 G 6549300.99 6549301.12 6549301.26 0.0275 0.0210

Jupiter 13221-02-21 18:43 G 6549983.08 6549983.28 6549983.49 0.0541 0.0088

Jupiter 13226-12-29 06:43 G 6552119.64 6552119.78 6552119.91 0.0487 0.0366

Mars 13228-04-12 20:23 G 6552590.21 6552590.35 6552590.50 0.1608 0.0840

Mars 13231-01-20 16:48 G 6553603.02 6553603.20 6553603.37 0.1924 0.0184

Neptune 13232-10-25 03:36 G 6554246.61 6554246.65 6554246.72 0.0089 0.0087

Jupiter 13232-10-27 06:43 G 6554248.67 6554248.78 6554248.90 0.0539 0.0441

Saturn 13233-02-04 11:02 G 6554348.77 6554348.96 6554349.15 0.0283 0.0118

Uranus 13233-02-26 18:14 G 6554371.19 6554371.26 6554371.35 0.0145 0.0134

Neptune 13233-06-07 17:02 G 6554472.07 6554472.21 6554472.36 0.0089 0.0067

Saturn 13233-09-22 01:26 G 6554578.37 6554578.56 6554578.76 0.0283 0.0104

Uranus 13233-10-11 06:00 G 6554597.58 6554597.75 6554597.93 0.0144 0.0084

Neptune 13234-01-19 06:28 G 6554697.59 6554697.77 6554697.96 0.0089 0.0047

Uranus 13234-05-25 18:00 G 6554824.04 6554824.25 6554824.46 0.0144 0.0033

Neptune 13234-09-01 19:55 G 6554923.12 6554923.33 6554923.54 0.0089 0.0027

Uranus 13235-01-07 05:31 G 6555050.52 6555050.73 6555050.95 0.0144 0.0018

Neptune 13235-04-15 09:07 G 6555148.66 6555148.88 6555149.10 0.0089 0.0007

Uranus 13235-08-21 17:02 G 6555277.03 6555277.21 6555277.41 0.0144 0.0069

Neptune 13235-11-26 22:33 G 6555374.22 6555374.44 6555374.66 0.0089 0.0013

Uranus 13236-04-04 04:33 G 6555503.58 6555503.69 6555503.83 0.0144 0.0119

Neptune 13236-07-09 11:31 G 6555599.79 6555599.98 6555600.20 0.0089 0.0034

Neptune 13237-02-20 00:43 G 6555825.37 6555825.53 6555825.72 0.0089 0.0054

Neptune 13237-10-03 13:55 G 6556050.97 6556051.08 6556051.22 0.0089 0.0074

Jupiter 13238-09-03 11:45 G 6556385.79 6556385.99 6556386.19 0.0488 0.0015

Saturn 13247-07-21 02:09 G 6559628.43 6559628.59 6559628.76 0.0276 0.0171

Saturn 13248-03-06 11:31 G 6559857.77 6559857.98 6559858.19 0.0276 0.0034

Saturn 13248-10-21 20:09 G 6560087.25 6560087.34 6560087.46 0.0276 0.0239

Jupiter 13250-05-09 15:07 G 6560652.02 6560652.13 6560652.25 0.0490 0.0405

Jupiter 13256-10-30 12:28 G 6563017.88 6563018.02 6563018.16 0.0541 0.0393

Mars 13260-04-11 12:28 G 6564276.85 6564277.02 6564277.18 0.1613 0.0423

Saturn 13262-08-17 22:48 G 6565135.25 6565135.45 6565135.66 0.0283 0.0080

Saturn 13263-04-04 13:26 G 6565364.89 6565365.06 6565365.25 0.0283 0.0142

Jupiter 13268-07-04 21:21 G 6567283.20 6567283.39 6567283.59 0.0540 0.0154

Jupiter 13274-05-11 19:40 G 6569420.14 6569420.32 6569420.51 0.0487 0.0208

Uranus 13275-11-30 14:52 G 6569988.08 6569988.12 6569988.19 0.0134 0.0129

Uranus 13276-07-13 20:38 G 6570214.20 6570214.36 6570214.52 0.0134 0.0089

Saturn 13277-01-30 09:36 G 6570414.72 6570414.90 6570415.08 0.0276 0.0140

Uranus 13277-02-25 02:09 G 6570440.39 6570440.59 6570440.80 0.0134 0.0049

Saturn 13277-09-16 18:28 G 6570644.06 6570644.27 6570644.48 0.0275 0.0064

Uranus 13277-10-09 07:55 G 6570666.61 6570666.83 6570667.05 0.0134 0.0009

Saturn 13278-05-04 02:52 G 6570873.59 6570873.62 6570873.68 0.0275 0.0267

Uranus 13278-05-23 13:26 G 6570892.85 6570893.06 6570893.28 0.0134 0.0032

Uranus 13279-01-04 19:12 G 6571119.13 6571119.30 6571119.49 0.0134 0.0073

Uranus 13279-08-19 00:57 G 6571345.44 6571345.54 6571345.67 0.0134 0.0113

Jupiter 13286-01-15 00:14 G 6573686.32 6573686.51 6573686.70 0.0488 0.0178

Earth 13288-03-18 19:12 G 6574480.14 6574480.30 6574480.46 0.2652 0.0240

Moon 13288-03-18 19:40 G 6574480.15 6574480.32 6574480.48 0.2645 0.0396 *

Saturn 13291-07-13 10:19 G 6575691.90 6575691.93 6575691.99 0.0283 0.0275

Saturn 13292-02-28 00:57 G 6575921.34 6575921.54 6575921.75 0.0283 0.0055

Saturn 13292-10-14 15:36 G 6576150.98 6576151.15 6576151.32 0.0283 0.0166

Mars 13294-02-08 09:07 G 6576632.74 6576632.88 6576633.01 0.1607 0.0999

Mars 13296-11-16 19:12 G 6577645.14 6577645.30 6577645.46 0.1927 0.0732

Jupiter 13304-03-13 17:45 G 6580318.05 6580318.24 6580318.44 0.0540 0.0169

Saturn 13306-08-13 13:55 G 6581200.89 6581201.08 6581201.28 0.0276 0.0114

Saturn 13307-03-30 23:02 G 6581430.26 6581430.46 6581430.66 0.0276 0.0091

Jupiter 13310-01-18 02:38 G 6582454.52 6582454.61 6582454.71 0.0487 0.0424

Neptune 13314-05-01 09:07 G 6584018.85 6584018.88 6584018.97 0.0088 0.0085

Neptune 13314-12-12 21:50 G 6584244.29 6584244.41 6584244.58 0.0088 0.0067

Neptune 13315-07-26 11:02 G 6584469.78 6584469.96 6584470.16 0.0088 0.0047

Jupiter 13315-11-17 03:36 G 6584583.51 6584583.65 6584583.80 0.0539 0.0373

Neptune 13316-03-07 23:45 G 6584695.29 6584695.49 6584695.70 0.0088 0.0027

Neptune 13316-10-19 12:28 G 6584920.80 6584921.02 6584921.24 0.0088 0.0008

Neptune 13317-06-02 01:12 G 6585146.34 6585146.55 6585146.77 0.0088 0.0011

Uranus 13317-06-11 11:31 G 6585155.84 6585155.98 6585156.13 0.0145 0.0108

Neptune 13318-01-13 13:40 G 6585371.88 6585372.07 6585372.29 0.0088 0.0030

Uranus 13318-01-23 23:16 G 6585382.27 6585382.47 6585382.67 0.0144 0.0057

Neptune 13318-08-27 02:24 G 6585597.43 6585597.60 6585597.79 0.0088 0.0049

Uranus 13318-09-07 11:02 G 6585608.75 6585608.96 6585609.18 0.0144 0.0007

Neptune 13319-04-09 15:07 G 6585823.00 6585823.13 6585823.28 0.0088 0.0068

Uranus 13319-04-21 22:33 G 6585835.24 6585835.44 6585835.66 0.0144 0.0045

Neptune 13319-11-21 03:50 G 6586048.64 6586048.66 6586048.69 0.0088 0.0087

Uranus 13319-12-04 10:04 G 6586061.77 6586061.92 6586062.10 0.0144 0.0095

Saturn 13321-01-23 21:36 G 6586478.30 6586478.40 6586478.52 0.0283 0.0238

Saturn 13321-09-10 12:28 G 6586707.80 6586708.02 6586708.23 0.0283 0.0018

Jupiter 13321-09-23 07:40 G 6586720.61 6586720.82 6586721.02 0.0488 0.0043

Saturn 13322-04-28 03:07 G 6586937.49 6586937.63 6586937.78 0.0283 0.0204

Mars 13326-02-08 00:57 G 6588319.37 6588319.54 6588319.71 0.1612 0.0262

Pluto 13329-08-05 23:45 G 6589594.43 6589594.49 6589594.59 0.0067 0.0063

Pluto 13330-03-19 05:16 G 6589819.52 6589819.72 6589819.95 0.0068 0.0018

Pluto 13330-10-30 10:48 G 6590044.76 6590044.95 6590045.16 0.0068 0.0028

Jupiter 13333-05-29 12:57 G 6590986.90 6590987.04 6590987.19 0.0489 0.0339

Saturn 13336-02-23 22:04 G 6591987.22 6591987.42 6591987.63 0.0275 0.0081

Saturn 13336-10-10 06:57 G 6592216.60 6592216.79 6592216.98 0.0275 0.0122

Jupiter 13339-11-20 09:50 G 6593352.81 6593352.91 6593353.01 0.0542 0.0466

Saturn 13350-08-06 00:00 G 6597264.37 6597264.50 6597264.64 0.0283 0.0213

Saturn 13351-03-23 14:38 G 6597493.90 6597494.11 6597494.32 0.0283 0.0007

Jupiter 13351-07-25 21:50 G 6597618.21 6597618.41 6597618.62 0.0540 0.0067

Saturn 13351-11-08 05:16 G 6597723.60 6597723.72 6597723.85 0.0284 0.0229

Jupiter 13357-05-31 16:33 G 6599755.02 6599755.19 6599755.36 0.0487 0.0267

Mars 13358-02-06 17:16 G 6600006.17 6600006.22 6600006.26 0.1617 0.1552

Mars 13359-12-07 21:36 G 6600675.28 6600675.40 6600675.52 0.1605 0.1158

Uranus 13360-03-14 04:33 G 6600772.59 6600772.69 6600772.84 0.0134 0.0109

Uranus 13360-10-26 10:19 G 6600998.75 6600998.93 6600999.13 0.0134 0.0069

Uranus 13361-06-09 16:04 G 6601224.96 6601225.17 6601225.39 0.0134 0.0028

Uranus 13362-01-21 22:04 G 6601451.20 6601451.42 6601451.63 0.0134 0.0012

Uranus 13362-09-05 03:50 G 6601677.46 6601677.66 6601677.86 0.0134 0.0053

Mars 13362-09-14 20:52 G 6601687.24 6601687.37 6601687.50 0.1930 0.1318

Uranus 13363-04-19 09:21 G 6601903.74 6601903.89 6601904.06 0.0134 0.0093

Uranus 13363-12-01 15:21 G 6602130.13 6602130.14 6602130.16 0.0134 0.0134

Saturn 13365-01-18 16:04 G 6602544.11 6602544.17 6602544.25 0.0276 0.0261

Saturn 13365-09-05 01:26 G 6602773.36 6602773.56 6602773.77 0.0276 0.0057

Saturn 13366-04-22 10:19 G 6603002.76 6603002.93 6603003.12 0.0276 0.0148

Jupiter 13369-02-03 20:09 G 6604021.15 6604021.34 6604021.54 0.0489 0.0121

Saturn 13380-02-16 10:19 G 6608050.77 6608050.93 6608051.10 0.0283 0.0178

Saturn 13380-10-03 00:57 G 6608280.34 6608280.54 6608280.76 0.0283 0.0045

Saturn 13381-05-20 16:04 G 6608510.10 6608510.17 6608510.24 0.0283 0.0265

Jupiter 13387-04-02 12:43 G 6610652.85 6610653.03 6610653.22 0.0541 0.0227

Mars 13391-12-06 13:12 G 6612361.87 6612362.05 6612362.22 0.1610 0.0095

Saturn 13394-08-01 01:12 G 6613330.44 6613330.55 6613330.68 0.0276 0.0227

Mars 13394-09-14 23:45 G 6613375.40 6613375.49 6613375.59 0.1921 0.1606

Saturn 13395-03-18 10:19 G 6613559.72 6613559.93 6613560.14 0.0275 0.0023

Saturn 13395-11-02 18:43 G 6613789.13 6613789.28 6613789.45 0.0275 0.0181

Neptune 13397-09-10 04:19 G 6614466.58 6614466.68 6614466.82 0.0089 0.0074

Neptune 13398-04-23 17:45 G 6614692.08 6614692.24 6614692.43 0.0089 0.0054

Neptune 13398-12-05 07:12 G 6614917.61 6614917.80 6614918.02 0.0089 0.0034

Jupiter 13398-12-06 00:28 G 6614918.35 6614918.52 6614918.68 0.0539 0.0307

Neptune 13399-07-18 20:38 G 6615143.15 6615143.36 6615143.59 0.0089 0.0015

Neptune 13400-03-01 10:04 G 6615368.70 6615368.92 6615369.14 0.0089 0.0006

Neptune 13400-10-12 23:16 G 6615594.27 6615594.47 6615594.69 0.0089 0.0026

Uranus 13401-02-09 16:33 G 6615714.12 6615714.19 6615714.29 0.0145 0.0133

Neptune 13401-05-26 12:28 G 6615819.84 6615820.02 6615820.22 0.0089 0.0046

Uranus 13401-09-24 04:19 G 6615940.51 6615940.68 6615940.87 0.0144 0.0082

Neptune 13402-01-07 01:40 G 6616045.45 6616045.57 6616045.74 0.0089 0.0067

Uranus 13402-05-08 16:19 G 6616166.97 6616167.18 6616167.40 0.0144 0.0031

Neptune 13402-08-20 14:52 G 6616271.09 6616271.12 6616271.20 0.0089 0.0087

Uranus 13402-12-21 04:04 G 6616393.46 6616393.67 6616393.89 0.0144 0.0019

Uranus 13403-08-04 15:36 G 6616619.97 6616620.15 6616620.36 0.0144 0.0071

Uranus 13404-03-18 03:21 G 6616846.53 6616846.64 6616846.77 0.0144 0.0120

Jupiter 13404-10-13 05:31 G 6617055.53 6617055.73 6617055.93 0.0488 0.0107

Saturn 13409-08-29 12:28 G 6618836.85 6618837.02 6618837.21 0.0283 0.0154

Saturn 13410-04-16 03:07 G 6619066.43 6619066.63 6619066.84 0.0283 0.0069

Pluto 13416-01-13 19:26 G 6621165.14 6621165.31 6621165.50 0.0077 0.0045

Jupiter 13416-06-18 10:19 G 6621321.77 6621321.93 6621322.10 0.0489 0.0278

Pluto 13416-08-26 04:19 G 6621390.48 6621390.68 6621390.90 0.0077 0.0022

Moon 13417-09-19 07:40 G 6621779.73 6621779.82 6621779.91 0.2680 0.2172

Mars 13423-12-06 05:45 G 6624048.65 6624048.74 6624048.82 0.1616 0.1387

Saturn 13424-02-12 03:36 G 6624116.52 6624116.65 6624116.80 0.0276 0.0205

Saturn 13424-09-28 12:43 G 6624345.82 6624346.03 6624346.25 0.0276 0.0005

Saturn 13425-05-15 21:36 G 6624575.26 6624575.40 6624575.55 0.0276 0.0203

Moon 13425-09-16 23:45 G 6624699.35 6624699.49 6624699.63 0.2686 0.1076

Earth 13425-09-17 03:36 G 6624699.50 6624699.65 6624699.80 0.2681 0.0751 *

Mars 13425-10-05 10:04 G 6624717.83 6624717.92 6624718.02 0.1604 0.1322

Mars 13428-07-12 22:33 G 6625729.42 6625729.44 6625729.47 0.1932 0.1903

Jupiter 13434-08-14 20:09 G 6627953.14 6627953.34 6627953.55 0.0540 0.0018

Saturn 13439-03-11 21:36 G 6629623.21 6629623.40 6629623.60 0.0283 0.0119

Saturn 13439-10-27 12:28 G 6629852.83 6629853.02 6629853.22 0.0283 0.0102

Jupiter 13440-06-20 13:12 G 6630089.90 6630090.05 6630090.20 0.0487 0.0329

Uranus 13443-11-13 13:26 G 6631331.01 6631331.06 6631331.14 0.0134 0.0128

Uranus 13444-06-26 18:57 G 6631557.14 6631557.29 6631557.47 0.0134 0.0088

Uranus 13445-02-08 00:43 G 6631783.34 6631783.53 6631783.75 0.0134 0.0048

Uranus 13445-09-22 06:43 G 6632009.56 6632009.78 6632010.00 0.0134 0.0007

Uranus 13446-05-06 12:28 G 6632235.81 6632236.02 6632236.23 0.0134 0.0033

Uranus 13446-12-18 18:00 G 6632462.08 6632462.25 6632462.44 0.0134 0.0074

Uranus 13447-08-02 00:00 G 6632688.40 6632688.50 6632688.62 0.0134 0.0115

Jupiter 13452-02-24 18:57 G 6634356.09 6634356.29 6634356.49 0.0488 0.0051

Saturn 13453-08-24 12:57 G 6634902.88 6634903.04 6634903.21 0.0276 0.0169

Saturn 13454-04-10 21:50 G 6635132.20 6635132.41 6635132.62 0.0275 0.0034

Saturn 13454-11-26 06:14 G 6635361.66 6635361.76 6635361.88 0.0275 0.0237

Mars 13457-10-04 01:55 G 6636404.41 6636404.58 6636404.76 0.1609 0.0063

Mars 13460-07-13 01:55 G 6637417.43 6637417.58 6637417.72 0.1924 0.1047

Jupiter 13463-10-30 23:16 G 6638622.39 6638622.47 6638622.56 0.0490 0.0439

Saturn 13468-09-21 00:00 G 6640409.30 6640409.50 6640409.70 0.0283 0.0095

Saturn 13469-05-08 14:38 G 6640638.93 6640639.11 6640639.30 0.0283 0.0127

Jupiter 13470-04-22 13:55 G 6640987.92 6640988.08 6640988.25 0.0541 0.0320

Neptune 13479-03-17 10:33 G 6644238.82 6644238.94 6644239.07 0.0088 0.0072

Neptune 13479-10-28 23:02 G 6644464.30 6644464.46 6644464.65 0.0088 0.0054

Neptune 13480-06-10 12:00 G 6644689.80 6644690.00 6644690.21 0.0088 0.0034

Neptune 13481-01-22 00:43 G 6644915.32 6644915.53 6644915.75 0.0088 0.0015

Neptune 13481-09-04 13:26 G 6645140.84 6645141.06 6645141.28 0.0088 0.0004

Jupiter 13481-12-26 01:55 G 6645253.40 6645253.58 6645253.77 0.0539 0.0211

Neptune 13482-04-18 01:55 G 6645366.37 6645366.58 6645366.80 0.0088 0.0023

Neptune 13482-11-29 14:38 G 6645591.92 6645592.11 6645592.30 0.0088 0.0042

Saturn 13483-03-06 14:09 G 6645688.92 6645689.09 6645689.28 0.0276 0.0150

Neptune 13483-07-13 03:21 G 6645817.49 6645817.64 6645817.80 0.0088 0.0062

Saturn 13483-10-21 23:16 G 6645918.26 6645918.47 6645918.68 0.0275 0.0054

Neptune 13484-02-23 15:21 G 6646043.09 6646043.14 6646043.26 0.0088 0.0082

Saturn 13484-06-07 07:40 G 6646147.76 6646147.82 6646147.91 0.0275 0.0258

Uranus 13485-05-24 09:50 G 6646498.77 6646498.91 6646499.07 0.0145 0.0106

Uranus 13486-01-05 21:50 G 6646725.21 6646725.41 6646725.62 0.0144 0.0056

Uranus 13486-08-20 09:50 G 6646951.69 6646951.91 6646952.13 0.0144 0.0005

Uranus 13487-04-03 21:21 G 6647178.19 6647178.39 6647178.61 0.0144 0.0046

Jupiter 13487-11-02 02:24 G 6647390.41 6647390.60 6647390.79 0.0488 0.0169

Uranus 13487-11-16 08:52 G 6647404.72 6647404.87 6647405.05 0.0144 0.0096

Mars 13489-10-02 18:00 G 6648091.14 6648091.25 6648091.37 0.1614 0.1220

Mars 13491-08-02 23:02 G 6648760.40 6648760.46 6648760.53 0.1602 0.1474

Saturn 13497-08-16 17:02 G 6650966.21 6650966.21 6650966.21 0.0283 0.0283

Saturn 13498-04-03 07:40 G 6651195.61 6651195.82 6651196.02 0.0283 0.0063

Saturn 13498-11-18 22:33 G 6651425.27 6651425.44 6651425.62 0.0283 0.0158

Jupiter 13499-07-08 07:26 G 6651656.63 6651656.81 6651657.00 0.0489 0.0215

Saturn 13512-09-16 23:31 G 6656475.29 6656475.48 6656475.68 0.0276 0.0114

Saturn 13513-05-04 08:24 G 6656704.65 6656704.85 6656705.05 0.0275 0.0090

Jupiter 13517-09-03 17:02 G 6658288.01 6658288.21 6658288.41 0.0540 0.0079

Jupiter 13523-07-11 12:14 G 6660424.90 6660425.01 6660425.13 0.0487 0.0400

Mars 13523-08-02 14:24 G 6660446.93 6660447.10 6660447.27 0.1607 0.0228

Mars 13526-05-11 03:36 G 6661459.48 6661459.65 6661459.82 0.1927 0.0466

Saturn 13527-02-27 19:26 G 6661752.23 6661752.31 6661752.39 0.0283 0.0258

Saturn 13527-10-15 09:50 G 6661981.70 6661981.91 6661982.12 0.0283 0.0039

Uranus 13528-02-26 04:04 G 6662115.54 6662115.67 6662115.80 0.0134 0.0106

Saturn 13528-06-01 00:43 G 6662211.37 6662211.53 6662211.69 0.0284 0.0183

Uranus 13528-10-09 09:07 G 6662341.71 6662341.88 6662342.09 0.0134 0.0067

Jupiter 13529-05-09 05:45 G 6662553.63 6662553.74 6662553.85 0.0539 0.0446

Uranus 13529-05-23 15:07 G 6662567.92 6662568.13 6662568.35 0.0134 0.0026

Uranus 13530-01-04 21:07 G 6662794.16 6662794.38 6662794.59 0.0134 0.0014

Uranus 13530-08-19 02:52 G 6663020.42 6663020.62 6663020.82 0.0134 0.0055

Moon 13531-03-22 19:12 G 6663236.15 6663236.30 6663236.45 0.2657 0.0276

Earth 13531-03-22 21:50 G 6663236.25 6663236.41 6663236.57 0.2651 0.0295 *

Uranus 13531-04-02 08:24 G 6663246.71 6663246.85 6663247.01 0.0134 0.0095

Jupiter 13535-03-16 17:31 G 6664691.03 6664691.23 6664691.44 0.0488 0.0018

Saturn 13542-03-30 00:14 G 6667261.31 6667261.51 6667261.71 0.0275 0.0095

Saturn 13542-11-14 09:07 G 6667490.69 6667490.88 6667491.08 0.0275 0.0108

Jupiter 13546-11-19 20:52 G 6668957.25 6668957.37 6668957.51 0.0490 0.0375

Jupiter 13553-05-12 14:09 G 6671322.97 6671323.09 6671323.23 0.0541 0.0410

Mars 13555-08-01 06:28 G 6672133.64 6672133.77 6672133.90 0.1612 0.1049

Saturn 13556-09-09 01:12 G 6672538.43 6672538.55 6672538.67 0.0283 0.0231

Saturn 13557-04-26 16:04 G 6672767.96 6672768.17 6672768.38 0.0283 0.0010

Saturn 13557-12-12 06:57 G 6672997.66 6672997.79 6672997.94 0.0283 0.0212

Neptune 13561-12-14 16:04 G 6674461.10 6674461.17 6674461.27 0.0089 0.0082

Neptune 13562-07-28 05:31 G 6674686.58 6674686.73 6674686.90 0.0089 0.0061

Neptune 13563-03-10 18:43 G 6674912.09 6674912.28 6674912.48 0.0089 0.0042

Neptune 13563-10-22 08:09 G 6675137.63 6675137.84 6675138.06 0.0089 0.0021

Neptune 13564-06-03 21:21 G 6675363.18 6675363.39 6675363.62 0.0089 0.0003

Jupiter 13565-01-14 22:04 G 6675588.22 6675588.42 6675588.61 0.0539 0.0149

Neptune 13565-01-15 11:02 G 6675588.74 6675588.96 6675589.17 0.0089 0.0019

Neptune 13565-08-29 00:14 G 6675814.31 6675814.51 6675814.71 0.0089 0.0039

Neptune 13566-04-11 13:26 G 6676039.90 6676040.06 6676040.23 0.0089 0.0059

Neptune 13566-11-23 02:52 G 6676265.52 6676265.62 6676265.72 0.0089 0.0079

Uranus 13569-01-22 15:07 G 6677057.06 6677057.13 6677057.24 0.0145 0.0131

Uranus 13569-09-06 03:21 G 6677283.47 6677283.64 6677283.83 0.0144 0.0080

Uranus 13570-04-20 15:21 G 6677509.93 6677510.14 6677510.35 0.0144 0.0029

Jupiter 13570-11-22 02:24 G 6677725.43 6677725.60 6677725.78 0.0488 0.0247

Uranus 13570-12-03 03:07 G 6677736.42 6677736.63 6677736.85 0.0144 0.0022

Saturn 13571-02-23 00:00 G 6677818.45 6677818.50 6677818.57 0.0276 0.0263

Uranus 13571-07-17 14:52 G 6677962.94 6677963.12 6677963.31 0.0144 0.0072

Saturn 13571-10-10 09:07 G 6678047.67 6678047.88 6678048.09 0.0276 0.0060

Uranus 13572-02-29 02:24 G 6678189.50 6678189.60 6678189.72 0.0144 0.0122

Saturn 13572-05-26 17:31 G 6678277.06 6678277.23 6678277.42 0.0275 0.0144

Pluto 13575-09-06 11:45 G 6679474.83 6679474.99 6679475.16 0.0068 0.0045

Pluto	13576-04-18 17:16 G	6679700.00	6679700.22	6679700.44	0.0068	0.0000
Pluto	13576-11-29 22:19 G	6679925.28	6679925.43	6679925.60	0.0068	0.0047
Jupiter	13582-07-28 07:40 G	6681991.62	6681991.82	6681992.01	0.0489	0.0139
Saturn	13586-03-22 04:04 G	6683324.53	6683324.67	6683324.82	0.0283	0.0205
Saturn	13586-11-06 18:43 G	6683554.06	6683554.28	6683554.49	0.0283	0.0016
Saturn	13587-06-24 09:36 G	6683783.78	6683783.90	6683784.01	0.0283	0.0236
Mars	13589-05-30 02:52 G	6684489.45	6684489.62	6684489.79	0.1605	0.0390
Mars	13592-03-07 05:45 G	6685501.56	6685501.74	6685501.91	0.1929	0.0116
Saturn	13600-09-03 23:45 G	6688604.41	6688604.49	6688604.59	0.0276	0.0246
Jupiter	13600-09-22 20:09 G	6688623.16	6688623.34	6688623.54	0.0541	0.0187
Saturn	13601-04-21 08:52 G	6688833.67	6688833.87	6688834.09	0.0275	0.0043
Saturn	13601-12-06 17:45 G	6689063.08	6689063.24	6689063.42	0.0275	0.0161
Jupiter	13606-07-30 10:33 G	6690759.89	6690759.94	6690760.00	0.0487	0.0468
Uranus	13611-10-26 12:28 G	6692673.96	6692674.02	6692674.12	0.0134	0.0125
Jupiter	13612-05-28 07:12 G	6692888.65	6692888.80	6692888.96	0.0539	0.0351
Uranus	13612-06-08 18:14 G	6692900.10	6692900.26	6692900.44	0.0134	0.0085
Uranus	13613-01-21 00:14 G	6693126.31	6693126.51	6693126.72	0.0134	0.0045
Uranus	13613-09-04 06:00 G	6693352.53	6693352.75	6693352.97	0.0134	0.0005
Uranus	13614-04-18 11:31 G	6693578.78	6693578.98	6693579.20	0.0134	0.0036
Uranus	13614-11-30 17:16 G	6693805.05	6693805.22	6693805.41	0.0134	0.0076
Uranus	13615-07-14 23:02 G	6694031.37	6694031.46	6694031.58	0.0134	0.0117
Saturn	13615-10-02 08:09 G	6694110.68	6694110.84	6694111.01	0.0283	0.0180
Saturn	13616-05-18 23:16 G	6694340.26	6694340.47	6694340.68	0.0283	0.0041
Saturn	13617-01-03 14:09 G	6694570.02	6694570.09	6694570.18	0.0283	0.0263
Jupiter	13618-04-04 16:04 G	6695025.97	6695026.17	6695026.37	0.0488	0.0088
Mars	13621-05-28 18:43 G	6696176.13	6696176.28	6696176.42	0.1610	0.0882
Jupiter	13629-12-08 21:36 G	6699292.24	6699292.40	6699292.57	0.0490	0.0296
Saturn	13630-03-17 08:38 G	6699390.73	6699390.86	6699391.01	0.0276	0.0211
Saturn	13630-11-01 17:45 G	6699620.03	6699620.24	6699620.46	0.0276	0.0009
Saturn	13631-06-19 02:24 G	6699849.46	6699849.60	6699849.75	0.0275	0.0195

Jupiter 13636-05-31 11:45 G 6701657.90 6701657.99 6701658.08 0.0541 0.0480

Neptune 13643-06-19 21:50 G 6704233.34 6704233.41 6704233.53 0.0088 0.0080

Neptune 13644-01-31 11:02 G 6704458.81 6704458.96 6704459.13 0.0088 0.0060

Neptune 13644-09-12 23:31 G 6704684.30 6704684.48 6704684.69 0.0088 0.0042

Saturn 13645-04-13 11:31 G 6704896.81 6704896.98 6704897.17 0.0283 0.0154

Neptune 13645-04-26 12:14 G 6704909.81 6704910.01 6704910.24 0.0088 0.0023

Saturn 13645-11-29 02:09 G 6705126.39 6705126.59 6705126.80 0.0283 0.0067

Neptune 13645-12-08 01:12 G 6705135.33 6705135.55 6705135.77 0.0088 0.0003

Neptune 13646-07-21 14:09 G 6705360.87 6705361.09 6705361.30 0.0088 0.0017

Neptune 13647-03-04 02:24 G 6705586.41 6705586.60 6705586.81 0.0088 0.0036

Neptune 13647-10-15 14:52 G 6705811.97 6705812.12 6705812.31 0.0088 0.0055

Jupiter 13648-02-04 00:14 G 6705923.31 6705923.51 6705923.72 0.0540 0.0051

Neptune 13648-05-28 03:36 G 6706037.55 6706037.65 6706037.79 0.0088 0.0074

Uranus 13653-05-06 08:38 G 6707841.72 6707841.86 6707842.02 0.0145 0.0104

Jupiter 13653-12-11 02:09 G 6708060.44 6708060.59 6708060.75 0.0487 0.0321

Uranus 13653-12-18 20:52 G 6708068.17 6708068.37 6708068.57 0.0144 0.0053

Uranus 13654-08-02 08:52 G 6708294.65 6708294.87 6708295.09 0.0144 0.0002

Uranus 13655-03-16 20:38 G 6708521.16 6708521.36 6708521.57 0.0144 0.0048

Mars 13655-03-27 15:36 G 6708531.99 6708532.15 6708532.32 0.1604 0.0549

Uranus 13655-10-29 07:55 G 6708747.69 6708747.83 6708748.00 0.0144 0.0099

Mars 13658-01-02 07:12 G 6709543.64 6709543.80 6709543.96 0.1932 0.0696

Saturn 13659-09-27 07:55 G 6710176.69 6710176.83 6710176.98 0.0275 0.0195

Saturn 13660-05-13 17:02 G 6710406.00 6710406.21 6710406.42 0.0275 0.0008

Saturn 13660-12-29 01:40 G 6710635.44 6710635.57 6710635.71 0.0275 0.0211

Pluto 13662-02-12 08:52 G 6711045.66 6711045.87 6711046.09 0.0077 0.0020

Pluto 13662-09-25 17:31 G 6711271.08 6711271.23 6711271.43 0.0076 0.0047

Jupiter 13665-08-16 06:28 G 6712326.57 6712326.77 6712326.98 0.0489 0.0068

Earth 13668-09-18 03:21 G 6713455.49 6713455.64 6713455.78 0.2681 0.1027

Moon 13668-09-18 08:38 G 6713455.70 6713455.86 6713456.02 0.2678 0.0761 *

Saturn 13674-10-24 14:38 G 6715682.93 6715683.11 6715683.30 0.0283 0.0130

Saturn 13675-06-11 05:45 G 6715912.54 6715912.74 6715912.94 0.0283 0.0091

Jupiter 13677-04-21 11:16 G 6716592.90 6716592.97 6716593.05 0.0490 0.0455

Jupiter 13683-10-12 17:31 G 6718958.06 6718958.23 6718958.41 0.0540 0.0256

Mars 13687-03-26 07:12 G 6720218.64 6720218.80 6720218.95 0.1609 0.0712

Saturn 13689-04-08 16:19 G 6720963.01 6720963.18 6720963.36 0.0276 0.0161

Saturn 13689-11-24 01:26 G 6721192.35 6721192.56 6721192.77 0.0276 0.0043

Saturn 13690-07-11 10:19 G 6721421.83 6721421.93 6721422.02 0.0275 0.0245

Jupiter 13695-06-17 04:48 G 6723223.53 6723223.70 6723223.88 0.0539 0.0282

Uranus 13696-02-07 02:52 G 6723458.50 6723458.62 6723458.77 0.0134 0.0104

Uranus 13696-09-20 08:38 G 6723684.68 6723684.86 6723685.06 0.0134 0.0064

Uranus 13697-05-04 14:24 G 6723910.89 6723911.10 6723911.32 0.0134 0.0024

Uranus 13697-12-16 20:09 G 6724137.13 6724137.34 6724137.56 0.0134 0.0017

Uranus 13698-07-31 01:55 G 6724363.39 6724363.58 6724363.78 0.0134 0.0057

Uranus 13699-03-14 07:40 G 6724589.68 6724589.82 6724589.97 0.0134 0.0097

Jupiter 13701-04-24 16:48 G 6725361.01 6725361.20 6725361.40 0.0488 0.0169

Saturn 13704-05-06 18:43 G 6726469.09 6726469.28 6726469.48 0.0283 0.0103

Saturn 13704-12-22 09:21 G 6726698.70 6726698.89 6726699.08 0.0283 0.0117

Jupiter 13712-12-28 22:04 G 6729627.24 6729627.42 6729627.61 0.0489 0.0217

Saturn 13718-10-20 15:50 G 6731748.98 6731749.16 6731749.34 0.0276 0.0145

Saturn 13719-06-07 00:43 G 6731978.33 6731978.53 6731978.74 0.0275 0.0059

Saturn 13720-01-22 09:36 G 6732207.83 6732207.90 6732207.96 0.0275 0.0260

Mars 13721-01-23 04:04 G 6732574.52 6732574.67 6732574.83 0.1603 0.0712

Mars 13723-10-31 09:21 G 6733585.76 6733585.89 6733586.02 0.1934 0.1272

Neptune 13726-03-19 04:04 G 6734455.65 6734455.67 6734455.69 0.0089 0.0089

Neptune 13726-10-30 17:16 G 6734681.08 6734681.22 6734681.36 0.0089 0.0069

Neptune 13727-06-13 06:00 G 6734906.59 6734906.75 6734906.96 0.0089 0.0050

Neptune 13728-01-24 19:55 G 6735132.12 6735132.33 6735132.54 0.0089 0.0029

Neptune 13728-09-06 09:07 G 6735357.66 6735357.88 6735358.10 0.0089 0.0009

Neptune 13729-04-19 22:19 G 6735583.22 6735583.43 6735583.65 0.0089 0.0012

Neptune 13729-12-01 11:45 G 6735808.79 6735808.99 6735809.20 0.0089 0.0031

Neptune 13730-07-15 00:57 G 6736034.37 6736034.54 6736034.73 0.0089 0.0052

Jupiter 13731-02-24 03:21 G 6736258.44 6736258.64 6736258.84 0.0540 0.0054

Neptune 13731-02-25 14:09 G 6736259.97 6736260.09 6736260.23 0.0089 0.0072

Saturn 13733-11-16 20:38 G 6737255.16 6737255.36 6737255.57 0.0283 0.0082

Saturn 13734-07-04 11:31 G 6737484.81 6737484.98 6737485.17 0.0283 0.0140

Jupiter 13736-12-31 01:55 G 6738395.46 6738395.58 6738395.70 0.0487 0.0395

Uranus 13737-01-04 14:09 G 6738400.01 6738400.09 6738400.21 0.0145 0.0128

Uranus 13737-08-19 02:38 G 6738626.43 6738626.61 6738626.80 0.0144 0.0077

Uranus 13738-04-02 14:24 G 6738852.89 6738853.10 6738853.32 0.0144 0.0026

Uranus 13738-11-15 02:24 G 6739079.38 6739079.60 6739079.81 0.0144 0.0025

Uranus 13739-06-29 13:55 G 6739305.90 6739306.08 6739306.27 0.0144 0.0075

Uranus 13740-02-11 01:26 G 6739532.47 6739532.56 6739532.68 0.0144 0.0125

Jupiter 13742-10-29 11:31 G 6740523.91 6740523.98 6740524.06 0.0538 0.0498

Saturn 13748-05-01 23:31 G 6742535.29 6742535.48 6742535.67 0.0276 0.0111

Jupiter 13748-09-05 07:40 G 6742661.61 6742661.82 6742662.02 0.0489 0.0017

Saturn 13748-12-17 08:38 G 6742764.67 6742764.86 6742765.07 0.0276 0.0093

Mars 13753-01-21 19:40 G 6744261.16 6744261.32 6744261.48 0.1607 0.0552

Mars 13755-10-31 12:57 G 6745273.96 6745274.04 6745274.12 0.1926 0.1712

Jupiter 13760-05-11 12:14 G 6746927.88 6746928.01 6746928.14 0.0490 0.0374

Saturn 13762-10-12 11:45 G 6747811.93 6747811.99 6747812.05 0.0282 0.0271

Saturn 13763-05-30 01:55 G 6748041.38 6748041.58 6748041.79 0.0283 0.0053

Saturn 13764-01-14 16:19 G 6748271.02 6748271.18 6748271.36 0.0283 0.0168

Jupiter 13766-11-01 19:55 G 6749293.18 6749293.33 6749293.49 0.0541 0.0357

Earth 13774-03-24 00:14 G 6751992.35 6751992.51 6751992.66 0.2651 0.0310

Moon 13774-03-24 04:33 G 6751992.55 6751992.69 6751992.84 0.2648 0.1063 *

Saturn 13777-11-11 23:02 G 6753321.27 6753321.46 6753321.67 0.0276 0.0096

Saturn 13778-06-29 08:09 G 6753550.65 6753550.84 6753551.04 0.0275 0.0108

Jupiter 13778-07-07 09:07 G 6753558.69 6753558.88 6753559.07 0.0539 0.0171

Uranus 13779-10-08 12:00 G 6754016.93 6754017.00 6754017.10 0.0134 0.0122

Uranus 13780-05-21 17:45 G 6754243.07 6754243.24 6754243.42 0.0134 0.0082

Uranus 13781-01-02 23:31 G 6754469.28 6754469.48 6754469.69 0.0134 0.0042

Uranus 13781-08-17 05:16 G 6754695.50 6754695.72 6754695.94 0.0134 0.0002

Uranus 13782-03-31 10:48 G 6754921.75 6754921.95 6754922.16 0.0134 0.0038

Uranus 13782-11-12 16:19 G 6755148.01 6755148.18 6755148.37 0.0134 0.0079

Uranus 13783-06-26 22:04 G 6755374.33 6755374.42 6755374.53 0.0134 0.0119

Jupiter 13784-05-13 16:33 G 6755696.01 6755696.19 6755696.36 0.0488 0.0242

Mars 13786-11-20 17:02 G 6756617.06 6756617.21 6756617.35 0.1601 0.0868

Mars 13789-08-27 10:48 G 6757627.91 6757627.95 6757627.99 0.1936 0.1879

Saturn 13792-04-23 12:28 G 6758597.93 6758598.02 6758598.12 0.0283 0.0251

Saturn 13792-12-09 03:07 G 6758827.42 6758827.63 6758827.84 0.0283 0.0032

Saturn 13793-07-26 17:45 G 6759057.09 6759057.24 6759057.40 0.0283 0.0189

Jupiter 13796-01-17 21:36 G 6759962.21 6759962.40 6759962.60 0.0489 0.0144

Saturn 13806-10-08 20:52 G 6763878.33 6763878.37 6763878.43 0.0277 0.0267

Saturn 13807-05-26 06:43 G 6764107.57 6764107.78 6764107.98 0.0276 0.0063

Neptune 13807-09-23 09:36 G 6764227.89 6764227.90 6764227.95 0.0088 0.0087

Saturn 13808-01-10 15:50 G 6764336.98 6764337.16 6764337.35 0.0276 0.0142

Neptune 13808-05-05 22:19 G 6764453.31 6764453.43 6764453.59 0.0088 0.0068

Neptune 13808-12-17 11:31 G 6764678.80 6764678.98 6764679.16 0.0088 0.0048

Neptune 13809-07-31 00:14 G 6764904.31 6764904.51 6764904.72 0.0088 0.0029

Neptune 13810-03-13 12:57 G 6765129.83 6765130.04 6765130.26 0.0088 0.0010

Neptune 13810-10-25 01:40 G 6765355.35 6765355.57 6765355.79 0.0088 0.0009

Neptune 13811-06-07 14:09 G 6765580.90 6765581.09 6765581.31 0.0088 0.0029

Neptune 13812-01-19 02:52 G 6765806.45 6765806.62 6765806.82 0.0088 0.0048

Neptune 13812-08-31 15:21 G 6766032.02 6766032.14 6766032.30 0.0088 0.0067

Neptune 13813-04-14 04:04 G 6766257.64 6766257.67 6766257.73 0.0088 0.0086

Jupiter 13814-03-16 00:57 G 6766593.35 6766593.54 6766593.74 0.0540 0.0126

Mars 13818-11-20 08:09 G 6768303.67 6768303.84 6768304.01 0.1606 0.0385

Jupiter 13820-01-21 02:09 G 6768730.56 6768730.59 6768730.64 0.0487 0.0476

Uranus 13821-04-19 08:09 G 6769184.69 6769184.84 6769185.00 0.0145 0.0101

Mars 13821-08-28 14:52 G 6769315.98 6769316.12 6769316.26 0.1929 0.1138

Pluto 13821-10-06 22:33 G 6769355.26 6769355.44 6769355.65 0.0068 0.0031

Saturn 13821-11-04 18:57 G 6769384.17 6769384.29 6769384.43 0.0282 0.0221

Uranus 13821-12-01 19:55 G 6769411.14 6769411.33 6769411.55 0.0144 0.0051

Pluto 13822-05-20 04:04 G 6769580.46 6769580.67 6769580.89 0.0068 0.0015

Saturn 13822-06-22 09:21 G 6769613.68 6769613.89 6769614.10 0.0283 0.0003

Uranus 13822-07-16 08:09 G 6769637.62 6769637.84 6769638.06 0.0144 0.0001

Pluto 13822-12-31 09:21 G 6769805.81 6769805.89 6769805.99 0.0068 0.0062

Saturn 13823-02-06 23:45 G 6769843.36 6769843.49 6769843.63 0.0283 0.0218

Uranus 13823-02-27 19:40 G 6769864.13 6769864.32 6769864.53 0.0144 0.0051

Uranus 13823-10-12 07:12 G 6770090.66 6770090.80 6770090.97 0.0144 0.0101

Jupiter 13825-11-18 13:12 G 6770858.92 6770859.05 6770859.19 0.0538 0.0404

Jupiter 13831-09-26 07:55 G 6772996.63 6772996.83 6772997.03 0.0488 0.0093

Saturn 13836-04-19 21:07 G 6774664.30 6774664.38 6774664.48 0.0276 0.0249

Saturn 13836-12-05 06:43 G 6774893.58 6774893.78 6774894.00 0.0276 0.0046

Saturn 13837-07-22 15:50 G 6775122.99 6775123.16 6775123.34 0.0275 0.0158

Jupiter 13843-06-01 11:45 G 6777262.83 6777262.99 6777263.16 0.0490 0.0300

Jupiter 13849-11-21 23:16 G 6779628.37 6779628.47 6779628.58 0.0541 0.0463

Saturn 13851-05-17 19:40 G 6780170.18 6780170.32 6780170.48 0.0283 0.0201

Saturn 13852-01-02 10:19 G 6780399.72 6780399.93 6780400.14 0.0283 0.0019

Saturn 13852-08-19 00:43 G 6780629.43 6780629.53 6780629.65 0.0283 0.0239

Mars 13852-09-18 05:31 G 6780659.60 6780659.73 6780659.87 0.1600 0.1029

Jupiter 13861-07-27 07:55 G 6783893.63 6783893.83 6783894.03 0.0539 0.0092

Uranus 13864-01-21 02:24 G 6784801.47 6784801.60 6784801.75 0.0134 0.0101

Uranus 13864-09-03 07:55 G 6785027.65 6785027.83 6785028.03 0.0134 0.0062

Uranus 13865-04-17 13:40 G 6785253.86 6785254.07 6785254.29 0.0134 0.0021

Saturn 13865-10-31 04:04 G 6785450.55 6785450.67 6785450.80 0.0277 0.0219

Uranus 13865-11-29 19:12 G 6785480.09 6785480.30 6785480.52 0.0134 0.0019

Saturn 13866-06-17 13:55 G 6785679.87 6785680.08 6785680.29 0.0276 0.0014

Uranus 13866-07-14 00:43 G 6785706.35 6785706.53 6785706.74 0.0134 0.0059

Saturn 13867-02-01 23:02 G 6785909.31 6785909.46 6785909.62 0.0276 0.0191

Uranus 13867-02-25 06:28 G 6785932.64 6785932.77 6785932.93 0.0134 0.0099

Jupiter 13867-06-03 16:48 G 6786031.05 6786031.20 6786031.35 0.0488 0.0321

Jupiter 13879-02-06 21:36 G 6790297.20 6790297.40 6790297.61 0.0489 0.0066

Saturn 13880-11-27 03:36 G 6790956.48 6790956.65 6790956.82 0.0282 0.0168

Saturn 13881-07-14 17:45 G 6791186.03 6791186.24 6791186.45 0.0283 0.0051

Saturn 13882-03-01 07:55 G 6791415.78 6791415.83 6791415.90 0.0283 0.0270

Mars 13884-09-16 21:07 G 6792346.20 6792346.38 6792346.55 0.1604 0.0234

Mars 13887-06-25 16:19 G 6793358.02 6793358.18 6793358.35 0.1931 0.0553

Jupiter 13890-10-13 02:24 G 6794563.53 6794563.60 6794563.68 0.0491 0.0455

Neptune 13891-02-02 04:19 G 6794675.58 6794675.68 6794675.81 0.0089 0.0076

Neptune 13891-09-15 17:31 G 6794901.08 6794901.23 6794901.42 0.0089 0.0057

Neptune 13892-04-28 06:57 G 6795126.60 6795126.79 6795127.00 0.0089 0.0036

Neptune 13892-12-09 20:24 G 6795352.14 6795352.35 6795352.57 0.0089 0.0016

Neptune 13893-07-23 09:50 G 6795577.69 6795577.91 6795578.13 0.0089 0.0004

Neptune 13894-03-05 22:48 G 6795803.25 6795803.45 6795803.67 0.0089 0.0024

Neptune 13894-10-17 11:45 G 6796028.82 6796028.99 6796029.20 0.0089 0.0045

Saturn 13895-05-13 05:16 G 6796236.58 6796236.72 6796236.87 0.0276 0.0200

Neptune 13895-05-31 00:57 G 6796254.41 6796254.54 6796254.72 0.0089 0.0065

Saturn 13895-12-28 15:07 G 6796465.91 6796466.13 6796466.34 0.0276 0.0007

Neptune 13896-01-11 14:24 G 6796480.05 6796480.10 6796480.20 0.0089 0.0085

Saturn 13896-08-14 00:00 G 6796695.37 6796695.50 6796695.64 0.0276 0.0209

Jupiter 13897-04-04 04:19 G 6796928.49 6796928.68 6796928.86 0.0540 0.0232

Moon 13903-09-24 07:40 G 6799291.71 6799291.82 6799291.93 0.2678 0.1969

Earth 13903-09-24 12:43 G 6799292.01 6799292.03 6799292.06 0.2681 0.2643

Uranus 13904-12-18 13:55 G 6799742.98 6799743.08 6799743.19 0.0145 0.0125

Uranus 13905-08-02 01:55 G 6799969.40 6799969.58 6799969.78 0.0145 0.0074

Uranus 13906-03-16 13:55 G 6800195.87 6800196.08 6800196.30 0.0144 0.0024

Uranus 13906-10-29 01:40 G 6800422.36 6800422.57 6800422.79 0.0144 0.0027

Uranus 13907-06-12 13:12 G 6800648.88 6800649.05 6800649.25 0.0144 0.0077

Pluto 13907-08-03 11:31 G 6800700.89 6800700.98 6800701.13 0.0077 0.0065

Uranus 13908-01-25 00:43 G 6800875.45 6800875.53 6800875.65 0.0144 0.0127

Pluto 13908-03-15 21:21 G 6800926.17 6800926.39 6800926.61 0.0077 0.0003

Pluto 13908-10-27 05:45 G 6801151.67 6801151.74 6801151.86 0.0076 0.0070

Jupiter 13908-12-08 16:19 G 6801194.02 6801194.18 6801194.35 0.0538 0.0300

Saturn 13910-06-10 04:04 G 6801742.50 6801742.67 6801742.86 0.0283 0.0148

Saturn 13911-01-25 18:28 G 6801972.06 6801972.27 6801972.47 0.0283 0.0071

Moon 13911-09-21 20:52 G 6802211.25 6802211.37 6802211.50 0.2684 0.1591

Earth 13911-09-22 02:52 G 6802211.48 6802211.62 6802211.76 0.2682 0.1330 *

Jupiter 13914-10-16 06:43 G 6803331.59 6803331.78 6803331.98 0.0488 0.0164

Mars 13916-09-16 12:43 G 6804032.98 6804033.03 6804033.09 0.1609 0.1514

Mars 13918-07-17 18:28 G 6804702.16 6804702.27 6804702.39 0.1599 0.1182

Saturn 13924-11-23 12:00 G 6807022.84 6807023.00 6807023.17 0.0277 0.0169

Saturn 13925-07-10 21:50 G 6807252.20 6807252.41 6807252.62 0.0277 0.0037

Saturn 13926-02-25 07:12 G 6807481.70 6807481.80 6807481.90 0.0276 0.0241

Jupiter 13926-06-21 11:16 G 6807597.79 6807597.97 6807598.15 0.0490 0.0226

Jupiter 13932-12-11 20:38 G 6809963.33 6809963.36 6809963.39 0.0541 0.0533

Saturn 13939-12-21 13:12 G 6812528.86 6812529.05 6812529.25 0.0282 0.0114

Saturn 13940-08-07 03:21 G 6812758.44 6812758.64 6812758.83 0.0282 0.0105

Jupiter 13944-08-16 07:55 G 6814228.63 6814228.83 6814229.03 0.0539 0.0006

Uranus 13947-09-21 11:16 G 6815359.89 6815359.97 6815360.08 0.0134 0.0120

Uranus 13948-05-04 17:02 G 6815586.04 6815586.21 6815586.39 0.0134 0.0080

Uranus 13948-12-16 22:48 G 6815812.24 6815812.45 6815812.66 0.0134 0.0040

Uranus 13949-07-31 04:19 G 6816038.46 6816038.68 6816038.90 0.0134 0.0000

Uranus 13950-03-14 09:36 G 6816264.70 6816264.90 6816265.12 0.0134 0.0041

Jupiter 13950-06-23 16:04 G 6816366.06 6816366.17 6816366.29 0.0488 0.0395

Mars 13950-07-16 09:36 G 6816388.72 6816388.90 6816389.07 0.1603 0.0074

Uranus 13950-10-26 15:07 G 6816490.97 6816491.13 6816491.32 0.0134 0.0081

Uranus 13951-06-09 20:52 G 6816717.29 6816717.37 6816717.48 0.0134 0.0120

Mars 13953-04-22 17:45 G 6817400.07 6817400.24 6817400.42 0.1934 0.0058

Saturn 13954-06-05 14:09 G 6817808.92 6817809.09 6817809.28 0.0276 0.0148

Saturn 13955-01-21 00:00 G 6818038.29 6818038.50 6818038.71 0.0276 0.0057

Saturn 13955-09-07 09:07 G 6818267.81 6818267.88 6818267.95 0.0276 0.0260

Jupiter 13956-04-20 20:52 G 6818494.34 6818494.37 6818494.40 0.0537 0.0530

Jupiter 13962-02-26 20:24 G 6820632.15 6820632.35 6820632.56 0.0489 0.0010

Saturn 13969-07-02 13:55 G 6823314.89 6823315.08 6823315.28 0.0282 0.0094

Saturn 13970-02-17 04:04 G 6823544.48 6823544.67 6823544.86 0.0283 0.0126

Neptune 13972-08-08 09:50 G 6824447.81 6824447.91 6824448.04 0.0088 0.0075

Neptune 13973-03-21 22:33 G 6824673.29 6824673.44 6824673.63 0.0088 0.0056

Jupiter 13973-11-02 00:43 G 6824898.41 6824898.53 6824898.66 0.0491 0.0387

Neptune 13973-11-02 11:16 G 6824898.79 6824898.97 6824899.19 0.0088 0.0037

Neptune 13974-06-16 00:28 G 6825124.31 6825124.52 6825124.74 0.0088 0.0017

Neptune 13975-01-27 13:12 G 6825349.84 6825350.05 6825350.28 0.0088 0.0003

Neptune 13975-09-10 01:55 G 6825575.37 6825575.58 6825575.80 0.0088 0.0021

Neptune 13976-04-22 14:38 G 6825800.92 6825801.11 6825801.31 0.0088 0.0041

Neptune 13976-12-04 02:52 G 6826026.48 6826026.62 6826026.80 0.0088 0.0060

Neptune 13977-07-17 15:50 G 6826252.08 6826252.16 6826252.27 0.0088 0.0079

Jupiter 13980-04-24 02:52 G 6827263.46 6827263.62 6827263.79 0.0540 0.0312

Mars 13982-07-15 01:12 G 6828075.46 6828075.55 6828075.64 0.1608 0.1344

Saturn 13983-12-16 20:24 G 6828595.17 6828595.35 6828595.55 0.0277 0.0119

Mars 13984-05-14 06:57 G 6828744.70 6828744.79 6828744.88 0.1598 0.1345

Saturn 13984-08-02 06:28 G 6828824.57 6828824.77 6828824.97 0.0277 0.0088

Uranus 13989-04-01 07:26 G 6830527.67 6830527.81 6830527.99 0.0145 0.0099

Uranus 13989-11-13 19:40 G 6830754.12 6830754.32 6830754.53 0.0145 0.0048

Uranus 13990-06-28 07:40 G 6830980.60 6830980.82 6830981.04 0.0144 0.0003

Uranus 13991-02-09 19:12 G 6831207.11 6831207.30 6831207.51 0.0144 0.0053

Uranus 13991-09-24 06:43 G 6831433.64 6831433.78 6831433.94 0.0144 0.0103

Jupiter 13991-12-28 13:40 G 6831528.88 6831529.07 6831529.25 0.0538 0.0230

Jupiter 13997-11-04 05:02 G 6833666.53 6833666.71 6833666.89 0.0489 0.0234

Saturn 13998-05-28 10:33 G 6833871.90 6833871.94 6833871.99 0.0282 0.0274

Saturn 13999-01-13 00:14 G 6834101.30 6834101.51 6834101.72 0.0282 0.0058

Saturn 13999-08-30 13:55 G 6834330.92 6834331.08 6834331.26 0.0282 0.0162

15TH MILLENNIUM CE

This is a list of transits of Venus in the 15th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**14009-07-10 10:19**	**G**	**6837932.73**	**6837932.93**	**6837933.12**	**0.0490**	**0.0153**	
Saturn	**14013-06-28 00:14**	**G**	**6839381.31**	**6839381.51**	**6839381.71**	**0.0276**	**0.0095**	
Saturn	**14014-02-12 09:50**	**G**	**6839610.72**	**6839610.91**	**6839611.11**	**0.0276**	**0.0110**	
Mars	**14016-05-12 22:19**	**G**	**6840431.26**	**6840431.43**	**6840431.60**	**0.1602**	**0.0089**	
Moon	**14017-03-25 21:36**	**G**	**6840748.24**	**6840748.40**	**6840748.56**	**0.2651**	**0.0301**	
Earth	**14017-03-26 02:52**	**G**	**6840748.46**	**6840748.62**	**6840748.78**	**0.2650**	**0.0375**	*****
Mars	**14019-02-17 19:55**	**G**	**6841442.16**	**6841442.33**	**6841442.50**	**0.1936**	**0.0640**	
Jupiter	**14027-09-05 09:50**	**G**	**6844563.71**	**6844563.91**	**6844564.11**	**0.0539**	**0.0093**	
Saturn	**14027-12-08 11:16**	**G**	**6844657.89**	**6844657.97**	**6844658.07**	**0.0282**	**0.0253**	
Saturn	**14028-07-25 01:12**	**G**	**6844887.34**	**6844887.55**	**6844887.76**	**0.0282**	**0.0036**	
Saturn	**14029-03-11 15:07**	**G**	**6845116.97**	**6845117.13**	**6845117.30**	**0.0283**	**0.0183**	
Uranus	**14032-01-03 01:40**	**G**	**6846144.44**	**6846144.57**	**6846144.73**	**0.0134**	**0.0099**	
Uranus	**14032-08-16 07:26**	**G**	**6846370.62**	**6846370.81**	**6846371.01**	**0.0134**	**0.0059**	
Uranus	**14033-03-30 12:57**	**G**	**6846596.82**	**6846597.04**	**6846597.26**	**0.0134**	**0.0019**	
Jupiter	**14033-07-12 13:55**	**G**	**6846701.02**	**6846701.08**	**6846701.15**	**0.0488**	**0.0461**	
Uranus	**14033-11-11 18:28**	**G**	**6846823.05**	**6846823.27**	**6846823.48**	**0.0134**	**0.0020**	
Uranus	**14034-06-26 00:00**	**G**	**6847049.31**	**6847049.50**	**6847049.70**	**0.0134**	**0.0060**	
Uranus	**14035-02-07 05:45**	**G**	**6847275.60**	**6847275.74**	**6847275.89**	**0.0134**	**0.0100**	

Jupiter 14039-05-10 19:55 G 6848829.22 6848829.33 6848829.44 0.0537 0.0447

Saturn 14042-05-23 19:40 G 6849938.29 6849938.32 6849938.36 0.0277 0.0273

Saturn 14043-01-08 06:00 G 6850167.55 6850167.75 6850167.96 0.0277 0.0067

Saturn 14043-08-25 16:04 G 6850396.99 6850397.17 6850397.35 0.0277 0.0140

Jupiter 14045-03-17 18:00 G 6850967.05 6850967.25 6850967.45 0.0490 0.0071

Mars 14048-05-11 13:55 G 6852117.96 6852118.08 6852118.19 0.1606 0.1184

Mars 14050-03-11 20:09 G 6852787.28 6852787.34 6852787.40 0.1597 0.1495

Neptune 14055-05-07 15:21 G 6854670.10 6854670.14 6854670.24 0.0089 0.0085

Neptune 14055-12-19 04:48 G 6854895.57 6854895.70 6854895.88 0.0089 0.0065

Neptune 14056-07-31 18:14 G 6855121.09 6855121.26 6855121.47 0.0089 0.0044

Jupiter 14056-11-20 22:04 G 6855233.27 6855233.42 6855233.58 0.0491 0.0322

Neptune 14057-03-14 07:40 G 6855346.61 6855346.82 6855347.04 0.0089 0.0024

Saturn 14057-06-19 22:33 G 6855444.31 6855444.44 6855444.58 0.0282 0.0216

Neptune 14057-10-25 20:52 G 6855572.16 6855572.37 6855572.60 0.0089 0.0004

Saturn 14058-02-04 12:14 G 6855673.80 6855674.01 6855674.23 0.0282 0.0005

Neptune 14058-06-08 10:04 G 6855797.71 6855797.92 6855798.14 0.0089 0.0016

Saturn 14058-09-22 02:09 G 6855903.47 6855903.59 6855903.73 0.0282 0.0219

Neptune 14059-01-19 23:16 G 6856023.28 6856023.47 6856023.68 0.0089 0.0037

Neptune 14059-09-02 12:28 G 6856248.87 6856249.02 6856249.21 0.0089 0.0057

Neptune 14060-04-15 01:40 G 6856474.48 6856474.57 6856474.70 0.0089 0.0077

Jupiter 14063-05-14 00:43 G 6857598.39 6857598.53 6857598.67 0.0540 0.0387

Pluto 14067-03-26 06:28 G 6859010.64 6859010.77 6859010.90 0.0068 0.0054

Pluto 14067-11-06 11:31 G 6859235.77 6859235.98 6859236.21 0.0068 0.0009

Pluto 14068-06-18 16:33 G 6859461.03 6859461.19 6859461.40 0.0068 0.0038

Saturn 14071-12-04 00:57 G 6860724.45 6860724.54 6860724.64 0.0277 0.0246

Saturn 14072-07-20 11:02 G 6860953.75 6860953.96 6860954.17 0.0276 0.0040

Uranus 14072-11-29 13:26 G 6861085.96 6861086.06 6861086.19 0.0145 0.0122

Saturn 14073-03-06 20:38 G 6861183.19 6861183.36 6861183.53 0.0276 0.0165

Uranus 14073-07-14 01:40 G 6861312.39 6861312.57 6861312.77 0.0145 0.0071

Uranus 14074-02-25 13:40 G 6861538.86 6861539.07 6861539.29 0.0145 0.0021

Uranus 14074-10-10 01:26 G 6861765.35 6861765.56 6861765.77 0.0144 0.0029

Jupiter 14075-01-16 13:12 G 6861863.86 6861864.05 6861864.25 0.0539 0.0145

Uranus 14075-05-24 12:57 G 6861991.86 6861992.04 6861992.23 0.0144 0.0079

Uranus 14076-01-06 00:28 G 6862218.44 6862218.52 6862218.62 0.0144 0.0129

Jupiter 14080-11-23 02:52 G 6864001.46 6864001.62 6864001.78 0.0488 0.0299

Mars 14082-03-10 11:02 G 6864473.79 6864473.96 6864474.14 0.1600 0.0251

Mars 14084-12-14 21:07 G 6865484.25 6865484.38 6865484.52 0.1938 0.1254

Saturn 14086-12-31 00:00 G 6866230.35 6866230.50 6866230.66 0.0282 0.0194

Saturn 14087-08-17 13:40 G 6866459.86 6866460.07 6866460.28 0.0282 0.0024

Saturn 14088-04-03 03:36 G 6866689.55 6866689.65 6866689.76 0.0283 0.0242

Jupiter 14092-07-29 07:26 G 6868267.61 6868267.81 6868268.01 0.0490 0.0091

Saturn 14101-06-16 06:14 G 6871510.64 6871510.76 6871510.89 0.0277 0.0219

Saturn 14102-01-31 16:33 G 6871739.98 6871740.19 6871740.40 0.0277 0.0012

Saturn 14102-09-18 02:24 G 6871969.45 6871969.60 6871969.75 0.0277 0.0194

Jupiter 14104-04-04 10:04 G 6872533.92 6872533.92 6872533.93 0.0492 0.0492

Jupiter 14110-09-25 06:28 G 6874898.57 6874898.77 6874898.96 0.0539 0.0161

Mars 14114-03-10 02:24 G 6876160.46 6876160.60 6876160.73 0.1605 0.1016

Uranus 14115-09-03 11:02 G 6876702.87 6876702.96 6876703.08 0.0134 0.0117

Uranus 14116-04-16 16:48 G 6876929.03 6876929.20 6876929.38 0.0134 0.0077

Saturn 14116-07-13 11:31 G 6877016.81 6877016.98 6877017.16 0.0282 0.0157

Uranus 14116-11-28 22:04 G 6877155.22 6877155.42 6877155.64 0.0134 0.0038

Mars 14116-12-16 02:09 G 6877172.54 6877172.59 6877172.65 0.1931 0.1823

Saturn 14117-02-28 01:12 G 6877246.35 6877246.55 6877246.76 0.0282 0.0062

Uranus 14117-07-13 03:50 G 6877381.44 6877381.66 6877381.88 0.0134 0.0002

Saturn 14117-10-15 15:07 G 6877476.11 6877476.13 6877476.17 0.0282 0.0279

Uranus 14118-02-24 09:21 G 6877607.69 6877607.89 6877608.10 0.0134 0.0042

Uranus 14118-10-08 14:52 G 6877833.96 6877834.12 6877834.30 0.0134 0.0082

Uranus 14119-05-22 20:24 G 6878060.28 6878060.35 6878060.45 0.0134 0.0122

Jupiter 14122-05-30 16:19 G 6879164.04 6879164.18 6879164.33 0.0537 0.0383

Jupiter 14128-04-06 15:50 G 6881301.97 6881302.16 6881302.36 0.0489 0.0138

Saturn 14130-12-27 12:57 G 6882296.89 6882297.04 6882297.20 0.0277 0.0189

Saturn 14131-08-13 23:02 G 6882526.24 6882526.46 6882526.67 0.0276 0.0018

Saturn 14132-03-30 08:24 G 6882755.73 6882755.85 6882755.98 0.0276 0.0221

Neptune 14136-11-10 20:38 G 6884442.31 6884442.36 6884442.45 0.0088 0.0083

Neptune 14137-06-24 09:21 G 6884667.77 6884667.89 6884668.07 0.0088 0.0065

Neptune 14138-02-04 22:33 G 6884893.26 6884893.44 6884893.64 0.0088 0.0045

Neptune 14138-09-18 11:16 G 6885118.77 6885118.97 6885119.19 0.0088 0.0025

Neptune 14139-05-02 00:00 G 6885344.29 6885344.50 6885344.73 0.0088 0.0006

Jupiter 14139-12-11 19:40 G 6885568.15 6885568.32 6885568.50 0.0491 0.0258

Neptune 14139-12-13 12:57 G 6885569.82 6885570.04 6885570.26 0.0088 0.0013

Neptune 14140-07-26 01:26 G 6885795.37 6885795.56 6885795.78 0.0088 0.0033

Neptune 14141-03-08 14:09 G 6886020.93 6886021.09 6886021.28 0.0088 0.0052

Neptune 14141-10-20 02:52 G 6886246.50 6886246.62 6886246.76 0.0088 0.0071

Saturn 14146-01-23 13:26 G 6887802.88 6887803.06 6887803.25 0.0282 0.0133

Jupiter 14146-06-03 01:26 G 6887933.47 6887933.56 6887933.66 0.0540 0.0480

Saturn 14146-09-10 03:07 G 6888032.43 6888032.63 6888032.84 0.0282 0.0085

Earth 14146-09-25 12:00 G 6888047.93 6888048.00 6888048.08 0.2682 0.2336

Moon 14146-09-25 15:36 G 6888048.10 6888048.15 6888048.19 0.2687 0.2556

Mars 14148-01-06 23:45 G 6888516.33 6888516.49 6888516.66 0.1599 0.0408

Mars 14150-10-12 23:31 G 6889526.42 6889526.48 6889526.53 0.1940 0.1842

Pluto 14153-09-02 02:52 G 6890581.42 6890581.62 6890581.82 0.0077 0.0032

Pluto 14154-04-15 11:31 G 6890806.80 6890806.98 6890807.19 0.0076 0.0035

Earth 14154-09-23 02:09 G 6890967.47 6890967.59 6890967.72 0.2683 0.1626

Moon 14154-09-23 08:09 G 6890967.70 6890967.84 6890967.98 0.2683 0.1252 *

Uranus 14157-03-14 07:26 G 6891870.65 6891870.81 6891870.98 0.0145 0.0095

Uranus 14157-10-26 19:12 G 6892097.10 6892097.30 6892097.52 0.0145 0.0045

Jupiter 14158-02-05 12:14 G 6892198.81 6892199.01 6892199.21 0.0538 0.0062

Uranus 14158-06-10 07:12 G 6892323.59 6892323.80 6892324.02 0.0145 0.0006

Uranus 14159-01-22 18:43 G 6892550.09 6892550.28 6892550.50 0.0144 0.0057

Uranus 14159-09-06 06:28 G 6892776.64 6892776.77 6892776.93 0.0144 0.0106

Saturn 14160-07-08 17:31 G 6893083.06 6893083.23 6893083.40 0.0277 0.0163

Saturn 14161-02-23 03:36 G 6893312.44 6893312.65 6893312.86 0.0277 0.0044

Saturn 14161-10-10 13:12 G 6893541.97 6893542.05 6893542.15 0.0277 0.0249

Jupiter 14163-12-13 22:48 G 6894336.32 6894336.45 6894336.60 0.0489 0.0359

Saturn 14175-08-06 01:12 G 6898589.35 6898589.55 6898589.75 0.0282 0.0095

Jupiter 14175-08-19 03:21 G 6898602.44 6898602.64 6898602.85 0.0490 0.0033

Saturn 14176-03-22 14:52 G 6898818.94 6898819.12 6898819.32 0.0282 0.0123

Mars 14180-01-05 15:07 G 6900202.99 6900203.13 6900203.28 0.1603 0.0861

Mars 14182-10-13 04:04 G 6901214.53 6901214.67 6901214.80 0.1933 0.1235

Jupiter 14187-04-24 07:55 G 6902868.74 6902868.83 6902868.94 0.0492 0.0425

Saturn 14190-01-19 01:26 G 6903869.37 6903869.56 6903869.74 0.0277 0.0131

Saturn 14190-09-05 11:02 G 6904098.76 6904098.96 6904099.17 0.0276 0.0075

Jupiter 14193-10-14 03:50 G 6905233.48 6905233.66 6905233.85 0.0540 0.0236

Uranus 14199-12-16 01:55 G 6907487.43 6907487.58 6907487.74 0.0134 0.0095

Uranus 14200-07-30 07:12 G 6907713.61 6907713.80 6907714.01 0.0134 0.0056

Uranus 14201-03-13 12:57 G 6907939.82 6907940.04 6907940.25 0.0134 0.0016

Uranus 14201-10-25 18:14 G 6908166.05 6908166.26 6908166.48 0.0134 0.0024

Uranus 14202-06-09 00:00 G 6908392.31 6908392.50 6908392.69 0.0134 0.0064

Uranus 14203-01-21 05:45 G 6908618.60 6908618.74 6908618.88 0.0134 0.0103

Saturn 14205-02-16 03:21 G 6909375.44 6909375.64 6909375.85 0.0282 0.0071

Jupiter 14205-06-19 16:48 G 6909499.03 6909499.20 6909499.37 0.0538 0.0295

Saturn 14205-10-03 17:02 G 6909605.03 6909605.21 6909605.39 0.0282 0.0147

Jupiter 14211-04-27 12:28 G 6911636.84 6911637.02 6911637.21 0.0489 0.0198

Mars 14213-11-04 12:57 G 6912558.88 6912559.04 6912559.20 0.1598 0.0560

Saturn 14219-08-02 05:31 G 6914655.54 6914655.73 6914655.93 0.0277 0.0106

Saturn 14220-03-18 15:21 G 6914884.95 6914885.14 6914885.35 0.0277 0.0101

Neptune 14220-03-23 15:36 G 6914890.05 6914890.15 6914890.31 0.0089 0.0073

Neptune 14220-11-04 05:02 G 6915115.55 6915115.71 6915115.91 0.0089 0.0052

Neptune 14221-06-17 18:28 G 6915341.07 6915341.27 6915341.49 0.0089 0.0032

Neptune 14222-01-29 07:55 G 6915566.62 6915566.83 6915567.05 0.0089 0.0012

Neptune 14222-09-11 21:07 G 6915792.17 6915792.38 6915792.61 0.0089 0.0009

Jupiter 14222-12-31 15:21 G 6915902.96 6915903.14 6915903.33 0.0491 0.0202

Neptune 14223-04-25 10:19 G 6916017.73 6916017.93 6916018.15 0.0089 0.0028

Neptune 14223-12-06 23:31 G 6916243.31 6916243.48 6916243.68 0.0089 0.0049

Neptune 14224-07-19 12:43 G 6916468.90 6916469.03 6916469.18 0.0089 0.0069

Neptune 14225-03-02 01:55 G 6916694.57 6916694.58 6916694.62 0.0089 0.0089

Saturn 14234-01-12 00:57 G 6919932.45 6919932.54 6919932.64 0.0282 0.0250

Saturn 14234-08-29 14:38 G 6920161.90 6920162.11 6920162.32 0.0282 0.0034

Saturn 14235-04-16 04:19 G 6920391.53 6920391.68 6920391.85 0.0282 0.0185

Uranus 14240-11-12 12:57 G 6922428.94 6922429.04 6922429.18 0.0145 0.0119

Jupiter 14241-02-25 07:12 G 6922533.60 6922533.80 6922534.00 0.0538 0.0006

Uranus 14241-06-27 01:26 G 6922655.37 6922655.56 6922655.75 0.0145 0.0068

Uranus 14242-02-08 13:26 G 6922881.84 6922882.06 6922882.28 0.0145 0.0018

Uranus 14242-09-23 01:12 G 6923108.34 6923108.55 6923108.76 0.0144 0.0033

Uranus 14243-05-07 12:43 G 6923334.86 6923335.03 6923335.22 0.0144 0.0083

Uranus 14243-12-20 00:28 G 6923561.44 6923561.52 6923561.61 0.0144 0.0133

Mars 14245-11-03 03:50 G 6924245.50 6924245.66 6924245.81 0.1602 0.0697

Jupiter 14247-01-02 20:38 G 6924671.26 6924671.36 6924671.46 0.0488 0.0424

Mars 14248-08-10 05:31 G 6925256.57 6925256.73 6925256.90 0.1936 0.0639

Saturn 14249-02-11 13:55 G 6925441.88 6925442.08 6925442.29 0.0277 0.0072

Saturn 14249-09-28 23:31 G 6925671.30 6925671.48 6925671.67 0.0276 0.0133

Jupiter 14252-10-30 19:40 G 6926799.31 6926799.32 6926799.33 0.0536 0.0535

Jupiter 14258-09-08 00:57 G 6928937.34 6928937.54 6928937.75 0.0490 0.0034

Earth 14260-03-28 05:16 G 6929504.56 6929504.72 6929504.87 0.2649 0.0388

Moon 14260-03-28 10:33 G 6929504.79 6929504.94 6929505.09 0.2652 0.0793 *

Saturn 14263-07-25 03:36 G 6930718.53 6930718.65 6930718.78 0.0282 0.0225

Saturn 14264-03-10 17:16 G 6930948.00 6930948.22 6930948.43 0.0282 0.0010

Saturn 14264-10-26 06:57 G 6931177.65 6931177.79 6931177.93 0.0282 0.0209

Jupiter 14270-05-14 04:48 G 6933203.57 6933203.70 6933203.84 0.0491 0.0365

Jupiter 14276-11-03 03:50 G 6935568.50 6935568.66 6935568.82 0.0539 0.0322

Saturn 14278-01-07 06:43 G 6935998.72 6935998.78 6935998.88 0.0277 0.0255

Saturn 14278-08-24 17:16 G 6936228.01 6936228.22 6936228.43 0.0277 0.0049

Saturn 14279-04-11 03:07 G 6936457.46 6936457.63 6936457.81 0.0277 0.0157

Mars 14279-09-02 01:55 G 6936601.42 6936601.58 6936601.73 0.1597 0.0719

Uranus 14283-08-16 11:31 G 6938045.88 6938045.98 6938046.11 0.0133 0.0112

Uranus 14284-03-29 16:48 G 6938272.03 6938272.20 6938272.40 0.0134 0.0074

Uranus 14284-11-10 22:19 G 6938498.23 6938498.43 6938498.65 0.0134 0.0034

Uranus 14285-06-25 04:04 G 6938724.45 6938724.67 6938724.89 0.0134 0.0006

Uranus 14286-02-06 09:36 G 6938950.70 6938950.90 6938951.11 0.0134 0.0046

Uranus 14286-09-20 15:07 G 6939176.98 6939177.13 6939177.31 0.0134 0.0086

Uranus 14287-05-04 21:07 G 6939403.31 6939403.38 6939403.45 0.0134 0.0126

Jupiter 14288-07-08 14:24 G 6939833.92 6939834.10 6939834.29 0.0537 0.0221

Saturn 14293-02-03 13:40 G 6941504.92 6941505.07 6941505.23 0.0282 0.0190

Saturn 14293-09-21 03:21 G 6941734.43 6941734.64 6941734.85 0.0282 0.0027

Saturn 14294-05-08 17:16 G 6941964.12 6941964.22 6941964.33 0.0282 0.0245

Jupiter 14294-05-16 08:24 G 6941971.68 6941971.85 6941972.02 0.0489 0.0256

Neptune 14301-09-27 20:24 G 6944662.25 6944662.35 6944662.50 0.0088 0.0072

Neptune 14302-05-11 09:21 G 6944887.72 6944887.89 6944888.08 0.0088 0.0053

Neptune 14302-12-22 22:04 G 6945113.23 6945113.42 6945113.63 0.0088 0.0033

Neptune 14303-08-05 11:02 G 6945338.75 6945338.96 6945339.18 0.0088 0.0014

Neptune 14304-03-17 23:45 G 6945564.27 6945564.49 6945564.71 0.0088 0.0006

Neptune 14304-10-29 12:14 G 6945789.81 6945790.01 6945790.23 0.0088 0.0025

Neptune 14305-06-12 00:57 G 6946015.36 6946015.54 6946015.74 0.0088 0.0045

Jupiter 14306-01-20 13:40 G 6946237.87 6946238.07 6946238.26 0.0491 0.0134

Neptune 14306-01-23 13:55 G 6946240.93 6946241.08 6946241.24 0.0088 0.0063

Neptune 14306-09-06 02:09 G 6946466.54 6946466.59 6946466.69 0.0088 0.0083

Saturn 14307-07-21 16:48 G 6946785.07 6946785.20 6946785.33 0.0277 0.0218

Saturn 14308-03-07 02:38 G 6947014.40 6947014.61 6947014.82 0.0277 0.0013

Saturn 14308-10-22 12:00 G 6947243.86 6947244.00 6947244.16 0.0276 0.0191

Mars 14311-09-01 17:02 G 6948288.04 6948288.21 6948288.37 0.1601 0.0547

Pluto 14313-04-26 17:45 G 6948891.07 6948891.24 6948891.45 0.0068 0.0036

Pluto 14313-12-07 23:16 G 6949116.26 6949116.47 6949116.70 0.0068 0.0011

Mars 14314-06-08 07:12 G 6949298.63 6949298.80 6949298.98 0.1937 0.0041

Pluto 14314-07-21 04:19 G 6949341.58 6949341.68 6949341.82 0.0068 0.0057

Saturn 14322-08-17 16:19 G 6952291.01 6952291.18 6952291.35 0.0282 0.0165

Saturn 14323-04-04 06:00 G 6952520.54 6952520.75 6952520.96 0.0282 0.0052

Saturn 14323-11-19 19:55 G 6952750.27 6952750.33 6952750.39 0.0283 0.0269

Jupiter 14324-03-17 07:40 G 6952868.62 6952868.82 6952869.02 0.0539 0.0084

Uranus 14324-07-13 19:12 G 6952987.27 6952987.30 6952987.35 0.0145 0.0142

Uranus 14325-02-25 07:12 G 6953213.64 6953213.80 6953213.98 0.0145 0.0092

Uranus 14325-10-09 19:26 G 6953440.10 6953440.31 6953440.52 0.0145 0.0041

Uranus 14326-05-24 07:12 G 6953666.58 6953666.80 6953667.02 0.0145 0.0009

Uranus 14327-01-05 18:57 G 6953893.10 6953893.29 6953893.49 0.0144 0.0060

Uranus 14327-08-20 06:57 G 6954119.65 6954119.79 6954119.93 0.0144 0.0109

Jupiter 14330-01-22 17:45 G 6955006.23 6955006.24 6955006.26 0.0488 0.0486

Jupiter 14335-11-20 20:09 G 6957134.23 6957134.34 6957134.46 0.0536 0.0444

Saturn 14337-01-30 18:43 G 6957571.14 6957571.28 6957571.44 0.0277 0.0197

Saturn 14337-09-17 05:02 G 6957800.49 6957800.71 6957800.92 0.0277 0.0010

Saturn 14338-05-04 14:24 G 6958029.98 6958030.10 6958030.24 0.0276 0.0214

Jupiter 14341-09-27 20:52 G 6959272.17 6959272.37 6959272.58 0.0490 0.0091

Mars 14345-06-30 14:38 G 6960643.97 6960644.11 6960644.26 0.1596 0.0871

Saturn 14352-02-28 01:12 G 6963077.37 6963077.55 6963077.75 0.0282 0.0132

Saturn 14352-10-14 15:07 G 6963306.94 6963307.13 6963307.34 0.0282 0.0086

Jupiter 14353-06-03 01:12 G 6963538.39 6963538.55 6963538.71 0.0492 0.0306

Jupiter 14359-11-23 22:33 G 6965903.30 6965903.44 6965903.59 0.0540 0.0379

Saturn 14366-08-13 04:33 G 6968357.53 6968357.69 6968357.87 0.0277 0.0161

Saturn 14367-03-30 14:38 G 6968586.90 6968587.11 6968587.32 0.0276 0.0045

Uranus 14367-04-16 20:52 G 6968604.34 6968604.37 6968604.43 0.0133 0.0130

Saturn 14367-11-15 00:00 G 6968816.41 6968816.50 6968816.59 0.0276 0.0248

Uranus 14367-11-29 02:09 G 6968830.45 6968830.59 6968830.77 0.0133 0.0092

Uranus 14368-07-12 07:55 G 6969056.63 6969056.83 6969057.03 0.0134 0.0052

Uranus 14369-02-23 13:26 G 6969282.85 6969283.06 6969283.28 0.0134 0.0012

Uranus 14369-10-07 18:57 G 6969509.08 6969509.29 6969509.51 0.0134 0.0028

Uranus 14370-05-22 00:43 G 6969735.34 6969735.53 6969735.72 0.0134 0.0067

Uranus 14371-01-03 06:14 G 6969961.64 6969961.76 6969961.90 0.0134 0.0107

Jupiter 14371-07-29 10:33 G 6970168.75 6970168.94 6970169.14 0.0538 0.0159

Jupiter 14377-06-05 06:43 G 6972306.64 6972306.78 6972306.94 0.0489 0.0325

Mars 14377-06-29 05:31 G 6972330.56 6972330.73 6972330.90 0.1599 0.0384

Mars 14380-04-04 08:24 G 6973340.68 6973340.85 6973341.02 0.1940 0.0586

Saturn 14381-09-09 03:50 G 6973863.47 6973863.66 6973863.86 0.0282 0.0107

Saturn 14382-04-26 17:31 G 6974093.04 6974093.23 6974093.43 0.0282 0.0111

Neptune 14384-06-26 02:24 G 6974884.52 6974884.60 6974884.70 0.0089 0.0080

Neptune 14385-02-06 15:36 G 6975110.00 6975110.15 6975110.33 0.0089 0.0061

Neptune 14385-09-20 05:02 G 6975335.52 6975335.71 6975335.91 0.0089 0.0040

Neptune 14386-05-03 18:14 G 6975561.05 6975561.26 6975561.48 0.0089 0.0020

Neptune 14386-12-15 07:40 G 6975786.60 6975786.82 6975787.05 0.0089 0.0002

Neptune 14387-07-28 20:52 G 6976012.16 6976012.37 6976012.59 0.0089 0.0020

Neptune 14388-03-10 09:50 G 6976237.73 6976237.91 6976238.12 0.0089 0.0041

Neptune 14388-10-21 23:02 G 6976463.32 6976463.46 6976463.64 0.0089 0.0061

Jupiter 14389-02-08 11:31 G 6976572.77 6976572.98 6976573.18 0.0490 0.0068

Neptune 14389-06-04 12:14 G 6976688.93 6976689.01 6976689.12 0.0089 0.0080

Moon 14389-09-27 10:04 G 6976803.82 6976803.92 6976804.02 0.2676 0.2165

Earth 14389-09-27 11:31 G 6976803.88 6976803.98 6976804.09 0.2682 0.2037 *

Saturn 14396-02-23 06:14 G 6979143.58 6979143.76 6979143.95 0.0277 0.0140

Saturn 14396-10-09 16:04 G 6979372.97 6979373.17 6979373.38 0.0276 0.0065

Saturn 14397-05-27 01:40 G 6979602.53 6979602.57 6979602.62 0.0276 0.0268

Moon 14397-09-24 20:24 G 6979723.29 6979723.35 6979723.41 0.2681 0.2445

Earth 14397-09-25 01:40 G 6979723.46 6979723.57 6979723.68 0.2683 0.1943

Pluto 14399-02-20 07:12 G 6980236.74 6980236.80 6980236.89 0.0077 0.0072

Pluto 14399-10-03 16:33 G 6980461.97 6980462.19 6980462.41 0.0077 0.0004

Pluto 14400-05-16 00:57 G 6980687.44 6980687.54 6980687.69 0.0076 0.0063

Jupiter 14400-10-14 13:40 G 6980839.02 6980839.07 6980839.13 0.0492 0.0473

Jupiter 14407-04-06 06:57 G 6983203.60 6983203.79 6983203.98 0.0539 0.0167

Uranus 14408-10-25 13:26 G 6983771.94 6983772.06 6983772.20 0.0145 0.0115

Uranus 14409-06-09 01:26 G 6983998.38 6983998.56 6983998.77 0.0145 0.0065

Uranus 14410-01-21 13:40 G 6984224.86 6984225.07 6984225.29 0.0145 0.0014

Uranus 14410-09-05 01:40 G 6984451.36 6984451.57 6984451.78 0.0144 0.0037

Saturn 14411-03-22 11:16 G 6984649.77 6984649.97 6984650.18 0.0282 0.0076

Uranus 14411-04-19 13:40 G 6984677.89 6984678.07 6984678.24 0.0144 0.0087

Mars 14411-04-28 03:36 G 6984686.52 6984686.65 6984686.78 0.1595 0.1029

Saturn 14411-11-07 01:26 G 6984879.38 6984879.56 6984879.74 0.0282 0.0142

Uranus 14411-12-02 01:12 G 6984904.49 6984904.55 6984904.63 0.0144 0.0136

Jupiter 14418-12-09 15:21 G 6987469.00 6987469.14 6987469.28 0.0536 0.0388

Jupiter 14424-10-16 20:09 G 6989607.15 6989607.34 6989607.54 0.0490 0.0163

Saturn 14425-09-04 16:04 G 6989929.97 6989930.17 6989930.37 0.0277 0.0103

Saturn 14426-04-22 01:40 G 6990159.37 6990159.57 6990159.77 0.0276 0.0101

Jupiter 14436-06-22 00:28 G 6993873.34 6993873.52 6993873.70 0.0491 0.0232

Saturn 14440-02-15 00:57 G 6995206.47 6995206.54 6995206.60 0.0282 0.0266

Saturn 14440-10-01 14:09 G 6995435.89 6995436.09 6995436.30 0.0282 0.0051

Saturn 14441-05-19 04:04 G 6995665.50 6995665.67 6995665.84 0.0282 0.0167

Jupiter 14442-12-12 23:45 G 6996238.40 6996238.49 6996238.59 0.0540 0.0473

Mars 14443-04-26 18:28 G 6996373.10 6996373.27 6996373.45 0.1598 0.0235

Mars 14446-01-30 10:33 G 6997382.80 6997382.94 6997383.07 0.1941 0.1186

Uranus 14451-07-29 12:14 G 6999388.90 6999389.01 6999389.16 0.0133 0.0109

Uranus 14452-03-11 17:45 G 6999615.07 6999615.24 6999615.44 0.0133 0.0069

Uranus 14452-10-23 23:31 G 6999841.27 6999841.48 6999841.69 0.0134 0.0030

Uranus 14453-06-07 05:02 G 7000067.49 7000067.71 7000067.93 0.0134 0.0010

Uranus 14454-01-19 10:33 G 7000293.75 7000293.94 7000294.15 0.0134 0.0050

Jupiter 14454-08-17 12:43 G 7000503.83 7000504.03 7000504.24 0.0538 0.0059

Uranus 14454-09-02 16:04 G 7000520.02 7000520.17 7000520.35 0.0134 0.0090

Saturn 14455-03-17 16:33 G 7000716.00 7000716.19 7000716.40 0.0277 0.0086

Uranus 14455-04-16 21:50 G 7000746.37 7000746.41 7000746.48 0.0134 0.0130

Saturn 14455-11-02 02:24 G 7000945.41 7000945.60 7000945.79 0.0276 0.0120

Jupiter 14460-06-24 04:04 G 7002641.56 7002641.67 7002641.80 0.0489 0.0389

Neptune 14465-12-30 06:43 G 7004656.71 7004656.78 7004656.89 0.0088 0.0081

Neptune 14466-08-12 19:26 G 7004882.18 7004882.31 7004882.49 0.0088 0.0061

Neptune 14467-03-26 08:38 G 7005107.67 7005107.86 7005108.06 0.0088 0.0042

Neptune 14467-11-06 21:07 G 7005333.18 7005333.38 7005333.60 0.0088 0.0023

Neptune 14468-06-19 10:04 G 7005558.70 7005558.92 7005559.14 0.0088 0.0003

Neptune 14469-01-30 22:48 G 7005784.24 7005784.45 7005784.67 0.0088 0.0016

Saturn 14469-08-27 06:14 G 7005992.66 7005992.76 7005992.88 0.0282 0.0239

Neptune 14469-09-13 11:16 G 7006009.78 7006009.97 7006010.18 0.0088 0.0036

Saturn 14470-04-13 20:09 G 7006222.13 7006222.34 7006222.55 0.0282 0.0022

Neptune 14470-04-26 23:45 G 7006235.34 7006235.49 7006235.68 0.0088 0.0055

Saturn 14470-11-29 10:19 G 7006451.78 7006451.93 7006452.08 0.0282 0.0196

Neptune 14470-12-08 12:43 G 7006460.92 7006461.03 7006461.15 0.0088 0.0074

Jupiter 14472-02-28 08:52 G 7006907.67 7006907.87 7006908.08 0.0490 0.0004

Mars 14475-04-25 09:50 G 7008059.86 7008059.91 7008059.97 0.1602 0.1508

Mars 14477-02-22 16:48 G 7008729.09 7008729.20 7008729.32 0.1594 0.1177

Jupiter 14483-11-03 13:26 G 7011173.95 7011174.06 7011174.19 0.0492 0.0398

Saturn 14484-02-10 16:04 G 7011273.10 7011273.17 7011273.27 0.0277 0.0253

Saturn 14484-09-27 02:09 G 7011502.39 7011502.59 7011502.80 0.0277 0.0049

Saturn 14485-05-14 11:45 G 7011731.82 7011731.99 7011732.17 0.0276 0.0156

Jupiter 14490-04-25 03:21 G 7013538.46 7013538.64 7013538.83 0.0539 0.0233

Uranus 14492-06-24 19:40 G 7014330.27 7014330.32 7014330.40 0.0145 0.0138

Uranus 14493-02-06 07:55 G 7014556.67 7014556.83 7014557.01 0.0145 0.0088

Uranus 14493-09-20 20:09 G 7014783.13 7014783.34 7014783.55 0.0145 0.0037

Uranus 14494-05-05 08:09 G 7015009.62 7015009.84 7015010.06 0.0145 0.0014

Uranus 14494-12-17 20:09 G 7015236.14 7015236.34 7015236.53 0.0144 0.0064

Uranus 14495-08-01 08:09 G 7015462.71 7015462.84 7015462.97 0.0144 0.0114

Saturn 14499-03-09 09:50 G 7016778.77 7016778.91 7016779.04 0.0282 0.0213

Saturn 14499-10-24 23:16 G 7017008.25 7017008.47 7017008.68 0.0282 0.0006

Saturn 14500-06-11 12:57 G 7017237.92 7017238.04 7017238.18 0.0282 0.0221

Jupiter 14501-12-29 16:48 G 7017804.03 7017804.20 7017804.37 0.0537 0.0295

Moon 14503-03-31 02:52 G 7018260.46 7018260.62 7018260.78 0.2645 0.0220

Earth 14503-03-31 07:40 G 7018260.67 7018260.82 7018260.98 0.2649 0.0431 *

Jupiter 14507-11-06 19:26 G 7019942.13 7019942.31 7019942.49 0.0489 0.0236

Mars 14509-02-22 07:26 G 7020415.64 7020415.81 7020415.99 0.1597 0.0083

Mars 14511-11-28 11:31 G 7021424.92 7021424.98 7021425.04 0.1943 0.1815

Saturn 14513-08-23 16:19 G 7022059.08 7022059.18 7022059.29 0.0277 0.0236

Saturn 14514-04-10 02:24 G 7022288.39 7022288.60 7022288.81 0.0276 0.0031

Saturn 14514-11-25 12:00 G 7022517.84 7022518.00 7022518.17 0.0276 0.0173

Jupiter 14519-07-12 22:33 G 7024208.25 7024208.44 7024208.64 0.0491 0.0165

Saturn 14528-09-19 13:40 G 7027564.92 7027565.07 7027565.23 0.0282 0.0188

Saturn 14529-05-07 03:36 G 7027794.44 7027794.65 7027794.86 0.0282 0.0029

Saturn 14529-12-22 17:45 G 7028024.14 7028024.24 7028024.35 0.0283 0.0247

Uranus 14535-03-29 22:19 G 7029947.37 7029947.43 7029947.51 0.0133 0.0126

Uranus 14535-11-11 03:36 G 7030173.50 7030173.65 7030173.83 0.0133 0.0087

Uranus 14536-06-24 09:07 G 7030399.68 7030399.88 7030400.09 0.0133 0.0048

Uranus 14537-02-05 14:52 G 7030625.90 7030626.12 7030626.34 0.0134 0.0008

Jupiter 14537-09-06 09:21 G 7030838.69 7030838.89 7030839.09 0.0538 0.0007

Uranus 14537-09-19 20:24 G 7030852.14 7030852.35 7030852.56 0.0134 0.0032

Uranus 14538-05-04 01:55 G 7031078.40 7031078.58 7031078.77 0.0134 0.0071

Uranus 14538-12-16 07:26 G 7031304.70 7031304.81 7031304.94 0.0134 0.0111

Mars 14541-02-20 22:19 G 7032102.34 7032102.43 7032102.53 0.1601 0.1343

Mars 14542-12-22 05:31 G 7032771.64 7032771.73 7032771.83 0.1593 0.1333

Saturn 14543-03-06 01:26 G 7032845.42 7032845.56 7032845.71 0.0277 0.0201

Jupiter 14543-07-15 04:33 G 7032976.64 7032976.69 7032976.75 0.0489 0.0468

Saturn 14543-10-21 11:31 G 7033074.76 7033074.98 7033075.19 0.0277 0.0006

Mars 14543-11-28 17:31 G 7033113.11 7033113.23 7033113.36 0.1937 0.1350

Saturn 14544-06-06 20:52 G 7033304.24 7033304.37 7033304.51 0.0276 0.0208

Jupiter 14549-05-11 21:21 G 7035104.36 7035104.39 7035104.43 0.0536 0.0525

Neptune 14549-05-12 01:26 G 7035104.44 7035104.56 7035104.71 0.0089 0.0070

Neptune 14549-12-23 14:52 G 7035329.95 7035330.12 7035330.32 0.0089 0.0050

Neptune 14550-08-06 04:19 G 7035555.48 7035555.68 7035555.90 0.0089 0.0029

Neptune 14551-03-19 17:45 G 7035781.03 7035781.24 7035781.46 0.0089 0.0009

Neptune 14551-10-31 06:57 G 7036006.58 7036006.79 7036007.01 0.0089 0.0011

Neptune 14552-06-12 20:09 G 7036232.14 7036232.34 7036232.55 0.0089 0.0032

Neptune 14553-01-24 09:36 G 7036457.73 7036457.90 7036458.09 0.0089 0.0052

Neptune 14553-09-06 22:48 G 7036683.33 7036683.45 7036683.59 0.0089 0.0072

Jupiter 14555-03-20 09:21 G 7037242.69 7037242.89 7037243.09 0.0490 0.0077

Saturn 14558-04-01 17:31 G 7038351.06 7038351.23 7038351.40 0.0282 0.0162

Pluto 14558-10-14 02:52 G 7038546.50 7038546.62 7038546.76 0.0068 0.0054

Saturn 14558-11-17 06:57 G 7038580.59 7038580.79 7038581.00 0.0282 0.0055

Pluto 14559-05-27 08:24 G 7038771.63 7038771.85 7038772.07 0.0068 0.0008

Saturn 14559-07-04 20:52 G 7038810.32 7038810.37 7038810.43 0.0282 0.0272

Pluto 14560-01-07 13:26 G 7038996.89 7038997.06 7038997.25 0.0068 0.0038

Jupiter 14566-11-23 13:40 G 7041508.92 7041509.07 7041509.23 0.0492 0.0319

Saturn 14572-09-15 00:57 G 7043631.39 7043631.54 7043631.70 0.0277 0.0184

Saturn 14573-05-02 11:02 G 7043860.75 7043860.96 7043861.17 0.0276 0.0021

Jupiter 14573-05-15 06:57 G 7043873.64 7043873.79 7043873.95 0.0539 0.0343

Saturn 14573-12-17 20:38 G 7044090.24 7044090.36 7044090.48 0.0276 0.0225

Mars 14574-12-20 20:24 G 7044458.18 7044458.35 7044458.53 0.1596 0.0084

Uranus 14576-10-07 14:38 G 7045114.98 7045115.11 7045115.26 0.0145 0.0111

Uranus 14577-05-22 02:38 G 7045341.42 7045341.61 7045341.82 0.0145 0.0060

Uranus 14578-01-03 14:52 G 7045567.91 7045568.12 7045568.34 0.0145 0.0010

Uranus 14578-08-18 02:52 G 7045794.42 7045794.62 7045794.84 0.0145 0.0042

Uranus 14579-04-01 14:52 G 7046020.96 7046021.12 7046021.30 0.0144 0.0091

Uranus 14579-11-14 02:24 G 7046247.58 7046247.60 7046247.67 0.0144 0.0142

Jupiter 14585-01-17 19:12 G 7048139.11 7048139.30 7048139.49 0.0537 0.0195

Saturn 14587-10-12 20:09 G 7049137.16 7049137.34 7049137.53 0.0282 0.0139

Saturn 14588-05-29 10:04 G 7049366.72 7049366.92 7049367.13 0.0282 0.0078

Jupiter 14590-11-25 18:14 G 7050277.10 7050277.26 7050277.42 0.0489 0.0308

Saturn 14602-03-29 09:36 G 7054417.73 7054417.90 7054418.08 0.0277 0.0150

Jupiter 14602-08-01 23:16 G 7054543.27 7054543.47 7054543.68 0.0491 0.0084

Saturn 14602-11-13 19:40 G 7054647.11 7054647.32 7054647.53 0.0277 0.0056

Saturn 14603-07-01 05:16 G 7054876.65 7054876.72 7054876.79 0.0276 0.0259

Mars 14606-12-20 11:31 G 7056144.86 7056144.98 7056145.09 0.1600 0.1190

Mars 14608-10-19 18:57 G 7056814.23 7056814.29 7056814.35 0.1592 0.1481

Mars 14609-09-25 19:12 G 7057155.14 7057155.30 7057155.46 0.1939 0.0741

Jupiter 14614-04-07 03:21 G 7058809.60 7058809.64 7058809.68 0.0493 0.0481

Saturn 14617-04-25 00:28 G 7059923.33 7059923.52 7059923.72 0.0282 0.0113

Saturn 14617-12-10 14:09 G 7060152.89 7060153.09 7060153.29 0.0282 0.0104

Uranus 14619-07-12 14:09 G 7060731.97 7060732.09 7060732.24 0.0133 0.0103

Uranus 14620-02-23 19:55 G 7060958.14 7060958.33 7060958.53 0.0133 0.0064

Jupiter 14620-09-26 11:16 G 7061173.77 7061173.97 7061174.17 0.0538 0.0106

Uranus 14620-10-07 01:26 G 7061184.35 7061184.56 7061184.78 0.0134 0.0025

Uranus 14621-05-21 06:57 G 7061410.57 7061410.79 7061411.01 0.0134 0.0015

Uranus 14622-01-02 12:14 G 7061636.83 7061637.01 7061637.22 0.0134 0.0055

Uranus 14622-08-16 18:00 G 7061863.10 7061863.25 7061863.41 0.0134 0.0094

Uranus 14623-03-30 23:31 G 7062089.48 7062089.48 7062089.51 0.0134 0.0134

Neptune 14630-11-16 06:00 G 7064876.62 7064876.75 7064876.89 0.0088 0.0069

Neptune 14631-06-29 18:43 G 7065102.11 7065102.28 7065102.47 0.0088 0.0050

Saturn 14631-10-09 09:07 G 7065203.70 7065203.88 7065204.07 0.0277 0.0134

Neptune 14632-02-10 07:12 G 7065327.61 7065327.80 7065328.02 0.0088 0.0032

Saturn 14632-05-25 19:12 G 7065433.09 7065433.30 7065433.50 0.0276 0.0072

Jupiter 14632-06-01 01:12 G 7065439.42 7065439.55 7065439.67 0.0536 0.0418

Neptune 14632-09-22 19:55 G 7065553.12 7065553.33 7065553.56 0.0088 0.0013

Moon 14632-09-29 10:04 G 7065559.79 7065559.92 7065560.05 0.2689 0.1347

Earth 14632-09-29 11:02 G 7065559.84 7065559.96 7065560.08 0.2683 0.1728 *

Saturn 14633-01-10 04:48 G 7065662.68 7065662.70 7065662.72 0.0276 0.0274

Neptune 14633-05-06 08:38 G 7065778.65 7065778.86 7065779.09 0.0088 0.0008

Neptune 14633-12-17 21:21 G 7066004.19 7066004.39 7066004.61 0.0088 0.0027

Neptune 14634-07-31 10:04 G 7066229.74 7066229.92 7066230.12 0.0088 0.0046

Neptune 14635-03-13 22:48 G 7066455.31 7066455.45 7066455.60 0.0088 0.0066

Neptune 14635-10-25 11:02 G 7066680.93 7066680.96 7066681.04 0.0088 0.0085

Jupiter 14638-04-09 08:38 G 7067577.66 7067577.86 7067578.05 0.0490 0.0151

Earth 14640-09-27 00:57 G 7068479.45 7068479.54 7068479.62 0.2684 0.2267

Moon 14640-09-27 04:19 G 7068479.56 7068479.68 7068479.80 0.2689 0.1692 *

Mars 14640-10-18 09:36 G 7068500.73 7068500.90 7068501.07 0.1595 0.0232

Pluto 14645-03-22 23:31 G 7070117.30 7070117.48 7070117.70 0.0077 0.0033

Pluto 14645-11-03 08:38 G 7070342.68 7070342.86 7070343.07 0.0077 0.0035

Saturn 14646-11-05 02:09 G 7070709.39 7070709.59 7070709.79 0.0282 0.0091

Saturn 14647-06-22 16:19 G 7070938.99 7070939.18 7070939.37 0.0282 0.0127

Jupiter 14649-12-13 12:57 G 7071843.86 7071844.04 7071844.22 0.0492 0.0246

Jupiter 14656-06-04 04:48 G 7074208.58 7074208.70 7074208.84 0.0539 0.0417

Uranus 14660-06-07 21:07 G 7075673.31 7075673.38 7075673.48 0.0145 0.0133

Uranus 14661-01-20 09:36 G 7075899.73 7075899.90 7075900.08 0.0145 0.0082

Saturn 14661-04-20 17:02 G 7075990.01 7075990.21 7075990.41 0.0277 0.0101

Uranus 14661-09-03 21:50 G 7076126.20 7076126.41 7076126.63 0.0145 0.0032

Saturn 14661-12-06 03:07 G 7076219.44 7076219.63 7076219.83 0.0277 0.0105

Uranus 14662-04-18 10:04 G 7076352.70 7076352.92 7076353.13 0.0145 0.0019

Uranus 14662-11-30 21:36 G 7076579.23 7076579.40 7076579.61 0.0145 0.0070

Uranus 14663-07-15 09:36 G 7076805.80 7076805.90 7076806.04 0.0144 0.0120

Jupiter 14668-02-07 16:48 G 7078474.00 7078474.20 7078474.40 0.0537 0.0123

Mars 14672-10-17 00:14 G 7080187.38 7080187.51 7080187.64 0.1598 0.1029

Jupiter 14673-12-15 18:57 G 7080612.17 7080612.29 7080612.42 0.0489 0.0391

Mars 14675-07-23 20:38 G 7081197.18 7081197.36 7081197.53 0.1941 0.0132

Saturn 14675-09-30 18:14 G 7081266.24 7081266.26 7081266.31 0.0281 0.0277

Saturn 14676-05-17 07:40 G 7081495.61 7081495.82 7081496.03 0.0281 0.0063

Saturn 14677-01-01 21:07 G 7081725.21 7081725.38 7081725.56 0.0282 0.0154

Jupiter 14685-08-21 00:00 G 7084878.30 7084878.50 7084878.71 0.0491 0.0005

Saturn 14690-10-31 16:48 G 7086776.00 7086776.20 7086776.41 0.0277 0.0084

Saturn 14691-06-18 02:38 G 7087005.43 7087005.61 7087005.81 0.0276 0.0122

Jupiter 14697-04-26 02:52 G 7089144.51 7089144.62 7089144.74 0.0493 0.0406

Uranus 14703-03-13 00:43 G 7091290.45 7091290.53 7091290.64 0.0133 0.0120

Jupiter 14703-10-17 14:38 G 7091508.92 7091509.11 7091509.30 0.0538 0.0213

Uranus 14703-10-25 06:14 G 7091516.60 7091516.76 7091516.94 0.0133 0.0080

Uranus 14704-06-07 11:45 G 7091742.79 7091742.99 7091743.20 0.0133 0.0041

Uranus 14705-01-19 17:31 G 7091969.01 7091969.23 7091969.45 0.0134 0.0003

Saturn 14705-04-12 18:57 G 7092052.21 7092052.29 7092052.38 0.0281 0.0257

Uranus 14705-09-02 22:48 G 7092195.25 7092195.45 7092195.67 0.0134 0.0038

Saturn 14705-11-28 08:24 G 7092281.64 7092281.85 7092282.06 0.0282 0.0043

Uranus 14706-04-17 04:04 G 7092421.51 7092421.67 7092421.86 0.0134 0.0077

Saturn 14706-07-15 22:04 G 7092511.26 7092511.42 7092511.59 0.0282 0.0174

Mars 14706-08-16 22:33 G 7092543.27 7092543.44 7092543.61 0.1594 0.0391

Uranus 14706-11-29 09:50 G 7092647.81 7092647.91 7092648.02 0.0134 0.0116

Neptune 14713-08-15 10:33 G 7095098.87 7095098.94 7095099.07 0.0089 0.0080

Neptune 14714-03-29 00:00 G 7095324.35 7095324.50 7095324.68 0.0089 0.0059

Neptune 14714-11-09 13:40 G 7095549.87 7095550.07 7095550.27 0.0089 0.0039

Jupiter 14715-06-22 00:00 G 7095774.35 7095774.50 7095774.66 0.0536 0.0339

Neptune 14715-06-23 02:52 G 7095775.41 7095775.62 7095775.84 0.0089 0.0019

Neptune 14716-02-03 16:19 G 7096000.96 7096001.18 7096001.40 0.0089 0.0002

Neptune 14716-09-16 05:31 G 7096226.52 7096226.73 7096226.95 0.0089 0.0022

Neptune 14717-04-29 18:43 G 7096452.10 7096452.28 7096452.49 0.0089 0.0042

Neptune 14717-12-11 07:55 G 7096677.69 7096677.83 7096678.01 0.0089 0.0063

Neptune 14718-07-24 21:07 G 7096903.32 7096903.38 7096903.49 0.0089 0.0083

Saturn 14719-09-27 13:26 G 7097332.99 7097333.06 7097333.14 0.0278 0.0259

Saturn 14720-05-14 00:14 G 7097562.30 7097562.51 7097562.72 0.0278 0.0052

Saturn 14720-12-29 10:19 G 7097791.76 7097791.93 7097792.11 0.0277 0.0155

Jupiter	14721-04-29 09:07 G	7097912.71	7097912.88	7097913.07	0.0490	0.0233
Jupiter	14733-01-02 13:40 G	7102178.88	7102179.07	7102179.26	0.0492	0.0163
Saturn	14734-10-24 01:40 G	7102838.45	7102838.57	7102838.70	0.0281	0.0228
Saturn	14735-06-10 14:52 G	7103067.91	7103068.12	7103068.33	0.0281	0.0013
Saturn	14736-01-26 04:19 G	7103297.54	7103297.68	7103297.83	0.0282	0.0203
Mars	14738-08-15 13:26 G	7104229.91	7104230.06	7104230.20	0.1597	0.0877
Jupiter	14739-06-25 06:43 G	7104543.72	7104543.78	7104543.84	0.0540	0.0515
Mars	14741-05-20 21:50 G	7105239.24	7105239.41	7105239.58	0.1943	0.0506
Uranus	14744-09-20 16:19 G	7106458.03	7106458.18	7106458.33	0.0145	0.0105
Uranus	14745-05-05 04:19 G	7106684.49	7106684.68	7106684.89	0.0145	0.0054
Uranus	14745-12-17 16:48 G	7106910.98	7106911.20	7106911.42	0.0145	0.0004
Earth	14746-04-02 10:19 G	7107016.77	7107016.93	7107017.08	0.2648	0.0459
Moon	14746-04-02 13:40 G	7107016.92	7107017.07	7107017.22	0.2654	0.0480 *
Uranus	14746-08-01 05:02 G	7107137.50	7107137.71	7107137.92	0.0145	0.0047
Uranus	14747-03-15 17:02 G	7107364.05	7107364.21	7107364.37	0.0145	0.0097
Saturn	14749-04-08 13:40 G	7108118.98	7108119.07	7108119.18	0.0277	0.0241
Saturn	14749-11-24 00:28 G	7108348.31	7108348.52	7108348.73	0.0277	0.0035
Saturn	14750-07-11 10:19 G	7108577.77	7108577.93	7108578.10	0.0276	0.0171
Jupiter	14751-02-27 20:24 G	7108809.14	7108809.35	7108809.55	0.0538	0.0017
Moon	14754-03-31 08:24 G	7109936.77	7109936.85	7109936.92	0.2649	0.2297
Jupiter	14757-01-04 18:43 G	7110947.22	7110947.28	7110947.34	0.0489	0.0465
Saturn	14764-05-05 01:55 G	7113624.45	7113624.58	7113624.73	0.0281	0.0209
Saturn	14764-12-20 15:21 G	7113853.93	7113854.14	7113854.35	0.0282	0.0007
Saturn	14765-08-07 04:48 G	7114083.58	7114083.70	7114083.84	0.0282	0.0224
Jupiter	14768-09-09 23:31 G	7115213.27	7115213.48	7115213.68	0.0491	0.0074
Mars	14772-06-13 11:31 G	7116585.81	7116585.98	7116586.14	0.1593	0.0545
Saturn	14778-10-19 20:24 G	7118905.22	7118905.35	7118905.49	0.0278	0.0211
Saturn	14779-06-06 07:12 G	7119134.59	7119134.80	7119135.01	0.0278	0.0004
Saturn	14780-01-21 17:31 G	7119364.09	7119364.23	7119364.38	0.0277	0.0202
Jupiter	14780-05-16 02:52 G	7119479.48	7119479.62	7119479.78	0.0493	0.0328

Jupiter 14786-11-05 12:28 G 7121843.85 7121844.02 7121844.19 0.0538 0.0287

Uranus 14787-06-24 17:16 G 7122075.09 7122075.22 7122075.39 0.0133 0.0096

Uranus 14788-02-05 23:02 G 7122301.27 7122301.46 7122301.66 0.0133 0.0057

Uranus 14788-09-19 04:33 G 7122527.48 7122527.69 7122527.91 0.0133 0.0018

Uranus 14789-05-03 09:50 G 7122753.70 7122753.91 7122754.13 0.0134 0.0022

Uranus 14789-12-15 15:21 G 7122979.95 7122980.14 7122980.34 0.0134 0.0061

Uranus 14790-07-29 20:52 G 7123206.23 7123206.37 7123206.52 0.0134 0.0100

Saturn 14793-11-15 09:36 G 7124410.74 7124410.90 7124411.07 0.0281 0.0177

Saturn 14794-07-02 22:48 G 7124640.24 7124640.45 7124640.66 0.0281 0.0037

Saturn 14795-02-17 12:14 G 7124869.92 7124870.01 7124870.10 0.0282 0.0253

Neptune 14795-02-18 15:50 G 7124871.06 7124871.16 7124871.26 0.0088 0.0079

Neptune 14795-10-02 04:19 G 7125096.53 7125096.68 7125096.85 0.0088 0.0059

Neptune 14796-05-14 16:48 G 7125322.02 7125322.20 7125322.41 0.0088 0.0040

Neptune 14796-12-26 05:31 G 7125547.53 7125547.73 7125547.96 0.0088 0.0021

Neptune 14797-08-08 18:43 G 7125773.06 7125773.28 7125773.50 0.0088 0.0002

Neptune 14798-03-22 07:12 G 7125998.59 7125998.80 7125999.02 0.0088 0.0018

Jupiter 14798-07-11 00:43 G 7126109.36 7126109.53 7126109.72 0.0536 0.0248

Neptune 14798-11-02 19:40 G 7126224.13 7126224.32 7126224.53 0.0088 0.0037

Neptune 14799-06-16 08:38 G 7126449.69 7126449.86 7126450.03 0.0088 0.0057

Neptune 14800-01-27 20:52 G 7126675.28 7126675.37 7126675.50 0.0088 0.0076

Jupiter 14804-05-18 09:36 G 7128247.74 7128247.90 7128248.06 0.0490 0.0313

Mars 14804-06-12 01:55 G 7128272.42 7128272.58 7128272.73 0.1596 0.0714

Pluto 14804-11-13 16:19 G 7128426.98 7128427.18 7128427.38 0.0068 0.0030

Pluto 14805-06-26 21:36 G 7128652.19 7128652.40 7128652.61 0.0068 0.0016

Pluto 14806-02-07 02:24 G 7128877.54 7128877.60 7128877.70 0.0068 0.0063

Mars 14807-03-17 22:48 G 7129281.31 7129281.45 7129281.59 0.1944 0.1149

Saturn 14808-04-30 21:36 G 7129691.26 7129691.40 7129691.56 0.0278 0.0192

Saturn 14808-12-16 08:24 G 7129920.64 7129920.85 7129921.07 0.0277 0.0017

Saturn 14809-08-02 18:28 G 7130150.15 7130150.27 7130150.40 0.0277 0.0221

Jupiter 14816-01-22 13:12 G 7132513.85 7132514.05 7132514.25 0.0491 0.0088

Saturn 14823-05-28 09:50 G 7135196.74 7135196.91 7135197.09 0.0281 0.0158

Saturn 14824-01-12 23:02 G 7135426.26 7135426.46 7135426.67 0.0282 0.0058

Saturn 14824-08-29 12:28 G 7135655.98 7135656.02 7135656.08 0.0282 0.0273

Jupiter 14827-09-27 16:48 G 7136780.19 7136780.20 7136780.22 0.0493 0.0490

Uranus 14828-05-20 22:33 G 7137016.36 7137016.44 7137016.57 0.0145 0.0128

Uranus 14829-01-02 11:16 G 7137242.79 7137242.97 7137243.16 0.0145 0.0076

Uranus 14829-08-16 23:45 G 7137469.28 7137469.49 7137469.71 0.0145 0.0026

Uranus 14830-03-31 12:00 G 7137695.79 7137696.00 7137696.21 0.0145 0.0025

Uranus 14830-11-13 00:00 G 7137922.32 7137922.50 7137922.69 0.0145 0.0075

Uranus 14831-06-27 12:00 G 7138148.90 7138149.00 7138149.11 0.0145 0.0125

Jupiter 14834-03-18 19:40 G 7139144.12 7139144.32 7139144.52 0.0537 0.0069

Saturn 14837-11-11 03:50 G 7140477.49 7140477.66 7140477.83 0.0278 0.0163

Mars 14838-04-11 00:28 G 7140628.36 7140628.52 7140628.67 0.1592 0.0703

Saturn 14838-06-28 14:38 G 7140706.90 7140707.11 7140707.32 0.0278 0.0045

Saturn 14839-02-13 00:43 G 7140936.46 7140936.53 7140936.63 0.0277 0.0252

Jupiter 14845-11-21 07:26 G 7143409.72 7143409.81 7143409.91 0.0535 0.0466

Jupiter 14851-09-29 22:48 G 7145548.25 7145548.45 7145548.64 0.0491 0.0150

Saturn 14852-12-07 18:57 G 7145983.10 7145983.29 7145983.48 0.0281 0.0125

Saturn 14853-07-25 07:55 G 7146212.63 7146212.83 7146213.03 0.0281 0.0090

Jupiter 14863-06-05 03:07 G 7149814.46 7149814.63 7149814.81 0.0492 0.0248

Saturn 14867-05-24 06:00 G 7151263.58 7151263.75 7151263.94 0.0278 0.0142

Saturn 14868-01-08 17:02 G 7151493.00 7151493.21 7151493.41 0.0277 0.0066

Saturn 14868-08-25 02:52 G 7151722.59 7151722.62 7151722.67 0.0277 0.0271

Jupiter 14869-11-24 14:38 G 7152178.97 7152179.11 7152179.25 0.0539 0.0388

Mars 14870-04-09 15:07 G 7152314.97 7152315.13 7152315.30 0.1595 0.0564

Uranus 14871-02-22 04:48 G 7152633.59 7152633.70 7152633.82 0.0133 0.0111

Uranus 14871-10-06 09:50 G 7152859.74 7152859.91 7152860.11 0.0133 0.0073

Uranus 14872-05-19 15:21 G 7153085.94 7153086.14 7153086.36 0.0133 0.0034

Uranus 14872-12-31 20:52 G 7153312.15 7153312.37 7153312.59 0.0133 0.0005

Mars 14873-01-12 00:28 G 7153323.45 7153323.52 7153323.59 0.1946 0.1765

Uranus 14873-08-15 02:09 G 7153538.39 7153538.59 7153538.80 0.0134 0.0045

Uranus 14874-03-29 07:26 G 7153764.65 7153764.81 7153764.99 0.0134 0.0084

Uranus 14874-11-10 12:43 G 7153990.97 7153991.03 7153991.13 0.0134 0.0123

Earth 14875-10-01 10:19 G 7154315.79 7154315.93 7154316.06 0.2683 0.1400

Moon 14875-10-01 13:40 G 7154315.95 7154316.07 7154316.19 0.2678 0.1831 *

Neptune 14877-11-16 19:40 G 7155093.32 7155093.32 7155093.35 0.0089 0.0089

Neptune 14878-06-30 08:52 G 7155318.75 7155318.87 7155319.03 0.0089 0.0069

Neptune 14879-02-10 22:04 G 7155544.26 7155544.42 7155544.63 0.0089 0.0050

Neptune 14879-09-24 11:45 G 7155769.79 7155769.99 7155770.21 0.0089 0.0029

Neptune 14880-05-07 01:12 G 7155995.33 7155995.55 7155995.77 0.0089 0.0008

Neptune 14880-12-18 14:24 G 7156220.89 7156221.10 7156221.33 0.0089 0.0012

Jupiter 14881-07-30 03:50 G 7156444.46 7156444.66 7156444.85 0.0537 0.0144

Neptune 14881-08-01 03:36 G 7156446.46 7156446.65 7156446.87 0.0089 0.0032

Neptune 14882-03-14 16:48 G 7156672.04 7156672.20 7156672.40 0.0089 0.0053

Saturn 14882-06-19 19:12 G 7156769.11 7156769.30 7156769.50 0.0281 0.0105

Neptune 14882-10-26 06:00 G 7156897.64 7156897.75 7156897.90 0.0089 0.0073

Saturn 14883-02-04 08:09 G 7156998.65 7156998.84 7156999.04 0.0282 0.0110

Earth 14883-09-29 00:14 G 7157235.47 7157235.51 7157235.55 0.2684 0.2588

Jupiter 14887-06-07 08:09 G 7158582.72 7158582.84 7158582.97 0.0490 0.0384

Pluto 14890-09-09 05:31 G 7159772.63 7159772.73 7159772.85 0.0077 0.0066

Pluto 14891-04-22 14:52 G 7159997.90 7159998.12 7159998.34 0.0077 0.0002

Pluto 14891-12-03 23:16 G 7160223.40 7160223.47 7160223.59 0.0076 0.0070

Saturn 14896-12-03 12:14 G 7162049.81 7162050.01 7162050.20 0.0278 0.0113

Saturn 14897-07-20 23:02 G 7162279.26 7162279.46 7162279.66 0.0278 0.0096

Jupiter 14899-02-10 11:45 G 7162848.79 7162848.99 7162849.19 0.0492 0.0016

Mars 14904-02-07 13:40 G 7164670.92 7164671.07 7164671.21 0.1591 0.0853

Mars 14905-01-13 06:43 G 7165011.66 7165011.78 7165011.89 0.1940 0.1440

Jupiter 14910-10-17 15:07 G 7167115.03 7167115.13 7167115.24 0.0494 0.0419

Saturn 14912-01-01 05:02 G 7167555.51 7167555.71 7167555.92 0.0281 0.0071

Saturn 14912-08-17 18:00 G 7167785.07 7167785.25 7167785.44 0.0281 0.0145

Uranus	14912-09-02 18:28 G	7167801.11	7167801.27	7167801.43	0.0145	0.0098
Uranus	14913-04-17 06:28 G	7168027.58	7168027.77	7168027.99	0.0145	0.0048
Uranus	14913-11-29 18:57 G	7168254.07	7168254.29	7168254.51	0.0145	0.0003
Uranus	14914-07-14 07:12 G	7168480.60	7168480.80	7168481.00	0.0145	0.0053
Uranus	14915-02-25 19:12 G	7168707.15	7168707.30	7168707.46	0.0145	0.0103
Jupiter	14917-04-07 18:28 G	7169479.08	7169479.27	7169479.47	0.0538	0.0151
Saturn	14926-06-16 15:50 G	7172835.96	7172836.16	7172836.36	0.0278	0.0089
Saturn	14927-02-01 02:24 G	7173065.41	7173065.60	7173065.79	0.0277	0.0119
Jupiter	14928-12-11 08:09 G	7173744.70	7173744.84	7173744.99	0.0535	0.0376
Jupiter	14934-10-19 21:21 G	7175883.21	7175883.39	7175883.57	0.0490	0.0221
Mars	14936-02-06 04:04 G	7176357.50	7176357.67	7176357.84	0.1594	0.0406
Saturn	14940-11-25 17:16 G	7178112.15	7178112.22	7178112.30	0.0281	0.0262
Saturn	14941-07-13 06:00 G	7178341.54	7178341.75	7178341.96	0.0281	0.0049
Saturn	14942-02-27 18:57 G	7178571.12	7178571.29	7178571.46	0.0281	0.0166
Jupiter	14946-06-25 01:26 G	7180149.37	7180149.56	7180149.75	0.0492	0.0180
Jupiter	14952-12-14 13:55 G	7182513.99	7182514.08	7182514.18	0.0538	0.0473
Uranus	14954-10-23 16:04 G	7183192.13	7183192.17	7183192.25	0.0133	0.0127
Saturn	14955-05-12 09:36 G	7183392.86	7183392.90	7183392.96	0.0279	0.0270
Uranus	14955-06-06 21:36 G	7183418.25	7183418.40	7183418.57	0.0133	0.0088
Saturn	14955-12-27 21:07 G	7183622.18	7183622.38	7183622.59	0.0278	0.0062
Uranus	14956-01-19 03:07 G	7183644.43	7183644.63	7183644.84	0.0133	0.0049
Saturn	14956-08-13 08:09 G	7183851.66	7183851.84	7183852.02	0.0278	0.0147
Uranus	14956-09-01 08:38 G	7183870.64	7183870.86	7183871.07	0.0133	0.0011
Uranus	14957-04-15 13:40 G	7184096.86	7184097.07	7184097.29	0.0133	0.0029
Uranus	14957-11-27 18:57 G	7184323.11	7184323.29	7184323.48	0.0134	0.0068
Uranus	14958-07-12 00:14 G	7184549.39	7184549.51	7184549.65	0.0134	0.0107
Neptune	14960-01-04 13:12 G	7185090.93	7185091.05	7185091.21	0.0088	0.0069
Neptune	14960-08-17 02:24 G	7185316.42	7185316.60	7185316.78	0.0088	0.0050
Neptune	14961-03-30 14:52 G	7185541.92	7185542.12	7185542.34	0.0088	0.0030
Neptune	14961-11-11 03:36 G	7185767.44	7185767.65	7185767.88	0.0088	0.0011

Neptune 14962-06-24 16:33 G 7185992.97 7185993.19 7185993.41 0.0088 0.0008

Neptune 14963-02-05 05:02 G 7186218.51 7186218.71 7186218.93 0.0088 0.0028

Neptune 14963-09-18 17:31 G 7186444.06 7186444.23 7186444.43 0.0088 0.0047

Neptune 14964-05-01 06:14 G 7186669.62 7186669.76 7186669.91 0.0088 0.0066

Jupiter 14964-08-19 01:12 G 7186779.35 7186779.55 7186779.75 0.0536 0.0071

Neptune 14964-12-12 18:57 G 7186895.25 7186895.29 7186895.34 0.0088 0.0085

Mars 14969-12-05 02:24 G 7188713.47 7188713.60 7188713.74 0.1590 0.1011

Saturn 14970-06-08 03:50 G 7188898.55 7188898.66 7188898.79 0.0280 0.0227

Jupiter 14970-06-27 05:45 G 7188917.67 7188917.74 7188917.82 0.0490 0.0452

Mars 14970-11-10 08:09 G 7189053.68 7189053.84 7189054.00 0.1943 0.0823

Saturn 14971-01-23 16:33 G 7189127.98 7189128.19 7189128.40 0.0281 0.0014

Saturn 14971-09-10 05:31 G 7189357.59 7189357.73 7189357.88 0.0281 0.0201

Jupiter 14982-03-02 10:33 G 7193183.74 7193183.94 7193184.14 0.0491 0.0057

Saturn 14984-11-21 15:07 G 7194179.04 7194179.13 7194179.25 0.0278 0.0242

Saturn 14985-07-09 02:24 G 7194408.39 7194408.60 7194408.81 0.0278 0.0034

Saturn 14986-02-23 12:43 G 7194637.88 7194638.03 7194638.21 0.0277 0.0174

Moon 14989-04-03 11:02 G 7195772.79 7195772.96 7195773.12 0.2642 0.0495

Earth 14989-04-03 12:57 G 7195772.88 7195773.04 7195773.19 0.2648 0.0497 *

Jupiter 14993-11-05 13:40 G 7197449.93 7197450.07 7197450.21 0.0493 0.0348

Uranus 14996-05-03 01:40 G 7198359.46 7198359.57 7198359.70 0.0145 0.0120

Uranus 14996-12-15 13:55 G 7198585.90 7198586.08 7198586.28 0.0145 0.0070

Uranus 14997-07-30 02:38 G 7198812.39 7198812.61 7198812.83 0.0145 0.0019

Uranus 14998-03-13 14:52 G 7199038.90 7199039.12 7199039.33 0.0145 0.0031

Uranus 14998-10-26 02:38 G 7199265.44 7199265.61 7199265.80 0.0145 0.0082

Uranus 14999-06-09 14:52 G 7199492.03 7199492.12 7199492.21 0.0145 0.0131

Saturn 14999-12-19 05:02 G 7199684.58 7199684.71 7199684.86 0.0281 0.0205

Jupiter 15000-04-27 20:09 G 7199814.16 7199814.34 7199814.52 0.0538 0.0248

Saturn 15000-08-05 17:45 G 7199914.03 7199914.24 7199914.45 0.0281 0.0009

16TH MILLENNIUM CE

This is a list of transits of Venus in the 16th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**15001-03-23 06:28**	**G**	**7200143.65**	**7200143.77**	**7200143.91**	**0.0281**	**0.0224**	
Mars	**15001-12-04 17:02**	**G**	**7200400.04**	**7200400.21**	**7200400.38**	**0.1593**	**0.0250**	
Jupiter	**15012-01-01 07:40**	**G**	**7204079.66**	**7204079.82**	**7204080.00**	**0.0535**	**0.0290**	
Saturn	**15014-06-04 19:55**	**G**	**7204965.21**	**7204965.33**	**7204965.47**	**0.0279**	**0.0216**	
Saturn	**15015-01-20 07:26**	**G**	**7205194.60**	**7205194.81**	**7205195.03**	**0.0278**	**0.0008**	
Saturn	**15015-09-06 18:28**	**G**	**7205424.12**	**7205424.27**	**7205424.41**	**0.0278**	**0.0200**	
Jupiter	**15017-11-08 18:14**	**G**	**7206218.09**	**7206218.26**	**7206218.42**	**0.0491**	**0.0284**	
Saturn	**15029-07-01 16:19**	**G**	**7210471.02**	**7210471.18**	**7210471.36**	**0.0280**	**0.0168**	
Jupiter	**15029-07-14 21:50**	**G**	**7210484.22**	**7210484.41**	**7210484.61**	**0.0493**	**0.0117**	
Saturn	**15030-02-16 05:02**	**G**	**7210700.50**	**7210700.71**	**7210700.92**	**0.0281**	**0.0045**	
Saturn	**15030-10-03 18:00**	**G**	**7210930.18**	**7210930.25**	**7210930.34**	**0.0281**	**0.0259**	
Mars	**15033-12-03 07:40**	**G**	**7212086.78**	**7212086.82**	**7212086.87**	**0.1596**	**0.1522**	
Mars	**15035-10-03 15:50**	**G**	**7212756.04**	**7212756.16**	**7212756.28**	**0.1590**	**0.1158**	
Mars	**15036-09-07 09:21**	**G**	**7213095.71**	**7213095.89**	**7213096.06**	**0.1944**	**0.0188**	
Uranus	**15039-02-05 08:52**	**G**	**7213976.75**	**7213976.87**	**7213977.02**	**0.0133**	**0.0104**	
Uranus	**15039-09-19 14:24**	**G**	**7214202.92**	**7214203.10**	**7214203.30**	**0.0133**	**0.0065**	
Uranus	**15040-05-02 19:40**	**G**	**7214429.11**	**7214429.32**	**7214429.54**	**0.0133**	**0.0027**	
Uranus	**15040-12-15 00:57**	**G**	**7214655.32**	**7214655.54**	**7214655.76**	**0.0133**	**0.0012**	
Uranus	**15041-07-29 06:00**	**G**	**7214881.56**	**7214881.75**	**7214881.96**	**0.0134**	**0.0052**	
Uranus	**15042-03-12 11:16**	**G**	**7215107.83**	**7215107.97**	**7215108.15**	**0.0134**	**0.0091**	

Neptune 15042-10-03 17:16 G 7215313.13 7215313.22 7215313.33 0.0089 0.0080

Uranus 15042-10-24 17:02 G 7215334.16 7215334.21 7215334.26 0.0134 0.0129

Neptune 15043-05-17 06:28 G 7215538.62 7215538.77 7215538.95 0.0089 0.0060

Saturn 15043-12-16 03:07 G 7215751.47 7215751.63 7215751.79 0.0278 0.0185

Neptune 15043-12-28 19:55 G 7215764.14 7215764.33 7215764.54 0.0089 0.0040

Saturn 15044-08-01 14:09 G 7215980.88 7215981.09 7215981.30 0.0278 0.0023

Neptune 15044-08-10 09:21 G 7215989.68 7215989.89 7215990.11 0.0089 0.0019

Saturn 15045-03-19 00:28 G 7216210.40 7216210.52 7216210.64 0.0277 0.0228

Neptune 15045-03-23 22:33 G 7216215.23 7216215.44 7216215.67 0.0089 0.0003

Neptune 15045-11-04 11:45 G 7216440.78 7216440.99 7216441.21 0.0089 0.0022

Neptune 15046-06-18 01:12 G 7216666.36 7216666.55 7216666.75 0.0089 0.0041

Neptune 15047-01-29 14:38 G 7216891.96 7216892.11 7216892.27 0.0089 0.0062

Jupiter 15047-09-08 23:31 G 7217114.28 7217114.48 7217114.69 0.0537 0.0008

Neptune 15047-09-12 03:21 G 7217117.59 7217117.64 7217117.75 0.0089 0.0083

Pluto 15050-05-04 01:26 G 7218082.42 7218082.56 7218082.74 0.0068 0.0046

Pluto 15050-12-15 07:12 G 7218307.58 7218307.80 7218308.02 0.0068 0.0001

Pluto 15051-07-28 11:45 G 7218532.87 7218532.99 7218533.18 0.0068 0.0049

Saturn 15059-01-11 18:14 G 7221257.08 7221257.26 7221257.44 0.0281 0.0145

Jupiter 15059-05-14 13:12 G 7221380.01 7221380.05 7221380.10 0.0534 0.0517

Saturn 15059-08-29 06:43 G 7221486.58 7221486.78 7221486.99 0.0281 0.0068

Jupiter 15065-03-22 07:40 G 7223518.62 7223518.82 7223519.02 0.0491 0.0120

Mars 15067-10-02 06:14 G 7224442.59 7224442.76 7224442.93 0.1592 0.0098

Saturn 15073-06-27 07:12 G 7226537.64 7226537.80 7226537.98 0.0279 0.0161

Saturn 15074-02-11 18:43 G 7226767.07 7226767.28 7226767.49 0.0278 0.0049

Saturn 15074-09-29 05:16 G 7226996.65 7226996.72 7226996.81 0.0278 0.0255

Jupiter 15076-11-25 09:21 G 7227784.73 7227784.89 7227785.06 0.0494 0.0291

Uranus 15080-01-02 08:38 G 7228917.83 7228917.86 7228917.91 0.0145 0.0143

Uranus 15080-08-15 21:07 G 7229144.23 7229144.38 7229144.56 0.0145 0.0092

Uranus 15081-03-30 09:36 G 7229370.70 7229370.90 7229371.11 0.0145 0.0042

Uranus 15081-11-11 21:50 G 7229597.20 7229597.41 7229597.63 0.0145 0.0009

Uranus 15082-06-26 10:04 G 7229823.72 7229823.92 7229824.12 0.0145 0.0059

Uranus 15083-02-07 22:04 G 7230050.28 7230050.42 7230050.57 0.0145 0.0109

Jupiter 15083-05-17 17:16 G 7230149.05 7230149.22 7230149.38 0.0537 0.0319

Saturn 15088-07-24 05:31 G 7232043.53 7232043.73 7232043.92 0.0280 0.0109

Saturn 15089-03-10 18:14 G 7232273.06 7232273.26 7232273.45 0.0281 0.0105

Jupiter 15095-01-20 03:21 G 7234414.46 7234414.64 7234414.83 0.0535 0.0229

Mars 15099-09-30 20:38 G 7236129.27 7236129.36 7236129.44 0.1595 0.1361

Jupiter 15100-11-28 16:04 G 7236553.03 7236553.17 7236553.31 0.0490 0.0352

Mars 15101-08-01 04:48 G 7236798.60 7236798.70 7236798.80 0.1589 0.1314

Mars 15102-07-06 10:19 G 7237137.75 7237137.93 7237138.10 0.1946 0.0460

Saturn 15103-01-08 15:36 G 7237323.97 7237324.15 7237324.34 0.0278 0.0127

Saturn 15103-08-26 02:24 G 7237553.40 7237553.60 7237553.81 0.0278 0.0081

Jupiter 15112-08-03 19:40 G 7240819.12 7240819.32 7240819.53 0.0492 0.0051

Saturn 15118-02-04 07:40 G 7242829.62 7242829.82 7242830.02 0.0281 0.0085

Saturn 15118-09-21 20:09 G 7243059.16 7243059.34 7243059.53 0.0281 0.0129

Moon 15118-10-04 04:48 G 7243071.56 7243071.70 7243071.85 0.2688 0.0741

Earth 15118-10-04 09:50 G 7243071.76 7243071.91 7243072.05 0.2684 0.1105 *

Uranus 15122-10-06 20:52 G 7244535.29 7244535.37 7244535.48 0.0133 0.0119

Uranus 15123-05-21 02:09 G 7244761.43 7244761.59 7244761.77 0.0133 0.0081

Uranus 15124-01-02 07:40 G 7244987.61 7244987.82 7244988.02 0.0133 0.0042

Neptune 15124-04-08 22:04 G 7245085.35 7245085.42 7245085.54 0.0088 0.0079

Jupiter 15124-04-08 22:48 G 7245085.38 7245085.45 7245085.53 0.0494 0.0457 *

Uranus 15124-08-15 12:43 G 7245213.82 7245214.03 7245214.25 0.0133 0.0004

Neptune 15124-11-20 11:16 G 7245310.81 7245310.97 7245311.13 0.0088 0.0059

Uranus 15125-03-29 18:00 G 7245440.04 7245440.25 7245440.46 0.0133 0.0036

Neptune 15125-07-04 00:00 G 7245536.31 7245536.50 7245536.70 0.0088 0.0040

Uranus 15125-11-10 23:02 G 7245666.29 7245666.46 7245666.65 0.0134 0.0075

Neptune 15126-02-14 12:43 G 7245761.82 7245762.03 7245762.25 0.0088 0.0021

Uranus 15126-06-25 04:19 G 7245892.58 7245892.68 7245892.81 0.0134 0.0114

Neptune 15126-09-28 01:26 G 7245987.34 7245987.56 7245987.78 0.0088 0.0002

Neptune 15127-05-11 13:55 G 7246212.87 7246213.08 7246213.31 0.0088 0.0018

Neptune 15127-12-23 02:38 G 7246438.42 7246438.61 7246438.82 0.0088 0.0037

Neptune 15128-08-04 15:07 G 7246663.98 7246664.13 7246664.32 0.0088 0.0057

Neptune 15129-03-18 03:50 G 7246889.57 7246889.66 7246889.79 0.0088 0.0076

Jupiter 15130-09-28 23:16 G 7247449.27 7247449.47 7247449.67 0.0536 0.0095

Saturn 15132-07-20 19:26 G 7248110.11 7248110.31 7248110.51 0.0278 0.0103

Saturn 15133-03-07 06:28 G 7248339.58 7248339.77 7248339.97 0.0278 0.0105

Mars 15133-07-30 18:57 G 7248485.12 7248485.29 7248485.47 0.1592 0.0068

Pluto 15136-10-10 23:31 G 7249653.27 7249653.48 7249653.70 0.0077 0.0020

Pluto 15137-05-24 08:24 G 7249878.69 7249878.85 7249879.03 0.0076 0.0048

Jupiter 15142-06-03 10:48 G 7251714.84 7251714.95 7251715.06 0.0534 0.0443

Saturn 15146-12-31 06:00 G 7253386.68 7253386.75 7253386.83 0.0280 0.0260

Saturn 15147-08-17 18:28 G 7253616.07 7253616.27 7253616.48 0.0281 0.0049

Saturn 15148-04-03 07:12 G 7253845.64 7253845.80 7253845.98 0.0281 0.0166

Jupiter 15148-04-11 03:07 G 7253853.45 7253853.63 7253853.83 0.0492 0.0179

Jupiter 15159-12-16 07:26 G 7258119.63 7258119.81 7258119.99 0.0493 0.0223

Saturn 15161-06-15 17:02 G 7258667.19 7258667.21 7258667.25 0.0278 0.0276

Saturn 15162-01-31 04:33 G 7258896.48 7258896.69 7258896.90 0.0278 0.0068

Saturn 15162-09-17 15:07 G 7259125.95 7259126.13 7259126.32 0.0278 0.0139

Uranus 15164-04-16 04:48 G 7259702.58 7259702.70 7259702.85 0.0145 0.0114

Uranus 15164-11-28 17:31 G 7259929.04 7259929.23 7259929.43 0.0145 0.0063

Uranus 15165-07-13 06:00 G 7260155.53 7260155.75 7260155.96 0.0145 0.0012

Mars 15165-07-29 09:36 G 7260171.78 7260171.90 7260172.01 0.1594 0.1205

Uranus 15166-02-24 18:00 G 7260382.04 7260382.25 7260382.46 0.0145 0.0038

Jupiter 15166-06-06 13:55 G 7260483.94 7260484.08 7260484.22 0.0538 0.0387

Uranus 15166-10-09 06:00 G 7260608.59 7260608.75 7260608.93 0.0145 0.0088

Uranus 15167-05-23 17:45 G 7260835.19 7260835.24 7260835.32 0.0145 0.0138

Mars 15167-05-29 17:45 G 7260841.18 7260841.24 7260841.30 0.1589 0.1471

Mars 15168-05-02 11:02 G 7261179.81 7261179.96 7261180.10 0.1947 0.1119

Saturn 15176-07-12 08:52 G 7264172.76 7264172.87 7264172.98 0.0280 0.0236

Saturn 15177-02-26 21:07 G 7264402.17 7264402.38 7264402.59 0.0281 0.0024

Saturn 15177-10-14 09:36 G 7264631.76 7264631.90 7264632.07 0.0281 0.0190

Jupiter 15178-02-09 03:21 G 7264749.45 7264749.64 7264749.84 0.0536 0.0143

Jupiter 15183-12-18 12:57 G 7266887.93 7266888.04 7266888.15 0.0490 0.0413

Saturn 15190-12-26 20:09 G 7269453.27 7269453.34 7269453.44 0.0279 0.0254

Saturn 15191-08-13 07:55 G 7269682.62 7269682.83 7269683.04 0.0278 0.0045

Saturn 15192-03-29 18:28 G 7269912.11 7269912.27 7269912.45 0.0278 0.0163

Jupiter 15195-08-23 15:07 G 7271153.93 7271154.13 7271154.34 0.0492 0.0008

Mars 15199-05-28 07:55 G 7272527.66 7272527.83 7272528.01 0.1591 0.0223

Saturn 15206-01-22 18:28 G 7274959.13 7274959.27 7274959.42 0.0280 0.0202

Saturn 15206-09-09 07:12 G 7275188.59 7275188.80 7275189.01 0.0281 0.0011

Uranus 15207-01-18 14:09 G 7275319.95 7275320.09 7275320.25 0.0133 0.0095

Saturn 15207-04-26 20:09 G 7275418.22 7275418.34 7275418.47 0.0281 0.0225

Jupiter 15207-04-28 18:00 G 7275420.14 7275420.25 7275420.38 0.0494 0.0403

Neptune 15207-08-19 14:38 G 7275532.98 7275533.11 7275533.25 0.0089 0.0071

Uranus 15207-09-01 19:12 G 7275546.12 7275546.30 7275546.51 0.0133 0.0057

Neptune 15208-04-01 03:50 G 7275758.49 7275758.66 7275758.85 0.0089 0.0051

Uranus 15208-04-15 00:28 G 7275772.31 7275772.52 7275772.74 0.0133 0.0019

Neptune 15208-11-12 17:02 G 7275984.01 7275984.21 7275984.42 0.0089 0.0030

Uranus 15208-11-27 05:45 G 7275998.52 7275998.74 7275998.96 0.0133 0.0020

Neptune 15209-06-26 06:14 G 7276209.55 7276209.76 7276209.99 0.0089 0.0011

Uranus 15209-07-11 10:48 G 7276224.76 7276224.95 7276225.15 0.0133 0.0059

Neptune 15210-02-06 19:40 G 7276435.10 7276435.32 7276435.54 0.0089 0.0010

Uranus 15210-02-22 16:04 G 7276451.04 7276451.17 7276451.33 0.0134 0.0098

Neptune 15210-09-20 08:52 G 7276660.67 7276660.87 7276661.08 0.0089 0.0030

Neptune 15211-05-03 22:04 G 7276886.25 7276886.42 7276886.61 0.0089 0.0051

Neptune 15211-12-15 11:31 G 7277111.85 7277111.98 7277112.12 0.0089 0.0071

Jupiter 15213-10-17 17:45 G 7277784.04 7277784.24 7277784.43 0.0537 0.0149

Saturn 15220-07-08 06:28 G 7280239.65 7280239.77 7280239.91 0.0278 0.0216

Saturn 15221-02-22 17:31 G 7280469.02 7280469.23 7280469.45 0.0278 0.0010

Saturn 15221-10-10 04:04 G 7280698.53 7280698.67 7280698.82 0.0277 0.0198

Jupiter 15225-06-22 06:28 G 7282049.63 7282049.77 7282049.92 0.0534 0.0384

Jupiter 15231-05-01 01:12 G 7284188.38 7284188.55 7284188.73 0.0491 0.0246

Mars 15231-05-26 22:19 G 7284214.30 7284214.43 7284214.56 0.1593 0.1044

Moon 15232-04-05 15:07 G 7284528.99 7284529.13 7284529.28 0.2654 0.0560

Earth 15232-04-05 15:36 G 7284528.99 7284529.15 7284529.30 0.2648 0.0544 *

Mars 15234-02-27 11:45 G 7285221.92 7285221.99 7285222.06 0.1948 0.1778

Saturn 15235-08-04 21:21 G 7285745.24 7285745.39 7285745.56 0.0281 0.0177

Saturn 15236-03-21 10:04 G 7285974.71 7285974.92 7285975.13 0.0281 0.0036

Saturn 15236-11-05 22:48 G 7286204.36 7286204.45 7286204.55 0.0281 0.0250

Moon 15240-04-03 11:31 G 7287448.91 7287448.98 7287449.05 0.2652 0.2317

Jupiter 15243-01-04 04:48 G 7288454.51 7288454.70 7288454.90 0.0493 0.0159

Uranus 15247-12-15 12:00 G 7290260.92 7290261.00 7290261.08 0.0146 0.0135

Uranus 15248-07-29 00:28 G 7290487.35 7290487.52 7290487.70 0.0145 0.0085

Uranus 15249-03-12 12:43 G 7290713.82 7290714.03 7290714.25 0.0145 0.0034

Jupiter 15249-06-25 14:24 G 7290819.01 7290819.10 7290819.19 0.0538 0.0479

Uranus 15249-10-25 00:57 G 7290940.33 7290940.54 7290940.76 0.0145 0.0016

Saturn 15250-01-18 08:52 G 7291025.72 7291025.87 7291026.02 0.0278 0.0195

Uranus 15250-06-08 13:12 G 7291166.86 7291167.05 7291167.24 0.0145 0.0066

Saturn 15250-09-04 19:55 G 7291255.12 7291255.33 7291255.54 0.0278 0.0013

Uranus 15251-01-21 01:12 G 7291393.43 7291393.55 7291393.69 0.0145 0.0116

Saturn 15251-04-22 06:28 G 7291484.65 7291484.77 7291484.91 0.0278 0.0220

Jupiter 15261-02-28 01:55 G 7295084.38 7295084.58 7295084.78 0.0535 0.0064

Saturn 15265-02-14 06:14 G 7296531.58 7296531.76 7296531.95 0.0281 0.0144

Mars 15265-03-24 20:52 G 7296570.20 7296570.37 7296570.54 0.1590 0.0382

Saturn 15265-10-01 18:57 G 7296761.09 7296761.29 7296761.50 0.0281 0.0070

Mars 15266-02-27 18:57 G 7296910.18 7296910.29 7296910.40 0.1944 0.1500

Jupiter 15267-01-06 08:52 G 7297222.82 7297222.87 7297222.92 0.0490 0.0472

Jupiter 15278-09-11 13:40 G 7301488.87 7301489.07 7301489.27 0.0492 0.0076

Saturn 15279-07-31 19:12 G 7301812.13 7301812.30 7301812.48 0.0278 0.0157

Saturn 15280-03-17 06:00 G 7302041.55 7302041.75 7302041.97 0.0278 0.0051

Saturn 15280-11-01 16:19 G 7302271.11 7302271.18 7302271.27 0.0277 0.0256

Neptune 15289-02-21 19:12 G 7305305.19 7305305.30 7305305.46 0.0088 0.0070

Neptune 15289-10-05 08:24 G 7305530.67 7305530.85 7305531.03 0.0088 0.0050

Jupiter 15290-05-17 17:02 G 7305755.06 7305755.21 7305755.36 0.0494 0.0330

Neptune 15290-05-18 20:52 G 7305756.18 7305756.37 7305756.59 0.0088 0.0031

Uranus 15290-09-18 02:38 G 7305878.49 7305878.61 7305878.74 0.0133 0.0109

Neptune 15290-12-30 09:50 G 7305981.70 7305981.91 7305982.13 0.0088 0.0012

Uranus 15291-05-02 07:40 G 7306104.64 7306104.82 7306105.01 0.0133 0.0071

Neptune 15291-08-12 22:33 G 7306207.23 7306207.44 7306207.67 0.0088 0.0008

Uranus 15291-12-14 12:43 G 7306330.83 7306331.03 7306331.25 0.0133 0.0033

Neptune 15292-03-25 11:16 G 7306432.77 7306432.97 7306433.18 0.0088 0.0027

Uranus 15292-07-27 18:00 G 7306557.03 7306557.25 7306557.47 0.0133 0.0006

Neptune 15292-11-06 00:00 G 7306658.32 7306658.50 7306658.69 0.0088 0.0046

Uranus 15293-03-10 23:16 G 7306783.27 7306783.47 7306783.68 0.0133 0.0045

Neptune 15293-06-19 12:28 G 7306883.89 7306884.02 7306884.18 0.0088 0.0066

Uranus 15293-10-23 04:19 G 7307009.52 7307009.68 7307009.86 0.0133 0.0084

Neptune 15294-01-31 01:12 G 7307109.51 7307109.55 7307109.62 0.0088 0.0085

Uranus 15294-06-06 09:21 G 7307235.83 7307235.89 7307236.00 0.0134 0.0123

Saturn 15294-08-27 09:07 G 7307317.70 7307317.88 7307318.08 0.0281 0.0119

Saturn 15295-04-13 21:50 G 7307547.21 7307547.41 7307547.61 0.0281 0.0095

Pluto 15295-10-21 09:36 G 7307737.87 7307737.90 7307737.97 0.0067 0.0066

Pluto 15296-06-02 15:07 G 7307962.93 7307963.13 7307963.35 0.0068 0.0020

Jupiter 15296-11-05 17:45 G 7308119.06 7308119.24 7308119.43 0.0537 0.0238

Pluto 15297-01-13 20:09 G 7308188.16 7308188.34 7308188.56 0.0068 0.0027

Mars 15297-03-23 11:16 G 7308256.83 7308256.97 7308257.12 0.1592 0.0888

Jupiter 15308-07-12 07:40 G 7312384.65 7312384.82 7312384.99 0.0535 0.0289

Saturn 15309-02-10 20:52 G 7312598.18 7312598.37 7312598.55 0.0278 0.0136

Saturn 15309-09-28 07:40 G 7312827.62 7312827.82 7312828.03 0.0278 0.0071

Saturn 15310-05-15 18:00 G 7313057.25 7313057.25 7313057.28 0.0277 0.0276

Jupiter 15314-05-20 21:21 G 7314523.24 7314523.39 7314523.56 0.0491 0.0306

Saturn 15324-03-09 16:33 G 7318103.99 7318104.19 7318104.40 0.0281 0.0088

Saturn 15324-10-25 05:31 G 7318333.54 7318333.73 7318333.92 0.0281 0.0126

Jupiter 15326-01-24 01:12 G 7318789.35 7318789.55 7318789.75 0.0493 0.0098

Mars 15331-01-21 09:50 G 7320612.75 7320612.91 7320613.08 0.1589 0.0537

Mars 15331-12-26 19:40 G 7320952.16 7320952.32 7320952.48 0.1945 0.0852

Uranus 15332-03-29 07:55 G 7321045.69 7321045.83 7321045.99 0.0146 0.0106

Jupiter 15332-07-15 09:07 G 7321153.87 7321153.88 7321153.90 0.0538 0.0536

Uranus 15332-11-10 20:24 G 7321272.15 7321272.35 7321272.56 0.0145 0.0055

Uranus 15333-06-25 08:52 G 7321498.65 7321498.87 7321499.09 0.0145 0.0005

Uranus 15334-02-06 21:07 G 7321725.17 7321725.38 7321725.59 0.0145 0.0046

Uranus 15334-09-21 09:07 G 7321951.73 7321951.88 7321952.05 0.0145 0.0096

Saturn 15338-08-24 06:57 G 7323384.60 7323384.79 7323384.99 0.0278 0.0099

Saturn 15339-04-10 17:45 G 7323614.04 7323614.24 7323614.44 0.0278 0.0108

Jupiter 15344-03-19 21:36 G 7325419.20 7325419.40 7325419.61 0.0536 0.0007

Saturn 15353-02-02 07:40 G 7328660.78 7328660.82 7328660.87 0.0280 0.0274

Saturn 15353-09-19 19:55 G 7328890.13 7328890.33 7328890.54 0.0281 0.0063

Saturn 15354-05-07 08:38 G 7329119.68 7329119.86 7329120.04 0.0281 0.0151

Jupiter 15355-11-23 11:45 G 7329684.96 7329684.99 7329685.02 0.0534 0.0526

Jupiter 15361-10-01 12:00 G 7331823.81 7331824.00 7331824.20 0.0492 0.0147

Earth 15361-10-05 08:52 G 7331827.72 7331827.87 7331828.02 0.2684 0.0776

Moon 15361-10-05 14:52 G 7331827.97 7331828.12 7331828.27 0.2683 0.1070 *

Mars 15363-01-20 00:14 G 7332299.35 7332299.51 7332299.66 0.1592 0.0730

Saturn 15368-03-05 07:55 G 7334170.63 7334170.83 7334171.03 0.0278 0.0080

Saturn 15368-10-20 18:28 G 7334400.09 7334400.27 7334400.47 0.0277 0.0127

Neptune 15371-11-21 21:36 G 7335527.34 7335527.40 7335527.51 0.0089 0.0083

Neptune 15372-07-04 11:02 G 7335752.82 7335752.96 7335753.13 0.0089 0.0062

Neptune 15373-02-15 00:43 G 7335978.34 7335978.53 7335978.72 0.0089 0.0042

Jupiter 15373-06-06 13:55 G 7336089.91 7336090.08 7336090.26 0.0494 0.0268

Neptune 15373-09-28 13:55 G 7336203.87 7336204.08 7336204.30 0.0089 0.0022

Neptune 15374-05-12 03:07 G 7336429.41 7336429.63 7336429.85 0.0089 0.0002

Uranus 15374-05-19 14:52 G 7336437.05 7336437.12 7336437.20 0.0133 0.0123

Neptune 15374-12-23 16:19 G 7336654.97 7336655.18 7336655.40 0.0089 0.0019

Uranus 15374-12-31 19:55 G 7336663.17 7336663.33 7336663.51 0.0133 0.0085

Neptune 15375-08-06 05:31 G 7336880.54 7336880.73 7336880.94 0.0089 0.0039

Uranus 15375-08-15 00:57 G 7336889.35 7336889.54 7336889.76 0.0133 0.0047

Neptune 15376-03-18 18:43 G 7337106.13 7337106.28 7337106.46 0.0089 0.0059

Uranus 15376-03-28 06:14 G 7337115.55 7337115.76 7337115.98 0.0133 0.0009

Neptune 15376-10-30 07:55 G 7337331.75 7337331.83 7337331.94 0.0089 0.0080

Uranus 15376-11-09 11:31 G 7337341.77 7337341.98 7337342.19 0.0133 0.0030

Uranus 15377-06-23 16:19 G 7337568.01 7337568.18 7337568.38 0.0133 0.0070

Uranus 15378-02-04 22:04 G 7337794.30 7337794.42 7337794.55 0.0133 0.0108

Jupiter 15379-11-26 18:14 G 7338454.10 7338454.26 7338454.42 0.0537 0.0327

Pluto 15382-03-30 05:45 G 7339308.59 7339308.74 7339308.91 0.0077 0.0051

Saturn 15382-08-15 12:57 G 7339446.94 7339447.04 7339447.14 0.0280 0.0247

Pluto 15382-11-10 15:07 G 7339533.91 7339534.13 7339534.35 0.0077 0.0017

Saturn 15383-04-02 01:40 G 7339676.36 7339676.57 7339676.78 0.0281 0.0035

Saturn 15383-11-17 14:38 G 7339905.95 7339906.11 7339906.27 0.0281 0.0179

Jupiter 15391-08-01 03:21 G 7342719.46 7342719.64 7342719.83 0.0535 0.0230

Mars 15396-11-17 22:48 G 7344655.30 7344655.45 7344655.61 0.1589 0.0695

Saturn 15397-01-29 06:43 G 7344727.69 7344727.78 7344727.88 0.0279 0.0250

Jupiter 15397-06-08 21:07 G 7344858.25 7344858.38 7344858.51 0.0491 0.0381

Saturn 15397-09-15 18:00 G 7344957.04 7344957.25 7344957.46 0.0278 0.0043

Mars 15397-10-22 20:52 G 7344994.20 7344994.37 7344994.55 0.1947 0.0219

Saturn 15398-05-03 04:33 G 7345186.52 7345186.69 7345186.86 0.0278 0.0164

Jupiter 15409-02-13 01:12 G 7349124.35 7349124.55 7349124.75 0.0493 0.0020

Saturn 15412-02-26 16:48 G 7350233.08 7350233.20 7350233.33 0.0280 0.0221

Saturn 15412-10-13 05:16 G 7350462.51 7350462.72 7350462.93 0.0281 0.0010

Saturn 15413-05-30 18:00 G 7350692.11 7350692.25 7350692.40 0.0281 0.0204

Uranus 15415-11-28 14:38 G 7351604.01 7351604.11 7351604.21 0.0146 0.0128

Uranus	15416-07-12 03:07 G	7351830.45	7351830.63	7351830.82	0.0145	0.0078
Uranus	15417-02-23 15:21 G	7352056.93	7352057.14	7352057.36	0.0145	0.0028
Uranus	15417-10-08 03:50 G	7352283.45	7352283.66	7352283.88	0.0145	0.0023
Uranus	15418-05-22 16:04 G	7352509.98	7352510.17	7352510.36	0.0145	0.0074
Uranus	15419-01-04 03:50 G	7352736.57	7352736.66	7352736.79	0.0145	0.0124
Jupiter	15420-10-19 04:19 G	7353390.59	7353390.68	7353390.79	0.0495	0.0429
Saturn	15426-08-12 06:57 G	7355513.68	7355513.79	7355513.90	0.0278	0.0233
Saturn	15427-03-29 18:00 G	7355743.04	7355743.25	7355743.46	0.0278	0.0026
Jupiter	15427-04-10 00:14 G	7355754.31	7355754.51	7355754.71	0.0536	0.0100
Saturn	15427-11-14 04:33 G	7355972.53	7355972.69	7355972.85	0.0277	0.0181
Mars	15428-11-17 13:12 G	7356341.89	7356342.05	7356342.21	0.1591	0.0572
Jupiter	15438-12-13 13:12 G	7360019.93	7360020.05	7360020.17	0.0534	0.0432
Saturn	15441-09-07 20:52 G	7361019.22	7361019.37	7361019.52	0.0281	0.0196
Saturn	15442-04-25 09:21 G	7361248.68	7361248.89	7361249.11	0.0281	0.0017
Saturn	15442-12-10 22:33 G	7361478.32	7361478.44	7361478.56	0.0281	0.0231
Jupiter	15444-10-21 09:50 G	7362158.73	7362158.91	7362159.10	0.0492	0.0213
Neptune	15453-05-28 03:50 G	7365299.59	7365299.66	7365299.77	0.0088	0.0080
Neptune	15454-01-08 16:33 G	7365525.05	7365525.19	7365525.37	0.0088	0.0061
Neptune	15454-08-22 05:45 G	7365750.55	7365750.74	7365750.93	0.0088	0.0041
Neptune	15455-04-04 18:14 G	7365976.06	7365976.26	7365976.48	0.0088	0.0022
Neptune	15455-11-16 07:12 G	7366201.58	7366201.80	7366202.02	0.0088	0.0003
Saturn	15456-02-22 16:19 G	7366300.03	7366300.18	7366300.33	0.0279	0.0197
Jupiter	15456-06-26 14:09 G	7366424.90	7366425.09	7366425.28	0.0494	0.0188
Neptune	15456-06-28 19:40 G	7366427.11	7366427.32	7366427.55	0.0088	0.0017
Saturn	15456-10-09 03:21 G	7366529.43	7366529.64	7366529.85	0.0278	0.0011
Neptune	15457-02-09 08:24 G	7366652.66	7366652.85	7366653.06	0.0088	0.0036
Saturn	15457-05-26 13:55 G	7366758.95	7366759.08	7366759.21	0.0278	0.0217
Neptune	15457-09-22 20:52 G	7366878.22	7366878.37	7366878.56	0.0088	0.0056
Neptune	15458-05-06 09:21 G	7367103.80	7367103.89	7367104.03	0.0088	0.0075
Uranus	15458-09-01 08:38 G	7367221.72	7367221.86	7367222.01	0.0133	0.0099

Uranus 15459-04-15 13:40 G 7367447.88 7367448.07 7367448.27 0.0133 0.0061

Uranus 15459-11-27 18:43 G 7367674.07 7367674.28 7367674.50 0.0133 0.0023

Uranus 15460-07-11 00:00 G 7367900.29 7367900.50 7367900.72 0.0133 0.0016

Uranus 15461-02-22 05:31 G 7368126.53 7368126.73 7368126.93 0.0133 0.0055

Uranus 15461-10-06 10:33 G 7368352.79 7368352.94 7368353.10 0.0133 0.0093

Uranus 15462-05-20 16:04 G 7368579.14 7368579.17 7368579.20 0.0133 0.0132

Mars 15462-09-16 12:14 G 7368697.86 7368698.01 7368698.16 0.1588 0.0845

Jupiter 15462-12-16 14:52 G 7368788.99 7368789.12 7368789.26 0.0537 0.0393

Mars 15463-08-20 21:50 G 7369036.23 7369036.41 7369036.58 0.1948 0.0448

Saturn 15471-03-21 00:43 G 7371805.37 7371805.53 7371805.71 0.0280 0.0170

Saturn 15471-11-05 13:12 G 7372034.85 7372035.05 7372035.26 0.0281 0.0043

Saturn 15472-06-22 02:09 G 7372264.51 7372264.59 7372264.68 0.0281 0.0256

Jupiter 15474-08-21 04:33 G 7373054.50 7373054.69 7373054.89 0.0535 0.0136

Earth 15475-04-08 18:14 G 7373285.10 7373285.26 7373285.41 0.2647 0.0591

Moon 15475-04-08 20:52 G 7373285.21 7373285.37 7373285.53 0.2642 0.0601 *

Jupiter 15480-06-28 20:52 G 7375193.31 7375193.37 7375193.44 0.0491 0.0459

Saturn 15485-09-03 16:04 G 7377086.02 7377086.17 7377086.34 0.0278 0.0180

Saturn 15486-04-21 03:21 G 7377315.43 7377315.64 7377315.85 0.0278 0.0028

Saturn 15486-12-06 13:40 G 7377544.97 7377545.07 7377545.19 0.0277 0.0233

Jupiter 15492-03-03 23:45 G 7379459.29 7379459.49 7379459.69 0.0492 0.0051

Mars 15494-09-15 02:24 G 7380384.43 7380384.60 7380384.77 0.1590 0.0417

Uranus 15500-03-12 11:02 G 7382388.81 7382388.96 7382389.13 0.0146 0.0099

Saturn 15500-10-01 03:21 G 7382591.46 7382591.64 7382591.82 0.0281 0.0147

Uranus 15500-10-24 23:31 G 7382615.28 7382615.48 7382615.69 0.0145 0.0048

Saturn 15501-05-18 16:04 G 7382820.96 7382821.17 7382821.38 0.0281 0.0066

Uranus 15501-06-08 12:00 G 7382841.78 7382842.00 7382842.22 0.0145 0.0003

Saturn 15502-01-03 05:02 G 7383050.70 7383050.71 7383050.74 0.0281 0.0280

Uranus 15502-01-21 00:14 G 7383068.31 7383068.51 7383068.72 0.0145 0.0053

Uranus 15502-09-04 12:28 G 7383294.88 7383295.02 7383295.18 0.0145 0.0103

Jupiter 15503-11-09 02:52 G 7383725.49 7383725.62 7383725.76 0.0495 0.0358

Jupiter 15510-04-29 21:21 G 7386089.20 7386089.39 7386089.59 0.0536 0.0171

Saturn 15515-03-18 00:43 G 7387872.36 7387872.53 7387872.72 0.0279 0.0146

Saturn 15515-11-02 12:00 G 7388101.79 7388102.00 7388102.21 0.0278 0.0062

Saturn 15516-06-18 22:19 G 7388331.39 7388331.43 7388331.49 0.0278 0.0268

Jupiter 15522-01-02 10:19 G 7390354.79 7390354.93 7390355.08 0.0534 0.0363

Jupiter 15527-11-11 10:33 G 7392493.78 7392493.94 7392494.11 0.0492 0.0297

Mars 15528-07-15 00:57 G 7392740.41 7392740.54 7392740.68 0.1587 0.1005

Mars 15529-06-17 22:19 G 7393078.29 7393078.43 7393078.58 0.1949 0.1113

Saturn 15530-04-13 08:09 G 7393377.65 7393377.84 7393378.03 0.0280 0.0120

Saturn 15530-11-28 20:38 G 7393607.16 7393607.36 7393607.56 0.0281 0.0092

Neptune 15536-10-07 18:28 G 7395747.15 7395747.27 7395747.39 0.0089 0.0074

Neptune 15537-05-21 07:40 G 7395972.65 7395972.82 7395973.00 0.0089 0.0054

Neptune 15538-01-01 20:52 G 7396198.17 7396198.37 7396198.58 0.0089 0.0034

Neptune 15538-08-15 10:19 G 7396423.71 7396423.93 7396424.15 0.0089 0.0013

Neptune 15539-03-28 23:31 G 7396649.26 7396649.48 7396649.70 0.0089 0.0007

Jupiter 15539-07-17 14:52 G 7396759.92 7396760.12 7396760.32 0.0493 0.0106

Neptune 15539-11-09 12:28 G 7396874.82 7396875.02 7396875.24 0.0089 0.0027

Neptune 15540-06-22 01:40 G 7397100.39 7397100.57 7397100.77 0.0089 0.0048

Neptune 15541-02-02 15:07 G 7397326.00 7397326.13 7397326.28 0.0089 0.0068

Neptune 15541-09-16 04:19 G 7397551.65 7397551.68 7397551.73 0.0089 0.0088

Pluto 15541-11-22 00:00 G 7397618.33 7397618.50 7397618.70 0.0068 0.0038

Uranus 15542-05-02 21:21 G 7397780.28 7397780.39 7397780.50 0.0133 0.0113

Pluto 15542-07-05 05:31 G 7397843.51 7397843.73 7397843.95 0.0068 0.0009

Uranus 15542-12-15 02:09 G 7398006.42 7398006.59 7398006.78 0.0133 0.0075

Pluto 15543-02-15 10:19 G 7398068.83 7398068.93 7398069.07 0.0068 0.0057

Uranus 15543-07-29 07:26 G 7398232.60 7398232.81 7398233.02 0.0133 0.0037

Uranus 15544-03-11 12:43 G 7398458.81 7398459.03 7398459.25 0.0133 0.0002

Saturn 15544-09-27 00:28 G 7398658.34 7398658.52 7398658.71 0.0278 0.0129

Uranus 15544-10-23 17:45 G 7398685.04 7398685.24 7398685.45 0.0133 0.0040

Saturn 15545-05-14 11:31 G 7398887.78 7398887.98 7398888.19 0.0278 0.0079

Uranus	15545-06-06 22:48 G	7398911.29	7398911.45	7398911.64	0.0133	0.0079
Jupiter	15546-01-05 18:28 G	7399124.21	7399124.27	7399124.34	0.0538	0.0504
Uranus	15546-01-19 04:19 G	7399137.59	7399137.68	7399137.79	0.0133	0.0118
Jupiter	15557-09-10 07:26 G	7403389.61	7403389.81	7403390.02	0.0535	0.0034
Saturn	15559-10-24 09:21 G	7404163.70	7404163.89	7404164.09	0.0280	0.0100
Saturn	15560-06-09 22:04 G	7404393.23	7404393.42	7404393.62	0.0281	0.0114
Mars	15560-07-13 15:07 G	7404426.96	7404427.13	7404427.30	0.1589	0.0253
Saturn	15574-04-09 08:38 G	7409444.66	7409444.86	7409445.06	0.0279	0.0096
Saturn	15574-11-24 19:40 G	7409674.13	7409674.32	7409674.52	0.0278	0.0113
Jupiter	15575-03-25 00:14 G	7409794.32	7409794.51	7409794.71	0.0493	0.0134
Uranus	15583-11-10 17:45 G	7412947.13	7412947.24	7412947.37	0.0146	0.0121
Uranus	15584-06-24 06:14 G	7413173.58	7413173.76	7413173.96	0.0146	0.0071
Uranus	15585-02-05 18:57 G	7413400.08	7413400.29	7413400.51	0.0145	0.0020
Uranus	15585-09-20 07:26 G	7413626.60	7413626.81	7413627.02	0.0145	0.0031
Uranus	15586-05-04 19:40 G	7413853.15	7413853.32	7413853.51	0.0145	0.0081
Jupiter	15586-11-28 03:50 G	7414060.49	7414060.66	7414060.83	0.0495	0.0273
Uranus	15586-12-17 07:55 G	7414079.75	7414079.83	7414079.93	0.0145	0.0131
Saturn	15589-05-05 14:52 G	7414949.92	7414950.12	7414950.33	0.0280	0.0072
Saturn	15589-12-21 03:07 G	7415179.46	7415179.63	7415179.82	0.0281	0.0141
Mars	15592-07-12 05:16 G	7416113.68	7416113.72	7416113.77	0.1592	0.1528
Jupiter	15593-05-18 23:02 G	7416424.28	7416424.46	7416424.64	0.0537	0.0268
Mars	15594-05-12 14:09 G	7416782.98	7416783.09	7416783.21	0.1587	0.1159
Mars	15595-04-14 22:48 G	7417120.39	7417120.45	7417120.52	0.1950	0.1791
Saturn	15603-10-20 08:24 G	7420230.65	7420230.85	7420231.06	0.0278	0.0079
Saturn	15604-06-05 19:26 G	7420460.13	7420460.31	7420460.50	0.0278	0.0129
Moon	15604-10-07 02:24 G	7420583.44	7420583.60	7420583.76	0.2684	0.0186
Earth	15604-10-07 08:38 G	7420583.70	7420583.86	7420584.01	0.2685	0.0486 *
Jupiter	15605-01-21 13:40 G	7420689.90	7420690.07	7420690.25	0.0534	0.0256
Jupiter	15610-11-30 10:04 G	7422828.79	7422828.92	7422829.06	0.0491	0.0374
Saturn	15618-03-31 03:07 G	7425506.57	7425506.63	7425506.71	0.0280	0.0263

Neptune 15618-04-13 00:57 G 7425519.43 7425519.54 7425519.68 0.0088 0.0071

Saturn 15618-11-15 15:21 G 7425735.94 7425736.14 7425736.35 0.0280 0.0053

Neptune 15618-11-24 13:40 G 7425744.91 7425745.07 7425745.26 0.0088 0.0052

Saturn 15619-07-03 04:04 G 7425965.50 7425965.67 7425965.85 0.0281 0.0161

Neptune 15619-07-08 02:38 G 7425970.41 7425970.61 7425970.82 0.0088 0.0033

Neptune 15620-02-18 15:21 G 7426195.93 7426196.14 7426196.36 0.0088 0.0013

Neptune 15620-10-01 04:04 G 7426421.45 7426421.67 7426421.89 0.0088 0.0007

Neptune 15621-05-14 16:33 G 7426646.99 7426647.19 7426647.41 0.0088 0.0026

Neptune 15621-12-26 05:16 G 7426872.54 7426872.72 7426872.92 0.0088 0.0045

Jupiter 15622-08-05 14:09 G 7427094.88 7427095.09 7427095.29 0.0493 0.0031

Neptune 15622-08-08 17:45 G 7427098.12 7427098.24 7427098.41 0.0088 0.0065

Neptune 15623-03-22 06:28 G 7427323.73 7427323.77 7427323.86 0.0088 0.0084

Uranus 15625-12-31 09:21 G 7428338.86 7428338.89 7428338.97 0.0133 0.0128

Mars 15626-05-11 04:19 G 7428469.51 7428469.68 7428469.86 0.1589 0.0104

Uranus 15626-08-14 14:38 G 7428564.97 7428565.11 7428565.29 0.0133 0.0090

Uranus 15627-03-28 19:55 G 7428791.14 7428791.33 7428791.54 0.0133 0.0051

Mars 15627-04-15 05:31 G 7428808.62 7428808.73 7428808.84 0.1946 0.1506

Pluto 15627-09-17 13:40 G 7428964.07 7428964.07 7428964.09 0.0077 0.0077

Uranus 15627-11-10 01:12 G 7429017.33 7429017.55 7429017.77 0.0133 0.0013

Pluto 15628-04-29 23:02 G 7429189.24 7429189.46 7429189.68 0.0077 0.0008

Uranus 15628-06-23 06:14 G 7429243.55 7429243.76 7429243.98 0.0133 0.0026

Pluto 15628-12-11 07:55 G 7429414.70 7429414.83 7429414.97 0.0076 0.0060

Uranus 15629-02-04 11:45 G 7429469.80 7429469.99 7429470.18 0.0133 0.0064

Uranus 15629-09-18 17:16 G 7429696.08 7429696.22 7429696.35 0.0133 0.0103

Saturn 15632-09-14 03:50 G 7430787.58 7430787.66 7430787.75 0.0279 0.0257

Saturn 15633-05-01 15:36 G 7431016.95 7431017.15 7431017.37 0.0279 0.0048

Saturn 15633-12-17 02:52 G 7431246.46 7431246.62 7431246.80 0.0278 0.0161

Jupiter 15634-04-10 17:02 G 7431361.12 7431361.21 7431361.30 0.0496 0.0442

Jupiter 15640-09-29 05:31 G 7433724.53 7433724.73 7433724.93 0.0535 0.0043

Saturn 15647-10-11 10:04 G 7436292.81 7436292.92 7436293.04 0.0279 0.0234

Saturn 15648-05-27 22:04 G 7436522.20 7436522.42 7436522.63 0.0280 0.0024

Saturn 15649-01-12 10:19 G 7436751.78 7436751.93 7436752.09 0.0281 0.0189

Jupiter 15652-06-03 18:43 G 7437990.21 7437990.28 7437990.37 0.0533 0.0484

Jupiter 15658-04-13 01:12 G 7440129.37 7440129.55 7440129.73 0.0492 0.0218

Mars 15658-05-09 18:14 G 7440156.18 7440156.26 7440156.35 0.1591 0.1370

Mars 15660-03-09 03:21 G 7440825.55 7440825.64 7440825.74 0.1587 0.1315

Saturn 15662-03-27 04:33 G 7441573.59 7441573.69 7441573.80 0.0279 0.0238

Saturn 15662-11-11 16:19 G 7441802.97 7441803.18 7441803.39 0.0278 0.0029

Saturn 15663-06-29 03:21 G 7442032.48 7442032.64 7442032.80 0.0278 0.0178

Uranus 15667-07-11 02:24 G 7443505.55 7443505.60 7443505.66 0.0146 0.0141

Uranus 15668-02-22 14:52 G 7443731.96 7443732.12 7443732.30 0.0146 0.0091

Uranus 15668-10-06 03:21 G 7443958.44 7443958.64 7443958.85 0.0145 0.0040

Uranus 15669-05-20 15:50 G 7444184.94 7444185.16 7444185.38 0.0145 0.0011

Jupiter 15669-12-17 03:50 G 7444395.47 7444395.66 7444395.85 0.0494 0.0194

Uranus 15670-01-02 04:19 G 7444411.48 7444411.68 7444411.88 0.0145 0.0061

Uranus 15670-08-16 16:19 G 7444638.06 7444638.18 7444638.34 0.0145 0.0111

Jupiter 15676-06-07 02:38 G 7446759.47 7446759.61 7446759.75 0.0537 0.0377

Saturn 15677-04-22 09:50 G 7447078.78 7447078.91 7447079.05 0.0280 0.0215

Saturn 15677-12-07 21:50 G 7447308.20 7447308.41 7447308.62 0.0280 0.0006

Saturn 15678-07-25 10:19 G 7447537.80 7447537.93 7447538.08 0.0281 0.0208

Jupiter 15688-02-10 13:26 G 7451024.87 7451025.06 7451025.25 0.0534 0.0170

Saturn 15691-10-07 11:02 G 7452359.82 7452359.96 7452360.10 0.0280 0.0209

Mars 15692-03-07 17:02 G 7452512.04 7452512.21 7452512.39 0.1588 0.0072

Saturn 15692-05-23 22:48 G 7452589.24 7452589.45 7452589.67 0.0279 0.0005

Saturn 15693-01-08 10:04 G 7452818.79 7452818.92 7452819.07 0.0279 0.0210

Mars 15693-02-09 07:26 G 7452850.65 7452850.81 7452850.96 0.1948 0.0882

Jupiter 15693-12-19 10:19 G 7453163.86 7453163.93 7453164.01 0.0492 0.0455

Neptune 15701-01-10 01:26 G 7455741.51 7455741.56 7455741.63 0.0089 0.0086

Neptune 15701-08-23 14:38 G 7455966.98 7455967.11 7455967.27 0.0089 0.0066

Neptune 15702-04-06 03:50 G 7456192.49 7456192.66 7456192.86 0.0089 0.0046

Neptune 15702-11-17 17:16 G 7456418.01 7456418.22 7456418.44 0.0089 0.0025

Neptune 15703-07-01 06:43 G 7456643.56 7456643.78 7456644.00 0.0089 0.0005

Neptune 15704-02-11 19:55 G 7456869.12 7456869.33 7456869.55 0.0089 0.0016

Neptune 15704-09-24 09:07 G 7457094.69 7457094.88 7457095.09 0.0089 0.0036

Neptune 15705-05-07 22:04 G 7457320.27 7457320.42 7457320.61 0.0089 0.0056

Jupiter 15705-08-25 14:24 G 7457429.89 7457430.10 7457430.30 0.0493 0.0053

Neptune 15705-12-19 11:16 G 7457545.88 7457545.97 7457546.10 0.0089 0.0076

Saturn 15706-11-03 17:16 G 7457865.07 7457865.22 7457865.39 0.0279 0.0186

Saturn 15707-06-21 05:31 G 7458094.52 7458094.73 7458094.94 0.0280 0.0026

Saturn 15708-02-05 17:31 G 7458324.13 7458324.23 7458324.35 0.0280 0.0238

Uranus 15710-04-15 03:36 G 7459123.52 7459123.65 7459123.79 0.0133 0.0103

Uranus 15710-11-27 08:38 G 7459349.67 7459349.86 7459350.05 0.0133 0.0065

Uranus 15711-07-11 13:40 G 7459575.86 7459576.07 7459576.29 0.0133 0.0027

Uranus 15712-02-22 19:12 G 7459802.08 7459802.30 7459802.52 0.0133 0.0011

Uranus 15712-10-06 00:14 G 7460028.32 7460028.51 7460028.72 0.0133 0.0050

Uranus 15713-05-20 05:31 G 7460254.57 7460254.73 7460254.90 0.0133 0.0088

Uranus 15714-01-01 11:02 G 7460480.89 7460480.96 7460481.02 0.0133 0.0127

Jupiter 15717-04-30 18:00 G 7461696.11 7461696.25 7461696.39 0.0495 0.0357

Moon 15718-04-10 16:33 G 7462041.04 7462041.19 7462041.34 0.2651 0.0504

Earth 15718-04-10 20:52 G 7462041.22 7462041.37 7462041.52 0.2647 0.0633 *

Saturn 15721-04-19 12:28 G 7463145.87 7463146.02 7463146.18 0.0279 0.0189

Saturn 15721-12-05 00:14 G 7463375.30 7463375.51 7463375.72 0.0278 0.0020

Saturn 15722-07-22 11:02 G 7463604.86 7463604.96 7463605.10 0.0278 0.0228

Jupiter 15723-10-20 08:09 G 7464059.65 7464059.84 7464060.04 0.0536 0.0148

Mars 15724-03-07 07:26 G 7464198.70 7464198.81 7464198.92 0.1590 0.1214

Mars 15726-01-05 16:19 G 7464868.12 7464868.18 7464868.24 0.1586 0.1475

Jupiter 15735-06-24 22:19 G 7468325.29 7468325.43 7468325.57 0.0533 0.0378

Saturn 15736-05-15 17:16 G 7468651.06 7468651.22 7468651.39 0.0280 0.0167

Saturn 15736-12-31 05:16 G 7468880.51 7468880.72 7468880.93 0.0280 0.0044

Saturn 15737-08-17 17:31 G 7469110.16 7469110.23 7469110.33 0.0281 0.0257

Jupiter 15741-05-03 00:14 G 7470464.35 7470464.51 7470464.68 0.0492 0.0293

Saturn 15750-10-30 18:00 G 7473932.08 7473932.25 7473932.43 0.0280 0.0162

Saturn 15751-06-17 06:14 G 7474161.55 7474161.76 7474161.97 0.0279 0.0049

Uranus 15751-10-23 21:36 G 7474290.27 7474290.40 7474290.55 0.0146 0.0113

Saturn 15752-02-01 17:45 G 7474391.16 7474391.24 7474391.32 0.0279 0.0257

Uranus 15752-06-06 10:04 G 7474516.73 7474516.92 7474517.13 0.0146 0.0062

Jupiter 15753-01-06 03:07 G 7474730.43 7474730.63 7474730.83 0.0495 0.0118

Uranus 15753-01-18 22:48 G 7474743.23 7474743.45 7474743.67 0.0145 0.0012

Uranus 15753-09-02 11:16 G 7474969.77 7474969.97 7474970.18 0.0145 0.0039

Uranus 15754-04-16 23:31 G 7475196.32 7475196.48 7475196.66 0.0145 0.0089

Uranus 15754-11-29 11:31 G 7475422.94 7475422.98 7475423.07 0.0145 0.0139

Mars 15758-01-04 06:28 G 7476554.59 7476554.77 7476554.94 0.1587 0.0216

Mars 15758-12-08 07:55 G 7476892.66 7476892.83 7476893.01 0.1949 0.0218

Jupiter 15759-06-28 00:43 G 7477094.42 7477094.53 7477094.63 0.0536 0.0454

Saturn 15765-11-26 01:55 G 7479437.40 7479437.58 7479437.77 0.0279 0.0135

Saturn 15766-07-13 13:55 G 7479666.88 7479667.08 7479667.28 0.0280 0.0076

Jupiter 15771-03-02 13:12 G 7481359.85 7481360.05 7481360.25 0.0534 0.0083

Saturn 15780-05-11 20:38 G 7484718.19 7484718.36 7484718.55 0.0279 0.0139

Saturn 15780-12-27 08:52 G 7484947.66 7484947.87 7484948.07 0.0279 0.0071

Saturn 15781-08-13 19:55 G 7485177.32 7485177.33 7485177.34 0.0278 0.0277

Neptune 15782-07-16 09:50 G 7485513.83 7485513.91 7485513.99 0.0088 0.0081

Neptune 15783-02-26 22:19 G 7485739.29 7485739.43 7485739.59 0.0088 0.0062

Neptune 15783-10-10 10:48 G 7485964.77 7485964.95 7485965.16 0.0088 0.0043

Neptune 15784-05-22 23:45 G 7486190.28 7486190.49 7486190.70 0.0088 0.0023

Neptune 15785-01-03 12:28 G 7486415.80 7486416.02 7486416.24 0.0088 0.0004

Neptune 15785-08-17 01:12 G 7486641.33 7486641.55 7486641.77 0.0088 0.0015

Neptune 15786-03-30 13:40 G 7486866.88 7486867.07 7486867.28 0.0088 0.0035

Neptune 15786-11-11 02:09 G 7487092.43 7487092.59 7487092.78 0.0088 0.0054

Pluto 15787-05-11 06:43 G 7487273.72 7487273.78 7487273.89 0.0067 0.0063

Neptune 15787-06-24 14:38 G 7487318.02 7487318.11 7487318.26 0.0088 0.0074

Pluto	15787-12-22 12:14 G	7487498.81	7487499.01	7487499.23	0.0068	0.0017
Pluto	15788-08-03 17:16 G	7487724.04	7487724.22	7487724.43	0.0068	0.0031
Jupiter	15788-09-13 13:55 G	7487764.88	7487765.08	7487765.27	0.0493	0.0129
Mars	15790-01-02 20:24 G	7488241.22	7488241.35	7488241.48	0.1589	0.1058
Uranus	15793-12-13 16:04 G	7489682.08	7489682.17	7489682.28	0.0133	0.0117
Uranus	15794-07-27 21:21 G	7489908.22	7489908.39	7489908.57	0.0133	0.0079
Uranus	15795-03-11 02:24 G	7490134.40	7490134.60	7490134.82	0.0133	0.0041
Saturn	15795-06-08 01:55 G	7490223.39	7490223.58	7490223.78	0.0280	0.0116
Uranus	15795-10-23 07:40 G	7490360.61	7490360.82	7490361.04	0.0133	0.0004
Saturn	15796-01-23 13:55 G	7490452.88	7490453.08	7490453.28	0.0280	0.0095
Uranus	15796-06-05 12:43 G	7490586.83	7490587.03	7490587.25	0.0133	0.0036
Uranus	15797-01-17 18:00 G	7490813.08	7490813.25	7490813.44	0.0133	0.0074
Uranus	15797-08-31 23:16 G	7491039.37	7491039.47	7491039.60	0.0133	0.0113
Jupiter	15800-05-20 16:48 G	7492031.04	7492031.20	7492031.37	0.0495	0.0283
Jupiter	15806-11-09 08:09 G	7494394.66	7494394.84	7494395.02	0.0535	0.0237
Saturn	15809-11-23 02:09 G	7495504.40	7495504.59	7495504.79	0.0280	0.0112
Saturn	15810-07-10 14:09 G	7495733.90	7495734.09	7495734.30	0.0279	0.0099
Jupiter	15818-07-14 20:38 G	7498660.20	7498660.36	7498660.53	0.0533	0.0299
Mars	15823-11-02 19:26 G	7500597.14	7500597.31	7500597.48	0.1587	0.0373
Jupiter	15824-05-22 23:02 G	7500799.32	7500799.46	7500799.59	0.0492	0.0368
Mars	15824-10-05 09:21 G	7500934.71	7500934.89	7500935.06	0.1950	0.0439
Saturn	15824-12-19 11:31 G	7501009.78	7501009.98	7501010.19	0.0279	0.0082
Saturn	15825-08-05 23:16 G	7501239.29	7501239.47	7501239.67	0.0280	0.0129
Uranus	15835-06-24 05:31 G	7504848.66	7504848.73	7504848.83	0.0146	0.0133
Jupiter	15836-01-27 03:07 G	7505065.43	7505065.63	7505065.83	0.0494	0.0037
Uranus	15836-02-05 18:14 G	7505075.09	7505075.26	7505075.45	0.0146	0.0083
Uranus	15836-09-19 06:57 G	7505301.58	7505301.79	7505302.00	0.0145	0.0032
Uranus	15837-05-03 19:26 G	7505528.09	7505528.31	7505528.53	0.0145	0.0018
Uranus	15837-12-16 07:40 G	7505754.64	7505754.82	7505755.02	0.0145	0.0069
Uranus	15838-07-30 20:09 G	7505981.22	7505981.34	7505981.47	0.0145	0.0119

Saturn 15839-06-05 06:00 G 7506290.55 7506290.75 7506290.95 0.0279 0.0087

Saturn 15840-01-20 17:45 G 7506520.06 7506520.24 7506520.44 0.0279 0.0123

Jupiter 15847-10-02 05:16 G 7509331.65 7509331.72 7509331.81 0.0496 0.0455

Earth 15847-10-10 07:40 G 7509339.66 7509339.82 7509339.98 0.2685 0.0144

Moon 15847-10-10 13:12 G 7509339.90 7509340.05 7509340.20 0.2688 0.0538 *

Saturn 15853-11-14 00:43 G 7511566.49 7511566.53 7511566.59 0.0279 0.0270

Jupiter 15854-03-22 15:36 G 7511694.95 7511695.15 7511695.36 0.0535 0.0019

Saturn 15854-07-01 12:14 G 7511795.80 7511796.01 7511796.22 0.0280 0.0062

Saturn 15855-02-15 23:45 G 7512025.32 7512025.49 7512025.68 0.0280 0.0149

Mars 15855-11-01 09:36 G 7512283.76 7512283.90 7512284.04 0.1589 0.0903

Jupiter 15865-11-25 04:19 G 7515960.63 7515960.68 7515960.74 0.0531 0.0511

Neptune 15865-11-25 21:21 G 7515961.30 7515961.39 7515961.52 0.0089 0.0078

Neptune 15866-07-09 10:48 G 7516186.80 7516186.95 7516187.13 0.0089 0.0057

Neptune 15867-02-20 00:14 G 7516412.32 7516412.51 7516412.72 0.0089 0.0037

Neptune 15867-10-03 13:40 G 7516637.86 7516638.07 7516638.29 0.0089 0.0017

Saturn 15868-04-29 22:19 G 7516847.39 7516847.43 7516847.48 0.0280 0.0272

Neptune 15868-05-16 02:52 G 7516863.41 7516863.62 7516863.85 0.0089 0.0005

Saturn 15868-12-15 11:02 G 7517076.76 7517076.96 7517077.17 0.0280 0.0061

Neptune 15868-12-27 16:04 G 7517088.97 7517089.17 7517089.40 0.0089 0.0025

Saturn 15869-08-01 23:16 G 7517306.29 7517306.47 7517306.65 0.0279 0.0150

Neptune 15869-08-10 05:16 G 7517314.55 7517314.72 7517314.93 0.0089 0.0045

Neptune 15870-03-23 18:43 G 7517540.14 7517540.28 7517540.44 0.0089 0.0065

Neptune 15870-11-04 07:55 G 7517765.77 7517765.83 7517765.91 0.0089 0.0085

Jupiter 15871-10-04 11:31 G 7518099.79 7518099.98 7518100.16 0.0494 0.0198

Pluto 15873-10-18 03:07 G 7518844.46 7518844.63 7518844.80 0.0077 0.0048

Pluto 15874-05-31 12:00 G 7519069.79 7519070.00 7519070.22 0.0077 0.0020

Uranus 15877-08-14 04:33 G 7520240.67 7520240.69 7520240.74 0.0133 0.0131

Uranus 15878-03-28 09:50 G 7520466.77 7520466.91 7520467.08 0.0133 0.0093

Uranus 15878-11-09 14:52 G 7520692.93 7520693.12 7520693.33 0.0133 0.0055

Uranus 15879-06-23 20:09 G 7520919.13 7520919.34 7520919.56 0.0133 0.0017

Uranus	15880-02-05 01:40 G	7521145.35	7521145.57	7521145.78	0.0133	0.0022
Uranus	15880-09-18 06:43 G	7521371.59	7521371.78	7521371.98	0.0133	0.0060
Uranus	15881-05-02 11:45 G	7521597.86	7521597.99	7521598.15	0.0133	0.0099
Saturn	15883-05-27 11:02 G	7522352.85	7522352.96	7522353.08	0.0279	0.0235
Jupiter	15883-06-09 14:24 G	7522365.92	7522366.10	7522366.28	0.0496	0.0214
Saturn	15884-01-11 22:19 G	7522582.22	7522582.43	7522582.65	0.0279	0.0028
Saturn	15884-08-28 10:04 G	7522811.77	7522811.92	7522812.09	0.0280	0.0184
Mars	15889-08-30 08:52 G	7524639.70	7524639.87	7524640.03	0.1587	0.0524
Jupiter	15889-11-28 06:00 G	7524729.59	7524729.75	7524729.92	0.0536	0.0313
Mars	15890-08-02 09:50 G	7524976.77	7524976.91	7524977.06	0.1951	0.1110
Saturn	15897-11-10 04:04 G	7527633.58	7527633.67	7527633.78	0.0280	0.0244
Saturn	15898-06-27 16:33 G	7527862.98	7527863.19	7527863.40	0.0279	0.0033
Saturn	15899-02-12 04:19 G	7528092.52	7528092.68	7528092.85	0.0279	0.0176
Jupiter	15901-08-03 20:09 G	7528995.16	7528995.34	7528995.53	0.0533	0.0216
Jupiter	15907-06-12 21:36 G	7531134.31	7531134.40	7531134.49	0.0492	0.0439
Saturn	15912-12-07 12:14 G	7533138.88	7533139.01	7533139.14	0.0279	0.0214
Saturn	15913-07-24 23:31 G	7533368.27	7533368.48	7533368.69	0.0280	0.0007
Saturn	15914-03-11 11:16 G	7533597.83	7533597.97	7533598.12	0.0280	0.0205
Jupiter	15919-02-16 00:57 G	7535400.34	7535400.54	7535400.75	0.0494	0.0031
Uranus	15919-10-07 00:28 G	7535633.38	7535633.52	7535633.68	0.0146	0.0105
Uranus	15920-05-20 13:12 G	7535859.85	7535860.05	7535860.25	0.0145	0.0054
Uranus	15921-01-02 01:40 G	7536086.35	7536086.57	7536086.79	0.0145	0.0004
Uranus	15921-08-16 14:09 G	7536312.89	7536313.09	7536313.30	0.0145	0.0046
Mars	15921-08-29 22:48 G	7536326.30	7536326.45	7536326.61	0.1588	0.0750
Uranus	15922-03-31 02:24 G	7536539.45	7536539.60	7536539.78	0.0145	0.0096
Saturn	15927-05-24 08:09 G	7538419.72	7538419.84	7538419.98	0.0280	0.0220
Saturn	15928-01-08 21:07 G	7538649.17	7538649.38	7538649.59	0.0280	0.0008
Saturn	15928-08-25 08:52 G	7538878.73	7538878.87	7538879.02	0.0279	0.0203
Jupiter	15930-10-22 01:40 G	7539666.46	7539666.57	7539666.70	0.0497	0.0393
Jupiter	15937-04-11 13:26 G	7542029.86	7542030.06	7542030.26	0.0534	0.0094

Saturn 15942-06-19 23:02 G 7543925.31 7543925.46 7543925.63 0.0279 0.0179

Saturn 15943-02-04 10:33 G 7544154.73 7544154.94 7544155.15 0.0279 0.0030

Saturn 15943-09-21 22:19 G 7544384.33 7544384.43 7544384.54 0.0280 0.0240

Neptune 15947-06-02 06:43 G 7545733.67 7545733.78 7545733.92 0.0088 0.0073

Neptune 15948-01-13 19:26 G 7545959.15 7545959.31 7545959.50 0.0088 0.0053

Neptune 15948-08-26 08:24 G 7546184.65 7546184.85 7546185.06 0.0088 0.0034

Jupiter 15948-12-15 00:57 G 7546295.44 7546295.54 7546295.65 0.0532 0.0445

Neptune 15949-04-08 21:07 G 7546410.17 7546410.38 7546410.60 0.0088 0.0014

Neptune 15949-11-20 09:50 G 7546635.69 7546635.91 7546636.13 0.0088 0.0005

Neptune 15950-07-03 22:19 G 7546861.23 7546861.43 7546861.65 0.0088 0.0025

Neptune 15951-02-14 11:02 G 7547086.78 7547086.96 7547087.16 0.0088 0.0044

Neptune 15951-09-28 00:00 G 7547312.35 7547312.50 7547312.65 0.0088 0.0063

Neptune 15952-05-10 12:00 G 7547537.95 7547538.00 7547538.10 0.0088 0.0083

Jupiter 15954-10-24 10:04 G 7548434.75 7548434.92 7548435.09 0.0493 0.0270

Mars 15955-06-28 21:36 G 7548682.25 7548682.40 7548682.56 0.1586 0.0682

Mars 15956-05-30 10:33 G 7549018.88 7549018.94 7549019.01 0.1952 0.1787

Saturn 15956-12-03 15:36 G 7549206.00 7549206.15 7549206.31 0.0280 0.0188

Saturn 15957-07-21 03:50 G 7549435.45 7549435.66 7549435.87 0.0279 0.0023

Saturn 15958-03-07 15:36 G 7549665.03 7549665.15 7549665.26 0.0279 0.0231

Earth 15961-04-12 23:31 G 7550797.33 7550797.48 7550797.63 0.2647 0.0679

Moon 15961-04-13 04:48 G 7550797.56 7550797.70 7550797.85 0.2646 0.1094 *

Uranus 15961-11-26 22:04 G 7551025.31 7551025.42 7551025.56 0.0133 0.0107

Uranus 15962-07-11 03:21 G 7551251.47 7551251.64 7551251.84 0.0133 0.0069

Uranus 15963-02-22 08:52 G 7551477.66 7551477.87 7551478.08 0.0133 0.0031

Uranus 15963-10-06 13:55 G 7551703.87 7551704.08 7551704.30 0.0133 0.0008

Uranus 15964-05-19 18:57 G 7551930.09 7551930.29 7551930.50 0.0133 0.0046

Uranus 15965-01-01 00:00 G 7552156.35 7552156.50 7552156.68 0.0133 0.0084

Uranus 15965-08-15 05:02 G 7552382.65 7552382.71 7552382.82 0.0133 0.0123

Jupiter 15966-06-29 12:57 G 7552700.84 7552701.04 7552701.23 0.0495 0.0143

Moon 15969-04-10 18:57 G 7553717.20 7553717.29 7553717.38 0.2641 0.2223

Saturn	**15971-12-31 00:43**	**G**	**7554711.35**	**7554711.53**	**7554711.70**	**0.0279**	**0.0157**	
Saturn	**15972-08-16 12:00**	**G**	**7554940.79**	**7554941.00**	**7554941.21**	**0.0280**	**0.0053**	
Jupiter	**15972-12-18 07:12**	**G**	**7555064.67**	**7555064.80**	**7555064.93**	**0.0536**	**0.0407**	
Saturn	**15973-04-02 23:45**	**G**	**7555170.42**	**7555170.49**	**7555170.56**	**0.0280**	**0.0262**	
Jupiter	**15984-08-22 20:09**	**G**	**7559330.15**	**7559330.34**	**7559330.54**	**0.0533**	**0.0126**	
Saturn	**15986-06-15 19:26**	**G**	**7559992.15**	**7559992.31**	**7559992.49**	**0.0280**	**0.0164**	
Saturn	**15987-01-31 08:09**	**G**	**7560221.63**	**7560221.84**	**7560222.05**	**0.0280**	**0.0048**	
Mars	**15987-06-27 11:45**	**G**	**7560368.82**	**7560368.99**	**7560369.15**	**0.1588**	**0.0588**	
Saturn	**15987-09-17 19:55**	**G**	**7560451.26**	**7560451.33**	**7560451.42**	**0.0279**	**0.0257**	
Mars	**15988-05-30 17:45**	**G**	**7560707.14**	**7560707.24**	**7560707.35**	**0.1949**	**0.1562**	

17TH MILLENNIUM CE

This is a list of transits of Venus in the 17th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**16001-07-12 11:31**	**G**	**7565497.80**	**7565497.98**	**7565498.18**	**0.0279**	**0.0121**	
Saturn	**16002-02-26 23:16**	**G**	**7565727.27**	**7565727.47**	**7565727.67**	**0.0279**	**0.0089**	
Jupiter	**16002-03-06 20:52**	**G**	**7565735.17**	**7565735.37**	**7565735.57**	**0.0494**	**0.0091**	
Uranus	**16003-06-06 08:09**	**G**	**7566191.74**	**7566191.84**	**7566191.95**	**0.0146**	**0.0126**	
Uranus	**16004-01-18 20:38**	**G**	**7566418.18**	**7566418.36**	**7566418.55**	**0.0145**	**0.0076**	
Uranus	**16004-09-01 09:21**	**G**	**7566644.68**	**7566644.89**	**7566645.11**	**0.0145**	**0.0025**	
Uranus	**16005-04-15 21:50**	**G**	**7566871.20**	**7566871.41**	**7566871.63**	**0.0145**	**0.0025**	
Uranus	**16005-11-28 10:04**	**G**	**7567097.74**	**7567097.92**	**7567098.11**	**0.0145**	**0.0075**	
Uranus	**16006-07-12 22:33**	**G**	**7567324.33**	**7567324.44**	**7567324.55**	**0.0145**	**0.0125**	

Jupiter 16013-11-10 00:14 G 7570001.36 7570001.51 7570001.67 0.0496 0.0321

Saturn 16015-12-27 04:04 G 7570778.48 7570778.67 7570778.86 0.0280 0.0129

Saturn 16016-08-12 16:04 G 7571007.97 7571008.17 7571008.38 0.0279 0.0081

Jupiter 16020-04-30 10:33 G 7572364.75 7572364.94 7572365.14 0.0535 0.0165

Mars 16021-04-25 11:02 G 7572724.82 7572724.96 7572725.11 0.1586 0.0835

Neptune 16030-02-28 05:16 G 7575955.70 7575955.72 7575955.75 0.0089 0.0089

Neptune 16030-10-11 18:28 G 7576181.14 7576181.27 7576181.42 0.0089 0.0068

Saturn 16031-01-22 13:55 G 7576283.88 7576284.08 7576284.28 0.0279 0.0097

Neptune 16031-05-25 07:40 G 7576406.64 7576406.82 7576407.01 0.0089 0.0048

Saturn 16031-09-09 01:12 G 7576513.36 7576513.55 7576513.75 0.0280 0.0113

Jupiter 16032-01-04 01:12 G 7576630.40 7576630.55 7576630.70 0.0532 0.0358

Neptune 16032-01-05 21:07 G 7576632.18 7576632.38 7576632.60 0.0089 0.0028

Neptune 16032-08-18 10:33 G 7576857.72 7576857.94 7576858.16 0.0089 0.0008

Neptune 16033-03-31 23:45 G 7577083.28 7577083.49 7577083.71 0.0089 0.0013

Pluto 16033-06-10 19:26 G 7577154.14 7577154.31 7577154.50 0.0068 0.0040

Neptune 16033-11-12 12:43 G 7577308.84 7577309.03 7577309.25 0.0089 0.0033

Pluto 16034-01-22 00:43 G 7577379.32 7577379.53 7577379.76 0.0068 0.0007

Neptune 16034-06-26 01:55 G 7577534.42 7577534.58 7577534.77 0.0089 0.0054

Pluto 16034-09-04 05:45 G 7577604.63 7577604.74 7577604.89 0.0068 0.0054

Neptune 16035-02-06 15:21 G 7577760.03 7577760.14 7577760.28 0.0089 0.0074

Jupiter 16037-11-12 06:57 G 7578769.65 7578769.79 7578769.95 0.0493 0.0334

Saturn 16045-07-08 07:40 G 7581564.62 7581564.82 7581565.01 0.0280 0.0106

Uranus 16045-07-27 10:33 G 7581583.87 7581583.94 7581584.04 0.0133 0.0121

Saturn 16046-02-22 19:40 G 7581794.13 7581794.32 7581794.53 0.0279 0.0106

Uranus 16046-03-10 15:50 G 7581810.00 7581810.16 7581810.34 0.0133 0.0083

Uranus 16046-10-22 21:07 G 7582036.18 7582036.38 7582036.59 0.0133 0.0045

Uranus 16047-06-06 02:24 G 7582262.38 7582262.60 7582262.82 0.0133 0.0007

Uranus 16048-01-18 07:26 G 7582488.60 7582488.81 7582489.03 0.0133 0.0031

Uranus 16048-08-31 12:28 G 7582714.84 7582715.02 7582715.22 0.0133 0.0070

Uranus 16049-04-14 17:45 G 7582941.12 7582941.24 7582941.37 0.0133 0.0108

Jupiter 16049-07-18 08:09 G 7583035.64 7583035.84 7583036.05 0.0495 0.0087

Mars 16053-04-24 01:12 G 7584411.38 7584411.55 7584411.72 0.1587 0.0437

Mars 16054-03-27 18:28 G 7584749.11 7584749.27 7584749.42 0.1950 0.0888

Jupiter 16056-01-07 04:48 G 7585399.62 7585399.70 7585399.79 0.0535 0.0482

Saturn 16059-12-18 12:57 G 7586841.00 7586841.04 7586841.10 0.0279 0.0269

Saturn 16060-08-04 00:28 G 7587070.31 7587070.52 7587070.73 0.0279 0.0062

Saturn 16061-03-21 11:45 G 7587299.82 7587299.99 7587300.18 0.0280 0.0149

Jupiter 16067-09-11 15:07 G 7589664.93 7589665.13 7589665.33 0.0533 0.0070

Saturn 16074-06-03 04:48 G 7592121.69 7592121.70 7592121.71 0.0280 0.0279

Saturn 16075-01-18 17:16 G 7592351.02 7592351.22 7592351.43 0.0280 0.0070

Saturn 16075-09-05 05:02 G 7592580.54 7592580.71 7592580.90 0.0279 0.0140

Jupiter 16085-03-25 18:57 G 7596070.10 7596070.29 7596070.48 0.0494 0.0160

Mars 16087-02-21 00:14 G 7596767.38 7596767.51 7596767.65 0.1585 0.0990

Uranus 16087-09-18 03:07 G 7596976.49 7596976.63 7596976.81 0.0145 0.0099

Uranus 16088-05-01 15:36 G 7597202.96 7597203.15 7597203.37 0.0145 0.0049

Uranus 16088-12-14 04:19 G 7597429.46 7597429.68 7597429.90 0.0145 0.0003

Saturn 16089-06-29 15:50 G 7597627.07 7597627.16 7597627.27 0.0279 0.0245

Uranus 16089-07-28 16:48 G 7597656.00 7597656.20 7597656.41 0.0145 0.0052

Saturn 16090-02-14 03:07 G 7597856.42 7597856.63 7597856.84 0.0279 0.0037

Uranus 16090-03-12 04:48 G 7597882.56 7597882.70 7597882.87 0.0145 0.0102

Saturn 16090-10-01 14:38 G 7598085.94 7598086.11 7598086.28 0.0280 0.0172

Moon 16090-10-11 02:24 G 7598095.44 7598095.60 7598095.76 0.2681 0.0660

Earth 16090-10-11 07:12 G 7598095.64 7598095.80 7598095.96 0.2685 0.0164 *

Jupiter 16096-11-28 21:21 G 7600336.22 7600336.39 7600336.57 0.0496 0.0256

Jupiter 16103-05-21 10:33 G 7602699.77 7602699.94 7602700.12 0.0535 0.0256

Saturn 16103-12-15 07:26 G 7602907.74 7602907.81 7602907.90 0.0280 0.0258

Saturn 16104-07-31 20:09 G 7603137.14 7603137.34 7603137.56 0.0280 0.0048

Saturn 16105-03-18 08:09 G 7603366.68 7603366.84 7603367.02 0.0279 0.0163

Neptune 16111-09-04 15:21 G 7605728.08 7605728.14 7605728.23 0.0088 0.0083

Neptune 16112-04-17 04:04 G 7605953.53 7605953.67 7605953.84 0.0088 0.0063

Neptune 16112-11-28 17:02 G 7606179.02 7606179.21 7606179.40 0.0088 0.0044

Neptune 16113-07-12 05:45 G 7606404.54 7606404.74 7606404.96 0.0088 0.0024

Neptune 16114-02-22 18:28 G 7606630.06 7606630.27 7606630.50 0.0088 0.0005

Neptune 16114-10-06 06:57 G 7606855.58 7606855.79 7606856.02 0.0088 0.0016

Jupiter 16115-01-23 23:31 G 7606965.30 7606965.48 7606965.65 0.0532 0.0281

Neptune 16115-05-19 19:40 G 7607081.13 7607081.32 7607081.53 0.0088 0.0034

Neptune 16115-12-31 08:38 G 7607306.68 7607306.86 7607307.03 0.0088 0.0054

Neptune 16116-08-12 20:52 G 7607532.27 7607532.37 7607532.51 0.0088 0.0073

Saturn 16119-01-11 01:26 G 7608413.43 7608413.56 7608413.70 0.0279 0.0211

Mars 16119-02-20 13:55 G 7608453.91 7608454.08 7608454.25 0.1587 0.0276

Saturn 16119-08-28 12:57 G 7608642.83 7608643.04 7608643.25 0.0279 0.0005

Pluto 16119-11-18 17:31 G 7608725.01 7608725.23 7608725.44 0.0077 0.0015

Mars 16120-01-23 20:09 G 7608791.17 7608791.34 7608791.52 0.1951 0.0255

Saturn 16120-04-14 00:43 G 7608872.40 7608872.53 7608872.68 0.0280 0.0208

Pluto 16120-07-01 01:40 G 7608950.44 7608950.57 7608950.76 0.0077 0.0054

Jupiter 16120-12-02 02:24 G 7609104.48 7609104.60 7609104.73 0.0493 0.0391

Uranus 16129-11-09 03:50 G 7612368.52 7612368.66 7612368.81 0.0133 0.0098

Uranus 16130-06-23 08:52 G 7612594.68 7612594.87 7612595.07 0.0133 0.0060

Uranus 16131-02-04 14:24 G 7612820.88 7612821.10 7612821.31 0.0133 0.0022

Uranus 16131-09-18 19:26 G 7613047.10 7613047.31 7613047.53 0.0133 0.0016

Uranus 16132-05-02 00:28 G 7613273.32 7613273.52 7613273.72 0.0133 0.0054

Jupiter 16132-08-07 06:28 G 7613370.56 7613370.77 7613370.97 0.0495 0.0019

Uranus 16132-12-14 05:16 G 7613499.58 7613499.72 7613499.89 0.0133 0.0093

Saturn 16133-06-26 18:14 G 7613694.13 7613694.26 7613694.39 0.0280 0.0219

Uranus 16133-07-28 10:33 G 7613725.91 7613725.94 7613726.00 0.0133 0.0130

Saturn 16134-02-11 06:28 G 7613923.56 7613923.77 7613923.99 0.0279 0.0011

Saturn 16134-09-28 18:14 G 7614153.11 7614153.26 7614153.41 0.0279 0.0199

Jupiter 16144-04-12 08:38 G 7617636.77 7617636.86 7617636.96 0.0497 0.0436

Saturn 16148-07-23 04:48 G 7619199.54 7619199.70 7619199.86 0.0279 0.0186

Saturn 16149-03-09 16:04 G 7619428.95 7619429.17 7619429.38 0.0280 0.0023

Saturn 16149-10-25 03:21 G 7619658.54 7619658.64 7619658.77 0.0280 0.0232

Jupiter 16150-10-01 14:38 G 7619999.91 7620000.11 7620000.32 0.0534 0.0017

Mars 16151-02-19 04:04 G 7620140.64 7620140.67 7620140.70 0.1588 0.1560

Mars 16152-12-19 13:26 G 7620809.94 7620810.06 7620810.18 0.1585 0.1146

Jupiter 16162-06-06 05:16 G 7624265.67 7624265.72 7624265.79 0.0531 0.0504

Saturn 16163-01-06 20:38 G 7624480.22 7624480.36 7624480.51 0.0280 0.0198

Saturn 16163-08-24 09:07 G 7624709.67 7624709.88 7624710.09 0.0279 0.0012

Saturn 16164-04-09 20:52 G 7624939.24 7624939.37 7624939.50 0.0279 0.0221

Jupiter 16168-04-14 14:24 G 7626404.92 7626405.10 7626405.28 0.0494 0.0217

Uranus 16171-05-19 10:48 G 7627534.84 7627534.95 7627535.09 0.0146 0.0119

Uranus 16171-12-31 23:16 G 7627761.29 7627761.47 7627761.67 0.0145 0.0070

Uranus 16172-08-14 12:00 G 7627987.79 7627988.00 7627988.22 0.0145 0.0019

Uranus 16173-03-29 00:28 G 7628214.31 7628214.52 7628214.73 0.0145 0.0031

Uranus 16173-11-10 12:43 G 7628440.85 7628441.03 7628441.21 0.0145 0.0081

Uranus 16174-06-25 00:43 G 7628667.45 7628667.53 7628667.63 0.0145 0.0130

Saturn 16178-02-02 12:57 G 7629985.87 7629986.04 7629986.22 0.0279 0.0155

Saturn 16178-09-20 00:43 G 7630215.32 7630215.53 7630215.74 0.0280 0.0055

Saturn 16179-05-07 12:28 G 7630444.97 7630445.02 7630445.10 0.0280 0.0265

Jupiter 16179-12-19 16:48 G 7630671.02 7630671.20 7630671.39 0.0496 0.0201

Mars 16184-12-18 03:36 G 7632496.47 7632496.65 7632496.82 0.1586 0.0134

Mars 16185-11-19 20:52 G 7632833.20 7632833.37 7632833.54 0.1951 0.0421

Jupiter 16186-06-09 05:02 G 7633034.55 7633034.71 7633034.88 0.0535 0.0310

Saturn 16192-07-19 07:40 G 7635266.65 7635266.82 7635267.00 0.0280 0.0159

Saturn 16193-03-05 19:40 G 7635496.11 7635496.32 7635496.53 0.0279 0.0051

Saturn 16193-10-21 07:12 G 7635725.73 7635725.80 7635725.88 0.0279 0.0258

Neptune 16195-01-14 02:24 G 7636175.52 7636175.60 7636175.72 0.0089 0.0079

Neptune 16195-08-27 15:36 G 7636401.00 7636401.15 7636401.33 0.0089 0.0059

Neptune 16196-04-09 04:48 G 7636626.52 7636626.70 7636626.92 0.0089 0.0040

Neptune 16196-11-20 18:28 G 7636852.05 7636852.27 7636852.49 0.0089 0.0019

Neptune 16197-07-04 07:40 G 7637077.60 7637077.82 7637078.04 0.0089 0.0002

Jupiter 16198-02-11 18:28 G 7637300.09 7637300.27 7637300.46 0.0532 0.0225

Neptune 16198-02-14 20:52 G 7637303.17 7637303.37 7637303.60 0.0089 0.0023

Neptune 16198-09-28 10:19 G 7637528.74 7637528.93 7637529.13 0.0089 0.0042

Neptune 16199-05-11 23:31 G 7637754.33 7637754.48 7637754.65 0.0089 0.0063

Neptune 16199-12-23 12:28 G 7637979.97 7637980.02 7637980.13 0.0089 0.0083

Jupiter 16203-12-23 00:57 G 7639439.47 7639439.54 7639439.61 0.0493 0.0462

Moon 16204-04-14 20:52 G 7639553.21 7639553.37 7639553.53 0.2645 0.0118

Earth 16204-04-15 02:09 G 7639553.44 7639553.59 7639553.74 0.2647 0.0720 *

Saturn 16207-08-16 16:33 G 7640772.00 7640772.19 7640772.38 0.0279 0.0129

Saturn 16208-04-02 03:50 G 7641001.46 7641001.66 7641001.87 0.0280 0.0080

Uranus 16213-07-10 15:21 G 7642927.05 7642927.14 7642927.27 0.0133 0.0113

Uranus 16214-02-21 20:52 G 7643153.20 7643153.37 7643153.56 0.0133 0.0075

Uranus 16214-10-06 02:09 G 7643379.38 7643379.59 7643379.80 0.0133 0.0037

Uranus 16215-05-20 07:12 G 7643605.58 7643605.80 7643606.02 0.0133 0.0001

Jupiter 16215-08-28 04:19 G 7643705.47 7643705.68 7643705.88 0.0495 0.0052

Uranus 16216-01-01 12:14 G 7643831.81 7643832.01 7643832.22 0.0133 0.0039

Uranus 16216-08-14 17:02 G 7644058.05 7644058.21 7644058.40 0.0133 0.0078

Mars 16216-12-17 17:16 G 7644183.15 7644183.22 7644183.30 0.1587 0.1406

Uranus 16217-03-28 22:19 G 7644284.34 7644284.43 7644284.55 0.0133 0.0115

Mars 16218-10-18 02:52 G 7644852.53 7644852.62 7644852.72 0.1585 0.1296

Saturn 16222-01-30 09:21 G 7646052.71 7646052.89 7646053.07 0.0279 0.0139

Saturn 16222-09-16 21:36 G 7646282.19 7646282.40 7646282.60 0.0279 0.0071

Saturn 16223-05-04 08:52 G 7646511.87 7646511.87 7646511.89 0.0279 0.0279

Jupiter 16227-05-03 04:48 G 7647971.57 7647971.70 7647971.83 0.0497 0.0377

Jupiter 16233-10-21 13:55 G 7650334.88 7650335.08 7650335.28 0.0534 0.0099

Saturn 16237-02-25 23:31 G 7651558.29 7651558.48 7651558.68 0.0279 0.0099

Saturn 16237-10-13 11:16 G 7651787.78 7651787.97 7651788.17 0.0280 0.0111

Jupiter 16245-06-26 00:14 G 7654600.41 7654600.51 7654600.62 0.0531 0.0449

Mars 16250-10-16 16:33 G 7656539.02 7656539.19 7656539.37 0.1586 0.0033

Jupiter 16251-05-05 12:57 G 7656739.88 7656740.04 7656740.21 0.0494 0.0289

Saturn 16251-08-12 20:09 G 7656839.15 7656839.34 7656839.54 0.0280 0.0100

Mars 16251-09-17 22:19 G 7656875.28 7656875.43 7656875.57 0.1952 0.1081

Saturn 16252-03-29 08:09 G 7657068.65 7657068.84 7657069.03 0.0279 0.0110

Uranus 16255-01-17 17:31 G 7658093.20 7658093.23 7658093.29 0.0145 0.0142

Uranus 16255-09-01 06:14 G 7658319.60 7658319.76 7658319.93 0.0145 0.0092

Uranus 16256-04-14 18:43 G 7658546.07 7658546.28 7658546.49 0.0145 0.0042

Uranus 16256-11-27 06:57 G 7658772.57 7658772.79 7658773.01 0.0145 0.0008

Uranus 16257-07-11 18:57 G 7658999.11 7658999.29 7658999.50 0.0145 0.0059

Uranus 16258-02-23 07:26 G 7659225.67 7659225.81 7659225.96 0.0145 0.0107

Jupiter 16263-01-08 16:04 G 7661005.98 7661006.17 7661006.37 0.0496 0.0125

Saturn 16266-09-08 03:21 G 7662344.44 7662344.64 7662344.84 0.0279 0.0073

Saturn 16267-04-25 14:52 G 7662573.93 7662574.12 7662574.30 0.0280 0.0136

Jupiter 16269-06-29 05:02 G 7663369.58 7663369.71 7663369.85 0.0535 0.0397

Neptune 16276-07-20 12:57 G 7665947.94 7665948.04 7665948.19 0.0088 0.0073

Neptune 16277-03-03 01:55 G 7666173.42 7666173.58 7666173.77 0.0088 0.0054

Neptune 16277-10-14 14:38 G 7666398.92 7666399.11 7666399.33 0.0088 0.0034

Neptune 16278-05-28 03:36 G 7666624.44 7666624.65 7666624.87 0.0088 0.0014

Neptune 16279-01-08 16:19 G 7666849.96 7666850.18 7666850.40 0.0088 0.0005

Pluto 16279-07-12 06:43 G 7667034.58 7667034.78 7667034.99 0.0068 0.0022

Neptune 16279-08-22 04:48 G 7667075.51 7667075.70 7667075.93 0.0088 0.0026

Pluto 16280-02-22 11:45 G 7667259.79 7667259.99 7667260.20 0.0068 0.0025

Neptune 16280-04-03 17:31 G 7667301.05 7667301.23 7667301.43 0.0088 0.0044

Neptune 16280-11-15 06:28 G 7667526.62 7667526.77 7667526.92 0.0088 0.0063

Saturn 16281-02-21 21:21 G 7667625.19 7667625.39 7667625.59 0.0279 0.0081

Jupiter 16281-03-03 19:55 G 7667635.14 7667635.33 7667635.53 0.0533 0.0128

Neptune 16281-06-28 18:43 G 7667752.23 7667752.28 7667752.37 0.0088 0.0083

Saturn 16281-10-09 09:07 G 7667854.70 7667854.88 7667855.07 0.0279 0.0129

Mars 16282-10-15 06:43 G 7668225.68 7668225.78 7668225.89 0.1587 0.1256

Mars 16284-08-14 16:04 G 7668895.11 7668895.17 7668895.24 0.1585 0.1456

Saturn 16295-08-03 21:21 G 7672901.30 7672901.39 7672901.47 0.0279 0.0253

Saturn 16296-03-20 08:38 G 7673130.65 7673130.86 7673131.07 0.0279 0.0046

Saturn 16296-11-04 20:38 G 7673360.19 7673360.36 7673360.53 0.0280 0.0164

Uranus 16297-03-10 03:07 G 7673485.58 7673485.63 7673485.70 0.0133 0.0128

Uranus 16297-10-22 08:24 G 7673711.69 7673711.85 7673712.01 0.0133 0.0090

Uranus 16298-06-05 13:12 G 7673937.86 7673938.05 7673938.26 0.0133 0.0053

Jupiter 16298-09-16 00:43 G 7674040.34 7674040.53 7674040.73 0.0495 0.0113

Uranus 16299-01-17 18:28 G 7674164.06 7674164.27 7674164.49 0.0133 0.0015

Uranus 16299-08-31 23:45 G 7674390.27 7674390.49 7674390.70 0.0133 0.0023

Uranus 16300-04-15 04:48 G 7674616.51 7674616.70 7674616.89 0.0133 0.0061

Uranus 16300-11-27 09:36 G 7674842.77 7674842.90 7674843.06 0.0133 0.0100

Saturn 16310-01-18 19:26 G 7678182.22 7678182.31 7678182.40 0.0280 0.0253

Jupiter 16310-05-23 03:50 G 7678306.50 7678306.66 7678306.83 0.0497 0.0302

Saturn 16310-09-05 07:55 G 7678411.62 7678411.83 7678412.04 0.0280 0.0043

Saturn 16311-04-22 19:26 G 7678641.15 7678641.31 7678641.49 0.0279 0.0166

Mars 16316-08-14 06:00 G 7680581.58 7680581.75 7680581.92 0.1586 0.0179

Jupiter 16316-11-10 09:36 G 7680669.71 7680669.90 7680670.10 0.0534 0.0161

Mars 16317-07-15 23:02 G 7680917.39 7680917.46 7680917.53 0.1952 0.1756

Saturn 16325-02-14 01:40 G 7683687.46 7683687.57 7683687.70 0.0279 0.0227

Saturn 16325-10-01 12:43 G 7683916.82 7683917.03 7683917.25 0.0279 0.0021

Saturn 16326-05-19 00:14 G 7684146.36 7684146.51 7684146.67 0.0280 0.0190

Jupiter 16328-07-16 00:14 G 7684935.37 7684935.51 7684935.66 0.0532 0.0364

Earth 16333-10-14 06:14 G 7686851.60 7686851.76 7686851.91 0.2685 0.0518

Moon 16333-10-14 08:52 G 7686851.72 7686851.87 7686852.02 0.2691 0.0052 *

Jupiter 16334-05-25 12:14 G 7687074.87 7687075.01 7687075.15 0.0493 0.0364

Uranus 16339-05-02 13:12 G 7688877.92 7688878.05 7688878.20 0.0145 0.0113

Saturn 16339-07-31 19:40 G 7688968.22 7688968.32 7688968.44 0.0280 0.0235

Uranus 16339-12-15 01:26 G 7689104.38 7689104.56 7689104.77 0.0145 0.0064

Saturn 16340-03-17 08:09 G 7689197.63 7689197.84 7689198.05 0.0279 0.0025

Uranus 16340-07-28 14:09 G 7689330.88 7689331.09 7689331.31 0.0145 0.0013

Saturn 16340-11-01 19:55 G 7689427.17 7689427.33 7689427.49 0.0279 0.0184

Uranus	16341-03-12 02:24 G	7689557.39	7689557.60	7689557.82	0.0145	0.0037
Uranus	16341-10-24 14:24 G	7689783.94	7689784.10	7689784.29	0.0145	0.0086
Uranus	16342-06-08 02:38 G	7690010.55	7690010.61	7690010.70	0.0145	0.0135
Jupiter	16346-01-28 13:40 G	7691340.87	7691341.07	7691341.28	0.0495	0.0059
Mars	16348-08-12 19:55 G	7692268.21	7692268.33	7692268.46	0.1586	0.1102
Mars	16349-07-16 05:45 G	7692605.64	7692605.74	7692605.84	0.1951	0.1608
Jupiter	16352-07-19 06:14 G	7693704.68	7693704.76	7693704.84	0.0535	0.0491
Saturn	16354-08-27 05:16 G	7694473.58	7694473.72	7694473.87	0.0279	0.0203
Saturn	16355-04-13 16:48 G	7694702.99	7694703.20	7694703.41	0.0280	0.0007
Saturn	16355-11-29 04:33 G	7694932.56	7694932.69	7694932.83	0.0280	0.0215
Jupiter	16357-10-03 15:50 G	7695607.11	7695607.16	7695607.21	0.0498	0.0480
Neptune	16359-12-01 00:14 G	7696395.39	7696395.51	7696395.66	0.0089	0.0069
Neptune	16360-07-13 13:26 G	7696620.89	7696621.06	7696621.26	0.0089	0.0049
Neptune	16361-02-24 02:52 G	7696846.42	7696846.62	7696846.84	0.0089	0.0029
Neptune	16361-10-07 16:19 G	7697071.96	7697072.18	7697072.40	0.0089	0.0009
Neptune	16362-05-21 05:31 G	7697297.51	7697297.73	7697297.95	0.0089	0.0012
Neptune	16363-01-01 18:43 G	7697523.08	7697523.28	7697523.49	0.0089	0.0032
Neptune	16363-08-15 07:55 G	7697748.66	7697748.83	7697749.02	0.0089	0.0052
Jupiter	16364-03-23 16:19 G	7697969.98	7697970.18	7697970.39	0.0532	0.0063
Neptune	16364-03-27 21:07 G	7697974.27	7697974.38	7697974.52	0.0089	0.0073
Pluto	16365-05-07 19:55 G	7698380.21	7698380.33	7698380.46	0.0077	0.0064
Pluto	16365-12-19 05:02 G	7698605.49	7698605.71	7698605.94	0.0077	0.0006
Pluto	16366-08-01 13:26 G	7698831.03	7698831.06	7698831.14	0.0076	0.0075
Saturn	16369-02-10 05:31 G	7699754.59	7699754.73	7699754.89	0.0280	0.0199
Saturn	16369-09-27 18:00 G	7699984.04	7699984.25	7699984.47	0.0280	0.0013
Saturn	16370-05-15 05:45 G	7700213.62	7700213.74	7700213.87	0.0279	0.0220
Uranus	16381-06-22 19:40 G	7704270.19	7704270.32	7704270.46	0.0133	0.0105
Jupiter	16381-10-06 00:57 G	7704375.36	7704375.54	7704375.73	0.0494	0.0196
Uranus	16382-02-04 00:43 G	7704496.36	7704496.53	7704496.73	0.0133	0.0068
Mars	16382-06-11 18:57 G	7704624.12	7704624.29	7704624.46	0.1585	0.0339

Uranus	16382-09-18 06:00 G	7704722.54	7704722.75	7704722.97	0.0133	0.0030
Uranus	16383-05-02 11:02 G	7704948.75	7704948.96	7704949.18	0.0133	0.0009
Uranus	16383-12-14 16:04 G	7705174.97	7705175.17	7705175.38	0.0133	0.0046
Saturn	16384-03-08 09:50 G	7705259.75	7705259.91	7705260.08	0.0279	0.0177
Uranus	16384-07-27 21:07 G	7705401.22	7705401.38	7705401.56	0.0133	0.0084
Saturn	16384-10-23 21:07 G	7705489.17	7705489.38	7705489.59	0.0279	0.0031
Uranus	16385-03-11 02:24 G	7705627.53	7705627.60	7705627.70	0.0133	0.0122
Saturn	16385-06-10 08:38 G	7705718.76	7705718.86	7705718.97	0.0280	0.0240
Jupiter	16393-06-11 04:04 G	7708641.49	7708641.67	7708641.85	0.0497	0.0221
Saturn	16398-08-23 06:00 G	7710540.59	7710540.75	7710540.91	0.0280	0.0181
Saturn	16399-04-09 18:14 G	7710770.05	7710770.26	7710770.47	0.0279	0.0030
Saturn	16399-11-25 05:45 G	7710999.64	7710999.74	7710999.86	0.0279	0.0238
Jupiter	16399-11-30 12:28 G	7711004.84	7711005.02	7711005.19	0.0534	0.0265
Jupiter	16411-08-05 02:24 G	7715270.43	7715270.60	7715270.78	0.0532	0.0265
Saturn	16413-09-18 12:00 G	7716045.83	7716046.00	7716046.18	0.0279	0.0155
Saturn	16414-05-05 23:31 G	7716275.28	7716275.48	7716275.69	0.0280	0.0054
Mars	16414-06-10 08:52 G	7716310.74	7716310.87	7716311.01	0.1586	0.0943
Saturn	16414-12-21 11:16 G	7716504.92	7716504.97	7716505.05	0.0280	0.0264
Mars	16415-05-13 06:57 G	7716647.64	7716647.79	7716647.95	0.1951	0.0952
Jupiter	16417-06-13 10:19 G	7717409.84	7717409.93	7717410.03	0.0493	0.0434
Uranus	16422-12-30 19:12 G	7719436.24	7719436.30	7719436.39	0.0145	0.0135
Uranus	16423-08-14 07:55 G	7719662.66	7719662.83	7719663.01	0.0145	0.0086
Uranus	16424-03-27 20:09 G	7719889.13	7719889.34	7719889.56	0.0145	0.0036
Uranus	16424-11-09 08:24 G	7720115.64	7720115.85	7720116.07	0.0145	0.0014
Uranus	16425-06-23 20:38 G	7720342.17	7720342.36	7720342.56	0.0145	0.0063
Uranus	16426-02-05 08:52 G	7720568.74	7720568.87	7720569.01	0.0145	0.0113
Saturn	16428-03-04 14:38 G	7721326.93	7721327.11	7721327.29	0.0280	0.0147
Saturn	16428-10-20 02:52 G	7721556.42	7721556.62	7721556.83	0.0280	0.0065
Jupiter	16429-02-16 13:55 G	7721675.88	7721676.08	7721676.28	0.0496	0.0023
Saturn	16429-06-06 14:38 G	7721786.07	7721786.11	7721786.16	0.0279	0.0272

Jupiter 16440-10-22 16:33 G 7725942.07 7725942.19 7725942.32 0.0498 0.0395

Neptune 16440-10-22 22:04 G 7725942.36 7725942.42 7725942.51 0.0088 0.0083

Neptune 16441-06-05 10:48 G 7726167.82 7726167.95 7726168.13 0.0088 0.0063

Neptune 16442-01-17 00:00 G 7726393.31 7726393.50 7726393.70 0.0088 0.0043

Neptune 16442-08-30 12:43 G 7726618.83 7726619.03 7726619.25 0.0088 0.0024

Saturn 16443-03-31 17:31 G 7726832.04 7726832.23 7726832.42 0.0279 0.0128

Neptune 16443-04-13 01:40 G 7726844.35 7726844.57 7726844.79 0.0088 0.0004

Saturn 16443-11-16 04:33 G 7727061.49 7727061.69 7727061.89 0.0279 0.0080

Neptune 16443-11-24 14:24 G 7727069.89 7727070.10 7727070.32 0.0088 0.0015

Neptune 16444-07-07 02:52 G 7727295.43 7727295.62 7727295.84 0.0088 0.0035

Neptune 16445-02-17 15:50 G 7727521.00 7727521.16 7727521.34 0.0088 0.0054

Neptune 16445-10-01 04:04 G 7727746.58 7727746.67 7727746.81 0.0088 0.0074

Jupiter 16447-04-12 17:16 G 7728305.02 7728305.22 7728305.42 0.0533 0.0030

Earth 16447-04-17 04:48 G 7728309.55 7728309.70 7728309.85 0.2646 0.0747

Moon 16447-04-17 09:21 G 7728309.76 7728309.89 7728310.01 0.2651 0.1527 *

Mars 16448-04-08 08:38 G 7728666.69 7728666.86 7728667.02 0.1585 0.0491

Moon 16455-04-15 02:38 G 7731229.52 7731229.61 7731229.71 0.2645 0.2098

Saturn 16457-09-14 14:52 G 7732112.93 7732113.12 7732113.31 0.0280 0.0129

Saturn 16458-05-02 03:07 G 7732342.43 7732342.63 7732342.83 0.0279 0.0081

Jupiter 16458-12-16 09:07 G 7732570.80 7732570.88 7732570.96 0.0531 0.0486

Jupiter 16464-10-25 00:14 G 7734710.34 7734710.51 7734710.68 0.0494 0.0269

Uranus 16465-02-20 06:28 G 7734828.69 7734828.77 7734828.87 0.0133 0.0121

Uranus 16465-10-04 11:45 G 7735054.82 7735054.99 7735055.16 0.0133 0.0083

Uranus 16466-05-18 16:33 G 7735281.00 7735281.19 7735281.41 0.0133 0.0046

Uranus 16466-12-30 22:04 G 7735507.20 7735507.42 7735507.64 0.0133 0.0008

Uranus 16467-08-14 03:07 G 7735733.42 7735733.63 7735733.85 0.0133 0.0030

Uranus 16468-03-27 08:24 G 7735959.66 7735959.85 7735960.04 0.0133 0.0068

Uranus 16468-11-08 13:26 G 7736185.94 7736186.06 7736186.20 0.0133 0.0107

Saturn 16472-10-10 18:14 G 7737618.07 7737618.26 7737618.46 0.0279 0.0108

Saturn 16473-05-28 05:45 G 7737847.54 7737847.74 7737847.94 0.0280 0.0101

Jupiter 16476-06-30 02:52 G 7738976.43 7738976.62 7738976.82 0.0496 0.0148

Mars 16480-04-06 22:33 G 7740353.29 7740353.44 7740353.59 0.1586 0.0793

Mars 16481-03-09 07:55 G 7740689.65 7740689.83 7740690.00 0.1952 0.0272

Jupiter 16482-12-19 10:33 G 7741339.79 7741339.94 7741340.10 0.0534 0.0342

Saturn 16487-03-27 22:48 G 7742899.25 7742899.45 7742899.65 0.0280 0.0096

Saturn 16487-11-12 11:02 G 7743128.78 7743128.96 7743129.16 0.0280 0.0115

Jupiter 16494-08-24 00:14 G 7745605.32 7745605.51 7745605.70 0.0531 0.0191

Saturn 16502-04-24 00:14 G 7748404.31 7748404.51 7748404.71 0.0279 0.0080

Saturn 16502-12-09 11:16 G 7748633.79 7748633.97 7748634.16 0.0279 0.0128

Uranus 16507-04-14 13:40 G 7750220.94 7750221.07 7750221.23 0.0145 0.0109

Uranus 16507-11-27 02:09 G 7750447.40 7750447.59 7750447.80 0.0145 0.0059

Uranus 16508-07-10 14:38 G 7750673.90 7750674.11 7750674.33 0.0145 0.0009

Uranus 16509-02-22 02:52 G 7750900.42 7750900.62 7750900.84 0.0145 0.0041

Uranus 16509-10-06 15:07 G 7751126.97 7751127.13 7751127.31 0.0145 0.0091

Uranus 16510-05-21 03:07 G 7751353.59 7751353.63 7751353.70 0.0145 0.0140

Jupiter 16512-03-08 14:52 G 7752010.92 7752011.12 7752011.32 0.0495 0.0110

Mars 16514-02-04 21:36 G 7752709.25 7752709.40 7752709.56 0.1585 0.0647

Saturn 16516-10-07 22:48 G 7753685.25 7753685.45 7753685.66 0.0280 0.0079

Saturn 16517-05-25 11:02 G 7753914.78 7753914.96 7753915.15 0.0279 0.0132

Jupiter 16523-11-12 16:33 G 7756277.03 7756277.19 7756277.34 0.0497 0.0316

Neptune 16524-03-04 10:04 G 7756389.82 7756389.92 7756390.03 0.0089 0.0078

Neptune 16524-10-15 23:16 G 7756615.31 7756615.47 7756615.64 0.0089 0.0058

Pluto 16524-12-29 12:43 G 7756689.90 7756690.03 7756690.20 0.0067 0.0050

Neptune 16525-05-29 12:14 G 7756840.83 7756841.01 7756841.22 0.0089 0.0039

Pluto 16525-08-11 18:14 G 7756915.04 7756915.26 7756915.48 0.0068 0.0003

Neptune 16526-01-10 01:40 G 7757066.36 7757066.57 7757066.79 0.0089 0.0018

Pluto 16526-03-24 23:16 G 7757140.31 7757140.47 7757140.65 0.0068 0.0044

Neptune 16526-08-23 15:07 G 7757291.91 7757292.13 7757292.35 0.0089 0.0002

Neptune 16527-04-06 04:19 G 7757517.47 7757517.68 7757517.89 0.0089 0.0022

Neptune 16527-11-17 17:31 G 7757743.04 7757743.23 7757743.42 0.0089 0.0043

Neptune 16528-06-30 06:14 G 7757968.63 7757968.76 7757968.94 0.0089 0.0063

Neptune 16529-02-10 19:40 G 7758194.26 7758194.32 7758194.42 0.0089 0.0084

Jupiter 16530-05-02 20:38 G 7758640.16 7758640.36 7758640.56 0.0533 0.0137

Saturn 16531-03-19 13:40 G 7758961.02 7758961.07 7758961.13 0.0278 0.0267

Saturn 16531-11-04 00:28 G 7759190.32 7759190.52 7759190.73 0.0279 0.0061

Saturn 16532-06-20 12:00 G 7759419.82 7759420.00 7759420.18 0.0279 0.0148

Jupiter 16542-01-05 08:38 G 7762905.73 7762905.86 7762905.99 0.0530 0.0401

Saturn 16545-09-02 16:48 G 7764242.13 7764242.20 7764242.28 0.0281 0.0261

Mars 16546-02-03 11:16 G 7764395.81 7764395.97 7764396.13 0.1585 0.0630

Saturn 16546-04-20 06:00 G 7764471.54 7764471.75 7764471.96 0.0280 0.0048

Saturn 16546-12-05 18:28 G 7764701.10 7764701.27 7764701.44 0.0280 0.0163

Mars 16547-01-05 09:21 G 7764731.72 7764731.89 7764732.06 0.1952 0.0380

Jupiter 16547-11-15 00:28 G 7765045.38 7765045.52 7765045.66 0.0495 0.0353

Uranus 16549-06-04 22:19 G 7765613.30 7765613.43 7765613.59 0.0133 0.0099

Uranus 16550-01-17 03:50 G 7765839.47 7765839.66 7765839.86 0.0133 0.0061

Uranus 16550-08-31 09:07 G 7766065.67 7766065.88 7766066.10 0.0133 0.0023

Uranus 16551-04-14 14:09 G 7766291.88 7766292.09 7766292.31 0.0133 0.0015

Uranus 16551-11-26 19:12 G 7766518.11 7766518.30 7766518.51 0.0133 0.0053

Uranus 16552-07-10 00:14 G 7766744.37 7766744.51 7766744.69 0.0133 0.0092

Uranus 16553-02-21 05:31 G 7766970.70 7766970.73 7766970.81 0.0133 0.0130

Jupiter 16559-07-21 03:36 G 7769311.45 7769311.65 7769311.86 0.0497 0.0062

Saturn 16560-09-28 20:09 G 7769747.25 7769747.34 7769747.46 0.0278 0.0239

Saturn 16561-05-16 06:57 G 7769976.58 7769976.79 7769977.00 0.0278 0.0033

Saturn 16561-12-31 18:00 G 7770206.09 7770206.25 7770206.42 0.0279 0.0175

Jupiter 16566-01-08 11:45 G 7771674.88 7771674.99 7771675.11 0.0534 0.0437

Jupiter 16571-03-26 06:28 G 7773577.72 7773577.77 7773577.82 0.0499 0.0482

Saturn 16575-03-15 17:31 G 7775028.14 7775028.23 7775028.35 0.0280 0.0242

Saturn 16575-10-31 06:43 G 7775257.57 7775257.78 7775257.99 0.0280 0.0029

Saturn 16576-06-16 18:57 G 7775487.14 7775487.29 7775487.46 0.0279 0.0181

Moon 16576-10-15 05:02 G 7775607.56 7775607.71 7775607.86 0.2679 0.1198

Earth 16576-10-15 05:31 G 7775607.58 7775607.73 7775607.88 0.2685 0.0832 *

Jupiter 16577-09-13 03:07 G 7775940.43 7775940.63 7775940.83 0.0532 0.0087

Mars 16579-12-03 11:02 G 7776751.81 7776751.96 7776752.11 0.1585 0.0805

Saturn 16590-04-10 19:55 G 7780533.21 7780533.33 7780533.46 0.0278 0.0221

Saturn 16590-11-26 06:43 G 7780762.57 7780762.78 7780762.99 0.0279 0.0015

Uranus 16590-12-12 19:55 G 7780779.24 7780779.33 7780779.43 0.0145 0.0131

Saturn 16591-07-13 18:00 G 7780992.10 7780992.25 7780992.41 0.0279 0.0194

Uranus 16591-07-27 08:09 G 7781005.67 7781005.84 7781006.03 0.0145 0.0082

Uranus 16592-03-09 20:38 G 7781232.15 7781232.36 7781232.58 0.0145 0.0032

Uranus 16592-10-22 08:52 G 7781458.66 7781458.87 7781459.09 0.0145 0.0018

Uranus 16593-06-05 21:07 G 7781685.19 7781685.38 7781685.58 0.0145 0.0067

Uranus 16594-01-18 09:07 G 7781911.77 7781911.88 7781912.02 0.0145 0.0117

Jupiter 16595-03-28 14:24 G 7782345.91 7782346.10 7782346.29 0.0495 0.0187

Saturn 16604-09-25 23:31 G 7785814.35 7785814.48 7785814.62 0.0281 0.0214

Saturn 16605-05-13 12:57 G 7786043.83 7786044.04 7786044.25 0.0281 0.0002

Neptune 16605-09-08 20:24 G 7786162.25 7786162.35 7786162.50 0.0088 0.0073

Saturn 16605-12-29 01:26 G 7786273.43 7786273.56 7786273.71 0.0280 0.0211

Neptune 16606-04-22 09:36 G 7786387.73 7786387.90 7786388.08 0.0088 0.0052

Jupiter 16606-12-02 16:04 G 7786611.99 7786612.17 7786612.35 0.0498 0.0235

Neptune 16606-12-03 22:19 G 7786613.24 7786613.43 7786613.64 0.0088 0.0033

Neptune 16607-07-17 11:16 G 7786838.76 7786838.97 7786839.20 0.0088 0.0014

Neptune 16608-02-28 00:14 G 7787064.29 7787064.51 7787064.73 0.0088 0.0006

Neptune 16608-10-10 12:43 G 7787289.83 7787290.03 7787290.25 0.0088 0.0026

Neptune 16609-05-24 01:26 G 7787515.38 7787515.56 7787515.76 0.0088 0.0046

Neptune 16610-01-04 13:55 G 7787740.95 7787741.08 7787741.25 0.0088 0.0065

Neptune 16610-08-18 02:52 G 7787966.58 7787966.62 7787966.70 0.0088 0.0085

Pluto 16611-06-08 08:38 G 7788260.69 7788260.86 7788261.08 0.0077 0.0036

Mars 16611-12-03 00:57 G 7788438.37 7788438.54 7788438.70 0.1585 0.0481

Pluto 16612-01-19 17:45 G 7788486.06 7788486.24 7788486.46 0.0077 0.0034

Mars 16612-11-02 10:19 G 7788773.78 7788773.93 7788774.07 0.1952 0.1065

Jupiter	16613-05-22 18:57 G	7788975.11	7788975.29	7788975.48	0.0533	0.0217
Saturn	16619-10-23 03:36 G	7791319.50	7791319.65	7791319.81	0.0278	0.0191
Saturn	16620-06-08 14:09 G	7791548.88	7791549.09	7791549.31	0.0278	0.0016
Saturn	16621-01-24 01:12 G	7791778.43	7791778.55	7791778.68	0.0279	0.0223
Jupiter	16625-01-25 09:07 G	7793240.71	7793240.88	7793241.04	0.0531	0.0312
Jupiter	16630-12-05 01:26 G	7795380.47	7795380.56	7795380.65	0.0494	0.0439
Uranus	16633-02-03 08:52 G	7796171.78	7796171.87	7796171.99	0.0133	0.0115
Uranus	16633-09-17 14:24 G	7796397.92	7796398.10	7796398.28	0.0133	0.0077
Saturn	16634-04-08 01:12 G	7796600.41	7796600.55	7796600.71	0.0281	0.0193
Uranus	16634-05-01 19:26 G	7796624.11	7796624.31	7796624.52	0.0133	0.0040
Saturn	16634-11-23 14:24 G	7796829.89	7796830.10	7796830.31	0.0280	0.0020
Uranus	16634-12-14 00:43 G	7796850.31	7796850.53	7796850.75	0.0133	0.0002
Saturn	16635-07-11 02:38 G	7797059.50	7797059.61	7797059.74	0.0279	0.0229
Uranus	16635-07-28 05:45 G	7797076.54	7797076.74	7797076.96	0.0133	0.0037
Uranus	16636-03-10 11:16 G	7797302.79	7797302.97	7797303.15	0.0133	0.0075
Uranus	16636-10-22 16:19 G	7797529.08	7797529.18	7797529.31	0.0133	0.0113
Jupiter	16642-08-10 03:50 G	7799646.46	7799646.66	7799646.87	0.0496	0.0021
Mars	16645-10-01 00:28 G	7800794.38	7800794.52	7800794.66	0.1585	0.0955
Saturn	16649-05-04 02:52 G	7802105.47	7802105.62	7802105.79	0.0278	0.0174
Saturn	16649-12-19 13:40 G	7802334.86	7802335.07	7802335.28	0.0279	0.0033
Saturn	16650-08-06 00:43 G	7802564.44	7802564.53	7802564.65	0.0279	0.0241
Jupiter	16654-04-15 05:45 G	7803912.63	7803912.74	7803912.86	0.0498	0.0404
Jupiter	16660-10-03 03:21 G	7806275.44	7806275.64	7806275.85	0.0532	0.0012
Saturn	16663-10-19 06:43 G	7807386.61	7807386.78	7807386.95	0.0281	0.0166
Saturn	16664-06-04 20:09 G	7807616.13	7807616.34	7807616.55	0.0281	0.0048
Saturn	16665-01-20 08:52 G	7807845.79	7807845.87	7807845.95	0.0280	0.0258
Jupiter	16672-06-07 17:16 G	7810541.19	7810541.22	7810541.26	0.0529	0.0520
Uranus	16675-03-27 14:38 G	7811563.96	7811564.11	7811564.26	0.0145	0.0104
Uranus	16675-11-09 02:52 G	7811790.42	7811790.62	7811790.83	0.0145	0.0054
Uranus	16676-06-22 15:21 G	7812016.92	7812017.14	7812017.35	0.0145	0.0006

Uranus 16677-02-04 03:21 G 7812243.44 7812243.64 7812243.86 0.0145 0.0045

Uranus 16677-09-18 15:50 G 7812470.00 7812470.16 7812470.33 0.0145 0.0094

Mars 16677-09-29 14:09 G 7812480.92 7812481.09 7812481.26 0.1585 0.0326

Jupiter 16678-04-17 13:55 G 7812680.91 7812681.08 7812681.25 0.0495 0.0269

Uranus 16678-05-03 04:04 G 7812696.65 7812696.67 7812696.71 0.0145 0.0143

Mars 16678-08-30 11:16 G 7812815.89 7812815.97 7812816.05 0.1953 0.1738

Saturn 16678-11-14 11:16 G 7812891.80 7812891.97 7812892.16 0.0278 0.0143

Saturn 16679-07-01 22:04 G 7813121.21 7813121.42 7813121.63 0.0278 0.0064

Saturn 16680-02-16 09:07 G 7813350.84 7813350.88 7813350.93 0.0279 0.0271

Neptune 16688-06-06 19:40 G 7816384.30 7816384.32 7816384.38 0.0089 0.0088

Neptune 16689-01-18 09:07 G 7816609.75 7816609.88 7816610.04 0.0089 0.0067

Neptune 16689-08-31 22:19 G 7816835.26 7816835.43 7816835.63 0.0089 0.0047

Jupiter 16689-12-21 17:02 G 7816947.02 7816947.21 7816947.41 0.0497 0.0148

Neptune 16690-04-14 11:31 G 7817060.78 7817060.98 7817061.20 0.0089 0.0027

Moon 16690-04-19 03:50 G 7817065.49 7817065.66 7817065.82 0.2641 0.0069

Earth 16690-04-19 07:26 G 7817065.66 7817065.81 7817065.96 0.2647 0.0792 *

Neptune 16690-11-26 00:43 G 7817286.32 7817286.53 7817286.76 0.0089 0.0007

Neptune 16691-07-09 14:09 G 7817511.87 7817512.09 7817512.31 0.0089 0.0013

Neptune 16692-02-20 03:07 G 7817737.44 7817737.63 7817737.85 0.0089 0.0034

Neptune 16692-10-02 16:19 G 7817963.02 7817963.18 7817963.37 0.0089 0.0054

Saturn 16693-04-30 09:36 G 7818172.72 7818172.90 7818173.08 0.0281 0.0143

Neptune 16693-05-16 05:31 G 7818188.62 7818188.73 7818188.87 0.0089 0.0074

Saturn 16693-12-15 22:33 G 7818402.24 7818402.44 7818402.65 0.0280 0.0070

Saturn 16694-08-02 11:02 G 7818631.95 7818631.96 7818631.97 0.0279 0.0279

Jupiter 16696-06-10 20:52 G 7819310.21 7819310.37 7819310.53 0.0534 0.0317

Jupiter 16708-02-15 12:00 G 7823575.82 7823576.00 7823576.19 0.0531 0.0207

Saturn 16708-05-27 11:02 G 7823677.78 7823677.96 7823678.15 0.0278 0.0124

Saturn 16709-01-11 21:36 G 7823907.20 7823907.40 7823907.61 0.0279 0.0083

Mars 16710-08-31 18:00 G 7824504.16 7824504.25 7824504.34 0.1952 0.1662

Mars 16711-07-30 13:26 G 7824836.94 7824837.06 7824837.18 0.1585 0.1120

Uranus	16716-10-04 19:26 G	7826730.28	7826730.31	7826730.35	0.0133	0.0131
Uranus	16717-05-19 00:14 G	7826956.38	7826956.51	7826956.69	0.0133	0.0095
Uranus	16717-12-31 05:45 G	7827182.55	7827182.74	7827182.95	0.0133	0.0056
Uranus	16718-08-14 11:02 G	7827408.75	7827408.96	7827409.18	0.0133	0.0018
Uranus	16719-03-28 16:33 G	7827634.97	7827635.19	7827635.40	0.0133	0.0020
Uranus	16719-11-09 21:36 G	7827861.21	7827861.40	7827861.60	0.0133	0.0059
Uranus	16720-06-23 02:52 G	7828087.48	7828087.62	7828087.78	0.0133	0.0096
Saturn	16722-11-11 14:24 G	7828958.91	7828959.10	7828959.29	0.0281	0.0117
Saturn	16723-06-29 03:36 G	7829188.46	7829188.65	7829188.85	0.0281	0.0097
Jupiter	16725-08-30 02:24 G	7829981.40	7829981.60	7829981.80	0.0497	0.0095
Jupiter	16737-05-05 04:19 G	7834247.53	7834247.68	7834247.84	0.0499	0.0328
Saturn	16737-12-07 20:09 G	7834464.15	7834464.34	7834464.55	0.0278	0.0092
Saturn	16738-07-25 06:57 G	7834693.60	7834693.79	7834693.98	0.0278	0.0115
Mars	16743-07-29 03:21 G	7836523.46	7836523.64	7836523.81	0.1585	0.0171
Jupiter	16743-10-24 02:24 G	7836610.40	7836610.60	7836610.80	0.0532	0.0087
Saturn	16752-05-23 18:28 G	7839745.07	7839745.27	7839745.47	0.0281	0.0092
Saturn	16753-01-08 07:40 G	7839974.63	7839974.82	7839975.01	0.0280	0.0121
Jupiter	16755-06-28 17:31 G	7840876.12	7840876.23	7840876.36	0.0530	0.0433
Uranus	16758-11-25 20:38 G	7842122.27	7842122.36	7842122.48	0.0145	0.0126
Uranus	16759-07-10 08:52 G	7842348.70	7842348.87	7842349.07	0.0145	0.0078
Uranus	16760-02-21 21:36 G	7842575.19	7842575.40	7842575.62	0.0145	0.0027
Uranus	16760-10-05 09:50 G	7842801.70	7842801.91	7842802.13	0.0145	0.0022
Jupiter	16761-05-07 13:26 G	7843015.92	7843016.06	7843016.21	0.0495	0.0346
Uranus	16761-05-19 21:50 G	7843028.24	7843028.41	7843028.61	0.0145	0.0072
Uranus	16762-01-01 10:04 G	7843254.81	7843254.92	7843255.05	0.0145	0.0121
Saturn	16766-11-02 10:19 G	7845020.92	7845020.93	7845020.96	0.0278	0.0276
Saturn	16767-06-19 20:24 G	7845250.15	7845250.35	7845250.56	0.0278	0.0072
Saturn	16768-02-04 06:57 G	7845479.61	7845479.79	7845479.98	0.0279	0.0134
Neptune	16769-12-12 06:57 G	7846156.71	7846156.79	7846156.88	0.0088	0.0081
Neptune	16770-07-25 19:40 G	7846382.18	7846382.32	7846382.49	0.0088	0.0061

Pluto 16771-01-29 22:19 G 7846570.27 7846570.43 7846570.64 0.0067 0.0038

Neptune 16771-03-08 08:38 G 7846607.67 7846607.86 7846608.06 0.0088 0.0042

Pluto 16771-09-12 03:50 G 7846795.45 7846795.66 7846795.89 0.0068 0.0010

Neptune 16771-10-19 21:21 G 7846833.18 7846833.39 7846833.61 0.0088 0.0022

Pluto 16772-04-24 08:52 G 7847020.77 7847020.87 7847021.01 0.0068 0.0057

Neptune 16772-06-01 10:19 G 7847058.71 7847058.93 7847059.15 0.0088 0.0002

Jupiter 16773-01-10 15:50 G 7847281.96 7847282.16 7847282.36 0.0497 0.0074

Neptune 16773-01-12 23:02 G 7847284.25 7847284.46 7847284.68 0.0088 0.0017

Neptune 16773-08-26 11:45 G 7847509.80 7847509.99 7847510.20 0.0088 0.0037

Neptune 16774-04-09 00:28 G 7847735.36 7847735.52 7847735.70 0.0088 0.0057

Neptune 16774-11-20 12:57 G 7847960.95 7847961.04 7847961.17 0.0088 0.0076

Mars 16775-07-27 17:02 G 7848210.15 7848210.21 7848210.28 0.1585 0.1458

Mars 16776-06-27 18:43 G 7848546.13 7848546.28 7848546.43 0.1952 0.0976

Mars 16777-05-27 02:52 G 7848879.52 7848879.62 7848879.72 0.1585 0.1274

Jupiter 16779-07-01 21:21 G 7849645.26 7849645.39 7849645.52 0.0533 0.0410

Saturn 16781-04-18 08:52 G 7850301.87 7850301.87 7850301.90 0.0282 0.0281

Saturn 16781-12-03 23:02 G 7850531.26 7850531.46 7850531.67 0.0281 0.0066

Saturn 16782-07-21 12:28 G 7850760.84 7850761.02 7850761.20 0.0281 0.0147

Jupiter 16791-03-06 10:48 G 7853910.75 7853910.95 7853911.15 0.0530 0.0125

Saturn 16796-05-14 19:55 G 7855807.25 7855807.33 7855807.45 0.0277 0.0244

Saturn 16796-12-30 06:14 G 7856036.55 7856036.76 7856036.97 0.0278 0.0039

Saturn 16797-08-16 16:48 G 7856266.04 7856266.20 7856266.37 0.0278 0.0168

Uranus 16801-01-16 10:19 G 7857514.82 7857514.93 7857515.06 0.0133 0.0111

Uranus 16801-08-30 15:50 G 7857740.98 7857741.16 7857741.34 0.0133 0.0073

Uranus 16802-04-13 21:07 G 7857967.17 7857967.38 7857967.59 0.0133 0.0035

Uranus 16802-11-26 02:24 G 7858193.38 7858193.60 7858193.82 0.0133 0.0003

Uranus 16803-07-10 07:26 G 7858419.61 7858419.81 7858420.03 0.0133 0.0042

Uranus 16804-02-21 12:57 G 7858645.87 7858646.04 7858646.22 0.0133 0.0079

Uranus 16804-10-04 18:00 G 7858872.17 7858872.25 7858872.37 0.0133 0.0118

Jupiter 16808-09-18 01:55 G 7860316.39 7860316.58 7860316.77 0.0496 0.0175

Mars 16809-05-25 16:33 G 7860566.01 7860566.19 7860566.36 0.1584 0.0040

Saturn 16810-10-29 14:52 G 7861088.03 7861088.12 7861088.22 0.0281 0.0251

Saturn 16811-06-16 04:33 G 7861317.48 7861317.69 7861317.90 0.0281 0.0038

Moon 16811-10-20 09:36 G 7861443.85 7861443.90 7861443.96 0.2687 0.2467

Saturn 16812-01-31 17:31 G 7861547.07 7861547.23 7861547.41 0.0280 0.0174

Moon 16819-10-18 02:52 G 7864363.48 7864363.62 7864363.76 0.2691 0.1156

Earth 16819-10-18 04:48 G 7864363.55 7864363.70 7864363.84 0.2685 0.1174 *

Jupiter 16820-05-24 03:50 G 7864582.49 7864582.66 7864582.84 0.0498 0.0250

Saturn 16825-11-24 20:52 G 7866593.26 7866593.37 7866593.51 0.0278 0.0223

Saturn 16826-07-12 07:12 G 7866822.59 7866822.80 7866823.01 0.0278 0.0018

Jupiter 16826-11-12 04:19 G 7866945.49 7866945.68 7866945.87 0.0532 0.0187

Saturn 16827-02-26 17:45 G 7867052.08 7867052.24 7867052.39 0.0279 0.0188

Jupiter 16838-07-17 18:28 G 7871211.12 7871211.27 7871211.43 0.0529 0.0338

Saturn 16840-05-10 18:43 G 7871874.16 7871874.28 7871874.41 0.0282 0.0228

Saturn 16840-12-26 08:52 G 7872103.66 7872103.87 7872104.08 0.0281 0.0013

Mars 16841-05-24 06:14 G 7872252.67 7872252.76 7872252.86 0.1585 0.1301

Saturn 16841-08-12 21:50 G 7872333.27 7872333.41 7872333.57 0.0281 0.0200

Mars 16842-04-24 19:55 G 7872588.15 7872588.33 7872588.50 0.1952 0.0305

Uranus 16843-03-09 15:21 G 7872906.99 7872907.14 7872907.31 0.0145 0.0099

Mars 16843-03-24 15:50 G 7872922.09 7872922.16 7872922.23 0.1585 0.1438

Uranus 16843-10-22 03:50 G 7873133.46 7873133.66 7873133.87 0.0145 0.0050

Jupiter 16844-05-26 10:04 G 7873350.82 7873350.92 7873351.04 0.0495 0.0413

Uranus 16844-06-04 16:04 G 7873359.96 7873360.17 7873360.39 0.0145 0.0002

Uranus 16845-01-17 04:19 G 7873586.48 7873586.68 7873586.89 0.0145 0.0049

Uranus 16845-08-31 16:33 G 7873813.04 7873813.19 7873813.36 0.0145 0.0098

Neptune 16853-04-22 19:55 G 7876604.22 7876604.33 7876604.45 0.0089 0.0076

Neptune 16853-12-04 09:07 G 7876829.71 7876829.88 7876830.06 0.0089 0.0055

Neptune 16854-07-17 22:19 G 7877055.23 7877055.43 7877055.64 0.0089 0.0035

Neptune 16855-02-28 11:31 G 7877280.77 7877280.98 7877281.21 0.0089 0.0015

Saturn 16855-06-07 07:12 G 7877379.66 7877379.80 7877379.96 0.0277 0.0189

Neptune 16855-10-12 00:57 G 7877506.32 7877506.54 7877506.76 0.0089 0.0005

Saturn 16856-01-22 17:31 G 7877609.02 7877609.23 7877609.44 0.0278 0.0016

Jupiter 16856-01-30 12:43 G 7877616.82 7877617.03 7877617.23 0.0497 0.0011

Neptune 16856-05-24 13:55 G 7877731.87 7877732.08 7877732.30 0.0089 0.0025

Saturn 16856-09-08 04:04 G 7877838.55 7877838.67 7877838.80 0.0278 0.0222

Neptune 16857-01-05 03:07 G 7877957.45 7877957.63 7877957.82 0.0089 0.0046

Pluto 16857-07-07 18:43 G 7878141.08 7878141.28 7878141.50 0.0077 0.0021

Neptune 16857-08-18 15:50 G 7878183.04 7878183.16 7878183.33 0.0089 0.0067

Pluto 16858-02-18 03:21 G 7878366.49 7878366.64 7878366.83 0.0077 0.0049

Neptune 16858-04-01 05:02 G 7878408.68 7878408.71 7878408.79 0.0089 0.0087

Jupiter 16862-07-20 18:14 G 7879980.18 7879980.26 7879980.35 0.0533 0.0481

Jupiter 16867-10-05 14:52 G 7881883.03 7881883.12 7881883.23 0.0500 0.0433

Saturn 16869-11-21 02:24 G 7882660.45 7882660.60 7882660.75 0.0281 0.0195

Saturn 16870-07-08 15:50 G 7882889.95 7882890.16 7882890.38 0.0281 0.0019

Saturn 16871-02-23 04:48 G 7883119.59 7883119.70 7883119.83 0.0280 0.0229

Jupiter 16874-03-25 08:52 G 7884245.67 7884245.87 7884246.07 0.0531 0.0049

Mars 16875-03-23 05:45 G 7884608.57 7884608.74 7884608.91 0.1585 0.0146

Uranus 16884-09-15 20:38 G 7888073.30 7888073.36 7888073.43 0.0133 0.0126

Saturn 16884-12-17 08:38 G 7888165.70 7888165.86 7888166.03 0.0278 0.0167

Uranus 16885-04-30 01:40 G 7888299.42 7888299.57 7888299.75 0.0133 0.0089

Saturn 16885-08-03 18:57 G 7888395.08 7888395.29 7888395.50 0.0278 0.0038

Uranus 16885-12-12 06:57 G 7888525.60 7888525.79 7888526.00 0.0133 0.0051

Saturn 16886-03-21 05:16 G 7888624.63 7888624.72 7888624.83 0.0279 0.0244

Uranus 16886-07-26 12:28 G 7888751.81 7888752.02 7888752.24 0.0133 0.0013

Uranus 16887-03-09 17:45 G 7888978.03 7888978.24 7888978.46 0.0133 0.0025

Uranus 16887-10-21 23:16 G 7889204.28 7889204.47 7889204.66 0.0133 0.0063

Uranus 16888-06-04 04:19 G 7889430.55 7889430.68 7889430.83 0.0133 0.0101

Jupiter 16891-10-07 23:45 G 7890651.31 7890651.49 7890651.67 0.0496 0.0243

Saturn 16899-06-03 05:45 G 7893446.58 7893446.74 7893446.92 0.0282 0.0172

Saturn 16900-01-18 19:55 G 7893676.12 7893676.33 7893676.54 0.0281 0.0042

Saturn 16900-09-05 08:52 G 7893905.79 7893905.87 7893905.96 0.0281 0.0254

Jupiter 16903-06-13 23:45 G 7894917.30 7894917.49 7894917.68 0.0499 0.0191

Mars 16907-03-22 19:40 G 7896295.20 7896295.32 7896295.44 0.1585 0.1146

Mars 16908-02-20 20:24 G 7896630.18 7896630.35 7896630.52 0.1953 0.0397

Jupiter 16909-12-02 02:24 G 7897280.43 7897280.60 7897280.78 0.0532 0.0265

Saturn 16914-06-30 19:26 G 7898952.12 7898952.31 7898952.49 0.0277 0.0132

Saturn 16915-02-15 05:31 G 7899181.53 7899181.73 7899181.94 0.0278 0.0073

Jupiter 16921-08-06 14:24 G 7901545.93 7901546.10 7901546.27 0.0529 0.0277

Uranus 16926-11-07 21:21 G 7903465.28 7903465.39 7903465.52 0.0145 0.0121

Jupiter 16927-06-16 08:38 G 7903685.83 7903685.86 7903685.90 0.0495 0.0484

Uranus 16927-06-22 09:36 G 7903691.72 7903691.90 7903692.10 0.0145 0.0072

Uranus 16928-02-03 22:04 G 7903918.21 7903918.42 7903918.64 0.0145 0.0023

Uranus 16928-09-17 10:19 G 7904144.72 7904144.93 7904145.15 0.0145 0.0027

Saturn 16928-12-14 14:38 G 7904232.93 7904233.11 7904233.30 0.0281 0.0138

Uranus 16929-05-01 22:33 G 7904371.26 7904371.44 7904371.63 0.0145 0.0076

Saturn 16929-08-01 04:04 G 7904462.47 7904462.67 7904462.88 0.0281 0.0076

Uranus 16929-12-14 10:48 G 7904597.85 7904597.95 7904598.06 0.0145 0.0124

Earth 16933-04-21 10:04 G 7905821.76 7905821.92 7905822.07 0.2646 0.0819

Moon 16933-04-21 11:45 G 7905821.86 7905821.99 7905822.12 0.2653 0.1264 *

Neptune 16934-10-28 06:14 G 7906376.64 7906376.76 7906376.90 0.0088 0.0070

Neptune 16935-06-10 18:43 G 7906602.12 7906602.28 7906602.48 0.0088 0.0051

Neptune 16936-01-22 07:55 G 7906827.63 7906827.83 7906828.04 0.0088 0.0030

Neptune 16936-09-03 20:52 G 7907053.15 7907053.37 7907053.59 0.0088 0.0011

Neptune 16937-04-17 09:36 G 7907278.68 7907278.90 7907279.12 0.0088 0.0009

Neptune 16937-11-28 22:19 G 7907504.22 7907504.43 7907504.64 0.0088 0.0029

Neptune 16938-07-12 11:02 G 7907729.78 7907729.96 7907730.15 0.0088 0.0048

Jupiter 16939-02-19 11:16 G 7907951.77 7907951.97 7907952.17 0.0497 0.0065

Neptune 16939-02-22 23:31 G 7907955.36 7907955.48 7907955.64 0.0088 0.0068

Neptune 16939-10-06 12:28 G 7908181.01 7908181.02 7908181.06 0.0088 0.0087

Mars 16941-01-18 18:43 G 7908651.11 7908651.28 7908651.46 0.1585 0.0308

Moon	16941-04-19 07:40 G	7908741.77	7908741.82	7908741.87	0.2649	0.2481
Saturn	16944-01-10 21:36 G	7909738.20	7909738.40	7909738.59	0.0278	0.0109
Saturn	16944-08-27 07:40 G	7909967.62	7909967.82	7909968.02	0.0278	0.0096
Jupiter	16950-10-25 12:43 G	7912217.89	7912218.03	7912218.17	0.0499	0.0364
Jupiter	16957-04-14 09:07 G	7914580.68	7914580.88	7914581.09	0.0531	0.0045
Saturn	16958-06-26 18:00 G	7915019.06	7915019.25	7915019.44	0.0281	0.0114
Saturn	16959-02-11 07:40 G	7915248.62	7915248.82	7915249.02	0.0281	0.0099
Jupiter	16968-12-17 23:02 G	7918846.39	7918846.46	7918846.54	0.0528	0.0484
Uranus	16968-12-29 11:16 G	7918857.85	7918857.97	7918858.11	0.0133	0.0106
Uranus	16969-08-12 16:33 G	7919084.01	7919084.19	7919084.39	0.0133	0.0068
Uranus	16970-03-26 22:04 G	7919310.21	7919310.42	7919310.63	0.0133	0.0030
Uranus	16970-11-08 03:21 G	7919536.42	7919536.64	7919536.86	0.0133	0.0008
Uranus	16971-06-22 08:38 G	7919762.66	7919762.86	7919763.07	0.0133	0.0046
Uranus	16972-02-03 13:55 G	7919988.92	7919989.08	7919989.26	0.0133	0.0084
Uranus	16972-09-16 18:57 G	7920215.22	7920215.29	7920215.40	0.0133	0.0122
Saturn	16972-12-05 21:36 G	7920295.40	7920295.40	7920295.40	0.0277	0.0277
Mars	16973-01-17 08:24 G	7920337.72	7920337.85	7920337.99	0.1585	0.0982
Saturn	16973-07-23 07:40 G	7920524.62	7920524.82	7920525.02	0.0278	0.0074
Mars	16973-12-17 21:50 G	7920672.26	7920672.41	7920672.55	0.1953	0.1061
Saturn	16974-03-09 18:00 G	7920754.07	7920754.25	7920754.44	0.0278	0.0131
Jupiter	16974-10-27 18:57 G	7920986.13	7920986.29	7920986.46	0.0496	0.0301
Jupiter	16986-07-02 22:04 G	7925252.22	7925252.42	7925252.61	0.0498	0.0120
Saturn	16988-01-07 04:04 G	7925805.47	7925805.67	7925805.88	0.0281	0.0077
Saturn	16988-08-23 17:16 G	7926035.04	7926035.22	7926035.41	0.0281	0.0136
Jupiter	16992-12-20 22:33 G	7927615.29	7927615.44	7927615.60	0.0532	0.0330

18TH MILLENNIUM CE

This is a list of transits of Venus in the 18th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**17002-06-19 00:28**	**G**	**7931081.45**	**7931081.52**	**7931081.61**	**0.0277**	**0.0253**	
Saturn	**17003-02-03 10:33**	**G**	**7931310.73**	**7931310.94**	**7931311.15**	**0.0278**	**0.0050**	
Saturn	**17003-09-20 20:38**	**G**	**7931540.19**	**7931540.36**	**7931540.54**	**0.0278**	**0.0156**	
Jupiter	**17004-08-26 13:55**	**G**	**7931880.89**	**7931881.08**	**7931881.27**	**0.0530**	**0.0193**	
Mars	**17006-11-17 08:09**	**G**	**7932693.67**	**7932693.84**	**7932694.00**	**0.1585**	**0.0467**	
Uranus	**17010-07-09 02:52**	**G**	**7934023.60**	**7934023.62**	**7934023.65**	**0.0145**	**0.0144**	
Uranus	**17011-02-20 14:52**	**G**	**7934249.97**	**7934250.12**	**7934250.30**	**0.0145**	**0.0095**	
Uranus	**17011-10-05 03:21**	**G**	**7934476.44**	**7934476.64**	**7934476.86**	**0.0145**	**0.0046**	
Uranus	**17012-05-18 15:50**	**G**	**7934702.94**	**7934703.16**	**7934703.38**	**0.0145**	**0.0004**	
Uranus	**17012-12-31 03:50**	**G**	**7934929.47**	**7934929.66**	**7934929.87**	**0.0145**	**0.0053**	
Uranus	**17013-08-14 16:04**	**G**	**7935156.03**	**7935156.17**	**7935156.34**	**0.0145**	**0.0102**	
Saturn	**17016-12-02 16:48**	**G**	**7936362.14**	**7936362.20**	**7936362.27**	**0.0282**	**0.0268**	
Pluto	**17017-03-01 07:12**	**G**	**7936450.62**	**7936450.80**	**7936451.02**	**0.0067**	**0.0028**	
Saturn	**17017-07-20 06:43**	**G**	**7936591.58**	**7936591.78**	**7936591.99**	**0.0281**	**0.0055**	
Neptune	**17017-07-27 06:43**	**G**	**7936598.72**	**7936598.78**	**7936598.86**	**0.0089**	**0.0084**	
Pluto	**17017-10-12 12:28**	**G**	**7936675.82**	**7936676.02**	**7936676.24**	**0.0068**	**0.0020**	
Saturn	**17018-03-06 20:09**	**G**	**7936821.17**	**7936821.34**	**7936821.52**	**0.0281**	**0.0158**	
Neptune	**17018-03-09 19:55**	**G**	**7936824.19**	**7936824.33**	**7936824.50**	**0.0089**	**0.0063**	
Pluto	**17018-05-25 18:00**	**G**	**7936901.23**	**7936901.25**	**7936901.28**	**0.0068**	**0.0067**	
Neptune	**17018-10-21 09:07**	**G**	**7937049.70**	**7937049.88**	**7937050.08**	**0.0089**	**0.0043**	
Neptune	**17019-06-03 22:19**	**G**	**7937275.23**	**7937275.43**	**7937275.66**	**0.0089**	**0.0023**	
Neptune	**17020-01-15 12:00**	**G**	**7937500.78**	**7937501.00**	**7937501.22**	**0.0089**	**0.0003**	

Neptune 17020-08-28 01:12 G 7937726.33 7937726.55 7937726.76 0.0089 0.0018

Neptune 17021-04-10 13:55 G 7937951.90 7937952.08 7937952.30 0.0089 0.0038

Neptune 17021-11-22 03:07 G 7938177.48 7938177.63 7938177.81 0.0089 0.0058

Jupiter 17022-03-11 06:28 G 7938286.57 7938286.77 7938286.97 0.0497 0.0120

Neptune 17022-07-05 16:04 G 7938403.09 7938403.17 7938403.30 0.0089 0.0079

Saturn 17031-12-30 09:36 G 7941867.78 7941867.90 7941868.04 0.0277 0.0221

Saturn 17032-08-15 20:09 G 7942097.12 7942097.34 7942097.55 0.0278 0.0017

Saturn 17033-04-02 06:43 G 7942326.62 7942326.78 7942326.93 0.0278 0.0190

Jupiter 17033-11-14 07:40 G 7942552.66 7942552.82 7942552.98 0.0499 0.0310

Mars 17038-11-15 21:50 G 7944380.27 7944380.41 7944380.56 0.1585 0.0831

Mars 17039-10-15 22:33 G 7944714.36 7944714.44 7944714.51 0.1952 0.1762

Jupiter 17040-05-04 03:50 G 7944915.46 7944915.66 7944915.86 0.0531 0.0097

Saturn 17046-06-15 03:50 G 7947148.55 7947148.66 7947148.79 0.0282 0.0229

Saturn 17047-01-30 17:45 G 7947378.03 7947378.24 7947378.45 0.0281 0.0016

Saturn 17047-09-17 06:43 G 7947607.63 7947607.78 7947607.93 0.0280 0.0195

Jupiter 17052-01-07 18:28 G 7949181.15 7949181.27 7949181.39 0.0528 0.0427

Uranus 17052-08-29 20:52 G 7949416.30 7949416.37 7949416.47 0.0133 0.0122

Uranus 17053-04-13 02:24 G 7949642.44 7949642.60 7949642.78 0.0133 0.0084

Uranus 17053-11-25 07:55 G 7949868.62 7949868.83 7949869.03 0.0133 0.0047

Uranus 17054-07-09 13:12 G 7950094.83 7950095.05 7950095.27 0.0133 0.0009

Earth 17054-10-22 13:55 G 7950200.03 7950200.08 7950200.14 0.2685 0.2508

Uranus 17055-02-20 18:28 G 7950321.06 7950321.27 7950321.49 0.0133 0.0029

Uranus 17055-10-04 23:31 G 7950547.31 7950547.48 7950547.68 0.0133 0.0067

Uranus 17056-05-18 04:48 G 7950773.58 7950773.70 7950773.85 0.0133 0.0105

Jupiter 17057-11-16 17:31 G 7951321.09 7951321.23 7951321.36 0.0496 0.0372

Saturn 17061-07-11 13:12 G 7952653.91 7952654.05 7952654.21 0.0277 0.0196

Saturn 17062-02-25 23:16 G 7952883.26 7952883.47 7952883.68 0.0278 0.0008

Saturn 17062-10-13 09:36 G 7953112.77 7953112.90 7953113.04 0.0279 0.0214

Earth 17062-10-20 04:04 G 7953119.54 7953119.67 7953119.80 0.2686 0.1492

Moon 17062-10-20 08:09 G 7953119.69 7953119.84 7953119.99 0.2681 0.1008 *

Jupiter	17069-07-22 19:40 G	7955587.11	7955587.32	7955587.52	0.0498	0.0052
Mars	17071-10-16 05:16 G	7956402.63	7956402.72	7956402.81	0.1953	0.1676
Mars	17072-09-13 21:21 G	7956736.23	7956736.39	7956736.55	0.1585	0.0624
Saturn	17075-12-26 06:28 G	7957934.63	7957934.77	7957934.92	0.0281	0.0208
Jupiter	17076-01-10 23:02 G	7957950.34	7957950.46	7957950.58	0.0533	0.0422
Saturn	17076-08-11 20:09 G	7958164.13	7958164.34	7958164.56	0.0281	0.0008
Saturn	17077-03-29 09:07 G	7958393.76	7958393.88	7958394.02	0.0280	0.0218
Jupiter	17081-03-27 18:43 G	7959853.26	7959853.28	7959853.31	0.0500	0.0495
Jupiter	17087-09-15 12:43 G	7962215.83	7962216.03	7962216.23	0.0530	0.0113
Saturn	17091-01-21 21:21 G	7963440.22	7963440.39	7963440.56	0.0278	0.0164
Saturn	17091-09-08 07:55 G	7963669.62	7963669.83	7963670.04	0.0278	0.0041
Saturn	17092-04-24 18:43 G	7963899.18	7963899.28	7963899.37	0.0279	0.0247
Uranus	17094-10-20 20:09 G	7964808.23	7964808.34	7964808.49	0.0145	0.0118
Uranus	17095-06-04 08:38 G	7965034.68	7965034.86	7965035.06	0.0145	0.0069
Uranus	17096-01-16 21:07 G	7965261.16	7965261.38	7965261.59	0.0145	0.0020
Uranus	17096-08-30 09:21 G	7965487.68	7965487.89	7965488.11	0.0145	0.0029
Uranus	17097-04-13 21:21 G	7965714.22	7965714.39	7965714.58	0.0145	0.0078
Uranus	17097-11-26 09:21 G	7965940.80	7965940.89	7965941.01	0.0145	0.0127
Neptune	17099-01-30 17:16 G	7966371.14	7966371.22	7966371.35	0.0088	0.0077
Neptune	17099-09-13 06:14 G	7966596.61	7966596.76	7966596.94	0.0088	0.0058
Neptune	17100-04-26 18:57 G	7966822.10	7966822.29	7966822.50	0.0088	0.0038
Neptune	17100-12-08 07:55 G	7967047.62	7967047.83	7967048.05	0.0088	0.0018
Neptune	17101-07-21 20:52 G	7967273.15	7967273.37	7967273.59	0.0088	0.0001
Neptune	17102-03-04 09:21 G	7967498.69	7967498.89	7967499.11	0.0088	0.0021
Neptune	17102-10-15 22:04 G	7967724.24	7967724.42	7967724.63	0.0088	0.0041
Pluto	17102-12-26 19:26 G	7967796.29	7967796.31	7967796.40	0.0077	0.0076
Neptune	17103-05-29 10:33 G	7967949.80	7967949.94	7967950.12	0.0088	0.0060
Pluto	17103-08-09 05:16 G	7968021.50	7968021.72	7968021.94	0.0077	0.0005
Neptune	17104-01-09 23:31 G	7968175.40	7968175.48	7968175.59	0.0088	0.0080
Pluto	17104-03-21 13:40 G	7968246.97	7968247.07	7968247.21	0.0076	0.0065

Mars	17104-09-13 10:48 G	7968422.80	7968422.95	7968423.11	0.1584	0.0669
Jupiter	17105-03-31 04:33 G	7968621.50	7968621.69	7968621.88	0.0497	0.0190
Saturn	17105-07-08 17:31 G	7968721.07	7968721.23	7968721.41	0.0281	0.0169
Saturn	17106-02-23 07:12 G	7968950.59	7968950.80	7968951.01	0.0281	0.0045
Saturn	17106-10-10 19:40 G	7969180.25	7969180.32	7969180.42	0.0280	0.0256
Jupiter	17116-12-04 06:28 G	7972887.59	7972887.77	7972887.95	0.0499	0.0235
Saturn	17120-08-04 01:26 G	7974226.38	7974226.56	7974226.75	0.0278	0.0138
Saturn	17121-03-21 11:31 G	7974455.78	7974455.98	7974456.19	0.0278	0.0066
Saturn	17121-11-05 22:04 G	7974685.38	7974685.42	7974685.47	0.0279	0.0272
Jupiter	17123-05-25 02:52 G	7975250.43	7975250.62	7975250.82	0.0532	0.0180
Saturn	17135-01-18 19:40 G	7979507.14	7979507.32	7979507.50	0.0281	0.0147
Jupiter	17135-01-27 18:57 G	7979516.14	7979516.29	7979516.45	0.0529	0.0337
Saturn	17135-09-05 09:07 G	7979736.68	7979736.88	7979737.09	0.0281	0.0066
Saturn	17136-04-21 21:50 G	7979966.38	7979966.41	7979966.45	0.0280	0.0275
Uranus	17136-12-12 11:31 G	7980200.85	7980200.98	7980201.13	0.0133	0.0102
Uranus	17137-07-26 16:48 G	7980427.02	7980427.20	7980427.40	0.0133	0.0064
Mars	17137-08-13 06:00 G	7980444.60	7980444.75	7980444.90	0.1953	0.0984
Uranus	17138-03-09 22:19 G	7980653.22	7980653.43	7980653.65	0.0133	0.0026
Mars	17138-07-13 10:19 G	7980778.78	7980778.93	7980779.08	0.1585	0.0793
Uranus	17138-10-22 03:36 G	7980879.44	7980879.65	7980879.87	0.0133	0.0012
Uranus	17139-06-05 08:52 G	7981105.67	7981105.87	7981106.08	0.0133	0.0049
Uranus	17140-01-17 13:55 G	7981331.93	7981332.08	7981332.26	0.0133	0.0088
Uranus	17140-08-30 19:26 G	7981558.24	7981558.31	7981558.39	0.0133	0.0125
Jupiter	17140-12-06 13:12 G	7981655.95	7981656.05	7981656.15	0.0496	0.0430
Saturn	17150-02-14 08:09 G	7985012.65	7985012.84	7985013.03	0.0278	0.0109
Saturn	17150-10-01 18:28 G	7985242.08	7985242.27	7985242.47	0.0278	0.0097
Jupiter	17152-08-11 15:07 G	7985921.93	7985922.13	7985922.33	0.0498	0.0005
Jupiter	17159-01-30 17:45 G	7988285.16	7988285.24	7988285.33	0.0532	0.0477
Jupiter	17164-04-16 17:02 G	7990188.11	7990188.21	7990188.32	0.0501	0.0423
Saturn	17164-07-31 07:12 G	7990293.60	7990293.80	7990293.99	0.0281	0.0108

Saturn 17165-03-17 20:24 G 7990523.15 7990523.35 7990523.55 0.0281 0.0105

Mars 17170-07-12 00:00 G 7992465.34 7992465.50 7992465.67 0.1584 0.0509

Jupiter 17170-10-05 07:55 G 7992550.62 7992550.83 7992551.03 0.0530 0.0057

Earth 17176-04-23 12:43 G 7994577.88 7994578.03 7994578.18 0.2646 0.0870

Moon 17176-04-23 12:57 G 7994577.88 7994578.04 7994578.20 0.2640 0.0851 *

Uranus 17178-06-21 01:26 G 7995366.53 7995366.56 7995366.63 0.0145 0.0141

Uranus 17179-02-02 13:55 G 7995592.92 7995593.08 7995593.26 0.0145 0.0092

Saturn 17179-08-27 12:28 G 7995798.82 7995799.02 7995799.22 0.0278 0.0083

Uranus 17179-09-17 02:24 G 7995819.39 7995819.60 7995819.81 0.0145 0.0043

Saturn 17180-04-12 22:33 G 7996028.25 7996028.44 7996028.63 0.0278 0.0122

Uranus 17180-04-30 14:38 G 7996045.89 7996046.11 7996046.33 0.0145 0.0006

Uranus 17180-12-13 02:24 G 7996272.41 7996272.60 7996272.82 0.0145 0.0055

Uranus 17181-07-27 14:52 G 7996498.97 7996499.12 7996499.27 0.0145 0.0103

Neptune 17182-06-12 06:57 G 7996818.67 7996818.79 7996818.93 0.0089 0.0071

Neptune 17183-01-23 20:24 G 7997044.18 7997044.35 7997044.54 0.0089 0.0051

Neptune 17183-09-06 09:36 G 7997269.71 7997269.90 7997270.12 0.0089 0.0031

Neptune 17184-04-18 23:02 G 7997495.24 7997495.46 7997495.68 0.0089 0.0011

Neptune 17184-11-30 12:14 G 7997720.79 7997721.01 7997721.23 0.0089 0.0010

Neptune 17185-07-14 01:12 G 7997946.35 7997946.55 7997946.77 0.0089 0.0030

Neptune 17186-02-24 14:38 G 7998171.94 7998172.11 7998172.30 0.0089 0.0050

Neptune 17186-10-08 03:50 G 7998397.53 7998397.66 7998397.80 0.0089 0.0071

Jupiter 17188-04-19 02:52 G 7998956.45 7998956.62 7998956.80 0.0496 0.0263

Saturn 17194-02-10 08:24 G 8001079.65 8001079.85 8001080.05 0.0281 0.0088

Saturn 17194-09-27 21:36 G 8001309.21 8001309.40 8001309.59 0.0280 0.0124

Jupiter 17199-12-24 02:52 G 8003222.43 8003222.62 8003222.82 0.0499 0.0174

Mars 17203-06-10 06:28 G 8004486.60 8004486.77 8004486.95 0.1953 0.0278

Mars 17204-05-09 23:45 G 8004821.35 8004821.49 8004821.63 0.1585 0.0948

Jupiter 17206-06-13 02:52 G 8005585.45 8005585.62 8005585.80 0.0532 0.0268

Saturn 17208-07-22 07:12 G 8006355.74 8006355.80 8006355.89 0.0278 0.0260

Saturn 17209-03-08 17:31 G 8006585.03 8006585.23 8006585.44 0.0278 0.0056

Saturn 17209-10-24 04:04 G 8006814.50 8006814.67 8006814.86 0.0278 0.0151

Jupiter 17218-02-15 14:24 G 8009850.93 8009851.10 8009851.28 0.0529 0.0278

Uranus 17220-08-11 20:52 G 8010759.29 8010759.37 8010759.48 0.0133 0.0119

Uranus 17221-03-26 02:09 G 8010985.43 8010985.59 8010985.78 0.0133 0.0081

Uranus 17221-11-07 07:40 G 8011211.62 8011211.82 8011212.03 0.0133 0.0043

Uranus 17222-06-21 12:57 G 8011437.83 8011438.04 8011438.26 0.0133 0.0006

Saturn 17223-01-06 05:16 G 8011636.66 8011636.72 8011636.80 0.0282 0.0263

Uranus 17223-02-02 18:14 G 8011664.06 8011664.26 8011664.48 0.0133 0.0032

Saturn 17223-08-23 19:12 G 8011866.09 8011866.30 8011866.51 0.0281 0.0049

Uranus 17223-09-16 23:45 G 8011890.30 8011890.49 8011890.67 0.0133 0.0070

Saturn 17224-04-09 08:09 G 8012095.68 8012095.84 8012096.02 0.0281 0.0163

Uranus 17224-04-30 04:33 G 8012116.58 8012116.69 8012116.83 0.0133 0.0108

Jupiter 17235-08-31 14:38 G 8016256.91 8016257.11 8016257.32 0.0498 0.0086

Mars 17236-05-08 13:12 G 8016507.88 8016508.05 8016508.22 0.1584 0.0349

Saturn 17238-02-01 12:14 G 8017141.90 8017142.01 8017142.13 0.0277 0.0233

Saturn 17238-09-18 22:04 G 8017371.21 8017371.42 8017371.63 0.0278 0.0030

Saturn 17239-05-06 08:24 G 8017600.69 8017600.85 8017601.02 0.0278 0.0176

Jupiter 17247-05-06 16:33 G 8020523.04 8020523.19 8020523.34 0.0500 0.0344

Saturn 17252-07-18 06:14 G 8022422.67 8022422.76 8022422.87 0.0281 0.0244

Saturn 17253-03-04 20:09 G 8022652.13 8022652.34 8022652.55 0.0281 0.0030

Saturn 17253-10-20 09:07 G 8022881.72 8022881.88 8022882.05 0.0280 0.0181

Jupiter 17253-10-24 09:07 G 8022885.68 8022885.88 8022886.09 0.0531 0.0043

Uranus 17262-10-02 19:26 G 8026151.20 8026151.31 8026151.46 0.0145 0.0115

Pluto 17263-03-31 14:38 G 8026330.92 8026331.11 8026331.33 0.0067 0.0024

Neptune 17263-05-05 04:48 G 8026365.65 8026365.70 8026365.77 0.0088 0.0085

Uranus 17263-05-17 07:55 G 8026377.64 8026377.83 8026378.03 0.0145 0.0066

Pluto 17263-11-11 19:40 G 8026556.13 8026556.32 8026556.55 0.0068 0.0024

Neptune 17263-12-16 17:16 G 8026591.09 8026591.22 8026591.39 0.0088 0.0065

Uranus 17263-12-29 20:09 G 8026604.12 8026604.34 8026604.55 0.0145 0.0017

Neptune 17264-07-29 06:28 G 8026816.59 8026816.77 8026816.97 0.0088 0.0045

Uranus 17264-08-12 08:09 G 8026830.64 8026830.84 8026831.06 0.0145 0.0032

Neptune 17265-03-11 19:12 G 8027042.10 8027042.30 8027042.52 0.0088 0.0026

Uranus 17265-03-26 20:24 G 8027057.17 8027057.35 8027057.53 0.0145 0.0080

Jupiter 17265-06-29 00:14 G 8027151.43 8027151.51 8027151.60 0.0528 0.0480

Neptune 17265-10-23 08:09 G 8027267.62 8027267.84 8027268.06 0.0088 0.0006

Uranus 17265-11-08 07:55 G 8027283.76 8027283.83 8027283.95 0.0145 0.0129

Neptune 17266-06-05 20:52 G 8027493.15 8027493.37 8027493.59 0.0088 0.0013

Neptune 17267-01-17 09:21 G 8027718.70 8027718.89 8027719.10 0.0088 0.0033

Saturn 17267-08-14 15:21 G 8027928.02 8027928.14 8027928.29 0.0278 0.0210

Neptune 17267-08-30 22:19 G 8027944.26 8027944.43 8027944.61 0.0088 0.0052

Saturn 17268-03-31 01:55 G 8028157.36 8028157.58 8028157.79 0.0278 0.0007

Neptune 17268-04-12 10:48 G 8028169.84 8028169.95 8028170.09 0.0088 0.0072

Saturn 17268-11-15 12:28 G 8028386.88 8028387.02 8028387.17 0.0279 0.0201

Mars 17269-04-06 07:26 G 8028528.64 8028528.81 8028528.98 0.1952 0.0414

Mars 17270-03-07 12:28 G 8028863.90 8028864.02 8028864.14 0.1585 0.1119

Jupiter 17271-05-08 23:45 G 8029291.35 8029291.49 8029291.65 0.0496 0.0328

Saturn 17282-01-28 16:33 G 8033209.05 8033209.19 8033209.33 0.0282 0.0207

Saturn 17282-09-15 06:14 G 8033438.55 8033438.76 8033438.97 0.0281 0.0007

Jupiter 17283-01-12 02:09 G 8033557.40 8033557.59 8033557.80 0.0499 0.0097

Saturn 17283-05-02 19:12 G 8033668.17 8033668.30 8033668.44 0.0281 0.0218

Jupiter 17289-07-01 23:02 G 8035920.30 8035920.46 8035920.62 0.0531 0.0332

Saturn 17297-02-23 20:38 G 8038714.21 8038714.36 8038714.53 0.0277 0.0183

Saturn 17297-10-11 06:43 G 8038943.57 8038943.78 8038943.99 0.0278 0.0021

Moon 17297-10-23 07:55 G 8038955.72 8038955.83 8038955.94 0.2683 0.1922

Earth 17297-10-23 13:40 G 8038955.98 8038956.07 8038956.16 0.2685 0.2206

Saturn 17298-05-28 17:02 G 8039173.09 8039173.21 8039173.34 0.0278 0.0226

Jupiter 17301-03-07 14:09 G 8040185.91 8040186.09 8040186.28 0.0529 0.0192

Mars 17302-03-07 02:24 G 8040550.42 8040550.60 8040550.77 0.1585 0.0191

Uranus 17304-11-24 11:16 G 8041543.82 8041543.97 8041544.11 0.0133 0.0099

Uranus 17305-07-08 16:19 G 8041769.99 8041770.18 8041770.38 0.0133 0.0061

Moon 17305-10-21 22:19 G 8041875.40 8041875.43 8041875.46 0.2689 0.2619

Earth 17305-10-22 03:36 G 8041875.53 8041875.65 8041875.76 0.2685 0.1802

Uranus 17306-02-19 21:50 G 8041996.20 8041996.41 8041996.63 0.0133 0.0024

Uranus 17306-10-04 03:07 G 8042222.41 8042222.63 8042222.85 0.0133 0.0014

Uranus 17307-05-18 08:09 G 8042448.65 8042448.84 8042449.05 0.0133 0.0052

Uranus 17307-12-30 13:12 G 8042674.91 8042675.05 8042675.23 0.0133 0.0090

Uranus 17308-08-12 18:43 G 8042901.22 8042901.28 8042901.35 0.0134 0.0127

Saturn 17311-08-11 17:02 G 8043995.06 8043995.21 8043995.37 0.0281 0.0188

Saturn 17312-03-28 06:43 G 8044224.57 8044224.78 8044224.99 0.0281 0.0025

Saturn 17312-11-12 19:26 G 8044454.21 8044454.31 8044454.43 0.0280 0.0236

Jupiter 17318-09-20 12:57 G 8046591.85 8046592.04 8046592.24 0.0497 0.0156

Saturn 17326-09-06 22:48 G 8049500.28 8049500.45 8049500.62 0.0278 0.0161

Saturn 17327-04-24 08:52 G 8049729.66 8049729.87 8049730.08 0.0278 0.0044

Saturn 17327-12-09 19:26 G 8049959.23 8049959.31 8049959.41 0.0279 0.0250

Jupiter 17330-05-26 14:24 G 8050857.93 8050858.10 8050858.27 0.0500 0.0276

Mars 17334-03-05 16:04 G 8052237.12 8052237.17 8052237.23 0.1584 0.1491

Mars 17335-02-02 07:55 G 8052570.69 8052570.83 8052570.97 0.1952 0.1120

Mars 17336-01-04 01:40 G 8052906.47 8052906.57 8052906.68 0.1586 0.1278

Jupiter 17336-11-13 06:28 G 8053220.57 8053220.77 8053220.97 0.0530 0.0114

Saturn 17341-02-21 02:09 G 8054781.42 8054781.59 8054781.77 0.0282 0.0154

Saturn 17341-10-08 15:50 G 8055010.96 8055011.16 8055011.37 0.0281 0.0060

Saturn 17342-05-26 04:48 G 8055240.66 8055240.70 8055240.76 0.0281 0.0271

Uranus 17346-06-03 01:26 G 8056709.49 8056709.56 8056709.62 0.0145 0.0137

Neptune 17346-09-14 18:57 G 8056813.19 8056813.29 8056813.39 0.0089 0.0079

Uranus 17347-01-15 13:12 G 8056935.89 8056936.05 8056936.23 0.0145 0.0090

Neptune 17347-04-28 07:55 G 8057038.67 8057038.83 8057039.00 0.0089 0.0058

Uranus 17347-08-30 01:26 G 8057162.36 8057162.56 8057162.78 0.0145 0.0041

Neptune 17347-12-09 21:07 G 8057264.19 8057264.38 8057264.59 0.0089 0.0038

Uranus 17348-04-12 13:55 G 8057388.86 8057389.08 8057389.29 0.0145 0.0008

Jupiter 17348-07-18 21:21 G 8057486.26 8057486.39 8057486.52 0.0527 0.0411

Neptune 17348-07-22 10:19 G 8057489.73 8057489.93 8057490.16 0.0089 0.0018

Uranus 17348-11-25 01:40 G 8057615.38 8057615.57 8057615.78 0.0145 0.0057

Pluto 17349-01-25 02:24 G 8057676.56 8057676.60 8057676.68 0.0077 0.0075

Neptune 17349-03-04 23:45 G 8057715.28 8057715.49 8057715.72 0.0089 0.0004

Uranus 17349-07-09 13:40 G 8057841.93 8057842.07 8057842.23 0.0145 0.0105

Pluto 17349-09-07 12:00 G 8057901.78 8057902.00 8057902.22 0.0077 0.0004

Neptune 17349-10-16 13:12 G 8057940.84 8057941.05 8057941.26 0.0089 0.0023

Pluto 17350-04-20 20:09 G 8058127.26 8058127.34 8058127.48 0.0077 0.0066

Neptune 17350-05-30 01:55 G 8058166.41 8058166.58 8058166.79 0.0089 0.0044

Neptune 17351-01-10 15:21 G 8058392.00 8058392.14 8058392.31 0.0089 0.0063

Neptune 17351-08-24 04:33 G 8058617.63 8058617.69 8058617.78 0.0089 0.0084

Jupiter 17354-05-29 00:28 G 8059626.41 8059626.52 8059626.63 0.0496 0.0413

Saturn 17356-03-19 04:19 G 8060286.50 8060286.68 8060286.87 0.0277 0.0134

Saturn 17356-11-03 14:09 G 8060515.89 8060516.09 8060516.30 0.0278 0.0070

Saturn 17357-06-21 00:28 G 8060745.50 8060745.52 8060745.56 0.0278 0.0275

Jupiter 17366-02-01 03:07 G 8063892.42 8063892.63 8063892.83 0.0499 0.0015

Mars 17368-01-02 15:36 G 8064592.97 8064593.15 8064593.32 0.1585 0.0037

Saturn 17370-09-03 02:52 G 8065567.44 8065567.62 8065567.81 0.0281 0.0135

Saturn 17371-04-20 16:19 G 8065796.98 8065797.18 8065797.39 0.0281 0.0078

Jupiter 17372-07-22 01:26 G 8066255.45 8066255.56 8066255.68 0.0532 0.0436

Jupiter 17377-10-07 03:07 G 8068158.55 8068158.63 8068158.73 0.0501 0.0450

Jupiter 17384-03-26 16:48 G 8070521.00 8070521.20 8070521.40 0.0529 0.0090

Saturn 17385-09-29 05:02 G 8071072.52 8071072.71 8071072.91 0.0277 0.0115

Saturn 17386-05-16 15:07 G 8071301.93 8071302.13 8071302.33 0.0278 0.0090

Uranus 17388-07-24 19:55 G 8072102.24 8072102.33 8072102.45 0.0133 0.0116

Uranus 17389-03-08 01:40 G 8072328.40 8072328.57 8072328.75 0.0133 0.0079

Uranus 17389-10-20 06:43 G 8072554.58 8072554.78 8072555.00 0.0133 0.0042

Uranus 17390-06-03 12:14 G 8072780.79 8072781.01 8072781.22 0.0133 0.0004

Uranus 17391-01-15 17:16 G 8073007.01 8073007.22 8073007.44 0.0133 0.0034

Uranus 17391-08-29 22:33 G 8073233.26 8073233.44 8073233.63 0.0133 0.0072

Uranus 17392-04-12 03:36 G 8073459.54 8073459.65 8073459.79 0.0133 0.0110

Mars 17400-01-01 05:02 G 8076279.62 8076279.71 8076279.81 0.1584 0.1327

Saturn 17400-03-16 10:48 G 8076353.75 8076353.95 8076354.15 0.0282 0.0103

Saturn 17400-11-01 00:28 G 8076583.33 8076583.52 8076583.72 0.0281 0.0111

Mars 17400-11-30 09:21 G 8076612.82 8076612.89 8076612.96 0.1952 0.1791

Jupiter 17401-10-10 12:57 G 8076926.86 8076927.04 8076927.22 0.0498 0.0238

Mars 17401-11-01 14:52 G 8076949.05 8076949.12 8076949.19 0.1586 0.1442

Jupiter 17413-06-15 15:07 G 8081192.94 8081193.13 8081193.32 0.0500 0.0188

Saturn 17415-04-12 11:02 G 8081858.77 8081858.96 8081859.17 0.0277 0.0088

Saturn 17415-11-27 20:52 G 8082088.18 8082088.37 8082088.57 0.0278 0.0117

Moon 17419-04-26 13:12 G 8083333.90 8083334.05 8083334.20 0.2652 0.0481

Earth 17419-04-26 15:21 G 8083333.99 8083334.14 8083334.29 0.2646 0.0913 *

Jupiter 17419-12-04 06:57 G 8083555.61 8083555.79 8083555.98 0.0531 0.0206

Earth 17427-04-24 07:55 G 8086253.81 8086253.83 8086253.85 0.2646 0.2618

Moon 17427-04-24 09:50 G 8086253.90 8086253.91 8086253.93 0.2652 0.2624

Neptune 17428-03-21 05:16 G 8086585.61 8086585.72 8086585.86 0.0088 0.0072

Neptune 17428-11-01 18:14 G 8086811.09 8086811.26 8086811.44 0.0088 0.0053

Neptune 17429-06-15 06:43 G 8087036.59 8087036.78 8087037.00 0.0088 0.0034

Saturn 17429-09-26 11:16 G 8087139.77 8087139.97 8087140.18 0.0281 0.0085

Neptune 17430-01-26 19:55 G 8087262.11 8087262.33 8087262.55 0.0088 0.0013

Saturn 17430-05-14 00:57 G 8087369.35 8087369.54 8087369.73 0.0281 0.0129

Neptune 17430-09-09 08:38 G 8087487.64 8087487.86 8087488.08 0.0088 0.0007

Uranus 17430-09-15 18:43 G 8087494.17 8087494.28 8087494.44 0.0145 0.0113

Neptune 17431-04-22 21:07 G 8087713.18 8087713.38 8087713.60 0.0088 0.0026

Uranus 17431-04-30 07:12 G 8087720.61 8087720.80 8087721.00 0.0145 0.0063

Jupiter 17431-08-08 23:45 G 8087821.32 8087821.49 8087821.65 0.0528 0.0310

Neptune 17431-12-04 09:50 G 8087938.73 8087938.91 8087939.11 0.0088 0.0046

Uranus 17431-12-12 19:26 G 8087947.09 8087947.31 8087947.53 0.0145 0.0015

Neptune 17432-07-16 22:19 G 8088164.31 8088164.43 8088164.60 0.0088 0.0066

Uranus 17432-07-26 07:26 G 8088173.60 8088173.81 8088174.03 0.0145 0.0034

Mars 17432-11-30 16:19 G 8088301.09 8088301.18 8088301.27 0.1953 0.1677

Neptune 17433-02-27 11:16 G 8088389.93 8088389.97 8088390.05 0.0088 0.0085

Uranus 17433-03-09 19:40 G 8088400.14 8088400.32 8088400.50 0.0145 0.0082

Uranus 17433-10-22 07:12 G 8088626.73 8088626.80 8088626.91 0.0145 0.0131

Mars 17433-10-31 04:48 G 8088635.52 8088635.70 8088635.87 0.1585 0.0135

Jupiter 17437-06-18 00:00 G 8089961.48 8089961.50 8089961.53 0.0496 0.0491

Saturn 17444-03-07 01:40 G 8092415.53 8092415.57 8092415.62 0.0277 0.0270

Saturn 17444-10-22 11:02 G 8092644.76 8092644.96 8092645.17 0.0277 0.0069

Saturn 17445-06-08 21:07 G 8092874.20 8092874.38 8092874.57 0.0278 0.0136

Jupiter 17449-02-21 02:09 G 8094227.39 8094227.59 8094227.80 0.0498 0.0068

Jupiter 17455-08-12 00:43 G 8096590.50 8096590.53 8096590.57 0.0532 0.0520

Saturn 17458-08-22 03:50 G 8097696.61 8097696.66 8097696.73 0.0283 0.0270

Saturn 17459-04-08 18:28 G 8097926.06 8097926.27 8097926.48 0.0282 0.0054

Saturn 17459-11-24 08:09 G 8098155.67 8098155.84 8098156.02 0.0281 0.0160

Jupiter 17460-10-27 02:52 G 8098493.49 8098493.62 8098493.76 0.0501 0.0369

Mars 17465-10-29 18:28 G 8100322.16 8100322.27 8100322.39 0.1584 0.1176

Jupiter 17467-04-16 15:07 G 8100855.93 8100856.13 8100856.33 0.0529 0.0011

Uranus 17472-11-06 09:50 G 8102886.78 8102886.91 8102887.08 0.0133 0.0097

Uranus 17473-06-20 15:07 G 8103112.95 8103113.13 8103113.34 0.0133 0.0059

Saturn 17473-09-17 08:24 G 8103201.76 8103201.85 8103201.95 0.0276 0.0242

Uranus 17474-02-01 20:38 G 8103339.15 8103339.36 8103339.58 0.0133 0.0022

Saturn 17474-05-04 17:45 G 8103431.03 8103431.24 8103431.45 0.0277 0.0041

Uranus 17474-09-16 01:55 G 8103565.37 8103565.58 8103565.80 0.0133 0.0016

Saturn 17474-12-20 03:36 G 8103660.48 8103660.65 8103660.82 0.0277 0.0163

Uranus 17475-04-30 07:12 G 8103791.60 8103791.80 8103792.00 0.0133 0.0054

Uranus 17475-12-12 12:14 G 8104017.86 8104018.01 8104018.18 0.0133 0.0092

Uranus 17476-07-25 17:31 G 8104244.19 8104244.23 8104244.30 0.0134 0.0129

Jupiter 17484-10-29 14:09 G 8107261.94 8107262.09 8107262.24 0.0497 0.0327

Saturn 17488-03-03 05:02 G 8108482.62 8108482.71 8108482.81 0.0282 0.0250

Saturn 17488-10-18 19:26 G 8108712.10 8108712.31 8108712.52 0.0281 0.0035

Saturn 17489-06-05 08:52 G 8108941.72 8108941.87 8108942.04 0.0281 0.0179

Jupiter 17496-07-04 15:21 G 8111527.94 8111528.14 8111528.34 0.0499 0.0105

Mars 17498-09-27 16:48 G 8112343.05 8112343.20 8112343.35 0.1953 0.0969

Mars 17499-08-28 18:00 G 8112678.08 8112678.25 8112678.42 0.1585 0.0294

Jupiter 17502-12-24 10:33 G 8113890.78 8113890.94 8113891.11 0.0531 0.0314

Saturn 17503-03-31 07:55 G 8113987.71 8113987.83 8113987.95 0.0277 0.0225

Saturn 17503-11-15 17:16 G 8114217.01 8114217.22 8114217.43 0.0277 0.0023

Saturn 17504-07-02 03:07 G 8114446.48 8114446.63 8114446.80 0.0278 0.0181

Pluto 17509-05-01 20:52 G 8116211.18 8116211.37 8116211.59 0.0067 0.0025

Pluto 17509-12-13 02:09 G 8116436.40 8116436.59 8116436.81 0.0068 0.0023

Neptune 17510-12-19 06:00 G 8116807.71 8116807.75 8116807.82 0.0089 0.0086

Neptune 17511-08-01 19:12 G 8117033.17 8117033.30 8117033.46 0.0089 0.0066

Neptune 17512-03-14 08:24 G 8117258.68 8117258.85 8117259.06 0.0089 0.0046

Neptune 17512-10-25 21:50 G 8117484.21 8117484.41 8117484.63 0.0089 0.0026

Neptune 17513-06-08 11:16 G 8117709.75 8117709.97 8117710.19 0.0089 0.0005

Neptune 17514-01-20 00:28 G 8117935.31 8117935.52 8117935.74 0.0089 0.0015

Uranus 17514-05-17 00:14 G 8118052.43 8118052.51 8118052.59 0.0145 0.0134

Jupiter 17514-08-29 00:00 G 8118156.32 8118156.50 8118156.69 0.0528 0.0218

Neptune 17514-09-02 13:40 G 8118160.88 8118161.07 8118161.28 0.0089 0.0036

Uranus 17514-12-29 12:14 G 8118278.84 8118279.01 8118279.19 0.0145 0.0086

Neptune 17515-04-16 02:38 G 8118386.46 8118386.61 8118386.80 0.0089 0.0056

Uranus 17515-08-13 00:28 G 8118505.31 8118505.52 8118505.73 0.0145 0.0038

Neptune 17515-11-27 15:50 G 8118612.07 8118612.16 8118612.29 0.0089 0.0076

Uranus 17516-03-26 12:43 G 8118731.81 8118732.03 8118732.24 0.0145 0.0011

Uranus 17516-11-08 00:43 G 8118958.33 8118958.53 8118958.73 0.0145 0.0059

Uranus 17517-06-22 12:14 G 8119184.89 8119185.01 8119185.17 0.0145 0.0108

Saturn 17517-09-14 10:48 G 8119268.82 8119268.95 8119269.08 0.0283 0.0223

Saturn 17518-05-02 01:26 G 8119498.35 8119498.56 8119498.77 0.0282 0.0007

Saturn 17518-12-17 15:07 G 8119728.00 8119728.13 8119728.28 0.0282 0.0208

Mars 17531-08-28 07:26 G 8124364.68 8124364.81 8124364.95 0.1584 0.1011

Jupiter 17532-03-13 02:24 G 8124562.41 8124562.60 8124562.80 0.0499 0.0153

Saturn 17532-10-10 15:21 G 8124774.00 8124774.14 8124774.29 0.0276 0.0196

Saturn 17533-05-28 00:43 G 8125003.31 8125003.53 8125003.74 0.0277 0.0008

Saturn 17534-01-12 10:04 G 8125232.80 8125232.92 8125233.07 0.0277 0.0210

Earth 17540-10-26 12:43 G 8127711.92 8127712.03 8127712.15 0.2685 0.1873

Moon 17540-10-26 17:31 G 8127712.14 8127712.23 8127712.31 0.2690 0.2233 *

Jupiter 17543-11-17 04:33 G 8128828.52 8128828.69 8128828.86 0.0501 0.0277

Saturn 17547-03-27 12:43 G 8130054.89 8130055.03 8130055.19 0.0282 0.0201

Saturn 17547-11-12 03:07 G 8130284.42 8130284.63 8130284.85 0.0282 0.0016

Saturn 17548-06-28 17:02 G 8130514.08 8130514.21 8130514.33 0.0281 0.0227

Earth 17548-10-24 02:52 G 8130631.52 8130631.62 8130631.71 0.2685 0.2130

Moon 17548-10-24 08:52 G 8130631.72 8130631.87 8130632.01 0.2685 0.1090

Jupiter 17550-05-06 17:16 G 8131191.02 8131191.22 8131191.42 0.0530 0.0090

Uranus 17556-07-07 18:43 G 8133445.18 8133445.28 8133445.41 0.0133 0.0114

Uranus 17557-02-19 00:14 G 8133671.34 8133671.51 8133671.70 0.0133 0.0076

Uranus 17557-10-03 05:45 G 8133897.53 8133897.74 8133897.95 0.0133 0.0039

Uranus 17558-05-17 11:02 G 8134123.74 8134123.96 8134124.18 0.0133 0.0002

Uranus 17558-12-29 16:04 G 8134349.97 8134350.17 8134350.38 0.0133 0.0037

Uranus 17559-08-12 21:07 G 8134576.22 8134576.38 8134576.58 0.0133 0.0075

Uranus 17560-03-26 02:38 G 8134802.51 8134802.61 8134802.74 0.0133 0.0112

Jupiter 17562-01-09 09:36 G 8135456.79 8135456.90 8135457.03 0.0527 0.0424

Saturn 17562-04-22 14:38 G 8135559.95 8135560.11 8135560.27 0.0277 0.0179

Saturn 17562-12-07 23:45 G 8135789.28 8135789.49 8135789.70 0.0277 0.0024

Saturn 17563-07-25 09:36 G 8136018.79 8136018.90 8136019.03 0.0278 0.0227

Mars 17564-07-25 17:31 G 8136385.06 8136385.23 8136385.41 0.1953 0.0273

Mars 17565-06-26 06:57 G 8136720.62 8136720.79 8136720.95 0.1585 0.0465

Jupiter 17567-11-19 13:40 G 8137596.96 8137597.07 8137597.19 0.0497 0.0406

Saturn 17576-10-06 18:00 G 8140841.08 8140841.25 8140841.41 0.0283 0.0175

Saturn 17577-05-24 08:38 G 8141070.65 8141070.86 8141071.07 0.0282 0.0041

Saturn 17578-01-08 22:33 G 8141300.36 8141300.44 8141300.54 0.0282 0.0255

Jupiter 17579-07-25 14:38 G 8141862.90 8141863.11 8141863.31 0.0500 0.0026

Jupiter 17586-01-12 09:36 G 8144225.77 8144225.90 8144226.04 0.0530 0.0398

Jupiter 17591-03-30 15:36 G 8146129.08 8146129.15 8146129.24 0.0502 0.0462

Saturn 17591-11-02 22:48 G 8146346.28 8146346.45 8146346.63 0.0276 0.0149

Saturn 17592-06-19 07:55 G 8146575.63 8146575.83 8146576.04 0.0277 0.0054

Neptune 17592-06-23 16:48 G 8146580.13 8146580.20 8146580.32 0.0088 0.0080

Saturn 17593-02-03 17:45 G 8146805.17 8146805.24 8146805.32 0.0277 0.0256

Neptune 17593-02-04 06:00 G 8146805.60 8146805.75 8146805.92 0.0088 0.0060

Neptune 17593-09-17 18:43 G 8147031.10 8147031.28 8147031.49 0.0088 0.0040

Neptune 17594-05-01 07:40 G 8147256.61 8147256.82 8147257.04 0.0088 0.0020

Neptune 17594-12-12 20:24 G 8147482.14 8147482.35 8147482.58 0.0088 0.0002

Pluto 17595-02-25 08:24 G 8147556.82 8147556.85 8147556.92 0.0077 0.0075

Neptune 17595-07-26 09:07 G 8147707.68 8147707.88 8147708.11 0.0088 0.0020

Pluto 17595-10-08 18:00 G 8147782.03 8147782.25 8147782.47 0.0077 0.0004

Neptune 17596-03-07 22:04 G 8147933.23 8147933.42 8147933.62 0.0088 0.0039

Pluto 17596-05-21 02:52 G 8148007.51 8148007.62 8148007.74 0.0077 0.0065

Neptune 17596-10-19 10:33 G 8148158.79 8148158.94 8148159.12 0.0088 0.0058

Neptune 17597-06-01 23:16 G 8148384.38 8148384.47 8148384.58 0.0088 0.0078

Mars 17597-06-24 20:38 G 8148407.22 8148407.36 8148407.51 0.1584 0.0853

Jupiter 17597-09-16 23:45 G 8148491.30 8148491.49 8148491.69 0.0528 0.0133

Uranus 17598-08-28 16:48 G 8148837.07 8148837.20 8148837.36 0.0145 0.0110

Uranus 17599-04-12 05:16 G 8149063.52 8149063.72 8149063.92 0.0145 0.0061

Uranus 17599-11-24 17:16 G 8149290.01 8149290.22 8149290.44 0.0145 0.0013

Uranus 17600-07-08 05:16 G 8149516.52 8149516.72 8149516.94 0.0145 0.0036

Uranus 17601-02-19 17:31 G 8149743.06 8149743.23 8149743.41 0.0145 0.0084

Uranus 17601-10-04 05:31 G 8149969.66 8149969.73 8149969.83 0.0145 0.0133

Saturn 17606-04-18 20:38 G 8151627.19 8151627.36 8151627.55 0.0282 0.0152

Saturn 17606-12-04 11:16 G 8151856.76 8151856.97 8151857.17 0.0282 0.0064

Saturn 17607-07-22 00:43 G 8152086.50 8152086.53 8152086.58 0.0281 0.0276

Jupiter 17615-04-02 02:52 G 8154897.44 8154897.62 8154897.80 0.0498 0.0236

Saturn 17621-05-14 22:19 G 8157132.25 8157132.43 8157132.62 0.0277 0.0131

Saturn 17621-12-30 07:26 G 8157361.61 8157361.81 8157362.02 0.0277 0.0072

Saturn 17622-08-16 17:16 G 8157591.20 8157591.22 8157591.26 0.0278 0.0275

Jupiter 17626-12-06 04:04 G 8159163.49 8159163.67 8159163.86 0.0501 0.0197

Mars 17630-05-22 18:00 G 8160427.07 8160427.25 8160427.42 0.1952 0.0454

Mars 17631-04-23 20:24 G 8160763.19 8160763.35 8160763.51 0.1586 0.0621

Jupiter 17633-05-25 18:14 G 8161526.07 8161526.26 8161526.45 0.0529 0.0187

Saturn 17635-10-30 01:12 G 8162413.36 8162413.55 8162413.74 0.0283 0.0127

Saturn 17636-06-15 15:50 G 8162642.96 8162643.16 8162643.37 0.0282 0.0090

Uranus 17640-03-07 03:36 G 8164003.62 8164003.65 8164003.70 0.0133 0.0131

Uranus 17640-10-19 08:52 G 8164229.72 8164229.87 8164230.03 0.0133 0.0094

Uranus 17641-06-02 14:09 G 8164455.90 8164456.09 8164456.29 0.0133 0.0056

Uranus 17642-01-14 19:26 G 8164682.10 8164682.31 8164682.53 0.0133 0.0019

Uranus 17642-08-29 00:43 G 8164908.32 8164908.53 8164908.75 0.0133 0.0019

Uranus 17643-04-12 06:00 G 8165134.56 8165134.75 8165134.96 0.0133 0.0057

Uranus 17643-11-24 11:02 G 8165360.83 8165360.96 8165361.13 0.0133 0.0095

Uranus 17644-07-07 16:33 G 8165587.17 8165587.19 8165587.24 0.0133 0.0132

Jupiter 17645-01-28 09:07 G 8165791.73 8165791.88 8165792.04 0.0526 0.0337

Saturn 17650-11-25 06:57 G 8167918.60 8167918.79 8167919.00 0.0276 0.0100

Jupiter 17650-12-08 12:28 G 8167931.98 8167932.02 8167932.07 0.0497 0.0485

Saturn 17651-07-12 16:19 G 8168147.99 8168148.18 8168148.38 0.0277 0.0103

Earth 17662-04-27 18:00 G 8172090.11 8172090.25 8172090.40 0.2647 0.0944

Moon 17662-04-27 22:19 G 8172090.30 8172090.43 8172090.55 0.2643 0.1704 *

Jupiter 17662-08-13 15:21 G 8172197.93 8172198.14 8172198.34 0.0500 0.0062

Mars 17663-04-22 09:50 G 8172449.76 8172449.91 8172450.07 0.1585 0.0692

Saturn 17665-05-11 05:45 G 8173199.54 8173199.74 8173199.94 0.0282 0.0101

Saturn 17665-12-26 20:09 G 8173429.15 8173429.34 8173429.53 0.0282 0.0115

Jupiter 17669-01-31 10:33 G 8174560.86 8174560.94 8174561.01 0.0531 0.0491

Earth 17670-04-25 10:33 G 8175009.91 8175009.94 8175009.97 0.2646 0.2584

Moon 17670-04-25 11:02 G 8175009.93 8175009.96 8175009.99 0.2640 0.2579 *

Jupiter 17674-04-18 16:04 G 8176464.04 8176464.17 8176464.31 0.0502 0.0376

Neptune 17675-11-03 06:57 G 8177027.69 8177027.79 8177027.94 0.0089 0.0074

Neptune 17676-06-15 20:09 G 8177253.19 8177253.34 8177253.54 0.0089 0.0054

Neptune 17677-01-27 10:04 G 8177478.71 8177478.92 8177479.12 0.0089 0.0033

Neptune 17677-09-09 23:16 G 8177704.25 8177704.47 8177704.68 0.0089 0.0012

Neptune 17678-04-23 12:14 G 8177929.79 8177930.01 8177930.23 0.0089 0.0008

Neptune 17678-12-05 01:12 G 8178155.35 8178155.55 8178155.77 0.0089 0.0029

Neptune 17679-07-18 14:38 G 8178380.93 8178381.11 8178381.30 0.0089 0.0048

Neptune 17680-02-29 04:04 G 8178606.53 8178606.67 8178606.81 0.0089 0.0069

Saturn 17680-06-06 07:12 G 8178704.60 8178704.80 8178705.00 0.0276 0.0081

Jupiter 17680-10-06 02:24 G 8178826.40 8178826.60 8178826.81 0.0529 0.0030

Neptune 17680-10-11 17:02 G 8178832.21 8178832.21 8178832.24 0.0089 0.0089

Saturn 17681-01-21 16:19 G 8178933.99 8178934.18 8178934.37 0.0277 0.0121

Uranus 17682-04-27 21:21 G 8179395.32 8179395.39 8179395.49 0.0145 0.0133

Uranus 17682-12-10 09:36 G 8179621.74 8179621.90 8179622.09 0.0145 0.0085

Uranus 17683-07-24 22:04 G 8179848.21 8179848.42 8179848.63 0.0145 0.0036

Uranus 17684-03-07 10:19 G 8180074.71 8180074.93 8180075.14 0.0145 0.0012

Uranus 17684-10-19 22:19 G 8180301.24 8180301.43 8180301.63 0.0145 0.0061

Uranus 17685-06-03 10:19 G 8180527.80 8180527.93 8180528.08 0.0145 0.0109

Saturn 17694-11-21 09:21 G 8183985.69 8183985.89 8183986.10 0.0283 0.0077

Saturn 17695-07-09 00:00 G 8184215.32 8184215.50 8184215.69 0.0282 0.0140

Mars 17696-03-18 19:12 G 8184469.16 8184469.30 8184469.44 0.1951 0.1135

Mars 17697-02-18 09:07 G 8184805.73 8184805.88 8184806.03 0.1586 0.0793

Jupiter 17698-04-21 00:28 G 8185232.36 8185232.52 8185232.68 0.0499 0.0308

Saturn 17709-05-03 07:40 G 8189261.74 8189261.82 8189261.93 0.0276 0.0248

Saturn 17709-12-18 16:33 G 8189490.99 8189491.19 8189491.40 0.0276 0.0048

Jupiter 17709-12-26 01:40 G 8189498.38 8189498.57 8189498.77 0.0501 0.0126

Saturn 17710-08-05 01:55 G 8189720.41 8189720.58 8189720.76 0.0277 0.0154

Jupiter 17716-06-14 16:19 G 8191861.01 8191861.18 8191861.36 0.0530 0.0264

Saturn 17723-10-18 00:00 G 8194542.44 8194542.50 8194542.59 0.0283 0.0264

Saturn 17724-06-03 15:07 G 8194771.93 8194772.13 8194772.34 0.0282 0.0048

Uranus 17724-06-19 18:00 G 8194788.13 8194788.25 8194788.37 0.0133 0.0111

Saturn 17725-01-19 05:31 G 8195001.57 8195001.73 8195001.91 0.0282 0.0168

Uranus 17725-01-31 23:16 G 8195014.29 8195014.47 8195014.66 0.0133 0.0073

Uranus 17725-09-15 04:33 G 8195240.49 8195240.69 8195240.91 0.0133 0.0036

Uranus 17726-04-29 10:04 G 8195466.70 8195466.92 8195467.13 0.0133 0.0003

Uranus 17726-12-11 15:07 G 8195692.93 8195693.13 8195693.34 0.0133 0.0039

Uranus 17727-07-25 20:24 G 8195919.18 8195919.35 8195919.54 0.0133 0.0077

Jupiter 17728-02-18 08:24 G 8196126.68 8196126.85 8196127.03 0.0527 0.0255

Uranus 17728-03-08 01:40 G 8196145.48 8196145.57 8196145.70 0.0133 0.0115

Mars 17729-02-17 23:02 G 8196492.30 8196492.46 8196492.62 0.1585 0.0530

Saturn 17738-11-13 08:24 G 8200047.74 8200047.85 8200047.97 0.0276 0.0228

Saturn 17739-06-30 17:16 G 8200277.01 8200277.22 8200277.43 0.0276 0.0028

Saturn 17740-02-15 02:09 G 8200506.44 8200506.59 8200506.76 0.0277 0.0174

Jupiter 17745-09-02 13:55 G 8202532.89 8202533.08 8202533.28 0.0499 0.0137

Saturn 17753-04-29 03:36 G 8205328.55 8205328.65 8205328.76 0.0283 0.0242

Saturn 17753-12-14 18:57 G 8205558.08 8205558.29 8205558.50 0.0283 0.0024

Saturn 17754-08-01 09:36 G 8205787.75 8205787.90 8205788.06 0.0282 0.0192

Pluto 17755-06-01 01:26 G 8206091.38 8206091.56 8206091.77 0.0067 0.0030

Pluto 17756-01-12 06:57 G 8206316.58 8206316.79 8206317.01 0.0068 0.0017

Pluto 17756-08-24 11:31 G 8206541.95 8206541.98 8206542.07 0.0068 0.0065

Neptune 17756-09-26 04:33 G 8206574.67 8206574.69 8206574.75 0.0088 0.0087

Jupiter 17757-05-08 12:43 G 8206798.87 8206799.03 8206799.19 0.0502 0.0311

Neptune 17757-05-09 17:16 G 8206800.10 8206800.22 8206800.38 0.0088 0.0067

Neptune 17757-12-21 06:14 G 8207025.59 8207025.76 8207025.96 0.0088 0.0048

Neptune 17758-08-03 19:26 G 8207251.11 8207251.31 8207251.52 0.0088 0.0028

Neptune 17759-03-17 08:09 G 8207476.63 8207476.84 8207477.07 0.0088 0.0009

Neptune 17759-10-28 20:52 G 8207702.16 8207702.37 8207702.60 0.0088 0.0012

Neptune 17760-06-10 09:36 G 8207927.70 8207927.90 8207928.12 0.0088 0.0032

Neptune 17761-01-21 22:19 G 8208153.26 8208153.43 8208153.62 0.0088 0.0051

Neptune 17761-09-04 11:16 G 8208378.85 8208378.97 8208379.11 0.0088 0.0071

Mars 17762-01-14 19:40 G 8208511.27 8208511.32 8208511.38 0.1950 0.1843

Mars 17762-12-17 22:33 G 8208848.30 8208848.44 8208848.58 0.1587 0.0952

Jupiter 17763-10-27 01:26 G 8209161.36 8209161.56 8209161.76 0.0528 0.0055

Uranus 17766-08-10 14:38 G 8210179.98 8210180.11 8210180.27 0.0145 0.0108

Uranus 17767-03-25 02:52 G 8210406.44 8210406.62 8210406.83 0.0145 0.0060

Uranus 17767-11-06 15:21 G 8210632.92 8210633.14 8210633.36 0.0145 0.0011

Saturn 17768-05-25 18:14 G 8210834.12 8210834.26 8210834.41 0.0276 0.0195

Uranus 17768-06-20 03:21 G 8210859.44 8210859.64 8210859.86 0.0145 0.0038

Saturn 17769-01-10 03:07 G 8211063.42 8211063.63 8211063.84 0.0276 0.0005

Uranus 17769-02-01 15:36 G 8211085.98 8211086.15 8211086.33 0.0145 0.0086

Saturn 17769-08-27 12:28 G 8211292.88 8211293.02 8211293.16 0.0277 0.0207

Uranus 17769-09-16 03:50 G 8211312.59 8211312.66 8211312.75 0.0145 0.0134

Jupiter 17775-07-01 14:52 G 8213427.04 8213427.12 8213427.21 0.0525 0.0475

Jupiter 17781-05-10 23:45 G 8215567.37 8215567.49 8215567.62 0.0498 0.0386

Saturn 17782-11-09 11:02 G 8216114.83 8216114.96 8216115.11 0.0283 0.0209

Saturn 17783-06-27 02:09 G 8216344.38 8216344.59 8216344.80 0.0282 0.0008

Moon 17783-10-28 08:52 G 8216467.71 8216467.87 8216468.02 0.2679 0.1124

Earth 17783-10-28 12:14 G 8216467.89 8216468.01 8216468.14 0.2685 0.1573 *

Saturn 17784-02-11 16:33 G 8216574.06 8216574.19 8216574.32 0.0282 0.0222

Earth 17791-10-26 02:09 G 8219387.53 8219387.59 8219387.66 0.2685 0.2439

Jupiter 17793-01-14 01:12 G 8219833.35 8219833.55 8219833.75 0.0500 0.0046

Mars 17794-01-15 03:21 G 8220199.56 8220199.64 8220199.73 0.1953 0.1685

Mars 17794-12-16 12:28 G 8220534.85 8220535.02 8220535.18 0.1585 0.0372

Saturn 17797-12-05 19:26 G 8221620.16 8221620.31 8221620.48 0.0276 0.0174

Saturn 17798-07-23 04:33 G 8221849.48 8221849.69 8221849.90 0.0277 0.0027

Saturn 17799-03-09 13:40 G 8222078.96 8222079.07 8222079.19 0.0277 0.0228

Jupiter 17799-07-04 17:31 G 8222196.08 8222196.23 8222196.38 0.0530 0.0360

Jupiter 17804-09-20 01:40 G 8224099.53 8224099.57 8224099.62 0.0503 0.0488

Uranus 17808-02-19 02:24 G 8225346.56 8225346.60 8225346.67 0.0133 0.0128

Uranus 17808-10-02 07:40 G 8225572.68 8225572.82 8225572.99 0.0133 0.0091

Uranus 17809-05-16 13:12 G 8225798.86 8225799.05 8225799.25 0.0133 0.0054

Uranus 17809-12-28 18:28 G 8226025.06 8226025.27 8226025.49 0.0133 0.0016

Uranus 17810-08-11 23:45 G 8226251.28 8226251.49 8226251.71 0.0133 0.0022

Jupiter 17811-03-10 09:21 G 8226461.70 8226461.89 8226462.08 0.0527 0.0160

Uranus 17811-03-26 05:02 G 8226477.53 8226477.71 8226477.92 0.0133 0.0060

Uranus 17811-11-07 10:33 G 8226703.80 8226703.94 8226704.10 0.0133 0.0096

Saturn 17812-05-22 14:24 G 8226900.94 8226901.10 8226901.26 0.0283 0.0186

Saturn 17813-01-07 05:31 G 8227130.52 8227130.73 8227130.95 0.0283 0.0032

Saturn 17813-08-24 19:55 G 8227360.24 8227360.33 8227360.44 0.0282 0.0246

Saturn 17827-06-19 05:31 G 8232406.55 8232406.73 8232406.91 0.0276 0.0140

Saturn 17828-02-03 14:24 G 8232635.90 8232636.10 8232636.31 0.0276 0.0061

Saturn 17828-09-20 00:00 G 8232865.43 8232865.50 8232865.56 0.0277 0.0262

Jupiter 17828-09-22 09:50 G 8232867.73 8232867.91 8232868.10 0.0499 0.0198

Mars 17828-10-15 11:45 G 8232890.87 8232890.99 8232891.11 0.1587 0.1116

Neptune 17840-02-06 18:57 G 8237022.21 8237022.29 8237022.40 0.0089 0.0080

Jupiter 17840-05-28 11:31 G 8237133.81 8237133.98 8237134.16 0.0502 0.0236

Neptune 17840-09-19 08:09 G 8237247.69 8237247.84 8237248.02 0.0089 0.0060

Neptune 17841-05-02 21:21 G 8237473.21 8237473.39 8237473.60 0.0089 0.0040

Pluto 17841-11-07 20:52 G 8237662.17 8237662.37 8237662.60 0.0077 0.0019

Saturn 17841-12-02 23:31 G 8237687.31 8237687.48 8237687.67 0.0283 0.0151

Neptune 17841-12-14 10:33 G 8237698.73 8237698.94 8237699.16 0.0089 0.0020

Pluto 17842-06-21 05:45 G 8237887.59 8237887.74 8237887.92 0.0077 0.0052

Saturn 17842-07-20 14:24 G 8237916.89 8237917.10 8237917.31 0.0282 0.0066

Neptune 17842-07-28 00:00 G 8237924.28 8237924.50 8237924.72 0.0089 0.0001

Saturn 17843-03-07 04:33 G 8238146.67 8238146.69 8238146.72 0.0282 0.0279

Neptune 17843-03-10 12:57 G 8238149.84 8238150.04 8238150.27 0.0089 0.0022

Neptune 17843-10-22 02:09 G 8238375.41 8238375.59 8238375.80 0.0089 0.0041

Neptune 17844-06-03 15:21 G 8238600.99 8238601.14 8238601.31 0.0089 0.0062

Neptune 17845-01-15 04:48 G 8238826.62 8238826.70 8238826.79 0.0089 0.0082

Jupiter 17846-11-15 22:33 G 8239496.24 8239496.44 8239496.64 0.0529 0.0125

Uranus 17850-04-10 20:38 G 8240738.26 8240738.36 8240738.45 0.0145 0.0130

Uranus 17850-11-23 08:38 G 8240964.68 8240964.86 8240965.04 0.0145 0.0082

Uranus 17851-07-07 20:38 G 8241191.16 8241191.36 8241191.58 0.0145 0.0034

Uranus 17852-02-19 09:07 G 8241417.66 8241417.88 8241418.10 0.0145 0.0015

Uranus 17852-10-02 21:21 G 8241644.19 8241644.39 8241644.59 0.0145 0.0063

Uranus 17853-05-17 09:21 G 8241870.76 8241870.89 8241871.03 0.0145 0.0111

Saturn 17856-12-29 07:26 G 8243192.63 8243192.81 8243193.01 0.0276 0.0118

Saturn 17857-08-15 16:33 G 8243421.99 8243422.19 8243422.39 0.0277 0.0083

Jupiter 17858-07-21 15:07 G 8243761.99 8243762.13 8243762.26 0.0526 0.0388

Mars 17859-11-13 04:33 G 8244241.54 8244241.69 8244241.84 0.1953 0.0985

Mars 17860-10-14 01:40 G 8244577.40 8244577.57 8244577.74 0.1586 0.0212

Jupiter 17864-05-30 21:21 G 8245902.32 8245902.39 8245902.48 0.0498 0.0456

Saturn 17871-06-15 02:24 G 8248473.42 8248473.60 8248473.80 0.0283 0.0128

Saturn 17872-01-30 17:31 G 8248703.03 8248703.23 8248703.44 0.0282 0.0089

Jupiter 17876-02-03 20:38 G 8250168.16 8250168.36 8250168.57 0.0500 0.0012

Jupiter 17882-07-24 16:04 G 8252531.06 8252531.17 8252531.28 0.0530 0.0440

Saturn 17886-07-11 17:16 G 8253979.02 8253979.22 8253979.42 0.0276 0.0084

Saturn 17887-02-26 02:24 G 8254208.41 8254208.60 8254208.79 0.0277 0.0117

Jupiter 17887-10-09 20:52 G 8254434.27 8254434.37 8254434.47 0.0503 0.0432

Uranus 17892-06-01 16:48 G 8256131.08 8256131.20 8256131.33 0.0133 0.0108

Mars 17892-10-12 15:36 G 8256264.11 8256264.15 8256264.19 0.1584 0.1535

Uranus 17893-01-13 22:04 G 8256357.25 8256357.42 8256357.62 0.0133 0.0071

Uranus 17893-08-28 03:36 G 8256583.44 8256583.65 8256583.87 0.0133 0.0034

Jupiter 17894-03-29 04:33 G 8256796.49 8256796.69 8256796.89 0.0527 0.0102

Uranus 17894-04-11 09:07 G 8256809.66 8256809.88 8256810.10 0.0133 0.0004

Mars 17894-08-13 00:57 G 8256933.44 8256933.54 8256933.64 0.1588 0.1279

Uranus 17894-11-23 14:24 G 8257035.90 8257036.10 8257036.31 0.0133 0.0041

Uranus 17895-07-07 19:55 G 8257262.15 8257262.33 8257262.50 0.0133 0.0079

Uranus 17896-02-19 00:57 G 8257488.45 8257488.54 8257488.66 0.0133 0.0117

Saturn 17900-12-26 12:57 G 8259259.84 8259260.04 8259260.24 0.0283 0.0090

Saturn 17901-08-13 03:36 G 8259489.46 8259489.65 8259489.84 0.0282 0.0126

Moon 17905-04-30 15:36 G 8260845.99 8260846.15 8260846.30 0.2648 0.0196

Earth 17905-04-30 20:38 G 8260846.22 8260846.36 8260846.51 0.2646 0.0984 *

Jupiter 17911-10-13 08:24 G 8263202.69 8263202.85 8263203.03 0.0499 0.0273

Moon 17913-04-28 10:33 G 8263765.91 8263765.94 8263765.97 0.2652 0.2587

Earth 17913-04-28 13:12 G 8263766.01 8263766.05 8263766.09 0.2646 0.2563

Saturn 17915-06-07 11:31 G 8264535.91 8264535.98 8264536.05 0.0276 0.0259

Saturn 17916-01-22 20:09 G 8264765.13 8264765.34 8264765.54 0.0276 0.0061

Saturn 17916-09-08 05:02 G 8264994.53 8264994.71 8264994.90 0.0277 0.0141

Neptune 17921-08-13 05:02 G 8266794.62 8266794.71 8266794.85 0.0088 0.0075

Neptune 17922-03-26 18:14 G 8267020.10 8267020.26 8267020.44 0.0088 0.0054

Neptune 17922-11-07 07:12 G 8267245.60 8267245.80 8267246.00 0.0088 0.0035

Jupiter 17923-06-18 09:21 G 8267468.70 8267468.89 8267469.09 0.0501 0.0165

Neptune 17923-06-20 19:55 G 8267471.12 8267471.33 8267471.55 0.0088 0.0015

Neptune 17924-02-01 08:52 G 8267696.65 8267696.87 8267697.09 0.0088 0.0005

Neptune 17924-09-13 21:36 G 8267922.20 8267922.40 8267922.62 0.0088 0.0025

Neptune 17925-04-27 10:19 G 8268147.75 8268147.93 8268148.13 0.0088 0.0044

Mars 17925-09-10 05:02 G 8268283.54 8268283.71 8268283.89 0.1952 0.0273

Neptune 17925-12-08 23:16 G 8268373.32 8268373.47 8268373.62 0.0088 0.0064

Neptune 17926-07-22 11:45 G 8268598.94 8268598.99 8268599.08 0.0088 0.0083

Mars 17926-08-12 14:52 G 8268619.95 8268620.12 8268620.30 0.1586 0.0066

Jupiter 17929-12-05 22:48 G 8269831.27 8269831.45 8269831.64 0.0529 0.0216

Saturn 17930-07-08 15:36 G 8270045.94 8270046.15 8270046.36 0.0283 0.0068

Saturn 17931-02-23 06:14 G 8270275.59 8270275.76 8270275.95 0.0282 0.0148

Uranus 17934-07-24 14:24 G 8271522.95 8271523.10 8271523.25 0.0145 0.0104

Uranus 17935-03-08 02:38 G 8271749.41 8271749.61 8271749.81 0.0145 0.0056

Uranus 17935-10-20 14:52 G 8271975.90 8271976.12 8271976.34 0.0145 0.0008

Uranus 17936-06-03 02:52 G 8272202.42 8272202.62 8272202.84 0.0145 0.0041

Uranus 17937-01-15 14:52 G 8272428.96 8272429.12 8272429.31 0.0145 0.0089

Uranus 17937-08-30 03:07 G 8272655.58 8272655.63 8272655.72 0.0145 0.0137

Jupiter 17941-08-10 13:55 G 8274096.91 8274097.08 8274097.24 0.0526 0.0308

Saturn 17944-12-17 20:09 G 8275322.22 8275322.34 8275322.46 0.0276 0.0227

Saturn 17945-08-04 05:02 G 8275551.50 8275551.71 8275551.93 0.0276 0.0028

Saturn 17946-03-21 14:09 G 8275780.94 8275781.09 8275781.27 0.0277 0.0175

Mars 17958-08-11 04:33 G 8280306.60 8280306.69 8280306.77 0.1585 0.1370

Jupiter 17959-02-23 18:43 G 8280503.08 8280503.28 8280503.48 0.0500 0.0083

Saturn 17959-06-03 11:45 G 8280602.89 8280602.99 8280603.10 0.0283 0.0244

Saturn 17960-01-19 03:07 G 8280832.42 8280832.63 8280832.84 0.0283 0.0028

Mars 17960-06-10 13:55 G 8280976.02 8280976.08 8280976.15 0.1588 0.1447

Saturn 17960-09-04 17:16 G 8281062.07 8281062.22 8281062.38 0.0282 0.0187

Jupiter 17965-08-13 11:31 G 8282865.92 8282865.98 8282866.05 0.0530 0.0499

Jupiter 17970-10-29 19:40 G 8284769.18 8284769.32 8284769.46 0.0503 0.0356

Saturn 17974-06-29 23:45 G 8286108.36 8286108.49 8286108.64 0.0276 0.0203

Saturn 17975-02-14 08:38 G 8286337.65 8286337.86 8286338.07 0.0276 0.0003

Saturn 17975-10-01 17:31 G 8286567.10 8286567.23 8286567.39 0.0277 0.0199

Uranus 17976-02-01 01:26 G 8286689.51 8286689.56 8286689.65 0.0133 0.0126

Uranus 17976-09-14 06:57 G 8286915.64 8286915.79 8286915.96 0.0133 0.0088

Jupiter 17977-04-18 03:36 G 8287131.44 8287131.65 8287131.85 0.0528 0.0024

Uranus 17977-04-28 12:14 G 8287141.82 8287142.01 8287142.22 0.0133 0.0051

Uranus 17977-12-10 17:45 G 8287368.02 8287368.24 8287368.46 0.0133 0.0014

Uranus 17978-07-24 23:02 G 8287594.25 8287594.46 8287594.68 0.0133 0.0024

Uranus 17979-03-08 04:19 G 8287820.50 8287820.68 8287820.89 0.0133 0.0062

Uranus 17979-10-20 09:36 G 8288046.77 8288046.90 8288047.06 0.0133 0.0099

Saturn 17988-12-13 14:09 G 8291388.97 8291389.09 8291389.23 0.0283 0.0223

Saturn 17989-07-31 05:16 G 8291618.51 8291618.72 8291618.94 0.0282 0.0008

Saturn 17990-03-17 19:55 G 8291848.19 8291848.33 8291848.47 0.0282 0.0208

Mars 17991-07-08 06:14 G 8292325.58 8292325.76 8292325.93 0.1951 0.0425

Mars 17992-06-09 04:04 G 8292662.49 8292662.67 8292662.84 0.1586 0.0118

Jupiter 17994-11-01 03:36 G 8293537.50 8293537.65 8293537.81 0.0499 0.0328

19TH MILLENNIUM CE

This is a list of transits of Venus in the 19th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Pluto	**18001-07-01 05:02**	**G**	**8295971.54**	**8295971.71**	**8295971.89**	**0.0067**	**0.0041**	
Pluto	**18002-02-11 10:04**	**G**	**8296196.71**	**8296196.92**	**8296197.15**	**0.0068**	**0.0007**	
Pluto	**18002-09-24 15:07**	**G**	**8296422.01**	**8296422.13**	**8296422.28**	**0.0068**	**0.0054**	
Saturn	**18004-01-10 07:26**	**G**	**8296894.65**	**8296894.81**	**8296894.98**	**0.0276**	**0.0172**	
Neptune	**18004-05-11 06:43**	**G**	**8297016.76**	**8297016.78**	**8297016.84**	**0.0089**	**0.0087**	
Saturn	**18004-08-26 16:33**	**G**	**8297123.99**	**8297124.19**	**8297124.41**	**0.0277**	**0.0030**	
Neptune	**18004-12-22 19:55**	**G**	**8297242.20**	**8297242.33**	**8297242.49**	**0.0089**	**0.0067**	
Saturn	**18005-04-13 01:55**	**G**	**8297353.48**	**8297353.58**	**8297353.71**	**0.0277**	**0.0231**	
Neptune	**18005-08-05 09:07**	**G**	**8297467.71**	**8297467.88**	**8297468.08**	**0.0089**	**0.0047**	
Neptune	**18006-03-18 22:19**	**G**	**8297693.23**	**8297693.43**	**8297693.65**	**0.0089**	**0.0027**	
Jupiter	**18006-07-07 04:19**	**G**	**8297803.48**	**8297803.68**	**8297803.88**	**0.0502**	**0.0112**	
Neptune	**18006-10-30 11:45**	**G**	**8297918.77**	**8297918.99**	**8297919.21**	**0.0089**	**0.0007**	
Neptune	**18007-06-13 00:57**	**G**	**8298144.32**	**8298144.54**	**8298144.76**	**0.0089**	**0.0014**	
Neptune	**18008-01-24 13:55**	**G**	**8298369.89**	**8298370.08**	**8298370.29**	**0.0089**	**0.0034**	
Neptune	**18008-09-06 02:52**	**G**	**8298595.46**	**8298595.62**	**8298595.81**	**0.0089**	**0.0055**	
Neptune	**18009-04-19 16:04**	**G**	**8298821.07**	**8298821.17**	**8298821.31**	**0.0089**	**0.0075**	
Jupiter	**18012-12-24 17:16**	**G**	**8300166.05**	**8300166.22**	**8300166.40**	**0.0529**	**0.0271**	
Uranus	**18018-03-23 20:24**	**G**	**8302081.24**	**8302081.35**	**8302081.45**	**0.0145**	**0.0126**	
Saturn	**18018-06-26 02:09**	**G**	**8302175.43**	**8302175.59**	**8302175.75**	**0.0283**	**0.0183**	

Uranus 18018-11-05 08:24 G 8302307.67 8302307.85 8302308.04 0.0145 0.0078

Saturn 18019-02-10 17:02 G 8302405.00 8302405.21 8302405.42 0.0283 0.0034

Uranus 18019-06-19 20:38 G 8302534.15 8302534.36 8302534.57 0.0145 0.0030

Saturn 18019-09-28 06:57 G 8302634.70 8302634.79 8302634.90 0.0282 0.0247

Uranus 18020-02-01 08:52 G 8302760.65 8302760.87 8302761.09 0.0145 0.0018

Uranus 18020-09-14 21:07 G 8302987.19 8302987.38 8302987.58 0.0145 0.0066

Uranus 18021-04-29 09:21 G 8303213.76 8303213.89 8303214.02 0.0145 0.0114

Mars 18024-06-07 18:00 G 8304349.14 8304349.25 8304349.36 0.1585 0.1215

Jupiter 18024-08-29 08:38 G 8304431.69 8304431.86 8304432.05 0.0526 0.0253

Earth 18026-10-30 11:31 G 8305223.84 8305223.98 8305224.12 0.2685 0.1221

Moon 18026-10-30 12:57 G 8305223.93 8305224.04 8305224.16 0.2692 0.1680 *

Saturn 18033-07-22 12:00 G 8307680.82 8307681.00 8307681.18 0.0276 0.0146

Saturn 18034-03-08 20:38 G 8307910.16 8307910.36 8307910.57 0.0276 0.0054

Saturn 18034-10-24 06:00 G 8308139.67 8308139.75 8308139.83 0.0277 0.0255

Moon 18034-10-28 06:43 G 8308143.68 8308143.78 8308143.88 0.2688 0.2033

Jupiter 18042-03-14 16:48 G 8310838.01 8310838.20 8310838.40 0.0500 0.0154

Saturn 18048-01-06 04:19 G 8312961.51 8312961.68 8312961.86 0.0283 0.0161

Saturn 18048-08-22 19:12 G 8313191.09 8313191.30 8313191.51 0.0282 0.0055

Saturn 18049-04-09 09:07 G 8313420.83 8313420.88 8313420.95 0.0282 0.0268

Jupiter 18053-11-17 15:21 G 8315103.98 8315104.14 8315104.30 0.0502 0.0299

Mars 18057-05-04 06:43 G 8316367.64 8316367.78 8316367.92 0.1950 0.1143

Mars 18058-04-06 17:31 G 8316705.06 8316705.23 8316705.40 0.1587 0.0274

Jupiter 18060-05-07 02:52 G 8317466.41 8317466.62 8317466.82 0.0528 0.0062

Uranus 18060-05-14 16:04 G 8317474.05 8317474.17 8317474.32 0.0133 0.0105

Uranus 18060-12-26 21:21 G 8317700.22 8317700.39 8317700.59 0.0133 0.0068

Uranus 18061-08-10 03:07 G 8317926.42 8317926.63 8317926.84 0.0133 0.0031

Uranus 18062-03-24 08:24 G 8318152.64 8318152.85 8318153.07 0.0133 0.0008

Uranus 18062-11-05 13:40 G 8318378.87 8318379.07 8318379.28 0.0133 0.0044

Saturn 18063-02-01 18:14 G 8318467.07 8318467.26 8318467.45 0.0276 0.0118

Uranus 18063-06-19 18:57 G 8318605.13 8318605.29 8318605.47 0.0133 0.0081

Saturn 18063-09-19 03:21 G 8318696.44 8318696.64 8318696.85 0.0277 0.0084

Uranus 18064-02-01 00:14 G 8318831.42 8318831.51 8318831.62 0.0133 0.0119

Jupiter 18072-01-10 15:36 G 8321732.07 8321732.15 8321732.24 0.0524 0.0472

Saturn 18077-07-18 16:04 G 8323747.98 8323748.17 8323748.36 0.0283 0.0121

Jupiter 18077-11-20 01:55 G 8323872.46 8323872.58 8323872.70 0.0499 0.0399

Saturn 18078-03-05 06:43 G 8323977.58 8323977.78 8323977.98 0.0282 0.0095

Neptune 18085-11-14 16:33 G 8326789.13 8326789.19 8326789.29 0.0088 0.0082

Neptune 18086-06-28 05:45 G 8327014.59 8327014.74 8327014.90 0.0088 0.0062

Neptune 18087-02-08 18:14 G 8327240.08 8327240.26 8327240.47 0.0088 0.0043

Neptune 18087-09-22 07:26 G 8327465.60 8327465.81 8327466.03 0.0088 0.0022

Pluto 18087-12-07 23:45 G 8327542.30 8327542.49 8327542.70 0.0077 0.0034

Neptune 18088-05-04 20:09 G 8327691.13 8327691.34 8327691.57 0.0088 0.0003

Pluto 18088-07-20 08:52 G 8327767.68 8327767.87 8327768.07 0.0077 0.0036

Neptune 18088-12-16 08:52 G 8327916.66 8327916.87 8327917.10 0.0088 0.0017

Jupiter 18089-07-26 03:36 G 8328138.44 8328138.65 8328138.85 0.0501 0.0034

Neptune 18089-07-29 21:36 G 8328142.22 8328142.40 8328142.62 0.0088 0.0037

Neptune 18090-03-12 10:33 G 8328367.78 8328367.94 8328368.12 0.0088 0.0057

Mars 18090-04-05 07:12 G 8328391.67 8328391.80 8328391.93 0.1585 0.1054

Neptune 18090-10-23 23:02 G 8328593.37 8328593.46 8328593.59 0.0088 0.0076

Saturn 18092-08-13 23:02 G 8329253.26 8329253.46 8329253.66 0.0276 0.0092

Saturn 18093-03-31 07:55 G 8329482.64 8329482.83 8329483.03 0.0277 0.0109

Jupiter 18096-01-13 16:19 G 8330501.03 8330501.18 8330501.33 0.0529 0.0352

Jupiter 18101-04-01 03:50 G 8332404.61 8332404.66 8332404.73 0.0504 0.0478

Uranus 18102-07-06 13:26 G 8332865.92 8332866.06 8332866.23 0.0145 0.0101

Uranus 18103-02-18 01:40 G 8333092.38 8333092.57 8333092.78 0.0145 0.0053

Uranus 18103-10-02 14:09 G 8333318.88 8333319.09 8333319.31 0.0145 0.0005

Uranus 18104-05-16 02:24 G 8333545.40 8333545.60 8333545.81 0.0145 0.0044

Uranus 18104-12-28 14:24 G 8333771.94 8333772.10 8333772.28 0.0145 0.0092

Uranus 18105-08-12 02:24 G 8333998.56 8333998.60 8333998.67 0.0145 0.0140

Saturn 18107-01-29 17:31 G 8334534.04 8334534.23 8334534.43 0.0282 0.0101

Saturn 18107-09-16 08:09 G 8334763.65 8334763.84 8334764.04 0.0282 0.0115

Jupiter 18107-09-19 09:07 G 8334766.69 8334766.88 8334767.08 0.0526 0.0164

Saturn 18121-07-10 18:57 G 8339810.24 8339810.29 8339810.36 0.0276 0.0264

Saturn 18122-02-25 04:04 G 8340039.46 8340039.67 8340039.88 0.0276 0.0065

Saturn 18122-10-12 13:12 G 8340268.87 8340269.05 8340269.24 0.0277 0.0137

Mars 18123-03-02 08:24 G 8340409.79 8340409.85 8340409.91 0.1949 0.1818

Mars 18124-02-03 06:14 G 8340747.60 8340747.76 8340747.93 0.1587 0.0447

Jupiter 18125-04-03 12:43 G 8341172.84 8341173.03 8341173.21 0.0500 0.0212

Saturn 18135-12-25 13:40 G 8345091.04 8345091.07 8345091.11 0.0283 0.0278

Saturn 18136-08-11 04:48 G 8345320.50 8345320.70 8345320.91 0.0283 0.0062

Jupiter 18136-12-07 13:40 G 8345438.89 8345439.07 8345439.25 0.0503 0.0225

Saturn 18137-03-28 19:12 G 8345550.13 8345550.30 8345550.49 0.0282 0.0155

Jupiter 18143-05-27 22:04 G 8347801.22 8347801.42 8347801.62 0.0528 0.0121

Uranus 18144-01-14 01:12 G 8348032.47 8348032.55 8348032.65 0.0133 0.0122

Uranus 18144-08-27 06:43 G 8348258.61 8348258.78 8348258.95 0.0133 0.0085

Uranus 18145-04-10 12:00 G 8348484.80 8348485.00 8348485.21 0.0133 0.0048

Uranus 18145-11-22 17:16 G 8348711.01 8348711.22 8348711.44 0.0133 0.0011

Uranus 18146-07-06 22:33 G 8348937.23 8348937.44 8348937.66 0.0133 0.0027

Uranus 18147-02-18 03:50 G 8349163.48 8349163.66 8349163.86 0.0133 0.0064

Uranus 18147-10-02 08:52 G 8349389.75 8349389.87 8349390.03 0.0133 0.0102

Earth 18148-05-01 23:02 G 8349602.31 8349602.46 8349602.61 0.2647 0.0986

Moon 18148-05-02 04:33 G 8349602.56 8349602.69 8349602.81 0.2648 0.1559 *

Saturn 18151-01-21 00:14 G 8350596.41 8350596.51 8350596.62 0.0276 0.0238

Saturn 18151-09-07 08:52 G 8350825.67 8350825.87 8350826.09 0.0276 0.0039

Saturn 18152-04-23 17:45 G 8351055.08 8351055.24 8351055.42 0.0277 0.0163

Jupiter 18155-01-30 14:24 G 8352066.97 8352067.10 8352067.24 0.0525 0.0393

Mars 18155-03-02 15:36 G 8352098.07 8352098.15 8352098.23 0.1952 0.1716

Mars 18156-02-01 20:24 G 8352434.21 8352434.35 8352434.49 0.1586 0.0895

Earth 18156-04-29 15:36 G 8352522.11 8352522.15 8352522.19 0.2646 0.2541

Moon 18156-04-29 20:24 G 8352522.28 8352522.35 8352522.42 0.2643 0.2367

Jupiter 18160-12-10 00:57 G 8354207.48 8354207.54 8354207.60 0.0499 0.0476

Saturn 18165-07-06 14:52 G 8355877.05 8355877.12 8355877.22 0.0283 0.0258

Saturn 18166-02-21 06:14 G 8356106.55 8356106.76 8356106.97 0.0282 0.0042

Saturn 18166-10-08 20:38 G 8356336.20 8356336.36 8356336.53 0.0282 0.0174

Neptune 18169-03-27 07:40 G 8357236.71 8357236.82 8357236.94 0.0089 0.0074

Neptune 18169-11-07 20:38 G 8357462.20 8357462.36 8357462.55 0.0089 0.0055

Neptune 18170-06-21 09:50 G 8357687.72 8357687.91 8357688.13 0.0089 0.0035

Neptune 18171-02-01 23:16 G 8357913.26 8357913.47 8357913.70 0.0089 0.0014

Neptune 18171-09-15 12:43 G 8358138.81 8358139.03 8358139.25 0.0089 0.0006

Neptune 18172-04-28 01:40 G 8358364.36 8358364.57 8358364.78 0.0089 0.0027

Jupiter 18172-08-15 00:43 G 8358473.33 8358473.53 8358473.74 0.0501 0.0033

Neptune 18172-12-09 14:24 G 8358589.93 8358590.10 8358590.31 0.0089 0.0047

Neptune 18173-07-23 03:36 G 8358815.53 8358815.65 8358815.81 0.0089 0.0067

Neptune 18174-03-05 16:48 G 8359041.18 8359041.20 8359041.27 0.0089 0.0088

Jupiter 18179-02-02 16:48 G 8360836.10 8360836.20 8360836.32 0.0529 0.0444

Saturn 18180-08-02 03:36 G 8361382.52 8361382.65 8361382.79 0.0276 0.0214

Saturn 18181-03-19 12:28 G 8361611.81 8361612.02 8361612.24 0.0277 0.0015

Saturn 18181-11-03 21:36 G 8361841.26 8361841.40 8361841.57 0.0277 0.0189

Jupiter 18184-04-20 00:43 G 8362739.42 8362739.53 8362739.64 0.0504 0.0414

Uranus 18186-03-05 18:28 G 8363424.17 8363424.27 8363424.40 0.0145 0.0124

Uranus 18186-10-18 06:43 G 8363650.61 8363650.78 8363650.98 0.0145 0.0076

Uranus 18187-06-01 19:12 G 8363877.09 8363877.30 8363877.52 0.0145 0.0027

Uranus 18188-01-14 07:26 G 8364103.60 8364103.81 8364104.03 0.0145 0.0021

Uranus 18188-08-27 19:40 G 8364330.14 8364330.32 8364330.52 0.0145 0.0069

Uranus 18189-04-11 07:40 G 8364556.71 8364556.82 8364556.96 0.0145 0.0117

Mars 18189-11-30 19:55 G 8364790.17 8364790.33 8364790.49 0.1588 0.0605

Jupiter 18190-10-08 05:31 G 8365101.53 8365101.73 8365101.93 0.0526 0.0097

Saturn 18195-01-17 01:12 G 8366663.43 8366663.55 8366663.69 0.0283 0.0222

Saturn 18195-09-03 16:33 G 8366892.98 8366893.19 8366893.40 0.0283 0.0005

Saturn 18196-04-20 06:57 G 8367122.65 8367122.79 8367122.93 0.0282 0.0210

Jupiter 18208-04-23 12:28 G 8371507.86 8371508.02 8371508.19 0.0500 0.0296

Saturn 18210-02-13 09:21 G 8372168.74 8372168.89 8372169.05 0.0276 0.0187

Saturn 18210-09-30 18:00 G 8372398.04 8372398.25 8372398.46 0.0276 0.0012

Saturn 18211-05-18 02:52 G 8372627.49 8372627.62 8372627.76 0.0277 0.0214

Jupiter 18219-12-28 13:40 G 8375773.88 8375774.07 8375774.27 0.0502 0.0142

Mars 18220-12-28 16:33 G 8376140.04 8376140.19 8376140.34 0.1952 0.1018

Mars 18221-11-30 09:50 G 8376476.75 8376476.91 8376477.06 0.1586 0.0736

Saturn 18224-07-30 02:24 G 8377449.46 8377449.60 8377449.75 0.0283 0.0202

Saturn 18225-03-16 17:31 G 8377679.02 8377679.23 8377679.44 0.0282 0.0015

Saturn 18225-11-01 07:55 G 8377908.71 8377908.83 8377908.95 0.0282 0.0229

Jupiter 18226-06-16 23:16 G 8378136.29 8378136.47 8378136.66 0.0528 0.0218

Uranus 18228-04-27 15:50 G 8378817.04 8378817.16 8378817.32 0.0133 0.0101

Uranus 18228-12-09 21:21 G 8379043.21 8379043.39 8379043.59 0.0133 0.0064

Uranus 18229-07-24 02:38 G 8379269.40 8379269.61 8379269.83 0.0133 0.0027

Uranus 18230-03-07 08:09 G 8379495.63 8379495.84 8379496.06 0.0133 0.0010

Uranus 18230-10-19 13:12 G 8379721.86 8379722.05 8379722.27 0.0133 0.0048

Uranus 18231-06-02 18:14 G 8379948.11 8379948.26 8379948.45 0.0133 0.0085

Uranus 18232-01-14 23:31 G 8380174.41 8380174.48 8380174.58 0.0133 0.0121

Jupiter 18238-02-19 15:50 G 8382401.99 8382402.16 8382402.33 0.0525 0.0299

Saturn 18239-08-26 11:02 G 8382954.80 8382954.96 8382955.14 0.0276 0.0166

Saturn 18240-04-11 19:55 G 8383184.12 8383184.33 8383184.54 0.0277 0.0034

Saturn 18240-11-27 05:02 G 8383413.62 8383413.71 8383413.83 0.0277 0.0236

Pluto 18247-08-01 07:12 G 8385851.69 8385851.80 8385851.94 0.0067 0.0055

Pluto 18248-03-13 12:28 G 8386076.81 8386077.02 8386077.24 0.0067 0.0009

Pluto 18248-10-24 17:16 G 8386302.06 8386302.22 8386302.42 0.0068 0.0039

Neptune 18250-10-01 16:48 G 8387009.09 8387009.20 8387009.36 0.0088 0.0070

Neptune 18251-05-15 06:00 G 8387234.58 8387234.75 8387234.94 0.0088 0.0049

Neptune 18251-12-26 18:57 G 8387460.08 8387460.29 8387460.50 0.0088 0.0030

Neptune 18252-08-08 07:40 G 8387685.61 8387685.82 8387686.05 0.0088 0.0010

Neptune 18253-03-21 20:38 G 8387911.14 8387911.36 8387911.58 0.0088 0.0010

Neptune 18253-11-02 09:07 G 8388136.68 8388136.88 8388137.10 0.0088 0.0030

Saturn 18254-02-09 11:45 G 8388235.82 8388235.99 8388236.16 0.0284 0.0167

Neptune 18254-06-15 21:36 G 8388362.24 8388362.40 8388362.60 0.0088 0.0050

Saturn 18254-09-27 03:07 G 8388465.42 8388465.63 8388465.83 0.0283 0.0050

Neptune 18255-01-27 10:33 G 8388587.82 8388587.94 8388588.09 0.0088 0.0069

Saturn 18255-05-14 17:16 G 8388695.16 8388695.22 8388695.30 0.0282 0.0264

Jupiter 18255-09-05 00:00 G 8388808.30 8388808.50 8388808.70 0.0501 0.0112

Neptune 18255-09-09 23:31 G 8388813.48 8388813.48 8388813.50 0.0088 0.0088

Mars 18255-09-29 09:07 G 8388832.72 8388832.88 8388833.03 0.1589 0.0773

Jupiter 18262-02-22 13:40 G 8391171.02 8391171.07 8391171.12 0.0529 0.0511

Jupiter 18267-05-11 00:57 G 8393074.39 8393074.54 8393074.69 0.0504 0.0328

Saturn 18269-03-07 17:02 G 8393741.03 8393741.21 8393741.40 0.0275 0.0140

Saturn 18269-10-23 01:40 G 8393970.37 8393970.57 8393970.78 0.0276 0.0061

Earth 18269-11-01 11:02 G 8393979.81 8393979.96 8393980.11 0.2685 0.0921

Moon 18269-11-01 11:31 G 8393979.81 8393979.98 8393980.14 0.2678 0.0633 *

Saturn 18270-06-09 10:33 G 8394199.89 8394199.94 8394200.02 0.0277 0.0262

Uranus 18270-06-18 12:00 G 8394208.84 8394209.00 8394209.16 0.0145 0.0099

Uranus 18271-01-31 00:14 G 8394435.31 8394435.51 8394435.72 0.0145 0.0051

Uranus 18271-09-14 12:28 G 8394661.81 8394662.02 8394662.24 0.0145 0.0004

Uranus 18272-04-28 00:43 G 8394888.33 8394888.53 8394888.74 0.0145 0.0046

Uranus 18272-12-10 12:28 G 8395114.87 8395115.02 8395115.20 0.0145 0.0094

Uranus 18273-07-25 00:57 G 8395341.50 8395341.54 8395341.59 0.0145 0.0141

Jupiter 18273-10-28 05:16 G 8395436.51 8395436.72 8395436.92 0.0527 0.0013

Saturn 18283-08-22 12:28 G 8399021.85 8399022.02 8399022.21 0.0283 0.0148

Saturn 18284-04-08 03:36 G 8399251.44 8399251.65 8399251.86 0.0282 0.0069

Jupiter 18285-07-02 22:48 G 8399702.43 8399702.45 8399702.49 0.0524 0.0516

Mars 18286-10-25 17:45 G 8400182.07 8400182.24 8400182.41 0.1951 0.0316

Mars 18287-09-27 23:02 G 8400519.30 8400519.46 8400519.63 0.1587 0.0575

Jupiter 18291-05-13 11:31 G 8401842.85 8401842.98 8401843.12 0.0499 0.0372

Saturn 18298-09-17 17:45 G 8404527.06 8404527.24 8404527.44 0.0276 0.0120

Saturn 18299-05-05 02:38 G 8404756.41 8404756.61 8404756.81 0.0277 0.0081

Jupiter 18303-01-17 12:14 G 8406108.81 8406109.01 8406109.21 0.0502 0.0068

Jupiter 18309-07-06 21:50 G 8408471.24 8408471.41 8408471.58 0.0528 0.0297

Uranus 18311-12-28 00:57 G 8409375.46 8409375.54 8409375.66 0.0133 0.0119

Uranus 18312-08-10 06:28 G 8409601.61 8409601.77 8409601.96 0.0133 0.0081

Saturn 18313-03-04 20:24 G 8409808.17 8409808.35 8409808.55 0.0284 0.0117

Uranus 18313-03-24 12:00 G 8409827.80 8409828.00 8409828.21 0.0133 0.0044

Saturn 18313-10-20 11:45 G 8410037.79 8410037.99 8410038.19 0.0283 0.0102

Uranus 18313-11-05 17:16 G 8410054.01 8410054.22 8410054.44 0.0133 0.0008

Uranus 18314-06-19 22:19 G 8410280.23 8410280.43 8410280.65 0.0133 0.0031

Uranus 18315-02-01 03:36 G 8410506.47 8410506.65 8410506.85 0.0133 0.0067

Uranus 18315-09-15 08:52 G 8410732.74 8410732.87 8410733.01 0.0133 0.0104

Jupiter 18321-03-11 13:26 G 8412736.88 8412737.06 8412737.25 0.0525 0.0224

Mars 18321-07-27 22:04 G 8412875.28 8412875.42 8412875.56 0.1589 0.0939

Saturn 18328-03-31 00:00 G 8415313.30 8415313.50 8415313.70 0.0275 0.0093

Saturn 18328-11-15 08:38 G 8415542.66 8415542.86 8415543.05 0.0276 0.0107

Neptune 18333-06-30 18:28 G 8417231.20 8417231.27 8417231.37 0.0089 0.0082

Pluto 18334-01-07 23:16 G 8417422.37 8417422.47 8417422.62 0.0077 0.0063

Neptune 18334-02-11 07:55 G 8417456.68 8417456.83 8417457.00 0.0089 0.0062

Pluto 18334-08-21 08:52 G 8417647.65 8417647.87 8417648.09 0.0077 0.0008

Neptune 18334-09-24 21:07 G 8417682.20 8417682.38 8417682.59 0.0089 0.0042

Neptune 18335-05-08 10:19 G 8417907.73 8417907.93 8417908.15 0.0089 0.0022

Neptune 18335-12-19 23:45 G 8418133.27 8418133.49 8418133.71 0.0089 0.0002

Neptune 18336-08-01 12:43 G 8418358.82 8418359.03 8418359.25 0.0089 0.0019

Neptune 18337-03-15 01:55 G 8418584.39 8418584.58 8418584.79 0.0089 0.0039

Neptune 18337-10-26 15:07 G 8418809.98 8418810.13 8418810.30 0.0089 0.0059

Neptune 18338-06-09 04:19 G 8419035.59 8419035.68 8419035.79 0.0089 0.0080

Jupiter 18338-09-25 00:57 G 8419143.36 8419143.54 8419143.73 0.0501 0.0203

Saturn 18342-09-14 21:50 G 8420594.21 8420594.41 8420594.61 0.0283 0.0096

Saturn 18343-05-02 12:43 G 8420823.84 8420824.03 8420824.22 0.0282 0.0121

Jupiter 18350-05-31 00:57 G 8423409.36 8423409.54 8423409.72 0.0503 0.0245

Mars 18352-08-22 18:28 G 8424224.09 8424224.27 8424224.44 0.1950 0.0401

Mars 18353-07-26 12:14 G 8424561.84 8424562.01 8424562.18 0.1587 0.0411

Uranus 18354-02-16 17:16 G 8424767.12 8424767.22 8424767.36 0.0145 0.0122

Uranus 18354-10-01 05:45 G 8424993.56 8424993.74 8424993.94 0.0145 0.0073

Uranus 18355-05-15 18:14 G 8425220.04 8425220.26 8425220.47 0.0145 0.0025

Uranus 18355-12-28 06:14 G 8425446.55 8425446.76 8425446.98 0.0145 0.0023

Uranus 18356-08-10 18:28 G 8425673.09 8425673.27 8425673.47 0.0145 0.0071

Jupiter 18356-11-17 08:09 G 8425771.64 8425771.84 8425772.04 0.0527 0.0094

Saturn 18357-02-23 15:50 G 8425870.13 8425870.16 8425870.19 0.0275 0.0272

Uranus 18357-03-25 06:28 G 8425899.66 8425899.77 8425899.91 0.0145 0.0119

Saturn 18357-10-10 23:45 G 8426099.29 8426099.49 8426099.70 0.0276 0.0075

Saturn 18358-05-28 08:24 G 8426328.67 8426328.85 8426329.04 0.0276 0.0126

Jupiter 18368-07-22 22:48 G 8430037.34 8430037.45 8430037.57 0.0524 0.0428

Saturn 18372-03-27 04:33 G 8431380.48 8431380.69 8431380.90 0.0284 0.0067

Saturn 18372-11-11 19:40 G 8431610.15 8431610.32 8431610.50 0.0283 0.0151

Jupiter 18374-06-02 11:02 G 8432177.89 8432177.96 8432178.05 0.0500 0.0455

Jupiter 18386-02-05 12:43 G 8436443.82 8436444.03 8436444.23 0.0502 0.0021

Saturn 18386-09-05 22:33 G 8436656.35 8436656.44 8436656.54 0.0275 0.0244

Saturn 18387-04-23 06:28 G 8436885.57 8436885.77 8436885.98 0.0275 0.0047

Mars 18387-05-25 11:16 G 8436917.85 8436917.97 8436918.10 0.1590 0.1107

Saturn 18387-12-08 14:52 G 8437114.95 8437115.12 8437115.30 0.0276 0.0153

Moon 18391-05-04 20:38 G 8438358.20 8438358.36 8438358.52 0.2643 0.0684

Earth 18391-05-05 01:40 G 8438358.43 8438358.57 8438358.72 0.2647 0.1018 *

Jupiter 18392-07-25 22:04 G 8438806.29 8438806.42 8438806.56 0.0528 0.0388

Uranus 18396-04-09 16:19 G 8440160.04 8440160.18 8440160.34 0.0133 0.0097

Uranus 18396-11-21 21:36 G 8440386.21 8440386.40 8440386.60 0.0133 0.0061

Uranus 18397-07-06 02:52 G 8440612.41 8440612.62 8440612.84 0.0133 0.0024

Jupiter 18397-10-11 13:40 G 8440709.96 8440710.07 8440710.18 0.0505 0.0423

Uranus 18398-02-17 08:09 G 8440838.63 8440838.84 8440839.06 0.0133 0.0013

Uranus 18398-10-01 13:12 G 8441064.86 8441065.05 8441065.26 0.0133 0.0051

Earth 18399-05-02 18:00 G 8441278.21 8441278.25 8441278.30 0.2647 0.2534

Uranus 18399-05-15 18:14 G 8441291.11 8441291.26 8441291.44 0.0133 0.0088

Uranus 18399-12-27 23:45 G 8441517.41 8441517.49 8441517.57 0.0133 0.0124

Saturn 18401-02-19 13:55 G 8441937.02 8441937.08 8441937.17 0.0284 0.0265

Saturn 18401-10-07 05:45 G 8442166.54 8442166.74 8442166.96 0.0283 0.0047

Saturn 18402-05-24 20:52 G 8442396.20 8442396.37 8442396.54 0.0282 0.0170

Jupiter 18404-03-30 15:21 G 8443071.94 8443072.14 8443072.34 0.0526 0.0125

Neptune 18415-01-04 04:04 G 8447003.58 8447003.67 8447003.79 0.0088 0.0077

Neptune 18415-08-17 16:48 G 8447229.06 8447229.20 8447229.39 0.0088 0.0058

Saturn 18416-03-17 21:50 G 8447442.29 8447442.41 8447442.53 0.0275 0.0227

Neptune 18416-03-30 06:00 G 8447454.56 8447454.75 8447454.96 0.0088 0.0037

Saturn 18416-11-02 05:45 G 8447671.53 8447671.74 8447671.95 0.0276 0.0030

Neptune 18416-11-10 18:43 G 8447680.07 8447680.28 8447680.50 0.0088 0.0018

Saturn 18417-06-19 14:09 G 8447900.93 8447901.09 8447901.27 0.0276 0.0171

Neptune 18417-06-24 07:40 G 8447905.60 8447905.82 8447906.04 0.0088 0.0002

Neptune 18418-02-04 20:24 G 8448131.14 8448131.35 8448131.56 0.0088 0.0022

Mars 18418-06-19 19:40 G 8448266.17 8448266.32 8448266.46 0.1948 0.1099

Neptune 18418-09-18 08:52 G 8448356.69 8448356.87 8448357.08 0.0088 0.0042

Neptune 18419-05-01 21:21 G 8448582.26 8448582.39 8448582.58 0.0088 0.0062

Mars 18419-05-24 01:26 G 8448604.39 8448604.56 8448604.74 0.1587 0.0245

Neptune 18419-12-13 10:19 G 8448807.86 8448807.93 8448808.04 0.0088 0.0081

Jupiter 18421-10-14 00:43 G 8449478.36 8449478.53 8449478.70 0.0500 0.0283

Saturn 18430-09-01 19:26 G 8452723.21 8452723.31 8452723.44 0.0284 0.0239

Saturn 18431-04-19 11:45 G 8452952.78 8452952.99 8452953.20 0.0284 0.0019

Saturn 18431-12-05 02:52 G 8453182.48 8453182.62 8453182.78 0.0283 0.0199

Jupiter 18433-06-19 00:14 G 8453744.32 8453744.51 8453744.70 0.0504 0.0164

Uranus 18437-10-16 23:16 G 8455325.45 8455325.47 8455325.52 0.0145 0.0143

Uranus 18438-05-31 11:31 G 8455551.83 8455551.98 8455552.16 0.0145 0.0096

Uranus 18439-01-13 00:00 G 8455778.30 8455778.50 8455778.71 0.0145 0.0047

Uranus	18439-08-27 12:14 G	8456004.80	8456005.01	8456005.23	0.0145	0.0003
Jupiter	18439-12-07 06:57 G	8456106.61	8456106.79	8456106.99	0.0526	0.0179
Uranus	18440-04-10 00:14 G	8456231.32	8456231.51	8456231.73	0.0145	0.0049
Uranus	18440-11-22 12:28 G	8456457.87	8456458.02	8456458.19	0.0145	0.0096
Uranus	18441-07-07 00:28 G	8456684.51	8456684.52	8456684.55	0.0145	0.0144
Saturn	18445-09-28 04:48 G	8458228.57	8458228.70	8458228.86	0.0275	0.0200
Saturn	18446-05-15 12:57 G	8458457.83	8458458.04	8458458.25	0.0275	0.0002
Saturn	18446-12-30 21:21 G	8458687.25	8458687.39	8458687.54	0.0276	0.0198
Jupiter	18451-08-11 22:48 G	8460372.30	8460372.45	8460372.61	0.0524	0.0341
Mars	18453-03-22 00:28 G	8460960.42	8460960.52	8460960.62	0.1591	0.1278
Saturn	18460-03-13 22:04 G	8463509.28	8463509.42	8463509.56	0.0284	0.0215
Saturn	18460-10-29 13:40 G	8463738.86	8463739.07	8463739.29	0.0283	0.0007
Saturn	18461-06-16 04:48 G	8463968.57	8463968.70	8463968.83	0.0283	0.0220
Jupiter	18469-02-24 13:26 G	8466778.87	8466779.06	8466779.26	0.0502	0.0109
Saturn	18475-04-10 03:50 G	8469014.51	8469014.66	8469014.83	0.0275	0.0183
Jupiter	18475-08-15 01:40 G	8469141.50	8469141.57	8469141.63	0.0529	0.0497
Saturn	18475-11-25 12:00 G	8469243.79	8469244.00	8469244.21	0.0276	0.0015
Saturn	18476-07-11 20:24 G	8469473.23	8469473.35	8469473.49	0.0276	0.0215
Uranus	18479-12-09 01:26 G	8470718.47	8470718.56	8470718.69	0.0133	0.0115
Uranus	18480-07-22 06:57 G	8470944.62	8470944.79	8470944.97	0.0133	0.0077
Jupiter	18480-10-30 13:40 G	8471044.92	8471045.07	8471045.22	0.0504	0.0339
Uranus	18481-03-05 12:14 G	8471170.81	8471171.01	8471171.23	0.0133	0.0041
Uranus	18481-10-17 17:31 G	8471397.02	8471397.23	8471397.45	0.0133	0.0004
Uranus	18482-05-31 22:33 G	8471623.24	8471623.44	8471623.66	0.0133	0.0033
Uranus	18483-01-13 03:50 G	8471849.48	8471849.66	8471849.85	0.0133	0.0070
Uranus	18483-08-27 08:52 G	8472075.75	8472075.87	8472076.01	0.0133	0.0107
Mars	18484-04-15 20:09 G	8472308.28	8472308.34	8472308.40	0.1947	0.1821
Mars	18485-03-20 14:52 G	8472646.94	8472647.12	8472647.29	0.1588	0.0090
Jupiter	18487-04-19 16:33 G	8473406.99	8473407.19	8473407.40	0.0525	0.0029
Saturn	18489-09-24 02:24 G	8474295.46	8474295.60	8474295.77	0.0284	0.0192

Saturn 18490-05-11 18:43 G 8474525.07 8474525.28 8474525.49 0.0284 0.0029

Saturn 18490-12-27 09:50 G 8474754.82 8474754.91 8474755.02 0.0283 0.0247

Pluto 18494-04-12 12:28 G 8475956.84 8475957.02 8475957.23 0.0067 0.0032

Pluto 18494-11-23 18:00 G 8476182.03 8476182.25 8476182.46 0.0068 0.0016

Pluto 18495-07-06 22:33 G 8476407.40 8476407.44 8476407.54 0.0068 0.0064

Neptune 18498-05-15 18:43 G 8477451.16 8477451.28 8477451.43 0.0089 0.0070

Neptune 18498-12-27 07:55 G 8477676.66 8477676.83 8477677.02 0.0089 0.0050

Neptune 18499-08-09 21:07 G 8477902.19 8477902.38 8477902.60 0.0089 0.0030

Neptune 18500-03-23 10:48 G 8478127.73 8478127.95 8478128.17 0.0089 0.0009

Neptune 18500-11-03 23:45 G 8478353.28 8478353.49 8478353.72 0.0089 0.0012

Neptune 18501-06-17 12:57 G 8478578.84 8478579.04 8478579.26 0.0089 0.0031

Neptune 18502-01-29 02:24 G 8478804.42 8478804.60 8478804.78 0.0089 0.0051

Neptune 18502-09-11 15:07 G 8479030.02 8479030.13 8479030.28 0.0089 0.0072

Saturn 18504-10-21 11:45 G 8479800.82 8479800.99 8479801.17 0.0275 0.0154

Jupiter 18504-11-03 00:14 G 8479813.38 8479813.51 8479813.65 0.0501 0.0367

Saturn 18505-06-07 19:40 G 8480030.12 8480030.32 8480030.53 0.0275 0.0045

Saturn 18506-01-23 04:04 G 8480259.58 8480259.67 8480259.77 0.0276 0.0244

Moon 18512-11-03 07:40 G 8482735.67 8482735.82 8482735.97 0.2690 0.0533

Earth 18512-11-03 10:04 G 8482735.77 8482735.92 8482736.08 0.2685 0.0581 *

Mars 18516-04-17 03:50 G 8483996.58 8483996.66 8483996.73 0.1951 0.1751

Jupiter 18516-07-09 01:55 G 8484079.38 8484079.58 8484079.78 0.0503 0.0071

Mars 18517-03-20 04:33 G 8484333.61 8484333.69 8484333.76 0.1586 0.1424

Mars 18519-01-18 13:40 G 8485003.00 8485003.07 8485003.14 0.1592 0.1449

Saturn 18519-04-07 06:00 G 8485081.58 8485081.75 8485081.92 0.0284 0.0166

Saturn 18519-11-22 21:36 G 8485311.19 8485311.40 8485311.61 0.0283 0.0053

Saturn 18520-07-09 12:28 G 8485540.97 8485541.02 8485541.10 0.0283 0.0269

Uranus 18522-01-29 17:45 G 8486110.13 8486110.24 8486110.39 0.0145 0.0117

Uranus 18522-09-13 06:14 G 8486336.58 8486336.76 8486336.96 0.0145 0.0069

Jupiter 18522-12-27 08:24 G 8486441.68 8486441.85 8486442.03 0.0527 0.0274

Uranus 18523-04-27 18:43 G 8486563.06 8486563.28 8486563.49 0.0145 0.0021

Uranus 18523-12-10 06:43 G 8486789.57 8486789.78 8486790.00 0.0145 0.0027

Uranus 18524-07-23 18:43 G 8487016.11 8487016.28 8487016.48 0.0145 0.0075

Uranus 18525-03-07 06:57 G 8487242.69 8487242.79 8487242.92 0.0145 0.0123

Saturn 18534-05-03 11:02 G 8490586.78 8490586.96 8490587.15 0.0275 0.0136

Jupiter 18534-09-01 01:55 G 8490707.40 8490707.58 8490707.76 0.0525 0.0236

Saturn 18534-12-18 18:57 G 8490816.08 8490816.29 8490816.50 0.0276 0.0062

Saturn 18535-08-05 03:21 G 8491045.58 8491045.64 8491045.72 0.0276 0.0261

Saturn 18548-10-17 09:50 G 8495867.73 8495867.91 8495868.10 0.0284 0.0143

Saturn 18549-06-04 01:55 G 8496097.38 8496097.58 8496097.79 0.0284 0.0078

Mars 18551-01-17 03:36 G 8496689.48 8496689.65 8496689.83 0.1589 0.0094

Jupiter 18552-03-16 12:00 G 8497113.81 8497114.00 8497114.19 0.0502 0.0185

Uranus 18563-08-09 11:31 G 8501276.95 8501276.98 8501277.04 0.0133 0.0130

Saturn 18563-11-13 19:26 G 8501373.12 8501373.31 8501373.51 0.0275 0.0106

Jupiter 18563-11-20 12:14 G 8501379.84 8501380.01 8501380.19 0.0505 0.0262

Uranus 18564-03-22 17:02 G 8501503.06 8501503.21 8501503.37 0.0133 0.0093

Saturn 18564-06-30 03:21 G 8501602.44 8501602.64 8501602.84 0.0275 0.0092

Uranus 18564-11-03 22:04 G 8501729.23 8501729.42 8501729.63 0.0133 0.0057

Uranus 18565-06-18 03:21 G 8501955.43 8501955.64 8501955.86 0.0133 0.0020

Uranus 18566-01-30 08:38 G 8502181.64 8502181.86 8502182.08 0.0133 0.0017

Uranus 18566-09-13 13:40 G 8502407.88 8502408.07 8502408.28 0.0133 0.0054

Uranus 18567-04-27 18:43 G 8502634.13 8502634.28 8502634.45 0.0133 0.0091

Uranus 18567-12-09 23:45 G 8502860.45 8502860.49 8502860.57 0.0133 0.0128

Jupiter 18570-05-09 15:50 G 8503741.96 8503742.16 8503742.36 0.0526 0.0055

Saturn 18578-04-29 14:24 G 8506653.91 8506654.10 8506654.30 0.0284 0.0116

Saturn 18578-12-15 06:14 G 8506883.56 8506883.76 8506883.96 0.0283 0.0103

Neptune 18579-04-08 15:07 G 8506998.08 8506998.13 8506998.20 0.0088 0.0085

Neptune 18579-11-20 03:36 G 8507223.53 8507223.65 8507223.82 0.0088 0.0066

Neptune 18580-07-02 16:33 G 8507449.02 8507449.19 8507449.40 0.0088 0.0046

Pluto 18580-09-19 07:12 G 8507527.60 8507527.80 8507528.02 0.0077 0.0025

Neptune 18581-02-13 05:45 G 8507674.53 8507674.74 8507674.95 0.0088 0.0026

Pluto 18581-05-02 16:04 G 8507753.01 8507753.17 8507753.37 0.0077 0.0046

Neptune 18581-09-26 18:28 G 8507900.05 8507900.27 8507900.49 0.0088 0.0006

Jupiter 18582-01-12 09:07 G 8508007.79 8508007.88 8508007.99 0.0523 0.0452

Mars 18582-02-12 04:33 G 8508038.54 8508038.69 8508038.84 0.1950 0.1041

Neptune 18582-05-10 07:12 G 8508125.58 8508125.80 8508126.02 0.0088 0.0014

Neptune 18582-12-21 19:40 G 8508351.13 8508351.32 8508351.53 0.0088 0.0033

Mars 18583-01-15 17:45 G 8508376.14 8508376.24 8508376.34 0.1587 0.1263

Neptune 18583-08-04 08:24 G 8508576.69 8508576.85 8508577.04 0.0088 0.0053

Neptune 18584-03-16 21:07 G 8508802.27 8508802.38 8508802.52 0.0088 0.0073

Jupiter 18587-11-23 00:43 G 8510148.45 8510148.53 8510148.62 0.0500 0.0452

Saturn 18593-05-25 19:12 G 8512159.10 8512159.30 8512159.50 0.0275 0.0088

Saturn 18594-01-10 03:07 G 8512388.43 8512388.63 8512388.82 0.0275 0.0110

Jupiter 18599-07-29 01:40 G 8514414.36 8514414.57 8514414.77 0.0503 0.0013

Uranus 18605-09-30 00:00 G 8516668.45 8516668.50 8516668.58 0.0145 0.0138

Jupiter 18606-01-16 10:04 G 8516776.78 8516776.92 8516777.07 0.0527 0.0375

Uranus 18606-05-14 12:28 G 8516894.85 8516895.02 8516895.19 0.0145 0.0091

Uranus 18606-12-27 00:28 G 8517121.32 8517121.52 8517121.73 0.0145 0.0043

Uranus 18607-08-10 12:57 G 8517347.82 8517348.04 8517348.26 0.0145 0.0005

Saturn 18607-11-10 17:31 G 8517440.04 8517440.23 8517440.44 0.0284 0.0094

Uranus 18608-03-24 00:57 G 8517574.35 8517574.54 8517574.75 0.0145 0.0053

Saturn 18608-06-27 09:50 G 8517669.72 8517669.91 8517670.10 0.0284 0.0127

Uranus 18608-11-05 13:12 G 8517800.90 8517801.05 8517801.22 0.0145 0.0101

Jupiter 18611-04-03 23:02 G 8518680.38 8518680.46 8518680.56 0.0506 0.0451

Mars 18616-11-14 17:02 G 8520732.04 8520732.21 8520732.38 0.1590 0.0254

Jupiter 18617-09-21 01:55 G 8521042.39 8521042.58 8521042.78 0.0524 0.0146

Saturn 18622-04-21 20:38 G 8522716.29 8522716.36 8522716.45 0.0274 0.0252

Saturn 18622-12-07 04:19 G 8522945.47 8522945.68 8522945.88 0.0275 0.0057

Saturn 18623-07-24 12:14 G 8523174.83 8523175.01 8523175.19 0.0275 0.0142

Earth 18634-05-07 04:04 G 8527114.52 8527114.67 8527114.82 0.2647 0.1029

Moon 18634-05-07 07:55 G 8527114.69 8527114.83 8527114.96 0.2652 0.1089 *

Jupiter 18635-04-06 12:28 G 8527448.85 8527449.02 8527449.19 0.0502 0.0271

Saturn 18636-10-05 07:26 G 8527996.80 8527996.81 8527996.84 0.0285 0.0282

Saturn 18637-05-23 00:00 G 8528226.29 8528226.50 8528226.70 0.0284 0.0063

Saturn 18638-01-07 15:36 G 8528455.98 8528456.15 8528456.33 0.0283 0.0156

Earth 18642-05-04 20:38 G 8530034.31 8530034.36 8530034.40 0.2647 0.2515

Moon 18642-05-05 02:24 G 8530034.49 8530034.60 8530034.71 0.2648 0.1881

Jupiter 18646-12-10 12:43 G 8531714.84 8531715.03 8531715.23 0.0504 0.0175

Uranus 18647-11-22 02:38 G 8532061.50 8532061.61 8532061.74 0.0133 0.0109

Mars 18647-12-11 05:45 G 8532080.57 8532080.74 8532080.91 0.1949 0.0338

Uranus 18648-07-05 07:40 G 8532287.65 8532287.82 8532288.02 0.0133 0.0073

Mars 18648-11-13 06:57 G 8532418.67 8532418.79 8532418.92 0.1587 0.1103

Uranus 18649-02-16 13:12 G 8532513.84 8532514.05 8532514.26 0.0133 0.0036

Uranus 18649-09-30 18:28 G 8532740.05 8532740.27 8532740.49 0.0133 0.0002

Uranus 18650-05-14 23:31 G 8532966.27 8532966.48 8532966.69 0.0133 0.0037

Uranus 18650-12-27 04:19 G 8533192.51 8533192.68 8533192.87 0.0133 0.0074

Uranus 18651-08-10 09:36 G 8533418.79 8533418.90 8533419.03 0.0133 0.0111

Saturn 18651-11-01 20:52 G 8533502.27 8533502.37 8533502.49 0.0274 0.0234

Saturn 18652-06-18 04:33 G 8533731.48 8533731.69 8533731.90 0.0275 0.0037

Saturn 18653-02-02 12:14 G 8533960.85 8533961.01 8533961.19 0.0275 0.0161

Jupiter 18653-05-29 17:45 G 8534077.05 8534077.24 8534077.44 0.0526 0.0155

Neptune 18662-08-19 05:16 G 8537445.62 8537445.72 8537445.82 0.0089 0.0078

Neptune 18663-04-01 18:14 G 8537671.11 8537671.26 8537671.44 0.0089 0.0058

Neptune 18663-11-13 07:26 G 8537896.62 8537896.81 8537897.02 0.0089 0.0038

Neptune 18664-06-25 20:38 G 8538122.16 8538122.36 8538122.59 0.0089 0.0019

Jupiter 18665-02-01 10:48 G 8538342.81 8538342.95 8538343.11 0.0523 0.0353

Neptune 18665-02-06 10:19 G 8538347.71 8538347.93 8538348.15 0.0089 0.0002

Neptune 18665-09-19 23:16 G 8538573.27 8538573.47 8538573.69 0.0089 0.0023

Saturn 18666-04-17 10:19 G 8538782.85 8538782.93 8538783.02 0.0285 0.0261

Neptune 18666-05-03 12:28 G 8538798.84 8538799.02 8538799.22 0.0089 0.0043

Saturn 18666-12-03 02:52 G 8539012.42 8539012.62 8539012.84 0.0284 0.0041

Neptune 18666-12-15 01:40 G 8539024.43 8539024.57 8539024.74 0.0089 0.0063

Saturn 18667-07-20 18:57 G 8539242.13 8539242.29 8539242.46 0.0284 0.0179

Neptune 18667-07-28 14:52 G 8539250.06 8539250.12 8539250.21 0.0089 0.0084

Saturn 18681-05-14 06:14 G 8544288.63 8544288.76 8544288.91 0.0274 0.0201

Saturn 18681-12-29 13:55 G 8544517.87 8544518.08 8544518.29 0.0275 0.0005

Saturn 18682-08-15 21:50 G 8544747.27 8544747.41 8544747.57 0.0275 0.0194

Jupiter 18682-08-17 22:19 G 8544749.23 8544749.43 8544749.63 0.0503 0.0079

Mars 18682-09-12 06:00 G 8544774.58 8544774.75 8544774.92 0.1590 0.0428

Jupiter 18689-02-04 07:40 G 8547111.71 8547111.82 8547111.93 0.0527 0.0447

Uranus 18690-01-11 18:00 G 8547453.11 8547453.25 8547453.39 0.0145 0.0113

Uranus 18690-08-26 06:14 G 8547679.57 8547679.76 8547679.96 0.0145 0.0065

Uranus 18691-04-09 18:43 G 8547906.06 8547906.28 8547906.50 0.0145 0.0017

Uranus 18691-11-22 06:43 G 8548132.58 8548132.78 8548133.00 0.0145 0.0032

Uranus 18692-07-05 18:57 G 8548359.12 8548359.29 8548359.48 0.0145 0.0079

Uranus 18693-02-17 07:40 G 8548585.71 8548585.82 8548585.92 0.0145 0.0127

Jupiter 18694-04-22 23:02 G 8549015.32 8549015.46 8549015.60 0.0506 0.0368

Saturn 18695-10-28 18:00 G 8549569.13 8549569.25 8549569.38 0.0285 0.0228

Saturn 18696-06-14 10:19 G 8549798.72 8549798.93 8549799.15 0.0284 0.0010

Saturn 18697-01-30 02:09 G 8550028.45 8550028.59 8550028.73 0.0283 0.0210

Jupiter 18700-10-11 00:00 G 8551377.30 8551377.50 8551377.71 0.0525 0.0072

Saturn 18710-11-25 07:40 G 8555074.67 8555074.82 8555074.98 0.0274 0.0180

Saturn 18711-07-12 15:21 G 8555303.92 8555304.14 8555304.35 0.0275 0.0017

Saturn 18712-02-26 23:02 G 8555533.33 8555533.46 8555533.60 0.0276 0.0214

Mars 18713-10-08 06:43 G 8556122.61 8556122.78 8556122.95 0.1948 0.0374

Mars 18714-09-11 20:09 G 8556461.20 8556461.34 8556461.48 0.1588 0.0935

Jupiter 18718-04-26 11:02 G 8557783.82 8557783.96 8557784.11 0.0501 0.0347

Saturn 18725-05-10 20:52 G 8560355.23 8560355.37 8560355.52 0.0285 0.0206

Saturn 18725-12-26 13:26 G 8560584.85 8560585.06 8560585.27 0.0284 0.0014

Saturn 18726-08-13 05:16 G 8560814.61 8560814.72 8560814.84 0.0284 0.0233

Jupiter 18729-12-30 08:52 G 8562049.67 8562049.87 8562050.07 0.0504 0.0112

Uranus 18731-07-23 12:57 G 8562619.98 8562620.04 8562620.12 0.0133 0.0124

Uranus 18732-03-05 18:14 G 8562846.11 8562846.26 8562846.43 0.0133 0.0088

Uranus 18732-10-17 23:16 G 8563072.28 8563072.47 8563072.69 0.0133 0.0052

Uranus 18733-06-01 04:48 G 8563298.48 8563298.70 8563298.91 0.0133 0.0015

Uranus 18734-01-13 09:50 G 8563524.70 8563524.91 8563525.13 0.0133 0.0022

Uranus 18734-08-27 14:52 G 8563750.93 8563751.12 8563751.32 0.0133 0.0058

Uranus 18735-04-10 19:55 G 8563977.20 8563977.33 8563977.50 0.0133 0.0096

Uranus 18735-11-23 01:26 G 8564203.53 8564203.56 8564203.59 0.0133 0.0132

Jupiter 18736-06-18 17:02 G 8564412.03 8564412.21 8564412.39 0.0526 0.0241

Pluto 18740-05-13 11:16 G 8565836.88 8565836.97 8565837.09 0.0067 0.0059

Saturn 18740-06-06 17:02 G 8565861.03 8565861.21 8565861.39 0.0274 0.0148

Pluto 18740-12-24 16:33 G 8566061.98 8566062.19 8566062.41 0.0067 0.0013

Saturn 18741-01-22 00:43 G 8566090.32 8566090.53 8566090.74 0.0275 0.0049

Pluto 18741-08-06 21:50 G 8566287.22 8566287.41 8566287.60 0.0068 0.0035

Saturn 18741-09-08 08:52 G 8566319.78 8566319.87 8566319.96 0.0275 0.0247

Neptune 18744-02-23 14:09 G 8567217.99 8567218.09 8567218.23 0.0088 0.0074

Neptune 18744-10-06 03:07 G 8567443.47 8567443.63 8567443.82 0.0088 0.0054

Neptune 18745-05-19 15:50 G 8567668.97 8567669.16 8567669.38 0.0088 0.0034

Neptune 18745-12-31 04:48 G 8567894.49 8567894.70 8567894.93 0.0088 0.0015

Neptune 18746-08-13 17:45 G 8568120.02 8568120.24 8568120.46 0.0088 0.0006

Neptune 18747-03-27 06:28 G 8568345.57 8568345.77 8568345.99 0.0088 0.0025

Neptune 18747-11-07 19:12 G 8568571.12 8568571.30 8568571.49 0.0088 0.0045

Jupiter 18748-02-22 07:12 G 8568677.64 8568677.80 8568677.98 0.0523 0.0289

Neptune 18748-06-20 07:40 G 8568796.68 8568796.82 8568796.98 0.0088 0.0064

Mars 18748-07-10 18:57 G 8568817.13 8568817.29 8568817.45 0.1591 0.0600

Neptune 18749-01-31 20:38 G 8569022.30 8569022.36 8569022.43 0.0088 0.0084

Saturn 18754-11-21 06:14 G 8571141.60 8571141.76 8571141.94 0.0285 0.0170

Saturn 18755-07-08 22:33 G 8571371.23 8571371.44 8571371.65 0.0284 0.0050

Earth 18755-11-06 09:36 G 8571491.75 8571491.90 8571492.06 0.2684 0.0285

Moon 18755-11-06 14:09 G 8571491.94 8571492.09 8571492.25 0.2681 0.0820 *

Saturn	18756-02-23 14:09 G	8571601.03	8571601.09	8571601.16	0.0283	0.0267
Jupiter	18765-09-06 21:50 G	8575084.22	8575084.41	8575084.60	0.0503	0.0159
Saturn	18769-12-17 19:12 G	8576647.12	8576647.30	8576647.49	0.0275	0.0126
Saturn	18770-08-04 02:52 G	8576876.42	8576876.62	8576876.83	0.0275	0.0071
Saturn	18771-03-21 10:48 G	8577105.91	8577105.95	8577106.00	0.0276	0.0269
Uranus	18773-09-11 23:02 G	8578011.40	8578011.46	8578011.56	0.0145	0.0135
Uranus	18774-04-26 11:31 G	8578237.82	8578237.98	8578238.16	0.0145	0.0087
Uranus	18774-12-09 00:00 G	8578464.29	8578464.50	8578464.71	0.0145	0.0039
Uranus	18775-07-23 12:14 G	8578690.80	8578691.01	8578691.23	0.0145	0.0010
Uranus	18776-03-06 00:28 G	8578917.33	8578917.52	8578917.73	0.0145	0.0057
Uranus	18776-10-18 13:12 G	8579143.90	8579144.05	8579144.20	0.0145	0.0105
Jupiter	18777-05-12 21:36 G	8579350.23	8579350.40	8579350.56	0.0505	0.0292
Mars	18779-08-05 07:26 G	8580164.67	8580164.81	8580164.96	0.1946	0.1091
Mars	18780-07-09 09:21 G	8580503.74	8580503.89	8580504.04	0.1588	0.0769
Jupiter	18783-10-31 00:57 G	8581712.33	8581712.54	8581712.74	0.0525	0.0025
Saturn	18784-06-02 08:38 G	8581927.69	8581927.86	8581928.05	0.0284	0.0148
Saturn	18785-01-18 01:12 G	8582157.35	8582157.55	8582157.76	0.0284	0.0072
Jupiter	18795-07-05 17:16 G	8585978.15	8585978.22	8585978.29	0.0522	0.0489
Saturn	18799-06-30 04:33 G	8587433.49	8587433.69	8587433.89	0.0275	0.0093
Saturn	18800-02-14 12:14 G	8587662.82	8587663.01	8587663.21	0.0275	0.0105
Jupiter	18801-05-15 06:14 G	8588118.64	8588118.76	8588118.88	0.0502	0.0404
Jupiter	18813-01-18 07:26 G	8592384.60	8592384.81	8592385.01	0.0504	0.0039
Saturn	18813-12-13 19:26 G	8592714.12	8592714.31	8592714.51	0.0284	0.0109
Mars	18814-05-08 08:09 G	8592859.69	8592859.84	8592859.99	0.1592	0.0772
Saturn	18814-07-31 11:31 G	8592943.78	8592943.98	8592944.18	0.0284	0.0110
Uranus	18815-11-04 04:48 G	8593404.56	8593404.70	8593404.84	0.0133	0.0103
Uranus	18816-06-17 09:50 G	8593630.73	8593630.91	8593631.10	0.0133	0.0067
Uranus	18817-01-29 14:52 G	8593856.92	8593857.12	8593857.34	0.0133	0.0031
Uranus	18817-09-12 20:09 G	8594083.13	8594083.34	8594083.56	0.0133	0.0006
Uranus	18818-04-27 01:12 G	8594309.35	8594309.55	8594309.77	0.0133	0.0043

Uranus 18818-12-09 06:28 G 8594535.60 8594535.77 8594535.95 0.0133 0.0079

Jupiter 18819-07-08 13:12 G 8594746.89 8594747.05 8594747.22 0.0526 0.0304

Uranus 18819-07-23 11:16 G 8594761.89 8594761.97 8594762.10 0.0133 0.0116

Jupiter 18824-09-23 07:12 G 8596650.76 8596650.80 8596650.85 0.0507 0.0490

Pluto 18826-10-20 01:55 G 8597407.54 8597407.58 8597407.67 0.0077 0.0074

Neptune 18826-11-21 15:07 G 8597440.10 8597440.13 8597440.18 0.0089 0.0087

Pluto 18827-06-02 11:31 G 8597632.76 8597632.98 8597633.21 0.0077 0.0002

Neptune 18827-07-05 04:19 G 8597665.55 8597665.68 8597665.83 0.0089 0.0067

Pluto 18828-01-13 20:09 G 8597858.27 8597858.34 8597858.46 0.0077 0.0069

Neptune 18828-02-15 17:31 G 8597891.06 8597891.23 8597891.43 0.0089 0.0047

Saturn 18828-05-25 00:00 G 8597990.45 8597990.50 8597990.56 0.0274 0.0264

Neptune 18828-09-28 06:43 G 8598116.59 8598116.78 8598117.01 0.0089 0.0027

Saturn 18829-01-09 07:26 G 8598219.60 8598219.81 8598220.01 0.0275 0.0069

Neptune 18829-05-11 20:09 G 8598342.12 8598342.34 8598342.56 0.0089 0.0007

Saturn 18829-08-26 15:07 G 8598448.95 8598449.13 8598449.32 0.0275 0.0128

Neptune 18829-12-23 09:07 G 8598567.67 8598567.88 8598568.11 0.0089 0.0014

Neptune 18830-08-05 22:19 G 8598793.24 8598793.43 8598793.65 0.0089 0.0034

Jupiter 18831-03-13 06:28 G 8599012.59 8599012.77 8599012.96 0.0524 0.0207

Neptune 18831-03-19 11:45 G 8599018.83 8599018.99 8599019.17 0.0089 0.0054

Neptune 18831-10-31 00:57 G 8599244.43 8599244.54 8599244.67 0.0089 0.0075

Saturn 18843-06-25 22:04 G 8603500.22 8603500.42 8603500.62 0.0284 0.0087

Saturn 18844-02-10 14:09 G 8603729.91 8603730.09 8603730.29 0.0284 0.0133

Mars 18845-06-01 08:24 G 8604206.79 8604206.85 8604206.91 0.1944 0.1804

Mars 18846-05-06 22:19 G 8604546.27 8604546.43 8604546.59 0.1589 0.0596

Jupiter 18848-09-25 16:48 G 8605419.02 8605419.20 8605419.39 0.0503 0.0216

Saturn 18857-12-05 08:24 G 8608776.74 8608776.85 8608776.96 0.0275 0.0233

Uranus 18857-12-24 17:02 G 8608796.08 8608796.21 8608796.36 0.0145 0.0110

Saturn 18858-07-22 16:04 G 8609005.96 8609006.17 8609006.38 0.0275 0.0037

Uranus 18858-08-08 05:45 G 8609022.54 8609022.74 8609022.94 0.0145 0.0061

Saturn 18859-03-09 00:00 G 8609235.34 8609235.50 8609235.68 0.0275 0.0161

Uranus 18859-03-22 18:14 G 8609249.04 8609249.26 8609249.48 0.0145 0.0013

Uranus 18859-11-04 06:43 G 8609475.57 8609475.78 8609475.99 0.0145 0.0035

Jupiter 18860-05-31 16:04 G 8609685.00 8609685.17 8609685.35 0.0505 0.0240

Uranus 18860-06-17 18:57 G 8609702.11 8609702.29 8609702.47 0.0145 0.0083

Uranus 18861-01-30 07:12 G 8609928.72 8609928.80 8609928.90 0.0145 0.0130

Jupiter 18866-11-18 19:55 G 8612047.12 8612047.33 8612047.53 0.0525 0.0081

Saturn 18872-05-20 17:16 G 8614057.15 8614057.22 8614057.29 0.0285 0.0266

Saturn 18873-01-05 09:36 G 8614286.69 8614286.90 8614287.11 0.0284 0.0047

Saturn 18873-08-23 01:12 G 8614516.39 8614516.55 8614516.73 0.0284 0.0172

Moon 18877-05-08 04:19 G 8615870.53 8615870.68 8615870.83 0.2641 0.1110

Earth 18877-05-08 06:43 G 8615870.64 8615870.78 8615870.93 0.2647 0.1053 *

Mars 18877-06-01 14:38 G 8615895.03 8615895.11 8615895.19 0.1949 0.1735

Jupiter 18878-07-24 12:28 G 8616312.91 8616313.02 8616313.13 0.0522 0.0432

Mars 18880-03-04 20:52 G 8616902.23 8616902.37 8616902.51 0.1593 0.0953

Jupiter 18884-06-03 04:48 G 8618453.66 8618453.70 8618453.77 0.0501 0.0480

Earth 18885-05-05 23:02 G 8618790.41 8618790.46 8618790.51 0.2647 0.2495

Saturn 18887-06-17 12:14 G 8619562.88 8619563.01 8619563.16 0.0274 0.0208

Saturn 18888-02-01 19:55 G 8619792.12 8619792.33 8619792.54 0.0275 0.0012

Saturn 18888-09-18 03:36 G 8620021.50 8620021.65 8620021.81 0.0275 0.0186

Jupiter 18896-02-07 05:16 G 8622719.52 8622719.72 8622719.93 0.0504 0.0036

Uranus 18899-07-04 15:21 G 8623963.05 8623963.14 8623963.25 0.0133 0.0118

Uranus 18900-02-15 20:38 G 8624189.20 8624189.36 8624189.54 0.0133 0.0082

Uranus 18900-09-30 01:40 G 8624415.38 8624415.57 8624415.79 0.0133 0.0046

Uranus 18901-05-14 07:12 G 8624641.58 8624641.80 8624642.02 0.0133 0.0009

Saturn 18901-12-01 19:26 G 8624843.21 8624843.31 8624843.43 0.0284 0.0244

Uranus 18901-12-26 12:14 G 8624867.80 8624868.01 8624868.23 0.0133 0.0028

Saturn 18902-07-19 12:00 G 8625072.79 8625073.00 8625073.21 0.0284 0.0025

Jupiter 18902-07-28 13:12 G 8625081.92 8625082.05 8625082.19 0.0526 0.0395

Uranus 18902-08-09 17:16 G 8625094.04 8625094.22 8625094.42 0.0133 0.0064

Saturn 18903-03-06 03:50 G 8625302.51 8625302.66 8625302.82 0.0283 0.0193

Uranus 18903-03-23 22:33 G 8625320.31 8625320.44 8625320.59 0.0133 0.0101

Jupiter 18907-10-14 02:24 G 8626985.50 8626985.60 8626985.71 0.0506 0.0434

Neptune 18908-05-27 23:45 G 8627212.44 8627212.49 8627212.59 0.0088 0.0083

Neptune 18909-01-08 12:57 G 8627437.90 8627438.04 8627438.20 0.0088 0.0062

Neptune 18909-08-22 02:09 G 8627663.40 8627663.59 8627663.78 0.0088 0.0043

Neptune 18910-04-04 14:38 G 8627888.91 8627889.11 8627889.34 0.0088 0.0024

Neptune 18910-11-16 03:36 G 8628114.43 8628114.65 8628114.87 0.0088 0.0004

Neptune 18911-06-29 16:19 G 8628339.97 8628340.18 8628340.40 0.0088 0.0016

Neptune 18912-02-10 04:48 G 8628565.52 8628565.70 8628565.92 0.0088 0.0036

Mars 18912-03-04 11:16 G 8628588.81 8628588.97 8628589.14 0.1590 0.0427

Neptune 18912-09-22 17:45 G 8628791.08 8628791.24 8628791.42 0.0088 0.0056

Neptune 18913-05-06 06:14 G 8629016.67 8629016.76 8629016.89 0.0088 0.0075

Jupiter 18914-04-02 05:31 G 8629347.53 8629347.73 8629347.93 0.0523 0.0126

Saturn 18916-12-28 19:26 G 8630349.16 8630349.31 8630349.48 0.0275 0.0179

Saturn 18917-08-15 03:36 G 8630578.44 8630578.65 8630578.86 0.0275 0.0019

Saturn 18918-04-01 11:45 G 8630807.86 8630807.99 8630808.12 0.0276 0.0217

Saturn 18931-06-14 07:40 G 8635629.68 8635629.82 8635629.98 0.0285 0.0204

Jupiter 18931-10-16 14:52 G 8635753.95 8635754.12 8635754.28 0.0503 0.0286

Saturn 18932-01-30 00:14 G 8635859.30 8635859.51 8635859.72 0.0284 0.0016

Saturn 18932-09-15 15:36 G 8636089.04 8636089.15 8636089.28 0.0284 0.0234

Uranus 18941-08-24 23:31 G 8639354.40 8639354.48 8639354.59 0.0145 0.0131

Uranus 18942-04-08 12:14 G 8639580.83 8639581.01 8639581.19 0.0145 0.0083

Uranus 18942-11-21 00:28 G 8639807.32 8639807.52 8639807.74 0.0145 0.0035

Mars 18943-03-30 16:04 G 8639937.03 8639937.17 8639937.32 0.1948 0.1043

Jupiter 18943-06-21 15:07 G 8640019.94 8640020.13 8640020.32 0.0505 0.0161

Uranus 18943-07-05 12:57 G 8640033.83 8640034.04 8640034.26 0.0145 0.0013

Uranus 18944-02-17 01:12 G 8640260.37 8640260.55 8640260.76 0.0145 0.0062

Uranus 18944-09-30 13:40 G 8640486.94 8640487.07 8640487.23 0.0145 0.0109

Mars 18946-01-01 10:04 G 8640944.80 8640944.92 8640945.04 0.1594 0.1128

Saturn 18946-07-11 00:14 G 8641135.34 8641135.51 8641135.69 0.0274 0.0153

Saturn 18947-02-25 07:55 G 8641364.62 8641364.83 8641365.04 0.0275 0.0044

Saturn 18947-10-12 15:50 G 8641594.07 8641594.16 8641594.26 0.0275 0.0242

Jupiter 18949-12-08 18:00 G 8642382.06 8642382.25 8642382.45 0.0525 0.0158

Saturn 18960-12-24 10:04 G 8646415.77 8646415.92 8646416.09 0.0284 0.0182

Saturn 18961-08-11 02:24 G 8646645.39 8646645.60 8646645.81 0.0284 0.0038

Jupiter 18961-08-13 12:14 G 8646647.86 8646648.01 8646648.16 0.0522 0.0347

Saturn 18962-03-28 18:00 G 8646875.16 8646875.25 8646875.34 0.0283 0.0255

Saturn 18976-01-21 06:14 G 8651921.58 8651921.76 8651921.95 0.0275 0.0125

Saturn 18976-09-06 14:24 G 8652150.90 8652151.10 8652151.31 0.0275 0.0073

Saturn 18977-04-23 22:33 G 8652380.42 8652380.44 8652380.49 0.0276 0.0272

Mars 18977-12-31 00:14 G 8652631.34 8652631.51 8652631.68 0.1591 0.0250

Jupiter 18979-02-27 00:14 G 8653054.31 8653054.51 8653054.72 0.0504 0.0089

Uranus 18983-10-17 07:26 G 8654747.67 8654747.81 8654747.97 0.0133 0.0097

Uranus 18984-05-30 12:28 G 8654973.84 8654974.02 8654974.23 0.0133 0.0061

Uranus 18985-01-11 18:00 G 8655200.03 8655200.25 8655200.46 0.0133 0.0024

Jupiter 18985-08-16 08:09 G 8655416.74 8655416.84 8655416.94 0.0526 0.0450

Uranus 18985-08-25 23:02 G 8655426.25 8655426.46 8655426.68 0.0133 0.0012

Uranus 18986-04-09 04:04 G 8655652.48 8655652.67 8655652.89 0.0133 0.0049

Uranus 18986-11-21 09:21 G 8655878.73 8655878.89 8655879.07 0.0133 0.0085

Pluto 18987-01-23 11:45 G 8655941.88 8655941.99 8655942.15 0.0067 0.0052

Uranus 18987-07-05 14:38 G 8656105.03 8656105.11 8656105.20 0.0133 0.0121

Pluto 18987-09-05 17:16 G 8656167.00 8656167.22 8656167.44 0.0067 0.0005

Pluto 18988-04-17 21:50 G 8656392.26 8656392.41 8656392.60 0.0068 0.0043

Saturn 18990-07-06 22:19 G 8657202.24 8657202.43 8657202.61 0.0285 0.0141

Jupiter 18990-11-02 00:00 G 8657320.37 8657320.50 8657320.65 0.0507 0.0364

Saturn 18991-02-21 14:24 G 8657431.90 8657432.10 8657432.31 0.0284 0.0078

Neptune 18991-10-07 14:09 G 8657659.98 8657660.09 8657660.20 0.0089 0.0076

Neptune 18992-05-20 03:07 G 8657885.47 8657885.63 8657885.81 0.0089 0.0056

Neptune 18992-12-31 16:19 G 8658110.99 8658111.18 8658111.39 0.0089 0.0036

Neptune 18993-08-14 05:31 G 8658336.52 8658336.73 8658336.95 0.0089 0.0016

Neptune	**18994-03-27 18:57**	**G**	**8658562.07**	**8658562.29**	**8658562.51**	**0.0089**	**0.0004**	
Neptune	**18994-11-08 08:09**	**G**	**8658787.63**	**8658787.84**	**8658788.05**	**0.0089**	**0.0025**	
Neptune	**18995-06-21 20:52**	**G**	**8659013.20**	**8659013.37**	**8659013.58**	**0.0089**	**0.0045**	
Neptune	**18996-02-02 10:19**	**G**	**8659238.79**	**8659238.93**	**8659239.09**	**0.0089**	**0.0065**	
Neptune	**18996-09-14 23:31**	**G**	**8659464.44**	**8659464.48**	**8659464.56**	**0.0089**	**0.0085**	
Jupiter	**18997-04-21 00:14**	**G**	**8659682.31**	**8659682.51**	**8659682.71**	**0.0523**	**0.0070**	
Moon	**18998-11-07 03:50**	**G**	**8660247.51**	**8660247.66**	**8660247.81**	**0.2686**	**0.0873**	
Earth	**18998-11-07 09:21**	**G**	**8660247.73**	**8660247.89**	**8660248.05**	**0.2684**	**0.0066**	*****

20TH MILLENNIUM CE

This is a list of transits of Venus in the 20th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**19005-08-03 11:31**	**G**	**8662707.78**	**8662707.98**	**8662708.18**	**0.0275**	**0.0098**	
Saturn	**19006-03-20 19:12**	**G**	**8662937.10**	**8662937.30**	**8662937.50**	**0.0275**	**0.0099**	
Mars	**19009-01-25 16:48**	**G**	**8663979.03**	**8663979.20**	**8663979.38**	**0.1947**	**0.0323**	
Mars	**19011-10-30 23:02**	**G**	**8664987.36**	**8664987.46**	**8664987.56**	**0.1595**	**0.1307**	
Jupiter	**19014-11-05 13:12**	**G**	**8666088.91**	**8666089.05**	**8666089.19**	**0.0502**	**0.0360**	
Saturn	**19020-01-18 00:28**	**G**	**8667988.33**	**8667988.52**	**8667988.71**	**0.0284**	**0.0119**	
Saturn	**19020-09-03 16:33**	**G**	**8668217.99**	**8668218.19**	**8668218.39**	**0.0284**	**0.0100**	
Uranus	**19025-12-07 18:57**	**G**	**8670139.14**	**8670139.29**	**8670139.44**	**0.0145**	**0.0104**	
Jupiter	**19026-07-11 11:16**	**G**	**8670354.77**	**8670354.97**	**8670355.17**	**0.0505**	**0.0100**	
Uranus	**19026-07-22 07:26**	**G**	**8670365.61**	**8670365.81**	**8670366.01**	**0.0145**	**0.0056**	
Uranus	**19027-03-05 19:55**	**G**	**8670592.11**	**8670592.33**	**8670592.55**	**0.0145**	**0.0008**	

Uranus 19027-10-18 08:24 G 8670818.64 8670818.85 8670819.06 0.0145 0.0040

Uranus 19028-05-31 20:38 G 8671045.20 8671045.36 8671045.54 0.0145 0.0088

Uranus 19029-01-13 09:07 G 8671271.81 8671271.88 8671271.97 0.0145 0.0136

Jupiter 19032-12-28 17:45 G 8672717.06 8672717.24 8672717.42 0.0525 0.0242

Saturn 19034-06-29 08:24 G 8673264.82 8673264.85 8673264.91 0.0275 0.0267

Saturn 19035-02-13 16:04 G 8673493.97 8673494.17 8673494.38 0.0275 0.0072

Saturn 19035-10-01 00:14 G 8673723.32 8673723.51 8673723.70 0.0275 0.0126

Mars 19043-10-29 13:26 G 8676673.89 8676674.06 8676674.24 0.1592 0.0090

Jupiter 19044-09-02 07:55 G 8676982.66 8676982.83 8676983.00 0.0522 0.0286

Saturn 19049-07-30 12:00 G 8678774.80 8678775.00 8678775.21 0.0285 0.0080

Saturn 19050-03-17 04:04 G 8679004.49 8679004.67 8679004.86 0.0284 0.0139

Jupiter 19062-03-18 23:45 G 8683389.29 8683389.49 8683389.68 0.0504 0.0170

Saturn 19064-01-09 13:55 G 8684051.00 8684051.08 8684051.19 0.0274 0.0241

Saturn 19064-08-25 21:36 G 8684280.20 8684280.40 8684280.61 0.0275 0.0046

Saturn 19065-04-12 05:16 G 8684509.55 8684509.72 8684509.91 0.0275 0.0152

Uranus 19067-06-17 18:57 G 8685306.17 8685306.29 8685306.41 0.0133 0.0111

Uranus 19068-01-30 00:00 G 8685532.33 8685532.50 8685532.69 0.0133 0.0075

Uranus 19068-09-12 05:16 G 8685758.52 8685758.72 8685758.93 0.0133 0.0039

Uranus 19069-04-26 10:33 G 8685984.72 8685984.94 8685985.16 0.0133 0.0002

Uranus 19069-12-08 15:36 G 8686210.94 8686211.15 8686211.36 0.0133 0.0034

Uranus 19070-07-22 20:24 G 8686437.18 8686437.35 8686437.55 0.0133 0.0071

Uranus 19071-03-06 01:40 G 8686663.46 8686663.57 8686663.72 0.0133 0.0107

Neptune 19073-04-12 22:33 G 8687432.33 8687432.44 8687432.58 0.0088 0.0072

Pluto 19073-07-02 03:50 G 8687512.54 8687512.66 8687512.81 0.0077 0.0061

Jupiter 19073-11-21 23:31 G 8687655.31 8687655.48 8687655.65 0.0506 0.0283

Neptune 19073-11-24 11:16 G 8687657.81 8687657.97 8687658.17 0.0088 0.0052

Pluto 19074-02-12 12:57 G 8687737.83 8687738.04 8687738.27 0.0077 0.0011

Neptune 19074-07-08 00:14 G 8687883.32 8687883.51 8687883.73 0.0088 0.0033

Mars 19074-11-22 18:14 G 8688021.08 8688021.26 8688021.43 0.1945 0.0388

Neptune 19075-02-18 13:26 G 8688108.84 8688109.06 8688109.27 0.0088 0.0013

Neptune 19075-10-02 02:09 G 8688334.37 8688334.59 8688334.81 0.0088 0.0007

Mars 19075-10-28 03:36 G 8688360.58 8688360.65 8688360.72 0.1589 0.1456

Neptune 19076-05-14 14:38 G 8688559.91 8688560.11 8688560.33 0.0088 0.0027

Neptune 19076-12-26 03:21 G 8688785.47 8688785.64 8688785.84 0.0088 0.0047

Neptune 19077-08-08 16:04 G 8689011.04 8689011.17 8689011.33 0.0088 0.0066

Mars 19077-08-27 12:00 G 8689029.94 8689030.00 8689030.06 0.1596 0.1484

Neptune 19078-03-22 05:02 G 8689236.67 8689236.71 8689236.77 0.0088 0.0085

Saturn 19078-06-24 21:21 G 8689331.35 8689331.39 8689331.43 0.0284 0.0278

Saturn 19079-02-09 13:55 G 8689560.87 8689561.08 8689561.29 0.0284 0.0059

Saturn 19079-09-27 05:45 G 8689790.57 8689790.74 8689790.92 0.0283 0.0160

Jupiter 19080-05-11 00:28 G 8690017.32 8690017.52 8690017.72 0.0524 0.0019

Jupiter 19092-01-14 18:00 G 8694283.18 8694283.25 8694283.32 0.0521 0.0487

Saturn 19093-07-21 17:16 G 8694837.10 8694837.22 8694837.36 0.0275 0.0218

Saturn 19094-03-08 00:57 G 8695066.33 8695066.54 8695066.76 0.0275 0.0022

Saturn 19094-10-23 09:07 G 8695295.72 8695295.88 8695296.04 0.0276 0.0177

Jupiter 19097-11-24 09:36 G 8696423.79 8696423.90 8696424.01 0.0502 0.0421

Saturn 19108-01-06 07:40 G 8700117.72 8700117.82 8700117.94 0.0285 0.0242

Saturn 19108-08-23 00:28 G 8700347.31 8700347.52 8700347.73 0.0285 0.0022

Saturn 19109-04-09 16:19 G 8700577.03 8700577.18 8700577.34 0.0284 0.0197

Jupiter 19109-07-31 09:50 G 8700689.70 8700689.91 8700690.11 0.0505 0.0026

Uranus 19109-08-08 02:09 G 8700697.49 8700697.59 8700697.72 0.0145 0.0124

Mars 19109-08-27 02:09 G 8700716.42 8700716.59 8700716.77 0.1593 0.0097

Uranus 19110-03-22 14:52 G 8700923.94 8700924.12 8700924.31 0.0145 0.0076

Uranus 19110-11-04 03:21 G 8701150.43 8701150.64 8701150.86 0.0145 0.0028

Uranus 19111-06-18 15:50 G 8701376.95 8701377.16 8701377.38 0.0145 0.0020

Uranus 19112-01-31 04:19 G 8701603.49 8701603.68 8701603.87 0.0145 0.0068

Uranus 19112-09-13 16:48 G 8701830.08 8701830.20 8701830.34 0.0145 0.0115

Jupiter 19116-01-18 13:26 G 8703051.90 8703052.06 8703052.23 0.0525 0.0305

Earth 19120-05-11 09:07 G 8704626.74 8704626.88 8704627.03 0.2648 0.1079

Moon 19120-05-11 09:21 G 8704626.75 8704626.89 8704627.03 0.2654 0.0982 *

Jupiter 19121-04-05 09:21 G 8704955.83 8704955.89 8704955.96 0.0508 0.0480

Saturn 19123-02-01 23:16 G 8705623.32 8705623.47 8705623.62 0.0274 0.0191

Saturn 19123-09-19 06:43 G 8705852.57 8705852.78 8705852.99 0.0275 0.0005

Saturn 19124-05-05 14:24 G 8706081.96 8706082.10 8706082.25 0.0275 0.0202

Jupiter 19127-09-23 06:28 G 8707317.58 8707317.77 8707317.96 0.0522 0.0208

Earth 19128-05-09 01:40 G 8707546.52 8707546.57 8707546.62 0.2647 0.2491

Moon 19128-05-09 05:31 G 8707546.62 8707546.73 8707546.85 0.2652 0.1742 *

Saturn 19137-07-18 09:36 G 8710903.77 8710903.90 8710904.03 0.0284 0.0221

Saturn 19138-03-05 02:09 G 8711133.38 8711133.59 8711133.80 0.0284 0.0001

Saturn 19138-10-20 17:45 G 8711363.11 8711363.24 8711363.38 0.0283 0.0217

Mars 19140-09-19 18:57 G 8712063.15 8712063.29 8712063.44 0.1943 0.1100

Mars 19141-08-25 16:33 G 8712403.09 8712403.19 8712403.29 0.1590 0.1285

Jupiter 19145-04-07 21:36 G 8713724.23 8713724.40 8713724.58 0.0503 0.0241

Uranus 19151-02-16 06:14 G 8715864.70 8715864.76 8715864.84 0.0133 0.0125

Uranus 19151-09-30 11:31 G 8716090.82 8716090.98 8716091.15 0.0133 0.0089

Uranus 19152-05-13 16:33 G 8716317.00 8716317.19 8716317.40 0.0133 0.0053

Saturn 19152-08-14 01:12 G 8716409.38 8716409.55 8716409.71 0.0275 0.0170

Uranus 19152-12-25 21:50 G 8716543.19 8716543.41 8716543.63 0.0133 0.0017

Saturn 19153-03-31 08:38 G 8716638.65 8716638.86 8716639.07 0.0275 0.0027

Uranus 19153-08-09 02:52 G 8716769.41 8716769.62 8716769.84 0.0133 0.0020

Saturn 19153-11-15 16:33 G 8716868.08 8716868.19 8716868.32 0.0276 0.0225

Uranus 19154-03-23 07:55 G 8716995.64 8716995.83 8716996.04 0.0133 0.0056

Uranus 19154-11-04 12:57 G 8717221.90 8717222.04 8717222.21 0.0133 0.0092

Uranus 19155-06-18 18:00 G 8717448.21 8717448.25 8717448.32 0.0133 0.0128

Neptune 19156-01-10 22:48 G 8717654.41 8717654.45 8717654.51 0.0089 0.0086

Neptune 19156-08-23 12:00 G 8717879.87 8717880.00 8717880.16 0.0089 0.0066

Jupiter 19156-12-11 20:52 G 8717990.19 8717990.37 8717990.56 0.0506 0.0214

Neptune 19157-04-06 01:12 G 8718105.37 8718105.55 8718105.75 0.0089 0.0046

Neptune 19157-11-17 14:24 G 8718330.90 8718331.10 8718331.32 0.0089 0.0026

Neptune 19158-07-01 03:36 G 8718556.43 8718556.65 8718556.87 0.0089 0.0006

Neptune 19159-02-11 17:02 G 8718781.99 8718782.21 8718782.43 0.0089 0.0014

Neptune 19159-09-25 05:45 G 8719007.55 8719007.74 8719007.96 0.0089 0.0035

Neptune 19160-05-07 18:57 G 8719233.13 8719233.29 8719233.48 0.0089 0.0055

Neptune 19160-12-19 08:09 G 8719458.74 8719458.84 8719458.97 0.0089 0.0075

Jupiter 19163-05-31 21:50 G 8720352.21 8720352.41 8720352.61 0.0524 0.0092

Saturn 19167-01-28 19:12 G 8721690.14 8721690.30 8721690.46 0.0285 0.0186

Saturn 19167-09-15 11:45 G 8721919.78 8721919.99 8721920.20 0.0285 0.0035

Saturn 19168-05-02 03:36 G 8722149.56 8722149.65 8722149.75 0.0284 0.0252

Jupiter 19175-02-03 14:52 G 8724618.00 8724618.12 8724618.24 0.0521 0.0418

Mars 19175-06-24 15:07 G 8724758.96 8724759.13 8724759.31 0.1594 0.0273

Saturn 19182-02-24 07:12 G 8727195.63 8727195.80 8727195.99 0.0274 0.0143

Saturn 19182-10-11 14:38 G 8727424.90 8727425.11 8727425.32 0.0274 0.0053

Saturn 19183-05-28 22:19 G 8727654.35 8727654.43 8727654.52 0.0275 0.0250

Jupiter 19192-08-19 10:19 G 8731024.73 8731024.93 8731025.14 0.0505 0.0064

Uranus 19193-04-07 09:07 G 8731255.85 8731255.88 8731255.91 0.0145 0.0144

Uranus 19193-11-19 21:21 G 8731482.24 8731482.39 8731482.56 0.0146 0.0097

Uranus 19194-07-04 10:04 G 8731708.72 8731708.92 8731709.13 0.0146 0.0049

Uranus 19195-02-15 22:33 G 8731935.22 8731935.44 8731935.66 0.0146 0.0002

Uranus 19195-09-30 11:02 G 8732161.76 8732161.96 8732162.17 0.0146 0.0047

Uranus 19196-05-13 23:31 G 8732388.32 8732388.48 8732388.65 0.0146 0.0095

Saturn 19196-08-09 20:24 G 8732476.18 8732476.35 8732476.52 0.0285 0.0166

Uranus 19196-12-26 11:45 G 8732614.96 8732614.99 8732615.05 0.0145 0.0143

Saturn 19197-03-27 12:57 G 8732705.83 8732706.04 8732706.25 0.0284 0.0055

Saturn 19197-11-12 04:33 G 8732935.64 8732935.69 8732935.75 0.0283 0.0272

Jupiter 19199-02-06 14:38 G 8733386.99 8733387.11 8733387.25 0.0526 0.0401

Jupiter 19204-04-24 08:38 G 8735290.74 8735290.86 8735290.99 0.0507 0.0399

Mars 19206-07-17 20:09 G 8736105.28 8736105.34 8736105.40 0.1941 0.1812

Mars 19207-06-23 05:31 G 8736445.61 8736445.73 8736445.86 0.1590 0.1117

Jupiter 19210-10-12 08:09 G 8737652.64 8737652.84 8737653.04 0.0523 0.0111

Saturn 19211-09-06 08:09 G 8737981.65 8737981.84 8737982.03 0.0274 0.0124

Saturn 19212-04-22 15:21 G 8738210.94 8738211.14 8738211.35 0.0275 0.0073

Saturn 19212-12-07 23:16 G 8738440.44 8738440.47 8738440.52 0.0276 0.0270

Saturn 19226-02-20 04:33 G 8743262.51 8743262.69 8743262.89 0.0285 0.0135

Saturn 19226-10-07 21:21 G 8743492.19 8743492.39 8743492.59 0.0285 0.0087

Jupiter 19228-04-26 20:38 G 8744059.21 8744059.36 8744059.52 0.0504 0.0322

Pluto 19233-10-05 10:33 G 8746046.82 8746046.94 8746047.10 0.0067 0.0052

Pluto 19234-05-18 15:50 G 8746271.95 8746272.16 8746272.39 0.0067 0.0006

Pluto 19234-12-29 20:38 G 8746497.21 8746497.36 8746497.55 0.0068 0.0043

Uranus 19235-05-30 23:02 G 8746649.34 8746649.46 8746649.61 0.0133 0.0103

Uranus 19236-01-12 04:19 G 8746875.50 8746875.68 8746875.88 0.0133 0.0067

Uranus 19236-08-25 09:36 G 8747101.69 8747101.90 8747102.12 0.0133 0.0031

Uranus 19237-04-08 14:52 G 8747327.90 8747328.12 8747328.34 0.0133 0.0006

Neptune 19237-07-16 07:26 G 8747426.75 8747426.81 8747426.91 0.0088 0.0081

Uranus 19237-11-20 19:40 G 8747554.12 8747554.32 8747554.54 0.0133 0.0042

Neptune 19238-02-26 20:24 G 8747652.21 8747652.35 8747652.52 0.0088 0.0062

Uranus 19238-07-05 00:43 G 8747780.36 8747780.53 8747780.72 0.0133 0.0078

Mars 19238-07-18 02:09 G 8747793.52 8747793.59 8747793.67 0.1947 0.1742

Neptune 19238-10-10 09:07 G 8747877.71 8747877.88 8747878.09 0.0088 0.0042

Uranus 19239-02-16 05:45 G 8748006.64 8748006.74 8748006.86 0.0133 0.0114

Neptune 19239-05-23 22:04 G 8748103.22 8748103.42 8748103.64 0.0088 0.0023

Jupiter 19239-12-31 20:52 G 8748325.18 8748325.37 8748325.57 0.0506 0.0127

Neptune 19240-01-04 11:02 G 8748328.74 8748328.96 8748329.18 0.0088 0.0003

Neptune 19240-08-17 00:00 G 8748554.29 8748554.50 8748554.72 0.0088 0.0017

Saturn 19241-03-18 14:24 G 8748767.91 8748768.10 8748768.30 0.0274 0.0097

Neptune 19241-03-30 12:28 G 8748779.84 8748780.02 8748780.24 0.0088 0.0037

Mars 19241-04-21 04:04 G 8748801.51 8748801.67 8748801.84 0.1595 0.0450

Saturn 19241-11-02 21:36 G 8748997.21 8748997.40 8748997.60 0.0274 0.0099

Earth 19241-11-09 08:52 G 8749003.71 8749003.87 8749004.03 0.2684 0.0331

Moon 19241-11-09 14:38 G 8749003.95 8749004.11 8749004.26 0.2685 0.0691 *

Neptune 19241-11-11 01:26 G 8749005.40 8749005.56 8749005.74 0.0088 0.0056

Neptune 19242-06-24 13:40 G 8749230.99 8749231.07 8749231.21 0.0088 0.0077

Jupiter 19246-06-19 21:21 G 8750687.20 8750687.39 8750687.58 0.0524 0.0177

Saturn 19255-09-02 06:14 G 8754048.57 8754048.76 8754048.96 0.0285 0.0113

Saturn 19256-04-18 22:33 G 8754278.25 8754278.44 8754278.64 0.0284 0.0108

Jupiter 19258-02-22 15:50 G 8754953.01 8754953.16 8754953.33 0.0521 0.0326

Saturn 19270-02-11 07:26 G 8759324.79 8759324.81 8759324.83 0.0274 0.0272

Saturn 19270-09-28 14:24 G 8759553.89 8759554.10 8759554.30 0.0274 0.0079

Saturn 19271-05-15 21:36 G 8759783.21 8759783.40 8759783.59 0.0275 0.0118

Mars 19273-04-19 18:28 G 8760488.13 8760488.27 8760488.41 0.1591 0.0941

Jupiter 19275-09-08 09:36 G 8761359.70 8761359.90 8761360.09 0.0504 0.0142

Uranus 19277-07-20 04:19 G 8762040.56 8762040.68 8762040.81 0.0146 0.0117

Uranus 19278-03-03 16:33 G 8762267.02 8762267.19 8762267.40 0.0146 0.0070

Uranus 19278-10-16 05:31 G 8762493.52 8762493.73 8762493.95 0.0146 0.0021

Uranus 19279-05-30 18:00 G 8762720.04 8762720.25 8762720.47 0.0146 0.0027

Uranus 19280-01-12 06:14 G 8762946.59 8762946.76 8762946.96 0.0146 0.0075

Uranus 19280-08-25 18:57 G 8763173.18 8763173.29 8763173.41 0.0146 0.0122

Jupiter 19282-02-25 14:24 G 8763722.03 8763722.10 8763722.17 0.0525 0.0489

Saturn 19285-03-14 12:43 G 8764834.83 8764835.03 8764835.24 0.0285 0.0085

Saturn 19285-10-30 05:31 G 8765064.55 8765064.73 8765064.92 0.0285 0.0137

Jupiter 19287-05-14 07:40 G 8765625.67 8765625.82 8765625.98 0.0508 0.0319

Jupiter 19293-10-31 06:43 G 8767987.58 8767987.78 8767987.99 0.0522 0.0031

Saturn 19299-08-24 14:09 G 8770111.01 8770111.09 8770111.19 0.0273 0.0245

Saturn 19300-04-10 21:07 G 8770340.17 8770340.38 8770340.59 0.0274 0.0052

Saturn 19300-11-26 04:19 G 8770569.50 8770569.68 8770569.86 0.0274 0.0144

Mars 19304-05-15 02:38 G 8771835.46 8771835.61 8771835.76 0.1946 0.1004

Mars 19307-02-17 16:48 G 8772844.04 8772844.20 8772844.36 0.1596 0.0633

Jupiter 19311-05-17 22:04 G 8774394.32 8774394.42 8774394.54 0.0503 0.0415

Saturn 19314-02-07 21:36 G 8775391.39 8775391.40 8775391.42 0.0285 0.0284

Saturn 19314-09-25 14:38 G 8775620.91 8775621.11 8775621.32 0.0285 0.0063

Saturn 19315-05-13 06:57 G 8775850.63 8775850.79 8775850.98 0.0284 0.0158

Uranus 19319-01-29 11:02 G 8777207.87 8777207.96 8777208.07 0.0133 0.0116

Uranus 19319-09-12 16:19 G 8777434.01 8777434.18 8777434.36 0.0133 0.0080

Pluto 19320-03-14 01:40 G 8777617.47 8777617.57 8777617.68 0.0077 0.0068

Uranus 19320-04-25 21:36 G 8777660.19 8777660.40 8777660.60 0.0133 0.0044

Pluto 19320-10-25 10:48 G 8777842.73 8777842.95 8777843.17 0.0077 0.0004

Neptune 19320-11-25 20:09 G 8777874.25 8777874.34 8777874.47 0.0089 0.0077

Uranus 19320-12-08 02:24 G 8777886.39 8777886.60 8777886.82 0.0133 0.0009

Pluto 19321-06-07 19:12 G 8778068.28 8778068.30 8778068.37 0.0077 0.0075

Neptune 19321-07-09 09:50 G 8778099.74 8778099.91 8778100.08 0.0089 0.0056

Uranus 19321-07-22 07:26 G 8778112.60 8778112.81 8778113.03 0.0133 0.0028

Neptune 19322-02-19 23:02 G 8778325.27 8778325.46 8778325.67 0.0089 0.0036

Uranus 19322-03-05 12:28 G 8778338.84 8778339.02 8778339.22 0.0133 0.0064

Neptune 19322-10-03 12:14 G 8778550.80 8778551.01 8778551.23 0.0089 0.0016

Uranus 19322-10-17 17:16 G 8778565.10 8778565.22 8778565.38 0.0133 0.0100

Jupiter 19323-01-20 21:50 G 8778660.20 8778660.41 8778660.61 0.0505 0.0039

Neptune 19323-05-17 01:26 G 8778776.34 8778776.56 8778776.78 0.0089 0.0004

Neptune 19323-12-28 14:24 G 8779001.90 8779002.10 8779002.32 0.0089 0.0024

Neptune 19324-08-10 03:36 G 8779227.47 8779227.65 8779227.85 0.0089 0.0044

Neptune 19325-03-23 17:02 G 8779453.06 8779453.21 8779453.36 0.0089 0.0065

Neptune 19325-11-04 05:31 G 8779678.70 8779678.73 8779678.83 0.0089 0.0086

Saturn 19329-03-06 13:12 G 8780896.95 8780897.05 8780897.18 0.0274 0.0229

Jupiter 19329-07-10 00:28 G 8781022.35 8781022.52 8781022.69 0.0525 0.0284

Saturn 19329-10-21 20:09 G 8781126.13 8781126.34 8781126.55 0.0274 0.0035

Saturn 19330-06-08 03:21 G 8781355.47 8781355.64 8781355.82 0.0275 0.0162

Jupiter 19334-09-25 20:38 G 8782926.33 8782926.36 8782926.40 0.0508 0.0500

Mars 19339-02-16 07:40 G 8784530.67 8784530.82 8784530.97 0.1592 0.0771

Jupiter 19341-03-14 16:48 G 8785288.02 8785288.20 8785288.39 0.0521 0.0230

Saturn 19343-08-21 02:52 G 8786177.54 8786177.62 8786177.71 0.0286 0.0258

Saturn 19344-04-06 20:24 G 8786407.14 8786407.35 8786407.56 0.0285 0.0035

Saturn 19344-11-22 13:12 G 8786636.89 8786637.05 8786637.21 0.0285 0.0186

Saturn 19358-09-16 20:38 G 8791683.22 8791683.36 8791683.51 0.0273 0.0201

Jupiter 19358-09-28 09:21 G 8791694.71 8791694.89 8791695.07 0.0505 0.0229

Saturn 19359-05-04 03:21 G 8791912.43 8791912.64 8791912.85 0.0274 0.0007

Saturn 19359-12-19 10:19 G 8792141.79 8792141.93 8792142.09 0.0274 0.0189

Uranus 19361-03-20 10:19 G 8792598.86 8792598.93 8792599.00 0.0146 0.0138

Uranus 19361-11-01 22:33 G 8792825.28 8792825.44 8792825.62 0.0146 0.0091

Uranus 19362-06-16 11:16 G 8793051.76 8793051.97 8793052.18 0.0146 0.0043

Uranus 19363-01-28 23:45 G 8793278.27 8793278.49 8793278.71 0.0146 0.0005

Earth 19363-05-13 11:31 G 8793382.84 8793382.98 8793383.13 0.2648 0.1084

Moon 19363-05-13 13:40 G 8793382.92 8793383.07 8793383.22 0.2642 0.1164 *

Uranus 19363-09-12 12:14 G 8793504.82 8793505.01 8793505.22 0.0146 0.0053

Uranus 19364-04-26 00:57 G 8793731.38 8793731.54 8793731.70 0.0146 0.0100

Mars 19370-03-12 04:19 G 8795877.51 8795877.68 8795877.86 0.1944 0.0318

Jupiter 19370-06-03 09:36 G 8795960.72 8795960.90 8795961.09 0.0507 0.0223

Earth 19371-05-11 04:04 G 8796302.62 8796302.67 8796302.72 0.2648 0.2468

Mars 19372-12-15 06:00 G 8796886.60 8796886.75 8796886.90 0.1597 0.0809

Saturn 19373-03-02 05:31 G 8796963.61 8796963.73 8796963.85 0.0285 0.0235

Saturn 19373-10-17 22:33 G 8797193.23 8797193.44 8797193.65 0.0285 0.0014

Saturn 19374-06-04 14:52 G 8797422.99 8797423.12 8797423.27 0.0284 0.0207

Jupiter 19376-11-20 08:09 G 8798322.64 8798322.84 8798323.04 0.0523 0.0067

Saturn 19388-03-28 19:55 G 8802469.17 8802469.33 8802469.48 0.0274 0.0184

Jupiter 19388-07-26 02:38 G 8802588.51 8802588.61 8802588.73 0.0520 0.0433

Saturn 19388-11-13 02:24 G 8802698.39 8802698.60 8802698.82 0.0274 0.0011

Saturn 19389-06-30 09:36 G 8802927.76 8802927.90 8802928.04 0.0275 0.0206

Jupiter 19394-06-05 22:19 G 8804729.41 8804729.43 8804729.45 0.0503 0.0499

Neptune 19402-06-02 05:16 G 8807646.61 8807646.72 8807646.87 0.0088 0.0072

Saturn 19402-09-13 09:36 G 8807749.76 8807749.90 8807750.05 0.0286 0.0211

Uranus 19402-09-29 23:31 G 8807766.44 8807766.48 8807766.53 0.0133 0.0129

Neptune 19403-01-13 18:28 G 8807872.09 8807872.27 8807872.45 0.0088 0.0052

Saturn 19403-05-01 03:07 G 8807979.42 8807979.63 8807979.84 0.0285 0.0012

Uranus 19403-05-14 04:19 G 8807992.54 8807992.68 8807992.85 0.0133 0.0094

Neptune 19403-08-27 06:57 G 8808097.60 8808097.79 8808098.01 0.0088 0.0033

Saturn 19403-12-16 19:55 G 8808209.21 8808209.33 8808209.45 0.0285 0.0233

Uranus 19403-12-26 09:36 G 8808218.71 8808218.90 8808219.10 0.0133 0.0058

Neptune 19404-04-08 20:09 G 8808323.12 8808323.34 8808323.55 0.0088 0.0013

Uranus 19404-08-08 14:38 G 8808444.90 8808445.11 8808445.33 0.0133 0.0022

Neptune 19404-11-20 08:38 G 8808548.65 8808548.86 8808549.09 0.0088 0.0008

Mars 19404-12-14 20:24 G 8808573.19 8808573.35 8808573.51 0.1593 0.0591

Uranus 19405-03-22 19:55 G 8808671.12 8808671.33 8808671.55 0.0133 0.0014

Neptune 19405-07-03 21:07 G 8808774.19 8808774.38 8808774.61 0.0088 0.0028

Uranus 19405-11-04 00:57 G 8808897.34 8808897.54 8808897.74 0.0133 0.0050

Jupiter 19406-02-09 20:38 G 8808995.15 8808995.36 8808995.56 0.0506 0.0042

Neptune 19406-02-14 10:04 G 8808999.74 8808999.92 8809000.12 0.0088 0.0046

Uranus 19406-06-18 05:45 G 8809123.58 8809123.74 8809123.91 0.0133 0.0086

Neptune 19406-09-27 22:48 G 8809225.32 8809225.45 8809225.61 0.0088 0.0066

Uranus 19407-01-30 10:33 G 8809349.87 8809349.94 8809350.04 0.0133 0.0122

Neptune 19407-05-11 11:45 G 8809450.95 8809450.99 8809451.05 0.0088 0.0085

Jupiter 19412-07-30 00:14 G 8811357.37 8811357.51 8811357.65 0.0524 0.0373

Saturn 19417-10-10 03:21 G 8813255.47 8813255.64 8813255.82 0.0273 0.0155

Jupiter 19417-10-15 19:55 G 8813261.22 8813261.33 8813261.44 0.0509 0.0418

Saturn 19418-05-27 09:50 G 8813484.70 8813484.91 8813485.12 0.0274 0.0039

Saturn 19419-01-11 17:02 G 8813714.10 8813714.21 8813714.32 0.0274 0.0234

Jupiter 19424-04-03 16:33 G 8815622.99 8815623.19 8815623.38 0.0521 0.0144

Saturn 19432-03-25 13:12 G 8818535.90 8818536.05 8818536.22 0.0286 0.0186

Saturn 19432-11-10 06:28 G 8818765.56 8818765.77 8818765.98 0.0285 0.0037

Saturn 19433-06-27 22:48 G 8818995.37 8818995.45 8818995.55 0.0284 0.0257

Mars 19436-01-08 05:16 G 8819919.55 8819919.72 8819919.90 0.1942 0.0402

Mars 19438-10-13 18:57 G 8820929.15 8820929.29 8820929.42 0.1598 0.0995

Jupiter 19441-10-18 10:33 G 8822029.79 8822029.94 8822030.10 0.0504 0.0321

Uranus 19445-07-03 05:45 G 8823383.61 8823383.74 8823383.89 0.0146 0.0111

Uranus 19446-02-14 18:14 G 8823610.07 8823610.26 8823610.47 0.0146 0.0064

Uranus 19446-09-29 06:57 G 8823836.58 8823836.79 8823837.01 0.0146 0.0016

Saturn 19447-04-22 02:24 G 8824041.42 8824041.60 8824041.79 0.0273 0.0139

Uranus 19447-05-13 19:26 G 8824063.10 8824063.31 8824063.53 0.0146 0.0032

Saturn 19447-12-07 09:07 G 8824270.67 8824270.88 8824271.09 0.0274 0.0055

Uranus 19447-12-26 07:40 G 8824289.65 8824289.82 8824290.02 0.0146 0.0080

Saturn 19448-07-23 16:04 G 8824500.09 8824500.17 8824500.26 0.0275 0.0251

Uranus 19448-08-08 20:24 G 8824516.25 8824516.35 8824516.46 0.0146 0.0127

Jupiter 19453-06-23 10:04 G 8826295.72 8826295.92 8826296.12 0.0507 0.0135

Jupiter 19459-12-11 10:04 G 8828657.73 8828657.92 8828658.11 0.0523 0.0170

Saturn 19461-10-05 16:48 G 8829322.02 8829322.20 8829322.37 0.0286 0.0163

Saturn 19462-05-23 10:04 G 8829551.72 8829551.92 8829552.13 0.0285 0.0060

Saturn 19463-01-08 02:52 G 8829781.59 8829781.62 8829781.66 0.0285 0.0280

Mars 19470-10-12 09:36 G 8832615.74 8832615.90 8832616.07 0.1594 0.0423

Jupiter 19471-08-16 03:21 G 8832923.49 8832923.64 8832923.80 0.0520 0.0339

Saturn 19476-11-01 10:33 G 8834827.75 8834827.94 8834828.14 0.0273 0.0109

Saturn 19477-06-18 17:02 G 8835057.01 8835057.21 8835057.42 0.0274 0.0085

Pluto 19480-06-17 06:00 G 8836151.73 8836151.75 8836151.84 0.0067 0.0065

Pluto 19481-01-28 11:16 G 8836376.77 8836376.97 8836377.20 0.0067 0.0019

Pluto 19481-09-10 16:19 G 8836602.00 8836602.18 8836602.39 0.0067 0.0030

Moon 19484-11-11 03:07 G 8837759.50 8837759.63 8837759.76 0.2681 0.1540

Earth 19484-11-11 08:38 G 8837759.70 8837759.86 8837760.01 0.2683 0.0607 *

Neptune 19485-02-28 03:50 G 8837868.65 8837868.66 8837868.72 0.0089 0.0088

Neptune 19485-10-11 17:02 G 8838094.09 8838094.21 8838094.38 0.0089 0.0068

Neptune 19486-05-25 06:43 G 8838319.60 8838319.78 8838319.97 0.0089 0.0047

Neptune 19487-01-05 19:55 G 8838545.12 8838545.33 8838545.54 0.0089 0.0027

Uranus 19487-01-11 16:33 G 8838551.08 8838551.19 8838551.33 0.0133 0.0107

Neptune 19487-08-19 09:07 G 8838770.66 8838770.88 8838771.10 0.0089 0.0007

Uranus 19487-08-25 21:50 G 8838777.23 8838777.41 8838777.60 0.0133 0.0071

Neptune 19488-03-31 22:19 G 8838996.22 8838996.43 8838996.65 0.0089 0.0013

Uranus 19488-04-08 03:07 G 8839003.42 8839003.63 8839003.84 0.0133 0.0035

Neptune 19488-11-12 11:31 G 8839221.78 8839221.98 8839222.19 0.0089 0.0033

Uranus 19488-11-20 08:09 G 8839229.62 8839229.84 8839230.06 0.0133 0.0001

Jupiter 19489-02-28 22:04 G 8839330.22 8839330.42 8839330.62 0.0506 0.0135

Neptune 19489-06-26 00:43 G 8839447.36 8839447.53 8839447.71 0.0089 0.0054

Uranus 19489-07-04 12:57 G 8839455.84 8839456.04 8839456.25 0.0133 0.0037

Neptune 19490-02-06 13:26 G 8839672.96 8839673.06 8839673.21 0.0089 0.0074

Uranus 19490-02-15 17:45 G 8839682.07 8839682.24 8839682.44 0.0133 0.0073

Uranus 19490-09-29 22:48 G 8839908.34 8839908.45 8839908.59 0.0133 0.0108

Saturn 19491-04-17 21:21 G 8840108.21 8840108.39 8840108.58 0.0286 0.0136

Saturn 19491-12-03 14:24 G 8840337.90 8840338.10 8840338.31 0.0285 0.0087

Jupiter 19495-08-19 00:43 G 8841692.44 8841692.53 8841692.63 0.0525 0.0464

Jupiter 19500-11-04 21:21 G 8843596.24 8843596.39 8843596.55 0.0508 0.0324

Mars 19501-11-05 06:57 G 8843961.65 8843961.79 8843961.94 0.1940 0.1095

Mars 19504-08-11 07:40 G 8844971.71 8844971.82 8844971.94 0.1599 0.1174

Saturn 19506-05-15 09:50 G 8845613.72 8845613.91 8845614.12 0.0273 0.0092

Saturn 19506-12-30 16:33 G 8845842.99 8845843.19 8845843.38 0.0274 0.0102

Jupiter 19507-04-24 18:57 G 8845958.09 8845958.29 8845958.50 0.0522 0.0044

Saturn 19520-10-29 00:14 G 8850894.32 8850894.51 8850894.71 0.0286 0.0114

Saturn 19521-06-15 17:45 G 8851124.05 8851124.24 8851124.44 0.0285 0.0110

Jupiter 19524-11-07 08:24 G 8852364.73 8852364.85 8852364.98 0.0504 0.0394

Uranus 19529-03-03 12:28 G 8853941.94 8853942.02 8853942.12 0.0146 0.0132

Uranus 19529-10-16 01:12 G 8854168.38 8854168.55 8854168.73 0.0146 0.0084

Uranus 19530-05-30 13:40 G 8854394.86 8854395.07 8854395.28 0.0146 0.0037

Uranus 19531-01-12 02:09 G 8854621.37 8854621.59 8854621.81 0.0146 0.0011

Uranus 19531-08-26 14:38 G 8854847.92 8854848.11 8854848.31 0.0146 0.0059

Uranus 19532-04-09 03:07 G 8855074.49 8855074.63 8855074.79 0.0146 0.0106

Saturn 19535-04-10 12:14 G 8856170.93 8856171.01 8856171.09 0.0273 0.0253

Saturn 19535-11-25 18:28 G 8856400.06 8856400.27 8856400.47 0.0273 0.0062

Saturn 19536-07-12 00:57 G 8856629.36 8856629.54 8856629.73 0.0274 0.0133

Jupiter 19536-07-13 07:55 G 8856630.62 8856630.83 8856631.03 0.0507 0.0062

Mars 19536-08-09 22:19 G 8856658.26 8856658.43 8856658.60 0.1595 0.0240

Jupiter 19542-12-31 08:38 G 8858992.69 8858992.86 8858993.04 0.0523 0.0249

Saturn 19550-05-11 06:28 G 8861680.57 8861680.77 8861680.98 0.0286 0.0084

Saturn 19550-12-26 23:31 G 8861910.30 8861910.48 8861910.67 0.0285 0.0139

Jupiter 19554-09-05 02:52 G 8863258.44 8863258.62 8863258.80 0.0520 0.0257

Saturn 19564-10-20 12:14 G 8866956.91 8866957.01 8866957.12 0.0273 0.0235

Saturn 19565-06-06 18:28 G 8867186.06 8867186.27 8867186.48 0.0273 0.0043

Saturn 19566-01-22 00:57 G 8867415.37 8867415.54 8867415.72 0.0274 0.0151

Neptune 19566-09-04 14:09 G 8867641.02 8867641.09 8867641.19 0.0088 0.0081

Neptune 19567-04-18 02:38 G 8867866.48 8867866.61 8867866.79 0.0088 0.0062

Pluto 19567-07-08 04:48 G 8867947.49 8867947.70 8867947.92 0.0077 0.0017

Mars 19567-09-02 08:09 G 8868003.78 8868003.84 8868003.91 0.1938 0.1796

Neptune 19567-11-29 15:36 G 8868091.97 8868092.15 8868092.36 0.0088 0.0043

Pluto 19568-02-18 13:40 G 8868172.92 8868173.07 8868173.23 0.0077 0.0054

Neptune 19568-07-12 04:33 G 8868317.48 8868317.69 8868317.91 0.0088 0.0023

Neptune 19569-02-22 17:31 G 8868543.01 8868543.23 8868543.45 0.0088 0.0003

Neptune 19569-10-06 06:14 G 8868768.54 8868768.76 8868768.98 0.0088 0.0017

Neptune 19570-05-19 18:43 G 8868994.09 8868994.28 8868994.49 0.0088 0.0036

Mars 19570-06-08 20:24 G 8869014.27 8869014.35 8869014.44 0.1601 0.1365

Uranus 19570-09-12 05:02 G 8869109.64 8869109.71 8869109.82 0.0133 0.0120

Neptune 19570-12-31 07:12 G 8869219.65 8869219.80 8869219.99 0.0088 0.0056

Uranus 19571-04-26 10:19 G 8869335.77 8869335.93 8869336.11 0.0133 0.0084

Neptune 19571-08-13 20:24 G 8869445.25 8869445.35 8869445.47 0.0088 0.0075

Uranus 19571-12-08 15:21 G 8869561.94 8869562.14 8869562.35 0.0133 0.0049

Jupiter 19572-03-20 21:50 G 8869665.23 8869665.41 8869665.60 0.0505 0.0218

Uranus 19572-07-21 20:24 G 8869788.14 8869788.35 8869788.57 0.0133 0.0013

Uranus 19573-03-05 01:40 G 8870014.35 8870014.57 8870014.78 0.0133 0.0023

Uranus 19573-10-17 06:28 G 8870240.58 8870240.77 8870240.97 0.0133 0.0059

Uranus 19574-05-31 11:16 G 8870466.83 8870466.97 8870467.13 0.0133 0.0095

Uranus 19575-01-12 16:19 G 8870693.15 8870693.18 8870693.22 0.0133 0.0130

Saturn 19579-04-05 14:52 G 8872237.11 8872237.12 8872237.15 0.0286 0.0285

Saturn 19579-11-21 08:52 G 8872466.67 8872466.87 8872467.08 0.0286 0.0062

Saturn 19580-07-08 02:09 G 8872696.43 8872696.59 8872696.78 0.0285 0.0162

Jupiter 19583-11-24 18:14 G 8873931.09 8873931.26 8873931.44 0.0508 0.0256

Jupiter 19590-05-13 19:26 G 8876293.11 8876293.31 8876293.51 0.0522 0.0049

Saturn 19594-05-02 20:52 G 8877743.23 8877743.37 8877743.51 0.0273 0.0204

Saturn 19594-12-18 03:07 G 8877972.42 8877972.63 8877972.85 0.0273 0.0013

Saturn 19595-08-04 10:04 G 8878201.76 8878201.92 8878202.08 0.0274 0.0183

Mars 19599-09-02 13:12 G 8879691.97 8879692.05 8879692.13 0.1945 0.1726

Jupiter 19602-01-16 11:31 G 8880558.89 8880558.98 8880559.06 0.0519 0.0465

Mars 19602-06-07 11:31 G 8880700.80 8880700.98 8880701.15 0.1596 0.0072

Moon 19606-05-15 10:19 G 8882138.79 8882138.93 8882139.07 0.2653 0.1002

Earth 19606-05-15 14:09 G 8882138.95 8882139.09 8882139.24 0.2648 0.1104 *

Jupiter 19607-11-27 08:24 G 8882699.79 8882699.85 8882699.92 0.0504 0.0478

Saturn 19608-10-15 23:02 G 8883023.37 8883023.46 8883023.57 0.0286 0.0251

Saturn 19609-06-02 16:48 G 8883252.99 8883253.20 8883253.41 0.0286 0.0029

Saturn 19610-01-18 09:36 G 8883482.76 8883482.90 8883483.07 0.0285 0.0194

Uranus 19613-06-15 09:36 G 8884726.75 8884726.90 8884727.06 0.0146 0.0103

Uranus 19614-01-27 22:04 G 8884953.22 8884953.42 8884953.62 0.0146 0.0056

Moon 19614-05-13 06:28 G 8885058.71 8885058.77 8885058.82 0.2654 0.2447

Earth 19614-05-13 06:28 G 8885058.71 8885058.77 8885058.82 0.2648 0.2474 *

Uranus 19614-09-11 10:48 G 8885179.73 8885179.95 8885180.17 0.0146 0.0008

Uranus 19615-04-25 23:02 G 8885406.26 8885406.46 8885406.68 0.0146 0.0040

Uranus 19615-12-08 11:31 G 8885632.81 8885632.98 8885633.16 0.0146 0.0087

Uranus 19616-07-21 23:45 G 8885859.43 8885859.49 8885859.59 0.0146 0.0135

Jupiter 19619-08-02 08:24 G 8886965.65 8886965.85 8886966.06 0.0506 0.0028

Saturn 19623-11-12 22:04 G 8888529.26 8888529.42 8888529.57 0.0273 0.0184

Saturn 19624-06-29 04:19 G 8888758.46 8888758.68 8888758.89 0.0273 0.0010

Saturn 19625-02-13 10:48 G 8888987.81 8888987.95 8888988.09 0.0274 0.0202

Jupiter 19626-01-19 09:50 G 8889327.76 8889327.91 8889328.07 0.0524 0.0344

Jupiter 19631-04-07 07:12 G 8891231.70 8891231.80 8891231.90 0.0509 0.0438

Mars 19634-06-06 02:09 G 8892387.53 8892387.59 8892387.65 0.1592 0.1474

Mars 19636-04-05 09:21 G 8893056.85 8893056.89 8893056.94 0.1602 0.1546

Jupiter 19637-09-24 04:19 G 8893593.49 8893593.68 8893593.88 0.0520 0.0159

Saturn 19638-04-28 01:12 G 8893809.44 8893809.55 8893809.69 0.0286 0.0230

Saturn 19638-12-13 19:12 G 8894039.09 8894039.30 8894039.51 0.0286 0.0007

Saturn 19639-07-31 12:14 G 8894268.89 8894269.01 8894269.16 0.0285 0.0216

Neptune 19650-01-14 00:43 G 8898088.44 8898088.53 8898088.64 0.0089 0.0079

Neptune 19650-08-27 13:55 G 8898313.93 8898314.08 8898314.26 0.0089 0.0059

Neptune 19651-04-10 03:07 G 8898539.45 8898539.63 8898539.84 0.0089 0.0039

Neptune 19651-11-21 16:48 G 8898764.98 8898765.20 8898765.41 0.0089 0.0019

Neptune 19652-07-04 06:00 G 8898990.52 8898990.75 8898990.97 0.0089 0.0003

Neptune 19653-02-14 18:57 G 8899216.09 8899216.29 8899216.51 0.0089 0.0022

Saturn 19653-05-25 06:28 G 8899315.60 8899315.77 8899315.95 0.0273 0.0153

Neptune 19653-09-28 08:09 G 8899441.66 8899441.84 8899442.04 0.0089 0.0042

Saturn 19654-01-09 12:57 G 8899544.83 8899545.04 8899545.25 0.0273 0.0041

Neptune 19654-05-11 21:21 G 8899667.24 8899667.39 8899667.55 0.0089 0.0062

Uranus 19654-05-12 17:45 G 8899668.24 8899668.24 8899668.25 0.0133 0.0133

Saturn 19654-08-26 19:55 G 8899774.23 8899774.33 8899774.44 0.0274 0.0235

Neptune 19654-12-23 10:19 G 8899892.86 8899892.93 8899893.02 0.0089 0.0083

Uranus 19654-12-24 22:48 G 8899894.31 8899894.45 8899894.60 0.0133 0.0097

Jupiter 19655-04-09 17:45 G 8900000.08 8900000.24 8900000.41 0.0505 0.0281

Uranus 19655-08-08 03:36 G 8900120.47 8900120.65 8900120.86 0.0133 0.0062

Uranus 19656-03-21 09:07 G 8900346.67 8900346.88 8900347.10 0.0133 0.0026

Uranus 19656-11-02 14:09 G 8900572.87 8900573.09 8900573.31 0.0133 0.0010

Uranus 19657-06-16 18:57 G 8900799.09 8900799.29 8900799.50 0.0133 0.0046

Uranus 19658-01-28 23:31 G 8901025.33 8901025.48 8901025.67 0.0133 0.0082

Uranus 19658-09-12 04:48 G 8901251.61 8901251.70 8901251.81 0.0133 0.0117

Mars 19665-06-29 15:07 G 8903733.98 8903734.13 8903734.28 0.1943 0.1034

Jupiter 19666-12-13 17:45 G 8904266.05 8904266.24 8904266.43 0.0508 0.0175

Saturn 19667-11-08 11:02 G 8904595.80 8904595.96 8904596.11 0.0286 0.0193

Mars 19668-04-04 00:14 G 8904743.34 8904743.51 8904743.69 0.1598 0.0116

Saturn 19668-06-25 04:33 G 8904825.48 8904825.69 8904825.90 0.0286 0.0030

Saturn 19669-02-09 21:07 G 8905055.30 8905055.38 8905055.50 0.0285 0.0251

Jupiter 19673-06-01 16:33 G 8906628.00 8906628.19 8906628.39 0.0522 0.0120

Saturn 19682-12-05 08:38 G 8910101.68 8910101.86 8910102.05 0.0273 0.0131

Saturn 19683-07-22 15:07 G 8910330.92 8910331.13 8910331.33 0.0274 0.0062

Saturn 19684-03-07 21:50 G 8910560.34 8910560.41 8910560.48 0.0274 0.0255

Jupiter 19685-02-04 11:16 G 8910893.84 8910893.97 8910894.11 0.0519 0.0380

Uranus 19697-02-12 16:48 G 8915285.09 8915285.20 8915285.32 0.0146 0.0123

Saturn 19697-05-20 13:12 G 8915381.88 8915382.05 8915382.22 0.0286 0.0172

Uranus 19697-09-27 05:16 G 8915511.55 8915511.72 8915511.92 0.0146 0.0076

Saturn 19698-01-05 06:43 G 8915611.58 8915611.78 8915611.99 0.0286 0.0051

Uranus 19698-05-11 18:00 G 8915738.04 8915738.25 8915738.46 0.0146 0.0028

Saturn 19698-08-23 00:00 G 8915841.44 8915841.50 8915841.56 0.0285 0.0271

Uranus 19698-12-24 06:14 G 8915964.55 8915964.76 8915964.98 0.0146 0.0020

Uranus 19699-08-07 18:57 G 8916191.10 8916191.29 8916191.48 0.0146 0.0067

Uranus 19700-03-22 07:12 G 8916417.68 8916417.80 8916417.95 0.0146 0.0115

Mars 19700-04-03 14:52 G 8916430.03 8916430.12 8916430.22 0.1594 0.1297

Jupiter 19702-08-22 04:04 G 8917300.47 8917300.67 8917300.87 0.0506 0.0087

Jupiter 19709-02-08 09:21 G 8919662.79 8919662.89 8919663.02 0.0523 0.0431

Saturn 19712-06-17 17:02 G 8920888.02 8920888.21 8920888.41 0.0273 0.0100

Saturn 19713-02-01 23:45 G 8921117.29 8921117.49 8921117.69 0.0274 0.0094

Jupiter 19714-04-27 02:09 G 8921566.46 8921566.59 8921566.72 0.0509 0.0382

Jupiter 19720-10-14 00:28 G 8923928.32 8923928.52 8923928.72 0.0520 0.0097

Saturn 19726-12-02 00:00 G 8926168.32 8926168.50 8926168.69 0.0286 0.0133

Saturn 19727-07-19 17:16 G 8926398.03 8926398.22 8926398.43 0.0286 0.0090

Pluto 19727-10-11 05:16 G 8926481.55 8926481.72 8926481.92 0.0067 0.0036

Earth 19727-11-14 07:55 G 8926515.68 8926515.83 8926515.98 0.2683 0.0919

Moon 19727-11-14 12:28 G 8926515.87 8926516.02 8926516.17 0.2688 0.0307 *

Pluto 19728-05-23 10:19 G 8926706.72 8926706.93 8926707.16 0.0067 0.0011

Pluto 19729-01-03 15:07 G 8926932.04 8926932.13 8926932.26 0.0068 0.0059

Mars 19731-04-27 15:50 G 8927775.99 8927776.16 8927776.34 0.1941 0.0310

Neptune 19731-07-21 11:02 G 8927860.86 8927860.96 8927861.11 0.0088 0.0073

Neptune 19732-03-03 00:14 G 8928086.34 8928086.51 8928086.69 0.0088 0.0052

Neptune 19732-10-14 12:43 G 8928311.84 8928312.03 8928312.25 0.0088 0.0033

Neptune 19733-05-28 01:40 G 8928537.36 8928537.57 8928537.79 0.0088 0.0013

Neptune 19734-01-08 14:24 G 8928762.89 8928763.10 8928763.32 0.0088 0.0007

Mars 19734-01-31 13:12 G 8928785.88 8928786.05 8928786.22 0.1599 0.0298

Neptune 19734-08-22 03:07 G 8928988.43 8928988.63 8928988.85 0.0088 0.0026

Neptune 19735-04-04 15:50 G 8929213.98 8929214.16 8929214.36 0.0088 0.0046

Neptune 19735-11-16 04:19 G 8929439.55 8929439.68 8929439.85 0.0088 0.0065

Neptune 19736-06-28 17:16 G 8929665.17 8929665.22 8929665.29 0.0088 0.0084

Jupiter 19738-04-29 17:02 G 8930335.08 8930335.21 8930335.36 0.0505 0.0362

Uranus 19738-08-25 11:16 G 8930452.87 8930452.97 8930453.11 0.0133 0.0110

Uranus 19739-04-08 16:48 G 8930679.02 8930679.20 8930679.38 0.0133 0.0074

Uranus 19739-11-20 21:36 G 8930905.20 8930905.40 8930905.62 0.0133 0.0039

Uranus 19740-07-04 02:52 G 8931131.40 8931131.62 8931131.83 0.0133 0.0004

Uranus 19741-02-15 07:40 G 8931357.61 8931357.82 8931358.04 0.0133 0.0033

Saturn 19741-05-13 13:55 G 8931445.05 8931445.08 8931445.13 0.0273 0.0268

Uranus 19741-09-29 12:28 G 8931583.85 8931584.02 8931584.22 0.0133 0.0069

Saturn 19741-12-28 20:09 G 8931674.14 8931674.34 8931674.54 0.0273 0.0077

Uranus 19742-05-13 17:45 G 8931810.11 8931810.24 8931810.37 0.0133 0.0104

Saturn 19742-08-15 02:38 G 8931903.42 8931903.61 8931903.81 0.0274 0.0117

Jupiter 19750-01-02 16:19 G 8934600.98 8934601.18 8934601.38 0.0507 0.0098

Saturn 19756-06-13 02:24 G 8936954.41 8936954.60 8936954.80 0.0286 0.0111

Jupiter 19756-06-21 17:02 G 8936963.03 8936963.21 8936963.40 0.0522 0.0212

Saturn 19757-01-28 19:55 G 8937184.14 8937184.33 8937184.53 0.0285 0.0112

Mars 19766-01-30 04:04 G 8940472.55 8940472.67 8940472.79 0.1595 0.1128

Jupiter 19768-02-25 10:48 G 8941228.78 8941228.95 8941229.11 0.0519 0.0297

Saturn 19770-11-23 21:36 G 8942231.31 8942231.40 8942231.51 0.0273 0.0238

Saturn 19771-07-11 04:19 G 8942460.47 8942460.68 8942460.89 0.0273 0.0045

Saturn 19772-02-25 11:02 G 8942689.78 8942689.96 8942690.14 0.0274 0.0149

Uranus 19780-10-14 01:12 G 8945843.50 8945843.55 8945843.60 0.0146 0.0141

Uranus 19781-05-28 13:40 G 8946069.90 8946070.07 8946070.23 0.0146 0.0094

Uranus 19782-01-10 01:55 G 8946296.38 8946296.58 8946296.79 0.0146 0.0047

Uranus 19782-08-24 14:38 G 8946522.90 8946523.11 8946523.33 0.0146 0.0002

Uranus 19783-04-08 03:21 G 8946749.43 8946749.64 8946749.84 0.0146 0.0048

Uranus 19783-11-20 15:36 G 8946976.00 8946976.15 8946976.32 0.0146 0.0096

Uranus 19784-07-04 04:04 G 8947202.64 8947202.67 8947202.72 0.0146 0.0143

Jupiter 19785-09-10 02:09 G 8947635.40 8947635.59 8947635.79 0.0506 0.0160

Saturn 19785-12-24 14:09 G 8947740.88 8947741.09 8947741.30 0.0286 0.0071

Saturn 19786-08-11 07:26 G 8947970.63 8947970.81 8947970.99 0.0285 0.0151

Jupiter 19792-02-28 05:02 G 8949997.64 8949997.71 8949997.78 0.0524 0.0489

Mars 19797-02-21 18:00 G 8951818.08 8951818.25 8951818.43 0.1939 0.0367

Jupiter 19797-05-16 01:26 G 8951901.39 8951901.56 8951901.72 0.0509 0.0301

Mars 19799-11-29 02:09 G 8952828.43 8952828.59 8952828.76 0.1600 0.0476

Saturn 19800-06-06 01:55 G 8953017.45 8953017.58 8953017.72 0.0273 0.0213

Saturn 19801-01-21 08:09 G 8953246.63 8953246.84 8953247.05 0.0273 0.0021

Saturn 19801-09-07 14:52 G 8953475.96 8953476.12 8953476.29 0.0274 0.0173

Jupiter 19803-11-03 22:48 G 8954263.24 8954263.45 8954263.65 0.0521 0.0020

Pluto 19814-03-19 18:57 G 8958052.15 8958052.29 8958052.47 0.0077 0.0054

Pluto 19814-10-31 04:19 G 8958277.47 8958277.68 8958277.90 0.0077 0.0018

Saturn 19814-11-19 22:48 G 8958297.40 8958297.45 8958297.53 0.0286 0.0271

Neptune 19814-11-30 20:38 G 8958308.25 8958308.36 8958308.52 0.0089 0.0071

Saturn 19815-07-07 16:48 G 8958526.99 8958527.20 8958527.41 0.0285 0.0049

Jupiter 19815-07-09 18:00 G 8958529.23 8958529.25 8958529.29 0.0518 0.0512

Neptune 19815-07-14 10:19 G 8958533.75 8958533.93 8958534.11 0.0089 0.0050

Saturn 19816-02-22 10:04 G 8958756.75 8958756.92 8958757.09 0.0285 0.0173

Neptune 19816-02-24 23:45 G 8958759.28 8958759.49 8958759.70 0.0089 0.0030

Neptune 19816-10-07 12:57 G 8958984.82 8958985.04 8958985.26 0.0089 0.0010

Neptune 19817-05-21 02:09 G 8959210.37 8959210.59 8959210.81 0.0089 0.0010

Neptune 19818-01-01 15:21 G 8959435.93 8959436.14 8959436.35 0.0089 0.0030

Neptune 19818-08-15 04:04 G 8959661.51 8959661.67 8959661.87 0.0089 0.0051

Neptune 19819-03-28 17:31 G 8959887.12 8959887.23 8959887.38 0.0089 0.0071

Jupiter 19821-05-19 12:14 G 8960669.91 8960670.01 8960670.13 0.0505 0.0418

Uranus 19822-04-25 23:45 G 8961011.43 8961011.49 8961011.59 0.0133 0.0123

Uranus 19822-12-08 05:02 G 8961237.56 8961237.71 8961237.89 0.0133 0.0087

Uranus 19823-07-22 10:19 G 8961463.73 8961463.93 8961464.13 0.0133 0.0051

Uranus 19824-03-04 15:21 G 8961689.93 8961690.14 8961690.36 0.0133 0.0016

Uranus 19824-10-16 20:24 G 8961916.14 8961916.35 8961916.57 0.0133 0.0020

Uranus 19825-05-31 01:12 G 8962142.36 8962142.55 8962142.76 0.0133 0.0056

Uranus 19826-01-12 06:00 G 8962368.61 8962368.75 8962368.92 0.0133 0.0092

Uranus 19826-08-26 11:02 G 8962594.91 8962594.96 8962595.03 0.0133 0.0127

Saturn 19829-12-17 08:38 G 8963803.71 8963803.86 8963804.02 0.0273 0.0184

Saturn 19830-08-03 15:21 G 8964032.93 8964033.14 8964033.36 0.0274 0.0011

Saturn 19831-03-20 22:19 G 8964262.30 8964262.43 8964262.58 0.0274 0.0204

Mars 19831-11-28 17:02 G 8964515.07 8964515.21 8964515.35 0.1596 0.0951

Jupiter 19833-01-22 10:48 G 8964935.75 8964935.95 8964936.15 0.0508 0.0046

Jupiter 19839-07-12 12:00 G 8967297.83 8967298.00 8967298.18 0.0522 0.0268

Saturn 19844-06-01 11:16 G 8969083.86 8969083.97 8969084.11 0.0286 0.0230

Saturn 19845-01-17 05:16 G 8969313.50 8969313.72 8969313.93 0.0286 0.0009

Saturn 19845-09-03 22:04 G 8969543.29 8969543.42 8969543.57 0.0285 0.0214

Earth 19849-05-17 16:19 G 8970895.03 8970895.18 8970895.32 0.2649 0.1082

Moon 19849-05-17 21:36 G 8970895.26 8970895.40 8970895.54 0.2647 0.1345 *

Jupiter 19851-03-17 05:31 G 8971563.55 8971563.73 8971563.91 0.0519 0.0242

Earth 19857-05-15 08:38 G 8973814.81 8973814.86 8973814.91 0.2649 0.2485

Moon 19857-05-15 11:02 G 8973814.85 8973814.96 8973815.07 0.2643 0.2008 *

Saturn 19859-06-29 13:40 G 8974589.91 8974590.07 8974590.25 0.0273 0.0158

Saturn 19860-02-13 20:09 G 8974819.13 8974819.34 8974819.55 0.0273 0.0035

Saturn 19860-09-30 02:52 G 8975048.51 8975048.62 8975048.74 0.0274 0.0229

Mars 19862-12-20 19:40 G 8975860.17 8975860.32 8975860.46 0.1936 0.1063

Uranus 19865-01-26 19:40 G 8976628.19 8976628.32 8976628.45 0.0146 0.0115

Uranus 19865-09-10 08:09 G 8976854.65 8976854.84 8976855.04 0.0146 0.0068

Mars 19865-09-26 15:07 G 8976870.97 8976871.13 8976871.29 0.1601 0.0661

Uranus 19866-04-24 20:52 G 8977081.15 8977081.37 8977081.58 0.0146 0.0021

Uranus 19866-12-07 09:21 G 8977307.68 8977307.89 8977308.11 0.0146 0.0027

Uranus 19867-07-21 21:50 G 8977534.23 8977534.41 8977534.60 0.0146 0.0075

Uranus 19868-03-04 10:19 G 8977760.83 8977760.93 8977761.06 0.0146 0.0122

Jupiter 19868-09-30 00:28 G 8977970.34 8977970.52 8977970.70 0.0506 0.0235

Saturn 19873-12-12 13:40 G 8979869.93 8979870.07 8979870.22 0.0286 0.0208

Saturn 19874-07-30 07:26 G 8980099.60 8980099.81 8980100.02 0.0285 0.0015

Saturn 19875-03-17 00:14 G 8980329.40 8980329.51 8980329.64 0.0285 0.0236

Jupiter 19880-06-04 20:52 G 8982236.20 8982236.37 8982236.55 0.0509 0.0242

Jupiter 19886-11-22 21:50 G 8984598.21 8984598.41 8984598.61 0.0521 0.0063

Saturn 19889-01-08 19:26 G 8985376.13 8985376.31 8985376.51 0.0274 0.0131

Saturn 19889-08-26 02:24 G 8985605.40 8985605.60 8985605.81 0.0274 0.0064

Saturn 19890-04-12 09:21 G 8985834.84 8985834.89 8985834.97 0.0274 0.0259

Neptune 19895-10-23 19:40 G 8987855.26 8987855.32 8987855.41 0.0088 0.0082

Neptune 19896-06-05 08:38 G 8988080.71 8988080.86 8988081.02 0.0088 0.0063

Neptune 19897-01-16 21:07 G 8988306.21 8988306.38 8988306.59 0.0088 0.0044

Neptune 19897-08-30 10:19 G 8988531.72 8988531.93 8988532.15 0.0088 0.0024

Mars 19897-09-25 06:14 G 8988557.61 8988557.76 8988557.91 0.1597 0.0780

Neptune 19898-04-12 23:02 G 8988757.24 8988757.46 8988757.68 0.0088 0.0004

Jupiter 19898-07-28 13:12 G 8988863.96 8988864.05 8988864.15 0.0518 0.0454

Neptune 19898-11-24 11:45 G 8988982.78 8988982.99 8988983.21 0.0088 0.0016

Neptune 19899-07-08 00:14 G 8989208.32 8989208.51 8989208.72 0.0088 0.0035

Neptune 19900-02-18 13:12 G 8989433.88 8989434.05 8989434.22 0.0088 0.0055

Neptune 19900-10-02 01:40 G 8989659.47 8989659.57 8989659.70 0.0088 0.0074

Saturn	19903-06-26 02:09 G	8990656.42	8990656.59	8990656.77	0.0286	0.0167
Saturn	19904-02-10 19:55 G	8990886.12	8990886.33	8990886.54	0.0286	0.0056
Jupiter	19904-06-08 09:50 G	8991004.87	8991004.91	8991004.97	0.0505	0.0489
Saturn	19904-09-27 12:28 G	8991115.98	8991116.02	8991116.08	0.0285	0.0277
Uranus	19906-08-08 17:31 G	8991796.11	8991796.23	8991796.39	0.0133	0.0100
Uranus	19907-03-22 23:02 G	8992022.27	8992022.46	8992022.66	0.0133	0.0064
Uranus	19907-11-04 04:04 G	8992248.46	8992248.67	8992248.89	0.0133	0.0029
Uranus	19908-06-17 09:07 G	8992474.66	8992474.88	8992475.10	0.0133	0.0007
Uranus	19909-01-29 14:09 G	8992700.88	8992701.09	8992701.30	0.0133	0.0043
Uranus	19909-09-12 18:57 G	8992927.13	8992927.29	8992927.47	0.0133	0.0079
Uranus	19910-04-27 00:14 G	8993153.40	8993153.51	8993153.62	0.0133	0.0114
Jupiter	19916-02-12 09:36 G	8995270.70	8995270.90	8995271.11	0.0507	0.0035
Saturn	19918-07-23 01:12 G	8996162.36	8996162.55	8996162.75	0.0273	0.0104
Saturn	19919-03-09 07:40 G	8996391.62	8996391.82	8996392.02	0.0273	0.0090
Jupiter	19922-08-01 09:36 G	8997632.75	8997632.90	8997633.06	0.0523	0.0343
Jupiter	19927-10-18 08:09 G	8999536.75	8999536.84	8999536.96	0.0510	0.0434
Mars	19928-10-17 21:21 G	8999902.32	8999902.39	8999902.47	0.1934	0.1748
Mars	19931-07-26 04:04 G	9000913.52	9000913.67	9000913.81	0.1603	0.0844
Saturn	19933-01-05 04:48 G	9001442.52	9001442.70	9001442.89	0.0286	0.0144
Saturn	19933-08-22 22:19 G	9001672.23	9001672.43	9001672.63	0.0285	0.0079
Jupiter	19934-04-06 04:48 G	9001898.51	9001898.70	9001898.90	0.0520	0.0159
Saturn	19947-06-17 23:31 G	9006719.45	9006719.48	9006719.51	0.0273	0.0270
Saturn	19948-02-02 05:45 G	9006948.54	9006948.74	9006948.95	0.0274	0.0078
Saturn	19948-09-18 12:43 G	9007177.84	9007178.03	9007178.22	0.0274	0.0116
Uranus	19948-09-27 02:52 G	9007186.56	9007186.62	9007186.72	0.0146	0.0135
Uranus	19949-05-11 15:21 G	9007412.98	9007413.14	9007413.33	0.0146	0.0088
Uranus	19949-12-24 04:04 G	9007639.47	9007639.67	9007639.88	0.0146	0.0040
Uranus	19950-08-07 16:48 G	9007865.98	9007866.20	9007866.42	0.0146	0.0007
Uranus	19951-03-22 05:16 G	9008092.53	9008092.72	9008092.93	0.0146	0.0055
Jupiter	19951-10-20 19:40 G	9008305.16	9008305.32	9008305.49	0.0506	0.0291

Uranus 19951-11-03 18:14 G 9008319.10 9008319.26 9008319.41 0.0146 0.0102

Mars 19960-10-18 02:09 G 9011590.52 9011590.59 9011590.66 0.1942 0.1777

Saturn 19962-07-18 16:19 G 9012228.99 9012229.18 9012229.39 0.0286 0.0105

Moon 19962-11-18 19:12 G 9012352.26 9012352.30 9012352.34 0.2676 0.2587

Saturn 19963-03-05 10:04 G 9012458.73 9012458.92 9012459.11 0.0286 0.0118

Jupiter 19963-06-25 18:28 G 9012571.08 9012571.27 9012571.46 0.0509 0.0171

Mars 19963-07-24 18:57 G 9012600.13 9012600.29 9012600.45 0.1598 0.0597

Jupiter 19969-12-12 16:48 G 9014933.00 9014933.20 9014933.40 0.0521 0.0120

Moon 19970-11-16 04:33 G 9015271.55 9015271.69 9015271.83 0.2677 0.1465

Earth 19970-11-16 07:40 G 9015271.68 9015271.82 9015271.97 0.2683 0.1200 *

Pluto 19974-06-22 20:09 G 9016586.33 9016586.34 9016586.40 0.0067 0.0066

Pluto 19975-02-03 01:26 G 9016811.36 9016811.56 9016811.78 0.0067 0.0019

Pluto 19975-09-16 06:14 G 9017036.58 9017036.76 9017036.98 0.0067 0.0028

Saturn 19976-12-28 05:31 G 9017505.64 9017505.73 9017505.83 0.0273 0.0243

Saturn 19977-08-14 11:45 G 9017734.79 9017734.99 9017735.20 0.0273 0.0052

Saturn 19978-03-31 18:28 G 9017964.09 9017964.27 9017964.45 0.0274 0.0143

Neptune 19979-03-05 04:04 G 9018302.60 9018302.67 9018302.76 0.0089 0.0082

Neptune 19979-10-16 17:16 G 9018528.08 9018528.22 9018528.39 0.0089 0.0062

Neptune 19980-05-29 06:28 G 9018753.59 9018753.77 9018753.97 0.0089 0.0042

Neptune 19981-01-09 19:40 G 9018979.11 9018979.32 9018979.54 0.0089 0.0022

Jupiter 19981-08-17 11:02 G 9019198.82 9019198.96 9019199.09 0.0518 0.0383

Neptune 19981-08-23 09:07 G 9019204.66 9019204.88 9019205.10 0.0089 0.0002

Neptune 19982-04-05 22:04 G 9019430.22 9019430.42 9019430.65 0.0089 0.0019

Neptune 19982-11-17 11:16 G 9019655.79 9019655.97 9019656.18 0.0089 0.0039

Neptune 19983-07-01 00:28 G 9019881.37 9019881.52 9019881.70 0.0089 0.0059

Neptune 19984-02-11 13:40 G 9020106.99 9020107.07 9020107.19 0.0089 0.0080

Uranus 19990-04-08 06:43 G 9022354.67 9022354.78 9022354.89 0.0133 0.0112

Uranus 19990-11-20 11:31 G 9022580.82 9022580.98 9022581.17 0.0133 0.0077

Uranus 19991-07-04 16:48 G 9022807.00 9022807.20 9022807.41 0.0133 0.0041

Saturn 19992-01-28 18:57 G 9023015.09 9023015.29 9023015.49 0.0286 0.0082

Uranus 19992-02-15 22:04 G 9023033.20 9023033.42 9023033.63 0.0133 0.0006

Saturn 19992-09-14 12:00 G 9023244.83 9023245.00 9023245.19 0.0285 0.0141

Uranus 19992-09-29 02:52 G 9023259.42 9023259.62 9023259.84 0.0133 0.0031

Uranus 19993-05-13 08:09 G 9023485.65 9023485.84 9023486.03 0.0133 0.0066

Uranus 19993-12-25 12:43 G 9023711.91 9023712.03 9023712.19 0.0133 0.0102

Mars 19997-05-22 16:48 G 9024956.07 9024956.20 9024956.33 0.1604 0.1035

Jupiter 19999-03-03 06:43 G 9025605.58 9025605.78 9025605.98 0.0507 0.0101

21ST MILLENNIUM CE

This is a list of transits of Venus in the 21st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 20005-08-20 09:36 G 9027967.80 9027967.90 9027968.02 0.0523 0.0430

Saturn 20006-07-10 08:24 G 9028291.74 9028291.85 9028291.98 0.0273 0.0220

Saturn 20007-02-24 15:07 G 9028520.92 9028521.13 9028521.34 0.0274 0.0028

Saturn 20007-10-11 21:50 G 9028750.25 9028750.41 9028750.58 0.0274 0.0167

Jupiter 20010-11-06 04:33 G 9029871.55 9029871.69 9029871.83 0.0510 0.0371

Jupiter 20017-04-25 01:12 G 9032233.35 9032233.55 9032233.75 0.0519 0.0091

Saturn 20020-12-23 12:00 G 9033571.93 9033572.00 9033572.07 0.0286 0.0268

Saturn 20021-08-10 06:00 G 9033801.54 9033801.75 9033801.96 0.0286 0.0045

Saturn 20022-03-27 23:16 G 9034031.31 9034031.47 9034031.64 0.0286 0.0178

Mars 20026-08-15 03:36 G 9035632.50 9035632.65 9035632.79 0.1940 0.1069

Mars 20029-05-21 08:09 G 9036642.67 9036642.84 9036643.01 0.1599 0.0421

Uranus 20033-01-08 21:50 G 9037971.28 9037971.41 9037971.57 0.0145 0.0108

Uranus 20033-08-23 10:19 G 9038197.75 9038197.93 9038198.14 0.0146 0.0062

Uranus 20034-04-06 23:16 G 9038424.25 9038424.47 9038424.69 0.0146 0.0014

Jupiter 20034-11-08 18:57 G 9038640.16 9038640.29 9038640.43 0.0506 0.0374

Uranus 20034-11-19 11:45 G 9038650.78 9038650.99 9038651.21 0.0146 0.0034

Uranus 20035-07-04 00:28 G 9038877.34 9038877.52 9038877.70 0.0146 0.0081

Saturn 20036-01-20 14:52 G 9039077.98 9039078.12 9039078.27 0.0273 0.0193

Uranus 20036-02-15 12:57 G 9039103.94 9039104.04 9039104.15 0.0146 0.0128

Saturn 20036-09-05 21:21 G 9039307.17 9039307.39 9039307.60 0.0273 0.0005

Saturn 20037-04-23 03:36 G 9039536.51 9039536.65 9039536.81 0.0274 0.0194

Jupiter 20046-07-14 18:28 G 9042906.07 9042906.27 9042906.47 0.0508 0.0086

Saturn 20050-07-05 13:55 G 9044357.98 9044358.08 9044358.19 0.0286 0.0246

Saturn 20051-02-20 07:55 G 9044587.62 9044587.83 9044588.04 0.0286 0.0023

Saturn 20051-10-08 00:57 G 9044817.40 9044817.54 9044817.70 0.0285 0.0199

Jupiter 20052-12-31 16:48 G 9045268.02 9045268.20 9045268.39 0.0522 0.0208

Neptune 20060-09-07 16:33 G 9048075.09 9048075.19 9048075.33 0.0088 0.0073

Neptune 20061-04-21 05:31 G 9048300.57 9048300.73 9048300.91 0.0088 0.0054

Pluto 20061-07-11 16:04 G 9048381.98 9048382.17 9048382.39 0.0077 0.0030

Neptune 20061-12-02 18:14 G 9048526.07 9048526.26 9048526.47 0.0088 0.0034

Pluto 20062-02-22 01:12 G 9048607.38 9048607.55 9048607.75 0.0077 0.0042

Neptune 20062-07-16 07:12 G 9048751.59 9048751.80 9048752.02 0.0088 0.0014

Neptune 20063-02-26 19:55 G 9048977.11 9048977.33 9048977.55 0.0088 0.0006

Mars 20063-03-20 05:31 G 9048998.62 9048998.73 9048998.85 0.1606 0.1223

Neptune 20063-10-10 08:38 G 9049202.66 9049202.86 9049203.08 0.0088 0.0025

Neptune 20064-05-22 21:21 G 9049428.21 9049428.39 9049428.59 0.0088 0.0044

Jupiter 20064-09-05 11:31 G 9049533.82 9049533.98 9049534.15 0.0519 0.0293

Neptune 20065-01-03 09:36 G 9049653.78 9049653.90 9049654.08 0.0088 0.0065

Saturn 20065-08-01 16:33 G 9049864.04 9049864.19 9049864.37 0.0273 0.0173

Neptune 20065-08-16 22:33 G 9049879.39 9049879.44 9049879.53 0.0088 0.0084

Saturn 20066-03-18 23:16 G 9050093.26 9050093.47 9050093.68 0.0274 0.0021

Saturn 20066-11-03 06:00 G 9050322.62 9050322.75 9050322.88 0.0274 0.0215

Uranus	20073-12-06 18:28 G	9052913.23	9052913.27	9052913.36	0.0133	0.0126	
Uranus	20074-07-21 00:00 G	9053139.35	9053139.50	9053139.67	0.0133	0.0090	
Uranus	20075-03-04 05:31 G	9053365.53	9053365.73	9053365.93	0.0133	0.0054	
Uranus	20075-10-16 10:33 G	9053591.73	9053591.94	9053592.16	0.0133	0.0019	
Uranus	20076-05-29 15:36 G	9053817.94	9053818.15	9053818.37	0.0133	0.0018	
Uranus	20077-01-10 20:38 G	9054044.17	9054044.36	9054044.56	0.0133	0.0053	
Uranus	20077-08-25 01:26 G	9054270.42	9054270.56	9054270.74	0.0133	0.0089	
Uranus	20078-04-08 06:43 G	9054496.72	9054496.78	9054496.87	0.0133	0.0124	
Saturn	20080-01-15 23:31 G	9055144.35	9055144.48	9055144.63	0.0287	0.0212	
Saturn	20080-09-01 17:31 G	9055374.02	9055374.23	9055374.45	0.0286	0.0014	
Saturn	20081-04-19 10:48 G	9055603.84	9055603.95	9055604.08	0.0286	0.0235	
Jupiter	20082-03-22 05:02 G	9055940.52	9055940.71	9055940.90	0.0507	0.0177	
Jupiter	20088-09-08 06:14 G	9058302.70	9058302.76	9058302.82	0.0523	0.0497	
Moon	20092-05-18 13:12 G	9059650.90	9059651.05	9059651.20	0.2648	0.0646	
Earth	20092-05-18 18:43 G	9059651.14	9059651.28	9059651.43	0.2649	0.1094	*
Mars	20092-06-11 05:16 G	9059674.55	9059674.72	9059674.89	0.1937	0.0376	
Jupiter	20093-11-25 03:50 G	9060206.50	9060206.66	9060206.83	0.0510	0.0287	
Saturn	20095-02-11 23:16 G	9060650.29	9060650.47	9060650.65	0.0273	0.0145	
Mars	20095-03-18 20:38 G	9060685.19	9060685.36	9060685.54	0.1601	0.0236	
Saturn	20095-09-29 05:16 G	9060879.52	9060879.72	9060879.94	0.0273	0.0048	
Saturn	20096-05-15 11:45 G	9061108.90	9061108.99	9061109.10	0.0274	0.0241	
Jupiter	20100-05-14 23:45 G	9062568.29	9062568.49	9062568.69	0.0520	0.0013	
Earth	20100-05-17 11:02 G	9062570.91	9062570.96	9062571.01	0.2649	0.2492	
Saturn	20109-07-29 01:26 G	9065930.41	9065930.56	9065930.73	0.0286	0.0190	
Saturn	20110-03-15 19:40 G	9066160.11	9066160.32	9066160.53	0.0286	0.0034	
Saturn	20110-10-31 12:43 G	9066389.94	9066390.03	9066390.13	0.0285	0.0255	
Jupiter	20112-01-18 19:26 G	9066834.27	9066834.31	9066834.36	0.0517	0.0505	
Uranus	20116-09-09 06:28 G	9068529.67	9068529.77	9068529.88	0.0145	0.0127	
Uranus	20117-04-23 18:57 G	9068756.12	9068756.29	9068756.48	0.0145	0.0080	
Jupiter	20117-11-28 18:00 G	9068975.16	9068975.25	9068975.34	0.0505	0.0451	

Uranus 20117-12-06 07:26 G 9068982.60 9068982.81 9068983.03 0.0146 0.0033

Uranus 20118-07-20 20:09 G 9069209.12 9069209.34 9069209.56 0.0146 0.0015

Uranus 20119-03-04 08:38 G 9069435.67 9069435.86 9069436.06 0.0146 0.0062

Uranus 20119-10-16 21:21 G 9069662.25 9069662.39 9069662.54 0.0146 0.0109

Saturn 20124-08-24 23:45 G 9071436.31 9071436.49 9071436.69 0.0273 0.0126

Saturn 20125-04-11 06:14 G 9071665.55 9071665.76 9071665.97 0.0274 0.0067

Saturn 20125-11-26 12:43 G 9071894.98 9071895.03 9071895.10 0.0274 0.0261

Mars 20129-01-15 18:00 G 9073041.18 9073041.25 9073041.33 0.1607 0.1421

Jupiter 20129-08-03 16:48 G 9073240.99 9073241.20 9073241.40 0.0508 0.0016

Jupiter 20136-01-21 15:21 G 9075602.97 9075603.14 9075603.31 0.0521 0.0289

Saturn 20139-02-08 10:04 G 9076716.74 9076716.92 9076717.10 0.0287 0.0158

Saturn 20139-09-26 04:04 G 9076946.46 9076946.67 9076946.88 0.0286 0.0067

Jupiter 20141-04-08 13:40 G 9077507.01 9077507.07 9077507.13 0.0512 0.0488

Neptune 20144-01-19 00:14 G 9078522.41 9078522.51 9078522.66 0.0089 0.0074

Neptune 20144-08-31 13:55 G 9078747.91 9078748.08 9078748.26 0.0089 0.0053

Neptune 20145-04-14 03:07 G 9078973.43 9078973.63 9078973.84 0.0089 0.0033

Neptune 20145-11-25 16:19 G 9079198.97 9079199.18 9079199.40 0.0089 0.0013

Neptune 20146-07-09 05:31 G 9079424.52 9079424.73 9079424.96 0.0089 0.0007

Neptune 20147-02-19 18:57 G 9079650.08 9079650.29 9079650.50 0.0089 0.0027

Jupiter 20147-09-26 09:21 G 9079868.71 9079868.89 9079869.07 0.0518 0.0217

Neptune 20147-10-03 08:09 G 9079875.66 9079875.84 9079876.03 0.0089 0.0047

Neptune 20148-05-15 20:52 G 9080101.25 9080101.37 9080101.53 0.0089 0.0068

Neptune 20148-12-27 10:04 G 9080326.91 9080326.92 9080326.98 0.0089 0.0088

Saturn 20154-03-07 06:14 G 9082222.57 9082222.76 9082222.97 0.0272 0.0100

Saturn 20154-10-22 12:28 G 9082451.83 9082452.02 9082452.22 0.0273 0.0094

Uranus 20158-03-21 12:28 G 9083697.90 9083698.02 9083698.17 0.0133 0.0103

Mars 20158-04-09 06:43 G 9083716.61 9083716.78 9083716.95 0.1935 0.0335

Uranus 20158-11-02 18:00 G 9083924.06 9083924.25 9083924.44 0.0133 0.0067

Uranus 20159-06-16 23:02 G 9084150.25 9084150.46 9084150.68 0.0133 0.0032

Uranus 20160-01-29 04:19 G 9084376.46 9084376.68 9084376.90 0.0133 0.0004

Uranus 20160-09-11 09:21 G 9084602.68 9084602.89 9084603.10 0.0133 0.0040

Mars 20161-01-14 09:36 G 9084727.73 9084727.90 9084728.08 0.1602 0.0055

Uranus 20161-04-25 14:24 G 9084828.93 9084829.10 9084829.29 0.0133 0.0076

Uranus 20161-12-07 19:26 G 9085055.20 9085055.31 9085055.44 0.0133 0.0111

Jupiter 20165-04-11 06:14 G 9086275.59 9086275.76 9086275.93 0.0507 0.0269

Saturn 20168-08-20 11:45 G 9087502.81 9087502.99 9087503.19 0.0286 0.0137

Saturn 20169-04-07 05:45 G 9087732.54 9087732.74 9087732.94 0.0286 0.0088

Jupiter 20176-12-15 04:19 G 9090541.49 9090541.68 9090541.86 0.0509 0.0200

Saturn 20183-01-31 00:14 G 9092779.51 9092779.51 9092779.53 0.0273 0.0272

Jupiter 20183-06-04 01:55 G 9092903.37 9092903.58 9092903.78 0.0520 0.0087

Saturn 20183-09-17 06:14 G 9093008.56 9093008.76 9093008.96 0.0273 0.0081

Saturn 20184-05-03 12:14 G 9093237.82 9093238.01 9093238.21 0.0273 0.0112

Mars 20193-01-13 00:57 G 9096414.48 9096414.54 9096414.60 0.1598 0.1501

Mars 20194-11-13 06:57 G 9097083.79 9097083.79 9097083.80 0.1609 0.1607

Jupiter 20195-02-06 19:26 G 9097169.19 9097169.31 9097169.43 0.0517 0.0415

Saturn 20198-03-02 18:43 G 9098289.09 9098289.28 9098289.48 0.0287 0.0107

Saturn 20198-10-18 12:57 G 9098518.84 9098519.04 9098519.23 0.0286 0.0118

Uranus 20200-12-23 02:24 G 9099314.46 9099314.60 9099314.77 0.0145 0.0100

Uranus 20201-08-06 15:07 G 9099540.93 9099541.13 9099541.34 0.0145 0.0052

Uranus 20202-03-21 03:50 G 9099767.44 9099767.66 9099767.87 0.0146 0.0006

Uranus 20202-11-02 16:19 G 9099993.97 9099994.18 9099994.39 0.0146 0.0042

Uranus 20203-06-17 04:48 G 9100220.53 9100220.70 9100220.87 0.0146 0.0089

Uranus 20204-01-29 17:02 G 9100447.15 9100447.21 9100447.30 0.0146 0.0136

Moon 20205-11-20 14:09 G 9101108.02 9101108.09 9101108.15 0.2688 0.2402

Earth 20205-11-20 17:16 G 9101108.17 9101108.22 9101108.28 0.2682 0.2494

Saturn 20212-08-13 07:26 G 9103565.72 9103565.81 9103565.90 0.0272 0.0244

Jupiter 20212-08-23 16:19 G 9103575.98 9103576.18 9103576.39 0.0509 0.0076

Saturn 20213-03-30 12:57 G 9103794.83 9103795.04 9103795.25 0.0272 0.0054

Saturn 20213-11-14 18:57 G 9104024.11 9104024.29 9104024.47 0.0273 0.0138

Earth 20213-11-18 07:26 G 9104027.67 9104027.81 9104027.94 0.2682 0.1489

Moon 20213-11-18 08:38 G 9104027.74 9104027.86 9104027.98 0.2689 0.1655 *

Jupiter 20219-02-10 14:52 G 9105937.99 9105938.12 9105938.27 0.0522 0.0375

Pluto 20221-10-15 14:52 G 9106916.01 9106916.12 9106916.26 0.0067 0.0054

Pluto 20222-05-28 20:09 G 9107141.12 9107141.34 9107141.56 0.0067 0.0007

Pluto 20223-01-09 00:43 G 9107366.37 9107366.53 9107366.73 0.0067 0.0041

Mars 20224-02-05 09:07 G 9107758.73 9107758.88 9107759.03 0.1932 0.0999

Jupiter 20224-04-28 15:21 G 9107842.02 9107842.14 9107842.27 0.0511 0.0391

Neptune 20224-12-12 00:43 G 9108069.48 9108069.53 9108069.62 0.0088 0.0084

Neptune 20225-07-25 13:26 G 9108294.93 9108295.06 9108295.23 0.0088 0.0065

Neptune 20226-03-08 02:38 G 9108520.43 9108520.61 9108520.81 0.0088 0.0044

Neptune 20226-10-19 15:36 G 9108745.94 9108746.15 9108746.36 0.0088 0.0025

Mars 20226-11-12 22:48 G 9108770.27 9108770.45 9108770.62 0.1604 0.0131

Neptune 20227-06-02 04:19 G 9108971.47 9108971.68 9108971.90 0.0088 0.0005

Saturn 20227-09-13 21:07 G 9109075.18 9109075.38 9109075.58 0.0286 0.0084

Neptune 20228-01-13 17:16 G 9109197.00 9109197.22 9109197.43 0.0088 0.0015

Saturn 20228-04-30 14:52 G 9109304.94 9109305.12 9109305.31 0.0286 0.0140

Neptune 20228-08-26 05:45 G 9109422.55 9109422.74 9109422.96 0.0088 0.0035

Neptune 20229-04-08 18:14 G 9109648.11 9109648.26 9109648.46 0.0088 0.0055

Neptune 20229-11-20 07:12 G 9109873.69 9109873.80 9109873.93 0.0088 0.0073

Jupiter 20230-10-16 10:19 G 9110203.73 9110203.93 9110204.12 0.0519 0.0126

Uranus 20241-11-20 00:43 G 9114256.44 9114256.53 9114256.65 0.0133 0.0116

Saturn 20242-02-23 06:14 G 9114351.66 9114351.76 9114351.88 0.0272 0.0229

Uranus 20242-07-04 06:14 G 9114482.59 9114482.76 9114482.93 0.0133 0.0080

Saturn 20242-10-10 12:00 G 9114580.79 9114581.00 9114581.21 0.0273 0.0038

Uranus 20243-02-15 11:16 G 9114708.78 9114708.97 9114709.19 0.0133 0.0045

Saturn 20243-05-27 18:00 G 9114810.08 9114810.25 9114810.43 0.0273 0.0155

Uranus 20243-09-29 16:48 G 9114934.98 9114935.20 9114935.41 0.0133 0.0009

Uranus 20244-05-12 21:50 G 9115161.20 9115161.41 9115161.62 0.0133 0.0027

Uranus 20244-12-25 02:52 G 9115387.43 9115387.62 9115387.81 0.0133 0.0062

Uranus 20245-08-08 07:40 G 9115613.69 9115613.82 9115613.98 0.0133 0.0098

Uranus 20246-03-22 12:57 G 9115840.04 9115840.04 9115840.05 0.0133 0.0133

Jupiter 20248-05-01 06:00 G 9116610.60 9116610.75 9116610.89 0.0506 0.0353

Saturn 20256-08-08 07:40 G 9119631.79 9119631.82 9119631.85 0.0287 0.0283

Saturn 20257-03-26 02:24 G 9119861.40 9119861.60 9119861.81 0.0287 0.0058

Saturn 20257-11-10 20:24 G 9120091.19 9120091.35 9120091.53 0.0286 0.0167

Mars 20258-11-11 13:40 G 9120456.98 9120457.07 9120457.17 0.1599 0.1321

Jupiter 20260-01-05 02:52 G 9120876.42 9120876.62 9120876.82 0.0510 0.0119

Jupiter 20266-06-24 01:26 G 9123238.37 9123238.56 9123238.75 0.0520 0.0174

Saturn 20271-09-05 13:26 G 9125137.93 9125138.06 9125138.21 0.0272 0.0201

Saturn 20272-04-21 19:12 G 9125367.09 9125367.30 9125367.51 0.0272 0.0011

Saturn 20272-12-07 00:57 G 9125596.39 9125596.54 9125596.70 0.0273 0.0182

Jupiter 20278-02-26 19:12 G 9127504.15 9127504.30 9127504.46 0.0517 0.0331

Uranus 20284-08-22 11:02 G 9129872.85 9129872.96 9129873.10 0.0145 0.0117

Uranus 20285-04-05 23:31 G 9130099.30 9130099.48 9130099.68 0.0145 0.0071

Uranus 20285-11-18 12:14 G 9130325.80 9130326.01 9130326.22 0.0146 0.0024

Saturn 20286-02-18 10:48 G 9130417.86 9130417.95 9130418.04 0.0287 0.0259

Uranus 20286-07-03 00:43 G 9130552.31 9130552.53 9130552.74 0.0146 0.0023

Saturn 20286-10-06 05:16 G 9130647.51 9130647.72 9130647.93 0.0286 0.0035

Uranus 20287-02-14 12:57 G 9130778.86 9130779.04 9130779.24 0.0146 0.0071

Saturn 20287-05-23 23:02 G 9130877.30 9130877.46 9130877.62 0.0286 0.0189

Uranus 20287-09-29 01:26 G 9131005.45 9131005.56 9131005.70 0.0146 0.0118

Mars 20289-12-02 11:02 G 9131800.88 9131800.96 9131801.04 0.1929 0.1687

Mars 20292-09-09 11:16 G 9132812.80 9132812.97 9132813.14 0.1605 0.0323

Jupiter 20295-09-12 17:45 G 9133911.06 9133911.24 9133911.44 0.0508 0.0170

Saturn 20301-03-18 12:14 G 9135923.87 9135924.01 9135924.18 0.0272 0.0186

Saturn 20301-11-02 18:00 G 9136153.04 9136153.25 9136153.46 0.0273 0.0006

Jupiter 20302-03-02 18:00 G 9136273.18 9136273.25 9136273.33 0.0522 0.0481

Saturn 20302-06-19 23:45 G 9136382.35 9136382.49 9136382.64 0.0273 0.0198

Jupiter 20307-05-19 15:50 G 9138177.01 9138177.16 9138177.33 0.0511 0.0302

Neptune 20308-04-23 08:24 G 9138516.79 9138516.85 9138516.93 0.0089 0.0084

Pluto 20308-11-04 10:19 G 9138711.72 9138711.93 9138712.15 0.0077 0.0019

Neptune 20308-12-04 21:36 G 9138742.25 9138742.40 9138742.55 0.0089 0.0064

Pluto 20309-06-17 19:12 G 9138937.15 9138937.30 9138937.47 0.0077 0.0053

Neptune 20309-07-18 10:48 G 9138967.76 9138967.95 9138968.14 0.0089 0.0044

Neptune 20310-03-01 00:00 G 9139193.29 9139193.50 9139193.72 0.0089 0.0024

Neptune 20310-10-12 13:12 G 9139418.83 9139419.05 9139419.27 0.0089 0.0004

Neptune 20311-05-26 02:09 G 9139644.38 9139644.59 9139644.82 0.0089 0.0017

Neptune 20312-01-06 15:21 G 9139869.95 9139870.14 9139870.35 0.0089 0.0036

Neptune 20312-08-19 04:33 G 9140095.53 9140095.69 9140095.87 0.0089 0.0056

Neptune 20313-04-01 18:14 G 9140321.15 9140321.26 9140321.37 0.0089 0.0077

Jupiter 20313-11-05 12:00 G 9140538.79 9140539.00 9140539.20 0.0519 0.0026

Saturn 20315-09-01 14:24 G 9141203.99 9141204.10 9141204.23 0.0287 0.0237

Saturn 20316-04-18 09:21 G 9141433.68 9141433.89 9141434.11 0.0287 0.0012

Saturn 20316-12-04 03:36 G 9141663.52 9141663.65 9141663.79 0.0286 0.0215

Mars 20321-12-03 15:07 G 9143489.08 9143489.13 9143489.18 0.1939 0.1831

Mars 20324-09-09 02:52 G 9144499.50 9144499.62 9144499.74 0.1600 0.1145

Uranus 20325-07-21 12:43 G 9144815.00 9144815.03 9144815.10 0.0133 0.0129

Uranus 20326-03-04 18:28 G 9145041.12 9145041.27 9145041.43 0.0133 0.0093

Uranus 20326-10-16 23:31 G 9145267.30 9145267.48 9145267.69 0.0133 0.0058

Uranus 20327-05-31 05:02 G 9145493.49 9145493.71 9145493.92 0.0133 0.0022

Uranus 20328-01-12 10:04 G 9145719.70 9145719.92 9145720.14 0.0133 0.0014

Uranus 20328-08-25 15:07 G 9145945.93 9145946.13 9145946.34 0.0133 0.0049

Uranus 20329-04-08 19:55 G 9146172.18 9146172.33 9146172.52 0.0133 0.0085

Uranus 20329-11-21 00:57 G 9146398.47 9146398.54 9146398.65 0.0133 0.0120

Saturn 20330-09-28 19:40 G 9146710.15 9146710.32 9146710.50 0.0272 0.0157

Saturn 20331-05-16 01:12 G 9146939.34 9146939.55 9146939.76 0.0272 0.0034

Jupiter 20331-05-22 05:02 G 9146945.62 9146945.71 9146945.82 0.0507 0.0437

Saturn 20331-12-31 06:57 G 9147168.68 9147168.79 9147168.91 0.0273 0.0225

Earth 20335-05-22 20:38 G 9148407.22 9148407.36 9148407.51 0.2649 0.1050

Moon 20335-05-23 01:40 G 9148407.46 9148407.57 9148407.69 0.2653 0.1716 *

Jupiter 20343-01-25 04:48 G 9151211.50 9151211.70 9151211.91 0.0510 0.0023

Earth 20343-05-20 12:57 G 9151327.00 9151327.04 9151327.08 0.2650 0.2537

Moon 20343-05-20 18:14 G 9151327.14 9151327.26 9151327.39 0.2647 0.1685

Saturn 20345-03-13 18:28 G 9151990.14 9151990.27 9151990.42 0.0287 0.0210

Saturn 20345-10-29 13:12 G 9152219.84 9152220.05 9152220.26 0.0287 0.0016

Saturn 20346-06-16 06:57 G 9152449.68 9152449.79 9152449.91 0.0286 0.0239

Jupiter 20349-07-14 02:09 G 9153573.42 9153573.59 9153573.77 0.0521 0.0267

Jupiter 20354-09-30 03:07 G 9155477.58 9155477.63 9155477.68 0.0512 0.0494

Mars 20358-07-09 00:14 G 9156855.34 9156855.51 9156855.67 0.1607 0.0507

Saturn 20360-04-09 18:57 G 9157496.11 9157496.29 9157496.47 0.0272 0.0141

Saturn 20360-11-25 00:14 G 9157725.30 9157725.51 9157725.72 0.0273 0.0050

Jupiter 20361-03-18 21:50 G 9157839.23 9157839.41 9157839.60 0.0518 0.0228

Saturn 20361-07-12 05:45 G 9157954.66 9157954.74 9157954.85 0.0273 0.0242

Uranus 20368-04-22 17:45 G 9160431.19 9160431.24 9160431.33 0.0145 0.0137

Uranus 20368-12-05 06:28 G 9160657.60 9160657.77 9160657.94 0.0145 0.0091

Uranus 20369-07-19 18:57 G 9160884.08 9160884.29 9160884.50 0.0145 0.0044

Uranus 20370-03-03 07:26 G 9161110.59 9161110.81 9161111.02 0.0145 0.0004

Uranus 20370-10-15 19:55 G 9161337.13 9161337.33 9161337.54 0.0146 0.0050

Uranus 20371-05-30 08:09 G 9161563.69 9161563.84 9161564.01 0.0146 0.0097

Uranus 20372-01-11 20:52 G 9161790.33 9161790.37 9161790.41 0.0146 0.0143

Saturn 20374-09-23 21:21 G 9162776.23 9162776.39 9162776.55 0.0287 0.0189

Saturn 20375-05-11 16:19 G 9163005.97 9163006.18 9163006.39 0.0287 0.0038

Saturn 20375-12-27 10:19 G 9163235.86 9163235.93 9163236.02 0.0287 0.0262

Jupiter 20378-10-02 16:19 G 9164246.00 9164246.18 9164246.35 0.0508 0.0248

Mars 20387-09-30 16:33 G 9167531.05 9167531.19 9167531.34 0.1936 0.1128

Saturn 20389-10-21 02:24 G 9168282.42 9168282.60 9168282.80 0.0272 0.0112

Neptune 20389-10-27 21:36 G 9168289.31 9168289.40 9168289.55 0.0088 0.0075

Saturn 20390-06-07 07:55 G 9168511.63 9168511.83 9168512.03 0.0272 0.0079

Jupiter 20390-06-07 14:24 G 9168511.92 9168512.10 9168512.28 0.0511 0.0223 *

Neptune 20390-06-10 10:48 G 9168514.79 9168514.95 9168515.13 0.0088 0.0055

Mars 20390-07-07 15:21 G 9168542.00 9168542.14 9168542.28 0.1601 0.0958

Neptune 20391-01-21 23:31 G 9168740.29 9168740.48 9168740.70 0.0088 0.0035

Saturn 20391-01-22 13:55 G 9168741.05 9168741.08 9168741.10 0.0273 0.0270

Neptune 20391-09-04 12:43 G 9168965.82 9168966.03 9168966.25 0.0088 0.0015

Neptune 20392-04-17 01:40 G 9169191.35 9169191.57 9169191.79 0.0088 0.0005

Neptune 20392-11-28 14:24 G 9169416.89 9169417.10 9169417.32 0.0088 0.0024

Neptune 20393-07-12 03:21 G 9169642.45 9169642.64 9169642.83 0.0088 0.0044

Neptune 20394-02-22 15:36 G 9169868.02 9169868.15 9169868.32 0.0088 0.0064

Neptune 20394-10-06 04:19 G 9170093.63 9170093.68 9170093.78 0.0088 0.0083

Jupiter 20396-11-24 11:16 G 9170873.77 9170873.97 9170874.17 0.0519 0.0059

Saturn 20404-04-05 02:24 G 9173562.43 9173562.60 9173562.78 0.0287 0.0160

Saturn 20404-11-20 20:52 G 9173792.17 9173792.37 9173792.58 0.0287 0.0066

Jupiter 20408-07-30 06:43 G 9175139.67 9175139.78 9175139.89 0.0516 0.0434

Uranus 20409-11-02 06:00 G 9175599.63 9175599.75 9175599.89 0.0133 0.0107

Uranus 20410-06-16 11:31 G 9175825.80 9175825.98 9175826.16 0.0133 0.0071

Uranus 20411-01-28 16:33 G 9176051.99 9176052.19 9176052.41 0.0133 0.0036

Uranus 20411-09-11 21:50 G 9176278.19 9176278.41 9176278.63 0.0133 0.0001

Uranus 20412-04-25 02:52 G 9176504.42 9176504.62 9176504.84 0.0133 0.0036

Uranus 20412-12-07 07:55 G 9176730.66 9176730.83 9176731.02 0.0133 0.0071

Uranus 20413-07-21 12:43 G 9176956.92 9176957.03 9176957.18 0.0133 0.0106

Saturn 20419-05-03 01:55 G 9179068.38 9179068.58 9179068.78 0.0272 0.0095

Saturn 20419-12-18 07:12 G 9179297.60 9179297.80 9179298.00 0.0272 0.0096

Mars 20424-05-05 12:57 G 9180897.88 9180898.04 9180898.19 0.1608 0.0704

Jupiter 20426-02-13 05:31 G 9181546.53 9181546.73 9181546.93 0.0509 0.0068

Jupiter 20432-08-02 04:33 G 9183908.55 9183908.69 9183908.83 0.0520 0.0372

Saturn 20433-10-16 04:48 G 9184348.52 9184348.70 9184348.89 0.0287 0.0139

Saturn 20434-06-02 23:45 G 9184578.29 9184578.49 9184578.69 0.0287 0.0088

Jupiter 20437-10-19 00:43 G 9185812.42 9185812.53 9185812.65 0.0512 0.0420

Jupiter 20444-04-06 23:02 G 9188174.26 9188174.46 9188174.65 0.0517 0.0133

Saturn 20448-03-28 04:33 G 9189625.63 9189625.69 9189625.78 0.0272 0.0254

Saturn 20448-11-12 09:50 G 9189854.71 9189854.91 9189855.12 0.0272 0.0065

Earth 20448-11-21 16:48 G 9189864.11 9189864.20 9189864.29 0.2682 0.2189

Saturn 20449-06-29 15:21 G 9190083.95 9190084.14 9190084.33 0.0272 0.0126

Uranus 20452-08-04 13:12 G 9191215.92 9191216.05 9191216.20 0.0145 0.0110

Uranus 20453-03-19 01:26 G 9191442.38 9191442.56 9191442.77 0.0145 0.0064

Mars 20453-07-27 18:14 G 9191573.09 9191573.26 9191573.43 0.1934 0.0419

Uranus 20453-10-31 14:09 G 9191668.88 9191669.09 9191669.31 0.0145 0.0017

Uranus 20454-06-15 02:24 G 9191895.39 9191895.60 9191895.82 0.0146 0.0030

Uranus 20455-01-27 14:38 G 9192121.94 9192122.11 9192122.31 0.0146 0.0077

Uranus 20455-09-11 03:21 G 9192348.53 9192348.64 9192348.76 0.0146 0.0123

Mars 20456-05-04 04:19 G 9192584.53 9192584.68 9192584.83 0.1603 0.0778

Earth 20456-11-19 07:12 G 9192783.68 9192783.80 9192783.92 0.2682 0.1774

Moon 20456-11-19 08:09 G 9192783.69 9192783.84 9192783.98 0.2675 0.1334 *

Jupiter 20461-10-21 17:16 G 9194581.07 9194581.22 9194581.37 0.0508 0.0339

Saturn 20463-04-28 11:02 G 9195134.77 9195134.96 9195135.16 0.0287 0.0108

Saturn 20463-12-14 05:31 G 9195364.54 9195364.73 9195364.93 0.0287 0.0117

Pluto 20469-02-06 06:00 G 9197245.65 9197245.75 9197245.90 0.0067 0.0055

Pluto 20469-09-19 11:16 G 9197470.76 9197470.97 9197471.20 0.0067 0.0008

Pluto 20470-05-02 16:19 G 9197696.01 9197696.18 9197696.36 0.0067 0.0040

Neptune 20473-03-08 05:45 G 9198736.65 9198736.74 9198736.88 0.0089 0.0075

Jupiter 20473-06-26 16:04 G 9198846.97 9198847.17 9198847.37 0.0510 0.0127

Neptune 20473-10-19 18:57 G 9198962.14 9198962.29 9198962.49 0.0089 0.0055

Neptune 20474-06-02 08:09 G 9199187.65 9199187.84 9199188.06 0.0089 0.0035

Neptune 20475-01-13 21:36 G 9199413.18 9199413.40 9199413.62 0.0089 0.0014

Neptune 20475-08-27 10:48 G 9199638.73 9199638.95 9199639.17 0.0089 0.0006

Neptune 20476-04-08 23:45 G 9199864.29 9199864.49 9199864.71 0.0089 0.0026

Neptune 20476-11-20 12:43 G 9200089.86 9200090.03 9200090.24 0.0089 0.0046

Neptune 20477-07-04 01:55 G 9200315.45 9200315.58 9200315.74 0.0089 0.0066

Saturn 20477-10-08 05:02 G 9200411.61 9200411.71 9200411.82 0.0272 0.0235

Neptune 20478-02-14 15:07 G 9200541.10 9200541.13 9200541.20 0.0089 0.0086

Saturn	20478-05-25 10:04 G	9200640.71	9200640.92	9200641.13	0.0272	0.0046
Saturn	20479-01-09 15:21 G	9200869.96	9200870.14	9200870.32	0.0272	0.0144
Jupiter	20479-12-14 13:12 G	9201208.86	9201209.05	9201209.24	0.0520	0.0158
Mars	20490-03-03 01:26 G	9204940.42	9204940.56	9204940.70	0.1610	0.0899
Jupiter	20491-08-19 08:52 G	9205474.72	9205474.87	9205475.03	0.0516	0.0333
Saturn	20492-11-07 13:12 G	9205920.85	9205921.05	9205921.25	0.0287	0.0088
Saturn	20493-06-25 07:55 G	9206150.65	9206150.83	9206151.02	0.0287	0.0139
Uranus	20493-07-02 17:45 G	9206158.16	9206158.24	9206158.34	0.0133	0.0120
Uranus	20494-02-13 23:02 G	9206384.31	9206384.46	9206384.64	0.0133	0.0085
Uranus	20494-09-28 04:33 G	9206610.49	9206610.69	9206610.90	0.0133	0.0049
Uranus	20495-05-12 09:36 G	9206836.69	9206836.90	9206837.13	0.0133	0.0014
Uranus	20495-12-24 14:52 G	9207062.90	9207063.12	9207063.34	0.0133	0.0022
Uranus	20496-08-06 19:55 G	9207289.13	9207289.33	9207289.53	0.0133	0.0057
Uranus	20497-03-21 00:43 G	9207515.39	9207515.53	9207515.70	0.0133	0.0093
Uranus	20497-11-02 06:00 G	9207741.70	9207741.75	9207741.81	0.0133	0.0127
Saturn	20507-04-21 12:57 G	9211197.91	9211198.04	9211198.18	0.0272	0.0205
Saturn	20507-12-06 18:14 G	9211427.05	9211427.26	9211427.47	0.0272	0.0016
Saturn	20508-07-22 23:45 G	9211656.33	9211656.49	9211656.65	0.0272	0.0175
Jupiter	20509-03-05 02:24 G	9211881.41	9211881.60	9211881.80	0.0509	0.0137
Jupiter	20515-08-23 02:38 G	9214243.51	9214243.61	9214243.72	0.0521	0.0447
Mars	20519-05-25 20:09 G	9215615.16	9215615.34	9215615.51	0.1931	0.0278
Jupiter	20520-11-08 01:12 G	9216147.40	9216147.55	9216147.71	0.0512	0.0332
Saturn	20521-10-04 02:09 G	9216477.56	9216477.59	9216477.65	0.0288	0.0280
Mars	20522-03-02 16:48 G	9216627.04	9216627.20	9216627.36	0.1604	0.0585
Saturn	20522-05-21 21:07 G	9216707.18	9216707.38	9216707.59	0.0287	0.0054
Saturn	20523-01-06 15:36 G	9216936.98	9216937.15	9216937.32	0.0287	0.0171
Jupiter	20527-04-27 21:21 G	9218509.19	9218509.39	9218509.59	0.0518	0.0056
Uranus	20536-04-04 19:12 G	9221774.23	9221774.30	9221774.41	0.0145	0.0131
Saturn	20536-10-31 14:09 G	9221983.94	9221984.09	9221984.25	0.0272	0.0185
Uranus	20536-11-17 07:26 G	9222000.65	9222000.81	9222001.00	0.0145	0.0086

Saturn 20537-06-17 19:12 G 9222213.09 9222213.30 9222213.52 0.0272 0.0006

Uranus 20537-07-01 19:55 G 9222227.13 9222227.33 9222227.55 0.0145 0.0039

Saturn 20538-02-02 00:28 G 9222442.38 9222442.52 9222442.68 0.0272 0.0194

Uranus 20538-02-13 08:24 G 9222453.63 9222453.85 9222454.07 0.0145 0.0008

Uranus 20538-09-27 20:38 G 9222680.17 9222680.36 9222680.57 0.0145 0.0055

Uranus 20539-05-12 09:07 G 9222906.73 9222906.88 9222907.04 0.0145 0.0101

Jupiter 20544-11-10 17:02 G 9224916.11 9224916.21 9224916.33 0.0507 0.0423

Saturn 20551-04-16 03:50 G 9227263.57 9227263.66 9227263.75 0.0287 0.0259

Saturn 20551-12-01 23:02 G 9227493.25 9227493.46 9227493.67 0.0287 0.0033

Saturn 20552-07-18 17:31 G 9227723.08 9227723.23 9227723.39 0.0287 0.0193

Neptune 20554-01-30 06:14 G 9228283.72 9228283.76 9228283.85 0.0088 0.0085

Neptune 20554-09-12 19:26 G 9228509.17 9228509.31 9228509.47 0.0088 0.0065

Neptune 20555-04-26 08:38 G 9228734.67 9228734.86 9228735.05 0.0088 0.0045

Neptune 20555-12-07 21:07 G 9228960.18 9228960.38 9228960.60 0.0088 0.0026

Mars 20555-12-30 13:40 G 9228982.95 9228983.07 9228983.20 0.1612 0.1104

Pluto 20556-02-27 01:55 G 9229041.37 9229041.58 9229041.80 0.0077 0.0020

Jupiter 20556-07-16 12:28 G 9229181.82 9229182.02 9229182.23 0.0510 0.0063

Neptune 20556-07-20 10:19 G 9229185.71 9229185.93 9229186.15 0.0088 0.0006

Pluto 20556-10-09 10:33 G 9229266.79 9229266.94 9229267.12 0.0077 0.0052

Neptune 20557-03-02 23:02 G 9229411.24 9229411.46 9229411.68 0.0088 0.0014

Neptune 20557-10-14 11:31 G 9229636.80 9229636.98 9229637.20 0.0088 0.0035

Neptune 20558-05-28 00:28 G 9229862.36 9229862.52 9229862.71 0.0088 0.0054

Neptune 20559-01-08 12:57 G 9230087.94 9230088.04 9230088.19 0.0088 0.0074

Jupiter 20563-01-03 13:40 G 9231543.89 9231544.07 9231544.25 0.0519 0.0249

Saturn 20566-05-13 22:19 G 9232770.26 9232770.43 9232770.60 0.0272 0.0155

Saturn 20566-12-29 03:36 G 9232999.44 9232999.65 9232999.86 0.0272 0.0035

Saturn 20567-08-15 09:21 G 9233228.78 9233228.89 9233229.01 0.0272 0.0226

Jupiter 20574-09-08 06:14 G 9235809.59 9235809.76 9235809.94 0.0516 0.0264

Uranus 20577-10-15 10:04 G 9236942.79 9236942.92 9236943.08 0.0133 0.0100

Moon 20578-05-23 18:43 G 9237163.12 9237163.28 9237163.45 0.2645 0.0318

Earth	20578-05-23 23:02 G	9237163.32	9237163.46	9237163.61	0.2650	0.1059 *
Uranus	20578-05-29 15:50 G	9237168.96	9237169.16	9237169.35	0.0133	0.0064
Uranus	20579-01-10 20:52 G	9237395.16	9237395.37	9237395.58	0.0133	0.0028
Uranus	20579-08-25 01:55 G	9237621.37	9237621.58	9237621.80	0.0133	0.0008
Uranus	20580-04-07 07:12 G	9237847.60	9237847.80	9237848.01	0.0133	0.0043
Saturn	20580-10-26 13:26 G	9238049.94	9238050.06	9238050.20	0.0288	0.0223
Uranus	20580-11-19 12:14 G	9238073.84	9238074.01	9238074.19	0.0133	0.0078
Saturn	20581-06-13 08:24 G	9238279.64	9238279.85	9238280.06	0.0287	0.0003
Uranus	20581-07-03 17:02 G	9238300.11	9238300.21	9238300.34	0.0133	0.0113
Saturn	20582-01-29 02:38 G	9238509.49	9238509.61	9238509.74	0.0287	0.0228
Mars	20585-03-21 21:50 G	9239657.25	9239657.41	9239657.56	0.1928	0.0972
Earth	20586-05-21 15:21 G	9240083.09	9240083.14	9240083.18	0.2650	0.2533
Mars	20587-12-29 05:31 G	9240669.57	9240669.73	9240669.90	0.1606	0.0397
Jupiter	20592-03-24 02:52 G	9242216.44	9242216.62	9242216.81	0.0509	0.0226
Saturn	20595-11-24 00:14 G	9243556.34	9243556.51	9243556.70	0.0272	0.0134
Saturn	20596-07-10 05:31 G	9243785.53	9243785.73	9243785.94	0.0272	0.0056
Saturn	20597-02-24 10:48 G	9244014.87	9244014.95	9244015.05	0.0272	0.0246
Jupiter	20603-11-29 00:57 G	9246482.36	9246482.54	9246482.72	0.0511	0.0248
Saturn	20610-05-09 15:21 G	9248836.00	9248836.14	9248836.30	0.0287	0.0202
Jupiter	20610-05-17 22:33 G	9248844.24	9248844.44	9248844.64	0.0518	0.0039
Saturn	20610-12-25 10:33 G	9249065.73	9249065.94	9249066.15	0.0287	0.0025
Saturn	20611-08-12 04:48 G	9249295.61	9249295.70	9249295.81	0.0287	0.0250
Uranus	20620-07-18 14:09 G	9252558.96	9252559.09	9252559.26	0.0145	0.0106
Uranus	20621-03-02 02:38 G	9252785.42	9252785.61	9252785.82	0.0145	0.0059
Uranus	20621-10-14 15:07 G	9253011.92	9253012.13	9253012.35	0.0145	0.0013
Mars	20621-10-28 02:38 G	9253025.50	9253025.61	9253025.71	0.1614	0.1300
Jupiter	20622-01-20 17:31 G	9253110.14	9253110.23	9253110.32	0.0515	0.0456
Uranus	20622-05-29 03:21 G	9253238.43	9253238.64	9253238.86	0.0145	0.0034
Uranus	20623-01-10 15:36 G	9253464.98	9253465.15	9253465.34	0.0145	0.0081
Uranus	20623-08-25 04:04 G	9253691.57	9253691.67	9253691.78	0.0145	0.0127

Saturn 20625-06-06 08:09 G 9254342.65 9254342.84 9254343.04 0.0272 0.0103

Saturn 20626-01-21 13:40 G 9254571.87 9254572.07 9254572.27 0.0272 0.0087

Jupiter 20627-12-01 12:14 G 9255250.95 9255251.01 9255251.08 0.0508 0.0481

Neptune 20637-06-11 14:52 G 9258731.06 9258731.12 9258731.20 0.0089 0.0084

Neptune 20638-01-23 04:04 G 9258956.53 9258956.67 9258956.83 0.0089 0.0064

Neptune 20638-09-05 17:16 G 9259182.04 9259182.22 9259182.42 0.0089 0.0044

Neptune 20639-04-19 06:28 G 9259407.56 9259407.77 9259407.99 0.0089 0.0024

Jupiter 20639-08-06 11:31 G 9259516.77 9259516.98 9259517.18 0.0510 0.0018

Saturn 20639-11-20 02:24 G 9259622.43 9259622.60 9259622.78 0.0287 0.0162

Neptune 20639-11-30 19:40 G 9259633.10 9259633.32 9259633.54 0.0089 0.0004

Saturn 20640-07-06 21:07 G 9259852.18 9259852.38 9259852.59 0.0287 0.0064

Neptune 20640-07-13 08:38 G 9259858.65 9259858.86 9259859.08 0.0089 0.0016

Saturn 20641-02-21 15:36 G 9260082.15 9260082.15 9260082.15 0.0287 0.0287

Neptune 20641-02-23 21:50 G 9260084.22 9260084.41 9260084.62 0.0089 0.0036

Neptune 20641-10-07 11:02 G 9260309.80 9260309.96 9260310.14 0.0089 0.0056

Neptune 20642-05-21 00:00 G 9260535.40 9260535.50 9260535.63 0.0089 0.0076

Jupiter 20646-01-23 10:04 G 9261878.76 9261878.92 9261879.08 0.0519 0.0314

Mars 20651-01-18 00:14 G 9263699.42 9263699.51 9263699.60 0.1925 0.1630

Jupiter 20651-04-11 09:36 G 9263782.81 9263782.90 9263782.99 0.0513 0.0457

Mars 20653-10-26 18:28 G 9264712.10 9264712.27 9264712.44 0.1607 0.0207

Saturn 20654-05-02 06:28 G 9264899.74 9264899.77 9264899.80 0.0272 0.0268

Saturn 20654-12-17 11:31 G 9265128.78 9265128.98 9265129.18 0.0272 0.0080

Saturn 20655-08-03 16:48 G 9265358.01 9265358.20 9265358.39 0.0272 0.0110

Jupiter 20657-09-28 05:16 G 9266144.53 9266144.72 9266144.91 0.0517 0.0183

Uranus 20661-06-15 21:21 G 9267501.29 9267501.39 9267501.51 0.0133 0.0113

Uranus 20662-01-28 02:38 G 9267727.45 9267727.61 9267727.80 0.0133 0.0078

Uranus 20662-09-11 08:09 G 9267953.63 9267953.84 9267954.05 0.0133 0.0042

Uranus 20663-04-25 13:26 G 9268179.84 9268180.06 9268180.28 0.0133 0.0007

Uranus 20663-12-07 18:28 G 9268406.06 9268406.27 9268406.49 0.0133 0.0029

Uranus 20664-07-20 23:16 G 9268632.30 9268632.47 9268632.68 0.0133 0.0065

Uranus 20665-03-04 04:33 G 9268858.56 9268858.69 9268858.84 0.0133 0.0099

Saturn 20669-06-01 04:48 G 9270408.52 9270408.70 9270408.88 0.0287 0.0140

Saturn 20670-01-16 23:31 G 9270638.28 9270638.48 9270638.68 0.0287 0.0086

Jupiter 20675-04-13 22:19 G 9272551.27 9272551.43 9272551.60 0.0509 0.0284

Mars 20683-01-18 03:50 G 9275387.62 9275387.66 9275387.69 0.1935 0.1881

Saturn 20683-11-12 13:26 G 9275685.96 9275686.06 9275686.16 0.0272 0.0239

Saturn 20684-06-28 18:43 G 9275915.08 9275915.28 9275915.49 0.0272 0.0050

Saturn 20685-02-13 00:28 G 9276144.34 9276144.52 9276144.70 0.0272 0.0141

Jupiter 20686-12-17 19:26 G 9276817.13 9276817.31 9276817.50 0.0511 0.0195

Mars 20687-08-25 14:38 G 9277068.05 9277068.11 9277068.17 0.1615 0.1508

Moon 20691-11-24 11:31 G 9278619.83 9278619.98 9278620.12 0.2682 0.1108

Earth 20691-11-24 16:48 G 9278620.09 9278620.20 9278620.31 0.2681 0.1944 *

Jupiter 20693-06-05 18:14 G 9279179.06 9279179.26 9279179.46 0.0518 0.0100

Saturn 20698-12-12 16:48 G 9281195.00 9281195.20 9281195.40 0.0287 0.0100

Saturn 20699-07-30 11:16 G 9281424.78 9281424.97 9281425.16 0.0287 0.0126

Moon 20699-11-22 04:04 G 9281539.62 9281539.67 9281539.71 0.2686 0.2551

Earth 20699-11-22 06:57 G 9281539.69 9281539.79 9281539.90 0.2681 0.2024 *

Uranus 20704-03-18 21:50 G 9283117.30 9283117.41 9283117.52 0.0145 0.0124

Uranus 20704-10-31 09:36 G 9283343.74 9283343.90 9283344.10 0.0145 0.0080

Jupiter 20705-02-09 12:57 G 9283444.92 9283445.04 9283445.17 0.0515 0.0398

Uranus 20705-06-14 21:50 G 9283570.21 9283570.41 9283570.63 0.0145 0.0034

Uranus 20706-01-27 10:19 G 9283796.71 9283796.93 9283797.15 0.0145 0.0013

Uranus 20706-09-10 22:19 G 9284023.25 9284023.43 9284023.64 0.0145 0.0061

Uranus 20707-04-25 10:33 G 9284249.81 9284249.94 9284250.11 0.0145 0.0107

Saturn 20713-05-25 17:31 G 9286472.12 9286472.23 9286472.37 0.0272 0.0215

Saturn 20714-01-09 23:02 G 9286701.25 9286701.46 9286701.67 0.0272 0.0026

Saturn 20714-08-27 04:19 G 9286930.52 9286930.68 9286930.86 0.0272 0.0165

Pluto 20716-06-01 20:09 G 9287575.27 9287575.34 9287575.44 0.0067 0.0061

Pluto 20717-01-13 01:26 G 9287800.34 9287800.56 9287800.77 0.0067 0.0014

Pluto 20717-08-26 06:00 G 9288025.57 9288025.75 9288025.96 0.0067 0.0033

Neptune 20718-12-17 04:19 G 9288503.58 9288503.68 9288503.82 0.0088 0.0074

Neptune 20719-07-30 17:16 G 9288729.06 9288729.22 9288729.41 0.0088 0.0055

Mars 20719-08-25 06:57 G 9288754.61 9288754.79 9288754.96 0.1609 0.0045

Neptune 20720-03-12 06:28 G 9288954.57 9288954.77 9288954.98 0.0088 0.0035

Neptune 20720-10-23 19:12 G 9289180.09 9289180.30 9289180.53 0.0088 0.0015

Neptune 20721-06-06 08:09 G 9289405.62 9289405.84 9289406.06 0.0088 0.0005

Neptune 20722-01-17 20:52 G 9289631.17 9289631.37 9289631.59 0.0088 0.0025

Jupiter 20722-08-26 10:19 G 9289851.73 9289851.93 9289852.13 0.0510 0.0096

Neptune 20722-08-31 09:36 G 9289856.73 9289856.90 9289857.11 0.0088 0.0045

Neptune 20723-04-13 22:48 G 9290082.30 9290082.45 9290082.61 0.0088 0.0064

Neptune 20723-11-25 11:16 G 9290307.92 9290307.97 9290308.06 0.0088 0.0083

Saturn 20728-06-24 19:12 G 9291981.10 9291981.30 9291981.51 0.0287 0.0077

Saturn 20729-02-09 13:55 G 9292210.90 9292211.08 9292211.26 0.0287 0.0149

Jupiter 20729-02-12 10:04 G 9292213.80 9292213.92 9292214.05 0.0520 0.0402

Jupiter 20734-05-01 05:02 G 9294117.59 9294117.71 9294117.84 0.0513 0.0398

Jupiter 20740-10-18 04:33 G 9296479.49 9296479.69 9296479.89 0.0517 0.0102

Saturn 20742-12-06 00:14 G 9297258.35 9297258.51 9297258.66 0.0272 0.0187

Saturn 20743-07-23 05:45 G 9297487.53 9297487.74 9297487.95 0.0272 0.0005

Saturn 20744-03-08 11:31 G 9297716.83 9297716.98 9297717.13 0.0273 0.0195

Uranus 20745-02-14 07:40 G 9298059.78 9298059.82 9298059.89 0.0133 0.0129

Uranus 20745-09-28 13:26 G 9298285.90 9298286.06 9298286.22 0.0133 0.0093

Uranus 20746-05-12 18:28 G 9298512.08 9298512.27 9298512.48 0.0133 0.0058

Uranus 20746-12-24 23:45 G 9298738.28 9298738.49 9298738.71 0.0133 0.0022

Uranus 20747-08-08 05:02 G 9298964.50 9298964.71 9298964.93 0.0133 0.0014

Uranus 20748-03-21 10:04 G 9299190.73 9299190.92 9299191.14 0.0133 0.0050

Uranus 20748-11-02 15:21 G 9299416.98 9299417.14 9299417.32 0.0133 0.0084

Mars 20748-11-15 05:16 G 9299429.58 9299429.72 9299429.86 0.1932 0.1163

Uranus 20749-06-16 20:24 G 9299643.26 9299643.35 9299643.45 0.0133 0.0119

Mars 20751-08-23 22:33 G 9300441.38 9300441.44 9300441.50 0.1604 0.1499

Saturn 20757-05-20 12:57 G 9302537.96 9302538.04 9302538.13 0.0288 0.0261

Saturn 20758-01-05 07:40 G 9302767.61 9302767.82 9302768.03 0.0287 0.0036

Jupiter 20758-05-03 19:55 G 9302886.19 9302886.33 9302886.48 0.0509 0.0355

Saturn 20758-08-23 02:09 G 9302997.43 9302997.59 9302997.75 0.0287 0.0189

Jupiter 20770-01-06 18:28 G 9307152.07 9307152.27 9307152.47 0.0511 0.0114

Saturn 20772-06-17 05:16 G 9308044.55 9308044.72 9308044.89 0.0272 0.0161

Saturn 20773-02-01 10:33 G 9308273.73 9308273.94 9308274.15 0.0272 0.0029

Saturn 20773-09-18 16:19 G 9308503.06 9308503.18 9308503.30 0.0272 0.0220

Jupiter 20776-06-25 15:50 G 9309513.97 9309514.16 9309514.35 0.0519 0.0173

Mars 20785-06-21 19:40 G 9312797.15 9312797.32 9312797.49 0.1611 0.0185

Saturn 20786-11-30 15:36 G 9313324.04 9313324.15 9313324.27 0.0287 0.0237

Saturn 20787-07-18 10:33 G 9313553.72 9313553.94 9313554.15 0.0287 0.0013

Uranus 20787-11-17 05:16 G 9313675.70 9313675.72 9313675.76 0.0145 0.0143

Jupiter 20788-02-29 12:14 G 9313779.85 9313780.01 9313780.17 0.0516 0.0317

Saturn 20788-03-04 04:48 G 9313783.57 9313783.70 9313783.85 0.0286 0.0212

Uranus 20788-06-30 17:16 G 9313902.07 9313902.22 9313902.39 0.0145 0.0098

Uranus 20789-02-12 05:31 G 9314128.53 9314128.73 9314128.94 0.0145 0.0052

Uranus 20789-09-26 17:45 G 9314355.03 9314355.24 9314355.46 0.0145 0.0007

Uranus 20790-05-11 06:00 G 9314581.55 9314581.75 9314581.96 0.0145 0.0040

Uranus 20790-12-23 18:14 G 9314808.09 9314808.26 9314808.44 0.0145 0.0086

Uranus 20791-08-07 06:28 G 9315034.69 9315034.77 9315034.86 0.0145 0.0133

Saturn 20801-12-28 10:48 G 9318830.77 9318830.95 9318831.13 0.0272 0.0134

Neptune 20802-04-27 13:40 G 9318950.96 9318951.07 9318951.21 0.0089 0.0073

Saturn 20802-08-14 16:19 G 9319059.98 9319060.18 9319060.39 0.0273 0.0058

Neptune 20802-12-09 02:52 G 9319176.45 9319176.62 9319176.80 0.0089 0.0053

Saturn 20803-03-31 22:19 G 9319289.35 9319289.43 9319289.52 0.0273 0.0248

Pluto 20803-06-21 13:26 G 9319370.88 9319371.06 9319371.27 0.0077 0.0037

Neptune 20803-07-22 16:04 G 9319401.97 9319402.17 9319402.38 0.0089 0.0033

Pluto 20804-02-01 22:48 G 9319596.26 9319596.45 9319596.65 0.0077 0.0035

Neptune 20804-03-04 05:16 G 9319627.51 9319627.72 9319627.94 0.0089 0.0013

Neptune 20804-10-15 18:28 G 9319853.05 9319853.27 9319853.49 0.0089 0.0007

Neptune 20805-05-29 07:26 G 9320078.61 9320078.81 9320079.03 0.0089 0.0027

Jupiter 20805-09-14 04:48 G 9320186.50 9320186.70 9320186.89 0.0510 0.0148

Neptune 20806-01-09 20:24 G 9320304.17 9320304.35 9320304.55 0.0089 0.0047

Neptune 20806-08-23 09:21 G 9320529.76 9320529.89 9320530.05 0.0089 0.0067

Neptune 20807-04-05 22:33 G 9320755.42 9320755.44 9320755.50 0.0089 0.0087

Jupiter 20812-03-03 05:02 G 9322548.63 9322548.71 9322548.81 0.0520 0.0461

Mars 20814-09-12 06:57 G 9323471.62 9323471.79 9323471.96 0.1929 0.0462

Saturn 20816-06-12 04:19 G 9324110.53 9324110.68 9324110.84 0.0288 0.0197

Saturn 20817-01-27 23:16 G 9324340.26 9324340.47 9324340.68 0.0287 0.0030

Jupiter 20817-05-20 02:09 G 9324452.44 9324452.59 9324452.75 0.0513 0.0329

Mars 20817-06-20 11:02 G 9324483.86 9324483.96 9324484.06 0.1605 0.1306

Saturn 20817-09-14 17:31 G 9324570.13 9324570.23 9324570.33 0.0287 0.0253

Earth 20821-05-26 01:12 G 9325919.40 9325919.55 9325919.69 0.2650 0.1021

Moon 20821-05-26 03:50 G 9325919.54 9325919.66 9325919.77 0.2656 0.1653 *

Jupiter 20823-11-06 23:16 G 9326814.27 9326814.47 9326814.68 0.0517 0.0046

Earth 20829-05-23 17:16 G 9328839.19 9328839.22 9328839.25 0.2651 0.2578

Moon 20829-05-23 22:48 G 9328839.36 9328839.45 9328839.54 0.2652 0.2133

Uranus 20829-05-28 23:45 G 9328844.38 9328844.49 9328844.64 0.0133 0.0108

Uranus 20830-01-10 05:31 G 9329070.54 9329070.73 9329070.91 0.0133 0.0072

Uranus 20830-08-24 10:33 G 9329296.74 9329296.94 9329297.16 0.0133 0.0037

Uranus 20831-04-07 16:04 G 9329522.95 9329523.17 9329523.39 0.0133 0.0001

Saturn 20831-07-10 16:33 G 9329617.00 9329617.19 9329617.38 0.0272 0.0107

Uranus 20831-11-19 21:21 G 9329749.18 9329749.39 9329749.60 0.0133 0.0035

Saturn 20832-02-24 21:50 G 9329846.21 9329846.41 9329846.62 0.0272 0.0083

Uranus 20832-07-03 02:09 G 9329975.42 9329975.59 9329975.79 0.0133 0.0070

Uranus 20833-02-14 07:12 G 9330201.68 9330201.80 9330201.95 0.0133 0.0105

Jupiter 20841-05-22 18:28 G 9333221.17 9333221.27 9333221.38 0.0508 0.0432

Saturn 20845-12-23 07:12 G 9334896.63 9334896.80 9334896.97 0.0287 0.0173

Saturn 20846-08-10 01:55 G 9335126.37 9335126.58 9335126.79 0.0287 0.0053

Saturn 20847-03-27 19:55 G 9335356.29 9335356.33 9335356.40 0.0286 0.0276

Mars 20851-04-19 07:55 G 9336839.66 9336839.83 9336840.00 0.1613 0.0392

Jupiter 20853-01-25 14:38 G 9337486.91 9337487.11 9337487.31 0.0511 0.0051

Jupiter 20859-07-15 15:07 G 9339848.95 9339849.13 9339849.30 0.0519 0.0255

Saturn 20860-06-04 15:21 G 9340174.13 9340174.14 9340174.17 0.0272 0.0271

Saturn 20861-01-19 20:52 G 9340403.17 9340403.37 9340403.57 0.0272 0.0082

Saturn 20861-09-06 02:38 G 9340632.42 9340632.61 9340632.81 0.0273 0.0109

Jupiter 20871-03-20 07:40 G 9344114.65 9344114.82 9344115.00 0.0515 0.0256

Uranus 20872-02-29 00:28 G 9344460.40 9344460.52 9344460.65 0.0145 0.0117

Uranus 20872-10-12 12:28 G 9344686.84 9344687.02 9344687.22 0.0145 0.0072

Uranus 20873-05-27 00:43 G 9344913.32 9344913.53 9344913.75 0.0145 0.0026

Uranus 20874-01-08 12:57 G 9345139.82 9345140.04 9345140.26 0.0145 0.0020

Uranus 20874-08-23 01:12 G 9345366.36 9345366.55 9345366.74 0.0145 0.0066

Uranus 20875-04-06 13:26 G 9345592.93 9345593.06 9345593.20 0.0145 0.0113

Saturn 20875-07-05 19:12 G 9345683.11 9345683.30 9345683.49 0.0288 0.0134

Saturn 20876-02-20 14:09 G 9345912.89 9345913.09 9345913.29 0.0287 0.0093

Mars 20880-07-09 08:38 G 9347513.68 9347513.86 9347514.03 0.1926 0.0246

Neptune 20883-03-20 14:24 G 9348498.03 9348498.10 9348498.17 0.0088 0.0083

Mars 20883-04-17 23:45 G 9348526.36 9348526.49 9348526.61 0.1607 0.1117

Neptune 20883-11-01 02:52 G 9348723.48 9348723.62 9348723.79 0.0088 0.0064

Neptune 20884-06-13 15:50 G 9348948.98 9348949.16 9348949.36 0.0088 0.0044

Neptune 20885-01-25 04:33 G 9349174.49 9349174.69 9349174.91 0.0088 0.0024

Neptune 20885-09-07 17:45 G 9349400.02 9349400.24 9349400.46 0.0088 0.0004

Neptune 20886-04-21 06:28 G 9349625.56 9349625.77 9349625.99 0.0088 0.0015

Neptune 20886-12-02 19:26 G 9349851.11 9349851.31 9349851.51 0.0088 0.0035

Neptune 20887-07-16 07:55 G 9350076.67 9350076.83 9350077.01 0.0088 0.0055

Neptune 20888-02-26 20:24 G 9350302.26 9350302.35 9350302.49 0.0088 0.0075

Jupiter 20888-10-03 03:21 G 9350521.46 9350521.64 9350521.83 0.0510 0.0229

Saturn 20889-12-15 21:50 G 9350960.33 9350960.41 9350960.51 0.0272 0.0244

Saturn 20890-08-02 03:21 G 9351189.43 9351189.64 9351189.84 0.0272 0.0055

Saturn 20891-03-19 08:38 G 9351418.68 9351418.86 9351419.05 0.0272 0.0136

Jupiter 20900-06-09 01:26 G 9354787.38 9354787.56 9354787.74 0.0512 0.0247

Saturn 20905-01-15 22:04 G 9356469.23 9356469.42 9356469.62 0.0287 0.0110

Saturn 20905-09-02 16:33 G 9356699.00 9356699.19 9356699.39 0.0287 0.0116

Jupiter 20906-11-26 22:19 G 9357149.23 9357149.43 9357149.63 0.0517 0.0036

Uranus 20913-01-27 09:36 G 9359402.83 9359402.90 9359403.00 0.0133 0.0123

Uranus 20913-09-10 15:07 G 9359628.98 9359629.13 9359629.31 0.0133 0.0087

Uranus 20914-04-24 20:38 G 9359855.17 9359855.36 9359855.57 0.0133 0.0052

Uranus 20914-12-07 02:09 G 9360081.37 9360081.59 9360081.81 0.0133 0.0016

Uranus 20915-07-21 07:26 G 9360307.59 9360307.81 9360308.02 0.0133 0.0019

Uranus 20916-03-03 12:28 G 9360533.83 9360534.02 9360534.23 0.0133 0.0055

Uranus 20916-10-15 17:31 G 9360760.08 9360760.23 9360760.40 0.0133 0.0090

Mars 20917-02-14 20:24 G 9360882.19 9360882.35 9360882.51 0.1615 0.0591

Uranus 20917-05-29 22:33 G 9360986.39 9360986.44 9360986.53 0.0133 0.0125

Jupiter 20918-08-01 18:00 G 9361415.16 9361415.25 9361415.34 0.0515 0.0455

Saturn 20919-06-29 00:57 G 9361746.42 9361746.54 9361746.66 0.0272 0.0221

Saturn 20920-02-13 06:14 G 9361975.55 9361975.76 9361975.97 0.0272 0.0032

Saturn 20920-09-29 12:00 G 9362204.83 9362205.00 9362205.17 0.0273 0.0160

Jupiter 20924-06-11 14:24 G 9363556.06 9363556.10 9363556.15 0.0508 0.0492

Saturn 20934-07-29 09:21 G 9367255.68 9367255.89 9367256.09 0.0288 0.0072

Earth 20934-11-26 16:33 G 9367376.07 9367376.19 9367376.32 0.2681 0.1649

Moon 20934-11-26 21:50 G 9367376.38 9367376.41 9367376.44 0.2683 0.2604

Saturn 20935-03-16 04:04 G 9367485.50 9367485.67 9367485.85 0.0287 0.0154

Jupiter 20936-02-15 12:00 G 9367821.79 9367822.00 9367822.20 0.0511 0.0021

Jupiter 20942-08-04 10:33 G 9370183.78 9370183.94 9370184.10 0.0518 0.0317

Earth 20942-11-24 06:57 G 9370295.71 9370295.79 9370295.87 0.2681 0.2291

Moon 20942-11-24 12:00 G 9370295.88 9370296.00 9370296.11 0.2678 0.1840

Mars 20946-05-07 10:48 G 9371555.79 9371555.95 9371556.10 0.1923 0.0929

Jupiter 20947-10-21 09:36 G 9372087.82 9372087.90 9372088.00 0.0514 0.0458

Saturn 20949-01-08 07:40 G 9372532.68 9372532.82 9372532.97 0.0271 0.0194

Mars 20949-02-13 12:14 G 9372568.86 9372569.01 9372569.15 0.1609 0.0922

Saturn 20949-08-25 12:57 G 9372761.83 9372762.04 9372762.25 0.0272 0.0004

Saturn 20950-04-11 18:14 G 9372991.11 9372991.26 9372991.42 0.0272 0.0186

Jupiter 20954-04-09 05:16 G 9374449.53 9374449.72 9374449.91 0.0516 0.0184

Uranus 20955-10-30 06:28 G 9375018.72 9375018.77 9375018.85 0.0145 0.0137

Uranus 20956-06-12 18:28 G 9375245.12 9375245.27 9375245.45 0.0145 0.0092

Uranus 20957-01-25 06:43 G 9375471.58 9375471.78 9375471.99 0.0145 0.0046

Uranus 20957-09-08 19:12 G 9375698.08 9375698.30 9375698.52 0.0145 0.0001

Uranus 20958-04-23 07:12 G 9375924.60 9375924.80 9375925.02 0.0145 0.0046

Uranus 20958-12-05 19:26 G 9376151.15 9376151.31 9376151.49 0.0145 0.0092

Uranus 20959-07-20 07:40 G 9376377.77 9376377.82 9376377.90 0.0145 0.0138

Saturn 20963-06-23 16:33 G 9377812.14 9377812.19 9377812.26 0.0287 0.0276

Saturn 20964-02-08 11:45 G 9378041.78 9378041.99 9378042.20 0.0287 0.0050

Pluto 20964-05-06 11:16 G 9378129.80 9378129.97 9378130.18 0.0067 0.0034

Saturn 20964-09-25 06:14 G 9378271.60 9378271.76 9378271.93 0.0287 0.0177

Pluto 20964-12-17 16:48 G 9378354.98 9378355.20 9378355.41 0.0067 0.0014

Pluto 20965-07-30 21:07 G 9378580.32 9378580.38 9378580.50 0.0067 0.0062

Neptune 20966-07-30 23:31 G 9378945.41 9378945.48 9378945.58 0.0089 0.0082

Neptune 20967-03-13 12:57 G 9379170.90 9379171.04 9379171.21 0.0089 0.0062

Neptune 20967-10-25 02:09 G 9379396.41 9379396.59 9379396.80 0.0089 0.0042

Neptune 20968-06-06 15:21 G 9379621.93 9379622.14 9379622.36 0.0089 0.0022

Neptune 20969-01-18 04:33 G 9379847.47 9379847.69 9379847.92 0.0089 0.0003

Neptune 20969-08-31 17:45 G 9380073.03 9380073.24 9380073.46 0.0089 0.0018

Neptune 20970-04-14 06:43 G 9380298.60 9380298.78 9380298.99 0.0089 0.0039

Neptune 20970-11-25 20:09 G 9380524.18 9380524.34 9380524.51 0.0089 0.0058

Neptune 20971-07-09 09:07 G 9380749.79 9380749.88 9380749.99 0.0089 0.0079

Jupiter 20971-10-24 01:26 G 9380856.40 9380856.56 9380856.72 0.0509 0.0301

Saturn 20978-07-21 09:36 G 9383318.74 9383318.90 9383319.07 0.0272 0.0173

Saturn 20979-03-07 14:52 G 9383547.91 9383548.12 9383548.33 0.0272 0.0017

Saturn 20979-10-22 20:38 G 9383777.22 9383777.36 9383777.49 0.0273 0.0208

Mars 20982-12-13 08:38 G 9384924.71 9384924.86 9384925.01 0.1616 0.0800

Jupiter	**20983-06-28 22:19**	**G**	**9385122.24**	**9385122.43**	**9385122.63**	**0.0512**	**0.0179**	
Jupiter	**20989-12-15 19:26**	**G**	**9387484.12**	**9387484.31**	**9387484.52**	**0.0517**	**0.0110**	
Saturn	**20993-01-03 02:38**	**G**	**9388598.50**	**9388598.61**	**9388598.72**	**0.0288**	**0.0241**	
Saturn	**20993-08-20 21:50**	**G**	**9388828.20**	**9388828.41**	**9388828.62**	**0.0288**	**0.0014**	
Saturn	**20994-04-07 16:33**	**G**	**9389058.05**	**9389058.19**	**9389058.34**	**0.0287**	**0.0212**	
Uranus	**20997-05-11 01:26**	**G**	**9390187.43**	**9390187.56**	**9390187.71**	**0.0133**	**0.0102**	
Uranus	**20997-12-23 06:43**	**G**	**9390413.61**	**9390413.78**	**9390413.98**	**0.0133**	**0.0067**	
Uranus	**20998-08-06 12:28**	**G**	**9390639.81**	**9390640.02**	**9390640.23**	**0.0133**	**0.0031**	
Uranus	**20999-03-20 17:45**	**G**	**9390866.03**	**9390866.24**	**9390866.46**	**0.0133**	**0.0005**	
Uranus	**20999-11-01 23:02**	**G**	**9391092.26**	**9391092.46**	**9391092.67**	**0.0133**	**0.0040**	
Uranus	**21000-06-16 04:04**	**G**	**9391318.50**	**9391318.67**	**9391318.86**	**0.0133**	**0.0076**	

22ND MILLENNIUM CE

This is a list of transits of Venus in the 22nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Uranus	**21001-01-28 09:21**	**G**	**9391544.78**	**9391544.89**	**9391545.01**	**0.0133**	**0.0110**	
Jupiter	**21001-08-21 14:38**	**G**	**9391749.98**	**9391750.11**	**9391750.25**	**0.0514**	**0.0386**	
Saturn	**21008-02-01 16:19**	**G**	**9394105.00**	**9394105.18**	**9394105.36**	**0.0271**	**0.0146**	
Saturn	**21008-09-17 21:21**	**G**	**9394334.19**	**9394334.39**	**9394334.60**	**0.0272**	**0.0044**	
Saturn	**21009-05-05 02:38**	**G**	**9394563.52**	**9394563.61**	**9394563.73**	**0.0272**	**0.0234**	
Mars	**21012-03-04 12:28**	**G**	**9395597.93**	**9395598.02**	**9395598.12**	**0.1920**	**0.1614**	
Mars	**21014-12-13 00:43**	**G**	**9396611.38**	**9396611.53**	**9396611.69**	**0.1610**	**0.0728**	
Jupiter	**21019-03-07 12:28**	**G**	**9398156.82**	**9398157.02**	**9398157.22**	**0.0511**	**0.0110**	

Saturn 21022-07-17 05:16 G 9399384.58 9399384.72 9399384.86 0.0287 0.0217

Saturn 21023-03-04 00:28 G 9399614.31 9399614.52 9399614.73 0.0287 0.0009

Saturn 21023-10-19 18:43 G 9399844.17 9399844.28 9399844.42 0.0287 0.0235

Jupiter 21025-08-24 10:19 G 9400518.81 9400518.93 9400519.06 0.0519 0.0403

Jupiter 21030-11-10 09:07 G 9402422.74 9402422.88 9402423.02 0.0513 0.0374

Jupiter 21037-04-29 06:00 G 9404784.55 9404784.75 9404784.95 0.0516 0.0092

Saturn 21037-08-13 17:02 G 9404891.03 9404891.21 9404891.41 0.0272 0.0127

Saturn 21038-03-30 22:19 G 9405120.23 9405120.43 9405120.64 0.0272 0.0064

Saturn 21038-11-15 03:50 G 9405349.59 9405349.66 9405349.74 0.0273 0.0254

Uranus 21040-02-12 00:00 G 9405803.38 9405803.50 9405803.65 0.0145 0.0113

Uranus 21040-09-25 12:28 G 9406029.83 9406030.02 9406030.22 0.0145 0.0067

Uranus 21041-05-10 00:43 G 9406256.31 9406256.53 9406256.74 0.0145 0.0021

Uranus 21041-12-22 12:43 G 9406482.82 9406483.03 9406483.25 0.0145 0.0025

Uranus 21042-08-06 00:43 G 9406709.36 9406709.53 9406709.74 0.0145 0.0071

Uranus 21043-03-20 13:26 G 9406935.93 9406936.06 9406936.19 0.0145 0.0116

Mars 21044-03-04 16:04 G 9407286.15 9407286.17 9407286.19 0.1930 0.1906

Neptune 21048-02-04 13:12 G 9408717.93 9408718.05 9408718.19 0.0088 0.0072

Neptune 21048-09-17 01:55 G 9408943.42 9408943.58 9408943.78 0.0088 0.0053

Mars 21048-10-10 21:07 G 9408967.25 9408967.38 9408967.52 0.1618 0.1005

Neptune 21049-04-30 15:07 G 9409168.93 9409169.13 9409169.34 0.0088 0.0033

Neptune 21049-12-12 03:50 G 9409394.45 9409394.66 9409394.88 0.0088 0.0013

Neptune 21050-07-25 16:48 G 9409619.98 9409620.20 9409620.42 0.0088 0.0007

Pluto 21050-10-13 21:50 G 9409700.34 9409700.41 9409700.55 0.0077 0.0069

Neptune 21051-03-08 05:16 G 9409845.52 9409845.72 9409845.94 0.0088 0.0027

Pluto 21051-05-27 07:40 G 9409925.60 9409925.82 9409926.04 0.0077 0.0005

Neptune 21051-10-19 18:28 G 9410071.08 9410071.27 9410071.46 0.0088 0.0046

Saturn 21052-01-27 13:12 G 9410170.90 9410171.05 9410171.22 0.0288 0.0187

Neptune 21052-06-01 06:57 G 9410296.65 9410296.79 9410296.95 0.0088 0.0066

Saturn 21052-09-13 08:38 G 9410400.65 9410400.86 9410401.07 0.0288 0.0041

Neptune 21053-01-12 19:26 G 9410522.28 9410522.31 9410522.39 0.0088 0.0085

Saturn 21053-05-01 03:07 G 9410630.57 9410630.63 9410630.72 0.0287 0.0268

Jupiter 21054-11-12 23:31 G 9411191.34 9411191.48 9411191.61 0.0510 0.0379

Moon 21064-05-28 02:38 G 9414675.45 9414675.61 9414675.77 0.2644 0.0697

Earth 21064-05-28 03:21 G 9414675.50 9414675.64 9414675.79 0.2651 0.1019 *

Jupiter 21066-07-18 21:36 G 9415457.20 9415457.40 9415457.60 0.0513 0.0094

Saturn 21067-02-24 00:00 G 9415677.31 9415677.50 9415677.70 0.0271 0.0099

Saturn 21067-10-11 05:02 G 9415906.51 9415906.71 9415906.91 0.0271 0.0090

Earth 21072-05-25 19:40 G 9417595.29 9417595.32 9417595.35 0.2651 0.2585

Jupiter 21073-01-04 18:14 G 9417819.07 9417819.26 9417819.45 0.0517 0.0188

Mars 21080-10-09 13:26 G 9420653.89 9420654.06 9420654.22 0.1612 0.0532

Uranus 21081-01-09 10:33 G 9420745.86 9420745.94 9420746.07 0.0133 0.0118

Saturn 21081-08-08 15:36 G 9420956.99 9420957.15 9420957.34 0.0288 0.0164

Uranus 21081-08-23 16:33 G 9420972.02 9420972.19 9420972.36 0.0133 0.0082

Saturn 21082-03-26 11:02 G 9421186.76 9421186.96 9421187.17 0.0287 0.0064

Uranus 21082-04-06 22:04 G 9421198.22 9421198.42 9421198.63 0.0133 0.0046

Uranus 21082-11-19 03:21 G 9421424.43 9421424.64 9421424.86 0.0133 0.0011

Uranus 21083-07-03 08:38 G 9421650.65 9421650.86 9421651.08 0.0133 0.0025

Uranus 21084-02-14 13:55 G 9421876.89 9421877.08 9421877.28 0.0133 0.0060

Jupiter 21084-09-09 14:38 G 9422084.95 9422085.11 9422085.28 0.0515 0.0301

Uranus 21084-09-27 19:12 G 9422103.16 9422103.30 9422103.46 0.0133 0.0095

Uranus 21085-05-12 00:28 G 9422329.49 9422329.52 9422329.57 0.0133 0.0130

Saturn 21096-01-19 18:57 G 9426234.27 9426234.29 9426234.32 0.0271 0.0269

Saturn 21096-09-05 00:00 G 9426463.30 9426463.50 9426463.70 0.0272 0.0082

Saturn 21097-04-22 04:48 G 9426692.51 9426692.70 9426692.90 0.0272 0.0108

Jupiter 21102-03-27 11:31 G 9428491.80 9428491.98 9428492.17 0.0510 0.0191

Jupiter 21108-09-13 10:04 G 9430853.86 9430853.92 9430853.98 0.0519 0.0492

Mars 21109-12-31 18:00 G 9431328.11 9431328.25 9431328.38 0.1927 0.1205

Saturn 21111-02-19 22:48 G 9431743.26 9431743.45 9431743.64 0.0288 0.0134

Saturn 21111-10-07 18:14 G 9431973.06 9431973.26 9431973.46 0.0288 0.0094

Jupiter 21113-11-30 07:12 G 9432757.64 9432757.80 9432757.97 0.0514 0.0297

Mars 21114-08-09 09:07 G 9433009.77 9433009.88 9433009.99 0.1620 0.1221

Jupiter 21120-05-19 05:02 G 9435119.50 9435119.71 9435119.91 0.0516 0.0013

Uranus 21123-10-13 05:31 G 9436361.67 9436361.73 9436361.83 0.0145 0.0134

Uranus 21124-05-26 18:00 G 9436588.08 9436588.25 9436588.42 0.0145 0.0088

Uranus 21125-01-08 05:45 G 9436814.54 9436814.74 9436814.96 0.0145 0.0043

Saturn 21125-08-02 01:55 G 9437020.50 9437020.58 9437020.69 0.0271 0.0242

Uranus 21125-08-22 18:14 G 9437041.04 9437041.26 9437041.48 0.0145 0.0003

Saturn 21126-03-19 06:43 G 9437249.58 9437249.78 9437249.99 0.0271 0.0055

Uranus 21126-04-06 06:28 G 9437267.57 9437267.77 9437267.98 0.0145 0.0049

Saturn 21126-11-03 11:31 G 9437478.80 9437478.98 9437479.17 0.0271 0.0135

Uranus 21126-11-18 18:28 G 9437494.12 9437494.27 9437494.45 0.0145 0.0096

Uranus 21127-07-03 06:43 G 9437720.75 9437720.78 9437720.85 0.0145 0.0141

Neptune 21131-06-16 23:16 G 9439165.35 9439165.47 9439165.62 0.0089 0.0070

Jupiter 21132-01-23 00:00 G 9439385.46 9439385.50 9439385.54 0.0513 0.0502

Neptune 21132-01-28 12:28 G 9439390.85 9439391.02 9439391.21 0.0089 0.0050

Neptune 21132-09-10 01:40 G 9439616.37 9439616.57 9439616.79 0.0089 0.0030

Neptune 21133-04-23 15:07 G 9439841.91 9439842.13 9439842.35 0.0089 0.0010

Neptune 21133-12-05 04:19 G 9440067.46 9440067.68 9440067.90 0.0089 0.0010

Neptune 21134-07-18 17:16 G 9440293.02 9440293.22 9440293.44 0.0089 0.0030

Neptune 21135-03-01 06:28 G 9440518.60 9440518.77 9440518.96 0.0089 0.0050

Neptune 21135-10-12 19:40 G 9440744.20 9440744.32 9440744.46 0.0089 0.0070

Jupiter 21137-12-03 00:57 G 9441526.47 9441526.54 9441526.62 0.0509 0.0474

Saturn 21140-09-01 01:12 G 9442529.36 9442529.55 9442529.75 0.0288 0.0111

Saturn 21141-04-18 20:24 G 9442759.16 9442759.35 9442759.55 0.0287 0.0117

Mars 21146-08-08 01:40 G 9444696.40 9444696.57 9444696.74 0.1614 0.0327

Jupiter 21149-08-07 22:48 G 9445792.25 9445792.45 9445792.66 0.0512 0.0010

Saturn 21155-02-12 00:57 G 9447806.44 9447806.54 9447806.67 0.0271 0.0227

Saturn 21155-09-29 06:00 G 9448035.54 9448035.75 9448035.96 0.0272 0.0038

Jupiter 21156-01-25 20:24 G 9448154.19 9448154.35 9448154.52 0.0518 0.0290

Saturn 21156-05-15 11:02 G 9448264.78 9448264.96 9448265.13 0.0272 0.0151

Jupiter 21161-04-12 19:40 G 9450058.26 9450058.32 9450058.39 0.0515 0.0486

Uranus 21164-09-09 20:24 G 9451304.35 9451304.35 9451304.40 0.0134 0.0133

Uranus 21165-04-24 02:24 G 9451530.46 9451530.60 9451530.76 0.0133 0.0097

Uranus 21165-12-06 07:55 G 9451756.64 9451756.83 9451757.03 0.0133 0.0061

Uranus 21166-07-20 13:12 G 9451982.85 9451983.05 9451983.27 0.0133 0.0027

Uranus 21167-03-03 18:57 G 9452209.07 9452209.29 9452209.51 0.0133 0.0010

Jupiter 21167-09-30 15:36 G 9452419.97 9452420.15 9452420.34 0.0515 0.0205

Uranus 21167-10-16 00:00 G 9452435.31 9452435.50 9452435.72 0.0133 0.0045

Uranus 21168-05-29 05:16 G 9452661.56 9452661.72 9452661.91 0.0133 0.0081

Uranus 21169-01-10 10:33 G 9452887.85 9452887.94 9452888.06 0.0133 0.0115

Saturn 21170-03-14 06:28 G 9453315.57 9453315.77 9453315.98 0.0288 0.0085

Saturn 21170-10-30 01:55 G 9453545.40 9453545.58 9453545.77 0.0288 0.0144

Mars 21175-10-28 19:40 G 9455370.15 9455370.32 9455370.49 0.1924 0.0498

Moon 21177-11-28 12:00 G 9456131.84 9456132.00 9456132.16 0.2676 0.0603

Earth 21177-11-28 16:48 G 9456132.06 9456132.20 9456132.33 0.2680 0.1424 *

Mars 21180-06-05 21:36 G 9457052.32 9457052.40 9457052.48 0.1622 0.1434

Saturn 21184-08-24 08:24 G 9458592.71 9458592.85 9458592.99 0.0271 0.0198

Saturn 21185-04-10 12:57 G 9458821.83 9458822.04 9458822.25 0.0271 0.0011

Jupiter 21185-04-15 11:02 G 9458826.79 9458826.96 9458827.13 0.0511 0.0276

Saturn 21185-11-25 17:31 G 9459051.08 9459051.23 9459051.40 0.0271 0.0178

Earth 21185-11-26 07:12 G 9459051.75 9459051.80 9459051.85 0.2680 0.2522

Jupiter 21196-12-19 09:21 G 9463092.70 9463092.89 9463093.08 0.0514 0.0198

Saturn 21199-02-06 14:09 G 9463872.08 9463872.09 9463872.10 0.0288 0.0287

Saturn 21199-09-24 09:50 G 9464101.70 9464101.91 9464102.12 0.0288 0.0060

Saturn 21200-05-11 04:48 G 9464331.54 9464331.70 9464331.88 0.0288 0.0168

Jupiter 21203-06-08 05:31 G 9465454.53 9465454.73 9465454.94 0.0516 0.0082

Uranus 21208-01-24 23:45 G 9467146.36 9467146.49 9467146.65 0.0145 0.0109

Uranus 21208-09-07 12:14 G 9467372.82 9467373.01 9467373.21 0.0145 0.0063

Uranus 21209-04-22 00:14 G 9467599.30 9467599.51 9467599.73 0.0145 0.0018

Uranus 21209-12-04 12:28 G 9467825.81 9467826.02 9467826.24 0.0145 0.0028

Uranus 21210-07-19 00:28 G 9468052.34 9468052.52 9468052.72 0.0145 0.0074

Uranus 21211-03-02 12:57 G 9468278.92 9468279.04 9468279.16 0.0145 0.0120

Pluto 21211-08-29 20:38 G 9468459.27 9468459.36 9468459.47 0.0067 0.0059

Pluto 21212-04-11 01:40 G 9468684.36 9468684.57 9468684.79 0.0067 0.0012

Neptune 21212-05-09 00:00 G 9468712.41 9468712.50 9468712.59 0.0088 0.0080

Mars 21212-06-04 14:24 G 9468738.93 9468739.10 9468739.27 0.1615 0.0131

Pluto 21212-11-22 06:14 G 9468909.59 9468909.76 9468909.96 0.0067 0.0035

Neptune 21212-12-20 12:28 G 9468937.87 9468938.02 9468938.19 0.0088 0.0061

Neptune 21213-08-03 01:26 G 9469163.38 9469163.56 9469163.77 0.0088 0.0041

Saturn 21214-03-06 06:57 G 9469378.65 9469378.79 9469378.96 0.0271 0.0183

Neptune 21214-03-16 14:09 G 9469388.89 9469389.09 9469389.32 0.0088 0.0022

Saturn 21214-10-21 11:45 G 9469607.78 9469607.99 9469608.20 0.0271 0.0005

Neptune 21214-10-28 03:21 G 9469614.42 9469614.64 9469614.86 0.0088 0.0001

Jupiter 21215-02-11 02:24 G 9469720.48 9469720.60 9469720.73 0.0514 0.0402

Saturn 21215-06-07 16:19 G 9469837.04 9469837.18 9469837.33 0.0272 0.0194

Neptune 21215-06-10 16:04 G 9469839.96 9469840.17 9469840.39 0.0088 0.0018

Neptune 21216-01-22 04:48 G 9470065.51 9470065.70 9470065.91 0.0088 0.0038

Neptune 21216-09-03 17:31 G 9470291.08 9470291.23 9470291.41 0.0088 0.0058

Neptune 21217-04-17 06:43 G 9470516.67 9470516.78 9470516.89 0.0088 0.0077

Saturn 21228-08-18 17:16 G 9474658.15 9474658.22 9474658.31 0.0288 0.0265

Saturn 21229-04-05 13:26 G 9474887.85 9474888.06 9474888.28 0.0288 0.0037

Saturn 21229-11-21 08:52 G 9475117.72 9475117.87 9475118.04 0.0288 0.0192

Jupiter 21232-08-26 21:21 G 9476127.19 9476127.39 9476127.59 0.0512 0.0080

Jupiter 21239-02-13 21:07 G 9478489.25 9478489.38 9478489.52 0.0517 0.0384

Mars 21241-08-24 21:50 G 9479412.23 9479412.41 9479412.58 0.1921 0.0188

Saturn 21243-09-16 14:24 G 9480164.93 9480165.10 9480165.27 0.0271 0.0155

Jupiter 21244-05-01 18:14 G 9480393.14 9480393.26 9480393.39 0.0515 0.0405

Saturn 21244-05-02 18:43 G 9480394.07 9480394.28 9480394.49 0.0271 0.0033

Saturn 21244-12-17 23:16 G 9480623.36 9480623.47 9480623.60 0.0271 0.0221

Uranus 21248-12-22 11:16 G 9482088.87 9482088.97 9482089.10 0.0134 0.0113

Uranus 21249-08-05 16:48 G 9482315.03 9482315.20 9482315.39 0.0134 0.0078

Uranus 21250-03-19 22:48 G 9482541.24 9482541.45 9482541.65 0.0133 0.0042

Jupiter 21250-10-19 15:36 G 9482754.95 9482755.15 9482755.35 0.0515 0.0120

Uranus 21250-11-01 04:04 G 9482767.46 9482767.67 9482767.89 0.0133 0.0007

Uranus 21251-06-15 09:21 G 9482993.69 9482993.89 9482994.11 0.0133 0.0029

Uranus 21252-01-27 14:38 G 9483219.93 9483220.11 9483220.31 0.0133 0.0064

Uranus 21252-09-09 19:55 G 9483446.20 9483446.33 9483446.49 0.0133 0.0100

Saturn 21258-02-28 21:36 G 9485444.29 9485444.40 9485444.53 0.0288 0.0239

Saturn 21258-10-16 17:31 G 9485674.02 9485674.23 9485674.44 0.0288 0.0011

Saturn 21259-06-03 12:28 G 9485903.89 9485904.02 9485904.17 0.0288 0.0217

Jupiter 21268-05-04 12:57 G 9489161.91 9489162.04 9489162.18 0.0510 0.0375

Saturn 21273-03-28 13:12 G 9490950.87 9490951.05 9490951.23 0.0271 0.0139

Saturn 21273-11-12 17:31 G 9491180.02 9491180.23 9491180.44 0.0271 0.0049

Saturn 21274-06-29 22:04 G 9491409.32 9491409.42 9491409.53 0.0272 0.0237

Mars 21278-04-02 02:24 G 9492781.43 9492781.60 9492781.77 0.1618 0.0083

Jupiter 21280-01-08 10:33 G 9493427.74 9493427.94 9493428.14 0.0513 0.0103

Jupiter 21286-06-27 07:55 G 9495789.64 9495789.83 9495790.02 0.0516 0.0186

Saturn 21287-09-11 00:00 G 9496230.37 9496230.50 9496230.65 0.0289 0.0218

Saturn 21288-04-27 20:09 G 9496460.13 9496460.34 9496460.55 0.0288 0.0012

Saturn 21288-12-13 15:36 G 9496690.05 9496690.15 9496690.28 0.0288 0.0240

Uranus 21291-09-24 06:43 G 9497704.69 9497704.78 9497704.88 0.0145 0.0128

Uranus 21292-05-07 18:43 G 9497931.11 9497931.28 9497931.46 0.0145 0.0083

Uranus 21292-12-20 06:43 G 9498157.57 9498157.78 9498157.99 0.0145 0.0038

Uranus 21293-08-03 18:57 G 9498384.07 9498384.29 9498384.50 0.0145 0.0008

Uranus 21294-03-18 06:57 G 9498610.59 9498610.79 9498610.99 0.0145 0.0053

Uranus 21294-10-30 18:57 G 9498837.15 9498837.29 9498837.46 0.0145 0.0099

Uranus 21295-06-14 07:26 G 9499063.80 9499063.81 9499063.83 0.0145 0.0144

Neptune 21295-09-18 10:19 G 9499159.84 9499159.93 9499160.05 0.0089 0.0078

Neptune 21296-04-30 23:31 G 9499385.33 9499385.48 9499385.66 0.0089 0.0058

Neptune 21296-12-12 12:43 G 9499610.84 9499611.03 9499611.24 0.0089 0.0038

Neptune 21297-07-26 01:55 G 9499836.37 9499836.58 9499836.81 0.0089 0.0018

Jupiter 21298-03-02 03:50 G 9500055.50 9500055.66 9500055.83 0.0513 0.0305

Neptune 21298-03-08 15:21 G 9500061.92 9500062.14 9500062.37 0.0089 0.0003

Pluto 21298-09-17 12:43 G 9500254.85 9500255.03 9500255.23 0.0077 0.0041

Neptune 21298-10-20 04:19 G 9500287.48 9500287.68 9500287.91 0.0089 0.0023

Pluto 21299-04-30 21:36 G 9500480.21 9500480.40 9500480.62 0.0077 0.0032

Neptune 21299-06-02 17:16 G 9500513.05 9500513.22 9500513.43 0.0089 0.0043

Neptune 21300-01-14 06:14 G 9500738.63 9500738.76 9500738.94 0.0089 0.0063

Neptune 21300-08-27 19:26 G 9500964.26 9500964.31 9500964.42 0.0089 0.0083

Saturn 21302-10-09 20:24 G 9501737.16 9501737.35 9501737.54 0.0271 0.0111

Saturn 21303-05-27 00:43 G 9501966.33 9501966.53 9501966.73 0.0271 0.0077

Saturn 21304-01-11 05:16 G 9502195.68 9502195.72 9502195.77 0.0271 0.0264

Moon 21307-05-31 04:04 G 9503431.53 9503431.67 9503431.82 0.2658 0.0844

Earth 21307-05-31 05:31 G 9503431.58 9503431.73 9503431.87 0.2651 0.0982 *

Mars 21307-06-22 23:45 G 9503454.33 9503454.49 9503454.64 0.1918 0.0881

Mars 21310-04-01 18:43 G 9504468.21 9504468.28 9504468.35 0.1611 0.1457

Earth 21315-05-28 21:21 G 9506351.38 9506351.39 9506351.41 0.2652 0.2633

Moon 21315-05-29 00:28 G 9506351.51 9506351.52 9506351.52 0.2657 0.2652

Jupiter 21315-09-16 23:16 G 9506462.28 9506462.47 9506462.66 0.0512 0.0178

Saturn 21317-03-24 05:31 G 9507016.57 9507016.73 9507016.89 0.0288 0.0189

Saturn 21317-11-09 01:12 G 9507246.34 9507246.55 9507246.76 0.0288 0.0040

Saturn 21318-06-26 20:09 G 9507476.28 9507476.34 9507476.43 0.0288 0.0267

Jupiter 21322-03-05 21:36 G 9508824.32 9508824.40 9508824.48 0.0518 0.0473

Jupiter 21327-05-22 20:52 G 9510728.21 9510728.37 9510728.54 0.0514 0.0302

Saturn 21332-04-20 19:26 G 9512523.12 9512523.31 9512523.52 0.0271 0.0095

Uranus 21332-08-22 20:52 G 9512647.32 9512647.37 9512647.44 0.0134 0.0128

Saturn 21332-12-05 23:45 G 9512752.30 9512752.49 9512752.69 0.0271 0.0093

Uranus 21333-04-06 02:38 G 9512873.46 9512873.61 9512873.77 0.0134 0.0093

Jupiter 21333-11-08 17:45 G 9513090.04 9513090.24 9513090.45 0.0515 0.0022

Uranus 21333-11-18 08:09 G 9513099.65 9513099.84 9513100.04 0.0133 0.0057

Uranus 21334-07-02 13:40 G 9513325.86 9513326.07 9513326.29 0.0133 0.0022

Uranus 21335-02-13 19:12 G 9513552.09 9513552.30 9513552.52 0.0133 0.0014

Uranus 21335-09-28 00:43 G 9513778.33 9513778.53 9513778.73 0.0133 0.0049

Uranus 21336-05-11 05:45 G 9514004.59 9514004.74 9514004.92 0.0133 0.0084

Uranus 21336-12-23 10:48 G 9514230.88 9514230.95 9514231.07 0.0133 0.0120

Mars 21344-01-29 14:52 G 9516823.95 9516824.12 9516824.30 0.1620 0.0287

Jupiter 21345-07-14 14:52 G 9517356.08 9517356.12 9517356.17 0.0512 0.0497

Saturn 21346-10-04 07:12 G 9517802.63 9517802.80 9517802.97 0.0289 0.0169

Saturn 21347-05-22 03:07 G 9518032.43 9518032.63 9518032.84 0.0288 0.0061

Saturn 21348-01-06 22:48 G 9518262.45 9518262.45 9518262.46 0.0288 0.0288

Jupiter 21351-05-25 11:02 G 9519496.87 9519496.96 9519497.05 0.0510 0.0450

Saturn 21361-03-16 22:33 G 9523080.37 9523080.44 9523080.52 0.0271 0.0252

Saturn 21361-11-01 02:52 G 9523309.42 9523309.62 9523309.83 0.0271 0.0066

Saturn 21362-06-18 07:12 G 9523538.62 9523538.80 9523538.99 0.0271 0.0122

Jupiter 21363-01-28 08:09 G 9523762.64 9523762.84 9523763.05 0.0513 0.0030

Jupiter 21369-07-17 07:12 G 9526124.63 9526124.80 9526124.98 0.0516 0.0268

Mars 21373-04-19 02:24 G 9527496.50 9527496.60 9527496.70 0.1914 0.1541

Jupiter 21374-10-03 06:00 G 9528028.73 9528028.75 9528028.77 0.0516 0.0511

Uranus 21376-01-07 01:12 G 9528489.42 9528489.55 9528489.72 0.0145 0.0103

Mars 21376-01-28 07:12 G 9528510.69 9528510.80 9528510.91 0.1613 0.1259

Saturn 21376-04-15 13:40 G 9528588.89 9528589.07 9528589.26 0.0289 0.0138

Neptune 21376-08-11 10:33 G 9528706.93 9528706.94 9528706.99 0.0088 0.0088

Uranus 21376-08-20 13:40 G 9528715.87 9528716.07 9528716.27 0.0145 0.0057

Saturn 21376-12-01 09:21 G 9528818.69 9528818.89 9528819.09 0.0288 0.0091

Neptune 21377-03-25 00:00 G 9528932.36 9528932.50 9528932.63 0.0088 0.0068

Uranus 21377-04-04 01:40 G 9528942.36 9528942.57 9528942.79 0.0145 0.0012

Neptune 21377-11-05 12:28 G 9529157.85 9529158.02 9529158.21 0.0088 0.0048

Uranus 21377-11-16 13:40 G 9529168.87 9529169.07 9529169.29 0.0145 0.0034

Neptune 21378-06-19 01:26 G 9529383.36 9529383.56 9529383.77 0.0088 0.0029

Uranus 21378-07-01 01:40 G 9529395.40 9529395.57 9529395.76 0.0145 0.0079

Neptune 21379-01-30 14:09 G 9529608.88 9529609.09 9529609.32 0.0088 0.0010

Uranus 21379-02-12 13:55 G 9529621.98 9529622.08 9529622.20 0.0145 0.0124

Neptune 21379-09-13 03:21 G 9529834.42 9529834.64 9529834.86 0.0088 0.0011

Neptune 21380-04-25 15:50 G 9530059.96 9530060.16 9530060.38 0.0088 0.0030

Neptune 21380-12-07 04:48 G 9530285.52 9530285.70 9530285.88 0.0088 0.0050

Jupiter 21381-03-22 03:21 G 9530390.46 9530390.64 9530390.83 0.0514 0.0223

Neptune 21381-07-20 17:02 G 9530511.10 9530511.21 9530511.37 0.0088 0.0070

Saturn 21390-09-26 22:48 G 9533866.35 9533866.45 9533866.56 0.0271 0.0234

Saturn 21391-05-14 02:52 G 9534095.41 9534095.62 9534095.83 0.0271 0.0048

Saturn 21391-12-29 06:57 G 9534324.62 9534324.79 9534324.98 0.0271 0.0139

Jupiter 21398-10-06 00:14 G 9536797.34 9536797.51 9536797.68 0.0511 0.0270

Saturn 21405-10-27 15:07 G 9539374.94 9539375.13 9539375.33 0.0289 0.0118

Saturn 21406-06-14 11:16 G 9539604.77 9539604.97 9539605.16 0.0288 0.0112

Mars 21409-11-27 03:07 G 9540866.47 9540866.63 9540866.80 0.1622 0.0496

Jupiter 21410-06-11 18:14 G 9541063.08 9541063.26 9541063.45 0.0514 0.0230

Jupiter 21416-11-28 19:12 G 9543425.10 9543425.30 9543425.51 0.0515 0.0079

Uranus 21416-12-05 11:16 G 9543431.86 9543431.97 9543432.11 0.0134 0.0109

Uranus 21417-07-19 16:48 G 9543658.04 9543658.20 9543658.40 0.0134 0.0074

Uranus 21418-03-02 22:48 G 9543884.24 9543884.45 9543884.66 0.0133 0.0038

Uranus 21418-10-15 04:19 G 9544110.46 9544110.68 9544110.90 0.0133 0.0002

Uranus 21419-05-29 09:36 G 9544336.70 9544336.90 9544337.12 0.0133 0.0033

Uranus 21420-01-10 14:52 G 9544562.94 9544563.12 9544563.31 0.0133 0.0068

Saturn 21420-04-09 06:00 G 9544652.62 9544652.75 9544652.89 0.0271 0.0205

Uranus 21420-08-23 19:55 G 9544789.21 9544789.33 9544789.49 0.0133 0.0104

Saturn 21420-11-24 10:19 G 9544881.72 9544881.93 9544882.14 0.0271 0.0019

Earth 21420-11-30 16:33 G 9544888.05 9544888.19 9544888.34 0.2680 0.1147

Moon 21420-11-30 19:55 G 9544888.21 9544888.33 9544888.45 0.2686 0.1609 *

Saturn 21421-07-11 14:38 G 9545110.95 9545111.11 9545111.28 0.0271 0.0169

Jupiter 21428-08-03 13:26 G 9547690.95 9547691.06 9547691.18 0.0512 0.0420

Moon 21428-11-28 12:57 G 9547807.99 9547808.04 9547808.09 0.2681 0.2508

Saturn 21435-05-09 23:16 G 9550161.26 9550161.47 9550161.67 0.0289 0.0084

Saturn 21435-12-25 18:43 G 9550391.10 9550391.28 9550391.47 0.0288 0.0145

Mars 21441-11-25 19:40 G 9552553.20 9552553.32 9552553.45 0.1615 0.1065

Jupiter 21446-02-17 09:50 G 9554097.71 9554097.91 9554098.12 0.0513 0.0070

Saturn 21449-10-20 07:12 G 9555438.65 9555438.80 9555438.95 0.0271 0.0186

Saturn 21450-06-06 11:16 G 9555667.76 9555667.97 9555668.18 0.0271 0.0002

Saturn 21451-01-21 15:21 G 9555897.00 9555897.14 9555897.30 0.0271 0.0188

Jupiter 21452-08-06 08:24 G 9556459.71 9556459.85 9556459.99 0.0517 0.0363

Jupiter 21457-10-23 06:43 G 9558363.67 9558363.78 9558363.90 0.0516 0.0419

Pluto 21459-08-04 08:09 G 9559013.69 9559013.84 9559013.99 0.0067 0.0048

Uranus 21459-09-07 07:40 G 9559047.71 9559047.82 9559047.94 0.0145 0.0122

Neptune 21459-12-22 21:36 G 9559154.35 9559154.40 9559154.48 0.0089 0.0085

Pluto 21460-03-16 12:57 G 9559238.82 9559239.04 9559239.26 0.0067 0.0001

Uranus 21460-04-20 19:40 G 9559274.14 9559274.32 9559274.51 0.0145 0.0077

Neptune 21460-08-04 10:48 G 9559379.81 9559379.95 9559380.11 0.0089 0.0065

Pluto 21460-10-27 17:16 G 9559464.08 9559464.22 9559464.40 0.0067 0.0047

Uranus 21460-12-03 07:40 G 9559500.61 9559500.82 9559501.03 0.0145 0.0032

Neptune 21461-03-18 00:14 G 9559605.32 9559605.51 9559605.70 0.0089 0.0045

Uranus 21461-07-17 19:40 G 9559727.11 9559727.32 9559727.54 0.0145 0.0013

Neptune 21461-10-29 13:26 G 9559830.85 9559831.06 9559831.27 0.0089 0.0025

Uranus 21462-03-01 07:26 G 9559953.63 9559953.81 9559954.02 0.0145 0.0059

Neptune 21462-06-12 02:24 G 9560056.39 9560056.60 9560056.83 0.0089 0.0006

Uranus 21462-10-13 19:40 G 9560180.19 9560180.32 9560180.49 0.0145 0.0104

Neptune 21463-01-23 15:36 G 9560281.94 9560282.15 9560282.37 0.0089 0.0015

Neptune 21463-09-06 04:33 G 9560507.50 9560507.69 9560507.91 0.0089 0.0035

Jupiter 21464-04-11 05:16 G 9560725.53 9560725.72 9560725.92 0.0514 0.0124

Neptune 21464-04-18 17:45 G 9560733.08 9560733.24 9560733.43 0.0089 0.0055

Saturn 21464-11-19 00:28 G 9560947.31 9560947.52 9560947.73 0.0288 0.0064

Neptune 21464-11-30 06:57 G 9560958.69 9560958.79 9560958.92 0.0089 0.0075

Saturn 21465-07-06 20:24 G 9561177.18 9561177.35 9561177.52 0.0288 0.0165

Mars	21471-02-15 07:12 G	9563226.67	9563226.80	9563226.93	0.1923	0.1267
Mars	21475-09-24 15:36 G	9564908.99	9564909.15	9564909.31	0.1624	0.0704
Saturn	21479-05-02 14:24 G	9566224.93	9566225.10	9566225.28	0.0271	0.0157
Saturn	21479-12-17 18:43 G	9566454.07	9566454.28	9566454.50	0.0271	0.0031
Saturn	21480-08-02 23:16 G	9566683.35	9566683.47	9566683.60	0.0271	0.0218
Jupiter	21481-10-25 20:24 G	9567132.20	9567132.35	9567132.50	0.0512	0.0334
Jupiter	21493-06-30 18:14 G	9571398.06	9571398.26	9571398.45	0.0514	0.0144
Saturn	21493-10-14 13:55 G	9571503.99	9571504.08	9571504.19	0.0289	0.0256
Saturn	21494-06-01 10:04 G	9571733.71	9571733.92	9571734.13	0.0289	0.0027
Saturn	21495-01-17 05:16 G	9571963.58	9571963.72	9571963.89	0.0288	0.0202
Jupiter	21499-12-18 17:02 G	9573760.01	9573760.21	9573760.40	0.0515	0.0151
Uranus	21500-08-05 20:38 G	9573990.29	9573990.36	9573990.45	0.0134	0.0124
Uranus	21501-03-20 02:24 G	9574216.45	9574216.60	9574216.77	0.0134	0.0089
Uranus	21501-11-01 07:55 G	9574442.64	9574442.83	9574443.04	0.0133	0.0054
Uranus	21502-06-15 13:40 G	9574668.85	9574669.07	9574669.29	0.0133	0.0018
Uranus	21503-01-27 18:57 G	9574895.08	9574895.29	9574895.51	0.0133	0.0018
Uranus	21503-09-11 00:14 G	9575121.32	9575121.51	9575121.72	0.0133	0.0053
Uranus	21504-04-24 05:31 G	9575347.58	9575347.73	9575347.91	0.0133	0.0088
Uranus	21504-12-06 10:33 G	9575573.88	9575573.94	9575574.05	0.0133	0.0123
Mars	21507-09-24 08:24 G	9576595.70	9576595.85	9576595.99	0.1617	0.0867
Saturn	21508-11-12 16:33 G	9577011.01	9577011.19	9577011.38	0.0271	0.0136
Saturn	21509-06-29 20:38 G	9577240.16	9577240.36	9577240.57	0.0271	0.0051
Saturn	21510-02-14 00:57 G	9577469.45	9577469.54	9577469.64	0.0271	0.0238
Jupiter	21511-08-24 13:26 G	9578025.91	9578026.06	9578026.21	0.0513	0.0336
Saturn	21523-04-27 15:36 G	9582290.04	9582290.15	9582290.28	0.0288	0.0234
Saturn	21523-12-13 11:45 G	9582519.78	9582519.99	9582520.20	0.0288	0.0006
Saturn	21524-07-30 07:26 G	9582749.68	9582749.81	9582749.95	0.0288	0.0222
Jupiter	21529-03-09 06:14 G	9584432.56	9584432.76	9584432.96	0.0513	0.0132
Jupiter	21535-08-27 08:52 G	9586794.78	9586794.87	9586794.97	0.0517	0.0453
Mars	21536-12-13 09:36 G	9587268.73	9587268.90	9587269.07	0.1919	0.0583

Saturn 21538-05-25 23:45 G 9587797.30 9587797.49 9587797.69 0.0271 0.0106

Saturn 21539-01-10 04:19 G 9588026.48 9588026.68 9588026.88 0.0271 0.0081

Saturn 21539-08-27 09:07 G 9588255.86 9588255.88 9588255.90 0.0271 0.0269

Jupiter 21540-11-12 02:09 G 9588698.45 9588698.59 9588698.73 0.0516 0.0360

Neptune 21541-06-28 10:33 G 9588926.85 9588926.94 9588927.07 0.0088 0.0076

Mars 21541-07-23 03:36 G 9588951.51 9588951.65 9588951.79 0.1626 0.0923

Neptune 21542-02-08 23:45 G 9589152.33 9589152.49 9589152.67 0.0088 0.0056

Neptune 21542-09-22 12:43 G 9589377.84 9589378.03 9589378.24 0.0088 0.0036

Neptune 21543-05-06 01:40 G 9589603.36 9589603.57 9589603.79 0.0088 0.0017

Uranus 21543-05-08 12:43 G 9589606.02 9589606.03 9589606.08 0.0145 0.0143

Neptune 21543-12-17 14:38 G 9589828.89 9589829.11 9589829.33 0.0088 0.0003

Uranus 21543-12-21 00:57 G 9589832.39 9589832.54 9589832.70 0.0145 0.0098

Neptune 21544-07-30 03:36 G 9590054.43 9590054.65 9590054.86 0.0088 0.0023

Uranus 21544-08-03 12:57 G 9590058.84 9590059.04 9590059.24 0.0145 0.0053

Neptune 21545-03-12 16:04 G 9590279.99 9590280.17 9590280.37 0.0088 0.0043

Uranus 21545-03-18 00:57 G 9590285.32 9590285.54 9590285.76 0.0145 0.0008

Neptune 21545-10-24 04:48 G 9590505.56 9590505.70 9590505.88 0.0088 0.0062

Uranus 21545-10-30 13:12 G 9590511.84 9590512.05 9590512.26 0.0145 0.0037

Neptune 21546-06-06 17:45 G 9590731.17 9590731.24 9590731.33 0.0088 0.0082

Uranus 21546-06-14 01:12 G 9590738.37 9590738.55 9590738.73 0.0145 0.0082

Pluto 21546-08-24 00:28 G 9590809.32 9590809.52 9590809.74 0.0077 0.0025

Uranus 21547-01-26 13:12 G 9590964.95 9590965.05 9590965.16 0.0145 0.0128

Pluto 21547-04-06 09:21 G 9591034.74 9591034.89 9591035.08 0.0077 0.0048

Jupiter 21547-05-02 02:24 G 9591060.39 9591060.60 9591060.80 0.0514 0.0056

Earth 21550-06-02 07:26 G 9592187.66 9592187.81 9592187.96 0.2652 0.0940

Moon 21550-06-02 10:48 G 9592187.82 9592187.95 9592188.09 0.2647 0.1563 *

Saturn 21552-11-07 02:24 G 9593076.45 9593076.60 9593076.76 0.0289 0.0197

Saturn 21553-06-24 22:19 G 9593306.22 9593306.43 9593306.64 0.0289 0.0032

Saturn 21554-02-09 17:45 G 9593536.16 9593536.24 9593536.34 0.0288 0.0259

Moon 21558-05-30 22:33 G 9595107.41 9595107.44 9595107.47 0.2646 0.2591

Jupiter 21564-11-14 20:38 G 9597467.25 9597467.36 9597467.47 0.0511 0.0422

Saturn 21567-04-20 23:02 G 9598354.45 9598354.46 9598354.49 0.0271 0.0269

Saturn 21567-12-06 03:07 G 9598583.43 9598583.63 9598583.84 0.0271 0.0084

Saturn 21568-07-22 07:26 G 9598812.62 9598812.81 9598813.01 0.0271 0.0104

Mars 21573-07-21 20:38 G 9600638.20 9600638.36 9600638.52 0.1619 0.0660

Jupiter 21576-07-20 17:45 G 9601733.04 9601733.24 9601733.45 0.0514 0.0061

Saturn 21582-05-20 04:33 G 9603862.53 9603862.69 9603862.86 0.0288 0.0174

Saturn 21583-01-05 00:28 G 9604092.31 9604092.52 9604092.73 0.0288 0.0055

Jupiter 21583-01-07 17:31 G 9604095.05 9604095.23 9604095.41 0.0516 0.0241

Saturn 21583-08-22 20:09 G 9604322.30 9604322.34 9604322.38 0.0288 0.0281

Uranus 21584-11-17 10:48 G 9604774.84 9604774.95 9604775.11 0.0134 0.0105

Uranus 21585-07-01 16:33 G 9605001.02 9605001.19 9605001.39 0.0133 0.0069

Uranus 21586-02-12 22:19 G 9605227.22 9605227.43 9605227.64 0.0133 0.0034

Uranus 21586-09-27 03:50 G 9605453.44 9605453.66 9605453.87 0.0133 0.0003

Uranus 21587-05-11 09:07 G 9605679.67 9605679.88 9605680.09 0.0133 0.0036

Uranus 21587-12-23 14:09 G 9605905.92 9605906.09 9605906.29 0.0133 0.0072

Uranus 21588-08-05 19:12 G 9606132.19 9606132.30 9606132.45 0.0133 0.0107

Jupiter 21594-09-12 13:26 G 9608360.88 9608361.06 9608361.24 0.0513 0.0251

Saturn 21596-10-31 05:31 G 9609140.64 9609140.73 9609140.83 0.0271 0.0241

Saturn 21597-06-17 10:04 G 9609369.71 9609369.92 9609370.13 0.0271 0.0054

Saturn 21598-02-01 14:24 G 9609598.93 9609599.10 9609599.29 0.0271 0.0134

Mars 21602-10-10 11:31 G 9611310.81 9611310.98 9611311.16 0.1916 0.0116

Mars 21607-05-20 15:50 G 9612994.04 9612994.16 9612994.29 0.1628 0.1138

Saturn 21611-11-30 16:33 G 9614649.01 9614649.19 9614649.38 0.0289 0.0134

Jupiter 21612-03-28 04:19 G 9614767.50 9614767.68 9614767.87 0.0513 0.0208

Saturn 21612-07-17 12:28 G 9614878.82 9614879.02 9614879.22 0.0289 0.0095

Jupiter 21618-09-15 04:33 G 9617129.68 9617129.69 9617129.71 0.0517 0.0514

Jupiter 21623-12-02 01:40 G 9619033.40 9619033.57 9619033.74 0.0515 0.0275

Neptune 21624-11-06 22:48 G 9619374.33 9619374.45 9619374.58 0.0089 0.0072

Neptune 21625-06-20 12:00 G 9619599.82 9619600.00 9619600.18 0.0089 0.0052

Neptune 21626-02-01 00:43 G 9619825.34 9619825.53 9619825.75 0.0089 0.0033

Saturn 21626-05-13 10:19 G 9619926.80 9619926.93 9619927.06 0.0271 0.0216

Neptune 21626-09-14 13:55 G 9620050.87 9620051.08 9620051.31 0.0089 0.0013

Saturn 21626-12-28 14:24 G 9620155.89 9620156.10 9620156.31 0.0271 0.0030

Neptune 21627-04-28 03:21 G 9620276.42 9620276.64 9620276.86 0.0089 0.0008

Saturn 21627-08-14 18:57 G 9620385.12 9620385.29 9620385.46 0.0271 0.0158

Uranus 21627-08-20 05:16 G 9620390.62 9620390.72 9620390.86 0.0145 0.0120

Neptune 21627-12-09 16:04 G 9620501.98 9620502.17 9620502.40 0.0089 0.0028

Uranus 21628-04-02 17:31 G 9620617.05 9620617.23 9620617.42 0.0145 0.0075

Neptune 21628-07-22 05:16 G 9620727.55 9620727.72 9620727.92 0.0089 0.0048

Uranus 21628-11-15 05:31 G 9620843.52 9620843.73 9620843.94 0.0145 0.0030

Neptune 21629-03-04 18:14 G 9620953.14 9620953.26 9620953.43 0.0089 0.0068

Uranus 21629-06-29 17:31 G 9621070.01 9621070.23 9621070.44 0.0145 0.0015

Neptune 21629-10-16 07:26 G 9621178.80 9621178.81 9621178.87 0.0089 0.0088

Uranus 21630-02-11 05:31 G 9621296.53 9621296.73 9621296.93 0.0145 0.0060

Jupiter 21630-05-21 00:14 G 9621395.31 9621395.51 9621395.72 0.0515 0.0021

Uranus 21630-09-25 17:31 G 9621523.09 9621523.23 9621523.39 0.0145 0.0105

Mars 21639-05-19 09:21 G 9624680.72 9624680.89 9624681.06 0.1621 0.0463

Saturn 21641-06-11 18:57 G 9625435.10 9625435.29 9625435.49 0.0288 0.0111

Jupiter 21642-01-23 21:50 G 9625661.33 9625661.41 9625661.50 0.0512 0.0459

Saturn 21642-01-27 14:38 G 9625664.93 9625665.11 9625665.31 0.0288 0.0118

Jupiter 21647-12-04 16:04 G 9627802.11 9627802.17 9627802.24 0.0511 0.0479

Saturn 21655-11-23 16:19 G 9630713.03 9630713.18 9630713.34 0.0271 0.0188

Saturn 21656-07-09 20:52 G 9630942.16 9630942.37 9630942.58 0.0271 0.0001

Saturn 21657-02-24 01:26 G 9631171.41 9631171.56 9631171.72 0.0271 0.0187

Jupiter 21659-08-09 12:14 G 9632067.81 9632068.01 9632068.22 0.0514 0.0012

Moon 21663-12-02 14:38 G 9633643.95 9633644.11 9633644.27 0.2672 0.0816

Earth 21663-12-02 16:48 G 9633644.05 9633644.20 9633644.35 0.2679 0.0911 *

Jupiter 21666-01-26 12:57 G 9634429.88 9634430.04 9634430.21 0.0516 0.0302

Uranus 21668-07-17 20:09 G 9635333.25 9635333.34 9635333.44 0.0134 0.0120

Mars 21668-08-06 14:24 G 9635352.94 9635353.10 9635353.26 0.1912 0.0763

Uranus 21669-03-01 01:40 G 9635559.41 9635559.57 9635559.75 0.0134 0.0085

Uranus 21669-10-13 07:26 G 9635785.61 9635785.81 9635786.01 0.0134 0.0050

Uranus 21670-05-27 12:57 G 9636011.82 9636012.04 9636012.25 0.0133 0.0015

Saturn 21670-12-23 07:40 G 9636221.61 9636221.82 9636222.03 0.0289 0.0069

Uranus 21671-01-08 18:14 G 9636238.04 9636238.26 9636238.47 0.0133 0.0020

Jupiter 21671-04-14 08:38 G 9636333.81 9636333.86 9636333.91 0.0517 0.0498

Saturn 21671-08-10 03:07 G 9636451.46 9636451.63 9636451.82 0.0288 0.0160

Uranus 21671-08-22 23:16 G 9636464.28 9636464.47 9636464.68 0.0133 0.0056

Uranus 21672-04-05 04:33 G 9636690.55 9636690.69 9636690.87 0.0133 0.0091

Uranus 21672-11-17 10:04 G 9636916.85 9636916.92 9636917.00 0.0133 0.0125

Mars 21673-03-17 03:50 G 9637036.57 9637036.66 9637036.76 0.1630 0.1362

Jupiter 21677-10-01 08:38 G 9638695.67 9638695.86 9638696.05 0.0513 0.0193

Saturn 21685-06-04 21:50 G 9641499.24 9641499.41 9641499.58 0.0271 0.0162

Saturn 21686-01-20 02:09 G 9641728.38 9641728.59 9641728.80 0.0271 0.0025

Saturn 21686-09-06 06:43 G 9641957.65 9641957.78 9641957.91 0.0271 0.0212

Jupiter 21695-04-17 03:07 G 9645102.47 9645102.63 9645102.80 0.0512 0.0287

Saturn 21699-11-17 14:38 G 9646778.06 9646778.11 9646778.19 0.0288 0.0273

Saturn 21700-07-05 10:48 G 9647007.74 9647007.95 9647008.16 0.0288 0.0045

Saturn 21701-02-20 06:28 G 9647237.61 9647237.77 9647237.93 0.0288 0.0183

Mars 21705-03-16 21:21 G 9648723.21 9648723.39 9648723.56 0.1623 0.0248

Neptune 21705-09-30 22:04 G 9648921.36 9648921.42 9648921.52 0.0089 0.0083

Neptune 21706-05-14 11:31 G 9649146.82 9649146.98 9649147.13 0.0088 0.0063

Jupiter 21706-12-21 21:36 G 9649368.22 9649368.40 9649368.58 0.0515 0.0214

Neptune 21706-12-26 00:00 G 9649372.32 9649372.50 9649372.70 0.0088 0.0044

Pluto 21707-07-09 17:16 G 9649568.07 9649568.22 9649568.40 0.0067 0.0043

Neptune 21707-08-08 13:12 G 9649597.84 9649598.05 9649598.26 0.0088 0.0024

Pluto 21708-02-19 22:33 G 9649793.22 9649793.44 9649793.66 0.0067 0.0004

Neptune 21708-03-21 02:09 G 9649823.37 9649823.59 9649823.81 0.0088 0.0004

Pluto 21708-10-02 02:38 G 9650018.50 9650018.61 9650018.78 0.0067 0.0052

Neptune 21708-11-01 14:52 G 9650048.91 9650049.12 9650049.34 0.0088 0.0016

Neptune 21709-06-15 03:36 G 9650274.46 9650274.65 9650274.86 0.0088 0.0035

Neptune 21710-01-26 16:33 G 9650500.02 9650500.19 9650500.37 0.0088 0.0055

Neptune 21710-09-09 05:16 G 9650725.62 9650725.72 9650725.85 0.0088 0.0075

Uranus 21711-04-20 10:19 G 9650948.90 9650948.93 9650948.99 0.0145 0.0141

Uranus 21711-12-02 22:04 G 9651175.27 9651175.42 9651175.59 0.0145 0.0097

Uranus 21712-07-16 10:04 G 9651401.72 9651401.92 9651402.13 0.0145 0.0052

Uranus 21713-02-27 22:04 G 9651628.21 9651628.42 9651628.64 0.0145 0.0007

Jupiter 21713-06-09 23:31 G 9651730.28 9651730.48 9651730.68 0.0515 0.0100

Uranus 21713-10-12 10:19 G 9651854.72 9651854.93 9651855.14 0.0145 0.0038

Uranus 21714-05-26 22:04 G 9652081.25 9652081.42 9652081.61 0.0145 0.0083

Saturn 21714-12-17 02:52 G 9652285.45 9652285.62 9652285.81 0.0271 0.0136

Uranus 21715-01-08 10:04 G 9652307.83 9652307.92 9652308.03 0.0145 0.0128

Saturn 21715-08-03 07:40 G 9652514.61 9652514.82 9652515.03 0.0271 0.0052

Saturn 21716-03-19 12:14 G 9652743.93 9652744.01 9652744.12 0.0271 0.0241

Jupiter 21725-02-12 17:16 G 9655996.10 9655996.22 9655996.36 0.0512 0.0399

Saturn 21729-05-31 03:21 G 9657564.52 9657564.64 9657564.77 0.0289 0.0233

Saturn 21730-01-15 23:16 G 9657794.26 9657794.47 9657794.69 0.0289 0.0007

Saturn 21730-09-02 18:57 G 9658024.16 9658024.29 9658024.42 0.0288 0.0224

Mars 21734-06-04 16:33 G 9659395.08 9659395.19 9659395.31 0.1909 0.1441

Mars 21739-01-13 16:04 G 9661079.13 9661079.17 9661079.20 0.1632 0.1588

Jupiter 21742-08-29 11:02 G 9662402.76 9662402.96 9662403.16 0.0514 0.0074

Saturn 21744-06-28 09:07 G 9663071.69 9663071.88 9663072.08 0.0271 0.0109

Saturn 21745-02-12 13:40 G 9663300.86 9663301.07 9663301.27 0.0271 0.0079

Saturn 21745-09-29 18:14 G 9663530.23 9663530.26 9663530.30 0.0271 0.0266

Jupiter 21749-02-15 09:50 G 9664764.78 9664764.91 9664765.06 0.0516 0.0371

Uranus 21752-10-30 09:50 G 9666117.79 9666117.91 9666118.07 0.0134 0.0102

Uranus 21753-06-13 15:36 G 9666343.97 9666344.15 9666344.35 0.0134 0.0066

Uranus 21754-01-25 21:07 G 9666570.17 9666570.38 9666570.60 0.0134 0.0031

Jupiter 21754-05-04 07:40 G 9666668.70 9666668.82 9666668.94 0.0516 0.0417

Uranus 21754-09-09 02:38 G 9666796.39 9666796.61 9666796.83 0.0133 0.0004

Uranus 21755-04-23 08:09 G 9667022.63 9667022.84 9667023.05 0.0133 0.0039

Uranus 21755-12-05 13:26 G 9667248.88 9667249.06 9667249.24 0.0133 0.0074

Uranus 21756-07-18 18:28 G 9667475.15 9667475.27 9667475.41 0.0133 0.0108

Saturn 21758-12-11 06:28 G 9668350.63 9668350.77 9668350.92 0.0288 0.0208

Saturn 21759-07-29 02:38 G 9668580.39 9668580.61 9668580.82 0.0288 0.0021

Saturn 21760-03-14 22:04 G 9668810.32 9668810.42 9668810.53 0.0288 0.0248

Jupiter 21760-10-21 06:57 G 9669030.60 9669030.79 9669030.99 0.0513 0.0117

Mars 21771-01-12 09:50 G 9672765.74 9672765.91 9672766.08 0.1625 0.0041

Saturn 21773-05-24 08:52 G 9673628.87 9673628.87 9673628.89 0.0271 0.0271

Saturn 21774-01-08 13:26 G 9673857.86 9673858.06 9673858.26 0.0271 0.0084

Saturn 21774-08-25 18:14 G 9674087.06 9674087.26 9674087.45 0.0271 0.0105

Jupiter 21778-05-06 22:04 G 9675437.27 9675437.42 9675437.57 0.0512 0.0342

Saturn 21788-06-22 18:57 G 9679137.13 9679137.29 9679137.47 0.0289 0.0169

Saturn 21789-02-07 15:07 G 9679366.92 9679367.13 9679367.34 0.0289 0.0061

Neptune 21789-02-09 10:19 G 9679368.85 9679368.93 9679369.05 0.0089 0.0079

Neptune 21789-09-22 23:31 G 9679594.33 9679594.48 9679594.66 0.0089 0.0059

Saturn 21789-09-25 10:33 G 9679596.94 9679596.94 9679596.95 0.0288 0.0288

Jupiter 21790-01-09 18:14 G 9679703.06 9679703.26 9679703.45 0.0515 0.0145

Neptune 21790-05-06 12:57 G 9679819.84 9679820.04 9679820.24 0.0089 0.0039

Neptune 21790-12-18 01:55 G 9680045.37 9680045.58 9680045.80 0.0089 0.0019

Neptune 21791-07-31 15:07 G 9680270.91 9680271.13 9680271.35 0.0089 0.0001

Neptune 21792-03-13 04:04 G 9680496.47 9680496.67 9680496.90 0.0089 0.0021

Neptune 21792-10-24 17:02 G 9680722.03 9680722.21 9680722.42 0.0089 0.0041

Moon 21793-06-03 04:33 G 9680943.53 9680943.69 9680943.84 0.2655 0.0056

Earth 21793-06-03 09:21 G 9680943.74 9680943.89 9680944.04 0.2653 0.0894 *

Neptune 21793-06-07 06:00 G 9680947.61 9680947.75 9680947.93 0.0089 0.0061

Neptune 21794-01-18 19:40 G 9681173.23 9681173.32 9681173.41 0.0089 0.0080

Pluto 21794-07-28 09:07 G 9681363.68 9681363.88 9681364.10 0.0077 0.0024

Pluto 21795-03-10 18:28 G 9681589.10 9681589.27 9681589.44 0.0077 0.0049

Uranus 21795-08-02 03:21 G 9681733.53 9681733.64 9681733.78 0.0145 0.0117

Uranus 21796-03-15 15:21 G 9681959.96 9681960.14 9681960.33 0.0145 0.0073

Jupiter 21796-06-28 18:14 G 9682065.07 9682065.26 9682065.46 0.0514 0.0157

Uranus 21796-10-28 03:21 G 9682186.43 9682186.64 9682186.86 0.0145 0.0028

Uranus 21797-06-11 15:21 G 9682412.92 9682413.14 9682413.36 0.0145 0.0017

Uranus 21798-01-24 03:07 G 9682639.44 9682639.63 9682639.83 0.0145 0.0062

Uranus 21798-09-07 15:07 G 9682866.00 9682866.13 9682866.29 0.0145 0.0107

Saturn 21802-12-05 15:50 G 9684415.07 9684415.16 9684415.25 0.0271 0.0243

Mars 21803-01-12 02:24 G 9684452.60 9684452.60 9684452.61 0.1618 0.1618

Saturn 21803-07-22 19:55 G 9684644.13 9684644.33 9684644.54 0.0271 0.0057

Saturn 21804-03-08 00:28 G 9684873.33 9684873.52 9684873.70 0.0271 0.0131

Jupiter 21808-03-04 14:09 G 9686330.94 9686331.09 9686331.25 0.0512 0.0332

Saturn 21818-01-03 22:19 G 9689923.25 9689923.43 9689923.62 0.0288 0.0144

Saturn 21818-08-21 18:14 G 9690153.06 9690153.26 9690153.46 0.0288 0.0085

Jupiter 21825-09-18 07:55 G 9692737.64 9692737.83 9692738.03 0.0513 0.0142

Jupiter 21832-03-07 09:21 G 9695099.80 9695099.89 9695099.99 0.0517 0.0454

Mars 21832-04-01 21:21 G 9695125.27 9695125.39 9695125.51 0.1917 0.1369

Saturn 21832-06-16 18:43 G 9695201.16 9695201.28 9695201.40 0.0271 0.0221

Saturn 21833-01-31 23:02 G 9695430.25 9695430.46 9695430.67 0.0271 0.0034

Saturn 21833-09-18 03:36 G 9695659.49 9695659.65 9695659.84 0.0271 0.0156

Uranus 21836-06-30 18:28 G 9696676.19 9696676.27 9696676.39 0.0134 0.0118

Mars 21836-11-09 22:04 G 9696808.24 9696808.42 9696808.59 0.1627 0.0180

Uranus 21837-02-12 00:14 G 9696902.35 9696902.51 9696902.69 0.0134 0.0083

Jupiter 21837-05-24 03:21 G 9697003.50 9697003.64 9697003.79 0.0516 0.0354

Uranus 21837-09-26 05:45 G 9697128.55 9697128.74 9697128.96 0.0134 0.0048

Uranus 21838-05-10 11:31 G 9697354.77 9697354.98 9697355.20 0.0134 0.0012

Uranus 21838-12-22 17:02 G 9697580.99 9697581.21 9697581.42 0.0133 0.0023

Uranus 21839-08-05 22:04 G 9697807.23 9697807.42 9697807.63 0.0133 0.0058

Uranus 21840-03-19 03:21 G 9698033.50 9698033.64 9698033.81 0.0133 0.0093

Uranus 21840-10-31 08:52 G 9698259.81 9698259.87 9698259.94 0.0133 0.0127

Jupiter 21843-11-11 03:21 G 9699365.44 9699365.64 9699365.84 0.0513 0.0049

Saturn 21847-07-17 09:50 G 9700709.71 9700709.91 9700710.11 0.0289 0.0106

Saturn 21848-03-03 05:45 G 9700939.55 9700939.74 9700939.94 0.0289 0.0124

Jupiter 21861-05-26 20:24 G 9705772.24 9705772.35 9705772.47 0.0512 0.0422

Saturn 21861-12-28 01:26 G 9705987.42 9705987.56 9705987.72 0.0270 0.0193

Saturn 21862-08-14 06:00 G 9706216.54 9706216.75 9706216.96 0.0271 0.0006

Saturn 21863-03-31 10:19 G 9706445.78 9706445.93 9706446.09 0.0271 0.0182

Mars 21868-11-08 15:07 G 9708495.05 9708495.13 9708495.21 0.1620 0.1418

Neptune 21870-08-16 23:02 G 9709141.33 9709141.46 9709141.60 0.0089 0.0070

Neptune 21871-03-30 11:45 G 9709366.82 9709366.99 9709367.18 0.0088 0.0051

Neptune 21871-11-11 00:43 G 9709592.34 9709592.53 9709592.75 0.0088 0.0031

Neptune 21872-06-23 13:40 G 9709817.86 9709818.07 9709818.30 0.0088 0.0011

Jupiter 21873-01-29 17:45 G 9710038.04 9710038.24 9710038.45 0.0515 0.0060

Neptune 21873-02-04 02:38 G 9710043.39 9710043.61 9710043.83 0.0088 0.0009

Neptune 21873-09-17 15:36 G 9710268.95 9710269.15 9710269.36 0.0088 0.0028

Neptune 21874-05-01 04:33 G 9710494.51 9710494.69 9710494.88 0.0088 0.0048

Neptune 21874-12-12 17:02 G 9710720.09 9710720.21 9710720.37 0.0088 0.0068

Neptune 21875-07-26 05:31 G 9710945.72 9710945.73 9710945.80 0.0088 0.0088

Saturn 21877-01-26 12:57 G 9711495.84 9711496.04 9711496.25 0.0288 0.0081

Saturn 21877-09-13 08:38 G 9711725.69 9711725.86 9711726.05 0.0288 0.0148

Uranus 21879-04-02 09:36 G 9712291.85 9712291.90 9712291.98 0.0145 0.0137

Jupiter 21879-07-19 16:48 G 9712400.03 9712400.20 9712400.39 0.0515 0.0237

Uranus 21879-11-14 21:21 G 9712518.23 9712518.39 9712518.57 0.0145 0.0093

Uranus 21880-06-28 09:07 G 9712744.69 9712744.88 9712745.10 0.0145 0.0049

Uranus 21881-02-09 21:07 G 9712971.17 9712971.38 9712971.60 0.0145 0.0005

Uranus 21881-09-24 09:21 G 9713197.68 9713197.89 9713198.10 0.0145 0.0041

Uranus 21882-05-08 21:07 G 9713424.22 9713424.38 9713424.56 0.0145 0.0086

Uranus 21882-12-21 09:07 G 9713650.80 9713650.88 9713650.98 0.0145 0.0131

Jupiter 21891-03-24 13:40 G 9716665.89 9716666.07 9716666.25 0.0512 0.0249

Saturn 21891-07-10 03:36 G 9716773.49 9716773.65 9716773.81 0.0271 0.0172

Saturn 21892-02-24 07:55 G 9717002.62 9717002.83 9717003.04 0.0271 0.0015

Saturn 21892-10-10 12:28 G 9717231.89 9717232.02 9717232.16 0.0271 0.0203

Mars 21898-01-28 00:00 G 9719167.34 9719167.50 9719167.67 0.1914 0.0703

Mars 21902-09-08 10:04 G 9720850.76 9720850.92 9720851.09 0.1629 0.0391

Saturn 21905-12-23 02:52 G 9722052.56 9722052.62 9722052.69 0.0289 0.0275

Saturn 21906-08-09 23:16 G 9722282.26 9722282.47 9722282.68 0.0289 0.0046

Earth 21906-12-05 16:48 G 9722400.04 9722400.20 9722400.35 0.2678 0.0653

Moon 21906-12-05 16:48 G 9722400.06 9722400.20 9722400.35 0.2685 0.0374 *

Saturn 21907-03-27 19:26 G 9722512.15 9722512.31 9722512.47 0.0289 0.0184

Jupiter 21908-10-08 05:02 G 9723072.52 9723072.71 9723072.89 0.0514 0.0214

Uranus 21920-03-01 03:07 G 9727234.63 9727234.63 9727234.65 0.0134 0.0134

Jupiter 21920-06-13 01:40 G 9727338.40 9727338.57 9727338.74 0.0517 0.0274

Uranus 21920-10-13 08:38 G 9727460.73 9727460.86 9727461.02 0.0134 0.0099

Saturn 21921-01-20 10:33 G 9727559.76 9727559.94 9727560.12 0.0270 0.0145

Uranus 21921-05-27 14:24 G 9727686.91 9727687.10 9727687.30 0.0134 0.0064

Saturn 21921-09-06 14:52 G 9727788.91 9727789.12 9727789.33 0.0270 0.0043

Uranus 21922-01-08 19:55 G 9727913.12 9727913.33 9727913.54 0.0134 0.0029

Saturn 21922-04-23 18:57 G 9728018.19 9728018.29 9728018.41 0.0271 0.0230

Uranus 21922-08-23 01:26 G 9728139.34 9728139.56 9728139.78 0.0134 0.0006

Uranus 21923-04-06 06:43 G 9728365.58 9728365.78 9728366.00 0.0133 0.0042

Uranus 21923-11-18 12:00 G 9728591.83 9728592.00 9728592.19 0.0133 0.0076

Uranus 21924-07-01 17:16 G 9728818.11 9728818.22 9728818.35 0.0133 0.0111

Jupiter 21926-12-01 00:43 G 9729700.33 9729700.53 9729700.74 0.0513 0.0026

Mars 21934-09-07 03:21 G 9732537.53 9732537.64 9732537.75 0.1622 0.1214

Saturn 21935-07-05 06:00 G 9732838.66 9732838.75 9732838.86 0.0289 0.0251

Saturn 21936-02-20 02:24 G 9733068.39 9733068.60 9733068.81 0.0288 0.0021

Saturn 21936-10-06 22:04 G 9733298.28 9733298.42 9733298.57 0.0288 0.0208

Jupiter 21938-08-05 22:19 G 9733966.34 9733966.43 9733966.52 0.0511 0.0455

Jupiter 21944-06-15 19:26 G 9736107.27 9736107.31 9736107.34 0.0511 0.0502

Saturn 21950-08-02 11:16 G 9738345.79 9738345.97 9738346.16 0.0271 0.0126

Saturn 21951-03-19 15:36 G 9738574.95 9738575.15 9738575.36 0.0271 0.0062

Saturn 21951-11-03 19:55 G 9738804.26 9738804.33 9738804.42 0.0271 0.0249

Neptune 21953-05-15 22:04 G 9739363.39 9739363.42 9739363.49 0.0089 0.0086

Neptune 21953-12-27 11:16 G 9739588.84 9739588.97 9739589.13 0.0089 0.0066

Neptune 21954-08-10 00:28 G 9739814.34 9739814.52 9739814.72 0.0089 0.0046

Neptune 21955-03-23 13:55 G 9740039.87 9740040.08 9740040.29 0.0089 0.0026

Pluto 21955-06-14 00:57 G 9740122.40 9740122.54 9740122.72 0.0067 0.0045

Neptune 21955-11-04 03:07 G 9740265.41 9740265.63 9740265.85 0.0089 0.0006

Pluto 21956-01-25 06:14 G 9740347.54 9740347.76 9740347.98 0.0067 0.0002

Jupiter 21956-02-19 15:50 G 9740372.96 9740373.16 9740373.36 0.0514 0.0016

Neptune 21956-06-16 15:50 G 9740490.95 9740491.16 9740491.39 0.0089 0.0014

Pluto 21956-09-06 10:48 G 9740572.82 9740572.95 9740573.11 0.0067 0.0050

Neptune 21957-01-28 04:48 G 9740716.51 9740716.70 9740716.92 0.0089 0.0034

Neptune 21957-09-10 18:14 G 9740942.09 9740942.26 9740942.44 0.0089 0.0053

Neptune 21958-04-24 07:26 G 9741167.69 9741167.81 9741167.94 0.0089 0.0073

Jupiter 21962-08-08 15:21 G 9742734.98 9742735.14 9742735.30 0.0515 0.0317

Uranus 21963-07-16 03:21 G 9743076.52 9743076.64 9743076.79 0.0145 0.0113

Mars 21963-11-26 02:52 G 9743209.45 9743209.62 9743209.80 0.1910 0.0051

Uranus 21964-02-27 15:07 G 9743302.95 9743303.13 9743303.33 0.0145 0.0069

Uranus 21964-10-11 03:21 G 9743529.43 9743529.64 9743529.86 0.0145 0.0024

Saturn 21965-01-14 14:24 G 9743624.97 9743625.10 9743625.24 0.0289 0.0219

Uranus 21965-05-25 15:21 G 9743755.93 9743756.14 9743756.36 0.0145 0.0021

Saturn 21965-09-01 10:48 G 9743854.74 9743854.95 9743855.16 0.0289 0.0012

Uranus 21966-01-07 03:07 G 9743982.45 9743982.63 9743982.83 0.0145 0.0066

Saturn 21966-04-19 06:57 G 9744084.68 9744084.79 9744084.91 0.0289 0.0241

Uranus 21966-08-21 15:07 G 9744209.00 9744209.13 9744209.28 0.0145 0.0111

Jupiter 21967-10-25 10:04 G 9744638.86 9744638.92 9744638.99 0.0518 0.0487

Mars 21968-07-05 22:04 G 9744893.26 9744893.42 9744893.59 0.1631 0.0614

Jupiter 21974-04-13 11:16 G 9747000.78 9747000.97 9747001.17 0.0512 0.0174

Saturn 21980-02-12 18:14 G 9749132.07 9749132.26 9749132.46 0.0270 0.0099

Saturn	**21980-09-28 22:33**	**G**	**9749361.24**	**9749361.44**	**9749361.64**	**0.0270**	**0.0089**	
Jupiter	**21991-10-28 05:45**	**G**	**9753407.58**	**9753407.74**	**9753407.91**	**0.0513**	**0.0306**	
Saturn	**21994-07-27 17:45**	**G**	**9754411.09**	**9754411.24**	**9754411.40**	**0.0289**	**0.0194**	
Saturn	**21995-03-14 14:09**	**G**	**9754640.88**	**9754641.09**	**9754641.30**	**0.0289**	**0.0036**	
Saturn	**21995-10-30 09:50**	**G**	**9754870.84**	**9754870.91**	**9754871.00**	**0.0288**	**0.0264**	
Mars	**22000-07-04 15:50**	**G**	**9756580.02**	**9756580.16**	**9756580.29**	**0.1624**	**0.1007**	

23RD MILLENNIUM CE

This is a list of transits of Venus in the 23rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**22003-07-03 02:09**	**G**	**9757673.40**	**9757673.59**	**9757673.78**	**0.0516**	**0.0183**	
Uranus	**22004-06-12 17:45**	**G**	**9758019.13**	**9758019.24**	**9758019.35**	**0.0134**	**0.0114**	
Uranus	**22005-01-24 23:02**	**G**	**9758245.30**	**9758245.46**	**9758245.65**	**0.0134**	**0.0080**	
Uranus	**22005-09-08 04:33**	**G**	**9758471.50**	**9758471.69**	**9758471.91**	**0.0134**	**0.0045**	
Uranus	**22006-04-22 10:19**	**G**	**9758697.72**	**9758697.93**	**9758698.15**	**0.0134**	**0.0010**	
Uranus	**22006-12-04 15:50**	**G**	**9758923.95**	**9758924.16**	**9758924.37**	**0.0133**	**0.0025**	
Uranus	**22007-07-18 20:52**	**G**	**9759150.19**	**9759150.37**	**9759150.58**	**0.0133**	**0.0061**	
Uranus	**22008-03-01 02:09**	**G**	**9759376.46**	**9759376.59**	**9759376.76**	**0.0133**	**0.0095**	
Uranus	**22008-10-13 07:40**	**G**	**9759602.78**	**9759602.82**	**9759602.88**	**0.0133**	**0.0129**	
Saturn	**22009-01-07 14:09**	**G**	**9759689.07**	**9759689.09**	**9759689.13**	**0.0271**	**0.0267**	
Saturn	**22009-08-24 18:14**	**G**	**9759918.06**	**9759918.26**	**9759918.47**	**0.0271**	**0.0081**	
Jupiter	**22009-12-20 01:40**	**G**	**9760035.38**	**9760035.57**	**9760035.77**	**0.0514**	**0.0117**	
Saturn	**22010-04-10 22:19**	**G**	**9760147.24**	**9760147.43**	**9760147.63**	**0.0271**	**0.0106**	

Jupiter 22021-08-24 21:50 G 9764301.28 9764301.41 9764301.56 0.0511 0.0368

Saturn 22024-02-07 00:14 G 9765197.35 9765197.51 9765197.69 0.0289 0.0166

Saturn 22024-09-23 20:52 G 9765427.17 9765427.37 9765427.58 0.0289 0.0065

Mars 22029-09-22 05:31 G 9767251.56 9767251.73 9767251.89 0.1907 0.0633

Mars 22034-05-03 10:19 G 9768935.78 9768935.93 9768936.08 0.1634 0.0833

Neptune 22034-11-19 10:33 G 9769135.85 9769135.94 9769136.06 0.0089 0.0077

Neptune 22035-07-02 23:16 G 9769361.32 9769361.47 9769361.65 0.0088 0.0058

Neptune 22036-02-13 12:14 G 9769586.82 9769587.01 9769587.22 0.0088 0.0038

Earth 22036-06-05 11:02 G 9769699.81 9769699.96 9769700.11 0.2653 0.0828

Moon 22036-06-05 16:33 G 9769700.07 9769700.19 9769700.32 0.2653 0.1659 *

Neptune 22036-09-26 01:12 G 9769812.35 9769812.55 9769812.78 0.0088 0.0019

Neptune 22037-05-09 14:24 G 9770037.88 9770038.10 9770038.32 0.0088 0.0002

Neptune 22037-12-21 03:07 G 9770263.42 9770263.63 9770263.85 0.0088 0.0021

Saturn 22038-07-20 21:21 G 9770475.30 9770475.39 9770475.49 0.0270 0.0239

Neptune 22038-08-03 16:04 G 9770488.98 9770489.17 9770489.37 0.0088 0.0041

Saturn 22039-03-07 01:12 G 9770704.34 9770704.55 9770704.76 0.0270 0.0054

Jupiter 22039-03-10 14:38 G 9770707.91 9770708.11 9770708.31 0.0515 0.0098

Neptune 22039-03-17 04:33 G 9770714.55 9770714.69 9770714.87 0.0088 0.0061

Saturn 22039-10-22 05:02 G 9770933.53 9770933.71 9770933.90 0.0270 0.0133

Neptune 22039-10-28 17:16 G 9770940.16 9770940.22 9770940.34 0.0088 0.0081

Pluto 22042-07-02 16:19 G 9771917.99 9771918.18 9771918.40 0.0077 0.0028

Pluto 22043-02-13 01:40 G 9772143.40 9772143.57 9772143.76 0.0077 0.0046

Jupiter 22045-08-27 14:09 G 9773069.96 9773070.09 9773070.22 0.0515 0.0397

Uranus 22047-03-15 08:52 G 9773634.80 9773634.87 9773634.96 0.0145 0.0133

Uranus 22047-10-27 20:52 G 9773861.20 9773861.37 9773861.55 0.0145 0.0089

Uranus 22048-06-10 08:38 G 9774087.66 9774087.86 9774088.08 0.0145 0.0045

Uranus 22049-01-22 20:52 G 9774314.15 9774314.37 9774314.58 0.0145 0.0003

Uranus 22049-09-06 08:52 G 9774540.66 9774540.87 9774541.08 0.0145 0.0045

Uranus 22050-04-20 20:52 G 9774767.21 9774767.37 9774767.55 0.0145 0.0090

Jupiter 22050-11-13 11:45 G 9774973.86 9774973.99 9774974.12 0.0518 0.0390

Uranus	22050-12-03 08:52 G	9774993.81	9774993.87	9774993.96	0.0145	0.0135
Saturn	22053-08-19 03:36 G	9775983.46	9775983.65	9775983.83	0.0289	0.0141
Saturn	22054-04-05 23:45 G	9776213.30	9776213.49	9776213.70	0.0289	0.0090
Jupiter	22057-05-02 11:16 G	9777335.77	9777335.97	9777336.17	0.0512	0.0088
Mars	22066-05-02 04:04 G	9780622.52	9780622.67	9780622.82	0.1626	0.0802
Saturn	22068-01-30 20:38 G	9781261.25	9781261.36	9781261.49	0.0270	0.0223
Saturn	22068-09-16 00:43 G	9781490.32	9781490.53	9781490.74	0.0270	0.0037
Saturn	22069-05-03 04:33 G	9781719.52	9781719.69	9781719.87	0.0271	0.0149
Jupiter	22074-11-16 05:45 G	9783742.62	9783742.74	9783742.88	0.0513	0.0394
Saturn	22083-03-01 08:38 G	9786769.67	9786769.86	9786770.06	0.0289	0.0115
Saturn	22083-10-17 05:16 G	9786999.53	9786999.72	9786999.92	0.0289	0.0116
Jupiter	22086-07-22 00:14 G	9788008.31	9788008.51	9788008.71	0.0516	0.0106
Uranus	22088-02-11 02:09 G	9788577.54	9788577.59	9788577.64	0.0134	0.0130
Uranus	22088-09-24 07:26 G	9788803.67	9788803.81	9788803.98	0.0134	0.0096
Uranus	22089-05-08 13:12 G	9789029.86	9789030.05	9789030.25	0.0134	0.0061
Uranus	22089-12-20 18:43 G	9789256.07	9789256.28	9789256.50	0.0133	0.0026
Uranus	22090-08-04 00:14 G	9789482.30	9789482.51	9789482.73	0.0133	0.0010
Uranus	22091-03-18 05:45 G	9789708.54	9789708.74	9789708.95	0.0133	0.0044
Uranus	22091-10-30 10:48 G	9789934.79	9789934.95	9789935.14	0.0133	0.0080
Uranus	22092-06-12 16:19 G	9790161.08	9790161.18	9790161.30	0.0133	0.0113
Jupiter	22093-01-08 01:40 G	9790370.39	9790370.57	9790370.76	0.0513	0.0206
Mars	22095-07-20 08:38 G	9791293.73	9791293.86	9791293.99	0.1903	0.1278
Saturn	22097-08-12 03:50 G	9792047.52	9792047.66	9792047.81	0.0270	0.0195
Saturn	22098-03-29 07:26 G	9792276.60	9792276.81	9792277.02	0.0270	0.0010
Saturn	22098-11-13 11:16 G	9792505.81	9792505.97	9792506.13	0.0270	0.0176
Mars	22100-02-28 22:04 G	9792978.29	9792978.42	9792978.55	0.1636	0.1065
Jupiter	22104-09-13 21:21 G	9794636.23	9794636.39	9794636.57	0.0511	0.0286
Saturn	22112-09-11 12:14 G	9797555.81	9797556.01	9797556.22	0.0289	0.0090
Saturn	22113-04-29 08:52 G	9797785.68	9797785.87	9797786.05	0.0289	0.0141
Neptune	22118-03-31 23:16 G	9799583.36	9799583.47	9799583.61	0.0089	0.0073

Neptune 22118-11-12 12:28 G 9799808.86 9799809.02 9799809.21 0.0089 0.0053

Neptune 22119-06-26 01:40 G 9800034.37 9800034.57 9800034.78 0.0089 0.0033

Neptune 22120-02-06 14:52 G 9800259.91 9800260.12 9800260.34 0.0089 0.0013

Neptune 22120-09-19 04:04 G 9800485.45 9800485.67 9800485.89 0.0089 0.0007

Neptune 22121-05-02 17:02 G 9800711.01 9800711.21 9800711.43 0.0089 0.0027

Neptune 22121-12-14 06:00 G 9800936.58 9800936.75 9800936.95 0.0089 0.0047

Jupiter 22122-03-30 16:48 G 9801043.01 9801043.20 9801043.39 0.0514 0.0199

Neptune 22122-07-27 18:57 G 9801162.17 9801162.29 9801162.46 0.0089 0.0067

Neptune 22123-03-10 08:24 G 9801387.81 9801387.85 9801387.91 0.0089 0.0087

Saturn 22127-02-23 02:52 G 9802833.46 9802833.62 9802833.78 0.0270 0.0179

Saturn 22127-10-10 06:28 G 9803062.56 9803062.77 9803062.98 0.0270 0.0006

Saturn 22128-05-26 10:04 G 9803291.78 9803291.92 9803292.07 0.0270 0.0192

Jupiter 22128-09-16 16:19 G 9803405.14 9803405.18 9803405.24 0.0516 0.0500

Uranus 22131-06-28 01:26 G 9804419.43 9804419.56 9804419.71 0.0145 0.0110

Uranus 22132-02-09 13:12 G 9804645.87 9804646.05 9804646.26 0.0145 0.0066

Mars 22132-02-28 16:04 G 9804665.01 9804665.17 9804665.33 0.1628 0.0580

Uranus 22132-09-23 01:40 G 9804872.35 9804872.57 9804872.78 0.0145 0.0021

Uranus 22133-05-07 13:40 G 9805098.86 9805099.07 9805099.28 0.0145 0.0024

Jupiter 22133-12-03 12:57 G 9805308.87 9805309.04 9805309.21 0.0517 0.0295

Uranus 22133-12-20 01:26 G 9805325.38 9805325.56 9805325.76 0.0145 0.0069

Uranus 22134-08-03 13:55 G 9805551.95 9805552.08 9805552.21 0.0145 0.0113

Jupiter 22140-05-22 12:57 G 9807670.84 9807671.04 9807671.25 0.0512 0.0018

Saturn 22142-03-24 15:36 G 9808341.95 9808342.15 9808342.36 0.0290 0.0067

Saturn 22142-11-09 12:14 G 9808571.85 9808572.01 9808572.20 0.0289 0.0166

Earth 22149-12-06 17:02 G 9811156.05 9811156.21 9811156.36 0.2678 0.0420

Moon 22149-12-06 18:43 G 9811156.13 9811156.28 9811156.44 0.2672 0.0942 *

Jupiter 22152-01-26 10:19 G 9811936.85 9811936.93 9811937.01 0.0509 0.0466

Saturn 22156-09-04 09:50 G 9813619.74 9813619.91 9813620.09 0.0270 0.0151

Saturn 22157-04-21 13:26 G 9813848.85 9813849.06 9813849.27 0.0270 0.0034

Jupiter 22157-12-06 04:33 G 9814077.62 9814077.69 9814077.77 0.0513 0.0476

Saturn 22157-12-06 17:02 G 9814078.09 9814078.21 9814078.33 0.0270 0.0219

Mars 22165-12-27 10:04 G 9817020.82 9817020.92 9817021.03 0.1639 0.1296

Jupiter 22169-08-11 02:24 G 9818343.40 9818343.60 9818343.81 0.0516 0.0009

Saturn 22171-02-16 23:02 G 9818898.40 9818898.46 9818898.55 0.0289 0.0271

Saturn 22171-10-04 20:09 G 9819128.13 9819128.34 9819128.55 0.0289 0.0040

Saturn 22172-05-21 16:33 G 9819358.03 9819358.19 9819358.35 0.0289 0.0191

Uranus 22172-05-25 16:33 G 9819362.08 9819362.19 9819362.32 0.0134 0.0111

Uranus 22173-01-06 22:04 G 9819588.25 9819588.42 9819588.61 0.0134 0.0076

Uranus 22173-08-21 03:36 G 9819814.45 9819814.65 9819814.87 0.0133 0.0041

Uranus 22174-04-04 09:21 G 9820040.68 9820040.89 9820041.11 0.0133 0.0007

Uranus 22174-11-16 14:52 G 9820266.91 9820267.12 9820267.33 0.0133 0.0029

Uranus 22175-06-30 20:09 G 9820493.15 9820493.34 9820493.54 0.0133 0.0063

Jupiter 22176-01-29 02:09 G 9820705.43 9820705.59 9820705.76 0.0514 0.0295

Uranus 22176-02-12 01:12 G 9820719.42 9820719.55 9820719.71 0.0133 0.0098

Uranus 22176-09-25 06:28 G 9820945.77 9820945.77 9820945.82 0.0133 0.0133

Jupiter 22181-04-15 23:02 G 9822609.41 9822609.46 9822609.52 0.0518 0.0498

Saturn 22186-03-17 08:38 G 9824405.69 9824405.86 9824406.05 0.0270 0.0136

Saturn 22186-11-01 12:14 G 9824634.80 9824635.01 9824635.22 0.0270 0.0050

Saturn 22187-06-18 15:50 G 9824864.06 9824864.16 9824864.26 0.0270 0.0234

Jupiter 22187-10-03 23:45 G 9824971.30 9824971.49 9824971.68 0.0511 0.0186

Mars 22193-05-17 12:14 G 9827023.90 9827024.01 9827024.12 0.1912 0.1490

Mars 22197-12-26 04:33 G 9828707.52 9828707.69 9828707.86 0.1631 0.0372

Neptune 22199-02-21 22:19 G 9829130.38 9829130.43 9829130.52 0.0089 0.0084

Neptune 22199-10-05 11:45 G 9829355.84 9829355.99 9829356.14 0.0089 0.0064

Neptune 22200-05-19 00:14 G 9829581.33 9829581.51 9829581.71 0.0089 0.0045

Saturn 22200-08-30 01:12 G 9829684.45 9829684.55 9829684.66 0.0290 0.0250

Neptune 22200-12-30 13:12 G 9829806.84 9829807.05 9829807.26 0.0088 0.0025

Saturn 22201-04-16 22:33 G 9829914.23 9829914.44 9829914.65 0.0290 0.0018

Neptune 22201-08-13 02:09 G 9830032.37 9830032.59 9830032.81 0.0088 0.0005

Saturn 22201-12-02 19:26 G 9830144.17 9830144.31 9830144.45 0.0289 0.0214

Neptune 22202-03-26 14:52 G 9830257.91 9830258.12 9830258.34 0.0088 0.0014

Neptune 22202-11-07 03:50 G 9830483.46 9830483.66 9830483.86 0.0088 0.0034

Pluto 22203-05-19 07:26 G 9830676.68 9830676.81 9830676.97 0.0066 0.0051

Neptune 22203-06-20 16:19 G 9830709.02 9830709.18 9830709.37 0.0088 0.0054

Pluto 22203-12-30 12:43 G 9830901.81 9830902.03 9830902.25 0.0067 0.0004

Neptune 22204-02-01 05:31 G 9830934.61 9830934.73 9830934.85 0.0088 0.0073

Pluto 22204-08-11 17:02 G 9831127.07 9831127.21 9831127.40 0.0067 0.0044

Jupiter 22205-04-19 15:07 G 9831377.96 9831378.13 9831378.30 0.0514 0.0277

Uranus 22215-02-26 06:00 G 9834977.66 9834977.75 9834977.84 0.0144 0.0131

Saturn 22215-09-28 15:50 G 9835191.96 9835192.16 9835192.35 0.0270 0.0108

Uranus 22215-10-10 18:00 G 9835204.08 9835204.25 9835204.42 0.0145 0.0087

Saturn 22216-05-14 19:12 G 9835421.10 9835421.30 9835421.51 0.0270 0.0077

Uranus 22216-05-24 05:45 G 9835430.54 9835430.74 9835430.96 0.0145 0.0043

Jupiter 22216-12-23 11:02 G 9835643.78 9835643.96 9835644.15 0.0517 0.0217

Saturn 22216-12-29 22:48 G 9835650.41 9835650.45 9835650.50 0.0270 0.0262

Uranus 22217-01-05 18:00 G 9835657.03 9835657.25 9835657.46 0.0145 0.0003

Uranus 22217-08-20 05:45 G 9835883.54 9835883.74 9835883.96 0.0145 0.0047

Uranus 22218-04-03 18:14 G 9836110.09 9836110.26 9836110.43 0.0145 0.0091

Uranus 22218-11-16 06:14 G 9836336.70 9836336.76 9836336.84 0.0145 0.0136

Jupiter 22223-06-12 12:57 G 9838005.84 9838006.04 9838006.24 0.0512 0.0097

Saturn 22230-03-12 06:43 G 9840470.65 9840470.78 9840470.92 0.0290 0.0221

Saturn 22230-10-28 03:36 G 9840700.44 9840700.65 9840700.86 0.0290 0.0011

Saturn 22231-06-15 00:00 G 9840930.39 9840930.50 9840930.62 0.0289 0.0241

Mars 22231-10-25 22:19 G 9841063.37 9841063.43 9841063.49 0.1641 0.1525

Jupiter 22235-02-15 10:19 G 9842271.80 9842271.93 9842272.07 0.0510 0.0382

Saturn 22245-04-09 15:07 G 9845977.93 9845978.13 9845978.33 0.0270 0.0091

Saturn 22245-11-24 18:28 G 9846207.07 9846207.27 9846207.47 0.0270 0.0094

Jupiter 22252-08-31 04:19 G 9848678.48 9848678.68 9848678.88 0.0515 0.0093

Uranus 22256-01-25 00:57 G 9849920.49 9849920.54 9849920.62 0.0134 0.0127

Uranus 22256-09-07 06:43 G 9850146.63 9850146.78 9850146.95 0.0134 0.0092

Uranus 22257-04-21 12:43 G 9850372.83 9850373.03 9850373.23 0.0134 0.0057

Uranus 22257-12-03 18:00 G 9850599.04 9850599.25 9850599.47 0.0133 0.0023

Uranus 22258-07-17 23:45 G 9850825.27 9850825.49 9850825.70 0.0133 0.0013

Jupiter 22259-02-18 05:02 G 9851040.59 9851040.71 9851040.84 0.0514 0.0401

Uranus 22259-03-01 05:02 G 9851051.51 9851051.71 9851051.92 0.0133 0.0047

Mars 22259-03-15 14:52 G 9851065.96 9851066.12 9851066.27 0.1908 0.0818

Saturn 22259-09-22 07:40 G 9851256.68 9851256.82 9851256.98 0.0290 0.0202

Uranus 22259-10-13 10:04 G 9851277.77 9851277.92 9851278.11 0.0133 0.0083

Saturn 22260-05-09 05:02 G 9851486.50 9851486.71 9851486.92 0.0290 0.0031

Uranus 22260-05-26 15:36 G 9851504.06 9851504.15 9851504.27 0.0133 0.0117

Saturn 22260-12-25 01:55 G 9851716.50 9851716.58 9851716.67 0.0290 0.0262

Mars 22263-10-24 16:19 G 9852750.01 9852750.18 9852750.35 0.1633 0.0144

Jupiter 22264-05-05 21:07 G 9852944.26 9852944.38 9852944.49 0.0518 0.0422

Jupiter 22270-10-24 01:55 G 9855306.38 9855306.58 9855306.78 0.0511 0.0086

Saturn 22274-03-05 18:28 G 9856535.19 9856535.27 9856535.36 0.0270 0.0247

Saturn 22274-10-20 21:50 G 9856764.21 9856764.41 9856764.62 0.0270 0.0064

Saturn 22275-06-07 01:26 G 9856993.37 9856993.56 9856993.75 0.0270 0.0122

Moon 22279-06-08 07:12 G 9858455.64 9858455.80 9858455.96 0.2652 0.0109

Earth 22279-06-08 12:43 G 9858455.88 9858456.03 9858456.19 0.2654 0.0766 *

Neptune 22282-07-04 10:33 G 9859577.86 9859577.94 9859578.05 0.0089 0.0080

Neptune 22283-02-14 23:45 G 9859803.34 9859803.49 9859803.67 0.0089 0.0060

Neptune 22283-09-28 13:12 G 9860028.86 9860029.05 9860029.25 0.0089 0.0040

Neptune 22284-05-11 02:24 G 9860254.39 9860254.60 9860254.82 0.0089 0.0020

Neptune 22284-12-22 15:36 G 9860479.93 9860480.15 9860480.37 0.0089 0.0001

Neptune 22285-08-05 04:33 G 9860705.48 9860705.69 9860705.91 0.0089 0.0020

Neptune 22286-03-18 17:45 G 9860931.05 9860931.24 9860931.45 0.0089 0.0040

Neptune 22286-10-30 06:43 G 9861156.64 9861156.78 9861156.96 0.0089 0.0060

Neptune 22287-06-12 20:09 G 9861382.25 9861382.34 9861382.44 0.0089 0.0079

Jupiter 22288-05-08 16:48 G 9861713.06 9861713.20 9861713.34 0.0514 0.0374

Saturn 22289-04-03 14:38 G 9862042.95 9862043.11 9862043.29 0.0290 0.0170

Saturn 22289-11-19 11:31 G 9862272.78 9862272.98 9862273.19 0.0290 0.0062

Pluto 22290-06-06 20:52 G 9862472.21 9862472.37 9862472.57 0.0077 0.0044

Pluto 22291-01-18 06:14 G 9862697.57 9862697.76 9862697.98 0.0077 0.0030

Uranus 22299-06-09 22:19 G 9865762.31 9865762.43 9865762.60 0.0145 0.0109

Jupiter 22300-01-12 13:55 G 9865978.88 9865979.08 9865979.28 0.0517 0.0112

Uranus 22300-01-22 10:33 G 9865988.75 9865988.94 9865989.14 0.0145 0.0064

Uranus 22300-09-05 22:48 G 9866215.23 9866215.45 9866215.67 0.0145 0.0019

Uranus 22301-04-20 10:48 G 9866441.74 9866441.95 9866442.17 0.0145 0.0025

Uranus 22301-12-02 22:48 G 9866668.27 9866668.45 9866668.65 0.0145 0.0070

Uranus 22302-07-17 11:02 G 9866894.83 9866894.96 9866895.10 0.0145 0.0114

Saturn 22303-09-16 18:43 G 9867321.18 9867321.28 9867321.39 0.0270 0.0229

Saturn 22304-05-02 22:04 G 9867550.21 9867550.42 9867550.63 0.0270 0.0046

Saturn 22304-12-18 01:12 G 9867779.37 9867779.55 9867779.74 0.0270 0.0139

Jupiter 22306-07-02 14:38 G 9868340.93 9868341.11 9868341.30 0.0513 0.0195

Jupiter 22318-03-07 12:57 G 9872606.87 9872607.04 9872607.21 0.0510 0.0279

Saturn 22318-10-15 15:36 G 9872828.97 9872829.15 9872829.33 0.0290 0.0150

Saturn 22319-06-02 12:43 G 9873058.82 9873059.03 9873059.23 0.0290 0.0082

Mars 22325-01-10 18:00 G 9875108.08 9875108.25 9875108.42 0.1905 0.0167

Mars 22329-08-22 04:19 G 9876792.51 9876792.68 9876792.85 0.1635 0.0079

Saturn 22333-03-29 01:12 G 9878107.42 9878107.55 9878107.70 0.0270 0.0202

Saturn 22333-11-13 04:48 G 9878336.49 9878336.70 9878336.92 0.0270 0.0018

Saturn 22334-06-30 08:24 G 9878565.68 9878565.85 9878566.01 0.0270 0.0168

Jupiter 22335-09-21 01:26 G 9879013.36 9879013.56 9879013.75 0.0516 0.0163

Uranus 22340-05-08 15:36 G 9880705.04 9880705.15 9880705.30 0.0134 0.0108

Uranus 22340-12-20 21:21 G 9880931.22 9880931.39 9880931.58 0.0134 0.0073

Uranus 22341-08-04 03:07 G 9881157.43 9881157.63 9881157.84 0.0134 0.0038

Jupiter 22342-03-10 04:04 G 9881375.61 9881375.67 9881375.74 0.0514 0.0481

Uranus 22342-03-18 08:52 G 9881383.65 9881383.87 9881384.09 0.0133 0.0003

Uranus 22342-10-30 14:24 G 9881609.89 9881610.10 9881610.31 0.0133 0.0032

Uranus 22343-06-13 19:40 G 9881836.14 9881836.32 9881836.51 0.0133 0.0067

Uranus 22344-01-26 00:43 G 9882062.41 9882062.53 9882062.69 0.0133 0.0101

Jupiter 22347-05-26 22:04 G 9883279.26 9883279.42 9883279.58 0.0518 0.0329

Saturn 22348-04-26 23:31 G 9883615.29 9883615.48 9883615.67 0.0290 0.0117

Saturn 22348-12-12 20:09 G 9883845.15 9883845.34 9883845.54 0.0290 0.0115

Jupiter 22353-11-13 00:43 G 9885641.33 9885641.53 9885641.74 0.0511 0.0010

Mars 22361-08-20 22:04 G 9888479.37 9888479.42 9888479.46 0.1627 0.1560

Saturn 22362-10-09 02:24 G 9888893.45 9888893.60 9888893.76 0.0270 0.0183

Saturn 22363-05-26 05:45 G 9889122.53 9889122.74 9889122.95 0.0270 0.0002

Neptune 22364-01-08 23:02 G 9889350.34 9889350.46 9889350.60 0.0089 0.0071

Saturn 22364-01-10 08:52 G 9889351.72 9889351.87 9889352.03 0.0270 0.0186

Neptune 22364-08-21 11:45 G 9889575.83 9889575.99 9889576.18 0.0089 0.0052

Neptune 22365-04-04 00:57 G 9889801.34 9889801.54 9889801.75 0.0088 0.0032

Jupiter 22365-07-18 22:33 G 9889907.38 9889907.44 9889907.50 0.0509 0.0481

Neptune 22365-11-15 13:40 G 9890026.86 9890027.07 9890027.30 0.0088 0.0013

Neptune 22366-06-29 02:38 G 9890252.39 9890252.61 9890252.83 0.0088 0.0007

Neptune 22367-02-09 15:21 G 9890477.93 9890478.14 9890478.35 0.0088 0.0027

Neptune 22367-09-23 04:04 G 9890703.50 9890703.67 9890703.87 0.0088 0.0047

Neptune 22368-05-05 17:02 G 9890929.07 9890929.21 9890929.36 0.0088 0.0066

Neptune 22368-12-17 05:31 G 9891154.70 9891154.73 9891154.81 0.0088 0.0086

Jupiter 22371-05-29 17:45 G 9892048.16 9892048.24 9892048.33 0.0514 0.0467

Saturn 22377-11-07 00:43 G 9894401.33 9894401.53 9894401.73 0.0290 0.0097

Saturn 22378-06-24 21:36 G 9894631.21 9894631.40 9894631.59 0.0290 0.0135

Jupiter 22383-02-01 11:02 G 9896313.76 9896313.96 9896314.16 0.0517 0.0041

Uranus 22383-02-08 04:33 G 9896320.59 9896320.69 9896320.79 0.0144 0.0128

Uranus 22383-09-22 16:04 G 9896547.01 9896547.17 9896547.36 0.0145 0.0085

Uranus 22384-05-06 04:19 G 9896773.48 9896773.68 9896773.89 0.0145 0.0040

Uranus 22384-12-18 16:19 G 9896999.97 9897000.18 9897000.40 0.0145 0.0005

Uranus 22385-08-02 04:19 G 9897226.48 9897226.68 9897226.89 0.0145 0.0049

Uranus 22386-03-16 16:04 G 9897453.02 9897453.17 9897453.35 0.0145 0.0094

Uranus 22386-10-29 04:19 G 9897679.64 9897679.68 9897679.76 0.0145 0.0138

Jupiter 22389-07-21 16:19 G 9898676.01 9898676.18 9898676.35 0.0513 0.0291

Mars 22390-11-07 20:52 G 9899150.20 9899150.37 9899150.54 0.1901 0.0487

Saturn 22392-04-20 08:52 G 9899679.71 9899679.87 9899680.06 0.0270 0.0155

Saturn 22392-12-05 12:43 G 9899908.82 9899909.03 9899909.24 0.0270 0.0031

Moon 22392-12-08 13:40 G 9899911.92 9899912.07 9899912.22 0.2682 0.0393

Earth 22392-12-08 17:16 G 9899912.06 9899912.22 9899912.37 0.2677 0.0200 *

Saturn 22393-07-22 15:50 G 9900138.05 9900138.16 9900138.30 0.0270 0.0216

Mars 22395-06-19 16:04 G 9900835.00 9900835.17 9900835.34 0.1638 0.0311

Jupiter 22401-03-26 11:16 G 9902941.79 9902941.97 9902942.16 0.0510 0.0204

Saturn 22407-05-20 09:50 G 9905187.71 9905187.91 9905188.12 0.0290 0.0061

Saturn 22408-01-05 06:28 G 9905417.61 9905417.77 9905417.95 0.0290 0.0171

Jupiter 22418-10-10 02:38 G 9909348.44 9909348.61 9909348.79 0.0515 0.0260

Saturn 22421-10-31 11:02 G 9910465.78 9910465.96 9910466.15 0.0270 0.0134

Saturn 22422-06-17 14:24 G 9910694.89 9910695.10 9910695.31 0.0270 0.0051

Saturn 22423-02-01 17:31 G 9910924.14 9910924.23 9910924.35 0.0270 0.0236

Uranus 22424-01-07 00:28 G 9911263.45 9911263.52 9911263.62 0.0134 0.0123

Uranus 22424-08-20 06:00 G 9911489.61 9911489.75 9911489.93 0.0134 0.0089

Uranus 22425-04-03 12:00 G 9911715.81 9911716.00 9911716.21 0.0134 0.0054

Uranus 22425-11-15 17:45 G 9911942.03 9911942.24 9911942.46 0.0134 0.0019

Uranus 22426-06-29 23:16 G 9912168.26 9912168.47 9912168.69 0.0133 0.0016

Uranus 22427-02-11 04:33 G 9912394.50 9912394.69 9912394.90 0.0133 0.0051

Mars 22427-06-18 10:04 G 9912521.83 9912521.92 9912522.02 0.1630 0.1343

Uranus 22427-09-25 09:50 G 9912620.76 9912620.91 9912621.09 0.0133 0.0085

Uranus 22428-05-08 15:21 G 9912847.06 9912847.14 9912847.25 0.0133 0.0119

Jupiter 22430-06-14 22:48 G 9913614.27 9913614.45 9913614.64 0.0518 0.0235

Saturn 22436-04-13 14:09 G 9915744.03 9915744.09 9915744.17 0.0289 0.0271

Saturn 22436-11-29 11:16 G 9915973.76 9915973.97 9915974.18 0.0289 0.0040

Jupiter 22436-12-02 02:09 G 9915976.39 9915976.59 9915976.79 0.0512 0.0088

Saturn 22437-07-17 07:55 G 9916203.68 9916203.83 9916204.00 0.0289 0.0192

Neptune 22446-10-06 22:04 G 9919572.40 9919572.42 9919572.48 0.0089 0.0087

Neptune 22447-05-20 11:31 G 9919797.84 9919797.98 9919798.13 0.0089 0.0067

Neptune 22448-01-01 00:43 G 9920023.35 9920023.53 9920023.72 0.0089 0.0047

Jupiter 22448-08-06 23:16 G 9920242.35 9920242.47 9920242.61 0.0509 0.0391

Neptune 22448-08-13 13:55 G 9920248.87 9920249.08 9920249.29 0.0089 0.0027

Neptune 22449-03-27 03:07 G 9920474.42 9920474.63 9920474.86 0.0089 0.0008

Neptune 22449-11-07 16:19 G 9920699.97 9920700.18 9920700.40 0.0089 0.0013

Neptune 22450-06-21 05:31 G 9920925.53 9920925.73 9920925.94 0.0089 0.0032

Neptune 22451-02-01 18:28 G 9921151.10 9921151.27 9921151.46 0.0089 0.0052

Pluto 22451-04-22 13:12 G 9921230.98 9921231.05 9921231.15 0.0066 0.0061

Saturn 22451-05-13 17:31 G 9921252.04 9921252.23 9921252.43 0.0270 0.0106

Neptune 22451-09-15 07:26 G 9921376.70 9921376.81 9921376.95 0.0089 0.0072

Pluto 22451-12-03 18:14 G 9921456.04 9921456.26 9921456.48 0.0067 0.0014

Saturn 22451-12-28 21:07 G 9921481.18 9921481.38 9921481.59 0.0270 0.0080

Pluto 22452-07-15 23:02 G 9921681.28 9921681.46 9921681.66 0.0067 0.0033

Saturn 22452-08-14 00:43 G 9921710.50 9921710.53 9921710.58 0.0270 0.0265

Mars 22456-09-03 23:45 G 9923192.35 9923192.49 9923192.63 0.1897 0.1140

Mars 22461-04-16 03:50 G 9924877.50 9924877.66 9924877.82 0.1640 0.0545

Saturn 22465-10-25 00:57 G 9926530.42 9926530.54 9926530.67 0.0290 0.0233

Jupiter 22466-02-20 10:19 G 9926648.72 9926648.93 9926649.13 0.0517 0.0042

Saturn 22466-06-11 21:50 G 9926760.20 9926760.41 9926760.63 0.0290 0.0006

Saturn 22467-01-27 18:28 G 9926990.15 9926990.27 9926990.40 0.0290 0.0229

Uranus 22467-05-22 22:48 G 9927105.31 9927105.45 9927105.61 0.0145 0.0104

Uranus 22468-01-04 10:48 G 9927331.76 9927331.95 9927332.15 0.0145 0.0060

Uranus 22468-08-17 22:48 G 9927558.24 9927558.45 9927558.67 0.0145 0.0015

Uranus 22469-04-01 10:48 G 9927784.74 9927784.95 9927785.17 0.0145 0.0029

Uranus 22469-11-13 22:48 G 9928011.27 9928011.45 9928011.65 0.0145 0.0074

Uranus 22470-06-28 10:48 G 9928237.84 9928237.95 9928238.09 0.0145 0.0118

Jupiter 22472-08-09 13:12 G 9929010.91 9929011.05 9929011.20 0.0513 0.0359

Jupiter 22477-10-26 06:28 G 9930914.68 9930914.77 9930914.87 0.0519 0.0455

Saturn 22480-04-07 17:16 G 9931809.21 9931809.22 9931809.27 0.0270 0.0267

Saturn 22480-11-22 20:52 G 9932038.17 9932038.37 9932038.57 0.0270 0.0083

Saturn 22481-07-10 00:00 G 9932267.31 9932267.50 9932267.71 0.0270 0.0103

Jupiter 22484-04-14 10:19 G 9933276.73 9933276.93 9933277.13 0.0511 0.0125

Mars 22493-04-14 22:04 G 9936564.30 9936564.42 9936564.55 0.1632 0.1127

Saturn 22495-05-07 03:07 G 9937316.49 9937316.63 9937316.78 0.0289 0.0210

Saturn 22495-12-23 00:00 G 9937546.29 9937546.50 9937546.71 0.0289 0.0021

Saturn 22496-08-08 20:38 G 9937776.26 9937776.36 9937776.47 0.0289 0.0251

Jupiter 22501-10-29 22:48 G 9939683.30 9939683.45 9939683.61 0.0515 0.0323

Uranus 22508-04-20 16:04 G 9942048.03 9942048.17 9942048.31 0.0134 0.0103

Uranus 22508-12-02 21:21 G 9942274.22 9942274.39 9942274.59 0.0134 0.0069

Uranus 22509-07-17 03:07 G 9942500.43 9942500.63 9942500.85 0.0134 0.0034

Saturn 22509-10-19 23:31 G 9942595.38 9942595.48 9942595.57 0.0270 0.0240

Uranus 22510-02-28 08:52 G 9942726.65 9942726.87 9942727.09 0.0133 0.0002

Saturn 22510-06-06 03:07 G 9942824.42 9942824.63 9942824.84 0.0270 0.0055

Uranus 22510-10-12 14:09 G 9942952.89 9942953.09 9942953.31 0.0133 0.0036

Saturn 22511-01-21 06:43 G 9943053.60 9943053.78 9943053.97 0.0270 0.0131

Uranus 22511-05-26 19:26 G 9943179.14 9943179.31 9943179.51 0.0133 0.0070

Uranus 22512-01-08 00:43 G 9943405.41 9943405.53 9943405.68 0.0133 0.0104

Jupiter 22513-07-04 17:45 G 9943949.05 9943949.24 9943949.43 0.0518 0.0179

Jupiter 22519-12-22 22:48 G 9946311.26 9946311.45 9946311.64 0.0512 0.0155

Earth 22522-06-10 14:38 G 9947211.95 9947212.11 9947212.26 0.2654 0.0707

Moon 22522-06-10 19:26 G 9947212.17 9947212.31 9947212.45 0.2658 0.1029 *

Mars 22522-07-03 02:52 G 9947234.57 9947234.62 9947234.68 0.1893 0.1776

Saturn 22524-11-17 14:52 G 9948102.95 9948103.12 9948103.29 0.0290 0.0171

Saturn 22525-07-05 11:31 G 9948332.78 9948332.98 9948333.19 0.0290 0.0061

Mars 22527-02-12 15:36 G 9948919.99 9948920.15 9948920.30 0.1643 0.0786

Neptune 22528-04-12 10:33 G 9949344.84 9949344.94 9949345.05 0.0089 0.0078

Neptune 22528-11-23 23:02 G 9949570.32 9949570.46 9949570.64 0.0089 0.0059

Neptune 22529-07-07 12:14 G 9949795.82 9949796.01 9949796.21 0.0089 0.0039

Neptune 22530-02-18 00:57 G 9950021.33 9950021.54 9950021.76 0.0088 0.0020

Moon 22530-06-08 12:00 G 9950131.97 9950132.00 9950132.04 0.2653 0.2573

Neptune 22530-10-01 14:09 G 9950246.87 9950247.09 9950247.31 0.0088 0.0001

Neptune 22531-05-15 02:52 G 9950472.41 9950472.62 9950472.84 0.0088 0.0020

Jupiter 22531-08-27 19:26 G 9950577.16 9950577.31 9950577.47 0.0509 0.0329

Neptune 22531-12-26 15:21 G 9950697.96 9950698.14 9950698.35 0.0088 0.0039

Neptune 22532-08-08 04:04 G 9950923.52 9950923.67 9950923.85 0.0088 0.0059

Neptune 22533-03-21 17:16 G 9951149.12 9951149.22 9951149.32 0.0088 0.0078

Pluto 22538-05-12 01:40 G 9953026.44 9953026.57 9953026.71 0.0077 0.0061

Pluto 22538-12-23 10:48 G 9953251.74 9953251.95 9953252.18 0.0077 0.0014

Saturn 22539-05-02 04:04 G 9953381.55 9953381.67 9953381.80 0.0270 0.0215

Saturn 22539-12-17 07:26 G 9953610.60 9953610.81 9953611.02 0.0270 0.0031

Saturn 22540-08-02 10:48 G 9953839.78 9953839.95 9953840.13 0.0270 0.0155

Jupiter 22549-03-12 09:50 G 9956983.71 9956983.91 9956984.10 0.0516 0.0125

Uranus 22551-01-21 05:02 G 9957663.61 9957663.71 9957663.84 0.0144 0.0123

Uranus 22551-09-04 17:02 G 9957890.04 9957890.21 9957890.41 0.0145 0.0079

Uranus 22552-04-18 05:02 G 9958116.51 9958116.71 9958116.93 0.0145 0.0035

Uranus 22552-11-30 17:16 G 9958343.00 9958343.22 9958343.44 0.0145 0.0010

Uranus 22553-07-15 05:02 G 9958569.52 9958569.71 9958569.92 0.0145 0.0054

Uranus 22554-02-26 17:16 G 9958796.06 9958796.22 9958796.38 0.0145 0.0098

Saturn 22554-05-30 17:16 G 9958889.04 9958889.22 9958889.41 0.0289 0.0148

Mars 22554-07-03 02:09 G 9958922.50 9958922.59 9958922.69 0.1906 0.1582

Uranus 22554-10-11 05:31 G 9959022.69 9959022.73 9959022.77 0.0145 0.0142

Saturn 22555-01-15 13:55 G 9959118.89 9959119.08 9959119.29 0.0289 0.0085

Jupiter 22555-08-30 12:57 G 9959345.94 9959346.04 9959346.14 0.0514 0.0445

Mars 22559-02-11 09:50 G 9960606.77 9960606.91 9960607.06 0.1634 0.0898

Jupiter 22560-11-15 02:38 G 9961249.48 9961249.61 9961249.75 0.0519 0.0390

Jupiter 22567-05-05 09:50 G 9963611.71 9963611.91 9963612.11 0.0511 0.0042

Saturn 22568-11-11 09:36 G 9964167.75 9964167.90 9964168.06 0.0270 0.0188

Saturn 22569-06-28 13:26 G 9964396.84 9964397.06 9964397.27 0.0270 0.0005

Saturn 22570-02-12 16:48 G 9964626.06 9964626.20 9964626.37 0.0270 0.0184

Saturn 22583-12-11 06:00 G 9969675.55 9969675.75 9969675.95 0.0290 0.0107

Saturn 22584-07-28 02:52 G 9969905.43 9969905.62 9969905.81 0.0290 0.0125

Jupiter 22584-11-17 20:09 G 9970018.22 9970018.34 9970018.48 0.0515 0.0396

Uranus 22591-12-20 01:12 G 9972606.45 9972606.55 9972606.65 0.0134 0.0118

Uranus 22592-08-02 06:43 G 9972832.62 9972832.78 9972832.96 0.0134 0.0084

Mars 22592-12-10 03:07 G 9972962.50 9972962.63 9972962.77 0.1645 0.1025

Uranus 22593-03-16 12:43 G 9973058.82 9973059.03 9973059.23 0.0134 0.0049

Uranus 22593-10-28 18:14 G 9973285.04 9973285.26 9973285.48 0.0133 0.0014

Uranus 22594-06-11 23:31 G 9973511.27 9973511.48 9973511.70 0.0133 0.0020

Uranus 22595-01-24 04:48 G 9973737.51 9973737.70 9973737.90 0.0133 0.0055

Uranus 22595-09-07 10:04 G 9973963.77 9973963.92 9973964.09 0.0133 0.0089

Uranus 22596-04-20 15:36 G 9974190.07 9974190.15 9974190.24 0.0133 0.0123

Jupiter 22596-07-23 16:48 G 9974284.00 9974284.20 9974284.40 0.0518 0.0096

Saturn 22598-05-24 15:07 G 9974953.97 9974954.13 9974954.30 0.0270 0.0162

Saturn 22599-01-08 18:43 G 9975183.07 9975183.28 9975183.49 0.0270 0.0023

Saturn 22599-08-25 22:04 G 9975412.30 9975412.42 9975412.56 0.0270 0.0208

Jupiter 22603-01-11 19:55 G 9976646.15 9976646.33 9976646.51 0.0512 0.0224

Neptune 22611-08-23 22:04 G 9979792.33 9979792.42 9979792.57 0.0089 0.0075

Neptune 22612-04-05 11:45 G 9980017.83 9980017.99 9980018.18 0.0089 0.0055

Neptune 22612-11-17 00:57 G 9980243.35 9980243.54 9980243.75 0.0089 0.0035

Saturn 22613-06-23 09:07 G 9980461.68 9980461.88 9980462.09 0.0289 0.0082

Neptune 22613-06-30 14:09 G 9980468.88 9980469.09 9980469.31 0.0089 0.0015

Saturn 22614-02-08 06:00 G 9980691.57 9980691.75 9980691.93 0.0289 0.0150

Neptune 22614-02-11 03:21 G 9980694.42 9980694.64 9980694.86 0.0089 0.0005

Jupiter 22614-09-16 18:14 G 9980912.08 9980912.26 9980912.43 0.0510 0.0252

Neptune 22614-09-24 16:19 G 9980919.98 9980920.18 9980920.40 0.0089 0.0025

Neptune 22615-05-08 05:31 G 9981145.56 9981145.73 9981145.94 0.0089 0.0045

Neptune 22615-12-19 18:43 G 9981371.15 9981371.28 9981371.44 0.0089 0.0065

Neptune 22616-08-01 07:40 G 9981596.78 9981596.82 9981596.91 0.0089 0.0085

Mars 22620-04-30 05:31 G 9982964.58 9982964.73 9982964.88 0.1902 0.0934

Mars 22624-12-09 22:04 G 9984649.26 9984649.42 9984649.58 0.1637 0.0681

Saturn 22627-12-05 20:09 G 9985740.16 9985740.34 9985740.52 0.0270 0.0137

Saturn 22628-07-22 00:00 G 9985969.29 9985969.50 9985969.70 0.0270 0.0050

Saturn 22629-03-08 03:21 G 9986198.55 9986198.64 9986198.76 0.0270 0.0236

Jupiter 22632-04-01 04:19 G 9987318.49 9987318.68 9987318.87 0.0516 0.0179

Uranus 22634-09-21 11:16 G 9988221.94 9988221.97 9988222.01 0.0144 0.0142

Uranus 22635-05-05 22:48 G 9988448.31 9988448.45 9988448.63 0.0145 0.0099

Earth 22635-12-11 17:31 G 9988668.07 9988668.23 9988668.39 0.2677 0.0043

Moon 22635-12-11 22:48 G 9988668.29 9988668.45 9988668.61 0.2674 0.0449 *

Uranus 22635-12-18 10:48 G 9988674.76 9988674.95 9988675.16 0.0145 0.0055

Uranus 22636-07-31 23:02 G 9988901.24 9988901.46 9988901.68 0.0145 0.0011

Uranus 22637-03-15 10:48 G 9989127.75 9989127.95 9989128.17 0.0145 0.0034

Uranus 22637-10-27 23:02 G 9989354.28 9989354.46 9989354.65 0.0145 0.0078

Uranus 22638-06-11 11:02 G 9989580.86 9989580.96 9989581.09 0.0145 0.0122

Jupiter 22638-09-19 08:24 G 9989680.83 9989680.85 9989680.89 0.0513 0.0506

Saturn 22642-05-19 00:57 G 9991018.47 9991018.54 9991018.61 0.0290 0.0272

Saturn 22643-01-03 21:36 G 9991248.20 9991248.40 9991248.62 0.0290 0.0042

Saturn 22643-08-21 18:14 G 9991478.11 9991478.26 9991478.43 0.0290 0.0191

Jupiter 22643-12-05 23:16 G 9991584.32 9991584.47 9991584.63 0.0519 0.0322

Jupiter 22650-05-25 04:48 G 9993946.49 9993946.70 9993946.90 0.0511 0.0018

Saturn 22657-06-17 02:24 G 9996526.41 9996526.60 9996526.80 0.0270 0.0110

Saturn 22658-02-01 06:00 G 9996755.55 9996755.75 9996755.96 0.0270 0.0076

Saturn 22658-09-18 09:36 G 9996984.86 9996984.90 9996984.96 0.0270 0.0261

Mars 22658-10-08 14:52 G 9997005.01 9997005.12 9997005.23 0.1648 0.1266

Jupiter 22662-01-28 01:40 G 9998212.49 9998212.57 9998212.65 0.0508 0.0463

Jupiter 22667-12-08 19:12 G 10000353.22 10000353.30 10000353.38 0.0514 0.0475

Saturn 22671-11-29 04:33 G 10001804.58 10001804.69 10001804.80 0.0289 0.0246

Saturn 22672-07-16 01:26 G 10002034.35 10002034.56 10002034.77 0.0289 0.0015

Saturn 22673-03-02 21:50 G 10002264.29 10002264.41 10002264.56 0.0289 0.0217

Uranus 22675-08-20 10:33 G 10003164.93 10003164.94 10003164.98 0.0134 0.0133

Uranus 22676-04-02 16:33 G 10003391.05 10003391.19 10003391.35 0.0134 0.0098

Uranus 22676-11-14 22:04 G 10003617.24 10003617.42 10003617.62 0.0134 0.0064

Uranus 22677-06-29 03:36 G 10003843.45 10003843.65 10003843.87 0.0133 0.0030

Uranus 22678-02-10 09:07 G 10004069.67 10004069.88 10004070.10 0.0133 0.0006

Uranus 22678-09-24 14:38 G 10004295.90 10004296.11 10004296.32 0.0133 0.0040

Uranus 22679-05-08 19:40 G 10004522.15 10004522.32 10004522.52 0.0133 0.0074

Jupiter 22679-08-13 13:26 G 10004618.85 10004619.06 10004619.26 0.0517 0.0031

Uranus 22679-12-21 01:12 G 10004748.43 10004748.55 10004748.68 0.0133 0.0108

Jupiter 22686-01-30 18:43 G 10006981.12 10006981.28 10006981.44 0.0513 0.0304

Mars 22686-02-25 08:24 G 10007006.68 10007006.85 10007007.02 0.1898 0.0277

Saturn 22686-05-13 02:52 G 10007083.62 10007083.62 10007083.63 0.0271 0.0270

Saturn 22686-12-28 06:28 G 10007312.58 10007312.77 10007312.98 0.0270 0.0086

Saturn 22687-08-14 10:19 G 10007541.74 10007541.93 10007542.13 0.0270 0.0101

Mars 22690-10-07 09:36 G 10008691.73 10008691.90 10008692.07 0.1639 0.0445

Neptune 22692-07-15 21:07 G 10009339.35 10009339.38 10009339.46 0.0089 0.0086

Neptune 22693-02-26 10:33 G 10009564.80 10009564.94 10009565.09 0.0089 0.0066

Neptune 22693-10-09 23:16 G 10009790.30 10009790.47 10009790.67 0.0088 0.0047

Neptune 22694-05-23 12:28 G 10010015.81 10010016.02 10010016.23 0.0088 0.0027

Neptune 22695-01-04 01:12 G 10010241.34 10010241.55 10010241.77 0.0088 0.0008

Neptune 22695-08-17 14:09 G 10010466.87 10010467.09 10010467.31 0.0088 0.0012

Neptune 22696-03-30 02:52 G 10010692.42 10010692.62 10010692.83 0.0088 0.0032

Neptune 22696-11-10 15:36 G 10010917.98 10010918.15 10010918.34 0.0088 0.0051

Neptune 22697-06-24 04:19 G 10011143.56 10011143.68 10011143.82 0.0088 0.0071

Jupiter 22697-10-05 13:55 G 10011246.89 10011247.08 10011247.27 0.0509 0.0188

Pluto 22699-11-07 22:19 G 10012010.24 10012010.43 10012010.64 0.0066 0.0029

Pluto 22700-06-21 03:21 G 10012235.43 10012235.64 10012235.85 0.0067 0.0018

Pluto 22701-02-01 07:40 G 10012460.81 10012460.82 10012460.88 0.0067 0.0066

Saturn 22701-06-11 17:02 G 10012591.07 10012591.21 10012591.36 0.0290 0.0207

Saturn 22702-01-27 13:55 G 10012820.87 10012821.08 10012821.30 0.0290 0.0026

Saturn 22702-09-14 10:48 G 10013050.85 10013050.95 10013051.05 0.0290 0.0256

Jupiter 22715-04-22 02:24 G 10017653.43 10017653.60 10017653.78 0.0516 0.0258

Saturn 22715-11-24 09:50 G 10017869.83 10017869.91 10017870.01 0.0270 0.0242

Saturn 22716-07-10 13:26 G 10018098.86 10018099.06 10018099.27 0.0270 0.0057

Saturn 22717-02-24 17:02 G 10018328.03 10018328.21 10018328.40 0.0270 0.0129

Uranus 22719-01-04 04:04 G 10019006.55 10019006.67 10019006.80 0.0145 0.0119

Uranus 22719-08-18 15:36 G 10019232.98 10019233.15 10019233.35 0.0145 0.0076

Uranus 22720-04-01 03:50 G 10019459.45 10019459.66 10019459.88 0.0145 0.0032

Uranus 22720-11-13 15:50 G 10019685.95 10019686.16 10019686.38 0.0145 0.0013

Uranus 22721-06-28 03:50 G 10019912.47 10019912.66 10019912.87 0.0145 0.0057

Uranus 22722-02-09 15:50 G 10020139.02 10020139.16 10020139.33 0.0145 0.0101

Uranus 22722-09-24 04:19 G 10020365.68 10020365.68 10020365.68 0.0145 0.0145

Mars 22724-08-06 02:09 G 10021047.53 10021047.59 10021047.66 0.1651 0.1522

Jupiter 22726-12-25 22:33 G 10021919.26 10021919.44 10021919.62 0.0519 0.0239

Saturn 22730-12-22 20:24 G 10023377.20 10023377.35 10023377.52 0.0289 0.0182

Saturn 22731-08-09 17:31 G 10023607.02 10023607.23 10023607.44 0.0289 0.0051

Saturn 22732-03-26 13:55 G 10023837.05 10023837.08 10023837.14 0.0289 0.0281

Jupiter 22733-06-14 02:38 G 10024281.41 10024281.61 10024281.81 0.0511 0.0090

Jupiter 22745-02-17 00:14 G 10028547.38 10028547.51 10028547.65 0.0509 0.0386

Saturn 22745-06-05 12:57 G 10028655.93 10028656.04 10028656.17 0.0270 0.0220

Saturn 22746-01-20 16:48 G 10028884.99 10028885.20 10028885.41 0.0270 0.0034

Saturn 22746-09-06 20:24 G 10029114.19 10029114.35 10029114.53 0.0270 0.0153

Mars 22751-12-24 11:45 G 10031048.82 10031048.99 10031049.17 0.1894 0.0364

Mars 22756-08-04 21:21 G 10032734.22 10032734.39 10032734.57 0.1642 0.0216

Uranus 22759-12-03 02:09 G 10033949.48 10033949.59 10033949.71 0.0134 0.0113

Saturn 22760-07-04 08:09 G 10034163.66 10034163.84 10034164.03 0.0290 0.0144

Uranus 22760-07-16 07:40 G 10034175.65 10034175.82 10034176.00 0.0134 0.0079

Saturn 22761-02-19 05:16 G 10034393.52 10034393.72 10034393.93 0.0290 0.0089

Uranus 22761-02-27 13:12 G 10034401.85 10034402.05 10034402.26 0.0133 0.0044

Uranus 22761-10-11 18:43 G 10034628.07 10034628.28 10034628.50 0.0133 0.0010

Uranus 22762-05-26 00:14 G 10034854.30 10034854.51 10034854.72 0.0133 0.0025

Jupiter 22762-09-02 09:36 G 10034953.70 10034953.90 10034954.11 0.0517 0.0040

Uranus 22763-01-07 05:31 G 10035080.53 10035080.73 10035080.93 0.0133 0.0059

Uranus 22763-08-21 10:33 G 10035306.79 10035306.94 10035307.10 0.0133 0.0093

Uranus 22764-04-03 15:50 G 10035533.10 10035533.16 10035533.23 0.0133 0.0126

Moon 22765-06-12 12:28 G 10035967.85 10035968.02 10035968.18 0.2650 0.0537

Earth 22765-06-12 16:19 G 10035968.02 10035968.18 10035968.33 0.2655 0.0630 *

Jupiter 22769-02-19 14:09 G 10037315.95 10037316.09 10037316.23 0.0512 0.0365

Jupiter 22774-05-08 05:02 G 10039219.63 10039219.71 10039219.81 0.0520 0.0464

Saturn 22774-12-16 20:09 G 10039442.21 10039442.34 10039442.50 0.0270 0.0192

Saturn 22775-08-02 23:45 G 10039671.28 10039671.49 10039671.71 0.0270 0.0009

Neptune 22775-11-26 09:36 G 10039786.83 10039786.90 10039787.00 0.0089 0.0082

Saturn 22776-03-19 03:07 G 10039900.48 10039900.63 10039900.80 0.0270 0.0180

Neptune 22776-07-08 23:02 G 10040012.30 10040012.46 10040012.61 0.0089 0.0062

Neptune 22777-02-19 11:45 G 10040237.81 10040237.99 10040238.20 0.0089 0.0043

Neptune 22777-10-03 00:57 G 10040463.34 10040463.54 10040463.76 0.0089 0.0023

Neptune 22778-05-16 14:24 G 10040688.88 10040689.10 10040689.32 0.0089 0.0003

Neptune 22778-12-28 03:21 G 10040914.43 10040914.64 10040914.86 0.0089 0.0017

Neptune 22779-08-10 16:19 G 10041139.99 10041140.18 10041140.39 0.0089 0.0037

Neptune 22780-03-23 05:31 G 10041365.58 10041365.73 10041365.91 0.0089 0.0057

Jupiter 22780-10-25 10:33 G 10041581.74 10041581.94 10041582.14 0.0510 0.0122

Neptune 22780-11-03 18:28 G 10041591.18 10041591.27 10041591.40 0.0089 0.0077

Pluto 22786-11-27 12:28 G 10043805.81 10043806.02 10043806.25 0.0077 0.0016

Pluto 22787-07-10 21:07 G 10044031.26 10044031.38 10044031.55 0.0077 0.0058

Saturn 22790-01-14 12:00 G 10044949.82 10044950.00 10044950.20 0.0289 0.0118

Saturn 22790-09-01 08:52 G 10045179.68 10045179.87 10045180.07 0.0289 0.0116

Jupiter 22798-05-11 00:28 G 10047988.36 10047988.52 10047988.67 0.0515 0.0333

Uranus 22802-09-03 08:38 G 10049564.82 10049564.86 10049564.93 0.0145 0.0140

Uranus 22803-04-17 20:24 G 10049791.21 10049791.35 10049791.53 0.0145 0.0097

Uranus 22803-11-30 08:38 G 10050017.66 10050017.86 10050018.07 0.0145 0.0053

Saturn 22804-06-27 22:19 G 10050228.27 10050228.43 10050228.60 0.0270 0.0171

Uranus 22804-07-13 20:38 G 10050244.14 10050244.36 10050244.58 0.0145 0.0009

Saturn 22805-02-12 01:55 G 10050457.37 10050457.58 10050457.80 0.0270 0.0016

Uranus 22805-02-25 08:38 G 10050470.65 10050470.86 10050471.07 0.0145 0.0035

Saturn 22805-09-29 05:31 G 10050686.60 10050686.73 10050686.88 0.0270 0.0201

Uranus 22805-10-09 20:52 G 10050697.19 10050697.37 10050697.55 0.0145 0.0080

Uranus 22806-05-24 09:07 G 10050923.77 10050923.88 10050923.99 0.0145 0.0124

Jupiter 22810-01-13 19:12 G 10052254.11 10052254.30 10052254.49 0.0518 0.0170

Jupiter 22816-07-02 23:45 G 10054616.30 10054616.49 10054616.68 0.0511 0.0162

Mars 22817-10-20 14:52 G 10055090.98 10055091.12 10055091.27 0.1890 0.1002

Saturn 22819-07-27 22:19 G 10055736.23 10055736.43 10055736.64 0.0290 0.0082

Saturn 22820-03-13 19:26 G 10055966.13 10055966.31 10055966.49 0.0290 0.0151

Mars 22822-06-02 08:52 G 10056776.70 10056776.87 10056777.05 0.1644 0.0045

Jupiter 22828-03-07 20:52 G 10058882.22 10058882.37 10058882.53 0.0508 0.0318

Saturn 22834-01-08 05:45 G 10061014.57 10061014.74 10061014.93 0.0269 0.0142

Saturn 22834-08-25 09:21 G 10061243.68 10061243.89 10061244.10 0.0269 0.0043

Saturn 22835-04-11 12:43 G 10061472.92 10061473.03 10061473.14 0.0270 0.0228

Uranus 22843-08-02 12:00 G 10064507.94 10064508.00 10064508.07 0.0134 0.0127

Uranus 22844-03-15 17:45 G 10064734.09 10064734.24 10064734.40 0.0134 0.0093

Uranus 22844-10-27 23:16 G 10064960.28 10064960.47 10064960.67 0.0134 0.0059

Uranus 22845-06-11 04:48 G 10065186.49 10065186.70 10065186.92 0.0133 0.0024

Jupiter 22845-09-21 09:36 G 10065288.71 10065288.90 10065289.10 0.0517 0.0128

Uranus 22846-01-23 10:04 G 10065412.71 10065412.92 10065413.14 0.0133 0.0010

Uranus 22846-09-06 15:21 G 10065638.94 10065639.14 10065639.35 0.0133 0.0044

Uranus 22847-04-20 20:38 G 10065865.20 10065865.36 10065865.55 0.0133 0.0078

Uranus 22847-12-03 01:40 G 10066091.47 10066091.57 10066091.71 0.0133 0.0112

Saturn 22848-06-21 04:48 G 10066292.69 10066292.70 10066292.74 0.0289 0.0288

Saturn 22849-02-06 02:09 G 10066522.38 10066522.59 10066522.80 0.0290 0.0056

Saturn 22849-09-23 22:48 G 10066752.29 10066752.45 10066752.63 0.0290 0.0177

Jupiter 22852-03-10 12:43 G 10067650.93 10067651.03 10067651.13 0.0513 0.0443

Jupiter 22857-05-27 04:33 G 10069554.55 10069554.69 10069554.83 0.0520 0.0378

Neptune 22857-05-31 20:52 G 10069559.26 10069559.37 10069559.50 0.0089 0.0074

Neptune 22858-01-12 09:36 G 10069784.75 10069784.90 10069785.09 0.0088 0.0055

Neptune 22858-08-25 22:48 G 10070010.26 10070010.45 10070010.66 0.0088 0.0035

Neptune 22859-04-08 11:45 G 10070235.78 10070235.99 10070236.21 0.0088 0.0015

Neptune 22859-11-20 00:43 G 10070461.32 10070461.53 10070461.75 0.0088 0.0005

Neptune 22860-07-02 13:26 G 10070686.86 10070687.06 10070687.28 0.0088 0.0024

Neptune 22861-02-13 02:09 G 10070912.41 10070912.59 10070912.79 0.0088 0.0044

Neptune 22861-09-26 15:21 G 10071137.99 10071138.14 10071138.30 0.0088 0.0063

Neptune 22862-05-10 03:50 G 10071363.60 10071363.66 10071363.76 0.0088 0.0083

Saturn 22863-07-21 06:43 G 10071800.60 10071800.78 10071800.98 0.0270 0.0123

Jupiter 22863-11-14 10:19 G 10071916.72 10071916.93 10071917.13 0.0510 0.0038

Saturn 22864-03-06 10:19 G 10072029.72 10072029.93 10072030.14 0.0270 0.0062

Saturn 22864-10-21 13:40 G 10072259.00 10072259.07 10072259.16 0.0270 0.0248

Saturn 22878-01-01 13:12 G 10077078.96 10077079.05 10077079.16 0.0290 0.0256

Saturn 22878-08-19 10:48 G 10077308.74 10077308.95 10077309.16 0.0290 0.0023

Moon 22878-12-12 12:28 G 10077423.87 10077424.02 10077424.17 0.2676 0.0556

Earth 22878-12-12 18:00 G 10077424.10 10077424.25 10077424.41 0.2676 0.0237 *

Saturn 22879-04-06 08:09 G 10077538.70 10077538.84 10077538.99 0.0290 0.0210

Jupiter 22881-05-29 21:21 G 10078323.27 10078323.39 10078323.51 0.0516 0.0405

Mars 22883-08-17 18:28 G 10079133.18 10079133.27 10079133.35 0.1886 0.1630

Uranus 22886-12-16 01:55 G 10080349.47 10080349.58 10080349.72 0.0145 0.0117

Uranus 22887-07-30 13:55 G 10080575.90 10080576.08 10080576.27 0.0145 0.0073

Uranus 22888-03-13 01:40 G 10080802.37 10080802.57 10080802.79 0.0145 0.0030

Mars 22888-03-29 20:24 G 10080819.18 10080819.35 10080819.52 0.1647 0.0274

Uranus 22888-10-25 13:55 G 10081028.87 10081029.08 10081029.30 0.0145 0.0015

Uranus 22889-06-09 01:55 G 10081255.39 10081255.58 10081255.78 0.0145 0.0059

Uranus 22890-01-21 13:40 G 10081481.94 10081482.07 10081482.24 0.0145 0.0104

Saturn 22893-01-30 13:55 G 10082586.89 10082587.08 10082587.29 0.0269 0.0095

Jupiter 22893-02-01 17:16 G 10082589.02 10082589.22 10082589.42 0.0519 0.0091

Saturn 22893-09-16 17:16 G 10082816.03 10082816.22 10082816.43 0.0269 0.0090

Jupiter 22899-07-22 21:36 G 10084951.22 10084951.40 10084951.58 0.0511 0.0236

Saturn 22907-07-15 17:16 G 10087865.10 10087865.22 10087865.35 0.0290 0.0230

Saturn 22908-03-01 14:24 G 10088094.89 10088095.10 10088095.32 0.0290 0.0007

Saturn 22908-10-17 11:16 G 10088324.86 10088324.97 10088325.10 0.0290 0.0235

Jupiter 22911-03-28 19:40 G 10089217.15 10089217.32 10089217.51 0.0509 0.0240

Mars 22915-08-18 17:02 G 10090821.13 10090821.21 10090821.28 0.1899 0.1702

Mars 22920-03-29 15:21 G 10092506.06 10092506.14 10092506.22 0.1638 0.1439

Saturn 22921-12-27 10:48 G 10093143.91 10093143.95 10093144.01 0.0270 0.0262

Saturn 22922-08-13 14:09 G 10093372.89 10093373.09 10093373.30 0.0270 0.0078

Saturn 22923-03-30 17:31 G 10093602.04 10093602.23 10093602.42 0.0270 0.0108

Uranus 22927-11-15 03:21 G 10095292.52 10095292.64 10095292.78 0.0134 0.0108

Uranus 22928-06-28 08:52 G 10095518.70 10095518.87 10095519.06 0.0134 0.0074

Jupiter 22928-10-11 08:52 G 10095623.68 10095623.87 10095624.05 0.0517 0.0209

Uranus 22929-02-09 14:24 G 10095744.90 10095745.10 10095745.31 0.0134 0.0039

Uranus 22929-09-23 19:55 G 10095971.11 10095971.33 10095971.55 0.0133 0.0005

Uranus 22930-05-08 01:12 G 10096197.35 10096197.55 10096197.77 0.0133 0.0030

Uranus 22930-12-20 06:28 G 10096423.59 10096423.77 10096423.97 0.0133 0.0063

Uranus 22931-08-03 11:31 G 10096649.85 10096649.98 10096650.15 0.0133 0.0097

Uranus 22932-03-16 17:02 G 10096876.18 10096876.21 10096876.26 0.0133 0.0131

Saturn 22937-01-24 23:31 G 10098651.34 10098651.48 10098651.64 0.0290 0.0202

Saturn 22937-09-11 21:07 G 10098881.17 10098881.38 10098881.60 0.0290 0.0032

Saturn 22938-04-29 18:28 G 10099111.19 10099111.27 10099111.36 0.0290 0.0265

Jupiter 22940-06-16 01:40 G 10099889.41 10099889.57 10099889.74 0.0520 0.0305

Neptune 22940-10-11 09:21 G 10100006.77 10100006.89 10100007.04 0.0089 0.0070

Neptune 22941-05-24 22:48 G 10100232.27 10100232.45 10100232.63 0.0089 0.0050

Neptune 22942-01-05 11:31 G 10100457.79 10100457.98 10100458.20 0.0089 0.0031

Neptune 22942-08-19 00:43 G 10100683.32 10100683.53 10100683.76 0.0089 0.0011

Neptune 22943-04-01 14:09 G 10100908.87 10100909.09 10100909.31 0.0089 0.0009

Neptune 22943-11-13 03:07 G 10101134.43 10101134.63 10101134.85 0.0089 0.0029

Neptune 22944-06-25 16:04 G 10101360.00 10101360.17 10101360.37 0.0089 0.0049

Neptune 22945-02-06 05:02 G 10101585.59 10101585.71 10101585.87 0.0089 0.0069

Neptune 22945-09-19 18:28 G 10101811.26 10101811.27 10101811.30 0.0089 0.0088

Jupiter 22946-12-04 09:07 G 10102251.68 10102251.88 10102252.09 0.0510 0.0046

Pluto 22947-10-13 02:09 G 10102564.44 10102564.59 10102564.76 0.0066 0.0046

Pluto 22948-05-25 07:12 G 10102789.58 10102789.80 10102790.02 0.0067 0.0002

Pluto 22949-01-05 11:31 G 10103014.85 10103014.98 10103015.15 0.0067 0.0049

Saturn 22951-07-09 18:00 G 10103930.15 10103930.25 10103930.36 0.0269 0.0233

Saturn 22952-02-23 21:07 G 10104159.17 10104159.38 10104159.59 0.0269 0.0050

Saturn 22952-10-10 00:14 G 10104388.33 10104388.51 10104388.70 0.0269 0.0135

Mars 22954-01-26 07:55 G 10104861.66 10104861.83 10104861.99 0.1650 0.0522

Jupiter 22958-08-09 06:00 G 10106517.65 10106517.75 10106517.86 0.0507 0.0434

Jupiter 22964-06-18 22:33 G 10108658.40 10108658.44 10108658.49 0.0516 0.0500

Saturn 22966-08-07 03:36 G 10109437.49 10109437.65 10109437.82 0.0290 0.0175

Saturn 22967-03-25 00:57 G 10109667.34 10109667.54 10109667.75 0.0290 0.0058

Saturn 22967-11-09 22:04 G 10109897.42 10109897.42 10109897.43 0.0290 0.0290

Uranus 22970-08-16 08:24 G 10110907.78 10110907.85 10110907.93 0.0145 0.0136

Uranus 22971-03-30 20:09 G 10111134.18 10111134.34 10111134.51 0.0145 0.0093

Uranus 22971-11-12 08:09 G 10111360.64 10111360.84 10111361.05 0.0145 0.0049

Uranus 22972-06-25 20:09 G 10111587.12 10111587.34 10111587.56 0.0145 0.0005

Uranus 22973-02-07 07:55 G 10111813.63 10111813.83 10111814.05 0.0145 0.0039

Uranus 22973-09-21 20:09 G 10112040.17 10112040.34 10112040.53 0.0145 0.0083

Uranus 22974-05-06 08:09 G 10112266.76 10112266.84 10112266.96 0.0145 0.0128

Jupiter 22976-02-22 18:43 G 10112924.08 10112924.28 10112924.49 0.0518 0.0008

Saturn 22981-01-18 17:16 G 10114716.11 10114716.22 10114716.35 0.0270 0.0218

Mars 22981-06-14 19:40 G 10114863.17 10114863.32 10114863.46 0.1895 0.1031

Saturn 22981-09-04 20:38 G 10114945.15 10114945.36 10114945.57 0.0269 0.0033

Saturn 22982-04-21 23:45 G 10115174.31 10115174.49 10115174.66 0.0269 0.0151

Jupiter 22982-08-11 22:48 G 10115286.29 10115286.45 10115286.60 0.0512 0.0331

Mars 22986-01-25 02:52 G 10116548.51 10116548.62 10116548.74 0.1641 0.1204

Jupiter 22987-10-28 13:26 G 10117190.02 10117190.06 10117190.12 0.0521 0.0501

Jupiter 22994-04-16 20:24 G 10119552.16 10119552.35 10119552.55 0.0509 0.0147

Saturn 22996-02-17 08:24 G 10120223.67 10120223.85 10120224.04 0.0290 0.0150

Saturn 22996-10-04 06:14 G 10120453.55 10120453.76 10120453.96 0.0290 0.0085

24TH MILLENNIUM CE

This is a list of transits of Venus in the 24th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	**23008-06-14 18:00 G**		**10124724.09**	**10124724.25**	**10124724.40**	**0.2656**	**0.0569**	
Moon	**23008-06-14 19:40 G**		**10124724.18**	**10124724.32**	**10124724.47**	**0.2662**	**0.0458**	*****
Saturn	**23010-08-02 00:00 G**		**10125502.36**	**10125502.50**	**10125502.66**	**0.0269**	**0.0191**	
Saturn	**23011-03-19 03:21 G**		**10125731.42**	**10125731.64**	**10125731.85**	**0.0269**	**0.0007**	
Uranus	**23011-07-16 13:26 G**		**10125850.99**	**10125851.06**	**10125851.16**	**0.0134**	**0.0122**	
Jupiter	**23011-11-01 07:12 G**		**10125958.64**	**10125958.80**	**10125958.97**	**0.0517**	**0.0291**	
Saturn	**23011-11-03 06:14 G**		**10125960.61**	**10125960.76**	**10125960.92**	**0.0269**	**0.0178**	
Uranus	**23012-02-27 18:57 G**		**10126077.14**	**10126077.29**	**10126077.47**	**0.0134**	**0.0088**	
Uranus	**23012-10-11 00:43 G**		**10126303.34**	**10126303.53**	**10126303.74**	**0.0134**	**0.0054**	
Uranus	**23013-05-25 06:14 G**		**10126529.55**	**10126529.76**	**10126529.98**	**0.0134**	**0.0019**	
Uranus	**23014-01-06 11:31 G**		**10126755.77**	**10126755.98**	**10126756.21**	**0.0133**	**0.0016**	
Uranus	**23014-08-20 16:48 G**		**10126982.01**	**10126982.20**	**10126982.41**	**0.0133**	**0.0049**	
Uranus	**23015-04-03 22:04 G**		**10127208.27**	**10127208.42**	**10127208.61**	**0.0133**	**0.0083**	
Uranus	**23015-11-16 03:36 G**		**10127434.55**	**10127434.65**	**10127434.76**	**0.0133**	**0.0117**	
Moon	**23016-06-12 14:38 G**		**10127644.04**	**10127644.11**	**10127644.18**	**0.2659**	**0.2388**	
Mars	**23019-11-24 19:26 G**		**10128904.16**	**10128904.31**	**10128904.46**	**0.1652**	**0.0771**	

Neptune 23021-09-04 07:26 G 10129553.74 10129553.81 10129553.90 0.0089 0.0082

Neptune 23022-04-17 20:09 G 10129779.20 10129779.34 10129779.51 0.0088 0.0063

Neptune 23022-11-29 09:21 G 10130004.70 10130004.89 10130005.09 0.0088 0.0043

Jupiter 23023-07-07 03:36 G 10130224.47 10130224.65 10130224.84 0.0520 0.0205

Neptune 23023-07-12 22:04 G 10130230.22 10130230.42 10130230.64 0.0088 0.0023

Neptune 23024-02-23 11:02 G 10130455.74 10130455.96 10130456.18 0.0088 0.0004

Neptune 23024-10-06 00:14 G 10130681.29 10130681.51 10130681.72 0.0088 0.0016

Neptune 23025-05-19 12:43 G 10130906.84 10130907.03 10130907.24 0.0088 0.0036

Saturn 23025-08-30 12:28 G 10131009.83 10131010.02 10131010.21 0.0290 0.0123

Neptune 23025-12-31 01:40 G 10131132.40 10131132.57 10131132.75 0.0088 0.0055

Saturn 23026-04-17 10:04 G 10131239.72 10131239.92 10131240.11 0.0290 0.0110

Neptune 23026-08-13 14:09 G 10131357.99 10131358.09 10131358.23 0.0088 0.0074

Jupiter 23029-12-24 09:07 G 10132586.68 10132586.88 10132587.08 0.0510 0.0131

Pluto 23034-11-01 14:38 G 10134359.95 10134360.11 10134360.31 0.0077 0.0043

Pluto 23035-06-15 00:00 G 10134585.31 10134585.50 10134585.71 0.0077 0.0031

Saturn 23040-02-11 23:16 G 10136288.31 10136288.47 10136288.64 0.0269 0.0174

Saturn 23040-09-28 02:24 G 10136517.39 10136517.60 10136517.81 0.0269 0.0010

Saturn 23041-05-15 05:02 G 10136746.57 10136746.71 10136746.87 0.0269 0.0194

Jupiter 23041-08-29 07:26 G 10136852.66 10136852.81 10136852.96 0.0508 0.0340

Mars 23047-04-12 23:31 G 10138905.31 10138905.48 10138905.65 0.1892 0.0412

Mars 23051-11-23 14:52 G 10140590.99 10140591.12 10140591.26 0.1643 0.0981

Uranus 23054-11-29 03:21 G 10141692.51 10141692.64 10141692.79 0.0145 0.0111

Saturn 23055-03-12 15:36 G 10141795.96 10141796.15 10141796.36 0.0290 0.0101

Uranus 23055-07-13 15:07 G 10141918.95 10141919.13 10141919.34 0.0145 0.0068

Saturn 23055-10-28 13:26 G 10142025.88 10142026.06 10142026.25 0.0291 0.0134

Uranus 23056-02-25 03:21 G 10142145.42 10142145.64 10142145.85 0.0145 0.0024

Uranus 23056-10-08 15:36 G 10142371.93 10142372.15 10142372.36 0.0145 0.0020

Uranus 23057-05-23 03:36 G 10142598.46 10142598.65 10142598.84 0.0145 0.0064

Uranus 23058-01-04 15:36 G 10142825.01 10142825.15 10142825.30 0.0145 0.0108

Jupiter 23059-03-14 16:48 G 10143259.00 10143259.20 10143259.40 0.0518 0.0085

Jupiter 23065-08-31 23:45 G 10145621.39 10145621.49 10145621.61 0.0511 0.0426

Saturn 23069-08-24 05:45 G 10147074.58 10147074.74 10147074.93 0.0269 0.0147

Saturn 23070-04-10 08:52 G 10147303.66 10147303.87 10147304.08 0.0269 0.0037

Jupiter 23070-11-17 11:45 G 10147524.88 10147524.99 10147525.11 0.0521 0.0422

Saturn 23070-11-25 11:45 G 10147532.87 10147532.99 10147533.11 0.0269 0.0220

Jupiter 23077-05-06 20:24 G 10149887.14 10149887.35 10149887.55 0.0509 0.0062

Saturn 23084-09-21 20:24 G 10152582.15 10152582.35 10152582.56 0.0290 0.0073

Saturn 23085-05-09 18:00 G 10152812.07 10152812.25 10152812.43 0.0290 0.0161

Mars 23085-09-21 06:57 G 10152946.65 10152946.79 10152946.92 0.1655 0.1020

Jupiter 23094-11-20 10:04 G 10156293.79 10156293.92 10156294.05 0.0516 0.0396

Uranus 23095-10-28 05:16 G 10156635.60 10156635.72 10156635.88 0.0134 0.0102

Uranus 23096-06-10 11:02 G 10156861.78 10156861.96 10156862.16 0.0134 0.0068

Uranus 23097-01-22 16:33 G 10157087.98 10157088.19 10157088.41 0.0134 0.0033

Uranus 23097-09-05 22:04 G 10157314.20 10157314.42 10157314.64 0.0133 0.0001

Uranus 23098-04-20 03:21 G 10157540.44 10157540.64 10157540.86 0.0133 0.0035

Uranus 23098-12-02 08:38 G 10157766.69 10157766.86 10157767.06 0.0133 0.0069

Saturn 23099-03-06 04:48 G 10157860.52 10157860.70 10157860.89 0.0269 0.0132

Uranus 23099-07-16 14:09 G 10157992.95 10157993.09 10157993.23 0.0133 0.0103

Saturn 23099-10-21 07:40 G 10158089.62 10158089.82 10158090.03 0.0269 0.0052

Saturn 23100-06-07 10:19 G 10158318.84 10158318.93 10158319.04 0.0269 0.0235

Neptune 23105-01-14 18:57 G 10160001.22 10160001.29 10160001.42 0.0089 0.0079

Neptune 23105-08-28 08:24 G 10160226.70 10160226.85 10160227.03 0.0089 0.0059

Neptune 23106-04-10 21:50 G 10160452.22 10160452.41 10160452.61 0.0089 0.0039

Jupiter 23106-07-27 05:45 G 10160559.54 10160559.74 10160559.94 0.0519 0.0104

Neptune 23106-11-22 11:02 G 10160677.74 10160677.96 10160678.17 0.0089 0.0019

Neptune 23107-07-06 00:00 G 10160903.28 10160903.50 10160903.72 0.0089 0.0001

Neptune 23108-02-16 12:57 G 10161128.83 10161129.04 10161129.26 0.0089 0.0020

Neptune 23108-09-29 01:55 G 10161354.40 10161354.58 10161354.79 0.0089 0.0040

Neptune 23109-05-12 15:07 G 10161579.98 10161580.13 10161580.31 0.0089 0.0060

Neptune 23109-12-24 04:04 G 10161805.60 10161805.67 10161805.79 0.0089 0.0080

Jupiter 23113-01-13 11:31 G 10162921.80 10162921.98 10162922.16 0.0510 0.0234

Mars 23113-02-08 02:52 G 10162947.44 10162947.62 10162947.79 0.1887 0.0226

Saturn 23113-08-18 00:28 G 10163138.48 10163138.52 10163138.56 0.0290 0.0285

Saturn 23114-04-04 22:19 G 10163368.23 10163368.43 10163368.64 0.0291 0.0052

Saturn 23114-11-20 20:09 G 10163598.18 10163598.34 10163598.51 0.0291 0.0183

Mars 23117-09-21 02:09 G 10164633.44 10164633.59 10164633.75 0.1646 0.0736

Earth 23121-12-15 18:28 G 10166180.12 10166180.27 10166180.43 0.2675 0.0426

Moon 23121-12-16 00:00 G 10166180.34 10166180.50 10166180.65 0.2678 0.0206 *

Jupiter 23124-09-18 09:36 G 10167187.73 10167187.90 10167188.08 0.0507 0.0241

Saturn 23128-09-16 11:31 G 10168646.78 10168646.98 10168647.18 0.0269 0.0104

Saturn 23129-05-03 14:09 G 10168875.89 10168876.09 10168876.30 0.0269 0.0080

Saturn 23129-12-18 16:48 G 10169105.17 10169105.20 10169105.25 0.0269 0.0262

Uranus 23138-07-30 09:50 G 10172250.84 10172250.91 10172251.03 0.0145 0.0130

Uranus 23139-03-13 22:04 G 10172477.25 10172477.42 10172477.60 0.0145 0.0086

Uranus 23139-10-26 10:04 G 10172703.72 10172703.92 10172704.14 0.0145 0.0043

Uranus 23140-06-08 22:19 G 10172930.21 10172930.43 10172930.65 0.0145 0.0002

Uranus 23141-01-21 10:33 G 10173156.73 10173156.94 10173157.14 0.0145 0.0046

Uranus 23141-09-04 22:48 G 10173383.28 10173383.45 10173383.62 0.0145 0.0090

Jupiter 23142-04-03 18:57 G 10173594.11 10173594.29 10173594.49 0.0518 0.0187

Uranus 23142-04-19 10:48 G 10173609.88 10173609.95 10173610.04 0.0145 0.0134

Saturn 23143-02-28 05:45 G 10173924.65 10173924.74 10173924.85 0.0290 0.0256

Saturn 23143-10-16 03:36 G 10174154.44 10174154.65 10174154.86 0.0291 0.0023

Saturn 23144-06-02 01:12 G 10174384.41 10174384.55 10174384.70 0.0291 0.0211

Mars 23151-07-20 18:14 G 10176989.15 10176989.26 10176989.36 0.1658 0.1283

Jupiter 23153-12-07 15:07 G 10177859.97 10177860.13 10177860.30 0.0521 0.0313

Saturn 23158-03-29 10:48 G 10179432.75 10179432.95 10179433.15 0.0269 0.0088

Saturn 23158-11-13 13:26 G 10179661.86 10179662.06 10179662.26 0.0269 0.0096

Jupiter 23160-05-26 22:19 G 10180222.22 10180222.43 10180222.63 0.0509 0.0037

Jupiter 23172-01-30 21:36 G 10184488.29 10184488.40 10184488.51 0.0507 0.0427

Saturn 23172-09-09 06:57 G 10184710.67 10184710.79 10184710.91 0.0290 0.0237

Saturn 23173-04-27 04:48 G 10184940.49 10184940.70 10184940.92 0.0291 0.0007

Saturn 23173-12-13 02:38 G 10185170.49 10185170.61 10185170.74 0.0291 0.0232

Jupiter 23177-12-10 08:24 G 10186628.77 10186628.85 10186628.93 0.0516 0.0473

Mars 23178-12-06 06:43 G 10186989.63 10186989.78 10186989.94 0.1884 0.0839

Uranus 23179-06-28 16:04 G 10187194.08 10187194.17 10187194.30 0.0134 0.0115

Uranus 23180-02-09 21:50 G 10187420.24 10187420.41 10187420.59 0.0134 0.0081

Uranus 23180-09-23 03:21 G 10187646.44 10187646.64 10187646.85 0.0133 0.0047

Uranus 23181-05-07 09:07 G 10187872.66 10187872.88 10187873.10 0.0133 0.0012

Uranus 23181-12-19 14:24 G 10188098.89 10188099.10 10188099.32 0.0133 0.0022

Uranus 23182-08-02 19:40 G 10188325.13 10188325.32 10188325.52 0.0133 0.0056

Uranus 23183-03-17 00:57 G 10188551.39 10188551.54 10188551.71 0.0133 0.0089

Mars 23183-07-19 13:55 G 10188675.92 10188676.08 10188676.25 0.1649 0.0503

Uranus 23183-10-29 06:00 G 10188777.69 10188777.75 10188777.85 0.0133 0.0123

Neptune 23186-07-21 06:14 G 10189773.64 10189773.76 10189773.90 0.0088 0.0071

Saturn 23187-02-22 13:55 G 10189990.01 10189990.08 10189990.18 0.0269 0.0244

Neptune 23187-03-03 18:57 G 10189999.12 10189999.29 10189999.48 0.0088 0.0052

Saturn 23187-10-09 17:02 G 10190219.01 10190219.21 10190219.42 0.0269 0.0060

Neptune 23187-10-15 08:09 G 10190224.64 10190224.84 10190225.05 0.0088 0.0032

Saturn 23188-05-25 19:55 G 10190448.14 10190448.33 10190448.52 0.0269 0.0123

Neptune 23188-05-27 21:07 G 10190450.16 10190450.38 10190450.60 0.0088 0.0012

Neptune 23189-01-08 09:50 G 10190675.70 10190675.91 10190676.13 0.0088 0.0007

Jupiter 23189-08-15 03:21 G 10190894.44 10190894.64 10190894.85 0.0519 0.0032

Neptune 23189-08-21 22:48 G 10190901.24 10190901.45 10190901.66 0.0088 0.0027

Neptune 23190-04-04 11:16 G 10191126.80 10191126.97 10191127.18 0.0088 0.0047

Neptune 23190-11-16 00:14 G 10191352.38 10191352.51 10191352.67 0.0088 0.0066

Neptune 23191-06-29 13:26 G 10191578.00 10191578.06 10191578.12 0.0088 0.0085

Jupiter 23196-02-02 11:31 G 10193256.82 10193256.98 10193257.14 0.0510 0.0319

Pluto 23196-04-29 09:21 G 10193343.69 10193343.89 10193344.11 0.0066 0.0021

Pluto 23196-12-10 14:09 G 10193568.89 10193569.09 10193569.30 0.0067 0.0026

Saturn 23202-03-22 13:40 G 10195496.92 10195497.07 10195497.22 0.0291 0.0206

Saturn 23202-11-07 11:16 G 10195726.76 10195726.97 10195727.18 0.0291 0.0028

Saturn 23203-06-25 08:38 G 10195956.78 10195956.86 10195956.96 0.0291 0.0262

Jupiter 23207-10-08 09:21 G 10197522.70 10197522.89 10197523.09 0.0508 0.0158

Saturn 23216-09-03 14:24 G 10200776.00 10200776.10 10200776.22 0.0269 0.0225

Saturn 23217-04-20 17:16 G 10201005.01 10201005.22 10201005.43 0.0269 0.0043

Mars 23217-05-17 05:45 G 10201031.68 10201031.74 10201031.80 0.1661 0.1533

Saturn 23217-12-05 19:40 G 10201234.14 10201234.32 10201234.50 0.0269 0.0140

Uranus 23222-11-11 04:33 G 10203035.55 10203035.69 10203035.85 0.0145 0.0105

Uranus 23223-06-25 16:48 G 10203262.00 10203262.20 10203262.40 0.0145 0.0061

Uranus 23224-02-07 04:48 G 10203488.48 10203488.70 10203488.92 0.0145 0.0017

Uranus 23224-09-20 16:48 G 10203715.00 10203715.20 10203715.42 0.0145 0.0027

Jupiter 23225-04-22 21:21 G 10203929.22 10203929.39 10203929.56 0.0517 0.0287

Uranus 23225-05-05 05:16 G 10203941.53 10203941.72 10203941.91 0.0145 0.0071

Uranus 23225-12-17 17:31 G 10204168.10 10204168.23 10204168.37 0.0145 0.0115

Saturn 23231-10-02 13:40 G 10206282.92 10206283.07 10206283.24 0.0290 0.0187

Saturn 23232-05-19 11:45 G 10206512.78 10206512.99 10206513.20 0.0291 0.0048

Saturn 23233-01-04 09:50 G 10206742.86 10206742.91 10206742.96 0.0291 0.0281

Jupiter 23236-12-26 13:12 G 10208194.87 10208195.05 10208195.23 0.0520 0.0237

Jupiter 23243-06-16 00:43 G 10210557.33 10210557.53 10210557.73 0.0509 0.0136

Mars 23244-10-02 10:33 G 10211031.83 10211031.94 10211032.05 0.1879 0.1449

Saturn 23246-03-16 20:38 G 10211562.22 10211562.36 10211562.51 0.0269 0.0198

Saturn 23246-10-31 23:31 G 10211791.27 10211791.48 10211791.69 0.0269 0.0015

Saturn 23247-06-18 02:09 G 10212020.43 10212020.59 10212020.76 0.0269 0.0168

Mars 23249-05-16 01:26 G 10212718.39 10212718.56 10212718.73 0.1651 0.0254

Earth 23251-06-16 19:26 G 10213480.15 10213480.31 10213480.47 0.2656 0.0469

Moon 23251-06-16 19:40 G 10213480.16 10213480.32 10213480.49 0.2650 0.0639 *

Jupiter 23255-02-18 21:21 G 10214823.24 10214823.39 10214823.54 0.0506 0.0345

Saturn 23261-04-13 21:50 G 10217069.23 10217069.41 10217069.59 0.0291 0.0154

Saturn 23261-11-29 19:26 G 10217299.11 10217299.31 10217299.52 0.0291 0.0081

Uranus 23263-02-26 03:07 G 10217752.57 10217752.63 10217752.69 0.0134 0.0128

Uranus 23263-10-10 08:52 G 10217978.71 10217978.87 10217979.02 0.0134 0.0094

Uranus 23264-05-23 14:24 G 10218204.90 10218205.10 10218205.29 0.0133 0.0060

Uranus 23265-01-04 19:40 G 10218431.11 10218431.32 10218431.54 0.0133 0.0026

Uranus 23265-08-19 01:12 G 10218657.33 10218657.55 10218657.77 0.0133 0.0008

Uranus 23266-04-02 06:28 G 10218883.57 10218883.77 10218883.99 0.0133 0.0042

Uranus 23266-11-14 11:45 G 10219109.82 10219109.99 10219110.18 0.0133 0.0076

Uranus 23267-06-28 17:02 G 10219336.10 10219336.21 10219336.34 0.0133 0.0109

Neptune 23269-04-18 04:48 G 10219995.69 10219995.70 10219995.76 0.0089 0.0088

Neptune 23269-11-29 18:00 G 10220221.13 10220221.25 10220221.41 0.0089 0.0068

Neptune 23270-07-13 07:12 G 10220446.63 10220446.80 10220447.00 0.0089 0.0048

Neptune 23271-02-23 20:38 G 10220672.15 10220672.36 10220672.57 0.0089 0.0028

Neptune 23271-10-07 09:36 G 10220897.69 10220897.90 10220898.13 0.0089 0.0009

Neptune 23272-05-19 22:48 G 10221123.24 10221123.45 10221123.67 0.0089 0.0012

Jupiter 23272-09-03 06:14 G 10221229.56 10221229.76 10221229.96 0.0519 0.0076

Neptune 23272-12-31 11:45 G 10221348.79 10221348.99 10221349.21 0.0089 0.0031

Neptune 23273-08-14 00:43 G 10221574.37 10221574.53 10221574.73 0.0089 0.0051

Neptune 23274-03-27 13:40 G 10221799.96 10221800.07 10221800.23 0.0089 0.0071

Saturn 23275-09-26 21:50 G 10222348.26 10222348.41 10222348.57 0.0269 0.0179

Saturn 23276-05-13 00:28 G 10222577.31 10222577.52 10222577.73 0.0269 0.0004

Mars 23276-10-02 07:40 G 10222719.77 10222719.82 10222719.86 0.1893 0.1823

Saturn 23276-12-28 02:52 G 10222806.47 10222806.62 10222806.77 0.0269 0.0186

Jupiter 23279-02-21 12:28 G 10223591.91 10223592.02 10223592.15 0.0511 0.0413

Pluto 23283-05-18 23:16 G 10225139.25 10225139.47 10225139.69 0.0077 0.0009

Pluto 23283-12-30 08:09 G 10225364.73 10225364.84 10225364.97 0.0077 0.0064

Jupiter 23284-05-09 01:12 G 10225495.44 10225495.55 10225495.67 0.0522 0.0432

Saturn 23290-10-24 22:33 G 10227855.26 10227855.44 10227855.63 0.0290 0.0134

Jupiter 23290-10-27 11:45 G 10227857.79 10227857.99 10227858.19 0.0508 0.0058

Saturn 23291-06-11 20:24 G 10228085.15 10228085.35 10228085.55 0.0291 0.0101

Saturn 23305-04-09 04:04 G 10233134.49 10233134.67 10233134.84 0.0269 0.0152

Saturn 23305-11-24 06:43 G 10233363.57 10233363.78 10233363.99 0.0269 0.0032

Saturn 23306-07-11 09:21 G 10233592.77 10233592.89 10233593.02 0.0269 0.0215

Uranus 23306-07-12 09:36 G 10233593.81 10233593.90 10233594.03 0.0145 0.0125

Uranus 23307-02-23 22:04 G 10233820.24 10233820.42 10233820.60 0.0145 0.0081

Uranus 23307-10-08 10:04 G 10234046.72 10234046.92 10234047.13 0.0145 0.0038

Jupiter 23308-05-12 17:45 G 10234264.10 10234264.24 10234264.39 0.0518 0.0353

Uranus 23308-05-21 22:19 G 10234273.21 10234273.43 10234273.65 0.0145 0.0006

Uranus 23309-01-03 10:19 G 10234499.74 10234499.93 10234500.14 0.0145 0.0051

Uranus 23309-08-17 22:33 G 10234726.29 10234726.44 10234726.62 0.0145 0.0094

Uranus 23310-04-01 10:48 G 10234952.90 10234952.95 10234953.03 0.0145 0.0138

Mars 23315-03-14 12:43 G 10236760.85 10236761.03 10236761.20 0.1654 0.0015

Jupiter 23320-01-16 13:40 G 10238529.87 10238530.07 10238530.26 0.0520 0.0147

Saturn 23320-05-07 07:26 G 10238641.61 10238641.81 10238642.01 0.0291 0.0099

Saturn 23320-12-23 05:02 G 10238871.53 10238871.71 10238871.91 0.0291 0.0136

Jupiter 23326-07-05 23:02 G 10240892.27 10240892.46 10240892.64 0.0509 0.0212

Saturn 23334-10-20 06:00 G 10243920.58 10243920.75 10243920.95 0.0269 0.0131

Saturn 23335-06-06 08:52 G 10244149.66 10244149.87 10244150.08 0.0269 0.0052

Saturn 23336-01-21 11:02 G 10244378.87 10244378.96 10244379.07 0.0269 0.0235

Jupiter 23338-03-10 21:07 G 10245158.21 10245158.38 10245158.56 0.0507 0.0261

Mars 23342-07-31 11:31 G 10246761.85 10246761.98 10246762.12 0.1889 0.1202

Uranus 23347-06-10 19:55 G 10248537.20 10248537.33 10248537.46 0.0134 0.0107

Uranus 23348-01-23 01:26 G 10248763.38 10248763.56 10248763.75 0.0133 0.0073

Uranus 23348-09-05 06:57 G 10248989.59 10248989.79 10248990.00 0.0133 0.0039

Uranus 23349-04-19 12:43 G 10249215.81 10249216.03 10249216.25 0.0133 0.0005

Saturn 23349-11-17 08:38 G 10249427.66 10249427.86 10249428.07 0.0290 0.0078

Uranus 23349-12-01 18:00 G 10249442.04 10249442.25 10249442.47 0.0133 0.0029

Saturn 23350-07-05 06:28 G 10249657.59 10249657.77 10249657.95 0.0291 0.0157

Uranus 23350-07-15 23:02 G 10249668.28 10249668.46 10249668.67 0.0133 0.0063

Neptune 23350-10-23 15:50 G 10249768.08 10249768.16 10249768.27 0.0089 0.0080

Uranus 23351-02-27 04:33 G 10249894.55 10249894.69 10249894.84 0.0133 0.0096

Neptune 23351-06-06 04:33 G 10249993.55 10249993.69 10249993.87 0.0088 0.0061

Uranus 23351-10-11 09:21 G 10250120.87 10250120.89 10250120.96 0.0133 0.0130

Neptune 23352-01-17 17:45 G 10250219.05 10250219.24 10250219.44 0.0088 0.0041

Neptune 23352-08-30 06:28 G 10250444.57 10250444.77 10250444.99 0.0088 0.0022

Neptune 23353-04-12 19:26 G 10250670.09 10250670.31 10250670.53 0.0088 0.0002

Neptune 23353-11-24 08:24 G 10250895.63 10250895.85 10250896.06 0.0088 0.0018

Neptune 23354-07-07 20:52 G 10251121.18 10251121.37 10251121.58 0.0088 0.0037

Neptune 23355-02-18 09:36 G 10251346.75 10251346.90 10251347.09 0.0088 0.0057

Jupiter 23355-09-24 03:21 G 10251564.44 10251564.64 10251564.83 0.0519 0.0146

Neptune 23355-10-01 22:48 G 10251572.35 10251572.45 10251572.57 0.0088 0.0076

Jupiter 23362-03-13 13:55 G 10253927.07 10253927.08 10253927.11 0.0511 0.0508

Saturn 23364-05-01 12:14 G 10254706.82 10254707.01 10254707.21 0.0269 0.0103

Saturn 23364-12-16 14:52 G 10254935.93 10254936.12 10254936.33 0.0269 0.0081

Moon 23364-12-16 14:24 G 10254935.95 10254936.10 10254936.26 0.2670 0.0848 *

Earth 23364-12-16 19:12 G 10254936.15 10254936.30 10254936.45 0.2675 0.0617 *

Saturn 23365-08-02 17:31 G 10255165.20 10255165.23 10255165.29 0.0269 0.0263

Jupiter 23367-05-29 21:07 G 10255830.24 10255830.38 10255830.52 0.0521 0.0369

Jupiter 23373-11-16 09:50 G 10258192.71 10258192.91 10258193.12 0.0508 0.0017

Saturn 23378-10-12 21:36 G 10259984.33 10259984.40 10259984.47 0.0290 0.0273

Saturn 23379-05-30 19:12 G 10260214.09 10260214.30 10260214.51 0.0291 0.0040

Saturn 23380-01-15 17:02 G 10260444.05 10260444.21 10260444.36 0.0291 0.0194

Mars 23381-01-09 00:14 G 10260803.34 10260803.51 10260803.68 0.1657 0.0251

Jupiter 23385-07-22 07:55 G 10262458.74 10262458.83 10262458.91 0.0506 0.0455

Uranus 23390-03-11 15:50 G 10264152.15 10264152.16 10264152.20 0.0145 0.0144

Uranus 23390-10-24 03:50 G 10264378.52 10264378.66 10264378.83 0.0145 0.0101

Jupiter 23391-06-01 18:43 G 10264599.18 10264599.28 10264599.38 0.0517 0.0447

Uranus 23391-06-07 16:04 G 10264604.97 10264605.17 10264605.37 0.0145 0.0057

Uranus 23392-01-20 04:04 G 10264831.46 10264831.67 10264831.89 0.0145 0.0014

Uranus 23392-09-02 16:19 G 10265057.97 10265058.18 10265058.40 0.0145 0.0030

Saturn 23393-03-27 12:43 G 10265263.99 10265264.03 10265264.08 0.0269 0.0263

Uranus 23393-04-17 04:33 G 10265284.51 10265284.69 10265284.88 0.0145 0.0074

Saturn 23393-11-11 15:36 G 10265492.95 10265493.15 10265493.35 0.0269 0.0080

Uranus 23393-11-29 16:48 G 10265511.09 10265511.20 10265511.34 0.0145 0.0118

Saturn 23394-06-28 18:14 G 10265722.06 10265722.26 10265722.46 0.0269 0.0103

Jupiter 23403-02-05 14:09 G 10268864.89 10268865.09 10268865.30 0.0520 0.0055

Saturn 23408-04-24 23:02 G 10270770.37 10270770.46 10270770.58 0.0290 0.0251

Mars 23408-05-28 14:52 G 10270803.95 10270804.12 10270804.29 0.1885 0.0557

Saturn 23408-12-10 20:52 G 10271000.16 10271000.37 10271000.59 0.0290 0.0018

Jupiter 23409-07-25 23:31 G 10271227.32 10271227.48 10271227.65 0.0510 0.0302

Saturn 23409-07-28 18:28 G 10271230.14 10271230.27 10271230.42 0.0291 0.0216

Mars 23413-01-08 19:55 G 10272490.27 10272490.33 10272490.40 0.1648 0.1522

Jupiter 23421-03-30 21:50 G 10275493.22 10275493.41 10275493.60 0.0507 0.0173

Saturn 23422-10-08 18:14 G 10276050.17 10276050.26 10276050.37 0.0270 0.0237

Saturn 23423-05-25 21:21 G 10276279.19 10276279.39 10276279.60 0.0269 0.0054

Saturn 23424-01-10 00:14 G 10276508.33 10276508.51 10276508.70 0.0269 0.0131

Uranus 23431-02-09 06:57 G 10279095.70 10279095.79 10279095.88 0.0134 0.0120

Uranus 23431-09-23 12:14 G 10279321.86 10279322.01 10279322.19 0.0134 0.0087

Uranus 23432-05-06 18:00 G 10279548.07 10279548.25 10279548.47 0.0133 0.0053

Uranus 23432-12-18 23:45 G 10279774.28 10279774.49 10279774.71 0.0133 0.0018

Uranus 23433-08-02 05:16 G 10280000.51 10280000.72 10280000.94 0.0133 0.0016

Neptune 23434-03-05 03:07 G 10280215.53 10280215.63 10280215.74 0.0089 0.0077

Uranus 23434-03-16 10:33 G 10280226.75 10280226.94 10280227.15 0.0133 0.0050

Neptune 23434-10-16 15:50 G 10280441.01 10280441.16 10280441.35 0.0089 0.0058

Uranus 23434-10-28 15:50 G 10280453.00 10280453.16 10280453.34 0.0133 0.0083

Neptune 23435-05-30 05:16 G 10280666.53 10280666.72 10280666.93 0.0089 0.0038

Uranus 23435-06-11 20:52 G 10280679.29 10280679.37 10280679.49 0.0133 0.0117

Neptune 23436-01-10 18:28 G 10280892.06 10280892.27 10280892.49 0.0089 0.0018

Neptune 23436-08-23 07:40 G 10281117.60 10281117.82 10281118.04 0.0089 0.0002

Neptune 23437-04-05 20:38 G 10281343.16 10281343.36 10281343.59 0.0089 0.0022

Saturn 23437-11-05 10:48 G 10281556.81 10281556.95 10281557.10 0.0290 0.0212

Neptune 23437-11-17 09:50 G 10281568.73 10281568.91 10281569.12 0.0089 0.0041

Saturn 23438-06-23 08:24 G 10281786.64 10281786.85 10281787.07 0.0291 0.0023

Neptune 23438-06-30 22:48 G 10281794.31 10281794.45 10281794.62 0.0089 0.0061

Jupiter 23438-10-14 01:40 G 10281899.39 10281899.57 10281899.75 0.0519 0.0224

Saturn 23439-02-08 06:14 G 10282016.66 10282016.76 10282016.86 0.0291 0.0255

Neptune 23439-02-11 11:31 G 10282019.92 10282019.98 10282020.10 0.0089 0.0081

Pluto 23444-04-03 11:02 G 10283897.82 10283897.96 10283898.15 0.0066 0.0045

Pluto 23444-11-14 16:19 G 10284122.96 10284123.18 10284123.40 0.0067 0.0002

Pluto 23445-06-27 20:52 G 10284348.23 10284348.37 10284348.52 0.0067 0.0049

Mars 23446-11-07 11:31 G 10284845.82 10284845.98 10284846.15 0.1660 0.0507

Jupiter 23450-06-18 21:07 G 10286165.21 10286165.38 10286165.55 0.0521 0.0279

Saturn 23452-04-19 23:02 G 10286836.34 10286836.46 10286836.59 0.0269 0.0212

Saturn 23452-12-05 01:55 G 10287065.37 10287065.58 10287065.79 0.0269 0.0029

Saturn 23453-07-22 04:33 G 10287294.52 10287294.69 10287294.86 0.0269 0.0155

Jupiter 23456-12-06 07:40 G 10288527.62 10288527.82 10288528.02 0.0509 0.0090

Saturn 23467-05-18 13:26 G 10292342.91 10292343.06 10292343.23 0.0290 0.0188

Saturn 23468-01-03 11:16 G 10292572.76 10292572.97 10292573.18 0.0290 0.0046

Jupiter 23468-08-11 06:57 G 10292793.66 10292793.79 10292793.93 0.0506 0.0375

Saturn 23468-08-20 08:38 G 10292802.82 10292802.86 10292802.93 0.0290 0.0280

Mars 23474-03-25 19:12 G 10294846.13 10294846.30 10294846.48 0.1881 0.0054

Jupiter 23474-06-21 14:52 G 10294934.10 10294934.12 10294934.15 0.0517 0.0511

Uranus 23474-06-24 09:50 G 10294936.80 10294936.91 10294937.04 0.0145 0.0120

Uranus 23475-02-05 21:50 G 10295163.24 10295163.41 10295163.60 0.0145 0.0077

Uranus 23475-09-20 10:04 G 10295389.71 10295389.92 10295390.14 0.0145 0.0033

Uranus 23476-05-03 22:19 G 10295616.21 10295616.43 10295616.65 0.0145 0.0011

Uranus 23476-12-16 10:33 G 10295842.74 10295842.94 10295843.14 0.0145 0.0054

Uranus 23477-07-30 22:33 G 10296069.29 10296069.44 10296069.61 0.0145 0.0098

Uranus 23478-03-14 11:02 G 10296295.92 10296295.96 10296296.01 0.0145 0.0142

Mars 23478-11-06 07:55 G 10296532.72 10296532.83 10296532.93 0.1650 0.1292

Saturn 23481-10-31 04:19 G 10297622.53 10297622.68 10297622.83 0.0270 0.0186

Saturn 23482-06-17 07:26 G 10297851.60 10297851.81 10297852.02 0.0269 0.0002

Saturn 23483-02-01 10:04 G 10298080.78 10298080.92 10298081.09 0.0269 0.0183

Jupiter 23486-02-24 09:07 G 10299199.67 10299199.88 10299200.08 0.0520 0.0007

Jupiter 23492-08-13 19:55 G 10301562.19 10301562.33 10301562.47 0.0510 0.0368

Moon 23494-06-18 18:28 G 10302236.12 10302236.27 10302236.42 0.2663 0.0232

Earth 23494-06-18 20:52 G 10302236.21 10302236.37 10302236.53 0.2657 0.0380 *

Saturn 23496-11-28 01:55 G 10303129.40 10303129.58 10303129.77 0.0290 0.0148

Saturn 23497-07-15 23:31 G 10303359.28 10303359.48 10303359.69 0.0291 0.0087

Jupiter 23497-10-30 02:52 G 10303465.59 10303465.62 10303465.67 0.0523 0.0512

Jupiter 23504-04-19 17:16 G 10305828.03 10305828.22 10305828.42 0.0507 0.0112

Saturn 23511-05-14 09:50 G 10308408.75 10308408.91 10308409.09 0.0269 0.0160

Saturn 23511-12-29 12:57 G 10308637.83 10308638.04 10308638.25 0.0269 0.0024

Saturn 23512-08-14 15:36 G 10308867.02 10308867.15 10308867.29 0.0269 0.0207

Mars 23512-09-04 22:48 G 10308888.30 10308888.45 10308888.61 0.1663 0.0764

Uranus 23514-10-10 18:00 G 10309654.25 10309654.25 10309654.29 0.0134 0.0133

Neptune 23515-01-27 01:26 G 10309762.56 10309762.56 10309762.57 0.0089 0.0088

Uranus 23515-05-25 00:00 G 10309880.36 10309880.50 10309880.66 0.0134 0.0099

Neptune 23515-09-09 13:55 G 10309987.97 10309988.08 10309988.24 0.0088 0.0070

Uranus 23516-01-06 05:45 G 10310106.55 10310106.74 10310106.94 0.0134 0.0065

Neptune 23516-04-22 03:07 G 10310213.46 10310213.63 10310213.82 0.0088 0.0050

Uranus 23516-08-19 11:31 G 10310332.76 10310332.98 10310333.19 0.0133 0.0031

Neptune 23516-12-03 15:50 G 10310438.97 10310439.16 10310439.38 0.0088 0.0031

Uranus 23517-04-02 17:02 G 10310558.99 10310559.21 10310559.43 0.0133 0.0003

Neptune 23517-07-17 04:48 G 10310664.49 10310664.70 10310664.92 0.0088 0.0011

Uranus 23517-11-14 22:19 G 10310785.23 10310785.43 10310785.65 0.0133 0.0037

Neptune 23518-02-27 17:31 G 10310890.02 10310890.23 10310890.46 0.0088 0.0009

Uranus 23518-06-29 03:50 G 10311011.47 10311011.66 10311011.84 0.0133 0.0071

Neptune 23518-10-11 06:43 G 10311115.57 10311115.78 10311115.99 0.0088 0.0028

Uranus 23519-02-10 08:38 G 10311237.74 10311237.86 10311238.01 0.0133 0.0104

Neptune 23519-05-24 18:57 G 10311341.13 10311341.29 10311341.50 0.0088 0.0048

Neptune 23520-01-05 07:55 G 10311566.70 10311566.83 10311566.99 0.0088 0.0067

Neptune 23520-08-17 20:52 G 10311792.33 10311792.37 10311792.42 0.0088 0.0086

Jupiter 23521-11-03 00:43 G 10312234.38 10312234.53 10312234.70 0.0518 0.0309

Saturn 23526-06-11 05:16 G 10313915.53 10313915.72 10313915.91 0.0290 0.0122

Saturn 23527-01-27 02:38 G 10314145.42 10314145.61 10314145.81 0.0290 0.0112

Pluto 23531-04-23 22:48 G 10315693.29 10315693.45 10315693.64 0.0077 0.0048

Pluto 23531-12-05 08:09 G 10315918.64 10315918.84 10315919.05 0.0077 0.0027

Jupiter 23533-07-08 17:31 G 10316500.05 10316500.23 10316500.42 0.0521 0.0212

Jupiter 23539-12-27 06:43 G 10318862.59 10318862.78 10318862.97 0.0509 0.0170

Mars 23540-01-21 23:16 G 10318888.31 10318888.47 10318888.64 0.1876 0.0643

Saturn 23540-11-23 14:38 G 10319194.93 10319195.11 10319195.30 0.0270 0.0135

Saturn 23541-07-10 17:45 G 10319424.03 10319424.24 10319424.45 0.0269 0.0050

Saturn 23542-02-24 20:38 G 10319653.27 10319653.36 10319653.47 0.0269 0.0234

Mars 23544-09-03 18:57 G 10320575.16 10320575.29 10320575.43 0.1653 0.1042

Jupiter 23551-09-01 02:52 G 10323128.47 10323128.62 10323128.79 0.0506 0.0311

Saturn 23555-12-22 18:00 G 10324702.05 10324702.25 10324702.46 0.0291 0.0082

Saturn 23556-08-08 15:50 G 10324931.98 10324932.16 10324932.34 0.0291 0.0153

Uranus 23558-02-22 18:00 G 10325495.20 10325495.25 10325495.33 0.0145 0.0137

Uranus 23558-10-07 06:00 G 10325721.60 10325721.75 10325721.93 0.0145 0.0094

Uranus 23559-05-21 18:00 G 10325948.06 10325948.25 10325948.47 0.0145 0.0051

Uranus 23560-01-03 06:14 G 10326174.55 10326174.76 10326174.98 0.0145 0.0008

Uranus 23560-08-16 18:28 G 10326401.06 10326401.27 10326401.48 0.0145 0.0037

Uranus 23561-03-31 06:28 G 10326627.60 10326627.77 10326627.96 0.0145 0.0080

Uranus 23561-11-12 18:57 G 10326854.18 10326854.29 10326854.40 0.0145 0.0124

Jupiter 23569-03-16 07:12 G 10329534.60 10329534.80 10329535.00 0.0520 0.0083

Saturn 23570-06-05 21:07 G 10329981.19 10329981.38 10329981.58 0.0269 0.0107

Saturn 23571-01-21 00:00 G 10330210.30 10330210.50 10330210.71 0.0269 0.0077

Saturn 23571-09-07 02:52 G 10330439.57 10330439.62 10330439.68 0.0269 0.0260

Jupiter 23575-09-03 16:04 G 10331897.08 10331897.17 10331897.29 0.0510 0.0434

Mars 23578-07-03 10:04 G 10332930.79 10332930.92 10332931.06 0.1666 0.1030

Jupiter 23580-11-19 02:09 G 10333800.48 10333800.59 10333800.71 0.0522 0.0428

Saturn 23584-11-16 00:28 G 10335258.50 10335258.52 10335258.55 0.0290 0.0287

Saturn 23585-07-03 22:04 G 10335488.21 10335488.42 10335488.63 0.0290 0.0055

Saturn 23586-02-18 19:26 G 10335718.15 10335718.31 10335718.48 0.0290 0.0180

Jupiter 23587-05-09 15:07 G 10336162.93 10336163.13 10336163.33 0.0508 0.0040

Neptune 23598-06-07 10:48 G 10340209.94 10340209.95 10340210.01 0.0089 0.0088

Neptune 23599-01-19 00:00 G 10340435.38 10340435.50 10340435.66 0.0089 0.0068

Uranus 23599-01-22 11:45 G 10340438.87 10340438.99 10340439.11 0.0134 0.0111

Saturn 23599-05-01 21:36 G 10340538.39 10340538.40 10340538.44 0.0270 0.0268

Neptune 23599-09-01 13:26 G 10340660.89 10340661.06 10340661.25 0.0089 0.0048

Uranus 23599-09-05 17:16 G 10340665.05 10340665.22 10340665.41 0.0134 0.0077

Saturn 23599-12-17 00:57 G 10340767.35 10340767.54 10340767.75 0.0270 0.0084

Moon 23599-12-22 03:50 G 10340772.63 10340772.66 10340772.69 0.2681 0.2623

Neptune 23600-04-14 02:38 G 10340886.42 10340886.61 10340886.83 0.0089 0.0029

Uranus 23600-04-18 23:02 G 10340891.26 10340891.46 10340891.68 0.0134 0.0044

Saturn 23600-08-02 04:04 G 10340996.48 10340996.67 10340996.87 0.0269 0.0102

Neptune 23600-11-25 16:04 G 10341111.95 10341112.17 10341112.39 0.0089 0.0009

Uranus 23600-12-01 04:48 G 10341117.48 10341117.70 10341117.92 0.0133 0.0010

Neptune 23601-07-09 05:16 G 10341337.50 10341337.72 10341337.94 0.0089 0.0011

Uranus 23601-07-15 10:04 G 10341343.71 10341343.92 10341344.14 0.0133 0.0025

Neptune 23602-02-19 18:14 G 10341563.06 10341563.26 10341563.47 0.0089 0.0031

Uranus 23602-02-26 15:21 G 10341569.95 10341570.14 10341570.35 0.0133 0.0058

Neptune 23602-10-03 06:57 G 10341788.63 10341788.79 10341788.99 0.0089 0.0051

Uranus 23602-10-10 20:38 G 10341796.21 10341796.36 10341796.53 0.0133 0.0091

Neptune 23603-05-16 20:38 G 10342014.23 10342014.36 10342014.50 0.0089 0.0070

Uranus 23603-05-25 02:09 G 10342022.52 10342022.59 10342022.67 0.0133 0.0124

Jupiter 23604-11-21 19:40 G 10342569.18 10342569.32 10342569.47 0.0518 0.0365

Mars 23605-11-18 03:50 G 10342930.53 10342930.66 10342930.79 0.1873 0.1228

Earth 23607-12-19 19:40 G 10343692.17 10343692.32 10343692.48 0.2674 0.0806

Moon 23607-12-19 23:02 G 10343692.31 10343692.46 10343692.61 0.2680 0.0510 *

Mars 23610-07-02 06:43 G 10344617.63 10344617.78 10344617.94 0.1656 0.0805

Saturn	23614-05-29 12:57 G	10346044.94	10346045.04	10346045.15	0.0290	0.0248
Saturn	23615-01-14 10:33 G	10346274.73	10346274.94	10346275.15	0.0291	0.0015
Saturn	23615-09-01 08:09 G	10346504.71	10346504.84	10346504.98	0.0291	0.0220
Jupiter	23616-07-27 13:26 G	10346834.87	10346835.06	10346835.26	0.0521	0.0146
Jupiter	23623-01-15 01:40 G	10349197.39	10349197.57	10349197.75	0.0509	0.0228
Saturn	23628-11-11 04:48 G	10351324.62	10351324.70	10351324.81	0.0269	0.0240
Saturn	23629-06-28 08:09 G	10351553.63	10351553.84	10351554.05	0.0269	0.0055
Saturn	23630-02-12 11:02 G	10351782.77	10351782.96	10351783.14	0.0269	0.0129
Jupiter	23634-09-19 23:02 G	10353463.28	10353463.46	10353463.64	0.0506	0.0249
Uranus	23642-06-06 13:55 G	10356279.95	10356280.08	10356280.23	0.0145	0.0111
Uranus	23643-01-19 01:55 G	10356506.39	10356506.58	10356506.78	0.0145	0.0068
Uranus	23643-09-02 13:55 G	10356732.87	10356733.08	10356733.30	0.0145	0.0025
Saturn	23643-12-09 17:16 G	10356831.09	10356831.22	10356831.36	0.0290	0.0221
Uranus	23644-04-16 01:55 G	10356959.37	10356959.58	10356959.80	0.0145	0.0019
Mars	23644-04-29 21:21 G	10356973.29	10356973.39	10356973.50	0.1669	0.1291
Saturn	23644-07-26 14:52 G	10357060.91	10357061.12	10357061.33	0.0290	0.0013
Uranus	23644-11-28 14:09 G	10357185.90	10357186.09	10357186.29	0.0145	0.0062
Saturn	23645-03-13 12:14 G	10357290.91	10357291.01	10357291.13	0.0290	0.0247
Uranus	23645-07-13 02:09 G	10357412.46	10357412.59	10357412.75	0.0145	0.0106
Jupiter	23652-04-04 04:19 G	10359869.49	10359869.68	10359869.88	0.0519	0.0154
Saturn	23658-05-24 08:09 G	10362110.72	10362110.84	10362110.97	0.0270	0.0217
Saturn	23659-01-08 11:16 G	10362339.76	10362339.97	10362340.18	0.0270	0.0033
Saturn	23659-08-25 14:24 G	10362568.93	10362569.10	10362569.27	0.0269	0.0152
Jupiter	23663-12-08 21:50 G	10364135.27	10364135.41	10364135.56	0.0522	0.0364
Jupiter	23670-05-28 11:16 G	10366497.77	10366497.97	10366498.17	0.0507	0.0027
Mars	23671-09-15 08:09 G	10366972.80	10366972.84	10366972.88	0.1868	0.1813
Saturn	23673-06-21 05:02 G	10367617.55	10367617.71	10367617.88	0.0290	0.0183
Saturn	23674-02-06 02:38 G	10367847.41	10367847.61	10367847.83	0.0291	0.0052
Saturn	23674-09-24 00:28 G	10368077.49	10368077.52	10368077.56	0.0291	0.0285
Mars	23676-04-28 17:45 G	10368660.08	10368660.24	10368660.41	0.1659	0.0545

Neptune 23679-12-11 23:02 G 10369982.38 10369982.46 10369982.57 0.0088 0.0079

Neptune 23680-07-24 11:45 G 10370207.84 10370207.99 10370208.17 0.0088 0.0059

Neptune 23681-03-07 00:57 G 10370433.34 10370433.54 10370433.74 0.0088 0.0040

Neptune 23681-10-18 13:40 G 10370658.86 10370659.07 10370659.29 0.0088 0.0021

Jupiter 23682-01-31 09:07 G 10370763.80 10370763.88 10370763.99 0.0505 0.0444

Neptune 23682-06-01 02:38 G 10370884.39 10370884.61 10370884.83 0.0088 0.0001

Uranus 23682-09-21 23:45 G 10370997.41 10370997.49 10370997.58 0.0134 0.0123

Neptune 23683-01-12 15:07 G 10371109.93 10371110.13 10371110.36 0.0088 0.0019

Uranus 23683-05-06 05:45 G 10371223.58 10371223.74 10371223.90 0.0134 0.0089

Neptune 23683-08-26 04:04 G 10371335.48 10371335.67 10371335.87 0.0088 0.0038

Uranus 23683-12-18 11:16 G 10371449.78 10371449.97 10371450.18 0.0134 0.0055

Neptune 23684-04-07 16:48 G 10371561.04 10371561.20 10371561.38 0.0088 0.0057

Uranus 23684-07-31 17:02 G 10371675.99 10371676.21 10371676.42 0.0133 0.0021

Neptune 23684-11-19 05:16 G 10371786.63 10371786.72 10371786.85 0.0088 0.0077

Uranus 23685-03-14 22:33 G 10371902.22 10371902.44 10371902.65 0.0133 0.0012

Uranus 23685-10-27 03:36 G 10372128.46 10372128.65 10372128.87 0.0133 0.0046

Uranus 23686-06-10 09:07 G 10372354.71 10372354.88 10372355.06 0.0133 0.0079

Uranus 23687-01-22 14:09 G 10372580.99 10372581.09 10372581.21 0.0133 0.0112

Saturn 23687-12-04 15:36 G 10372897.01 10372897.15 10372897.31 0.0269 0.0188

Jupiter 23687-12-11 17:16 G 10372904.11 10372904.22 10372904.32 0.0518 0.0440

Saturn 23688-07-20 18:28 G 10373126.06 10373126.27 10373126.49 0.0269 0.0006

Saturn 23689-03-06 21:07 G 10373355.23 10373355.38 10373355.55 0.0269 0.0180

Pluto 23692-10-18 16:04 G 10374676.99 10374677.17 10374677.39 0.0066 0.0030

Pluto 23693-05-31 21:07 G 10374902.17 10374902.38 10374902.60 0.0067 0.0018

Pluto 23694-01-12 01:12 G 10375127.54 10375127.55 10375127.62 0.0067 0.0066

Jupiter 23699-08-16 12:43 G 10377169.83 10377170.03 10377170.23 0.0521 0.0062

Saturn 23703-01-02 09:21 G 10378403.71 10378403.89 10378404.07 0.0290 0.0156

Saturn 23703-08-20 06:57 G 10378633.59 10378633.79 10378634.00 0.0290 0.0079

Mars 23703-09-16 03:50 G 10378660.54 10378660.66 10378660.78 0.1882 0.1386

Jupiter 23706-02-03 23:02 G 10379532.30 10379532.46 10379532.63 0.0509 0.0300

Mars 23710-02-26 08:09 G 10381015.78 10381015.84 10381015.89 0.1672 0.1577

Saturn 23717-06-16 17:45 G 10383683.08 10383683.24 10383683.41 0.0270 0.0168

Jupiter 23717-10-09 21:36 G 10383798.21 10383798.40 10383798.59 0.0507 0.0172

Saturn 23718-01-31 20:52 G 10383912.16 10383912.37 10383912.58 0.0269 0.0017

Saturn 23718-09-17 23:31 G 10384141.35 10384141.48 10384141.63 0.0269 0.0202

Uranus 23726-02-04 22:33 G 10386838.35 10386838.44 10386838.55 0.0145 0.0127

Uranus 23726-09-19 10:19 G 10387064.77 10387064.93 10387065.12 0.0145 0.0085

Uranus 23727-05-03 22:33 G 10387291.23 10387291.44 10387291.65 0.0145 0.0041

Uranus 23727-12-16 10:33 G 10387517.73 10387517.94 10387518.16 0.0145 0.0003

Uranus 23728-07-29 22:33 G 10387744.24 10387744.44 10387744.65 0.0145 0.0046

Uranus 23729-03-13 10:33 G 10387970.78 10387970.94 10387971.12 0.0145 0.0089

Uranus 23729-10-25 22:48 G 10388197.38 10388197.45 10388197.56 0.0145 0.0133

Saturn 23732-07-14 19:40 G 10389190.13 10389190.32 10389190.51 0.0291 0.0121

Saturn 23733-03-01 17:31 G 10389420.04 10389420.23 10389420.43 0.0291 0.0115

Jupiter 23735-04-25 00:28 G 10390204.34 10390204.52 10390204.71 0.0520 0.0221

Earth 23737-06-20 22:04 G 10390992.26 10390992.42 10390992.58 0.2658 0.0258

Moon 23737-06-21 02:38 G 10390992.45 10390992.61 10390992.77 0.2654 0.0430 *

Mars 23742-02-25 05:02 G 10392702.54 10392702.71 10392702.88 0.1662 0.0289

Saturn 23746-12-28 01:26 G 10394469.38 10394469.56 10394469.75 0.0269 0.0139

Jupiter 23746-12-28 19:12 G 10394470.13 10394470.30 10394470.47 0.0522 0.0291

Saturn 23747-08-14 04:04 G 10394698.47 10394698.67 10394698.89 0.0269 0.0046

Saturn 23748-03-30 06:43 G 10394927.68 10394927.78 10394927.90 0.0269 0.0228

Jupiter 23753-06-17 07:55 G 10396832.63 10396832.83 10396833.03 0.0508 0.0093

Saturn 23762-01-25 00:00 G 10399976.31 10399976.50 10399976.71 0.0290 0.0094

Saturn 23762-09-11 21:50 G 10400206.23 10400206.41 10400206.60 0.0291 0.0142

Neptune 23763-04-23 07:40 G 10400429.75 10400429.82 10400429.95 0.0089 0.0079

Neptune 23763-12-04 21:07 G 10400655.23 10400655.38 10400655.56 0.0089 0.0059

Neptune 23764-07-17 10:33 G 10400880.74 10400880.94 10400881.14 0.0089 0.0039

Jupiter 23765-02-20 06:57 G 10401098.66 10401098.79 10401098.93 0.0505 0.0373

Neptune 23765-02-27 23:45 G 10401106.28 10401106.49 10401106.71 0.0089 0.0019

Neptune 23765-10-11 12:57 G 10401331.82 10401332.04 10401332.26 0.0089 0.0001

Neptune 23766-05-25 02:09 G 10401557.38 10401557.59 10401557.81 0.0089 0.0020

Uranus 23767-01-04 17:45 G 10401782.10 10401782.24 10401782.39 0.0134 0.0101

Neptune 23767-01-05 15:07 G 10401782.94 10401783.13 10401783.34 0.0089 0.0040

Uranus 23767-08-18 23:16 G 10402008.29 10402008.47 10402008.67 0.0134 0.0067

Neptune 23767-08-19 04:04 G 10402008.53 10402008.67 10402008.85 0.0089 0.0060 *

Neptune 23768-03-31 17:45 G 10402234.15 10402234.24 10402234.34 0.0089 0.0079

Uranus 23768-04-01 05:02 G 10402234.51 10402234.71 10402234.93 0.0133 0.0034

Uranus 23768-11-13 10:48 G 10402460.73 10402460.95 10402461.16 0.0133 0.0003

Uranus 23769-06-27 15:50 G 10402686.96 10402687.16 10402687.38 0.0133 0.0034

Mars 23769-07-13 08:09 G 10402702.68 10402702.84 10402703.00 0.1878 0.0786

Uranus 23770-02-08 21:07 G 10402913.20 10402913.38 10402913.58 0.0133 0.0067

Uranus 23770-09-23 02:09 G 10403139.46 10403139.59 10403139.75 0.0133 0.0101

Uranus 23771-05-07 07:40 G 10403365.82 10403365.82 10403365.83 0.0133 0.0133

Saturn 23776-07-09 02:38 G 10405255.42 10405255.61 10405255.80 0.0269 0.0119

Saturn 23777-02-23 05:16 G 10405484.52 10405484.72 10405484.93 0.0269 0.0065

Saturn 23777-10-10 08:24 G 10405713.77 10405713.85 10405713.93 0.0269 0.0248

Pluto 23779-11-08 04:04 G 10406472.48 10406472.67 10406472.89 0.0077 0.0028

Pluto 23780-06-20 13:26 G 10406697.89 10406698.06 10406698.24 0.0077 0.0048

Jupiter 23782-09-05 10:33 G 10407504.74 10407504.94 10407505.15 0.0520 0.0018

Jupiter 23789-02-22 21:07 G 10409867.25 10409867.38 10409867.52 0.0509 0.0377

Saturn 23791-08-07 08:52 G 10410762.66 10410762.87 10410763.08 0.0291 0.0060

Saturn 23792-03-24 06:57 G 10410992.63 10410992.79 10410992.97 0.0291 0.0176

Jupiter 23794-05-11 02:24 G 10411770.57 10411770.60 10411770.64 0.0524 0.0514

Jupiter 23800-10-29 19:12 G 10414133.10 10414133.30 10414133.50 0.0506 0.0098

Saturn 23806-01-20 10:04 G 10416041.72 10416041.92 10416042.12 0.0269 0.0091

Saturn 23806-09-06 12:43 G 10416270.83 10416271.03 10416271.23 0.0268 0.0093

Mars 23807-12-24 16:33 G 10416745.01 10416745.19 10416745.36 0.1665 0.0054

Uranus 23810-05-20 17:02 G 10417623.07 10417623.21 10417623.37 0.0145 0.0103

Uranus 23811-01-02 05:02 G 10417849.51 10417849.71 10417849.91 0.0145 0.0060

Uranus 23811-08-16 17:02 G 10418075.99 10418076.21 10418076.42 0.0145 0.0017

Uranus 23812-03-30 05:02 G 10418302.50 10418302.71 10418302.93 0.0145 0.0026

Uranus 23812-11-11 17:16 G 10418529.03 10418529.22 10418529.41 0.0145 0.0070

Uranus 23813-06-26 05:16 G 10418755.60 10418755.72 10418755.87 0.0145 0.0113

Jupiter 23818-05-15 00:57 G 10420539.38 10420539.54 10420539.70 0.0519 0.0311

Saturn 23820-07-02 15:07 G 10421319.06 10421319.13 10421319.22 0.0290 0.0268

Saturn 23821-02-17 12:57 G 10421548.83 10421549.04 10421549.25 0.0291 0.0034

Saturn 23821-10-05 10:48 G 10421778.81 10421778.95 10421779.11 0.0291 0.0202

Jupiter 23830-01-17 19:40 G 10424805.13 10424805.32 10424805.51 0.0522 0.0197

Saturn 23834-12-16 07:55 G 10426598.77 10426598.83 10426598.89 0.0269 0.0256

Mars 23835-05-11 12:00 G 10426744.83 10426745.00 10426745.18 0.1874 0.0168

Saturn 23835-08-02 10:33 G 10426827.74 10426827.94 10426828.15 0.0269 0.0073

Saturn 23836-03-18 12:57 G 10427056.86 10427057.04 10427057.24 0.0269 0.0111

Jupiter 23836-07-07 07:40 G 10427167.63 10427167.82 10427168.01 0.0508 0.0179

Neptune 23844-03-16 07:40 G 10429976.82 10429976.82 10429976.85 0.0088 0.0088

Neptune 23844-10-27 20:52 G 10430202.24 10430202.37 10430202.51 0.0088 0.0069

Neptune 23845-06-10 09:36 G 10430427.73 10430427.90 10430428.09 0.0088 0.0050

Neptune 23846-01-21 22:19 G 10430653.24 10430653.43 10430653.65 0.0088 0.0031

Neptune 23846-09-04 11:31 G 10430878.76 10430878.98 10430879.20 0.0088 0.0011

Neptune 23847-04-18 00:14 G 10431104.29 10431104.51 10431104.73 0.0088 0.0009

Neptune 23847-11-29 12:43 G 10431329.84 10431330.03 10431330.25 0.0088 0.0029

Jupiter 23848-03-12 06:14 G 10431433.60 10431433.76 10431433.93 0.0505 0.0289

Neptune 23848-07-12 01:26 G 10431555.39 10431555.56 10431555.76 0.0088 0.0048

Neptune 23849-02-22 14:09 G 10431780.96 10431781.09 10431781.25 0.0088 0.0067

Neptune 23849-10-06 03:07 G 10432006.59 10432006.63 10432006.70 0.0088 0.0086

Saturn 23850-01-12 21:36 G 10432105.29 10432105.40 10432105.52 0.0291 0.0239

Saturn 23850-08-30 19:55 G 10432335.12 10432335.33 10432335.54 0.0291 0.0004

Uranus 23850-09-05 05:45 G 10432340.64 10432340.74 10432340.87 0.0134 0.0113

Moon 23850-12-21 18:28 G 10432448.13 10432448.27 10432448.42 0.2667 0.1333

Earth 23850-12-21 20:24 G 10432448.20 10432448.35 10432448.50 0.2673 0.0991 *

Saturn	23851-04-17 18:14 G	10432565.14	10432565.26	10432565.39	0.0291	0.0233
Uranus	23851-04-19 12:00 G	10432566.82	10432567.00	10432567.18	0.0134	0.0079
Uranus	23851-12-01 17:16 G	10432793.03	10432793.22	10432793.44	0.0134	0.0046
Uranus	23852-07-14 23:02 G	10433019.24	10433019.46	10433019.68	0.0133	0.0012
Uranus	23853-02-26 04:19 G	10433245.47	10433245.68	10433245.90	0.0133	0.0022
Uranus	23853-10-10 09:36 G	10433471.71	10433471.90	10433472.10	0.0133	0.0055
Uranus	23854-05-24 14:52 G	10433697.96	10433698.12	10433698.29	0.0133	0.0088
Uranus	23855-01-05 19:55 G	10433924.25	10433924.33	10433924.43	0.0133	0.0121
Saturn	23864-06-27 15:07 G	10437385.02	10437385.13	10437385.24	0.0269	0.0227
Saturn	23865-02-11 17:45 G	10437614.03	10437614.24	10437614.44	0.0268	0.0045
Jupiter	23865-09-25 08:24 G	10437839.65	10437839.85	10437840.05	0.0521	0.0091
Saturn	23865-09-28 20:09 G	10437843.16	10437843.34	10437843.52	0.0268	0.0138
Jupiter	23872-03-14 19:40 G	10440202.23	10440202.32	10440202.41	0.0509	0.0453
Mars	23873-10-21 03:36 G	10440787.48	10440787.65	10440787.82	0.1668	0.0235
Jupiter	23877-05-31 03:21 G	10442105.53	10442105.64	10442105.77	0.0523	0.0419
Saturn	23879-07-26 02:09 G	10442891.46	10442891.59	10442891.74	0.0291	0.0212
Saturn	23880-03-12 00:28 G	10443121.31	10443121.52	10443121.73	0.0291	0.0024
Saturn	23880-10-27 22:19 G	10443351.34	10443351.43	10443351.53	0.0291	0.0259
Jupiter	23883-11-18 18:14 G	10444468.06	10444468.26	10444468.46	0.0507	0.0019
Saturn	23894-01-07 14:38 G	10448170.99	10448171.11	10448171.25	0.0269	0.0211
Uranus	23894-01-18 00:00 G	10448181.40	10448181.50	10448181.64	0.0145	0.0121
Saturn	23894-08-24 17:31 G	10448400.02	10448400.23	10448400.44	0.0269	0.0028
Uranus	23894-09-01 12:00 G	10448407.83	10448408.00	10448408.19	0.0145	0.0078
Saturn	23895-04-10 19:55 G	10448629.16	10448629.33	10448629.50	0.0269	0.0155
Uranus	23895-04-16 00:00 G	10448634.29	10448634.50	10448634.72	0.0145	0.0035
Jupiter	23895-07-24 17:16 G	10448734.17	10448734.22	10448734.29	0.0504	0.0480
Uranus	23895-11-28 12:14 G	10448860.79	10448861.01	10448861.22	0.0145	0.0008
Uranus	23896-07-12 00:00 G	10449087.31	10449087.50	10449087.71	0.0145	0.0052
Uranus	23897-02-23 12:14 G	10449313.85	10449314.01	10449314.18	0.0145	0.0095
Uranus	23897-10-08 00:43 G	10449540.47	10449540.53	10449540.60	0.0145	0.0138

Mars 23901-03-08 16:48 G 10450787.03 10450787.20 10450787.38 0.1870 0.0408

Jupiter 23901-06-04 01:12 G 10450874.42 10450874.55 10450874.68 0.0519 0.0401

Mars 23905-10-21 00:28 G 10452474.49 10452474.52 10452474.56 0.1658 0.1611

Saturn 23909-02-05 06:28 G 10453677.62 10453677.77 10453677.94 0.0291 0.0187

Saturn 23909-09-23 05:02 G 10453907.50 10453907.71 10453907.92 0.0291 0.0050

Saturn 23910-05-11 03:21 G 10454137.61 10454137.64 10454137.69 0.0291 0.0286

Jupiter 23913-02-06 17:02 G 10455140.01 10455140.21 10455140.41 0.0522 0.0123

Jupiter 23919-07-28 07:55 G 10457502.66 10457502.83 10457503.01 0.0508 0.0268

Saturn 23923-07-21 21:36 G 10458957.26 10458957.40 10458957.56 0.0269 0.0183

Saturn 23924-03-07 00:14 G 10459186.30 10459186.51 10459186.72 0.0268 0.0000

Saturn 23924-10-22 02:38 G 10459415.46 10459415.61 10459415.77 0.0268 0.0182

Neptune 23928-03-09 04:19 G 10460649.57 10460649.68 10460649.83 0.0089 0.0070

Neptune 23928-10-20 17:45 G 10460875.07 10460875.24 10460875.43 0.0089 0.0050

Neptune 23929-06-03 06:43 G 10461100.59 10461100.78 10461101.00 0.0089 0.0031

Neptune 23930-01-14 20:09 G 10461326.12 10461326.34 10461326.56 0.0089 0.0011

Neptune 23930-08-28 09:21 G 10461551.67 10461551.89 10461552.11 0.0089 0.0009

Jupiter 23931-04-02 05:31 G 10461768.55 10461768.73 10461768.92 0.0505 0.0208

Neptune 23931-04-10 22:19 G 10461777.23 10461777.43 10461777.65 0.0089 0.0029

Neptune 23931-11-22 11:16 G 10462002.81 10462002.97 10462003.18 0.0089 0.0049

Neptune 23932-07-05 00:43 G 10462228.40 10462228.53 10462228.68 0.0089 0.0068

Neptune 23933-02-15 13:26 G 10462454.05 10462454.06 10462454.12 0.0089 0.0088

Uranus 23934-05-06 18:00 G 10462899.19 10462899.25 10462899.34 0.0134 0.0125

Uranus 23934-12-19 00:00 G 10463125.35 10463125.50 10463125.67 0.0134 0.0091

Uranus 23935-08-02 05:31 G 10463351.54 10463351.73 10463351.94 0.0134 0.0058

Uranus 23936-03-15 11:16 G 10463577.76 10463577.97 10463578.19 0.0133 0.0024

Uranus 23936-10-27 16:33 G 10463803.98 10463804.19 10463804.42 0.0133 0.0011

Uranus 23937-06-10 22:04 G 10464030.22 10464030.42 10464030.63 0.0133 0.0043

Uranus 23938-01-23 03:07 G 10464256.46 10464256.63 10464256.82 0.0133 0.0077

Saturn 23938-08-18 11:16 G 10464463.80 10464463.97 10464464.15 0.0291 0.0159

Uranus 23938-09-06 08:24 G 10464482.73 10464482.85 10464482.98 0.0133 0.0109

Saturn 23939-04-05 09:36 G 10464693.70 10464693.90 10464694.11 0.0291 0.0077

Mars 23939-08-19 14:38 G 10464829.95 10464830.11 10464830.28 0.1671 0.0500

Pluto 23940-09-23 16:04 G 10465231.10 10465231.17 10465231.28 0.0066 0.0061

Pluto 23941-05-06 20:52 G 10465456.17 10465456.37 10465456.60 0.0066 0.0014

Pluto 23941-12-18 01:12 G 10465681.38 10465681.55 10465681.77 0.0067 0.0034

Jupiter 23948-10-15 10:48 G 10468174.77 10468174.95 10468175.14 0.0520 0.0196

Saturn 23953-01-30 21:07 G 10469743.22 10469743.38 10469743.55 0.0269 0.0167

Saturn 23953-09-16 23:31 G 10469972.27 10469972.48 10469972.70 0.0268 0.0017

Saturn 23954-05-04 01:26 G 10470201.43 10470201.56 10470201.72 0.0268 0.0199

Jupiter 23960-06-20 05:02 G 10472440.55 10472440.71 10472440.87 0.0523 0.0318

Jupiter 23966-12-08 19:40 G 10474803.12 10474803.32 10474803.53 0.0507 0.0080

Mars 23967-01-03 21:21 G 10474829.25 10474829.39 10474829.54 0.1865 0.0993

Saturn 23968-02-28 14:24 G 10475249.91 10475250.10 10475250.29 0.0291 0.0136

Saturn 23968-10-15 12:57 G 10475479.84 10475480.04 10475480.24 0.0291 0.0101

Mars 23971-08-18 11:31 G 10476516.88 10476516.98 10476517.08 0.1661 0.1354

Uranus 23977-09-18 06:00 G 10478739.72 10478739.75 10478739.83 0.0144 0.0140

Uranus 23978-05-02 17:45 G 10478966.10 10478966.24 10478966.42 0.0145 0.0098

Jupiter 23978-08-13 18:57 G 10479069.16 10479069.29 10479069.42 0.0504 0.0385

Uranus 23978-12-15 05:45 G 10479192.55 10479192.74 10479192.95 0.0145 0.0055

Uranus 23979-07-29 17:45 G 10479419.03 10479419.24 10479419.46 0.0145 0.0012

Uranus 23980-03-12 05:45 G 10479645.53 10479645.74 10479645.96 0.0145 0.0031

Moon 23980-06-22 18:00 G 10479748.10 10479748.25 10479748.41 0.2660 0.0088

Earth 23980-06-22 23:31 G 10479748.32 10479748.48 10479748.64 0.2658 0.0156 *

Uranus 23980-10-24 18:00 G 10479872.07 10479872.25 10479872.44 0.0145 0.0075

Uranus 23981-06-08 06:28 G 10480098.64 10480098.77 10480098.89 0.0145 0.0118

Saturn 23982-08-13 03:36 G 10480529.47 10480529.65 10480529.83 0.0268 0.0139

Saturn 23983-03-30 06:00 G 10480758.54 10480758.75 10480758.96 0.0268 0.0043

Saturn 23983-11-14 07:55 G 10480987.73 10480987.83 10480987.96 0.0268 0.0225

Jupiter 23984-06-22 23:16 G 10481209.40 10481209.47 10481209.55 0.0519 0.0480

Jupiter 23996-02-26 19:12 G 10485475.09 10485475.30 10485475.50 0.0522 0.0024

Saturn 23997-09-09 19:12 G 10486036.10 10486036.30 10486036.50 0.0291 0.0108

Saturn 23998-04-27 17:31 G 10486266.04 10486266.23 10486266.42 0.0291 0.0129

25TH MILLENNIUM CE

This is a list of transits of Venus in the 25th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**24002-08-16 07:55**	**G**	**10487837.69**	**10487837.83**	**10487837.98**	**0.0508**	**0.0354**	
Mars	**24005-06-16 01:40**	**G**	**10488872.42**	**10488872.57**	**10488872.73**	**0.1674**	**0.0778**	
Neptune	**24009-01-30 04:48**	**G**	**10490196.61**	**10490196.70**	**10490196.81**	**0.0088**	**0.0079**	
Neptune	**24009-09-12 17:45**	**G**	**10490422.09**	**10490422.24**	**10490422.41**	**0.0088**	**0.0060**	
Neptune	**24010-04-26 06:28**	**G**	**10490647.59**	**10490647.77**	**10490647.98**	**0.0088**	**0.0041**	
Neptune	**24010-12-07 19:40**	**G**	**10490873.11**	**10490873.32**	**10490873.54**	**0.0088**	**0.0021**	
Neptune	**24011-07-21 08:38**	**G**	**10491098.64**	**10491098.86**	**10491099.08**	**0.0088**	**0.0002**	
Saturn	**24012-02-23 02:52**	**G**	**10491315.44**	**10491315.62**	**10491315.81**	**0.0268**	**0.0123**	
Neptune	**24012-03-02 21:21**	**G**	**10491324.17**	**10491324.39**	**10491324.61**	**0.0088**	**0.0018**	
Saturn	**24012-10-09 05:16**	**G**	**10491544.51**	**10491544.72**	**10491544.92**	**0.0268**	**0.0059**	
Neptune	**24012-10-14 10:04**	**G**	**10491549.73**	**10491549.92**	**10491550.13**	**0.0088**	**0.0037**	
Saturn	**24013-05-26 07:12**	**G**	**10491773.71**	**10491773.80**	**10491773.89**	**0.0268**	**0.0240**	
Neptune	**24013-05-27 22:48**	**G**	**10491775.29**	**10491775.45**	**10491775.63**	**0.0088**	**0.0057**	
Neptune	**24014-01-08 11:31**	**G**	**10492000.88**	**10492000.98**	**10492001.11**	**0.0088**	**0.0076**	
Jupiter	**24014-04-21 07:12**	**G**	**10492103.60**	**10492103.80**	**10492104.00**	**0.0506**	**0.0114**	
Uranus	**24018-08-18 12:00**	**G**	**10493683.87**	**10493684.00**	**10493684.15**	**0.0134**	**0.0103**	
Uranus	**24019-04-01 17:45**	**G**	**10493910.06**	**10493910.24**	**10493910.44**	**0.0134**	**0.0070**	

Uranus	24019-11-13 23:31 G	10494136.27	10494136.48	10494136.69	0.0134	0.0036
Uranus	24020-06-27 05:02 G	10494362.49	10494362.71	10494362.93	0.0134	0.0002
Uranus	24021-02-08 10:19 G	10494588.72	10494588.93	10494589.15	0.0133	0.0031
Uranus	24021-09-22 15:36 G	10494814.97	10494815.15	10494815.35	0.0133	0.0064
Uranus	24022-05-06 20:52 G	10495041.24	10495041.37	10495041.53	0.0133	0.0098
Uranus	24022-12-19 02:09 G	10495267.56	10495267.59	10495267.64	0.0133	0.0130
Saturn	24027-03-22 20:52 G	10496822.17	10496822.37	10496822.57	0.0291	0.0087
Saturn	24027-11-07 19:12 G	10497052.13	10497052.30	10497052.49	0.0292	0.0151
Pluto	24028-05-25 10:33 G	10497251.72	10497251.94	10497252.16	0.0077	0.0003
Pluto	24029-01-05 18:57 G	10497477.23	10497477.29	10497477.40	0.0077	0.0071
Jupiter	24031-11-04 09:07 G	10498509.71	10498509.88	10498510.05	0.0520	0.0274
Mars	24032-10-31 02:09 G	10498871.50	10498871.59	10498871.68	0.1861	0.1562
Mars	24037-06-14 23:02 G	10500559.33	10500559.46	10500559.59	0.1663	0.1105
Saturn	24041-09-04 09:07 G	10502101.68	10502101.88	10502102.08	0.0268	0.0096
Saturn	24042-04-21 11:16 G	10502330.77	10502330.97	10502331.17	0.0268	0.0086
Saturn	24042-12-06 13:12 G	10502560.04	10502560.05	10502560.07	0.0268	0.0267
Jupiter	24043-07-10 03:07 G	10502775.45	10502775.63	10502775.81	0.0523	0.0241
Jupiter	24049-12-27 19:55 G	10505138.14	10505138.33	10505138.53	0.0507	0.0166
Saturn	24056-10-02 02:24 G	10507608.39	10507608.60	10507608.81	0.0291	0.0058
Saturn	24057-05-20 00:57 G	10507838.37	10507838.54	10507838.70	0.0292	0.0179
Jupiter	24061-09-01 18:57 G	10509404.13	10509404.29	10509404.46	0.0504	0.0300
Uranus	24061-12-31 02:24 G	10509524.47	10509524.60	10509524.74	0.0145	0.0114
Uranus	24062-08-14 13:55 G	10509750.90	10509751.08	10509751.28	0.0145	0.0072
Uranus	24063-03-29 01:55 G	10509977.37	10509977.58	10509977.80	0.0145	0.0029
Uranus	24063-11-10 13:55 G	10510203.87	10510204.08	10510204.30	0.0145	0.0014
Uranus	24064-06-24 01:55 G	10510430.39	10510430.58	10510430.79	0.0145	0.0057
Mars	24064-10-30 20:52 G	10510559.29	10510559.37	10510559.46	0.1876	0.1609
Uranus	24065-02-05 13:55 G	10510656.94	10510657.08	10510657.25	0.0145	0.0101
Uranus	24065-09-20 02:24 G	10510883.58	10510883.60	10510883.64	0.0145	0.0144
Saturn	24070-07-31 06:14 G	10512658.72	10512658.76	10512658.81	0.0269	0.0261

Saturn 24071-03-17 08:24 G 10512887.65 10512887.85 10512888.06 0.0268 0.0080

Mars 24071-04-13 12:28 G 10512914.89 10512915.02 10512915.16 0.1677 0.1056

Saturn 24071-11-01 10:33 G 10513116.75 10513116.94 10513117.14 0.0268 0.0102

Jupiter 24079-03-17 21:50 G 10515810.21 10515810.41 10515810.61 0.0521 0.0084

Saturn 24085-08-27 04:33 G 10518164.62 10518164.69 10518164.76 0.0291 0.0273

Jupiter 24085-09-04 10:48 G 10518172.87 10518172.95 10518173.04 0.0508 0.0458

Moon 24085-12-25 02:09 G 10518284.49 10518284.59 10518284.69 0.2677 0.2015

Earth 24085-12-25 06:14 G 10518284.74 10518284.76 10518284.77 0.2673 0.2657

Saturn 24086-04-14 03:07 G 10518394.42 10518394.63 10518394.84 0.0291 0.0038

Saturn 24086-11-30 01:55 G 10518624.42 10518624.58 10518624.73 0.0292 0.0199

Jupiter 24090-11-20 12:43 G 10520075.93 10520076.03 10520076.13 0.0524 0.0452

Neptune 24092-06-10 11:45 G 10520643.92 10520643.99 10520644.10 0.0089 0.0081

Neptune 24093-01-22 00:57 G 10520869.39 10520869.54 10520869.71 0.0089 0.0061

Neptune 24093-09-04 13:55 G 10521094.90 10521095.08 10521095.29 0.0089 0.0042

Moon 24093-12-22 20:52 G 10521204.23 10521204.37 10521204.52 0.2679 0.0884

Earth 24093-12-22 21:21 G 10521204.24 10521204.39 10521204.53 0.2672 0.1160 *

Neptune 24094-04-18 03:21 G 10521320.44 10521320.64 10521320.86 0.0089 0.0022

Neptune 24094-11-29 16:33 G 10521545.98 10521546.19 10521546.42 0.0089 0.0003

Neptune 24095-07-13 05:31 G 10521771.53 10521771.73 10521771.96 0.0089 0.0018

Neptune 24096-02-23 18:43 G 10521997.09 10521997.28 10521997.49 0.0089 0.0037

Neptune 24096-10-06 07:40 G 10522222.67 10522222.82 10522223.01 0.0089 0.0057

Jupiter 24097-05-10 09:50 G 10522438.71 10522438.91 10522439.12 0.0506 0.0016

Neptune 24097-05-19 20:52 G 10522448.28 10522448.37 10522448.50 0.0089 0.0077

Saturn 24100-02-10 11:45 G 10523444.89 10523444.99 10523445.10 0.0269 0.0235

Saturn 24100-09-27 14:09 G 10523673.89 10523674.09 10523674.31 0.0268 0.0054

Saturn 24101-05-14 16:33 G 10523903.00 10523903.19 10523903.37 0.0268 0.0129

Uranus 24102-04-19 00:00 G 10524242.40 10524242.50 10524242.62 0.0134 0.0116

Uranus 24102-12-01 05:45 G 10524468.58 10524468.74 10524468.93 0.0134 0.0082

Mars 24103-04-13 09:36 G 10524601.76 10524601.90 10524602.06 0.1667 0.0835

Uranus 24103-07-15 11:31 G 10524694.78 10524694.98 10524695.19 0.0134 0.0048

Uranus 24104-02-26 17:02 G 10524921.00 10524921.21 10524921.43 0.0134 0.0015

Uranus 24104-10-09 22:33 G 10525147.23 10525147.44 10525147.66 0.0134 0.0019

Uranus 24105-05-24 04:04 G 10525373.48 10525373.67 10525373.88 0.0133 0.0053

Uranus 24106-01-05 09:21 G 10525599.73 10525599.89 10525600.06 0.0133 0.0086

Uranus 24106-08-19 14:38 G 10525826.02 10525826.11 10525826.21 0.0133 0.0119

Jupiter 24109-01-14 07:40 G 10526704.77 10526704.82 10526704.88 0.0503 0.0481

Jupiter 24114-11-24 11:02 G 10528844.82 10528844.96 10528845.10 0.0520 0.0375

Saturn 24115-03-10 11:02 G 10528950.85 10528950.96 10528951.08 0.0291 0.0243

Saturn 24115-10-26 09:21 G 10529180.68 10529180.89 10529181.11 0.0292 0.0010

Saturn 24116-06-12 07:55 G 10529410.70 10529410.83 10529410.96 0.0292 0.0229

Jupiter 24126-07-30 06:43 G 10533110.58 10533110.78 10533110.98 0.0523 0.0129

Saturn 24129-08-23 12:00 G 10534230.88 10534231.00 10534231.13 0.0269 0.0217

Saturn 24130-04-09 14:09 G 10534459.88 10534460.09 10534460.30 0.0268 0.0036

Mars 24130-08-29 01:12 G 10534601.40 10534601.55 10534601.70 0.1871 0.0997

Saturn 24130-11-24 16:04 G 10534689.00 10534689.17 10534689.35 0.0268 0.0146

Jupiter 24133-01-16 21:36 G 10535473.23 10535473.40 10535473.58 0.0507 0.0261

Mars 24137-02-08 23:02 G 10536957.36 10536957.46 10536957.57 0.1680 0.1350

Saturn 24144-09-19 11:16 G 10539736.84 10539736.97 10539737.10 0.0291 0.0224

Jupiter 24144-09-21 21:50 G 10539739.22 10539739.41 10539739.60 0.0505 0.0199

Saturn 24145-05-07 09:50 G 10539966.70 10539966.91 10539967.12 0.0291 0.0012

Uranus 24145-08-31 10:33 G 10540082.86 10540082.94 10540083.04 0.0144 0.0131

Saturn 24145-12-23 08:24 G 10540196.75 10540196.85 10540196.96 0.0292 0.0249

Uranus 24146-04-14 22:04 G 10540309.26 10540309.42 10540309.60 0.0145 0.0089

Uranus 24146-11-27 09:50 G 10540535.72 10540535.91 10540536.13 0.0145 0.0047

Uranus 24147-07-11 21:50 G 10540762.20 10540762.41 10540762.63 0.0145 0.0005

Uranus 24148-02-23 09:50 G 10540988.71 10540988.91 10540989.12 0.0145 0.0040

Uranus 24148-10-06 21:50 G 10541215.25 10541215.41 10541215.60 0.0145 0.0083

Uranus 24149-05-21 10:19 G 10541441.83 10541441.93 10541442.04 0.0145 0.0126

Saturn 24159-03-05 17:16 G 10545017.08 10545017.22 10545017.38 0.0269 0.0192

Saturn 24159-10-20 19:55 G 10545246.12 10545246.33 10545246.54 0.0268 0.0009

Saturn 24160-06-05 21:50 G 10545475.26 10545475.41 10545475.58 0.0268 0.0173

Jupiter 24162-04-06 19:12 G 10546145.11 10546145.30 10546145.50 0.0521 0.0157

Mars 24169-02-07 20:52 G 10548644.21 10548644.37 10548644.53 0.1670 0.0568

Jupiter 24173-12-10 13:55 G 10550410.94 10550411.08 10550411.24 0.0524 0.0355

Neptune 24173-12-16 01:40 G 10550416.45 10550416.57 10550416.72 0.0089 0.0070

Saturn 24174-04-01 18:43 G 10550523.13 10550523.28 10550523.45 0.0291 0.0193

Neptune 24174-07-29 14:38 G 10550641.94 10550642.11 10550642.30 0.0088 0.0051

Saturn 24174-11-17 17:16 G 10550753.01 10550753.22 10550753.43 0.0292 0.0045

Neptune 24175-03-12 03:21 G 10550867.45 10550867.64 10550867.86 0.0088 0.0032

Saturn 24175-07-05 15:50 G 10550983.11 10550983.16 10550983.22 0.0292 0.0280

Neptune 24175-10-23 16:48 G 10551092.98 10551093.20 10551093.42 0.0088 0.0012

Neptune 24176-06-05 05:31 G 10551318.52 10551318.73 10551318.95 0.0088 0.0008

Neptune 24177-01-16 18:00 G 10551544.06 10551544.25 10551544.48 0.0088 0.0028

Neptune 24177-08-30 06:57 G 10551769.61 10551769.79 10551769.99 0.0088 0.0046

Neptune 24178-04-12 19:40 G 10551995.19 10551995.32 10551995.48 0.0088 0.0066

Neptune 24178-11-24 08:38 G 10552220.81 10552220.86 10552220.93 0.0088 0.0085

Jupiter 24180-05-30 09:21 G 10552773.69 10552773.89 10552774.09 0.0506 0.0071

Uranus 24185-12-17 12:14 G 10554800.95 10554801.01 10554801.08 0.0134 0.0127

Uranus 24186-07-31 17:45 G 10555027.11 10555027.24 10555027.42 0.0134 0.0094

Uranus 24187-03-14 23:45 G 10555253.31 10555253.49 10555253.69 0.0134 0.0060

Uranus 24187-10-27 05:31 G 10555479.52 10555479.73 10555479.95 0.0134 0.0027

Uranus 24188-06-09 11:16 G 10555705.75 10555705.97 10555706.19 0.0134 0.0007

Saturn 24188-09-14 18:28 G 10555803.11 10555803.27 10555803.43 0.0268 0.0172

Uranus 24189-01-21 16:33 G 10555931.99 10555932.19 10555932.40 0.0133 0.0041

Pluto 24189-04-09 18:43 G 10556010.18 10556010.28 10556010.44 0.0066 0.0053

Saturn 24189-05-01 20:38 G 10556032.15 10556032.36 10556032.57 0.0268 0.0010

Uranus 24189-09-04 21:50 G 10556158.24 10556158.41 10556158.60 0.0133 0.0074

Pluto 24189-11-20 23:45 G 10556235.28 10556235.49 10556235.72 0.0066 0.0007

Saturn 24189-12-16 22:19 G 10556261.29 10556261.43 10556261.59 0.0268 0.0191

Uranus 24190-04-19 03:07 G 10556384.52 10556384.63 10556384.78 0.0133 0.0108

Pluto 24190-07-04 04:33 G 10556460.52 10556460.69 10556460.86 0.0067 0.0041

Jupiter 24192-02-03 08:38 G 10557039.73 10557039.86 10557039.99 0.0504 0.0392

Mars 24196-06-25 05:31 G 10558643.56 10558643.73 10558643.91 0.1867 0.0407

Jupiter 24197-12-13 13:26 G 10559179.99 10559180.06 10559180.14 0.0520 0.0477

Mars 24202-12-08 10:04 G 10560999.88 10560999.92 10560999.96 0.1684 0.1634

Saturn 24203-10-13 18:57 G 10561309.13 10561309.29 10561309.47 0.0291 0.0173

Saturn 24204-05-30 17:31 G 10561539.03 10561539.23 10561539.44 0.0291 0.0064

Jupiter 24209-08-19 04:48 G 10563445.50 10563445.70 10563445.90 0.0522 0.0053

Jupiter 24216-02-07 00:00 G 10565808.36 10565808.50 10565808.65 0.0507 0.0361

Saturn 24218-03-28 23:45 G 10566589.32 10566589.49 10566589.67 0.0269 0.0147

Saturn 24218-11-13 02:09 G 10566818.38 10566818.59 10566818.80 0.0268 0.0036

Saturn 24219-06-30 04:19 G 10567047.56 10567047.68 10567047.80 0.0268 0.0217

Earth 24223-06-26 00:28 G 10568504.36 10568504.52 10568504.68 0.2659 0.0019

Moon 24223-06-26 06:28 G 10568504.61 10568504.77 10568504.92 0.2660 0.0454 *

Jupiter 24227-10-12 21:21 G 10570074.19 10570074.39 10570074.59 0.0505 0.0116

Uranus 24229-12-14 07:55 G 10570867.69 10570867.83 10570867.99 0.0144 0.0104

Uranus 24230-07-28 19:40 G 10571094.13 10571094.32 10571094.52 0.0145 0.0062

Uranus 24231-03-12 07:40 G 10571320.60 10571320.82 10571321.04 0.0145 0.0019

Uranus 24231-10-24 19:40 G 10571547.11 10571547.32 10571547.54 0.0145 0.0024

Uranus 24232-06-07 07:40 G 10571773.64 10571773.82 10571774.02 0.0145 0.0067

Uranus 24233-01-19 19:40 G 10572000.20 10572000.32 10572000.48 0.0145 0.0111

Saturn 24233-04-25 03:50 G 10572095.48 10572095.66 10572095.85 0.0291 0.0138

Saturn 24233-12-11 02:09 G 10572325.40 10572325.59 10572325.80 0.0292 0.0099

Mars 24234-12-07 07:55 G 10572686.65 10572686.83 10572687.00 0.1673 0.0299

Jupiter 24245-04-26 21:36 G 10576480.23 10576480.40 10576480.58 0.0521 0.0261

Saturn 24247-10-09 01:55 G 10577375.40 10577375.58 10577375.77 0.0268 0.0126

Saturn 24248-05-25 04:04 G 10577604.46 10577604.67 10577604.88 0.0268 0.0056

Saturn 24249-01-09 05:45 G 10577833.65 10577833.74 10577833.85 0.0268 0.0237

Jupiter 24256-12-30 16:19 G 10580746.00 10580746.18 10580746.36 0.0523 0.0253

Neptune 24257-04-27 08:09 G 10580863.73 10580863.84 10580863.98 0.0089 0.0072

Neptune 24257-12-08 21:07 G 10581089.22 10581089.38 10581089.58 0.0089 0.0053

Neptune 24258-07-22 10:33 G 10581314.74 10581314.94 10581315.15 0.0089 0.0033

Neptune 24259-03-04 23:31 G 10581540.27 10581540.48 10581540.71 0.0089 0.0014

Neptune 24259-10-16 12:43 G 10581765.82 10581766.03 10581766.26 0.0089 0.0007

Neptune 24260-05-29 01:55 G 10581991.37 10581991.58 10581991.79 0.0089 0.0026

Neptune 24261-01-09 14:38 G 10582216.94 10582217.11 10582217.32 0.0089 0.0046

Neptune 24261-08-23 04:04 G 10582442.53 10582442.67 10582442.83 0.0089 0.0065

Neptune 24262-04-05 17:02 G 10582668.17 10582668.21 10582668.29 0.0089 0.0085

Mars 24262-04-23 09:50 G 10582685.74 10582685.91 10582686.09 0.1862 0.0195

Saturn 24262-11-05 04:48 G 10582881.51 10582881.70 10582881.89 0.0291 0.0117

Jupiter 24263-06-20 11:02 G 10583108.77 10583108.96 10583109.15 0.0506 0.0166

Saturn 24263-06-23 03:07 G 10583111.44 10583111.63 10583111.83 0.0291 0.0120

Uranus 24270-04-01 06:14 G 10585585.64 10585585.76 10585585.91 0.0134 0.0106

Uranus 24270-11-13 12:28 G 10585811.83 10585812.02 10585812.20 0.0134 0.0071

Uranus 24271-06-27 18:00 G 10586038.05 10586038.25 10586038.46 0.0134 0.0038

Uranus 24272-02-08 23:45 G 10586264.27 10586264.49 10586264.71 0.0134 0.0004

Uranus 24272-09-22 05:02 G 10586490.51 10586490.71 10586490.93 0.0134 0.0030

Uranus 24273-05-06 10:48 G 10586716.76 10586716.95 10586717.15 0.0133 0.0063

Uranus 24273-12-18 16:04 G 10586943.03 10586943.17 10586943.33 0.0133 0.0096

Uranus 24274-08-01 21:21 G 10587169.35 10587169.39 10587169.46 0.0133 0.0128

Jupiter 24275-02-23 10:19 G 10587374.77 10587374.93 10587375.10 0.0504 0.0298

Pluto 24276-04-29 02:52 G 10587805.57 10587805.62 10587805.72 0.0078 0.0073

Pluto 24276-12-10 12:28 G 10588030.80 10588031.02 10588031.25 0.0077 0.0004

Saturn 24277-04-20 07:12 G 10588161.60 10588161.80 10588162.00 0.0269 0.0100

Saturn 24277-12-05 09:21 G 10588390.70 10588390.89 10588391.10 0.0268 0.0084

Saturn 24278-07-22 11:31 G 10588619.95 10588619.98 10588620.02 0.0268 0.0264

Saturn 24292-05-17 14:52 G 10593667.91 10593668.12 10593668.32 0.0291 0.0081

Jupiter 24292-09-07 04:33 G 10593780.49 10593780.69 10593780.89 0.0522 0.0035

Saturn 24293-01-02 13:12 G 10593897.87 10593898.05 10593898.23 0.0292 0.0156

Jupiter 24299-02-25 21:50 G 10596143.31 10596143.41 10596143.52 0.0507 0.0434

Mars 24300-10-04 18:28 G 10596729.10 10596729.27 10596729.44 0.1676 0.0017

Jupiter 24304-05-13 23:16 G 10598046.39 10598046.47 10598046.55 0.0525 0.0480

Saturn 24306-03-17 07:40 G 10598718.78 10598718.82 10598718.88 0.0269 0.0260

Saturn 24306-11-01 10:19 G 10598947.73 10598947.93 10598948.14 0.0268 0.0078

Saturn 24307-06-18 12:28 G 10599176.83 10599177.02 10599177.22 0.0268 0.0105

Jupiter 24310-11-01 20:24 G 10600409.15 10600409.35 10600409.56 0.0505 0.0039

Uranus 24313-08-14 15:50 G 10601426.06 10601426.16 10601426.30 0.0144 0.0121

Uranus 24314-03-29 03:36 G 10601652.48 10601652.65 10601652.85 0.0144 0.0079

Uranus 24314-11-10 15:50 G 10601878.95 10601879.16 10601879.37 0.0145 0.0036

Uranus 24315-06-25 03:36 G 10602105.44 10602105.65 10602105.87 0.0145 0.0008

Uranus 24316-02-06 15:36 G 10602331.95 10602332.15 10602332.36 0.0145 0.0050

Uranus 24316-09-20 03:36 G 10602558.50 10602558.65 10602558.83 0.0145 0.0093

Uranus 24317-05-04 16:04 G 10602785.10 10602785.17 10602785.25 0.0145 0.0136

Saturn 24321-11-28 16:19 G 10604453.97 10604454.18 10604454.39 0.0291 0.0059

Jupiter 24322-07-07 20:52 G 10604675.34 10604675.37 10604675.42 0.0503 0.0492

Saturn 24322-07-16 14:38 G 10604683.95 10604684.11 10604684.28 0.0291 0.0178

Mars 24328-02-19 15:07 G 10606727.97 10606728.13 10606728.29 0.1858 0.0746

Jupiter 24328-05-16 18:57 G 10606815.13 10606815.29 10606815.45 0.0520 0.0331

Earth 24328-12-28 06:57 G 10607040.73 10607040.79 10607040.84 0.2672 0.2478

Saturn 24335-09-27 12:57 G 10609504.95 10609505.04 10609505.15 0.0269 0.0234

Saturn 24336-05-13 15:50 G 10609733.95 10609734.16 10609734.37 0.0269 0.0051

Earth 24336-12-25 22:04 G 10609960.28 10609960.42 10609960.55 0.2672 0.1328

Moon 24336-12-26 00:28 G 10609960.38 10609960.52 10609960.66 0.2666 0.1344 *

Saturn 24336-12-28 18:00 G 10609963.07 10609963.25 10609963.44 0.0268 0.0132

Neptune 24338-03-21 09:50 G 10610410.82 10610410.91 10610411.00 0.0089 0.0080

Neptune 24338-11-01 22:33 G 10610636.29 10610636.44 10610636.61 0.0089 0.0061

Neptune 24339-06-15 11:31 G 10610861.80 10610861.98 10610862.19 0.0088 0.0042

Jupiter 24340-01-20 12:00 G 10611080.81 10611081.00 10611081.19 0.0523 0.0191

Neptune 24340-01-27 00:28 G 10611087.31 10611087.52 10611087.74 0.0088 0.0022

Neptune 24340-09-08 13:26 G 10611312.85 10611313.06 10611313.29 0.0088 0.0004

Neptune 24341-04-22 02:24 G 10611538.39 10611538.60 10611538.82 0.0088 0.0017

Neptune 24341-12-03 15:07 G 10611763.94 10611764.13 10611764.34 0.0088 0.0036

Neptune 24342-07-17 03:50 G 10611989.51 10611989.66 10611989.85 0.0088 0.0056

Neptune 24343-02-27 16:48 G 10612215.09 10612215.20 10612215.33 0.0088 0.0075

Jupiter 24346-07-10 08:38 G 10613443.69 10613443.86 10613444.04 0.0506 0.0239

Saturn 24350-10-24 05:16 G 10615010.63 10615010.72 10615010.83 0.0291 0.0255

Saturn 24351-06-11 03:36 G 10615240.44 10615240.65 10615240.86 0.0291 0.0020

Saturn 24352-01-27 01:55 G 10615470.44 10615470.58 10615470.72 0.0292 0.0217

Uranus 24353-11-30 18:28 G 10616144.17 10616144.27 10616144.38 0.0134 0.0117

Uranus 24354-07-15 00:28 G 10616370.35 10616370.52 10616370.69 0.0134 0.0084

Uranus 24355-02-26 06:00 G 10616596.56 10616596.75 10616596.96 0.0134 0.0050

Uranus 24355-10-10 11:45 G 10616822.78 10616822.99 10616823.22 0.0134 0.0017

Uranus 24356-05-23 17:45 G 10617049.02 10617049.24 10617049.46 0.0134 0.0017

Uranus 24357-01-04 23:16 G 10617275.27 10617275.47 10617275.67 0.0133 0.0051

Uranus 24357-08-19 04:48 G 10617501.53 10617501.70 10617501.87 0.0133 0.0084

Jupiter 24358-03-15 07:12 G 10617709.62 10617709.80 10617709.99 0.0504 0.0230

Uranus 24358-04-02 10:04 G 10617727.82 10617727.92 10617728.03 0.0133 0.0117

Saturn 24365-04-08 17:31 G 10620291.11 10620291.23 10620291.37 0.0269 0.0210

Saturn 24365-11-23 20:09 G 10620520.13 10620520.34 10620520.55 0.0268 0.0026

Saturn 24366-07-10 22:04 G 10620749.26 10620749.42 10620749.60 0.0268 0.0156

Mars 24366-08-02 05:31 G 10620771.56 10620771.73 10620771.90 0.1679 0.0263

Jupiter 24375-09-28 05:02 G 10624115.51 10624115.71 10624115.91 0.0522 0.0126

Saturn 24380-05-05 07:40 G 10625796.71 10625796.82 10625796.96 0.0290 0.0232

Saturn 24380-12-21 06:14 G 10626026.54 10626026.76 10626026.97 0.0291 0.0007

Saturn 24381-08-08 04:33 G 10626256.57 10626256.69 10626256.81 0.0291 0.0241

Jupiter 24387-06-02 20:24 G 10628381.22 10628381.35 10628381.47 0.0524 0.0408

Jupiter 24393-11-20 20:24 G 10630744.15 10630744.35 10630744.55 0.0506 0.0047

Mars 24393-12-16 19:55 G 10630770.21 10630770.33 10630770.45 0.1854 0.1318

Saturn 24394-10-19 22:33 G 10631077.29 10631077.44 10631077.60 0.0269 0.0185

Saturn 24395-06-06 01:12 G 10631306.34 10631306.55 10631306.77 0.0269 0.0005

Saturn 24396-01-21 03:36 G 10631535.50 10631535.65 10631535.81 0.0268 0.0182

Uranus 24397-04-14 00:14 G 10631984.46 10631984.51 10631984.59 0.0144 0.0136

Uranus 24397-11-26 12:00 G 10632210.85 10632211.00 10632211.17 0.0144 0.0095

Uranus 24398-07-10 23:45 G 10632437.29 10632437.49 10632437.70 0.0144 0.0053

Mars 24398-08-01 03:07 G 10632458.60 10632458.63 10632458.65 0.1668 0.1643

Uranus 24399-02-22 11:45 G 10632663.77 10632663.99 10632664.21 0.0145 0.0010

Uranus 24399-10-06 23:45 G 10632890.28 10632890.49 10632890.71 0.0145 0.0033

Uranus 24400-05-20 11:45 G 10633116.81 10633116.99 10633117.18 0.0145 0.0076

Uranus 24401-01-02 00:00 G 10633343.38 10633343.50 10633343.63 0.0145 0.0119

Jupiter 24405-07-26 17:45 G 10635010.14 10635010.24 10635010.36 0.0503 0.0423

Saturn 24409-11-15 19:55 G 10636583.17 10636583.33 10636583.49 0.0291 0.0192

Saturn 24410-07-03 18:00 G 10636813.04 10636813.25 10636813.46 0.0292 0.0044

Saturn 24411-02-18 16:33 G 10637043.13 10637043.19 10637043.24 0.0292 0.0280

Jupiter 24411-06-05 16:19 G 10637150.06 10637150.18 10637150.31 0.0521 0.0405

Neptune 24421-07-30 15:36 G 10640858.10 10640858.15 10640858.25 0.0089 0.0083

Neptune 24422-03-13 05:02 G 10641083.57 10641083.71 10641083.87 0.0089 0.0063

Neptune 24422-10-24 18:00 G 10641309.07 10641309.25 10641309.46 0.0089 0.0044

Jupiter 24423-02-08 11:02 G 10641415.76 10641415.96 10641416.16 0.0523 0.0105

Neptune 24423-06-07 07:12 G 10641534.60 10641534.80 10641535.02 0.0089 0.0024

Neptune 24424-01-18 20:24 G 10641760.13 10641760.35 10641760.57 0.0089 0.0005

Saturn 24424-05-01 04:19 G 10641863.52 10641863.68 10641863.86 0.0269 0.0158

Neptune 24424-08-31 09:21 G 10641985.68 10641985.89 10641986.11 0.0089 0.0015

Saturn 24424-12-16 06:57 G 10642092.58 10642092.79 10642093.00 0.0268 0.0026

Neptune 24425-04-13 22:19 G 10642211.24 10642211.43 10642211.65 0.0089 0.0035

Saturn 24425-08-02 08:52 G 10642321.74 10642321.87 10642322.01 0.0268 0.0208

Neptune 24425-11-25 11:31 G 10642436.82 10642436.98 10642437.17 0.0089 0.0054

Mars 24425-12-16 13:55 G 10642458.04 10642458.08 10642458.12 0.1869 0.1818

Neptune 24426-07-09 00:14 G 10642662.41 10642662.51 10642662.66 0.0089 0.0074

Jupiter 24429-07-29 05:45 G 10643778.58 10643778.74 10643778.90 0.0507 0.0307

Mars 24432-05-29 16:04 G 10644814.00 10644814.17 10644814.33 0.1682 0.0554

Uranus 24437-07-31 06:14 G 10646702.72 10646702.76 10646702.83 0.0134 0.0129

Pluto 24437-10-25 22:19 G 10646789.27 10646789.43 10646789.60 0.0066 0.0044

Uranus 24438-03-14 12:28 G 10646928.87 10646929.02 10646929.18 0.0134 0.0095

Pluto 24438-06-08 02:52 G 10647014.40 10647014.62 10647014.84 0.0066 0.0003

Uranus 24438-10-26 18:14 G 10647155.08 10647155.26 10647155.46 0.0134 0.0062

Pluto 24439-01-19 06:57 G 10647239.67 10647239.79 10647239.96 0.0067 0.0051

Saturn 24439-05-28 23:02 G 10647369.30 10647369.46 10647369.64 0.0291 0.0167

Uranus 24439-06-10 00:14 G 10647381.30 10647381.51 10647381.73 0.0134 0.0028

Saturn 24440-01-13 21:21 G 10647599.19 10647599.39 10647599.60 0.0291 0.0070

Uranus 24440-01-22 06:00 G 10647607.53 10647607.75 10647607.97 0.0134 0.0006

Uranus 24440-09-04 11:16 G 10647833.77 10647833.97 10647834.19 0.0133 0.0040

Jupiter 24441-04-03 05:31 G 10648044.54 10648044.73 10648044.93 0.0504 0.0156

Uranus 24441-04-18 17:02 G 10648060.03 10648060.21 10648060.40 0.0133 0.0072

Uranus 24441-11-30 22:19 G 10648286.31 10648286.43 10648286.58 0.0133 0.0106

Saturn 24453-11-11 08:52 G 10652649.69 10652649.87 10652650.06 0.0269 0.0133

Saturn 24454-06-28 11:31 G 10652878.77 10652878.98 10652879.19 0.0269 0.0051

Saturn 24455-02-12 13:55 G 10653107.98 10653108.08 10653108.18 0.0269 0.0233

Jupiter 24458-10-17 00:00 G 10654450.31 10654450.50 10654450.69 0.0521 0.0183

Mars 24464-05-28 14:09 G 10656501.00 10656501.09 10656501.19 0.1672 0.1383

Moon 24466-06-26 20:09 G 10657260.19 10657260.34 10657260.50 0.2658 0.0673

Earth 24466-06-27 01:55 G 10657260.42 10657260.58 10657260.74 0.2660 0.0079 *

Saturn 24468-12-08 12:00 G 10658155.82 10658156.00 10658156.20 0.0291 0.0126

Saturn 24469-07-26 10:19 G 10658385.74 10658385.93 10658386.13 0.0292 0.0111

Jupiter 24470-06-21 16:33 G 10658716.04 10658716.19 10658716.35 0.0524 0.0340

Jupiter 24476-12-09 15:36 G 10661078.96 10661079.15 10661079.36 0.0505 0.0108

Uranus 24481-07-26 18:28 G 10662769.15 10662769.27 10662769.42 0.0144 0.0113

Uranus 24482-03-10 06:14 G 10662995.58 10662995.76 10662995.96 0.0144 0.0071

Uranus 24482-10-22 18:14 G 10663222.05 10663222.26 10663222.48 0.0144 0.0029

Saturn 24483-05-24 15:36 G 10663435.96 10663436.15 10663436.35 0.0269 0.0105

Uranus 24483-06-06 06:14 G 10663448.54 10663448.76 10663448.98 0.0145 0.0014

Saturn 24484-01-08 18:00 G 10663665.05 10663665.25 10663665.46 0.0268 0.0078

Uranus 24484-01-18 18:00 G 10663675.06 10663675.25 10663675.46 0.0145 0.0057

Saturn 24484-08-24 19:55 G 10663894.30 10663894.33 10663894.39 0.0268 0.0260

Uranus 24484-09-01 06:00 G 10663901.60 10663901.75 10663901.92 0.0145 0.0099

Uranus 24485-04-15 18:28 G 10664128.23 10664128.27 10664128.31 0.0145 0.0142

Jupiter 24488-08-14 14:09 G 10665344.95 10665345.09 10665345.23 0.0503 0.0360

Mars 24491-10-13 18:14 G 10666500.13 10666500.26 10666500.39 0.1864 0.1221

Jupiter 24494-06-24 15:21 G 10667485.08 10667485.14 10667485.21 0.0520 0.0488

Mars 24498-03-27 02:38 G 10668856.46 10668856.61 10668856.76 0.1686 0.0846

Saturn 24498-06-20 16:04 G 10668941.97 10668942.17 10668942.37 0.0291 0.0099

Saturn 24499-02-05 14:09 G 10669171.91 10669172.09 10669172.28 0.0291 0.0138

Neptune 24503-02-04 06:28 G 10670630.65 10670630.77 10670630.91 0.0089 0.0071

Neptune 24503-09-17 19:26 G 10670856.14 10670856.31 10670856.50 0.0089 0.0052

Neptune 24504-04-30 08:09 G 10671081.65 10671081.84 10671082.06 0.0089 0.0033

Neptune 24504-12-11 21:21 G 10671307.18 10671307.39 10671307.61 0.0089 0.0013

Neptune 24505-07-25 10:19 G 10671532.71 10671532.93 10671533.15 0.0088 0.0006

Jupiter 24506-02-28 07:55 G 10671750.63 10671750.83 10671751.03 0.0522 0.0034

Neptune 24506-03-07 23:02 G 10671758.25 10671758.46 10671758.67 0.0088 0.0026

Neptune 24506-10-19 11:45 G 10671983.82 10671983.99 10671984.20 0.0088 0.0046

Neptune 24507-06-02 00:43 G 10672209.39 10672209.53 10672209.69 0.0088 0.0064

Neptune 24508-01-13 13:26 G 10672435.01 10672435.06 10672435.15 0.0088 0.0084

Saturn 24512-04-19 16:48 G 10673993.17 10673993.20 10673993.24 0.0270 0.0265

Jupiter 24512-08-18 04:04 G 10674113.54 10674113.67 10674113.80 0.0507 0.0384

Saturn 24512-12-04 19:40 G 10674222.12 10674222.32 10674222.52 0.0269 0.0081

Saturn 24513-07-21 22:19 G 10674451.23 10674451.43 10674451.62 0.0269 0.0103

Uranus 24521-11-12 23:45 G 10677487.38 10677487.49 10677487.63 0.0134 0.0108

Uranus 24522-06-27 05:45 G 10677713.57 10677713.74 10677713.93 0.0134 0.0075

Uranus 24523-02-08 11:45 G 10677939.79 10677939.99 10677940.20 0.0134 0.0041

Uranus 24523-09-22 17:45 G 10678166.02 10678166.24 10678166.45 0.0134 0.0007

Jupiter 24524-04-23 01:40 G 10678379.37 10678379.57 10678379.77 0.0504 0.0091

Uranus 24524-05-05 23:31 G 10678392.27 10678392.48 10678392.69 0.0134 0.0027

Pluto 24524-11-14 06:14 G 10678584.65 10678584.76 10678584.92 0.0078 0.0061

Uranus 24524-12-18 05:02 G 10678618.52 10678618.71 10678618.91 0.0133 0.0060

Pluto 24525-06-27 15:50 G 10678809.95 10678810.16 10678810.39 0.0077 0.0015

Uranus 24525-08-01 10:33 G 10678844.79 10678844.94 10678845.10 0.0133 0.0093

Uranus 24526-03-15 15:50 G 10679071.10 10679071.16 10679071.24 0.0133 0.0126

Saturn 24528-01-02 04:33 G 10679728.49 10679728.69 10679728.90 0.0291 0.0059

Saturn 24528-08-19 02:52 G 10679958.46 10679958.62 10679958.80 0.0292 0.0179

Mars 24530-03-27 00:28 G 10680543.39 10680543.52 10680543.65 0.1675 0.1097

Saturn 24541-10-31 00:14 G 10684779.42 10684779.51 10684779.62 0.0269 0.0236

Jupiter 24541-11-05 21:21 G 10684785.21 10684785.39 10684785.56 0.0522 0.0259

Saturn 24542-06-17 03:07 G 10685008.42 10685008.63 10685008.84 0.0268 0.0052

Saturn 24543-02-01 05:16 G 10685237.54 10685237.72 10685237.91 0.0268 0.0131

Jupiter 24553-07-11 15:36 G 10689050.97 10689051.15 10689051.33 0.0524 0.0257

Saturn 24556-11-26 11:16 G 10690284.90 10690284.97 10690285.07 0.0290 0.0266

Saturn 24557-07-14 09:36 G 10690514.69 10690514.90 10690515.11 0.0291 0.0031

Mars 24557-08-10 22:33 G 10690542.28 10690542.44 10690542.61 0.1860 0.0621

Saturn 24558-03-01 07:40 G 10690744.68 10690744.82 10690744.97 0.0291 0.0207

Jupiter 24559-12-30 12:43 G 10691413.84 10691414.03 10691414.22 0.0506 0.0176

Mars 24564-01-23 12:43 G 10692898.91 10692899.03 10692899.16 0.1689 0.1155

Uranus 24565-03-27 01:55 G 10693327.51 10693327.58 10693327.69 0.0144 0.0130

Uranus 24565-11-08 13:55 G 10693553.91 10693554.08 10693554.26 0.0144 0.0088

Uranus 24566-06-23 01:26 G 10693780.37 10693780.56 10693780.78 0.0144 0.0047

Uranus 24567-02-04 13:26 G 10694006.84 10694007.06 10694007.28 0.0145 0.0004

Uranus 24567-09-19 01:12 G 10694233.35 10694233.55 10694233.77 0.0145 0.0039

Uranus 24568-05-02 13:12 G 10694459.88 10694460.05 10694460.24 0.0145 0.0081

Uranus 24568-12-15 01:26 G 10694686.45 10694686.56 10694686.68 0.0145 0.0124

Saturn 24571-05-13 03:36 G 10695565.52 10695565.65 10695565.78 0.0270 0.0214

Jupiter 24571-09-04 11:45 G 10695679.83 10695679.99 10695680.16 0.0504 0.0288

Saturn 24571-12-28 06:14 G 10695794.56 10695794.76 10695794.98 0.0269 0.0031

Moon 24571-12-30 02:24 G 10695796.50 10695796.60 10695796.71 0.2671 0.2003

Earth 24571-12-30 07:55 G 10695796.76 10695796.83 10695796.91 0.2671 0.2331

Saturn 24572-08-13 08:38 G 10696023.69 10696023.86 10696024.04 0.0269 0.0154

Moon 24579-12-27 19:12 G 10698716.19 10698716.30 10698716.41 0.2675 0.1769

Earth 24579-12-27 23:16 G 10698716.34 10698716.47 10698716.60 0.2671 0.1451 *

Saturn 24586-06-08 23:02 G 10701071.34 10701071.46 10701071.60 0.0291 0.0227

Neptune 24586-06-15 12:57 G 10701077.93 10701078.04 10701078.17 0.0089 0.0073

Saturn 24587-01-24 21:21 G 10701301.18 10701301.39 10701301.60 0.0291 0.0009

Neptune 24587-01-27 01:55 G 10701303.42 10701303.58 10701303.77 0.0089 0.0054

Neptune 24587-09-09 15:21 G 10701528.93 10701529.14 10701529.34 0.0089 0.0034

Saturn 24587-09-11 19:40 G 10701531.22 10701531.32 10701531.44 0.0292 0.0246

Neptune 24588-04-22 04:19 G 10701754.47 10701754.68 10701754.91 0.0089 0.0015

Neptune 24588-12-03 17:31 G 10701980.01 10701980.23 10701980.45 0.0089 0.0005

Jupiter 24589-03-19 03:21 G 10702085.44 10702085.64 10702085.84 0.0523 0.0029

Neptune 24589-07-17 06:14 G 10702205.56 10702205.76 10702205.99 0.0089 0.0025

Neptune 24590-02-27 19:26 G 10702431.13 10702431.31 10702431.51 0.0089 0.0044

Neptune 24590-10-11 08:38 G 10702656.71 10702656.86 10702657.02 0.0089 0.0063

Neptune 24591-05-24 21:21 G 10702882.34 10702882.39 10702882.49 0.0089 0.0083

Jupiter 24595-09-06 23:31 G 10704448.39 10704448.48 10704448.58 0.0507 0.0444

Mars 24596-01-22 11:16 G 10704585.82 10704585.97 10704586.12 0.1678 0.0820

Jupiter 24600-11-22 20:52 G 10706351.30 10706351.37 10706351.44 0.0526 0.0494

Saturn 24600-11-23 11:16 G 10706351.82 10706351.97 10706352.13 0.0269 0.0184

Saturn 24601-07-10 13:55 G 10706580.87 10706581.08 10706581.29 0.0268 0.0001

Saturn 24602-02-24 16:04 G 10706810.02 10706810.17 10706810.33 0.0268 0.0182

Uranus 24605-07-14 11:02 G 10708045.88 10708045.96 10708046.07 0.0134 0.0121

Uranus 24606-02-25 17:31 G 10708272.06 10708272.23 10708272.39 0.0134 0.0087

Uranus 24606-10-09 23:16 G 10708498.28 10708498.47 10708498.68 0.0134 0.0053

Jupiter 24607-05-13 21:21 G 10708714.19 10708714.39 10708714.60 0.0504 0.0032

Uranus 24607-05-24 05:31 G 10708724.51 10708724.73 10708724.94 0.0134 0.0019

Uranus 24608-01-05 11:16 G 10708950.75 10708950.97 10708951.19 0.0134 0.0014

Uranus 24608-08-18 16:48 G 10709177.00 10709177.20 10709177.41 0.0134 0.0048

Uranus 24609-04-01 22:33 G 10709403.27 10709403.44 10709403.61 0.0134 0.0081

Uranus 24609-11-14 03:50 G 10709629.56 10709629.66 10709629.78 0.0133 0.0114

Saturn 24615-12-21 03:50 G 10711857.52 10711857.66 10711857.83 0.0291 0.0200

Saturn 24616-08-07 02:09 G 10712087.38 10712087.59 10712087.81 0.0291 0.0038

Saturn 24617-03-25 00:43 G 10712317.46 10712317.53 10712317.60 0.0291 0.0274

Jupiter 24619-01-16 21:21 G 10712980.34 10712980.39 10712980.44 0.0502 0.0487

Mars 24623-06-09 03:36 G 10714584.47 10714584.65 10714584.82 0.1855 0.0057

Jupiter 24624-11-25 19:12 G 10715120.15 10715120.30 10715120.46 0.0521 0.0336

Mars 24629-11-20 23:16 G 10716941.39 10716941.47 10716941.56 0.1693 0.1455

Saturn 24630-06-05 13:40 G 10717137.91 10717138.07 10717138.24 0.0269 0.0164

Saturn 24631-01-20 16:19 G 10717366.97 10717367.18 10717367.39 0.0269 0.0021

Saturn 24631-09-06 18:28 G 10717596.14 10717596.27 10717596.42 0.0269 0.0204

Jupiter 24636-07-31 12:14 G 10719385.82 10719386.01 10719386.20 0.0524 0.0186

Jupiter 24643-01-19 09:21 G 10721748.71 10721748.89 10721749.07 0.0506 0.0246

Saturn 24645-07-02 14:38 G 10722643.94 10722644.11 10722644.29 0.0291 0.0163

Saturn 24646-02-17 12:57 G 10722873.84 10722874.04 10722874.25 0.0292 0.0075

Uranus 24649-07-09 21:36 G 10724112.27 10724112.40 10724112.56 0.0144 0.0105

Uranus 24650-02-21 09:21 G 10724338.70 10724338.89 10724339.09 0.0144 0.0064

Uranus 24650-10-05 21:07 G 10724565.16 10724565.38 10724565.59 0.0144 0.0022

Uranus 24651-05-20 08:52 G 10724791.65 10724791.87 10724792.08 0.0145 0.0020

Uranus 24652-01-01 20:24 G 10725018.17 10725018.35 10725018.56 0.0145 0.0063

Uranus 24652-08-15 08:24 G 10725244.71 10725244.85 10725245.01 0.0145 0.0105

Jupiter 24654-09-24 08:24 G 10726014.66 10726014.85 10726015.03 0.0503 0.0221

Saturn 24659-12-16 21:36 G 10727924.22 10727924.40 10727924.59 0.0269 0.0133

Saturn 24660-08-02 00:00 G 10728153.29 10728153.50 10728153.71 0.0268 0.0050

Saturn 24661-03-19 01:55 G 10728382.48 10728382.58 10728382.69 0.0268 0.0232

Mars 24661-11-19 21:50 G 10728628.25 10728628.41 10728628.58 0.1681 0.0537

Neptune 24667-05-09 14:52 G 10730625.04 10730625.12 10730625.22 0.0089 0.0081

Neptune 24667-12-21 03:36 G 10730850.51 10730850.65 10730850.82 0.0089 0.0062

Neptune 24668-08-02 16:19 G 10731076.01 10731076.18 10731076.39 0.0089 0.0043

Neptune 24669-03-16 05:45 G 10731301.52 10731301.74 10731301.95 0.0089 0.0023

Neptune 24669-10-27 18:43 G 10731527.06 10731527.28 10731527.50 0.0089 0.0004

Neptune 24670-06-10 07:26 G 10731752.60 10731752.81 10731753.03 0.0089 0.0016

Neptune 24671-01-21 20:24 G 10731978.15 10731978.35 10731978.55 0.0088 0.0035

Neptune 24671-09-04 08:52 G 10732203.71 10732203.87 10732204.06 0.0088 0.0055

Jupiter 24672-04-08 02:52 G 10732420.42 10732420.62 10732420.82 0.0523 0.0115

Neptune 24672-04-16 21:50 G 10732429.30 10732429.41 10732429.54 0.0088 0.0074

Saturn 24675-01-12 19:40 G 10733430.14 10733430.32 10733430.51 0.0291 0.0134

Saturn 24675-08-30 18:00 G 10733660.05 10733660.25 10733660.45 0.0291 0.0103

Jupiter 24683-12-12 20:09 G 10736686.22 10736686.34 10736686.47 0.0525 0.0406

Pluto 24686-05-12 23:45 G 10737568.32 10737568.49 10737568.67 0.0066 0.0040

Pluto 24686-12-24 04:33 G 10737793.47 10737793.69 10737793.91 0.0066 0.0006

Pluto 24687-08-06 08:52 G 10738018.76 10738018.87 10738019.01 0.0067 0.0054

Uranus 24689-03-13 21:50 G 10738604.40 10738604.41 10738604.44 0.0135 0.0134

Mars 24689-04-05 08:09 G 10738626.67 10738626.84 10738627.01 0.1850 0.0528

Saturn 24689-06-27 23:02 G 10738710.27 10738710.46 10738710.65 0.0269 0.0114

Uranus 24689-10-26 03:50 G 10738830.53 10738830.66 10738830.82 0.0134 0.0101

Saturn 24690-02-12 01:26 G 10738939.35 10738939.56 10738939.76 0.0269 0.0069

Jupiter 24690-06-01 19:55 G 10739049.12 10739049.33 10739049.53 0.0505 0.0049

Uranus 24690-06-09 10:04 G 10739056.74 10739056.92 10739057.12 0.0134 0.0067

Saturn 24690-09-29 03:36 G 10739168.58 10739168.65 10739168.73 0.0268 0.0251

Uranus 24691-01-21 16:19 G 10739282.97 10739283.18 10739283.39 0.0134 0.0032

Uranus 24691-09-04 22:19 G 10739509.21 10739509.43 10739509.65 0.0134 0.0002

Uranus 24692-04-18 04:04 G 10739735.46 10739735.67 10739735.88 0.0134 0.0035

Uranus 24692-11-30 09:36 G 10739961.72 10739961.90 10739962.10 0.0134 0.0068

Uranus 24693-07-14 15:07 G 10740188.00 10740188.13 10740188.28 0.0134 0.0101

Uranus 24694-02-25 20:38 G 10740414.36 10740414.36 10740414.37 0.0133 0.0133

Jupiter 24702-02-05 18:57 G 10743315.18 10743315.29 10743315.41 0.0502 0.0412

Saturn 24704-07-26 04:33 G 10744216.49 10744216.69 10744216.89 0.0291 0.0101

Saturn 24705-03-13 03:07 G 10744446.44 10744446.63 10744446.82 0.0292 0.0137

Jupiter 24707-12-16 15:07 G 10745455.01 10745455.13 10745455.26 0.0521 0.0402

Earth 24709-06-30 02:52 G 10746016.46 10746016.62 10746016.78 0.2660 0.0235

Moon 24709-06-30 07:26 G 10746016.66 10746016.81 10746016.96 0.2665 0.0484 *

Saturn 24718-05-25 03:50 G 10749267.66 10749267.66 10749267.69 0.0269 0.0268

Saturn 24719-01-09 06:28 G 10749496.58 10749496.77 10749496.98 0.0268 0.0085

Jupiter 24719-08-21 08:52 G 10749720.68 10749720.87 10749721.07 0.0524 0.0116

Saturn 24719-08-26 08:38 G 10749725.67 10749725.86 10749726.06 0.0268 0.0098

Jupiter 24726-02-08 06:28 G 10752083.61 10752083.77 10752083.93 0.0506 0.0314

Mars 24727-09-18 08:09 G 10752670.67 10752670.84 10752671.02 0.1685 0.0244

Uranus 24733-03-10 06:57 G 10754670.68 10754670.79 10754670.91 0.0144 0.0120

Uranus 24733-10-22 18:28 G 10754897.10 10754897.27 10754897.46 0.0144 0.0079

Saturn 24734-02-05 09:21 G 10755002.69 10755002.89 10755003.10 0.0291 0.0073

Uranus 24734-06-06 06:14 G 10755123.55 10755123.76 10755123.97 0.0144 0.0037

Saturn 24734-09-23 07:55 G 10755232.66 10755232.83 10755233.00 0.0292 0.0165

Uranus 24735-01-18 17:45 G 10755350.02 10755350.24 10755350.46 0.0144 0.0004

Uranus 24735-09-02 05:16 G 10755576.52 10755576.72 10755576.93 0.0145 0.0047

Uranus 24736-04-15 17:02 G 10755803.05 10755803.21 10755803.39 0.0145 0.0089

Uranus 24736-11-28 05:02 G 10756029.63 10756029.71 10756029.81 0.0145 0.0131

Jupiter 24737-10-14 06:00 G 10756349.56 10756349.75 10756349.95 0.0503 0.0150

Saturn 24747-12-05 04:48 G 10760053.63 10760053.70 10760053.78 0.0269 0.0250

Saturn 24748-07-21 07:12 G 10760282.60 10760282.80 10760283.01 0.0269 0.0067

Saturn 24749-03-07 09:21 G 10760511.70 10760511.89 10760512.08 0.0268 0.0116

Neptune 24750-09-18 21:07 G 10761072.32 10761072.38 10761072.47 0.0089 0.0083

Neptune 24751-05-02 10:19 G 10761297.79 10761297.93 10761298.10 0.0089 0.0064

Neptune 24751-12-13 23:31 G 10761523.30 10761523.48 10761523.68 0.0089 0.0044

Neptune 24752-07-26 12:28 G 10761748.82 10761749.02 10761749.25 0.0089 0.0025

Neptune 24753-03-09 01:55 G 10761974.36 10761974.58 10761974.80 0.0089 0.0005

Neptune 24753-10-20 14:52 G 10762199.91 10762200.12 10762200.34 0.0089 0.0015

Neptune 24754-06-03 04:04 G 10762425.47 10762425.67 10762425.88 0.0089 0.0034

Neptune 24755-01-14 16:48 G 10762651.04 10762651.20 10762651.39 0.0089 0.0054

Mars 24755-02-01 13:55 G 10762668.94 10762669.08 10762669.22 0.1846 0.1061

Jupiter 24755-04-29 01:55 G 10762755.39 10762755.58 10762755.77 0.0522 0.0199

Neptune 24755-08-28 05:45 G 10762876.64 10762876.74 10762876.88 0.0089 0.0073

Saturn 24762-12-31 17:31 G 10765559.19 10765559.23 10765559.30 0.0291 0.0279

Saturn 24763-08-18 16:19 G 10765788.97 10765789.18 10765789.39 0.0291 0.0043

Saturn 24764-04-04 15:21 G 10766018.98 10766019.14 10766019.30 0.0292 0.0196

Jupiter 24767-01-01 16:19 G 10767021.04 10767021.18 10767021.34 0.0525 0.0340

Pluto 24773-06-01 06:57 G 10769363.67 10769363.79 10769363.94 0.0078 0.0062

Jupiter 24773-06-21 18:43 G 10769384.08 10769384.28 10769384.48 0.0504 0.0128

Uranus 24773-06-26 15:07 G 10769389.03 10769389.13 10769389.26 0.0135 0.0113

Pluto 24774-01-12 16:19 G 10769588.97 10769589.18 10769589.41 0.0077 0.0015

Uranus 24774-02-07 21:36 G 10769615.23 10769615.40 10769615.58 0.0134 0.0079

Uranus 24774-09-22 03:36 G 10769841.45 10769841.65 10769841.86 0.0134 0.0045

Uranus 24775-05-06 09:50 G 10770067.69 10770067.91 10770068.13 0.0134 0.0011

Uranus 24775-12-18 15:36 G 10770293.94 10770294.15 10770294.37 0.0134 0.0022

Uranus 24776-07-31 21:07 G 10770520.19 10770520.38 10770520.59 0.0134 0.0056

Uranus 24777-03-15 02:38 G 10770746.46 10770746.61 10770746.79 0.0134 0.0089

Saturn 24777-06-16 12:00 G 10770839.88 10770840.00 10770840.12 0.0269 0.0221

Uranus 24777-10-27 07:55 G 10770972.77 10770972.83 10770972.94 0.0134 0.0122

Saturn 24778-01-31 14:24 G 10771068.89 10771069.10 10771069.31 0.0268 0.0038

Saturn 24778-09-17 16:19 G 10771298.01 10771298.18 10771298.36 0.0268 0.0144

Jupiter 24785-02-24 17:02 G 10773650.07 10773650.21 10773650.37 0.0502 0.0339

Jupiter 24791-01-04 15:50 G 10775790.10 10775790.16 10775790.22 0.0521 0.0495

Saturn 24792-07-12 22:48 G 10776345.35 10776345.45 10776345.56 0.0291 0.0251

Saturn 24793-02-27 21:21 G 10776575.17 10776575.39 10776575.60 0.0291 0.0015

Mars 24793-07-15 18:57 G 10776713.12 10776713.29 10776713.47 0.1688 0.0065

Saturn 24793-10-15 19:55 G 10776805.20 10776805.33 10776805.47 0.0292 0.0223

Jupiter 24802-09-09 10:33 G 10780055.74 10780055.94 10780056.14 0.0524 0.0015

Saturn 24806-12-27 12:00 G 10781625.87 10781626.00 10781626.14 0.0269 0.0204

Saturn 24807-08-13 14:24 G 10781854.89 10781855.10 10781855.31 0.0268 0.0022

Saturn 24808-03-29 16:04 G 10782084.01 10782084.17 10782084.35 0.0268 0.0161

Jupiter 24809-02-27 06:28 G 10782418.65 10782418.77 10782418.90 0.0506 0.0401

Earth 24815-01-01 08:52 G 10784552.78 10784552.87 10784552.96 0.2671 0.2178

Moon 24815-01-01 13:40 G 10784553.00 10784553.07 10784553.14 0.2674 0.2352

Uranus 24816-11-07 15:50 G 10785229.11 10785229.16 10785229.25 0.0144 0.0136

Uranus 24817-06-22 03:07 G 10785455.48 10785455.63 10785455.81 0.0144 0.0095

Uranus 24818-02-03 14:38 G 10785681.92 10785682.11 10785682.32 0.0144 0.0054

Uranus 24818-09-18 02:24 G 10785908.38 10785908.60 10785908.82 0.0144 0.0012

Uranus 24819-05-02 13:55 G 10786134.87 10786135.08 10786135.30 0.0144 0.0030

Uranus 24819-12-15 01:40 G 10786361.39 10786361.57 10786361.76 0.0145 0.0072

Uranus 24820-07-28 13:12 G 10786587.93 10786588.05 10786588.20 0.0145 0.0114

Jupiter 24820-11-02 06:14 G 10786684.56 10786684.76 10786684.96 0.0504 0.0061

Mars 24820-11-28 18:57 G 10786711.21 10786711.29 10786711.37 0.1842 0.1612

Saturn 24822-01-23 03:07 G 10787131.50 10787131.63 10787131.77 0.0291 0.0225

Saturn 24822-09-10 01:55 G 10787361.37 10787361.58 10787361.80 0.0292 0.0013

Earth 24822-12-30 00:14 G 10787472.38 10787472.51 10787472.63 0.2670 0.1615

Moon 24822-12-30 05:31 G 10787472.58 10787472.73 10787472.88 0.2669 0.0879 *

Saturn 24823-04-28 00:57 G 10787591.45 10787591.54 10787591.66 0.0292 0.0251

Neptune 24832-03-24 12:28 G 10790844.89 10790845.02 10790845.15 0.0089 0.0071

Neptune 24832-11-05 01:12 G 10791070.38 10791070.55 10791070.74 0.0089 0.0052

Neptune 24833-06-18 14:09 G 10791295.89 10791296.09 10791296.30 0.0089 0.0033

Neptune 24834-01-30 02:52 G 10791521.41 10791521.62 10791521.85 0.0089 0.0014

Neptune 24834-09-12 15:50 G 10791746.95 10791747.16 10791747.39 0.0089 0.0006

Neptune 24835-04-26 04:33 G 10791972.49 10791972.69 10791972.91 0.0089 0.0026

Neptune 24835-12-07 17:31 G 10792198.05 10792198.23 10792198.43 0.0089 0.0045

Saturn 24836-07-08 18:43 G 10792412.13 10792412.28 10792412.45 0.0268 0.0176

Neptune 24836-07-20 06:14 G 10792423.62 10792423.76 10792423.93 0.0088 0.0064

Saturn 24837-02-22 21:07 G 10792641.16 10792641.38 10792641.59 0.0268 0.0009

Neptune 24837-03-02 19:26 G 10792649.24 10792649.31 10792649.39 0.0088 0.0083

Saturn 24837-10-09 22:48 G 10792870.31 10792870.45 10792870.61 0.0267 0.0189

Jupiter 24838-05-17 23:16 G 10793090.30 10793090.47 10793090.65 0.0523 0.0274

Jupiter 24850-01-20 18:00 G 10797356.07 10797356.25 10797356.43 0.0525 0.0242

Saturn 24851-08-05 08:24 G 10797917.70 10797917.85 10797918.01 0.0291 0.0197

Saturn 24852-03-22 07:12 G 10798147.59 10798147.80 10798148.01 0.0292 0.0041

Saturn 24852-11-07 05:45 G 10798377.69 10798377.74 10798377.81 0.0292 0.0279

Mars 24852-11-28 11:31 G 10798398.87 10798398.98 10798399.09 0.1857 0.1446

Jupiter 24856-07-10 18:00 G 10799719.06 10799719.25 10799719.43 0.0505 0.0208

Uranus 24857-02-24 01:40 G 10799947.50 10799947.57 10799947.65 0.0135 0.0126

Uranus 24857-10-08 08:09 G 10800173.68 10800173.84 10800174.00 0.0135 0.0092

Uranus 24858-05-22 14:09 G 10800399.91 10800400.09 10800400.30 0.0134 0.0059

Uranus 24859-01-03 20:24 G 10800626.14 10800626.35 10800626.57 0.0134 0.0025

Mars 24859-05-13 05:16 G 10800755.55 10800755.72 10800755.89 0.1691 0.0354

Uranus 24859-08-18 02:24 G 10800852.38 10800852.60 10800852.82 0.0134 0.0009

Uranus 24860-03-31 08:09 G 10801078.63 10801078.84 10801079.05 0.0134 0.0042

Uranus 24860-11-12 13:26 G 10801304.90 10801305.06 10801305.26 0.0134 0.0076

Uranus 24861-06-26 19:26 G 10801531.19 10801531.31 10801531.44 0.0134 0.0108

Saturn 24866-01-18 18:28 G 10803198.10 10803198.27 10803198.44 0.0268 0.0159

Saturn 24866-09-04 20:24 G 10803427.14 10803427.35 10803427.57 0.0268 0.0024

Saturn 24867-04-21 22:04 G 10803656.29 10803656.42 10803656.56 0.0268 0.0204

Jupiter 24868-03-15 17:45 G 10803985.06 10803985.24 10803985.41 0.0503 0.0251

Saturn 24881-02-14 11:02 G 10808703.80 10808703.96 10808704.14 0.0291 0.0174

Saturn 24881-10-02 10:04 G 10808933.71 10808933.92 10808934.13 0.0292 0.0064

Jupiter 24885-09-28 08:24 G 10810390.64 10810390.85 10810391.05 0.0524 0.0061

Mars 24891-05-12 04:19 G 10812442.64 10812442.68 10812442.71 0.1680 0.1640

Jupiter 24892-03-18 07:55 G 10812753.80 10812753.83 10812753.88 0.0506 0.0495

Saturn 24895-08-01 00:43 G 10813984.35 10813984.53 10813984.72 0.0268 0.0132

Saturn 24896-03-17 02:38 G 10814213.41 10814213.61 10814213.82 0.0268 0.0051

Saturn 24896-11-01 04:19 G 10814442.59 10814442.68 10814442.79 0.0267 0.0231

Jupiter 24897-06-03 00:57 G 10814656.46 10814656.54 10814656.64 0.0526 0.0469

Uranus 24901-02-20 11:16 G 10816013.84 10816013.97 10816014.12 0.0144 0.0111

Uranus 24901-10-04 22:48 G 10816240.27 10816240.45 10816240.64 0.0144 0.0070

Uranus 24902-05-19 10:19 G 10816466.72 10816466.93 10816467.14 0.0144 0.0029

Uranus 24902-12-31 21:50 G 10816693.20 10816693.41 10816693.63 0.0144 0.0013

Uranus 24903-08-15 09:21 G 10816919.69 10816919.89 10816920.10 0.0145 0.0055

Jupiter 24903-11-23 06:14 G 10817019.55 10817019.76 10817019.96 0.0503 0.0024

Uranus 24904-03-28 20:52 G 10817146.23 10817146.37 10817146.55 0.0145 0.0097

Uranus 24904-11-10 09:21 G 10817372.83 10817372.89 10817372.95 0.0145 0.0138

Saturn 24910-08-28 16:19 G 10819489.99 10819490.18 10819490.36 0.0292 0.0146

Saturn 24911-04-15 15:07 G 10819719.93 10819720.13 10819720.33 0.0292 0.0093

Jupiter 24915-07-29 06:00 G 10821285.66 10821285.75 10821285.86 0.0501 0.0434

Neptune 24915-08-04 19:12 G 10821292.20 10821292.30 10821292.45 0.0089 0.0073

Neptune 24916-03-17 08:38 G 10821517.69 10821517.86 10821518.04 0.0089 0.0053

Neptune 24916-10-28 21:36 G 10821743.21 10821743.40 10821743.62 0.0089 0.0034

Neptune 24917-06-11 11:02 G 10821968.74 10821968.96 10821969.18 0.0089 0.0014

Neptune 24918-01-23 00:00 G 10822194.29 10822194.50 10822194.73 0.0089 0.0006

Neptune 24918-09-05 12:57 G 10822419.84 10822420.04 10822420.26 0.0089 0.0025

Mars 24918-09-26 16:33 G 10822441.03 10822441.19 10822441.34 0.1852 0.0875

Neptune 24919-04-19 02:24 G 10822645.41 10822645.60 10822645.79 0.0089 0.0044

Neptune 24919-11-30 15:07 G 10822871.00 10822871.13 10822871.30 0.0089 0.0064

Neptune 24920-07-13 04:19 G 10823096.61 10823096.68 10823096.76 0.0089 0.0083

Jupiter 24921-06-07 02:38 G 10823425.47 10823425.61 10823425.75 0.0522 0.0383

Saturn 24925-02-11 00:14 G 10824770.33 10824770.51 10824770.71 0.0268 0.0115

Mars 24925-03-10 15:36 G 10824797.99 10824798.15 10824798.31 0.1695 0.0659

Saturn 24925-09-28 02:09 G 10824999.39 10824999.59 10824999.80 0.0268 0.0067

Saturn 24926-05-15 03:36 G 10825228.58 10825228.65 10825228.74 0.0267 0.0247

Jupiter 24933-02-09 20:24 G 10827691.16 10827691.35 10827691.55 0.0525 0.0135

Pluto 24934-11-28 02:24 G 10828347.43 10828347.60 10828347.81 0.0066 0.0032

Pluto 24935-07-11 07:26 G 10828572.59 10828572.81 10828573.02 0.0066 0.0015

Pluto 24936-02-21 11:16 G 10828797.93 10828797.97 10828798.08 0.0067 0.0063

Jupiter 24939-07-31 20:09 G 10830054.18 10830054.34 10830054.50 0.0505 0.0307

Saturn 24940-03-09 17:45 G 10830276.05 10830276.24 10830276.43 0.0291 0.0124

Saturn 24940-10-25 16:48 G 10830506.01 10830506.20 10830506.40 0.0292 0.0114

Uranus 24941-06-08 18:57 G 10830732.16 10830732.29 10830732.44 0.0135 0.0105

Uranus 24942-01-21 01:12 G 10830958.37 10830958.55 10830958.74 0.0134 0.0071

Uranus 24942-09-04 07:12 G 10831184.60 10831184.80 10831185.02 0.0134 0.0038

Uranus 24943-04-18 13:26 G 10831410.84 10831411.06 10831411.28 0.0134 0.0004

Uranus 24943-11-30 19:12 G 10831637.09 10831637.30 10831637.52 0.0134 0.0030

Uranus 24944-07-14 00:43 G 10831863.35 10831863.53 10831863.73 0.0134 0.0063

Uranus 24945-02-25 06:00 G 10832089.62 10832089.75 10832089.92 0.0134 0.0096

Uranus 24945-10-09 11:45 G 10832315.94 10832315.99 10832316.06 0.0134 0.0128

Jupiter 24951-04-05 20:09 G 10834320.15 10834320.34 10834320.54 0.0503 0.0152

Moon 24952-07-01 00:43 G 10834772.38 10834772.53 10834772.69 0.2656 0.1018

Earth 24952-07-01 04:04 G 10834772.51 10834772.67 10834772.83 0.2661 0.0340 *

Saturn 24954-08-24 06:14 G 10835556.56 10835556.76 10835556.96 0.0268 0.0088

Saturn 24955-04-10 07:55 G 10835785.63 10835785.83 10835786.03 0.0267 0.0093

Mars 24957-03-09 14:24 G 10836485.00 10836485.10 10836485.20 0.1684 0.1344

Jupiter 24968-10-18 10:19 G 10840725.74 10840725.93 10840726.13 0.0524 0.0163

Saturn 24969-09-19 23:16 G 10841062.28 10841062.47 10841062.68 0.0292 0.0096

Saturn 24970-05-07 22:33 G 10841292.26 10841292.44 10841292.62 0.0292 0.0144

Jupiter 24980-06-23 05:02 G 10844991.56 10844991.71 10844991.86 0.0526 0.0353

Saturn 24983-07-20 03:50 G 10846113.59 10846113.66 10846113.73 0.0269 0.0253

Saturn 24984-03-05 05:45 G 10846342.54 10846342.74 10846342.95 0.0268 0.0072

Mars 24984-07-23 21:21 G 10846483.21 10846483.39 10846483.56 0.1848 0.0299

Saturn 24984-10-20 07:40 G 10846571.63 10846571.82 10846572.01 0.0267 0.0110

Uranus 24984-10-20 18:14 G 10846572.18 10846572.26 10846572.37 0.0144 0.0129

Uranus 24985-06-04 05:31 G 10846798.57 10846798.73 10846798.91 0.0144 0.0088

Uranus 24986-01-16 16:48 G 10847025.01 10847025.20 10847025.42 0.0144 0.0047

Uranus 24986-08-31 04:33 G 10847251.47 10847251.69 10847251.90 0.0144 0.0006

Jupiter 24986-12-12 07:40 G 10847354.62 10847354.82 10847355.02 0.0504 0.0117

Uranus 24987-04-14 15:50 G 10847477.96 10847478.16 10847478.38 0.0144 0.0036

Uranus 24987-11-27 03:36 G 10847704.48 10847704.65 10847704.84 0.0145 0.0078

Uranus 24988-07-10 15:07 G 10847931.03 10847931.13 10847931.27 0.0145 0.0120

Mars 24991-01-06 01:40 G 10848840.43 10848840.57 10848840.71 0.1699 0.0973

Neptune 24996-06-26 20:52 G 10850839.31 10850839.37 10850839.49 0.0089 0.0081

Neptune 24997-02-07 10:19 G 10851064.78 10851064.93 10851065.09 0.0089 0.0061

Neptune 24997-09-20 23:02 G 10851290.28 10851290.46 10851290.67 0.0089 0.0042

Neptune 24998-05-04 12:00 G 10851515.80 10851516.00 10851516.22 0.0089 0.0023

Jupiter 24998-08-17 08:38 G 10851620.71 10851620.86 10851621.01 0.0502 0.0334

Neptune 24998-12-16 01:12 G 10851741.33 10851741.55 10851741.77 0.0089 0.0003

Saturn 24999-04-01 23:45 G 10851848.28 10851848.49 10851848.69 0.0292 0.0076

Neptune 24999-07-29 13:55 G 10851966.86 10851967.08 10851967.30 0.0089 0.0016

Saturn 24999-11-17 22:48 G 10852078.28 10852078.45 10852078.63 0.0292 0.0163

Neptune 25000-03-12 02:24 G 10852192.41 10852192.60 10852192.82 0.0089 0.0036

Neptune 25000-10-23 15:21 G 10852417.98 10852418.14 10852418.33 0.0089 0.0055

26TH MILLENNIUM CE

This is a list of transits of Venus in the 26th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 25001-06-06 04:04 G 10852643.57 10852643.67 10852643.81 0.0089 0.0074

Jupiter 25004-06-27 00:57 G 10853760.45 10853760.54 10853760.64 0.0522 0.0462

Saturn 25013-01-30 09:21 G 10856899.78 10856899.89 10856900.00 0.0269 0.0227

Saturn 25013-09-16 11:31 G 10857128.77 10857128.98 10857129.19 0.0268 0.0045

Saturn 25014-05-03 13:12 G 10857357.87 10857358.05 10857358.23 0.0267 0.0137

Jupiter 25016-03-01 18:14 G 10858026.06 10858026.26 10858026.46 0.0525 0.0060

Pluto 25021-12-17 09:21 G 10860142.75 10860142.89 10860143.08 0.0078 0.0053

Pluto 25022-07-30 19:12 G 10860368.09 10860368.30 10860368.51 0.0077 0.0024

Jupiter 25022-08-20 20:38 G 10860389.24 10860389.36 10860389.49 0.0505 0.0396

Mars 25023-01-06 01:12 G 10860527.41 10860527.55 10860527.68 0.1687 0.1064

Uranus 25025-02-07 04:33 G 10861290.60 10861290.69 10861290.81 0.0135 0.0119

Uranus 25025-09-21 11:02 G 10861516.80 10861516.96 10861517.13 0.0135 0.0085

Uranus 25026-05-05 17:16 G 10861743.03 10861743.22 10861743.43 0.0134 0.0051

Uranus 25026-12-17 23:16 G 10861969.26 10861969.47 10861969.69 0.0134 0.0018

Uranus 25027-08-01 05:02 G 10862195.50 10862195.71 10862195.94 0.0134 0.0016

Saturn 25028-02-26 07:26 G 10862404.76 10862404.81 10862404.86 0.0291 0.0282

Uranus 25028-03-14 10:48 G 10862421.75 10862421.95 10862422.16 0.0134 0.0049

Saturn 25028-10-13 06:00 G 10862634.54 10862634.75 10862634.96 0.0292 0.0046

Uranus 25028-10-26 16:19 G 10862648.02 10862648.18 10862648.37 0.0134 0.0082

Saturn 25029-05-31 05:02 G 10862864.56 10862864.71 10862864.87 0.0293 0.0194

Uranus 25029-06-09 21:50 G 10862874.32 10862874.41 10862874.54 0.0134 0.0115

Jupiter 25034-04-25 20:24 G 10864655.14 10864655.35 10864655.55 0.0503 0.0067

Saturn 25042-08-12 09:36 G 10867685.78 10867685.90 10867686.04 0.0268 0.0209

Saturn 25043-03-29 11:31 G 10867914.77 10867914.98 10867915.20 0.0268 0.0028

Saturn 25043-11-13 13:12 G 10868143.88 10868144.05 10868144.22 0.0267 0.0153

Mars 25050-05-22 02:38 G 10870525.44 10870525.61 10870525.78 0.1843 0.0253

Jupiter 25051-11-08 13:40 G 10871060.90 10871061.07 10871061.24 0.0523 0.0270

Mars 25056-11-03 12:00 G 10872882.89 10872883.00 10872883.11 0.1702 0.1284

Saturn 25057-09-07 07:26 G 10873190.72 10873190.81 10873190.90 0.0291 0.0262

Moon 25058-01-03 06:14 G 10873308.65 10873308.76 10873308.88 0.2665 0.1881

Earth 25058-01-03 10:04 G 10873308.82 10873308.92 10873309.02 0.2670 0.2044 *

Saturn 25058-04-25 06:14 G 10873420.55 10873420.76 10873420.98 0.0292 0.0027

Saturn 25058-12-11 05:31 G 10873650.59 10873650.73 10873650.88 0.0292 0.0213

Jupiter 25063-07-14 03:36 G 10875326.48 10875326.65 10875326.83 0.0526 0.0273

Moon 25065-12-31 19:55 G 10876228.31 10876228.33 10876228.35 0.2669 0.2634

Earth 25066-01-01 01:26 G 10876228.44 10876228.56 10876228.68 0.2670 0.1714

Uranus 25069-02-02 11:45 G 10877356.85 10877356.99 10877357.14 0.0144 0.0106

Uranus 25069-09-16 23:02 G 10877583.27 10877583.46 10877583.65 0.0144 0.0065

Jupiter 25070-01-01 10:48 G 10877689.77 10877689.95 10877690.13 0.0504 0.0219

Uranus 25070-05-01 10:19 G 10877809.72 10877809.93 10877810.15 0.0144 0.0024

Uranus 25070-12-13 21:50 G 10878036.20 10878036.41 10878036.63 0.0144 0.0017

Uranus 25071-07-28 09:21 G 10878262.70 10878262.89 10878263.09 0.0144 0.0059

Saturn 25072-02-22 14:38 G 10878471.97 10878472.11 10878472.27 0.0269 0.0184

Uranus 25072-03-10 20:52 G 10878489.23 10878489.37 10878489.54 0.0145 0.0101

Saturn 25072-10-08 17:02 G 10878701.00 10878701.21 10878701.42 0.0268 0.0001

Uranus 25072-10-23 08:52 G 10878715.84 10878715.87 10878715.92 0.0145 0.0142

Saturn 25073-05-25 18:28 G 10878930.12 10878930.27 10878930.43 0.0267 0.0180

Neptune 25079-11-07 05:02 G 10881286.63 10881286.71 10881286.80 0.0089 0.0081

Neptune 25080-06-19 17:45 G 10881512.10 10881512.24 10881512.42 0.0089 0.0062

Neptune 25081-01-31 06:57 G 10881737.61 10881737.79 10881738.00 0.0089 0.0043

Jupiter 25081-09-06 09:07 G 10881955.71 10881955.88 10881956.06 0.0502 0.0246

Neptune 25081-09-13 20:09 G 10881963.14 10881963.34 10881963.56 0.0089 0.0023

Neptune 25082-04-27 09:36 G 10882188.68 10882188.90 10882189.12 0.0089 0.0004

Neptune 25082-12-08 22:48 G 10882414.23 10882414.45 10882414.66 0.0089 0.0016

Neptune 25083-07-22 11:31 G 10882639.79 10882639.98 10882640.19 0.0089 0.0036

Neptune 25084-03-04 00:28 G 10882865.36 10882865.52 10882865.71 0.0089 0.0055

Neptune 25084-10-15 13:55 G 10883090.97 10883091.08 10883091.20 0.0089 0.0074

Saturn 25087-03-20 14:38 G 10883976.98 10883977.11 10883977.24 0.0291 0.0231

Saturn 25087-11-05 13:26 G 10884206.84 10884207.06 10884207.27 0.0292 0.0007

Saturn 25088-06-22 12:14 G 10884436.91 10884437.01 10884437.13 0.0293 0.0245

Mars 25088-11-02 11:31 G 10884569.82 10884569.98 10884570.13 0.1690 0.0766

Jupiter 25099-03-21 21:50 G 10888361.20 10888361.41 10888361.61 0.0525 0.0052

Saturn 25101-09-04 15:50 G 10889258.00 10889258.16 10889258.34 0.0268 0.0164

Saturn 25102-04-21 18:00 G 10889487.04 10889487.25 10889487.46 0.0268 0.0018

Saturn 25102-12-06 19:12 G 10889716.17 10889716.30 10889716.45 0.0267 0.0198

Jupiter 25105-09-09 21:50 G 10890724.36 10890724.41 10890724.46 0.0506 0.0488

Uranus 25108-10-08 14:38 G 10891849.08 10891849.11 10891849.16 0.0135 0.0132

Uranus 25109-05-22 20:52 G 10892075.24 10892075.37 10892075.54 0.0135 0.0099

Uranus 25110-01-04 03:21 G 10892301.46 10892301.64 10892301.84 0.0135 0.0065

Uranus 25110-08-18 09:21 G 10892527.69 10892527.89 10892528.11 0.0134 0.0032

Jupiter 25110-11-25 15:21 G 10892627.06 10892627.14 10892627.23 0.0527 0.0472

Uranus 25111-04-01 15:36 G 10892753.93 10892754.15 10892754.37 0.0134 0.0003

Uranus 25111-11-13 21:21 G 10892980.18 10892980.39 10892980.60 0.0134 0.0035

Uranus 25112-06-27 03:07 G 10893206.44 10893206.63 10893206.82 0.0134 0.0068

Uranus 25113-02-08 08:38 G 10893432.72 10893432.86 10893433.01 0.0134 0.0101

Uranus 25113-09-22 14:09 G 10893659.09 10893659.09 10893659.11 0.0134 0.0133

Mars 25116-03-19 07:55 G 10894567.67 10894567.83 10894567.98 0.1839 0.0800

Saturn 25116-09-30 14:38 G 10894762.97 10894763.11 10894763.25 0.0291 0.0212

Jupiter 25117-05-15 22:48 G 10894990.24 10894990.45 10894990.65 0.0503 0.0033

Saturn 25117-05-18 13:26 G 10894992.85 10894993.06 10894993.28 0.0292 0.0026

Saturn 25118-01-03 12:28 G 10895222.94 10895223.02 10895223.12 0.0292 0.0265

Mars 25122-09-01 21:36 G 10896925.35 10896925.40 10896925.45 0.1706 0.1619

Jupiter 25129-01-18 23:02 G 10899256.36 10899256.46 10899256.57 0.0501 0.0421

Saturn 25131-03-17 20:52 G 10900044.19 10900044.37 10900044.56 0.0269 0.0139

Saturn 25131-11-01 23:02 G 10900273.25 10900273.46 10900273.67 0.0268 0.0044

Saturn 25132-06-18 00:28 G 10900502.42 10900502.52 10900502.64 0.0267 0.0225

Jupiter 25134-11-28 10:48 G 10901395.80 10901395.95 10901396.10 0.0523 0.0341

Saturn 25146-04-12 23:16 G 10905549.31 10905549.47 10905549.64 0.0292 0.0179

Jupiter 25146-08-03 04:33 G 10905661.50 10905661.69 10905661.88 0.0526 0.0177

Saturn 25146-11-28 22:04 G 10905779.21 10905779.42 10905779.63 0.0292 0.0059

Uranus 25152-10-03 18:14 G 10907915.16 10907915.26 10907915.38 0.0143 0.0124

Jupiter 25153-01-21 09:50 G 10908024.74 10908024.91 10908025.07 0.0504 0.0300

Uranus 25153-05-18 05:16 G 10908141.55 10908141.72 10908141.91 0.0144 0.0084

Uranus 25153-12-30 16:33 G 10908367.99 10908368.19 10908368.40 0.0144 0.0043

Uranus 25154-08-14 04:04 G 10908594.45 10908594.67 10908594.88 0.0144 0.0003

Mars 25154-08-31 21:36 G 10908612.24 10908612.40 10908612.57 0.1694 0.0465

Uranus 25155-03-28 15:21 G 10908820.94 10908821.14 10908821.35 0.0144 0.0040

Uranus 25155-11-10 02:52 G 10909047.46 10909047.62 10909047.81 0.0144 0.0082

Uranus 25156-06-23 14:52 G 10909274.01 10909274.12 10909274.24 0.0145 0.0123

Saturn 25160-09-26 23:02 G 10910830.28 10910830.46 10910830.66 0.0268 0.0118

Neptune 25161-05-13 19:40 G 10911059.20 10911059.32 10911059.47 0.0089 0.0070

Saturn 25161-05-14 00:57 G 10911059.34 10911059.54 10911059.75 0.0267 0.0064 *

Neptune 25161-12-25 08:24 G 10911284.69 10911284.85 10911285.05 0.0089 0.0051

Saturn 25161-12-29 02:09 G 10911288.52 10911288.59 10911288.68 0.0267 0.0244

Neptune 25162-08-07 21:21 G 10911510.20 10911510.39 10911510.61 0.0089 0.0032

Neptune 25163-03-21 10:33 G 10911735.72 10911735.94 10911736.16 0.0089 0.0012

Neptune 25163-11-01 23:31 G 10911961.26 10911961.48 10911961.70 0.0089 0.0007

Neptune 25164-06-14 12:14 G 10912186.81 10912187.01 10912187.23 0.0089 0.0027

Jupiter 25164-09-26 09:21 G 10912290.69 10912290.89 10912291.08 0.0502 0.0162

Neptune 25165-01-26 00:57 G 10912412.37 10912412.54 10912412.74 0.0089 0.0046

Neptune 25165-09-08 13:55 G 10912637.94 10912638.08 10912638.24 0.0089 0.0065

Neptune 25166-04-22 02:52 G 10912863.56 10912863.62 10912863.69 0.0089 0.0084

Saturn 25175-10-23 23:31 G 10916335.31 10916335.48 10916335.67 0.0291 0.0159

Saturn 25176-06-09 22:33 G 10916565.24 10916565.44 10916565.64 0.0292 0.0080

Mars 25182-01-14 14:09 G 10918609.97 10918610.09 10918610.21 0.1834 0.1307

Jupiter 25182-04-10 19:55 G 10918696.14 10918696.33 10918696.53 0.0524 0.0130

Pluto 25183-06-15 04:04 G 10919126.49 10919126.67 10919126.89 0.0066 0.0028

Pluto 25184-01-26 08:52 G 10919351.67 10919351.87 10919352.09 0.0066 0.0019

Pluto 25184-09-07 13:55 G 10919577.08 10919577.08 10919577.09 0.0067 0.0066

Saturn 25190-04-09 03:50 G 10921616.47 10921616.66 10921616.86 0.0269 0.0093

Saturn 25190-11-24 06:00 G 10921845.55 10921845.75 10921845.95 0.0268 0.0090

Uranus 25193-01-20 05:45 G 10922633.63 10922633.74 10922633.87 0.0135 0.0113

Uranus 25193-09-03 12:00 G 10922859.84 10922860.00 10922860.19 0.0135 0.0080

Jupiter 25193-12-14 12:14 G 10922961.88 10922962.01 10922962.14 0.0526 0.0403

Uranus 25194-04-17 18:28 G 10923086.07 10923086.27 10923086.48 0.0135 0.0046

Uranus 25194-11-30 00:28 G 10923312.31 10923312.52 10923312.74 0.0134 0.0013

Earth 25195-07-04 04:48 G 10923528.55 10923528.70 10923528.86 0.2662 0.0517

Moon 25195-07-04 06:00 G 10923528.60 10923528.75 10923528.90 0.2668 0.0118 *

Uranus 25195-07-14 06:28 G 10923538.56 10923538.77 10923538.99 0.0134 0.0021

Uranus 25196-02-25 12:00 G 10923764.81 10923765.00 10923765.21 0.0134 0.0054

Uranus 25196-10-08 17:45 G 10923991.09 10923991.24 10923991.42 0.0134 0.0087

Uranus 25197-05-22 23:45 G 10924217.40 10924217.49 10924217.59 0.0134 0.0119

Jupiter 25200-06-03 21:50 G 10925325.21 10925325.41 10925325.61 0.0503 0.0113

Saturn 25205-05-05 09:21 G 10927121.70 10927121.89 10927122.08 0.0292 0.0123

Saturn 25205-12-21 08:09 G 10927351.65 10927351.84 10927352.04 0.0292 0.0116

Jupiter 25212-02-07 21:21 G 10929591.25 10929591.39 10929591.54 0.0501 0.0346

Mars 25214-01-14 06:00 G 10930297.69 10930297.75 10930297.81 0.1850 0.1724

Jupiter 25217-12-17 12:28 G 10931730.91 10931731.02 10931731.13 0.0523 0.0441

Saturn 25219-03-05 04:33 G 10932173.63 10932173.69 10932173.77 0.0269 0.0253

Saturn 25219-10-20 07:12 G 10932402.60 10932402.80 10932403.01 0.0268 0.0070

Saturn 25220-06-05 08:52 G 10932631.69 10932631.87 10932632.07 0.0267 0.0112

Mars 25220-06-28 08:24 G 10932654.67 10932654.85 10932655.02 0.1697 0.0168

Jupiter 25229-08-22 06:28 G 10935996.57 10935996.77 10935996.97 0.0525 0.0077

Saturn 25234-11-15 10:48 G 10937907.75 10937907.95 10937908.15 0.0291 0.0100

Saturn 25235-07-03 09:36 G 10938137.72 10938137.90 10938138.09 0.0292 0.0139

Jupiter 25236-02-10 10:33 G 10938359.81 10938359.94 10938360.07 0.0505 0.0389

Uranus 25236-06-03 01:26 G 10938473.54 10938473.56 10938473.62 0.0143 0.0141

Uranus 25237-01-15 12:28 G 10938699.88 10938700.02 10938700.19 0.0144 0.0101

Uranus 25237-08-29 23:45 G 10938926.30 10938926.49 10938926.69 0.0144 0.0060

Uranus 25238-04-13 11:02 G 10939152.75 10939152.96 10939153.18 0.0144 0.0019

Uranus 25238-11-25 22:33 G 10939379.23 10939379.44 10939379.65 0.0144 0.0022

Uranus 25239-07-10 09:50 G 10939605.72 10939605.91 10939606.11 0.0144 0.0064

Uranus 25240-02-21 21:36 G 10939832.26 10939832.40 10939832.55 0.0144 0.0105

Neptune 25244-09-22 04:04 G 10941506.55 10941506.67 10941506.82 0.0089 0.0070

Neptune 25245-05-05 17:16 G 10941732.06 10941732.22 10941732.42 0.0089 0.0051

Neptune 25245-12-17 06:43 G 10941957.57 10941957.78 10941957.99 0.0089 0.0031

Neptune 25246-07-30 19:40 G 10942183.11 10942183.32 10942183.54 0.0089 0.0012

Neptune 25247-03-13 08:52 G 10942408.65 10942408.87 10942409.09 0.0089 0.0008

Jupiter 25247-10-16 10:19 G 10942625.73 10942625.93 10942626.14 0.0503 0.0072

Neptune 25247-10-24 22:04 G 10942634.21 10942634.42 10942634.63 0.0089 0.0027

Neptune 25248-06-06 10:48 G 10942859.78 10942859.95 10942860.15 0.0089 0.0047

Saturn 25248-09-14 09:21 G 10942959.78 10942959.89 10942960.00 0.0269 0.0228

Neptune 25249-01-18 00:00 G 10943085.37 10943085.50 10943085.66 0.0089 0.0066

Saturn 25249-05-01 12:00 G 10943188.79 10943189.00 10943189.21 0.0269 0.0045

Neptune 25249-08-31 12:43 G 10943311.00 10943311.03 10943311.11 0.0089 0.0086

Saturn 25249-12-16 13:55 G 10943417.90 10943418.08 10943418.26 0.0268 0.0138

Saturn 25264-05-27 21:50 G 10948694.20 10948694.41 10948694.62 0.0292 0.0063

Saturn 25265-01-12 20:38 G 10948924.19 10948924.36 10948924.53 0.0292 0.0177

Jupiter 25265-04-29 18:43 G 10949031.10 10949031.28 10949031.47 0.0524 0.0212

Pluto 25270-07-03 10:48 G 10950921.80 10950921.95 10950922.13 0.0078 0.0051

Pluto 25271-02-13 20:09 G 10951147.15 10951147.34 10951147.56 0.0077 0.0026

Uranus 25276-09-19 15:07 G 10953192.07 10953192.13 10953192.21 0.0135 0.0127

Jupiter 25277-01-02 12:28 G 10953296.86 10953297.02 10953297.19 0.0527 0.0310

Uranus 25277-05-03 21:36 G 10953418.25 10953418.40 10953418.57 0.0135 0.0094

Uranus 25277-12-16 04:04 G 10953644.48 10953644.67 10953644.87 0.0135 0.0060

Saturn 25278-03-27 13:40 G 10953745.94 10953746.07 10953746.21 0.0269 0.0204

Uranus 25278-07-30 10:04 G 10953870.71 10953870.92 10953871.14 0.0135 0.0027

Saturn 25278-11-11 16:19 G 10953974.97 10953975.18 10953975.39 0.0268 0.0021

Uranus 25279-03-13 16:04 G 10954096.96 10954097.17 10954097.39 0.0134 0.0007

Saturn 25279-06-28 18:00 G 10954204.09 10954204.25 10954204.42 0.0267 0.0161

Uranus 25279-10-25 21:50 G 10954323.21 10954323.41 10954323.63 0.0134 0.0041

Mars 25279-11-11 10:48 G 10954339.82 10954339.95 10954340.09 0.1845 0.1152

Uranus 25280-06-08 03:50 G 10954549.49 10954549.66 10954549.85 0.0134 0.0073

Uranus 25281-01-20 09:21 G 10954775.78 10954775.89 10954776.04 0.0134 0.0106

Jupiter 25283-06-23 19:55 G 10955660.14 10955660.33 10955660.52 0.0504 0.0187

Mars 25286-04-25 18:14 G 10956697.08 10956697.26 10956697.43 0.1701 0.0155

Saturn 25293-04-22 01:26 G 10959250.51 10959250.56 10959250.64 0.0290 0.0275

Saturn 25293-12-08 00:00 G 10959480.29 10959480.50 10959480.72 0.0291 0.0039

Saturn 25294-07-25 23:02 G 10959710.30 10959710.46 10959710.61 0.0292 0.0200

Jupiter 25295-02-26 20:38 G 10959926.19 10959926.36 10959926.54 0.0501 0.0266

Earth 25301-01-05 11:02 G 10962064.85 10962064.96 10962065.07 0.2669 0.1886

Moon 25301-01-05 13:12 G 10962064.96 10962065.05 10962065.14 0.2676 0.2097 *

Jupiter 25301-01-06 09:36 G 10962065.87 10962065.90 10962065.94 0.0522 0.0512

Saturn 25307-10-08 18:14 G 10964532.11 10964532.26 10964532.42 0.0269 0.0180

Saturn 25308-05-24 20:52 G 10964761.16 10964761.37 10964761.58 0.0269 0.0005

Earth 25309-01-03 02:24 G 10964984.49 10964984.60 10964984.71 0.2669 0.1874

Moon 25309-01-03 07:40 G 10964984.67 10964984.82 10964984.96 0.2672 0.0947 *

Saturn 25309-01-08 22:48 G 10964990.30 10964990.45 10964990.61 0.0268 0.0187

Jupiter 25312-09-11 02:09 G 10966331.39 10966331.59 10966331.79 0.0525 0.0014

Jupiter 25319-03-02 07:55 G 10968694.75 10968694.83 10968694.91 0.0505 0.0460

Uranus 25320-09-15 20:38 G 10969258.26 10969258.36 10969258.51 0.0143 0.0117

Uranus 25321-04-30 08:09 G 10969484.66 10969484.84 10969485.02 0.0144 0.0076

Uranus 25321-12-12 19:12 G 10969711.09 10969711.30 10969711.52 0.0144 0.0035

Uranus 25322-07-27 06:28 G 10969937.56 10969937.77 10969937.99 0.0144 0.0006

Saturn 25322-11-03 13:26 G 10970036.94 10970037.06 10970037.19 0.0291 0.0236

Uranus 25323-03-10 17:45 G 10970164.04 10970164.24 10970164.46 0.0144 0.0047

Saturn 25323-06-21 12:00 G 10970266.79 10970267.00 10970267.21 0.0292 0.0002

Uranus 25323-10-23 05:31 G 10970390.57 10970390.73 10970390.91 0.0144 0.0088

Saturn 25324-02-06 10:33 G 10970496.83 10970496.94 10970497.07 0.0293 0.0241

Uranus 25324-06-05 17:02 G 10970617.13 10970617.21 10970617.32 0.0144 0.0130

Neptune 25325-08-16 05:31 G 10971053.64 10971053.73 10971053.84 0.0089 0.0078

Neptune 25326-03-29 18:28 G 10971279.11 10971279.27 10971279.44 0.0089 0.0059

Neptune 25326-11-10 07:26 G 10971504.63 10971504.81 10971505.02 0.0089 0.0040

Neptune 25327-06-23 20:24 G 10971730.15 10971730.35 10971730.57 0.0089 0.0021

Neptune 25328-02-04 09:36 G 10971955.68 10971955.90 10971956.12 0.0089 0.0002

Neptune 25328-09-16 22:04 G 10972181.22 10972181.42 10972181.65 0.0089 0.0019

Neptune 25329-04-30 11:02 G 10972406.77 10972406.96 10972407.17 0.0089 0.0038

Neptune 25329-12-11 23:45 G 10972632.34 10972632.49 10972632.68 0.0089 0.0057

Neptune 25330-07-25 12:43 G 10972857.93 10972858.03 10972858.16 0.0089 0.0076

Jupiter 25330-11-05 06:57 G 10972960.58 10972960.79 10972960.99 0.0502 0.0013

Saturn 25337-04-20 00:00 G 10975318.33 10975318.50 10975318.68 0.0269 0.0153

Saturn 25337-12-05 02:24 G 10975547.39 10975547.60 10975547.81 0.0268 0.0031

Saturn 25338-07-22 03:50 G 10975776.55 10975776.66 10975776.80 0.0267 0.0213

Jupiter 25342-07-11 06:00 G 10977226.69 10977226.75 10977226.83 0.0500 0.0464

Mars 25345-09-08 16:33 G 10978382.03 10978382.19 10978382.36 0.1840 0.0610

Jupiter 25348-05-19 18:43 G 10979366.12 10979366.28 10979366.45 0.0524 0.0301

Mars 25352-02-22 04:33 G 10980739.52 10980739.69 10980739.86 0.1704 0.0463

Saturn 25352-05-15 17:02 G 10980823.07 10980823.21 10980823.36 0.0291 0.0210

Saturn 25352-12-31 15:21 G 10981052.93 10981053.14 10981053.36 0.0291 0.0028

Saturn 25353-08-18 14:09 G 10981283.01 10981283.09 10981283.18 0.0292 0.0266

Jupiter 25360-01-23 10:04 G 10983631.74 10983631.92 10983632.10 0.0526 0.0235

Uranus 25361-01-02 06:28 G 10983976.64 10983976.77 10983976.90 0.0135 0.0108

Uranus 25361-08-16 12:28 G 10984202.85 10984203.02 10984203.22 0.0135 0.0075

Uranus 25362-03-30 18:43 G 10984429.09 10984429.28 10984429.50 0.0135 0.0042

Uranus 25362-11-12 01:12 G 10984655.33 10984655.55 10984655.77 0.0135 0.0008

Uranus 25363-06-26 07:12 G 10984881.59 10984881.80 10984882.02 0.0134 0.0026

Uranus 25364-02-07 12:57 G 10985107.85 10985108.04 10985108.25 0.0134 0.0059

Uranus 25364-09-20 18:43 G 10985334.14 10985334.28 10985334.45 0.0134 0.0092

Uranus 25365-05-05 00:43 G 10985560.46 10985560.53 10985560.62 0.0134 0.0124

Jupiter 25366-07-13 18:57 G 10985995.12 10985995.29 10985995.46 0.0504 0.0266

Saturn 25366-10-31 04:04 G 10986104.49 10986104.67 10986104.86 0.0269 0.0130

Saturn 25367-06-17 06:43 G 10986333.57 10986333.78 10986333.99 0.0269 0.0055

Saturn 25368-02-01 08:24 G 10986562.76 10986562.85 10986562.96 0.0268 0.0237

Jupiter 25378-03-18 17:16 G 10990261.04 10990261.22 10990261.41 0.0501 0.0198

Saturn 25381-11-26 05:31 G 10991609.56 10991609.73 10991609.90 0.0291 0.0170

Saturn 25382-07-14 03:50 G 10991839.46 10991839.66 10991839.87 0.0292 0.0068

Mars 25384-02-21 04:19 G 10992426.63 10992426.68 10992426.73 0.1693 0.1604

Jupiter 25395-10-01 00:14 G 10996666.31 10996666.51 10996666.71 0.0525 0.0066

Saturn 25396-05-12 11:02 G 10996890.76 10996890.96 10996891.15 0.0269 0.0101

Saturn 25396-12-27 12:57 G 10997119.84 10997120.04 10997120.25 0.0268 0.0083

Saturn 25397-08-13 14:38 G 10997349.09 10997349.11 10997349.15 0.0267 0.0264

Uranus 25404-05-17 04:33 G 10999816.63 10999816.69 10999816.79 0.0143 0.0132

Uranus 25404-12-29 15:36 G 11000043.00 11000043.15 11000043.33 0.0143 0.0092

Uranus 25405-08-13 02:52 G 11000269.42 11000269.62 11000269.82 0.0144 0.0052

Uranus 25406-03-27 14:09 G 11000495.87 11000496.09 11000496.31 0.0144 0.0011

Uranus 25406-11-09 01:40 G 11000722.36 11000722.57 11000722.79 0.0144 0.0030

Jupiter 25407-06-06 17:31 G 11000932.14 11000932.23 11000932.33 0.0527 0.0461

Uranus 25407-06-23 12:57 G 11000948.87 11000949.04 11000949.24 0.0144 0.0072

Uranus 25408-02-05 00:43 G 11001175.40 11001175.53 11001175.67 0.0144 0.0112

Neptune 25408-12-26 14:38 G 11001501.03 11001501.11 11001501.24 0.0089 0.0078

Neptune 25409-08-09 04:04 G 11001726.51 11001726.67 11001726.84 0.0089 0.0058

Neptune 25410-03-22 17:02 G 11001952.02 11001952.21 11001952.42 0.0089 0.0039

Neptune 25410-11-03 06:14 G 11002177.55 11002177.76 11002177.98 0.0089 0.0019

Saturn 25411-06-09 09:36 G 11002395.72 11002395.90 11002396.08 0.0291 0.0143

Neptune 25411-06-16 19:26 G 11002403.09 11002403.31 11002403.53 0.0089 0.0000

Mars 25411-07-07 21:50 G 11002424.24 11002424.41 11002424.58 0.1836 0.0053

Saturn 25412-01-25 07:55 G 11002625.64 11002625.83 11002626.04 0.0292 0.0096

Neptune 25412-01-28 08:24 G 11002628.64 11002628.85 11002629.07 0.0089 0.0020

Neptune 25412-09-09 21:21 G 11002854.20 11002854.39 11002854.60 0.0089 0.0039

Neptune 25413-04-23 10:48 G 11003079.79 11003079.95 11003080.12 0.0089 0.0058

Jupiter 25413-11-25 04:19 G 11003295.47 11003295.68 11003295.88 0.0503 0.0064

Neptune 25413-12-04 23:31 G 11003305.39 11003305.48 11003305.60 0.0089 0.0078

Mars 25417-12-20 14:24 G 11004781.95 11004782.10 11004782.26 0.1708 0.0790

Saturn 25425-04-08 11:31 G 11007447.95 11007447.98 11007448.04 0.0270 0.0263

Jupiter 25425-07-31 03:50 G 11007561.54 11007561.66 11007561.79 0.0501 0.0392

Saturn 25425-11-23 14:38 G 11007676.91 11007677.11 11007677.32 0.0269 0.0078

Saturn 25426-07-10 17:02 G 11007906.02 11007906.21 11007906.41 0.0268 0.0106

Pluto 25431-05-20 03:21 G 11009680.59 11009680.64 11009680.71 0.0066 0.0063

Jupiter 25431-06-09 13:55 G 11009700.94 11009701.08 11009701.23 0.0523 0.0361

Pluto 25431-12-31 07:55 G 11009905.63 11009905.83 11009906.05 0.0066 0.0017

Pluto 25432-08-12 12:28 G 11010130.84 11010131.02 11010131.23 0.0066 0.0030

Earth 25438-07-06 05:45 G 11012284.59 11012284.74 11012284.89 0.2663 0.0661

Moon 25438-07-06 06:57 G 11012284.62 11012284.79 11012284.95 0.2656 0.0601 *

Saturn 25440-12-19 22:04 G 11013182.23 11013182.42 11013182.63 0.0291 0.0103

Saturn 25441-08-06 20:52 G 11013412.19 11013412.37 11013412.56 0.0292 0.0136

Jupiter 25443-02-12 05:31 G 11013966.54 11013966.73 11013966.92 0.0526 0.0171

Uranus 25444-09-02 15:36 G 11014535.07 11014535.15 11014535.25 0.0135 0.0122

Uranus 25445-04-16 22:04 G 11014761.27 11014761.42 11014761.60 0.0135 0.0089

Uranus 25445-11-29 04:33 G 11014987.50 11014987.69 11014987.89 0.0135 0.0055

Uranus 25446-07-13 10:48 G 11015213.74 11015213.95 11015214.17 0.0135 0.0021

Uranus 25447-02-24 16:48 G 11015439.99 11015440.20 11015440.42 0.0134 0.0012

Uranus 25447-10-08 22:48 G 11015666.25 11015666.45 11015666.66 0.0134 0.0045

Uranus 25448-05-22 04:48 G 11015892.53 11015892.70 11015892.88 0.0134 0.0078

Uranus 25449-01-03 10:33 G 11016118.83 11016118.94 11016119.07 0.0134 0.0111

Jupiter 25449-08-02 14:09 G 11016329.94 11016330.09 11016330.25 0.0504 0.0327

Mars 25449-12-19 14:52 G 11016469.01 11016469.12 11016469.23 0.1696 0.1312

Saturn 25454-10-19 19:40 G 11018234.21 11018234.32 11018234.42 0.0269 0.0233

Saturn 25455-06-05 22:04 G 11018463.21 11018463.42 11018463.63 0.0268 0.0049

Saturn 25456-01-21 00:00 G 11018692.33 11018692.50 11018692.69 0.0268 0.0135

Jupiter 25461-04-07 13:12 G 11020595.85 11020596.05 11020596.24 0.0501 0.0139

Saturn 25470-07-02 03:07 G 11023968.43 11023968.63 11023968.84 0.0291 0.0074

Saturn 25471-02-17 01:40 G 11024198.40 11024198.57 11024198.75 0.0292 0.0165

Mars 25477-05-04 03:50 G 11026466.49 11026466.66 11026466.83 0.1831 0.0466

Jupiter 25478-10-20 21:50 G 11027001.21 11027001.41 11027001.60 0.0524 0.0141

Mars 25483-10-18 00:28 G 11028824.39 11028824.52 11028824.65 0.1712 0.1112

Saturn 25484-04-30 22:33 G 11029020.32 11029020.44 11029020.58 0.0270 0.0211

Saturn 25484-12-16 01:26 G 11029249.35 11029249.56 11029249.77 0.0269 0.0026

Saturn 25485-08-02 03:36 G 11029478.48 11029478.65 11029478.82 0.0268 0.0158

Uranus 25488-08-28 22:33 G 11030601.31 11030601.44 11030601.59 0.0143 0.0109

Uranus 25489-04-12 09:36 G 11030827.73 11030827.90 11030828.11 0.0143 0.0070

Neptune 25489-11-18 15:50 G 11031048.13 11031048.16 11031048.23 0.0089 0.0086

Uranus 25489-11-24 21:07 G 11031054.17 11031054.38 11031054.60 0.0144 0.0029

Jupiter 25490-06-25 13:26 G 11031266.93 11031267.06 11031267.20 0.0527 0.0394

Neptune 25490-07-02 04:48 G 11031273.57 11031273.70 11031273.86 0.0089 0.0067

Uranus 25490-07-09 08:38 G 11031280.64 11031280.86 11031281.08 0.0144 0.0012

Neptune 25491-02-12 17:45 G 11031499.07 11031499.24 11031499.44 0.0089 0.0048

Uranus 25491-02-20 20:09 G 11031507.14 11031507.34 11031507.54 0.0144 0.0053

Neptune 25491-09-26 07:12 G 11031724.59 11031724.80 11031725.01 0.0089 0.0028

Uranus 25491-10-05 07:40 G 11031733.66 11031733.82 11031733.99 0.0144 0.0095

Neptune 25492-05-08 20:09 G 11031950.12 11031950.34 11031950.56 0.0089 0.0009

Uranus 25492-05-18 19:12 G 11031960.24 11031960.30 11031960.38 0.0144 0.0136

Neptune 25492-12-20 08:52 G 11032175.66 11032175.87 11032176.10 0.0089 0.0011

Neptune 25493-08-02 21:50 G 11032401.21 11032401.41 11032401.62 0.0089 0.0030

Neptune 25494-03-16 10:33 G 11032626.77 11032626.94 11032627.13 0.0089 0.0049

Neptune 25494-10-27 23:45 G 11032852.35 11032852.49 11032852.63 0.0089 0.0068

Neptune 25495-06-10 12:28 G 11033077.99 11033078.02 11033078.07 0.0089 0.0087

Jupiter 25496-12-14 00:14 G 11033630.31 11033630.51 11033630.71 0.0503 0.0129

Saturn 25499-05-27 16:19 G 11034525.12 11034525.18 11034525.27 0.0291 0.0272

Saturn 25500-01-12 14:52 G 11034754.91 11034755.12 11034755.33 0.0292 0.0036

Saturn 25500-08-30 13:40 G 11034984.93 11034985.07 11034985.23 0.0292 0.0205

Jupiter 25508-08-19 23:45 G 11037896.34 11037896.49 11037896.65 0.0500 0.0329

Saturn 25513-11-12 06:43 G 11039806.63 11039806.78 11039806.95 0.0269 0.0180

Saturn 25514-06-29 09:21 G 11040035.68 11040035.89 11040036.10 0.0268 0.0004

Jupiter 25514-06-29 10:33 G 11040035.83 11040035.94 11040036.05 0.0524 0.0431 *

Saturn 25515-02-13 11:02 G 11040264.82 11040264.96 11040265.12 0.0268 0.0187

Mars 25515-10-18 00:57 G 11040511.40 11040511.54 11040511.68 0.1700 0.1004

Pluto 25519-01-19 14:24 G 11041700.92 11041701.10 11041701.32 0.0078 0.0037

Pluto 25519-09-02 00:00 G 11041926.32 11041926.50 11041926.70 0.0077 0.0040

Jupiter 25526-03-04 04:19 G 11044301.48 11044301.68 11044301.88 0.0526 0.0088

Saturn 25528-12-07 22:04 G 11045311.31 11045311.42 11045311.54 0.0291 0.0242

Uranus 25528-12-16 06:43 G 11045319.65 11045319.78 11045319.93 0.0135 0.0103

Saturn 25529-07-25 20:24 G 11045541.14 11045541.35 11045541.57 0.0291 0.0007

Uranus 25529-07-30 12:57 G 11045545.87 11045546.04 11045546.24 0.0135 0.0070

Saturn 25530-03-12 18:57 G 11045771.18 11045771.29 11045771.43 0.0292 0.0234

Uranus 25530-03-13 19:40 G 11045772.10 11045772.32 11045772.53 0.0135 0.0036

Uranus 25530-10-26 01:40 G 11045998.36 11045998.57 11045998.79 0.0134 0.0003

Uranus 25531-06-09 07:55 G 11046224.62 11046224.83 11046225.04 0.0134 0.0031

Uranus 25532-01-21 13:40 G 11046450.89 11046451.07 11046451.27 0.0134 0.0064

Jupiter 25532-08-22 10:48 G 11046664.83 11046664.95 11046665.08 0.0504 0.0392

Uranus 25532-09-03 19:55 G 11046677.18 11046677.33 11046677.48 0.0134 0.0096

Uranus 25533-04-18 01:26 G 11046903.52 11046903.56 11046903.63 0.0134 0.0129

Mars 25543-03-02 09:36 G 11050508.76 11050508.90 11050509.05 0.1827 0.0986

Saturn 25543-05-25 09:21 G 11050592.73 11050592.89 11050593.07 0.0269 0.0159

Moon 25544-01-08 11:45 G 11050820.85 11050820.99 11050821.13 0.2662 0.1516

Earth 25544-01-08 12:14 G 11050820.90 11050821.01 11050821.13 0.2669 0.1772 *

Saturn 25544-01-09 12:00 G 11050821.79 11050822.00 11050822.21 0.0269 0.0026

Jupiter 25544-04-27 10:33 G 11050930.73 11050930.94 11050931.14 0.0502 0.0068

Saturn 25544-08-25 13:40 G 11051050.95 11051051.07 11051051.21 0.0268 0.0208

Mars 25549-08-15 10:04 G 11052866.83 11052866.92 11052867.01 0.1716 0.1455

Earth 25552-01-06 03:50 G 11053740.55 11053740.66 11053740.76 0.2668 0.1975

Saturn 25558-06-20 08:38 G 11056097.72 11056097.86 11056098.01 0.0291 0.0206

Saturn 25559-02-05 07:12 G 11056327.60 11056327.80 11056328.02 0.0292 0.0033

Saturn 25559-09-23 06:28 G 11056557.70 11056557.77 11056557.85 0.0293 0.0272

Jupiter 25561-11-09 16:48 G 11057336.01 11057336.20 11057336.39 0.0525 0.0202

Uranus 25572-04-29 04:19 G 11061159.60 11061159.68 11061159.80 0.0143 0.0127

Saturn 25572-12-04 17:31 G 11061379.05 11061379.23 11061379.42 0.0269 0.0128

Uranus 25572-12-11 15:36 G 11061385.99 11061386.15 11061386.33 0.0143 0.0087

Neptune 25573-03-31 02:24 G 11061495.54 11061495.60 11061495.67 0.0089 0.0084

Jupiter 25573-07-15 09:21 G 11061601.73 11061601.89 11061602.05 0.0527 0.0327

Saturn 25573-07-21 19:40 G 11061608.12 11061608.32 11061608.53 0.0268 0.0056

Uranus 25573-07-26 02:52 G 11061612.42 11061612.62 11061612.83 0.0144 0.0047

Neptune 25573-11-11 15:21 G 11061721.00 11061721.14 11061721.29 0.0089 0.0065

Saturn 25574-03-07 21:36 G 11061837.30 11061837.40 11061837.49 0.0267 0.0237

Uranus 25574-03-09 14:09 G 11061838.87 11061839.09 11061839.31 0.0144 0.0006

Neptune 25574-06-25 04:19 G 11061946.50 11061946.68 11061946.88 0.0089 0.0046

Uranus 25574-10-22 01:40 G 11062065.36 11062065.57 11062065.78 0.0144 0.0035

Neptune 25575-02-05 17:16 G 11062172.02 11062172.22 11062172.44 0.0089 0.0027

Uranus 25575-06-05 12:57 G 11062291.87 11062292.04 11062292.24 0.0144 0.0076

Neptune 25575-09-19 06:28 G 11062397.55 11062397.77 11062397.99 0.0089 0.0007

Uranus 25576-01-18 00:43 G 11062518.41 11062518.53 11062518.66 0.0144 0.0117

Neptune 25576-05-01 19:40 G 11062623.10 11062623.32 11062623.54 0.0089 0.0012

Neptune 25576-12-13 08:24 G 11062848.66 11062848.85 11062849.07 0.0089 0.0032

Neptune 25577-07-26 21:21 G 11063074.22 11063074.39 11063074.59 0.0089 0.0051

Neptune 25578-03-09 10:33 G 11063299.82 11063299.94 11063300.08 0.0089 0.0070

Jupiter 25580-01-03 20:09 G 11063965.16 11063965.34 11063965.54 0.0503 0.0192

Mars 25581-08-14 11:02 G 11064553.80 11064553.96 11064554.12 0.1703 0.0695

Saturn 25587-12-31 14:09 G 11066883.92 11066884.09 11066884.26 0.0291 0.0177

Saturn 25588-08-17 12:28 G 11067113.82 11067114.02 11067114.24 0.0292 0.0062

Jupiter 25591-09-08 20:24 G 11068231.18 11068231.35 11068231.53 0.0501 0.0264

Jupiter 25597-07-18 09:21 G 11070370.86 11070370.89 11070370.93 0.0523 0.0515

Saturn 25602-06-16 19:26 G 11072165.12 11072165.31 11072165.51 0.0269 0.0108

Saturn 25603-01-31 21:50 G 11072394.20 11072394.41 11072394.61 0.0268 0.0076

Saturn 25603-09-17 23:16 G 11072623.42 11072623.47 11072623.54 0.0268 0.0257

Mars 25608-12-27 16:19 G 11074551.08 11074551.18 11074551.28 0.1822 0.1472

Jupiter 25609-03-23 02:09 G 11074636.38 11074636.59 11074636.79 0.0525 0.0012

Uranus 25612-08-15 15:36 G 11075878.06 11075878.15 11075878.27 0.0135 0.0118

Uranus 25613-03-29 22:04 G 11076104.26 11076104.42 11076104.60 0.0135 0.0084

Uranus 25613-11-11 04:48 G 11076330.50 11076330.70 11076330.90 0.0135 0.0050

Uranus 25614-06-25 11:02 G 11076556.74 11076556.96 11076557.18 0.0135 0.0017

Uranus 25615-02-06 17:16 G 11076783.00 11076783.22 11076783.43 0.0134 0.0017

Jupiter 25615-09-11 08:09 G 11076999.77 11076999.84 11076999.92 0.0504 0.0465

Uranus 25615-09-20 23:02 G 11077009.27 11077009.46 11077009.67 0.0134 0.0050

Uranus 25616-05-04 05:02 G 11077235.55 11077235.71 11077235.89 0.0134 0.0083

Uranus 25616-12-16 11:02 G 11077461.86 11077461.96 11077462.08 0.0134 0.0115

Saturn 25617-07-12 22:48 G 11077670.27 11077670.45 11077670.64 0.0291 0.0144

Saturn 25618-02-27 21:50 G 11077900.21 11077900.41 11077900.61 0.0292 0.0096

Jupiter 25627-05-17 07:55 G 11081265.63 11081265.83 11081266.04 0.0502 0.0010

Saturn 25631-05-13 00:43 G 11082722.49 11082722.53 11082722.58 0.0269 0.0262

Saturn 25631-12-28 03:21 G 11082951.44 11082951.64 11082951.84 0.0268 0.0078

Saturn 25632-08-13 05:02 G 11083180.53 11083180.71 11083180.92 0.0268 0.0106

Jupiter 25639-01-20 07:12 G 11085531.72 11085531.80 11085531.88 0.0499 0.0453

Mars 25640-12-27 06:43 G 11086238.68 11086238.78 11086238.88 0.1838 0.1485

Jupiter 25644-11-28 16:19 G 11087671.02 11087671.18 11087671.35 0.0525 0.0290

Saturn 25647-01-23 04:48 G 11088456.50 11088456.70 11088456.89 0.0291 0.0113

Mars 25647-06-11 21:21 G 11088596.22 11088596.39 11088596.56 0.1707 0.0385

Saturn 25647-09-10 03:21 G 11088686.46 11088686.64 11088686.84 0.0292 0.0126

Neptune 25654-10-04 15:50 G 11091268.05 11091268.16 11091268.28 0.0089 0.0074

Neptune 25655-05-18 04:33 G 11091493.53 11091493.69 11091493.88 0.0089 0.0055

Neptune 25655-12-29 17:31 G 11091719.04 11091719.23 11091719.44 0.0089 0.0036

Jupiter 25656-08-03 09:36 G 11091936.73 11091936.90 11091937.09 0.0527 0.0234

Uranus 25656-08-10 21:07 G 11091944.24 11091944.38 11091944.53 0.0143 0.0105

Neptune 25656-08-11 06:28 G 11091944.57 11091944.77 11091945.00 0.0089 0.0017

Neptune 25657-03-24 19:40 G 11092170.10 11092170.32 11092170.54 0.0089 0.0003

Uranus 25657-03-25 08:09 G 11092170.65 11092170.84 11092171.04 0.0143 0.0065

Neptune 25657-11-05 08:52 G 11092395.65 11092395.87 11092396.08 0.0089 0.0022

Uranus 25657-11-06 19:26 G 11092397.10 11092397.31 11092397.53 0.0144 0.0026

Neptune 25658-06-18 21:21 G 11092621.21 11092621.39 11092621.60 0.0089 0.0042

Uranus 25658-06-21 06:57 G 11092623.57 11092623.79 11092624.01 0.0144 0.0016

Neptune 25659-01-30 10:04 G 11092846.78 11092846.92 11092847.10 0.0089 0.0061

Uranus 25659-02-02 18:14 G 11092850.06 11092850.26 11092850.46 0.0144 0.0056

Neptune 25659-09-12 23:02 G 11093072.38 11093072.46 11093072.57 0.0089 0.0080

Uranus 25659-09-17 05:31 G 11093076.58 11093076.73 11093076.90 0.0144 0.0098

Uranus 25660-04-30 17:02 G 11093303.17 11093303.21 11093303.29 0.0144 0.0138

Saturn 25660-11-22 01:55 G 11093508.50 11093508.58 11093508.68 0.0269 0.0243

Saturn 25661-07-09 04:33 G 11093737.48 11093737.69 11093737.89 0.0269 0.0059

Saturn 25662-02-23 06:14 G 11093966.58 11093966.76 11093966.95 0.0268 0.0124

Jupiter 25663-01-22 18:43 G 11094300.11 11094300.28 11094300.45 0.0503 0.0269

Jupiter 25674-09-27 18:57 G 11098566.10 11098566.29 11098566.48 0.0501 0.0186

Saturn 25676-08-04 11:16 G 11099242.77 11099242.97 11099243.18 0.0292 0.0083

Saturn 25677-03-22 10:19 G 11099472.76 11099472.93 11099473.12 0.0292 0.0158

Pluto 25679-12-04 05:45 G 11100459.64 11100459.74 11100459.86 0.0066 0.0056

Pluto 25680-07-16 10:19 G 11100684.72 11100684.93 11100685.16 0.0066 0.0010

Pluto 25681-02-26 14:38 G 11100909.95 11100910.11 11100910.31 0.0066 0.0038

Moon 25681-07-07 03:21 G 11101040.51 11101040.64 11101040.77 0.2669 0.1338

Earth 25681-07-07 06:28 G 11101040.62 11101040.77 11101040.92 0.2663 0.0833 *

Saturn 25690-06-04 09:21 G 11104294.77 11104294.89 11104295.03 0.0269 0.0213

Saturn 25691-01-19 11:45 G 11104523.78 11104523.99 11104524.20 0.0268 0.0030

Saturn 25691-09-05 13:40 G 11104752.89 11104753.07 11104753.24 0.0267 0.0153

Jupiter 25692-04-10 22:33 G 11104971.24 11104971.44 11104971.64 0.0526 0.0058

Uranus 25696-04-14 23:31 G 11106436.46 11106436.48 11106436.54 0.0135 0.0133

Uranus 25696-11-27 06:14 G 11106662.63 11106662.76 11106662.92 0.0135 0.0099

Uranus 25697-07-11 12:57 G 11106888.85 11106889.04 11106889.23 0.0135 0.0065

Uranus 25698-02-22 19:12 G 11107115.09 11107115.30 11107115.52 0.0135 0.0032

Uranus 25698-10-07 01:26 G 11107341.35 11107341.56 11107341.78 0.0135 0.0003

Uranus 25699-05-21 07:40 G 11107567.62 11107567.82 11107568.04 0.0134 0.0035

Uranus 25700-01-02 13:40 G 11107793.89 11107794.07 11107794.27 0.0134 0.0068

Uranus 25700-08-16 19:40 G 11108020.18 11108020.32 11108020.47 0.0134 0.0100

Uranus 25701-03-31 01:12 G 11108246.54 11108246.55 11108246.59 0.0134 0.0133

Jupiter 25703-12-16 16:04 G 11109237.08 11109237.17 11109237.26 0.0528 0.0468

Saturn 25705-06-30 18:28 G 11109799.26 11109799.27 11109799.29 0.0291 0.0290

Saturn 25706-02-15 16:48 G 11110028.99 11110029.20 11110029.41 0.0292 0.0054

Saturn 25706-10-03 15:50 G 11110259.00 11110259.16 11110259.32 0.0292 0.0186

Mars 25706-10-25 12:14 G 11110280.86 11110281.01 11110281.16 0.1833 0.0938

Jupiter 25710-06-06 06:00 G 11111600.55 11111600.75 11111600.95 0.0502 0.0078

Mars 25713-04-09 06:57 G 11112638.61 11112638.79 11112638.96 0.1710 0.0059

Saturn 25719-12-16 09:50 G 11115080.78 11115080.91 11115081.07 0.0269 0.0195

Saturn 25720-08-01 12:14 G 11115309.80 11115310.01 11115310.22 0.0268 0.0011

Saturn 25721-03-18 13:40 G 11115538.92 11115539.07 11115539.24 0.0268 0.0170

Jupiter 25722-02-09 06:14 G 11115866.63 11115866.76 11115866.89 0.0500 0.0375

Jupiter 25727-12-19 16:33 G 11118006.06 11118006.19 11118006.33 0.0524 0.0381

Saturn 25735-01-10 22:48 G 11120585.37 11120585.45 11120585.55 0.0291 0.0264

Saturn 25735-08-28 21:50 G 11120815.20 11120815.41 11120815.62 0.0292 0.0026

Saturn 25736-04-14 21:07 G 11121045.25 11121045.38 11121045.53 0.0293 0.0215

Neptune 25738-02-14 02:24 G 11121715.49 11121715.60 11121715.75 0.0089 0.0072

Neptune 25738-09-27 15:36 G 11121940.99 11121941.15 11121941.34 0.0089 0.0053

Neptune 25739-05-11 04:48 G 11122166.51 11122166.70 11122166.92 0.0089 0.0034

Jupiter 25739-08-24 06:28 G 11122271.58 11122271.77 11122271.96 0.0527 0.0164

Neptune 25739-12-22 18:14 G 11122392.04 11122392.26 11122392.47 0.0089 0.0014

Uranus 25740-04-11 02:52 G 11122502.52 11122502.62 11122502.74 0.0143 0.0123

Neptune 25740-08-04 07:12 G 11122617.58 11122617.80 11122618.02 0.0089 0.0005

Uranus 25740-11-23 14:09 G 11122728.91 11122729.09 11122729.26 0.0143 0.0084

Neptune 25741-03-17 19:55 G 11122843.13 11122843.33 11122843.55 0.0089 0.0025

Uranus 25741-07-08 01:12 G 11122955.34 11122955.55 11122955.76 0.0143 0.0044

Neptune 25741-10-29 08:52 G 11123068.69 11123068.87 11123069.08 0.0089 0.0044

Uranus 25742-02-19 12:14 G 11123181.80 11123182.01 11123182.23 0.0144 0.0004

Neptune 25742-06-11 22:04 G 11123294.28 11123294.42 11123294.59 0.0089 0.0063

Uranus 25742-10-03 23:31 G 11123408.28 11123408.48 11123408.70 0.0144 0.0037

Neptune 25743-01-23 11:16 G 11123519.90 11123519.97 11123520.06 0.0089 0.0082

Uranus 25743-05-18 10:48 G 11123634.78 11123634.95 11123635.14 0.0144 0.0078

Uranus 25743-12-30 22:33 G 11123861.32 11123861.44 11123861.56 0.0144 0.0119

Jupiter 25746-02-11 18:57 G 11124635.15 11124635.29 11124635.43 0.0503 0.0355

Saturn 25749-06-27 16:48 G 11125867.04 11125867.20 11125867.37 0.0269 0.0166

Saturn 25750-02-11 18:57 G 11126096.08 11126096.29 11126096.50 0.0268 0.0017

Saturn 25750-09-28 20:24 G 11126325.22 11126325.35 11126325.50 0.0267 0.0198

Jupiter 25757-10-17 18:00 G 11128901.05 11128901.25 11128901.45 0.0501 0.0108

Saturn 25764-07-23 04:33 G 11131371.57 11131371.69 11131371.81 0.0291 0.0235

Saturn 25765-03-10 03:07 G 11131601.42 11131601.63 11131601.84 0.0292 0.0003

Saturn 25765-10-26 02:09 G 11131831.48 11131831.59 11131831.72 0.0293 0.0243

Pluto 25767-08-05 17:31 G 11132480.02 11132480.23 11132480.44 0.0078 0.0028

Pluto 25768-03-18 02:24 G 11132705.45 11132705.60 11132705.79 0.0077 0.0049

Mars 25772-08-21 18:14 G 11134323.09 11134323.26 11134323.43 0.1829 0.0413

Jupiter 25775-05-02 01:12 G 11135306.36 11135306.55 11135306.74 0.0525 0.0164

Saturn 25779-01-07 17:02 G 11136653.03 11136653.21 11136653.38 0.0269 0.0149

Mars 25779-02-04 17:02 G 11136681.04 11136681.21 11136681.38 0.1714 0.0270

Saturn 25779-08-24 18:43 G 11136882.07 11136882.28 11136882.49 0.0268 0.0034

Saturn 25780-04-09 20:09 G 11137111.22 11137111.34 11137111.47 0.0267 0.0214

Uranus 25780-07-28 14:38 G 11137221.00 11137221.11 11137221.23 0.0135 0.0114

Uranus 25781-03-11 21:07 G 11137447.21 11137447.38 11137447.56 0.0135 0.0080

Uranus 25781-10-24 03:36 G 11137673.45 11137673.65 11137673.86 0.0135 0.0047

Uranus 25782-06-07 10:19 G 11137899.71 11137899.93 11137900.15 0.0135 0.0013

Uranus 25783-01-19 16:19 G 11138125.97 11138126.18 11138126.40 0.0135 0.0021

Uranus 25783-09-02 22:19 G 11138352.24 11138352.43 11138352.64 0.0134 0.0054

Uranus 25784-04-16 04:19 G 11138578.53 11138578.68 11138578.86 0.0134 0.0086

Uranus 25784-11-28 10:33 G 11138804.84 11138804.94 11138805.04 0.0134 0.0118

Jupiter 25787-01-04 18:00 G 11139572.10 11139572.25 11139572.39 0.0528 0.0366

Moon 25787-01-09 12:14 G 11139576.91 11139577.01 11139577.12 0.2675 0.1842

Earth 25787-01-09 13:26 G 11139576.94 11139577.06 11139577.19 0.2668 0.1625 *

Jupiter 25793-06-25 06:57 G 11141935.60 11141935.79 11141935.98 0.0502 0.0169

Saturn 25794-02-02 06:57 G 11142157.65 11142157.79 11142157.94 0.0291 0.0212

Saturn 25794-09-20 06:00 G 11142387.54 11142387.75 11142387.96 0.0292 0.0027

Earth 25795-01-07 05:02 G 11142496.61 11142496.71 11142496.80 0.2668 0.2109

Moon 25795-01-07 08:09 G 11142496.72 11142496.84 11142496.95 0.2673 0.1736 *

Saturn 25795-05-08 05:31 G 11142617.66 11142617.73 11142617.82 0.0293 0.0268

Jupiter 25805-03-01 07:55 G 11146201.66 11146201.83 11146202.00 0.0500 0.0281

Saturn 25808-07-20 22:48 G 11147439.27 11147439.45 11147439.65 0.0268 0.0122

Saturn 25809-03-07 00:43 G 11147668.33 11147668.53 11147668.74 0.0267 0.0062

Saturn 25809-10-22 02:09 G 11147897.51 11147897.59 11147897.69 0.0267 0.0242

Jupiter 25811-01-08 14:09 G 11148340.99 11148341.09 11148341.19 0.0524 0.0454

Neptune 25819-01-08 03:07 G 11151262.55 11151262.63 11151262.73 0.0089 0.0081

Neptune 25819-08-21 16:05 G 11151488.02 11151488.17 11151488.33 0.0089 0.0062

Neptune 25820-04-03 04:48 G 11151713.52 11151713.70 11151713.91 0.0089 0.0043

Neptune 25820-11-14 18:00 G 11151939.05 11151939.25 11151939.47 0.0089 0.0024

Neptune 25821-06-28 07:12 G 11152164.58 11152164.80 11152165.02 0.0089 0.0005

Neptune 25822-02-08 19:55 G 11152390.12 11152390.33 11152390.55 0.0089 0.0015

Jupiter 25822-09-13 08:09 G 11152606.64 11152606.84 11152607.04 0.0527 0.0064

Neptune 25822-09-22 08:53 G 11152615.67 11152615.87 11152616.08 0.0089 0.0034

Neptune 25823-05-05 21:21 G 11152841.24 11152841.39 11152841.59 0.0089 0.0054

Saturn 25823-08-16 12:29 G 11152943.86 11152944.02 11152944.19 0.0291 0.0184

Uranus 25823-12-11 09:50 G 11153060.89 11153060.91 11153060.97 0.0143 0.0140

Neptune 25823-12-17 10:19 G 11153066.83 11153066.93 11153067.08 0.0089 0.0073

Saturn 25824-04-02 11:31 G 11153173.77 11153173.98 11153174.19 0.0292 0.0056

Uranus 25824-07-24 20:53 G 11153287.23 11153287.37 11153287.53 0.0143 0.0100

Uranus 25825-03-08 07:55 G 11153513.64 11153513.83 11153514.03 0.0143 0.0061

Uranus 25825-10-20 19:12 G 11153740.08 11153740.30 11153740.51 0.0144 0.0021

Uranus 25826-06-04 06:14 G 11153966.55 11153966.76 11153966.98 0.0144 0.0020

Uranus 25827-01-16 17:31 G 11154193.04 11154193.23 11154193.43 0.0144 0.0060

Uranus 25827-08-31 05:02 G 11154419.55 11154419.71 11154419.86 0.0144 0.0101

Uranus 25828-04-13 16:05 G 11154646.14 11154646.17 11154646.23 0.0144 0.0141

Jupiter 25829-03-03 18:29 G 11154970.18 11154970.27 11154970.37 0.0503 0.0438

Saturn 25838-01-30 22:48 G 11158225.26 11158225.45 11158225.65 0.0268 0.0104

Mars 25838-06-19 23:45 G 11158365.32 11158365.49 11158365.67 0.1824 0.0137

Saturn 25838-09-17 00:29 G 11158454.32 11158454.52 11158454.72 0.0267 0.0078

Saturn 25839-05-04 01:26 G 11158683.52 11158683.56 11158683.62 0.0267 0.0257

Jupiter 25840-11-06 18:43 G 11159236.08 11159236.28 11159236.49 0.0501 0.0021

Mars 25844-12-03 02:38 G 11160723.45 11160723.61 11160723.77 0.1718 0.0613

Jupiter 25852-07-12 20:38 G 11163502.28 11163502.36 11163502.43 0.0499 0.0461

Saturn 25853-02-25 13:41 G 11163729.90 11163730.07 11163730.25 0.0291 0.0162

Saturn 25853-10-13 12:57 G 11163959.83 11163960.04 11163960.24 0.0292 0.0077

Jupiter 25858-05-21 23:31 G 11165641.30 11165641.48 11165641.66 0.0525 0.0242

Uranus 25864-03-28 22:19 G 11167779.38 11167779.43 11167779.51 0.0135 0.0129

Uranus 25864-11-10 05:02 G 11168005.57 11168005.71 11168005.88 0.0135 0.0095

Uranus 25865-06-24 12:00 G 11168231.80 11168232.00 11168232.19 0.0135 0.0061

Uranus 25866-02-05 18:14 G 11168458.05 11168458.26 11168458.48 0.0135 0.0028

Uranus 25866-09-20 00:43 G 11168684.31 11168684.53 11168684.74 0.0135 0.0006

Saturn 25866-12-27 01:41 G 11168782.54 11168782.57 11168782.63 0.0269 0.0262

Uranus 25867-05-04 06:43 G 11168910.58 11168910.78 11168911.00 0.0134 0.0039

Saturn 25867-08-13 04:05 G 11169011.47 11169011.67 11169011.88 0.0268 0.0078

Uranus 25867-12-16 12:43 G 11169136.86 11169137.03 11169137.23 0.0134 0.0071

Saturn 25868-03-29 05:45 G 11169240.55 11169240.74 11169240.94 0.0267 0.0104

Uranus 25868-07-29 18:29 G 11169363.15 11169363.27 11169363.42 0.0134 0.0104

Jupiter 25870-01-24 15:36 G 11169906.98 11169907.15 11169907.32 0.0528 0.0291

Jupiter 25876-07-15 07:26 G 11172270.64 11172270.81 11172270.99 0.0502 0.0257

Mars 25876-12-02 03:50 G 11172410.60 11172410.66 11172410.73 0.1706 0.1557

Saturn 25882-09-07 19:12 G 11174516.12 11174516.30 11174516.50 0.0292 0.0134

Saturn 25883-04-25 18:29 G 11174746.08 11174746.27 11174746.47 0.0293 0.0107

Jupiter 25888-03-20 07:55 G 11176536.65 11176536.83 11176537.02 0.0500 0.0197

Saturn 25896-07-08 01:41 G 11179568.50 11179568.57 11179568.67 0.0269 0.0244

Saturn 25897-02-22 04:05 G 11179797.46 11179797.67 11179797.87 0.0268 0.0061

Saturn 25897-10-09 05:17 G 11180026.54 11180026.72 11180026.92 0.0267 0.0121

Neptune 25902-05-20 13:55 G 11181710.01 11181710.08 11181710.21 0.0089 0.0079

Neptune 25903-01-01 03:36 G 11181935.49 11181935.65 11181935.81 0.0089 0.0059

Neptune 25903-08-14 16:33 G 11182161.00 11182161.19 11182161.39 0.0089 0.0040

Neptune 25904-03-27 05:31 G 11182386.52 11182386.73 11182386.95 0.0089 0.0021

Mars 25904-04-17 06:14 G 11182407.60 11182407.76 11182407.92 0.1819 0.0624

Neptune 25904-11-07 18:43 G 11182612.06 11182612.28 11182612.50 0.0089 0.0002

Neptune 25905-06-21 07:41 G 11182837.61 11182837.82 11182838.04 0.0089 0.0018

Jupiter 25905-10-03 11:45 G 11182941.79 11182941.99 11182942.19 0.0526 0.0047

Neptune 25906-02-01 20:38 G 11183063.17 11183063.36 11183063.57 0.0089 0.0037

Neptune 25906-09-15 09:36 G 11183288.74 11183288.90 11183289.08 0.0089 0.0056

Neptune 25907-04-28 23:02 G 11183514.34 11183514.46 11183514.57 0.0089 0.0075

Uranus 25908-03-25 04:05 G 11183845.56 11183845.67 11183845.81 0.0143 0.0117

Uranus 25908-11-06 15:21 G 11184071.96 11184072.14 11184072.33 0.0143 0.0077

Uranus 25909-06-21 02:24 G 11184298.39 11184298.60 11184298.81 0.0143 0.0038

Uranus 25910-02-02 13:26 G 11184524.85 11184525.06 11184525.28 0.0144 0.0003

Uranus 25910-09-17 00:29 G 11184751.32 11184751.52 11184751.74 0.0144 0.0043

Mars 25910-10-01 12:14 G 11184765.87 11184766.01 11184766.15 0.1722 0.0953

Uranus 25911-05-01 11:45 G 11184977.82 11184977.99 11184978.18 0.0144 0.0083

Uranus 25911-12-13 23:17 G 11185204.37 11185204.47 11185204.59 0.0144 0.0124

Saturn 25912-03-20 19:26 G 11185302.12 11185302.31 11185302.51 0.0292 0.0114

Saturn 25912-11-05 18:43 G 11185532.09 11185532.28 11185532.48 0.0293 0.0127

Jupiter 25917-06-08 00:43 G 11187207.48 11187207.53 11187207.59 0.0529 0.0507

Jupiter 25923-11-27 22:05 G 11189571.22 11189571.42 11189571.62 0.0501 0.0084

Earth 25924-07-10 07:12 G 11189796.65 11189796.80 11189796.94 0.2664 0.1022

Moon 25924-07-10 12:00 G 11189796.83 11189797.00 11189797.16 0.2660 0.0172 *

Saturn	25926-01-19 06:57 G	11190354.67	11190354.79	11190354.91	0.0269	0.0218
Saturn	25926-09-05 08:53 G	11190583.67	11190583.87	11190584.09	0.0268	0.0036
Saturn	25927-04-22 10:33 G	11190812.76	11190812.94	11190813.12	0.0267	0.0146
Pluto	25928-06-21 10:05 G	11191238.76	11191238.92	11191239.10	0.0066	0.0042
Pluto	25929-02-01 14:53 G	11191463.90	11191464.12	11191464.34	0.0066	0.0004
Pluto	25929-09-14 19:12 G	11191689.18	11191689.30	11191689.46	0.0066	0.0052
Jupiter	25935-08-02 21:36 G	11193837.27	11193837.40	11193837.54	0.0499	0.0371
Jupiter	25941-06-11 01:26 G	11195976.41	11195976.56	11195976.72	0.0525	0.0345
Saturn	25941-10-01 01:41 G	11196088.37	11196088.57	11196088.78	0.0292	0.0084
Saturn	25942-05-19 00:57 G	11196318.37	11196318.54	11196318.73	0.0293	0.0157
Mars	25942-09-30 13:41 G	11196452.95	11196453.07	11196453.19	0.1709	0.1231
Uranus	25948-07-11 13:41 G	11198563.96	11198564.07	11198564.21	0.0135	0.0109
Uranus	25949-02-22 20:09 G	11198790.18	11198790.34	11198790.54	0.0135	0.0076
Uranus	25949-10-07 02:38 G	11199016.42	11199016.61	11199016.83	0.0135	0.0043
Uranus	25950-05-21 09:21 G	11199242.68	11199242.89	11199243.11	0.0135	0.0010
Uranus	25951-01-02 15:36 G	11199468.94	11199469.15	11199469.37	0.0135	0.0024
Uranus	25951-08-16 21:50 G	11199695.21	11199695.41	11199695.60	0.0134	0.0057
Uranus	25952-03-30 03:36 G	11199921.49	11199921.65	11199921.82	0.0134	0.0089
Uranus	25952-11-11 09:36 G	11200147.81	11200147.90	11200147.99	0.0134	0.0122
Jupiter	25953-02-13 19:41 G	11200242.13	11200242.32	11200242.51	0.0528	0.0175
Saturn	25955-08-01 06:57 G	11201140.66	11201140.79	11201140.94	0.0268	0.0201
Saturn	25956-03-17 09:07 G	11201369.66	11201369.88	11201370.09	0.0268	0.0018
Saturn	25956-11-01 10:33 G	11201598.77	11201598.94	11201599.10	0.0267	0.0163
Jupiter	25959-08-05 08:53 G	11202605.73	11202605.87	11202606.02	0.0503	0.0349
Mars	25970-02-12 12:29 G	11206449.89	11206450.02	11206450.16	0.1815	0.1127
Jupiter	25971-04-10 10:48 G	11206871.75	11206871.95	11206872.15	0.0500	0.0098
Saturn	25971-04-13 01:26 G	11206874.36	11206874.56	11206874.77	0.0292	0.0065
Saturn	25971-11-29 00:43 G	11207104.37	11207104.53	11207104.71	0.0293	0.0176
Mars	25976-07-28 21:36 G	11208808.29	11208808.40	11208808.51	0.1726	0.1314
Neptune	25983-04-12 14:24 G	11211257.09	11211257.10	11211257.15	0.0089	0.0088

Neptune 25983-11-24 03:21 G 11211482.52 11211482.64 11211482.80 0.0089 0.0069

Neptune 25984-07-06 16:19 G 11211708.02 11211708.18 11211708.38 0.0089 0.0050

Saturn 25985-02-10 11:31 G 11211926.83 11211926.98 11211927.15 0.0269 0.0176

Neptune 25985-02-17 05:17 G 11211933.53 11211933.72 11211933.94 0.0089 0.0031

Saturn 25985-09-27 13:55 G 11212155.86 11212156.08 11212156.29 0.0268 0.0009

Neptune 25985-09-30 18:29 G 11212159.06 11212159.27 11212159.49 0.0089 0.0011

Neptune 25986-05-14 07:26 G 11212384.59 11212384.81 11212385.03 0.0089 0.0008

Saturn 25986-05-14 15:07 G 11212384.99 11212385.13 11212385.29 0.0267 0.0189 *

Neptune 25986-12-25 20:09 G 11212610.14 11212610.34 11212610.56 0.0089 0.0028

Neptune 25987-08-08 08:53 G 11212835.70 11212835.87 11212836.08 0.0089 0.0047

Neptune 25988-03-20 21:50 G 11213061.28 11213061.41 11213061.58 0.0089 0.0066

Jupiter 25988-10-22 09:36 G 11213276.70 11213276.90 11213277.10 0.0526 0.0123

Neptune 25988-11-01 10:48 G 11213286.91 11213286.95 11213287.04 0.0089 0.0085

Uranus 25991-11-23 11:17 G 11214403.91 11214403.97 11214404.06 0.0143 0.0133

Uranus 25992-07-06 22:05 G 11214630.27 11214630.42 11214630.60 0.0143 0.0094

Uranus 25993-02-18 09:07 G 11214856.69 11214856.88 11214857.09 0.0143 0.0055

Uranus 25993-10-02 20:24 G 11215083.13 11215083.35 11215083.57 0.0144 0.0015

Uranus 25994-05-17 07:26 G 11215309.60 11215309.81 11215310.03 0.0144 0.0026

Uranus 25994-12-29 18:43 G 11215536.09 11215536.28 11215536.48 0.0144 0.0066

Uranus 25995-08-13 05:45 G 11215762.61 11215762.74 11215762.90 0.0144 0.0107

Saturn 26000-03-07 09:36 G 11217430.82 11217430.90 11217430.97 0.0291 0.0272

Jupiter 26000-06-27 02:24 G 11217542.48 11217542.60 11217542.74 0.0529 0.0406

Saturn 26000-10-23 08:09 G 11217660.63 11217660.84 11217661.05 0.0292 0.0035

27TH MILLENNIUM CE

This is a list of transits of Venus in the 27th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**26001-06-10 07:26**	**G**	**11217890.67**	**11217890.81**	**11217890.97**	**0.0293**	**0.0207**	
Mars	**26002-02-12 02:38**	**G**	**11218137.59**	**11218137.61**	**11218137.62**	**0.1830**	**0.1818**	
Jupiter	**26006-12-16 22:05**	**G**	**11219906.23**	**11219906.42**	**11219906.61**	**0.0501**	**0.0169**	
Mars	**26008-07-27 23:31**	**G**	**11220495.33**	**11220495.48**	**11220495.63**	**0.1713**	**0.0905**	
Saturn	**26014-08-23 12:43**	**G**	**11222712.86**	**11222713.03**	**11222713.21**	**0.0268**	**0.0156**	
Saturn	**26015-04-09 14:38**	**G**	**11222941.90**	**11222942.11**	**11222942.32**	**0.0267**	**0.0026**	
Saturn	**26015-11-24 15:50**	**G**	**11223171.03**	**11223171.16**	**11223171.30**	**0.0267**	**0.0207**	
Pluto	**26016-02-20 22:33**	**G**	**11223259.22**	**11223259.44**	**11223259.66**	**0.0078**	**0.0008**	
Pluto	**26016-10-03 07:12**	**G**	**11223484.72**	**11223484.80**	**11223484.93**	**0.0077**	**0.0068**	
Jupiter	**26018-08-21 22:19**	**G**	**11224172.27**	**11224172.43**	**11224172.61**	**0.0499**	**0.0284**	
Jupiter	**26024-06-30 05:02**	**G**	**11226311.61**	**11226311.71**	**11226311.81**	**0.0525**	**0.0454**	
Saturn	**26029-09-17 08:53**	**G**	**11228216.78**	**11228216.87**	**11228216.99**	**0.0291**	**0.0253**	
Earth	**26030-01-11 14:53**	**G**	**11228332.99**	**11228333.12**	**11228333.25**	**0.2667**	**0.1523**	
Moon	**26030-01-11 18:00**	**G**	**11228333.11**	**11228333.25**	**11228333.38**	**0.2662**	**0.1534**	*****
Saturn	**26030-05-05 08:09**	**G**	**11228446.63**	**11228446.84**	**11228447.05**	**0.0292**	**0.0015**	
Saturn	**26030-12-21 07:41**	**G**	**11228676.69**	**11228676.82**	**11228676.95**	**0.0293**	**0.0226**	
Uranus	**26032-03-10 22:05**	**G**	**11229122.34**	**11229122.42**	**11229122.51**	**0.0135**	**0.0124**	
Uranus	**26032-10-23 04:48**	**G**	**11229348.54**	**11229348.70**	**11229348.86**	**0.0135**	**0.0090**	
Uranus	**26033-06-06 11:17**	**G**	**11229574.78**	**11229574.97**	**11229575.18**	**0.0135**	**0.0057**	
Uranus	**26034-01-18 17:45**	**G**	**11229801.03**	**11229801.24**	**11229801.46**	**0.0135**	**0.0024**	
Uranus	**26034-09-02 00:00**	**G**	**11230027.28**	**11230027.50**	**11230027.72**	**0.0135**	**0.0009**	
Uranus	**26035-04-16 06:00**	**G**	**11230253.55**	**11230253.75**	**11230253.97**	**0.0134**	**0.0042**	
Uranus	**26035-11-28 12:14**	**G**	**11230479.83**	**11230480.01**	**11230480.19**	**0.0134**	**0.0075**	
Mars	**26035-12-10 19:26**	**G**	**11230492.23**	**11230492.31**	**11230492.39**	**0.1810**	**0.1598**	
Jupiter	**26036-03-04 18:57**	**G**	**11230577.09**	**11230577.29**	**11230577.49**	**0.0527**	**0.0091**	
Uranus	**26036-07-11 17:45**	**G**	**11230706.12**	**11230706.24**	**11230706.38**	**0.0134**	**0.0107**	

Moon 26038-01-09 04:48 G 11231252.61 11231252.70 11231252.79 0.2661 0.2195

Earth 26038-01-09 06:29 G 11231252.68 11231252.77 11231252.86 0.2667 0.2205 *

Mars 26042-05-26 06:43 G 11232850.74 11232850.78 11232850.83 0.1730 0.1672

Jupiter 26042-08-24 12:00 G 11232940.92 11232941.00 11232941.09 0.0503 0.0452

Saturn 26044-03-04 17:02 G 11233499.03 11233499.21 11233499.40 0.0269 0.0132

Saturn 26044-10-19 19:12 G 11233728.09 11233728.30 11233728.51 0.0268 0.0052

Saturn 26045-06-05 20:24 G 11233957.26 11233957.35 11233957.46 0.0267 0.0232

Jupiter 26054-04-29 11:17 G 11237206.77 11237206.97 11237207.17 0.0500 0.0009

Saturn 26059-03-30 17:02 G 11239003.08 11239003.21 11239003.36 0.0291 0.0221

Saturn 26059-11-15 16:05 G 11239232.96 11239233.17 11239233.38 0.0292 0.0018

Saturn 26060-07-02 15:21 G 11239463.05 11239463.14 11239463.24 0.0293 0.0260

Jupiter 26066-01-02 11:45 G 11241472.92 11241472.99 11241473.07 0.0498 0.0458

Neptune 26066-08-22 01:55 G 11241704.53 11241704.58 11241704.66 0.0089 0.0085

Neptune 26067-04-04 14:53 G 11241929.99 11241930.12 11241930.29 0.0089 0.0066

Neptune 26067-11-16 04:05 G 11242155.50 11242155.67 11242155.87 0.0089 0.0047

Mars 26067-12-10 08:24 G 11242179.73 11242179.85 11242179.97 0.1826 0.1283

Neptune 26068-06-28 17:17 G 11242381.02 11242381.22 11242381.44 0.0089 0.0028

Neptune 26069-02-09 06:43 G 11242606.56 11242606.78 11242607.00 0.0089 0.0008

Neptune 26069-09-22 19:41 G 11242832.10 11242832.32 11242832.54 0.0089 0.0011

Neptune 26070-05-06 08:38 G 11243057.66 11243057.86 11243058.08 0.0089 0.0031

Neptune 26070-12-17 21:36 G 11243283.23 11243283.40 11243283.60 0.0089 0.0050

Neptune 26071-07-31 10:33 G 11243508.82 11243508.94 11243509.09 0.0089 0.0069

Jupiter 26071-11-11 12:43 G 11243611.85 11243612.03 11243612.21 0.0526 0.0232

Neptune 26072-03-12 23:31 G 11243734.47 11243734.48 11243734.53 0.0089 0.0088

Saturn 26073-09-14 19:12 G 11244285.11 11244285.30 11244285.49 0.0268 0.0111

Saturn 26074-05-01 20:53 G 11244514.17 11244514.37 11244514.58 0.0267 0.0072

Mars 26074-05-25 09:21 G 11244537.72 11244537.89 11244538.05 0.1716 0.0579

Saturn 26074-12-16 21:50 G 11244743.36 11244743.41 11244743.49 0.0267 0.0252

Uranus 26076-03-06 03:50 G 11245188.55 11245188.66 11245188.82 0.0143 0.0112

Uranus 26076-10-18 15:07 G 11245414.95 11245415.13 11245415.32 0.0143 0.0072

Uranus	26077-06-02 02:09 G	11245641.38	11245641.59	11245641.81	0.0143	0.0033
Uranus	26078-01-14 13:12 G	11245867.84	11245868.05	11245868.27	0.0144	0.0007
Uranus	26078-08-29 00:29 G	11246094.31	11246094.52	11246094.72	0.0144	0.0047
Uranus	26079-04-12 11:45 G	11246320.82	11246320.99	11246321.16	0.0144	0.0087
Uranus	26079-11-24 23:17 G	11246547.37	11246547.47	11246547.57	0.0144	0.0128
Jupiter	26083-07-17 05:45 G	11247877.58	11247877.74	11247877.91	0.0528	0.0295
Saturn	26088-10-09 17:02 G	11249789.06	11249789.21	11249789.37	0.0291	0.0201
Saturn	26089-05-27 16:05 G	11250018.96	11250019.17	11250019.38	0.0292	0.0038
Jupiter	26090-01-04 23:45 G	11250241.32	11250241.49	11250241.67	0.0502	0.0264
Saturn	26090-01-12 15:36 G	11250249.09	11250249.15	11250249.22	0.0293	0.0279
Jupiter	26101-09-11 00:43 G	11254507.34	11254507.53	11254507.72	0.0500	0.0186
Saturn	26103-03-28 23:31 G	11255071.28	11255071.48	11255071.68	0.0269	0.0087
Saturn	26103-11-13 01:41 G	11255300.37	11255300.57	11255300.77	0.0268	0.0097
Jupiter	26107-07-21 02:09 G	11256646.59	11256646.59	11256646.59	0.0524	0.0524
Uranus	26116-06-23 13:26 G	11259906.93	11259907.06	11259907.20	0.0135	0.0105
Uranus	26117-02-04 19:55 G	11260133.15	11260133.33	11260133.52	0.0135	0.0071
Uranus	26117-09-19 02:24 G	11260359.39	11260359.60	11260359.81	0.0135	0.0038
Saturn	26118-04-23 02:24 G	11260575.43	11260575.60	11260575.78	0.0291	0.0166
Uranus	26118-05-03 08:53 G	11260585.65	11260585.87	11260586.08	0.0135	0.0006
Saturn	26118-12-09 01:12 G	11260805.35	11260805.55	11260805.76	0.0293	0.0074
Uranus	26118-12-15 14:53 G	11260811.91	11260812.12	11260812.34	0.0134	0.0028
Jupiter	26119-03-25 18:57 G	11260912.09	11260912.29	11260912.49	0.0527	0.0004
Uranus	26119-07-29 20:38 G	11261038.18	11261038.36	11261038.57	0.0134	0.0061
Uranus	26120-03-12 02:38 G	11261264.46	11261264.61	11261264.77	0.0134	0.0093
Uranus	26120-10-24 08:09 G	11261490.78	11261490.84	11261490.94	0.0134	0.0125
Jupiter	26130-11-28 12:14 G	11265178.00	11265178.01	11265178.02	0.0529	0.0528
Saturn	26132-02-22 00:00 G	11265628.43	11265628.50	11265628.59	0.0269	0.0249
Saturn	26132-10-08 02:38 G	11265857.41	11265857.61	11265857.82	0.0268	0.0064
Saturn	26133-05-25 04:33 G	11266086.50	11266086.69	11266086.88	0.0267	0.0119
Mars	26133-10-07 14:09 G	11266221.94	11266222.09	11266222.25	0.1821	0.0755

Jupiter 26137-05-19 10:33 G 11267541.74 11267541.94 11267542.15 0.0501 0.0072

Mars 26140-03-22 18:29 G 11268580.10 11268580.27 11268580.44 0.1721 0.0224

Saturn 26147-11-03 03:36 G 11271361.47 11271361.65 11271361.83 0.0291 0.0144

Neptune 26148-02-26 15:21 G 11271477.04 11271477.14 11271477.27 0.0089 0.0075

Saturn 26148-06-20 02:38 G 11271591.41 11271591.61 11271591.81 0.0292 0.0096

Neptune 26148-10-09 04:19 G 11271702.52 11271702.68 11271702.86 0.0089 0.0056

Jupiter 26149-01-22 12:14 G 11271807.88 11271808.01 11271808.15 0.0499 0.0373

Neptune 26149-05-22 17:17 G 11271928.03 11271928.22 11271928.43 0.0089 0.0037

Neptune 26150-01-03 06:14 G 11272153.55 11272153.76 11272153.98 0.0089 0.0018

Neptune 26150-08-16 19:12 G 11272379.08 11272379.30 11272379.52 0.0089 0.0001

Neptune 26151-03-30 07:55 G 11272604.62 11272604.83 11272605.05 0.0089 0.0021

Neptune 26151-11-10 20:53 G 11272830.18 11272830.37 11272830.58 0.0089 0.0040

Neptune 26152-06-23 09:36 G 11273055.75 11273055.90 11273056.08 0.0089 0.0059

Neptune 26153-02-03 22:19 G 11273281.35 11273281.43 11273281.56 0.0089 0.0078

Jupiter 26154-12-01 11:02 G 11273946.80 11273946.96 11273947.13 0.0525 0.0312

Moon 26159-07-14 11:45 G 11275632.89 11275632.99 11275633.09 0.2661 0.2055

Earth 26159-07-14 16:48 G 11275633.18 11275633.20 11275633.23 0.2664 0.2626

Uranus 26159-11-05 09:07 G 11275746.81 11275746.88 11275746.98 0.0143 0.0130

Uranus 26160-06-18 19:55 G 11275973.17 11275973.33 11275973.51 0.0143 0.0091

Uranus 26161-01-31 06:43 G 11276199.59 11276199.78 11276199.99 0.0143 0.0052

Saturn 26161-09-03 04:19 G 11276414.57 11276414.68 11276414.80 0.0270 0.0225

Uranus 26161-09-14 18:00 G 11276426.03 11276426.25 11276426.47 0.0144 0.0012

Saturn 26162-04-20 06:57 G 11276643.59 11276643.79 11276644.00 0.0269 0.0040

Uranus 26162-04-29 05:02 G 11276652.50 11276652.71 11276652.93 0.0144 0.0028

Saturn 26162-12-05 08:53 G 11276872.70 11276872.87 11276873.06 0.0268 0.0144

Uranus 26162-12-11 16:19 G 11276879.00 11276879.18 11276879.38 0.0144 0.0068

Uranus 26163-07-26 03:36 G 11277105.52 11277105.65 11277105.80 0.0144 0.0108

Jupiter 26166-08-06 02:38 G 11278212.43 11278212.61 11278212.79 0.0528 0.0224

Moon 26167-07-12 02:24 G 11278552.51 11278552.60 11278552.69 0.2667 0.2140

Earth 26167-07-12 07:55 G 11278552.68 11278552.83 11278552.97 0.2665 0.1183 *

Jupiter 26173-01-24 22:33 G 11280576.30 11280576.44 11280576.59 0.0502 0.0344

Pluto 26177-01-05 13:12 G 11282017.87 11282018.05 11282018.26 0.0066 0.0032

Saturn 26177-05-15 13:41 G 11282147.88 11282148.07 11282148.27 0.0292 0.0109

Pluto 26177-08-18 17:45 G 11282243.04 11282243.24 11282243.47 0.0066 0.0015

Saturn 26177-12-31 12:43 G 11282377.84 11282378.03 11282378.22 0.0293 0.0132

Pluto 26178-03-31 22:05 G 11282468.37 11282468.42 11282468.53 0.0066 0.0063

Jupiter 26184-09-29 22:33 G 11284842.24 11284842.44 11284842.64 0.0500 0.0113

Saturn 26191-03-16 09:07 G 11287200.74 11287200.88 11287201.02 0.0269 0.0199

Saturn 26191-10-31 11:31 G 11287429.77 11287429.98 11287430.20 0.0268 0.0016

Saturn 26192-06-16 13:26 G 11287658.89 11287659.06 11287659.22 0.0267 0.0168

Mars 26199-08-04 20:24 G 11290264.18 11290264.35 11290264.53 0.1817 0.0246

Uranus 26200-02-21 21:21 G 11290465.30 11290465.39 11290465.50 0.0135 0.0120

Uranus 26200-10-06 03:50 G 11290691.50 11290691.66 11290691.84 0.0135 0.0087

Uranus 26201-05-20 10:33 G 11290917.74 11290917.94 11290918.14 0.0135 0.0053

Uranus 26202-01-01 16:48 G 11291143.99 11291144.20 11291144.42 0.0135 0.0020

Jupiter 26202-04-14 20:24 G 11291247.16 11291247.35 11291247.55 0.0527 0.0100

Uranus 26202-08-15 23:02 G 11291370.24 11291370.46 11291370.68 0.0135 0.0013

Uranus 26203-03-30 05:02 G 11291596.51 11291596.71 11291596.92 0.0134 0.0045

Uranus 26203-11-11 11:02 G 11291822.79 11291822.96 11291823.14 0.0134 0.0078

Uranus 26204-06-24 16:48 G 11292049.09 11292049.20 11292049.33 0.0134 0.0110

Mars 26206-01-19 04:19 G 11292622.50 11292622.68 11292622.85 0.1724 0.0117

Saturn 26206-11-26 16:05 G 11292933.97 11292934.17 11292934.37 0.0291 0.0084

Saturn 26207-07-14 14:53 G 11293163.95 11293164.12 11293164.31 0.0292 0.0157

Jupiter 26213-12-18 10:48 G 11295512.84 11295512.95 11295513.06 0.0528 0.0445

Jupiter 26220-06-08 10:48 G 11297876.76 11297876.95 11297877.14 0.0501 0.0157

Saturn 26220-09-26 13:12 G 11297986.90 11297987.05 11297987.22 0.0270 0.0176

Saturn 26221-05-13 15:50 G 11298215.95 11298216.16 11298216.37 0.0269 0.0010

Saturn 26221-12-28 17:31 G 11298445.09 11298445.23 11298445.39 0.0268 0.0193

Neptune 26231-07-09 02:53 G 11301924.49 11301924.62 11301924.75 0.0089 0.0072

Jupiter 26232-02-12 10:05 G 11302142.76 11302142.92 11302143.09 0.0499 0.0298

Neptune 26232-02-19 15:50 G 11302149.99 11302150.16 11302150.34 0.0089 0.0053

Neptune 26232-10-02 04:48 G 11302375.51 11302375.70 11302375.91 0.0089 0.0034

Neptune 26233-05-15 18:14 G 11302601.05 11302601.26 11302601.48 0.0089 0.0015

Neptune 26233-12-27 07:26 G 11302826.59 11302826.81 11302827.03 0.0089 0.0005

Neptune 26234-08-09 20:24 G 11303052.14 11303052.35 11303052.57 0.0089 0.0024

Neptune 26235-03-23 09:21 G 11303277.71 11303277.89 11303278.09 0.0089 0.0043

Saturn 26235-10-22 05:17 G 11303490.68 11303490.72 11303490.77 0.0290 0.0282

Neptune 26235-11-03 22:33 G 11303503.29 11303503.44 11303503.60 0.0089 0.0062

Saturn 26236-06-08 03:36 G 11303720.45 11303720.65 11303720.87 0.0292 0.0046

Neptune 26236-06-16 11:17 G 11303728.91 11303728.97 11303729.08 0.0089 0.0082

Saturn 26237-01-24 02:38 G 11303950.46 11303950.61 11303950.77 0.0293 0.0196

Jupiter 26237-12-21 08:53 G 11304281.73 11304281.87 11304282.00 0.0525 0.0389

Uranus 26244-02-18 00:29 G 11306531.39 11306531.52 11306531.67 0.0143 0.0110

Uranus 26244-10-01 11:17 G 11306757.79 11306757.97 11306758.17 0.0143 0.0071

Uranus 26245-05-15 22:19 G 11306984.22 11306984.43 11306984.65 0.0143 0.0032

Uranus 26245-12-28 09:21 G 11307210.68 11307210.89 11307211.11 0.0144 0.0009

Uranus 26246-08-11 20:38 G 11307437.16 11307437.36 11307437.57 0.0144 0.0048

Uranus 26247-03-26 07:55 G 11307663.66 11307663.83 11307664.00 0.0144 0.0088

Uranus 26247-11-07 19:26 G 11307890.22 11307890.31 11307890.41 0.0144 0.0128

Jupiter 26249-08-26 01:55 G 11308547.38 11308547.58 11308547.77 0.0528 0.0138

Saturn 26250-04-08 18:57 G 11308773.12 11308773.29 11308773.47 0.0269 0.0149

Saturn 26250-11-23 21:21 G 11309002.19 11309002.39 11309002.61 0.0268 0.0037

Saturn 26251-07-10 22:48 G 11309231.34 11309231.45 11309231.59 0.0267 0.0218

Jupiter 26256-02-14 19:41 G 11310911.21 11310911.32 11310911.44 0.0502 0.0412

Pluto 26264-01-25 16:48 G 11313813.12 11313813.20 11313813.30 0.0078 0.0070

Pluto 26264-09-07 02:09 G 11314038.38 11314038.59 11314038.82 0.0078 0.0008

Saturn 26265-05-03 08:38 G 11314276.77 11314276.86 11314276.96 0.0290 0.0256

Mars 26265-06-02 02:24 G 11314306.43 11314306.60 11314306.77 0.1812 0.0280

Saturn 26265-12-19 06:57 G 11314506.58 11314506.79 11314507.00 0.0291 0.0019

Saturn 26266-08-06 05:45 G 11314736.61 11314736.74 11314736.89 0.0292 0.0222

Jupiter 26267-10-20 20:53 G 11315177.17 11315177.37 11315177.58 0.0500 0.0039

Mars 26271-11-16 13:26 G 11316664.89 11316665.06 11316665.22 0.1728 0.0475

Moon 26273-01-13 12:00 G 11317088.86 11317089.00 11317089.14 0.2670 0.1113

Earth 26273-01-13 16:19 G 11317089.05 11317089.18 11317089.31 0.2667 0.1416 *

Jupiter 26279-06-25 21:36 G 11319443.36 11319443.40 11319443.44 0.0498 0.0485

Saturn 26279-10-19 23:17 G 11319559.28 11319559.47 11319559.66 0.0270 0.0125

Saturn 26280-06-05 01:41 G 11319788.37 11319788.57 11319788.78 0.0269 0.0060

Earth 26281-01-11 07:55 G 11320008.75 11320008.83 11320008.91 0.2666 0.2297

Saturn 26281-01-20 03:36 G 11320017.56 11320017.65 11320017.74 0.0268 0.0242

Uranus 26283-10-23 05:02 G 11321023.70 11321023.71 11321023.75 0.0136 0.0135

Uranus 26284-06-05 11:45 G 11321249.86 11321249.99 11321250.15 0.0135 0.0102

Uranus 26285-01-17 18:29 G 11321476.09 11321476.27 11321476.46 0.0135 0.0068

Jupiter 26285-05-03 16:19 G 11321581.99 11321582.18 11321582.37 0.0526 0.0164

Uranus 26285-09-01 00:57 G 11321702.33 11321702.54 11321702.75 0.0135 0.0035

Uranus 26286-04-15 07:12 G 11321928.59 11321928.80 11321929.02 0.0135 0.0003

Uranus 26286-11-27 13:26 G 11322154.85 11322155.06 11322155.27 0.0135 0.0031

Uranus 26287-07-11 19:12 G 11322381.12 11322381.30 11322381.51 0.0134 0.0064

Uranus 26288-02-23 01:12 G 11322607.41 11322607.55 11322607.71 0.0134 0.0096

Uranus 26288-10-06 07:12 G 11322833.74 11322833.80 11322833.87 0.0134 0.0127

Saturn 26294-11-13 20:38 G 11325063.23 11325063.36 11325063.51 0.0291 0.0217

Saturn 26295-07-01 19:12 G 11325293.09 11325293.30 11325293.51 0.0292 0.0021

Saturn 26296-02-16 18:14 G 11325523.18 11325523.26 11325523.36 0.0293 0.0262

Jupiter 26297-01-06 06:57 G 11325847.66 11325847.79 11325847.94 0.0529 0.0377

Jupiter 26303-06-29 06:43 G 11328211.60 11328211.78 11328211.97 0.0501 0.0221

Saturn 26309-05-02 06:00 G 11330345.55 11330345.75 11330345.95 0.0269 0.0096

Saturn 26309-12-17 08:09 G 11330574.64 11330574.84 11330575.04 0.0268 0.0088

Neptune 26312-06-01 03:36 G 11331471.56 11331471.65 11331471.74 0.0089 0.0081

Neptune 26313-01-12 16:33 G 11331697.03 11331697.19 11331697.34 0.0089 0.0062

Neptune 26313-08-26 05:17 G 11331922.53 11331922.72 11331922.91 0.0089 0.0043

Neptune 26314-04-08 18:14 G 11332148.05 11332148.26 11332148.47 0.0089 0.0024

Neptune 26314-11-20 07:12 G 11332373.58 11332373.80 11332374.02 0.0089 0.0005

Jupiter 26315-03-04 06:29 G 11332477.59 11332477.77 11332477.95 0.0499 0.0236

Neptune 26315-07-03 20:09 G 11332599.12 11332599.34 11332599.56 0.0089 0.0014

Neptune 26316-02-14 08:53 G 11332824.67 11332824.87 11332825.08 0.0089 0.0033

Neptune 26316-09-26 21:36 G 11333050.23 11333050.40 11333050.59 0.0089 0.0052

Neptune 26317-05-10 10:33 G 11333275.82 11333275.94 11333276.08 0.0089 0.0071

Jupiter 26321-01-10 08:09 G 11334616.76 11334616.84 11334616.93 0.0525 0.0474

Saturn 26324-05-27 01:12 G 11335849.40 11335849.55 11335849.72 0.0291 0.0190

Saturn 26325-01-11 23:45 G 11336079.28 11336079.49 11336079.70 0.0292 0.0049

Saturn 26325-08-29 22:48 G 11336309.43 11336309.45 11336309.48 0.0293 0.0290

Uranus 26327-10-19 06:00 G 11337089.66 11337089.75 11337089.85 0.0143 0.0128

Uranus 26328-06-01 16:48 G 11337316.03 11337316.20 11337316.37 0.0143 0.0089

Uranus 26329-01-14 03:21 G 11337542.45 11337542.64 11337542.85 0.0143 0.0051

Uranus 26329-08-28 14:24 G 11337768.89 11337769.10 11337769.32 0.0143 0.0011

Uranus 26330-04-12 01:41 G 11337995.35 11337995.57 11337995.78 0.0144 0.0029

Uranus 26330-11-24 12:57 G 11338221.85 11338222.04 11338222.23 0.0144 0.0069

Mars 26331-03-31 09:07 G 11338348.72 11338348.88 11338349.04 0.1807 0.0761

Uranus 26331-07-09 00:14 G 11338448.38 11338448.51 11338448.66 0.0144 0.0109

Jupiter 26332-09-14 23:45 G 11338882.29 11338882.49 11338882.69 0.0527 0.0060

Mars 26337-09-13 22:33 G 11340707.29 11340707.44 11340707.59 0.1732 0.0835

Saturn 26338-03-28 06:29 G 11340902.72 11340902.77 11340902.83 0.0270 0.0260

Saturn 26338-11-12 09:50 G 11341131.71 11341131.91 11341132.12 0.0269 0.0073

Jupiter 26339-03-06 17:45 G 11341246.20 11341246.24 11341246.29 0.0503 0.0487

Saturn 26339-06-29 12:14 G 11341360.82 11341361.01 11341361.20 0.0268 0.0112

Jupiter 26350-11-09 17:02 G 11345512.01 11345512.21 11345512.42 0.0500 0.0029

Saturn 26353-12-07 13:26 G 11346635.89 11346636.06 11346636.25 0.0291 0.0150

Saturn 26354-07-25 12:14 G 11346865.81 11346866.01 11346866.21 0.0292 0.0090

Jupiter 26362-07-15 17:31 G 11349778.12 11349778.23 11349778.34 0.0498 0.0423

Saturn 26367-10-08 14:24 G 11351689.00 11351689.10 11351689.22 0.0270 0.0229

Uranus 26368-02-04 19:26 G 11351808.21 11351808.31 11351808.43 0.0135 0.0117

Jupiter 26368-05-23 13:12 G 11351916.87 11351917.05 11351917.23 0.0527 0.0236

Saturn 26368-05-24 17:17 G 11351918.02 11351918.22 11351918.43 0.0269 0.0043

Uranus 26368-09-18 02:09 G 11352034.42 11352034.59 11352034.76 0.0135 0.0084

Saturn 26369-01-08 19:26 G 11352147.13 11352147.31 11352147.49 0.0268 0.0141

Uranus 26369-05-02 08:38 G 11352260.66 11352260.86 11352261.07 0.0135 0.0051

Mars 26369-09-13 00:57 G 11352394.44 11352394.54 11352394.63 0.1719 0.1422

Uranus 26369-12-14 14:53 G 11352486.91 11352487.12 11352487.35 0.0135 0.0018

Uranus 26370-07-28 21:07 G 11352713.17 11352713.38 11352713.60 0.0135 0.0016

Uranus 26371-03-12 03:21 G 11352939.44 11352939.64 11352939.84 0.0135 0.0048

Uranus 26371-10-24 09:07 G 11353165.72 11353165.88 11353166.07 0.0134 0.0081

Uranus 26372-06-06 15:21 G 11353392.03 11353392.14 11353392.26 0.0134 0.0113

Jupiter 26380-01-27 06:00 G 11356182.58 11356182.75 11356182.92 0.0529 0.0294

Saturn 26383-06-19 18:57 G 11357422.10 11357422.29 11357422.48 0.0291 0.0120

Saturn 26384-02-04 17:31 G 11357652.04 11357652.23 11357652.42 0.0292 0.0119

Jupiter 26386-07-18 03:21 G 11358546.47 11358546.64 11358546.81 0.0501 0.0285

Neptune 26395-10-11 14:09 G 11361919.01 11361919.09 11361919.21 0.0089 0.0079

Neptune 26396-05-24 03:21 G 11362144.50 11362144.64 11362144.82 0.0089 0.0060

Neptune 26397-01-04 16:33 G 11362370.01 11362370.19 11362370.40 0.0089 0.0041

Mars 26397-01-25 15:50 G 11362391.03 11362391.16 11362391.28 0.1803 0.1247

Saturn 26397-04-19 17:31 G 11362475.11 11362475.23 11362475.38 0.0270 0.0208

Neptune 26397-08-18 06:00 G 11362595.53 11362595.75 11362595.96 0.0089 0.0021

Saturn 26397-12-04 20:38 G 11362704.15 11362704.36 11362704.58 0.0269 0.0021

Jupiter 26398-03-23 03:21 G 11362812.45 11362812.64 11362812.84 0.0500 0.0168

Neptune 26398-03-31 18:57 G 11362821.07 11362821.29 11362821.52 0.0089 0.0003

Saturn 26398-07-21 22:48 G 11362933.29 11362933.45 11362933.62 0.0268 0.0164

Neptune 26398-11-12 07:55 G 11363046.63 11363046.83 11363047.06 0.0089 0.0018

Neptune 26399-06-25 21:07 G 11363272.19 11363272.38 11363272.59 0.0089 0.0037

Neptune 26400-02-06 10:05 G 11363497.76 11363497.92 11363498.11 0.0089 0.0056

Neptune 26400-09-18 23:02 G 11363723.36 11363723.46 11363723.60 0.0089 0.0075

Earth 26402-07-16 17:31 G 11364389.17 11364389.23 11364389.29 0.2665 0.2447

Mars 26403-07-12 07:26 G 11364749.69 11364749.81 11364749.93 0.1736 0.1214

Earth 26410-07-14 08:24 G 11367308.71 11367308.85 11367308.98 0.2665 0.1376

Moon 26410-07-14 14:09 G 11367308.94 11367309.09 11367309.25 0.2665 0.0531 *

Uranus 26412-01-30 23:02 G 11367874.33 11367874.46 11367874.62 0.0143 0.0107

Uranus 26412-09-13 10:05 G 11368100.73 11368100.92 11368101.11 0.0143 0.0068

Saturn 26412-12-30 06:43 G 11368208.58 11368208.78 11368208.99 0.0291 0.0082

Uranus 26413-04-27 20:53 G 11368327.16 11368327.37 11368327.59 0.0143 0.0028

Saturn 26413-08-17 05:45 G 11368438.56 11368438.74 11368438.92 0.0292 0.0160

Uranus 26413-12-10 08:09 G 11368553.62 11368553.84 11368554.05 0.0144 0.0012

Uranus 26414-07-24 18:57 G 11368780.10 11368780.29 11368780.51 0.0144 0.0052

Uranus 26415-03-08 06:29 G 11369006.61 11369006.77 11369006.94 0.0144 0.0091

Jupiter 26415-10-04 18:29 G 11369217.07 11369217.27 11369217.48 0.0527 0.0010

Uranus 26415-10-20 18:00 G 11369233.17 11369233.25 11369233.34 0.0144 0.0131

Pluto 26424-12-10 13:41 G 11372572.01 11372572.07 11372572.17 0.0066 0.0061

Pluto 26425-07-23 18:14 G 11372797.06 11372797.26 11372797.49 0.0066 0.0015

Pluto 26426-03-05 23:02 G 11373022.28 11373022.46 11373022.66 0.0066 0.0032

Saturn 26426-10-31 02:09 G 11373261.43 11373261.59 11373261.75 0.0269 0.0175

Saturn 26427-06-17 04:48 G 11373490.49 11373490.70 11373490.91 0.0268 0.0010

Saturn 26428-02-01 06:29 G 11373719.63 11373719.77 11373719.92 0.0267 0.0193

Mars 26429-01-25 04:19 G 11374078.60 11374078.68 11374078.76 0.1818 0.1621

Jupiter 26433-11-28 12:43 G 11375846.83 11375847.03 11375847.23 0.0500 0.0086

Mars 26435-07-11 10:33 G 11376436.80 11376436.94 11376437.07 0.1723 0.1081

Saturn 26441-11-24 14:53 G 11378765.09 11378765.12 11378765.15 0.0290 0.0286

Saturn 26442-07-12 12:57 G 11378994.83 11378995.04 11378995.25 0.0291 0.0051

Saturn 26443-02-27 11:31 G 11379224.83 11379224.98 11379225.15 0.0292 0.0190

Jupiter 26445-08-03 13:26 G 11380112.93 11380113.06 11380113.20 0.0498 0.0363

Jupiter 26451-06-12 11:17 G 11382251.81 11382251.97 11382252.14 0.0526 0.0316

Uranus 26451-10-05 03:07 G 11382366.60 11382366.63 11382366.70 0.0136 0.0132

Uranus 26452-05-18 10:05 G 11382592.78 11382592.92 11382593.08 0.0135 0.0099

Uranus 26452-12-30 16:48 G 11382819.01 11382819.20 11382819.40 0.0135 0.0065

Uranus 26453-08-13 23:17 G 11383045.26 11383045.47 11383045.68 0.0135 0.0032

Uranus 26454-03-28 05:31 G 11383271.52 11383271.73 11383271.95 0.0135 0.0003

Uranus 26454-11-09 11:45 G 11383497.78 11383497.99 11383498.21 0.0135 0.0034

Uranus 26455-06-23 17:45 G 11383724.06 11383724.24 11383724.44 0.0134 0.0067

Uranus 26456-02-05 00:00 G 11383950.36 11383950.50 11383950.65 0.0134 0.0098

Saturn 26456-05-12 04:48 G 11384047.53 11384047.70 11384047.87 0.0270 0.0154

Uranus 26456-09-18 05:45 G 11384176.70 11384176.74 11384176.80 0.0134 0.0131

Saturn 26456-12-27 07:26 G 11384276.60 11384276.81 11384277.02 0.0269 0.0032

Saturn 26457-08-13 09:07 G 11384505.76 11384505.88 11384506.01 0.0268 0.0215

Mars 26462-11-22 22:48 G 11386433.40 11386433.45 11386433.51 0.1798 0.1704

Jupiter 26463-02-15 02:38 G 11386517.43 11386517.61 11386517.80 0.0528 0.0222

Mars 26469-05-08 16:19 G 11388792.11 11388792.18 11388792.25 0.1741 0.1594

Jupiter 26469-08-05 23:31 G 11388881.34 11388881.48 11388881.63 0.0501 0.0351

Saturn 26471-06-07 00:57 G 11389551.45 11389551.54 11389551.66 0.0290 0.0251

Saturn 26472-01-22 23:31 G 11389781.27 11389781.48 11389781.70 0.0292 0.0013

Saturn 26472-09-08 22:33 G 11390011.32 11390011.44 11390011.58 0.0293 0.0229

Neptune 26476-09-02 14:38 G 11391466.10 11391466.11 11391466.16 0.0089 0.0088

Neptune 26477-04-16 03:36 G 11391691.53 11391691.65 11391691.81 0.0089 0.0069

Neptune 26477-11-27 16:48 G 11391917.03 11391917.20 11391917.39 0.0089 0.0050

Neptune 26478-07-11 05:45 G 11392142.54 11392142.74 11392142.96 0.0089 0.0031

Neptune 26479-02-21 18:43 G 11392368.07 11392368.28 11392368.50 0.0089 0.0012

Neptune 26479-10-05 07:41 G 11392593.61 11392593.82 11392594.04 0.0089 0.0008

Neptune 26480-05-17 20:24 G 11392819.15 11392819.35 11392819.57 0.0089 0.0027

Neptune 26480-12-29 09:07 G 11393044.71 11393044.88 11393045.09 0.0089 0.0046

Jupiter 26481-04-11 00:00 G 11393147.30 11393147.50 11393147.70 0.0499 0.0102

Neptune 26481-08-11 21:50 G 11393270.29 11393270.41 11393270.59 0.0089 0.0065

Neptune 26482-03-25 10:33 G 11393495.90 11393495.94 11393496.04 0.0089 0.0084

Saturn 26485-11-22 12:57 G 11394833.86 11394834.04 11394834.24 0.0269 0.0123

Saturn 26486-07-09 15:21 G 11395062.94 11395063.14 11395063.35 0.0268 0.0063

Saturn 26487-02-23 17:02 G 11395292.13 11395292.21 11395292.30 0.0267 0.0244

Mars 26494-11-22 10:19 G 11398120.79 11398120.93 11398121.07 0.1814 0.1102

Uranus 26495-09-30 06:00 G 11398432.66 11398432.75 11398432.87 0.0143 0.0123

Uranus 26496-05-13 16:48 G 11398659.04 11398659.20 11398659.39 0.0143 0.0084

Uranus 26496-12-26 03:50 G 11398885.46 11398885.66 11398885.87 0.0143 0.0045

Uranus 26497-08-09 14:53 G 11399111.91 11399112.12 11399112.34 0.0143 0.0006

Uranus 26498-03-24 01:55 G 11399338.38 11399338.58 11399338.80 0.0144 0.0035

Jupiter 26498-10-23 17:17 G 11399552.02 11399552.22 11399552.42 0.0527 0.0082

Uranus 26498-11-05 13:26 G 11399564.88 11399565.06 11399565.25 0.0144 0.0074

Uranus 26499-06-20 00:43 G 11399791.41 11399791.53 11399791.67 0.0144 0.0114

Saturn 26500-12-18 07:12 G 11400337.67 11400337.80 11400337.95 0.0290 0.0221

Mars 26501-05-08 19:41 G 11400479.16 11400479.32 11400479.48 0.1727 0.0730

Saturn 26501-08-05 05:45 G 11400567.53 11400567.74 11400567.95 0.0292 0.0018

Saturn 26502-03-23 04:48 G 11400797.60 11400797.70 11400797.80 0.0293 0.0259

Jupiter 26510-06-29 09:21 G 11403817.80 11403817.89 11403818.00 0.0529 0.0452

Pluto 26512-08-11 23:17 G 11404592.29 11404592.47 11404592.65 0.0078 0.0044

Pluto 26513-03-25 08:24 G 11404817.66 11404817.85 11404818.06 0.0078 0.0033

Saturn 26515-06-05 15:21 G 11405619.95 11405620.14 11405620.34 0.0269 0.0102

Earth 26516-01-16 17:45 G 11405845.10 11405845.24 11405845.38 0.2666 0.1312

Moon 26516-01-16 23:02 G 11405845.36 11405845.46 11405845.56 0.2665 0.2008 *

Saturn 26516-01-20 17:31 G 11405849.03 11405849.23 11405849.44 0.0268 0.0083

Saturn 26516-09-05 18:57 G 11406078.27 11406078.29 11406078.33 0.0268 0.0265

Jupiter 26516-12-18 09:50 G 11406181.72 11406181.91 11406182.10 0.0501 0.0155

Earth 26524-01-14 09:36 G 11408764.83 11408764.90 11408764.97 0.2666 0.2383

Moon 26524-01-14 12:29 G 11408764.90 11408765.02 11408765.14 0.2661 0.1803 *

Jupiter 26528-08-23 10:19 G 11410447.77 11410447.93 11410448.10 0.0498 0.0294

Saturn 26530-06-30 16:05 G 11411124.02 11411124.17 11411124.34 0.0291 0.0186

Saturn 26531-02-15 14:53 G 11411353.92 11411354.12 11411354.33 0.0292 0.0054

Jupiter 26534-07-02 06:14 G 11412586.62 11412586.76 11412586.90 0.0526 0.0375

Uranus 26536-01-17 18:29 G 11413151.16 11413151.27 11413151.39 0.0135 0.0113

Uranus 26536-08-31 01:12 G 11413377.37 11413377.55 11413377.73 0.0135 0.0080

Uranus 26537-04-14 07:26 G 11413603.62 11413603.81 11413604.03 0.0135 0.0047

Uranus 26537-11-26 14:09 G 11413829.87 11413830.09 11413830.31 0.0135 0.0014

Uranus 26538-07-10 20:24 G 11414056.13 11414056.35 11414056.57 0.0135 0.0019

Uranus 26539-02-22 02:24 G 11414282.41 11414282.60 11414282.81 0.0134 0.0052

Uranus 26539-10-06 08:24 G 11414508.69 11414508.85 11414509.03 0.0134 0.0084

Uranus 26540-05-19 14:24 G 11414735.01 11414735.10 11414735.23 0.0134 0.0117

Saturn 26544-04-30 20:09 G 11416177.29 11416177.34 11416177.41 0.0270 0.0257

Saturn 26544-12-15 23:17 G 11416406.26 11416406.47 11416406.67 0.0269 0.0071

Saturn 26545-08-02 01:12 G 11416635.36 11416635.55 11416635.75 0.0268 0.0113

Jupiter 26546-03-06 22:05 G 11416852.23 11416852.42 11416852.62 0.0529 0.0159

Jupiter 26552-08-25 19:55 G 11419216.23 11419216.33 11419216.45 0.0501 0.0416

Saturn 26560-01-10 22:33 G 11421910.26 11421910.44 11421910.62 0.0291 0.0155

Neptune 26560-01-14 02:09 G 11421913.54 11421913.59 11421913.66 0.0089 0.0085

Neptune 26560-08-26 15:07 G 11422139.00 11422139.13 11422139.29 0.0089 0.0066

Saturn 26560-08-27 21:07 G 11422140.18 11422140.38 11422140.59 0.0292 0.0084

Mars 26560-09-19 16:48 G 11422163.03 11422163.20 11422163.36 0.1809 0.0596

Neptune 26561-04-09 04:19 G 11422364.50 11422364.68 11422364.88 0.0089 0.0047

Neptune 26561-11-20 17:31 G 11422590.03 11422590.23 11422590.45 0.0089 0.0028

Neptune 26562-07-04 06:43 G 11422815.56 11422815.78 11422816.00 0.0089 0.0008

Neptune 26563-02-14 19:41 G 11423041.11 11423041.32 11423041.54 0.0089 0.0011

Neptune 26563-09-28 08:38 G 11423266.66 11423266.86 11423267.08 0.0089 0.0030

Jupiter 26564-04-30 20:53 G 11423482.16 11423482.37 11423482.57 0.0499 0.0038

Neptune 26564-05-10 21:50 G 11423492.24 11423492.41 11423492.61 0.0089 0.0049

Neptune 26564-12-22 11:02 G 11423717.83 11423717.96 11423718.11 0.0089 0.0068

Neptune 26565-08-05 00:14 G 11423943.48 11423943.51 11423943.56 0.0089 0.0087

Mars 26567-03-06 04:33 G 11424521.52 11424521.69 11424521.86 0.1731 0.0359

Saturn 26573-11-10 22:05 G 11426963.32 11426963.42 11426963.52 0.0270 0.0237

Saturn 26574-06-28 00:43 G 11427192.33 11427192.53 11427192.74 0.0269 0.0052

Saturn 26575-02-12 02:38 G 11427421.43 11427421.61 11427421.80 0.0268 0.0132

Jupiter 26576-01-04 21:21 G 11427748.34 11427748.39 11427748.43 0.0498 0.0483

Uranus 26579-05-31 12:29 G 11428991.00 11428991.02 11428991.09 0.0143 0.0140

Uranus 26580-01-12 23:31 G 11429217.34 11429217.48 11429217.64 0.0143 0.0101

Uranus 26580-08-26 10:19 G 11429443.74 11429443.93 11429444.13 0.0143 0.0062

Uranus 26581-04-09 21:36 G 11429670.18 11429670.40 11429670.61 0.0143 0.0023

Jupiter 26581-11-12 16:05 G 11429886.98 11429887.17 11429887.37 0.0527 0.0165

Uranus 26581-11-22 08:53 G 11429896.65 11429896.87 11429897.08 0.0144 0.0017

Uranus 26582-07-06 19:55 G 11430123.14 11430123.33 11430123.54 0.0144 0.0057

Uranus 26583-02-18 07:12 G 11430349.65 11430349.80 11430349.97 0.0144 0.0097

Uranus 26583-10-02 18:57 G 11430576.22 11430576.29 11430576.36 0.0144 0.0136

Saturn 26589-07-23 05:02 G 11432696.53 11432696.71 11432696.91 0.0291 0.0125

Saturn 26590-03-10 04:05 G 11432926.48 11432926.67 11432926.87 0.0292 0.0116

Jupiter 26593-07-18 04:48 G 11434152.57 11434152.70 11434152.84 0.0529 0.0390

Jupiter 26600-01-07 08:24 G 11436516.67 11436516.85 11436517.03 0.0500 0.0232

Saturn 26603-05-25 05:45 G 11437749.61 11437749.74 11437749.88 0.0269 0.0206

Saturn 26604-01-09 08:09 G 11437978.63 11437978.84 11437979.06 0.0268 0.0022

Saturn 26604-08-25 09:50 G 11438207.75 11438207.91 11438208.09 0.0267 0.0162

Jupiter 26611-09-13 08:09 G 11440782.66 11440782.84 11440783.02 0.0498 0.0223

Jupiter 26617-07-22 06:00 G 11442921.66 11442921.75 11442921.85 0.0526 0.0464

Saturn 26619-02-03 11:17 G 11443482.77 11443482.97 11443483.18 0.0291 0.0095

Uranus 26619-09-18 02:53 G 11443709.56 11443709.62 11443709.71 0.0135 0.0127

Saturn 26619-09-21 10:19 G 11443712.75 11443712.93 11443713.11 0.0293 0.0146

Uranus 26620-05-01 09:50 G 11443935.76 11443935.91 11443936.07 0.0135 0.0094

Uranus 26620-12-13 16:19 G 11444162.00 11444162.18 11444162.39 0.0135 0.0061

Uranus 26621-07-27 22:48 G 11444388.24 11444388.45 11444388.67 0.0135 0.0028

Uranus 26622-03-11 05:17 G 11444614.50 11444614.72 11444614.94 0.0135 0.0005

Uranus 26622-10-23 11:31 G 11444840.77 11444840.98 11444841.19 0.0134 0.0038

Uranus 26623-06-06 17:31 G 11445067.06 11445067.23 11445067.43 0.0134 0.0071

Uranus 26624-01-18 23:45 G 11445293.36 11445293.49 11445293.64 0.0134 0.0102

Mars 26626-07-18 23:17 G 11446205.30 11446205.47 11446205.65 0.1804 0.0105

Jupiter 26629-03-26 23:31 G 11447187.27 11447187.48 11447187.68 0.0528 0.0061

Saturn 26632-12-04 06:43 G 11448535.63 11448535.78 11448535.93 0.0269 0.0187

Mars 26633-01-01 14:09 G 11448563.91 11448564.09 11448564.26 0.1735 0.0021

Saturn 26633-07-21 09:07 G 11448764.67 11448764.88 11448765.09 0.0268 0.0003

Saturn 26634-03-07 10:48 G 11448993.79 11448993.95 11448994.10 0.0267 0.0180

Jupiter 26635-09-15 18:43 G 11449551.25 11449551.28 11449551.32 0.0502 0.0493

Neptune 26641-07-20 15:07 G 11451686.04 11451686.13 11451686.27 0.0089 0.0076

Neptune 26642-03-03 04:05 G 11451911.53 11451911.67 11451911.86 0.0089 0.0057

Neptune 26642-10-14 17:45 G 11452137.04 11452137.24 11452137.44 0.0089 0.0037

Neptune 26643-05-28 06:43 G 11452362.56 11452362.78 11452362.99 0.0089 0.0018

Neptune 26644-01-08 19:41 G 11452588.10 11452588.32 11452588.54 0.0089 0.0002

Neptune 26644-08-21 08:24 G 11452813.64 11452813.85 11452814.07 0.0089 0.0020

Neptune 26645-04-03 21:07 G 11453039.19 11453039.38 11453039.59 0.0089 0.0039

Moon 26645-07-18 15:36 G 11453145.01 11453145.15 11453145.28 0.2659 0.1639

Earth 26645-07-18 18:14 G 11453145.18 11453145.26 11453145.34 0.2665 0.2281 *

Neptune 26645-11-15 10:05 G 11453264.77 11453264.92 11453265.10 0.0089 0.0058

Neptune 26646-06-28 22:48 G 11453490.36 11453490.45 11453490.58 0.0089 0.0077

Jupiter 26647-05-21 19:55 G 11453817.13 11453817.33 11453817.54 0.0500 0.0045

Saturn 26648-08-15 16:19 G 11454268.97 11454269.18 11454269.38 0.0292 0.0067

Saturn 26649-04-02 15:21 G 11454498.98 11454499.14 11454499.32 0.0293 0.0176

Moon 26653-07-16 03:21 G 11456064.55 11456064.64 11456064.73 0.2664 0.2197

Earth 26653-07-16 09:07 G 11456064.75 11456064.88 11456065.01 0.2666 0.1550

Jupiter 26659-01-24 21:21 G 11458083.28 11458083.39 11458083.52 0.0498 0.0399

Saturn 26662-06-16 13:41 G 11459321.91 11459322.07 11459322.25 0.0269 0.0158

Saturn 26663-01-31 15:50 G 11459550.95 11459551.16 11459551.38 0.0268 0.0027

Uranus 26663-09-13 05:17 G 11459775.61 11459775.72 11459775.85 0.0143 0.0118

Saturn 26663-09-17 17:17 G 11459780.10 11459780.22 11459780.36 0.0267 0.0208

Uranus 26664-04-26 15:50 G 11460002.00 11460002.16 11460002.36 0.0143 0.0080

Jupiter 26664-12-02 12:29 G 11460221.84 11460222.02 11460222.20 0.0527 0.0233

Uranus 26664-12-09 03:07 G 11460228.43 11460228.63 11460228.84 0.0143 0.0041

Uranus 26665-07-23 14:24 G 11460454.88 11460455.10 11460455.32 0.0143 0.0002

Uranus 26666-03-07 01:26 G 11460681.36 11460681.56 11460681.77 0.0144 0.0039

Uranus 26666-10-19 12:43 G 11460907.86 11460908.03 11460908.22 0.0144 0.0079

Uranus 26667-06-03 00:14 G 11461134.40 11461134.51 11461134.64 0.0144 0.0118

Pluto 26673-06-27 18:14 G 11463351.12 11463351.26 11463351.43 0.0066 0.0046

Pluto 26674-02-07 23:02 G 11463576.24 11463576.46 11463576.68 0.0066 0.0001

Pluto 26674-09-21 03:50 G 11463801.51 11463801.66 11463801.81 0.0066 0.0048

Jupiter 26676-08-07 05:17 G 11464487.56 11464487.72 11464487.89 0.0530 0.0297

Saturn 26677-07-10 23:17 G 11464825.41 11464825.47 11464825.55 0.0291 0.0275

Saturn 26678-02-25 21:50 G 11465055.20 11465055.41 11465055.62 0.0292 0.0037

Saturn 26678-10-13 21:07 G 11465285.23 11465285.38 11465285.53 0.0293 0.0204

Jupiter 26683-01-27 06:57 G 11466851.63 11466851.79 11466851.95 0.0501 0.0307

Saturn 26691-12-27 14:24 G 11470107.92 11470108.10 11470108.28 0.0269 0.0139

Mars 26692-05-15 05:45 G 11470247.57 11470247.74 11470247.91 0.1800 0.0399

Saturn 26692-08-12 16:19 G 11470336.97 11470337.18 11470337.39 0.0268 0.0045

Saturn 26693-03-29 17:31 G 11470566.13 11470566.23 11470566.35 0.0267 0.0226

Jupiter 26694-10-02 07:26 G 11471117.62 11471117.81 11471118.01 0.0499 0.0143

Mars 26698-10-29 22:48 G 11472606.28 11472606.45 11472606.62 0.1739 0.0375

Uranus 26703-12-31 18:43 G 11474494.15 11474494.28 11474494.41 0.0135 0.0108

Uranus 26704-08-14 00:57 G 11474720.37 11474720.54 11474720.73 0.0135 0.0075

Uranus 26705-03-28 07:41 G 11474946.62 11474946.82 11474947.03 0.0135 0.0042

Uranus 26705-11-09 14:09 G 11475172.87 11475173.09 11475173.31 0.0135 0.0009

Uranus 26706-06-23 20:38 G 11475399.14 11475399.36 11475399.57 0.0135 0.0024

Saturn 26707-01-22 01:55 G 11475611.49 11475611.58 11475611.70 0.0291 0.0251

Uranus 26707-02-05 02:24 G 11475625.42 11475625.60 11475625.81 0.0134 0.0057

Saturn 26707-09-09 00:57 G 11475841.32 11475841.54 11475841.75 0.0292 0.0013

Uranus 26707-09-19 08:38 G 11475851.70 11475851.86 11475852.03 0.0134 0.0088

Saturn 26708-04-26 00:29 G 11476071.40 11476071.52 11476071.65 0.0293 0.0230

Uranus 26708-05-02 14:38 G 11476078.03 11476078.11 11476078.21 0.0134 0.0120

Jupiter 26712-04-15 20:38 G 11477522.16 11477522.36 11477522.57 0.0528 0.0014

Saturn 26721-07-09 20:24 G 11480894.17 11480894.35 11480894.55 0.0269 0.0112

Saturn 26722-02-23 22:19 G 11481123.23 11481123.43 11481123.64 0.0268 0.0073

Saturn 26722-10-10 23:45 G 11481352.43 11481352.49 11481352.56 0.0267 0.0253

Jupiter 26723-12-20 12:00 G 11481787.99 11481788.00 11481788.01 0.0530 0.0529

Neptune 26724-11-30 02:24 G 11482133.50 11482133.60 11482133.76 0.0089 0.0073

Neptune 26725-07-13 15:36 G 11482359.00 11482359.15 11482359.35 0.0089 0.0054

Neptune 26726-02-24 04:48 G 11482584.51 11482584.70 11482584.92 0.0089 0.0035

Neptune 26726-10-07 18:00 G 11482810.04 11482810.25 11482810.47 0.0089 0.0015

Neptune 26727-05-21 07:12 G 11483035.58 11483035.80 11483036.03 0.0089 0.0004

Neptune 26728-01-01 20:09 G 11483261.14 11483261.34 11483261.56 0.0089 0.0023

Neptune 26728-08-14 09:21 G 11483486.70 11483486.89 11483487.09 0.0089 0.0042

Neptune 26729-03-27 22:19 G 11483712.28 11483712.43 11483712.60 0.0089 0.0061

Neptune 26729-11-08 11:31 G 11483937.89 11483937.98 11483938.08 0.0089 0.0080

Jupiter 26730-06-10 19:55 G 11484152.13 11484152.33 11484152.52 0.0499 0.0128

Saturn 26736-08-03 07:55 G 11486397.70 11486397.83 11486397.97 0.0291 0.0222

Saturn 26737-03-21 06:43 G 11486627.57 11486627.78 11486627.99 0.0292 0.0017

Saturn 26737-11-06 06:00 G 11486857.66 11486857.75 11486857.86 0.0293 0.0260

Jupiter 26742-02-13 20:53 G 11488418.21 11488418.37 11488418.52 0.0498 0.0318

Uranus 26747-05-14 10:05 G 11490333.87 11490333.92 11490333.99 0.0143 0.0137

Jupiter 26747-12-23 15:36 G 11490557.00 11490557.15 11490557.31 0.0527 0.0343

Uranus 26747-12-26 20:53 G 11490560.23 11490560.37 11490560.54 0.0143 0.0098

Uranus 26748-08-09 07:55 G 11490786.64 11490786.83 11490787.03 0.0143 0.0059

Uranus 26749-03-23 18:57 G 11491013.08 11491013.29 11491013.51 0.0143 0.0020

Uranus 26749-11-05 06:14 G 11491239.55 11491239.76 11491239.98 0.0144 0.0020

Uranus 26750-06-19 17:31 G 11491466.04 11491466.23 11491466.43 0.0144 0.0059

Saturn 26751-01-19 20:53 G 11491680.17 11491680.37 11491680.57 0.0268 0.0093

Uranus 26751-02-01 04:48 G 11491692.55 11491692.70 11491692.87 0.0144 0.0099

Saturn 26751-09-05 22:33 G 11491909.24 11491909.44 11491909.64 0.0267 0.0090

Uranus 26751-09-15 16:19 G 11491919.13 11491919.18 11491919.24 0.0144 0.0138

Mars 26758-03-13 12:57 G 11494289.89 11494290.04 11494290.19 0.1795 0.0854

Moon 26759-01-18 14:09 G 11494600.93 11494601.09 11494601.25 0.2664 0.0378

Earth 26759-01-18 19:26 G 11494601.18 11494601.31 11494601.45 0.2665 0.1250 *

Jupiter 26759-08-28 08:24 G 11494822.66 11494822.85 11494823.04 0.0529 0.0189

Pluto 26761-02-27 04:33 G 11495371.49 11495371.69 11495371.92 0.0078 0.0021

Pluto 26761-10-10 13:55 G 11495596.95 11495597.08 11495597.25 0.0078 0.0057

Mars 26764-08-27 07:55 G 11496648.67 11496648.83 11496648.98 0.1743 0.0748

Saturn 26766-02-13 08:53 G 11497183.72 11497183.87 11497184.02 0.0291 0.0200

Jupiter 26766-02-16 08:24 G 11497186.73 11497186.85 11497186.98 0.0501 0.0401

Saturn 26766-10-01 07:41 G 11497413.61 11497413.82 11497414.04 0.0292 0.0040

Earth 26767-01-16 11:17 G 11497520.91 11497520.97 11497521.03 0.2665 0.2455

Saturn 26767-05-19 07:26 G 11497643.77 11497643.81 11497643.88 0.0293 0.0282

Jupiter 26777-10-22 10:05 G 11501452.72 11501452.92 11501453.12 0.0499 0.0045

Saturn 26779-12-15 23:45 G 11502237.42 11502237.49 11502237.57 0.0270 0.0252

Saturn 26780-08-01 02:24 G 11502466.39 11502466.60 11502466.80 0.0268 0.0066

Saturn 26781-03-18 04:05 G 11502695.48 11502695.67 11502695.86 0.0267 0.0117

Uranus 26787-08-31 03:07 G 11505052.55 11505052.63 11505052.73 0.0135 0.0122

Uranus 26788-04-13 10:05 G 11505278.76 11505278.92 11505279.09 0.0135 0.0089

Uranus 26788-11-25 16:33 G 11505505.00 11505505.19 11505505.40 0.0135 0.0056

Jupiter 26789-06-27 10:33 G 11505718.92 11505718.94 11505718.97 0.0497 0.0490

Uranus 26789-07-09 23:02 G 11505731.25 11505731.46 11505731.68 0.0135 0.0023

Uranus 26790-02-21 05:31 G 11505957.51 11505957.73 11505957.95 0.0135 0.0010

Uranus 26790-10-05 11:31 G 11506183.78 11506183.98 11506184.20 0.0134 0.0043

Uranus 26791-05-19 18:00 G 11506410.07 11506410.25 11506410.43 0.0134 0.0075

Uranus 26792-01-01 00:00 G 11506636.37 11506636.50 11506636.63 0.0134 0.0106

Jupiter 26795-05-05 22:33 G 11507857.24 11507857.44 11507857.64 0.0528 0.0113

Saturn 26795-08-26 14:24 G 11507969.94 11507970.10 11507970.28 0.0291 0.0173

Saturn 26796-04-12 13:41 G 11508199.86 11508200.07 11508200.28 0.0293 0.0069

Mars 26796-08-26 11:17 G 11508335.91 11508335.97 11508336.04 0.1730 0.1589

Neptune 26805-10-23 02:38 G 11511680.54 11511680.61 11511680.70 0.0089 0.0082

Neptune 26806-06-05 15:50 G 11511906.01 11511906.16 11511906.32 0.0089 0.0063

Jupiter 26807-01-08 15:50 G 11512123.04 11512123.16 11512123.29 0.0530 0.0414

Neptune 26807-01-17 04:48 G 11512131.51 11512131.70 11512131.89 0.0089 0.0044

Neptune 26807-08-30 17:45 G 11512357.03 11512357.24 11512357.45 0.0089 0.0025

Neptune 26808-04-12 06:43 G 11512582.56 11512582.78 11512583.00 0.0089 0.0006

Neptune 26808-11-23 19:41 G 11512808.11 11512808.32 11512808.54 0.0089 0.0013

Saturn 26809-06-27 00:14 G 11513023.41 11513023.51 11513023.62 0.0269 0.0233

Neptune 26809-07-07 08:38 G 11513033.66 11513033.86 11513034.07 0.0089 0.0032

Saturn 26810-02-11 02:24 G 11513252.40 11513252.60 11513252.81 0.0268 0.0049

Neptune 26810-02-17 21:21 G 11513259.22 11513259.39 11513259.58 0.0089 0.0051

Saturn 26810-09-28 03:50 G 11513481.49 11513481.66 11513481.85 0.0267 0.0134

Neptune 26810-10-01 10:05 G 11513484.81 11513484.92 11513485.07 0.0089 0.0070

Neptune 26811-05-14 23:17 G 11513710.47 11513710.47 11513710.48 0.0089 0.0088

Jupiter 26813-06-29 20:38 G 11514487.18 11514487.36 11514487.55 0.0500 0.0217

Mars 26824-01-08 19:55 G 11518332.22 11518332.33 11518332.45 0.1791 0.1321

Jupiter 26825-03-04 22:48 G 11518753.27 11518753.45 11518753.64 0.0498 0.0224

Saturn 26825-03-07 14:53 G 11518755.94 11518756.12 11518756.30 0.0291 0.0151

Saturn 26825-10-23 13:55 G 11518985.88 11518986.08 11518986.29 0.0292 0.0089

Mars 26830-06-24 16:19 G 11520691.05 11520691.18 11520691.31 0.1747 0.1143

Jupiter 26831-01-11 14:24 G 11520891.99 11520892.10 11520892.23 0.0527 0.0424

Uranus 26831-08-26 01:55 G 11521118.46 11521118.58 11521118.71 0.0143 0.0116

Uranus 26832-04-08 12:29 G 11521344.85 11521345.02 11521345.21 0.0143 0.0078

Uranus 26832-11-20 23:45 G 11521571.28 11521571.49 11521571.70 0.0143 0.0039

Uranus 26833-07-05 10:48 G 11521797.74 11521797.95 11521798.17 0.0143 0.0003

Uranus 26834-02-16 21:50 G 11522024.21 11522024.41 11522024.63 0.0144 0.0040

Uranus 26834-10-01 09:21 G 11522250.71 11522250.89 11522251.07 0.0144 0.0079

Uranus 26835-05-15 20:24 G 11522477.24 11522477.35 11522477.48 0.0144 0.0119

Saturn 26839-01-07 05:02 G 11523809.58 11523809.71 11523809.85 0.0269 0.0208

Saturn 26839-08-24 07:26 G 11524038.60 11524038.81 11524039.02 0.0268 0.0023

Saturn 26840-04-09 08:53 G 11524267.70 11524267.87 11524268.04 0.0267 0.0160

Jupiter 26842-09-16 06:14 G 11525157.56 11525157.76 11525157.96 0.0529 0.0112

Jupiter 26849-03-07 09:36 G 11527521.87 11527521.90 11527521.94 0.0501 0.0492

Saturn 26854-09-17 20:38 G 11529542.17 11529542.36 11529542.56 0.0292 0.0123

Saturn 26855-05-05 19:55 G 11529772.14 11529772.33 11529772.53 0.0293 0.0119

Mars 26856-01-08 06:57 G 11530019.70 11530019.79 11530019.89 0.1806 0.1476

Jupiter 26860-11-10 10:33 G 11531787.73 11531787.94 11531788.14 0.0499 0.0042

Mars 26862-06-23 20:24 G 11532378.23 11532378.35 11532378.47 0.1734 0.1232

Saturn 26868-07-19 05:31 G 11534595.59 11534595.73 11534595.88 0.0269 0.0189

Saturn 26869-03-05 07:41 G 11534824.61 11534824.82 11534825.03 0.0268 0.0006

Saturn 26869-10-20 09:07 G 11535053.73 11535053.88 11535054.04 0.0267 0.0177

Uranus 26871-12-12 18:14 G 11535837.13 11535837.26 11535837.41 0.0135 0.0103

Jupiter 26872-07-16 11:31 G 11536053.87 11536053.98 11536054.10 0.0497 0.0403

Uranus 26872-07-26 00:57 G 11536063.36 11536063.54 11536063.74 0.0135 0.0070

Uranus 26873-03-09 07:41 G 11536289.61 11536289.82 11536290.03 0.0135 0.0037

Uranus 26873-10-21 14:09 G 11536515.87 11536516.09 11536516.31 0.0135 0.0004

Uranus 26874-06-04 20:38 G 11536742.15 11536742.36 11536742.57 0.0135 0.0028

Uranus 26875-01-17 02:38 G 11536968.42 11536968.61 11536968.81 0.0134 0.0061

Uranus 26875-08-31 08:38 G 11537194.71 11537194.86 11537195.03 0.0134 0.0092

Uranus 26876-04-13 14:24 G 11537421.04 11537421.10 11537421.20 0.0134 0.0124

Jupiter 26878-05-25 02:38 G 11538192.43 11538192.61 11538192.79 0.0528 0.0228

Saturn 26884-03-29 20:24 G 11540328.15 11540328.35 11540328.55 0.0291 0.0103

Saturn 26884-11-14 19:41 G 11540558.13 11540558.32 11540558.50 0.0293 0.0138

Earth 26888-07-19 18:43 G 11541901.18 11541901.28 11541901.38 0.2666 0.2088

Moon 26888-07-19 19:26 G 11541901.26 11541901.31 11541901.36 0.2673 0.2489 *

Neptune 26889-03-03 14:09 G 11542128.01 11542128.09 11542128.20 0.0089 0.0079

Neptune 26889-10-15 03:21 G 11542353.49 11542353.64 11542353.81 0.0089 0.0060

Mars 26889-11-05 03:36 G 11542374.62 11542374.65 11542374.68 0.1786 0.1757

Jupiter 26890-01-27 15:36 G 11542457.99 11542458.15 11542458.31 0.0530 0.0327

Neptune 26890-05-28 16:33 G 11542579.00 11542579.19 11542579.39 0.0089 0.0041

Neptune 26891-01-09 05:45 G 11542804.53 11542804.74 11542804.95 0.0089 0.0022

Neptune 26891-08-22 18:43 G 11543030.06 11543030.28 11543030.50 0.0089 0.0003

Neptune 26892-04-04 07:41 G 11543255.61 11543255.82 11543256.04 0.0089 0.0016

Neptune 26892-11-15 20:53 G 11543481.17 11543481.37 11543481.57 0.0089 0.0035

Neptune 26893-06-29 09:50 G 11543706.74 11543706.91 11543707.09 0.0089 0.0054

Neptune 26894-02-09 23:02 G 11543932.34 11543932.46 11543932.58 0.0089 0.0073

Mars 26896-04-21 00:43 G 11544733.45 11544733.53 11544733.61 0.1752 0.1545

Earth 26896-07-17 09:21 G 11544820.77 11544820.89 11544821.01 0.2666 0.1750

Moon 26896-07-17 14:09 G 11544820.96 11544821.09 11544821.22 0.2670 0.1464 *

Jupiter 26896-07-19 00:14 G 11544822.35 11544822.51 11544822.67 0.0500 0.0320

Saturn 26898-01-29 09:50 G 11545381.75 11545381.91 11545382.08 0.0269 0.0165

Saturn 26898-09-15 12:00 G 11545610.79 11545611.00 11545611.22 0.0268 0.0021

Saturn 26899-05-02 13:26 G 11545839.93 11545840.06 11545840.20 0.0267 0.0202

Jupiter 26908-03-25 00:14 G 11549088.32 11549088.51 11549088.71 0.0498 0.0131

Saturn 26913-10-11 02:53 G 11551114.42 11551114.62 11551114.83 0.0292 0.0073

Jupiter 26914-01-31 16:19 G 11551227.17 11551227.18 11551227.20 0.0527 0.0525

Saturn 26914-05-29 02:09 G 11551344.43 11551344.59 11551344.77 0.0293 0.0169

Uranus 26915-04-26 07:41 G 11551676.76 11551676.82 11551676.91 0.0143 0.0134

Uranus 26915-12-08 18:43 G 11551903.12 11551903.28 11551903.44 0.0143 0.0095

Uranus 26916-07-22 05:17 G 11552129.53 11552129.72 11552129.93 0.0143 0.0057

Uranus 26917-03-05 16:33 G 11552355.97 11552356.19 11552356.40 0.0143 0.0018

Uranus 26917-10-18 03:36 G 11552582.44 11552582.65 11552582.87 0.0144 0.0022

Uranus 26918-06-01 14:38 G 11552808.92 11552809.11 11552809.31 0.0144 0.0061

Uranus 26919-01-14 01:55 G 11553035.43 11553035.58 11553035.74 0.0144 0.0101

Uranus 26919-08-28 12:57 G 11553262.01 11553262.04 11553262.11 0.0144 0.0140

Mars 26921-11-05 13:41 G 11554061.93 11554062.07 11554062.22 0.1801 0.0983

Pluto 26922-01-13 00:43 G 11554130.34 11554130.53 11554130.76 0.0066 0.0023

Pluto 26922-08-26 05:31 G 11554355.53 11554355.73 11554355.94 0.0066 0.0024

Jupiter 26925-10-06 10:19 G 11555492.73 11555492.93 11555493.13 0.0529 0.0005

Saturn 26927-08-12 11:02 G 11556167.78 11556167.96 11556168.14 0.0269 0.0145

Saturn 26928-03-28 12:57 G 11556396.83 11556397.04 11556397.25 0.0268 0.0039

Mars 26928-04-21 05:17 G 11556420.57 11556420.72 11556420.87 0.1738 0.0865

Saturn 26928-11-12 14:09 G 11556625.98 11556626.09 11556626.22 0.0267 0.0221

Saturn 26943-04-23 02:38 G 11561900.40 11561900.61 11561900.82 0.0291 0.0054

Jupiter 26943-12-01 12:57 G 11562122.84 11562123.04 11562123.24 0.0499 0.0139

Saturn 26943-12-09 01:41 G 11562130.42 11562130.57 11562130.75 0.0293 0.0189

Jupiter 26955-08-06 14:38 G 11566388.95 11566389.11 11566389.28 0.0498 0.0302

Uranus 26955-08-13 03:07 G 11566395.52 11566395.63 11566395.74 0.0136 0.0117

Uranus 26956-03-26 09:36 G 11566621.74 11566621.90 11566622.08 0.0135 0.0084

Uranus 26956-11-07 16:19 G 11566847.99 11566848.18 11566848.39 0.0135 0.0051

Saturn 26957-02-21 14:38 G 11566953.93 11566954.11 11566954.31 0.0269 0.0122

Uranus 26957-06-21 23:02 G 11567074.25 11567074.46 11567074.68 0.0135 0.0019

Saturn 26957-10-08 17:02 G 11567183.01 11567183.21 11567183.42 0.0268 0.0063

Uranus 26958-02-03 05:31 G 11567300.51 11567300.73 11567300.95 0.0135 0.0014

Saturn 26958-05-25 18:29 G 11567412.19 11567412.27 11567412.35 0.0267 0.0244

Uranus 26958-09-17 11:31 G 11567526.79 11567526.98 11567527.19 0.0135 0.0047

Uranus 26959-05-01 17:45 G 11567753.07 11567753.24 11567753.42 0.0134 0.0079

Uranus 26959-12-13 23:45 G 11567979.38 11567979.49 11567979.62 0.0134 0.0111

Jupiter 26961-06-14 00:43 G 11568527.37 11568527.53 11568527.70 0.0527 0.0304

Neptune 26970-09-08 02:53 G 11571900.49 11571900.62 11571900.76 0.0089 0.0070

Neptune 26971-04-21 15:50 G 11572125.98 11572126.16 11572126.34 0.0089 0.0051

Neptune 26971-12-03 04:33 G 11572351.50 11572351.69 11572351.91 0.0089 0.0033

Saturn 26972-03-17 11:17 G 11572456.89 11572456.97 11572457.07 0.0291 0.0261

Neptune 26972-07-15 17:45 G 11572577.03 11572577.24 11572577.46 0.0089 0.0013

Saturn 26972-11-02 09:50 G 11572686.70 11572686.91 11572687.12 0.0292 0.0023

Jupiter 26973-02-16 16:48 G 11572793.02 11572793.20 11572793.38 0.0530 0.0228

Neptune 26973-02-26 06:43 G 11572802.56 11572802.78 11572803.00 0.0089 0.0006

Saturn 26973-06-20 09:07 G 11572916.75 11572916.88 11572917.03 0.0293 0.0221

Neptune 26973-10-09 19:41 G 11573028.11 11573028.32 11573028.53 0.0089 0.0025

Neptune 26974-05-23 08:24 G 11573253.67 11573253.85 11573254.05 0.0089 0.0044

Neptune 26975-01-03 21:21 G 11573479.25 11573479.39 11573479.56 0.0089 0.0063

Neptune 26975-08-17 09:50 G 11573704.85 11573704.91 11573705.02 0.0089 0.0082

Jupiter 26979-08-09 00:14 G 11575157.39 11575157.51 11575157.63 0.0500 0.0404

Saturn 26986-09-03 16:48 G 11577740.00 11577740.20 11577740.39 0.0269 0.0101

Saturn 26987-04-20 18:43 G 11577969.08 11577969.28 11577969.48 0.0267 0.0083

Mars 26987-09-02 20:38 G 11578104.19 11578104.36 11578104.53 0.1797 0.0499

Saturn 26987-12-05 19:55 G 11578198.31 11578198.33 11578198.36 0.0267 0.0264

Jupiter 26991-04-14 00:57 G 11579423.33 11579423.54 11579423.74 0.0498 0.0047

Mars 26994-02-16 14:09 G 11580462.92 11580463.09 11580463.26 0.1742 0.0485

Uranus 26999-08-08 01:55 G 11582461.45 11582461.58 11582461.72 0.0143 0.0111

Uranus 27000-03-22 12:29 G 11582687.85 11582688.02 11582688.22 0.0143 0.0073

Uranus 27000-11-03 23:31 G 11582914.28 11582914.48 11582914.70 0.0143 0.0035

28TH MILLENNIUM CE

This is a list of transits of Venus in the 28th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 27001-06-18 10:48 G 11583140.73 11583140.95 11583141.16 0.0144 0.0006

Saturn 27001-09-28 11:17 G 11583242.86 11583242.97 11583243.09 0.0290 0.0241

Earth 27002-01-20 21:07 G 11583357.23 11583357.38 11583357.52 0.2665 0.1143

Moon 27002-01-21 01:41 G 11583357.47 11583357.57 11583357.67 0.2669 0.2002 *

Uranus 27002-01-30 21:36 G 11583367.20 11583367.40 11583367.61 0.0144 0.0044

Saturn 27002-05-16 10:05 G 11583472.70 11583472.92 11583473.13 0.0292 0.0004

Uranus 27002-09-14 08:53 G 11583593.69 11583593.87 11583594.05 0.0144 0.0083

Jupiter 27002-12-19 03:21 G 11583689.60 11583689.64 11583689.69 0.0497 0.0481

Saturn 27003-01-01 09:21 G 11583702.78 11583702.89 11583703.01 0.0293 0.0240

Uranus 27003-04-28 20:09 G 11583820.23 11583820.34 11583820.45 0.0144 0.0123

Jupiter 27008-10-26 09:50 G 11585827.72 11585827.91 11585828.12 0.0528 0.0092

Pluto 27009-02-01 03:36 G 11585925.53 11585925.65 11585925.79 0.0078 0.0063

Pluto 27009-09-14 12:57 G 11586150.83 11586151.04 11586151.27 0.0078 0.0015

Earth 27010-01-18 12:57 G 11586276.99 11586277.04 11586277.08 0.2665 0.2532

Moon 27010-01-18 18:29 G 11586277.17 11586277.27 11586277.36 0.2663 0.2115

Saturn 27015-07-31 17:17 G 11588297.19 11588297.22 11588297.27 0.0271 0.0265

Saturn 27016-03-16 20:38 G 11588526.15 11588526.36 11588526.56 0.0269 0.0077

Saturn 27016-10-31 22:33 G 11588755.26 11588755.44 11588755.64 0.0268 0.0108

Jupiter 27020-07-01 00:57 G 11590093.43 11590093.54 11590093.64 0.0530 0.0452

Jupiter 27026-12-21 13:12 G 11592457.87 11592458.05 11592458.23 0.0499 0.0227

Saturn 27031-04-10 19:55 G 11594029.19 11594029.33 11594029.49 0.0291 0.0208

Saturn 27031-11-26 18:43 G 11594259.07 11594259.28 11594259.49 0.0292 0.0032

Saturn 27032-07-13 18:00 G 11594489.18 11594489.25 11594489.33 0.0293 0.0274

Jupiter 27038-08-26 13:55 G 11596723.90 11596724.08 11596724.27 0.0497 0.0221

Uranus 27039-04-13 11:45 G 11596953.95 11596953.99 11596954.06 0.0136 0.0131

Uranus 27039-11-25 18:43 G 11597180.14 11597180.28 11597180.44 0.0135 0.0098

Uranus 27040-07-09 01:41 G 11597406.38 11597406.57 11597406.76 0.0135 0.0065

Uranus 27041-02-20 08:09 G 11597632.63 11597632.84 11597633.06 0.0135 0.0032

Uranus 27041-10-04 14:38 G 11597858.89 11597859.11 11597859.33 0.0135 0.0001

Uranus 27042-05-18 21:07 G 11598085.17 11598085.38 11598085.59 0.0135 0.0033

Uranus 27042-12-31 02:53 G 11598311.45 11598311.62 11598311.83 0.0135 0.0066

Uranus 27043-08-14 09:07 G 11598537.74 11598537.88 11598538.04 0.0134 0.0097

Uranus 27044-03-27 14:53 G 11598764.07 11598764.12 11598764.19 0.0134 0.0128

Jupiter 27044-07-04 02:53 G 11598862.50 11598862.62 11598862.75 0.0527 0.0409

Saturn 27045-02-09 20:24 G 11599083.27 11599083.35 11599083.45 0.0270 0.0242

Saturn 27045-09-26 23:17 G 11599312.27 11599312.47 11599312.68 0.0268 0.0055

Saturn 27046-05-14 01:12 G 11599541.37 11599541.55 11599541.74 0.0267 0.0129

Neptune 27053-06-07 00:57 G 11602122.51 11602122.54 11602122.62 0.0089 0.0086

Mars 27053-07-01 03:36 G 11602146.48 11602146.65 11602146.83 0.1792 0.0028

Neptune 27054-01-18 14:09 G 11602347.96 11602348.09 11602348.25 0.0089 0.0067

Neptune 27054-09-01 03:21 G 11602573.46 11602573.64 11602573.83 0.0089 0.0048

Neptune 27055-04-14 16:33 G 11602798.98 11602799.19 11602799.40 0.0089 0.0029

Neptune 27055-11-26 05:45 G 11603024.52 11603024.74 11603024.96 0.0089 0.0010

Jupiter 27056-03-08 19:55 G 11603128.13 11603128.33 11603128.53 0.0529 0.0119

Neptune 27056-07-08 18:43 G 11603250.06 11603250.28 11603250.50 0.0089 0.0009

Neptune 27057-02-19 07:41 G 11603475.61 11603475.82 11603476.03 0.0089 0.0028

Neptune 27057-10-02 20:38 G 11603701.18 11603701.36 11603701.55 0.0089 0.0047

Neptune 27058-05-16 09:36 G 11603926.77 11603926.90 11603927.06 0.0089 0.0066

Neptune 27058-12-27 22:33 G 11604152.40 11604152.44 11604152.52 0.0089 0.0085

Mars 27059-12-15 23:31 G 11604505.30 11604505.48 11604505.65 0.1746 0.0123

Saturn 27060-10-20 20:38 G 11604815.20 11604815.36 11604815.52 0.0290 0.0187

Saturn 27061-06-07 19:26 G 11605045.10 11605045.31 11605045.52 0.0292 0.0053

Jupiter 27062-08-29 01:12 G 11605492.52 11605492.55 11605492.58 0.0501 0.0494

Jupiter 27074-05-04 02:24 G 11609758.40 11609758.60 11609758.80 0.0499 0.0048

Saturn 27074-08-23 00:00 G 11609869.39 11609869.50 11609869.63 0.0270 0.0219

Saturn 27075-04-09 03:07 G 11610098.42 11610098.63 11610098.84 0.0269 0.0032

Saturn 27075-11-24 05:02 G 11610327.55 11610327.71 11610327.89 0.0268 0.0153

Uranus 27083-04-08 09:21 G 11613019.80 11613019.89 11613020.00 0.0143 0.0127

Uranus 27083-11-20 20:09 G 11613246.18 11613246.34 11613246.52 0.0143 0.0089

Uranus 27084-07-04 06:57 G 11613472.59 11613472.79 11613473.00 0.0143 0.0051

Uranus 27085-02-15 18:00 G 11613699.03 11613699.25 11613699.47 0.0143 0.0012

Uranus 27085-09-30 04:48 G 11613925.50 11613925.70 11613925.92 0.0144 0.0028

Jupiter 27086-01-07 02:38 G 11614024.50 11614024.61 11614024.74 0.0497 0.0398

Uranus 27086-05-14 15:50 G 11614151.98 11614152.16 11614152.37 0.0144 0.0067

Uranus 27086-12-27 03:21 G 11614378.50 11614378.64 11614378.79 0.0144 0.0106

Saturn 27090-05-03 06:14 G 11615601.59 11615601.76 11615601.95 0.0291 0.0152

Saturn 27090-12-19 05:02 G 11615831.51 11615831.71 11615831.92 0.0292 0.0089

Jupiter 27091-11-15 09:07 G 11616162.69 11616162.88 11616163.07 0.0528 0.0178

Jupiter 27103-07-22 01:41 G 11620428.42 11620428.57 11620428.72 0.0530 0.0356

Saturn 27104-03-05 04:33 G 11620655.55 11620655.69 11620655.84 0.0270 0.0194

Saturn 27104-10-20 07:26 G 11620884.60 11620884.81 11620885.02 0.0268 0.0008

Saturn 27105-06-06 09:07 G 11621113.73 11621113.88 11621114.04 0.0267 0.0177

Jupiter 27110-01-10 11:45 G 11622792.83 11622792.99 11622793.16 0.0500 0.0302

Mars 27119-04-29 10:33 G 11626188.77 11626188.94 11626189.11 0.1788 0.0447

Saturn 27119-11-14 08:24 G 11626387.66 11626387.85 11626388.04 0.0291 0.0128

Saturn 27120-07-01 07:12 G 11626617.61 11626617.80 11626618.00 0.0292 0.0113

Jupiter 27121-09-15 13:41 G 11627058.87 11627059.07 11627059.27 0.0498 0.0140

Uranus 27123-07-27 04:19 G 11627738.57 11627738.68 11627738.82 0.0135 0.0111

Uranus 27124-03-09 11:17 G 11627964.80 11627964.97 11627965.15 0.0135 0.0078

Uranus 27124-10-21 17:45 G 11628191.04 11628191.24 11628191.46 0.0135 0.0045

Uranus 27125-06-05 00:29 G 11628417.31 11628417.52 11628417.74 0.0135 0.0013

Mars 27125-10-13 07:41 G 11628547.65 11628547.82 11628548.00 0.1750 0.0283

Uranus 27126-01-17 06:57 G 11628643.57 11628643.79 11628644.00 0.0135 0.0020

Uranus 27126-08-31 12:57 G 11628869.84 11628870.04 11628870.25 0.0135 0.0052

Uranus 27127-04-14 19:12 G 11629096.13 11629096.30 11629096.47 0.0134 0.0084

Jupiter 27127-07-25 01:41 G 11629197.50 11629197.57 11629197.64 0.0526 0.0491

Uranus 27127-11-27 00:43 G 11629322.44 11629322.53 11629322.66 0.0134 0.0116

Earth 27131-07-23 18:57 G 11630657.18 11630657.29 11630657.41 0.2667 0.1884

Moon 27131-07-23 20:24 G 11630657.24 11630657.35 11630657.47 0.2660 0.1910 *

Saturn 27133-09-15 08:09 G 11631441.68 11631441.84 11631442.00 0.0270 0.0171

Saturn 27134-05-02 11:02 G 11631670.75 11631670.96 11631671.17 0.0269 0.0016

Neptune 27134-12-12 13:55 G 11631894.97 11631895.08 11631895.18 0.0089 0.0077

Saturn 27134-12-17 12:57 G 11631899.91 11631900.04 11631900.18 0.0268 0.0200

Neptune 27135-07-26 02:24 G 11632120.45 11632120.60 11632120.78 0.0089 0.0059

Neptune 27136-03-07 15:21 G 11632345.96 11632346.14 11632346.35 0.0089 0.0040

Neptune 27136-10-19 04:33 G 11632571.48 11632571.69 11632571.91 0.0089 0.0021

Neptune 27137-06-01 17:31 G 11632797.01 11632797.23 11632797.45 0.0089 0.0002

Neptune 27138-01-13 06:14 G 11633022.56 11633022.76 11633022.99 0.0089 0.0018

Neptune 27138-08-26 18:57 G 11633248.11 11633248.29 11633248.51 0.0089 0.0037

Jupiter 27139-03-29 16:48 G 11633463.00 11633463.20 11633463.40 0.0529 0.0047

Neptune 27139-04-09 08:09 G 11633473.68 11633473.84 11633474.02 0.0089 0.0055

Moon 27139-07-21 06:14 G 11633576.65 11633576.76 11633576.87 0.2662 0.2007

Earth 27139-07-21 09:50 G 11633576.80 11633576.91 11633577.01 0.2667 0.1964 *

Neptune 27139-11-20 21:07 G 11633699.27 11633699.38 11633699.51 0.0089 0.0074

Saturn 27149-05-26 19:12 G 11637174.11 11637174.30 11637174.51 0.0291 0.0091

Saturn 27150-01-11 18:14 G 11637404.08 11637404.26 11637404.44 0.0293 0.0151

Jupiter 27157-05-23 23:45 G 11640093.29 11640093.49 11640093.69 0.0499 0.0119

Saturn 27163-03-28 13:26 G 11642227.89 11642228.06 11642228.25 0.0269 0.0145

Saturn 27163-11-12 16:19 G 11642456.98 11642457.18 11642457.40 0.0268 0.0043

Saturn 27164-06-28 18:14 G 11642686.15 11642686.26 11642686.37 0.0267 0.0225

Uranus 27166-12-07 16:48 G 11643578.20 11643578.20 11643578.22 0.0143 0.0142

Uranus 27167-07-22 03:07 G 11643804.50 11643804.63 11643804.79 0.0143 0.0105

Uranus 27168-03-04 14:09 G 11644030.90 11644031.09 11644031.29 0.0143 0.0067

Uranus 27168-10-17 00:57 G 11644257.33 11644257.54 11644257.76 0.0143 0.0028

Jupiter 27169-01-27 00:00 G 11644359.36 11644359.50 11644359.66 0.0497 0.0330

Uranus 27169-05-31 12:00 G 11644483.79 11644484.00 11644484.22 0.0144 0.0011

Pluto 27169-12-18 02:38 G 11644684.48 11644684.61 11644684.80 0.0066 0.0046

Uranus 27170-01-12 23:17 G 11644710.27 11644710.47 11644710.67 0.0144 0.0050

Pluto 27170-07-31 07:41 G 11644909.60 11644909.82 11644910.04 0.0066 0.0001

Uranus 27170-08-27 10:19 G 11644936.77 11644936.93 11644937.11 0.0144 0.0089

Pluto 27171-03-13 11:45 G 11645134.86 11645134.99 11645135.16 0.0066 0.0048

Uranus 27171-04-10 21:36 G 11645163.31 11645163.40 11645163.51 0.0144 0.0129

Jupiter 27174-12-05 09:50 G 11646497.74 11646497.91 11646498.09 0.0528 0.0273

Saturn 27178-12-06 22:19 G 11647960.22 11647960.43 11647960.64 0.0291 0.0065

Saturn 27179-07-24 21:07 G 11648190.21 11648190.38 11648190.55 0.0292 0.0177

Mars 27185-02-23 18:29 G 11650231.12 11650231.27 11650231.42 0.1783 0.0881

Jupiter 27186-08-10 00:29 G 11650763.35 11650763.52 11650763.69 0.0529 0.0270

Mars 27191-08-10 16:48 G 11652590.04 11652590.20 11652590.36 0.1754 0.0666

Saturn 27192-10-07 17:31 G 11653014.04 11653014.23 11653014.42 0.0270 0.0121

Jupiter 27193-01-29 10:48 G 11653127.82 11653127.95 11653128.08 0.0500 0.0383

Saturn 27193-05-24 20:24 G 11653243.14 11653243.35 11653243.55 0.0269 0.0066

Saturn 27194-01-08 22:19 G 11653472.35 11653472.43 11653472.50 0.0268 0.0249

Jupiter 27204-10-04 10:48 G 11657393.75 11657393.95 11657394.15 0.0498 0.0069

Uranus 27207-03-26 14:09 G 11658297.02 11658297.09 11658297.19 0.0136 0.0124

Saturn 27207-11-01 12:00 G 11658516.92 11658517.00 11658517.10 0.0290 0.0263

Uranus 27207-11-07 21:07 G 11658523.23 11658523.38 11658523.55 0.0135 0.0091

Saturn 27208-06-18 10:19 G 11658746.72 11658746.93 11658747.14 0.0291 0.0026

Uranus 27208-06-21 03:50 G 11658749.47 11658749.66 11658749.86 0.0135 0.0058

Uranus 27209-02-02 10:19 G 11658975.72 11658975.93 11658976.15 0.0135 0.0026

Saturn 27209-02-03 09:07 G 11658976.75 11658976.88 11658977.03 0.0293 0.0217

Uranus 27209-09-16 16:48 G 11659201.98 11659202.20 11659202.42 0.0135 0.0007

Uranus 27210-04-30 23:02 G 11659428.25 11659428.46 11659428.67 0.0135 0.0039

Uranus 27210-12-13 05:02 G 11659654.53 11659654.71 11659654.90 0.0134 0.0071

Uranus 27211-07-27 10:48 G 11659880.82 11659880.95 11659881.10 0.0134 0.0103

Uranus 27212-03-09 16:48 G 11660107.19 11660107.20 11660107.22 0.0134 0.0134

Neptune 27218-04-23 00:57 G 11662342.43 11662342.54 11662342.67 0.0089 0.0074

Neptune 27218-12-04 13:41 G 11662567.92 11662568.07 11662568.27 0.0089 0.0056

Neptune 27219-07-18 02:53 G 11662793.44 11662793.62 11662793.84 0.0089 0.0037

Neptune 27220-02-28 16:05 G 11663018.96 11663019.17 11663019.40 0.0089 0.0018

Neptune 27220-10-11 05:17 G 11663244.50 11663244.72 11663244.94 0.0089 0.0002

Neptune 27221-05-24 18:14 G 11663470.06 11663470.26 11663470.49 0.0089 0.0021

Neptune 27222-01-05 07:12 G 11663695.62 11663695.80 11663696.01 0.0089 0.0040

Jupiter 27222-04-17 14:38 G 11663797.91 11663798.11 11663798.32 0.0529 0.0033

Saturn 27222-04-20 00:14 G 11663800.31 11663800.51 11663800.71 0.0269 0.0092

Neptune 27222-08-18 20:09 G 11663921.19 11663921.34 11663921.52 0.0089 0.0059

Saturn 27222-12-05 02:38 G 11664029.42 11664029.61 11664029.81 0.0268 0.0095

Neptune 27223-04-01 09:36 G 11664146.79 11664146.90 11664147.01 0.0089 0.0077

Jupiter 27233-12-21 06:57 G 11668063.73 11668063.79 11668063.85 0.0531 0.0504

Saturn 27237-05-13 16:48 G 11669303.08 11669303.20 11669303.32 0.0290 0.0235

Saturn 27237-12-29 14:38 G 11669532.90 11669533.11 11669533.33 0.0291 0.0007

Saturn 27238-08-16 13:41 G 11669762.96 11669763.07 11669763.19 0.0293 0.0245

Jupiter 27240-06-11 21:07 G 11670428.19 11670428.38 11670428.57 0.0499 0.0187

Moon 27245-01-21 18:57 G 11672113.13 11672113.29 11672113.45 0.2659 0.0399

Earth 27245-01-21 22:48 G 11672113.31 11672113.45 11672113.59 0.2664 0.1075 *

Mars 27250-12-22 01:55 G 11674273.46 11674273.58 11674273.69 0.1779 0.1326

Saturn 27251-03-16 00:14 G 11674357.45 11674357.51 11674357.58 0.0271 0.0258

Uranus 27251-03-21 09:07 G 11674362.78 11674362.88 11674363.01 0.0143 0.0122

Saturn 27251-10-31 04:05 G 11674586.46 11674586.67 11674586.87 0.0270 0.0069

Uranus 27251-11-02 19:55 G 11674589.17 11674589.33 11674589.52 0.0143 0.0084

Jupiter 27252-02-15 21:36 G 11674694.23 11674694.40 11674694.58 0.0498 0.0259

Saturn 27252-06-16 06:29 G 11674815.58 11674815.77 11674815.96 0.0269 0.0118

Uranus 27252-06-16 06:57 G 11674815.59 11674815.79 11674816.00 0.0143 0.0046 *

Earth 27253-01-19 14:38 G 11675033.08 11675033.11 11675033.14 0.2664 0.2600

Uranus 27253-01-28 18:00 G 11675042.03 11675042.25 11675042.46 0.0144 0.0007

Uranus 27253-09-12 05:02 G 11675268.49 11675268.71 11675268.92 0.0144 0.0032

Uranus 27254-04-26 16:05 G 11675494.99 11675495.17 11675495.36 0.0144 0.0071

Uranus 27254-12-09 03:36 G 11675721.52 11675721.65 11675721.79 0.0144 0.0110

Mars 27257-06-07 00:57 G 11676632.40 11676632.54 11676632.67 0.1758 0.1080

Pluto 27257-08-18 12:14 G 11676704.81 11676705.01 11676705.23 0.0078 0.0025

Jupiter 27257-12-24 06:00 G 11676832.60 11676832.75 11676832.91 0.0527 0.0339

Pluto 27258-03-31 21:36 G 11676930.25 11676930.40 11676930.58 0.0078 0.0053

Saturn 27266-11-24 04:19 G 11680089.53 11680089.68 11680089.84 0.0290 0.0197

Saturn 27267-07-12 02:38 G 11680319.40 11680319.61 11680319.82 0.0292 0.0043

Saturn 27268-02-27 01:41 G 11680549.53 11680549.57 11680549.63 0.0293 0.0285

Jupiter 27269-08-28 19:55 G 11681098.14 11681098.33 11681098.52 0.0530 0.0207

Jupiter 27276-02-18 06:43 G 11683462.69 11683462.78 11683462.88 0.0500 0.0445

Saturn 27280-09-25 08:24 G 11685143.74 11685143.85 11685143.97 0.0270 0.0227

Saturn 27281-05-12 11:45 G 11685372.78 11685372.99 11685373.20 0.0269 0.0038

Saturn 27281-12-27 13:55 G 11685601.91 11685602.08 11685602.26 0.0268 0.0147

Mars 27282-12-21 11:45 G 11685960.88 11685960.99 11685961.09 0.1794 0.1404

Jupiter 27287-10-24 06:43 G 11687728.57 11687728.78 11687728.98 0.0498 0.0014

Mars 27289-06-06 06:14 G 11688319.65 11688319.76 11688319.86 0.1745 0.1383

Uranus 27291-07-08 06:57 G 11689081.67 11689081.79 11689081.95 0.0135 0.0104

Uranus 27292-02-19 13:55 G 11689307.90 11689308.08 11689308.27 0.0135 0.0071

Uranus 27292-10-02 20:24 G 11689534.15 11689534.35 11689534.56 0.0135 0.0038

Uranus 27293-05-17 02:53 G 11689760.41 11689760.62 11689760.84 0.0135 0.0007

Uranus 27293-12-29 09:07 G 11689986.67 11689986.88 11689987.10 0.0135 0.0026

Uranus 27294-08-12 15:07 G 11690212.94 11690213.13 11690213.34 0.0134 0.0058

Uranus 27295-03-26 21:21 G 11690439.23 11690439.39 11690439.55 0.0134 0.0090

Uranus 27295-11-08 02:53 G 11690665.54 11690665.62 11690665.73 0.0134 0.0121

Saturn 27296-06-05 09:50 G 11690875.75 11690875.91 11690876.09 0.0290 0.0167

Saturn 27297-01-21 08:09 G 11691105.64 11691105.84 11691106.05 0.0292 0.0073

Neptune 27299-03-15 23:45 G 11691889.45 11691889.49 11691889.58 0.0089 0.0085

Jupiter 27299-06-29 08:09 G 11691994.76 11691994.84 11691994.93 0.0496 0.0449

Neptune 27299-10-27 12:57 G 11692114.91 11692115.04 11692115.20 0.0089 0.0066

Neptune 27300-06-10 02:09 G 11692340.41 11692340.59 11692340.78 0.0089 0.0047

Neptune 27301-01-21 15:07 G 11692565.92 11692566.13 11692566.34 0.0089 0.0028

Neptune 27301-09-04 03:50 G 11692791.44 11692791.66 11692791.88 0.0089 0.0009

Neptune 27302-04-17 16:48 G 11693016.98 11693017.20 11693017.42 0.0089 0.0009

Neptune 27302-11-29 05:31 G 11693242.53 11693242.73 11693242.95 0.0089 0.0029

Neptune 27303-07-12 18:14 G 11693468.09 11693468.26 11693468.47 0.0089 0.0048

Neptune 27304-02-23 07:26 G 11693693.67 11693693.81 11693693.96 0.0089 0.0066

Neptune 27304-10-05 20:09 G 11693919.29 11693919.34 11693919.41 0.0089 0.0085

Jupiter 27305-05-07 12:57 G 11694132.84 11694133.04 11694133.24 0.0528 0.0113

Saturn 27310-04-08 11:31 G 11695929.85 11695929.98 11695930.13 0.0271 0.0205

Saturn 27310-11-23 15:07 G 11696158.92 11696159.13 11696159.34 0.0270 0.0016

Saturn 27311-07-10 17:31 G 11696388.07 11696388.23 11696388.40 0.0268 0.0170

Mars 27316-10-19 10:05 G 11698315.89 11698315.92 11698315.95 0.1775 0.1737

Jupiter 27317-01-10 03:36 G 11698398.54 11698398.65 11698398.77 0.0530 0.0432

Mars 27323-04-05 09:07 G 11700674.79 11700674.88 11700674.97 0.1763 0.1498

Jupiter 27323-07-02 17:02 G 11700763.03 11700763.21 11700763.38 0.0499 0.0251

Saturn 27325-12-17 21:36 G 11701662.22 11701662.40 11701662.60 0.0291 0.0128

Saturn 27326-08-04 20:09 G 11701892.15 11701892.34 11701892.54 0.0292 0.0114

Uranus 27334-11-19 15:07 G 11704921.09 11704921.13 11704921.19 0.0143 0.0139

Jupiter 27335-03-07 17:45 G 11705029.05 11705029.24 11705029.43 0.0497 0.0196

Uranus 27335-07-04 01:41 G 11705147.43 11705147.57 11705147.73 0.0143 0.0101

Uranus 27336-02-15 12:29 G 11705373.83 11705374.02 11705374.22 0.0143 0.0063

Uranus 27336-09-28 23:17 G 11705600.26 11705600.47 11705600.69 0.0143 0.0025

Uranus 27337-05-13 10:19 G 11705826.72 11705826.93 11705827.15 0.0144 0.0014

Uranus 27337-12-25 21:36 G 11706053.20 11706053.40 11706053.60 0.0144 0.0053

Uranus 27338-08-09 08:53 G 11706279.71 11706279.87 11706280.04 0.0144 0.0092

Uranus 27339-03-23 20:09 G 11706506.26 11706506.34 11706506.44 0.0144 0.0132

Saturn 27339-10-19 20:09 G 11706716.19 11706716.34 11706716.51 0.0270 0.0172

Saturn 27340-06-04 23:17 G 11706945.26 11706945.47 11706945.69 0.0269 0.0017

Jupiter 27341-01-13 01:41 G 11707167.45 11707167.57 11707167.71 0.0528 0.0405

Saturn 27341-01-20 01:12 G 11707174.42 11707174.55 11707174.70 0.0268 0.0201

Mars 27348-10-18 18:57 G 11710003.14 11710003.29 11710003.44 0.1790 0.0938

Jupiter 27352-09-17 18:14 G 11711433.07 11711433.26 11711433.46 0.0530 0.0127

Mars 27355-04-04 14:53 G 11712361.98 11712362.12 11712362.26 0.1749 0.1000

Saturn 27355-06-30 03:50 G 11712448.46 11712448.66 11712448.86 0.0291 0.0097

Saturn 27356-02-15 02:09 G 11712678.41 11712678.59 11712678.78 0.0292 0.0144

Saturn 27369-04-30 23:31 G 11717502.30 11717502.48 11717502.66 0.0270 0.0150

Saturn 27369-12-16 02:24 G 11717731.40 11717731.60 11717731.82 0.0269 0.0039

Saturn 27370-08-02 04:19 G 11717960.58 11717960.68 11717960.81 0.0268 0.0223

Jupiter 27370-11-13 03:07 G 11718063.43 11718063.63 11718063.83 0.0499 0.0056

Moon 27374-07-24 16:19 G 11719413.04 11719413.18 11719413.31 0.2672 0.1226

Earth 27374-07-24 19:26 G 11719413.19 11719413.31 11719413.43 0.2667 0.1690 *

Uranus 27375-03-08 16:33 G 11719640.10 11719640.19 11719640.32 0.0136 0.0117

Uranus 27375-10-20 23:31 G 11719866.32 11719866.48 11719866.66 0.0135 0.0084

Uranus 27376-06-03 06:14 G 11720092.57 11720092.76 11720092.97 0.0135 0.0052

Uranus 27377-01-15 12:43 G 11720318.82 11720319.03 11720319.25 0.0135 0.0019

Uranus 27377-08-29 19:12 G 11720545.08 11720545.30 11720545.52 0.0135 0.0013

Uranus 27378-04-13 01:12 G 11720771.35 11720771.55 11720771.76 0.0135 0.0045

Uranus 27378-11-25 07:12 G 11720997.63 11720997.80 11720997.99 0.0134 0.0077

Uranus 27379-07-09 13:12 G 11721223.94 11721224.05 11721224.19 0.0134 0.0109

Jupiter 27382-07-19 04:05 G 11722329.55 11722329.67 11722329.80 0.0497 0.0387

Earth 27382-07-22 10:05 G 11722332.83 11722332.92 11722333.01 0.2667 0.2173

Moon 27382-07-22 11:17 G 11722332.90 11722332.97 11722333.04 0.2674 0.2335 *

Neptune 27382-07-26 10:48 G 11722336.87 11722336.95 11722337.04 0.0089 0.0082

Neptune 27383-03-08 23:31 G 11722562.35 11722562.48 11722562.65 0.0089 0.0064

Neptune 27383-10-20 12:43 G 11722787.86 11722788.03 11722788.24 0.0089 0.0045

Neptune 27384-06-02 02:09 G 11723013.39 11723013.59 11723013.81 0.0089 0.0026

Saturn 27385-01-09 14:38 G 11723234.90 11723235.11 11723235.32 0.0291 0.0059

Neptune 27385-01-13 15:21 G 11723238.92 11723239.14 11723239.36 0.0089 0.0007

Neptune 27385-08-27 04:19 G 11723464.47 11723464.68 11723464.91 0.0089 0.0013

Saturn 27385-08-27 13:26 G 11723464.90 11723465.06 11723465.23 0.0292 0.0183 *

Neptune 27386-04-09 17:17 G 11723690.03 11723690.22 11723690.44 0.0089 0.0032

Neptune 27386-11-21 06:14 G 11723915.60 11723915.76 11723915.96 0.0089 0.0051

Neptune 27387-07-04 19:55 G 11724141.19 11724141.33 11724141.46 0.0089 0.0069

Neptune 27388-02-15 08:38 G 11724366.85 11724366.86 11724366.89 0.0089 0.0088

Jupiter 27388-05-26 07:26 G 11724467.62 11724467.81 11724468.00 0.0529 0.0169

Saturn 27398-11-11 08:09 G 11728288.65 11728288.84 11728289.03 0.0270 0.0117

Saturn 27399-06-28 10:48 G 11728517.75 11728517.95 11728518.16 0.0268 0.0070

Jupiter 27400-01-29 22:33 G 11728733.30 11728733.44 11728733.58 0.0531 0.0374

Saturn 27400-02-12 12:29 G 11728746.97 11728747.02 11728747.10 0.0267 0.0253

Jupiter 27406-07-22 12:43 G 11731097.87 11731098.03 11731098.19 0.0499 0.0310

Saturn 27413-12-05 23:31 G 11733791.41 11733791.48 11733791.58 0.0290 0.0264

Saturn 27414-07-23 21:36 G 11734021.18 11734021.40 11734021.61 0.0291 0.0027

Mars 27414-08-17 02:24 G 11734045.43 11734045.60 11734045.76 0.1785 0.0475

Saturn 27415-03-10 20:09 G 11734251.20 11734251.34 11734251.49 0.0292 0.0215

Pluto 27417-11-22 07:12 G 11735238.73 11735238.80 11735238.92 0.0066 0.0059

Jupiter 27418-03-27 13:41 G 11735363.88 11735364.07 11735364.27 0.0497 0.0136

Pluto 27418-07-05 12:14 G 11735463.79 11735464.01 11735464.23 0.0066 0.0012

Pluto 27419-02-15 16:33 G 11735689.01 11735689.19 11735689.38 0.0066 0.0034

Uranus 27419-03-04 06:57 G 11735705.68 11735705.79 11735705.92 0.0143 0.0119

Uranus 27419-10-16 17:31 G 11735932.06 11735932.23 11735932.42 0.0143 0.0081

Uranus 27420-05-30 04:19 G 11736158.48 11736158.68 11736158.90 0.0143 0.0043

Uranus 27421-01-11 15:36 G 11736384.93 11736385.15 11736385.36 0.0143 0.0005

Mars 27421-01-30 23:17 G 11736404.31 11736404.47 11736404.64 0.1753 0.0608

Uranus 27421-08-26 02:24 G 11736611.40 11736611.60 11736611.82 0.0144 0.0035

Uranus 27422-04-09 13:26 G 11736837.89 11736838.06 11736838.26 0.0144 0.0074

Uranus 27422-11-22 00:57 G 11737064.42 11737064.54 11737064.69 0.0144 0.0113

Jupiter 27424-02-03 00:43 G 11737502.46 11737502.53 11737502.60 0.0527 0.0488

Saturn 27428-05-24 10:48 G 11739074.75 11739074.95 11739075.15 0.0270 0.0095

Saturn 27429-01-08 13:26 G 11739303.86 11739304.06 11739304.26 0.0269 0.0092

Jupiter 27435-10-08 16:05 G 11741767.97 11741768.17 11741768.37 0.0529 0.0049

Saturn 27443-06-18 08:24 G 11744577.73 11744577.85 11744577.98 0.0290 0.0229

Saturn 27444-02-03 06:43 G 11744807.56 11744807.78 11744807.99 0.0291 0.0011

Saturn 27444-09-20 05:45 G 11745037.64 11745037.74 11745037.85 0.0293 0.0252

Jupiter 27453-12-03 00:29 G 11748398.32 11748398.52 11748398.72 0.0498 0.0125

Saturn 27457-04-19 15:36 G 11749632.08 11749632.15 11749632.23 0.0271 0.0252

Saturn 27457-12-04 18:57 G 11749861.09 11749861.29 11749861.50 0.0269 0.0064

Saturn 27458-07-21 21:21 G 11750090.21 11750090.39 11750090.58 0.0268 0.0123

Uranus 27458-11-07 02:38 G 11750198.55 11750198.61 11750198.68 0.0136 0.0129

Uranus 27459-06-21 09:21 G 11750424.75 11750424.89 11750425.05 0.0136 0.0097

Uranus 27460-02-02 15:50 G 11750650.98 11750651.16 11750651.37 0.0135 0.0065

Uranus 27460-09-15 22:33 G 11750877.23 11750877.44 11750877.66 0.0135 0.0032

Uranus 27461-04-30 05:17 G 11751103.50 11751103.72 11751103.93 0.0135 0.0003

Uranus 27461-12-12 11:17 G 11751329.77 11751329.97 11751330.19 0.0135 0.0033

Uranus 27462-07-26 17:31 G 11751556.04 11751556.23 11751556.43 0.0135 0.0065

Uranus 27463-03-09 23:17 G 11751782.34 11751782.47 11751782.64 0.0134 0.0097

Uranus 27463-10-22 05:17 G 11752008.67 11752008.72 11752008.80 0.0134 0.0128

Neptune 27464-01-30 23:02 G 11752109.36 11752109.46 11752109.61 0.0089 0.0074

Neptune 27464-09-12 12:14 G 11752334.85 11752335.01 11752335.19 0.0089 0.0055

Neptune 27465-04-26 01:12 G 11752560.36 11752560.55 11752560.76 0.0089 0.0036

Jupiter 27465-08-08 00:29 G 11752664.37 11752664.52 11752664.68 0.0496 0.0324

Neptune 27465-12-07 14:24 G 11752785.88 11752786.10 11752786.31 0.0089 0.0017

Neptune 27466-07-21 03:07 G 11753011.42 11753011.63 11753011.85 0.0089 0.0003

Neptune 27467-03-03 15:50 G 11753236.96 11753237.16 11753237.38 0.0089 0.0021

Neptune 27467-10-15 04:33 G 11753462.51 11753462.69 11753462.90 0.0089 0.0040

Neptune 27468-05-27 17:31 G 11753688.08 11753688.23 11753688.41 0.0089 0.0058

Neptune 27469-01-08 06:14 G 11753913.67 11753913.76 11753913.89 0.0089 0.0077

Jupiter 27471-06-16 06:00 G 11754802.58 11754802.75 11754802.93 0.0529 0.0251

Saturn 27472-12-28 15:07 G 11755363.98 11755364.13 11755364.29 0.0290 0.0198

Saturn 27473-08-15 13:26 G 11755593.85 11755594.06 11755594.27 0.0292 0.0041

Saturn 27474-04-02 12:29 G 11755823.97 11755824.02 11755824.07 0.0293 0.0283

Mars 27480-06-13 09:50 G 11758087.73 11758087.91 11758088.08 0.1781 0.0030

Jupiter 27483-02-18 22:33 G 11759068.27 11759068.44 11759068.61 0.0530 0.0282

Saturn 27486-10-30 17:45 G 11760418.14 11760418.24 11760418.36 0.0271 0.0231

Mars 27486-11-28 08:24 G 11760446.67 11760446.85 11760447.02 0.1757 0.0225

Saturn 27487-06-16 21:07 G 11760647.17 11760647.38 11760647.59 0.0269 0.0043

Earth 27488-01-25 00:29 G 11760869.37 11760869.52 11760869.67 0.2664 0.0991

Moon 27488-01-25 02:53 G 11760869.49 11760869.62 11760869.75 0.2670 0.1296 *

Saturn 27488-01-31 23:17 G 11760876.30 11760876.47 11760876.65 0.0268 0.0143

Jupiter 27489-08-10 09:50 G 11761432.78 11761432.91 11761433.04 0.0500 0.0379

Moon 27496-01-22 21:50 G 11763789.35 11763789.41 11763789.46 0.2666 0.2460

Jupiter 27501-04-16 11:17 G 11765698.77 11765698.97 11765699.17 0.0498 0.0065

Saturn 27502-07-11 22:05 G 11766150.25 11766150.42 11766150.60 0.0290 0.0166

Uranus 27502-11-02 14:38 G 11766264.04 11766264.11 11766264.18 0.0143 0.0134

Saturn 27503-02-26 20:38 G 11766380.16 11766380.36 11766380.57 0.0292 0.0074

Uranus 27503-06-17 00:57 G 11766490.39 11766490.54 11766490.71 0.0143 0.0097

Uranus 27504-01-29 11:31 G 11766716.79 11766716.98 11766717.19 0.0143 0.0059

Uranus 27504-09-11 22:33 G 11766943.23 11766943.44 11766943.66 0.0143 0.0021

Uranus 27505-04-26 09:36 G 11767169.68 11767169.90 11767170.11 0.0144 0.0018

Pluto 27505-07-24 14:24 G 11767258.95 11767259.10 11767259.28 0.0078 0.0052

Uranus 27505-12-08 20:53 G 11767396.17 11767396.37 11767396.57 0.0144 0.0057

Pluto 27506-03-07 00:00 G 11767484.30 11767484.50 11767484.72 0.0078 0.0026

Uranus 27506-07-23 07:55 G 11767622.68 11767622.83 11767623.00 0.0144 0.0096

Uranus 27507-03-06 19:12 G 11767849.25 11767849.30 11767849.39 0.0144 0.0136

Saturn 27516-05-13 01:41 G 11771204.43 11771204.57 11771204.72 0.0270 0.0199

Saturn 27516-12-28 04:48 G 11771433.49 11771433.70 11771433.91 0.0269 0.0011

Saturn 27517-08-14 06:43 G 11771662.62 11771662.78 11771662.95 0.0268 0.0173

Jupiter 27518-10-28 11:31 G 11772102.77 11772102.98 11772103.18 0.0530 0.0016

Jupiter 27530-07-03 03:21 G 11776368.62 11776368.64 11776368.67 0.0532 0.0526

Saturn 27532-01-22 04:48 G 11776936.52 11776936.70 11776936.89 0.0291 0.0136

Saturn 27532-09-08 03:21 G 11777166.44 11777166.64 11777166.84 0.0292 0.0105

Jupiter 27536-12-22 21:36 G 11778733.21 11778733.40 11778733.59 0.0498 0.0192

Uranus 27543-02-19 18:43 G 11780983.17 11780983.28 11780983.42 0.0136 0.0110

Uranus 27543-10-04 01:26 G 11781209.40 11781209.56 11781209.76 0.0136 0.0078

Uranus 27544-05-17 08:38 G 11781435.65 11781435.86 11781436.07 0.0135 0.0045

Uranus 27544-12-29 15:07 G 11781661.91 11781662.13 11781662.35 0.0135 0.0012

Uranus 27545-08-12 21:21 G 11781888.18 11781888.39 11781888.61 0.0135 0.0020

Saturn 27545-11-23 03:21 G 11781990.48 11781990.64 11781990.80 0.0270 0.0179

Uranus 27546-03-27 03:36 G 11782114.45 11782114.65 11782114.86 0.0135 0.0052

Mars 27546-04-11 17:17 G 11782130.05 11782130.22 11782130.38 0.1776 0.0432

Saturn 27546-07-10 06:00 G 11782219.54 11782219.75 11782219.97 0.0269 0.0009

Uranus 27546-11-08 09:36 G 11782340.74 11782340.90 11782341.08 0.0134 0.0084

Saturn 27547-02-24 07:55 G 11782448.69 11782448.83 11782448.98 0.0268 0.0192

Neptune 27547-06-12 09:07 G 11782556.77 11782556.88 11782557.02 0.0089 0.0072

Uranus 27547-06-22 15:36 G 11782567.06 11782567.15 11782567.28 0.0134 0.0116

Neptune 27548-01-23 22:19 G 11782782.26 11782782.43 11782782.62 0.0089 0.0053

Jupiter 27548-08-27 22:19 G 11782999.26 11782999.43 11782999.61 0.0497 0.0253

Neptune 27548-09-05 11:31 G 11783007.78 11783007.98 11783008.19 0.0089 0.0034

Neptune 27549-04-19 00:43 G 11783233.31 11783233.53 11783233.75 0.0089 0.0015

Neptune 27549-11-30 13:55 G 11783458.86 11783459.08 11783459.30 0.0089 0.0004

Neptune 27550-07-14 02:53 G 11783684.41 11783684.62 11783684.84 0.0089 0.0023

Neptune 27551-02-24 15:50 G 11783909.98 11783910.16 11783910.36 0.0089 0.0042

Neptune 27551-10-08 04:48 G 11784135.56 11784135.70 11784135.87 0.0089 0.0061

Neptune 27552-05-20 17:45 G 11784361.17 11784361.24 11784361.36 0.0089 0.0080

Mars 27552-09-25 16:19 G 11784489.01 11784489.18 11784489.36 0.1761 0.0194

Jupiter 27554-07-06 06:00 G 11785137.60 11785137.75 11785137.91 0.0528 0.0341

Saturn 27561-08-03 09:36 G 11787722.71 11787722.90 11787723.10 0.0291 0.0107

Saturn 27562-03-21 08:24 G 11787952.67 11787952.85 11787953.04 0.0292 0.0135

Jupiter 27566-03-10 18:29 G 11789403.08 11789403.27 11789403.45 0.0530 0.0217

Jupiter 27572-08-30 09:36 G 11791767.83 11791767.90 11791767.98 0.0499 0.0461

Saturn 27575-06-05 10:19 G 11792776.76 11792776.93 11792777.11 0.0270 0.0149

Saturn 27576-01-20 12:57 G 11793005.83 11793006.04 11793006.25 0.0268 0.0038

Saturn 27576-09-05 14:24 G 11793234.99 11793235.10 11793235.23 0.0267 0.0221

Jupiter 27584-05-05 09:50 G 11796033.71 11796033.91 11796034.12 0.0497 0.0016

Uranus 27587-02-14 08:53 G 11797048.74 11797048.87 11797049.01 0.0143 0.0112

Uranus 27587-09-28 19:26 G 11797275.13 11797275.31 11797275.50 0.0143 0.0074

Uranus 27588-05-12 06:14 G 11797501.56 11797501.76 11797501.98 0.0143 0.0036

Uranus 27588-12-24 17:31 G 11797728.01 11797728.23 11797728.44 0.0143 0.0003

Uranus 27589-08-08 04:19 G 11797954.48 11797954.68 11797954.90 0.0144 0.0042

Uranus 27590-03-22 15:36 G 11798180.98 11798181.15 11798181.34 0.0144 0.0080

Uranus 27590-11-04 03:07 G 11798407.52 11798407.63 11798407.76 0.0144 0.0119

Saturn 27591-02-13 15:50 G 11798508.96 11798509.16 11798509.37 0.0291 0.0077

Saturn 27591-10-01 14:38 G 11798738.94 11798739.11 11798739.29 0.0293 0.0165

Jupiter 27596-01-09 11:17 G 11800299.88 11800299.97 11800300.08 0.0496 0.0429

Jupiter 27601-11-16 13:26 G 11802437.86 11802438.06 11802438.26 0.0529 0.0115

Saturn 27604-12-15 11:17 G 11803562.79 11803562.97 11803563.16 0.0269 0.0130

Saturn 27605-08-01 13:41 G 11803791.87 11803792.07 11803792.28 0.0268 0.0057

Saturn 27606-03-18 15:07 G 11804021.04 11804021.13 11804021.23 0.0267 0.0239

Mars 27612-02-07 01:26 G 11806172.41 11806172.56 11806172.71 0.1772 0.0849

Jupiter 27613-07-22 05:02 G 11806703.59 11806703.71 11806703.83 0.0531 0.0425

Earth 27617-07-26 19:26 G 11808169.18 11808169.31 11808169.45 0.2668 0.1443

Moon 27617-07-27 00:29 G 11808169.44 11808169.52 11808169.60 0.2665 0.2298 *

Mars 27618-07-24 00:57 G 11808531.38 11808531.54 11808531.71 0.1765 0.0598

Saturn 27620-01-08 20:53 G 11809065.36 11809065.37 11809065.40 0.0290 0.0288

Jupiter 27620-01-11 21:36 G 11809068.23 11809068.40 11809068.57 0.0499 0.0276

Saturn 27620-08-25 18:57 G 11809295.09 11809295.29 11809295.50 0.0291 0.0051

Saturn 27621-04-12 18:00 G 11809525.10 11809525.25 11809525.42 0.0293 0.0192

Earth 27625-07-24 10:05 G 11811088.86 11811088.92 11811088.99 0.2668 0.2408

Moon 27625-07-24 11:17 G 11811088.87 11811088.97 11811089.06 0.2662 0.2204 *

Uranus 27626-10-20 05:17 G 11811541.64 11811541.72 11811541.83 0.0136 0.0122

Uranus 27627-06-03 12:14 G 11811767.86 11811768.01 11811768.19 0.0136 0.0090

Uranus 27628-01-15 19:12 G 11811994.10 11811994.30 11811994.50 0.0135 0.0057

Neptune 27628-05-04 08:38 G 11812103.80 11812103.86 11812103.97 0.0089 0.0082

Uranus 27628-08-29 01:41 G 11812220.36 11812220.57 11812220.79 0.0135 0.0025

Neptune 27628-12-15 21:50 G 11812329.27 11812329.41 11812329.58 0.0089 0.0063

Uranus 27629-04-12 08:24 G 11812446.63 11812446.85 11812447.06 0.0135 0.0008

Neptune 27629-07-29 11:02 G 11812554.77 11812554.96 11812555.15 0.0089 0.0044

Uranus 27629-11-24 14:38 G 11812672.90 11812673.11 11812673.32 0.0135 0.0040

Neptune 27630-03-11 23:45 G 11812780.29 11812780.49 11812780.71 0.0089 0.0026

Uranus 27630-07-08 20:53 G 11812899.19 11812899.37 11812899.56 0.0135 0.0072

Neptune 27630-10-23 12:57 G 11813005.82 11813006.04 11813006.26 0.0089 0.0007

Uranus 27631-02-20 02:53 G 11813125.49 11813125.62 11813125.77 0.0134 0.0103

Neptune 27631-06-06 01:41 G 11813231.36 11813231.57 11813231.79 0.0089 0.0012

Jupiter 27631-09-16 23:45 G 11813334.29 11813334.49 11813334.68 0.0497 0.0163

Neptune 27632-01-17 14:24 G 11813456.90 11813457.10 11813457.32 0.0089 0.0031

Neptune 27632-08-30 03:07 G 11813682.46 11813682.63 11813682.83 0.0089 0.0050

Neptune 27633-04-12 15:36 G 11813908.04 11813908.15 11813908.32 0.0089 0.0069

Neptune 27633-11-24 04:48 G 11814133.68 11814133.70 11814133.76 0.0089 0.0087

Saturn 27634-06-27 17:17 G 11814349.03 11814349.22 11814349.42 0.0269 0.0102

Saturn 27635-02-11 19:41 G 11814578.12 11814578.32 11814578.52 0.0268 0.0084

Saturn 27635-09-28 20:53 G 11814807.37 11814807.37 11814807.39 0.0267 0.0266

Jupiter 27637-07-25 02:38 G 11815472.49 11815472.61 11815472.74 0.0528 0.0409

Jupiter 27649-03-29 19:12 G 11819738.10 11819738.30 11819738.50 0.0531 0.0122

Saturn 27649-07-21 02:38 G 11819851.53 11819851.61 11819851.71 0.0290 0.0260

Saturn 27650-03-08 00:43 G 11820081.32 11820081.53 11820081.75 0.0292 0.0023

Saturn 27650-10-23 23:45 G 11820311.36 11820311.49 11820311.64 0.0293 0.0221

Saturn 27664-01-07 17:45 G 11825135.05 11825135.24 11825135.45 0.0269 0.0083

Saturn 27664-08-23 19:55 G 11825364.14 11825364.33 11825364.53 0.0268 0.0103

Pluto 27666-06-08 17:17 G 11826018.03 11826018.22 11826018.44 0.0066 0.0023

Pluto 27667-01-19 21:50 G 11826243.22 11826243.41 11826243.63 0.0066 0.0024

Jupiter 27667-05-25 09:50 G 11826368.71 11826368.91 11826369.11 0.0498 0.0093

Uranus 27670-10-14 17:45 G 11827607.16 11827607.24 11827607.36 0.0143 0.0126

Uranus 27671-05-29 04:33 G 11827833.53 11827833.69 11827833.87 0.0143 0.0088

Uranus 27672-01-10 15:21 G 11828059.94 11828060.14 11828060.35 0.0143 0.0050

Uranus 27672-08-24 02:24 G 11828286.38 11828286.60 11828286.81 0.0143 0.0012

Uranus 27673-04-07 13:26 G 11828512.85 11828513.06 11828513.27 0.0144 0.0027

Uranus 27673-11-20 00:29 G 11828739.34 11828739.52 11828739.73 0.0144 0.0066

Uranus 27674-07-04 12:00 G 11828965.86 11828966.00 11828966.15 0.0144 0.0104

Uranus 27675-02-15 23:17 G 11829192.46 11829192.47 11829192.51 0.0144 0.0143

Mars 27677-12-04 09:07 G 11830214.76 11830214.88 11830215.00 0.1767 0.1279

Jupiter 27679-01-28 12:14 G 11830634.87 11830635.01 11830635.16 0.0496 0.0341

Saturn 27679-01-31 03:36 G 11830637.54 11830637.65 11830637.78 0.0290 0.0238

Saturn 27679-09-18 02:09 G 11830867.38 11830867.59 11830867.80 0.0292 0.0001

Saturn 27680-05-05 01:41 G 11831097.45 11831097.57 11831097.68 0.0293 0.0244

Mars 27684-05-20 08:38 G 11832573.72 11832573.86 11832574.00 0.1770 0.1035

Jupiter 27684-12-05 11:31 G 11832772.79 11832772.98 11832773.17 0.0529 0.0191

Saturn 27692-12-02 19:55 G 11835692.26 11835692.33 11835692.44 0.0271 0.0245

Saturn 27693-07-19 23:17 G 11835921.26 11835921.47 11835921.68 0.0269 0.0056

Saturn 27694-03-06 01:26 G 11836150.37 11836150.56 11836150.74 0.0268 0.0129

Jupiter 27696-08-10 02:24 G 11837038.45 11837038.60 11837038.75 0.0531 0.0352

Jupiter 27703-01-31 22:05 G 11839403.29 11839403.42 11839403.57 0.0498 0.0365

Saturn 27708-08-13 09:36 G 11841423.76 11841423.90 11841424.05 0.0290 0.0209

Saturn 27709-03-31 07:55 G 11841653.62 11841653.83 11841654.04 0.0292 0.0030

Saturn 27709-11-16 07:26 G 11841883.74 11841883.81 11841883.88 0.0293 0.0274

Mars 27709-12-04 17:31 G 11841902.13 11841902.23 11841902.34 0.1782 0.1387

Uranus 27710-06-20 16:19 G 11842100.15 11842100.18 11842100.22 0.0136 0.0133

Uranus 27711-02-01 23:02 G 11842326.33 11842326.46 11842326.62 0.0136 0.0101

Neptune 27711-09-14 17:45 G 11842551.17 11842551.24 11842551.35 0.0089 0.0081

Uranus 27711-09-16 06:00 G 11842552.57 11842552.75 11842552.94 0.0135 0.0068

Neptune 27712-04-27 07:12 G 11842776.65 11842776.80 11842776.97 0.0089 0.0062

Uranus 27712-04-29 12:43 G 11842778.83 11842779.03 11842779.25 0.0135 0.0036

Neptune 27712-12-08 20:24 G 11843002.16 11843002.35 11843002.55 0.0089 0.0043

Uranus 27712-12-11 19:26 G 11843005.09 11843005.31 11843005.53 0.0135 0.0004

Neptune 27713-07-22 09:36 G 11843227.69 11843227.90 11843228.11 0.0089 0.0024

Uranus 27713-07-26 01:41 G 11843231.36 11843231.57 11843231.79 0.0135 0.0029

Neptune 27714-03-04 22:33 G 11843453.23 11843453.44 11843453.67 0.0089 0.0006

Uranus 27714-03-09 07:55 G 11843457.64 11843457.83 11843458.03 0.0135 0.0061

Jupiter 27714-10-06 23:31 G 11843669.28 11843669.48 11843669.69 0.0497 0.0080

Neptune 27714-10-16 11:45 G 11843678.77 11843678.99 11843679.21 0.0089 0.0014

Uranus 27714-10-21 14:09 G 11843683.94 11843684.09 11843684.26 0.0134 0.0092

Neptune 27715-05-30 00:43 G 11843904.34 11843904.53 11843904.75 0.0089 0.0033

Uranus 27715-06-04 20:09 G 11843910.27 11843910.34 11843910.44 0.0134 0.0123

Neptune 27716-01-10 13:41 G 11844129.91 11844130.07 11844130.27 0.0089 0.0052

Mars 27716-05-20 15:07 G 11844261.04 11844261.13 11844261.21 0.1756 0.1516

Neptune 27716-08-23 02:38 G 11844355.50 11844355.61 11844355.77 0.0089 0.0071

Jupiter 27720-08-14 06:29 G 11845807.74 11845807.77 11845807.80 0.0528 0.0522

Saturn 27722-06-15 20:38 G 11846478.25 11846478.36 11846478.48 0.0270 0.0225

Saturn 27723-01-30 23:31 G 11846707.27 11846707.48 11846707.69 0.0269 0.0038

Saturn 27723-09-17 01:26 G 11846936.38 11846936.56 11846936.73 0.0267 0.0147

Moon 27731-01-27 01:12 G 11849625.40 11849625.55 11849625.71 0.2656 0.0975

Earth 27731-01-27 02:09 G 11849625.44 11849625.59 11849625.74 0.2663 0.0910 *

Jupiter 27732-04-18 23:02 G 11850073.26 11850073.46 11850073.66 0.0530 0.0009

Saturn 27738-02-23 09:36 G 11852209.74 11852209.90 11852210.06 0.0290 0.0189

Saturn 27738-10-11 08:09 G 11852439.63 11852439.84 11852440.05 0.0292 0.0051

Mars 27743-10-02 17:45 G 11854257.19 11854257.24 11854257.29 0.1763 0.1675

Mars 27750-03-18 16:33 G 11856616.09 11856616.19 11856616.28 0.1775 0.1479

Jupiter 27750-06-14 12:57 G 11856703.85 11856704.04 11856704.23 0.0498 0.0194

Saturn 27751-12-27 01:12 G 11857264.42 11857264.55 11857264.70 0.0270 0.0200

Saturn 27752-08-12 04:05 G 11857493.46 11857493.67 11857493.89 0.0269 0.0014

Saturn 27753-03-29 05:45 G 11857722.59 11857722.74 11857722.91 0.0268 0.0173

Pluto 27753-06-27 18:43 G 11857813.18 11857813.28 11857813.38 0.0078 0.0070

Pluto 27754-02-08 04:05 G 11858038.45 11858038.67 11858038.89 0.0078 0.0009

Uranus 27754-06-15 01:26 G 11858165.54 11858165.56 11858165.61 0.0142 0.0141

Uranus 27755-01-27 12:00 G 11858391.86 11858392.00 11858392.16 0.0143 0.0104

Uranus 27755-09-10 22:33 G 11858618.26 11858618.44 11858618.65 0.0143 0.0066

Uranus 27756-04-24 09:36 G 11858844.69 11858844.90 11858845.12 0.0143 0.0028

Uranus 27756-12-06 20:53 G 11859071.16 11859071.37 11859071.59 0.0143 0.0011

Uranus 27757-07-21 07:55 G 11859297.63 11859297.83 11859298.04 0.0144 0.0050

Uranus 27758-03-04 19:12 G 11859524.14 11859524.30 11859524.48 0.0144 0.0088

Uranus 27758-10-17 06:29 G 11859750.68 11859750.77 11859750.88 0.0144 0.0127

Jupiter 27762-02-17 13:41 G 11860969.90 11860970.07 11860970.25 0.0496 0.0249

Saturn 27767-09-05 15:07 G 11862995.96 11862996.13 11862996.31 0.0291 0.0161

Jupiter 27767-12-26 13:12 G 11863107.89 11863108.05 11863108.22 0.0529 0.0294

Saturn 27768-04-22 13:55 G 11863225.87 11863226.08 11863226.28 0.0292 0.0080

Mars 27775-10-02 01:12 G 11865944.41 11865944.55 11865944.70 0.1778 0.0938

Jupiter 27779-08-31 06:29 G 11867373.59 11867373.77 11867373.95 0.0531 0.0236

Saturn 27781-07-08 02:09 G 11868050.44 11868050.59 11868050.75 0.0270 0.0181

Saturn 27782-02-22 04:48 G 11868279.49 11868279.70 11868279.91 0.0268 0.0007

Mars 27782-03-17 23:31 G 11868303.34 11868303.48 11868303.61 0.1760 0.1110

Saturn 27782-10-09 06:29 G 11868508.62 11868508.77 11868508.92 0.0267 0.0190

Jupiter 27786-02-19 23:17 G 11869738.39 11869738.47 11869738.55 0.0499 0.0453

Neptune 27793-03-20 06:57 G 11872323.69 11872323.79 11872323.94 0.0089 0.0072

Neptune 27793-10-31 20:09 G 11872549.18 11872549.34 11872549.53 0.0089 0.0053

Neptune 27794-06-14 09:21 G 11872774.69 11872774.89 11872775.10 0.0089 0.0034

Uranus 27794-10-02 10:33 G 11872884.82 11872884.94 11872885.06 0.0136 0.0112

Neptune 27795-01-25 22:05 G 11873000.22 11873000.42 11873000.65 0.0089 0.0016

Uranus 27795-05-16 17:31 G 11873111.06 11873111.23 11873111.41 0.0135 0.0080

Neptune 27795-09-08 11:17 G 11873225.75 11873225.97 11873226.19 0.0089 0.0004

Uranus 27795-12-29 00:14 G 11873337.31 11873337.51 11873337.72 0.0135 0.0047

Neptune 27796-04-20 23:45 G 11873451.29 11873451.49 11873451.72 0.0089 0.0023

Uranus 27796-08-11 06:57 G 11873563.57 11873563.79 11873564.01 0.0135 0.0015

Neptune 27796-12-02 12:57 G 11873676.85 11873677.04 11873677.24 0.0089 0.0041

Saturn 27797-03-17 14:38 G 11873781.93 11873782.11 11873782.30 0.0291 0.0142

Uranus 27797-03-25 13:26 G 11873789.84 11873790.06 11873790.28 0.0135 0.0017

Neptune 27797-07-16 01:26 G 11873902.42 11873902.56 11873902.74 0.0089 0.0060

Jupiter 27797-10-26 01:55 G 11874004.38 11874004.58 11874004.78 0.0497 0.0016

Saturn 27797-11-02 13:26 G 11874011.86 11874012.06 11874012.26 0.0292 0.0099

Uranus 27797-11-06 19:41 G 11874016.12 11874016.32 11874016.53 0.0135 0.0049

Neptune 27798-02-26 14:38 G 11874128.01 11874128.11 11874128.21 0.0089 0.0078

Uranus 27798-06-21 02:09 G 11874242.42 11874242.59 11874242.77 0.0134 0.0081

Uranus 27799-02-02 07:55 G 11874468.73 11874468.83 11874468.97 0.0134 0.0112

Jupiter 27809-07-02 04:33 G 11878270.58 11878270.69 11878270.80 0.0496 0.0416

Saturn 27811-01-19 06:14 G 11878836.59 11878836.76 11878836.93 0.0270 0.0156

Saturn 27811-09-05 08:53 G 11879065.66 11879065.87 11879066.08 0.0269 0.0031

Saturn 27812-04-21 10:33 G 11879294.82 11879294.94 11879295.06 0.0267 0.0215

Jupiter 27815-05-09 21:21 G 11880408.19 11880408.39 11880408.59 0.0530 0.0071

Saturn 27826-09-28 20:53 G 11884568.18 11884568.37 11884568.57 0.0291 0.0113

Jupiter 27827-01-12 12:57 G 11884673.95 11884674.04 11884674.14 0.0532 0.0468

Saturn 27827-05-16 19:41 G 11884798.14 11884798.32 11884798.52 0.0293 0.0130

Jupiter 27833-07-04 13:26 G 11887038.89 11887039.06 11887039.23 0.0498 0.0282

Uranus 27838-09-27 19:41 G 11888950.21 11888950.32 11888950.45 0.0143 0.0119

Uranus 27839-05-12 06:29 G 11889176.60 11889176.77 11889176.95 0.0143 0.0081

Uranus 27839-12-24 17:17 G 11889403.02 11889403.22 11889403.44 0.0143 0.0043

Saturn 27840-07-31 07:26 G 11889622.63 11889622.81 11889622.99 0.0269 0.0136

Uranus 27840-08-07 04:19 G 11889629.47 11889629.68 11889629.90 0.0143 0.0006

Saturn 27841-03-17 09:50 G 11889851.70 11889851.91 11889852.12 0.0268 0.0051

Uranus 27841-03-21 15:21 G 11889855.93 11889856.14 11889856.36 0.0144 0.0034

Mars 27841-07-30 08:53 G 11889986.71 11889986.87 11889987.04 0.1774 0.0489

Saturn 27841-11-01 11:31 G 11890080.88 11890080.98 11890081.08 0.0267 0.0233

Uranus 27841-11-03 02:38 G 11890082.43 11890082.61 11890082.80 0.0144 0.0072

Uranus 27842-06-17 13:41 G 11890308.95 11890309.07 11890309.23 0.0144 0.0111

Jupiter 27845-03-09 14:38 G 11891304.92 11891305.11 11891305.30 0.0496 0.0161

Mars 27848-01-14 07:41 G 11892345.66 11892345.82 11892345.98 0.1764 0.0697

Jupiter 27851-01-15 17:45 G 11893443.11 11893443.24 11893443.37 0.0529 0.0409

Saturn 27856-04-09 19:55 G 11895354.13 11895354.33 11895354.54 0.0291 0.0094

Saturn 27856-11-25 18:43 G 11895584.11 11895584.28 11895584.47 0.0292 0.0149

Moon 27860-07-28 14:24 G 11896924.94 11896925.10 11896925.26 0.2670 0.0294

Earth 27860-07-28 19:55 G 11896925.19 11896925.33 11896925.47 0.2668 0.1261 *

Jupiter 27862-09-20 06:43 G 11897708.59 11897708.78 11897708.98 0.0530 0.0144

Earth 27868-07-26 10:19 G 11899844.91 11899844.93 11899844.96 0.2668 0.2626

Saturn 27870-02-10 11:17 G 11900408.78 11900408.97 11900409.16 0.0270 0.0113

Saturn 27870-09-27 13:41 G 11900637.87 11900638.07 11900638.28 0.0269 0.0075

Saturn 27871-05-14 15:07 G 11900867.09 11900867.13 11900867.20 0.0267 0.0257

Neptune 27876-07-30 15:36 G 11902771.02 11902771.15 11902771.28 0.0089 0.0071

Neptune 27877-03-13 04:19 G 11902996.52 11902996.68 11902996.87 0.0089 0.0053

Neptune 27877-10-24 17:31 G 11903222.04 11903222.23 11903222.44 0.0089 0.0034

Uranus 27878-06-02 21:21 G 11903443.32 11903443.39 11903443.50 0.0136 0.0124

Neptune 27878-06-07 06:57 G 11903447.57 11903447.79 11903448.01 0.0089 0.0015

Uranus 27879-01-15 04:48 G 11903669.54 11903669.70 11903669.86 0.0136 0.0091

Neptune 27879-01-18 19:55 G 11903673.11 11903673.33 11903673.55 0.0089 0.0004

Uranus 27879-08-29 11:31 G 11903895.79 11903895.98 11903896.18 0.0135 0.0059

Neptune 27879-09-01 08:53 G 11903898.66 11903898.87 11903899.09 0.0089 0.0023

Uranus 27880-04-11 18:14 G 11904122.05 11904122.26 11904122.48 0.0135 0.0026

Neptune 27880-04-13 21:50 G 11904124.23 11904124.41 11904124.62 0.0089 0.0042

Jupiter 27880-11-15 03:21 G 11904339.44 11904339.64 11904339.84 0.0497 0.0110

Uranus 27880-11-24 00:57 G 11904348.32 11904348.54 11904348.76 0.0135 0.0006

Neptune 27880-11-25 10:48 G 11904349.81 11904349.95 11904350.13 0.0089 0.0061

Uranus 27881-07-08 07:26 G 11904574.60 11904574.81 11904575.02 0.0135 0.0038

Neptune 27881-07-09 00:00 G 11904575.43 11904575.50 11904575.62 0.0089 0.0080

Uranus 27882-02-19 13:26 G 11904800.89 11904801.06 11904801.26 0.0135 0.0070

Uranus 27882-10-03 19:41 G 11905027.19 11905027.32 11905027.47 0.0134 0.0101

Uranus 27883-05-18 02:09 G 11905253.55 11905253.59 11905253.62 0.0134 0.0132

Saturn 27885-10-21 02:53 G 11906140.42 11906140.62 11906140.83 0.0291 0.0064

Saturn 27886-06-08 02:09 G 11906370.42 11906370.59 11906370.75 0.0293 0.0179

Jupiter 27892-07-21 04:48 G 11908605.56 11908605.70 11908605.86 0.0496 0.0330

Jupiter 27898-05-29 00:57 G 11910743.35 11910743.54 11910743.73 0.0530 0.0183

Saturn 27899-08-23 13:12 G 11911194.85 11911195.05 11911195.25 0.0269 0.0092

Saturn 27900-04-09 15:21 G 11911423.95 11911424.14 11911424.34 0.0268 0.0095

Mars 27907-05-28 16:33 G 11914029.02 11914029.19 11914029.37 0.1769 0.0056

Jupiter 27910-02-01 17:17 G 11915009.07 11915009.22 11915009.37 0.0532 0.0352

Mars 27913-11-11 15:50 G 11916387.99 11916388.16 11916388.34 0.1768 0.0290

Pluto 27914-05-15 01:26 G 11916572.36 11916572.56 11916572.78 0.0066 0.0022

Saturn 27914-09-16 05:02 G 11916696.67 11916696.71 11916696.76 0.0289 0.0280

Pluto 27914-12-26 05:45 G 11916797.55 11916797.74 11916797.96 0.0066 0.0025

Saturn 27915-05-04 02:53 G 11916926.42 11916926.62 11916926.83 0.0291 0.0044

Saturn 27915-12-20 01:55 G 11917156.43 11917156.58 11917156.74 0.0293 0.0200

Jupiter 27916-07-24 15:21 G 11917374.01 11917374.14 11917374.28 0.0498 0.0376

Uranus 27922-05-29 01:55 G 11919508.52 11919508.58 11919508.65 0.0142 0.0135

Uranus 27923-01-10 12:14 G 11919734.87 11919735.01 11919735.18 0.0143 0.0098

Uranus 27923-08-24 23:02 G 11919961.27 11919961.46 11919961.66 0.0143 0.0060

Uranus 27924-04-07 10:05 G 11920187.70 11920187.92 11920188.13 0.0143 0.0022

Uranus 27924-11-19 21:07 G 11920414.16 11920414.38 11920414.60 0.0143 0.0016

Uranus 27925-07-04 07:55 G 11920640.64 11920640.83 11920641.04 0.0144 0.0055

Uranus 27926-02-15 19:12 G 11920867.14 11920867.30 11920867.47 0.0144 0.0093

Uranus 27926-09-30 06:29 G 11921093.69 11921093.77 11921093.87 0.0144 0.0132

Jupiter 27928-03-29 17:17 G 11921640.02 11921640.22 11921640.43 0.0497 0.0063

Saturn 27928-07-19 12:43 G 11921751.99 11921752.03 11921752.11 0.0271 0.0260

Saturn 27929-03-05 16:33 G 11921980.99 11921981.19 11921981.40 0.0270 0.0069

Saturn 27929-10-20 19:12 G 11922210.11 11922210.30 11922210.49 0.0268 0.0118

Jupiter 27934-02-04 15:50 G 11923778.09 11923778.16 11923778.24 0.0528 0.0487

Saturn 27944-03-28 12:57 G 11927482.93 11927483.04 11927483.15 0.0290 0.0249

Saturn 27944-11-13 10:48 G 11927712.74 11927712.95 11927713.16 0.0291 0.0012

Saturn 27945-07-01 09:50 G 11927942.79 11927942.91 11927943.04 0.0293 0.0232

Jupiter 27945-10-10 07:26 G 11928043.61 11928043.81 11928044.01 0.0531 0.0048

Neptune 27957-06-23 15:50 G 11932318.09 11932318.16 11932318.28 0.0089 0.0081

Saturn 27958-01-29 16:05 G 11932538.08 11932538.17 11932538.28 0.0271 0.0236

Neptune 27958-02-04 05:02 G 11932543.57 11932543.71 11932543.88 0.0089 0.0062

Saturn 27958-09-15 19:41 G 11932767.11 11932767.32 11932767.53 0.0269 0.0046

Neptune 27958-09-17 18:00 G 11932769.07 11932769.25 11932769.45 0.0089 0.0043

Neptune 27959-05-01 06:57 G 11932994.59 11932994.79 11932995.01 0.0089 0.0024

Saturn 27959-05-02 21:50 G 11932996.23 11932996.41 11932996.59 0.0268 0.0141

Neptune 27959-12-12 20:09 G 11933220.12 11933220.34 11933220.56 0.0089 0.0006

Neptune 27960-07-25 08:53 G 11933445.66 11933445.87 11933446.10 0.0089 0.0014

Neptune 27961-03-07 21:50 G 11933671.21 11933671.41 11933671.62 0.0089 0.0032

Neptune 27961-10-19 10:33 G 11933896.77 11933896.94 11933897.13 0.0089 0.0051

Uranus 27962-02-01 08:24 G 11934001.84 11934001.85 11934001.89 0.0136 0.0136

Neptune 27962-06-01 23:45 G 11934122.35 11934122.49 11934122.63 0.0089 0.0069

Uranus 27962-09-15 15:36 G 11934228.02 11934228.15 11934228.30 0.0136 0.0103

Neptune 27963-01-13 12:14 G 11934348.00 11934348.01 11934348.06 0.0089 0.0088

Uranus 27963-04-29 22:33 G 11934454.27 11934454.44 11934454.64 0.0136 0.0071

Jupiter 27963-12-06 03:07 G 11934674.45 11934674.63 11934674.83 0.0498 0.0193

Uranus 27963-12-12 05:45 G 11934680.53 11934680.74 11934680.95 0.0135 0.0038

Uranus 27964-07-25 12:14 G 11934906.80 11934907.01 11934907.23 0.0135 0.0006

Uranus 27965-03-08 18:43 G 11935133.07 11935133.28 11935133.50 0.0135 0.0027

Uranus 27965-10-21 01:12 G 11935359.35 11935359.55 11935359.75 0.0135 0.0058

Uranus 27966-06-04 07:26 G 11935585.66 11935585.81 11935585.98 0.0135 0.0090

Uranus 27967-01-16 13:26 G 11935811.98 11935812.06 11935812.17 0.0134 0.0121

Mars 27973-03-25 00:29 G 11938071.35 11938071.52 11938071.69 0.1765 0.0386

Saturn 27973-10-08 13:12 G 11938268.93 11938269.05 11938269.19 0.0289 0.0229

Moon 27974-01-29 03:07 G 11938381.48 11938381.63 11938381.78 0.2669 0.0462

Earth 27974-01-29 04:05 G 11938381.52 11938381.67 11938381.82 0.2663 0.0876 *

Saturn 27974-05-26 11:31 G 11938498.76 11938498.98 11938499.19 0.0291 0.0011

Saturn 27975-01-11 10:19 G 11938728.84 11938728.93 11938729.05 0.0293 0.0254

Jupiter 27975-08-11 05:45 G 11938940.57 11938940.74 11938940.92 0.0496 0.0243

Mars 27979-09-08 23:31 G 11940430.31 11940430.48 11940430.66 0.1773 0.0157

Jupiter 27981-06-18 00:57 G 11941078.37 11941078.54 11941078.71 0.0529 0.0273

Moon 27982-01-26 23:17 G 11941301.42 11941301.47 11941301.51 0.2668 0.2506

Saturn 27987-08-11 19:26 G 11943324.19 11943324.31 11943324.45 0.0271 0.0214

Saturn 27988-03-27 23:02 G 11943553.25 11943553.46 11943553.67 0.0270 0.0023

Saturn 27988-11-12 01:41 G 11943782.40 11943782.57 11943782.74 0.0268 0.0164

Jupiter 27993-02-20 15:36 G 11945343.98 11945344.15 11945344.32 0.0531 0.0271

Jupiter 27999-08-13 15:21 G 11947709.06 11947709.14 11947709.21 0.0499 0.0461

29TH MILLENNIUM CE

This is a list of transits of Venus in the 29th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Pluto	**28001-06-02 00:57**	**G**	**11948367.50**	**11948367.54**	**11948367.65**	**0.0078**	**0.0075**	
Pluto	**28002-01-13 11:17**	**G**	**11948592.75**	**11948592.97**	**11948593.19**	**0.0078**	**0.0005**	
Saturn	**28003-04-20 22:48**	**G**	**11949055.29**	**11949055.45**	**11949055.61**	**0.0290**	**0.0194**	
Saturn	**28003-12-06 20:38**	**G**	**11949285.16**	**11949285.36**	**11949285.58**	**0.0292**	**0.0046**	
Saturn	**28004-07-23 19:55**	**G**	**11949515.30**	**11949515.33**	**11949515.37**	**0.0293**	**0.0289**	
Uranus	**28006-09-09 19:55**	**G**	**11950293.21**	**11950293.33**	**11950293.47**	**0.0142**	**0.0113**	
Uranus	**28007-04-24 06:29**	**G**	**11950519.60**	**11950519.77**	**11950519.96**	**0.0143**	**0.0076**	
Uranus	**28007-12-06 17:31**	**G**	**11950746.02**	**11950746.23**	**11950746.44**	**0.0143**	**0.0038**	
Uranus	**28008-07-20 04:19**	**G**	**11950972.46**	**11950972.68**	**11950972.90**	**0.0143**	**0.0000**	
Uranus	**28009-03-03 15:07**	**G**	**11951198.93**	**11951199.13**	**11951199.34**	**0.0144**	**0.0038**	
Uranus	**28009-10-16 01:55**	**G**	**11951425.41**	**11951425.58**	**11951425.78**	**0.0144**	**0.0077**	
Uranus	**28010-05-30 13:12**	**G**	**11951651.94**	**11951652.05**	**11951652.20**	**0.0144**	**0.0115**	
Jupiter	**28011-04-18 16:19**	**G**	**11951974.98**	**11951975.18**	**11951975.39**	**0.0497**	**0.0017**	
Saturn	**28017-02-21 00:00**	**G**	**11954110.35**	**11954110.50**	**11954110.65**	**0.0271**	**0.0188**	
Saturn	**28017-10-08 03:21**	**G**	**11954339.42**	**11954339.64**	**11954339.85**	**0.0269**	**0.0005**	
Saturn	**28018-05-25 05:17**	**G**	**11954568.58**	**11954568.72**	**11954568.88**	**0.0268**	**0.0188**	
Jupiter	**28022-12-22 17:17**	**G**	**11956241.13**	**11956241.22**	**11956241.34**	**0.0495**	**0.0425**	
Jupiter	**28028-10-29 10:05**	**G**	**11958378.71**	**11958378.92**	**11958379.12**	**0.0530**	**0.0058**	
Saturn	**28032-10-31 00:14**	**G**	**11959841.35**	**11959841.51**	**11959841.69**	**0.0290**	**0.0172**	
Saturn	**28033-06-17 22:33**	**G**	**11960071.23**	**11960071.44**	**11960071.64**	**0.0291**	**0.0069**	
Mars	**28039-01-20 08:53**	**G**	**11962113.72**	**11962113.87**	**11962114.03**	**0.1760**	**0.0792**	
Jupiter	**28040-07-03 23:45**	**G**	**11962644.42**	**11962644.49**	**11962644.56**	**0.0531**	**0.0492**	

Neptune 28040-11-01 23:17 G 11962765.40 11962765.47 11962765.58 0.0089 0.0081

Neptune 28041-06-15 12:43 G 11962990.88 11962991.03 11962991.19 0.0089 0.0062

Neptune 28042-01-27 01:26 G 11963216.39 11963216.56 11963216.77 0.0089 0.0044

Neptune 28042-09-09 14:38 G 11963441.91 11963442.11 11963442.33 0.0089 0.0025

Neptune 28043-04-23 03:50 G 11963667.44 11963667.66 11963667.89 0.0089 0.0006

Neptune 28043-12-04 17:02 G 11963892.99 11963893.21 11963893.43 0.0089 0.0013

Neptune 28044-07-17 06:00 G 11964118.55 11964118.75 11964118.96 0.0089 0.0032

Neptune 28045-02-27 18:43 G 11964344.12 11964344.28 11964344.48 0.0089 0.0051

Mars 28045-07-06 07:41 G 11964472.66 11964472.82 11964472.99 0.1777 0.0580

Neptune 28045-10-11 08:09 G 11964569.71 11964569.84 11964569.98 0.0089 0.0069

Uranus 28046-05-16 01:55 G 11964786.48 11964786.58 11964786.71 0.0136 0.0115

Neptune 28046-05-24 21:07 G 11964795.37 11964795.38 11964795.42 0.0089 0.0088

Saturn 28046-09-03 02:53 G 11964896.47 11964896.62 11964896.80 0.0271 0.0167

Jupiter 28046-12-25 03:36 G 11965009.49 11965009.65 11965009.82 0.0498 0.0280

Uranus 28046-12-28 09:21 G 11965012.72 11965012.89 11965013.07 0.0136 0.0082

Saturn 28047-04-20 06:43 G 11965125.56 11965125.78 11965125.99 0.0270 0.0025

Uranus 28047-08-11 16:19 G 11965238.98 11965239.18 11965239.38 0.0136 0.0050

Saturn 28047-12-05 09:07 G 11965354.75 11965354.88 11965355.01 0.0268 0.0211

Uranus 28048-03-24 23:02 G 11965465.24 11965465.46 11965465.68 0.0135 0.0017

Uranus 28048-11-06 05:45 G 11965691.52 11965691.74 11965691.96 0.0135 0.0015

Uranus 28049-06-20 12:14 G 11965917.81 11965918.01 11965918.22 0.0135 0.0047

Uranus 28050-02-01 18:29 G 11966144.10 11966144.27 11966144.46 0.0135 0.0078

Uranus 28050-09-16 00:29 G 11966370.41 11966370.52 11966370.66 0.0135 0.0110

Jupiter 28058-08-30 04:33 G 11969275.49 11969275.69 11969275.88 0.0496 0.0164

Saturn 28062-05-13 10:48 G 11970627.76 11970627.95 11970628.14 0.0290 0.0135

Saturn 28062-12-29 08:53 G 11970857.67 11970857.87 11970858.07 0.0292 0.0106

Jupiter 28064-07-06 23:17 G 11971413.32 11971413.47 11971413.62 0.0529 0.0353

Jupiter 28076-03-11 14:53 G 11975678.94 11975679.12 11975679.32 0.0531 0.0183

Saturn 28076-03-15 08:38 G 11975682.69 11975682.86 11975683.05 0.0270 0.0138

Saturn 28076-10-30 12:00 G 11975911.79 11975912.00 11975912.21 0.0269 0.0052

Saturn 28077-06-16 13:55 G 11976140.99 11976141.08 11976141.19 0.0268 0.0237

Uranus 28090-05-10 04:05 G 11980851.59 11980851.67 11980851.78 0.0142 0.0127

Uranus 28090-12-22 14:38 G 11981077.95 11981078.11 11981078.28 0.0143 0.0091

Uranus 28091-08-06 00:57 G 11981304.35 11981304.54 11981304.75 0.0143 0.0054

Saturn 28091-11-23 13:41 G 11981413.88 11981414.07 11981414.27 0.0290 0.0110

Uranus 28092-03-19 11:45 G 11981530.78 11981530.99 11981531.21 0.0143 0.0016

Saturn 28092-07-10 12:00 G 11981643.82 11981644.00 11981644.19 0.0292 0.0132

Uranus 28092-10-31 22:33 G 11981757.23 11981757.44 11981757.66 0.0143 0.0023

Uranus 28093-06-15 09:21 G 11981983.71 11981983.89 11981984.10 0.0144 0.0061

Uranus 28094-01-27 20:24 G 11982210.21 11982210.35 11982210.52 0.0144 0.0099

Jupiter 28094-05-07 14:53 G 11982309.92 11982310.12 11982310.33 0.0497 0.0093

Uranus 28094-09-11 07:26 G 11982436.77 11982436.81 11982436.90 0.0144 0.0137

Earth 28103-07-31 19:55 G 11985681.18 11985681.33 11985681.48 0.2669 0.1002

Moon 28103-08-01 01:41 G 11985681.46 11985681.57 11985681.68 0.2670 0.1879 *

Mars 28104-11-17 16:48 G 11986156.08 11986156.20 11986156.32 0.1756 0.1211

Saturn 28105-09-26 12:00 G 11986468.82 11986469.00 11986469.20 0.0271 0.0116

Jupiter 28106-01-11 16:05 G 11986576.03 11986576.17 11986576.32 0.0496 0.0347

Saturn 28106-05-13 15:21 G 11986697.94 11986698.14 11986698.35 0.0270 0.0075

Saturn 28106-12-28 17:45 G 11986927.20 11986927.24 11986927.30 0.0268 0.0260

Mars 28111-05-04 14:53 G 11988514.98 11988515.12 11988515.26 0.1782 0.1048

Jupiter 28111-11-19 06:57 G 11988713.60 11988713.79 11988713.99 0.0529 0.0131

Saturn 28121-06-06 01:12 G 11992200.35 11992200.55 11992200.76 0.0290 0.0071

Saturn 28122-01-21 23:31 G 11992430.31 11992430.48 11992430.66 0.0292 0.0171

Neptune 28122-05-09 13:26 G 11992537.94 11992538.06 11992538.20 0.0089 0.0071

Neptune 28122-12-21 02:38 G 11992763.44 11992763.61 11992763.79 0.0089 0.0052

Jupiter 28123-07-24 20:24 G 11992979.23 11992979.35 11992979.47 0.0532 0.0420

Neptune 28123-08-03 15:21 G 11992988.95 11992989.14 11992989.36 0.0089 0.0034

Neptune 28124-03-16 04:33 G 11993214.47 11993214.69 11993214.91 0.0089 0.0015

Neptune 28124-10-27 17:31 G 11993440.01 11993440.23 11993440.45 0.0089 0.0004

Neptune 28125-06-10 06:14 G 11993665.56 11993665.76 11993665.98 0.0089 0.0023

Neptune 28126-01-21 18:57 G 11993891.11 11993891.29 11993891.50 0.0089 0.0042

Neptune 28126-09-04 07:55 G 11994116.68 11994116.83 11994117.00 0.0089 0.0060

Neptune 28127-04-17 20:24 G 11994342.28 11994342.35 11994342.48 0.0089 0.0079

Jupiter 28130-01-14 00:43 G 11995344.39 11995344.53 11995344.68 0.0498 0.0348

Uranus 28130-01-14 12:57 G 11995344.97 11995345.04 11995345.13 0.0136 0.0127

Uranus 28130-08-28 20:09 G 11995571.19 11995571.34 11995571.50 0.0136 0.0094

Uranus 28131-04-12 03:07 G 11995797.45 11995797.63 11995797.84 0.0136 0.0062

Uranus 28131-11-24 10:19 G 11996023.72 11996023.93 11996024.14 0.0136 0.0029

Uranus 28132-07-07 17:02 G 11996250.00 11996250.21 11996250.43 0.0135 0.0004

Uranus 28133-02-18 23:31 G 11996476.28 11996476.48 11996476.70 0.0135 0.0035

Uranus 28133-10-03 05:45 G 11996702.56 11996702.74 11996702.94 0.0135 0.0067

Uranus 28134-05-17 12:14 G 11996928.87 11996929.01 11996929.17 0.0135 0.0098

Uranus 28134-12-29 18:29 G 11997155.22 11997155.27 11997155.33 0.0135 0.0129

Saturn 28135-04-08 18:43 G 11997255.08 11997255.28 11997255.48 0.0270 0.0086

Saturn 28135-11-23 21:50 G 11997484.22 11997484.41 11997484.61 0.0269 0.0103

Mars 28136-11-17 00:00 G 11997843.39 11997843.50 11997843.61 0.1771 0.1392

Jupiter 28141-09-19 01:12 G 11999610.35 11999610.55 11999610.75 0.0496 0.0098

Mars 28143-05-03 22:19 G 12000202.36 12000202.43 12000202.50 0.1767 0.1595

Jupiter 28147-07-27 23:17 G 12001748.36 12001748.47 12001748.58 0.0529 0.0443

Saturn 28150-05-01 08:24 G 12002756.81 12002756.85 12002756.91 0.0289 0.0279

Saturn 28150-12-17 05:31 G 12002986.52 12002986.73 12002986.94 0.0290 0.0043

Saturn 28151-08-04 03:50 G 12003216.51 12003216.66 12003216.82 0.0292 0.0199

Jupiter 28159-04-01 13:55 G 12006013.88 12006014.08 12006014.28 0.0530 0.0096

Pluto 28161-09-05 06:00 G 12006901.70 12006901.75 12006901.85 0.0066 0.0062

Pluto 28162-04-18 10:33 G 12007126.74 12007126.94 12007127.17 0.0066 0.0016

Pluto 28162-11-29 15:21 G 12007351.95 12007352.14 12007352.34 0.0066 0.0031

Saturn 28164-03-03 18:00 G 12007812.18 12007812.25 12007812.32 0.0272 0.0257

Saturn 28164-10-18 22:19 G 12008041.22 12008041.43 12008041.64 0.0271 0.0064

Saturn 28165-06-05 01:26 G 12008270.37 12008270.56 12008270.75 0.0269 0.0126

Mars 28170-09-15 01:41 G 12010198.50 12010198.57 12010198.64 0.1752 0.1595

Uranus 28174-01-08 14:38 G 12011410.08 12011410.11 12011410.16 0.0142 0.0139

Uranus 28174-08-23 00:43 G 12011636.40 12011636.53 12011636.69 0.0142 0.0103

Uranus 28175-04-06 11:02 G 12011862.79 12011862.96 12011863.17 0.0143 0.0067

Uranus 28175-11-18 22:05 G 12012089.21 12012089.42 12012089.63 0.0143 0.0029

Uranus 28176-07-02 08:53 G 12012315.65 12012315.87 12012316.09 0.0143 0.0009

Uranus 28177-02-13 19:26 G 12012542.11 12012542.31 12012542.52 0.0143 0.0047

Mars 28177-02-28 22:05 G 12012557.33 12012557.42 12012557.51 0.1786 0.1516

Jupiter 28177-05-27 11:31 G 12012644.78 12012644.98 12012645.17 0.0497 0.0159

Uranus 28177-09-28 06:14 G 12012768.60 12012768.76 12012768.95 0.0144 0.0085

Uranus 28178-05-12 17:17 G 12012995.13 12012995.22 12012995.35 0.0144 0.0123

Saturn 28179-11-11 19:41 G 12013543.21 12013543.32 12013543.44 0.0289 0.0241

Saturn 28180-06-28 17:17 G 12013773.01 12013773.22 12013773.43 0.0291 0.0004

Saturn 28181-02-13 15:50 G 12014003.05 12014003.16 12014003.29 0.0292 0.0240

Jupiter 28189-01-30 12:43 G 12016910.86 12016911.03 12016911.20 0.0496 0.0282

Saturn 28193-09-14 01:41 G 12018598.46 12018598.57 12018598.70 0.0272 0.0225

Saturn 28194-05-01 05:45 G 12018827.54 12018827.74 12018827.96 0.0270 0.0033

Jupiter 28194-12-08 03:36 G 12019048.46 12019048.65 12019048.84 0.0530 0.0201

Saturn 28194-12-16 08:53 G 12019056.70 12019056.87 12019057.04 0.0268 0.0156

Mars 28202-09-15 07:55 G 12021885.69 12021885.83 12021885.98 0.1766 0.0957

Neptune 28205-09-18 19:55 G 12022985.22 12022985.33 12022985.47 0.0089 0.0072

Neptune 28206-05-02 08:53 G 12023210.71 12023210.87 12023211.07 0.0089 0.0054

Jupiter 28206-08-13 19:26 G 12023314.15 12023314.31 12023314.46 0.0532 0.0336

Neptune 28206-12-13 22:05 G 12023436.23 12023436.42 12023436.64 0.0089 0.0035

Neptune 28207-07-27 11:31 G 12023661.76 12023661.98 12023662.19 0.0089 0.0016

Neptune 28208-03-09 00:29 G 12023887.30 12023887.52 12023887.74 0.0089 0.0003

Neptune 28208-10-20 13:12 G 12024112.85 12024113.05 12024113.27 0.0089 0.0022

Mars 28209-03-01 06:14 G 12024244.64 12024244.76 12024244.90 0.1771 0.1172

Saturn 28209-05-25 01:41 G 12024329.43 12024329.57 12024329.72 0.0289 0.0211

Neptune 28209-06-03 02:38 G 12024338.41 12024338.61 12024338.81 0.0089 0.0040

Saturn 28210-01-09 23:02 G 12024559.25 12024559.46 12024559.67 0.0291 0.0027

Neptune 28210-01-14 15:21 G 12024563.99 12024564.14 12024564.32 0.0089 0.0059

Saturn 28210-08-27 21:21 G 12024789.33 12024789.39 12024789.48 0.0292 0.0271

Neptune 28210-08-28 04:05 G 12024789.59 12024789.67 12024789.80 0.0089 0.0078

Jupiter 28213-02-02 21:07 G 12025679.27 12025679.38 12025679.50 0.0498 0.0411

Uranus 28214-04-29 07:26 G 12026129.69 12026129.81 12026129.96 0.0136 0.0105

Uranus 28214-12-11 14:38 G 12026355.94 12026356.11 12026356.31 0.0136 0.0073

Uranus 28215-07-25 21:50 G 12026582.20 12026582.41 12026582.62 0.0136 0.0040

Uranus 28216-03-08 04:33 G 12026808.48 12026808.69 12026808.91 0.0135 0.0008

Uranus 28216-10-20 11:17 G 12027034.76 12027034.97 12027035.19 0.0135 0.0024

Earth 28217-01-31 06:00 G 12027137.60 12027137.75 12027137.90 0.2662 0.0800

Moon 28217-01-31 09:07 G 12027137.74 12027137.88 12027138.02 0.2657 0.1407 *

Uranus 28217-06-03 17:45 G 12027261.05 12027261.24 12027261.45 0.0135 0.0056

Uranus 28218-01-16 00:14 G 12027487.35 12027487.51 12027487.68 0.0135 0.0087

Uranus 28218-08-30 06:29 G 12027713.67 12027713.77 12027713.87 0.0135 0.0118

Saturn 28223-03-28 05:02 G 12029384.58 12029384.71 12029384.86 0.0272 0.0202

Saturn 28223-11-12 09:21 G 12029613.68 12029613.89 12029614.10 0.0270 0.0010

Saturn 28224-06-28 12:14 G 12029842.85 12029843.01 12029843.17 0.0269 0.0178

Jupiter 28224-10-08 21:36 G 12029945.20 12029945.40 12029945.61 0.0497 0.0035

Jupiter 28230-08-16 19:26 G 12032083.27 12032083.31 12032083.36 0.0528 0.0512

Jupiter 28236-06-13 23:17 G 12034211.41 12034211.47 12034211.53 0.0495 0.0470

Saturn 28238-12-05 12:43 G 12035115.87 12035116.03 12035116.21 0.0289 0.0173

Saturn 28239-07-23 10:33 G 12035345.74 12035345.94 12035346.15 0.0291 0.0068

Jupiter 28242-04-21 08:38 G 12036348.66 12036348.86 12036349.06 0.0531 0.0038

Pluto 28249-05-07 11:31 G 12038921.86 12038921.98 12038922.13 0.0078 0.0063

Pluto 28249-12-18 21:21 G 12039147.17 12039147.39 12039147.61 0.0078 0.0016

Saturn 28252-10-07 13:41 G 12040170.91 12040171.07 12040171.24 0.0271 0.0169

Saturn 28253-05-24 17:31 G 12040400.02 12040400.23 12040400.44 0.0270 0.0022

Saturn 28254-01-08 19:55 G 12040629.21 12040629.33 12040629.47 0.0268 0.0210

Uranus 28258-04-23 10:19 G 12042194.81 12042194.93 12042195.05 0.0142 0.0117

Uranus 28258-12-05 20:24 G 12042421.18 12042421.35 12042421.54 0.0143 0.0081

Uranus 28259-07-20 07:12 G 12042647.59 12042647.80 12042648.01 0.0143 0.0043

Uranus 28260-03-02 17:45 G 12042874.02 12042874.24 12042874.46 0.0143 0.0006

Jupiter 28260-06-16 06:57 G 12042979.61 12042979.79 12042979.98 0.0497 0.0217

Uranus 28260-10-15 04:19 G 12043100.47 12043100.68 12043100.90 0.0143 0.0032

Uranus 28261-05-29 15:21 G 12043326.95 12043327.14 12043327.33 0.0144 0.0070

Uranus 28262-01-11 02:24 G 12043553.46 12043553.60 12043553.75 0.0144 0.0108

Saturn 28268-06-16 19:12 G 12045902.13 12045902.30 12045902.50 0.0290 0.0142

Mars 28268-07-12 15:50 G 12045927.99 12045928.16 12045928.32 0.1762 0.0515

Saturn 28269-02-01 17:02 G 12046132.02 12046132.21 12046132.41 0.0291 0.0099

Jupiter 28272-02-20 08:24 G 12047245.67 12047245.85 12047246.04 0.0496 0.0223

Mars 28274-12-27 13:55 G 12048286.93 12048287.08 12048287.24 0.1776 0.0731

Jupiter 28277-12-28 02:09 G 12049383.42 12049383.59 12049383.76 0.0529 0.0283

Saturn 28282-04-19 17:02 G 12050957.04 12050957.21 12050957.39 0.0271 0.0146

Saturn 28282-12-04 20:53 G 12051186.16 12051186.37 12051186.58 0.0270 0.0045

Saturn 28283-07-21 23:17 G 12051415.37 12051415.47 12051415.58 0.0269 0.0232

Neptune 28286-08-11 21:21 G 12052532.32 12052532.39 12052532.51 0.0089 0.0081

Neptune 28287-03-25 10:33 G 12052757.80 12052757.94 12052758.11 0.0089 0.0062

Neptune 28287-11-05 23:45 G 12052983.30 12052983.49 12052983.69 0.0089 0.0043

Neptune 28288-06-18 12:29 G 12053208.82 12053209.02 12053209.25 0.0089 0.0025

Neptune 28289-01-30 01:41 G 12053434.35 12053434.57 12053434.79 0.0089 0.0006

Jupiter 28289-09-01 16:33 G 12053649.01 12053649.19 12053649.37 0.0531 0.0262

Neptune 28289-09-12 14:38 G 12053659.89 12053660.11 12053660.33 0.0089 0.0013

Neptune 28290-04-26 03:21 G 12053885.44 12053885.64 12053885.85 0.0089 0.0032

Neptune 28290-12-07 16:33 G 12054111.01 12054111.19 12054111.37 0.0089 0.0050

Neptune 28291-07-21 05:17 G 12054336.60 12054336.72 12054336.87 0.0089 0.0069

Neptune 28292-03-02 18:29 G 12054562.23 12054562.27 12054562.31 0.0089 0.0087

Jupiter 28296-02-22 16:48 G 12056014.14 12056014.20 12056014.27 0.0498 0.0473

Uranus 28297-12-27 19:12 G 12056688.20 12056688.30 12056688.43 0.0136 0.0116

Saturn 28297-12-28 06:00 G 12056688.55 12056688.75 12056688.95 0.0290 0.0103

Uranus 28298-08-11 02:38 G 12056914.44 12056914.61 12056914.79 0.0136 0.0083

Saturn	28298-08-15 04:05 G	12056918.49	12056918.67	12056918.86	0.0292	0.0139
Uranus	28299-03-25 09:36 G	12057140.71	12057140.90	12057141.11	0.0136	0.0051
Uranus	28299-11-06 16:33 G	12057366.98	12057367.19	12057367.41	0.0136	0.0019
Uranus	28300-06-20 23:31 G	12057593.26	12057593.48	12057593.70	0.0135	0.0013
Uranus	28301-02-02 05:45 G	12057819.55	12057819.74	12057819.96	0.0135	0.0045
Uranus	28301-09-16 12:14 G	12058045.84	12058046.01	12058046.20	0.0135	0.0076
Uranus	28302-04-30 18:14 G	12058272.15	12058272.26	12058272.41	0.0135	0.0108
Jupiter	28307-10-29 18:14 G	12060280.05	12060280.26	12060280.46	0.0497	0.0031
Saturn	28311-11-01 01:41 G	12061743.39	12061743.57	12061743.77	0.0271	0.0113
Saturn	28312-06-17 05:02 G	12061972.51	12061972.71	12061972.92	0.0269	0.0078
Saturn	28313-02-01 07:12 G	12062201.77	12062201.80	12062201.85	0.0268	0.0263
Jupiter	28319-07-04 18:57 G	12064546.18	12064546.29	12064546.40	0.0495	0.0411
Jupiter	28325-05-11 06:43 G	12066683.57	12066683.78	12066683.98	0.0531	0.0040
Saturn	28327-07-11 13:12 G	12067474.84	12067475.05	12067475.25	0.0290	0.0070
Saturn	28328-02-26 11:17 G	12067704.80	12067704.97	12067705.14	0.0292	0.0171
Mars	28334-05-11 00:00 G	12069970.32	12069970.50	12069970.67	0.1757	0.0108
Jupiter	28337-01-13 22:19 G	12070949.36	12070949.43	12070949.50	0.0532	0.0498
Mars	28340-10-24 21:50 G	12072329.24	12072329.41	12072329.58	0.1780	0.0294
Saturn	28341-05-13 04:48 G	12072529.50	12072529.70	12072529.90	0.0271	0.0090
Uranus	28341-12-22 20:09 G	12072753.25	12072753.34	12072753.43	0.0142	0.0129
Saturn	28341-12-28 08:09 G	12072758.64	12072758.84	12072759.04	0.0269	0.0100
Uranus	28342-08-06 06:00 G	12072979.60	12072979.75	12072979.93	0.0142	0.0094
Uranus	28343-03-20 16:33 G	12073206.00	12073206.19	12073206.39	0.0143	0.0057
Jupiter	28343-07-07 02:53 G	12073314.45	12073314.62	12073314.79	0.0498	0.0279
Uranus	28343-11-02 03:07 G	12073432.42	12073432.63	12073432.85	0.0143	0.0020
Uranus	28344-06-15 13:55 G	12073658.86	12073659.08	12073659.30	0.0143	0.0018
Uranus	28345-01-28 00:43 G	12073885.33	12073885.53	12073885.73	0.0143	0.0056
Uranus	28345-09-11 11:31 G	12074111.83	12074111.98	12074112.15	0.0144	0.0094
Uranus	28346-04-25 22:33 G	12074338.37	12074338.44	12074338.54	0.0144	0.0132
Moon	28346-08-02 14:38 G	12074436.95	12074437.11	12074437.27	0.2667	0.0129

Earth 28346-08-02 20:24 G 12074437.19 12074437.35 12074437.50 0.2669 0.0816 *

Jupiter 28355-03-12 04:33 G 12077580.49 12077580.69 12077580.88 0.0496 0.0161

Saturn 28356-06-05 00:43 G 12078031.47 12078031.53 12078031.61 0.0289 0.0271

Saturn 28357-01-20 22:05 G 12078261.21 12078261.42 12078261.63 0.0290 0.0035

Saturn 28357-09-07 20:38 G 12078491.21 12078491.36 12078491.51 0.0292 0.0208

Jupiter 28361-01-16 20:09 G 12079718.19 12079718.34 12079718.50 0.0529 0.0338

Neptune 28369-12-22 03:21 G 12082979.58 12082979.64 12082979.74 0.0089 0.0082

Saturn 28370-04-08 09:07 G 12083086.81 12083086.88 12083086.97 0.0272 0.0249

Neptune 28370-08-04 16:19 G 12083205.05 12083205.18 12083205.35 0.0089 0.0064

Saturn 28370-11-23 13:26 G 12083315.86 12083316.06 12083316.27 0.0270 0.0057

Neptune 28371-03-18 05:31 G 12083430.55 12083430.73 12083430.93 0.0089 0.0045

Saturn 28371-07-10 16:33 G 12083545.00 12083545.19 12083545.37 0.0269 0.0132

Neptune 28371-10-29 18:29 G 12083656.07 12083656.27 12083656.49 0.0089 0.0027

Neptune 28372-06-11 07:55 G 12083881.61 12083881.83 12083882.05 0.0089 0.0008

Jupiter 28372-09-21 10:48 G 12083983.77 12083983.95 12083984.14 0.0531 0.0208

Neptune 28373-01-22 20:53 G 12084107.15 12084107.37 12084107.59 0.0089 0.0011

Neptune 28373-09-05 09:36 G 12084332.70 12084332.90 12084333.12 0.0089 0.0030

Neptune 28374-04-18 22:33 G 12084558.27 12084558.44 12084558.64 0.0089 0.0049

Neptune 28374-11-30 11:45 G 12084783.86 12084783.99 12084784.14 0.0089 0.0067

Neptune 28375-07-14 00:29 G 12085009.49 12085009.52 12085009.60 0.0089 0.0086

Uranus 28381-08-28 07:12 G 12087246.73 12087246.80 12087246.89 0.0136 0.0127

Uranus 28382-04-11 14:24 G 12087472.96 12087473.10 12087473.27 0.0136 0.0094

Uranus 28382-11-23 21:36 G 12087699.21 12087699.40 12087699.60 0.0136 0.0062

Uranus 28383-07-08 04:33 G 12087925.49 12087925.69 12087925.91 0.0136 0.0030

Uranus 28384-02-19 11:31 G 12088151.76 12088151.98 12088152.20 0.0135 0.0003

Uranus 28384-10-02 18:00 G 12088378.04 12088378.25 12088378.47 0.0135 0.0034

Uranus 28385-05-17 00:29 G 12088604.34 12088604.52 12088604.72 0.0135 0.0066

Saturn 28385-12-16 08:09 G 12088817.73 12088817.84 12088817.96 0.0289 0.0239

Uranus 28385-12-29 06:43 G 12088830.64 12088830.78 12088830.94 0.0135 0.0097

Saturn 28386-08-03 05:31 G 12089047.51 12089047.73 12089047.94 0.0291 0.0004

Uranus 28386-08-12 12:57 G 12089056.98 12089057.04 12089057.12 0.0135 0.0128

Saturn 28387-03-21 03:50 G 12089277.55 12089277.66 12089277.78 0.0292 0.0241

Jupiter 28390-11-17 14:09 G 12090614.89 12090615.09 12090615.30 0.0497 0.0092

Saturn 28399-10-19 12:00 G 12093872.89 12093873.00 12093873.12 0.0272 0.0227

Mars 28400-03-07 08:09 G 12094012.67 12094012.84 12094013.01 0.1753 0.0320

Saturn 28400-06-04 16:05 G 12094101.96 12094102.17 12094102.38 0.0270 0.0035

Saturn 28401-01-19 18:43 G 12094331.11 12094331.28 12094331.46 0.0269 0.0154

Jupiter 28402-07-23 15:07 G 12094880.99 12094881.13 12094881.28 0.0495 0.0350

Mars 28406-08-22 05:17 G 12096371.55 12096371.72 12096371.89 0.1784 0.0167

Jupiter 28408-05-30 05:17 G 12097018.53 12097018.72 12097018.92 0.0530 0.0122

Pluto 28409-08-10 18:00 G 12097456.12 12097456.25 12097456.44 0.0066 0.0045

Pluto 28410-03-23 23:02 G 12097681.24 12097681.46 12097681.68 0.0066 0.0002

Pluto 28410-11-04 03:21 G 12097906.51 12097906.64 12097906.80 0.0066 0.0049

Saturn 28415-06-28 15:07 G 12099603.99 12099604.13 12099604.28 0.0289 0.0206

Saturn 28416-02-13 12:57 G 12099833.83 12099834.04 12099834.25 0.0291 0.0032

Saturn 28416-09-30 11:45 G 12100063.93 12100063.99 12100064.07 0.0293 0.0276

Jupiter 28420-02-02 17:02 G 12101284.10 12101284.21 12101284.32 0.0532 0.0442

Uranus 28426-04-05 13:55 G 12103537.94 12103538.08 12103538.22 0.0142 0.0108

Jupiter 28426-07-26 01:12 G 12103649.41 12103649.55 12103649.69 0.0497 0.0351

Uranus 28426-11-18 00:00 G 12103764.33 12103764.50 12103764.70 0.0142 0.0073

Uranus 28427-07-02 10:33 G 12103990.74 12103990.94 12103991.16 0.0143 0.0036

Uranus 28428-02-13 21:07 G 12104217.17 12104217.38 12104217.60 0.0143 0.0004

Uranus 28428-09-27 07:55 G 12104443.62 12104443.83 12104444.04 0.0143 0.0040

Saturn 28429-04-30 20:09 G 12104659.20 12104659.34 12104659.49 0.0271 0.0194

Uranus 28429-05-11 18:43 G 12104670.10 12104670.28 12104670.47 0.0143 0.0077

Saturn 28429-12-16 00:00 G 12104888.29 12104888.50 12104888.71 0.0270 0.0004

Uranus 28429-12-24 05:45 G 12104896.63 12104896.74 12104896.88 0.0144 0.0116

Saturn 28430-08-02 02:38 G 12105117.46 12105117.61 12105117.76 0.0268 0.0184

Jupiter 28438-03-31 01:41 G 12107915.37 12107915.57 12107915.78 0.0496 0.0094

Jupiter 28444-02-05 18:57 G 12110053.17 12110053.29 12110053.41 0.0530 0.0419

Saturn 28445-01-07 22:05 G 12110390.25 12110390.42 12110390.59 0.0290 0.0176

Saturn 28445-08-25 19:41 G 12110620.12 12110620.32 12110620.53 0.0291 0.0064

Neptune 28451-06-27 18:14 G 12112752.16 12112752.26 12112752.41 0.0089 0.0072

Neptune 28452-02-08 07:26 G 12112977.65 12112977.81 12112978.00 0.0089 0.0053

Neptune 28452-09-20 20:09 G 12113203.15 12113203.34 12113203.56 0.0089 0.0035

Neptune 28453-05-04 09:21 G 12113428.68 12113428.89 12113429.11 0.0089 0.0016

Neptune 28453-12-15 22:33 G 12113654.22 12113654.44 12113654.66 0.0089 0.0003

Neptune 28454-07-29 11:17 G 12113879.76 12113879.97 12113880.19 0.0089 0.0022

Neptune 28455-03-12 00:00 G 12114105.32 12114105.50 12114105.71 0.0089 0.0041

Jupiter 28455-10-11 11:31 G 12114318.78 12114318.98 12114319.18 0.0531 0.0112

Neptune 28455-10-23 12:57 G 12114330.89 12114331.04 12114331.22 0.0089 0.0059

Neptune 28456-06-05 01:41 G 12114556.49 12114556.57 12114556.70 0.0089 0.0078

Saturn 28458-11-10 22:33 G 12115445.29 12115445.44 12115445.61 0.0271 0.0172

Saturn 28459-06-28 02:09 G 12115674.38 12115674.59 12115674.80 0.0270 0.0019

Moon 28460-02-02 03:50 G 12115893.51 12115893.66 12115893.81 0.2665 0.0194

Earth 28460-02-02 08:09 G 12115893.69 12115893.84 12115893.99 0.2662 0.0789 *

Saturn 28460-02-12 04:19 G 12115903.56 12115903.68 12115903.83 0.0268 0.0205

Uranus 28465-12-10 01:55 G 12118031.45 12118031.58 12118031.73 0.0136 0.0106

Mars 28466-01-02 16:48 G 12118055.04 12118055.20 12118055.36 0.1749 0.0715

Uranus 28466-07-24 09:07 G 12118257.70 12118257.88 12118258.07 0.0136 0.0073

Uranus 28467-03-07 16:05 G 12118483.97 12118484.17 12118484.39 0.0136 0.0041

Uranus 28467-10-19 23:02 G 12118710.25 12118710.46 12118710.68 0.0136 0.0009

Moon 28468-01-30 23:17 G 12118813.47 12118813.47 12118813.47 0.2668 0.2664

Uranus 28468-06-02 05:45 G 12118936.53 12118936.74 12118936.96 0.0135 0.0024

Uranus 28469-01-14 12:29 G 12119162.82 12119163.02 12119163.22 0.0135 0.0055

Uranus 28469-08-28 18:43 G 12119389.12 12119389.28 12119389.45 0.0135 0.0086

Uranus 28470-04-12 00:57 G 12119615.44 12119615.54 12119615.65 0.0135 0.0117

Mars 28472-06-18 12:43 G 12120413.87 12120414.03 12120414.20 0.1789 0.0622

Jupiter 28473-12-06 12:29 G 12120949.82 12120950.02 12120950.21 0.0497 0.0164

Saturn 28474-07-21 03:07 G 12121176.45 12121176.63 12121176.81 0.0290 0.0146

Saturn	28475-03-08 01:12 G	12121406.35	12121406.55	12121406.75	0.0291	0.0095
Jupiter	28485-08-11 14:53 G	12125215.95	12125216.12	12125216.29	0.0495	0.0269
Saturn	28488-05-23 06:00 G	12126231.57	12126231.75	12126231.93	0.0271	0.0141
Saturn	28489-01-07 09:21 G	12126460.68	12126460.89	12126461.10	0.0269	0.0049
Saturn	28489-08-24 11:17 G	12126689.88	12126689.97	12126690.08	0.0268	0.0235
Jupiter	28491-06-19 00:43 G	12127353.34	12127353.53	12127353.72	0.0530	0.0182
Pluto	28497-04-11 00:43 G	12129476.34	12129476.53	12129476.72	0.0078	0.0038
Pluto	28497-11-22 09:50 G	12129701.74	12129701.91	12129702.11	0.0078	0.0041
Jupiter	28503-02-22 16:19 G	12131619.03	12131619.18	12131619.33	0.0532	0.0357
Saturn	28504-02-01 09:50 G	12131962.72	12131962.91	12131963.11	0.0290	0.0115
Saturn	28504-09-18 07:55 G	12132192.64	12132192.83	12132193.03	0.0292	0.0126
Jupiter	28509-08-14 23:02 G	12133984.35	12133984.46	12133984.57	0.0497	0.0422
Uranus	28509-12-04 21:50 G	12134096.32	12134096.41	12134096.53	0.0142	0.0123
Uranus	28510-07-19 07:55 G	12134322.67	12134322.83	12134323.02	0.0142	0.0087
Uranus	28511-03-02 18:14 G	12134549.07	12134549.26	12134549.47	0.0143	0.0051
Uranus	28511-10-15 04:48 G	12134775.49	12134775.70	12134775.92	0.0143	0.0014
Uranus	28512-05-28 15:36 G	12135001.94	12135002.15	12135002.36	0.0143	0.0024
Uranus	28513-01-10 02:09 G	12135228.41	12135228.59	12135228.80	0.0143	0.0063
Uranus	28513-08-24 13:12 G	12135454.91	12135455.05	12135455.22	0.0144	0.0100
Uranus	28514-04-08 00:14 G	12135681.47	12135681.51	12135681.59	0.0144	0.0138
Saturn	28517-12-04 07:41 G	12137017.64	12137017.82	12137018.02	0.0270	0.0120
Saturn	28518-07-21 10:48 G	12137246.75	12137246.95	12137247.16	0.0269	0.0070
Saturn	28519-03-07 12:43 G	12137475.97	12137476.03	12137476.10	0.0268	0.0254
Jupiter	28521-04-20 00:00 G	12138250.30	12138250.50	12138250.71	0.0496	0.0021
Jupiter	28527-02-25 20:24 G	12140388.30	12140388.35	12140388.39	0.0529	0.0515
Mars	28531-11-01 01:12 G	12142097.42	12142097.55	12142097.68	0.1745	0.1115
Jupiter	28532-12-24 02:53 G	12142516.54	12142516.62	12142516.71	0.0495	0.0450
Saturn	28533-08-13 12:57 G	12142748.84	12142749.04	12142749.24	0.0290	0.0089
Saturn	28534-03-31 11:17 G	12142978.79	12142978.97	12142979.15	0.0292	0.0153
Neptune	28534-11-06 23:31 G	12143199.38	12143199.48	12143199.63	0.0088	0.0074

Neptune 28535-06-20 12:57 G 12143424.88 12143425.04 12143425.22 0.0088 0.0055

Neptune 28536-02-01 01:55 G 12143650.39 12143650.58 12143650.80 0.0089 0.0037

Neptune 28536-09-13 15:07 G 12143875.92 12143876.13 12143876.35 0.0089 0.0018

Neptune 28537-04-27 04:19 G 12144101.46 12144101.68 12144101.90 0.0089 0.0001

Neptune 28537-12-08 17:17 G 12144327.01 12144327.22 12144327.44 0.0089 0.0020

Mars 28538-04-16 19:26 G 12144456.18 12144456.31 12144456.45 0.1794 0.1117

Neptune 28538-07-22 06:00 G 12144552.57 12144552.75 12144552.97 0.0089 0.0039

Jupiter 28538-10-31 08:24 G 12144653.65 12144653.85 12144654.05 0.0531 0.0043

Neptune 28539-03-04 19:12 G 12144778.14 12144778.30 12144778.48 0.0089 0.0057

Neptune 28539-10-16 07:55 G 12145003.74 12145003.83 12145003.97 0.0089 0.0076

Saturn 28547-06-16 14:09 G 12147803.89 12147804.09 12147804.29 0.0270 0.0091

Saturn 28548-01-31 17:02 G 12148033.01 12148033.21 12148033.41 0.0269 0.0098

Uranus 28549-08-10 12:29 G 12148589.93 12148590.02 12148590.15 0.0137 0.0118

Uranus 28550-03-24 20:09 G 12148816.17 12148816.34 12148816.51 0.0136 0.0085

Uranus 28550-11-06 03:21 G 12149042.44 12149042.64 12149042.84 0.0136 0.0052

Uranus 28551-06-20 10:33 G 12149268.72 12149268.94 12149269.15 0.0136 0.0020

Uranus 28552-02-01 17:17 G 12149495.00 12149495.22 12149495.44 0.0136 0.0012

Uranus 28552-09-14 23:45 G 12149721.29 12149721.49 12149721.70 0.0135 0.0044

Uranus 28553-04-29 06:14 G 12149947.59 12149947.76 12149947.95 0.0135 0.0075

Uranus 28553-12-11 12:43 G 12150173.90 12150174.03 12150174.17 0.0135 0.0106

Jupiter 28556-12-26 12:00 G 12151284.83 12151285.00 12151285.18 0.0497 0.0245

Saturn 28563-02-23 18:57 G 12153535.09 12153535.29 12153535.50 0.0291 0.0060

Saturn 28563-10-11 17:17 G 12153765.07 12153765.22 12153765.39 0.0292 0.0184

Mars 28563-10-31 07:12 G 12153784.70 12153784.80 12153784.90 0.1759 0.1430

Jupiter 28568-08-31 13:41 G 12155550.89 12155551.07 12155551.26 0.0495 0.0193

Mars 28570-04-16 04:19 G 12156143.62 12156143.68 12156143.75 0.1779 0.1632

Jupiter 28574-07-09 03:21 G 12157688.47 12157688.64 12157688.81 0.0530 0.0289

Saturn 28576-05-11 11:02 G 12158360.92 12158360.96 12158361.03 0.0272 0.0263

Saturn 28576-12-26 15:21 G 12158589.94 12158590.14 12158590.34 0.0270 0.0071

Saturn 28577-08-12 18:00 G 12158819.06 12158819.25 12158819.44 0.0268 0.0118

Jupiter 28586-03-13 19:12 G 12161954.12 12161954.30 12161954.48 0.0532 0.0249

Earth 28589-08-03 20:09 G 12163193.18 12163193.34 12163193.50 0.2670 0.0559

Moon 28589-08-04 00:57 G 12163193.39 12163193.54 12163193.68 0.2674 0.0899 *

Saturn 28592-01-18 23:31 G 12164091.41 12164091.48 12164091.55 0.0289 0.0272

Saturn 28592-09-04 20:38 G 12164321.15 12164321.36 12164321.58 0.0290 0.0036

Saturn 28593-04-22 19:26 G 12164551.16 12164551.31 12164551.46 0.0292 0.0207

Uranus 28593-08-04 06:14 G 12164654.71 12164654.76 12164654.82 0.0142 0.0137

Uranus 28594-03-18 15:50 G 12164881.03 12164881.16 12164881.33 0.0142 0.0102

Uranus 28594-10-31 02:09 G 12165107.41 12165107.59 12165107.79 0.0142 0.0066

Uranus 28595-06-14 12:43 G 12165333.82 12165334.03 12165334.24 0.0143 0.0029

Uranus 28596-01-26 23:02 G 12165560.25 12165560.46 12165560.68 0.0143 0.0009

Uranus 28596-09-09 09:36 G 12165786.70 12165786.90 12165787.11 0.0143 0.0046

Uranus 28597-04-23 20:24 G 12166013.18 12166013.35 12166013.53 0.0143 0.0084

Mars 28597-08-28 10:19 G 12166139.85 12166139.93 12166140.02 0.1741 0.1484

Uranus 28597-12-06 07:26 G 12166239.71 12166239.81 12166239.94 0.0143 0.0121

Mars 28604-02-13 02:38 G 12168498.53 12168498.61 12168498.68 0.1798 0.1601

Jupiter 28604-05-10 02:09 G 12168585.39 12168585.59 12168585.80 0.0496 0.0076

Saturn 28605-11-22 16:48 G 12169147.11 12169147.20 12169147.31 0.0272 0.0236

Saturn 28606-07-09 20:38 G 12169376.16 12169376.36 12169376.58 0.0270 0.0044

Saturn 28607-02-23 23:17 G 12169605.30 12169605.47 12169605.65 0.0268 0.0145

Neptune 28615-10-01 02:24 G 12172746.53 12172746.60 12172746.70 0.0089 0.0081

Jupiter 28616-01-14 03:50 G 12172851.52 12172851.66 12172851.80 0.0495 0.0362

Neptune 28616-05-13 15:07 G 12172972.00 12172972.13 12172972.31 0.0089 0.0063

Neptune 28616-12-25 04:19 G 12173197.51 12173197.68 12173197.89 0.0089 0.0044

Neptune 28617-08-07 17:17 G 12173423.02 12173423.22 12173423.44 0.0089 0.0026

Neptune 28618-03-21 06:29 G 12173648.55 12173648.77 12173648.99 0.0089 0.0007

Neptune 28618-11-01 19:26 G 12173874.09 12173874.31 12173874.53 0.0089 0.0012

Neptune 28619-06-15 07:55 G 12174099.64 12174099.83 12174100.05 0.0089 0.0031

Neptune 28620-01-26 21:07 G 12174325.20 12174325.38 12174325.57 0.0089 0.0049

Neptune 28620-09-08 09:36 G 12174550.78 12174550.90 12174551.06 0.0089 0.0068

Neptune 28621-04-21 22:33 G 12174776.41 12174776.44 12174776.51 0.0089 0.0086

Saturn 28621-08-01 05:02 G 12174877.60 12174877.71 12174877.83 0.0289 0.0244

Jupiter 28621-11-20 09:36 G 12174988.70 12174988.90 12174989.10 0.0531 0.0055

Saturn 28622-03-19 02:24 G 12175107.39 12175107.60 12175107.81 0.0291 0.0007

Saturn 28622-11-04 00:57 G 12175337.43 12175337.54 12175337.67 0.0293 0.0237

Mars 28629-08-28 15:21 G 12177827.00 12177827.14 12177827.29 0.1755 0.1012

Uranus 28633-04-10 22:33 G 12179148.38 12179148.44 12179148.51 0.0137 0.0130

Jupiter 28633-07-26 01:55 G 12179254.50 12179254.58 12179254.67 0.0533 0.0480

Uranus 28633-11-23 06:00 G 12179374.61 12179374.75 12179374.91 0.0137 0.0098

Uranus 28634-07-07 13:12 G 12179600.87 12179601.05 12179601.26 0.0136 0.0066

Uranus 28635-02-18 20:24 G 12179827.15 12179827.35 12179827.57 0.0136 0.0034

Saturn 28635-06-04 17:45 G 12179933.12 12179933.24 12179933.37 0.0271 0.0215

Uranus 28635-10-03 03:36 G 12180053.43 12180053.65 12180053.87 0.0136 0.0001

Saturn 28636-01-19 21:21 G 12180162.18 12180162.39 12180162.60 0.0269 0.0024

Mars 28636-02-12 12:00 G 12180185.87 12180186.00 12180186.13 0.1783 0.1188

Uranus 28636-05-16 10:19 G 12180279.73 12180279.93 12180280.15 0.0136 0.0032

Saturn 28636-09-04 23:45 G 12180391.33 12180391.49 12180391.66 0.0268 0.0163

Uranus 28636-12-28 17:02 G 12180506.03 12180506.21 12180506.41 0.0135 0.0063

Uranus 28637-08-11 23:31 G 12180732.34 12180732.48 12180732.65 0.0135 0.0095

Uranus 28638-03-26 06:00 G 12180958.68 12180958.75 12180958.84 0.0135 0.0125

Jupiter 28640-01-16 12:14 G 12181619.86 12181620.01 12181620.17 0.0497 0.0329

Saturn 28651-02-11 05:02 G 12185663.58 12185663.71 12185663.85 0.0289 0.0224

Jupiter 28651-09-21 15:07 G 12185885.93 12185886.13 12185886.34 0.0496 0.0103

Saturn 28651-09-29 02:38 G 12185893.40 12185893.61 12185893.82 0.0291 0.0014

Saturn 28652-05-16 01:26 G 12186123.47 12186123.56 12186123.67 0.0292 0.0258

Pluto 28657-07-16 07:55 G 12188010.64 12188010.83 12188011.06 0.0066 0.0021

Jupiter 28657-07-29 02:24 G 12188023.46 12188023.60 12188023.75 0.0530 0.0371

Pluto 28658-02-26 12:29 G 12188235.83 12188236.02 12188236.24 0.0066 0.0026

Saturn 28664-12-14 22:19 G 12190719.28 12190719.43 12190719.58 0.0271 0.0190

Saturn 28665-08-01 01:55 G 12190948.37 12190948.58 12190948.80 0.0270 0.0004

Saturn 28666-03-18 04:19 G 12191177.53 12191177.68 12191177.83 0.0268 0.0189

Jupiter 28669-04-02 17:02 G 12192289.02 12192289.21 12192289.41 0.0532 0.0172

Uranus 28677-11-17 02:24 G 12195439.48 12195439.60 12195439.73 0.0142 0.0114

Uranus 28678-07-01 12:14 G 12195665.84 12195666.01 12195666.20 0.0142 0.0078

Uranus 28679-02-12 22:33 G 12195892.24 12195892.44 12195892.65 0.0142 0.0042

Uranus 28679-09-27 08:53 G 12196118.66 12196118.87 12196119.09 0.0143 0.0005

Uranus 28680-05-10 19:26 G 12196345.10 12196345.31 12196345.53 0.0143 0.0033

Saturn 28680-08-23 10:33 G 12196449.79 12196449.94 12196450.10 0.0289 0.0197

Uranus 28680-12-23 06:14 G 12196571.58 12196571.76 12196571.96 0.0143 0.0070

Saturn 28681-04-10 08:09 G 12196679.64 12196679.84 12196680.06 0.0291 0.0043

Uranus 28681-08-06 17:02 G 12196798.08 12196798.21 12196798.36 0.0143 0.0108

Saturn 28681-11-26 07:12 G 12196909.77 12196909.80 12196909.85 0.0293 0.0287

Jupiter 28687-05-30 02:53 G 12198920.42 12198920.62 12198920.81 0.0496 0.0161

Saturn 28694-06-26 23:17 G 12201505.31 12201505.47 12201505.64 0.0271 0.0170

Saturn 28695-02-11 02:38 G 12201734.40 12201734.61 12201734.82 0.0269 0.0021

Mars 28695-06-25 23:45 G 12201869.32 12201869.49 12201869.65 0.1751 0.0588

Saturn 28695-09-28 04:48 G 12201963.57 12201963.70 12201963.83 0.0268 0.0207

Jupiter 28699-02-02 04:19 G 12203186.52 12203186.68 12203186.86 0.0495 0.0276

Neptune 28699-02-09 07:26 G 12203193.74 12203193.81 12203193.89 0.0088 0.0083

Neptune 28699-09-22 20:09 G 12203419.21 12203419.34 12203419.51 0.0088 0.0065

Neptune 28700-05-06 09:36 G 12203644.72 12203644.90 12203645.09 0.0088 0.0046

Neptune 28700-12-17 22:33 G 12203870.24 12203870.44 12203870.66 0.0089 0.0028

Neptune 28701-07-31 11:45 G 12204095.77 12204095.99 12204096.21 0.0089 0.0009

Mars 28701-12-10 19:26 G 12204228.15 12204228.31 12204228.47 0.1788 0.0727

Neptune 28702-03-14 00:43 G 12204321.32 12204321.53 12204321.75 0.0089 0.0010

Neptune 28702-10-25 13:26 G 12204546.87 12204547.06 12204547.29 0.0089 0.0029

Earth 28703-02-05 10:05 G 12204649.77 12204649.92 12204650.07 0.2661 0.0727

Moon 28703-02-05 15:36 G 12204650.01 12204650.15 12204650.29 0.2661 0.1160 *

Neptune 28703-06-08 02:53 G 12204772.44 12204772.62 12204772.81 0.0089 0.0047

Neptune 28704-01-19 16:05 G 12204998.02 12204998.17 12204998.32 0.0089 0.0065

Neptune 28704-09-01 04:33 G 12205223.64 12205223.69 12205223.78 0.0089 0.0084

Jupiter 28704-12-10 13:55 G 12205323.89 12205324.08 12205324.28 0.0531 0.0172

Saturn 28710-03-06 09:50 G 12207235.75 12207235.91 12207236.09 0.0289 0.0177

Saturn 28710-10-22 07:41 G 12207465.62 12207465.82 12207466.03 0.0291 0.0063

Jupiter 28716-08-15 02:24 G 12209589.46 12209589.60 12209589.74 0.0532 0.0386

Uranus 28717-07-24 16:48 G 12209933.07 12209933.20 12209933.33 0.0137 0.0109

Uranus 28718-03-08 00:00 G 12210159.33 12210159.50 12210159.69 0.0137 0.0077

Uranus 28718-10-20 07:26 G 12210385.61 12210385.81 12210386.02 0.0136 0.0044

Uranus 28719-06-03 14:38 G 12210611.90 12210612.11 12210612.33 0.0136 0.0012

Uranus 28720-01-15 21:36 G 12210838.19 12210838.40 12210838.62 0.0136 0.0020

Uranus 28720-08-29 04:19 G 12211064.48 12211064.68 12211064.89 0.0136 0.0052

Uranus 28721-04-12 10:48 G 12211290.79 12211290.95 12211291.13 0.0135 0.0084

Uranus 28721-11-24 17:31 G 12211517.12 12211517.23 12211517.35 0.0135 0.0114

Jupiter 28723-02-05 15:50 G 12211955.06 12211955.16 12211955.26 0.0497 0.0432

Saturn 28724-01-08 02:53 G 12212291.44 12212291.62 12212291.80 0.0271 0.0147

Saturn 28724-08-24 06:14 G 12212520.55 12212520.76 12212520.97 0.0270 0.0045

Saturn 28725-04-10 08:09 G 12212749.75 12212749.84 12212749.96 0.0268 0.0231

Jupiter 28734-10-11 17:02 G 12216221.01 12216221.21 12216221.42 0.0496 0.0010

Saturn 28739-09-16 15:36 G 12218021.97 12218022.15 12218022.34 0.0290 0.0150

Saturn 28740-05-03 13:26 G 12218251.87 12218252.06 12218252.27 0.0292 0.0092

Jupiter 28740-08-18 04:19 G 12218358.59 12218358.68 12218358.77 0.0530 0.0473

Pluto 28744-08-04 07:26 G 12219805.76 12219805.81 12219805.89 0.0078 0.0075

Pluto 28745-03-17 17:17 G 12220031.00 12220031.22 12220031.44 0.0078 0.0005

Jupiter 28746-06-16 19:12 G 12220487.22 12220487.30 12220487.40 0.0494 0.0439

Jupiter 28752-04-22 21:07 G 12222624.18 12222624.38 12222624.58 0.0532 0.0056

Saturn 28753-07-20 04:05 G 12223077.49 12223077.67 12223077.86 0.0271 0.0126

Saturn 28754-03-06 07:12 G 12223306.60 12223306.80 12223307.01 0.0269 0.0064

Saturn 28754-10-21 09:07 G 12223535.81 12223535.88 12223535.96 0.0267 0.0250

Mars 28761-04-23 08:24 G 12225911.67 12225911.85 12225912.02 0.1746 0.0195

Uranus 28761-07-18 12:29 G 12225997.95 12225998.02 12225998.14 0.0142 0.0127

Uranus 28762-03-01 22:33 G 12226224.29 12226224.44 12226224.62 0.0142 0.0091

Uranus 28762-10-14 08:53 G 12226450.67 12226450.87 12226451.07 0.0142 0.0054

Uranus 28763-05-28 19:12 G 12226677.09 12226677.30 12226677.52 0.0142 0.0018

Uranus 28764-01-10 05:45 G 12226903.53 12226903.74 12226903.96 0.0143 0.0019

Uranus 28764-08-23 16:05 G 12227129.98 12227130.17 12227130.38 0.0143 0.0057

Uranus 28765-04-07 02:53 G 12227356.47 12227356.62 12227356.79 0.0143 0.0094

Uranus 28765-11-19 13:41 G 12227583.01 12227583.07 12227583.18 0.0143 0.0132

Mars 28767-10-08 02:53 G 12228270.45 12228270.62 12228270.79 0.1792 0.0273

Saturn 28769-03-28 14:38 G 12228807.92 12228808.11 12228808.30 0.0289 0.0131

Saturn 28769-11-13 12:43 G 12229037.83 12229038.03 12229038.22 0.0291 0.0110

Jupiter 28770-06-19 05:02 G 12229255.54 12229255.71 12229255.89 0.0497 0.0256

Neptune 28780-08-15 23:02 G 12232966.35 12232966.46 12232966.61 0.0089 0.0072

Neptune 28781-03-29 12:00 G 12233191.84 12233192.00 12233192.19 0.0089 0.0054

Neptune 28781-11-10 01:12 G 12233417.36 12233417.55 12233417.76 0.0089 0.0035

Jupiter 28782-02-22 07:41 G 12233521.63 12233521.82 12233522.01 0.0495 0.0174

Neptune 28782-06-23 14:09 G 12233642.88 12233643.09 12233643.32 0.0089 0.0017

Saturn 28783-01-30 07:12 G 12233863.61 12233863.80 12233864.00 0.0271 0.0104

Neptune 28783-02-04 03:07 G 12233868.42 12233868.63 12233868.86 0.0089 0.0003

Saturn 28783-09-16 10:19 G 12234092.74 12234092.93 12234093.14 0.0269 0.0088

Neptune 28783-09-17 15:50 G 12234093.96 12234094.16 12234094.39 0.0089 0.0021

Neptune 28784-04-30 04:48 G 12234319.51 12234319.70 12234319.91 0.0089 0.0039

Neptune 28784-12-11 17:45 G 12234545.09 12234545.24 12234545.42 0.0089 0.0058

Neptune 28785-07-25 06:43 G 12234770.68 12234770.78 12234770.90 0.0089 0.0076

Jupiter 28787-12-30 12:57 G 12235658.86 12235659.04 12235659.22 0.0530 0.0255

Saturn 28798-10-08 20:53 G 12239594.18 12239594.37 12239594.58 0.0290 0.0102

Saturn 28799-05-26 19:12 G 12239824.12 12239824.30 12239824.49 0.0292 0.0141

Jupiter 28799-09-04 03:50 G 12239924.49 12239924.66 12239924.83 0.0532 0.0286

Uranus 28801-03-24 02:38 G 12240491.53 12240491.61 12240491.73 0.0137 0.0122

Uranus 28801-11-05 10:33 G 12240717.78 12240717.94 12240718.11 0.0137 0.0089

Uranus 28802-06-19 18:00 G 12240944.06 12240944.25 12240944.46 0.0136 0.0057

Uranus 28803-02-01 01:12 G 12241170.34 12241170.55 12241170.77 0.0136 0.0025

Uranus 28803-09-15 08:24 G 12241396.63 12241396.85 12241397.07 0.0136 0.0008

Uranus 28804-04-28 15:21 G 12241622.93 12241623.14 12241623.35 0.0136 0.0040

Uranus 28804-12-10 22:05 G 12241849.24 12241849.42 12241849.61 0.0135 0.0072

Uranus 28805-07-25 04:48 G 12242075.57 12242075.70 12242075.85 0.0135 0.0103

Uranus 28806-03-08 11:17 G 12242301.96 12242301.97 12242302.01 0.0135 0.0134

Saturn 28812-08-11 08:53 G 12244649.67 12244649.87 12244650.07 0.0270 0.0083

Saturn 28813-03-28 11:45 G 12244878.81 12244878.99 12244879.19 0.0269 0.0108

Jupiter 28817-10-30 17:45 G 12246556.04 12246556.24 12246556.45 0.0496 0.0081

Mars 28827-02-18 17:02 G 12249954.04 12249954.21 12249954.38 0.1742 0.0211

Saturn 28828-04-19 20:24 G 12250380.15 12250380.35 12250380.56 0.0290 0.0083

Saturn 28828-12-05 18:29 G 12250610.10 12250610.27 12250610.45 0.0292 0.0160

Jupiter 28829-07-05 21:07 G 12250822.24 12250822.38 12250822.53 0.0495 0.0347

Moon 28832-08-05 16:48 G 12251949.03 12251949.20 12251949.36 0.2665 0.0252

Earth 28832-08-05 20:24 G 12251949.19 12251949.35 12251949.51 0.2670 0.0337 *

Mars 28833-08-04 10:05 G 12252312.74 12252312.92 12252313.09 0.1796 0.0215

Jupiter 28835-05-12 22:19 G 12252959.22 12252959.43 12252959.63 0.0531 0.0043

Saturn 28841-07-07 07:12 G 12255206.74 12255206.80 12255206.88 0.0273 0.0256

Saturn 28842-02-21 11:45 G 12255435.79 12255435.99 12255436.20 0.0271 0.0061

Saturn 28842-10-08 15:07 G 12255664.94 12255665.13 12255665.31 0.0269 0.0130

Uranus 28845-03-17 23:31 G 12256556.44 12256556.48 12256556.53 0.0141 0.0138

Uranus 28845-10-30 09:07 G 12256782.75 12256782.88 12256783.04 0.0142 0.0103

Uranus 28846-06-13 19:12 G 12257009.12 12257009.30 12257009.51 0.0142 0.0067

Jupiter 28847-01-15 12:29 G 12257224.96 12257225.02 12257225.09 0.0532 0.0505

Uranus 28847-01-26 05:31 G 12257235.53 12257235.73 12257235.95 0.0142 0.0031

Uranus 28847-09-09 16:05 G 12257461.95 12257462.17 12257462.39 0.0142 0.0007

Uranus 28848-04-23 02:24 G 12257688.40 12257688.60 12257688.82 0.0143 0.0044

Uranus 28848-12-05 13:12 G 12257914.88 12257915.05 12257915.24 0.0143 0.0081

Uranus 28849-07-20 00:00 G 12258141.39 12258141.50 12258141.64 0.0143 0.0118

Jupiter 28853-07-08 06:14 G 12259590.62 12259590.76 12259590.91 0.0497 0.0350

Saturn 28857-03-15 06:43 G 12260936.77 12260936.78 12260936.80 0.0288 0.0287

Saturn 28857-10-31 03:36 G 12261166.44 12261166.65 12261166.86 0.0290 0.0052

Saturn 28858-06-18 01:41 G 12261396.42 12261396.57 12261396.74 0.0292 0.0191

Neptune 28863-12-26 04:19 G 12263413.58 12263413.68 12263413.82 0.0088 0.0074

Neptune 28864-08-07 17:17 G 12263639.07 12263639.22 12263639.41 0.0088 0.0056

Jupiter 28865-03-13 08:09 G 12263856.63 12263856.84 12263857.04 0.0495 0.0088

Neptune 28865-03-21 06:43 G 12263864.58 12263864.78 12263864.98 0.0088 0.0037

Neptune 28865-11-01 19:41 G 12264090.11 12264090.32 12264090.54 0.0088 0.0018

Neptune 28866-06-15 09:07 G 12264315.65 12264315.88 12264316.10 0.0089 0.0002

Neptune 28867-01-26 21:50 G 12264541.20 12264541.41 12264541.64 0.0089 0.0019

Neptune 28867-09-09 10:33 G 12264766.76 12264766.94 12264767.16 0.0089 0.0038

Neptune 28868-04-21 23:45 G 12264992.33 12264992.49 12264992.68 0.0089 0.0056

Neptune 28868-12-03 12:57 G 12265217.93 12265218.04 12265218.17 0.0089 0.0074

Saturn 28871-01-17 10:19 G 12265992.83 12265992.93 12265993.04 0.0272 0.0231

Jupiter 28871-01-18 15:36 G 12265994.01 12265994.15 12265994.30 0.0531 0.0363

Saturn 28871-09-03 14:38 G 12266221.90 12266222.11 12266222.32 0.0270 0.0038

Saturn 28872-04-19 17:31 G 12266451.06 12266451.23 12266451.40 0.0269 0.0152

Jupiter 28882-09-23 07:55 G 12270259.64 12270259.83 12270260.03 0.0532 0.0171

Uranus 28884-11-21 14:24 G 12271050.05 12271050.10 12271050.15 0.0137 0.0132

Uranus 28885-07-05 21:50 G 12271276.27 12271276.41 12271276.57 0.0137 0.0100

Uranus 28886-02-17 05:17 G 12271502.54 12271502.72 12271502.92 0.0137 0.0068

Saturn 28886-09-25 06:57 G 12271722.72 12271722.79 12271722.87 0.0288 0.0267

Uranus 28886-10-01 12:43 G 12271728.83 12271729.03 12271729.25 0.0136 0.0035

Saturn 28887-05-13 03:50 G 12271952.45 12271952.66 12271952.87 0.0290 0.0031

Uranus 28887-05-15 20:09 G 12271955.12 12271955.34 12271955.56 0.0136 0.0003

Uranus 28887-12-28 03:07 G 12272181.42 12272181.63 12272181.85 0.0136 0.0029

Saturn 28887-12-29 02:09 G 12272182.45 12272182.59 12272182.73 0.0292 0.0212

Uranus 28888-08-10 10:05 G 12272407.73 12272407.92 12272408.12 0.0136 0.0061

Uranus 28889-03-24 16:33 G 12272634.04 12272634.19 12272634.36 0.0135 0.0093

Uranus 28889-11-05 23:17 G 12272860.39 12272860.47 12272860.56 0.0135 0.0123

Mars 28892-12-16 01:55 G 12273996.42 12273996.58 12273996.75 0.1738 0.0588

Mars 28899-06-01 17:17 G 12276355.06 12276355.22 12276355.38 0.1801 0.0686

Saturn 28900-07-30 12:57 G 12276778.91 12276779.04 12276779.18 0.0273 0.0211

Jupiter 28900-11-19 19:55 G 12276891.14 12276891.33 12276891.52 0.0497 0.0176

Saturn 28901-03-16 17:31 G 12277008.01 12277008.23 12277008.44 0.0271 0.0017

Saturn 28901-10-31 20:24 G 12277237.20 12277237.35 12277237.52 0.0269 0.0174

Pluto 28904-11-07 19:55 G 12278340.16 12278340.33 12278340.54 0.0066 0.0033

Pluto 28905-06-21 00:29 G 12278565.32 12278565.52 12278565.75 0.0066 0.0014

Pluto 28906-02-01 04:33 G 12278790.63 12278790.69 12278790.80 0.0066 0.0061

Jupiter 28912-07-25 21:21 G 12281157.22 12281157.39 12281157.57 0.0495 0.0260

Saturn 28916-04-07 15:07 G 12282509.02 12282509.13 12282509.26 0.0288 0.0236

Saturn 28916-11-23 12:14 G 12282738.80 12282739.01 12282739.22 0.0290 0.0002

Saturn 28917-07-11 10:48 G 12282968.83 12282968.95 12282969.06 0.0292 0.0246

Jupiter 28918-06-01 22:19 G 12283294.23 12283294.43 12283294.62 0.0531 0.0133

Uranus 28929-06-30 18:43 G 12287341.17 12287341.28 12287341.42 0.0141 0.0116

Jupiter 28930-02-04 13:55 G 12287559.95 12287560.08 12287560.21 0.0533 0.0406

Saturn 28930-02-09 17:02 G 12287565.06 12287565.21 12287565.37 0.0272 0.0185

Uranus 28930-02-12 04:48 G 12287567.53 12287567.70 12287567.88 0.0142 0.0080

Uranus 28930-09-26 14:53 G 12287793.92 12287794.12 12287794.33 0.0142 0.0044

Saturn 28930-09-26 21:07 G 12287794.17 12287794.38 12287794.60 0.0270 0.0010 *

Uranus 28931-05-11 01:12 G 12288020.33 12288020.55 12288020.77 0.0142 0.0008

Saturn 28931-05-14 00:00 G 12288023.36 12288023.50 12288023.65 0.0268 0.0198

Uranus 28931-12-23 11:31 G 12288246.78 12288246.98 12288247.20 0.0143 0.0030

Uranus 28932-08-05 22:19 G 12288473.24 12288473.43 12288473.62 0.0143 0.0066

Uranus 28933-03-20 08:53 G 12288699.73 12288699.87 12288700.03 0.0143 0.0103

Uranus 28933-11-01 19:41 G 12288926.29 12288926.32 12288926.37 0.0143 0.0140

Jupiter 28936-07-28 05:45 G 12289925.64 12289925.74 12289925.84 0.0497 0.0428

Neptune 28944-11-18 07:26 G 12292960.73 12292960.81 12292960.90 0.0089 0.0081

Neptune 28945-07-01 20:09 G 12293186.21 12293186.34 12293186.51 0.0089 0.0063

Saturn 28945-10-18 16:05 G 12293295.04 12293295.17 12293295.32 0.0288 0.0214

Moon 28946-02-06 06:43 G 12293405.62 12293405.78 12293405.94 0.2660 0.0406

Earth 28946-02-06 12:14 G 12293405.86 12293406.01 12293406.17 0.2661 0.0703 *

Neptune 28946-02-12 09:07 G 12293411.71 12293411.88 12293412.09 0.0089 0.0045

Saturn 28946-06-05 13:26 G 12293524.85 12293525.06 12293525.27 0.0290 0.0024

Neptune 28946-09-25 22:19 G 12293637.22 12293637.43 12293637.64 0.0089 0.0026

Saturn 28947-01-21 11:45 G 12293754.91 12293754.99 12293755.08 0.0292 0.0268

Neptune 28947-05-09 11:17 G 12293862.75 12293862.97 12293863.19 0.0089 0.0007

Neptune 28947-12-21 00:14 G 12294088.30 12294088.51 12294088.73 0.0089 0.0011

Jupiter 28948-04-02 08:09 G 12294191.64 12294191.84 12294192.05 0.0496 0.0007

Neptune 28948-08-02 12:57 G 12294313.85 12294314.04 12294314.26 0.0089 0.0030

Neptune 28949-03-16 01:55 G 12294539.40 12294539.58 12294539.77 0.0089 0.0048

Neptune 28949-10-27 14:24 G 12294764.98 12294765.10 12294765.27 0.0089 0.0067

Neptune 28950-06-10 03:21 G 12294990.60 12294990.64 12294990.73 0.0089 0.0085

Jupiter 28954-02-07 16:05 G 12296329.07 12296329.17 12296329.27 0.0529 0.0456

Mars 28958-10-14 11:02 G 12298038.81 12298038.96 12298039.10 0.1734 0.0967

Saturn 28959-08-22 19:55 G 12298351.17 12298351.33 12298351.51 0.0272 0.0164

Jupiter 28959-12-07 10:05 G 12298457.83 12298457.92 12298458.02 0.0495 0.0436

Saturn 28960-04-08 00:14 G 12298580.30 12298580.51 12298580.73 0.0271 0.0031

Saturn 28960-11-23 03:21 G 12298809.53 12298809.64 12298809.77 0.0269 0.0220

Mars 28965-03-29 23:31 G 12300397.35 12300397.48 12300397.61 0.1806 0.1205

Jupiter 28965-10-13 06:43 G 12300594.58 12300594.78 12300594.98 0.0531 0.0087

Uranus 28969-03-06 08:09 G 12301834.72 12301834.84 12301834.97 0.0137 0.0112

Uranus 28969-10-18 15:36 G 12302060.99 12302061.15 12302061.34 0.0137 0.0080

Uranus 28970-06-01 23:17 G 12302287.27 12302287.47 12302287.68 0.0136 0.0047

Uranus 28971-01-14 06:43 G 12302513.57 12302513.78 12302514.00 0.0136 0.0015

Uranus 28971-08-28 13:55 G 12302739.86 12302740.08 12302740.30 0.0136 0.0017

Uranus 28972-04-10 20:38 G 12302966.17 12302966.36 12302966.57 0.0136 0.0049

Uranus 28972-11-23 03:36 G 12303192.48 12303192.65 12303192.83 0.0135 0.0081

Uranus 28973-07-07 10:05 G 12303418.82 12303418.92 12303419.06 0.0135 0.0113

Saturn 28975-05-01 01:55 G 12304081.42 12304081.58 12304081.75 0.0289 0.0179

Saturn 28975-12-16 23:02 G 12304311.25 12304311.46 12304311.67 0.0291 0.0060

Jupiter 28983-12-09 18:29 G 12307226.10 12307226.27 12307226.45 0.0496 0.0252

Saturn 28989-03-04 01:26 G 12309137.38 12309137.56 12309137.75 0.0272 0.0136

Saturn 28989-10-19 05:31 G 12309366.52 12309366.73 12309366.94 0.0270 0.0058

Saturn 28990-06-05 08:09 G 12309595.76 12309595.84 12309595.93 0.0268 0.0246

Mars 28990-10-13 15:50 G 12309726.08 12309726.16 12309726.24 0.1748 0.1524

Pluto 28992-07-09 02:38 G 12310360.40 12310360.61 12310360.83 0.0078 0.0021

Pluto 28993-02-19 12:00 G 12310585.86 12310586.00 12310586.15 0.0078 0.0058

Jupiter 28995-08-14 19:41 G 12311492.13 12311492.32 12311492.51 0.0495 0.0187

Mars 28997-03-29 09:50 G 12312084.85 12312084.91 12312084.98 0.1791 0.1653

30TH MILLENNIUM CE

This is a list of transits of Venus in the 30th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 29001-06-22 00:00 G 12313629.32 12313629.50 12313629.69 0.0531 0.0234

Saturn 29004-11-11 04:33 G 12314867.52 12314867.69 12314867.87 0.0289 0.0154

Saturn 29005-06-29 01:55 G 12315097.38 12315097.58 12315097.78 0.0291 0.0086

Jupiter 29013-02-24 14:24 G 12317894.93 12317895.10 12317895.26 0.0532 0.0310

Uranus 29013-03-01 03:07 G 12317899.56 12317899.63 12317899.73 0.0141 0.0129

Uranus 29013-10-13 12:57 G 12318125.89 12318126.04 12318126.21 0.0142 0.0094

Uranus 29014-05-27 23:02 G 12318352.27 12318352.46 12318352.66 0.0142 0.0058

Uranus 29015-01-09 09:21 G 12318578.68 12318578.89 12318579.10 0.0142 0.0022

Uranus 29015-08-23 19:41 G 12318805.10 12318805.32 12318805.53 0.0142 0.0015

Uranus 29016-04-06 05:45 G 12319031.55 12319031.74 12319031.96 0.0143 0.0052

Uranus 29016-11-18 16:33 G 12319258.03 12319258.19 12319258.37 0.0143 0.0088

Uranus 29017-07-03 03:07 G 12319484.55 12319484.63 12319484.75 0.0143 0.0126

Saturn 29018-09-15 04:19 G 12319923.50 12319923.68 12319923.88 0.0272 0.0114

Saturn 29019-05-02 08:38 G 12320152.66 12320152.86 12320153.06 0.0270 0.0080

Saturn 29019-12-17 11:31 G 12320381.98 12320381.98 12320382.00 0.0269 0.0268

Mars 29024-08-11 20:38 G 12322081.25 12322081.36 12322081.47 0.1730 0.1320

Neptune 29028-03-30 12:29 G 12323407.97 12323408.02 12323408.12 0.0088 0.0083

Neptune 29028-11-11 01:26 G 12323633.43 12323633.56 12323633.74 0.0088 0.0065

Neptune 29029-06-24 15:07 G 12323858.94 12323859.13 12323859.32 0.0088 0.0046

Neptune 29030-02-05 04:05 G 12324084.47 12324084.67 12324084.89 0.0088 0.0027

Neptune 29030-09-18 17:02 G 12324310.00 12324310.21 12324310.44 0.0088 0.0009

Mars 29031-01-26 06:29 G 12324439.71 12324439.77 12324439.82 0.1810 0.1708

Jupiter 29031-04-23 06:00 G 12324526.55 12324526.75 12324526.96 0.0496 0.0071

Neptune 29031-05-02 06:14 G 12324535.54 12324535.76 12324535.98 0.0088 0.0010

Neptune 29031-12-13 19:26 G 12324761.10 12324761.31 12324761.52 0.0089 0.0028

Neptune 29032-07-26 08:09 G 12324986.67 12324986.84 12324987.04 0.0089 0.0047

Neptune 29033-03-08 21:21 G 12325212.25 12325212.39 12325212.55 0.0089 0.0065

Neptune 29033-10-20 10:05 G 12325437.87 12325437.92 12325438.02 0.0089 0.0084

Saturn 29034-05-24 15:07 G 12325653.93 12325654.13 12325654.32 0.0289 0.0117

Saturn 29035-01-09 12:29 G 12325883.83 12325884.02 12325884.21 0.0291 0.0123

Jupiter 29037-02-27 13:26 G 12326664.06 12326664.06 12326664.06 0.0530 0.0529

Jupiter 29042-12-27 07:55 G 12328792.70 12328792.83 12328792.97 0.0494 0.0364

Saturn 29048-03-27 11:17 G 12330709.77 12330709.97 12330710.17 0.0271 0.0083

Jupiter 29048-11-02 04:48 G 12330929.50 12330929.70 12330929.90 0.0532 0.0009

Saturn 29048-11-11 15:07 G 12330938.94 12330939.13 12330939.33 0.0270 0.0110

Uranus 29052-11-04 18:14 G 12332393.19 12332393.26 12332393.37 0.0137 0.0125

Uranus 29053-06-19 02:24 G 12332619.45 12332619.60 12332619.77 0.0137 0.0091

Uranus 29054-01-31 10:05 G 12332845.73 12332845.92 12332846.12 0.0137 0.0059

Uranus 29054-09-14 17:31 G 12333072.02 12333072.23 12333072.44 0.0136 0.0026

Uranus 29055-04-29 00:43 G 12333298.31 12333298.53 12333298.75 0.0136 0.0006

Uranus 29055-12-11 07:41 G 12333524.62 12333524.82 12333525.04 0.0136 0.0038

Uranus 29056-07-24 14:38 G 12333750.93 12333751.11 12333751.31 0.0136 0.0070

Mars 29056-08-11 00:29 G 12333768.39 12333768.52 12333768.66 0.1744 0.1125

Uranus 29057-03-07 21:36 G 12333977.26 12333977.40 12333977.55 0.0135 0.0101

Uranus 29057-10-20 04:05 G 12334203.63 12334203.67 12334203.73 0.0135 0.0132

Mars 29063-01-25 17:17 G 12336127.09 12336127.22 12336127.35 0.1795 0.1191

Saturn 29063-12-04 19:12 G 12336440.10 12336440.30 12336440.51 0.0289 0.0090

Saturn 29064-07-21 16:48 G 12336670.02 12336670.20 12336670.38 0.0291 0.0151

Jupiter 29066-12-29 16:05 G 12337561.02 12337561.17 12337561.33 0.0497 0.0322

Earth 29075-08-08 20:09 G 12340705.18 12340705.34 12340705.50 0.2671 0.0081

Moon 29075-08-08 21:36 G 12340705.25 12340705.40 12340705.55 0.2677 0.0093 *

Saturn 29077-02-20 09:21 G 12341266.83 12341266.89 12341266.96 0.0274 0.0258

Saturn 29077-10-07 14:38 G 12341495.91 12341496.11 12341496.32 0.0272 0.0061

Saturn 29078-05-24 18:29 G 12341725.09 12341725.27 12341725.46 0.0270 0.0132

Jupiter 29078-09-03 17:02 G 12341827.02 12341827.21 12341827.41 0.0496 0.0117

Jupiter 29084-07-10 21:21 G 12343964.23 12343964.39 12343964.56 0.0530 0.0309

Mars 29090-06-09 05:31 G 12346123.70 12346123.73 12346123.76 0.1726 0.1691

Saturn 29092-10-29 10:33 G 12346996.91 12346996.94 12346996.96 0.0287 0.0285

Saturn 29093-06-16 06:43 G 12347226.57 12347226.78 12347226.99 0.0289 0.0050

Saturn 29094-02-01 04:33 G 12347456.53 12347456.69 12347456.85 0.0291 0.0192

Jupiter 29096-03-15 10:05 G 12348229.74 12348229.92 12348230.10 0.0532 0.0245

Uranus 29097-06-12 20:38 G 12348684.24 12348684.36 12348684.51 0.0141 0.0109

Uranus 29098-01-25 06:43 G 12348910.60 12348910.78 12348910.97 0.0142 0.0073

Uranus 29098-09-08 16:48 G 12349136.99 12349137.20 12349137.41 0.0142 0.0037

Uranus 29099-04-23 02:53 G 12349363.40 12349363.62 12349363.83 0.0142 0.0002

Uranus 29099-12-05 13:12 G 12349589.84 12349590.05 12349590.26 0.0142 0.0035

Uranus 29100-07-19 23:31 G 12349816.30 12349816.48 12349816.67 0.0143 0.0072

Uranus 29101-03-03 09:50 G 12350042.79 12350042.91 12350043.07 0.0143 0.0109

Saturn 29106-09-03 17:17 G 12352053.11 12352053.22 12352053.34 0.0273 0.0225

Saturn 29107-04-20 22:19 G 12352282.22 12352282.43 12352282.64 0.0271 0.0029

Saturn 29107-12-06 01:55 G 12352511.42 12352511.58 12352511.76 0.0269 0.0163

Neptune 29109-10-05 04:33 G 12353180.57 12353180.69 12353180.83 0.0089 0.0072

Neptune 29110-05-18 17:17 G 12353406.07 12353406.22 12353406.42 0.0089 0.0054

Neptune 29110-12-30 06:43 G 12353631.59 12353631.78 12353631.99 0.0089 0.0035

Neptune 29111-08-12 19:41 G 12353857.11 12353857.32 12353857.54 0.0089 0.0017

Neptune 29112-03-25 08:53 G 12354082.65 12354082.87 12354083.09 0.0089 0.0002

Neptune 29112-11-05 21:36 G 12354308.19 12354308.40 12354308.62 0.0089 0.0021

Neptune 29113-06-19 10:33 G 12354533.75 12354533.94 12354534.14 0.0089 0.0039

Neptune 29114-01-30 23:31 G 12354759.32 12354759.48 12354759.65 0.0089 0.0057

Jupiter 29114-05-13 02:24 G 12354861.40 12354861.60 12354861.80 0.0496 0.0132

Neptune 29114-09-13 12:00 G 12354984.91 12354985.00 12354985.13 0.0089 0.0076

Saturn 29122-05-12 16:05 G 12357783.08 12357783.17 12357783.27 0.0287 0.0256

Mars 29122-06-09 09:07 G 12357810.73 12357810.88 12357811.04 0.1740 0.0724

Saturn 29122-12-28 12:14 G 12358012.80 12358013.01 12358013.22 0.0289 0.0021

Saturn 29123-08-15 10:05 G 12358242.78 12358242.92 12358243.05 0.0291 0.0222

Jupiter 29126-01-16 04:19 G 12359127.53 12359127.68 12359127.85 0.0495 0.0302

Mars 29128-11-23 00:14 G 12360169.35 12360169.51 12360169.67 0.1799 0.0707

Jupiter 29131-11-23 03:50 G 12361264.46 12361264.66 12361264.87 0.0531 0.0081

Saturn 29136-03-15 20:53 G 12362839.23 12362839.37 12362839.51 0.0273 0.0202

Uranus 29136-07-06 03:07 G 12362951.63 12362951.63 12362951.64 0.0137 0.0137

Saturn 29136-10-31 01:55 G 12363068.37 12363068.58 12363068.79 0.0271 0.0006

Uranus 29137-02-17 10:48 G 12363177.83 12363177.95 12363178.11 0.0137 0.0105

Saturn 29137-06-17 05:31 G 12363297.58 12363297.73 12363297.89 0.0270 0.0186

Uranus 29137-10-01 18:43 G 12363404.10 12363404.28 12363404.47 0.0137 0.0072

Uranus 29138-05-16 02:24 G 12363630.40 12363630.60 12363630.81 0.0137 0.0040

Uranus 29138-12-28 09:50 G 12363856.70 12363856.91 12363857.13 0.0136 0.0008

Uranus 29139-08-11 17:02 G 12364083.00 12364083.21 12364083.43 0.0136 0.0025

Uranus 29140-03-25 00:00 G 12364309.31 12364309.50 12364309.71 0.0136 0.0057

Uranus 29140-11-06 06:57 G 12364535.63 12364535.79 12364535.96 0.0136 0.0088

Uranus 29141-06-20 13:55 G 12364761.98 12364762.08 12364762.19 0.0135 0.0119

Jupiter 29143-07-28 18:00 G 12365530.15 12365530.25 12365530.34 0.0532 0.0469

Jupiter 29150-01-18 12:00 G 12367895.88 12367896.00 12367896.13 0.0497 0.0384

Saturn 29151-11-23 02:38 G 12368569.49 12368569.61 12368569.76 0.0288 0.0218

Pluto 29152-03-02 09:21 G 12368669.72 12368669.89 12368670.07 0.0066 0.0039

Saturn 29152-07-09 23:31 G 12368799.27 12368799.48 12368799.69 0.0290 0.0020

Pluto 29152-10-13 13:41 G 12368894.86 12368895.07 12368895.30 0.0066 0.0008

Saturn 29153-02-24 21:21 G 12369029.31 12369029.39 12369029.49 0.0292 0.0263

Pluto 29153-05-26 18:00 G 12369120.14 12369120.25 12369120.39 0.0066 0.0055

Jupiter 29161-09-23 13:41 G 12372161.87 12372162.07 12372162.27 0.0495 0.0053

Saturn 29165-09-26 05:17 G 12373625.57 12373625.72 12373625.90 0.0273 0.0169

Saturn 29166-05-13 10:19 G 12373854.72 12373854.93 12373855.14 0.0271 0.0028

Saturn 29166-12-28 13:41 G 12374083.95 12374084.07 12374084.20 0.0269 0.0218

Jupiter 29167-07-31 16:48 G 12374299.06 12374299.20 12374299.34 0.0530 0.0370

Jupiter 29173-05-29 14:53 G 12376428.10 12376428.12 12376428.15 0.0494 0.0488

Jupiter 29179-04-05 08:09 G 12378564.65 12378564.84 12378565.04 0.0532 0.0166

Uranus 29181-02-11 05:02 G 12379242.62 12379242.71 12379242.84 0.0141 0.0122

Saturn 29181-06-04 09:50 G 12379355.76 12379355.91 12379356.08 0.0288 0.0186

Uranus 29181-09-25 14:38 G 12379468.96 12379469.11 12379469.30 0.0141 0.0088

Saturn 29182-01-20 06:29 G 12379585.57 12379585.77 12379585.98 0.0290 0.0052

Uranus 29182-05-10 00:43 G 12379695.33 12379695.53 12379695.74 0.0142 0.0052

Uranus 29182-12-22 10:48 G 12379921.74 12379921.95 12379922.17 0.0142 0.0016

Uranus 29183-08-05 21:07 G 12380148.16 12380148.38 12380148.59 0.0142 0.0020

Uranus 29184-03-19 07:12 G 12380374.60 12380374.80 12380375.00 0.0142 0.0057

Uranus 29184-10-31 17:45 G 12380601.07 12380601.24 12380601.40 0.0143 0.0093

Uranus 29185-06-15 03:50 G 12380827.59 12380827.66 12380827.77 0.0143 0.0130

Mars 29188-04-05 18:14 G 12381853.09 12381853.26 12381853.43 0.1736 0.0347

Earth 29189-02-08 14:24 G 12382161.94 12382162.10 12382162.25 0.2660 0.0661

Moon 29189-02-08 19:26 G 12382162.16 12382162.31 12382162.45 0.2664 0.0839 *

Neptune 29193-02-13 11:02 G 12383627.85 12383627.96 12383628.10 0.0088 0.0072

Neptune 29193-09-26 23:45 G 12383853.34 12383853.49 12383853.69 0.0088 0.0055

Neptune 29194-05-10 13:12 G 12384078.86 12384079.05 12384079.26 0.0088 0.0036

Mars 29194-09-20 07:26 G 12384211.64 12384211.81 12384211.99 0.1804 0.0236

Neptune 29194-12-22 02:09 G 12384304.38 12384304.59 12384304.82 0.0088 0.0018

Saturn 29195-04-08 09:07 G 12384411.71 12384411.88 12384412.07 0.0273 0.0144

Neptune 29195-08-04 15:21 G 12384529.92 12384530.14 12384530.36 0.0088 0.0001

Saturn 29195-11-23 13:55 G 12384640.87 12384641.08 12384641.29 0.0271 0.0051

Neptune 29196-03-17 04:19 G 12384755.47 12384755.68 12384755.90 0.0088 0.0019

Saturn 29196-07-09 17:02 G 12384870.13 12384870.21 12384870.31 0.0269 0.0241

Neptune 29196-10-28 17:17 G 12384981.03 12384981.22 12384981.43 0.0089 0.0038

Moon 29197-02-06 12:00 G 12385081.91 12385082.00 12385082.09 0.2658 0.2205

Jupiter 29197-05-31 22:05 G 12385196.23 12385196.42 12385196.61 0.0496 0.0192

Neptune 29197-06-11 06:14 G 12385206.61 12385206.76 12385206.95 0.0089 0.0056

Neptune 29198-01-22 19:12 G 12385432.20 12385432.30 12385432.44 0.0089 0.0075

Jupiter 29209-02-03 23:45 G 12389462.32 12389462.49 12389462.67 0.0495 0.0243

Saturn 29210-12-15 20:09 G 12390142.17 12390142.34 12390142.53 0.0288 0.0148

Saturn 29211-08-02 17:17 G 12390372.02 12390372.22 12390372.42 0.0290 0.0092

Jupiter 29214-12-11 22:05 G 12391599.22 12391599.42 12391599.62 0.0531 0.0133

Uranus 29220-10-17 19:55 G 12393736.22 12393736.33 12393736.44 0.0137 0.0118

Uranus 29221-06-01 03:36 G 12393962.50 12393962.65 12393962.84 0.0137 0.0086

Uranus 29222-01-13 11:31 G 12394188.79 12394188.98 12394189.19 0.0137 0.0053

Uranus 29222-08-27 19:12 G 12394415.08 12394415.30 12394415.51 0.0137 0.0020

Uranus 29223-04-11 02:24 G 12394641.39 12394641.60 12394641.82 0.0136 0.0012

Uranus 29223-11-23 09:36 G 12394867.70 12394867.90 12394868.11 0.0136 0.0044

Uranus 29224-07-06 16:33 G 12395094.02 12395094.19 12395094.38 0.0136 0.0076

Saturn 29224-10-18 18:00 G 12395198.06 12395198.25 12395198.45 0.0272 0.0110

Uranus 29225-02-17 23:31 G 12395320.35 12395320.48 12395320.62 0.0136 0.0107

Saturn 29225-06-04 22:19 G 12395427.23 12395427.43 12395427.63 0.0270 0.0084

Jupiter 29226-08-16 12:00 G 12395864.88 12395865.00 12395865.13 0.0533 0.0415

Jupiter 29233-02-06 07:41 G 12398230.73 12398230.82 12398230.91 0.0497 0.0442

Pluto 29239-11-01 15:21 G 12400689.95 12400690.14 12400690.36 0.0078 0.0030

Pluto 29240-06-14 01:12 G 12400915.39 12400915.55 12400915.72 0.0078 0.0050

Saturn 29240-06-27 03:50 G 12400928.47 12400928.66 12400928.86 0.0289 0.0115

Saturn 29241-02-12 00:43 G 12401158.34 12401158.53 12401158.73 0.0291 0.0125

Jupiter 29244-10-12 09:07 G 12402496.68 12402496.88 12402497.09 0.0495 0.0005

Jupiter 29250-08-19 15:21 G 12404634.05 12404634.14 12404634.25 0.0530 0.0454

Mars 29254-02-01 03:21 G 12405895.47 12405895.64 12405895.82 0.1732 0.0042

Saturn 29254-04-30 21:36 G 12405984.20 12405984.40 12405984.60 0.0272 0.0086

Saturn 29254-12-16 01:55 G 12406213.38 12406213.58 12406213.77 0.0270 0.0108

Jupiter 29256-06-17 10:05 G 12406762.83 12406762.92 12406763.02 0.0494 0.0433

Mars 29260-07-17 14:09 G 12408253.92 12408254.09 12408254.26 0.1808 0.0272

Jupiter 29262-04-24 06:00 G 12408899.55 12408899.75 12408899.95 0.0532 0.0089

Uranus 29264-10-11 15:07 G 12409801.07 12409801.13 12409801.20 0.0141 0.0134

Uranus 29265-05-26 00:29 G 12410027.38 12410027.52 12410027.68 0.0141 0.0100

Uranus 29266-01-07 10:19 G 12410253.74 12410253.93 12410254.13 0.0141 0.0065

Uranus 29266-08-21 20:09 G 12410480.13 12410480.34 12410480.56 0.0142 0.0029

Uranus 29267-04-05 06:14 G 12410706.54 12410706.76 12410706.97 0.0142 0.0007

Uranus 29267-11-17 16:19 G 12410932.98 12410933.18 12410933.39 0.0142 0.0043

Uranus 29268-07-01 02:38 G 12411159.43 12411159.61 12411159.79 0.0143 0.0079

Uranus 29269-02-12 12:57 G 12411385.92 12411386.04 12411386.17 0.0143 0.0115

Saturn 29270-01-07 12:57 G 12411714.84 12411715.04 12411715.25 0.0289 0.0078

Saturn 29270-08-25 10:19 G 12411944.76 12411944.93 12411945.11 0.0291 0.0164

Neptune 29274-01-06 12:57 G 12413174.97 12413175.04 12413175.15 0.0089 0.0081

Neptune 29274-08-20 01:55 G 12413400.45 12413400.58 12413400.76 0.0089 0.0063

Neptune 29275-04-02 15:07 G 12413625.95 12413626.13 12413626.33 0.0089 0.0044

Neptune 29275-11-14 04:19 G 12413851.48 12413851.68 12413851.90 0.0089 0.0026

Neptune 29276-06-26 17:31 G 12414077.01 12414077.23 12414077.45 0.0089 0.0007

Neptune 29277-02-07 06:14 G 12414302.55 12414302.76 12414302.99 0.0089 0.0012

Neptune 29277-09-20 19:12 G 12414528.10 12414528.30 12414528.52 0.0089 0.0030

Neptune 29278-05-04 08:24 G 12414753.66 12414753.85 12414754.03 0.0089 0.0048

Neptune 29278-12-15 20:53 G 12414979.25 12414979.37 12414979.54 0.0089 0.0067

Neptune 29279-07-29 10:05 G 12415204.87 12415204.92 12415204.99 0.0089 0.0085

Jupiter 29280-06-19 18:57 G 12415531.12 12415531.29 12415531.47 0.0496 0.0258

Saturn 29283-03-27 00:57 G 12416541.47 12416541.54 12416541.64 0.0273 0.0249

Saturn 29283-11-11 06:29 G 12416770.56 12416770.77 12416770.98 0.0272 0.0052

Saturn 29284-06-27 10:19 G 12416999.75 12416999.93 12417000.11 0.0270 0.0141

Jupiter 29292-02-23 19:55 G 12419797.14 12419797.33 12419797.52 0.0494 0.0182

Jupiter 29297-12-30 19:41 G 12421934.13 12421934.32 12421934.50 0.0531 0.0208

Saturn 29298-12-03 00:43 G 12422271.49 12422271.53 12422271.59 0.0287 0.0279

Saturn 29299-07-20 20:53 G 12422501.16 12422501.37 12422501.58 0.0289 0.0044

Saturn 29300-03-07 18:14 G 12422731.11 12422731.26 12422731.42 0.0291 0.0197

Uranus 29304-06-18 03:50 G 12424294.61 12424294.66 12424294.74 0.0138 0.0132

Uranus 29305-01-30 12:00 G 12424520.86 12424521.00 12424521.16 0.0137 0.0099

Uranus 29305-09-13 19:41 G 12424747.14 12424747.32 12424747.52 0.0137 0.0066

Uranus 29306-04-28 03:21 G 12424973.44 12424973.64 12424973.86 0.0137 0.0034

Uranus 29306-12-10 11:02 G 12425199.74 12425199.96 12425200.18 0.0136 0.0002

Uranus 29307-07-24 18:29 G 12425426.06 12425426.27 12425426.48 0.0136 0.0031

Uranus 29308-03-07 01:26 G 12425652.37 12425652.56 12425652.76 0.0136 0.0062

Uranus 29308-10-19 08:09 G 12425878.70 12425878.84 12425879.01 0.0136 0.0094

Uranus 29309-06-02 14:53 G 12426105.06 12426105.12 12426105.22 0.0136 0.0125

Jupiter 29309-09-05 11:17 G 12426199.82 12426199.97 12426200.13 0.0533 0.0328

Saturn 29312-10-07 04:19 G 12427327.57 12427327.68 12427327.80 0.0273 0.0225

Saturn 29313-05-24 09:21 G 12427556.68 12427556.89 12427557.10 0.0271 0.0029

Saturn 29314-01-08 12:57 G 12427785.88 12427786.04 12427786.21 0.0270 0.0164

Earth 29318-08-10 19:55 G 12429461.17 12429461.33 12429461.49 0.2671 0.0188

Moon 29318-08-10 20:38 G 12429461.19 12429461.36 12429461.53 0.2665 0.0053 *

Mars 29319-11-30 12:43 G 12429937.86 12429938.03 12429938.20 0.1727 0.0401

Mars 29326-05-15 21:07 G 12432296.22 12432296.38 12432296.54 0.1813 0.0771

Jupiter 29327-11-02 05:31 G 12432831.52 12432831.73 12432831.93 0.0496 0.0067

Saturn 29328-06-15 07:55 G 12433057.72 12433057.83 12433057.94 0.0287 0.0246

Saturn 29329-01-31 04:19 G 12433287.46 12433287.68 12433287.89 0.0289 0.0011

Saturn 29329-09-18 01:55 G 12433517.46 12433517.58 12433517.72 0.0291 0.0233

Jupiter 29333-09-08 09:50 G 12434968.86 12434968.91 12434968.97 0.0530 0.0507

Jupiter 29339-07-08 08:09 G 12437097.70 12437097.84 12437097.98 0.0494 0.0362

Saturn 29342-04-19 12:43 G 12438113.89 12438114.03 12438114.19 0.0273 0.0192

Saturn 29342-12-04 17:45 G 12438343.03 12438343.24 12438343.45 0.0271 0.0005

Saturn 29343-07-21 20:53 G 12438572.24 12438572.37 12438572.52 0.0269 0.0196

Jupiter 29345-05-14 00:14 G 12439234.31 12439234.51 12439234.71 0.0532 0.0036

Uranus 29349-01-24 10:19 G 12440585.81 12440585.93 12440586.07 0.0141 0.0112

Uranus 29349-09-07 19:55 G 12440812.15 12440812.33 12440812.52 0.0141 0.0077

Uranus 29350-04-22 05:31 G 12441038.53 12441038.73 12441038.95 0.0142 0.0042

Uranus 29350-12-04 15:36 G 12441264.94 12441265.15 12441265.37 0.0142 0.0007

Uranus 29351-07-19 01:41 G 12441491.36 12441491.57 12441491.79 0.0142 0.0029

Uranus 29352-03-01 11:45 G 12441717.80 12441717.99 12441718.19 0.0142 0.0065

Uranus 29352-10-13 21:50 G 12441944.27 12441944.41 12441944.58 0.0143 0.0102

Uranus 29353-05-28 08:24 G 12442170.81 12442170.85 12442170.92 0.0143 0.0138

Neptune 29357-05-18 20:53 G 12443622.29 12443622.37 12443622.48 0.0088 0.0080

Saturn 29357-12-26 15:07 G 12443844.00 12443844.13 12443844.28 0.0288 0.0214

Neptune 29357-12-30 09:50 G 12443847.77 12443847.91 12443848.08 0.0088 0.0062

Neptune 29358-08-12 22:48 G 12444073.27 12444073.45 12444073.66 0.0088 0.0044

Saturn 29358-08-13 11:45 G 12444073.78 12444073.99 12444074.20 0.0290 0.0023

Neptune 29359-03-26 11:45 G 12444298.79 12444298.99 12444299.21 0.0088 0.0026

Saturn 29359-03-31 09:21 G 12444303.82 12444303.89 12444303.99 0.0292 0.0266

Neptune 29359-11-07 00:57 G 12444524.32 12444524.54 12444524.76 0.0088 0.0007

Neptune 29360-06-19 14:09 G 12444749.87 12444750.09 12444750.31 0.0088 0.0011

Neptune 29361-01-31 03:07 G 12444975.43 12444975.63 12444975.84 0.0088 0.0030

Neptune 29361-09-13 15:36 G 12445200.99 12445201.15 12445201.36 0.0089 0.0049

Neptune 29362-04-27 04:48 G 12445426.57 12445426.70 12445426.86 0.0089 0.0067

Neptune 29362-12-08 18:00 G 12445652.20 12445652.25 12445652.33 0.0089 0.0085

Jupiter 29363-07-10 15:21 G 12445865.99 12445866.14 12445866.30 0.0496 0.0320

Saturn 29371-10-30 15:50 G 12448899.99 12448900.16 12448900.32 0.0272 0.0168

Saturn 29372-06-15 20:09 G 12449129.13 12449129.34 12449129.56 0.0271 0.0028

Saturn 29373-01-30 23:17 G 12449358.36 12449358.47 12449358.60 0.0269 0.0217

Jupiter 29375-03-15 16:19 G 12450131.99 12450132.18 12450132.38 0.0495 0.0120

Jupiter 29381-01-19 19:12 G 12452269.14 12452269.30 12452269.47 0.0531 0.0296

Mars 29385-09-26 22:05 G 12453980.26 12453980.42 12453980.57 0.1724 0.0768

Saturn 29387-07-08 20:24 G 12454630.20 12454630.35 12454630.53 0.0288 0.0184

Saturn 29388-02-23 17:17 G 12454860.02 12454860.22 12454860.44 0.0290 0.0055

Uranus 29388-09-29 21:07 G 12455079.27 12455079.38 12455079.53 0.0137 0.0112

Uranus 29389-05-14 05:31 G 12455305.55 12455305.73 12455305.91 0.0137 0.0078

Uranus 29389-12-26 13:12 G 12455531.85 12455532.05 12455532.26 0.0137 0.0046

Uranus 29390-08-09 20:53 G 12455758.15 12455758.37 12455758.58 0.0137 0.0014

Uranus 29391-03-24 04:05 G 12455984.45 12455984.67 12455984.89 0.0136 0.0018

Uranus 29391-11-05 11:02 G 12456210.77 12456210.96 12456211.17 0.0136 0.0050

Mars 29392-03-12 02:53 G 12456338.51 12456338.62 12456338.74 0.1818 0.1318

Uranus 29392-06-18 18:29 G 12456437.10 12456437.27 12456437.44 0.0136 0.0081

Jupiter 29392-09-24 06:43 G 12456534.61 12456534.78 12456534.95 0.0532 0.0268

Uranus 29393-01-31 00:57 G 12456663.44 12456663.54 12456663.68 0.0136 0.0113

Pluto 29399-06-25 00:43 G 12458999.36 12458999.53 12458999.73 0.0066 0.0037

Pluto 29400-02-05 05:17 G 12459224.51 12459224.72 12459224.94 0.0066 0.0010

Pluto 29400-09-18 09:21 G 12459449.80 12459449.89 12459450.02 0.0066 0.0057

Saturn 29401-05-12 23:17 G 12459686.29 12459686.47 12459686.65 0.0272 0.0136

Saturn 29401-12-28 03:36 G 12459915.44 12459915.65 12459915.86 0.0270 0.0058

Saturn 29402-08-14 06:29 G 12460144.69 12460144.77 12460144.85 0.0269 0.0247

Jupiter 29410-11-22 03:36 G 12463166.46 12463166.65 12463166.85 0.0495 0.0140

Saturn 29417-01-19 03:36 G 12465416.47 12465416.65 12465416.83 0.0289 0.0153

Saturn 29417-09-06 00:14 G 12465646.32 12465646.51 12465646.72 0.0291 0.0087

Mars 29417-09-27 01:41 G 12465667.53 12465667.57 12465667.62 0.1737 0.1674

Jupiter 29422-07-28 05:45 G 12467432.57 12467432.74 12467432.90 0.0494 0.0293

Mars 29424-03-12 14:38 G 12468026.05 12468026.11 12468026.18 0.1803 0.1654

Jupiter 29428-06-03 01:26 G 12469569.35 12469569.56 12469569.76 0.0532 0.0062

Saturn 29430-11-23 01:26 G 12470472.38 12470472.56 12470472.76 0.0272 0.0114

Saturn 29431-07-10 05:31 G 12470701.53 12470701.73 12470701.94 0.0270 0.0080

Moon 29432-02-11 12:14 G 12470917.85 12470918.01 12470918.17 0.2656 0.0452

Earth 29432-02-11 16:33 G 12470918.04 12470918.19 12470918.34 0.2660 0.0634 *

Saturn 29432-02-24 08:24 G 12470930.84 12470930.85 12470930.86 0.0269 0.0268

Uranus 29432-09-24 19:41 G 12471144.23 12471144.32 12471144.43 0.0141 0.0125

Uranus 29433-05-09 05:17 G 12471370.56 12471370.72 12471370.89 0.0141 0.0090

Uranus 29433-12-21 14:53 G 12471596.93 12471597.12 12471597.33 0.0141 0.0056

Uranus 29434-08-05 00:43 G 12471823.32 12471823.53 12471823.75 0.0142 0.0020

Uranus 29435-03-19 10:48 G 12472049.73 12472049.95 12472050.16 0.0142 0.0015

Uranus 29435-10-31 20:38 G 12472276.17 12472276.36 12472276.57 0.0142 0.0052

Uranus 29436-06-14 06:57 G 12472502.63 12472502.79 12472502.97 0.0142 0.0087

Uranus 29437-01-26 17:17 G 12472729.13 12472729.22 12472729.34 0.0143 0.0124

Neptune 29438-11-23 11:17 G 12473394.86 12473394.97 12473395.13 0.0089 0.0071

Neptune 29439-07-07 00:43 G 12473620.36 12473620.53 12473620.71 0.0089 0.0052

Jupiter 29440-02-06 16:19 G 12473835.10 12473835.18 12473835.27 0.0533 0.0481

Neptune 29440-02-17 13:41 G 12473845.88 12473846.07 12473846.28 0.0089 0.0034

Neptune 29440-09-30 02:53 G 12474071.40 12474071.62 12474071.84 0.0089 0.0015

Neptune 29441-05-13 15:50 G 12474296.94 12474297.16 12474297.38 0.0089 0.0003

Neptune 29441-12-25 04:48 G 12474522.50 12474522.70 12474522.92 0.0089 0.0022

Neptune 29442-08-07 17:45 G 12474748.05 12474748.24 12474748.45 0.0089 0.0040

Neptune 29443-03-21 06:57 G 12474973.62 12474973.79 12474973.95 0.0089 0.0058

Neptune 29443-11-01 19:26 G 12475199.22 12475199.31 12475199.44 0.0089 0.0077

Jupiter 29446-07-30 14:09 G 12476200.97 12476201.09 12476201.22 0.0496 0.0394

Saturn 29446-08-01 06:43 G 12476202.59 12476202.78 12476202.97 0.0289 0.0126

Saturn 29447-03-19 03:50 G 12476432.47 12476432.66 12476432.86 0.0291 0.0114

Mars 29451-07-26 07:55 G 12478022.70 12478022.83 12478022.96 0.1720 0.1111

Jupiter 29458-04-04 17:02 G 12480467.00 12480467.21 12480467.41 0.0495 0.0035

Saturn 29460-06-04 08:09 G 12481258.64 12481258.84 12481259.05 0.0272 0.0084

Saturn 29461-01-19 12:00 G 12481487.81 12481488.00 12481488.20 0.0270 0.0110

Jupiter 29464-02-09 15:07 G 12482603.98 12482604.13 12482604.28 0.0531 0.0357

Jupiter 29469-12-08 18:57 G 12484733.22 12484733.29 12484733.36 0.0493 0.0465

Uranus 29472-05-31 06:29 G 12485637.68 12485637.77 12485637.86 0.0137 0.0124

Uranus 29473-01-12 14:09 G 12485863.94 12485864.09 12485864.26 0.0137 0.0092

Uranus 29473-08-26 21:50 G 12486090.22 12486090.41 12486090.62 0.0137 0.0059

Uranus 29474-04-10 05:31 G 12486316.52 12486316.73 12486316.95 0.0137 0.0027

Uranus 29474-11-22 12:57 G 12486542.83 12486543.04 12486543.26 0.0136 0.0006

Uranus 29475-07-06 20:09 G 12486769.14 12486769.34 12486769.56 0.0136 0.0038

Jupiter 29475-10-15 06:14 G 12486869.57 12486869.76 12486869.95 0.0533 0.0181

Saturn 29476-02-11 13:12 G 12486988.85 12486989.05 12486989.25 0.0289 0.0096

Uranus 29476-02-18 03:21 G 12486995.46 12486995.64 12486995.83 0.0136 0.0068

Saturn 29476-09-28 10:19 G 12487218.75 12487218.93 12487219.12 0.0291 0.0145

Uranus 29476-10-01 10:05 G 12487221.79 12487221.92 12487222.08 0.0136 0.0100

Uranus 29477-05-15 16:48 G 12487448.16 12487448.20 12487448.28 0.0136 0.0131

Mars 29483-07-25 10:48 G 12489709.83 12489709.95 12489710.07 0.1733 0.1283

Pluto 29487-02-24 06:14 G 12491019.56 12491019.76 12491019.97 0.0078 0.0030

Pluto 29487-10-07 15:21 G 12491245.00 12491245.14 12491245.34 0.0078 0.0051

Saturn 29489-04-30 04:33 G 12491815.64 12491815.69 12491815.77 0.0273 0.0259

Saturn 29489-12-15 09:50 G 12492044.71 12492044.91 12492045.12 0.0271 0.0063

Mars 29490-01-07 21:50 G 12492068.28 12492068.41 12492068.54 0.1807 0.1167

Saturn 29490-08-01 13:26 G 12492273.88 12492274.06 12492274.25 0.0269 0.0130

Jupiter 29493-12-11 02:24 G 12493501.42 12493501.60 12493501.79 0.0496 0.0214

Jupiter 29505-08-17 05:31 G 12497767.54 12497767.73 12497767.91 0.0494 0.0213

Saturn 29505-08-24 14:53 G 12497774.92 12497775.12 12497775.33 0.0289 0.0072

Saturn 29506-04-11 12:14 G 12498004.85 12498005.01 12498005.19 0.0291 0.0170

Jupiter 29511-06-23 23:17 G 12499904.27 12499904.47 12499904.66 0.0531 0.0137

Uranus 29516-05-26 03:36 G 12501702.63 12501702.65 12501702.70 0.0141 0.0139

Uranus 29517-01-07 13:26 G 12501928.91 12501929.06 12501929.20 0.0141 0.0104

Mars 29517-05-23 17:17 G 12502065.13 12502065.22 12502065.30 0.1716 0.1468

Uranus 29517-08-21 22:33 G 12502155.27 12502155.44 12502155.64 0.0141 0.0070

Uranus 29518-04-05 08:24 G 12502381.65 12502381.85 12502382.07 0.0142 0.0035

Saturn 29518-11-11 10:33 G 12502601.83 12502601.94 12502602.05 0.0273 0.0231

Uranus 29518-11-17 18:29 G 12502608.05 12502608.27 12502608.49 0.0142 0.0001

Saturn 29519-06-28 15:36 G 12502830.94 12502831.15 12502831.36 0.0271 0.0035

Uranus 29519-07-02 04:33 G 12502834.48 12502834.69 12502834.90 0.0142 0.0036

Saturn 29520-02-12 18:57 G 12503060.12 12503060.29 12503060.46 0.0270 0.0158

Uranus 29520-02-13 14:24 G 12503060.92 12503061.10 12503061.30 0.0142 0.0073

Uranus 29520-09-27 00:43 G 12503287.40 12503287.53 12503287.68 0.0143 0.0109

Neptune 29521-08-22 07:12 G 12503616.77 12503616.80 12503616.85 0.0088 0.0087

Neptune 29522-04-04 20:09 G 12503842.21 12503842.34 12503842.49 0.0088 0.0069

Neptune 29522-11-16 09:07 G 12504067.71 12504067.88 12504068.07 0.0088 0.0051

Jupiter 29523-02-26 13:12 G 12504169.93 12504170.05 12504170.18 0.0533 0.0411

Neptune 29523-06-29 22:05 G 12504293.23 12504293.42 12504293.64 0.0088 0.0033

Neptune 29524-02-10 11:17 G 12504518.76 12504518.97 12504519.19 0.0088 0.0014

Neptune 29524-09-23 00:14 G 12504744.29 12504744.51 12504744.73 0.0088 0.0004

Neptune 29525-05-06 12:57 G 12504969.84 12504970.04 12504970.27 0.0089 0.0023

Neptune 29525-12-18 01:55 G 12505195.40 12505195.58 12505195.79 0.0089 0.0041

Neptune 29526-07-31 15:07 G 12505420.98 12505421.13 12505421.30 0.0089 0.0059

Neptune 29527-03-14 04:05 G 12505646.57 12505646.67 12505646.79 0.0089 0.0077

Jupiter 29529-08-19 14:38 G 12506536.07 12506536.11 12506536.17 0.0496 0.0481

Saturn 29534-07-20 00:14 G 12508331.47 12508331.51 12508331.57 0.0287 0.0279

Saturn 29535-03-06 20:24 G 12508561.14 12508561.35 12508561.56 0.0290 0.0044

Saturn 29535-10-22 18:00 G 12508791.10 12508791.25 12508791.41 0.0292 0.0199

Jupiter 29541-04-24 16:48 G 12510801.99 12510802.20 12510802.40 0.0495 0.0047

Jupiter 29547-03-01 18:00 G 12512939.16 12512939.25 12512939.35 0.0531 0.0465

Saturn 29548-05-23 12:00 G 12513387.88 12513388.00 12513388.14 0.0273 0.0210

Saturn 29549-01-07 16:48 G 12513616.99 12513617.20 12513617.42 0.0271 0.0015

Mars 29549-05-22 19:41 G 12513752.18 12513752.32 12513752.47 0.1729 0.0900

Saturn 29549-08-24 19:55 G 12513846.18 12513846.33 12513846.50 0.0269 0.0178

Jupiter 29552-12-28 18:29 G 12515068.15 12515068.27 12515068.40 0.0494 0.0386

Moon 29553-08-15 00:14 G 12515297.46 12515297.51 12515297.56 0.2673 0.2541

Mars 29555-11-06 04:05 G 12516110.51 12516110.67 12516110.83 0.1811 0.0652

Uranus 29556-01-30 15:07 G 12516196.13 12516196.13 12516196.18 0.0138 0.0137

Uranus 29556-09-12 23:02 G 12516422.34 12516422.46 12516422.62 0.0137 0.0105

Uranus 29557-04-27 07:26 G 12516648.62 12516648.81 12516648.99 0.0137 0.0072

Uranus 29557-12-09 15:07 G 12516874.92 12516875.13 12516875.34 0.0137 0.0039

Uranus 29558-07-23 22:33 G 12517101.22 12517101.44 12517101.66 0.0137 0.0007

Jupiter 29558-11-04 10:05 G 12517204.72 12517204.92 12517205.12 0.0532 0.0068

Uranus 29559-03-07 05:45 G 12517327.53 12517327.74 12517327.96 0.0136 0.0025

Uranus 29559-10-19 12:43 G 12517553.84 12517554.03 12517554.24 0.0136 0.0056

Uranus 29560-06-01 19:55 G 12517780.17 12517780.33 12517780.51 0.0136 0.0087

Uranus 29561-01-14 02:53 G 12518006.52 12518006.62 12518006.73 0.0136 0.0118

Moon 29561-08-12 17:17 G 12518217.07 12518217.22 12518217.36 0.2677 0.0659

Earth 29561-08-12 19:41 G 12518217.17 12518217.32 12518217.48 0.2671 0.0442 *

Saturn 29564-01-30 00:43 G 12519117.44 12519117.53 12519117.62 0.0287 0.0258

Saturn 29564-09-15 20:53 G 12519347.16 12519347.37 12519347.58 0.0289 0.0022

Saturn 29565-05-03 18:43 G 12519577.15 12519577.28 12519577.42 0.0291 0.0221

Jupiter 29576-12-31 05:17 G 12523836.56 12523836.72 12523836.88 0.0496 0.0312

Saturn 29577-12-03 16:48 G 12524174.05 12524174.20 12524174.36 0.0273 0.0184

Saturn 29578-07-20 21:36 G 12524403.19 12524403.40 12524403.61 0.0271 0.0012

Saturn 29579-03-07 00:29 G 12524632.39 12524632.52 12524632.67 0.0269 0.0204

Jupiter 29588-09-05 06:57 G 12528102.59 12528102.79 12528102.99 0.0494 0.0121

Saturn 29593-08-11 06:14 G 12529903.63 12529903.76 12529903.88 0.0288 0.0230

Saturn 29594-03-29 02:24 G 12530133.39 12530133.60 12530133.82 0.0290 0.0009

Jupiter 29594-07-13 00:29 G 12530239.34 12530239.52 12530239.70 0.0532 0.0235

Saturn 29594-11-14 00:29 G 12530363.42 12530363.52 12530363.63 0.0292 0.0250

Uranus 29600-09-06 20:09 G 12532487.24 12532487.34 12532487.46 0.0141 0.0119

Uranus 29601-04-21 05:31 G 12532713.57 12532713.73 12532713.91 0.0141 0.0085

Uranus 29601-12-03 15:21 G 12532939.94 12532940.14 12532940.35 0.0141 0.0050

Uranus 29602-07-18 01:12 G 12533166.33 12533166.55 12533166.77 0.0142 0.0015

Neptune 29603-02-25 20:53 G 12533389.30 12533389.37 12533389.50 0.0089 0.0079

Uranus 29603-03-01 11:02 G 12533392.75 12533392.96 12533393.18 0.0142 0.0021

Neptune 29603-10-09 10:19 G 12533614.78 12533614.93 12533615.10 0.0089 0.0060

Uranus 29603-10-13 21:07 G 12533619.18 12533619.38 12533619.58 0.0142 0.0056

Neptune 29604-05-21 23:17 G 12533840.29 12533840.47 12533840.67 0.0089 0.0042

Uranus 29604-05-27 07:12 G 12533845.65 12533845.80 12533845.97 0.0142 0.0093

Neptune 29605-01-02 12:43 G 12534065.81 12534066.03 12534066.24 0.0089 0.0023

Uranus 29605-01-08 17:45 G 12534072.16 12534072.24 12534072.34 0.0143 0.0129

Neptune 29605-08-16 01:41 G 12534291.35 12534291.57 12534291.79 0.0089 0.0005

Jupiter 29606-03-17 16:48 G 12534505.03 12534505.20 12534505.37 0.0533 0.0298

Neptune 29606-03-29 14:24 G 12534516.89 12534517.10 12534517.33 0.0089 0.0014

Neptune 29606-11-10 03:36 G 12534742.45 12534742.65 12534742.86 0.0089 0.0032

Saturn 29607-06-15 18:14 G 12534960.09 12534960.26 12534960.43 0.0272 0.0163

Neptune 29607-06-23 16:33 G 12534968.02 12534968.19 12534968.38 0.0089 0.0050

Saturn 29608-01-30 22:33 G 12535189.23 12535189.44 12535189.65 0.0270 0.0033

Neptune 29608-02-04 05:17 G 12535193.60 12535193.72 12535193.88 0.0089 0.0069

Saturn 29608-09-16 01:26 G 12535418.45 12535418.56 12535418.68 0.0269 0.0223

Neptune 29608-09-16 18:14 G 12535419.24 12535419.26 12535419.32 0.0089 0.0087

Mars 29615-03-20 05:17 G 12537794.56 12537794.72 12537794.89 0.1725 0.0536

Mars 29621-09-02 11:02 G 12540152.79 12540152.96 12540153.14 0.1816 0.0161

Saturn 29623-02-21 05:02 G 12540689.58 12540689.71 12540689.86 0.0288 0.0212

Saturn 29623-10-09 01:41 G 12540919.36 12540919.57 12540919.79 0.0290 0.0027

Jupiter 29624-05-13 18:29 G 12541137.08 12541137.27 12541137.47 0.0495 0.0138

Saturn 29624-05-26 00:00 G 12541149.42 12541149.50 12541149.58 0.0292 0.0270

Jupiter 29636-01-17 21:36 G 12545403.24 12545403.40 12545403.57 0.0494 0.0287

Saturn 29636-12-25 22:05 G 12545746.24 12545746.42 12545746.61 0.0273 0.0139

Saturn 29637-08-12 02:38 G 12545975.40 12545975.61 12545975.81 0.0271 0.0057

Saturn 29638-03-29 05:17 G 12546204.65 12546204.72 12546204.81 0.0269 0.0247

Uranus 29640-05-13 07:12 G 12546980.70 12546980.80 12546980.92 0.0138 0.0118

Uranus 29640-12-25 15:07 G 12547206.97 12547207.13 12547207.31 0.0137 0.0086

Uranus 29641-08-08 22:48 G 12547433.26 12547433.45 12547433.66 0.0137 0.0053

Jupiter 29641-11-23 08:53 G 12547539.67 12547539.87 12547540.08 0.0532 0.0016

Uranus 29642-03-23 06:29 G 12547659.56 12547659.77 12547659.99 0.0137 0.0021

Uranus 29642-11-04 13:55 G 12547885.86 12547886.08 12547886.30 0.0137 0.0011

Uranus 29643-06-18 21:07 G 12548112.18 12548112.38 12548112.60 0.0136 0.0043

Uranus 29644-01-31 04:05 G 12548338.50 12548338.67 12548338.87 0.0136 0.0074

Uranus 29644-09-13 11:02 G 12548564.84 12548564.96 12548565.11 0.0136 0.0105

Uranus 29645-04-27 18:00 G 12548791.25 12548791.25 12548791.27 0.0136 0.0135

Pluto 29646-10-17 17:45 G 12549329.06 12549329.24 12549329.46 0.0066 0.0028

Pluto 29647-05-30 22:19 G 12549554.23 12549554.43 12549554.65 0.0066 0.0019

Pluto 29648-01-11 02:53 G 12549779.62 12549779.62 12549779.63 0.0066 0.0066

Saturn 29652-09-02 10:48 G 12551475.79 12551475.95 12551476.11 0.0288 0.0184

Saturn 29653-04-20 07:26 G 12551705.60 12551705.81 12551706.02 0.0290 0.0054

Jupiter 29653-07-28 23:17 G 12551805.45 12551805.47 12551805.50 0.0534 0.0529

Jupiter 29660-01-20 06:00 G 12554171.64 12554171.75 12554171.88 0.0496 0.0401

Saturn 29666-07-07 23:45 G 12556532.30 12556532.49 12556532.68 0.0272 0.0117

Saturn 29667-02-22 03:50 G 12556761.46 12556761.66 12556761.86 0.0270 0.0078

Saturn 29667-10-09 06:29 G 12556990.75 12556990.77 12556990.80 0.0268 0.0266

Jupiter 29671-09-25 07:55 G 12558437.62 12558437.83 12558438.03 0.0495 0.0034

Earth 29675-02-12 18:43 G 12559674.12 12559674.28 12559674.43 0.2660 0.0601

Moon 29675-02-12 21:21 G 12559674.25 12559674.39 12559674.54 0.2666 0.0831 *

Jupiter 29677-08-01 05:17 G 12560574.57 12560574.72 12560574.87 0.0531 0.0354

Mars 29681-01-14 14:24 G 12561836.93 12561837.10 12561837.28 0.1721 0.0163

Saturn 29682-03-15 09:50 G 12562261.74 12562261.91 12562262.09 0.0288 0.0166

Saturn 29682-10-31 06:43 G 12562491.57 12562491.78 12562491.98 0.0290 0.0074

Moon 29683-02-10 16:19 G 12562594.08 12562594.18 12562594.28 0.2661 0.2060

Jupiter 29683-05-31 11:31 G 12562703.90 12562703.98 12562704.06 0.0493 0.0456

Uranus 29684-05-07 02:53 G 12563045.56 12563045.62 12563045.68 0.0141 0.0134

Uranus 29684-12-19 12:00 G 12563271.86 12563272.00 12563272.16 0.0141 0.0100

Uranus 29685-08-02 21:21 G 12563498.21 12563498.39 12563498.60 0.0141 0.0066

Uranus 29686-03-17 07:12 G 12563724.59 12563724.80 12563725.01 0.0141 0.0031

Neptune 29686-07-07 06:57 G 12563836.69 12563836.79 12563836.92 0.0088 0.0076

Uranus 29686-10-29 17:02 G 12563950.99 12563951.21 12563951.43 0.0142 0.0005

Neptune 29687-02-17 19:55 G 12564062.18 12564062.33 12564062.51 0.0088 0.0058

Uranus 29687-06-13 02:53 G 12564177.42 12564177.62 12564177.83 0.0142 0.0040

Mars 29687-06-30 17:02 G 12564195.04 12564195.21 12564195.39 0.1820 0.0387

Neptune 29687-10-01 08:53 G 12564287.69 12564287.87 12564288.08 0.0088 0.0040

Uranus 29688-01-25 12:57 G 12564403.87 12564404.04 12564404.23 0.0142 0.0076

Neptune 29688-05-13 22:05 G 12564513.21 12564513.42 12564513.64 0.0088 0.0021

Uranus 29688-09-07 23:02 G 12564630.35 12564630.46 12564630.61 0.0142 0.0113

Neptune 29688-12-25 11:17 G 12564738.75 12564738.97 12564739.19 0.0088 0.0003

Jupiter 29689-04-05 18:00 G 12564840.07 12564840.25 12564840.44 0.0532 0.0199

Neptune 29689-08-08 00:00 G 12564964.29 12564964.50 12564964.73 0.0088 0.0016

Neptune 29690-03-21 12:57 G 12565189.84 12565190.04 12565190.25 0.0089 0.0034

Neptune 29690-11-02 01:55 G 12565415.41 12565415.58 12565415.77 0.0089 0.0052

Neptune 29691-06-15 14:53 G 12565641.00 12565641.12 12565641.27 0.0089 0.0070

Neptune 29692-01-27 04:05 G 12565866.66 12565866.67 12565866.70 0.0089 0.0088

Saturn 29696-01-18 02:53 G 12567318.42 12567318.62 12567318.81 0.0273 0.0095

Saturn 29696-09-03 06:57 G 12567547.60 12567547.79 12567547.99 0.0271 0.0101

Jupiter 29707-06-03 20:38 G 12571472.18 12571472.36 12571472.54 0.0495 0.0234

Saturn 29711-09-26 15:50 G 12573047.97 12573048.16 12573048.34 0.0288 0.0138

Saturn 29712-05-13 12:29 G 12573277.83 12573278.02 12573278.22 0.0291 0.0103

Jupiter 29719-02-06 22:48 G 12575738.26 12575738.45 12575738.64 0.0494 0.0196

Uranus 29724-01-12 14:24 G 12577539.05 12577539.10 12577539.17 0.0138 0.0132

Uranus 29724-08-25 22:19 G 12577765.30 12577765.43 12577765.60 0.0138 0.0100

Jupiter 29724-12-13 12:29 G 12577874.82 12577875.02 12577875.21 0.0532 0.0127

Saturn 29724-12-13 23:02 G 12577875.44 12577875.46 12577875.49 0.0274 0.0272

Uranus 29725-04-09 06:14 G 12577991.58 12577991.76 12577991.96 0.0137 0.0068

Saturn 29725-07-31 04:33 G 12578104.49 12578104.69 12578104.90 0.0272 0.0073

Uranus 29725-11-21 14:09 G 12578217.88 12578218.09 12578218.30 0.0137 0.0035

Saturn 29726-03-17 08:38 G 12578333.67 12578333.86 12578334.05 0.0270 0.0122

Uranus 29726-07-05 21:50 G 12578444.19 12578444.41 12578444.63 0.0137 0.0004

Uranus 29727-02-17 05:17 G 12578670.51 12578670.72 12578670.93 0.0137 0.0029

Uranus 29727-10-01 12:14 G 12578896.83 12578897.01 12578897.22 0.0136 0.0061

Uranus 29728-05-14 19:12 G 12579123.16 12579123.30 12579123.48 0.0136 0.0092

Uranus 29728-12-27 02:09 G 12579349.52 12579349.59 12579349.70 0.0136 0.0123

Pluto 29734-06-19 00:29 G 12581349.31 12581349.52 12581349.74 0.0078 0.0014

Pluto 29735-01-30 09:21 G 12581574.80 12581574.89 12581575.04 0.0078 0.0067

Jupiter 29736-08-18 04:19 G 12582140.55 12582140.68 12582140.81 0.0533 0.0408

Saturn 29741-04-07 14:53 G 12583833.93 12583834.12 12583834.32 0.0288 0.0119

Saturn 29741-11-23 11:45 G 12584063.80 12584063.99 12584064.19 0.0290 0.0122

Jupiter 29743-02-09 08:09 G 12584506.83 12584506.84 12584506.86 0.0496 0.0494

Mars 29746-11-13 00:14 G 12585879.34 12585879.51 12585879.68 0.1717 0.0190

Mars 29753-04-27 23:31 G 12588237.33 12588237.48 12588237.63 0.1825 0.0921

Saturn 29754-06-26 01:26 G 12588661.49 12588661.56 12588661.66 0.0274 0.0252

Jupiter 29754-10-15 10:33 G 12588772.74 12588772.94 12588773.15 0.0495 0.0067

Saturn 29755-02-10 07:26 G 12588890.60 12588890.81 12588891.02 0.0272 0.0051

Saturn 29755-09-27 11:31 G 12589119.80 12589119.98 12589120.16 0.0270 0.0144

Jupiter 29760-08-21 04:48 G 12590909.59 12590909.70 12590909.81 0.0530 0.0441

Jupiter 29766-06-20 12:43 G 12593038.90 12593039.03 12593039.18 0.0494 0.0363

Neptune 29767-05-31 07:26 G 12593383.78 12593383.81 12593383.90 0.0089 0.0086

Neptune 29768-01-11 20:53 G 12593609.24 12593609.37 12593609.53 0.0089 0.0067

Uranus 29768-08-19 19:41 G 12593830.20 12593830.32 12593830.45 0.0141 0.0114

Neptune 29768-08-24 09:50 G 12593834.74 12593834.91 12593835.10 0.0089 0.0049

Uranus 29769-04-03 05:02 G 12594056.54 12594056.71 12594056.89 0.0141 0.0080

Neptune 29769-04-06 22:48 G 12594060.26 12594060.45 12594060.67 0.0089 0.0031

Uranus 29769-11-15 14:38 G 12594282.91 12594283.11 12594283.32 0.0141 0.0045

Neptune 29769-11-18 12:00 G 12594285.79 12594286.00 12594286.22 0.0089 0.0012

Uranus 29770-06-30 00:29 G 12594509.30 12594509.52 12594509.73 0.0141 0.0010

Neptune 29770-07-02 01:12 G 12594511.33 12594511.55 12594511.77 0.0089 0.0006

Saturn 29770-10-18 21:50 G 12594620.20 12594620.41 12594620.61 0.0289 0.0089

Uranus 29771-02-11 10:05 G 12594735.71 12594735.92 12594736.14 0.0142 0.0026

Neptune 29771-02-12 13:41 G 12594736.87 12594737.07 12594737.30 0.0089 0.0025

Saturn 29771-06-05 18:43 G 12594850.11 12594850.28 12594850.47 0.0291 0.0153

Uranus 29771-09-25 19:55 G 12594962.15 12594962.33 12594962.54 0.0142 0.0061

Neptune 29771-09-26 02:38 G 12594962.43 12594962.61 12594962.82 0.0089 0.0043 *

Jupiter 29772-04-25 19:12 G 12595175.11 12595175.30 12595175.50 0.0532 0.0101

Neptune 29772-05-08 15:36 G 12595188.01 12595188.15 12595188.32 0.0089 0.0061

Uranus 29772-05-09 06:14 G 12595188.61 12595188.76 12595188.93 0.0142 0.0097

Neptune 29772-12-20 05:02 G 12595413.62 12595413.71 12595413.81 0.0089 0.0079

Uranus 29772-12-21 16:33 G 12595415.13 12595415.19 12595415.29 0.0142 0.0133

Saturn 29784-01-06 04:33 G 12599447.58 12599447.69 12599447.81 0.0274 0.0227

Saturn 29784-08-22 10:05 G 12599676.71 12599676.92 12599677.13 0.0272 0.0028

Saturn 29785-04-08 13:55 G 12599905.92 12599906.08 12599906.25 0.0270 0.0166

Jupiter 29790-06-22 20:53 G 12601807.22 12601807.37 12601807.53 0.0496 0.0320

Saturn 29800-04-30 21:36 G 12605406.20 12605406.40 12605406.61 0.0288 0.0069

Saturn 29800-12-16 18:43 G 12605636.11 12605636.28 12605636.45 0.0291 0.0173

Jupiter 29802-02-27 00:00 G 12606073.30 12606073.50 12606073.70 0.0494 0.0107

Earth 29804-08-14 19:41 G 12606973.16 12606973.32 12606973.47 0.2672 0.0690

Moon 29804-08-15 00:00 G 12606973.34 12606973.50 12606973.67 0.2667 0.0491 *

Jupiter 29808-01-03 13:55 G 12608209.90 12608210.08 12608210.27 0.0531 0.0230

Uranus 29808-04-26 04:48 G 12608323.59 12608323.70 12608323.83 0.0138 0.0115

Uranus 29808-12-08 12:43 G 12608549.87 12608550.03 12608550.22 0.0138 0.0083

Uranus 29809-07-22 20:38 G 12608776.17 12608776.36 12608776.58 0.0137 0.0051

Uranus 29810-03-06 04:33 G 12609002.48 12609002.69 12609002.91 0.0137 0.0018

Uranus 29810-10-18 12:00 G 12609228.79 12609229.00 12609229.22 0.0137 0.0015

Uranus 29811-06-01 19:26 G 12609455.11 12609455.31 12609455.52 0.0136 0.0046

Uranus 29812-01-14 02:53 G 12609681.44 12609681.62 12609681.80 0.0136 0.0077

Uranus 29812-08-27 09:36 G 12609907.79 12609907.90 12609908.05 0.0136 0.0109

Mars 29812-09-10 09:50 G 12609921.74 12609921.91 12609922.07 0.1713 0.0548

Saturn 29813-07-19 06:43 G 12610233.65 12610233.78 12610233.92 0.0274 0.0207

Saturn 29814-03-05 12:29 G 12610462.81 12610463.02 12610463.23 0.0272 0.0007

Saturn 29814-10-20 16:19 G 12610692.03 12610692.18 12610692.34 0.0270 0.0187

Mars 29819-02-24 05:02 G 12612279.61 12612279.71 12612279.81 0.1830 0.1488

Jupiter 29819-09-08 04:19 G 12612475.52 12612475.68 12612475.84 0.0532 0.0315

Saturn 29829-03-26 09:50 G 12615962.85 12615962.91 12615962.98 0.0286 0.0271

Saturn 29829-11-11 05:17 G 12616192.51 12616192.72 12616192.93 0.0289 0.0037

Saturn 29830-06-29 02:38 G 12616422.46 12616422.61 12616422.76 0.0291 0.0205

Jupiter 29837-11-04 10:48 G 12619107.76 12619107.95 12619108.15 0.0495 0.0151

Saturn 29843-01-29 10:48 G 12621019.79 12621019.95 12621020.11 0.0273 0.0181

Saturn 29843-09-15 16:05 G 12621248.96 12621249.17 12621249.38 0.0271 0.0018

Saturn 29844-05-01 19:41 G 12621478.20 12621478.32 12621478.46 0.0270 0.0212

Jupiter 29849-07-10 12:29 G 12623373.86 12623374.02 12623374.20 0.0494 0.0282

Neptune 29850-10-10 17:17 G 12623831.17 12623831.22 12623831.33 0.0088 0.0083

Mars 29851-02-23 18:00 G 12623967.18 12623967.25 12623967.34 0.1815 0.1598

Neptune 29851-05-24 06:57 G 12624056.65 12624056.79 12624056.95 0.0088 0.0064

Neptune 29852-01-04 20:09 G 12624282.15 12624282.34 12624282.53 0.0088 0.0046

Uranus 29852-04-20 03:50 G 12624388.59 12624388.66 12624388.77 0.0140 0.0128

Neptune 29852-08-17 09:07 G 12624507.67 12624507.88 12624508.09 0.0088 0.0028

Uranus 29852-12-02 13:26 G 12624614.91 12624615.06 12624615.23 0.0141 0.0094

Neptune 29853-03-30 22:05 G 12624733.20 12624733.42 12624733.64 0.0088 0.0010

Uranus 29853-07-16 23:02 G 12624841.27 12624841.46 12624841.66 0.0141 0.0059

Neptune 29853-11-11 11:02 G 12624958.74 12624958.96 12624959.18 0.0088 0.0009

Uranus 29854-02-28 08:38 G 12625067.65 12625067.86 12625068.08 0.0141 0.0024

Neptune 29854-06-25 00:14 G 12625184.30 12625184.51 12625184.72 0.0089 0.0027

Uranus 29854-10-12 18:14 G 12625294.05 12625294.26 12625294.48 0.0142 0.0012

Neptune 29855-02-05 13:12 G 12625409.86 12625410.05 12625410.24 0.0089 0.0045

Jupiter 29855-05-16 22:48 G 12625510.25 12625510.45 12625510.65 0.0532 0.0011

Uranus 29855-05-27 04:05 G 12625520.48 12625520.67 12625520.89 0.0142 0.0047

Neptune 29855-09-19 02:09 G 12625635.44 12625635.59 12625635.75 0.0089 0.0063

Uranus 29856-01-08 14:24 G 12625746.93 12625747.10 12625747.29 0.0142 0.0082

Neptune 29856-05-01 15:07 G 12625861.05 12625861.13 12625861.22 0.0089 0.0081

Uranus 29856-08-22 00:43 G 12625973.42 12625973.53 12625973.66 0.0142 0.0118

Saturn 29858-10-06 10:48 G 12626748.85 12626748.95 12626749.06 0.0286 0.0250

Saturn 29859-05-24 06:29 G 12626978.55 12626978.77 12626978.98 0.0289 0.0016

Saturn 29860-01-09 03:21 G 12627208.52 12627208.64 12627208.78 0.0291 0.0228

Jupiter 29867-01-19 12:43 G 12629776.03 12629776.03 12629776.04 0.0533 0.0533

Saturn 29872-08-10 13:12 G 12631805.88 12631806.05 12631806.22 0.0274 0.0160

Saturn 29873-03-27 18:43 G 12632035.07 12632035.28 12632035.49 0.0272 0.0039

Jupiter 29873-07-12 21:50 G 12632142.30 12632142.41 12632142.53 0.0496 0.0409

Saturn 29873-11-11 22:19 G 12632264.34 12632264.43 12632264.55 0.0270 0.0234

Mars 29878-07-08 19:41 G 12633964.17 12633964.32 12633964.47 0.1710 0.0888

Jupiter 29885-03-17 23:31 G 12636408.27 12636408.48 12636408.68 0.0495 0.0024

Saturn 29888-04-17 19:26 G 12637535.18 12637535.31 12637535.46 0.0287 0.0217

Saturn 29888-12-03 15:21 G 12637764.93 12637765.14 12637765.35 0.0289 0.0020

Saturn 29889-07-21 12:29 G 12637994.95 12637995.02 12637995.12 0.0291 0.0263

Jupiter 29891-01-22 13:12 G 12638544.89 12638545.05 12638545.21 0.0531 0.0314

Uranus 29891-12-25 12:29 G 12638881.95 12638882.02 12638882.10 0.0138 0.0128

Uranus 29892-08-07 20:38 G 12639108.21 12639108.36 12639108.52 0.0138 0.0096

Uranus 29893-03-22 04:33 G 12639334.50 12639334.69 12639334.88 0.0137 0.0064

Pluto 29893-06-29 09:07 G 12639433.77 12639433.88 12639434.01 0.0065 0.0055

Uranus 29893-11-03 12:14 G 12639560.80 12639561.01 12639561.23 0.0137 0.0032

Pluto 29894-02-09 13:41 G 12639658.85 12639659.07 12639659.29 0.0066 0.0009

Uranus 29894-06-17 20:09 G 12639787.12 12639787.34 12639787.56 0.0137 0.0001

Pluto 29894-09-22 17:45 G 12639884.07 12639884.24 12639884.43 0.0066 0.0038

Uranus 29895-01-30 03:36 G 12640013.44 12640013.65 12640013.87 0.0137 0.0033

Uranus 29895-09-13 10:48 G 12640239.77 12640239.95 12640240.15 0.0136 0.0064

Uranus 29896-04-26 18:00 G 12640466.11 12640466.25 12640466.42 0.0136 0.0096

Jupiter 29896-11-21 01:55 G 12640674.50 12640674.58 12640674.66 0.0493 0.0452

Uranus 29896-12-09 01:12 G 12640692.48 12640692.55 12640692.64 0.0136 0.0126

Saturn 29902-02-21 18:00 G 12642592.08 12642592.25 12642592.44 0.0273 0.0133

Jupiter 29902-09-28 04:19 G 12642810.50 12642810.68 12642810.86 0.0533 0.0225

Saturn 29902-10-08 23:17 G 12642821.27 12642821.47 12642821.68 0.0271 0.0067

Saturn 29903-05-26 02:53 G 12643050.57 12643050.62 12643050.68 0.0269 0.0258

Mars 29910-07-08 21:21 G 12645651.30 12645651.39 12645651.48 0.1722 0.1460

Mars 29916-12-22 00:29 G 12648009.38 12648009.52 12648009.66 0.1819 0.1077

Saturn 29917-10-29 21:50 G 12648321.26 12648321.41 12648321.57 0.0287 0.0193

Moon 29918-02-15 19:55 G 12648430.16 12648430.33 12648430.50 0.2653 0.0340

Earth 29918-02-15 21:07 G 12648430.22 12648430.38 12648430.53 0.2660 0.0601 *

Saturn 29918-06-16 17:45 G 12648551.03 12648551.24 12648551.45 0.0289 0.0044

Saturn 29919-02-01 15:07 G 12648781.10 12648781.13 12648781.17 0.0291 0.0287

Jupiter 29920-11-24 10:05 G 12649442.74 12649442.92 12649443.10 0.0495 0.0229

Saturn 29931-09-03 20:53 G 12653378.18 12653378.37 12653378.56 0.0274 0.0111

Neptune 29932-04-16 07:41 G 12653603.72 12653603.82 12653603.96 0.0089 0.0074

Saturn 29932-04-20 02:09 G 12653607.39 12653607.59 12653607.79 0.0272 0.0088

Jupiter 29932-07-30 11:31 G 12653708.80 12653708.98 12653709.17 0.0495 0.0203

Neptune 29932-11-27 20:38 G 12653829.21 12653829.36 12653829.55 0.0089 0.0056

Neptune 29933-07-11 10:05 G 12654054.72 12654054.92 12654055.12 0.0089 0.0037

Neptune 29934-02-21 23:02 G 12654280.25 12654280.46 12654280.68 0.0089 0.0019

Neptune 29934-10-05 12:00 G 12654505.78 12654506.00 12654506.22 0.0089 0.0001

Neptune 29935-05-19 00:43 G 12654731.32 12654731.53 12654731.75 0.0089 0.0018

Uranus 29935-12-20 12:57 G 12654947.04 12654947.04 12654947.07 0.0140 0.0140

Neptune 29935-12-30 13:41 G 12654956.88 12654957.07 12654957.29 0.0089 0.0036

Uranus 29936-08-02 22:05 G 12655173.30 12655173.42 12655173.58 0.0141 0.0107

Neptune 29936-08-12 02:38 G 12655182.45 12655182.61 12655182.80 0.0089 0.0054

Uranus 29937-03-17 07:41 G 12655399.64 12655399.82 12655400.01 0.0141 0.0072

Neptune 29937-03-25 15:50 G 12655408.04 12655408.16 12655408.29 0.0089 0.0072

Uranus 29937-10-29 17:17 G 12655626.02 12655626.22 12655626.43 0.0141 0.0038

Jupiter 29938-06-05 21:36 G 12655845.20 12655845.40 12655845.60 0.0531 0.0097

Uranus 29938-06-13 03:07 G 12655852.41 12655852.63 12655852.85 0.0141 0.0003

Uranus 29939-01-25 12:57 G 12656078.83 12656079.04 12656079.26 0.0142 0.0033

Uranus 29939-09-08 23:02 G 12656305.27 12656305.46 12656305.65 0.0142 0.0068

Uranus 29940-04-22 08:53 G 12656531.74 12656531.87 12656532.03 0.0142 0.0104

Uranus 29940-12-04 19:26 G 12656758.28 12656758.31 12656758.36 0.0142 0.0140

Mars 29944-05-06 05:17 G 12658006.60 12658006.72 12658006.84 0.1706 0.1232

Saturn 29947-05-12 07:26 G 12659107.64 12659107.81 12659107.99 0.0287 0.0157

Saturn 29947-12-28 03:21 G 12659337.44 12659337.64 12659337.85 0.0289 0.0082

Jupiter 29950-02-08 10:19 G 12660110.83 12660110.93 12660111.04 0.0533 0.0457

Jupiter 29956-08-01 19:55 G 12662477.29 12662477.33 12662477.38 0.0496 0.0482

Saturn 29961-03-16 03:21 G 12664164.44 12664164.64 12664164.84 0.0273 0.0080

Saturn 29961-10-31 08:09 G 12664393.66 12664393.84 12664394.04 0.0271 0.0118

Jupiter 29968-04-06 21:07 G 12666743.18 12666743.38 12666743.59 0.0495 0.0046

Jupiter 29974-02-11 13:55 G 12668879.96 12668880.08 12668880.21 0.0531 0.0409

Uranus 29976-04-08 03:50 G 12669666.55 12669666.66 12669666.81 0.0138 0.0110

Mars 29976-05-05 06:43 G 12669693.65 12669693.78 12669693.91 0.1719 0.1092

Uranus 29976-11-20 12:00 G 12669892.83 12669893.00 12669893.19 0.0137 0.0078

Saturn 29976-11-21 11:31 G 12669893.80 12669893.98 12669894.17 0.0287 0.0131

Uranus 29977-07-04 20:09 G 12670119.14 12670119.34 12670119.55 0.0137 0.0045

Saturn 29977-07-09 07:41 G 12670123.63 12670123.82 12670124.02 0.0289 0.0108

Uranus 29978-02-16 04:05 G 12670345.45 12670345.67 12670345.89 0.0137 0.0013

Uranus 29978-09-30 11:31 G 12670571.77 12670571.98 12670572.20 0.0137 0.0019

Uranus 29979-05-14 18:57 G 12670798.09 12670798.29 12670798.50 0.0136 0.0051

Jupiter 29979-12-11 23:45 G 12671009.36 12671009.49 12671009.62 0.0494 0.0382

Uranus 29979-12-27 02:09 G 12671024.43 12671024.59 12671024.78 0.0136 0.0082

Uranus 29980-08-09 09:21 G 12671250.78 12671250.89 12671251.02 0.0136 0.0113

Pluto 29981-02-28 10:33 G 12671453.86 12671453.94 12671454.06 0.0079 0.0070

Pluto 29981-10-11 20:38 G 12671679.14 12671679.36 12671679.58 0.0078 0.0011

Mars 29982-10-19 06:14 G 12672051.60 12672051.76 12672051.93 0.1824 0.0530

Jupiter 29985-10-17 04:48 G 12673145.50 12673145.70 12673145.89 0.0532 0.0129

Saturn 29990-02-08 23:45 G 12674721.42 12674721.49 12674721.55 0.0276 0.0261

Saturn 29990-09-26 06:14 G 12674950.55 12674950.76 12674950.97 0.0273 0.0058

Saturn 29991-05-13 11:17 G 12675179.79 12675179.97 12675180.15 0.0272 0.0140

31ST MILLENNIUM CE

This is a list of transits of Venus in the 31st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**30003-12-14 06:57**	**G**	**12679777.63**	**12679777.79**	**12679777.96**	**0.0496**	**0.0298**	
Saturn	**30006-06-03 22:05**	**G**	**12680680.22**	**12680680.42**	**12680680.62**	**0.0288**	**0.0092**	
Saturn	**30007-01-19 18:14**	**G**	**12680910.09**	**12680910.26**	**12680910.45**	**0.0290**	**0.0148**	
Mars	**30010-03-03 15:36**	**G**	**12682049.09**	**12682049.15**	**12682049.22**	**0.1702**	**0.1552**	
Neptune	**30015-01-13 05:02**	**G**	**12683825.71**	**12683825.71**	**12683825.75**	**0.0088**	**0.0088**	
Jupiter	**30015-08-19 09:07**	**G**	**12684043.68**	**12684043.88**	**12684044.07**	**0.0494**	**0.0135**	
Neptune	**30015-08-26 17:45**	**G**	**12684051.14**	**12684051.24**	**12684051.40**	**0.0088**	**0.0071**	
Neptune	**30016-04-08 06:57**	**G**	**12684276.63**	**12684276.79**	**12684276.99**	**0.0088**	**0.0053**	
Neptune	**30016-11-19 20:09**	**G**	**12684502.15**	**12684502.34**	**12684502.56**	**0.0088**	**0.0034**	
Neptune	**30017-07-03 09:36**	**G**	**12684727.68**	**12684727.90**	**12684728.12**	**0.0088**	**0.0016**	
Neptune	**30018-02-13 22:33**	**G**	**12684953.22**	**12684953.44**	**12684953.66**	**0.0088**	**0.0003**	
Neptune	**30018-09-27 11:31**	**G**	**12685178.77**	**12685178.98**	**12685179.20**	**0.0088**	**0.0020**	
Neptune	**30019-05-11 00:29**	**G**	**12685404.33**	**12685404.52**	**12685404.73**	**0.0089**	**0.0039**	
Saturn	**30019-08-22 07:26**	**G**	**12685507.70**	**12685507.81**	**12685507.93**	**0.0275**	**0.0228**	
Neptune	**30019-12-22 13:26**	**G**	**12685629.90**	**12685630.06**	**12685630.24**	**0.0089**	**0.0057**	
Uranus	**30020-04-02 06:29**	**G**	**12685731.66**	**12685731.77**	**12685731.88**	**0.0140**	**0.0120**	

Saturn 30020-04-07 13:41 G 12685736.86 12685737.07 12685737.28 0.0273 0.0026

Neptune 30020-08-04 02:24 G 12685855.50 12685855.60 12685855.73 0.0089 0.0075

Uranus 30020-11-14 15:50 G 12685957.99 12685958.16 12685958.34 0.0141 0.0086

Saturn 30020-11-22 18:29 G 12685966.11 12685966.27 12685966.44 0.0271 0.0171

Jupiter 30021-06-24 18:29 G 12686180.08 12686180.27 12686180.46 0.0532 0.0167

Uranus 30021-06-29 01:26 G 12686184.36 12686184.56 12686184.76 0.0141 0.0051

Uranus 30022-02-10 11:02 G 12686410.75 12686410.96 12686411.18 0.0141 0.0017

Uranus 30022-09-24 20:53 G 12686637.15 12686637.37 12686637.58 0.0142 0.0018

Uranus 30023-05-09 06:43 G 12686863.58 12686863.78 12686863.98 0.0142 0.0054

Uranus 30023-12-21 16:48 G 12687090.04 12687090.20 12687090.38 0.0142 0.0089

Uranus 30024-08-04 03:07 G 12687316.54 12687316.63 12687316.74 0.0142 0.0125

Jupiter 30033-02-27 09:50 G 12690445.76 12690445.91 12690446.05 0.0533 0.0371

Saturn 30035-12-15 03:21 G 12691466.44 12691466.64 12691466.85 0.0288 0.0063

Saturn 30036-07-31 23:45 G 12691696.33 12691696.49 12691696.66 0.0290 0.0177

Moon 30039-08-18 23:31 G 12692809.40 12692809.48 12692809.57 0.2670 0.2211

Mars 30042-03-02 16:33 G 12693736.03 12693736.19 12693736.35 0.1715 0.0736

Moon 30047-08-16 13:55 G 12695728.95 12695729.08 12695729.23 0.2675 0.1168

Earth 30047-08-16 19:26 G 12695729.16 12695729.31 12695729.46 0.2672 0.0954 *

Mars 30048-08-15 12:43 G 12696093.86 12696094.03 12696094.21 0.1828 0.0047

Saturn 30049-03-03 11:02 G 12696293.82 12696293.96 12696294.10 0.0275 0.0204

Saturn 30049-10-18 17:17 G 12696523.01 12696523.22 12696523.43 0.0273 0.0002

Saturn 30050-06-04 21:50 G 12696752.27 12696752.41 12696752.56 0.0271 0.0194

Jupiter 30051-04-26 17:31 G 12697078.03 12697078.23 12697078.43 0.0495 0.0109

Jupiter 30057-03-02 11:31 G 12699214.90 12699214.98 12699215.06 0.0530 0.0483

Uranus 30059-12-07 12:14 G 12700224.93 12700225.01 12700225.13 0.0138 0.0123

Uranus 30060-07-20 20:24 G 12700451.20 12700451.35 12700451.53 0.0138 0.0091

Uranus 30061-03-04 04:33 G 12700677.50 12700677.69 12700677.90 0.0137 0.0058

Uranus 30061-10-16 12:29 G 12700903.81 12700904.02 12700904.24 0.0137 0.0026

Uranus 30062-05-30 20:24 G 12701130.13 12701130.35 12701130.57 0.0137 0.0006

Jupiter 30062-12-30 19:26 G 12701344.16 12701344.31 12701344.47 0.0494 0.0322

Uranus 30063-01-12 03:50 G 12701356.45 12701356.66 12701356.87 0.0137 0.0038

Uranus 30063-08-26 11:02 G 12701582.78 12701582.96 12701583.16 0.0136 0.0070

Uranus 30064-04-08 18:14 G 12701809.12 12701809.26 12701809.42 0.0136 0.0100

Saturn 30064-11-08 18:57 G 12702023.21 12702023.29 12702023.39 0.0286 0.0257

Uranus 30064-11-21 01:12 G 12702035.51 12702035.55 12702035.62 0.0136 0.0131

Saturn 30065-06-26 14:09 G 12702252.88 12702253.09 12702253.31 0.0288 0.0024

Saturn 30066-02-11 10:48 G 12702482.82 12702482.95 12702483.10 0.0290 0.0218

Jupiter 30068-11-04 23:45 G 12703480.29 12703480.49 12703480.70 0.0532 0.0071

Saturn 30078-09-13 19:26 G 12707080.15 12707080.31 12707080.48 0.0274 0.0170

Saturn 30079-05-01 01:26 G 12707309.35 12707309.56 12707309.77 0.0272 0.0032

Saturn 30079-12-16 05:45 G 12707538.64 12707538.74 12707538.87 0.0270 0.0227

Jupiter 30087-01-02 03:07 G 12710112.49 12710112.63 12710112.77 0.0495 0.0357

Saturn 30094-05-22 02:09 G 12712809.46 12712809.59 12712809.72 0.0286 0.0226

Saturn 30095-01-06 21:07 G 12713039.17 12713039.38 12713039.59 0.0288 0.0009

Saturn 30095-08-24 17:45 G 12713269.14 12713269.24 12713269.35 0.0290 0.0251

Neptune 30096-07-18 19:12 G 12713598.22 12713598.30 12713598.41 0.0089 0.0080

Neptune 30097-03-01 08:09 G 12713823.70 12713823.84 12713824.01 0.0089 0.0062

Neptune 30097-10-12 21:07 G 12714049.20 12714049.38 12714049.58 0.0089 0.0044

Neptune 30098-05-26 10:05 G 12714274.72 12714274.92 12714275.14 0.0089 0.0026

Jupiter 30098-09-07 04:48 G 12714378.50 12714378.70 12714378.91 0.0494 0.0076

Neptune 30099-01-06 23:17 G 12714500.26 12714500.47 12714500.69 0.0089 0.0008

Neptune 30099-08-20 12:14 G 12714725.80 12714726.01 12714726.23 0.0089 0.0011

Neptune 30100-04-03 00:57 G 12714951.34 12714951.54 12714951.76 0.0089 0.0029

Neptune 30100-11-14 14:09 G 12715176.91 12715177.09 12715177.28 0.0089 0.0047

Neptune 30101-06-28 03:07 G 12715402.48 12715402.63 12715402.78 0.0089 0.0065

Neptune 30102-02-08 15:36 G 12715628.10 12715628.15 12715628.24 0.0089 0.0084

Uranus 30103-12-02 13:41 G 12716290.02 12716290.07 12716290.14 0.0140 0.0134

Jupiter 30104-07-14 17:31 G 12716515.05 12716515.23 12716515.41 0.0531 0.0252

Uranus 30104-07-15 22:48 G 12716516.31 12716516.45 12716516.61 0.0141 0.0100

Uranus 30105-02-27 08:24 G 12716742.66 12716742.85 12716743.04 0.0141 0.0066

Uranus 30105-10-11 18:00 G 12716969.04 12716969.25 12716969.46 0.0141 0.0032

Uranus 30106-05-26 03:36 G 12717195.44 12717195.65 12717195.87 0.0141 0.0005

Uranus 30107-01-07 13:41 G 12717421.86 12717422.07 12717422.28 0.0142 0.0038

Uranus 30107-08-21 23:31 G 12717648.30 12717648.48 12717648.67 0.0142 0.0074

Mars 30107-12-30 01:55 G 12717778.41 12717778.58 12717778.75 0.1711 0.0371

Saturn 30108-03-26 23:17 G 12717866.30 12717866.47 12717866.66 0.0274 0.0146

Uranus 30108-04-04 09:36 G 12717874.77 12717874.90 12717875.05 0.0142 0.0109

Saturn 30108-11-11 05:17 G 12718095.51 12718095.72 12718095.93 0.0272 0.0056

Saturn 30109-06-28 09:36 G 12718324.82 12718324.90 12718324.98 0.0271 0.0250

Mars 30114-06-13 18:14 G 12720136.09 12720136.26 12720136.43 0.1833 0.0573

Jupiter 30116-03-19 07:41 G 12720780.65 12720780.82 12720780.99 0.0533 0.0293

Saturn 30123-12-03 11:31 G 12723595.83 12723595.98 12723596.15 0.0286 0.0189

Saturn 30124-07-20 07:12 G 12723825.59 12723825.80 12723826.01 0.0289 0.0048

Saturn 30125-03-07 04:19 G 12724055.68 12724055.68 12724055.70 0.0291 0.0291

Jupiter 30134-05-16 14:09 G 12727412.90 12727413.09 12727413.29 0.0495 0.0172

Saturn 30137-10-07 08:38 G 12728652.67 12728652.86 12728653.06 0.0274 0.0109

Saturn 30138-05-24 13:55 G 12728881.89 12728882.08 12728882.29 0.0272 0.0091

Pluto 30140-10-22 06:43 G 12729763.59 12729763.78 12729763.99 0.0065 0.0028

Pluto 30141-06-04 11:02 G 12729988.76 12729988.96 12729989.19 0.0066 0.0019

Pluto 30142-01-15 15:50 G 12730214.14 12730214.16 12730214.18 0.0066 0.0065

Uranus 30143-08-07 20:09 G 12730783.32 12730783.34 12730783.39 0.0138 0.0136

Uranus 30144-03-21 04:19 G 12731009.55 12731009.68 12731009.84 0.0138 0.0104

Uranus 30144-11-02 12:29 G 12731235.84 12731236.02 12731236.21 0.0137 0.0072

Uranus 30145-06-16 20:38 G 12731462.15 12731462.36 12731462.57 0.0137 0.0039

Jupiter 30146-01-19 15:36 G 12731678.97 12731679.15 12731679.32 0.0494 0.0262

Uranus 30146-01-29 04:19 G 12731688.47 12731688.68 12731688.90 0.0137 0.0008

Uranus 30146-09-12 12:00 G 12731914.79 12731915.00 12731915.22 0.0137 0.0024

Uranus 30147-04-26 19:12 G 12732141.11 12732141.30 12732141.51 0.0136 0.0056

Uranus 30147-12-09 02:24 G 12732367.45 12732367.60 12732367.78 0.0136 0.0088

Uranus 30148-07-22 09:36 G 12732593.81 12732593.90 12732594.03 0.0136 0.0118

Jupiter 30151-11-25 21:21 G 12733815.19 12733815.39 12733815.59 0.0532 0.0007

Saturn 30153-06-14 19:26 G 12734382.14 12734382.31 12734382.49 0.0287 0.0156

Saturn 30154-01-30 15:07 G 12734611.93 12734612.13 12734612.33 0.0289 0.0082

Moon 30161-02-16 22:19 G 12737186.29 12737186.43 12737186.57 0.2665 0.0765

Earth 30161-02-16 23:17 G 12737186.32 12737186.47 12737186.62 0.2659 0.0569 *

Jupiter 30163-07-31 12:43 G 12738081.03 12738081.03 12738081.03 0.0533 0.0533

Saturn 30167-04-19 12:43 G 12739438.83 12739439.03 12739439.23 0.0274 0.0084

Saturn 30167-12-04 18:00 G 12739668.06 12739668.25 12739668.44 0.0272 0.0115

Moon 30169-02-14 18:57 G 12740106.26 12740106.29 12740106.31 0.2664 0.2607

Jupiter 30170-01-21 22:05 G 12740447.31 12740447.42 12740447.54 0.0496 0.0412

Mars 30173-10-26 12:00 G 12741820.82 12741821.00 12741821.17 0.1707 0.0039

Neptune 30179-11-29 05:17 G 12744045.63 12744045.72 12744045.85 0.0088 0.0076

Mars 30180-04-10 00:00 G 12744178.37 12744178.50 12744178.64 0.1837 0.1142

Neptune 30180-07-11 18:29 G 12744271.12 12744271.27 12744271.45 0.0088 0.0058

Neptune 30181-02-22 07:26 G 12744496.63 12744496.81 12744497.03 0.0088 0.0041

Jupiter 30181-09-27 00:00 G 12744713.30 12744713.50 12744713.71 0.0495 0.0022

Neptune 30181-10-05 20:38 G 12744722.16 12744722.36 12744722.59 0.0088 0.0022

Neptune 30182-05-19 09:50 G 12744947.70 12744947.91 12744948.14 0.0088 0.0005

Saturn 30182-12-26 04:33 G 12745168.50 12745168.69 12745168.89 0.0287 0.0118

Neptune 30182-12-30 23:02 G 12745173.24 12745173.46 12745173.68 0.0088 0.0014

Saturn 30183-08-13 00:43 G 12745398.34 12745398.53 12745398.72 0.0289 0.0121

Neptune 30183-08-13 12:00 G 12745398.80 12745399.00 12745399.21 0.0088 0.0032

Neptune 30184-03-26 00:43 G 12745624.37 12745624.53 12745624.73 0.0089 0.0051

Neptune 30184-11-06 13:55 G 12745849.96 12745850.08 12745850.23 0.0089 0.0069

Neptune 30185-06-20 02:53 G 12746075.60 12746075.62 12746075.69 0.0089 0.0087

Jupiter 30187-08-03 11:17 G 12746849.81 12746849.97 12746850.14 0.0531 0.0303

Uranus 30188-03-15 04:48 G 12747074.59 12747074.70 12747074.83 0.0140 0.0116

Uranus 30188-10-27 14:09 G 12747300.92 12747301.09 12747301.28 0.0141 0.0082

Uranus 30189-06-10 23:45 G 12747527.29 12747527.49 12747527.70 0.0141 0.0047

Uranus 30190-01-23 09:21 G 12747753.68 12747753.89 12747754.11 0.0141 0.0013

Uranus 30190-09-06 19:12 G 12747980.09 12747980.30 12747980.52 0.0142 0.0022

Uranus 30191-04-21 05:02 G 12748206.51 12748206.71 12748206.91 0.0142 0.0057

Uranus 30191-12-03 15:07 G 12748432.97 12748433.13 12748433.30 0.0142 0.0093

Uranus 30192-07-17 01:26 G 12748659.47 12748659.56 12748659.66 0.0142 0.0128

Jupiter 30193-06-02 02:53 G 12748979.54 12748979.62 12748979.71 0.0493 0.0444

Saturn 30196-03-14 15:07 G 12749996.05 12749996.13 12749996.22 0.0275 0.0252

Saturn 30196-10-29 21:36 G 12750225.20 12750225.40 12750225.61 0.0273 0.0049

Saturn 30197-06-16 02:38 G 12750454.44 12750454.61 12750454.79 0.0271 0.0149

Jupiter 30199-04-08 01:12 G 12751115.37 12751115.55 12751115.73 0.0533 0.0244

Saturn 30212-07-08 12:29 G 12755954.82 12755955.02 12755955.22 0.0288 0.0085

Saturn 30213-02-23 08:24 G 12756184.68 12756184.85 12756185.04 0.0290 0.0155

Jupiter 30217-06-05 09:36 G 12757747.73 12757747.90 12757748.09 0.0495 0.0229

Saturn 30225-09-25 19:12 G 12760782.18 12760782.30 12760782.42 0.0275 0.0225

Saturn 30226-05-13 01:26 G 12761011.35 12761011.56 12761011.77 0.0273 0.0024

Saturn 30226-12-28 06:29 G 12761240.61 12761240.77 12761240.93 0.0271 0.0173

Uranus 30227-11-20 11:45 G 12761567.89 12761567.99 12761568.12 0.0138 0.0118

Pluto 30228-06-23 11:02 G 12761783.76 12761783.96 12761784.18 0.0079 0.0024

Uranus 30228-07-03 19:55 G 12761794.18 12761794.33 12761794.52 0.0138 0.0086

Pluto 30229-02-03 20:24 G 12762009.22 12762009.35 12762009.52 0.0078 0.0057

Jupiter 30229-02-08 10:33 G 12762013.75 12762013.94 12762014.12 0.0494 0.0208

Uranus 30229-02-15 04:05 G 12762020.48 12762020.67 12762020.88 0.0137 0.0054

Uranus 30229-09-29 12:14 G 12762246.79 12762247.01 12762247.23 0.0137 0.0021

Uranus 30230-05-13 19:55 G 12762473.11 12762473.33 12762473.55 0.0137 0.0011

Uranus 30230-12-26 03:21 G 12762699.44 12762699.64 12762699.85 0.0137 0.0043

Uranus 30231-08-09 10:33 G 12762925.77 12762925.94 12762926.14 0.0136 0.0075

Uranus 30232-03-22 17:45 G 12763152.12 12763152.24 12763152.39 0.0136 0.0105

Uranus 30232-11-04 00:57 G 12763378.53 12763378.54 12763378.57 0.0136 0.0135

Jupiter 30234-12-15 19:55 G 12764150.13 12764150.33 12764150.53 0.0532 0.0084

Mars 30239-08-24 21:36 G 12765863.23 12765863.40 12765863.57 0.1703 0.0316

Saturn 30241-06-03 01:26 G 12766511.53 12766511.56 12766511.59 0.0285 0.0282

Saturn 30242-01-18 20:09 G 12766741.13 12766741.34 12766741.55 0.0288 0.0050

Saturn 30242-09-05 16:33 G 12766971.04 12766971.19 12766971.35 0.0290 0.0191

Mars 30246-02-06 05:17 G 12768220.66 12768220.72 12768220.77 0.1842 0.1743

Jupiter 30246-08-20 06:43 G 12768415.70 12768415.78 12768415.87 0.0533 0.0480

Jupiter 30253-02-10 19:55 G 12770782.28 12770782.33 12770782.38 0.0496 0.0480

Saturn 30255-04-08 04:05 G 12771568.53 12771568.67 12771568.83 0.0275 0.0191

Saturn 30255-11-23 10:19 G 12771797.72 12771797.93 12771798.14 0.0273 0.0011

Saturn 30256-07-09 14:38 G 12772026.98 12772027.11 12772027.25 0.0271 0.0207

Neptune 30260-10-22 06:43 G 12773592.74 12773592.78 12773592.85 0.0089 0.0086

Neptune 30261-06-04 19:41 G 12773818.20 12773818.32 12773818.48 0.0089 0.0068

Neptune 30262-01-16 08:53 G 12774043.70 12774043.87 12774044.06 0.0089 0.0050

Neptune 30262-08-29 21:50 G 12774269.22 12774269.41 12774269.63 0.0089 0.0032

Neptune 30263-04-12 10:48 G 12774494.75 12774494.95 12774495.18 0.0089 0.0014

Neptune 30263-11-24 00:00 G 12774720.29 12774720.50 12774720.72 0.0089 0.0005

Neptune 30264-07-06 12:57 G 12774945.83 12774946.04 12774946.26 0.0089 0.0023

Jupiter 30264-10-16 20:53 G 12775048.17 12775048.37 12775048.58 0.0494 0.0047

Neptune 30265-02-17 01:55 G 12775171.39 12775171.58 12775171.78 0.0089 0.0041

Neptune 30265-09-30 14:38 G 12775396.96 12775397.11 12775397.28 0.0089 0.0059

Neptune 30266-05-14 03:36 G 12775622.55 12775622.65 12775622.76 0.0089 0.0077

Jupiter 30270-08-23 08:53 G 12777184.73 12777184.87 12777185.01 0.0532 0.0376

Saturn 30270-12-14 09:21 G 12777297.79 12777297.89 12777297.99 0.0286 0.0249

Saturn 30271-08-01 04:05 G 12777527.46 12777527.67 12777527.89 0.0288 0.0017

Uranus 30271-11-14 10:48 G 12777632.89 12777632.95 12777633.05 0.0140 0.0131

Saturn 30272-03-18 00:43 G 12777757.40 12777757.53 12777757.67 0.0290 0.0225

Uranus 30272-06-27 20:09 G 12777859.19 12777859.34 12777859.51 0.0141 0.0097

Uranus 30273-02-09 05:31 G 12778085.54 12778085.73 12778085.93 0.0141 0.0063

Uranus 30273-09-23 14:53 G 12778311.92 12778312.12 12778312.34 0.0141 0.0029

Uranus 30274-05-08 00:43 G 12778538.31 12778538.53 12778538.75 0.0141 0.0006

Uranus 30274-12-20 10:33 G 12778764.73 12778764.94 12778765.15 0.0142 0.0041

Uranus 30275-08-03 20:09 G 12778991.17 12778991.34 12778991.54 0.0142 0.0076

Uranus 30276-03-17 06:00 G 12779217.64 12779217.75 12779217.91 0.0142 0.0112

Jupiter 30276-06-21 23:02 G 12779314.34 12779314.46 12779314.59 0.0493 0.0383

Mars 30278-02-05 19:41 G 12779908.22 12779908.32 12779908.42 0.1827 0.1466

Jupiter 30282-04-28 00:43 G 12781450.34 12781450.53 12781450.73 0.0533 0.0156

Saturn 30284-10-18 07:41 G 12782354.66 12782354.82 12782355.00 0.0274 0.0165

Saturn 30285-06-04 13:26 G 12782583.86 12782584.06 12782584.28 0.0272 0.0036

Saturn 30286-01-19 17:45 G 12782813.14 12782813.24 12782813.36 0.0270 0.0230

Earth 30290-08-18 19:12 G 12784485.16 12784485.30 12784485.44 0.2672 0.1202

Moon 30290-08-19 01:12 G 12784485.40 12784485.55 12784485.70 0.2671 0.0863 *

Jupiter 30300-06-25 06:29 G 12788082.61 12788082.77 12788082.94 0.0495 0.0292

Saturn 30300-06-26 14:38 G 12788083.98 12788084.11 12788084.25 0.0286 0.0219

Saturn 30301-02-11 10:05 G 12788313.70 12788313.92 12788314.13 0.0288 0.0017

Saturn 30301-09-29 06:43 G 12788543.69 12788543.78 12788543.88 0.0290 0.0258

Mars 30305-06-22 07:41 G 12789905.66 12789905.82 12789905.98 0.1700 0.0646

Uranus 30311-07-21 18:14 G 12792126.21 12792126.26 12792126.33 0.0138 0.0132

Jupiter 30312-02-29 09:21 G 12792348.69 12792348.89 12792349.09 0.0494 0.0133

Uranus 30312-03-04 02:24 G 12792352.47 12792352.60 12792352.77 0.0138 0.0100

Uranus 30312-10-16 10:48 G 12792578.76 12792578.95 12792579.14 0.0137 0.0068

Uranus 30313-05-30 18:57 G 12792805.08 12792805.29 12792805.50 0.0137 0.0035

Uranus 30314-01-12 02:53 G 12793031.40 12793031.62 12793031.84 0.0137 0.0004

Saturn 30314-05-01 15:36 G 12793140.97 12793141.15 12793141.34 0.0274 0.0132

Uranus 30314-08-26 10:19 G 12793257.72 12793257.93 12793258.15 0.0137 0.0028

Saturn 30314-12-16 21:21 G 12793370.19 12793370.39 12793370.60 0.0272 0.0068

Uranus 30315-04-09 17:45 G 12793484.05 12793484.24 12793484.44 0.0137 0.0060

Saturn 30315-08-03 01:26 G 12793599.51 12793599.56 12793599.61 0.0270 0.0261

Uranus 30315-11-22 00:57 G 12793710.39 12793710.54 12793710.71 0.0136 0.0091

Uranus 30316-07-05 08:09 G 12793936.76 12793936.84 12793936.95 0.0136 0.0121

Jupiter 30318-01-04 14:09 G 12794484.89 12794485.09 12794485.28 0.0532 0.0137

Jupiter 30329-09-09 04:33 G 12798750.57 12798750.69 12798750.83 0.0534 0.0404

Saturn 30330-01-06 21:50 G 12798870.26 12798870.41 12798870.58 0.0287 0.0188

Saturn 30330-08-24 17:17 G 12799100.01 12799100.22 12799100.43 0.0289 0.0049

Mars 30337-06-21 08:38 G 12801592.82 12801592.86 12801592.90 0.1712 0.1662

Saturn 30343-11-11 18:43 G 12803927.09 12803927.28 12803927.48 0.0273 0.0108

Mars 30343-12-05 01:26 G 12803950.41 12803950.56 12803950.71 0.1831 0.0915

Neptune 30344-03-03 17:17 G 12804040.15 12804040.22 12804040.31 0.0088 0.0082

Saturn 30344-06-28 00:00 G 12804156.31 12804156.50 12804156.70 0.0271 0.0092

Neptune 30344-10-15 06:29 G 12804265.62 12804265.77 12804265.92 0.0088 0.0064

Neptune 30345-05-28 19:12 G 12804491.13 12804491.30 12804491.50 0.0088 0.0046

Neptune 30346-01-09 08:09 G 12804716.65 12804716.84 12804717.07 0.0088 0.0029

Neptune 30346-08-22 21:36 G 12804942.18 12804942.40 12804942.62 0.0088 0.0010

Neptune 30347-04-05 10:33 G 12805167.72 12805167.94 12805168.16 0.0088 0.0008

Jupiter 30347-11-06 18:00 G 12805383.05 12805383.25 12805383.45 0.0495 0.0110

Neptune 30347-11-16 23:17 G 12805393.27 12805393.47 12805393.70 0.0088 0.0027

Neptune 30348-06-29 12:29 G 12805618.84 12805619.02 12805619.23 0.0089 0.0044

Neptune 30349-02-10 01:26 G 12805844.42 12805844.56 12805844.73 0.0089 0.0063

Neptune 30349-09-23 14:24 G 12806070.03 12806070.10 12806070.21 0.0089 0.0081

Jupiter 30353-09-12 09:21 G 12807519.80 12807519.89 12807519.99 0.0531 0.0468

Uranus 30356-02-27 03:07 G 12808417.52 12808417.63 12808417.78 0.0140 0.0112

Uranus 30356-10-10 12:29 G 12808643.84 12808644.02 12808644.21 0.0141 0.0078

Uranus 30357-05-24 21:50 G 12808870.21 12808870.41 12808870.62 0.0141 0.0044

Uranus 30358-01-06 07:26 G 12809096.60 12809096.81 12809097.03 0.0141 0.0009

Uranus 30358-08-20 17:02 G 12809323.00 12809323.21 12809323.43 0.0141 0.0025

Uranus 30359-04-04 02:38 G 12809549.42 12809549.61 12809549.81 0.0142 0.0060

Jupiter 30359-07-12 20:53 G 12809649.22 12809649.37 12809649.53 0.0494 0.0315

Saturn 30359-07-20 01:41 G 12809656.40 12809656.57 12809656.75 0.0287 0.0160

Uranus 30359-11-16 12:29 G 12809775.87 12809776.02 12809776.19 0.0142 0.0095

Saturn 30360-03-05 21:21 G 12809886.19 12809886.39 12809886.60 0.0289 0.0078

Uranus 30360-06-29 22:19 G 12810002.37 12810002.43 12810002.54 0.0142 0.0131

Jupiter 30365-05-17 21:07 G 12811785.18 12811785.38 12811785.58 0.0533 0.0090

Mars 30371-04-19 17:45 G 12813948.10 12813948.24 12813948.38 0.1696 0.0975

Saturn 30373-05-24 01:41 G 12814713.37 12814713.57 12814713.78 0.0273 0.0077

Saturn 30374-01-08 06:43 G 12814942.60 12814942.78 12814942.98 0.0271 0.0123

Jupiter 30383-07-15 05:31 G 12818417.61 12818417.73 12818417.87 0.0495 0.0371

Pluto 30387-07-05 02:53 G 12819868.44 12819868.62 12819868.81 0.0065 0.0036

Pluto 30388-02-15 07:12 G 12820093.59 12820093.80 12820094.02 0.0066 0.0010

Pluto 30388-09-27 11:17 G 12820318.88 12820318.97 12820319.10 0.0066 0.0057

Saturn 30389-01-29 08:24 G 12820442.66 12820442.85 12820443.04 0.0287 0.0130

Saturn 30389-09-16 04:05 G 12820672.48 12820672.67 12820672.87 0.0290 0.0109

Jupiter 30395-03-20 07:41 G 12822683.62 12822683.82 12822684.02 0.0494 0.0060

Uranus 30395-11-02 09:07 G 12822910.77 12822910.88 12822911.01 0.0138 0.0114

Uranus 30396-06-15 17:31 G 12823137.06 12823137.23 12823137.41 0.0138 0.0082

Uranus 30397-01-28 01:41 G 12823363.37 12823363.57 12823363.78 0.0137 0.0050

Uranus 30397-09-11 09:36 G 12823589.68 12823589.90 12823590.12 0.0137 0.0018

Uranus 30398-04-25 17:17 G 12823816.01 12823816.22 12823816.44 0.0137 0.0014

Uranus 30398-12-08 00:43 G 12824042.33 12824042.53 12824042.75 0.0137 0.0046

Uranus 30399-07-22 08:24 G 12824268.67 12824268.85 12824269.03 0.0136 0.0077

Uranus 30400-03-04 15:21 G 12824495.02 12824495.14 12824495.29 0.0136 0.0108

Jupiter 30401-01-23 15:36 G 12824819.97 12824820.15 12824820.33 0.0532 0.0236

Saturn 30402-04-18 21:21 G 12825270.32 12825270.39 12825270.47 0.0275 0.0256

Saturn 30402-12-04 04:05 G 12825499.46 12825499.67 12825499.88 0.0273 0.0053

Mars 30403-04-18 18:14 G 12825635.16 12825635.26 12825635.38 0.1709 0.1308

Saturn 30403-07-21 08:38 G 12825728.69 12825728.86 12825729.05 0.0271 0.0144

Earth 30404-02-20 01:41 G 12825942.42 12825942.57 12825942.73 0.2659 0.0592

Moon 30404-02-20 05:02 G 12825942.54 12825942.71 12825942.87 0.2654 0.0637 *

Jupiter 30406-11-23 09:21 G 12826949.87 12826949.89 12826949.91 0.0493 0.0489

Mars 30409-10-01 06:57 G 12827992.62 12827992.79 12827992.96 0.1836 0.0342

Jupiter 30412-09-28 06:57 G 12829085.62 12829085.79 12829085.96 0.0533 0.0301

Saturn 30418-08-11 10:05 G 12831228.73 12831228.92 12831229.12 0.0287 0.0105

Saturn 30419-03-29 06:14 G 12831458.57 12831458.76 12831458.95 0.0289 0.0135

Neptune 30425-09-07 07:12 G 12833812.70 12833812.80 12833812.94 0.0089 0.0074

Neptune 30426-04-20 20:09 G 12834038.19 12834038.34 12834038.53 0.0089 0.0056

Neptune 30426-12-02 09:21 G 12834263.71 12834263.89 12834264.11 0.0089 0.0038

Neptune 30427-07-15 22:33 G 12834489.23 12834489.44 12834489.66 0.0089 0.0020

Neptune 30428-02-26 11:45 G 12834714.77 12834714.99 12834715.21 0.0089 0.0001

Neptune 30428-10-09 00:29 G 12834940.31 12834940.52 12834940.74 0.0089 0.0017

Neptune 30429-05-22 13:26 G 12835165.87 12835166.06 12835166.27 0.0089 0.0035

Neptune 30430-01-03 02:24 G 12835391.44 12835391.60 12835391.79 0.0089 0.0053

Neptune 30430-08-16 15:21 G 12835617.02 12835617.14 12835617.28 0.0089 0.0071

Jupiter 30430-11-25 19:12 G 12835718.12 12835718.30 12835718.49 0.0495 0.0200

Saturn 30431-10-30 03:21 G 12836056.53 12836056.64 12836056.76 0.0275 0.0228

Saturn 30432-06-15 09:36 G 12836285.70 12836285.90 12836286.12 0.0273 0.0026

Saturn 30433-01-30 14:24 G 12836514.94 12836515.10 12836515.26 0.0271 0.0172

Mars 30437-02-14 04:19 G 12837990.57 12837990.68 12837990.80 0.1693 0.1288

Uranus 30439-10-27 11:17 G 12838975.88 12838975.97 12838976.08 0.0140 0.0125

Uranus 30440-06-09 20:09 G 12839202.19 12839202.34 12839202.52 0.0140 0.0092

Uranus 30441-01-22 05:31 G 12839428.54 12839428.73 12839428.94 0.0141 0.0058

Uranus 30441-09-05 15:07 G 12839654.92 12839655.13 12839655.35 0.0141 0.0023

Uranus 30442-04-20 00:43 G 12839881.31 12839881.53 12839881.74 0.0141 0.0011

Jupiter 30442-07-31 21:21 G 12839984.21 12839984.39 12839984.58 0.0494 0.0228

Uranus 30442-12-02 10:19 G 12840107.73 12840107.93 12840108.14 0.0142 0.0046

Uranus 30443-07-16 20:09 G 12840334.17 12840334.34 12840334.52 0.0142 0.0080

Uranus 30444-02-28 06:00 G 12840560.64 12840560.75 12840560.89 0.0142 0.0115

Saturn 30448-02-21 15:50 G 12842014.96 12842015.16 12842015.37 0.0288 0.0077

Jupiter 30448-06-05 21:07 G 12842120.18 12842120.38 12842120.58 0.0533 0.0000

Saturn 30448-10-08 12:00 G 12842244.83 12842245.00 12842245.18 0.0290 0.0164

Jupiter 30460-02-09 13:12 G 12846386.05 12846386.05 12846386.05 0.0534 0.0534

Saturn 30461-05-11 05:31 G 12846842.59 12846842.73 12846842.87 0.0274 0.0205

Saturn 30461-12-26 11:31 G 12847071.77 12847071.98 12847072.19 0.0272 0.0004

Saturn 30462-08-12 15:36 G 12847301.02 12847301.15 12847301.31 0.0270 0.0194

Jupiter 30466-08-03 05:02 G 12848752.63 12848752.71 12848752.80 0.0495 0.0448

Mars 30469-02-13 04:19 G 12849677.54 12849677.68 12849677.83 0.1705 0.0964

Pluto 30475-03-05 04:19 G 12851888.52 12851888.68 12851888.88 0.0079 0.0045

Mars 30475-07-29 12:57 G 12852034.87 12852035.04 12852035.22 0.1840 0.0221

Pluto 30475-10-16 14:09 G 12852113.91 12852114.09 12852114.30 0.0078 0.0037

Saturn 30477-09-02 16:33 G 12852800.98 12852801.19 12852801.40 0.0288 0.0054

Jupiter 30478-04-08 08:09 G 12853018.64 12853018.84 12853019.05 0.0494 0.0024

Saturn 30478-04-20 12:57 G 12853030.88 12853031.04 12853031.20 0.0290 0.0187

Uranus 30479-07-02 16:19 G 12853469.11 12853469.18 12853469.26 0.0138 0.0128

Uranus 30480-02-14 00:29 G 12853695.38 12853695.52 12853695.69 0.0138 0.0096

Uranus 30480-09-27 08:53 G 12853921.68 12853921.87 12853922.06 0.0138 0.0064

Uranus 30481-05-11 16:48 G 12854147.99 12854148.20 12854148.42 0.0137 0.0032

Uranus 30481-12-24 00:43 G 12854374.31 12854374.53 12854374.75 0.0137 0.0000

Uranus 30482-08-07 08:09 G 12854600.64 12854600.84 12854601.06 0.0137 0.0032

Uranus 30483-03-21 15:36 G 12854826.97 12854827.15 12854827.35 0.0137 0.0063

Uranus 30483-11-02 23:02 G 12855053.31 12855053.46 12855053.62 0.0136 0.0094

Jupiter 30484-02-12 14:38 G 12855154.95 12855155.11 12855155.27 0.0532 0.0320

Uranus 30484-06-16 06:00 G 12855279.68 12855279.75 12855279.85 0.0136 0.0124

Jupiter 30489-12-12 11:31 G 12857284.87 12857284.98 12857285.11 0.0493 0.0395

Saturn 30490-11-21 09:50 G 12857628.76 12857628.91 12857629.08 0.0275 0.0180

Saturn 30491-07-08 15:50 G 12857857.95 12857858.16 12857858.38 0.0273 0.0024

Saturn 30492-02-22 19:55 G 12858087.22 12858087.33 12858087.47 0.0271 0.0219

Jupiter 30495-10-18 05:02 G 12859420.52 12859420.71 12859420.89 0.0533 0.0223

Mars 30502-12-13 14:38 G 12862033.06 12862033.11 12862033.16 0.1689 0.1607

Saturn 30506-07-30 03:07 G 12863357.54 12863357.63 12863357.72 0.0286 0.0260

Saturn 30507-03-16 21:50 G 12863587.19 12863587.41 12863587.62 0.0288 0.0027

Saturn 30507-11-01 18:00 G 12863817.12 12863817.25 12863817.40 0.0290 0.0216

Neptune 30508-06-06 05:02 G 12864034.70 12864034.71 12864034.76 0.0088 0.0088

Neptune 30509-01-17 18:00 G 12864260.13 12864260.25 12864260.40 0.0088 0.0070

Neptune 30509-08-31 07:12 G 12864485.63 12864485.80 12864485.99 0.0088 0.0052

Neptune 30510-04-13 20:09 G 12864711.14 12864711.34 12864711.55 0.0088 0.0034

Neptune 30510-11-25 09:21 G 12864936.67 12864936.89 12864937.11 0.0088 0.0016

Neptune 30511-07-08 22:33 G 12865162.22 12865162.44 12865162.66 0.0088 0.0002

Neptune 30512-02-19 11:17 G 12865387.77 12865387.97 12865388.20 0.0088 0.0021

Neptune 30512-10-02 00:14 G 12865613.32 12865613.51 12865613.72 0.0088 0.0038

Neptune 30513-05-15 13:12 G 12865838.90 12865839.05 12865839.24 0.0089 0.0057

Jupiter 30513-12-15 19:41 G 12866053.16 12866053.32 12866053.49 0.0495 0.0285

Neptune 30513-12-27 02:09 G 12866064.49 12866064.59 12866064.73 0.0089 0.0075

Saturn 30520-06-03 11:31 G 12868414.81 12868414.98 12868415.16 0.0274 0.0157

Saturn 30521-01-18 17:17 G 12868644.01 12868644.22 12868644.43 0.0272 0.0044

Saturn 30521-09-04 21:07 G 12868873.30 12868873.38 12868873.49 0.0270 0.0239

Uranus 30523-06-27 19:12 G 12869534.28 12869534.30 12869534.35 0.0140 0.0138

Uranus 30524-02-09 04:33 G 12869760.55 12869760.69 12869760.83 0.0140 0.0105

Uranus 30524-09-22 13:26 G 12869986.88 12869987.06 12869987.26 0.0141 0.0072

Uranus 30525-05-06 22:48 G 12870213.25 12870213.45 12870213.67 0.0141 0.0038

Jupiter 30525-08-20 21:36 G 12870319.21 12870319.40 12870319.60 0.0494 0.0146

Moon 30525-08-23 00:43 G 12870321.45 12870321.53 12870321.62 0.2667 0.2269

Earth 30525-08-23 04:48 G 12870321.65 12870321.70 12870321.76 0.2673 0.2469

Uranus 30525-12-19 08:38 G 12870439.64 12870439.86 12870440.07 0.0141 0.0004

Uranus 30526-08-02 18:00 G 12870666.05 12870666.25 12870666.47 0.0141 0.0031

Uranus 30527-03-17 03:50 G 12870892.47 12870892.66 12870892.86 0.0142 0.0066

Uranus 30527-10-29 13:55 G 12871118.93 12871119.08 12871119.23 0.0142 0.0100

Uranus 30528-06-11 23:45 G 12871345.44 12871345.49 12871345.56 0.0142 0.0135

Jupiter 30531-06-27 01:41 G 12872455.37 12872455.57 12872455.76 0.0533 0.0116

Moon 30533-08-20 12:43 G 12873240.92 12873241.03 12873241.14 0.2673 0.1940

Earth 30533-08-20 18:57 G 12873241.15 12873241.29 12873241.42 0.2673 0.1471

Mars 30534-12-12 14:09 G 12873719.92 12873720.09 12873720.25 0.1701 0.0613

Saturn 30536-02-09 02:09 G 12874143.48 12874143.59 12874143.71 0.0286 0.0242

Saturn 30536-09-25 21:07 G 12874373.17 12874373.38 12874373.59 0.0288 0.0007

Saturn 30537-05-13 17:45 G 12874603.12 12874603.24 12874603.37 0.0290 0.0235

Mars 30541-05-26 18:00 G 12876077.10 12876077.25 12876077.41 0.1845 0.0820

Jupiter 30543-03-01 13:55 G 12876720.97 12876721.08 12876721.20 0.0533 0.0437

Saturn 30549-12-14 15:21 G 12879200.96 12879201.14 12879201.32 0.0274 0.0133

Saturn 30550-07-31 20:53 G 12879430.17 12879430.37 12879430.58 0.0272 0.0068

Saturn 30551-03-18 00:57 G 12879659.50 12879659.54 12879659.59 0.0270 0.0262

Jupiter 30561-04-28 10:19 G 12883353.73 12883353.93 12883354.13 0.0494 0.0120

Uranus 30563-10-15 08:24 G 12884253.73 12884253.85 12884253.99 0.0138 0.0109

Uranus 30564-05-28 16:48 G 12884480.03 12884480.20 12884480.39 0.0138 0.0077

Uranus 30565-01-10 00:43 G 12884706.33 12884706.53 12884706.75 0.0137 0.0046

Saturn 30565-08-21 07:12 G 12884929.67 12884929.80 12884929.95 0.0286 0.0215

Uranus 30565-08-24 08:53 G 12884932.65 12884932.87 12884933.08 0.0137 0.0013

Uranus 30566-04-07 16:19 G 12885158.97 12885159.18 12885159.40 0.0137 0.0018

Saturn 30566-04-08 02:24 G 12885159.39 12885159.60 12885159.81 0.0288 0.0021 *

Uranus 30566-11-19 23:45 G 12885385.29 12885385.49 12885385.70 0.0137 0.0050

Saturn 30566-11-23 23:02 G 12885389.38 12885389.46 12885389.55 0.0291 0.0264

Jupiter 30567-03-04 16:19 G 12885490.06 12885490.18 12885490.30 0.0532 0.0419

Uranus 30567-07-04 07:12 G 12885611.63 12885611.80 12885611.99 0.0136 0.0081

Uranus 30568-02-15 14:09 G 12885837.99 12885838.09 12885838.24 0.0136 0.0112

Jupiter 30573-01-01 12:57 G 12887619.88 12887620.04 12887620.20 0.0493 0.0305

Jupiter 30578-11-07 08:38 G 12889755.66 12889755.86 12889756.05 0.0533 0.0112

Saturn 30579-06-26 16:48 G 12889987.01 12889987.20 12889987.39 0.0274 0.0111

Saturn 30580-02-10 22:05 G 12890216.23 12890216.42 12890216.63 0.0272 0.0089

Neptune 30589-12-10 18:57 G 12893807.22 12893807.29 12893807.41 0.0089 0.0080

Neptune 30590-07-24 07:55 G 12894032.70 12894032.83 12894033.01 0.0089 0.0062

Neptune 30591-03-06 21:07 G 12894258.21 12894258.38 12894258.59 0.0089 0.0044

Neptune 30591-10-18 10:05 G 12894483.73 12894483.92 12894484.15 0.0089 0.0026

Neptune 30592-05-30 23:31 G 12894709.26 12894709.48 12894709.70 0.0089 0.0007

Neptune 30593-01-11 12:29 G 12894934.81 12894935.02 12894935.24 0.0089 0.0011

Neptune 30593-08-25 01:26 G 12895160.36 12895160.56 12895160.77 0.0089 0.0029

Neptune 30594-04-07 14:09 G 12895385.92 12895386.09 12895386.29 0.0089 0.0047

Neptune 30594-11-19 03:07 G 12895611.50 12895611.63 12895611.79 0.0089 0.0065

Saturn 30595-03-03 06:00 G 12895715.61 12895715.75 12895715.91 0.0286 0.0197

Neptune 30595-07-02 16:05 G 12895837.11 12895837.17 12895837.26 0.0089 0.0083

Saturn 30595-10-19 01:12 G 12895945.34 12895945.55 12895945.76 0.0288 0.0040

Saturn 30596-06-04 22:19 G 12896175.39 12896175.43 12896175.48 0.0291 0.0283

Jupiter 30597-01-03 21:50 G 12896388.28 12896388.41 12896388.55 0.0495 0.0378

Mars 30600-10-10 00:29 G 12897762.35 12897762.52 12897762.69 0.1698 0.0287

Mars 30607-03-24 23:31 G 12900119.37 12900119.48 12900119.59 0.1849 0.1418

Uranus 30607-10-10 11:45 G 12900318.88 12900318.99 12900319.11 0.0140 0.0119

Uranus 30608-05-23 20:38 G 12900545.20 12900545.36 12900545.54 0.0141 0.0086

Jupiter 30608-09-10 00:43 G 12900654.33 12900654.53 12900654.74 0.0494 0.0046

Uranus 30609-01-05 06:14 G 12900771.56 12900771.76 12900771.96 0.0141 0.0052

Saturn 30609-01-06 19:41 G 12900773.12 12900773.32 12900773.52 0.0274 0.0090

Uranus 30609-08-19 15:36 G 12900997.94 12900998.15 12900998.37 0.0141 0.0018

Saturn 30609-08-24 00:57 G 12901002.35 12901002.54 12901002.74 0.0272 0.0111

Uranus 30610-04-03 01:12 G 12901224.33 12901224.55 12901224.77 0.0141 0.0016

Uranus 30610-11-15 10:48 G 12901450.75 12901450.95 12901451.16 0.0142 0.0051

Uranus 30611-06-29 20:38 G 12901677.20 12901677.36 12901677.54 0.0142 0.0086

Uranus 30612-02-11 06:57 G 12901903.68 12901903.79 12901903.90 0.0142 0.0120

Jupiter 30614-07-17 01:26 G 12902790.38 12902790.56 12902790.75 0.0532 0.0206

Jupiter 30620-05-16 03:21 G 12904920.58 12904920.64 12904920.71 0.0493 0.0468

Saturn 30624-09-13 11:17 G 12906501.80 12906501.97 12906502.14 0.0286 0.0171

Saturn 30625-05-01 06:29 G 12906731.56 12906731.77 12906731.98 0.0289 0.0067

Jupiter 30626-03-21 15:36 G 12907056.00 12907056.15 12907056.31 0.0533 0.0336

Pluto 30634-03-17 00:29 G 12909973.35 12909973.52 12909973.72 0.0065 0.0036

Pluto 30634-10-28 05:17 G 12910198.50 12910198.72 12910198.94 0.0066 0.0010

Pluto 30635-06-10 09:07 G 12910423.79 12910423.88 12910424.01 0.0066 0.0057

Saturn 30637-12-02 14:38 G 12911330.08 12911330.11 12911330.15 0.0276 0.0272

Saturn 30638-07-19 21:36 G 12911559.20 12911559.40 12911559.61 0.0273 0.0067

Saturn 30639-03-06 02:38 G 12911788.44 12911788.61 12911788.80 0.0271 0.0134

Jupiter 30644-05-18 11:17 G 12913688.79 12913688.97 12913689.16 0.0494 0.0208

Moon 30647-02-21 23:45 G 12914698.34 12914698.49 12914698.64 0.2662 0.0250

Earth 30647-02-22 04:05 G 12914698.52 12914698.67 12914698.83 0.2659 0.0573 *

Uranus 30647-06-15 16:33 G 12914812.11 12914812.19 12914812.30 0.0138 0.0122

Uranus 30648-01-28 00:43 G 12915038.38 12915038.53 12915038.71 0.0138 0.0091

Uranus 30648-09-10 08:53 G 12915264.68 12915264.87 12915265.08 0.0137 0.0059

Uranus 30649-04-24 17:02 G 12915490.99 12915491.21 12915491.42 0.0137 0.0027

Uranus 30649-12-07 00:43 G 12915717.31 12915717.53 12915717.75 0.0137 0.0005

Uranus 30650-07-21 08:09 G 12915943.64 12915943.84 12915944.06 0.0137 0.0037

Uranus 30651-03-04 15:21 G 12916169.97 12916170.14 12916170.34 0.0136 0.0068

Uranus 30651-10-16 22:33 G 12916396.31 12916396.44 12916396.61 0.0136 0.0098

Uranus 30652-05-30 05:45 G 12916622.69 12916622.74 12916622.83 0.0136 0.0128

Saturn 30654-03-26 10:05 G 12917287.75 12917287.92 12917288.11 0.0286 0.0153

Saturn 30654-11-11 05:31 G 12917517.53 12917517.73 12917517.93 0.0289 0.0085

Jupiter 30656-01-22 14:53 G 12917954.94 12917955.12 12917955.30 0.0494 0.0213

Jupiter 30661-11-27 11:02 G 12920090.75 12920090.96 12920091.16 0.0532 0.0009

Mars 30666-08-07 10:33 G 12921804.77 12921804.94 12921805.11 0.1694 0.0049

Saturn 30667-06-14 16:33 G 12922116.11 12922116.19 12922116.28 0.0276 0.0252

Saturn 30668-01-29 23:45 G 12922345.29 12922345.49 12922345.70 0.0274 0.0046

Saturn 30668-09-15 05:17 G 12922574.54 12922574.72 12922574.89 0.0272 0.0154

Neptune 30673-04-22 05:31 G 12924254.64 12924254.73 12924254.87 0.0088 0.0076

Neptune 30673-12-03 18:43 G 12924480.13 12924480.28 12924480.46 0.0088 0.0058

Neptune 30674-07-17 07:55 G 12924705.64 12924705.83 12924706.04 0.0088 0.0040

Neptune 30675-02-27 21:07 G 12924931.17 12924931.38 12924931.60 0.0088 0.0022

Neptune 30675-10-11 10:05 G 12925156.70 12925156.92 12925157.14 0.0088 0.0004

Neptune 30676-05-23 23:02 G 12925382.25 12925382.46 12925382.68 0.0088 0.0014

Neptune 30677-01-04 11:45 G 12925607.80 12925607.99 12925608.21 0.0088 0.0033

Neptune 30677-08-18 00:43 G 12925833.37 12925833.53 12925833.73 0.0089 0.0051

Neptune 30678-03-31 14:09 G 12926058.95 12926059.09 12926059.23 0.0089 0.0068

Neptune 30678-11-12 03:07 G 12926284.59 12926284.63 12926284.69 0.0089 0.0086

Jupiter 30680-01-24 23:45 G 12926723.44 12926723.49 12926723.55 0.0495 0.0473

Saturn 30683-10-06 16:19 G 12928073.99 12928074.18 12928074.37 0.0287 0.0124

Saturn 30684-05-23 11:31 G 12928303.79 12928303.98 12928304.18 0.0289 0.0115

Uranus 30691-06-09 18:00 G 12930877.20 12930877.25 12930877.32 0.0140 0.0134

Jupiter 30691-09-30 02:09 G 12930989.38 12930989.59 12930989.79 0.0494 0.0046

Uranus 30692-01-22 03:07 G 12931103.48 12931103.63 12931103.78 0.0140 0.0101

Uranus 30692-09-04 12:00 G 12931329.82 12931330.00 12931330.20 0.0141 0.0068

Uranus 30693-04-18 21:36 G 12931556.19 12931556.40 12931556.61 0.0141 0.0034

Uranus 30693-12-01 07:12 G 12931782.59 12931782.80 12931783.02 0.0141 0.0002

Uranus 30694-07-15 16:48 G 12932009.00 12932009.20 12932009.42 0.0141 0.0035

Uranus 30695-02-27 02:38 G 12932235.43 12932235.61 12932235.80 0.0142 0.0070

Uranus 30695-10-11 12:29 G 12932461.89 12932462.02 12932462.18 0.0142 0.0105

Uranus 30696-05-24 22:48 G 12932688.42 12932688.45 12932688.50 0.0142 0.0139

Saturn 30696-12-24 19:26 G 12932902.20 12932902.31 12932902.44 0.0276 0.0228

Jupiter 30697-08-05 04:19 G 12933125.52 12933125.68 12933125.85 0.0532 0.0314

Saturn 30697-08-11 02:24 G 12933131.39 12933131.60 12933131.82 0.0273 0.0023

Saturn 30698-03-28 07:26 G 12933360.66 12933360.81 12933360.97 0.0271 0.0177

Jupiter 30703-06-06 04:19 G 12935255.55 12935255.68 12935255.81 0.0493 0.0381

Mars 30705-01-19 20:24 G 12935849.23 12935849.35 12935849.47 0.1839 0.1298

Jupiter 30709-04-10 20:24 G 12937391.17 12937391.35 12937391.54 0.0533 0.0217

Saturn 30713-04-18 15:21 G 12938859.95 12938860.14 12938860.34 0.0286 0.0106

Saturn 30713-12-04 10:48 G 12939089.77 12939089.95 12939090.14 0.0289 0.0134

Pluto 30721-11-16 02:38 G 12941993.44 12941993.61 12941993.81 0.0079 0.0044

Pluto 30722-06-29 12:14 G 12942218.84 12942219.01 12942219.23 0.0078 0.0038

Saturn 30726-07-07 21:36 G 12943688.27 12943688.40 12943688.54 0.0276 0.0208

Saturn 30727-02-22 04:48 G 12943917.48 12943917.70 12943917.91 0.0274 0.0005

Jupiter 30727-06-08 13:26 G 12944023.91 12944024.06 12944024.23 0.0495 0.0305

Saturn 30727-10-09 09:50 G 12944146.77 12944146.91 12944147.06 0.0272 0.0198

Uranus 30731-02-14 00:29 G 12945370.49 12945370.52 12945370.57 0.0138 0.0136

Uranus 30731-09-28 08:38 G 12945596.73 12945596.86 12945597.02 0.0138 0.0104

Uranus 30732-05-11 16:48 G 12945823.03 12945823.20 12945823.40 0.0138 0.0072

Mars 30732-06-04 20:53 G 12945847.20 12945847.37 12945847.54 0.1690 0.0366

Uranus 30732-12-24 01:12 G 12946049.34 12946049.55 12946049.76 0.0137 0.0040

Uranus 30733-08-07 08:53 G 12946275.65 12946275.87 12946276.09 0.0137 0.0008

Uranus 30734-03-21 16:33 G 12946501.97 12946502.19 12946502.40 0.0137 0.0023

Uranus 30734-11-02 23:45 G 12946728.30 12946728.49 12946728.70 0.0137 0.0055

Uranus 30735-06-17 06:57 G 12946954.64 12946954.79 12946954.98 0.0136 0.0086

Uranus 30736-01-29 14:24 G 12947181.00 12947181.10 12947181.22 0.0136 0.0116

Jupiter 30739-02-11 15:50 G 12948289.96 12948290.16 12948290.36 0.0494 0.0123

Saturn 30742-10-29 22:19 G 12949646.23 12949646.43 12949646.64 0.0287 0.0075

Saturn 30743-06-16 18:00 G 12949876.09 12949876.25 12949876.43 0.0289 0.0166

Jupiter 30744-12-17 11:45 G 12950425.79 12950425.99 12950426.19 0.0532 0.0090

Neptune 30754-03-16 06:29 G 12953801.74 12953801.77 12953801.85 0.0089 0.0086

Neptune 30754-10-27 19:26 G 12954027.19 12954027.31 12954027.47 0.0089 0.0068

Neptune 30755-06-10 08:38 G 12954252.69 12954252.86 12954253.06 0.0089 0.0050

Saturn 30756-01-18 01:26 G 12954474.41 12954474.56 12954474.72 0.0275 0.0181

Neptune 30756-01-21 21:50 G 12954478.22 12954478.41 12954478.63 0.0089 0.0032

Jupiter 30756-08-22 02:53 G 12954691.51 12954691.62 12954691.73 0.0534 0.0447

Saturn 30756-09-03 08:09 G 12954703.63 12954703.84 12954704.06 0.0273 0.0025

Neptune 30756-09-03 11:02 G 12954703.75 12954703.96 12954704.18 0.0089 0.0013 *

Neptune 30757-04-17 00:00 G 12954929.29 12954929.50 12954929.73 0.0089 0.0005

Saturn 30757-04-20 13:12 G 12954932.93 12954933.05 12954933.17 0.0271 0.0222

Neptune 30757-11-28 12:57 G 12955154.84 12955155.04 12955155.26 0.0089 0.0023

Neptune 30758-07-12 01:55 G 12955380.40 12955380.58 12955380.79 0.0089 0.0041

Neptune 30759-02-22 14:53 G 12955605.97 12955606.12 12955606.30 0.0089 0.0059

Neptune 30759-10-06 03:36 G 12955831.57 12955831.65 12955831.78 0.0089 0.0077

Earth 30768-08-25 04:19 G 12959077.59 12959077.68 12959077.77 0.2673 0.2195

Moon 30768-08-25 06:43 G 12959077.69 12959077.78 12959077.87 0.2679 0.2112 *

Mars 30770-11-17 01:41 G 12959891.41 12959891.57 12959891.74 0.1843 0.0717

Saturn 30772-05-10 23:17 G 12960432.26 12960432.47 12960432.68 0.0287 0.0054

Saturn 30772-12-26 18:43 G 12960662.13 12960662.28 12960662.45 0.0289 0.0187

Jupiter 30774-10-20 02:53 G 12961324.42 12961324.62 12961324.82 0.0494 0.0132

Uranus 30775-09-22 08:09 G 12961661.74 12961661.84 12961661.98 0.0140 0.0117

Uranus 30776-05-05 17:17 G 12961888.06 12961888.22 12961888.41 0.0141 0.0083

Earth 30776-08-22 18:29 G 12961997.15 12961997.27 12961997.39 0.2673 0.1740

Moon 30776-08-23 00:00 G 12961997.36 12961997.50 12961997.64 0.2675 0.1085 *

Uranus 30776-12-18 02:38 G 12962114.42 12962114.61 12962114.83 0.0141 0.0050

Uranus 30777-08-01 12:14 G 12962340.80 12962341.01 12962341.23 0.0141 0.0016

Uranus 30778-03-15 21:50 G 12962567.20 12962567.41 12962567.63 0.0141 0.0019

Uranus 30778-10-28 07:26 G 12962793.62 12962793.81 12962794.02 0.0142 0.0053

Uranus 30779-06-11 17:17 G 12963020.06 12963020.22 12963020.40 0.0142 0.0088

Uranus 30780-01-24 03:21 G 12963246.55 12963246.64 12963246.77 0.0142 0.0123

Jupiter 30780-08-25 06:29 G 12963460.65 12963460.77 12963460.89 0.0531 0.0418

Saturn 30785-07-30 03:36 G 12965260.48 12965260.65 12965260.83 0.0276 0.0161

Saturn 30786-03-16 10:33 G 12965489.73 12965489.94 12965490.15 0.0274 0.0045

Jupiter 30786-06-25 04:48 G 12965590.54 12965590.70 12965590.87 0.0494 0.0295

Saturn 30786-10-31 15:21 G 12965719.06 12965719.14 12965719.24 0.0272 0.0244

Jupiter 30792-04-29 20:53 G 12967726.17 12967726.37 12967726.57 0.0532 0.0122

Mars 30798-04-02 07:26 G 12969889.65 12969889.81 12969889.97 0.1687 0.0680

Saturn 30801-04-05 12:57 G 12970988.95 12970989.04 12970989.14 0.0284 0.0253

Saturn 30801-11-21 06:57 G 12971218.58 12971218.79 12971219.00 0.0287 0.0021

Saturn 30802-07-09 02:53 G 12971448.49 12971448.62 12971448.76 0.0289 0.0220

Jupiter 30810-06-27 13:26 G 12974358.94 12974359.06 12974359.19 0.0495 0.0386

Saturn 30815-02-09 08:24 G 12976046.68 12976046.85 12976047.05 0.0275 0.0132

Uranus 30815-05-28 16:05 G 12976155.06 12976155.17 12976155.29 0.0138 0.0117

Saturn 30815-09-26 15:07 G 12976275.93 12976276.13 12976276.34 0.0273 0.0073

Uranus 30816-01-10 00:00 G 12976381.35 12976381.50 12976381.69 0.0138 0.0086

Saturn 30816-05-12 19:55 G 12976505.32 12976505.33 12976505.35 0.0271 0.0270

Uranus 30816-08-23 08:24 G 12976607.65 12976607.85 12976608.05 0.0138 0.0054

Uranus 30817-04-06 16:05 G 12976833.96 12976834.17 12976834.39 0.0137 0.0022

Uranus 30817-11-19 00:00 G 12977060.28 12977060.50 12977060.72 0.0137 0.0009

Uranus 30818-07-03 07:26 G 12977286.61 12977286.81 12977287.03 0.0137 0.0041

Uranus 30819-02-14 14:53 G 12977512.94 12977513.12 12977513.32 0.0137 0.0072

Uranus 30819-09-28 22:05 G 12977739.29 12977739.42 12977739.58 0.0136 0.0102

Uranus 30820-05-12 05:17 G 12977965.68 12977965.72 12977965.78 0.0136 0.0132

Jupiter 30822-03-02 15:07 G 12978624.93 12978625.13 12978625.33 0.0494 0.0044

Jupiter 30828-01-06 14:24 G 12980760.91 12980761.10 12980761.29 0.0532 0.0197

Mars 30830-04-01 07:12 G 12981576.74 12981576.80 12981576.86 0.1699 0.1566

Saturn 30830-10-16 15:21 G 12981775.01 12981775.14 12981775.26 0.0285 0.0230

Saturn 30831-06-03 09:21 G 12982004.67 12982004.89 12982005.10 0.0287 0.0006

Saturn 30832-01-19 05:02 G 12982234.60 12982234.71 12982234.83 0.0289 0.0244

Jupiter 30833-11-05 18:00 G 12982891.19 12982891.25 12982891.31 0.0493 0.0465

Mars 30836-09-13 07:12 G 12983933.62 12983933.80 12983933.97 0.1848 0.0126

Neptune 30837-07-25 17:45 G 12984249.17 12984249.24 12984249.35 0.0088 0.0081

Neptune 30838-03-08 06:57 G 12984474.64 12984474.79 12984474.95 0.0088 0.0063

Neptune 30838-10-19 19:41 G 12984700.15 12984700.32 12984700.53 0.0088 0.0045

Neptune 30839-06-02 08:53 G 12984925.67 12984925.87 12984926.09 0.0088 0.0027

Jupiter 30839-09-11 04:48 G 12985026.55 12985026.70 12985026.86 0.0533 0.0341

Neptune 30840-01-13 22:05 G 12985151.20 12985151.42 12985151.64 0.0088 0.0009

Neptune 30840-08-26 11:02 G 12985376.74 12985376.96 12985377.18 0.0088 0.0008

Neptune 30841-04-08 23:45 G 12985602.29 12985602.49 12985602.71 0.0089 0.0027

Neptune 30841-11-20 12:29 G 12985827.85 12985828.02 12985828.23 0.0089 0.0045

Neptune 30842-07-04 02:09 G 12986053.43 12986053.59 12986053.75 0.0089 0.0062

Neptune 30843-02-14 14:53 G 12986279.04 12986279.12 12986279.22 0.0089 0.0080

Saturn 30844-08-21 11:02 G 12986832.77 12986832.96 12986833.16 0.0276 0.0111

Saturn 30845-04-07 17:45 G 12987062.05 12987062.24 12987062.44 0.0273 0.0094

Jupiter 30857-11-08 01:26 G 12991659.37 12991659.56 12991659.74 0.0495 0.0209

Uranus 30859-05-22 14:09 G 12992220.02 12992220.09 12992220.17 0.0140 0.0131

Uranus 30860-01-03 23:17 G 12992446.32 12992446.47 12992446.63 0.0140 0.0099

Saturn 30860-04-28 00:14 G 12992561.36 12992561.51 12992561.67 0.0285 0.0195

Uranus 30860-08-17 08:09 G 12992672.66 12992672.84 12992673.04 0.0141 0.0066

Saturn 30860-12-13 18:29 G 12992791.06 12992791.27 12992791.48 0.0287 0.0039

Uranus 30861-03-31 17:31 G 12992899.03 12992899.23 12992899.45 0.0141 0.0032

Saturn 30861-07-31 14:38 G 12993021.07 12993021.11 12993021.16 0.0290 0.0281

Uranus 30861-11-13 03:07 G 12993125.42 12993125.63 12993125.85 0.0141 0.0003

Uranus 30862-06-27 12:57 G 12993351.83 12993352.04 12993352.25 0.0141 0.0037

Uranus 30863-02-08 22:33 G 12993578.26 12993578.44 12993578.64 0.0142 0.0072

Jupiter 30863-09-14 04:33 G 12993795.63 12993795.69 12993795.77 0.0531 0.0497

Uranus 30863-09-23 08:24 G 12993804.72 12993804.85 12993805.01 0.0142 0.0106

Mars 30864-01-28 18:29 G 12993932.13 12993932.27 12993932.41 0.1684 0.0980

Uranus 30864-05-06 18:57 G 12994031.26 12994031.29 12994031.32 0.0142 0.0141

Jupiter 30869-07-14 03:50 G 12995925.48 12995925.66 12995925.84 0.0494 0.0217

Saturn 30874-03-03 17:17 G 12997619.02 12997619.22 12997619.43 0.0275 0.0080

Saturn 30874-10-18 23:45 G 12997848.30 12997848.49 12997848.68 0.0273 0.0124

Jupiter 30875-05-19 19:41 G 12998061.11 12998061.32 12998061.52 0.0533 0.0041

Pluto 30880-11-26 01:26 G 13000078.37 13000078.56 13000078.77 0.0065 0.0027

Pluto 30881-07-09 05:45 G 13000303.54 13000303.74 13000303.96 0.0066 0.0020

Saturn 30889-11-08 03:50 G 13003347.50 13003347.66 13003347.84 0.0285 0.0169

Earth 30890-02-23 06:29 G 13003454.62 13003454.77 13003454.93 0.2658 0.0569

Moon 30890-02-23 12:00 G 13003454.86 13003455.00 13003455.14 0.2657 0.1252 *

Saturn 30890-06-25 22:19 G 13003577.22 13003577.43 13003577.64 0.0287 0.0066

Jupiter 30893-07-16 11:45 G 13004693.92 13004693.99 13004694.07 0.0495 0.0459

Mars 30896-01-27 17:31 G 13005619.11 13005619.23 13005619.34 0.1695 0.1236

Moon 30898-02-21 01:41 G 13006374.50 13006374.57 13006374.63 0.2653 0.2403

Uranus 30899-01-25 22:05 G 13006713.38 13006713.42 13006713.50 0.0138 0.0132

Uranus 30899-09-09 06:29 G 13006939.63 13006939.77 13006939.93 0.0138 0.0100

Uranus 30900-04-23 14:53 G 13007165.93 13007166.12 13007166.31 0.0138 0.0068

Uranus 30900-12-05 22:48 G 13007392.25 13007392.45 13007392.67 0.0138 0.0037

Uranus 30901-07-20 06:57 G 13007618.57 13007618.79 13007619.01 0.0137 0.0005

Uranus 30902-03-03 14:24 G 13007844.90 13007845.10 13007845.32 0.0137 0.0027

Mars 30902-07-12 12:43 G 13007975.86 13007976.03 13007976.20 0.1852 0.0469

Uranus 30902-10-15 22:05 G 13008071.23 13008071.42 13008071.62 0.0137 0.0058

Saturn 30903-01-28 12:00 G 13008175.95 13008176.00 13008176.06 0.0278 0.0267

Uranus 30903-05-30 05:31 G 13008297.57 13008297.73 13008297.90 0.0136 0.0089

Saturn 30903-09-14 20:09 G 13008405.14 13008405.34 13008405.55 0.0275 0.0057

Uranus 30904-01-11 12:43 G 13008523.94 13008524.03 13008524.15 0.0136 0.0119

Saturn 30904-05-01 02:38 G 13008634.43 13008634.61 13008634.79 0.0273 0.0146

Jupiter 30905-03-22 12:43 G 13008959.82 13008960.03 13008960.23 0.0495 0.0027

Jupiter 30911-01-26 13:26 G 13011095.89 13011096.06 13011096.23 0.0531 0.0281

Jupiter 30916-11-25 14:53 G 13013226.01 13013226.12 13013226.24 0.0494 0.0399

Neptune 30919-01-30 06:57 G 13014021.70 13014021.79 13014021.94 0.0089 0.0075

Saturn 30919-05-22 13:41 G 13014133.88 13014134.07 13014134.26 0.0285 0.0132

Neptune 30919-09-12 20:09 G 13014247.19 13014247.34 13014247.53 0.0089 0.0056

Saturn 30920-01-07 08:09 G 13014363.65 13014363.84 13014364.04 0.0288 0.0104

Neptune 30920-04-25 09:07 G 13014472.70 13014472.88 13014473.10 0.0089 0.0038

Neptune 30920-12-06 22:33 G 13014698.23 13014698.44 13014698.66 0.0089 0.0020

Neptune 30921-07-20 11:45 G 13014923.77 13014923.99 13014924.21 0.0089 0.0002

Neptune 30922-03-03 00:29 G 13015149.31 13015149.52 13015149.74 0.0089 0.0017

Jupiter 30922-10-01 01:41 G 13015361.40 13015361.57 13015361.74 0.0533 0.0271

Neptune 30922-10-14 13:12 G 13015374.86 13015375.05 13015375.27 0.0089 0.0035

Neptune 30923-05-28 02:09 G 13015600.43 13015600.59 13015600.78 0.0089 0.0053

Neptune 30924-01-08 15:07 G 13015826.02 13015826.13 13015826.29 0.0089 0.0071

Neptune 30924-08-21 04:33 G 13016051.68 13016051.69 13016051.72 0.0089 0.0088

Mars 30929-11-26 05:02 G 13017974.60 13017974.71 13017974.82 0.1680 0.1287

Saturn 30932-08-09 19:41 G 13018962.21 13018962.32 13018962.44 0.0277 0.0233

Saturn 30933-03-27 03:36 G 13019191.44 13019191.65 13019191.86 0.0275 0.0025

Saturn 30933-11-11 09:36 G 13019420.75 13019420.90 13019421.06 0.0272 0.0178

Jupiter 30940-11-27 22:33 G 13021994.27 13021994.44 13021994.61 0.0495 0.0275

Uranus 30943-09-04 06:14 G 13023004.64 13023004.76 13023004.89 0.0140 0.0112

Uranus 30944-04-17 15:07 G 13023230.96 13023231.13 13023231.32 0.0140 0.0080

Uranus 30944-11-30 00:43 G 13023457.32 13023457.53 13023457.73 0.0141 0.0046

Uranus	30945-07-14 10:05 G	13023683.70	13023683.92	13023684.14	0.0141	0.0012
Uranus	30946-02-25 19:26 G	13023910.10	13023910.31	13023910.53	0.0141	0.0022
Uranus	30946-10-10 05:02 G	13024136.52	13024136.71	13024136.92	0.0141	0.0057
Uranus	30947-05-24 14:53 G	13024362.97	13024363.12	13024363.30	0.0142	0.0091
Uranus	30948-01-06 01:12 G	13024589.46	13024589.55	13024589.66	0.0142	0.0125
Saturn	30948-12-01 18:57 G	13024920.10	13024920.29	13024920.50	0.0286	0.0104
Saturn	30949-07-19 13:41 G	13025149.89	13025150.07	13025150.26	0.0288	0.0134
Jupiter	30952-08-03 00:57 G	13026260.34	13026260.54	13026260.73	0.0494	0.0152
Jupiter	30958-06-08 19:41 G	13028396.12	13028396.32	13028396.53	0.0532	0.0054
Mars	30961-11-25 03:36 G	13029661.50	13029661.65	13029661.80	0.1692	0.0900
Saturn	30962-02-19 23:02 G	13029748.34	13029748.46	13029748.61	0.0277	0.0209
Saturn	30962-10-07 07:12 G	13029977.58	13029977.80	13029978.01	0.0275	0.0005
Saturn	30963-05-24 12:57 G	13030206.91	13030207.04	13030207.19	0.0273	0.0202
Mars	30968-05-08 17:17 G	13032018.08	13032018.22	13032018.36	0.1857	0.1104
Pluto	30968-07-28 03:07 G	13032098.44	13032098.63	13032098.84	0.0079	0.0033
Pluto	30969-03-10 12:29 G	13032323.87	13032324.02	13032324.22	0.0078	0.0049
Jupiter	30970-02-11 09:50 G	13032661.83	13032661.91	13032661.99	0.0533	0.0490
Saturn	30978-06-14 05:31 G	13035706.52	13035706.73	13035706.93	0.0286	0.0064
Saturn	30979-01-30 00:14 G	13035936.35	13035936.51	13035936.69	0.0288	0.0175
Uranus	30983-05-10 13:12 G	13037497.94	13037498.05	13037498.18	0.0138	0.0114
Uranus	30983-12-22 21:21 G	13037724.23	13037724.39	13037724.58	0.0138	0.0083
Uranus	30984-08-05 05:45 G	13037950.54	13037950.74	13037950.95	0.0138	0.0051
Uranus	30985-03-19 13:41 G	13038176.86	13038177.07	13038177.29	0.0137	0.0019
Uranus	30985-10-31 21:36 G	13038403.18	13038403.40	13038403.62	0.0137	0.0013
Uranus	30986-06-15 05:17 G	13038629.52	13038629.72	13038629.94	0.0137	0.0044
Uranus	30987-01-27 12:57 G	13038855.86	13038856.04	13038856.23	0.0137	0.0075
Uranus	30987-09-10 20:09 G	13039082.21	13039082.34	13039082.49	0.0136	0.0106
Jupiter	30988-04-10 09:50 G	13039294.71	13039294.91	13039295.11	0.0494	0.0093
Uranus	30988-04-24 03:36 G	13039308.64	13039308.65	13039308.67	0.0136	0.0136
Saturn	30991-09-02 07:41 G	13040534.66	13040534.82	13040534.99	0.0276	0.0174

Saturn 30992-04-18 15:07 G 13040763.92 13040764.13 13040764.34 0.0274 0.0034

Saturn 30992-12-03 20:53 G 13040993.27 13040993.37 13040993.48 0.0272 0.0234

Jupiter 30994-02-14 08:53 G 13041430.71 13041430.87 13041431.02 0.0532 0.0342

Mars 30995-09-23 15:50 G 13042017.11 13042017.16 13042017.22 0.1677 0.1583

Jupiter 30999-12-15 11:31 G 13043560.83 13043560.98 13043561.13 0.0493 0.0336

32ND MILLENNIUM CE

This is a list of transits of Venus in the 32nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 31001-10-29 04:48 G 13044243.68 13044243.70 13044243.77 0.0088 0.0087

Neptune 31002-06-11 18:14 G 13044469.13 13044469.26 13044469.41 0.0088 0.0069

Neptune 31003-01-23 07:26 G 13044694.64 13044694.81 13044695.00 0.0088 0.0051

Neptune 31003-09-05 20:09 G 13044920.15 13044920.34 13044920.56 0.0088 0.0034

Neptune 31004-04-18 09:21 G 13045145.68 13045145.89 13045146.11 0.0088 0.0015

Neptune 31004-11-29 22:33 G 13045371.22 13045371.44 13045371.66 0.0088 0.0003

Neptune 31005-07-13 11:31 G 13045596.77 13045596.98 13045597.20 0.0088 0.0020

Jupiter 31005-10-20 23:45 G 13045696.31 13045696.49 13045696.68 0.0533 0.0194

Neptune 31006-02-24 00:14 G 13045822.33 13045822.51 13045822.73 0.0088 0.0039

Neptune 31006-10-07 13:26 G 13046047.90 13046048.06 13046048.24 0.0089 0.0056

Saturn 31007-05-10 18:43 G 13046263.22 13046263.28 13046263.37 0.0284 0.0263

Neptune 31007-05-21 02:09 G 13046273.49 13046273.59 13046273.73 0.0089 0.0074

Saturn 31007-12-26 12:14 G 13046492.80 13046493.01 13046493.22 0.0286 0.0033

Saturn 31008-08-12 07:12 G 13046722.66 13046722.80 13046722.95 0.0289 0.0207

Moon 31011-08-28 03:50 G 13047833.56 13047833.66 13047833.76 0.2666 0.2136

Earth 31011-08-28 04:05 G 13047833.56 13047833.67 13047833.78 0.2673 0.1924 *

Earth 31019-08-25 18:00 G 13050753.15 13050753.25 13050753.36 0.2673 0.2011

Saturn 31021-03-15 11:45 G 13051320.81 13051320.99 13051321.17 0.0276 0.0148

Saturn 31021-10-30 18:57 G 13051550.09 13051550.29 13051550.50 0.0274 0.0059

Saturn 31022-06-17 00:43 G 13051779.47 13051779.53 13051779.60 0.0272 0.0258

Jupiter 31023-12-18 17:45 G 13052329.09 13052329.24 13052329.40 0.0495 0.0331

Uranus 31027-05-05 13:41 G 13053563.00 13053563.07 13053563.18 0.0140 0.0126

Mars 31027-09-23 14:24 G 13053703.94 13053704.10 13053704.26 0.1688 0.0590

Uranus 31027-12-17 23:02 G 13053789.31 13053789.46 13053789.63 0.0140 0.0093

Uranus 31028-07-31 08:24 G 13054015.66 13054015.85 13054016.05 0.0141 0.0060

Uranus 31029-03-14 17:45 G 13054242.03 13054242.24 13054242.45 0.0141 0.0026

Uranus 31029-10-27 03:07 G 13054468.42 13054468.63 13054468.85 0.0141 0.0008

Uranus 31030-06-10 12:43 G 13054694.83 13054695.03 13054695.25 0.0141 0.0042

Uranus 31031-01-22 22:33 G 13054921.27 13054921.44 13054921.64 0.0142 0.0077

Uranus 31031-09-06 08:24 G 13055147.74 13055147.85 13055148.00 0.0142 0.0111

Mars 31034-03-06 22:33 G 13056060.37 13056060.44 13056060.50 0.1861 0.1721

Jupiter 31035-08-23 19:55 G 13056595.13 13056595.33 13056595.53 0.0494 0.0097

Saturn 31036-11-20 04:19 G 13057049.56 13057049.68 13057049.82 0.0284 0.0225

Saturn 31037-07-07 22:05 G 13057279.21 13057279.42 13057279.64 0.0287 0.0009

Saturn 31038-02-22 17:31 G 13057509.13 13057509.23 13057509.35 0.0289 0.0247

Jupiter 31041-06-28 14:09 G 13058730.90 13058731.09 13058731.29 0.0532 0.0107

Saturn 31050-09-25 20:53 G 13062107.18 13062107.37 13062107.57 0.0276 0.0112

Saturn 31051-05-13 03:50 G 13062336.47 13062336.66 13062336.86 0.0274 0.0094

Jupiter 31053-03-03 03:50 G 13062996.55 13062996.66 13062996.77 0.0533 0.0440

Mars 31066-03-06 15:21 G 13067748.07 13067748.14 13067748.20 0.1846 0.1693

Saturn 31066-06-02 12:29 G 13067835.87 13067836.02 13067836.18 0.0285 0.0192

Uranus 31067-01-08 20:53 G 13068056.29 13068056.37 13068056.46 0.0138 0.0128

Saturn 31067-01-18 06:14 G 13068065.55 13068065.76 13068065.97 0.0287 0.0041

Uranus 31067-08-23 05:02 G 13068282.57 13068282.71 13068282.88 0.0138 0.0096

Saturn 31067-09-05 01:41 G 13068295.53 13068295.57 13068295.62 0.0289 0.0281

Uranus 31068-04-05 13:26 G 13068508.87 13068509.06 13068509.26 0.0138 0.0064

Uranus 31068-11-17 21:21 G 13068735.19 13068735.39 13068735.61 0.0137 0.0033

Uranus 31069-07-02 05:45 G 13068961.52 13068961.74 13068961.96 0.0137 0.0001

Uranus 31070-02-13 13:26 G 13069187.85 13069188.06 13069188.28 0.0137 0.0031

Uranus 31070-09-27 21:07 G 13069414.19 13069414.38 13069414.58 0.0137 0.0062

Jupiter 31071-05-01 05:17 G 13069629.53 13069629.72 13069629.92 0.0494 0.0149

Uranus 31071-05-12 04:33 G 13069640.53 13069640.69 13069640.85 0.0136 0.0093

Uranus 31071-12-24 11:31 G 13069866.91 13069866.98 13069867.09 0.0136 0.0124

Jupiter 31077-03-06 07:26 G 13071765.70 13071765.81 13071765.94 0.0532 0.0425

Saturn 31080-04-07 00:57 G 13072893.35 13072893.54 13072893.75 0.0276 0.0086

Saturn 31080-11-22 07:55 G 13073122.64 13073122.83 13073123.02 0.0273 0.0120

Jupiter 31083-01-04 06:00 G 13073895.59 13073895.75 13073895.92 0.0494 0.0286

Neptune 31083-05-04 18:57 G 13074016.20 13074016.29 13074016.40 0.0089 0.0079

Neptune 31083-12-16 07:41 G 13074241.69 13074241.82 13074242.00 0.0089 0.0062

Neptune 31084-07-28 20:53 G 13074467.20 13074467.37 13074467.58 0.0089 0.0044

Neptune 31085-03-11 09:50 G 13074692.71 13074692.91 13074693.13 0.0089 0.0026

Neptune 31085-10-22 23:02 G 13074918.24 13074918.46 13074918.68 0.0089 0.0008

Neptune 31086-06-05 12:00 G 13075143.78 13075144.00 13075144.22 0.0089 0.0010

Neptune 31087-01-17 01:12 G 13075369.34 13075369.55 13075369.76 0.0089 0.0028

Neptune 31087-08-30 13:55 G 13075594.90 13075595.08 13075595.28 0.0089 0.0046

Neptune 31088-04-12 02:53 G 13075820.48 13075820.62 13075820.78 0.0089 0.0064

Jupiter 31088-11-08 22:05 G 13076031.22 13076031.42 13076031.62 0.0533 0.0115

Neptune 31088-11-23 15:36 G 13076046.09 13076046.15 13076046.25 0.0089 0.0082

Mars 31093-07-21 00:29 G 13077746.35 13077746.52 13077746.70 0.1685 0.0264

Saturn 31095-12-13 21:07 G 13078622.21 13078622.38 13078622.56 0.0285 0.0155

Saturn 31096-07-30 15:21 G 13078851.94 13078852.14 13078852.35 0.0287 0.0080

Jupiter 31107-01-07 14:38 G 13082663.99 13082664.11 13082664.24 0.0495 0.0394

Saturn 31109-03-04 02:09 G 13083450.52 13083450.59 13083450.67 0.0278 0.0259

Saturn 31109-10-19 10:19 G 13083679.73 13083679.93 13083680.14 0.0275 0.0049

Saturn 31110-06-05 16:33 G 13083909.03 13083909.19 13083909.38 0.0273 0.0155

Uranus 31111-01-03 22:05 G 13084121.41 13084121.42 13084121.46 0.0140 0.0139

Uranus 31111-08-18 07:12 G 13084347.67 13084347.80 13084347.95 0.0140 0.0106

Uranus 31112-03-31 16:05 G 13084574.00 13084574.17 13084574.37 0.0140 0.0074

Uranus 31112-11-13 01:41 G 13084800.37 13084800.57 13084800.78 0.0141 0.0040

Uranus 31113-06-27 11:17 G 13085026.75 13085026.97 13085027.19 0.0141 0.0006

Uranus 31114-02-08 20:53 G 13085253.16 13085253.37 13085253.58 0.0141 0.0028

Uranus 31114-09-23 06:29 G 13085479.58 13085479.77 13085479.97 0.0141 0.0062

Uranus 31115-05-07 16:19 G 13085706.03 13085706.18 13085706.35 0.0142 0.0097

Uranus 31115-12-20 02:24 G 13085932.53 13085932.60 13085932.69 0.0142 0.0131

Jupiter 31118-09-12 16:05 G 13086929.96 13086930.17 13086930.37 0.0494 0.0037

Jupiter 31124-07-18 11:02 G 13089065.77 13089065.96 13089066.15 0.0532 0.0176

Saturn 31125-06-26 05:17 G 13089408.53 13089408.72 13089408.92 0.0285 0.0122

Saturn 31126-02-10 23:31 G 13089638.29 13089638.48 13089638.68 0.0288 0.0114

Pluto 31126-12-27 22:33 G 13089958.36 13089958.44 13089958.57 0.0065 0.0058

Pluto 31127-08-10 03:21 G 13090183.43 13090183.64 13090183.86 0.0065 0.0012

Pluto 31128-03-22 07:26 G 13090408.64 13090408.81 13090409.01 0.0066 0.0035

Jupiter 31130-05-18 18:00 G 13091196.19 13091196.25 13091196.32 0.0493 0.0462

Mars 31132-01-02 20:24 G 13091790.21 13091790.35 13091790.49 0.1851 0.1097

Moon 31133-02-26 03:21 G 13092210.48 13092210.64 13092210.79 0.2658 0.0295

Earth 31133-02-26 08:53 G 13092210.72 13092210.87 13092211.03 0.2658 0.0571 *

Jupiter 31136-03-23 02:38 G 13093331.46 13093331.61 13093331.76 0.0533 0.0357

Saturn 31138-09-14 06:43 G 13094236.67 13094236.78 13094236.90 0.0277 0.0231

Saturn 31139-05-01 14:53 G 13094465.91 13094466.12 13094466.33 0.0275 0.0022

Saturn 31139-12-16 20:53 G 13094695.22 13094695.37 13094695.54 0.0273 0.0181

Uranus 31151-04-23 13:41 G 13098840.94 13098841.07 13098841.21 0.0138 0.0108

Uranus 31151-12-05 21:50 G 13099067.24 13099067.41 13099067.60 0.0138 0.0077

Uranus 31152-07-19 06:14 G 13099293.56 13099293.76 13099293.97 0.0138 0.0045

Uranus 31153-03-02 14:24 G 13099519.88 13099520.10 13099520.32 0.0137 0.0013

Uranus 31153-10-14 22:19 G 13099746.21 13099746.43 13099746.64 0.0137 0.0018

Jupiter 31154-05-21 00:29 G 13099964.34 13099964.52 13099964.71 0.0495 0.0204

Uranus 31154-05-29 05:45 G 13099972.55 13099972.74 13099972.95 0.0137 0.0050

Saturn 31155-01-06 12:57 G 13100194.84 13100195.04 13100195.25 0.0285 0.0086

Uranus 31155-01-10 13:12 G 13100198.89 13100199.05 13100199.24 0.0137 0.0081

Saturn 31155-08-24 07:41 G 13100424.65 13100424.82 13100425.01 0.0288 0.0152

Uranus 31155-08-24 20:53 G 13100425.25 13100425.37 13100425.50 0.0136 0.0111

Mars 31159-05-19 11:31 G 13101788.80 13101788.98 13101789.15 0.1682 0.0060

Jupiter 31160-03-26 01:26 G 13102100.48 13102100.56 13102100.65 0.0531 0.0474

Jupiter 31166-01-24 03:21 G 13104230.46 13104230.64 13104230.83 0.0494 0.0220

Neptune 31166-09-14 05:17 G 13104463.62 13104463.72 13104463.86 0.0088 0.0075

Neptune 31167-04-27 18:43 G 13104689.11 13104689.28 13104689.45 0.0088 0.0057

Neptune 31167-12-09 07:26 G 13104914.63 13104914.81 13104915.02 0.0088 0.0039

Saturn 31168-03-26 16:05 G 13105023.03 13105023.17 13105023.32 0.0277 0.0195

Neptune 31168-07-21 20:38 G 13105140.16 13105140.36 13105140.59 0.0088 0.0022

Saturn 31168-11-10 23:45 G 13105252.28 13105252.49 13105252.70 0.0274 0.0014

Neptune 31169-03-04 09:50 G 13105365.69 13105365.91 13105366.14 0.0088 0.0004

Saturn 31169-06-28 05:31 G 13105481.60 13105481.73 13105481.86 0.0272 0.0215

Neptune 31169-10-15 22:48 G 13105591.24 13105591.45 13105591.67 0.0088 0.0014

Neptune 31170-05-29 12:00 G 13105816.79 13105817.00 13105817.21 0.0088 0.0032

Neptune 31171-01-10 00:43 G 13106042.36 13106042.53 13106042.72 0.0089 0.0050

Neptune 31171-08-23 13:41 G 13106267.94 13106268.07 13106268.23 0.0089 0.0068

Jupiter 31171-11-29 15:21 G 13106365.94 13106366.14 13106366.34 0.0533 0.0068

Neptune 31172-04-05 02:24 G 13106493.57 13106493.60 13106493.68 0.0089 0.0086

Saturn 31183-12-02 04:05 G 13110751.65 13110751.67 13110751.70 0.0284 0.0282

Saturn 31184-07-18 21:07 G 13110981.18 13110981.38 13110981.59 0.0286 0.0053

Saturn 31185-03-05 16:05 G 13111211.01 13111211.17 13111211.33 0.0289 0.0186

Jupiter 31190-01-26 10:19 G 13112998.86 13112998.93 13112999.02 0.0495 0.0452

Uranus 31195-04-17 14:09 G 13114906.00 13114906.09 13114906.22 0.0140 0.0120

Uranus 31195-11-29 23:31 G 13115132.32 13115132.48 13115132.66 0.0140 0.0087

Uranus 31196-07-13 08:53 G 13115358.68 13115358.87 13115359.08 0.0141 0.0054

Uranus	31197-02-24 18:29 G	13115585.05	13115585.27	13115585.48	0.0141	0.0020
Saturn	31197-10-06 20:09 G	13115809.18	13115809.34	13115809.52	0.0276	0.0167
Uranus	31197-10-09 03:50 G	13115811.45	13115811.66	13115811.88	0.0141	0.0014
Mars	31197-10-30 01:26 G	13115832.39	13115832.56	13115832.73	0.1855	0.0484
Uranus	31198-05-23 13:26 G	13116037.86	13116038.06	13116038.27	0.0141	0.0048
Saturn	31198-05-24 03:36 G	13116038.44	13116038.65	13116038.86	0.0274	0.0040
Uranus	31199-01-04 23:31 G	13116264.31	13116264.48	13116264.66	0.0142	0.0082
Saturn	31199-01-08 09:07 G	13116267.79	13116267.88	13116267.99	0.0272	0.0240
Uranus	31199-08-19 09:21 G	13116490.78	13116490.89	13116491.02	0.0142	0.0116
Jupiter	31201-10-01 11:17 G	13117264.76	13117264.97	13117265.17	0.0494	0.0019
Jupiter	31207-08-07 10:05 G	13119400.75	13119400.92	13119401.10	0.0532	0.0258
Jupiter	31213-06-06 13:55 G	13121530.97	13121531.08	13121531.20	0.0493	0.0405
Saturn	31213-06-13 09:36 G	13121537.81	13121537.90	13121538.01	0.0284	0.0251
Saturn	31214-01-29 03:07 G	13121767.42	13121767.63	13121767.84	0.0286	0.0020
Saturn	31214-09-15 22:19 G	13121997.30	13121997.43	13121997.57	0.0289	0.0220
Pluto	31215-04-10 07:12 G	13122203.58	13122203.80	13122204.02	0.0079	0.0005
Pluto	31215-11-21 16:48 G	13122429.15	13122429.20	13122429.26	0.0078	0.0076
Jupiter	31219-04-11 21:07 G	13123666.22	13123666.38	13123666.55	0.0533	0.0301
Mars	31225-03-15 22:19 G	13125831.26	13125831.43	13125831.60	0.1678	0.0347
Saturn	31227-04-19 04:48 G	13126595.53	13126595.70	13126595.90	0.0276	0.0133
Saturn	31227-12-04 12:00 G	13126824.80	13126825.00	13126825.21	0.0274	0.0074
Uranus	31234-12-21 22:33 G	13129399.34	13129399.44	13129399.55	0.0138	0.0120
Uranus	31235-08-05 06:43 G	13129625.63	13129625.78	13129625.96	0.0138	0.0089
Uranus	31236-03-18 15:07 G	13129851.94	13129852.13	13129852.34	0.0138	0.0057
Uranus	31236-10-30 23:17 G	13130078.26	13130078.47	13130078.69	0.0137	0.0025
Jupiter	31237-06-08 22:19 G	13130299.26	13130299.43	13130299.60	0.0494	0.0272
Uranus	31237-06-14 07:26 G	13130304.59	13130304.81	13130305.03	0.0137	0.0006
Uranus	31238-01-26 15:07 G	13130530.93	13130531.13	13130531.35	0.0137	0.0038
Uranus	31238-09-09 22:33 G	13130757.26	13130757.44	13130757.64	0.0137	0.0069
Uranus	31239-04-24 06:14 G	13130983.61	13130983.76	13130983.91	0.0136	0.0099

Uranus 31239-12-06 13:12 G 13131210.00 13131210.05 13131210.14 0.0136 0.0129

Saturn 31242-12-24 17:02 G 13132324.08 13132324.21 13132324.35 0.0284 0.0219

Saturn 31243-08-11 10:48 G 13132553.74 13132553.95 13132554.16 0.0287 0.0013

Saturn 31244-03-28 06:14 G 13132783.66 13132783.76 13132783.86 0.0289 0.0254

Neptune 31247-08-07 06:29 G 13134010.71 13134010.77 13134010.83 0.0089 0.0085

Neptune 31248-03-19 18:57 G 13134236.17 13134236.29 13134236.45 0.0089 0.0068

Neptune 31248-10-31 07:55 G 13134461.67 13134461.83 13134462.03 0.0089 0.0050

Jupiter 31249-02-12 00:14 G 13134565.32 13134565.51 13134565.71 0.0493 0.0155

Neptune 31249-06-13 21:07 G 13134687.18 13134687.38 13134687.59 0.0089 0.0032

Neptune 31250-01-25 10:19 G 13134912.71 13134912.93 13134913.15 0.0089 0.0014

Neptune 31250-09-07 23:17 G 13135138.25 13135138.47 13135138.69 0.0089 0.0004

Neptune 31251-04-21 12:00 G 13135363.79 13135364.00 13135364.22 0.0089 0.0022

Neptune 31251-12-03 00:43 G 13135589.35 13135589.53 13135589.75 0.0089 0.0040

Neptune 31252-07-15 14:09 G 13135814.92 13135815.09 13135815.26 0.0089 0.0057

Neptune 31253-02-26 02:53 G 13136040.51 13136040.62 13136040.74 0.0089 0.0075

Moon 31254-08-29 01:55 G 13136589.45 13136589.58 13136589.71 0.2679 0.1409

Earth 31254-08-29 03:36 G 13136589.53 13136589.65 13136589.78 0.2673 0.1656 *

Jupiter 31254-12-18 15:07 G 13136700.93 13136701.13 13136701.33 0.0533 0.0020

Saturn 31256-10-29 08:38 G 13137381.67 13137381.86 13137382.06 0.0275 0.0106

Saturn 31257-06-15 15:21 G 13137610.95 13137611.14 13137611.34 0.0273 0.0099

Earth 31262-08-26 17:31 G 13139509.15 13139509.23 13139509.31 0.2673 0.2294

Moon 31262-08-26 20:24 G 13139509.23 13139509.35 13139509.46 0.2678 0.1677 *

Mars 31263-08-27 06:29 G 13139874.59 13139874.77 13139874.94 0.1859 0.0151

Jupiter 31266-08-23 06:00 G 13140966.70 13140966.75 13140966.80 0.0534 0.0518

Saturn 31272-07-05 21:21 G 13143110.23 13143110.39 13143110.55 0.0284 0.0191

Saturn 31273-02-20 15:07 G 13143339.92 13143340.13 13143340.34 0.0287 0.0043

Saturn 31273-10-08 10:48 G 13143569.92 13143569.95 13143569.99 0.0289 0.0284

Uranus 31278-12-15 21:07 G 13145464.34 13145464.38 13145464.46 0.0140 0.0134

Uranus 31279-07-30 06:14 G 13145690.62 13145690.76 13145690.92 0.0140 0.0101

Uranus 31280-03-12 15:21 G 13145916.96 13145917.14 13145917.34 0.0140 0.0069

Uranus	31280-10-25 00:43 G	13146143.32	13146143.53	13146143.74	0.0141	0.0035
Uranus	31281-06-08 10:19 G	13146369.71	13146369.93	13146370.14	0.0141	0.0002
Uranus	31282-01-20 19:55 G	13146596.12	13146596.33	13146596.54	0.0141	0.0033
Uranus	31282-09-04 05:31 G	13146822.55	13146822.73	13146822.93	0.0142	0.0067
Uranus	31283-04-18 15:07 G	13147049.00	13147049.13	13147049.30	0.0142	0.0101
Uranus	31283-12-01 01:12 G	13147275.50	13147275.55	13147275.63	0.0142	0.0135
Jupiter	31284-10-20 10:48 G	13147599.75	13147599.95	13147600.15	0.0494	0.0096
Saturn	31286-05-11 16:05 G	13148167.97	13148168.17	13148168.38	0.0275	0.0074
Saturn	31286-12-26 22:33 G	13148397.27	13148397.44	13148397.64	0.0273	0.0131
Jupiter	31290-08-26 04:48 G	13149735.54	13149735.70	13149735.87	0.0532	0.0315
Mars	31291-01-11 09:21 G	13149873.73	13149873.89	13149874.05	0.1675	0.0640
Jupiter	31296-06-25 12:57 G	13151865.89	13151866.04	13151866.20	0.0493	0.0328
Saturn	31302-01-17 03:36 G	13153896.48	13153896.65	13153896.83	0.0285	0.0161
Jupiter	31302-05-01 19:26 G	13154001.12	13154001.31	13154001.49	0.0533	0.0223
Saturn	31302-09-03 21:36 G	13154126.20	13154126.40	13154126.61	0.0288	0.0074
Saturn	31315-04-07 11:17 G	13158724.91	13158724.97	13158725.05	0.0277	0.0258
Saturn	31315-11-22 19:26 G	13158954.10	13158954.31	13158954.52	0.0275	0.0048
Saturn	31316-07-09 01:26 G	13159183.40	13159183.56	13159183.74	0.0273	0.0156
Uranus	31318-08-22 07:12 G	13159957.75	13159957.80	13159957.86	0.0138	0.0133
Uranus	31319-04-05 15:21 G	13160184.01	13160184.14	13160184.31	0.0138	0.0102
Uranus	31319-11-18 00:00 G	13160410.32	13160410.50	13160410.69	0.0138	0.0069
Jupiter	31320-06-28 19:55 G	13160634.18	13160634.33	13160634.48	0.0494	0.0339
Uranus	31320-07-01 08:24 G	13160636.64	13160636.85	13160637.06	0.0138	0.0038
Uranus	31321-02-12 16:33 G	13160862.97	13160863.19	13160863.40	0.0137	0.0007
Uranus	31321-09-27 00:14 G	13161089.30	13161089.51	13161089.73	0.0137	0.0025
Uranus	31322-05-11 07:55 G	13161315.63	13161315.83	13161316.03	0.0137	0.0056
Uranus	31322-12-23 15:21 G	13161541.98	13161542.14	13161542.31	0.0137	0.0087
Mars	31323-01-11 07:26 G	13161560.75	13161560.81	13161560.88	0.1686	0.1544
Uranus	31323-08-06 22:33 G	13161768.34	13161768.44	13161768.57	0.0136	0.0117
Mars	31329-06-24 11:31 G	13163916.82	13163916.98	13163917.13	0.1864	0.0765

Neptune 31330-12-17 16:19 G 13164458.10 13164458.18 13164458.28 0.0088 0.0081

Saturn 31331-07-30 06:00 G 13164682.57 13164682.75 13164682.94 0.0285 0.0136

Neptune 31331-07-31 05:02 G 13164683.58 13164683.71 13164683.89 0.0088 0.0064

Jupiter 31332-03-03 22:48 G 13164900.25 13164900.45 13164900.65 0.0494 0.0083

Neptune 31332-03-12 18:29 G 13164909.09 13164909.27 13164909.47 0.0088 0.0045

Saturn 31332-03-16 00:29 G 13164912.32 13164912.52 13164912.72 0.0287 0.0101

Neptune 31332-10-24 07:41 G 13165134.61 13165134.82 13165135.03 0.0088 0.0028

Neptune 31333-06-06 20:38 G 13165360.15 13165360.36 13165360.59 0.0088 0.0011

Neptune 31334-01-18 09:50 G 13165585.69 13165585.91 13165586.13 0.0088 0.0008

Neptune 31334-08-31 22:48 G 13165811.25 13165811.45 13165811.67 0.0088 0.0026

Neptune 31335-04-14 11:31 G 13166036.81 13166036.98 13166037.19 0.0088 0.0044

Neptune 31335-11-26 00:57 G 13166262.38 13166262.54 13166262.70 0.0088 0.0061

Neptune 31336-07-08 13:55 G 13166487.99 13166488.08 13166488.19 0.0089 0.0079

Jupiter 31338-01-07 12:29 G 13167035.82 13167036.02 13167036.22 0.0532 0.0094

Saturn 31344-10-17 17:45 G 13169511.13 13169511.24 13169511.36 0.0277 0.0228

Saturn 31345-06-04 01:41 G 13169740.36 13169740.57 13169740.78 0.0275 0.0019

Saturn 31346-01-19 07:41 G 13169969.67 13169969.82 13169969.98 0.0273 0.0184

Jupiter 31349-09-12 02:24 G 13171301.49 13171301.60 13171301.71 0.0533 0.0450

Mars 31356-11-08 20:09 G 13173916.20 13173916.34 13173916.48 0.1672 0.0935

Saturn 31361-02-08 12:00 G 13175468.81 13175469.00 13175469.20 0.0286 0.0107

Saturn 31361-09-26 06:29 G 13175698.59 13175698.77 13175698.96 0.0288 0.0131

Uranus 31363-03-30 12:00 G 13176248.89 13176249.00 13176249.13 0.0140 0.0116

Uranus 31363-11-11 21:07 G 13176475.21 13176475.38 13176475.55 0.0140 0.0084

Uranus 31364-06-25 06:14 G 13176701.56 13176701.76 13176701.96 0.0141 0.0051

Uranus 31365-02-06 15:36 G 13176927.93 13176928.15 13176928.37 0.0141 0.0017

Uranus 31365-09-21 00:57 G 13177154.33 13177154.54 13177154.76 0.0141 0.0016

Uranus 31366-05-05 10:19 G 13177380.74 13177380.93 13177381.15 0.0141 0.0051

Uranus 31366-12-17 20:09 G 13177607.18 13177607.34 13177607.53 0.0142 0.0085

Uranus 31367-08-01 06:14 G 13177833.65 13177833.76 13177833.89 0.0142 0.0118

Jupiter 31367-11-10 09:50 G 13177934.72 13177934.91 13177935.11 0.0494 0.0174

Pluto 31373-09-08 02:53 G 13180063.45 13180063.62 13180063.83 0.0065 0.0033

Jupiter 31373-09-15 06:29 G 13180070.65 13180070.77 13180070.91 0.0532 0.0416

Pluto 31374-04-21 07:41 G 13180288.60 13180288.82 13180289.03 0.0066 0.0013

Saturn 31374-04-29 20:24 G 13180297.22 13180297.35 13180297.50 0.0276 0.0203

Pluto 31374-12-02 11:31 G 13180513.92 13180513.98 13180514.10 0.0066 0.0060

Saturn 31374-12-15 04:19 G 13180526.47 13180526.68 13180526.89 0.0274 0.0006

Saturn 31375-08-01 09:50 G 13180755.78 13180755.91 13180756.05 0.0272 0.0207

Earth 31376-02-28 11:17 G 13180966.81 13180966.97 13180967.12 0.2658 0.0553

Moon 31376-02-28 16:33 G 13180967.06 13180967.19 13180967.32 0.2660 0.1476 *

Jupiter 31379-07-16 11:45 G 13182200.82 13182200.99 13182201.17 0.0493 0.0254

Moon 31384-02-26 08:53 G 13183886.82 13183886.87 13183886.92 0.2655 0.2520

Jupiter 31385-05-20 22:19 G 13184336.24 13184336.43 13184336.63 0.0533 0.0116

Mars 31388-11-07 18:00 G 13185603.13 13185603.25 13185603.37 0.1683 0.1221

Saturn 31390-08-21 12:43 G 13186254.83 13186255.03 13186255.23 0.0285 0.0084

Saturn 31391-04-08 07:26 G 13186484.63 13186484.81 13186484.99 0.0288 0.0154

Mars 31395-04-21 15:36 G 13187959.04 13187959.15 13187959.26 0.1868 0.1439

Uranus 31402-12-04 23:17 G 13190742.37 13190742.47 13190742.61 0.0138 0.0115

Uranus 31403-07-19 08:09 G 13190968.67 13190968.84 13190969.02 0.0138 0.0082

Jupiter 31403-07-19 21:50 G 13190969.31 13190969.41 13190969.51 0.0495 0.0432

Saturn 31403-11-11 01:26 G 13191083.40 13191083.56 13191083.73 0.0277 0.0177

Uranus 31404-03-01 16:19 G 13191194.99 13191195.18 13191195.40 0.0138 0.0051

Saturn 31404-06-27 09:07 G 13191312.67 13191312.88 13191313.09 0.0275 0.0032

Uranus 31404-10-14 00:43 G 13191421.31 13191421.53 13191421.75 0.0137 0.0019

Saturn 31405-02-11 14:38 G 13191542.01 13191542.11 13191542.23 0.0272 0.0234

Uranus 31405-05-28 08:38 G 13191647.65 13191647.86 13191648.08 0.0137 0.0013

Uranus 31406-01-09 16:19 G 13191873.98 13191874.18 13191874.40 0.0137 0.0044

Uranus 31406-08-23 23:45 G 13192100.32 13192100.49 13192100.69 0.0137 0.0075

Uranus 31407-04-07 07:26 G 13192326.68 13192326.81 13192326.95 0.0136 0.0105

Uranus 31407-11-19 14:38 G 13192553.09 13192553.11 13192553.15 0.0136 0.0135

Neptune 31412-06-23 06:00 G 13194230.65 13194230.75 13194230.89 0.0089 0.0074

Neptune 31413-02-03 19:12 G 13194456.15 13194456.30 13194456.48 0.0089 0.0056

Neptune 31413-09-17 08:24 G 13194681.66 13194681.85 13194682.05 0.0089 0.0038

Neptune 31414-04-30 21:07 G 13194907.18 13194907.38 13194907.61 0.0089 0.0021

Neptune 31414-12-12 10:33 G 13195132.72 13195132.94 13195133.16 0.0089 0.0003

Jupiter 31415-03-25 00:00 G 13195235.30 13195235.50 13195235.71 0.0494 0.0009

Neptune 31415-07-25 23:17 G 13195358.26 13195358.47 13195358.69 0.0089 0.0015

Neptune 31416-03-07 12:00 G 13195583.81 13195584.00 13195584.22 0.0089 0.0033

Neptune 31416-10-19 00:43 G 13195809.37 13195809.53 13195809.73 0.0089 0.0051

Neptune 31417-06-01 13:55 G 13196034.95 13196035.08 13196035.22 0.0089 0.0068

Neptune 31418-01-13 02:38 G 13196260.58 13196260.61 13196260.68 0.0089 0.0086

Saturn 31420-03-03 18:00 G 13197041.04 13197041.25 13197041.46 0.0286 0.0057

Saturn 31420-10-19 12:43 G 13197270.87 13197271.03 13197271.20 0.0289 0.0182

Jupiter 31421-01-27 12:57 G 13197370.85 13197371.04 13197371.23 0.0533 0.0185

Mars 31422-09-07 07:26 G 13197958.69 13197958.81 13197958.93 0.1669 0.1222

Jupiter 31426-11-28 02:24 G 13199501.50 13199501.60 13199501.72 0.0493 0.0414

Jupiter 31432-10-02 04:48 G 13201636.55 13201636.70 13201636.85 0.0534 0.0345

Saturn 31433-05-23 03:50 G 13201869.49 13201869.66 13201869.84 0.0276 0.0152

Saturn 31434-01-07 11:02 G 13202098.76 13202098.96 13202099.17 0.0274 0.0056

Saturn 31434-08-24 16:33 G 13202328.12 13202328.19 13202328.26 0.0271 0.0255

Uranus 31446-11-28 18:43 G 13206807.22 13206807.28 13206807.38 0.0140 0.0130

Uranus 31447-07-13 04:05 G 13207033.51 13207033.67 13207033.82 0.0140 0.0098

Uranus 31448-02-24 12:43 G 13207259.85 13207260.03 13207260.23 0.0140 0.0065

Uranus 31448-10-07 22:05 G 13207486.21 13207486.42 13207486.63 0.0141 0.0032

Saturn 31449-01-27 00:29 G 13207597.47 13207597.52 13207597.60 0.0283 0.0268

Uranus 31449-05-22 07:12 G 13207712.59 13207712.80 13207713.02 0.0141 0.0003

Saturn 31449-09-13 17:45 G 13207827.03 13207827.24 13207827.45 0.0286 0.0037

Uranus 31450-01-03 16:48 G 13207938.99 13207939.20 13207939.41 0.0141 0.0035

Saturn 31450-05-01 12:43 G 13208056.89 13208057.03 13208057.18 0.0288 0.0203

Uranus 31450-08-18 02:24 G 13208165.41 13208165.60 13208165.79 0.0142 0.0069

Jupiter 31450-11-30 11:02 G 13208269.79 13208269.96 13208270.14 0.0494 0.0260

Uranus 31451-04-01 11:45 G 13208391.86 13208391.99 13208392.16 0.0142 0.0103

Uranus 31451-11-13 22:05 G 13208618.37 13208618.42 13208618.48 0.0142 0.0136

Mars 31454-09-06 05:02 G 13209645.56 13209645.71 13209645.85 0.1680 0.0918

Jupiter 31456-10-05 07:12 G 13210405.74 13210405.80 13210405.86 0.0531 0.0507

Pluto 31461-05-10 02:53 G 13212083.46 13212083.62 13212083.81 0.0079 0.0049

Pluto 31461-12-21 12:43 G 13212308.84 13212309.03 13212309.24 0.0079 0.0033

Jupiter 31462-08-05 14:09 G 13212535.90 13212536.09 13212536.29 0.0494 0.0157

Saturn 31462-12-03 07:41 G 13212655.64 13212655.82 13212656.01 0.0277 0.0129

Saturn 31463-07-20 14:53 G 13212884.92 13212885.12 13212885.33 0.0274 0.0079

Jupiter 31468-06-09 21:36 G 13214671.20 13214671.40 13214671.61 0.0533 0.0031

Saturn 31478-08-09 05:31 G 13218383.63 13218383.73 13218383.85 0.0284 0.0241

Saturn 31479-03-26 22:48 G 13218613.24 13218613.45 13218613.66 0.0286 0.0010

Saturn 31479-11-11 17:45 G 13218843.12 13218843.24 13218843.37 0.0289 0.0231

Uranus 31486-08-04 06:43 G 13221300.71 13221300.78 13221300.88 0.0139 0.0128

Uranus 31487-03-18 15:36 G 13221527.00 13221527.15 13221527.31 0.0138 0.0095

Uranus 31487-10-30 23:45 G 13221753.31 13221753.49 13221753.70 0.0138 0.0064

Uranus 31488-06-13 08:24 G 13221979.64 13221979.85 13221980.06 0.0138 0.0032

Mars 31488-07-04 18:14 G 13222001.19 13222001.26 13222001.33 0.1666 0.1518

Uranus 31489-01-25 16:33 G 13222205.97 13222206.19 13222206.41 0.0137 0.0001

Uranus 31489-09-09 00:14 G 13222432.30 13222432.51 13222432.73 0.0137 0.0031

Uranus 31490-04-23 07:55 G 13222658.64 13222658.83 13222659.03 0.0137 0.0061

Uranus 31490-12-05 15:21 G 13222884.99 13222885.14 13222885.31 0.0137 0.0092

Uranus 31491-07-19 22:48 G 13223111.37 13223111.45 13223111.56 0.0136 0.0122

Saturn 31492-06-14 09:21 G 13223441.70 13223441.89 13223442.09 0.0276 0.0106

Saturn 31493-01-29 16:33 G 13223670.99 13223671.19 13223671.38 0.0273 0.0102

Mars 31493-02-16 14:38 G 13223689.00 13223689.11 13223689.21 0.1858 0.1460

Neptune 31495-03-22 02:24 G 13224452.60 13224452.60 13224452.66 0.0088 0.0088

Neptune 31495-11-02 15:50 G 13224678.03 13224678.16 13224678.30 0.0088 0.0070

Neptune 31496-06-15 04:48 G 13224903.54 13224903.70 13224903.89 0.0088 0.0052

Neptune 31497-01-26 18:00 G 13225129.05 13225129.25 13225129.46 0.0088 0.0035

Earth 31497-08-31 03:07 G 13225345.49 13225345.63 13225345.77 0.2673 0.1372

Moon 31497-08-31 07:12 G 13225345.66 13225345.80 13225345.93 0.2669 0.1596 *

Neptune 31497-09-09 07:12 G 13225354.58 13225354.80 13225355.02 0.0088 0.0017

Jupiter 31498-04-13 00:43 G 13225570.33 13225570.53 13225570.73 0.0494 0.0094

Neptune 31498-04-22 20:09 G 13225580.12 13225580.34 13225580.56 0.0088 0.0001

Neptune 31498-12-04 09:07 G 13225805.67 13225805.88 13225806.10 0.0088 0.0019

Neptune 31499-07-17 22:05 G 13226031.23 13226031.42 13226031.64 0.0088 0.0037

Neptune 31500-02-28 11:17 G 13226256.80 13226256.97 13226257.15 0.0088 0.0054

Neptune 31500-10-12 00:00 G 13226482.39 13226482.50 13226482.65 0.0089 0.0072

Jupiter 31504-02-17 17:45 G 13227706.08 13227706.24 13227706.41 0.0533 0.0304

Earth 31505-08-29 17:02 G 13228265.17 13228265.21 13228265.26 0.2673 0.2567

Saturn 31508-02-20 04:19 G 13229169.56 13229169.68 13229169.82 0.0284 0.0224

Saturn 31508-10-06 21:36 G 13229399.19 13229399.40 13229399.62 0.0286 0.0011

Saturn 31509-05-24 17:02 G 13229629.11 13229629.21 13229629.31 0.0289 0.0250

Jupiter 31509-12-18 04:19 G 13229836.53 13229836.68 13229836.84 0.0493 0.0323

Jupiter 31515-10-23 06:57 G 13231971.61 13231971.79 13231971.97 0.0533 0.0240

Mars 31520-07-04 15:21 G 13233687.98 13233688.14 13233688.30 0.1676 0.0595

Saturn 31521-12-26 12:14 G 13234227.81 13234228.01 13234228.21 0.0276 0.0084

Saturn 31522-08-12 19:12 G 13234457.12 13234457.30 13234457.50 0.0274 0.0124

Uranus 31531-03-13 11:17 G 13237591.86 13237591.97 13237592.12 0.0140 0.0111

Uranus 31531-10-25 20:24 G 13237818.17 13237818.35 13237818.53 0.0140 0.0079

Uranus 31532-06-08 05:31 G 13238044.52 13238044.73 13238044.93 0.0140 0.0046

Uranus 31533-01-20 14:38 G 13238270.90 13238271.11 13238271.33 0.0141 0.0013

Uranus 31533-09-04 00:00 G 13238497.29 13238497.50 13238497.72 0.0141 0.0021

Jupiter 31533-12-20 13:26 G 13238604.92 13238605.06 13238605.20 0.0495 0.0358

Uranus 31534-04-18 09:21 G 13238723.70 13238723.89 13238724.10 0.0141 0.0054

Uranus 31534-11-30 19:12 G 13238950.13 13238950.30 13238950.47 0.0142 0.0088

Uranus 31535-07-15 04:48 G 13239176.60 13239176.70 13239176.82 0.0142 0.0122

Saturn 31537-09-01 09:21 G 13239955.74 13239955.89 13239956.05 0.0284 0.0197

Saturn 31538-04-19 02:38 G 13240185.40 13240185.61 13240185.82 0.0287 0.0037

Saturn 31538-12-04 22:05 G 13240415.37 13240415.42 13240415.48 0.0289 0.0278

Jupiter 31545-08-25 16:05 G 13242870.96 13242871.17 13242871.37 0.0494 0.0066

Saturn 31550-11-21 05:31 G 13244784.70 13244784.73 13244784.77 0.0278 0.0272

Jupiter 31551-07-01 00:57 G 13245006.34 13245006.54 13245006.74 0.0533 0.0081

Saturn 31551-07-08 14:24 G 13245013.89 13245014.10 13245014.30 0.0275 0.0060

Saturn 31552-02-22 21:07 G 13245243.20 13245243.38 13245243.56 0.0273 0.0146

Jupiter 31557-04-30 18:14 G 13247137.24 13247137.26 13247137.29 0.0493 0.0487

Mars 31558-12-15 19:12 G 13247731.14 13247731.30 13247731.45 0.1863 0.0828

Jupiter 31563-03-05 17:02 G 13249272.10 13249272.21 13249272.32 0.0534 0.0449

Saturn 31567-03-14 08:24 G 13250741.68 13250741.85 13250742.01 0.0284 0.0179

Saturn 31567-10-30 01:41 G 13250971.36 13250971.57 13250971.78 0.0286 0.0055

Uranus 31570-11-16 23:17 G 13252085.35 13252085.47 13252085.62 0.0138 0.0109

Uranus 31571-07-01 08:24 G 13252311.67 13252311.85 13252312.03 0.0138 0.0077

Uranus 31572-02-12 16:33 G 13252537.99 13252538.19 13252538.40 0.0138 0.0045

Uranus 31572-09-26 00:43 G 13252764.31 13252764.53 13252764.75 0.0138 0.0014

Uranus 31573-05-10 08:38 G 13252990.65 13252990.86 13252991.08 0.0137 0.0018

Uranus 31573-12-22 16:19 G 13253216.99 13253217.18 13253217.40 0.0137 0.0049

Uranus 31574-08-06 00:14 G 13253443.34 13253443.51 13253443.69 0.0137 0.0079

Uranus 31575-03-20 07:26 G 13253669.69 13253669.81 13253669.95 0.0137 0.0110

Neptune 31576-09-25 16:19 G 13254225.11 13254225.18 13254225.29 0.0089 0.0081

Neptune 31577-05-09 05:31 G 13254450.59 13254450.73 13254450.90 0.0089 0.0063

Neptune 31577-12-20 18:43 G 13254676.11 13254676.28 13254676.48 0.0089 0.0045

Neptune 31578-08-03 07:55 G 13254901.63 13254901.83 13254902.04 0.0089 0.0027

Neptune 31579-03-16 20:53 G 13255127.16 13255127.37 13255127.59 0.0089 0.0010

Neptune 31579-10-28 09:50 G 13255352.69 13255352.91 13255353.13 0.0089 0.0008

Saturn 31580-06-02 06:57 G 13255570.71 13255570.79 13255570.88 0.0279 0.0254

Neptune 31580-06-09 22:33 G 13255578.24 13255578.44 13255578.66 0.0089 0.0026

Saturn 31581-01-17 16:05 G 13255799.96 13255800.17 13255800.38 0.0276 0.0040

Neptune 31581-01-21 11:31 G 13255803.80 13255803.98 13255804.19 0.0089 0.0044

Jupiter 31581-05-03 03:36 G 13255905.46 13255905.65 13255905.84 0.0495 0.0193

Saturn 31581-09-03 22:48 G 13256029.29 13256029.45 13256029.63 0.0274 0.0167

Neptune 31581-09-04 00:43 G 13256029.38 13256029.53 13256029.69 0.0089 0.0061 *

Neptune 31582-04-17 13:12 G 13256254.97 13256255.05 13256255.17 0.0089 0.0079

Mars 31586-05-02 02:24 G 13257730.43 13257730.60 13257730.77 0.1673 0.0306

Jupiter 31587-03-08 18:29 G 13258041.15 13258041.27 13258041.41 0.0532 0.0400

Jupiter 31593-01-06 06:14 G 13260171.58 13260171.76 13260171.94 0.0494 0.0228

Saturn 31596-09-23 13:26 G 13261527.88 13261528.06 13261528.24 0.0284 0.0152

Saturn 31597-05-11 06:57 G 13261757.59 13261757.79 13261757.99 0.0287 0.0083

Jupiter 31598-11-11 08:53 G 13262306.67 13262306.87 13262307.06 0.0533 0.0140

Saturn 31609-12-13 09:50 G 13266356.80 13266356.91 13266357.04 0.0278 0.0228

Saturn 31610-07-30 18:43 G 13266586.06 13266586.28 13266586.49 0.0275 0.0016

Saturn 31611-03-17 00:57 G 13266815.40 13266815.54 13266815.70 0.0273 0.0190

Uranus 31614-11-10 20:38 G 13268150.27 13268150.36 13268150.47 0.0140 0.0123

Uranus 31615-06-25 05:17 G 13268376.57 13268376.72 13268376.90 0.0140 0.0091

Uranus 31616-02-06 14:24 G 13268602.91 13268603.10 13268603.31 0.0140 0.0058

Uranus 31616-09-19 23:31 G 13268829.27 13268829.48 13268829.70 0.0141 0.0026

Jupiter 31617-01-08 14:38 G 13268940.02 13268940.11 13268940.20 0.0495 0.0446

Uranus 31617-05-04 08:53 G 13269055.65 13269055.87 13269056.09 0.0141 0.0008

Uranus 31617-12-16 18:14 G 13269282.06 13269282.26 13269282.48 0.0141 0.0042

Uranus 31618-07-31 04:05 G 13269508.49 13269508.67 13269508.85 0.0141 0.0075

Moon 31619-03-02 09:07 G 13269722.72 13269722.88 13269723.04 0.2655 0.0228

Earth 31619-03-02 13:55 G 13269722.92 13269723.08 13269723.23 0.2658 0.0581 *

Uranus 31619-03-14 13:26 G 13269734.94 13269735.06 13269735.21 0.0142 0.0109

Pluto 31619-10-09 04:05 G 13269943.54 13269943.67 13269943.82 0.0065 0.0050

Pluto 31620-05-21 08:24 G 13270168.64 13270168.85 13270169.08 0.0065 0.0004

Pluto 31621-01-01 12:29 G 13270393.87 13270394.02 13270394.21 0.0066 0.0043

Mars 31624-10-11 23:45 G 13271773.32 13271773.49 13271773.66 0.1867 0.0182

Saturn 31626-04-05 12:29 G 13272313.84 13272314.02 13272314.21 0.0284 0.0134

Saturn 31626-11-21 06:00 G 13272543.56 13272543.75 13272543.96 0.0287 0.0102

Jupiter 31628-09-13 17:45 G 13273206.04 13273206.24 13273206.45 0.0494 0.0026

Jupiter 31634-07-20 04:19 G 13275341.49 13275341.68 13275341.87 0.0532 0.0192

Saturn 31639-06-25 11:31 G 13277142.84 13277142.98 13277143.12 0.0278 0.0209

Saturn 31640-02-09 20:09 G 13277372.13 13277372.34 13277372.56 0.0276 0.0008

Jupiter 31640-05-19 19:55 G 13277472.21 13277472.33 13277472.46 0.0494 0.0395

Saturn 31640-09-26 03:07 G 13277601.49 13277601.63 13277601.76 0.0274 0.0210

Jupiter 31646-03-24 18:43 G 13279607.13 13279607.28 13279607.43 0.0533 0.0346

Mars 31652-02-27 13:26 G 13281772.88 13281773.06 13281773.23 0.1670 0.0036

Uranus 31654-07-17 08:24 G 13282643.76 13282643.85 13282643.97 0.0139 0.0121

Uranus 31655-02-28 17:17 G 13282870.05 13282870.22 13282870.39 0.0138 0.0089

Uranus 31655-10-13 01:26 G 13283096.37 13283096.56 13283096.77 0.0138 0.0057

Saturn 31655-10-16 18:43 G 13283100.08 13283100.28 13283100.48 0.0284 0.0105

Uranus 31656-05-26 09:50 G 13283322.70 13283322.91 13283323.13 0.0138 0.0025

Saturn 31656-06-02 12:29 G 13283329.83 13283330.02 13283330.21 0.0287 0.0132

Uranus 31657-01-07 18:00 G 13283549.03 13283549.25 13283549.47 0.0137 0.0006

Uranus 31657-08-22 01:41 G 13283775.37 13283775.57 13283775.79 0.0137 0.0037

Uranus 31658-04-05 09:36 G 13284001.71 13284001.90 13284002.09 0.0137 0.0067

Uranus 31658-11-17 16:48 G 13284228.06 13284228.20 13284228.36 0.0137 0.0098

Uranus 31659-07-02 00:14 G 13284454.45 13284454.51 13284454.60 0.0136 0.0128

Neptune 31660-02-05 01:55 G 13284672.49 13284672.58 13284672.71 0.0088 0.0077

Neptune 31660-09-17 14:53 G 13284897.97 13284898.12 13284898.30 0.0088 0.0059

Neptune 31661-05-01 04:05 G 13285123.48 13285123.67 13285123.87 0.0088 0.0042

Neptune 31661-12-12 17:02 G 13285349.01 13285349.21 13285349.43 0.0088 0.0024

Neptune 31662-07-26 06:14 G 13285574.55 13285574.76 13285574.99 0.0088 0.0007

Neptune 31663-03-08 19:12 G 13285800.09 13285800.30 13285800.53 0.0088 0.0012

Neptune 31663-10-20 08:24 G 13286025.64 13286025.85 13286026.06 0.0088 0.0029

Jupiter 31664-05-22 05:02 G 13286240.54 13286240.71 13286240.88 0.0494 0.0283

Neptune 31664-06-01 21:07 G 13286251.21 13286251.38 13286251.58 0.0088 0.0047

Neptune 31665-01-13 10:05 G 13286476.79 13286476.92 13286477.09 0.0088 0.0065

Neptune 31665-08-26 23:31 G 13286702.41 13286702.48 13286702.57 0.0089 0.0082

Saturn 31669-01-04 14:38 G 13287928.96 13287929.11 13287929.28 0.0278 0.0183

Saturn 31669-08-21 23:17 G 13288158.26 13288158.47 13288158.68 0.0275 0.0030

Jupiter 31670-03-27 20:53 G 13288376.31 13288376.37 13288376.44 0.0532 0.0501

Saturn 31670-04-08 05:45 G 13288387.64 13288387.74 13288387.85 0.0273 0.0234

Jupiter 31676-01-26 06:57 G 13290506.60 13290506.79 13290506.99 0.0493 0.0143

Jupiter 31681-11-30 13:12 G 13292641.85 13292642.05 13292642.25 0.0533 0.0024

Saturn 31685-04-27 18:43 G 13293886.08 13293886.28 13293886.49 0.0284 0.0085

Saturn 31685-12-13 12:29 G 13294115.84 13294116.02 13294116.20 0.0287 0.0152

Mars 31690-08-09 03:50 G 13295815.50 13295815.66 13295815.83 0.1871 0.0489

Uranus 31698-07-11 05:31 G 13298708.68 13298708.73 13298708.78 0.0140 0.0135

Saturn 31698-07-17 16:19 G 13298715.02 13298715.18 13298715.36 0.0278 0.0163

Uranus 31699-02-22 14:09 G 13298934.95 13298935.09 13298935.23 0.0140 0.0103

Saturn 31699-03-04 00:57 G 13298944.33 13298944.54 13298944.75 0.0276 0.0050

Uranus 31699-10-06 22:48 G 13299161.27 13299161.45 13299161.64 0.0140 0.0071

Saturn 31699-10-19 07:26 G 13299173.74 13299173.81 13299173.89 0.0273 0.0254

Uranus 31700-05-21 07:55 G 13299387.62 13299387.83 13299388.04 0.0141 0.0039

Uranus 31701-01-02 17:17 G 13299614.00 13299614.22 13299614.44 0.0141 0.0006

Uranus 31701-08-17 02:38 G 13299840.40 13299840.61 13299840.83 0.0141 0.0028

Uranus 31702-03-31 12:00 G 13300066.81 13300067.00 13300067.20 0.0141 0.0062

Uranus 31702-11-12 21:50 G 13300293.25 13300293.41 13300293.57 0.0142 0.0095

Uranus 31703-06-27 07:26 G 13300519.74 13300519.81 13300519.92 0.0142 0.0129

Pluto 31707-06-10 01:55 G 13301963.58 13301963.58 13301963.60 0.0079 0.0079

Pluto 31708-01-21 12:00 G 13302188.78 13302189.00 13302189.22 0.0079 0.0003

Jupiter 31711-10-04 18:00 G 13303541.05 13303541.25 13303541.45 0.0494 0.0112

Saturn 31714-03-24 09:36 G 13304442.90 13304442.90 13304442.92 0.0282 0.0281

Saturn 31714-11-09 01:41 G 13304672.36 13304672.57 13304672.78 0.0285 0.0054

Saturn 31715-06-26 19:41 G 13304902.16 13304902.32 13304902.48 0.0287 0.0184

Jupiter 31717-08-09 04:33 G 13305676.52 13305676.69 13305676.86 0.0532 0.0282

Mars 31717-12-26 00:29 G 13305815.35 13305815.52 13305815.69 0.1667 0.0285

Jupiter 31723-06-09 20:53 G 13307807.21 13307807.37 13307807.53 0.0493 0.0309

Saturn 31728-01-28 20:53 G 13309501.19 13309501.37 13309501.56 0.0277 0.0135

Saturn 31728-09-14 05:17 G 13309730.52 13309730.72 13309730.93 0.0275 0.0077

Jupiter 31729-04-13 19:26 G 13309942.13 13309942.31 13309942.49 0.0533 0.0252

Uranus 31738-03-17 18:14 G 13313202.21 13313202.26 13313202.35 0.0139 0.0132

Uranus 31738-10-30 03:07 G 13313428.49 13313428.63 13313428.79 0.0138 0.0100

Uranus 31739-06-13 11:31 G 13313654.81 13313654.98 13313655.18 0.0138 0.0069

Uranus 31740-01-25 19:55 G 13313881.13 13313881.33 13313881.55 0.0138 0.0037

Moon 31740-09-01 21:50 G 13314101.27 13314101.41 13314101.56 0.2677 0.0910

Earth 31740-09-02 02:53 G 13314101.48 13314101.62 13314101.77 0.2673 0.1117 *

Uranus 31740-09-08 04:19 G 13314107.46 13314107.68 13314107.89 0.0138 0.0006

Neptune 31740-12-29 02:38 G 13314219.60 13314219.61 13314219.67 0.0089 0.0088

Uranus 31741-04-22 12:00 G 13314333.79 13314334.00 13314334.22 0.0137 0.0026

Neptune 31741-08-11 15:50 G 13314445.04 13314445.16 13314445.31 0.0089 0.0070

Uranus 31741-12-04 19:41 G 13314560.13 13314560.32 13314560.53 0.0137 0.0056

Neptune 31742-03-25 05:02 G 13314670.54 13314670.71 13314670.89 0.0089 0.0052

Uranus 31742-07-19 03:21 G 13314786.48 13314786.64 13314786.82 0.0137 0.0087

Neptune 31742-11-05 17:45 G 13314896.05 13314896.24 13314896.46 0.0089 0.0035

Uranus 31743-03-02 10:48 G 13315012.85 13315012.95 13315013.07 0.0137 0.0117

Neptune 31743-06-19 06:57 G 13315121.58 13315121.79 13315122.01 0.0089 0.0017

Saturn 31743-10-04 11:17 G 13315228.90 13315228.97 13315229.06 0.0282 0.0260

Neptune 31744-01-30 20:09 G 13315347.12 13315347.34 13315347.56 0.0089 0.0001

Saturn 31744-05-21 03:21 G 13315458.43 13315458.64 13315458.85 0.0285 0.0031

Neptune 31744-09-12 08:53 G 13315572.67 13315572.87 13315573.10 0.0089 0.0019

Saturn 31745-01-05 21:07 G 13315688.24 13315688.38 13315688.54 0.0287 0.0207

Neptune 31745-04-25 22:05 G 13315798.22 13315798.42 13315798.62 0.0089 0.0036

Neptune 31745-12-07 10:48 G 13316023.79 13316023.95 13316024.13 0.0089 0.0054

Neptune 31746-07-20 23:31 G 13316249.37 13316249.48 13316249.63 0.0089 0.0072

Jupiter 31747-06-12 05:02 G 13316575.58 13316575.71 13316575.85 0.0495 0.0365

Mars 31756-06-06 08:24 G 13319857.72 13319857.85 13319857.99 0.1875 0.1143

Saturn 31757-08-09 22:48 G 13320287.27 13320287.45 13320287.65 0.0278 0.0114

Saturn 31758-03-27 07:12 G 13320516.61 13320516.80 13320517.00 0.0275 0.0098

Jupiter 31759-02-15 06:29 G 13320841.57 13320841.77 13320841.97 0.0494 0.0063

Jupiter 31764-12-20 14:09 G 13322976.89 13322977.09 13322977.29 0.0532 0.0073

Jupiter 31770-10-21 08:53 G 13325107.83 13325107.87 13325107.91 0.0493 0.0483

Saturn 31773-04-15 19:12 G 13326015.18 13326015.30 13326015.43 0.0282 0.0227

Saturn 31773-12-01 11:17 G 13326244.76 13326244.97 13326245.19 0.0285 0.0005

Saturn 31774-07-19 05:31 G 13326474.63 13326474.73 13326474.85 0.0288 0.0242

Jupiter 31776-08-25 02:38 G 13327242.52 13327242.61 13327242.70 0.0533 0.0475

Uranus 31782-10-23 22:33 G 13329493.33 13329493.44 13329493.57 0.0140 0.0116

Uranus 31783-06-07 07:26 G 13329719.65 13329719.81 13329719.99 0.0140 0.0084

Mars 31783-10-23 11:45 G 13329857.82 13329857.99 13329858.15 0.1664 0.0576

Uranus 31784-01-19 16:33 G 13329945.99 13329946.19 13329946.40 0.0140 0.0051

Uranus 31784-09-02 01:41 G 13330172.36 13330172.57 13330172.79 0.0141 0.0019

Uranus 31785-04-16 11:02 G 13330398.75 13330398.96 13330399.18 0.0141 0.0015

Uranus 31785-11-28 20:24 G 13330625.16 13330625.35 13330625.56 0.0141 0.0049

Uranus 31786-07-13 06:14 G 13330851.59 13330851.76 13330851.94 0.0141 0.0082

Saturn 31787-02-20 04:33 G 13331073.50 13331073.69 13331073.90 0.0277 0.0083

Uranus 31787-02-24 15:50 G 13331078.05 13331078.16 13331078.30 0.0142 0.0116

Saturn 31787-10-07 12:43 G 13331302.84 13331303.03 13331303.22 0.0275 0.0128

Jupiter 31794-10-23 16:48 G 13333876.02 13333876.20 13333876.39 0.0494 0.0189

Jupiter 31800-08-29 06:14 G 13336011.62 13336011.76 13336011.90 0.0532 0.0381

Saturn 31802-10-27 22:05 G 13336801.28 13336801.42 13336801.57 0.0283 0.0203

Saturn 31803-06-14 14:24 G 13337030.89 13337031.10 13337031.32 0.0285 0.0028

Saturn 31804-01-30 08:38 G 13337260.79 13337260.86 13337260.94 0.0288 0.0267

Jupiter 31806-06-29 19:41 G 13338142.14 13338142.32 13338142.50 0.0493 0.0233

Jupiter 31812-05-03 21:21 G 13340277.20 13340277.39 13340277.59 0.0532 0.0149

Mars 31815-10-23 08:38 G 13341544.80 13341544.86 13341544.93 0.1674 0.1550

Saturn 31816-01-16 21:07 G 13341630.37 13341630.38 13341630.42 0.0280 0.0278

Saturn 31816-09-02 07:26 G 13341859.61 13341859.81 13341860.02 0.0278 0.0060

Saturn 31817-04-19 15:21 G 13342088.97 13342089.14 13342089.33 0.0275 0.0150

Mars 31822-04-04 12:00 G 13343899.98 13343900.00 13343900.02 0.1879 0.1858

Uranus 31822-06-30 13:12 G 13343986.93 13343987.05 13343987.19 0.0139 0.0111

Uranus 31823-02-11 21:50 G 13344213.24 13344213.41 13344213.60 0.0138 0.0079

Uranus 31823-09-26 06:00 G 13344439.56 13344439.75 13344439.97 0.0138 0.0048

Uranus 31824-05-09 14:24 G 13344665.88 13344666.10 13344666.32 0.0138 0.0016

Neptune 31824-05-10 11:31 G 13344666.92 13344666.98 13344667.06 0.0088 0.0084

Uranus 31824-12-21 22:19 G 13344892.22 13344892.43 13344892.65 0.0137 0.0015

Neptune 31824-12-22 00:14 G 13344892.38 13344892.51 13344892.67 0.0088 0.0067 *

Neptune 31825-08-04 13:12 G 13345117.89 13345118.05 13345118.26 0.0088 0.0050

Uranus 31825-08-05 06:14 G 13345118.56 13345118.76 13345118.97 0.0137 0.0045

Neptune 31826-03-18 02:38 G 13345343.41 13345343.61 13345343.82 0.0088 0.0032

Uranus 31826-03-19 13:41 G 13345344.90 13345345.07 13345345.27 0.0137 0.0076

Neptune 31826-10-29 15:21 G 13345568.93 13345569.14 13345569.37 0.0088 0.0015

Uranus 31826-10-31 21:21 G 13345571.26 13345571.39 13345571.53 0.0137 0.0106

Neptune 31827-06-12 04:48 G 13345794.48 13345794.70 13345794.92 0.0088 0.0004

Uranus 31827-06-15 04:48 G 13345797.69 13345797.70 13345797.73 0.0136 0.0136

Neptune 31828-01-23 17:31 G 13346020.03 13346020.23 13346020.46 0.0088 0.0021

Neptune 31828-09-05 06:43 G 13346245.59 13346245.78 13346245.98 0.0088 0.0039

Neptune 31829-04-18 19:26 G 13346471.16 13346471.31 13346471.50 0.0088 0.0057

Neptune 31829-11-30 08:38 G 13346696.75 13346696.86 13346696.99 0.0088 0.0074

Jupiter 31830-07-02 02:38 G 13346910.52 13346910.61 13346910.71 0.0495 0.0435

Saturn 31832-05-09 06:57 G 13347587.62 13347587.79 13347587.96 0.0283 0.0167

Saturn 31832-12-24 23:31 G 13347817.27 13347817.48 13347817.69 0.0285 0.0065

Jupiter 31842-03-07 05:02 G 13351176.51 13351176.71 13351176.92 0.0494 0.0013

Saturn 31845-07-29 04:48 G 13352416.60 13352416.70 13352416.81 0.0279 0.0243

Saturn 31846-03-15 14:24 G 13352645.89 13352646.10 13352646.32 0.0277 0.0028

Saturn 31846-10-30 22:05 G 13352875.27 13352875.42 13352875.58 0.0274 0.0182

Jupiter 31848-01-10 11:31 G 13353311.78 13353311.98 13353312.17 0.0532 0.0145

Mars 31849-08-20 23:02 G 13353900.31 13353900.46 13353900.61 0.1661 0.0860

Jupiter 31853-11-10 06:43 G 13355442.68 13355442.78 13355442.90 0.0493 0.0412

Mars 31854-04-04 07:55 G 13355587.79 13355587.83 13355587.87 0.1865 0.1804

Jupiter 31859-09-15 02:24 G 13357577.47 13357577.60 13357577.75 0.0533 0.0387

Saturn 31861-11-19 12:00 G 13358373.82 13358374.00 13358374.19 0.0283 0.0139

Earth 31862-03-04 16:19 G 13358479.02 13358479.18 13358479.33 0.2658 0.0579

Moon 31862-03-04 19:26 G 13358479.17 13358479.31 13358479.45 0.2663 0.1020 *

Saturn 31862-07-07 04:48 G 13358603.50 13358603.70 13358603.90 0.0286 0.0094

Pluto 31865-11-08 07:26 G 13359823.73 13359823.81 13359823.95 0.0065 0.0056

Pluto 31866-06-21 12:00 G 13360048.80 13360049.00 13360049.23 0.0065 0.0011

Uranus 31866-06-24 06:00 G 13360051.67 13360051.75 13360051.83 0.0140 0.0129

Pluto 31867-02-01 16:19 G 13360274.01 13360274.18 13360274.38 0.0066 0.0036

Uranus 31867-02-05 14:38 G 13360277.96 13360278.11 13360278.26 0.0140 0.0097

Uranus 31867-09-19 23:17 G 13360504.29 13360504.47 13360504.67 0.0140 0.0065

Uranus 31868-05-03 08:24 G 13360730.64 13360730.85 13360731.06 0.0141 0.0033

Uranus 31868-12-15 17:45 G 13360957.03 13360957.24 13360957.46 0.0141 0.0001

Uranus 31869-07-30 03:07 G 13361183.42 13361183.63 13361183.85 0.0141 0.0034

Uranus 31870-03-13 12:29 G 13361409.84 13361410.02 13361410.22 0.0141 0.0068

Uranus 31870-10-25 22:19 G 13361636.29 13361636.43 13361636.59 0.0142 0.0101

Uranus 31871-06-09 08:09 G 13361862.79 13361862.84 13361862.92 0.0142 0.0135

Saturn 31875-02-08 08:09 G 13363202.71 13363202.84 13363202.97 0.0279 0.0219

Saturn 31875-09-25 17:45 G 13363432.03 13363432.24 13363432.46 0.0277 0.0007

Saturn 31876-05-12 01:26 G 13363661.43 13363661.56 13363661.70 0.0275 0.0206

Jupiter 31877-11-12 13:12 G 13364210.88 13364211.05 13364211.23 0.0495 0.0251

Mars 31881-08-19 19:41 G 13365587.21 13365587.32 13365587.44 0.1671 0.1251

Jupiter 31883-09-18 05:17 G 13366346.63 13366346.72 13366346.82 0.0531 0.0465

Jupiter 31889-07-18 15:36 G 13368476.96 13368477.15 13368477.34 0.0494 0.0174

Saturn 31891-06-01 21:07 G 13369160.19 13369160.38 13369160.58 0.0283 0.0102

Saturn 31892-01-17 14:09 G 13369389.90 13369390.09 13369390.28 0.0286 0.0133

Jupiter 31895-05-23 17:31 G 13370612.03 13370612.23 13370612.43 0.0532 0.0085

Saturn 31904-08-21 16:48 G 13373989.05 13373989.20 13373989.36 0.0279 0.0183

Saturn 31905-04-08 02:09 G 13374218.38 13374218.59 13374218.80 0.0276 0.0032

Neptune 31905-11-15 01:41 G 13374439.47 13374439.57 13374439.68 0.0089 0.0077

Saturn 31905-11-23 09:21 G 13374447.79 13374447.89 13374448.00 0.0274 0.0239

Uranus 31906-02-28 23:02 G 13374545.37 13374545.46 13374545.58 0.0139 0.0122

Neptune 31906-06-28 14:24 G 13374664.96 13374665.10 13374665.28 0.0089 0.0060

Uranus 31906-10-13 07:41 G 13374771.67 13374771.82 13374772.00 0.0138 0.0091

Neptune 31907-02-09 03:36 G 13374890.47 13374890.65 13374890.86 0.0089 0.0042

Uranus 31907-05-27 16:05 G 13374997.99 13374998.17 13374998.38 0.0138 0.0060

Neptune 31907-09-22 16:48 G 13375115.99 13375116.20 13375116.42 0.0089 0.0024

Uranus 31908-01-09 00:29 G 13375224.31 13375224.52 13375224.74 0.0138 0.0028

Neptune 31908-05-05 05:45 G 13375341.53 13375341.74 13375341.97 0.0089 0.0007

Uranus 31908-08-22 08:53 G 13375450.65 13375450.87 13375451.09 0.0138 0.0004

Neptune 31908-12-16 18:57 G 13375567.07 13375567.29 13375567.51 0.0089 0.0011

Uranus 31909-04-05 16:33 G 13375676.98 13375677.19 13375677.41 0.0137 0.0035

Neptune 31909-07-30 07:41 G 13375792.63 13375792.82 13375793.04 0.0089 0.0029

Uranus 31909-11-18 00:14 G 13375903.33 13375903.51 13375903.71 0.0137 0.0065

Neptune 31910-03-12 20:24 G 13376018.19 13376018.35 13376018.56 0.0089 0.0047

Uranus 31910-07-02 07:41 G 13376129.69 13376129.82 13376130.00 0.0137 0.0096

Neptune 31910-10-24 09:36 G 13376243.76 13376243.90 13376244.06 0.0089 0.0064

Uranus 31911-02-13 15:07 G 13376356.07 13376356.13 13376356.24 0.0137 0.0126

Neptune 31911-06-06 22:05 G 13376469.36 13376469.42 13376469.53 0.0089 0.0082

Mars 31915-06-19 09:50 G 13377942.79 13377942.91 13377943.04 0.1658 0.1149

Mars 31920-01-31 12:00 G 13379629.87 13379630.00 13379630.14 0.1870 0.1142

Saturn 31920-12-13 03:50 G 13379946.45 13379946.66 13379946.86 0.0284 0.0071

Saturn 31921-07-30 20:53 G 13380176.20 13380176.37 13380176.55 0.0286 0.0165

Jupiter 31925-03-27 01:26 G 13381511.36 13381511.56 13381511.76 0.0494 0.0073

Jupiter 31931-01-30 11:17 G 13383646.79 13383646.97 13383647.15 0.0532 0.0234

Saturn 31934-03-03 21:07 G 13384775.21 13384775.38 13384775.56 0.0279 0.0156

Saturn 31934-10-19 06:14 G 13385004.55 13385004.76 13385004.97 0.0276 0.0059

Saturn 31935-06-05 13:26 G 13385234.01 13385234.06 13385234.11 0.0274 0.0264

Jupiter 31936-11-30 01:41 G 13385777.44 13385777.57 13385777.72 0.0494 0.0360

Jupiter 31942-10-05 01:26 G 13387912.39 13387912.56 13387912.73 0.0533 0.0304

Mars 31947-06-18 06:14 G 13389629.62 13389629.76 13389629.90 0.1668 0.0936

Saturn 31949-11-07 21:50 G 13390503.34 13390503.41 13390503.50 0.0281 0.0259

Saturn 31950-06-25 13:26 G 13390732.85 13390733.06 13390733.28 0.0284 0.0032

Uranus 31950-10-06 21:50 G 13390836.29 13390836.41 13390836.55 0.0140 0.0111

Saturn 31951-02-10 06:57 G 13390962.65 13390962.79 13390962.94 0.0287 0.0205

Uranus 31951-05-21 06:29 G 13391062.61 13391062.77 13391062.97 0.0140 0.0079

Uranus 31952-01-02 15:50 G 13391288.96 13391289.16 13391289.37 0.0140 0.0046

Uranus 31952-08-16 00:57 G 13391515.33 13391515.54 13391515.76 0.0141 0.0014

Uranus 31953-03-30 10:05 G 13391741.71 13391741.92 13391742.14 0.0141 0.0020

Uranus 31953-11-11 19:26 G 13391968.12 13391968.31 13391968.52 0.0141 0.0053

Pluto 31954-02-20 13:41 G 13392068.86 13392069.07 13392069.29 0.0079 0.0014

Uranus 31954-06-26 05:02 G 13392194.55 13392194.71 13392194.90 0.0141 0.0087

Pluto 31954-10-03 23:17 G 13392294.36 13392294.47 13392294.59 0.0079 0.0067

Uranus 31955-02-07 15:07 G 13392421.03 13392421.13 13392421.25 0.0142 0.0120

Jupiter 31960-12-02 10:19 G 13394545.78 13394545.93 13394546.09 0.0495 0.0315

Saturn 31963-09-14 06:29 G 13395561.58 13395561.77 13395561.96 0.0278 0.0118

Saturn 31964-04-30 15:07 G 13395790.94 13395791.13 13395791.33 0.0276 0.0095

Jupiter 31966-10-07 23:31 G 13396681.45 13396681.48 13396681.53 0.0532 0.0518

Jupiter 31972-08-07 12:00 G 13398811.80 13398812.00 13398812.20 0.0494 0.0112

Jupiter 31978-06-12 14:38 G 13400946.91 13400947.11 13400947.31 0.0533 0.0014

Saturn 31979-05-21 05:17 G 13401289.61 13401289.72 13401289.86 0.0282 0.0227

Saturn 31980-01-05 21:07 G 13401519.17 13401519.38 13401519.60 0.0285 0.0005

Saturn 31980-08-22 14:38 G 13401749.01 13401749.11 13401749.24 0.0287 0.0239

Mars 31981-04-15 21:21 G 13401985.30 13401985.39 13401985.47 0.1655 0.1431

Earth 31983-09-05 02:24 G 13402857.44 13402857.60 13402857.75 0.2673 0.0835

Moon 31983-09-05 08:24 G 13402857.70 13402857.85 13402857.99 0.2672 0.1128 *

Mars 31985-11-27 16:05 G 13403672.00 13403672.17 13403672.33 0.1874 0.0469

Neptune 31989-03-26 09:21 G 13404886.79 13404886.89 13404887.03 0.0088 0.0074

Uranus 31989-10-29 07:41 G 13405103.77 13405103.82 13405103.88 0.0139 0.0134

Neptune 31989-11-06 22:33 G 13405112.28 13405112.44 13405112.62 0.0088 0.0057

Uranus 31990-06-12 16:19 G 13405330.05 13405330.18 13405330.34 0.0139 0.0103

Neptune 31990-06-20 11:31 G 13405337.80 13405337.98 13405338.19 0.0088 0.0040

Uranus 31991-01-25 00:57 G 13405556.37 13405556.54 13405556.74 0.0138 0.0072

Neptune 31991-02-01 00:29 G 13405563.32 13405563.52 13405563.75 0.0088 0.0023

Moon 31991-09-02 19:26 G 13405777.26 13405777.31 13405777.35 0.2667 0.2562

Uranus 31991-09-08 09:21 G 13405782.69 13405782.89 13405783.11 0.0138 0.0040

Neptune 31991-09-14 13:55 G 13405788.85 13405789.08 13405789.30 0.0088 0.0005

Uranus 31992-04-21 17:45 G 13406009.02 13406009.24 13406009.46 0.0138 0.0009

Neptune 31992-04-27 02:38 G 13406014.40 13406014.61 13406014.83 0.0088 0.0013

Uranus 31992-12-04 01:55 G 13406235.36 13406235.58 13406235.80 0.0138 0.0023

Neptune 31992-12-08 15:36 G 13406239.95 13406240.15 13406240.36 0.0088 0.0030

Saturn 31993-03-26 11:02 G 13406347.76 13406347.96 13406348.16 0.0278 0.0090

Uranus 31993-07-18 09:50 G 13406461.71 13406461.91 13406462.12 0.0137 0.0054

Neptune 31993-07-22 04:48 G 13406465.52 13406465.70 13406465.89 0.0088 0.0048

Saturn 31993-11-10 19:41 G 13406577.13 13406577.32 13406577.51 0.0276 0.0122

Uranus 31994-03-01 17:31 G 13406688.07 13406688.23 13406688.41 0.0137 0.0084

Neptune 31994-03-04 17:31 G 13406691.10 13406691.23 13406691.39 0.0088 0.0066

Uranus 31994-10-14 01:12 G 13406914.44 13406914.55 13406914.67 0.0137 0.0114

Neptune 31994-10-16 06:43 G 13406916.71 13406916.78 13406916.86 0.0089 0.0083

33RD MILLENNIUM CE

This is a list of transits of Venus in the 33rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter	32008-04-14 19:55 G	13411846.14	13411846.33	13411846.53	0.0494	0.0124
Saturn	32008-11-30 14:09 G	13412075.94	13412076.09	13412076.25	0.0282	0.0190
Saturn	32009-07-18 06:29 G	13412305.56	13412305.77	13412305.98	0.0285	0.0041
Saturn	32010-03-05 00:29 G	13412535.47	13412535.52	13412535.57	0.0287	0.0279
Mars	32013-04-14 17:45 G	13413672.08	13413672.24	13413672.40	0.1665	0.0654
Jupiter	32014-02-18 05:17 G	13413981.55	13413981.72	13413981.89	0.0532	0.0285
Jupiter	32019-12-19 22:48 G	13416112.29	13416112.45	13416112.62	0.0493	0.0296
Saturn	32022-02-19 10:33 G	13416904.90	13416904.94	13416905.00	0.0280	0.0270
Saturn	32022-10-06 20:53 G	13417134.16	13417134.37	13417134.57	0.0278	0.0053
Saturn	32023-05-24 04:48 G	13417363.53	13417363.70	13417363.88	0.0275	0.0159
Jupiter	32025-10-23 18:43 G	13418247.10	13418247.28	13418247.46	0.0533	0.0257
Uranus	32034-06-06 05:31 G	13421394.65	13421394.73	13421394.84	0.0139	0.0124
Uranus	32035-01-18 14:24 G	13421620.94	13421621.10	13421621.27	0.0140	0.0092
Uranus	32035-09-01 23:02 G	13421847.28	13421847.46	13421847.67	0.0140	0.0060
Uranus	32036-04-15 08:09 G	13422073.63	13422073.84	13422074.06	0.0140	0.0028
Uranus	32036-11-27 17:31 G	13422300.01	13422300.23	13422300.44	0.0141	0.0006
Uranus	32037-07-12 02:38 G	13422526.41	13422526.61	13422526.83	0.0141	0.0039
Uranus	32038-02-23 12:00 G	13422752.83	13422753.00	13422753.20	0.0141	0.0073
Saturn	32038-06-12 22:33 G	13422862.27	13422862.44	13422862.63	0.0283	0.0156
Uranus	32038-10-07 21:36 G	13422979.27	13422979.40	13422979.56	0.0141	0.0106
Saturn	32039-01-28 14:53 G	13423091.92	13423092.12	13423092.33	0.0285	0.0076
Uranus	32039-05-22 07:41 G	13423205.79	13423205.82	13423205.87	0.0142	0.0139
Jupiter	32043-12-22 05:31 G	13424880.60	13424880.73	13424880.87	0.0494	0.0369
Saturn	32051-09-01 15:50 G	13427691.06	13427691.16	13427691.27	0.0279	0.0240
Mars	32051-09-24 20:09 G	13427714.17	13427714.34	13427714.51	0.1878	0.0216
Saturn	32052-04-18 01:41 G	13427920.36	13427920.57	13427920.79	0.0277	0.0024
Saturn	32052-12-03 09:36 G	13428149.75	13428149.90	13428150.06	0.0275	0.0186
Jupiter	32055-08-27 06:14 G	13429146.55	13429146.76	13429146.96	0.0494	0.0064
Jupiter	32061-07-01 12:57 G	13431281.84	13431282.04	13431282.25	0.0532	0.0065
Jupiter	32067-05-02 08:38 G	13433412.82	13433412.86	13433412.89	0.0493	0.0484

Saturn 32067-12-24 06:29 G 13433648.58 13433648.77 13433648.96 0.0283 0.0120

Saturn 32068-08-09 23:02 G 13433878.27 13433878.46 13433878.66 0.0286 0.0114

Neptune 32070-02-16 10:48 G 13434433.90 13434433.95 13434434.02 0.0089 0.0085

Neptune 32070-09-29 23:31 G 13434659.36 13434659.48 13434659.64 0.0089 0.0068

Neptune 32071-05-13 12:43 G 13434884.86 13434885.03 13434885.22 0.0089 0.0050

Neptune 32071-12-25 02:09 G 13435110.39 13435110.59 13435110.79 0.0089 0.0032

Neptune 32072-08-06 14:53 G 13435335.91 13435336.12 13435336.35 0.0089 0.0015

Jupiter 32073-03-06 00:14 G 13435547.43 13435547.51 13435547.59 0.0533 0.0491

Neptune 32073-03-20 04:05 G 13435561.45 13435561.67 13435561.89 0.0089 0.0003

Neptune 32073-10-31 16:48 G 13435787.00 13435787.20 13435787.42 0.0089 0.0021

Uranus 32074-02-10 00:57 G 13435888.42 13435888.54 13435888.66 0.0139 0.0115

Neptune 32074-06-14 06:00 G 13436012.55 13436012.75 13436012.95 0.0089 0.0038

Uranus 32074-09-24 09:36 G 13436114.73 13436114.90 13436115.08 0.0139 0.0084

Neptune 32075-01-25 18:43 G 13436238.13 13436238.28 13436238.47 0.0089 0.0056

Uranus 32075-05-08 18:00 G 13436341.06 13436341.25 13436341.47 0.0138 0.0053

Neptune 32075-09-08 07:26 G 13436463.72 13436463.81 13436463.96 0.0089 0.0074

Uranus 32075-12-21 02:38 G 13436567.40 13436567.61 13436567.83 0.0138 0.0021

Uranus 32076-08-03 11:02 G 13436793.74 13436793.96 13436794.18 0.0138 0.0011

Uranus 32077-03-17 18:57 G 13437020.09 13437020.29 13437020.51 0.0138 0.0042

Uranus 32077-10-30 02:53 G 13437246.44 13437246.62 13437246.81 0.0137 0.0072

Uranus 32078-06-13 10:33 G 13437472.81 13437472.94 13437473.10 0.0137 0.0103

Uranus 32079-01-25 18:00 G 13437699.22 13437699.25 13437699.32 0.0137 0.0133

Mars 32079-02-10 04:33 G 13437714.52 13437714.69 13437714.86 0.1662 0.0359

Saturn 32081-03-14 01:26 G 13438477.42 13438477.56 13438477.71 0.0279 0.0203

Saturn 32081-10-29 11:02 G 13438706.75 13438706.96 13438707.17 0.0277 0.0014

Saturn 32082-06-15 18:14 G 13438936.15 13438936.26 13438936.39 0.0274 0.0222

Jupiter 32091-05-04 16:33 G 13442181.00 13442181.19 13442181.38 0.0494 0.0186

Jupiter 32097-03-09 01:26 G 13444316.41 13444316.56 13444316.71 0.0532 0.0350

Saturn 32097-07-05 14:53 G 13444434.92 13444435.12 13444435.32 0.0284 0.0086

Saturn 32098-02-20 07:41 G 13444664.64 13444664.82 13444665.00 0.0286 0.0148

Jupiter 32103-01-08 18:29 G 13446447.10 13446447.27 13446447.45 0.0493 0.0238

Moon 32105-03-06 17:31 G 13447235.07 13447235.23 13447235.39 0.2652 0.0570

Earth 32105-03-06 18:57 G 13447235.13 13447235.29 13447235.44 0.2658 0.0598 *

Jupiter 32108-11-12 17:17 G 13448582.03 13448582.22 13448582.41 0.0533 0.0178

Saturn 32110-09-25 06:43 G 13449263.61 13449263.78 13449263.94 0.0279 0.0173

Saturn 32111-05-12 15:50 G 13449492.95 13449493.16 13449493.37 0.0276 0.0042

Pluto 32111-12-09 12:14 G 13449703.94 13449704.01 13449704.14 0.0065 0.0059

Saturn 32111-12-27 22:48 G 13449722.38 13449722.45 13449722.55 0.0274 0.0249

Pluto 32112-07-21 17:02 G 13449929.00 13449929.21 13449929.43 0.0065 0.0013

Pluto 32113-03-03 21:07 G 13450154.21 13450154.38 13450154.58 0.0066 0.0034

Mars 32117-07-22 23:45 G 13451756.34 13451756.49 13451756.64 0.1882 0.0921

Uranus 32118-02-04 15:50 G 13451953.12 13451953.16 13451953.23 0.0139 0.0134

Uranus 32118-09-19 00:29 G 13452179.38 13452179.52 13452179.67 0.0140 0.0103

Uranus 32119-05-03 09:07 G 13452405.70 13452405.88 13452406.07 0.0140 0.0071

Uranus 32119-12-15 18:00 G 13452632.05 13452632.25 13452632.47 0.0140 0.0039

Uranus 32120-07-29 03:21 G 13452858.42 13452858.64 13452858.85 0.0140 0.0006

Uranus 32121-03-12 12:29 G 13453084.81 13453085.02 13453085.23 0.0141 0.0027

Uranus 32121-10-24 21:36 G 13453311.22 13453311.40 13453311.61 0.0141 0.0060

Uranus 32122-06-08 07:12 G 13453537.65 13453537.80 13453537.97 0.0141 0.0093

Uranus 32123-01-20 17:02 G 13453764.13 13453764.21 13453764.32 0.0142 0.0127

Saturn 32126-06-01 05:45 G 13454991.73 13454991.74 13454991.78 0.0281 0.0279

Jupiter 32127-01-11 01:12 G 13455215.45 13455215.55 13455215.66 0.0495 0.0424

Saturn 32127-01-16 21:07 G 13455221.18 13455221.38 13455221.59 0.0284 0.0053

Saturn 32127-09-03 14:24 G 13455450.94 13455451.10 13455451.27 0.0286 0.0184

Jupiter 32138-09-16 04:05 G 13459481.47 13459481.67 13459481.88 0.0494 0.0006

Saturn 32140-04-06 15:36 G 13460049.97 13460050.15 13460050.34 0.0279 0.0137

Saturn 32140-11-22 00:29 G 13460279.32 13460279.52 13460279.72 0.0276 0.0077

Jupiter 32144-07-21 06:29 G 13461616.58 13461616.77 13461616.97 0.0532 0.0113

Mars 32144-12-08 16:05 G 13461757.00 13461757.17 13461757.34 0.1659 0.0080

Jupiter 32150-05-22 06:00 G 13463747.65 13463747.75 13463747.87 0.0493 0.0416

Neptune 32153-06-28 17:45 G 13464881.18 13464881.24 13464881.34 0.0088 0.0083

Neptune 32154-02-09 06:43 G 13465106.66 13465106.78 13465106.95 0.0088 0.0066

Neptune 32154-09-22 20:09 G 13465332.16 13465332.34 13465332.53 0.0088 0.0048

Neptune 32155-05-06 08:53 G 13465557.68 13465557.87 13465558.09 0.0088 0.0031

Saturn 32155-12-12 13:26 G 13465777.97 13465778.06 13465778.17 0.0282 0.0247

Neptune 32155-12-17 22:05 G 13465783.21 13465783.42 13465783.64 0.0088 0.0013

Jupiter 32156-03-25 20:38 G 13465882.24 13465882.36 13465882.48 0.0534 0.0425

Saturn 32156-07-29 05:17 G 13466007.50 13466007.72 13466007.93 0.0284 0.0020

Neptune 32156-07-30 11:17 G 13466008.75 13466008.97 13466009.19 0.0088 0.0005

Neptune 32157-03-13 00:14 G 13466234.30 13466234.51 13466234.73 0.0088 0.0022

Saturn 32157-03-15 22:33 G 13466237.31 13466237.44 13466237.58 0.0287 0.0218

Uranus 32157-10-11 09:36 G 13466446.82 13466446.90 13466446.99 0.0139 0.0127

Neptune 32157-10-24 12:57 G 13466459.85 13466460.04 13466460.25 0.0088 0.0039

Uranus 32158-05-25 18:29 G 13466673.12 13466673.27 13466673.44 0.0139 0.0096

Neptune 32158-06-07 01:55 G 13466685.43 13466685.58 13466685.76 0.0088 0.0057

Uranus 32159-01-07 03:21 G 13466899.45 13466899.64 13466899.84 0.0139 0.0064

Neptune 32159-01-18 14:38 G 13466911.02 13466911.11 13466911.26 0.0088 0.0075

Uranus 32159-08-21 12:00 G 13467125.79 13467126.00 13467126.22 0.0138 0.0032

Uranus 32160-04-03 20:24 G 13467352.13 13467352.35 13467352.57 0.0138 0.0001

Uranus 32160-11-16 04:33 G 13467578.48 13467578.69 13467578.91 0.0138 0.0030

Uranus 32161-06-30 12:29 G 13467804.84 13467805.02 13467805.23 0.0137 0.0062

Uranus 32162-02-11 20:38 G 13468031.20 13468031.36 13468031.53 0.0137 0.0091

Uranus 32162-09-26 04:05 G 13468257.59 13468257.67 13468257.78 0.0137 0.0122

Saturn 32169-10-17 19:55 G 13470836.14 13470836.33 13470836.53 0.0278 0.0109

Saturn 32170-06-04 04:19 G 13471065.49 13471065.68 13471065.88 0.0275 0.0104

Jupiter 32174-05-24 12:14 G 13472515.83 13472516.01 13472516.19 0.0494 0.0242

Jupiter 32180-03-29 01:12 G 13474651.44 13474651.55 13474651.67 0.0532 0.0436

Mars 32183-05-20 03:50 G 13475798.57 13475798.66 13475798.75 0.1886 0.1617

Saturn 32185-06-23 17:45 G 13476564.12 13476564.24 13476564.39 0.0282 0.0218

Jupiter 32186-01-27 14:53 G 13476781.94 13476782.12 13476782.32 0.0493 0.0179

Saturn 32186-02-08 09:50 G 13476793.70 13476793.91 13476794.12 0.0284 0.0012

Saturn 32186-09-26 03:36 G 13477023.55 13477023.65 13477023.75 0.0287 0.0249

Jupiter 32191-12-02 12:57 G 13478916.85 13478917.04 13478917.24 0.0533 0.0115

Saturn 32199-04-30 03:50 G 13481622.46 13481622.66 13481622.87 0.0278 0.0075

Saturn 32199-12-15 12:14 G 13481851.83 13481852.01 13481852.19 0.0275 0.0137

Pluto 32200-03-22 17:31 G 13481949.03 13481949.23 13481949.46 0.0079 0.0020

Pluto 32200-11-03 03:07 G 13482174.52 13482174.63 13482174.78 0.0079 0.0063

Uranus 32202-05-20 10:05 G 13482737.81 13482737.92 13482738.05 0.0139 0.0114

Uranus 32203-01-01 18:57 G 13482964.12 13482964.29 13482964.47 0.0140 0.0083

Uranus 32203-08-16 03:36 G 13483190.46 13483190.65 13483190.87 0.0140 0.0051

Uranus 32204-03-29 12:43 G 13483416.82 13483417.03 13483417.25 0.0140 0.0019

Uranus 32204-11-10 21:50 G 13483643.20 13483643.41 13483643.63 0.0141 0.0015

Uranus 32205-06-25 06:57 G 13483869.60 13483869.79 13483870.01 0.0141 0.0048

Uranus 32206-02-06 16:48 G 13484096.03 13484096.20 13484096.38 0.0141 0.0081

Uranus 32206-09-21 02:24 G 13484322.48 13484322.60 13484322.73 0.0141 0.0114

Mars 32210-10-07 03:21 G 13485799.47 13485799.64 13485799.81 0.1656 0.0206

Saturn 32215-01-05 00:43 G 13487350.37 13487350.53 13487350.69 0.0283 0.0188

Saturn 32215-08-22 16:48 G 13487579.99 13487580.20 13487580.41 0.0285 0.0043

Saturn 32216-04-08 10:33 G 13487809.91 13487809.94 13487809.99 0.0288 0.0282

Jupiter 32221-10-06 01:41 G 13489816.37 13489816.57 13489816.77 0.0494 0.0073

Moon 32226-09-06 19:55 G 13491613.17 13491613.33 13491613.49 0.2673 0.0189

Earth 32226-09-07 02:09 G 13491613.43 13491613.59 13491613.75 0.2673 0.0587 *

Jupiter 32227-08-11 06:29 G 13491951.58 13491951.77 13491951.96 0.0533 0.0201

Saturn 32228-03-25 21:36 G 13492179.35 13492179.40 13492179.48 0.0279 0.0266

Saturn 32228-11-10 07:41 G 13492408.62 13492408.82 13492409.03 0.0277 0.0048

Saturn 32229-06-27 15:36 G 13492637.98 13492638.15 13492638.32 0.0275 0.0163

Jupiter 32233-06-11 03:07 G 13494082.49 13494082.63 13494082.77 0.0493 0.0352

Neptune 32235-01-03 09:07 G 13494653.77 13494653.88 13494654.00 0.0089 0.0075

Neptune 32235-08-16 21:50 G 13494879.26 13494879.41 13494879.59 0.0089 0.0058

Neptune 32236-03-29 11:02 G 13495104.77 13495104.96 13495105.16 0.0089 0.0040

Neptune 32236-11-09 23:45 G 13495330.29 13495330.49 13495330.71 0.0089 0.0023

Neptune 32237-06-23 12:57 G 13495555.82 13495556.04 13495556.26 0.0089 0.0005

Neptune 32238-02-04 01:55 G 13495781.37 13495781.58 13495781.81 0.0089 0.0013

Neptune 32238-09-17 14:53 G 13496006.92 13496007.12 13496007.34 0.0089 0.0030

Jupiter 32239-04-15 21:36 G 13496217.25 13496217.40 13496217.57 0.0534 0.0331

Neptune 32239-05-01 03:36 G 13496232.48 13496232.65 13496232.85 0.0089 0.0048

Neptune 32239-12-12 16:48 G 13496458.06 13496458.20 13496458.36 0.0089 0.0065

Neptune 32240-07-25 05:31 G 13496683.67 13496683.73 13496683.83 0.0089 0.0083

Uranus 32241-06-11 19:41 G 13497005.32 13497005.32 13497005.36 0.0139 0.0139

Uranus 32242-01-24 04:33 G 13497231.57 13497231.69 13497231.85 0.0139 0.0107

Uranus 32242-09-07 13:41 G 13497457.90 13497458.07 13497458.26 0.0139 0.0075

Uranus 32243-04-21 22:19 G 13497684.23 13497684.43 13497684.65 0.0138 0.0043

Uranus 32243-12-04 06:57 G 13497910.57 13497910.79 13497911.01 0.0138 0.0012

Saturn 32244-07-17 03:21 G 13498136.47 13498136.64 13498136.82 0.0283 0.0162

Uranus 32244-07-17 15:21 G 13498136.93 13498137.14 13498137.36 0.0138 0.0020

Uranus 32245-02-28 23:31 G 13498363.28 13498363.48 13498363.69 0.0138 0.0051

Saturn 32245-03-03 19:41 G 13498366.12 13498366.32 13498366.53 0.0285 0.0071

Uranus 32245-10-13 07:26 G 13498589.64 13498589.81 13498589.99 0.0137 0.0081

Uranus 32246-05-27 15:21 G 13498816.02 13498816.14 13498816.27 0.0137 0.0111

Jupiter 32257-06-13 12:29 G 13502850.87 13502851.02 13502851.18 0.0494 0.0325

Saturn 32257-10-06 04:19 G 13502965.57 13502965.68 13502965.80 0.0280 0.0235

Saturn 32258-05-23 14:09 G 13503194.88 13503195.09 13503195.30 0.0277 0.0018

Saturn 32259-01-07 21:50 G 13503424.27 13503424.41 13503424.57 0.0275 0.0193

Jupiter 32263-04-18 20:53 G 13504986.31 13504986.37 13504986.45 0.0532 0.0499

Jupiter 32269-02-16 14:53 G 13507116.92 13507117.12 13507117.32 0.0494 0.0097

Saturn 32274-01-27 09:21 G 13508922.70 13508922.89 13508923.08 0.0283 0.0133

Saturn 32274-09-14 01:41 G 13509152.37 13509152.57 13509152.77 0.0286 0.0100

Jupiter 32274-12-22 11:45 G 13509251.78 13509251.99 13509252.19 0.0533 0.0036

Mars 32276-08-03 14:53 G 13509841.96 13509842.12 13509842.29 0.1654 0.0484

Mars 32281-03-17 04:19 G 13511528.57 13511528.68 13511528.79 0.1877 0.1442

Uranus	32286-01-17 21:07 G	13513296.30	13513296.38	13513296.49	0.0139	0.0124
Uranus	32286-09-01 06:00 G	13513522.59	13513522.75	13513522.91	0.0139	0.0093
Uranus	32287-04-15 14:38 G	13513748.92	13513749.11	13513749.31	0.0140	0.0061
Saturn	32287-04-18 07:41 G	13513751.69	13513751.82	13513751.97	0.0279	0.0208
Uranus	32287-11-27 23:31 G	13513975.27	13513975.48	13513975.70	0.0140	0.0029
Saturn	32287-12-03 17:17 G	13513981.01	13513981.22	13513981.43	0.0276	0.0009
Uranus	32288-07-11 08:38 G	13514201.64	13514201.86	13514202.08	0.0140	0.0004
Saturn	32288-07-20 00:29 G	13514210.40	13514210.52	13514210.66	0.0274	0.0217
Uranus	32289-02-22 17:45 G	13514428.04	13514428.24	13514428.46	0.0141	0.0037
Uranus	32289-10-07 03:07 G	13514654.45	13514654.63	13514654.83	0.0141	0.0069
Uranus	32290-05-21 12:29 G	13514880.89	13514881.02	13514881.18	0.0141	0.0103
Uranus	32291-01-02 22:19 G	13515107.39	13515107.43	13515107.51	0.0142	0.0136
Saturn	32303-08-10 10:05 G	13519708.73	13519708.92	13519709.12	0.0283	0.0111
Saturn	32304-03-27 02:53 G	13519938.43	13519938.62	13519938.82	0.0286	0.0124
Jupiter	32304-10-26 00:57 G	13520151.35	13520151.54	13520151.74	0.0494	0.0150
Mars	32308-08-03 11:02 G	13521528.91	13521528.96	13521529.00	0.1663	0.1601
Jupiter	32310-08-31 05:17 G	13522286.55	13522286.72	13522286.89	0.0532	0.0283
Jupiter	32316-07-01 04:05 G	13524417.50	13524417.67	13524417.85	0.0494	0.0265
Saturn	32316-10-29 13:12 G	13524537.89	13524538.05	13524538.21	0.0279	0.0181
Saturn	32317-06-15 22:33 G	13524767.23	13524767.44	13524767.65	0.0277	0.0036
Saturn	32318-01-31 05:45 G	13524996.66	13524996.74	13524996.84	0.0274	0.0244
Neptune	32318-05-15 14:53 G	13525101.01	13525101.12	13525101.25	0.0088	0.0073
Neptune	32318-12-27 03:50 G	13525326.50	13525326.66	13525326.84	0.0088	0.0056
Neptune	32319-08-09 16:48 G	13525552.02	13525552.20	13525552.42	0.0088	0.0039
Neptune	32320-03-22 06:00 G	13525777.54	13525777.75	13525777.97	0.0088	0.0022
Neptune	32320-11-02 19:12 G	13526003.08	13526003.30	13526003.52	0.0088	0.0004
Neptune	32321-06-16 07:55 G	13526228.62	13526228.83	13526229.06	0.0088	0.0014
Neptune	32322-01-27 20:53 G	13526454.18	13526454.37	13526454.59	0.0088	0.0031
Jupiter	32322-05-05 19:26 G	13526552.13	13526552.31	13526552.49	0.0533	0.0253
Neptune	32322-09-10 10:05 G	13526679.74	13526679.92	13526680.11	0.0088	0.0048

Neptune 32323-04-23 22:33 G 13526905.32 13526905.44 13526905.61 0.0088 0.0066

Neptune 32323-12-05 11:31 G 13527130.93 13527130.98 13527131.08 0.0088 0.0083

Uranus 32325-09-24 15:36 G 13527790.05 13527790.15 13527790.28 0.0139 0.0117

Uranus 32326-05-09 00:43 G 13528016.36 13528016.53 13528016.71 0.0139 0.0085

Uranus 32326-12-21 09:21 G 13528242.70 13528242.89 13528243.10 0.0139 0.0054

Uranus 32327-08-04 18:14 G 13528469.05 13528469.26 13528469.48 0.0138 0.0022

Uranus 32328-03-18 02:38 G 13528695.40 13528695.61 13528695.83 0.0138 0.0010

Uranus 32328-10-30 10:48 G 13528921.75 13528921.95 13528922.17 0.0138 0.0041

Uranus 32329-06-13 18:57 G 13529148.11 13529148.29 13529148.48 0.0137 0.0071

Uranus 32330-01-26 02:53 G 13529374.48 13529374.62 13529374.77 0.0137 0.0102

Uranus 32330-09-09 10:48 G 13529600.89 13529600.95 13529601.01 0.0137 0.0131

Saturn 32333-02-19 15:21 G 13530494.94 13530495.14 13530495.35 0.0284 0.0084

Saturn 32333-10-07 08:09 G 13530724.67 13530724.84 13530725.03 0.0286 0.0152

Jupiter 32340-07-03 12:43 G 13533185.91 13533186.03 13533186.14 0.0494 0.0407

Mars 32342-06-02 02:09 G 13533884.44 13533884.59 13533884.74 0.1651 0.0762

Saturn 32346-05-11 15:50 G 13535323.99 13535324.16 13535324.34 0.0278 0.0155

Saturn 32346-12-27 00:57 G 13535553.34 13535553.54 13535553.75 0.0276 0.0061

Mars 32347-01-13 07:55 G 13535570.67 13535570.83 13535571.00 0.1881 0.0747

Saturn 32347-08-13 08:09 G 13535782.79 13535782.84 13535782.88 0.0273 0.0267

Moon 32348-03-08 20:38 G 13535991.21 13535991.36 13535991.50 0.2664 0.0247

Earth 32348-03-08 21:21 G 13535991.24 13535991.39 13535991.55 0.2658 0.0629 *

Jupiter 32352-03-08 14:24 G 13537451.89 13537452.10 13537452.30 0.0493 0.0018

Moon 32356-03-06 17:02 G 13538911.20 13538911.21 13538911.22 0.2663 0.2652

Pluto 32358-01-08 20:09 G 13539584.21 13539584.34 13539584.49 0.0065 0.0049

Jupiter 32358-01-11 15:21 G 13539586.94 13539587.14 13539587.34 0.0533 0.0076

Pluto 32358-08-22 00:29 G 13539809.31 13539809.52 13539809.75 0.0065 0.0004

Pluto 32359-04-04 04:19 G 13540034.54 13540034.68 13540034.87 0.0066 0.0043

Saturn 32362-09-01 15:21 G 13541280.93 13541281.14 13541281.35 0.0283 0.0063

Saturn 32363-04-19 08:24 G 13541510.68 13541510.85 13541511.02 0.0286 0.0173

Jupiter 32363-11-12 17:31 G 13541718.14 13541718.23 13541718.33 0.0493 0.0432

Jupiter 32369-09-16 04:05 G 13543852.58 13543852.67 13543852.77 0.0533 0.0465

Uranus 32369-09-18 06:14 G 13543854.74 13543854.76 13543854.83 0.0139 0.0136

Uranus 32370-05-02 15:07 G 13544080.99 13544081.13 13544081.28 0.0139 0.0105

Uranus 32370-12-14 23:31 G 13544307.31 13544307.48 13544307.68 0.0140 0.0074

Uranus 32371-07-29 08:38 G 13544533.66 13544533.86 13544534.07 0.0140 0.0041

Uranus 32372-03-11 17:31 G 13544760.02 13544760.23 13544760.45 0.0140 0.0009

Uranus 32372-10-24 02:38 G 13544986.40 13544986.61 13544986.82 0.0141 0.0024

Uranus 32373-06-07 11:31 G 13545212.80 13545212.98 13545213.19 0.0141 0.0057

Uranus 32374-01-19 21:21 G 13545439.23 13545439.39 13545439.56 0.0141 0.0089

Mars 32374-05-31 21:50 G 13545571.30 13545571.41 13545571.51 0.1660 0.1298

Uranus 32374-09-03 06:43 G 13545665.69 13545665.78 13545665.90 0.0141 0.0122

Saturn 32375-11-21 19:41 G 13546110.14 13546110.32 13546110.51 0.0279 0.0131

Saturn 32376-07-08 04:48 G 13546339.50 13546339.70 13546339.90 0.0276 0.0085

Jupiter 32387-11-15 02:38 G 13550486.43 13550486.61 13550486.79 0.0494 0.0243

Saturn 32391-07-28 04:33 G 13551837.63 13551837.69 13551837.77 0.0281 0.0264

Saturn 32392-03-13 19:41 G 13552067.11 13552067.32 13552067.54 0.0284 0.0037

Saturn 32392-10-29 12:57 G 13552296.89 13552297.04 13552297.19 0.0287 0.0200

Jupiter 32393-09-19 06:14 G 13552621.62 13552621.76 13552621.90 0.0532 0.0377

Neptune 32399-04-07 17:02 G 13554648.16 13554648.21 13554648.31 0.0089 0.0084

Jupiter 32399-07-21 05:17 G 13554752.53 13554752.72 13554752.92 0.0493 0.0176

Neptune 32399-11-19 06:14 G 13554873.63 13554873.76 13554873.92 0.0089 0.0066

Neptune 32400-07-01 19:12 G 13555099.13 13555099.30 13555099.50 0.0089 0.0049

Neptune 32401-02-12 08:24 G 13555324.65 13555324.85 13555325.06 0.0089 0.0031

Neptune 32401-09-25 21:21 G 13555550.18 13555550.39 13555550.61 0.0089 0.0014

Neptune 32402-05-09 10:19 G 13555775.71 13555775.93 13555776.15 0.0089 0.0004

Neptune 32402-12-20 23:31 G 13556001.26 13556001.48 13556001.69 0.0089 0.0021

Neptune 32403-08-03 12:14 G 13556226.82 13556227.01 13556227.22 0.0089 0.0039

Neptune 32404-03-16 01:12 G 13556452.39 13556452.55 13556452.73 0.0089 0.0056

Neptune 32404-10-27 13:55 G 13556677.98 13556678.08 13556678.22 0.0089 0.0074

Jupiter 32405-05-24 22:05 G 13556887.22 13556887.42 13556887.61 0.0533 0.0149

Saturn 32405-06-02 22:19 G 13556896.23 13556896.43 13556896.62 0.0278 0.0105

Saturn 32406-01-18 06:57 G 13557125.60 13557125.79 13557125.99 0.0275 0.0109

Mars 32408-03-29 13:41 G 13557926.94 13557927.07 13557927.21 0.1648 0.1039

Uranus 32409-05-25 02:24 G 13558348.54 13558348.60 13558348.71 0.0139 0.0128

Uranus 32410-01-06 11:45 G 13558574.84 13558574.99 13558575.16 0.0139 0.0095

Uranus 32410-08-20 20:38 G 13558801.18 13558801.36 13558801.57 0.0139 0.0064

Uranus 32411-04-04 05:17 G 13559027.52 13559027.72 13559027.95 0.0138 0.0033

Uranus 32411-11-16 14:09 G 13559253.87 13559254.09 13559254.31 0.0138 0.0001

Uranus 32412-06-29 22:33 G 13559480.23 13559480.44 13559480.65 0.0138 0.0031

Mars 32412-11-09 11:31 G 13559612.81 13559612.98 13559613.16 0.1885 0.0055

Uranus 32413-02-11 06:29 G 13559706.59 13559706.77 13559706.98 0.0138 0.0062

Uranus 32413-09-25 14:38 G 13559932.95 13559933.11 13559933.28 0.0137 0.0092

Uranus 32414-05-09 22:05 G 13560159.34 13560159.42 13560159.54 0.0137 0.0122

Saturn 32421-02-06 03:36 G 13562623.56 13562623.65 13562623.76 0.0281 0.0246

Saturn 32421-09-23 18:57 G 13562853.07 13562853.29 13562853.50 0.0284 0.0018

Saturn 32422-05-11 12:00 G 13563082.87 13563083.00 13563083.14 0.0286 0.0220

Saturn 32434-12-14 00:57 G 13567682.35 13567682.54 13567682.75 0.0279 0.0084

Jupiter 32435-03-28 16:48 G 13567787.00 13567787.20 13567787.40 0.0494 0.0080

Saturn 32435-07-31 09:50 G 13567911.73 13567911.91 13567912.10 0.0276 0.0132

Mars 32440-03-28 09:36 G 13569613.76 13569613.90 13569614.03 0.1657 0.1024

Jupiter 32441-01-30 15:50 G 13569921.97 13569922.16 13569922.35 0.0532 0.0170

Pluto 32446-04-22 00:57 G 13571829.32 13571829.54 13571829.76 0.0079 0.0009

Jupiter 32446-12-01 19:41 G 13572053.17 13572053.32 13572053.47 0.0493 0.0338

Pluto 32446-12-03 10:05 G 13572054.87 13572054.92 13572055.03 0.0079 0.0073

Saturn 32450-08-19 08:09 G 13573409.72 13573409.84 13573409.98 0.0281 0.0220

Saturn 32451-04-05 23:31 G 13573639.27 13573639.48 13573639.69 0.0284 0.0009

Saturn 32451-11-21 16:48 G 13573869.10 13573869.20 13573869.31 0.0287 0.0247

Jupiter 32452-10-05 05:45 G 13574187.59 13574187.74 13574187.89 0.0533 0.0366

Uranus 32453-12-31 00:14 G 13574639.41 13574639.51 13574639.65 0.0139 0.0117

Uranus 32454-08-14 09:07 G 13574865.71 13574865.88 13574866.05 0.0139 0.0085

Uranus 32455-03-28 17:45 G 13575092.04 13575092.24 13575092.44 0.0140 0.0053

Uranus 32455-11-10 02:24 G 13575318.39 13575318.60 13575318.82 0.0140 0.0021

Uranus 32456-06-23 11:17 G 13575544.76 13575544.97 13575545.19 0.0140 0.0012

Uranus 32457-02-04 20:24 G 13575771.15 13575771.35 13575771.57 0.0141 0.0044

Uranus 32457-09-19 05:45 G 13575997.57 13575997.74 13575997.93 0.0141 0.0076

Uranus 32458-05-03 15:07 G 13576224.00 13576224.13 13576224.28 0.0141 0.0109

Saturn 32463-11-08 16:19 G 13578239.18 13578239.18 13578239.21 0.0281 0.0280

Saturn 32464-06-25 03:21 G 13578468.43 13578468.64 13578468.85 0.0278 0.0059

Saturn 32465-02-09 11:45 G 13578697.83 13578697.99 13578698.17 0.0275 0.0155

Earth 32469-09-08 01:26 G 13580369.40 13580369.56 13580369.72 0.2673 0.0299

Moon 32469-09-08 07:12 G 13580369.65 13580369.80 13580369.95 0.2676 0.0901 *

Jupiter 32470-12-04 03:50 G 13580821.51 13580821.66 13580821.82 0.0494 0.0331

Mars 32474-01-25 01:26 G 13581969.46 13581969.56 13581969.66 0.1645 0.1301

Jupiter 32476-10-08 11:17 G 13582956.90 13582956.97 13582957.04 0.0532 0.0496

Mars 32478-09-06 15:21 G 13583654.98 13583655.14 13583655.31 0.1889 0.0675

Saturn 32480-02-29 06:57 G 13584195.64 13584195.79 13584195.93 0.0281 0.0204

Saturn 32480-10-15 22:05 G 13584425.21 13584425.42 13584425.64 0.0284 0.0026

Saturn 32481-06-02 15:21 G 13584655.08 13584655.14 13584655.23 0.0287 0.0265

Jupiter 32482-08-09 07:12 G 13585087.60 13585087.80 13585088.01 0.0494 0.0085

Neptune 32482-08-16 22:19 G 13585095.37 13585095.43 13585095.53 0.0088 0.0082

Neptune 32483-03-30 11:17 G 13585320.84 13585320.97 13585321.14 0.0088 0.0065

Neptune 32483-11-11 00:43 G 13585546.35 13585546.53 13585546.72 0.0088 0.0048

Neptune 32484-06-23 13:41 G 13585771.87 13585772.07 13585772.29 0.0088 0.0031

Neptune 32485-02-04 02:53 G 13585997.40 13585997.62 13585997.84 0.0088 0.0013

Neptune 32485-09-17 15:50 G 13586222.94 13586223.16 13586223.38 0.0088 0.0004

Neptune 32486-05-01 04:48 G 13586448.49 13586448.70 13586448.92 0.0088 0.0021

Neptune 32486-12-12 17:45 G 13586674.05 13586674.24 13586674.44 0.0088 0.0039

Neptune 32487-07-26 06:57 G 13586899.62 13586899.79 13586899.96 0.0088 0.0056

Neptune 32488-03-07 19:26 G 13587125.21 13587125.31 13587125.46 0.0088 0.0074

Jupiter 32488-06-13 01:26 G 13587222.36 13587222.56 13587222.76 0.0532 0.0037

Uranus 32493-01-22 12:57 G 13588907.02 13588907.04 13588907.08 0.0140 0.0138

Saturn 32493-05-20 18:29 G 13589025.19 13589025.27 13589025.35 0.0281 0.0259

Uranus 32493-09-05 22:05 G 13589133.29 13589133.42 13589133.57 0.0139 0.0106

Saturn 32494-01-05 05:31 G 13589254.52 13589254.73 13589254.94 0.0278 0.0038

Uranus 32494-04-20 07:12 G 13589359.62 13589359.80 13589359.99 0.0139 0.0074

Saturn 32494-08-22 13:55 G 13589483.93 13589484.08 13589484.25 0.0276 0.0176

Uranus 32494-12-02 16:05 G 13589585.97 13589586.17 13589586.38 0.0139 0.0043

Uranus 32495-07-17 00:57 G 13589812.32 13589812.54 13589812.76 0.0138 0.0011

Uranus 32496-02-28 09:21 G 13590038.68 13590038.89 13590039.11 0.0138 0.0020

Uranus 32496-10-11 17:31 G 13590265.03 13590265.23 13590265.44 0.0138 0.0051

Uranus 32497-05-26 01:41 G 13590491.40 13590491.57 13590491.75 0.0137 0.0082

Uranus 32498-01-07 09:36 G 13590717.78 13590717.90 13590718.03 0.0137 0.0112

Mars 32506-01-24 20:38 G 13593656.20 13593656.36 13593656.51 0.1654 0.0736

Saturn 32509-09-11 11:31 G 13594981.82 13594981.98 13594982.15 0.0282 0.0177

Saturn 32510-04-29 02:53 G 13595211.42 13595211.62 13595211.84 0.0284 0.0054

Jupiter 32518-04-17 18:57 G 13598122.09 13598122.29 13598122.48 0.0494 0.0172

Saturn 32522-12-01 21:21 G 13599811.28 13599811.39 13599811.51 0.0280 0.0233

Saturn 32523-07-19 08:09 G 13600040.62 13600040.84 13600041.05 0.0278 0.0013

Jupiter 32524-02-20 18:43 G 13600257.11 13600257.28 13600257.45 0.0532 0.0276

Saturn 32524-03-04 16:19 G 13600270.04 13600270.18 13600270.33 0.0275 0.0200

Jupiter 32529-12-21 21:07 G 13602388.21 13602388.38 13602388.56 0.0493 0.0248

Jupiter 32535-10-26 10:48 G 13604522.77 13604522.95 13604523.13 0.0533 0.0247

Uranus 32537-08-31 08:53 G 13605197.80 13605197.87 13605197.96 0.0139 0.0128

Uranus 32538-04-14 17:17 G 13605424.07 13605424.22 13605424.38 0.0139 0.0097

Uranus 32538-11-27 01:26 G 13605650.38 13605650.56 13605650.77 0.0139 0.0067

Saturn 32539-03-24 10:48 G 13605767.78 13605767.95 13605768.13 0.0282 0.0159

Uranus 32539-07-11 10:19 G 13605876.72 13605876.93 13605877.14 0.0140 0.0035

Saturn 32539-11-09 02:24 G 13605997.39 13605997.60 13605997.80 0.0284 0.0072

Mars 32539-11-23 12:57 G 13606011.99 13606012.04 13606012.09 0.1643 0.1573

Uranus 32540-02-22 19:12 G 13606103.08 13606103.30 13606103.51 0.0140 0.0003

Uranus 32540-10-06 04:05 G 13606329.45 13606329.67 13606329.88 0.0140 0.0030

Uranus 32541-05-20 13:12 G 13606555.85 13606556.05 13606556.24 0.0141 0.0062

Uranus 32542-01-01 22:05 G 13606782.28 13606782.42 13606782.60 0.0141 0.0095

Uranus 32542-08-16 07:41 G 13607008.74 13607008.82 13607008.92 0.0141 0.0127

Mars 32544-07-04 18:43 G 13607697.16 13607697.28 13607697.39 0.1893 0.1413

Saturn 32552-06-12 22:48 G 13610597.32 13610597.45 13610597.59 0.0281 0.0214

Saturn 32553-01-28 09:36 G 13610826.69 13610826.90 13610827.11 0.0278 0.0008

Saturn 32553-09-14 18:14 G 13611056.13 13611056.26 13611056.38 0.0276 0.0220

Jupiter 32553-12-24 06:00 G 13611156.65 13611156.75 13611156.86 0.0495 0.0427

Neptune 32564-02-21 14:24 G 13614868.00 13614868.10 13614868.24 0.0089 0.0075

Neptune 32564-10-04 03:36 G 13615093.49 13615093.65 13615093.83 0.0089 0.0057

Neptune 32565-05-17 16:33 G 13615319.00 13615319.19 13615319.40 0.0089 0.0040

Jupiter 32565-08-29 08:38 G 13615422.66 13615422.86 13615423.07 0.0494 0.0014

Neptune 32565-12-29 05:45 G 13615544.53 13615544.74 13615544.96 0.0089 0.0022

Neptune 32566-08-11 18:43 G 13615770.06 13615770.28 13615770.50 0.0089 0.0005

Neptune 32567-03-25 07:26 G 13615995.60 13615995.81 13615996.04 0.0089 0.0013

Neptune 32567-11-05 20:24 G 13616221.15 13616221.35 13616221.56 0.0089 0.0030

Neptune 32568-06-18 09:21 G 13616446.71 13616446.89 13616447.08 0.0089 0.0047

Saturn 32568-10-03 16:05 G 13616553.99 13616554.17 13616554.36 0.0282 0.0131

Neptune 32569-01-29 22:05 G 13616672.29 13616672.42 13616672.59 0.0089 0.0065

Saturn 32569-05-21 07:41 G 13616783.62 13616783.82 13616784.02 0.0285 0.0101

Neptune 32569-09-12 11:17 G 13616897.90 13616897.97 13616898.06 0.0089 0.0082

Jupiter 32571-07-04 03:07 G 13617557.42 13617557.63 13617557.83 0.0532 0.0062

Mars 32571-11-22 08:24 G 13617698.69 13617698.85 13617699.02 0.1652 0.0469

Jupiter 32577-05-04 11:31 G 13619688.87 13619688.98 13619689.09 0.0493 0.0409

Uranus 32577-05-07 06:43 G 13619691.68 13619691.78 13619691.91 0.0140 0.0119

Uranus 32577-12-19 16:05 G 13619918.01 13619918.17 13619918.35 0.0139 0.0087

Uranus 32578-08-03 01:12 G 13620144.36 13620144.55 13620144.76 0.0139 0.0055

Uranus 32579-03-17 10:05 G 13620370.71 13620370.92 13620371.14 0.0139 0.0023

Uranus 32579-10-29 18:43 G 13620597.06 13620597.28 13620597.50 0.0138 0.0009

Uranus 32580-06-12 03:21 G 13620823.43 13620823.64 13620823.85 0.0138 0.0040

Uranus 32581-01-24 11:31 G 13621049.79 13621049.98 13621050.17 0.0138 0.0070

Uranus 32581-09-07 19:26 G 13621276.17 13621276.31 13621276.47 0.0138 0.0101

Saturn 32581-12-24 02:09 G 13621383.44 13621383.59 13621383.75 0.0280 0.0187

Uranus 32582-04-22 03:07 G 13621502.58 13621502.63 13621502.71 0.0137 0.0131

Saturn 32582-08-10 12:43 G 13621612.82 13621613.03 13621613.24 0.0278 0.0034

Jupiter 32583-03-08 18:00 G 13621823.16 13621823.25 13621823.35 0.0533 0.0469

Saturn 32583-03-27 20:53 G 13621842.28 13621842.37 13621842.47 0.0275 0.0245

Earth 32591-03-10 23:45 G 13624747.34 13624747.49 13624747.65 0.2658 0.0616

Moon 32591-03-11 03:07 G 13624747.48 13624747.63 13624747.77 0.2653 0.1227 *

Saturn 32598-04-15 16:05 G 13627339.98 13627340.17 13627340.37 0.0282 0.0112

Saturn 32598-12-01 07:41 G 13627569.63 13627569.82 13627570.01 0.0285 0.0120

Jupiter 32601-05-07 20:24 G 13628457.17 13628457.35 13628457.52 0.0494 0.0262

Pluto 32604-02-09 03:36 G 13629464.49 13629464.65 13629464.84 0.0065 0.0040

Pluto 32604-09-21 08:09 G 13629689.62 13629689.84 13629690.06 0.0065 0.0006

Pluto 32605-05-04 12:00 G 13629914.89 13629915.00 13629915.15 0.0066 0.0053

Jupiter 32607-03-12 22:19 G 13630592.30 13630592.43 13630592.57 0.0532 0.0389

Saturn 32611-07-07 03:36 G 13632169.49 13632169.65 13632169.82 0.0281 0.0167

Saturn 32612-02-21 14:09 G 13632398.89 13632399.09 13632399.30 0.0278 0.0054

Saturn 32612-10-07 22:33 G 13632628.39 13632628.44 13632628.50 0.0276 0.0265

Jupiter 32613-01-10 21:50 G 13632723.22 13632723.41 13632723.61 0.0494 0.0161

Jupiter 32618-11-15 13:12 G 13634857.86 13634858.05 13634858.25 0.0532 0.0141

Uranus 32621-05-01 19:12 G 13635756.30 13635756.30 13635756.32 0.0139 0.0138

Uranus 32621-12-14 03:21 G 13635982.52 13635982.64 13635982.79 0.0139 0.0108

Uranus 32622-07-28 11:45 G 13636208.82 13636208.99 13636209.18 0.0139 0.0077

Uranus 32623-03-11 20:09 G 13636435.14 13636435.34 13636435.55 0.0140 0.0046

Uranus 32623-10-24 04:48 G 13636661.48 13636661.70 13636661.92 0.0140 0.0014

Uranus 32624-06-06 13:26 G 13636887.85 13636888.06 13636888.28 0.0140 0.0018

Uranus 32625-01-18 22:19 G 13637114.24 13637114.43 13637114.65 0.0140 0.0051

Uranus 32625-09-02 07:26 G 13637340.65 13637340.81 13637341.00 0.0141 0.0083

Uranus 32626-04-16 16:33 G 13637567.08 13637567.19 13637567.33 0.0141 0.0115

Saturn 32627-10-27 22:19 G 13638126.23 13638126.43 13638126.64 0.0282 0.0081

Saturn 32628-06-13 14:09 G 13638355.92 13638356.09 13638356.27 0.0285 0.0152

Mars 32637-09-19 20:09 G 13641741.16 13641741.34 13641741.51 0.1649 0.0199

Saturn 32641-01-16 08:09 G 13642955.66 13642955.84 13642956.02 0.0280 0.0138

Saturn 32641-09-02 18:29 G 13643185.07 13643185.27 13643185.47 0.0277 0.0082

Mars 32642-05-02 20:09 G 13643427.28 13643427.34 13643427.41 0.1883 0.1729

Neptune 32647-07-03 18:29 G 13645315.18 13645315.27 13645315.41 0.0088 0.0074

Neptune 32648-02-14 07:55 G 13645540.67 13645540.83 13645541.00 0.0088 0.0057

Jupiter 32648-09-18 09:21 G 13645757.69 13645757.89 13645758.09 0.0494 0.0092

Neptune 32648-09-26 20:53 G 13645766.18 13645766.37 13645766.57 0.0088 0.0040

Neptune 32649-05-10 09:50 G 13645991.70 13645991.91 13645992.13 0.0088 0.0023

Neptune 32649-12-21 23:02 G 13646217.24 13646217.46 13646217.68 0.0088 0.0005

Neptune 32650-08-04 12:00 G 13646442.79 13646443.00 13646443.23 0.0088 0.0012

Neptune 32651-03-18 00:57 G 13646668.34 13646668.54 13646668.76 0.0088 0.0030

Neptune 32651-10-29 13:55 G 13646893.90 13646894.08 13646894.28 0.0088 0.0047

Neptune 32652-06-11 03:07 G 13647119.48 13647119.63 13647119.79 0.0088 0.0064

Neptune 32653-01-22 16:05 G 13647345.09 13647345.17 13647345.26 0.0088 0.0081

Jupiter 32654-07-24 06:29 G 13647892.58 13647892.77 13647892.97 0.0532 0.0172

Saturn 32657-05-08 23:45 G 13648912.28 13648912.49 13648912.70 0.0282 0.0060

Saturn 32657-12-24 15:36 G 13649141.98 13649142.15 13649142.32 0.0285 0.0174

Jupiter 32660-05-24 12:14 G 13650023.85 13650024.01 13650024.16 0.0493 0.0325

Uranus 32661-01-05 15:07 G 13650250.08 13650250.13 13650250.23 0.0140 0.0131

Uranus 32661-08-20 00:43 G 13650476.39 13650476.53 13650476.70 0.0139 0.0099

Uranus 32662-04-03 10:05 G 13650702.73 13650702.92 13650703.11 0.0139 0.0067

Uranus 32662-11-15 18:57 G 13650929.08 13650929.29 13650929.51 0.0139 0.0035

Uranus 32663-06-30 04:05 G 13651155.45 13651155.67 13651155.89 0.0139 0.0004

Uranus 32664-02-11 12:29 G 13651381.81 13651382.02 13651382.24 0.0138 0.0028

Uranus 32664-09-24 20:38 G 13651608.17 13651608.36 13651608.57 0.0138 0.0059

Uranus 32665-05-09 05:02 G 13651834.55 13651834.71 13651834.88 0.0138 0.0089

Uranus 32665-12-21 12:29 G 13652060.94 13652061.02 13652061.15 0.0137 0.0120

Jupiter 32666-03-28 21:50 G 13652158.26 13652158.41 13652158.56 0.0533 0.0355

Saturn 32670-07-29 09:36 G 13653741.71 13653741.90 13653742.09 0.0280 0.0118

Saturn 32671-03-15 19:55 G 13653971.13 13653971.33 13653971.53 0.0278 0.0102

Jupiter 32684-05-26 19:41 G 13658792.17 13658792.32 13658792.47 0.0495 0.0341

Saturn 32686-04-03 17:02 G 13659469.12 13659469.21 13659469.30 0.0280 0.0251

Saturn 32686-11-19 06:57 G 13659698.58 13659698.79 13659699.00 0.0282 0.0027

Saturn 32687-07-06 22:48 G 13659928.32 13659928.45 13659928.61 0.0285 0.0208

Jupiter 32690-03-31 22:05 G 13660927.33 13660927.42 13660927.51 0.0531 0.0474

Pluto 32691-10-09 23:45 G 13661484.42 13661484.49 13661484.58 0.0079 0.0074

Pluto 32692-05-22 09:50 G 13661709.70 13661709.91 13661710.14 0.0079 0.0009

Jupiter 32696-01-30 22:19 G 13663058.23 13663058.43 13663058.63 0.0494 0.0078

Saturn 32700-02-08 15:07 G 13664527.93 13664528.13 13664528.33 0.0280 0.0087

Saturn 32700-09-26 01:12 G 13664757.37 13664757.55 13664757.74 0.0277 0.0132

Jupiter 32701-12-05 12:57 G 13665192.84 13665193.04 13665193.24 0.0532 0.0056

Mars 32703-07-19 07:41 G 13665783.65 13665783.82 13665783.99 0.1646 0.0077

Uranus 32705-08-14 14:09 G 13666540.99 13666541.09 13666541.22 0.0139 0.0119

Uranus 32706-03-28 22:19 G 13666767.27 13666767.43 13666767.61 0.0139 0.0088

Uranus 32706-11-10 06:29 G 13666993.59 13666993.77 13666993.98 0.0139 0.0058

Uranus 32707-06-24 15:07 G 13667219.92 13667220.13 13667220.35 0.0140 0.0026

Uranus 32708-02-06 00:00 G 13667446.28 13667446.50 13667446.71 0.0140 0.0006

Mars 32708-02-29 00:14 G 13667469.36 13667469.51 13667469.65 0.1888 0.1035

Uranus 32708-09-19 08:38 G 13667672.65 13667672.86 13667673.07 0.0140 0.0038

Uranus 32709-05-03 17:31 G 13667899.05 13667899.23 13667899.42 0.0140 0.0070

Uranus 32709-12-16 02:38 G 13668125.47 13668125.61 13668125.77 0.0141 0.0103

Uranus 32710-07-30 12:00 G 13668351.95 13668352.00 13668352.07 0.0141 0.0135

Moon 32712-09-10 20:24 G 13669125.19 13669125.35 13669125.51 0.2670 0.0660

Earth 32712-09-11 01:12 G 13669125.39 13669125.55 13669125.71 0.2673 0.0051 *

Saturn 32715-10-15 19:41 G 13670255.21 13670255.32 13670255.45 0.0280 0.0228

Saturn 32716-06-01 09:50 G 13670484.70 13670484.91 13670485.12 0.0283 0.0003

Saturn 32717-01-17 01:55 G 13670714.46 13670714.58 13670714.71 0.0285 0.0233

Neptune 32728-05-26 22:19 G 13674862.36 13674862.43 13674862.51 0.0089 0.0083

Neptune 32729-01-07 11:17 G 13675087.84 13675087.97 13675088.13 0.0089 0.0066

Neptune 32729-08-21 00:14 G 13675313.35 13675313.51 13675313.71 0.0089 0.0049

Saturn 32729-08-21 17:31 G 13675314.03 13675314.23 13675314.44 0.0280 0.0064

Neptune 32730-04-03 13:26 G 13675538.86 13675539.06 13675539.27 0.0089 0.0031

Saturn 32730-04-08 03:36 G 13675543.48 13675543.65 13675543.83 0.0277 0.0154

Neptune 32730-11-15 02:24 G 13675764.39 13675764.60 13675764.82 0.0089 0.0014

Neptune 32731-06-28 15:36 G 13675989.93 13675990.15 13675990.37 0.0089 0.0004

Jupiter 32731-10-09 07:12 G 13676092.61 13676092.80 13676093.00 0.0495 0.0164

Neptune 32732-02-09 04:33 G 13676215.48 13676215.69 13676215.91 0.0089 0.0021

Neptune 32732-09-21 17:31 G 13676441.03 13676441.23 13676441.43 0.0089 0.0038

Neptune 32733-05-05 06:00 G 13676666.60 13676666.75 13676666.94 0.0089 0.0056

Neptune 32733-12-16 19:12 G 13676892.19 13676892.30 13676892.43 0.0089 0.0073

Jupiter 32737-08-13 07:26 G 13678227.64 13678227.81 13678227.99 0.0531 0.0267

Jupiter 32743-06-14 09:50 G 13680358.73 13680358.91 13680359.08 0.0494 0.0256

Uranus 32745-04-20 09:36 G 13681034.78 13681034.90 13681035.05 0.0140 0.0111

Saturn 32745-04-27 03:36 G 13681041.51 13681041.65 13681041.81 0.0280 0.0193

Uranus 32745-12-02 19:12 G 13681261.12 13681261.30 13681261.48 0.0139 0.0079

Saturn 32745-12-12 18:00 G 13681271.04 13681271.25 13681271.46 0.0283 0.0034

Uranus 32746-07-17 04:19 G 13681487.48 13681487.68 13681487.89 0.0139 0.0047

Saturn 32746-07-30 10:33 G 13681500.88 13681500.94 13681501.01 0.0286 0.0269

Uranus 32747-02-28 13:12 G 13681713.84 13681714.05 13681714.27 0.0139 0.0016

Uranus 32747-10-12 21:50 G 13681940.20 13681940.41 13681940.63 0.0139 0.0016

Uranus 32748-05-26 06:14 G 13682166.57 13682166.76 13682166.98 0.0138 0.0047

Uranus 32749-01-07 14:24 G 13682392.94 13682393.10 13682393.30 0.0138 0.0078

Jupiter 32749-04-17 20:09 G 13682493.16 13682493.34 13682493.51 0.0532 0.0278

Uranus 32749-08-21 22:48 G 13682619.33 13682619.45 13682619.60 0.0138 0.0108

Uranus 32750-04-05 06:57 G 13682845.79 13682845.79 13682845.79 0.0137 0.0137

Saturn 32758-07-17 12:00 G 13685870.93 13685871.00 13685871.10 0.0282 0.0256

Saturn 32759-03-04 00:00 G 13686100.29 13686100.50 13686100.71 0.0279 0.0031

Saturn 32759-10-19 09:36 G 13686329.75 13686329.90 13686330.06 0.0277 0.0186

Jupiter 32767-06-16 18:14 G 13689127.15 13689127.26 13689127.37 0.0495 0.0413

Mars 32769-05-15 19:26 G 13689826.14 13689826.31 13689826.48 0.1644 0.0344

Mars 32773-12-26 03:21 G 13691511.47 13691511.64 13691511.81 0.1892 0.0304

Saturn 32774-11-07 08:09 G 13691827.68 13691827.84 13691828.02 0.0280 0.0167

Saturn 32775-06-24 22:48 G 13692057.24 13692057.45 13692057.66 0.0283 0.0062

Jupiter 32779-02-19 20:24 G 13693393.14 13693393.35 13693393.55 0.0494 0.0009

Jupiter 32784-12-24 14:24 G 13695527.90 13695528.10 13695528.30 0.0532 0.0043

Saturn 32788-01-27 15:21 G 13696657.03 13696657.14 13696657.27 0.0282 0.0231

Saturn 32788-09-13 03:21 G 13696886.43 13696886.64 13696886.85 0.0279 0.0006

Uranus 32789-04-14 02:09 G 13697099.52 13697099.59 13697099.68 0.0139 0.0128

Saturn 32789-04-30 12:57 G 13697115.90 13697116.04 13697116.18 0.0277 0.0210

Uranus 32789-11-26 10:05 G 13697325.78 13697325.92 13697326.09 0.0139 0.0098

Uranus 32790-07-10 18:14 G 13697552.08 13697552.26 13697552.46 0.0139 0.0067

Jupiter 32790-10-25 20:38 G 13697659.27 13697659.36 13697659.45 0.0494 0.0437

Uranus 32791-02-22 02:53 G 13697778.41 13697778.62 13697778.83 0.0139 0.0036

Uranus 32791-10-06 11:31 G 13698004.76 13698004.98 13698005.19 0.0140 0.0005

Uranus 32792-05-19 19:55 G 13698231.13 13698231.33 13698231.55 0.0140 0.0028

Uranus 32793-01-01 04:48 G 13698457.52 13698457.70 13698457.91 0.0140 0.0061

Uranus 32793-08-15 13:55 G 13698683.93 13698684.08 13698684.26 0.0141 0.0093

Uranus 32794-03-29 23:02 G 13698910.38 13698910.46 13698910.58 0.0141 0.0125

Jupiter 32796-08-29 04:48 G 13699793.63 13699793.70 13699793.78 0.0533 0.0490

Saturn 32804-05-19 16:48 G 13702614.01 13702614.20 13702614.39 0.0281 0.0130

Saturn 32805-01-04 07:26 G 13702843.61 13702843.81 13702844.01 0.0283 0.0099

Neptune 32811-10-06 02:24 G 13705309.54 13705309.60 13705309.69 0.0088 0.0083

Neptune 32812-05-18 15:21 G 13705535.00 13705535.14 13705535.30 0.0088 0.0065

Neptune 32812-12-30 04:19 G 13705760.51 13705760.68 13705760.87 0.0088 0.0049

Neptune 32813-08-12 17:31 G 13705986.03 13705986.23 13705986.44 0.0088 0.0031

Neptune 32814-03-26 06:29 G 13706211.56 13706211.77 13706211.99 0.0088 0.0014

Jupiter 32814-10-28 05:31 G 13706427.55 13706427.73 13706427.91 0.0494 0.0233

Neptune 32814-11-06 19:41 G 13706437.10 13706437.32 13706437.54 0.0088 0.0003

Neptune 32815-06-20 08:24 G 13706662.65 13706662.85 13706663.08 0.0088 0.0021

Neptune 32816-01-31 21:21 G 13706888.20 13706888.39 13706888.60 0.0088 0.0038

Neptune 32816-09-13 10:33 G 13707113.77 13707113.94 13707114.12 0.0088 0.0055

Neptune 32817-04-26 23:31 G 13707339.36 13707339.48 13707339.62 0.0088 0.0072

Saturn 32817-08-08 23:45 G 13707443.35 13707443.49 13707443.65 0.0282 0.0195

Saturn 32818-03-26 11:17 G 13707672.76 13707672.97 13707673.18 0.0279 0.0029

Saturn 32818-11-10 20:24 G 13707902.26 13707902.35 13707902.45 0.0276 0.0244

Jupiter 32820-09-01 03:36 G 13708562.50 13708562.65 13708562.81 0.0532 0.0330

Jupiter 32826-07-03 07:26 G 13710693.62 13710693.81 13710693.99 0.0494 0.0189

Uranus 32828-12-18 20:24 G 13711593.25 13711593.35 13711593.47 0.0140 0.0121

Uranus 32829-08-02 06:00 G 13711819.59 13711819.75 13711819.92 0.0140 0.0089

Uranus 32830-03-16 15:07 G 13712045.93 13712046.13 13712046.33 0.0139 0.0057

Uranus 32830-10-29 00:00 G 13712272.29 13712272.50 13712272.72 0.0139 0.0026

Uranus 32831-06-12 08:53 G 13712498.65 13712498.87 13712499.09 0.0139 0.0006

Uranus 32832-01-24 17:31 G 13712725.02 13712725.23 13712725.44 0.0138 0.0037

Jupiter 32832-05-06 18:29 G 13712828.09 13712828.27 13712828.46 0.0533 0.0198

Uranus 32832-09-07 01:55 G 13712951.39 13712951.58 13712951.77 0.0138 0.0067

Uranus 32833-04-21 09:50 G 13713177.77 13713177.91 13713178.07 0.0138 0.0098

Saturn 32833-11-29 23:02 G 13713400.26 13713400.46 13713400.66 0.0281 0.0100

Uranus 32833-12-03 17:45 G 13713404.18 13713404.24 13713404.34 0.0138 0.0128

Moon 32834-03-12 22:05 G 13713503.27 13713503.42 13713503.57 0.2662 0.0046

Earth 32834-03-13 02:38 G 13713503.45 13713503.61 13713503.76 0.2658 0.0657 *

Saturn 32834-07-17 13:55 G 13713629.90 13713630.08 13713630.27 0.0284 0.0131

Mars 32835-03-13 07:12 G 13713868.64 13713868.80 13713868.96 0.1641 0.0610

Mars 32839-10-23 06:43 G 13715553.61 13715553.78 13715553.95 0.1896 0.0431

Saturn 32847-02-19 03:50 G 13718229.50 13718229.66 13718229.83 0.0281 0.0167

Saturn 32847-10-06 15:07 G 13718458.92 13718459.13 13718459.34 0.0279 0.0056

Saturn 32848-05-23 00:00 G 13718688.47 13718688.50 13718688.56 0.0276 0.0270

Pluto 32850-03-10 13:55 G 13719344.89 13719345.08 13719345.31 0.0065 0.0021

Jupiter 32850-07-05 13:26 G 13719462.00 13719462.06 13719462.13 0.0495 0.0467

Pluto 32850-10-21 18:29 G 13719570.07 13719570.27 13719570.47 0.0065 0.0026

Jupiter 32862-03-10 15:21 G 13723727.94 13723728.14 13723728.35 0.0494 0.0046

Saturn 32863-06-12 07:55 G 13724186.63 13724186.83 13724187.04 0.0281 0.0062

Saturn 32864-01-27 23:02 G 13724416.30 13724416.46 13724416.64 0.0284 0.0170

Mars 32867-03-12 02:09 G 13725555.51 13725555.59 13725555.68 0.1650 0.1432

Jupiter 32868-01-13 09:36 G 13725862.71 13725862.90 13725863.10 0.0532 0.0102

Uranus 32872-12-12 13:26 G 13727658.05 13727658.06 13727658.09 0.0138 0.0138

Uranus 32873-07-26 21:21 G 13727884.27 13727884.39 13727884.54 0.0139 0.0108

Jupiter 32873-11-13 18:00 G 13727994.12 13727994.25 13727994.39 0.0494 0.0371

Uranus 32874-03-10 05:31 G 13728110.56 13728110.73 13728110.92 0.0139 0.0077

Uranus 32874-10-22 13:41 G 13728336.87 13728337.07 13728337.28 0.0139 0.0046

Uranus 32875-06-05 22:19 G 13728563.21 13728563.43 13728563.64 0.0140 0.0015

Uranus 32876-01-18 06:57 G 13728789.58 13728789.79 13728790.01 0.0140 0.0017

Saturn 32876-08-31 13:12 G 13729015.86 13729016.05 13729016.24 0.0281 0.0129

Uranus 32876-08-31 15:50 G 13729015.96 13729016.16 13729016.36 0.0140 0.0049 *

Uranus 32877-04-15 00:43 G 13729242.36 13729242.53 13729242.71 0.0140 0.0081

Saturn 32877-04-18 00:00 G 13729245.30 13729245.50 13729245.70 0.0278 0.0092

Uranus 32877-11-27 09:50 G 13729468.79 13729468.91 13729469.04 0.0141 0.0113

Jupiter 32879-09-17 23:02 G 13730128.35 13730128.46 13730128.58 0.0533 0.0437

Saturn 32892-05-07 01:55 G 13734743.50 13734743.58 13734743.67 0.0279 0.0253

Saturn 32892-12-22 15:21 G 13734972.93 13734973.14 13734973.35 0.0282 0.0030

Neptune 32893-04-10 18:43 G 13735082.18 13735082.28 13735082.41 0.0089 0.0075

Saturn 32893-08-09 06:43 G 13735202.64 13735202.78 13735202.93 0.0285 0.0203

Neptune 32893-11-22 08:09 G 13735307.67 13735307.84 13735308.01 0.0089 0.0058

Neptune 32894-07-05 20:53 G 13735533.19 13735533.37 13735533.58 0.0089 0.0041

Neptune 32895-02-16 10:05 G 13735758.72 13735758.92 13735759.14 0.0089 0.0023

Neptune 32895-09-29 23:17 G 13735984.25 13735984.47 13735984.69 0.0089 0.0005

Neptune 32896-05-12 12:00 G 13736209.79 13736210.00 13736210.23 0.0089 0.0012

Neptune 32896-12-24 01:12 G 13736435.35 13736435.55 13736435.76 0.0089 0.0029

Neptune 32897-08-06 13:41 G 13736660.91 13736661.07 13736661.28 0.0089 0.0047

Jupiter 32897-11-16 01:12 G 13736762.39 13736762.55 13736762.72 0.0494 0.0290

Neptune 32898-03-20 02:38 G 13736886.48 13736886.61 13736886.78 0.0089 0.0064

Neptune 32898-10-31 15:36 G 13737112.08 13737112.15 13737112.26 0.0089 0.0081

Mars 32901-01-08 18:57 G 13737911.15 13737911.29 13737911.44 0.1639 0.0868

Jupiter 32903-09-22 02:38 G 13738897.49 13738897.61 13738897.74 0.0532 0.0412

Mars 32905-08-20 10:05 G 13739595.79 13739595.92 13739596.06 0.1899 0.1174

Saturn 32906-03-14 18:14 G 13739802.06 13739802.26 13739802.46 0.0280 0.0099

Saturn 32906-10-30 04:48 G 13740031.51 13740031.70 13740031.89 0.0278 0.0121

Jupiter 32909-07-23 01:26 G 13741028.37 13741028.56 13741028.76 0.0494 0.0141

Uranus 32912-08-19 06:29 G 13742151.72 13742151.77 13742151.86 0.0140 0.0132

Uranus 32913-04-02 16:05 G 13742378.03 13742378.17 13742378.33 0.0140 0.0100

Uranus 32913-11-15 01:12 G 13742604.37 13742604.55 13742604.75 0.0139 0.0069

Uranus 32914-06-29 10:48 G 13742830.74 13742830.95 13742831.16 0.0139 0.0037

Uranus 32915-02-10 19:41 G 13743057.10 13743057.32 13743057.54 0.0139 0.0006

Jupiter 32915-05-27 17:17 G 13743163.02 13743163.22 13743163.42 0.0532 0.0118

Uranus 32915-09-25 04:19 G 13743283.46 13743283.68 13743283.89 0.0139 0.0026

Uranus 32916-05-08 12:43 G 13743509.83 13743510.03 13743510.23 0.0138 0.0057

Uranus 32916-12-20 20:53 G 13743736.21 13743736.37 13743736.54 0.0138 0.0087

Uranus 32917-08-04 05:17 G 13743962.61 13743962.72 13743962.83 0.0138 0.0117

Saturn 32921-11-18 10:05 G 13745529.80 13745529.92 13745530.06 0.0279 0.0217

Saturn 32922-07-06 00:14 G 13745759.30 13745759.51 13745759.72 0.0282 0.0009

Saturn 32923-02-20 16:05 G 13745989.06 13745989.17 13745989.28 0.0285 0.0243

Mars 32933-01-07 13:41 G 13749597.95 13749598.07 13749598.19 0.1647 0.1151

Saturn 32935-09-25 03:50 G 13750588.46 13750588.66 13750588.87 0.0280 0.0062

Saturn 32936-05-11 13:55 G 13750817.92 13750818.08 13750818.26 0.0278 0.0159

Pluto 32937-11-09 11:31 G 13751364.80 13751364.98 13751365.17 0.0079 0.0043

Pluto 32938-06-22 21:07 G 13751590.21 13751590.38 13751590.59 0.0079 0.0040

Jupiter 32945-03-30 11:45 G 13754062.79 13754062.99 13754063.19 0.0494 0.0106

Jupiter 32951-02-02 05:45 G 13756197.55 13756197.74 13756197.93 0.0532 0.0165

Saturn 32951-05-31 18:29 G 13756316.11 13756316.27 13756316.43 0.0280 0.0183

Saturn 32952-01-16 08:24 G 13756545.65 13756545.85 13756546.07 0.0283 0.0044

Saturn 32952-09-02 00:29 G 13756775.49 13756775.52 13756775.57 0.0285 0.0279

Earth 32955-09-13 00:29 G 13757881.36 13757881.52 13757881.68 0.2673 0.0259

Moon 32955-09-13 03:36 G 13757881.50 13757881.65 13757881.80 0.2679 0.0404 *

Jupiter 32956-12-03 13:26 G 13758328.91 13758329.06 13758329.22 0.0493 0.0316

Uranus 32957-03-27 08:09 G 13758442.73 13758442.84 13758442.96 0.0139 0.0118

Uranus 32957-11-08 15:50 G 13758669.01 13758669.16 13758669.34 0.0139 0.0088

Uranus 32958-06-23 00:14 G 13758895.32 13758895.51 13758895.71 0.0139 0.0057

Uranus 32959-02-04 08:53 G 13759121.66 13759121.87 13759122.08 0.0139 0.0026

Uranus 32959-09-18 17:17 G 13759348.01 13759348.22 13759348.44 0.0140 0.0006

Uranus 32960-05-02 01:55 G 13759574.38 13759574.58 13759574.80 0.0140 0.0038

Uranus 32960-12-14 11:02 G 13759800.77 13759800.96 13759801.15 0.0140 0.0070

Uranus 32961-07-28 19:55 G 13760027.19 13760027.33 13760027.49 0.0141 0.0102

Uranus 32962-03-12 05:17 G 13760253.67 13760253.72 13760253.79 0.0141 0.0134

Jupiter 32962-10-07 21:21 G 13760463.25 13760463.39 13760463.54 0.0533 0.0359

Saturn 32964-08-19 21:21 G 13761145.31 13761145.39 13761145.48 0.0282 0.0256

Saturn 32965-04-06 09:21 G 13761374.68 13761374.89 13761375.10 0.0280 0.0030

Saturn 32965-11-21 19:12 G 13761604.15 13761604.30 13761604.46 0.0277 0.0187

Mars 32966-11-06 06:57 G 13761953.66 13761953.79 13761953.91 0.1636 0.1131

Neptune 32976-08-20 22:48 G 13765529.36 13765529.45 13765529.59 0.0088 0.0074

Neptune 32977-04-03 11:45 G 13765754.84 13765754.99 13765755.18 0.0088 0.0057

Neptune 32977-11-15 00:43 G 13765980.35 13765980.53 13765980.75 0.0088 0.0041

Neptune 32978-06-28 13:55 G 13766205.88 13766206.08 13766206.31 0.0088 0.0023

Neptune 32979-02-09 03:07 G 13766431.41 13766431.63 13766431.86 0.0088 0.0006

Neptune 32979-09-22 16:05 G 13766656.96 13766657.17 13766657.39 0.0088 0.0011

Neptune 32980-05-05 05:02 G 13766882.51 13766882.71 13766882.92 0.0088 0.0028

Jupiter 32980-12-05 19:26 G 13767097.17 13767097.31 13767097.47 0.0495 0.0339

Saturn 32980-12-11 01:41 G 13767102.40 13767102.57 13767102.76 0.0280 0.0149

Neptune 32980-12-16 18:00 G 13767108.07 13767108.25 13767108.45 0.0088 0.0046

Saturn 32981-07-28 16:19 G 13767331.98 13767332.18 13767332.39 0.0283 0.0081

Neptune 32981-07-30 07:12 G 13767333.65 13767333.80 13767333.96 0.0088 0.0063

Neptune 32982-03-12 20:09 G 13767559.26 13767559.34 13767559.44 0.0088 0.0080

Jupiter 32986-10-10 20:38 G 13769232.26 13769232.36 13769232.46 0.0532 0.0462

Jupiter 32992-08-10 22:33 G 13771363.23 13771363.44 13771363.64 0.0494 0.0078

Saturn 32994-03-02 07:41 G 13771931.69 13771931.82 13771931.96 0.0282 0.0216

Saturn 32994-10-17 19:12 G 13772161.09 13772161.30 13772161.51 0.0279 0.0009

Saturn 32995-06-04 04:33 G 13772390.58 13772390.69 13772390.82 0.0277 0.0225

Uranus 32996-12-01 02:53 G 13772936.50 13772936.62 13772936.77 0.0140 0.0110

Uranus 32997-07-15 12:14 G 13773162.85 13773163.01 13773163.21 0.0140 0.0079

Uranus 32998-02-26 21:50 G 13773389.20 13773389.41 13773389.61 0.0139 0.0047

Jupiter 32998-06-15 10:19 G 13773497.73 13773497.93 13773498.13 0.0532 0.0075

Uranus 32998-10-11 06:43 G 13773615.56 13773615.78 13773615.99 0.0139 0.0015

Mars 32998-11-05 01:41 G 13773640.43 13773640.57 13773640.72 0.1645 0.0893

Uranus 32999-05-25 15:21 G 13773841.92 13773842.14 13773842.36 0.0139 0.0016

Uranus 33000-01-07 00:00 G 13774068.30 13774068.50 13774068.71 0.0138 0.0047

Uranus 33000-08-21 08:24 G 13774294.67 13774294.85 13774295.04 0.0138 0.0078

34TH MILLENNIUM CE

This is a list of transits of Venus in the 34th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 33001-04-04 16:19 G 13774521.06 13774521.18 13774521.33 0.0138 0.0108

Uranus 33001-11-17 00:29 G 13774747.52 13774747.52 13774747.54 0.0138 0.0138

Saturn 33010-06-24 10:19 G 13777888.74 13777888.93 13777889.13 0.0281 0.0114

Saturn 33011-02-09 00:57 G 13778118.35 13778118.54 13778118.74 0.0284 0.0116

Saturn 33023-09-13 13:26 G 13782717.91 13782718.06 13782718.23 0.0281 0.0184

Saturn 33024-04-30 00:43 G 13782947.32 13782947.53 13782947.74 0.0279 0.0040

Saturn 33024-12-15 10:05 G 13783176.84 13783176.92 13783177.00 0.0276 0.0254

Jupiter 33028-04-19 05:45 G 13784397.55 13784397.74 13784397.94 0.0494 0.0154

Mars 33032-09-03 19:12 G 13785996.21 13785996.30 13785996.39 0.1634 0.1373

Jupiter 33034-02-22 04:19 G 13786532.50 13786532.68 13786532.86 0.0532 0.0244

Jupiter 33039-12-24 08:09 G 13788663.67 13788663.84 13788664.02 0.0494 0.0265

Saturn 33040-01-04 16:48 G 13788675.00 13788675.20 13788675.41 0.0281 0.0080

Saturn 33040-08-21 07:55 G 13788904.66 13788904.83 13788905.02 0.0284 0.0152

Uranus 33040-11-25 18:00 G 13789001.18 13789001.25 13789001.33 0.0138 0.0129

Uranus 33041-07-10 01:41 G 13789227.43 13789227.57 13789227.73 0.0139 0.0099

Uranus 33042-02-21 09:36 G 13789453.72 13789453.90 13789454.10 0.0139 0.0069

Uranus 33042-10-05 18:00 G 13789680.04 13789680.25 13789680.46 0.0139 0.0038

Uranus 33043-05-20 02:24 G 13789906.38 13789906.60 13789906.82 0.0139 0.0006

Uranus 33044-01-01 11:02 G 13790132.75 13790132.96 13790133.18 0.0140 0.0025

Uranus 33044-08-14 19:41 G 13790359.13 13790359.32 13790359.53 0.0140 0.0057

Uranus 33045-03-29 04:33 G 13790585.54 13790585.69 13790585.87 0.0140 0.0089

Jupiter 33045-10-27 15:50 G 13790798.00 13790798.16 13790798.33 0.0533 0.0304

Uranus 33045-11-10 13:55 G 13790811.98 13790812.08 13790812.19 0.0141 0.0121

Saturn 33053-03-25 23:17 G 13793504.29 13793504.47 13793504.65 0.0281 0.0147

Saturn 33053-11-10 10:05 G 13793733.71 13793733.92 13793734.12 0.0279 0.0076

Neptune 33057-07-15 01:55 G 13795076.54 13795076.58 13795076.68 0.0089 0.0085

Neptune 33058-02-25 15:36 G 13795302.01 13795302.15 13795302.30 0.0089 0.0066

Neptune 33058-10-09 04:33 G 13795527.52 13795527.69 13795527.88 0.0089 0.0049

Neptune 33059-05-22 17:31 G 13795753.04 13795753.23 13795753.45 0.0089 0.0032

Neptune 33060-01-03 06:57 G 13795978.58 13795978.79 13795979.01 0.0089 0.0014

Neptune 33060-08-15 20:09 G 13796204.12 13796204.34 13796204.56 0.0089 0.0003

Neptune 33061-03-29 09:07 G 13796429.66 13796429.88 13796430.09 0.0089 0.0020

Neptune 33061-11-09 21:36 G 13796655.22 13796655.40 13796655.62 0.0089 0.0038

Neptune 33062-06-23 10:33 G 13796880.79 13796880.94 13796881.13 0.0089 0.0055

Neptune 33063-02-03 23:45 G 13797106.38 13797106.49 13797106.63 0.0089 0.0072

Jupiter 33063-12-26 16:48 G 13797432.08 13797432.20 13797432.31 0.0494 0.0404

Mars 33064-09-02 13:41 G 13797682.91 13797683.07 13797683.23 0.1642 0.0626

Saturn 33068-11-29 11:17 G 13799231.93 13799231.97 13799232.03 0.0279 0.0270

Mars 33069-04-14 15:36 G 13799368.02 13799368.15 13799368.28 0.1894 0.1303

Saturn 33069-07-17 00:43 G 13799461.32 13799461.53 13799461.74 0.0282 0.0047

Jupiter 33069-10-30 16:33 G 13799567.16 13799567.19 13799567.22 0.0532 0.0525

Saturn 33070-03-03 16:05 G 13799691.01 13799691.17 13799691.33 0.0285 0.0186

Jupiter 33075-08-31 18:29 G 13801698.07 13801698.27 13801698.48 0.0494 0.0020

Earth 33077-03-15 04:48 G 13802259.55 13802259.70 13802259.85 0.2658 0.0642

Moon 33077-03-15 10:19 G 13802259.79 13802259.93 13802260.08 0.2657 0.1108 *

Uranus 33080-08-01 11:45 G 13803494.89 13803494.99 13803495.10 0.0140 0.0123

Uranus 33081-03-15 20:53 G 13803721.22 13803721.37 13803721.55 0.0140 0.0091

Jupiter 33081-07-05 08:38 G 13803832.66 13803832.86 13803833.06 0.0533 0.0004

Uranus 33081-10-28 06:29 G 13803947.57 13803947.77 13803947.97 0.0140 0.0059

Uranus 33082-06-11 15:36 G 13804173.94 13804174.15 13804174.37 0.0139 0.0028

Saturn 33082-10-06 04:33 G 13804290.50 13804290.69 13804290.89 0.0280 0.0115

Uranus 33083-01-24 00:43 G 13804400.31 13804400.53 13804400.75 0.0139 0.0004

Saturn 33083-05-23 15:07 G 13804519.94 13804520.13 13804520.33 0.0278 0.0106

Uranus 33083-09-07 09:21 G 13804626.68 13804626.89 13804627.10 0.0139 0.0035

Uranus 33084-04-20 17:31 G 13804853.06 13804853.23 13804853.44 0.0138 0.0067

Uranus 33084-12-03 02:09 G 13805079.44 13805079.59 13805079.75 0.0138 0.0096

Uranus 33085-07-17 10:48 G 13805305.86 13805305.95 13805306.03 0.0138 0.0126

Jupiter 33087-05-06 19:12 G 13805964.22 13805964.30 13805964.39 0.0493 0.0444

Jupiter 33093-03-09 23:31 G 13808098.45 13808098.48 13808098.52 0.0533 0.0524

Pluto 33095-08-28 19:12 G 13809000.18 13809000.30 13809000.47 0.0065 0.0048

Pluto 33096-04-10 00:00 G 13809225.28 13809225.50 13809225.72 0.0065 0.0003

Pluto 33096-11-21 03:50 G 13809450.51 13809450.66 13809450.84 0.0066 0.0044

Saturn 33098-06-11 16:05 G 13810018.07 13810018.17 13810018.28 0.0279 0.0240

Saturn 33099-01-27 05:45 G 13810247.53 13810247.74 13810247.96 0.0282 0.0016

Saturn 33099-09-13 21:21 G 13810477.27 13810477.39 13810477.53 0.0285 0.0219

Jupiter 33111-05-10 04:19 G 13814732.50 13814732.68 13814732.86 0.0494 0.0226

Saturn 33112-04-18 13:26 G 13815076.86 13815077.06 13815077.26 0.0280 0.0080

Saturn 33112-12-03 23:31 G 13815306.30 13815306.48 13815306.67 0.0278 0.0141

Jupiter 33117-03-13 22:33 G 13816867.27 13816867.44 13816867.61 0.0532 0.0296

Jupiter 33123-01-13 06:29 G 13818998.58 13818998.77 13818998.96 0.0494 0.0193

Uranus 33125-03-10 11:31 G 13819785.85 13819785.98 13819786.11 0.0138 0.0110

Uranus 33125-10-22 19:12 G 13820012.13 13820012.30 13820012.48 0.0139 0.0080

Uranus 33126-06-06 03:21 G 13820238.44 13820238.64 13820238.84 0.0139 0.0049

Uranus 33127-01-18 11:45 G 13820464.78 13820464.99 13820465.21 0.0139 0.0018

Uranus 33127-09-01 20:09 G 13820691.13 13820691.34 13820691.56 0.0139 0.0013

Saturn 33127-12-23 23:02 G 13820804.33 13820804.46 13820804.61 0.0280 0.0210

Uranus 33128-04-15 04:48 G 13820917.50 13820917.70 13820917.91 0.0140 0.0045

Saturn 33128-08-09 13:12 G 13821033.84 13821034.05 13821034.26 0.0283 0.0017

Jupiter 33128-11-16 12:29 G 13821132.84 13821133.02 13821133.21 0.0533 0.0237

Uranus 33128-11-27 13:12 G 13821143.89 13821144.05 13821144.25 0.0140 0.0077

Saturn 33129-03-27 05:02 G 13821263.62 13821263.71 13821263.81 0.0285 0.0252

Uranus 33129-07-11 22:33 G 13821370.31 13821370.44 13821370.58 0.0140 0.0108

Uranus 33130-02-23 07:41 G 13821596.82 13821596.82 13821596.84 0.0141 0.0141

Mars 33130-07-02 01:12 G 13821725.38 13821725.55 13821725.72 0.1640 0.0361

Mars 33135-02-10 19:12 G 13823410.13 13823410.30 13823410.47 0.1898 0.0576

Neptune 33140-11-24 07:26 G 13825523.74 13825523.81 13825523.90 0.0088 0.0082

Saturn 33141-03-14 06:00 G 13825633.72 13825633.75 13825633.80 0.0282 0.0276

Neptune 33141-07-07 20:09 G 13825749.21 13825749.34 13825749.51 0.0088 0.0065

Saturn 33141-10-29 18:00 G 13825863.05 13825863.25 13825863.46 0.0280 0.0050

Neptune 33142-02-18 09:07 G 13825974.71 13825974.88 13825975.08 0.0088 0.0049

Saturn 33142-06-16 03:50 G 13826092.50 13826092.66 13826092.83 0.0277 0.0169

Neptune 33142-10-01 22:05 G 13826200.23 13826200.42 13826200.64 0.0088 0.0032

Neptune 33143-05-15 11:02 G 13826425.75 13826425.96 13826426.19 0.0088 0.0015

Neptune 33143-12-27 00:14 G 13826651.29 13826651.51 13826651.73 0.0088 0.0003

Neptune 33144-08-08 12:57 G 13826876.84 13826877.04 13826877.27 0.0088 0.0021

Neptune 33145-03-22 01:55 G 13827102.39 13827102.58 13827102.79 0.0088 0.0037

Neptune 33145-11-02 14:38 G 13827327.96 13827328.11 13827328.31 0.0088 0.0055

Neptune 33146-06-16 03:36 G 13827553.55 13827553.65 13827553.81 0.0088 0.0072

Jupiter 33147-01-15 12:57 G 13827766.98 13827767.04 13827767.12 0.0494 0.0463

Neptune 33147-01-27 16:48 G 13827779.20 13827779.20 13827779.24 0.0088 0.0088

Saturn 33157-07-05 02:24 G 13831590.44 13831590.60 13831590.76 0.0280 0.0183

Saturn 33158-02-19 16:33 G 13831819.98 13831820.19 13831820.40 0.0283 0.0045

Jupiter 33158-09-20 15:50 G 13832032.95 13832033.16 13832033.36 0.0494 0.0047

Saturn 33158-10-07 08:38 G 13832049.83 13832049.86 13832049.90 0.0285 0.0280

Uranus 33164-04-01 19:12 G 13834053.27 13834053.30 13834053.38 0.0140 0.0136

Jupiter 33164-07-25 05:31 G 13834167.53 13834167.73 13834167.93 0.0532 0.0075

Uranus 33164-11-14 05:02 G 13834279.58 13834279.71 13834279.87 0.0140 0.0104

Uranus 33165-06-28 14:53 G 13834505.94 13834506.12 13834506.31 0.0140 0.0071

Uranus 33166-02-10 00:14 G 13834732.30 13834732.51 13834732.72 0.0140 0.0040

Uranus 33166-09-24 09:21 G 13834958.67 13834958.89 13834959.11 0.0139 0.0008

Uranus 33167-05-08 18:14 G 13835185.04 13835185.26 13835185.47 0.0139 0.0023

Uranus 33167-12-21 02:38 G 13835411.42 13835411.61 13835411.82 0.0139 0.0055

Uranus 33168-08-03 11:17 G 13835637.81 13835637.97 13835638.16 0.0138 0.0086

Uranus 33169-03-17 19:55 G 13835864.22 13835864.33 13835864.46 0.0138 0.0115

Jupiter 33170-05-26 18:43 G 13836299.15 13836299.28 13836299.42 0.0494 0.0365

Saturn 33170-09-24 12:57 G 13836419.95 13836420.04 13836420.16 0.0283 0.0245

Saturn 33171-05-12 01:12 G 13836649.34 13836649.55 13836649.76 0.0280 0.0018

Saturn 33171-12-27 10:48 G 13836878.81 13836878.95 13836879.10 0.0277 0.0200

Jupiter 33176-03-29 19:26 G 13838433.21 13838433.31 13838433.41 0.0533 0.0459

Pluto 33183-12-10 22:48 G 13841245.23 13841245.45 13841245.67 0.0079 0.0013

Pluto 33184-07-23 08:24 G 13841470.76 13841470.85 13841470.97 0.0079 0.0069

Saturn 33187-01-15 08:24 G 13842376.68 13842376.85 13842377.03 0.0280 0.0154

Saturn 33187-09-01 22:48 G 13842606.25 13842606.45 13842606.66 0.0283 0.0075

Jupiter 33194-05-29 02:53 G 13845067.46 13845067.62 13845067.78 0.0494 0.0299

Mars 33196-04-28 13:26 G 13845767.88 13845768.06 13845768.23 0.1637 0.0106

Moon 33198-09-14 23:17 G 13846637.31 13846637.47 13846637.63 0.2667 0.0886

Earth 33198-09-15 00:14 G 13846637.35 13846637.51 13846637.66 0.2673 0.0509 *

Jupiter 33200-04-01 22:33 G 13847202.31 13847202.44 13847202.58 0.0532 0.0385

Saturn 33200-04-05 17:31 G 13847206.10 13847206.23 13847206.37 0.0282 0.0215

Saturn 33200-11-21 05:17 G 13847435.51 13847435.72 13847435.93 0.0279 0.0012

Mars 33200-12-07 21:50 G 13847452.24 13847452.41 13847452.59 0.1902 0.0195

Saturn 33201-07-08 14:24 G 13847664.99 13847665.10 13847665.23 0.0276 0.0227

Jupiter 33206-02-01 04:19 G 13849333.49 13849333.68 13849333.88 0.0493 0.0124

Uranus 33208-11-07 21:50 G 13850344.32 13850344.41 13850344.53 0.0138 0.0120

Uranus 33209-06-22 05:45 G 13850570.58 13850570.74 13850570.91 0.0138 0.0090

Uranus 33210-02-03 13:55 G 13850796.89 13850797.08 13850797.28 0.0139 0.0060

Uranus 33210-09-17 22:05 G 13851023.21 13851023.42 13851023.63 0.0139 0.0029

Uranus 33211-05-02 06:29 G 13851249.55 13851249.77 13851249.98 0.0139 0.0003

Jupiter 33211-12-06 14:24 G 13851467.91 13851468.10 13851468.30 0.0533 0.0138

Uranus 33211-12-14 14:53 G 13851475.91 13851476.12 13851476.33 0.0139 0.0033

Uranus 33212-07-27 23:31 G 13851702.29 13851702.48 13851702.68 0.0140 0.0065

Uranus 33213-03-11 08:09 G 13851928.70 13851928.84 13851929.01 0.0140 0.0097

Uranus 33213-10-23 17:02 G 13852155.14 13852155.21 13852155.31 0.0140 0.0129

Saturn 33216-07-27 10:05 G 13853162.73 13853162.92 13853163.11 0.0280 0.0131

Saturn 33217-03-14 00:43 G 13853392.33 13853392.53 13853392.73 0.0283 0.0099

Neptune 33222-05-30 22:48 G 13855296.35 13855296.45 13855296.58 0.0089 0.0076

Neptune 33223-01-11 12:00 G 13855521.85 13855522.00 13855522.18 0.0089 0.0058

Neptune 33223-08-25 01:12 G 13855747.37 13855747.55 13855747.76 0.0089 0.0041

Neptune 33224-04-06 14:24 G 13855972.89 13855973.10 13855973.32 0.0089 0.0023

Neptune 33224-11-18 03:36 G 13856198.43 13856198.65 13856198.87 0.0089 0.0006

Neptune 33225-07-01 16:33 G 13856423.98 13856424.19 13856424.41 0.0089 0.0011

Neptune	33226-02-12 05:31 G	13856649.54	13856649.73	13856649.95	0.0089	0.0029
Neptune	33226-09-25 18:29 G	13856875.10	13856875.27	13856875.47	0.0089	0.0046
Neptune	33227-05-09 07:26 G	13857100.67	13857100.81	13857100.98	0.0089	0.0063
Neptune	33227-12-20 20:38 G	13857326.28	13857326.36	13857326.46	0.0089	0.0080
Saturn	33229-10-16 23:17 G	13857992.31	13857992.47	13857992.63	0.0282	0.0186
Saturn	33230-06-03 10:48 G	13858221.74	13858221.95	13858222.16	0.0279	0.0039
Saturn	33231-01-18 20:09 G	13858451.26	13858451.34	13858451.42	0.0277	0.0255
Jupiter	33241-10-09 16:19 G	13862367.98	13862368.18	13862368.38	0.0494	0.0132
Saturn	33246-02-06 15:21 G	13863948.94	13863949.14	13863949.34	0.0281	0.0103
Saturn	33246-09-24 06:00 G	13864178.56	13864178.75	13864178.94	0.0284	0.0128
Jupiter	33247-08-14 04:48 G	13864502.51	13864502.70	13864502.90	0.0532	0.0158
Uranus	33248-07-14 11:45 G	13864837.89	13864837.99	13864838.12	0.0140	0.0117
Uranus	33249-02-25 21:36 G	13865064.23	13865064.40	13865064.58	0.0140	0.0085
Uranus	33249-10-10 06:57 G	13865290.60	13865290.79	13865291.00	0.0140	0.0054
Uranus	33250-05-24 16:19 G	13865516.97	13865517.18	13865517.40	0.0139	0.0022
Uranus	33251-01-06 01:26 G	13865743.35	13865743.56	13865743.78	0.0139	0.0010
Uranus	33251-08-20 10:33 G	13865969.73	13865969.94	13865970.15	0.0139	0.0041
Uranus	33252-04-02 18:57 G	13866196.12	13866196.29	13866196.49	0.0139	0.0073
Uranus	33252-11-15 03:50 G	13866422.52	13866422.66	13866422.81	0.0138	0.0103
Jupiter	33253-06-14 18:43 G	13866634.12	13866634.28	13866634.45	0.0493	0.0284
Uranus	33253-06-29 12:00 G	13866648.96	13866649.00	13866649.08	0.0138	0.0133
Jupiter	33259-04-18 20:24 G	13868768.21	13868768.35	13868768.50	0.0533	0.0365
Saturn	33259-04-29 02:38 G	13868778.44	13868778.61	13868778.78	0.0281	0.0159
Saturn	33259-12-14 13:41 G	13869007.87	13869008.07	13869008.28	0.0278	0.0066
Mars	33262-02-24 01:12 G	13869810.38	13869810.55	13869810.73	0.1635	0.0163
Mars	33266-10-05 00:57 G	13871494.39	13871494.54	13871494.70	0.1906	0.0958
Saturn	33275-08-19 15:21 G	13874734.94	13874735.14	13874735.35	0.0281	0.0083
Saturn	33276-04-05 06:14 G	13874964.58	13874964.76	13874964.94	0.0284	0.0149
Jupiter	33277-06-17 03:07 G	13875402.50	13875402.63	13875402.76	0.0494	0.0380
Jupiter	33283-04-21 23:02 G	13877537.38	13877537.46	13877537.55	0.0532	0.0476

Saturn 33288-11-08 06:29 G 13879564.59 13879564.77 13879564.96 0.0282 0.0134

Jupiter 33289-02-20 05:45 G 13879668.54 13879668.74 13879668.95 0.0494 0.0035

Saturn 33289-06-25 17:45 G 13879794.04 13879794.24 13879794.44 0.0279 0.0091

Uranus 33292-07-08 09:36 G 13880902.83 13880902.90 13880902.97 0.0138 0.0129

Uranus 33293-02-19 17:02 G 13881129.07 13881129.21 13881129.37 0.0138 0.0100

Uranus 33293-10-04 00:57 G 13881355.36 13881355.54 13881355.74 0.0138 0.0070

Uranus 33294-05-18 09:21 G 13881581.68 13881581.89 13881582.09 0.0139 0.0039

Jupiter 33294-12-25 13:55 G 13881802.88 13881803.08 13881803.28 0.0532 0.0051

Uranus 33294-12-30 17:31 G 13881808.02 13881808.23 13881808.45 0.0139 0.0009

Uranus 33295-08-14 01:55 G 13882034.37 13882034.58 13882034.80 0.0139 0.0023

Uranus 33296-03-27 10:19 G 13882260.74 13882260.93 13882261.14 0.0140 0.0055

Uranus 33296-11-08 18:57 G 13882487.13 13882487.29 13882487.47 0.0140 0.0086

Uranus 33297-06-23 04:05 G 13882713.56 13882713.67 13882713.79 0.0140 0.0117

Jupiter 33300-10-27 08:24 G 13883934.77 13883934.85 13883934.94 0.0494 0.0447

Saturn 33304-07-15 07:12 G 13885291.80 13885291.80 13885291.80 0.0278 0.0278

Saturn 33305-03-01 19:55 G 13885521.12 13885521.33 13885521.54 0.0281 0.0056

Neptune 33305-10-10 05:02 G 13885743.60 13885743.71 13885743.85 0.0088 0.0072

Saturn 33305-10-17 10:48 G 13885750.79 13885750.95 13885751.12 0.0284 0.0176

Neptune 33306-05-23 18:00 G 13885969.09 13885969.25 13885969.43 0.0088 0.0056

Neptune 33307-01-04 07:12 G 13886194.60 13886194.80 13886195.00 0.0088 0.0039

Neptune 33307-08-17 19:55 G 13886420.13 13886420.33 13886420.56 0.0088 0.0022

Neptune 33308-03-30 09:07 G 13886645.66 13886645.88 13886646.10 0.0088 0.0005

Neptune 33308-11-10 21:50 G 13886871.20 13886871.41 13886871.64 0.0088 0.0012

Neptune 33309-06-24 10:48 G 13887096.75 13887096.95 13887097.17 0.0088 0.0029

Neptune 33310-02-04 23:31 G 13887322.31 13887322.48 13887322.69 0.0088 0.0046

Neptune 33310-09-18 12:57 G 13887547.89 13887548.04 13887548.19 0.0088 0.0063

Neptune 33311-05-02 01:41 G 13887773.49 13887773.57 13887773.67 0.0088 0.0080

Saturn 33318-05-22 09:21 G 13890350.70 13890350.89 13890351.09 0.0281 0.0107

Saturn 33319-01-06 20:24 G 13890580.16 13890580.35 13890580.54 0.0278 0.0116

Moon 33320-03-17 01:55 G 13891015.42 13891015.58 13891015.73 0.2658 0.0360

Earth 33320-03-17 07:26 G 13891015.66 13891015.81 13891015.97 0.2658 0.0679 *

Jupiter 33324-10-29 16:48 G 13892703.01 13892703.20 13892703.38 0.0494 0.0216

Mars 33327-12-23 13:12 G 13893852.89 13893853.05 13893853.22 0.1633 0.0415

Jupiter 33330-09-03 09:07 G 13894837.71 13894837.88 13894838.05 0.0532 0.0272

Uranus 33332-03-14 20:38 G 13895396.28 13895396.36 13895396.45 0.0141 0.0129

Mars 33332-08-02 03:50 G 13895536.59 13895536.66 13895536.73 0.1909 0.1740

Uranus 33332-10-27 06:00 G 13895622.61 13895622.75 13895622.93 0.0140 0.0098

Uranus 33333-06-10 15:50 G 13895848.98 13895849.16 13895849.36 0.0140 0.0065

Uranus 33334-01-23 01:26 G 13896075.35 13896075.56 13896075.78 0.0140 0.0033

Saturn 33334-01-25 06:14 G 13896077.69 13896077.76 13896077.83 0.0278 0.0261

Uranus 33334-09-06 10:48 G 13896301.73 13896301.95 13896302.17 0.0139 0.0002

Saturn 33334-09-11 19:12 G 13896307.09 13896307.30 13896307.51 0.0281 0.0037

Uranus 33335-04-20 19:41 G 13896528.11 13896528.32 13896528.54 0.0139 0.0030

Saturn 33335-04-29 10:05 G 13896536.78 13896536.92 13896537.08 0.0284 0.0196

Uranus 33335-12-03 04:33 G 13896754.50 13896754.69 13896754.89 0.0139 0.0061

Jupiter 33336-07-04 19:55 G 13896969.15 13896969.33 13896969.52 0.0494 0.0197

Uranus 33336-07-16 13:12 G 13896980.90 13896981.05 13896981.23 0.0138 0.0092

Uranus 33337-02-27 22:05 G 13897207.32 13897207.42 13897207.52 0.0138 0.0122

Pluto 33341-09-28 06:57 G 13898880.58 13898880.79 13898880.99 0.0065 0.0024

Jupiter 33342-05-08 23:02 G 13899103.28 13899103.46 13899103.64 0.0532 0.0258

Pluto 33342-05-11 10:48 G 13899105.76 13899105.95 13899106.17 0.0065 0.0023

Saturn 33347-12-02 11:45 G 13901136.80 13901136.99 13901137.20 0.0281 0.0086

Saturn 33348-07-18 22:48 G 13901366.27 13901366.45 13901366.63 0.0279 0.0138

Mars 33359-12-22 07:12 G 13905539.76 13905539.80 13905539.84 0.1640 0.1585

Jupiter 33360-07-07 05:02 G 13905737.67 13905737.71 13905737.77 0.0495 0.0475

Saturn 33363-08-07 10:05 G 13906863.82 13906863.92 13906864.04 0.0279 0.0236

Saturn 33364-03-23 23:17 G 13907093.26 13907093.47 13907093.68 0.0281 0.0012

Saturn 33364-11-08 14:09 G 13907322.97 13907323.09 13907323.23 0.0284 0.0222

Jupiter 33372-03-12 07:41 G 13910003.62 13910003.82 13910004.03 0.0494 0.0059

Uranus 33376-10-21 04:48 G 13911687.58 13911687.70 13911687.84 0.0138 0.0109

Uranus 33377-06-04 12:29 G 13911913.86 13911914.02 13911914.21 0.0138 0.0080

Saturn 33377-06-13 14:09 G 13911922.89 13911923.09 13911923.30 0.0281 0.0060

Jupiter 33378-01-14 16:33 G 13912137.99 13912138.19 13912138.39 0.0533 0.0053

Uranus 33378-01-16 20:53 G 13912140.17 13912140.37 13912140.58 0.0139 0.0049

Saturn 33378-01-29 00:57 G 13912152.37 13912152.54 13912152.72 0.0278 0.0162

Uranus 33378-08-31 05:02 G 13912366.50 13912366.71 13912366.93 0.0139 0.0018

Uranus 33379-04-14 13:26 G 13912592.84 13912593.06 13912593.28 0.0139 0.0013

Uranus 33379-11-26 21:36 G 13912819.21 13912819.40 13912819.62 0.0139 0.0045

Uranus 33380-07-10 06:14 G 13913045.59 13913045.76 13913045.95 0.0140 0.0076

Uranus 33381-02-21 15:07 G 13913272.00 13913272.13 13913272.28 0.0140 0.0107

Uranus 33381-10-06 00:00 G 13913498.48 13913498.50 13913498.55 0.0140 0.0139

Jupiter 33383-11-16 09:50 G 13914269.78 13914269.91 13914270.06 0.0493 0.0358

Neptune 33386-09-02 07:41 G 13915290.74 13915290.82 13915290.89 0.0089 0.0084

Neptune 33387-04-15 20:24 G 13915516.21 13915516.35 13915516.50 0.0089 0.0067

Neptune 33387-11-27 09:21 G 13915741.72 13915741.89 13915742.08 0.0089 0.0049

Neptune 33388-07-09 22:19 G 13915967.24 13915967.43 13915967.65 0.0089 0.0032

Neptune 33389-02-20 11:31 G 13916192.78 13916192.98 13916193.21 0.0089 0.0016

Jupiter 33389-09-19 08:38 G 13916403.77 13916403.86 13916403.96 0.0533 0.0465

Neptune 33389-10-04 00:57 G 13916418.32 13916418.54 13916418.76 0.0089 0.0003

Neptune 33390-05-17 13:41 G 13916643.87 13916644.07 13916644.30 0.0089 0.0021

Neptune 33390-12-29 02:53 G 13916869.43 13916869.62 13916869.83 0.0089 0.0037

Neptune 33391-08-11 16:05 G 13917095.00 13917095.17 13917095.35 0.0089 0.0054

Neptune 33392-03-24 04:33 G 13917320.59 13917320.69 13917320.84 0.0089 0.0072

Neptune 33392-11-04 17:45 G 13917546.24 13917546.24 13917546.27 0.0089 0.0089

Saturn 33393-02-16 08:38 G 13917649.74 13917649.86 13917650.00 0.0279 0.0220

Saturn 33393-10-03 21:50 G 13917879.20 13917879.41 13917879.62 0.0281 0.0006

Mars 33393-10-20 01:12 G 13917895.39 13917895.55 13917895.71 0.1630 0.0674

Saturn 33394-05-21 12:57 G 13918108.93 13918109.04 13918109.16 0.0284 0.0240

Saturn 33406-05-10 02:53 G 13922479.57 13922479.62 13922479.69 0.0284 0.0270

Saturn 33406-12-25 16:05 G 13922708.96 13922709.17 13922709.38 0.0281 0.0039

Saturn 33407-08-12 02:38 G 13922938.46 13922938.61 13922938.78 0.0278 0.0184

Jupiter 33407-11-19 18:57 G 13923038.14 13923038.29 13923038.45 0.0495 0.0312

Jupiter 33413-09-23 11:02 G 13925172.82 13925172.96 13925173.10 0.0531 0.0373

Uranus 33416-06-27 15:07 G 13926180.99 13926181.13 13926181.27 0.0140 0.0109

Uranus 33417-02-09 00:29 G 13926407.35 13926407.52 13926407.72 0.0140 0.0077

Uranus 33417-09-23 10:19 G 13926633.72 13926633.93 13926634.13 0.0140 0.0045

Uranus 33418-05-07 19:26 G 13926860.10 13926860.31 13926860.53 0.0139 0.0014

Uranus 33418-12-20 04:33 G 13927086.48 13927086.69 13927086.91 0.0139 0.0019

Jupiter 33419-07-25 21:50 G 13927304.21 13927304.41 13927304.62 0.0494 0.0104

Uranus 33419-08-03 13:55 G 13927312.87 13927313.08 13927313.28 0.0139 0.0049

Uranus 33420-03-16 22:33 G 13927539.27 13927539.44 13927539.62 0.0139 0.0080

Uranus 33420-10-29 06:57 G 13927765.67 13927765.79 13927765.93 0.0138 0.0111

Saturn 33422-08-30 12:43 G 13928435.89 13928436.03 13928436.19 0.0279 0.0194

Saturn 33423-04-17 01:55 G 13928665.37 13928665.58 13928665.80 0.0282 0.0032

Saturn 33423-12-02 17:17 G 13928895.15 13928895.22 13928895.30 0.0285 0.0266

Jupiter 33425-05-29 00:57 G 13929438.35 13929438.54 13929438.74 0.0532 0.0158

Mars 33425-10-19 19:26 G 13929582.21 13929582.31 13929582.41 0.1638 0.1331

Pluto 33429-05-30 01:26 G 13930900.43 13930900.56 13930900.74 0.0079 0.0058

Pluto 33430-01-10 11:45 G 13931125.79 13931125.99 13931126.21 0.0079 0.0026

Mars 33430-05-31 06:57 G 13931266.70 13931266.79 13931266.89 0.1900 0.1573

Saturn 33435-11-20 05:31 G 13933265.63 13933265.73 13933265.84 0.0283 0.0243

Saturn 33436-07-06 18:29 G 13933495.05 13933495.27 13933495.48 0.0280 0.0015

Saturn 33437-02-21 04:48 G 13933724.57 13933724.70 13933724.85 0.0278 0.0207

Moon 33441-09-16 22:19 G 13935393.29 13935393.43 13935393.57 0.2679 0.0849

Earth 33441-09-16 23:45 G 13935393.33 13935393.49 13935393.64 0.2673 0.0787 *

Saturn 33452-03-11 11:45 G 13939221.83 13939221.99 13939222.15 0.0279 0.0177

Saturn 33452-10-27 00:43 G 13939451.33 13939451.53 13939451.75 0.0282 0.0050

Saturn 33453-06-13 16:19 G 13939681.17 13939681.18 13939681.19 0.0284 0.0284

Jupiter 33455-04-02 09:50 G 13940338.72 13940338.91 13940339.11 0.0494 0.0152

Mars 33459-08-18 13:41 G 13941937.92 13941938.07 13941938.21 0.1628 0.0918

Uranus 33460-06-21 15:36 G 13942246.06 13942246.15 13942246.27 0.0138 0.0119

Uranus 33461-02-02 23:31 G 13942472.33 13942472.48 13942472.66 0.0138 0.0089

Jupiter 33461-02-03 20:53 G 13942473.18 13942473.37 13942473.56 0.0532 0.0170

Uranus 33461-09-17 07:26 G 13942698.63 13942698.81 13942699.02 0.0138 0.0059

Uranus 33462-05-01 15:36 G 13942924.95 13942925.15 13942925.37 0.0139 0.0029

Uranus 33462-12-14 00:00 G 13943151.29 13943151.50 13943151.72 0.0139 0.0004

Uranus 33463-07-28 08:24 G 13943377.64 13943377.85 13943378.07 0.0139 0.0033

Uranus 33464-03-10 16:48 G 13943604.02 13943604.20 13943604.40 0.0140 0.0065

Uranus 33464-10-23 01:26 G 13943830.42 13943830.56 13943830.73 0.0140 0.0096

Saturn 33465-06-01 06:14 G 13944051.65 13944051.76 13944051.90 0.0284 0.0225

Uranus 33465-06-06 10:19 G 13944056.85 13944056.93 13944057.03 0.0140 0.0127

Saturn 33466-01-16 19:41 G 13944281.11 13944281.32 13944281.53 0.0281 0.0007

Saturn 33466-09-03 06:00 G 13944510.64 13944510.75 13944510.88 0.0278 0.0227

Jupiter 33466-12-06 11:31 G 13944604.81 13944604.98 13944605.15 0.0494 0.0267

Neptune 33470-01-12 14:09 G 13945738.01 13945738.09 13945738.20 0.0088 0.0080

Neptune 33470-08-26 03:21 G 13945963.49 13945963.64 13945963.80 0.0088 0.0063

Neptune 33471-04-08 16:05 G 13946189.00 13946189.17 13946189.37 0.0088 0.0046

Neptune 33471-11-20 05:02 G 13946414.51 13946414.71 13946414.93 0.0088 0.0029

Neptune 33472-07-02 18:14 G 13946640.04 13946640.26 13946640.48 0.0088 0.0012

Jupiter 33472-10-09 11:45 G 13946738.85 13946738.99 13946739.15 0.0532 0.0355

Neptune 33473-02-13 07:12 G 13946865.58 13946865.80 13946866.02 0.0088 0.0005

Neptune 33473-09-26 19:55 G 13947091.12 13947091.33 13947091.55 0.0088 0.0022

Neptune 33474-05-10 08:38 G 13947316.68 13947316.86 13947317.07 0.0088 0.0039

Neptune 33474-12-21 21:21 G 13947542.24 13947542.39 13947542.58 0.0088 0.0056

Neptune 33475-08-04 10:19 G 13947767.83 13947767.93 13947768.08 0.0088 0.0073

Saturn 33481-09-21 15:50 G 13950007.98 13950008.16 13950008.34 0.0279 0.0150

Saturn 33482-05-09 05:02 G 13950237.51 13950237.71 13950237.92 0.0282 0.0077

Jupiter 33490-12-08 21:21 G 13953373.28 13953373.39 13953373.51 0.0495 0.0405

Mars 33491-08-17 07:26 G 13953624.68 13953624.81 13953624.94 0.1636 0.1065

Saturn 33494-12-12 09:36 G 13954837.76 13954837.90 13954838.06 0.0283 0.0197

Saturn 33495-07-29 22:33 G 13955067.23 13955067.44 13955067.65 0.0280 0.0033

Saturn 33496-03-15 08:38 G 13955296.78 13955296.86 13955296.95 0.0277 0.0252

Mars 33496-03-27 09:36 G 13955308.74 13955308.90 13955309.06 0.1904 0.0795

Jupiter 33496-10-12 13:26 G 13955507.98 13955508.06 13955508.15 0.0532 0.0476

Uranus 33500-02-26 00:43 G 13956739.43 13956739.53 13956739.66 0.0140 0.0120

Uranus 33500-10-10 10:48 G 13956965.78 13956965.95 13956966.12 0.0140 0.0088

Uranus 33501-05-24 20:09 G 13957192.15 13957192.34 13957192.55 0.0140 0.0056

Uranus 33502-01-06 05:45 G 13957418.53 13957418.74 13957418.96 0.0140 0.0024

Jupiter 33502-08-14 23:45 G 13957639.28 13957639.49 13957639.69 0.0494 0.0012

Uranus 33502-08-20 15:07 G 13957644.91 13957645.13 13957645.35 0.0139 0.0008

Uranus 33503-04-04 00:00 G 13957871.30 13957871.50 13957871.72 0.0139 0.0039

Uranus 33503-11-16 08:53 G 13958097.69 13958097.87 13958098.07 0.0139 0.0070

Uranus 33504-06-29 17:31 G 13958324.09 13958324.23 13958324.39 0.0138 0.0100

Uranus 33505-02-11 01:55 G 13958550.53 13958550.58 13958550.67 0.0138 0.0131

Jupiter 33508-06-18 05:45 G 13959773.54 13959773.74 13959773.95 0.0532 0.0042

Saturn 33511-04-04 15:21 G 13960793.96 13960794.14 13960794.33 0.0279 0.0133

Saturn 33511-11-20 04:48 G 13961023.50 13961023.70 13961023.90 0.0282 0.0095

Jupiter 33514-04-20 02:38 G 13961905.51 13961905.61 13961905.71 0.0494 0.0425

Saturn 33524-06-24 10:48 G 13965623.78 13965623.95 13965624.11 0.0283 0.0178

Saturn 33525-02-08 23:31 G 13965853.28 13965853.48 13965853.69 0.0281 0.0052

Mars 33525-06-16 01:12 G 13965980.44 13965980.55 13965980.67 0.1626 0.1175

Saturn 33525-09-26 09:50 G 13966082.88 13966082.91 13966082.96 0.0278 0.0272

Jupiter 33538-04-22 10:48 G 13970673.77 13970673.95 13970674.13 0.0495 0.0238

Saturn 33540-10-14 20:38 G 13971580.16 13971580.36 13971580.56 0.0279 0.0104

Saturn 33541-06-01 10:05 G 13971809.73 13971809.92 13971810.11 0.0282 0.0125

Uranus 33544-02-21 01:55 G 13972804.52 13972804.58 13972804.67 0.0138 0.0129

Jupiter 33544-02-24 22:19 G 13972808.26 13972808.43 13972808.61 0.0532 0.0266

Uranus 33544-10-04 09:50 G 13973030.76 13973030.91 13973031.06 0.0138 0.0099

Uranus 33545-05-18 17:31 G 13973257.05 13973257.23 13973257.42 0.0138 0.0070

Uranus 33545-12-31 01:41 G 13973483.37 13973483.57 13973483.78 0.0139 0.0039

Uranus 33546-08-14 09:50 G 13973709.69 13973709.91 13973710.13 0.0139 0.0009

Uranus 33547-03-28 18:00 G 13973936.04 13973936.25 13973936.47 0.0139 0.0022

Uranus 33547-11-10 02:09 G 13974162.40 13974162.59 13974162.80 0.0139 0.0054

Uranus 33548-06-23 11:02 G 13974388.79 13974388.96 13974389.13 0.0140 0.0084

Uranus 33549-02-04 19:41 G 13974615.21 13974615.32 13974615.45 0.0140 0.0115

Jupiter 33549-12-26 13:26 G 13974939.87 13974940.06 13974940.26 0.0494 0.0177

Neptune 33551-07-20 04:48 G 13975510.60 13975510.70 13975510.84 0.0089 0.0075

Neptune 33552-03-01 18:00 G 13975736.09 13975736.25 13975736.43 0.0089 0.0057

Neptune 33552-10-13 06:57 G 13975961.61 13975961.79 13975962.00 0.0089 0.0040

Neptune 33553-05-26 20:09 G 13976187.14 13976187.34 13976187.56 0.0089 0.0023

Saturn 33554-01-04 14:38 G 13976409.94 13976410.11 13976410.29 0.0283 0.0149

Neptune 33554-01-07 09:21 G 13976412.68 13976412.89 13976413.12 0.0089 0.0006

Neptune 33554-08-20 22:19 G 13976638.22 13976638.43 13976638.66 0.0089 0.0012

Saturn 33554-08-22 03:07 G 13976639.43 13976639.63 13976639.84 0.0280 0.0080

Neptune 33555-04-03 11:17 G 13976863.78 13976863.97 13976864.19 0.0089 0.0029

Jupiter 33555-10-30 13:26 G 13977073.88 13977074.06 13977074.24 0.0532 0.0259

Neptune 33555-11-15 00:14 G 13977089.34 13977089.51 13977089.71 0.0089 0.0046

Neptune 33556-06-27 13:26 G 13977314.92 13977315.06 13977315.22 0.0089 0.0063

Neptune 33557-02-08 02:38 G 13977540.53 13977540.61 13977540.71 0.0089 0.0080

Mars 33557-06-14 19:12 G 13977667.15 13977667.30 13977667.45 0.1633 0.0804

Mars 33562-01-23 12:43 G 13979350.86 13979351.03 13979351.21 0.1908 0.0034

Earth 33563-03-20 09:50 G 13979771.76 13979771.91 13979772.07 0.2658 0.0684

Moon 33563-03-20 15:07 G 13979771.99 13979772.13 13979772.28 0.2661 0.0879 *

Saturn 33570-04-26 21:07 G 13982366.18 13982366.38 13982366.59 0.0279 0.0084

Saturn 33570-12-12 10:33 G 13982595.76 13982595.94 13982596.13 0.0282 0.0145

Moon 33571-03-18 07:41 G 13982691.73 13982691.82 13982691.91 0.2656 0.2166

Jupiter 33573-12-28 22:33 G 13983708.42 13983708.44 13983708.46 0.0495 0.0491

Saturn 33583-07-17 16:05 G 13987195.98 13987196.17 13987196.36 0.0283 0.0128

Uranus 33583-10-27 08:53 G 13987297.82 13987297.87 13987297.96 0.0141 0.0132

Saturn 33584-03-03 04:33 G 13987425.50 13987425.69 13987425.89 0.0280 0.0101

Uranus 33584-06-09 18:57 G 13987524.15 13987524.29 13987524.46 0.0140 0.0100

Uranus 33585-01-22 05:02 G 13987750.52 13987750.71 13987750.90 0.0140 0.0068

Jupiter 33585-09-02 23:31 G 13987974.28 13987974.48 13987974.68 0.0495 0.0068

Uranus 33585-09-05 14:24 G 13987976.89 13987977.10 13987977.32 0.0140 0.0036

Uranus 33586-04-19 23:45 G 13988203.27 13988203.49 13988203.71 0.0139 0.0004

Uranus 33586-12-02 08:53 G 13988429.66 13988429.87 13988430.09 0.0139 0.0027

Pluto 33587-03-18 12:57 G 13988535.92 13988536.04 13988536.22 0.0065 0.0047

Uranus 33587-07-16 18:00 G 13988656.05 13988656.25 13988656.45 0.0139 0.0058

Pluto 33587-10-29 17:31 G 13988761.02 13988761.23 13988761.46 0.0065 0.0003

Uranus 33588-02-28 02:38 G 13988882.45 13988882.61 13988882.79 0.0139 0.0089

Pluto 33588-06-10 21:21 G 13988986.25 13988986.39 13988986.58 0.0065 0.0045

Uranus 33588-10-11 11:17 G 13989108.87 13989108.97 13989109.09 0.0138 0.0119

Mars 33591-04-13 13:55 G 13990023.00 13990023.08 13990023.16 0.1624 0.1410

Jupiter 33591-07-08 08:53 G 13990108.67 13990108.87 13990109.07 0.0531 0.0066

Jupiter 33597-05-09 01:55 G 13992240.44 13992240.58 13992240.73 0.0494 0.0348

Saturn 33599-03-22 15:36 G 13992923.12 13992923.15 13992923.20 0.0277 0.0272

Saturn 33599-11-07 03:21 G 13993152.43 13993152.64 13993152.85 0.0280 0.0052

Saturn 33600-06-23 17:02 G 13993382.05 13993382.21 13993382.38 0.0282 0.0177

Jupiter 33603-03-12 21:50 G 13994374.32 13994374.41 13994374.51 0.0532 0.0470

Saturn 33613-01-26 21:21 G 13997982.19 13997982.39 13997982.59 0.0283 0.0097

Saturn 33613-09-13 09:21 G 13998211.71 13998211.89 13998212.09 0.0280 0.0131

Jupiter 33621-05-11 11:02 G 14001008.81 14001008.96 14001009.12 0.0495 0.0321

Mars 33623-04-12 07:26 G 14001709.64 14001709.81 14001709.97 0.1631 0.0548

Jupiter 33627-03-16 00:57 G 14003143.40 14003143.54 14003143.69 0.0532 0.0369

Mars 33627-11-20 14:53 G 14003392.96 14003393.12 14003393.28 0.1911 0.0776

Uranus 33628-06-03 18:14 G 14003589.15 14003589.26 14003589.40 0.0138 0.0111

Saturn 33628-10-01 18:14 G 14003709.17 14003709.26 14003709.35 0.0277 0.0249

Uranus 33629-01-16 02:24 G 14003815.43 14003815.60 14003815.78 0.0138 0.0081

Saturn 33629-05-19 05:45 G 14003938.53 14003938.74 14003938.95 0.0280 0.0029

Uranus 33629-08-30 10:05 G 14004041.73 14004041.92 14004042.13 0.0138 0.0052

Saturn 33630-01-03 19:26 G 14004168.17 14004168.31 14004168.47 0.0283 0.0201

Uranus 33630-04-13 18:14 G 14004268.04 14004268.26 14004268.47 0.0139 0.0021

Uranus 33630-11-26 02:09 G 14004494.38 14004494.59 14004494.81 0.0139 0.0010

Uranus 33631-07-10 10:33 G 14004720.73 14004720.94 14004721.15 0.0139 0.0040

Uranus 33632-02-21 18:43 G 14004947.11 14004947.28 14004947.48 0.0140 0.0072

Uranus 33632-10-05 03:36 G 14005173.51 14005173.65 14005173.80 0.0140 0.0102

Jupiter 33633-01-14 13:41 G 14005274.87 14005275.07 14005275.27 0.0494 0.0096

Uranus 33633-05-19 12:14 G 14005399.95 14005400.01 14005400.08 0.0140 0.0133

Neptune 33634-04-16 23:45 G 14005732.47 14005732.49 14005732.56 0.0088 0.0086

Neptune 33634-11-28 12:57 G 14005957.92 14005958.04 14005958.19 0.0088 0.0069

Neptune 33635-07-12 02:09 G 14006183.42 14006183.59 14006183.77 0.0088 0.0053

Neptune 33636-02-22 14:53 G 14006408.94 14006409.12 14006409.34 0.0088 0.0036

Neptune 33636-10-05 04:05 G 14006634.46 14006634.67 14006634.89 0.0088 0.0019

Neptune 33637-05-18 17:02 G 14006859.99 14006860.21 14006860.43 0.0088 0.0002

Neptune 33637-12-30 06:00 G 14007085.53 14007085.75 14007085.97 0.0088 0.0015

Neptune 33638-08-12 18:43 G 14007311.09 14007311.28 14007311.50 0.0088 0.0032

Jupiter 33638-11-18 17:02 G 14007409.01 14007409.21 14007409.40 0.0532 0.0149

Neptune 33639-03-26 07:26 G 14007536.65 14007536.81 14007537.02 0.0088 0.0049

Neptune 33639-11-06 20:38 G 14007762.22 14007762.36 14007762.52 0.0088 0.0065

Neptune 33640-06-19 09:21 G 14007987.82 14007987.89 14007987.99 0.0088 0.0082

Saturn 33642-08-08 23:17 G 14008768.27 14008768.47 14008768.68 0.0283 0.0074

Saturn 33643-03-26 11:31 G 14008997.81 14008997.98 14008998.16 0.0280 0.0153

Saturn 33658-04-14 00:57 G 14014495.41 14014495.54 14014495.67 0.0277 0.0216

Saturn 33658-11-29 12:43 G 14014724.82 14014725.03 14014725.25 0.0280 0.0006

Saturn 33659-07-17 02:53 G 14014954.51 14014954.62 14014954.74 0.0283 0.0236

Uranus 33668-02-08 02:53 G 14018082.50 14018082.62 14018082.76 0.0141 0.0112

Uranus 33668-09-21 12:29 G 14018308.86 14018309.02 14018309.22 0.0140 0.0081

Jupiter 33668-09-21 23:31 G 14018309.28 14018309.48 14018309.67 0.0495 0.0147

Uranus 33669-05-05 22:19 G 14018535.23 14018535.43 14018535.64 0.0140 0.0048

Uranus 33669-12-18 07:55 G 14018761.62 14018761.83 14018762.05 0.0140 0.0017

Uranus 33670-08-01 17:17 G 14018988.01 14018988.22 14018988.44 0.0139 0.0015

Uranus 33671-03-16 02:24 G 14019214.40 14019214.60 14019214.81 0.0139 0.0046

Saturn 33671-07-04 15:36 G 14019325.10 14019325.15 14019325.20 0.0285 0.0276

Uranus 33671-10-28 11:02 G 14019440.79 14019440.96 14019441.16 0.0139 0.0077

Saturn 33672-02-19 05:45 G 14019554.53 14019554.74 14019554.95 0.0282 0.0041

Uranus 33672-06-10 19:41 G 14019667.20 14019667.32 14019667.48 0.0139 0.0108

Saturn 33672-10-05 17:31 G 14019784.08 14019784.23 14019784.40 0.0279 0.0185

Uranus 33673-01-23 04:05 G 14019893.67 14019893.67 14019893.72 0.0138 0.0138

Jupiter 33674-07-27 07:26 G 14020443.61 14020443.81 14020444.00 0.0532 0.0143

Pluto 33675-06-29 14:09 G 14020780.88 14020781.09 14020781.31 0.0079 0.0023

Pluto 33676-02-09 23:31 G 14021006.36 14021006.48 14021006.65 0.0079 0.0060

Jupiter 33680-05-28 01:26 G 14022575.39 14022575.56 14022575.73 0.0494 0.0270

Earth 33684-09-17 23:17 G 14024149.32 14024149.47 14024149.61 0.2673 0.1042

Moon 33684-09-18 02:38 G 14024149.45 14024149.61 14024149.78 0.2667 0.0480 *

Jupiter 33686-03-31 22:33 G 14024709.31 14024709.44 14024709.59 0.0532 0.0379

Saturn 33687-10-25 05:02 G 14025281.56 14025281.71 14025281.87 0.0278 0.0191

Saturn 33688-06-10 17:02 G 14025511.00 14025511.21 14025511.42 0.0280 0.0032

Saturn 33689-01-26 06:57 G 14025740.73 14025740.79 14025740.88 0.0283 0.0263

Mars 33689-02-06 19:12 G 14025752.13 14025752.30 14025752.48 0.1629 0.0290

Mars 33693-09-16 17:31 G 14027435.14 14027435.23 14027435.33 0.1915 0.1581

Saturn 33701-01-14 18:57 G 14030111.19 14030111.29 14030111.39 0.0285 0.0249

Saturn 33701-09-01 09:07 G 14030340.66 14030340.88 14030341.09 0.0282 0.0016

Saturn 33702-04-18 20:53 G 14030570.23 14030570.37 14030570.51 0.0279 0.0210

Jupiter 33704-05-31 07:55 G 14031343.71 14031343.83 14031343.96 0.0495 0.0384

Jupiter 33710-04-05 01:55 G 14033478.49 14033478.58 14033478.68 0.0531 0.0461

Uranus 33712-02-03 03:36 G 14034147.56 14034147.65 14034147.76 0.0138 0.0122

Uranus 33712-09-16 11:02 G 14034373.81 14034373.96 14034374.13 0.0138 0.0093

Uranus 33713-04-30 18:43 G 14034600.10 14034600.28 14034600.49 0.0138 0.0063

Uranus 33713-12-13 02:53 G 14034826.41 14034826.62 14034826.83 0.0138 0.0033

Uranus 33714-07-27 10:48 G 14035052.73 14035052.95 14035053.17 0.0139 0.0003

Uranus 33715-03-10 18:43 G 14035279.08 14035279.28 14035279.50 0.0139 0.0028

Neptune 33715-10-22 14:24 G 14035505.02 14035505.10 14035505.19 0.0089 0.0082

Uranus 33715-10-23 03:07 G 14035505.43 14035505.63 14035505.83 0.0139 0.0059

Jupiter 33716-02-04 10:05 G 14035609.72 14035609.92 14035610.13 0.0495 0.0036

Neptune 33716-06-04 03:21 G 14035730.50 14035730.64 14035730.80 0.0089 0.0065

Uranus 33716-06-05 11:17 G 14035731.82 14035731.97 14035732.15 0.0140 0.0090

Neptune 33717-01-15 16:33 G 14035956.01 14035956.19 14035956.38 0.0089 0.0048

Uranus 33717-01-17 20:09 G 14035958.24 14035958.34 14035958.46 0.0140 0.0120

Saturn 33717-05-07 12:43 G 14036067.86 14036068.03 14036068.21 0.0278 0.0156

Neptune 33717-08-29 05:31 G 14036181.54 14036181.73 14036181.95 0.0089 0.0031

Saturn 33717-12-23 01:12 G 14036297.34 14036297.55 14036297.76 0.0281 0.0069

Neptune 33718-04-11 18:43 G 14036407.06 14036407.28 14036407.50 0.0089 0.0013

Neptune 33718-11-23 07:41 G 14036632.60 14036632.82 14036633.04 0.0089 0.0004

Neptune 33719-07-06 20:38 G 14036858.15 14036858.36 14036858.58 0.0089 0.0021

Neptune 33720-02-17 09:36 G 14037083.71 14037083.90 14037084.11 0.0089 0.0039

Neptune 33720-09-29 22:48 G 14037309.28 14037309.45 14037309.63 0.0089 0.0055

Neptune 33721-05-13 11:45 G 14037534.87 14037534.99 14037535.12 0.0089 0.0072

Jupiter 33721-12-08 14:38 G 14037743.91 14037744.11 14037744.31 0.0532 0.0077

Jupiter 33727-10-10 12:43 G 14039875.95 14039876.03 14039876.12 0.0494 0.0448

Saturn 33730-07-28 02:53 G 14040897.49 14040897.62 14040897.76 0.0285 0.0213

Saturn 33731-03-14 16:48 G 14041126.99 14041127.20 14041127.41 0.0282 0.0021

Saturn 33731-10-30 03:50 G 14041356.57 14041356.66 14041356.77 0.0279 0.0244

Saturn 33746-11-17 18:43 G 14046854.09 14046854.28 14046854.47 0.0278 0.0126

Saturn 33747-07-05 07:12 G 14047083.60 14047083.80 14047084.00 0.0281 0.0099

Uranus 33751-10-09 07:55 G 14048640.75 14048640.83 14048640.94 0.0141 0.0127

Jupiter 33751-10-12 20:38 G 14048644.18 14048644.36 14048644.55 0.0494 0.0213

Uranus 33752-05-22 18:00 G 14048867.10 14048867.25 14048867.42 0.0140 0.0095

Uranus 33753-01-04 04:05 G 14049093.48 14049093.67 14049093.87 0.0140 0.0062

Uranus 33753-08-18 13:41 G 14049319.86 14049320.07 14049320.29 0.0140 0.0031

Uranus 33754-04-01 23:17 G 14049546.25 14049546.47 14049546.69 0.0140 0.0002

Uranus 33754-11-14 08:24 G 14049772.64 14049772.85 14049773.06 0.0139 0.0032

Mars 33754-12-06 07:26 G 14049794.64 14049794.81 14049794.99 0.1627 0.0058

Uranus 33755-06-28 17:17 G 14049999.04 14049999.22 14049999.43 0.0139 0.0064

Uranus 33756-02-10 02:09 G 14050225.44 14050225.59 14050225.76 0.0139 0.0094

Uranus 33756-09-23 10:48 G 14050451.87 14050451.95 14050452.06 0.0139 0.0124

Jupiter 33757-08-16 08:09 G 14050778.66 14050778.84 14050779.02 0.0532 0.0235

Saturn 33760-02-07 06:57 G 14051683.64 14051683.79 14051683.95 0.0284 0.0184

Saturn 33760-09-23 20:38 G 14051913.15 14051913.36 14051913.57 0.0282 0.0048

Saturn 33761-05-11 07:55 G 14052142.79 14052142.83 14052142.88 0.0279 0.0270

Jupiter 33763-06-17 20:38 G 14052910.18 14052910.36 14052910.55 0.0494 0.0216

Jupiter 33769-04-20 23:02 G 14055044.29 14055044.46 14055044.63 0.0532 0.0290

Saturn 33776-05-30 02:53 G 14057640.42 14057640.62 14057640.83 0.0278 0.0090

Saturn 33777-01-14 15:50 G 14057869.98 14057870.16 14057870.35 0.0281 0.0137

Jupiter 33787-06-20 05:45 G 14061678.66 14061678.74 14061678.83 0.0495 0.0451

Saturn 33789-08-19 16:19 G 14062470.00 14062470.18 14062470.36 0.0284 0.0146

Saturn 33790-04-06 05:31 G 14062699.53 14062699.73 14062699.93 0.0281 0.0085

Mars 33791-07-15 20:38 G 14063165.30 14063165.36 14063165.43 0.1906 0.1769

Jupiter 33793-04-23 20:53 G 14063813.33 14063813.37 14063813.42 0.0531 0.0516

Uranus 33795-10-03 12:57 G 14064706.01 14064706.04 14064706.12 0.0137 0.0133

Uranus 33796-05-16 20:24 G 14064932.23 14064932.35 14064932.51 0.0138 0.0104

Uranus 33796-12-29 04:19 G 14065158.50 14065158.68 14065158.87 0.0138 0.0074

Uranus 33797-08-12 12:00 G 14065384.80 14065385.00 14065385.21 0.0138 0.0045

Uranus 33798-03-26 19:55 G 14065611.11 14065611.33 14065611.55 0.0138 0.0014

Uranus 33798-11-08 03:50 G 14065837.45 14065837.66 14065837.88 0.0139 0.0016

Jupiter 33799-02-23 07:26 G 14065944.60 14065944.81 14065945.01 0.0494 0.0031

Neptune 33799-03-02 23:17 G 14065952.36 14065952.47 14065952.58 0.0088 0.0076

Uranus 33799-06-22 12:00 G 14066063.80 14066064.00 14066064.20 0.0139 0.0046

Neptune 33799-10-14 11:45 G 14066177.85 14066177.99 14066178.17 0.0088 0.0059

Uranus 33800-02-03 20:09 G 14066290.17 14066290.34 14066290.53 0.0139 0.0077

Neptune 33800-05-28 00:57 G 14066403.35 14066403.54 14066403.74 0.0088 0.0042

Uranus 33800-09-18 04:48 G 14066516.57 14066516.70 14066516.84 0.0140 0.0108

Neptune 33801-01-08 14:09 G 14066628.88 14066629.09 14066629.30 0.0088 0.0026

Uranus 33801-05-02 13:12 G 14066743.04 14066743.05 14066743.09 0.0140 0.0139

Neptune 33801-08-22 03:07 G 14066854.41 14066854.63 14066854.85 0.0088 0.0009

Neptune 33802-04-04 16:05 G 14067079.95 14067080.17 14067080.39 0.0088 0.0008

Neptune 33802-11-16 05:02 G 14067305.50 14067305.71 14067305.92 0.0088 0.0025

Neptune 33803-06-29 17:45 G 14067531.06 14067531.24 14067531.45 0.0088 0.0042

Neptune 33804-02-10 06:29 G 14067756.63 14067756.77 14067756.96 0.0088 0.0059

Neptune 33804-09-22 19:55 G 14067982.22 14067982.33 14067982.45 0.0088 0.0075

Jupiter 33804-12-28 11:45 G 14068078.79 14068078.99 14068079.20 0.0532 0.0014

Saturn 33805-04-25 23:17 G 14068197.46 14068197.47 14068197.50 0.0276 0.0275

Saturn 33805-12-11 10:19 G 14068426.72 14068426.93 14068427.14 0.0279 0.0057

Moon 33806-03-22 08:24 G 14068527.69 14068527.85 14068528.01 0.2655 0.0524

Earth 33806-03-22 12:29 G 14068527.87 14068528.02 14068528.18 0.2659 0.0712 *

Saturn 33806-07-28 23:17 G 14068656.31 14068656.47 14068656.65 0.0282 0.0171

Jupiter 33810-10-30 08:53 G 14070210.75 14070210.87 14070211.00 0.0494 0.0388

Jupiter 33816-09-02 03:36 G 14072344.63 14072344.65 14072344.69 0.0532 0.0525

Saturn 33819-03-02 21:36 G 14073256.21 14073256.40 14073256.59 0.0283 0.0114

Saturn 33819-10-18 10:19 G 14073485.75 14073485.93 14073486.13 0.0281 0.0116

Mars 33820-10-03 19:41 G 14073837.15 14073837.32 14073837.49 0.1625 0.0216

Pluto 33832-09-04 21:50 G 14078191.37 14078191.41 14078191.51 0.0065 0.0062

Pluto 33833-04-18 02:09 G 14078416.40 14078416.59 14078416.82 0.0065 0.0017

Pluto 33833-11-29 06:14 G 14078641.58 14078641.76 14078641.98 0.0065 0.0030

Jupiter 33834-11-01 15:07 G 14078978.96 14078979.13 14078979.30 0.0495 0.0261

Saturn 33834-11-06 07:26 G 14078983.71 14078983.81 14078983.92 0.0277 0.0239

Uranus 33835-06-09 14:09 G 14079199.08 14079199.09 14079199.13 0.0141 0.0140

Saturn 33835-06-23 18:57 G 14079213.08 14079213.29 14079213.50 0.0279 0.0019

Uranus 33836-01-22 00:29 G 14079425.39 14079425.52 14079425.66 0.0141 0.0108

Saturn 33836-02-08 08:09 G 14079442.71 14079442.84 14079442.99 0.0282 0.0210

Uranus 33836-09-04 10:05 G 14079651.75 14079651.92 14079652.12 0.0140 0.0077

Uranus 33837-04-18 20:09 G 14079878.13 14079878.34 14079878.55 0.0140 0.0044

Uranus 33837-12-01 05:45 G 14080104.52 14080104.74 14080104.96 0.0140 0.0013

Uranus 33838-07-15 15:07 G 14080330.92 14080331.13 14080331.35 0.0140 0.0019

Uranus 33839-02-27 00:00 G 14080557.31 14080557.50 14080557.72 0.0139 0.0050

Uranus 33839-10-11 09:07 G 14080783.71 14080783.88 14080784.06 0.0139 0.0080

Uranus 33840-05-24 17:31 G 14081010.12 14081010.23 14081010.38 0.0139 0.0111

Jupiter 33840-09-05 02:53 G 14081113.45 14081113.62 14081113.79 0.0531 0.0290

Jupiter 33846-07-07 17:45 G 14083245.05 14083245.24 14083245.44 0.0494 0.0153

Saturn 33848-09-12 07:26 G 14084042.60 14084042.81 14084043.01 0.0283 0.0076

Saturn 33849-04-29 19:41 G 14084272.15 14084272.32 14084272.50 0.0280 0.0153

Jupiter 33852-05-10 16:33 G 14085379.01 14085379.19 14085379.37 0.0532 0.0242

Mars 33857-05-12 23:45 G 14087207.34 14087207.49 14087207.64 0.1910 0.0997

Saturn 33864-05-18 15:21 G 14089770.00 14089770.14 14089770.29 0.0277 0.0206

Saturn 33865-01-03 03:07 G 14089999.41 14089999.63 14089999.84 0.0280 0.0016

Saturn 33865-08-20 16:48 G 14090229.10 14090229.20 14090229.31 0.0283 0.0245

Saturn 33877-08-07 22:33 G 14094599.41 14094599.44 14094599.50 0.0285 0.0278

Saturn 33878-03-25 13:12 G 14094828.84 14094829.05 14094829.26 0.0282 0.0043

Saturn 33878-11-10 01:12 G 14095058.40 14095058.55 14095058.72 0.0280 0.0185

Uranus 33880-01-16 06:57 G 14095490.68 14095490.79 14095490.92 0.0138 0.0114

Neptune 33880-01-25 00:14 G 14095499.50 14095499.51 14095499.55 0.0089 0.0088

Uranus 33880-08-29 14:24 G 14095716.94 14095717.10 14095717.28 0.0138 0.0085

Neptune 33880-09-06 13:26 G 14095724.94 14095725.06 14095725.20 0.0089 0.0071

Uranus 33881-04-12 22:05 G 14095943.22 14095943.42 14095943.62 0.0138 0.0055

Neptune 33881-04-20 02:24 G 14095950.44 14095950.60 14095950.79 0.0089 0.0054

Uranus 33881-11-25 05:45 G 14096169.53 14096169.74 14096169.96 0.0138 0.0025

Neptune 33881-12-01 15:21 G 14096175.96 14096176.14 14096176.35 0.0089 0.0038

Jupiter 33882-03-15 00:57 G 14096279.34 14096279.54 14096279.75 0.0494 0.0076

Uranus 33882-07-09 13:41 G 14096395.86 14096396.07 14096396.29 0.0139 0.0006

Neptune 33882-07-15 04:33 G 14096401.48 14096401.69 14096401.91 0.0089 0.0020

Uranus 33883-02-20 21:50 G 14096622.20 14096622.41 14096622.62 0.0139 0.0035

Neptune 33883-02-25 17:45 G 14096627.02 14096627.24 14096627.46 0.0089 0.0003

Uranus 33883-10-05 05:45 G 14096848.57 14096848.74 14096848.95 0.0139 0.0067

Neptune 33883-10-09 06:43 G 14096852.57 14096852.78 14096853.00 0.0089 0.0014

Uranus 33884-05-18 14:24 G 14097074.95 14097075.10 14097075.26 0.0139 0.0097

Neptune 33884-05-21 19:41 G 14097078.12 14097078.32 14097078.53 0.0089 0.0031

Uranus 33884-12-30 22:48 G 14097301.38 14097301.45 14097301.55 0.0140 0.0128

Neptune 33885-01-02 08:38 G 14097303.69 14097303.86 14097304.06 0.0089 0.0048

Neptune 33885-08-15 21:36 G 14097529.27 14097529.40 14097529.56 0.0089 0.0065

Neptune 33886-03-29 10:33 G 14097754.87 14097754.94 14097755.04 0.0089 0.0082

Mars 33886-08-01 07:55 G 14097879.66 14097879.83 14097880.00 0.1622 0.0459

Jupiter 33888-01-17 10:19 G 14098413.73 14098413.93 14098414.13 0.0532 0.0071

Jupiter 33893-11-18 02:53 G 14100545.48 14100545.62 14100545.77 0.0494 0.0342

Saturn 33893-11-28 23:02 G 14100556.29 14100556.46 14100556.63 0.0277 0.0171

Saturn 33894-07-16 11:02 G 14100785.75 14100785.96 14100786.17 0.0280 0.0053

Jupiter 33899-09-21 22:05 G 14102679.33 14102679.42 14102679.51 0.0532 0.0470

Saturn 33907-02-19 09:21 G 14105385.78 14105385.89 14105386.01 0.0285 0.0238

Saturn 33907-10-06 23:31 G 14105615.27 14105615.48 14105615.69 0.0282 0.0005

Saturn 33908-05-23 11:02 G 14105844.84 14105844.96 14105845.09 0.0280 0.0222

Jupiter 33917-11-21 11:31 G 14109313.83 14109313.98 14109314.14 0.0495 0.0322

Mars 33918-08-01 01:12 G 14109566.48 14109566.55 14109566.61 0.1630 0.1506

Uranus 33919-09-22 06:57 G 14109983.69 14109983.79 14109983.91 0.0141 0.0121

Moon 33919-09-24 02:53 G 14109985.53 14109985.62 14109985.71 0.2672 0.2224

Earth 33919-09-24 08:53 G 14109985.84 14109985.87 14109985.90 0.2673 0.2621

Uranus 33920-05-05 16:48 G 14110210.04 14110210.20 14110210.38 0.0140 0.0089

Pluto 33920-12-17 19:26 G 14110436.17 14110436.31 14110436.48 0.0079 0.0057

Uranus 33920-12-18 02:38 G 14110436.42 14110436.61 14110436.82 0.0140 0.0058 *

Pluto 33921-07-31 05:45 G 14110661.54 14110661.74 14110661.95 0.0079 0.0026

Uranus 33921-08-01 12:29 G 14110662.81 14110663.02 14110663.24 0.0140 0.0026

Uranus 33922-03-15 21:50 G 14110889.19 14110889.41 14110889.63 0.0140 0.0005

Uranus 33922-10-28 06:57 G 14111115.58 14111115.79 14111116.00 0.0139 0.0037

Mars 33923-03-11 01:55 G 14111249.41 14111249.58 14111249.76 0.1913 0.0196

Uranus 33923-06-11 15:50 G 14111341.98 14111342.16 14111342.36 0.0139 0.0068

Saturn 33923-06-12 07:12 G 14111342.62 14111342.80 14111342.99 0.0278 0.0137

Jupiter 33923-09-25 22:05 G 14111448.28 14111448.42 14111448.58 0.0532 0.0349

Uranus 33924-01-24 00:29 G 14111568.39 14111568.52 14111568.69 0.0139 0.0098

Saturn 33924-01-27 19:41 G 14111572.12 14111572.32 14111572.52 0.0281 0.0088

Uranus 33924-09-06 09:21 G 14111794.82 14111794.89 14111794.99 0.0139 0.0128

Moon 33927-09-21 18:14 G 14112905.17 14112905.26 14112905.35 0.2677 0.2140

Earth 33927-09-21 22:48 G 14112905.31 14112905.45 14112905.59 0.2672 0.1290 *

Jupiter 33929-07-27 13:12 G 14113579.85 14113580.05 14113580.25 0.0494 0.0098

Jupiter 33935-05-31 14:09 G 14115713.90 14115714.09 14115714.28 0.0532 0.0170

Saturn 33936-08-31 15:36 G 14116172.01 14116172.15 14116172.31 0.0284 0.0204

Saturn 33937-04-18 05:17 G 14116401.52 14116401.72 14116401.94 0.0281 0.0030

Saturn 33937-12-03 16:48 G 14116631.11 14116631.20 14116631.28 0.0279 0.0253

Mars 33952-05-29 19:55 G 14121922.17 14121922.33 14121922.48 0.1620 0.0711

Saturn 33952-12-22 13:55 G 14122128.88 14122129.08 14122129.28 0.0278 0.0103

Saturn 33953-08-09 02:38 G 14122358.43 14122358.61 14122358.81 0.0281 0.0124

Neptune 33963-06-06 09:36 G 14125946.83 14125946.90 14125946.99 0.0088 0.0082

Uranus 33963-09-16 16:33 G 14126049.12 14126049.19 14126049.30 0.0137 0.0125

Neptune 33964-01-17 22:19 G 14126172.30 14126172.43 14126172.60 0.0088 0.0065

Uranus 33964-04-30 00:00 G 14126275.36 14126275.50 14126275.67 0.0138 0.0096

Neptune 33964-08-30 11:31 G 14126397.81 14126397.98 14126398.18 0.0088 0.0049

Uranus 33964-12-12 07:41 G 14126501.64 14126501.82 14126502.02 0.0138 0.0066

Jupiter 33965-04-03 22:05 G 14126614.23 14126614.42 14126614.62 0.0495 0.0140

Neptune 33965-04-13 00:29 G 14126623.32 14126623.52 14126623.74 0.0088 0.0032

Uranus 33965-07-26 15:36 G 14126727.94 14126728.15 14126728.36 0.0138 0.0036

Neptune 33965-11-24 13:26 G 14126848.85 14126849.06 14126849.29 0.0088 0.0016

Uranus 33966-03-09 23:31 G 14126954.26 14126954.48 14126954.70 0.0139 0.0006

Saturn 33966-03-14 01:41 G 14126958.41 14126958.57 14126958.75 0.0284 0.0164

Neptune 33966-07-08 02:38 G 14127074.39 14127074.61 14127074.84 0.0088 0.0002

Uranus 33966-10-22 07:26 G 14127180.60 14127180.81 14127181.02 0.0139 0.0024

Saturn 33966-10-29 14:53 G 14127187.92 14127188.12 14127188.33 0.0281 0.0069

Neptune 33967-02-18 15:36 G 14127299.94 14127300.15 14127300.37 0.0088 0.0018

Uranus 33967-06-05 15:36 G 14127406.95 14127407.15 14127407.35 0.0139 0.0054

Neptune 33967-10-02 04:19 G 14127525.49 14127525.68 14127525.90 0.0088 0.0036

Uranus 33968-01-17 23:45 G 14127633.33 14127633.49 14127633.68 0.0139 0.0086

Neptune 33968-05-14 17:31 G 14127751.06 14127751.23 14127751.41 0.0088 0.0052

Uranus 33968-08-31 08:24 G 14127859.74 14127859.85 14127859.98 0.0140 0.0116

Neptune 33968-12-26 06:14 G 14127976.64 14127976.76 14127976.91 0.0088 0.0069

Neptune 33969-08-08 18:57 G 14128202.26 14128202.29 14128202.38 0.0088 0.0086

Jupiter 33971-02-06 03:21 G 14128748.44 14128748.64 14128748.84 0.0532 0.0116

Jupiter 33976-12-07 23:45 G 14130880.33 14130880.49 14130880.67 0.0494 0.0278

Saturn 33982-07-04 21:50 G 14132915.21 14132915.41 14132915.62 0.0279 0.0070

Jupiter 33982-10-11 17:02 G 14133014.09 14133014.21 14133014.34 0.0532 0.0413

Saturn 33983-02-19 10:48 G 14133144.78 14133144.95 14133145.13 0.0282 0.0158

Mars 33984-05-28 13:12 G 14133608.94 14133609.05 14133609.16 0.1627 0.1254

Mars 33989-01-05 04:33 G 14135291.52 14135291.69 14135291.85 0.1917 0.0614

Saturn 33995-09-24 08:09 G 14137744.66 14137744.84 14137745.03 0.0283 0.0130

Saturn 33996-05-10 21:07 G 14137974.18 14137974.38 14137974.58 0.0280 0.0100

Jupiter 34000-12-10 06:00 G 14139648.62 14139648.75 14139648.89 0.0494 0.0371

35TH MILLENNIUM CE

This is a list of transits of Venus in the 35th millennium CE.

FROM	MAX-TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S

TIME

Uranus	34003-05-22 14:53 G	14140542.06	14140542.12	14140542.20	0.0141	0.0133
Uranus	34004-01-04 00:43 G	14140768.40	14140768.53	14140768.70	0.0141	0.0102
Uranus	34004-08-17 10:48 G	14140994.77	14140994.95	14140995.15	0.0140	0.0070
Uranus	34005-03-31 20:24 G	14141221.15	14141221.35	14141221.57	0.0140	0.0038
Uranus	34005-11-13 06:00 G	14141447.53	14141447.75	14141447.97	0.0140	0.0007
Uranus	34006-06-27 15:21 G	14141673.92	14141674.14	14141674.36	0.0140	0.0025
Jupiter	34006-10-14 20:53 G	14141783.26	14141783.37	14141783.50	0.0532	0.0428
Uranus	34007-02-09 00:14 G	14141900.32	14141900.51	14141900.72	0.0139	0.0056
Uranus	34007-09-23 09:07 G	14142126.72	14142126.88	14142127.06	0.0139	0.0086
Uranus	34008-05-06 17:45 G	14142353.14	14142353.24	14142353.37	0.0139	0.0116
Saturn	34011-05-30 16:05 G	14143472.09	14143472.17	14143472.24	0.0276	0.0258
Saturn	34012-01-15 03:07 G	14143701.43	14143701.63	14143701.85	0.0279	0.0039
Jupiter	34012-08-15 08:24 G	14143914.64	14143914.85	14143915.05	0.0494	0.0046
Saturn	34012-08-31 16:33 G	14143931.04	14143931.19	14143931.35	0.0282	0.0191
Mars	34018-03-27 08:38 G	14145964.72	14145964.86	14145965.00	0.1619	0.0945
Jupiter	34018-06-19 09:07 G	14146048.69	14146048.88	14146049.08	0.0532	0.0110
Jupiter	34024-04-20 10:48 G	14148180.88	14148180.95	14148181.03	0.0494	0.0456
Saturn	34025-04-05 17:17 G	14148531.02	14148531.22	14148531.42	0.0283	0.0094
Saturn	34025-11-21 05:45 G	14148760.56	14148760.74	14148760.92	0.0281	0.0136
Saturn	34040-12-09 23:02 G	14154258.34	14154258.46	14154258.58	0.0277	0.0227
Saturn	34041-07-27 10:33 G	14154487.73	14154487.94	14154488.16	0.0280	0.0008
Saturn	34042-03-14 00:00 G	14154717.38	14154717.50	14154717.64	0.0282	0.0225
Neptune	34044-12-09 23:45 G	14155719.39	14155719.49	14155719.60	0.0089	0.0078
Neptune	34045-07-23 12:57 G	14155944.88	14155945.04	14155945.20	0.0089	0.0061
Neptune	34046-03-06 01:55 G	14156170.40	14156170.58	14156170.78	0.0089	0.0044
Neptune	34046-10-17 15:07 G	14156395.92	14156396.13	14156396.34	0.0089	0.0027
Uranus	34047-05-17 02:09 G	14156607.56	14156607.59	14156607.64	0.0137	0.0135
Neptune	34047-05-31 04:05 G	14156621.46	14156621.67	14156621.89	0.0089	0.0010
Uranus	34047-12-29 09:36 G	14156833.77	14156833.90	14156834.05	0.0138	0.0106

Neptune 34048-01-11 17:17 G 14156847.00 14156847.22 14156847.44 0.0089 0.0007

Jupiter 34048-04-22 18:43 G 14156949.10 14156949.28 14156949.47 0.0494 0.0202

Uranus 34048-08-11 17:02 G 14157060.04 14157060.21 14157060.40 0.0138 0.0077

Neptune 34048-08-24 06:14 G 14157072.55 14157072.76 14157072.97 0.0089 0.0024

Earth 34049-03-23 15:07 G 14157283.98 14157284.13 14157284.28 0.2659 0.0732

Moon 34049-03-23 17:17 G 14157284.08 14157284.22 14157284.36 0.2664 0.0951 *

Uranus 34049-03-26 00:43 G 14157286.33 14157286.53 14157286.74 0.0138 0.0048

Neptune 34049-04-06 19:12 G 14157298.11 14157298.30 14157298.50 0.0089 0.0041

Uranus 34049-11-07 08:38 G 14157512.64 14157512.86 14157513.07 0.0138 0.0018

Neptune 34049-11-18 07:55 G 14157523.68 14157523.83 14157524.01 0.0089 0.0058

Mars 34050-03-26 01:41 G 14157651.43 14157651.57 14157651.70 0.1625 0.1002

Uranus 34050-06-21 16:33 G 14157738.97 14157739.19 14157739.41 0.0139 0.0012

Neptune 34050-07-01 20:53 G 14157749.27 14157749.37 14157749.50 0.0089 0.0075

Uranus 34051-02-03 00:43 G 14157965.33 14157965.53 14157965.74 0.0139 0.0043

Uranus 34051-09-17 09:07 G 14158191.70 14158191.88 14158192.07 0.0139 0.0073

Uranus 34052-04-30 17:17 G 14158418.09 14158418.22 14158418.38 0.0139 0.0104

Uranus 34052-12-13 01:55 G 14158644.54 14158644.58 14158644.65 0.0140 0.0135

Jupiter 34054-02-25 01:26 G 14159083.37 14159083.56 14159083.75 0.0532 0.0192

Saturn 34054-10-16 23:02 G 14159317.25 14159317.46 14159317.66 0.0282 0.0061

Mars 34054-11-02 06:29 G 14159333.66 14159333.77 14159333.89 0.1920 0.1452

Saturn 34055-06-03 10:48 G 14159546.80 14159546.95 14159547.13 0.0280 0.0168

Moon 34057-03-21 12:29 G 14160203.92 14160204.02 14160204.13 0.2661 0.1951

Jupiter 34059-12-27 19:41 G 14161215.14 14161215.32 14161215.50 0.0494 0.0220

Jupiter 34065-10-30 16:48 G 14163349.05 14163349.20 14163349.36 0.0533 0.0328

Saturn 34070-06-22 02:09 G 14165044.45 14165044.59 14165044.74 0.0277 0.0201

Saturn 34071-02-06 14:09 G 14165273.88 14165274.09 14165274.30 0.0280 0.0022

Saturn 34071-09-24 04:05 G 14165503.58 14165503.67 14165503.76 0.0283 0.0254

Pluto 34078-10-05 10:05 G 14168071.75 14168071.92 14168072.12 0.0065 0.0035

Pluto 34079-05-18 14:24 G 14168296.89 14168297.10 14168297.32 0.0065 0.0010

Pluto 34079-12-29 18:57 G 14168522.18 14168522.29 14168522.40 0.0065 0.0056

Saturn 34083-09-11 16:19 G 14169874.11 14169874.18 14169874.27 0.0285 0.0264

Jupiter 34083-12-30 04:48 G 14169983.62 14169983.70 14169983.79 0.0495 0.0446

Mars 34084-01-22 20:38 G 14170007.25 14170007.36 14170007.48 0.1617 0.1188

Saturn 34084-04-28 06:43 G 14170103.58 14170103.78 14170104.00 0.0283 0.0028

Saturn 34084-12-13 18:43 G 14170333.14 14170333.28 14170333.43 0.0280 0.0200

Uranus 34087-09-03 08:24 G 14171326.74 14171326.85 14171327.00 0.0141 0.0114

Uranus 34088-04-16 18:43 G 14171553.10 14171553.28 14171553.46 0.0140 0.0082

Uranus 34088-11-29 04:19 G 14171779.48 14171779.68 14171779.88 0.0140 0.0050

Uranus 34089-07-13 13:55 G 14172005.86 14172006.08 14172006.30 0.0140 0.0019

Jupiter 34089-11-02 16:05 G 14172118.09 14172118.17 14172118.25 0.0531 0.0486

Uranus 34090-02-24 23:17 G 14172232.25 14172232.47 14172232.69 0.0140 0.0012

Uranus 34090-10-09 08:09 G 14172458.64 14172458.84 14172459.06 0.0139 0.0043

Uranus 34091-05-23 17:17 G 14172685.04 14172685.22 14172685.41 0.0139 0.0074

Uranus 34092-01-05 01:55 G 14172911.45 14172911.58 14172911.73 0.0139 0.0104

Uranus 34092-08-18 10:33 G 14173137.90 14173137.94 14173138.01 0.0139 0.0134

Jupiter 34095-09-04 06:57 G 14174249.59 14174249.79 14174250.00 0.0494 0.0032

Saturn 34100-01-02 08:24 G 14175830.69 14175830.85 14175831.02 0.0278 0.0172

Saturn 34100-08-19 20:38 G 14176060.15 14176060.36 14176060.57 0.0280 0.0053

Jupiter 34101-07-09 06:14 G 14176383.56 14176383.76 14176383.96 0.0532 0.0041

Jupiter 34107-05-11 09:07 G 14178515.75 14178515.88 14178516.00 0.0494 0.0385

Saturn 34113-03-24 21:36 G 14180660.29 14180660.40 14180660.54 0.0284 0.0231

Saturn 34113-11-09 11:45 G 14180889.78 14180889.99 14180890.20 0.0282 0.0005

Saturn 34114-06-26 23:17 G 14181119.35 14181119.47 14181119.59 0.0279 0.0229

Mars 34116-01-22 13:41 G 14181693.91 14181694.07 14181694.22 0.1623 0.0746

Neptune 34127-09-08 20:24 G 14185941.34 14185941.35 14185941.40 0.0088 0.0087

Neptune 34128-04-21 09:36 G 14186166.77 14186166.90 14186167.03 0.0088 0.0071

Neptune 34128-12-02 22:19 G 14186392.27 14186392.43 14186392.61 0.0088 0.0054

Saturn 34129-07-15 10:33 G 14186616.76 14186616.94 14186617.12 0.0278 0.0147

Neptune 34129-07-16 11:31 G 14186617.79 14186617.98 14186618.19 0.0088 0.0038

Neptune 34130-02-27 00:29 G 14186843.31 14186843.52 14186843.74 0.0088 0.0021

Saturn 34130-03-01 22:48 G 14186846.25 14186846.45 14186846.66 0.0280 0.0078

Neptune 34130-10-10 13:26 G 14187068.84 14187069.06 14187069.29 0.0088 0.0005

Jupiter 34131-05-13 16:48 G 14187284.03 14187284.20 14187284.37 0.0494 0.0271

Neptune 34131-05-24 02:24 G 14187294.39 14187294.60 14187294.82 0.0088 0.0012

Uranus 34131-08-29 17:45 G 14187392.14 14187392.24 14187392.36 0.0138 0.0118

Neptune 34132-01-04 15:07 G 14187519.94 14187520.13 14187520.35 0.0088 0.0030

Uranus 34132-04-12 01:12 G 14187618.39 14187618.55 14187618.72 0.0138 0.0089

Neptune 34132-08-17 04:33 G 14187745.51 14187745.69 14187745.88 0.0088 0.0046

Uranus 34132-11-24 08:38 G 14187844.67 14187844.86 14187845.06 0.0138 0.0060

Neptune 34133-03-30 17:17 G 14187971.08 14187971.22 14187971.39 0.0088 0.0063

Uranus 34133-07-08 16:19 G 14188070.98 14188071.18 14188071.40 0.0138 0.0031

Neptune 34133-11-11 06:00 G 14188196.68 14188196.75 14188196.87 0.0088 0.0079

Uranus 34134-02-20 00:29 G 14188297.30 14188297.52 14188297.74 0.0139 0.0001

Uranus 34134-10-04 08:24 G 14188523.64 14188523.85 14188524.07 0.0139 0.0031

Uranus 34135-05-18 16:33 G 14188750.00 14188750.19 14188750.39 0.0139 0.0061

Uranus 34135-12-31 00:57 G 14188976.39 14188976.54 14188976.72 0.0139 0.0092

Uranus 34136-08-13 09:50 G 14189202.81 14189202.91 14189203.01 0.0140 0.0122

Jupiter 34137-03-16 23:31 G 14189418.31 14189418.48 14189418.66 0.0531 0.0272

Saturn 34142-10-05 03:50 G 14191446.52 14191446.66 14191446.82 0.0285 0.0201

Jupiter 34143-01-16 19:26 G 14191550.11 14191550.31 14191550.51 0.0494 0.0140

Saturn 34143-05-22 17:45 G 14191676.03 14191676.24 14191676.45 0.0282 0.0034

Saturn 34144-01-07 05:17 G 14191905.65 14191905.72 14191905.80 0.0279 0.0259

Jupiter 34148-11-19 14:09 G 14193683.92 14193684.09 14193684.27 0.0532 0.0254

Mars 34149-11-20 09:21 G 14194049.81 14194049.89 14194049.97 0.1615 0.1421

Saturn 34159-01-25 15:36 G 14197402.96 14197403.15 14197403.34 0.0278 0.0120

Saturn 34159-09-12 04:05 G 14197632.47 14197632.67 14197632.86 0.0281 0.0106

Earth 34162-09-25 08:24 G 14198741.77 14198741.85 14198741.92 0.2673 0.2344

Pluto 34167-01-17 10:05 G 14200316.71 14200316.92 14200317.14 0.0079 0.0013

Pluto 34167-08-30 19:41 G 14200542.24 14200542.32 14200542.44 0.0079 0.0070

Earth 34170-09-22 22:19 G 14201661.31 14201661.43 14201661.56 0.2672 0.1555

Moon 34170-09-23 04:05 G 14201661.51 14201661.67 14201661.83 0.2670 0.0563 *

Uranus 34171-05-04 16:05 G 14201885.08 14201885.17 14201885.28 0.0141 0.0126

Uranus 34171-12-17 01:55 G 14202111.43 14202111.58 14202111.75 0.0141 0.0095

Saturn 34172-04-16 08:24 G 14202232.69 14202232.85 14202233.02 0.0284 0.0170

Uranus 34172-07-30 12:00 G 14202337.81 14202338.00 14202338.20 0.0140 0.0063

Saturn 34172-12-01 21:50 G 14202462.21 14202462.41 14202462.62 0.0281 0.0064

Uranus 34173-03-13 21:36 G 14202564.19 14202564.40 14202564.62 0.0140 0.0031

Uranus 34173-10-26 06:57 G 14202790.57 14202790.79 14202791.01 0.0140 0.0002

Uranus 34174-06-09 16:19 G 14203016.97 14203017.18 14203017.39 0.0140 0.0031

Uranus 34175-01-22 01:26 G 14203243.36 14203243.56 14203243.75 0.0139 0.0062

Uranus 34175-09-05 10:05 G 14203469.77 14203469.92 14203470.10 0.0139 0.0092

Uranus 34176-04-18 18:57 G 14203696.20 14203696.29 14203696.40 0.0139 0.0122

Jupiter 34178-09-24 05:45 G 14204584.54 14204584.74 14204584.94 0.0494 0.0105

Mars 34181-11-19 02:09 G 14205736.42 14205736.59 14205736.75 0.1621 0.0503

Jupiter 34184-07-28 08:38 G 14206718.66 14206718.86 14206719.07 0.0532 0.0064

Saturn 34188-08-06 16:05 G 14208188.98 14208189.17 14208189.38 0.0278 0.0100

Saturn 34189-03-24 04:48 G 14208418.51 14208418.70 14208418.89 0.0281 0.0128

Jupiter 34190-05-30 08:38 G 14208850.70 14208850.86 14208851.02 0.0494 0.0307

Jupiter 34196-04-01 22:33 G 14210984.34 14210984.44 14210984.54 0.0532 0.0464

Saturn 34201-10-28 12:57 G 14213018.87 14213019.04 14213019.23 0.0284 0.0144

Saturn 34202-06-15 02:24 G 14213248.41 14213248.60 14213248.81 0.0282 0.0090

Neptune 34209-03-15 10:33 G 14215713.88 14215713.94 14215714.03 0.0089 0.0084

Neptune 34209-10-26 23:45 G 14215939.35 14215939.49 14215939.64 0.0089 0.0067

Neptune 34210-06-09 12:57 G 14216164.86 14216165.04 14216165.23 0.0089 0.0050

Neptune 34211-01-21 02:09 G 14216390.39 14216390.59 14216390.80 0.0089 0.0033

Neptune 34211-09-03 15:21 G 14216615.92 14216616.14 14216616.35 0.0089 0.0016

Neptune 34212-04-16 04:19 G 14216841.46 14216841.68 14216841.90 0.0089 0.0001

Neptune 34212-11-27 17:17 G 14217067.01 14217067.22 14217067.44 0.0089 0.0018

Neptune 34213-07-11 06:14 G 14217292.56 14217292.76 14217292.96 0.0089 0.0035

Neptune 34214-02-21 19:12 G 14217518.13 14217518.30 14217518.49 0.0089 0.0052

Jupiter 34214-06-02 17:45 G 14217619.10 14217619.24 14217619.38 0.0495 0.0359

Neptune 34214-10-05 07:55 G 14217743.71 14217743.83 14217743.99 0.0089 0.0069

Uranus 34215-04-30 01:26 G 14217950.49 14217950.56 14217950.63 0.0137 0.0130

Neptune 34215-05-18 20:38 G 14217969.33 14217969.36 14217969.45 0.0089 0.0087

Uranus 34215-12-12 08:53 G 14218176.72 14218176.87 14218177.01 0.0138 0.0101

Uranus 34216-07-25 16:05 G 14218402.99 14218403.17 14218403.36 0.0138 0.0072

Uranus 34217-03-08 23:31 G 14218629.29 14218629.48 14218629.70 0.0138 0.0043

Uranus 34217-10-21 07:26 G 14218855.60 14218855.81 14218856.03 0.0138 0.0013

Saturn 34218-02-17 20:53 G 14218975.16 14218975.37 14218975.58 0.0278 0.0072

Uranus 34218-06-04 15:21 G 14219081.93 14219082.14 14219082.36 0.0139 0.0018

Mars 34218-06-28 12:43 G 14219105.89 14219106.03 14219106.17 0.1915 0.1158

Saturn 34218-10-05 09:21 G 14219204.72 14219204.89 14219205.07 0.0281 0.0156

Uranus 34219-01-16 23:31 G 14219308.29 14219308.48 14219308.70 0.0139 0.0048

Uranus 34219-08-31 07:55 G 14219534.66 14219534.83 14219535.02 0.0139 0.0078

Jupiter 34220-04-05 23:31 G 14219753.34 14219753.48 14219753.64 0.0532 0.0358

Uranus 34220-04-13 16:19 G 14219761.06 14219761.18 14219761.33 0.0139 0.0109

Uranus 34220-11-26 01:12 G 14219987.54 14219987.55 14219987.56 0.0140 0.0139

Jupiter 34226-02-05 20:24 G 14221885.14 14221885.35 14221885.55 0.0494 0.0056

Saturn 34231-05-10 16:33 G 14223805.00 14223805.19 14223805.39 0.0284 0.0115

Jupiter 34231-12-10 15:36 G 14224018.96 14224019.15 14224019.34 0.0532 0.0159

Saturn 34231-12-26 05:45 G 14224034.55 14224034.74 14224034.93 0.0281 0.0117

Jupiter 34237-10-11 22:19 G 14226151.37 14226151.43 14226151.49 0.0494 0.0469

Saturn 34247-01-13 09:36 G 14229531.87 14229531.90 14229531.93 0.0276 0.0272

Saturn 34247-08-30 20:09 G 14229761.14 14229761.34 14229761.55 0.0278 0.0054

Mars 34247-09-17 14:24 G 14229778.93 14229779.10 14229779.27 0.1619 0.0253

Saturn 34248-04-16 08:53 G 14229990.71 14229990.87 14229991.04 0.0281 0.0175

Uranus 34255-01-02 21:36 G 14232443.39 14232443.40 14232443.43 0.0141 0.0140

Uranus 34255-08-17 07:26 G 14232669.69 14232669.81 14232669.97 0.0141 0.0109

Uranus 34256-03-30 17:45 G 14232896.06 14232896.24 14232896.42 0.0141 0.0077

Uranus 34256-11-12 03:21 G 14233122.44 14233122.64 14233122.85 0.0140 0.0045

Uranus 34257-06-26 12:57 G 14233348.83 14233349.04 14233349.26 0.0140 0.0014

Uranus 34258-02-07 22:19 G 14233575.22 14233575.43 14233575.65 0.0140 0.0018

Uranus 34258-09-22 07:26 G 14233801.61 14233801.81 14233802.02 0.0139 0.0048

Uranus 34259-05-06 16:19 G 14234028.02 14234028.18 14234028.38 0.0139 0.0079

Uranus 34259-12-19 01:12 G 14234254.43 14234254.55 14234254.70 0.0139 0.0109

Uranus 34260-08-01 10:19 G 14234480.93 14234480.93 14234480.94 0.0139 0.0139

Saturn 34260-11-19 19:41 G 14234591.12 14234591.32 14234591.52 0.0284 0.0092

Saturn 34261-07-07 08:38 G 14234820.69 14234820.86 14234821.05 0.0281 0.0141

Jupiter 34261-10-14 07:12 G 14234919.62 14234919.80 14234920.00 0.0495 0.0195

Jupiter 34267-08-18 09:36 G 14237053.71 14237053.90 14237054.10 0.0531 0.0157

Jupiter 34273-06-19 10:05 G 14239185.74 14239185.92 14239186.10 0.0494 0.0217

Saturn 34276-07-25 13:41 G 14240317.98 14240318.07 14240318.16 0.0276 0.0246

Saturn 34277-03-12 00:14 G 14240547.30 14240547.51 14240547.72 0.0279 0.0027

Saturn 34277-10-27 12:57 G 14240776.90 14240777.04 14240777.19 0.0281 0.0202

Jupiter 34279-04-22 23:45 G 14241319.35 14241319.49 14241319.64 0.0532 0.0370

Mars 34284-04-24 15:21 G 14243147.97 14243148.14 14243148.31 0.1919 0.0352

Saturn 34290-06-01 22:33 G 14245377.24 14245377.44 14245377.65 0.0283 0.0064

Saturn 34291-01-17 11:31 G 14245606.82 14245606.98 14245607.16 0.0280 0.0167

Moon 34292-03-25 17:31 G 14246040.07 14246040.23 14246040.40 0.2653 0.0546

Earth 34292-03-25 17:45 G 14246040.09 14246040.24 14246040.39 0.2659 0.0757 *

Neptune 34292-07-24 20:24 G 14246161.27 14246161.35 14246161.49 0.0088 0.0077

Neptune 34293-03-07 09:50 G 14246386.75 14246386.91 14246387.08 0.0088 0.0060

Neptune 34293-10-18 22:33 G 14246612.26 14246612.44 14246612.64 0.0088 0.0043

Neptune 34294-06-01 11:31 G 14246837.78 14246837.98 14246838.20 0.0088 0.0027

Neptune 34295-01-13 00:29 G 14247063.31 14247063.52 14247063.75 0.0088 0.0010

Neptune 34295-08-26 13:41 G 14247288.85 14247289.07 14247289.29 0.0088 0.0007

Neptune 34296-04-08 02:24 G 14247514.40 14247514.60 14247514.82 0.0088 0.0024

Neptune 34296-11-19 15:36 G 14247739.95 14247740.15 14247740.35 0.0088 0.0040

Jupiter 34297-06-21 18:57 G 14247954.21 14247954.29 14247954.39 0.0495 0.0446

Neptune 34297-07-03 04:19 G 14247965.52 14247965.68 14247965.86 0.0088 0.0057

Neptune 34298-02-13 17:02 G 14248191.11 14248191.21 14248191.36 0.0088 0.0074

Uranus 34299-08-11 16:05 G 14248735.07 14248735.17 14248735.31 0.0137 0.0114

Uranus 34300-03-25 23:31 G 14248961.32 14248961.48 14248961.66 0.0138 0.0085

Uranus 34300-11-07 07:12 G 14249187.60 14249187.80 14249188.00 0.0138 0.0055

Uranus 34301-06-21 14:53 G 14249413.91 14249414.12 14249414.34 0.0138 0.0026

Uranus 34302-02-02 23:02 G 14249640.24 14249640.46 14249640.67 0.0138 0.0005

Uranus 34302-09-17 06:57 G 14249866.58 14249866.79 14249867.00 0.0139 0.0034

Jupiter 34303-04-27 04:19 G 14250088.59 14250088.68 14250088.77 0.0532 0.0472

Uranus 34303-05-01 14:53 G 14250092.94 14250093.12 14250093.32 0.0139 0.0065

Uranus 34303-12-13 23:17 G 14250319.32 14250319.47 14250319.64 0.0139 0.0095

Uranus 34304-07-27 07:41 G 14250545.74 14250545.82 14250545.92 0.0139 0.0126

Saturn 34306-02-05 12:29 G 14251103.91 14251104.02 14251104.14 0.0276 0.0230

Saturn 34306-09-22 23:17 G 14251333.26 14251333.47 14251333.69 0.0279 0.0010

Saturn 34307-05-10 12:14 G 14251562.88 14251563.01 14251563.14 0.0282 0.0220

Jupiter 34309-02-25 22:05 G 14252220.22 14252220.42 14252220.63 0.0494 0.0035

Mars 34313-07-16 02:38 G 14253821.44 14253821.61 14253821.78 0.1617 0.0012

Jupiter 34314-12-30 19:26 G 14254354.11 14254354.31 14254354.51 0.0531 0.0046

Saturn 34319-04-28 09:07 G 14255933.85 14255933.88 14255933.91 0.0287 0.0283

Saturn 34319-12-14 00:29 G 14256163.32 14256163.52 14256163.73 0.0284 0.0043

Saturn 34320-07-30 13:26 G 14256392.91 14256393.06 14256393.22 0.0281 0.0189

Jupiter 34320-10-31 23:31 G 14256486.36 14256486.48 14256486.62 0.0495 0.0380

Pluto 34324-03-25 19:12 G 14257727.18 14257727.30 14257727.47 0.0065 0.0048

Pluto 34324-11-05 23:45 G 14257952.28 14257952.49 14257952.72 0.0065 0.0003

Pluto 34325-06-19 03:36 G 14258177.51 14258177.65 14258177.84 0.0065 0.0044

Saturn 34335-08-18 16:19 G 14261890.04 14261890.18 14261890.33 0.0276 0.0204

Saturn 34336-04-04 03:07 G 14262119.42 14262119.63 14262119.84 0.0279 0.0017

Saturn 34336-11-19 16:05 G 14262349.07 14262349.17 14262349.28 0.0282 0.0246

Uranus 34339-04-17 12:14 G 14263227.91 14263228.01 14263228.12 0.0141 0.0123

Uranus 34339-11-29 22:05 G 14263454.27 14263454.42 14263454.60 0.0141 0.0092

Uranus 34340-07-13 08:09 G 14263680.65 14263680.84 14263681.05 0.0140 0.0060

Uranus 34341-02-24 18:00 G 14263907.04 14263907.25 14263907.47 0.0140 0.0029

Uranus 34341-10-09 03:36 G 14264133.43 14264133.65 14264133.87 0.0140 0.0003

Uranus 34342-05-23 12:57 G 14264359.83 14264360.04 14264360.25 0.0140 0.0034

Uranus 34343-01-04 22:05 G 14264586.23 14264586.42 14264586.62 0.0139 0.0065

Uranus 34343-08-19 07:12 G 14264812.65 14264812.80 14264812.97 0.0139 0.0095

Uranus 34344-04-01 16:05 G 14265039.09 14265039.17 14265039.27 0.0139 0.0125

Jupiter 34344-11-03 09:50 G 14265254.74 14265254.91 14265255.08 0.0495 0.0288

Saturn 34348-11-07 11:31 G 14266719.90 14266719.98 14266720.08 0.0286 0.0256

Saturn 34349-06-25 02:53 G 14266949.41 14266949.62 14266949.83 0.0283 0.0017

Saturn 34350-02-09 15:50 G 14267179.03 14267179.16 14267179.30 0.0280 0.0214

Mars 34350-02-20 17:31 G 14267190.06 14267190.23 14267190.40 0.1922 0.0486

Jupiter 34350-09-07 12:29 G 14267388.84 14267389.02 14267389.19 0.0532 0.0259

Jupiter 34356-07-09 12:14 G 14269520.81 14269521.01 14269521.20 0.0494 0.0126

Jupiter 34362-05-13 04:48 G 14271654.52 14271654.70 14271654.87 0.0532 0.0252

Saturn 34365-02-27 15:21 G 14272675.98 14272676.14 14272676.29 0.0276 0.0187

Saturn 34365-10-15 02:09 G 14272905.37 14272905.59 14272905.80 0.0279 0.0034

Saturn 34366-06-01 14:53 G 14273135.06 14273135.12 14273135.20 0.0282 0.0264

Neptune 34373-06-17 21:36 G 14275708.40 14275708.40 14275708.41 0.0089 0.0089

Neptune 34374-01-29 10:33 G 14275933.83 14275933.94 14275934.09 0.0089 0.0073

Neptune 34374-09-11 23:45 G 14276159.33 14276159.49 14276159.68 0.0089 0.0056

Neptune 34375-04-25 12:57 G 14276384.85 14276385.04 14276385.25 0.0089 0.0039

Neptune 34375-12-07 02:09 G 14276610.38 14276610.59 14276610.81 0.0089 0.0022

Neptune 34376-07-19 15:21 G 14276835.92 14276836.14 14276836.36 0.0089 0.0005

Neptune 34377-03-02 04:33 G 14277061.47 14277061.69 14277061.91 0.0089 0.0012

Neptune 34377-10-13 17:31 G 14277287.03 14277287.23 14277287.44 0.0089 0.0029

Saturn 34378-05-20 12:43 G 14277505.92 14277506.03 14277506.15 0.0287 0.0236

Neptune 34378-05-27 06:29 G 14277512.59 14277512.77 14277512.96 0.0089 0.0046

Saturn 34379-01-05 04:19 G 14277735.47 14277735.68 14277735.89 0.0284 0.0005

Neptune 34379-01-07 19:12 G 14277738.17 14277738.30 14277738.47 0.0089 0.0064

Mars 34379-05-13 14:53 G 14277863.95 14277864.12 14277864.30 0.1615 0.0235

Neptune 34379-08-21 08:09 G 14277963.77 14277963.84 14277963.96 0.0089 0.0080

Saturn 34379-08-22 17:02 G 14277965.10 14277965.21 14277965.33 0.0281 0.0234

Uranus 34383-04-12 00:57 G 14279293.46 14279293.54 14279293.64 0.0137 0.0124

Uranus 34383-11-24 08:24 G 14279519.70 14279519.85 14279520.01 0.0137 0.0096

Uranus 34384-07-07 15:36 G 14279745.97 14279746.15 14279746.35 0.0138 0.0067

Uranus 34385-02-18 23:31 G 14279972.27 14279972.48 14279972.69 0.0138 0.0037

Uranus 34385-10-03 07:12 G 14280198.59 14280198.80 14280199.02 0.0138 0.0008

Uranus 34386-05-17 15:07 G 14280424.92 14280425.13 14280425.35 0.0138 0.0023

Uranus 34386-12-29 23:17 G 14280651.28 14280651.47 14280651.68 0.0139 0.0053

Uranus 34387-08-13 07:26 G 14280877.65 14280877.81 14280877.99 0.0139 0.0083

Uranus 34388-03-26 15:50 G 14281104.04 14281104.16 14281104.29 0.0139 0.0113

Jupiter 34392-03-16 23:31 G 14282555.29 14282555.48 14282555.68 0.0495 0.0126

Saturn 34394-09-09 18:57 G 14283462.13 14283462.29 14283462.47 0.0276 0.0161

Saturn 34395-04-27 06:00 G 14283691.54 14283691.75 14283691.96 0.0279 0.0061

Jupiter 34398-01-18 21:36 G 14284689.20 14284689.40 14284689.61 0.0531 0.0055

Jupiter 34403-11-21 02:24 G 14286821.43 14286821.60 14286821.77 0.0494 0.0286

Moon 34405-09-27 03:36 G 14287497.51 14287497.65 14287497.79 0.2668 0.1439

Earth 34405-09-27 08:09 G 14287497.74 14287497.84 14287497.94 0.2672 0.2112 *

Saturn 34407-11-30 15:36 G 14288292.02 14288292.15 14288292.31 0.0286 0.0209

Saturn 34408-07-17 06:57 G 14288521.58 14288521.79 14288522.00 0.0283 0.0031

Saturn 34409-03-03 19:41 G 14288751.25 14288751.32 14288751.40 0.0280 0.0260

Jupiter 34409-09-23 12:57 G 14288954.95 14288955.04 14288955.14 0.0532 0.0463

Pluto 34412-07-06 16:33 G 14289972.01 14289972.19 14289972.40 0.0079 0.0040

Pluto 34413-02-17 02:24 G 14290197.44 14290197.60 14290197.81 0.0079 0.0044

Earth 34413-09-24 22:05 G 14290417.30 14290417.42 14290417.54 0.2672 0.1798

Mars 34415-12-18 19:41 G 14291232.19 14291232.32 14291232.45 0.1925 0.1313

Uranus 34422-12-15 16:48 G 14293786.18 14293786.20 14293786.26 0.0141 0.0138

Uranus 34423-07-30 03:21 G 14294012.50 14294012.64 14294012.79 0.0141 0.0106

Uranus 34424-03-12 13:12 G 14294238.87 14294239.05 14294239.24 0.0141 0.0075

Saturn 34424-03-21 18:43 G 14294248.10 14294248.28 14294248.46 0.0276 0.0144

Uranus 34424-10-24 23:02 G 14294465.26 14294465.46 14294465.67 0.0140 0.0043

Saturn 34424-11-06 05:31 G 14294477.53 14294477.73 14294477.94 0.0279 0.0079

Uranus 34425-06-08 08:53 G 14294691.65 14294691.87 14294692.09 0.0140 0.0012

Uranus 34426-01-20 18:14 G 14294918.05 14294918.26 14294918.48 0.0140 0.0020

Uranus 34426-09-04 03:36 G 14295144.45 14295144.65 14295144.86 0.0139 0.0051

Uranus 34427-04-18 12:43 G 14295370.86 14295371.03 14295371.22 0.0139 0.0081

Jupiter 34427-11-23 12:00 G 14295589.87 14295590.00 14295590.13 0.0495 0.0380

Uranus 34427-11-30 21:50 G 14295597.29 14295597.41 14295597.55 0.0139 0.0111

Jupiter 34433-09-26 17:17 G 14297724.08 14297724.22 14297724.36 0.0531 0.0377

Saturn 34437-06-11 16:19 G 14299078.03 14299078.18 14299078.34 0.0286 0.0189

Saturn 34438-01-27 07:41 G 14299307.61 14299307.82 14299308.03 0.0284 0.0050

Saturn 34438-09-13 20:24 G 14299537.33 14299537.35 14299537.37 0.0281 0.0279

Jupiter 34439-07-29 12:57 G 14299855.84 14299856.04 14299856.25 0.0495 0.0041

Mars 34445-03-10 03:50 G 14301906.49 14301906.66 14301906.82 0.1614 0.0461

Jupiter 34445-06-01 08:53 G 14301989.67 14301989.87 14301990.06 0.0531 0.0139

Jupiter 34451-04-03 15:36 G 14304122.07 14304122.15 14304122.23 0.0495 0.0451

Saturn 34453-10-01 23:02 G 14305034.26 14305034.46 14305034.65 0.0276 0.0116

Saturn 34454-05-19 10:05 G 14305263.72 14305263.92 14305264.11 0.0279 0.0107

Neptune 34456-10-27 07:55 G 14306155.77 14306155.83 14306155.95 0.0088 0.0082

Neptune 34457-06-09 21:21 G 14306381.25 14306381.39 14306381.55 0.0088 0.0064

Neptune 34458-01-21 10:05 G 14306606.75 14306606.92 14306607.12 0.0088 0.0048

Neptune 34458-09-03 23:31 G 14306832.27 14306832.48 14306832.68 0.0088 0.0032

Neptune 34459-04-17 12:14 G 14307057.80 14307058.01 14307058.23 0.0088 0.0015

Neptune 34459-11-29 01:12 G 14307283.33 14307283.55 14307283.77 0.0088 0.0001

Neptune 34460-07-11 13:55 G 14307508.88 14307509.08 14307509.31 0.0088 0.0019

Neptune 34461-02-22 03:07 G 14307734.43 14307734.63 14307734.84 0.0088 0.0034

Neptune 34461-10-05 15:36 G 14307959.99 14307960.15 14307960.35 0.0088 0.0052

Neptune 34462-05-19 04:48 G 14308185.57 14308185.70 14308185.86 0.0088 0.0068

Neptune 34462-12-30 17:31 G 14308411.19 14308411.23 14308411.32 0.0088 0.0084

Uranus 34466-12-10 09:50 G 14309851.89 14309851.91 14309851.96 0.0137 0.0135

Saturn 34466-12-22 19:55 G 14309864.16 14309864.33 14309864.51 0.0286 0.0161

Uranus 34467-07-24 17:31 G 14310078.09 14310078.23 14310078.36 0.0137 0.0107

Saturn 34467-08-09 11:02 G 14310093.76 14310093.96 14310094.16 0.0283 0.0078

Uranus 34468-03-07 00:43 G 14310304.36 14310304.53 14310304.72 0.0138 0.0078

Uranus 34468-10-19 08:09 G 14310530.65 14310530.84 14310531.05 0.0138 0.0049

Uranus 34469-06-02 16:05 G 14310756.96 14310757.17 14310757.39 0.0138 0.0019

Uranus 34470-01-15 00:14 G 14310983.29 14310983.51 14310983.72 0.0138 0.0011

Uranus 34470-08-29 08:09 G 14311209.64 14311209.84 14311210.05 0.0139 0.0041

Uranus 34471-04-12 16:05 G 14311436.00 14311436.17 14311436.37 0.0139 0.0071

Uranus 34471-11-25 00:29 G 14311662.38 14311662.52 14311662.67 0.0139 0.0101

Uranus 34472-07-08 08:53 G 14311888.81 14311888.87 14311888.95 0.0139 0.0132

Jupiter 34475-04-06 01:26 G 14312890.38 14312890.56 14312890.74 0.0495 0.0216

Mars 34477-03-08 20:24 G 14313593.28 14313593.35 14313593.42 0.1620 0.1475

Jupiter 34481-02-07 01:55 G 14315024.39 14315024.58 14315024.77 0.0532 0.0166

Saturn 34483-04-13 23:17 G 14315820.27 14315820.47 14315820.67 0.0277 0.0097

Saturn 34483-11-29 10:19 G 14316049.74 14316049.93 14316050.12 0.0279 0.0127

Jupiter 34486-12-10 04:05 G 14317156.48 14317156.67 14317156.86 0.0494 0.0196

Jupiter 34492-10-12 18:00 G 14319290.10 14319290.25 14319290.40 0.0531 0.0344

Saturn 34496-07-03 20:53 G 14320650.19 14320650.37 14320650.56 0.0286 0.0140

Saturn 34497-02-18 12:00 G 14320879.81 14320880.00 14320880.20 0.0283 0.0099

Uranus 34507-03-30 09:36 G 14324570.79 14324570.90 14324571.02 0.0141 0.0119

Uranus 34507-11-11 19:41 G 14324797.16 14324797.32 14324797.50 0.0141 0.0088

Uranus 34508-06-25 05:31 G 14325023.54 14325023.73 14325023.94 0.0140 0.0057

Uranus 34509-02-06 15:36 G 14325249.93 14325250.15 14325250.36 0.0140 0.0025

Uranus 34509-09-21 01:12 G 14325476.33 14325476.55 14325476.77 0.0140 0.0007

Uranus 34510-05-05 10:33 G 14325702.73 14325702.94 14325703.15 0.0140 0.0038

Jupiter 34510-12-13 12:00 G 14325924.93 14325925.00 14325925.07 0.0495 0.0460

Uranus 34510-12-17 19:41 G 14325929.14 14325929.32 14325929.52 0.0139 0.0069

Mars 34511-01-06 16:05 G 14325949.01 14325949.17 14325949.33 0.1612 0.0698

Uranus 34511-08-01 04:48 G 14326155.56 14326155.70 14326155.87 0.0139 0.0099

Uranus 34512-03-14 13:41 G 14326382.01 14326382.07 14326382.17 0.0139 0.0129

Saturn 34512-10-25 04:33 G 14326606.48 14326606.69 14326606.90 0.0277 0.0066

Saturn 34513-06-11 15:50 G 14326835.98 14326836.16 14326836.33 0.0279 0.0158

Jupiter 34516-10-16 18:29 G 14328059.18 14328059.27 14328059.36 0.0531 0.0469

Jupiter 34522-08-18 14:38 G 14330190.91 14330191.11 14330191.32 0.0495 0.0050

Saturn 34526-01-15 01:26 G 14331436.37 14331436.56 14331436.76 0.0286 0.0110

Saturn 34526-09-01 16:19 G 14331665.99 14331666.18 14331666.36 0.0283 0.0128

Jupiter 34528-06-21 09:36 G 14332324.69 14332324.90 14332325.10 0.0531 0.0050

Jupiter 34534-04-23 16:48 G 14334457.07 14334457.20 14334457.34 0.0494 0.0364

Moon 34535-03-28 18:14 G 14334796.12 14334796.26 14334796.40 0.2665 0.0889

Earth 34535-03-28 20:09 G 14334796.19 14334796.34 14334796.49 0.2659 0.0771 *

Neptune 34538-05-03 22:19 G 14335928.33 14335928.43 14335928.54 0.0089 0.0078

Neptune 34538-12-15 11:31 G 14336153.82 14336153.98 14336154.14 0.0089 0.0061

Neptune 34539-07-29 00:14 G 14336379.34 14336379.51 14336379.72 0.0089 0.0044

Neptune 34540-03-10 13:26 G 14336604.87 14336605.06 14336605.28 0.0089 0.0028

Neptune 34540-10-22 02:53 G 14336830.40 14336830.62 14336830.84 0.0089 0.0010

Neptune 34541-06-04 15:50 G 14337055.95 14337056.16 14337056.38 0.0089 0.0007

Saturn 34541-09-19 21:07 G 14337163.32 14337163.38 14337163.45 0.0274 0.0259

Neptune 34542-01-16 04:48 G 14337281.50 14337281.70 14337281.93 0.0089 0.0024

Saturn 34542-05-07 06:14 G 14337392.55 14337392.76 14337392.97 0.0277 0.0045

Neptune 34542-08-29 18:14 G 14337507.06 14337507.26 14337507.45 0.0089 0.0041

Saturn 34542-12-22 17:31 G 14337622.07 14337622.23 14337622.40 0.0280 0.0180

Mars 34543-01-05 08:38 G 14337635.75 14337635.86 14337635.97 0.1618 0.1227

Moon 34543-03-26 14:53 G 14337716.09 14337716.12 14337716.15 0.2666 0.2580

Neptune 34543-04-12 06:57 G 14337732.63 14337732.79 14337732.97 0.0089 0.0057

Neptune 34543-11-23 19:41 G 14337958.22 14337958.32 14337958.46 0.0089 0.0074

Uranus 34551-03-25 02:24 G 14340636.50 14340636.60 14340636.72 0.0137 0.0117

Uranus 34551-11-06 09:50 G 14340862.75 14340862.91 14340863.08 0.0137 0.0089

Uranus 34552-06-19 17:17 G 14341089.03 14341089.22 14341089.42 0.0138 0.0060

Uranus 34553-02-01 01:12 G 14341315.34 14341315.55 14341315.76 0.0138 0.0030

Uranus 34553-09-15 09:07 G 14341541.66 14341541.88 14341542.10 0.0138 0.0001

Uranus 34554-04-29 16:48 G 14341768.00 14341768.20 14341768.42 0.0139 0.0030

Uranus 34554-12-12 00:43 G 14341994.35 14341994.53 14341994.74 0.0139 0.0060

Uranus 34555-07-26 09:21 G 14342220.72 14342220.89 14342221.05 0.0139 0.0089

Saturn 34555-07-28 03:07 G 14342222.43 14342222.63 14342222.83 0.0286 0.0087

Uranus 34556-03-08 17:45 G 14342447.13 14342447.24 14342447.35 0.0139 0.0120

Saturn 34556-03-13 17:45 G 14342452.07 14342452.24 14342452.42 0.0283 0.0151

Jupiter 34558-04-26 00:14 G 14343225.34 14343225.51 14343225.67 0.0495 0.0289

Jupiter 34564-02-28 05:02 G 14345359.53 14345359.71 14345359.88 0.0531 0.0271

Pluto 34569-09-12 03:50 G 14347382.66 14347382.66 14347382.68 0.0065 0.0065

Jupiter 34569-12-30 02:24 G 14347491.40 14347491.60 14347491.80 0.0495 0.0126

Pluto 34570-04-25 07:55 G 14347607.63 14347607.83 14347608.05 0.0065 0.0020

Pluto 34570-12-06 12:00 G 14347832.81 14347833.00 14347833.21 0.0065 0.0025

Saturn 34571-04-02 02:38 G 14347949.50 14347949.61 14347949.73 0.0274 0.0229

Saturn 34571-11-17 12:14 G 14348178.80 14348179.01 14348179.22 0.0277 0.0013

Saturn 34572-07-03 23:45 G 14348408.36 14348408.49 14348408.63 0.0280 0.0213

Jupiter 34575-11-02 18:00 G 14349625.08 14349625.25 14349625.43 0.0531 0.0259

Mars 34576-11-03 05:02 G 14349991.57 14349991.71 14349991.85 0.1610 0.0925

Mars 34579-08-13 02:09 G 14351004.47 14351004.59 14351004.72 0.1920 0.1337

Saturn 34585-02-06 09:07 G 14353008.68 14353008.88 14353009.09 0.0285 0.0054

Saturn 34585-09-23 23:17 G 14353238.32 14353238.47 14353238.64 0.0282 0.0183

Uranus 34590-11-27 16:48 G 14355129.14 14355129.20 14355129.29 0.0141 0.0132

Uranus 34591-07-12 03:21 G 14355355.49 14355355.64 14355355.79 0.0141 0.0100

Uranus 34592-02-23 13:12 G 14355581.87 14355582.05 14355582.25 0.0140 0.0069

Uranus 34592-10-06 23:02 G 14355808.25 14355808.46 14355808.67 0.0140 0.0037

Uranus 34593-05-21 08:38 G 14356034.65 14356034.86 14356035.08 0.0140 0.0006

Uranus 34594-01-02 18:00 G 14356261.05 14356261.25 14356261.48 0.0140 0.0026

Uranus 34594-08-17 03:21 G 14356487.45 14356487.64 14356487.85 0.0139 0.0057

Uranus 34595-03-31 12:43 G 14356713.87 14356714.03 14356714.21 0.0139 0.0087

Uranus 34595-11-12 21:21 G 14356940.29 14356940.39 14356940.53 0.0139 0.0117

Saturn 34600-10-13 06:00 G 14358735.62 14358735.75 14358735.90 0.0275 0.0205

Saturn 34601-05-30 15:50 G 14358964.94 14358965.16 14358965.37 0.0277 0.0013

Saturn 34602-01-15 03:07 G 14359194.54 14359194.63 14359194.75 0.0280 0.0240

Jupiter 34605-09-07 13:55 G 14360525.89 14360526.08 14360526.29 0.0495 0.0126

Mars 34608-11-02 21:21 G 14361678.25 14361678.39 14361678.52 0.1616 0.0992

Jupiter 34611-07-12 12:29 G 14362659.82 14362660.02 14362660.22 0.0531 0.0055

Saturn 34614-01-02 18:57 G 14363565.23 14363565.29 14363565.36 0.0288 0.0272

Saturn 34614-08-20 11:45 G 14363794.78 14363794.99 14363795.20 0.0285 0.0028

Saturn 34615-04-07 01:41 G 14364024.44 14364024.57 14364024.73 0.0282 0.0208

Jupiter 34617-05-13 13:41 G 14364791.91 14364792.07 14364792.24 0.0495 0.0302

Neptune 34621-01-30 20:09 G 14366150.29 14366150.34 14366150.39 0.0088 0.0086

Neptune 34621-09-13 08:53 G 14366375.75 14366375.87 14366376.02 0.0088 0.0069

Neptune 34622-04-26 21:36 G 14366601.24 14366601.40 14366601.60 0.0088 0.0054

Neptune 34622-12-08 11:02 G 14366826.76 14366826.96 14366827.16 0.0088 0.0037

Jupiter 34623-03-17 03:50 G 14366925.56 14366925.66 14366925.76 0.0531 0.0462

Neptune 34623-07-21 23:45 G 14367052.28 14367052.49 14367052.71 0.0088 0.0021

Neptune 34624-03-03 12:57 G 14367277.82 14367278.04 14367278.26 0.0088 0.0004

Neptune 34624-10-15 01:41 G 14367503.36 14367503.57 14367503.79 0.0088 0.0013

Neptune 34625-05-28 14:24 G 14367728.90 14367729.10 14367729.32 0.0088 0.0029

Neptune 34626-01-09 03:21 G 14367954.46 14367954.64 14367954.84 0.0088 0.0046

Neptune 34626-08-22 16:48 G 14368180.04 14368180.20 14368180.35 0.0088 0.0062

Neptune 34627-04-05 05:17 G 14368405.64 14368405.72 14368405.84 0.0088 0.0078

Saturn 34630-04-25 12:43 G 14369521.88 14369522.03 14369522.21 0.0275 0.0171

Saturn 34630-12-10 22:48 G 14369751.24 14369751.45 14369751.66 0.0278 0.0048

Saturn 34631-07-28 10:48 G 14369980.92 14369980.95 14369981.00 0.0280 0.0275

Uranus 34634-11-23 10:19 G 14371194.88 14371194.93 14371195.03 0.0137 0.0130

Uranus 34635-07-07 18:00 G 14371421.11 14371421.25 14371421.41 0.0137 0.0101

Uranus 34636-02-19 01:26 G 14371647.39 14371647.56 14371647.76 0.0138 0.0072

Uranus 34636-10-02 09:21 G 14371873.69 14371873.89 14371874.10 0.0138 0.0042

Uranus 34637-05-16 17:02 G 14372100.00 14372100.21 14372100.43 0.0138 0.0013

Uranus 34637-12-29 00:57 G 14372326.33 14372326.54 14372326.76 0.0138 0.0018

Uranus 34638-08-12 09:07 G 14372552.68 14372552.88 14372553.09 0.0139 0.0047

Uranus 34639-03-26 17:02 G 14372779.04 14372779.21 14372779.40 0.0139 0.0077

Uranus 34639-11-08 01:12 G 14373005.43 14373005.55 14373005.70 0.0139 0.0108

Uranus 34640-06-21 09:36 G 14373231.88 14373231.90 14373231.95 0.0140 0.0138

Jupiter 34641-05-15 23:31 G 14373560.34 14373560.48 14373560.62 0.0495 0.0364

Mars 34642-09-01 17:45 G 14374034.12 14374034.24 14374034.36 0.1609 0.1154

Saturn 34643-07-16 02:24 G 14374351.49 14374351.60 14374351.73 0.0288 0.0237

Saturn 34644-03-01 18:57 G 14374581.08 14374581.29 14374581.50 0.0285 0.0007

Saturn 34644-10-17 08:53 G 14374810.76 14374810.87 14374810.98 0.0282 0.0240

Mars 34645-06-10 04:19 G 14375046.51 14375046.68 14375046.85 0.1924 0.0497

Jupiter 34647-03-20 02:24 G 14375694.44 14375694.60 14375694.75 0.0531 0.0340

Earth 34648-09-29 07:26 G 14376253.70 14376253.81 14376253.93 0.2672 0.1826

Moon 34648-09-29 10:19 G 14376253.88 14376253.93 14376253.99 0.2678 0.2477 *

Jupiter 34653-01-19 01:26 G 14377826.35 14377826.56 14377826.76 0.0495 0.0052

Earth 34656-09-26 21:36 G 14379173.30 14379173.40 14379173.50 0.2672 0.2052

Moon 34656-09-27 03:21 G 14379173.51 14379173.64 14379173.78 0.2673 0.1383

Pluto 34657-12-24 21:36 G 14379627.35 14379627.40 14379627.45 0.0080 0.0077

Pluto 34658-08-07 07:41 G 14379852.60 14379852.82 14379853.05 0.0079 0.0007

Jupiter 34658-11-22 17:31 G 14379960.04 14379960.23 14379960.42 0.0532 0.0176

Saturn 34659-11-05 17:45 G 14380308.07 14380308.24 14380308.43 0.0275 0.0144

Saturn 34660-06-22 03:50 G 14380537.46 14380537.66 14380537.87 0.0278 0.0076

Jupiter 34664-09-24 03:21 G 14382092.57 14382092.64 14382092.70 0.0494 0.0466

Saturn 34673-01-25 06:57 G 14385137.65 14385137.79 14385137.94 0.0287 0.0207

Saturn 34673-09-11 23:02 G 14385367.25 14385367.46 14385367.67 0.0284 0.0036

Saturn 34674-04-29 12:43 G 14385596.97 14385597.03 14385597.09 0.0282 0.0268

Mars 34674-08-31 09:36 G 14385720.75 14385720.90 14385721.06 0.1615 0.0745

Uranus 34675-03-12 11:02 G 14385913.83 14385913.96 14385914.10 0.0141 0.0112

Uranus 34675-10-24 20:53 G 14386140.20 14386140.37 14386140.56 0.0141 0.0081

Uranus 34676-06-07 06:43 G 14386366.59 14386366.78 14386367.00 0.0140 0.0050

Uranus 34677-01-19 16:48 G 14386592.98 14386593.20 14386593.42 0.0140 0.0018

Uranus 34677-09-03 02:24 G 14386819.38 14386819.60 14386819.82 0.0140 0.0014

Uranus 34678-04-17 11:31 G 14387045.78 14387045.98 14387046.20 0.0140 0.0045

Uranus 34678-11-29 20:38 G 14387272.19 14387272.36 14387272.56 0.0139 0.0075

Uranus 34679-07-14 05:45 G 14387498.61 14387498.74 14387498.90 0.0139 0.0105

Uranus 34680-02-25 14:38 G 14387725.07 14387725.11 14387725.17 0.0139 0.0135

Jupiter 34688-09-26 09:36 G 14390860.71 14390860.90 14390861.09 0.0495 0.0179

Saturn 34689-05-18 01:26 G 14391094.36 14391094.56 14391094.75 0.0275 0.0108

Saturn 34690-01-02 11:45 G 14391323.80 14391323.99 14391324.18 0.0278 0.0113

Jupiter 34694-07-31 09:21 G 14392994.69 14392994.89 14392995.09 0.0531 0.0121

Jupiter 34700-06-02 12:00 G 14395126.82 14395127.00 14395127.19 0.0495 0.0232

Neptune 34702-08-07 10:05 G 14395922.84 14395922.92 14395923.00 0.0089 0.0083

Saturn 34702-08-08 15:50 G 14395924.00 14395924.16 14395924.34 0.0287 0.0168

Neptune 34703-03-20 22:48 G 14396148.32 14396148.45 14396148.61 0.0089 0.0066

Saturn 34703-03-26 07:41 G 14396153.61 14396153.82 14396154.02 0.0284 0.0074

Neptune 34703-11-01 12:00 G 14396373.83 14396374.00 14396374.19 0.0089 0.0049

Neptune 34704-06-14 01:12 G 14396599.35 14396599.55 14396599.76 0.0089 0.0032

Neptune 34705-01-25 14:24 G 14396824.89 14396825.10 14396825.32 0.0089 0.0016

Neptune 34705-09-08 03:36 G 14397050.43 14397050.65 14397050.87 0.0089 0.0002

Jupiter 34706-04-05 23:17 G 14397260.34 14397260.47 14397260.60 0.0531 0.0403

Neptune 34706-04-21 16:33 G 14397275.98 14397276.19 14397276.41 0.0089 0.0018

Neptune 34706-12-03 05:31 G 14397501.54 14397501.73 14397501.94 0.0089 0.0035

Neptune 34707-07-16 18:14 G 14397727.11 14397727.26 14397727.46 0.0089 0.0053

Neptune 34708-02-27 07:55 G 14397952.70 14397952.83 14397952.97 0.0089 0.0068

Mars 34708-06-30 06:14 G 14398076.68 14398076.76 14398076.84 0.1607 0.1390

Neptune 34708-10-09 20:38 G 14398178.32 14398178.36 14398178.44 0.0089 0.0085

Mars 34711-04-08 06:43 G 14399088.60 14399088.78 14399088.95 0.1927 0.0333

Saturn 34718-11-29 08:09 G 14401880.64 14401880.84 14401881.04 0.0276 0.0077

Uranus 34719-03-08 01:26 G 14401979.46 14401979.56 14401979.70 0.0137 0.0113

Saturn 34719-07-16 18:43 G 14402110.10 14402110.28 14402110.46 0.0279 0.0146

Uranus	34719-10-20 08:53 G	14402205.71	14402205.87	14402206.06	0.0138	0.0084
Uranus	34720-06-02 16:33 G	14402432.00	14402432.19	14402432.40	0.0138	0.0055
Uranus	34721-01-15 00:29 G	14402658.31	14402658.52	14402658.73	0.0138	0.0025
Uranus	34721-08-29 08:09 G	14402884.63	14402884.84	14402885.06	0.0138	0.0005
Uranus	34722-04-12 15:50 G	14403110.96	14403111.16	14403111.38	0.0139	0.0035
Uranus	34722-11-25 00:00 G	14403337.31	14403337.50	14403337.70	0.0139	0.0064
Uranus	34723-07-09 08:09 G	14403563.69	14403563.84	14403564.01	0.0139	0.0094
Uranus	34724-02-20 16:19 G	14403790.11	14403790.18	14403790.30	0.0139	0.0125
Jupiter	34724-06-04 20:09 G	14403895.24	14403895.34	14403895.45	0.0495	0.0424
Jupiter	34730-04-09 01:55 G	14406029.47	14406029.58	14406029.71	0.0531	0.0424
Saturn	34732-02-18 21:21 G	14406710.20	14406710.39	14406710.57	0.0286	0.0136
Saturn	34732-10-05 12:43 G	14406939.83	14406940.03	14406940.23	0.0284	0.0104
Jupiter	34736-02-08 19:55 G	14408161.12	14408161.33	14408161.53	0.0495	0.0009
Mars	34740-06-28 22:05 G	14409763.26	14409763.42	14409763.59	0.1613	0.0511
Jupiter	34741-12-12 17:17 G	14410295.02	14410295.22	14410295.42	0.0531	0.0092
Jupiter	34747-10-14 21:36 G	14412427.29	14412427.40	14412427.51	0.0495	0.0419
Saturn	34747-10-25 06:43 G	14412437.72	14412437.78	14412437.87	0.0274	0.0255
Saturn	34748-06-10 15:50 G	14412666.95	14412667.16	14412667.37	0.0276	0.0040
Saturn	34749-01-26 02:38 G	14412896.46	14412896.61	14412896.77	0.0279	0.0183
Uranus	34758-11-10 17:45 G	14416472.16	14416472.24	14416472.36	0.0141	0.0125
Uranus	34759-06-25 04:19 G	14416698.52	14416698.68	14416698.84	0.0141	0.0093
Uranus	34760-02-06 14:09 G	14416924.90	14416925.09	14416925.29	0.0140	0.0062
Uranus	34760-09-20 00:00 G	14417151.29	14417151.50	14417151.72	0.0140	0.0030
Uranus	34761-05-04 09:36 G	14417377.69	14417377.90	14417378.12	0.0140	0.0003
Saturn	34761-08-31 07:12 G	14417496.61	14417496.80	14417497.01	0.0286	0.0096
Uranus	34761-12-16 19:12 G	14417604.09	14417604.30	14417604.51	0.0140	0.0032
Saturn	34762-04-17 22:19 G	14417726.25	14417726.43	14417726.61	0.0283	0.0144
Uranus	34762-07-31 04:19 G	14417830.50	14417830.68	14417830.89	0.0139	0.0063
Uranus	34763-03-14 13:41 G	14418056.91	14418057.07	14418057.23	0.0139	0.0093
Uranus	34763-10-26 22:33 G	14418283.34	14418283.44	14418283.54	0.0139	0.0122

Jupiter 34771-10-17 06:29 G 14421195.59 14421195.77 14421195.95 0.0495 0.0242

Mars 34777-02-02 08:38 G 14423130.72 14423130.86 14423130.99 0.1929 0.1190

Saturn 34777-05-06 14:24 G 14423223.98 14423224.10 14423224.23 0.0274 0.0223

Jupiter 34777-08-20 05:17 G 14423329.54 14423329.72 14423329.92 0.0531 0.0185

Saturn 34777-12-21 23:31 G 14423453.27 14423453.48 14423453.70 0.0277 0.0009

Earth 34778-03-30 22:33 G 14423552.29 14423552.44 14423552.59 0.2660 0.0786

Moon 34778-03-31 02:38 G 14423552.45 14423552.61 14423552.76 0.2655 0.0924 *

Saturn 34778-08-08 10:48 G 14423682.83 14423682.95 14423683.09 0.0280 0.0218

Jupiter 34783-06-22 07:55 G 14425461.64 14425461.83 14425462.03 0.0494 0.0175

Neptune 34785-12-16 20:24 G 14426370.26 14426370.35 14426370.49 0.0088 0.0075

Moon 34786-03-28 14:24 G 14426472.06 14426472.10 14426472.15 0.2653 0.2535

Neptune 34786-07-30 10:05 G 14426595.75 14426595.92 14426596.09 0.0088 0.0058

Neptune 34787-03-12 22:48 G 14426821.26 14426821.45 14426821.65 0.0088 0.0041

Neptune 34787-10-24 11:45 G 14427046.78 14427046.99 14427047.21 0.0088 0.0025

Neptune 34788-06-06 00:43 G 14427272.31 14427272.53 14427272.75 0.0088 0.0009

Neptune 34789-01-17 13:41 G 14427497.85 14427498.07 14427498.29 0.0088 0.0008

Jupiter 34789-04-24 21:36 G 14427595.24 14427595.40 14427595.55 0.0532 0.0328

Neptune 34789-08-31 02:24 G 14427723.40 14427723.60 14427723.83 0.0088 0.0025

Neptune 34790-04-13 15:21 G 14427948.96 14427949.14 14427949.35 0.0088 0.0041

Neptune 34790-11-25 04:19 G 14428174.52 14428174.68 14428174.86 0.0088 0.0057

Saturn 34791-03-13 13:41 G 14428282.87 14428283.07 14428283.28 0.0285 0.0060

Neptune 34791-07-08 16:48 G 14428400.11 14428400.20 14428400.35 0.0088 0.0074

Saturn 34791-10-29 04:19 G 14428512.52 14428512.68 14428512.85 0.0283 0.0177

Uranus 34802-11-05 08:38 G 14432537.78 14432537.86 14432537.96 0.0137 0.0124

Uranus 34803-06-19 15:36 G 14432764.02 14432764.15 14432764.32 0.0137 0.0097

Uranus 34804-01-31 23:17 G 14432990.29 14432990.47 14432990.67 0.0138 0.0068

Uranus 34804-09-14 06:57 G 14433216.59 14433216.79 14433217.00 0.0138 0.0038

Uranus 34805-04-28 14:38 G 14433442.90 14433443.11 14433443.33 0.0138 0.0009

Uranus 34805-12-10 22:19 G 14433669.22 14433669.43 14433669.65 0.0138 0.0021

Mars 34806-04-26 10:48 G 14433805.78 14433805.95 14433806.12 0.1611 0.0272

Uranus 34806-07-25 06:14 G 14433895.56 14433895.76 14433895.97 0.0139 0.0050

Saturn 34806-11-16 21:50 G 14434010.26 14434010.41 14434010.57 0.0275 0.0188

Uranus 34807-03-08 14:24 G 14434121.93 14434122.10 14434122.28 0.0139 0.0080

Jupiter 34807-06-24 14:09 G 14434230.03 14434230.09 14434230.15 0.0495 0.0469

Saturn 34807-07-04 07:41 G 14434239.61 14434239.82 14434240.03 0.0277 0.0031

Uranus 34807-10-20 22:19 G 14434348.32 14434348.43 14434348.58 0.0139 0.0111

Saturn 34808-02-18 19:26 G 14434469.22 14434469.31 14434469.39 0.0280 0.0256

Jupiter 34813-04-27 20:24 G 14436364.27 14436364.35 14436364.44 0.0531 0.0477

Pluto 34815-10-13 17:17 G 14437263.04 14437263.22 14437263.41 0.0065 0.0033

Pluto 34816-05-25 21:21 G 14437488.18 14437488.39 14437488.61 0.0065 0.0012

Pluto 34817-01-06 01:12 G 14437713.47 14437713.55 14437713.68 0.0065 0.0058

Jupiter 34819-02-27 16:33 G 14438495.99 14438496.19 14438496.40 0.0495 0.0059

Saturn 34820-02-06 07:41 G 14438839.74 14438839.82 14438839.90 0.0288 0.0265

Saturn 34820-09-23 00:14 G 14439069.30 14439069.51 14439069.72 0.0285 0.0020

Saturn 34821-05-10 14:09 G 14439298.97 14439299.09 14439299.23 0.0283 0.0216

Jupiter 34824-12-31 10:33 G 14440629.73 14440629.94 14440630.14 0.0531 0.0047

Jupiter 34830-11-02 18:14 G 14442762.12 14442762.26 14442762.40 0.0494 0.0356

Saturn 34836-05-29 06:00 G 14444796.58 14444796.75 14444796.93 0.0275 0.0154

Saturn 34837-01-13 15:50 G 14445025.95 14445026.16 14445026.37 0.0278 0.0065

Uranus 34842-07-10 23:31 G 14447030.44 14447030.48 14447030.52 0.0141 0.0139

Uranus 34843-02-22 09:36 G 14447256.77 14447256.90 14447257.05 0.0141 0.0107

Uranus 34843-10-06 19:41 G 14447483.15 14447483.32 14447483.51 0.0141 0.0076

Uranus 34844-05-20 05:31 G 14447709.53 14447709.73 14447709.95 0.0140 0.0045

Uranus 34845-01-01 15:36 G 14447935.93 14447936.15 14447936.37 0.0140 0.0013

Uranus 34845-08-16 01:12 G 14448162.34 14448162.55 14448162.77 0.0140 0.0018

Uranus 34846-03-30 10:33 G 14448388.74 14448388.94 14448389.15 0.0140 0.0049

Uranus 34846-11-11 19:41 G 14448615.15 14448615.32 14448615.50 0.0139 0.0079

Uranus 34847-06-26 04:48 G 14448841.57 14448841.70 14448841.84 0.0139 0.0109

Uranus 34848-02-07 13:41 G 14449068.07 14449068.07 14449068.08 0.0139 0.0139

Saturn 34849-08-18 14:38 G 14449625.99 14449626.11 14449626.25 0.0287 0.0228

Saturn 34850-04-05 06:57 G 14449855.58 14449855.79 14449856.00 0.0284 0.0016

Saturn 34850-11-20 20:38 G 14450085.27 14450085.36 14450085.46 0.0282 0.0250

Jupiter 34854-11-05 00:00 G 14451530.34 14451530.50 14451530.67 0.0495 0.0286

Jupiter 34860-09-08 03:36 G 14453664.48 14453664.65 14453664.83 0.0531 0.0259

Saturn 34865-12-09 12:43 G 14455582.84 14455583.03 14455583.22 0.0275 0.0120

Jupiter 34866-07-11 01:55 G 14455796.38 14455796.58 14455796.78 0.0495 0.0129

Saturn 34866-07-26 23:02 G 14455812.27 14455812.46 14455812.66 0.0278 0.0101

Neptune 34866-11-08 21:36 G 14455917.37 14455917.40 14455917.45 0.0089 0.0088

Neptune 34867-06-22 10:19 G 14456142.82 14456142.93 14456143.09 0.0089 0.0072

Neptune 34868-02-02 23:45 G 14456368.33 14456368.49 14456368.68 0.0089 0.0055

Neptune 34868-09-15 12:57 G 14456593.85 14456594.04 14456594.25 0.0089 0.0038

Neptune 34869-04-29 01:55 G 14456819.38 14456819.58 14456819.80 0.0089 0.0021

Neptune 34869-12-10 15:07 G 14457044.91 14457045.13 14457045.35 0.0089 0.0004

Neptune 34870-07-24 04:05 G 14457270.46 14457270.67 14457270.89 0.0089 0.0013

Neptune 34871-03-06 17:17 G 14457496.02 14457496.22 14457496.43 0.0089 0.0029

Neptune 34871-10-18 06:14 G 14457721.58 14457721.76 14457721.95 0.0089 0.0046

Mars 34872-02-21 23:31 G 14457848.31 14457848.48 14457848.65 0.1609 0.0047

Jupiter 34872-05-13 15:50 G 14457929.99 14457930.16 14457930.34 0.0531 0.0273

Neptune 34872-05-30 18:57 G 14457947.16 14457947.29 14457947.46 0.0089 0.0063

Neptune 34873-01-11 08:24 G 14458172.76 14458172.85 14458172.95 0.0089 0.0079

Saturn 34879-03-01 01:12 G 14460412.41 14460412.55 14460412.72 0.0287 0.0188

Saturn 34879-10-16 17:17 G 14460642.02 14460642.22 14460642.43 0.0285 0.0056

Uranus 34886-07-05 16:19 G 14463096.17 14463096.18 14463096.21 0.0137 0.0136

Uranus 34887-02-16 23:17 G 14463322.36 14463322.47 14463322.62 0.0137 0.0108

Uranus 34887-10-01 06:43 G 14463548.61 14463548.78 14463548.96 0.0137 0.0080

Uranus 34888-05-14 14:09 G 14463774.89 14463775.09 14463775.30 0.0138 0.0051

Uranus 34888-12-26 21:50 G 14464001.20 14464001.41 14464001.62 0.0138 0.0022

Uranus 34889-08-10 05:31 G 14464227.51 14464227.73 14464227.94 0.0138 0.0008

Uranus 34890-03-24 12:57 G 14464453.84 14464454.04 14464454.26 0.0138 0.0038

Uranus 34890-11-05 20:53 G 14464680.19 14464680.37 14464680.57 0.0139 0.0067

Uranus 34891-06-20 05:17 G 14464906.56 14464906.72 14464906.87 0.0139 0.0096

Moon 34891-10-01 06:14 G 14465009.60 14465009.76 14465009.91 0.2665 0.1152

Earth 34891-10-01 07:12 G 14465009.68 14465009.80 14465009.93 0.2672 0.1599 *

Uranus 34892-02-01 13:26 G 14465132.98 14465133.06 14465133.16 0.0139 0.0126

Saturn 34895-06-21 20:53 G 14466369.17 14466369.37 14466369.57 0.0276 0.0087

Saturn 34896-02-06 07:26 G 14466598.63 14466598.81 14466599.00 0.0279 0.0136

Earth 34899-09-28 21:21 G 14467929.31 14467929.39 14467929.46 0.2671 0.2306

Jupiter 34902-03-19 12:14 G 14468830.81 14468831.01 14468831.21 0.0495 0.0114

Pluto 34904-01-25 14:09 G 14469507.89 14469508.09 14469508.32 0.0079 0.0022

Pluto 34904-09-07 00:14 G 14469733.38 14469733.51 14469733.66 0.0079 0.0062

Jupiter 34908-01-21 07:26 G 14470964.61 14470964.81 14470965.01 0.0532 0.0022

Saturn 34908-09-11 08:53 G 14471198.70 14471198.87 14471199.05 0.0286 0.0149

Saturn 34909-04-29 00:14 G 14471428.31 14471428.51 14471428.71 0.0283 0.0091

Jupiter 34913-11-22 12:29 G 14473096.86 14473097.02 14473097.18 0.0494 0.0308

Jupiter 34919-09-25 22:48 G 14475230.38 14475230.45 14475230.52 0.0532 0.0493

Saturn 34924-05-17 17:31 G 14476926.21 14476926.23 14476926.28 0.0274 0.0270

Saturn 34925-01-02 02:38 G 14477155.40 14477155.61 14477155.82 0.0276 0.0055

Saturn 34925-08-19 13:41 G 14477384.90 14477385.07 14477385.24 0.0279 0.0169

Uranus 34926-10-23 13:55 G 14477814.99 14477815.08 14477815.21 0.0141 0.0122

Uranus 34927-06-07 00:29 G 14478041.36 14478041.52 14478041.69 0.0141 0.0090

Uranus 34928-01-19 10:33 G 14478267.75 14478267.94 14478268.14 0.0141 0.0059

Uranus 34928-09-01 20:24 G 14478494.14 14478494.35 14478494.57 0.0140 0.0028

Uranus 34929-04-16 06:14 G 14478720.54 14478720.76 14478720.98 0.0140 0.0004

Uranus 34929-11-28 15:36 G 14478946.94 14478947.15 14478947.37 0.0140 0.0035

Uranus 34930-07-13 00:57 G 14479173.36 14479173.54 14479173.74 0.0140 0.0065

Uranus 34931-02-24 10:05 G 14479399.77 14479399.92 14479400.09 0.0139 0.0096

Uranus 34931-10-08 18:57 G 14479626.21 14479626.29 14479626.40 0.0139 0.0125

Jupiter 34937-11-24 21:21 G 14481865.25 14481865.39 14481865.53 0.0495 0.0351

Mars 34937-12-20 12:14 G 14481890.84 14481891.01 14481891.18 0.1608 0.0187

Saturn 34938-03-24 18:14 G 14481985.07 14481985.26 14481985.46 0.0287 0.0112

Saturn 34938-11-09 09:21 G 14482214.71 14482214.89 14482215.08 0.0284 0.0129

Mars 34940-09-27 15:07 G 14482903.02 14482903.13 14482903.24 0.1926 0.1486

Jupiter 34943-09-28 21:07 G 14483999.22 14483999.38 14483999.55 0.0531 0.0308

Jupiter 34949-07-30 23:17 G 14486131.27 14486131.47 14486131.67 0.0495 0.0062

Neptune 34950-03-21 07:55 G 14486364.76 14486364.83 14486364.96 0.0088 0.0080

Neptune 34950-11-01 21:21 G 14486590.24 14486590.39 14486590.55 0.0088 0.0063

Neptune 34951-06-15 10:19 G 14486815.75 14486815.93 14486816.13 0.0088 0.0046

Neptune 34952-01-26 23:17 G 14487041.27 14487041.47 14487041.69 0.0088 0.0030

Neptune 34952-09-08 12:14 G 14487266.81 14487267.01 14487267.24 0.0088 0.0015

Neptune 34953-04-22 01:26 G 14487492.34 14487492.56 14487492.78 0.0088 0.0003

Saturn 34953-11-28 00:57 G 14487712.44 14487712.54 14487712.65 0.0274 0.0238

Neptune 34953-12-03 14:09 G 14487717.89 14487718.09 14487718.32 0.0088 0.0019

Saturn 34954-07-15 10:05 G 14487941.71 14487941.92 14487942.14 0.0277 0.0023

Neptune 34954-07-17 03:07 G 14487943.44 14487943.63 14487943.85 0.0088 0.0036

Neptune 34955-02-27 16:19 G 14488169.01 14488169.18 14488169.36 0.0088 0.0052

Saturn 34955-03-01 21:21 G 14488171.24 14488171.39 14488171.53 0.0280 0.0203

Jupiter 34955-06-03 11:02 G 14488264.78 14488264.96 14488265.15 0.0532 0.0215

Neptune 34955-10-11 05:17 G 14488394.58 14488394.72 14488394.86 0.0088 0.0068

Neptune 34956-05-23 17:45 G 14488620.20 14488620.24 14488620.33 0.0088 0.0084

Jupiter 34961-04-05 00:43 G 14490397.48 14490397.53 14490397.59 0.0494 0.0476

Saturn 34967-10-05 01:12 G 14492771.35 14492771.55 14492771.76 0.0285 0.0075

Saturn 34968-05-21 15:50 G 14493000.99 14493001.16 14493001.34 0.0283 0.0163

Uranus 34970-10-18 07:12 G 14493880.72 14493880.80 14493880.93 0.0137 0.0120

Uranus 34971-06-01 14:38 G 14494106.96 14494107.11 14494107.28 0.0137 0.0092

Uranus 34972-01-13 22:19 G 14494333.24 14494333.43 14494333.62 0.0138 0.0063

Uranus 34972-08-27 05:45 G 14494559.53 14494559.74 14494559.95 0.0138 0.0034

Uranus 34973-04-10 13:12 G 14494785.84 14494786.05 14494786.27 0.0138 0.0005

Uranus 34973-11-22 20:53 G 14495012.16 14495012.37 14495012.59 0.0138 0.0024

Uranus 34974-07-07 04:48 G 14495238.50 14495238.70 14495238.90 0.0139 0.0054

Uranus 34975-02-18 12:43 G 14495464.87 14495465.03 14495465.21 0.0139 0.0084

Uranus	**34975-10-02 21:07**	**G**	**14495691.26**	**14495691.38**	**14495691.51**	**0.0139**	**0.0113**	
Saturn	**34983-06-10 04:33**	**G**	**14498498.57**	**14498498.69**	**14498498.84**	**0.0274**	**0.0212**	
Saturn	**34984-01-25 14:09**	**G**	**14498727.88**	**14498728.09**	**14498728.31**	**0.0277**	**0.0009**	
Saturn	**34984-09-11 01:55**	**G**	**14498957.47**	**14498957.58**	**14498957.70**	**0.0280**	**0.0233**	
Jupiter	**34985-04-07 07:55**	**G**	**14499165.64**	**14499165.83**	**14499166.03**	**0.0495**	**0.0172**	
Jupiter	**34991-02-09 03:36**	**G**	**14501299.45**	**14501299.65**	**14501299.85**	**0.0531**	**0.0088**	
Saturn	**34996-08-29 16:33**	**G**	**14503328.18**	**14503328.19**	**14503328.22**	**0.0289**	**0.0287**	
Jupiter	**34996-12-11 10:05**	**G**	**14503431.75**	**14503431.92**	**14503432.11**	**0.0495**	**0.0239**	
Saturn	**34997-04-16 09:36**	**G**	**14503557.69**	**14503557.90**	**14503558.11**	**0.0286**	**0.0040**	
Saturn	**34997-12-02 00:00**	**G**	**14503787.35**	**14503787.50**	**14503787.65**	**0.0283**	**0.0197**	

36TH MILLENNIUM CE

This is a list of transits of Venus in the 36th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**35002-10-15 18:00**	**G**	**14505565.13**	**14505565.25**	**14505565.36**	**0.0531**	**0.0432**	
Mars	**35003-10-19 01:12**	**G**	**14505933.38**	**14505933.55**	**14505933.72**	**0.1606**	**0.0408**	
Mars	**35006-07-26 17:31**	**G**	**14506945.07**	**14506945.23**	**14506945.40**	**0.1928**	**0.0667**	
Uranus	**35010-06-23 19:41**	**G**	**14508373.27**	**14508373.32**	**14508373.38**	**0.0141**	**0.0135**	
Uranus	**35011-02-05 05:45**	**G**	**14508599.61**	**14508599.74**	**14508599.90**	**0.0141**	**0.0104**	
Uranus	**35011-09-19 15:50**	**G**	**14508825.99**	**14508826.16**	**14508826.36**	**0.0141**	**0.0073**	
Uranus	**35012-05-03 01:55**	**G**	**14509052.38**	**14509052.58**	**14509052.79**	**0.0141**	**0.0041**	
Uranus	**35012-12-15 11:45**	**G**	**14509278.77**	**14509278.99**	**14509279.21**	**0.0140**	**0.0010**	
Saturn	**35012-12-21 11:17**	**G**	**14509284.81**	**14509284.97**	**14509285.13**	**0.0275**	**0.0181**	

Uranus 35013-07-29 21:21 G 14509505.18 14509505.39 14509505.61 0.0140 0.0021

Saturn 35013-08-07 21:07 G 14509514.17 14509514.38 14509514.59 0.0277 0.0038

Uranus 35014-03-13 06:43 G 14509731.58 14509731.78 14509731.99 0.0140 0.0052

Saturn 35014-03-25 08:38 G 14509743.80 14509743.86 14509743.93 0.0280 0.0265

Uranus 35014-10-25 16:05 G 14509957.99 14509958.17 14509958.35 0.0139 0.0082

Uranus 35015-06-09 00:57 G 14510184.42 14510184.54 14510184.68 0.0139 0.0112

Jupiter 35020-12-14 18:43 G 14512200.18 14512200.28 14512200.40 0.0495 0.0418

Moon 35021-04-01 20:24 G 14512308.19 14512308.35 14512308.50 0.2664 0.0419

Earth 35021-04-02 01:12 G 14512308.40 14512308.55 14512308.70 0.2660 0.0800 *

Saturn 35026-03-12 22:33 G 14514114.35 14514114.44 14514114.55 0.0288 0.0252

Jupiter 35026-10-18 19:26 G 14514334.17 14514334.31 14514334.45 0.0531 0.0384

Saturn 35026-10-28 15:21 G 14514343.93 14514344.14 14514344.35 0.0285 0.0008

Saturn 35027-06-15 05:02 G 14514573.60 14514573.71 14514573.84 0.0282 0.0229

Neptune 35031-09-25 22:48 G 14516137.34 14516137.45 14516137.57 0.0089 0.0076

Neptune 35032-05-08 11:31 G 14516362.84 14516362.98 14516363.16 0.0089 0.0060

Jupiter 35032-08-19 19:55 G 14516466.13 14516466.33 14516466.54 0.0494 0.0008

Neptune 35032-12-20 00:57 G 14516588.35 14516588.54 14516588.74 0.0089 0.0042

Neptune 35033-08-02 13:41 G 14516813.88 14516814.07 14516814.30 0.0089 0.0027

Neptune 35034-03-16 03:07 G 14517039.41 14517039.63 14517039.85 0.0089 0.0009

Neptune 35034-10-27 16:05 G 14517264.95 14517265.17 14517265.39 0.0089 0.0008

Neptune 35035-06-10 05:02 G 14517490.50 14517490.71 14517490.93 0.0089 0.0024

Mars 35035-10-17 17:02 G 14517620.15 14517620.21 14517620.27 0.1612 0.1500

Neptune 35036-01-21 18:00 G 14517716.07 14517716.25 14517716.46 0.0089 0.0041

Neptune 35036-09-03 07:12 G 14517941.64 14517941.80 14517941.97 0.0089 0.0057

Neptune 35037-04-16 19:55 G 14518167.23 14518167.33 14518167.47 0.0089 0.0074

Jupiter 35038-06-23 11:17 G 14518599.78 14518599.97 14518600.17 0.0532 0.0127

Saturn 35042-07-03 13:26 G 14520070.90 14520071.06 14520071.25 0.0275 0.0157

Saturn 35043-02-17 23:31 G 14520300.27 14520300.48 14520300.69 0.0278 0.0063

Jupiter 35044-04-24 22:05 G 14520732.31 14520732.42 14520732.54 0.0494 0.0410

Uranus 35054-06-18 16:05 G 14524439.12 14524439.17 14524439.25 0.0137 0.0131

Uranus 35055-01-30 23:31 G 14524665.35 14524665.48 14524665.63 0.0137 0.0103

Uranus 35055-09-14 06:43 G 14524891.61 14524891.78 14524891.97 0.0137 0.0074

Saturn 35055-09-23 05:17 G 14524900.60 14524900.72 14524900.87 0.0288 0.0221

Uranus 35056-04-27 14:09 G 14525117.89 14525118.09 14525118.30 0.0138 0.0046

Saturn 35056-05-09 21:50 G 14525130.20 14525130.41 14525130.62 0.0285 0.0025

Uranus 35056-12-09 21:36 G 14525344.19 14525344.40 14525344.62 0.0138 0.0017

Saturn 35056-12-25 11:45 G 14525359.91 14525359.99 14525360.07 0.0282 0.0260

Uranus 35057-07-24 05:17 G 14525570.51 14525570.72 14525570.94 0.0138 0.0013

Uranus 35058-03-07 13:12 G 14525796.85 14525797.05 14525797.26 0.0138 0.0042

Uranus 35058-10-19 21:07 G 14526023.20 14526023.38 14526023.57 0.0139 0.0072

Uranus 35059-06-03 05:02 G 14526249.58 14526249.71 14526249.87 0.0139 0.0102

Uranus 35060-01-15 13:41 G 14526476.01 14526476.07 14526476.15 0.0139 0.0131

Pluto 35061-04-02 01:12 G 14526918.42 14526918.55 14526918.69 0.0065 0.0051

Pluto 35061-11-13 05:17 G 14527143.51 14527143.72 14527143.94 0.0065 0.0007

Pluto 35062-06-26 09:36 G 14527368.72 14527368.90 14527369.08 0.0065 0.0039

Jupiter 35068-04-27 07:12 G 14529500.63 14529500.80 14529500.98 0.0495 0.0250

Mars 35069-08-15 13:55 G 14529975.92 14529976.08 14529976.24 0.1605 0.0639

Saturn 35072-01-13 18:43 G 14530857.10 14530857.28 14530857.47 0.0275 0.0129

Mars 35072-05-22 19:12 G 14530987.12 14530987.30 14530987.47 0.1931 0.0223

Saturn 35072-08-30 04:48 G 14531086.51 14531086.70 14531086.91 0.0278 0.0093

Jupiter 35074-03-01 01:26 G 14531634.37 14531634.56 14531634.75 0.0531 0.0161

Jupiter 35080-01-01 09:21 G 14533766.70 14533766.89 14533767.08 0.0495 0.0163

Saturn 35085-04-04 10:33 G 14535686.79 14535686.94 14535687.11 0.0287 0.0188

Jupiter 35085-11-03 17:02 G 14535900.06 14535900.21 14535900.37 0.0532 0.0351

Saturn 35085-11-20 02:38 G 14535916.41 14535916.61 14535916.82 0.0284 0.0057

Uranus 35094-10-05 12:29 G 14539157.92 14539158.02 14539158.16 0.0141 0.0117

Uranus 35095-05-19 23:02 G 14539384.28 14539384.46 14539384.63 0.0141 0.0085

Uranus 35096-01-01 08:53 G 14539610.67 14539610.87 14539611.07 0.0141 0.0054

Uranus 35096-08-14 18:43 G 14539837.07 14539837.28 14539837.50 0.0140 0.0023

Uranus 35097-03-29 04:33 G 14540063.47 14540063.69 14540063.90 0.0140 0.0008

Uranus 35097-11-10 13:41 G 14540289.87 14540290.07 14540290.29 0.0140 0.0039

Uranus 35098-06-24 22:48 G 14540516.28 14540516.45 14540516.66 0.0140 0.0070

Uranus 35099-02-06 07:55 G 14540742.70 14540742.83 14540743.00 0.0139 0.0100

Uranus 35099-09-20 16:48 G 14540969.14 14540969.20 14540969.30 0.0139 0.0129

Saturn 35101-07-26 19:55 G 14541643.14 14541643.33 14541643.53 0.0275 0.0107

Mars 35101-08-15 05:31 G 14541662.62 14541662.73 14541662.84 0.1610 0.1255

Saturn 35102-03-13 06:00 G 14541872.56 14541872.75 14541872.95 0.0278 0.0115

Jupiter 35104-01-04 18:00 G 14542535.23 14542535.25 14542535.27 0.0495 0.0491

Jupiter 35109-11-07 19:12 G 14544669.21 14544669.30 14544669.39 0.0531 0.0471

Neptune 35114-06-24 19:55 G 14546359.27 14546359.33 14546359.41 0.0088 0.0084

Saturn 35114-10-16 15:36 G 14546472.97 14546473.15 14546473.32 0.0288 0.0160

Neptune 35115-02-05 08:53 G 14546584.74 14546584.87 14546585.02 0.0088 0.0067

Saturn 35115-06-03 07:26 G 14546702.61 14546702.81 14546703.02 0.0285 0.0084

Jupiter 35115-09-09 19:55 G 14546801.13 14546801.33 14546801.54 0.0495 0.0082

Neptune 35115-09-18 21:50 G 14546810.25 14546810.41 14546810.60 0.0088 0.0051

Neptune 35116-05-01 10:48 G 14547035.76 14547035.95 14547036.17 0.0088 0.0035

Neptune 35116-12-12 23:45 G 14547261.29 14547261.49 14547261.72 0.0088 0.0019

Neptune 35117-07-26 13:12 G 14547486.83 14547487.05 14547487.27 0.0088 0.0002

Neptune 35118-03-09 01:55 G 14547712.37 14547712.58 14547712.81 0.0088 0.0014

Neptune 35118-10-20 14:53 G 14547937.92 14547938.12 14547938.34 0.0088 0.0030

Neptune 35119-06-03 03:50 G 14548163.48 14548163.66 14548163.86 0.0088 0.0046

Neptune 35120-01-14 16:48 G 14548389.05 14548389.20 14548389.36 0.0088 0.0063

Neptune 35120-08-27 06:00 G 14548614.66 14548614.75 14548614.85 0.0088 0.0079

Jupiter 35121-07-13 10:19 G 14548934.73 14548934.93 14548935.14 0.0531 0.0044

Jupiter 35127-05-15 22:19 G 14551067.28 14551067.43 14551067.58 0.0495 0.0328

Saturn 35131-02-06 00:14 G 14552429.31 14552429.51 14552429.71 0.0276 0.0080

Saturn 35131-09-23 10:33 G 14552658.76 14552658.94 14552659.12 0.0278 0.0142

Moon 35134-10-04 05:45 G 14553765.61 14553765.74 14553765.87 0.2678 0.1384

Earth 35134-10-04 06:43 G 14553765.64 14553765.78 14553765.92 0.2671 0.1326 *

Mars 35135-06-14 02:38 G 14554018.46 14554018.61 14554018.76 0.1603 0.0868

Mars 35138-03-20 21:21 G 14555029.25 14555029.39 14555029.54 0.1933 0.1067

Uranus 35138-10-01 07:41 G 14555223.72 14555223.82 14555223.96 0.0137 0.0114

Uranus 35139-05-15 15:07 G 14555449.97 14555450.13 14555450.30 0.0137 0.0086

Uranus 35139-12-27 22:19 G 14555676.25 14555676.43 14555676.64 0.0138 0.0058

Uranus 35140-08-10 06:00 G 14555902.54 14555902.75 14555902.97 0.0138 0.0029

Uranus 35141-03-24 13:41 G 14556128.86 14556129.07 14556129.29 0.0138 0.0002

Uranus 35141-11-05 21:21 G 14556355.18 14556355.39 14556355.61 0.0138 0.0030

Uranus 35142-06-20 05:17 G 14556581.53 14556581.72 14556581.92 0.0139 0.0060

Earth 35142-10-01 20:53 G 14556685.32 14556685.37 14556685.42 0.2671 0.2538

Moon 35142-10-02 00:29 G 14556685.46 14556685.52 14556685.57 0.2676 0.2496

Uranus 35143-02-01 13:26 G 14556807.91 14556808.06 14556808.24 0.0139 0.0090

Uranus 35143-09-15 21:50 G 14557034.31 14557034.41 14557034.53 0.0139 0.0119

Saturn 35144-04-27 19:26 G 14557259.13 14557259.31 14557259.50 0.0287 0.0130

Saturn 35144-12-13 11:17 G 14557488.77 14557488.97 14557489.16 0.0284 0.0113

Pluto 35149-07-14 17:45 G 14559163.13 14559163.24 14559163.40 0.0080 0.0063

Pluto 35150-02-25 04:05 G 14559388.47 14559388.67 14559388.90 0.0079 0.0022

Jupiter 35151-05-18 07:12 G 14559835.65 14559835.80 14559835.95 0.0495 0.0328

Jupiter 35157-03-21 04:19 G 14561969.51 14561969.68 14561969.86 0.0531 0.0267

Saturn 35160-08-18 00:00 G 14563215.29 14563215.50 14563215.71 0.0276 0.0062

Saturn 35161-04-04 10:19 G 14563444.76 14563444.93 14563445.10 0.0278 0.0162

Jupiter 35163-01-21 09:50 G 14564101.71 14564101.91 14564102.12 0.0495 0.0081

Mars 35167-06-12 18:14 G 14565705.13 14565705.26 14565705.39 0.1608 0.1026

Jupiter 35168-11-23 19:12 G 14566235.13 14566235.30 14566235.48 0.0531 0.0248

Saturn 35173-11-07 23:02 G 14568045.26 14568045.46 14568045.65 0.0287 0.0105

Saturn 35174-06-25 14:38 G 14568274.93 14568275.11 14568275.30 0.0284 0.0138

Jupiter 35174-09-26 11:17 G 14568367.96 14568367.97 14568367.99 0.0495 0.0493

Uranus 35178-06-05 20:24 G 14569716.27 14569716.35 14569716.45 0.0141 0.0129

Uranus 35179-01-18 06:43 G 14569942.63 14569942.78 14569942.94 0.0141 0.0097

Uranus 35179-09-01 16:48 G 14570169.01 14570169.20 14570169.40 0.0141 0.0066

Uranus 35180-04-15 02:38 G 14570395.40 14570395.61 14570395.82 0.0140 0.0035

Uranus 35180-11-27 12:14 G 14570621.80 14570622.01 14570622.23 0.0140 0.0005

Uranus 35181-07-11 21:50 G 14570848.20 14570848.41 14570848.63 0.0140 0.0027

Uranus 35182-02-23 06:57 G 14571074.61 14571074.79 14571075.00 0.0140 0.0058

Uranus 35182-10-07 16:19 G 14571301.02 14571301.18 14571301.36 0.0139 0.0088

Uranus 35183-05-22 01:12 G 14571527.44 14571527.55 14571527.68 0.0139 0.0117

Saturn 35189-07-13 19:12 G 14573772.22 14573772.30 14573772.39 0.0273 0.0250

Saturn 35190-02-28 03:36 G 14574001.44 14574001.65 14574001.86 0.0276 0.0036

Saturn 35190-10-15 14:09 G 14574230.93 14574231.09 14574231.25 0.0279 0.0188

Neptune 35195-12-29 10:19 G 14576131.85 14576131.93 14576132.03 0.0089 0.0081

Neptune 35196-08-10 23:02 G 14576357.33 14576357.46 14576357.63 0.0089 0.0065

Neptune 35197-03-24 12:29 G 14576582.84 14576583.02 14576583.21 0.0089 0.0048

Neptune 35197-11-05 01:26 G 14576808.36 14576808.56 14576808.77 0.0089 0.0031

Neptune 35198-06-18 14:38 G 14577033.90 14577034.11 14577034.33 0.0089 0.0014

Jupiter 35198-09-28 21:36 G 14577136.21 14577136.40 14577136.60 0.0495 0.0170

Neptune 35199-01-30 03:50 G 14577259.44 14577259.66 14577259.88 0.0089 0.0002

Neptune 35199-09-12 16:33 G 14577484.99 14577485.19 14577485.42 0.0089 0.0019

Neptune 35200-04-25 05:31 G 14577710.54 14577710.73 14577710.94 0.0089 0.0036

Neptune 35200-12-06 18:14 G 14577936.10 14577936.26 14577936.46 0.0089 0.0052

Mars 35201-04-10 15:36 G 14578061.03 14578061.15 14578061.28 0.1602 0.1092

Neptune 35201-07-20 07:26 G 14578161.69 14578161.81 14578161.96 0.0089 0.0068

Neptune 35202-03-02 20:24 G 14578387.31 14578387.35 14578387.44 0.0089 0.0085

Saturn 35203-05-21 02:09 G 14578831.39 14578831.59 14578831.79 0.0286 0.0076

Saturn 35204-01-05 17:17 G 14579061.06 14579061.22 14579061.40 0.0283 0.0166

Jupiter 35204-08-01 12:00 G 14579269.80 14579270.00 14579270.21 0.0531 0.0054

Jupiter 35210-06-03 23:31 G 14581402.31 14581402.48 14581402.67 0.0495 0.0241

Jupiter 35216-04-06 04:19 G 14583535.59 14583535.68 14583535.79 0.0532 0.0454

Saturn 35219-01-23 18:14 G 14584558.16 14584558.26 14584558.37 0.0273 0.0234

Saturn 35219-09-10 02:38 G 14584787.40 14584787.61 14584787.83 0.0276 0.0019

Saturn 35220-04-26 13:12 G 14585016.91 14585017.05 14585017.20 0.0279 0.0206

Uranus 35222-05-31 15:50 G 14585782.09 14585782.16 14585782.26 0.0137 0.0125

Uranus 35223-01-12 23:02 G 14586008.33 14586008.46 14586008.63 0.0137 0.0098

Uranus 35223-08-27 06:43 G 14586234.59 14586234.78 14586234.97 0.0138 0.0069

Uranus 35224-04-09 14:09 G 14586460.88 14586461.09 14586461.29 0.0138 0.0040

Uranus 35224-11-21 21:36 G 14586687.18 14586687.40 14586687.62 0.0138 0.0011

Uranus 35225-07-06 05:17 G 14586913.51 14586913.72 14586913.94 0.0138 0.0018

Uranus 35226-02-17 13:12 G 14587139.85 14587140.05 14587140.26 0.0139 0.0048

Uranus 35226-10-01 21:07 G 14587366.21 14587366.38 14587366.57 0.0139 0.0078

Uranus 35227-05-16 05:31 G 14587592.60 14587592.73 14587592.87 0.0139 0.0107

Uranus 35227-12-28 13:41 G 14587819.05 14587819.07 14587819.12 0.0139 0.0137

Saturn 35232-11-30 04:05 G 14589617.46 14589617.67 14589617.87 0.0287 0.0054

Mars 35233-04-09 06:43 G 14589747.63 14589747.78 14589747.94 0.1607 0.0788

Saturn 35233-07-17 19:26 G 14589847.16 14589847.31 14589847.47 0.0284 0.0187

Jupiter 35234-06-06 08:38 G 14590170.76 14590170.86 14590170.97 0.0496 0.0418

Jupiter 35240-04-09 06:57 G 14592304.65 14592304.79 14592304.94 0.0530 0.0368

Jupiter 35246-02-09 11:17 G 14594436.77 14594436.97 14594437.18 0.0495 0.0014

Saturn 35248-08-04 21:07 G 14595344.26 14595344.38 14595344.53 0.0273 0.0209

Saturn 35249-03-22 05:45 G 14595573.53 14595573.74 14595573.96 0.0276 0.0007

Saturn 35249-11-06 16:19 G 14595803.07 14595803.18 14595803.30 0.0279 0.0231

Jupiter 35251-12-13 21:21 G 14596570.20 14596570.39 14596570.58 0.0531 0.0150

Jupiter 35257-10-15 13:55 G 14598702.96 14598703.08 14598703.20 0.0495 0.0400

Saturn 35261-10-25 12:57 G 14600173.99 14600174.04 14600174.11 0.0289 0.0277

Uranus 35262-02-03 04:19 G 14600274.67 14600274.68 14600274.72 0.0141 0.0141

Saturn 35262-06-12 06:57 G 14600403.58 14600403.79 14600404.00 0.0286 0.0026

Uranus 35262-09-17 14:38 G 14600500.98 14600501.11 14600501.26 0.0141 0.0109

Saturn 35263-01-27 22:19 G 14600633.29 14600633.43 14600633.56 0.0283 0.0214

Uranus 35263-05-02 00:43 G 14600727.36 14600727.53 14600727.72 0.0141 0.0078

Uranus 35263-12-14 10:33 G 14600953.74 14600953.94 14600954.15 0.0141 0.0047

Earth 35264-04-03 03:36 G 14601064.50 14601064.65 14601064.80 0.2660 0.0811

Moon 35264-04-03 09:07 G 14601064.75 14601064.88 14601065.01 0.2659 0.1519 *

Uranus 35264-07-27 20:38 G 14601180.14 14601180.36 14601180.58 0.0140 0.0016

Uranus 35265-03-11 06:14 G 14601406.54 14601406.76 14601406.98 0.0140 0.0015

Uranus 35265-10-23 15:21 G 14601632.94 14601633.14 14601633.36 0.0140 0.0046

Uranus 35266-06-07 00:43 G 14601859.35 14601859.53 14601859.72 0.0140 0.0076

Uranus 35267-01-19 09:21 G 14602085.77 14602085.89 14602086.05 0.0139 0.0107

Mars 35267-02-06 04:05 G 14602103.58 14602103.67 14602103.77 0.1601 0.1326

Uranus 35267-09-02 18:43 G 14602312.24 14602312.28 14602312.34 0.0139 0.0135

Moon 35272-03-31 22:33 G 14603984.35 14603984.44 14603984.54 0.2655 0.2134

Saturn 35278-02-14 20:09 G 14606130.20 14606130.34 14606130.50 0.0273 0.0193

Neptune 35278-09-26 07:41 G 14606353.82 14606353.82 14606353.83 0.0088 0.0088

Saturn 35278-10-02 04:48 G 14606359.49 14606359.70 14606359.91 0.0276 0.0024

Neptune 35279-05-09 20:09 G 14606579.24 14606579.34 14606579.49 0.0088 0.0073

Saturn 35279-05-19 15:07 G 14606589.05 14606589.13 14606589.24 0.0279 0.0249

Neptune 35279-12-21 09:07 G 14606804.73 14606804.88 14606805.07 0.0088 0.0057

Neptune 35280-08-02 22:19 G 14607030.25 14607030.43 14607030.64 0.0088 0.0040

Neptune 35281-03-16 11:17 G 14607255.77 14607255.97 14607256.20 0.0088 0.0025

Jupiter 35281-10-18 00:00 G 14607471.32 14607471.50 14607471.67 0.0495 0.0262

Neptune 35281-10-28 00:43 G 14607481.31 14607481.53 14607481.75 0.0088 0.0008

Neptune 35282-06-10 13:26 G 14607706.85 14607707.06 14607707.29 0.0088 0.0009

Neptune 35283-01-22 02:24 G 14607932.40 14607932.60 14607932.82 0.0088 0.0025

Neptune 35283-09-04 15:21 G 14608157.96 14608158.14 14608158.35 0.0088 0.0042

Neptune 35284-04-17 04:19 G 14608383.53 14608383.68 14608383.86 0.0088 0.0058

Neptune 35284-11-28 17:17 G 14608609.12 14608609.22 14608609.36 0.0088 0.0074

Jupiter 35287-08-21 17:02 G 14609605.02 14609605.21 14609605.40 0.0531 0.0169

Saturn 35291-05-07 14:09 G 14610960.00 14610960.09 14610960.19 0.0290 0.0256

Saturn 35291-12-23 08:09 G 14611189.63 14611189.84 14611190.05 0.0287 0.0007

Saturn 35292-08-08 23:17 G 14611419.36 14611419.47 14611419.59 0.0284 0.0234

Jupiter 35293-06-23 00:57 G 14611737.34 14611737.54 14611737.73 0.0495 0.0154

Mars 35299-02-04 19:41 G 14613790.15 14613790.32 14613790.48 0.1605 0.0563

Jupiter 35299-04-26 08:53 G 14613870.71 14613870.87 14613871.02 0.0531 0.0340

Mars 35301-11-13 04:05 G 14614801.58 14614801.67 14614801.76 0.1930 0.1646

Uranus 35306-09-13 06:14 G 14616566.64 14616566.76 14616566.90 0.0137 0.0109

Pluto 35306-09-20 10:19 G 14616573.93 14616573.93 14616573.95 0.0065 0.0065

Uranus 35307-04-27 13:12 G 14616792.89 14616793.05 14616793.24 0.0137 0.0082

Pluto 35307-05-03 14:24 G 14616798.90 14616799.10 14616799.31 0.0065 0.0020

Saturn 35307-08-28 23:17 G 14616916.32 14616916.47 14616916.65 0.0273 0.0168

Uranus 35307-12-09 20:53 G 14617019.17 14617019.37 14617019.57 0.0138 0.0053

Pluto 35307-12-14 18:14 G 14617024.07 14617024.26 14617024.48 0.0065 0.0025

Saturn 35308-04-14 08:09 G 14617145.63 14617145.84 14617146.05 0.0276 0.0050

Uranus 35308-07-23 04:19 G 14617245.47 14617245.68 14617245.90 0.0138 0.0024

Saturn 35308-11-29 18:43 G 14617375.26 14617375.28 14617375.32 0.0279 0.0275

Uranus 35309-03-06 12:00 G 14617471.79 14617472.00 14617472.22 0.0138 0.0006

Uranus 35309-10-18 19:55 G 14617698.12 14617698.33 14617698.54 0.0138 0.0035

Uranus 35310-06-02 03:36 G 14617924.47 14617924.65 14617924.85 0.0139 0.0065

Uranus 35311-01-14 12:00 G 14618150.85 14618151.00 14618151.17 0.0139 0.0094

Uranus 35311-08-28 19:55 G 14618377.26 14618377.33 14618377.45 0.0139 0.0125

Saturn 35320-11-17 17:02 G 14621746.09 14621746.21 14621746.34 0.0289 0.0228

Saturn 35321-07-05 10:48 G 14621975.74 14621975.95 14621976.16 0.0286 0.0022

Saturn 35322-02-20 01:55 G 14622205.50 14622205.58 14622205.66 0.0283 0.0260

Jupiter 35323-04-30 09:36 G 14622639.81 14622639.90 14622639.99 0.0531 0.0468

Jupiter 35329-03-01 13:55 G 14624771.88 14624772.08 14624772.28 0.0495 0.0102

Mars 35332-12-04 17:17 G 14626146.18 14626146.22 14626146.26 0.1599 0.1542

Jupiter 35335-01-03 02:09 G 14626905.39 14626905.59 14626905.80 0.0531 0.0036

Saturn 35337-03-09 22:33 G 14627702.27 14627702.44 14627702.63 0.0274 0.0151

Saturn 35337-10-25 07:12 G 14627931.59 14627931.80 14627932.01 0.0276 0.0067

Jupiter 35340-11-04 16:19 G 14629038.03 14629038.18 14629038.35 0.0495 0.0307

Uranus 35346-05-18 21:36 G 14631059.30 14631059.40 14631059.52 0.0141 0.0122

Uranus 35346-12-31 07:55 G 14631285.67 14631285.83 14631286.00 0.0141 0.0090

Uranus 35347-08-14 18:00 G 14631512.06 14631512.25 14631512.45 0.0141 0.0059

Uranus 35348-03-28 03:50 G 14631738.45 14631738.66 14631738.88 0.0141 0.0028

Uranus 35348-11-09 13:41 G 14631964.85 14631965.07 14631965.29 0.0140 0.0004

Uranus 35349-06-23 23:02 G 14632191.25 14632191.46 14632191.68 0.0140 0.0034

Uranus 35350-02-05 08:24 G 14632417.66 14632417.85 14632418.05 0.0140 0.0064

Saturn 35350-05-30 17:45 G 14632532.10 14632532.24 14632532.39 0.0289 0.0208

Uranus 35350-09-19 17:31 G 14632644.08 14632644.23 14632644.40 0.0139 0.0094

Saturn 35351-01-15 11:31 G 14632761.78 14632761.98 14632762.19 0.0286 0.0043

Uranus 35351-05-04 02:24 G 14632870.52 14632870.60 14632870.72 0.0139 0.0124

Saturn 35351-09-02 02:53 G 14632991.59 14632991.62 14632991.64 0.0283 0.0281

Neptune 35360-04-01 21:50 G 14636126.36 14636126.41 14636126.48 0.0089 0.0086

Neptune 35360-11-13 10:33 G 14636351.83 14636351.94 14636352.10 0.0089 0.0070

Neptune 35361-06-27 00:00 G 14636577.33 14636577.50 14636577.68 0.0089 0.0053

Neptune 35362-02-07 13:12 G 14636802.86 14636803.05 14636803.26 0.0089 0.0036

Neptune 35362-09-21 02:24 G 14637028.39 14637028.60 14637028.82 0.0089 0.0020

Neptune 35363-05-04 15:21 G 14637253.92 14637254.14 14637254.36 0.0089 0.0003

Neptune 35363-12-16 04:19 G 14637479.47 14637479.68 14637479.90 0.0089 0.0014

Neptune 35364-07-28 17:02 G 14637705.02 14637705.21 14637705.43 0.0089 0.0031

Jupiter 35364-11-07 00:57 G 14637806.40 14637806.54 14637806.69 0.0496 0.0348

Mars 35364-12-03 08:24 G 14637832.68 14637832.85 14637833.02 0.1604 0.0331

Neptune 35365-03-11 06:14 G 14637930.59 14637930.76 14637930.96 0.0089 0.0047

Neptune 35365-10-22 18:57 G 14638156.16 14638156.29 14638156.47 0.0089 0.0063

Neptune 35366-06-05 07:55 G 14638381.75 14638381.83 14638381.95 0.0089 0.0080

Saturn 35366-09-20 02:09 G 14638488.41 14638488.59 14638488.79 0.0273 0.0123

Saturn 35367-05-07 11:02 G 14638717.76 14638717.96 14638718.16 0.0276 0.0095

Mars 35367-09-10 05:31 G 14638843.57 14638843.73 14638843.89 0.1933 0.0768

Jupiter 35370-09-10 19:26 G 14639940.14 14639940.31 14639940.49 0.0530 0.0269

Jupiter 35376-07-13 03:50 G 14642072.46 14642072.66 14642072.86 0.0495 0.0060

Earth 35377-10-05 06:29 G 14642521.63 14642521.77 14642521.92 0.2671 0.1094

Moon 35377-10-05 09:50 G 14642521.77 14642521.91 14642522.04 0.2666 0.1545 *

Saturn 35379-12-10 21:07 G 14643318.23 14643318.38 14643318.55 0.0289 0.0179

Saturn 35380-07-27 14:53 G 14643547.91 14643548.12 14643548.32 0.0286 0.0070

Jupiter 35382-05-16 10:48 G 14644205.78 14644205.95 14644206.14 0.0531 0.0243

Moon 35385-10-02 18:57 G 14645441.27 14645441.29 14645441.30 0.2664 0.2646

Jupiter 35388-03-18 06:00 G 14646338.69 14646338.75 14646338.82 0.0495 0.0468

Uranus 35390-05-13 13:26 G 14647124.97 14647125.06 14647125.16 0.0137 0.0121

Uranus 35390-12-25 20:38 G 14647351.21 14647351.36 14647351.52 0.0137 0.0093

Uranus 35391-08-09 03:36 G 14647577.47 14647577.65 14647577.85 0.0137 0.0066

Uranus 35392-03-22 11:02 G 14647803.76 14647803.96 14647804.18 0.0138 0.0037

Uranus 35392-11-03 18:43 G 14648030.07 14648030.28 14648030.50 0.0138 0.0008

Uranus 35393-06-18 02:24 G 14648256.39 14648256.60 14648256.82 0.0138 0.0022

Uranus 35394-01-30 10:19 G 14648482.74 14648482.93 14648483.14 0.0138 0.0051

Uranus 35394-09-13 18:14 G 14648709.10 14648709.26 14648709.45 0.0139 0.0081

Uranus 35395-04-28 02:38 G 14648935.48 14648935.61 14648935.74 0.0139 0.0110

Pluto 35395-08-14 11:02 G 14649043.74 14649043.96 14649044.18 0.0080 0.0007

Pluto 35396-03-26 20:24 G 14649269.31 14649269.35 14649269.44 0.0079 0.0076

Saturn 35396-04-01 02:38 G 14649274.41 14649274.61 14649274.81 0.0274 0.0105

Saturn 35396-11-16 11:17 G 14649503.78 14649503.97 14649504.16 0.0277 0.0114

Saturn 35409-06-22 22:05 G 14654104.25 14654104.42 14654104.60 0.0289 0.0157

Saturn 35410-02-07 15:50 G 14654333.96 14654334.16 14654334.36 0.0286 0.0092

Jupiter 35412-03-21 13:55 G 14655106.90 14655107.08 14655107.28 0.0496 0.0183

Jupiter 35418-01-23 06:57 G 14657240.59 14657240.79 14657240.99 0.0530 0.0079

Jupiter 35423-11-25 16:19 G 14659373.00 14659373.18 14659373.36 0.0496 0.0228

Saturn 35425-10-13 06:43 G 14660060.58 14660060.78 14660060.99 0.0274 0.0076

Saturn 35426-05-30 15:36 G 14660289.97 14660290.15 14660290.34 0.0276 0.0143

Jupiter 35429-09-27 20:38 G 14661506.26 14661506.36 14661506.48 0.0531 0.0442

Uranus 35430-01-17 02:53 G 14661617.57 14661617.62 14661617.69 0.0142 0.0136

Uranus 35430-08-31 13:12 G 14661843.91 14661844.05 14661844.20 0.0141 0.0105

Mars 35430-10-01 21:21 G 14661875.22 14661875.39 14661875.57 0.1603 0.0110

Uranus 35431-04-14 23:17 G 14662070.29 14662070.47 14662070.67 0.0141 0.0073

Uranus 35431-11-27 09:21 G 14662296.69 14662296.89 14662297.11 0.0141 0.0042

Uranus 35432-07-10 19:26 G 14662523.09 14662523.31 14662523.53 0.0140 0.0011

Uranus 35433-02-22 05:02 G 14662749.50 14662749.71 14662749.93 0.0140 0.0021

Mars 35433-07-08 07:41 G 14662885.65 14662885.82 14662886.00 0.1935 0.0092

Uranus 35433-10-06 14:38 G 14662975.91 14662976.11 14662976.32 0.0140 0.0051

Uranus 35434-05-21 00:00 G 14663202.33 14663202.50 14663202.68 0.0140 0.0081

Uranus 35435-01-02 09:21 G 14663428.76 14663428.89 14663429.02 0.0139 0.0111

Saturn 35439-01-03 02:24 G 14664890.41 14664890.60 14664890.79 0.0289 0.0127

Saturn 35439-08-20 19:26 G 14665120.13 14665120.31 14665120.51 0.0286 0.0121

Neptune 35443-08-13 07:41 G 14666573.73 14666573.82 14666573.94 0.0088 0.0077

Neptune 35444-03-25 20:38 G 14666799.22 14666799.36 14666799.53 0.0088 0.0061

Neptune 35444-11-06 09:36 G 14667024.72 14667024.90 14667025.10 0.0088 0.0045

Neptune 35445-06-19 22:33 G 14667250.24 14667250.44 14667250.66 0.0088 0.0029

Neptune 35446-01-31 11:31 G 14667475.77 14667475.98 14667476.21 0.0088 0.0013

Neptune 35446-09-14 00:43 G 14667701.31 14667701.53 14667701.75 0.0088 0.0003

Neptune 35447-04-27 13:41 G 14667926.86 14667927.07 14667927.29 0.0088 0.0019

Jupiter 35447-11-28 02:38 G 14668141.52 14668141.61 14668141.71 0.0495 0.0436

Neptune 35447-12-09 02:38 G 14668152.41 14668152.61 14668152.81 0.0088 0.0036

Neptune 35448-07-21 15:36 G 14668377.98 14668378.15 14668378.34 0.0088 0.0052

Neptune 35449-03-04 04:48 G 14668603.56 14668603.70 14668603.84 0.0088 0.0068

Neptune 35449-10-15 17:17 G 14668829.18 14668829.22 14668829.31 0.0088 0.0084

Jupiter 35453-09-30 22:48 G 14670275.31 14670275.45 14670275.60 0.0531 0.0374

Saturn 35454-09-08 01:26 G 14670617.53 14670617.56 14670617.62 0.0271 0.0264

Saturn 35455-04-25 08:24 G 14670846.64 14670846.85 14670847.06 0.0274 0.0055

Saturn 35455-12-10 17:02 G 14671076.05 14671076.21 14671076.39 0.0277 0.0165

Jupiter 35459-08-03 05:02 G 14672407.51 14672407.71 14672407.92 0.0495 0.0026

Jupiter 35465-06-05 15:36 G 14674540.96 14674541.15 14674541.35 0.0531 0.0128

Saturn 35468-07-15 03:36 G 14675676.46 14675676.65 14675676.86 0.0289 0.0104

Saturn 35469-03-01 21:07 G 14675906.21 14675906.38 14675906.57 0.0286 0.0145

Jupiter 35471-04-08 04:48 G 14676673.58 14676673.70 14676673.82 0.0495 0.0397

Uranus 35474-01-11 20:53 G 14677683.34 14677683.37 14677683.43 0.0137 0.0133

Uranus 35474-08-26 04:05 G 14677909.54 14677909.67 14677909.81 0.0137 0.0105

Uranus 35475-04-09 11:02 G 14678135.79 14678135.96 14678136.15 0.0137 0.0077

Uranus 35475-11-21 18:29 G 14678362.07 14678362.27 14678362.47 0.0137 0.0049

Uranus 35476-07-05 01:55 G 14678588.37 14678588.58 14678588.80 0.0138 0.0020

Uranus 35477-02-16 09:50 G 14678814.69 14678814.91 14678815.12 0.0138 0.0009

Uranus 35477-09-30 17:17 G 14679041.02 14679041.22 14679041.44 0.0138 0.0039

Uranus 35478-05-15 01:12 G 14679267.37 14679267.55 14679267.75 0.0138 0.0068

Uranus 35478-12-27 09:21 G 14679493.74 14679493.89 14679494.05 0.0139 0.0097

Uranus 35479-08-10 17:45 G 14679720.15 14679720.24 14679720.33 0.0139 0.0126

Saturn 35484-03-20 06:29 G 14681403.68 14681403.77 14681403.89 0.0271 0.0234

Saturn 35484-11-04 13:41 G 14681632.86 14681633.07 14681633.28 0.0274 0.0023

Saturn 35485-06-21 22:48 G 14681862.30 14681862.45 14681862.60 0.0277 0.0197

Jupiter 35495-04-10 15:21 G 14685441.97 14685442.14 14685442.31 0.0496 0.0267

Mars 35496-07-29 10:05 G 14685917.75 14685917.92 14685918.09 0.1601 0.0122

Saturn 35498-01-25 09:36 G 14686462.69 14686462.90 14686463.10 0.0289 0.0071

Saturn 35498-09-12 02:24 G 14686692.44 14686692.60 14686692.77 0.0286 0.0176

Mars 35499-05-05 08:38 G 14686927.71 14686927.86 14686928.01 0.1937 0.1010

Jupiter 35501-02-12 06:43 G 14687575.59 14687575.78 14687575.98 0.0530 0.0162

Jupiter 35506-12-15 17:17 G 14689708.02 14689708.22 14689708.41 0.0495 0.0144

Moon 35507-04-07 00:29 G 14689820.36 14689820.52 14689820.68 0.2661 0.0028

Earth 35507-04-07 06:00 G 14689820.60 14689820.75 14689820.90 0.2661 0.0837 *

Jupiter 35512-10-17 22:19 G 14691841.28 14691841.43 14691841.58 0.0531 0.0347

Saturn 35513-10-01 09:50 G 14692189.78 14692189.91 14692190.04 0.0272 0.0210

Uranus 35514-05-01 18:00 G 14692402.14 14692402.25 14692402.38 0.0141 0.0119

Saturn 35514-05-18 16:48 G 14692418.99 14692419.20 14692419.41 0.0274 0.0002

Uranus 35514-12-14 04:19 G 14692628.52 14692628.68 14692628.86 0.0141 0.0088

Saturn 35515-01-03 01:41 G 14692648.46 14692648.57 14692648.71 0.0277 0.0223

Uranus 35515-07-28 14:38 G 14692854.92 14692855.11 14692855.32 0.0141 0.0056

Uranus 35516-03-11 00:43 G 14693081.32 14693081.53 14693081.75 0.0141 0.0025

Uranus 35516-10-23 10:33 G 14693307.72 14693307.94 14693308.16 0.0140 0.0006

Uranus 35517-06-06 20:09 G 14693534.13 14693534.34 14693534.56 0.0140 0.0037

Uranus 35518-01-19 05:31 G 14693760.55 14693760.73 14693760.94 0.0140 0.0068

Uranus 35518-09-02 15:07 G 14693986.99 14693987.13 14693987.29 0.0140 0.0098

Uranus 35519-04-17 00:14 G 14694213.44 14694213.51 14694213.61 0.0139 0.0128

Neptune 35525-02-16 22:05 G 14696346.31 14696346.42 14696346.55 0.0089 0.0075

Neptune 35525-09-30 11:02 G 14696571.81 14696571.96 14696572.14 0.0089 0.0058

Neptune 35526-05-14 00:29 G 14696797.32 14696797.52 14696797.71 0.0089 0.0042

Neptune 35526-12-25 13:12 G 14697022.85 14697023.05 14697023.27 0.0089 0.0026

Neptune 35527-08-08 02:38 G 14697248.39 14697248.61 14697248.83 0.0089 0.0009

Saturn 35527-08-08 11:31 G 14697248.78 14697248.98 14697249.19 0.0288 0.0045 *

Neptune 35528-03-20 15:36 G 14697473.94 14697474.15 14697474.37 0.0089 0.0008

Saturn 35528-03-25 04:19 G 14697478.54 14697478.68 14697478.84 0.0285 0.0202

Neptune 35528-11-01 04:33 G 14697699.49 14697699.69 14697699.91 0.0089 0.0025

Neptune 35529-06-14 17:17 G 14697925.05 14697925.22 14697925.44 0.0089 0.0042

Neptune 35530-01-26 06:29 G 14698150.62 14698150.77 14698150.95 0.0089 0.0057

Neptune 35530-09-08 19:41 G 14698376.21 14698376.32 14698376.45 0.0089 0.0073

Jupiter 35536-10-21 01:41 G 14700610.49 14700610.57 14700610.66 0.0530 0.0475

Jupiter 35542-08-23 02:24 G 14702742.40 14702742.60 14702742.80 0.0496 0.0090

Saturn 35543-04-13 15:36 G 14702975.99 14702976.15 14702976.31 0.0272 0.0178

Saturn 35543-11-28 23:02 G 14703205.25 14703205.46 14703205.67 0.0274 0.0035

Saturn 35544-07-15 08:24 G 14703434.78 14703434.85 14703434.93 0.0277 0.0256

Jupiter 35548-06-25 15:07 G 14704875.93 14704876.13 14704876.33 0.0530 0.0047

Pluto 35552-10-20 22:19 G 14706454.27 14706454.43 14706454.62 0.0065 0.0038

Pluto 35553-06-03 02:38 G 14706679.40 14706679.61 14706679.83 0.0065 0.0007

Pluto 35554-01-14 06:29 G 14706904.66 14706904.77 14706904.92 0.0065 0.0052

Jupiter 35554-04-28 04:33 G 14707008.54 14707008.69 14707008.86 0.0495 0.0319

Saturn 35556-07-02 23:31 G 14707805.40 14707805.48 14707805.57 0.0291 0.0264

Saturn 35557-02-17 18:43 G 14708035.07 14708035.28 14708035.49 0.0288 0.0010

Saturn 35557-10-05 11:17 G 14708264.85 14708264.97 14708265.09 0.0285 0.0235

Uranus 35558-04-26 12:43 G 14708467.93 14708468.03 14708468.15 0.0137 0.0116

Uranus 35558-12-08 19:55 G 14708694.17 14708694.33 14708694.50 0.0137 0.0088

Uranus 35559-07-23 03:07 G 14708920.44 14708920.63 14708920.83 0.0137 0.0060

Uranus 35560-03-05 10:33 G 14709146.74 14709146.94 14709147.16 0.0137 0.0032

Uranus 35560-10-17 18:14 G 14709373.05 14709373.26 14709373.48 0.0138 0.0003

Uranus 35561-06-01 01:55 G 14709599.37 14709599.58 14709599.80 0.0138 0.0027

Uranus 35562-01-13 09:36 G 14709825.71 14709825.90 14709826.11 0.0138 0.0056

Mars 35562-05-27 23:02 G 14709960.29 14709960.46 14709960.63 0.1600 0.0351

Uranus 35562-08-27 17:31 G 14710052.07 14710052.23 14710052.42 0.0139 0.0086

Uranus 35563-04-11 01:41 G 14710278.46 14710278.57 14710278.70 0.0139 0.0115

Mars 35565-03-02 10:48 G 14710969.91 14710969.95 14710969.99 0.1939 0.1883

Saturn 35572-10-23 20:09 G 14713762.17 14713762.34 14713762.52 0.0272 0.0152

Saturn 35573-06-10 03:36 G 14713991.45 14713991.65 14713991.86 0.0275 0.0063

Jupiter 35578-04-30 13:55 G 14715776.93 14715777.08 14715777.23 0.0495 0.0338

Jupiter 35584-03-03 08:38 G 14717910.68 14717910.86 14717911.04 0.0530 0.0257

Saturn 35586-01-13 03:36 G 14718591.53 14718591.65 14718591.78 0.0290 0.0233

Saturn 35586-08-30 22:33 G 14718821.23 14718821.44 14718821.65 0.0288 0.0020

Saturn 35587-04-17 14:53 G 14719051.04 14719051.12 14719051.20 0.0285 0.0263

Jupiter 35590-01-03 13:12 G 14720042.85 14720043.05 14720043.25 0.0495 0.0088

Mars 35594-05-26 14:09 G 14721647.05 14721647.09 14721647.14 0.1605 0.1540

Jupiter 35595-11-07 00:14 G 14722176.33 14722176.51 14722176.69 0.0531 0.0251

Uranus 35597-12-30 00:00 G 14722960.43 14722960.50 14722960.59 0.0142 0.0132

Uranus 35598-08-13 10:33 G 14723186.79 14723186.94 14723187.10 0.0141 0.0101

Uranus 35599-03-27 20:53 G 14723413.18 14723413.37 14723413.56 0.0141 0.0069

Uranus 35599-11-09 06:57 G 14723639.58 14723639.79 14723640.00 0.0141 0.0038

Uranus 35600-06-22 17:02 G 14723865.99 14723866.21 14723866.43 0.0140 0.0007

Uranus 35601-02-04 02:53 G 14724092.40 14724092.62 14724092.84 0.0140 0.0024

Uranus 35601-09-18 12:29 G 14724318.82 14724319.02 14724319.22 0.0140 0.0055

Uranus 35602-05-02 21:50 G 14724545.25 14724545.41 14724545.59 0.0140 0.0085

Saturn 35602-05-06 02:53 G 14724548.44 14724548.62 14724548.82 0.0272 0.0118

Uranus 35602-12-15 07:12 G 14724771.68 14724771.80 14724771.93 0.0139 0.0115

Saturn 35602-12-21 10:48 G 14724777.76 14724777.95 14724778.15 0.0275 0.0099

Neptune 35607-11-15 18:43 G 14726568.22 14726568.28 14726568.38 0.0088 0.0082

Neptune 35608-06-28 07:41 G 14726793.69 14726793.82 14726793.98 0.0088 0.0067

Neptune 35609-02-08 20:53 G 14727019.20 14727019.37 14727019.56 0.0088 0.0050

Neptune 35609-09-22 09:50 G 14727244.71 14727244.91 14727245.12 0.0088 0.0034

Neptune 35610-05-05 22:48 G 14727470.24 14727470.45 14727470.67 0.0088 0.0018

Neptune 35610-12-17 11:45 G 14727695.77 14727695.99 14727696.21 0.0088 0.0002

Neptune 35611-07-31 00:43 G 14727921.32 14727921.53 14727921.75 0.0088 0.0014

Neptune 35612-03-12 13:26 G 14728146.87 14728147.06 14728147.28 0.0088 0.0031

Neptune 35612-10-24 02:24 G 14728372.43 14728372.60 14728372.80 0.0088 0.0046

Neptune 35613-06-06 15:07 G 14728598.00 14728598.13 14728598.31 0.0088 0.0063

Neptune 35614-01-18 04:05 G 14728823.59 14728823.67 14728823.80 0.0088 0.0079

Saturn 35615-07-26 11:45 G 14729377.85 14729377.99 14729378.16 0.0290 0.0197

Saturn 35616-03-12 06:29 G 14729607.57 14729607.77 14729607.98 0.0287 0.0057

Moon 35620-10-07 01:41 G 14731277.42 14731277.57 14731277.72 0.2674 0.0080

Earth 35620-10-07 06:14 G 14731277.61 14731277.76 14731277.91 0.2671 0.0865 *

Jupiter 35625-09-11 00:43 G 14733077.34 14733077.53 14733077.72 0.0495 0.0160

Mars 35628-03-24 11:45 G 14734002.83 14734002.99 14734003.16 0.1599 0.0575

Jupiter 35631-07-15 12:57 G 14735210.84 14735211.04 14735211.24 0.0531 0.0027

Saturn 35631-11-16 09:07 G 14735334.68 14735334.88 14735335.08 0.0273 0.0088

Saturn 35632-07-02 17:17 G 14735564.03 14735564.22 14735564.40 0.0276 0.0129

Jupiter 35637-05-17 02:09 G 14737343.41 14737343.59 14737343.77 0.0495 0.0253

Pluto 35641-01-31 14:38 G 14738698.96 14738699.11 14738699.31 0.0080 0.0049

Pluto 35641-09-14 00:57 G 14738924.35 14738924.54 14738924.75 0.0079 0.0036

Uranus 35641-12-24 21:36 G 14739026.33 14739026.40 14739026.49 0.0137 0.0127

Uranus 35642-08-08 04:33 G 14739252.56 14739252.69 14739252.86 0.0137 0.0099

Jupiter 35643-03-20 05:31 G 14739476.65 14739476.73 14739476.82 0.0531 0.0477

Uranus 35643-03-22 11:45 G 14739478.82 14739478.99 14739479.19 0.0137 0.0071

Uranus 35643-11-03 19:12 G 14739705.10 14739705.30 14739705.52 0.0137 0.0043

Uranus 35644-06-17 02:53 G 14739931.41 14739931.62 14739931.84 0.0138 0.0014

Uranus 35645-01-29 10:33 G 14740157.73 14740157.94 14740158.16 0.0138 0.0016

Saturn 35645-02-04 17:31 G 14740164.06 14740164.23 14740164.41 0.0290 0.0162

Uranus 35645-09-12 18:29 G 14740384.06 14740384.27 14740384.47 0.0138 0.0044

Saturn 35645-09-22 11:45 G 14740393.79 14740393.99 14740394.19 0.0287 0.0089

Uranus 35646-04-27 02:09 G 14740610.41 14740610.59 14740610.78 0.0138 0.0074

Uranus 35646-12-09 10:05 G 14740836.79 14740836.92 14740837.07 0.0139 0.0103

Uranus 35647-07-23 18:14 G 14741063.21 14741063.26 14741063.34 0.0139 0.0132

Mars 35660-03-23 02:38 G 14745689.52 14745689.61 14745689.71 0.1603 0.1302

Saturn 35660-10-11 09:50 G 14745891.86 14745891.91 14745891.97 0.0271 0.0261

Jupiter 35661-05-19 08:24 G 14746111.73 14746111.85 14746111.98 0.0496 0.0386

Saturn 35661-05-28 16:19 G 14746120.97 14746121.18 14746121.39 0.0273 0.0052

Saturn 35662-01-13 00:43 G 14746350.36 14746350.53 14746350.70 0.0276 0.0166

Mars 35662-12-28 15:50 G 14746700.09 14746700.16 14746700.23 0.1934 0.1755

Jupiter 35667-03-23 04:48 G 14748245.54 14748245.70 14748245.86 0.0530 0.0319

Jupiter 35673-01-22 10:48 G 14750377.75 14750377.95 14750378.16 0.0495 0.0022

Saturn 35674-08-18 03:21 G 14750950.45 14750950.64 14750950.83 0.0290 0.0121

Saturn 35675-04-04 21:07 G 14751180.19 14751180.38 14751180.57 0.0287 0.0129

Jupiter 35678-11-25 18:57 G 14752511.10 14752511.29 14752511.47 0.0530 0.0198

Uranus 35682-04-12 18:00 G 14753745.14 14753745.25 14753745.40 0.0141 0.0113

Uranus 35682-11-25 04:33 G 14753971.52 14753971.69 14753971.88 0.0141 0.0081

Uranus 35683-07-09 14:53 G 14754197.92 14754198.12 14754198.33 0.0141 0.0050

Uranus 35684-02-21 00:57 G 14754424.33 14754424.54 14754424.76 0.0141 0.0019

Jupiter 35684-09-27 12:29 G 14754643.92 14754644.02 14754644.12 0.0495 0.0433

Uranus 35684-10-04 11:02 G 14754650.74 14754650.96 14754651.18 0.0140 0.0013

Uranus 35685-05-18 20:38 G 14754877.15 14754877.36 14754877.57 0.0140 0.0043

Uranus 35685-12-31 06:00 G 14755103.57 14755103.75 14755103.95 0.0140 0.0074

Uranus 35686-08-14 15:36 G 14755330.01 14755330.15 14755330.30 0.0140 0.0104

Uranus 35687-03-29 00:29 G 14755556.48 14755556.52 14755556.60 0.0139 0.0134

Neptune 35689-05-21 08:38 G 14756340.78 14756340.86 14756340.97 0.0089 0.0080

Neptune 35690-01-01 22:05 G 14756566.27 14756566.42 14756566.58 0.0089 0.0064

Saturn 35690-04-23 16:48 G 14756678.10 14756678.20 14756678.32 0.0272 0.0231

Neptune 35690-08-15 11:02 G 14756791.79 14756791.96 14756792.16 0.0089 0.0047

Saturn 35690-12-08 23:45 G 14756907.28 14756907.49 14756907.70 0.0274 0.0020

Neptune 35691-03-29 00:00 G 14757017.31 14757017.50 14757017.72 0.0089 0.0031

Saturn 35691-07-26 08:24 G 14757136.71 14757136.85 14757137.00 0.0277 0.0200

Neptune 35691-11-09 13:26 G 14757242.84 14757243.06 14757243.28 0.0089 0.0014

Neptune 35692-06-22 02:38 G 14757468.39 14757468.61 14757468.83 0.0089 0.0003

Neptune 35693-02-02 15:36 G 14757693.94 14757694.15 14757694.37 0.0089 0.0019

Neptune 35693-09-16 04:33 G 14757919.50 14757919.69 14757919.90 0.0089 0.0035

Mars 35694-01-20 00:29 G 14758045.37 14758045.52 14758045.67 0.1598 0.0805

Neptune 35694-04-29 17:31 G 14758145.06 14758145.23 14758145.42 0.0089 0.0051

Neptune 35694-12-11 06:29 G 14758370.64 14758370.77 14758370.92 0.0089 0.0068

Neptune 35695-07-24 18:57 G 14758596.25 14758596.29 14758596.39 0.0089 0.0085

Saturn 35704-02-29 09:50 G 14761736.71 14761736.91 14761737.12 0.0289 0.0086

Saturn 35704-10-16 03:07 G 14761966.46 14761966.63 14761966.81 0.0286 0.0163

Jupiter 35708-09-30 18:29 G 14763412.09 14763412.27 14763412.46 0.0495 0.0204

Jupiter 35714-08-04 12:00 G 14765545.81 14765546.00 14765546.20 0.0531 0.0106

Saturn 35719-11-04 23:45 G 14767464.35 14767464.49 14767464.64 0.0272 0.0197

Jupiter 35720-06-05 19:55 G 14767678.15 14767678.33 14767678.52 0.0495 0.0209

Saturn 35720-06-21 06:57 G 14767693.58 14767693.79 14767694.01 0.0274 0.0017

Saturn 35721-02-05 16:05 G 14767923.07 14767923.17 14767923.28 0.0277 0.0237

Uranus 35725-08-25 07:12 G 14769584.80 14769584.80 14769584.82 0.0137 0.0136

Mars 35726-01-19 15:36 G 14769732.02 14769732.15 14769732.28 0.1602 0.1078

Uranus 35726-04-08 14:09 G 14769810.97 14769811.09 14769811.23 0.0137 0.0109

Jupiter 35726-04-09 00:43 G 14769811.41 14769811.53 14769811.66 0.0531 0.0419

Uranus 35726-11-20 21:21 G 14770037.22 14770037.39 14770037.57 0.0137 0.0081

Uranus 35727-07-05 04:33 G 14770263.50 14770263.69 14770263.90 0.0137 0.0053

Uranus 35728-02-16 12:14 G 14770489.80 14770490.01 14770490.23 0.0138 0.0024

Uranus 35728-09-29 19:55 G 14770716.11 14770716.33 14770716.54 0.0138 0.0005

Mars 35728-10-25 17:31 G 14770742.08 14770742.23 14770742.39 0.1936 0.0866

Uranus 35729-05-14 03:21 G 14770942.44 14770942.64 14770942.86 0.0138 0.0034

Uranus 35729-12-26 11:17 G 14771168.78 14771168.97 14771169.17 0.0138 0.0063

Uranus 35730-08-09 19:12 G 14771395.14 14771395.30 14771395.47 0.0139 0.0092

Uranus 35731-03-24 03:07 G 14771621.54 14771621.63 14771621.75 0.0139 0.0121

Saturn 35733-09-10 20:24 G 14772523.14 14772523.35 14772523.56 0.0289 0.0044

Saturn 35734-04-28 13:12 G 14772752.91 14772753.05 14772753.20 0.0286 0.0203

Jupiter 35744-06-08 05:02 G 14776446.63 14776446.71 14776446.80 0.0496 0.0447

Saturn 35749-05-17 07:26 G 14778250.65 14778250.81 14778250.98 0.0272 0.0164

Saturn 35750-01-01 14:53 G 14778479.91 14778480.12 14778480.33 0.0275 0.0050

Earth 35750-04-08 08:24 G 14778576.70 14778576.85 14778577.00 0.2661 0.0835

Moon 35750-04-08 13:12 G 14778576.93 14778577.05 14778577.17 0.2664 0.1684 *

Jupiter 35750-04-11 23:45 G 14778580.35 14778580.49 14778580.63 0.0531 0.0375

Saturn 35750-08-19 00:29 G 14778709.48 14778709.52 14778709.56 0.0278 0.0272

Jupiter 35756-02-12 06:29 G 14780712.56 14780712.77 14780712.97 0.0495 0.0033

Moon 35758-04-06 05:45 G 14781496.66 14781496.74 14781496.82 0.2659 0.2305

Mars 35759-11-18 13:41 G 14782087.94 14782088.07 14782088.20 0.1597 0.1023

Jupiter 35761-12-15 15:50 G 14782845.97 14782846.16 14782846.36 0.0531 0.0130

Saturn 35762-08-06 09:07 G 14783079.79 14783079.88 14783079.97 0.0290 0.0260

Saturn 35763-03-24 04:05 G 14783309.46 14783309.67 14783309.88 0.0288 0.0007

Saturn 35763-11-08 20:24 G 14783539.24 14783539.35 14783539.47 0.0285 0.0239

Uranus 35765-12-12 02:38 G 14784303.52 14784303.61 14784303.73 0.0142 0.0124

Uranus 35766-07-26 13:12 G 14784529.90 14784530.05 14784530.23 0.0141 0.0092

Uranus 35767-03-09 23:31 G 14784756.30 14784756.48 14784756.69 0.0141 0.0061

Jupiter 35767-10-18 06:00 G 14784978.63 14784978.75 14784978.88 0.0495 0.0389

Uranus 35767-10-22 09:50 G 14784982.70 14784982.91 14784983.13 0.0141 0.0030

Uranus 35768-06-04 19:55 G 14785209.11 14785209.33 14785209.55 0.0140 0.0002

Uranus 35769-01-17 05:31 G 14785435.52 14785435.73 14785435.95 0.0140 0.0033

Uranus 35769-08-31 15:07 G 14785661.95 14785662.13 14785662.34 0.0140 0.0063

Uranus 35770-04-15 00:43 G 14785888.37 14785888.53 14785888.70 0.0140 0.0093

Uranus 35770-11-27 09:50 G 14786114.82 14786114.91 14786115.02 0.0139 0.0122

Neptune 35772-02-18 05:31 G 14786562.72 14786562.73 14786562.77 0.0088 0.0087

Neptune 35772-09-30 18:43 G 14786788.15 14786788.28 14786788.41 0.0088 0.0072

Neptune 35773-05-14 06:57 G 14787013.65 14787013.79 14787013.99 0.0088 0.0057

Neptune 35773-12-25 20:09 G 14787239.16 14787239.34 14787239.55 0.0088 0.0040

Neptune 35774-08-08 09:21 G 14787464.68 14787464.89 14787465.11 0.0088 0.0024

Neptune 35775-03-21 22:19 G 14787690.21 14787690.43 14787690.65 0.0088 0.0008

Neptune 35775-11-02 11:17 G 14787915.75 14787915.97 14787916.19 0.0088 0.0008

Neptune 35776-06-15 00:00 G 14788141.30 14788141.50 14788141.72 0.0088 0.0024

Neptune 35777-01-26 12:43 G 14788366.85 14788367.03 14788367.24 0.0088 0.0040

Neptune 35777-09-09 01:41 G 14788592.42 14788592.57 14788592.76 0.0088 0.0057

Neptune 35778-04-22 14:38 G 14788818.01 14788818.11 14788818.26 0.0088 0.0072

Saturn 35778-11-27 14:09 G 14789036.91 14789037.09 14789037.28 0.0273 0.0131

Neptune 35778-12-04 04:05 G 14789043.65 14789043.67 14789043.69 0.0088 0.0088

Saturn 35779-07-14 22:05 G 14789266.22 14789266.42 14789266.62 0.0275 0.0085

Jupiter 35791-10-20 15:07 G 14793746.95 14793747.13 14793747.30 0.0496 0.0265

Mars 35791-11-17 04:19 G 14793774.54 14793774.68 14793774.83 0.1600 0.0848

Saturn 35792-02-16 19:55 G 14793866.20 14793866.33 14793866.47 0.0291 0.0219

Saturn 35792-10-03 14:24 G 14794095.90 14794096.10 14794096.31 0.0288 0.0036

Saturn 35793-05-21 06:29 G 14794325.73 14794325.77 14794325.82 0.0285 0.0278

Mars 35794-08-22 18:43 G 14794784.10 14794784.28 14794784.45 0.1938 0.0053

Jupiter 35797-08-23 05:17 G 14795880.52 14795880.72 14795880.91 0.0530 0.0150

Pluto 35798-04-09 07:41 G 14796109.69 14796109.82 14796109.95 0.0065 0.0052

Pluto 35798-11-20 11:31 G 14796334.77 14796334.98 14796335.21 0.0065 0.0008

Pluto 35799-07-03 15:21 G 14796559.98 14796560.14 14796560.34 0.0065 0.0038

Jupiter 35803-06-26 16:33 G 14798012.99 14798013.19 14798013.38 0.0495 0.0147

Saturn 35808-06-09 22:05 G 14799823.22 14799823.42 14799823.62 0.0273 0.0097

Saturn 35809-01-25 06:14 G 14800052.57 14800052.76 14800052.95 0.0276 0.0120

Jupiter 35809-04-28 18:57 G 14800146.15 14800146.29 14800146.44 0.0531 0.0367

Uranus 35809-12-07 22:33 G 14800369.35 14800369.44 14800369.55 0.0137 0.0120

Uranus 35810-07-22 05:45 G 14800595.59 14800595.74 14800595.90 0.0137 0.0092

Uranus 35811-03-05 12:57 G 14800821.86 14800822.04 14800822.24 0.0137 0.0064

Uranus 35811-10-17 20:24 G 14801048.14 14801048.35 14801048.56 0.0137 0.0036

Uranus 35812-05-31 03:50 G 14801274.44 14801274.66 14801274.88 0.0138 0.0007

Uranus 35813-01-12 11:17 G 14801500.76 14801500.97 14801501.19 0.0138 0.0022

Uranus 35813-08-26 19:12 G 14801727.10 14801727.30 14801727.50 0.0138 0.0051

Uranus 35814-04-10 02:53 G 14801953.45 14801953.62 14801953.80 0.0139 0.0080

Uranus 35814-11-22 10:48 G 14802179.83 14802179.95 14802180.09 0.0139 0.0109

Uranus 35815-07-06 18:43 G 14802406.28 14802406.28 14802406.32 0.0139 0.0139

Saturn 35821-08-30 04:05 G 14804652.51 14804652.67 14804652.84 0.0289 0.0178

Saturn 35822-04-16 22:05 G 14804882.22 14804882.42 14804882.63 0.0287 0.0074

Mars 35825-09-16 02:24 G 14806130.50 14806130.60 14806130.71 0.1596 0.1252

Jupiter 35827-06-28 22:48 G 14806781.44 14806781.45 14806781.48 0.0495 0.0492

Jupiter 35833-05-01 21:36 G 14808915.30 14808915.40 14808915.51 0.0531 0.0448

Saturn 35837-12-21 03:36 G 14810609.45 14810609.65 14810609.86 0.0273 0.0066

Saturn 35838-08-07 12:14 G 14810838.83 14810839.01 14810839.19 0.0276 0.0153

Jupiter 35839-03-04 00:43 G 14811047.32 14811047.53 14811047.73 0.0495 0.0081

Jupiter 35845-01-04 10:48 G 14813180.75 14813180.95 14813181.15 0.0531 0.0072

Uranus 35849-08-12 12:00 G 14814861.94 14814862.00 14814862.07 0.0142 0.0134

Uranus 35850-03-26 22:33 G 14815088.29 14815088.44 14815088.59 0.0141 0.0103

Jupiter 35850-11-07 02:24 G 14815313.45 14815313.60 14815313.76 0.0495 0.0328

Uranus 35850-11-08 08:53 G 14815314.68 14815314.87 14815315.06 0.0141 0.0071

Saturn 35851-03-12 14:24 G 14815438.92 14815439.10 14815439.29 0.0290 0.0138

Uranus 35851-06-22 19:12 G 14815541.09 14815541.30 14815541.51 0.0141 0.0040

Saturn 35851-10-28 08:09 G 14815668.65 14815668.84 14815669.04 0.0287 0.0113

Uranus 35852-02-04 05:17 G 14815767.50 14815767.72 14815767.94 0.0141 0.0009

Uranus 35852-09-17 15:07 G 14815993.91 14815994.13 14815994.35 0.0140 0.0022

Uranus 35853-05-02 00:43 G 14816220.33 14816220.53 14816220.74 0.0140 0.0052

Neptune 35853-08-24 19:41 G 14816335.27 14816335.32 14816335.38 0.0089 0.0086

Uranus 35853-12-14 09:50 G 14816446.75 14816446.91 14816447.10 0.0140 0.0083

Neptune 35854-04-07 08:24 G 14816560.73 14816560.85 14816561.00 0.0089 0.0070

Uranus 35854-07-28 19:12 G 14816673.19 14816673.30 14816673.45 0.0140 0.0113

Neptune 35854-11-18 21:21 G 14816786.24 14816786.39 14816786.59 0.0089 0.0054

Neptune 35855-07-02 10:33 G 14817011.76 14817011.94 14817012.16 0.0089 0.0037

Neptune 35856-02-13 00:00 G 14817237.29 14817237.50 14817237.72 0.0089 0.0021

Neptune 35856-09-25 13:12 G 14817462.83 14817463.05 14817463.27 0.0089 0.0004

Neptune 35857-05-09 02:09 G 14817688.38 14817688.59 14817688.81 0.0089 0.0013

Mars 35857-09-14 17:31 G 14817817.07 14817817.23 14817817.39 0.1599 0.0625

Neptune 35857-12-20 15:07 G 14817913.93 14817914.13 14817914.35 0.0089 0.0029

Neptune 35858-08-03 04:05 G 14818139.50 14818139.67 14818139.87 0.0089 0.0045

Neptune 35859-03-16 17:17 G 14818365.08 14818365.22 14818365.39 0.0089 0.0061

Neptune 35859-10-28 06:29 G 14818590.67 14818590.77 14818590.88 0.0089 0.0077

Mars 35860-06-19 20:38 G 14818826.21 14818826.36 14818826.51 0.1940 0.0930

Earth 35863-10-10 06:00 G 14820033.59 14820033.75 14820033.91 0.2670 0.0627

Moon 35863-10-10 11:45 G 14820033.86 14820033.99 14820034.12 0.2669 0.1616 *

Saturn 35866-11-16 04:19 G 14821166.60 14821166.68 14821166.78 0.0271 0.0244

Saturn 35867-07-03 11:17 G 14821395.76 14821395.97 14821396.18 0.0274 0.0033

Saturn 35868-02-17 19:55 G 14821625.18 14821625.33 14821625.49 0.0277 0.0187

Jupiter 35874-11-09 10:48 G 14824081.80 14824081.95 14824082.11 0.0495 0.0323

Jupiter 35880-09-12 01:41 G 14826215.39 14826215.57 14826215.76 0.0531 0.0215

Saturn 35880-09-21 22:33 G 14826225.24 14826225.44 14826225.64 0.0289 0.0099

Saturn 35881-05-09 15:36 G 14826454.98 14826455.15 14826455.34 0.0286 0.0151

Jupiter 35886-07-15 11:31 G 14828347.77 14828347.98 14828348.18 0.0495 0.0095

Pluto 35886-07-21 21:07 G 14828354.35 14828354.38 14828354.43 0.0080 0.0078

Pluto 35887-03-04 07:26 G 14828579.59 14828579.81 14828580.03 0.0080 0.0006

Mars 35891-07-14 15:21 G 14830173.08 14830173.14 14830173.21 0.1595 0.1470

Jupiter 35892-05-17 17:17 G 14830481.06 14830481.22 14830481.40 0.0531 0.0291

Uranus 35893-08-07 06:57 G 14830927.75 14830927.79 14830927.88 0.0136 0.0131

Uranus 35894-03-21 14:09 G 14831153.96 14831154.09 14831154.24 0.0137 0.0103

Uranus 35894-11-02 21:07 G 14831380.21 14831380.38 14831380.57 0.0137 0.0075

Uranus 35895-06-17 04:19 G 14831606.49 14831606.68 14831606.89 0.0137 0.0048

Uranus 35896-01-29 12:00 G 14831832.79 14831833.00 14831833.22 0.0138 0.0019

Saturn 35896-05-28 08:38 G 14831952.74 14831952.86 14831952.99 0.0272 0.0217

Uranus 35896-09-11 19:26 G 14832059.09 14832059.31 14832059.53 0.0138 0.0010

Saturn 35897-01-12 15:50 G 14832181.95 14832182.16 14832182.37 0.0274 0.0004

Uranus 35897-04-26 02:53 G 14832285.42 14832285.62 14832285.83 0.0138 0.0039

Saturn 35897-08-30 00:57 G 14832411.41 14832411.54 14832411.67 0.0277 0.0218

Uranus 35897-12-08 10:33 G 14832511.76 14832511.94 14832512.13 0.0138 0.0068

Uranus 35898-07-22 18:14 G 14832738.12 14832738.26 14832738.43 0.0139 0.0097

Uranus 35899-03-06 02:24 G 14832964.52 14832964.60 14832964.70 0.0139 0.0126

Saturn 35910-04-05 07:26 G 14837011.61 14837011.81 14837012.02 0.0289 0.0062

Saturn 35910-11-21 00:29 G 14837241.37 14837241.52 14837241.68 0.0286 0.0187

Jupiter 35916-05-21 16:19 G 14839250.12 14839250.18 14839250.24 0.0530 0.0501

Jupiter 35922-03-23 22:05 G 14841382.23 14841382.42 14841382.62 0.0495 0.0149

Mars 35923-07-14 06:14 G 14841859.59 14841859.76 14841859.92 0.1598 0.0395

Saturn 35925-12-09 15:07 G 14842738.98 14842739.13 14842739.29 0.0272 0.0186

Mars 35926-04-17 21:21 G 14842868.35 14842868.39 14842868.43 0.1942 0.1875

Saturn 35926-07-26 22:19 G 14842968.22 14842968.43 14842968.65 0.0274 0.0028

Saturn 35927-03-13 07:41 G 14843197.73 14843197.82 14843197.91 0.0277 0.0250

Jupiter 35928-01-25 06:29 G 14843515.57 14843515.77 14843515.97 0.0531 0.0013

Uranus 35933-11-25 06:00 G 14845646.63 14845646.75 14845646.88 0.0142 0.0115

Jupiter 35933-11-26 23:31 G 14845648.31 14845648.48 14845648.66 0.0495 0.0263

Uranus 35934-07-09 16:33 G 14845873.02 14845873.19 14845873.38 0.0141 0.0083

Uranus 35935-02-21 02:53 G 14846099.43 14846099.62 14846099.83 0.0141 0.0052

Uranus 35935-10-05 13:12 G 14846325.84 14846326.05 14846326.27 0.0141 0.0021

Uranus 35936-05-18 23:17 G 14846552.25 14846552.47 14846552.69 0.0141 0.0010

Uranus 35936-12-31 08:53 G 14846778.67 14846778.87 14846779.08 0.0140 0.0041

Neptune 35937-01-04 04:33 G 14846782.60 14846782.69 14846782.81 0.0088 0.0077

Uranus 35937-08-14 18:29 G 14847005.09 14847005.27 14847005.47 0.0140 0.0072

Neptune 35937-08-17 17:45 G 14847008.09 14847008.24 14847008.41 0.0088 0.0062

Uranus 35938-03-29 04:05 G 14847231.52 14847231.67 14847231.82 0.0140 0.0101

Neptune 35938-03-31 06:29 G 14847233.60 14847233.77 14847233.97 0.0088 0.0046

Uranus 35938-11-10 12:57 G 14847457.98 14847458.04 14847458.13 0.0139 0.0131

Neptune 35938-11-11 19:26 G 14847459.11 14847459.31 14847459.53 0.0088 0.0030

Saturn 35939-02-28 19:26 G 14847568.26 14847568.31 14847568.36 0.0291 0.0280

Neptune 35939-06-25 08:24 G 14847684.64 14847684.85 14847685.08 0.0088 0.0014

Jupiter 35939-09-29 22:05 G 14847781.38 14847781.42 14847781.46 0.0531 0.0518

Saturn 35939-10-16 14:38 G 14847797.90 14847798.11 14847798.32 0.0288 0.0024

Neptune 35940-02-05 21:36 G 14847910.18 14847910.40 14847910.62 0.0088 0.0002

Saturn 35940-06-02 07:12 G 14848027.67 14848027.80 14848027.93 0.0285 0.0222

Neptune 35940-09-18 10:19 G 14848135.72 14848135.93 14848136.15 0.0088 0.0018

Neptune 35941-05-01 23:17 G 14848361.27 14848361.47 14848361.68 0.0088 0.0034

Neptune 35941-12-13 12:00 G 14848586.83 14848587.00 14848587.19 0.0088 0.0050

Neptune 35942-07-27 00:57 G 14848812.41 14848812.54 14848812.70 0.0088 0.0066

Neptune 35943-03-09 13:55 G 14849038.01 14849038.08 14849038.18 0.0088 0.0081

Saturn 35955-06-21 18:00 G 14853525.08 14853525.25 14853525.42 0.0272 0.0161

Saturn 35956-02-06 01:26 G 14853754.36 14853754.56 14853754.77 0.0275 0.0054

Saturn 35956-09-22 11:02 G 14853983.96 14853983.96 14853983.97 0.0277 0.0277

Jupiter 35957-11-29 07:41 G 14854416.69 14854416.82 14854416.95 0.0495 0.0383

Jupiter 35963-10-02 23:02 G 14856550.30 14856550.46 14856550.63 0.0530 0.0288

Saturn 35968-09-10 03:07 G 14858354.52 14858354.63 14858354.74 0.0291 0.0246

Saturn 35969-04-27 22:05 G 14858584.21 14858584.42 14858584.63 0.0288 0.0010

Jupiter 35969-08-04 09:36 G 14858682.69 14858682.90 14858683.10 0.0496 0.0026

Saturn 35969-12-13 14:24 G 14858814.02 14858814.10 14858814.20 0.0285 0.0256

Jupiter 35975-06-07 14:09 G 14860815.90 14860816.09 14860816.27 0.0530 0.0222

Uranus 35977-11-19 21:50 G 14861712.31 14861712.41 14861712.54 0.0136 0.0114

Uranus 35978-07-04 04:48 G 14861938.54 14861938.70 14861938.88 0.0137 0.0087

Uranus 35979-02-15 12:00 G 14862164.81 14862165.00 14862165.20 0.0137 0.0059

Uranus 35979-09-29 19:12 G 14862391.09 14862391.30 14862391.52 0.0137 0.0031

Uranus 35980-05-13 02:38 G 14862617.39 14862617.61 14862617.82 0.0138 0.0003

Uranus 35980-12-25 10:05 G 14862843.70 14862843.92 14862844.13 0.0138 0.0026

Jupiter 35981-04-09 11:17 G 14862948.88 14862948.97 14862949.07 0.0496 0.0433

Uranus 35981-08-08 17:17 G 14863070.03 14863070.22 14863070.43 0.0138 0.0055

Uranus	**35982-03-23 01:12**	**G**	**14863296.39**	**14863296.55**	**14863296.73**	**0.0138**	**0.0084**	
Uranus	**35982-11-04 08:53**	**G**	**14863522.76**	**14863522.87**	**14863523.01**	**0.0139**	**0.0113**	
Saturn	**35984-12-31 23:31**	**G**	**14864311.30**	**14864311.48**	**14864311.67**	**0.0272**	**0.0132**	
Saturn	**35985-08-18 07:26**	**G**	**14864540.61**	**14864540.81**	**14864541.01**	**0.0275**	**0.0084**	
Mars	**35989-05-10 19:12**	**G**	**14865902.13**	**14865902.30**	**14865902.48**	**0.1597**	**0.0174**	
Moon	**35993-04-10 07:12**	**G**	**14867332.63**	**14867332.80**	**14867332.96**	**0.2657**	**0.0256**	
Earth	**35993-04-10 10:48**	**G**	**14867332.80**	**14867332.95**	**14867333.10**	**0.2662**	**0.0870**	*
Saturn	**35998-03-23 09:07**	**G**	**14869140.75**	**14869140.88**	**14869141.04**	**0.0290**	**0.0211**	
Saturn	**35998-11-08 04:05**	**G**	**14869370.46**	**14869370.67**	**14869370.88**	**0.0287**	**0.0045**	

37TH MILLENNIUM CE

This is a list of transits of Venus in the 37th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**36005-04-11 19:55**	**G**	**14871717.15**	**14871717.33**	**14871717.52**	**0.0495**	**0.0217**	
Jupiter	**36011-02-13 07:12**	**G**	**14873850.60**	**14873850.80**	**14873851.00**	**0.0531**	**0.0078**	
Saturn	**36014-07-14 01:12**	**G**	**14875097.36**	**14875097.55**	**14875097.75**	**0.0273**	**0.0110**	
Saturn	**36015-02-28 08:53**	**G**	**14875326.68**	**14875326.87**	**14875327.07**	**0.0275**	**0.0108**	
Jupiter	**36016-12-15 22:05**	**G**	**14875983.23**	**14875983.42**	**14875983.61**	**0.0495**	**0.0191**	
Uranus	**36017-07-25 12:14**	**G**	**14876204.93**	**14876205.01**	**14876205.11**	**0.0142**	**0.0128**	
Uranus	**36018-03-08 22:48**	**G**	**14876431.31**	**14876431.45**	**14876431.63**	**0.0142**	**0.0097**	
Neptune	**36018-07-10 18:43**	**G**	**14876555.18**	**14876555.28**	**14876555.41**	**0.0089**	**0.0075**	
Uranus	**36018-10-21 09:21**	**G**	**14876657.71**	**14876657.89**	**14876658.10**	**0.0141**	**0.0065**	
Neptune	**36019-02-21 07:41**	**G**	**14876780.68**	**14876780.82**	**14876781.00**	**0.0089**	**0.0060**	

Uranus 36019-06-04 19:41 G 14876884.12 14876884.32 14876884.54 0.0141 0.0034

Neptune 36019-10-04 20:53 G 14877006.19 14877006.37 14877006.57 0.0089 0.0043

Uranus 36020-01-17 06:00 G 14877110.53 14877110.75 14877110.97 0.0141 0.0003

Neptune 36020-05-17 09:50 G 14877231.72 14877231.91 14877232.13 0.0089 0.0027

Uranus 36020-08-30 15:50 G 14877336.96 14877337.16 14877337.38 0.0141 0.0029

Neptune 36020-12-28 23:17 G 14877457.25 14877457.47 14877457.68 0.0089 0.0010

Uranus 36021-04-14 01:26 G 14877563.38 14877563.56 14877563.77 0.0140 0.0060

Neptune 36021-08-11 12:14 G 14877682.79 14877683.01 14877683.23 0.0089 0.0006

Uranus 36021-11-26 11:02 G 14877789.80 14877789.96 14877790.14 0.0140 0.0089

Neptune 36022-03-25 01:12 G 14877908.35 14877908.55 14877908.77 0.0089 0.0022

Uranus 36022-07-10 20:24 G 14878016.25 14878016.35 14878016.48 0.0140 0.0119

Jupiter 36022-10-18 21:36 G 14878116.29 14878116.40 14878116.52 0.0530 0.0431

Neptune 36022-11-05 14:24 G 14878133.91 14878134.10 14878134.30 0.0089 0.0038

Neptune 36023-06-19 03:07 G 14878359.47 14878359.63 14878359.82 0.0089 0.0055

Neptune 36024-01-30 16:05 G 14878585.06 14878585.17 14878585.33 0.0089 0.0071

Mars 36024-02-13 03:36 G 14878598.60 14878598.65 14878598.70 0.1938 0.1851

Neptune 36024-09-12 05:17 G 14878810.69 14878810.72 14878810.78 0.0089 0.0087

Saturn 36027-10-03 14:53 G 14879926.96 14879927.12 14879927.29 0.0291 0.0181

Saturn 36028-05-20 09:36 G 14880156.69 14880156.90 14880157.10 0.0288 0.0074

Jupiter 36040-12-18 07:26 G 14884751.74 14884751.81 14884751.88 0.0496 0.0463

Saturn 36044-01-24 05:31 G 14885883.53 14885883.73 14885883.94 0.0273 0.0083

Pluto 36044-05-09 18:43 G 14885990.10 14885990.28 14885990.50 0.0065 0.0028

Saturn 36044-09-09 13:26 G 14886112.88 14886113.06 14886113.25 0.0275 0.0136

Pluto 36044-12-20 23:02 G 14886215.26 14886215.46 14886215.68 0.0065 0.0017

Pluto 36045-08-03 02:53 G 14886440.58 14886440.62 14886440.70 0.0065 0.0063

Jupiter 36046-10-21 21:50 G 14886885.27 14886885.41 14886885.56 0.0530 0.0366

Jupiter 36052-08-23 09:36 G 14889017.70 14889017.90 14889018.10 0.0495 0.0055

Mars 36055-03-08 08:09 G 14889944.67 14889944.84 14889945.01 0.1596 0.0052

Saturn 36057-04-14 19:55 G 14890713.15 14890713.33 14890713.51 0.0290 0.0147

Saturn 36057-11-30 14:09 G 14890942.90 14890943.09 14890943.29 0.0287 0.0106

Jupiter 36058-06-26 13:41 G 14891150.88 14891151.07 14891151.27 0.0531 0.0139

Uranus 36061-07-20 07:26 G 14892270.74 14892270.81 14892270.91 0.0136 0.0124

Uranus 36062-03-03 14:38 G 14892496.96 14892497.11 14892497.26 0.0137 0.0097

Uranus 36062-10-15 21:07 G 14892723.21 14892723.38 14892723.58 0.0137 0.0070

Uranus 36063-05-30 04:19 G 14892949.48 14892949.68 14892949.89 0.0137 0.0042

Uranus 36064-01-11 11:45 G 14893175.77 14893175.99 14893176.20 0.0137 0.0014

Jupiter 36064-04-28 11:02 G 14893283.82 14893283.96 14893284.11 0.0495 0.0354

Uranus 36064-08-24 18:57 G 14893402.08 14893402.29 14893402.51 0.0138 0.0015

Uranus 36065-04-08 02:09 G 14893628.40 14893628.59 14893628.81 0.0138 0.0044

Uranus 36065-11-20 09:50 G 14893854.73 14893854.91 14893855.10 0.0138 0.0072

Uranus 36066-07-04 17:45 G 14894081.09 14894081.24 14894081.39 0.0138 0.0101

Uranus 36067-02-16 01:41 G 14894307.51 14894307.57 14894307.65 0.0139 0.0130

Saturn 36073-08-05 06:14 G 14896669.55 14896669.76 14896669.97 0.0273 0.0063

Saturn 36074-03-22 14:09 G 14896898.92 14896899.09 14896899.27 0.0276 0.0156

Saturn 36086-10-25 23:45 G 14901499.30 14901499.49 14901499.69 0.0290 0.0121

Saturn 36087-06-12 18:14 G 14901729.07 14901729.26 14901729.45 0.0287 0.0133

Jupiter 36088-04-30 20:09 G 14902052.18 14902052.34 14902052.50 0.0496 0.0298

Mars 36089-12-10 04:48 G 14902640.55 14902640.70 14902640.86 0.1940 0.0943

Jupiter 36094-03-04 07:55 G 14904185.64 14904185.83 14904186.03 0.0530 0.0170

Jupiter 36100-01-04 22:19 G 14906318.24 14906318.43 14906318.64 0.0496 0.0110

Uranus 36101-03-25 18:00 G 14906763.24 14906763.25 14906763.29 0.0142 0.0141

Neptune 36101-04-08 14:09 G 14906777.04 14906777.09 14906777.17 0.0088 0.0084

Uranus 36101-11-07 04:48 G 14906989.58 14906989.70 14906989.85 0.0142 0.0110

Neptune 36101-11-20 02:53 G 14907002.50 14907002.62 14907002.78 0.0088 0.0068

Uranus 36102-06-21 15:21 G 14907215.97 14907216.14 14907216.34 0.0142 0.0079

Saturn 36102-07-02 03:50 G 14907226.57 14907226.66 14907226.75 0.0270 0.0246

Neptune 36102-07-03 15:50 G 14907228.00 14907228.16 14907228.36 0.0088 0.0053

Uranus 36103-02-03 02:09 G 14907442.38 14907442.59 14907442.80 0.0141 0.0047

Neptune 36103-02-14 05:02 G 14907453.52 14907453.71 14907453.92 0.0088 0.0036

Saturn 36103-02-16 09:50 G 14907455.70 14907455.91 14907456.12 0.0273 0.0036

Uranus 36103-09-17 12:14 G 14907668.80 14907669.01 14907669.24 0.0141 0.0016

Neptune 36103-09-27 18:14 G 14907679.05 14907679.26 14907679.48 0.0088 0.0020

Saturn 36103-10-03 17:45 G 14907685.09 14907685.24 14907685.41 0.0276 0.0183

Uranus 36104-04-30 22:19 G 14907895.22 14907895.43 14907895.65 0.0141 0.0016

Neptune 36104-05-10 07:12 G 14907904.58 14907904.80 14907905.02 0.0088 0.0005

Uranus 36104-12-13 07:55 G 14908121.64 14908121.83 14908122.05 0.0141 0.0047

Neptune 36104-12-21 20:09 G 14908130.12 14908130.34 14908130.56 0.0088 0.0011

Uranus 36105-07-27 17:45 G 14908348.07 14908348.24 14908348.44 0.0140 0.0077

Neptune 36105-08-04 08:53 G 14908355.67 14908355.87 14908356.09 0.0088 0.0028

Jupiter 36105-11-07 22:19 G 14908451.28 14908451.43 14908451.58 0.0530 0.0342

Uranus 36106-03-11 03:21 G 14908574.51 14908574.64 14908574.79 0.0140 0.0106

Neptune 36106-03-17 21:50 G 14908581.23 14908581.41 14908581.61 0.0088 0.0043

Moon 36106-10-12 00:00 G 14908789.34 14908789.50 14908789.66 0.2670 0.0525

Earth 36106-10-12 06:00 G 14908789.59 14908789.75 14908789.91 0.2670 0.0426 *

Uranus 36106-10-23 12:29 G 14908800.99 14908801.02 14908801.09 0.0140 0.0136

Neptune 36106-10-29 11:02 G 14908806.80 14908806.96 14908807.12 0.0088 0.0059

Neptune 36107-06-11 23:31 G 14909032.38 14909032.48 14909032.61 0.0088 0.0075

Saturn 36116-05-08 03:21 G 14912285.44 14912285.64 14912285.84 0.0290 0.0091

Saturn 36116-12-23 21:07 G 14912515.22 14912515.38 14912515.56 0.0287 0.0162

Mars 36121-01-03 21:07 G 14913987.21 14913987.38 14913987.55 0.1595 0.0282

Jupiter 36129-11-11 01:26 G 14917220.47 14917220.56 14917220.65 0.0531 0.0472

Saturn 36132-01-12 03:07 G 14918012.52 14918012.63 14918012.75 0.0271 0.0229

Pluto 36132-08-21 10:48 G 14918234.76 14918234.95 14918235.15 0.0080 0.0038

Saturn 36132-08-28 09:21 G 14918241.68 14918241.89 14918242.10 0.0273 0.0019

Pluto 36133-04-03 20:24 G 14918460.19 14918460.35 14918460.55 0.0079 0.0046

Saturn 36133-04-14 17:17 G 14918471.08 14918471.22 14918471.37 0.0276 0.0201

Jupiter 36135-09-13 10:48 G 14919352.76 14919352.95 14919353.15 0.0495 0.0142

Jupiter 36141-07-16 17:17 G 14921486.02 14921486.22 14921486.42 0.0530 0.0030

Uranus 36145-03-20 17:02 G 14922829.19 14922829.21 14922829.26 0.0136 0.0134

Uranus 36145-11-01 23:45 G 14923055.37 14923055.49 14923055.64 0.0136 0.0107

Saturn 36145-11-18 05:45 G 14923071.53 14923071.74 14923071.94 0.0290 0.0067

Uranus 36146-06-16 06:43 G 14923281.61 14923281.78 14923281.96 0.0137 0.0080

Saturn 36146-07-05 23:45 G 14923301.33 14923301.49 14923301.65 0.0287 0.0185

Uranus 36147-01-28 13:55 G 14923507.88 14923508.08 14923508.28 0.0137 0.0052

Jupiter 36147-05-19 11:31 G 14923618.81 14923618.98 14923619.16 0.0496 0.0272

Uranus 36147-09-11 20:53 G 14923734.16 14923734.37 14923734.59 0.0137 0.0025

Uranus 36148-04-25 04:05 G 14923960.46 14923960.67 14923960.89 0.0137 0.0005

Uranus 36148-12-07 11:17 G 14924186.77 14924186.97 14924187.19 0.0138 0.0033

Uranus 36149-07-21 18:57 G 14924413.10 14924413.29 14924413.49 0.0138 0.0061

Uranus 36150-03-05 02:53 G 14924639.46 14924639.62 14924639.78 0.0138 0.0090

Uranus 36150-10-17 10:33 G 14924865.84 14924865.94 14924866.06 0.0139 0.0119

Mars 36155-10-08 06:29 G 14926682.59 14926682.77 14926682.94 0.1941 0.0052

Saturn 36161-07-24 06:00 G 14928798.62 14928798.75 14928798.90 0.0270 0.0204

Saturn 36162-03-10 12:14 G 14929027.80 14929028.01 14929028.23 0.0273 0.0008

Saturn 36162-10-25 20:24 G 14929257.24 14929257.35 14929257.48 0.0276 0.0227

Jupiter 36171-05-21 22:33 G 14932387.32 14932387.44 14932387.57 0.0496 0.0389

Saturn 36175-05-31 08:38 G 14933857.65 14933857.86 14933858.07 0.0289 0.0039

Saturn 36176-01-16 02:24 G 14934087.47 14934087.60 14934087.75 0.0286 0.0212

Jupiter 36177-03-24 10:05 G 14934520.74 14934520.92 14934521.09 0.0530 0.0266

Neptune 36182-10-13 04:48 G 14936549.63 14936549.70 14936549.80 0.0089 0.0082

Jupiter 36183-01-25 00:43 G 14936653.33 14936653.53 14936653.74 0.0495 0.0018

Neptune 36183-05-26 17:45 G 14936775.11 14936775.24 14936775.40 0.0089 0.0066

Neptune 36184-01-07 06:57 G 14937000.62 14937000.79 14937000.98 0.0089 0.0049

Neptune 36184-08-19 19:55 G 14937226.14 14937226.33 14937226.55 0.0089 0.0033

Neptune 36185-04-02 09:07 G 14937451.67 14937451.88 14937452.10 0.0089 0.0017

Uranus 36185-07-07 12:43 G 14937547.92 14937548.03 14937548.15 0.0142 0.0121

Neptune 36185-11-13 22:19 G 14937677.21 14937677.43 14937677.65 0.0089 0.0001

Uranus 36186-02-18 23:17 G 14937774.31 14937774.47 14937774.65 0.0142 0.0090

Neptune 36186-06-27 11:17 G 14937902.75 14937902.97 14937903.19 0.0089 0.0016

Uranus 36186-10-03 09:50 G 14938000.72 14938000.91 14938001.11 0.0142 0.0059

Mars 36186-11-01 10:19 G 14938029.76 14938029.93 14938030.09 0.1594 0.0493

Neptune 36187-02-08 00:00 G 14938128.31 14938128.50 14938128.72 0.0089 0.0033

Uranus 36187-05-17 20:09 G 14938227.13 14938227.34 14938227.56 0.0141 0.0027

Neptune 36187-09-21 13:12 G 14938353.88 14938354.05 14938354.25 0.0089 0.0048

Uranus 36187-12-30 06:14 G 14938453.55 14938453.76 14938453.98 0.0141 0.0005

Neptune 36188-05-04 02:09 G 14938579.45 14938579.59 14938579.75 0.0089 0.0064

Uranus 36188-08-12 16:19 G 14938679.97 14938680.18 14938680.40 0.0141 0.0034

Jupiter 36188-11-27 02:24 G 14938786.43 14938786.60 14938786.79 0.0531 0.0233

Neptune 36188-12-15 15:07 G 14938805.05 14938805.13 14938805.24 0.0089 0.0080

Uranus 36189-03-27 02:09 G 14938906.40 14938906.59 14938906.79 0.0140 0.0065

Uranus 36189-11-08 11:45 G 14939132.83 14939132.99 14939133.15 0.0140 0.0095

Uranus 36190-06-22 21:07 G 14939359.29 14939359.38 14939359.48 0.0140 0.0124

Saturn 36191-02-03 05:02 G 14939584.57 14939584.71 14939584.87 0.0271 0.0188

Saturn 36191-09-20 11:31 G 14939813.77 14939813.98 14939814.19 0.0273 0.0024

Saturn 36192-05-06 19:26 G 14940043.23 14940043.31 14940043.42 0.0276 0.0244

Jupiter 36194-09-30 03:07 G 14940919.53 14940919.63 14940919.74 0.0495 0.0423

Saturn 36204-04-25 12:57 G 14944413.98 14944414.04 14944414.11 0.0293 0.0279

Saturn 36204-12-11 09:36 G 14944643.69 14944643.90 14944644.11 0.0290 0.0018

Saturn 36205-07-29 03:21 G 14944873.53 14944873.64 14944873.77 0.0287 0.0233

Jupiter 36218-10-03 12:14 G 14949687.83 14949688.01 14949688.19 0.0496 0.0228

Mars 36218-11-01 00:43 G 14949716.45 14949716.53 14949716.62 0.1598 0.1377

Saturn 36220-08-16 07:41 G 14950370.66 14950370.82 14950371.00 0.0270 0.0163

Saturn 36221-04-02 14:09 G 14950599.88 14950600.09 14950600.30 0.0273 0.0050

Mars 36221-08-05 07:26 G 14950724.65 14950724.81 14950724.96 0.1943 0.0901

Saturn 36221-11-17 22:19 G 14950829.39 14950829.43 14950829.48 0.0276 0.0269

Jupiter 36224-08-05 20:09 G 14951821.14 14951821.34 14951821.54 0.0530 0.0070

Uranus 36229-07-03 10:33 G 14953613.85 14953613.94 14953614.07 0.0136 0.0117

Uranus 36230-02-14 17:45 G 14953840.08 14953840.24 14953840.41 0.0137 0.0089

Jupiter 36230-06-08 14:38 G 14953953.92 14953954.11 14953954.31 0.0496 0.0178

Uranus 36230-09-29 00:29 G 14954066.34 14954066.52 14954066.72 0.0137 0.0062

Uranus 36231-05-13 07:26 G 14954292.61 14954292.81 14954293.03 0.0137 0.0034

Uranus 36231-12-25 14:53 G 14954518.90 14954519.12 14954519.34 0.0137 0.0006

Uranus 36232-08-07 22:05 G 14954745.21 14954745.42 14954745.64 0.0138 0.0023

Uranus 36233-03-22 05:45 G 14954971.54 14954971.74 14954971.94 0.0138 0.0051

Uranus 36233-11-03 13:12 G 14955197.88 14955198.05 14955198.23 0.0138 0.0080

Saturn 36233-11-05 15:50 G 14955200.06 14955200.16 14955200.27 0.0292 0.0251

Uranus 36234-06-17 21:07 G 14955424.25 14955424.38 14955424.52 0.0138 0.0109

Saturn 36234-06-23 12:14 G 14955429.80 14955430.01 14955430.22 0.0289 0.0011

Uranus 36235-01-30 05:02 G 14955650.70 14955650.71 14955650.75 0.0139 0.0138

Saturn 36235-02-08 06:00 G 14955659.66 14955659.75 14955659.84 0.0286 0.0260

Jupiter 36236-04-10 11:45 G 14956086.88 14956086.99 14956087.11 0.0530 0.0433

Earth 36236-04-12 13:12 G 14956088.90 14956089.05 14956089.19 0.2662 0.0867

Moon 36236-04-12 14:38 G 14956088.98 14956089.11 14956089.25 0.2668 0.1010 *

Moon 36244-04-10 10:05 G 14959008.87 14959008.92 14959008.98 0.2665 0.2491

Saturn 36250-02-26 06:57 G 14961156.61 14961156.79 14961156.97 0.0271 0.0146

Saturn 36250-10-13 13:12 G 14961385.84 14961386.05 14961386.26 0.0273 0.0066

Mars 36252-08-29 23:02 G 14962072.31 14962072.46 14962072.62 0.1593 0.0722

Jupiter 36254-06-11 01:12 G 14962722.51 14962722.55 14962722.60 0.0496 0.0481

Jupiter 36260-04-13 15:36 G 14964856.01 14964856.15 14964856.29 0.0530 0.0384

Saturn 36263-05-18 16:19 G 14965986.06 14965986.18 14965986.31 0.0292 0.0230

Saturn 36264-01-03 12:43 G 14966215.82 14966216.03 14966216.24 0.0290 0.0032

Saturn 36264-08-20 06:29 G 14966445.74 14966445.77 14966445.82 0.0287 0.0281

Jupiter 36266-02-14 01:41 G 14966988.37 14966988.57 14966988.77 0.0496 0.0066

Neptune 36266-02-22 12:00 G 14966996.90 14966997.00 14966997.13 0.0088 0.0074

Neptune 36266-10-06 01:12 G 14967222.39 14967222.55 14967222.72 0.0088 0.0059

Neptune 36267-05-19 13:55 G 14967447.90 14967448.08 14967448.28 0.0088 0.0043

Neptune 36267-12-31 02:53 G 14967673.42 14967673.62 14967673.84 0.0088 0.0027

Neptune 36268-08-12 16:05 G 14967898.96 14967899.17 14967899.40 0.0088 0.0012

Uranus 36269-03-07 21:21 G 14968106.33 14968106.39 14968106.49 0.0142 0.0133

Neptune 36269-03-26 05:17 G 14968124.49 14968124.72 14968124.94 0.0088 0.0005

Uranus 36269-10-20 08:09 G 14968332.70 14968332.84 14968333.01 0.0142 0.0101

Neptune 36269-11-06 18:00 G 14968350.04 14968350.25 14968350.47 0.0088 0.0020

Uranus 36270-06-03 18:43 G 14968559.10 14968559.28 14968559.48 0.0142 0.0070

Neptune 36270-06-20 06:43 G 14968575.59 14968575.78 14968575.99 0.0088 0.0036

Uranus 36271-01-16 05:17 G 14968785.51 14968785.72 14968785.93 0.0141 0.0038

Neptune 36271-01-31 19:41 G 14968801.15 14968801.32 14968801.51 0.0088 0.0052

Uranus 36271-08-30 15:36 G 14969011.93 14969012.15 14969012.37 0.0141 0.0007

Neptune 36271-09-14 08:38 G 14969026.73 14969026.86 14969027.02 0.0088 0.0068

Jupiter 36271-12-18 07:55 G 14969121.64 14969121.83 14969122.03 0.0530 0.0116

Uranus 36272-04-13 01:41 G 14969238.35 14969238.57 14969238.79 0.0141 0.0024

Neptune 36272-04-26 21:21 G 14969252.34 14969252.39 14969252.49 0.0088 0.0083

Uranus 36272-11-25 11:31 G 14969464.78 14969464.98 14969465.18 0.0141 0.0054

Uranus 36273-07-09 21:07 G 14969691.21 14969691.38 14969691.56 0.0140 0.0084

Uranus 36274-02-21 06:29 G 14969917.66 14969917.77 14969917.91 0.0140 0.0114

Jupiter 36277-10-20 03:50 G 14971254.52 14971254.66 14971254.81 0.0496 0.0341

Saturn 36279-09-08 09:50 G 14971942.72 14971942.91 14971943.10 0.0271 0.0120

Saturn 36280-04-24 16:05 G 14972171.97 14972172.17 14972172.37 0.0273 0.0093

Mars 36284-08-28 13:55 G 14973758.96 14973759.08 14973759.20 0.1597 0.1156

Mars 36287-06-02 08:53 G 14974766.81 14974766.87 14974766.93 0.1944 0.1816

Pluto 36289-10-28 02:09 G 14975645.47 14975645.59 14975645.77 0.0065 0.0048

Pluto 36290-06-10 06:43 G 14975870.56 14975870.78 14975871.00 0.0065 0.0003

Pluto 36291-01-21 10:19 G 14976095.79 14976095.93 14976096.12 0.0065 0.0042

Saturn 36292-11-27 19:12 G 14976772.15 14976772.30 14976772.45 0.0292 0.0202

Saturn 36293-07-15 15:21 G 14977001.93 14977002.14 14977002.35 0.0289 0.0059

Jupiter 36301-10-23 14:53 G 14980022.97 14980023.12 14980023.28 0.0496 0.0322

Jupiter 36307-08-27 00:43 G 14982156.34 14982156.53 14982156.72 0.0530 0.0181

Saturn 36309-03-21 09:36 G 14982728.71 14982728.90 14982729.10 0.0271 0.0102

Saturn 36309-11-05 15:50 G 14982957.97 14982958.16 14982958.36 0.0274 0.0111

Uranus 36313-03-03 21:07 G 14984172.31 14984172.38 14984172.47 0.0136 0.0126

Jupiter 36313-06-28 17:17 G 14984289.02 14984289.22 14984289.43 0.0496 0.0085

Uranus 36313-10-16 03:50 G 14984398.52 14984398.66 14984398.81 0.0136 0.0099

Uranus 36314-05-30 10:19 G 14984624.76 14984624.93 14984625.13 0.0137 0.0072

Uranus 36315-01-11 17:31 G 14984851.03 14984851.23 14984851.44 0.0137 0.0044

Uranus 36315-08-26 00:43 G 14985077.32 14985077.53 14985077.75 0.0137 0.0016

Uranus 36316-04-08 08:09 G 14985303.62 14985303.84 14985304.05 0.0137 0.0013

Uranus 36316-11-20 15:21 G 14985529.94 14985530.14 14985530.35 0.0138 0.0041

Uranus 36317-07-04 22:48 G 14985756.27 14985756.45 14985756.65 0.0138 0.0070

Uranus 36318-02-16 06:43 G 14985982.64 14985982.78 14985982.94 0.0138 0.0098

Mars 36318-06-28 12:14 G 14986114.87 14986115.01 14986115.15 0.1592 0.0938

Uranus 36318-09-30 14:53 G 14986209.04 14986209.12 14986209.21 0.0139 0.0127

Jupiter 36319-05-01 17:45 G 14986422.08 14986422.24 14986422.41 0.0530 0.0313

Saturn 36322-06-10 19:26 G 14987558.15 14987558.31 14987558.48 0.0292 0.0180

Saturn 36323-01-26 15:50 G 14987787.96 14987788.16 14987788.36 0.0289 0.0080

Saturn 36338-10-01 12:43 G 14993514.83 14993515.03 14993515.24 0.0271 0.0075

Saturn 36339-05-18 19:12 G 14993744.12 14993744.30 14993744.48 0.0273 0.0138

Jupiter 36343-05-04 18:14 G 14995191.18 14995191.26 14995191.35 0.0529 0.0482

Neptune 36347-01-16 13:41 G 14996544.07 14996544.07 14996544.14 0.0089 0.0089

Neptune 36347-08-30 02:53 G 14996769.52 14996769.62 14996769.77 0.0089 0.0073

Neptune 36348-04-11 16:05 G 14996995.02 14996995.17 14996995.36 0.0089 0.0056

Neptune 36348-11-23 05:31 G 14997220.53 14997220.73 14997220.93 0.0089 0.0040

Jupiter 36349-03-06 04:33 G 14997323.49 14997323.69 14997323.88 0.0496 0.0158

Neptune 36349-07-06 18:29 G 14997446.06 14997446.27 14997446.49 0.0089 0.0024

Earth 36349-10-14 05:31 G 14997545.57 14997545.73 14997545.89 0.2669 0.0197

Moon 36349-10-14 11:17 G 14997545.82 14997545.97 14997546.12 0.2671 0.0893 *

Neptune 36350-02-17 07:41 G 14997671.60 14997671.82 14997672.04 0.0089 0.0008

Mars 36350-06-27 02:38 G 14997801.47 14997801.61 14997801.76 0.1595 0.0931

Neptune 36350-09-30 20:38 G 14997897.15 14997897.36 14997897.58 0.0089 0.0009

Neptune 36351-05-14 09:21 G 14998122.69 14998122.89 14998123.12 0.0089 0.0025

Saturn 36351-12-21 23:31 G 14998344.30 14998344.48 14998344.66 0.0292 0.0150

Neptune 36351-12-25 22:19 G 14998348.25 14998348.43 14998348.64 0.0089 0.0041

Neptune 36352-08-07 11:17 G 14998573.82 14998573.97 14998574.16 0.0089 0.0057

Saturn 36352-08-07 19:12 G 14998574.11 14998574.30 14998574.50 0.0289 0.0109 *

Uranus 36352-11-06 07:26 G 14998664.81 14998664.81 14998664.84 0.0142 0.0142

Neptune 36353-03-21 00:29 G 14998799.41 14998799.52 14998799.66 0.0089 0.0073

Uranus 36353-06-20 18:14 G 14998891.14 14998891.26 14998891.41 0.0142 0.0111

Neptune 36353-11-01 13:41 G 14999025.07 14999025.07 14999025.09 0.0089 0.0089

Uranus 36354-02-02 04:48 G 14999117.54 14999117.70 14999117.90 0.0142 0.0080

Uranus 36354-09-16 15:21 G 14999343.95 14999344.14 14999344.36 0.0142 0.0049

Jupiter 36355-01-07 09:50 G 14999456.71 14999456.91 14999457.12 0.0530 0.0022

Uranus 36355-05-01 01:55 G 14999570.36 14999570.58 14999570.80 0.0141 0.0017

Uranus 36355-12-13 12:00 G 14999796.78 14999797.00 14999797.22 0.0141 0.0014

Uranus 36356-07-26 21:50 G 15000023.21 15000023.41 15000023.63 0.0141 0.0045

Uranus 36357-03-10 07:41 G 15000249.65 15000249.82 15000250.01 0.0140 0.0075

Uranus 36357-10-22 17:31 G 15000476.09 15000476.23 15000476.37 0.0140 0.0105

Uranus 36358-06-06 02:38 G 15000702.56 15000702.61 15000702.68 0.0140 0.0134

Jupiter 36360-11-09 06:29 G 15001589.60 15001589.77 15001589.95 0.0496 0.0248

Jupiter 36366-09-12 01:55 G 15003722.55 15003722.58 15003722.62 0.0530 0.0520

Saturn 36367-08-27 08:53 G 15004071.84 15004071.87 15004071.93 0.0269 0.0261

Saturn 36368-04-12 13:41 G 15004300.86 15004301.07 15004301.28 0.0271 0.0056

Saturn 36368-11-27 19:55 G 15004530.17 15004530.33 15004530.51 0.0274 0.0159

Pluto 36378-02-08 14:38 G 15007890.08 15007890.11 15007890.18 0.0080 0.0078

Pluto 36378-09-22 01:12 G 15008115.34 15008115.55 15008115.78 0.0080 0.0007

Saturn 36381-07-03 00:14 G 15009130.33 15009130.51 15009130.71 0.0292 0.0127

Saturn 36382-02-17 20:24 G 15009360.17 15009360.35 15009360.54 0.0289 0.0132

Mars 36384-04-25 01:12 G 15010157.44 15010157.55 15010157.67 0.1592 0.1158

Jupiter 36384-11-11 14:24 G 15010357.98 15010358.10 15010358.22 0.0496 0.0395

Jupiter 36390-09-15 05:45 G 15012491.57 15012491.74 15012491.91 0.0530 0.0294

Jupiter 36396-07-17 16:33 G 15014623.98 15014624.19 15014624.39 0.0496 0.0012

Uranus 36396-11-01 07:55 G 15014730.80 15014730.83 15014730.86 0.0136 0.0134

Saturn 36397-03-08 13:12 G 15014857.94 15014858.05 15014858.15 0.0269 0.0232

Uranus 36397-06-15 13:55 G 15014956.97 15014957.08 15014957.24 0.0136 0.0109

Saturn 36397-10-23 17:45 G 15015087.03 15015087.24 15015087.45 0.0271 0.0026

Uranus 36398-01-27 21:07 G 15015183.22 15015183.38 15015183.56 0.0137 0.0081

Saturn 36398-06-10 00:14 G 15015316.37 15015316.51 15015316.67 0.0274 0.0189

Uranus 36398-09-11 03:50 G 15015409.48 15015409.66 15015409.88 0.0137 0.0054

Uranus 36399-04-25 11:02 G 15015635.75 15015635.96 15015636.18 0.0137 0.0026

Uranus 36399-12-07 18:14 G 15015862.05 15015862.26 15015862.48 0.0137 0.0003

Uranus 36400-07-21 01:41 G 15016088.36 15016088.57 15016088.78 0.0138 0.0031

Uranus 36401-03-04 09:07 G 15016314.69 15016314.88 15016315.08 0.0138 0.0060

Uranus 36401-10-16 16:48 G 15016541.04 15016541.20 15016541.38 0.0138 0.0088

Jupiter 36402-05-20 19:41 G 15016757.14 15016757.32 15016757.51 0.0530 0.0218

Uranus 36402-05-31 00:57 G 15016767.42 15016767.54 15016767.65 0.0138 0.0117

Jupiter 36408-03-22 18:57 G 15018890.19 15018890.29 15018890.40 0.0496 0.0416

Saturn 36411-01-13 05:17 G 15019916.52 15019916.72 15019916.92 0.0292 0.0095

Saturn 36411-08-31 00:43 G 15020146.36 15020146.53 15020146.71 0.0289 0.0163

Mars 36416-04-23 16:05 G 15021844.01 15021844.17 15021844.32 0.1595 0.0710

Saturn 36426-09-18 15:07 G 15025644.00 15025644.13 15025644.26 0.0269 0.0211

Saturn 36427-05-05 19:55 G 15025873.12 15025873.33 15025873.54 0.0272 0.0004

Saturn 36427-12-21 02:38 G 15026102.48 15026102.61 15026102.74 0.0274 0.0211

Neptune 36430-05-27 20:24 G 15026991.28 15026991.35 15026991.45 0.0088 0.0081

Neptune 36431-01-08 09:36 G 15027216.76 15027216.90 15027217.05 0.0088 0.0066

Neptune 36431-08-21 22:19 G 15027442.27 15027442.43 15027442.63 0.0088 0.0051

Jupiter 36432-03-25 05:17 G 15027658.54 15027658.72 15027658.90 0.0496 0.0240

Neptune 36432-04-03 11:31 G 15027667.79 15027667.98 15027668.19 0.0088 0.0035

Neptune 36432-11-15 00:43 G 15027893.31 15027893.53 15027893.75 0.0088 0.0019

Neptune 36433-06-28 13:41 G 15028118.85 15028119.07 15028119.29 0.0088 0.0003

Neptune 36434-02-09 02:24 G 15028344.39 15028344.60 15028344.83 0.0088 0.0013

Neptune 36434-09-22 15:36 G 15028569.94 15028570.15 15028570.36 0.0088 0.0029

Neptune 36435-05-06 04:19 G 15028795.50 15028795.68 15028795.88 0.0088 0.0045

Neptune 36435-12-17 17:02 G 15029021.07 15029021.21 15029021.39 0.0088 0.0061

Neptune 36436-07-30 06:29 G 15029246.66 15029246.77 15029246.89 0.0088 0.0076

Uranus 36437-02-18 04:05 G 15029449.57 15029449.67 15029449.80 0.0142 0.0121

Uranus 36437-10-02 14:38 G 15029675.96 15029676.11 15029676.30 0.0142 0.0090

Jupiter 36438-01-26 14:09 G 15029791.89 15029792.09 15029792.29 0.0530 0.0088

Uranus 36438-05-17 01:26 G 15029902.37 15029902.56 15029902.77 0.0142 0.0059

Uranus 36438-12-29 11:45 G 15030128.78 15030128.99 15030129.21 0.0141 0.0028

Uranus 36439-08-12 22:19 G 15030355.21 15030355.43 15030355.65 0.0141 0.0004

Uranus 36440-03-26 08:09 G 15030581.64 15030581.84 15030582.06 0.0141 0.0035

Saturn 36440-07-25 07:12 G 15030702.60 15030702.80 15030703.01 0.0291 0.0069

Uranus 36440-11-07 18:14 G 15030808.07 15030808.26 15030808.45 0.0141 0.0065

Saturn 36441-03-12 02:53 G 15030932.47 15030932.62 15030932.79 0.0289 0.0189

Uranus 36441-06-22 03:36 G 15031034.51 15031034.65 15031034.83 0.0140 0.0095

Uranus 36442-02-03 13:12 G 15031260.97 15031261.05 15031261.16 0.0140 0.0125

Jupiter 36443-11-29 04:19 G 15031924.49 15031924.68 15031924.88 0.0496 0.0182

Jupiter 36449-10-01 06:14 G 15034057.64 15034057.76 15034057.89 0.0530 0.0412

Mars 36450-02-20 14:24 G 15034200.01 15034200.10 15034200.18 0.1591 0.1372

Mars 36451-01-25 16:33 G 15034539.04 15034539.19 15034539.34 0.1942 0.1028

Saturn 36456-03-30 19:55 G 15036430.18 15036430.33 15036430.50 0.0269 0.0180

Saturn 36456-11-15 01:12 G 15036659.34 15036659.55 15036659.76 0.0272 0.0028

Saturn 36457-07-02 07:55 G 15036888.75 15036888.83 15036888.93 0.0274 0.0244

Jupiter 36467-12-01 15:07 G 15040693.08 15040693.13 15040693.19 0.0496 0.0477

Saturn 36470-02-04 13:55 G 15041488.87 15041489.08 15041489.29 0.0291 0.0034

Saturn 36470-09-22 09:07 G 15041718.75 15041718.88 15041719.01 0.0288 0.0222

Jupiter 36473-10-04 04:33 G 15042826.55 15042826.69 15042826.84 0.0530 0.0371

Earth 36479-04-14 15:36 G 15044845.00 15044845.15 15044845.29 0.2663 0.0881

Moon 36479-04-14 15:50 G 15044845.01 15044845.16 15044845.31 0.2656 0.1156 *

Jupiter 36479-08-06 17:02 G 15044959.01 15044959.21 15044959.42 0.0496 0.0070

Uranus 36481-02-12 23:45 G 15045515.40 15045515.49 15045515.61 0.0136 0.0118

Uranus 36481-09-27 06:14 G 15045741.62 15045741.76 15045741.94 0.0136 0.0092

Mars 36482-02-19 04:48 G 15045886.54 15045886.70 15045886.87 0.1594 0.0490

Uranus 36482-05-11 13:12 G 15045967.86 15045968.05 15045968.25 0.0137 0.0064

Uranus 36482-12-23 20:09 G 15046194.13 15046194.34 15046194.55 0.0137 0.0036

Uranus 36483-08-07 03:21 G 15046420.42 15046420.64 15046420.85 0.0137 0.0009

Uranus 36484-03-20 10:19 G 15046646.72 15046646.93 15046647.15 0.0137 0.0021

Uranus 36484-11-01 17:45 G 15046873.04 15046873.24 15046873.45 0.0138 0.0048

Jupiter 36485-06-08 20:09 G 15047092.14 15047092.34 15047092.54 0.0530 0.0132

Uranus 36485-06-16 01:12 G 15047099.38 15047099.55 15047099.74 0.0138 0.0077

Saturn 36485-10-11 00:00 G 15047216.33 15047216.50 15047216.68 0.0270 0.0155

Uranus 36486-01-28 09:07 G 15047325.75 15047325.88 15047326.03 0.0138 0.0105

Saturn 36486-05-28 05:02 G 15047445.51 15047445.71 15047445.92 0.0272 0.0055

Uranus 36486-09-11 16:48 G 15047552.17 15047552.20 15047552.27 0.0138 0.0134

Saturn 36487-01-12 12:14 G 15047674.98 15047675.01 15047675.04 0.0275 0.0271

Jupiter 36491-04-11 18:29 G 15049225.13 15049225.27 15049225.43 0.0496 0.0340

Saturn 36498-12-30 19:41 G 15052045.24 15052045.32 15052045.41 0.0293 0.0269

Saturn 36499-08-17 17:17 G 15052275.01 15052275.22 15052275.43 0.0291 0.0004

Saturn 36500-04-04 12:29 G 15052504.92 15052505.02 15052505.12 0.0288 0.0250

Neptune 36511-12-02 12:14 G 15056763.91 15056764.01 15056764.12 0.0089 0.0079

Neptune 36512-07-15 01:26 G 15056989.41 15056989.56 15056989.72 0.0089 0.0063

Neptune 36513-02-25 14:38 G 15057214.93 15057215.11 15057215.30 0.0089 0.0047

Neptune 36513-10-09 03:36 G 15057440.45 15057440.65 15057440.86 0.0089 0.0031

Neptune 36514-05-22 16:48 G 15057665.98 15057666.20 15057666.41 0.0089 0.0015

Neptune 36515-01-03 05:45 G 15057891.52 15057891.74 15057891.96 0.0089 0.0002

Jupiter 36515-04-15 01:41 G 15057993.40 15057993.57 15057993.73 0.0496 0.0297

Saturn 36515-04-24 05:31 G 15058002.55 15058002.73 15058002.93 0.0270 0.0123

Neptune 36515-08-16 18:43 G 15058117.07 15058117.28 15058117.50 0.0089 0.0018

Saturn 36515-12-09 11:02 G 15058231.77 15058231.96 15058232.17 0.0272 0.0089

Mars 36515-12-20 03:36 G 15058242.65 15058242.65 15058242.65 0.1590 0.1589

Neptune 36516-03-29 07:41 G 15058342.62 15058342.82 15058343.03 0.0089 0.0034

Neptune 36516-11-09 20:38 G 15058568.18 15058568.36 15058568.55 0.0089 0.0050

Mars 36516-11-22 18:00 G 15058581.07 15058581.25 15058581.42 0.1944 0.0111

Neptune 36517-06-23 09:36 G 15058793.76 15058793.90 15058794.05 0.0089 0.0065

Neptune 36518-02-03 22:33 G 15059019.36 15059019.44 15059019.54 0.0089 0.0081

Uranus 36520-10-19 12:14 G 15060007.94 15060008.01 15060008.09 0.0143 0.0133

Jupiter 36521-02-15 12:57 G 15060126.85 15060127.04 15060127.23 0.0530 0.0164

Uranus 36521-06-02 23:02 G 15060234.31 15060234.46 15060234.62 0.0142 0.0102

Uranus 36522-01-15 09:50 G 15060460.72 15060460.91 15060461.10 0.0142 0.0070

Uranus 36522-08-29 20:24 G 15060687.15 15060687.35 15060687.57 0.0142 0.0039

Uranus 36523-04-13 06:57 G 15060913.57 15060913.79 15060914.01 0.0141 0.0008

Uranus 36523-11-25 17:02 G 15061140.00 15061140.21 15061140.43 0.0141 0.0024

Uranus 36524-07-09 03:21 G 15061366.44 15061366.64 15061366.84 0.0141 0.0054

Uranus 36525-02-20 12:57 G 15061592.88 15061593.04 15061593.23 0.0141 0.0085

Uranus 36525-10-04 22:48 G 15061819.34 15061819.45 15061819.59 0.0140 0.0115

Jupiter 36526-12-19 03:50 G 15062259.46 15062259.66 15062259.86 0.0496 0.0107

Saturn 36528-07-13 03:50 G 15062831.53 15062831.66 15062831.79 0.0294 0.0231

Saturn 36529-02-28 01:12 G 15063061.34 15063061.55 15063061.76 0.0291 0.0033

Saturn 36529-10-15 19:41 G 15063291.31 15063291.32 15063291.35 0.0288 0.0286

Jupiter 36532-10-21 03:21 G 15064392.49 15064392.64 15064392.80 0.0530 0.0344

Pluto 36535-11-28 12:43 G 15065525.84 15065526.03 15065526.23 0.0065 0.0029

Pluto 36536-07-10 16:48 G 15065750.99 15065751.20 15065751.42 0.0065 0.0015

Pluto 36537-02-20 20:38 G 15065976.30 15065976.36 15065976.46 0.0065 0.0060

Saturn 36544-11-03 11:17 G 15068788.77 15068788.97 15068789.17 0.0270 0.0094

Saturn 36545-06-20 16:48 G 15069018.01 15069018.20 15069018.39 0.0273 0.0118

Mars 36547-12-18 18:00 G 15069929.08 15069929.25 15069929.42 0.1593 0.0264

Jupiter 36556-10-24 05:17 G 15073161.62 15073161.72 15073161.82 0.0530 0.0458

Saturn 36558-01-23 09:21 G 15073617.74 15073617.89 15073618.05 0.0293 0.0196

Saturn 36558-09-10 06:14 G 15073847.56 15073847.76 15073847.97 0.0290 0.0067

Jupiter 36562-08-26 12:14 G 15075293.81 15075294.01 15075294.21 0.0496 0.0121

Uranus 36564-10-14 10:19 G 15076073.86 15076073.93 15076074.01 0.0136 0.0127

Uranus 36565-05-28 16:48 G 15076300.06 15076300.20 15076300.35 0.0136 0.0100

Uranus 36566-01-09 23:31 G 15076526.30 15076526.48 15076526.67 0.0136 0.0073

Uranus 36566-08-24 06:14 G 15076752.56 15076752.76 15076752.97 0.0137 0.0046

Uranus 36567-04-07 13:12 G 15076978.84 15076979.05 15076979.27 0.0137 0.0018

Uranus 36567-11-19 20:24 G 15077205.13 15077205.35 15077205.57 0.0137 0.0010

Jupiter 36568-06-28 21:21 G 15077427.18 15077427.39 15077427.59 0.0530 0.0042

Uranus 36568-07-03 03:21 G 15077431.44 15077431.64 15077431.86 0.0137 0.0039

Uranus 36569-02-14 10:48 G 15077657.78 15077657.95 15077658.16 0.0138 0.0067

Uranus 36569-09-28 18:29 G 15077884.13 15077884.27 15077884.44 0.0138 0.0095

Uranus 36570-05-13 02:09 G 15078110.51 15078110.59 15078110.70 0.0138 0.0123

Saturn 36573-09-29 13:41 G 15079346.04 15079346.07 15079346.11 0.0268 0.0264

Jupiter 36574-05-01 13:26 G 15079559.90 15079560.06 15079560.23 0.0496 0.0289

Saturn 36574-05-16 18:00 G 15079575.04 15079575.25 15079575.46 0.0270 0.0059

Saturn 36574-12-31 23:45 G 15079804.32 15079804.49 15079804.67 0.0273 0.0154

Mars 36582-09-19 19:12 G 15082623.14 15082623.30 15082623.46 0.1945 0.0827

Saturn 36587-08-05 18:57 G 15084404.11 15084404.29 15084404.47 0.0293 0.0156

Saturn 36588-03-22 15:36 G 15084633.96 15084634.15 15084634.35 0.0290 0.0106

Moon 36592-10-15 00:29 G 15086301.35 15086301.52 15086301.68 0.2666 0.0473

Earth 36592-10-15 05:31 G 15086301.57 15086301.73 15086301.89 0.2669 0.0071 *

Neptune 36595-04-12 17:17 G 15087211.12 15087211.22 15087211.36 0.0088 0.0073

Neptune 36595-11-24 06:29 G 15087436.61 15087436.77 15087436.94 0.0088 0.0057

Neptune 36596-07-06 19:12 G 15087662.12 15087662.30 15087662.51 0.0088 0.0042

Neptune 36597-02-17 08:24 G 15087887.64 15087887.85 15087888.07 0.0088 0.0026

Neptune 36597-09-30 21:36 G 15088113.18 15088113.40 15088113.62 0.0088 0.0011

Jupiter 36598-05-03 23:31 G 15088328.34 15088328.48 15088328.62 0.0496 0.0365

Neptune 36598-05-14 10:33 G 15088338.72 15088338.94 15088339.16 0.0088 0.0005

Neptune 36598-12-25 23:17 G 15088564.26 15088564.47 15088564.69 0.0088 0.0021

Neptune 36599-08-08 12:29 G 15088789.82 15088790.02 15088790.22 0.0088 0.0036

Neptune 36600-03-22 01:12 G 15089015.39 15089015.55 15089015.74 0.0088 0.0052

Neptune 36600-11-02 14:24 G 15089240.96 15089241.10 15089241.24 0.0088 0.0068

Neptune 36601-06-16 02:53 G 15089466.57 15089466.62 15089466.71 0.0088 0.0084

Saturn 36603-04-12 20:09 G 15090132.25 15090132.34 15090132.46 0.0269 0.0234

Saturn 36603-11-28 00:43 G 15090361.32 15090361.53 15090361.74 0.0271 0.0028

Jupiter 36604-03-07 09:21 G 15090461.71 15090461.89 15090462.08 0.0530 0.0229

Saturn 36604-07-14 06:43 G 15090590.64 15090590.78 15090590.95 0.0274 0.0187

Uranus 36605-02-01 05:31 G 15090792.62 15090792.73 15090792.87 0.0142 0.0115

Uranus 36605-09-15 16:33 G 15091019.02 15091019.19 15091019.38 0.0142 0.0083

Uranus 36606-04-30 03:07 G 15091245.44 15091245.63 15091245.85 0.0142 0.0052

Uranus 36606-12-12 13:55 G 15091471.87 15091472.08 15091472.30 0.0142 0.0020

Uranus 36607-07-27 00:29 G 15091698.31 15091698.52 15091698.74 0.0141 0.0012

Uranus 36608-03-09 10:48 G 15091924.75 15091924.95 15091925.16 0.0141 0.0042

Uranus 36608-10-21 20:38 G 15092151.19 15092151.36 15092151.56 0.0141 0.0073

Uranus 36609-06-05 06:43 G 15092377.64 15092377.78 15092377.93 0.0140 0.0103

Jupiter 36610-01-08 00:43 G 15092594.32 15092594.53 15092594.73 0.0496 0.0047

Uranus 36610-01-17 16:19 G 15092604.13 15092604.18 15092604.26 0.0140 0.0133

Mars 36613-10-16 07:26 G 15093971.63 15093971.81 15093971.98 0.1592 0.0057

Jupiter 36615-11-11 01:55 G 15094727.41 15094727.58 15094727.76 0.0530 0.0268

Saturn 36617-02-16 01:41 G 15095190.38 15095190.57 15095190.77 0.0292 0.0118

Saturn 36617-10-03 21:50 G 15095420.23 15095420.41 15095420.60 0.0289 0.0142

Jupiter 36621-09-12 23:45 G 15096860.43 15096860.49 15096860.56 0.0496 0.0466

Pluto 36624-03-11 00:57 G 15097770.40 15097770.54 15097770.73 0.0080 0.0053

Pluto 36624-10-22 11:17 G 15097995.78 15097995.97 15097996.19 0.0080 0.0032

Saturn 36632-10-23 03:07 G 15100918.49 15100918.63 15100918.77 0.0269 0.0200

Saturn 36633-06-09 07:41 G 15101147.61 15101147.82 15101148.04 0.0271 0.0010

Saturn 36634-01-24 14:24 G 15101376.98 15101377.10 15101377.22 0.0274 0.0223

Jupiter 36639-11-14 00:57 G 15103496.50 15103496.54 15103496.58 0.0529 0.0517

Jupiter 36645-09-15 09:07 G 15105628.70 15105628.88 15105629.08 0.0496 0.0184

Saturn 36646-08-29 12:14 G 15105976.81 15105977.01 15105977.22 0.0292 0.0076

Saturn 36647-04-16 08:09 G 15106206.68 15106206.84 15106207.00 0.0289 0.0183

Mars 36648-07-17 20:09 G 15106665.27 15106665.34 15106665.41 0.1947 0.1772

Uranus 36649-01-27 03:21 G 15106858.53 15106858.64 15106858.78 0.0136 0.0110

Uranus 36649-09-10 09:50 G 15107084.75 15107084.91 15107085.10 0.0136 0.0083

Uranus 36650-04-24 16:33 G 15107311.00 15107311.19 15107311.40 0.0136 0.0056

Uranus 36650-12-06 23:31 G 15107537.27 15107537.48 15107537.70 0.0137 0.0028

Jupiter 36651-07-19 15:21 G 15107761.94 15107762.14 15107762.34 0.0530 0.0009

Uranus 36651-07-21 06:43 G 15107763.56 15107763.78 15107763.99 0.0137 0.0003

Uranus 36652-03-03 13:55 G 15107989.87 15107990.08 15107990.29 0.0137 0.0027

Uranus 36652-10-15 21:07 G 15108216.18 15108216.38 15108216.58 0.0137 0.0056

Uranus 36653-05-30 04:19 G 15108442.52 15108442.68 15108442.86 0.0138 0.0084

Uranus 36654-01-11 12:00 G 15108668.88 15108669.00 15108669.13 0.0138 0.0112

Jupiter 36657-05-21 10:33 G 15109894.76 15109894.94 15109895.12 0.0496 0.0226

Saturn 36662-05-05 10:33 G 15111704.78 15111704.94 15111705.11 0.0269 0.0168

Saturn 36662-12-20 15:36 G 15111933.94 15111934.15 15111934.36 0.0272 0.0041

Jupiter 36663-03-24 05:31 G 15112027.67 15112027.73 15112027.80 0.0530 0.0499

Saturn 36663-08-06 22:19 G 15112163.37 15112163.43 15112163.51 0.0274 0.0258

Neptune 36676-03-05 20:09 G 15116758.31 15116758.34 15116758.42 0.0089 0.0086

Saturn 36676-03-10 20:38 G 15116763.15 15116763.36 15116763.57 0.0291 0.0035

Neptune 36676-10-17 09:21 G 15116983.78 15116983.89 15116984.05 0.0089 0.0070

Saturn 36676-10-26 15:50 G 15116993.03 15116993.16 15116993.29 0.0288 0.0221

Neptune 36677-05-30 22:33 G 15117209.28 15117209.44 15117209.63 0.0089 0.0054

Neptune 36678-01-11 11:45 G 15117434.81 15117434.99 15117435.20 0.0089 0.0038

Neptune 36678-08-25 00:57 G 15117660.34 15117660.54 15117660.76 0.0089 0.0022

Neptune 36679-04-07 14:09 G 15117885.88 15117886.09 15117886.31 0.0089 0.0006

Mars 36679-08-13 20:09 G 15118014.17 15118014.34 15118014.51 0.1591 0.0174

Neptune 36679-11-19 03:21 G 15118111.42 15118111.64 15118111.86 0.0089 0.0010

Neptune 36680-07-01 16:05 G 15118336.97 15118337.17 15118337.39 0.0089 0.0026

Neptune 36681-02-12 05:17 G 15118562.54 15118562.72 15118562.92 0.0089 0.0042

Jupiter 36681-05-23 16:48 G 15118663.10 15118663.20 15118663.33 0.0496 0.0408

Neptune 36681-09-25 18:00 G 15118788.10 15118788.25 15118788.44 0.0089 0.0058

Neptune 36682-05-09 06:57 G 15119013.69 15119013.79 15119013.93 0.0089 0.0074

Jupiter 36687-03-27 07:55 G 15120796.66 15120796.83 15120796.99 0.0530 0.0303

Uranus 36688-10-01 12:00 G 15121350.92 15121351.00 15121351.12 0.0143 0.0128

Uranus 36689-05-15 23:17 G 15121577.32 15121577.47 15121577.64 0.0142 0.0096

Uranus 36689-12-28 10:05 G 15121803.74 15121803.92 15121804.12 0.0142 0.0065

Uranus 36690-08-11 21:07 G 15122030.17 15122030.38 15122030.60 0.0142 0.0033

Uranus 36691-03-26 07:41 G 15122256.61 15122256.82 15122257.04 0.0142 0.0003

Uranus 36691-11-07 18:14 G 15122483.04 15122483.26 15122483.47 0.0141 0.0030

Saturn 36691-11-15 17:02 G 15122491.03 15122491.21 15122491.40 0.0270 0.0135

Uranus 36692-06-21 04:33 G 15122709.49 15122709.69 15122709.88 0.0141 0.0060

Saturn 36692-07-01 22:33 G 15122720.24 15122720.44 15122720.65 0.0272 0.0076

Jupiter 36693-01-26 18:14 G 15122929.06 15122929.26 15122929.47 0.0496 0.0007

Uranus 36693-02-02 14:24 G 15122935.94 15122936.10 15122936.27 0.0141 0.0091

Uranus 36693-09-17 00:29 G 15123162.42 15123162.52 15123162.63 0.0140 0.0121

Jupiter 36698-11-29 20:53 G 15125062.19 15125062.37 15125062.56 0.0530 0.0211

Jupiter 36704-10-02 19:55 G 15127195.22 15127195.33 15127195.45 0.0496 0.0407

Saturn 36705-02-04 09:21 G 15127319.81 15127319.89 15127320.00 0.0294 0.0259

Saturn 36705-09-22 06:57 G 15127549.58 15127549.79 15127550.00 0.0291 0.0008

Saturn 36706-05-10 01:41 G 15127779.50 15127779.57 15127779.67 0.0288 0.0262

Saturn 36721-05-29 00:57 G 15133277.34 15133277.54 15133277.73 0.0270 0.0102

Saturn 36722-01-13 06:29 G 15133506.58 15133506.77 15133506.97 0.0273 0.0110

Moon 36722-04-17 15:36 G 15133601.00 15133601.15 15133601.30 0.2669 0.0323

Earth 36722-04-17 17:45 G 15133601.09 15133601.24 15133601.39 0.2663 0.0883 *

Jupiter 36728-10-05 04:48 G 15135963.52 15135963.70 15135963.88 0.0496 0.0237

Moon 36730-04-15 11:45 G 15136520.93 15136520.99 15136521.06 0.2670 0.2399

Uranus 36732-09-27 15:21 G 15137417.05 15137417.14 15137417.26 0.0136 0.0118

Uranus 36733-05-11 22:05 G 15137643.26 15137643.42 15137643.58 0.0136 0.0091

Uranus 36733-12-24 04:33 G 15137869.51 15137869.69 15137869.89 0.0136 0.0064

Uranus 36734-08-07 11:31 G 15138095.77 15138095.98 15138096.19 0.0136 0.0037

Jupiter 36734-08-08 11:31 G 15138096.78 15138096.98 15138097.18 0.0530 0.0070

Saturn 36734-08-17 18:29 G 15138106.14 15138106.27 15138106.42 0.0293 0.0216

Uranus 36735-03-21 18:29 G 15138322.06 15138322.27 15138322.49 0.0137 0.0009

Saturn 36735-04-04 15:36 G 15138335.95 15138336.15 15138336.36 0.0290 0.0049

Uranus 36735-11-03 01:26 G 15138548.35 15138548.56 15138548.78 0.0137 0.0019

Uranus 36736-06-16 08:24 G 15138774.66 15138774.85 15138775.07 0.0137 0.0048

Uranus 36737-01-28 15:50 G 15139000.99 15139001.16 15139001.36 0.0137 0.0075

Uranus 36737-09-11 23:31 G 15139227.34 15139227.48 15139227.63 0.0138 0.0103

Uranus 36738-04-26 06:57 G 15139453.74 15139453.79 15139453.87 0.0138 0.0132

Jupiter 36740-06-10 04:19 G 15140229.49 15140229.68 15140229.87 0.0496 0.0180

Mars 36745-06-11 09:36 G 15142056.73 15142056.90 15142057.06 0.1591 0.0385

Jupiter 36746-04-13 03:07 G 15142362.52 15142362.63 15142362.75 0.0530 0.0429

Saturn 36750-12-09 06:43 G 15144063.58 15144063.78 15144063.99 0.0271 0.0070

Saturn 36751-07-26 12:43 G 15144292.86 15144293.03 15144293.22 0.0273 0.0144

Neptune 36759-07-17 01:12 G 15147205.49 15147205.55 15147205.67 0.0088 0.0080

Neptune 36760-02-27 14:38 G 15147430.96 15147431.11 15147431.26 0.0088 0.0064

Neptune 36760-10-10 03:07 G 15147656.47 15147656.63 15147656.83 0.0088 0.0050

Neptune 36761-05-23 16:05 G 15147881.98 15147882.17 15147882.39 0.0088 0.0034

Neptune 36762-01-04 05:02 G 15148107.50 15148107.71 15148107.94 0.0088 0.0018

Neptune 36762-08-17 18:14 G 15148333.04 15148333.26 15148333.48 0.0088 0.0003

Neptune 36763-03-31 07:12 G 15148558.58 15148558.80 15148559.02 0.0088 0.0013

Neptune 36763-11-11 20:09 G 15148784.13 15148784.34 15148784.55 0.0088 0.0029

Saturn 36764-02-28 05:31 G 15148892.56 15148892.73 15148892.90 0.0293 0.0174

Jupiter 36764-06-12 13:12 G 15148997.99 15148998.05 15148998.12 0.0496 0.0468

Neptune 36764-06-24 08:38 G 15149009.69 15149009.86 15149010.07 0.0088 0.0045

Saturn 36764-10-15 02:09 G 15149122.39 15149122.59 15149122.79 0.0290 0.0089

Neptune 36765-02-04 22:05 G 15149235.26 15149235.42 15149235.58 0.0088 0.0060

Neptune 36765-09-18 10:48 G 15149460.85 15149460.95 15149461.08 0.0088 0.0075

Jupiter 36770-04-16 01:12 G 15151131.40 15151131.55 15151131.70 0.0530 0.0350

Uranus 36772-06-01 20:24 G 15151909.32 15151909.35 15151909.42 0.0143 0.0139

Uranus 36773-01-14 07:55 G 15152135.69 15152135.83 15152135.98 0.0143 0.0107

Uranus 36773-08-28 18:57 G 15152362.11 15152362.29 15152362.48 0.0142 0.0075

Uranus 36774-04-12 05:45 G 15152588.54 15152588.74 15152588.95 0.0142 0.0044

Uranus 36774-11-24 16:33 G 15152814.97 15152815.19 15152815.41 0.0142 0.0012

Uranus 36775-07-09 03:07 G 15153041.42 15153041.63 15153041.85 0.0141 0.0019

Jupiter 36776-02-16 14:53 G 15153263.92 15153264.12 15153264.32 0.0496 0.0059

Uranus 36776-02-20 13:26 G 15153267.86 15153268.06 15153268.27 0.0141 0.0050

Uranus 36776-10-03 23:31 G 15153494.31 15153494.48 15153494.67 0.0141 0.0081

Uranus 36777-05-18 09:36 G 15153720.78 15153720.90 15153721.04 0.0141 0.0111

Mars 36777-06-10 00:00 G 15153743.44 15153743.50 15153743.56 0.1593 0.1485

Uranus 36777-12-30 19:26 G 15153947.31 15153947.31 15153947.33 0.0140 0.0140

Saturn 36779-11-04 09:36 G 15154620.83 15154620.90 15154621.00 0.0269 0.0244

Saturn 36780-06-20 14:24 G 15154849.89 15154850.10 15154850.31 0.0271 0.0037

Saturn 36781-02-04 20:38 G 15155079.20 15155079.36 15155079.52 0.0274 0.0178

Pluto 36781-05-17 17:31 G 15155181.15 15155181.23 15155181.35 0.0064 0.0058

Jupiter 36781-12-19 15:07 G 15155396.94 15155397.13 15155397.33 0.0530 0.0160

Pluto 36781-12-28 21:50 G 15155406.20 15155406.41 15155406.63 0.0065 0.0014

Pluto 36782-08-11 01:41 G 15155631.39 15155631.57 15155631.78 0.0065 0.0031

Jupiter 36787-10-22 16:05 G 15157530.02 15157530.17 15157530.31 0.0496 0.0350

Saturn 36793-09-09 14:09 G 15159678.91 15159679.09 15159679.28 0.0292 0.0132

Saturn 36794-04-27 10:19 G 15159908.74 15159908.93 15159909.12 0.0289 0.0129

Saturn 36809-05-16 14:09 G 15165406.98 15165407.09 15165407.23 0.0269 0.0216

Saturn 36809-12-31 19:12 G 15165636.09 15165636.30 15165636.51 0.0271 0.0008

Saturn 36810-08-18 01:41 G 15165865.44 15165865.57 15165865.72 0.0274 0.0209

Mars 36811-04-08 22:33 G 15166099.28 15166099.44 15166099.60 0.1590 0.0605

Jupiter 36811-10-24 23:17 G 15166298.31 15166298.47 15166298.64 0.0496 0.0288

Mars 36812-03-12 04:48 G 15166437.56 15166437.70 15166437.84 0.1945 0.1134

Uranus 36816-05-28 03:21 G 15167975.57 15167975.64 15167975.73 0.0136 0.0126

Uranus 36817-01-09 09:36 G 15168201.78 15168201.90 15168202.07 0.0136 0.0100

Uranus 36817-08-23 16:19 G 15168428.01 15168428.18 15168428.38 0.0136 0.0073

Jupiter 36817-08-27 06:57 G 15168431.60 15168431.79 15168431.99 0.0530 0.0133

Uranus 36818-04-06 23:17 G 15168654.27 15168654.47 15168654.68 0.0136 0.0045

Uranus 36818-11-19 06:00 G 15168880.54 15168880.75 15168880.97 0.0137 0.0018

Uranus 36819-07-03 13:12 G 15169106.83 15169107.05 15169107.26 0.0137 0.0010

Uranus 36820-02-14 20:09 G 15169333.14 15169333.34 15169333.56 0.0137 0.0038

Uranus 36820-09-28 03:21 G 15169559.46 15169559.64 15169559.84 0.0137 0.0066

Uranus 36821-05-12 10:33 G 15169785.80 15169785.94 15169786.11 0.0138 0.0094

Uranus 36821-12-24 18:00 G 15170012.17 15170012.25 15170012.36 0.0138 0.0122

Saturn 36823-03-22 23:45 G 15170465.29 15170465.49 15170465.69 0.0292 0.0093

Jupiter 36823-06-30 00:43 G 15170564.34 15170564.53 15170564.74 0.0496 0.0120

Saturn 36823-11-07 19:41 G 15170695.15 15170695.32 15170695.49 0.0289 0.0168

Jupiter 36829-05-01 21:50 G 15172697.27 15172697.41 15172697.55 0.0530 0.0372

Earth 36835-10-18 05:31 G 15175057.57 15175057.73 15175057.89 0.2668 0.0240

Moon 36835-10-18 09:07 G 15175057.72 15175057.88 15175058.03 0.2673 0.0143 *

Saturn 36838-11-26 20:38 G 15176193.22 15176193.36 15176193.53 0.0269 0.0186

Saturn 36839-07-14 01:55 G 15176422.36 15176422.58 15176422.79 0.0272 0.0025

Saturn 36840-02-28 08:24 G 15176651.77 15176651.85 15176651.96 0.0274 0.0242

Neptune 36841-01-19 17:17 G 15176978.12 15176978.22 15176978.34 0.0089 0.0078

Neptune 36841-09-02 06:29 G 15177203.62 15177203.77 15177203.94 0.0089 0.0062

Neptune 36842-04-15 19:41 G 15177429.14 15177429.32 15177429.51 0.0089 0.0046

Neptune 36842-11-27 08:53 G 15177654.66 15177654.87 15177655.08 0.0089 0.0030

Mars 36843-04-07 13:12 G 15177785.94 15177786.05 15177786.15 0.1593 0.1265

Neptune 36843-07-10 22:05 G 15177880.20 15177880.42 15177880.63 0.0089 0.0014

Neptune 36844-02-21 11:17 G 15178105.75 15178105.97 15178106.19 0.0089 0.0002

Neptune 36844-10-04 00:14 G 15178331.30 15178331.51 15178331.73 0.0089 0.0018

Neptune 36845-05-17 13:12 G 15178556.85 15178557.05 15178557.26 0.0089 0.0034

Neptune 36845-12-29 01:55 G 15178782.42 15178782.58 15178782.78 0.0089 0.0050

Neptune 36846-08-11 14:53 G 15179007.99 15179008.12 15179008.29 0.0089 0.0066

Neptune 36847-03-25 04:33 G 15179233.60 15179233.69 15179233.77 0.0089 0.0082

Saturn 36852-10-02 07:55 G 15181251.63 15181251.83 15181252.04 0.0291 0.0053

Jupiter 36853-05-04 21:36 G 15181466.28 15181466.40 15181466.53 0.0530 0.0413

Saturn 36853-05-20 03:21 G 15181481.50 15181481.64 15181481.79 0.0288 0.0206

Uranus 36856-09-13 17:02 G 15182694.10 15182694.21 15182694.35 0.0143 0.0118

Uranus 36857-04-28 04:19 G 15182920.51 15182920.68 15182920.86 0.0142 0.0086

Uranus 36857-12-10 15:21 G 15183146.94 15183147.14 15183147.34 0.0142 0.0054

Uranus 36858-07-25 02:09 G 15183373.38 15183373.59 15183373.81 0.0142 0.0023

Jupiter 36859-03-07 10:33 G 15183598.74 15183598.94 15183599.14 0.0496 0.0116

Uranus 36859-03-08 12:57 G 15183599.82 15183600.04 15183600.26 0.0142 0.0009

Uranus 36859-10-20 23:31 G 15183826.27 15183826.48 15183826.69 0.0141 0.0040

Uranus 36860-06-03 09:36 G 15184052.72 15184052.90 15184053.10 0.0141 0.0070

Uranus 36861-01-15 19:26 G 15184279.18 15184279.31 15184279.48 0.0141 0.0101

Uranus 36861-08-30 05:31 G 15184505.67 15184505.73 15184505.83 0.0141 0.0131

Jupiter 36865-01-07 13:41 G 15185731.87 15185732.07 15185732.27 0.0530 0.0083

Saturn 36868-06-08 00:14 G 15186979.34 15186979.51 15186979.68 0.0269 0.0160

Saturn 36869-01-23 05:31 G 15187208.52 15187208.73 15187208.94 0.0272 0.0051

Saturn 36869-09-09 12:43 G 15187437.99 15187438.03 15187438.07 0.0274 0.0269

Pluto 36870-04-10 11:31 G 15187650.79 15187650.98 15187651.21 0.0080 0.0028

Jupiter 36870-11-10 12:00 G 15187864.84 15187865.00 15187865.17 0.0496 0.0291

Pluto 36870-11-21 21:21 G 15187876.26 15187876.39 15187876.57 0.0079 0.0057

Mars 36877-02-03 11:45 G 15190141.84 15190141.99 15190142.14 0.1589 0.0819

Mars 36878-01-07 05:31 G 15190479.55 15190479.73 15190479.90 0.1946 0.0182

Saturn 36881-08-27 18:14 G 15191808.21 15191808.26 15191808.32 0.0294 0.0284

Saturn 36882-04-14 16:05 G 15192037.96 15192038.17 15192038.38 0.0291 0.0016

Saturn 36882-11-30 11:17 G 15192267.86 15192267.97 15192268.09 0.0289 0.0241

Jupiter 36894-11-12 21:07 G 15196633.25 15196633.38 15196633.53 0.0496 0.0356

Saturn 36897-12-19 05:45 G 15197765.56 15197765.74 15197765.93 0.0270 0.0130

Saturn 36898-08-05 11:17 G 15197994.76 15197994.97 15197995.17 0.0272 0.0081

Uranus 36900-01-26 15:50 G 15198534.14 15198534.16 15198534.20 0.0135 0.0134

Uranus 36900-09-09 22:33 G 15198760.31 15198760.44 15198760.57 0.0136 0.0107

Jupiter 36900-09-16 03:21 G 15198766.45 15198766.64 15198766.83 0.0530 0.0195

Uranus 36901-04-24 04:33 G 15198986.53 15198986.69 15198986.88 0.0136 0.0081

Uranus 36901-12-06 11:31 G 15199212.78 15199212.98 15199213.18 0.0136 0.0053

Uranus 36902-07-20 18:14 G 15199439.05 15199439.26 15199439.47 0.0136 0.0026

Uranus 36903-03-04 01:12 G 15199665.34 15199665.55 15199665.77 0.0137 0.0002

Uranus 36903-10-16 08:09 G 15199891.63 15199891.84 15199892.06 0.0137 0.0029

Uranus 36904-05-29 15:07 G 15200117.94 15200118.13 15200118.34 0.0137 0.0057

Uranus 36905-01-10 22:19 G 15200344.27 15200344.43 15200344.61 0.0138 0.0085

Uranus 36905-08-25 05:45 G 15200570.63 15200570.74 15200570.88 0.0138 0.0113

Jupiter 36906-07-19 23:02 G 15200899.25 15200899.46 15200899.66 0.0496 0.0051

Mars 36909-02-03 02:09 G 15201828.46 15201828.59 15201828.72 0.1592 0.1046

Saturn 36911-03-11 01:12 G 15202594.45 15202594.55 15202594.68 0.0293 0.0246

Saturn 36911-10-26 22:48 G 15202824.24 15202824.45 15202824.66 0.0291 0.0022

Jupiter 36912-05-21 19:12 G 15203032.13 15203032.30 15203032.46 0.0530 0.0304

Saturn 36912-06-12 17:45 G 15203054.19 15203054.24 15203054.30 0.0288 0.0276

Jupiter 36918-03-25 00:00 G 15205165.43 15205165.50 15205165.58 0.0496 0.0458

Neptune 36923-10-19 09:07 G 15207199.87 15207199.88 15207199.93 0.0088 0.0087

Neptune 36924-05-31 21:50 G 15207425.31 15207425.41 15207425.56 0.0088 0.0072

Neptune 36925-01-12 11:02 G 15207650.80 15207650.96 15207651.14 0.0088 0.0056

Neptune 36925-08-26 00:00 G 15207876.31 15207876.50 15207876.70 0.0088 0.0041

Neptune 36926-04-08 12:43 G 15208101.83 15208102.03 15208102.26 0.0088 0.0026

Neptune 36926-11-20 01:55 G 15208327.36 15208327.58 15208327.80 0.0088 0.0010

Saturn 36927-07-02 07:41 G 15208551.63 15208551.82 15208552.02 0.0270 0.0108

Neptune 36927-07-03 14:38 G 15208552.89 15208553.11 15208553.34 0.0088 0.0005

Neptune 36928-02-14 03:21 G 15208778.44 15208778.64 15208778.87 0.0088 0.0021

Saturn 36928-02-16 13:12 G 15208780.85 15208781.05 15208781.25 0.0272 0.0104

Neptune 36928-09-26 16:33 G 15209003.99 15209004.19 15209004.40 0.0088 0.0036

Neptune 36929-05-10 05:02 G 15209229.56 15209229.71 15209229.91 0.0088 0.0052

Neptune 36929-12-21 18:14 G 15209455.13 15209455.26 15209455.41 0.0088 0.0067

Neptune 36930-08-04 07:26 G 15209680.74 15209680.81 15209680.89 0.0088 0.0083

Jupiter 36936-05-24 20:24 G 15211801.28 15211801.35 15211801.42 0.0530 0.0492

Uranus 36940-05-15 03:50 G 15213252.57 15213252.66 15213252.77 0.0143 0.0127

Saturn 36940-09-20 07:55 G 15213380.69 15213380.83 15213380.98 0.0294 0.0212

Uranus 36940-12-27 15:21 G 15213478.98 15213479.14 15213479.30 0.0143 0.0095

Saturn 36941-05-08 05:17 G 15213610.52 15213610.72 15213610.93 0.0291 0.0054

Uranus 36941-08-11 02:24 G 15213705.41 15213705.60 15213705.80 0.0142 0.0063

Uranus 36942-03-25 13:12 G 15213931.84 15213932.05 15213932.27 0.0142 0.0032

Jupiter 36942-03-27 08:53 G 15213933.68 15213933.87 15213934.06 0.0496 0.0186

Uranus 36942-11-07 00:00 G 15214158.28 15214158.50 15214158.72 0.0142 0.0001

Mars 36942-12-03 00:57 G 15214184.41 15214184.54 15214184.67 0.1589 0.1035

Uranus 36943-06-21 10:33 G 15214384.73 15214384.94 15214385.15 0.0142 0.0031

Mars 36943-11-05 06:43 G 15214521.62 15214521.78 15214521.95 0.1947 0.0759

Uranus 36944-02-02 20:53 G 15214611.18 15214611.37 15214611.57 0.0141 0.0061

Uranus 36944-09-16 06:57 G 15214837.64 15214837.79 15214837.97 0.0141 0.0092

Uranus 36945-04-30 16:48 G 15215064.11 15215064.20 15215064.32 0.0141 0.0122

Jupiter 36948-01-28 12:14 G 15216066.80 15216067.01 15216067.21 0.0529 0.0013

Jupiter 36953-11-30 10:33 G 15218199.76 15218199.94 15218200.13 0.0496 0.0219

Saturn 36957-01-11 12:00 G 15219337.81 15219338.00 15219338.21 0.0270 0.0080

Saturn 36957-08-28 17:45 G 15219567.06 15219567.24 15219567.43 0.0273 0.0134

Jupiter 36959-10-03 02:24 G 15220332.55 15220332.60 15220332.65 0.0530 0.0512

Earth 36965-04-18 19:55 G 15222357.18 15222357.33 15222357.48 0.2663 0.0870

Moon 36965-04-18 23:45 G 15222357.35 15222357.49 15222357.62 0.2658 0.1532 *

Saturn 36970-04-02 13:41 G 15224166.91 15224167.07 15224167.24 0.0293 0.0177

Saturn 36970-11-18 10:48 G 15224396.75 15224396.95 15224397.15 0.0290 0.0088

Mars 36974-12-01 15:21 G 15225870.99 15225871.14 15225871.29 0.1591 0.0823

Jupiter 36977-12-02 20:09 G 15226968.25 15226968.34 15226968.45 0.0496 0.0429

Jupiter 36983-10-06 04:33 G 15229101.52 15229101.69 15229101.86 0.0530 0.0287

Uranus 36984-05-10 09:50 G 15229318.81 15229318.91 15229319.03 0.0136 0.0116

Uranus 36984-12-22 16:19 G 15229545.02 15229545.18 15229545.34 0.0136 0.0089

Uranus 36985-08-05 22:48 G 15229771.26 15229771.45 15229771.65 0.0136 0.0062

Saturn 36985-12-07 09:21 G 15229894.86 15229894.89 15229894.92 0.0268 0.0264

Uranus 36986-03-20 05:17 G 15229997.52 15229997.72 15229997.94 0.0136 0.0036

Saturn 36986-07-24 13:12 G 15230123.84 15230124.05 15230124.26 0.0270 0.0059

Uranus 36986-11-01 12:14 G 15230223.79 15230224.01 15230224.23 0.0137 0.0008

Saturn 36987-03-10 18:43 G 15230353.11 15230353.28 15230353.46 0.0273 0.0155

Uranus 36987-06-15 18:57 G 15230450.08 15230450.29 15230450.51 0.0137 0.0020

Uranus 36988-01-28 02:09 G 15230676.39 15230676.59 15230676.79 0.0137 0.0047

Uranus 36988-09-10 08:53 G 15230902.71 15230902.87 15230903.07 0.0137 0.0076

Uranus 36989-04-24 16:19 G 15231129.05 15231129.18 15231129.33 0.0138 0.0103

Jupiter 36989-08-07 22:19 G 15231234.23 15231234.43 15231234.64 0.0496 0.0026

Uranus 36989-12-06 23:31 G 15231355.43 15231355.48 15231355.56 0.0138 0.0131

Jupiter 36995-06-10 20:09 G 15233367.16 15233367.34 15233367.53 0.0530 0.0210

Saturn 36999-10-13 18:14 G 15234953.08 15234953.26 15234953.45 0.0293 0.0148

Saturn 37000-05-31 15:21 G 15235182.95 15235183.14 15235183.33 0.0290 0.0116

38TH MILLENNIUM CE

This is a list of transits of Venus in the 38th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 37001-04-13 22:48 G 15235500.32 15235500.45 15235500.58 0.0496 0.0385

Neptune 37005-04-25 00:29 G 15236972.48 15236972.52 15236972.61 0.0089 0.0086

Neptune 37005-12-06 13:41 G 15237197.95 15237198.07 15237198.23 0.0089 0.0070

Neptune 37006-07-20 03:07 G 15237423.46 15237423.63 15237423.81 0.0089 0.0053

Neptune 37007-03-02 16:19 G 15237648.99 15237649.18 15237649.39 0.0089 0.0038

Neptune 37007-10-14 05:45 G 15237874.53 15237874.74 15237874.95 0.0089 0.0022

Neptune 37008-05-26 18:43 G 15238100.07 15238100.28 15238100.50 0.0089 0.0006

Mars 37008-09-30 14:24 G 15238226.99 15238227.10 15238227.20 0.1589 0.1251

Neptune 37009-01-07 07:55 G 15238325.61 15238325.83 15238326.05 0.0089 0.0010

Neptune 37009-08-20 20:53 G 15238551.17 15238551.37 15238551.59 0.0089 0.0026

Mars 37009-09-02 07:41 G 15238563.74 15238563.82 15238563.91 0.1948 0.1708

Neptune 37010-04-03 09:50 G 15238776.73 15238776.91 15238777.12 0.0089 0.0043

Neptune 37010-11-14 22:48 G 15239002.31 15239002.45 15239002.64 0.0089 0.0058

Neptune 37011-06-28 12:14 G 15239227.89 15239228.01 15239228.14 0.0089 0.0074

Saturn 37015-06-20 12:43 G 15240680.93 15240681.03 15240681.12 0.0268 0.0238

Saturn 37016-02-04 16:33 G 15240909.98 15240910.19 15240910.40 0.0270 0.0033

Saturn 37016-09-20 22:19 G 15241139.28 15241139.43 15241139.59 0.0273 0.0181

Uranus 37024-01-14 12:43 G 15243810.99 15243811.03 15243811.10 0.0143 0.0138

Uranus 37024-08-28 00:29 G 15244037.38 15244037.52 15244037.67 0.0143 0.0106

Uranus 37025-04-11 11:31 G 15244263.80 15244263.98 15244264.18 0.0143 0.0075

Jupiter 37025-04-16 09:50 G 15244268.74 15244268.91 15244269.08 0.0496 0.0269

Uranus 37025-11-23 22:33 G 15244490.24 15244490.44 15244490.66 0.0142 0.0043

Uranus 37026-07-08 09:36 G 15244716.68 15244716.90 15244717.12 0.0142 0.0011

Uranus 37027-02-19 20:24 G 15244943.13 15244943.35 15244943.56 0.0142 0.0020

Pluto 37027-06-18 01:55 G 15245061.44 15245061.58 15245061.74 0.0064 0.0047

Uranus 37027-10-04 06:29 G 15245169.58 15245169.77 15245169.99 0.0141 0.0052

Pluto 37028-01-29 06:00 G 15245286.53 15245286.75 15245286.97 0.0065 0.0003

Uranus 37028-05-17 17:02 G 15245396.03 15245396.21 15245396.39 0.0141 0.0081

Pluto 37028-09-10 10:05 G 15245511.75 15245511.92 15245512.09 0.0065 0.0041

Uranus 37028-12-30 02:53 G 15245622.50 15245622.62 15245622.76 0.0141 0.0112

Saturn 37029-04-25 22:48 G 15245739.26 15245739.45 15245739.65 0.0293 0.0115

Saturn 37029-12-11 19:41 G 15245969.14 15245969.32 15245969.50 0.0290 0.0148

Jupiter 37031-02-17 12:14 G 15246401.81 15246402.01 15246402.22 0.0530 0.0080

Jupiter 37036-12-20 11:17 G 15248534.78 15248534.97 15248535.17 0.0496 0.0136

Mars 37040-09-29 04:33 G 15249913.53 15249913.69 15249913.85 0.1590 0.0611

Jupiter 37042-10-23 04:48 G 15250667.57 15250667.70 15250667.82 0.0530 0.0413

Saturn 37044-12-30 12:29 G 15251466.91 15251467.02 15251467.15 0.0268 0.0221

Saturn 37045-08-16 16:33 G 15251695.98 15251696.19 15251696.41 0.0270 0.0015

Saturn 37046-04-02 22:19 G 15251925.29 15251925.43 15251925.58 0.0273 0.0200

Saturn 37058-11-06 01:55 G 15256525.38 15256525.58 15256525.78 0.0293 0.0089

Saturn 37059-06-23 22:33 G 15256755.28 15256755.44 15256755.62 0.0290 0.0175

Jupiter 37066-10-26 07:12 G 15259436.66 15259436.80 15259436.94 0.0529 0.0385

Uranus 37068-01-09 20:53 G 15259877.30 15259877.37 15259877.47 0.0135 0.0124

Uranus 37068-08-23 03:21 G 15260103.50 15260103.64 15260103.80 0.0136 0.0098

Uranus 37069-04-06 09:50 G 15260329.73 15260329.91 15260330.10 0.0136 0.0071

Uranus 37069-11-18 16:19 G 15260555.97 15260556.18 15260556.38 0.0136 0.0044

Uranus 37070-07-02 22:48 G 15260782.24 15260782.45 15260782.67 0.0136 0.0017

Uranus 37071-02-14 05:45 G 15261008.52 15261008.74 15261008.96 0.0137 0.0010

Uranus 37071-09-28 12:29 G 15261234.82 15261235.02 15261235.23 0.0137 0.0038

Uranus 37072-05-11 19:26 G 15261461.12 15261461.31 15261461.50 0.0137 0.0065

Jupiter 37072-08-27 22:48 G 15261569.25 15261569.45 15261569.65 0.0497 0.0106

Uranus 37072-12-24 02:38 G 15261687.45 15261687.61 15261687.77 0.0137 0.0093

Uranus 37073-08-07 09:36 G 15261913.81 15261913.90 15261914.02 0.0138 0.0121

Saturn 37074-07-12 15:21 G 15262253.00 15262253.14 15262253.29 0.0268 0.0195

Mars 37074-07-29 03:21 G 15262269.58 15262269.64 15262269.70 0.1588 0.1467

Saturn 37075-02-26 19:26 G 15262482.10 15262482.31 15262482.53 0.0270 0.0012

Saturn 37075-10-14 01:26 G 15262711.45 15262711.56 15262711.68 0.0273 0.0226

Jupiter 37078-06-30 21:50 G 15263702.21 15263702.41 15263702.60 0.0529 0.0118

Moon 37078-10-20 03:21 G 15263813.47 15263813.64 15263813.81 0.2662 0.0323

Earth 37078-10-20 05:31 G 15263813.57 15263813.73 15263813.88 0.2668 0.0437 *

Jupiter 37084-05-03 00:57 G 15265835.38 15265835.54 15265835.70 0.0497 0.0296

Saturn 37088-05-18 05:17 G 15267311.52 15267311.72 15267311.93 0.0293 0.0060

Neptune 37088-09-03 05:45 G 15267419.67 15267419.74 15267419.86 0.0088 0.0079

Saturn 37089-01-03 01:55 G 15267541.43 15267541.58 15267541.73 0.0290 0.0203

Neptune 37089-04-16 19:12 G 15267645.15 15267645.30 15267645.45 0.0088 0.0063

Neptune 37089-11-28 07:41 G 15267870.65 15267870.82 15267871.02 0.0088 0.0048

Neptune 37090-07-11 20:38 G 15268096.16 15268096.36 15268096.57 0.0088 0.0033

Neptune 37091-02-22 09:21 G 15268321.69 15268321.89 15268322.12 0.0088 0.0018

Neptune 37091-10-05 22:33 G 15268547.22 15268547.44 15268547.66 0.0088 0.0002

Neptune 37092-05-18 11:17 G 15268772.76 15268772.97 15268773.19 0.0088 0.0013

Neptune 37092-12-30 00:14 G 15268998.30 15268998.51 15268998.72 0.0088 0.0028

Neptune 37093-08-12 12:43 G 15269223.86 15269224.03 15269224.24 0.0088 0.0045

Neptune 37094-03-26 01:41 G 15269449.43 15269449.57 15269449.75 0.0088 0.0060

Neptune 37094-11-06 14:53 G 15269675.01 15269675.12 15269675.24 0.0088 0.0075

Saturn 37104-01-23 14:38 G 15273038.96 15273039.11 15273039.28 0.0268 0.0178

Saturn 37104-09-08 18:57 G 15273268.08 15273268.29 15273268.50 0.0271 0.0029

Saturn 37105-04-26 00:57 G 15273497.44 15273497.54 15273497.63 0.0273 0.0244

Mars 37106-07-28 17:17 G 15273956.06 15273956.22 15273956.39 0.1590 0.0385

Uranus 37108-04-28 08:09 G 15274595.74 15274595.84 15274595.98 0.0143 0.0118

Jupiter 37108-05-06 11:45 G 15274603.85 15274603.99 15274604.13 0.0496 0.0357

Uranus 37108-12-10 19:41 G 15274822.15 15274822.32 15274822.50 0.0143 0.0086

Uranus 37109-07-25 06:57 G 15275048.60 15275048.79 15275049.00 0.0143 0.0054

Uranus 37110-03-08 18:14 G 15275275.04 15275275.26 15275275.47 0.0142 0.0023

Uranus 37110-10-21 05:02 G 15275501.49 15275501.71 15275501.92 0.0142 0.0009

Uranus 37111-06-04 15:21 G 15275727.94 15275728.14 15275728.36 0.0142 0.0040

Uranus 37112-01-17 01:41 G 15275954.39 15275954.57 15275954.77 0.0141 0.0071

Uranus 37112-08-30 12:00 G 15276180.86 15276181.00 15276181.17 0.0141 0.0101

Uranus 37113-04-13 21:50 G 15276407.35 15276407.41 15276407.51 0.0141 0.0131

Jupiter 37114-03-09 16:48 G 15276737.02 15276737.20 15276737.39 0.0529 0.0190

Pluto 37116-05-11 18:57 G 15277531.07 15277531.29 15277531.50 0.0080 0.0019

Pluto 37116-12-23 04:19 G 15277756.58 15277756.68 15277756.84 0.0079 0.0065

Saturn 37117-11-29 06:57 G 15278097.58 15278097.79 15278098.00 0.0293 0.0036

Saturn 37118-07-17 03:21 G 15278327.52 15278327.64 15278327.78 0.0290 0.0227

Jupiter 37120-01-10 11:45 G 15278869.79 15278869.99 15278870.20 0.0497 0.0056

Jupiter 37125-11-12 09:21 G 15281002.73 15281002.89 15281003.06 0.0529 0.0302

Jupiter 37131-09-15 13:55 G 15283136.01 15283136.08 15283136.16 0.0497 0.0459

Saturn 37133-08-04 17:17 G 15283825.05 15283825.22 15283825.40 0.0268 0.0153

Saturn 37134-03-21 21:21 G 15284054.19 15284054.39 15284054.60 0.0270 0.0055

Saturn 37134-11-06 03:21 G 15284283.62 15284283.64 15284283.68 0.0273 0.0269

Saturn 37146-10-24 11:02 G 15288653.89 15288653.96 15288654.03 0.0295 0.0279

Saturn 37147-06-11 09:50 G 15288883.70 15288883.91 15288884.13 0.0293 0.0009

Saturn 37148-01-27 06:14 G 15289113.67 15289113.76 15289113.86 0.0290 0.0254

Jupiter 37149-11-15 09:21 G 15289771.81 15289771.89 15289771.97 0.0529 0.0481

Uranus 37151-09-10 08:09 G 15290435.83 15290435.84 15290435.90 0.0135 0.0133

Uranus 37152-04-23 14:38 G 15290661.98 15290662.11 15290662.25 0.0135 0.0107

Uranus 37152-12-05 20:38 G 15290888.20 15290888.36 15290888.55 0.0136 0.0081

Uranus 37153-07-20 03:07 G 15291114.44 15291114.63 15291114.83 0.0136 0.0054

Uranus 37154-03-03 09:36 G 15291340.70 15291340.90 15291341.12 0.0136 0.0027

Uranus 37154-10-15 16:19 G 15291566.96 15291567.18 15291567.40 0.0136 0.0001

Uranus 37155-05-29 22:48 G 15291793.25 15291793.45 15291793.67 0.0137 0.0028

Jupiter 37155-09-18 01:41 G 15291904.38 15291904.57 15291904.76 0.0496 0.0199

Uranus 37156-01-11 05:45 G 15292019.55 15292019.74 15292019.94 0.0137 0.0055

Uranus 37156-08-24 12:43 G 15292245.86 15292246.03 15292246.21 0.0137 0.0082

Uranus 37157-04-07 19:41 G 15292472.21 15292472.32 15292472.46 0.0137 0.0110

Uranus 37157-11-20 03:21 G 15292698.64 15292698.64 15292698.64 0.0138 0.0138

Jupiter 37161-07-21 01:55 G 15294037.38 15294037.58 15294037.79 0.0530 0.0015

Saturn 37163-02-14 16:48 G 15294611.02 15294611.20 15294611.39 0.0268 0.0136

Saturn 37163-10-01 20:53 G 15294840.17 15294840.37 15294840.58 0.0271 0.0072

Jupiter 37167-05-24 03:36 G 15296170.47 15296170.65 15296170.84 0.0496 0.0204

Neptune 37170-03-10 21:07 G 15297192.29 15297192.38 15297192.50 0.0089 0.0077

Neptune 37170-10-22 10:19 G 15297417.78 15297417.93 15297418.10 0.0089 0.0062

Neptune 37171-06-04 23:31 G 15297643.30 15297643.48 15297643.68 0.0089 0.0046

Neptune 37172-01-16 12:43 G 15297868.83 15297869.03 15297869.24 0.0089 0.0030

Mars 37172-05-25 06:43 G 15297998.61 15297998.78 15297998.96 0.1589 0.0179

Neptune 37172-08-29 01:41 G 15298094.37 15298094.57 15298094.80 0.0089 0.0015

Jupiter 37173-03-25 19:12 G 15298303.24 15298303.30 15298303.38 0.0529 0.0496

Neptune 37173-04-11 15:07 G 15298319.91 15298320.13 15298320.35 0.0089 0.0002

Mars 37173-04-27 15:50 G 15298336.02 15298336.16 15298336.30 0.1946 0.1189

Neptune 37173-11-23 04:05 G 15298545.46 15298545.67 15298545.89 0.0089 0.0018

Neptune 37174-07-06 17:02 G 15298771.02 15298771.21 15298771.43 0.0089 0.0034

Neptune 37175-02-17 06:29 G 15298996.60 15298996.77 15298996.96 0.0089 0.0050

Neptune 37175-09-30 19:26 G 15299222.18 15299222.31 15299222.47 0.0089 0.0066

Saturn 37176-05-05 11:31 G 15299439.89 15299439.98 15299440.09 0.0295 0.0256

Neptune 37176-05-13 08:24 G 15299447.78 15299447.85 15299447.96 0.0089 0.0081

Saturn 37176-12-21 10:48 G 15299669.74 15299669.95 15299670.16 0.0293 0.0017

Saturn 37177-08-08 06:57 G 15299899.74 15299899.79 15299899.86 0.0290 0.0277

Jupiter 37191-05-26 12:43 G 15304938.93 15304939.03 15304939.12 0.0497 0.0439

Uranus 37191-12-27 13:41 G 15305153.99 15305154.07 15305154.16 0.0143 0.0132

Uranus 37192-08-10 00:57 G 15305380.40 15305380.54 15305380.71 0.0143 0.0100

Saturn 37192-08-26 19:26 G 15305397.12 15305397.31 15305397.51 0.0268 0.0110

Uranus 37193-03-24 12:43 G 15305606.84 15305607.03 15305607.22 0.0143 0.0068

Saturn 37193-04-12 23:31 G 15305626.28 15305626.48 15305626.68 0.0270 0.0098

Uranus 37193-11-05 23:31 G 15305833.28 15305833.48 15305833.70 0.0143 0.0037

Uranus 37194-06-20 10:48 G 15306059.73 15306059.95 15306060.16 0.0142 0.0006

Uranus 37195-02-01 21:21 G 15306286.18 15306286.39 15306286.61 0.0142 0.0027

Uranus 37195-09-16 07:55 G 15306512.64 15306512.83 15306513.04 0.0142 0.0058

Uranus 37196-04-29 18:29 G 15306739.10 15306739.27 15306739.44 0.0141 0.0088

Uranus 37196-12-12 04:19 G 15306965.58 15306965.68 15306965.82 0.0141 0.0118

Jupiter 37197-03-28 20:09 G 15307072.17 15307072.34 15307072.51 0.0529 0.0291

Jupiter 37203-01-29 15:07 G 15309204.93 15309205.13 15309205.34 0.0497 0.0039

Saturn 37205-11-15 14:09 G 15310225.97 15310226.09 15310226.23 0.0295 0.0228

Saturn 37206-07-03 13:12 G 15310455.84 15310456.05 15310456.26 0.0292 0.0044

Moon 37208-04-20 17:31 G 15311113.07 15311113.23 15311113.38 0.2668 0.0284

Earth 37208-04-20 22:05 G 15311113.27 15311113.42 15311113.57 0.2664 0.0882 *

Jupiter 37208-12-01 12:00 G 15311337.81 15311338.00 15311338.18 0.0529 0.0205

Jupiter 37214-10-04 17:17 G 15313471.09 15313471.22 15313471.37 0.0497 0.0363

Moon 37216-04-18 12:57 G 15314032.99 15314033.04 15314033.09 0.2672 0.2491

Saturn 37222-03-08 19:12 G 15316183.10 15316183.30 15316183.50 0.0268 0.0092

Saturn 37222-10-23 23:17 G 15316412.28 15316412.47 15316412.67 0.0271 0.0117

Saturn 37235-05-28 15:07 G 15321011.98 15321012.13 15321012.28 0.0295 0.0205

Uranus 37235-12-23 02:24 G 15321220.50 15321220.60 15321220.73 0.0135 0.0115

Saturn 37236-01-13 13:55 G 15321241.88 15321242.08 15321242.29 0.0292 0.0067

Uranus 37236-08-05 08:38 G 15321446.71 15321446.86 15321447.03 0.0135 0.0089

Uranus 37237-03-19 14:53 G 15321672.94 15321673.12 15321673.32 0.0136 0.0063

Uranus 37237-10-31 21:21 G 15321899.18 15321899.39 15321899.60 0.0136 0.0036

Mars 37238-03-22 19:41 G 15322041.15 15322041.32 15322041.50 0.1589 0.0053

Uranus 37238-06-15 03:50 G 15322125.45 15322125.66 15322125.88 0.0136 0.0009

Jupiter 37238-10-07 01:55 G 15322239.41 15322239.58 15322239.75 0.0497 0.0278

Uranus 37239-01-27 10:33 G 15322351.73 15322351.94 15322352.16 0.0136 0.0018

Mars 37239-02-22 17:02 G 15322378.04 15322378.21 15322378.39 0.1947 0.0263

Uranus 37239-09-10 17:17 G 15322578.02 15322578.22 15322578.43 0.0137 0.0046

Uranus 37240-04-24 00:00 G 15322804.32 15322804.50 15322804.69 0.0137 0.0073

Uranus 37240-12-06 06:43 G 15323030.65 15323030.78 15323030.95 0.0137 0.0101

Uranus 37241-07-20 13:55 G 15323257.03 15323257.08 15323257.18 0.0137 0.0129

Jupiter 37244-08-09 08:09 G 15324372.64 15324372.84 15324373.04 0.0529 0.0109

Jupiter 37250-06-12 03:50 G 15326505.46 15326505.66 15326505.86 0.0497 0.0127

Saturn 37251-02-01 19:41 G 15326740.32 15326740.32 15326740.33 0.0266 0.0266

Saturn 37251-09-18 22:05 G 15326969.22 15326969.42 15326969.63 0.0268 0.0065

Saturn 37252-05-05 02:09 G 15327198.42 15327198.59 15327198.78 0.0271 0.0144

Neptune 37252-12-06 14:09 G 15327414.05 15327414.09 15327414.15 0.0088 0.0085

Neptune 37253-07-20 03:07 G 15327639.51 15327639.63 15327639.77 0.0088 0.0070

Neptune 37254-03-02 15:50 G 15327865.00 15327865.16 15327865.35 0.0088 0.0055

Neptune 37254-10-14 04:48 G 15328090.51 15328090.70 15328090.91 0.0088 0.0040

Neptune 37255-05-27 17:31 G 15328316.03 15328316.23 15328316.46 0.0088 0.0025

Neptune 37256-01-08 06:43 G 15328541.56 15328541.78 15328542.00 0.0088 0.0009

Jupiter 37256-04-13 22:48 G 15328638.32 15328638.45 15328638.59 0.0529 0.0393

Neptune 37256-08-20 19:41 G 15328767.10 15328767.32 15328767.54 0.0088 0.0006

Neptune 37257-04-03 08:24 G 15328992.64 15328992.85 15328993.07 0.0088 0.0021

Neptune 37257-11-14 21:07 G 15329218.19 15329218.38 15329218.59 0.0088 0.0037

Neptune 37258-06-28 09:36 G 15329443.74 15329443.90 15329444.10 0.0088 0.0052

Neptune 37259-02-08 22:33 G 15329669.32 15329669.44 15329669.60 0.0088 0.0067

Neptune 37259-09-22 11:31 G 15329894.92 15329894.98 15329895.08 0.0088 0.0083

Saturn 37264-12-07 18:29 G 15331798.10 15331798.27 15331798.44 0.0295 0.0175

Saturn 37265-07-25 17:02 G 15332028.01 15332028.21 15332028.41 0.0292 0.0095

Pluto 37273-07-17 09:07 G 15334941.72 15334941.88 15334942.07 0.0064 0.0040

Pluto 37274-02-27 13:26 G 15335166.85 15335167.06 15335167.29 0.0065 0.0004

Pluto 37274-10-10 17:31 G 15335392.09 15335392.23 15335392.38 0.0065 0.0048

Uranus 37276-04-09 08:09 G 15335938.72 15335938.84 15335938.99 0.0143 0.0112

Uranus 37276-11-21 19:41 G 15336165.14 15336165.32 15336165.50 0.0143 0.0080

Uranus 37277-07-06 06:43 G 15336391.59 15336391.78 15336392.00 0.0143 0.0049

Uranus 37278-02-17 18:00 G 15336618.04 15336618.25 15336618.47 0.0142 0.0017

Uranus 37278-10-02 04:48 G 15336844.49 15336844.70 15336844.92 0.0142 0.0015

Uranus 37279-05-16 15:36 G 15337070.94 15337071.15 15337071.36 0.0142 0.0045

Uranus 37279-12-29 01:55 G 15337297.40 15337297.58 15337297.77 0.0142 0.0076

Jupiter 37280-04-17 00:00 G 15337407.37 15337407.50 15337407.63 0.0529 0.0396

Uranus 37280-08-11 12:14 G 15337523.88 15337524.01 15337524.16 0.0141 0.0106

Saturn 37280-08-13 20:24 G 15337526.28 15337526.35 15337526.44 0.0266 0.0247

Uranus 37281-03-25 22:19 G 15337750.39 15337750.43 15337750.50 0.0141 0.0136

Saturn 37281-03-30 23:02 G 15337755.25 15337755.46 15337755.67 0.0269 0.0046

Saturn 37281-11-15 02:53 G 15337984.46 15337984.62 15337984.80 0.0271 0.0164

Jupiter 37286-02-17 17:31 G 15339540.04 15339540.23 15339540.43 0.0497 0.0129

Jupiter 37291-12-21 17:31 G 15341673.03 15341673.23 15341673.43 0.0529 0.0090

Saturn 37294-06-19 18:57 G 15342584.12 15342584.29 15342584.48 0.0295 0.0152

Saturn 37295-02-04 17:45 G 15342814.05 15342814.24 15342814.43 0.0292 0.0119

Jupiter 37297-10-23 16:48 G 15343806.03 15343806.20 15343806.36 0.0497 0.0290

Mars 37304-01-19 08:53 G 15346083.70 15346083.87 15346084.05 0.1588 0.0267

Mars 37304-12-20 18:00 G 15346420.08 15346420.25 15346420.41 0.1948 0.0711

Saturn 37310-02-24 23:31 G 15348312.37 15348312.48 15348312.61 0.0266 0.0220

Saturn 37310-10-12 02:24 G 15348541.38 15348541.60 15348541.81 0.0268 0.0017

Saturn 37311-05-29 06:29 G 15348770.63 15348770.77 15348770.93 0.0271 0.0193

Moon 37313-10-24 10:48 G 15349649.90 15349649.95 15349650.00 0.2671 0.2516

Uranus 37319-08-23 15:07 G 15351779.04 15351779.13 15351779.22 0.0135 0.0122

Uranus 37320-04-05 21:07 G 15352005.23 15352005.38 15352005.54 0.0135 0.0097

Uranus 37320-11-18 03:07 G 15352231.45 15352231.63 15352231.82 0.0135 0.0071

Uranus 37321-07-02 09:36 G 15352457.70 15352457.90 15352458.11 0.0136 0.0044

Moon 37321-10-22 05:02 G 15352569.57 15352569.71 15352569.85 0.2673 0.0850

Earth 37321-10-22 05:31 G 15352569.57 15352569.73 15352569.88 0.2667 0.0614 *

Jupiter 37321-10-27 04:19 G 15352574.55 15352574.68 15352574.82 0.0497 0.0367

Uranus 37322-02-13 16:05 G 15352683.96 15352684.17 15352684.39 0.0136 0.0017

Uranus 37322-09-27 22:33 G 15352910.23 15352910.44 15352910.66 0.0136 0.0010

Uranus 37323-05-12 05:02 G 15353136.51 15353136.71 15353136.93 0.0136 0.0038

Uranus 37323-12-24 11:45 G 15353362.81 15353362.99 15353363.20 0.0137 0.0065

Saturn 37323-12-31 23:17 G 15353370.29 15353370.47 15353370.67 0.0295 0.0121

Uranus 37324-08-06 18:43 G 15353589.14 15353589.28 15353589.46 0.0137 0.0092

Saturn 37324-08-17 21:36 G 15353600.23 15353600.40 15353600.59 0.0292 0.0149

Uranus 37325-03-21 02:09 G 15353815.49 15353815.59 15353815.70 0.0137 0.0119

Jupiter 37327-08-30 09:21 G 15354707.71 15354707.89 15354708.08 0.0529 0.0198

Jupiter 37333-07-02 06:14 G 15356840.56 15356840.76 15356840.97 0.0497 0.0036

Neptune 37334-06-13 04:48 G 15357186.64 15357186.70 15357186.77 0.0089 0.0085

Neptune 37335-01-24 17:31 G 15357412.12 15357412.23 15357412.39 0.0089 0.0070

Neptune 37335-09-07 06:57 G 15357637.63 15357637.79 15357637.98 0.0089 0.0054

Neptune 37336-04-19 20:09 G 15357863.15 15357863.34 15357863.55 0.0089 0.0038

Neptune 37336-12-01 09:07 G 15358088.68 15358088.88 15358089.11 0.0089 0.0022

Neptune 37337-07-14 22:33 G 15358314.22 15358314.44 15358314.66 0.0089 0.0006

Neptune 37338-02-25 11:45 G 15358539.77 15358539.99 15358540.21 0.0089 0.0010

Neptune 37338-10-09 00:57 G 15358765.33 15358765.54 15358765.75 0.0089 0.0026

Jupiter 37339-05-05 01:12 G 15358973.39 15358973.55 15358973.73 0.0529 0.0297

Neptune 37339-05-22 13:41 G 15358990.89 15358991.07 15358991.28 0.0089 0.0042

Saturn 37339-09-07 01:12 G 15359098.42 15359098.55 15359098.70 0.0267 0.0199

Neptune 37340-01-03 02:38 G 15359216.46 15359216.61 15359216.80 0.0089 0.0057

Saturn 37340-04-23 04:05 G 15359327.46 15359327.67 15359327.88 0.0269 0.0004

Neptune 37340-08-15 15:36 G 15359442.05 15359442.15 15359442.30 0.0089 0.0073

Saturn 37340-12-08 08:24 G 15359556.73 15359556.85 15359556.98 0.0271 0.0214

Neptune 37341-03-29 05:02 G 15359667.70 15359667.71 15359667.75 0.0089 0.0089

Jupiter 37345-03-07 07:55 G 15361106.75 15361106.83 15361106.93 0.0497 0.0440

Saturn 37353-07-13 01:12 G 15364156.36 15364156.55 15364156.76 0.0294 0.0094

Saturn 37354-02-27 23:45 G 15364386.32 15364386.49 15364386.66 0.0292 0.0175

Uranus 37359-12-09 15:07 G 15366497.04 15366497.13 15366497.26 0.0143 0.0124

Uranus 37360-07-23 02:53 G 15366723.46 15366723.62 15366723.80 0.0143 0.0092

Uranus 37361-03-06 14:09 G 15366949.90 15366950.09 15366950.30 0.0143 0.0061

Uranus 37361-10-19 01:26 G 15367176.35 15367176.56 15367176.77 0.0143 0.0029

Uranus 37362-06-02 12:14 G 15367402.79 15367403.01 15367403.23 0.0142 0.0003

Pluto 37362-06-11 02:24 G 15367411.38 15367411.60 15367411.82 0.0080 0.0009

Uranus 37363-01-14 23:02 G 15367629.25 15367629.46 15367629.67 0.0142 0.0033

Pluto 37363-01-22 11:45 G 15367636.94 15367636.99 15367637.09 0.0079 0.0075

Jupiter 37363-05-08 04:48 G 15367742.64 15367742.70 15367742.76 0.0529 0.0504

Uranus 37363-08-29 09:36 G 15367855.71 15367855.90 15367856.10 0.0142 0.0064

Uranus 37364-04-11 19:55 G 15368082.18 15368082.33 15368082.50 0.0142 0.0095

Uranus 37364-11-24 06:14 G 15368308.67 15368308.76 15368308.87 0.0141 0.0124

Jupiter 37369-03-09 15:50 G 15369874.97 15369875.16 15369875.35 0.0497 0.0195

Saturn 37369-03-19 05:45 G 15369884.57 15369884.74 15369884.90 0.0267 0.0169

Saturn 37369-11-03 08:24 G 15370113.64 15370113.85 15370114.06 0.0269 0.0035

Mars 37369-11-15 22:05 G 15370126.26 15370126.42 15370126.59 0.1588 0.0484

Saturn 37370-06-20 12:57 G 15370342.96 15370343.04 15370343.13 0.0271 0.0246

Mars 37370-10-17 18:57 G 15370462.20 15370462.29 15370462.38 0.1949 0.1668

Jupiter 37375-01-10 19:12 G 15372008.10 15372008.30 15372008.50 0.0529 0.0004

Jupiter 37380-11-12 18:00 G 15374141.07 15374141.25 15374141.44 0.0497 0.0206

Saturn 37383-01-23 06:57 G 15374942.58 15374942.79 15374942.99 0.0294 0.0061

Saturn 37383-09-10 04:48 G 15375172.56 15375172.70 15375172.85 0.0292 0.0207

Jupiter 37386-09-15 10:19 G 15376273.87 15376273.93 15376274.00 0.0529 0.0495

Saturn 37398-09-29 08:38 G 15380670.69 15380670.86 15380671.04 0.0267 0.0145

Saturn 37399-05-16 11:45 G 15380899.78 15380899.99 15380900.19 0.0269 0.0060

Saturn 37399-12-31 16:19 G 15381129.17 15381129.18 15381129.20 0.0272 0.0271

Mars 37401-11-15 12:29 G 15381812.93 15381813.02 15381813.10 0.1590 0.1381

Uranus 37403-04-24 03:07 G 15382337.59 15382337.63 15382337.70 0.0135 0.0130

Uranus 37403-12-06 09:07 G 15382563.76 15382563.88 15382564.03 0.0135 0.0105

Uranus 37404-07-19 15:21 G 15382789.98 15382790.14 15382790.33 0.0135 0.0079

Jupiter 37404-11-16 04:19 G 15382909.60 15382909.68 15382909.78 0.0497 0.0444

Uranus 37405-03-02 21:50 G 15383016.22 15383016.41 15383016.62 0.0136 0.0052

Uranus 37405-10-15 04:19 G 15383242.47 15383242.68 15383242.89 0.0136 0.0025

Uranus 37406-05-29 10:48 G 15383468.73 15383468.95 15383469.17 0.0136 0.0002

Uranus 37407-01-10 17:17 G 15383695.02 15383695.22 15383695.44 0.0136 0.0029

Uranus 37407-08-25 00:00 G 15383921.31 15383921.50 15383921.71 0.0137 0.0057

Uranus 37408-04-07 06:57 G 15384147.63 15384147.79 15384147.97 0.0137 0.0084

Uranus 37408-11-19 13:55 G 15384373.97 15384374.08 15384374.22 0.0137 0.0112

Jupiter 37410-09-19 12:29 G 15385042.85 15385043.02 15385043.19 0.0529 0.0297

Saturn 37412-08-05 09:50 G 15385728.71 15385728.91 15385729.12 0.0294 0.0031

Saturn 37413-03-23 07:41 G 15385958.71 15385958.82 15385958.95 0.0291 0.0237

Jupiter 37416-07-22 03:21 G 15387175.44 15387175.64 15387175.85 0.0497 0.0025

Neptune 37417-10-23 11:02 G 15387633.87 15387633.96 15387634.09 0.0088 0.0077

Neptune 37418-06-05 23:45 G 15387859.36 15387859.49 15387859.67 0.0088 0.0062

Neptune 37419-01-17 12:43 G 15388084.86 15388085.03 15388085.24 0.0088 0.0047

Neptune 37419-08-31 01:55 G 15388310.38 15388310.58 15388310.80 0.0088 0.0032

Neptune 37420-04-12 15:07 G 15388535.91 15388536.13 15388536.34 0.0088 0.0016

Neptune 37420-11-24 03:50 G 15388761.44 15388761.66 15388761.88 0.0088 0.0001

Neptune 37421-07-07 16:33 G 15388986.98 15388987.19 15388987.41 0.0088 0.0014

Neptune 37422-02-18 05:17 G 15389212.52 15389212.72 15389212.94 0.0088 0.0030

Jupiter 37422-05-25 05:02 G 15389308.52 15389308.71 15389308.90 0.0529 0.0193

Neptune 37422-10-01 18:29 G 15389438.08 15389438.27 15389438.46 0.0088 0.0044

Neptune 37423-05-15 07:12 G 15389663.64 15389663.80 15389663.97 0.0088 0.0060

Neptune 37423-12-26 19:26 G 15389889.23 15389889.31 15389889.46 0.0088 0.0076

Jupiter 37428-03-27 04:48 G 15391441.57 15391441.70 15391441.83 0.0497 0.0381

Saturn 37428-04-11 13:41 G 15391456.88 15391457.07 15391457.26 0.0267 0.0115

Saturn 37428-11-26 16:48 G 15391686.00 15391686.20 15391686.40 0.0269 0.0091

Mars 37435-09-14 11:31 G 15394168.82 15394168.98 15394169.13 0.1588 0.0700

Saturn 37441-06-30 17:02 G 15396285.14 15396285.21 15396285.31 0.0297 0.0270

Saturn 37442-02-15 17:17 G 15396515.01 15396515.22 15396515.43 0.0294 0.0008

Saturn 37442-10-03 14:38 G 15396745.05 15396745.11 15396745.19 0.0291 0.0271

Uranus 37443-08-10 01:26 G 15397055.49 15397055.56 15397055.64 0.0143 0.0134

Uranus 37444-03-23 12:43 G 15397281.89 15397282.03 15397282.19 0.0143 0.0102

Uranus 37444-11-05 00:00 G 15397508.32 15397508.50 15397508.70 0.0143 0.0071

Uranus 37445-06-19 11:17 G 15397734.76 15397734.97 15397735.18 0.0143 0.0039

Uranus 37446-01-31 22:19 G 15397961.21 15397961.43 15397961.65 0.0142 0.0008

Uranus 37446-09-15 09:07 G 15398187.67 15398187.88 15398188.10 0.0142 0.0024

Uranus 37447-04-29 19:41 G 15398414.12 15398414.32 15398414.53 0.0142 0.0054

Uranus 37447-12-12 06:00 G 15398640.59 15398640.75 15398640.94 0.0142 0.0085

Uranus 37448-07-25 16:19 G 15398867.07 15398867.18 15398867.32 0.0141 0.0115

Earth 37451-04-24 00:14 G 15399869.36 15399869.51 15399869.66 0.2665 0.0866

Moon 37451-04-24 05:45 G 15399869.60 15399869.74 15399869.88 0.2663 0.1293 *

Jupiter 37452-03-29 15:50 G 15400209.99 15400210.16 15400210.33 0.0497 0.0272

Saturn 37457-10-22 18:14 G 15402243.06 15402243.26 15402243.46 0.0268 0.0087

Jupiter 37458-01-30 18:14 G 15402343.06 15402343.26 15402343.46 0.0529 0.0080

Saturn 37458-06-08 21:36 G 15402472.21 15402472.40 15402472.59 0.0270 0.0119

Moon 37459-04-21 19:12 G 15402789.28 15402789.30 15402789.32 0.2659 0.2630

Jupiter 37463-12-03 16:48 G 15404476.01 15404476.20 15404476.40 0.0497 0.0135

Mars 37467-09-13 01:41 G 15405855.45 15405855.57 15405855.69 0.1589 0.1167

Jupiter 37469-10-05 11:17 G 15406608.84 15406608.97 15406609.10 0.0529 0.0408

Saturn 37471-01-10 22:19 G 15407071.31 15407071.43 15407071.57 0.0296 0.0234

Saturn 37471-08-28 22:05 G 15407301.21 15407301.42 15407301.63 0.0293 0.0040

Saturn 37486-09-17 21:50 G 15412800.36 15412800.41 15412800.47 0.0266 0.0256

Saturn 37487-05-05 00:00 G 15413029.30 15413029.50 15413029.71 0.0268 0.0055

Uranus 37487-08-05 21:21 G 15413122.29 15413122.39 15413122.53 0.0135 0.0113

Jupiter 37487-12-06 00:00 G 15413244.49 15413244.50 15413244.51 0.0497 0.0495

Saturn 37487-12-20 03:50 G 15413258.49 15413258.66 15413258.83 0.0270 0.0153

Uranus 37488-03-19 03:36 G 15413348.50 15413348.65 15413348.83 0.0135 0.0086

Uranus 37488-10-31 10:05 G 15413574.72 15413574.92 15413575.11 0.0136 0.0060

Uranus 37489-06-14 16:05 G 15413800.97 15413801.17 15413801.39 0.0136 0.0034

Uranus 37490-01-26 22:48 G 15414027.24 15414027.45 15414027.67 0.0136 0.0007

Uranus 37490-09-10 05:31 G 15414253.51 15414253.73 15414253.94 0.0136 0.0020

Uranus 37491-04-24 12:00 G 15414479.80 15414480.00 15414480.21 0.0136 0.0048

Uranus 37491-12-06 18:57 G 15414706.11 15414706.29 15414706.47 0.0137 0.0075

Uranus 37492-07-20 01:55 G 15414932.44 15414932.58 15414932.73 0.0137 0.0102

Uranus 37493-03-03 08:53 G 15415158.83 15415158.87 15415158.96 0.0137 0.0131

Jupiter 37493-10-08 10:33 G 15415377.80 15415377.94 15415378.09 0.0529 0.0369

Neptune 37499-04-29 01:26 G 15417406.46 15417406.56 15417406.68 0.0089 0.0077

Jupiter 37499-08-11 01:55 G 15417510.38 15417510.58 15417510.78 0.0497 0.0096

Neptune 37499-12-10 14:24 G 15417631.96 15417632.10 15417632.28 0.0089 0.0061

Neptune 37500-07-24 03:36 G 15417857.48 15417857.65 15417857.85 0.0089 0.0046

Saturn 37500-07-24 07:12 G 15417857.65 15417857.80 15417857.97 0.0296 0.0195 *

Neptune 37501-03-06 17:02 G 15418083.01 15418083.21 15418083.42 0.0089 0.0030

Saturn 37501-03-11 06:43 G 15418087.58 15418087.78 15418087.99 0.0293 0.0079

Mars 37501-07-13 00:29 G 15418211.38 15418211.52 15418211.66 0.1587 0.0921

Neptune 37501-10-18 06:14 G 15418308.55 15418308.76 15418308.98 0.0089 0.0014

Neptune 37502-05-31 19:26 G 15418534.09 15418534.31 15418534.53 0.0089 0.0002

Neptune 37503-01-12 08:24 G 15418759.64 15418759.85 15418760.07 0.0089 0.0018

Neptune 37503-08-25 21:21 G 15418985.20 15418985.39 15418985.60 0.0089 0.0033

Neptune 37504-04-07 10:19 G 15419210.77 15419210.93 15419211.13 0.0089 0.0050

Neptune 37504-11-18 23:45 G 15419436.35 15419436.49 15419436.65 0.0089 0.0065

Jupiter 37505-06-14 01:12 G 15419643.36 15419643.55 15419643.75 0.0529 0.0130

Neptune 37505-07-02 12:43 G 15419661.95 15419662.03 15419662.14 0.0089 0.0080

Jupiter 37511-04-17 03:21 G 15421776.48 15421776.64 15421776.80 0.0497 0.0310

Saturn 37516-03-31 03:21 G 15423586.55 15423586.64 15423586.77 0.0266 0.0227

Saturn 37516-11-15 06:00 G 15423815.53 15423815.75 15423815.96 0.0268 0.0026

Saturn 37517-07-02 09:36 G 15424044.75 15424044.90 15424045.06 0.0271 0.0184

Pluto 37519-08-18 15:07 G 15424821.96 15424822.13 15424822.32 0.0064 0.0038

Pluto 37520-03-30 19:26 G 15425047.09 15425047.31 15425047.53 0.0065 0.0006

Pluto 37520-11-10 23:17 G 15425272.34 15425272.47 15425272.62 0.0065 0.0050

Uranus 37527-11-22 21:21 G 15427840.27 15427840.39 15427840.54 0.0143 0.0113

Uranus 37528-07-06 08:53 G 15428066.70 15428066.87 15428067.06 0.0143 0.0082

Uranus 37529-02-17 20:09 G 15428293.14 15428293.34 15428293.55 0.0143 0.0050

Uranus 37529-10-02 07:12 G 15428519.59 15428519.80 15428520.02 0.0143 0.0019

Saturn 37530-02-03 14:24 G 15428643.93 15428644.10 15428644.29 0.0295 0.0155

Uranus 37530-05-16 18:14 G 15428746.04 15428746.26 15428746.48 0.0142 0.0013

Saturn 37530-09-21 13:26 G 15428873.87 15428874.06 15428874.25 0.0292 0.0117

Uranus 37530-12-29 04:48 G 15428972.50 15428972.70 15428972.91 0.0142 0.0044

Uranus 37531-08-12 15:21 G 15429198.97 15429199.14 15429199.34 0.0142 0.0075

Uranus 37532-03-26 01:55 G 15429425.44 15429425.58 15429425.73 0.0142 0.0105

Uranus 37532-11-07 12:00 G 15429651.95 15429652.00 15429652.08 0.0141 0.0135

Mars 37533-07-11 14:24 G 15429897.96 15429898.10 15429898.24 0.1589 0.0936

Mars 37534-06-13 02:53 G 15430234.49 15430234.62 15430234.76 0.1947 0.1244

Jupiter 37535-04-19 10:05 G 15430544.77 15430544.92 15430545.08 0.0496 0.0320

Jupiter 37541-02-19 18:14 G 15432678.07 15432678.26 15432678.46 0.0529 0.0163

Saturn 37545-10-11 09:21 G 15434372.76 15434372.89 15434373.05 0.0266 0.0196

Saturn 37546-05-28 12:14 G 15434601.80 15434602.01 15434602.23 0.0268 0.0009

Jupiter 37546-12-23 11:17 G 15434810.77 15434810.97 15434811.17 0.0496 0.0087

Saturn 37547-01-12 16:33 G 15434831.07 15434831.19 15434831.32 0.0271 0.0219

Jupiter 37552-10-25 07:55 G 15436943.68 15436943.83 15436943.99 0.0529 0.0341

Jupiter 37558-08-28 12:57 G 15439077.01 15439077.04 15439077.08 0.0497 0.0488

Saturn 37559-08-17 00:43 G 15439430.34 15439430.53 15439430.73 0.0295 0.0113

Saturn 37560-04-02 23:31 G 15439660.30 15439660.48 15439660.65 0.0292 0.0158

Earth 37564-10-24 05:31 G 15441325.58 15441325.73 15441325.88 0.2667 0.0807

Moon 37564-10-24 08:24 G 15441325.68 15441325.85 15441326.01 0.2661 0.0583 *

Mars 37567-05-10 13:41 G 15442253.95 15442254.07 15442254.19 0.1587 0.1143

Uranus 37571-04-06 09:07 G 15443680.79 15443680.88 15443680.98 0.0135 0.0120

Uranus 37571-11-18 15:07 G 15443906.98 15443907.13 15443907.29 0.0135 0.0095

Uranus 37572-07-01 21:07 G 15444133.20 15444133.38 15444133.57 0.0135 0.0069

Uranus 37573-02-13 03:36 G 15444359.45 15444359.65 15444359.86 0.0136 0.0042

Uranus 37573-09-27 09:50 G 15444585.70 15444585.91 15444586.13 0.0136 0.0016

Uranus 37574-05-11 16:19 G 15444811.97 15444812.18 15444812.40 0.0136 0.0012

Uranus 37574-12-23 23:02 G 15445038.25 15445038.46 15445038.67 0.0136 0.0039

Saturn 37575-04-23 16:33 G 15445159.03 15445159.19 15445159.36 0.0267 0.0164

Uranus 37575-08-07 05:45 G 15445264.56 15445264.74 15445264.94 0.0137 0.0066

Saturn 37575-12-08 19:26 G 15445388.10 15445388.31 15445388.52 0.0269 0.0041

Uranus 37576-03-20 12:57 G 15445490.88 15445491.04 15445491.20 0.0137 0.0093

Saturn 37576-07-24 23:45 G 15445617.43 15445617.49 15445617.58 0.0272 0.0253

Jupiter 37576-10-28 06:00 G 15445712.63 15445712.75 15445712.87 0.0529 0.0425

Uranus 37576-11-01 20:09 G 15445717.24 15445717.34 15445717.44 0.0137 0.0121

Neptune 37582-01-25 19:55 G 15447628.28 15447628.33 15447628.41 0.0088 0.0083

Jupiter 37582-08-30 22:19 G 15447845.23 15447845.43 15447845.62 0.0497 0.0153

Neptune 37582-09-08 08:53 G 15447853.75 15447853.87 15447854.02 0.0088 0.0068

Neptune 37583-04-21 21:50 G 15448079.25 15448079.41 15448079.60 0.0088 0.0053

Neptune 37583-12-03 10:48 G 15448304.76 15448304.95 15448305.16 0.0088 0.0038

Neptune 37584-07-15 23:31 G 15448530.28 15448530.48 15448530.71 0.0088 0.0023

Neptune 37585-02-26 12:43 G 15448755.81 15448756.03 15448756.25 0.0088 0.0008

Neptune 37585-10-10 01:41 G 15448981.35 15448981.57 15448981.79 0.0088 0.0007

Neptune 37586-05-23 14:09 G 15449206.89 15449207.09 15449207.32 0.0088 0.0023

Neptune 37587-01-04 02:53 G 15449432.44 15449432.62 15449432.84 0.0088 0.0038

Neptune 37587-08-17 15:50 G 15449658.00 15449658.16 15449658.35 0.0088 0.0053

Neptune 37588-03-30 04:33 G 15449883.58 15449883.69 15449883.85 0.0088 0.0069

Jupiter 37588-07-02 22:19 G 15449978.23 15449978.43 15449978.63 0.0529 0.0064

Neptune 37588-11-10 17:31 G 15450109.18 15450109.23 15450109.32 0.0088 0.0083

Saturn 37589-02-26 09:07 G 15450216.68 15450216.88 15450217.09 0.0294 0.0071

Saturn 37589-10-14 07:12 G 15450446.65 15450446.80 15450446.96 0.0291 0.0198

Jupiter 37594-05-05 21:21 G 15452111.22 15452111.39 15452111.56 0.0496 0.0263

Mars 37599-05-09 03:50 G 15453940.51 15453940.66 15453940.82 0.1588 0.0726

Mars 37600-04-09 03:36 G 15454276.48 15454276.65 15454276.83 0.1948 0.0275

Saturn 37604-11-02 22:33 G 15455945.26 15455945.44 15455945.63 0.0267 0.0132

Saturn 37605-06-20 01:41 G 15456174.37 15456174.57 15456174.78 0.0269 0.0075

Pluto 37608-07-11 06:14 G 15457291.55 15457291.76 15457291.99 0.0080 0.0016

Pluto 37609-02-21 16:19 G 15457517.08 15457517.18 15457517.31 0.0079 0.0068

Uranus 37611-07-23 06:29 G 15458398.67 15458398.77 15458398.88 0.0143 0.0124

Uranus 37612-03-05 17:45 G 15458625.09 15458625.24 15458625.42 0.0143 0.0093

Uranus 37612-10-18 05:02 G 15458851.52 15458851.71 15458851.92 0.0143 0.0061

Uranus 37613-06-01 16:19 G 15459077.97 15459078.18 15459078.40 0.0143 0.0029

Uranus 37614-01-14 03:21 G 15459304.42 15459304.64 15459304.86 0.0143 0.0002

Uranus 37614-08-28 14:24 G 15459530.89 15459531.10 15459531.31 0.0142 0.0033

Uranus 37615-04-12 00:57 G 15459757.35 15459757.54 15459757.74 0.0142 0.0064

Uranus 37615-11-24 11:17 G 15459983.82 15459983.97 15459984.15 0.0142 0.0095

Uranus 37616-07-07 21:50 G 15460210.32 15460210.41 15460210.52 0.0141 0.0125

Jupiter 37618-05-08 06:29 G 15460879.65 15460879.77 15460879.91 0.0497 0.0380

Saturn 37618-09-08 20:09 G 15461003.13 15461003.34 15461003.55 0.0294 0.0028

Saturn 37619-04-26 17:45 G 15461233.13 15461233.24 15461233.36 0.0292 0.0240

Jupiter 37624-03-10 12:00 G 15463012.82 15463013.00 15463013.19 0.0529 0.0211

Jupiter 37630-01-11 07:55 G 15465145.62 15465145.83 15465146.03 0.0497 0.0027

Mars 37633-03-07 02:53 G 15466296.53 15466296.62 15466296.71 0.1587 0.1360

Saturn 37634-05-16 06:00 G 15466731.56 15466731.75 15466731.95 0.0268 0.0099

Saturn 37634-12-31 09:36 G 15466960.70 15466960.90 15466961.09 0.0270 0.0108

Jupiter 37635-11-14 01:55 G 15467278.42 15467278.58 15467278.76 0.0529 0.0291

Jupiter 37641-09-16 08:38 G 15469411.77 15469411.86 15469411.97 0.0497 0.0433

Saturn 37647-08-04 05:31 G 15471559.65 15471559.73 15471559.85 0.0296 0.0259

Saturn 37648-03-21 05:31 G 15471789.52 15471789.73 15471789.95 0.0293 0.0018

Saturn 37648-11-06 02:53 G 15472019.57 15472019.62 15472019.67 0.0290 0.0281

Uranus 37654-12-04 19:55 G 15474239.28 15474239.33 15474239.40 0.0135 0.0129

Uranus 37655-07-19 02:09 G 15474465.45 15474465.59 15474465.73 0.0135 0.0103

Uranus 37656-03-01 08:09 G 15474691.67 15474691.84 15474692.02 0.0135 0.0078

Uranus 37656-10-13 14:09 G 15474917.90 15474918.09 15474918.30 0.0135 0.0052

Uranus 37657-05-27 20:38 G 15475144.15 15475144.36 15475144.57 0.0136 0.0025

Uranus 37658-01-09 03:07 G 15475370.41 15475370.63 15475370.85 0.0136 0.0002

Uranus 37658-08-23 09:36 G 15475596.69 15475596.90 15475597.11 0.0136 0.0029

Uranus 37659-04-06 16:05 G 15475822.99 15475823.17 15475823.38 0.0136 0.0057

Jupiter 37659-11-17 03:36 G 15476047.58 15476047.65 15476047.72 0.0529 0.0496

Uranus 37659-11-18 23:02 G 15476049.30 15476049.46 15476049.64 0.0137 0.0083

Uranus 37660-07-02 05:45 G 15476275.63 15476275.74 15476275.89 0.0137 0.0111

Neptune 37663-08-01 09:21 G 15477400.83 15477400.89 15477400.98 0.0089 0.0084

Saturn 37663-11-26 12:00 G 15477517.80 15477518.00 15477518.21 0.0268 0.0068

Neptune 37664-03-13 22:33 G 15477626.32 15477626.44 15477626.60 0.0089 0.0069

Saturn 37664-07-12 15:50 G 15477746.98 15477747.16 15477747.34 0.0270 0.0141

Neptune 37664-10-25 12:00 G 15477851.83 15477852.00 15477852.18 0.0089 0.0053

Mars 37665-03-05 16:33 G 15477983.03 15477983.19 15477983.36 0.1588 0.0500

Neptune 37665-06-08 00:43 G 15478077.35 15478077.53 15478077.75 0.0089 0.0038

Jupiter 37665-09-18 16:05 G 15478179.98 15478180.17 15478180.35 0.0496 0.0197

Neptune 37666-01-19 14:09 G 15478302.88 15478303.09 15478303.31 0.0089 0.0021

Mars 37666-02-04 04:48 G 15478318.54 15478318.70 15478318.87 0.1949 0.0674

Neptune 37666-09-02 03:21 G 15478528.42 15478528.64 15478528.86 0.0089 0.0006

Neptune 37667-04-15 16:19 G 15478753.97 15478754.18 15478754.41 0.0089 0.0011

Neptune 37667-11-27 05:31 G 15478979.52 15478979.73 15478979.94 0.0089 0.0026

Neptune 37668-07-09 18:29 G 15479205.08 15479205.27 15479205.47 0.0089 0.0041

Neptune 37669-02-20 07:26 G 15479430.66 15479430.81 15479431.00 0.0089 0.0057

Neptune 37669-10-03 20:38 G 15479656.25 15479656.36 15479656.50 0.0089 0.0073

Neptune 37670-05-17 09:21 G 15479881.88 15479881.89 15479881.95 0.0089 0.0089

Jupiter 37671-07-22 17:31 G 15480313.02 15480313.23 15480313.43 0.0529 0.0011

Saturn 37677-02-13 17:02 G 15482346.07 15482346.21 15482346.35 0.0296 0.0215

Jupiter 37677-05-24 17:02 G 15482446.03 15482446.21 15482446.40 0.0497 0.0206

Saturn 37677-10-01 16:19 G 15482575.98 15482576.18 15482576.39 0.0293 0.0059

Jupiter 37683-03-27 08:24 G 15484578.79 15484578.85 15484578.91 0.0529 0.0502

Saturn 37692-10-21 17:17 G 15488075.12 15488075.22 15488075.31 0.0266 0.0237

Saturn 37693-06-07 19:26 G 15488304.10 15488304.31 15488304.52 0.0268 0.0034

Saturn 37694-01-22 23:17 G 15488533.32 15488533.47 15488533.64 0.0271 0.0176

Moon 37694-04-24 20:53 G 15488625.22 15488625.37 15488625.53 0.2665 0.0595

Earth 37694-04-25 02:24 G 15488625.45 15488625.60 15488625.75 0.2665 0.0878 *

Uranus 37695-03-22 11:31 G 15488956.94 15488956.98 15488957.06 0.0144 0.0138

Uranus 37695-11-03 23:02 G 15489183.33 15489183.46 15489183.62 0.0143 0.0107

Uranus 37696-06-17 10:48 G 15489409.76 15489409.95 15489410.14 0.0143 0.0074

Uranus 37697-01-29 22:05 G 15489636.21 15489636.42 15489636.63 0.0143 0.0043

Uranus 37697-09-13 09:21 G 15489862.67 15489862.89 15489863.11 0.0143 0.0011

Uranus 37698-04-27 20:09 G 15490089.13 15490089.34 15490089.56 0.0142 0.0020

Uranus 37698-12-10 06:57 G 15490315.60 15490315.79 15490316.00 0.0142 0.0051

Mars 37699-01-02 15:50 G 15490339.16 15490339.16 15490339.17 0.1587 0.1586

Uranus 37699-07-24 17:45 G 15490542.07 15490542.24 15490542.43 0.0142 0.0082

Uranus 37700-03-08 04:33 G 15490768.56 15490768.69 15490768.82 0.0142 0.0112

Jupiter 37701-05-28 02:09 G 15491214.50 15491214.59 15491214.69 0.0497 0.0433

Saturn 37706-08-28 02:38 G 15493132.44 15493132.61 15493132.78 0.0295 0.0170

Jupiter 37707-03-31 07:26 G 15493347.63 15493347.81 15493347.98 0.0529 0.0268

Saturn 37707-04-15 01:41 G 15493362.37 15493362.57 15493362.77 0.0292 0.0103

Jupiter 37713-01-31 02:09 G 15495480.39 15495480.59 15495480.79 0.0496 0.0022

Jupiter 37718-12-03 23:17 G 15497613.28 15497613.47 15497613.65 0.0530 0.0223

Saturn 37722-05-04 22:05 G 15498861.29 15498861.42 15498861.55 0.0266 0.0209

Saturn 37722-12-20 00:43 G 15499090.32 15499090.53 15499090.74 0.0269 0.0005

Saturn 37723-08-06 04:48 G 15499319.58 15499319.70 15499319.85 0.0271 0.0207

Jupiter 37724-10-06 03:07 G 15499746.51 15499746.63 15499746.77 0.0496 0.0382

Mars 37731-01-02 06:00 G 15502025.58 15502025.75 15502025.92 0.1588 0.0285

Mars 37731-12-03 05:31 G 15502360.64 15502360.73 15502360.82 0.1949 0.1653

Saturn 37736-03-09 13:12 G 15503918.87 15503919.05 15503919.24 0.0295 0.0129

Saturn 37736-10-25 12:00 G 15504148.82 15504149.00 15504149.18 0.0293 0.0144

Uranus 37739-03-19 12:57 G 15505023.93 15505024.04 15505024.16 0.0135 0.0112

Uranus 37739-10-31 18:57 G 15505250.13 15505250.29 15505250.46 0.0135 0.0086

Uranus 37740-06-14 00:57 G 15505476.35 15505476.54 15505476.74 0.0135 0.0060

Uranus 37741-01-26 07:12 G 15505702.60 15505702.80 15505703.02 0.0135 0.0034

Uranus 37741-09-09 13:41 G 15505928.85 15505929.07 15505929.29 0.0136 0.0007

Uranus 37742-04-23 19:55 G 15506155.12 15506155.33 15506155.55 0.0136 0.0020

Uranus 37742-12-06 02:38 G 15506381.41 15506381.61 15506381.82 0.0136 0.0046

Uranus 37743-07-20 09:21 G 15506607.71 15506607.89 15506608.08 0.0136 0.0074

Uranus 37744-03-02 16:19 G 15506834.04 15506834.18 15506834.33 0.0137 0.0101

Uranus 37744-10-14 23:02 G 15507060.40 15507060.46 15507060.55 0.0137 0.0128

Neptune 37746-12-11 18:00 G 15507848.14 15507848.25 15507848.38 0.0088 0.0074

Neptune 37747-07-25 06:43 G 15508073.63 15508073.78 15508073.96 0.0088 0.0059

Neptune 37748-03-06 19:41 G 15508299.14 15508299.32 15508299.52 0.0088 0.0044

Jupiter 37748-10-08 12:29 G 15508514.85 15508515.02 15508515.20 0.0497 0.0258

Neptune 37748-10-18 08:38 G 15508524.66 15508524.86 15508525.08 0.0088 0.0029

Neptune 37749-05-31 21:36 G 15508750.19 15508750.40 15508750.63 0.0088 0.0014

Neptune 37750-01-12 10:33 G 15508975.72 15508975.94 15508976.16 0.0088 0.0002

Neptune 37750-08-25 23:31 G 15509201.27 15509201.48 15509201.70 0.0088 0.0016

Neptune 37751-04-08 12:29 G 15509426.82 15509427.02 15509427.23 0.0088 0.0031

Saturn 37751-11-15 04:48 G 15509647.55 15509647.70 15509647.86 0.0267 0.0177

Neptune 37751-11-20 01:12 G 15509652.37 15509652.55 15509652.75 0.0088 0.0046

Saturn 37752-07-01 07:41 G 15509876.61 15509876.82 15509877.03 0.0269 0.0028

Neptune 37752-07-02 14:09 G 15509877.94 15509878.09 15509878.25 0.0088 0.0061

Neptune 37753-02-13 02:53 G 15510103.52 15510103.62 15510103.74 0.0088 0.0076

Saturn 37753-02-15 12:14 G 15510105.91 15510106.01 15510106.11 0.0271 0.0240

Jupiter 37754-08-11 11:45 G 15510647.79 15510647.99 15510648.20 0.0529 0.0047

Jupiter 37760-06-13 13:26 G 15512780.87 15512781.06 15512781.26 0.0497 0.0148

Pluto 37765-09-16 18:57 G 15514702.15 15514702.29 15514702.47 0.0064 0.0044

Saturn 37765-09-19 22:33 G 15514705.24 15514705.44 15514705.64 0.0294 0.0084

Jupiter 37766-04-16 03:36 G 15514913.55 15514913.65 15514913.76 0.0529 0.0446

Pluto 37766-04-29 23:17 G 15514927.26 15514927.47 15514927.70 0.0065 0.0002

Saturn 37766-05-07 20:38 G 15514935.20 15514935.36 15514935.53 0.0292 0.0186

Pluto 37766-12-11 02:53 G 15515152.48 15515152.62 15515152.80 0.0065 0.0045

Uranus 37779-07-05 04:19 G 15519741.58 15519741.68 15519741.82 0.0144 0.0120

Uranus 37780-02-16 15:50 G 15519968.01 15519968.16 15519968.35 0.0143 0.0089

Uranus 37780-09-30 03:36 G 15520194.45 15520194.65 15520194.85 0.0143 0.0056

Uranus 37781-05-14 14:53 G 15520420.91 15520421.12 15520421.34 0.0143 0.0025

Saturn 37781-05-27 08:38 G 15520433.69 15520433.86 15520434.05 0.0267 0.0151

Uranus 37781-12-27 01:55 G 15520647.37 15520647.58 15520647.80 0.0143 0.0008

Saturn 37782-01-11 11:45 G 15520662.79 15520662.99 15520663.20 0.0269 0.0056

Uranus 37782-08-10 12:57 G 15520873.84 15520874.04 15520874.26 0.0142 0.0039

Saturn 37782-08-28 16:33 G 15520892.17 15520892.19 15520892.23 0.0272 0.0269

Uranus 37783-03-24 23:45 G 15521100.31 15521100.49 15521100.69 0.0142 0.0070

Uranus 37783-11-06 10:19 G 15521326.80 15521326.93 15521327.10 0.0142 0.0100

Jupiter 37784-06-15 21:50 G 15521549.37 15521549.41 15521549.45 0.0496 0.0487

Uranus 37784-06-19 20:53 G 15521553.30 15521553.37 15521553.47 0.0141 0.0130

Jupiter 37790-04-19 03:50 G 15523682.51 15523682.66 15523682.82 0.0529 0.0334

Saturn 37795-04-02 07:12 G 15525491.59 15525491.80 15525492.01 0.0295 0.0046

Saturn 37795-11-18 05:17 G 15525721.59 15525721.72 15525721.86 0.0292 0.0223

Jupiter 37796-02-19 22:48 G 15525815.25 15525815.45 15525815.65 0.0497 0.0084

Mars 37796-10-29 19:12 G 15526068.13 15526068.30 15526068.48 0.1587 0.0070

Moon 37799-10-28 09:36 G 15527161.79 15527161.90 15527162.01 0.2666 0.1894

Jupiter 37801-12-23 19:12 G 15527948.11 15527948.30 15527948.50 0.0529 0.0160

Jupiter 37807-10-27 00:14 G 15530081.35 15530081.51 15530081.66 0.0497 0.0320

Moon 37807-10-27 01:41 G 15530081.43 15530081.57 15530081.70 0.2670 0.1154 *

Earth 37807-10-27 05:45 G 15530081.59 15530081.74 15530081.89 0.2666 0.0968 *

Saturn 37810-12-08 14:38 G 15531219.92 15531220.11 15531220.30 0.0267 0.0120

Saturn 37811-07-25 17:45 G 15531449.04 15531449.24 15531449.44 0.0269 0.0087

Uranus 37822-11-18 00:00 G 15535582.42 15535582.50 15535582.61 0.0135 0.0121

Uranus 37823-07-02 06:00 G 15535808.61 15535808.75 15535808.92 0.0135 0.0095

Uranus 37824-02-13 12:14 G 15536034.84 15536035.01 15536035.21 0.0135 0.0069

Saturn 37824-02-26 15:07 G 15536048.07 15536048.13 15536048.19 0.0297 0.0283

Uranus 37824-09-26 18:43 G 15536261.07 15536261.28 15536261.49 0.0135 0.0043

Saturn 37824-10-13 15:21 G 15536277.93 15536278.14 15536278.35 0.0294 0.0006

Uranus 37825-05-11 00:57 G 15536487.32 15536487.54 15536487.76 0.0135 0.0016

Saturn 37825-05-31 12:43 G 15536507.95 15536508.03 15536508.13 0.0291 0.0262

Uranus 37825-12-23 07:26 G 15536713.59 15536713.81 15536714.02 0.0136 0.0011

Uranus 37826-08-06 13:55 G 15536939.87 15536940.08 15536940.29 0.0136 0.0037

Uranus 37827-03-20 20:38 G 15537166.17 15537166.36 15537166.55 0.0136 0.0064

Uranus 37827-11-02 03:07 G 15537392.48 15537392.63 15537392.80 0.0136 0.0092

Uranus 37828-06-15 09:50 G 15537618.83 15537618.91 15537619.04 0.0137 0.0119

Neptune 37828-06-17 07:26 G 15537620.70 15537620.81 15537620.94 0.0089 0.0075

Neptune 37829-01-28 20:24 G 15537846.21 15537846.35 15537846.53 0.0089 0.0060

Neptune 37829-09-11 09:50 G 15538071.73 15538071.91 15538072.11 0.0089 0.0044

Neptune 37830-04-24 22:48 G 15538297.26 15538297.45 15538297.67 0.0089 0.0029

Neptune 37830-12-06 12:14 G 15538522.79 15538523.01 15538523.23 0.0089 0.0012

Neptune 37831-07-20 01:12 G 15538748.34 15538748.55 15538748.77 0.0089 0.0004

Jupiter 37831-10-29 09:21 G 15538849.73 15538849.89 15538850.05 0.0496 0.0319

Neptune 37832-03-01 14:24 G 15538973.89 15538974.10 15538974.32 0.0089 0.0019

Neptune 37832-10-13 03:21 G 15539199.45 15539199.64 15539199.85 0.0089 0.0034

Neptune 37833-05-26 16:33 G 15539425.01 15539425.19 15539425.38 0.0089 0.0050

Neptune 37834-01-07 05:17 G 15539650.59 15539650.72 15539650.89 0.0089 0.0065

Neptune 37834-08-20 18:29 G 15539876.19 15539876.27 15539876.37 0.0089 0.0081

Jupiter 37837-08-31 10:48 G 15540982.75 15540982.95 15540983.14 0.0530 0.0124

Saturn 37840-06-19 17:17 G 15542006.02 15542006.22 15542006.42 0.0267 0.0097

Saturn 37841-02-03 20:24 G 15542235.17 15542235.35 15542235.55 0.0270 0.0112

Jupiter 37843-07-04 10:48 G 15543115.75 15543115.95 15543116.15 0.0496 0.0083

Jupiter 37849-05-06 02:09 G 15545248.45 15545248.59 15545248.74 0.0529 0.0368

Saturn 37853-09-07 22:19 G 15546834.32 15546834.43 15546834.55 0.0297 0.0248

Saturn 37854-04-25 22:33 G 15547064.23 15547064.44 15547064.65 0.0294 0.0030

Pluto 37854-08-11 08:38 G 15547171.67 15547171.86 15547172.08 0.0080 0.0029

Jupiter 37855-03-09 11:02 G 15547381.93 15547381.96 15547381.99 0.0497 0.0490

Pluto 37855-03-24 18:57 G 15547397.14 15547397.29 15547397.46 0.0080 0.0055

Mars 37862-08-28 08:24 G 15550110.68 15550110.85 15550111.02 0.1587 0.0153

Uranus 37863-03-05 09:36 G 15550299.83 15550299.90 15550299.99 0.0144 0.0133

Uranus 37863-10-17 21:07 G 15550526.24 15550526.38 15550526.55 0.0143 0.0102

Uranus 37864-05-31 08:24 G 15550752.68 15550752.85 15550753.06 0.0143 0.0071

Uranus 37865-01-12 20:09 G 15550979.13 15550979.34 15550979.55 0.0143 0.0038

Uranus 37865-08-27 07:26 G 15551205.60 15551205.81 15551206.03 0.0143 0.0007

Uranus 37866-04-10 18:43 G 15551432.06 15551432.28 15551432.49 0.0142 0.0025

Uranus 37866-11-23 05:17 G 15551658.53 15551658.72 15551658.93 0.0142 0.0056

Uranus 37867-07-07 16:05 G 15551885.01 15551885.17 15551885.35 0.0142 0.0087

Uranus 37868-02-19 02:38 G 15552111.50 15552111.61 15552111.75 0.0142 0.0117

Saturn 37869-12-30 22:05 G 15552792.21 15552792.42 15552792.63 0.0267 0.0068

Saturn 37870-08-17 01:26 G 15553021.39 15553021.56 15553021.75 0.0270 0.0141

Jupiter 37873-05-09 01:12 G 15554017.42 15554017.55 15554017.68 0.0529 0.0401

Jupiter 37879-03-11 21:50 G 15556150.21 15556150.41 15556150.60 0.0497 0.0155

Saturn 37883-03-21 04:48 G 15557620.56 15557620.70 15557620.85 0.0296 0.0210

Saturn 37883-11-06 04:33 G 15557850.49 15557850.69 15557850.90 0.0293 0.0067

Jupiter 37885-01-11 17:17 G 15558283.02 15558283.22 15558283.42 0.0529 0.0089

Jupiter 37890-11-14 22:48 G 15560416.28 15560416.45 15560416.63 0.0497 0.0248

Mars 37895-07-28 13:12 G 15562132.92 15562133.05 15562133.18 0.1948 0.1255

Saturn 37898-11-25 21:36 G 15563349.33 15563349.40 15563349.48 0.0266 0.0248

Saturn 37899-07-12 23:31 G 15563578.27 15563578.48 15563578.69 0.0268 0.0046

Saturn 37900-02-27 02:53 G 15563807.46 15563807.62 15563807.80 0.0270 0.0163

Uranus 37906-07-19 11:17 G 15566140.93 15566140.97 15566141.05 0.0135 0.0129

Uranus 37907-03-02 17:31 G 15566367.10 15566367.23 15566367.38 0.0135 0.0103

Uranus 37907-10-14 23:45 G 15566593.31 15566593.49 15566593.67 0.0135 0.0077

Uranus 37908-05-28 05:45 G 15566819.55 15566819.74 15566819.95 0.0135 0.0051

Uranus 37909-01-09 12:14 G 15567045.80 15567046.01 15567046.22 0.0135 0.0025

Uranus 37909-08-23 18:43 G 15567272.06 15567272.28 15567272.49 0.0136 0.0003

Uranus 37910-04-07 00:57 G 15567498.34 15567498.54 15567498.76 0.0136 0.0029

Uranus 37910-11-19 07:26 G 15567724.63 15567724.81 15567725.02 0.0136 0.0056

Neptune 37911-03-17 03:36 G 15567842.58 15567842.65 15567842.76 0.0088 0.0080

Uranus 37911-07-03 14:24 G 15567950.93 15567951.10 15567951.27 0.0136 0.0083

Neptune 37911-10-28 16:19 G 15568068.06 15568068.18 15568068.35 0.0088 0.0065

Uranus 37912-02-14 21:07 G 15568177.26 15568177.38 15568177.52 0.0137 0.0110

Neptune 37912-06-10 05:17 G 15568293.55 15568293.72 15568293.92 0.0088 0.0050

Uranus 37912-09-28 04:05 G 15568403.67 15568403.67 15568403.69 0.0137 0.0137

Saturn 37912-10-01 10:05 G 15568406.76 15568406.92 15568407.09 0.0296 0.0179

Neptune 37913-01-21 18:14 G 15568519.07 15568519.26 15568519.47 0.0088 0.0035

Saturn 37913-05-19 09:50 G 15568636.71 15568636.91 15568637.11 0.0294 0.0098

Neptune 37913-09-04 07:12 G 15568744.60 15568744.80 15568745.03 0.0088 0.0020

Neptune 37914-04-17 20:24 G 15568970.13 15568970.35 15568970.57 0.0088 0.0005

Jupiter 37914-11-18 07:41 G 15569184.70 15569184.82 15569184.95 0.0497 0.0390

Neptune 37914-11-29 09:07 G 15569195.66 15569195.88 15569196.10 0.0088 0.0010

Neptune 37915-07-12 21:50 G 15569421.21 15569421.41 15569421.63 0.0088 0.0025

Neptune 37916-02-23 10:48 G 15569646.76 15569646.95 15569647.15 0.0088 0.0040

Neptune 37916-10-05 23:45 G 15569872.33 15569872.49 15569872.67 0.0088 0.0055

Neptune 37917-05-19 12:29 G 15570097.90 15570098.02 15570098.17 0.0088 0.0070

Neptune 37917-12-31 01:12 G 15570323.52 15570323.55 15570323.63 0.0088 0.0085

Jupiter 37920-09-20 11:02 G 15571317.77 15571317.96 15571318.15 0.0529 0.0209

Jupiter 37926-07-24 09:36 G 15573450.70 15573450.90 15573451.11 0.0497 0.0012

Saturn 37928-06-08 01:12 G 15574135.43 15574135.55 15574135.66 0.0265 0.0221

Mars 37928-06-25 21:36 G 15574153.23 15574153.40 15574153.57 0.1587 0.0373

Saturn 37929-01-23 02:53 G 15574364.41 15574364.62 15574364.84 0.0268 0.0020

Saturn 37929-09-09 06:29 G 15574593.63 15574593.77 15574593.93 0.0270 0.0190

Jupiter 37932-05-26 01:41 G 15575583.40 15575583.57 15575583.74 0.0529 0.0288

Earth 37937-04-28 04:19 G 15577381.53 15577381.68 15577381.83 0.2666 0.0864

Moon 37937-04-28 09:07 G 15577381.74 15577381.88 15577382.02 0.2669 0.1033 *

Jupiter 37938-03-29 11:31 G 15577716.87 15577716.98 15577717.10 0.0497 0.0411

Saturn 37942-04-13 15:21 G 15579192.96 15579193.14 15579193.33 0.0296 0.0144

Saturn 37942-11-29 14:53 G 15579422.93 15579423.12 15579423.31 0.0293 0.0131

Moon 37945-04-26 01:26 G 15580301.46 15580301.56 15580301.67 0.2664 0.1997

Uranus 37947-06-18 04:48 G 15581084.57 15581084.70 15581084.83 0.0143 0.0113

Uranus 37948-01-30 16:05 G 15581311.00 15581311.17 15581311.36 0.0143 0.0082

Uranus 37948-09-13 03:36 G 15581537.46 15581537.65 15581537.87 0.0143 0.0050

Uranus 37949-04-27 15:07 G 15581763.91 15581764.13 15581764.35 0.0143 0.0018

Uranus 37949-12-10 02:09 G 15581990.38 15581990.59 15581990.81 0.0143 0.0014

Uranus 37950-07-24 13:12 G 15582216.85 15582217.05 15582217.26 0.0142 0.0045

Uranus 37951-03-08 00:00 G 15582443.33 15582443.50 15582443.70 0.0142 0.0076

Uranus 37951-10-20 10:33 G 15582669.81 15582669.94 15582670.10 0.0142 0.0106

Uranus 37952-06-02 21:07 G 15582896.34 15582896.38 15582896.45 0.0142 0.0136

Jupiter 37956-05-29 03:07 G 15584352.56 15584352.63 15584352.70 0.0529 0.0494

Saturn 37957-12-19 01:26 G 15584921.43 15584921.56 15584921.70 0.0266 0.0203

Saturn 37958-08-05 03:36 G 15585150.43 15585150.65 15585150.86 0.0268 0.0004

Saturn 37959-03-22 07:12 G 15585379.67 15585379.80 15585379.93 0.0270 0.0210

Mars 37960-06-24 11:31 G 15585839.92 15585839.98 15585840.04 0.1588 0.1495

Mars 37961-05-25 14:24 G 15586174.93 15586175.10 15586175.28 0.1948 0.0305

Jupiter 37962-03-31 22:05 G 15586485.24 15586485.42 15586485.60 0.0497 0.0235

Jupiter 37968-02-01 19:41 G 15588618.12 15588618.32 15588618.53 0.0529 0.0015

Saturn 37971-10-24 18:43 G 15589979.09 15589979.28 15589979.47 0.0296 0.0116

Saturn 37972-06-10 18:00 G 15590209.08 15590209.25 15590209.43 0.0293 0.0159

Jupiter 37973-12-04 22:05 G 15590751.23 15590751.42 15590751.61 0.0497 0.0175

Jupiter 37979-10-07 12:29 G 15592883.94 15592884.02 15592884.11 0.0528 0.0474

Saturn 37987-07-01 04:05 G 15595707.51 15595707.67 15595707.83 0.0265 0.0177

Saturn 37988-02-15 06:00 G 15595936.54 15595936.75 15595936.97 0.0268 0.0026

Saturn 37988-10-01 09:50 G 15596165.81 15596165.91 15596166.02 0.0270 0.0235

Uranus 37990-10-31 05:02 G 15596925.59 15596925.71 15596925.83 0.0135 0.0111

Uranus 37991-06-14 11:02 G 15597151.80 15597151.96 15597152.13 0.0135 0.0085

Uranus 37992-01-26 17:17 G 15597378.03 15597378.22 15597378.42 0.0135 0.0059

Uranus 37992-09-08 23:31 G 15597604.27 15597604.48 15597604.70 0.0135 0.0033

Neptune 37992-09-19 16:05 G 15597615.10 15597615.17 15597615.28 0.0089 0.0082

Uranus 37993-04-23 06:00 G 15597830.53 15597830.75 15597830.96 0.0136 0.0007

Neptune 37993-05-03 05:31 G 15597840.59 15597840.73 15597840.89 0.0089 0.0066

Uranus 37993-12-05 12:14 G 15598056.80 15598057.01 15598057.23 0.0136 0.0020

Neptune 37993-12-14 18:29 G 15598066.11 15598066.27 15598066.47 0.0089 0.0051

Mars 37994-04-23 10:48 G 15598195.79 15598195.95 15598196.11 0.1587 0.0593

Uranus 37994-07-19 18:43 G 15598283.08 15598283.28 15598283.49 0.0136 0.0047

Neptune 37994-07-28 07:55 G 15598291.64 15598291.83 15598292.04 0.0089 0.0035

Uranus 37995-03-03 01:26 G 15598509.39 15598509.56 15598509.75 0.0136 0.0074

Neptune 37995-03-10 21:07 G 15598517.18 15598517.38 15598517.61 0.0089 0.0020

Uranus 37995-10-15 08:24 G 15598735.71 15598735.85 15598736.00 0.0137 0.0101

Neptune 37995-10-22 10:33 G 15598742.72 15598742.94 15598743.16 0.0089 0.0004

Uranus 37996-05-28 14:53 G 15598962.07 15598962.12 15598962.22 0.0137 0.0128

Neptune 37996-06-03 23:31 G 15598968.27 15598968.48 15598968.70 0.0089 0.0012

Neptune 37997-01-15 12:29 G 15599193.82 15599194.02 15599194.24 0.0089 0.0028

Neptune 37997-08-29 01:26 G 15599419.38 15599419.56 15599419.77 0.0089 0.0043

Jupiter 37997-12-07 09:36 G 15599519.85 15599519.90 15599519.96 0.0497 0.0475

Neptune 37998-04-11 14:38 G 15599644.96 15599645.11 15599645.29 0.0089 0.0059

Neptune 37998-11-23 03:50 G 15599870.55 15599870.66 15599870.79 0.0089 0.0074

Neptune 37999-07-06 16:48 G 15600096.20 15600096.20 15600096.23 0.0089 0.0089

39TH MILLENNIUM CE

This is a list of transits of Venus in the 39th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**38001-05-05 22:19**	**G**	**15600765.23**	**15600765.43**	**15600765.63**	**0.0296**	**0.0085**	
Saturn	**38001-12-21 21:21**	**G**	**15600995.24**	**15600995.39**	**15600995.56**	**0.0293**	**0.0189**	
Jupiter	**38003-10-10 12:00**	**G**	**15601652.83**	**15601653.00**	**15601653.17**	**0.0529**	**0.0296**	
Jupiter	**38009-08-12 11:31**	**G**	**15603785.78**	**15603785.98**	**15603786.19**	**0.0497**	**0.0077**	
Pluto	**38011-10-17 21:36**	**G**	**15604582.31**	**15604582.40**	**15604582.54**	**0.0064**	**0.0055**	
Pluto	**38012-05-30 01:41**	**G**	**15604807.37**	**15604807.57**	**15604807.80**	**0.0064**	**0.0012**	
Pluto	**38013-01-10 05:45**	**G**	**15605032.56**	**15605032.74**	**15605032.94**	**0.0065**	**0.0033**	
Jupiter	**38015-06-15 04:33**	**G**	**15605918.50**	**15605918.69**	**15605918.88**	**0.0529**	**0.0189**	
Saturn	**38017-01-10 03:36**	**G**	**15606493.49**	**15606493.65**	**15606493.83**	**0.0266**	**0.0160**	
Saturn	**38017-08-27 05:45**	**G**	**15606722.53**	**15606722.74**	**15606722.95**	**0.0268**	**0.0043**	
Saturn	**38018-04-13 09:21**	**G**	**15606951.83**	**15606951.89**	**15606951.97**	**0.0270**	**0.0253**	
Jupiter	**38021-04-17 13:26**	**G**	**15608051.91**	**15608052.06**	**15608052.21**	**0.0497**	**0.0324**	
Mars	**38026-04-22 00:57**	**G**	**15609882.44**	**15609882.54**	**15609882.64**	**0.1588**	**0.1283**	
Mars	**38027-03-22 15:21**	**G**	**15610216.97**	**15610217.14**	**15610217.30**	**0.1949**	**0.0666**	
Saturn	**38030-11-16 00:29**	**G**	**15611551.31**	**15611551.52**	**15611551.72**	**0.0296**	**0.0060**	
Uranus	**38031-02-15 12:43**	**G**	**15611642.93**	**15611643.03**	**15611643.14**	**0.0143**	**0.0124**	
Saturn	**38031-07-03 23:31**	**G**	**15611781.35**	**15611781.48**	**15611781.63**	**0.0293**	**0.0214**	
Uranus	**38031-09-30 00:14**	**G**	**15611869.35**	**15611869.51**	**15611869.68**	**0.0143**	**0.0092**	
Uranus	**38032-05-13 11:31**	**G**	**15612095.79**	**15612095.98**	**15612096.19**	**0.0143**	**0.0061**	
Uranus	**38032-12-25 23:02**	**G**	**15612322.25**	**15612322.46**	**15612322.68**	**0.0143**	**0.0029**	
Uranus	**38033-08-09 10:19**	**G**	**15612548.72**	**15612548.93**	**15612549.15**	**0.0143**	**0.0004**	
Uranus	**38034-03-23 21:21**	**G**	**15612775.18**	**15612775.39**	**15612775.61**	**0.0142**	**0.0033**	

Uranus 38034-11-05 08:09 G 15613001.65 15613001.84 15613002.04 0.0142 0.0064

Uranus 38035-06-19 18:43 G 15613228.13 15613228.28 15613228.45 0.0142 0.0095

Uranus 38036-02-01 05:17 G 15613454.63 15613454.72 15613454.83 0.0142 0.0125

Earth 38042-10-30 15:21 G 15615918.12 15615918.14 15615918.16 0.2666 0.2627

Jupiter 38045-04-19 22:33 G 15616820.28 15616820.44 15616820.60 0.0497 0.0314

Saturn 38046-07-23 05:45 G 15617279.56 15617279.74 15617279.93 0.0265 0.0135

Saturn 38047-03-09 07:41 G 15617508.62 15617508.82 15617509.03 0.0268 0.0069

Earth 38050-10-28 06:00 G 15618837.60 15618837.75 15618837.89 0.2665 0.1141

Moon 38050-10-28 11:31 G 15618837.82 15618837.98 15618838.13 0.2662 0.0926 *

Jupiter 38051-02-20 22:33 G 15618953.24 15618953.44 15618953.64 0.0528 0.0107

Jupiter 38056-12-24 00:43 G 15621086.33 15621086.53 15621086.74 0.0497 0.0085

Mars 38060-02-19 00:00 G 15622238.35 15622238.50 15622238.65 0.1587 0.0812

Saturn 38060-05-28 03:07 G 15622337.43 15622337.63 15622337.85 0.0296 0.0032

Saturn 38061-01-13 02:09 G 15622567.48 15622567.59 15622567.71 0.0293 0.0242

Jupiter 38062-10-26 14:24 G 15623218.97 15623219.10 15623219.24 0.0528 0.0381

Jupiter 38068-08-29 02:53 G 15625352.58 15625352.62 15625352.68 0.0497 0.0481

Uranus 38074-06-30 15:36 G 15627484.06 15627484.15 15627484.26 0.0135 0.0120

Uranus 38075-02-11 21:50 G 15627710.26 15627710.41 15627710.57 0.0135 0.0094

Neptune 38075-06-18 13:41 G 15627837.04 15627837.07 15627837.15 0.0088 0.0085

Uranus 38075-09-26 03:50 G 15627936.48 15627936.66 15627936.86 0.0135 0.0068

Neptune 38076-01-30 02:38 G 15628062.49 15628062.61 15628062.76 0.0088 0.0070

Saturn 38076-02-02 05:02 G 15628065.53 15628065.71 15628065.91 0.0266 0.0118

Uranus 38076-05-09 10:05 G 15628162.72 15628162.92 15628163.13 0.0135 0.0042

Neptune 38076-09-11 15:36 G 15628287.99 15628288.15 15628288.34 0.0088 0.0055

Saturn 38076-09-18 07:12 G 15628294.60 15628294.80 15628295.01 0.0268 0.0086

Uranus 38076-12-21 16:33 G 15628388.97 15628389.19 15628389.40 0.0136 0.0016

Neptune 38077-04-25 04:48 G 15628513.50 15628513.70 15628513.90 0.0088 0.0040

Uranus 38077-08-04 22:48 G 15628615.24 15628615.45 15628615.67 0.0136 0.0011

Neptune 38077-12-06 17:31 G 15628739.02 15628739.23 15628739.44 0.0088 0.0025

Uranus 38078-03-19 05:17 G 15628841.52 15628841.72 15628841.94 0.0136 0.0038

Neptune 38078-07-20 06:14 G 15628964.55 15628964.76 15628964.99 0.0088 0.0011

Uranus 38078-10-31 12:00 G 15629067.81 15629068.00 15629068.19 0.0136 0.0065

Neptune 38079-03-02 19:12 G 15629190.08 15629190.30 15629190.53 0.0088 0.0005

Uranus 38079-06-14 18:29 G 15629294.12 15629294.27 15629294.44 0.0136 0.0092

Neptune 38079-10-14 07:55 G 15629415.63 15629415.83 15629416.06 0.0088 0.0020

Uranus 38080-01-27 01:41 G 15629520.46 15629520.57 15629520.67 0.0137 0.0118

Neptune 38080-05-26 21:07 G 15629641.18 15629641.38 15629641.58 0.0088 0.0034

Neptune 38081-01-07 09:50 G 15629866.74 15629866.91 15629867.10 0.0088 0.0049

Neptune 38081-08-20 22:48 G 15630092.31 15630092.45 15630092.61 0.0088 0.0064

Neptune 38082-04-03 11:31 G 15630317.91 15630317.98 15630318.09 0.0088 0.0080

Jupiter 38086-10-29 17:17 G 15631988.10 15631988.22 15631988.35 0.0529 0.0408

Saturn 38089-04-22 02:24 G 15632893.55 15632893.60 15632893.65 0.0298 0.0289

Saturn 38089-12-08 04:05 G 15633123.46 15633123.67 15633123.88 0.0296 0.0009

Saturn 38090-07-26 03:07 G 15633353.55 15633353.63 15633353.72 0.0293 0.0265

Mars 38092-02-17 13:41 G 15633924.94 15633925.07 15633925.20 0.1588 0.1057

Jupiter 38092-08-31 11:45 G 15634120.80 15634120.99 15634121.19 0.0497 0.0155

Mars 38093-01-16 16:33 G 15634259.09 15634259.19 15634259.28 0.1949 0.1619

Jupiter 38098-07-04 10:33 G 15636253.74 15636253.94 15636254.14 0.0528 0.0072

Pluto 38100-09-10 07:12 G 15637051.68 15637051.80 15637051.97 0.0080 0.0061

Pluto 38101-04-23 17:45 G 15637277.04 15637277.24 15637277.46 0.0080 0.0024

Jupiter 38104-05-07 13:41 G 15638386.90 15638387.07 15638387.25 0.0497 0.0246

Saturn 38105-08-15 06:57 G 15638851.59 15638851.79 15638851.99 0.0266 0.0093

Saturn 38106-04-01 08:53 G 15639080.68 15639080.87 15639081.07 0.0268 0.0111

Uranus 38114-10-16 21:07 G 15642201.32 15642201.38 15642201.47 0.0144 0.0135

Uranus 38115-05-31 08:38 G 15642427.73 15642427.86 15642428.03 0.0143 0.0104

Uranus 38116-01-12 20:24 G 15642654.17 15642654.35 15642654.54 0.0143 0.0072

Uranus 38116-08-26 07:55 G 15642880.62 15642880.83 15642881.04 0.0143 0.0040

Uranus 38117-04-09 19:12 G 15643107.08 15643107.30 15643107.52 0.0143 0.0009

Uranus 38117-11-22 06:14 G 15643333.55 15643333.76 15643333.98 0.0142 0.0023

Uranus 38118-07-06 17:17 G 15643560.02 15643560.22 15643560.42 0.0142 0.0054

Saturn 38118-11-03 05:17 G 15643679.63 15643679.72 15643679.82 0.0298 0.0261

Uranus 38119-02-18 03:50 G 15643786.49 15643786.66 15643786.84 0.0142 0.0084

Saturn 38119-06-21 06:43 G 15643909.57 15643909.78 15643909.99 0.0296 0.0021

Uranus 38119-10-02 14:24 G 15644012.99 15644013.10 15644013.24 0.0142 0.0115

Saturn 38120-02-06 05:31 G 15644139.73 15644139.73 15644139.74 0.0293 0.0292

Mars 38125-12-17 12:57 G 15646280.91 15646281.04 15646281.17 0.1587 0.1038

Jupiter 38128-05-10 01:55 G 15647155.47 15647155.58 15647155.70 0.0497 0.0408

Jupiter 38134-03-13 02:38 G 15649288.43 15649288.61 15649288.80 0.0529 0.0213

Saturn 38135-02-25 06:29 G 15649637.57 15649637.77 15649637.98 0.0266 0.0076

Saturn 38135-10-12 08:38 G 15649866.68 15649866.86 15649867.05 0.0268 0.0128

Jupiter 38140-01-14 03:50 G 15651421.46 15651421.66 15651421.87 0.0497 0.0011

Jupiter 38145-11-15 20:24 G 15653554.18 15653554.35 15653554.53 0.0528 0.0264

Saturn 38148-05-15 05:45 G 15654465.62 15654465.74 15654465.87 0.0298 0.0237

Saturn 38148-12-31 07:12 G 15654695.59 15654695.80 15654696.01 0.0295 0.0045

Jupiter 38151-09-19 03:07 G 15655687.51 15655687.63 15655687.75 0.0497 0.0405

Neptune 38156-12-23 02:09 G 15657609.55 15657609.59 15657609.64 0.0089 0.0087

Neptune 38157-08-05 15:07 G 15657835.02 15657835.13 15657835.28 0.0089 0.0072

Mars 38157-12-16 03:07 G 15657967.49 15657967.63 15657967.78 0.1588 0.0845

Uranus 38158-03-01 01:55 G 15658042.53 15658042.58 15658042.65 0.0135 0.0129

Neptune 38158-03-19 04:19 G 15658060.53 15658060.68 15658060.87 0.0089 0.0057

Uranus 38158-10-13 08:09 G 15658268.70 15658268.84 15658268.98 0.0135 0.0103

Neptune 38158-10-30 17:45 G 15658286.06 15658286.24 15658286.45 0.0089 0.0041

Uranus 38159-05-27 14:09 G 15658494.91 15658495.09 15658495.27 0.0135 0.0077

Neptune 38159-06-13 06:57 G 15658511.59 15658511.79 15658512.01 0.0089 0.0025

Uranus 38160-01-08 20:09 G 15658721.14 15658721.34 15658721.54 0.0135 0.0051

Neptune 38160-01-24 20:24 G 15658737.13 15658737.35 15658737.57 0.0089 0.0010

Uranus 38160-08-22 02:24 G 15658947.39 15658947.60 15658947.81 0.0135 0.0025

Neptune 38160-09-06 09:21 G 15658962.68 15658962.89 15658963.11 0.0089 0.0006

Uranus 38161-04-05 08:38 G 15659173.65 15659173.86 15659174.08 0.0136 0.0003

Neptune 38161-04-19 22:33 G 15659188.23 15659188.44 15659188.66 0.0089 0.0022

Uranus 38161-11-17 14:53 G 15659399.92 15659400.12 15659400.34 0.0136 0.0028

Neptune 38161-12-01 11:45 G 15659413.79 15659413.99 15659414.19 0.0089 0.0037

Uranus 38162-07-01 21:36 G 15659626.20 15659626.40 15659626.60 0.0136 0.0055

Neptune 38162-07-15 00:29 G 15659639.36 15659639.52 15659639.71 0.0089 0.0053

Uranus 38163-02-13 04:05 G 15659852.51 15659852.67 15659852.85 0.0136 0.0081

Neptune 38163-02-25 13:41 G 15659864.94 15659865.07 15659865.23 0.0089 0.0068

Uranus 38163-09-27 11:02 G 15660078.83 15660078.96 15660079.09 0.0137 0.0108

Neptune 38163-10-09 02:53 G 15660090.55 15660090.62 15660090.71 0.0089 0.0083

Saturn 38164-01-21 08:09 G 15660194.77 15660194.84 15660194.92 0.0264 0.0247

Uranus 38164-05-10 17:31 G 15660305.21 15660305.23 15660305.28 0.0137 0.0135

Saturn 38164-09-06 08:53 G 15660423.66 15660423.87 15660424.08 0.0266 0.0050

Saturn 38165-04-23 10:48 G 15660652.79 15660652.95 15660653.13 0.0268 0.0155

Jupiter 38169-11-18 20:53 G 15662323.33 15662323.37 15662323.43 0.0528 0.0510

Jupiter 38175-09-21 15:21 G 15664455.96 15664456.14 15664456.32 0.0497 0.0248

Saturn 38177-11-25 08:38 G 15665251.72 15665251.86 15665252.01 0.0298 0.0209

Saturn 38178-07-13 09:50 G 15665481.71 15665481.91 15665482.12 0.0295 0.0073

Moon 38180-04-29 02:53 G 15666137.46 15666137.62 15666137.78 0.2662 0.0671

Earth 38180-04-29 06:29 G 15666137.62 15666137.77 15666137.92 0.2666 0.0849 *

Jupiter 38181-07-24 12:57 G 15666588.84 15666589.04 15666589.24 0.0528 0.0024

Jupiter 38187-05-27 17:17 G 15668722.03 15668722.22 15668722.42 0.0497 0.0150

Mars 38191-10-15 02:24 G 15670323.50 15670323.60 15670323.71 0.1587 0.1250

Jupiter 38193-03-29 05:31 G 15670854.63 15670854.73 15670854.82 0.0529 0.0461

Saturn 38193-08-02 08:09 G 15670980.75 15670980.84 15670980.96 0.0264 0.0230

Saturn 38194-03-19 08:53 G 15671209.66 15671209.87 15671210.08 0.0266 0.0032

Saturn 38194-11-03 11:02 G 15671438.80 15671438.96 15671439.12 0.0268 0.0173

Uranus 38199-01-28 15:21 G 15672986.02 15672986.14 15672986.28 0.0143 0.0116

Uranus 38199-09-12 02:53 G 15673212.46 15673212.62 15673212.81 0.0143 0.0085

Uranus 38200-04-26 14:38 G 15673438.91 15673439.11 15673439.32 0.0143 0.0052

Uranus 38200-12-09 01:55 G 15673665.37 15673665.58 15673665.80 0.0143 0.0021

Uranus 38201-07-23 13:12 G 15673891.83 15673892.05 15673892.27 0.0143 0.0010

Uranus 38202-03-07 00:14 G 15674118.30 15674118.51 15674118.72 0.0142 0.0041

Uranus 38202-10-19 11:02 G 15674344.78 15674344.96 15674345.15 0.0142 0.0072

Uranus 38203-06-02 21:21 G 15674571.26 15674571.39 15674571.56 0.0142 0.0103

Uranus 38204-01-15 07:55 G 15674797.77 15674797.83 15674797.92 0.0142 0.0133

Saturn 38207-06-08 09:21 G 15676037.73 15676037.89 15676038.06 0.0298 0.0184

Saturn 38208-01-24 10:33 G 15676267.75 15676267.94 15676268.14 0.0295 0.0098

Jupiter 38211-05-31 01:41 G 15677490.53 15677490.57 15677490.62 0.0497 0.0482

Jupiter 38217-04-02 09:07 G 15679623.72 15679623.88 15679624.04 0.0528 0.0330

Jupiter 38223-02-03 03:36 G 15681756.45 15681756.65 15681756.85 0.0497 0.0082

Saturn 38223-02-13 10:48 G 15681766.83 15681766.95 15681767.10 0.0264 0.0203

Saturn 38223-09-30 11:45 G 15681995.78 15681995.99 15681996.20 0.0266 0.0005

Mars 38223-10-14 16:19 G 15682010.02 15682010.18 15682010.34 0.1587 0.0627

Saturn 38224-05-16 13:41 G 15682224.94 15682225.07 15682225.22 0.0268 0.0201

Jupiter 38228-12-06 00:00 G 15683889.31 15683889.50 15683889.69 0.0528 0.0162

Jupiter 38234-10-09 06:00 G 15686022.59 15686022.75 15686022.91 0.0498 0.0314

Saturn 38236-12-18 13:12 G 15686823.88 15686824.05 15686824.24 0.0298 0.0154

Saturn 38237-08-05 14:24 G 15687053.91 15687054.10 15687054.29 0.0295 0.0127

Neptune 38240-05-04 13:12 G 15688056.95 15688057.05 15688057.18 0.0088 0.0075

Neptune 38240-12-16 02:09 G 15688282.44 15688282.59 15688282.76 0.0088 0.0060

Neptune 38241-07-29 15:07 G 15688507.95 15688508.13 15688508.32 0.0088 0.0045

Neptune 38242-03-12 03:50 G 15688733.46 15688733.66 15688733.88 0.0088 0.0031

Uranus 38242-06-13 17:17 G 15688827.11 15688827.22 15688827.34 0.0135 0.0113

Neptune 38242-10-23 16:48 G 15688958.99 15688959.20 15688959.42 0.0088 0.0016

Uranus 38243-01-25 23:31 G 15689053.31 15689053.48 15689053.64 0.0135 0.0087

Neptune 38243-06-06 05:45 G 15689184.52 15689184.74 15689184.96 0.0088 0.0001

Uranus 38243-09-09 05:31 G 15689279.54 15689279.73 15689279.92 0.0135 0.0061

Neptune 38244-01-17 18:29 G 15689410.06 15689410.27 15689410.49 0.0088 0.0014

Uranus 38244-04-22 11:31 G 15689505.77 15689505.98 15689506.19 0.0135 0.0035

Neptune 38244-08-30 07:12 G 15689635.61 15689635.80 15689636.02 0.0088 0.0029

Uranus 38244-12-04 17:31 G 15689732.02 15689732.23 15689732.45 0.0135 0.0010

Neptune 38245-04-12 20:09 G 15689861.16 15689861.34 15689861.54 0.0088 0.0044

Uranus 38245-07-18 23:45 G 15689958.28 15689958.49 15689958.71 0.0136 0.0018

Neptune 38245-11-24 08:53 G 15690086.72 15690086.87 15690087.05 0.0088 0.0059

Uranus 38246-03-02 06:14 G 15690184.56 15690184.76 15690184.97 0.0136 0.0044

Neptune 38246-07-07 22:05 G 15690312.30 15690312.42 15690312.54 0.0088 0.0073

Uranus 38246-10-14 12:43 G 15690410.85 15690411.03 15690411.22 0.0136 0.0071

Uranus 38247-05-28 19:12 G 15690637.16 15690637.30 15690637.46 0.0136 0.0097

Uranus 38248-01-10 01:55 G 15690863.50 15690863.58 15690863.68 0.0137 0.0124

Saturn 38252-08-25 12:14 G 15692552.87 15692553.01 15692553.17 0.0264 0.0183

Saturn 38253-04-11 13:12 G 15692781.83 15692782.05 15692782.26 0.0266 0.0017

Saturn 38253-11-26 15:07 G 15693011.02 15693011.13 15693011.26 0.0269 0.0223

Mars 38256-09-12 00:14 G 15694031.38 15694031.51 15694031.64 0.1948 0.1297

Mars 38257-08-12 15:21 G 15694366.08 15694366.14 15694366.20 0.1588 0.1477

Pluto 38258-06-30 01:55 G 15694687.40 15694687.58 15694687.79 0.0064 0.0032

Jupiter 38258-10-11 17:31 G 15694791.08 15694791.23 15694791.38 0.0497 0.0335

Pluto 38259-02-10 06:14 G 15694912.54 15694912.76 15694912.98 0.0064 0.0012

Pluto 38259-09-23 09:50 G 15695137.82 15695137.91 15695138.04 0.0065 0.0056

Jupiter 38264-08-13 18:00 G 15696924.06 15696924.25 15696924.45 0.0529 0.0133

Saturn 38266-06-30 14:53 G 15697609.93 15697610.12 15697610.32 0.0297 0.0126

Saturn 38267-02-15 15:50 G 15697839.99 15697840.16 15697840.35 0.0295 0.0154

Jupiter 38270-06-16 16:05 G 15699056.97 15699057.17 15699057.38 0.0497 0.0081

Jupiter 38276-04-18 11:17 G 15701189.82 15701189.97 15701190.12 0.0528 0.0346

Jupiter 38282-02-19 17:31 G 15703323.19 15703323.23 15703323.29 0.0498 0.0482

Saturn 38282-03-07 15:36 G 15703338.99 15703339.15 15703339.33 0.0264 0.0155

Uranus 38282-09-28 19:55 G 15703544.25 15703544.33 15703544.44 0.0144 0.0130

Saturn 38282-10-22 16:33 G 15703567.98 15703568.19 15703568.40 0.0266 0.0046

Uranus 38283-05-13 07:55 G 15703770.67 15703770.83 15703770.99 0.0143 0.0098

Saturn 38283-06-08 18:57 G 15703797.23 15703797.29 15703797.37 0.0268 0.0252

Uranus 38283-12-25 19:26 G 15703997.12 15703997.31 15703997.51 0.0143 0.0066

Uranus 38284-08-08 06:57 G 15704223.58 15704223.79 15704224.01 0.0143 0.0035

Uranus 38285-03-22 18:14 G 15704450.04 15704450.26 15704450.48 0.0143 0.0004

Moon 38285-11-01 10:48 G 15704673.84 15704673.95 15704674.05 0.2661 0.2004

Earth 38285-11-01 15:50 G 15704674.10 15704674.16 15704674.21 0.2665 0.2479

Uranus 38285-11-04 05:17 G 15704676.51 15704676.72 15704676.94 0.0143 0.0028

Uranus 38286-06-18 16:19 G 15704902.98 15704903.18 15704903.38 0.0142 0.0059

Uranus 38287-01-31 02:53 G 15705129.46 15705129.62 15705129.80 0.0142 0.0089

Uranus 38287-09-14 13:55 G 15705355.96 15705356.08 15705356.19 0.0142 0.0119

Mars 38289-08-11 05:31 G 15706052.56 15706052.73 15706052.90 0.1588 0.0407

Moon 38293-10-30 00:29 G 15707593.39 15707593.52 15707593.64 0.2666 0.1587

Earth 38293-10-30 06:14 G 15707593.62 15707593.76 15707593.90 0.2664 0.1297 *

Saturn 38296-01-10 19:41 G 15708396.13 15708396.32 15708396.53 0.0298 0.0094

Saturn 38296-08-27 20:24 G 15708626.19 15708626.35 15708626.52 0.0295 0.0185

Jupiter 38300-04-22 09:36 G 15709958.78 15709958.90 15709959.03 0.0528 0.0414

Jupiter 38306-02-23 05:31 G 15712091.54 15712091.73 15712091.93 0.0497 0.0171

Saturn 38311-09-18 18:14 G 15714125.08 15714125.26 15714125.45 0.0265 0.0132

Jupiter 38311-12-27 01:26 G 15714224.36 15714224.56 15714224.76 0.0528 0.0073

Saturn 38312-05-04 19:12 G 15714354.10 15714354.30 15714354.51 0.0267 0.0070

Jupiter 38317-10-29 07:12 G 15716357.62 15716357.80 15716357.98 0.0497 0.0231

Neptune 38321-11-09 01:41 G 15717829.46 15717829.57 15717829.68 0.0089 0.0077

Neptune 38322-06-22 14:38 G 15718054.96 15718055.11 15718055.28 0.0089 0.0062

Mars 38322-07-11 01:12 G 15718073.38 15718073.55 15718073.72 0.1948 0.0329

Neptune 38323-02-03 03:36 G 15718280.48 15718280.65 15718280.86 0.0089 0.0047

Neptune 38323-09-16 17:17 G 15718506.01 15718506.22 15718506.43 0.0089 0.0031

Neptune 38324-04-29 06:14 G 15718731.55 15718731.76 15718731.99 0.0089 0.0016

Neptune 38324-12-10 19:41 G 15718957.10 15718957.32 15718957.54 0.0089 0.0001

Saturn 38325-07-23 23:02 G 15719182.25 15719182.46 15719182.66 0.0297 0.0063

Neptune 38325-07-24 08:53 G 15719182.65 15719182.87 15719183.08 0.0089 0.0016 *

Uranus 38326-02-12 02:53 G 15719385.55 15719385.62 15719385.73 0.0135 0.0123

Neptune 38326-03-06 21:50 G 15719408.22 15719408.41 15719408.63 0.0089 0.0031

Saturn 38326-03-10 23:31 G 15719412.34 15719412.48 15719412.63 0.0294 0.0216

Uranus 38326-09-26 08:53 G 15719611.73 15719611.87 15719612.03 0.0135 0.0097

Neptune 38326-10-18 11:02 G 15719633.78 15719633.96 15719634.16 0.0089 0.0046

Uranus 38327-05-10 14:53 G 15719837.94 15719838.12 15719838.31 0.0135 0.0071

Neptune 38327-06-01 00:14 G 15719859.36 15719859.51 15719859.67 0.0089 0.0062

Uranus 38327-12-22 20:53 G 15720064.17 15720064.37 15720064.58 0.0135 0.0045

Neptune 38328-01-12 12:43 G 15720084.95 15720085.03 15720085.17 0.0089 0.0078

Uranus 38328-08-05 02:53 G 15720290.41 15720290.62 15720290.84 0.0135 0.0020

Uranus 38329-03-19 09:21 G 15720516.67 15720516.89 15720517.10 0.0136 0.0007

Uranus 38329-10-31 15:22 G 15720742.94 15720743.14 15720743.36 0.0136 0.0034

Uranus 38330-06-14 21:36 G 15720969.22 15720969.40 15720969.61 0.0136 0.0060

Uranus 38331-01-27 04:19 G 15721195.52 15721195.68 15721195.85 0.0136 0.0087

Uranus 38331-09-10 10:48 G 15721421.85 15721421.95 15721422.09 0.0136 0.0113

Saturn 38341-03-30 22:48 G 15724911.25 15724911.45 15724911.65 0.0265 0.0102

Jupiter 38341-10-31 14:53 G 15725126.00 15725126.12 15725126.24 0.0497 0.0396

Saturn 38341-11-15 00:00 G 15725140.30 15725140.50 15725140.69 0.0267 0.0100

Pluto 38347-05-24 14:38 G 15727156.90 15727157.11 15727157.33 0.0080 0.0019

Jupiter 38347-09-03 19:12 G 15727259.11 15727259.30 15727259.48 0.0528 0.0221

Pluto 38348-01-05 00:43 G 15727382.41 15727382.53 15727382.66 0.0080 0.0064

Jupiter 38353-07-06 16:48 G 15729392.00 15729392.20 15729392.41 0.0497 0.0003

Saturn 38355-02-03 05:31 G 15729968.53 15729968.73 15729968.95 0.0297 0.0028

Mars 38355-06-09 18:58 G 15730095.12 15730095.29 15730095.46 0.1587 0.0192

Saturn 38355-09-21 05:46 G 15730198.64 15730198.74 15730198.86 0.0294 0.0250

Jupiter 38359-05-09 10:19 G 15731524.76 15731524.93 15731525.11 0.0528 0.0269

Jupiter 38365-03-11 18:29 G 15733658.15 15733658.27 15733658.39 0.0497 0.0400

Uranus 38366-05-30 00:00 G 15734102.50 15734102.50 15734102.50 0.0144 0.0144

Uranus 38367-01-11 11:17 G 15734328.85 15734328.97 15734329.12 0.0143 0.0113

Uranus 38367-08-25 23:17 G 15734555.29 15734555.47 15734555.65 0.0143 0.0081

Uranus 38368-04-08 10:48 G 15734781.74 15734781.95 15734782.15 0.0143 0.0049

Uranus 38368-11-20 22:05 G 15735008.20 15735008.42 15735008.63 0.0143 0.0018

Uranus 38369-07-05 09:07 G 15735234.66 15735234.88 15735235.10 0.0143 0.0013

Uranus 38370-02-16 19:55 G 15735461.13 15735461.33 15735461.55 0.0142 0.0045

Uranus 38370-10-01 06:43 G 15735687.61 15735687.78 15735687.98 0.0142 0.0076

Saturn 38370-10-11 02:53 G 15735697.41 15735697.62 15735697.82 0.0265 0.0075

Uranus 38371-05-15 17:31 G 15735914.10 15735914.23 15735914.39 0.0142 0.0105

Saturn 38371-05-28 04:05 G 15735926.49 15735926.67 15735926.86 0.0267 0.0127

Uranus 38371-12-28 04:05 G 15736140.62 15736140.67 15736140.74 0.0142 0.0135

Jupiter 38383-05-12 11:17 G 15740293.92 15740293.97 15740294.03 0.0529 0.0504

Saturn 38383-12-29 07:55 G 15740524.76 15740524.83 15740524.90 0.0299 0.0278

Saturn 38384-08-15 10:05 G 15740754.71 15740754.92 15740755.13 0.0296 0.0007

Saturn 38385-04-02 10:05 G 15740984.87 15740984.92 15740984.98 0.0294 0.0282

Mars 38388-05-07 02:24 G 15742115.44 15742115.60 15742115.77 0.1948 0.0622

Jupiter 38389-03-14 02:10 G 15742426.40 15742426.59 15742426.77 0.0497 0.0226

Jupiter 38395-01-15 04:19 G 15744559.47 15744559.68 15744559.88 0.0529 0.0026

Saturn 38399-09-06 07:41 G 15746254.75 15746254.82 15746254.91 0.0263 0.0242

Saturn 38400-04-22 07:55 G 15746483.62 15746483.83 15746484.05 0.0265 0.0045

Jupiter 38400-11-17 03:07 G 15746692.44 15746692.63 15746692.82 0.0497 0.0176

Saturn 38400-12-07 09:36 G 15746712.73 15746712.90 15746713.07 0.0267 0.0159

Neptune 38404-08-07 00:14 G 15748051.44 15748051.51 15748051.62 0.0088 0.0079

Neptune 38405-03-20 13:26 G 15748276.92 15748277.06 15748277.21 0.0088 0.0064

Neptune 38405-11-01 01:55 G 15748502.42 15748502.58 15748502.78 0.0088 0.0050

Neptune 38406-06-14 14:53 G 15748727.93 15748728.12 15748728.33 0.0088 0.0035

Jupiter 38406-09-19 18:43 G 15748825.19 15748825.28 15748825.37 0.0528 0.0467

Neptune 38407-01-26 03:50 G 15748953.45 15748953.66 15748953.88 0.0088 0.0021

Neptune 38407-09-08 16:48 G 15749178.99 15749179.20 15749179.43 0.0088 0.0006

Neptune 38408-04-21 05:46 G 15749404.52 15749404.74 15749404.96 0.0088 0.0009

Neptune 38408-12-02 18:14 G 15749630.06 15749630.26 15749630.49 0.0088 0.0025

Neptune 38409-07-16 06:58 G 15749855.61 15749855.79 15749856.01 0.0088 0.0039

Uranus 38409-10-12 12:29 G 15749943.99 15749944.02 15749944.07 0.0135 0.0132

Neptune 38410-02-26 20:10 G 15750081.17 15750081.34 15750081.52 0.0088 0.0053

Uranus 38410-05-26 18:14 G 15750170.14 15750170.26 15750170.41 0.0135 0.0107

Neptune 38410-10-10 08:53 G 15750306.75 15750306.87 15750307.02 0.0088 0.0068

Uranus 38411-01-08 00:14 G 15750396.35 15750396.51 15750396.69 0.0135 0.0081

Neptune 38411-05-23 21:36 G 15750532.35 15750532.40 15750532.49 0.0088 0.0083

Uranus 38411-08-22 06:29 G 15750622.57 15750622.77 15750622.97 0.0135 0.0055

Uranus 38412-04-04 12:29 G 15750848.81 15750849.02 15750849.23 0.0135 0.0029

Uranus 38412-11-16 18:29 G 15751075.06 15751075.27 15751075.49 0.0135 0.0005

Uranus 38413-07-01 00:43 G 15751301.32 15751301.53 15751301.75 0.0136 0.0023

Saturn 38413-07-10 16:05 G 15751311.06 15751311.17 15751311.30 0.0299 0.0240

Uranus 38414-02-12 07:12 G 15751527.60 15751527.80 15751528.01 0.0136 0.0050

Saturn 38414-02-25 18:14 G 15751541.06 15751541.26 15751541.47 0.0296 0.0046

Uranus 38414-09-26 13:41 G 15751753.90 15751754.07 15751754.26 0.0136 0.0076

Uranus 38415-05-10 20:24 G 15751980.21 15751980.35 15751980.49 0.0136 0.0103

Uranus 38415-12-23 02:38 G 15752206.56 15752206.61 15752206.70 0.0136 0.0130

Mars 38421-04-06 07:55 G 15754137.66 15754137.83 15754138.01 0.1588 0.0047

Earth 38423-05-02 08:24 G 15754893.70 15754893.85 15754894.00 0.2667 0.0831

Moon 38423-05-02 09:50 G 15754893.77 15754893.91 15754894.05 0.2673 0.1053 *

Jupiter 38424-11-19 13:55 G 15755461.02 15755461.08 15755461.15 0.0497 0.0468

Saturn 38429-03-18 12:58 G 15757040.92 15757041.04 15757041.17 0.0264 0.0213

Saturn 38429-11-02 13:26 G 15757269.85 15757270.06 15757270.27 0.0266 0.0015

Saturn 38430-06-19 15:07 G 15757498.98 15757499.13 15757499.28 0.0268 0.0189

Jupiter 38430-09-22 16:48 G 15757594.03 15757594.20 15757594.37 0.0528 0.0289

Moon 38431-04-30 04:48 G 15757813.60 15757813.70 15757813.80 0.2671 0.1998

Jupiter 38436-07-25 15:07 G 15759726.93 15759727.13 15759727.33 0.0497 0.0066

Jupiter 38442-05-28 09:50 G 15761859.72 15761859.91 15761860.10 0.0529 0.0192

Saturn 38443-01-20 23:17 G 15762097.32 15762097.47 15762097.63 0.0298 0.0199

Saturn 38443-09-08 00:58 G 15762327.34 15762327.54 15762327.74 0.0295 0.0084

Jupiter 38448-03-30 13:41 G 15763992.93 15763993.07 15763993.22 0.0497 0.0347

Uranus 38450-09-10 16:05 G 15764887.08 15764887.17 15764887.29 0.0144 0.0126

Uranus 38451-04-25 03:50 G 15765113.50 15765113.66 15765113.83 0.0143 0.0094

Uranus 38451-12-07 15:07 G 15765339.95 15765340.13 15765340.34 0.0143 0.0064

Uranus 38452-07-21 02:53 G 15765566.41 15765566.62 15765566.83 0.0143 0.0031

Uranus 38453-03-04 14:10 G 15765792.87 15765793.09 15765793.31 0.0143 0.0001

Uranus 38453-10-17 01:12 G 15766019.34 15766019.55 15766019.76 0.0143 0.0031

Mars 38454-03-04 03:22 G 15766157.54 15766157.64 15766157.74 0.1948 0.1586

Uranus 38454-05-31 12:00 G 15766245.81 15766246.00 15766246.20 0.0142 0.0062

Uranus 38455-01-12 22:34 G 15766472.29 15766472.44 15766472.62 0.0142 0.0092

Uranus 38455-08-27 09:22 G 15766698.79 15766698.89 15766699.01 0.0142 0.0122

Saturn 38458-09-28 18:29 G 15767827.13 15767827.27 15767827.43 0.0264 0.0183

Saturn 38459-05-15 19:26 G 15768056.09 15768056.31 15768056.52 0.0266 0.0018

Saturn 38459-12-30 21:22 G 15768285.28 15768285.39 15768285.51 0.0268 0.0223

Jupiter 38472-04-01 23:46 G 15772761.33 15772761.49 15772761.66 0.0497 0.0292

Saturn 38472-08-02 08:38 G 15772883.69 15772883.86 15772884.05 0.0298 0.0159

Saturn 38473-03-20 10:05 G 15773113.74 15773113.92 15773114.12 0.0296 0.0125

Jupiter 38478-02-02 23:46 G 15774894.29 15774894.49 15774894.70 0.0528 0.0084

Jupiter 38483-12-07 00:58 G 15777027.34 15777027.54 15777027.74 0.0497 0.0109

Neptune 38486-02-10 12:14 G 15777823.94 15777824.01 15777824.11 0.0089 0.0082

Neptune 38486-09-24 01:26 G 15778049.43 15778049.56 15778049.72 0.0089 0.0067

Mars 38487-02-01 21:22 G 15778180.21 15778180.39 15778180.56 0.1588 0.0250

Neptune 38487-05-07 14:24 G 15778274.94 15778275.10 15778275.30 0.0089 0.0052

Neptune 38487-12-19 03:50 G 15778500.46 15778500.66 15778500.87 0.0089 0.0036

Saturn 38488-04-10 00:43 G 15778613.37 15778613.53 15778613.72 0.0264 0.0153

Neptune 38488-07-31 17:02 G 15778726.00 15778726.21 15778726.43 0.0089 0.0020

Saturn 38488-11-25 01:55 G 15778842.37 15778842.58 15778842.79 0.0266 0.0049

Neptune 38489-03-14 06:29 G 15778951.55 15778951.77 15778951.99 0.0089 0.0005

Saturn 38489-07-12 04:05 G 15779071.61 15779071.67 15779071.74 0.0269 0.0255

Jupiter 38489-10-08 14:24 G 15779159.97 15779160.10 15779160.23 0.0528 0.0410

Neptune 38489-10-25 19:26 G 15779177.10 15779177.31 15779177.53 0.0089 0.0010

Neptune 38490-06-08 08:38 G 15779402.65 15779402.86 15779403.07 0.0089 0.0025

Neptune 38491-01-19 21:50 G 15779628.21 15779628.41 15779628.60 0.0089 0.0041

Neptune 38491-09-02 10:34 G 15779853.79 15779853.94 15779854.13 0.0089 0.0056

Neptune 38492-04-14 23:46 G 15780079.38 15780079.49 15780079.64 0.0089 0.0072

Neptune 38492-11-26 12:58 G 15780305.00 15780305.04 15780305.11 0.0089 0.0087

Uranus 38494-01-24 04:05 G 15780728.58 15780728.67 15780728.79 0.0135 0.0116

Uranus 38494-09-07 10:19 G 15780954.77 15780954.93 15780955.09 0.0135 0.0090

Uranus 38495-04-21 15:50 G 15781180.98 15781181.16 15781181.36 0.0135 0.0065

Uranus 38495-12-03 22:05 G 15781407.22 15781407.42 15781407.63 0.0135 0.0039

Uranus 38496-07-17 04:19 G 15781633.46 15781633.68 15781633.89 0.0135 0.0013

Uranus 38497-02-28 10:34 G 15781859.73 15781859.94 15781860.16 0.0136 0.0014

Uranus 38497-10-12 16:48 G 15782086.00 15782086.20 15782086.42 0.0136 0.0040

Uranus 38498-05-26 23:17 G 15782312.29 15782312.47 15782312.67 0.0136 0.0066

Uranus 38499-01-08 05:46 G 15782538.59 15782538.74 15782538.91 0.0136 0.0093

Uranus 38499-08-22 12:29 G 15782764.93 15782765.02 15782765.14 0.0136 0.0120

Saturn 38502-02-13 17:31 G 15783670.04 15783670.23 15783670.43 0.0297 0.0114

Saturn 38502-10-01 18:14 G 15783900.10 15783900.26 15783900.44 0.0295 0.0167

Pluto 38504-07-30 00:58 G 15784567.46 15784567.54 15784567.66 0.0064 0.0056

Pluto 38505-03-12 05:17 G 15784792.51 15784792.72 15784792.94 0.0064 0.0014

Pluto 38505-10-23 09:22 G 15785017.70 15785017.89 15785018.09 0.0064 0.0030

Jupiter 38513-10-12 15:50 G 15787929.01 15787929.16 15787929.31 0.0529 0.0365

Saturn 38517-10-22 06:29 G 15789399.59 15789399.77 15789399.97 0.0265 0.0122

Saturn 38518-06-08 07:55 G 15789628.63 15789628.83 15789629.03 0.0267 0.0081

Jupiter 38519-08-15 09:07 G 15790061.68 15790061.88 15790062.08 0.0497 0.0112

Jupiter 38525-06-17 06:00 G 15792194.55 15792194.75 15792194.95 0.0528 0.0128

Earth 38528-11-03 15:50 G 15793430.08 15793430.16 15793430.24 0.2664 0.2289

Moon 38528-11-03 19:26 G 15793430.24 15793430.31 15793430.37 0.2670 0.2403 *

Jupiter 38531-04-20 10:19 G 15794327.76 15794327.93 15794328.10 0.0497 0.0287

Saturn 38531-08-27 04:19 G 15794456.47 15794456.68 15794456.88 0.0297 0.0071

Saturn 38532-04-13 04:48 G 15794686.56 15794686.70 15794686.85 0.0295 0.0209

Uranus 38534-05-11 22:34 G 15795445.39 15795445.44 15795445.50 0.0144 0.0138

Uranus 38534-12-24 10:05 G 15795671.78 15795671.92 15795672.07 0.0143 0.0107

Uranus 38535-08-07 21:36 G 15795898.22 15795898.40 15795898.60 0.0143 0.0076

Uranus 38536-03-21 09:07 G 15796124.67 15796124.88 15796125.09 0.0143 0.0044

Earth 38536-11-01 06:29 G 15796349.64 15796349.77 15796349.90 0.2664 0.1458

Moon 38536-11-01 12:14 G 15796349.87 15796350.01 15796350.16 0.2665 0.0980 *

Uranus 38536-11-02 20:24 G 15796351.13 15796351.35 15796351.56 0.0143 0.0013

Uranus 38537-06-17 07:12 G 15796577.59 15796577.80 15796578.02 0.0143 0.0019

Uranus 38538-01-29 18:14 G 15796804.06 15796804.26 15796804.47 0.0142 0.0049

Uranus 38538-09-13 05:02 G 15797030.54 15797030.71 15797030.90 0.0142 0.0080

Uranus 38539-04-27 15:22 G 15797257.03 15797257.14 15797257.30 0.0142 0.0110

Uranus 38539-12-10 02:24 G 15797483.56 15797483.60 15797483.64 0.0142 0.0139

Saturn 38547-05-04 13:41 G 15800185.88 15800186.07 15800186.28 0.0265 0.0089

Saturn 38547-12-19 15:07 G 15800414.94 15800415.13 15800415.33 0.0267 0.0114

Mars 38552-11-30 10:34 G 15802222.77 15802222.94 15802223.10 0.1588 0.0473

Jupiter 38555-04-22 19:41 G 15803096.18 15803096.32 15803096.47 0.0497 0.0347

Jupiter 38561-02-22 19:41 G 15805229.13 15805229.32 15805229.52 0.0529 0.0142

Saturn 38561-03-08 14:10 G 15805242.88 15805243.09 15805243.30 0.0296 0.0025

Saturn 38561-10-24 14:10 G 15805472.98 15805473.09 15805473.20 0.0294 0.0252

Jupiter 38566-12-26 18:58 G 15807362.09 15807362.29 15807362.49 0.0497 0.0062

Neptune 38568-11-09 11:31 G 15808045.92 15808045.98 15808046.06 0.0088 0.0083

Neptune 38569-06-23 00:00 G 15808271.39 15808271.50 15808271.66 0.0088 0.0069

Neptune 38570-02-03 13:12 G 15808496.88 15808497.05 15808497.23 0.0088 0.0054

Neptune 38570-09-17 01:55 G 15808722.40 15808722.58 15808722.80 0.0088 0.0040

Neptune 38571-04-30 15:07 G 15808947.92 15808948.13 15808948.35 0.0088 0.0025

Neptune 38571-12-12 04:05 G 15809173.45 15809173.67 15809173.89 0.0088 0.0010

Neptune 38572-07-24 16:48 G 15809398.98 15809399.20 15809399.42 0.0088 0.0005

Jupiter 38572-10-28 11:46 G 15809494.84 15809494.99 15809495.14 0.0529 0.0342

Neptune 38573-03-07 05:31 G 15809624.52 15809624.73 15809624.96 0.0088 0.0019

Neptune 38573-10-18 18:29 G 15809850.07 15809850.27 15809850.48 0.0088 0.0034

Neptune 38574-06-01 07:26 G 15810075.63 15810075.81 15810076.00 0.0088 0.0049

Neptune 38575-01-12 19:55 G 15810301.20 15810301.33 15810301.50 0.0088 0.0064

Neptune 38575-08-26 08:53 G 15810526.79 15810526.87 15810526.99 0.0088 0.0078

Saturn 38576-03-29 18:58 G 15810743.26 15810743.29 15810743.35 0.0264 0.0257

Saturn 38576-11-13 19:26 G 15810972.11 15810972.31 15810972.52 0.0265 0.0059

Saturn 38577-06-30 21:07 G 15811201.21 15811201.38 15811201.57 0.0267 0.0147

Uranus 38577-09-24 13:26 G 15811287.00 15811287.06 15811287.15 0.0135 0.0126

Uranus 38578-05-08 19:26 G 15811513.17 15811513.31 15811513.46 0.0135 0.0100

Jupiter 38578-08-31 19:41 G 15811628.26 15811628.32 15811628.40 0.0497 0.0464

Uranus 38578-12-21 01:12 G 15811739.38 15811739.55 15811739.74 0.0135 0.0075

Uranus 38579-08-04 07:12 G 15811965.61 15811965.80 15811966.02 0.0135 0.0050

Uranus 38580-03-17 13:41 G 15812191.86 15812192.07 15812192.29 0.0135 0.0023

Uranus 38580-10-29 19:55 G 15812418.12 15812418.33 15812418.55 0.0136 0.0004

Uranus 38581-06-13 02:10 G 15812644.38 15812644.59 15812644.81 0.0136 0.0030

Uranus 38582-01-25 08:38 G 15812870.67 15812870.86 15812871.07 0.0136 0.0057

Uranus 38582-09-08 15:07 G 15813096.97 15813097.13 15813097.31 0.0136 0.0083

Uranus 38583-04-22 22:05 G 15813323.30 15813323.42 15813323.55 0.0136 0.0110

Uranus 38583-12-05 04:48 G 15813549.70 15813549.70 15813549.72 0.0137 0.0137

Mars 38584-11-29 00:43 G 15813909.45 15813909.53 15813909.60 0.1588 0.1422

Saturn 38590-01-31 22:34 G 15815799.36 15815799.44 15815799.54 0.0299 0.0268

Saturn 38590-09-19 00:43 G 15816029.33 15816029.53 15816029.75 0.0297 0.0020

Pluto 38593-06-22 07:26 G 15817036.81 15817036.81 15817036.81 0.0080 0.0080

Pluto 38594-02-02 17:46 G 15817262.02 15817262.24 15817262.46 0.0080 0.0004

Jupiter 38596-10-31 09:36 G 15818263.78 15818263.90 15818264.02 0.0528 0.0413

Jupiter 38602-09-04 05:17 G 15820396.53 15820396.72 15820396.91 0.0497 0.0170

Saturn 38605-10-11 01:55 G 15821529.48 15821529.58 15821529.70 0.0264 0.0225

Saturn 38606-05-28 02:38 G 15821758.40 15821758.61 15821758.82 0.0266 0.0026

Saturn 38607-01-12 04:19 G 15821987.53 15821987.68 15821987.85 0.0268 0.0180

Jupiter 38608-07-06 23:46 G 15822529.29 15822529.49 15822529.69 0.0528 0.0081

Jupiter 38614-05-10 06:00 G 15824662.57 15824662.75 15824662.93 0.0497 0.0232

Mars 38617-10-28 11:02 G 15825929.83 15825929.96 15825930.08 0.1948 0.1327

Uranus 38618-08-24 17:17 G 15826230.12 15826230.22 15826230.36 0.0144 0.0119

Mars 38618-09-29 00:00 G 15826265.34 15826265.50 15826265.65 0.1588 0.0687

Uranus 38619-04-08 04:48 G 15826456.54 15826456.70 15826456.89 0.0143 0.0088

Saturn 38619-08-15 09:22 G 15826585.76 15826585.89 15826586.04 0.0298 0.0219

Uranus 38619-11-20 16:19 G 15826682.99 15826683.18 15826683.39 0.0143 0.0056

Saturn 38620-04-01 11:17 G 15826815.76 15826815.97 15826816.18 0.0296 0.0065

Uranus 38620-07-04 03:36 G 15826909.44 15826909.65 15826909.87 0.0143 0.0025

Uranus 38621-02-15 14:53 G 15827135.90 15827136.12 15827136.34 0.0143 0.0007

Uranus 38621-09-30 01:41 G 15827362.37 15827362.57 15827362.79 0.0143 0.0038

Uranus 38622-05-14 12:29 G 15827588.84 15827589.02 15827589.22 0.0142 0.0068

Uranus 38622-12-26 23:17 G 15827815.32 15827815.47 15827815.63 0.0142 0.0098

Uranus 38623-08-10 10:05 G 15828041.83 15828041.92 15828042.01 0.0142 0.0128

Saturn 38635-04-23 07:12 G 15832315.66 15832315.80 15832315.95 0.0264 0.0197

Saturn 38635-12-08 07:55 G 15832544.62 15832544.83 15832545.05 0.0266 0.0005

Saturn 38636-07-24 09:50 G 15832773.80 15832773.91 15832774.06 0.0268 0.0212

Jupiter 38638-05-12 13:41 G 15833430.95 15833431.07 15833431.20 0.0497 0.0393

Jupiter 38644-03-14 14:53 G 15835563.94 15835564.12 15835564.31 0.0528 0.0201

Saturn 38649-02-24 20:24 G 15837372.18 15837372.35 15837372.52 0.0298 0.0176

Saturn 38649-10-12 21:50 G 15837602.21 15837602.41 15837602.60 0.0296 0.0108

Jupiter 38650-01-15 14:24 G 15837696.90 15837697.10 15837697.31 0.0497 0.0008

Neptune 38650-05-16 23:02 G 15837818.43 15837818.46 15837818.55 0.0089 0.0087

Mars 38650-09-27 13:55 G 15837951.96 15837952.08 15837952.19 0.1588 0.1202

Neptune 38650-12-28 12:58 G 15838043.91 15838044.04 15838044.17 0.0089 0.0071

Neptune 38651-08-11 01:55 G 15838269.41 15838269.58 15838269.76 0.0089 0.0056

Neptune 38652-03-23 15:07 G 15838494.94 15838495.13 15838495.33 0.0089 0.0041

Neptune 38652-11-04 04:19 G 15838720.48 15838720.68 15838720.90 0.0089 0.0025

Neptune 38653-06-17 17:31 G 15838946.01 15838946.23 15838946.45 0.0089 0.0010

Neptune 38654-01-29 06:43 G 15839171.56 15839171.78 15839172.00 0.0089 0.0005

Neptune 38654-09-11 19:41 G 15839397.11 15839397.32 15839397.54 0.0089 0.0021

Neptune 38655-04-25 09:07 G 15839622.68 15839622.88 15839623.08 0.0089 0.0036

Jupiter 38655-11-18 06:14 G 15839829.59 15839829.76 15839829.93 0.0528 0.0287

Neptune 38655-12-06 21:50 G 15839848.25 15839848.41 15839848.60 0.0089 0.0051

Neptune 38656-07-19 10:48 G 15840073.83 15840073.95 15840074.12 0.0089 0.0067

Neptune 38657-03-02 00:00 G 15840299.44 15840299.50 15840299.61 0.0089 0.0082

Jupiter 38661-09-20 15:22 G 15841963.03 15841963.14 15841963.26 0.0497 0.0409

Uranus 38662-01-07 04:34 G 15842071.58 15842071.69 15842071.83 0.0135 0.0110

Uranus 38662-08-21 10:48 G 15842297.78 15842297.95 15842298.12 0.0135 0.0084

Uranus 38663-04-04 16:48 G 15842524.01 15842524.20 15842524.40 0.0135 0.0059

Uranus 38663-11-16 22:48 G 15842750.24 15842750.45 15842750.66 0.0135 0.0033

Uranus 38664-06-30 05:02 G 15842976.49 15842976.71 15842976.93 0.0135 0.0007

Saturn 38664-11-02 13:41 G 15843101.91 15843102.07 15843102.24 0.0264 0.0165

Uranus 38665-02-11 11:31 G 15843202.76 15843202.98 15843203.19 0.0136 0.0020

Saturn 38665-06-19 14:38 G 15843330.90 15843331.11 15843331.32 0.0266 0.0037

Uranus 38665-09-25 17:46 G 15843429.04 15843429.24 15843429.45 0.0136 0.0047

Saturn 38666-02-03 16:48 G 15843560.13 15843560.20 15843560.30 0.0269 0.0245

Earth 38666-05-04 10:19 G 15843649.78 15843649.93 15843650.08 0.2668 0.0802

Moon 38666-05-04 10:48 G 15843649.79 15843649.95 15843650.12 0.2661 0.0586 *

Uranus 38666-05-10 00:14 G 15843655.34 15843655.51 15843655.70 0.0136 0.0073

Uranus 38666-12-22 06:58 G 15843881.65 15843881.79 15843881.94 0.0136 0.0100

Uranus 38667-08-05 13:26 G 15844108.00 15844108.06 15844108.16 0.0137 0.0127

Saturn 38678-09-07 06:14 G 15848158.58 15848158.76 15848158.96 0.0297 0.0130

Saturn 38679-04-25 07:26 G 15848388.63 15848388.81 15848388.99 0.0295 0.0153

Jupiter 38679-11-21 04:34 G 15848598.60 15848598.69 15848598.78 0.0529 0.0467

Mars 38683-08-25 12:29 G 15849971.85 15849972.02 15849972.20 0.1947 0.0399

Mars 38684-07-26 12:43 G 15850307.89 15850308.03 15850308.17 0.1589 0.0916

Jupiter 38685-09-23 00:14 G 15850731.33 15850731.51 15850731.69 0.0497 0.0221

Jupiter 38691-07-26 20:38 G 15852864.15 15852864.36 15852864.56 0.0529 0.0019

Saturn 38694-05-15 17:46 G 15853888.07 15853888.24 15853888.43 0.0265 0.0139

Saturn 38694-12-30 18:58 G 15854117.09 15854117.29 15854117.50 0.0267 0.0065

Jupiter 38697-05-29 01:12 G 15854997.36 15854997.55 15854997.74 0.0497 0.0179

Uranus 38702-04-25 00:43 G 15856788.45 15856788.53 15856788.63 0.0144 0.0130

Uranus 38702-12-07 12:00 G 15857014.86 15857015.00 15857015.17 0.0143 0.0099

Jupiter 38703-04-01 11:46 G 15857129.93 15857129.99 15857130.06 0.0528 0.0499

Uranus 38703-07-21 23:46 G 15857241.30 15857241.49 15857241.69 0.0143 0.0068

Uranus 38704-03-04 11:02 G 15857467.75 15857467.96 15857468.17 0.0143 0.0037

Uranus 38704-10-16 22:19 G 15857694.21 15857694.43 15857694.65 0.0143 0.0006

Uranus 38705-05-31 09:07 G 15857920.67 15857920.88 15857921.10 0.0143 0.0026

Uranus 38706-01-12 19:55 G 15858147.14 15858147.33 15858147.54 0.0142 0.0057

Uranus 38706-08-27 06:43 G 15858373.62 15858373.78 15858373.97 0.0142 0.0087

Uranus 38707-04-10 17:31 G 15858600.12 15858600.23 15858600.36 0.0142 0.0117

Saturn 38708-03-20 16:19 G 15858944.98 15858945.18 15858945.39 0.0298 0.0088

Saturn 38708-11-05 17:17 G 15859175.06 15859175.22 15859175.38 0.0295 0.0193

Mars 38716-07-26 02:53 G 15861994.49 15861994.62 15861994.76 0.1588 0.0983

Jupiter 38721-06-01 10:05 G 15863765.85 15863765.92 15863766.01 0.0497 0.0453

Saturn 38723-11-26 23:46 G 15864674.30 15864674.49 15864674.69 0.0265 0.0107

Saturn 38724-07-13 00:58 G 15864903.35 15864903.54 15864903.74 0.0267 0.0096

Jupiter 38727-04-04 10:05 G 15865898.74 15865898.92 15865899.09 0.0528 0.0254

Jupiter 38733-02-04 11:17 G 15868031.77 15868031.97 15868032.18 0.0497 0.0053

Neptune 38733-02-12 23:02 G 15868040.44 15868040.46 15868040.48 0.0088 0.0087

Neptune 38733-09-26 11:31 G 15868265.88 15868265.98 15868266.13 0.0088 0.0073

Neptune 38734-05-10 00:43 G 15868491.38 15868491.53 15868491.70 0.0088 0.0058

Neptune 38734-12-21 13:26 G 15868716.88 15868717.06 15868717.27 0.0088 0.0044

Neptune 38735-08-04 02:24 G 15868942.40 15868942.60 15868942.82 0.0088 0.0029

Neptune 38736-03-16 15:36 G 15869167.93 15869168.15 15869168.37 0.0088 0.0014

Neptune 38736-10-28 04:34 G 15869393.47 15869393.69 15869393.91 0.0088 0.0001

Neptune 38737-06-10 17:02 G 15869619.00 15869619.21 15869619.44 0.0088 0.0016

Saturn 38737-10-01 01:26 G 15869731.35 15869731.56 15869731.77 0.0297 0.0044

Neptune 38738-01-22 06:00 G 15869844.55 15869844.75 15869844.96 0.0088 0.0030

Saturn 38738-05-19 01:41 G 15869961.45 15869961.57 15869961.70 0.0294 0.0236

Neptune 38738-09-04 18:43 G 15870070.11 15870070.28 15870070.49 0.0088 0.0045

Jupiter 38738-12-08 01:41 G 15870164.39 15870164.57 15870164.75 0.0528 0.0231

Neptune 38739-04-18 07:26 G 15870295.67 15870295.81 15870296.00 0.0088 0.0059

Neptune 38739-11-29 20:24 G 15870521.25 15870521.35 15870521.49 0.0088 0.0074

Neptune 38740-07-12 09:07 G 15870746.88 15870746.88 15870746.92 0.0088 0.0088

Jupiter 38744-10-10 12:00 G 15872297.86 15872298.00 15872298.15 0.0497 0.0347

Uranus 38745-09-07 13:12 G 15872629.96 15872630.05 15872630.16 0.0135 0.0120

Uranus 38746-04-21 18:58 G 15872856.15 15872856.29 15872856.45 0.0135 0.0095

Uranus 38746-12-04 00:58 G 15873082.36 15873082.54 15873082.73 0.0135 0.0069

Uranus 38747-07-18 07:12 G 15873308.59 15873308.80 15873309.00 0.0135 0.0043

Uranus 38748-02-29 13:26 G 15873534.85 15873535.06 15873535.28 0.0135 0.0017

Uranus 38748-10-12 19:41 G 15873761.11 15873761.32 15873761.54 0.0136 0.0009

Uranus 38749-05-27 01:55 G 15873987.38 15873987.58 15873987.80 0.0136 0.0036

Mars 38749-06-22 13:26 G 15874013.89 15874014.06 15874014.23 0.1947 0.0583

Uranus 38750-01-08 08:24 G 15874213.66 15874213.85 15874214.05 0.0136 0.0062

Mars 38750-05-25 02:10 G 15874350.47 15874350.59 15874350.71 0.1589 0.1130

Uranus 38750-08-22 15:07 G 15874439.97 15874440.13 15874440.30 0.0136 0.0089

Uranus 38751-04-05 21:36 G 15874666.31 15874666.40 15874666.53 0.0136 0.0116

Pluto 38751-04-12 01:26 G 15874672.43 15874672.56 15874672.72 0.0064 0.0048

Pluto 38751-11-23 05:46 G 15874897.52 15874897.74 15874897.96 0.0064 0.0005

Pluto 38752-07-05 09:36 G 15875122.73 15875122.90 15875123.08 0.0064 0.0038

Saturn 38753-06-08 03:07 G 15875460.43 15875460.63 15875460.84 0.0265 0.0082

Saturn 38754-01-23 04:19 G 15875689.50 15875689.68 15875689.88 0.0267 0.0123

Saturn 38766-08-26 06:58 G 15880287.75 15880287.79 15880287.83 0.0299 0.0294

Saturn 38767-04-13 09:36 G 15880517.69 15880517.90 15880518.11 0.0297 0.0006

Saturn 38767-11-29 09:50 G 15880747.84 15880747.91 15880747.99 0.0294 0.0273

Jupiter 38768-10-12 20:38 G 15881066.20 15881066.36 15881066.53 0.0497 0.0282

Moon 38771-11-06 14:24 G 15882186.01 15882186.10 15882186.19 0.2658 0.2253

Earth 38771-11-06 16:19 G 15882186.08 15882186.18 15882186.27 0.2664 0.2139 *

Jupiter 38774-08-15 18:00 G 15883199.05 15883199.25 15883199.46 0.0528 0.0057

Moon 38779-11-04 01:26 G 15885105.47 15885105.56 15885105.65 0.2661 0.2224

Earth 38779-11-04 06:58 G 15885105.66 15885105.79 15885105.91 0.2663 0.1604

Jupiter 38780-06-17 22:05 G 15885332.22 15885332.42 15885332.62 0.0498 0.0118

Saturn 38782-05-04 07:55 G 15886017.77 15886017.83 15886017.90 0.0263 0.0250

Mars 38782-05-23 16:19 G 15886037.03 15886037.18 15886037.33 0.1588 0.0766

Saturn 38782-12-19 07:55 G 15886246.62 15886246.83 15886247.04 0.0265 0.0053

Saturn 38783-08-05 09:22 G 15886475.72 15886475.89 15886476.07 0.0267 0.0151

Uranus 38785-12-23 06:00 G 15887346.75 15887346.75 15887346.77 0.0144 0.0143

Jupiter 38786-04-20 08:38 G 15887464.75 15887464.86 15887464.97 0.0528 0.0435

Uranus 38786-08-06 17:31 G 15887573.11 15887573.23 15887573.38 0.0144 0.0113

Uranus 38787-03-21 05:02 G 15887799.55 15887799.71 15887799.91 0.0143 0.0082

Uranus 38787-11-02 16:34 G 15888026.00 15888026.19 15888026.40 0.0143 0.0050

Uranus 38788-06-16 03:50 G 15888252.45 15888252.66 15888252.88 0.0143 0.0019

Uranus 38789-01-28 15:07 G 15888478.92 15888479.13 15888479.35 0.0143 0.0013

Uranus 38789-09-12 02:10 G 15888705.39 15888705.59 15888705.81 0.0142 0.0044

Uranus 38790-04-26 12:58 G 15888931.87 15888932.04 15888932.24 0.0142 0.0075

Uranus 38790-12-09 00:00 G 15889158.36 15889158.50 15889158.65 0.0142 0.0104

Uranus 38791-07-23 10:19 G 15889384.88 15889384.93 15889385.02 0.0142 0.0135

Saturn 38796-03-07 14:38 G 15891074.01 15891074.11 15891074.23 0.0299 0.0253

Saturn 38796-10-23 17:02 G 15891304.00 15891304.21 15891304.42 0.0296 0.0035

Jupiter 38810-04-23 09:07 G 15896233.72 15896233.88 15896234.04 0.0529 0.0332

Saturn 38811-11-14 10:05 G 15896803.82 15896803.92 15896804.03 0.0264 0.0228

Saturn 38812-06-30 10:05 G 15897032.71 15897032.92 15897033.14 0.0265 0.0031

Saturn 38813-02-14 11:46 G 15897261.83 15897261.99 15897262.15 0.0267 0.0175

Neptune 38815-04-02 00:00 G 15898038.40 15898038.50 15898038.64 0.0089 0.0075

Mars 38815-04-19 15:07 G 15898056.02 15898056.13 15898056.24 0.1946 0.1524

Neptune 38815-11-13 12:58 G 15898263.90 15898264.04 15898264.23 0.0089 0.0061

Jupiter 38816-02-24 09:36 G 15898366.70 15898366.90 15898367.10 0.0497 0.0120

Mars 38816-03-21 15:07 G 15898393.04 15898393.13 15898393.21 0.1589 0.1361

Neptune 38816-06-26 02:10 G 15898489.42 15898489.59 15898489.80 0.0089 0.0046

Neptune 38817-02-06 15:50 G 15898714.95 15898715.16 15898715.37 0.0089 0.0030

Neptune 38817-09-20 04:48 G 15898940.49 15898940.70 15898940.92 0.0089 0.0015

Neptune 38818-05-03 18:00 G 15899166.03 15899166.25 15899166.47 0.0089 0.0001

Neptune 38818-12-15 07:12 G 15899391.58 15899391.80 15899392.01 0.0089 0.0016

Neptune 38819-07-28 20:10 G 15899617.14 15899617.34 15899617.55 0.0089 0.0031

Neptune 38820-03-10 09:07 G 15899842.71 15899842.88 15899843.08 0.0089 0.0046

Neptune 38820-10-21 22:05 G 15900068.28 15900068.42 15900068.60 0.0089 0.0062

Neptune 38821-06-04 11:17 G 15900293.88 15900293.97 15900294.10 0.0089 0.0076

Jupiter 38821-12-27 01:26 G 15900499.36 15900499.56 15900499.75 0.0528 0.0149

Saturn 38825-09-17 21:22 G 15901860.24 15901860.39 15901860.53 0.0299 0.0217

Saturn 38826-05-05 23:31 G 15902090.28 15902090.48 15902090.69 0.0297 0.0070

Jupiter 38827-10-30 09:22 G 15902632.72 15902632.89 15902633.06 0.0498 0.0286

Uranus 38829-05-07 21:22 G 15903188.36 15903188.39 15903188.46 0.0134 0.0131

Uranus 38829-12-20 03:07 G 15903414.52 15903414.63 15903414.78 0.0135 0.0106

Uranus 38830-08-03 09:22 G 15903640.72 15903640.89 15903641.07 0.0135 0.0080

Uranus 38831-03-17 15:22 G 15903866.95 15903867.14 15903867.35 0.0135 0.0054

Uranus 38831-10-29 21:36 G 15904093.19 15904093.40 15904093.61 0.0135 0.0028

Uranus 38832-06-12 03:50 G 15904319.44 15904319.66 15904319.88 0.0135 0.0002

Uranus 38833-01-24 10:05 G 15904545.71 15904545.92 15904546.14 0.0136 0.0024

Uranus 38833-09-07 16:34 G 15904771.99 15904772.19 15904772.39 0.0136 0.0051

Uranus 38834-04-21 23:02 G 15904998.29 15904998.46 15904998.64 0.0136 0.0077

Uranus 38834-12-04 05:17 G 15905224.60 15905224.72 15905224.88 0.0136 0.0105

Uranus 38835-07-18 12:14 G 15905450.96 15905451.01 15905451.08 0.0136 0.0131

Pluto 38840-03-04 07:41 G 15907141.72 15907141.82 15907141.95 0.0080 0.0068

Pluto 38840-10-15 18:29 G 15907367.06 15907367.27 15907367.49 0.0080 0.0016

Saturn 38841-05-26 13:55 G 15907589.94 15907590.08 15907590.22 0.0263 0.0200

Saturn 38842-01-10 13:55 G 15907818.87 15907819.08 15907819.30 0.0265 0.0005

Saturn 38842-08-27 15:36 G 15908048.02 15908048.15 15908048.29 0.0267 0.0203

Mars 38848-03-20 05:17 G 15910079.56 15910079.72 15910079.89 0.1588 0.0541

Jupiter 38851-11-01 20:24 G 15911401.21 15911401.35 15911401.50 0.0497 0.0356

Saturn 38855-03-31 03:22 G 15912646.48 15912646.64 15912646.81 0.0299 0.0181

Saturn 38855-11-16 05:17 G 15912876.53 15912876.72 15912876.93 0.0296 0.0107

Jupiter 38857-09-03 16:48 G 15913534.00 15913534.20 15913534.39 0.0528 0.0128

Jupiter 38863-07-07 22:05 G 15915667.21 15915667.42 15915667.62 0.0497 0.0042

Jupiter 38869-05-09 09:07 G 15917799.73 15917799.88 15917800.03 0.0528 0.0351

Uranus 38870-04-05 21:22 G 15918131.30 15918131.39 15918131.50 0.0144 0.0127

Uranus 38870-11-18 09:07 G 15918357.72 15918357.88 15918358.04 0.0143 0.0096

Saturn 38870-12-06 14:53 G 15918375.98 15918376.12 15918376.29 0.0264 0.0181

Uranus 38871-07-02 20:24 G 15918584.16 15918584.35 15918584.55 0.0143 0.0065

Saturn 38871-07-23 15:07 G 15918604.92 15918605.13 15918605.35 0.0266 0.0019

Uranus 38872-02-14 07:55 G 15918810.62 15918810.83 15918811.05 0.0143 0.0033

Saturn 38872-03-08 16:48 G 15918834.09 15918834.20 15918834.32 0.0268 0.0224

Uranus 38872-09-27 19:26 G 15919037.09 15919037.31 15919037.52 0.0143 0.0003

Uranus 38873-05-12 06:14 G 15919263.56 15919263.76 15919263.98 0.0143 0.0030

Uranus 38873-12-24 17:17 G 15919490.03 15919490.22 15919490.43 0.0142 0.0060

Uranus 38874-08-08 04:34 G 15919716.52 15919716.69 15919716.86 0.0142 0.0091

Jupiter 38875-03-12 23:17 G 15919933.39 15919933.47 15919933.58 0.0497 0.0439

Uranus 38875-03-22 14:53 G 15919943.03 15919943.12 15919943.25 0.0142 0.0121

Mars 38882-01-17 04:19 G 15922435.67 15922435.68 15922435.69 0.1590 0.1582

Saturn 38884-10-10 07:26 G 15923432.63 15923432.81 15923433.00 0.0299 0.0150

Saturn 38885-05-28 09:36 G 15923662.71 15923662.90 15923663.09 0.0296 0.0137

Jupiter 38893-05-12 11:02 G 15926568.85 15926568.96 15926569.08 0.0528 0.0423

Neptune 38897-12-28 22:48 G 15928260.37 15928260.45 15928260.58 0.0088 0.0077

Neptune 38898-08-11 12:14 G 15928485.86 15928486.01 15928486.17 0.0088 0.0062

Jupiter 38899-03-15 08:38 G 15928701.67 15928701.86 15928702.05 0.0498 0.0191

Neptune 38899-03-25 00:58 G 15928711.37 15928711.54 15928711.74 0.0088 0.0048

Neptune 38899-11-05 14:10 G 15928936.89 15928937.09 15928937.30 0.0088 0.0033

Saturn 38900-06-18 18:00 G 15929162.08 15929162.25 15929162.42 0.0263 0.0154

Neptune 38900-06-19 02:53 G 15929162.41 15929162.62 15929162.84 0.0088 0.0019 *

Neptune 38901-01-30 16:05 G 15929387.94 15929388.17 15929388.39 0.0088 0.0004

Saturn 38901-02-02 18:00 G 15929391.04 15929391.25 15929391.46 0.0265 0.0046

Neptune 38901-09-13 04:48 G 15929613.49 15929613.70 15929613.93 0.0088 0.0011

Saturn 38901-09-19 19:41 G 15929620.26 15929620.32 15929620.40 0.0267 0.0251

Neptune 38902-04-26 17:46 G 15929839.03 15929839.24 15929839.46 0.0088 0.0025

Neptune 38902-12-08 06:29 G 15930064.59 15930064.77 15930064.98 0.0088 0.0040

Neptune 38903-07-21 19:26 G 15930290.14 15930290.31 15930290.49 0.0088 0.0054

Neptune 38904-03-03 07:55 G 15930515.72 15930515.83 15930515.99 0.0088 0.0069

Neptune 38904-10-14 21:07 G 15930741.33 15930741.38 15930741.47 0.0088 0.0084

Jupiter 38905-01-16 02:10 G 15930834.39 15930834.59 15930834.79 0.0528 0.0063

Moon 38909-05-06 09:50 G 15932405.77 15932405.91 15932406.06 0.2675 0.0909

Earth 38909-05-06 12:14 G 15932405.86 15932406.01 15932406.16 0.2668 0.0783 *

Jupiter 38910-11-19 10:34 G 15932967.75 15932967.94 15932968.13 0.0498 0.0204

Uranus 38913-08-20 11:46 G 15933972.90 15933972.99 15933973.11 0.0135 0.0116

Mars 38914-01-16 18:43 G 15934122.11 15934122.28 15934122.45 0.1589 0.0324

Uranus 38914-04-03 17:31 G 15934199.09 15934199.23 15934199.41 0.0135 0.0091

Saturn 38914-04-23 12:14 G 15934218.82 15934219.01 15934219.20 0.0299 0.0116

Uranus 38914-11-15 23:46 G 15934425.31 15934425.49 15934425.69 0.0135 0.0065

Saturn 38914-12-09 14:10 G 15934448.92 15934449.09 15934449.26 0.0296 0.0169

Uranus 38915-06-30 05:46 G 15934651.54 15934651.74 15934651.96 0.0135 0.0039

Uranus 38916-02-11 12:14 G 15934877.79 15934878.01 15934878.22 0.0135 0.0013

Uranus 38916-09-24 18:29 G 15935104.05 15935104.27 15935104.49 0.0135 0.0013

Uranus 38917-05-09 00:43 G 15935330.33 15935330.53 15935330.74 0.0136 0.0040

Uranus 38917-12-21 07:12 G 15935556.61 15935556.80 15935556.99 0.0136 0.0066

Uranus 38918-08-04 13:26 G 15935782.92 15935783.06 15935783.23 0.0136 0.0093

Uranus 38919-03-18 20:10 G 15936009.26 15936009.34 15936009.46 0.0136 0.0120

Saturn 38929-12-29 18:14 G 15939948.08 15939948.26 15939948.45 0.0264 0.0135

Saturn 38930-08-15 18:29 G 15940177.06 15940177.27 15940177.48 0.0266 0.0065

Jupiter 38934-11-21 21:50 G 15941736.32 15941736.41 15941736.51 0.0497 0.0437

Jupiter 38940-09-23 20:10 G 15943869.17 15943869.34 15943869.53 0.0528 0.0231

Saturn 38943-11-03 14:53 G 15945004.92 15945005.12 15945005.33 0.0299 0.0088

Saturn 38944-06-20 16:48 G 15945235.05 15945235.20 15945235.36 0.0296 0.0197

Jupiter 38946-07-27 21:22 G 15946002.18 15946002.39 15946002.59 0.0498 0.0032

Jupiter 38952-05-29 13:41 G 15948134.89 15948135.07 15948135.25 0.0528 0.0244

Uranus 38953-12-05 00:14 G 15948689.50 15948689.51 15948689.57 0.0144 0.0142

Uranus 38954-07-19 12:00 G 15948915.88 15948916.00 15948916.16 0.0144 0.0111

Uranus 38955-03-02 23:46 G 15949142.32 15949142.49 15949142.68 0.0143 0.0079

Uranus 38955-10-15 11:31 G 15949368.77 15949368.98 15949369.19 0.0143 0.0048

Uranus 38956-05-28 22:48 G 15949595.23 15949595.45 15949595.67 0.0143 0.0016

Uranus 38957-01-10 10:05 G 15949821.70 15949821.92 15949822.14 0.0143 0.0015

Uranus 38957-08-24 21:22 G 15950048.18 15950048.39 15950048.60 0.0142 0.0046

Jupiter 38958-04-01 22:48 G 15950268.32 15950268.45 15950268.59 0.0498 0.0367

Uranus 38958-04-08 08:10 G 15950274.67 15950274.84 15950275.03 0.0142 0.0077

Uranus 38958-11-20 18:58 G 15950501.16 15950501.29 15950501.45 0.0142 0.0107

Uranus 38959-07-05 05:31 G 15950727.69 15950727.73 15950727.81 0.0142 0.0137

Saturn 38959-07-11 20:24 G 15950734.16 15950734.35 15950734.55 0.0263 0.0110

Saturn 38960-02-25 20:38 G 15950963.16 15950963.36 15950963.56 0.0265 0.0090

Saturn 38973-05-15 18:00 G 15955791.04 15955791.25 15955791.46 0.0298 0.0058

Saturn 38973-12-31 19:41 G 15956021.18 15956021.32 15956021.45 0.0296 0.0226

Jupiter 38976-06-01 12:43 G 15956903.98 15956904.03 15956904.08 0.0528 0.0511

Mars 38978-12-12 22:34 G 15957828.32 15957828.44 15957828.56 0.1947 0.1400

Neptune 38979-07-05 11:31 G 15958032.91 15958032.98 15958033.11 0.0089 0.0080

Mars 38979-11-14 07:55 G 15958164.65 15958164.83 15958165.00 0.1589 0.0102

Neptune 38980-02-16 00:43 G 15958258.41 15958258.53 15958258.71 0.0089 0.0065

Neptune 38980-09-28 14:10 G 15958483.92 15958484.09 15958484.29 0.0089 0.0049

Neptune 38981-05-12 03:36 G 15958709.45 15958709.65 15958709.86 0.0089 0.0034

Neptune 38981-12-23 16:48 G 15958934.98 15958935.20 15958935.41 0.0089 0.0019

Jupiter 38982-04-04 11:17 G 15959036.81 15959036.97 15959037.14 0.0497 0.0281

Neptune 38982-08-06 05:46 G 15959160.52 15959160.74 15959160.96 0.0089 0.0004

Neptune 38983-03-19 18:58 G 15959386.08 15959386.29 15959386.51 0.0089 0.0011

Neptune 38983-10-31 07:55 G 15959611.63 15959611.83 15959612.05 0.0089 0.0027

Neptune 38984-06-12 20:53 G 15959837.19 15959837.37 15959837.58 0.0089 0.0042

Neptune 38985-01-24 09:50 G 15960062.76 15960062.91 15960063.10 0.0089 0.0057

Neptune 38985-09-06 23:02 G 15960288.34 15960288.46 15960288.61 0.0089 0.0071

Neptune 38986-04-20 12:00 G 15960513.97 15960514.00 15960514.08 0.0089 0.0087

Jupiter 38988-02-05 05:17 G 15961169.52 15961169.72 15961169.93 0.0528 0.0037

Saturn 38989-01-20 20:24 G 15961520.15 15961520.35 15961520.55 0.0264 0.0092

Saturn 38989-09-06 20:24 G 15961749.17 15961749.35 15961749.55 0.0266 0.0109

Jupiter 38993-12-08 12:58 G 15963302.84 15963303.04 15963303.24 0.0498 0.0115

Uranus 38997-04-19 20:38 G 15964531.30 15964531.36 15964531.46 0.0134 0.0126

Uranus 38997-12-02 02:53 G 15964757.48 15964757.62 15964757.77 0.0135 0.0100

Pluto 38997-12-22 00:43 G 15964777.38 15964777.53 15964777.70 0.0064 0.0044

Uranus 38998-07-16 08:38 G 15964983.69 15964983.86 15964984.05 0.0135 0.0075

Pluto 38998-08-04 04:48 G 15965002.48 15965002.70 15965002.92 0.0064 0.0002

Uranus 38999-02-27 14:53 G 15965209.93 15965210.12 15965210.33 0.0135 0.0049

Pluto 38999-03-17 08:53 G 15965227.71 15965227.87 15965228.04 0.0064 0.0042

Jupiter 38999-10-10 23:02 G 15965435.36 15965435.46 15965435.58 0.0528 0.0435

Uranus 38999-10-11 21:07 G 15965436.17 15965436.38 15965436.60 0.0135 0.0023

Uranus 39000-05-26 03:22 G 15965662.42 15965662.64 15965662.86 0.0135 0.0003

40TH MILLENNIUM CE

This is a list of transits of Venus in the 40th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 39001-01-07 09:36 G 15965888.69 15965888.90 15965889.11 0.0135 0.0030

Uranus 39001-08-21 16:05 G 15966114.97 15966115.17 15966115.37 0.0136 0.0056

Uranus 39002-04-04 22:48 G 15966341.27 15966341.45 15966341.62 0.0136 0.0082

Uranus 39002-11-17 04:48 G 15966567.59 15966567.70 15966567.85 0.0136 0.0109

Saturn 39002-11-26 19:26 G 15966577.10 15966577.31 15966577.52 0.0298 0.0032

Uranus 39003-07-01 11:31 G 15966793.97 15966793.98 15966794.03 0.0136 0.0136

Saturn 39003-07-14 21:07 G 15966807.28 15966807.38 15966807.49 0.0296 0.0252

Moon 39014-11-08 16:05 G 15970942.06 15970942.17 15970942.29 0.2669 0.1730

Earth 39014-11-08 16:34 G 15970942.08 15970942.19 15970942.29 0.2663 0.1977 *

Saturn 39017-12-17 23:17 G 15972077.46 15972077.47 15972077.49 0.0262 0.0261

Saturn 39018-08-03 22:05 G 15972306.22 15972306.42 15972306.63 0.0263 0.0067

Saturn 39019-03-20 22:19 G 15972535.25 15972535.43 15972535.61 0.0265 0.0133

Earth 39022-11-06 07:12 G 15973861.68 15973861.80 15973861.92 0.2662 0.1748

Moon 39022-11-06 11:02 G 15973861.82 15973861.96 15973862.10 0.2667 0.1077 *

Jupiter 39023-10-14 23:46 G 15974204.34 15974204.49 15974204.66 0.0528 0.0330

Jupiter 39029-08-17 00:29 G 15976337.32 15976337.52 15976337.72 0.0498 0.0122

Saturn 39031-10-21 18:29 G 15977133.24 15977133.27 15977133.30 0.0301 0.0296

Saturn 39032-06-07 22:05 G 15977363.21 15977363.42 15977363.63 0.0298 0.0006

Saturn 39033-01-23 23:31 G 15977593.42 15977593.48 15977593.55 0.0296 0.0280

Jupiter 39035-06-19 16:05 G 15978469.97 15978470.17 15978470.36 0.0528 0.0150

Uranus 39038-03-19 17:02 G 15979474.11 15979474.21 15979474.33 0.0144 0.0124

Uranus 39038-11-01 04:34 G 15979700.53 15979700.69 15979700.87 0.0143 0.0093

Uranus 39039-06-15 16:05 G 15979926.98 15979927.17 15979927.38 0.0143 0.0061

Uranus 39040-01-28 03:36 G 15980153.44 15980153.65 15980153.87 0.0143 0.0030

Uranus 39040-09-10 15:07 G 15980379.91 15980380.13 15980380.35 0.0143 0.0002

Jupiter 39041-04-22 02:38 G 15980603.44 15980603.61 15980603.78 0.0498 0.0271

Uranus 39041-04-25 02:10 G 15980606.39 15980606.59 15980606.81 0.0143 0.0033

Uranus 39041-12-07 13:12 G 15980832.86 15980833.05 15980833.25 0.0142 0.0063

Uranus 39042-07-22 00:14 G 15981059.35 15981059.51 15981059.68 0.0142 0.0094

Uranus 39043-03-05 10:48 G 15981285.86 15981285.95 15981286.07 0.0142 0.0124

Mars 39044-10-09 23:17 G 15981870.30 15981870.47 15981870.64 0.1946 0.0424

Mars 39045-09-11 21:07 G 15982207.21 15982207.38 15982207.55 0.1589 0.0119

Saturn 39047-06-29 23:02 G 15982863.39 15982863.46 15982863.55 0.0262 0.0243

Saturn 39048-02-13 21:50 G 15983092.20 15983092.41 15983092.62 0.0264 0.0049

Saturn 39048-09-29 22:05 G 15983321.25 15983321.42 15983321.60 0.0266 0.0152

Saturn 39061-05-02 18:43 G 15987919.19 15987919.28 15987919.37 0.0300 0.0271

Saturn 39061-12-18 22:34 G 15988149.23 15988149.44 15988149.65 0.0298 0.0022

Neptune 39062-04-03 10:34 G 15988254.88 15988254.94 15988255.05 0.0088 0.0081

Neptune 39062-11-14 23:46 G 15988480.36 15988480.49 15988480.65 0.0088 0.0066

Neptune 39063-06-28 12:29 G 15988705.86 15988706.02 15988706.21 0.0088 0.0052

Neptune 39064-02-09 01:41 G 15988931.37 15988931.57 15988931.77 0.0088 0.0037

Neptune 39064-09-21 14:24 G 15989156.90 15989157.10 15989157.33 0.0088 0.0023

Jupiter 39065-04-24 11:31 G 15989371.84 15989371.98 15989372.12 0.0498 0.0356

Neptune 39065-05-05 03:36 G 15989382.43 15989382.65 15989382.87 0.0088 0.0008

Neptune 39065-12-16 16:34 G 15989607.97 15989608.19 15989608.41 0.0088 0.0006

Neptune 39066-07-30 05:02 G 15989833.51 15989833.71 15989833.94 0.0088 0.0022

Neptune 39067-03-12 18:14 G 15990059.06 15990059.26 15990059.47 0.0088 0.0035

Neptune 39067-10-24 06:58 G 15990284.62 15990284.79 15990284.99 0.0088 0.0050

Neptune 39068-06-05 19:55 G 15990510.19 15990510.33 15990510.49 0.0088 0.0064

Neptune 39069-01-17 08:24 G 15990735.78 15990735.85 15990735.97 0.0088 0.0079

Jupiter 39071-02-25 12:14 G 15991504.82 15991505.01 15991505.21 0.0528 0.0153

Jupiter 39076-12-28 13:12 G 15993637.84 15993638.05 15993638.25 0.0498 0.0040

Saturn 39077-01-09 00:29 G 15993649.42 15993649.52 15993649.65 0.0262 0.0219

Saturn 39077-08-25 23:46 G 15993878.27 15993878.49 15993878.70 0.0263 0.0024

Saturn 39078-04-12 00:00 G 15994107.34 15994107.50 15994107.65 0.0265 0.0177

Uranus 39081-08-02 11:31 G 15995315.87 15995315.98 15995316.12 0.0135 0.0110

Uranus 39082-03-16 17:31 G 15995542.08 15995542.23 15995542.41 0.0135 0.0085

Uranus 39082-10-28 23:46 G 15995768.30 15995768.49 15995768.69 0.0135 0.0059

Jupiter 39082-10-31 03:36 G 15995770.50 15995770.65 15995770.81 0.0528 0.0329

Uranus 39083-06-12 05:46 G 15995994.54 15995994.74 15995994.96 0.0135 0.0033

Uranus 39084-01-24 12:14 G 15996220.79 15996221.01 15996221.23 0.0135 0.0007

Uranus 39084-09-06 18:29 G 15996447.06 15996447.27 15996447.49 0.0135 0.0019

Uranus 39085-04-21 00:43 G 15996673.33 15996673.53 15996673.74 0.0136 0.0046

Uranus 39085-12-03 07:12 G 15996899.62 15996899.80 15996899.99 0.0136 0.0072

Uranus 39086-07-17 13:55 G 15997125.93 15997126.08 15997126.23 0.0136 0.0098

Pluto 39086-11-15 05:17 G 15997246.64 15997246.72 15997246.84 0.0080 0.0072

Uranus 39087-02-28 20:38 G 15997352.28 15997352.36 15997352.45 0.0136 0.0125

Pluto 39087-06-28 16:05 G 15997471.95 15997472.17 15997472.39 0.0080 0.0013

Jupiter 39088-09-02 15:22 G 15997904.05 15997904.14 15997904.25 0.0498 0.0431

Saturn 39090-11-12 21:22 G 15998705.27 15998705.39 15998705.51 0.0301 0.0244

Saturn 39091-07-01 00:58 G 15998935.33 15998935.54 15998935.75 0.0298 0.0049

Saturn 39106-07-23 00:43 G 16004435.40 16004435.53 16004435.67 0.0262 0.0201

Jupiter 39106-11-04 03:36 G 16004539.54 16004539.65 16004539.77 0.0528 0.0431

Saturn 39107-03-08 23:31 G 16004664.27 16004664.48 16004664.69 0.0264 0.0006

Saturn 39107-10-23 23:31 G 16004893.35 16004893.48 16004893.64 0.0266 0.0196

Mars 39110-08-08 01:12 G 16005912.38 16005912.55 16005912.72 0.1945 0.0509

Mars 39111-07-11 09:50 G 16006249.74 16006249.91 16006250.08 0.1590 0.0354

Jupiter 39112-09-06 03:36 G 16006672.47 16006672.65 16006672.84 0.0498 0.0213

Jupiter 39118-07-09 21:50 G 16008805.21 16008805.41 16008805.61 0.0528 0.0038

Saturn 39120-05-25 21:50 G 16009491.27 16009491.41 16009491.56 0.0300 0.0218

Saturn 39121-01-11 01:41 G 16009721.37 16009721.57 16009721.77 0.0298 0.0075

Uranus 39121-11-17 23:17 G 16010032.42 16010032.47 16010032.55 0.0144 0.0136

Uranus 39122-07-02 11:02 G 16010258.82 16010258.96 16010259.12 0.0143 0.0105

Uranus 39123-02-13 22:34 G 16010485.26 16010485.44 16010485.64 0.0143 0.0074

Uranus 39123-09-28 10:05 G 16010711.72 16010711.92 16010712.14 0.0143 0.0042

Uranus 39124-05-11 21:36 G 16010938.18 16010938.40 16010938.62 0.0143 0.0011

Jupiter 39124-05-12 02:24 G 16010938.41 16010938.60 16010938.79 0.0498 0.0197 *

Uranus 39124-12-24 08:38 G 16011164.65 16011164.86 16011165.08 0.0143 0.0021

Uranus 39125-08-07 19:55 G 16011391.13 16011391.33 16011391.54 0.0142 0.0051

Uranus 39126-03-22 06:58 G 16011617.61 16011617.79 16011617.97 0.0142 0.0082

Uranus 39126-11-03 17:31 G 16011844.11 16011844.23 16011844.38 0.0142 0.0112

Uranus 39127-06-18 04:05 G 16012070.67 16012070.67 16012070.70 0.0142 0.0142

Jupiter 39130-03-14 15:36 G 16013071.10 16013071.15 16013071.21 0.0528 0.0506

Saturn 39136-02-02 02:24 G 16015221.46 16015221.60 16015221.77 0.0262 0.0176

Saturn 39136-09-18 01:41 G 16015450.36 16015450.57 16015450.79 0.0264 0.0020

Saturn 39137-05-05 01:55 G 16015679.47 16015679.58 16015679.70 0.0266 0.0222

Mars 39143-07-10 00:14 G 16017936.48 16017936.51 16017936.54 0.1589 0.1559

Neptune 39143-10-08 23:02 G 16018027.41 16018027.46 16018027.57 0.0089 0.0084

Neptune 39144-05-21 12:14 G 16018252.90 16018253.01 16018253.18 0.0089 0.0069

Neptune 39145-01-02 01:41 G 16018478.41 16018478.57 16018478.76 0.0089 0.0053

Neptune 39145-08-15 14:53 G 16018703.93 16018704.12 16018704.33 0.0089 0.0038

Neptune 39146-03-29 04:19 G 16018929.48 16018929.68 16018929.90 0.0089 0.0023

Neptune 39146-11-09 17:31 G 16019155.02 16019155.23 16019155.45 0.0089 0.0008

Neptune 39147-06-23 06:43 G 16019380.56 16019380.78 16019381.00 0.0089 0.0007

Neptune 39148-02-03 19:26 G 16019606.11 16019606.31 16019606.54 0.0089 0.0023

Jupiter 39148-05-14 14:38 G 16019707.03 16019707.11 16019707.20 0.0498 0.0447

Neptune 39148-09-16 08:53 G 16019831.67 16019831.87 16019832.07 0.0089 0.0037

Neptune 39149-04-29 22:05 G 16020057.24 16020057.42 16020057.60 0.0089 0.0052

Saturn 39149-12-06 00:58 G 16020277.38 16020277.54 16020277.71 0.0300 0.0189

Neptune 39149-12-11 11:02 G 16020282.82 16020282.96 16020283.11 0.0089 0.0067

Saturn 39150-07-24 04:19 G 16020507.49 16020507.68 16020507.89 0.0298 0.0103

Neptune 39150-07-24 23:46 G 16020508.42 16020508.49 16020508.60 0.0089 0.0082

Earth 39152-05-08 13:55 G 16021161.92 16021162.08 16021162.23 0.2669 0.0741

Moon 39152-05-08 17:46 G 16021162.08 16021162.24 16021162.39 0.2663 0.0865 *

Jupiter 39154-03-17 14:38 G 16021839.93 16021840.11 16021840.29 0.0528 0.0246

Jupiter 39160-01-18 16:34 G 16023972.99 16023973.19 16023973.40 0.0498 0.0056

Moon 39160-05-06 04:48 G 16024081.68 16024081.70 16024081.72 0.2663 0.2636

Uranus 39165-04-02 20:38 G 16025874.28 16025874.36 16025874.48 0.0135 0.0120

Saturn 39165-08-14 03:36 G 16026007.47 16026007.65 16026007.82 0.0262 0.0156

Uranus 39165-11-15 02:53 G 16026100.47 16026100.62 16026100.78 0.0135 0.0094

Jupiter 39165-11-20 06:43 G 16026105.60 16026105.78 16026105.96 0.0528 0.0232

Saturn 39166-03-31 02:24 G 16026236.39 16026236.60 16026236.81 0.0264 0.0040

Uranus 39166-06-29 08:38 G 16026326.69 16026326.86 16026327.06 0.0135 0.0069

Saturn 39166-11-15 02:38 G 16026465.53 16026465.61 16026465.70 0.0266 0.0242

Uranus	39167-02-10 14:53 G	16026552.93	16026553.12	16026553.34	0.0135	0.0044
Uranus	39167-09-24 21:22 G	16026779.18	16026779.39	16026779.61	0.0135	0.0017
Uranus	39168-05-08 03:36 G	16027005.43	16027005.65	16027005.87	0.0135	0.0009
Uranus	39168-12-20 09:50 G	16027231.70	16027231.91	16027232.12	0.0136	0.0036
Uranus	39169-08-03 16:05 G	16027457.99	16027458.17	16027458.37	0.0136	0.0062
Uranus	39170-03-17 22:48 G	16027684.29	16027684.45	16027684.62	0.0136	0.0088
Uranus	39170-10-30 05:31 G	16027910.62	16027910.73	16027910.85	0.0136	0.0115
Jupiter	39171-09-23 18:14 G	16028239.12	16028239.26	16028239.41	0.0498	0.0341
Mars	39176-06-04 01:41 G	16029954.46	16029954.57	16029954.68	0.1944	0.1498
Mars	39177-05-07 23:17 G	16030292.31	16030292.47	16030292.63	0.1591	0.0570
Saturn	39179-06-18 02:10 G	16031063.42	16031063.59	16031063.77	0.0300	0.0162
Saturn	39180-02-03 05:31 G	16031293.55	16031293.73	16031293.93	0.0298	0.0130
Saturn	39195-02-24 05:46 G	16036793.56	16036793.74	16036793.93	0.0262	0.0130
Jupiter	39195-09-26 02:38 G	16037007.45	16037007.61	16037007.78	0.0498	0.0283
Saturn	39195-10-11 05:02 G	16037022.50	16037022.71	16037022.92	0.0264	0.0067
Jupiter	39201-07-29 01:26 G	16039140.36	16039140.56	16039140.76	0.0528	0.0064
Uranus	39206-03-01 18:43 G	16040817.17	16040817.28	16040817.42	0.0144	0.0116
Uranus	39206-10-14 06:29 G	16041043.60	16041043.77	16041043.95	0.0143	0.0085
Uranus	39207-05-28 18:00 G	16041270.05	16041270.25	16041270.45	0.0143	0.0053
Jupiter	39207-06-01 04:48 G	16041273.50	16041273.70	16041273.90	0.0498	0.0109
Uranus	39208-01-10 05:17 G	16041496.51	16041496.72	16041496.94	0.0143	0.0022
Uranus	39208-08-23 16:48 G	16041722.98	16041723.20	16041723.42	0.0143	0.0009
Saturn	39208-12-28 06:29 G	16041849.59	16041849.77	16041849.96	0.0300	0.0131
Uranus	39209-04-07 03:50 G	16041949.45	16041949.66	16041949.87	0.0143	0.0040
Mars	39209-05-06 13:26 G	16041978.97	16041979.06	16041979.16	0.1589	0.1339
Saturn	39209-08-15 09:50 G	16042079.73	16042079.91	16042080.08	0.0298	0.0160
Uranus	39209-11-19 14:38 G	16042175.93	16042176.11	16042176.31	0.0142	0.0071
Uranus	39210-07-04 01:12 G	16042402.42	16042402.55	16042402.72	0.0142	0.0101
Uranus	39211-02-15 11:46 G	16042628.93	16042628.99	16042629.10	0.0142	0.0131
Jupiter	39213-04-02 17:17 G	16043406.10	16043406.22	16043406.34	0.0527	0.0415

Saturn 39224-09-05 07:41 G 16047579.63 16047579.82 16047580.02 0.0263 0.0108

Saturn 39225-04-22 06:58 G 16047808.59 16047808.79 16047808.99 0.0264 0.0089

Neptune 39226-07-06 22:34 G 16048249.40 16048249.44 16048249.52 0.0088 0.0084

Neptune 39227-02-17 11:17 G 16048474.86 16048474.97 16048475.13 0.0088 0.0070

Neptune 39227-10-01 00:43 G 16048700.36 16048700.53 16048700.70 0.0088 0.0055

Neptune 39228-05-13 13:26 G 16048925.87 16048926.06 16048926.26 0.0088 0.0041

Neptune 39228-12-25 02:10 G 16049151.39 16049151.59 16049151.81 0.0088 0.0027

Neptune 39229-08-07 15:22 G 16049376.92 16049377.14 16049377.36 0.0088 0.0012

Neptune 39230-03-21 04:19 G 16049602.46 16049602.68 16049602.90 0.0088 0.0002

Neptune 39230-11-01 17:02 G 16049828.00 16049828.21 16049828.43 0.0088 0.0017

Neptune 39231-06-15 06:00 G 16050053.55 16050053.75 16050053.96 0.0088 0.0031

Neptune 39232-01-26 18:29 G 16050279.10 16050279.27 16050279.48 0.0088 0.0046

Neptune 39232-09-08 07:41 G 16050504.68 16050504.82 16050505.00 0.0088 0.0060

Neptune 39233-04-21 20:53 G 16050730.26 16050730.37 16050730.49 0.0088 0.0074

Jupiter 39237-04-05 18:43 G 16052175.13 16052175.28 16052175.43 0.0528 0.0348

Saturn 39238-07-10 09:07 G 16052635.69 16052635.88 16052636.08 0.0299 0.0100

Saturn 39239-02-25 12:00 G 16052865.85 16052866.00 16052866.17 0.0297 0.0191

Jupiter 39243-02-06 14:53 G 16054307.93 16054308.12 16054308.32 0.0498 0.0121

Mars 39243-03-05 12:00 G 16054334.85 16054335.00 16054335.15 0.1591 0.0805

Pluto 39244-09-02 21:36 G 16054882.28 16054882.40 16054882.56 0.0064 0.0050

Pluto 39245-04-16 01:55 G 16055107.36 16055107.58 16055107.80 0.0064 0.0007

Pluto 39245-11-27 05:31 G 16055332.56 16055332.73 16055332.93 0.0064 0.0036

Uranus 39248-12-01 05:17 G 16056432.68 16056432.72 16056432.80 0.0135 0.0130

Jupiter 39248-12-09 12:00 G 16056440.80 16056441.00 16056441.19 0.0528 0.0122

Uranus 39249-07-15 11:31 G 16056658.85 16056658.98 16056659.12 0.0135 0.0104

Uranus 39250-02-26 17:31 G 16056885.06 16056885.23 16056885.42 0.0135 0.0079

Uranus 39250-10-10 23:31 G 16057111.29 16057111.48 16057111.69 0.0135 0.0053

Uranus 39251-05-25 05:46 G 16057337.53 16057337.74 16057337.96 0.0135 0.0027

Uranus 39252-01-06 12:00 G 16057563.78 16057564.00 16057564.22 0.0135 0.0001

Uranus 39252-08-19 18:14 G 16057790.05 16057790.26 16057790.47 0.0136 0.0025

Uranus 39253-04-03 00:29 G 16058016.33 16058016.52 16058016.73 0.0136 0.0052

Uranus 39253-11-15 06:43 G 16058242.62 16058242.78 16058242.97 0.0136 0.0078

Saturn 39254-03-18 11:02 G 16058365.76 16058365.96 16058366.16 0.0263 0.0081

Uranus 39254-06-29 13:12 G 16058468.93 16058469.05 16058469.21 0.0136 0.0104

Jupiter 39254-10-12 16:19 G 16058574.01 16058574.18 16058574.35 0.0498 0.0276

Saturn 39254-11-02 10:19 G 16058594.75 16058594.93 16058595.13 0.0264 0.0119

Uranus 39255-02-10 19:55 G 16058695.29 16058695.33 16058695.41 0.0136 0.0131

Earth 39257-11-09 17:02 G 16059698.10 16059698.21 16059698.32 0.2662 0.1843

Moon 39257-11-09 19:41 G 16059698.22 16059698.32 16059698.42 0.2657 0.2097 *

Moon 39265-11-07 05:31 G 16062617.66 16062617.73 16062617.80 0.2656 0.2406

Earth 39265-11-07 07:41 G 16062617.71 16062617.82 16062617.94 0.2662 0.1871 *

Saturn 39268-01-20 14:38 G 16063421.91 16063422.11 16063422.32 0.0300 0.0067

Saturn 39268-09-06 17:17 G 16063652.09 16063652.22 16063652.37 0.0297 0.0223

Mars 39275-03-04 02:24 G 16066021.48 16066021.60 16066021.73 0.1590 0.1111

Jupiter 39278-10-15 04:19 G 16067342.54 16067342.68 16067342.82 0.0498 0.0366

Saturn 39283-02-11 15:36 G 16068923.10 16068923.15 16068923.22 0.0261 0.0249

Saturn 39283-09-28 14:10 G 16069151.88 16069152.09 16069152.30 0.0263 0.0056

Saturn 39284-05-14 13:26 G 16069380.89 16069381.06 16069381.25 0.0265 0.0143

Jupiter 39284-08-17 01:41 G 16069475.37 16069475.57 16069475.76 0.0528 0.0145

Uranus 39289-10-30 01:55 G 16071375.49 16071375.58 16071375.69 0.0144 0.0128

Uranus 39290-06-13 13:26 G 16071601.92 16071602.06 16071602.24 0.0143 0.0097

Jupiter 39290-06-20 05:17 G 16071608.52 16071608.72 16071608.93 0.0498 0.0032

Uranus 39291-01-26 01:12 G 16071828.36 16071828.55 16071828.75 0.0143 0.0065

Uranus 39291-09-09 12:43 G 16072054.83 16072055.03 16072055.25 0.0143 0.0034

Uranus 39292-04-23 00:14 G 16072281.29 16072281.51 16072281.73 0.0143 0.0003

Uranus 39292-12-05 11:17 G 16072507.76 16072507.97 16072508.19 0.0143 0.0028

Uranus 39293-07-19 22:05 G 16072734.24 16072734.42 16072734.63 0.0142 0.0060

Uranus 39294-03-03 09:07 G 16072960.72 16072960.88 16072961.06 0.0142 0.0090

Uranus 39294-10-15 19:55 G 16073187.22 16073187.33 16073187.45 0.0142 0.0120

Jupiter 39296-04-21 19:12 G 16073741.14 16073741.30 16073741.46 0.0528 0.0325

Saturn 39297-08-01 19:12 G 16074208.09 16074208.30 16074208.51 0.0299 0.0031

Saturn 39298-03-19 21:36 G 16074438.31 16074438.40 16074438.52 0.0297 0.0257

Jupiter 39302-02-24 03:50 G 16075874.57 16075874.66 16075874.76 0.0498 0.0440

Neptune 39308-01-11 11:17 G 16078021.92 16078021.97 16078022.02 0.0089 0.0087

Neptune 39308-08-24 00:00 G 16078247.39 16078247.50 16078247.65 0.0089 0.0072

Mars 39309-01-01 01:12 G 16078377.42 16078377.55 16078377.68 0.1592 0.1031

Neptune 39309-04-06 13:26 G 16078472.91 16078473.06 16078473.24 0.0089 0.0057

Neptune 39309-11-18 02:38 G 16078698.43 16078698.61 16078698.82 0.0089 0.0043

Neptune 39310-07-01 15:50 G 16078923.97 16078924.16 16078924.38 0.0089 0.0028

Neptune 39311-02-12 05:17 G 16079149.51 16079149.72 16079149.94 0.0089 0.0012

Neptune 39311-09-25 18:29 G 16079375.05 16079375.27 16079375.49 0.0089 0.0003

Neptune 39312-05-08 07:41 G 16079600.60 16079600.82 16079601.03 0.0089 0.0018

Saturn 39312-08-24 19:41 G 16079709.22 16079709.32 16079709.44 0.0262 0.0222

Neptune 39312-12-19 20:38 G 16079826.16 16079826.36 16079826.57 0.0089 0.0033

Saturn 39313-04-10 18:29 G 16079938.06 16079938.27 16079938.48 0.0263 0.0027

Neptune 39313-08-02 09:36 G 16080051.72 16080051.90 16080052.10 0.0089 0.0047

Saturn 39313-11-25 18:14 G 16080167.10 16080167.26 16080167.42 0.0265 0.0173

Neptune 39314-03-15 22:34 G 16080277.30 16080277.44 16080277.62 0.0089 0.0063

Neptune 39314-10-27 11:31 G 16080502.90 16080502.98 16080503.11 0.0089 0.0077

Jupiter 39320-04-25 18:58 G 16082510.18 16082510.29 16082510.41 0.0528 0.0432

Jupiter 39326-02-26 14:53 G 16084642.93 16084643.12 16084643.31 0.0498 0.0196

Saturn 39326-06-27 22:19 G 16084764.38 16084764.43 16084764.49 0.0301 0.0289

Saturn 39327-02-13 02:38 G 16084994.40 16084994.61 16084994.82 0.0299 0.0006

Saturn 39327-10-01 04:48 G 16085224.67 16085224.70 16085224.74 0.0297 0.0292

Jupiter 39331-12-30 10:19 G 16086775.73 16086775.93 16086776.13 0.0528 0.0049

Uranus 39333-03-15 20:24 G 16087217.24 16087217.35 16087217.46 0.0135 0.0114

Uranus 39333-10-28 01:55 G 16087443.43 16087443.58 16087443.75 0.0135 0.0089

Pluto 39334-03-10 11:02 G 16087576.74 16087576.96 16087577.19 0.0080 0.0002

Uranus 39334-06-11 07:41 G 16087669.65 16087669.82 16087670.03 0.0135 0.0064

Uranus 39335-01-23 13:55 G 16087895.88 16087896.08 16087896.30 0.0135 0.0038

Uranus	39335-09-06 20:10 G	16088122.13	16088122.34	16088122.56	0.0135	0.0012
Uranus	39336-04-20 02:24 G	16088348.38	16088348.60	16088348.82	0.0135	0.0014
Uranus	39336-12-02 08:24 G	16088574.65	16088574.85	16088575.07	0.0136	0.0041
Uranus	39337-07-16 14:38 G	16088800.93	16088801.11	16088801.31	0.0136	0.0067
Jupiter	39337-11-01 16:19 G	16088908.99	16088909.18	16088909.37	0.0498	0.0199
Uranus	39338-02-27 21:07 G	16089027.24	16089027.38	16089027.55	0.0136	0.0093
Uranus	39338-10-12 03:36 G	16089253.57	16089253.65	16089253.77	0.0136	0.0120
Mars	39340-01-28 09:22 G	16089726.77	16089726.89	16089727.00	0.1946	0.1445
Mars	39340-12-30 15:50 G	16090064.01	16090064.16	16090064.30	0.1590	0.0891
Saturn	39342-03-07 00:14 G	16090495.37	16090495.51	16090495.65	0.0262	0.0194
Saturn	39342-10-21 23:02 G	16090724.25	16090724.46	16090724.67	0.0264	0.0002
Saturn	39343-06-07 22:48 G	16090953.32	16090953.45	16090953.59	0.0265	0.0202
Saturn	39356-01-08 05:02 G	16095550.60	16095550.71	16095550.83	0.0300	0.0248
Saturn	39356-08-25 08:53 G	16095780.67	16095780.87	16095781.08	0.0298	0.0046
Jupiter	39361-11-04 00:00 G	16097677.40	16097677.50	16097677.61	0.0497	0.0419
Jupiter	39367-09-07 03:07 G	16099810.45	16099810.63	16099810.82	0.0528	0.0235
Saturn	39371-09-17 05:17 G	16101281.55	16101281.72	16101281.88	0.0262	0.0166
Saturn	39372-05-03 04:05 G	16101510.46	16101510.67	16101510.88	0.0264	0.0031
Saturn	39372-12-18 04:05 G	16101739.58	16101739.67	16101739.78	0.0265	0.0233
Uranus	39373-06-30 07:12 G	16101933.78	16101933.80	16101933.86	0.0144	0.0141
Jupiter	39373-07-10 00:58 G	16101943.33	16101943.54	16101943.74	0.0498	0.0022
Uranus	39374-02-11 18:58 G	16102160.17	16102160.29	16102160.45	0.0144	0.0110
Uranus	39374-09-26 06:43 G	16102386.61	16102386.78	16102386.98	0.0143	0.0079
Mars	39374-10-29 14:24 G	16102420.00	16102420.10	16102420.20	0.1592	0.1259
Uranus	39375-05-10 18:29 G	16102613.07	16102613.27	16102613.48	0.0143	0.0047
Uranus	39375-12-23 05:46 G	16102839.53	16102839.74	16102839.97	0.0143	0.0017
Uranus	39376-08-05 17:17 G	16103066.00	16103066.22	16103066.44	0.0143	0.0015
Uranus	39377-03-20 04:19 G	16103292.48	16103292.68	16103292.89	0.0143	0.0046
Uranus	39377-11-01 15:22 G	16103518.96	16103519.14	16103519.33	0.0142	0.0077
Uranus	39378-06-16 01:55 G	16103745.45	16103745.58	16103745.74	0.0142	0.0107

Uranus 39379-01-28 12:43 G 16103971.98 16103972.03 16103972.09 0.0142 0.0136

Jupiter 39379-05-12 18:00 G 16104076.07 16104076.25 16104076.43 0.0528 0.0248

Jupiter 39385-03-15 02:10 G 16106209.46 16106209.59 16106209.73 0.0498 0.0372

Saturn 39385-07-20 13:55 G 16106336.93 16106337.08 16106337.23 0.0301 0.0209

Saturn 39386-03-07 17:46 G 16106567.04 16106567.24 16106567.44 0.0299 0.0086

Neptune 39390-10-09 10:19 G 16108243.93 16108243.93 16108243.97 0.0088 0.0088

Neptune 39391-05-22 23:31 G 16108469.37 16108469.48 16108469.61 0.0088 0.0073

Neptune 39392-01-03 12:14 G 16108694.86 16108695.01 16108695.18 0.0088 0.0059

Neptune 39392-08-16 00:58 G 16108920.36 16108920.54 16108920.74 0.0088 0.0045

Neptune 39393-03-29 13:55 G 16109145.88 16109146.08 16109146.30 0.0088 0.0031

Neptune 39393-11-10 02:53 G 16109371.41 16109371.62 16109371.84 0.0088 0.0016

Neptune 39394-06-23 15:50 G 16109596.94 16109597.16 16109597.38 0.0088 0.0002

Neptune 39395-02-04 04:34 G 16109822.47 16109822.69 16109822.91 0.0088 0.0012

Moon 39395-05-10 11:02 G 16109917.81 16109917.96 16109918.12 0.2674 0.0349

Earth 39395-05-10 15:50 G 16109918.00 16109918.16 16109918.31 0.2670 0.0724 *

Neptune 39395-09-17 17:31 G 16110048.03 16110048.23 16110048.45 0.0088 0.0027

Neptune 39396-04-30 06:14 G 16110273.58 16110273.76 16110273.97 0.0088 0.0042

Neptune 39396-12-11 19:26 G 16110499.14 16110499.31 16110499.48 0.0088 0.0055

Neptune 39397-07-25 07:55 G 16110724.72 16110724.83 16110724.98 0.0088 0.0070

Neptune 39398-03-07 20:53 G 16110950.33 16110950.37 16110950.45 0.0088 0.0084

Saturn 39401-03-30 10:48 G 16112067.77 16112067.95 16112068.13 0.0262 0.0136

Saturn 39401-11-14 09:50 G 16112296.71 16112296.91 16112297.12 0.0264 0.0062

Saturn 39402-07-01 10:19 G 16112525.91 16112525.93 16112525.95 0.0266 0.0264

Jupiter 39403-05-16 15:22 G 16112845.08 16112845.14 16112845.22 0.0528 0.0493

Mars 39405-11-25 10:34 G 16113768.77 16113768.94 16113769.11 0.1944 0.0481

Mars 39406-10-29 04:48 G 16114106.54 16114106.70 16114106.86 0.1591 0.0662

Jupiter 39409-03-18 12:29 G 16114977.85 16114978.02 16114978.20 0.0498 0.0259

Jupiter 39415-01-19 08:10 G 16117110.64 16117110.84 16117111.05 0.0528 0.0022

Saturn 39415-01-31 22:48 G 16117123.28 16117123.45 16117123.63 0.0300 0.0163

Saturn 39415-09-19 02:10 G 16117353.41 16117353.59 16117353.78 0.0298 0.0129

Uranus	39416-11-14 04:05 G	16117775.61	16117775.67	16117775.77	0.0134	0.0125
Uranus	39417-06-28 09:50 G	16118001.78	16118001.91	16118002.07	0.0135	0.0100
Uranus	39418-02-09 16:05 G	16118227.99	16118228.17	16118228.36	0.0135	0.0074
Uranus	39418-09-23 21:50 G	16118454.22	16118454.41	16118454.62	0.0135	0.0049
Uranus	39419-05-08 03:50 G	16118680.45	16118680.66	16118680.88	0.0135	0.0023
Uranus	39419-12-20 10:05 G	16118906.70	16118906.92	16118907.13	0.0135	0.0003
Uranus	39420-08-02 16:05 G	16119132.96	16119133.17	16119133.39	0.0135	0.0029
Jupiter	39420-11-21 11:31 G	16119243.78	16119243.98	16119244.17	0.0497	0.0148
Uranus	39421-03-16 22:34 G	16119359.24	16119359.44	16119359.64	0.0136	0.0055
Uranus	39421-10-29 04:48 G	16119585.53	16119585.70	16119585.88	0.0136	0.0081
Uranus	39422-06-12 11:02 G	16119811.84	16119811.96	16119812.11	0.0136	0.0107
Uranus	39423-01-24 17:31 G	16120038.21	16120038.23	16120038.29	0.0136	0.0134
Jupiter	39426-09-24 00:43 G	16121376.43	16121376.53	16121376.63	0.0528	0.0453
Saturn	39430-10-10 16:19 G	16122853.99	16122854.18	16122854.38	0.0263	0.0106
Saturn	39431-05-27 15:36 G	16123082.96	16123083.15	16123083.36	0.0264	0.0094
Mars	39440-08-27 03:22 G	16126462.58	16126462.64	16126462.70	0.1593	0.1493
Saturn	39444-08-13 09:07 G	16127909.69	16127909.88	16127910.08	0.0300	0.0120
Jupiter	39444-11-23 20:53 G	16128012.33	16128012.37	16128012.43	0.0498	0.0481
Saturn	39445-03-31 12:29 G	16128139.85	16128140.02	16128140.19	0.0298	0.0171
Jupiter	39450-09-26 22:19 G	16130145.27	16130145.43	16130145.60	0.0528	0.0291
Jupiter	39456-07-29 22:05 G	16132278.22	16132278.42	16132278.62	0.0498	0.0085
Uranus	39457-10-12 23:02 G	16132718.36	16132718.46	16132718.58	0.0144	0.0124
Uranus	39458-05-27 10:34 G	16132944.79	16132944.94	16132945.12	0.0144	0.0093
Uranus	39459-01-08 22:19 G	16133171.24	16133171.43	16133171.63	0.0143	0.0061
Uranus	39459-08-23 10:05 G	16133397.71	16133397.92	16133398.13	0.0143	0.0030
Uranus	39460-04-05 21:22 G	16133624.17	16133624.39	16133624.61	0.0143	0.0003
Saturn	39460-04-21 22:48 G	16133640.25	16133640.45	16133640.66	0.0263	0.0074
Uranus	39460-11-18 08:38 G	16133850.65	16133850.86	16133851.07	0.0143	0.0032
Saturn	39460-12-06 22:34 G	16133869.25	16133869.44	16133869.62	0.0265	0.0126
Uranus	39461-07-02 19:26 G	16134077.12	16134077.31	16134077.51	0.0143	0.0063

Uranus 39462-02-14 06:14 G 16134303.61 16134303.76 16134303.94 0.0142 0.0093

Jupiter 39462-06-01 12:43 G 16134410.84 16134411.03 16134411.22 0.0528 0.0196

Uranus 39462-09-28 17:02 G 16134530.12 16134530.21 16134530.34 0.0142 0.0123

Jupiter 39468-04-03 22:48 G 16136544.30 16136544.45 16136544.61 0.0498 0.0313

Mars 39471-09-22 11:31 G 16137810.81 16137810.98 16137811.15 0.1943 0.0500

Mars 39472-08-25 18:00 G 16138149.08 16138149.25 16138149.42 0.1591 0.0440

Neptune 39472-11-26 11:31 G 16138241.89 16138241.98 16138242.11 0.0089 0.0076

Neptune 39473-07-10 00:43 G 16138467.39 16138467.53 16138467.71 0.0089 0.0062

Neptune 39474-02-20 14:10 G 16138692.91 16138693.09 16138693.29 0.0089 0.0047

Saturn 39474-02-23 19:12 G 16138696.10 16138696.30 16138696.50 0.0299 0.0072

Neptune 39474-10-04 03:36 G 16138918.45 16138918.65 16138918.86 0.0089 0.0031

Saturn 39474-10-11 21:36 G 16138926.27 16138926.40 16138926.56 0.0297 0.0217

Neptune 39475-05-17 16:48 G 16139143.99 16139144.20 16139144.42 0.0089 0.0017

Neptune 39475-12-29 06:00 G 16139369.53 16139369.75 16139369.97 0.0089 0.0002

Neptune 39476-08-10 18:58 G 16139595.08 16139595.29 16139595.52 0.0089 0.0014

Neptune 39477-03-24 08:10 G 16139820.65 16139820.84 16139821.06 0.0089 0.0029

Neptune 39477-11-04 21:36 G 16140046.21 16140046.40 16140046.59 0.0089 0.0043

Neptune 39478-06-18 10:34 G 16140271.78 16140271.94 16140272.11 0.0089 0.0058

Neptune 39479-01-29 23:17 G 16140497.36 16140497.47 16140497.62 0.0089 0.0073

Neptune 39479-09-12 12:14 G 16140722.99 16140723.01 16140723.08 0.0089 0.0088

Saturn 39489-03-18 05:46 G 16144197.67 16144197.74 16144197.84 0.0262 0.0239

Saturn 39489-11-02 04:34 G 16144426.48 16144426.69 16144426.91 0.0263 0.0044

Saturn 39490-06-19 04:19 G 16144655.52 16144655.68 16144655.86 0.0265 0.0158

Pluto 39491-05-16 17:17 G 16144987.17 16144987.22 16144987.32 0.0064 0.0060

Pluto 39491-12-27 21:36 G 16145212.19 16145212.40 16145212.61 0.0064 0.0017

Jupiter 39492-04-06 06:29 G 16145312.61 16145312.77 16145312.94 0.0497 0.0304

Pluto 39492-08-09 01:12 G 16145437.36 16145437.55 16145437.76 0.0064 0.0025

Jupiter 39498-02-07 04:05 G 16147445.47 16147445.67 16147445.87 0.0528 0.0082

Uranus 39500-07-15 13:12 G 16148334.05 16148334.05 16148334.07 0.0134 0.0134

Moon 39500-11-12 13:26 G 16148453.93 16148454.06 16148454.18 0.2666 0.1499

Earth 39500-11-12 17:31 G 16148454.11 16148454.23 16148454.35 0.2662 0.1705 *

Uranus 39501-02-26 18:58 G 16148560.18 16148560.29 16148560.42 0.0134 0.0109

Uranus 39501-10-11 00:29 G 16148786.37 16148786.52 16148786.71 0.0135 0.0085

Uranus 39502-05-25 06:29 G 16149012.59 16149012.77 16149012.98 0.0135 0.0059

Uranus 39503-01-06 12:29 G 16149238.81 16149239.02 16149239.24 0.0135 0.0034

Uranus 39503-08-20 18:29 G 16149465.06 16149465.27 16149465.49 0.0135 0.0008

Saturn 39503-09-07 06:14 G 16149482.55 16149482.76 16149482.97 0.0299 0.0028

Jupiter 39503-12-12 07:12 G 16149578.60 16149578.80 16149579.00 0.0498 0.0092

Uranus 39504-04-03 00:43 G 16149691.32 16149691.53 16149691.75 0.0135 0.0018

Saturn 39504-04-24 08:53 G 16149712.77 16149712.87 16149712.97 0.0297 0.0260

Uranus 39504-11-15 06:43 G 16149917.58 16149917.78 16149917.99 0.0135 0.0044

Uranus 39505-06-29 12:58 G 16150143.86 16150144.04 16150144.24 0.0136 0.0070

Uranus 39506-02-10 19:41 G 16150370.17 16150370.32 16150370.47 0.0136 0.0096

Uranus 39506-09-25 02:10 G 16150596.50 16150596.59 16150596.68 0.0136 0.0122

Moon 39508-11-10 08:24 G 16151373.74 16151373.85 16151373.96 0.2668 0.1818

Earth 39508-11-10 08:24 G 16151373.75 16151373.85 16151373.96 0.2661 0.1990 *

Jupiter 39509-10-13 19:26 G 16151711.18 16151711.31 16151711.44 0.0528 0.0399

Jupiter 39515-08-17 07:55 G 16153844.80 16153844.83 16153844.87 0.0498 0.0488

Saturn 39518-09-29 12:29 G 16154983.90 16154984.02 16154984.16 0.0262 0.0207

Saturn 39519-05-16 11:31 G 16155212.77 16155212.98 16155213.20 0.0264 0.0011

Saturn 39519-12-31 11:31 G 16155441.84 16155441.98 16155442.13 0.0265 0.0191

Saturn 39532-08-01 12:58 G 16160038.96 16160039.04 16160039.13 0.0301 0.0274

Saturn 39533-03-19 17:17 G 16160269.01 16160269.22 16160269.43 0.0298 0.0022

Jupiter 39533-10-16 17:17 G 16160480.07 16160480.22 16160480.38 0.0528 0.0343

Mars 39537-07-20 13:26 G 16161852.94 16161853.06 16161853.17 0.1942 0.1429

Mars 39538-06-24 06:43 G 16162191.61 16162191.78 16162191.96 0.1592 0.0209

Jupiter 39539-08-19 16:34 G 16162612.99 16162613.19 16162613.39 0.0497 0.0133

Uranus 39541-06-13 02:38 G 16163276.57 16163276.61 16163276.69 0.0144 0.0138

Uranus 39542-01-25 14:24 G 16163502.97 16163503.10 16163503.26 0.0144 0.0107

Uranus 39542-09-09 02:24 G 16163729.42 16163729.60 16163729.79 0.0144 0.0075

Uranus 39543-04-23 13:55 G 16163955.88 16163956.08 16163956.29 0.0143 0.0044

Uranus 39543-12-06 01:26 G 16164182.34 16164182.56 16164182.78 0.0143 0.0013

Uranus 39544-07-19 12:43 G 16164408.81 16164409.03 16164409.25 0.0143 0.0018

Uranus 39545-03-02 23:46 G 16164635.29 16164635.49 16164635.70 0.0143 0.0049

Jupiter 39545-06-21 09:22 G 16164745.69 16164745.89 16164746.08 0.0528 0.0132

Uranus 39545-10-15 10:34 G 16164861.77 16164861.94 16164862.14 0.0143 0.0080

Uranus 39546-05-29 21:22 G 16165088.27 16165088.39 16165088.54 0.0142 0.0110

Uranus 39547-01-11 07:55 G 16165314.81 16165314.83 16165314.90 0.0142 0.0140

Saturn 39548-04-10 18:00 G 16165770.11 16165770.25 16165770.42 0.0262 0.0179

Saturn 39548-11-25 17:17 G 16165999.01 16165999.22 16165999.43 0.0264 0.0020

Saturn 39549-07-12 17:17 G 16166228.12 16166228.22 16166228.35 0.0266 0.0223

Jupiter 39551-04-24 17:02 G 16166879.04 16166879.21 16166879.39 0.0497 0.0265

Neptune 39555-08-26 11:02 G 16168463.88 16168463.96 16168464.09 0.0088 0.0077

Neptune 39556-04-07 23:46 G 16168689.36 16168689.49 16168689.67 0.0088 0.0063

Neptune 39556-11-19 12:43 G 16168914.87 16168915.03 16168915.23 0.0088 0.0049

Neptune 39557-07-03 01:55 G 16169140.38 16169140.58 16169140.78 0.0088 0.0034

Neptune 39558-02-13 14:38 G 16169365.90 16169366.11 16169366.33 0.0088 0.0020

Neptune 39558-09-27 03:36 G 16169591.43 16169591.65 16169591.87 0.0088 0.0006

Neptune 39559-05-10 16:34 G 16169816.97 16169817.19 16169817.41 0.0088 0.0008

Neptune 39559-12-22 05:17 G 16170042.51 16170042.72 16170042.94 0.0088 0.0023

Neptune 39560-08-03 17:46 G 16170268.06 16170268.24 16170268.46 0.0088 0.0037

Neptune 39561-03-17 06:43 G 16170493.61 16170493.78 16170493.97 0.0088 0.0051

Neptune 39561-10-28 19:55 G 16170719.19 16170719.33 16170719.48 0.0088 0.0065

Saturn 39562-02-12 00:00 G 16170825.37 16170825.50 16170825.64 0.0301 0.0229

Neptune 39562-06-11 08:10 G 16170944.78 16170944.84 16170944.96 0.0088 0.0081

Saturn 39562-09-30 03:50 G 16171055.46 16171055.66 16171055.87 0.0299 0.0065

Jupiter 39575-04-27 02:24 G 16175647.46 16175647.60 16175647.74 0.0498 0.0359

Saturn 39577-10-22 00:43 G 16176556.35 16176556.53 16176556.71 0.0262 0.0146

Saturn 39578-06-07 23:46 G 16176785.29 16176785.49 16176785.71 0.0264 0.0053

Saturn 39579-01-23 00:14 G 16177014.46 16177014.51 16177014.58 0.0266 0.0256

Pluto 39580-11-20 03:07 G 16177681.44 16177681.63 16177681.85 0.0080 0.0032

Jupiter 39581-02-26 21:50 G 16177780.22 16177780.41 16177780.61 0.0528 0.0128

Pluto 39581-07-03 13:12 G 16177906.90 16177907.05 16177907.24 0.0080 0.0052

Uranus 39584-10-27 03:22 G 16179118.56 16179118.64 16179118.76 0.0134 0.0120

Uranus 39585-06-10 09:07 G 16179344.74 16179344.88 16179345.05 0.0135 0.0095

Uranus 39586-01-22 15:07 G 16179570.95 16179571.13 16179571.32 0.0135 0.0069

Uranus 39586-09-05 20:53 G 16179797.18 16179797.37 16179797.59 0.0135 0.0044

Jupiter 39586-12-31 03:07 G 16179913.42 16179913.63 16179913.83 0.0498 0.0038

Uranus 39587-04-20 03:07 G 16180023.42 16180023.63 16180023.85 0.0135 0.0018

Uranus 39587-12-02 09:07 G 16180249.67 16180249.88 16180250.10 0.0135 0.0008

Uranus 39588-07-15 15:22 G 16180475.93 16180476.14 16180476.35 0.0135 0.0034

Uranus 39589-02-26 21:36 G 16180702.21 16180702.40 16180702.60 0.0136 0.0060

Uranus 39589-10-11 03:50 G 16180928.50 16180928.66 16180928.84 0.0136 0.0086

Uranus 39590-05-25 10:19 G 16181154.82 16181154.93 16181155.06 0.0136 0.0112

Saturn 39591-08-25 10:48 G 16181611.79 16181611.95 16181612.13 0.0300 0.0180

Saturn 39592-04-11 14:38 G 16181841.92 16181842.11 16181842.31 0.0298 0.0113

Jupiter 39592-11-01 13:41 G 16182045.92 16182046.07 16182046.22 0.0528 0.0349

Jupiter 39598-09-05 03:07 G 16184179.54 16184179.63 16184179.74 0.0497 0.0435

Mars 39604-04-20 19:55 G 16186234.16 16186234.33 16186234.51 0.1593 0.0022

Saturn 39607-05-04 05:17 G 16187342.54 16187342.72 16187342.92 0.0263 0.0119

Saturn 39607-12-19 04:48 G 16187571.50 16187571.70 16187571.91 0.0264 0.0081

Jupiter 39616-11-04 13:12 G 16190814.92 16190815.05 16190815.18 0.0528 0.0402

Saturn 39621-03-06 21:36 G 16192398.22 16192398.40 16192398.59 0.0300 0.0136

Saturn 39621-10-23 00:58 G 16192628.36 16192628.54 16192628.72 0.0298 0.0157

Jupiter 39622-09-07 11:46 G 16192947.80 16192947.99 16192948.18 0.0498 0.0185

Uranus 39625-09-24 19:41 G 16194061.22 16194061.32 16194061.46 0.0144 0.0120

Uranus 39626-05-09 07:26 G 16194287.66 16194287.81 16194288.00 0.0144 0.0089

Uranus 39626-12-21 19:12 G 16194514.11 16194514.30 16194514.51 0.0143 0.0057

Uranus 39627-08-05 06:43 G 16194740.57 16194740.78 16194741.00 0.0143 0.0026

Uranus 39628-03-18 18:14 G 16194967.04 16194967.26 16194967.48 0.0143 0.0005

Jupiter 39628-07-10 04:48 G 16195080.50 16195080.70 16195080.90 0.0528 0.0074

Uranus 39628-10-31 05:17 G 16195193.51 16195193.72 16195193.94 0.0143 0.0036

Uranus 39629-06-14 16:05 G 16195419.99 16195420.17 16195420.38 0.0143 0.0067

Uranus 39630-01-27 03:07 G 16195646.48 16195646.63 16195646.80 0.0142 0.0097

Uranus 39630-09-10 14:10 G 16195873.00 16195873.09 16195873.19 0.0142 0.0126

Jupiter 39634-05-13 12:43 G 16197213.84 16197214.03 16197214.21 0.0498 0.0211

Saturn 39636-11-13 11:17 G 16198128.77 16198128.97 16198129.18 0.0263 0.0087

Neptune 39637-02-28 22:48 G 16198236.38 16198236.45 16198236.57 0.0089 0.0081

Saturn 39637-06-30 10:48 G 16198357.76 16198357.95 16198358.15 0.0265 0.0113

Neptune 39637-10-12 12:14 G 16198461.88 16198462.01 16198462.17 0.0089 0.0066

Earth 39638-05-12 17:17 G 16198674.07 16198674.22 16198674.38 0.2670 0.0669

Moon 39638-05-12 22:48 G 16198674.31 16198674.45 16198674.58 0.2668 0.1393 *

Neptune 39638-05-26 01:26 G 16198687.39 16198687.56 16198687.75 0.0089 0.0051

Neptune 39639-01-06 14:24 G 16198912.92 16198913.10 16198913.32 0.0089 0.0037

Neptune 39639-08-20 03:50 G 16199138.45 16199138.66 16199138.88 0.0089 0.0021

Neptune 39640-04-01 17:17 G 16199364.00 16199364.22 16199364.44 0.0089 0.0006

Neptune 39640-11-13 06:29 G 16199589.55 16199589.77 16199589.99 0.0089 0.0009

Neptune 39641-06-26 19:26 G 16199815.11 16199815.31 16199815.53 0.0089 0.0024

Neptune 39642-02-07 08:24 G 16200040.67 16200040.85 16200041.07 0.0089 0.0039

Neptune 39642-09-20 22:05 G 16200266.24 16200266.42 16200266.59 0.0089 0.0053

Neptune 39643-05-04 11:02 G 16200491.83 16200491.96 16200492.11 0.0089 0.0068

Neptune 39643-12-15 23:46 G 16200717.43 16200717.49 16200717.60 0.0089 0.0083

Moon 39646-05-10 11:31 G 16201593.91 16201593.98 16201594.05 0.2665 0.2399

Saturn 39650-09-17 07:26 G 16203184.61 16203184.81 16203185.01 0.0300 0.0090

Saturn 39651-05-05 10:19 G 16203414.78 16203414.93 16203415.09 0.0297 0.0202

Jupiter 39658-05-15 22:05 G 16205982.32 16205982.42 16205982.54 0.0497 0.0414

Jupiter 39664-03-17 18:43 G 16208115.10 16208115.28 16208115.47 0.0528 0.0193

Saturn 39665-10-09 16:48 G 16208686.17 16208686.20 16208686.25 0.0262 0.0256

Saturn 39666-05-26 15:22 G 16208914.93 16208915.14 16208915.35 0.0263 0.0061

Saturn 39667-01-10 14:38 G 16209143.94 16209144.11 16209144.30 0.0265 0.0140

Uranus 39668-06-26 12:43 G 16209676.98 16209677.03 16209677.10 0.0134 0.0129

Uranus 39669-02-07 18:29 G 16209903.15 16209903.27 16209903.42 0.0135 0.0104

Uranus 39669-09-22 00:14 G 16210129.35 16210129.51 16210129.70 0.0135 0.0079

Jupiter 39670-01-18 23:02 G 16210248.26 16210248.46 16210248.67 0.0497 0.0020

Mars 39670-02-16 08:38 G 16210276.69 16210276.86 16210277.03 0.1593 0.0256

Uranus 39670-05-06 06:29 G 16210355.57 16210355.77 16210355.97 0.0135 0.0053

Uranus 39670-12-18 12:14 G 16210581.80 16210582.01 16210582.23 0.0135 0.0028

Uranus 39671-08-01 18:14 G 16210808.05 16210808.26 16210808.48 0.0135 0.0003

Uranus 39672-03-15 00:29 G 16211034.31 16211034.52 16211034.74 0.0135 0.0024

Uranus 39672-10-27 06:58 G 16211260.59 16211260.79 16211260.99 0.0136 0.0050

Uranus 39673-06-10 12:58 G 16211486.87 16211487.04 16211487.23 0.0136 0.0076

Uranus 39674-01-22 19:26 G 16211713.18 16211713.31 16211713.46 0.0136 0.0102

Uranus 39674-09-06 02:10 G 16211939.53 16211939.59 16211939.67 0.0136 0.0128

Jupiter 39675-11-21 10:48 G 16212380.78 16212380.95 16212381.12 0.0528 0.0282

Saturn 39680-03-29 16:34 G 16213970.98 16213971.19 16213971.40 0.0300 0.0048

Saturn 39680-11-14 19:12 G 16214201.19 16214201.30 16214201.43 0.0297 0.0242

Jupiter 39681-09-23 22:48 G 16214514.32 16214514.45 16214514.58 0.0498 0.0382

Saturn 39695-04-21 21:22 G 16219472.30 16219472.39 16219472.51 0.0261 0.0227

Saturn 39695-12-06 20:10 G 16219701.13 16219701.34 16219701.55 0.0263 0.0031

Saturn 39696-07-22 19:41 G 16219930.16 16219930.32 16219930.49 0.0265 0.0170

Jupiter 39699-11-24 09:07 G 16221149.78 16221149.88 16221149.98 0.0528 0.0460

Mars 39701-03-14 20:24 G 16221625.24 16221625.35 16221625.46 0.1943 0.1489

Jupiter 39705-09-27 09:22 G 16223282.72 16223282.89 16223283.07 0.0498 0.0248

Uranus 39709-05-26 02:53 G 16224619.54 16224619.62 16224619.72 0.0144 0.0131

Saturn 39709-10-11 00:58 G 16224757.33 16224757.54 16224757.75 0.0299 0.0006

Uranus 39710-01-07 14:38 G 16224845.96 16224846.11 16224846.27 0.0144 0.0100

Saturn 39710-05-29 03:36 G 16224987.59 16224987.65 16224987.71 0.0297 0.0283

Uranus 39710-08-22 02:24 G 16225072.41 16225072.60 16225072.80 0.0144 0.0069

Uranus 39711-04-05 13:55 G 16225298.87 16225299.08 16225299.29 0.0143 0.0038

Jupiter 39711-07-31 00:58 G 16225415.33 16225415.54 16225415.74 0.0528 0.0017

Uranus 39711-11-18 01:12 G 16225525.33 16225525.55 16225525.77 0.0143 0.0007

Uranus 39712-07-01 12:29 G 16225751.80 16225752.02 16225752.23 0.0143 0.0024

Uranus 39713-02-12 23:17 G 16225978.28 16225978.47 16225978.68 0.0143 0.0055

Uranus 39713-09-27 10:19 G 16226204.77 16226204.93 16226205.12 0.0143 0.0086

Uranus 39714-05-11 21:07 G 16226431.27 16226431.38 16226431.52 0.0142 0.0116

Jupiter 39717-06-02 10:19 G 16227548.74 16227548.93 16227549.13 0.0498 0.0146

Neptune 39719-11-28 22:05 G 16228458.36 16228458.42 16228458.53 0.0088 0.0081

Neptune 39720-07-11 11:02 G 16228683.84 16228683.96 16228684.12 0.0088 0.0067

Neptune 39721-02-22 00:00 G 16228909.34 16228909.50 16228909.69 0.0088 0.0053

Neptune 39721-10-05 13:26 G 16229134.86 16229135.06 16229135.26 0.0088 0.0038

Neptune 39722-05-19 02:10 G 16229360.38 16229360.59 16229360.81 0.0088 0.0024

Neptune 39722-12-30 14:53 G 16229585.91 16229586.12 16229586.35 0.0088 0.0010

Jupiter 39723-04-04 17:02 G 16229681.13 16229681.21 16229681.28 0.0528 0.0488

Neptune 39723-08-13 03:50 G 16229811.44 16229811.66 16229811.88 0.0088 0.0004

Neptune 39724-03-25 16:34 G 16230036.98 16230037.19 16230037.41 0.0088 0.0018

Saturn 39724-11-02 00:29 G 16230258.39 16230258.52 16230258.66 0.0262 0.0203

Neptune 39724-11-06 05:31 G 16230262.53 16230262.73 16230262.94 0.0088 0.0032

Saturn 39725-06-18 23:02 G 16230487.24 16230487.46 16230487.67 0.0263 0.0007

Neptune 39725-06-19 18:00 G 16230488.08 16230488.25 16230488.46 0.0088 0.0047

Neptune 39726-01-31 06:43 G 16230713.65 16230713.78 16230713.96 0.0088 0.0061

Saturn 39726-02-02 22:34 G 16230716.31 16230716.44 16230716.59 0.0265 0.0195

Neptune 39726-09-13 19:55 G 16230939.23 16230939.33 16230939.46 0.0088 0.0075

Mars 39735-12-15 21:50 G 16234319.24 16234319.41 16234319.58 0.1594 0.0482

Saturn 39738-09-05 03:36 G 16235313.55 16235313.65 16235313.74 0.0301 0.0265

Pluto 39738-09-08 14:10 G 16235316.93 16235317.09 16235317.28 0.0064 0.0039

Pluto 39739-04-21 18:29 G 16235542.05 16235542.27 16235542.49 0.0064 0.0004

Saturn 39739-04-23 08:10 G 16235543.63 16235543.84 16235544.05 0.0299 0.0032

Pluto 39739-12-02 21:50 G 16235767.28 16235767.41 16235767.58 0.0064 0.0047

Jupiter 39741-06-04 18:43 G 16236317.23 16236317.28 16236317.35 0.0498 0.0473

Earth 39743-11-14 18:14 G 16237210.13 16237210.26 16237210.38 0.2661 0.1588

Moon 39743-11-14 23:46 G 16237210.37 16237210.49 16237210.61 0.2659 0.1805 *

Jupiter 39747-04-07 18:00 G 16238450.08 16238450.25 16238450.43 0.0528 0.0269

Earth 39751-11-12 09:07 G 16240129.78 16240129.88 16240129.97 0.2660 0.2105

Moon 39751-11-12 11:17 G 16240129.85 16240129.97 16240130.09 0.2654 0.1815 *

Uranus 39752-10-09 03:22 G 16240461.54 16240461.64 16240461.77 0.0135 0.0114

Jupiter 39753-02-07 20:10 G 16240583.14 16240583.34 16240583.54 0.0498 0.0079

Uranus 39753-05-23 09:07 G 16240687.73 16240687.88 16240688.06 0.0135 0.0089

Uranus 39754-01-04 15:07 G 16240913.95 16240914.13 16240914.33 0.0135 0.0063

Saturn 39754-05-15 04:19 G 16241044.52 16241044.68 16241044.84 0.0262 0.0175

Uranus 39754-08-18 21:07 G 16241140.17 16241140.38 16241140.59 0.0135 0.0038

Saturn 39754-12-30 02:53 G 16241273.40 16241273.62 16241273.83 0.0263 0.0021

Uranus 39755-04-02 03:22 G 16241366.42 16241366.64 16241366.85 0.0135 0.0012

Saturn 39755-08-16 02:24 G 16241502.50 16241502.60 16241502.73 0.0265 0.0223

Uranus 39755-11-14 09:22 G 16241592.68 16241592.89 16241593.11 0.0135 0.0014

Uranus 39756-06-27 15:36 G 16241818.94 16241819.15 16241819.36 0.0135 0.0040

Uranus 39757-02-08 21:50 G 16242045.23 16242045.41 16242045.61 0.0136 0.0066

Uranus 39757-09-23 04:19 G 16242271.53 16242271.68 16242271.85 0.0136 0.0092

Uranus 39758-05-07 10:48 G 16242497.86 16242497.95 16242498.07 0.0136 0.0118

Jupiter 39758-12-11 08:38 G 16242715.68 16242715.86 16242716.05 0.0527 0.0213

Jupiter 39764-10-13 21:36 G 16244849.25 16244849.40 16244849.56 0.0498 0.0312

Mars 39767-01-09 21:36 G 16245667.23 16245667.40 16245667.57 0.1942 0.0527

Mars 39767-12-14 12:29 G 16246005.96 16246006.02 16246006.09 0.1592 0.1458

Saturn 39768-03-17 10:19 G 16246099.80 16246099.93 16246100.07 0.0301 0.0226

Saturn 39768-11-02 14:38 G 16246329.91 16246330.11 16246330.32 0.0299 0.0071

Saturn 39783-11-25 05:46 G 16251830.58 16251830.74 16251830.92 0.0262 0.0154

Saturn 39784-07-11 04:19 G 16252059.47 16252059.68 16252059.89 0.0264 0.0043

Saturn 39785-02-25 04:05 G 16252288.60 16252288.67 16252288.76 0.0265 0.0245

Jupiter 39788-10-16 08:38 G 16253617.70 16253617.86 16253618.01 0.0498 0.0319

Uranus 39793-01-23 10:48 G 16255177.93 16255177.95 16255178.00 0.0144 0.0142

Uranus 39793-09-06 22:48 G 16255404.32 16255404.45 16255404.60 0.0144 0.0111

Uranus 39794-04-21 10:34 G 16255630.76 16255630.94 16255631.12 0.0144 0.0080

Jupiter 39794-08-19 01:41 G 16255750.37 16255750.57 16255750.77 0.0528 0.0070

Uranus 39794-12-03 22:05 G 16255857.21 16255857.42 16255857.62 0.0143 0.0049

Uranus 39795-07-18 09:22 G 16256083.68 16256083.89 16256084.11 0.0143 0.0018

Uranus 39796-02-29 20:38 G 16256310.15 16256310.36 16256310.58 0.0143 0.0014

Uranus 39796-10-13 07:55 G 16256536.62 16256536.83 16256537.04 0.0143 0.0044

Uranus 39797-05-27 18:43 G 16256763.11 16256763.28 16256763.48 0.0143 0.0075

Saturn 39797-09-27 15:36 G 16256885.99 16256886.15 16256886.32 0.0301 0.0191

Uranus 39798-01-09 05:46 G 16256989.60 16256989.74 16256989.89 0.0142 0.0105

Saturn 39798-05-15 19:55 G 16257116.14 16257116.33 16257116.53 0.0299 0.0106

Uranus 39798-08-23 16:48 G 16257216.13 16257216.20 16257216.27 0.0142 0.0134

Jupiter 39800-06-22 07:41 G 16257883.62 16257883.82 16257884.02 0.0498 0.0085

Neptune 39801-06-04 10:19 G 16258230.88 16258230.93 16258231.02 0.0089 0.0085

Mars 39801-10-13 11:02 G 16258361.80 16258361.96 16258362.11 0.1595 0.0716

Neptune 39802-01-15 23:31 G 16258456.36 16258456.48 16258456.63 0.0089 0.0070

Neptune 39802-08-29 12:29 G 16258681.87 16258682.02 16258682.22 0.0089 0.0056

Neptune 39803-04-12 01:55 G 16258907.40 16258907.58 16258907.79 0.0089 0.0041

Neptune 39803-11-23 15:22 G 16259132.93 16259133.14 16259133.36 0.0089 0.0026

Neptune 39804-07-06 04:34 G 16259358.47 16259358.69 16259358.91 0.0089 0.0011

Neptune 39805-02-16 17:46 G 16259584.02 16259584.24 16259584.46 0.0089 0.0004

Neptune 39805-09-30 06:58 G 16259809.57 16259809.79 16259810.00 0.0089 0.0019

Jupiter 39806-04-24 18:58 G 16260016.16 16260016.29 16260016.42 0.0527 0.0397

Neptune 39806-05-13 19:55 G 16260035.14 16260035.33 16260035.54 0.0089 0.0034

Neptune 39806-12-25 08:53 G 16260260.70 16260260.87 16260261.07 0.0089 0.0048

Neptune 39807-08-07 22:19 G 16260486.28 16260486.43 16260486.59 0.0089 0.0063

Neptune 39808-03-20 11:17 G 16260711.88 16260711.97 16260712.09 0.0089 0.0078

Jupiter 39812-02-26 09:07 G 16262149.82 16262149.88 16262149.93 0.0498 0.0478

Saturn 39813-06-07 08:38 G 16262616.68 16262616.86 16262617.05 0.0262 0.0127

Saturn 39814-01-22 07:12 G 16262845.60 16262845.80 16262846.01 0.0263 0.0070

Saturn 39827-04-10 20:53 G 16267672.20 16267672.37 16267672.56 0.0301 0.0157

Pluto 39827-08-02 15:50 G 16267786.12 16267786.16 16267786.23 0.0080 0.0078

Saturn 39827-11-27 00:58 G 16267902.36 16267902.54 16267902.73 0.0299 0.0140

Pluto 39828-03-15 02:24 G 16268011.38 16268011.60 16268011.83 0.0080 0.0007

Jupiter 39830-04-27 17:31 G 16268785.08 16268785.23 16268785.38 0.0528 0.0345

Mars 39832-11-06 23:02 G 16269709.29 16269709.46 16269709.63 0.1940 0.0434

Mars 39833-10-12 01:26 G 16270048.46 16270048.56 16270048.67 0.1593 0.1225

Jupiter 39836-02-28 21:07 G 16270918.19 16270918.38 16270918.58 0.0498 0.0160

Uranus 39836-06-09 12:58 G 16271019.96 16271020.04 16271020.13 0.0134 0.0123

Uranus 39837-01-21 18:43 G 16271246.13 16271246.28 16271246.43 0.0135 0.0098

Uranus 39837-09-05 00:29 G 16271472.34 16271472.52 16271472.71 0.0135 0.0073

Uranus 39838-04-19 06:14 G 16271698.56 16271698.76 16271698.97 0.0135 0.0048

Uranus 39838-12-01 12:14 G 16271924.80 16271925.01 16271925.23 0.0135 0.0022

Uranus 39839-07-15 18:29 G 16272151.05 16272151.27 16272151.48 0.0135 0.0004

Uranus 39840-02-27 00:29 G 16272377.32 16272377.52 16272377.74 0.0135 0.0030

Uranus 39840-10-10 06:58 G 16272603.59 16272603.79 16272603.99 0.0136 0.0056

Uranus 39841-05-24 13:12 G 16272829.89 16272830.05 16272830.23 0.0136 0.0082

Jupiter 39841-12-31 09:50 G 16273050.71 16273050.91 16273051.10 0.0528 0.0127

Uranus 39842-01-05 19:41 G 16273056.20 16273056.32 16273056.46 0.0136 0.0108

Uranus 39842-08-20 02:10 G 16273282.57 16273282.59 16273282.64 0.0136 0.0135

Saturn 39842-12-18 09:36 G 16273402.71 16273402.90 16273403.10 0.0262 0.0107

Saturn 39843-08-04 08:10 G 16273631.64 16273631.84 16273632.04 0.0264 0.0090

Jupiter 39847-11-03 22:34 G 16275184.26 16275184.44 16275184.62 0.0498 0.0232

Saturn 39856-10-21 00:14 G 16278458.32 16278458.51 16278458.70 0.0301 0.0125

Saturn 39857-06-08 04:19 G 16278688.51 16278688.68 16278688.86 0.0299 0.0170

Mars 39867-08-10 23:46 G 16282404.35 16282404.49 16282404.63 0.1596 0.0954

Jupiter 39871-11-06 07:26 G 16283952.69 16283952.81 16283952.95 0.0498 0.0389

Saturn 39872-06-29 11:31 G 16284188.78 16284188.98 16284189.18 0.0261 0.0082

Saturn 39873-02-13 10:05 G 16284417.73 16284417.92 16284418.11 0.0263 0.0115

Uranus 39877-05-08 05:46 G 16285962.64 16285962.74 16285962.87 0.0144 0.0123

Jupiter 39877-09-08 03:50 G 16286085.46 16286085.66 16286085.85 0.0527 0.0160

Uranus 39877-12-20 17:31 G 16286189.07 16286189.23 16286189.41 0.0144 0.0092

Uranus 39878-08-04 05:17 G 16286415.53 16286415.72 16286415.93 0.0144 0.0061

Uranus 39879-03-18 16:48 G 16286641.99 16286642.20 16286642.42 0.0143 0.0030

Uranus 39879-10-31 04:19 G 16286868.46 16286868.68 16286868.90 0.0143 0.0002

Uranus 39880-06-13 15:22 G 16287094.94 16287095.14 16287095.36 0.0143 0.0033

Uranus 39881-01-26 02:24 G 16287321.42 16287321.60 16287321.81 0.0143 0.0064

Moon 39881-05-14 13:41 G 16287429.92 16287430.07 16287430.23 0.2671 0.0227

Earth 39881-05-14 19:12 G 16287430.14 16287430.30 16287430.45 0.2671 0.0654 *

Uranus 39881-09-09 13:55 G 16287547.92 16287548.08 16287548.25 0.0143 0.0094

Uranus 39882-04-24 00:43 G 16287774.43 16287774.53 16287774.65 0.0142 0.0124

Jupiter 39883-07-12 09:36 G 16288218.70 16288218.90 16288219.11 0.0498 0.0002

Neptune 39884-03-02 09:07 G 16288452.85 16288452.88 16288452.96 0.0088 0.0085

Neptune 39884-10-13 22:05 G 16288678.32 16288678.42 16288678.58 0.0088 0.0071

Neptune 39885-05-27 11:02 G 16288903.81 16288903.96 16288904.15 0.0088 0.0057

Neptune 39886-01-08 00:00 G 16289129.32 16289129.50 16289129.71 0.0088 0.0043

Saturn 39886-05-03 04:05 G 16289244.47 16289244.67 16289244.87 0.0301 0.0094

Neptune 39886-08-21 13:26 G 16289354.85 16289355.06 16289355.26 0.0088 0.0028

Saturn 39886-12-19 07:55 G 16289474.69 16289474.83 16289474.99 0.0299 0.0202

Neptune 39887-04-04 02:10 G 16289580.37 16289580.59 16289580.81 0.0088 0.0014

Neptune 39887-11-15 15:07 G 16289805.91 16289806.13 16289806.35 0.0088 0.0001

Neptune 39888-06-28 03:36 G 16290031.44 16290031.65 16290031.88 0.0088 0.0014

Neptune 39889-02-08 16:19 G 16290256.98 16290257.18 16290257.40 0.0088 0.0029

Jupiter 39889-05-13 19:55 G 16290351.17 16290351.33 16290351.49 0.0527 0.0312

Neptune 39889-09-22 05:17 G 16290482.54 16290482.72 16290482.93 0.0088 0.0042

Neptune 39890-05-05 18:14 G 16290708.10 16290708.26 16290708.44 0.0088 0.0056

Neptune 39890-12-17 06:58 G 16290933.67 16290933.79 16290933.94 0.0088 0.0070

Neptune 39891-07-30 19:41 G 16291159.28 16291159.32 16291159.40 0.0088 0.0084

Jupiter 39895-03-17 11:31 G 16292484.86 16292484.98 16292485.11 0.0498 0.0389

Mars 39898-09-04 00:00 G 16293751.38 16293751.50 16293751.62 0.1939 0.1396

Mars 39899-08-09 14:38 G 16294090.97 16294091.11 16294091.24 0.1593 0.1000

Saturn	39901-05-26 14:24 G	16294746.06	16294746.10	16294746.15	0.0260	0.0254
Saturn	39902-01-10 11:46 G	16294974.79	16294974.99	16294975.20	0.0262	0.0063
Saturn	39902-08-27 10:19 G	16295203.75	16295203.93	16295204.12	0.0264	0.0135
Jupiter	39913-05-17 21:50 G	16299120.30	16299120.41	16299120.51	0.0528	0.0447
Saturn	39915-11-14 06:14 G	16300030.56	16300030.76	16300030.97	0.0301	0.0065
Saturn	39916-07-01 10:05 G	16300260.80	16300260.92	16300261.06	0.0299	0.0230
Jupiter	39919-03-20 20:24 G	16301253.18	16301253.35	16301253.54	0.0498	0.0231
Uranus	39920-02-08 21:36 G	16301578.37	16301578.40	16301578.43	0.0134	0.0133
Uranus	39920-09-22 02:53 G	16301804.51	16301804.62	16301804.76	0.0134	0.0108
Uranus	39921-05-06 08:38 G	16302030.70	16302030.86	16302031.04	0.0134	0.0083
Uranus	39921-12-18 14:38 G	16302256.92	16302257.11	16302257.31	0.0135	0.0058
Uranus	39922-08-01 20:24 G	16302483.15	16302483.35	16302483.57	0.0135	0.0033
Uranus	39923-03-16 02:38 G	16302709.40	16302709.61	16302709.83	0.0135	0.0007
Uranus	39923-10-28 08:38 G	16302935.65	16302935.86	16302936.08	0.0135	0.0020
Uranus	39924-06-10 14:53 G	16303161.92	16303162.12	16303162.33	0.0135	0.0045
Jupiter	39925-01-20 15:36 G	16303385.95	16303386.15	16303386.35	0.0527	0.0017
Uranus	39925-01-22 20:53 G	16303388.20	16303388.37	16303388.57	0.0136	0.0072
Uranus	39925-09-06 03:36 G	16303614.51	16303614.65	16303614.81	0.0136	0.0097
Uranus	39926-04-20 10:19 G	16303840.84	16303840.93	16303841.02	0.0136	0.0123
Jupiter	39930-11-23 22:05 G	16305519.23	16305519.42	16305519.61	0.0498	0.0162
Saturn	39930-12-06 15:50 G	16305532.08	16305532.16	16305532.27	0.0260	0.0230
Saturn	39931-07-23 13:26 G	16305760.85	16305761.06	16305761.27	0.0262	0.0038
Saturn	39932-03-08 12:00 G	16305989.83	16305990.00	16305990.17	0.0263	0.0160
Mars	39933-06-08 12:58 G	16306446.92	16306447.04	16306447.15	0.1597	0.1184
Jupiter	39936-09-25 07:12 G	16307651.73	16307651.80	16307651.88	0.0527	0.0489
Saturn	39945-05-26 09:07 G	16310816.67	16310816.88	16310817.09	0.0301	0.0036
Saturn	39946-01-11 12:58 G	16311046.94	16311047.04	16311047.14	0.0299	0.0258
Jupiter	39954-11-26 10:48 G	16314287.91	16314287.95	16314288.01	0.0498	0.0479
Saturn	39960-06-17 15:50 G	16316318.05	16316318.16	16316318.29	0.0260	0.0212
Jupiter	39960-09-28 06:58 G	16316420.62	16316420.79	16316420.97	0.0528	0.0258

Uranus 39961-01-06 11:02 G 16316520.91 16316520.96 16316521.05 0.0144 0.0137

Saturn 39961-02-01 13:26 G 16316546.84 16316547.06 16316547.27 0.0262 0.0019

Uranus 39961-08-20 23:17 G 16316747.33 16316747.47 16316747.62 0.0144 0.0105

Saturn 39961-09-18 11:46 G 16316775.85 16316775.99 16316776.16 0.0264 0.0179

Uranus 39962-04-04 11:02 G 16316973.78 16316973.96 16316974.15 0.0144 0.0074

Uranus 39962-11-16 22:34 G 16317200.24 16317200.44 16317200.66 0.0144 0.0043

Uranus 39963-07-01 10:19 G 16317426.71 16317426.93 16317427.15 0.0143 0.0011

Uranus 39964-02-12 21:36 G 16317653.19 16317653.40 16317653.62 0.0143 0.0020

Uranus 39964-09-26 08:53 G 16317879.68 16317879.87 16317880.09 0.0143 0.0051

Uranus 39965-05-10 19:55 G 16318106.17 16318106.33 16318106.53 0.0143 0.0082

Mars 39965-06-07 03:36 G 16318133.50 16318133.65 16318133.80 0.1594 0.0768

Neptune 39965-09-06 21:07 G 16318225.37 16318225.38 16318225.43 0.0089 0.0089

Uranus 39965-12-23 07:12 G 16318332.68 16318332.80 16318332.94 0.0142 0.0112

Neptune 39966-04-20 10:48 G 16318450.84 16318450.95 16318451.08 0.0089 0.0074

Jupiter 39966-08-01 12:43 G 16318553.83 16318554.03 16318554.23 0.0498 0.0089

Uranus 39966-08-06 18:14 G 16318559.25 16318559.26 16318559.29 0.0142 0.0141

Neptune 39966-12-01 23:46 G 16318676.34 16318676.49 16318676.67 0.0089 0.0060

Neptune 39967-07-15 13:12 G 16318901.86 16318902.05 16318902.24 0.0089 0.0045

Neptune 39968-02-26 02:10 G 16319127.39 16319127.59 16319127.80 0.0089 0.0030

Neptune 39968-10-08 15:22 G 16319352.93 16319353.14 16319353.36 0.0089 0.0016

Neptune 39969-05-22 04:34 G 16319578.47 16319578.69 16319578.91 0.0089 0.0001

Neptune 39970-01-02 17:46 G 16319804.02 16319804.24 16319804.45 0.0089 0.0014

Neptune 39970-08-16 06:43 G 16320029.58 16320029.78 16320029.99 0.0089 0.0028

Neptune 39971-03-29 19:41 G 16320255.15 16320255.32 16320255.53 0.0089 0.0044

Neptune 39971-11-10 09:07 G 16320480.72 16320480.88 16320481.05 0.0089 0.0058

Jupiter 39972-06-03 01:12 G 16320686.37 16320686.55 16320686.74 0.0527 0.0204

Neptune 39972-06-22 21:50 G 16320706.30 16320706.41 16320706.56 0.0089 0.0072

Neptune 39973-02-03 11:17 G 16320931.93 16320931.97 16320932.03 0.0089 0.0087

Saturn 39974-12-06 10:05 G 16321602.71 16321602.92 16321603.13 0.0301 0.0009

Saturn 39975-07-24 13:55 G 16321833.03 16321833.08 16321833.15 0.0298 0.0285

Jupiter	**39978-04-06 11:17**	**G**	**16322819.82**	**16322819.97**	**16322820.13**	**0.0498**	**0.0317**	
Pluto	**39986-01-01 09:07**	**G**	**16325646.70**	**16325646.88**	**16325647.11**	**0.0064**	**0.0024**	
Pluto	**39986-08-14 13:12**	**G**	**16325871.85**	**16325872.05**	**16325872.27**	**0.0064**	**0.0019**	
Moon	**39986-11-16 12:58**	**G**	**16325965.90**	**16325966.04**	**16325966.18**	**0.2661**	**0.1186**	
Earth	**39986-11-16 18:58**	**G**	**16325966.15**	**16325966.29**	**16325966.42**	**0.2660**	**0.1467**	*
Pluto	**39987-03-27 17:17**	**G**	**16326097.17**	**16326097.22**	**16326097.29**	**0.0064**	**0.0062**	
Saturn	**39989-12-28 17:31**	**G**	**16327104.09**	**16327104.23**	**16327104.38**	**0.0260**	**0.0187**	
Saturn	**39990-08-14 14:53**	**G**	**16327332.91**	**16327333.12**	**16327333.34**	**0.0262**	**0.0007**	
Saturn	**39991-03-31 13:26**	**G**	**16327561.93**	**16327562.06**	**16327562.20**	**0.0263**	**0.0203**	
Earth	**39994-11-14 09:50**	**G**	**16328885.82**	**16328885.91**	**16328886.00**	**0.2660**	**0.2193**	
Mars	**39999-04-06 01:26**	**G**	**16330489.49**	**16330489.56**	**16330489.64**	**0.1598**	**0.1430**	

41ST MILLENNIUM CE

This is a list of transits of Venus in the 41st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**40002-04-09 00:00**	**G**	**16331588.35**	**16331588.50**	**16331588.66**	**0.0498**	**0.0321**	
Saturn	**40003-10-31 06:58**	**G**	**16332158.72**	**16332158.79**	**16332158.87**	**0.0303**	**0.0283**	
Uranus	**40004-05-22 12:29**	**G**	**16332362.92**	**16332363.02**	**16332363.12**	**0.0134**	**0.0118**	
Saturn	**40004-06-17 12:43**	**G**	**16332388.82**	**16332389.03**	**16332389.24**	**0.0301**	**0.0019**	
Uranus	**40005-01-03 17:46**	**G**	**16332589.10**	**16332589.24**	**16332589.41**	**0.0134**	**0.0093**	
Uranus	**40005-08-17 23:46**	**G**	**16332815.31**	**16332815.49**	**16332815.68**	**0.0134**	**0.0068**	
Uranus	**40006-04-01 05:31**	**G**	**16333041.54**	**16333041.73**	**16333041.95**	**0.0135**	**0.0043**	
Uranus	**40006-11-13 11:46**	**G**	**16333267.77**	**16333267.99**	**16333268.20**	**0.0135**	**0.0017**	

Uranus 40007-06-27 17:46 G 16333494.02 16333494.24 16333494.45 0.0135 0.0009

Uranus 40008-02-08 23:46 G 16333720.29 16333720.49 16333720.70 0.0135 0.0035

Jupiter 40008-02-09 18:14 G 16333721.06 16333721.26 16333721.47 0.0527 0.0079

Uranus 40008-09-22 06:00 G 16333946.56 16333946.75 16333946.95 0.0135 0.0061

Uranus 40009-05-06 12:14 G 16334172.85 16334173.01 16334173.18 0.0136 0.0087

Uranus 40009-12-18 18:29 G 16334399.17 16334399.27 16334399.40 0.0136 0.0113

Jupiter 40013-12-13 01:55 G 16335854.38 16335854.58 16335854.79 0.0498 0.0068

Saturn 40019-07-10 17:31 G 16337890.08 16337890.23 16337890.40 0.0260 0.0169

Jupiter 40019-10-15 10:48 G 16337986.81 16337986.95 16337987.08 0.0527 0.0392

Saturn 40020-02-24 15:07 G 16338118.92 16338119.13 16338119.34 0.0262 0.0025

Saturn 40020-10-10 13:26 G 16338347.96 16338348.06 16338348.19 0.0264 0.0223

Jupiter 40025-08-18 03:36 G 16340120.57 16340120.65 16340120.73 0.0498 0.0456

Mars 40031-04-04 16:34 G 16342176.02 16342176.19 16342176.35 0.1595 0.0539

Saturn 40033-05-12 07:55 G 16342944.72 16342944.83 16342944.94 0.0302 0.0255

Saturn 40033-12-28 13:41 G 16343174.86 16343175.07 16343175.28 0.0300 0.0047

Jupiter 40043-10-18 14:24 G 16346755.96 16346756.10 16346756.24 0.0527 0.0375

Uranus 40045-04-20 03:07 G 16347305.52 16347305.63 16347305.76 0.0144 0.0119

Uranus 40045-12-02 14:53 G 16347531.96 16347532.12 16347532.30 0.0144 0.0088

Uranus 40046-07-17 02:38 G 16347758.42 16347758.61 16347758.82 0.0144 0.0057

Uranus 40047-02-28 14:24 G 16347984.89 16347985.10 16347985.32 0.0143 0.0026

Uranus 40047-10-13 02:10 G 16348211.37 16348211.59 16348211.81 0.0143 0.0006

Uranus 40048-05-26 13:26 G 16348437.85 16348438.06 16348438.28 0.0143 0.0037

Uranus 40049-01-08 00:43 G 16348664.35 16348664.53 16348664.73 0.0143 0.0068

Neptune 40049-01-16 08:53 G 16348672.77 16348672.87 16348673.00 0.0088 0.0075

Saturn 40049-01-19 19:26 G 16348676.13 16348676.31 16348676.49 0.0260 0.0144

Jupiter 40049-08-20 12:29 G 16348888.83 16348889.02 16348889.22 0.0498 0.0161

Uranus 40049-08-22 11:46 G 16348890.85 16348890.99 16348891.17 0.0143 0.0099

Neptune 40049-08-29 21:50 G 16348898.27 16348898.41 16348898.58 0.0088 0.0061

Saturn 40049-09-05 17:02 G 16348905.00 16348905.21 16348905.42 0.0262 0.0050

Uranus 40050-04-05 23:02 G 16349117.38 16349117.46 16349117.56 0.0142 0.0128

Neptune 40050-04-12 10:48 G 16349123.78 16349123.95 16349124.15 0.0088 0.0047

Saturn 40050-04-22 15:36 G 16349134.08 16349134.15 16349134.22 0.0263 0.0248

Neptune 40050-11-23 23:46 G 16349349.29 16349349.49 16349349.70 0.0088 0.0033

Neptune 40051-07-07 12:43 G 16349574.82 16349575.03 16349575.25 0.0088 0.0019

Neptune 40052-02-18 01:41 G 16349800.35 16349800.57 16349800.79 0.0088 0.0005

Neptune 40052-09-30 14:38 G 16350025.89 16350026.11 16350026.33 0.0088 0.0009

Neptune 40053-05-14 03:36 G 16350251.44 16350251.65 16350251.86 0.0088 0.0023

Neptune 40053-12-25 16:19 G 16350476.98 16350477.18 16350477.38 0.0088 0.0037

Neptune 40054-08-08 05:02 G 16350702.54 16350702.71 16350702.90 0.0088 0.0051

Neptune 40055-03-21 18:00 G 16350928.11 16350928.25 16350928.40 0.0088 0.0065

Jupiter 40055-06-23 06:00 G 16351021.55 16351021.75 16351021.95 0.0527 0.0098

Neptune 40055-11-02 06:43 G 16351153.70 16351153.78 16351153.89 0.0088 0.0080

Jupiter 40061-04-25 14:38 G 16353154.93 16353155.11 16353155.29 0.0499 0.0226

Mars 40062-04-29 07:55 G 16353523.73 16353523.83 16353523.93 0.1941 0.1565

Saturn 40062-11-22 10:05 G 16353730.80 16353730.92 16353731.07 0.0303 0.0229

Saturn 40063-07-10 16:05 G 16353960.96 16353961.17 16353961.37 0.0301 0.0074

Pluto 40074-11-24 10:48 G 16358115.82 16358115.95 16358116.13 0.0080 0.0058

Pluto 40075-07-07 21:36 G 16358341.20 16358341.40 16358341.62 0.0080 0.0027

Saturn 40078-08-01 20:10 G 16359462.15 16359462.34 16359462.53 0.0261 0.0124

Saturn 40079-03-18 17:31 G 16359691.03 16359691.23 16359691.44 0.0262 0.0070

Jupiter 40085-04-28 02:53 G 16361923.51 16361923.62 16361923.74 0.0498 0.0410

Uranus 40088-01-20 21:22 G 16362921.34 16362921.39 16362921.47 0.0134 0.0127

Uranus 40088-09-03 03:07 G 16363147.50 16363147.63 16363147.78 0.0134 0.0102

Uranus 40089-04-17 08:53 G 16363373.70 16363373.87 16363374.05 0.0134 0.0077

Uranus 40089-11-29 14:38 G 16363599.92 16363600.11 16363600.32 0.0134 0.0052

Uranus 40090-07-13 20:38 G 16363826.15 16363826.36 16363826.57 0.0135 0.0027

Uranus 40091-02-25 02:38 G 16364052.40 16364052.61 16364052.83 0.0135 0.0003

Jupiter 40091-02-28 23:46 G 16364056.30 16364056.49 16364056.68 0.0528 0.0186

Uranus 40091-10-09 08:38 G 16364278.65 16364278.86 16364279.08 0.0135 0.0025

Uranus 40092-05-22 14:53 G 16364504.92 16364505.12 16364505.32 0.0135 0.0050

Saturn 40092-06-03 12:00 G 16364516.84 16364517.00 16364517.16 0.0302 0.0199

Uranus 40093-01-03 20:53 G 16364731.20 16364731.37 16364731.56 0.0135 0.0076

Saturn 40093-01-19 17:31 G 16364747.03 16364747.23 16364747.42 0.0300 0.0103

Uranus 40093-08-18 02:53 G 16364957.50 16364957.62 16364957.78 0.0136 0.0103

Uranus 40094-04-01 09:36 G 16365183.85 16365183.90 16365183.98 0.0136 0.0128

Jupiter 40097-01-01 01:26 G 16366189.36 16366189.56 16366189.77 0.0498 0.0009

Mars 40097-01-30 05:17 G 16366218.55 16366218.72 16366218.89 0.1596 0.0302

Jupiter 40102-11-04 17:31 G 16368322.06 16368322.23 16368322.41 0.0527 0.0275

Saturn 40108-02-12 22:05 G 16370248.23 16370248.42 16370248.62 0.0260 0.0099

Jupiter 40108-09-07 02:53 G 16370455.50 16370455.62 16370455.75 0.0498 0.0386

Saturn 40108-09-28 19:55 G 16370477.13 16370477.33 16370477.53 0.0262 0.0096

Saturn 40121-12-15 15:36 G 16375302.98 16375303.15 16375303.33 0.0302 0.0169

Saturn 40122-08-02 20:53 G 16375533.19 16375533.37 16375533.56 0.0300 0.0132

Earth 40124-05-16 20:38 G 16376186.20 16376186.36 16376186.51 0.2672 0.0584

Moon 40124-05-17 01:12 G 16376186.41 16376186.55 16376186.68 0.2675 0.1379 *

Jupiter 40126-11-07 16:19 G 16377091.09 16377091.18 16377091.28 0.0527 0.0464

Mars 40128-02-25 09:07 G 16377565.71 16377565.88 16377566.04 0.1939 0.0598

Uranus 40128-12-19 07:41 G 16377863.74 16377863.82 16377863.91 0.0144 0.0133

Uranus 40129-08-02 19:41 G 16378090.17 16378090.32 16378090.48 0.0144 0.0101

Uranus 40130-03-17 07:41 G 16378316.63 16378316.82 16378317.01 0.0144 0.0070

Neptune 40130-07-23 21:07 G 16378445.30 16378445.38 16378445.51 0.0089 0.0079

Uranus 40130-10-29 19:26 G 16378543.10 16378543.31 16378543.52 0.0144 0.0039

Neptune 40131-03-06 10:48 G 16378670.80 16378670.95 16378671.11 0.0089 0.0064

Uranus 40131-06-13 06:58 G 16378769.58 16378769.79 16378770.01 0.0143 0.0008

Neptune 40131-10-17 23:46 G 16378896.32 16378896.49 16378896.69 0.0089 0.0050

Uranus 40132-01-25 18:29 G 16378996.06 16378996.27 16378996.49 0.0143 0.0024

Neptune 40132-05-30 13:12 G 16379121.85 16379122.05 16379122.25 0.0089 0.0035

Uranus 40132-09-08 06:00 G 16379222.56 16379222.75 16379222.96 0.0143 0.0055

Jupiter 40132-09-09 15:50 G 16379223.98 16379224.16 16379224.33 0.0498 0.0252

Neptune 40133-01-11 02:10 G 16379347.38 16379347.59 16379347.81 0.0089 0.0020

Uranus 40133-04-22 17:17 G 16379449.06 16379449.22 16379449.40 0.0143 0.0086

Neptune 40133-08-24 15:22 G 16379572.92 16379573.14 16379573.36 0.0089 0.0006

Uranus 40133-12-05 04:19 G 16379675.57 16379675.68 16379675.82 0.0143 0.0116

Neptune 40134-04-07 04:34 G 16379798.48 16379798.69 16379798.91 0.0089 0.0009

Neptune 40134-11-18 17:31 G 16380024.03 16380024.23 16380024.45 0.0089 0.0024

Neptune 40135-07-02 06:29 G 16380249.58 16380249.77 16380249.98 0.0089 0.0038

Neptune 40136-02-12 19:26 G 16380475.15 16380475.31 16380475.50 0.0089 0.0053

Neptune 40136-09-25 08:53 G 16380700.73 16380700.87 16380701.02 0.0089 0.0067

Neptune 40137-05-08 21:50 G 16380926.34 16380926.41 16380926.51 0.0089 0.0081

Saturn 40137-08-24 23:46 G 16381034.29 16381034.49 16381034.70 0.0261 0.0077

Saturn 40138-04-10 21:22 G 16381263.21 16381263.39 16381263.59 0.0262 0.0118

Jupiter 40138-07-13 08:10 G 16381356.64 16381356.84 16381357.04 0.0527 0.0007

Jupiter 40144-05-15 17:02 G 16383490.02 16383490.21 16383490.41 0.0498 0.0139

Jupiter 40150-03-18 02:10 G 16385622.50 16385622.59 16385622.69 0.0527 0.0466

Saturn 40151-06-27 17:46 G 16386089.06 16386089.24 16386089.43 0.0302 0.0138

Saturn 40152-02-12 23:02 G 16386319.28 16386319.46 16386319.64 0.0300 0.0162

Mars 40162-11-28 18:29 G 16390261.09 16390261.27 16390261.44 0.1597 0.0075

Saturn 40166-07-21 05:31 G 16391591.67 16391591.73 16391591.81 0.0260 0.0242

Saturn 40167-03-07 02:24 G 16391820.40 16391820.60 16391820.82 0.0261 0.0051

Saturn 40167-10-22 00:29 G 16392049.35 16392049.52 16392049.70 0.0262 0.0145

Jupiter 40168-05-18 01:26 G 16392258.50 16392258.56 16392258.62 0.0498 0.0475

Uranus 40172-05-04 12:58 G 16393705.94 16393706.04 16393706.18 0.0134 0.0111

Uranus 40172-12-16 18:43 G 16393932.13 16393932.28 16393932.46 0.0134 0.0086

Uranus 40173-07-31 00:29 G 16394158.34 16394158.52 16394158.73 0.0134 0.0062

Uranus 40174-03-14 06:43 G 16394384.57 16394384.78 16394384.99 0.0135 0.0036

Jupiter 40174-03-21 02:38 G 16394391.45 16394391.61 16394391.79 0.0527 0.0284

Uranus 40174-10-26 12:43 G 16394610.81 16394611.03 16394611.25 0.0135 0.0010

Uranus 40175-06-09 18:29 G 16394837.06 16394837.27 16394837.49 0.0135 0.0016

Uranus 40176-01-22 00:43 G 16395063.33 16395063.53 16395063.74 0.0135 0.0041

Uranus 40176-09-04 06:43 G 16395289.60 16395289.78 16395289.98 0.0135 0.0067

Uranus 40177-04-18 13:12 G 16395515.90 16395516.05 16395516.21 0.0135 0.0093

Uranus 40177-11-30 19:12 G 16395742.21 16395742.30 16395742.42 0.0136 0.0119

Jupiter 40180-01-22 03:22 G 16396524.44 16396524.64 16396524.84 0.0498 0.0090

Saturn 40181-01-06 22:34 G 16396875.25 16396875.44 16396875.64 0.0302 0.0106

Saturn 40181-08-25 03:36 G 16397105.50 16397105.65 16397105.82 0.0300 0.0194

Jupiter 40185-11-23 18:29 G 16398657.08 16398657.27 16398657.46 0.0527 0.0188

Jupiter 40191-09-27 05:02 G 16400790.55 16400790.71 16400790.87 0.0498 0.0299

Mars 40193-12-22 10:48 G 16401607.77 16401607.95 16401608.12 0.1938 0.0352

Saturn 40196-01-31 08:10 G 16402377.73 16402377.84 16402377.96 0.0260 0.0218

Saturn 40196-09-16 05:17 G 16402606.50 16402606.72 16402606.93 0.0261 0.0027

Saturn 40197-05-03 02:53 G 16402835.47 16402835.62 16402835.79 0.0263 0.0170

Saturn 40210-07-21 03:07 G 16407661.43 16407661.63 16407661.84 0.0301 0.0070

Saturn 40211-03-08 07:55 G 16407891.70 16407891.83 16407891.97 0.0299 0.0228

Uranus 40213-04-03 01:55 G 16408648.46 16408648.58 16408648.72 0.0144 0.0113

Neptune 40213-04-21 18:43 G 16408667.22 16408667.28 16408667.40 0.0088 0.0080

Uranus 40213-11-15 13:55 G 16408874.90 16408875.08 16408875.26 0.0144 0.0082

Neptune 40213-12-03 07:41 G 16408892.70 16408892.82 16408892.99 0.0088 0.0066

Uranus 40214-06-30 01:41 G 16409101.37 16409101.57 16409101.78 0.0144 0.0051

Neptune 40214-07-16 20:38 G 16409118.20 16409118.36 16409118.56 0.0088 0.0052

Uranus 40215-02-11 13:26 G 16409327.84 16409328.06 16409328.28 0.0144 0.0019

Neptune 40215-02-27 09:36 G 16409343.71 16409343.90 16409344.11 0.0088 0.0038

Uranus 40215-09-26 01:12 G 16409554.33 16409554.55 16409554.77 0.0143 0.0012

Jupiter 40215-09-30 13:26 G 16409558.90 16409559.06 16409559.22 0.0498 0.0315

Neptune 40215-10-10 22:48 G 16409569.24 16409569.45 16409569.67 0.0088 0.0024

Uranus 40216-05-09 12:29 G 16409780.82 16409781.02 16409781.23 0.0143 0.0043

Neptune 40216-05-23 11:46 G 16409794.77 16409794.99 16409795.21 0.0088 0.0010

Uranus 40216-12-21 23:46 G 16410007.31 16410007.49 16410007.69 0.0143 0.0074

Neptune 40217-01-04 00:43 G 16410020.31 16410020.53 16410020.75 0.0088 0.0004

Uranus 40217-08-05 11:02 G 16410233.82 16410233.96 16410234.12 0.0143 0.0104

Neptune 40217-08-17 13:26 G 16410245.85 16410246.06 16410246.28 0.0088 0.0018

Uranus 40218-03-19 22:19 G 16410460.36 16410460.43 16410460.50 0.0142 0.0134

Neptune 40218-03-31 02:10 G 16410471.40 16410471.59 16410471.81 0.0088 0.0032

Neptune 40218-11-11 15:07 G 16410696.95 16410697.13 16410697.33 0.0088 0.0046

Neptune 40219-06-25 03:50 G 16410922.52 16410922.66 16410922.84 0.0088 0.0060

Neptune 40220-02-05 16:34 G 16411148.10 16411148.19 16411148.33 0.0088 0.0075

Neptune 40220-09-18 05:46 G 16411373.74 16411373.74 16411373.77 0.0088 0.0088

Jupiter 40221-08-02 12:14 G 16411691.81 16411692.01 16411692.21 0.0528 0.0097

Saturn 40225-08-13 11:31 G 16413163.84 16413163.98 16413164.13 0.0260 0.0192

Saturn 40226-03-30 08:53 G 16413392.65 16413392.87 16413393.08 0.0261 0.0003

Saturn 40226-11-14 06:43 G 16413621.66 16413621.78 16413621.93 0.0263 0.0199

Jupiter 40227-06-05 14:24 G 16413824.90 16413825.10 16413825.31 0.0498 0.0077

Mars 40228-09-26 07:26 G 16414303.63 16414303.81 16414303.98 0.1598 0.0162

Earth 40229-11-18 19:26 G 16414722.18 16414722.31 16414722.45 0.2660 0.1358

Moon 40229-11-19 01:26 G 16414722.44 16414722.56 16414722.67 0.2661 0.1809 *

Pluto 40232-09-12 20:53 G 16415751.36 16415751.37 16415751.44 0.0064 0.0063

Jupiter 40233-04-07 03:50 G 16415957.52 16415957.66 16415957.80 0.0527 0.0375

Pluto 40233-04-26 01:12 G 16415976.35 16415976.55 16415976.77 0.0064 0.0021

Pluto 40233-12-07 05:17 G 16416201.51 16416201.72 16416201.93 0.0064 0.0021

Pluto 40234-07-20 08:53 G 16416426.87 16416426.87 16416426.89 0.0064 0.0064

Earth 40237-11-16 10:34 G 16417641.86 16417641.94 16417642.01 0.2659 0.2313

Moon 40237-11-16 15:22 G 16417642.00 16417642.14 16417642.28 0.2655 0.1433 *

Jupiter 40239-02-08 15:50 G 16418091.09 16418091.16 16418091.23 0.0499 0.0465

Saturn 40240-01-31 09:07 G 16418447.67 16418447.88 16418448.09 0.0302 0.0036

Saturn 40240-09-17 13:41 G 16418677.97 16418678.07 16418678.17 0.0300 0.0262

Saturn 40255-02-23 15:07 G 16423949.97 16423950.13 16423950.30 0.0260 0.0166

Saturn 40255-10-10 12:43 G 16424178.82 16424179.03 16424179.24 0.0262 0.0028

Uranus 40256-01-03 22:48 G 16424264.38 16424264.45 16424264.57 0.0134 0.0120

Saturn 40256-05-26 10:48 G 16424407.85 16424407.95 16424408.07 0.0263 0.0225

Uranus 40256-08-17 04:34 G 16424490.56 16424490.69 16424490.86 0.0134 0.0096

Uranus 40257-03-31 10:34 G 16424716.77 16424716.94 16424717.14 0.0134 0.0070

Jupiter 40257-04-10 01:41 G 16424726.43 16424726.57 16424726.72 0.0527 0.0357

Uranus 40257-11-12 16:34 G 16424942.99 16424943.19 16424943.40 0.0135 0.0045

Uranus 40258-06-26 22:19 G 16425169.22 16425169.43 16425169.65 0.0135 0.0020

Uranus 40259-02-08 04:19 G 16425395.47 16425395.68 16425395.90 0.0135 0.0007

Uranus 40259-09-22 10:19 G 16425621.73 16425621.93 16425622.15 0.0135 0.0032

Mars 40259-10-20 12:14 G 16425649.88 16425650.01 16425650.14 0.1935 0.1292

Uranus 40260-05-05 16:34 G 16425847.99 16425848.19 16425848.39 0.0135 0.0058

Uranus 40260-12-17 22:34 G 16426074.28 16426074.44 16426074.62 0.0135 0.0084

Uranus 40261-08-01 05:02 G 16426300.58 16426300.71 16426300.84 0.0136 0.0109

Uranus 40262-03-15 11:17 G 16426526.96 16426526.97 16426527.00 0.0136 0.0135

Jupiter 40263-02-11 03:07 G 16426859.44 16426859.63 16426859.82 0.0498 0.0162

Jupiter 40268-12-13 18:58 G 16428992.09 16428992.29 16428992.49 0.0528 0.0107

Saturn 40268-12-25 09:07 G 16429003.87 16429003.88 16429003.92 0.0302 0.0300

Saturn 40269-08-12 15:22 G 16429233.93 16429234.14 16429234.35 0.0301 0.0005

Jupiter 40274-10-17 01:55 G 16431125.40 16431125.58 16431125.76 0.0498 0.0239

Saturn 40284-09-04 19:26 G 16434736.13 16434736.31 16434736.49 0.0260 0.0139

Saturn 40285-04-21 17:02 G 16434965.00 16434965.21 16434965.42 0.0262 0.0056

Saturn 40285-12-06 15:22 G 16435194.10 16435194.14 16435194.20 0.0263 0.0255

Mars 40294-07-24 20:10 G 16438346.17 16438346.34 16438346.51 0.1599 0.0401

Neptune 40294-10-26 07:55 G 16438439.75 16438439.83 16438439.91 0.0089 0.0083

Neptune 40295-06-08 20:38 G 16438665.24 16438665.36 16438665.52 0.0089 0.0069

Neptune 40296-01-20 09:50 G 16438890.75 16438890.91 16438891.10 0.0089 0.0054

Neptune 40296-09-01 23:17 G 16439116.28 16439116.47 16439116.67 0.0089 0.0040

Uranus 40296-12-01 10:05 G 16439206.82 16439206.92 16439207.04 0.0144 0.0124

Neptune 40297-04-15 12:29 G 16439341.82 16439342.02 16439342.24 0.0089 0.0025

Uranus 40297-07-15 22:05 G 16439433.26 16439433.42 16439433.60 0.0144 0.0093

Neptune 40297-11-27 01:41 G 16439567.36 16439567.57 16439567.79 0.0089 0.0011

Uranus 40298-02-27 09:50 G 16439659.73 16439659.91 16439660.12 0.0144 0.0062

Saturn 40298-07-07 17:31 G 16439790.13 16439790.23 16439790.34 0.0303 0.0261

Neptune 40298-07-10 14:53 G 16439792.90 16439793.12 16439793.34 0.0089 0.0004

Uranus 40298-10-11 21:50 G 16439886.20 16439886.41 16439886.63 0.0144 0.0030

Jupiter 40298-10-19 12:14 G 16439893.89 16439894.01 16439894.15 0.0498 0.0385

Neptune 40299-02-21 03:50 G 16440018.45 16440018.66 16440018.88 0.0089 0.0018

Saturn 40299-02-22 23:31 G 16440020.27 16440020.48 16440020.69 0.0301 0.0043

Uranus 40299-05-26 09:36 G 16440112.68 16440112.90 16440113.12 0.0143 0.0001

Neptune 40299-10-04 17:02 G 16440244.01 16440244.21 16440244.42 0.0089 0.0033

Uranus 40300-01-07 21:07 G 16440339.17 16440339.38 16440339.59 0.0143 0.0032

Neptune 40300-05-18 05:46 G 16440469.58 16440469.74 16440469.95 0.0089 0.0048

Uranus 40300-08-22 08:38 G 16440565.66 16440565.86 16440566.05 0.0143 0.0063

Neptune 40300-12-29 18:58 G 16440695.15 16440695.29 16440695.46 0.0089 0.0062

Uranus 40301-04-05 19:41 G 16440792.17 16440792.32 16440792.49 0.0143 0.0094

Neptune 40301-08-12 08:24 G 16440920.74 16440920.85 16440920.97 0.0089 0.0076

Uranus 40301-11-18 06:43 G 16441018.69 16441018.78 16441018.90 0.0143 0.0124

Jupiter 40304-08-22 10:05 G 16442026.72 16442026.92 16442027.11 0.0527 0.0165

Jupiter 40310-06-25 13:26 G 16444159.86 16444160.06 16444160.27 0.0498 0.0010

Saturn 40314-03-19 00:14 G 16445522.32 16445522.51 16445522.71 0.0261 0.0110

Saturn 40314-11-02 22:05 G 16445751.22 16445751.42 16445751.62 0.0262 0.0086

Jupiter 40316-04-27 00:43 G 16446292.37 16446292.53 16446292.70 0.0527 0.0312

Jupiter 40322-02-28 14:24 G 16448425.98 16448426.10 16448426.22 0.0498 0.0397

Pluto 40322-03-20 02:24 G 16448445.46 16448445.60 16448445.78 0.0080 0.0056

Pluto 40322-10-31 12:58 G 16448670.85 16448671.04 16448671.26 0.0080 0.0029

Mars 40326-07-24 11:17 G 16450032.95 16450032.97 16450033.00 0.1596 0.1577

Saturn 40328-01-19 02:10 G 16450576.44 16450576.59 16450576.74 0.0302 0.0215

Saturn 40328-09-05 07:41 G 16450806.62 16450806.82 16450807.02 0.0300 0.0087

Uranus 40339-09-04 09:50 G 16454822.86 16454822.91 16454822.99 0.0134 0.0128

Uranus 40340-04-17 15:36 G 16455049.02 16455049.15 16455049.30 0.0134 0.0103

Jupiter 40340-04-30 01:41 G 16455061.47 16455061.57 16455061.69 0.0528 0.0438

Uranus 40340-11-29 21:22 G 16455275.22 16455275.39 16455275.57 0.0134 0.0078

Uranus 40341-07-14 03:07 G 16455501.44 16455501.63 16455501.83 0.0134 0.0053

Uranus 40342-02-25 09:07 G 16455727.67 16455727.88 16455728.09 0.0135 0.0028

Uranus 40342-10-09 15:07 G 16455953.91 16455954.13 16455954.34 0.0135 0.0003

Uranus 40343-05-23 20:53 G 16456180.16 16456180.37 16456180.59 0.0135 0.0023

Saturn 40343-09-29 05:17 G 16456308.52 16456308.72 16456308.93 0.0261 0.0081

Uranus 40344-01-05 02:38 G 16456406.42 16456406.61 16456406.82 0.0135 0.0049

Saturn 40344-05-15 03:07 G 16456537.44 16456537.63 16456537.83 0.0262 0.0116

Uranus 40344-08-18 08:53 G 16456632.70 16456632.87 16456633.06 0.0135 0.0075

Uranus 40345-04-01 15:07 G 16456859.00 16456859.13 16456859.29 0.0136 0.0101

Uranus 40345-11-13 21:22 G 16457085.33 16457085.39 16457085.49 0.0136 0.0126

Jupiter 40346-03-02 22:19 G 16457194.24 16457194.43 16457194.61 0.0498 0.0213

Jupiter 40352-01-03 16:48 G 16459327.00 16459327.20 16459327.40 0.0528 0.0035

Saturn 40357-07-31 11:31 G 16461362.82 16461362.98 16461363.16 0.0302 0.0174

Jupiter 40357-11-05 23:02 G 16461460.28 16461460.46 16461460.66 0.0498 0.0177

Saturn 40358-03-18 16:48 G 16461593.02 16461593.20 16461593.40 0.0300 0.0129

Mars 40360-05-22 09:22 G 16462388.73 16462388.89 16462389.05 0.1600 0.0632

Jupiter 40363-09-08 08:10 G 16463592.79 16463592.84 16463592.90 0.0527 0.0506

Moon 40367-05-19 18:43 G 16464942.12 16464942.28 16464942.45 0.2667 0.0055

Earth 40367-05-19 22:05 G 16464942.27 16464942.42 16464942.58 0.2672 0.0552 *

Saturn 40372-08-24 13:41 G 16466866.00 16466866.07 16466866.15 0.0260 0.0243

Saturn 40373-04-10 11:02 G 16467094.75 16467094.96 16467095.17 0.0261 0.0051

Saturn 40373-11-25 08:53 G 16467323.70 16467323.87 16467324.05 0.0263 0.0147

Neptune 40377-07-25 05:02 G 16468661.66 16468661.71 16468661.78 0.0088 0.0084

Neptune 40378-03-07 17:31 G 16468887.12 16468887.23 16468887.38 0.0088 0.0071

Neptune 40378-10-19 06:29 G 16469112.62 16469112.77 16469112.96 0.0088 0.0057

Neptune 40379-06-01 19:26 G 16469338.13 16469338.31 16469338.52 0.0088 0.0043

Neptune 40380-01-13 08:24 G 16469563.65 16469563.85 16469564.07 0.0088 0.0029

Uranus 40380-08-01 18:58 G 16469765.22 16469765.29 16469765.38 0.0144 0.0135

Neptune 40380-08-25 21:22 G 16469789.18 16469789.39 16469789.61 0.0088 0.0015

Uranus 40381-03-16 06:58 G 16469991.65 16469991.79 16469991.95 0.0144 0.0103

Neptune 40381-04-08 10:19 G 16470014.71 16470014.93 16470015.16 0.0088 0.0002

Uranus 40381-10-28 18:58 G 16470218.11 16470218.29 16470218.49 0.0144 0.0072

Jupiter 40381-11-08 09:22 G 16470228.80 16470228.89 16470228.98 0.0498 0.0443

Neptune 40381-11-19 23:17 G 16470240.25 16470240.47 16470240.69 0.0088 0.0013

Uranus 40382-06-12 06:43 G 16470444.58 16470444.78 16470445.00 0.0144 0.0041

Neptune 40382-07-03 12:00 G 16470465.80 16470466.00 16470466.22 0.0088 0.0027

Uranus 40383-01-24 18:29 G 16470671.06 16470671.27 16470671.49 0.0144 0.0010

Neptune 40383-02-14 00:43 G 16470691.35 16470691.53 16470691.74 0.0088 0.0041

Uranus 40383-09-08 06:14 G 16470897.55 16470897.76 16470897.98 0.0143 0.0022

Neptune 40383-09-27 14:10 G 16470916.91 16470917.09 16470917.26 0.0088 0.0055

Uranus 40384-04-21 17:31 G 16471124.04 16471124.23 16471124.44 0.0143 0.0054

Neptune 40384-05-10 02:53 G 16471142.49 16471142.62 16471142.76 0.0088 0.0068

Uranus 40384-12-04 04:48 G 16471350.53 16471350.70 16471350.89 0.0143 0.0084

Neptune 40384-12-21 15:36 G 16471368.09 16471368.15 16471368.24 0.0088 0.0082

Uranus 40385-07-18 16:05 G 16471577.04 16471577.17 16471577.30 0.0143 0.0114

Saturn 40387-02-10 21:50 G 16472149.22 16472149.41 16472149.61 0.0301 0.0125

Jupiter 40387-09-11 06:29 G 16472361.59 16472361.77 16472361.95 0.0528 0.0224

Saturn 40387-09-29 02:38 G 16472379.45 16472379.61 16472379.79 0.0300 0.0176

Mars 40392-05-21 00:14 G 16474075.42 16474075.51 16474075.60 0.1597 0.1340

Jupiter 40393-07-14 08:24 G 16474494.65 16474494.85 16474495.06 0.0498 0.0047

Jupiter 40399-05-16 22:34 G 16476627.26 16476627.44 16476627.62 0.0528 0.0242

Saturn 40402-03-06 18:43 G 16477652.18 16477652.28 16477652.41 0.0260 0.0216

Saturn 40402-10-21 16:34 G 16477880.97 16477881.19 16477881.40 0.0262 0.0022

Saturn 40403-06-07 14:38 G 16478109.96 16478110.11 16478110.27 0.0263 0.0177

Jupiter 40405-03-19 09:07 G 16478760.74 16478760.88 16478761.03 0.0498 0.0347

Saturn 40416-08-23 08:38 G 16482935.66 16482935.86 16482936.07 0.0302 0.0080

Saturn 40417-04-10 13:26 G 16483165.92 16483166.06 16483166.21 0.0300 0.0219

Jupiter 40423-05-19 20:38 G 16485396.30 16485396.36 16485396.44 0.0527 0.0491

Mars 40423-06-14 19:26 G 16485422.22 16485422.31 16485422.40 0.1937 0.1648

Uranus 40423-12-17 01:41 G 16485607.47 16485607.57 16485607.70 0.0134 0.0112

Uranus 40424-07-30 07:26 G 16485833.65 16485833.81 16485833.98 0.0134 0.0088

Uranus 40425-03-13 13:12 G 16486059.86 16486060.05 16486060.25 0.0134 0.0063

Uranus 40425-10-25 18:58 G 16486286.09 16486286.29 16486286.50 0.0134 0.0037

Mars 40426-03-19 21:50 G 16486431.27 16486431.41 16486431.56 0.1601 0.0883

Uranus 40426-06-09 00:43 G 16486512.32 16486512.53 16486512.75 0.0135 0.0012

Uranus 40427-01-21 06:29 G 16486738.56 16486738.77 16486738.99 0.0135 0.0014

Uranus 40427-09-04 12:29 G 16486964.82 16486965.02 16486965.23 0.0135 0.0039

Uranus 40428-04-17 18:14 G 16487191.09 16487191.26 16487191.47 0.0135 0.0066

Uranus 40428-11-30 00:29 G 16487417.37 16487417.52 16487417.69 0.0135 0.0091

Jupiter 40429-03-21 18:43 G 16487529.11 16487529.28 16487529.45 0.0498 0.0270

Uranus 40429-07-14 06:43 G 16487643.68 16487643.78 16487643.90 0.0136 0.0116

Saturn 40431-09-17 01:12 G 16488438.40 16488438.55 16488438.70 0.0260 0.0183

Saturn 40432-05-02 22:48 G 16488667.24 16488667.45 16488667.66 0.0262 0.0011

Saturn 40432-12-17 21:07 G 16488896.26 16488896.38 16488896.52 0.0263 0.0210

Jupiter 40435-01-22 11:02 G 16489661.76 16489661.96 16489662.16 0.0527 0.0013

Jupiter 40440-11-24 19:12 G 16491795.11 16491795.30 16491795.50 0.0498 0.0122

Saturn 40446-03-05 19:55 G 16493722.12 16493722.33 16493722.54 0.0301 0.0029

Jupiter 40446-09-27 03:07 G 16493927.53 16493927.63 16493927.73 0.0527 0.0455

Saturn 40446-10-22 00:00 G 16493952.42 16493952.50 16493952.60 0.0299 0.0268

Mars 40458-03-18 13:12 G 16498117.92 16498118.05 16498118.17 0.1598 0.1110

Neptune 40459-01-28 17:17 G 16498434.19 16498434.22 16498434.27 0.0089 0.0088

Neptune 40459-09-11 06:29 G 16498659.66 16498659.77 16498659.90 0.0089 0.0074

Neptune 40460-04-23 19:41 G 16498885.17 16498885.32 16498885.50 0.0089 0.0059

Neptune 40460-12-05 09:07 G 16499110.70 16499110.88 16499111.08 0.0089 0.0045

Saturn 40461-03-29 06:29 G 16499224.60 16499224.77 16499224.94 0.0261 0.0155

Neptune 40461-07-18 22:19 G 16499336.23 16499336.43 16499336.64 0.0089 0.0030

Saturn 40461-11-13 04:05 G 16499453.47 16499453.67 16499453.89 0.0262 0.0042

Neptune 40462-03-01 11:31 G 16499561.77 16499561.98 16499562.20 0.0089 0.0016

Saturn 40462-06-30 02:38 G 16499682.54 16499682.61 16499682.71 0.0264 0.0241

Neptune 40462-10-13 00:43 G 16499787.31 16499787.53 16499787.75 0.0089 0.0002

Neptune 40463-05-26 13:41 G 16500012.86 16500013.07 16500013.30 0.0089 0.0013

Neptune 40464-01-07 02:38 G 16500238.42 16500238.61 16500238.83 0.0089 0.0028

Neptune 40464-08-19 15:50 G 16500463.98 16500464.16 16500464.36 0.0089 0.0042

Uranus 40464-11-13 15:07 G 16500550.00 16500550.13 16500550.26 0.0144 0.0115

Jupiter 40464-11-27 03:22 G 16500563.61 16500563.64 16500563.68 0.0497 0.0488

Neptune 40465-04-02 05:17 G 16500689.55 16500689.72 16500689.89 0.0089 0.0056

Uranus 40465-06-28 02:53 G 16500776.45 16500776.62 16500776.81 0.0144 0.0084

Neptune 40465-11-13 17:46 G 16500915.13 16500915.24 16500915.40 0.0089 0.0071

Uranus 40466-02-09 14:53 G 16501002.93 16501003.12 16501003.33 0.0144 0.0052

Neptune 40466-06-27 06:58 G 16501140.74 16501140.79 16501140.88 0.0089 0.0084

Uranus 40466-09-24 02:53 G 16501229.41 16501229.62 16501229.84 0.0144 0.0021

Uranus 40467-05-08 14:38 G 16501455.89 16501456.11 16501456.33 0.0144 0.0011

Uranus 40467-12-21 02:10 G 16501682.38 16501682.59 16501682.80 0.0143 0.0042

Uranus 40468-08-03 13:26 G 16501908.88 16501909.06 16501909.26 0.0143 0.0073

Uranus 40469-03-18 00:58 G 16502135.39 16502135.54 16502135.69 0.0143 0.0103

Uranus 40469-10-30 11:46 G 16502361.93 16502361.99 16502362.08 0.0143 0.0134

Jupiter 40470-09-30 02:10 G 16502696.42 16502696.59 16502696.76 0.0528 0.0283

Moon 40472-11-19 14:53 G 16503477.97 16503478.12 16503478.28 0.2656 0.0669

Earth 40472-11-19 20:24 G 16503478.21 16503478.35 16503478.49 0.2659 0.1254 *

Saturn 40475-01-29 01:12 G 16504278.49 16504278.55 16504278.62 0.0303 0.0287

Saturn 40475-09-16 06:58 G 16504508.58 16504508.79 16504509.00 0.0301 0.0018

Jupiter 40476-08-02 03:36 G 16504829.45 16504829.65 16504829.86 0.0498 0.0097

Pluto 40480-08-17 15:22 G 16506305.95 16506306.14 16506306.36 0.0064 0.0024

Earth 40480-11-17 11:31 G 16506397.91 16506397.98 16506398.05 0.2658 0.2377

Pluto 40481-03-30 19:41 G 16506531.11 16506531.32 16506531.53 0.0064 0.0018

Pluto 40481-11-10 23:02 G 16506756.42 16506756.46 16506756.55 0.0064 0.0061

Jupiter 40482-06-04 17:31 G 16506962.05 16506962.23 16506962.42 0.0527 0.0188

Jupiter 40488-04-07 04:19 G 16509095.52 16509095.68 16509095.85 0.0498 0.0296

Mars 40489-04-10 21:36 G 16509464.23 16509464.40 16509464.56 0.1936 0.0721

Saturn 40490-10-09 12:43 G 16510010.85 16510011.03 16510011.23 0.0261 0.0123

Saturn 40491-05-26 10:48 G 16510239.74 16510239.95 16510240.15 0.0262 0.0074

Mars 40492-01-15 11:02 G 16510473.84 16510473.96 16510474.08 0.1602 0.1116

Saturn 40504-08-11 12:58 G 16515064.91 16515065.04 16515065.17 0.0302 0.0235

Saturn 40505-03-29 18:29 G 16515295.07 16515295.27 16515295.48 0.0300 0.0068

Uranus 40507-08-17 12:14 G 16516165.94 16516166.01 16516166.12 0.0134 0.0121

Uranus 40508-03-30 18:00 G 16516392.11 16516392.25 16516392.41 0.0134 0.0096

Uranus 40508-11-11 23:46 G 16516618.31 16516618.49 16516618.68 0.0134 0.0071

Uranus 40509-06-26 05:17 G 16516844.52 16516844.72 16516844.93 0.0134 0.0046

Uranus 40510-02-07 11:02 G 16517070.75 16517070.96 16517071.18 0.0134 0.0021

Uranus 40510-09-21 16:48 G 16517296.99 16517297.20 16517297.42 0.0135 0.0005

Uranus 40511-05-05 22:34 G 16517523.23 16517523.44 16517523.66 0.0135 0.0030

Uranus 40511-12-18 04:19 G 16517749.49 16517749.68 16517749.89 0.0135 0.0055

Jupiter 40512-04-10 13:26 G 16517863.91 16517864.06 16517864.22 0.0497 0.0320

Uranus 40512-07-31 10:34 G 16517975.77 16517975.94 16517976.11 0.0135 0.0081

Uranus 40513-03-14 16:34 G 16518202.07 16518202.19 16518202.33 0.0135 0.0106

Uranus 40513-10-26 22:48 G 16518428.41 16518428.45 16518428.51 0.0136 0.0132

Jupiter 40518-02-11 06:58 G 16519996.59 16519996.79 16519996.99 0.0528 0.0072

Saturn 40520-04-21 18:00 G 16520797.06 16520797.25 16520797.45 0.0261 0.0095

Saturn 40520-12-06 16:05 G 16521025.97 16521026.17 16521026.36 0.0263 0.0103

Jupiter 40523-12-15 14:10 G 16522129.89 16522130.09 16522130.29 0.0498 0.0072

Mars 40524-01-15 01:55 G 16522160.44 16522160.58 16522160.73 0.1599 0.0874

Jupiter 40529-10-16 22:34 G 16524262.31 16524262.44 16524262.58 0.0527 0.0397

Saturn 40534-02-22 00:00 G 16525851.34 16525851.50 16525851.67 0.0302 0.0189

Saturn 40534-10-10 05:17 G 16526081.53 16526081.72 16526081.92 0.0300 0.0114

Jupiter 40535-08-20 13:41 G 16526396.00 16526396.07 16526396.14 0.0498 0.0467

Neptune 40542-06-10 02:38 G 16528881.53 16528881.61 16528881.75 0.0088 0.0076

Neptune 40543-01-21 15:36 G 16529107.01 16529107.15 16529107.33 0.0088 0.0062

Neptune 40543-09-04 04:48 G 16529332.52 16529332.70 16529332.89 0.0088 0.0048

Neptune 40544-04-16 17:46 G 16529558.04 16529558.24 16529558.44 0.0088 0.0034

Neptune 40544-11-28 06:14 G 16529783.56 16529783.76 16529783.99 0.0088 0.0021

Neptune 40545-07-11 19:12 G 16530009.09 16530009.30 16530009.53 0.0088 0.0007

Neptune 40546-02-22 08:10 G 16530234.62 16530234.84 16530235.06 0.0088 0.0007

Neptune 40546-10-05 21:07 G 16530460.17 16530460.38 16530460.60 0.0088 0.0021

Neptune 40547-05-19 09:50 G 16530685.72 16530685.91 16530686.13 0.0088 0.0035

Neptune 40547-12-30 22:34 G 16530911.28 16530911.44 16530911.64 0.0088 0.0049

Uranus 40548-07-14 20:53 G 16531108.28 16531108.37 16531108.49 0.0144 0.0128

Neptune 40548-08-12 11:46 G 16531136.84 16531136.99 16531137.15 0.0088 0.0062

Uranus 40549-02-26 08:53 G 16531334.73 16531334.87 16531335.05 0.0144 0.0097

Saturn 40549-03-18 02:38 G 16531354.58 16531354.61 16531354.65 0.0260 0.0255

Neptune 40549-03-26 00:29 G 16531362.43 16531362.52 16531362.64 0.0088 0.0076

Uranus 40549-10-10 21:22 G 16531561.20 16531561.39 16531561.59 0.0144 0.0064

Saturn 40549-11-02 00:00 G 16531583.29 16531583.50 16531583.70 0.0261 0.0062

Uranus 40550-05-25 09:07 G 16531787.67 16531787.88 16531788.10 0.0144 0.0033

Saturn 40550-06-18 21:50 G 16531812.24 16531812.41 16531812.60 0.0263 0.0135

Uranus 40551-01-06 21:07 G 16532014.16 16532014.38 16532014.60 0.0144 0.0003

Uranus 40551-08-21 08:53 G 16532240.65 16532240.87 16532241.08 0.0144 0.0030

Uranus 40552-04-03 20:24 G 16532467.15 16532467.35 16532467.55 0.0143 0.0061

Uranus 40552-11-16 07:41 G 16532693.65 16532693.82 16532693.99 0.0143 0.0091

Uranus 40553-06-30 18:29 G 16532920.18 16532920.27 16532920.40 0.0143 0.0122

Jupiter 40553-10-19 20:24 G 16533031.19 16533031.35 16533031.51 0.0527 0.0330

Mars 40555-02-06 22:48 G 16533506.28 16533506.45 16533506.62 0.1934 0.0235

Mars 40557-11-12 23:46 G 16534516.40 16534516.49 16534516.58 0.1604 0.1365

Jupiter 40559-08-22 23:46 G 16535164.30 16535164.49 16535164.69 0.0498 0.0152

Saturn 40563-09-04 10:34 G 16536637.76 16536637.94 16536638.13 0.0302 0.0141

Saturn 40564-04-21 15:50 G 16536867.99 16536868.16 16536868.34 0.0300 0.0161

Jupiter 40565-06-24 12:00 G 16537296.80 16537297.00 16537297.19 0.0528 0.0139

Pluto 40569-07-11 13:41 G 16538775.00 16538775.07 16538775.17 0.0080 0.0074

Pluto 40570-02-22 00:14 G 16539000.30 16539000.51 16539000.73 0.0080 0.0011

Jupiter 40571-04-28 00:29 G 16539430.34 16539430.52 16539430.70 0.0498 0.0239

Saturn 40578-09-28 07:26 G 16542140.71 16542140.81 16542140.91 0.0260 0.0228

Saturn 40579-05-15 04:34 G 16542369.48 16542369.69 16542369.90 0.0262 0.0035

Saturn 40579-12-30 02:38 G 16542598.45 16542598.61 16542598.78 0.0263 0.0163

Mars 40589-11-11 15:07 G 16546202.97 16546203.13 16546203.29 0.1600 0.0641

Uranus 40591-04-16 23:17 G 16546724.42 16546724.47 16546724.52 0.0134 0.0129

Uranus 40591-11-29 04:19 G 16546950.56 16546950.68 16546950.83 0.0134 0.0105

Uranus 40592-07-12 10:05 G 16547176.75 16547176.92 16547177.09 0.0134 0.0080

Uranus 40593-02-23 15:36 G 16547402.96 16547403.15 16547403.35 0.0134 0.0056

Saturn 40593-03-16 20:53 G 16547424.17 16547424.37 16547424.57 0.0302 0.0095

Uranus 40593-10-07 21:07 G 16547629.17 16547629.38 16547629.60 0.0134 0.0031

Saturn 40593-11-02 01:41 G 16547654.43 16547654.57 16547654.73 0.0300 0.0206

Uranus 40594-05-22 02:53 G 16547855.40 16547855.62 16547855.83 0.0134 0.0006

Uranus 40595-01-03 08:24 G 16548081.64 16548081.85 16548082.07 0.0135 0.0020

Jupiter 40595-04-30 08:38 G 16548198.73 16548198.86 16548199.00 0.0498 0.0370

Uranus 40595-08-17 13:55 G 16548307.89 16548308.08 16548308.30 0.0135 0.0046

Uranus 40596-03-30 19:55 G 16548534.16 16548534.33 16548534.53 0.0135 0.0071

Uranus 40596-11-12 01:55 G 16548760.44 16548760.58 16548760.75 0.0135 0.0097

Uranus 40597-06-26 08:10 G 16548986.76 16548986.84 16548986.94 0.0135 0.0122

Jupiter 40601-03-03 03:50 G 16550331.46 16550331.66 16550331.86 0.0527 0.0134

Jupiter 40607-01-04 09:36 G 16552464.69 16552464.90 16552465.10 0.0498 0.0023

Saturn 40608-04-10 12:14 G 16552926.88 16552927.01 16552927.16 0.0260 0.0198

Saturn 40608-11-25 09:36 G 16553155.69 16553155.90 16553156.12 0.0261 0.0007

Saturn 40609-07-12 07:55 G 16553384.69 16553384.83 16553384.97 0.0263 0.0194

Earth 40610-05-21 23:31 G 16553698.32 16553698.48 16553698.63 0.2673 0.0471

Moon 40610-05-22 00:58 G 16553698.39 16553698.54 16553698.69 0.2680 0.0545 *

Jupiter 40612-11-05 18:14 G 16554597.11 16554597.26 16554597.42 0.0527 0.0340

Jupiter 40618-09-09 10:34 G 16556730.83 16556730.94 16556731.06 0.0498 0.0409

Mars 40620-12-05 00:43 G 16557548.40 16557548.53 16557548.67 0.1932 0.1161

Saturn 40622-09-28 06:29 G 16558210.56 16558210.77 16558210.97 0.0302 0.0050

Saturn 40623-05-16 11:02 G 16558440.86 16558440.96 16558441.08 0.0299 0.0250

Neptune 40623-12-15 15:50 G 16558654.06 16558654.16 16558654.27 0.0089 0.0079

Neptune 40624-07-28 04:48 G 16558879.57 16558879.70 16558879.87 0.0089 0.0065

Neptune 40625-03-10 18:00 G 16559105.09 16559105.25 16559105.45 0.0089 0.0051

Neptune 40625-10-22 07:41 G 16559330.62 16559330.82 16559331.02 0.0089 0.0036

Neptune 40626-06-04 20:53 G 16559556.16 16559556.37 16559556.58 0.0089 0.0021

Neptune 40627-01-16 10:05 G 16559781.70 16559781.92 16559782.14 0.0089 0.0007

Neptune 40627-08-29 23:17 G 16560007.25 16560007.47 16560007.69 0.0089 0.0007

Neptune 40628-04-11 12:29 G 16560232.81 16560233.02 16560233.24 0.0089 0.0022

Neptune 40628-11-23 01:41 G 16560458.37 16560458.57 16560458.77 0.0089 0.0036

Neptune 40629-07-06 14:24 G 16560683.94 16560684.10 16560684.30 0.0089 0.0050

Neptune 40630-02-17 03:22 G 16560909.51 16560909.64 16560909.81 0.0089 0.0065

Neptune 40630-09-30 16:34 G 16561135.10 16561135.19 16561135.31 0.0089 0.0079

Uranus 40632-03-15 01:55 G 16561666.54 16561666.58 16561666.64 0.0145 0.0141

Uranus 40632-10-27 13:55 G 16561892.96 16561893.08 16561893.24 0.0144 0.0110

Uranus 40633-06-11 02:24 G 16562119.42 16562119.60 16562119.78 0.0144 0.0078

Uranus 40634-01-23 14:10 G 16562345.89 16562346.09 16562346.31 0.0144 0.0047

Uranus 40634-09-07 02:24 G 16562572.38 16562572.60 16562572.82 0.0144 0.0015

Uranus 40635-04-21 14:10 G 16562798.87 16562799.09 16562799.31 0.0144 0.0017

Uranus 40635-12-04 01:41 G 16563025.37 16563025.57 16563025.78 0.0144 0.0048

Uranus 40636-07-17 12:58 G 16563251.87 16563252.04 16563252.23 0.0143 0.0079

Jupiter 40636-11-08 17:17 G 16563366.09 16563366.22 16563366.36 0.0528 0.0394

Uranus 40637-03-01 00:14 G 16563478.38 16563478.51 16563478.67 0.0143 0.0109

Uranus 40637-10-13 11:31 G 16563704.95 16563704.98 16563705.05 0.0143 0.0139

Saturn 40637-10-21 16:05 G 16563713.02 16563713.17 16563713.34 0.0260 0.0173

Saturn 40638-06-07 13:26 G 16563941.85 16563942.06 16563942.27 0.0262 0.0022

Saturn 40639-01-22 11:31 G 16564170.87 16564170.98 16564171.10 0.0263 0.0220

Jupiter 40642-09-11 20:53 G 16565499.19 16565499.37 16565499.56 0.0498 0.0211

Jupiter 40648-07-14 09:50 G 16567631.71 16567631.91 16567632.11 0.0527 0.0070

Saturn 40652-04-09 14:24 G 16568996.89 16568997.10 16568997.31 0.0301 0.0009

Saturn 40652-11-25 19:12 G 16569227.25 16569227.30 16569227.35 0.0299 0.0290

Jupiter 40654-05-17 19:55 G 16569765.14 16569765.33 16569765.52 0.0498 0.0188

Mars 40655-09-10 03:50 G 16570245.49 16570245.66 16570245.83 0.1601 0.0402

Saturn 40667-05-03 20:24 G 16574499.17 16574499.35 16574499.53 0.0260 0.0143

Saturn 40667-12-18 17:31 G 16574728.02 16574728.23 16574728.44 0.0261 0.0051

Saturn 40668-08-03 15:50 G 16574957.10 16574957.16 16574957.23 0.0263 0.0249

Uranus 40675-07-30 15:50 G 16577509.05 16577509.16 16577509.28 0.0134 0.0113

Uranus 40676-03-12 21:36 G 16577735.24 16577735.40 16577735.56 0.0134 0.0088

Uranus 40676-10-25 02:38 G 16577961.43 16577961.61 16577961.81 0.0134 0.0064

Uranus 40677-06-08 08:10 G 16578187.64 16578187.84 16578188.06 0.0134 0.0039

Uranus 40678-01-20 13:55 G 16578413.87 16578414.08 16578414.30 0.0134 0.0014

Jupiter 40678-05-20 06:58 G 16578533.70 16578533.79 16578533.89 0.0498 0.0435

Uranus 40678-09-03 19:41 G 16578640.10 16578640.32 16578640.54 0.0134 0.0011

Uranus 40679-04-18 01:26 G 16578866.35 16578866.56 16578866.77 0.0135 0.0037

Uranus 40679-11-30 07:12 G 16579092.61 16579092.80 16579093.00 0.0135 0.0062

Uranus 40680-07-13 13:12 G 16579318.89 16579319.05 16579319.22 0.0135 0.0087

Uranus 40681-02-24 18:58 G 16579545.19 16579545.29 16579545.42 0.0135 0.0113

Saturn 40681-03-04 15:50 G 16579553.08 16579553.16 16579553.26 0.0303 0.0273

Saturn 40681-10-20 22:19 G 16579783.22 16579783.43 16579783.63 0.0301 0.0034

Jupiter 40684-03-22 00:43 G 16580666.34 16580666.53 16580666.72 0.0527 0.0196

Jupiter 40690-01-23 08:24 G 16582799.64 16582799.85 16582800.05 0.0498 0.0049

Jupiter 40695-11-25 16:34 G 16584932.02 16584932.19 16584932.36 0.0528 0.0271

Saturn 40696-11-12 22:48 G 16585285.27 16585285.45 16585285.64 0.0260 0.0120

Saturn 40697-06-29 20:10 G 16585514.13 16585514.34 16585514.54 0.0262 0.0075

Jupiter 40701-09-29 09:22 G 16587065.75 16587065.89 16587066.04 0.0498 0.0340

Neptune 40706-09-13 11:46 G 16588875.93 16588875.99 16588876.10 0.0088 0.0081

Neptune 40707-04-27 00:43 G 16589101.41 16589101.53 16589101.69 0.0088 0.0067

Neptune 40707-12-08 13:55 G 16589326.91 16589327.08 16589327.26 0.0088 0.0053

Neptune 40708-07-21 02:24 G 16589552.41 16589552.60 16589552.81 0.0088 0.0040

Neptune 40709-03-03 15:22 G 16589777.93 16589778.14 16589778.35 0.0088 0.0026

Neptune 40709-10-15 04:05 G 16590003.46 16590003.67 16590003.90 0.0088 0.0013

Neptune 40710-05-28 17:02 G 16590228.99 16590229.21 16590229.44 0.0088 0.0002

Saturn 40710-09-15 22:19 G 16590339.30 16590339.43 16590339.56 0.0303 0.0234

Neptune 40711-01-09 05:46 G 16590454.53 16590454.74 16590454.96 0.0088 0.0015

Saturn 40711-05-04 04:34 G 16590569.49 16590569.69 16590569.90 0.0301 0.0071

Neptune 40711-08-22 18:29 G 16590680.07 16590680.27 16590680.49 0.0088 0.0029

Neptune 40712-04-04 07:41 G 16590905.62 16590905.82 16590906.01 0.0088 0.0042

Neptune 40712-11-15 20:24 G 16591131.19 16591131.35 16591131.52 0.0088 0.0056

Neptune 40713-06-29 08:53 G 16591356.76 16591356.87 16591357.02 0.0088 0.0070

Neptune 40714-02-09 22:19 G 16591582.36 16591582.43 16591582.49 0.0088 0.0084

Earth 40715-11-23 21:07 G 16592234.24 16592234.38 16592234.52 0.2658 0.1150

Moon 40715-11-24 00:58 G 16592234.43 16592234.54 16592234.65 0.2663 0.1812 *

Uranus 40716-06-27 19:55 G 16592451.22 16592451.33 16592451.46 0.0145 0.0122

Uranus 40717-02-09 07:55 G 16592677.68 16592677.83 16592678.02 0.0144 0.0091

Uranus 40717-09-23 20:10 G 16592904.15 16592904.34 16592904.55 0.0144 0.0059

Uranus 40718-05-08 08:24 G 16593130.63 16593130.85 16593131.06 0.0144 0.0027

Uranus 40718-12-20 20:10 G 16593357.12 16593357.34 16593357.56 0.0144 0.0004

Uranus 40719-08-04 07:55 G 16593583.62 16593583.83 16593584.04 0.0144 0.0035

Jupiter 40719-11-29 18:29 G 16593701.18 16593701.27 16593701.35 0.0527 0.0477

Uranus 40720-03-17 19:12 G 16593810.12 16593810.30 16593810.50 0.0144 0.0066

Uranus 40720-10-30 06:58 G 16594036.63 16594036.79 16594036.95 0.0143 0.0097

Uranus 40721-06-13 18:00 G 16594263.16 16594263.25 16594263.36 0.0143 0.0127

Mars 40721-07-08 16:48 G 16594288.02 16594288.20 16594288.37 0.1602 0.0163

Earth 40723-11-21 12:14 G 16595153.95 16595154.01 16595154.06 0.2657 0.2493

Moon 40723-11-21 17:46 G 16595154.12 16595154.24 16595154.36 0.2657 0.1737

Jupiter 40725-10-01 18:14 G 16595834.09 16595834.26 16595834.43 0.0498 0.0270

Saturn 40726-05-27 02:10 G 16596071.39 16596071.59 16596071.79 0.0260 0.0092

Saturn 40727-01-10 23:17 G 16596300.28 16596300.47 16596300.67 0.0261 0.0102

Pluto 40727-12-12 03:22 G 16596635.47 16596635.64 16596635.83 0.0064 0.0037

Pluto 40728-07-24 07:12 G 16596860.58 16596860.80 16596861.02 0.0064 0.0005

Pluto 40729-03-06 10:34 G 16597085.81 16597085.94 16597086.11 0.0064 0.0047

Jupiter 40731-08-04 09:36 G 16597966.69 16597966.90 16597967.10 0.0527 0.0014

Jupiter 40737-06-06 19:41 G 16600100.12 16600100.32 16600100.52 0.0499 0.0115

Saturn 40740-03-28 03:50 G 16601125.51 16601125.66 16601125.83 0.0303 0.0199

Saturn 40740-11-13 10:05 G 16601355.72 16601355.92 16601356.12 0.0301 0.0107

Jupiter 40743-04-09 01:26 G 16602232.47 16602232.56 16602232.66 0.0527 0.0458

Saturn 40755-12-07 03:36 G 16606857.45 16606857.65 16606857.86 0.0260 0.0071

Saturn 40756-07-23 00:43 G 16607086.35 16607086.53 16607086.72 0.0262 0.0124

Uranus 40759-03-31 03:07 G 16608067.55 16608067.63 16608067.73 0.0134 0.0121

Uranus 40759-11-12 08:24 G 16608293.71 16608293.85 16608294.01 0.0134 0.0097

Uranus 40760-06-25 13:55 G 16608519.90 16608520.08 16608520.27 0.0134 0.0072

Uranus 40761-02-06 19:26 G 16608746.11 16608746.31 16608746.52 0.0134 0.0047

Uranus 40761-09-21 00:58 G 16608972.33 16608972.54 16608972.76 0.0134 0.0023

Uranus 40762-05-05 06:43 G 16609198.56 16609198.78 16609199.00 0.0134 0.0003

Uranus 40762-12-17 12:14 G 16609424.80 16609425.01 16609425.23 0.0135 0.0028

Uranus 40763-07-31 18:00 G 16609651.06 16609651.25 16609651.46 0.0135 0.0054

Uranus 40764-03-14 00:00 G 16609877.34 16609877.50 16609877.69 0.0135 0.0079

Uranus 40764-10-26 06:00 G 16610103.63 16610103.75 16610103.90 0.0135 0.0105

Uranus 40765-06-09 12:14 G 16610329.96 16610330.01 16610330.08 0.0135 0.0130

Jupiter 40767-04-12 02:24 G 16611001.44 16611001.60 16611001.78 0.0527 0.0284

Saturn 40769-10-08 08:10 G 16611911.67 16611911.84 16611912.02 0.0303 0.0164

Saturn 40770-05-26 14:24 G 16612141.92 16612142.10 16612142.29 0.0301 0.0141

Jupiter 40773-02-12 06:00 G 16613134.55 16613134.75 16613134.95 0.0498 0.0110

Jupiter 40778-12-15 20:10 G 16615267.15 16615267.34 16615267.53 0.0527 0.0173

Mars 40784-07-30 08:10 G 16617320.78 16617320.84 16617320.91 0.1934 0.1785

Jupiter 40784-10-18 07:26 G 16617400.64 16617400.81 16617400.98 0.0499 0.0277

Saturn 40784-11-01 09:07 G 16617414.81 16617414.88 16617414.98 0.0259 0.0236

Saturn 40785-06-18 05:46 G 16617643.53 16617643.74 16617643.95 0.0260 0.0045

Saturn 40786-02-02 02:38 G 16617872.45 16617872.61 16617872.80 0.0261 0.0151

Mars 40787-05-06 05:46 G 16618330.56 16618330.74 16618330.91 0.1603 0.0089

Neptune 40788-03-19 00:14 G 16618648.46 16618648.51 16618648.60 0.0089 0.0085

Neptune 40788-10-30 13:26 G 16618873.94 16618874.06 16618874.21 0.0089 0.0070

Neptune 40789-06-13 02:24 G 16619099.45 16619099.60 16619099.79 0.0089 0.0057

Neptune 40790-01-24 16:05 G 16619324.98 16619325.17 16619325.37 0.0089 0.0042

Neptune	40790-09-07 05:17 G	16619550.51	16619550.72	16619550.93	0.0089	0.0028
Neptune	40791-04-20 18:29 G	16619776.06	16619776.27	16619776.50	0.0089	0.0014
Neptune	40791-12-02 07:55 G	16620001.61	16620001.83	16620002.05	0.0089	0.0001
Neptune	40792-07-14 20:53 G	16620227.16	16620227.37	16620227.59	0.0089	0.0016
Neptune	40793-02-25 10:05 G	16620452.72	16620452.92	16620453.13	0.0089	0.0030
Neptune	40793-10-08 23:31 G	16620678.29	16620678.48	16620678.67	0.0089	0.0044
Neptune	40794-05-22 12:14 G	16620903.86	16620904.01	16620904.19	0.0089	0.0058
Neptune	40795-01-03 01:12 G	16621129.45	16621129.55	16621129.70	0.0089	0.0073
Neptune	40795-08-16 14:24 G	16621355.07	16621355.10	16621355.17	0.0089	0.0086
Saturn	40799-04-20 12:29 G	16622697.84	16622698.02	16622698.22	0.0303	0.0132
Saturn	40799-12-06 18:43 G	16622928.11	16622928.28	16622928.45	0.0301	0.0173
Uranus	40800-02-26 03:36 G	16623009.57	16623009.65	16623009.73	0.0145	0.0133
Uranus	40800-10-09 15:36 G	16623236.00	16623236.15	16623236.31	0.0145	0.0102
Uranus	40801-05-24 03:36 G	16623462.47	16623462.65	16623462.85	0.0144	0.0071
Uranus	40802-01-05 15:36 G	16623688.95	16623689.15	16623689.37	0.0144	0.0039
Uranus	40802-08-20 03:36 G	16623915.44	16623915.65	16623915.87	0.0144	0.0008
Uranus	40803-04-03 15:22 G	16624141.93	16624142.14	16624142.36	0.0144	0.0024
Uranus	40803-11-16 03:07 G	16624368.43	16624368.63	16624368.83	0.0144	0.0055
Uranus	40804-06-29 14:24 G	16624594.94	16624595.10	16624595.28	0.0144	0.0086
Uranus	40805-02-11 01:41 G	16624821.46	16624821.57	16624821.71	0.0143	0.0117
Jupiter	40808-10-20 20:10 G	16626169.20	16626169.34	16626169.48	0.0498	0.0353
Saturn	40814-05-14 10:05 G	16628200.81	16628200.92	16628201.04	0.0259	0.0216
Jupiter	40814-08-23 11:02 G	16628301.76	16628301.96	16628302.16	0.0527	0.0094
Saturn	40814-12-29 06:29 G	16628429.56	16628429.77	16628429.98	0.0260	0.0025
Saturn	40815-08-15 03:36 G	16628658.49	16628658.65	16628658.81	0.0262	0.0170
Pluto	40817-06-16 08:38 G	16629329.65	16629329.86	16629330.08	0.0080	0.0022
Pluto	40818-01-27 18:58 G	16629555.15	16629555.29	16629555.44	0.0080	0.0061
Jupiter	40820-06-25 21:36 G	16630435.19	16630435.40	16630435.60	0.0498	0.0034
Jupiter	40826-04-28 05:02 G	16632567.56	16632567.71	16632567.86	0.0527	0.0361
Saturn	40828-10-30 14:53 G	16633483.93	16633484.12	16633484.33	0.0303	0.0101

Saturn 40829-06-17 20:53 G 16633714.22 16633714.37 16633714.53 0.0301 0.0204

Jupiter 40832-02-29 20:10 G 16634701.24 16634701.34 16634701.44 0.0499 0.0433

Uranus 40842-11-28 15:22 G 16638626.09 16638626.14 16638626.20 0.0134 0.0128

Uranus 40843-07-12 20:24 G 16638852.23 16638852.35 16638852.50 0.0134 0.0104

Saturn 40843-11-24 11:46 G 16638986.85 16638986.99 16638987.13 0.0259 0.0191

Uranus 40844-02-24 02:10 G 16639078.42 16639078.59 16639078.77 0.0134 0.0079

Saturn 40844-07-10 07:55 G 16639215.62 16639215.83 16639216.04 0.0260 0.0001

Uranus 40844-10-07 07:26 G 16639304.62 16639304.81 16639305.02 0.0134 0.0055

Saturn 40845-02-24 05:02 G 16639444.57 16639444.71 16639444.85 0.0261 0.0195

Uranus 40845-05-21 12:58 G 16639530.84 16639531.04 16639531.26 0.0134 0.0030

Uranus 40846-01-02 18:43 G 16639757.06 16639757.28 16639757.50 0.0134 0.0005

Uranus 40846-08-17 00:14 G 16639983.30 16639983.51 16639983.73 0.0135 0.0021

Uranus 40847-03-31 06:14 G 16640209.56 16640209.76 16640209.97 0.0135 0.0046

Uranus 40847-11-12 12:14 G 16640435.83 16640436.01 16640436.19 0.0135 0.0071

Uranus 40848-06-25 17:46 G 16640662.11 16640662.24 16640662.41 0.0135 0.0097

Uranus 40849-02-07 00:00 G 16640888.42 16640888.50 16640888.61 0.0135 0.0122

Jupiter 40850-05-01 05:46 G 16641336.60 16641336.74 16641336.88 0.0527 0.0380

Mars 40850-05-27 09:36 G 16641362.74 16641362.90 16641363.06 0.1932 0.0825

Mars 40853-03-02 18:14 G 16642373.09 16642373.26 16642373.43 0.1605 0.0329

Earth 40853-05-23 00:58 G 16642454.38 16642454.54 16642454.69 0.2674 0.0416

Moon 40853-05-23 00:58 G 16642454.38 16642454.54 16642454.71 0.2667 0.0714 *

Jupiter 40856-03-03 08:24 G 16643469.67 16643469.85 16643470.04 0.0499 0.0196

Saturn 40858-05-12 17:46 G 16644270.04 16644270.24 16644270.45 0.0303 0.0072

Saturn 40858-12-28 23:31 G 16644500.36 16644500.48 16644500.63 0.0301 0.0233

Jupiter 40862-01-03 21:50 G 16645602.21 16645602.41 16645602.62 0.0527 0.0085

Jupiter 40867-11-07 10:48 G 16647735.76 16647735.95 16647736.14 0.0499 0.0187

Neptune 40870-12-15 20:24 G 16648870.32 16648870.35 16648870.41 0.0088 0.0086

Neptune 40871-07-29 08:53 G 16649095.77 16649095.87 16649096.02 0.0088 0.0073

Neptune 40872-03-10 21:50 G 16649321.27 16649321.41 16649321.59 0.0088 0.0059

Neptune 40872-10-22 11:17 G 16649546.78 16649546.97 16649547.15 0.0088 0.0045

Neptune 40873-06-04 23:46 G 16649772.29 16649772.49 16649772.70 0.0088 0.0032

Saturn 40873-06-05 11:31 G 16649772.83 16649772.98 16649773.15 0.0259 0.0173

Neptune 40874-01-16 12:43 G 16649997.81 16649998.03 16649998.25 0.0088 0.0018

Saturn 40874-01-20 07:55 G 16650001.62 16650001.83 16650002.04 0.0260 0.0018

Neptune 40874-08-30 01:26 G 16650223.34 16650223.56 16650223.79 0.0088 0.0005

Saturn 40874-09-06 05:02 G 16650230.59 16650230.71 16650230.84 0.0262 0.0214

Neptune 40875-04-12 14:24 G 16650448.88 16650449.10 16650449.32 0.0088 0.0009

Neptune 40875-11-24 02:53 G 16650674.42 16650674.62 16650674.85 0.0088 0.0023

Neptune 40876-07-06 15:50 G 16650899.96 16650900.16 16650900.37 0.0088 0.0036

Neptune 40877-02-17 04:19 G 16651125.52 16651125.68 16651125.88 0.0088 0.0050

Neptune 40877-09-30 17:46 G 16651351.09 16651351.24 16651351.39 0.0088 0.0063

Neptune 40878-05-14 06:14 G 16651576.67 16651576.76 16651576.88 0.0088 0.0077

Uranus 40883-10-26 12:58 G 16653568.02 16653568.04 16653568.09 0.0145 0.0143

Uranus 40884-06-09 00:58 G 16653794.42 16653794.54 16653794.69 0.0145 0.0112

Uranus 40885-01-21 13:12 G 16654020.88 16654021.05 16654021.24 0.0145 0.0080

Uranus 40885-09-05 01:26 G 16654247.36 16654247.56 16654247.77 0.0144 0.0049

Uranus 40886-04-19 13:26 G 16654473.84 16654474.06 16654474.28 0.0144 0.0017

Uranus 40886-12-02 01:12 G 16654700.33 16654700.55 16654700.77 0.0144 0.0014

Uranus 40887-07-16 12:58 G 16654926.83 16654927.04 16654927.24 0.0144 0.0045

Saturn 40887-11-22 19:26 G 16655056.11 16655056.31 16655056.52 0.0303 0.0043

Uranus 40888-02-28 00:29 G 16655153.34 16655153.52 16655153.71 0.0144 0.0076

Saturn 40888-07-10 01:26 G 16655286.46 16655286.56 16655286.66 0.0301 0.0261

Uranus 40888-10-11 12:00 G 16655379.86 16655380.00 16655380.15 0.0143 0.0107

Uranus 40889-05-25 23:02 G 16655606.42 16655606.46 16655606.54 0.0143 0.0137

Jupiter 40891-11-09 19:41 G 16656504.21 16656504.32 16656504.43 0.0498 0.0423

Jupiter 40897-09-11 17:46 G 16658637.05 16658637.24 16658637.43 0.0527 0.0206

Saturn 40902-12-17 12:43 G 16660558.86 16660559.03 16660559.21 0.0259 0.0149

Jupiter 40903-07-16 21:07 G 16660770.18 16660770.38 16660770.58 0.0499 0.0038

Saturn 40903-08-03 09:07 G 16660787.67 16660787.88 16660788.09 0.0260 0.0043

Saturn 40904-03-19 06:14 G 16661016.68 16661016.76 16661016.85 0.0261 0.0238

Jupiter 40909-05-18 09:36 G 16662902.73 16662902.90 16662903.08 0.0527 0.0257

Jupiter 40915-03-21 23:02 G 16665036.32 16665036.46 16665036.62 0.0499 0.0344

Mars 40916-03-24 11:46 G 16665404.81 16665404.99 16665405.16 0.1930 0.0095

Saturn 40917-06-04 21:36 G 16665842.19 16665842.40 16665842.61 0.0303 0.0016

Saturn 40918-01-21 03:22 G 16666072.59 16666072.64 16666072.70 0.0301 0.0288

Mars 40918-12-30 07:12 G 16666415.64 16666415.80 16666415.96 0.1606 0.0568

Uranus 40927-03-13 08:38 G 16669410.76 16669410.86 16669410.99 0.0134 0.0112

Uranus 40927-10-25 14:10 G 16669636.93 16669637.09 16669637.26 0.0134 0.0087

Uranus 40928-06-07 19:12 G 16669863.13 16669863.30 16669863.51 0.0134 0.0063

Uranus 40929-01-20 00:58 G 16670089.34 16670089.54 16670089.75 0.0134 0.0038

Uranus 40929-09-03 06:29 G 16670315.56 16670315.77 16670315.99 0.0134 0.0013

Uranus 40930-04-17 12:14 G 16670541.80 16670542.01 16670542.23 0.0134 0.0013

Uranus 40930-11-29 18:00 G 16670768.04 16670768.25 16670768.46 0.0135 0.0038

Uranus 40931-07-13 23:46 G 16670994.30 16670994.49 16670994.69 0.0135 0.0063

Uranus 40932-02-25 05:31 G 16671220.58 16671220.73 16671220.91 0.0135 0.0089

Saturn 40932-06-28 12:43 G 16671344.85 16671345.03 16671345.22 0.0259 0.0130

Uranus 40932-10-08 11:31 G 16671446.89 16671446.98 16671447.11 0.0135 0.0114

Saturn 40933-02-12 09:07 G 16671573.67 16671573.88 16671574.09 0.0260 0.0062

Jupiter 40933-05-21 08:53 G 16671671.79 16671671.87 16671671.97 0.0527 0.0475

Saturn 40933-09-29 06:14 G 16671802.73 16671802.76 16671802.81 0.0262 0.0257

Jupiter 40939-03-24 12:00 G 16673804.83 16673805.00 16673805.17 0.0498 0.0285

Jupiter 40945-01-24 03:22 G 16675937.44 16675937.64 16675937.84 0.0527 0.0022

Saturn 40946-04-29 15:07 G 16676398.09 16676398.13 16676398.18 0.0304 0.0296

Saturn 40946-12-15 22:34 G 16676628.23 16676628.44 16676628.65 0.0302 0.0013

Jupiter 40950-11-27 10:34 G 16678070.74 16678070.94 16678071.14 0.0499 0.0114

Mars 40950-12-28 22:34 G 16678102.36 16678102.44 16678102.51 0.1602 0.1445

Neptune 40953-02-01 21:22 G 16678868.31 16678868.39 16678868.53 0.0089 0.0077

Neptune 40953-09-15 11:17 G 16679093.81 16679093.97 16679094.13 0.0089 0.0062

Neptune 40954-04-29 00:29 G 16679319.34 16679319.52 16679319.71 0.0089 0.0048

Neptune 40954-12-10 13:41 G 16679544.87 16679545.07 16679545.28 0.0089 0.0034

Neptune 40955-07-24 02:38 G 16679770.41 16679770.61 16679770.84 0.0089 0.0020

Neptune 40956-03-05 16:05 G 16679995.95 16679996.17 16679996.39 0.0089 0.0005

Jupiter 40956-09-28 21:36 G 16680203.29 16680203.40 16680203.52 0.0527 0.0429

Neptune 40956-10-17 05:17 G 16680221.51 16680221.72 16680221.94 0.0089 0.0009

Neptune 40957-05-30 18:29 G 16680447.06 16680447.27 16680447.49 0.0089 0.0023

Neptune 40958-01-11 07:26 G 16680672.62 16680672.81 16680673.02 0.0089 0.0038

Neptune 40958-08-24 20:38 G 16680898.19 16680898.36 16680898.55 0.0089 0.0052

Moon 40958-11-24 19:41 G 16680990.16 16680990.32 16680990.49 0.2652 0.0508

Earth 40958-11-24 22:05 G 16680990.27 16680990.42 16680990.56 0.2658 0.1066 *

Neptune 40959-04-07 10:05 G 16681123.78 16681123.92 16681124.07 0.0089 0.0066

Neptune 40959-11-18 23:17 G 16681349.38 16681349.47 16681349.57 0.0089 0.0080

Saturn 40962-01-08 13:55 G 16682130.88 16682131.08 16682131.27 0.0259 0.0107

Saturn 40962-08-25 10:05 G 16682359.72 16682359.92 16682360.13 0.0260 0.0085

Earth 40966-11-22 13:26 G 16683910.01 16683910.06 16683910.10 0.2657 0.2538

Uranus 40968-02-08 10:05 G 16684352.82 16684352.92 16684353.05 0.0145 0.0123

Uranus 40968-09-21 22:34 G 16684579.28 16684579.44 16684579.62 0.0145 0.0091

Uranus 40969-05-06 10:34 G 16684805.75 16684805.94 16684806.15 0.0145 0.0060

Uranus 40969-12-18 22:34 G 16685032.24 16685032.44 16685032.67 0.0144 0.0029

Uranus 40970-08-02 10:48 G 16685258.73 16685258.95 16685259.17 0.0144 0.0004

Uranus 40971-03-16 22:34 G 16685485.23 16685485.44 16685485.65 0.0144 0.0035

Uranus 40971-10-29 10:19 G 16685711.74 16685711.93 16685712.13 0.0144 0.0066

Uranus 40972-06-11 21:50 G 16685938.26 16685938.41 16685938.58 0.0144 0.0097

Uranus 40973-01-24 09:07 G 16686164.80 16686164.88 16686164.99 0.0143 0.0128

Pluto 40975-04-04 13:41 G 16686964.98 16686965.07 16686965.21 0.0064 0.0055

Saturn 40975-11-09 17:17 G 16687184.14 16687184.22 16687184.33 0.0304 0.0271

Pluto 40975-11-15 18:00 G 16687190.03 16687190.25 16687190.46 0.0064 0.0013

Saturn 40976-06-27 00:43 G 16687414.32 16687414.53 16687414.74 0.0303 0.0040

Pluto 40976-06-27 21:07 G 16687415.21 16687415.38 16687415.60 0.0064 0.0029

Jupiter 40980-10-01 20:53 G 16688972.20 16688972.37 16688972.53 0.0527 0.0301

Mars 40982-01-19 13:26 G 16689446.91 16689447.06 16689447.20 0.1927 0.1019

Mars	**40984-10-26 19:41**	**G**	**16690458.17**	**16690458.32**	**16690458.47**	**0.1608**	**0.0824**	
Jupiter	**40986-08-05 01:12**	**G**	**16691105.36**	**16691105.55**	**16691105.75**	**0.0499**	**0.0132**	
Saturn	**40991-07-21 14:10**	**G**	**16692916.89**	**16692917.09**	**16692917.29**	**0.0259**	**0.0088**	
Saturn	**40992-03-06 10:19**	**G**	**16693145.74**	**16693145.93**	**16693146.13**	**0.0260**	**0.0105**	
Jupiter	**40992-06-06 12:58**	**G**	**16693237.84**	**16693238.04**	**16693238.23**	**0.0527**	**0.0162**	
Jupiter	**40998-04-10 02:53**	**G**	**16695371.44**	**16695371.62**	**16695371.80**	**0.0499**	**0.0252**	

42ND MILLENNIUM CE

This is a list of transits of Venus in the 42nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**41005-05-22 18:58**	**G**	**16697970.17**	**16697970.29**	**16697970.42**	**0.0304**	**0.0240**	
Saturn	**41006-01-08 02:10**	**G**	**16698200.38**	**16698200.59**	**16698200.79**	**0.0302**	**0.0069**	
Uranus	**41010-11-11 21:07**	**G**	**16699969.29**	**16699969.38**	**16699969.48**	**0.0134**	**0.0119**	
Uranus	**41011-06-26 02:10**	**G**	**16700195.45**	**16700195.59**	**16700195.75**	**0.0134**	**0.0095**	
Uranus	**41012-02-07 07:55**	**G**	**16700421.64**	**16700421.83**	**16700422.01**	**0.0134**	**0.0070**	
Uranus	**41012-09-20 12:58**	**G**	**16700647.85**	**16700648.04**	**16700648.26**	**0.0134**	**0.0046**	
Uranus	**41013-05-04 18:43**	**G**	**16700874.07**	**16700874.28**	**16700874.50**	**0.0134**	**0.0021**	
Uranus	**41013-12-17 00:14**	**G**	**16701100.30**	**16701100.51**	**16701100.73**	**0.0134**	**0.0005**	
Uranus	**41014-07-31 06:00**	**G**	**16701326.54**	**16701326.75**	**16701326.96**	**0.0134**	**0.0030**	
Uranus	**41015-03-14 11:31**	**G**	**16701552.80**	**16701552.98**	**16701553.19**	**0.0135**	**0.0056**	
Uranus	**41015-10-26 17:31**	**G**	**16701779.07**	**16701779.23**	**16701779.42**	**0.0135**	**0.0081**	
Uranus	**41016-06-08 23:31**	**G**	**16702005.36**	**16702005.48**	**16702005.62**	**0.0135**	**0.0106**	
Mars	**41016-10-26 11:17**	**G**	**16702144.86**	**16702144.97**	**16702145.09**	**0.1603**	**0.1208**	

Uranus 41017-01-21 05:31 G 16702231.69 16702231.73 16702231.79 0.0135 0.0131

Saturn 41020-06-16 19:41 G 16703474.29 16703474.32 16703474.37 0.0258 0.0253

Saturn 41021-01-31 15:36 G 16703702.94 16703703.15 16703703.36 0.0259 0.0064

Saturn 41021-09-17 12:00 G 16703931.82 16703932.00 16703932.19 0.0260 0.0130

Jupiter 41022-04-13 11:46 G 16704139.85 16704139.99 16704140.13 0.0498 0.0356

Jupiter 41028-02-14 08:24 G 16706272.65 16706272.85 16706273.05 0.0527 0.0128

Jupiter 41033-12-17 13:41 G 16708405.87 16708406.07 16708406.27 0.0499 0.0025

Saturn 41034-12-02 21:36 G 16708756.25 16708756.40 16708756.55 0.0304 0.0213

Saturn 41035-07-21 04:34 G 16708986.50 16708986.69 16708986.89 0.0303 0.0097

Neptune 41035-11-01 17:17 G 16709090.14 16709090.22 16709090.34 0.0088 0.0078

Neptune 41036-06-14 06:00 G 16709315.62 16709315.75 16709315.92 0.0088 0.0065

Neptune 41037-01-25 18:58 G 16709541.12 16709541.29 16709541.48 0.0088 0.0051

Neptune 41037-09-08 07:41 G 16709766.64 16709766.82 16709767.04 0.0088 0.0038

Neptune 41038-04-21 20:53 G 16709992.16 16709992.37 16709992.58 0.0088 0.0024

Neptune 41038-12-03 09:36 G 16710217.68 16710217.90 16710218.12 0.0088 0.0011

Neptune 41039-07-16 22:19 G 16710443.21 16710443.43 16710443.65 0.0088 0.0003

Jupiter 41039-10-20 00:29 G 16710538.37 16710538.52 16710538.68 0.0527 0.0334

Neptune 41040-02-27 11:02 G 16710668.75 16710668.96 16710669.18 0.0088 0.0017

Neptune 41040-10-10 00:00 G 16710894.30 16710894.50 16710894.71 0.0088 0.0030

Neptune 41041-05-23 12:29 G 16711119.85 16711120.02 16711120.23 0.0088 0.0044

Neptune 41042-01-04 01:12 G 16711345.40 16711345.55 16711345.74 0.0088 0.0057

Neptune 41042-08-17 14:24 G 16711570.97 16711571.10 16711571.23 0.0088 0.0070

Neptune 41043-03-31 02:53 G 16711796.57 16711796.62 16711796.70 0.0088 0.0084

Jupiter 41045-08-22 15:36 G 16712672.04 16712672.15 16712672.27 0.0499 0.0406

Saturn 41049-12-27 20:38 G 16714260.28 16714260.36 16714260.46 0.0258 0.0232

Saturn 41050-08-13 16:19 G 16714488.97 16714489.18 16714489.40 0.0259 0.0043

Mars 41050-08-25 08:24 G 16714500.72 16714500.85 16714500.98 0.1609 0.1070

Saturn 41051-03-30 12:43 G 16714717.86 16714718.03 16714718.21 0.0261 0.0151

Uranus 41051-10-09 18:58 G 16714911.21 16714911.29 16714911.38 0.0145 0.0133

Uranus 41052-05-23 07:12 G 16715137.65 16715137.80 16715137.96 0.0145 0.0102

Uranus 41053-01-04 19:12 G 16715364.12 16715364.30 16715364.50 0.0145 0.0071

Uranus 41053-08-19 07:41 G 16715590.61 16715590.82 16715591.03 0.0144 0.0039

Uranus 41054-04-02 19:55 G 16715817.11 16715817.33 16715817.54 0.0144 0.0007

Uranus 41054-11-15 07:41 G 16716043.61 16716043.82 16716044.04 0.0144 0.0025

Uranus 41055-06-29 19:26 G 16716270.11 16716270.31 16716270.52 0.0144 0.0056

Uranus 41056-02-11 07:12 G 16716496.63 16716496.80 16716496.98 0.0144 0.0087

Uranus 41056-09-24 18:43 G 16716723.17 16716723.28 16716723.42 0.0143 0.0118

Jupiter 41063-10-23 01:26 G 16719307.43 16719307.56 16719307.69 0.0527 0.0403

Saturn 41064-06-13 23:46 G 16719542.33 16719542.49 16719542.67 0.0303 0.0182

Pluto 41064-10-08 13:26 G 16719658.98 16719659.06 16719659.18 0.0080 0.0071

Saturn 41065-01-30 06:43 G 16719772.59 16719772.78 16719772.97 0.0302 0.0128

Pluto 41065-05-22 00:14 G 16719884.29 16719884.51 16719884.73 0.0080 0.0013

Jupiter 41069-08-25 00:43 G 16721440.34 16721440.53 16721440.71 0.0498 0.0202

Jupiter 41075-06-27 19:12 G 16723573.10 16723573.30 16723573.51 0.0527 0.0050

Saturn 41079-07-09 22:34 G 16725046.33 16725046.44 16725046.58 0.0258 0.0209

Saturn 41080-02-23 18:29 G 16725275.06 16725275.27 16725275.49 0.0259 0.0019

Saturn 41080-10-09 15:22 G 16725503.98 16725504.14 16725504.29 0.0261 0.0176

Jupiter 41081-04-30 01:55 G 16725706.39 16725706.58 16725706.77 0.0498 0.0183

Mars 41082-08-24 00:00 G 16726187.36 16726187.50 16726187.64 0.1605 0.0962

Jupiter 41087-03-02 11:17 G 16727838.93 16727838.97 16727839.03 0.0527 0.0508

Saturn 41093-12-25 03:50 G 16730328.48 16730328.66 16730328.85 0.0304 0.0151

Uranus 41094-07-12 09:07 G 16730527.82 16730527.88 16730527.94 0.0133 0.0127

Saturn 41094-08-12 10:34 G 16730558.77 16730558.94 16730559.13 0.0302 0.0158

Uranus 41095-02-23 14:10 G 16730753.97 16730754.09 16730754.24 0.0133 0.0103

Uranus 41095-10-07 19:26 G 16730980.15 16730980.31 16730980.50 0.0134 0.0079

Uranus 41096-05-21 00:58 G 16731206.34 16731206.54 16731206.74 0.0134 0.0054

Moon 41096-05-25 00:29 G 16731210.37 16731210.52 16731210.67 0.2681 0.0215

Earth 41096-05-25 02:10 G 16731210.43 16731210.59 16731210.75 0.2674 0.0342 *

Uranus 41097-01-02 06:14 G 16731432.55 16731432.76 16731432.98 0.0134 0.0029

Uranus 41097-08-16 12:00 G 16731658.78 16731659.00 16731659.21 0.0134 0.0004

Uranus 41098-03-30 17:31 G 16731885.02 16731885.23 16731885.45 0.0134 0.0022

Uranus 41098-11-11 23:17 G 16732111.27 16732111.47 16732111.68 0.0134 0.0046

Uranus 41099-06-26 04:48 G 16732337.53 16732337.70 16732337.90 0.0134 0.0072

Uranus 41100-02-07 10:48 G 16732563.81 16732563.95 16732564.11 0.0135 0.0097

Uranus 41100-09-21 16:48 G 16732790.12 16732790.20 16732790.30 0.0135 0.0122

Jupiter 41105-05-03 14:24 G 16734475.01 16734475.10 16734475.20 0.0498 0.0443

Saturn 41109-01-20 00:29 G 16735832.38 16735832.52 16735832.68 0.0259 0.0186

Saturn 41109-09-05 20:38 G 16736061.14 16736061.36 16736061.57 0.0260 0.0006

Saturn 41110-04-22 17:17 G 16736290.08 16736290.22 16736290.36 0.0261 0.0199

Jupiter 41111-03-06 09:50 G 16736607.73 16736607.91 16736608.10 0.0527 0.0214

Mars 41116-06-22 20:53 G 16738543.27 16738543.37 16738543.47 0.1610 0.1331

Jupiter 41117-01-06 15:36 G 16738740.95 16738741.15 16738741.36 0.0498 0.0059

Neptune 41117-05-08 05:17 G 16738862.66 16738862.72 16738862.83 0.0090 0.0083

Neptune 41117-12-19 18:29 G 16739088.15 16739088.27 16739088.43 0.0089 0.0069

Neptune 41118-08-02 07:41 G 16739313.66 16739313.82 16739314.01 0.0089 0.0055

Neptune 41119-03-15 21:22 G 16739539.19 16739539.39 16739539.59 0.0089 0.0040

Neptune 41119-10-27 10:34 G 16739764.73 16739764.94 16739765.15 0.0089 0.0026

Neptune 41120-06-08 23:46 G 16739990.27 16739990.49 16739990.71 0.0089 0.0012

Neptune 41121-01-20 12:58 G 16740215.82 16740216.04 16740216.26 0.0089 0.0003

Neptune 41121-09-03 01:55 G 16740441.37 16740441.58 16740441.80 0.0089 0.0017

Neptune 41122-04-16 15:22 G 16740666.94 16740667.14 16740667.35 0.0089 0.0031

Jupiter 41122-11-09 03:36 G 16740873.47 16740873.65 16740873.83 0.0527 0.0240

Neptune 41122-11-28 04:34 G 16740892.51 16740892.69 16740892.88 0.0089 0.0045

Saturn 41123-07-08 07:55 G 16741114.64 16741114.83 16741115.03 0.0303 0.0116

Neptune 41123-07-11 17:46 G 16741118.08 16741118.24 16741118.41 0.0089 0.0059

Neptune 41124-02-22 06:58 G 16741343.67 16741343.79 16741343.92 0.0089 0.0073

Saturn 41124-02-23 14:24 G 16741344.94 16741345.10 16741345.27 0.0302 0.0192

Neptune 41124-10-04 20:10 G 16741569.29 16741569.34 16741569.39 0.0089 0.0087

Jupiter 41128-09-11 14:24 G 16743006.96 16743007.10 16743007.26 0.0498 0.0337

Uranus 41136-01-22 12:43 G 16745695.90 16745696.03 16745696.17 0.0145 0.0115

Uranus	41136-09-05 00:58 G	16745922.38	16745922.54	16745922.73	0.0145	0.0084
Uranus	41137-04-19 13:26 G	16746148.86	16746149.06	16746149.27	0.0145	0.0052
Uranus	41137-12-02 01:41 G	16746375.35	16746375.57	16746375.79	0.0144	0.0020
Uranus	41138-07-16 13:41 G	16746601.86	16746602.07	16746602.29	0.0144	0.0012
Saturn	41138-08-02 03:22 G	16746618.48	16746618.64	16746618.81	0.0259	0.0161
Uranus	41139-02-28 01:41 G	16746828.37	16746828.57	16746828.78	0.0144	0.0043
Saturn	41139-03-18 23:31 G	16746847.27	16746847.48	16746847.69	0.0260	0.0031
Uranus	41139-10-12 13:41 G	16747054.89	16747055.07	16747055.26	0.0144	0.0074
Saturn	41139-11-02 20:24 G	16747076.25	16747076.35	16747076.46	0.0261	0.0226
Uranus	41140-05-26 01:26 G	16747281.42	16747281.56	16747281.71	0.0144	0.0105
Uranus	41141-01-07 12:58 G	16747507.98	16747508.04	16747508.12	0.0143	0.0136
Mars	41145-09-14 19:41 G	16749219.28	16749219.32	16749219.37	0.1929	0.1866
Jupiter	41146-11-12 04:05 G	16749642.61	16749642.67	16749642.74	0.0527	0.0496
Mars	41148-06-21 12:43 G	16750229.88	16750230.03	16750230.19	0.1606	0.0718
Jupiter	41152-09-14 01:41 G	16751775.41	16751775.57	16751775.75	0.0498	0.0283
Saturn	41153-01-17 12:58 G	16751900.84	16751901.04	16751901.24	0.0304	0.0083
Saturn	41153-09-04 19:12 G	16752131.17	16752131.30	16752131.45	0.0302	0.0225
Jupiter	41158-07-17 19:55 G	16753908.12	16753908.33	16753908.53	0.0527	0.0036
Jupiter	41164-05-20 03:22 G	16756041.44	16756041.64	16756041.84	0.0499	0.0102
Saturn	41168-02-12 06:29 G	16757404.59	16757404.77	16757404.95	0.0259	0.0135
Saturn	41168-09-28 02:38 G	16757633.41	16757633.61	16757633.82	0.0260	0.0058
Saturn	41169-05-14 23:31 G	16757862.44	16757862.48	16757862.54	0.0261	0.0252
Jupiter	41170-03-22 11:02 G	16758173.85	16758173.96	16758174.08	0.0527	0.0432
Jupiter	41176-01-24 04:19 G	16760307.64	16760307.68	16760307.72	0.0499	0.0486
Uranus	41178-10-25 02:24 G	16761312.50	16761312.60	16761312.74	0.0133	0.0111
Uranus	41179-06-08 07:55 G	16761538.67	16761538.83	16761539.00	0.0133	0.0086
Uranus	41180-01-20 12:58 G	16761764.86	16761765.04	16761765.25	0.0134	0.0062
Uranus	41180-09-02 18:29 G	16761991.07	16761991.27	16761991.49	0.0134	0.0037
Uranus	41181-04-17 00:14 G	16762217.29	16762217.51	16762217.73	0.0134	0.0012
Uranus	41181-11-29 05:46 G	16762443.52	16762443.74	16762443.96	0.0134	0.0013

Mars 41182-04-20 09:22 G 16762585.86 16762585.89 16762585.91 0.1612 0.1588

Uranus 41182-07-13 11:17 G 16762669.77 16762669.97 16762670.18 0.0134 0.0039

Saturn 41182-07-30 19:12 G 16762687.09 16762687.30 16762687.51 0.0303 0.0043

Uranus 41183-02-24 17:02 G 16762896.02 16762896.21 16762896.40 0.0134 0.0064

Saturn 41183-03-18 01:26 G 16762917.46 16762917.56 16762917.66 0.0301 0.0263

Uranus 41183-10-08 22:48 G 16763122.29 16763122.45 16763122.62 0.0134 0.0089

Uranus 41184-05-22 04:34 G 16763348.58 16763348.69 16763348.81 0.0135 0.0114

Jupiter 41194-03-25 12:43 G 16766942.87 16766943.03 16766943.20 0.0528 0.0309

Saturn 41197-08-24 10:19 G 16768190.74 16768190.93 16768191.12 0.0259 0.0109

Saturn 41198-04-10 06:29 G 16768419.57 16768419.77 16768419.98 0.0260 0.0085

Jupiter 41200-01-26 12:43 G 16769075.83 16769076.03 16769076.23 0.0498 0.0119

Neptune 41200-02-04 00:58 G 16769084.50 16769084.54 16769084.64 0.0088 0.0084

Neptune 41200-09-16 14:24 G 16769309.98 16769310.10 16769310.24 0.0088 0.0070

Neptune 41201-04-30 03:07 G 16769535.48 16769535.63 16769535.81 0.0088 0.0057

Earth 41201-11-26 23:02 G 16769746.31 16769746.46 16769746.61 0.2657 0.0993

Moon 41201-11-26 23:02 G 16769746.33 16769746.46 16769746.59 0.2663 0.1227 *

Neptune 41201-12-11 16:05 G 16769760.98 16769761.17 16769761.37 0.0088 0.0043

Neptune 41202-07-25 04:48 G 16769986.50 16769986.70 16769986.91 0.0088 0.0030

Neptune 41203-03-07 17:31 G 16770212.02 16770212.23 16770212.46 0.0088 0.0017

Neptune 41203-10-19 06:43 G 16770437.56 16770437.78 16770438.00 0.0088 0.0003

Neptune 41204-05-31 19:26 G 16770663.09 16770663.31 16770663.53 0.0088 0.0011

Neptune 41205-01-12 08:10 G 16770888.63 16770888.84 16770889.06 0.0088 0.0024

Neptune 41205-08-25 21:07 G 16771114.18 16771114.38 16771114.58 0.0088 0.0037

Jupiter 41205-11-28 04:19 G 16771208.49 16771208.68 16771208.88 0.0527 0.0154

Neptune 41206-04-08 09:22 G 16771339.73 16771339.89 16771340.09 0.0088 0.0051

Neptune 41206-11-19 22:34 G 16771565.30 16771565.44 16771565.59 0.0088 0.0064

Neptune 41207-07-03 10:48 G 16771790.88 16771790.95 16771791.08 0.0088 0.0078

Earth 41209-11-24 14:10 G 16772666.07 16772666.09 16772666.11 0.2656 0.2624

Moon 41209-11-24 18:14 G 16772666.21 16772666.26 16772666.31 0.2660 0.2487

Mars 41211-07-12 22:19 G 16773261.28 16773261.43 16773261.58 0.1927 0.0966

Jupiter 41211-10-01 13:55 G 16773341.91 16773342.08 16773342.26 0.0499 0.0265

Saturn 41212-02-10 02:10 G 16773473.38 16773473.59 16773473.80 0.0303 0.0006

Saturn 41212-09-27 08:10 G 16773703.83 16773703.84 16773703.86 0.0301 0.0300

Mars 41214-04-19 01:26 G 16774272.39 16774272.56 16774272.72 0.1607 0.0470

Uranus 41219-09-21 18:29 G 16776254.18 16776254.27 16776254.39 0.0145 0.0128

Uranus 41220-05-05 07:12 G 16776480.64 16776480.80 16776480.96 0.0145 0.0096

Uranus 41220-12-17 19:12 G 16776707.12 16776707.30 16776707.51 0.0145 0.0065

Uranus 41221-08-01 07:41 G 16776933.61 16776933.82 16776934.04 0.0145 0.0033

Uranus 41222-03-15 19:55 G 16777160.12 16777160.33 16777160.55 0.0144 0.0003

Uranus 41222-10-28 08:10 G 16777386.63 16777386.84 16777387.05 0.0144 0.0031

Pluto 41223-03-10 01:55 G 16777519.43 16777519.58 16777519.78 0.0064 0.0040

Uranus 41223-06-11 19:55 G 16777613.14 16777613.33 16777613.53 0.0144 0.0062

Pluto 41223-10-21 06:14 G 16777744.54 16777744.76 16777744.98 0.0064 0.0002

Uranus 41224-01-24 07:55 G 16777839.67 16777839.83 16777840.00 0.0144 0.0093

Pluto 41224-06-02 09:36 G 16777969.76 16777969.90 16777970.08 0.0064 0.0044

Uranus 41224-09-06 19:41 G 16778066.22 16778066.32 16778066.44 0.0144 0.0124

Saturn 41227-03-06 14:24 G 16778976.90 16778977.10 16778977.31 0.0259 0.0081

Saturn 41227-10-21 11:02 G 16779205.77 16779205.96 16779206.16 0.0260 0.0113

Jupiter 41235-10-04 00:58 G 16782110.40 16782110.54 16782110.69 0.0498 0.0350

Saturn 41241-01-04 02:24 G 16784029.52 16784029.60 16784029.70 0.0304 0.0273

Jupiter 41241-08-05 18:43 G 16784243.09 16784243.28 16784243.48 0.0527 0.0107

Saturn 41241-08-22 09:50 G 16784259.70 16784259.91 16784260.12 0.0302 0.0038

Jupiter 41247-06-09 00:00 G 16786376.29 16786376.50 16786376.70 0.0498 0.0042

Jupiter 41253-04-10 11:31 G 16788508.83 16788508.98 16788509.13 0.0528 0.0350

Saturn 41256-01-30 23:02 G 16789534.40 16789534.46 16789534.54 0.0259 0.0244

Saturn 41256-09-15 19:12 G 16789763.09 16789763.30 16789763.51 0.0260 0.0053

Saturn 41257-05-02 15:50 G 16789991.98 16789992.16 16789992.34 0.0261 0.0142

Jupiter 41259-02-12 00:29 G 16790642.42 16790642.52 16790642.63 0.0498 0.0428

Uranus 41262-06-24 14:53 G 16791871.03 16791871.12 16791871.23 0.0133 0.0117

Uranus 41263-02-05 20:10 G 16792097.20 16792097.34 16792097.51 0.0133 0.0093

Uranus 41263-09-20 01:41 G 16792323.39 16792323.57 16792323.76 0.0134 0.0069

Uranus 41264-05-03 07:12 G 16792549.59 16792549.80 16792550.00 0.0134 0.0044

Uranus 41264-12-15 12:29 G 16792775.81 16792776.02 16792776.24 0.0134 0.0019

Uranus 41265-07-29 18:00 G 16793002.03 16793002.25 16793002.47 0.0134 0.0006

Uranus 41266-03-12 23:31 G 16793228.28 16793228.48 16793228.70 0.0134 0.0031

Uranus 41266-10-25 05:02 G 16793454.53 16793454.71 16793454.92 0.0134 0.0056

Uranus 41267-06-08 10:34 G 16793680.79 16793680.94 16793681.13 0.0134 0.0082

Uranus 41268-01-20 16:34 G 16793907.06 16793907.19 16793907.33 0.0135 0.0106

Uranus 41268-09-02 22:19 G 16794133.39 16794133.43 16794133.49 0.0135 0.0131

Saturn 41270-07-17 11:31 G 16794815.85 16794815.98 16794816.12 0.0304 0.0232

Saturn 41271-03-04 18:43 G 16795046.08 16795046.28 16795046.48 0.0303 0.0079

Jupiter 41277-04-13 09:50 G 16797277.78 16797277.91 16797278.06 0.0527 0.0373

Mars 41277-05-08 23:46 G 16797303.32 16797303.49 16797303.67 0.1925 0.0049

Mars 41280-02-14 13:55 G 16798314.91 16798315.08 16798315.25 0.1609 0.0214

Neptune 41281-08-09 12:43 G 16798857.02 16798857.03 16798857.09 0.0090 0.0089

Neptune 41282-03-23 01:55 G 16799082.49 16799082.58 16799082.73 0.0090 0.0075

Neptune 41282-11-03 15:22 G 16799308.00 16799308.14 16799308.32 0.0090 0.0061

Jupiter 41283-02-14 10:48 G 16799410.76 16799410.95 16799411.14 0.0498 0.0184

Neptune 41283-06-17 04:34 G 16799533.52 16799533.69 16799533.89 0.0090 0.0047

Neptune 41284-01-28 17:46 G 16799759.05 16799759.24 16799759.46 0.0089 0.0033

Neptune 41284-09-10 06:58 G 16799984.59 16799984.79 16799985.01 0.0089 0.0019

Neptune 41285-04-23 20:24 G 16800210.14 16800210.35 16800210.57 0.0089 0.0005

Saturn 41285-08-12 03:50 G 16800320.56 16800320.66 16800320.79 0.0259 0.0215

Neptune 41285-12-05 09:36 G 16800435.69 16800435.90 16800436.12 0.0089 0.0010

Saturn 41286-03-29 00:14 G 16800549.30 16800549.51 16800549.72 0.0260 0.0023

Neptune 41286-07-18 22:48 G 16800661.24 16800661.45 16800661.66 0.0089 0.0024

Saturn 41286-11-12 20:53 G 16800778.22 16800778.37 16800778.54 0.0261 0.0173

Neptune 41287-03-01 12:00 G 16800886.80 16800887.00 16800887.20 0.0089 0.0038

Neptune 41287-10-13 01:12 G 16801112.37 16801112.55 16801112.73 0.0089 0.0052

Neptune 41288-05-25 14:24 G 16801337.95 16801338.10 16801338.25 0.0089 0.0066

Jupiter 41288-12-17 00:29 G 16801543.32 16801543.52 16801543.72 0.0527 0.0096

Neptune 41289-01-06 03:22 G 16801563.55 16801563.64 16801563.75 0.0089 0.0080

Jupiter 41294-10-20 11:46 G 16803676.80 16803676.99 16803677.18 0.0498 0.0202

Saturn 41300-01-27 21:36 G 16805602.24 16805602.40 16805602.57 0.0303 0.0182

Saturn 41300-09-15 04:34 G 16805832.50 16805832.69 16805832.88 0.0302 0.0127

Uranus 41303-05-23 00:14 G 16806812.46 16806812.51 16806812.56 0.0145 0.0140

Uranus 41304-01-04 12:29 G 16807038.89 16807039.02 16807039.17 0.0145 0.0109

Uranus 41304-08-18 01:12 G 16807265.37 16807265.55 16807265.73 0.0145 0.0077

Uranus 41305-04-01 13:26 G 16807491.86 16807492.06 16807492.27 0.0145 0.0046

Uranus 41305-11-14 01:41 G 16807718.36 16807718.57 16807718.79 0.0145 0.0014

Uranus 41306-06-28 13:41 G 16807944.86 16807945.07 16807945.30 0.0144 0.0019

Uranus 41307-02-10 01:55 G 16808171.38 16808171.58 16808171.79 0.0144 0.0049

Uranus 41307-09-24 13:41 G 16808397.91 16808398.07 16808398.27 0.0144 0.0081

Uranus 41308-05-08 01:41 G 16808624.45 16808624.57 16808624.72 0.0144 0.0112

Uranus 41308-12-20 13:26 G 16808851.04 16808851.06 16808851.10 0.0144 0.0142

Pluto 41312-09-13 03:07 G 16810213.46 16810213.63 16810213.83 0.0080 0.0045

Pluto 41313-04-26 13:26 G 16810438.89 16810439.06 16810439.27 0.0080 0.0040

Saturn 41315-02-23 09:22 G 16811106.74 16811106.89 16811107.03 0.0259 0.0187

Saturn 41315-10-10 05:46 G 16811335.52 16811335.74 16811335.95 0.0260 0.0008

Saturn 41316-05-26 02:38 G 16811564.48 16811564.61 16811564.75 0.0261 0.0202

Jupiter 41318-10-23 19:55 G 16812445.21 16812445.33 16812445.45 0.0498 0.0400

Jupiter 41324-08-25 15:50 G 16814577.97 16814578.16 16814578.36 0.0527 0.0173

Saturn 41329-08-10 07:41 G 16816388.64 16816388.82 16816389.02 0.0303 0.0139

Saturn 41330-03-28 14:24 G 16816618.93 16816619.10 16816619.28 0.0302 0.0171

Jupiter 41330-06-28 20:24 G 16816711.14 16816711.35 16816711.55 0.0498 0.0015

Jupiter 41336-04-30 07:41 G 16818843.65 16818843.82 16818843.99 0.0527 0.0289

Earth 41339-05-28 03:36 G 16819966.49 16819966.65 16819966.80 0.2675 0.0286

Moon 41339-05-28 06:43 G 16819966.63 16819966.78 16819966.94 0.2669 0.0906 *

Jupiter 41342-03-03 20:53 G 16820977.24 16820977.37 16820977.51 0.0499 0.0372

Mars 41343-03-07 02:10 G 16821345.43 16821345.59 16821345.75 0.1922 0.0865

Saturn 41344-09-04 14:53 G 16821892.95 16821893.12 16821893.29 0.0259 0.0155

Saturn 41345-04-21 11:17 G 16822121.76 16822121.97 16822122.19 0.0260 0.0039

Saturn 41345-12-06 08:24 G 16822350.77 16822350.85 16822350.95 0.0261 0.0235

Mars 41345-12-13 02:38 G 16822357.44 16822357.61 16822357.79 0.1610 0.0047

Uranus 41346-02-23 03:22 G 16822429.59 16822429.64 16822429.74 0.0133 0.0125

Uranus 41346-10-07 09:07 G 16822655.74 16822655.88 16822656.02 0.0133 0.0100

Uranus 41347-05-21 14:10 G 16822881.92 16822882.09 16822882.28 0.0134 0.0076

Uranus 41348-01-02 19:41 G 16823108.12 16823108.32 16823108.52 0.0134 0.0051

Uranus 41348-08-16 00:58 G 16823334.33 16823334.54 16823334.76 0.0134 0.0027

Uranus 41349-03-30 06:43 G 16823560.56 16823560.78 16823561.00 0.0134 0.0002

Uranus 41349-11-11 12:14 G 16823786.80 16823787.01 16823787.23 0.0134 0.0024

Uranus 41350-06-25 17:46 G 16824013.04 16824013.24 16824013.45 0.0134 0.0049

Uranus 41351-02-06 23:31 G 16824239.30 16824239.48 16824239.66 0.0134 0.0074

Uranus 41351-09-21 05:02 G 16824465.57 16824465.71 16824465.86 0.0135 0.0099

Uranus 41352-05-04 10:48 G 16824691.88 16824691.95 16824692.04 0.0135 0.0124

Saturn 41359-02-20 18:58 G 16827175.09 16827175.29 16827175.49 0.0303 0.0087

Saturn 41359-10-09 01:12 G 16827405.41 16827405.55 16827405.70 0.0301 0.0221

Jupiter 41360-05-03 05:17 G 16827612.60 16827612.72 16827612.84 0.0528 0.0426

Neptune 41364-12-19 21:50 G 16829304.33 16829304.41 16829304.55 0.0088 0.0076

Neptune 41365-08-02 10:34 G 16829529.81 16829529.94 16829530.12 0.0088 0.0063

Jupiter 41366-03-06 06:00 G 16829745.57 16829745.75 16829745.93 0.0498 0.0234

Neptune 41366-03-15 23:46 G 16829755.32 16829755.49 16829755.68 0.0088 0.0049

Neptune 41366-10-27 12:43 G 16829980.84 16829981.03 16829981.24 0.0088 0.0036

Neptune 41367-06-10 01:26 G 16830206.36 16830206.56 16830206.79 0.0088 0.0023

Neptune 41368-01-21 14:24 G 16830431.88 16830432.10 16830432.32 0.0088 0.0009

Neptune 41368-09-03 03:22 G 16830657.42 16830657.64 16830657.86 0.0088 0.0004

Neptune 41369-04-16 16:05 G 16830882.96 16830883.17 16830883.39 0.0088 0.0018

Neptune 41369-11-28 05:02 G 16831108.50 16831108.71 16831108.91 0.0088 0.0031

Neptune 41370-07-11 17:17 G 16831334.05 16831334.22 16831334.43 0.0088 0.0045

Neptune 41371-02-22 06:14 G 16831559.61 16831559.76 16831559.94 0.0088 0.0058

Neptune 41371-10-05 19:12 G 16831785.18 16831785.30 16831785.44 0.0088 0.0071

Jupiter 41372-01-06 20:53 G 16831878.17 16831878.37 16831878.57 0.0528 0.0034

Neptune 41372-05-18 07:41 G 16832010.79 16832010.82 16832010.90 0.0088 0.0085

Saturn 41374-03-17 20:10 G 16832679.16 16832679.34 16832679.53 0.0260 0.0127

Saturn 41374-11-01 16:48 G 16832908.00 16832908.20 16832908.41 0.0261 0.0068

Jupiter 41377-11-09 06:29 G 16834011.58 16834011.77 16834011.97 0.0498 0.0152

Jupiter 41383-09-11 12:29 G 16836143.96 16836144.02 16836144.10 0.0527 0.0494

Uranus 41387-09-03 21:36 G 16837597.28 16837597.40 16837597.53 0.0145 0.0119

Uranus 41388-04-17 09:50 G 16837823.75 16837823.91 16837824.09 0.0145 0.0088

Saturn 41388-09-02 06:14 G 16837961.55 16837961.76 16837961.97 0.0303 0.0040

Uranus 41388-11-29 22:19 G 16838050.23 16838050.43 16838050.63 0.0145 0.0056

Saturn 41389-04-20 12:29 G 16838191.93 16838192.02 16838192.12 0.0301 0.0266

Uranus 41389-07-14 10:34 G 16838276.73 16838276.94 16838277.16 0.0145 0.0024

Uranus 41390-02-25 22:48 G 16838503.23 16838503.45 16838503.67 0.0144 0.0008

Uranus 41390-10-10 10:48 G 16838729.75 16838729.95 16838730.17 0.0144 0.0040

Uranus 41391-05-24 23:02 G 16838956.27 16838956.46 16838956.65 0.0144 0.0070

Uranus 41392-01-06 10:48 G 16839182.80 16839182.95 16839183.11 0.0144 0.0101

Uranus 41392-08-19 22:34 G 16839409.36 16839409.44 16839409.53 0.0144 0.0132

Jupiter 41401-11-12 15:22 G 16842780.07 16842780.14 16842780.23 0.0498 0.0453

Saturn 41403-09-29 02:10 G 16843465.40 16843465.59 16843465.79 0.0260 0.0095

Saturn 41404-05-14 23:02 G 16843694.26 16843694.46 16843694.66 0.0261 0.0100

Jupiter 41407-09-15 09:50 G 16844912.73 16844912.91 16844913.10 0.0527 0.0219

Mars 41409-01-02 04:19 G 16845387.62 16845387.68 16845387.74 0.1920 0.1774

Mars 41411-10-11 15:07 G 16846399.96 16846400.13 16846400.30 0.1612 0.0292

Jupiter 41413-07-18 16:19 G 16847045.97 16847046.18 16847046.38 0.0498 0.0068

Saturn 41417-07-29 10:48 G 16848517.92 16848517.95 16848517.98 0.0304 0.0299

Saturn 41418-03-16 17:46 G 16848748.03 16848748.24 16848748.46 0.0302 0.0014

Jupiter 41419-05-21 01:41 G 16849178.39 16849178.57 16849178.75 0.0527 0.0242

Jupiter 41425-03-23 16:34 G 16851312.03 16851312.19 16851312.34 0.0498 0.0318

Uranus 41429-10-24 16:19 G 16852988.16 16852988.18 16852988.23 0.0133 0.0131

Uranus 41430-06-07 21:36 G 16853214.29 16853214.40 16853214.54 0.0133 0.0107

Uranus 41431-01-20 03:07 G 16853440.47 16853440.63 16853440.81 0.0134 0.0083

Uranus 41431-09-03 08:38 G 16853666.66 16853666.86 16853667.06 0.0134 0.0058

Uranus 41432-04-16 13:55 G 16853892.88 16853893.08 16853893.30 0.0134 0.0034

Saturn 41432-08-24 11:17 G 16854022.96 16854022.97 16854023.00 0.0259 0.0258

Uranus 41432-11-28 19:26 G 16854119.10 16854119.31 16854119.53 0.0134 0.0009

Saturn 41433-04-10 07:41 G 16854251.61 16854251.82 16854252.02 0.0260 0.0066

Uranus 41433-07-13 00:58 G 16854345.33 16854345.54 16854345.76 0.0134 0.0016

Saturn 41433-11-25 04:19 G 16854480.50 16854480.68 16854480.87 0.0261 0.0130

Uranus 41434-02-24 06:29 G 16854571.57 16854571.77 16854571.98 0.0134 0.0042

Uranus 41434-10-08 12:00 G 16854797.82 16854798.00 16854798.20 0.0134 0.0067

Uranus 41435-05-22 17:31 G 16855024.09 16855024.23 16855024.40 0.0134 0.0092

Uranus 41436-01-03 23:02 G 16855250.37 16855250.46 16855250.59 0.0135 0.0117

Jupiter 41443-05-24 00:43 G 16857947.45 16857947.53 16857947.61 0.0528 0.0482

Earth 41444-11-29 00:00 G 16858502.35 16858502.50 16858502.65 0.2656 0.0915

Moon 41444-11-29 02:10 G 16858502.44 16858502.59 16858502.75 0.2650 0.1134 *

Neptune 41446-06-26 09:07 G 16859076.81 16859076.88 16859076.99 0.0090 0.0081

Neptune 41447-02-06 22:34 G 16859302.31 16859302.44 16859302.60 0.0090 0.0067

Saturn 41447-02-08 22:05 G 16859304.30 16859304.42 16859304.54 0.0304 0.0251

Neptune 41447-09-20 12:00 G 16859527.83 16859528.00 16859528.18 0.0090 0.0053

Saturn 41447-09-27 05:02 G 16859534.50 16859534.71 16859534.91 0.0302 0.0059

Neptune 41448-05-03 01:12 G 16859753.36 16859753.55 16859753.76 0.0090 0.0039

Neptune 41448-12-14 14:38 G 16859978.90 16859979.11 16859979.32 0.0089 0.0025

Jupiter 41449-03-26 00:43 G 16860080.36 16860080.53 16860080.70 0.0498 0.0281

Neptune 41449-07-28 03:50 G 16860204.44 16860204.66 16860204.88 0.0089 0.0011

Neptune 41450-03-10 17:02 G 16860429.99 16860430.21 16860430.43 0.0089 0.0003

Neptune 41450-10-22 06:00 G 16860655.54 16860655.75 16860655.97 0.0089 0.0017

Neptune 41451-06-04 18:58 G 16860881.10 16860881.29 16860881.51 0.0089 0.0032

Neptune 41452-01-16 08:38 G 16861106.67 16861106.86 16861107.04 0.0089 0.0045

Neptune 41452-08-28 21:36 G 16861332.24 16861332.40 16861332.57 0.0089 0.0059

Moon 41452-11-26 12:58 G 16861422.01 16861422.04 16861422.07 0.2650 0.2591

Neptune 41453-04-11 10:48 G 16861557.83 16861557.95 16861558.08 0.0089 0.0073

Neptune 41453-11-22 23:46 G 16861783.46 16861783.49 16861783.56 0.0089 0.0087

Jupiter 41455-01-26 16:34 G 16862212.99 16862213.19 16862213.39 0.0527 0.0022

Jupiter 41460-11-29 01:26 G 16864346.36 16864346.56 16864346.76 0.0498 0.0105

Saturn 41462-03-06 16:34 G 16864809.10 16864809.19 16864809.31 0.0259 0.0227

Saturn 41462-10-21 13:12 G 16865037.84 16865038.05 16865038.26 0.0260 0.0034

Saturn 41463-06-07 10:05 G 16865266.76 16865266.92 16865267.09 0.0261 0.0161

Jupiter 41466-10-01 06:58 G 16866478.69 16866478.79 16866478.90 0.0527 0.0445

Pluto 41471-02-12 12:58 G 16868073.86 16868074.04 16868074.25 0.0064 0.0029

Uranus 41471-05-05 06:00 G 16868155.67 16868155.75 16868155.86 0.0145 0.0130

Pluto 41471-09-25 17:02 G 16868299.00 16868299.21 16868299.43 0.0064 0.0013

Uranus 41471-12-17 18:43 G 16868382.13 16868382.28 16868382.44 0.0145 0.0098

Pluto 41472-05-07 20:24 G 16868524.26 16868524.35 16868524.49 0.0064 0.0055

Uranus 41472-07-31 06:58 G 16868608.61 16868608.79 16868609.00 0.0145 0.0067

Jupiter 41472-08-04 02:10 G 16868612.55 16868612.59 16868612.63 0.0499 0.0488

Uranus 41473-03-14 19:26 G 16868835.10 16868835.31 16868835.53 0.0145 0.0035

Uranus 41473-10-27 07:41 G 16869061.61 16869061.82 16869062.04 0.0145 0.0004

Uranus 41474-06-10 19:55 G 16869288.11 16869288.33 16869288.54 0.0144 0.0029

Uranus 41475-01-23 07:41 G 16869514.63 16869514.82 16869515.03 0.0144 0.0060

Uranus 41475-09-06 19:41 G 16869741.16 16869741.32 16869741.50 0.0144 0.0091

Uranus 41476-04-20 07:26 G 16869967.71 16869967.81 16869967.93 0.0144 0.0122

Saturn 41476-08-21 09:22 G 16870090.74 16870090.89 16870091.06 0.0303 0.0200

Saturn 41477-04-08 16:34 G 16870320.99 16870321.19 16870321.38 0.0302 0.0110

Mars 41477-08-08 03:36 G 16870442.49 16870442.65 16870442.81 0.1614 0.0546

Jupiter 41490-10-04 05:17 G 16875247.55 16875247.72 16875247.90 0.0528 0.0274

Saturn 41491-09-16 21:50 G 16875595.28 16875595.41 16875595.55 0.0259 0.0199

Saturn 41492-05-02 18:14 G 16875824.05 16875824.26 16875824.47 0.0260 0.0006

Saturn 41492-12-17 14:53 G 16876052.99 16876053.12 16876053.28 0.0261 0.0191

Jupiter 41496-08-06 11:46 G 16877380.79 16877380.99 16877381.19 0.0498 0.0119

Jupiter 41502-06-09 21:36 G 16879513.21 16879513.40 16879513.59 0.0527 0.0185

Saturn 41506-03-04 20:10 G 16880877.16 16880877.34 16880877.53 0.0303 0.0152

Saturn 41506-10-21 02:53 G 16881107.44 16881107.62 16881107.80 0.0302 0.0157

Jupiter 41508-04-12 10:48 G 16881646.78 16881646.95 16881647.12 0.0498 0.0274

Mars 41509-08-07 19:26 G 16882129.26 16882129.31 16882129.37 0.1609 0.1514

Uranus 41514-02-06 10:48 G 16883772.84 16883772.95 16883773.07 0.0133 0.0114

Uranus 41514-09-20 16:05 G 16883999.01 16883999.17 16883999.34 0.0133 0.0090

Uranus 41515-05-04 21:07 G 16884225.21 16884225.38 16884225.59 0.0134 0.0066

Uranus 41515-12-17 02:38 G 16884451.41 16884451.61 16884451.82 0.0134 0.0041

Uranus 41516-07-30 08:10 G 16884677.63 16884677.84 16884678.06 0.0134 0.0016

Uranus 41517-03-13 13:41 G 16884903.86 16884904.07 16884904.29 0.0134 0.0009

Uranus 41517-10-25 19:12 G 16885130.09 16885130.30 16885130.51 0.0134 0.0034

Uranus 41518-06-09 00:29 G 16885356.34 16885356.52 16885356.72 0.0134 0.0059

Uranus 41519-01-21 06:00 G 16885582.59 16885582.75 16885582.93 0.0134 0.0084

Uranus 41519-09-04 11:46 G 16885808.87 16885808.99 16885809.12 0.0135 0.0109

Uranus 41520-04-17 17:31 G 16886035.22 16886035.23 16886035.27 0.0135 0.0134

Saturn 41521-03-30 02:53 G 16886381.46 16886381.62 16886381.79 0.0259 0.0168

Saturn 41521-11-13 23:17 G 16886610.26 16886610.47 16886610.69 0.0260 0.0025

Saturn 41522-06-30 20:10 G 16886839.24 16886839.34 16886839.46 0.0261 0.0222

Neptune 41529-03-25 06:29 G 16889298.70 16889298.77 16889298.87 0.0088 0.0081

Neptune 41529-11-05 19:12 G 16889524.18 16889524.30 16889524.46 0.0088 0.0068

Neptune 41530-06-19 07:55 G 16889749.68 16889749.83 16889750.02 0.0088 0.0055

Neptune 41531-01-30 21:07 G 16889975.19 16889975.38 16889975.58 0.0088 0.0041

Neptune 41531-09-13 09:50 G 16890200.71 16890200.91 16890201.13 0.0088 0.0028

Jupiter 41532-04-14 21:07 G 16890415.24 16890415.38 16890415.54 0.0498 0.0336

Neptune 41532-04-25 22:34 G 16890426.23 16890426.44 16890426.67 0.0088 0.0015

Neptune 41532-12-07 11:31 G 16890651.76 16890651.98 16890652.20 0.0088 0.0002

Neptune 41533-07-21 00:14 G 16890877.30 16890877.51 16890877.73 0.0088 0.0012

Neptune 41534-03-03 13:12 G 16891102.84 16891103.05 16891103.26 0.0088 0.0025

Neptune 41534-10-15 01:41 G 16891328.39 16891328.57 16891328.79 0.0088 0.0039

Neptune 41535-05-28 14:38 G 16891553.94 16891554.11 16891554.30 0.0088 0.0052

Saturn 41535-09-15 06:14 G 16891663.57 16891663.76 16891663.96 0.0303 0.0105

Neptune 41536-01-09 03:22 G 16891779.51 16891779.64 16891779.80 0.0088 0.0065

Saturn 41536-05-02 12:43 G 16891893.89 16891894.03 16891894.19 0.0302 0.0204

Neptune 41536-08-21 16:19 G 16892005.09 16892005.18 16892005.28 0.0088 0.0078

Jupiter 41538-02-15 11:17 G 16892547.77 16892547.97 16892548.17 0.0527 0.0071

Mars 41543-06-06 16:05 G 16894485.02 16894485.17 16894485.32 0.1615 0.0812

Jupiter 41543-12-19 22:05 G 16894681.22 16894681.42 16894681.63 0.0498 0.0047

Jupiter 41549-10-21 02:38 G 16896813.48 16896813.61 16896813.75 0.0527 0.0390

Saturn 41550-10-10 07:12 G 16897167.62 16897167.80 16897167.98 0.0259 0.0142

Saturn 41551-05-27 03:36 G 16897396.44 16897396.65 16897396.86 0.0260 0.0052

Saturn 41552-01-11 00:29 G 16897625.46 16897625.52 16897625.59 0.0262 0.0248

Uranus 41555-01-03 16:19 G 16898714.12 16898714.18 16898714.23 0.0145 0.0139

Uranus 41555-08-18 04:34 G 16898940.56 16898940.69 16898940.85 0.0145 0.0108

Jupiter 41555-08-24 22:48 G 16898947.35 16898947.45 16898947.56 0.0498 0.0430

Uranus 41556-03-31 17:17 G 16899167.04 16899167.22 16899167.41 0.0145 0.0076

Uranus 41556-11-13 05:31 G 16899393.53 16899393.73 16899393.94 0.0145 0.0045

Uranus 41557-06-27 17:46 G 16899620.02 16899620.24 16899620.46 0.0145 0.0013

Uranus 41558-02-09 05:46 G 16899846.53 16899846.74 16899846.97 0.0144 0.0020

Uranus 41558-09-23 18:00 G 16900073.05 16900073.25 16900073.46 0.0144 0.0051

Uranus 41559-05-08 05:46 G 16900299.58 16900299.74 16900299.94 0.0144 0.0082

Uranus 41559-12-20 17:31 G 16900526.11 16900526.23 16900526.38 0.0144 0.0113

Uranus 41560-08-03 05:17 G 16900752.71 16900752.72 16900752.75 0.0144 0.0143

Pluto 41560-08-18 13:41 G 16900767.88 16900768.07 16900768.29 0.0080 0.0034

Pluto 41561-04-01 00:14 G 16900993.35 16900993.51 16900993.69 0.0080 0.0050

Saturn 41565-03-27 15:50 G 16902449.95 16902450.16 16902450.36 0.0303 0.0060

Saturn 41565-11-12 22:05 G 16902680.31 16902680.42 16902680.54 0.0302 0.0248

Mars 41572-08-27 10:05 G 16905159.78 16905159.92 16905160.07 0.1922 0.1069

Jupiter 41573-10-24 03:36 G 16905582.50 16905582.65 16905582.81 0.0527 0.0341

Mars 41575-06-05 08:10 G 16906171.74 16906171.84 16906171.95 0.1610 0.1266

Jupiter 41579-08-27 06:58 G 16907715.60 16907715.79 16907715.99 0.0498 0.0169

Saturn 41580-04-21 11:17 G 16907953.79 16907953.97 16907954.17 0.0259 0.0112

Saturn 41580-12-06 07:41 G 16908182.62 16908182.82 16908183.03 0.0260 0.0082

Moon 41582-05-30 00:29 G 16908722.36 16908722.52 16908722.67 0.2681 0.0369

Earth 41582-05-30 04:34 G 16908722.54 16908722.69 16908722.85 0.2676 0.0216 *

Jupiter 41585-06-28 18:29 G 16909848.07 16909848.27 16909848.47 0.0527 0.0124

Jupiter 41591-05-02 08:24 G 16911981.66 16911981.85 16911982.03 0.0499 0.0213

Saturn 41594-10-08 00:29 G 16913236.31 16913236.52 16913236.73 0.0303 0.0017

Saturn 41595-05-26 06:29 G 16913466.73 16913466.77 16913466.83 0.0301 0.0292

Uranus 41597-10-06 23:17 G 16914331.39 16914331.47 16914331.57 0.0133 0.0121

Uranus 41598-05-21 04:19 G 16914557.55 16914557.68 16914557.85 0.0133 0.0098

Uranus 41599-01-02 09:50 G 16914783.73 16914783.91 16914784.10 0.0133 0.0073

Uranus 41599-08-16 14:53 G 16915009.93 16915010.12 16915010.34 0.0134 0.0049

Uranus 41600-03-29 20:38 G 16915236.15 16915236.36 16915236.58 0.0134 0.0023

Uranus 41600-11-11 01:55 G 16915462.37 16915462.58 16915462.80 0.0134 0.0003

Uranus 41601-06-25 07:26 G 16915688.60 16915688.81 16915689.02 0.0134 0.0026

Uranus 41602-02-06 12:43 G 16915914.84 16915915.03 16915915.24 0.0134 0.0051

Uranus 41602-09-20 18:00 G 16916141.09 16916141.25 16916141.45 0.0134 0.0077

Uranus 41603-05-05 00:00 G 16916367.36 16916367.50 16916367.65 0.0134 0.0101

Uranus 41603-12-17 05:31 G 16916593.66 16916593.73 16916593.81 0.0135 0.0126

Mars 41609-04-03 04:05 G 16918527.54 16918527.67 16918527.80 0.1617 0.1079

Saturn 41609-11-01 14:53 G 16918739.92 16918740.12 16918740.32 0.0259 0.0087

Saturn 41610-06-18 11:02 G 16918968.77 16918968.96 16918969.16 0.0260 0.0107

Neptune 41610-09-28 16:34 G 16919071.15 16919071.19 16919071.25 0.0090 0.0087

Neptune 41611-05-12 06:00 G 16919296.63 16919296.75 16919296.88 0.0090 0.0073

Neptune 41611-12-23 18:43 G 16919522.14 16919522.28 16919522.47 0.0090 0.0060

Neptune 41612-08-05 08:10 G 16919747.67 16919747.84 16919748.04 0.0090 0.0046

Neptune 41613-03-18 21:36 G 16919973.20 16919973.40 16919973.61 0.0090 0.0032

Neptune 41613-10-30 10:48 G 16920198.75 16920198.95 16920199.18 0.0090 0.0018

Neptune 41614-06-13 00:14 G 16920424.29 16920424.51 16920424.73 0.0089 0.0004

Neptune 41615-01-24 13:12 G 16920649.84 16920650.05 16920650.27 0.0089 0.0011

Jupiter 41615-05-04 18:58 G 16920750.18 16920750.29 16920750.42 0.0498 0.0398

Neptune 41615-09-07 02:10 G 16920875.40 16920875.59 16920875.82 0.0089 0.0025

Neptune 41616-04-19 15:50 G 16921100.96 16921101.16 16921101.36 0.0089 0.0038

Neptune 41616-12-01 04:48 G 16921326.53 16921326.70 16921326.89 0.0089 0.0052

Neptune 41617-07-14 17:46 G 16921552.11 16921552.24 16921552.40 0.0089 0.0066

Neptune 41618-02-25 06:43 G 16921777.70 16921777.78 16921777.90 0.0089 0.0080

Jupiter 41621-03-06 10:05 G 16922882.73 16922882.92 16922883.12 0.0527 0.0142

Saturn 41623-09-02 00:00 G 16923792.44 16923792.50 16923792.57 0.0304 0.0286

Saturn 41624-04-19 07:41 G 16924022.62 16924022.82 16924023.04 0.0303 0.0027

Jupiter 41627-01-07 17:46 G 16925016.04 16925016.24 16925016.45 0.0498 0.0011

Jupiter 41632-11-09 03:22 G 16927148.48 16927148.64 16927148.81 0.0527 0.0309

Mars 41638-06-24 12:43 G 16929201.85 16929202.03 16929202.20 0.1920 0.0183

Jupiter 41638-09-12 18:43 G 16929282.16 16929282.28 16929282.42 0.0499 0.0379

Saturn 41638-09-27 22:19 G 16929297.39 16929297.43 16929297.50 0.0258 0.0249

Uranus 41639-04-17 11:31 G 16929498.87 16929498.98 16929499.11 0.0145 0.0120

Saturn 41639-05-14 18:14 G 16929526.05 16929526.26 16929526.47 0.0259 0.0058

Uranus 41639-11-29 23:46 G 16929725.33 16929725.49 16929725.67 0.0145 0.0089

Saturn 41639-12-29 14:24 G 16929754.92 16929755.10 16929755.28 0.0260 0.0135

Uranus 41640-07-13 12:14 G 16929951.82 16929952.01 16929952.22 0.0145 0.0057

Uranus 41641-02-25 00:43 G 16930178.32 16930178.53 16930178.75 0.0145 0.0025

Mars 41641-04-01 20:38 G 16930214.22 16930214.36 16930214.49 0.1612 0.1009

Uranus 41641-10-09 12:58 G 16930404.83 16930405.04 16930405.26 0.0145 0.0007

Uranus 41642-05-24 00:58 G 16930631.34 16930631.54 16930631.76 0.0144 0.0039

Uranus 41643-01-05 13:12 G 16930857.86 16930858.05 16930858.24 0.0144 0.0070

Uranus 41643-08-20 00:43 G 16931084.39 16931084.53 16931084.70 0.0144 0.0101

Uranus 41644-04-02 12:43 G 16931310.95 16931311.03 16931311.13 0.0144 0.0131

Saturn 41653-03-14 06:43 G 16934578.67 16934578.78 16934578.91 0.0304 0.0248

Saturn 41653-10-30 14:24 G 16934808.90 16934809.10 16934809.31 0.0303 0.0065

Jupiter 41656-11-12 01:26 G 16935917.43 16935917.56 16935917.69 0.0527 0.0405

Jupiter 41662-09-15 06:58 G 16938050.61 16938050.79 16938050.97 0.0498 0.0239

Saturn 41668-04-09 00:43 G 16940083.44 16940083.53 16940083.64 0.0259 0.0226

Jupiter 41668-07-17 17:02 G 16940183.01 16940183.21 16940183.41 0.0527 0.0054

Saturn 41668-11-23 20:24 G 16940312.14 16940312.35 16940312.57 0.0259 0.0035

Saturn 41669-07-10 16:34 G 16940541.03 16940541.19 16940541.36 0.0260 0.0159

Jupiter 41674-05-21 08:10 G 16942316.64 16942316.84 16942317.03 0.0498 0.0143

Mars 41675-01-29 16:34 G 16942570.09 16942570.19 16942570.28 0.1619 0.1350

Jupiter 41680-03-22 10:48 G 16944448.89 16944448.95 16944449.01 0.0527 0.0502

Uranus 41681-06-06 11:31 G 16944889.94 16944889.98 16944890.04 0.0133 0.0129

Uranus 41682-01-18 16:48 G 16945116.07 16945116.20 16945116.34 0.0133 0.0104

Uranus 41682-09-01 21:50 G 16945342.25 16945342.41 16945342.59 0.0133 0.0081

Saturn 41682-09-24 12:29 G 16945364.87 16945365.02 16945365.17 0.0304 0.0209

Uranus 41683-04-16 03:22 G 16945568.44 16945568.64 16945568.84 0.0133 0.0056

Saturn 41683-05-12 20:10 G 16945595.14 16945595.34 16945595.54 0.0303 0.0103

Uranus 41683-11-28 08:24 G 16945794.65 16945794.85 16945795.07 0.0134 0.0032

Uranus 41684-07-11 13:55 G 16946020.86 16946021.08 16946021.29 0.0134 0.0007

Uranus 41685-02-22 19:12 G 16946247.09 16946247.30 16946247.52 0.0134 0.0018

Uranus 41685-10-07 00:29 G 16946473.32 16946473.52 16946473.73 0.0134 0.0043

Uranus 41686-05-21 05:46 G 16946699.57 16946699.74 16946699.94 0.0134 0.0068

Uranus 41687-01-02 11:17 G 16946925.82 16946925.97 16946926.14 0.0134 0.0093

Uranus 41687-08-16 16:48 G 16947152.11 16947152.20 16947152.32 0.0134 0.0117

Moon 41687-11-30 21:36 G 16947258.25 16947258.40 16947258.55 0.2660 0.0283

Earth 41687-12-01 01:26 G 16947258.41 16947258.56 16947258.71 0.2655 0.0878 *

Neptune 41693-06-26 14:53 G 16949293.10 16949293.12 16949293.19 0.0088 0.0086

Neptune 41694-02-07 03:36 G 16949518.55 16949518.65 16949518.79 0.0088 0.0073

Neptune 41694-09-20 16:34 G 16949744.05 16949744.19 16949744.37 0.0088 0.0060

Neptune 41695-05-04 05:17 G 16949969.55 16949969.72 16949969.92 0.0088 0.0047

Neptune 41695-12-15 18:00 G 16950195.06 16950195.25 16950195.47 0.0088 0.0034

Neptune 41696-07-28 07:12 G 16950420.58 16950420.80 16950421.01 0.0088 0.0020

Neptune 41697-03-10 19:55 G 16950646.11 16950646.33 16950646.55 0.0088 0.0007

Saturn 41697-10-20 03:36 G 16950869.52 16950869.65 16950869.79 0.0258 0.0198

Neptune 41697-10-22 08:38 G 16950871.65 16950871.86 16950872.09 0.0088 0.0007

Jupiter 41698-05-23 16:34 G 16951085.11 16951085.19 16951085.27 0.0499 0.0456

Neptune 41698-06-04 21:22 G 16951097.19 16951097.39 16951097.62 0.0088 0.0020

Saturn 41698-06-05 23:02 G 16951098.25 16951098.46 16951098.68 0.0259 0.0009

Neptune 41699-01-16 10:05 G 16951322.73 16951322.92 16951323.14 0.0088 0.0033

Saturn 41699-01-20 18:58 G 16951327.16 16951327.29 16951327.45 0.0260 0.0186

Neptune 41699-08-29 23:02 G 16951548.28 16951548.46 16951548.66 0.0088 0.0046

Neptune 41700-04-12 12:00 G 16951773.84 16951774.00 16951774.17 0.0088 0.0059

Neptune 41700-11-24 00:58 G 16951999.42 16951999.54 16951999.67 0.0088 0.0072

Neptune 41701-07-07 13:12 G 16952225.03 16952225.05 16952225.12 0.0088 0.0086

Jupiter 41704-03-26 11:02 G 16953217.78 16953217.96 16953218.15 0.0527 0.0225

Mars 41704-04-21 14:53 G 16953243.96 16953244.12 16953244.28 0.1917 0.0724

Mars 41707-01-29 09:07 G 16954256.73 16954256.88 16954257.03 0.1614 0.0751

Jupiter 41710-01-27 18:14 G 16955351.06 16955351.26 16955351.46 0.0499 0.0079

Saturn 41712-04-06 17:31 G 16956151.06 16956151.23 16956151.40 0.0304 0.0176

Saturn 41712-11-23 00:58 G 16956381.36 16956381.54 16956381.73 0.0303 0.0137

Jupiter 41715-11-30 03:07 G 16957483.45 16957483.63 16957483.81 0.0527 0.0233

Pluto 41719-01-17 22:05 G 16958628.24 16958628.42 16958628.64 0.0064 0.0026

Pluto 41719-08-31 02:10 G 16958853.38 16958853.59 16958853.81 0.0064 0.0016

Pluto 41720-04-12 05:31 G 16959078.66 16959078.73 16959078.85 0.0064 0.0058

Jupiter 41721-10-02 20:10 G 16959617.18 16959617.34 16959617.51 0.0499 0.0299

Uranus 41722-12-16 17:17 G 16960057.15 16960057.22 16960057.32 0.0145 0.0133

Uranus 41723-07-31 06:00 G 16960283.60 16960283.75 16960283.91 0.0145 0.0101

Uranus 41724-03-13 18:14 G 16960510.08 16960510.26 16960510.47 0.0145 0.0070

Uranus 41724-10-26 06:43 G 16960736.58 16960736.78 16960737.00 0.0145 0.0038

Uranus 41725-06-09 19:12 G 16960963.08 16960963.30 16960963.52 0.0145 0.0006

Uranus 41726-01-22 07:26 G 16961189.59 16961189.81 16961190.02 0.0145 0.0026

Uranus 41726-09-05 19:26 G 16961416.11 16961416.31 16961416.52 0.0144 0.0057

Uranus 41727-04-20 07:26 G 16961642.64 16961642.81 16961642.99 0.0144 0.0088

Saturn 41727-05-03 05:02 G 16961655.56 16961655.71 16961655.87 0.0258 0.0177

Uranus 41727-12-02 19:12 G 16961869.19 16961869.30 16961869.43 0.0144 0.0119

Saturn 41727-12-18 00:29 G 16961884.31 16961884.52 16961884.73 0.0259 0.0014

Saturn 41728-08-02 20:24 G 16962113.23 16962113.35 16962113.49 0.0260 0.0208

Jupiter 41739-12-03 03:50 G 16966252.60 16966252.66 16966252.73 0.0527 0.0494

Mars 41740-11-27 04:48 G 16966612.69 16966612.70 16966612.71 0.1621 0.1618

Saturn 41741-10-17 20:53 G 16966937.18 16966937.37 16966937.56 0.0304 0.0141

Saturn 41742-06-05 04:19 G 16967167.51 16967167.68 16967167.86 0.0303 0.0172

Jupiter 41745-10-05 05:02 G 16968385.54 16968385.71 16968385.87 0.0498 0.0301

Jupiter 41751-08-07 21:50 G 16970518.21 16970518.41 16970518.61 0.0527 0.0049

Saturn 41756-11-12 06:58 G 16972441.62 16972441.79 16972441.96 0.0258 0.0151

Jupiter 41757-06-10 06:14 G 16972651.56 16972651.76 16972651.96 0.0499 0.0080

Saturn 41757-06-29 02:24 G 16972670.39 16972670.60 16972670.81 0.0259 0.0039

Saturn 41758-02-12 22:19 G 16972899.35 16972899.43 16972899.53 0.0260 0.0233

Jupiter 41763-04-12 13:55 G 16974783.95 16974784.08 16974784.21 0.0526 0.0407

Uranus 41765-09-19 04:48 G 16975674.60 16975674.70 16975674.83 0.0133 0.0112

Uranus 41766-05-03 10:19 G 16975900.77 16975900.93 16975901.09 0.0133 0.0088

Uranus 41766-12-15 15:22 G 16976126.95 16976127.14 16976127.34 0.0133 0.0063

Uranus 41767-07-29 20:38 G 16976353.15 16976353.36 16976353.57 0.0133 0.0039

Uranus 41768-03-12 01:55 G 16976579.37 16976579.58 16976579.80 0.0134 0.0015

Uranus 41768-10-24 07:12 G 16976805.59 16976805.80 16976806.02 0.0134 0.0010

Jupiter 41769-02-13 07:55 G 16976917.75 16976917.83 16976917.91 0.0499 0.0456

Uranus 41769-06-07 12:29 G 16977031.81 16977032.02 16977032.23 0.0134 0.0035

Uranus 41770-01-19 17:31 G 16977258.05 16977258.23 16977258.44 0.0134 0.0060

Mars 41770-02-16 17:31 G 16977286.13 16977286.23 16977286.32 0.1914 0.1588

Uranus 41770-09-02 23:17 G 16977484.31 16977484.47 16977484.64 0.0134 0.0084

Uranus 41771-04-17 04:34 G 16977710.59 16977710.69 16977710.84 0.0134 0.0110

Saturn 41771-04-30 00:43 G 16977723.33 16977723.53 16977723.72 0.0304 0.0111

Uranus 41771-11-29 10:34 G 16977936.93 16977936.94 16977936.97 0.0134 0.0134

Saturn 41771-12-16 07:55 G 16977953.68 16977953.83 16977953.99 0.0303 0.0202

Mars 41772-11-25 21:50 G 16978299.24 16978299.41 16978299.57 0.1615 0.0502

Neptune 41775-08-14 12:43 G 16979290.96 16979291.03 16979291.16 0.0090 0.0080

Neptune 41776-03-27 02:24 G 16979516.47 16979516.60 16979516.77 0.0090 0.0066

Neptune 41776-11-07 15:50 G 16979741.99 16979742.16 16979742.35 0.0090 0.0052

Neptune 41777-06-21 05:17 G 16979967.53 16979967.72 16979967.92 0.0090 0.0038

Neptune 41778-02-01 18:29 G 16980193.06 16980193.27 16980193.49 0.0090 0.0024

Neptune 41778-09-15 07:41 G 16980418.61 16980418.82 16980419.04 0.0089 0.0010

Neptune 41779-04-28 21:07 G 16980644.17 16980644.38 16980644.60 0.0089 0.0004

Neptune 41779-12-10 10:19 G 16980869.72 16980869.93 16980870.15 0.0089 0.0018

Neptune 41780-07-22 23:17 G 16981095.28 16981095.47 16981095.69 0.0089 0.0032

Neptune 41781-03-05 12:29 G 16981320.84 16981321.02 16981321.22 0.0089 0.0045

Neptune 41781-10-17 01:55 G 16981546.42 16981546.58 16981546.74 0.0089 0.0059

Neptune 41782-05-30 14:53 G 16981772.01 16981772.12 16981772.26 0.0089 0.0073

Neptune 41783-01-11 03:50 G 16981997.62 16981997.66 16981997.73 0.0089 0.0087

Saturn 41786-05-25 07:41 G 16983227.64 16983227.82 16983228.01 0.0258 0.0131

Saturn 41787-01-09 03:07 G 16983456.42 16983456.63 16983456.84 0.0259 0.0060

Jupiter 41787-04-15 12:43 G 16983552.87 16983553.03 16983553.20 0.0527 0.0310

Saturn 41787-08-25 23:02 G 16983685.42 16983685.46 16983685.51 0.0260 0.0253

Jupiter 41793-02-15 20:38 G 16985686.17 16985686.36 16985686.55 0.0498 0.0162

Jupiter 41798-12-19 06:58 G 16987818.59 16987818.79 16987818.98 0.0527 0.0136

Saturn 41800-11-10 03:07 G 16988509.42 16988509.63 16988509.83 0.0304 0.0078

Saturn 41801-06-28 10:19 G 16988739.81 16988739.93 16988740.07 0.0303 0.0234

Jupiter 41804-10-22 19:12 G 16989952.12 16989952.30 16989952.48 0.0499 0.0231

Uranus 41807-03-31 09:50 G 16990841.80 16990841.91 16990842.06 0.0145 0.0116

Uranus 41807-11-12 22:34 G 16991068.27 16991068.44 16991068.63 0.0145 0.0083

Uranus 41808-06-26 10:48 G 16991294.76 16991294.95 16991295.16 0.0145 0.0052

Pluto 41808-07-23 22:48 G 16991322.24 16991322.45 16991322.66 0.0080 0.0030

Uranus 41809-02-07 23:17 G 16991521.25 16991521.47 16991521.69 0.0145 0.0020

Pluto 41809-03-06 08:38 G 16991547.72 16991547.86 16991548.04 0.0080 0.0054

Uranus 41809-09-22 11:31 G 16991747.77 16991747.98 16991748.20 0.0145 0.0012

Uranus 41810-05-06 23:31 G 16991974.28 16991974.48 16991974.70 0.0145 0.0044

Uranus 41810-12-19 11:31 G 16992200.80 16992200.98 16992201.18 0.0144 0.0075

Uranus 41811-08-02 23:31 G 16992427.34 16992427.48 16992427.63 0.0144 0.0105

Uranus 41812-03-16 11:02 G 16992653.91 16992653.96 16992654.05 0.0144 0.0136

Saturn 41815-12-06 09:07 G 16994013.69 16994013.88 16994014.08 0.0258 0.0107

Saturn 41816-07-22 04:34 G 16994242.49 16994242.69 16994242.89 0.0259 0.0085

Earth 41825-06-01 05:46 G 16997478.58 16997478.74 16997478.90 0.2677 0.0126

Moon 41825-06-01 11:02 G 16997478.81 16997478.96 16997479.12 0.2675 0.0523 *

Jupiter 41828-10-25 07:41 G 16998720.69 16998720.82 16998720.95 0.0499 0.0386

Saturn 41830-05-23 05:02 G 16999295.50 16999295.71 16999295.92 0.0304 0.0052

Saturn 41831-01-08 12:14 G 16999525.92 16999526.01 16999526.13 0.0303 0.0261

Jupiter 41834-08-28 00:14 G 17000853.32 17000853.51 17000853.71 0.0527 0.0140

Mars 41838-09-24 09:50 G 17002341.74 17002341.91 17002342.09 0.1617 0.0235

Jupiter 41840-06-30 09:50 G 17002986.70 17002986.91 17002987.11 0.0499 0.0012

Saturn 41845-06-17 09:22 G 17004799.70 17004799.89 17004800.10 0.0258 0.0088

Saturn 41846-02-01 04:48 G 17005028.51 17005028.70 17005028.90 0.0259 0.0104

Jupiter 41846-05-02 16:19 G 17005119.03 17005119.18 17005119.35 0.0527 0.0317

Uranus 41849-05-20 16:34 G 17006233.11 17006233.19 17006233.30 0.0133 0.0119

Uranus 41850-01-01 21:36 G 17006459.27 17006459.40 17006459.57 0.0133 0.0096

Uranus 41850-08-16 02:53 G 17006685.45 17006685.62 17006685.82 0.0133 0.0071

Uranus 41851-03-30 08:24 G 17006911.65 17006911.85 17006912.06 0.0133 0.0047

Uranus 41851-11-11 13:41 G 17007137.86 17007138.07 17007138.29 0.0134 0.0022

Jupiter 41852-03-05 11:17 G 17007252.84 17007252.97 17007253.11 0.0499 0.0368

Uranus 41852-06-24 18:58 G 17007364.07 17007364.29 17007364.51 0.0134 0.0002

Uranus 41853-02-06 00:14 G 17007590.30 17007590.51 17007590.72 0.0134 0.0027

Uranus 41853-09-20 05:31 G 17007816.54 17007816.73 17007816.94 0.0134 0.0052

Uranus 41854-05-04 10:48 G 17008042.79 17008042.95 17008043.14 0.0134 0.0077

Uranus 41854-12-16 16:34 G 17008269.06 17008269.19 17008269.34 0.0134 0.0101

Uranus 41855-07-30 21:50 G 17008495.36 17008495.41 17008495.50 0.0134 0.0127

Neptune 41858-05-13 12:43 G 17009512.95 17009513.03 17009513.16 0.0088 0.0078

Neptune 41858-12-25 01:26 G 17009738.43 17009738.56 17009738.73 0.0088 0.0065

Neptune 41859-08-07 14:10 G 17009963.93 17009964.09 17009964.29 0.0088 0.0052

Saturn 41859-12-03 06:43 G 17010081.57 17010081.78 17010081.99 0.0304 0.0022

Neptune 41860-03-20 02:53 G 17010189.44 17010189.62 17010189.84 0.0088 0.0039

Saturn 41860-07-20 13:55 G 17010312.04 17010312.08 17010312.15 0.0303 0.0291

Neptune 41860-10-31 15:50 G 17010414.96 17010415.16 17010415.39 0.0088 0.0026

Neptune 41861-06-14 04:48 G 17010640.49 17010640.70 17010640.92 0.0088 0.0012

Neptune 41862-01-25 17:31 G 17010866.01 17010866.23 17010866.46 0.0088 0.0002

Neptune 41862-09-08 06:14 G 17011091.55 17011091.76 17011091.98 0.0088 0.0014

Neptune 41863-04-21 19:12 G 17011317.09 17011317.30 17011317.51 0.0088 0.0027

Neptune 41863-12-03 07:41 G 17011542.64 17011542.82 17011543.03 0.0088 0.0041

Neptune 41864-07-15 20:24 G 17011768.19 17011768.35 17011768.54 0.0088 0.0054

Neptune 41865-02-26 09:07 G 17011993.76 17011993.88 17011994.04 0.0088 0.0067

Neptune 41865-10-09 22:05 G 17012219.35 17012219.42 17012219.53 0.0088 0.0080

Jupiter 41870-05-05 19:55 G 17013888.22 17013888.33 17013888.46 0.0527 0.0424

Saturn 41874-05-13 15:36 G 17015357.12 17015357.15 17015357.20 0.0257 0.0252

Saturn 41874-12-28 10:34 G 17015585.74 17015585.94 17015586.15 0.0258 0.0064

Saturn 41875-08-14 06:00 G 17015814.57 17015814.75 17015814.94 0.0259 0.0128

Jupiter 41876-03-07 20:24 G 17016021.17 17016021.35 17016021.53 0.0499 0.0232

Jupiter 41882-01-08 12:14 G 17018153.81 17018154.01 17018154.21 0.0527 0.0030

Jupiter 41887-11-11 22:19 G 17020287.24 17020287.43 17020287.63 0.0499 0.0143

Saturn 41889-06-14 08:53 G 17020867.66 17020867.87 17020868.08 0.0304 0.0008

Uranus 41890-11-28 16:48 G 17021400.10 17021400.20 17021400.30 0.0145 0.0127

Uranus 41891-07-13 04:48 G 17021626.55 17021626.70 17021626.88 0.0145 0.0095

Uranus 41892-02-24 17:02 G 17021853.03 17021853.21 17021853.42 0.0145 0.0064

Uranus 41892-10-08 05:46 G 17022079.53 17022079.74 17022079.95 0.0145 0.0032

Uranus 41893-05-22 18:00 G 17022306.03 17022306.25 17022306.47 0.0145 0.0002

Jupiter 41893-09-13 04:34 G 17022419.61 17022419.69 17022419.77 0.0526 0.0482

Uranus 41894-01-04 05:46 G 17022532.54 17022532.74 17022532.96 0.0145 0.0032

Uranus 41894-08-18 18:00 G 17022759.06 17022759.25 17022759.45 0.0144 0.0063

Uranus 41895-04-02 06:00 G 17022985.59 17022985.75 17022985.92 0.0144 0.0094

Uranus 41895-11-14 17:46 G 17023212.14 17023212.24 17023212.36 0.0144 0.0124

Saturn 41903-11-24 16:05 G 17026143.09 17026143.17 17026143.27 0.0258 0.0232

Saturn 41904-07-10 11:02 G 17026371.75 17026371.96 17026372.17 0.0258 0.0043

Mars 41904-07-22 22:34 G 17026384.26 17026384.44 17026384.61 0.1619 0.0025

Saturn 41905-02-24 06:14 G 17026600.59 17026600.76 17026600.94 0.0259 0.0149

Jupiter 41911-11-15 11:02 G 17029055.91 17029055.96 17029056.03 0.0498 0.0474

Jupiter 41917-09-17 05:31 G 17031188.55 17031188.73 17031188.91 0.0527 0.0242

Saturn 41918-05-10 01:55 G 17031423.50 17031423.58 17031423.66 0.0305 0.0280

Saturn 41918-12-26 10:05 G 17031653.72 17031653.92 17031654.13 0.0304 0.0036

Jupiter 41923-07-21 09:36 G 17033321.70 17033321.90 17033322.11 0.0498 0.0084

Jupiter 41929-05-22 23:46 G 17035454.30 17035454.49 17035454.68 0.0527 0.0201

Earth 41930-12-04 02:24 G 17036014.45 17036014.60 17036014.75 0.2655 0.0797

Moon 41930-12-04 07:26 G 17036014.69 17036014.81 17036014.94 0.2652 0.1681 *

Uranus 41933-01-19 04:34 G 17036791.63 17036791.69 17036791.76 0.0133 0.0127

Saturn 41933-06-05 17:17 G 17036929.10 17036929.22 17036929.35 0.0258 0.0210

Uranus 41933-09-02 09:50 G 17037017.78 17037017.91 17037018.05 0.0133 0.0103

Mars 41933-10-12 23:02 G 17037058.33 17037058.46 17037058.60 0.1917 0.1230

Saturn 41934-01-20 12:14 G 17037157.80 17037158.01 17037158.22 0.0258 0.0020

Uranus 41934-04-16 14:53 G 17037243.96 17037244.12 17037244.31 0.0133 0.0079

Saturn 41934-09-06 07:26 G 17037386.66 17037386.81 17037386.98 0.0259 0.0172

Uranus 41934-11-28 20:10 G 17037470.15 17037470.34 17037470.55 0.0134 0.0054

Jupiter 41935-03-26 11:02 G 17037587.80 17037587.96 17037588.13 0.0499 0.0296

Uranus 41935-07-13 01:26 G 17037696.35 17037696.56 17037696.78 0.0134 0.0030

Uranus 41936-02-24 06:58 G 17037922.57 17037922.79 17037923.01 0.0134 0.0005

Uranus 41936-10-07 12:14 G 17038148.80 17038149.01 17038149.23 0.0134 0.0020

Uranus 41937-05-21 17:31 G 17038375.03 17038375.23 17038375.44 0.0134 0.0044

Uranus 41938-01-02 22:48 G 17038601.28 17038601.45 17038601.65 0.0134 0.0069

Uranus 41938-08-17 04:19 G 17038827.54 17038827.68 17038827.85 0.0134 0.0094

Moon 41938-12-01 19:26 G 17038934.28 17038934.31 17038934.34 0.2647 0.2588

Uranus 41939-03-31 10:19 G 17039053.84 17039053.93 17039054.03 0.0134 0.0119

Neptune 41939-11-17 21:07 G 17039285.32 17039285.38 17039285.45 0.0090 0.0085

Neptune 41940-06-30 09:50 G 17039510.80 17039510.91 17039511.06 0.0090 0.0072

Neptune 41941-02-10 23:17 G 17039736.32 17039736.47 17039736.65 0.0090 0.0058

Neptune 41941-09-24 12:43 G 17039961.85 17039962.03 17039962.23 0.0090 0.0044

Neptune 41942-05-08 02:24 G 17040187.39 17040187.60 17040187.81 0.0090 0.0030

Neptune 41942-12-19 15:36 G 17040412.94 17040413.15 17040413.37 0.0089 0.0016

Neptune 41943-08-02 04:48 G 17040638.49 17040638.70 17040638.92 0.0089 0.0003

Neptune 41944-03-14 18:00 G 17040864.04 17040864.25 17040864.48 0.0089 0.0012

Neptune 41944-10-26 07:12 G 17041089.60 17041089.80 17041090.02 0.0089 0.0025

Neptune 41945-06-08 20:38 G 17041315.16 17041315.36 17041315.56 0.0089 0.0039

Neptune 41946-01-20 09:36 G 17041540.73 17041540.90 17041541.09 0.0089 0.0053

Neptune 41946-09-02 22:34 G 17041766.31 17041766.44 17041766.61 0.0089 0.0067

Neptune 41947-04-16 12:00 G 17041991.92 17041992.00 17041992.11 0.0089 0.0080

Saturn 41947-11-20 03:36 G 17042209.55 17042209.65 17042209.78 0.0305 0.0255

Saturn 41948-07-07 12:00 G 17042439.80 17042440.00 17042440.21 0.0304 0.0062

Jupiter 41953-05-25 23:02 G 17044223.43 17044223.46 17044223.50 0.0527 0.0517

Jupiter 41959-03-29 00:00 G 17046356.35 17046356.50 17046356.66 0.0499 0.0324

Saturn 41962-12-16 17:46 G 17047715.10 17047715.24 17047715.39 0.0258 0.0189

Saturn 41963-08-02 12:43 G 17047943.82 17047944.03 17047944.24 0.0258 0.0002

Saturn 41964-03-18 08:10 G 17048172.70 17048172.84 17048172.99 0.0259 0.0193

Jupiter 41965-01-28 14:53 G 17048488.92 17048489.12 17048489.32 0.0527 0.0061

Pluto 41966-12-23 06:00 G 17049182.55 17049182.75 17049182.95 0.0063 0.0028

Pluto 41967-08-05 09:36 G 17049407.69 17049407.90 17049408.12 0.0064 0.0013

Pluto 41968-03-17 12:43 G 17049632.95 17049633.03 17049633.17 0.0064 0.0055

Mars 41970-05-20 10:48 G 17050426.77 17050426.95 17050427.12 0.1621 0.0294

Jupiter 41970-12-02 01:41 G 17050622.37 17050622.57 17050622.78 0.0499 0.0055

Uranus 41974-07-30 00:14 G 17051958.44 17051958.51 17051958.58 0.0145 0.0137

Uranus 41975-03-13 12:29 G 17052184.87 17052185.02 17052185.17 0.0145 0.0106

Uranus 41975-10-26 00:29 G 17052411.35 17052411.52 17052411.72 0.0145 0.0075

Uranus 41976-06-08 12:43 G 17052637.83 17052638.03 17052638.25 0.0145 0.0044

Jupiter 41976-10-03 08:53 G 17052754.73 17052754.87 17052755.01 0.0527 0.0383

Uranus 41977-01-21 00:58 G 17052864.33 17052864.54 17052864.76 0.0145 0.0012

Saturn 41977-06-01 06:29 G 17052995.63 17052995.77 17052995.91 0.0304 0.0222

Uranus 41977-09-04 13:12 G 17053090.84 17053091.05 17053091.27 0.0145 0.0020

Saturn 41978-01-17 14:24 G 17053225.91 17053226.10 17053226.31 0.0304 0.0095

Uranus 41978-04-19 01:12 G 17053317.35 17053317.55 17053317.76 0.0144 0.0051

Uranus 41978-12-01 12:58 G 17053543.87 17053544.04 17053544.23 0.0144 0.0082

Uranus 41979-07-16 00:43 G 17053770.41 17053770.53 17053770.68 0.0144 0.0113

Uranus 41980-02-27 12:43 G 17053997.02 17053997.03 17053997.05 0.0144 0.0143

Jupiter 41982-08-07 00:29 G 17054888.43 17054888.52 17054888.61 0.0499 0.0443

Saturn 41992-06-27 19:12 G 17058501.15 17058501.30 17058501.47 0.0258 0.0167

Saturn 41993-02-11 14:24 G 17058729.89 17058730.10 17058730.31 0.0258 0.0024

Saturn 41993-09-28 09:50 G 17058958.81 17058958.91 17058959.04 0.0259 0.0217

Mars 41999-08-10 01:26 G 17061100.39 17061100.56 17061100.73 0.1914 0.0335

Jupiter 42000-10-06 10:19 G 17061523.78 17061523.93 17061524.08 0.0527 0.0345

43RD MILLENNIUM CE

This is a list of transits of Venus in the 43rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 42006-08-09 12:14 G 17063656.83 17063657.01 17063657.21 0.0499 0.0170

Saturn 42006-12-12 09:07 G 17063781.72 17063781.88 17063782.04 0.0305 0.0195

Saturn 42007-07-30 17:02 G 17064012.03 17064012.21 17064012.41 0.0304 0.0122

Jupiter 42012-06-11 02:24 G 17065789.40 17065789.60 17065789.80 0.0527 0.0108

Uranus 42017-05-02 21:07 G 17067576.28 17067576.38 17067576.52 0.0133 0.0111

Uranus 42017-12-15 02:24 G 17067802.45 17067802.60 17067802.78 0.0134 0.0087

Jupiter 42018-04-14 14:24 G 17067922.91 17067923.10 17067923.28 0.0499 0.0207

Uranus 42018-07-29 07:55 G 17068028.64 17068028.83 17068029.02 0.0134 0.0062

Uranus 42019-03-12 13:12 G 17068254.85 17068255.05 17068255.26 0.0134 0.0038

Uranus 42019-10-24 18:43 G 17068481.06 17068481.28 17068481.49 0.0134 0.0013

Uranus 42020-06-07 00:00 G 17068707.28 17068707.50 17068707.71 0.0134 0.0012

Uranus 42021-01-19 05:02 G 17068933.51 17068933.71 17068933.93 0.0134 0.0037

Uranus 42021-09-02 10:48 G 17069159.76 17069159.95 17069160.14 0.0134 0.0061

Saturn 42022-01-07 20:24 G 17069287.18 17069287.35 17069287.54 0.0258 0.0145

Uranus 42022-04-16 16:19 G 17069386.02 17069386.18 17069386.36 0.0134 0.0086

Neptune 42022-08-15 22:19 G 17069507.37 17069507.43 17069507.52 0.0088 0.0082

Saturn 42022-08-24 15:36 G 17069515.94 17069516.15 17069516.36 0.0259 0.0047

Uranus 42022-11-28 21:50 G 17069612.30 17069612.41 17069612.55 0.0134 0.0111

Neptune 42023-03-29 11:02 G 17069732.84 17069732.96 17069733.11 0.0088 0.0069

Saturn 42023-04-10 11:17 G 17069744.90 17069744.97 17069745.06 0.0260 0.0239

Neptune 42023-11-10 00:00 G 17069958.34 17069958.50 17069958.68 0.0088 0.0056

Neptune 42024-06-22 12:43 G 17070183.84 17070184.03 17070184.23 0.0088 0.0043

Neptune 42025-02-03 01:26 G 17070409.36 17070409.56 17070409.77 0.0088 0.0030

Neptune 42025-09-16 14:24 G 17070634.88 17070635.10 17070635.32 0.0088 0.0017

Neptune 42026-04-30 03:07 G 17070860.41 17070860.63 17070860.85 0.0088 0.0004

Neptune 42026-12-11 15:50 G 17071085.94 17071086.16 17071086.38 0.0088 0.0009

Neptune 42027-07-25 04:34 G 17071311.48 17071311.69 17071311.90 0.0088 0.0022

Neptune 42028-03-06 17:17 G 17071537.02 17071537.22 17071537.42 0.0088 0.0035

Neptune 42028-10-18 06:00 G 17071762.58 17071762.75 17071762.94 0.0088 0.0048

Neptune 42029-05-31 18:58 G 17071988.14 17071988.29 17071988.45 0.0088 0.0061

Neptune 42030-01-12 07:41 G 17072213.71 17072213.82 17072213.94 0.0088 0.0074

Neptune 42030-08-25 20:24 G 17072439.34 17072439.35 17072439.38 0.0088 0.0087

Mars 42036-03-16 22:48 G 17074469.28 17074469.45 17074469.61 0.1623 0.0565

Saturn 42036-06-23 12:43 G 17074567.85 17074568.03 17074568.21 0.0304 0.0159

Saturn 42037-02-08 20:24 G 17074798.18 17074798.35 17074798.54 0.0303 0.0157

Jupiter 42042-04-16 23:17 G 17076691.35 17076691.47 17076691.60 0.0498 0.0392

Jupiter 42048-02-17 20:10 G 17078824.15 17078824.34 17078824.54 0.0527 0.0169

Saturn 42051-07-20 22:34 G 17080073.26 17080073.44 17080073.63 0.0258 0.0121

Saturn 42052-03-05 17:46 G 17080302.04 17080302.24 17080302.45 0.0259 0.0071

Jupiter 42053-12-21 00:43 G 17080957.32 17080957.53 17080957.73 0.0498 0.0017

Pluto 42056-06-27 03:50 G 17081876.48 17081876.66 17081876.85 0.0080 0.0045

Pluto 42057-02-07 13:55 G 17082101.90 17082102.08 17082102.29 0.0080 0.0039

Uranus 42058-11-10 21:22 G 17082743.28 17082743.39 17082743.53 0.0145 0.0117

Uranus 42059-06-25 09:50 G 17082969.74 17082969.91 17082970.09 0.0145 0.0085

Jupiter 42059-10-23 12:29 G 17083089.85 17083090.02 17083090.19 0.0527 0.0284

Uranus 42060-02-06 21:50 G 17083196.22 17083196.41 17083196.62 0.0145 0.0054

Uranus 42060-09-20 10:19 G 17083422.72 17083422.93 17083423.15 0.0145 0.0022

Uranus 42061-05-04 22:34 G 17083649.22 17083649.44 17083649.66 0.0145 0.0009

Uranus 42061-12-17 10:34 G 17083875.73 17083875.94 17083876.15 0.0144 0.0041

Uranus 42062-07-31 22:19 G 17084102.25 17084102.43 17084102.63 0.0144 0.0072

Uranus 42063-03-15 10:05 G 17084328.78 17084328.92 17084329.09 0.0144 0.0104

Uranus 42063-10-27 22:05 G 17084555.36 17084555.42 17084555.51 0.0144 0.0134

Mars 42065-06-06 04:34 G 17085142.52 17085142.69 17085142.85 0.1911 0.0525

Jupiter 42065-08-26 01:55 G 17085223.45 17085223.58 17085223.73 0.0499 0.0362

Saturn 42066-01-03 17:02 G 17085354.02 17085354.21 17085354.40 0.0305 0.0128

Saturn 42066-08-22 00:58 G 17085584.37 17085584.54 17085584.70 0.0304 0.0187

Mars 42068-03-15 15:36 G 17086156.11 17086156.15 17086156.20 0.1617 0.1557

Moon 42068-06-02 01:26 G 17086234.40 17086234.56 17086234.72 0.2678 0.0231

Earth 42068-06-02 06:58 G 17086234.63 17086234.79 17086234.95 0.2677 0.0042 *

Saturn 42081-01-30 00:43 G 17090859.34 17090859.53 17090859.73 0.0258 0.0097

Saturn 42081-09-15 20:10 G 17091088.14 17091088.34 17091088.54 0.0259 0.0095

Jupiter 42083-10-26 10:48 G 17091858.83 17091858.95 17091859.07 0.0527 0.0424

Jupiter 42089-08-28 13:41 G 17093991.90 17093992.07 17093992.26 0.0498 0.0249

Jupiter 42095-07-01 04:05 G 17096124.46 17096124.67 17096124.87 0.0527 0.0024

Saturn 42095-07-16 22:34 G 17096140.24 17096140.44 17096140.64 0.0304 0.0089

Saturn 42096-03-03 06:14 G 17096370.62 17096370.76 17096370.90 0.0303 0.0225

Uranus 42101-01-01 08:53 G 17098134.79 17098134.87 17098134.99 0.0133 0.0119

Jupiter 42101-05-04 12:58 G 17098257.85 17098258.04 17098258.24 0.0498 0.0139

Uranus 42101-08-15 14:10 G 17098360.95 17098361.09 17098361.26 0.0133 0.0095

Mars 42102-01-13 11:02 G 17098511.81 17098511.96 17098512.11 0.1624 0.0838

Uranus 42102-03-29 19:41 G 17098587.14 17098587.32 17098587.51 0.0134 0.0070

Uranus 42102-11-11 00:58 G 17098813.34 17098813.54 17098813.75 0.0134 0.0046

Uranus 42103-06-25 06:14 G 17099039.55 17099039.76 17099039.98 0.0134 0.0021

Uranus 42104-02-06 11:46 G 17099265.77 17099265.99 17099266.20 0.0134 0.0004

Uranus 42104-09-19 17:02 G 17099492.00 17099492.21 17099492.43 0.0134 0.0029

Neptune 42104-10-02 18:29 G 17099505.18 17099505.27 17099505.40 0.0090 0.0077

Uranus 42105-05-03 22:19 G 17099718.25 17099718.43 17099718.64 0.0134 0.0054

Neptune 42105-05-16 08:10 G 17099730.69 17099730.84 17099731.00 0.0090 0.0063

Uranus 42105-12-16 04:05 G 17099944.50 17099944.67 17099944.85 0.0134 0.0078

Neptune 42105-12-27 21:07 G 17099956.21 17099956.38 17099956.58 0.0090 0.0050

Uranus 42106-07-30 09:36 G 17100170.77 17100170.90 17100171.05 0.0134 0.0103

Neptune 42106-08-10 10:34 G 17100181.75 17100181.94 17100182.15 0.0090 0.0036

Jupiter 42107-03-06 21:07 G 17100390.29 17100390.38 17100390.47 0.0527 0.0468

Uranus 42107-03-13 15:07 G 17100397.09 17100397.13 17100397.22 0.0134 0.0129

Neptune 42107-03-24 00:00 G 17100407.29 17100407.50 17100407.72 0.0090 0.0022

Neptune 42107-11-04 13:12 G 17100632.84 17100633.05 17100633.28 0.0090 0.0009

Neptune 42108-06-17 02:38 G 17100858.39 17100858.61 17100858.83 0.0089 0.0006

Neptune 42109-01-28 15:36 G 17101083.95 17101084.15 17101084.38 0.0089 0.0020

Neptune 42109-09-11 05:02 G 17101309.51 17101309.71 17101309.92 0.0089 0.0033

Neptune 42110-04-24 18:14 G 17101535.08 17101535.26 17101535.46 0.0089 0.0047

Saturn 42110-08-13 03:50 G 17101645.46 17101645.66 17101645.87 0.0258 0.0072

Neptune 42110-12-06 07:12 G 17101760.66 17101760.80 17101760.98 0.0089 0.0061

Saturn 42111-03-29 23:17 G 17101874.28 17101874.47 17101874.66 0.0259 0.0121

Neptune 42111-07-19 20:38 G 17101986.25 17101986.36 17101986.49 0.0089 0.0074

Neptune 42112-03-01 09:22 G 17102211.87 17102211.89 17102211.96 0.0089 0.0088

Saturn 42125-01-27 04:19 G 17106926.47 17106926.68 17106926.89 0.0304 0.0055

Jupiter 42125-05-06 23:46 G 17107026.42 17107026.49 17107026.56 0.0498 0.0465

Saturn 42125-09-14 11:46 G 17107156.89 17107156.99 17107157.10 0.0303 0.0259

Jupiter 42131-03-09 20:24 G 17109159.17 17109159.35 17109159.53 0.0527 0.0246

Mars 42131-04-04 06:58 G 17109184.67 17109184.79 17109184.91 0.1908 0.1389

Mars 42134-01-12 04:05 G 17110198.57 17110198.67 17110198.78 0.1619 0.1296

Jupiter 42137-01-10 00:58 G 17111292.34 17111292.54 17111292.74 0.0499 0.0089

Saturn 42139-07-09 11:31 G 17112202.91 17112202.98 17112203.08 0.0258 0.0236

Saturn 42140-02-23 06:58 G 17112431.58 17112431.79 17112432.00 0.0258 0.0045

Saturn 42140-10-09 02:38 G 17112660.44 17112660.61 17112660.79 0.0259 0.0148

Uranus 42142-07-12 05:02 G 17113301.63 17113301.71 17113301.83 0.0145 0.0128

Jupiter 42142-11-12 11:17 G 17113424.78 17113424.97 17113425.15 0.0527 0.0213

Uranus 42143-02-23 17:31 G 17113528.08 17113528.23 17113528.40 0.0145 0.0097

Uranus 42143-10-08 06:00 G 17113754.56 17113754.75 17113754.95 0.0145 0.0065

Uranus 42144-05-21 18:14 G 17113981.05 17113981.26 17113981.47 0.0145 0.0034

Uranus 42145-01-03 06:14 G 17114207.55 17114207.76 17114207.98 0.0145 0.0004

Uranus 42145-08-17 18:29 G 17114434.06 17114434.27 17114434.49 0.0144 0.0029

Uranus 42146-04-01 06:14 G 17114660.58 17114660.76 17114660.97 0.0144 0.0062

Uranus 42146-11-13 18:14 G 17114887.11 17114887.26 17114887.44 0.0144 0.0092

Uranus 42147-06-28 06:00 G 17115113.66 17115113.75 17115113.88 0.0144 0.0123

Jupiter 42148-09-15 02:10 G 17115558.42 17115558.59 17115558.76 0.0499 0.0289

Saturn 42154-08-09 12:00 G 17117712.79 17117713.00 17117713.21 0.0304 0.0011

Saturn 42155-03-27 19:12 G 17117943.29 17117943.30 17117943.32 0.0302 0.0302

Jupiter 42166-11-15 12:14 G 17122193.96 17122194.01 17122194.06 0.0528 0.0510

Mars 42167-11-10 23:17 G 17122554.34 17122554.47 17122554.59 0.1627 0.1114

Saturn 42169-01-18 15:36 G 17122989.04 17122989.15 17122989.28 0.0258 0.0211

Saturn 42169-09-04 11:02 G 17123217.75 17123217.96 17123218.17 0.0259 0.0019

Saturn 42170-04-21 06:29 G 17123446.63 17123446.77 17123446.94 0.0259 0.0176

Jupiter 42172-09-17 10:34 G 17124326.79 17124326.94 17124327.11 0.0498 0.0306

Moon 42173-12-04 22:19 G 17124770.27 17124770.43 17124770.58 0.2656 0.0157

Earth 42173-12-05 03:50 G 17124770.51 17124770.66 17124770.81 0.2654 0.0778 *

Jupiter 42178-07-21 03:50 G 17126459.46 17126459.66 17126459.86 0.0527 0.0057

Saturn 42183-07-04 11:31 G 17128268.92 17128268.98 17128269.06 0.0305 0.0288

Saturn 42184-02-19 19:41 G 17128499.11 17128499.32 17128499.53 0.0304 0.0030

Jupiter 42184-05-23 11:31 G 17128592.78 17128592.98 17128593.18 0.0498 0.0073

Uranus 42184-08-31 20:10 G 17128693.28 17128693.34 17128693.41 0.0133 0.0127

Uranus 42185-04-15 01:26 G 17128919.43 17128919.56 17128919.71 0.0133 0.0103

Uranus 42185-11-27 06:29 G 17129145.61 17129145.77 17129145.96 0.0133 0.0079

Uranus 42186-07-11 11:46 G 17129371.80 17129371.99 17129372.20 0.0134 0.0054

Neptune 42186-11-18 07:55 G 17129501.81 17129501.83 17129501.89 0.0088 0.0086

Uranus 42187-02-22 17:17 G 17129598.01 17129598.22 17129598.44 0.0134 0.0030

Neptune 42187-07-01 20:53 G 17129727.26 17129727.37 17129727.50 0.0088 0.0073

Uranus 42187-10-06 22:48 G 17129824.23 17129824.45 17129824.67 0.0134 0.0005

Neptune 42188-02-12 09:07 G 17129952.75 17129952.88 17129953.07 0.0088 0.0061

Uranus 42188-05-20 04:05 G 17130050.46 17130050.67 17130050.89 0.0134 0.0020

Neptune 42188-09-24 22:05 G 17130178.26 17130178.42 17130178.63 0.0088 0.0048

Uranus 42189-01-01 09:22 G 17130276.69 17130276.89 17130277.10 0.0134 0.0045

Neptune 42189-05-08 11:02 G 17130403.77 17130403.96 17130404.18 0.0088 0.0035

Uranus 42189-08-15 14:53 G 17130502.95 17130503.12 17130503.32 0.0134 0.0070

Neptune 42189-12-19 23:46 G 17130629.29 17130629.49 17130629.72 0.0088 0.0022

Jupiter 42190-03-25 19:41 G 17130725.19 17130725.32 17130725.46 0.0527 0.0396

Uranus 42190-03-29 20:53 G 17130729.22 17130729.37 17130729.52 0.0134 0.0095

Neptune 42190-08-02 12:43 G 17130854.81 17130855.03 17130855.25 0.0088 0.0009

Uranus 42190-11-11 02:10 G 17130955.51 17130955.59 17130955.70 0.0134 0.0120

Neptune 42191-03-16 01:26 G 17131080.34 17131080.56 17131080.78 0.0088 0.0004

Neptune 42191-10-27 14:24 G 17131305.88 17131306.10 17131306.31 0.0088 0.0017

Neptune 42192-06-09 02:53 G 17131531.42 17131531.62 17131531.84 0.0088 0.0030

Neptune 42193-01-20 15:36 G 17131756.97 17131757.15 17131757.35 0.0088 0.0043

Neptune 42193-09-03 04:19 G 17131982.52 17131982.68 17131982.86 0.0088 0.0056

Neptune 42194-04-16 17:02 G 17132208.09 17132208.21 17132208.36 0.0088 0.0069

Neptune 42194-11-28 05:46 G 17132433.68 17132433.74 17132433.84 0.0088 0.0082

Jupiter 42196-01-27 12:14 G 17132858.93 17132859.01 17132859.10 0.0499 0.0451

Saturn 42198-07-31 19:55 G 17133775.18 17133775.33 17133775.48 0.0258 0.0182

Saturn 42199-03-17 15:22 G 17134003.92 17134004.14 17134004.35 0.0259 0.0010

Saturn 42199-11-01 11:02 G 17134232.85 17134232.96 17134233.11 0.0260 0.0205

Mars 42199-11-09 16:48 G 17134241.07 17134241.20 17134241.33 0.1620 0.1042

Saturn 42213-01-14 21:07 G 17139055.26 17139055.38 17139055.51 0.0304 0.0239

Saturn 42213-09-02 05:02 G 17139285.51 17139285.71 17139285.92 0.0303 0.0077

Jupiter 42214-03-29 18:00 G 17139494.09 17139494.25 17139494.41 0.0527 0.0310

Pluto 42214-11-27 11:17 G 17139736.81 17139736.97 17139737.17 0.0063 0.0038

Pluto 42215-07-10 15:22 G 17139961.92 17139962.14 17139962.36 0.0064 0.0004

Pluto 42216-02-20 18:43 G 17140187.14 17140187.28 17140187.45 0.0064 0.0045

Jupiter 42220-01-30 21:36 G 17141627.20 17141627.40 17141627.59 0.0498 0.0147

Jupiter 42225-12-02 09:50 G 17143759.72 17143759.91 17143760.11 0.0528 0.0141

Uranus 42226-03-12 11:46 G 17143859.95 17143859.99 17143860.05 0.0145 0.0140

Uranus 42226-10-25 00:00 G 17144086.37 17144086.50 17144086.65 0.0145 0.0109

Uranus 42227-06-08 12:14 G 17144312.84 17144313.01 17144313.20 0.0145 0.0078

Uranus 42228-01-21 00:43 G 17144539.32 17144539.53 17144539.74 0.0145 0.0046

Saturn 42228-02-12 00:29 G 17144561.36 17144561.52 17144561.70 0.0259 0.0155

Uranus 42228-09-03 12:58 G 17144765.83 17144766.04 17144766.26 0.0145 0.0015

Saturn 42228-09-27 20:10 G 17144790.13 17144790.34 17144790.55 0.0259 0.0039

Uranus 42229-04-18 01:12 G 17144992.34 17144992.55 17144992.77 0.0145 0.0017

Saturn 42229-05-14 16:05 G 17145019.09 17145019.17 17145019.27 0.0260 0.0233

Uranus 42229-11-30 13:26 G 17145218.85 17145219.06 17145219.27 0.0144 0.0049

Uranus 42230-07-15 01:12 G 17145445.38 17145445.55 17145445.74 0.0144 0.0080

Uranus 42231-02-26 13:12 G 17145671.92 17145672.05 17145672.20 0.0144 0.0111

Jupiter 42231-10-05 22:19 G 17145893.25 17145893.43 17145893.61 0.0498 0.0233

Uranus 42231-10-11 01:26 G 17145898.53 17145898.56 17145898.60 0.0144 0.0141

Mars 42233-09-08 11:17 G 17146596.88 17146596.97 17146597.06 0.1628 0.1392

Saturn 42242-07-28 06:43 G 17149841.62 17149841.78 17149841.94 0.0304 0.0196

Saturn 42243-03-15 14:38 G 17150071.91 17150072.11 17150072.30 0.0304 0.0120

Jupiter 42255-10-08 07:41 G 17154661.69 17154661.82 17154661.97 0.0498 0.0365

Saturn 42257-08-24 05:46 G 17155347.55 17155347.74 17155347.92 0.0258 0.0124

Saturn 42258-04-10 01:26 G 17155576.35 17155576.56 17155576.76 0.0259 0.0069

Jupiter 42261-08-09 23:17 G 17156794.27 17156794.47 17156794.67 0.0527 0.0110

Mars 42265-09-07 04:48 G 17158283.55 17158283.70 17158283.85 0.1622 0.0771

Jupiter 42267-06-13 08:38 G 17158927.65 17158927.86 17158928.06 0.0498 0.0014

Uranus 42268-12-14 12:43 G 17159477.91 17159478.03 17159478.15 0.0133 0.0111

Neptune 42269-01-05 03:36 G 17159499.58 17159499.65 17159499.75 0.0090 0.0082

Uranus 42269-07-28 17:46 G 17159704.08 17159704.24 17159704.41 0.0133 0.0087

Neptune 42269-08-18 17:02 G 17159725.07 17159725.21 17159725.36 0.0090 0.0068

Uranus 42270-03-11 23:02 G 17159930.27 17159930.46 17159930.66 0.0133 0.0062

Neptune 42270-04-01 06:14 G 17159950.60 17159950.76 17159950.95 0.0090 0.0055

Uranus 42270-10-24 04:19 G 17160156.48 17160156.68 17160156.89 0.0133 0.0038

Neptune 42270-11-12 19:41 G 17160176.13 17160176.32 17160176.52 0.0090 0.0041

Uranus 42271-06-07 09:36 G 17160382.69 17160382.90 17160383.12 0.0134 0.0014

Neptune 42271-06-26 08:38 G 17160401.67 17160401.86 17160402.08 0.0090 0.0028

Uranus 42272-01-19 15:07 G 17160608.91 17160609.13 17160609.34 0.0134 0.0012

Neptune 42272-02-06 22:05 G 17160627.21 17160627.42 17160627.64 0.0090 0.0014

Saturn 42272-02-07 18:00 G 17160628.06 17160628.25 17160628.43 0.0304 0.0144

Uranus 42272-09-01 20:10 G 17160835.15 17160835.34 17160835.56 0.0134 0.0037

Neptune 42272-09-19 11:31 G 17160852.76 17160852.98 17160853.20 0.0089 0.0000

Saturn 42272-09-25 01:26 G 17160858.39 17160858.56 17160858.74 0.0303 0.0171

Jupiter 42273-04-14 15:22 G 17161059.98 17161060.14 17161060.29 0.0527 0.0342

Uranus 42273-04-16 01:55 G 17161061.40 17161061.58 17161061.78 0.0134 0.0061

Neptune 42273-05-03 00:58 G 17161078.32 17161078.54 17161078.76 0.0089 0.0014

Uranus 42273-11-28 07:26 G 17161287.65 17161287.81 17161287.99 0.0134 0.0086

Neptune 42273-12-14 13:55 G 17161303.88 17161304.08 17161304.30 0.0089 0.0028

Uranus 42274-07-12 13:12 G 17161513.93 17161514.05 17161514.17 0.0134 0.0110

Neptune 42274-07-28 03:22 G 17161529.45 17161529.64 17161529.84 0.0089 0.0041

Neptune 42275-03-10 16:19 G 17161755.02 17161755.18 17161755.37 0.0089 0.0055

Neptune 42275-10-22 06:00 G 17161980.61 17161980.75 17161980.89 0.0089 0.0068

Neptune 42276-06-03 18:58 G 17162206.22 17162206.29 17162206.39 0.0089 0.0082

Jupiter 42279-02-16 08:24 G 17163193.73 17163193.85 17163193.98 0.0498 0.0394

Saturn 42287-03-06 11:02 G 17166133.76 17166133.96 17166134.16 0.0259 0.0095

Saturn 42287-10-21 06:58 G 17166362.59 17166362.79 17166362.99 0.0260 0.0099

Mars 42294-11-27 12:14 G 17168956.90 17168957.01 17168957.13 0.1912 0.1398

Jupiter 42297-04-17 14:24 G 17169828.96 17169829.10 17169829.24 0.0528 0.0371

Saturn 42301-08-21 04:48 G 17171414.51 17171414.70 17171414.91 0.0304 0.0097

Saturn 42302-04-08 12:14 G 17171644.87 17171645.01 17171645.16 0.0303 0.0218

Jupiter 42303-02-19 17:02 G 17171962.03 17171962.21 17171962.40 0.0498 0.0197

Pluto 42304-06-02 06:58 G 17172430.69 17172430.79 17172430.93 0.0080 0.0067

Pluto 42305-01-13 18:00 G 17172656.03 17172656.25 17172656.46 0.0080 0.0018

Jupiter 42308-12-22 06:14 G 17174094.56 17174094.76 17174094.96 0.0527 0.0083

Uranus 42310-06-25 04:05 G 17174644.57 17174644.67 17174644.80 0.0145 0.0123

Uranus 42311-02-06 16:34 G 17174871.03 17174871.19 17174871.37 0.0145 0.0092

Earth 42311-06-06 07:41 G 17174990.67 17174990.82 17174990.98 0.2678 0.0096

Moon 42311-06-06 12:43 G 17174990.87 17174991.03 17174991.18 0.2681 0.0149 *

Uranus 42311-09-21 05:02 G 17175097.52 17175097.71 17175097.92 0.0145 0.0060

Uranus 42312-05-04 17:17 G 17175324.01 17175324.22 17175324.44 0.0145 0.0029

Uranus 42312-12-17 05:31 G 17175550.52 17175550.73 17175550.95 0.0145 0.0005

Uranus 42313-07-31 17:46 G 17175777.03 17175777.24 17175777.45 0.0144 0.0035

Uranus 42314-03-15 05:46 G 17176003.55 17176003.74 17176003.94 0.0144 0.0066

Jupiter 42314-10-25 17:46 G 17176228.05 17176228.24 17176228.43 0.0499 0.0182

Uranus 42314-10-27 18:00 G 17176230.09 17176230.25 17176230.41 0.0144 0.0097

Uranus 42315-06-11 05:46 G 17176456.65 17176456.74 17176456.85 0.0144 0.0128

Saturn 42316-01-31 21:07 G 17176691.35 17176691.38 17176691.41 0.0258 0.0255

Saturn 42316-09-16 16:48 G 17176919.99 17176920.20 17176920.40 0.0259 0.0063

Saturn 42317-05-03 12:29 G 17177148.84 17177149.02 17177149.21 0.0259 0.0131

Saturn 42331-03-03 16:19 G 17182200.98 17182201.18 17182201.39 0.0304 0.0045

Mars 42331-07-06 17:17 G 17182326.06 17182326.22 17182326.39 0.1624 0.0514

Saturn 42331-10-19 23:31 G 17182431.39 17182431.48 17182431.58 0.0303 0.0269

Jupiter 42338-10-28 03:07 G 17184996.52 17184996.63 17184996.75 0.0498 0.0414

Jupiter 42344-08-29 18:43 G 17187129.09 17187129.28 17187129.47 0.0528 0.0165

Saturn 42345-08-13 02:38 G 17187477.52 17187477.61 17187477.72 0.0259 0.0226

Saturn 42346-03-29 22:19 G 17187706.22 17187706.43 17187706.64 0.0259 0.0034

Saturn 42346-11-13 18:14 G 17187935.10 17187935.26 17187935.44 0.0260 0.0161

Jupiter 42350-07-03 03:36 G 17189262.45 17189262.65 17189262.86 0.0498 0.0037

Neptune 42351-10-05 06:58 G 17189721.70 17189721.79 17189721.91 0.0088 0.0077

Neptune 42352-05-17 19:26 G 17189947.19 17189947.31 17189947.48 0.0088 0.0065

Uranus 42352-08-14 22:48 G 17190036.37 17190036.45 17190036.56 0.0133 0.0119

Neptune 42352-12-29 08:24 G 17190172.69 17190172.85 17190173.04 0.0088 0.0052

Uranus 42353-03-29 04:05 G 17190262.53 17190262.67 17190262.84 0.0133 0.0096

Neptune 42353-08-11 21:07 G 17190398.20 17190398.38 17190398.59 0.0088 0.0039

Uranus 42353-11-10 09:22 G 17190488.72 17190488.89 17190489.09 0.0133 0.0071

Neptune 42354-03-25 10:05 G 17190623.72 17190623.92 17190624.14 0.0088 0.0026

Uranus 42354-06-24 14:53 G 17190714.92 17190715.12 17190715.33 0.0133 0.0047

Neptune 42354-11-05 23:02 G 17190849.25 17190849.46 17190849.68 0.0088 0.0013

Uranus 42355-02-05 20:10 G 17190941.13 17190941.34 17190941.56 0.0134 0.0022

Neptune 42355-06-19 11:46 G 17191074.77 17191074.99 17191075.22 0.0088 0.0002

Uranus 42355-09-20 01:41 G 17191167.35 17191167.57 17191167.79 0.0134 0.0003

Neptune 42356-01-31 00:29 G 17191300.31 17191300.52 17191300.74 0.0088 0.0013

Uranus 42356-05-03 06:58 G 17191393.59 17191393.79 17191394.01 0.0134 0.0028

Jupiter 42356-05-04 10:48 G 17191394.78 17191394.95 17191395.12 0.0527 0.0286

Neptune 42356-09-12 13:12 G 17191525.85 17191526.05 17191526.27 0.0088 0.0026

Uranus 42356-12-15 12:14 G 17191619.83 17191620.01 17191620.23 0.0134 0.0053

Neptune 42357-04-26 01:41 G 17191751.39 17191751.57 17191751.79 0.0088 0.0039

Uranus 42357-07-29 18:00 G 17191846.08 17191846.25 17191846.43 0.0134 0.0077

Neptune 42357-12-07 14:24 G 17191976.94 17191977.10 17191977.30 0.0088 0.0052

Uranus 42358-03-12 23:31 G 17192072.35 17192072.48 17192072.63 0.0134 0.0102

Neptune 42358-07-21 03:36 G 17192202.50 17192202.65 17192202.80 0.0088 0.0064

Uranus 42358-10-25 05:17 G 17192298.66 17192298.72 17192298.80 0.0134 0.0126

Neptune 42359-03-03 16:05 G 17192428.08 17192428.17 17192428.29 0.0088 0.0077

Saturn 42360-09-13 04:05 G 17192987.46 17192987.67 17192987.88 0.0304 0.0006

Mars 42360-09-24 15:36 G 17192998.98 17192999.15 17192999.32 0.1909 0.0563

Jupiter 42362-03-08 02:53 G 17193528.48 17193528.62 17193528.77 0.0499 0.0350

Saturn 42375-02-23 08:10 G 17198263.71 17198263.84 17198263.99 0.0258 0.0194

Saturn 42375-10-10 04:05 G 17198492.46 17198492.67 17198492.88 0.0259 0.0001

Saturn 42376-05-26 00:00 G 17198721.37 17198721.50 17198721.65 0.0260 0.0193

Jupiter 42380-05-07 08:38 G 17200163.74 17200163.86 17200163.98 0.0527 0.0416

Jupiter 42386-03-10 12:58 G 17202296.86 17202297.04 17202297.22 0.0498 0.0248

Saturn 42389-08-08 07:41 G 17203543.73 17203543.82 17203543.94 0.0304 0.0260

Saturn 42390-03-26 15:50 G 17203773.96 17203774.16 17203774.37 0.0303 0.0058

Jupiter 42392-01-11 00:00 G 17204429.29 17204429.50 17204429.70 0.0527 0.0039

Uranus 42394-02-22 08:38 G 17205202.80 17205202.86 17205202.94 0.0145 0.0136

Uranus 42394-10-06 21:07 G 17205429.23 17205429.38 17205429.53 0.0145 0.0105

Uranus 42395-05-21 09:22 G 17205655.71 17205655.89 17205656.08 0.0145 0.0074

Uranus 42396-01-02 21:50 G 17205882.20 17205882.41 17205882.62 0.0145 0.0042

Uranus 42396-08-16 10:05 G 17206108.70 17206108.92 17206109.14 0.0145 0.0010

Uranus 42397-03-30 22:19 G 17206335.21 17206335.43 17206335.65 0.0144 0.0021

Mars 42397-05-03 05:17 G 17206368.54 17206368.72 17206368.89 0.1626 0.0236

Uranus 42397-11-12 10:05 G 17206561.73 17206561.92 17206562.14 0.0144 0.0054

Jupiter 42397-11-13 13:41 G 17206562.87 17206563.07 17206563.27 0.0498 0.0128

Uranus 42398-06-26 22:19 G 17206788.26 17206788.43 17206788.62 0.0144 0.0084

Uranus 42399-02-08 10:05 G 17207014.81 17207014.92 17207015.07 0.0144 0.0116

Jupiter 42403-09-15 14:38 G 17208695.05 17208695.11 17208695.19 0.0527 0.0494

Saturn 42404-09-04 13:55 G 17209049.92 17209050.08 17209050.25 0.0259 0.0165

Saturn 42405-04-21 09:36 G 17209278.69 17209278.90 17209279.11 0.0259 0.0028

Saturn 42405-12-06 05:31 G 17209507.63 17209507.73 17209507.85 0.0260 0.0224

Earth 42416-12-07 05:02 G 17213526.55 17213526.71 17213526.86 0.2653 0.0712

Moon 42416-12-07 10:48 G 17213526.82 17213526.95 17213527.08 0.2654 0.1493 *

Saturn 42419-02-18 18:58 G 17214330.14 17214330.29 17214330.44 0.0304 0.0209

Saturn 42419-10-07 02:38 G 17214560.42 17214560.61 17214560.81 0.0303 0.0107

Jupiter 42421-11-15 21:36 G 17215331.32 17215331.40 17215331.48 0.0498 0.0457

Mars 42426-07-22 18:14 G 17217041.09 17217041.26 17217041.44 0.1905 0.0306

Jupiter 42427-09-18 15:22 G 17217463.95 17217464.14 17217464.32 0.0527 0.0223

Neptune 42433-04-09 13:26 G 17219494.02 17219494.06 17219494.14 0.0090 0.0086

Jupiter 42433-07-21 22:05 G 17219597.22 17219597.42 17219597.62 0.0498 0.0080

Neptune 42433-11-21 02:38 G 17219719.50 17219719.61 17219719.75 0.0090 0.0073

Saturn 42434-03-17 19:12 G 17219836.11 17219836.30 17219836.48 0.0258 0.0133

Neptune 42434-07-04 16:05 G 17219945.01 17219945.17 17219945.34 0.0090 0.0059

Saturn 42434-11-01 14:53 G 17220064.91 17220065.12 17220065.33 0.0259 0.0060

Neptune 42435-02-15 05:02 G 17220170.54 17220170.71 17220170.91 0.0090 0.0046

Saturn 42435-06-18 10:48 G 17220293.92 17220293.95 17220294.00 0.0260 0.0255

Neptune 42435-09-28 18:43 G 17220396.07 17220396.28 17220396.48 0.0090 0.0032

Uranus 42436-04-14 09:22 G 17220594.84 17220594.89 17220594.96 0.0133 0.0128

Neptune 42436-05-11 07:55 G 17220621.62 17220621.83 17220622.05 0.0090 0.0018

Uranus 42436-11-26 14:38 G 17220820.98 17220821.11 17220821.25 0.0133 0.0104

Neptune 42436-12-22 21:07 G 17220847.16 17220847.38 17220847.60 0.0090 0.0005

Uranus 42437-07-10 19:55 G 17221047.16 17221047.33 17221047.51 0.0133 0.0079

Neptune 42437-08-05 10:19 G 17221072.71 17221072.93 17221073.15 0.0090 0.0009

Uranus 42438-02-22 01:26 G 17221273.37 17221273.56 17221273.76 0.0133 0.0055

Neptune 42438-03-18 23:17 G 17221298.27 17221298.47 17221298.70 0.0089 0.0023

Uranus 42438-10-06 06:43 G 17221499.58 17221499.78 17221500.00 0.0134 0.0031

Neptune 42438-10-30 12:43 G 17221523.84 17221524.03 17221524.24 0.0089 0.0036

Uranus 42439-05-20 12:14 G 17221725.79 17221726.01 17221726.23 0.0134 0.0006

Jupiter 42439-05-24 05:46 G 17221729.56 17221729.74 17221729.92 0.0527 0.0235

Neptune 42439-06-13 01:41 G 17221749.41 17221749.57 17221749.77 0.0089 0.0050

Uranus 42440-01-01 17:31 G 17221952.02 17221952.23 17221952.45 0.0134 0.0020

Neptune 42440-01-24 15:07 G 17221974.99 17221975.13 17221975.30 0.0089 0.0063

Uranus 42440-08-14 23:02 G 17222178.26 17222178.46 17222178.67 0.0134 0.0044

Neptune 42440-09-06 04:05 G 17222200.58 17222200.67 17222200.81 0.0089 0.0077

Uranus 42441-03-29 04:34 G 17222404.51 17222404.69 17222404.89 0.0134 0.0069

Neptune 42441-04-19 17:46 G 17222426.24 17222426.24 17222426.26 0.0089 0.0089

Uranus 42441-11-10 10:19 G 17222630.78 17222630.93 17222631.09 0.0134 0.0093

Uranus 42442-06-24 15:36 G 17222857.06 17222857.15 17222857.26 0.0134 0.0118

Jupiter 42445-03-26 23:02 G 17223863.30 17223863.46 17223863.63 0.0499 0.0297

Saturn 42448-08-31 05:46 G 17225116.57 17225116.74 17225116.92 0.0304 0.0160

Saturn 42449-04-18 13:26 G 17225346.89 17225347.06 17225347.25 0.0303 0.0157

Pluto 42462-10-31 15:07 G 17230291.04 17230291.13 17230291.29 0.0063 0.0053

Mars 42463-02-28 17:17 G 17230411.05 17230411.22 17230411.40 0.1628 0.0043

Jupiter 42463-05-27 03:50 G 17230498.57 17230498.66 17230498.75 0.0528 0.0468

Pluto 42463-06-13 19:26 G 17230516.10 17230516.31 17230516.53 0.0063 0.0012

Saturn 42463-09-28 00:00 G 17230622.31 17230622.50 17230622.70 0.0259 0.0105

Pluto 42464-01-24 22:48 G 17230741.27 17230741.45 17230741.66 0.0064 0.0030

Saturn 42464-05-13 19:41 G 17230851.12 17230851.32 17230851.52 0.0259 0.0088

Jupiter 42469-03-29 09:07 G 17232631.72 17232631.88 17232632.04 0.0498 0.0301

Jupiter 42475-01-29 20:10 G 17234764.14 17234764.34 17234764.55 0.0527 0.0022

Saturn 42478-03-13 16:05 G 17235902.98 17235903.17 17235903.37 0.0304 0.0111

Uranus 42478-06-06 02:24 G 17235987.49 17235987.60 17235987.74 0.0145 0.0118

Saturn 42478-10-29 23:46 G 17236133.34 17236133.49 17236133.65 0.0303 0.0204

Uranus 42479-01-18 14:53 G 17236213.95 17236214.12 17236214.30 0.0145 0.0086

Uranus 42479-09-02 03:07 G 17236440.44 17236440.63 17236440.84 0.0145 0.0055

Uranus 42480-04-15 15:22 G 17236666.93 17236667.14 17236667.36 0.0145 0.0024

Uranus 42480-11-28 03:36 G 17236893.43 17236893.65 17236893.87 0.0144 0.0009

Jupiter 42480-12-02 07:55 G 17236897.63 17236897.83 17236898.04 0.0498 0.0086

Uranus 42481-07-12 15:36 G 17237119.95 17237120.15 17237120.37 0.0144 0.0040

Uranus 42482-02-24 03:36 G 17237346.47 17237346.65 17237346.85 0.0144 0.0071

Uranus 42482-10-08 15:36 G 17237573.01 17237573.15 17237573.32 0.0144 0.0103

Uranus 42483-05-23 03:22 G 17237799.58 17237799.64 17237799.74 0.0144 0.0133

Jupiter 42486-10-04 13:12 G 17239029.93 17239030.05 17239030.17 0.0527 0.0425

Mars 42492-05-18 21:50 G 17241083.27 17241083.41 17241083.55 0.1902 0.1129

Jupiter 42492-08-07 08:24 G 17241163.78 17241163.85 17241163.93 0.0499 0.0464

Saturn 42493-04-09 04:34 G 17241408.49 17241408.69 17241408.89 0.0258 0.0074

Saturn 42493-11-24 00:14 G 17241637.32 17241637.51 17241637.70 0.0259 0.0119

Saturn 42507-09-25 01:12 G 17246689.34 17246689.55 17246689.76 0.0304 0.0067

Saturn 42508-05-12 08:53 G 17246919.75 17246919.87 17246919.99 0.0303 0.0248

Jupiter 42510-10-08 10:34 G 17247798.77 17247798.94 17247799.12 0.0527 0.0274

Neptune 42516-01-07 17:02 G 17249716.14 17249716.21 17249716.31 0.0088 0.0081

Jupiter 42516-08-10 19:55 G 17249932.13 17249932.33 17249932.52 0.0498 0.0141

Neptune 42516-08-20 06:00 G 17249941.62 17249941.75 17249941.90 0.0088 0.0068

Neptune 42517-04-02 18:29 G 17250167.12 17250167.27 17250167.46 0.0088 0.0056

Neptune 42517-11-14 07:26 G 17250392.64 17250392.81 17250393.02 0.0088 0.0043

Neptune 42518-06-27 20:24 G 17250618.15 17250618.35 17250618.57 0.0088 0.0030

Neptune 42519-02-08 09:22 G 17250843.68 17250843.89 17250844.11 0.0088 0.0017

Neptune 42519-09-21 22:19 G 17251069.21 17251069.43 17251069.65 0.0088 0.0004

Neptune 42520-05-04 11:02 G 17251294.74 17251294.96 17251295.18 0.0088 0.0009

Uranus 42520-07-28 00:29 G 17251379.42 17251379.52 17251379.65 0.0133 0.0113

Neptune 42520-12-15 23:46 G 17251520.28 17251520.49 17251520.71 0.0088 0.0022

Uranus 42521-03-11 05:46 G 17251605.60 17251605.74 17251605.92 0.0134 0.0089

Neptune 42521-07-29 12:14 G 17251745.82 17251746.01 17251746.23 0.0088 0.0035

Uranus 42521-10-23 11:31 G 17251831.79 17251831.98 17251832.17 0.0134 0.0064

Saturn 42522-03-06 13:12 G 17251965.98 17251966.05 17251966.14 0.0258 0.0238

Neptune 42522-03-12 01:12 G 17251971.37 17251971.55 17251971.74 0.0088 0.0047

Uranus 42522-06-06 17:02 G 17252058.00 17252058.21 17252058.41 0.0134 0.0039

Jupiter 42522-06-13 01:41 G 17252064.38 17252064.57 17252064.77 0.0527 0.0181

Saturn 42522-10-21 08:38 G 17252194.65 17252194.86 17252195.07 0.0259 0.0047

Neptune 42522-10-23 13:55 G 17252196.93 17252197.08 17252197.26 0.0088 0.0060

Uranus 42523-01-18 22:19 G 17252284.22 17252284.43 17252284.65 0.0134 0.0014

Neptune 42523-06-06 02:38 G 17252422.51 17252422.61 17252422.75 0.0088 0.0073

Saturn 42523-06-07 04:19 G 17252423.50 17252423.68 17252423.85 0.0259 0.0146

Uranus 42523-09-02 03:50 G 17252510.44 17252510.66 17252510.88 0.0134 0.0010

Neptune 42524-01-17 15:36 G 17252648.11 17252648.15 17252648.21 0.0088 0.0085

Uranus 42524-04-15 09:22 G 17252736.68 17252736.89 17252737.10 0.0134 0.0035

Uranus 42524-11-27 14:53 G 17252962.93 17252963.12 17252963.32 0.0134 0.0060

Uranus 42525-07-11 20:10 G 17253189.19 17253189.34 17253189.52 0.0134 0.0085

Uranus 42526-02-23 01:55 G 17253415.46 17253415.58 17253415.71 0.0134 0.0110

Uranus 42526-10-07 07:26 G 17253641.81 17253641.81 17253641.83 0.0134 0.0134

Jupiter 42528-04-15 20:38 G 17254198.19 17254198.36 17254198.55 0.0498 0.0237

Mars 42528-12-27 05:31 G 17254453.55 17254453.73 17254453.90 0.1630 0.0322

Saturn 42537-04-06 09:36 G 17257475.69 17257475.90 17257476.11 0.0304 0.0021

Saturn 42537-11-22 17:02 G 17257706.17 17257706.21 17257706.27 0.0303 0.0293

Saturn 42551-09-16 17:02 G 17262752.09 17262752.21 17262752.33 0.0258 0.0209

Jupiter 42552-04-18 04:48 G 17262966.55 17262966.70 17262966.84 0.0498 0.0350

Saturn 42552-05-02 12:14 G 17262980.79 17262981.01 17262981.22 0.0258 0.0019

Saturn 42552-12-17 07:26 G 17263209.67 17263209.81 17263209.98 0.0259 0.0175

Pluto 42552-12-17 17:17 G 17263210.02 17263210.22 17263210.45 0.0080 0.0023

Pluto 42553-07-31 03:50 G 17263435.52 17263435.66 17263435.81 0.0080 0.0060

Moon 42554-06-07 05:02 G 17263746.54 17263746.71 17263746.87 0.2674 0.0387

Earth 42554-06-07 08:53 G 17263746.71 17263746.87 17263747.02 0.2679 0.0169 *

Jupiter 42558-02-18 18:43 G 17265099.08 17265099.28 17265099.48 0.0527 0.0088

Uranus 42562-02-04 09:50 G 17266545.82 17266545.91 17266546.02 0.0145 0.0129

Uranus 42562-09-18 22:05 G 17266772.28 17266772.42 17266772.60 0.0145 0.0098

Uranus 42563-05-03 10:19 G 17266998.75 17266998.93 17266999.14 0.0145 0.0067

Uranus 42563-12-15 22:48 G 17267225.24 17267225.45 17267225.66 0.0145 0.0035

Jupiter 42563-12-23 06:14 G 17267232.55 17267232.76 17267232.96 0.0499 0.0025

Uranus 42564-07-29 10:48 G 17267451.74 17267451.95 17267452.17 0.0144 0.0005

Uranus 42565-03-12 23:02 G 17267678.25 17267678.46 17267678.67 0.0144 0.0029

Uranus 42565-10-25 10:48 G 17267904.77 17267904.95 17267905.16 0.0144 0.0061

Saturn 42566-03-01 08:38 G 17268031.83 17268031.86 17268031.91 0.0305 0.0298

Uranus 42566-06-08 22:48 G 17268131.29 17268131.45 17268131.63 0.0144 0.0091

Saturn 42566-10-17 17:02 G 17268262.00 17268262.21 17268262.42 0.0304 0.0020

Uranus 42567-01-21 10:34 G 17268357.84 17268357.94 17268358.07 0.0144 0.0122

Jupiter 42569-10-24 10:19 G 17269364.79 17269364.93 17269365.08 0.0527 0.0363

Jupiter 42575-08-28 07:55 G 17271498.70 17271498.83 17271498.95 0.0499 0.0395

Saturn 42581-03-28 19:41 G 17273538.18 17273538.32 17273538.48 0.0258 0.0185

Saturn 42581-11-12 15:07 G 17273766.92 17273767.13 17273767.34 0.0259 0.0007

Saturn 42582-06-29 10:34 G 17273995.81 17273995.94 17273996.08 0.0259 0.0199

Jupiter 42593-10-27 10:19 G 17278133.78 17278133.93 17278134.08 0.0527 0.0347

Mars 42594-10-24 17:31 G 17278496.06 17278496.23 17278496.39 0.1633 0.0604

Saturn 42595-09-11 14:53 G 17278818.02 17278818.12 17278818.24 0.0305 0.0257

Saturn 42596-04-28 23:31 G 17279048.28 17279048.48 17279048.69 0.0304 0.0061

Neptune 42597-07-13 00:00 G 17279488.50 17279488.50 17279488.50 0.0090 0.0090

Neptune 42598-02-23 12:43 G 17279713.94 17279714.03 17279714.17 0.0090 0.0077

Neptune 42598-10-07 02:24 G 17279939.45 17279939.60 17279939.76 0.0090 0.0063

Neptune 42599-05-20 15:36 G 17280164.98 17280165.15 17280165.35 0.0090 0.0050

Jupiter 42599-08-30 16:05 G 17280266.98 17280267.17 17280267.36 0.0498 0.0192

Neptune 42600-01-01 04:48 G 17280390.51 17280390.70 17280390.91 0.0090 0.0036

Neptune 42600-08-14 18:14 G 17280616.05 17280616.26 17280616.48 0.0090 0.0023

Neptune 42601-03-28 07:26 G 17280841.60 17280841.81 17280842.03 0.0090 0.0010

Neptune 42601-11-08 20:38 G 17281067.15 17281067.36 17281067.59 0.0090 0.0005

Neptune 42602-06-22 09:50 G 17281292.70 17281292.91 17281293.13 0.0089 0.0018

Neptune 42603-02-02 22:48 G 17281518.26 17281518.45 17281518.67 0.0089 0.0032

Neptune 42603-09-16 12:00 G 17281743.83 17281744.00 17281744.21 0.0089 0.0045

Uranus 42604-03-28 11:17 G 17281937.88 17281937.97 17281938.06 0.0134 0.0121

Neptune 42604-04-29 01:41 G 17281969.41 17281969.57 17281969.74 0.0089 0.0058

Uranus 42604-11-09 16:34 G 17282164.05 17282164.19 17282164.34 0.0134 0.0097

Neptune 42604-12-10 14:24 G 17282194.99 17282195.10 17282195.26 0.0089 0.0072

Uranus 42605-06-23 21:36 G 17282390.23 17282390.40 17282390.60 0.0134 0.0073

Jupiter 42605-07-03 04:05 G 17282399.47 17282399.67 17282399.87 0.0527 0.0094

Neptune 42605-07-24 03:50 G 17282420.61 17282420.66 17282420.74 0.0089 0.0085

Uranus 42606-02-05 03:22 G 17282616.44 17282616.64 17282616.85 0.0134 0.0048

Uranus 42606-09-19 08:53 G 17282842.66 17282842.87 17282843.08 0.0134 0.0023

Uranus 42607-05-03 14:24 G 17283068.88 17283069.10 17283069.32 0.0134 0.0002

Uranus 42607-12-15 19:41 G 17283295.11 17283295.32 17283295.54 0.0134 0.0027

Uranus 42608-07-29 00:58 G 17283521.35 17283521.54 17283521.75 0.0134 0.0052

Uranus 42609-03-12 06:43 G 17283747.61 17283747.78 17283747.97 0.0134 0.0076

Uranus 42609-10-24 12:14 G 17283973.88 17283974.01 17283974.16 0.0134 0.0101

Uranus 42610-06-07 17:46 G 17284200.18 17284200.24 17284200.33 0.0134 0.0126

Saturn 42610-10-09 22:34 G 17284324.28 17284324.44 17284324.62 0.0258 0.0158

Jupiter 42611-05-06 17:02 G 17284533.02 17284533.21 17284533.40 0.0499 0.0184

Saturn 42611-05-26 17:46 G 17284553.03 17284553.24 17284553.46 0.0258 0.0034

Saturn 42612-01-10 12:58 G 17284781.96 17284782.04 17284782.16 0.0259 0.0227

Saturn 42625-03-24 20:24 G 17289604.21 17289604.35 17289604.50 0.0305 0.0222

Saturn 42625-11-10 04:48 G 17289834.50 17289834.70 17289834.90 0.0304 0.0096

Mars 42626-10-24 11:31 G 17290182.95 17290182.98 17290183.01 0.1626 0.1590

Jupiter 42635-05-09 05:31 G 17293301.62 17293301.73 17293301.84 0.0498 0.0423

Saturn 42640-04-21 00:29 G 17295110.34 17295110.52 17295110.71 0.0258 0.0135

Saturn 42640-12-05 19:41 G 17295339.11 17295339.32 17295339.53 0.0258 0.0057

Jupiter 42641-03-10 18:00 G 17295434.06 17295434.25 17295434.44 0.0527 0.0159

Saturn 42641-07-22 14:53 G 17295568.07 17295568.12 17295568.18 0.0259 0.0249

Uranus 42645-10-05 18:00 G 17297104.21 17297104.25 17297104.31 0.0145 0.0140

Uranus 42646-05-20 06:14 G 17297330.63 17297330.76 17297330.91 0.0145 0.0109

Uranus 42647-01-01 18:29 G 17297557.09 17297557.27 17297557.46 0.0145 0.0078

Jupiter 42647-01-12 06:43 G 17297567.58 17297567.78 17297567.98 0.0498 0.0050

Uranus 42647-08-16 06:43 G 17297783.58 17297783.78 17297783.99 0.0145 0.0046

Uranus 42648-03-29 18:58 G 17298010.07 17298010.29 17298010.51 0.0144 0.0014

Uranus 42648-11-11 06:58 G 17298236.58 17298236.79 17298237.01 0.0144 0.0018

Uranus 42649-06-25 18:58 G 17298463.09 17298463.29 17298463.50 0.0144 0.0049

Uranus 42650-02-07 06:43 G 17298689.61 17298689.78 17298689.97 0.0144 0.0080

Uranus 42650-09-21 18:29 G 17298916.15 17298916.27 17298916.43 0.0144 0.0111

Uranus 42651-05-06 06:29 G 17299142.74 17299142.77 17299142.82 0.0144 0.0141

Jupiter 42652-11-13 11:46 G 17299699.82 17299699.99 17299700.16 0.0527 0.0282

Saturn 42654-10-05 00:58 G 17300390.38 17300390.54 17300390.71 0.0305 0.0185

Saturn 42655-05-23 09:36 G 17300620.72 17300620.90 17300621.09 0.0304 0.0134

Mars 42656-01-13 02:53 G 17300855.54 17300855.62 17300855.71 0.1906 0.1649

Jupiter 42658-09-17 05:17 G 17301833.57 17301833.72 17301833.87 0.0499 0.0337

Moon 42659-12-10 00:58 G 17302282.38 17302282.54 17302282.70 0.2651 0.0143

Earth 42659-12-10 06:29 G 17302282.62 17302282.77 17302282.92 0.2653 0.0696 *

Mars 42660-08-22 05:17 G 17302538.58 17302538.72 17302538.87 0.1635 0.0889

Saturn 42669-11-01 02:24 G 17305896.42 17305896.60 17305896.80 0.0258 0.0110

Saturn 42670-06-17 21:36 G 17306125.20 17306125.40 17306125.60 0.0258 0.0082

Jupiter 42676-11-16 12:43 G 17308468.92 17308469.03 17308469.15 0.0527 0.0435

Neptune 42680-04-11 04:05 G 17309710.62 17309710.67 17309710.74 0.0088 0.0084

Neptune 42680-11-22 16:34 G 17309936.09 17309936.19 17309936.34 0.0088 0.0072

Neptune 42681-07-06 05:31 G 17310161.58 17310161.73 17310161.91 0.0088 0.0059

Neptune 42682-02-16 18:29 G 17310387.09 17310387.27 17310387.46 0.0088 0.0046

Jupiter 42682-09-19 17:02 G 17310602.04 17310602.21 17310602.39 0.0499 0.0268

Neptune 42682-09-30 07:12 G 17310612.61 17310612.80 17310613.02 0.0088 0.0034

Neptune 42683-05-13 20:10 G 17310838.13 17310838.34 17310838.56 0.0088 0.0021

Neptune 42683-12-25 09:07 G 17311063.66 17311063.88 17311064.10 0.0088 0.0008

Saturn 42684-04-16 04:48 G 17311176.53 17311176.70 17311176.89 0.0305 0.0154

Neptune 42684-08-06 21:50 G 17311289.19 17311289.41 17311289.63 0.0088 0.0005

Saturn 42684-12-02 13:12 G 17311406.88 17311407.05 17311407.23 0.0304 0.0165

Neptune 42685-03-20 10:34 G 17311514.73 17311514.94 17311515.16 0.0088 0.0018

Neptune 42685-10-31 23:17 G 17311740.28 17311740.47 17311740.69 0.0088 0.0031

Neptune 42686-06-14 12:14 G 17311965.82 17311966.01 17311966.21 0.0088 0.0043

Neptune 42687-01-26 00:43 G 17312191.38 17312191.53 17312191.72 0.0088 0.0056

Neptune 42687-09-08 13:12 G 17312416.94 17312417.05 17312417.22 0.0088 0.0069

Uranus 42687-11-26 20:38 G 17312496.33 17312496.36 17312496.42 0.0133 0.0131

Neptune 42688-04-21 02:24 G 17312642.53 17312642.60 17312642.69 0.0088 0.0081

Uranus 42688-07-10 02:24 G 17312722.47 17312722.60 17312722.73 0.0134 0.0106

Jupiter 42688-07-22 04:48 G 17312734.49 17312734.70 17312734.90 0.0527 0.0014

Uranus 42689-02-21 07:41 G 17312948.66 17312948.82 17312949.00 0.0134 0.0082

Uranus 42689-10-05 13:26 G 17313174.86 17313175.06 17313175.25 0.0134 0.0057

Uranus 42690-05-19 18:29 G 17313401.07 17313401.27 17313401.49 0.0134 0.0033

Uranus 42691-01-01 00:00 G 17313627.29 17313627.50 17313627.72 0.0134 0.0008

Uranus 42691-08-15 05:31 G 17313853.52 17313853.73 17313853.95 0.0134 0.0017

Uranus 42692-03-28 11:02 G 17314079.76 17314079.96 17314080.17 0.0134 0.0042

Mars 42692-08-20 23:17 G 17314225.37 17314225.47 17314225.57 0.1628 0.1312

Uranus 42692-11-09 16:19 G 17314306.01 17314306.18 17314306.38 0.0134 0.0067

Uranus 42693-06-23 22:05 G 17314532.27 17314532.42 17314532.58 0.0134 0.0092

Uranus 42694-02-05 03:22 G 17314758.55 17314758.64 17314758.76 0.0134 0.0117

Jupiter 42694-05-25 19:12 G 17314868.10 17314868.30 17314868.50 0.0499 0.0102

Saturn 42699-05-14 03:36 G 17316682.46 17316682.65 17316682.86 0.0258 0.0088

Saturn 42699-12-28 22:34 G 17316911.25 17316911.44 17316911.64 0.0258 0.0104

Jupiter 42700-03-27 20:24 G 17317000.26 17317000.35 17317000.45 0.0527 0.0462

Jupiter 42706-01-29 20:24 G 17319134.30 17319134.35 17319134.42 0.0499 0.0474

Pluto 42711-05-19 22:05 G 17321070.25 17321070.42 17321070.63 0.0063 0.0032

Pluto 42711-12-31 02:10 G 17321295.37 17321295.59 17321295.81 0.0064 0.0009

Pluto 42712-08-12 05:17 G 17321520.62 17321520.72 17321520.88 0.0064 0.0051

Saturn 42713-10-28 07:41 G 17321962.64 17321962.82 17321963.02 0.0305 0.0120

Saturn 42714-06-15 16:19 G 17322193.02 17322193.18 17322193.34 0.0304 0.0199

Jupiter 42718-05-29 03:50 G 17323636.62 17323636.66 17323636.71 0.0498 0.0486

Mars 42721-11-10 05:31 G 17324897.57 17324897.73 17324897.89 0.1903 0.0778

Jupiter 42724-03-30 23:46 G 17325769.32 17325769.49 17325769.67 0.0527 0.0265

Mars 42726-06-20 17:17 G 17326581.10 17326581.22 17326581.34 0.1637 0.1180

Saturn 42728-04-09 10:05 G 17327239.90 17327239.92 17327239.97 0.0257 0.0253

Saturn 42728-11-24 05:02 G 17327468.50 17327468.71 17327468.92 0.0257 0.0063

Saturn 42729-07-10 23:46 G 17327697.31 17327697.49 17327697.68 0.0258 0.0128

Uranus 42730-01-18 13:12 G 17327888.94 17327889.05 17327889.18 0.0145 0.0121

Jupiter 42730-02-01 05:17 G 17327902.52 17327902.72 17327902.92 0.0499 0.0114

Uranus 42730-09-02 01:26 G 17328115.40 17328115.56 17328115.74 0.0145 0.0090

Uranus 42731-04-16 13:55 G 17328341.88 17328342.08 17328342.28 0.0145 0.0058

Uranus 42731-11-29 01:55 G 17328568.37 17328568.58 17328568.80 0.0145 0.0027

Uranus 42732-07-12 14:10 G 17328794.87 17328795.09 17328795.31 0.0144 0.0005

Uranus 42733-02-24 02:10 G 17329021.38 17329021.59 17329021.80 0.0144 0.0037

Uranus 42733-10-08 13:55 G 17329247.90 17329248.08 17329248.29 0.0144 0.0069

Uranus 42734-05-23 01:55 G 17329474.43 17329474.58 17329474.75 0.0144 0.0099

Uranus 42735-01-04 13:55 G 17329700.99 17329701.08 17329701.17 0.0144 0.0129

Jupiter 42735-12-04 16:05 G 17330034.98 17330035.17 17330035.36 0.0527 0.0182

Jupiter 42741-10-07 07:12 G 17332168.63 17332168.80 17332168.98 0.0499 0.0256

Saturn 42743-05-10 10:19 G 17332748.73 17332748.93 17332749.13 0.0305 0.0092

Saturn 42743-12-26 18:43 G 17332979.15 17332979.28 17332979.42 0.0304 0.0227

Saturn 42757-10-20 10:48 G 17338025.87 17338025.95 17338026.05 0.0257 0.0233

Saturn 42758-06-06 05:31 G 17338254.52 17338254.73 17338254.95 0.0258 0.0043

Mars 42758-06-19 11:46 G 17338267.86 17338267.99 17338268.12 0.1630 0.1048

Saturn 42759-01-21 00:14 G 17338483.34 17338483.51 17338483.69 0.0258 0.0149

Jupiter 42759-12-07 14:53 G 17338804.09 17338804.12 17338804.15 0.0527 0.0520

Neptune 42762-05-29 23:46 G 17339708.40 17339708.49 17339708.60 0.0090 0.0080

Neptune 42763-01-10 12:43 G 17339933.91 17339934.03 17339934.20 0.0090 0.0067

Neptune 42763-08-24 01:55 G 17340159.43 17340159.58 17340159.78 0.0090 0.0054

Neptune 42764-04-05 15:36 G 17340384.96 17340385.15 17340385.35 0.0090 0.0040

Neptune 42764-11-17 04:48 G 17340610.50 17340610.70 17340610.92 0.0090 0.0027

Neptune 42765-06-30 18:00 G 17340836.04 17340836.25 17340836.47 0.0090 0.0014

Jupiter 42765-10-09 20:10 G 17340937.19 17340937.34 17340937.48 0.0498 0.0352

Neptune 42766-02-11 07:26 G 17341061.59 17341061.81 17341062.03 0.0090 0.0002

Neptune 42766-09-24 20:24 G 17341287.14 17341287.35 17341287.57 0.0090 0.0014

Neptune 42767-05-08 09:50 G 17341512.70 17341512.91 17341513.12 0.0089 0.0027

Neptune 42767-12-19 23:02 G 17341738.27 17341738.46 17341738.66 0.0089 0.0040

Neptune 42768-08-01 11:46 G 17341963.84 17341963.99 17341964.19 0.0089 0.0054

Neptune 42769-03-15 01:12 G 17342189.42 17342189.55 17342189.71 0.0089 0.0067

Neptune 42769-10-26 14:24 G 17342415.01 17342415.10 17342415.21 0.0089 0.0080

Jupiter 42771-08-12 08:53 G 17343069.67 17343069.87 17343070.07 0.0527 0.0083

Uranus 42772-03-10 12:00 G 17343280.91 17343281.00 17343281.13 0.0133 0.0116

Uranus 42772-10-22 17:46 G 17343507.08 17343507.24 17343507.40 0.0133 0.0091

Saturn 42772-11-19 12:43 G 17343534.83 17343535.03 17343535.24 0.0305 0.0059

Uranus 42773-06-05 22:48 G 17343733.28 17343733.45 17343733.65 0.0134 0.0067

Saturn 42773-07-07 21:07 G 17343765.27 17343765.38 17343765.49 0.0304 0.0259

Uranus 42774-01-18 04:19 G 17343959.48 17343959.68 17343959.89 0.0134 0.0042

Uranus 42774-09-01 09:50 G 17344185.69 17344185.91 17344186.13 0.0134 0.0017

Uranus 42775-04-15 15:22 G 17344411.92 17344412.14 17344412.36 0.0134 0.0008

Uranus 42775-11-27 20:38 G 17344638.15 17344638.36 17344638.58 0.0134 0.0033

Uranus 42776-07-11 01:55 G 17344864.39 17344864.58 17344864.79 0.0134 0.0057

Uranus 42777-02-22 07:26 G 17345090.65 17345090.81 17345090.99 0.0134 0.0082

Jupiter 42777-06-14 18:43 G 17345203.07 17345203.28 17345203.48 0.0499 0.0034

Uranus 42777-10-06 12:58 G 17345316.92 17345317.04 17345317.18 0.0134 0.0107

Uranus 42778-05-20 18:29 G 17345543.24 17345543.27 17345543.33 0.0134 0.0131

Jupiter 42783-04-17 03:07 G 17347335.49 17347335.63 17347335.79 0.0527 0.0351

Saturn 42787-05-02 12:00 G 17348811.89 17348812.00 17348812.13 0.0257 0.0210

Mars 42787-09-07 09:22 G 17348939.72 17348939.89 17348940.07 0.1899 0.0026

Saturn 42787-12-17 06:43 G 17349040.57 17349040.78 17349040.99 0.0257 0.0020

Saturn 42788-08-02 01:12 G 17349269.40 17349269.55 17349269.72 0.0258 0.0172

Jupiter 42789-02-17 19:55 G 17349469.22 17349469.33 17349469.45 0.0499 0.0405

Mars 42792-04-17 05:02 G 17350623.64 17350623.71 17350623.79 0.1639 0.1473

Earth 42797-06-09 09:36 G 17352502.74 17352502.90 17352503.06 0.2679 0.0267

Moon 42797-06-09 11:31 G 17352502.83 17352502.98 17352503.14 0.2686 0.0083 *

Pluto 42800-11-21 16:34 G 17353764.07 17353764.19 17353764.32 0.0081 0.0066

Pluto 42801-07-05 03:07 G 17353989.42 17353989.63 17353989.85 0.0080 0.0018

Saturn 42802-06-01 14:24 G 17354320.89 17354321.10 17354321.31 0.0305 0.0033

Saturn 42803-01-17 22:34 G 17354551.38 17354551.44 17354551.52 0.0304 0.0285

Jupiter 42807-04-20 02:53 G 17356104.48 17356104.62 17356104.77 0.0527 0.0357

Jupiter 42813-02-20 09:07 G 17358237.69 17358237.88 17358238.07 0.0499 0.0204

Uranus 42813-09-17 18:29 G 17358447.20 17358447.27 17358447.36 0.0145 0.0134

Uranus 42814-05-02 06:43 G 17358673.64 17358673.78 17358673.94 0.0145 0.0103

Uranus 42814-12-14 18:58 G 17358900.11 17358900.29 17358900.49 0.0145 0.0072

Uranus 42815-07-29 07:12 G 17359126.59 17359126.80 17359127.01 0.0145 0.0040

Uranus 42816-03-11 19:26 G 17359353.09 17359353.31 17359353.53 0.0144 0.0008

Uranus 42816-10-24 07:26 G 17359579.60 17359579.81 17359580.03 0.0144 0.0023

Saturn 42816-11-11 12:14 G 17359597.88 17359598.01 17359598.16 0.0257 0.0189

Uranus 42817-06-07 19:26 G 17359806.11 17359806.31 17359806.51 0.0144 0.0055

Saturn 42817-06-28 06:58 G 17359826.58 17359826.79 17359827.00 0.0258 0.0002

Uranus 42818-01-20 07:12 G 17360032.63 17360032.80 17360032.98 0.0144 0.0086

Saturn 42818-02-12 01:26 G 17360055.43 17360055.56 17360055.72 0.0258 0.0193

Uranus 42818-09-03 19:12 G 17360259.18 17360259.30 17360259.43 0.0144 0.0116

Jupiter 42818-12-23 18:43 G 17360370.08 17360370.28 17360370.48 0.0527 0.0093

Mars 42824-04-15 23:17 G 17362310.32 17362310.47 17362310.63 0.1632 0.0757

Jupiter 42824-10-26 10:48 G 17362503.76 17362503.95 17362504.15 0.0499 0.0167

Saturn 42831-12-12 16:19 G 17365106.97 17365107.18 17365107.39 0.0305 0.0002

Neptune 42844-07-14 15:22 G 17369705.12 17369705.14 17369705.16 0.0088 0.0087

Neptune 42845-02-25 03:36 G 17369930.56 17369930.65 17369930.79 0.0088 0.0075

Neptune 42845-10-08 16:48 G 17370156.05 17370156.20 17370156.36 0.0088 0.0062

Neptune 42846-05-22 05:17 G 17370381.56 17370381.72 17370381.92 0.0088 0.0050

Saturn 42846-05-24 13:41 G 17370383.91 17370384.07 17370384.23 0.0257 0.0167

Neptune 42847-01-02 18:14 G 17370607.07 17370607.26 17370607.47 0.0088 0.0037

Saturn 42847-01-08 08:10 G 17370612.63 17370612.84 17370613.05 0.0258 0.0024

Neptune 42847-08-16 07:12 G 17370832.59 17370832.80 17370833.02 0.0088 0.0024

Saturn 42847-08-25 02:53 G 17370841.51 17370841.62 17370841.74 0.0258 0.0215

Neptune 42848-03-28 19:55 G 17371058.12 17371058.33 17371058.56 0.0088 0.0012

Jupiter 42848-10-28 19:41 G 17371272.22 17371272.32 17371272.43 0.0498 0.0422

Neptune 42848-11-09 09:07 G 17371283.65 17371283.88 17371284.10 0.0088 0.0002

Neptune 42849-06-22 21:50 G 17371509.19 17371509.41 17371509.63 0.0088 0.0014

Neptune 42850-02-03 10:19 G 17371734.73 17371734.93 17371735.15 0.0088 0.0027

Neptune 42850-09-16 23:31 G 17371960.28 17371960.48 17371960.68 0.0088 0.0039

Neptune 42851-04-30 12:00 G 17372185.84 17372186.00 17372186.19 0.0088 0.0052

Neptune 42851-12-12 00:43 G 17372411.40 17372411.53 17372411.70 0.0088 0.0065

Neptune 42852-07-24 13:55 G 17372636.98 17372637.08 17372637.19 0.0088 0.0077

Mars 42853-07-04 12:14 G 17372981.85 17372982.01 17372982.16 0.1895 0.0874

Jupiter 42854-08-31 14:24 G 17373404.92 17373405.10 17373405.29 0.0527 0.0191

Uranus 42855-11-08 21:36 G 17373839.33 17373839.40 17373839.48 0.0133 0.0125

Uranus 42856-06-22 02:38 G 17374065.49 17374065.61 17374065.77 0.0133 0.0101

Uranus 42857-02-03 08:24 G 17374291.67 17374291.85 17374292.03 0.0133 0.0076

Uranus 42857-09-17 13:26 G 17374517.87 17374518.06 17374518.27 0.0134 0.0052

Uranus 42858-05-01 18:58 G 17374744.08 17374744.29 17374744.51 0.0134 0.0027

Uranus 42858-12-14 00:29 G 17374970.30 17374970.52 17374970.73 0.0134 0.0003

Uranus 42859-07-28 05:31 G 17375196.53 17375196.73 17375196.95 0.0134 0.0023

Uranus 42860-03-10 11:17 G 17375422.77 17375422.97 17375423.17 0.0134 0.0047

Jupiter 42860-07-03 21:50 G 17375538.20 17375538.41 17375538.61 0.0499 0.0055

Uranus 42860-10-22 16:19 G 17375649.01 17375649.18 17375649.38 0.0134 0.0072

Saturn 42860-11-05 08:53 G 17375662.83 17375662.87 17375662.92 0.0306 0.0297

Uranus 42861-06-05 22:05 G 17375875.27 17375875.42 17375875.57 0.0134 0.0096

Saturn 42861-06-23 18:00 G 17375893.04 17375893.25 17375893.46 0.0305 0.0024

Uranus 42862-01-18 03:22 G 17376101.56 17376101.64 17376101.74 0.0134 0.0121

Jupiter 42866-05-06 06:43 G 17377670.61 17377670.78 17377670.96 0.0527 0.0255

Jupiter 42872-03-08 23:46 G 17379804.34 17379804.49 17379804.65 0.0499 0.0315

Saturn 42875-12-04 14:10 G 17381169.91 17381170.09 17381170.26 0.0257 0.0146

Saturn 42876-07-20 08:38 G 17381398.65 17381398.86 17381399.07 0.0258 0.0045

Saturn 42877-03-06 03:22 G 17381627.56 17381627.64 17381627.73 0.0258 0.0236

Mars 42890-02-11 11:17 G 17386352.81 17386352.97 17386353.14 0.1635 0.0478

Jupiter 42890-05-09 07:26 G 17386439.71 17386439.81 17386439.91 0.0527 0.0455

Saturn 42890-05-18 11:46 G 17386448.89 17386448.99 17386449.09 0.0305 0.0263

Saturn 42891-01-03 20:38 G 17386679.15 17386679.36 17386679.56 0.0304 0.0057

Jupiter 42896-03-11 09:07 G 17388572.71 17388572.88 17388573.05 0.0498 0.0276

Uranus 42897-12-30 10:19 G 17389231.81 17389231.93 17389232.06 0.0145 0.0117

Uranus 42898-08-13 22:19 G 17389458.27 17389458.43 17389458.62 0.0145 0.0086

Uranus 42899-03-28 10:34 G 17389684.75 17389684.94 17389685.15 0.0145 0.0055

Uranus 42899-11-09 22:48 G 17389911.24 17389911.45 17389911.67 0.0145 0.0023

Uranus 42900-06-24 10:48 G 17390137.74 17390137.95 17390138.17 0.0144 0.0009

Uranus 42901-02-05 22:48 G 17390364.24 17390364.45 17390364.66 0.0144 0.0040

Uranus 42901-09-20 10:48 G 17390590.77 17390590.95 17390591.15 0.0144 0.0071

Jupiter 42902-01-13 01:26 G 17390705.35 17390705.56 17390705.76 0.0527 0.0023

Uranus 42902-05-04 22:34 G 17390817.30 17390817.44 17390817.61 0.0144 0.0102

Earth 42902-12-12 07:41 G 17391038.67 17391038.82 17391038.98 0.2652 0.0657

Moon 42902-12-12 12:00 G 17391038.85 17391039.00 17391039.14 0.2656 0.0855 *

Uranus 42902-12-17 10:05 G 17391043.86 17391043.92 17391044.03 0.0144 0.0133

Saturn 42905-06-16 15:36 G 17391955.96 17391956.15 17391956.34 0.0257 0.0123

Saturn 42906-01-31 10:05 G 17392184.72 17392184.92 17392185.13 0.0258 0.0068

Jupiter 42907-11-16 10:48 G 17392838.75 17392838.95 17392839.15 0.0498 0.0094

Moon 42910-12-10 05:02 G 17393958.65 17393958.71 17393958.77 0.2650 0.2448

Jupiter 42913-09-17 17:46 G 17394971.13 17394971.24 17394971.37 0.0527 0.0422

Mars 42919-05-02 16:05 G 17397024.09 17397024.17 17397024.25 0.1892 0.1664

Jupiter 42919-07-22 12:14 G 17397104.94 17397105.01 17397105.09 0.0499 0.0463

Saturn 42919-11-29 13:12 G 17397234.93 17397235.05 17397235.19 0.0305 0.0239

Saturn 42920-07-16 22:19 G 17397465.23 17397465.43 17397465.63 0.0305 0.0083

Neptune 42926-09-01 11:02 G 17399702.88 17399702.96 17399703.04 0.0090 0.0083

Neptune 42927-04-15 00:14 G 17399928.38 17399928.51 17399928.65 0.0090 0.0070

Neptune 42927-11-26 13:26 G 17400153.90 17400154.06 17400154.24 0.0090 0.0057

Neptune 42928-07-09 02:38 G 17400379.43 17400379.61 17400379.81 0.0090 0.0044

Neptune 42929-02-19 15:50 G 17400604.97 17400605.16 17400605.38 0.0090 0.0031

Neptune 42929-10-03 05:17 G 17400830.51 17400830.72 17400830.94 0.0090 0.0017

Neptune 42930-05-16 18:43 G 17401056.06 17401056.28 17401056.50 0.0090 0.0004

Neptune 42930-12-28 07:55 G 17401281.61 17401281.83 17401282.05 0.0090 0.0010

Neptune 42931-08-10 21:07 G 17401507.17 17401507.38 17401507.59 0.0090 0.0023

Neptune 42932-03-23 10:05 G 17401732.73 17401732.92 17401733.13 0.0090 0.0036

Neptune 42932-11-03 23:02 G 17401958.30 17401958.46 17401958.66 0.0089 0.0050

Neptune 42933-06-17 12:29 G 17402183.88 17402184.02 17402184.19 0.0089 0.0063

Neptune 42934-01-29 01:26 G 17402409.46 17402409.56 17402409.69 0.0089 0.0076

Neptune 42934-09-11 14:38 G 17402635.10 17402635.11 17402635.15 0.0089 0.0089

Saturn 42934-12-27 16:19 G 17402741.99 17402742.18 17402742.38 0.0257 0.0102

Saturn 42935-08-13 11:02 G 17402970.76 17402970.96 17402971.16 0.0258 0.0090

Jupiter 42937-09-20 16:34 G 17403740.02 17403740.19 17403740.37 0.0527 0.0277

Uranus 42940-02-21 12:14 G 17404623.90 17404624.01 17404624.14 0.0133 0.0110

Uranus 42940-10-04 17:31 G 17404850.08 17404850.23 17404850.41 0.0134 0.0085

Uranus 42941-05-18 23:02 G 17405076.27 17405076.46 17405076.66 0.0134 0.0061

Uranus 42941-12-31 04:05 G 17405302.47 17405302.67 17405302.89 0.0134 0.0037

Uranus 42942-08-14 09:36 G 17405528.69 17405528.90 17405529.12 0.0134 0.0012

Uranus 42943-03-28 15:07 G 17405754.92 17405755.13 17405755.35 0.0134 0.0013

Jupiter 42943-07-25 00:43 G 17405873.34 17405873.53 17405873.73 0.0499 0.0140

Uranus 42943-11-09 20:24 G 17405981.15 17405981.35 17405981.56 0.0134 0.0038

Uranus 42944-06-23 01:55 G 17406207.39 17406207.58 17406207.77 0.0134 0.0062

Uranus 42945-02-04 06:58 G 17406433.64 17406433.79 17406433.97 0.0134 0.0087

Uranus 42945-09-18 12:43 G 17406659.92 17406660.03 17406660.16 0.0134 0.0112

Jupiter 42949-05-26 10:19 G 17408005.74 17408005.93 17408006.12 0.0527 0.0161

Saturn 42949-06-10 17:17 G 17408021.07 17408021.22 17408021.38 0.0305 0.0202

Saturn 42950-01-27 01:55 G 17408251.39 17408251.58 17408251.78 0.0304 0.0118

Jupiter 42955-03-30 00:00 G 17410139.32 17410139.50 17410139.68 0.0498 0.0240

Mars 42955-12-10 23:17 G 17410395.29 17410395.47 17410395.64 0.1637 0.0190

Pluto 42959-04-23 00:00 G 17411624.41 17411624.50 17411624.62 0.0063 0.0056

Pluto	42959-12-04 03:36 G	17411849.45	17411849.65	17411849.88	0.0063	0.0016
Pluto	42960-07-16 07:12 G	17412074.61	17412074.80	17412075.02	0.0064	0.0026
Saturn	42964-07-08 18:29 G	17413528.07	17413528.27	17413528.47	0.0258	0.0078
Saturn	42965-02-22 12:58 G	17413756.86	17413757.04	17413757.24	0.0258	0.0114
Saturn	42978-12-21 20:38 G	17418807.19	17418807.36	17418807.54	0.0305	0.0173
Jupiter	42979-04-01 11:17 G	17418907.83	17418907.97	17418908.11	0.0498	0.0357
Saturn	42979-08-09 05:17 G	17419037.54	17419037.72	17419037.91	0.0305	0.0148
Uranus	42981-08-30 13:55 G	17419790.00	17419790.08	17419790.18	0.0145	0.0131
Uranus	42982-04-14 02:10 G	17420016.44	17420016.59	17420016.75	0.0145	0.0100
Uranus	42982-11-26 14:10 G	17420242.91	17420243.09	17420243.29	0.0145	0.0069
Uranus	42983-07-11 02:24 G	17420469.39	17420469.60	17420469.81	0.0145	0.0037
Uranus	42984-02-22 14:24 G	17420695.88	17420696.10	17420696.32	0.0144	0.0006
Uranus	42984-10-06 02:24 G	17420922.39	17420922.60	17420922.82	0.0144	0.0026
Jupiter	42985-02-01 03:50 G	17421040.46	17421040.66	17421040.86	0.0527	0.0110
Uranus	42985-05-20 14:10 G	17421148.90	17421149.09	17421149.30	0.0144	0.0058
Uranus	42986-01-02 01:55 G	17421375.42	17421375.58	17421375.77	0.0144	0.0089
Uranus	42986-08-16 13:41 G	17421601.97	17421602.07	17421602.21	0.0144	0.0119
Jupiter	42990-12-05 13:12 G	17423173.84	17423174.05	17423174.25	0.0499	0.0013
Saturn	42993-06-04 01:26 G	17424085.50	17424085.56	17424085.63	0.0257	0.0245
Saturn	42994-01-18 20:10 G	17424314.13	17424314.34	17424314.55	0.0258	0.0054
Saturn	42994-09-04 14:53 G	17424542.95	17424543.12	17424543.30	0.0258	0.0138
Jupiter	42996-10-06 18:58 G	17425306.14	17425306.29	17425306.45	0.0527	0.0340

44TH MILLENNIUM CE

This is a list of transits of Venus in the 44th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**43002-08-11 14:24**	**G**	**17427439.97**	**17427440.10**	**17427440.24**	**0.0499**	**0.0381**	
Saturn	**43008-07-04 01:41**	**G**	**17429593.38**	**17429593.57**	**17429593.75**	**0.0305**	**0.0135**	
Saturn	**43009-02-19 09:50**	**G**	**17429823.75**	**17429823.91**	**17429824.09**	**0.0304**	**0.0186**	
Neptune	**43009-05-31 15:07**	**G**	**17429925.05**	**17429925.13**	**17429925.26**	**0.0088**	**0.0078**	
Neptune	**43010-01-12 04:05**	**G**	**17430150.54**	**17430150.67**	**17430150.83**	**0.0088**	**0.0065**	
Neptune	**43010-08-25 16:34**	**G**	**17430376.04**	**17430376.19**	**17430376.39**	**0.0088**	**0.0053**	
Neptune	**43011-04-08 05:46**	**G**	**17430601.55**	**17430601.74**	**17430601.94**	**0.0088**	**0.0040**	
Neptune	**43011-11-19 18:29**	**G**	**17430827.07**	**17430827.27**	**17430827.49**	**0.0088**	**0.0028**	
Neptune	**43012-07-02 07:26**	**G**	**17431052.59**	**17431052.81**	**17431053.03**	**0.0088**	**0.0015**	
Neptune	**43013-02-12 20:10**	**G**	**17431278.12**	**17431278.34**	**17431278.56**	**0.0088**	**0.0002**	
Neptune	**43013-09-26 08:53**	**G**	**17431503.66**	**17431503.87**	**17431504.10**	**0.0088**	**0.0011**	
Neptune	**43014-05-09 21:50**	**G**	**17431729.20**	**17431729.41**	**17431729.62**	**0.0088**	**0.0023**	
Neptune	**43014-12-21 10:19**	**G**	**17431954.74**	**17431954.93**	**17431955.15**	**0.0088**	**0.0036**	
Neptune	**43015-08-03 23:17**	**G**	**17432180.29**	**17432180.47**	**17432180.66**	**0.0088**	**0.0048**	
Neptune	**43016-03-16 12:00**	**G**	**17432405.85**	**17432406.00**	**17432406.17**	**0.0088**	**0.0061**	
Neptune	**43016-10-28 01:12**	**G**	**17432631.43**	**17432631.55**	**17432631.67**	**0.0088**	**0.0073**	
Mars	**43017-02-27 17:02**	**G**	**17432754.20**	**17432754.21**	**17432754.23**	**0.1900**	**0.1889**	
Neptune	**43017-06-10 13:41**	**G**	**17432857.05**	**17432857.07**	**17432857.13**	**0.0088**	**0.0086**	
Jupiter	**43020-10-10 20:38**	**G**	**17434075.23**	**17434075.36**	**17434075.51**	**0.0528**	**0.0376**	
Mars	**43021-10-08 10:48**	**G**	**17434437.78**	**17434437.95**	**17434438.13**	**0.1639**	**0.0110**	
Saturn	**43022-12-16 04:05**	**G**	**17434871.57**	**17434871.67**	**17434871.79**	**0.0258**	**0.0222**	
Saturn	**43023-08-01 23:02**	**G**	**17435100.24**	**17435100.46**	**17435100.67**	**0.0258**	**0.0030**	
Uranus	**43023-10-22 20:38**	**G**	**17435182.28**	**17435182.36**	**17435182.47**	**0.0134**	**0.0120**	
Saturn	**43024-03-17 17:31**	**G**	**17435329.08**	**17435329.23**	**17435329.41**	**0.0258**	**0.0164**	
Uranus	**43024-06-05 02:10**	**G**	**17435408.45**	**17435408.59**	**17435408.75**	**0.0134**	**0.0095**	
Uranus	**43025-01-17 07:26**	**G**	**17435634.63**	**17435634.81**	**17435635.00**	**0.0134**	**0.0071**	
Uranus	**43025-08-31 12:58**	**G**	**17435860.84**	**17435861.04**	**17435861.24**	**0.0134**	**0.0046**	

Uranus 43026-04-14 18:14 G 17436087.05 17436087.26 17436087.48 0.0134 0.0022

Jupiter 43026-08-13 23:31 G 17436208.29 17436208.48 17436208.67 0.0498 0.0206

Uranus 43026-11-26 23:46 G 17436313.27 17436313.49 17436313.71 0.0134 0.0003

Uranus 43027-07-11 05:02 G 17436539.50 17436539.71 17436539.93 0.0134 0.0028

Uranus 43028-02-22 10:19 G 17436765.74 17436765.93 17436766.14 0.0134 0.0053

Uranus 43028-10-05 16:05 G 17436992.00 17436992.17 17436992.35 0.0134 0.0077

Uranus 43029-05-19 21:22 G 17437218.27 17437218.39 17437218.55 0.0134 0.0103

Uranus 43030-01-01 03:07 G 17437444.57 17437444.63 17437444.71 0.0134 0.0127

Jupiter 43032-06-15 12:58 G 17438340.84 17438341.04 17438341.24 0.0527 0.0068

Saturn 43038-01-14 06:29 G 17440379.57 17440379.77 17440379.97 0.0305 0.0102

Jupiter 43038-04-19 00:43 G 17440474.34 17440474.53 17440474.73 0.0499 0.0164

Saturn 43038-09-01 14:53 G 17440609.98 17440610.12 17440610.27 0.0304 0.0218

Moon 43040-06-11 09:50 G 17441258.74 17441258.91 17441259.07 0.2673 0.0699

Earth 43040-06-11 10:19 G 17441258.77 17441258.93 17441259.09 0.2680 0.0374 *

Jupiter 43044-02-19 05:02 G 17442606.67 17442606.71 17442606.76 0.0527 0.0511

Pluto 43049-06-08 22:19 G 17444543.26 17444543.43 17444543.63 0.0080 0.0043

Pluto 43050-01-20 08:38 G 17444768.69 17444768.86 17444769.07 0.0080 0.0041

Saturn 43052-06-27 06:43 G 17445657.64 17445657.78 17445657.91 0.0258 0.0196

Saturn 43053-02-11 01:26 G 17445886.35 17445886.56 17445886.77 0.0258 0.0005

Saturn 43053-09-27 20:24 G 17446115.21 17446115.35 17446115.50 0.0258 0.0189

Jupiter 43062-04-21 12:00 G 17449242.90 17449243.00 17449243.10 0.0498 0.0431

Uranus 43065-04-30 18:58 G 17450348.28 17450348.29 17450348.33 0.0145 0.0144

Uranus 43065-12-13 06:58 G 17450574.67 17450574.79 17450574.94 0.0145 0.0113

Uranus 43066-07-27 18:58 G 17450801.12 17450801.29 17450801.48 0.0145 0.0082

Uranus 43067-03-11 07:12 G 17451027.60 17451027.80 17451028.01 0.0145 0.0050

Saturn 43067-07-27 13:41 G 17451165.86 17451166.07 17451166.28 0.0304 0.0059

Uranus 43067-10-23 19:26 G 17451254.09 17451254.31 17451254.52 0.0144 0.0019

Jupiter 43068-02-22 04:05 G 17451375.48 17451375.67 17451375.86 0.0527 0.0187

Saturn 43068-03-13 21:50 G 17451396.31 17451396.41 17451396.52 0.0304 0.0260

Uranus 43068-06-06 07:12 G 17451480.59 17451480.80 17451481.02 0.0144 0.0013

Uranus 43069-01-18 19:12 G 17451707.09 17451707.30 17451707.51 0.0144 0.0044

Uranus 43069-09-02 06:58 G 17451933.61 17451933.79 17451933.98 0.0144 0.0075

Uranus 43070-04-16 18:43 G 17452160.14 17452160.28 17452160.44 0.0144 0.0106

Uranus 43070-11-29 06:29 G 17452386.72 17452386.77 17452386.85 0.0144 0.0136

Jupiter 43073-12-25 11:31 G 17453508.78 17453508.98 17453509.19 0.0498 0.0055

Jupiter 43079-10-27 20:24 G 17455641.18 17455641.35 17455641.53 0.0528 0.0255

Saturn 43082-01-07 10:05 G 17456443.77 17456443.92 17456444.09 0.0258 0.0171

Saturn 43082-08-24 05:02 G 17456672.50 17456672.71 17456672.93 0.0258 0.0022

Mars 43082-12-25 20:38 G 17456796.21 17456796.36 17456796.50 0.1896 0.1054

Saturn 43083-04-10 00:14 G 17456901.39 17456901.51 17456901.63 0.0259 0.0215

Jupiter 43085-08-30 12:29 G 17457774.87 17457775.02 17457775.18 0.0498 0.0316

Mars 43087-08-05 22:48 G 17458480.28 17458480.45 17458480.61 0.1641 0.0401

Neptune 43090-12-04 21:36 G 17459697.37 17459697.40 17459697.48 0.0090 0.0087

Neptune 43091-07-18 10:48 G 17459922.85 17459922.95 17459923.10 0.0090 0.0074

Neptune 43092-02-29 00:29 G 17460148.37 17460148.52 17460148.69 0.0090 0.0060

Neptune 43092-10-11 13:55 G 17460373.90 17460374.08 17460374.27 0.0090 0.0047

Neptune 43093-05-25 03:07 G 17460599.44 17460599.63 17460599.85 0.0090 0.0034

Neptune 43094-01-05 16:34 G 17460824.98 17460825.19 17460825.41 0.0090 0.0020

Neptune 43094-08-19 05:46 G 17461050.53 17461050.74 17461050.97 0.0090 0.0008

Neptune 43095-04-01 19:12 G 17461276.08 17461276.30 17461276.52 0.0089 0.0006

Neptune 43095-11-13 08:24 G 17461501.64 17461501.85 17461502.07 0.0089 0.0019

Neptune 43096-06-25 21:36 G 17461727.20 17461727.40 17461727.61 0.0089 0.0033

Saturn 43097-02-05 20:24 G 17461952.14 17461952.35 17461952.56 0.0305 0.0022

Neptune 43097-02-06 10:34 G 17461952.77 17461952.94 17461953.14 0.0089 0.0046

Neptune 43097-09-19 23:46 G 17462178.34 17462178.49 17462178.67 0.0089 0.0059

Saturn 43097-09-24 04:19 G 17462182.64 17462182.68 17462182.73 0.0304 0.0296

Neptune 43098-05-03 13:12 G 17462403.93 17462404.05 17462404.19 0.0089 0.0072

Neptune 43098-12-15 02:24 G 17462629.54 17462629.60 17462629.68 0.0089 0.0085

Jupiter 43103-10-31 20:10 G 17464410.24 17464410.34 17464410.45 0.0527 0.0449

Uranus 43107-06-23 05:46 G 17465740.69 17465740.74 17465740.80 0.0134 0.0129

Uranus 43108-02-04 11:02 G 17465966.84 17465966.96 17465967.11 0.0134 0.0105

Uranus 43108-09-17 16:19 G 17466193.02 17466193.18 17466193.37 0.0134 0.0081

Uranus 43109-05-01 21:50 G 17466419.22 17466419.41 17466419.62 0.0134 0.0056

Jupiter 43109-09-02 22:48 G 17466543.28 17466543.45 17466543.62 0.0498 0.0274

Uranus 43109-12-14 03:22 G 17466645.43 17466645.64 17466645.86 0.0134 0.0031

Uranus 43110-07-28 08:53 G 17466871.65 17466871.87 17466872.09 0.0134 0.0007

Uranus 43111-03-11 14:24 G 17467097.88 17467098.10 17467098.31 0.0134 0.0018

Saturn 43111-07-21 13:26 G 17467229.89 17467230.06 17467230.24 0.0258 0.0143

Uranus 43111-10-23 19:41 G 17467324.12 17467324.32 17467324.53 0.0134 0.0043

Saturn 43112-03-06 08:38 G 17467458.65 17467458.86 17467459.07 0.0258 0.0049

Uranus 43112-06-06 00:58 G 17467550.37 17467550.54 17467550.74 0.0134 0.0069

Saturn 43112-10-21 03:50 G 17467687.60 17467687.66 17467687.74 0.0259 0.0243

Uranus 43113-01-18 06:58 G 17467776.63 17467776.79 17467776.94 0.0134 0.0093

Uranus 43113-09-01 12:14 G 17468002.92 17468003.01 17468003.13 0.0134 0.0118

Jupiter 43115-07-06 10:48 G 17468675.75 17468675.95 17468676.15 0.0527 0.0005

Jupiter 43121-05-09 00:00 G 17470809.30 17470809.50 17470809.70 0.0498 0.0097

Saturn 43126-01-01 20:38 G 17472508.32 17472508.36 17472508.41 0.0304 0.0295

Saturn 43126-08-20 05:02 G 17472738.51 17472738.71 17472738.92 0.0304 0.0026

Jupiter 43127-03-11 03:07 G 17472941.52 17472941.63 17472941.74 0.0527 0.0445

Jupiter 43133-01-11 23:46 G 17475075.43 17475075.49 17475075.56 0.0498 0.0470

Saturn 43141-01-30 17:46 G 17478016.06 17478016.24 17478016.44 0.0258 0.0117

Saturn 43141-09-16 12:58 G 17478244.84 17478245.04 17478245.25 0.0259 0.0077

Jupiter 43145-05-11 08:38 G 17479577.82 17479577.86 17479577.90 0.0498 0.0486

Moon 43145-12-14 06:43 G 17479794.62 17479794.78 17479794.94 0.2646 0.0685

Earth 43145-12-14 09:22 G 17479794.74 17479794.89 17479795.05 0.2651 0.0654 *

Mars 43148-10-22 23:31 G 17480838.31 17480838.48 17480838.65 0.1893 0.0211

Uranus 43149-08-13 13:55 G 17481132.98 17481133.08 17481133.20 0.0145 0.0125

Uranus 43150-03-28 01:55 G 17481359.43 17481359.58 17481359.76 0.0145 0.0094

Uranus 43150-11-09 13:55 G 17481585.89 17481586.08 17481586.29 0.0145 0.0063

Jupiter 43151-03-14 02:53 G 17481710.45 17481710.62 17481710.80 0.0528 0.0259

Uranus 43151-06-24 01:55 G 17481812.37 17481812.58 17481812.80 0.0144 0.0031

Uranus 43152-02-05 13:55 G 17482038.87 17482039.08 17482039.30 0.0144 0.0003

Uranus 43152-09-19 02:10 G 17482265.37 17482265.59 17482265.80 0.0144 0.0032

Uranus 43153-05-03 13:41 G 17482491.89 17482492.07 17482492.28 0.0144 0.0063

Mars 43153-06-03 10:19 G 17482522.78 17482522.93 17482523.09 0.1644 0.0700

Uranus 43153-12-16 01:26 G 17482718.41 17482718.56 17482718.74 0.0144 0.0094

Uranus 43154-07-30 12:58 G 17482944.96 17482945.04 17482945.17 0.0144 0.0125

Saturn 43155-07-15 05:46 G 17483294.63 17483294.74 17483294.86 0.0304 0.0252

Saturn 43156-03-01 13:55 G 17483524.88 17483525.08 17483525.29 0.0304 0.0068

Jupiter 43157-01-14 09:07 G 17483843.68 17483843.88 17483844.08 0.0498 0.0114

Jupiter 43162-11-16 18:43 G 17485976.09 17485976.28 17485976.47 0.0527 0.0187

Jupiter 43168-09-19 10:05 G 17488109.74 17488109.92 17488110.09 0.0499 0.0258

Saturn 43170-08-12 22:05 G 17488802.22 17488802.42 17488802.62 0.0258 0.0087

Saturn 43171-03-29 17:17 G 17489031.03 17489031.22 17489031.42 0.0258 0.0107

Neptune 43173-09-03 03:07 G 17489919.56 17489919.63 17489919.73 0.0088 0.0080

Neptune 43174-04-16 15:50 G 17490145.04 17490145.16 17490145.31 0.0088 0.0068

Neptune 43174-11-28 04:48 G 17490370.54 17490370.70 17490370.88 0.0088 0.0055

Neptune 43175-07-11 17:31 G 17490596.05 17490596.23 17490596.43 0.0088 0.0043

Neptune 43176-02-22 06:00 G 17490821.56 17490821.75 17490821.98 0.0088 0.0031

Neptune 43176-10-04 19:12 G 17491047.09 17491047.30 17491047.52 0.0088 0.0018

Neptune 43177-05-18 07:55 G 17491272.61 17491272.83 17491273.06 0.0088 0.0006

Neptune 43177-12-29 20:38 G 17491498.15 17491498.36 17491498.59 0.0088 0.0008

Neptune 43178-08-12 09:22 G 17491723.68 17491723.89 17491724.11 0.0088 0.0020

Neptune 43179-03-25 22:19 G 17491949.22 17491949.43 17491949.63 0.0088 0.0032

Neptune 43179-11-06 10:48 G 17492174.78 17492174.95 17492175.16 0.0088 0.0045

Neptune 43180-06-19 00:00 G 17492400.34 17492400.50 17492400.67 0.0088 0.0057

Neptune 43181-01-30 12:29 G 17492625.90 17492626.02 17492626.17 0.0088 0.0070

Neptune 43181-09-13 01:26 G 17492851.50 17492851.56 17492851.65 0.0088 0.0082

Saturn 43185-01-24 16:05 G 17494081.02 17494081.17 17494081.33 0.0304 0.0202

Mars 43185-06-02 05:31 G 17494209.68 17494209.73 17494209.77 0.1636 0.1570

Saturn 43185-09-12 00:14 G 17494311.32 17494311.51 17494311.71 0.0304 0.0118

Jupiter 43186-11-19 16:34 G 17494745.14 17494745.19 17494745.25 0.0528 0.0505

Uranus 43191-10-04 19:41 G 17496525.23 17496525.32 17496525.45 0.0134 0.0115

Uranus 43192-05-18 01:26 G 17496751.40 17496751.56 17496751.72 0.0134 0.0090

Jupiter 43192-09-21 19:26 G 17496878.16 17496878.31 17496878.46 0.0498 0.0329

Uranus 43192-12-30 06:29 G 17496977.59 17496977.77 17496977.97 0.0134 0.0066

Uranus 43193-08-13 12:14 G 17497203.80 17497204.01 17497204.21 0.0134 0.0041

Uranus 43194-03-27 17:31 G 17497430.02 17497430.23 17497430.45 0.0134 0.0017

Uranus 43194-11-08 23:02 G 17497656.25 17497656.46 17497656.68 0.0134 0.0009

Uranus 43195-06-23 04:34 G 17497882.48 17497882.69 17497882.90 0.0134 0.0033

Uranus 43196-02-04 09:50 G 17498108.73 17498108.91 17498109.12 0.0134 0.0058

Uranus 43196-09-17 15:22 G 17498334.99 17498335.14 17498335.33 0.0134 0.0083

Uranus 43197-05-01 21:36 G 17498561.27 17498561.40 17498561.53 0.0134 0.0108

Uranus 43197-12-14 02:53 G 17498787.60 17498787.62 17498787.67 0.0134 0.0133

Jupiter 43198-07-25 07:55 G 17499010.63 17499010.83 17499011.03 0.0528 0.0060

Saturn 43199-07-09 07:55 G 17499359.79 17499359.83 17499359.88 0.0259 0.0252

Saturn 43200-02-23 03:22 G 17499588.43 17499588.64 17499588.85 0.0259 0.0059

Saturn 43200-10-08 22:34 G 17499817.27 17499817.44 17499817.63 0.0259 0.0136

Jupiter 43204-05-27 20:10 G 17501144.13 17501144.34 17501144.54 0.0498 0.0043

Pluto 43207-11-08 04:19 G 17502403.54 17502403.68 17502403.87 0.0063 0.0043

Pluto 43208-06-20 08:38 G 17502628.64 17502628.86 17502629.08 0.0063 0.0002

Pluto 43209-01-31 11:46 G 17502853.84 17502853.99 17502854.19 0.0064 0.0040

Jupiter 43210-03-30 00:00 G 17503276.36 17503276.50 17503276.64 0.0527 0.0383

Saturn 43214-08-07 02:24 G 17504867.43 17504867.60 17504867.79 0.0304 0.0155

Mars 43214-08-20 03:36 G 17504880.49 17504880.65 17504880.82 0.1889 0.0569

Saturn 43215-03-25 10:34 G 17505097.77 17505097.94 17505098.12 0.0304 0.0164

Jupiter 43216-01-31 19:41 G 17505410.21 17505410.32 17505410.43 0.0499 0.0419

Mars 43219-03-31 21:50 G 17506565.27 17506565.41 17506565.55 0.1646 0.1006

Saturn 43229-01-18 12:29 G 17510145.93 17510146.02 17510146.14 0.0258 0.0222

Saturn 43229-09-04 08:10 G 17510374.63 17510374.84 17510375.05 0.0258 0.0028

Saturn 43230-04-21 03:22 G 17510603.49 17510603.64 17510603.81 0.0259 0.0167

Uranus 43233-04-12 20:53 G 17511691.32 17511691.37 17511691.46 0.0145 0.0137

Uranus 43233-11-25 08:53 G 17511917.74 17511917.87 17511918.03 0.0145 0.0106

Jupiter 43234-04-01 21:50 G 17512045.25 17512045.41 17512045.58 0.0527 0.0308

Uranus 43234-07-09 20:53 G 17512144.20 17512144.37 17512144.57 0.0145 0.0075

Uranus 43235-02-21 08:53 G 17512370.67 17512370.87 17512371.09 0.0144 0.0044

Uranus 43235-10-05 21:22 G 17512597.17 17512597.39 17512597.60 0.0144 0.0012

Uranus 43236-05-19 09:07 G 17512823.67 17512823.88 17512824.10 0.0144 0.0020

Uranus 43236-12-31 20:53 G 17513050.18 17513050.37 17513050.58 0.0144 0.0051

Uranus 43237-08-15 08:53 G 17513276.70 17513276.87 17513277.05 0.0144 0.0082

Uranus 43238-03-29 20:38 G 17513503.24 17513503.36 17513503.50 0.0144 0.0113

Uranus 43238-11-11 08:24 G 17513729.85 17513729.85 17513729.88 0.0144 0.0144

Jupiter 43240-02-03 05:31 G 17514178.54 17514178.73 17514178.93 0.0498 0.0169

Saturn 43244-02-17 14:10 G 17515653.89 17515654.09 17515654.29 0.0304 0.0103

Saturn 43244-10-04 21:50 G 17515884.28 17515884.41 17515884.57 0.0304 0.0217

Jupiter 43245-12-05 13:12 G 17516310.86 17516311.05 17516311.25 0.0527 0.0139

Mars 43251-03-30 16:34 G 17518252.08 17518252.19 17518252.30 0.1639 0.1266

Jupiter 43251-10-09 06:14 G 17518444.58 17518444.76 17518444.95 0.0498 0.0203

Neptune 43255-03-09 09:36 G 17519691.88 17519691.90 17519691.92 0.0090 0.0089

Neptune 43255-10-20 22:48 G 17519917.34 17519917.45 17519917.57 0.0090 0.0076

Neptune 43256-06-02 12:00 G 17520142.85 17520143.00 17520143.16 0.0090 0.0063

Neptune 43257-01-14 01:26 G 17520368.38 17520368.56 17520368.74 0.0090 0.0050

Neptune 43257-08-27 14:38 G 17520593.92 17520594.11 17520594.31 0.0090 0.0037

Neptune 43258-04-10 04:05 G 17520819.46 17520819.67 17520819.88 0.0090 0.0024

Saturn 43258-07-31 18:14 G 17520932.13 17520932.26 17520932.41 0.0259 0.0192

Neptune 43258-11-21 17:17 G 17521045.01 17521045.22 17521045.44 0.0090 0.0011

Saturn 43259-03-17 13:41 G 17521160.86 17521161.07 17521161.29 0.0259 0.0004

Neptune 43259-07-05 06:43 G 17521270.56 17521270.78 17521271.00 0.0090 0.0003

Saturn 43259-11-01 09:22 G 17521389.75 17521389.89 17521390.03 0.0259 0.0196

Neptune 43260-02-15 19:55 G 17521496.11 17521496.33 17521496.54 0.0089 0.0016

Neptune 43260-09-28 09:07 G 17521721.67 17521721.88 17521722.09 0.0089 0.0029

Neptune 43261-05-11 22:34 G 17521947.25 17521947.44 17521947.63 0.0089 0.0042

Neptune 43261-12-23 11:46 G 17522172.82 17522172.99 17522173.16 0.0089 0.0055

Neptune 43262-08-06 00:43 G 17522398.40 17522398.53 17522398.68 0.0089 0.0068

Neptune 43263-03-19 13:55 G 17522624.00 17522624.08 17522624.18 0.0089 0.0081

Saturn 43273-08-30 01:41 G 17526440.36 17526440.57 17526440.78 0.0304 0.0052

Saturn 43274-04-17 09:36 G 17526670.80 17526670.90 17526671.00 0.0304 0.0266

Uranus 43275-06-04 04:48 G 17527083.64 17527083.70 17527083.79 0.0134 0.0125

Moon 43275-06-15 15:36 G 17527095.12 17527095.15 17527095.18 0.2685 0.2619

Jupiter 43275-10-11 14:10 G 17527212.96 17527213.09 17527213.23 0.0498 0.0374

Uranus 43276-01-16 10:34 G 17527309.80 17527309.94 17527310.08 0.0134 0.0100

Uranus 43276-08-29 15:36 G 17527535.98 17527536.15 17527536.34 0.0134 0.0076

Uranus 43277-04-12 21:22 G 17527762.19 17527762.39 17527762.59 0.0134 0.0051

Uranus 43277-11-25 02:38 G 17527988.40 17527988.61 17527988.83 0.0134 0.0027

Uranus 43278-07-09 08:10 G 17528214.63 17528214.84 17528215.06 0.0134 0.0003

Uranus 43279-02-20 13:41 G 17528440.86 17528441.07 17528441.29 0.0134 0.0023

Uranus 43279-10-04 19:12 G 17528667.10 17528667.30 17528667.51 0.0134 0.0048

Uranus 43280-05-18 00:43 G 17528893.36 17528893.53 17528893.72 0.0134 0.0073

Mars 43280-06-16 06:43 G 17528922.67 17528922.78 17528922.90 0.1885 0.1393

Uranus 43280-12-30 06:14 G 17529119.63 17529119.76 17529119.92 0.0134 0.0098

Jupiter 43281-08-13 04:19 G 17529345.48 17529345.68 17529345.88 0.0527 0.0117

Uranus 43281-08-13 12:14 G 17529345.93 17529346.01 17529346.10 0.0134 0.0123

Moon 43283-06-13 10:05 G 17530014.77 17530014.92 17530015.07 0.2688 0.0230

Earth 43283-06-13 11:17 G 17530014.81 17530014.97 17530015.12 0.2681 0.0481 *

Mars 43285-01-26 09:22 G 17530607.78 17530607.89 17530607.99 0.1649 0.1323

Jupiter 43287-06-16 14:53 G 17531478.91 17531479.12 17531479.32 0.0498 0.0011

Saturn 43288-02-10 23:31 G 17531718.32 17531718.48 17531718.65 0.0258 0.0160

Saturn 43288-09-26 18:58 G 17531947.08 17531947.29 17531947.50 0.0258 0.0034

Saturn 43289-05-13 14:24 G 17532176.01 17532176.10 17532176.21 0.0259 0.0228

Jupiter 43293-04-17 18:43 G 17533611.12 17533611.28 17533611.44 0.0527 0.0334

Pluto 43297-12-24 05:17 G 17535322.51 17535322.72 17535322.94 0.0080 0.0016

Pluto 43298-08-06 15:07 G 17535548.04 17535548.13 17535548.28 0.0080 0.0067

Jupiter 43299-02-19 15:22 G 17535745.01 17535745.14 17535745.28 0.0499 0.0368

Saturn 43303-03-13 13:12 G 17537226.84 17537227.05 17537227.26 0.0304 0.0006

Mars 43317-01-26 04:34 G 17542294.55 17542294.69 17542294.83 0.1641 0.0980

Jupiter 43317-04-21 16:34 G 17542380.04 17542380.19 17542380.34 0.0528 0.0356

Uranus 43317-07-26 15:07 G 17542476.02 17542476.13 17542476.26 0.0145 0.0119

Saturn 43317-08-24 05:17 G 17542504.54 17542504.72 17542504.91 0.0259 0.0130

Uranus 43318-03-10 03:07 G 17542702.47 17542702.63 17542702.82 0.0145 0.0088

Saturn 43318-04-10 00:43 G 17542733.32 17542733.53 17542733.73 0.0259 0.0064

Uranus 43318-10-22 15:36 G 17542928.95 17542929.15 17542929.35 0.0145 0.0056

Saturn 43318-11-24 20:10 G 17542962.33 17542962.34 17542962.36 0.0259 0.0259

Uranus 43319-06-06 03:36 G 17543155.43 17543155.65 17543155.86 0.0144 0.0025

Uranus 43320-01-18 15:36 G 17543381.93 17543382.15 17543382.37 0.0144 0.0007

Uranus 43320-09-01 03:36 G 17543608.44 17543608.65 17543608.86 0.0144 0.0038

Uranus 43321-04-15 15:22 G 17543834.96 17543835.14 17543835.34 0.0144 0.0070

Uranus 43321-11-28 03:07 G 17544061.49 17544061.63 17544061.80 0.0144 0.0101

Uranus 43322-07-12 15:22 G 17544288.06 17544288.14 17544288.23 0.0144 0.0131

Jupiter 43323-02-23 00:58 G 17544513.36 17544513.54 17544513.73 0.0498 0.0218

Jupiter 43328-12-25 08:38 G 17546645.66 17546645.86 17546646.06 0.0527 0.0087

Saturn 43332-02-05 16:19 G 17547783.09 17547783.18 17547783.29 0.0304 0.0267

Saturn 43332-09-23 00:43 G 17548013.33 17548013.53 17548013.74 0.0304 0.0053

Jupiter 43334-10-29 00:14 G 17548779.32 17548779.51 17548779.70 0.0498 0.0162

Neptune 43337-12-06 14:38 G 17549914.06 17549914.11 17549914.20 0.0088 0.0083

Neptune 43338-07-20 03:50 G 17550139.53 17550139.66 17550139.79 0.0088 0.0070

Neptune 43339-03-02 16:19 G 17550365.03 17550365.18 17550365.36 0.0088 0.0058

Neptune 43339-10-14 05:02 G 17550590.54 17550590.71 17550590.92 0.0088 0.0046

Neptune 43340-05-26 18:14 G 17550816.06 17550816.26 17550816.47 0.0088 0.0033

Jupiter 43340-08-30 00:58 G 17550911.53 17550911.54 17550911.55 0.0527 0.0525

Neptune 43341-01-07 06:43 G 17551041.58 17551041.78 17551042.01 0.0088 0.0021

Neptune 43341-08-20 19:26 G 17551267.10 17551267.31 17551267.54 0.0088 0.0009

Neptune 43342-04-03 08:24 G 17551492.63 17551492.85 17551493.07 0.0088 0.0004

Neptune 43342-11-14 21:07 G 17551718.17 17551718.38 17551718.60 0.0088 0.0017

Neptune 43343-06-28 09:50 G 17551943.71 17551943.91 17551944.13 0.0088 0.0029

Neptune 43344-02-08 22:48 G 17552169.26 17552169.45 17552169.64 0.0088 0.0041

Neptune 43344-09-21 11:17 G 17552394.81 17552394.97 17552395.16 0.0088 0.0054

Neptune 43345-05-05 00:14 G 17552620.37 17552620.51 17552620.66 0.0088 0.0066

Neptune 43345-12-16 12:43 G 17552845.96 17552846.03 17552846.15 0.0088 0.0079

Saturn 43347-03-06 10:34 G 17553290.74 17553290.94 17553291.13 0.0258 0.0098

Saturn 43347-10-21 05:46 G 17553519.55 17553519.74 17553519.95 0.0258 0.0097

Mars 43350-11-24 21:07 G 17554650.35 17554650.38 17554650.41 0.1651 0.1625

Jupiter 43358-10-31 10:05 G 17557547.81 17557547.92 17557548.02 0.0498 0.0423

Uranus 43359-09-16 18:43 G 17557868.18 17557868.28 17557868.42 0.0134 0.0111

Uranus 43360-04-30 00:29 G 17558094.36 17558094.52 17558094.69 0.0134 0.0086

Uranus 43360-12-12 05:46 G 17558320.56 17558320.74 17558320.94 0.0134 0.0062

Uranus 43361-07-26 11:17 G 17558546.76 17558546.97 17558547.18 0.0134 0.0037

Saturn 43361-08-18 04:05 G 17558569.52 17558569.67 17558569.82 0.0304 0.0217

Uranus 43362-03-09 16:48 G 17558772.99 17558773.20 17558773.42 0.0134 0.0012

Saturn 43362-04-05 12:14 G 17558799.81 17558800.01 17558800.21 0.0304 0.0103

Uranus 43362-10-21 22:19 G 17558999.22 17558999.43 17558999.65 0.0134 0.0013

Uranus 43363-06-05 03:50 G 17559225.45 17559225.66 17559225.87 0.0134 0.0038

Uranus 43364-01-17 09:07 G 17559451.70 17559451.88 17559452.09 0.0134 0.0063

Uranus 43364-08-30 14:53 G 17559677.96 17559678.12 17559678.29 0.0134 0.0088

Jupiter 43364-09-01 22:05 G 17559680.23 17559680.42 17559680.62 0.0527 0.0160

Uranus 43365-04-13 20:38 G 17559904.25 17559904.36 17559904.49 0.0134 0.0112

Jupiter 43370-07-06 11:02 G 17561813.76 17561813.96 17561814.16 0.0498 0.0056

Jupiter 43376-05-07 12:43 G 17563945.87 17563946.03 17563946.20 0.0527 0.0289

Saturn 43376-09-15 16:05 G 17564076.96 17564077.17 17564077.37 0.0259 0.0068

Saturn 43377-05-02 11:17 G 17564305.79 17564305.97 17564306.16 0.0259 0.0126

Jupiter 43382-03-11 11:46 G 17566079.83 17566079.99 17566080.15 0.0498 0.0315

Mars 43382-11-23 16:05 G 17566337.02 17566337.17 17566337.33 0.1643 0.0681

Earth 43388-12-15 11:02 G 17568550.80 17568550.96 17568551.11 0.2650 0.0641

Moon 43388-12-15 11:17 G 17568550.83 17568550.97 17568551.12 0.2657 0.0459 *

Saturn 43391-02-28 14:53 G 17569355.94 17569356.12 17569356.29 0.0304 0.0165

Saturn 43391-10-16 23:02 G 17569586.28 17569586.46 17569586.64 0.0304 0.0154

Moon 43396-12-13 06:58 G 17571470.70 17571470.79 17571470.87 0.2654 0.2170

Jupiter 43400-05-11 14:10 G 17572714.96 17572715.09 17572715.21 0.0527 0.0417

Uranus 43401-03-26 19:26 G 17573034.24 17573034.31 17573034.41 0.0145 0.0133

Uranus 43401-11-08 07:55 G 17573260.68 17573260.83 17573260.98 0.0145 0.0101

Uranus 43402-06-22 19:55 G 17573487.14 17573487.33 17573487.52 0.0145 0.0070

Uranus 43403-02-04 07:55 G 17573713.62 17573713.83 17573714.05 0.0144 0.0039

Uranus 43403-09-18 20:10 G 17573940.13 17573940.34 17573940.56 0.0144 0.0007

Uranus 43404-05-02 08:24 G 17574166.63 17574166.85 17574167.06 0.0144 0.0025

Uranus 43404-12-14 20:10 G 17574393.15 17574393.34 17574393.55 0.0144 0.0056

Uranus 43405-07-29 07:55 G 17574619.67 17574619.83 17574620.02 0.0144 0.0088

Saturn 43405-08-13 01:12 G 17574634.47 17574634.55 17574634.66 0.0258 0.0229

Uranus 43406-03-12 19:55 G 17574846.22 17574846.33 17574846.46 0.0144 0.0118

Jupiter 43406-03-14 19:12 G 17574848.13 17574848.30 17574848.48 0.0498 0.0258

Saturn 43406-03-29 20:38 G 17574863.15 17574863.36 17574863.57 0.0258 0.0036

Saturn 43406-11-13 15:50 G 17575092.00 17575092.16 17575092.34 0.0258 0.0158

Jupiter 43412-01-15 04:34 G 17576980.49 17576980.69 17576980.89 0.0527 0.0032

Jupiter 43417-11-17 20:24 G 17579114.15 17579114.35 17579114.55 0.0499 0.0109

Neptune 43420-01-24 10:19 G 17579911.83 17579911.93 17579912.04 0.0090 0.0079

Neptune 43420-09-05 23:31 G 17580137.34 17580137.48 17580137.63 0.0090 0.0066

Saturn 43420-09-11 00:29 G 17580142.33 17580142.52 17580142.72 0.0305 0.0120

Neptune 43421-04-19 12:58 G 17580362.87 17580363.04 17580363.22 0.0090 0.0053

Saturn 43421-04-29 08:53 G 17580372.72 17580372.87 17580373.03 0.0304 0.0201

Neptune 43421-12-01 02:10 G 17580588.40 17580588.59 17580588.79 0.0090 0.0040

Neptune 43422-07-14 15:36 G 17580813.94 17580814.15 17580814.36 0.0090 0.0027

Neptune 43423-02-25 04:48 G 17581039.48 17581039.70 17581039.92 0.0090 0.0014

Jupiter 43423-09-19 19:41 G 17581246.24 17581246.32 17581246.41 0.0527 0.0476

Neptune 43423-10-08 18:00 G 17581265.04 17581265.25 17581265.47 0.0089 0.0002

Neptune 43424-05-21 07:26 G 17581490.60 17581490.81 17581491.03 0.0089 0.0013

Neptune 43425-01-01 20:38 G 17581716.16 17581716.36 17581716.58 0.0089 0.0026

Neptune 43425-08-15 09:50 G 17581941.72 17581941.91 17581942.12 0.0089 0.0039

Neptune 43426-03-28 23:02 G 17582167.29 17582167.46 17582167.65 0.0089 0.0052

Neptune 43426-11-09 12:14 G 17582392.88 17582393.01 17582393.18 0.0089 0.0065

Neptune 43427-06-23 01:26 G 17582618.47 17582618.56 17582618.69 0.0089 0.0078

Jupiter 43429-07-23 21:36 G 17583380.35 17583380.40 17583380.47 0.0499 0.0476

Saturn 43435-02-23 06:14 G 17585420.64 17585420.76 17585420.90 0.0258 0.0201

Saturn 43435-10-10 01:41 G 17585649.35 17585649.57 17585649.78 0.0258 0.0008

Saturn 43436-05-25 20:38 G 17585878.22 17585878.36 17585878.52 0.0259 0.0186

Jupiter 43441-11-20 06:43 G 17587882.73 17587882.78 17587882.84 0.0498 0.0478

Uranus 43443-05-18 04:05 G 17588426.59 17588426.67 17588426.78 0.0134 0.0120

Uranus 43443-12-30 09:22 G 17588652.75 17588652.89 17588653.05 0.0134 0.0096

Mars 43444-02-10 11:17 G 17588694.85 17588694.97 17588695.09 0.1890 0.1324

Uranus 43444-08-12 15:07 G 17588878.94 17588879.13 17588879.31 0.0134 0.0071

Uranus 43445-03-26 20:24 G 17589105.15 17589105.35 17589105.56 0.0134 0.0047

Uranus 43445-11-08 01:55 G 17589331.37 17589331.58 17589331.80 0.0134 0.0022

Uranus 43446-06-22 07:26 G 17589557.59 17589557.81 17589558.02 0.0134 0.0003

Uranus 43447-02-03 12:43 G 17589783.82 17589784.03 17589784.25 0.0134 0.0028

Uranus 43447-09-17 18:14 G 17590010.07 17590010.26 17590010.47 0.0134 0.0053

Jupiter 43447-09-22 18:58 G 17590015.11 17590015.29 17590015.48 0.0528 0.0218

Uranus 43448-04-30 23:46 G 17590236.33 17590236.49 17590236.68 0.0134 0.0078

Mars 43448-09-21 03:36 G 17590379.48 17590379.65 17590379.82 0.1646 0.0376

Uranus 43448-12-13 05:31 G 17590462.60 17590462.73 17590462.88 0.0134 0.0102

Uranus 43449-07-27 10:48 G 17590688.90 17590688.95 17590689.04 0.0134 0.0127

Saturn 43450-03-24 10:19 G 17590928.72 17590928.93 17590929.13 0.0304 0.0070

Saturn 43450-11-09 18:14 G 17591159.16 17591159.26 17591159.39 0.0304 0.0250

Jupiter 43453-07-26 05:31 G 17592148.53 17592148.73 17592148.93 0.0498 0.0098

Pluto 43456-05-25 08:24 G 17593182.68 17593182.85 17593183.06 0.0063 0.0033

Pluto 43457-01-05 12:14 G 17593407.80 17593408.01 17593408.24 0.0063 0.0009

Pluto 43457-08-18 15:50 G 17593633.03 17593633.16 17593633.31 0.0064 0.0049

Jupiter 43459-05-28 12:14 G 17594280.83 17594281.01 17594281.20 0.0527 0.0217

Saturn 43464-09-04 10:34 G 17596206.78 17596206.94 17596207.10 0.0258 0.0170

Jupiter 43465-03-31 06:14 G 17596414.59 17596414.76 17596414.93 0.0499 0.0272

Saturn 43465-04-21 05:31 G 17596435.52 17596435.73 17596435.95 0.0258 0.0023

Saturn 43465-12-06 00:43 G 17596664.42 17596664.53 17596664.65 0.0258 0.0216

Saturn 43479-10-04 18:29 G 17601715.06 17601715.27 17601715.48 0.0305 0.0028

Saturn 43480-05-22 02:38 G 17601945.57 17601945.61 17601945.68 0.0304 0.0292

Jupiter 43483-05-31 10:05 G 17603049.84 17603049.92 17603050.01 0.0527 0.0472

Uranus 43485-07-08 10:48 G 17603818.84 17603818.95 17603819.09 0.0145 0.0116

Uranus 43486-02-19 23:02 G 17604045.29 17604045.46 17604045.65 0.0145 0.0085

Uranus 43486-10-04 11:31 G 17604271.78 17604271.98 17604272.18 0.0145 0.0053

Uranus 43487-05-18 23:31 G 17604498.27 17604498.48 17604498.70 0.0144 0.0022

Uranus 43487-12-31 11:46 G 17604724.77 17604724.99 17604725.21 0.0144 0.0010

Uranus 43488-08-13 23:46 G 17604951.28 17604951.49 17604951.70 0.0144 0.0042

Uranus 43489-03-28 11:31 G 17605177.81 17605177.98 17605178.18 0.0144 0.0073

Jupiter 43489-04-02 17:46 G 17605183.08 17605183.24 17605183.40 0.0498 0.0321

Uranus 43489-11-09 23:31 G 17605404.35 17605404.48 17605404.64 0.0144 0.0104

Uranus 43490-06-24 11:17 G 17605630.92 17605630.97 17605631.06 0.0144 0.0135

Saturn 43494-03-17 14:24 G 17606992.93 17606993.10 17606993.28 0.0258 0.0143

Saturn 43494-11-01 09:36 G 17607221.69 17607221.90 17607222.11 0.0258 0.0050

Jupiter 43495-02-03 00:58 G 17607315.34 17607315.54 17607315.74 0.0527 0.0025

Saturn 43495-06-18 04:34 G 17607450.63 17607450.69 17607450.77 0.0259 0.0243

Jupiter 43500-12-07 18:58 G 17609449.08 17609449.29 17609449.49 0.0498 0.0048

Neptune 43502-03-12 02:38 G 17609908.57 17609908.61 17609908.68 0.0088 0.0085

Neptune 43502-10-23 15:22 G 17610134.04 17610134.14 17610134.29 0.0088 0.0073

Neptune 43503-06-06 04:05 G 17610359.54 17610359.67 17610359.86 0.0088 0.0061

Neptune 43504-01-17 17:17 G 17610585.04 17610585.22 17610585.41 0.0088 0.0048

Neptune 43504-08-30 05:46 G 17610810.55 17610810.74 17610810.96 0.0088 0.0036

Neptune 43505-04-12 18:43 G 17611036.08 17611036.28 17611036.50 0.0088 0.0024

Neptune 43505-11-24 07:41 G 17611261.60 17611261.82 17611262.04 0.0088 0.0011

Neptune 43506-07-07 20:24 G 17611487.13 17611487.35 17611487.58 0.0088 0.0002

Jupiter 43506-10-09 18:00 G 17611581.13 17611581.25 17611581.39 0.0527 0.0411

Neptune 43507-02-18 09:07 G 17611712.67 17611712.88 17611713.10 0.0088 0.0014

Neptune 43507-10-01 21:50 G 17611938.21 17611938.41 17611938.63 0.0088 0.0026

Neptune 43508-05-14 10:34 G 17612163.75 17612163.94 17612164.15 0.0088 0.0038

Saturn 43508-08-29 17:02 G 17612271.20 17612271.21 17612271.23 0.0304 0.0303

Neptune 43508-12-25 23:02 G 17612389.30 17612389.46 17612389.66 0.0088 0.0051

Saturn 43509-04-17 01:55 G 17612501.37 17612501.58 17612501.79 0.0304 0.0017

Neptune 43509-08-08 11:46 G 17612614.86 17612614.99 17612615.16 0.0088 0.0063

Mars 43509-12-08 14:53 G 17612736.96 17612737.12 17612737.29 0.1886 0.0519

Neptune 43510-03-22 00:43 G 17612840.43 17612840.53 17612840.65 0.0088 0.0075

Neptune 43510-11-02 13:55 G 17613066.06 17613066.08 17613066.10 0.0088 0.0087

Jupiter 43512-08-12 17:02 G 17613715.11 17613715.21 17613715.32 0.0499 0.0428

Mars 43514-07-20 15:22 G 17614421.96 17614422.14 17614422.31 0.1648 0.0085

Saturn 43523-09-28 18:00 G 17617779.06 17617779.25 17617779.44 0.0258 0.0114

Saturn 43524-05-14 12:43 G 17618007.83 17618008.03 17618008.24 0.0258 0.0078

Earth 43526-06-16 11:46 G 17618770.83 17618770.99 17618771.14 0.2682 0.0602

Moon 43526-06-16 14:24 G 17618770.94 17618771.10 17618771.26 0.2675 0.0613 *

Uranus 43527-01-16 12:14 G 17618984.98 17618985.01 17618985.08 0.0134 0.0130

Uranus 43527-08-30 17:46 G 17619211.12 17619211.24 17619211.39 0.0134 0.0106

Uranus 43528-04-12 23:31 G 17619437.31 17619437.48 17619437.66 0.0134 0.0081

Uranus 43528-11-25 04:48 G 17619663.51 17619663.70 17619663.91 0.0134 0.0057

Uranus 43529-07-09 10:19 G 17619889.73 17619889.93 17619890.15 0.0134 0.0032

Uranus 43530-02-20 15:50 G 17620115.95 17620116.16 17620116.38 0.0134 0.0008

Uranus 43530-10-04 21:36 G 17620342.18 17620342.40 17620342.61 0.0134 0.0018

Jupiter 43530-10-12 18:58 G 17620350.12 17620350.29 17620350.46 0.0527 0.0292

Uranus 43531-05-19 02:53 G 17620568.42 17620568.62 17620568.83 0.0134 0.0043

Uranus 43531-12-31 08:24 G 17620794.67 17620794.85 17620795.04 0.0134 0.0068

Uranus 43532-08-13 14:10 G 17621020.93 17621021.09 17621021.25 0.0134 0.0092

Uranus 43533-03-27 19:26 G 17621247.22 17621247.31 17621247.43 0.0134 0.0118

Jupiter 43536-08-15 04:19 G 17622483.48 17622483.68 17622483.87 0.0499 0.0162

Saturn 43538-03-11 23:17 G 17623057.38 17623057.47 17623057.58 0.0305 0.0267

Saturn 43538-10-28 08:10 G 17623287.63 17623287.84 17623288.05 0.0305 0.0054

Jupiter 43542-06-17 10:34 G 17624615.74 17624615.94 17624616.13 0.0527 0.0151

Pluto 43546-07-12 08:38 G 17626101.65 17626101.86 17626102.09 0.0080 0.0006

Pluto 43547-02-22 18:58 G 17626327.25 17626327.29 17626327.35 0.0080 0.0077

Jupiter 43548-04-20 06:14 G 17626749.58 17626749.76 17626749.95 0.0499 0.0202

Saturn 43553-04-09 20:38 G 17628565.16 17628565.36 17628565.56 0.0258 0.0089

Saturn 43553-11-24 15:36 G 17628793.95 17628794.15 17628794.34 0.0258 0.0103

Saturn 43567-09-22 05:17 G 17633843.58 17633843.72 17633843.86 0.0305 0.0226

Saturn 43568-05-09 14:10 G 17634073.89 17634074.09 17634074.29 0.0304 0.0096

Uranus 43569-03-08 14:38 G 17634377.03 17634377.11 17634377.22 0.0145 0.0130

Uranus 43569-10-21 02:53 G 17634603.47 17634603.62 17634603.79 0.0145 0.0098

Uranus 43570-06-04 15:07 G 17634829.94 17634830.13 17634830.33 0.0145 0.0067

Uranus 43571-01-17 03:22 G 17635056.43 17635056.64 17635056.85 0.0144 0.0035

Uranus 43571-08-31 15:36 G 17635282.93 17635283.15 17635283.37 0.0144 0.0004

Uranus 43572-04-14 03:36 G 17635509.44 17635509.65 17635509.87 0.0144 0.0028

Jupiter 43572-04-22 14:24 G 17635517.97 17635518.10 17635518.24 0.0498 0.0374

Uranus 43572-11-26 15:22 G 17635735.95 17635736.14 17635736.35 0.0144 0.0060

Uranus 43573-07-11 03:22 G 17635962.48 17635962.64 17635962.82 0.0144 0.0090

Uranus 43574-02-22 15:07 G 17636189.03 17636189.13 17636189.26 0.0144 0.0121

Mars 43575-10-05 18:29 G 17636779.09 17636779.27 17636779.44 0.1882 0.0292

Jupiter 43578-02-23 04:34 G 17637650.49 17637650.69 17637650.88 0.0527 0.0117

Mars 43580-05-17 02:38 G 17638464.43 17638464.61 17638464.78 0.1651 0.0244

Saturn 43582-03-06 04:19 G 17639122.66 17639122.68 17639122.72 0.0258 0.0254

Saturn 43582-10-20 23:17 G 17639351.26 17639351.47 17639351.68 0.0257 0.0063

Saturn 43583-06-06 18:00 G 17639580.07 17639580.25 17639580.44 0.0258 0.0130

Jupiter 43583-12-27 15:50 G 17639783.95 17639784.16 17639784.36 0.0498 0.0012

Neptune 43584-04-27 21:50 G 17639906.34 17639906.41 17639906.51 0.0090 0.0082

Neptune 43584-12-09 11:02 G 17640131.84 17640131.96 17640132.11 0.0090 0.0069

Neptune 43585-07-23 00:29 G 17640357.35 17640357.52 17640357.69 0.0090 0.0056

Neptune 43586-03-05 13:41 G 17640582.88 17640583.07 17640583.27 0.0090 0.0043

Neptune 43586-10-17 02:38 G 17640808.42 17640808.61 17640808.83 0.0090 0.0031

Neptune 43587-05-30 16:05 G 17641033.97 17641034.17 17641034.40 0.0090 0.0018

Neptune 43588-01-11 05:31 G 17641259.51 17641259.73 17641259.95 0.0090 0.0004

Neptune 43588-08-23 18:43 G 17641485.07 17641485.28 17641485.50 0.0090 0.0009

Neptune 43589-04-06 08:10 G 17641710.63 17641710.84 17641711.05 0.0089 0.0022

Jupiter 43589-10-28 20:24 G 17641916.19 17641916.35 17641916.51 0.0527 0.0323

Neptune 43589-11-17 21:22 G 17641936.19 17641936.39 17641936.59 0.0089 0.0035

Neptune 43590-07-01 10:34 G 17642161.76 17642161.94 17642162.13 0.0089 0.0048

Neptune 43591-02-11 23:31 G 17642387.34 17642387.48 17642387.66 0.0089 0.0061

Neptune 43591-09-25 12:43 G 17642612.93 17642613.03 17642613.17 0.0089 0.0074

Neptune 43592-05-08 01:55 G 17642838.55 17642838.58 17642838.66 0.0089 0.0087

Jupiter 43595-09-01 17:17 G 17644050.08 17644050.22 17644050.37 0.0499 0.0357

Saturn 43597-04-03 09:07 G 17644629.72 17644629.88 17644630.05 0.0305 0.0195

Saturn 43597-11-19 18:00 G 17644860.06 17644860.25 17644860.44 0.0305 0.0128

Uranus 43611-04-30 02:38 G 17649769.52 17649769.61 17649769.74 0.0134 0.0115

Saturn 43611-09-16 06:14 G 17649908.67 17649908.76 17649908.86 0.0258 0.0231

Uranus 43611-12-12 08:10 G 17649995.69 17649995.84 17649996.01 0.0134 0.0091

Saturn 43612-05-02 00:58 G 17650137.33 17650137.54 17650137.75 0.0258 0.0039

Uranus 43612-07-25 13:41 G 17650221.89 17650222.07 17650222.27 0.0134 0.0066

Saturn 43612-12-16 19:26 G 17650366.15 17650366.31 17650366.49 0.0258 0.0153

Uranus 43613-03-08 19:26 G 17650448.10 17650448.31 17650448.52 0.0134 0.0041

Uranus 43613-10-21 00:58 G 17650674.32 17650674.54 17650674.76 0.0134 0.0016

Jupiter 43613-10-31 18:43 G 17650685.14 17650685.28 17650685.43 0.0527 0.0366

Uranus 43614-06-04 06:29 G 17650900.55 17650900.77 17650900.99 0.0134 0.0009

Uranus 43615-01-16 11:46 G 17651126.79 17651126.99 17651127.21 0.0134 0.0034

Uranus 43615-08-30 17:17 G 17651353.03 17651353.22 17651353.42 0.0134 0.0058

Uranus 43616-04-12 22:48 G 17651579.30 17651579.45 17651579.63 0.0134 0.0083

Uranus 43616-11-25 04:19 G 17651805.57 17651805.68 17651805.83 0.0134 0.0108

Uranus 43617-07-09 09:50 G 17652031.90 17652031.91 17652031.96 0.0134 0.0133

Jupiter 43619-09-04 05:46 G 17652818.56 17652818.74 17652818.92 0.0498 0.0238

Jupiter 43625-07-06 12:29 G 17654950.82 17654951.02 17654951.22 0.0527 0.0067

Saturn 43626-10-14 13:12 G 17655415.88 17655416.05 17655416.24 0.0305 0.0158

Saturn 43627-06-01 22:19 G 17655646.25 17655646.43 17655646.61 0.0305 0.0165

Jupiter 43631-05-10 04:19 G 17657084.48 17657084.68 17657084.88 0.0499 0.0141

Earth 43631-12-18 12:43 G 17657306.87 17657307.03 17657307.18 0.2650 0.0645

Moon 43631-12-18 14:24 G 17657306.94 17657307.10 17657307.26 0.2644 0.0835 *

Jupiter 43637-03-11 06:43 G 17659216.71 17659216.78 17659216.85 0.0527 0.0493

Saturn 43641-03-28 07:55 G 17660694.71 17660694.83 17660694.96 0.0257 0.0206

Mars 43641-08-01 22:48 G 17660821.31 17660821.45 17660821.60 0.1878 0.1045

Saturn 43641-11-12 02:38 G 17660923.40 17660923.61 17660923.83 0.0257 0.0016

Saturn 43642-06-28 21:22 G 17661152.24 17661152.39 17661152.54 0.0258 0.0177

Mars 43646-03-14 13:55 G 17662506.92 17662507.08 17662507.24 0.1654 0.0555

Uranus 43652-11-05 20:24 G 17664935.32 17664935.35 17664935.40 0.0145 0.0142

Uranus 43653-06-20 08:38 G 17665161.73 17665161.86 17665162.00 0.0145 0.0111

Uranus 43654-02-01 20:38 G 17665388.19 17665388.36 17665388.55 0.0145 0.0080

Uranus 43654-09-16 08:53 G 17665614.67 17665614.87 17665615.08 0.0144 0.0048

Uranus 43655-04-30 21:07 G 17665841.16 17665841.38 17665841.60 0.0144 0.0017

Jupiter 43655-05-12 16:05 G 17665853.09 17665853.17 17665853.26 0.0498 0.0451

Uranus 43655-12-13 09:07 G 17666067.66 17666067.88 17666068.10 0.0144 0.0015

Saturn 43656-04-25 16:05 G 17666201.98 17666202.17 17666202.36 0.0305 0.0129

Uranus 43656-07-26 20:53 G 17666294.17 17666294.37 17666294.59 0.0144 0.0047

Saturn 43656-12-12 00:43 G 17666432.38 17666432.53 17666432.70 0.0305 0.0194

Uranus 43657-03-10 09:07 G 17666520.69 17666520.88 17666521.06 0.0144 0.0078

Uranus 43657-10-22 21:07 G 17666747.24 17666747.38 17666747.52 0.0144 0.0109

Uranus 43658-06-06 08:38 G 17666973.82 17666973.86 17666973.92 0.0144 0.0139

Jupiter 43661-03-14 06:14 G 17667985.58 17667985.76 17667985.95 0.0527 0.0201

Neptune 43666-06-13 14:10 G 17669903.09 17669903.09 17669903.13 0.0088 0.0088

Jupiter 43667-01-15 18:14 G 17670119.06 17670119.26 17670119.47 0.0499 0.0091

Neptune 43667-01-25 03:22 G 17670128.53 17670128.64 17670128.75 0.0088 0.0075

Neptune 43667-09-07 15:50 G 17670354.02 17670354.16 17670354.33 0.0088 0.0063

Neptune 43668-04-20 04:48 G 17670579.53 17670579.70 17670579.89 0.0088 0.0051

Neptune 43668-12-01 17:31 G 17670805.05 17670805.23 17670805.44 0.0088 0.0039

Neptune 43669-07-15 06:43 G 17671030.57 17671030.78 17671030.99 0.0088 0.0026

Neptune 43670-02-25 19:26 G 17671256.09 17671256.31 17671256.53 0.0088 0.0014

Saturn 43670-10-08 08:53 G 17671480.73 17671480.87 17671481.03 0.0257 0.0185

Neptune 43670-10-09 08:24 G 17671481.63 17671481.85 17671482.07 0.0088 0.0002

Neptune 43671-05-22 20:53 G 17671707.16 17671707.37 17671707.60 0.0088 0.0011

Saturn 43671-05-25 03:36 G 17671709.44 17671709.65 17671709.86 0.0257 0.0007

Neptune 43672-01-03 09:36 G 17671932.70 17671932.90 17671933.12 0.0088 0.0023

Saturn 43672-01-08 22:05 G 17671938.29 17671938.42 17671938.56 0.0258 0.0199

Neptune 43672-08-15 22:19 G 17672158.24 17672158.43 17672158.64 0.0088 0.0035

Jupiter 43672-11-16 21:50 G 17672251.23 17672251.41 17672251.59 0.0527 0.0242

Neptune 43673-03-29 11:17 G 17672383.79 17672383.97 17672384.16 0.0088 0.0047

Neptune 43673-11-09 23:46 G 17672609.35 17672609.49 17672609.67 0.0088 0.0060

Neptune 43674-06-23 12:29 G 17672834.92 17672835.02 17672835.17 0.0088 0.0072

Neptune 43675-02-04 01:12 G 17673060.51 17673060.55 17673060.64 0.0088 0.0084

Jupiter 43678-09-20 20:10 G 17674385.17 17674385.34 17674385.51 0.0499 0.0274

Saturn 43685-11-05 18:58 G 17676988.09 17676988.29 17676988.49 0.0305 0.0095

Saturn 43686-06-24 03:36 G 17677218.52 17677218.65 17677218.79 0.0304 0.0227

Uranus 43694-12-28 11:02 G 17680327.91 17680327.96 17680328.06 0.0134 0.0125

Uranus 43695-08-11 17:02 G 17680554.07 17680554.21 17680554.35 0.0134 0.0100

Uranus 43696-03-24 22:19 G 17680780.27 17680780.43 17680780.62 0.0134 0.0076

Uranus 43696-11-06 04:05 G 17681006.47 17681006.67 17681006.87 0.0134 0.0051

Jupiter 43696-11-20 01:26 G 17681020.47 17681020.56 17681020.64 0.0528 0.0472

Uranus 43697-06-20 09:36 G 17681232.69 17681232.90 17681233.11 0.0134 0.0026

Uranus	43698-02-01 15:07 G	17681458.91	17681459.13	17681459.35	0.0134	0.0002
Uranus	43698-09-15 20:24 G	17681685.14	17681685.35	17681685.57	0.0134	0.0024
Uranus	43699-04-30 01:55 G	17681911.39	17681911.58	17681911.80	0.0134	0.0049
Uranus	43699-12-12 07:41 G	17682137.64	17682137.82	17682138.01	0.0134	0.0073
Saturn	43700-04-20 10:19 G	17682266.76	17682266.93	17682267.09	0.0257	0.0162
Uranus	43700-07-26 12:58 G	17682363.91	17682364.04	17682364.20	0.0134	0.0098
Saturn	43700-12-05 04:48 G	17682495.49	17682495.70	17682495.91	0.0257	0.0030
Uranus	43701-03-09 18:43 G	17682590.20	17682590.28	17682590.38	0.0134	0.0123
Saturn	43701-07-21 23:17 G	17682724.37	17682724.47	17682724.58	0.0258	0.0222
Jupiter	43702-09-24 04:48 G	17683153.54	17683153.70	17683153.86	0.0498	0.0303
Pluto	43704-04-29 08:24 G	17683736.84	17683736.85	17683736.93	0.0063	0.0062
Pluto	43704-12-10 12:29 G	17683961.83	17683962.02	17683962.24	0.0063	0.0022
Pluto	43705-07-23 16:05 G	17684186.97	17684187.17	17684187.39	0.0063	0.0019
Pluto	43706-03-05 19:55 G	17684412.25	17684412.33	17684412.41	0.0064	0.0059
Mars	43707-05-31 02:24 G	17684863.57	17684863.60	17684863.64	0.1874	0.1834
Jupiter	43708-07-26 17:31 G	17685286.03	17685286.23	17685286.44	0.0527	0.0038
Mars	43712-01-11 01:12 G	17686549.40	17686549.55	17686549.70	0.1656	0.0875
Jupiter	43714-05-30 06:43 G	17687419.58	17687419.78	17687419.99	0.0499	0.0059
Saturn	43715-05-19 20:10 G	17687774.14	17687774.34	17687774.55	0.0305	0.0071
Saturn	43716-01-05 05:02 G	17688004.60	17688004.71	17688004.83	0.0305	0.0253
Jupiter	43720-03-31 09:50 G	17689551.78	17689551.91	17689552.04	0.0527	0.0401
Jupiter	43726-02-02 08:38 G	17691685.76	17691685.86	17691685.98	0.0499	0.0420
Saturn	43729-10-31 10:34 G	17693052.77	17693052.94	17693053.12	0.0257	0.0141
Saturn	43730-06-17 05:02 G	17693281.50	17693281.71	17693281.92	0.0257	0.0051
Saturn	43731-01-31 23:17 G	17693510.41	17693510.47	17693510.55	0.0258	0.0243
Uranus	43737-02-18 15:36 G	17695720.05	17695720.15	17695720.28	0.0145	0.0123
Uranus	43737-10-03 03:50 G	17695946.51	17695946.66	17695946.85	0.0144	0.0092
Uranus	43738-05-17 16:19 G	17696172.98	17696173.18	17696173.38	0.0144	0.0060
Uranus	43738-12-30 04:19 G	17696399.47	17696399.68	17696399.90	0.0144	0.0028
Uranus	43739-08-13 16:19 G	17696625.96	17696626.18	17696626.40	0.0144	0.0004

Uranus 43740-03-27 04:19 G 17696852.47 17696852.68 17696852.89 0.0144 0.0035

Uranus 43740-11-08 16:05 G 17697078.99 17697079.17 17697079.37 0.0144 0.0067

Uranus 43741-06-23 03:50 G 17697305.51 17697305.66 17697305.83 0.0144 0.0098

Uranus 43742-02-04 15:36 G 17697532.07 17697532.15 17697532.26 0.0144 0.0128

Mars 43744-01-09 21:07 G 17698236.30 17698236.38 17698236.46 0.1648 0.1474

Jupiter 43744-04-03 10:34 G 17698320.77 17698320.94 17698321.11 0.0527 0.0296

Saturn 43744-11-28 23:02 G 17698560.25 17698560.46 17698560.66 0.0305 0.0037

Saturn 43745-07-17 07:26 G 17698790.75 17698790.81 17698790.89 0.0304 0.0286

Neptune 43748-07-31 09:07 G 17699900.84 17699900.88 17699900.98 0.0090 0.0085

Neptune 43749-03-13 22:34 G 17700126.33 17700126.44 17700126.59 0.0090 0.0072

Neptune 43749-10-25 12:00 G 17700351.85 17700352.00 17700352.18 0.0090 0.0059

Jupiter 43750-02-04 18:14 G 17700454.07 17700454.26 17700454.46 0.0498 0.0161

Neptune 43750-06-08 01:26 G 17700577.38 17700577.56 17700577.76 0.0090 0.0046

Neptune 43751-01-19 14:53 G 17700802.91 17700803.12 17700803.32 0.0090 0.0033

Neptune 43751-09-02 03:50 G 17701028.45 17701028.66 17701028.88 0.0090 0.0020

Neptune 43752-04-14 17:17 G 17701254.00 17701254.22 17701254.44 0.0090 0.0007

Neptune 43752-11-26 06:29 G 17701479.55 17701479.77 17701479.99 0.0090 0.0006

Neptune 43753-07-09 19:41 G 17701705.11 17701705.32 17701705.54 0.0090 0.0019

Neptune 43754-02-20 08:38 G 17701930.67 17701930.86 17701931.08 0.0089 0.0032

Neptune 43754-10-03 21:50 G 17702156.23 17702156.41 17702156.61 0.0089 0.0045

Neptune 43755-05-17 11:02 G 17702381.81 17702381.96 17702382.15 0.0089 0.0058

Jupiter 43755-12-08 04:34 G 17702586.49 17702586.69 17702586.89 0.0527 0.0131

Neptune 43755-12-29 00:43 G 17702607.40 17702607.53 17702607.67 0.0089 0.0070

Neptune 43756-08-10 13:41 G 17702833.00 17702833.07 17702833.17 0.0089 0.0083

Saturn 43759-05-13 11:31 G 17703838.79 17703838.98 17703839.17 0.0257 0.0119

Saturn 43759-12-28 06:00 G 17704067.55 17704067.75 17704067.96 0.0257 0.0073

Jupiter 43761-10-10 19:55 G 17704720.15 17704720.33 17704720.52 0.0498 0.0203

Moon 43769-06-17 08:38 G 17707526.72 17707526.86 17707527.01 0.2688 0.0982

Earth 43769-06-17 12:29 G 17707526.87 17707527.02 17707527.18 0.2682 0.0704 *

Saturn 43774-06-10 23:46 G 17709346.28 17709346.49 17709346.70 0.0305 0.0013

Mars 43777-11-07 12:43 G 17710591.91 17710592.03 17710592.15 0.1659 0.1190

Uranus 43779-04-12 02:10 G 17711112.48 17711112.59 17711112.73 0.0134 0.0110

Uranus 43779-11-24 07:41 G 17711338.67 17711338.82 17711339.00 0.0134 0.0086

Uranus 43780-07-07 13:12 G 17711564.87 17711565.05 17711565.25 0.0134 0.0061

Uranus 43781-02-18 18:58 G 17711791.08 17711791.29 17711791.50 0.0134 0.0036

Uranus 43781-10-03 00:29 G 17712017.30 17712017.52 17712017.74 0.0134 0.0011

Uranus 43782-05-17 06:00 G 17712243.53 17712243.75 17712243.97 0.0134 0.0014

Uranus 43782-12-29 11:17 G 17712469.77 17712469.97 17712470.19 0.0134 0.0039

Uranus 43783-08-12 16:34 G 17712696.02 17712696.19 17712696.40 0.0134 0.0064

Uranus 43784-03-25 22:34 G 17712922.28 17712922.44 17712922.60 0.0134 0.0088

Uranus 43784-11-07 03:50 G 17713148.56 17713148.66 17713148.79 0.0134 0.0113

Jupiter 43785-10-13 08:38 G 17713488.74 17713488.86 17713488.99 0.0498 0.0391

Saturn 43788-11-22 11:31 G 17714624.79 17714624.98 17714625.19 0.0257 0.0099

Saturn 43789-07-09 06:14 G 17714853.56 17714853.76 17714853.96 0.0257 0.0094

Jupiter 43791-08-15 20:24 G 17715621.15 17715621.35 17715621.54 0.0527 0.0124

Pluto 43794-06-15 03:07 G 17716655.54 17716655.63 17716655.76 0.0081 0.0070

Pluto 43795-01-26 13:55 G 17716880.87 17716881.08 17716881.31 0.0080 0.0014

Jupiter 43797-06-18 10:19 G 17717754.73 17717754.93 17717755.14 0.0499 0.0031

Jupiter 43803-04-21 13:55 G 17719886.92 17719887.08 17719887.25 0.0527 0.0306

Saturn 43803-05-06 17:17 G 17719902.21 17719902.22 17719902.26 0.0305 0.0302

Saturn 43803-12-23 02:24 G 17720132.39 17720132.60 17720132.81 0.0305 0.0020

Mars 43805-03-28 02:38 G 17720593.52 17720593.61 17720593.69 0.1883 0.1626

Jupiter 43809-02-22 09:36 G 17722020.75 17722020.90 17722021.05 0.0498 0.0343

Mars 43809-11-07 08:24 G 17722278.73 17722278.85 17722278.98 0.1651 0.1165

Saturn 43818-06-05 12:43 G 17725410.83 17725411.03 17725411.24 0.0257 0.0077

Saturn 43819-01-20 07:12 G 17725639.61 17725639.80 17725639.99 0.0257 0.0116

Uranus 43820-10-19 23:02 G 17726278.40 17726278.46 17726278.55 0.0145 0.0135

Uranus 43821-06-03 11:02 G 17726504.83 17726504.96 17726505.13 0.0145 0.0104

Uranus 43822-01-15 23:31 G 17726731.30 17726731.48 17726731.67 0.0145 0.0072

Uranus 43822-08-30 11:31 G 17726957.78 17726957.98 17726958.20 0.0144 0.0041

Uranus 43823-04-13 23:46 G 17727184.28 17727184.49 17727184.71 0.0144 0.0009

Uranus 43823-11-26 11:46 G 17727410.78 17727410.99 17727411.21 0.0144 0.0023

Uranus 43824-07-09 23:46 G 17727637.29 17727637.49 17727637.69 0.0144 0.0054

Uranus 43825-02-21 11:31 G 17727863.81 17727863.98 17727864.16 0.0144 0.0086

Uranus 43825-10-05 23:31 G 17728090.36 17728090.48 17728090.61 0.0144 0.0116

Jupiter 43827-04-24 16:19 G 17728656.05 17728656.18 17728656.31 0.0527 0.0401

Neptune 43831-04-30 14:38 G 17730123.03 17730123.11 17730123.23 0.0088 0.0078

Neptune 43831-12-12 03:22 G 17730348.52 17730348.64 17730348.81 0.0088 0.0066

Neptune 43832-07-24 16:05 G 17730574.02 17730574.17 17730574.37 0.0088 0.0054

Saturn 43832-11-15 18:29 G 17730688.20 17730688.27 17730688.36 0.0305 0.0278

Jupiter 43833-02-24 21:07 G 17730789.21 17730789.38 17730789.56 0.0498 0.0246

Neptune 43833-03-07 05:02 G 17730799.53 17730799.71 17730799.92 0.0088 0.0042

Saturn 43833-07-04 03:36 G 17730918.44 17730918.65 17730918.86 0.0305 0.0045

Neptune 43833-10-18 18:14 G 17731025.05 17731025.26 17731025.47 0.0088 0.0029

Neptune 43834-06-01 06:58 G 17731250.58 17731250.79 17731251.01 0.0088 0.0017

Neptune 43835-01-12 19:55 G 17731476.11 17731476.33 17731476.55 0.0088 0.0005

Neptune 43835-08-26 08:24 G 17731701.64 17731701.85 17731702.08 0.0088 0.0008

Neptune 43836-04-07 21:07 G 17731927.18 17731927.38 17731927.61 0.0088 0.0020

Neptune 43836-11-19 10:05 G 17732152.72 17732152.92 17732153.14 0.0088 0.0032

Neptune 43837-07-02 22:48 G 17732378.27 17732378.45 17732378.65 0.0088 0.0044

Neptune 43838-02-13 11:46 G 17732603.82 17732603.99 17732604.16 0.0088 0.0056

Neptune 43838-09-27 00:29 G 17732829.39 17732829.52 17732829.66 0.0088 0.0068

Jupiter 43838-12-28 08:24 G 17732921.65 17732921.85 17732922.05 0.0527 0.0036

Neptune 43839-05-10 13:26 G 17733054.97 17733055.06 17733055.14 0.0088 0.0080

Mars 43843-09-05 23:31 G 17734634.41 17734634.48 17734634.54 0.1662 0.1529

Jupiter 43844-10-30 23:31 G 17735055.28 17735055.48 17735055.68 0.0499 0.0116

Saturn 43847-05-01 18:29 G 17735968.21 17735968.27 17735968.33 0.0258 0.0247

Saturn 43847-12-16 12:58 G 17736196.84 17736197.04 17736197.25 0.0257 0.0055

Saturn 43848-08-01 07:26 G 17736425.64 17736425.81 17736426.00 0.0257 0.0138

Jupiter 43850-09-01 23:46 G 17737187.40 17737187.49 17737187.57 0.0527 0.0475

Jupiter 43856-07-06 00:58 G 17739321.49 17739321.54 17739321.60 0.0499 0.0477

Saturn 43862-05-28 22:05 G 17741474.30 17741474.42 17741474.55 0.0305 0.0243

Uranus 43862-12-11 11:17 G 17741670.89 17741670.97 17741671.08 0.0134 0.0120

Saturn 43863-01-14 06:58 G 17741704.59 17741704.79 17741705.00 0.0305 0.0081

Uranus 43863-07-25 17:02 G 17741897.06 17741897.21 17741897.36 0.0134 0.0095

Uranus 43864-03-07 22:19 G 17742123.26 17742123.43 17742123.63 0.0134 0.0071

Uranus 43864-10-20 03:50 G 17742349.46 17742349.66 17742349.87 0.0134 0.0046

Uranus 43865-06-03 09:22 G 17742575.68 17742575.89 17742576.11 0.0134 0.0021

Uranus 43866-01-15 14:53 G 17742801.90 17742802.12 17742802.33 0.0134 0.0004

Uranus 43866-08-29 20:10 G 17743028.13 17743028.34 17743028.56 0.0134 0.0029

Uranus 43867-04-13 01:26 G 17743254.38 17743254.56 17743254.78 0.0134 0.0054

Uranus 43867-11-25 07:12 G 17743480.63 17743480.80 17743480.98 0.0134 0.0078

Uranus 43868-07-08 12:29 G 17743706.90 17743707.02 17743707.17 0.0134 0.0103

Jupiter 43868-11-02 08:53 G 17743823.80 17743823.87 17743823.95 0.0498 0.0462

Uranus 43869-02-19 18:00 G 17743933.20 17743933.25 17743933.33 0.0134 0.0128

Mars 43871-01-23 06:43 G 17744635.63 17744635.78 17744635.94 0.1879 0.0841

Jupiter 43874-09-05 02:10 G 17745956.41 17745956.59 17745956.78 0.0528 0.0231

Moon 43874-12-20 11:02 G 17746062.81 17746062.96 17746063.11 0.2655 0.0511

Earth 43874-12-20 14:24 G 17746062.95 17746063.10 17746063.26 0.2649 0.0650 *

Mars 43875-09-04 19:41 G 17746321.17 17746321.32 17746321.47 0.1653 0.0854

Saturn 43876-11-10 19:55 G 17746754.24 17746754.33 17746754.44 0.0258 0.0226

Saturn 43877-06-27 14:38 G 17746982.90 17746983.11 17746983.32 0.0258 0.0033

Saturn 43878-02-11 09:07 G 17747211.72 17747211.88 17747212.05 0.0258 0.0160

Jupiter 43880-07-08 10:34 G 17748089.74 17748089.94 17748090.14 0.0498 0.0101

Moon 43882-12-18 07:12 G 17748982.76 17748982.80 17748982.84 0.2655 0.2530

Jupiter 43886-05-10 18:58 G 17750222.10 17750222.29 17750222.48 0.0527 0.0203

Saturn 43891-12-09 00:14 G 17752260.37 17752260.51 17752260.66 0.0305 0.0217

Jupiter 43892-03-13 12:00 G 17752355.83 17752356.00 17752356.17 0.0499 0.0261

Saturn 43892-07-26 08:53 G 17752490.68 17752490.87 17752491.07 0.0305 0.0107

Uranus 43905-02-01 17:31 G 17757063.12 17757063.23 17757063.37 0.0145 0.0116

Uranus 43905-09-16 05:46 G 17757289.58 17757289.74 17757289.93 0.0145 0.0085

Uranus 43906-04-30 18:14 G 17757516.06 17757516.26 17757516.47 0.0145 0.0053

Saturn 43906-05-24 20:38 G 17757540.24 17757540.36 17757540.50 0.0258 0.0203

Uranus 43906-12-13 06:14 G 17757742.55 17757742.76 17757742.98 0.0145 0.0021

Saturn 43907-01-08 15:22 G 17757768.93 17757769.14 17757769.36 0.0258 0.0012

Uranus 43907-07-27 18:14 G 17757969.05 17757969.26 17757969.48 0.0144 0.0011

Saturn 43907-08-25 09:50 G 17757997.77 17757997.91 17757998.07 0.0258 0.0183

Uranus 43908-03-10 06:00 G 17758195.55 17758195.75 17758195.97 0.0144 0.0043

Uranus 43908-10-22 18:14 G 17758422.08 17758422.26 17758422.45 0.0144 0.0073

Uranus 43909-06-06 06:00 G 17758648.61 17758648.75 17758648.91 0.0144 0.0104

Uranus 43910-01-18 17:31 G 17758875.18 17758875.23 17758875.33 0.0144 0.0136

Jupiter 43910-05-14 18:00 G 17758991.17 17758991.25 17758991.33 0.0527 0.0483

Neptune 43912-11-03 20:53 G 17759895.33 17759895.37 17759895.43 0.0090 0.0087

Neptune 43913-06-17 09:50 G 17760120.81 17760120.91 17760121.05 0.0090 0.0075

Neptune 43914-01-28 23:17 G 17760346.33 17760346.47 17760346.64 0.0090 0.0062

Neptune 43914-09-11 12:43 G 17760571.85 17760572.03 17760572.22 0.0090 0.0049

Neptune 43915-04-25 02:10 G 17760797.39 17760797.59 17760797.79 0.0090 0.0036

Neptune 43915-12-06 15:07 G 17761022.93 17761023.13 17761023.35 0.0090 0.0024

Jupiter 43916-03-16 23:46 G 17761124.34 17761124.49 17761124.65 0.0498 0.0327

Neptune 43916-07-19 04:34 G 17761248.47 17761248.69 17761248.91 0.0090 0.0011

Neptune 43917-03-01 17:46 G 17761474.02 17761474.24 17761474.46 0.0090 0.0002

Neptune 43917-10-13 06:58 G 17761699.58 17761699.79 17761700.01 0.0090 0.0015

Neptune 43918-05-26 20:10 G 17761925.14 17761925.34 17761925.56 0.0089 0.0028

Neptune 43919-01-07 09:22 G 17762150.70 17762150.89 17762151.09 0.0089 0.0041

Neptune 43919-08-20 22:19 G 17762376.27 17762376.43 17762376.62 0.0089 0.0054

Neptune 43920-04-02 12:00 G 17762601.85 17762602.00 17762602.15 0.0089 0.0066

Neptune 43920-11-14 00:58 G 17762827.45 17762827.54 17762827.65 0.0089 0.0079

Saturn 43921-06-21 04:48 G 17763046.54 17763046.70 17763046.88 0.0305 0.0179

Jupiter 43922-01-17 10:48 G 17763256.75 17763256.95 17763257.16 0.0527 0.0053

Saturn 43922-02-06 13:41 G 17763276.89 17763277.07 17763277.26 0.0305 0.0144

Jupiter 43927-11-20 23:46 G 17765390.28 17765390.49 17765390.69 0.0498 0.0042

Jupiter 43933-09-22 03:36 G 17767522.51 17767522.65 17767522.79 0.0528 0.0379

Saturn 43935-12-04 23:02 G 17768326.31 17768326.46 17768326.62 0.0258 0.0180

Saturn 43936-07-20 17:46 G 17768555.03 17768555.24 17768555.46 0.0258 0.0015

Mars 43936-11-20 10:48 G 17768677.77 17768677.95 17768678.12 0.1875 0.0072

Saturn 43937-03-06 12:14 G 17768783.90 17768784.01 17768784.15 0.0258 0.0207

Jupiter 43939-07-27 00:58 G 17769656.43 17769656.54 17769656.66 0.0498 0.0404

Mars 43941-07-03 07:26 G 17770363.64 17770363.81 17770363.97 0.1656 0.0546

Uranus 43946-08-11 20:53 G 17772229.33 17772229.37 17772229.44 0.0133 0.0129

Uranus 43947-03-26 02:24 G 17772455.48 17772455.60 17772455.75 0.0133 0.0105

Uranus 43947-11-07 08:10 G 17772681.66 17772681.84 17772682.01 0.0133 0.0080

Uranus 43948-06-20 13:12 G 17772907.86 17772908.05 17772908.26 0.0134 0.0056

Uranus 43949-02-01 18:43 G 17773134.07 17773134.28 17773134.49 0.0134 0.0031

Uranus 43949-09-16 00:00 G 17773360.29 17773360.50 17773360.72 0.0134 0.0007

Uranus 43950-04-30 05:31 G 17773586.52 17773586.73 17773586.95 0.0134 0.0019

Uranus 43950-12-12 10:48 G 17773812.75 17773812.95 17773813.16 0.0134 0.0044

Saturn 43951-01-01 08:53 G 17773832.69 17773832.87 17773833.06 0.0305 0.0148

Uranus 43951-07-26 16:19 G 17774039.00 17774039.18 17774039.37 0.0134 0.0068

Saturn 43951-08-19 17:31 G 17774063.06 17774063.23 17774063.40 0.0305 0.0175

Uranus 43952-03-08 21:36 G 17774265.26 17774265.40 17774265.57 0.0134 0.0093

Uranus 43952-10-21 03:22 G 17774491.54 17774491.64 17774491.75 0.0134 0.0117

Pluto 43952-11-14 11:31 G 17774515.90 17774515.98 17774516.12 0.0063 0.0055

Pluto 43953-06-27 15:36 G 17774740.95 17774741.15 17774741.38 0.0063 0.0015

Pluto 43954-02-07 18:58 G 17774966.11 17774966.29 17774966.51 0.0063 0.0026

Jupiter 43957-09-25 04:19 G 17776291.52 17776291.68 17776291.85 0.0527 0.0317

Jupiter 43963-07-29 12:00 G 17778424.81 17778425.00 17778425.19 0.0498 0.0178

Saturn 43965-06-16 00:29 G 17779112.36 17779112.52 17779112.70 0.0258 0.0156

Saturn 43966-01-30 19:41 G 17779341.10 17779341.32 17779341.53 0.0258 0.0038

Saturn 43966-09-16 14:10 G 17779570.01 17779570.09 17779570.19 0.0258 0.0231

Jupiter 43969-05-30 19:26 G 17780557.11 17780557.31 17780557.50 0.0527 0.0125

Jupiter 43975-04-03 13:26 G 17782690.87 17782691.06 17782691.25 0.0499 0.0184

Saturn 43980-07-13 15:22 G 17784618.94 17784619.14 17784619.34 0.0304 0.0106

Saturn 43981-02-28 23:46 G 17784849.35 17784849.49 17784849.64 0.0304 0.0217

Uranus 43988-10-01 22:05 G 17787621.34 17787621.42 17787621.53 0.0145 0.0130

Uranus 43989-05-16 10:34 G 17787847.79 17787847.94 17787848.10 0.0145 0.0098

Uranus 43989-12-28 22:34 G 17788074.26 17788074.44 17788074.64 0.0145 0.0067

Uranus 43990-08-12 10:48 G 17788300.74 17788300.95 17788301.16 0.0145 0.0035

Uranus 43991-03-26 22:48 G 17788527.24 17788527.45 17788527.67 0.0145 0.0005

Uranus 43991-11-08 10:48 G 17788753.75 17788753.95 17788754.17 0.0144 0.0029

Uranus 43992-06-21 22:48 G 17788980.26 17788980.45 17788980.66 0.0144 0.0060

Uranus 43993-02-03 10:48 G 17789206.79 17789206.95 17789207.12 0.0144 0.0091

Uranus 43993-09-17 22:48 G 17789433.34 17789433.45 17789433.57 0.0144 0.0121

Saturn 43994-12-27 03:50 G 17789898.48 17789898.66 17789898.85 0.0258 0.0131

Neptune 43995-08-03 02:38 G 17790117.52 17790117.61 17790117.69 0.0088 0.0080

Saturn 43995-08-12 22:48 G 17790127.24 17790127.45 17790127.66 0.0258 0.0063

Neptune 43996-03-15 15:22 G 17790343.00 17790343.14 17790343.27 0.0088 0.0068

Saturn 43996-03-28 17:46 G 17790356.22 17790356.24 17790356.26 0.0258 0.0257

Neptune 43996-10-27 04:05 G 17790568.51 17790568.67 17790568.84 0.0088 0.0056

Neptune 43997-06-09 16:48 G 17790794.02 17790794.20 17790794.40 0.0088 0.0044

Neptune 43998-01-21 05:31 G 17791019.53 17791019.73 17791019.94 0.0088 0.0032

Neptune 43998-09-03 18:14 G 17791245.05 17791245.26 17791245.48 0.0088 0.0020

Jupiter 43999-04-05 22:34 G 17791459.32 17791459.44 17791459.57 0.0498 0.0391

Neptune 43999-04-17 07:12 G 17791470.58 17791470.80 17791471.02 0.0088 0.0008

Neptune 43999-11-28 20:10 G 17791696.12 17791696.34 17791696.56 0.0088 0.0004

Neptune 44000-07-11 08:53 G 17791921.66 17791921.87 17791922.09 0.0088 0.0017

45TH MILLENNIUM CE

This is a list of transits of Venus in the 45th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Neptune	44001-02-21 21:36	G	17792147.20	17792147.40	17792147.62	0.0088	0.0029	
Neptune	44001-10-05 10:19	G	17792372.75	17792372.93	17792373.14	0.0088	0.0041	
Neptune	44002-05-18 23:02	G	17792598.30	17792598.46	17792598.65	0.0088	0.0053	
Mars	44002-09-17 14:53	G	17792719.96	17792720.12	17792720.28	0.1871	0.0700	
Neptune	44002-12-30 12:00	G	17792823.86	17792824.00	17792824.16	0.0088	0.0065	
Neptune	44003-08-13 00:43	G	17793049.44	17793049.53	17793049.65	0.0088	0.0077	
Jupiter	44005-02-05 12:29	G	17793591.83	17793592.02	17793592.22	0.0528	0.0139	
Mars	44007-04-30 18:14	G	17794406.09	17794406.26	17794406.43	0.1659	0.0219	
Saturn	44010-01-23 20:53	G	17795405.16	17795405.37	17795405.57	0.0305	0.0071	
Saturn	44010-09-11 05:02	G	17795635.60	17795635.71	17795635.84	0.0305	0.0252	
Jupiter	44010-12-09 23:31	G	17795725.28	17795725.48	17795725.69	0.0498	0.0030	
Earth	44012-06-19 12:58	G	17796282.89	17796283.04	17796283.19	0.2683	0.0856	
Moon	44012-06-19 18:00	G	17796283.08	17796283.25	17796283.41	0.2680	0.0186	*
Jupiter	44016-10-11 04:34	G	17797857.53	17797857.69	17797857.86	0.0527	0.0298	
Jupiter	44022-08-15 00:43	G	17799991.38	17799991.53	17799991.68	0.0499	0.0336	
Saturn	44024-07-08 06:29	G	17800684.58	17800684.77	17800684.97	0.0258	0.0105	
Saturn	44025-02-22 01:26	G	17800913.37	17800913.56	17800913.77	0.0258	0.0090	
Uranus	44030-11-23 11:46	G	17803013.89	17803013.99	17803014.11	0.0133	0.0114	
Uranus	44031-07-07 16:48	G	17803240.06	17803240.20	17803240.38	0.0133	0.0090	
Uranus	44032-02-18 22:34	G	17803466.25	17803466.44	17803466.63	0.0133	0.0065	
Uranus	44032-10-02 03:36	G	17803692.46	17803692.65	17803692.87	0.0134	0.0041	
Uranus	44033-05-16 09:07	G	17803918.67	17803918.88	17803919.10	0.0134	0.0016	

Uranus 44033-12-28 14:24 G 17804144.89 17804145.10 17804145.32 0.0134 0.0010

Uranus 44034-08-11 19:41 G 17804371.12 17804371.32 17804371.54 0.0134 0.0034

Uranus 44035-03-26 00:58 G 17804597.36 17804597.54 17804597.75 0.0134 0.0059

Uranus 44035-11-07 06:29 G 17804823.61 17804823.77 17804823.95 0.0134 0.0083

Uranus 44036-06-20 11:46 G 17805049.88 17805049.99 17805050.14 0.0134 0.0108

Uranus 44037-02-01 17:17 G 17805276.20 17805276.22 17805276.27 0.0134 0.0132

Saturn 44039-08-06 05:17 G 17806191.51 17806191.72 17806191.93 0.0304 0.0026

Saturn 44040-03-23 13:26 G 17806422.02 17806422.06 17806422.11 0.0304 0.0297

Jupiter 44040-10-14 03:22 G 17806626.51 17806626.64 17806626.78 0.0528 0.0386

Pluto 44042-12-31 06:00 G 17807434.62 17807434.75 17807434.89 0.0081 0.0063

Pluto 44043-08-13 16:34 G 17807659.98 17807660.19 17807660.41 0.0080 0.0021

Jupiter 44046-08-17 10:19 G 17808759.76 17808759.93 17808760.11 0.0498 0.0242

Jupiter 44052-06-18 19:12 G 17810892.09 17810892.30 17810892.50 0.0528 0.0051

Saturn 44054-01-18 10:48 G 17811470.75 17811470.95 17811471.15 0.0258 0.0078

Saturn 44054-09-04 05:46 G 17811699.55 17811699.74 17811699.93 0.0258 0.0117

Jupiter 44058-04-22 11:31 G 17813025.79 17813025.98 17813026.18 0.0498 0.0121

Jupiter 44064-02-22 11:17 G 17815157.90 17815157.97 17815158.05 0.0527 0.0483

Mars 44068-07-14 19:41 G 17816762.21 17816762.32 17816762.43 0.1867 0.1421

Saturn 44069-02-15 13:12 G 17816977.84 17816978.05 17816978.26 0.0304 0.0016

Jupiter 44069-12-26 11:46 G 17817291.96 17817291.99 17817292.03 0.0499 0.0488

Uranus 44072-06-01 02:10 G 17818179.56 17818179.59 17818179.62 0.0145 0.0143

Uranus 44073-01-13 14:10 G 17818405.96 17818406.09 17818406.24 0.0145 0.0112

Mars 44073-02-25 05:46 G 17818448.56 17818448.74 17818448.91 0.1661 0.0104

Uranus 44073-08-28 02:24 G 17818632.43 17818632.60 17818632.79 0.0145 0.0081

Uranus 44074-04-11 14:38 G 17818858.91 17818859.11 17818859.32 0.0145 0.0049

Uranus 44074-11-24 02:38 G 17819085.40 17819085.61 17819085.83 0.0145 0.0018

Uranus 44075-07-08 14:38 G 17819311.90 17819312.11 17819312.33 0.0145 0.0014

Uranus 44076-02-20 02:38 G 17819538.41 17819538.61 17819538.82 0.0145 0.0046

Uranus 44076-10-03 14:53 G 17819764.94 17819765.12 17819765.31 0.0144 0.0077

Uranus 44077-05-18 02:53 G 17819991.48 17819991.62 17819991.76 0.0144 0.0108

Neptune 44077-09-18 21:22 G 17820115.29 17820115.39 17820115.51 0.0090 0.0077

Uranus 44077-12-30 14:24 G 17820218.06 17820218.10 17820218.17 0.0144 0.0139

Neptune 44078-05-02 10:34 G 17820340.81 17820340.94 17820341.11 0.0090 0.0065

Neptune 44078-12-14 00:00 G 17820566.33 17820566.50 17820566.69 0.0090 0.0052

Neptune 44079-07-27 12:58 G 17820791.86 17820792.04 17820792.26 0.0090 0.0040

Neptune 44080-03-09 02:24 G 17821017.40 17821017.60 17821017.82 0.0090 0.0027

Neptune 44080-10-20 15:50 G 17821242.95 17821243.16 17821243.38 0.0090 0.0014

Neptune 44081-06-03 05:17 G 17821468.50 17821468.72 17821468.94 0.0090 0.0001

Neptune 44082-01-14 18:29 G 17821694.05 17821694.27 17821694.49 0.0090 0.0012

Jupiter 44082-04-24 20:53 G 17821794.29 17821794.37 17821794.46 0.0498 0.0452

Neptune 44082-08-28 07:26 G 17821919.61 17821919.81 17821920.03 0.0090 0.0025

Saturn 44082-12-14 18:43 G 17822028.23 17822028.28 17822028.37 0.0259 0.0244

Neptune 44083-04-10 20:53 G 17822145.17 17822145.37 17822145.57 0.0090 0.0037

Saturn 44083-07-31 14:24 G 17822256.89 17822257.10 17822257.31 0.0258 0.0049

Neptune 44083-11-22 09:50 G 17822370.74 17822370.91 17822371.10 0.0089 0.0050

Saturn 44084-03-16 09:22 G 17822485.72 17822485.89 17822486.07 0.0258 0.0146

Neptune 44084-07-04 22:48 G 17822596.31 17822596.45 17822596.63 0.0089 0.0063

Neptune 44085-02-15 12:14 G 17822821.90 17822822.01 17822822.14 0.0089 0.0075

Neptune 44085-09-29 00:58 G 17823047.52 17823047.54 17823047.61 0.0089 0.0088

Jupiter 44088-02-25 09:50 G 17823926.72 17823926.91 17823927.10 0.0527 0.0198

Jupiter 44093-12-28 22:05 G 17826060.22 17826060.42 17826060.62 0.0498 0.0091

Saturn 44098-01-10 14:24 G 17827533.99 17827534.10 17827534.21 0.0304 0.0257

Saturn 44098-08-28 22:34 G 17827764.24 17827764.44 17827764.65 0.0304 0.0065

Jupiter 44099-10-31 01:41 G 17828192.39 17828192.57 17828192.75 0.0527 0.0239

Jupiter 44105-09-03 22:34 G 17830326.27 17830326.44 17830326.62 0.0498 0.0274

Saturn 44112-06-27 00:14 G 17832814.40 17832814.51 17832814.63 0.0259 0.0215

Saturn 44113-02-10 19:41 G 17833043.10 17833043.32 17833043.53 0.0259 0.0021

Saturn 44113-09-27 14:38 G 17833271.96 17833272.11 17833272.27 0.0259 0.0175

Uranus 44114-07-24 21:07 G 17833572.30 17833572.38 17833572.47 0.0133 0.0123

Uranus 44115-03-08 02:24 G 17833798.47 17833798.60 17833798.76 0.0134 0.0099

Uranus 44115-10-20 07:55 G 17834024.65 17834024.83 17834025.02 0.0134 0.0074

Uranus 44116-06-02 13:12 G 17834250.85 17834251.05 17834251.26 0.0134 0.0050

Uranus 44117-01-14 18:29 G 17834477.06 17834477.27 17834477.49 0.0134 0.0025

Uranus 44117-08-28 23:46 G 17834703.28 17834703.49 17834703.71 0.0134 0.0003

Earth 44117-12-22 16:05 G 17834819.02 17834819.17 17834819.33 0.2649 0.0659

Moon 44117-12-22 20:53 G 17834819.22 17834819.37 17834819.53 0.2645 0.0801 *

Uranus 44118-04-12 05:17 G 17834929.51 17834929.72 17834929.94 0.0134 0.0024

Uranus 44118-11-24 10:34 G 17835155.74 17835155.94 17835156.15 0.0134 0.0049

Uranus 44119-07-08 15:50 G 17835381.99 17835382.16 17835382.35 0.0134 0.0074

Uranus 44120-02-19 21:22 G 17835608.25 17835608.39 17835608.54 0.0134 0.0098

Uranus 44120-10-03 02:38 G 17835834.54 17835834.61 17835834.71 0.0134 0.0123

Jupiter 44123-11-04 01:12 G 17836961.45 17836961.55 17836961.66 0.0528 0.0450

Saturn 44127-07-25 00:29 G 17838320.37 17838320.52 17838320.67 0.0304 0.0210

Saturn 44128-03-11 08:24 G 17838550.66 17838550.85 17838551.05 0.0304 0.0111

Jupiter 44129-09-06 06:58 G 17839094.63 17839094.79 17839094.96 0.0498 0.0295

Jupiter 44135-07-09 17:02 G 17841227.01 17841227.21 17841227.42 0.0528 0.0015

Mars 44138-12-24 16:48 G 17842491.03 17842491.20 17842491.37 0.1664 0.0430

Jupiter 44141-05-12 07:55 G 17843360.63 17843360.83 17843361.04 0.0498 0.0069

Saturn 44142-01-07 04:19 G 17843600.54 17843600.68 17843600.84 0.0259 0.0185

Saturn 44142-08-23 23:46 G 17843829.28 17843829.49 17843829.71 0.0258 0.0012

Saturn 44143-04-09 18:58 G 17844058.17 17844058.29 17844058.43 0.0258 0.0205

Jupiter 44147-03-14 07:26 G 17845492.69 17845492.81 17845492.93 0.0527 0.0427

Jupiter 44153-01-15 08:53 G 17847626.77 17847626.87 17847626.97 0.0499 0.0432

Uranus 44156-09-13 18:29 G 17848964.18 17848964.27 17848964.39 0.0145 0.0126

Saturn 44157-02-03 11:31 G 17849106.81 17849106.98 17849107.16 0.0304 0.0159

Uranus 44157-04-28 06:58 G 17849190.63 17849190.79 17849190.95 0.0145 0.0094

Saturn 44157-09-21 19:41 G 17849337.15 17849337.32 17849337.50 0.0304 0.0163

Uranus 44157-12-10 18:43 G 17849417.09 17849417.28 17849417.49 0.0145 0.0063

Uranus 44158-07-25 06:43 G 17849643.58 17849643.78 17849644.00 0.0145 0.0032

Uranus 44159-03-08 18:58 G 17849870.07 17849870.29 17849870.51 0.0145 0.0002

Uranus 44159-10-21 07:12 G 17850096.59 17850096.80 17850097.01 0.0145 0.0032

Neptune 44159-11-05 13:26 G 17850112.01 17850112.06 17850112.15 0.0088 0.0083

Uranus 44160-06-03 18:58 G 17850323.10 17850323.29 17850323.50 0.0144 0.0063

Neptune 44160-06-18 02:24 G 17850337.48 17850337.60 17850337.74 0.0088 0.0071

Uranus 44161-01-16 06:43 G 17850549.63 17850549.78 17850549.96 0.0144 0.0095

Neptune 44161-01-29 15:07 G 17850562.97 17850563.13 17850563.30 0.0088 0.0059

Uranus 44161-08-30 18:43 G 17850776.19 17850776.28 17850776.40 0.0144 0.0125

Neptune 44161-09-12 03:50 G 17850788.48 17850788.66 17850788.85 0.0088 0.0047

Neptune 44162-04-25 16:34 G 17851013.99 17851014.19 17851014.40 0.0088 0.0035

Neptune 44162-12-07 05:31 G 17851239.52 17851239.73 17851239.94 0.0088 0.0023

Neptune 44163-07-20 18:14 G 17851465.04 17851465.26 17851465.48 0.0088 0.0011

Neptune 44164-03-02 06:58 G 17851690.57 17851690.79 17851691.01 0.0088 0.0001

Neptune 44164-10-13 19:55 G 17851916.11 17851916.33 17851916.55 0.0088 0.0013

Neptune 44165-05-27 08:38 G 17852141.65 17852141.86 17852142.08 0.0088 0.0025

Neptune 44166-01-07 21:22 G 17852367.20 17852367.39 17852367.60 0.0088 0.0037

Neptune 44166-08-21 10:05 G 17852592.75 17852592.92 17852593.11 0.0088 0.0049

Neptune 44167-04-03 23:02 G 17852818.31 17852818.46 17852818.62 0.0088 0.0061

Neptune 44167-11-15 11:46 G 17853043.88 17853043.99 17853044.12 0.0088 0.0073

Neptune 44168-06-28 00:43 G 17853269.49 17853269.53 17853269.59 0.0088 0.0085

Jupiter 44171-03-17 05:31 G 17854261.55 17854261.73 17854261.91 0.0528 0.0252

Saturn 44171-07-20 10:05 G 17854386.76 17854386.92 17854387.10 0.0259 0.0155

Saturn 44172-03-05 05:31 G 17854615.52 17854615.73 17854615.95 0.0259 0.0041

Saturn 44172-10-20 00:43 G 17854844.46 17854844.53 17854844.63 0.0259 0.0236

Jupiter 44177-01-17 18:14 G 17856395.07 17856395.26 17856395.46 0.0497 0.0142

Jupiter 44182-11-19 21:36 G 17858527.21 17858527.40 17858527.59 0.0528 0.0184

Saturn 44186-08-16 22:34 G 17859893.24 17859893.44 17859893.63 0.0304 0.0109

Saturn 44187-04-04 06:29 G 17860123.62 17860123.77 17860123.92 0.0304 0.0212

Jupiter 44188-09-22 17:46 G 17860661.06 17860661.24 17860661.42 0.0498 0.0228

Uranus 44198-03-24 06:14 G 17864130.74 17864130.76 17864130.80 0.0134 0.0132

Uranus 44198-11-05 11:31 G 17864356.86 17864356.98 17864357.11 0.0134 0.0108

Uranus 44199-06-19 16:48 G 17864583.04 17864583.20 17864583.37 0.0134 0.0084

Uranus 44200-01-31 21:50 G 17864809.23 17864809.41 17864809.62 0.0134 0.0060

Uranus 44200-09-15 03:22 G 17865035.44 17865035.64 17865035.86 0.0134 0.0035

Saturn 44201-01-30 15:07 G 17865172.94 17865173.13 17865173.32 0.0259 0.0123

Uranus 44201-04-29 08:53 G 17865261.66 17865261.87 17865262.09 0.0134 0.0010

Pluto 44201-06-01 15:50 G 17865295.02 17865295.16 17865295.33 0.0063 0.0045

Saturn 44201-09-16 10:34 G 17865401.73 17865401.94 17865402.14 0.0258 0.0072

Uranus 44201-12-11 14:10 G 17865487.88 17865488.09 17865488.31 0.0134 0.0015

Pluto 44202-01-12 19:41 G 17865520.10 17865520.32 17865520.54 0.0063 0.0006

Uranus 44202-07-25 19:26 G 17865714.11 17865714.31 17865714.53 0.0134 0.0040

Pluto 44202-08-25 23:02 G 17865745.29 17865745.46 17865745.65 0.0063 0.0035

Uranus 44203-03-09 01:12 G 17865940.36 17865940.55 17865940.74 0.0134 0.0064

Uranus 44203-10-21 06:14 G 17866166.61 17866166.76 17866166.94 0.0134 0.0089

Uranus 44204-06-03 11:46 G 17866392.89 17866392.99 17866393.12 0.0134 0.0114

Mars 44204-10-22 04:05 G 17866533.51 17866533.67 17866533.82 0.1667 0.0751

Jupiter 44206-11-23 20:10 G 17867296.28 17867296.34 17867296.41 0.0528 0.0498

Jupiter 44212-09-26 03:07 G 17869429.49 17869429.63 17869429.78 0.0498 0.0346

Saturn 44216-02-28 10:05 G 17870679.71 17870679.92 17870680.13 0.0304 0.0057

Saturn 44216-10-15 18:00 G 17870910.16 17870910.25 17870910.36 0.0304 0.0264

Jupiter 44218-07-29 11:17 G 17871561.76 17871561.97 17871562.17 0.0528 0.0060

Jupiter 44224-06-01 04:19 G 17873695.48 17873695.68 17873695.88 0.0498 0.0016

Jupiter 44230-04-03 01:26 G 17875827.43 17875827.56 17875827.70 0.0528 0.0384

Saturn 44230-08-12 21:07 G 17875959.18 17875959.38 17875959.58 0.0259 0.0092

Saturn 44231-03-29 16:19 G 17876187.99 17876188.18 17876188.38 0.0259 0.0103

Mars 44232-03-09 23:17 G 17876534.34 17876534.47 17876534.60 0.1872 0.1214

Jupiter 44236-02-05 04:48 G 17877961.58 17877961.70 17877961.84 0.0498 0.0380

Mars 44236-10-21 00:29 G 17878220.52 17878220.52 17878220.53 0.1658 0.1655

Uranus 44240-05-15 00:58 G 17879522.49 17879522.54 17879522.62 0.0145 0.0138

Uranus 44240-12-27 12:58 G 17879748.91 17879749.04 17879749.20 0.0145 0.0107

Uranus 44241-08-11 01:12 G 17879975.37 17879975.55 17879975.74 0.0145 0.0075

Neptune 44241-12-23 07:41 G 17880109.75 17880109.82 17880109.94 0.0090 0.0081

Uranus 44242-03-25 13:12 G 17880201.85 17880202.05 17880202.27 0.0145 0.0044

Neptune 44242-08-05 21:07 G 17880335.26 17880335.38 17880335.54 0.0090 0.0068

Uranus 44242-11-07 01:26 G 17880428.34 17880428.56 17880428.78 0.0145 0.0012

Neptune 44243-03-19 10:48 G 17880560.78 17880560.95 17880561.13 0.0090 0.0055

Uranus 44243-06-21 13:26 G 17880654.85 17880655.06 17880655.28 0.0145 0.0020

Neptune 44243-10-31 00:00 G 17880786.32 17880786.50 17880786.70 0.0090 0.0043

Uranus 44244-02-03 01:26 G 17880881.36 17880881.56 17880881.77 0.0145 0.0051

Neptune 44244-06-12 13:26 G 17881011.86 17881012.06 17881012.27 0.0090 0.0030

Uranus 44244-09-16 13:26 G 17881107.89 17881108.06 17881108.24 0.0144 0.0082

Neptune 44245-01-24 02:38 G 17881237.40 17881237.61 17881237.84 0.0090 0.0018

Uranus 44245-05-01 01:12 G 17881334.43 17881334.55 17881334.70 0.0144 0.0114

Neptune 44245-09-06 16:05 G 17881462.95 17881463.17 17881463.39 0.0090 0.0005

Saturn 44245-09-09 22:05 G 17881466.21 17881466.42 17881466.63 0.0304 0.0007

Uranus 44245-12-13 13:26 G 17881561.06 17881561.06 17881561.07 0.0144 0.0144

Neptune 44246-04-20 05:17 G 17881688.51 17881688.72 17881688.95 0.0089 0.0009

Neptune 44246-12-01 18:43 G 17881914.07 17881914.28 17881914.49 0.0089 0.0021

Moon 44247-06-24 18:58 G 17882119.25 17882119.29 17882119.33 0.2679 0.2585

Neptune 44247-07-15 07:41 G 17882139.63 17882139.82 17882140.03 0.0089 0.0034

Neptune 44248-02-25 20:53 G 17882365.19 17882365.37 17882365.57 0.0089 0.0046

Neptune 44248-10-08 09:50 G 17882590.76 17882590.91 17882591.09 0.0089 0.0059

Neptune 44249-05-21 23:31 G 17882816.35 17882816.48 17882816.62 0.0089 0.0071

Neptune 44250-01-02 12:14 G 17883041.96 17883042.01 17883042.11 0.0089 0.0084

Jupiter 44254-04-06 02:24 G 17884596.44 17884596.60 17884596.77 0.0528 0.0309

Moon 44255-06-22 08:10 G 17885038.73 17885038.84 17885038.95 0.2684 0.1836

Earth 44255-06-22 13:26 G 17885038.92 17885039.06 17885039.21 0.2684 0.0963 *

Saturn 44259-07-09 06:29 G 17886516.74 17886516.77 17886516.81 0.0259 0.0255

Jupiter 44260-02-07 12:14 G 17886729.82 17886730.01 17886730.20 0.0498 0.0182

Saturn 44260-02-23 01:55 G 17886745.38 17886745.58 17886745.80 0.0258 0.0061

Saturn 44260-10-08 21:22 G 17886974.21 17886974.39 17886974.58 0.0258 0.0135

Jupiter	44265-12-09 16:48 G	17888862.00	17888862.20	17888862.40	0.0527	0.0133
Mars	44270-08-19 14:38 G	17890575.98	17890576.11	17890576.24	0.1670	0.1098
Jupiter	44271-10-13 13:26 G	17890995.87	17890996.06	17890996.25	0.0498	0.0179
Saturn	44274-08-05 01:12 G	17892022.47	17892022.55	17892022.64	0.0304	0.0274
Saturn	44275-03-23 09:07 G	17892252.68	17892252.88	17892253.09	0.0304	0.0047
Uranus	44282-07-06 20:53 G	17894915.29	17894915.37	17894915.49	0.0134	0.0118
Uranus	44283-02-18 02:24 G	17895141.46	17895141.60	17895141.77	0.0134	0.0093
Uranus	44283-10-02 07:41 G	17895367.65	17895367.82	17895368.02	0.0134	0.0069
Uranus	44284-05-15 13:12 G	17895593.85	17895594.05	17895594.26	0.0134	0.0044
Uranus	44284-12-27 18:29 G	17895820.06	17895820.27	17895820.49	0.0134	0.0020
Uranus	44285-08-11 00:00 G	17896046.28	17896046.50	17896046.72	0.0134	0.0006
Uranus	44286-03-25 05:17 G	17896272.52	17896272.72	17896272.94	0.0134	0.0031
Uranus	44286-11-06 10:48 G	17896498.76	17896498.95	17896499.16	0.0134	0.0055
Uranus	44287-06-20 16:05 G	17896725.01	17896725.17	17896725.36	0.0134	0.0080
Uranus	44288-02-01 21:22 G	17896951.28	17896951.39	17896951.55	0.0134	0.0105
Uranus	44288-09-15 03:07 G	17897177.59	17897177.63	17897177.70	0.0134	0.0129
Saturn	44289-01-18 12:29 G	17897302.92	17897303.02	17897303.13	0.0259	0.0224
Saturn	44289-09-04 07:55 G	17897531.62	17897531.83	17897532.04	0.0259	0.0029
Saturn	44290-04-21 03:07 G	17897760.47	17897760.63	17897760.80	0.0259	0.0166
Pluto	44291-07-18 11:02 G	17898213.79	17898213.96	17898214.16	0.0081	0.0045
Pluto	44292-02-28 21:36 G	17898439.22	17898439.40	17898439.60	0.0080	0.0039
Jupiter	44295-10-15 23:02 G	17899764.34	17899764.46	17899764.59	0.0497	0.0394
Mars	44298-01-05 03:50 G	17900576.49	17900576.66	17900576.83	0.1868	0.0461
Jupiter	44301-08-18 06:29 G	17901896.57	17901896.77	17901896.96	0.0528	0.0108
Mars	44302-08-19 11:46 G	17902262.89	17902262.99	17902263.09	0.1661	0.1338
Saturn	44304-02-16 12:14 G	17902808.88	17902809.01	17902809.16	0.0304	0.0221
Saturn	44304-10-03 20:24 G	17903039.15	17903039.35	17903039.55	0.0304	0.0100
Jupiter	44307-06-21 22:05 G	17904030.21	17904030.42	17904030.62	0.0498	0.0023
Jupiter	44313-04-22 23:02 G	17906162.31	17906162.46	17906162.63	0.0527	0.0322
Saturn	44318-08-01 17:02 G	17908089.08	17908089.21	17908089.36	0.0259	0.0193

Jupiter 44319-02-24 22:34 G 17908296.29 17908296.44 17908296.58 0.0498 0.0342

Saturn 44319-03-18 12:29 G 17908317.81 17908318.02 17908318.24 0.0258 0.0007

Saturn 44319-11-02 07:55 G 17908546.70 17908546.83 17908546.97 0.0258 0.0197

Neptune 44324-02-09 00:14 G 17910106.49 17910106.51 17910106.58 0.0088 0.0086

Uranus 44324-08-27 20:38 G 17910307.24 17910307.36 17910307.49 0.0145 0.0118

Neptune 44324-09-21 13:12 G 17910331.95 17910332.05 17910332.18 0.0088 0.0074

Uranus 44325-04-11 08:38 G 17910533.70 17910533.86 17910534.05 0.0145 0.0087

Neptune 44325-05-05 01:55 G 17910557.44 17910557.58 17910557.75 0.0088 0.0062

Uranus 44325-11-23 20:38 G 17910760.17 17910760.36 17910760.58 0.0145 0.0056

Neptune 44325-12-16 14:53 G 17910782.95 17910783.12 17910783.31 0.0088 0.0050

Uranus 44326-07-08 08:53 G 17910986.66 17910986.87 17910987.09 0.0145 0.0024

Neptune 44326-07-30 03:36 G 17911008.46 17911008.65 17911008.85 0.0088 0.0038

Uranus 44327-02-19 21:07 G 17911213.16 17911213.38 17911213.60 0.0145 0.0008

Neptune 44327-03-12 16:05 G 17911233.97 17911234.17 17911234.40 0.0088 0.0027

Uranus 44327-10-04 09:07 G 17911439.68 17911439.88 17911440.10 0.0145 0.0040

Neptune 44327-10-24 05:02 G 17911459.50 17911459.71 17911459.94 0.0088 0.0015

Uranus 44328-05-17 21:22 G 17911666.20 17911666.39 17911666.58 0.0144 0.0071

Neptune 44328-06-05 18:00 G 17911685.03 17911685.25 17911685.47 0.0088 0.0003

Uranus 44328-12-30 08:53 G 17911892.73 17911892.87 17911893.04 0.0144 0.0103

Neptune 44329-01-17 06:43 G 17911910.56 17911910.78 17911911.00 0.0088 0.0010

Uranus 44329-08-13 20:53 G 17912119.30 17912119.37 17912119.46 0.0144 0.0133

Neptune 44329-08-30 19:12 G 17912136.10 17912136.30 17912136.53 0.0088 0.0022

Neptune 44330-04-13 07:55 G 17912361.64 17912361.83 17912362.05 0.0088 0.0034

Neptune 44330-11-24 20:38 G 17912587.19 17912587.36 17912587.57 0.0088 0.0046

Neptune 44331-07-08 09:22 G 17912812.75 17912812.89 17912813.08 0.0088 0.0058

Neptune 44332-02-18 22:48 G 17913038.32 17913038.45 17913038.58 0.0088 0.0069

Neptune 44332-10-01 11:17 G 17913263.90 17913263.97 17913264.07 0.0088 0.0081

Saturn 44333-08-28 22:48 G 17913595.28 17913595.45 17913595.63 0.0304 0.0174

Saturn 44334-04-16 06:58 G 17913825.61 17913825.79 17913825.98 0.0304 0.0149

Mars 44336-06-17 01:55 G 17914618.49 17914618.58 17914618.67 0.1673 0.1431

Jupiter 44337-04-25 20:53 G 17914931.22 17914931.37 17914931.52 0.0528 0.0353

Jupiter 44343-02-27 09:07 G 17917064.70 17917064.88 17917065.06 0.0498 0.0236

Saturn 44348-02-11 22:48 G 17918875.28 17918875.45 17918875.61 0.0259 0.0162

Saturn 44348-09-27 18:00 G 17919104.04 17919104.25 17919104.46 0.0259 0.0033

Jupiter 44348-12-29 10:48 G 17919196.76 17919196.95 17919197.16 0.0528 0.0091

Saturn 44349-05-14 12:58 G 17919332.95 17919333.04 17919333.15 0.0259 0.0227

Jupiter 44354-11-02 10:05 G 17921330.73 17921330.92 17921331.12 0.0498 0.0126

Jupiter 44360-09-03 03:22 G 17923462.61 17923462.64 17923462.68 0.0527 0.0519

Moon 44360-12-24 12:43 G 17923574.87 17923575.03 17923575.18 0.2651 0.0488

Earth 44360-12-24 18:00 G 17923575.10 17923575.25 17923575.41 0.2648 0.0678 *

Saturn 44363-03-11 08:53 G 17924381.68 17924381.87 17924382.07 0.0304 0.0122

Saturn 44363-10-27 17:17 G 17924612.06 17924612.22 17924612.38 0.0304 0.0199

Mars 44363-11-03 08:24 G 17924618.67 17924618.85 17924619.02 0.1864 0.0278

Uranus 44366-03-07 06:43 G 17925473.73 17925473.78 17925473.86 0.0134 0.0127

Uranus 44366-10-19 12:00 G 17925699.88 17925700.00 17925700.16 0.0134 0.0103

Uranus 44367-06-02 17:31 G 17925926.06 17925926.23 17925926.41 0.0134 0.0078

Uranus 44368-01-14 22:48 G 17926152.26 17926152.45 17926152.66 0.0134 0.0054

Mars 44368-06-15 23:02 G 17926305.32 17926305.46 17926305.60 0.1664 0.1020

Uranus 44368-08-28 04:19 G 17926378.47 17926378.68 17926378.89 0.0134 0.0029

Uranus 44369-04-11 09:50 G 17926604.69 17926604.91 17926605.13 0.0134 0.0004

Uranus 44369-11-23 15:07 G 17926830.92 17926831.13 17926831.35 0.0134 0.0021

Uranus 44370-07-07 20:24 G 17927057.15 17927057.35 17927057.56 0.0134 0.0046

Uranus 44371-02-19 01:41 G 17927283.40 17927283.57 17927283.77 0.0134 0.0071

Uranus 44371-10-03 07:26 G 17927509.66 17927509.81 17927509.97 0.0134 0.0095

Uranus 44372-05-16 12:58 G 17927735.96 17927736.04 17927736.15 0.0134 0.0120

Saturn 44377-08-24 02:53 G 17929661.44 17929661.62 17929661.81 0.0258 0.0131

Saturn 44378-04-09 22:05 G 17929890.21 17929890.42 17929890.63 0.0258 0.0063

Jupiter 44378-11-04 17:17 G 17930099.13 17930099.22 17930099.32 0.0498 0.0434

Saturn 44378-11-24 17:17 G 17930119.21 17930119.22 17930119.24 0.0258 0.0257

Jupiter 44384-09-06 03:36 G 17932231.46 17932231.65 17932231.85 0.0527 0.0168

Jupiter 44390-07-10 18:29 G 17934365.07 17934365.27 17934365.48 0.0498 0.0076

Saturn 44392-09-20 17:31 G 17935168.03 17935168.23 17935168.44 0.0304 0.0079

Saturn 44393-05-09 01:55 G 17935398.46 17935398.58 17935398.71 0.0304 0.0243

Jupiter 44396-05-11 18:43 G 17936497.11 17936497.28 17936497.46 0.0527 0.0269

Jupiter 44402-03-15 20:24 G 17938631.18 17938631.35 17938631.51 0.0499 0.0283

Neptune 44406-03-27 18:14 G 17940104.20 17940104.26 17940104.36 0.0090 0.0084

Neptune 44406-11-08 07:55 G 17940329.70 17940329.83 17940329.97 0.0090 0.0071

Saturn 44407-03-06 07:26 G 17940447.61 17940447.81 17940448.01 0.0258 0.0103

Neptune 44407-06-21 20:53 G 17940555.23 17940555.37 17940555.56 0.0090 0.0059

Saturn 44407-10-21 02:24 G 17940676.41 17940676.60 17940676.81 0.0258 0.0093

Neptune 44408-02-02 10:34 G 17940780.76 17940780.94 17940781.13 0.0090 0.0046

Uranus 44408-04-27 04:19 G 17940865.59 17940865.68 17940865.78 0.0145 0.0130

Neptune 44408-09-14 23:31 G 17941006.29 17941006.48 17941006.70 0.0090 0.0034

Uranus 44408-12-09 16:19 G 17941092.03 17941092.18 17941092.35 0.0145 0.0099

Neptune 44409-04-28 13:12 G 17941231.84 17941232.05 17941232.27 0.0090 0.0021

Uranus 44409-07-24 04:19 G 17941318.50 17941318.68 17941318.88 0.0145 0.0068

Neptune 44409-12-10 02:38 G 17941457.39 17941457.61 17941457.83 0.0090 0.0008

Uranus 44410-03-07 16:34 G 17941544.99 17941545.19 17941545.41 0.0145 0.0036

Neptune 44410-07-23 15:50 G 17941682.94 17941683.16 17941683.38 0.0090 0.0004

Uranus 44410-10-20 05:02 G 17941771.49 17941771.71 17941771.93 0.0145 0.0004

Neptune 44411-03-06 05:02 G 17941908.50 17941908.71 17941908.93 0.0089 0.0017

Uranus 44411-06-03 17:02 G 17941998.00 17941998.21 17941998.43 0.0145 0.0028

Neptune 44411-10-17 18:14 G 17942134.06 17942134.26 17942134.47 0.0089 0.0029

Uranus 44412-01-16 05:02 G 17942224.52 17942224.71 17942224.92 0.0145 0.0060

Neptune 44412-05-30 07:41 G 17942359.63 17942359.82 17942360.02 0.0089 0.0042

Uranus 44412-08-29 17:17 G 17942451.06 17942451.22 17942451.39 0.0144 0.0091

Neptune 44413-01-10 20:38 G 17942585.20 17942585.36 17942585.55 0.0089 0.0055

Uranus 44413-04-13 05:02 G 17942677.61 17942677.71 17942677.84 0.0144 0.0123

Neptune 44413-08-24 09:50 G 17942810.78 17942810.91 17942811.07 0.0089 0.0067

Neptune 44414-04-06 22:48 G 17943036.37 17943036.45 17943036.57 0.0089 0.0080

Jupiter 44420-05-14 18:00 G 17945266.13 17945266.25 17945266.39 0.0528 0.0412

Saturn 44422-04-03 02:24 G 17945954.39 17945954.60 17945954.81 0.0304 0.0030

Saturn 44422-11-19 10:34 G 17946184.89 17946184.94 17946185.01 0.0304 0.0291

Jupiter 44426-03-18 03:50 G 17947399.49 17947399.66 17947399.83 0.0498 0.0279

Mars 44429-08-30 12:58 G 17948660.90 17948661.04 17948661.19 0.1860 0.1008

Jupiter 44432-01-18 11:31 G 17949531.78 17949531.98 17949532.18 0.0527 0.0013

Mars 44434-04-13 09:50 G 17950347.75 17950347.91 17950348.06 0.1667 0.0684

Saturn 44436-09-15 11:02 G 17951233.76 17951233.96 17951234.17 0.0258 0.0073

Saturn 44437-05-02 06:00 G 17951462.57 17951462.75 17951462.94 0.0258 0.0121

Jupiter 44437-11-21 05:02 G 17951665.51 17951665.71 17951665.91 0.0498 0.0082

Jupiter 44443-09-23 02:53 G 17953797.52 17953797.62 17953797.73 0.0527 0.0446

Jupiter 44449-07-27 06:14 G 17955931.66 17955931.76 17955931.85 0.0499 0.0440

Pluto 44449-12-16 18:29 G 17956074.12 17956074.27 17956074.46 0.0063 0.0040

Uranus 44450-06-18 22:19 G 17956258.33 17956258.43 17956258.57 0.0133 0.0112

Pluto 44450-07-29 22:19 G 17956299.22 17956299.43 17956299.66 0.0063 0.0002

Uranus 44451-01-31 03:36 G 17956484.50 17956484.65 17956484.83 0.0133 0.0088

Pluto 44451-03-12 01:41 G 17956524.42 17956524.57 17956524.75 0.0063 0.0041

Uranus 44451-09-14 09:07 G 17956710.70 17956710.88 17956711.08 0.0133 0.0063

Saturn 44451-10-14 09:07 G 17956740.67 17956740.88 17956741.09 0.0305 0.0009

Uranus 44452-04-27 14:24 G 17956936.91 17956937.10 17956937.32 0.0133 0.0039

Uranus 44452-12-09 19:55 G 17957163.12 17957163.33 17957163.55 0.0133 0.0014

Uranus 44453-07-24 01:26 G 17957389.34 17957389.56 17957389.78 0.0134 0.0012

Uranus 44454-03-07 06:43 G 17957615.58 17957615.78 17957616.00 0.0134 0.0037

Uranus 44454-10-19 12:00 G 17957841.82 17957842.00 17957842.21 0.0134 0.0062

Uranus 44455-06-02 17:46 G 17958068.08 17958068.24 17958068.41 0.0134 0.0086

Uranus 44456-01-14 23:02 G 17958294.35 17958294.46 17958294.59 0.0134 0.0111

Jupiter 44461-11-23 16:34 G 17960434.19 17960434.19 17960434.19 0.0498 0.0497

Saturn 44465-08-11 19:12 G 17961791.23 17961791.30 17961791.39 0.0259 0.0241

Saturn 44466-03-28 14:24 G 17962019.90 17962020.10 17962020.32 0.0258 0.0047

Saturn 44466-11-12 09:22 G 17962248.72 17962248.89 17962249.07 0.0258 0.0148

Jupiter 44467-09-26 00:43 G 17962566.35 17962566.53 17962566.71 0.0528 0.0226

Jupiter 44473-07-29 17:46 G 17964700.04 17964700.24 17964700.44 0.0498 0.0140

Jupiter 44479-05-31 17:46 G 17966832.06 17966832.24 17966832.43 0.0527 0.0202

Saturn 44480-09-07 07:41 G 17967296.73 17967296.82 17967296.92 0.0304 0.0269

Saturn 44481-04-25 16:05 G 17967526.96 17967527.17 17967527.38 0.0304 0.0053

Jupiter 44485-04-03 16:19 G 17968966.00 17968966.18 17968966.36 0.0498 0.0232

Neptune 44488-12-23 23:31 G 17970326.39 17970326.48 17970326.60 0.0088 0.0077

Neptune 44489-08-06 12:29 G 17970551.88 17970552.02 17970552.17 0.0088 0.0065

Neptune 44490-03-20 00:43 G 17970777.38 17970777.53 17970777.73 0.0088 0.0054

Earth 44490-06-25 23:31 G 17970875.45 17970875.48 17970875.50 0.2684 0.2649

Neptune 44490-10-31 13:55 G 17971002.90 17971003.08 17971003.29 0.0088 0.0042

Neptune 44491-06-14 02:38 G 17971228.41 17971228.61 17971228.83 0.0088 0.0030

Uranus 44491-12-26 10:19 G 17971423.91 17971423.93 17971423.98 0.0145 0.0143

Neptune 44492-01-25 15:36 G 17971453.93 17971454.15 17971454.37 0.0088 0.0018

Uranus 44492-08-08 22:34 G 17971650.31 17971650.44 17971650.59 0.0145 0.0112

Neptune 44492-09-07 04:19 G 17971679.46 17971679.68 17971679.90 0.0088 0.0006

Uranus 44493-03-23 11:02 G 17971876.78 17971876.96 17971877.14 0.0145 0.0080

Neptune 44493-04-20 17:02 G 17971904.99 17971905.21 17971905.43 0.0088 0.0006

Uranus 44493-11-04 23:02 G 17972103.27 17972103.46 17972103.68 0.0145 0.0049

Neptune 44493-12-02 05:46 G 17972130.53 17972130.74 17972130.96 0.0088 0.0018

Uranus 44494-06-19 11:31 G 17972329.76 17972329.98 17972330.20 0.0145 0.0017

Neptune 44494-07-15 18:14 G 17972356.07 17972356.26 17972356.48 0.0088 0.0030

Uranus 44495-01-31 23:31 G 17972556.27 17972556.48 17972556.71 0.0145 0.0016

Saturn 44495-02-21 22:19 G 17972577.32 17972577.43 17972577.56 0.0258 0.0213

Neptune 44495-02-26 06:58 G 17972581.61 17972581.79 17972582.00 0.0088 0.0042

Mars 44495-06-27 18:00 G 17972703.19 17972703.25 17972703.32 0.1855 0.1706

Uranus 44495-09-15 12:00 G 17972782.79 17972783.00 17972783.21 0.0145 0.0047

Saturn 44495-10-08 17:31 G 17972806.02 17972806.23 17972806.44 0.0258 0.0019

Neptune 44495-10-09 20:10 G 17972807.17 17972807.34 17972807.52 0.0088 0.0053

Uranus 44496-04-29 00:00 G 17973009.33 17973009.50 17973009.69 0.0145 0.0079

Neptune 44496-05-22 08:53 G 17973032.73 17973032.87 17973033.02 0.0088 0.0065

Saturn 44496-05-24 12:00 G 17973034.86 17973035.00 17973035.17 0.0258 0.0175

Uranus 44496-12-11 12:00 G 17973235.87 17973236.00 17973236.15 0.0144 0.0110

Neptune 44497-01-02 21:36 G 17973258.31 17973258.40 17973258.51 0.0088 0.0077

Uranus 44497-07-26 00:00 G 17973462.47 17973462.50 17973462.56 0.0144 0.0141

Earth 44498-06-23 13:41 G 17973794.93 17973795.07 17973795.22 0.2684 0.1129

Moon 44498-06-23 18:43 G 17973795.13 17973795.28 17973795.44 0.2687 0.0265 *

Mars 44500-02-08 20:53 G 17974390.20 17974390.37 17974390.54 0.1670 0.0356

Jupiter 44503-06-04 19:26 G 17975601.24 17975601.31 17975601.38 0.0528 0.0491

Jupiter 44509-04-07 03:07 G 17977734.49 17977734.63 17977734.78 0.0498 0.0345

Saturn 44510-03-21 12:00 G 17978082.88 17978083.00 17978083.14 0.0304 0.0237

Saturn 44510-11-06 20:38 G 17978313.16 17978313.36 17978313.56 0.0305 0.0086

Jupiter 44515-02-07 10:48 G 17979866.75 17979866.95 17979867.16 0.0527 0.0059

Jupiter 44520-12-11 05:31 G 17982000.53 17982000.73 17982000.94 0.0498 0.0010

Saturn 44524-09-04 00:58 G 17983363.40 17983363.54 17983363.69 0.0258 0.0188

Saturn 44525-04-20 19:55 G 17983592.11 17983592.33 17983592.54 0.0258 0.0007

Saturn 44525-12-05 14:24 G 17983820.98 17983821.10 17983821.25 0.0258 0.0200

Jupiter 44526-10-13 01:41 G 17984132.44 17984132.57 17984132.71 0.0527 0.0379

Jupiter 44532-08-16 06:58 G 17986266.65 17986266.79 17986266.93 0.0499 0.0368

Uranus 44534-02-17 08:38 G 17986816.78 17986816.86 17986816.97 0.0133 0.0120

Uranus 44534-10-01 13:55 G 17987042.95 17987043.08 17987043.25 0.0133 0.0096

Uranus 44535-05-15 19:26 G 17987269.13 17987269.31 17987269.50 0.0133 0.0072

Uranus 44535-12-28 00:29 G 17987495.33 17987495.52 17987495.74 0.0133 0.0048

Uranus 44536-08-10 06:00 G 17987721.54 17987721.75 17987721.97 0.0133 0.0023

Uranus 44537-03-24 11:31 G 17987947.76 17987947.98 17987948.20 0.0133 0.0002

Uranus 44537-11-05 16:48 G 17988173.99 17988174.20 17988174.42 0.0133 0.0027

Uranus 44538-06-19 22:19 G 17988400.23 17988400.43 17988400.63 0.0133 0.0052

Uranus 44539-02-01 03:22 G 17988626.47 17988626.64 17988626.83 0.0134 0.0077

Uranus 44539-09-15 09:07 G 17988852.74 17988852.88 17988853.02 0.0134 0.0101

Saturn 44539-10-01 17:31 G 17988869.07 17988869.23 17988869.39 0.0304 0.0196

Pluto 44540-02-02 13:55 G 17988992.89 17988993.08 17988993.28 0.0081 0.0038

Uranus 44540-04-28 14:24 G 17989079.04 17989079.10 17989079.18 0.0134 0.0126

Saturn 44540-05-19 02:10 G 17989099.40 17989099.59 17989099.79 0.0304 0.0127

Pluto 44540-09-15 00:00 G 17989218.34 17989218.50 17989218.70 0.0080 0.0046

Jupiter 44550-10-16 05:02 G 17992901.55 17992901.71 17992901.87 0.0528 0.0320

Saturn 44554-03-17 03:22 G 17994149.47 17994149.64 17994149.80 0.0258 0.0162

Saturn 44554-10-31 22:05 G 17994378.21 17994378.42 17994378.64 0.0258 0.0032

Saturn 44555-06-17 16:34 G 17994607.10 17994607.19 17994607.30 0.0258 0.0225

Jupiter 44556-08-18 15:07 G 17995034.95 17995035.13 17995035.32 0.0498 0.0196

Jupiter 44562-06-20 21:07 G 17997167.19 17997167.38 17997167.58 0.0527 0.0109

Mars 44565-12-07 07:55 G 17998432.65 17998432.83 17998433.00 0.1673 0.0032

Jupiter 44568-04-23 17:02 G 17999301.02 17999301.21 17999301.40 0.0499 0.0159

Saturn 44569-04-12 20:24 G 17999655.18 17999655.35 17999655.53 0.0305 0.0168

Saturn 44569-11-29 05:02 G 17999885.54 17999885.71 17999885.90 0.0305 0.0156

Neptune 44570-06-30 04:34 G 18000098.65 18000098.69 18000098.76 0.0090 0.0087

Neptune 44571-02-10 17:46 G 18000324.14 18000324.24 18000324.38 0.0090 0.0075

Neptune 44571-09-24 07:12 G 18000549.65 18000549.80 18000549.97 0.0090 0.0062

Neptune 44572-05-06 20:38 G 18000775.19 18000775.36 18000775.55 0.0090 0.0050

Neptune 44572-12-18 10:05 G 18001000.73 18001000.92 18001001.12 0.0090 0.0037

Neptune 44573-07-31 23:17 G 18001226.27 18001226.47 18001226.69 0.0090 0.0025

Neptune 44574-03-14 12:43 G 18001451.81 18001452.03 18001452.25 0.0090 0.0012

Neptune 44574-10-26 01:55 G 18001677.37 18001677.58 18001677.80 0.0089 0.0002

Neptune 44575-06-08 15:22 G 18001902.93 18001903.14 18001903.36 0.0089 0.0013

Neptune 44576-01-20 04:34 G 18002128.49 18002128.69 18002128.91 0.0089 0.0026

Uranus 44576-04-09 03:22 G 18002208.55 18002208.64 18002208.76 0.0145 0.0125

Neptune 44576-09-01 18:00 G 18002354.05 18002354.25 18002354.45 0.0089 0.0038

Uranus 44576-11-21 15:36 G 18002435.00 18002435.15 18002435.33 0.0145 0.0094

Neptune 44577-04-15 06:58 G 18002579.62 18002579.79 18002579.98 0.0089 0.0051

Uranus 44577-07-06 04:05 G 18002661.48 18002661.67 18002661.87 0.0145 0.0062

Neptune 44577-11-26 20:24 G 18002805.20 18002805.35 18002805.51 0.0089 0.0063

Uranus 44578-02-17 16:19 G 18002887.97 18002888.18 18002888.40 0.0145 0.0030

Neptune 44578-07-10 09:07 G 18003030.79 18003030.88 18003031.03 0.0089 0.0076

Uranus 44578-10-02 04:48 G 18003114.49 18003114.70 18003114.92 0.0145 0.0003

Neptune 44579-02-20 22:19 G 18003256.41 18003256.43 18003256.50 0.0089 0.0088

Uranus 44579-05-16 17:02 G 18003341.00 18003341.21 18003341.43 0.0145 0.0034

Uranus 44579-12-29 05:17 G 18003567.53 18003567.72 18003567.92 0.0145 0.0066

Uranus 44580-08-11 17:31 G 18003794.07 18003794.23 18003794.39 0.0145 0.0097

Uranus 44581-03-26 05:17 G 18004020.64 18004020.72 18004020.84 0.0144 0.0129

Saturn 44583-09-27 04:34 G 18004935.52 18004935.69 18004935.88 0.0258 0.0139

Saturn 44584-05-12 23:31 G 18005164.27 18005164.48 18005164.69 0.0258 0.0055

Saturn 44584-12-27 18:14 G 18005393.21 18005393.26 18005393.31 0.0258 0.0248

Jupiter 44592-04-26 05:17 G 18008069.61 18008069.72 18008069.83 0.0498 0.0421

Mars 44593-04-24 16:34 G 18008433.11 18008433.19 18008433.28 0.1864 0.1625

Jupiter 44598-02-26 13:12 G 18010201.86 18010202.05 18010202.25 0.0528 0.0142

Saturn 44598-10-24 00:14 G 18010441.32 18010441.51 18010441.70 0.0304 0.0132

Saturn 44599-06-11 08:53 G 18010671.71 18010671.87 18010672.04 0.0305 0.0192

Earth 44603-12-27 19:41 G 18012331.17 18012331.32 18012331.48 0.2647 0.0687

Moon 44603-12-28 01:26 G 18012331.41 18012331.56 18012331.71 0.2647 0.1063 *

Jupiter 44604-01-01 04:19 G 18012335.47 18012335.68 18012335.88 0.0498 0.0054

Jupiter 44609-11-02 07:12 G 18014467.63 18014467.80 18014467.98 0.0527 0.0277

Moon 44611-12-25 15:22 G 18015251.04 18015251.14 18015251.25 0.2642 0.2035

Saturn 44613-04-09 06:29 G 18015721.58 18015721.77 18015721.97 0.0258 0.0115

Saturn 44613-11-24 01:12 G 18015950.35 18015950.55 18015950.76 0.0258 0.0080

Jupiter 44615-09-06 05:46 G 18016601.58 18016601.74 18016601.90 0.0498 0.0303

Uranus 44617-10-18 19:26 G 18017375.27 18017375.31 18017375.38 0.0133 0.0129

Uranus 44618-06-02 00:43 G 18017601.41 18017601.53 18017601.68 0.0133 0.0105

Uranus 44619-01-14 06:00 G 18017827.59 18017827.75 18017827.94 0.0133 0.0080

Uranus 44619-08-28 11:31 G 18018053.78 18018053.98 18018054.18 0.0133 0.0055

Uranus 44620-04-10 16:48 G 18018280.00 18018280.20 18018280.42 0.0133 0.0031

Uranus 44620-11-22 22:19 G 18018506.21 18018506.43 18018506.65 0.0133 0.0006

Uranus 44621-07-07 03:36 G 18018732.43 18018732.65 18018732.86 0.0133 0.0019

Uranus 44622-02-18 08:38 G 18018958.67 18018958.86 18018959.08 0.0133 0.0044

Uranus 44622-10-02 14:10 G 18019184.91 18019185.09 18019185.28 0.0133 0.0068

Uranus 44623-05-16 19:26 G 18019411.17 18019411.31 18019411.48 0.0134 0.0093

Uranus 44623-12-29 00:58 G 18019637.45 18019637.54 18019637.65 0.0134 0.0117

Saturn 44628-05-06 01:55 G 18021227.39 18021227.58 18021227.78 0.0305 0.0106

Saturn 44628-12-22 10:34 G 18021457.80 18021457.94 18021458.09 0.0305 0.0220

Mars 44631-10-05 18:43 G 18022475.11 18022475.28 18022475.45 0.1676 0.0322

Jupiter 44633-11-05 07:41 G 18023236.70 18023236.82 18023236.95 0.0527 0.0407

Jupiter 44639-09-08 18:00 G 18025370.09 18025370.25 18025370.43 0.0498 0.0279

Saturn 44642-10-20 07:12 G 18026507.61 18026507.80 18026508.01 0.0258 0.0093

Saturn 44643-06-06 01:55 G 18026736.39 18026736.58 18026736.78 0.0258 0.0101

Jupiter 44645-07-10 22:48 G 18027502.25 18027502.45 18027502.66 0.0527 0.0028

Jupiter 44651-05-14 20:10 G 18029636.14 18029636.34 18029636.54 0.0498 0.0077

Neptune 44653-03-29 09:36 G 18030320.82 18030320.90 18030321.00 0.0088 0.0080

Neptune 44653-11-09 22:05 G 18030546.31 18030546.42 18030546.59 0.0088 0.0069

Neptune 44654-06-23 11:02 G 18030771.81 18030771.96 18030772.15 0.0088 0.0057

Neptune 44655-02-04 00:00 G 18030997.32 18030997.50 18030997.70 0.0088 0.0045

Neptune 44655-09-17 12:58 G 18031222.83 18031223.04 18031223.24 0.0088 0.0033

Neptune 44656-04-30 01:26 G 18031448.35 18031448.56 18031448.78 0.0088 0.0022

Neptune 44656-12-11 14:24 G 18031673.88 18031674.10 18031674.32 0.0088 0.0010

Jupiter 44657-03-15 16:19 G 18031768.08 18031768.18 18031768.28 0.0527 0.0449

Neptune 44657-07-25 03:07 G 18031899.41 18031899.63 18031899.85 0.0088 0.0002

Saturn 44657-11-16 05:17 G 18032013.52 18032013.72 18032013.93 0.0304 0.0070

Neptune 44658-03-07 15:36 G 18032124.94 18032125.15 18032125.38 0.0088 0.0014

Saturn 44658-07-04 14:10 G 18032243.97 18032244.09 18032244.20 0.0305 0.0254

Neptune 44658-10-19 04:19 G 18032350.48 18032350.68 18032350.90 0.0088 0.0026

Mars 44659-02-20 21:22 G 18032475.23 18032475.39 18032475.54 0.1860 0.0886

Neptune 44659-06-01 17:17 G 18032576.02 18032576.22 18032576.42 0.0088 0.0037

Uranus 44659-12-09 07:26 G 18032766.77 18032766.81 18032766.89 0.0145 0.0139

Neptune 44660-01-13 05:46 G 18032801.57 18032801.74 18032801.93 0.0088 0.0049

Uranus 44660-07-22 20:10 G 18032993.20 18032993.34 18032993.49 0.0145 0.0107

Neptune 44660-08-25 18:14 G 18033027.12 18033027.26 18033027.44 0.0088 0.0061

Uranus 44661-03-06 08:10 G 18033219.67 18033219.84 18033220.04 0.0145 0.0076

Neptune 44661-04-08 06:58 G 18033252.69 18033252.79 18033252.94 0.0088 0.0073

Uranus 44661-10-18 20:53 G 18033446.16 18033446.37 18033446.58 0.0145 0.0044

Neptune 44661-11-19 20:10 G 18033478.29 18033478.34 18033478.41 0.0088 0.0084

Uranus 44662-06-02 09:07 G 18033672.67 18033672.88 18033673.10 0.0145 0.0013

Uranus 44663-01-14 21:36 G 18033899.18 18033899.40 18033899.61 0.0145 0.0020

Jupiter 44663-01-17 19:12 G 18033902.21 18033902.30 18033902.40 0.0499 0.0442

Uranus 44663-08-29 09:36 G 18034125.71 18034125.90 18034126.11 0.0145 0.0052

Uranus 44664-04-11 21:50 G 18034352.24 18034352.41 18034352.60 0.0145 0.0084

Uranus 44664-11-24 10:19 G 18034578.80 18034578.93 18034579.06 0.0145 0.0115

Saturn 44672-05-01 08:53 G 18037293.66 18037293.87 18037294.07 0.0258 0.0070

Saturn 44672-12-16 03:22 G 18037522.46 18037522.64 18037522.83 0.0257 0.0124

Jupiter 44675-05-17 04:48 G 18038404.67 18038404.70 18038404.74 0.0498 0.0488

Jupiter 44681-03-18 18:58 G 18040537.11 18040537.29 18040537.47 0.0528 0.0246

Jupiter 44687-01-20 06:58 G 18042670.59 18042670.79 18042670.98 0.0498 0.0135

Saturn 44687-05-29 05:46 G 18042799.53 18042799.74 18042799.95 0.0305 0.0048

Saturn 44688-01-14 14:24 G 18043030.02 18043030.10 18043030.19 0.0305 0.0278

Jupiter 44692-11-21 11:02 G 18044802.77 18044802.96 18044803.15 0.0527 0.0183

Mars 44697-08-02 05:17 G 18046517.56 18046517.72 18046517.88 0.1679 0.0680

Pluto 44698-07-03 22:48 G 18046853.26 18046853.45 18046853.65 0.0063 0.0029

Jupiter 44698-09-25 09:07 G 18046936.70 18046936.88 18046937.07 0.0499 0.0218

Pluto 44699-02-14 02:24 G 18047078.39 18047078.60 18047078.82 0.0063 0.0010

Pluto 44699-09-27 05:31 G 18047303.62 18047303.73 18047303.89 0.0064 0.0051

Saturn 44701-03-28 14:10 G 18047851.02 18047851.09 18047851.16 0.0258 0.0243

Saturn 44701-11-12 09:07 G 18048079.67 18048079.88 18048080.09 0.0258 0.0048

Uranus 44702-01-31 10:48 G 18048159.86 18048159.95 18048160.08 0.0133 0.0113

Saturn 44702-06-29 03:50 G 18048308.49 18048308.66 18048308.84 0.0257 0.0145

Uranus 44702-09-14 16:34 G 18048386.03 18048386.19 18048386.35 0.0133 0.0089

Uranus 44703-04-28 21:36 G 18048612.23 18048612.40 18048612.61 0.0133 0.0065

Uranus 44703-12-11 03:07 G 18048838.43 18048838.63 18048838.84 0.0133 0.0040

Uranus 44704-07-24 08:24 G 18049064.64 18049064.85 18049065.07 0.0133 0.0015

Uranus 44705-03-07 13:55 G 18049290.86 18049291.08 18049291.30 0.0133 0.0010

Uranus 44705-10-19 19:12 G 18049517.09 18049517.30 18049517.51 0.0133 0.0035

Uranus 44706-06-03 00:14 G 18049743.33 18049743.51 18049743.72 0.0133 0.0060

Uranus 44707-01-15 05:46 G 18049969.58 18049969.74 18049969.91 0.0134 0.0084

Uranus 44707-08-29 10:48 G 18050195.84 18050195.95 18050196.09 0.0134 0.0109

Uranus 44708-04-11 16:19 G 18050422.17 18050422.18 18050422.22 0.0134 0.0133

Jupiter 44716-11-25 11:46 G 18053571.93 18053571.99 18053572.05 0.0528 0.0499

Saturn 44716-12-09 09:07 G 18053585.67 18053585.88 18053586.09 0.0304 0.0013

Jupiter 44722-09-28 18:29 G 18055705.13 18055705.27 18055705.42 0.0498 0.0350

Mars 44724-12-19 02:10 G 18056517.42 18056517.59 18056517.76 0.1856 0.0162

Jupiter 44728-07-31 05:17 G 18057837.52 18057837.72 18057837.92 0.0528 0.0080

Saturn 44730-10-08 15:22 G 18058637.04 18058637.14 18058637.26 0.0258 0.0222

Saturn 44731-05-25 10:34 G 18058865.73 18058865.94 18058866.15 0.0258 0.0026

Saturn 44732-01-09 05:02 G 18059094.55 18059094.71 18059094.87 0.0258 0.0168

Moon 44733-06-28 23:31 G 18059631.39 18059631.48 18059631.57 0.2678 0.2240

Earth 44733-06-28 23:46 G 18059631.44 18059631.49 18059631.55 0.2684 0.2524 *

Jupiter 44734-06-03 20:24 G 18059971.15 18059971.35 18059971.56 0.0498 0.0010

Neptune 44735-05-17 03:36 G 18060318.56 18060318.65 18060318.77 0.0090 0.0078

Neptune 44735-12-28 16:48 G 18060544.07 18060544.20 18060544.36 0.0090 0.0066

Neptune 44736-08-10 06:00 G 18060769.59 18060769.75 18060769.94 0.0090 0.0054

Neptune 44737-03-23 19:26 G 18060995.12 18060995.31 18060995.51 0.0090 0.0041

Neptune 44737-11-04 08:38 G 18061220.66 18061220.86 18061221.08 0.0090 0.0029

Neptune 44738-06-17 22:05 G 18061446.21 18061446.42 18061446.64 0.0090 0.0016

Neptune 44739-01-29 11:31 G 18061671.76 18061671.98 18061672.20 0.0090 0.0004

Neptune 44739-09-12 00:43 G 18061897.32 18061897.53 18061897.75 0.0090 0.0009

Jupiter 44740-04-04 22:05 G 18062103.27 18062103.42 18062103.57 0.0527 0.0344

Neptune 44740-04-24 13:55 G 18062122.88 18062123.08 18062123.30 0.0089 0.0021

Neptune 44740-12-06 03:07 G 18062348.44 18062348.63 18062348.85 0.0089 0.0034

Moon 44741-06-26 09:50 G 18062550.79 18062550.91 18062551.02 0.2681 0.1931

Earth 44741-06-26 14:10 G 18062550.95 18062551.09 18062551.23 0.2685 0.1248 *

Neptune 44741-07-19 16:34 G 18062574.01 18062574.19 18062574.39 0.0089 0.0046

Neptune 44742-03-02 05:31 G 18062799.58 18062799.73 18062799.92 0.0089 0.0059

Neptune 44742-10-13 18:43 G 18063025.17 18063025.28 18063025.44 0.0089 0.0071

Neptune 44743-05-27 08:24 G 18063250.78 18063250.85 18063250.94 0.0089 0.0083

Uranus 44744-03-23 01:26 G 18063551.45 18063551.56 18063551.69 0.0145 0.0120

Uranus 44744-11-04 13:41 G 18063777.91 18063778.07 18063778.25 0.0145 0.0089

Uranus 44745-06-19 02:10 G 18064004.39 18064004.59 18064004.79 0.0145 0.0057

Uranus 44746-01-31 14:24 G 18064230.89 18064231.10 18064231.32 0.0145 0.0025

Jupiter 44746-02-06 21:50 G 18064237.28 18064237.41 18064237.56 0.0499 0.0360

Saturn 44746-06-21 09:50 G 18064371.70 18064371.91 18064372.13 0.0305 0.0013

Uranus 44746-09-15 02:53 G 18064457.40 18064457.62 18064457.84 0.0145 0.0007

Uranus 44747-04-29 15:07 G 18064683.93 18064684.13 18064684.35 0.0145 0.0039

Uranus 44747-12-12 03:22 G 18064910.46 18064910.64 18064910.84 0.0145 0.0071

Uranus 44748-07-25 15:22 G 18065137.00 18065137.14 18065137.31 0.0145 0.0103

Uranus 44749-03-09 03:22 G 18065363.58 18065363.64 18065363.74 0.0145 0.0134

Saturn 44760-04-19 15:36 G 18069423.02 18069423.15 18069423.28 0.0258 0.0200

Saturn 44760-12-04 10:48 G 18069651.73 18069651.95 18069652.16 0.0258 0.0005

Saturn 44761-07-21 05:02 G 18069880.58 18069880.71 18069880.87 0.0258 0.0190

Mars 44763-05-31 16:05 G 18070560.03 18070560.17 18070560.31 0.1682 0.1026

Jupiter 44764-04-07 21:36 G 18070872.24 18070872.40 18070872.56 0.0528 0.0332

Jupiter 44770-02-09 10:19 G 18073005.75 18073005.93 18073006.11 0.0498 0.0220

Saturn 44775-05-16 04:48 G 18074927.62 18074927.70 18074927.79 0.0304 0.0277

Jupiter 44775-12-12 14:38 G 18075137.91 18075138.11 18075138.31 0.0527 0.0092

Saturn 44776-01-01 13:12 G 18075157.84 18075158.05 18075158.26 0.0304 0.0046

Jupiter 44781-10-15 10:19 G 18077271.73 18077271.93 18077272.12 0.0498 0.0142

Uranus 44785-09-30 21:50 G 18078718.33 18078718.41 18078718.51 0.0133 0.0121

Uranus 44786-05-15 03:07 G 18078944.50 18078944.63 18078944.79 0.0133 0.0097

Uranus 44786-12-27 08:38 G 18079170.68 18079170.86 18079171.05 0.0133 0.0073

Uranus 44787-08-10 13:41 G 18079396.88 18079397.07 18079397.29 0.0133 0.0049

Jupiter 44787-08-17 07:26 G 18079403.77 18079403.81 18079403.86 0.0527 0.0513

Uranus 44788-03-23 19:26 G 18079623.10 18079623.31 18079623.53 0.0133 0.0023

Pluto 44788-08-19 19:12 G 18079772.09 18079772.30 18079772.52 0.0081 0.0019

Uranus 44788-11-05 00:43 G 18079849.32 18079849.53 18079849.75 0.0133 0.0003

Pluto 44789-04-02 05:17 G 18079997.61 18079997.72 18079997.87 0.0080 0.0064

Uranus 44789-06-19 06:00 G 18080075.54 18080075.75 18080075.97 0.0133 0.0026

Saturn 44789-10-30 17:17 G 18080209.07 18080209.22 18080209.38 0.0259 0.0178

Uranus 44790-01-31 11:02 G 18080301.77 18080301.96 18080302.17 0.0134 0.0052

Saturn 44790-06-16 12:14 G 18080437.80 18080438.01 18080438.23 0.0258 0.0019

Uranus 44790-09-14 16:34 G 18080528.02 18080528.19 18080528.37 0.0134 0.0076

Mars 44790-10-16 07:12 G 18080559.63 18080559.80 18080559.96 0.1852 0.0546

Saturn 44791-01-31 06:43 G 18080666.67 18080666.78 18080666.91 0.0258 0.0212

Uranus 44791-04-28 21:36 G 18080754.28 18080754.40 18080754.57 0.0134 0.0101

Uranus 44791-12-11 03:07 G 18080980.57 18080980.63 18080980.72 0.0134 0.0125

Jupiter 44793-06-20 12:00 G 18081537.98 18081538.00 18081538.01 0.0498 0.0496

Mars 44795-05-30 13:55 G 18082247.00 18082247.08 18082247.16 0.1672 0.1479

Saturn 44804-11-25 06:14 G 18085713.65 18085713.76 18085713.88 0.0304 0.0252

Saturn 44805-07-13 14:38 G 18085943.91 18085944.11 18085944.31 0.0305 0.0072

Jupiter 44805-10-17 21:07 G 18086040.29 18086040.38 18086040.49 0.0498 0.0430

Jupiter 44811-08-20 09:07 G 18088172.69 18088172.88 18088173.07 0.0528 0.0173

Jupiter 44817-06-22 23:17 G 18090306.27 18090306.47 18090306.67 0.0498 0.0078

Neptune 44817-07-01 18:43 G 18090315.24 18090315.28 18090315.37 0.0088 0.0084

Neptune 44818-02-12 07:41 G 18090540.71 18090540.82 18090540.96 0.0088 0.0072

Neptune 44818-09-25 20:10 G 18090766.21 18090766.34 18090766.53 0.0088 0.0061

Neptune 44819-05-09 09:07 G 18090991.72 18090991.88 18090992.08 0.0088 0.0049

Saturn 44819-05-12 17:17 G 18090995.06 18090995.22 18090995.40 0.0258 0.0157

Neptune 44819-12-20 22:19 G 18091217.23 18091217.43 18091217.63 0.0088 0.0037

Saturn 44819-12-27 12:43 G 18091223.82 18091224.03 18091224.24 0.0258 0.0040

Neptune 44820-08-02 10:48 G 18091442.75 18091442.95 18091443.17 0.0088 0.0026

Saturn 44820-08-12 07:12 G 18091452.72 18091452.80 18091452.90 0.0258 0.0234

Neptune 44821-03-15 23:46 G 18091668.28 18091668.49 18091668.71 0.0088 0.0014

Neptune 44821-10-27 12:43 G 18091893.81 18091894.03 18091894.25 0.0088 0.0002

Neptune 44822-06-10 01:26 G 18092119.34 18092119.56 18092119.78 0.0088 0.0010

Neptune 44823-01-21 13:55 G 18092344.88 18092345.08 18092345.30 0.0088 0.0022

Jupiter 44823-04-25 00:14 G 18092438.33 18092438.51 18092438.69 0.0527 0.0260

Neptune 44823-09-04 02:38 G 18092570.41 18092570.61 18092570.82 0.0088 0.0033

Neptune 44824-04-16 15:07 G 18092795.96 18092796.13 18092796.34 0.0088 0.0045

Neptune 44824-11-28 03:50 G 18093021.52 18093021.66 18093021.85 0.0088 0.0057

Neptune 44825-07-11 16:48 G 18093247.08 18093247.20 18093247.35 0.0088 0.0068

Neptune 44826-02-22 05:17 G 18093472.65 18093472.72 18093472.84 0.0088 0.0080

Uranus 44827-11-21 08:53 G 18094109.80 18094109.87 18094109.98 0.0145 0.0132

Uranus 44828-07-04 21:22 G 18094336.24 18094336.39 18094336.56 0.0145 0.0100

Uranus 44829-02-16 09:36 G 18094562.72 18094562.90 18094563.10 0.0145 0.0069

Jupiter 44829-02-26 00:58 G 18094572.37 18094572.54 18094572.71 0.0499 0.0276

Mars 44829-03-28 01:55 G 18094602.49 18094602.58 18094602.68 0.1685 0.1409

Uranus 44829-09-30 22:05 G 18094789.22 18094789.42 18094789.64 0.0145 0.0037

Uranus 44830-05-15 10:34 G 18095015.73 18095015.94 18095016.16 0.0145 0.0005

Uranus 44830-12-27 22:48 G 18095242.24 18095242.45 18095242.67 0.0145 0.0027

Uranus 44831-08-11 11:02 G 18095468.76 18095468.96 18095469.16 0.0145 0.0059

Uranus 44832-03-24 23:02 G 18095695.30 18095695.46 18095695.64 0.0145 0.0091

Uranus 44832-11-06 11:02 G 18095921.86 18095921.96 18095922.09 0.0145 0.0123

Saturn 44834-06-07 10:48 G 18096499.81 18096499.95 18096500.10 0.0304 0.0215

Saturn 44835-01-23 19:12 G 18096730.11 18096730.30 18096730.50 0.0304 0.0109

Moon 44846-12-28 16:19 G 18101087.02 18101087.18 18101087.34 0.2646 0.0206

Earth 44846-12-28 21:50 G 18101087.26 18101087.41 18101087.56 0.2647 0.0733 *

Jupiter 44847-04-28 02:10 G 18101207.48 18101207.59 18101207.71 0.0528 0.0430

Saturn 44848-11-21 19:41 G 18101781.14 18101781.32 18101781.51 0.0259 0.0133

Saturn 44849-07-08 14:53 G 18102009.91 18102010.12 18102010.33 0.0258 0.0063

Saturn 44850-02-22 09:22 G 18102238.89 18102238.89 18102238.92 0.0258 0.0257

Jupiter 44853-02-28 10:19 G 18103340.77 18103340.93 18103341.10 0.0497 0.0290

Mars 44856-08-12 12:00 G 18104601.88 18104602.00 18104602.13 0.1848 0.1254

Jupiter 44858-12-31 18:43 G 18105473.08 18105473.28 18105473.48 0.0528 0.0005

Mars 44861-03-27 00:29 G 18106289.39 18106289.52 18106289.65 0.1675 0.1128

Saturn 44863-12-18 13:41 G 18107285.91 18107286.07 18107286.24 0.0304 0.0186

Saturn 44864-08-04 21:50 G 18107516.22 18107516.41 18107516.60 0.0305 0.0137

Jupiter 44864-11-03 12:00 G 18107606.80 18107607.00 18107607.20 0.0498 0.0065

Uranus 44869-05-31 08:24 G 18109276.83 18109276.85 18109276.92 0.0133 0.0131

Uranus 44870-01-12 14:10 G 18109502.97 18109503.09 18109503.23 0.0133 0.0106

Uranus 44870-08-26 19:26 G 18109729.15 18109729.31 18109729.49 0.0133 0.0081

Jupiter 44870-09-05 10:48 G 18109738.83 18109738.95 18109739.07 0.0527 0.0422

Uranus 44871-04-10 00:58 G 18109955.35 18109955.54 18109955.74 0.0133 0.0057

Uranus 44871-11-22 06:14 G 18110181.56 18110181.76 18110181.98 0.0133 0.0032

Uranus 44872-07-05 11:46 G 18110407.77 18110407.99 18110408.20 0.0133 0.0007

Uranus 44873-02-16 17:02 G 18110633.99 18110634.21 18110634.42 0.0133 0.0018

Uranus 44873-09-30 22:05 G 18110860.22 18110860.42 18110860.63 0.0133 0.0043

Uranus 44874-05-15 03:22 G 18111086.46 18111086.64 18111086.84 0.0134 0.0067

Uranus 44874-12-27 08:38 G 18111312.71 18111312.86 18111313.03 0.0134 0.0092

Uranus 44875-08-10 14:10 G 18111538.99 18111539.09 18111539.20 0.0134 0.0116

Jupiter 44876-07-09 13:26 G 18111872.95 18111873.06 18111873.17 0.0499 0.0419

Saturn 44878-06-03 20:38 G 18112567.17 18112567.36 18112567.55 0.0258 0.0110

Saturn 44879-01-18 15:50 G 18112795.96 18112796.16 18112796.36 0.0258 0.0086

Saturn 44893-06-29 19:12 G 18118072.13 18118072.30 18118072.49 0.0304 0.0147

Saturn 44894-02-15 03:36 G 18118302.48 18118302.65 18118302.82 0.0304 0.0177

Jupiter 44894-09-08 10:19 G 18118507.76 18118507.93 18118508.11 0.0528 0.0254

Neptune 44899-08-18 12:43 G 18120312.96 18120313.03 18120313.14 0.0090 0.0082

Neptune 44900-04-01 01:55 G 18120538.47 18120538.58 18120538.74 0.0090 0.0070

Jupiter 44900-07-12 23:31 G 18120641.28 18120641.48 18120641.67 0.0497 0.0149

Neptune 44900-11-12 15:50 G 18120763.99 18120764.16 18120764.33 0.0090 0.0057

Neptune 44901-06-26 04:48 G 18120989.52 18120989.70 18120989.90 0.0090 0.0045

Neptune 44902-02-06 18:00 G 18121215.06 18121215.25 18121215.47 0.0090 0.0033

Neptune 44902-09-20 07:12 G 18121440.60 18121440.80 18121441.03 0.0090 0.0021

Neptune 44903-05-03 20:53 G 18121666.15 18121666.37 18121666.59 0.0090 0.0008

Neptune 44903-12-15 10:05 G 18121891.70 18121891.92 18121892.14 0.0090 0.0005

Neptune 44904-07-27 23:17 G 18122117.26 18122117.47 18122117.69 0.0090 0.0017

Neptune 44905-03-10 12:29 G 18122342.82 18122343.02 18122343.23 0.0090 0.0029

Neptune 44905-10-22 01:26 G 18122568.38 18122568.56 18122568.77 0.0089 0.0042

Jupiter 44906-05-15 02:38 G 18122773.41 18122773.61 18122773.80 0.0528 0.0174

Neptune 44906-06-04 14:53 G 18122793.96 18122794.12 18122794.31 0.0089 0.0054

Neptune 44907-01-16 04:19 G 18123019.54 18123019.68 18123019.84 0.0089 0.0066

Neptune 44907-08-29 17:31 G 18123245.14 18123245.23 18123245.35 0.0089 0.0078

Saturn 44907-12-15 23:17 G 18123353.28 18123353.47 18123353.68 0.0259 0.0086

Saturn 44908-07-31 18:43 G 18123582.09 18123582.28 18123582.47 0.0258 0.0111

Uranus 44911-07-22 17:17 G 18124668.20 18124668.22 18124668.26 0.0145 0.0143

Uranus 44912-03-05 05:31 G 18124894.61 18124894.73 18124894.88 0.0145 0.0112

Jupiter 44912-03-18 00:58 G 18124907.35 18124907.54 18124907.73 0.0498 0.0205

Uranus 44912-10-17 18:14 G 18125121.08 18125121.26 18125121.45 0.0145 0.0080

Uranus 44913-06-01 06:29 G 18125347.57 18125347.77 18125347.98 0.0145 0.0048

Uranus 44914-01-13 18:58 G 18125574.07 18125574.29 18125574.51 0.0145 0.0016

Uranus 44914-08-28 07:12 G 18125800.59 18125800.80 18125801.02 0.0145 0.0016

Uranus 44915-04-11 19:26 G 18126027.11 18126027.31 18126027.52 0.0145 0.0048

Uranus 44915-11-24 07:41 G 18126253.64 18126253.82 18126254.01 0.0145 0.0080

Uranus 44916-07-07 19:26 G 18126480.19 18126480.31 18126480.47 0.0145 0.0112

Uranus 44917-02-19 07:41 G 18126706.80 18126706.82 18126706.87 0.0145 0.0143

Saturn 44923-01-11 00:29 G 18128858.32 18128858.52 18128858.71 0.0304 0.0112

Saturn 44923-08-29 08:10 G 18129088.70 18129088.84 18129089.00 0.0304 0.0211

Mars 44927-01-23 11:17 G 18130331.82 18130331.97 18130332.13 0.1678 0.0790

Jupiter 44930-05-18 03:50 G 18131542.62 18131542.66 18131542.71 0.0528 0.0510

Jupiter 44936-03-20 10:48 G 18133675.81 18133675.95 18133676.09 0.0498 0.0360

Saturn 44936-11-10 05:17 G 18133910.71 18133910.72 18133910.75 0.0259 0.0258

Saturn 44937-06-27 01:12 G 18134139.34 18134139.55 18134139.76 0.0259 0.0060

Saturn 44938-02-10 20:24 G 18134368.17 18134368.35 18134368.53 0.0258 0.0136

Jupiter 44942-01-20 18:14 G 18135808.06 18135808.26 18135808.47 0.0528 0.0078

Pluto 44946-06-07 22:05 G 18137407.42 18137407.42 18137407.43 0.0063 0.0063

Pluto 44947-01-19 01:12 G 18137632.37 18137632.55 18137632.77 0.0063 0.0024

Pluto 44947-09-01 05:17 G 18137857.50 18137857.72 18137857.93 0.0063 0.0016

Jupiter 44947-11-24 12:29 G 18137941.82 18137942.02 18137942.23 0.0498 0.0013

Pluto 44948-04-13 08:38 G 18138082.77 18138082.86 18138082.97 0.0064 0.0056

Saturn 44952-07-23 07:41 G 18139644.62 18139644.82 18139645.03 0.0304 0.0069

Saturn 44953-03-10 15:50 G 18139875.05 18139875.16 18139875.27 0.0304 0.0255

Uranus 44953-09-13 02:10 G 18140061.48 18140061.59 18140061.70 0.0133 0.0114

Jupiter 44953-09-25 10:19 G 18140073.78 18140073.93 18140074.08 0.0527 0.0351

Uranus 44954-04-27 07:12 G 18140287.66 18140287.80 18140287.98 0.0133 0.0090

Uranus 44954-12-09 12:29 G 18140513.85 18140514.02 18140514.23 0.0133 0.0065

Uranus 44955-07-23 18:00 G 18140740.05 18140740.25 18140740.46 0.0133 0.0040

Uranus 44956-03-05 23:17 G 18140966.26 18140966.47 18140966.69 0.0133 0.0016

Uranus 44956-10-18 04:34 G 18141192.48 18141192.69 18141192.91 0.0133 0.0010

Uranus 44957-06-01 09:50 G 18141418.70 18141418.91 18141419.12 0.0133 0.0034

Uranus 44958-01-13 15:07 G 18141644.94 18141645.13 18141645.33 0.0133 0.0059

Uranus 44958-08-27 20:10 G 18141871.18 18141871.34 18141871.52 0.0134 0.0084

Uranus 44959-04-11 01:41 G 18142097.45 18142097.57 18142097.70 0.0134 0.0108

Jupiter 44959-07-30 13:12 G 18142207.91 18142208.05 18142208.20 0.0498 0.0349

Uranus 44959-11-23 07:12 G 18142323.77 18142323.80 18142323.83 0.0134 0.0132

Saturn 44966-05-23 09:07 G 18144696.79 18144696.88 18144696.98 0.0260 0.0232

Saturn 44967-01-07 05:02 G 18144925.50 18144925.71 18144925.92 0.0259 0.0034

Saturn 44967-08-24 00:14 G 18145154.35 18145154.51 18145154.68 0.0259 0.0163

Moon 44976-06-29 22:48 G 18148387.42 18148387.45 18148387.48 0.2692 0.2609

Earth 44976-06-30 00:14 G 18148387.44 18148387.51 18148387.58 0.2685 0.2377 *

Jupiter 44977-09-28 10:48 G 18148842.80 18148842.95 18148843.11 0.0528 0.0330

Neptune 44981-10-04 04:05 G 18150309.66 18150309.67 18150309.70 0.0088 0.0087

Saturn 44982-02-02 14:38 G 18150430.90 18150431.11 18150431.32 0.0304 0.0029

Neptune 44982-05-17 16:34 G 18150535.10 18150535.19 18150535.32 0.0088 0.0076

Saturn 44982-09-20 22:19 G 18150661.38 18150661.43 18150661.49 0.0304 0.0293

Neptune 44982-12-29 05:31 G 18150760.59 18150760.73 18150760.89 0.0088 0.0064

Jupiter 44983-08-01 22:19 G 18150976.25 18150976.43 18150976.62 0.0498 0.0212

Neptune 44983-08-11 18:00 G 18150986.09 18150986.25 18150986.45 0.0088 0.0053

Neptune 44984-03-24 06:58 G 18151211.61 18151211.79 18151212.00 0.0088 0.0041

Earth 44984-06-27 14:24 G 18151306.97 18151307.10 18151307.24 0.2685 0.1401

Moon 44984-06-27 17:31 G 18151307.09 18151307.23 18151307.37 0.2692 0.1113 *

Neptune 44984-11-04 19:41 G 18151437.13 18151437.32 18151437.55 0.0088 0.0030

Neptune 44985-06-18 08:38 G 18151662.65 18151662.86 18151663.09 0.0088 0.0018

Neptune 44986-01-29 21:36 G 18151888.18 18151888.40 18151888.62 0.0088 0.0006

Neptune 44986-09-12 10:19 G 18152113.71 18152113.93 18152114.15 0.0088 0.0006

Neptune 44987-04-25 23:02 G 18152339.24 18152339.46 18152339.68 0.0088 0.0017

Neptune 44987-12-07 11:31 G 18152564.79 18152564.98 18152565.20 0.0088 0.0029

Neptune 44988-07-20 00:14 G 18152790.33 18152790.51 18152790.72 0.0088 0.0041

Neptune 44989-03-02 12:58 G 18153015.88 18153016.04 18153016.23 0.0088 0.0052

Jupiter 44989-06-03 02:53 G 18153108.42 18153108.62 18153108.82 0.0528 0.0098

Neptune 44989-10-14 01:26 G 18153241.43 18153241.56 18153241.74 0.0088 0.0064

Neptune 44990-05-27 14:24 G 18153467.00 18153467.10 18153467.23 0.0088 0.0075

Neptune 44991-01-08 02:53 G 18153692.61 18153692.62 18153692.68 0.0088 0.0087

Mars 44992-11-19 21:50 G 18154374.24 18154374.41 18154374.58 0.1681 0.0433

Jupiter 44995-04-06 23:31 G 18155242.29 18155242.48 18155242.68 0.0498 0.0144

Uranus 44995-11-03 14:24 G 18155453.00 18155453.10 18155453.23 0.0145 0.0123

Saturn 44995-12-03 11:46 G 18155482.87 18155482.99 18155483.13 0.0259 0.0204

Uranus 44996-06-17 02:53 G 18155679.46 18155679.62 18155679.79 0.0145 0.0091

Saturn 44996-07-19 07:41 G 18155711.61 18155711.82 18155712.03 0.0259 0.0007

Uranus 44997-01-29 15:22 G 18155905.94 18155906.14 18155906.34 0.0145 0.0059

Saturn	**44997-03-05 02:53**	**G**	**18155940.48**	**18155940.62**	**18155940.77**	**0.0258**	**0.0190**	
Uranus	**44997-09-13 03:36**	**G**	**18156132.44**	**18156132.65**	**18156132.87**	**0.0145**	**0.0027**	
Uranus	**44998-04-27 16:05**	**G**	**18156358.95**	**18156359.17**	**18156359.39**	**0.0145**	**0.0005**	
Uranus	**44998-12-10 04:19**	**G**	**18156585.47**	**18156585.68**	**18156585.89**	**0.0145**	**0.0037**	
Uranus	**44999-07-24 16:19**	**G**	**18156812.00**	**18156812.18**	**18156812.38**	**0.0145**	**0.0069**	
Uranus	**45000-03-08 04:19**	**G**	**18157038.54**	**18157038.68**	**18157038.85**	**0.0145**	**0.0101**	
Uranus	**45000-10-20 16:48**	**G**	**18157265.12**	**18157265.20**	**18157265.30**	**0.0145**	**0.0132**	

46TH MILLENNIUM CE

This is a list of transits of Venus in the 46th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**45006-12-12 00:43**	**G**	**18159508.53**	**18159508.53**	**18159508.55**	**0.0499**	**0.0498**	
Saturn	**45010-12-29 16:05**	**G**	**18160987.16**	**18160987.17**	**18160987.18**	**0.0303**	**0.0302**	
Saturn	**45011-08-16 23:31**	**G**	**18161217.27**	**18161217.48**	**18161217.69**	**0.0304**	**0.0018**	
Jupiter	**45019-04-10 09:07**	**G**	**18164010.77**	**18164010.88**	**18164010.99**	**0.0497**	**0.0419**	
Mars	**45020-04-07 14:53**	**G**	**18164374.00**	**18164374.12**	**18164374.24**	**0.1853**	**0.1316**	
Jupiter	**45025-02-09 16:19**	**G**	**18166142.98**	**18166143.18**	**18166143.38**	**0.0529**	**0.0141**	
Saturn	**45025-06-15 16:48**	**G**	**18166269.04**	**18166269.20**	**18166269.35**	**0.0260**	**0.0176**	
Saturn	**45026-01-30 12:29**	**G**	**18166497.81**	**18166498.02**	**18166498.23**	**0.0259**	**0.0022**	
Saturn	**45026-09-16 07:41**	**G**	**18166726.71**	**18166726.82**	**18166726.94**	**0.0259**	**0.0219**	
Jupiter	**45030-12-14 10:19**	**G**	**18168276.73**	**18168276.93**	**18168277.14**	**0.0497**	**0.0067**	
Jupiter	**45036-10-15 08:24**	**G**	**18170408.69**	**18170408.85**	**18170409.03**	**0.0528**	**0.0286**	
Pluto	**45037-03-06 22:19**	**G**	**18170551.21**	**18170551.43**	**18170551.65**	**0.0081**	**0.0011**	

Uranus 45037-05-14 14:10 G 18170620.00 18170620.09 18170620.17 0.0133 0.0122

Pluto 45037-10-18 08:38 G 18170776.77 18170776.86 18170776.97 0.0080 0.0072

Uranus 45037-12-26 19:12 G 18170846.16 18170846.30 18170846.45 0.0133 0.0097

Uranus 45038-08-10 00:14 G 18171072.34 18171072.51 18171072.71 0.0133 0.0073

Uranus 45039-03-24 05:46 G 18171298.54 18171298.74 18171298.95 0.0133 0.0048

Uranus 45039-11-05 11:02 G 18171524.75 18171524.96 18171525.18 0.0133 0.0024

Uranus 45040-06-18 16:19 G 18171750.96 18171751.18 18171751.39 0.0133 0.0002

Saturn 45040-07-11 01:12 G 18171773.45 18171773.55 18171773.67 0.0303 0.0256

Uranus 45041-01-30 21:22 G 18171977.18 18171977.39 18171977.60 0.0133 0.0026

Saturn 45041-02-26 08:38 G 18172003.66 18172003.86 18172004.07 0.0304 0.0064

Uranus 45041-09-14 02:24 G 18172203.41 18172203.60 18172203.81 0.0133 0.0050

Uranus 45042-04-28 07:41 G 18172429.65 18172429.82 18172430.01 0.0133 0.0075

Jupiter 45042-08-19 10:19 G 18172542.77 18172542.93 18172543.10 0.0498 0.0295

Uranus 45042-12-10 12:43 G 18172655.90 18172656.03 18172656.19 0.0133 0.0100

Uranus 45043-07-24 18:00 G 18172882.18 18172882.25 18172882.34 0.0134 0.0124

Saturn 45054-12-26 20:10 G 18177055.17 18177055.34 18177055.52 0.0259 0.0146

Saturn 45055-08-12 16:05 G 18177283.96 18177284.17 18177284.38 0.0259 0.0052

Saturn 45056-03-28 11:17 G 18177512.92 18177512.97 18177513.04 0.0258 0.0248

Mars 45058-09-18 08:24 G 18178416.68 18178416.85 18178417.03 0.1684 0.0084

Jupiter 45060-10-18 07:26 G 18179177.68 18179177.81 18179177.95 0.0528 0.0386

Neptune 45063-11-21 21:07 G 18180307.34 18180307.38 18180307.47 0.0090 0.0086

Neptune 45064-07-04 10:34 G 18180532.83 18180532.94 18180533.08 0.0090 0.0074

Neptune 45065-02-14 23:46 G 18180758.35 18180758.49 18180758.67 0.0090 0.0062

Neptune 45065-09-28 13:26 G 18180983.88 18180984.06 18180984.25 0.0090 0.0049

Neptune 45066-05-12 02:53 G 18181209.42 18181209.62 18181209.82 0.0090 0.0037

Jupiter 45066-08-21 19:55 G 18181311.16 18181311.33 18181311.50 0.0498 0.0269

Neptune 45066-12-23 16:05 G 18181434.96 18181435.17 18181435.39 0.0090 0.0025

Neptune 45067-08-06 05:17 G 18181660.51 18181660.72 18181660.94 0.0090 0.0013

Neptune 45068-03-18 18:43 G 18181886.06 18181886.28 18181886.50 0.0090 0.0001

Neptune 45068-10-30 07:55 G 18182111.61 18182111.83 18182112.05 0.0090 0.0012

Neptune 45069-06-12 21:07 G 18182337.18 18182337.38 18182337.60 0.0090 0.0024

Saturn 45070-01-21 11:31 G 18182559.83 18182559.98 18182560.14 0.0303 0.0208

Neptune 45070-01-24 10:19 G 18182562.74 18182562.93 18182563.14 0.0090 0.0037

Neptune 45070-09-06 23:31 G 18182788.31 18182788.48 18182788.68 0.0089 0.0049

Saturn 45070-09-08 18:58 G 18182790.10 18182790.29 18182790.49 0.0304 0.0113

Neptune 45071-04-20 12:58 G 18183013.89 18183014.04 18183014.21 0.0089 0.0061

Neptune 45071-12-02 02:10 G 18183239.47 18183239.59 18183239.73 0.0089 0.0073

Jupiter 45072-06-22 22:48 G 18183443.25 18183443.45 18183443.65 0.0528 0.0045

Neptune 45072-07-14 15:36 G 18183465.09 18183465.15 18183465.22 0.0089 0.0085

Jupiter 45078-04-26 21:07 G 18185577.18 18185577.38 18185577.58 0.0498 0.0086

Uranus 45079-07-04 20:53 G 18186011.31 18186011.37 18186011.46 0.0145 0.0136

Uranus 45080-02-16 09:07 G 18186237.75 18186237.88 18186238.05 0.0145 0.0104

Uranus 45080-09-29 21:50 G 18186464.23 18186464.41 18186464.61 0.0145 0.0072

Uranus 45081-05-14 10:19 G 18186690.72 18186690.93 18186691.14 0.0145 0.0040

Uranus 45081-12-26 22:48 G 18186917.23 18186917.45 18186917.67 0.0145 0.0008

Uranus 45082-08-10 11:02 G 18187143.74 18187143.96 18187144.17 0.0145 0.0024

Uranus 45083-03-24 23:17 G 18187370.27 18187370.47 18187370.67 0.0145 0.0056

Uranus 45083-11-06 11:31 G 18187596.82 18187596.98 18187597.16 0.0145 0.0088

Jupiter 45084-02-26 12:43 G 18187708.95 18187709.03 18187709.12 0.0528 0.0479

Uranus 45084-06-19 23:31 G 18187823.38 18187823.48 18187823.62 0.0145 0.0120

Saturn 45084-07-08 01:55 G 18187841.39 18187841.58 18187841.77 0.0260 0.0116

Saturn 45085-02-21 21:36 G 18188070.20 18188070.40 18188070.61 0.0259 0.0082

Mars 45086-02-02 20:10 G 18188416.17 18188416.34 18188416.50 0.1849 0.0609

Jupiter 45089-12-30 22:05 G 18189843.33 18189843.42 18189843.52 0.0498 0.0441

Earth 45089-12-30 23:46 G 18189843.34 18189843.49 18189843.64 0.2646 0.0754 *

Moon 45089-12-31 03:50 G 18189843.54 18189843.66 18189843.79 0.2650 0.1417 *

Moon 45097-12-28 21:07 G 18192763.27 18192763.38 18192763.48 0.2645 0.1972

Saturn 45099-08-03 21:50 G 18193346.24 18193346.41 18193346.60 0.0303 0.0158

Saturn 45100-03-22 05:17 G 18193576.55 18193576.72 18193576.91 0.0304 0.0164

Jupiter 45102-04-30 04:48 G 18194345.64 18194345.70 18194345.77 0.0497 0.0466

Jupiter 45108-03-01 14:10 G 18196477.90 18196478.09 18196478.28 0.0528 0.0201

Jupiter 45114-01-03 05:46 G 18198611.54 18198611.74 18198611.94 0.0498 0.0111

Saturn 45114-01-19 06:29 G 18198627.57 18198627.77 18198627.97 0.0259 0.0084

Saturn 45114-09-05 02:10 G 18198856.40 18198856.59 18198856.78 0.0259 0.0113

Jupiter 45119-11-05 04:19 G 18200743.50 18200743.68 18200743.87 0.0527 0.0233

Uranus 45121-01-13 01:55 G 18201178.55 18201178.58 18201178.65 0.0133 0.0130

Uranus 45121-08-27 07:12 G 18201404.69 18201404.80 18201404.95 0.0133 0.0105

Uranus 45122-04-10 12:58 G 18201630.87 18201631.04 18201631.21 0.0133 0.0081

Uranus 45122-11-22 18:00 G 18201857.06 18201857.25 18201857.45 0.0133 0.0056

Uranus 45123-07-06 23:17 G 18202083.26 18202083.47 18202083.68 0.0133 0.0032

Uranus 45124-02-18 04:19 G 18202309.46 18202309.68 18202309.90 0.0133 0.0007

Mars 45124-07-16 18:43 G 18202459.11 18202459.28 18202459.45 0.1688 0.0289

Uranus 45124-10-01 09:22 G 18202535.68 18202535.89 18202536.11 0.0133 0.0018

Uranus 45125-05-15 14:38 G 18202761.91 18202762.11 18202762.32 0.0133 0.0042

Jupiter 45125-09-08 06:43 G 18202877.60 18202877.78 18202877.96 0.0498 0.0243

Uranus 45125-12-27 19:41 G 18202988.14 18202988.32 18202988.51 0.0133 0.0067

Uranus 45126-08-11 00:29 G 18203214.38 18203214.52 18203214.70 0.0133 0.0092

Uranus 45127-03-25 05:46 G 18203440.65 18203440.74 18203440.86 0.0133 0.0116

Saturn 45129-02-14 09:22 G 18204132.70 18204132.89 18204133.09 0.0303 0.0107

Saturn 45129-10-02 17:02 G 18204363.06 18204363.21 18204363.36 0.0304 0.0215

Saturn 45142-12-15 16:19 G 18209185.13 18209185.18 18209185.24 0.0260 0.0251

Saturn 45143-08-01 12:29 G 18209413.82 18209414.02 18209414.23 0.0260 0.0053

Jupiter 45143-11-08 01:55 G 18209512.47 18209512.58 18209512.70 0.0529 0.0431

Saturn 45144-03-17 08:10 G 18209642.67 18209642.84 18209643.02 0.0259 0.0145

Neptune 45146-08-21 01:12 G 18210529.48 18210529.55 18210529.67 0.0088 0.0080

Neptune 45147-04-03 14:10 G 18210754.97 18210755.09 18210755.24 0.0088 0.0068

Neptune 45147-11-15 02:53 G 18210980.47 18210980.62 18210980.81 0.0088 0.0057

Neptune 45148-06-27 15:50 G 18211205.98 18211206.16 18211206.36 0.0088 0.0045

Neptune 45149-02-08 04:34 G 18211431.50 18211431.69 18211431.90 0.0088 0.0034

Jupiter 45149-09-10 16:05 G 18211646.02 18211646.17 18211646.33 0.0497 0.0318

Neptune 45149-09-21 17:31 G 18211657.02 18211657.23 18211657.44 0.0088 0.0022

Neptune 45150-05-05 06:14 G 18211882.54 18211882.76 18211882.98 0.0088 0.0010

Neptune 45150-12-16 19:12 G 18212108.08 18212108.30 18212108.52 0.0088 0.0002

Neptune 45151-07-30 07:41 G 18212333.61 18212333.82 18212334.05 0.0088 0.0013

Mars 45151-12-02 01:12 G 18212458.38 18212458.55 18212458.72 0.1845 0.0089

Neptune 45152-03-11 20:24 G 18212559.15 18212559.35 18212559.57 0.0088 0.0024

Neptune 45152-10-23 09:07 G 18212784.69 18212784.88 18212785.09 0.0088 0.0036

Neptune 45153-06-05 21:36 G 18213010.24 18213010.40 18213010.61 0.0088 0.0048

Neptune 45154-01-17 10:34 G 18213235.79 18213235.94 18213236.12 0.0088 0.0059

Neptune 45154-08-30 23:31 G 18213461.35 18213461.48 18213461.61 0.0088 0.0070

Neptune 45155-04-13 11:46 G 18213686.93 18213686.99 18213687.09 0.0088 0.0082

Jupiter 45155-07-13 18:00 G 18213778.05 18213778.25 18213778.45 0.0528 0.0005

Saturn 45158-08-27 21:07 G 18214919.17 18214919.38 18214919.59 0.0303 0.0053

Saturn 45159-04-15 04:34 G 18215149.60 18215149.69 18215149.79 0.0304 0.0268

Jupiter 45161-05-16 15:36 G 18215911.95 18215912.15 18215912.35 0.0498 0.0045

Uranus 45163-10-17 15:36 G 18216796.03 18216796.15 18216796.28 0.0145 0.0116

Uranus 45164-05-31 03:36 G 18217022.49 18217022.65 18217022.85 0.0145 0.0086

Uranus 45165-01-12 16:05 G 18217248.98 18217249.17 18217249.39 0.0145 0.0053

Uranus 45165-08-27 04:34 G 18217475.48 18217475.69 18217475.91 0.0145 0.0021

Uranus 45166-04-10 17:02 G 18217702.00 18217702.21 18217702.43 0.0145 0.0012

Uranus 45166-11-23 05:31 G 18217928.52 18217928.73 18217928.94 0.0145 0.0044

Jupiter 45167-03-18 10:19 G 18218043.81 18218043.93 18218044.06 0.0527 0.0419

Uranus 45167-07-07 17:46 G 18218155.06 18218155.24 18218155.43 0.0145 0.0075

Uranus 45168-02-19 05:46 G 18218381.61 18218381.74 18218381.90 0.0145 0.0107

Uranus 45168-10-02 18:29 G 18218608.21 18218608.27 18218608.33 0.0145 0.0138

Saturn 45172-06-26 21:22 G 18219971.28 18219971.39 18219971.51 0.0260 0.0219

Jupiter 45173-01-19 15:50 G 18220178.05 18220178.16 18220178.29 0.0498 0.0403

Saturn 45173-02-10 17:31 G 18220200.02 18220200.23 18220200.44 0.0259 0.0020

Saturn 45173-09-27 13:12 G 18220428.89 18220429.05 18220429.20 0.0259 0.0177

Saturn 45188-03-09 07:55 G 18225705.62 18225705.83 18225706.05 0.0304 0.0008

Mars 45190-05-14 05:02 G 18226501.55 18226501.71 18226501.87 0.1691 0.0658

Jupiter 45191-03-21 07:55 G 18226812.66 18226812.83 18226813.02 0.0528 0.0244

Pluto 45194-12-24 01:41 G 18228186.47 18228186.57 18228186.71 0.0063 0.0053

Pluto 45195-08-06 05:31 G 18228411.52 18228411.73 18228411.95 0.0063 0.0014

Pluto 45196-03-18 09:07 G 18228636.68 18228636.88 18228637.09 0.0063 0.0026

Jupiter 45197-01-22 02:10 G 18228946.40 18228946.59 18228946.78 0.0497 0.0162

Saturn 45202-01-07 03:50 G 18230757.52 18230757.66 18230757.81 0.0260 0.0186

Saturn 45202-08-24 00:00 G 18230986.28 18230986.50 18230986.71 0.0259 0.0014

Jupiter 45202-11-23 21:50 G 18231078.22 18231078.41 18231078.60 0.0528 0.0193

Saturn 45203-04-09 19:26 G 18231215.19 18231215.31 18231215.44 0.0259 0.0209

Uranus 45205-04-26 19:41 G 18231963.21 18231963.32 18231963.44 0.0133 0.0112

Uranus 45205-12-09 00:43 G 18232189.38 18232189.53 18232189.70 0.0133 0.0088

Uranus 45206-07-23 05:46 G 18232415.56 18232415.74 18232415.94 0.0133 0.0064

Uranus 45207-03-06 11:02 G 18232641.76 18232641.96 18232642.18 0.0133 0.0039

Uranus 45207-10-18 16:19 G 18232867.96 18232868.18 18232868.40 0.0133 0.0015

Uranus 45208-05-31 21:22 G 18233094.18 18233094.39 18233094.61 0.0133 0.0010

Jupiter 45208-09-27 03:07 G 18233212.44 18233212.63 18233212.82 0.0498 0.0192

Uranus 45209-01-13 02:24 G 18233320.39 18233320.60 18233320.81 0.0133 0.0034

Uranus 45209-08-27 07:12 G 18233546.62 18233546.80 18233547.01 0.0133 0.0060

Uranus 45210-04-10 12:29 G 18233772.87 18233773.02 18233773.20 0.0133 0.0084

Uranus 45210-11-22 17:46 G 18233999.12 18233999.24 18233999.38 0.0133 0.0108

Uranus 45211-07-06 23:02 G 18234225.44 18234225.46 18234225.50 0.0133 0.0132

Saturn 45217-02-01 12:43 G 18236261.94 18236262.03 18236262.13 0.0302 0.0266

Saturn 45217-09-19 19:55 G 18236492.13 18236492.33 18236492.54 0.0303 0.0053

Mars 45217-09-28 06:43 G 18236500.62 18236500.78 18236500.94 0.1840 0.0763

Earth 45219-07-03 00:29 G 18237143.44 18237143.52 18237143.61 0.2686 0.2250

Moon 45219-07-03 03:36 G 18237143.56 18237143.65 18237143.74 0.2679 0.2225 *

Jupiter 45226-11-26 23:31 G 18239847.41 18239847.48 18239847.56 0.0528 0.0488

Moon 45227-06-30 12:58 G 18240062.90 18240063.04 18240063.18 0.2679 0.1502

Earth 45227-06-30 14:53 G 18240062.99 18240063.12 18240063.25 0.2686 0.1541 *

Neptune 45228-02-24 05:31 G 18240301.73 18240301.73 18240301.74 0.0090 0.0090

Neptune 45228-10-06 18:29 G 18240527.18 18240527.27 18240527.40 0.0090 0.0078

Neptune 45229-05-20 07:55 G 18240752.70 18240752.83 18240753.00 0.0090 0.0066

Neptune 45229-12-31 21:22 G 18240978.23 18240978.39 18240978.58 0.0090 0.0054

Neptune 45230-08-14 10:34 G 18241203.76 18241203.94 18241204.15 0.0090 0.0042

Neptune 45231-03-28 00:00 G 18241429.30 18241429.50 18241429.72 0.0090 0.0030

Saturn 45231-07-20 08:53 G 18241543.70 18241543.87 18241544.04 0.0260 0.0154

Neptune 45231-11-08 13:26 G 18241654.85 18241655.06 18241655.28 0.0090 0.0017

Saturn 45232-03-05 04:48 G 18241772.49 18241772.70 18241772.91 0.0259 0.0045

Neptune 45232-06-21 02:53 G 18241880.40 18241880.62 18241880.84 0.0090 0.0005

Jupiter 45232-09-29 09:50 G 18241980.77 18241980.91 18241981.06 0.0497 0.0355

Saturn 45232-10-20 00:14 G 18242001.44 18242001.51 18242001.59 0.0259 0.0241

Neptune 45233-02-01 16:05 G 18242105.95 18242106.17 18242106.39 0.0090 0.0007

Neptune 45233-09-15 05:02 G 18242331.51 18242331.71 18242331.94 0.0090 0.0020

Neptune 45234-04-28 18:29 G 18242557.07 18242557.27 18242557.48 0.0090 0.0032

Neptune 45234-12-10 07:41 G 18242782.64 18242782.82 18242783.02 0.0090 0.0044

Neptune 45235-07-23 20:53 G 18243008.21 18243008.37 18243008.55 0.0090 0.0056

Neptune 45236-03-05 10:05 G 18243233.79 18243233.92 18243234.07 0.0090 0.0068

Neptune 45236-10-16 23:17 G 18243459.39 18243459.47 18243459.58 0.0090 0.0080

Jupiter 45238-08-01 13:55 G 18244112.88 18244113.08 18244113.28 0.0528 0.0056

Jupiter 45244-06-04 11:02 G 18246246.76 18246246.96 18246247.17 0.0498 0.0009

Saturn 45246-08-14 23:02 G 18247048.33 18247048.46 18247048.62 0.0303 0.0220

Saturn 45247-04-02 06:43 G 18247278.58 18247278.78 18247278.98 0.0304 0.0101

Uranus 45247-06-16 19:55 G 18247354.25 18247354.33 18247354.44 0.0145 0.0130

Uranus 45248-01-29 08:24 G 18247580.70 18247580.85 18247581.02 0.0145 0.0099

Uranus 45248-09-11 20:53 G 18247807.19 18247807.37 18247807.57 0.0145 0.0067

Uranus 45249-04-26 09:22 G 18248033.68 18248033.89 18248034.11 0.0145 0.0035

Uranus 45249-12-08 21:50 G 18248260.19 18248260.41 18248260.63 0.0145 0.0003

Jupiter 45250-04-06 04:48 G 18248378.56 18248378.70 18248378.84 0.0527 0.0373

Uranus 45250-07-23 10:05 G 18248486.71 18248486.92 18248487.13 0.0145 0.0030

Uranus 45251-03-06 22:05 G 18248713.24 18248713.42 18248713.63 0.0145 0.0062

Uranus 45251-10-19 10:48 G 18248939.79 18248939.95 18248940.12 0.0145 0.0094

Uranus 45252-06-01 23:02 G 18249166.36 18249166.46 18249166.58 0.0145 0.0125

Jupiter 45256-02-08 12:43 G 18250512.89 18250513.03 18250513.17 0.0498 0.0349

Mars 45256-03-10 14:38 G 18250543.98 18250544.11 18250544.25 0.1695 0.1056

Saturn 45261-01-29 15:07 G 18252329.94 18252330.13 18252330.32 0.0260 0.0121

Saturn 45261-09-15 10:48 G 18252558.75 18252558.95 18252559.15 0.0259 0.0077

Jupiter 45274-04-09 03:22 G 18257147.48 18257147.64 18257147.81 0.0528 0.0292

Saturn 45276-02-25 09:50 G 18257834.74 18257834.91 18257835.09 0.0303 0.0167

Saturn 45276-10-12 17:17 G 18258065.05 18258065.22 18258065.41 0.0304 0.0154

Jupiter 45280-02-10 19:55 G 18259281.14 18259281.33 18259281.51 0.0498 0.0200

Mars 45283-07-26 12:00 G 18260542.89 18260543.00 18260543.11 0.1836 0.1442

Pluto 45285-02-07 16:48 G 18261105.13 18261105.20 18261105.29 0.0081 0.0075

Pluto 45285-09-21 03:22 G 18261330.43 18261330.64 18261330.87 0.0080 0.0009

Jupiter 45285-12-12 20:24 G 18261413.15 18261413.35 18261413.54 0.0528 0.0129

Mars 45288-03-09 13:55 G 18262231.02 18262231.08 18262231.15 0.1684 0.1545

Uranus 45288-12-25 07:12 G 18262521.73 18262521.80 18262521.91 0.0133 0.0121

Uranus 45289-08-08 12:43 G 18262747.89 18262748.03 18262748.19 0.0133 0.0096

Uranus 45290-03-22 18:00 G 18262974.07 18262974.25 18262974.44 0.0133 0.0071

Saturn 45290-08-11 19:41 G 18263116.13 18263116.32 18263116.53 0.0259 0.0090

Uranus 45290-11-03 23:02 G 18263200.27 18263200.46 18263200.67 0.0133 0.0047

Saturn 45291-03-28 15:22 G 18263344.95 18263345.14 18263345.34 0.0259 0.0108

Uranus 45291-06-18 04:19 G 18263426.47 18263426.68 18263426.89 0.0133 0.0022

Jupiter 45291-10-16 20:38 G 18263547.17 18263547.36 18263547.56 0.0498 0.0155

Uranus 45292-01-30 09:22 G 18263652.67 18263652.89 18263653.11 0.0133 0.0002

Uranus 45292-09-12 14:24 G 18263878.89 18263879.10 18263879.32 0.0133 0.0027

Uranus 45293-04-26 19:41 G 18264105.12 18264105.32 18264105.52 0.0133 0.0051

Uranus 45293-12-09 00:58 G 18264331.36 18264331.54 18264331.72 0.0133 0.0076

Uranus 45294-07-23 05:46 G 18264557.61 18264557.74 18264557.89 0.0133 0.0100

Uranus 45295-03-06 11:02 G 18264783.89 18264783.96 18264784.04 0.0133 0.0125

Saturn 45305-09-07 18:58 G 18268621.10 18268621.29 18268621.49 0.0303 0.0123

Saturn 45306-04-26 02:38 G 18268851.46 18268851.61 18268851.77 0.0304 0.0200

Neptune 45310-11-23 10:19 G 18270523.87 18270523.93 18270524.01 0.0088 0.0083

Neptune 45311-07-06 22:48 G 18270749.34 18270749.45 18270749.59 0.0088 0.0072

Neptune 45312-02-17 11:17 G 18270974.83 18270974.97 18270975.15 0.0088 0.0061

Neptune 45312-09-30 00:14 G 18271200.34 18271200.51 18271200.70 0.0088 0.0049

Neptune 45313-05-13 12:43 G 18271425.85 18271426.03 18271426.25 0.0088 0.0038

Neptune 45313-12-25 01:55 G 18271651.37 18271651.58 18271651.79 0.0088 0.0026

Neptune 45314-08-07 14:24 G 18271876.89 18271877.10 18271877.32 0.0088 0.0015

Neptune 45315-03-21 03:07 G 18272102.42 18272102.63 18272102.86 0.0088 0.0004

Jupiter 45315-10-20 07:12 G 18272315.69 18272315.80 18272315.92 0.0497 0.0409

Neptune 45315-11-01 16:05 G 18272327.95 18272328.17 18272328.39 0.0088 0.0008

Neptune 45316-06-14 04:48 G 18272553.49 18272553.70 18272553.92 0.0088 0.0020

Neptune 45317-01-25 17:31 G 18272779.03 18272779.23 18272779.44 0.0088 0.0031

Neptune 45317-09-08 06:00 G 18273004.57 18273004.75 18273004.96 0.0088 0.0043

Neptune 45318-04-21 18:43 G 18273230.12 18273230.28 18273230.47 0.0088 0.0054

Neptune 45318-12-03 07:26 G 18273455.69 18273455.81 18273455.98 0.0088 0.0066

Saturn 45319-07-09 04:48 G 18273673.68 18273673.70 18273673.74 0.0260 0.0257

Neptune 45319-07-16 20:10 G 18273681.26 18273681.34 18273681.47 0.0088 0.0077

Saturn 45320-02-23 01:12 G 18273902.34 18273902.55 18273902.75 0.0259 0.0059

Saturn 45320-10-08 20:24 G 18274131.18 18274131.35 18274131.54 0.0259 0.0139

Jupiter 45321-08-21 08:24 G 18274447.65 18274447.85 18274448.05 0.0528 0.0101

Mars 45322-01-07 00:43 G 18274586.44 18274586.53 18274586.62 0.1698 0.1440

Jupiter 45327-06-25 08:38 G 18276581.65 18276581.86 18276582.06 0.0498 0.0058

Uranus 45331-02-15 03:36 G 18277912.61 18277912.65 18277912.71 0.0145 0.0141

Uranus 45331-09-29 15:50 G 18278139.03 18278139.16 18278139.32 0.0145 0.0110

Uranus 45332-05-13 04:19 G 18278365.50 18278365.68 18278365.87 0.0145 0.0078

Uranus 45332-12-25 16:34 G 18278591.99 18278592.19 18278592.40 0.0145 0.0046

Moon 45333-01-01 23:02 G 18278599.30 18278599.46 18278599.63 0.2641 0.0228

Earth 45333-01-02 01:55 G 18278599.43 18278599.58 18278599.73 0.2646 0.0817 *

Jupiter 45333-04-26 00:58 G 18278713.38 18278713.54 18278713.70 0.0528 0.0321

Uranus 45333-08-09 05:02 G 18278818.49 18278818.71 18278818.92 0.0145 0.0014

Uranus 45334-03-23 17:17 G 18279045.00 18279045.22 18279045.44 0.0145 0.0018

Uranus 45334-11-05 05:31 G 18279271.53 18279271.73 18279271.94 0.0145 0.0050

Saturn 45335-03-21 04:34 G 18279407.49 18279407.69 18279407.90 0.0303 0.0072

Uranus 45335-06-19 17:46 G 18279498.07 18279498.24 18279498.43 0.0145 0.0082

Saturn 45335-11-06 12:29 G 18279637.90 18279638.02 18279638.14 0.0304 0.0250

Uranus 45336-02-01 06:14 G 18279724.63 18279724.76 18279724.90 0.0145 0.0113

Uranus 45336-09-14 18:29 G 18279951.27 18279951.27 18279951.28 0.0145 0.0145

Jupiter 45339-02-28 06:58 G 18280847.63 18280847.79 18280847.95 0.0498 0.0307

Earth 45340-12-30 18:00 G 18281519.23 18281519.25 18281519.28 0.2645 0.2590

Saturn 45349-01-18 09:07 G 18284459.79 18284459.88 18284459.99 0.0260 0.0227

Saturn 45349-09-04 05:17 G 18284688.50 18284688.72 18284688.93 0.0259 0.0029

Saturn 45350-04-21 00:29 G 18284917.36 18284917.52 18284917.69 0.0258 0.0168

Mars 45354-01-06 00:43 G 18286273.41 18286273.53 18286273.65 0.1687 0.1194

Jupiter 45357-04-29 02:10 G 18287482.45 18287482.59 18287482.74 0.0528 0.0358

Jupiter 45363-03-02 17:02 G 18289616.03 18289616.21 18289616.38 0.0498 0.0254

Saturn 45364-09-30 11:46 G 18290193.78 18290193.99 18290194.20 0.0304 0.0033

Saturn 45365-05-18 19:26 G 18290424.26 18290424.31 18290424.38 0.0304 0.0291

Jupiter 45369-01-01 17:17 G 18291748.02 18291748.22 18291748.42 0.0527 0.0071

Uranus 45372-08-25 18:58 G 18293080.25 18293080.29 18293080.37 0.0133 0.0129

Uranus 45373-04-09 00:43 G 18293306.40 18293306.53 18293306.67 0.0133 0.0104

Uranus 45373-11-21 05:46 G 18293532.58 18293532.74 18293532.93 0.0133 0.0080

Uranus 45374-07-05 10:48 G 18293758.77 18293758.95 18293759.16 0.0133 0.0056

Jupiter 45374-11-05 19:12 G 18293882.10 18293882.30 18293882.50 0.0498 0.0095

Uranus 45375-02-16 16:05 G 18293984.97 18293985.17 18293985.39 0.0133 0.0031

Uranus 45375-09-30 21:22 G 18294211.18 18294211.39 18294211.61 0.0133 0.0006

Uranus 45376-05-14 02:38 G 18294437.40 18294437.61 18294437.83 0.0133 0.0019

Uranus 45376-12-26 07:41 G 18294663.62 18294663.82 18294664.03 0.0133 0.0044

Uranus 45377-08-09 12:43 G 18294889.85 18294890.03 18294890.23 0.0133 0.0068

Uranus 45378-03-23 18:00 G 18295116.10 18295116.25 18295116.41 0.0133 0.0093

Saturn 45378-07-31 13:26 G 18295245.93 18295246.06 18295246.21 0.0260 0.0197

Uranus 45378-11-04 23:02 G 18295342.38 18295342.46 18295342.58 0.0133 0.0117

Saturn 45379-03-17 09:22 G 18295474.68 18295474.89 18295475.10 0.0259 0.0002

Saturn 45379-11-01 04:48 G 18295703.56 18295703.70 18295703.84 0.0258 0.0197

Jupiter 45380-09-06 07:12 G 18296013.75 18296013.80 18296013.86 0.0527 0.0502

Mars 45381-05-23 08:38 G 18296272.81 18296272.86 18296272.91 0.1845 0.1747

Jupiter 45386-07-11 20:24 G 18298148.26 18298148.35 18298148.44 0.0499 0.0446

Neptune 45393-01-09 02:24 G 18300521.51 18300521.60 18300521.68 0.0090 0.0082

Neptune 45393-08-22 15:07 G 18300747.02 18300747.13 18300747.29 0.0090 0.0071

Neptune 45394-04-05 05:02 G 18300972.55 18300972.71 18300972.88 0.0090 0.0058

Saturn 45394-04-12 19:41 G 18300980.11 18300980.32 18300980.53 0.0303 0.0015

Neptune 45394-11-16 18:29 G 18301198.08 18301198.27 18301198.46 0.0090 0.0046

Neptune 45395-06-30 07:55 G 18301423.63 18301423.83 18301424.03 0.0090 0.0034

Neptune 45396-02-10 21:07 G 18301649.17 18301649.38 18301649.60 0.0090 0.0022

Neptune 45396-09-23 10:34 G 18301874.72 18301874.94 18301875.16 0.0090 0.0010

Neptune 45397-05-07 00:00 G 18302100.28 18302100.50 18302100.72 0.0090 0.0003

Neptune 45397-12-18 12:58 G 18302325.83 18302326.04 18302326.27 0.0090 0.0015

Neptune 45398-08-01 02:10 G 18302551.39 18302551.59 18302551.81 0.0090 0.0027

Jupiter 45398-11-08 02:38 G 18302650.53 18302650.61 18302650.69 0.0497 0.0454

Neptune 45399-03-14 15:22 G 18302776.95 18302777.14 18302777.35 0.0090 0.0039

Neptune 45399-10-26 04:34 G 18303002.52 18303002.69 18303002.89 0.0090 0.0051

Neptune 45400-06-08 17:46 G 18303228.11 18303228.24 18303228.42 0.0090 0.0063

Neptune 45401-01-20 06:58 G 18303453.69 18303453.79 18303453.94 0.0090 0.0075

Neptune 45401-09-02 20:38 G 18303679.31 18303679.36 18303679.42 0.0090 0.0086

Jupiter 45404-09-10 10:05 G 18304782.73 18304782.92 18304783.11 0.0528 0.0182

Saturn 45408-02-11 17:02 G 18306032.05 18306032.21 18306032.38 0.0259 0.0169

Saturn 45408-09-27 12:43 G 18306260.82 18306261.03 18306261.24 0.0259 0.0029

Saturn 45409-05-14 07:41 G 18306489.72 18306489.82 18306489.93 0.0258 0.0224

Jupiter 45410-07-15 04:05 G 18306916.47 18306916.67 18306916.87 0.0498 0.0104

Uranus 45415-05-31 00:00 G 18308697.38 18308697.50 18308697.62 0.0145 0.0121

Uranus 45416-01-12 12:00 G 18308923.84 18308924.00 18308924.18 0.0145 0.0090

Jupiter 45416-05-16 01:55 G 18309048.40 18309048.58 18309048.76 0.0527 0.0242

Uranus 45416-08-26 00:14 G 18309150.32 18309150.51 18309150.72 0.0145 0.0058

Uranus 45417-04-09 12:43 G 18309376.82 18309377.03 18309377.25 0.0145 0.0026

Uranus 45417-11-22 01:12 G 18309603.33 18309603.55 18309603.77 0.0145 0.0006

Uranus 45418-07-06 13:26 G 18309829.85 18309830.06 18309830.27 0.0145 0.0038

Uranus 45419-02-18 01:41 G 18310056.39 18310056.57 18310056.77 0.0145 0.0070

Uranus 45419-10-02 14:10 G 18310282.94 18310283.09 18310283.25 0.0145 0.0102

Mars 45419-11-04 10:48 G 18310315.80 18310315.95 18310316.10 0.1691 0.0822

Uranus 45420-05-16 02:10 G 18310509.53 18310509.59 18310509.69 0.0145 0.0134

Jupiter 45422-03-20 05:17 G 18311182.55 18311182.72 18311182.90 0.0498 0.0247

Saturn 45423-03-08 17:02 G 18311536.13 18311536.21 18311536.31 0.0303 0.0272

Saturn 45423-10-25 00:43 G 18311766.32 18311766.53 18311766.74 0.0304 0.0049

Saturn 45437-08-23 19:55 G 18316818.16 18316818.33 18316818.51 0.0259 0.0142

Saturn 45438-04-09 15:36 G 18317046.94 18317047.15 18317047.36 0.0259 0.0055

Saturn 45438-11-24 10:48 G 18317275.90 18317275.95 18317276.00 0.0258 0.0250

Jupiter 45440-05-19 00:00 G 18317817.38 18317817.50 18317817.63 0.0528 0.0418

Pluto 45443-07-11 04:19 G 18318965.56 18318965.68 18318965.84 0.0063 0.0048

Pluto 45444-02-21 08:24 G 18319190.63 18319190.85 18319191.07 0.0063 0.0009

Pluto 45444-10-03 11:31 G 18319415.81 18319415.98 18319416.19 0.0063 0.0031

Jupiter 45446-03-22 16:48 G 18319951.05 18319951.20 18319951.36 0.0498 0.0321

Mars 45447-03-21 14:10 G 18320314.95 18320315.09 18320315.23 0.1841 0.1072

Jupiter 45452-01-22 16:48 G 18322083.00 18322083.20 18322083.41 0.0528 0.0009

Saturn 45452-09-17 23:17 G 18322322.34 18322322.47 18322322.61 0.0303 0.0230

Saturn 45453-05-06 06:58 G 18322552.59 18322552.79 18322553.00 0.0304 0.0092

Uranus 45456-12-08 12:58 G 18323864.93 18323865.04 18323865.17 0.0133 0.0112

Uranus 45457-07-22 18:00 G 18324091.10 18324091.25 18324091.43 0.0133 0.0088

Jupiter 45457-11-25 16:05 G 18324216.96 18324217.17 18324217.37 0.0498 0.0040

Uranus 45458-03-05 23:31 G 18324317.29 18324317.48 18324317.68 0.0133 0.0063

Uranus 45458-10-18 04:34 G 18324543.49 18324543.69 18324543.91 0.0133 0.0039

Uranus 45459-06-01 10:05 G 18324769.70 18324769.92 18324770.14 0.0133 0.0013

Uranus 45460-01-13 15:07 G 18324995.92 18324996.13 18324996.35 0.0133 0.0012

Uranus 45460-08-26 20:10 G 18325222.14 18325222.34 18325222.56 0.0133 0.0036

Uranus 45461-04-10 01:41 G 18325448.38 18325448.57 18325448.76 0.0133 0.0061

Uranus 45461-11-22 06:43 G 18325674.62 18325674.78 18325674.95 0.0133 0.0085

Moon 45462-07-04 20:53 G 18325899.26 18325899.37 18325899.48 0.2691 0.1883

Earth 45462-07-05 00:58 G 18325899.44 18325899.54 18325899.64 0.2686 0.2106 *

Uranus 45462-07-06 12:00 G 18325900.88 18325901.00 18325901.13 0.0133 0.0110

Jupiter 45463-09-27 10:34 G 18326348.81 18326348.94 18326349.06 0.0527 0.0413

Saturn 45467-03-05 22:48 G 18327604.26 18327604.45 18327604.64 0.0259 0.0116

Saturn 45467-10-20 18:00 G 18327833.05 18327833.25 18327833.46 0.0258 0.0082

Jupiter 45469-07-31 17:17 G 18328483.10 18328483.22 18328483.35 0.0498 0.0390

Earth 45470-07-02 15:07 G 18328819.00 18328819.13 18328819.25 0.2686 0.1687

Moon 45470-07-02 15:22 G 18328819.04 18328819.14 18328819.24 0.2694 0.2032 *

Neptune 45475-02-25 18:29 G 18330518.26 18330518.27 18330518.33 0.0088 0.0087

Neptune 45475-10-09 07:12 G 18330743.71 18330743.80 18330743.94 0.0088 0.0076

Neptune 45476-05-21 20:24 G 18330969.20 18330969.35 18330969.50 0.0088 0.0064

Neptune 45477-01-02 08:53 G 18331194.70 18331194.87 18331195.05 0.0088 0.0053

Neptune 45477-08-15 21:22 G 18331420.21 18331420.39 18331420.60 0.0088 0.0042

Neptune 45478-03-29 10:05 G 18331645.72 18331645.92 18331646.14 0.0088 0.0031

Neptune 45478-11-09 23:02 G 18331871.25 18331871.46 18331871.68 0.0088 0.0019

Neptune 45479-06-23 11:46 G 18332096.77 18332096.99 18332097.21 0.0088 0.0008

Neptune 45480-02-04 00:29 G 18332322.30 18332322.52 18332322.74 0.0088 0.0004

Neptune 45480-09-16 13:12 G 18332547.83 18332548.05 18332548.26 0.0088 0.0015

Neptune 45481-04-30 01:41 G 18332773.37 18332773.57 18332773.79 0.0088 0.0027

Neptune 45481-12-11 14:24 G 18332998.91 18332999.10 18332999.31 0.0088 0.0038

Saturn 45482-03-31 02:10 G 18333108.43 18333108.59 18333108.75 0.0303 0.0202

Neptune 45482-07-25 03:22 G 18333224.46 18333224.64 18333224.83 0.0088 0.0049

Saturn 45482-11-16 09:50 G 18333338.72 18333338.91 18333339.11 0.0304 0.0121

Neptune 45483-03-07 15:36 G 18333450.01 18333450.15 18333450.33 0.0088 0.0061

Neptune 45483-10-19 04:34 G 18333675.58 18333675.69 18333675.83 0.0088 0.0072

Neptune 45484-05-31 17:17 G 18333901.17 18333901.22 18333901.30 0.0088 0.0083

Mars 45485-08-31 21:07 G 18334358.22 18334358.38 18334358.55 0.1694 0.0460

Jupiter 45487-09-30 10:48 G 18335117.78 18335117.95 18335118.13 0.0528 0.0258

Jupiter 45493-08-03 05:02 G 18337251.52 18337251.71 18337251.90 0.0498 0.0177

Saturn 45496-09-15 00:29 G 18338390.32 18338390.52 18338390.72 0.0259 0.0091

Saturn 45497-05-01 19:41 G 18338619.13 18338619.32 18338619.52 0.0258 0.0106

Uranus 45499-01-28 09:36 G 18339255.83 18339255.90 18339256.00 0.0145 0.0132

Jupiter 45499-06-05 01:26 G 18339383.37 18339383.56 18339383.76 0.0527 0.0172

Uranus 45499-09-11 22:05 G 18339482.27 18339482.42 18339482.58 0.0145 0.0100

Uranus 45500-04-26 10:34 G 18339708.75 18339708.94 18339709.13 0.0145 0.0068

Uranus 45500-12-08 22:48 G 18339935.24 18339935.45 18339935.66 0.0145 0.0036

Uranus 45501-07-23 11:02 G 18340161.75 18340161.96 18340162.18 0.0145 0.0005

Uranus 45502-03-06 23:17 G 18340388.27 18340388.47 18340388.69 0.0145 0.0029

Uranus 45502-10-19 12:00 G 18340614.80 18340615.00 18340615.20 0.0145 0.0060

Uranus 45503-06-03 00:14 G 18340841.35 18340841.51 18340841.69 0.0145 0.0092

Uranus 45504-01-15 12:29 G 18341067.92 18341068.02 18341068.15 0.0145 0.0124

Jupiter 45505-04-09 06:58 G 18341517.60 18341517.79 18341517.98 0.0498 0.0172

Saturn 45511-10-12 06:58 G 18343894.62 18343894.79 18343894.97 0.0303 0.0163

Saturn 45512-05-29 14:53 G 18344124.95 18344125.12 18344125.30 0.0304 0.0160

Mars 45513-01-16 19:55 G 18344357.16 18344357.33 18344357.50 0.1837 0.0396

Jupiter 45523-06-09 05:02 G 18348152.67 18348152.71 18348152.75 0.0528 0.0515

Saturn 45526-03-29 02:38 G 18349176.40 18349176.61 18349176.81 0.0259 0.0067

Saturn 45526-11-12 21:36 G 18349405.23 18349405.40 18349405.60 0.0258 0.0130

Jupiter 45529-04-11 15:22 G 18350286.01 18350286.14 18350286.27 0.0497 0.0380

Pluto 45533-08-26 19:26 G 18351884.21 18351884.31 18351884.45 0.0081 0.0068

Pluto 45534-04-09 06:29 G 18352109.56 18352109.77 18352109.99 0.0080 0.0016

Jupiter 45535-02-11 21:22 G 18352418.19 18352418.39 18352418.59 0.0528 0.0096

Uranus 45540-08-09 01:26 G 18354423.48 18354423.56 18354423.67 0.0133 0.0120

Jupiter 45540-12-15 17:17 G 18354552.02 18354552.22 18354552.42 0.0498 0.0034

Uranus 45541-03-23 07:12 G 18354649.65 18354649.80 18354649.95 0.0133 0.0095

Saturn 45541-04-23 08:24 G 18354680.67 18354680.85 18354681.04 0.0304 0.0138

Uranus 45541-11-04 12:14 G 18354875.83 18354876.01 18354876.20 0.0133 0.0070

Saturn 45541-12-09 16:19 G 18354911.02 18354911.18 18354911.35 0.0304 0.0187

Uranus 45542-06-18 17:31 G 18355102.03 18355102.23 18355102.44 0.0133 0.0046

Uranus 45543-01-30 22:34 G 18355328.23 18355328.44 18355328.66 0.0133 0.0021

Uranus 45543-09-14 03:50 G 18355554.45 18355554.66 18355554.88 0.0133 0.0004

Uranus 45544-04-27 09:07 G 18355780.67 18355780.88 18355781.10 0.0133 0.0029

Uranus 45544-12-09 14:10 G 18356006.90 18356007.09 18356007.30 0.0133 0.0054

Uranus 45545-07-23 19:41 G 18356233.14 18356233.32 18356233.50 0.0133 0.0078

Uranus 45546-03-07 00:29 G 18356459.40 18356459.52 18356459.68 0.0133 0.0103

Jupiter 45546-10-17 13:12 G 18356683.89 18356684.05 18356684.21 0.0527 0.0326

Uranus 45546-10-19 06:00 G 18356685.69 18356685.75 18356685.82 0.0133 0.0127

Mars 45551-06-30 07:12 G 18358400.62 18358400.80 18358400.97 0.1697 0.0080

Jupiter 45552-08-20 19:26 G 18358818.15 18358818.31 18358818.47 0.0499 0.0313

Saturn 45555-02-22 07:26 G 18359733.74 18359733.81 18359733.89 0.0259 0.0243

Saturn 45555-10-09 03:22 G 18359962.43 18359962.64 18359962.85 0.0259 0.0044

Saturn 45556-05-24 22:34 G 18360191.27 18360191.44 18360191.61 0.0258 0.0152

Neptune 45557-04-14 08:53 G 18360515.84 18360515.87 18360515.94 0.0090 0.0087

Neptune 45557-11-25 22:34 G 18360741.33 18360741.44 18360741.57 0.0090 0.0075

Neptune 45558-07-09 12:00 G 18360966.85 18360967.00 18360967.16 0.0090 0.0063

Neptune 45559-02-20 01:12 G 18361192.38 18361192.55 18361192.74 0.0090 0.0051

Neptune 45559-10-03 14:38 G 18361417.92 18361418.11 18361418.31 0.0090 0.0039

Neptune 45560-05-16 04:19 G 18361643.47 18361643.68 18361643.89 0.0090 0.0027

Neptune 45560-12-27 17:31 G 18361869.02 18361869.23 18361869.45 0.0090 0.0015

Neptune 45561-08-10 06:58 G 18362094.57 18362094.79 18362095.01 0.0090 0.0003

Neptune 45562-03-23 20:10 G 18362320.12 18362320.34 18362320.56 0.0090 0.0009

Neptune 45562-11-04 09:36 G 18362545.68 18362545.90 18362546.11 0.0090 0.0021

Neptune 45563-06-17 22:48 G 18362771.25 18362771.45 18362771.66 0.0090 0.0033

Neptune 45564-01-29 12:00 G 18362996.82 18362997.00 18362997.20 0.0090 0.0045

Neptune 45564-09-11 01:12 G 18363222.39 18363222.55 18363222.73 0.0090 0.0057

Neptune 45565-04-24 14:24 G 18363447.98 18363448.10 18363448.25 0.0090 0.0069

Neptune 45565-12-06 03:36 G 18363673.57 18363673.65 18363673.76 0.0090 0.0081

Jupiter 45570-10-20 13:26 G 18365452.91 18365453.06 18365453.22 0.0528 0.0342

Saturn 45570-11-03 12:14 G 18365466.81 18365467.01 18365467.21 0.0303 0.0101

Saturn 45571-06-21 20:24 G 18365697.20 18365697.35 18365697.49 0.0304 0.0222

Earth 45576-01-05 04:05 G 18367355.52 18367355.67 18367355.82 0.2645 0.0858

Moon 45576-01-05 04:34 G 18367355.56 18367355.69 18367355.83 0.2651 0.1166 *

Jupiter 45576-08-23 04:34 G 18367586.52 18367586.69 18367586.87 0.0497 0.0243

Mars 45578-11-14 01:26 G 18368399.39 18368399.56 18368399.73 0.1833 0.0269

Jupiter 45582-06-25 07:12 G 18369718.60 18369718.80 18369719.00 0.0528 0.0070

Uranus 45582-09-28 17:46 G 18369814.22 18369814.24 18369814.28 0.0145 0.0143

Uranus 45583-05-13 06:00 G 18370040.62 18370040.75 18370040.90 0.0145 0.0112

Uranus 45583-12-25 18:14 G 18370267.09 18370267.26 18370267.45 0.0145 0.0081

Earth 45584-01-02 20:10 G 18370275.30 18370275.34 18370275.38 0.2645 0.2548

Moon 45584-01-03 00:29 G 18370275.46 18370275.52 18370275.58 0.2649 0.2404

Uranus 45584-08-08 06:43 G 18370493.58 18370493.78 18370493.99 0.0145 0.0048

Saturn 45584-09-03 09:07 G 18370519.78 18370519.88 18370520.00 0.0260 0.0220

Uranus 45585-03-22 19:12 G 18370720.08 18370720.30 18370720.52 0.0145 0.0016

Saturn 45585-04-20 04:48 G 18370748.49 18370748.70 18370748.92 0.0259 0.0022

Uranus 45585-11-04 07:41 G 18370946.61 18370946.82 18370947.04 0.0145 0.0016

Saturn 45585-12-05 00:00 G 18370977.35 18370977.50 18370977.66 0.0258 0.0175

Uranus 45586-06-18 20:10 G 18371173.14 18371173.34 18371173.55 0.0145 0.0048

Uranus 45587-01-31 08:38 G 18371399.68 18371399.86 18371400.04 0.0145 0.0081

Uranus 45587-09-14 21:07 G 18371626.24 18371626.38 18371626.52 0.0145 0.0112

Jupiter 45588-04-28 06:43 G 18371852.58 18371852.78 18371852.98 0.0498 0.0104

Uranus 45588-04-28 09:22 G 18371852.88 18371852.89 18371852.92 0.0145 0.0144 *

Jupiter 45594-02-27 23:46 G 18373984.42 18373984.49 18373984.57 0.0527 0.0485

Jupiter 45600-01-02 08:10 G 18376118.76 18376118.84 18376118.93 0.0499 0.0452

Saturn 45600-05-15 12:43 G 18376252.83 18376253.03 18376253.24 0.0304 0.0078

Saturn 45600-12-31 20:38 G 18376483.25 18376483.36 18376483.49 0.0305 0.0247

Jupiter 45612-04-30 18:14 G 18380621.19 18380621.26 18380621.34 0.0498 0.0461

Saturn 45614-03-16 09:22 G 18381305.76 18381305.89 18381306.03 0.0259 0.0198

Saturn 45614-10-31 05:17 G 18381534.50 18381534.72 18381534.93 0.0259 0.0005

Saturn 45615-06-17 00:00 G 18381763.38 18381763.50 18381763.65 0.0258 0.0197

Mars 45617-04-26 17:02 G 18382443.04 18382443.21 18382443.38 0.1701 0.0310

Jupiter 45618-03-02 23:31 G 18382753.29 18382753.48 18382753.67 0.0528 0.0178

Jupiter 45624-01-04 20:38 G 18384887.16 18384887.36 18384887.56 0.0498 0.0116

Uranus 45624-04-08 14:38 G 18384982.05 18384982.11 18384982.19 0.0133 0.0126

Uranus 45624-11-20 19:41 G 18385208.20 18385208.32 18385208.48 0.0133 0.0103

Uranus 45625-07-05 01:12 G 18385434.38 18385434.55 18385434.73 0.0133 0.0078

Uranus 45626-02-16 06:14 G 18385660.57 18385660.76 18385660.97 0.0133 0.0053

Uranus 45626-09-30 11:46 G 18385886.77 18385886.99 18385887.20 0.0133 0.0029

Uranus 45627-05-14 16:48 G 18386112.99 18386113.20 18386113.42 0.0133 0.0005

Uranus 45627-12-26 22:05 G 18386339.21 18386339.42 18386339.64 0.0133 0.0021

Uranus 45628-08-09 03:07 G 18386565.43 18386565.63 18386565.84 0.0133 0.0046

Uranus 45629-03-23 08:24 G 18386791.67 18386791.85 18386792.04 0.0133 0.0070

Uranus 45629-11-04 13:26 G 18387017.92 18387018.06 18387018.23 0.0133 0.0095

Jupiter 45629-11-05 16:19 G 18387019.01 18387019.18 18387019.37 0.0528 0.0238

Saturn 45629-11-25 16:19 G 18387038.97 18387039.18 18387039.39 0.0303 0.0043

Uranus 45630-06-18 18:43 G 18387244.20 18387244.28 18387244.39 0.0133 0.0119

Saturn 45630-07-14 00:29 G 18387269.44 18387269.52 18387269.59 0.0304 0.0281

Jupiter 45635-09-09 20:24 G 18389153.17 18389153.35 18389153.53 0.0498 0.0238

Neptune 45640-01-11 15:50 G 18390738.08 18390738.16 18390738.27 0.0088 0.0079

Neptune 45640-08-24 04:34 G 18390963.56 18390963.69 18390963.84 0.0088 0.0068

Neptune 45641-04-06 17:02 G 18391189.06 18391189.21 18391189.40 0.0088 0.0057

Neptune 45641-11-18 06:00 G 18391414.57 18391414.75 18391414.95 0.0088 0.0046

Neptune 45642-07-01 18:29 G 18391640.09 18391640.27 18391640.49 0.0088 0.0035

Neptune 45643-02-12 07:12 G 18391865.60 18391865.80 18391866.03 0.0088 0.0024

Neptune 45643-09-25 20:10 G 18392091.12 18392091.34 18392091.56 0.0088 0.0012

Saturn 45643-09-26 10:48 G 18392091.80 18392091.95 18392092.11 0.0260 0.0176

Neptune 45644-05-08 08:53 G 18392316.65 18392316.87 18392317.09 0.0088 0.0001

Saturn 45644-05-12 06:29 G 18392320.56 18392320.77 18392320.99 0.0259 0.0023

Mars 45644-09-10 07:26 G 18392441.66 18392441.81 18392441.96 0.1828 0.0909

Neptune 45644-12-19 21:36 G 18392542.18 18392542.40 18392542.62 0.0088 0.0011

Saturn 45644-12-27 01:26 G 18392549.46 18392549.56 18392549.68 0.0258 0.0219

Neptune 45645-08-02 10:05 G 18392767.71 18392767.92 18392768.14 0.0088 0.0022

Neptune 45646-03-15 22:34 G 18392993.25 18392993.44 18392993.66 0.0088 0.0034

Neptune 45646-10-27 11:17 G 18393218.80 18393218.97 18393219.18 0.0088 0.0045

Neptune 45647-06-10 00:00 G 18393444.35 18393444.50 18393444.69 0.0088 0.0056

Neptune 45648-01-21 12:58 G 18393669.91 18393670.04 18393670.19 0.0088 0.0067

Neptune 45648-09-03 01:41 G 18393895.48 18393895.57 18393895.68 0.0088 0.0078

Jupiter 45653-11-08 19:26 G 18395788.21 18395788.31 18395788.42 0.0528 0.0445

Saturn 45659-06-07 16:34 G 18397824.98 18397825.19 18397825.40 0.0304 0.0020

Jupiter 45659-09-12 07:26 G 18397921.66 18397921.81 18397921.97 0.0498 0.0323

Saturn 45660-01-24 00:29 G 18398055.52 18398055.52 18398055.53 0.0305 0.0304

Jupiter 45665-07-14 11:31 G 18400053.78 18400053.98 18400054.19 0.0528 0.0025

Uranus 45667-01-10 14:10 G 18400598.98 18400599.09 18400599.20 0.0145 0.0124

Uranus 45667-08-25 02:10 G 18400825.43 18400825.59 18400825.77 0.0145 0.0092

Uranus 45668-04-07 14:38 G 18401051.92 18401052.11 18401052.32 0.0145 0.0060

Uranus 45668-11-20 03:07 G 18401278.42 18401278.63 18401278.85 0.0145 0.0028

Uranus 45669-07-04 15:36 G 18401504.94 18401505.15 18401505.37 0.0145 0.0006

Uranus 45670-02-16 04:05 G 18401731.46 18401731.67 18401731.89 0.0145 0.0037

Uranus 45670-09-30 16:34 G 18401958.01 18401958.19 18401958.39 0.0145 0.0069

Uranus 45671-05-15 05:02 G 18402184.57 18402184.71 18402184.88 0.0145 0.0101

Jupiter 45671-05-18 09:50 G 18402187.71 18402187.91 18402188.12 0.0498 0.0022

Uranus 45671-12-27 17:17 G 18402411.15 18402411.22 18402411.32 0.0145 0.0133

Saturn 45673-04-07 10:34 G 18402877.78 18402877.94 18402878.12 0.0259 0.0154

Saturn 45673-11-22 06:29 G 18403106.56 18403106.77 18403106.98 0.0258 0.0045

Saturn 45674-07-09 01:26 G 18403335.50 18403335.56 18403335.65 0.0258 0.0240

Jupiter 45677-03-19 02:24 G 18404319.48 18404319.60 18404319.74 0.0527 0.0399

Jupiter 45683-01-21 11:46 G 18406453.86 18406453.99 18406454.13 0.0499 0.0367

Mars 45683-02-22 02:38 G 18406485.45 18406485.61 18406485.77 0.1704 0.0718

Saturn 45688-12-17 19:41 G 18408611.12 18408611.32 18408611.54 0.0303 0.0017

Pluto 45692-01-25 08:24 G 18409744.69 18409744.85 18409745.05 0.0063 0.0038

Pluto 45692-09-06 12:29 G 18409969.80 18409970.02 18409970.24 0.0063 0.0001

Pluto 45693-04-19 15:22 G 18410195.00 18410195.14 18410195.34 0.0063 0.0042

Jupiter 45701-03-23 05:02 G 18413088.54 18413088.71 18413088.89 0.0529 0.0280

Saturn 45702-10-19 12:29 G 18413663.84 18413664.02 18413664.21 0.0260 0.0132

Saturn 45703-06-05 08:10 G 18413892.64 18413892.84 18413893.05 0.0259 0.0067

Earth 45705-07-07 00:58 G 18414655.44 18414655.54 18414655.65 0.2687 0.1955

Moon 45705-07-07 06:14 G 18414655.71 18414655.76 18414655.81 0.2683 0.2557

Jupiter 45707-01-24 21:22 G 18415222.21 18415222.39 18415222.58 0.0497 0.0189

Uranus 45708-07-22 08:38 G 18415766.75 18415766.86 18415766.99 0.0133 0.0109

Uranus 45709-03-05 13:55 G 18415992.92 18415993.08 18415993.26 0.0133 0.0085

Uranus 45709-10-17 19:12 G 18416219.12 18416219.30 18416219.50 0.0133 0.0061

Uranus 45710-06-01 00:29 G 18416445.32 18416445.52 18416445.74 0.0133 0.0036

Mars 45710-07-09 13:12 G 18416483.96 18416484.05 18416484.13 0.1824 0.1562

Uranus 45711-01-13 05:46 G 18416671.52 18416671.74 18416671.96 0.0133 0.0011

Uranus 45711-08-27 10:48 G 18416897.74 18416897.95 18416898.17 0.0133 0.0014

Uranus 45712-04-09 16:19 G 18417123.97 18417124.18 18417124.39 0.0133 0.0038

Uranus 45712-11-21 21:22 G 18417350.20 18417350.39 18417350.59 0.0133 0.0063

Jupiter 45712-11-25 22:05 G 18417354.22 18417354.42 18417354.61 0.0528 0.0137

Earth 45713-07-04 15:07 G 18417575.02 18417575.13 18417575.25 0.2687 0.1844

Moon 45713-07-04 16:34 G 18417575.05 18417575.19 18417575.34 0.2680 0.1353 *

Uranus 45713-07-06 02:38 G 18417576.45 18417576.61 18417576.77 0.0133 0.0087

Uranus 45714-02-17 07:26 G 18417802.71 18417802.81 18417802.94 0.0133 0.0112

Saturn 45717-11-12 13:26 G 18419166.99 18419167.06 18419167.14 0.0302 0.0281

Saturn 45718-06-30 20:53 G 18419397.16 18419397.37 18419397.58 0.0304 0.0040

Jupiter 45718-09-29 23:17 G 18419488.27 18419488.47 18419488.66 0.0498 0.0158

Neptune 45722-02-28 05:17 G 18420735.64 18420735.72 18420735.84 0.0090 0.0080

Neptune 45722-10-11 18:43 G 18420961.15 18420961.28 18420961.44 0.0090 0.0068

Neptune 45723-05-25 08:24 G 18421186.69 18421186.85 18421187.03 0.0090 0.0056

Neptune 45724-01-05 21:50 G 18421412.22 18421412.41 18421412.60 0.0090 0.0044

Neptune 45724-08-18 11:17 G 18421637.76 18421637.97 18421638.17 0.0090 0.0032

Neptune 45725-04-01 00:14 G 18421863.31 18421863.51 18421863.74 0.0090 0.0021

Neptune 45725-11-12 13:55 G 18422088.87 18422089.08 18422089.30 0.0090 0.0008

Neptune 45726-06-26 03:22 G 18422314.43 18422314.64 18422314.86 0.0090 0.0004

Neptune 45727-02-06 16:48 G 18422539.98 18422540.20 18422540.42 0.0090 0.0016

Neptune 45727-09-20 06:00 G 18422765.55 18422765.75 18422765.96 0.0090 0.0028

Neptune 45728-05-02 19:12 G 18422991.12 18422991.30 18422991.51 0.0090 0.0040

Neptune 45728-12-14 08:24 G 18423216.69 18423216.85 18423217.05 0.0090 0.0052

Neptune 45729-07-27 21:36 G 18423442.27 18423442.40 18423442.57 0.0090 0.0064

Neptune 45730-03-10 11:02 G 18423667.85 18423667.96 18423668.09 0.0090 0.0075

Neptune 45730-10-22 00:14 G 18423893.47 18423893.51 18423893.58 0.0090 0.0087

Saturn 45732-04-30 12:14 G 18424449.83 18424450.01 18424450.21 0.0259 0.0110

Saturn 45732-12-15 08:10 G 18424678.64 18424678.84 18424679.04 0.0259 0.0089

Jupiter 45736-11-28 22:05 G 18426123.42 18426123.42 18426123.42 0.0528 0.0528

Jupiter 45742-10-02 10:48 G 18428256.83 18428256.95 18428257.07 0.0498 0.0404

Saturn 45747-05-25 17:46 G 18429953.12 18429953.24 18429953.36 0.0302 0.0245

Saturn 45748-01-11 00:58 G 18430183.34 18430183.54 18430183.75 0.0303 0.0076

Jupiter 45748-08-03 14:24 G 18430388.91 18430389.10 18430389.30 0.0528 0.0112

Mars 45748-12-20 12:29 G 18430527.89 18430528.02 18430528.15 0.1708 0.1119

Uranus 45750-09-10 18:43 G 18431157.23 18431157.28 18431157.37 0.0145 0.0137

Uranus 45751-04-25 07:12 G 18431383.67 18431383.80 18431383.96 0.0145 0.0106

Uranus 45751-12-07 19:41 G 18431610.14 18431610.32 18431610.52 0.0145 0.0073

Uranus 45752-07-21 08:10 G 18431836.63 18431836.84 18431837.05 0.0145 0.0041

Uranus 45753-03-04 20:38 G 18432063.14 18432063.36 18432063.58 0.0145 0.0009

Uranus 45753-10-17 09:22 G 18432289.67 18432289.89 18432290.10 0.0145 0.0023

Uranus 45754-05-31 21:36 G 18432516.21 18432516.40 18432516.61 0.0145 0.0056

Jupiter 45754-06-07 11:17 G 18432522.77 18432522.97 18432523.18 0.0497 0.0055

Uranus 45755-01-13 10:05 G 18432742.76 18432742.92 18432743.10 0.0145 0.0088

Uranus 45755-08-27 22:19 G 18432969.33 18432969.43 18432969.57 0.0145 0.0120

Jupiter 45760-04-08 06:43 G 18434654.62 18434654.78 18434654.95 0.0528 0.0305

Saturn 45761-11-10 14:38 G 18435235.91 18435236.11 18435236.32 0.0260 0.0087

Saturn 45762-06-27 10:19 G 18435464.74 18435464.93 18435465.13 0.0259 0.0112

Jupiter 45766-02-10 13:12 G 18436788.88 18436789.05 18436789.21 0.0498 0.0291

Saturn 45776-12-04 19:26 G 18440739.18 18440739.31 18440739.47 0.0302 0.0218

Saturn 45777-07-23 02:53 G 18440969.42 18440969.62 18440969.82 0.0304 0.0103

Mars 45780-12-19 13:12 G 18442214.99 18442215.05 18442215.11 0.1697 0.1584

Pluto 45782-03-13 00:43 G 18442663.37 18442663.53 18442663.72 0.0081 0.0050

Pluto 45782-10-24 11:17 G 18442888.78 18442888.97 18442889.19 0.0080 0.0034

Jupiter 45784-04-11 08:53 G 18443423.73 18443423.87 18443424.02 0.0528 0.0371

Jupiter 45790-02-12 23:31 G 18445557.31 18445557.48 18445557.66 0.0498 0.0265

Saturn 45791-05-23 15:07 G 18446021.92 18446022.13 18446022.34 0.0259 0.0064

Saturn 45792-01-07 10:48 G 18446250.77 18446250.95 18446251.14 0.0259 0.0135

Uranus 45792-03-21 21:07 G 18446325.28 18446325.38 18446325.49 0.0133 0.0117

Uranus 45792-11-03 02:10 G 18446551.45 18446551.59 18446551.77 0.0133 0.0093

Uranus 45793-06-17 07:41 G 18446777.64 18446777.82 18446778.01 0.0133 0.0068

Uranus 45794-01-29 12:43 G 18447003.84 18447004.03 18447004.25 0.0133 0.0044

Uranus 45794-09-12 18:14 G 18447230.05 18447230.26 18447230.48 0.0133 0.0018

Uranus 45795-04-26 23:31 G 18447456.27 18447456.48 18447456.70 0.0133 0.0007

Uranus 45795-12-09 04:48 G 18447682.49 18447682.70 18447682.91 0.0133 0.0031

Jupiter 45795-12-15 23:46 G 18447689.29 18447689.49 18447689.69 0.0528 0.0055

Uranus 45796-07-22 09:50 G 18447908.72 18447908.91 18447909.11 0.0133 0.0056

Uranus 45797-03-05 15:07 G 18448134.96 18448135.13 18448135.31 0.0133 0.0080

Uranus 45797-10-17 19:55 G 18448361.22 18448361.33 18448361.48 0.0133 0.0105

Uranus 45798-06-01 01:12 G 18448587.52 18448587.55 18448587.62 0.0133 0.0130

Jupiter 45801-10-20 01:41 G 18449823.37 18449823.57 18449823.77 0.0498 0.0079

Neptune 45804-04-16 00:14 G 18450732.46 18450732.51 18450732.61 0.0088 0.0083

Neptune 45804-11-27 13:12 G 18450957.94 18450958.05 18450958.19 0.0088 0.0072

Neptune 45805-07-11 01:41 G 18451183.44 18451183.57 18451183.75 0.0088 0.0061

Neptune 45806-02-21 14:24 G 18451408.94 18451409.10 18451409.30 0.0088 0.0050

Saturn 45806-06-18 00:58 G 18451525.38 18451525.54 18451525.71 0.0302 0.0180

Neptune 45806-10-05 03:36 G 18451634.45 18451634.65 18451634.85 0.0088 0.0038

Saturn 45807-02-03 08:24 G 18451755.66 18451755.85 18451756.03 0.0303 0.0142

Neptune 45807-05-18 16:05 G 18451859.96 18451860.17 18451860.38 0.0088 0.0027

Jupiter 45807-08-21 15:50 G 18451955.08 18451955.16 18451955.25 0.0527 0.0472

Neptune 45807-12-30 04:48 G 18452085.48 18452085.70 18452085.92 0.0088 0.0016

Mars 45808-05-06 08:53 G 18452213.78 18452213.87 18452213.96 0.1833 0.1555

Neptune 45808-08-11 17:31 G 18452311.01 18452311.23 18452311.45 0.0088 0.0005

Neptune 45809-03-25 06:00 G 18452536.53 18452536.75 18452536.97 0.0088 0.0006

Neptune 45809-11-05 18:43 G 18452762.07 18452762.28 18452762.50 0.0088 0.0018

Neptune 45810-06-19 07:12 G 18452987.60 18452987.80 18452988.02 0.0088 0.0029

Neptune 45811-01-30 19:55 G 18453213.14 18453213.33 18453213.53 0.0088 0.0040

Neptune 45811-09-13 08:38 G 18453438.68 18453438.86 18453439.04 0.0088 0.0051

Neptune 45812-04-25 21:22 G 18453664.24 18453664.39 18453664.55 0.0088 0.0062

Neptune 45812-12-07 09:36 G 18453889.81 18453889.90 18453890.05 0.0088 0.0074

Jupiter 45813-06-25 02:24 G 18454089.50 18454089.60 18454089.71 0.0498 0.0427

Neptune 45813-07-20 22:19 G 18454115.40 18454115.43 18454115.52 0.0088 0.0085

Mars 45814-10-18 22:05 G 18454570.34 18454570.42 18454570.49 0.1711 0.1533

Earth 45819-01-07 06:14 G 18456111.61 18456111.76 18456111.90 0.2645 0.0914

Moon 45819-01-07 07:26 G 18456111.66 18456111.81 18456111.97 0.2638 0.1016 *

Saturn 45820-04-18 21:07 G 18456579.32 18456579.38 18456579.48 0.0261 0.0241

Saturn 45820-12-03 18:00 G 18456808.04 18456808.25 18456808.46 0.0260 0.0039

Saturn 45821-07-20 13:26 G 18457036.91 18457037.06 18457037.24 0.0259 0.0160

Jupiter 45825-10-22 11:02 G 18458591.90 18458591.96 18458592.02 0.0497 0.0472

Moon 45827-01-04 19:12 G 18459031.24 18459031.30 18459031.36 0.2639 0.2443

Earth 45827-01-04 22:34 G 18459031.38 18459031.44 18459031.49 0.2644 0.2469

Jupiter 45831-08-24 17:31 G 18460724.05 18460724.23 18460724.42 0.0529 0.0200

Uranus 45834-12-24 13:55 G 18461941.96 18461942.08 18461942.21 0.0145 0.0117

Uranus 45835-08-08 01:55 G 18462168.42 18462168.58 18462168.77 0.0145 0.0086

Saturn 45835-12-29 05:02 G 18462311.53 18462311.71 18462311.90 0.0302 0.0147

Uranus 45836-03-21 14:38 G 18462394.91 18462395.11 18462395.31 0.0145 0.0054

Saturn 45836-08-15 12:00 G 18462541.84 18462542.00 18462542.18 0.0303 0.0175

Uranus 45836-11-03 03:07 G 18462621.42 18462621.63 18462621.85 0.0145 0.0021

Uranus 45837-06-17 15:36 G 18462847.93 18462848.15 18462848.37 0.0145 0.0011

Jupiter 45837-06-27 12:29 G 18462857.82 18462858.02 18462858.21 0.0497 0.0126

Uranus 45838-01-30 03:50 G 18463074.46 18463074.66 18463074.88 0.0145 0.0043

Uranus 45838-09-13 16:19 G 18463301.00 18463301.18 18463301.37 0.0145 0.0076

Uranus 45839-04-28 04:48 G 18463527.56 18463527.70 18463527.85 0.0145 0.0107

Uranus 45839-12-10 17:02 G 18463754.17 18463754.21 18463754.28 0.0145 0.0139

Jupiter 45843-04-29 09:36 G 18464989.72 18464989.90 18464990.09 0.0528 0.0219

Mars 45846-10-17 23:02 G 18466257.34 18466257.46 18466257.58 0.1700 0.1200

Jupiter 45849-03-02 13:55 G 18467123.90 18467124.08 18467124.26 0.0498 0.0221

Saturn 45849-10-29 22:34 G 18467365.33 18467365.44 18467365.56 0.0260 0.0216

Saturn 45850-06-15 19:12 G 18467594.09 18467594.30 18467594.51 0.0259 0.0015

Saturn 45851-01-30 14:53 G 18467822.98 18467823.12 18467823.27 0.0259 0.0184

Saturn 45865-07-10 11:31 G 18473097.78 18473097.98 18473098.17 0.0302 0.0107

Saturn 45866-02-25 18:29 G 18473328.13 18473328.27 18473328.42 0.0303 0.0216

Jupiter 45867-05-02 09:07 G 18473758.78 18473758.88 18473759.00 0.0529 0.0444

Jupiter 45873-03-04 23:46 G 18475892.34 18475892.49 18475892.64 0.0497 0.0333

Mars 45874-03-03 15:07 G 18476255.98 18476256.13 18476256.28 0.1829 0.0917

Uranus 45875-11-21 08:38 G 18476883.80 18476883.86 18476883.96 0.0133 0.0125

Uranus 45876-07-04 13:55 G 18477109.96 18477110.08 18477110.24 0.0133 0.0101

Uranus 45877-02-15 19:26 G 18477336.14 18477336.31 18477336.50 0.0133 0.0076

Uranus 45877-09-30 00:58 G 18477562.34 18477562.54 18477562.75 0.0133 0.0051

Uranus 45878-05-14 06:14 G 18477788.56 18477788.76 18477788.98 0.0133 0.0027

Uranus 45878-12-26 11:46 G 18478014.77 18478014.99 18478015.21 0.0133 0.0001

Jupiter 45879-01-05 00:29 G 18478024.31 18478024.52 18478024.72 0.0529 0.0023

Saturn 45879-05-12 02:10 G 18478151.45 18478151.59 18478151.74 0.0261 0.0190

Uranus 45879-08-09 16:48 G 18478240.99 18478241.20 18478241.42 0.0133 0.0024

Saturn 45879-12-26 22:48 G 18478380.24 18478380.45 18478380.67 0.0260 0.0013

Uranus 45880-03-22 22:05 G 18478467.22 18478467.42 18478467.63 0.0133 0.0049

Saturn 45880-08-11 18:43 G 18478609.16 18478609.28 18478609.40 0.0259 0.0211

Uranus 45880-11-04 03:07 G 18478693.46 18478693.63 18478693.83 0.0133 0.0074

Uranus 45881-06-18 08:38 G 18478919.71 18478919.86 18478920.01 0.0133 0.0098

Uranus 45882-01-30 13:26 G 18479145.99 18479146.06 18479146.16 0.0133 0.0122

Jupiter 45884-11-08 01:41 G 18480158.36 18480158.57 18480158.77 0.0497 0.0015

Neptune 45886-06-02 12:14 G 18480729.96 18480730.01 18480730.11 0.0090 0.0085

Neptune 45887-01-14 01:41 G 18480955.46 18480955.57 18480955.72 0.0090 0.0073

Neptune 45887-08-27 15:07 G 18481180.98 18481181.13 18481181.30 0.0090 0.0061

Neptune 45888-04-09 04:34 G 18481406.52 18481406.69 18481406.88 0.0090 0.0049

Neptune 45888-11-20 17:46 G 18481632.06 18481632.24 18481632.46 0.0090 0.0038

Neptune 45889-07-04 07:12 G 18481857.60 18481857.80 18481858.03 0.0090 0.0026

Neptune 45890-02-14 20:38 G 18482083.15 18482083.36 18482083.59 0.0090 0.0014

Jupiter 45890-09-09 16:48 G 18482290.07 18482290.20 18482290.33 0.0528 0.0395

Neptune 45890-09-28 10:19 G 18482308.71 18482308.93 18482309.15 0.0090 0.0002

Neptune 45891-05-11 23:31 G 18482534.27 18482534.48 18482534.71 0.0090 0.0011

Neptune 45891-12-23 12:43 G 18482759.83 18482760.03 18482760.26 0.0090 0.0023

Neptune 45892-08-05 02:24 G 18482985.40 18482985.60 18482985.80 0.0090 0.0034

Neptune 45893-03-18 15:36 G 18483210.97 18483211.15 18483211.34 0.0090 0.0046

Neptune 45893-10-30 04:48 G 18483436.55 18483436.70 18483436.88 0.0090 0.0058

Neptune 45894-06-12 18:00 G 18483662.14 18483662.25 18483662.41 0.0090 0.0070

Saturn 45895-01-20 17:31 G 18483884.03 18483884.23 18483884.44 0.0302 0.0068

Neptune 45895-01-24 07:41 G 18483887.74 18483887.82 18483887.92 0.0090 0.0081

Saturn 45895-09-08 00:14 G 18484114.41 18484114.51 18484114.64 0.0303 0.0254

Jupiter 45896-07-14 02:10 G 18484424.45 18484424.59 18484424.73 0.0498 0.0362

Saturn 45908-11-22 04:05 G 18488937.52 18488937.67 18488937.85 0.0261 0.0164

Saturn 45909-07-09 00:58 G 18489166.33 18489166.54 18489166.75 0.0260 0.0038

Saturn 45910-02-22 20:53 G 18489395.28 18489395.37 18489395.45 0.0259 0.0236

Mars 45912-08-15 09:22 G 18490299.74 18490299.89 18490300.04 0.1703 0.0828

Jupiter 45914-09-13 16:34 G 18491059.02 18491059.19 18491059.37 0.0528 0.0268

Uranus 45918-08-24 20:38 G 18492500.28 18492500.36 18492500.47 0.0145 0.0129

Uranus 45919-04-08 08:53 G 18492726.72 18492726.87 18492727.04 0.0145 0.0098

Uranus 45919-11-20 21:07 G 18492953.20 18492953.38 18492953.59 0.0145 0.0066

Uranus 45920-07-04 09:36 G 18493179.69 18493179.90 18493180.12 0.0145 0.0034

Jupiter 45920-07-17 12:00 G 18493192.82 18493193.00 18493193.19 0.0497 0.0192

Uranus 45921-02-15 22:05 G 18493406.20 18493406.42 18493406.64 0.0145 0.0002

Uranus 45921-09-30 10:19 G 18493632.72 18493632.93 18493633.15 0.0145 0.0031

Uranus 45922-05-14 22:48 G 18493859.26 18493859.45 18493859.65 0.0145 0.0063

Uranus 45922-12-27 11:02 G 18494085.80 18494085.96 18494086.13 0.0145 0.0095

Uranus 45923-08-10 23:02 G 18494312.38 18494312.46 18494312.58 0.0145 0.0127

Saturn 45924-08-03 01:55 G 18494670.37 18494670.58 18494670.79 0.0302 0.0024

Saturn 45925-03-21 08:53 G 18494900.84 18494900.87 18494900.91 0.0303 0.0298

Jupiter 45926-05-19 08:10 G 18495324.64 18495324.84 18495325.03 0.0528 0.0154

Jupiter 45932-03-22 13:12 G 18497458.86 18497459.05 18497459.25 0.0497 0.0155

Saturn 45938-06-04 08:53 G 18499723.69 18499723.87 18499724.06 0.0261 0.0135

Saturn 45939-01-19 05:31 G 18499952.52 18499952.73 18499952.94 0.0260 0.0067

Mars 45939-12-30 21:07 G 18500298.21 18500298.38 18500298.55 0.1825 0.0273

Pluto 45940-08-12 11:31 G 18500523.80 18500523.98 18500524.19 0.0063 0.0031

Pluto 45941-03-25 15:22 G 18500748.92 18500749.14 18500749.36 0.0063 0.0008

Pluto 45941-11-05 18:43 G 18500974.15 18500974.28 18500974.44 0.0063 0.0048

Moon 45948-07-08 19:55 G 18503411.18 18503411.33 18503411.47 0.2689 0.0988

Earth 45948-07-09 01:12 G 18503411.44 18503411.55 18503411.67 0.2687 0.1814 *

Jupiter 45950-05-22 08:24 G 18504093.81 18504093.85 18504093.91 0.0529 0.0510

Saturn 45953-06-28 03:36 G 18505226.62 18505226.65 18505226.70 0.0301 0.0295

Saturn 45954-02-13 09:50 G 18505456.70 18505456.91 18505457.12 0.0302 0.0021

Jupiter 45956-03-24 21:36 G 18506227.28 18506227.40 18506227.53 0.0497 0.0389

Moon 45956-07-06 12:14 G 18506330.96 18506331.01 18506331.07 0.2693 0.2499

Earth 45956-07-06 15:22 G 18506331.03 18506331.14 18506331.24 0.2688 0.1999 *

Uranus 45959-07-22 20:10 G 18507442.33 18507442.34 18507442.38 0.0134 0.0133

Uranus 45960-03-05 01:41 G 18507668.46 18507668.57 18507668.71 0.0134 0.0108

Uranus 45960-10-17 07:12 G 18507894.64 18507894.80 18507894.98 0.0133 0.0084

Uranus 45961-05-31 12:43 G 18508120.84 18508121.03 18508121.23 0.0133 0.0059

Uranus 45962-01-12 18:14 G 18508347.05 18508347.26 18508347.47 0.0133 0.0034

Jupiter 45962-01-25 00:14 G 18508359.31 18508359.51 18508359.71 0.0528 0.0092

Uranus 45962-08-26 23:31 G 18508573.27 18508573.48 18508573.70 0.0133 0.0009

Uranus 45963-04-10 04:48 G 18508799.49 18508799.70 18508799.92 0.0133 0.0017

Uranus 45963-11-22 10:05 G 18509025.72 18509025.92 18509026.13 0.0133 0.0041

Uranus 45964-07-05 15:22 G 18509251.95 18509252.14 18509252.33 0.0133 0.0066

Uranus 45965-02-16 20:10 G 18509478.20 18509478.34 18509478.52 0.0133 0.0091

Uranus 45965-10-01 01:41 G 18509704.47 18509704.57 18509704.68 0.0133 0.0115

Jupiter 45967-11-28 23:02 G 18510493.25 18510493.46 18510493.66 0.0497 0.0043

Saturn 45967-12-15 11:46 G 18510509.80 18510509.99 18510510.19 0.0261 0.0106

Neptune 45968-07-19 09:22 G 18510726.86 18510726.89 18510726.94 0.0088 0.0086

Saturn 45968-07-31 08:24 G 18510738.66 18510738.85 18510739.05 0.0260 0.0095

Neptune 45969-03-01 22:05 G 18510952.32 18510952.42 18510952.54 0.0088 0.0075

Neptune 45969-10-13 10:48 G 18511177.81 18511177.95 18511178.11 0.0088 0.0064

Neptune 45970-05-26 23:31 G 18511403.31 18511403.48 18511403.66 0.0088 0.0053

Neptune 45971-01-07 12:14 G 18511628.82 18511629.01 18511629.21 0.0088 0.0042

Neptune 45971-08-21 00:43 G 18511854.34 18511854.53 18511854.75 0.0088 0.0031

Neptune 45972-04-02 13:26 G 18512079.85 18512080.06 18512080.29 0.0088 0.0020

Neptune 45972-11-14 02:24 G 18512305.38 18512305.60 18512305.82 0.0088 0.0009

Neptune 45973-06-27 15:07 G 18512530.91 18512531.13 18512531.35 0.0088 0.0003

Jupiter 45973-09-29 14:38 G 18512624.95 18512625.11 18512625.27 0.0528 0.0333

Neptune 45974-02-08 03:36 G 18512756.44 18512756.65 18512756.87 0.0088 0.0014

Neptune 45974-09-21 16:05 G 18512981.97 18512982.17 18512982.39 0.0088 0.0025

Neptune 45975-05-05 04:48 G 18513207.51 18513207.70 18513207.91 0.0088 0.0036

Neptune 45975-12-16 17:31 G 18513433.05 18513433.23 18513433.43 0.0088 0.0047

Neptune 45976-07-29 06:00 G 18513658.60 18513658.75 18513658.93 0.0088 0.0058

Neptune 45977-03-11 18:43 G 18513884.16 18513884.28 18513884.43 0.0088 0.0069

Neptune 45977-10-23 07:26 G 18514109.73 18514109.81 18514109.91 0.0088 0.0080

Mars 45978-06-12 18:58 G 18514342.12 18514342.29 18514342.46 0.1707 0.0431

Jupiter 45979-08-04 00:14 G 18514759.35 18514759.51 18514759.67 0.0498 0.0303

Saturn 45983-01-08 13:12 G 18516012.94 18516013.05 18516013.17 0.0301 0.0250

Saturn 45983-08-26 19:26 G 18516243.10 18516243.31 18516243.52 0.0303 0.0068

Saturn 45997-06-26 17:17 G 18521296.02 18521296.22 18521296.43 0.0261 0.0076

Jupiter 45997-10-02 12:58 G 18521393.88 18521394.04 18521394.20 0.0529 0.0321

Saturn 45998-02-10 13:41 G 18521524.89 18521525.07 18521525.27 0.0260 0.0126

47TH MILLENNIUM CE

This is a list of transits of Venus in the 47th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 46002-04-24 06:00 G 18523058.71 18523058.75 18523058.82 0.0145 0.0140

Uranus 46002-12-06 18:29 G 18523285.13 18523285.27 18523285.41 0.0145 0.0108

Uranus 46003-07-21 06:43 G 18523511.59 18523511.78 18523511.96 0.0145 0.0076

Jupiter 46003-08-06 09:50 G 18523527.73 18523527.91 18523528.08 0.0497 0.0247

Uranus 46004-03-03 18:58 G 18523738.08 18523738.29 18523738.50 0.0145 0.0044

Uranus 46004-10-16 07:26 G 18523964.59 18523964.81 18523965.03 0.0145 0.0012

Uranus 46005-05-30 19:41 G 18524191.11 18524191.32 18524191.54 0.0145 0.0020

Mars 46005-10-27 03:22 G 18524340.47 18524340.64 18524340.81 0.1821 0.0353

Uranus 46006-01-12 07:55 G 18524417.63 18524417.83 18524418.04 0.0145 0.0052

Uranus 46006-08-26 20:10 G 18524644.17 18524644.34 18524644.52 0.0145 0.0084

Uranus 46007-04-10 08:24 G 18524870.73 18524870.85 18524870.98 0.0145 0.0116

Jupiter 46009-06-07 05:02 G 18525659.51 18525659.71 18525659.91 0.0529 0.0098

Saturn 46012-07-20 23:17 G 18526799.31 18526799.47 18526799.63 0.0301 0.0199

Saturn 46013-03-08 05:31 G 18527029.54 18527029.73 18527029.93 0.0302 0.0118

Jupiter 46015-04-11 09:36 G 18527793.70 18527793.90 18527794.10 0.0497 0.0106

Jupiter 46021-02-09 21:07 G 18529925.34 18529925.38 18529925.43 0.0528 0.0512

Saturn 46026-05-22 23:46 G 18531853.44 18531853.49 18531853.56 0.0262 0.0248

Jupiter 46026-12-15 10:19 G 18532059.85 18532059.93 18532060.01 0.0498 0.0455

Saturn 46027-01-06 21:07 G 18532082.18 18532082.38 18532082.60 0.0260 0.0045

Saturn 46027-08-23 17:46 G 18532311.07 18532311.24 18532311.41 0.0260 0.0156

Pluto 46030-09-28 04:19 G 18533442.49 18533442.68 18533442.88 0.0081 0.0040

Pluto 46031-05-11 14:53 G 18533667.94 18533668.12 18533668.31 0.0080 0.0043

Jupiter 46039-04-13 18:29 G 18536562.18 18536562.27 18536562.37 0.0497 0.0440

Saturn 46042-01-31 09:50 G 18537585.73 18537585.91 18537586.09 0.0302 0.0152

Saturn 46042-09-18 16:05 G 18537816.00 18537816.17 18537816.35 0.0303 0.0168

Uranus 46043-11-03 13:41 G 18538226.98 18538227.07 18538227.19 0.0134 0.0117

Mars 46044-04-09 04:48 G 18538384.52 18538384.70 18538384.87 0.1711 0.0053

Uranus 46044-06-16 19:12 G 18538453.16 18538453.30 18538453.47 0.0133 0.0092

Uranus 46045-01-29 00:58 G 18538679.35 18538679.54 18538679.73 0.0133 0.0067

Jupiter 46045-02-12 19:26 G 18538694.11 18538694.31 18538694.50 0.0528 0.0140

Uranus 46045-09-12 06:29 G 18538905.56 18538905.77 18538905.97 0.0133 0.0042

Uranus 46046-04-26 11:46 G 18539131.78 18539131.99 18539132.21 0.0133 0.0017

Uranus 46046-12-08 17:02 G 18539358.00 18539358.21 18539358.43 0.0133 0.0009

Uranus 46047-07-22 22:05 G 18539584.22 18539584.42 18539584.64 0.0133 0.0034

Uranus 46048-03-05 03:36 G 18539810.45 18539810.65 18539810.85 0.0133 0.0058

Uranus 46048-10-17 08:38 G 18540036.70 18540036.86 18540037.04 0.0133 0.0082

Uranus 46049-05-31 13:41 G 18540262.96 18540263.07 18540263.22 0.0133 0.0107

Uranus 46050-01-12 18:58 G 18540489.27 18540489.29 18540489.34 0.0133 0.0131

Neptune 46050-09-04 19:41 G 18540724.32 18540724.32 18540724.38 0.0090 0.0089

Jupiter 46050-12-17 20:10 G 18540828.14 18540828.34 18540828.54 0.0497 0.0098

Neptune 46051-04-18 09:22 G 18540949.80 18540949.89 18540950.02 0.0090 0.0077

Neptune 46051-11-29 23:02 G 18541175.31 18541175.46 18541175.61 0.0090 0.0065

Neptune 46052-07-12 12:00 G 18541400.84 18541401.00 18541401.19 0.0090 0.0054

Neptune 46053-02-23 01:26 G 18541626.38 18541626.56 18541626.76 0.0090 0.0042

Neptune 46053-10-06 14:53 G 18541851.92 18541852.12 18541852.33 0.0090 0.0030

Neptune 46054-05-20 04:05 G 18542077.47 18542077.67 18542077.90 0.0090 0.0019

Neptune 46054-12-31 17:46 G 18542303.02 18542303.24 18542303.46 0.0090 0.0007

Neptune 46055-08-14 06:58 G 18542528.57 18542528.79 18542529.01 0.0090 0.0005

Saturn 46055-12-03 06:00 G 18542639.64 18542639.75 18542639.88 0.0262 0.0216

Neptune 46056-03-26 20:24 G 18542754.13 18542754.35 18542754.56 0.0090 0.0017

Saturn 46056-07-19 03:22 G 18542868.43 18542868.64 18542868.85 0.0261 0.0013

Jupiter 46056-10-18 08:53 G 18542959.70 18542959.87 18542960.04 0.0528 0.0290

Neptune 46056-11-07 09:36 G 18542979.70 18542979.90 18542980.11 0.0090 0.0029

Saturn 46057-03-04 23:46 G 18543097.35 18543097.49 18543097.64 0.0260 0.0188

Neptune 46057-06-20 22:48 G 18543205.27 18543205.45 18543205.66 0.0090 0.0041

Neptune 46058-02-01 12:00 G 18543430.84 18543431.00 18543431.20 0.0090 0.0053

Neptune 46058-09-15 01:41 G 18543656.42 18543656.57 18543656.73 0.0090 0.0064

Neptune 46059-04-28 14:53 G 18543882.02 18543882.12 18543882.25 0.0090 0.0076

Neptune 46059-12-10 03:50 G 18544107.64 18544107.66 18544107.74 0.0090 0.0088

Moon 46062-01-08 05:31 G 18544867.58 18544867.73 18544867.88 0.2650 0.0506

Earth 46062-01-08 08:24 G 18544867.70 18544867.85 18544868.00 0.2644 0.0976 *

Jupiter 46062-08-22 21:22 G 18545094.21 18545094.39 18545094.57 0.0497 0.0250

Earth 46070-01-06 00:29 G 18547787.46 18547787.52 18547787.58 0.2644 0.2418

Moon 46070-01-06 01:55 G 18547787.54 18547787.58 18547787.62 0.2651 0.2524 *

Saturn 46071-08-13 20:53 G 18548372.17 18548372.37 18548372.57 0.0301 0.0098

Mars 46071-08-24 09:50 G 18548382.76 18548382.91 18548383.06 0.1816 0.0964

Saturn 46072-03-31 03:07 G 18548602.50 18548602.63 18548602.78 0.0303 0.0221

Jupiter 46080-10-21 10:48 G 18551728.81 18551728.95 18551729.09 0.0529 0.0379

Saturn	46085-06-14 10:48 G	18553425.80	18553425.95	18553426.10	0.0261	0.0184
Saturn	46086-01-29 07:41 G	18553654.61	18553654.82	18553655.04	0.0260	0.0020
Uranus	46086-08-06 03:07 G	18553843.51	18553843.63	18553843.75	0.0145	0.0119
Jupiter	46086-08-25 04:05 G	18553862.51	18553862.67	18553862.84	0.0497	0.0287
Saturn	46086-09-15 03:50 G	18553883.56	18553883.66	18553883.78	0.0259	0.0219
Uranus	46087-03-20 15:07 G	18554069.97	18554070.13	18554070.31	0.0145	0.0088
Uranus	46087-11-02 03:22 G	18554296.45	18554296.64	18554296.85	0.0145	0.0056
Uranus	46088-06-15 15:50 G	18554522.95	18554523.16	18554523.38	0.0145	0.0024
Uranus	46089-01-28 04:05 G	18554749.45	18554749.67	18554749.89	0.0145	0.0009
Uranus	46089-09-11 16:19 G	18554975.97	18554976.18	18554976.39	0.0145	0.0041
Uranus	46090-04-26 04:34 G	18555202.51	18555202.69	18555202.88	0.0145	0.0073
Uranus	46090-12-08 16:48 G	18555429.06	18555429.20	18555429.36	0.0145	0.0105
Uranus	46091-07-23 04:48 G	18555655.65	18555655.70	18555655.79	0.0145	0.0137
Jupiter	46092-06-26 00:58 G	18555994.34	18555994.54	18555994.74	0.0528	0.0045
Jupiter	46098-04-30 05:17 G	18558128.52	18558128.72	18558128.93	0.0498	0.0060
Saturn	46101-02-24 07:55 G	18559158.62	18559158.83	18559159.04	0.0302	0.0049
Saturn	46101-10-12 14:24 G	18559389.02	18559389.10	18559389.20	0.0303	0.0271
Jupiter	46104-03-01 15:22 G	18560260.05	18560260.14	18560260.24	0.0527	0.0468
Jupiter	46110-01-04 07:12 G	18562394.68	18562394.80	18562394.92	0.0498	0.0402
Mars	46110-02-05 13:55 G	18562426.91	18562427.08	18562427.25	0.1714	0.0390
Saturn	46114-12-26 17:31 G	18564212.05	18564212.23	18564212.40	0.0261	0.0150
Saturn	46115-08-12 14:10 G	18564440.89	18564441.09	18564441.31	0.0260	0.0053
Saturn	46116-03-28 10:34 G	18564669.89	18564669.94	18564669.99	0.0260	0.0252
Jupiter	46122-05-03 14:53 G	18566897.09	18566897.12	18566897.16	0.0497	0.0487
Uranus	46127-07-05 01:26 G	18568785.50	18568785.56	18568785.66	0.0134	0.0125
Uranus	46128-02-16 07:12 G	18569011.67	18569011.80	18569011.95	0.0134	0.0100
Jupiter	46128-03-04 13:55 G	18569028.90	18569029.08	18569029.28	0.0529	0.0184
Uranus	46128-09-29 12:58 G	18569237.86	18569238.04	18569238.22	0.0133	0.0075
Uranus	46129-05-13 18:29 G	18569464.07	18569464.27	18569464.47	0.0133	0.0050
Uranus	46129-12-25 23:31 G	18569690.28	18569690.48	18569690.70	0.0133	0.0026

Uranus 46130-08-09 05:02 G 18569916.49 18569916.71 18569916.93 0.0133 0.0000

Saturn 46130-09-06 19:41 G 18569945.11 18569945.32 18569945.53 0.0302 0.0007

Uranus 46131-03-23 10:05 G 18570142.72 18570142.92 18570143.15 0.0133 0.0026

Uranus 46131-11-04 15:36 G 18570368.95 18570369.15 18570369.35 0.0133 0.0050

Uranus 46132-06-17 20:38 G 18570595.19 18570595.36 18570595.55 0.0133 0.0075

Uranus 46133-01-30 01:41 G 18570821.44 18570821.57 18570821.73 0.0133 0.0099

Neptune 46133-06-04 06:29 G 18570946.70 18570946.77 18570946.89 0.0088 0.0079

Uranus 46133-09-13 06:43 G 18571047.72 18571047.78 18571047.88 0.0133 0.0124

Jupiter 46134-01-06 14:10 G 18571162.89 18571163.09 18571163.29 0.0497 0.0135

Neptune 46134-01-15 19:12 G 18571172.19 18571172.30 18571172.47 0.0088 0.0068

Neptune 46134-08-29 07:55 G 18571397.68 18571397.83 18571398.02 0.0088 0.0057

Neptune 46135-04-11 20:53 G 18571623.19 18571623.37 18571623.57 0.0088 0.0046

Neptune 46135-11-23 09:36 G 18571848.71 18571848.90 18571849.12 0.0088 0.0035

Neptune 46136-07-05 22:34 G 18572074.23 18572074.44 18572074.66 0.0088 0.0024

Neptune 46137-02-16 11:17 G 18572299.75 18572299.97 18572300.19 0.0088 0.0012

Mars 46137-06-21 16:05 G 18572425.09 18572425.17 18572425.25 0.1812 0.1584

Neptune 46137-09-30 00:00 G 18572525.28 18572525.50 18572525.72 0.0088 0.0001

Neptune 46138-05-13 12:29 G 18572750.81 18572751.02 18572751.25 0.0088 0.0010

Neptune 46138-12-25 01:12 G 18572976.34 18572976.55 18572976.77 0.0088 0.0021

Neptune 46139-08-07 13:55 G 18573201.88 18573202.08 18573202.29 0.0088 0.0032

Jupiter 46139-11-08 06:29 G 18573294.59 18573294.77 18573294.96 0.0528 0.0231

Neptune 46140-03-20 02:24 G 18573427.42 18573427.60 18573427.80 0.0088 0.0043

Neptune 46140-10-31 14:53 G 18573652.97 18573653.12 18573653.32 0.0088 0.0054

Neptune 46141-06-14 03:36 G 18573878.52 18573878.65 18573878.82 0.0088 0.0065

Neptune 46142-01-25 16:05 G 18574104.09 18574104.17 18574104.31 0.0088 0.0076

Neptune 46142-09-08 04:48 G 18574329.69 18574329.70 18574329.76 0.0088 0.0087

Saturn 46144-07-07 22:19 G 18574998.24 18574998.43 18574998.62 0.0261 0.0117

Saturn 46145-02-21 18:58 G 18575227.09 18575227.29 18575227.50 0.0260 0.0085

Jupiter 46145-09-11 14:53 G 18575428.93 18575429.12 18575429.30 0.0498 0.0214

Saturn 46159-08-01 23:46 G 18580501.40 18580501.49 18580501.61 0.0301 0.0263

Saturn 46160-03-19 06:00 G 18580731.54 18580731.75 18580731.96 0.0302 0.0055

Jupiter 46163-11-11 04:48 G 18582063.58 18582063.70 18582063.82 0.0529 0.0421

Jupiter 46169-09-14 00:43 G 18584197.38 18584197.53 18584197.68 0.0497 0.0336

Uranus 46170-04-06 11:17 G 18584401.90 18584401.97 18584402.08 0.0145 0.0131

Uranus 46170-11-18 23:46 G 18584628.34 18584628.49 18584628.66 0.0145 0.0099

Uranus 46171-07-03 12:00 G 18584854.81 18584855.00 18584855.20 0.0145 0.0067

Uranus 46172-02-15 00:14 G 18585081.30 18585081.51 18585081.73 0.0145 0.0035

Uranus 46172-09-28 12:43 G 18585307.81 18585308.03 18585308.25 0.0145 0.0003

Uranus 46173-05-13 00:43 G 18585534.33 18585534.53 18585534.75 0.0145 0.0030

Uranus 46173-12-25 12:58 G 18585760.85 18585761.04 18585761.25 0.0145 0.0062

Saturn 46174-01-18 04:48 G 18585784.50 18585784.70 18585784.90 0.0261 0.0083

Uranus 46174-08-09 00:58 G 18585987.39 18585987.54 18585987.72 0.0145 0.0094

Saturn 46174-09-04 01:26 G 18586013.37 18586013.56 18586013.75 0.0260 0.0118

Uranus 46175-03-23 13:26 G 18586213.96 18586214.06 18586214.18 0.0145 0.0126

Jupiter 46175-07-16 18:00 G 18586329.05 18586329.25 18586329.45 0.0528 0.0009

Mars 46175-12-03 23:31 G 18586469.33 18586469.48 18586469.64 0.1718 0.0802

Jupiter 46181-05-20 01:55 G 18588463.38 18588463.58 18588463.79 0.0497 0.0011

Jupiter 46187-03-21 10:05 G 18590594.80 18590594.92 18590595.04 0.0528 0.0424

Pluto 46188-07-16 12:43 G 18591077.96 18591078.03 18591078.14 0.0063 0.0057

Saturn 46189-02-11 11:17 G 18591287.82 18591287.97 18591288.12 0.0301 0.0207

Pluto 46189-02-26 16:48 G 18591302.99 18591303.20 18591303.41 0.0063 0.0018

Saturn 46189-09-29 17:17 G 18591518.03 18591518.22 18591518.43 0.0302 0.0111

Pluto 46189-10-09 20:24 G 18591528.14 18591528.35 18591528.56 0.0063 0.0021

Pluto 46190-05-22 23:17 G 18591753.44 18591753.47 18591753.57 0.0063 0.0061

Earth 46191-07-11 01:12 G 18592167.43 18592167.55 18592167.68 0.2688 0.1635

Moon 46191-07-11 06:29 G 18592167.73 18592167.77 18592167.82 0.2689 0.2550

Jupiter 46193-01-23 00:43 G 18592729.39 18592729.53 18592729.67 0.0498 0.0365

Earth 46199-07-08 15:22 G 18595087.05 18595087.14 18595087.23 0.2688 0.2166

Moon 46199-07-08 19:55 G 18595087.21 18595087.33 18595087.45 0.2684 0.1771 *

Saturn 46202-12-15 12:29 G 18596341.98 18596342.02 18596342.07 0.0262 0.0254

Saturn 46203-08-01 09:50 G 18596570.70 18596570.91 18596571.12 0.0260 0.0051

Saturn 46204-03-17 06:14 G 18596799.59 18596799.76 18596799.93 0.0260 0.0150

Uranus 46211-03-05 14:10 G 18599344.06 18599344.09 18599344.12 0.0134 0.0132

Jupiter 46211-03-25 11:02 G 18599363.78 18599363.96 18599364.14 0.0528 0.0240

Uranus 46211-10-17 19:26 G 18599570.19 18599570.31 18599570.45 0.0134 0.0108

Uranus 46212-05-31 00:58 G 18599796.38 18599796.54 18599796.72 0.0133 0.0083

Uranus 46213-01-12 06:29 G 18600022.57 18600022.77 18600022.97 0.0133 0.0058

Uranus 46213-08-26 11:31 G 18600248.78 18600248.98 18600249.20 0.0133 0.0034

Uranus 46214-04-09 17:17 G 18600475.00 18600475.22 18600475.43 0.0133 0.0008

Uranus 46214-11-21 22:19 G 18600701.22 18600701.43 18600701.65 0.0133 0.0017

Uranus 46215-07-06 03:36 G 18600927.44 18600927.65 18600927.86 0.0133 0.0042

Neptune 46215-07-22 17:17 G 18600944.14 18600944.22 18600944.32 0.0090 0.0081

Uranus 46216-02-17 08:38 G 18601153.68 18601153.86 18601154.05 0.0133 0.0066

Neptune 46216-03-04 06:14 G 18601169.65 18601169.76 18601169.92 0.0090 0.0070

Uranus 46216-09-30 13:55 G 18601379.92 18601380.08 18601380.24 0.0133 0.0091

Neptune 46216-10-15 19:55 G 18601395.17 18601395.33 18601395.51 0.0090 0.0058

Jupiter 46217-01-26 09:50 G 18601497.71 18601497.91 18601498.10 0.0497 0.0181

Uranus 46217-05-14 18:58 G 18601606.19 18601606.29 18601606.41 0.0133 0.0115

Neptune 46217-05-29 09:36 G 18601620.71 18601620.90 18601621.09 0.0090 0.0046

Neptune 46218-01-09 22:34 G 18601846.25 18601846.44 18601846.66 0.0090 0.0035

Neptune 46218-08-23 12:00 G 18602071.80 18602072.00 18602072.22 0.0090 0.0023

Saturn 46218-08-25 20:24 G 18602074.19 18602074.35 18602074.54 0.0302 0.0164

Neptune 46219-04-06 01:26 G 18602297.35 18602297.56 18602297.78 0.0090 0.0011

Saturn 46219-04-13 02:53 G 18602304.45 18602304.62 18602304.81 0.0303 0.0156

Neptune 46219-11-17 14:53 G 18602522.90 18602523.12 18602523.34 0.0090 0.0001

Neptune 46220-06-30 04:05 G 18602748.46 18602748.67 18602748.90 0.0090 0.0013

Neptune 46221-02-10 17:31 G 18602974.02 18602974.23 18602974.44 0.0090 0.0024

Neptune 46221-09-24 06:43 G 18603199.59 18603199.78 18603199.99 0.0090 0.0036

Neptune 46222-05-07 19:55 G 18603425.16 18603425.33 18603425.53 0.0090 0.0048

Jupiter 46222-11-28 01:26 G 18603629.37 18603629.56 18603629.76 0.0528 0.0183

Neptune 46222-12-19 09:22 G 18603650.74 18603650.89 18603651.07 0.0090 0.0059

Neptune 46223-08-01 22:34 G 18603876.33 18603876.44 18603876.59 0.0090 0.0071

Neptune 46224-03-14 12:14 G 18604101.93 18604102.01 18604102.10 0.0090 0.0082

Jupiter 46228-10-01 11:46 G 18605763.79 18605763.99 18605764.18 0.0498 0.0161

Saturn 46232-06-26 18:43 G 18607128.17 18607128.28 18607128.39 0.0261 0.0221

Saturn 46233-02-10 15:36 G 18607356.94 18607357.15 18607357.37 0.0260 0.0019

Saturn 46233-09-27 11:46 G 18607585.85 18607585.99 18607586.15 0.0260 0.0183

Mars 46235-04-19 11:02 G 18608154.85 18608154.96 18608155.06 0.1821 0.1458

Mars 46241-10-01 08:53 G 18610511.75 18610511.87 18610511.99 0.1722 0.1233

Jupiter 46246-12-01 00:14 G 18612398.43 18612398.51 18612398.61 0.0529 0.0469

Saturn 46248-03-07 06:58 G 18612860.60 18612860.79 18612860.99 0.0301 0.0111

Saturn 46248-10-23 13:26 G 18613090.91 18613091.06 18613091.22 0.0303 0.0209

Jupiter 46252-10-03 18:29 G 18614532.15 18614532.27 18614532.41 0.0497 0.0374

Uranus 46253-12-05 18:00 G 18614960.23 18614960.25 18614960.29 0.0145 0.0143

Uranus 46254-07-20 05:46 G 18615186.62 18615186.74 18615186.90 0.0145 0.0112

Uranus 46255-03-03 18:00 G 18615413.08 18615413.25 18615413.45 0.0145 0.0080

Uranus 46255-10-16 06:29 G 18615639.57 18615639.77 18615639.98 0.0145 0.0048

Uranus 46256-05-29 18:43 G 18615866.07 18615866.28 18615866.50 0.0145 0.0016

Uranus 46257-01-11 06:58 G 18616092.57 18616092.79 18616093.01 0.0145 0.0017

Uranus 46257-08-25 18:58 G 18616319.09 18616319.29 18616319.50 0.0145 0.0049

Uranus 46258-04-09 06:58 G 18616545.63 18616545.79 18616545.99 0.0145 0.0081

Jupiter 46258-08-05 17:17 G 18616664.02 18616664.22 18616664.42 0.0528 0.0058

Uranus 46258-11-21 19:12 G 18616772.19 18616772.30 18616772.46 0.0145 0.0113

Uranus 46259-07-06 07:41 G 18616998.81 18616998.82 18616998.85 0.0145 0.0144

Saturn 46262-01-06 23:31 G 18617914.34 18617914.48 18617914.63 0.0261 0.0189

Saturn 46262-08-23 20:24 G 18618143.13 18618143.35 18618143.56 0.0260 0.0014

Saturn 46263-04-09 16:05 G 18618372.06 18618372.17 18618372.30 0.0259 0.0213

Jupiter 46264-06-08 19:55 G 18618798.12 18618798.33 18618798.53 0.0497 0.0030

Jupiter 46270-04-10 08:38 G 18620929.71 18620929.86 18620930.01 0.0527 0.0358

Mars 46273-09-30 10:48 G 18622198.89 18622198.95 18622199.02 0.1710 0.1576

Jupiter 46276-02-12 20:53 G 18623064.22 18623064.37 18623064.53 0.0498 0.0315

Saturn 46277-09-17 14:10 G 18623646.89 18623647.09 18623647.30 0.0302 0.0072

Saturn 46278-05-05 21:07 G 18623877.26 18623877.38 18623877.50 0.0303 0.0250

Pluto 46279-04-15 10:19 G 18624221.72 18624221.93 18624222.15 0.0081 0.0018

Pluto 46279-11-26 21:07 G 18624447.25 18624447.38 18624447.52 0.0080 0.0064

Saturn 46291-07-20 04:34 G 18628700.53 18628700.69 18628700.87 0.0261 0.0158

Saturn 46292-03-05 01:26 G 18628929.35 18628929.56 18628929.77 0.0260 0.0045

Saturn 46292-10-19 21:22 G 18629158.32 18629158.39 18629158.46 0.0259 0.0243

Jupiter 46294-04-13 06:00 G 18629698.58 18629698.75 18629698.92 0.0528 0.0286

Uranus 46295-06-17 06:43 G 18630128.69 18630128.78 18630128.90 0.0134 0.0116

Uranus 46296-01-29 12:14 G 18630354.86 18630355.01 18630355.18 0.0134 0.0091

Uranus 46296-09-11 17:46 G 18630581.06 18630581.24 18630581.43 0.0133 0.0066

Uranus 46297-04-25 23:02 G 18630807.27 18630807.46 18630807.68 0.0133 0.0042

Neptune 46297-09-06 15:50 G 18630941.11 18630941.16 18630941.26 0.0088 0.0082

Uranus 46297-12-08 04:34 G 18631033.48 18631033.69 18631033.91 0.0133 0.0016

Neptune 46298-04-20 04:34 G 18631166.58 18631166.69 18631166.84 0.0088 0.0071

Uranus 46298-07-22 09:50 G 18631259.69 18631259.91 18631260.13 0.0133 0.0009

Neptune 46298-12-01 17:31 G 18631392.09 18631392.23 18631392.41 0.0088 0.0060

Uranus 46299-03-05 14:53 G 18631485.92 18631486.12 18631486.34 0.0133 0.0034

Neptune 46299-07-15 06:29 G 18631617.59 18631617.77 18631617.96 0.0088 0.0049

Uranus 46299-10-17 19:55 G 18631712.15 18631712.33 18631712.54 0.0133 0.0059

Jupiter 46300-02-15 07:41 G 18631832.64 18631832.82 18631833.00 0.0497 0.0237

Neptune 46300-02-25 19:12 G 18631843.11 18631843.30 18631843.50 0.0088 0.0038

Uranus 46300-06-01 01:12 G 18631938.39 18631938.55 18631938.73 0.0133 0.0083

Neptune 46300-10-09 07:55 G 18632068.62 18632068.83 18632069.04 0.0088 0.0027

Uranus 46301-01-13 06:14 G 18632164.65 18632164.76 18632164.91 0.0133 0.0108

Mars 46301-02-14 17:46 G 18632197.09 18632197.24 18632197.39 0.1817 0.0850

Neptune 46301-05-22 20:38 G 18632294.15 18632294.36 18632294.58 0.0088 0.0016

Uranus 46301-08-27 11:31 G 18632390.96 18632390.98 18632391.03 0.0133 0.0132

Neptune 46302-01-03 09:22 G 18632519.67 18632519.89 18632520.12 0.0088 0.0005

Neptune 46302-08-16 22:05 G 18632745.20 18632745.42 18632745.64 0.0088 0.0006

Neptune 46303-03-30 10:48 G 18632970.73 18632970.95 18632971.17 0.0088 0.0017

Neptune 46303-11-10 23:31 G 18633196.28 18633196.48 18633196.69 0.0088 0.0028

Neptune 46304-06-23 12:00 G 18633421.82 18633422.00 18633422.21 0.0088 0.0039

Earth 46305-01-11 10:34 G 18633623.79 18633623.94 18633624.08 0.2644 0.1023

Moon 46305-01-11 14:53 G 18633624.00 18633624.12 18633624.24 0.2639 0.1787 *

Neptune 46305-02-04 00:43 G 18633647.36 18633647.53 18633647.72 0.0088 0.0050

Neptune 46305-09-17 13:12 G 18633872.91 18633873.05 18633873.22 0.0088 0.0061

Jupiter 46305-12-17 22:19 G 18633964.23 18633964.43 18633964.63 0.0528 0.0128

Neptune 46306-05-01 01:41 G 18634098.47 18634098.57 18634098.72 0.0088 0.0072

Neptune 46306-12-12 14:53 G 18634324.05 18634324.12 18634324.20 0.0088 0.0082

Saturn 46307-03-31 23:31 G 18634433.27 18634433.48 18634433.69 0.0302 0.0022

Mars 46307-07-30 18:00 G 18634554.21 18634554.25 18634554.29 0.1725 0.1671

Saturn 46307-11-17 06:14 G 18634663.74 18634663.76 18634663.80 0.0303 0.0299

Jupiter 46311-10-22 06:43 G 18636098.58 18636098.78 18636098.98 0.0498 0.0117

Earth 46313-01-09 02:53 G 18636543.55 18636543.62 18636543.69 0.2643 0.2337

Moon 46313-01-09 03:07 G 18636543.55 18636543.63 18636543.72 0.2636 0.2274 *

Saturn 46321-01-30 08:53 G 18639486.69 18639486.87 18639487.06 0.0261 0.0128

Saturn 46321-09-16 05:17 G 18639715.52 18639715.72 18639715.93 0.0260 0.0074

Jupiter 46323-06-27 07:41 G 18640364.75 18640364.82 18640364.90 0.0498 0.0461

Jupiter 46335-10-24 16:19 G 18644867.09 18644867.18 18644867.29 0.0497 0.0430

Saturn 46336-10-11 05:02 G 18645219.50 18645219.71 18645219.92 0.0303 0.0014

Uranus 46338-03-20 11:17 G 18645744.88 18645744.97 18645745.10 0.0145 0.0125

Uranus 46338-11-01 23:46 G 18645971.33 18645971.49 18645971.66 0.0145 0.0093

Uranus 46339-06-16 11:46 G 18646197.80 18646197.99 18646198.20 0.0145 0.0061

Mars 46339-07-29 21:07 G 18646241.25 18646241.38 18646241.50 0.1713 0.1189

Uranus 46340-01-29 00:00 G 18646424.29 18646424.50 18646424.72 0.0145 0.0029

Uranus 46340-09-11 12:14 G 18646650.79 18646651.01 18646651.23 0.0145 0.0003

Uranus 46341-04-26 00:29 G 18646877.31 18646877.52 18646877.73 0.0145 0.0035

Jupiter 46341-08-25 15:22 G 18646998.95 18646999.14 18646999.34 0.0528 0.0121

Uranus 46341-12-08 12:29 G 18647103.83 18647104.02 18647104.22 0.0145 0.0067

Uranus 46342-07-23 00:43 G 18647330.38 18647330.53 18647330.69 0.0145 0.0099

Uranus 46343-03-06 12:43 G 18647556.96 18647557.03 18647557.14 0.0145 0.0131

Jupiter 46347-06-29 18:43 G 18649133.08 18649133.28 18649133.48 0.0498 0.0091

Saturn 46350-08-12 12:43 G 18650272.84 18650273.03 18650273.23 0.0260 0.0098

Saturn 46351-03-29 09:07 G 18650501.69 18650501.88 18650502.08 0.0260 0.0103

Jupiter 46353-04-30 05:17 G 18651264.56 18651264.72 18651264.89 0.0527 0.0303

Jupiter 46359-03-04 20:10 G 18653399.17 18653399.34 18653399.52 0.0498 0.0252

Saturn 46365-09-05 06:00 G 18655775.65 18655775.75 18655775.86 0.0301 0.0258

Saturn 46366-04-23 12:14 G 18656005.80 18656006.01 18656006.21 0.0302 0.0059

Mars 46366-12-13 00:14 G 18656239.33 18656239.51 18656239.68 0.1813 0.0243

Jupiter 46377-05-03 08:38 G 18660033.71 18660033.86 18660034.00 0.0529 0.0369

Uranus 46379-02-15 17:46 G 18660687.17 18660687.24 18660687.33 0.0134 0.0124

Uranus 46379-09-29 23:31 G 18660913.34 18660913.48 18660913.63 0.0134 0.0099

Neptune 46379-10-25 01:26 G 18660938.51 18660938.56 18660938.65 0.0090 0.0085

Saturn 46380-02-22 16:34 G 18661058.98 18661059.19 18661059.39 0.0260 0.0071

Uranus 46380-05-13 04:48 G 18661139.53 18661139.70 18661139.89 0.0134 0.0074

Neptune 46380-06-06 15:07 G 18661164.02 18661164.13 18661164.27 0.0090 0.0073

Saturn 46380-10-08 12:29 G 18661287.84 18661288.02 18661288.21 0.0259 0.0130

Uranus 46380-12-25 10:05 G 18661365.73 18661365.92 18661366.14 0.0134 0.0050

Neptune 46381-01-18 04:19 G 18661389.54 18661389.68 18661389.86 0.0090 0.0062

Uranus 46381-08-08 15:36 G 18661591.94 18661592.15 18661592.37 0.0133 0.0025

Neptune 46381-08-31 17:46 G 18661615.07 18661615.24 18661615.43 0.0090 0.0050

Uranus 46382-03-22 21:07 G 18661818.16 18661818.38 18661818.59 0.0133 0.0002

Neptune 46382-04-14 06:58 G 18661840.61 18661840.79 18661841.00 0.0090 0.0039

Uranus 46382-11-04 02:10 G 18662044.38 18662044.59 18662044.81 0.0133 0.0026

Neptune 46382-11-25 20:38 G 18662066.15 18662066.36 18662066.57 0.0090 0.0027

Jupiter 46383-03-07 04:05 G 18662167.50 18662167.67 18662167.83 0.0497 0.0287

Uranus 46383-06-18 07:12 G 18662270.61 18662270.80 18662271.02 0.0133 0.0051

Neptune 46383-07-09 09:50 G 18662291.70 18662291.91 18662292.13 0.0090 0.0016

Uranus 46384-01-30 12:43 G 18662496.85 18662497.03 18662497.21 0.0133 0.0075

Neptune 46384-02-19 23:17 G 18662517.25 18662517.47 18662517.69 0.0090 0.0004

Uranus 46384-09-12 17:31 G 18662723.10 18662723.23 18662723.39 0.0133 0.0100

Neptune 46384-10-02 12:29 G 18662742.80 18662743.02 18662743.24 0.0090 0.0008

Uranus 46385-04-26 23:02 G 18662949.39 18662949.46 18662949.55 0.0133 0.0124

Neptune 46385-05-16 01:41 G 18662968.37 18662968.57 18662968.80 0.0090 0.0020

Neptune 46385-12-27 15:07 G 18663193.93 18663194.13 18663194.34 0.0090 0.0031

Neptune 46386-08-10 04:05 G 18663419.50 18663419.67 18663419.88 0.0090 0.0043

Neptune 46387-03-23 17:46 G 18663645.07 18663645.24 18663645.42 0.0090 0.0054

Neptune 46387-11-04 06:43 G 18663870.65 18663870.78 18663870.95 0.0090 0.0066

Neptune 46388-06-16 20:24 G 18664096.25 18664096.35 18664096.47 0.0090 0.0077

Jupiter 46389-01-06 00:29 G 18664299.32 18664299.52 18664299.72 0.0528 0.0045

Neptune 46389-01-28 09:22 G 18664321.88 18664321.89 18664321.95 0.0090 0.0089

Jupiter 46394-11-10 05:46 G 18666433.54 18666433.74 18666433.94 0.0498 0.0054

Saturn 46395-03-18 09:07 G 18666561.75 18666561.88 18666562.02 0.0302 0.0229

Saturn 46395-11-03 15:36 G 18666791.95 18666792.15 18666792.36 0.0303 0.0090

Jupiter 46400-09-10 15:50 G 18668565.06 18668565.16 18668565.26 0.0527 0.0459

Mars 46405-05-26 06:14 G 18670283.60 18670283.76 18670283.91 0.1717 0.0773

Jupiter 46406-07-16 07:55 G 18670699.70 18670699.83 18670699.95 0.0499 0.0394

Saturn 46409-01-17 22:05 G 18671616.35 18671616.42 18671616.48 0.0261 0.0247

Saturn 46409-09-03 18:43 G 18671845.08 18671845.28 18671845.50 0.0260 0.0045

Saturn 46410-04-20 14:53 G 18672073.96 18672074.12 18672074.29 0.0259 0.0157

Jupiter 46418-11-12 17:02 G 18675202.21 18675202.21 18675202.22 0.0497 0.0497

Uranus 46421-11-17 17:17 G 18676303.16 18676303.22 18676303.29 0.0144 0.0137

Uranus 46422-07-02 05:02 G 18676529.57 18676529.71 18676529.87 0.0145 0.0106

Uranus 46423-02-13 17:17 G 18676756.03 18676756.22 18676756.40 0.0145 0.0074

Uranus 46423-09-28 05:02 G 18676982.51 18676982.71 18676982.93 0.0145 0.0043

Uranus 46424-05-11 17:17 G 18677209.00 18677209.22 18677209.44 0.0145 0.0010

Jupiter 46424-09-13 15:36 G 18677333.97 18677334.15 18677334.34 0.0528 0.0194

Saturn 46424-09-27 15:22 G 18677347.98 18677348.14 18677348.31 0.0301 0.0187

Uranus 46424-12-24 05:17 G 18677435.51 18677435.72 18677435.94 0.0145 0.0022

Saturn 46425-05-15 21:50 G 18677578.23 18677578.41 18677578.60 0.0303 0.0132

Uranus 46425-08-07 17:17 G 18677662.02 18677662.22 18677662.43 0.0145 0.0054

Uranus 46426-03-22 05:17 G 18677888.56 18677888.72 18677888.91 0.0145 0.0086

Uranus 46426-11-03 17:31 G 18678115.12 18678115.23 18678115.37 0.0145 0.0118

Jupiter 46430-07-18 16:34 G 18679467.99 18679468.19 18679468.38 0.0497 0.0149

Mars 46432-10-09 06:58 G 18680281.62 18680281.79 18680281.96 0.1809 0.0355

Moon 46434-07-12 20:38 G 18680923.21 18680923.36 18680923.52 0.2685 0.0720

Earth 46434-07-13 01:26 G 18680923.42 18680923.56 18680923.69 0.2688 0.1486 *

Jupiter 46436-05-19 09:07 G 18681599.69 18681599.88 18681600.06 0.0528 0.0212

Pluto 46437-01-31 17:02 G 18681857.09 18681857.21 18681857.39 0.0063 0.0046

Pluto 46437-09-13 21:07 G 18682082.17 18682082.38 18682082.61 0.0063 0.0007

Pluto 46438-04-27 00:29 G 18682307.35 18682307.52 18682307.73 0.0063 0.0033

Saturn 46438-07-31 00:58 G 18682402.44 18682402.54 18682402.66 0.0261 0.0221

Saturn 46439-03-16 21:50 G 18682631.20 18682631.41 18682631.62 0.0260 0.0018

Saturn 46439-10-31 17:31 G 18682860.09 18682860.23 18682860.39 0.0259 0.0182

Jupiter 46442-03-23 18:14 G 18683734.07 18683734.26 18683734.45 0.0498 0.0192

Moon 46442-07-10 09:50 G 18683842.88 18683842.91 18683842.94 0.2690 0.2622

Earth 46442-07-10 15:22 G 18683843.06 18683843.14 18683843.21 0.2689 0.2336

Saturn 46454-04-09 16:34 G 18688134.02 18688134.19 18688134.37 0.0302 0.0163

Saturn 46454-11-25 23:17 G 18688364.29 18688364.47 18688364.65 0.0303 0.0158

Jupiter 46460-05-22 10:34 G 18690368.83 18690368.94 18690369.05 0.0528 0.0448

Neptune 46461-12-10 01:26 G 18690935.53 18690935.56 18690935.65 0.0088 0.0085

Neptune 46462-07-23 14:10 G 18691161.00 18691161.09 18691161.23 0.0088 0.0074

Uranus 46462-10-16 03:36 G 18691245.64 18691245.65 18691245.68 0.0134 0.0133

Neptune 46463-03-06 03:07 G 18691386.49 18691386.63 18691386.79 0.0088 0.0063

Uranus 46463-05-30 08:53 G 18691471.77 18691471.87 18691472.02 0.0134 0.0109

Neptune 46463-10-17 15:50 G 18691611.99 18691612.16 18691612.35 0.0088 0.0052

Uranus 46464-01-11 14:38 G 18691697.95 18691698.11 18691698.29 0.0134 0.0084

Neptune 46464-05-30 04:48 G 18691837.51 18691837.70 18691837.89 0.0088 0.0041

Uranus 46464-08-24 20:10 G 18691924.15 18691924.34 18691924.54 0.0134 0.0059

Neptune 46465-01-10 17:31 G 18692063.02 18692063.23 18692063.44 0.0088 0.0030

Uranus 46465-04-08 01:41 G 18692150.37 18692150.57 18692150.79 0.0134 0.0034

Neptune 46465-08-24 06:00 G 18692288.54 18692288.75 18692288.97 0.0088 0.0020

Uranus 46465-11-20 07:12 G 18692376.58 18692376.80 18692377.02 0.0134 0.0009

Jupiter 46466-03-26 05:31 G 18692502.59 18692502.73 18692502.87 0.0497 0.0359

Neptune 46466-04-06 18:43 G 18692514.07 18692514.28 18692514.51 0.0088 0.0009

Uranus 46466-07-04 12:29 G 18692602.80 18692603.02 18692603.24 0.0134 0.0016

Neptune 46466-11-18 07:41 G 18692739.60 18692739.82 18692740.04 0.0088 0.0003

Uranus 46467-02-15 17:31 G 18692829.03 18692829.23 18692829.45 0.0134 0.0042

Neptune 46467-07-01 20:24 G 18692965.14 18692965.35 18692965.57 0.0088 0.0013

Uranus 46467-09-29 23:02 G 18693055.27 18693055.46 18693055.65 0.0133 0.0066

Saturn 46468-02-10 02:24 G 18693188.46 18693188.60 18693188.74 0.0261 0.0196

Neptune 46468-02-12 08:53 G 18693190.67 18693190.87 18693191.10 0.0088 0.0025

Uranus 46468-05-13 04:19 G 18693281.53 18693281.68 18693281.84 0.0133 0.0091

Neptune 46468-09-24 21:50 G 18693416.21 18693416.41 18693416.61 0.0088 0.0035

Saturn 46468-09-25 23:02 G 18693417.25 18693417.46 18693417.67 0.0260 0.0006

Uranus 46468-12-25 09:22 G 18693507.80 18693507.89 18693508.01 0.0133 0.0116

Neptune 46469-05-08 10:19 G 18693641.75 18693641.93 18693642.13 0.0088 0.0046

Saturn 46469-05-12 18:43 G 18693646.16 18693646.28 18693646.42 0.0259 0.0206

Neptune 46469-12-19 23:02 G 18693867.31 18693867.46 18693867.64 0.0088 0.0057

Neptune 46470-08-02 11:46 G 18694092.87 18694092.99 18694093.15 0.0088 0.0068

Neptune 46471-03-16 00:14 G 18694318.44 18694318.51 18694318.63 0.0088 0.0079

Mars 46471-03-23 15:36 G 18694325.98 18694326.15 18694326.32 0.1721 0.0359

Jupiter 46472-01-26 00:58 G 18694634.33 18694634.54 18694634.74 0.0528 0.0030

Jupiter 46477-11-29 07:41 G 18696768.62 18696768.82 18696769.03 0.0498 0.0021

Jupiter 46483-09-30 17:31 G 18698900.09 18698900.23 18698900.37 0.0528 0.0380

Saturn 46483-10-20 21:22 G 18698920.20 18698920.39 18698920.58 0.0301 0.0124

Saturn 46484-06-07 04:05 G 18699150.52 18699150.67 18699150.83 0.0303 0.0196

Jupiter 46489-08-04 07:26 G 18701034.66 18701034.81 18701034.96 0.0498 0.0326

Saturn 46497-08-22 04:34 G 18703974.54 18703974.69 18703974.85 0.0261 0.0172

Saturn 46498-04-08 01:12 G 18704203.34 18704203.55 18704203.76 0.0260 0.0031

Mars 46498-08-06 13:41 G 18704323.92 18704324.07 18704324.22 0.1804 0.0941

Saturn 46498-11-22 20:53 G 18704432.29 18704432.37 18704432.48 0.0259 0.0230

Uranus 46506-03-02 12:14 G 18707087.89 18707088.01 18707088.14 0.0144 0.0118

Uranus 46506-10-15 00:14 G 18707314.34 18707314.51 18707314.69 0.0145 0.0086

Uranus 46507-05-29 12:14 G 18707540.81 18707541.01 18707541.21 0.0145 0.0055

Jupiter 46507-10-04 20:38 G 18707669.20 18707669.36 18707669.53 0.0529 0.0290

Uranus 46508-01-11 00:14 G 18707767.29 18707767.51 18707767.73 0.0145 0.0023

Uranus 46508-08-24 12:14 G 18707993.79 18707994.01 18707994.23 0.0145 0.0009

Uranus 46509-04-08 00:14 G 18708220.30 18708220.51 18708220.72 0.0145 0.0041

Uranus 46509-11-20 12:14 G 18708446.83 18708447.01 18708447.21 0.0145 0.0074

Uranus 46510-07-05 00:29 G 18708673.38 18708673.52 18708673.68 0.0145 0.0105

Uranus 46511-02-16 12:29 G 18708899.97 18708900.02 18708900.10 0.0145 0.0137

Saturn 46513-05-02 21:50 G 18709706.22 18709706.41 18709706.62 0.0302 0.0101

Jupiter 46513-08-07 18:14 G 18709803.08 18709803.26 18709803.44 0.0497 0.0222

Saturn 46513-12-19 04:48 G 18709936.56 18709936.70 18709936.84 0.0303 0.0221

Jupiter 46519-06-09 12:43 G 18711934.83 18711935.03 18711935.23 0.0528 0.0123

Jupiter 46525-04-12 20:38 G 18714069.16 18714069.36 18714069.56 0.0498 0.0116

Saturn 46527-03-05 04:48 G 18714760.53 18714760.70 18714760.88 0.0261 0.0150

Pluto 46527-03-20 05:17 G 18714775.72 18714775.72 18714775.75 0.0081 0.0081

Saturn 46527-10-20 01:41 G 18714989.36 18714989.57 18714989.77 0.0260 0.0053

Pluto 46527-10-31 16:19 G 18715000.96 18715001.18 18715001.40 0.0081 0.0002

Saturn 46528-06-04 21:07 G 18715218.35 18715218.38 18715218.44 0.0259 0.0252

Jupiter 46536-12-16 22:48 G 18718335.36 18718335.45 18718335.53 0.0499 0.0453

Mars 46537-01-19 00:43 G 18718368.36 18718368.53 18718368.70 0.1725 0.0077

Saturn 46542-11-13 01:41 G 18720492.37 18720492.57 18720492.78 0.0302 0.0065

Saturn 46543-07-01 08:38 G 18720722.75 18720722.86 18720722.97 0.0303 0.0256

Neptune 46544-01-27 10:34 G 18720932.91 18720932.94 18720933.00 0.0090 0.0088

Neptune 46544-09-08 23:46 G 18721158.40 18721158.49 18721158.63 0.0090 0.0077

Neptune 46545-04-22 13:26 G 18721383.92 18721384.06 18721384.22 0.0090 0.0065

Neptune 46545-12-04 02:38 G 18721609.46 18721609.61 18721609.81 0.0090 0.0054

Neptune 46546-07-17 16:19 G 18721835.00 18721835.18 18721835.38 0.0090 0.0042

Uranus 46547-01-28 19:12 G 18722030.21 18722030.30 18722030.41 0.0134 0.0118

Neptune 46547-02-28 05:31 G 18722060.54 18722060.73 18722060.95 0.0090 0.0031

Uranus 46547-09-12 00:58 G 18722256.39 18722256.54 18722256.70 0.0134 0.0093

Neptune 46547-10-11 19:12 G 18722286.08 18722286.30 18722286.51 0.0090 0.0019

Moon 46548-01-13 07:55 G 18722379.67 18722379.83 18722379.98 0.2647 0.0262

Earth 46548-01-13 12:43 G 18722379.89 18722380.03 18722380.18 0.2643 0.1103 *

Uranus 46548-04-25 06:29 G 18722482.59 18722482.77 18722482.97 0.0134 0.0068

Neptune 46548-05-24 08:24 G 18722511.64 18722511.85 18722512.08 0.0090 0.0008

Uranus 46548-12-07 12:00 G 18722708.80 18722709.00 18722709.21 0.0134 0.0043

Neptune 46549-01-04 21:50 G 18722737.19 18722737.41 18722737.63 0.0090 0.0004

Jupiter 46549-04-15 05:46 G 18722837.64 18722837.74 18722837.85 0.0497 0.0427

Uranus 46549-07-21 17:31 G 18722935.01 18722935.23 18722935.45 0.0134 0.0018

Neptune 46549-08-18 11:02 G 18722962.75 18722962.96 18722963.18 0.0090 0.0016

Uranus 46550-03-04 22:48 G 18723161.24 18723161.45 18723161.67 0.0134 0.0008

Neptune 46550-04-01 00:14 G 18723188.31 18723188.51 18723188.73 0.0090 0.0027

Uranus 46550-10-17 04:05 G 18723387.47 18723387.67 18723387.89 0.0134 0.0033

Neptune 46550-11-12 13:26 G 18723413.87 18723414.06 18723414.27 0.0090 0.0039

Uranus 46551-05-31 09:22 G 18723613.71 18723613.89 18723614.10 0.0134 0.0058

Neptune 46551-06-26 02:53 G 18723639.45 18723639.62 18723639.81 0.0090 0.0050

Uranus 46552-01-12 15:07 G 18723839.96 18723840.13 18723840.30 0.0134 0.0082

Neptune 46552-02-06 15:50 G 18723865.02 18723865.16 18723865.34 0.0090 0.0062

Uranus 46552-08-25 20:10 G 18724066.22 18724066.34 18724066.48 0.0134 0.0107

Neptune 46552-09-19 05:17 G 18724090.61 18724090.72 18724090.86 0.0090 0.0073

Uranus 46553-04-09 01:26 G 18724292.54 18724292.56 18724292.61 0.0134 0.0132

Neptune 46553-05-02 18:43 G 18724316.22 18724316.28 18724316.36 0.0090 0.0084

Jupiter 46555-02-15 06:14 G 18724969.56 18724969.76 18724969.95 0.0529 0.0127

Moon 46556-01-11 03:22 G 18725299.56 18725299.64 18725299.71 0.2650 0.2277

Earth 46556-01-11 05:02 G 18725299.64 18725299.71 18725299.79 0.2643 0.2274 *

Saturn 46556-09-14 06:43 G 18725546.60 18725546.78 18725546.97 0.0261 0.0127

Saturn 46557-05-01 03:22 G 18725775.43 18725775.64 18725775.84 0.0260 0.0076

Jupiter 46560-12-19 08:10 G 18727103.64 18727103.84 18727104.04 0.0497 0.0091

Mars 46564-06-03 20:10 G 18728366.26 18728366.34 18728366.43 0.1800 0.1533

Jupiter 46566-10-20 22:48 G 18729235.29 18729235.45 18729235.63 0.0528 0.0281

Saturn 46572-05-25 01:55 G 18731278.37 18731278.58 18731278.78 0.0302 0.0043

Jupiter 46572-08-24 09:50 G 18731369.74 18731369.91 18731370.09 0.0498 0.0249

Saturn 46573-01-10 08:38 G 18731508.78 18731508.86 18731508.94 0.0303 0.0279

Saturn 46586-03-27 06:29 G 18736332.57 18736332.77 18736332.96 0.0261 0.0105

Saturn 46586-11-11 02:53 G 18736561.43 18736561.62 18736561.83 0.0260 0.0098

Uranus 46589-10-30 20:24 G 18737646.27 18737646.35 18737646.46 0.0144 0.0130

Uranus 46590-06-14 08:10 G 18737872.70 18737872.84 18737873.02 0.0144 0.0099

Jupiter 46590-10-23 23:17 G 18738004.33 18738004.47 18738004.61 0.0528 0.0372

Uranus 46591-01-26 20:10 G 18738099.16 18738099.34 18738099.54 0.0144 0.0067

Uranus 46591-09-10 08:10 G 18738325.63 18738325.84 18738326.06 0.0145 0.0035

Uranus 46592-04-23 20:10 G 18738552.13 18738552.34 18738552.56 0.0145 0.0004

Uranus 46592-12-06 08:10 G 18738778.63 18738778.84 18738779.06 0.0145 0.0030

Uranus 46593-07-20 20:10 G 18739005.15 18739005.34 18739005.55 0.0145 0.0062

Uranus 46594-03-04 08:10 G 18739231.69 18739231.84 18739232.02 0.0145 0.0094

Uranus 46594-10-16 20:10 G 18739458.26 18739458.34 18739458.47 0.0145 0.0126

Jupiter 46596-08-26 21:36 G 18740138.24 18740138.40 18740138.56 0.0497 0.0303

Saturn 46601-12-06 05:31 G 18742064.52 18742064.73 18742064.94 0.0302 0.0008

Jupiter 46602-06-29 15:50 G 18742269.95 18742270.16 18742270.36 0.0528 0.0037

Mars 46602-11-17 09:50 G 18742410.74 18742410.91 18742411.07 0.1729 0.0513

Jupiter 46608-05-02 22:05 G 18744404.22 18744404.42 18744404.63 0.0497 0.0041

Jupiter 46614-03-04 08:10 G 18746535.73 18746535.84 18746535.95 0.0528 0.0444

Saturn 46615-10-08 08:10 G 18747118.64 18747118.84 18747119.05 0.0261 0.0083

Saturn 46616-05-24 04:34 G 18747347.51 18747347.69 18747347.89 0.0260 0.0120

Jupiter 46620-01-07 00:14 G 18748670.38 18748670.51 18748670.65 0.0498 0.0377

Neptune 46626-03-15 11:46 G 18750929.98 18750929.99 18750930.04 0.0088 0.0087

Neptune 46626-10-27 00:43 G 18751155.43 18751155.53 18751155.65 0.0088 0.0076

Neptune 46627-06-09 13:12 G 18751380.92 18751381.05 18751381.22 0.0088 0.0066

Neptune 46628-01-21 01:55 G 18751606.42 18751606.58 18751606.77 0.0088 0.0055

Neptune 46628-09-02 14:38 G 18751831.93 18751832.11 18751832.31 0.0088 0.0044

Neptune 46629-04-16 03:36 G 18752057.44 18752057.65 18752057.85 0.0088 0.0033

Neptune 46629-11-27 16:05 G 18752282.97 18752283.17 18752283.40 0.0088 0.0023

Neptune 46630-07-11 05:02 G 18752508.49 18752508.71 18752508.93 0.0088 0.0012

Uranus 46630-09-29 04:48 G 18752588.65 18752588.70 18752588.78 0.0134 0.0128

Saturn 46630-10-31 00:14 G 18752620.50 18752620.51 18752620.53 0.0300 0.0299

Neptune 46631-02-21 17:46 G 18752734.02 18752734.24 18752734.46 0.0088 0.0001

Uranus 46631-05-13 10:34 G 18752814.82 18752814.94 18752815.09 0.0134 0.0103

Saturn 46631-06-18 06:00 G 18752850.54 18752850.75 18752850.96 0.0302 0.0017

Neptune 46631-10-05 06:14 G 18752959.55 18752959.76 18752959.99 0.0088 0.0010

Uranus 46631-12-25 16:19 G 18753041.01 18753041.18 18753041.36 0.0134 0.0078

Neptune 46632-05-17 18:58 G 18753185.08 18753185.29 18753185.51 0.0088 0.0021

Uranus 46632-08-07 21:50 G 18753267.22 18753267.41 18753267.62 0.0134 0.0053

Neptune 46632-12-29 07:41 G 18753410.62 18753410.82 18753411.04 0.0088 0.0032

Uranus 46633-03-22 03:22 G 18753493.44 18753493.64 18753493.86 0.0134 0.0028

Neptune 46633-08-11 20:24 G 18753636.17 18753636.35 18753636.55 0.0088 0.0043

Uranus 46633-11-03 09:07 G 18753719.66 18753719.88 18753720.09 0.0134 0.0003

Neptune 46634-03-25 08:53 G 18753861.72 18753861.87 18753862.06 0.0088 0.0054

Uranus 46634-06-17 14:24 G 18753945.89 18753946.10 18753946.32 0.0134 0.0023

Neptune 46634-11-05 21:50 G 18754087.27 18754087.41 18754087.57 0.0088 0.0064

Uranus 46635-01-29 19:41 G 18754172.13 18754172.32 18754172.53 0.0134 0.0048

Neptune 46635-06-19 10:19 G 18754312.84 18754312.93 18754313.07 0.0088 0.0075

Uranus 46635-09-13 01:12 G 18754398.37 18754398.55 18754398.74 0.0134 0.0073

Neptune 46636-01-30 23:02 G 18754538.44 18754538.46 18754538.53 0.0088 0.0086

Uranus 46636-04-26 06:29 G 18754624.64 18754624.77 18754624.93 0.0134 0.0098

Uranus 46636-12-08 11:46 G 18754850.93 18754850.99 18754851.10 0.0134 0.0123

Jupiter 46638-03-07 10:48 G 18755304.77 18755304.95 18755305.14 0.0529 0.0221

Jupiter 46644-01-09 11:02 G 18757438.77 18757438.96 18757439.15 0.0497 0.0169

Saturn 46645-04-19 07:26 G 18757904.61 18757904.81 18757905.02 0.0261 0.0062

Saturn 46645-12-04 04:19 G 18758133.50 18758133.68 18758133.86 0.0260 0.0141

Jupiter 46649-11-10 01:41 G 18759570.39 18759570.57 18759570.76 0.0528 0.0196

Jupiter 46655-09-14 13:12 G 18761704.86 18761705.05 18761705.24 0.0498 0.0167

Saturn 46660-05-12 03:50 G 18763406.57 18763406.66 18763406.76 0.0300 0.0265

Saturn 46660-12-28 09:36 G 18763636.69 18763636.90 18763637.11 0.0302 0.0051

Mars 46662-04-01 14:10 G 18764095.99 18764096.09 18764096.20 0.1809 0.1426

Mars 46668-09-13 18:43 G 18766453.13 18766453.28 18766453.42 0.1732 0.0965

Uranus 46673-07-01 04:34 G 18768204.66 18768204.69 18768204.75 0.0144 0.0141

Jupiter 46673-11-13 03:50 G 18768339.57 18768339.66 18768339.76 0.0530 0.0467

Uranus 46674-02-12 16:19 G 18768431.06 18768431.18 18768431.34 0.0144 0.0110

Saturn 46674-03-15 12:00 G 18768461.93 18768462.00 18768462.09 0.0262 0.0244

Uranus 46674-09-27 04:19 G 18768657.51 18768657.68 18768657.88 0.0144 0.0079

Saturn 46674-10-30 09:36 G 18768690.70 18768690.90 18768691.12 0.0261 0.0038

Uranus 46675-05-11 16:19 G 18768883.98 18768884.18 18768884.40 0.0145 0.0047

Saturn 46675-06-16 06:14 G 18768919.60 18768919.76 18768919.93 0.0260 0.0164

Uranus 46675-12-24 04:34 G 18769110.47 18769110.69 18769110.90 0.0145 0.0015

Uranus 46676-08-06 16:19 G 18769336.97 18769337.18 18769337.40 0.0145 0.0018

Uranus 46677-03-21 04:19 G 18769563.49 18769563.68 18769563.89 0.0145 0.0050

Earth 46677-07-15 01:12 G 18769679.42 18769679.55 18769679.69 0.2689 0.1314

Moon 46677-07-15 04:19 G 18769679.56 18769679.68 18769679.80 0.2694 0.1678 *

Uranus 46677-11-02 16:34 G 18769790.02 18769790.19 18769790.38 0.0145 0.0082

Uranus 46678-06-17 04:48 G 18770016.58 18770016.70 18770016.84 0.0145 0.0114

Jupiter 46679-09-16 22:48 G 18770473.32 18770473.45 18770473.59 0.0497 0.0374

Earth 46685-07-12 15:07 G 18772599.08 18772599.13 18772599.19 0.2689 0.2504

Moon 46685-07-12 20:53 G 18772599.28 18772599.37 18772599.45 0.2690 0.2273

Jupiter 46685-07-18 20:38 G 18772605.16 18772605.36 18772605.56 0.0529 0.0059

Pluto 46685-08-19 00:00 G 18772636.32 18772636.50 18772636.72 0.0063 0.0027

Pluto 46686-04-01 03:50 G 18772861.45 18772861.66 18772861.88 0.0063 0.0012

Pluto 46686-11-12 07:12 G 18773086.69 18773086.80 18773086.94 0.0063 0.0052

Saturn 46689-11-22 05:17 G 18774192.60 18774192.72 18774192.85 0.0300 0.0238

Saturn 46690-07-10 11:02 G 18774422.76 18774422.96 18774423.16 0.0302 0.0078

Jupiter 46691-05-23 00:43 G 18774739.32 18774739.53 18774739.73 0.0497 0.0037

Jupiter 46697-03-23 12:43 G 18776870.88 18776871.03 18776871.18 0.0528 0.0350

Jupiter 46703-01-27 02:24 G 18779005.44 18779005.60 18779005.77 0.0498 0.0302

Saturn 46703-09-26 11:46 G 18779247.88 18779247.99 18779248.11 0.0262 0.0221

Saturn 46704-05-12 09:22 G 18779476.68 18779476.89 18779477.10 0.0261 0.0016

Saturn 46704-12-27 06:00 G 18779705.61 18779705.75 18779705.90 0.0260 0.0186

Neptune 46708-12-13 09:07 G 18781152.81 18781152.88 18781153.01 0.0090 0.0080

Neptune 46709-07-26 22:48 G 18781378.32 18781378.45 18781378.60 0.0090 0.0068

Neptune 46710-03-09 12:00 G 18781603.85 18781604.00 18781604.19 0.0090 0.0057

Neptune 46710-10-21 01:26 G 18781829.39 18781829.56 18781829.77 0.0090 0.0046

Neptune 46711-06-03 15:07 G 18782054.94 18782055.13 18782055.34 0.0090 0.0034

Neptune 46712-01-15 04:34 G 18782280.48 18782280.69 18782280.91 0.0090 0.0022

Neptune 46712-08-27 18:00 G 18782506.03 18782506.25 18782506.47 0.0090 0.0011

Neptune 46713-04-10 07:12 G 18782731.58 18782731.80 18782732.02 0.0090 0.0002

Neptune 46713-11-21 20:38 G 18782957.14 18782957.36 18782957.58 0.0090 0.0012

Neptune 46714-07-05 09:50 G 18783182.71 18783182.91 18783183.13 0.0090 0.0024

Uranus 46715-01-11 21:07 G 18783373.28 18783373.38 18783373.51 0.0134 0.0112

Neptune 46715-02-15 23:02 G 18783408.27 18783408.46 18783408.67 0.0090 0.0035

Uranus 46715-08-26 02:53 G 18783599.46 18783599.62 18783599.79 0.0134 0.0087

Neptune 46715-09-29 12:29 G 18783633.84 18783634.02 18783634.21 0.0090 0.0046

Uranus 46716-04-08 08:38 G 18783825.67 18783825.86 18783826.06 0.0134 0.0062

Neptune 46716-05-12 01:26 G 18783859.41 18783859.56 18783859.75 0.0090 0.0058

Uranus 46716-11-20 14:10 G 18784051.88 18784052.09 18784052.30 0.0134 0.0037

Neptune 46716-12-23 14:53 G 18784085.00 18784085.12 18784085.27 0.0090 0.0069

Uranus 46717-07-04 19:41 G 18784278.10 18784278.32 18784278.54 0.0134 0.0012

Neptune 46717-08-06 04:19 G 18784310.59 18784310.68 18784310.79 0.0090 0.0080

Uranus 46718-02-16 00:58 G 18784504.33 18784504.54 18784504.76 0.0134 0.0014

Uranus 46718-09-30 06:29 G 18784730.57 18784730.77 18784730.98 0.0134 0.0039

Uranus 46719-05-14 12:00 G 18784956.82 18784957.00 18784957.20 0.0134 0.0064

Saturn 46719-06-05 10:05 G 18784978.77 18784978.92 18784979.08 0.0300 0.0202

Uranus 46719-12-26 17:17 G 18785183.07 18785183.22 18785183.40 0.0134 0.0089

Saturn 46720-01-21 15:36 G 18785208.96 18785209.15 18785209.35 0.0302 0.0115

Uranus 46720-08-08 22:34 G 18785409.35 18785409.44 18785409.57 0.0134 0.0114

Jupiter 46721-03-27 12:58 G 18785639.88 18785640.04 18785640.21 0.0529 0.0302

Jupiter 46727-01-29 12:29 G 18787773.85 18787774.02 18787774.20 0.0497 0.0243

Mars 46728-01-28 21:22 G 18788138.24 18788138.39 18788138.54 0.1805 0.0843

Jupiter 46732-11-30 04:34 G 18789905.49 18789905.69 18789905.89 0.0529 0.0111

Saturn 46733-04-07 14:10 G 18790033.96 18790034.09 18790034.24 0.0262 0.0198

Saturn 46733-11-22 12:00 G 18790262.79 18790263.00 18790263.22 0.0261 0.0009

Saturn 46734-07-09 08:38 G 18790491.74 18790491.86 18790491.99 0.0260 0.0210

Mars 46734-07-13 03:22 G 18790495.55 18790495.64 18790495.74 0.1736 0.1423

Jupiter 46738-10-04 14:53 G 18792039.92 18792040.12 18792040.32 0.0497 0.0093

Jupiter 46744-08-04 21:07 G 18794171.35 18794171.38 18794171.43 0.0528 0.0516

Saturn 46748-12-15 12:58 G 18795764.87 18795765.04 18795765.22 0.0300 0.0171

Saturn 46749-08-02 18:29 G 18795995.09 18795995.27 18795995.46 0.0302 0.0146

Jupiter 46750-06-09 15:50 G 18796306.07 18796306.16 18796306.26 0.0498 0.0435

Uranus 46757-10-13 23:46 G 18798989.39 18798989.49 18798989.62 0.0144 0.0122

Uranus 46758-05-28 11:46 G 18799215.83 18799215.99 18799216.17 0.0144 0.0091

Uranus 46759-01-09 23:31 G 18799442.29 18799442.48 18799442.69 0.0144 0.0059

Uranus 46759-08-24 11:31 G 18799668.77 18799668.98 18799669.20 0.0144 0.0028

Uranus 46760-04-06 23:46 G 18799895.27 18799895.49 18799895.71 0.0145 0.0005

Uranus 46760-11-19 11:46 G 18800121.79 18800121.99 18800122.21 0.0145 0.0038

Uranus 46761-07-03 23:46 G 18800348.31 18800348.49 18800348.69 0.0145 0.0070

Uranus 46762-02-15 11:46 G 18800574.85 18800574.99 18800575.16 0.0145 0.0102

Uranus 46762-09-30 00:29 G 18800801.43 18800801.52 18800801.60 0.0145 0.0133

Jupiter 46762-10-07 00:14 G 18800808.42 18800808.51 18800808.60 0.0497 0.0444

Saturn 46762-10-18 14:24 G 18800819.96 18800820.10 18800820.27 0.0262 0.0175

Saturn 46763-06-04 12:14 G 18801048.80 18801049.01 18801049.23 0.0261 0.0032

Saturn 46764-01-19 08:53 G 18801277.79 18801277.87 18801277.97 0.0260 0.0234

Mars 46766-07-12 07:26 G 18802182.73 18802182.81 18802182.89 0.1724 0.1519

Jupiter 46768-08-07 21:50 G 18802940.22 18802940.41 18802940.61 0.0529 0.0136

Jupiter 46774-06-12 02:24 G 18805074.40 18805074.60 18805074.80 0.0497 0.0110

Pluto 46775-10-05 14:53 G 18805554.94 18805555.12 18805555.31 0.0081 0.0044

Pluto 46776-05-18 01:41 G 18805780.37 18805780.57 18805780.76 0.0080 0.0038

Saturn 46778-06-27 18:43 G 18806551.09 18806551.28 18806551.47 0.0300 0.0133

Saturn 46779-02-13 00:29 G 18806781.36 18806781.52 18806781.69 0.0302 0.0184

Jupiter 46780-04-12 13:41 G 18807205.90 18807206.07 18807206.24 0.0528 0.0275

Jupiter 46786-02-15 03:50 G 18809340.48 18809340.66 18809340.84 0.0497 0.0228

Earth 46791-01-15 15:07 G 18811135.99 18811136.13 18811136.27 0.2643 0.1164

Moon 46791-01-15 20:38 G 18811136.25 18811136.36 18811136.47 0.2642 0.1899 *

Neptune 46791-01-29 11:17 G 18811149.88 18811149.97 18811150.07 0.0088 0.0078

Neptune 46791-09-11 23:31 G 18811375.36 18811375.48 18811375.64 0.0088 0.0068

Neptune 46792-04-24 12:29 G 18811600.86 18811601.02 18811601.20 0.0088 0.0057

Saturn 46792-04-29 18:00 G 18811606.08 18811606.25 18811606.44 0.0262 0.0148

Neptune 46792-12-06 01:12 G 18811826.38 18811826.55 18811826.75 0.0088 0.0047

Saturn 46792-12-14 15:50 G 18811834.96 18811835.16 18811835.37 0.0261 0.0059

Neptune 46793-07-19 13:55 G 18812051.89 18812052.08 18812052.29 0.0088 0.0036

Saturn 46793-07-31 12:29 G 18812064.02 18812064.02 18812064.03 0.0260 0.0260

Mars 46793-11-25 04:05 G 18812180.49 18812180.67 18812180.84 0.1801 0.0258

Neptune 46794-03-02 02:53 G 18812277.41 18812277.62 18812277.83 0.0088 0.0025

Neptune 46794-10-13 15:22 G 18812502.93 18812503.14 18812503.36 0.0088 0.0014

Neptune 46795-05-27 04:05 G 18812728.45 18812728.67 18812728.89 0.0088 0.0004

Neptune 46796-01-07 16:48 G 18812953.98 18812954.20 18812954.43 0.0088 0.0007

Neptune 46796-08-20 05:31 G 18813179.52 18813179.73 18813179.95 0.0088 0.0018

Neptune 46797-04-02 18:00 G 18813405.05 18813405.25 18813405.47 0.0088 0.0029

Neptune 46797-11-14 06:43 G 18813630.60 18813630.78 18813630.99 0.0088 0.0040

Neptune 46798-06-27 19:41 G 18813856.15 18813856.32 18813856.51 0.0088 0.0050

Uranus 46798-09-11 06:58 G 18813931.72 18813931.79 18813931.90 0.0134 0.0122

Earth 46799-01-13 07:26 G 18814055.72 18814055.81 18814055.90 0.2643 0.2187

Moon 46799-01-13 11:02 G 18814055.86 18814055.96 18814056.05 0.2637 0.2161 *

Neptune 46799-02-08 08:10 G 18814081.70 18814081.84 18814082.02 0.0088 0.0061

Uranus 46799-04-25 12:43 G 18814157.90 18814158.03 18814158.20 0.0134 0.0097

Neptune 46799-09-21 20:38 G 18814307.26 18814307.36 18814307.51 0.0088 0.0072

Uranus 46799-12-07 18:29 G 18814384.10 18814384.27 18814384.46 0.0134 0.0072

Neptune 46800-05-04 09:50 G 18814532.84 18814532.91 18814532.99 0.0088 0.0082

Uranus 46800-07-21 00:00 G 18814610.31 18814610.50 18814610.71 0.0134 0.0047

Uranus 46801-03-04 05:46 G 18814836.53 18814836.74 18814836.96 0.0134 0.0021

Uranus 46801-10-16 11:17 G 18815062.75 18815062.97 18815063.19 0.0134 0.0004

Uranus 46802-05-30 16:48 G 18815288.99 18815289.20 18815289.42 0.0134 0.0029

Uranus 46803-01-11 22:05 G 18815515.23 18815515.42 18815515.63 0.0134 0.0055

Uranus 46803-08-26 03:22 G 18815741.48 18815741.64 18815741.83 0.0133 0.0080

Uranus 46804-04-08 08:53 G 18815967.75 18815967.87 18815968.02 0.0133 0.0105

Jupiter 46804-04-15 15:07 G 18815974.99 18815975.13 18815975.27 0.0529 0.0381

Uranus 46804-11-20 14:38 G 18816194.06 18816194.11 18816194.17 0.0133 0.0129

Saturn 46808-01-08 00:00 G 18817337.30 18817337.50 18817337.70 0.0300 0.0096

Saturn 46808-08-25 05:31 G 18817567.59 18817567.73 18817567.87 0.0302 0.0221

Jupiter 46810-02-17 12:43 G 18818108.88 18818109.03 18818109.20 0.0497 0.0308

Jupiter 46815-12-20 06:58 G 18820240.59 18820240.79 18820241.00 0.0529 0.0032

Jupiter 46821-10-23 14:38 G 18822374.90 18822375.11 18822375.31 0.0497 0.0031

Saturn 46821-11-09 19:26 G 18822392.13 18822392.31 18822392.50 0.0262 0.0122

Saturn 46822-06-26 17:02 G 18822621.01 18822621.21 18822621.42 0.0261 0.0084

Jupiter 46827-08-24 21:36 G 18824506.29 18824506.40 18824506.51 0.0528 0.0443

Mars 46832-05-08 16:05 G 18826225.03 18826225.17 18826225.30 0.1728 0.1076

Jupiter 46833-06-28 16:19 G 18826641.04 18826641.18 18826641.31 0.0498 0.0367

Saturn 46837-07-20 07:12 G 18828123.59 18828123.80 18828124.01 0.0301 0.0054

Saturn 46838-03-07 12:43 G 18828353.94 18828354.03 18828354.14 0.0302 0.0264

Uranus 46841-06-13 05:17 G 18829547.67 18829547.72 18829547.81 0.0144 0.0136

Uranus 46842-01-25 17:02 G 18829774.08 18829774.21 18829774.38 0.0144 0.0105

Uranus 46842-09-09 05:02 G 18830000.54 18830000.71 18830000.91 0.0144 0.0073

Uranus 46843-04-23 17:17 G 18830227.01 18830227.22 18830227.43 0.0144 0.0040

Uranus 46843-12-06 05:17 G 18830453.51 18830453.72 18830453.94 0.0145 0.0009

Uranus 46844-07-19 17:17 G 18830680.01 18830680.22 18830680.44 0.0145 0.0024

Uranus 46845-03-03 05:31 G 18830906.53 18830906.73 18830906.93 0.0145 0.0056

Uranus 46845-10-15 17:46 G 18831133.07 18831133.24 18831133.41 0.0145 0.0088

Uranus 46846-05-30 05:46 G 18831359.63 18831359.74 18831359.87 0.0145 0.0120

Saturn 46851-05-22 23:46 G 18833178.30 18833178.49 18833178.70 0.0262 0.0093

Jupiter 46851-08-27 20:53 G 18833275.18 18833275.37 18833275.55 0.0529 0.0201

Saturn 46852-01-06 21:36 G 18833407.21 18833407.40 18833407.59 0.0261 0.0113

Jupiter 46857-07-01 02:10 G 18835409.40 18835409.59 18835409.78 0.0496 0.0173

Mars 46859-09-22 11:17 G 18836222.80 18836222.97 18836223.14 0.1797 0.0315

Jupiter 46863-05-02 12:58 G 18837540.86 18837541.04 18837541.23 0.0529 0.0209

Saturn 46867-01-30 14:10 G 18838909.88 18838910.09 18838910.30 0.0300 0.0013

Jupiter 46869-03-06 02:24 G 18839675.41 18839675.60 18839675.80 0.0497 0.0170

Neptune 46873-03-16 19:26 G 18841147.24 18841147.31 18841147.41 0.0090 0.0082

Neptune 46873-10-28 08:38 G 18841372.75 18841372.86 18841373.02 0.0090 0.0071

Neptune 46874-06-10 22:05 G 18841598.28 18841598.42 18841598.61 0.0090 0.0060

Neptune 46875-01-22 12:00 G 18841823.82 18841824.00 18841824.19 0.0090 0.0048

Neptune 46875-09-05 01:12 G 18842049.36 18842049.55 18842049.76 0.0090 0.0037

Neptune 46876-04-17 14:24 G 18842274.91 18842275.10 18842275.33 0.0090 0.0026

Neptune 46876-11-29 04:05 G 18842500.46 18842500.67 18842500.89 0.0090 0.0014

Neptune 46877-07-12 17:31 G 18842726.01 18842726.23 18842726.45 0.0090 0.0003

Neptune 46878-02-23 06:58 G 18842951.57 18842951.79 18842952.01 0.0090 0.0009

Neptune 46878-10-06 19:55 G 18843177.13 18843177.33 18843177.56 0.0090 0.0021

Neptune 46879-05-20 09:22 G 18843402.70 18843402.89 18843403.11 0.0090 0.0032

Neptune 46879-12-31 22:48 G 18843628.26 18843628.45 18843628.65 0.0090 0.0043

Neptune 46880-08-13 12:00 G 18843853.83 18843854.00 18843854.18 0.0090 0.0054

Saturn 46880-12-02 02:24 G 18843964.39 18843964.60 18843964.81 0.0262 0.0065

Neptune 46881-03-27 00:58 G 18844079.41 18844079.54 18844079.71 0.0090 0.0066

Saturn 46881-07-19 00:00 G 18844193.32 18844193.50 18844193.68 0.0261 0.0140

Neptune 46881-11-07 14:10 G 18844305.00 18844305.09 18844305.23 0.0090 0.0077

Uranus 46882-05-11 17:17 G 18844490.19 18844490.22 18844490.28 0.0134 0.0131

Neptune 46882-06-21 03:36 G 18844530.63 18844530.65 18844530.72 0.0090 0.0088

Uranus 46882-12-23 23:02 G 18844716.34 18844716.46 18844716.60 0.0134 0.0106

Uranus 46883-08-07 04:34 G 18844942.53 18844942.69 18844942.88 0.0134 0.0081

Uranus 46884-03-20 10:19 G 18845168.74 18845168.93 18845169.14 0.0134 0.0056

Uranus 46884-11-01 16:05 G 18845394.96 18845395.17 18845395.39 0.0134 0.0030

Uranus 46885-06-15 21:50 G 18845621.19 18845621.41 18845621.62 0.0134 0.0005

Uranus 46886-01-28 03:07 G 18845847.42 18845847.63 18845847.85 0.0134 0.0021

Uranus 46886-09-11 08:38 G 18846073.66 18846073.86 18846074.07 0.0134 0.0046

Uranus 46887-04-25 14:10 G 18846299.91 18846300.09 18846300.28 0.0134 0.0071

Jupiter 46887-05-05 13:41 G 18846309.96 18846310.07 18846310.18 0.0529 0.0443

Uranus 46887-12-07 19:26 G 18846526.17 18846526.31 18846526.47 0.0133 0.0096

Uranus 46888-07-21 00:43 G 18846752.45 18846752.53 18846752.64 0.0133 0.0121

Jupiter 46893-03-08 11:46 G 18848443.85 18848443.99 18848444.13 0.0497 0.0367

Saturn 46895-12-25 18:14 G 18849466.20 18849466.26 18849466.35 0.0299 0.0279

Saturn 46896-08-11 23:02 G 18849696.25 18849696.46 18849696.67 0.0301 0.0033

Mars 46898-03-06 01:12 G 18850267.39 18850267.55 18850267.72 0.1732 0.0645

Jupiter 46899-01-08 04:19 G 18850575.48 18850575.68 18850575.89 0.0529 0.0031

Jupiter 46904-11-12 13:41 G 18852709.87 18852710.07 18852710.28 0.0497 0.0032

Saturn 46909-10-29 08:53 G 18854521.81 18854521.87 18854521.97 0.0264 0.0243

Saturn 46910-06-15 07:41 G 18854750.61 18854750.82 18854751.04 0.0262 0.0034

Jupiter 46910-09-13 17:46 G 18854841.11 18854841.24 18854841.38 0.0528 0.0391

Saturn 46911-01-30 05:02 G 18854979.56 18854979.71 18854979.88 0.0261 0.0171

Jupiter 46916-07-18 15:07 G 18856975.97 18856976.13 18856976.29 0.0497 0.0306

Moon 46920-07-16 23:46 G 18858435.34 18858435.49 18858435.64 0.2682 0.1161

Earth 46920-07-17 01:12 G 18858435.41 18858435.55 18858435.70 0.2689 0.1149 *

Saturn 46925-07-08 03:50 G 18860252.53 18860252.66 18860252.80 0.0299 0.0230

Mars 46925-07-20 18:14 G 18860265.11 18860265.26 18860265.41 0.1792 0.0880

Uranus 46925-09-25 22:19 G 18860332.31 18860332.43 18860332.56 0.0144 0.0117

Saturn 46926-02-23 08:24 G 18860482.65 18860482.85 18860483.06 0.0301 0.0082

Uranus 46926-05-10 09:50 G 18860558.75 18860558.91 18860559.10 0.0144 0.0087

Uranus 46926-12-22 21:50 G 18860785.22 18860785.41 18860785.62 0.0144 0.0055

Uranus 46927-08-06 09:50 G 18861011.70 18861011.91 18861012.13 0.0144 0.0023

Uranus 46928-03-19 21:50 G 18861238.20 18861238.41 18861238.63 0.0144 0.0011

Earth 46928-07-14 15:07 G 18861355.12 18861355.13 18861355.15 0.2689 0.2668

Uranus 46928-11-01 10:05 G 18861464.72 18861464.92 18861465.13 0.0145 0.0042

Uranus 46929-06-15 21:50 G 18861691.24 18861691.41 18861691.62 0.0145 0.0075

Uranus 46930-01-28 10:19 G 18861917.78 18861917.93 18861918.08 0.0145 0.0106

Uranus 46930-09-11 22:05 G 18862144.37 18862144.42 18862144.50 0.0145 0.0138

Pluto 46933-07-24 03:50 G 18863190.51 18863190.66 18863190.82 0.0063 0.0045

Pluto 46934-03-06 07:12 G 18863415.59 18863415.80 18863416.03 0.0063 0.0007

Jupiter 46934-09-16 20:24 G 18863610.17 18863610.35 18863610.52 0.0529 0.0267

Pluto 46934-10-17 10:34 G 18863640.77 18863640.94 18863641.15 0.0063 0.0033

Saturn 46939-05-11 12:29 G 18865307.90 18865308.02 18865308.15 0.0263 0.0213

Saturn 46939-12-26 11:17 G 18865536.75 18865536.97 18865537.18 0.0262 0.0005

Jupiter 46940-07-20 22:34 G 18865744.25 18865744.44 18865744.62 0.0497 0.0221

Saturn 46940-08-11 08:38 G 18865765.73 18865765.86 18865766.00 0.0261 0.0200

Jupiter 46946-05-22 10:34 G 18867875.75 18867875.94 18867876.14 0.0528 0.0150

Jupiter 46952-03-25 23:46 G 18870010.29 18870010.49 18870010.69 0.0497 0.0116

Saturn 46955-01-18 13:12 G 18871038.89 18871039.05 18871039.22 0.0300 0.0186

Neptune 46955-05-03 22:05 G 18871144.34 18871144.42 18871144.51 0.0088 0.0080

Saturn 46955-09-05 18:00 G 18871269.06 18871269.25 18871269.44 0.0301 0.0128

Neptune 46955-12-15 10:34 G 18871369.82 18871369.94 18871370.09 0.0088 0.0070

Neptune 46956-07-27 23:31 G 18871595.32 18871595.48 18871595.65 0.0088 0.0059

Neptune 46957-03-10 12:00 G 18871820.83 18871821.00 18871821.19 0.0088 0.0049

Neptune 46957-10-22 00:43 G 18872046.34 18872046.53 18872046.74 0.0088 0.0038

Neptune 46958-06-04 13:26 G 18872271.86 18872272.06 18872272.28 0.0088 0.0028

Neptune 46959-01-16 02:10 G 18872497.38 18872497.59 18872497.81 0.0088 0.0017

Neptune 46959-08-29 14:53 G 18872722.90 18872723.12 18872723.34 0.0088 0.0006

Neptune 46960-04-11 03:36 G 18872948.43 18872948.65 18872948.87 0.0088 0.0004

Neptune 46960-11-22 16:19 G 18873173.97 18873174.18 18873174.40 0.0088 0.0015

Neptune 46961-07-06 04:48 G 18873399.50 18873399.70 18873399.92 0.0088 0.0026

Neptune 46962-02-16 17:17 G 18873625.04 18873625.22 18873625.44 0.0088 0.0037

Neptune 46962-09-30 06:14 G 18873850.58 18873850.76 18873850.95 0.0088 0.0047

Neptune 46963-05-13 18:43 G 18874076.13 18874076.28 18874076.46 0.0088 0.0058

Jupiter 46963-11-30 01:41 G 18874276.49 18874276.57 18874276.66 0.0498 0.0452

Neptune 46963-12-25 07:55 G 18874301.70 18874301.83 18874301.97 0.0088 0.0068

Mars 46964-01-02 09:50 G 18874309.74 18874309.91 18874310.09 0.1735 0.0187

Neptune 46964-08-06 20:24 G 18874527.27 18874527.35 18874527.46 0.0088 0.0079

Uranus 46966-08-24 07:41 G 18875274.73 18875274.82 18875274.95 0.0134 0.0116

Uranus 46967-04-07 13:41 G 18875500.92 18875501.07 18875501.24 0.0134 0.0091

Uranus 46967-11-19 19:41 G 18875727.13 18875727.32 18875727.51 0.0134 0.0065

Uranus 46968-07-03 01:12 G 18875953.35 18875953.55 18875953.76 0.0134 0.0040

Saturn 46968-11-20 19:12 G 18876094.15 18876094.30 18876094.46 0.0263 0.0178

Uranus 46969-02-14 06:43 G 18876179.57 18876179.78 18876180.00 0.0134 0.0015

Saturn 46969-07-07 17:31 G 18876323.02 18876323.23 18876323.44 0.0262 0.0030

Uranus 46969-09-28 12:29 G 18876405.80 18876406.02 18876406.24 0.0134 0.0011

Saturn 46970-02-21 14:53 G 18876552.03 18876552.12 18876552.21 0.0261 0.0233

Uranus 46970-05-12 18:00 G 18876632.05 18876632.25 18876632.46 0.0134 0.0036

Jupiter 46970-05-25 08:24 G 18876644.78 18876644.85 18876644.93 0.0530 0.0488

Uranus 46970-12-24 23:31 G 18876858.29 18876858.48 18876858.68 0.0134 0.0061

Uranus 46971-08-08 05:02 G 18877084.55 18877084.71 18877084.88 0.0134 0.0086

Uranus 46972-03-21 10:19 G 18877310.82 18877310.93 18877311.06 0.0134 0.0111

Jupiter 46976-03-28 09:07 G 18878778.78 18878778.88 18878778.99 0.0496 0.0419

Jupiter 46982-01-28 00:14 G 18880910.31 18880910.51 18880910.71 0.0529 0.0078

Saturn 46984-07-31 00:00 G 18881825.32 18881825.50 18881825.69 0.0299 0.0133

Saturn	**46985-03-18 04:48**	**G**	**18882055.54**	**18882055.70**	**18882055.87**	**0.0301**	**0.0182**	
Jupiter	**46987-12-02 09:07**	**G**	**18883044.68**	**18883044.88**	**18883045.08**	**0.0497**	**0.0075**	
Mars	**46991-05-18 01:12**	**G**	**18884307.45**	**18884307.55**	**18884307.65**	**0.1788**	**0.1443**	
Jupiter	**46993-10-02 16:19**	**G**	**18885176.03**	**18885176.18**	**18885176.34**	**0.0528**	**0.0329**	
Saturn	**46998-06-02 23:17**	**G**	**18886880.30**	**18886880.47**	**18886880.66**	**0.0263**	**0.0147**	
Saturn	**46999-01-17 21:50**	**G**	**18887109.20**	**18887109.41**	**18887109.61**	**0.0262**	**0.0061**	
Jupiter	**46999-08-07 09:50**	**G**	**18887310.74**	**18887310.91**	**18887311.08**	**0.0498**	**0.0265**	

48TH MILLENNIUM CE

This is a list of transits of Venus in the 48th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Uranus	**47009-05-27 03:22**	**G**	**18890890.57**	**18890890.64**	**18890890.75**	**0.0144**	**0.0131**	
Uranus	**47010-01-08 15:22**	**G**	**18891116.99**	**18891117.14**	**18891117.30**	**0.0144**	**0.0099**	
Uranus	**47010-08-23 02:53**	**G**	**18891343.44**	**18891343.62**	**18891343.82**	**0.0144**	**0.0068**	
Uranus	**47011-04-06 14:53**	**G**	**18891569.92**	**18891570.12**	**18891570.34**	**0.0144**	**0.0036**	
Uranus	**47011-11-19 03:07**	**G**	**18891796.41**	**18891796.63**	**18891796.85**	**0.0144**	**0.0004**	
Uranus	**47012-07-02 14:53**	**G**	**18892022.91**	**18892023.12**	**18892023.34**	**0.0144**	**0.0029**	
Uranus	**47013-02-14 02:53**	**G**	**18892249.43**	**18892249.62**	**18892249.82**	**0.0145**	**0.0060**	
Uranus	**47013-09-28 14:53**	**G**	**18892475.96**	**18892476.12**	**18892476.29**	**0.0145**	**0.0093**	
Saturn	**47014-02-11 10:34**	**G**	**18892611.74**	**18892611.94**	**18892612.14**	**0.0300**	**0.0085**	
Uranus	**47014-05-13 02:38**	**G**	**18892702.52**	**18892702.61**	**18892702.74**	**0.0145**	**0.0125**	
Saturn	**47014-09-29 15:36**	**G**	**18892842.02**	**18892842.15**	**18892842.29**	**0.0302**	**0.0231**	
Jupiter	**47017-10-06 14:53**	**G**	**18893944.96**	**18893945.12**	**18893945.29**	**0.0529**	**0.0312**	

Jupiter 47023-08-10 19:26 G 18896079.14 18896079.31 18896079.48 0.0497 0.0272

Pluto 47024-04-22 01:12 G 18896334.33 18896334.55 18896334.77 0.0081 0.0004

Pluto 47024-12-03 11:17 G 18896559.95 18896559.97 18896560.05 0.0080 0.0079

Saturn 47027-12-15 06:14 G 18897666.58 18897666.76 18897666.96 0.0263 0.0112

Saturn 47028-07-31 04:19 G 18897895.49 18897895.68 18897895.89 0.0262 0.0096

Jupiter 47029-06-11 04:05 G 18898210.47 18898210.67 18898210.86 0.0529 0.0112

Mars 47029-10-30 18:29 G 18898352.10 18898352.27 18898352.44 0.1739 0.0275

Moon 47034-01-17 12:14 G 18899891.85 18899892.01 18899892.16 0.2642 0.0724

Earth 47034-01-17 17:31 G 18899892.09 18899892.23 18899892.37 0.2642 0.1248 *

Jupiter 47035-04-15 20:53 G 18900345.16 18900345.37 18900345.57 0.0497 0.0066

Neptune 47037-06-20 06:14 G 18901141.69 18901141.76 18901141.84 0.0090 0.0084

Neptune 47038-01-31 19:26 G 18901367.20 18901367.31 18901367.45 0.0090 0.0073

Neptune 47038-09-14 08:38 G 18901592.72 18901592.86 18901593.04 0.0090 0.0062

Neptune 47039-04-27 22:05 G 18901818.25 18901818.42 18901818.62 0.0090 0.0051

Neptune 47039-12-09 11:31 G 18902043.80 18902043.98 18902044.19 0.0090 0.0039

Neptune 47040-07-22 01:12 G 18902269.34 18902269.55 18902269.76 0.0090 0.0028

Jupiter 47041-02-13 19:41 G 18902476.29 18902476.32 18902476.36 0.0528 0.0518

Neptune 47041-03-04 14:24 G 18902494.89 18902495.10 18902495.32 0.0090 0.0017

Neptune 47041-10-16 03:50 G 18902720.44 18902720.66 18902720.88 0.0090 0.0006

Moon 47042-01-15 05:31 G 18902811.65 18902811.73 18902811.81 0.2646 0.2229

Earth 47042-01-15 10:05 G 18902811.82 18902811.92 18902812.01 0.2642 0.2098

Neptune 47042-05-29 17:17 G 18902946.01 18902946.22 18902946.44 0.0090 0.0006

Neptune 47043-01-10 06:29 G 18903171.57 18903171.77 18903172.00 0.0090 0.0018

Neptune 47043-08-23 19:55 G 18903397.13 18903397.33 18903397.55 0.0090 0.0029

Saturn 47043-08-24 21:50 G 18903398.20 18903398.41 18903398.62 0.0300 0.0031

Neptune 47044-04-05 09:07 G 18903622.70 18903622.88 18903623.09 0.0090 0.0040

Saturn 47044-04-11 02:53 G 18903628.57 18903628.62 18903628.70 0.0301 0.0286

Neptune 47044-11-16 22:34 G 18903848.27 18903848.44 18903848.63 0.0090 0.0051

Neptune 47045-06-30 12:00 G 18904073.85 18904074.00 18904074.17 0.0090 0.0062

Neptune 47046-02-11 01:26 G 18904299.44 18904299.56 18904299.69 0.0090 0.0073

Neptune 47046-09-24 14:53 G 18904525.04 18904525.12 18904525.19 0.0090 0.0084

Jupiter 47046-12-19 19:55 G 18904611.22 18904611.33 18904611.45 0.0498 0.0412

Uranus 47050-04-24 16:48 G 18905833.14 18905833.20 18905833.28 0.0134 0.0126

Uranus 47050-12-06 22:34 G 18906059.31 18906059.44 18906059.60 0.0134 0.0101

Uranus 47051-07-21 04:19 G 18906285.51 18906285.68 18906285.87 0.0134 0.0076

Uranus 47052-03-03 10:19 G 18906511.73 18906511.93 18906512.13 0.0134 0.0050

Uranus 47052-10-15 16:05 G 18906737.96 18906738.17 18906738.38 0.0134 0.0025

Uranus 47053-05-29 21:50 G 18906964.19 18906964.41 18906964.63 0.0134 0.0001

Uranus 47054-01-11 03:22 G 18907190.43 18907190.64 18907190.85 0.0134 0.0026

Uranus 47054-08-25 08:38 G 18907416.67 18907416.86 18907417.07 0.0134 0.0052

Uranus 47055-04-08 14:10 G 18907642.93 18907643.09 18907643.28 0.0134 0.0077

Uranus 47055-11-20 19:41 G 18907869.19 18907869.32 18907869.47 0.0134 0.0102

Uranus 47056-07-04 00:58 G 18908095.49 18908095.54 18908095.62 0.0134 0.0127

Saturn 47057-06-26 11:17 G 18908452.77 18908452.97 18908453.18 0.0263 0.0079

Saturn 47058-02-10 09:07 G 18908681.70 18908681.88 18908682.07 0.0261 0.0127

Jupiter 47059-04-18 03:07 G 18909113.55 18909113.63 18909113.71 0.0496 0.0455

Jupiter 47065-02-16 20:38 G 18911245.16 18911245.36 18911245.56 0.0529 0.0131

Jupiter 47070-12-22 04:19 G 18913379.49 18913379.68 18913379.88 0.0497 0.0120

Saturn 47072-07-19 04:05 G 18913954.63 18913954.67 18913954.71 0.0299 0.0293

Saturn 47073-03-06 08:10 G 18914184.63 18914184.84 18914185.05 0.0301 0.0017

Jupiter 47076-10-22 10:48 G 18915510.78 18915510.95 18915511.12 0.0528 0.0284

Jupiter 47082-08-27 06:14 G 18917645.58 18917645.76 18917645.95 0.0498 0.0216

Saturn 47086-05-22 19:12 G 18919010.25 18919010.30 18919010.37 0.0264 0.0253

Saturn 47087-01-06 18:14 G 18919239.05 18919239.26 18919239.47 0.0262 0.0043

Saturn 47087-08-23 15:50 G 18919468.00 18919468.16 18919468.33 0.0261 0.0162

Mars 47089-03-14 18:14 G 18920037.16 18920037.26 18920037.36 0.1797 0.1438

Uranus 47093-01-24 10:19 G 18921448.92 18921448.93 18921448.96 0.0144 0.0143

Uranus 47093-09-07 22:05 G 18921675.30 18921675.42 18921675.57 0.0144 0.0112

Uranus 47094-04-22 10:05 G 18921901.74 18921901.92 18921902.10 0.0144 0.0080

Uranus 47094-12-04 21:50 G 18922128.20 18922128.41 18922128.61 0.0144 0.0049

Uranus 47095-07-19 09:36 G 18922354.68 18922354.90 18922355.12 0.0144 0.0017

Mars 47095-08-28 03:07 G 18922394.47 18922394.63 18922394.79 0.1743 0.0746

Uranus 47096-03-01 21:36 G 18922581.18 18922581.40 18922581.61 0.0144 0.0016

Uranus 47096-10-14 09:22 G 18922807.69 18922807.89 18922808.10 0.0144 0.0048

Uranus 47097-05-28 21:22 G 18923034.21 18923034.39 18923034.58 0.0144 0.0080

Uranus 47098-01-10 09:07 G 18923260.75 18923260.88 18923261.03 0.0144 0.0112

Uranus 47098-08-24 20:38 G 18923487.36 18923487.36 18923487.41 0.0145 0.0144

Jupiter 47100-10-26 09:22 G 18924279.74 18924279.89 18924280.04 0.0529 0.0353

Saturn 47102-01-30 15:36 G 18924741.03 18924741.15 18924741.28 0.0299 0.0238

Saturn 47102-09-17 19:55 G 18924971.13 18924971.33 18924971.54 0.0300 0.0073

Jupiter 47106-08-30 13:12 G 18926413.89 18926414.05 18926414.21 0.0497 0.0308

Jupiter 47112-07-01 01:55 G 18928545.38 18928545.58 18928545.79 0.0529 0.0052

Saturn 47115-12-04 00:43 G 18929796.42 18929796.53 18929796.65 0.0263 0.0220

Saturn 47116-07-19 23:17 G 18930025.26 18930025.47 18930025.69 0.0262 0.0012

Saturn 47117-03-05 20:38 G 18930254.23 18930254.36 18930254.51 0.0261 0.0194

Jupiter 47118-05-05 14:10 G 18930679.88 18930680.09 18930680.29 0.0497 0.0030

Neptune 47119-08-07 08:53 G 18931138.81 18931138.87 18931138.97 0.0088 0.0082

Neptune 47120-03-19 21:36 G 18931364.29 18931364.40 18931364.55 0.0088 0.0072

Neptune 47120-10-31 10:34 G 18931589.79 18931589.94 18931590.11 0.0088 0.0061

Neptune 47121-06-13 23:02 G 18931815.30 18931815.46 18931815.66 0.0088 0.0051

Neptune 47122-01-25 12:00 G 18932040.81 18932041.00 18932041.21 0.0088 0.0040

Neptune 47122-09-08 00:29 G 18932266.33 18932266.52 18932266.75 0.0088 0.0030

Neptune 47123-04-21 13:26 G 18932491.85 18932492.06 18932492.28 0.0088 0.0019

Neptune 47123-12-03 02:24 G 18932717.38 18932717.60 18932717.82 0.0088 0.0008

Jupiter 47124-03-05 16:48 G 18932811.11 18932811.20 18932811.30 0.0528 0.0460

Neptune 47124-07-15 15:07 G 18932942.91 18932943.13 18932943.35 0.0088 0.0002

Neptune 47125-02-26 03:36 G 18933168.44 18933168.65 18933168.87 0.0088 0.0013

Neptune 47125-10-09 16:19 G 18933393.97 18933394.18 18933394.39 0.0088 0.0023

Neptune 47126-05-23 04:48 G 18933619.51 18933619.70 18933619.91 0.0088 0.0034

Neptune 47127-01-03 17:17 G 18933845.05 18933845.22 18933845.43 0.0088 0.0045

Neptune 47127-08-17 06:14 G 18934070.60 18934070.76 18934070.94 0.0088 0.0055

Neptune 47128-03-29 18:43 G 18934296.15 18934296.28 18934296.44 0.0088 0.0066

Neptune 47128-11-10 07:26 G 18934521.72 18934521.81 18934521.94 0.0088 0.0076

Neptune 47129-06-23 20:38 G 18934747.32 18934747.36 18934747.40 0.0088 0.0086

Jupiter 47130-01-08 15:07 G 18934945.99 18934946.13 18934946.27 0.0498 0.0368

Saturn 47131-08-13 00:29 G 18935527.37 18935527.52 18935527.69 0.0299 0.0196

Saturn 47132-03-30 05:02 G 18935757.52 18935757.71 18935757.91 0.0301 0.0118

Uranus 47134-08-07 06:43 G 18936617.68 18936617.78 18936617.91 0.0134 0.0112

Uranus 47135-03-21 12:58 G 18936843.88 18936844.04 18936844.21 0.0134 0.0086

Uranus 47135-11-02 18:43 G 18937070.09 18937070.28 18937070.48 0.0134 0.0061

Uranus 47136-06-16 00:43 G 18937296.32 18937296.53 18937296.74 0.0134 0.0035

Uranus 47137-01-28 06:14 G 18937522.55 18937522.76 18937522.98 0.0134 0.0010

Uranus 47137-09-11 11:46 G 18937748.78 18937748.99 18937749.21 0.0134 0.0016

Uranus 47138-04-25 17:31 G 18937975.03 18937975.23 18937975.44 0.0134 0.0041

Uranus 47138-12-07 23:17 G 18938201.28 18938201.47 18938201.66 0.0134 0.0066

Uranus 47139-07-22 04:19 G 18938427.54 18938427.68 18938427.85 0.0134 0.0092

Uranus 47140-03-04 10:05 G 18938653.82 18938653.92 18938654.03 0.0134 0.0116

Saturn 47145-06-15 07:12 G 18940582.66 18940582.80 18940582.96 0.0263 0.0184

Saturn 47146-01-30 05:46 G 18940811.53 18940811.74 18940811.95 0.0262 0.0024

Saturn 47146-09-16 02:53 G 18941040.53 18941040.62 18941040.73 0.0261 0.0228

Jupiter 47148-03-08 13:41 G 18941579.88 18941580.07 18941580.27 0.0529 0.0168

Jupiter 47154-01-11 01:12 G 18943714.36 18943714.55 18943714.75 0.0497 0.0170

Mars 47155-01-11 01:26 G 18944079.41 18944079.56 18944079.71 0.1793 0.0876

Jupiter 47159-11-12 05:31 G 18945845.55 18945845.73 18945845.91 0.0528 0.0240

Saturn 47161-02-22 11:17 G 18946313.79 18946313.97 18946314.16 0.0299 0.0142

Mars 47161-06-25 11:17 G 18946436.85 18946436.97 18946437.09 0.1747 0.1231

Saturn 47161-10-10 16:05 G 18946544.00 18946544.17 18946544.35 0.0301 0.0172

Moon 47163-07-20 01:12 G 18947191.40 18947191.55 18947191.70 0.2697 0.0638

Earth 47163-07-20 01:12 G 18947191.41 18947191.55 18947191.70 0.2689 0.0998 *

Jupiter 47165-09-16 00:14 G 18947980.32 18947980.51 18947980.70 0.0497 0.0176

Moon 47171-07-17 19:12 G 18950111.23 18950111.30 18950111.36 0.2695 0.2446

Saturn 47174-12-26 12:29 G 18951368.85 18951369.02 18951369.20 0.0263 0.0152

Saturn 47175-08-12 10:34 G 18951597.74 18951597.94 18951598.15 0.0262 0.0056

Saturn 47176-03-28 07:26 G 18951826.80 18951826.81 18951826.85 0.0260 0.0259

Uranus 47177-05-09 05:46 G 18952233.64 18952233.74 18952233.85 0.0144 0.0124

Uranus 47177-12-21 17:02 G 18952460.06 18952460.21 18952460.39 0.0144 0.0093

Uranus 47178-08-05 05:02 G 18952686.52 18952686.71 18952686.91 0.0144 0.0061

Uranus 47179-03-19 16:48 G 18952912.99 18952913.20 18952913.42 0.0144 0.0029

Uranus 47179-11-01 04:48 G 18953139.49 18953139.70 18953139.92 0.0144 0.0004

Uranus 47180-06-14 16:34 G 18953365.99 18953366.19 18953366.41 0.0144 0.0035

Uranus 47181-01-27 04:19 G 18953592.50 18953592.68 18953592.88 0.0144 0.0067

Pluto 47181-06-28 08:38 G 18953744.80 18953744.86 18953744.99 0.0063 0.0057

Uranus 47181-09-10 16:05 G 18953819.03 18953819.17 18953819.34 0.0144 0.0099

Pluto 47182-02-08 12:43 G 18953969.83 18953970.03 18953970.25 0.0063 0.0018

Uranus 47182-04-25 04:05 G 18954045.59 18954045.67 18954045.77 0.0144 0.0131

Pluto 47182-09-21 16:34 G 18954194.98 18954195.19 18954195.40 0.0063 0.0021

Pluto 47183-05-04 20:10 G 18954420.27 18954420.34 18954420.41 0.0063 0.0060

Jupiter 47183-11-15 07:26 G 18954614.69 18954614.81 18954614.94 0.0529 0.0413

Jupiter 47189-09-18 08:53 G 18956748.73 18956748.87 18956749.02 0.0497 0.0354

Saturn 47190-09-04 18:58 G 18957100.10 18957100.29 18957100.49 0.0300 0.0102

Saturn 47191-04-23 00:14 G 18957330.36 18957330.51 18957330.66 0.0302 0.0214

Jupiter 47195-07-20 21:50 G 18958880.21 18958880.41 18958880.62 0.0528 0.0010

Jupiter 47201-05-24 11:17 G 18961014.77 18961014.97 18961015.18 0.0497 0.0022

Neptune 47201-09-22 17:02 G 18961136.17 18961136.21 18961136.29 0.0090 0.0086

Neptune 47202-05-06 06:29 G 18961361.67 18961361.77 18961361.91 0.0090 0.0075

Neptune 47202-12-17 19:55 G 18961587.19 18961587.33 18961587.50 0.0090 0.0064

Neptune 47203-07-31 09:07 G 18961812.72 18961812.88 18961813.07 0.0090 0.0053

Neptune 47204-03-12 22:19 G 18962038.25 18962038.43 18962038.64 0.0090 0.0042

Saturn 47204-07-07 18:14 G 18962155.07 18962155.26 18962155.45 0.0263 0.0119

Neptune 47204-10-24 11:46 G 18962263.80 18962263.99 18962264.21 0.0090 0.0031

Saturn 47205-02-21 16:05 G 18962383.97 18962384.17 18962384.37 0.0261 0.0088

Neptune 47205-06-07 01:12 G 18962489.35 18962489.55 18962489.78 0.0090 0.0020

Neptune 47206-01-18 14:53 G 18962714.90 18962715.12 18962715.34 0.0090 0.0008

Neptune 47206-09-01 04:05 G 18962940.45 18962940.67 18962940.89 0.0090 0.0003

Jupiter 47207-03-25 11:17 G 18963145.84 18963145.97 18963146.09 0.0528 0.0417

Neptune 47207-04-14 17:17 G 18963166.01 18963166.22 18963166.44 0.0090 0.0015

Neptune 47207-11-26 06:43 G 18963391.58 18963391.78 18963392.00 0.0090 0.0026

Neptune 47208-07-08 20:10 G 18963617.15 18963617.34 18963617.55 0.0090 0.0037

Neptune 47209-02-19 09:36 G 18963842.72 18963842.90 18963843.09 0.0090 0.0048

Neptune 47209-10-02 22:48 G 18964068.29 18964068.45 18964068.62 0.0090 0.0059

Neptune 47210-05-16 12:14 G 18964293.88 18964294.01 18964294.15 0.0090 0.0070

Neptune 47210-12-28 01:26 G 18964519.48 18964519.56 18964519.66 0.0090 0.0081

Jupiter 47213-01-27 12:43 G 18965280.87 18965281.03 18965281.19 0.0498 0.0314

Uranus 47218-04-06 16:05 G 18967176.10 18967176.17 18967176.27 0.0134 0.0122

Uranus 47218-11-18 21:50 G 18967402.28 18967402.41 18967402.58 0.0134 0.0098

Uranus 47219-07-03 04:05 G 18967628.49 18967628.67 18967628.86 0.0134 0.0071

Uranus 47220-02-14 09:36 G 18967854.71 18967854.90 18967855.12 0.0134 0.0046

Saturn 47220-03-17 04:48 G 18967886.50 18967886.70 18967886.91 0.0300 0.0051

Uranus 47220-09-27 15:36 G 18968080.94 18968081.15 18968081.37 0.0134 0.0020

Saturn 47220-11-02 09:50 G 18968116.82 18968116.91 18968117.02 0.0301 0.0266

Mars 47220-11-07 08:38 G 18968121.69 18968121.86 18968122.03 0.1789 0.0319

Uranus 47221-05-11 21:22 G 18968307.17 18968307.39 18968307.61 0.0134 0.0005

Uranus 47221-12-24 02:53 G 18968533.41 18968533.62 18968533.84 0.0134 0.0031

Uranus 47222-08-07 08:24 G 18968759.66 18968759.85 18968760.05 0.0134 0.0056

Uranus 47223-03-21 13:41 G 18968985.91 18968986.07 18968986.26 0.0134 0.0082

Uranus 47223-11-02 18:58 G 18969212.18 18969212.29 18969212.44 0.0134 0.0107

Uranus 47224-06-16 00:58 G 18969438.50 18969438.54 18969438.58 0.0134 0.0131

Mars 47227-04-22 19:41 G 18970479.29 18970479.32 18970479.34 0.1751 0.1721

Jupiter 47231-03-28 13:41 G 18971914.90 18971915.07 18971915.26 0.0529 0.0238

Saturn 47234-01-17 22:48 G 18972941.25 18972941.45 18972941.66 0.0262 0.0088

Saturn 47234-09-03 20:24 G 18973170.17 18973170.35 18973170.55 0.0261 0.0118

Jupiter 47237-01-29 19:41 G 18974049.14 18974049.32 18974049.51 0.0497 0.0210

Jupiter 47242-12-01 05:31 G 18976180.53 18976180.73 18976180.92 0.0528 0.0170

Jupiter 47248-10-04 21:07 G 18978315.18 18978315.38 18978315.58 0.0498 0.0125

Saturn 47249-09-27 10:19 G 18978672.72 18978672.93 18978673.14 0.0301 0.0016

Saturn 47250-05-15 16:05 G 18978903.17 18978903.17 18978903.17 0.0302 0.0302

Mars 47259-04-22 00:43 G 18982166.42 18982166.53 18982166.64 0.1739 0.1331

Jupiter 47260-06-09 23:02 G 18982581.39 18982581.46 18982581.54 0.0499 0.0458

Uranus 47261-01-06 12:58 G 18982791.99 18982792.04 18982792.12 0.0144 0.0137

Uranus 47261-08-21 00:43 G 18983018.39 18983018.53 18983018.69 0.0144 0.0105

Uranus 47262-04-04 12:14 G 18983244.84 18983245.01 18983245.21 0.0144 0.0074

Uranus 47262-11-17 00:14 G 18983471.31 18983471.51 18983471.73 0.0144 0.0042

Uranus 47263-07-01 12:14 G 18983697.79 18983698.01 18983698.23 0.0144 0.0010

Saturn 47263-07-31 03:07 G 18983727.43 18983727.63 18983727.84 0.0262 0.0057

Uranus 47264-02-13 00:00 G 18983924.29 18983924.50 18983924.72 0.0144 0.0022

Saturn 47264-03-16 00:29 G 18983956.36 18983956.52 18983956.71 0.0261 0.0149

Uranus 47264-09-26 11:46 G 18984150.80 18984150.99 18984151.20 0.0144 0.0055

Uranus 47265-05-10 23:31 G 18984377.32 18984377.48 18984377.67 0.0144 0.0087

Uranus 47265-12-23 11:17 G 18984603.87 18984603.97 18984604.11 0.0144 0.0119

Jupiter 47266-12-04 03:22 G 18984949.55 18984949.64 18984949.74 0.0529 0.0463

Pluto 47272-03-26 04:05 G 18986888.47 18986888.67 18986888.88 0.0081 0.0031

Jupiter 47272-10-07 07:41 G 18987083.71 18987083.82 18987083.94 0.0497 0.0412

Pluto 47272-11-06 14:24 G 18987113.95 18987114.10 18987114.29 0.0080 0.0051

Earth 47277-01-18 19:55 G 18988648.20 18988648.33 18988648.47 0.2642 0.1341

Moon 47277-01-19 00:14 G 18988648.39 18988648.51 18988648.64 0.2646 0.1524 *

Jupiter 47278-08-08 19:26 G 18989215.11 18989215.31 18989215.51 0.0529 0.0058

Saturn 47278-08-22 14:24 G 18989229.03 18989229.10 18989229.18 0.0298 0.0279

Saturn 47279-04-09 18:43 G 18989459.07 18989459.28 18989459.49 0.0300 0.0032

Neptune 47283-11-08 19:55 G 18991133.29 18991133.33 18991133.42 0.0088 0.0084

Jupiter 47284-06-12 07:12 G 18991349.60 18991349.80 18991350.00 0.0497 0.0070

Neptune 47284-06-21 09:07 G 18991358.77 18991358.88 18991359.01 0.0088 0.0073

Earth 47285-01-16 12:14 G 18991567.91 18991568.01 18991568.12 0.2642 0.2010

Moon 47285-01-16 17:31 G 18991568.11 18991568.23 18991568.36 0.2641 0.1612 *

Neptune 47285-02-01 21:36 G 18991584.26 18991584.40 18991584.57 0.0088 0.0063

Neptune 47285-09-15 10:19 G 18991809.77 18991809.93 18991810.12 0.0088 0.0053

Neptune 47286-04-28 23:17 G 18992035.28 18992035.47 18992035.67 0.0088 0.0042

Mars 47286-09-04 16:19 G 18992164.01 18992164.18 18992164.35 0.1785 0.0229

Neptune 47286-12-10 12:00 G 18992260.81 18992261.00 18992261.22 0.0088 0.0032

Neptune 47287-07-24 00:58 G 18992486.33 18992486.54 18992486.76 0.0088 0.0021

Neptune 47288-03-05 13:41 G 18992711.85 18992712.07 18992712.29 0.0088 0.0011

Neptune 47288-10-17 02:24 G 18992937.38 18992937.60 18992937.82 0.0088 0.0000

Neptune 47289-05-30 14:53 G 18993162.91 18993163.12 18993163.35 0.0088 0.0011

Neptune 47290-01-11 03:50 G 18993388.45 18993388.66 18993388.87 0.0088 0.0021

Jupiter 47290-04-13 12:14 G 18993480.86 18993481.01 18993481.17 0.0528 0.0341

Neptune 47290-08-24 16:05 G 18993613.98 18993614.17 18993614.39 0.0088 0.0032

Neptune 47291-04-07 04:48 G 18993839.52 18993839.70 18993839.91 0.0088 0.0042

Neptune 47291-11-18 17:31 G 18994065.07 18994065.23 18994065.42 0.0088 0.0053

Saturn 47292-06-25 09:07 G 18994284.79 18994284.88 18994284.97 0.0263 0.0237

Neptune 47292-07-01 06:14 G 18994290.62 18994290.76 18994290.93 0.0088 0.0063

Saturn 47293-02-09 07:26 G 18994513.60 18994513.81 18994514.02 0.0262 0.0028

Neptune 47293-02-11 19:12 G 18994516.18 18994516.30 18994516.43 0.0088 0.0073

Neptune 47293-09-25 07:26 G 18994741.77 18994741.81 18994741.90 0.0088 0.0084

Saturn 47293-09-26 04:34 G 18994742.54 18994742.69 18994742.85 0.0261 0.0177

Jupiter 47296-02-16 08:38 G 18995615.69 18995615.86 18995616.04 0.0498 0.0264

Uranus 47301-12-06 01:12 G 18997734.53 18997734.55 18997734.59 0.0134 0.0133

Uranus 47302-07-20 06:58 G 18997960.67 18997960.79 18997960.93 0.0134 0.0107

Uranus 47303-03-03 12:43 G 18998186.87 18998187.03 18998187.22 0.0134 0.0082

Uranus 47303-10-15 18:43 G 18998413.09 18998413.28 18998413.48 0.0134 0.0056

Uranus 47304-05-29 00:29 G 18998639.32 18998639.52 18998639.74 0.0134 0.0031

Uranus 47305-01-10 06:14 G 18998865.54 18998865.76 18998865.98 0.0134 0.0005

Uranus	47305-08-24 11:46 G	18999091.78	18999091.99	18999092.21	0.0134	0.0020
Uranus	47306-04-07 17:17 G	18999318.02	18999318.22	18999318.43	0.0134	0.0046
Uranus	47306-11-19 22:48 G	18999544.27	18999544.45	18999544.64	0.0134	0.0071
Uranus	47307-07-04 04:19 G	18999770.53	18999770.68	18999770.84	0.0134	0.0096
Uranus	47308-02-15 09:36 G	18999996.82	18999996.90	18999997.00	0.0134	0.0121
Saturn	47308-03-04 17:46 G	19000015.14	19000015.24	19000015.37	0.0299	0.0249
Saturn	47308-10-20 22:19 G	19000245.23	19000245.43	19000245.64	0.0301	0.0064
Jupiter	47314-04-17 13:26 G	19002249.90	19002250.06	19002250.23	0.0529	0.0305
Jupiter	47320-02-19 19:12 G	19004384.13	19004384.30	19004384.47	0.0497	0.0272
Saturn	47322-01-06 11:46 G	19005070.87	19005070.99	19005071.13	0.0263	0.0208
Saturn	47322-08-23 10:19 G	19005299.72	19005299.93	19005300.14	0.0262	0.0000
Saturn	47323-04-09 07:26 G	19005528.69	19005528.81	19005528.95	0.0261	0.0204
Mars	47325-02-17 09:36 G	19006208.75	19006208.90	19006209.05	0.1742	0.0884
Jupiter	47325-12-21 03:22 G	19006515.44	19006515.64	19006515.84	0.0528	0.0109
Jupiter	47331-10-25 21:07 G	19008650.18	19008650.38	19008650.59	0.0498	0.0060
Jupiter	47337-08-25 19:26 G	19010781.26	19010781.31	19010781.36	0.0527	0.0510
Saturn	47337-09-15 00:29 G	19010801.37	19010801.52	19010801.68	0.0299	0.0207
Saturn	47338-05-03 05:17 G	19011031.52	19011031.72	19011031.92	0.0301	0.0107
Jupiter	47343-06-30 20:53 G	19012916.25	19012916.37	19012916.49	0.0498	0.0400
Uranus	47345-04-21 06:58 G	19013576.68	19013576.79	19013576.92	0.0144	0.0118
Uranus	47345-12-03 18:29 G	19013803.11	19013803.27	19013803.46	0.0144	0.0087
Uranus	47346-07-18 06:14 G	19014029.57	19014029.76	19014029.97	0.0144	0.0055
Uranus	47347-03-01 18:14 G	19014256.05	19014256.26	19014256.48	0.0144	0.0023
Uranus	47347-10-14 06:14 G	19014482.54	19014482.76	19014482.97	0.0144	0.0009
Uranus	47348-05-27 17:46 G	19014709.04	19014709.24	19014709.46	0.0144	0.0042
Uranus	47349-01-09 05:31 G	19014935.55	19014935.73	19014935.93	0.0144	0.0074
Uranus	47349-08-23 17:17 G	19015162.09	19015162.22	19015162.38	0.0144	0.0105
Uranus	47350-04-07 05:17 G	19015388.66	19015388.72	19015388.80	0.0144	0.0137
Saturn	47351-07-19 15:36 G	19015857.01	19015857.15	19015857.31	0.0263	0.0181
Saturn	47352-03-04 13:41 G	19016085.86	19016086.07	19016086.29	0.0262	0.0028

Mars 47352-07-02 23:31 G 19016206.33 19016206.48 19016206.64 0.1781 0.0775

Saturn 47352-10-19 10:34 G 19016314.85 19016314.94 19016315.04 0.0260 0.0231

Jupiter 47355-10-28 05:02 G 19017418.64 19017418.71 19017418.78 0.0496 0.0465

Jupiter 47361-08-28 22:34 G 19019550.24 19019550.44 19019550.63 0.0529 0.0144

Neptune 47365-12-26 04:05 G 19021130.65 19021130.67 19021130.75 0.0090 0.0088

Neptune 47366-08-08 17:31 G 19021356.14 19021356.23 19021356.37 0.0090 0.0077

Neptune 47367-03-22 06:58 G 19021581.66 19021581.79 19021581.96 0.0090 0.0066

Saturn 47367-03-28 01:55 G 19021587.42 19021587.58 19021587.76 0.0299 0.0182

Jupiter 47367-07-03 06:58 G 19021684.60 19021684.79 19021684.99 0.0497 0.0134

Neptune 47367-11-02 20:24 G 19021807.19 19021807.35 19021807.54 0.0090 0.0055

Saturn 47367-11-13 06:58 G 19021817.60 19021817.79 19021817.98 0.0301 0.0134

Neptune 47368-06-15 09:50 G 19022032.73 19022032.91 19022033.12 0.0090 0.0044

Neptune 47369-01-26 23:17 G 19022258.27 19022258.47 19022258.68 0.0090 0.0033

Neptune 47369-09-09 12:29 G 19022483.82 19022484.02 19022484.24 0.0090 0.0022

Neptune 47370-04-23 01:55 G 19022709.37 19022709.58 19022709.80 0.0090 0.0011

Neptune 47370-12-04 15:22 G 19022934.92 19022935.14 19022935.36 0.0090 0.0001

Neptune 47371-07-18 04:48 G 19023160.48 19023160.70 19023160.92 0.0090 0.0012

Neptune 47372-02-28 17:46 G 19023386.04 19023386.24 19023386.47 0.0090 0.0024

Neptune 47372-10-11 07:12 G 19023611.61 19023611.80 19023612.01 0.0090 0.0034

Jupiter 47373-05-03 14:10 G 19023815.91 19023816.09 19023816.26 0.0528 0.0262

Neptune 47373-05-24 20:24 G 19023837.18 19023837.35 19023837.56 0.0090 0.0046

Neptune 47374-01-05 09:50 G 19024062.76 19024062.91 19024063.10 0.0090 0.0057

Neptune 47374-08-18 23:02 G 19024288.34 19024288.46 19024288.63 0.0090 0.0068

Neptune 47375-04-01 12:14 G 19024513.93 19024514.01 19024514.14 0.0090 0.0079

Neptune 47375-11-13 02:10 G 19024739.57 19024739.59 19024739.62 0.0090 0.0089

Jupiter 47379-03-08 09:07 G 19025950.70 19025950.88 19025951.07 0.0498 0.0197

Saturn 47381-01-28 17:17 G 19026643.06 19026643.22 19026643.40 0.0263 0.0155

Saturn 47381-09-14 15:22 G 19026871.94 19026872.14 19026872.35 0.0261 0.0053

Saturn 47382-05-01 12:14 G 19027100.99 19027101.01 19027101.06 0.0260 0.0256

Uranus 47386-03-19 16:19 G 19028519.10 19028519.18 19028519.31 0.0134 0.0118

Uranus 47386-10-31 22:34 G 19028745.29 19028745.44 19028745.60 0.0134 0.0092

Uranus 47387-06-15 04:19 G 19028971.50 19028971.68 19028971.88 0.0134 0.0066

Uranus 47388-01-27 09:50 G 19029197.71 19029197.91 19029198.13 0.0134 0.0041

Uranus 47388-09-09 15:50 G 19029423.94 19029424.16 19029424.37 0.0134 0.0015

Uranus 47389-04-23 21:22 G 19029650.18 19029650.39 19029650.61 0.0134 0.0011

Uranus 47389-12-06 02:53 G 19029876.41 19029876.62 19029876.83 0.0134 0.0036

Uranus 47390-07-20 08:10 G 19030102.66 19030102.84 19030103.04 0.0134 0.0061

Mars 47390-12-15 17:46 G 19030251.07 19030251.24 19030251.41 0.1746 0.0406

Uranus 47391-03-03 13:41 G 19030328.91 19030329.07 19030329.24 0.0134 0.0086

Uranus 47391-10-15 18:58 G 19030555.18 19030555.29 19030555.42 0.0134 0.0111

Saturn 47396-10-07 07:41 G 19032373.64 19032373.82 19032374.01 0.0299 0.0142

Jupiter 47397-05-06 14:24 G 19032584.96 19032585.10 19032585.24 0.0529 0.0378

Saturn 47397-05-25 12:43 G 19032603.86 19032604.03 19032604.20 0.0301 0.0174

Jupiter 47403-03-11 18:00 G 19034719.10 19034719.25 19034719.40 0.0497 0.0333

Earth 47406-07-22 01:12 G 19035947.39 19035947.55 19035947.70 0.2690 0.0808

Moon 47406-07-22 02:53 G 19035947.48 19035947.62 19035947.77 0.2683 0.1336 *

Jupiter 47409-01-10 06:58 G 19036850.59 19036850.79 19036851.00 0.0529 0.0022

Saturn 47410-08-11 20:24 G 19037429.17 19037429.35 19037429.54 0.0263 0.0129

Saturn 47411-03-28 18:14 G 19037658.06 19037658.26 19037658.47 0.0261 0.0078

Jupiter 47414-11-14 20:24 G 19038985.14 19038985.35 19038985.55 0.0497 0.0006

Mars 47418-05-01 06:58 G 19040248.68 19040248.79 19040248.91 0.1777 0.1305

Jupiter 47420-09-14 23:31 G 19041116.36 19041116.48 19041116.61 0.0528 0.0419

Saturn 47426-04-20 08:24 G 19043159.66 19043159.85 19043160.04 0.0300 0.0118

Jupiter 47426-07-20 21:50 G 19043251.26 19043251.41 19043251.56 0.0498 0.0330

Saturn 47426-12-06 13:12 G 19043389.90 19043390.05 19043390.22 0.0302 0.0199

Uranus 47428-12-20 11:46 G 19044134.92 19044134.99 19044135.09 0.0144 0.0132

Uranus 47429-08-03 23:02 G 19044361.33 19044361.46 19044361.64 0.0144 0.0102

Pluto 47430-01-13 18:43 G 19044524.09 19044524.28 19044524.49 0.0063 0.0028

Uranus 47430-03-18 11:02 G 19044587.78 19044587.96 19044588.16 0.0144 0.0069

Pluto 47430-08-26 22:19 G 19044749.22 19044749.43 19044749.66 0.0063 0.0011

Uranus 47430-10-30 23:02 G 19044814.25 19044814.46 19044814.67 0.0144 0.0037

Pluto 47431-04-09 01:41 G 19044974.45 19044974.57 19044974.72 0.0063 0.0050

Uranus 47431-06-14 10:48 G 19045040.73 19045040.95 19045041.17 0.0144 0.0005

Uranus 47432-01-26 22:34 G 19045267.23 19045267.44 19045267.65 0.0144 0.0027

Uranus 47432-09-09 10:19 G 19045493.73 19045493.93 19045494.13 0.0144 0.0059

Uranus 47433-04-23 22:05 G 19045720.26 19045720.42 19045720.60 0.0144 0.0091

Uranus 47433-12-06 10:05 G 19045946.82 19045946.92 19045947.04 0.0144 0.0123

Saturn 47440-02-21 20:53 G 19048215.18 19048215.37 19048215.57 0.0262 0.0105

Saturn 47440-10-07 18:43 G 19048444.09 19048444.28 19048444.48 0.0261 0.0102

Jupiter 47444-09-17 23:46 G 19049885.30 19049885.49 19049885.67 0.0529 0.0219

Neptune 47448-02-12 07:55 G 19051127.79 19051127.83 19051127.90 0.0088 0.0085

Neptune 47448-09-24 20:24 G 19051353.26 19051353.35 19051353.48 0.0088 0.0075

Neptune 47449-05-08 09:07 G 19051578.75 19051578.88 19051579.05 0.0088 0.0065

Neptune 47449-12-19 22:19 G 19051804.26 19051804.43 19051804.61 0.0088 0.0054

Jupiter 47450-07-23 09:22 G 19052019.70 19052019.89 19052020.07 0.0497 0.0209

Neptune 47450-08-02 10:48 G 19052029.77 19052029.95 19052030.16 0.0088 0.0044

Neptune 47451-03-16 00:00 G 19052255.29 19052255.50 19052255.70 0.0088 0.0033

Neptune 47451-10-27 12:29 G 19052480.81 19052481.02 19052481.24 0.0088 0.0023

Neptune 47452-06-09 01:12 G 19052706.34 19052706.55 19052706.78 0.0088 0.0013

Neptune 47453-01-20 14:10 G 19052931.87 19052932.09 19052932.31 0.0088 0.0002

Neptune 47453-09-03 02:38 G 19053157.40 19053157.61 19053157.84 0.0088 0.0009

Neptune 47454-04-16 15:22 G 19053382.93 19053383.14 19053383.36 0.0088 0.0019

Neptune 47454-11-28 04:05 G 19053608.47 19053608.67 19053608.89 0.0088 0.0030

Neptune 47455-07-11 16:48 G 19053834.01 19053834.20 19053834.41 0.0088 0.0040

Saturn 47455-10-31 12:29 G 19053945.82 19053946.02 19053946.22 0.0300 0.0082

Neptune 47456-02-22 05:31 G 19054059.55 19054059.73 19054059.92 0.0088 0.0050

Jupiter 47456-05-23 16:05 G 19054150.98 19054151.17 19054151.36 0.0528 0.0182

Saturn 47456-06-17 17:46 G 19054176.11 19054176.24 19054176.37 0.0301 0.0235

Neptune 47456-10-04 18:14 G 19054285.10 19054285.26 19054285.42 0.0088 0.0060

Mars 47456-10-13 02:10 G 19054293.41 19054293.59 19054293.76 0.1750 0.0088

Neptune 47457-05-18 06:29 G 19054510.66 19054510.77 19054510.92 0.0088 0.0071

Neptune 47457-12-29 19:26 G 19054736.24 19054736.31 19054736.41 0.0088 0.0081

Jupiter 47462-03-28 09:36 G 19056285.71 19056285.90 19056286.10 0.0497 0.0127

Saturn 47469-09-02 23:31 G 19059001.29 19059001.48 19059001.69 0.0263 0.0081

Uranus 47469-11-18 01:12 G 19059077.50 19059077.55 19059077.64 0.0134 0.0127

Saturn 47470-04-19 21:22 G 19059230.21 19059230.39 19059230.58 0.0261 0.0127

Uranus 47470-07-02 07:26 G 19059303.67 19059303.81 19059303.95 0.0134 0.0102

Uranus 47471-02-13 12:58 G 19059529.87 19059530.04 19059530.23 0.0134 0.0076

Uranus 47471-09-27 18:43 G 19059756.08 19059756.28 19059756.49 0.0134 0.0051

Uranus 47472-05-11 00:29 G 19059982.31 19059982.52 19059982.74 0.0134 0.0025

Uranus 47472-12-23 06:14 G 19060208.54 19060208.76 19060208.97 0.0134 0.0002

Uranus 47473-08-06 11:31 G 19060434.77 19060434.98 19060435.20 0.0134 0.0026

Jupiter 47473-12-01 12:00 G 19060551.92 19060552.00 19060552.08 0.0498 0.0456

Uranus 47474-03-20 17:02 G 19060661.01 19060661.21 19060661.42 0.0134 0.0051

Uranus 47474-11-01 22:34 G 19060887.26 19060887.44 19060887.62 0.0134 0.0076

Uranus 47475-06-16 04:05 G 19061113.53 19061113.67 19061113.81 0.0134 0.0101

Uranus 47476-01-28 09:22 G 19061339.83 19061339.89 19061339.97 0.0134 0.0126

Jupiter 47480-05-26 19:41 G 19062920.23 19062920.32 19062920.41 0.0529 0.0474

Saturn 47485-05-12 12:43 G 19064731.83 19064732.03 19064732.24 0.0300 0.0058

Saturn 47485-12-28 17:46 G 19064962.14 19064962.24 19064962.35 0.0302 0.0258

Jupiter 47486-03-30 20:10 G 19065054.22 19065054.34 19065054.45 0.0497 0.0405

Jupiter 47492-01-30 11:31 G 19067185.77 19067185.98 19067186.18 0.0529 0.0071

Jupiter 47497-12-03 22:34 G 19069320.24 19069320.44 19069320.65 0.0497 0.0078

Saturn 47499-03-15 23:31 G 19069787.27 19069787.48 19069787.69 0.0262 0.0058

Saturn 47499-10-30 21:22 G 19070016.21 19070016.39 19070016.56 0.0261 0.0148

Jupiter 47503-10-06 01:55 G 19071451.43 19071451.58 19071451.74 0.0528 0.0337

Jupiter 47509-08-10 00:43 G 19073586.36 19073586.53 19073586.71 0.0498 0.0251

Uranus 47513-04-04 03:22 G 19074919.52 19074919.64 19074919.78 0.0144 0.0115

Uranus 47513-11-16 15:07 G 19075145.96 19075146.13 19075146.31 0.0144 0.0083

Uranus 47514-07-01 02:38 G 19075372.42 19075372.61 19075372.82 0.0144 0.0052

Saturn 47514-11-23 16:34 G 19075517.98 19075518.19 19075518.40 0.0300 0.0024

Uranus 47515-02-12 14:24 G 19075598.89 19075599.10 19075599.32 0.0144 0.0020

Saturn 47515-07-11 22:05 G 19075748.38 19075748.42 19075748.47 0.0301 0.0294

Uranus 47515-09-27 02:10 G 19075825.38 19075825.59 19075825.81 0.0144 0.0013

Mars 47516-02-26 23:17 G 19075978.38 19075978.47 19075978.56 0.1785 0.1503

Uranus 47516-05-10 13:55 G 19076051.88 19076052.08 19076052.29 0.0144 0.0044

Uranus 47516-12-23 01:41 G 19076278.40 19076278.57 19076278.76 0.0144 0.0077

Uranus 47517-08-06 13:26 G 19076504.93 19076505.06 19076505.22 0.0144 0.0108

Uranus 47518-03-21 01:26 G 19076731.52 19076731.56 19076731.62 0.0144 0.0140

Moon 47520-01-22 19:26 G 19077404.18 19077404.31 19077404.45 0.2636 0.1441

Earth 47520-01-22 22:19 G 19077404.30 19077404.43 19077404.57 0.2642 0.1422 *

Pluto 47520-03-01 07:55 G 19077442.68 19077442.83 19077443.02 0.0081 0.0052

Pluto 47520-10-12 18:29 G 19077668.09 19077668.27 19077668.50 0.0081 0.0031

Mars 47522-08-11 10:19 G 19078335.77 19078335.93 19078336.10 0.1754 0.0569

Jupiter 47527-10-09 04:19 G 19080220.52 19080220.68 19080220.85 0.0530 0.0312

Moon 47528-01-20 09:50 G 19080323.86 19080323.91 19080323.96 0.2641 0.2500

Earth 47528-01-20 15:07 G 19080324.02 19080324.13 19080324.23 0.2642 0.1899

Saturn 47528-02-10 02:53 G 19080344.55 19080344.62 19080344.70 0.0264 0.0245

Saturn 47528-09-26 01:55 G 19080573.37 19080573.58 19080573.79 0.0263 0.0034

Saturn 47529-05-12 23:31 G 19080802.32 19080802.48 19080802.64 0.0261 0.0172

Neptune 47530-03-31 15:36 G 19081125.14 19081125.15 19081125.20 0.0090 0.0089

Neptune 47530-11-12 05:17 G 19081350.62 19081350.72 19081350.83 0.0090 0.0078

Neptune 47531-06-25 18:43 G 19081576.14 19081576.28 19081576.43 0.0090 0.0067

Neptune 47532-02-06 08:10 G 19081801.67 19081801.84 19081802.01 0.0090 0.0056

Neptune 47532-09-18 21:07 G 19082027.21 19082027.38 19082027.58 0.0090 0.0046

Neptune 47533-05-02 10:34 G 19082252.75 19082252.94 19082253.15 0.0090 0.0035

Jupiter 47533-08-12 10:34 G 19082354.77 19082354.94 19082355.11 0.0496 0.0279

Neptune 47533-12-14 00:00 G 19082478.29 19082478.50 19082478.72 0.0090 0.0023

Neptune 47534-07-27 13:12 G 19082703.84 19082704.05 19082704.28 0.0090 0.0013

Neptune 47535-03-10 02:38 G 19082929.39 19082929.61 19082929.83 0.0090 0.0002

Neptune 47535-10-21 15:50 G 19083154.95 19083155.16 19083155.39 0.0090 0.0010

Neptune 47536-06-03 05:17 G 19083380.51 19083380.72 19083380.94 0.0090 0.0021

Neptune 47537-01-14 18:29 G 19083606.08 19083606.27 19083606.49 0.0090 0.0032

Neptune 47537-08-28 07:41 G 19083831.64 19083831.82 19083832.03 0.0090 0.0043

Neptune 47538-04-10 20:53 G 19084057.21 19084057.37 19084057.56 0.0090 0.0054

Neptune 47538-11-22 10:05 G 19084282.79 19084282.92 19084283.10 0.0090 0.0065

Jupiter 47539-06-13 21:22 G 19084486.19 19084486.39 19084486.59 0.0529 0.0088

Neptune 47539-07-05 23:31 G 19084508.39 19084508.48 19084508.62 0.0090 0.0076

Neptune 47540-02-16 13:26 G 19084734.00 19084734.06 19084734.12 0.0090 0.0086

Saturn 47544-06-04 16:48 G 19086303.99 19086304.20 19086304.41 0.0300 0.0004

Jupiter 47545-04-17 12:14 G 19086620.81 19086621.01 19086621.22 0.0497 0.0052

Jupiter 47551-02-16 13:26 G 19088751.99 19088752.06 19088752.14 0.0528 0.0486

Uranus 47554-03-02 15:22 G 19089862.04 19089862.14 19089862.28 0.0134 0.0113

Uranus 47554-10-14 21:36 G 19090088.24 19090088.40 19090088.57 0.0134 0.0087

Uranus 47555-05-29 03:07 G 19090314.45 19090314.63 19090314.84 0.0134 0.0062

Uranus 47556-01-10 08:53 G 19090540.67 19090540.87 19090541.09 0.0134 0.0036

Uranus 47556-08-23 14:38 G 19090766.89 19090767.11 19090767.33 0.0134 0.0010

Jupiter 47556-12-21 14:24 G 19090886.97 19090887.10 19090887.23 0.0498 0.0381

Uranus 47557-04-06 20:10 G 19090993.13 19090993.34 19090993.56 0.0134 0.0016

Saturn 47557-08-22 02:10 G 19091130.49 19091130.59 19091130.71 0.0264 0.0223

Uranus 47557-11-19 01:41 G 19091219.37 19091219.57 19091219.79 0.0134 0.0041

Saturn 47558-04-08 01:26 G 19091359.34 19091359.56 19091359.77 0.0262 0.0013

Uranus 47558-07-03 07:12 G 19091445.62 19091445.80 19091446.00 0.0134 0.0066

Saturn 47558-11-22 23:02 G 19091588.32 19091588.46 19091588.61 0.0261 0.0194

Uranus 47559-02-14 12:43 G 19091671.88 19091672.03 19091672.19 0.0134 0.0091

Uranus 47559-09-28 18:14 G 19091898.16 19091898.26 19091898.37 0.0134 0.0116

Jupiter 47569-04-19 23:02 G 19095389.42 19095389.46 19095389.51 0.0497 0.0483

Saturn 47573-04-29 16:48 G 19096860.12 19096860.20 19096860.28 0.0298 0.0275

Saturn 47573-12-15 20:38 G 19097090.15 19097090.36 19097090.57 0.0300 0.0035

Jupiter 47575-02-19 14:10 G 19097520.90 19097521.09 19097521.28 0.0529 0.0153

Jupiter 47580-12-24 00:29 G 19099655.33 19099655.52 19099655.72 0.0497 0.0153

Mars 47581-12-24 06:58 G 19100020.64 19100020.79 19100020.93 0.1781 0.0970

Jupiter 47586-10-25 05:31 G 19101786.56 19101786.73 19101786.91 0.0529 0.0251

Saturn 47587-03-04 04:34 G 19101916.57 19101916.69 19101916.84 0.0264 0.0199

Saturn 47587-10-19 03:36 G 19102145.44 19102145.65 19102145.87 0.0263 0.0013

Saturn 47588-06-04 00:58 G 19102374.44 19102374.54 19102374.67 0.0261 0.0219

Mars 47588-06-07 18:14 G 19102378.12 19102378.26 19102378.39 0.1758 0.1076

Jupiter 47592-08-29 02:53 G 19103921.43 19103921.62 19103921.82 0.0497 0.0176

Uranus 47596-12-02 08:10 G 19105477.76 19105477.84 19105477.95 0.0144 0.0129

Uranus 47597-07-16 19:55 G 19105704.18 19105704.33 19105704.49 0.0144 0.0097

Uranus 47598-02-28 07:12 G 19105930.62 19105930.80 19105931.01 0.0144 0.0067

Uranus 47598-10-12 19:12 G 19106157.09 19106157.30 19106157.52 0.0144 0.0034

Uranus 47599-05-27 06:58 G 19106383.57 19106383.79 19106384.01 0.0144 0.0002

Uranus 47600-01-08 18:29 G 19106610.06 19106610.27 19106610.49 0.0144 0.0030

Uranus 47600-08-22 06:14 G 19106836.57 19106836.76 19106836.96 0.0144 0.0062

Uranus 47601-04-05 17:46 G 19107063.10 19107063.24 19107063.42 0.0144 0.0095

Uranus 47601-11-18 06:14 G 19107289.66 19107289.76 19107289.87 0.0144 0.0126

Saturn 47602-11-09 18:00 G 19107646.14 19107646.25 19107646.37 0.0298 0.0248

Saturn 47603-06-27 21:50 G 19107876.21 19107876.41 19107876.62 0.0300 0.0062

Jupiter 47610-10-28 09:22 G 19110555.76 19110555.89 19110556.02 0.0529 0.0403

Neptune 47612-05-16 19:55 G 19111122.29 19111122.33 19111122.37 0.0088 0.0086

Neptune 47612-12-28 08:24 G 19111347.75 19111347.85 19111347.97 0.0088 0.0076

Neptune 47613-08-10 20:53 G 19111573.24 19111573.37 19111573.53 0.0088 0.0066

Neptune 47614-03-24 09:36 G 19111798.75 19111798.90 19111799.09 0.0088 0.0056

Neptune 47614-11-04 22:48 G 19112024.26 19112024.45 19112024.64 0.0088 0.0045

Neptune 47615-06-18 11:17 G 19112249.78 19112249.97 19112250.18 0.0088 0.0035

Neptune 47616-01-30 00:00 G 19112475.30 19112475.50 19112475.72 0.0088 0.0025

Jupiter 47616-08-31 12:43 G 19112689.89 19112690.03 19112690.18 0.0497 0.0352

Neptune 47616-09-11 12:58 G 19112700.82 19112701.04 19112701.26 0.0088 0.0014

Saturn 47616-09-13 04:05 G 19112702.52 19112702.67 19112702.83 0.0264 0.0177

Neptune 47617-04-25 01:41 G 19112926.35 19112926.57 19112926.79 0.0088 0.0004

Saturn 47617-04-30 03:07 G 19112931.42 19112931.63 19112931.84 0.0262 0.0034

Neptune 47617-12-06 14:24 G 19113151.89 19113152.10 19113152.33 0.0088 0.0007

Saturn 47617-12-15 00:58 G 19113160.46 19113160.54 19113160.63 0.0261 0.0239

Neptune 47618-07-20 03:07 G 19113377.42 19113377.63 19113377.86 0.0088 0.0017

Neptune 47619-03-02 16:05 G 19113602.96 19113603.17 19113603.38 0.0088 0.0027

Neptune 47619-10-14 04:19 G 19113828.50 19113828.68 19113828.90 0.0088 0.0038

Neptune 47620-05-26 17:02 G 19114054.04 19114054.21 19114054.41 0.0088 0.0048

Neptune 47621-01-07 06:00 G 19114279.60 19114279.75 19114279.93 0.0088 0.0058

Neptune 47621-08-20 18:29 G 19114505.15 19114505.27 19114505.43 0.0088 0.0069

Neptune 47622-04-03 07:12 G 19114730.72 19114730.80 19114730.92 0.0088 0.0079

Jupiter 47622-07-03 00:00 G 19114821.29 19114821.50 19114821.70 0.0529 0.0007

Jupiter 47628-05-06 15:07 G 19116955.93 19116956.13 19116956.34 0.0497 0.0026

Saturn 47632-05-21 22:19 G 19118432.28 19118432.43 19118432.57 0.0298 0.0214

Saturn 47633-01-07 01:55 G 19118662.38 19118662.58 19118662.78 0.0300 0.0096

Jupiter 47634-03-07 15:36 G 19119087.02 19119087.15 19119087.28 0.0528 0.0405

Uranus 47637-10-30 23:02 G 19120420.39 19120420.46 19120420.56 0.0134 0.0124

Uranus 47638-06-14 04:48 G 19120646.57 19120646.70 19120646.87 0.0134 0.0099

Uranus 47639-01-26 10:48 G 19120872.78 19120872.95 19120873.14 0.0134 0.0073

Uranus 47639-09-09 16:34 G 19121098.99 19121099.19 19121099.40 0.0134 0.0047

Jupiter 47640-01-10 16:48 G 19121222.04 19121222.20 19121222.36 0.0497 0.0304

Uranus 47640-04-22 22:34 G 19121325.22 19121325.44 19121325.65 0.0134 0.0021

Uranus 47640-12-05 04:05 G 19121551.46 19121551.67 19121551.89 0.0134 0.0005

Uranus 47641-07-19 09:36 G 19121777.69 19121777.90 19121778.12 0.0134 0.0030

Uranus 47642-03-02 15:07 G 19122003.94 19122004.13 19122004.33 0.0134 0.0055

Uranus 47642-10-14 20:24 G 19122230.19 19122230.35 19122230.54 0.0134 0.0081

Uranus 47643-05-29 02:10 G 19122456.47 19122456.59 19122456.74 0.0134 0.0106

Uranus 47644-01-10 07:41 G 19122682.79 19122682.82 19122682.88 0.0134 0.0131

Saturn 47646-03-26 06:58 G 19123488.62 19123488.79 19123488.97 0.0264 0.0152

Saturn 47646-11-10 05:46 G 19123717.54 19123717.74 19123717.95 0.0263 0.0060

Mars 47647-10-21 14:38 G 19124062.94 19124063.11 19124063.28 0.1777 0.0444

Moon 47649-07-22 22:05 G 19124703.27 19124703.42 19124703.57 0.2696 0.0116

Earth 47649-07-23 01:12 G 19124703.39 19124703.55 19124703.70 0.2690 0.0661 *

Mars 47654-04-05 02:10 G 19126420.52 19126420.59 19126420.66 0.1762 0.1586

Jupiter 47658-03-10 17:46 G 19127856.06 19127856.24 19127856.43 0.0530 0.0240

Saturn 47661-12-02 00:29 G 19129218.37 19129218.52 19129218.70 0.0298 0.0184

Saturn 47662-07-20 04:19 G 19129448.49 19129448.68 19129448.88 0.0300 0.0127

Jupiter 47664-01-13 02:24 G 19129990.42 19129990.60 19129990.79 0.0496 0.0223

Jupiter 47669-11-13 10:05 G 19132121.73 19132121.92 19132122.11 0.0529 0.0161

Jupiter 47675-09-18 04:19 G 19134256.48 19134256.68 19134256.88 0.0497 0.0107

Saturn 47675-10-06 06:43 G 19134274.60 19134274.78 19134274.97 0.0264 0.0129

Saturn 47676-05-22 05:46 G 19134503.54 19134503.74 19134503.94 0.0262 0.0082

Pluto 47677-12-18 02:38 G 19135078.43 19135078.61 19135078.81 0.0063 0.0031

Pluto 47678-07-31 06:29 G 19135303.55 19135303.77 19135303.99 0.0063 0.0007

Pluto 47679-03-13 09:36 G 19135528.77 19135528.90 19135529.07 0.0063 0.0047

Uranus 47680-08-01 14:24 G 19136036.09 19136036.10 19136036.15 0.0144 0.0142

Uranus 47681-03-16 01:55 G 19136262.46 19136262.58 19136262.73 0.0144 0.0111

Uranus 47681-10-28 13:41 G 19136488.90 19136489.07 19136489.26 0.0144 0.0079

Uranus 47682-06-12 01:26 G 19136715.35 19136715.56 19136715.77 0.0144 0.0047

Uranus 47683-01-24 12:58 G 19136941.83 19136942.04 19136942.26 0.0144 0.0016

Uranus 47683-09-08 00:43 G 19137168.31 19137168.53 19137168.74 0.0144 0.0017

Uranus 47684-04-21 12:29 G 19137394.81 19137395.02 19137395.22 0.0144 0.0049

Uranus 47684-12-04 00:00 G 19137621.33 19137621.50 19137621.69 0.0144 0.0081

Uranus 47685-07-18 12:14 G 19137847.87 19137848.01 19137848.14 0.0144 0.0113

Mars 47686-04-04 08:24 G 19138107.78 19138107.85 19138107.93 0.1750 0.1564

Jupiter 47687-05-24 06:14 G 19138522.67 19138522.76 19138522.86 0.0498 0.0435

Saturn 47691-06-14 06:00 G 19140004.57 19140004.75 19140004.93 0.0298 0.0147

Saturn 47692-01-30 09:50 G 19140234.74 19140234.91 19140235.09 0.0300 0.0164

Jupiter 47693-11-16 10:34 G 19140890.86 19140890.94 19140891.03 0.0530 0.0477

Neptune 47695-02-13 16:19 G 19141345.11 19141345.18 19141345.31 0.0090 0.0080

Neptune 47695-09-27 06:00 G 19141570.63 19141570.75 19141570.91 0.0090 0.0069

Neptune 47696-05-09 19:26 G 19141796.16 19141796.31 19141796.49 0.0090 0.0058

Neptune 47696-12-21 08:53 G 19142021.70 19142021.87 19142022.07 0.0090 0.0047

Neptune 47697-08-03 22:19 G 19142247.24 19142247.43 19142247.64 0.0090 0.0036

Neptune 47698-03-17 11:46 G 19142472.78 19142472.99 19142473.20 0.0090 0.0025

Neptune 47698-10-29 00:58 G 19142698.33 19142698.54 19142698.76 0.0090 0.0014

Neptune 47699-06-11 14:24 G 19142923.89 19142924.10 19142924.32 0.0090 0.0004

Jupiter 47699-09-20 14:10 G 19143024.99 19143025.09 19143025.20 0.0496 0.0422

Neptune 47700-01-23 03:50 G 19143149.44 19143149.66 19143149.88 0.0090 0.0008

Neptune 47700-09-05 16:48 G 19143375.00 19143375.20 19143375.43 0.0090 0.0019

Neptune 47701-04-19 06:00 G 19143600.56 19143600.75 19143600.97 0.0090 0.0030

Neptune 47701-11-30 19:41 G 19143826.12 19143826.32 19143826.51 0.0090 0.0040

Neptune 47702-07-14 08:53 G 19144051.70 19144051.87 19144052.06 0.0090 0.0051

Neptune 47703-02-24 22:05 G 19144277.27 19144277.42 19144277.59 0.0090 0.0062

Neptune 47703-10-08 11:02 G 19144502.86 19144502.96 19144503.11 0.0090 0.0073

Neptune 47704-05-21 00:14 G 19144728.46 19144728.51 19144728.62 0.0090 0.0084

Saturn 47705-04-18 10:05 G 19145060.73 19145060.92 19145061.12 0.0264 0.0102

Jupiter 47705-07-23 00:58 G 19145156.34 19145156.54 19145156.74 0.0530 0.0069

Saturn 47705-12-03 09:07 G 19145289.69 19145289.88 19145290.08 0.0263 0.0109

Jupiter 47711-05-27 16:48 G 19147291.00 19147291.20 19147291.40 0.0496 0.0096

Mars 47713-08-18 22:48 G 19148105.27 19148105.45 19148105.62 0.1773 0.0088

Jupiter 47717-03-27 17:17 G 19149422.07 19149422.22 19149422.38 0.0529 0.0330

Saturn 47720-12-25 10:19 G 19150790.74 19150790.93 19150791.13 0.0298 0.0111

Saturn 47721-08-12 13:55 G 19151020.93 19151021.08 19151021.24 0.0300 0.0200

Uranus 47722-02-12 12:58 G 19151204.93 19151205.04 19151205.18 0.0134 0.0110

Uranus 47722-09-26 18:43 G 19151431.13 19151431.28 19151431.47 0.0134 0.0084

Jupiter 47723-01-30 17:46 G 19151557.06 19151557.24 19151557.42 0.0497 0.0237

Uranus 47723-05-11 00:58 G 19151657.35 19151657.54 19151657.74 0.0134 0.0058

Uranus 47723-12-23 06:43 G 19151883.57 19151883.78 19151883.99 0.0134 0.0033

Uranus 47724-08-05 12:29 G 19152109.80 19152110.02 19152110.24 0.0134 0.0007

Uranus 47725-03-19 18:00 G 19152336.04 19152336.25 19152336.47 0.0134 0.0019

Uranus 47725-10-31 23:46 G 19152562.29 19152562.49 19152562.70 0.0134 0.0044

Uranus 47726-06-15 05:17 G 19152788.54 19152788.72 19152788.91 0.0134 0.0070

Uranus 47727-01-27 11:02 G 19153014.81 19153014.96 19153015.11 0.0134 0.0095

Uranus 47727-09-10 16:34 G 19153241.10 19153241.19 19153241.29 0.0134 0.0120

Saturn 47734-10-29 10:34 G 19155846.74 19155846.94 19155847.15 0.0264 0.0078

Saturn 47735-06-15 09:36 G 19156075.72 19156075.90 19156076.09 0.0262 0.0132

Jupiter 47741-03-30 18:43 G 19158191.12 19158191.28 19158191.45 0.0529 0.0313

Jupiter 47747-02-02 03:22 G 19160325.47 19160325.64 19160325.81 0.0497 0.0290

Saturn 47750-07-07 16:34 G 19161576.99 19161577.19 19161577.40 0.0298 0.0073

Saturn 47751-02-22 20:24 G 19161807.23 19161807.35 19161807.48 0.0300 0.0239

Mars 47752-01-31 17:17 G 19162150.08 19162150.22 19162150.35 0.1753 0.1101

Jupiter 47752-12-03 09:50 G 19162456.71 19162456.91 19162457.11 0.0529 0.0093

Jupiter 47758-10-08 05:17 G 19164591.52 19164591.72 19164591.93 0.0497 0.0040

Earth 47763-01-24 00:58 G 19166160.41 19166160.54 19166160.67 0.2641 0.1518

Moon 47763-01-24 01:41 G 19166160.44 19166160.57 19166160.70 0.2648 0.1391 *

Saturn 47763-09-24 14:38 G 19166404.09 19166404.11 19166404.14 0.0266 0.0263

Saturn 47764-05-10 14:53 G 19166632.91 19166633.12 19166633.33 0.0264 0.0048

Jupiter 47764-08-07 23:31 G 19166722.42 19166722.48 19166722.54 0.0528 0.0502

Uranus 47764-11-14 08:53 G 19166820.78 19166820.87 19166821.00 0.0144 0.0124

Saturn 47764-12-25 13:41 G 19166861.91 19166862.07 19166862.25 0.0263 0.0162

Uranus 47765-06-28 20:38 G 19167047.20 19167047.36 19167047.53 0.0144 0.0092

Uranus 47766-02-10 07:55 G 19167273.65 19167273.83 19167274.04 0.0144 0.0061

Uranus 47766-09-24 19:41 G 19167500.12 19167500.32 19167500.54 0.0144 0.0029

Uranus 47767-05-09 07:41 G 19167726.60 19167726.82 19167727.04 0.0144 0.0004

Uranus 47767-12-21 19:12 G 19167953.10 19167953.30 19167953.52 0.0144 0.0036

Pluto 47768-02-03 14:38 G 19167996.99 19167997.11 19167997.27 0.0081 0.0062

Uranus 47768-08-04 06:58 G 19168179.61 19168179.79 19168179.99 0.0144 0.0068

Pluto 47768-09-16 01:41 G 19168222.37 19168222.57 19168222.79 0.0081 0.0021

Uranus 47769-03-18 18:43 G 19168406.14 19168406.28 19168406.45 0.0144 0.0101

Uranus 47769-10-31 07:12 G 19168632.71 19168632.80 19168632.89 0.0144 0.0132

Jupiter 47770-06-13 07:26 G 19168857.67 19168857.81 19168857.95 0.0497 0.0366

Earth 47771-01-21 17:17 G 19169080.11 19169080.22 19169080.34 0.2641 0.1817

Moon 47771-01-21 21:36 G 19169080.26 19169080.40 19169080.54 0.2645 0.1104 *

Neptune 47776-08-19 07:55 G 19171116.81 19171116.83 19171116.86 0.0088 0.0087

Neptune 47777-04-01 20:24 G 19171342.26 19171342.35 19171342.46 0.0088 0.0077

Neptune 47777-11-13 09:07 G 19171567.75 19171567.88 19171568.03 0.0088 0.0067

Neptune 47778-06-26 21:50 G 19171793.25 19171793.41 19171793.59 0.0088 0.0057

Neptune 47779-02-07 10:19 G 19172018.76 19172018.93 19172019.13 0.0088 0.0047

Mars 47779-06-16 06:29 G 19172147.61 19172147.77 19172147.93 0.1769 0.0592

Neptune 47779-09-20 23:02 G 19172244.27 19172244.46 19172244.67 0.0088 0.0037

Saturn 47780-01-17 23:17 G 19172363.26 19172363.47 19172363.68 0.0298 0.0031

Neptune 47780-05-03 11:46 G 19172469.79 19172469.99 19172470.21 0.0088 0.0026

Saturn 47780-09-04 02:53 G 19172593.55 19172593.62 19172593.70 0.0300 0.0280

Neptune 47780-12-15 00:43 G 19172695.32 19172695.53 19172695.75 0.0088 0.0016

Neptune 47781-07-28 13:26 G 19172920.84 19172921.06 19172921.28 0.0088 0.0006

Neptune 47782-03-11 02:10 G 19173146.37 19173146.59 19173146.81 0.0088 0.0005

Jupiter 47782-10-10 13:41 G 19173360.02 19173360.07 19173360.12 0.0496 0.0480

Neptune 47782-10-22 14:53 G 19173371.90 19173372.12 19173372.34 0.0088 0.0015

Neptune 47783-06-05 03:36 G 19173597.44 19173597.65 19173597.86 0.0088 0.0025

Neptune 47784-01-16 16:05 G 19173822.98 19173823.17 19173823.39 0.0088 0.0036

Neptune 47784-08-29 04:48 G 19174048.53 19174048.70 19174048.90 0.0088 0.0046

Neptune 47785-04-11 17:31 G 19174274.08 19174274.23 19174274.42 0.0088 0.0056

Neptune 47785-11-23 06:29 G 19174499.64 19174499.77 19174499.92 0.0088 0.0066

Neptune 47786-07-06 19:12 G 19174725.20 19174725.30 19174725.42 0.0088 0.0076

Neptune 47787-02-17 07:55 G 19174950.80 19174950.83 19174950.88 0.0088 0.0086

Jupiter 47788-08-11 02:53 G 19175491.42 19175491.62 19175491.81 0.0529 0.0145

Saturn 47793-04-05 16:05 G 19177190.09 19177190.17 19177190.28 0.0266 0.0237

Saturn 47793-11-20 16:34 G 19177418.98 19177419.19 19177419.40 0.0264 0.0022

Jupiter 47794-06-15 15:22 G 19177625.95 19177626.14 19177626.34 0.0497 0.0152

Saturn 47794-07-07 15:22 G 19177648.00 19177648.14 19177648.29 0.0262 0.0187

Jupiter 47800-04-16 17:17 G 19179757.05 19179757.22 19179757.40 0.0528 0.0260

Uranus 47805-10-13 21:07 G 19181763.30 19181763.38 19181763.49 0.0134 0.0121

Jupiter 47806-02-19 17:02 G 19181892.02 19181892.21 19181892.40 0.0497 0.0177

Uranus 47806-05-28 03:07 G 19181989.49 19181989.63 19181989.80 0.0134 0.0095

Uranus 47807-01-09 09:07 G 19182215.70 19182215.88 19182216.07 0.0134 0.0069

Uranus 47807-08-23 14:53 G 19182441.92 19182442.12 19182442.33 0.0134 0.0044

Uranus 47808-04-05 20:53 G 19182668.15 19182668.37 19182668.59 0.0134 0.0018

Uranus 47808-11-18 02:38 G 19182894.39 19182894.61 19182894.83 0.0134 0.0008

Saturn 47808-12-13 04:19 G 19182919.66 19182919.68 19182919.71 0.0296 0.0294

Uranus 47809-07-02 08:10 G 19183120.63 19183120.84 19183121.06 0.0134 0.0034

Saturn 47809-07-31 06:58 G 19183149.58 19183149.79 19183150.00 0.0299 0.0011

Uranus 47810-02-13 13:41 G 19183346.88 19183347.07 19183347.27 0.0134 0.0059

Uranus 47810-09-27 19:12 G 19183573.15 19183573.30 19183573.48 0.0134 0.0085

Uranus 47811-05-12 00:58 G 19183799.43 19183799.54 19183799.68 0.0134 0.0110

Mars 47817-11-29 00:58 G 19186192.38 19186192.54 19186192.70 0.1757 0.0600

Saturn 47822-10-17 21:22 G 19187976.27 19187976.39 19187976.54 0.0266 0.0205

Saturn 47823-06-03 21:36 G 19188205.19 19188205.40 19188205.62 0.0264 0.0010

Saturn 47824-01-18 20:24 G 19188434.24 19188434.35 19188434.47 0.0263 0.0219

Jupiter 47824-04-19 15:50 G 19188526.02 19188526.16 19188526.31 0.0530 0.0367

Jupiter 47830-02-22 02:38 G 19190660.47 19190660.61 19190660.76 0.0496 0.0349

Jupiter 47835-12-24 07:55 G 19192791.62 19192791.83 19192792.03 0.0529 0.0036

Saturn 47838-06-25 12:43 G 19193705.93 19193706.03 19193706.15 0.0296 0.0247

Saturn 47839-02-10 15:22 G 19193935.93 19193936.14 19193936.35 0.0298 0.0058

Jupiter 47841-10-28 03:07 G 19194926.43 19194926.63 19194926.84 0.0497 0.0016

Mars 47845-04-13 14:24 G 19196189.97 19196190.10 19196190.24 0.1765 0.1095

Jupiter 47847-08-29 00:00 G 19197057.39 19197057.50 19197057.62 0.0528 0.0431

Uranus 47848-07-15 16:05 G 19197379.10 19197379.17 19197379.23 0.0144 0.0136

Uranus 47849-02-27 03:22 G 19197605.50 19197605.64 19197605.79 0.0144 0.0105

Uranus 47849-10-11 15:07 G 19197831.94 19197832.13 19197832.32 0.0144 0.0073

Uranus 47850-05-26 02:38 G 19198058.41 19198058.61 19198058.82 0.0144 0.0042

Uranus 47851-01-07 14:24 G 19198284.89 19198285.10 19198285.32 0.0144 0.0010

Uranus 47851-08-22 02:10 G 19198511.38 19198511.59 19198511.81 0.0144 0.0023

Uranus 47852-04-04 13:55 G 19198737.88 19198738.08 19198738.29 0.0144 0.0055

Saturn 47852-04-29 00:14 G 19198762.36 19198762.51 19198762.67 0.0265 0.0176

Uranus 47852-11-17 01:55 G 19198964.42 19198964.58 19198964.76 0.0144 0.0087

Saturn 47852-12-14 00:29 G 19198991.31 19198991.52 19198991.73 0.0264 0.0038

Uranus 47853-07-01 13:41 G 19199190.97 19199191.07 19199191.21 0.0144 0.0120

Jupiter 47853-07-03 04:19 G 19199192.52 19199192.68 19199192.83 0.0498 0.0317

Saturn 47853-07-30 23:02 G 19199220.40 19199220.46 19199220.54 0.0262 0.0246

Neptune 47859-05-20 03:50 G 19201339.58 19201339.66 19201339.77 0.0090 0.0081

Neptune 47859-12-31 17:02 G 19201565.10 19201565.21 19201565.37 0.0090 0.0071

Neptune 47860-08-13 06:29 G 19201790.63 19201790.77 19201790.95 0.0090 0.0060

Neptune 47861-03-26 19:55 G 19202016.16 19202016.33 19202016.53 0.0090 0.0049

Neptune 47861-11-07 09:36 G 19202241.71 19202241.90 19202242.10 0.0090 0.0038

Neptune 47862-06-20 23:17 G 19202467.26 19202467.47 19202467.68 0.0090 0.0027

Neptune 47863-02-01 12:14 G 19202692.81 19202693.01 19202693.24 0.0090 0.0017

Neptune 47863-09-15 01:41 G 19202918.36 19202918.57 19202918.80 0.0090 0.0006

Neptune 47864-04-27 15:07 G 19203143.91 19203144.13 19203144.35 0.0090 0.0005

Neptune 47864-12-09 04:19 G 19203369.47 19203369.68 19203369.90 0.0090 0.0016

Neptune 47865-07-22 18:00 G 19203595.04 19203595.25 19203595.45 0.0090 0.0027

Neptune 47866-03-05 06:58 G 19203820.60 19203820.79 19203821.00 0.0090 0.0038

Neptune 47866-10-16 20:10 G 19204046.17 19204046.34 19204046.54 0.0090 0.0049

Neptune 47867-05-30 09:22 G 19204271.74 19204271.89 19204272.07 0.0090 0.0060

Saturn 47868-01-05 21:22 G 19204492.25 19204492.39 19204492.55 0.0297 0.0205

Neptune 47868-01-10 22:48 G 19204497.33 19204497.45 19204497.60 0.0090 0.0070

Saturn 47868-08-23 00:14 G 19204722.31 19204722.51 19204722.71 0.0299 0.0102

Neptune 47868-08-23 12:00 G 19204722.92 19204723.00 19204723.11 0.0090 0.0081

Jupiter 47871-08-31 23:17 G 19205826.29 19205826.47 19205826.66 0.0529 0.0198

Jupiter 47877-07-05 13:55 G 19207960.89 19207961.08 19207961.27 0.0496 0.0208

Saturn 47881-11-09 06:43 G 19209548.61 19209548.78 19209548.97 0.0265 0.0141

Saturn 47882-06-26 06:29 G 19209777.57 19209777.77 19209777.98 0.0264 0.0073

Jupiter 47883-05-06 12:00 G 19210091.82 19210092.00 19210092.19 0.0529 0.0217

Mars 47883-09-26 08:53 G 19210234.70 19210234.87 19210235.05 0.1762 0.0112

Jupiter 47889-03-10 15:36 G 19212226.95 19212227.15 19212227.35 0.0497 0.0120

Uranus 47889-06-13 06:29 G 19212321.73 19212321.77 19212321.83 0.0134 0.0131

Uranus 47890-01-25 12:14 G 19212547.89 19212548.01 19212548.16 0.0134 0.0106

Uranus 47890-09-08 18:29 G 19212774.09 19212774.27 19212774.44 0.0134 0.0080

Uranus 47891-04-23 00:00 G 19213000.31 19213000.50 19213000.71 0.0134 0.0055

Uranus 47891-12-05 06:00 G 19213226.54 19213226.75 19213226.97 0.0134 0.0028

Uranus 47892-07-18 11:46 G 19213452.77 19213452.99 19213453.21 0.0134 0.0003

Earth 47892-07-25 00:43 G 19213459.37 19213459.53 19213459.69 0.2691 0.0457

Moon 47892-07-25 05:17 G 19213459.57 19213459.72 19213459.88 0.2686 0.0909 *

Uranus 47893-03-01 17:17 G 19213679.01 19213679.22 19213679.44 0.0134 0.0023

Uranus 47893-10-13 22:48 G 19213905.26 19213905.45 19213905.66 0.0134 0.0049

Uranus 47894-05-28 04:48 G 19214131.52 19214131.70 19214131.88 0.0134 0.0074

Uranus 47895-01-09 10:05 G 19214357.79 19214357.92 19214358.08 0.0134 0.0100

Uranus 47895-08-23 15:36 G 19214584.09 19214584.15 19214584.24 0.0134 0.0125

Saturn 47897-07-18 07:41 G 19215278.65 19215278.82 19215279.01 0.0297 0.0153

Saturn 47898-03-05 10:34 G 19215508.76 19215508.94 19215509.12 0.0299 0.0154

Jupiter 47900-11-14 15:07 G 19216493.06 19216493.13 19216493.21 0.0498 0.0457

Jupiter 47907-05-10 15:07 G 19218861.01 19218861.13 19218861.25 0.0530 0.0429

Mars 47911-02-09 23:17 G 19220232.39 19220232.47 19220232.54 0.1761 0.1562

Saturn 47911-05-23 10:34 G 19220334.75 19220334.94 19220335.13 0.0265 0.0110

Saturn 47912-01-07 10:19 G 19220563.74 19220563.93 19220564.13 0.0263 0.0102

Jupiter 47913-03-13 22:05 G 19220995.30 19220995.42 19220995.55 0.0496 0.0390

Jupiter 47919-01-13 05:17 G 19223126.52 19223126.72 19223126.92 0.0529 0.0022

Jupiter 47924-11-16 23:31 G 19225261.28 19225261.48 19225261.69 0.0497 0.0063

Pluto 47925-11-23 11:02 G 19225632.78 19225632.96 19225633.16 0.0063 0.0032

Pluto 47926-07-06 14:53 G 19225857.91 19225858.12 19225858.35 0.0063 0.0006

Saturn 47927-01-29 17:17 G 19226065.02 19226065.22 19226065.41 0.0298 0.0109

Pluto 47927-02-16 18:00 G 19226083.12 19226083.25 19226083.43 0.0063 0.0045

Saturn 47927-09-16 20:10 G 19226295.19 19226295.34 19226295.50 0.0299 0.0201

Jupiter 47930-09-17 19:26 G 19227392.17 19227392.31 19227392.45 0.0528 0.0383

Uranus 47932-10-28 08:53 G 19228163.77 19228163.87 19228164.01 0.0144 0.0119

Uranus 47933-06-11 20:38 G 19228390.20 19228390.36 19228390.54 0.0144 0.0087

Uranus 47934-01-24 08:24 G 19228616.65 19228616.85 19228617.05 0.0144 0.0055

Uranus 47934-09-07 20:10 G 19228843.12 19228843.34 19228843.55 0.0144 0.0023

Uranus 47935-04-22 07:55 G 19229069.61 19229069.83 19229070.05 0.0144 0.0009

Uranus 47935-12-04 19:55 G 19229296.12 19229296.33 19229296.54 0.0144 0.0041

Uranus 47936-07-18 07:55 G 19229522.64 19229522.83 19229523.01 0.0144 0.0074

Jupiter 47936-07-23 01:41 G 19229527.40 19229527.57 19229527.74 0.0498 0.0264

Uranus 47937-03-01 19:41 G 19229749.18 19229749.32 19229749.47 0.0144 0.0106

Uranus 47937-10-14 07:41 G 19229975.76 19229975.82 19229975.89 0.0144 0.0138

Saturn 47940-12-02 17:46 G 19231121.03 19231121.24 19231121.44 0.0265 0.0074

Neptune 47941-07-06 08:38 G 19231336.77 19231336.86 19231336.96 0.0088 0.0078

Saturn 47941-07-19 17:02 G 19231350.04 19231350.21 19231350.40 0.0263 0.0138

Neptune 47942-02-16 21:07 G 19231562.25 19231562.38 19231562.53 0.0088 0.0068

Neptune 47942-09-30 09:50 G 19231787.75 19231787.91 19231788.08 0.0088 0.0058

Mars 47943-02-09 05:46 G 19231919.68 19231919.74 19231919.80 0.1774 0.1650

Neptune 47943-05-13 22:34 G 19232013.26 19232013.44 19232013.63 0.0088 0.0048

Neptune 47943-12-25 11:17 G 19232238.78 19232238.97 19232239.17 0.0088 0.0038

Neptune 47944-08-07 00:00 G 19232464.29 19232464.50 19232464.71 0.0088 0.0028

Neptune 47945-03-20 12:29 G 19232689.81 19232690.02 19232690.25 0.0088 0.0018

Neptune 47945-11-01 01:12 G 19232915.34 19232915.55 19232915.78 0.0088 0.0008

Neptune 47946-06-14 14:10 G 19233140.87 19233141.09 19233141.31 0.0088 0.0003

Neptune 47947-01-26 02:53 G 19233366.40 19233366.62 19233366.84 0.0088 0.0013

Neptune 47947-09-08 15:36 G 19233591.93 19233592.15 19233592.36 0.0088 0.0023

Neptune 47948-04-21 03:50 G 19233817.47 19233817.66 19233817.88 0.0088 0.0034

Neptune 47948-12-02 16:48 G 19234043.02 19234043.20 19234043.40 0.0088 0.0044

Neptune 47949-07-16 05:31 G 19234268.57 19234268.73 19234268.92 0.0088 0.0054

Mars 47949-07-24 17:02 G 19234277.04 19234277.21 19234277.38 0.1765 0.0408

Neptune 47950-02-26 18:14 G 19234494.12 19234494.26 19234494.42 0.0088 0.0064

Neptune 47950-10-10 06:58 G 19234719.69 19234719.79 19234719.92 0.0088 0.0074

Neptune 47951-05-23 19:41 G 19234945.27 19234945.32 19234945.40 0.0088 0.0084

Jupiter 47954-09-20 18:00 G 19236161.08 19236161.25 19236161.44 0.0530 0.0241

Saturn 47956-08-11 04:19 G 19236851.47 19236851.68 19236851.89 0.0297 0.0054

Saturn 47957-03-29 07:26 G 19237081.71 19237081.81 19237081.92 0.0299 0.0255

Jupiter 47960-07-25 08:38 G 19238295.68 19238295.86 19238296.04 0.0496 0.0248

Jupiter 47966-05-26 10:34 G 19240426.74 19240426.94 19240427.13 0.0529 0.0156

Saturn 47969-10-28 21:50 G 19241678.37 19241678.41 19241678.47 0.0266 0.0257

Saturn 47970-06-14 22:34 G 19241907.23 19241907.44 19241907.65 0.0264 0.0041

Saturn 47971-01-29 21:36 G 19242136.25 19242136.40 19242136.57 0.0263 0.0170

Jupiter 47972-03-30 09:36 G 19242561.69 19242561.90 19242562.10 0.0497 0.0082

Uranus 47973-09-25 21:22 G 19243106.29 19243106.39 19243106.51 0.0134 0.0115

Uranus 47974-05-10 03:07 G 19243332.49 19243332.63 19243332.81 0.0134 0.0090

Uranus 47974-12-22 09:07 G 19243558.70 19243558.88 19243559.08 0.0134 0.0064

Uranus 47975-08-05 15:07 G 19243784.92 19243785.13 19243785.34 0.0134 0.0038

Uranus 47976-03-18 20:53 G 19244011.15 19244011.37 19244011.59 0.0134 0.0013

Uranus 47976-10-31 02:38 G 19244237.39 19244237.61 19244237.82 0.0134 0.0013

Uranus 47977-06-14 08:10 G 19244463.64 19244463.84 19244464.05 0.0134 0.0039

Uranus 47978-01-26 13:55 G 19244689.89 19244690.08 19244690.27 0.0134 0.0064

Uranus 47978-09-09 19:12 G 19244916.15 19244916.30 19244916.47 0.0134 0.0090

Uranus 47979-04-24 00:58 G 19245142.44 19245142.54 19245142.66 0.0134 0.0115

Jupiter 47983-12-04 10:19 G 19246827.83 19246827.93 19246828.05 0.0498 0.0413

Saturn 47986-02-21 14:10 G 19247637.88 19247638.09 19247638.30 0.0298 0.0009

Jupiter 47990-05-29 09:36 G 19249195.81 19249195.90 19249195.99 0.0530 0.0471

Jupiter 47996-04-01 18:29 G 19251330.19 19251330.27 19251330.38 0.0496 0.0439

Saturn 47999-05-11 05:02 G 19252464.60 19252464.71 19252464.84 0.0266 0.0220

Saturn 47999-12-26 05:46 G 19252693.53 19252693.74 19252693.95 0.0264 0.0005

Saturn 48000-08-11 04:48 G 19252922.57 19252922.70 19252922.84 0.0263 0.0206

49TH MILLENNIUM CE

This is a list of transits of Venus in the 49th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**48002-01-31 22:05**	**G**	**19253461.21**	**19253461.42**	**19253461.62**	**0.0529**	**0.0057**	
Earth	**48006-01-26 03:22**	**G**	**19254916.51**	**19254916.64**	**19254916.76**	**0.2641**	**0.1600**	
Moon	**48006-01-26 04:34**	**G**	**19254916.56**	**19254916.69**	**19254916.82**	**0.2635**	**0.1702**	*
Jupiter	**48007-12-06 20:24**	**G**	**19255596.15**	**19255596.35**	**19255596.55**	**0.0497**	**0.0112**	
Mars	**48008-12-06 13:55**	**G**	**19255961.95**	**19255962.08**	**19255962.21**	**0.1770**	**0.1143**	
Jupiter	**48013-10-06 13:26**	**G**	**19257726.91**	**19257727.06**	**19257727.21**	**0.0528**	**0.0343**	
Moon	**48014-01-23 16:48**	**G**	**19257836.13**	**19257836.20**	**19257836.28**	**0.2636**	**0.2329**	
Earth	**48014-01-23 19:55**	**G**	**19257836.21**	**19257836.33**	**19257836.45**	**0.2641**	**0.1709**	*
Saturn	**48015-01-17 00:00**	**G**	**19258194.39**	**19258194.50**	**19258194.60**	**0.0296**	**0.0256**	
Mars	**48015-05-22 00:14**	**G**	**19258319.37**	**19258319.51**	**19258319.66**	**0.1770**	**0.0940**	
Saturn	**48015-09-04 01:55**	**G**	**19258424.37**	**19258424.58**	**19258424.79**	**0.0298**	**0.0047**	
Pluto	**48016-01-08 23:31**	**G**	**19258551.36**	**19258551.48**	**19258551.64**	**0.0081**	**0.0063**	
Uranus	**48016-06-27 13:26**	**G**	**19258721.99**	**19258722.06**	**19258722.16**	**0.0144**	**0.0133**	
Pluto	**48016-08-21 10:48**	**G**	**19258776.74**	**19258776.95**	**19258777.16**	**0.0081**	**0.0020**	
Uranus	**48017-02-09 01:12**	**G**	**19258948.40**	**19258948.55**	**19258948.71**	**0.0144**	**0.0101**	
Uranus	**48017-09-23 12:58**	**G**	**19259174.85**	**19259175.04**	**19259175.23**	**0.0144**	**0.0069**	
Uranus	**48018-05-08 00:43**	**G**	**19259401.32**	**19259401.53**	**19259401.74**	**0.0144**	**0.0037**	
Uranus	**48018-12-20 12:29**	**G**	**19259627.81**	**19259628.02**	**19259628.24**	**0.0144**	**0.0006**	

Uranus 48019-08-04 00:14 G 19259854.30 19259854.51 19259854.73 0.0144 0.0028

Jupiter 48019-08-11 19:41 G 19259862.14 19259862.32 19259862.50 0.0497 0.0226

Uranus 48020-03-17 12:14 G 19260080.81 19260081.01 19260081.21 0.0144 0.0060

Uranus 48020-10-30 00:00 G 19260307.35 19260307.50 19260307.68 0.0144 0.0092

Uranus 48021-06-13 11:46 G 19260533.90 19260533.99 19260534.12 0.0144 0.0125

Neptune 48023-08-22 15:07 G 19261334.07 19261334.13 19261334.24 0.0090 0.0083

Neptune 48024-04-04 04:34 G 19261559.58 19261559.69 19261559.84 0.0090 0.0072

Neptune 48024-11-15 18:14 G 19261785.10 19261785.26 19261785.42 0.0090 0.0061

Neptune 48025-06-29 07:26 G 19262010.64 19262010.81 19262011.01 0.0090 0.0051

Neptune 48026-02-09 20:53 G 19262236.19 19262236.37 19262236.58 0.0090 0.0040

Neptune 48026-09-23 10:19 G 19262461.73 19262461.93 19262462.15 0.0090 0.0029

Neptune 48027-05-06 23:46 G 19262687.28 19262687.49 19262687.71 0.0090 0.0018

Neptune 48027-12-18 13:12 G 19262912.83 19262913.05 19262913.27 0.0090 0.0008

Neptune 48028-07-31 02:38 G 19263138.39 19263138.61 19263138.83 0.0090 0.0004

Saturn 48028-11-20 11:02 G 19263250.81 19263250.96 19263251.11 0.0266 0.0186

Neptune 48029-03-13 15:50 G 19263363.95 19263364.16 19263364.38 0.0090 0.0014

Saturn 48029-07-07 11:02 G 19263479.75 19263479.96 19263480.17 0.0264 0.0029

Neptune 48029-10-25 05:17 G 19263589.51 19263589.72 19263589.93 0.0090 0.0025

Saturn 48030-02-21 09:50 G 19263708.83 19263708.91 19263709.00 0.0262 0.0238

Neptune 48030-06-07 18:29 G 19263815.08 19263815.27 19263815.48 0.0090 0.0036

Neptune 48031-01-19 07:41 G 19264040.65 19264040.82 19264041.02 0.0090 0.0046

Neptune 48031-09-01 20:53 G 19264266.22 19264266.37 19264266.55 0.0090 0.0057

Neptune 48032-04-14 10:05 G 19264491.79 19264491.92 19264492.08 0.0090 0.0068

Neptune 48032-11-25 23:31 G 19264717.38 19264717.48 19264717.60 0.0090 0.0078

Neptune 48033-07-09 12:43 G 19264943.02 19264943.03 19264943.08 0.0090 0.0089

Jupiter 48037-10-09 15:07 G 19266495.96 19266496.13 19266496.30 0.0529 0.0295

Jupiter 48043-08-14 03:36 G 19268630.49 19268630.65 19268630.82 0.0497 0.0291

Saturn 48044-07-29 08:10 G 19268980.70 19268980.84 19268980.99 0.0297 0.0215

Saturn 48045-03-16 10:48 G 19269210.75 19269210.95 19269211.15 0.0299 0.0091

Jupiter 48049-06-14 05:17 G 19270761.53 19270761.72 19270761.92 0.0528 0.0111

Jupiter 48055-04-19 05:46 G 19272896.54 19272896.74 19272896.95 0.0497 0.0035

Uranus 48057-05-26 06:29 G 19273664.71 19273664.77 19273664.86 0.0134 0.0125

Uranus 48058-01-07 12:43 G 19273890.88 19273891.03 19273891.17 0.0134 0.0100

Saturn 48058-06-02 18:00 G 19274037.08 19274037.25 19274037.43 0.0265 0.0149

Uranus 48058-08-21 18:14 G 19274117.09 19274117.26 19274117.45 0.0134 0.0074

Saturn 48059-01-17 18:00 G 19274266.05 19274266.25 19274266.46 0.0264 0.0066

Uranus 48059-04-05 00:14 G 19274343.31 19274343.51 19274343.72 0.0134 0.0048

Uranus 48059-11-17 06:00 G 19274569.54 19274569.75 19274569.97 0.0134 0.0023

Uranus 48060-06-30 11:46 G 19274795.78 19274795.99 19274796.21 0.0134 0.0004

Uranus 48061-02-11 17:31 G 19275022.02 19275022.23 19275022.44 0.0134 0.0029

Jupiter 48061-02-16 18:00 G 19275027.22 19275027.25 19275027.28 0.0528 0.0520

Uranus 48061-09-25 22:48 G 19275248.27 19275248.45 19275248.66 0.0134 0.0055

Uranus 48062-05-10 04:48 G 19275474.53 19275474.70 19275474.88 0.0134 0.0080

Uranus 48062-12-22 10:34 G 19275700.80 19275700.94 19275701.07 0.0134 0.0105

Uranus 48063-08-05 15:22 G 19275927.12 19275927.14 19275927.21 0.0134 0.0131

Jupiter 48066-12-23 07:12 G 19277162.67 19277162.80 19277162.94 0.0498 0.0363

Jupiter 48073-06-17 04:05 G 19279530.62 19279530.67 19279530.72 0.0530 0.0511

Saturn 48074-02-08 19:41 G 19279767.15 19279767.32 19279767.50 0.0297 0.0161

Saturn 48074-09-26 22:19 G 19279997.25 19279997.43 19279997.62 0.0299 0.0146

Mars 48074-10-03 22:19 G 19280004.27 19280004.43 19280004.59 0.1766 0.0643

Jupiter 48079-04-21 12:29 G 19281664.96 19281665.02 19281665.08 0.0496 0.0473

Mars 48081-03-18 07:55 G 19282361.74 19282361.83 19282361.93 0.1774 0.1475

Jupiter 48085-02-19 20:24 G 19283796.15 19283796.35 19283796.55 0.0529 0.0118

Saturn 48087-12-14 00:00 G 19284823.31 19284823.50 19284823.70 0.0265 0.0115

Saturn 48088-07-29 23:31 G 19285052.29 19285052.48 19285052.68 0.0263 0.0098

Jupiter 48090-12-25 13:55 G 19285930.88 19285931.08 19285931.27 0.0497 0.0147

Jupiter 48096-10-25 11:31 G 19288061.81 19288061.98 19288062.15 0.0528 0.0282

Uranus 48100-10-10 05:46 G 19289506.61 19289506.74 19289506.87 0.0144 0.0115

Uranus 48101-05-24 17:02 G 19289733.05 19289733.21 19289733.40 0.0144 0.0084

Uranus 48102-01-06 04:48 G 19289959.50 19289959.70 19289959.91 0.0144 0.0052

Uranus 48102-08-20 16:34 G 19290185.98 19290186.19 19290186.41 0.0144 0.0020

Jupiter 48102-08-31 14:53 G 19290196.93 19290197.12 19290197.31 0.0498 0.0182

Uranus 48103-04-04 04:19 G 19290412.47 19290412.68 19290412.90 0.0144 0.0013

Saturn 48103-08-23 03:22 G 19290553.45 19290553.64 19290553.83 0.0298 0.0121

Uranus 48103-11-16 16:19 G 19290638.98 19290639.18 19290639.39 0.0144 0.0045

Saturn 48104-04-09 06:14 G 19290783.60 19290783.76 19290783.93 0.0299 0.0188

Uranus 48104-06-30 04:05 G 19290865.50 19290865.67 19290865.86 0.0144 0.0078

Uranus 48105-02-11 15:50 G 19291092.03 19291092.16 19291092.31 0.0144 0.0110

Uranus 48105-09-26 03:50 G 19291318.63 19291318.66 19291318.71 0.0144 0.0142

Neptune 48105-10-08 19:41 G 19291331.25 19291331.32 19291331.44 0.0088 0.0080

Neptune 48106-05-22 08:24 G 19291556.74 19291556.85 19291557.01 0.0088 0.0070

Neptune 48107-01-02 21:22 G 19291782.25 19291782.39 19291782.57 0.0088 0.0060

Neptune 48107-08-16 10:05 G 19292007.75 19292007.92 19292008.12 0.0088 0.0050

Neptune 48108-03-28 22:34 G 19292233.26 19292233.44 19292233.66 0.0088 0.0040

Neptune 48108-11-09 11:31 G 19292458.78 19292458.98 19292459.20 0.0088 0.0030

Neptune 48109-06-23 00:14 G 19292684.30 19292684.51 19292684.73 0.0088 0.0020

Neptune 48110-02-03 12:58 G 19292909.83 19292910.04 19292910.26 0.0088 0.0009

Neptune 48110-09-17 01:41 G 19293135.35 19293135.57 19293135.79 0.0088 0.0001

Neptune 48111-04-30 14:24 G 19293360.88 19293361.10 19293361.32 0.0088 0.0011

Neptune 48111-12-12 03:07 G 19293586.42 19293586.63 19293586.85 0.0088 0.0021

Neptune 48112-07-24 15:50 G 19293811.96 19293812.16 19293812.37 0.0088 0.0031

Neptune 48113-03-07 04:34 G 19294037.50 19294037.69 19294037.89 0.0088 0.0041

Neptune 48113-10-18 17:17 G 19294263.04 19294263.22 19294263.40 0.0088 0.0051

Neptune 48114-06-01 06:00 G 19294488.59 19294488.75 19294488.91 0.0088 0.0061

Neptune 48115-01-12 18:58 G 19294714.16 19294714.29 19294714.41 0.0088 0.0071

Neptune 48115-08-26 07:26 G 19294939.74 19294939.81 19294939.90 0.0088 0.0081

Saturn 48117-06-26 06:14 G 19295609.56 19295609.76 19295609.97 0.0265 0.0079

Saturn 48118-02-10 05:46 G 19295838.56 19295838.74 19295838.92 0.0263 0.0133

Jupiter 48120-10-29 08:53 G 19296830.71 19296830.87 19296831.03 0.0529 0.0333

Jupiter 48126-09-03 00:58 G 19298965.39 19298965.54 19298965.68 0.0497 0.0341

Jupiter 48132-07-04 00:29 G 19301096.32 19301096.52 19301096.72 0.0529 0.0065

Saturn 48133-03-04 13:26 G 19301339.86 19301340.06 19301340.27 0.0297 0.0070

Saturn 48133-10-20 16:34 G 19301570.08 19301570.19 19301570.32 0.0299 0.0240

Moon 48135-07-27 19:26 G 19302215.15 19302215.31 19302215.46 0.2694 0.0043

Earth 48135-07-28 00:43 G 19302215.37 19302215.53 19302215.69 0.2691 0.0298 *

Jupiter 48138-05-09 00:14 G 19303231.31 19303231.51 19303231.72 0.0497 0.0008

Mars 48140-08-01 06:43 G 19304046.60 19304046.78 19304046.95 0.1762 0.0150

Uranus 48141-09-07 20:38 G 19304449.25 19304449.36 19304449.49 0.0134 0.0111

Uranus 48142-04-22 02:53 G 19304675.45 19304675.62 19304675.79 0.0134 0.0085

Uranus 48142-12-04 08:38 G 19304901.67 19304901.86 19304902.06 0.0134 0.0059

Uranus 48143-07-18 14:24 G 19305127.90 19305128.10 19305128.32 0.0134 0.0033

Uranus 48144-02-29 20:10 G 19305354.13 19305354.34 19305354.56 0.0134 0.0008

Jupiter 48144-03-08 17:02 G 19305362.11 19305362.21 19305362.31 0.0528 0.0455

Uranus 48144-10-13 01:55 G 19305580.37 19305580.58 19305580.80 0.0134 0.0019

Uranus 48145-05-27 07:55 G 19305806.62 19305806.83 19305807.03 0.0134 0.0044

Uranus 48146-01-08 13:12 G 19306032.87 19306033.05 19306033.24 0.0134 0.0070

Saturn 48146-05-22 11:17 G 19306166.95 19306166.97 19306167.01 0.0266 0.0263

Uranus 48146-08-22 18:43 G 19306259.14 19306259.28 19306259.44 0.0134 0.0095

Saturn 48147-01-06 12:00 G 19306395.79 19306396.00 19306396.21 0.0264 0.0047

Uranus 48147-04-06 00:00 G 19306485.43 19306485.50 19306485.61 0.0134 0.0121

Saturn 48147-08-23 11:02 G 19306624.80 19306624.96 19306625.13 0.0263 0.0164

Jupiter 48150-01-12 01:26 G 19307497.41 19307497.56 19307497.72 0.0498 0.0322

Saturn 48162-09-14 19:26 G 19312126.10 19312126.31 19312126.52 0.0298 0.0034

Saturn 48163-05-02 22:34 G 19312356.38 19312356.44 19312356.53 0.0300 0.0279

Jupiter 48168-03-11 17:31 G 19314131.04 19314131.23 19314131.42 0.0529 0.0173

Pluto 48173-10-27 21:50 G 19316187.22 19316187.41 19316187.62 0.0063 0.0026

Jupiter 48174-01-14 11:17 G 19316265.79 19316265.97 19316266.16 0.0497 0.0200

Pluto 48174-06-10 01:41 G 19316412.35 19316412.57 19316412.79 0.0063 0.0012

Pluto 48175-01-21 04:48 G 19316637.59 19316637.70 19316637.85 0.0063 0.0052

Saturn 48175-12-02 16:48 G 19316953.09 19316953.20 19316953.30 0.0266 0.0229

Saturn 48176-07-18 17:02 G 19317182.00 19317182.21 19317182.42 0.0264 0.0014

Saturn 48177-03-04 15:50 G 19317411.02 19317411.16 19317411.31 0.0263 0.0196

Mars 48179-01-14 00:00 G 19318091.39 19318091.50 19318091.62 0.1765 0.1296

Jupiter 48179-11-15 06:43 G 19318396.60 19318396.78 19318396.96 0.0528 0.0235

Uranus 48184-06-09 11:02 G 19320064.88 19320064.96 19320065.07 0.0144 0.0129

Uranus 48185-01-21 22:48 G 19320291.29 19320291.45 19320291.61 0.0144 0.0097

Uranus 48185-09-05 10:05 G 19320517.74 19320517.92 19320518.13 0.0144 0.0066

Jupiter 48185-09-19 12:58 G 19320531.84 19320532.04 19320532.24 0.0498 0.0126

Uranus 48186-04-19 22:05 G 19320744.21 19320744.42 19320744.63 0.0144 0.0033

Uranus 48186-12-02 09:50 G 19320970.69 19320970.91 19320971.13 0.0144 0.0001

Uranus 48187-07-16 21:36 G 19321197.19 19321197.40 19321197.61 0.0144 0.0031

Neptune 48187-11-25 02:24 G 19321328.54 19321328.60 19321328.69 0.0090 0.0084

Uranus 48188-02-28 09:22 G 19321423.70 19321423.89 19321424.09 0.0144 0.0064

Neptune 48188-07-07 15:36 G 19321554.05 19321554.15 19321554.30 0.0090 0.0074

Uranus 48188-10-11 20:53 G 19321650.23 19321650.37 19321650.55 0.0144 0.0097

Neptune 48189-02-18 05:17 G 19321779.58 19321779.72 19321779.89 0.0090 0.0063

Uranus 48189-05-26 08:38 G 19321876.78 19321876.86 19321876.98 0.0144 0.0129

Neptune 48189-10-01 18:14 G 19322005.11 19322005.26 19322005.46 0.0090 0.0053

Neptune 48190-05-15 07:55 G 19322230.65 19322230.83 19322231.04 0.0090 0.0042

Neptune 48190-12-26 21:36 G 19322456.20 19322456.40 19322456.61 0.0090 0.0031

Neptune 48191-08-09 10:48 G 19322681.75 19322681.95 19322682.17 0.0090 0.0020

Saturn 48191-08-10 02:24 G 19322682.57 19322682.60 19322682.66 0.0296 0.0288

Neptune 48192-03-22 00:14 G 19322907.30 19322907.51 19322907.73 0.0090 0.0010

Saturn 48192-03-27 04:48 G 19322912.49 19322912.70 19322912.91 0.0298 0.0016

Neptune 48192-11-02 13:41 G 19323132.85 19323133.07 19323133.29 0.0090 0.0002

Neptune 48193-06-16 03:22 G 19323358.42 19323358.64 19323358.85 0.0090 0.0012

Neptune 48194-01-27 16:34 G 19323583.98 19323584.19 19323584.41 0.0090 0.0023

Neptune 48194-09-10 05:31 G 19323809.55 19323809.73 19323809.95 0.0090 0.0034

Neptune 48195-04-23 19:12 G 19324035.11 19324035.30 19324035.49 0.0090 0.0044

Neptune 48195-12-05 08:10 G 19324260.69 19324260.84 19324261.03 0.0090 0.0055

Neptune 48196-07-17 21:50 G 19324486.27 19324486.41 19324486.57 0.0090 0.0065

Neptune 48197-02-28 10:48 G 19324711.86 19324711.95 19324712.09 0.0090 0.0076

Jupiter 48197-05-25 12:29 G 19324797.95 19324798.02 19324798.10 0.0498 0.0459

Neptune 48197-10-12 00:14 G 19324937.47 19324937.51 19324937.59 0.0090 0.0086

Jupiter 48203-11-19 09:22 G 19327165.77 19327165.89 19327166.03 0.0530 0.0406

Saturn 48205-06-14 21:50 G 19327739.28 19327739.41 19327739.56 0.0266 0.0198

Saturn 48206-01-29 21:50 G 19327968.20 19327968.41 19327968.63 0.0264 0.0017

Mars 48206-05-30 14:53 G 19328088.95 19328089.12 19328089.29 0.1758 0.0342

Saturn 48206-09-15 20:24 G 19328197.25 19328197.35 19328197.46 0.0262 0.0226

Jupiter 48209-09-22 20:10 G 19329300.22 19329300.34 19329300.47 0.0496 0.0385

Jupiter 48215-07-25 01:12 G 19331431.35 19331431.55 19331431.76 0.0529 0.0012

Saturn 48221-02-20 06:00 G 19333468.66 19333468.75 19333468.86 0.0296 0.0258

Jupiter 48221-05-28 21:50 G 19333566.21 19333566.41 19333566.62 0.0497 0.0060

Saturn 48221-10-08 08:24 G 19333698.64 19333698.85 19333699.06 0.0299 0.0047

Uranus 48225-05-09 05:02 G 19335007.64 19335007.71 19335007.82 0.0134 0.0122

Uranus 48225-12-21 11:31 G 19335233.82 19335233.98 19335234.13 0.0134 0.0096

Uranus 48226-08-04 17:02 G 19335460.04 19335460.21 19335460.41 0.0134 0.0070

Uranus 48227-03-18 23:02 G 19335686.26 19335686.46 19335686.67 0.0134 0.0044

Jupiter 48227-03-29 16:19 G 19335697.05 19335697.18 19335697.32 0.0528 0.0389

Uranus 48227-10-31 05:02 G 19335912.50 19335912.71 19335912.93 0.0134 0.0018

Uranus 48228-06-13 10:48 G 19336138.74 19336138.95 19336139.17 0.0134 0.0008

Uranus 48229-01-25 16:19 G 19336364.98 19336365.18 19336365.40 0.0134 0.0034

Uranus 48229-09-08 21:50 G 19336591.23 19336591.41 19336591.62 0.0134 0.0060

Uranus 48230-04-23 03:36 G 19336817.49 19336817.65 19336817.83 0.0134 0.0085

Uranus 48230-12-05 09:22 G 19337043.77 19337043.89 19337044.01 0.0134 0.0110

Jupiter 48233-02-01 00:00 G 19337832.33 19337832.50 19337832.67 0.0498 0.0265

Saturn 48234-12-26 01:41 G 19338525.40 19338525.57 19338525.73 0.0265 0.0168

Saturn 48235-08-12 01:26 G 19338754.35 19338754.56 19338754.77 0.0264 0.0046

Saturn 48236-03-28 00:00 G 19338983.46 19338983.50 19338983.55 0.0262 0.0255

Mars 48244-11-11 07:26 G 19342133.65 19342133.81 19342133.96 0.1769 0.0771

Moon 48249-01-28 03:07 G 19343672.51 19343672.63 19343672.75 0.2647 0.1652

Earth 48249-01-28 06:00 G 19343672.63 19343672.75 19343672.87 0.2641 0.1700 *

Saturn 48250-09-02 13:12 G 19344254.92 19344255.05 19344255.21 0.0296 0.0216

Jupiter 48251-04-01 15:50 G 19344465.98 19344466.16 19344466.34 0.0529 0.0233

Saturn 48251-04-20 15:50 G 19344484.97 19344485.16 19344485.37 0.0298 0.0092

Earth 48257-01-25 22:34 G 19346592.31 19346592.44 19346592.56 0.2641 0.1614

Moon 48257-01-26 00:00 G 19346592.36 19346592.50 19346592.63 0.2647 0.1281 *

Jupiter 48257-02-03 08:10 G 19346600.67 19346600.84 19346601.02 0.0496 0.0251

Jupiter 48262-12-05 08:24 G 19348731.66 19348731.85 19348732.04 0.0529 0.0157

Pluto 48263-12-14 10:48 G 19349105.79 19349105.95 19349106.13 0.0081 0.0052

Saturn 48264-07-07 06:00 G 19349311.57 19349311.75 19349311.94 0.0265 0.0138

Pluto 48264-07-26 21:36 G 19349331.20 19349331.40 19349331.61 0.0081 0.0030

Saturn 48265-02-21 05:31 G 19349540.53 19349540.73 19349540.94 0.0263 0.0075

Uranus 48268-02-08 17:46 G 19350623.22 19350623.24 19350623.28 0.0144 0.0142

Uranus 48268-09-22 05:02 G 19350849.59 19350849.71 19350849.87 0.0144 0.0111

Jupiter 48268-10-09 10:19 G 19350866.73 19350866.93 19350867.13 0.0497 0.0072

Uranus 48269-05-06 16:48 G 19351076.03 19351076.20 19351076.39 0.0144 0.0079

Uranus 48269-12-19 04:34 G 19351302.49 19351302.69 19351302.90 0.0144 0.0047

Neptune 48270-01-11 07:26 G 19351325.75 19351325.81 19351325.92 0.0088 0.0081

Uranus 48270-08-02 16:19 G 19351528.96 19351529.18 19351529.40 0.0144 0.0014

Neptune 48270-08-24 20:10 G 19351551.23 19351551.34 19351551.49 0.0088 0.0071

Uranus 48271-03-17 04:05 G 19351755.45 19351755.67 19351755.88 0.0144 0.0018

Neptune 48271-04-07 08:53 G 19351776.73 19351776.87 19351777.05 0.0088 0.0061

Uranus 48271-10-29 15:50 G 19351981.96 19351982.16 19351982.37 0.0144 0.0051

Neptune 48271-11-18 21:50 G 19352002.24 19352002.41 19352002.60 0.0088 0.0051

Mars 48272-03-26 23:17 G 19352131.32 19352131.47 19352131.63 0.1754 0.0819

Uranus 48272-06-12 03:50 G 19352208.48 19352208.66 19352208.83 0.0144 0.0083

Neptune 48272-07-01 10:34 G 19352227.76 19352227.94 19352228.15 0.0088 0.0041

Uranus 48273-01-24 15:07 G 19352435.02 19352435.13 19352435.28 0.0144 0.0115

Neptune 48273-02-11 23:17 G 19352453.27 19352453.47 19352453.69 0.0088 0.0031

Neptune 48273-09-25 12:00 G 19352678.79 19352679.00 19352679.22 0.0088 0.0021

Neptune 48274-05-09 00:43 G 19352904.31 19352904.53 19352904.75 0.0088 0.0011

Neptune 48274-12-20 13:41 G 19353129.85 19353130.07 19353130.29 0.0088 0.0002

Neptune 48275-08-03 02:10 G 19353355.37 19353355.59 19353355.81 0.0088 0.0009

Neptune 48276-03-15 14:53 G 19353580.90 19353581.12 19353581.34 0.0088 0.0019

Neptune 48276-10-27 03:22 G 19353806.44 19353806.64 19353806.85 0.0088 0.0029

Neptune 48277-06-09 16:05 G 19354031.98 19354032.17 19354032.37 0.0088 0.0039

Neptune 48278-01-21 04:48 G 19354257.52 19354257.70 19354257.89 0.0088 0.0049

Neptune 48278-09-03 17:17 G 19354483.07 19354483.22 19354483.40 0.0088 0.0059

Neptune 48279-04-17 06:00 G 19354708.63 19354708.75 19354708.90 0.0088 0.0069

Neptune 48279-11-28 18:43 G 19354934.20 19354934.28 19354934.39 0.0088 0.0079

Saturn 48280-03-14 15:22 G 19355040.99 19355041.14 19355041.31 0.0297 0.0188

Jupiter 48280-06-14 11:31 G 19355132.86 19355132.98 19355133.11 0.0498 0.0399

Saturn 48280-10-30 18:14 G 19355271.07 19355271.26 19355271.45 0.0299 0.0120

Jupiter 48286-12-08 10:19 G 19357500.86 19357500.93 19357501.03 0.0530 0.0478

Jupiter 48292-10-11 20:10 G 19359635.26 19359635.34 19359635.43 0.0497 0.0446

Saturn 48294-01-17 08:10 G 19360097.65 19360097.84 19360098.03 0.0265 0.0111

Saturn 48294-09-03 07:26 G 19360326.62 19360326.81 19360327.02 0.0263 0.0103

Jupiter 48298-08-13 00:14 G 19361766.31 19361766.51 19361766.71 0.0529 0.0073

Jupiter 48304-06-17 22:34 G 19363901.24 19363901.44 19363901.64 0.0497 0.0126

Uranus 48309-01-07 13:26 G 19365566.05 19365566.06 19365566.11 0.0134 0.0133

Uranus 48309-08-21 19:55 G 19365792.20 19365792.33 19365792.46 0.0134 0.0107

Saturn 48309-09-25 21:36 G 19365827.21 19365827.40 19365827.58 0.0297 0.0148

Uranus 48310-04-05 01:41 G 19366018.41 19366018.57 19366018.76 0.0134 0.0081

Jupiter 48310-04-18 16:05 G 19366032.01 19366032.17 19366032.34 0.0528 0.0320

Saturn 48310-05-14 00:14 G 19366057.34 19366057.51 19366057.69 0.0299 0.0161

Mars 48310-09-09 15:07 G 19366175.96 19366176.13 19366176.31 0.1773 0.0257

Uranus 48310-11-17 07:41 G 19366244.63 19366244.82 19366245.03 0.0134 0.0055

Uranus 48311-07-01 13:41 G 19366470.86 19366471.07 19366471.29 0.0134 0.0029

Uranus 48312-02-12 19:26 G 19366697.09 19366697.31 19366697.53 0.0134 0.0003

Uranus 48312-09-26 01:12 G 19366923.34 19366923.55 19366923.77 0.0134 0.0023

Uranus 48313-05-10 06:43 G 19367149.59 19367149.78 19367149.99 0.0134 0.0049

Uranus 48313-12-22 12:29 G 19367375.84 19367376.02 19367376.20 0.0134 0.0074

Uranus 48314-08-05 17:46 G 19367602.11 19367602.24 19367602.40 0.0134 0.0100

Uranus 48315-03-19 23:17 G 19367828.41 19367828.47 19367828.56 0.0134 0.0125

Jupiter 48316-02-21 22:48 G 19368167.27 19368167.45 19368167.64 0.0497 0.0203

Saturn 48323-07-31 11:46 G 19370883.79 19370883.99 19370884.19 0.0265 0.0084

Saturn 48324-03-16 11:02 G 19371112.78 19371112.96 19371113.15 0.0263 0.0129

Jupiter 48334-04-21 19:41 G 19374801.16 19374801.32 19374801.48 0.0530 0.0321

Mars 48338-01-23 08:24 G 19376173.73 19376173.85 19376173.96 0.1750 0.1269

Saturn 48339-04-07 22:05 G 19376613.23 19376613.42 19376613.62 0.0297 0.0124

Saturn 48339-11-24 00:58 G 19376843.38 19376843.54 19376843.71 0.0299 0.0185

Jupiter 48340-02-24 08:38 G 19376935.71 19376935.86 19376936.02 0.0496 0.0316

Jupiter 48345-12-25 11:17 G 19379066.77 19379066.97 19379067.17 0.0529 0.0076

Jupiter 48351-10-30 11:17 G 19381201.76 19381201.97 19381202.17 0.0497 0.0006

Neptune 48352-02-28 13:55 G 19381323.02 19381323.08 19381323.15 0.0090 0.0085

Uranus 48352-05-23 12:43 G 19381407.93 19381408.03 19381408.15 0.0144 0.0123

Neptune 48352-10-11 02:53 G 19381548.52 19381548.62 19381548.76 0.0090 0.0075

Uranus 48353-01-05 00:29 G 19381634.35 19381634.52 19381634.69 0.0144 0.0091

Saturn 48353-02-09 12:29 G 19381669.81 19381670.02 19381670.23 0.0265 0.0059

Neptune 48353-05-24 16:05 G 19381774.04 19381774.17 19381774.35 0.0090 0.0065

Uranus 48353-08-19 12:00 G 19381860.80 19381861.00 19381861.20 0.0144 0.0059

Saturn 48353-09-26 11:31 G 19381898.82 19381898.98 19381899.16 0.0263 0.0153

Neptune 48354-01-05 05:46 G 19381999.58 19381999.74 19381999.93 0.0090 0.0054

Uranus 48354-04-02 23:31 G 19382087.27 19382087.48 19382087.70 0.0144 0.0027

Neptune 48354-08-18 18:58 G 19382225.11 19382225.29 19382225.50 0.0090 0.0044

Uranus 48354-11-15 11:31 G 19382313.76 19382313.98 19382314.20 0.0144 0.0005

Neptune 48355-04-01 08:24 G 19382450.65 19382450.85 19382451.06 0.0090 0.0033

Uranus 48355-06-29 23:17 G 19382540.26 19382540.47 19382540.68 0.0144 0.0038

Neptune 48355-11-12 21:36 G 19382676.20 19382676.40 19382676.63 0.0090 0.0023

Uranus 48356-02-11 10:48 G 19382766.77 19382766.95 19382767.15 0.0144 0.0070

Neptune 48356-06-25 11:17 G 19382901.76 19382901.97 19382902.19 0.0090 0.0012

Uranus 48356-09-24 22:34 G 19382993.30 19382993.44 19382993.60 0.0144 0.0102

Neptune 48357-02-06 00:43 G 19383127.31 19383127.53 19383127.75 0.0090 0.0001

Uranus 48357-05-09 10:19 G 19383219.87 19383219.93 19383220.02 0.0144 0.0135

Jupiter 48357-08-30 01:41 G 19383332.49 19383332.57 19383332.66 0.0527 0.0473

Neptune 48357-09-19 13:55 G 19383352.87 19383353.08 19383353.30 0.0090 0.0010

Neptune 48358-05-03 03:07 G 19383578.43 19383578.63 19383578.86 0.0090 0.0021

Neptune 48358-12-14 16:34 G 19383803.99 19383804.19 19383804.41 0.0090 0.0031

Neptune 48359-07-28 06:00 G 19384029.57 19384029.75 19384029.96 0.0090 0.0041

Neptune 48360-03-09 19:26 G 19384255.14 19384255.31 19384255.49 0.0090 0.0052

Neptune 48360-10-21 08:24 G 19384480.71 19384480.85 19384481.03 0.0090 0.0063

Neptune 48361-06-03 22:05 G 19384706.30 19384706.42 19384706.56 0.0090 0.0073

Neptune 48362-01-15 11:31 G 19384931.91 19384931.98 19384932.06 0.0090 0.0083

Jupiter 48363-07-05 13:26 G 19385467.90 19385468.06 19385468.21 0.0498 0.0327

Saturn 48368-10-18 02:53 G 19387399.42 19387399.62 19387399.82 0.0297 0.0087

Saturn 48369-06-05 06:00 G 19387629.62 19387629.75 19387629.90 0.0299 0.0223

Mars 48376-07-06 22:34 G 19390218.27 19390218.44 19390218.61 0.1777 0.0285

Earth 48378-07-30 00:14 G 19390971.35 19390971.51 19390971.66 0.2691 0.0123

Moon 48378-07-30 05:46 G 19390971.58 19390971.74 19390971.90 0.2692 0.0328 *

Jupiter 48381-09-02 03:50 G 19392101.47 19392101.66 19392101.86 0.0530 0.0160

Saturn 48382-01-05 14:38 G 19392227.05 19392227.11 19392227.19 0.0267 0.0251

Saturn 48382-08-22 15:36 G 19392455.94 19392456.15 19392456.36 0.0265 0.0033

Saturn 48383-04-08 14:38 G 19392684.96 19392685.11 19392685.27 0.0263 0.0178

Jupiter 48387-07-07 22:48 G 19394236.27 19394236.45 19394236.64 0.0496 0.0191

Uranus 48393-04-21 05:02 G 19396350.63 19396350.71 19396350.84 0.0134 0.0118

Jupiter 48393-05-07 20:38 G 19396367.18 19396367.36 19396367.55 0.0529 0.0231

Uranus 48393-12-03 11:17 G 19396576.82 19396576.97 19396577.14 0.0134 0.0091

Uranus 48394-07-17 17:17 G 19396803.04 19396803.22 19396803.42 0.0134 0.0065

Uranus 48395-02-28 23:17 G 19397029.26 19397029.47 19397029.68 0.0134 0.0039

Uranus 48395-10-13 05:02 G 19397255.49 19397255.71 19397255.93 0.0134 0.0013

Uranus 48396-05-26 10:48 G 19397481.73 19397481.95 19397482.17 0.0134 0.0013

Uranus 48397-01-07 16:34 G 19397707.98 19397708.19 19397708.39 0.0134 0.0038

Uranus 48397-08-21 21:50 G 19397934.23 19397934.41 19397934.61 0.0134 0.0064

Uranus 48398-04-05 03:07 G 19398160.49 19398160.63 19398160.81 0.0134 0.0090

Saturn 48398-04-30 03:07 G 19398185.42 19398185.63 19398185.84 0.0297 0.0063

Uranus 48398-11-17 08:38 G 19398386.77 19398386.86 19398386.99 0.0134 0.0115

Saturn 48398-12-16 06:00 G 19398415.64 19398415.75 19398415.87 0.0299 0.0246

Jupiter 48399-03-13 00:29 G 19398502.33 19398502.52 19398502.72 0.0497 0.0133

Mars 48403-11-20 16:48 G 19400216.18 19400216.20 19400216.22 0.1746 0.1733

Jupiter 48410-11-16 02:38 G 19402768.53 19402768.61 19402768.69 0.0498 0.0455

Saturn 48411-07-18 14:24 G 19403013.00 19403013.10 19403013.22 0.0266 0.0228

Saturn 48412-03-03 15:07 G 19403241.92 19403242.13 19403242.34 0.0264 0.0011

Saturn 48412-10-18 14:10 G 19403470.96 19403471.09 19403471.23 0.0263 0.0200

Jupiter 48417-05-10 21:36 G 19405136.27 19405136.40 19405136.54 0.0529 0.0398

Pluto 48421-02-19 05:46 G 19406516.64 19406516.74 19406516.87 0.0063 0.0054

Pluto 48421-10-02 09:22 G 19406741.69 19406741.89 19406742.11 0.0063 0.0016

Pluto 48422-05-15 12:58 G 19406966.84 19406967.04 19406967.26 0.0063 0.0022

Pluto 48422-12-26 16:05 G 19407192.15 19407192.17 19407192.26 0.0063 0.0062

Jupiter 48423-03-15 11:17 G 19407270.85 19407270.97 19407271.10 0.0497 0.0389

Saturn 48427-11-10 06:58 G 19408971.58 19408971.79 19408972.00 0.0297 0.0029

Saturn 48428-06-27 10:05 G 19409201.86 19409201.92 19409202.00 0.0299 0.0282

Jupiter 48429-01-13 13:26 G 19409401.86 19409402.06 19409402.27 0.0529 0.0010

Neptune 48434-04-15 18:29 G 19411320.21 19411320.27 19411320.36 0.0088 0.0082

Jupiter 48434-11-18 12:43 G 19411536.83 19411537.03 19411537.23 0.0497 0.0066

Neptune 48434-11-27 07:41 G 19411545.70 19411545.82 19411545.95 0.0088 0.0072

Neptune 48435-07-10 19:55 G 19411771.20 19411771.33 19411771.51 0.0088 0.0063

Mars 48435-11-19 22:19 G 19411903.32 19411903.43 19411903.53 0.1759 0.1374

Uranus 48436-01-21 19:41 G 19411966.26 19411966.32 19411966.40 0.0144 0.0136

Neptune 48436-02-21 08:38 G 19411996.71 19411996.86 19411997.06 0.0088 0.0053

Uranus 48436-09-04 07:26 G 19412192.66 19412192.81 19412192.96 0.0144 0.0104

Neptune 48436-10-03 21:36 G 19412222.22 19412222.40 19412222.60 0.0088 0.0043

Uranus 48437-04-18 18:58 G 19412419.10 19412419.29 19412419.48 0.0144 0.0072

Neptune 48437-05-17 10:19 G 19412447.73 19412447.93 19412448.14 0.0088 0.0033

Uranus 48437-12-01 06:43 G 19412645.57 19412645.78 19412645.99 0.0144 0.0040

Neptune 48437-12-28 23:17 G 19412673.26 19412673.47 19412673.69 0.0088 0.0023

Uranus 48438-07-15 18:29 G 19412872.05 19412872.27 19412872.48 0.0144 0.0008

Neptune 48438-08-11 12:00 G 19412898.79 19412899.00 19412899.22 0.0088 0.0013

Uranus 48439-02-27 06:00 G 19413098.54 19413098.75 19413098.97 0.0144 0.0025

Neptune 48439-03-25 00:43 G 19413124.31 19413124.53 19413124.75 0.0088 0.0003

Uranus 48439-10-11 17:46 G 19413325.05 19413325.24 19413325.45 0.0144 0.0057

Neptune 48439-11-05 13:26 G 19413349.84 19413350.06 19413350.28 0.0088 0.0007

Uranus 48440-05-25 05:31 G 19413551.57 19413551.73 19413551.91 0.0144 0.0090

Neptune 48440-06-18 02:10 G 19413575.37 19413575.59 19413575.81 0.0088 0.0017

Jupiter 48440-09-18 05:02 G 19413667.58 19413667.71 19413667.85 0.0529 0.0389

Uranus 48441-01-06 17:17 G 19413778.12 19413778.22 19413778.35 0.0144 0.0122

Saturn 48441-01-27 17:02 G 19413799.08 19413799.21 19413799.36 0.0266 0.0203

Neptune 48441-01-29 14:38 G 19413800.91 19413801.11 19413801.33 0.0088 0.0027

Neptune 48441-09-12 03:07 G 19414026.45 19414026.63 19414026.85 0.0088 0.0037

Saturn 48441-09-13 17:46 G 19414028.03 19414028.24 19414028.45 0.0265 0.0015

Neptune 48442-04-25 15:50 G 19414251.99 19414252.16 19414252.36 0.0088 0.0047

Saturn 48442-04-30 16:48 G 19414257.09 19414257.20 19414257.31 0.0263 0.0225

Mars 48442-05-04 05:31 G 19414260.57 19414260.73 19414260.88 0.1781 0.0848

Neptune 48442-12-07 04:34 G 19414477.54 19414477.69 19414477.87 0.0088 0.0057

Neptune 48443-07-20 17:02 G 19414703.09 19414703.21 19414703.38 0.0088 0.0067

Neptune 48444-03-02 06:00 G 19414928.66 19414928.75 19414928.87 0.0088 0.0076

Neptune 48444-10-13 18:29 G 19415154.25 19415154.27 19415154.33 0.0088 0.0086

Jupiter 48446-07-24 15:07 G 19415802.96 19415803.13 19415803.31 0.0497 0.0255

Saturn 48457-05-22 06:58 G 19419757.58 19419757.79 19419758.00 0.0297 0.0005

Jupiter 48464-09-21 08:53 G 19422436.70 19422436.87 19422437.05 0.0530 0.0250

Jupiter 48470-07-27 01:12 G 19424571.38 19424571.55 19424571.72 0.0497 0.0263

Saturn 48470-08-09 16:34 G 19424585.03 19424585.19 19424585.34 0.0266 0.0181

Saturn 48471-03-26 17:02 G 19424814.00 19424814.21 19424814.42 0.0264 0.0036

Saturn 48471-11-10 16:05 G 19425043.10 19425043.17 19425043.25 0.0263 0.0246

Jupiter 48476-05-26 23:46 G 19426702.29 19426702.49 19426702.68 0.0528 0.0149

Uranus 48476-12-19 15:22 G 19426909.08 19426909.14 19426909.21 0.0134 0.0127

Uranus 48477-08-02 20:53 G 19427135.25 19427135.37 19427135.53 0.0134 0.0102

Uranus 48478-03-17 03:07 G 19427361.46 19427361.63 19427361.82 0.0134 0.0075

Uranus 48478-10-29 08:53 G 19427587.68 19427587.87 19427588.08 0.0134 0.0049

Uranus 48479-06-12 14:53 G 19427813.91 19427814.12 19427814.33 0.0134 0.0023

Uranus 48480-01-24 20:24 G 19428040.14 19428040.35 19428040.57 0.0134 0.0004

Uranus 48480-09-07 01:55 G 19428266.37 19428266.58 19428266.80 0.0134 0.0029

Uranus 48481-04-21 07:41 G 19428492.62 19428492.82 19428493.02 0.0134 0.0054

Uranus 48481-12-03 12:58 G 19428718.88 19428719.04 19428719.22 0.0134 0.0080

Jupiter 48482-04-01 03:36 G 19428837.44 19428837.65 19428837.85 0.0497 0.0057

Uranus 48482-07-17 18:29 G 19428945.14 19428945.27 19428945.41 0.0134 0.0105

Uranus 48483-02-28 23:46 G 19429171.45 19429171.49 19429171.55 0.0134 0.0130

Saturn 48486-04-16 09:07 G 19430313.81 19430313.88 19430313.96 0.0295 0.0273

Saturn 48486-12-02 10:34 G 19430543.73 19430543.94 19430544.15 0.0297 0.0029

Earth 48492-01-30 08:24 G 19432428.73 19432428.85 19432428.96 0.2641 0.1794

Moon 48492-01-30 12:29 G 19432428.91 19432429.02 19432429.14 0.2636 0.1858 *

Jupiter 48493-12-05 05:17 G 19433103.59 19433103.72 19433103.85 0.0498 0.0379

Moon 48500-01-28 00:58 G 19435348.41 19435348.54 19435348.68 0.2634 0.1486

Earth 48500-01-28 00:58 G 19435348.41 19435348.54 19435348.67 0.2641 0.1508 *

Saturn 48500-02-19 18:58 G 19435371.12 19435371.29 19435371.47 0.0266 0.0155

Jupiter 48500-05-31 01:26 G 19435471.49 19435471.56 19435471.65 0.0531 0.0484

Saturn 48500-10-06 19:26 G 19435600.10 19435600.31 19435600.52 0.0265 0.0061

Mars 48501-09-17 06:58 G 19435945.64 19435945.79 19435945.93 0.1755 0.0894

Jupiter 48506-04-04 13:26 G 19437605.98 19437606.06 19437606.13 0.0496 0.0459

Mars 48508-03-01 12:43 G 19438302.93 19438303.03 19438303.14 0.1785 0.1404

Pluto 48511-11-19 01:12 G 19439660.35 19439660.55 19439660.76 0.0081 0.0028

Jupiter 48512-02-03 18:14 G 19439737.06 19439737.26 19439737.46 0.0530 0.0093

Pluto 48512-07-01 11:31 G 19439885.84 19439885.98 19439886.17 0.0081 0.0054

Saturn 48515-10-28 10:05 G 19441099.81 19441099.92 19441100.04 0.0295 0.0246

Neptune 48516-06-02 00:29 G 19441317.49 19441317.52 19441317.60 0.0090 0.0087

Saturn 48516-06-14 11:17 G 19441329.77 19441329.97 19441330.18 0.0297 0.0056

Neptune 48517-01-13 13:41 G 19441542.98 19441543.07 19441543.21 0.0090 0.0077

Neptune 48517-08-27 03:22 G 19441768.50 19441768.64 19441768.80 0.0090 0.0066

Jupiter 48517-12-08 15:22 G 19441871.94 19441872.14 19441872.34 0.0497 0.0138

Neptune 48518-04-09 16:34 G 19441994.03 19441994.19 19441994.38 0.0090 0.0056

Neptune 48518-11-21 06:14 G 19442219.57 19442219.76 19442219.95 0.0090 0.0045

Neptune 48519-07-04 19:26 G 19442445.12 19442445.31 19442445.52 0.0090 0.0035

Neptune 48520-02-15 08:38 G 19442670.66 19442670.86 19442671.09 0.0090 0.0025

Uranus 48520-05-05 12:58 G 19442750.93 19442751.04 19442751.18 0.0144 0.0118

Neptune 48520-09-27 22:05 G 19442896.21 19442896.42 19442896.64 0.0090 0.0014

Uranus 48520-12-18 00:43 G 19442977.37 19442977.53 19442977.71 0.0144 0.0086

Neptune 48521-05-11 11:31 G 19443121.76 19443121.98 19443122.20 0.0090 0.0003

Uranus 48521-08-01 12:29 G 19443203.82 19443204.02 19443204.22 0.0144 0.0054

Neptune 48521-12-23 00:58 G 19443347.32 19443347.54 19443347.76 0.0090 0.0007

Uranus 48522-03-16 00:14 G 19443430.29 19443430.51 19443430.72 0.0144 0.0021

Neptune 48522-08-05 14:24 G 19443572.88 19443573.10 19443573.31 0.0090 0.0018

Uranus 48522-10-28 12:00 G 19443656.79 19443657.00 19443657.22 0.0144 0.0011

Neptune 48523-03-19 03:22 G 19443798.44 19443798.64 19443798.86 0.0090 0.0029

Uranus 48523-06-11 23:46 G 19443883.29 19443883.49 19443883.70 0.0144 0.0044

Jupiter 48523-10-09 10:19 G 19444002.77 19444002.93 19444003.10 0.0529 0.0298

Neptune 48523-10-30 16:48 G 19444024.01 19444024.20 19444024.41 0.0090 0.0039

Uranus 48524-01-24 11:17 G 19444109.80 19444109.97 19444110.17 0.0144 0.0077

Neptune 48524-06-12 06:00 G 19444249.59 19444249.75 19444249.95 0.0090 0.0050

Uranus 48524-09-06 23:17 G 19444336.34 19444336.47 19444336.62 0.0145 0.0108

Neptune 48525-01-23 19:26 G 19444475.16 19444475.31 19444475.49 0.0090 0.0060

Uranus 48525-04-21 11:02 G 19444562.93 19444562.96 19444563.03 0.0145 0.0141

Neptune 48525-09-06 09:07 G 19444700.75 19444700.88 19444701.02 0.0090 0.0070

Neptune 48526-04-19 21:50 G 19444926.34 19444926.41 19444926.53 0.0090 0.0081

Jupiter 48529-08-13 17:17 G 19446138.03 19446138.22 19446138.41 0.0497 0.0183

Saturn 48529-09-01 17:46 G 19446157.07 19446157.24 19446157.43 0.0266 0.0135

Saturn 48530-04-18 18:29 G 19446386.07 19446386.27 19446386.48 0.0264 0.0082

Saturn 48545-05-09 13:12 G 19451885.92 19451886.05 19451886.21 0.0295 0.0216

Saturn 48545-12-25 15:07 G 19452115.93 19452116.13 19452116.33 0.0298 0.0088

Jupiter 48547-10-12 11:17 G 19452771.82 19452771.97 19452772.13 0.0530 0.0329

Jupiter 48553-08-16 03:22 G 19454906.50 19454906.64 19454906.79 0.0496 0.0335

Saturn 48559-03-14 20:53 G 19456943.18 19456943.37 19456943.57 0.0266 0.0108

Jupiter 48559-06-17 02:10 G 19457037.39 19457037.59 19457037.79 0.0530 0.0070

Saturn 48559-10-29 21:22 G 19457172.20 19457172.39 19457172.59 0.0265 0.0108

Uranus 48561-04-03 07:26 G 19457693.70 19457693.81 19457693.95 0.0134 0.0110

Uranus 48561-11-15 13:26 G 19457919.90 19457920.06 19457920.24 0.0134 0.0085

Uranus 48562-06-29 19:26 G 19458146.11 19458146.31 19458146.51 0.0134 0.0058

Uranus 48563-02-11 00:58 G 19458372.33 19458372.54 19458372.76 0.0134 0.0033

Uranus 48563-09-25 06:43 G 19458598.56 19458598.78 19458599.00 0.0134 0.0007

Uranus 48564-05-08 12:29 G 19458824.80 19458825.02 19458825.23 0.0134 0.0019

Uranus 48564-12-20 17:46 G 19459051.04 19459051.24 19459051.45 0.0134 0.0045

Jupiter 48565-04-21 06:00 G 19459172.55 19459172.75 19459172.96 0.0496 0.0021

Uranus 48565-08-03 23:17 G 19459277.29 19459277.47 19459277.66 0.0134 0.0070

Uranus 48566-03-18 04:34 G 19459503.55 19459503.69 19459503.85 0.0134 0.0096

Uranus 48566-10-30 09:50 G 19459729.84 19459729.91 19459730.02 0.0134 0.0121

Mars 48567-07-15 15:22 G 19459987.97 19459988.14 19459988.31 0.1751 0.0410

Jupiter 48571-02-19 18:43 G 19461303.19 19461303.28 19461303.39 0.0529 0.0456

Saturn 48574-11-19 15:36 G 19462671.99 19462672.15 19462672.32 0.0295 0.0184

Saturn 48575-07-07 17:02 G 19462902.02 19462902.21 19462902.41 0.0297 0.0119

Jupiter 48576-12-25 07:26 G 19463438.65 19463438.81 19463438.97 0.0497 0.0307

Saturn 48588-09-23 20:10 G 19467729.14 19467729.34 19467729.54 0.0266 0.0086

Saturn 48589-05-10 20:38 G 19467958.18 19467958.36 19467958.55 0.0264 0.0130

Jupiter 48595-02-22 20:53 G 19470072.18 19470072.37 19470072.56 0.0529 0.0173

Neptune 48598-07-19 05:17 G 19471314.68 19471314.72 19471314.82 0.0088 0.0084

Neptune 48599-03-01 18:14 G 19471540.16 19471540.26 19471540.39 0.0088 0.0074

Neptune 48599-10-13 06:58 G 19471765.65 19471765.79 19471765.95 0.0088 0.0064

Neptune 48600-05-26 19:55 G 19471991.16 19471991.33 19471991.51 0.0088 0.0054

Jupiter 48600-12-28 17:31 G 19472207.05 19472207.23 19472207.42 0.0497 0.0211

Neptune 48601-01-07 08:24 G 19472216.68 19472216.85 19472217.06 0.0088 0.0045

Neptune 48601-08-20 21:07 G 19472442.19 19472442.38 19472442.60 0.0088 0.0035

Neptune 48602-04-03 10:05 G 19472667.71 19472667.92 19472668.14 0.0088 0.0025

Neptune 48602-11-14 22:48 G 19472893.24 19472893.45 19472893.68 0.0088 0.0015

Neptune 48603-06-28 11:46 G 19473118.77 19473118.99 19473119.21 0.0088 0.0005

Uranus 48604-01-04 18:14 G 19473309.18 19473309.26 19473309.35 0.0144 0.0131

Neptune 48604-02-09 00:29 G 19473344.30 19473344.52 19473344.74 0.0088 0.0005

Saturn 48604-06-01 20:10 G 19473458.16 19473458.34 19473458.52 0.0295 0.0151

Uranus 48604-08-18 05:17 G 19473535.58 19473535.72 19473535.89 0.0144 0.0100

Neptune 48604-09-21 12:58 G 19473569.83 19473570.04 19473570.26 0.0088 0.0015

Saturn 48605-01-17 21:36 G 19473688.23 19473688.40 19473688.59 0.0298 0.0154

Uranus 48605-04-01 17:02 G 19473762.03 19473762.21 19473762.41 0.0144 0.0068

Neptune 48605-05-05 01:26 G 19473795.36 19473795.56 19473795.78 0.0088 0.0025

Uranus 48605-11-14 05:02 G 19473988.50 19473988.71 19473988.92 0.0144 0.0036

Neptune 48605-12-16 14:10 G 19474020.90 19474021.09 19474021.31 0.0088 0.0035

Mars 48605-12-28 05:31 G 19474032.63 19474032.73 19474032.83 0.1776 0.1440

Uranus 48606-06-28 16:48 G 19474214.98 19474215.20 19474215.42 0.0144 0.0004

Neptune 48606-07-30 03:07 G 19474246.44 19474246.63 19474246.82 0.0088 0.0044

Jupiter 48606-10-29 12:00 G 19474337.82 19474338.00 19474338.19 0.0529 0.0222

Uranus 48607-02-10 04:19 G 19474441.47 19474441.68 19474441.90 0.0144 0.0029

Neptune 48607-03-12 15:36 G 19474471.99 19474472.15 19474472.33 0.0088 0.0054

Uranus 48607-09-24 16:05 G 19474667.98 19474668.17 19474668.38 0.0144 0.0062

Neptune 48607-10-24 04:05 G 19474697.53 19474697.67 19474697.84 0.0088 0.0064

Uranus 48608-05-08 03:50 G 19474894.51 19474894.66 19474894.84 0.0145 0.0095

Neptune 48608-06-05 16:34 G 19474923.09 19474923.19 19474923.33 0.0088 0.0074

Uranus 48608-12-20 15:50 G 19475121.07 19475121.16 19475121.28 0.0145 0.0127

Neptune 48609-01-17 05:31 G 19475148.68 19475148.73 19475148.81 0.0088 0.0083

Jupiter 48612-09-02 19:41 G 19476473.12 19476473.32 19476473.52 0.0497 0.0109

Saturn 48618-04-06 23:46 G 19478515.28 19478515.49 19478515.70 0.0266 0.0058

Saturn 48618-11-22 00:00 G 19478744.34 19478744.50 19478744.68 0.0265 0.0158

Moon 48621-07-31 18:43 G 19479727.12 19479727.28 19479727.44 0.2689 0.0322

Earth 48621-08-01 00:00 G 19479727.34 19479727.50 19479727.66 0.2691 0.0087 *

Jupiter 48624-05-08 22:05 G 19480739.32 19480739.42 19480739.52 0.0498 0.0429

Jupiter 48630-11-01 13:55 G 19483106.95 19483107.08 19483107.21 0.0530 0.0406

Mars 48633-05-13 00:00 G 19484030.32 19484030.50 19484030.67 0.1747 0.0061

Saturn 48633-12-12 23:31 G 19484244.29 19484244.48 19484244.68 0.0295 0.0117

Saturn 48634-07-31 01:12 G 19484474.39 19484474.55 19484474.71 0.0297 0.0187

Jupiter 48636-09-05 04:34 G 19485241.58 19485241.69 19485241.82 0.0496 0.0401

Jupiter 48642-07-07 06:14 G 19487372.55 19487372.76 19487372.96 0.0529 0.0019

Uranus 48644-12-02 17:31 G 19488252.14 19488252.23 19488252.33 0.0134 0.0120

Uranus 48645-07-16 23:02 G 19488478.32 19488478.46 19488478.63 0.0134 0.0094

Uranus 48646-02-28 04:48 G 19488704.53 19488704.70 19488704.90 0.0134 0.0069

Uranus 48646-10-12 10:48 G 19488930.75 19488930.95 19488931.16 0.0134 0.0042

Saturn 48647-03-02 21:36 G 19489072.35 19489072.40 19489072.47 0.0268 0.0256

Uranus 48647-05-26 16:34 G 19489156.98 19489157.19 19489157.41 0.0134 0.0016

Saturn 48647-10-17 23:46 G 19489301.28 19489301.49 19489301.70 0.0266 0.0034

Uranus 48648-01-07 22:05 G 19489383.21 19489383.42 19489383.64 0.0134 0.0010

Jupiter 48648-05-11 06:43 G 19489507.58 19489507.78 19489507.98 0.0497 0.0081

Saturn 48648-06-03 00:14 G 19489530.36 19489530.51 19489530.67 0.0264 0.0181

Uranus 48648-08-21 03:36 G 19489609.44 19489609.65 19489609.86 0.0134 0.0035

Uranus 48649-04-04 08:53 G 19489835.69 19489835.87 19489836.08 0.0134 0.0061

Uranus 48649-11-16 14:38 G 19490061.95 19490062.11 19490062.28 0.0134 0.0086

Uranus 48650-06-30 19:41 G 19490288.22 19490288.32 19490288.46 0.0134 0.0112

Jupiter 48654-03-11 20:38 G 19491638.23 19491638.36 19491638.51 0.0528 0.0380

Jupiter 48660-01-15 08:38 G 19493773.68 19493773.86 19493774.04 0.0498 0.0239

Saturn 48663-06-25 05:17 G 19495030.52 19495030.72 19495030.92 0.0296 0.0080

Saturn 48664-02-10 06:58 G 19495260.66 19495260.79 19495260.93 0.0298 0.0225

Pluto 48669-01-24 19:41 G 19497071.16 19497071.32 19497071.52 0.0063 0.0036

Pluto 48669-09-06 23:46 G 19497296.27 19497296.49 19497296.71 0.0063 0.0002

Pluto 48670-04-20 03:22 G 19497521.47 19497521.64 19497521.81 0.0063 0.0041

Mars 48671-10-25 12:29 G 19498074.86 19498075.02 19498075.17 0.1780 0.0886

Saturn 48676-09-12 01:55 G 19499858.48 19499858.58 19499858.71 0.0268 0.0225

Saturn 48677-04-29 04:05 G 19500087.46 19500087.67 19500087.88 0.0266 0.0004

Saturn 48677-12-14 04:19 G 19500316.56 19500316.68 19500316.82 0.0264 0.0211

Jupiter 48678-03-14 20:10 G 19500407.16 19500407.34 19500407.52 0.0530 0.0236

Neptune 48680-09-04 11:17 G 19501311.93 19501311.97 19501312.01 0.0090 0.0088

Neptune 48681-04-18 00:29 G 19501537.42 19501537.52 19501537.63 0.0090 0.0078

Neptune 48681-11-29 13:41 G 19501762.94 19501763.07 19501763.23 0.0090 0.0068

Neptune 48682-07-13 02:53 G 19501988.48 19501988.62 19501988.81 0.0090 0.0058

Neptune 48683-02-23 16:34 G 19502214.01 19502214.19 19502214.38 0.0090 0.0047

Neptune 48683-10-07 05:46 G 19502439.55 19502439.74 19502439.95 0.0090 0.0037

Jupiter 48684-01-17 18:58 G 19502542.12 19502542.29 19502542.46 0.0496 0.0277

Neptune 48684-05-19 19:12 G 19502665.10 19502665.30 19502665.52 0.0090 0.0026

Neptune 48684-12-31 08:38 G 19502890.65 19502890.86 19502891.08 0.0090 0.0016

Neptune 48685-08-13 22:05 G 19503116.20 19503116.42 19503116.64 0.0090 0.0006

Neptune 48686-03-27 11:17 G 19503341.75 19503341.97 19503342.19 0.0090 0.0005

Neptune 48686-11-08 00:29 G 19503567.31 19503567.52 19503567.74 0.0090 0.0015

Neptune 48687-06-21 13:55 G 19503792.87 19503793.08 19503793.30 0.0090 0.0026

Neptune 48688-02-02 03:22 G 19504018.44 19504018.64 19504018.84 0.0090 0.0036

Uranus 48688-04-17 10:19 G 19504093.81 19504093.93 19504094.07 0.0144 0.0114

Neptune 48688-09-14 16:19 G 19504244.01 19504244.18 19504244.38 0.0090 0.0047

Uranus 48688-11-29 21:50 G 19504320.25 19504320.41 19504320.60 0.0144 0.0083

Neptune 48689-04-28 05:46 G 19504469.58 19504469.74 19504469.92 0.0090 0.0057

Uranus 48689-07-14 09:36 G 19504546.70 19504546.90 19504547.11 0.0144 0.0050

Jupiter 48689-11-17 12:29 G 19504672.82 19504673.02 19504673.21 0.0529 0.0155

Neptune 48689-12-09 19:12 G 19504695.16 19504695.30 19504695.45 0.0090 0.0067

Uranus 48690-02-25 21:22 G 19504773.17 19504773.39 19504773.61 0.0144 0.0018

Neptune 48690-07-23 08:24 G 19504920.76 19504920.85 19504920.98 0.0090 0.0078

Uranus 48690-10-10 09:07 G 19504999.67 19504999.88 19505000.10 0.0144 0.0015

Neptune 48691-03-05 21:36 G 19505146.38 19505146.40 19505146.47 0.0090 0.0088

Uranus 48691-05-24 20:53 G 19505226.17 19505226.37 19505226.58 0.0144 0.0048

Uranus 48692-01-06 08:24 G 19505452.69 19505452.85 19505453.05 0.0145 0.0081

Uranus 48692-08-19 20:24 G 19505679.23 19505679.35 19505679.50 0.0145 0.0113

Saturn 48693-01-04 11:02 G 19505816.76 19505816.96 19505817.17 0.0295 0.0040

Uranus 48693-04-03 08:53 G 19505905.87 19505905.87 19505905.87 0.0145 0.0145

Saturn 48693-08-22 12:43 G 19506046.94 19506047.03 19506047.13 0.0298 0.0265

Jupiter 48695-09-22 19:55 G 19506808.12 19506808.33 19506808.53 0.0497 0.0049

Mars 48699-03-10 08:53 G 19508072.71 19508072.87 19508073.04 0.1743 0.0515

Saturn 48706-03-26 03:07 G 19510644.50 19510644.63 19510644.78 0.0268 0.0200

Saturn 48706-11-10 05:02 G 19510873.50 19510873.71 19510873.92 0.0266 0.0021

Jupiter 48707-05-29 21:07 G 19511074.25 19511074.38 19511074.52 0.0498 0.0371

Saturn 48707-06-27 05:17 G 19511102.63 19511102.72 19511102.82 0.0264 0.0235

Jupiter 48713-11-21 14:24 G 19513442.02 19513442.10 19513442.19 0.0530 0.0475

Jupiter 48719-09-26 04:34 G 19515576.62 19515576.69 19515576.77 0.0496 0.0461

Saturn 48722-07-18 17:46 G 19516603.03 19516603.24 19516603.45 0.0296 0.0005

Jupiter 48725-07-27 05:02 G 19517707.51 19517707.71 19517707.91 0.0529 0.0078

Uranus 48728-08-03 02:24 G 19518810.57 19518810.60 19518810.67 0.0135 0.0131

Uranus 48729-03-17 08:38 G 19519036.73 19519036.86 19519037.01 0.0134 0.0104

Uranus 48729-10-29 14:38 G 19519262.94 19519263.11 19519263.29 0.0134 0.0078

Uranus 48730-06-12 20:24 G 19519489.16 19519489.35 19519489.56 0.0134 0.0053

Uranus 48731-01-25 02:10 G 19519715.38 19519715.59 19519715.81 0.0134 0.0027

Jupiter 48731-06-01 07:12 G 19519842.61 19519842.80 19519843.00 0.0496 0.0144

Uranus 48731-09-08 07:41 G 19519941.61 19519941.82 19519942.04 0.0134 0.0003

Uranus 48732-04-21 13:26 G 19520167.85 19520168.06 19520168.28 0.0134 0.0025

Uranus 48732-12-03 18:58 G 19520394.09 19520394.29 19520394.50 0.0134 0.0051

Uranus 48733-07-18 00:14 G 19520620.35 19520620.51 19520620.70 0.0134 0.0077

Uranus 48734-03-01 05:46 G 19520846.61 19520846.74 19520846.89 0.0134 0.0102

Uranus 48734-10-13 11:31 G 19521072.92 19521072.98 19521073.04 0.0134 0.0127

Moon 48735-02-02 06:14 G 19521184.64 19521184.76 19521184.87 0.2644 0.1766

Earth 48735-02-02 11:02 G 19521184.85 19521184.96 19521185.07 0.2640 0.1907 *

Saturn 48735-10-06 08:24 G 19521430.69 19521430.85 19521431.02 0.0268 0.0167

Saturn 48736-05-22 10:05 G 19521659.72 19521659.92 19521660.14 0.0266 0.0054

Jupiter 48737-03-31 17:46 G 19521973.09 19521973.24 19521973.41 0.0529 0.0327

Mars 48737-08-22 19:55 G 19522117.15 19522117.33 19522117.50 0.1785 0.0346

Moon 48743-01-31 02:10 G 19524104.48 19524104.59 19524104.70 0.2647 0.1759

Earth 48743-01-31 03:36 G 19524104.52 19524104.65 19524104.79 0.2640 0.1387 *

Jupiter 48743-02-04 09:22 G 19524108.70 19524108.89 19524109.08 0.0497 0.0175

Saturn 48751-06-13 01:12 G 19527159.46 19527159.55 19527159.67 0.0293 0.0252

Saturn 48752-01-29 01:26 G 19527389.35 19527389.56 19527389.77 0.0296 0.0044

Pluto 48759-03-13 06:43 G 19529989.72 19529989.78 19529989.88 0.0081 0.0076

Pluto 48759-10-24 17:46 G 19530215.03 19530215.24 19530215.47 0.0081 0.0007

Jupiter 48761-04-03 21:36 G 19530742.23 19530742.40 19530742.56 0.0530 0.0308

Neptune 48762-10-22 16:05 G 19531309.13 19531309.17 19531309.24 0.0088 0.0085

Neptune 48763-06-05 04:34 G 19531534.60 19531534.69 19531534.82 0.0088 0.0076

Neptune 48764-01-16 17:17 G 19531760.10 19531760.22 19531760.39 0.0088 0.0066

Neptune 48764-08-29 06:14 G 19531985.60 19531985.76 19531985.94 0.0088 0.0056

Mars 48765-01-05 18:00 G 19532115.10 19532115.25 19532115.39 0.1739 0.0952

Neptune 48765-04-11 18:43 G 19532211.11 19532211.28 19532211.49 0.0088 0.0047

Saturn 48765-04-17 10:48 G 19532216.77 19532216.95 19532217.13 0.0268 0.0139

Neptune 48765-11-23 07:41 G 19532436.63 19532436.82 19532437.03 0.0088 0.0037

Saturn 48765-12-02 12:29 G 19532445.82 19532446.02 19532446.22 0.0266 0.0081

Neptune 48766-07-06 20:24 G 19532662.15 19532662.35 19532662.57 0.0088 0.0027

Jupiter 48767-02-06 16:34 G 19532877.04 19532877.19 19532877.34 0.0496 0.0327

Neptune 48767-02-17 09:22 G 19532887.67 19532887.89 19532888.11 0.0088 0.0017

Neptune 48767-09-30 22:05 G 19533113.20 19533113.42 19533113.64 0.0088 0.0007

Neptune 48768-05-13 10:48 G 19533338.73 19533338.95 19533339.17 0.0088 0.0003

Neptune 48768-12-24 23:31 G 19533564.27 19533564.48 19533564.70 0.0088 0.0013

Neptune 48769-08-07 12:00 G 19533789.80 19533790.00 19533790.23 0.0088 0.0023

Neptune 48770-03-21 00:58 G 19534015.34 19534015.54 19534015.75 0.0088 0.0032

Neptune 48770-11-01 13:26 G 19534240.88 19534241.06 19534241.27 0.0088 0.0042

Neptune 48771-06-15 01:55 G 19534466.42 19534466.58 19534466.78 0.0088 0.0052

Uranus 48771-12-17 16:48 G 19534652.11 19534652.20 19534652.31 0.0144 0.0127

Neptune 48772-01-26 15:07 G 19534691.98 19534692.13 19534692.29 0.0088 0.0061

Uranus 48772-07-31 03:50 G 19534878.52 19534878.66 19534878.84 0.0144 0.0096

Neptune 48772-09-08 03:22 G 19534917.53 19534917.64 19534917.79 0.0088 0.0071

Jupiter 48772-12-07 12:00 G 19535007.80 19535008.00 19535008.20 0.0529 0.0089

Uranus 48773-03-14 15:50 G 19535104.96 19535105.16 19535105.36 0.0144 0.0064

Neptune 48773-04-21 15:50 G 19535143.10 19535143.16 19535143.28 0.0088 0.0081

Uranus 48773-10-27 03:36 G 19535331.44 19535331.65 19535331.86 0.0144 0.0031

Uranus 48774-06-10 15:22 G 19535557.92 19535558.14 19535558.35 0.0144 0.0003

Uranus 48775-01-23 02:53 G 19535784.41 19535784.62 19535784.84 0.0144 0.0034

Uranus 48775-09-06 14:38 G 19536010.92 19536011.11 19536011.31 0.0144 0.0067

Uranus 48776-04-20 02:38 G 19536237.45 19536237.61 19536237.77 0.0144 0.0099

Uranus 48776-12-02 14:24 G 19536464.03 19536464.10 19536464.21 0.0145 0.0132

Jupiter 48778-10-12 18:00 G 19537143.05 19537143.25 19537143.46 0.0497 0.0014

Saturn 48780-12-23 09:07 G 19537945.74 19537945.88 19537946.03 0.0294 0.0212

Saturn 48781-08-10 09:22 G 19538175.70 19538175.89 19538176.10 0.0296 0.0087

Jupiter 48784-08-12 02:24 G 19539273.53 19539273.60 19539273.68 0.0528 0.0483

Jupiter 48790-06-17 20:24 G 19541409.20 19541409.35 19541409.51 0.0498 0.0312

Saturn 48794-10-28 17:02 G 19543003.01 19543003.21 19543003.41 0.0267 0.0103

Saturn 48795-06-14 18:29 G 19543232.08 19543232.27 19543232.46 0.0266 0.0115

Jupiter 48796-12-10 10:05 G 19543776.88 19543776.92 19543776.96 0.0531 0.0519

Mars 48803-06-20 02:24 G 19546159.43 19546159.60 19546159.78 0.1789 0.0236

Jupiter 48808-08-15 01:26 G 19548042.37 19548042.56 19548042.76 0.0530 0.0128

Saturn 48810-07-05 18:29 G 19548732.10 19548732.27 19548732.45 0.0294 0.0163

Saturn 48811-02-20 18:58 G 19548962.10 19548962.29 19548962.48 0.0296 0.0136

Uranus 48812-11-14 17:46 G 19549595.15 19549595.24 19549595.37 0.0134 0.0115

Uranus 48813-06-28 23:46 G 19549821.34 19549821.49 19549821.66 0.0134 0.0089

Uranus 48814-02-10 05:31 G 19550047.55 19550047.73 19550047.93 0.0134 0.0063

Jupiter 48814-06-20 04:05 G 19550177.48 19550177.67 19550177.86 0.0496 0.0192

Uranus 48814-09-24 11:31 G 19550273.77 19550273.98 19550274.19 0.0134 0.0037

Uranus 48815-05-08 17:17 G 19550500.01 19550500.22 19550500.44 0.0134 0.0011

Uranus 48815-12-20 23:02 G 19550726.24 19550726.46 19550726.67 0.0134 0.0015

Uranus 48816-08-03 04:19 G 19550952.48 19550952.68 19550952.90 0.0134 0.0041

Uranus 48817-03-17 09:50 G 19551178.73 19551178.91 19551179.11 0.0134 0.0067

Uranus 48817-10-29 15:22 G 19551405.00 19551405.14 19551405.31 0.0134 0.0092

Uranus 48818-06-12 20:53 G 19551631.29 19551631.37 19551631.49 0.0134 0.0118

Jupiter 48820-04-19 17:46 G 19552308.07 19552308.24 19552308.42 0.0529 0.0260

Saturn 48824-05-09 20:24 G 19553789.15 19553789.35 19553789.56 0.0267 0.0073

Saturn 48824-12-24 21:50 G 19554018.23 19554018.41 19554018.59 0.0265 0.0145

Jupiter 48826-02-23 05:17 G 19554443.52 19554443.72 19554443.91 0.0497 0.0130

Mars 48830-11-03 02:53 G 19556157.52 19556157.62 19556157.72 0.1736 0.1397

Jupiter 48837-10-29 06:00 G 19558709.67 19558709.75 19558709.84 0.0498 0.0453

Saturn 48840-01-16 02:53 G 19559518.43 19559518.62 19559518.82 0.0295 0.0121

Saturn 48840-09-02 03:36 G 19559748.49 19559748.65 19559748.82 0.0297 0.0180

Jupiter 48844-04-22 17:31 G 19561077.08 19561077.23 19561077.38 0.0530 0.0356

Neptune 48845-07-21 10:19 G 19561531.85 19561531.93 19561532.05 0.0090 0.0080

Neptune 48846-03-03 23:46 G 19561757.37 19561757.49 19561757.64 0.0090 0.0070

Neptune 48846-10-15 12:58 G 19561982.90 19561983.04 19561983.23 0.0090 0.0060

Neptune 48847-05-29 02:53 G 19562208.44 19562208.62 19562208.81 0.0090 0.0049

Neptune 48848-01-09 16:05 G 19562433.98 19562434.17 19562434.38 0.0090 0.0039

Neptune 48848-08-22 05:17 G 19562659.53 19562659.72 19562659.94 0.0090 0.0029

Neptune 48849-04-04 18:43 G 19562885.07 19562885.28 19562885.50 0.0090 0.0018

Neptune 48849-11-16 08:10 G 19563110.62 19563110.84 19563111.06 0.0090 0.0008

Jupiter 48850-02-25 14:24 G 19563211.97 19563212.10 19563212.23 0.0496 0.0378

Neptune 48850-06-29 21:36 G 19563336.18 19563336.40 19563336.62 0.0090 0.0003

Neptune 48851-02-10 10:48 G 19563561.74 19563561.95 19563562.17 0.0090 0.0013

Neptune 48851-09-24 00:14 G 19563787.30 19563787.51 19563787.72 0.0090 0.0023

Neptune 48852-05-06 13:12 G 19564012.86 19564013.05 19564013.27 0.0090 0.0034

Neptune 48852-12-18 02:24 G 19564238.43 19564238.60 19564238.81 0.0090 0.0044

Saturn 48853-04-05 00:43 G 19564346.48 19564346.53 19564346.59 0.0269 0.0259

Neptune 48853-07-31 16:05 G 19564464.00 19564464.17 19564464.35 0.0090 0.0054

Saturn 48853-11-20 03:22 G 19564575.43 19564575.64 19564575.86 0.0267 0.0037

Neptune 48854-03-14 05:17 G 19564689.58 19564689.72 19564689.88 0.0090 0.0064

Saturn 48854-07-07 04:34 G 19564804.54 19564804.69 19564804.85 0.0265 0.0181

Neptune 48854-10-25 18:14 G 19564915.16 19564915.26 19564915.40 0.0090 0.0075

Neptune 48855-06-08 07:41 G 19565140.77 19565140.82 19565140.91 0.0090 0.0085

Uranus 48855-08-17 00:00 G 19565210.46 19565210.50 19565210.55 0.0144 0.0140

Jupiter 48855-12-27 05:46 G 19565342.54 19565342.74 19565342.94 0.0529 0.0051

Uranus 48856-03-30 11:02 G 19565436.83 19565436.96 19565437.12 0.0144 0.0109

Uranus 48856-11-11 22:48 G 19565663.28 19565663.45 19565663.65 0.0144 0.0077

Uranus 48857-06-26 10:19 G 19565889.74 19565889.93 19565890.15 0.0144 0.0046

Uranus 48858-02-07 22:19 G 19566116.21 19566116.43 19566116.65 0.0144 0.0012

Uranus 48858-09-22 10:05 G 19566342.70 19566342.92 19566343.14 0.0144 0.0021

Uranus 48859-05-06 21:50 G 19566569.21 19566569.41 19566569.62 0.0144 0.0053

Uranus 48859-12-19 09:36 G 19566795.74 19566795.90 19566796.09 0.0144 0.0087

Uranus 48860-08-01 21:36 G 19567022.29 19567022.40 19567022.54 0.0145 0.0119

Jupiter 48861-10-31 16:19 G 19567477.98 19567478.18 19567478.38 0.0497 0.0061

Mars 48862-11-02 07:12 G 19567844.74 19567844.80 19567844.86 0.1748 0.1629

Earth 48864-08-01 23:31 G 19568483.32 19568483.48 19568483.64 0.2691 0.0270

Moon 48864-08-02 03:36 G 19568483.50 19568483.65 19568483.80 0.2696 0.0084 *

Jupiter 48867-08-31 21:07 G 19569608.28 19569608.38 19569608.49 0.0528 0.0441

Mars 48869-04-16 08:53 G 19570201.72 19570201.87 19570202.03 0.1793 0.0828

Saturn 48869-07-28 13:55 G 19570304.88 19570305.08 19570305.29 0.0294 0.0068

Saturn 48870-03-15 14:53 G 19570534.99 19570535.12 19570535.25 0.0297 0.0234

Jupiter 48873-07-06 16:05 G 19571744.00 19571744.17 19571744.34 0.0497 0.0268

Saturn 48882-10-16 05:31 G 19575132.62 19575132.73 19575132.84 0.0269 0.0227

Saturn 48883-06-02 07:55 G 19575361.62 19575361.83 19575362.04 0.0267 0.0005

Saturn 48884-01-17 08:38 G 19575590.75 19575590.86 19575591.00 0.0265 0.0212

Jupiter 48891-09-03 23:02 G 19578377.27 19578377.46 19578377.65 0.0529 0.0183

Uranus 48896-07-15 03:36 G 19580153.59 19580153.65 19580153.75 0.0135 0.0126

Uranus 48897-02-26 09:36 G 19580379.77 19580379.90 19580380.06 0.0134 0.0100

Jupiter 48897-07-08 23:46 G 19580512.32 19580512.49 19580512.68 0.0496 0.0236

Uranus 48897-10-10 15:36 G 19580605.98 19580606.15 19580606.34 0.0134 0.0074

Uranus 48898-05-24 21:36 G 19580832.20 19580832.40 19580832.61 0.0134 0.0047

Uranus 48899-01-06 03:22 G 19581058.43 19581058.64 19581058.86 0.0134 0.0022

Saturn 48899-02-07 22:48 G 19581091.24 19581091.45 19581091.66 0.0295 0.0025

Uranus 48899-08-20 09:07 G 19581284.66 19581284.88 19581285.10 0.0134 0.0005

Saturn 48899-09-26 00:00 G 19581321.44 19581321.50 19581321.58 0.0298 0.0279

Uranus 48900-04-03 14:38 G 19581510.91 19581511.11 19581511.33 0.0134 0.0031

Uranus 48900-11-15 20:10 G 19581737.16 19581737.34 19581737.55 0.0134 0.0057

Uranus 48901-06-30 01:41 G 19581963.42 19581963.57 19581963.76 0.0134 0.0083

Uranus 48902-02-11 07:26 G 19582189.69 19582189.81 19582189.95 0.0134 0.0108

Uranus 48902-09-25 13:12 G 19582416.03 19582416.05 19582416.06 0.0134 0.0133

Jupiter 48903-05-10 13:12 G 19582642.87 19582643.05 19582643.24 0.0528 0.0213

Jupiter 48909-03-15 02:10 G 19584778.38 19584778.59 19584778.79 0.0497 0.0083

Saturn 48912-04-28 12:43 G 19585918.89 19585919.03 19585919.19 0.0268 0.0189

Saturn 48912-12-13 15:22 G 19586147.93 19586148.14 19586148.35 0.0266 0.0033

Saturn 48913-07-30 16:05 G 19586377.10 19586377.17 19586377.24 0.0265 0.0248

Pluto 48916-05-19 07:26 G 19587400.70 19587400.81 19587400.97 0.0063 0.0050

Pluto 48916-12-30 11:31 G 19587625.77 19587625.98 19587626.20 0.0063 0.0012

Pluto 48917-08-12 15:07 G 19587850.94 19587851.13 19587851.34 0.0063 0.0027

Jupiter 48920-11-18 03:36 G 19589044.53 19589044.65 19589044.77 0.0498 0.0402

Neptune 48927-01-25 02:10 G 19591303.58 19591303.59 19591303.65 0.0088 0.0087

Jupiter 48927-05-13 11:46 G 19591411.85 19591411.99 19591412.12 0.0530 0.0394

Neptune 48927-09-07 14:53 G 19591529.03 19591529.12 19591529.24 0.0088 0.0077

Saturn 48928-01-04 10:34 G 19591647.86 19591647.94 19591648.04 0.0293 0.0265

Neptune 48928-04-20 03:22 G 19591754.52 19591754.64 19591754.80 0.0088 0.0068

Saturn 48928-08-21 10:19 G 19591877.72 19591877.93 19591878.14 0.0295 0.0030

Mars 48928-08-30 16:05 G 19591887.04 19591887.17 19591887.29 0.1744 0.1166

Neptune 48928-12-01 16:19 G 19591980.03 19591980.18 19591980.36 0.0088 0.0058

Neptune 48929-07-15 04:48 G 19592205.54 19592205.70 19592205.91 0.0088 0.0049

Neptune 48930-02-25 17:46 G 19592431.05 19592431.24 19592431.45 0.0088 0.0039

Neptune 48930-10-09 06:29 G 19592656.57 19592656.77 19592656.98 0.0088 0.0029

Neptune 48931-05-22 18:58 G 19592882.09 19592882.29 19592882.52 0.0088 0.0020

Neptune 48932-01-03 07:55 G 19593107.62 19593107.83 19593108.06 0.0088 0.0010

Neptune 48932-08-15 20:53 G 19593333.15 19593333.37 19593333.59 0.0088 0.0001

Jupiter 48933-03-17 08:38 G 19593546.76 19593546.86 19593546.98 0.0496 0.0416

Neptune 48933-03-29 09:22 G 19593558.68 19593558.89 19593559.11 0.0088 0.0010

Neptune 48933-11-09 22:05 G 19593784.21 19593784.42 19593784.64 0.0088 0.0020

Neptune 48934-06-23 10:34 G 19594009.75 19594009.94 19594010.16 0.0088 0.0030

Neptune 48935-02-03 23:31 G 19594235.29 19594235.48 19594235.68 0.0088 0.0039

Mars 48935-02-12 15:50 G 19594244.05 19594244.16 19594244.26 0.1797 0.1413

Neptune 48935-09-17 12:00 G 19594460.83 19594461.00 19594461.20 0.0088 0.0049

Neptune 48936-04-30 00:58 G 19594686.38 19594686.54 19594686.71 0.0088 0.0058

Neptune 48936-12-11 13:26 G 19594911.94 19594912.06 19594912.22 0.0088 0.0068

Neptune 48937-07-25 01:55 G 19595137.51 19595137.58 19595137.71 0.0088 0.0078

Neptune 48938-03-07 14:53 G 19595363.11 19595363.12 19595363.16 0.0088 0.0087

Jupiter 48939-01-16 03:50 G 19595677.46 19595677.66 19595677.87 0.0529 0.0010

Uranus 48939-11-29 19:26 G 19595995.20 19595995.31 19595995.43 0.0144 0.0121

Uranus 48940-07-13 06:58 G 19596221.62 19596221.79 19596221.96 0.0144 0.0089

Uranus 48941-02-24 18:29 G 19596448.08 19596448.27 19596448.48 0.0144 0.0057

Uranus 48941-10-09 06:29 G 19596674.55 19596674.77 19596674.98 0.0144 0.0025

Saturn 48941-11-08 18:29 G 19596705.11 19596705.27 19596705.45 0.0268 0.0155

Uranus 48942-05-23 18:14 G 19596901.04 19596901.26 19596901.48 0.0144 0.0008

Saturn 48942-06-25 20:24 G 19596934.15 19596934.35 19596934.56 0.0266 0.0066

Uranus 48943-01-05 05:46 G 19597127.54 19597127.74 19597127.96 0.0144 0.0042

Uranus 48943-08-19 17:46 G 19597354.06 19597354.24 19597354.43 0.0144 0.0074

Uranus 48944-04-02 05:31 G 19597580.60 19597580.73 19597580.89 0.0144 0.0107

Uranus 48944-11-14 18:00 G 19597807.20 19597807.25 19597807.31 0.0145 0.0139

Jupiter 48944-11-20 10:05 G 19597812.72 19597812.92 19597813.12 0.0497 0.0096

Jupiter 48950-09-20 18:43 G 19599943.15 19599943.28 19599943.42 0.0528 0.0383

Jupiter 48956-07-26 10:48 G 19602078.77 19602078.95 19602079.14 0.0498 0.0227

Saturn 48957-07-16 18:43 G 19602434.16 19602434.28 19602434.42 0.0294 0.0225

Saturn 48958-03-03 18:58 G 19602664.09 19602664.29 19602664.49 0.0296 0.0073

Saturn 48971-05-22 01:55 G 19607491.39 19607491.58 19607491.78 0.0268 0.0116

Saturn 48972-01-06 03:50 G 19607720.46 19607720.66 19607720.86 0.0266 0.0104

Jupiter 48974-09-23 15:50 G 19608711.97 19608712.16 19608712.34 0.0529 0.0216

Earth 48978-02-03 13:26 G 19609940.96 19609941.06 19609941.16 0.2640 0.2002

Moon 48978-02-03 18:58 G 19609941.22 19609941.29 19609941.36 0.2639 0.2371

Jupiter 48980-07-28 20:38 G 19610847.20 19610847.36 19610847.53 0.0496 0.0283

Uranus 48980-10-27 20:10 G 19610938.23 19610938.34 19610938.48 0.0134 0.0110

Uranus 48981-06-11 02:10 G 19611164.43 19611164.59 19611164.77 0.0134 0.0084

Uranus 48982-01-23 08:10 G 19611390.65 19611390.84 19611391.04 0.0134 0.0057

Uranus 48982-09-06 13:55 G 19611616.87 19611617.08 19611617.30 0.0134 0.0031

Uranus 48983-04-20 19:55 G 19611843.11 19611843.33 19611843.54 0.0134 0.0005

Uranus 48983-12-03 01:26 G 19612069.35 19612069.56 19612069.78 0.0134 0.0021

Uranus 48984-07-16 06:58 G 19612295.59 19612295.79 19612296.00 0.0134 0.0047

Uranus 48985-02-27 12:29 G 19612521.85 19612522.02 19612522.21 0.0134 0.0073

Uranus 48985-10-11 17:46 G 19612748.11 19612748.24 19612748.41 0.0134 0.0099

Earth 48986-02-01 06:14 G 19612860.62 19612860.76 19612860.90 0.2640 0.1282

Moon 48986-02-01 09:22 G 19612860.73 19612860.89 19612861.05 0.2635 0.0640 *

Uranus 48986-05-25 23:31 G 19612974.42 19612974.48 19612974.58 0.0134 0.0124

Jupiter 48986-05-29 06:58 G 19612977.60 19612977.79 19612977.99 0.0529 0.0175

Saturn 48987-01-27 06:29 G 19613220.60 19613220.77 19613220.94 0.0294 0.0171

Saturn 48987-09-14 06:43 G 19613450.59 19613450.78 19613450.97 0.0296 0.0128

Jupiter 48992-04-02 20:10 G 19615113.13 19615113.34 19615113.54 0.0497 0.0044

Mars 48994-06-28 00:43 G 19615929.37 19615929.53 19615929.69 0.1740 0.0701

Saturn 49000-12-02 07:55 G 19618277.64 19618277.83 19618278.04 0.0267 0.0083

50TH MILLENNIUM CE

This is a list of transits of Venus in the 50th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Saturn 49001-07-19 09:22 G 19618506.71 19618506.89 19618507.07 0.0266 0.0137

Jupiter 49003-12-08 21:07 G 19619379.24 19619379.38 19619379.52 0.0498 0.0365

Pluto 49007-02-16 04:05 G 19620544.46 19620544.67 19620544.89 0.0081 0.0020

Pluto 49007-09-29 14:38 G 19620769.98 19620770.11 19620770.27 0.0081 0.0061

Neptune 49009-10-24 19:41 G 19621526.24 19621526.32 19621526.42 0.0090 0.0082

Jupiter 49010-06-02 09:36 G 19621746.79 19621746.90 19621747.00 0.0530 0.0451

Neptune 49010-06-07 09:07 G 19621751.76 19621751.88 19621752.02 0.0090 0.0072

Neptune 49011-01-18 22:34 G 19621977.29 19621977.44 19621977.61 0.0090 0.0062

Neptune 49011-09-01 11:46 G 19622202.83 19622202.99 19622203.19 0.0090 0.0052

Neptune 49012-04-14 01:12 G 19622428.37 19622428.55 19622428.76 0.0090 0.0042

Neptune 49012-11-25 14:53 G 19622653.92 19622654.12 19622654.33 0.0090 0.0031

Neptune 49013-07-09 04:19 G 19622879.47 19622879.68 19622879.90 0.0090 0.0021

Neptune 49014-02-19 17:46 G 19623105.02 19623105.24 19623105.46 0.0090 0.0010

Neptune 49014-10-03 07:12 G 19623330.58 19623330.80 19623331.02 0.0090 0.0001

Neptune 49015-05-16 20:24 G 19623556.14 19623556.35 19623556.57 0.0090 0.0010

Neptune 49015-12-28 09:36 G 19623781.70 19623781.90 19623782.12 0.0090 0.0021

Jupiter 49016-04-06 03:50 G 19623881.59 19623881.66 19623881.74 0.0496 0.0457

Saturn 49016-08-09 13:26 G 19624006.88 19624007.06 19624007.26 0.0295 0.0132

Neptune 49016-08-09 23:02 G 19624007.26 19624007.46 19624007.67 0.0090 0.0031 *

Neptune 49017-03-23 12:14 G 19624232.83 19624233.01 19624233.22 0.0090 0.0041

Saturn 49017-03-27 14:10 G 19624236.92 19624237.09 19624237.27 0.0297 0.0169

Neptune 49017-11-04 01:26 G 19624458.39 19624458.56 19624458.75 0.0090 0.0051

Neptune 49018-06-17 14:53 G 19624683.97 19624684.12 19624684.29 0.0090 0.0061

Neptune 49019-01-29 04:19 G 19624909.56 19624909.68 19624909.82 0.0090 0.0071

Neptune 49019-09-11 17:46 G 19625135.15 19625135.24 19625135.33 0.0090 0.0081

Jupiter 49022-02-04 23:31 G 19626012.28 19626012.48 19626012.68 0.0529 0.0056

Uranus 49023-07-31 02:10 G 19626553.53 19626553.59 19626553.68 0.0144 0.0134

Uranus 49024-03-13 13:55 G 19626779.93 19626780.08 19626780.24 0.0144 0.0102

Uranus 49024-10-26 01:41 G 19627006.39 19627006.57 19627006.77 0.0144 0.0070

Uranus 49025-06-09 13:26 G 19627232.85 19627233.06 19627233.28 0.0144 0.0038

Uranus 49026-01-22 01:26 G 19627459.34 19627459.56 19627459.77 0.0144 0.0006

Uranus 49026-09-05 12:58 G 19627685.84 19627686.04 19627686.26 0.0144 0.0029

Uranus 49027-04-20 01:12 G 19627912.35 19627912.55 19627912.75 0.0144 0.0061

Uranus 49027-12-02 13:12 G 19628138.89 19628139.05 19628139.22 0.0145 0.0094

Jupiter 49027-12-11 06:14 G 19628147.57 19628147.76 19628147.96 0.0497 0.0142

Uranus 49028-07-16 00:58 G 19628365.46 19628365.54 19628365.66 0.0145 0.0127

Saturn 49029-10-28 12:00 G 19628834.99 19628835.00 19628835.02 0.0269 0.0268

Saturn 49030-06-14 14:38 G 19629063.90 19629064.11 19629064.32 0.0267 0.0045

Saturn 49031-01-29 15:50 G 19629293.01 19629293.16 19629293.33 0.0265 0.0173

Mars 49032-12-10 09:22 G 19629973.80 19629973.89 19629973.98 0.1788 0.1512

Jupiter 49033-10-10 12:00 G 19630277.85 19630278.00 19630278.16 0.0528 0.0345

Jupiter 49039-08-16 07:41 G 19632413.64 19632413.82 19632414.02 0.0498 0.0177

Saturn 49046-02-20 00:14 G 19634793.31 19634793.51 19634793.72 0.0294 0.0081

Saturn 49046-10-08 01:12 G 19635023.41 19635023.55 19635023.69 0.0297 0.0221

Jupiter 49057-10-13 14:24 G 19639046.93 19639047.10 19639047.28 0.0530 0.0279

Saturn 49059-05-10 18:29 G 19639621.18 19639621.27 19639621.38 0.0269 0.0234

Saturn 49059-12-25 21:07 G 19639850.16 19639850.38 19639850.59 0.0267 0.0012

Mars 49060-04-25 09:36 G 19639971.73 19639971.90 19639972.08 0.1736 0.0257

Saturn 49060-08-10 21:36 G 19640079.28 19640079.40 19640079.54 0.0265 0.0205

Jupiter 49063-08-18 14:38 G 19641181.95 19641182.11 19641182.26 0.0496 0.0320

Uranus 49064-06-28 07:55 G 19641496.73 19641496.83 19641496.93 0.0134 0.0118

Uranus 49065-02-09 13:26 G 19641722.92 19641723.06 19641723.23 0.0134 0.0092

Uranus 49065-09-23 19:26 G 19641949.13 19641949.31 19641949.51 0.0134 0.0066

Uranus 49066-05-08 01:26 G 19642175.36 19642175.56 19642175.77 0.0134 0.0040

Uranus 49066-12-20 07:12 G 19642401.59 19642401.80 19642402.02 0.0134 0.0014

Uranus 49067-08-03 12:58 G 19642627.82 19642628.04 19642628.26 0.0134 0.0012

Uranus 49068-03-16 18:29 G 19642854.06 19642854.27 19642854.48 0.0134 0.0038

Uranus 49068-10-29 00:00 G 19643080.32 19643080.50 19643080.70 0.0134 0.0064

Uranus 49069-06-12 05:31 G 19643306.58 19643306.73 19643306.90 0.0134 0.0090

Jupiter 49069-06-18 06:00 G 19643312.55 19643312.75 19643312.95 0.0529 0.0111

Uranus 49070-01-24 11:17 G 19643532.86 19643532.97 19643533.08 0.0134 0.0115

Jupiter 49075-04-23 15:50 G 19645447.95 19645448.16 19645448.36 0.0497 0.0010

Saturn 49075-09-02 06:14 G 19645579.55 19645579.76 19645579.97 0.0295 0.0044

Saturn 49076-04-19 07:26 G 19645809.71 19645809.81 19645809.91 0.0297 0.0260

Jupiter 49081-02-20 20:38 G 19647578.30 19647578.36 19647578.42 0.0527 0.0499

Jupiter 49086-12-27 17:31 G 19649714.08 19649714.23 19649714.39 0.0498 0.0317

Saturn 49088-11-20 00:14 G 19650407.37 19650407.51 19650407.66 0.0268 0.0198

Saturn 49089-07-07 02:24 G 19650636.39 19650636.60 19650636.82 0.0266 0.0024

Saturn 49090-02-21 03:07 G 19650865.54 19650865.63 19650865.72 0.0265 0.0239

Neptune 49091-12-11 00:43 G 19651523.46 19651523.53 19651523.65 0.0088 0.0079

Neptune 49092-07-23 13:55 G 19651748.95 19651749.08 19651749.22 0.0088 0.0069

Neptune 49093-03-06 02:10 G 19651974.45 19651974.59 19651974.77 0.0088 0.0060

Jupiter 49093-06-21 04:05 G 19652081.60 19652081.67 19652081.74 0.0530 0.0492

Neptune 49093-10-17 15:07 G 19652199.95 19652200.13 19652200.31 0.0088 0.0050

Neptune 49094-05-31 03:36 G 19652425.46 19652425.65 19652425.85 0.0088 0.0041

Neptune 49095-01-11 16:34 G 19652650.98 19652651.19 19652651.40 0.0088 0.0031

Neptune 49095-08-25 05:02 G 19652876.50 19652876.71 19652876.93 0.0088 0.0022

Neptune 49096-04-06 17:46 G 19653102.03 19653102.24 19653102.46 0.0088 0.0012

Neptune 49096-11-18 06:29 G 19653327.55 19653327.77 19653327.99 0.0088 0.0003

Neptune 49097-07-01 19:12 G 19653553.08 19653553.30 19653553.52 0.0088 0.0007

Neptune 49098-02-12 07:55 G 19653778.61 19653778.83 19653779.05 0.0088 0.0017

Neptune 49098-09-25 20:24 G 19654004.15 19654004.35 19654004.57 0.0088 0.0027

Mars 49098-10-07 15:50 G 19654016.01 19654016.16 19654016.31 0.1792 0.0931

Neptune 49099-05-09 09:22 G 19654229.69 19654229.89 19654230.09 0.0088 0.0036

Neptune 49099-12-20 21:50 G 19654455.23 19654455.41 19654455.61 0.0088 0.0046

Neptune 49100-08-03 10:19 G 19654680.78 19654680.93 19654681.12 0.0088 0.0056

Neptune 49101-03-16 23:17 G 19654906.33 19654906.47 19654906.63 0.0088 0.0065

Neptune 49101-10-28 11:31 G 19655131.89 19655131.98 19655132.12 0.0088 0.0075

Neptune 49102-06-11 00:29 G 19655357.47 19655357.52 19655357.60 0.0088 0.0084

Saturn 49104-07-28 16:19 G 19656136.16 19656136.18 19656136.22 0.0293 0.0289

Jupiter 49105-02-24 19:12 G 19656347.10 19656347.30 19656347.50 0.0529 0.0103

Saturn 49105-03-15 16:05 G 19656365.96 19656366.17 19656366.38 0.0295 0.0006

Moon 49107-08-05 20:38 G 19657239.20 19657239.36 19657239.52 0.2686 0.0850

Earth 49107-08-05 23:31 G 19657239.32 19657239.48 19657239.64 0.2692 0.0417 *

Uranus 49107-11-12 20:38 G 19657338.24 19657338.36 19657338.50 0.0144 0.0115

Uranus 49108-06-26 08:24 G 19657564.68 19657564.85 19657565.03 0.0144 0.0083

Uranus 49109-02-07 19:55 G 19657791.14 19657791.33 19657791.55 0.0144 0.0051

Uranus 49109-09-22 07:55 G 19658017.62 19658017.83 19658018.05 0.0144 0.0018

Uranus 49110-05-06 19:55 G 19658244.11 19658244.33 19658244.55 0.0144 0.0015

Uranus 49110-12-19 07:55 G 19658470.63 19658470.83 19658471.04 0.0144 0.0048

Jupiter 49110-12-31 01:26 G 19658482.37 19658482.56 19658482.75 0.0496 0.0186

Uranus 49111-08-02 19:41 G 19658697.15 19658697.32 19658697.51 0.0145 0.0081

Uranus 49112-03-16 07:41 G 19658923.70 19658923.82 19658923.97 0.0145 0.0114

Jupiter 49116-10-30 11:17 G 19660612.81 19660612.97 19660613.15 0.0529 0.0280

Saturn 49118-06-03 06:14 G 19661193.60 19661193.76 19661193.94 0.0268 0.0165

Saturn 49119-01-18 08:24 G 19661422.64 19661422.85 19661423.06 0.0266 0.0056

Jupiter 49122-09-05 03:07 G 19662748.43 19662748.63 19662748.83 0.0497 0.0132

Mars 49126-02-21 18:58 G 19664014.12 19664014.29 19664014.46 0.1733 0.0189

Saturn 49134-02-07 19:55 G 19666922.24 19666922.33 19666922.43 0.0293 0.0259

Jupiter 49134-05-11 03:50 G 19667014.58 19667014.66 19667014.75 0.0498 0.0454

Saturn 49134-09-25 19:55 G 19667152.12 19667152.33 19667152.54 0.0296 0.0037

Jupiter 49140-11-02 12:58 G 19669381.89 19669382.04 19669382.20 0.0530 0.0338

Jupiter 49146-09-07 12:29 G 19671516.88 19671517.02 19671517.15 0.0496 0.0373

Saturn 49147-12-14 10:48 G 19671979.77 19671979.95 19671980.14 0.0268 0.0132

Uranus 49148-02-27 19:12 G 19672055.23 19672055.30 19672055.37 0.0134 0.0127

Saturn 49148-07-30 12:29 G 19672208.82 19672209.02 19672209.23 0.0266 0.0088

Uranus 49148-10-11 01:12 G 19672281.41 19672281.55 19672281.69 0.0134 0.0101

Uranus 49149-05-25 06:43 G 19672507.62 19672507.78 19672507.98 0.0134 0.0076

Uranus 49150-01-06 12:43 G 19672733.84 19672734.03 19672734.24 0.0134 0.0049

Uranus 49150-08-20 18:29 G 19672960.06 19672960.27 19672960.49 0.0134 0.0023

Uranus 49151-04-04 00:29 G 19673186.30 19673186.52 19673186.73 0.0134 0.0004

Uranus 49151-11-16 06:00 G 19673412.54 19673412.75 19673412.97 0.0134 0.0030

Uranus 49152-06-29 11:31 G 19673638.79 19673638.98 19673639.19 0.0134 0.0056

Jupiter 49152-07-08 02:24 G 19673647.40 19673647.60 19673647.80 0.0528 0.0059

Uranus 49153-02-10 16:48 G 19673865.05 19673865.20 19673865.39 0.0134 0.0082

Uranus 49153-09-24 22:19 G 19674091.32 19674091.43 19674091.57 0.0134 0.0107

Uranus 49154-05-09 04:05 G 19674317.65 19674317.67 19674317.71 0.0133 0.0132

Jupiter 49158-05-13 14:24 G 19675782.90 19675783.10 19675783.30 0.0497 0.0058

Saturn 49163-08-21 04:19 G 19677708.54 19677708.68 19677708.82 0.0293 0.0215

Pluto 49163-09-11 22:48 G 19677730.35 19677730.45 19677730.56 0.0063 0.0054

Jupiter 49164-03-12 17:46 G 19677913.13 19677913.24 19677913.35 0.0528 0.0443

Saturn 49164-04-07 04:19 G 19677938.48 19677938.68 19677938.89 0.0296 0.0084

Pluto 49164-04-24 02:10 G 19677955.39 19677955.59 19677955.81 0.0063 0.0017

Mars 49164-08-04 22:48 G 19678058.28 19678058.45 19678058.62 0.1796 0.0362

Pluto 49164-12-05 05:46 G 19678180.54 19678180.74 19678180.96 0.0063 0.0022

Pluto 49165-07-18 09:07 G 19678405.84 19678405.88 19678405.98 0.0063 0.0060

Jupiter 49170-01-16 14:24 G 19680048.93 19680049.10 19680049.28 0.0498 0.0265

Neptune 49174-01-27 04:48 G 19681520.63 19681520.70 19681520.78 0.0090 0.0084

Neptune 49174-09-09 18:00 G 19681746.14 19681746.25 19681746.39 0.0090 0.0074

Neptune 49175-04-23 07:26 G 19681971.67 19681971.81 19681971.97 0.0090 0.0064

Neptune 49175-12-04 20:53 G 19682197.20 19682197.37 19682197.55 0.0090 0.0054

Neptune 49176-07-17 10:19 G 19682422.75 19682422.93 19682423.13 0.0090 0.0044

Neptune 49177-02-27 23:46 G 19682648.30 19682648.49 19682648.70 0.0090 0.0034

Saturn 49177-06-25 16:19 G 19682765.98 19682766.18 19682766.38 0.0268 0.0101

Neptune 49177-10-11 13:12 G 19682873.84 19682874.05 19682874.27 0.0090 0.0023

Saturn 49178-02-09 17:31 G 19682995.05 19682995.23 19682995.43 0.0266 0.0119

Neptune 49178-05-25 02:38 G 19683099.40 19683099.61 19683099.83 0.0090 0.0013

Neptune 49179-01-05 16:05 G 19683324.95 19683325.17 19683325.39 0.0090 0.0003

Neptune 49179-08-19 05:31 G 19683550.51 19683550.73 19683550.95 0.0090 0.0007

Neptune 49180-03-31 18:43 G 19683776.07 19683776.28 19683776.50 0.0090 0.0017

Neptune 49180-11-12 07:55 G 19684001.63 19684001.83 19684002.05 0.0090 0.0028

Neptune 49181-06-25 21:22 G 19684227.20 19684227.39 19684227.60 0.0090 0.0038

Neptune 49182-02-06 10:34 G 19684452.77 19684452.94 19684453.14 0.0090 0.0048

Neptune 49182-09-19 23:46 G 19684678.34 19684678.49 19684678.68 0.0090 0.0058

Neptune 49183-05-03 13:12 G 19684903.92 19684904.05 19684904.20 0.0090 0.0068

Neptune 49183-12-15 02:24 G 19685129.51 19685129.60 19685129.72 0.0090 0.0078

Neptune 49184-07-27 15:50 G 19685355.13 19685355.16 19685355.22 0.0090 0.0088

Jupiter 49188-03-15 20:53 G 19686682.18 19686682.37 19686682.56 0.0530 0.0179

Uranus 49191-07-13 01:41 G 19687896.49 19687896.57 19687896.68 0.0144 0.0129

Mars 49191-12-20 04:19 G 19688056.52 19688056.68 19688056.84 0.1729 0.0609

Uranus 49192-02-24 13:26 G 19688122.91 19688123.06 19688123.23 0.0144 0.0097

Uranus 49192-10-08 00:58 G 19688349.36 19688349.54 19688349.75 0.0144 0.0066

Saturn 49193-03-02 06:43 G 19688494.62 19688494.78 19688494.95 0.0294 0.0187

Uranus 49193-05-22 12:58 G 19688575.83 19688576.04 19688576.26 0.0144 0.0032

Saturn 49193-10-18 06:58 G 19688724.60 19688724.79 19688724.99 0.0296 0.0112

Uranus 49194-01-04 00:58 G 19688802.32 19688802.54 19688802.76 0.0144 0.0001

Jupiter 49194-01-18 23:46 G 19688817.32 19688817.49 19688817.67 0.0496 0.0240

Uranus 49194-08-18 12:43 G 19689028.82 19689029.03 19689029.25 0.0144 0.0034

Uranus 49195-04-02 00:43 G 19689255.34 19689255.53 19689255.73 0.0145 0.0067

Uranus 49195-11-14 12:43 G 19689481.89 19689482.03 19689482.20 0.0145 0.0100

Uranus 49196-06-28 00:58 G 19689708.46 19689708.54 19689708.64 0.0145 0.0132

Jupiter 49199-11-19 12:00 G 19690947.82 19690948.00 19690948.19 0.0528 0.0209

Jupiter 49205-09-24 01:55 G 19693083.38 19693083.58 19693083.78 0.0498 0.0075

Saturn 49207-01-05 18:58 G 19693552.09 19693552.29 19693552.50 0.0267 0.0072

Saturn 49207-08-22 20:10 G 19693781.17 19693781.34 19693781.53 0.0265 0.0147

Jupiter 49217-05-30 03:50 G 19697349.53 19697349.66 19697349.78 0.0499 0.0391

Moon 49221-02-05 11:17 G 19698696.84 19698696.97 19698697.09 0.2639 0.1584

Earth 49221-02-05 16:19 G 19698697.09 19698697.18 19698697.28 0.2640 0.2143 *

Saturn 49222-09-12 12:58 G 19699280.86 19699281.04 19699281.23 0.0294 0.0147

Saturn 49223-04-30 13:41 G 19699510.89 19699511.07 19699511.25 0.0296 0.0154

Jupiter 49223-11-22 12:00 G 19699716.87 19699717.00 19699717.13 0.0530 0.0400

Moon 49229-02-03 04:48 G 19701616.59 19701616.70 19701616.81 0.2644 0.1871

Earth 49229-02-03 08:53 G 19701616.73 19701616.87 19701617.02 0.2640 0.1153 *

Jupiter 49229-09-26 10:19 G 19701851.83 19701851.93 19701852.04 0.0496 0.0427

Mars 49230-06-02 05:02 G 19702100.53 19702100.71 19702100.88 0.1800 0.0248

Uranus 49232-06-10 12:14 G 19702839.90 19702840.01 19702840.14 0.0134 0.0110

Uranus 49233-01-22 18:14 G 19703066.10 19703066.26 19703066.43 0.0134 0.0084

Uranus 49233-09-06 00:14 G 19703292.31 19703292.51 19703292.71 0.0134 0.0057

Uranus 49234-04-20 06:00 G 19703518.54 19703518.75 19703518.97 0.0134 0.0031

Uranus 49234-12-02 11:46 G 19703744.78 19703744.99 19703745.21 0.0134 0.0006

Uranus 49235-07-16 17:31 G 19703971.02 19703971.23 19703971.45 0.0134 0.0021

Jupiter 49235-07-28 04:05 G 19703982.46 19703982.67 19703982.87 0.0529 0.0021

Saturn 49235-12-01 21:07 G 19704109.35 19704109.38 19704109.42 0.0269 0.0266

Uranus 49236-02-27 23:02 G 19704197.26 19704197.46 19704197.67 0.0134 0.0047

Saturn 49236-07-17 23:46 G 19704338.28 19704338.49 19704338.71 0.0267 0.0042

Uranus 49236-10-11 04:34 G 19704423.51 19704423.69 19704423.88 0.0134 0.0073

Saturn 49237-03-04 00:43 G 19704567.38 19704567.53 19704567.69 0.0265 0.0176

Uranus 49237-05-25 09:50 G 19704649.78 19704649.91 19704650.07 0.0134 0.0099

Uranus 49238-01-06 15:22 G 19704876.08 19704876.14 19704876.23 0.0134 0.0124

Jupiter 49241-06-01 12:58 G 19706117.84 19706118.04 19706118.24 0.0496 0.0115

Jupiter 49247-04-01 20:24 G 19708248.21 19708248.35 19708248.50 0.0528 0.0364

Saturn 49252-03-24 14:24 G 19710066.91 19710067.10 19710067.29 0.0294 0.0121

Saturn 49252-11-09 14:53 G 19710296.96 19710297.12 19710297.29 0.0297 0.0180

Jupiter 49253-02-04 14:24 G 19710383.91 19710384.10 19710384.29 0.0498 0.0203

Pluto 49254-06-09 16:48 G 19710874.01 19710874.20 19710874.41 0.0081 0.0035

Pluto 49255-01-21 03:36 G 19711099.49 19711099.65 19711099.85 0.0081 0.0047

Neptune 49256-03-14 10:05 G 19711517.86 19711517.92 19711518.03 0.0088 0.0081

Neptune 49256-10-25 23:02 G 19711743.34 19711743.46 19711743.60 0.0088 0.0071

Neptune 49257-06-08 11:31 G 19711968.84 19711968.98 19711969.15 0.0088 0.0062

Mars 49257-10-16 13:41 G 19712098.93 19712099.07 19712099.20 0.1725 0.1036

Neptune 49258-01-20 00:00 G 19712194.35 19712194.50 19712194.70 0.0088 0.0053

Neptune 49258-09-02 12:58 G 19712419.86 19712420.04 19712420.24 0.0088 0.0043

Neptune 49259-04-16 01:26 G 19712645.37 19712645.56 19712645.78 0.0088 0.0034

Neptune 49259-11-27 14:24 G 19712870.89 19712871.10 19712871.32 0.0088 0.0024

Neptune 49260-07-10 03:07 G 19713096.42 19713096.63 19713096.85 0.0088 0.0014

Neptune 49261-02-20 15:50 G 19713321.94 19713322.16 19713322.38 0.0088 0.0005

Neptune 49261-10-04 04:19 G 19713547.46 19713547.68 19713547.90 0.0088 0.0005

Neptune 49262-05-17 17:02 G 19713772.99 19713773.21 19713773.43 0.0088 0.0014

Neptune 49262-12-29 05:31 G 19713998.53 19713998.73 19713998.96 0.0088 0.0024

Neptune 49263-08-11 18:29 G 19714224.07 19714224.27 19714224.48 0.0088 0.0033

Neptune 49264-03-24 06:58 G 19714449.61 19714449.79 19714449.99 0.0088 0.0043

Neptune 49264-11-04 19:41 G 19714675.15 19714675.32 19714675.50 0.0088 0.0052

Saturn 49265-06-12 22:19 G 19714895.34 19714895.43 19714895.53 0.0269 0.0239

Neptune 49265-06-18 08:10 G 19714900.70 19714900.84 19714901.01 0.0088 0.0062

Saturn 49266-01-28 01:12 G 19715124.33 19715124.55 19715124.76 0.0267 0.0016

Neptune 49266-01-29 21:07 G 19715126.26 19715126.38 19715126.52 0.0088 0.0071

Neptune 49266-09-12 09:22 G 19715351.83 19715351.89 19715352.01 0.0088 0.0081

Saturn 49266-09-14 02:10 G 19715353.45 19715353.59 19715353.73 0.0265 0.0201

Jupiter 49271-04-04 20:53 G 19717017.19 19717017.37 19717017.55 0.0529 0.0246

Uranus 49275-03-12 08:24 G 19718454.83 19718454.85 19718454.89 0.0144 0.0142

Uranus 49275-10-24 20:10 G 19718681.21 19718681.34 19718681.48 0.0144 0.0110

Uranus 49276-06-07 07:41 G 19718907.65 19718907.82 19718908.01 0.0144 0.0078

Uranus 49277-01-19 19:26 G 19719134.11 19719134.31 19719134.52 0.0144 0.0045

Jupiter 49277-02-07 00:43 G 19719152.38 19719152.53 19719152.70 0.0497 0.0307

Uranus 49277-09-03 07:12 G 19719360.58 19719360.80 19719361.02 0.0144 0.0013

Uranus 49278-04-17 18:58 G 19719587.08 19719587.29 19719587.51 0.0144 0.0020

Uranus 49278-11-30 06:58 G 19719813.59 19719813.79 19719814.00 0.0145 0.0053

Uranus 49279-07-14 18:43 G 19720040.12 19720040.28 19720040.47 0.0145 0.0087

Uranus 49280-02-26 06:43 G 19720266.67 19720266.78 19720266.92 0.0145 0.0119

Saturn 49281-10-04 19:41 G 19720853.12 19720853.32 19720853.53 0.0294 0.0084

Saturn 49282-05-22 20:24 G 19721083.22 19721083.35 19721083.50 0.0297 0.0219

Jupiter 49282-12-08 12:29 G 19721282.83 19721283.02 19721283.22 0.0528 0.0140

Jupiter 49288-10-13 01:55 G 19723418.38 19723418.58 19723418.78 0.0497 0.0011

Jupiter 49294-08-13 04:05 G 19725548.65 19725548.67 19725548.71 0.0528 0.0521

Saturn 49294-12-24 02:24 G 19725681.48 19725681.60 19725681.74 0.0269 0.0211

Saturn 49295-08-10 05:02 G 19725910.50 19725910.71 19725910.92 0.0267 0.0013

Saturn 49296-03-26 05:31 G 19726139.64 19726139.73 19726139.85 0.0265 0.0230

Mars 49296-03-29 10:48 G 19726142.80 19726142.95 19726143.11 0.1805 0.0875

Jupiter 49300-06-19 04:19 G 19727684.53 19727684.68 19727684.84 0.0498 0.0324

Jupiter 49306-12-12 16:05 G 19730052.10 19730052.17 19730052.25 0.0530 0.0485

Saturn 49311-04-17 19:55 G 19731639.13 19731639.33 19731639.54 0.0294 0.0059

Saturn 49311-12-03 20:24 G 19731869.24 19731869.35 19731869.48 0.0297 0.0243

Jupiter 49312-10-16 11:17 G 19732186.96 19732186.97 19732187.01 0.0496 0.0491

Uranus 49316-02-09 22:34 G 19733398.36 19733398.44 19733398.55 0.0135 0.0120

Uranus 49316-09-23 04:48 G 19733624.55 19733624.70 19733624.86 0.0134 0.0093

Uranus 49317-05-07 10:48 G 19733850.77 19733850.95 19733851.15 0.0134 0.0067

Uranus 49317-12-19 16:48 G 19734077.00 19734077.20 19734077.41 0.0134 0.0041

Uranus 49318-08-02 22:34 G 19734303.23 19734303.44 19734303.66 0.0134 0.0015

Jupiter 49318-08-17 07:41 G 19734317.62 19734317.82 19734318.02 0.0529 0.0100

Uranus 49319-03-17 04:19 G 19734529.47 19734529.68 19734529.90 0.0134 0.0012

Uranus 49319-10-29 09:50 G 19734755.71 19734755.91 19734756.13 0.0134 0.0038

Uranus 49320-06-11 15:36 G 19734981.97 19734982.15 19734982.35 0.0134 0.0064

Uranus 49321-01-23 20:53 G 19735208.22 19735208.37 19735208.55 0.0134 0.0090

Uranus 49321-09-07 02:24 G 19735434.50 19735434.60 19735434.72 0.0134 0.0115

Mars 49323-08-14 23:31 G 19736141.39 19736141.48 19736141.58 0.1722 0.1427

Jupiter 49324-06-21 14:10 G 19736452.90 19736453.09 19736453.28 0.0497 0.0181

Saturn 49324-07-06 02:24 G 19736467.46 19736467.60 19736467.76 0.0269 0.0187

Saturn 49325-02-20 05:02 G 19736696.50 19736696.71 19736696.92 0.0267 0.0036

Saturn 49325-10-07 05:46 G 19736925.69 19736925.74 19736925.81 0.0265 0.0252

Jupiter 49330-04-21 22:19 G 19738583.26 19738583.43 19738583.60 0.0528 0.0288

Jupiter 49336-02-25 16:19 G 19740718.98 19740719.18 19740719.38 0.0498 0.0133

Neptune 49338-05-01 12:43 G 19741515.00 19741515.03 19741515.11 0.0090 0.0087

Neptune 49338-12-13 02:10 G 19741740.50 19741740.59 19741740.72 0.0090 0.0077

Neptune 49339-07-26 15:36 G 19741966.02 19741966.15 19741966.32 0.0090 0.0067

Neptune 49340-03-08 05:02 G 19742191.56 19742191.71 19742191.90 0.0090 0.0057

Neptune 49340-10-19 18:29 G 19742417.10 19742417.27 19742417.47 0.0090 0.0047

Saturn 49340-10-28 00:14 G 19742425.30 19742425.51 19742425.72 0.0295 0.0025

Neptune 49341-06-02 07:55 G 19742642.64 19742642.83 19742643.05 0.0090 0.0037

Saturn 49341-06-15 01:12 G 19742655.49 19742655.55 19742655.63 0.0297 0.0279

Neptune 49342-01-13 21:22 G 19742868.19 19742868.39 19742868.61 0.0090 0.0027

Moon 49342-08-09 06:14 G 19743075.73 19743075.76 19743075.79 0.2698 0.2640

Neptune 49342-08-27 11:02 G 19743093.75 19743093.96 19743094.18 0.0090 0.0016

Neptune 49343-04-10 00:29 G 19743319.30 19743319.52 19743319.74 0.0090 0.0006

Neptune 49343-11-21 13:55 G 19743544.86 19743545.08 19743545.30 0.0090 0.0004

Neptune 49344-07-04 03:22 G 19743770.43 19743770.64 19743770.86 0.0090 0.0014

Neptune 49345-02-14 16:34 G 19743995.99 19743996.19 19743996.41 0.0090 0.0025

Neptune 49345-09-28 05:46 G 19744221.55 19744221.74 19744221.96 0.0090 0.0035

Neptune 49346-05-11 19:12 G 19744447.12 19744447.30 19744447.50 0.0090 0.0045

Neptune 49346-12-23 08:24 G 19744672.70 19744672.85 19744673.04 0.0090 0.0055

Neptune 49347-08-05 21:50 G 19744898.28 19744898.41 19744898.58 0.0090 0.0065

Jupiter 49347-10-31 17:46 G 19744985.15 19744985.24 19744985.33 0.0498 0.0448

Neptune 49348-03-18 11:02 G 19745123.86 19745123.96 19745124.10 0.0090 0.0075

Neptune 49348-10-30 00:43 G 19745349.46 19745349.53 19745349.61 0.0090 0.0084

Earth 49350-08-06 23:02 G 19745995.31 19745995.46 19745995.62 0.2692 0.0617

Moon 49350-08-07 00:14 G 19745995.36 19745995.51 19745995.66 0.2699 0.0173 *

Saturn 49354-01-16 06:00 G 19747253.59 19747253.75 19747253.93 0.0269 0.0160

Jupiter 49354-04-25 00:00 G 19747352.35 19747352.50 19747352.66 0.0530 0.0328

Saturn 49354-09-02 08:24 G 19747482.65 19747482.85 19747483.06 0.0267 0.0063

Mars 49355-08-14 01:55 G 19747828.49 19747828.58 19747828.67 0.1733 0.1473

Uranus 49359-06-25 02:38 G 19749239.52 19749239.61 19749239.74 0.0144 0.0124

Uranus 49360-02-06 14:38 G 19749465.94 19749466.11 19749466.28 0.0144 0.0091

Jupiter 49360-02-28 02:10 G 19749487.46 19749487.59 19749487.72 0.0496 0.0372

Uranus 49360-09-20 01:55 G 19749692.40 19749692.58 19749692.79 0.0144 0.0059

Uranus 49361-05-04 13:55 G 19749918.87 19749919.08 19749919.30 0.0144 0.0026

Uranus 49361-12-17 01:41 G 19750145.36 19750145.57 19750145.79 0.0144 0.0007

Mars 49362-01-25 17:31 G 19750185.13 19750185.23 19750185.33 0.1808 0.1482

Uranus 49362-07-31 13:26 G 19750371.86 19750372.06 19750372.28 0.0144 0.0040

Uranus 49363-03-15 01:12 G 19750598.37 19750598.55 19750598.75 0.0145 0.0073

Uranus 49363-10-27 13:12 G 19750824.92 19750825.05 19750825.21 0.0145 0.0106

Uranus 49364-06-10 01:26 G 19751051.50 19751051.56 19751051.62 0.0145 0.0138

Jupiter 49365-12-28 16:48 G 19751618.00 19751618.20 19751618.40 0.0529 0.0054

Saturn 49369-09-22 01:41 G 19752981.57 19752981.57 19752981.60 0.0292 0.0291

Saturn 49370-05-10 00:43 G 19753211.32 19753211.53 19753211.74 0.0294 0.0002

Jupiter 49371-11-03 04:05 G 19753753.47 19753753.67 19753753.87 0.0497 0.0058

Jupiter 49377-09-02 09:07 G 19755883.77 19755883.88 19755884.00 0.0528 0.0434

Jupiter 49383-07-09 06:00 G 19758019.58 19758019.75 19758019.93 0.0498 0.0257

Saturn 49383-07-29 05:17 G 19758039.54 19758039.72 19758039.90 0.0269 0.0137

Saturn 49384-03-14 07:41 G 19758268.62 19758268.82 19758269.02 0.0266 0.0085

Saturn 49399-04-04 05:17 G 19763767.63 19763767.72 19763767.82 0.0292 0.0259

Uranus 49399-10-10 09:22 G 19763956.85 19763956.89 19763956.96 0.0135 0.0130

Saturn 49399-11-20 04:19 G 19763997.47 19763997.68 19763997.89 0.0295 0.0034

Uranus 49400-05-24 15:36 G 19764183.03 19764183.15 19764183.30 0.0134 0.0104

Uranus 49401-01-05 22:05 G 19764409.24 19764409.42 19764409.60 0.0134 0.0077

Uranus 49401-08-20 03:50 G 19764635.46 19764635.66 19764635.87 0.0134 0.0051

Jupiter 49401-09-06 10:05 G 19764652.73 19764652.92 19764653.11 0.0529 0.0177

Uranus 49402-04-03 09:50 G 19764861.70 19764861.91 19764862.12 0.0134 0.0024

Uranus 49402-11-15 15:36 G 19765087.93 19765088.15 19765088.37 0.0134 0.0002

Uranus 49403-06-29 21:07 G 19765314.18 19765314.38 19765314.60 0.0134 0.0029

Uranus 49404-02-11 02:38 G 19765540.42 19765540.61 19765540.82 0.0134 0.0055

Uranus 49404-09-24 08:10 G 19765766.68 19765766.84 19765767.03 0.0134 0.0081

Uranus 49405-05-08 13:55 G 19765992.96 19765993.08 19765993.22 0.0134 0.0106

Uranus 49405-12-20 18:58 G 19766219.28 19766219.29 19766219.35 0.0134 0.0132

Jupiter 49407-07-12 16:19 G 19766788.00 19766788.18 19766788.35 0.0496 0.0250

Pluto 49411-01-04 15:07 G 19768060.03 19768060.13 19768060.28 0.0063 0.0052

Pluto 49411-08-17 19:12 G 19768285.09 19768285.30 19768285.52 0.0063 0.0014

Pluto 49412-03-29 22:34 G 19768510.25 19768510.44 19768510.66 0.0063 0.0024

Pluto 49412-11-10 01:55 G 19768735.57 19768735.58 19768735.65 0.0063 0.0063

Saturn 49413-02-08 08:10 G 19768825.65 19768825.84 19768826.04 0.0269 0.0111

Jupiter 49413-05-12 00:58 G 19768918.35 19768918.54 19768918.72 0.0529 0.0211

Saturn 49413-09-25 10:34 G 19769054.75 19769054.94 19769055.13 0.0267 0.0112

Jupiter 49419-03-17 18:58 G 19771054.09 19771054.29 19771054.49 0.0497 0.0060

Neptune 49420-06-17 19:55 G 19771512.25 19771512.33 19771512.40 0.0088 0.0082

Neptune 49421-01-29 08:10 G 19771737.74 19771737.84 19771737.98 0.0088 0.0073

Mars 49421-06-11 11:02 G 19771870.82 19771870.96 19771871.10 0.1730 0.1031

Neptune 49421-09-11 20:38 G 19771963.23 19771963.36 19771963.53 0.0088 0.0064

Neptune 49422-04-25 09:22 G 19772188.74 19772188.89 19772189.08 0.0088 0.0055

Neptune 49422-12-06 22:19 G 19772414.25 19772414.43 19772414.63 0.0088 0.0045

Neptune 49423-07-20 11:02 G 19772639.77 19772639.96 19772640.17 0.0088 0.0036

Neptune 49424-03-01 23:46 G 19772865.28 19772865.49 19772865.70 0.0088 0.0026

Neptune 49424-10-13 12:14 G 19773090.80 19773091.01 19773091.23 0.0088 0.0017

Neptune 49425-05-27 00:58 G 19773316.32 19773316.54 19773316.76 0.0088 0.0007

Neptune 49426-01-07 13:41 G 19773541.85 19773542.07 19773542.29 0.0088 0.0002

Neptune 49426-08-21 02:10 G 19773767.38 19773767.59 19773767.82 0.0088 0.0012

Neptune 49427-04-03 14:53 G 19773992.91 19773993.12 19773993.34 0.0088 0.0021

Neptune 49427-11-15 03:07 G 19774218.44 19774218.63 19774218.85 0.0088 0.0031

Neptune 49428-06-27 15:50 G 19774443.98 19774444.16 19774444.37 0.0088 0.0040

Saturn 49428-10-15 06:00 G 19774553.63 19774553.75 19774553.88 0.0292 0.0233

Neptune 49429-02-08 04:48 G 19774669.52 19774669.70 19774669.88 0.0088 0.0049

Saturn 49429-06-02 04:48 G 19774783.50 19774783.70 19774783.91 0.0295 0.0061

Neptune 49429-09-21 17:02 G 19774895.06 19774895.21 19774895.39 0.0088 0.0059

Neptune 49430-05-05 05:46 G 19775120.62 19775120.74 19775120.89 0.0088 0.0068

Jupiter 49430-11-20 20:10 G 19775320.22 19775320.34 19775320.48 0.0498 0.0377

Neptune 49430-12-16 18:43 G 19775346.18 19775346.28 19775346.39 0.0088 0.0077

Neptune 49431-07-30 06:58 G 19775571.78 19775571.79 19775571.85 0.0088 0.0087

Jupiter 49437-05-15 05:31 G 19777687.60 19777687.73 19777687.85 0.0530 0.0415

Saturn 49442-08-21 06:58 G 19779611.60 19779611.79 19779612.00 0.0269 0.0090

Uranus 49443-02-23 12:00 G 19779797.94 19779798.00 19779798.08 0.0144 0.0135

Jupiter 49443-03-20 04:19 G 19779822.58 19779822.68 19779822.77 0.0496 0.0439

Saturn 49443-04-07 09:22 G 19779840.71 19779840.89 19779841.08 0.0266 0.0132

Uranus 49443-10-07 23:31 G 19780024.34 19780024.48 19780024.64 0.0144 0.0103

Uranus 49444-05-21 11:02 G 19780250.78 19780250.96 19780251.16 0.0144 0.0071

Uranus 49445-01-02 22:48 G 19780477.25 19780477.45 19780477.67 0.0144 0.0038

Uranus 49445-08-17 10:34 G 19780703.72 19780703.94 19780704.16 0.0144 0.0006

Uranus 49446-03-31 22:19 G 19780930.22 19780930.43 19780930.65 0.0144 0.0028

Uranus 49446-11-13 10:19 G 19781156.74 19781156.93 19781157.13 0.0144 0.0061

Uranus 49447-06-27 22:05 G 19781383.26 19781383.42 19781383.59 0.0145 0.0094

Uranus 49448-02-09 09:50 G 19781609.82 19781609.91 19781610.03 0.0145 0.0127

Jupiter 49449-01-17 20:10 G 19781953.13 19781953.34 19781953.54 0.0529 0.0029

Jupiter 49454-11-23 06:43 G 19784088.59 19784088.78 19784088.98 0.0497 0.0131

Saturn 49458-04-27 09:36 G 19785339.75 19785339.90 19785340.05 0.0292 0.0202

Saturn 49458-12-13 08:38 G 19785569.66 19785569.86 19785570.06 0.0295 0.0093

Mars 49459-11-23 12:00 G 19785914.91 19785915.00 19785915.09 0.1799 0.1532

Jupiter 49460-09-22 11:17 G 19786218.83 19786218.97 19786219.13 0.0528 0.0357

Earth 49464-02-08 18:43 G 19787453.20 19787453.28 19787453.37 0.2640 0.2227

Jupiter 49466-07-29 08:53 G 19788354.68 19788354.87 19788355.06 0.0497 0.0182

Earth 49472-02-06 11:31 G 19790372.84 19790372.98 19790373.13 0.2640 0.1040

Moon 49472-02-06 16:48 G 19790373.04 19790373.20 19790373.36 0.2639 0.0441 *

Saturn 49472-03-02 10:05 G 19790397.72 19790397.92 19790398.13 0.0269 0.0062

Saturn 49472-10-17 12:14 G 19790626.85 19790627.01 19790627.19 0.0267 0.0160

Jupiter 49478-04-03 11:17 G 19792620.95 19792620.97 19792621.00 0.0498 0.0493

Uranus 49484-01-23 02:53 G 19794741.52 19794741.62 19794741.75 0.0135 0.0113

Uranus 49484-09-05 08:53 G 19794967.72 19794967.87 19794968.05 0.0134 0.0087

Jupiter 49484-09-25 13:41 G 19794987.90 19794988.07 19794988.25 0.0530 0.0258

Uranus 49485-04-19 15:22 G 19795193.95 19795194.14 19795194.34 0.0134 0.0060

Uranus 49485-12-01 21:22 G 19795420.18 19795420.39 19795420.60 0.0134 0.0033

Uranus 49486-07-16 03:07 G 19795646.41 19795646.63 19795646.85 0.0134 0.0007

Uranus 49487-02-27 08:53 G 19795872.65 19795872.87 19795873.08 0.0134 0.0019

Mars 49487-04-08 20:38 G 19795913.19 19795913.36 19795913.52 0.1726 0.0608

Uranus 49487-10-11 14:24 G 19796098.90 19796099.10 19796099.30 0.0134 0.0045

Saturn 49487-11-07 11:17 G 19796125.81 19796125.97 19796126.15 0.0292 0.0171

Uranus 49488-05-24 20:10 G 19796325.15 19796325.34 19796325.52 0.0134 0.0071

Saturn 49488-06-24 10:19 G 19796355.74 19796355.93 19796356.12 0.0295 0.0123

Uranus 49489-01-06 01:26 G 19796551.42 19796551.56 19796551.71 0.0134 0.0097

Uranus 49489-08-20 06:29 G 19796777.71 19796777.77 19796777.87 0.0134 0.0123

Jupiter 49490-07-31 18:29 G 19797123.12 19797123.27 19797123.43 0.0496 0.0319

Jupiter 49496-05-31 06:00 G 19799253.56 19799253.75 19799253.95 0.0529 0.0124

Saturn 49501-01-27 04:48 G 19800954.68 19800954.70 19800954.73 0.0271 0.0269

Saturn 49501-09-13 08:53 G 19801183.66 19801183.87 19801184.08 0.0268 0.0041

Pluto 49501-10-03 11:17 G 19801203.77 19801203.97 19801204.19 0.0081 0.0025

Jupiter 49502-04-06 20:38 G 19801389.15 19801389.36 19801389.56 0.0497 0.0008

Saturn 49502-04-30 11:02 G 19801412.81 19801412.96 19801413.13 0.0266 0.0181

Pluto 49502-05-16 21:50 G 19801429.27 19801429.41 19801429.59 0.0081 0.0056

Neptune 49502-08-04 20:38 G 19801509.35 19801509.36 19801509.41 0.0090 0.0089

Neptune 49503-03-18 10:19 G 19801734.84 19801734.93 19801735.04 0.0090 0.0079

Neptune 49503-10-29 23:46 G 19801960.35 19801960.49 19801960.63 0.0090 0.0069

Neptune 49504-06-11 12:43 G 19802185.89 19802186.03 19802186.22 0.0090 0.0060

Neptune 49505-01-23 02:10 G 19802411.43 19802411.59 19802411.79 0.0090 0.0050

Neptune 49505-09-05 15:36 G 19802636.97 19802637.15 19802637.36 0.0090 0.0040

Neptune 49506-04-19 05:02 G 19802862.51 19802862.71 19802862.93 0.0090 0.0030

Neptune 49506-11-30 18:29 G 19803088.06 19803088.27 19803088.49 0.0090 0.0020

Neptune 49507-07-14 08:10 G 19803313.62 19803313.84 19803314.06 0.0090 0.0009

Jupiter 49508-02-04 21:22 G 19803519.33 19803519.39 19803519.44 0.0528 0.0504

Neptune 49508-02-24 21:36 G 19803539.18 19803539.40 19803539.62 0.0090 0.0001

Neptune 49508-10-07 10:48 G 19803764.74 19803764.95 19803765.17 0.0090 0.0011

Neptune 49509-05-21 00:14 G 19803990.30 19803990.51 19803990.73 0.0090 0.0021

Neptune 49510-01-01 13:41 G 19804215.87 19804216.07 19804216.28 0.0090 0.0031

Neptune 49510-08-15 03:07 G 19804441.44 19804441.63 19804441.83 0.0090 0.0041

Neptune 49511-03-28 16:19 G 19804667.01 19804667.18 19804667.37 0.0090 0.0051

Neptune 49511-11-09 05:31 G 19804892.59 19804892.73 19804892.91 0.0090 0.0061

Neptune 49512-06-21 18:58 G 19805118.18 19805118.29 19805118.44 0.0090 0.0071

Neptune 49513-02-02 08:10 G 19805343.77 19805343.84 19805343.96 0.0090 0.0081

Jupiter 49513-12-10 22:34 G 19805655.28 19805655.44 19805655.60 0.0498 0.0306

Saturn 49517-05-20 15:07 G 19806911.94 19806912.13 19806912.31 0.0293 0.0140

Saturn 49518-01-05 14:10 G 19807141.92 19807142.09 19807142.27 0.0295 0.0156

Jupiter 49520-06-04 07:26 G 19808022.73 19808022.81 19808022.88 0.0530 0.0489

Mars 49525-09-20 18:14 G 19809957.11 19809957.26 19809957.41 0.1804 0.0928

Uranus 49527-06-08 07:55 G 19810582.71 19810582.83 19810582.96 0.0144 0.0115

Uranus 49528-01-20 19:12 G 19810809.13 19810809.30 19810809.49 0.0144 0.0083

Uranus 49528-09-03 06:58 G 19811035.59 19811035.79 19811035.99 0.0144 0.0051

Uranus 49529-04-17 18:29 G 19811262.06 19811262.27 19811262.49 0.0144 0.0018

Uranus 49529-11-30 06:29 G 19811488.56 19811488.77 19811488.99 0.0144 0.0015

Uranus 49530-07-14 18:14 G 19811715.06 19811715.26 19811715.47 0.0144 0.0048

Saturn 49530-08-09 08:24 G 19811740.76 19811740.85 19811740.96 0.0271 0.0240

Uranus 49531-02-26 06:14 G 19811941.58 19811941.76 19811941.94 0.0145 0.0081

Saturn 49531-03-26 12:29 G 19811969.81 19811970.02 19811970.23 0.0269 0.0012

Uranus 49531-10-10 18:00 G 19812168.12 19812168.25 19812168.39 0.0145 0.0114

Saturn 49531-11-10 14:24 G 19812198.98 19812199.10 19812199.24 0.0267 0.0209

Jupiter 49532-02-07 20:53 G 19812288.17 19812288.37 19812288.57 0.0530 0.0097

Jupiter 49537-12-13 09:36 G 19814423.71 19814423.90 19814424.08 0.0496 0.0201

Jupiter 49543-10-13 13:26 G 19816553.89 19816554.06 19816554.23 0.0529 0.0283

Saturn 49546-11-30 18:14 G 19817698.07 19817698.26 19817698.46 0.0292 0.0106

Saturn 49547-07-18 17:31 G 19817928.07 19817928.23 19817928.39 0.0295 0.0189

Jupiter 49549-08-18 10:34 G 19818689.75 19818689.94 19818690.14 0.0497 0.0115

Mars 49553-02-04 06:00 G 19819955.58 19819955.75 19819955.93 0.1723 0.0190

Saturn 49560-02-19 07:55 G 19822526.71 19822526.83 19822526.96 0.0271 0.0217

Saturn 49560-10-05 11:46 G 19822755.78 19822755.99 19822756.21 0.0268 0.0012

Jupiter 49561-04-23 12:00 G 19822955.90 19822956.00 19822956.10 0.0498 0.0430

Saturn 49561-05-22 13:55 G 19822984.98 19822985.08 19822985.19 0.0266 0.0231

Uranus 49567-09-23 15:22 G 19825300.05 19825300.14 19825300.24 0.0135 0.0121

Jupiter 49567-10-16 16:05 G 19825323.02 19825323.17 19825323.33 0.0530 0.0334

Uranus 49568-05-06 21:36 G 19825526.25 19825526.40 19825526.56 0.0134 0.0095

Uranus 49568-12-19 03:22 G 19825752.47 19825752.64 19825752.84 0.0134 0.0069

Uranus 49569-08-02 09:22 G 19825978.69 19825978.89 19825979.11 0.0134 0.0042

Uranus 49570-03-16 15:22 G 19826204.92 19826205.14 19826205.35 0.0134 0.0016

Uranus 49570-10-28 20:53 G 19826431.16 19826431.37 19826431.59 0.0134 0.0011

Uranus 49571-06-12 02:38 G 19826657.41 19826657.61 19826657.82 0.0134 0.0037

Uranus 49572-01-24 08:10 G 19826883.65 19826883.84 19826884.04 0.0134 0.0063

Uranus 49572-09-06 13:26 G 19827109.91 19827110.06 19827110.24 0.0134 0.0089

Uranus 49573-04-20 18:43 G 19827336.19 19827336.28 19827336.41 0.0134 0.0115

Jupiter 49573-08-20 19:55 G 19827458.21 19827458.33 19827458.46 0.0496 0.0385

Saturn 49576-06-11 23:17 G 19828484.26 19828484.47 19828484.67 0.0293 0.0072

Saturn 49577-01-27 22:34 G 19828714.30 19828714.44 19828714.57 0.0295 0.0224

Jupiter 49579-06-21 06:58 G 19829588.59 19829588.79 19829589.00 0.0529 0.0054

Neptune 49584-09-20 03:50 G 19831506.63 19831506.66 19831506.74 0.0088 0.0085

Jupiter 49585-04-25 22:34 G 19831724.24 19831724.44 19831724.64 0.0496 0.0076

Neptune 49585-05-03 17:02 G 19831732.10 19831732.21 19831732.33 0.0088 0.0075

Neptune 49585-12-15 05:31 G 19831957.60 19831957.73 19831957.89 0.0088 0.0066

Neptune 49586-07-28 18:14 G 19832183.11 19832183.26 19832183.44 0.0088 0.0057

Neptune 49587-03-11 06:43 G 19832408.62 19832408.78 19832408.99 0.0088 0.0048

Neptune 49587-10-22 19:41 G 19832634.13 19832634.32 19832634.53 0.0088 0.0038

Neptune 49588-06-04 08:24 G 19832859.65 19832859.85 19832860.07 0.0088 0.0029

Neptune 49589-01-15 21:07 G 19833085.17 19833085.38 19833085.60 0.0088 0.0020

Neptune 49589-08-29 09:50 G 19833310.70 19833310.91 19833311.13 0.0088 0.0010

Saturn 49589-08-31 12:00 G 19833312.86 19833313.00 19833313.16 0.0271 0.0186

Neptune 49590-04-11 22:34 G 19833536.22 19833536.44 19833536.66 0.0088 0.0001

Saturn 49590-04-17 15:50 G 19833541.96 19833542.16 19833542.38 0.0268 0.0042

Neptune 49590-11-23 11:17 G 19833761.75 19833761.97 19833762.19 0.0088 0.0009

Saturn 49590-12-02 18:00 G 19833771.21 19833771.25 19833771.30 0.0267 0.0260

Jupiter 49591-02-23 20:10 G 19833854.24 19833854.34 19833854.45 0.0528 0.0444

Neptune 49591-07-06 23:46 G 19833987.28 19833987.49 19833987.71 0.0088 0.0018

Mars 49591-07-19 00:43 G 19833999.36 19833999.53 19833999.70 0.1808 0.0335

Neptune 49592-02-17 12:14 G 19834212.81 19834213.01 19834213.23 0.0088 0.0028

Neptune 49592-09-30 00:43 G 19834438.34 19834438.53 19834438.74 0.0088 0.0037

Neptune 49593-05-13 13:26 G 19834663.88 19834664.06 19834664.26 0.0088 0.0046

Earth 49593-08-08 22:48 G 19834751.30 19834751.45 19834751.60 0.2692 0.0778

Moon 49593-08-08 23:17 G 19834751.31 19834751.47 19834751.62 0.2685 0.1090 *

Neptune 49593-12-25 01:55 G 19834889.43 19834889.58 19834889.77 0.0088 0.0056

Neptune 49594-08-07 14:38 G 19835114.98 19835115.11 19835115.28 0.0088 0.0065

Neptune 49595-03-21 03:07 G 19835340.53 19835340.63 19835340.77 0.0088 0.0074

Neptune 49595-11-01 15:50 G 19835566.11 19835566.16 19835566.25 0.0088 0.0083

Jupiter 49596-12-30 01:12 G 19835990.37 19835990.55 19835990.73 0.0497 0.0235

Saturn 49605-12-23 04:05 G 19839270.46 19839270.67 19839270.88 0.0292 0.0034

Saturn 49606-08-10 03:22 G 19839500.55 19839500.64 19839500.74 0.0295 0.0262

Uranus 49611-02-05 16:34 G 19841141.11 19841141.19 19841141.31 0.0144 0.0127

Uranus 49611-09-20 04:05 G 19841367.52 19841367.67 19841367.84 0.0144 0.0095

Uranus 49612-05-03 15:50 G 19841593.97 19841594.16 19841594.36 0.0144 0.0062

Uranus 49612-12-16 03:36 G 19841820.44 19841820.65 19841820.86 0.0144 0.0030

Uranus 49613-07-30 15:22 G 19842046.92 19842047.14 19842047.35 0.0144 0.0004

Uranus 49614-03-14 02:53 G 19842273.42 19842273.62 19842273.84 0.0144 0.0036

Uranus 49614-10-26 14:38 G 19842499.93 19842500.11 19842500.32 0.0145 0.0070

Jupiter 49615-02-27 00:29 G 19842623.33 19842623.52 19842623.71 0.0530 0.0176

Uranus 49615-06-10 02:53 G 19842726.47 19842726.62 19842726.78 0.0145 0.0102

Uranus 49616-01-22 14:38 G 19842953.05 19842953.11 19842953.20 0.0145 0.0135

Mars 49618-12-02 15:50 G 19843997.99 19843998.16 19843998.33 0.1719 0.0215

Saturn 49619-03-13 12:29 G 19844098.86 19844099.02 19844099.20 0.0270 0.0162

Saturn 49619-10-28 16:19 G 19844327.97 19844328.18 19844328.39 0.0268 0.0065

Jupiter 49621-01-01 09:07 G 19844758.71 19844758.88 19844759.05 0.0496 0.0259

Jupiter 49626-11-01 15:07 G 19846888.95 19846889.13 19846889.32 0.0529 0.0209

Jupiter 49632-09-06 10:48 G 19849024.75 19849024.95 19849025.15 0.0497 0.0053

Saturn 49634-11-17 12:00 G 19849826.97 19849827.00 19849827.05 0.0291 0.0285

Saturn 49635-07-05 09:50 G 19850056.69 19850056.91 19850057.12 0.0293 0.0006

Jupiter 49644-05-12 13:12 G 19853290.91 19853291.05 19853291.19 0.0498 0.0364

Saturn 49648-09-22 17:46 G 19854885.06 19854885.24 19854885.43 0.0270 0.0128

Saturn 49649-05-09 21:22 G 19855114.20 19855114.39 19855114.59 0.0268 0.0098

Jupiter 49650-11-04 13:55 G 19855657.94 19855658.08 19855658.22 0.0531 0.0388

Uranus 49651-05-24 04:05 G 19855858.61 19855858.67 19855858.73 0.0135 0.0129

Uranus 49652-01-05 10:05 G 19856084.79 19856084.92 19856085.06 0.0135 0.0103

Uranus 49652-08-18 15:50 G 19856311.00 19856311.16 19856311.35 0.0134 0.0077

Uranus 49653-04-01 21:50 G 19856537.22 19856537.41 19856537.62 0.0134 0.0050

Uranus 49653-11-14 03:50 G 19856763.45 19856763.66 19856763.88 0.0134 0.0024

Uranus 49654-06-28 09:36 G 19856989.68 19856989.90 19856990.12 0.0134 0.0003

Uranus 49655-02-09 15:07 G 19857215.92 19857216.13 19857216.35 0.0134 0.0029

Uranus 49655-09-23 20:38 G 19857442.17 19857442.36 19857442.56 0.0134 0.0055

Uranus 49656-05-07 02:10 G 19857668.43 19857668.59 19857668.77 0.0134 0.0081

Jupiter 49656-09-08 20:53 G 19857793.29 19857793.37 19857793.46 0.0495 0.0447

Uranus 49656-12-19 07:26 G 19857894.70 19857894.81 19857894.96 0.0134 0.0107

Mars 49657-05-15 06:29 G 19858041.60 19858041.77 19858041.94 0.1812 0.0303

Uranus 49657-08-02 12:43 G 19858121.02 19858121.03 19858121.08 0.0134 0.0132

Pluto 49658-04-28 11:02 G 19858389.80 19858389.96 19858390.14 0.0063 0.0040

Pluto 49658-12-09 14:38 G 19858614.90 19858615.11 19858615.34 0.0063 0.0003

Pluto 49659-07-22 18:14 G 19858840.09 19858840.26 19858840.45 0.0063 0.0036

Jupiter 49662-07-10 05:46 G 19859923.54 19859923.74 19859923.94 0.0530 0.0007

Saturn 49664-05-29 19:12 G 19860613.19 19860613.30 19860613.42 0.0290 0.0241

Saturn 49665-01-14 16:48 G 19860842.99 19860843.20 19860843.41 0.0293 0.0047

Neptune 49667-06-19 17:31 G 19861729.17 19861729.23 19861729.35 0.0090 0.0082

Neptune 49668-01-31 07:12 G 19861954.68 19861954.80 19861954.94 0.0090 0.0072

Jupiter 49668-05-14 21:50 G 19862059.21 19862059.41 19862059.61 0.0496 0.0132

Neptune 49668-09-12 20:38 G 19862180.21 19862180.36 19862180.52 0.0090 0.0062

Neptune 49669-04-26 10:05 G 19862405.74 19862405.92 19862406.10 0.0090 0.0052

Neptune 49669-12-07 23:02 G 19862631.29 19862631.46 19862631.67 0.0090 0.0043

Neptune 49670-07-21 12:43 G 19862856.84 19862857.03 19862857.24 0.0090 0.0033

Neptune 49671-03-04 02:10 G 19863082.38 19863082.59 19863082.81 0.0090 0.0023

Neptune 49671-10-15 15:36 G 19863307.93 19863308.15 19863308.37 0.0090 0.0013

Neptune 49672-05-28 05:02 G 19863533.49 19863533.71 19863533.93 0.0090 0.0003

Neptune 49673-01-08 18:14 G 19863759.05 19863759.26 19863759.49 0.0090 0.0008

Neptune 49673-08-22 07:41 G 19863984.61 19863984.82 19863985.04 0.0090 0.0018

Jupiter 49674-03-14 22:05 G 19864189.29 19864189.42 19864189.57 0.0528 0.0371

Neptune 49674-04-04 20:53 G 19864210.18 19864210.37 19864210.59 0.0090 0.0028

Neptune 49674-11-16 10:34 G 19864435.74 19864435.94 19864436.14 0.0090 0.0037

Neptune 49675-06-30 00:00 G 19864661.32 19864661.50 19864661.69 0.0090 0.0047

Neptune 49676-02-10 13:12 G 19864886.90 19864887.05 19864887.23 0.0090 0.0057

Neptune 49676-09-23 02:24 G 19865112.48 19865112.60 19865112.77 0.0090 0.0067

Neptune 49677-05-06 15:50 G 19865338.07 19865338.16 19865338.29 0.0090 0.0077

Neptune 49677-12-18 05:31 G 19865563.68 19865563.73 19865563.79 0.0090 0.0086

Saturn 49678-04-04 19:26 G 19865671.12 19865671.31 19865671.51 0.0270 0.0102

Saturn 49678-11-19 22:48 G 19865900.27 19865900.45 19865900.65 0.0268 0.0124

Jupiter 49680-01-18 23:02 G 19866325.28 19866325.46 19866325.66 0.0497 0.0183

Mars 49684-09-29 01:26 G 19868040.40 19868040.56 19868040.73 0.1715 0.0624

Jupiter 49691-09-24 00:00 G 19870591.50 19870591.50 19870591.51 0.0499 0.0498

Saturn 49693-12-10 01:41 G 19871399.43 19871399.57 19871399.73 0.0291 0.0205

Saturn 49694-07-27 23:46 G 19871629.29 19871629.49 19871629.69 0.0294 0.0085

Uranus 49694-10-05 23:02 G 19871699.43 19871699.46 19871699.53 0.0144 0.0140

Uranus 49695-05-20 10:34 G 19871925.81 19871925.94 19871926.10 0.0144 0.0108

Uranus 49696-01-01 22:19 G 19872152.25 19872152.43 19872152.62 0.0144 0.0075

Uranus 49696-08-15 09:36 G 19872378.70 19872378.90 19872379.12 0.0144 0.0043

Uranus 49697-03-29 21:22 G 19872605.18 19872605.39 19872605.61 0.0144 0.0011

Uranus 49697-11-11 09:22 G 19872831.68 19872831.89 19872832.11 0.0144 0.0023

Jupiter 49698-03-17 22:34 G 19872958.26 19872958.44 19872958.62 0.0530 0.0233

Uranus 49698-06-25 21:07 G 19873058.18 19873058.38 19873058.58 0.0145 0.0056

Uranus 49699-02-07 08:53 G 19873284.71 19873284.87 19873285.05 0.0145 0.0089

Uranus 49699-09-21 20:38 G 19873511.26 19873511.36 19873511.49 0.0145 0.0122

Jupiter 49704-01-22 08:53 G 19875093.71 19875093.87 19875094.02 0.0496 0.0316

Moon 49707-02-10 18:58 G 19876209.17 19876209.29 19876209.41 0.2634 0.1771

Earth 49707-02-10 21:50 G 19876209.34 19876209.41 19876209.47 0.2640 0.2373 *

Saturn 49707-10-17 01:26 G 19876457.36 19876457.56 19876457.77 0.0270 0.0066

Saturn 49708-06-02 04:48 G 19876686.54 19876686.70 19876686.88 0.0268 0.0159

Jupiter 49709-11-21 10:48 G 19877223.76 19877223.95 19877224.14 0.0529 0.0164

Moon 49715-02-08 09:07 G 19879128.74 19879128.88 19879129.02 0.2639 0.1300

Earth 49715-02-08 14:24 G 19879128.95 19879129.10 19879129.25 0.2640 0.0915 *

Jupiter 49715-09-27 11:02 G 19879359.75 19879359.96 19879360.16 0.0497 0.0013

Mars 49723-03-13 12:14 G 19882083.86 19882084.01 19882084.15 0.1816 0.0954

Saturn 49723-06-23 10:19 G 19882185.76 19882185.93 19882186.12 0.0291 0.0158

Saturn 49724-02-08 08:24 G 19882415.66 19882415.85 19882416.04 0.0293 0.0133

Jupiter 49727-06-02 11:02 G 19883625.80 19883625.96 19883626.12 0.0498 0.0312

Jupiter 49733-11-24 14:24 G 19885993.00 19885993.10 19885993.21 0.0531 0.0454

Uranus 49735-09-05 22:19 G 19886643.32 19886643.43 19886643.56 0.0135 0.0111

Uranus 49736-04-19 04:19 G 19886869.53 19886869.68 19886869.87 0.0135 0.0085

Saturn 49736-09-11 00:00 G 19887014.47 19887014.50 19887014.54 0.0272 0.0267

Uranus 49736-12-01 10:19 G 19887095.75 19887095.93 19887096.14 0.0134 0.0059

Saturn 49737-04-28 04:48 G 19887243.49 19887243.70 19887243.92 0.0270 0.0037

Uranus 49737-07-15 16:19 G 19887321.98 19887322.18 19887322.40 0.0134 0.0032

Saturn 49737-12-13 07:55 G 19887472.69 19887472.83 19887472.99 0.0268 0.0188

Uranus 49738-02-26 22:05 G 19887548.21 19887548.42 19887548.64 0.0134 0.0006

Uranus 49738-10-11 03:50 G 19887774.44 19887774.66 19887774.87 0.0134 0.0021

Uranus 49739-05-25 09:22 G 19888000.69 19888000.89 19888001.10 0.0134 0.0047

Jupiter 49739-09-29 17:31 G 19888128.21 19888128.23 19888128.26 0.0495 0.0491

Uranus 49740-01-06 14:53 G 19888226.94 19888227.12 19888227.31 0.0134 0.0073

Uranus 49740-08-19 20:10 G 19888453.21 19888453.34 19888453.50 0.0134 0.0099

Uranus 49741-04-03 01:55 G 19888679.50 19888679.58 19888679.65 0.0134 0.0124

Jupiter 49745-07-30 05:02 G 19890258.51 19890258.71 19890258.91 0.0529 0.0069

Neptune 49748-12-23 13:12 G 19891501.02 19891501.05 19891501.10 0.0088 0.0086

Pluto 49749-01-25 08:53 G 19891533.65 19891533.87 19891534.09 0.0081 0.0003

Neptune 49749-08-06 01:55 G 19891726.48 19891726.58 19891726.69 0.0088 0.0077

Pluto 49749-09-07 19:12 G 19891759.26 19891759.30 19891759.38 0.0081 0.0078

Neptune 49750-03-19 14:24 G 19891951.97 19891952.10 19891952.25 0.0088 0.0068

Mars 49750-07-28 11:46 G 19892082.85 19892082.99 19892083.13 0.1712 0.1000

Neptune 49750-10-31 02:53 G 19892177.47 19892177.62 19892177.80 0.0088 0.0059

Jupiter 49751-06-04 19:12 G 19892394.11 19892394.30 19892394.49 0.0496 0.0181

Neptune 49751-06-13 15:36 G 19892402.98 19892403.15 19892403.34 0.0088 0.0050

Neptune 49752-01-25 04:19 G 19892628.50 19892628.68 19892628.89 0.0088 0.0041

Neptune 49752-09-06 17:17 G 19892854.01 19892854.22 19892854.43 0.0088 0.0031

Saturn 49753-01-02 18:00 G 19892972.06 19892972.25 19892972.45 0.0292 0.0118

Neptune 49753-04-20 05:46 G 19893079.53 19893079.74 19893079.96 0.0088 0.0022

Saturn 49753-08-20 16:19 G 19893202.02 19893202.18 19893202.36 0.0294 0.0175

Neptune 49753-12-01 18:29 G 19893305.06 19893305.27 19893305.50 0.0088 0.0013

Neptune 49754-07-15 07:12 G 19893530.58 19893530.80 19893531.02 0.0088 0.0004

Neptune 49755-02-25 19:55 G 19893756.11 19893756.33 19893756.55 0.0088 0.0006

Neptune 49755-10-09 08:10 G 19893981.64 19893981.84 19893982.07 0.0088 0.0016

Neptune 49756-05-21 20:53 G 19894207.17 19894207.37 19894207.59 0.0088 0.0025

Neptune 49757-01-02 09:36 G 19894432.71 19894432.90 19894433.11 0.0088 0.0034

Jupiter 49757-04-03 19:12 G 19894524.14 19894524.30 19894524.46 0.0528 0.0317

Neptune 49757-08-15 22:19 G 19894658.24 19894658.43 19894658.63 0.0088 0.0043

Neptune 49758-03-29 10:48 G 19894883.78 19894883.95 19894884.13 0.0088 0.0052

Neptune 49758-11-09 23:02 G 19895109.32 19895109.46 19895109.64 0.0088 0.0062

Neptune 49759-06-23 11:31 G 19895334.88 19895334.98 19895335.14 0.0088 0.0071

Neptune 49760-02-04 00:14 G 19895560.45 19895560.51 19895560.63 0.0088 0.0080

Jupiter 49763-02-07 21:36 G 19896660.20 19896660.40 19896660.60 0.0497 0.0129

Saturn 49766-03-24 06:58 G 19897800.69 19897800.79 19897800.91 0.0271 0.0229

Saturn 49766-11-08 11:46 G 19898029.78 19898029.99 19898030.21 0.0269 0.0003

Saturn 49767-06-25 14:38 G 19898259.00 19898259.11 19898259.23 0.0267 0.0224

Jupiter 49774-10-13 23:02 G 19900926.37 19900926.46 19900926.56 0.0498 0.0441

Uranus 49779-01-18 18:00 G 19902484.14 19902484.25 19902484.38 0.0144 0.0120

Uranus 49779-09-02 05:17 G 19902710.56 19902710.72 19902710.90 0.0144 0.0088

Uranus 49780-04-15 16:48 G 19902937.01 19902937.20 19902937.41 0.0144 0.0056

Uranus 49780-11-28 04:34 G 19903163.48 19903163.69 19903163.91 0.0144 0.0023

Jupiter 49781-04-06 17:46 G 19903293.07 19903293.24 19903293.42 0.0530 0.0276

Uranus 49781-07-12 16:19 G 19903389.96 19903390.18 19903390.40 0.0144 0.0010

Uranus 49782-02-24 04:05 G 19903616.46 19903616.67 19903616.88 0.0144 0.0043

Saturn 49782-07-16 04:34 G 19903758.49 19903758.69 19903758.90 0.0291 0.0067

Uranus 49782-10-08 15:50 G 19903842.98 19903843.16 19903843.35 0.0145 0.0076

Saturn 49783-03-03 03:07 G 19903988.49 19903988.63 19903988.76 0.0294 0.0226

Uranus 49783-05-23 03:36 G 19904069.52 19904069.65 19904069.80 0.0145 0.0109

Uranus 49784-01-04 15:36 G 19904296.12 19904296.15 19904296.21 0.0145 0.0142

Jupiter 49787-02-10 04:48 G 19905428.56 19905428.70 19905428.84 0.0496 0.0360

Mars 49789-01-07 18:29 G 19906126.18 19906126.27 19906126.35 0.1820 0.1587

Jupiter 49792-12-10 10:05 G 19907558.72 19907558.92 19907559.12 0.0529 0.0101

Saturn 49795-10-04 11:46 G 19908586.85 19908586.99 19908587.14 0.0271 0.0196

Saturn 49796-05-20 16:19 G 19908815.96 19908816.18 19908816.39 0.0269 0.0034

Saturn 49797-01-04 18:58 G 19909045.23 19909045.29 19909045.36 0.0267 0.0255

Jupiter 49798-10-16 06:00 G 19909694.55 19909694.75 19909694.96 0.0497 0.0049

Jupiter 49804-08-16 01:12 G 19911824.47 19911824.55 19911824.64 0.0528 0.0480

Jupiter 49810-06-22 06:58 G 19913960.62 19913960.79 19913960.96 0.0498 0.0268

Saturn 49812-01-27 12:14 G 19914544.80 19914545.01 19914545.22 0.0292 0.0027

Saturn 49812-09-13 11:02 G 19914774.88 19914774.96 19914775.05 0.0295 0.0269

Mars 49816-05-25 21:22 G 19916125.30 19916125.39 19916125.49 0.1708 0.1392

Jupiter 49816-12-14 10:19 G 19916327.86 19916327.93 19916327.99 0.0530 0.0499

Uranus 49819-05-07 10:05 G 19917201.83 19917201.92 19917202.03 0.0135 0.0120

Uranus 49819-12-19 16:05 G 19917428.03 19917428.17 19917428.34 0.0135 0.0094

Uranus 49820-08-01 22:19 G 19917654.24 19917654.43 19917654.62 0.0135 0.0067

Uranus 49821-03-16 04:05 G 19917880.47 19917880.67 19917880.89 0.0134 0.0040

Uranus 49821-10-28 10:05 G 19918106.70 19918106.92 19918107.14 0.0134 0.0014

Uranus 49822-06-11 15:50 G 19918332.94 19918333.16 19918333.38 0.0134 0.0013

Uranus 49823-01-23 21:22 G 19918559.19 19918559.39 19918559.60 0.0134 0.0039

Uranus 49823-09-07 02:53 G 19918785.44 19918785.62 19918785.82 0.0134 0.0065

Uranus 49824-04-20 08:10 G 19919011.70 19919011.84 19919012.02 0.0134 0.0091

Uranus 49824-12-02 14:10 G 19919237.98 19919238.09 19919238.19 0.0134 0.0116

Saturn 49825-04-16 19:41 G 19919373.14 19919373.32 19919373.49 0.0271 0.0156

Saturn 49825-12-01 23:46 G 19919602.29 19919602.49 19919602.70 0.0269 0.0072

Moon 49828-08-13 03:22 G 19920587.59 19920587.64 19920587.70 0.2696 0.2475

Jupiter 49828-08-18 22:05 G 19920593.22 19920593.42 19920593.62 0.0529 0.0103

Neptune 49831-09-23 00:29 G 19921723.47 19921723.52 19921723.62 0.0090 0.0085

Neptune 49832-05-05 13:55 G 19921948.98 19921949.08 19921949.22 0.0090 0.0075

Neptune 49832-12-17 03:36 G 19922174.51 19922174.65 19922174.81 0.0090 0.0065

Neptune 49833-07-30 17:17 G 19922400.05 19922400.22 19922400.39 0.0090 0.0055

Neptune 49834-03-13 06:14 G 19922625.59 19922625.76 19922625.96 0.0090 0.0046

Jupiter 49834-06-24 16:48 G 19922729.02 19922729.20 19922729.38 0.0496 0.0231

Neptune 49834-10-24 19:41 G 19922851.13 19922851.32 19922851.53 0.0090 0.0036

Neptune 49835-06-07 09:07 G 19923076.68 19923076.88 19923077.10 0.0090 0.0026

Neptune 49836-01-18 22:48 G 19923302.23 19923302.45 19923302.66 0.0090 0.0016

Moon 49836-08-10 20:24 G 19923507.21 19923507.35 19923507.50 0.2699 0.0911

Earth 49836-08-10 22:19 G 19923507.28 19923507.43 19923507.58 0.2692 0.0976 *

Neptune 49836-08-31 12:00 G 19923527.78 19923528.00 19923528.22 0.0090 0.0006

Neptune 49837-04-14 01:26 G 19923753.34 19923753.56 19923753.78 0.0090 0.0004

Neptune 49837-11-25 14:38 G 19923978.90 19923979.11 19923979.33 0.0090 0.0014

Neptune 49838-07-09 04:05 G 19924204.47 19924204.67 19924204.89 0.0090 0.0023

Neptune 49839-02-19 17:17 G 19924430.03 19924430.22 19924430.44 0.0090 0.0034

Neptune 49839-10-03 06:58 G 19924655.60 19924655.79 19924655.98 0.0090 0.0043

Jupiter 49840-04-23 13:12 G 19924858.88 19924859.05 19924859.23 0.0528 0.0278

Neptune 49840-05-15 20:10 G 19924881.17 19924881.34 19924881.53 0.0090 0.0053

Saturn 49840-12-22 02:24 G 19925101.52 19925101.60 19925101.71 0.0290 0.0259

Neptune 49840-12-27 09:22 G 19925106.75 19925106.89 19925107.07 0.0090 0.0063

Saturn 49841-08-08 23:46 G 19925331.28 19925331.49 19925331.70 0.0292 0.0028

Neptune 49841-08-09 22:48 G 19925332.35 19925332.45 19925332.60 0.0090 0.0073

Neptune 49842-03-23 12:29 G 19925557.95 19925558.02 19925558.12 0.0090 0.0082

Jupiter 49846-02-27 16:34 G 19926994.99 19926995.19 19926995.39 0.0497 0.0087

Mars 49848-05-24 22:48 G 19927812.35 19927812.45 19927812.55 0.1720 0.1418

Saturn 49854-10-28 01:12 G 19930159.37 19930159.55 19930159.75 0.0271 0.0123

Saturn 49855-06-14 05:02 G 19930388.52 19930388.71 19930388.91 0.0268 0.0105

Jupiter 49857-11-02 17:17 G 19931261.11 19931261.22 19931261.34 0.0498 0.0402

Uranus 49862-09-19 00:43 G 19933042.46 19933042.53 19933042.62 0.0143 0.0133

Uranus 49863-05-03 12:14 G 19933268.85 19933269.01 19933269.16 0.0144 0.0101

Uranus 49863-12-15 23:17 G 19933495.29 19933495.47 19933495.67 0.0144 0.0069

Jupiter 49864-04-26 15:36 G 19933628.00 19933628.15 19933628.31 0.0530 0.0332

Uranus 49864-07-29 11:02 G 19933721.75 19933721.96 19933722.17 0.0144 0.0036

Uranus 49865-03-12 22:34 G 19933948.22 19933948.44 19933948.66 0.0144 0.0004

Uranus 49865-10-25 10:19 G 19934174.72 19934174.93 19934175.14 0.0144 0.0029

Uranus 49866-06-08 21:50 G 19934401.22 19934401.41 19934401.62 0.0144 0.0063

Uranus 49867-01-21 09:36 G 19934627.75 19934627.90 19934628.08 0.0145 0.0096

Uranus 49867-09-04 21:22 G 19934854.31 19934854.39 19934854.51 0.0145 0.0129

Jupiter 49870-03-02 00:00 G 19935763.39 19935763.50 19935763.63 0.0496 0.0400

Saturn 49870-07-04 10:19 G 19935887.80 19935887.93 19935888.07 0.0291 0.0220

Saturn 49871-02-19 07:41 G 19936117.62 19936117.82 19936118.03 0.0293 0.0070

Jupiter 49875-12-31 05:46 G 19937893.54 19937893.74 19937893.94 0.0529 0.0055

Jupiter 49881-11-05 02:24 G 19940029.40 19940029.60 19940029.80 0.0497 0.0093

Saturn 49884-05-09 08:53 G 19940945.67 19940945.87 19940946.08 0.0270 0.0082

Saturn 49884-12-24 12:29 G 19941174.85 19941175.02 19941175.21 0.0268 0.0144

Mars 49886-11-05 13:55 G 19941855.99 19941856.08 19941856.17 0.1811 0.1522

Jupiter 49887-09-04 18:00 G 19942159.15 19942159.25 19942159.36 0.0527 0.0445

Jupiter 49893-07-11 04:05 G 19944295.49 19944295.67 19944295.85 0.0498 0.0219

Saturn 49900-01-14 21:36 G 19946674.23 19946674.40 19946674.58 0.0291 0.0167

Saturn 49900-09-01 19:12 G 19946904.12 19946904.30 19946904.50 0.0293 0.0123

Uranus 49903-01-05 21:07 G 19947760.33 19947760.38 19947760.45 0.0135 0.0129

Uranus 49903-08-20 03:07 G 19947986.51 19947986.63 19947986.78 0.0135 0.0103

Uranus 49904-04-02 09:36 G 19948212.72 19948212.90 19948213.08 0.0135 0.0076

Uranus 49904-11-14 15:22 G 19948438.95 19948439.14 19948439.35 0.0135 0.0050

Pluto 49905-01-09 04:48 G 19948494.65 19948494.70 19948494.80 0.0063 0.0059

Uranus 49905-06-28 21:22 G 19948665.18 19948665.39 19948665.61 0.0134 0.0023

Pluto 49905-08-22 08:38 G 19948719.67 19948719.86 19948720.08 0.0063 0.0022

Uranus 49906-02-10 03:22 G 19948891.42 19948891.64 19948891.86 0.0134 0.0004

Pluto 49906-04-04 12:29 G 19948944.81 19948945.02 19948945.24 0.0063 0.0016

Uranus 49906-09-24 08:53 G 19949117.66 19949117.87 19949118.09 0.0134 0.0030

Pluto 49906-11-15 15:50 G 19949170.07 19949170.16 19949170.29 0.0063 0.0055

Uranus 49907-05-08 14:38 G 19949343.92 19949344.11 19949344.31 0.0134 0.0056

Uranus 49907-12-20 20:10 G 19949570.18 19949570.34 19949570.52 0.0134 0.0082

Uranus 49908-08-03 01:41 G 19949796.46 19949796.57 19949796.71 0.0134 0.0108

Uranus 49909-03-17 07:12 G 19950022.80 19950022.80 19950022.82 0.0134 0.0134

Jupiter 49911-09-08 20:10 G 19950928.14 19950928.34 19950928.53 0.0530 0.0160

Neptune 49913-11-09 10:34 G 19951720.85 19951720.94 19951721.04 0.0088 0.0079

Saturn 49913-11-20 15:22 G 19951731.94 19951732.14 19951732.36 0.0270 0.0048

Mars 49914-03-23 08:38 G 19951854.73 19951854.86 19951855.00 0.1716 0.1017

Neptune 49914-06-22 23:02 G 19951946.34 19951946.46 19951946.60 0.0088 0.0070

Saturn 49914-07-07 18:43 G 19951961.12 19951961.28 19951961.44 0.0268 0.0177

Neptune 49915-02-03 11:46 G 19952171.84 19952171.99 19952172.16 0.0088 0.0061

Neptune 49915-09-17 00:14 G 19952397.35 19952397.51 19952397.70 0.0088 0.0052

Neptune 49916-04-29 12:58 G 19952622.86 19952623.04 19952623.24 0.0088 0.0043

Neptune 49916-12-11 01:41 G 19952848.38 19952848.57 19952848.79 0.0088 0.0034

Jupiter 49917-07-14 10:34 G 19953063.77 19953063.94 19953064.12 0.0496 0.0267

Neptune 49917-07-24 14:24 G 19953073.90 19953074.10 19953074.32 0.0088 0.0025

Neptune 49918-03-07 03:22 G 19953299.42 19953299.64 19953299.86 0.0088 0.0015

Neptune 49918-10-18 15:50 G 19953524.94 19953525.16 19953525.38 0.0088 0.0006

Neptune 49919-06-01 04:34 G 19953750.47 19953750.69 19953750.91 0.0088 0.0003

Neptune 49920-01-12 17:17 G 19953976.01 19953976.22 19953976.44 0.0088 0.0013

Neptune 49920-08-25 06:00 G 19954201.54 19954201.75 19954201.97 0.0088 0.0022

Neptune 49921-04-07 18:29 G 19954427.07 19954427.27 19954427.48 0.0088 0.0031

Neptune 49921-11-19 07:12 G 19954652.61 19954652.80 19954653.00 0.0088 0.0040

Neptune 49922-07-02 19:26 G 19954878.15 19954878.31 19954878.51 0.0088 0.0050

Neptune 49923-02-13 07:55 G 19955103.69 19955103.83 19955104.02 0.0088 0.0059

Jupiter 49923-05-14 11:17 G 19955193.79 19955193.97 19955194.16 0.0528 0.0220

Neptune 49923-09-26 20:38 G 19955329.24 19955329.36 19955329.52 0.0088 0.0068

Neptune 49924-05-09 09:07 G 19955554.80 19955554.88 19955555.01 0.0088 0.0077

Neptune 49924-12-20 21:36 G 19955780.38 19955780.40 19955780.48 0.0088 0.0086

Jupiter 49929-03-19 11:31 G 19957329.78 19957329.98 19957330.18 0.0497 0.0047

Saturn 49929-07-28 04:34 G 19957460.50 19957460.69 19957460.88 0.0292 0.0130

Saturn 49930-03-15 02:38 G 19957690.43 19957690.61 19957690.78 0.0294 0.0162

Jupiter 49940-11-22 13:12 G 19961595.91 19961596.05 19961596.19 0.0499 0.0358

Saturn 49942-10-16 17:46 G 19962289.14 19962289.24 19962289.34 0.0271 0.0239

Saturn 49943-06-02 22:34 G 19962518.23 19962518.44 19962518.65 0.0269 0.0009

Saturn 49944-01-18 01:41 G 19962747.45 19962747.57 19962747.70 0.0267 0.0215

Uranus 49947-01-01 21:07 G 19963827.25 19963827.38 19963827.52 0.0143 0.0113

Jupiter 49947-05-17 08:38 G 19963962.72 19963962.86 19963963.01 0.0530 0.0367

Uranus 49947-08-16 08:24 G 19964053.68 19964053.85 19964054.03 0.0144 0.0081

Uranus 49948-03-29 19:41 G 19964280.12 19964280.32 19964280.53 0.0144 0.0049

Uranus 49948-11-11 07:26 G 19964506.60 19964506.81 19964507.03 0.0144 0.0016

Uranus 49949-06-25 19:12 G 19964733.08 19964733.30 19964733.51 0.0144 0.0017

Uranus 49950-02-07 06:43 G 19964959.58 19964959.78 19964959.99 0.0144 0.0050

Earth 49950-02-13 00:14 G 19964965.45 19964965.51 19964965.56 0.2639 0.2462

Uranus 49950-09-21 18:14 G 19965186.10 19965186.26 19965186.45 0.0144 0.0084

Uranus 49951-05-06 06:14 G 19965412.65 19965412.76 19965412.90 0.0144 0.0116

Mars 49952-09-02 19:55 G 19965898.18 19965898.33 19965898.48 0.1815 0.0893

Jupiter 49953-03-21 20:53 G 19966098.29 19966098.37 19966098.46 0.0496 0.0447

Earth 49958-02-10 17:02 G 19967885.05 19967885.21 19967885.36 0.2640 0.0795

Moon 49958-02-10 21:22 G 19967885.24 19967885.39 19967885.54 0.2644 0.0679 *

Jupiter 49959-01-19 23:46 G 19968228.29 19968228.49 19968228.69 0.0529 0.0015

Saturn 49959-02-07 15:36 G 19968246.95 19968247.15 19968247.36 0.0291 0.0078

Saturn 49959-09-25 13:55 G 19968476.95 19968477.08 19968477.23 0.0294 0.0216

Jupiter 49964-11-24 20:53 G 19970364.18 19970364.37 19970364.57 0.0497 0.0133

Jupiter 49970-09-24 16:05 G 19972494.03 19972494.17 19972494.30 0.0528 0.0387

Saturn 49972-04-28 00:43 G 19973075.40 19973075.53 19973075.68 0.0271 0.0204

Saturn 49972-12-13 05:17 G 19973304.51 19973304.72 19973304.93 0.0269 0.0026

Saturn 49973-07-30 07:41 G 19973533.75 19973533.82 19973533.91 0.0267 0.0248

Jupiter 49976-07-30 22:05 G 19974630.23 19974630.42 19974630.62 0.0498 0.0180

Mars 49980-01-18 18:29 G 19975897.11 19975897.27 19975897.43 0.1713 0.0611

Uranus 49987-04-19 14:10 G 19978544.99 19978545.09 19978545.23 0.0135 0.0113

Uranus 49987-12-01 20:38 G 19978771.20 19978771.36 19978771.53 0.0135 0.0086

Jupiter 49988-04-04 22:34 G 19978896.42 19978896.44 19978896.46 0.0499 0.0495

Uranus 49988-07-15 02:38 G 19978997.42 19978997.61 19978997.81 0.0135 0.0059

Saturn 49988-08-19 21:22 G 19979033.18 19979033.39 19979033.60 0.0292 0.0042

Uranus 49989-02-26 08:38 G 19979223.66 19979223.86 19979224.08 0.0135 0.0033

Saturn 49989-04-06 19:55 G 19979263.23 19979263.33 19979263.44 0.0295 0.0253

Uranus 49989-10-10 14:38 G 19979449.89 19979450.11 19979450.33 0.0134 0.0006

Uranus 49990-05-24 20:38 G 19979676.15 19979676.36 19979676.58 0.0134 0.0020

Uranus 49991-01-06 02:10 G 19979902.40 19979902.59 19979902.81 0.0134 0.0047

Uranus 49991-08-20 07:55 G 19980128.66 19980128.83 19980129.02 0.0134 0.0073

Uranus 49992-04-02 13:26 G 19980354.93 19980355.06 19980355.22 0.0134 0.0099

Uranus 49992-11-14 18:58 G 19980581.23 19980581.29 19980581.38 0.0134 0.0125

Jupiter 49994-09-27 16:48 G 19981263.02 19981263.20 19981263.39 0.0529 0.0211

Pluto 49995-10-08 00:29 G 19981638.33 19981638.52 19981638.71 0.0081 0.0039

Neptune 49995-12-26 07:55 G 19981717.79 19981717.83 19981717.89 0.0090 0.0087

Pluto 49996-05-20 11:17 G 19981863.78 19981863.97 19981864.16 0.0081 0.0042

Neptune 49996-08-07 21:07 G 19981943.29 19981943.38 19981943.51 0.0090 0.0078

Neptune 49997-03-21 10:34 G 19982168.81 19982168.94 19982169.10 0.0090 0.0068

Neptune 49997-11-02 00:14 G 19982394.35 19982394.51 19982394.68 0.0090 0.0058

Neptune 49998-06-15 13:26 G 19982619.89 19982620.06 19982620.26 0.0090 0.0049

Neptune 49999-01-27 02:53 G 19982845.43 19982845.62 19982845.83 0.0090 0.0039

Neptune 49999-09-09 16:19 G 19983070.98 19983071.18 19983071.39 0.0090 0.0029

Neptune 50000-04-22 05:31 G 19983296.53 19983296.73 19983296.96 0.0090 0.0020

Jupiter 50000-08-02 06:58 G 19983398.64 19983398.79 19983398.95 0.0496 0.0311

Neptune 50000-12-03 18:58 G 19983522.08 19983522.29 19983522.52 0.0090 0.0010

51ST MILLENNIUM CE

This is a list of transits of Venus in the 51st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 50001-07-17 08:38 G 19983747.64 19983747.86 19983748.08 0.0090 0.0000

Saturn 50001-11-08 06:58 G 19983861.62 19983861.79 19983861.96 0.0271 0.0166

Neptune 50002-02-27 21:50 G 19983973.20 19983973.41 19983973.63 0.0090 0.0010

Saturn 50002-06-25 11:02 G 19984090.76 19984090.96 19984091.17 0.0269 0.0062

Neptune 50002-10-11 11:02 G 19984198.75 19984198.96 19984199.18 0.0090 0.0020

Neptune 50003-05-25 00:14 G 19984424.32 19984424.51 19984424.73 0.0090 0.0030

Neptune 50004-01-05 13:55 G 19984649.89 19984650.08 19984650.28 0.0090 0.0039

Neptune 50004-08-18 03:07 G 19984875.46 19984875.63 19984875.83 0.0090 0.0049

Neptune 50005-03-31 16:19 G 19985101.03 19985101.18 19985101.36 0.0090 0.0059

Neptune 50005-11-12 06:14 G 19985326.61 19985326.76 19985326.90 0.0090 0.0068

Jupiter 50006-06-02 05:46 G 19985528.55 19985528.74 19985528.93 0.0528 0.0178

Neptune 50006-06-25 19:12 G 19985552.21 19985552.30 19985552.42 0.0090 0.0078

Neptune 50007-02-06 08:24 G 19985777.83 19985777.85 19985777.92 0.0090 0.0088

Jupiter 50012-04-07 08:38 G 19987664.66 19987664.86 19987665.07 0.0497 0.0006

Saturn 50017-07-15 10:05 G 19989589.88 19989589.92 19989589.99 0.0290 0.0279

Saturn 50018-03-02 07:26 G 19989819.60 19989819.81 19989820.02 0.0292 0.0007

Mars 50018-07-01 01:55 G 19989940.40 19989940.58 19989940.75 0.1819 0.0272

Jupiter 50023-12-12 08:24 G 19991930.70 19991930.85 19991931.02 0.0498 0.0313

Jupiter 50030-06-05 07:55 G 19994297.71 19994297.83 19994297.95 0.0530 0.0428

Uranus 50030-09-01 05:46 G 19994385.65 19994385.74 19994385.86 0.0143 0.0125

Uranus 50031-04-15 17:02 G 19994612.05 19994612.21 19994612.38 0.0143 0.0093

Saturn 50031-05-21 13:41 G 19994647.89 19994648.07 19994648.26 0.0271 0.0131

Uranus 50031-11-28 04:34 G 19994838.50 19994838.69 19994838.89 0.0144 0.0061

Saturn 50032-01-05 17:31 G 19994877.04 19994877.23 19994877.43 0.0269 0.0096

Uranus 50032-07-11 16:05 G 19995064.96 19995065.17 19995065.39 0.0144 0.0028

Uranus 50033-02-23 03:36 G 19995291.43 19995291.65 19995291.87 0.0144 0.0005

Uranus 50033-10-07 15:07 G 19995517.93 19995518.13 19995518.35 0.0144 0.0038

Uranus 50034-05-22 02:53 G 19995744.44 19995744.62 19995744.82 0.0144 0.0071

Uranus 50035-01-03 14:38 G 19995970.98 19995971.11 19995971.28 0.0144 0.0105

Uranus 50035-08-18 02:53 G 19996197.56 19996197.62 19996197.69 0.0144 0.0137

Jupiter 50036-04-09 15:50 G 19996433.13 19996433.16 19996433.20 0.0496 0.0486

Jupiter 50042-02-07 23:31 G 19998563.27 19998563.48 19998563.68 0.0529 0.0051

Mars 50045-11-15 04:48 G 19999939.52 19999939.70 19999939.87 0.1709 0.0233

Saturn 50047-01-25 14:10 G 20000375.99 20000376.09 20000376.21 0.0290 0.0248

Saturn 50047-09-12 11:31 G 20000605.78 20000605.98 20000606.19 0.0293 0.0041

Jupiter 50047-12-14 17:17 G 20000699.03 20000699.22 20000699.41 0.0497 0.0178

Jupiter 50053-10-13 14:24 G 20002828.94 20002829.10 20002829.26 0.0528 0.0328

Jupiter 50059-08-19 19:12 G 20004965.10 20004965.30 20004965.49 0.0498 0.0131

Saturn 50060-11-30 18:29 G 20005434.08 20005434.27 20005434.47 0.0270 0.0097

Saturn 50061-07-17 22:05 G 20005663.24 20005663.42 20005663.61 0.0268 0.0129

Uranus 50070-12-18 01:41 G 20009103.49 20009103.57 20009103.68 0.0135 0.0122

Jupiter 50071-04-24 20:24 G 20009231.26 20009231.35 20009231.44 0.0499 0.0441

Uranus 50071-08-01 08:10 G 20009329.69 20009329.84 20009330.00 0.0135 0.0095

Earth 50071-08-15 08:10 G 20009343.83 20009343.84 20009343.86 0.2692 0.2666

Uranus 50072-03-14 14:10 G 20009555.91 20009556.09 20009556.29 0.0135 0.0069

Uranus 50072-10-26 20:24 G 20009782.14 20009782.35 20009782.56 0.0135 0.0042

Uranus 50073-06-10 02:24 G 20010008.39 20010008.60 20010008.82 0.0134 0.0015

Uranus 50074-01-22 08:24 G 20010234.63 20010234.85 20010235.07 0.0134 0.0012

Uranus 50074-09-05 14:10 G 20010460.88 20010461.09 20010461.30 0.0134 0.0038

Uranus 50075-04-19 19:55 G 20010687.15 20010687.33 20010687.53 0.0134 0.0064

Uranus 50075-12-02 01:26 G 20010913.42 20010913.56 20010913.73 0.0134 0.0091

Uranus 50076-07-15 06:58 G 20011139.71 20011139.79 20011139.92 0.0134 0.0117

Saturn 50076-08-06 23:02 G 20011162.31 20011162.46 20011162.61 0.0290 0.0203

Saturn 50077-03-24 20:24 G 20011392.15 20011392.35 20011392.56 0.0293 0.0087

Jupiter 50077-10-16 13:12 G 20011597.88 20011598.05 20011598.23 0.0530 0.0262

Neptune 50078-02-10 19:12 G 20011715.23 20011715.30 20011715.39 0.0088 0.0081

Neptune 50078-09-24 07:41 G 20011940.71 20011940.82 20011940.96 0.0088 0.0072

Neptune 50079-05-07 20:24 G 20012166.20 20012166.35 20012166.51 0.0088 0.0063

Earth 50079-08-12 21:50 G 20012263.27 20012263.41 20012263.56 0.2692 0.1154

Moon 50079-08-13 01:26 G 20012263.40 20012263.56 20012263.72 0.2687 0.0813 *

Neptune 50079-12-19 09:07 G 20012391.71 20012391.88 20012392.06 0.0088 0.0054

Neptune 50080-07-31 21:50 G 20012617.22 20012617.41 20012617.60 0.0088 0.0045

Neptune 50081-03-14 10:19 G 20012842.74 20012842.93 20012843.14 0.0088 0.0036

Neptune 50081-10-25 23:02 G 20013068.25 20013068.46 20013068.67 0.0088 0.0027

Neptune 50082-06-08 11:31 G 20013293.77 20013293.98 20013294.20 0.0088 0.0018

Neptune 50083-01-20 00:29 G 20013519.30 20013519.52 20013519.74 0.0088 0.0009

Jupiter 50083-08-22 03:07 G 20013733.50 20013733.63 20013733.78 0.0496 0.0358

Neptune 50083-09-02 13:12 G 20013744.83 20013745.05 20013745.27 0.0088 0.0001

Neptune 50084-04-15 01:41 G 20013970.36 20013970.57 20013970.79 0.0088 0.0010

Mars 50084-04-27 07:12 G 20013982.63 20013982.80 20013982.97 0.1823 0.0401

Neptune 50084-11-26 14:24 G 20014195.89 20014196.10 20014196.32 0.0088 0.0019

Neptune 50085-07-10 03:07 G 20014421.42 20014421.63 20014421.84 0.0088 0.0028

Neptune 50086-02-20 15:50 G 20014646.96 20014647.16 20014647.36 0.0088 0.0037

Neptune 50086-10-04 03:50 G 20014872.50 20014872.66 20014872.87 0.0088 0.0047

Neptune 50087-05-17 17:02 G 20015098.04 20015098.21 20015098.38 0.0088 0.0055

Neptune 50087-12-29 05:17 G 20015323.59 20015323.72 20015323.89 0.0088 0.0065

Neptune 50088-08-10 18:29 G 20015549.15 20015549.27 20015549.39 0.0088 0.0073

Neptune 50089-03-24 06:43 G 20015774.72 20015774.78 20015774.87 0.0088 0.0082

Jupiter 50089-06-21 05:17 G 20015863.52 20015863.72 20015863.92 0.0529 0.0113

Saturn 50090-06-13 00:29 G 20016220.32 20016220.52 20016220.73 0.0270 0.0064

Saturn 50091-01-28 03:50 G 20016449.50 20016449.66 20016449.84 0.0268 0.0161

Jupiter 50095-04-27 05:17 G 20017999.51 20017999.72 20017999.92 0.0497 0.0052

Jupiter 50101-02-24 21:50 G 20020129.33 20020129.41 20020129.48 0.0528 0.0483

Saturn 50106-02-18 01:12 G 20021948.40 20021948.55 20021948.73 0.0291 0.0175

Saturn 50106-10-05 23:02 G 20022178.27 20022178.46 20022178.66 0.0293 0.0115

Jupiter 50107-01-01 06:14 G 20022265.59 20022265.76 20022265.94 0.0498 0.0261

Mars 50111-09-13 14:38 G 20023981.94 20023982.11 20023982.29 0.1706 0.0167

Jupiter 50113-06-25 07:55 G 20024632.76 20024632.83 20024632.90 0.0530 0.0492

Uranus 50114-05-02 15:50 G 20024944.10 20024944.16 20024944.24 0.0143 0.0136

Uranus 50114-12-15 03:07 G 20025170.49 20025170.63 20025170.78 0.0143 0.0104

Uranus 50115-07-29 14:24 G 20025396.92 20025397.10 20025397.29 0.0144 0.0072

Uranus 50116-03-12 01:55 G 20025623.37 20025623.58 20025623.79 0.0144 0.0039

Uranus 50116-10-24 13:26 G 20025849.85 20025850.06 20025850.28 0.0144 0.0007

Uranus 50117-06-08 00:58 G 20026076.34 20026076.54 20026076.76 0.0144 0.0027

Uranus 50118-01-20 12:43 G 20026302.84 20026303.03 20026303.24 0.0144 0.0060

Uranus 50118-09-04 00:43 G 20026529.37 20026529.53 20026529.70 0.0144 0.0093

Uranus 50119-04-18 12:29 G 20026755.92 20026756.02 20026756.13 0.0144 0.0126

Saturn 50119-05-09 22:34 G 20026777.40 20026777.44 20026777.49 0.0272 0.0265

Saturn 50119-12-25 03:50 G 20027006.45 20027006.66 20027006.87 0.0270 0.0034

Saturn 50120-08-10 06:58 G 20027235.65 20027235.79 20027235.94 0.0268 0.0191

Jupiter 50125-02-27 21:07 G 20028898.18 20028898.38 20028898.58 0.0529 0.0107

Jupiter 50131-01-03 16:19 G 20031034.01 20031034.18 20031034.37 0.0497 0.0236

Saturn 50135-08-31 08:10 G 20032734.66 20032734.84 20032735.04 0.0291 0.0134

Saturn 50136-04-17 06:29 G 20032964.59 20032964.77 20032964.94 0.0293 0.0158

Jupiter 50136-11-02 12:29 G 20033163.85 20033164.02 20033164.19 0.0528 0.0270

Jupiter 50142-09-08 17:02 G 20035300.01 20035300.21 20035300.42 0.0497 0.0076

Saturn 50148-11-19 04:19 G 20037563.58 20037563.68 20037563.79 0.0272 0.0233

Saturn 50149-07-06 09:07 G 20037792.67 20037792.88 20037793.10 0.0270 0.0004

Saturn 50150-02-20 12:00 G 20038021.89 20038022.00 20038022.13 0.0268 0.0222

Mars 50150-02-23 12:29 G 20038024.88 20038025.02 20038025.16 0.1828 0.1075

Pluto 50152-05-03 05:02 G 20038824.53 20038824.71 20038824.91 0.0063 0.0032

Pluto 50152-12-14 08:53 G 20039049.65 20039049.87 20039050.09 0.0063 0.0005

Pluto 50153-07-27 12:14 G 20039274.86 20039275.01 20039275.18 0.0063 0.0044

Jupiter 50154-05-14 18:58 G 20039566.17 20039566.29 20039566.42 0.0498 0.0384

Uranus 50154-08-18 14:10 G 20039662.03 20039662.09 20039662.14 0.0135 0.0131

Uranus 50155-04-01 20:10 G 20039888.21 20039888.34 20039888.49 0.0135 0.0104

Uranus 50155-11-14 02:38 G 20040114.43 20040114.61 20040114.79 0.0135 0.0077

Uranus 50156-06-27 08:38 G 20040340.66 20040340.86 20040341.07 0.0135 0.0050

Uranus 50157-02-08 14:38 G 20040566.90 20040567.11 20040567.33 0.0134 0.0024

Uranus 50157-09-22 20:38 G 20040793.15 20040793.36 20040793.58 0.0134 0.0004

Uranus 50158-05-07 02:38 G 20041019.40 20041019.61 20041019.83 0.0134 0.0030

Uranus 50158-12-19 08:24 G 20041245.66 20041245.85 20041246.05 0.0134 0.0056

Uranus 50159-08-02 14:10 G 20041471.93 20041472.09 20041472.27 0.0134 0.0082

Uranus 50160-03-15 19:55 G 20041698.21 20041698.33 20041698.46 0.0134 0.0108

Neptune 50160-03-29 14:53 G 20041712.12 20041712.12 20041712.13 0.0090 0.0090

Jupiter 50160-11-05 15:36 G 20041932.99 20041933.15 20041933.31 0.0530 0.0337

Neptune 50160-11-10 04:19 G 20041937.59 20041937.68 20041937.78 0.0090 0.0080

Neptune 50161-06-23 17:31 G 20042163.12 20042163.23 20042163.38 0.0090 0.0071

Neptune 50162-02-04 07:12 G 20042388.65 20042388.80 20042388.97 0.0090 0.0061

Neptune 50162-09-17 20:24 G 20042614.19 20042614.35 20042614.54 0.0090 0.0052

Neptune 50163-05-01 09:50 G 20042839.73 20042839.91 20042840.12 0.0090 0.0042

Neptune 50163-12-12 23:17 G 20043065.28 20043065.47 20043065.69 0.0090 0.0033

Neptune 50164-07-25 12:58 G 20043290.83 20043291.04 20043291.26 0.0090 0.0023

Neptune 50165-03-08 02:24 G 20043516.38 20043516.60 20043516.82 0.0090 0.0013

Saturn 50165-03-12 10:05 G 20043520.72 20043520.92 20043521.11 0.0291 0.0107

Neptune 50165-10-19 15:36 G 20043741.94 20043742.15 20043742.38 0.0090 0.0004

Saturn 50165-10-28 07:55 G 20043750.67 20043750.83 20043751.00 0.0294 0.0185

Neptune 50166-06-02 05:02 G 20043967.50 20043967.71 20043967.93 0.0090 0.0007

Jupiter 50166-09-11 02:24 G 20044068.49 20044068.60 20044068.71 0.0496 0.0413

Neptune 50167-01-13 18:29 G 20044193.06 20044193.27 20044193.49 0.0090 0.0016

Neptune 50167-08-27 07:41 G 20044418.62 20044418.82 20044419.04 0.0090 0.0026

Neptune 50168-04-08 20:53 G 20044644.18 20044644.37 20044644.59 0.0090 0.0036

Neptune 50168-11-20 10:34 G 20044869.75 20044869.94 20044870.13 0.0090 0.0045

Neptune 50169-07-03 23:46 G 20045095.33 20045095.49 20045095.68 0.0090 0.0055

Neptune 50170-02-14 12:58 G 20045320.91 20045321.04 20045321.21 0.0090 0.0065

Neptune 50170-09-28 02:24 G 20045546.49 20045546.60 20045546.74 0.0090 0.0074

Neptune 50171-05-11 15:22 G 20045772.09 20045772.14 20045772.25 0.0090 0.0084

Jupiter 50172-07-11 07:12 G 20046198.60 20046198.80 20046199.00 0.0529 0.0040

Mars 50177-07-11 01:12 G 20048024.38 20048024.55 20048024.71 0.1703 0.0530

Jupiter 50178-05-17 04:34 G 20048334.49 20048334.69 20048334.89 0.0497 0.0109

Saturn 50178-06-01 05:46 G 20048349.61 20048349.74 20048349.88 0.0272 0.0205

Saturn 50179-01-16 10:48 G 20048578.74 20048578.95 20048579.16 0.0269 0.0025

Saturn 50179-09-02 13:41 G 20048807.99 20048808.07 20048808.15 0.0267 0.0247

Jupiter 50184-03-15 21:22 G 20050464.27 20050464.39 20050464.52 0.0527 0.0417

Jupiter 50190-01-20 06:29 G 20052600.59 20052600.77 20052600.96 0.0498 0.0198

Earth 50193-02-14 02:53 G 20053721.59 20053721.62 20053721.65 0.2639 0.2589

Saturn 50194-09-22 15:22 G 20054306.94 20054307.14 20054307.35 0.0291 0.0070

Saturn 50195-05-10 13:26 G 20054536.94 20054537.06 20054537.21 0.0294 0.0224

Uranus 50198-08-14 11:17 G 20055728.85 20055728.97 20055729.10 0.0143 0.0116

Uranus 50199-03-28 22:34 G 20055955.27 20055955.44 20055955.62 0.0143 0.0084

Uranus 50199-11-10 09:50 G 20056181.72 20056181.91 20056182.13 0.0144 0.0052

Uranus 50200-06-24 21:36 G 20056408.19 20056408.40 20056408.62 0.0144 0.0019

Uranus 50201-02-06 09:07 G 20056634.67 20056634.88 20056635.10 0.0144 0.0015

Moon 50201-02-12 16:05 G 20056641.01 20056641.17 20056641.33 0.2634 0.0685

Earth 50201-02-12 19:41 G 20056641.16 20056641.32 20056641.47 0.2640 0.0677 *

Uranus 50201-09-20 20:53 G 20056861.16 20056861.37 20056861.57 0.0144 0.0047

Uranus 50202-05-05 08:38 G 20057087.68 20057087.86 20057088.04 0.0144 0.0081

Uranus 50202-12-17 20:24 G 20057314.23 20057314.35 20057314.49 0.0144 0.0114

Saturn 50207-12-13 10:34 G 20059135.79 20059135.94 20059136.12 0.0272 0.0175

Jupiter 50208-03-19 22:48 G 20059233.26 20059233.45 20059233.64 0.0530 0.0179

Saturn 50208-07-29 15:22 G 20059364.93 20059365.14 20059365.35 0.0269 0.0055

Jupiter 50214-01-23 16:19 G 20061369.01 20061369.18 20061369.34 0.0496 0.0294

Mars 50215-12-22 18:14 G 20062067.21 20062067.26 20062067.31 0.1831 0.1740

Jupiter 50219-11-23 15:22 G 20063498.95 20063499.14 20063499.33 0.0529 0.0192

Saturn 50224-04-04 16:05 G 20065092.96 20065093.17 20065093.38 0.0291 0.0044

Saturn 50224-11-20 13:55 G 20065322.98 20065323.08 20065323.20 0.0294 0.0249

Jupiter 50225-09-28 17:46 G 20065635.04 20065635.24 20065635.44 0.0497 0.0014

Jupiter 50237-06-03 19:26 G 20069901.16 20069901.31 20069901.47 0.0498 0.0322

Saturn 50237-06-24 10:48 G 20069921.79 20069921.95 20069922.14 0.0271 0.0151

Saturn 50238-02-08 15:36 G 20070150.95 20070151.15 20070151.36 0.0269 0.0080

Uranus 50238-12-01 08:10 G 20070446.73 20070446.84 20070446.97 0.0135 0.0113

Uranus 50239-07-15 14:10 G 20070672.94 20070673.09 20070673.28 0.0135 0.0086

Uranus 50240-02-26 20:38 G 20070899.17 20070899.36 20070899.56 0.0135 0.0059

Uranus 50240-10-10 02:53 G 20071125.41 20071125.62 20071125.83 0.0135 0.0032

Uranus 50241-05-24 09:07 G 20071351.66 20071351.88 20071352.09 0.0134 0.0006

Uranus 50242-01-05 14:53 G 20071577.91 20071578.12 20071578.34 0.0134 0.0022

Neptune 50242-05-17 03:50 G 20071709.61 20071709.66 20071709.75 0.0088 0.0083

Pluto 50242-06-19 17:46 G 20071743.13 20071743.24 20071743.40 0.0081 0.0065

Uranus 50242-08-19 20:38 G 20071804.16 20071804.36 20071804.57 0.0134 0.0048

Neptune 50242-12-28 16:48 G 20071935.10 20071935.20 20071935.33 0.0088 0.0074

Pluto 50243-01-31 05:17 G 20071968.51 20071968.72 20071968.94 0.0081 0.0017

Uranus 50243-04-03 02:24 G 20072030.43 20072030.60 20072030.79 0.0134 0.0074

Mars 50243-05-09 11:17 G 20072066.82 20072066.97 20072067.11 0.1699 0.0905

Neptune 50243-08-11 05:31 G 20072160.59 20072160.73 20072160.89 0.0088 0.0065

Uranus 50243-11-15 08:24 G 20072256.71 20072256.85 20072256.99 0.0134 0.0100

Jupiter 50243-11-26 16:34 G 20072268.07 20072268.19 20072268.33 0.0530 0.0407

Neptune 50244-03-23 18:00 G 20072386.09 20072386.25 20072386.43 0.0088 0.0056

Uranus 50244-06-28 14:10 G 20072483.02 20072483.09 20072483.16 0.0134 0.0126

Neptune 50244-11-04 06:43 G 20072611.60 20072611.78 20072611.97 0.0088 0.0047

Neptune 50245-06-17 19:26 G 20072837.11 20072837.31 20072837.51 0.0088 0.0038

Neptune 50246-01-29 08:10 G 20073062.63 20073062.84 20073063.05 0.0088 0.0029

Neptune 50246-09-11 20:38 G 20073288.15 20073288.36 20073288.58 0.0088 0.0020

Neptune 50247-04-25 09:22 G 20073513.67 20073513.89 20073514.11 0.0088 0.0011

Neptune 50247-12-06 22:05 G 20073739.20 20073739.42 20073739.64 0.0088 0.0002

Neptune 50248-07-19 10:34 G 20073964.73 20073964.94 20073965.17 0.0088 0.0008

Neptune 50249-03-01 23:02 G 20074190.26 20074190.46 20074190.69 0.0088 0.0017

Jupiter 50249-10-01 03:50 G 20074403.61 20074403.66 20074403.71 0.0496 0.0478

Neptune 50249-10-13 11:46 G 20074415.79 20074415.99 20074416.21 0.0088 0.0025

Neptune 50250-05-27 00:14 G 20074641.32 20074641.51 20074641.73 0.0088 0.0035

Neptune 50251-01-07 12:58 G 20074866.87 20074867.04 20074867.25 0.0088 0.0044

Neptune 50251-08-21 01:41 G 20075092.41 20075092.57 20075092.76 0.0088 0.0053

Neptune 50252-04-02 14:10 G 20075317.96 20075318.09 20075318.27 0.0088 0.0062

Neptune 50252-11-14 03:07 G 20075543.51 20075543.63 20075543.77 0.0088 0.0070

Neptune 50253-06-27 15:36 G 20075769.07 20075769.15 20075769.26 0.0088 0.0079

Saturn 50253-10-15 20:38 G 20075879.15 20075879.36 20075879.57 0.0292 0.0010

Saturn 50254-06-02 19:12 G 20076109.25 20076109.30 20076109.35 0.0294 0.0285

Jupiter 50255-08-01 08:10 G 20076533.64 20076533.84 20076534.04 0.0529 0.0031

Jupiter 50261-06-06 05:31 G 20078669.54 20078669.73 20078669.92 0.0496 0.0173

Saturn 50267-01-04 15:07 G 20080707.95 20080708.13 20080708.33 0.0271 0.0121

Jupiter 50267-04-05 23:02 G 20080799.31 20080799.46 20080799.61 0.0528 0.0346

Saturn 50267-08-21 19:26 G 20080937.13 20080937.31 20080937.51 0.0269 0.0109

Jupiter 50273-02-09 08:24 G 20082935.65 20082935.85 20082936.04 0.0497 0.0131

Uranus 50282-04-14 19:12 G 20086287.21 20086287.30 20086287.40 0.0143 0.0128

Saturn 50282-09-10 00:43 G 20086435.46 20086435.53 20086435.62 0.0289 0.0267

Uranus 50282-11-27 06:29 G 20086513.61 20086513.77 20086513.94 0.0143 0.0096

Saturn 50283-04-27 21:07 G 20086665.16 20086665.38 20086665.59 0.0292 0.0017

Uranus 50283-07-11 17:46 G 20086740.05 20086740.24 20086740.44 0.0144 0.0064

Uranus 50284-02-23 05:17 G 20086966.51 20086966.72 20086966.93 0.0144 0.0031

Uranus 50284-10-06 16:48 G 20087192.98 20087193.20 20087193.42 0.0144 0.0002

Jupiter 50284-10-15 09:22 G 20087201.80 20087201.89 20087201.98 0.0499 0.0441

Uranus 50285-05-21 04:19 G 20087419.47 20087419.68 20087419.90 0.0144 0.0035

Uranus 50286-01-02 16:05 G 20087645.98 20087646.17 20087646.37 0.0144 0.0068

Uranus 50286-08-17 03:36 G 20087872.51 20087872.65 20087872.82 0.0144 0.0102

Uranus 50287-03-31 15:22 G 20088099.08 20088099.14 20088099.24 0.0144 0.0135

Jupiter 50291-04-09 03:07 G 20089568.46 20089568.63 20089568.81 0.0530 0.0263

Saturn 50296-07-16 14:38 G 20091493.91 20091494.11 20091494.31 0.0271 0.0098

Jupiter 50297-02-11 17:31 G 20091704.10 20091704.23 20091704.38 0.0496 0.0358

Saturn 50297-03-02 18:58 G 20091723.11 20091723.29 20091723.48 0.0269 0.0131

Jupiter 50302-12-13 18:00 G 20093834.05 20093834.25 20093834.45 0.0528 0.0115

Jupiter 50308-10-18 19:55 G 20095970.13 20095970.33 20095970.53 0.0497 0.0055

Mars 50309-03-06 22:05 G 20096109.30 20096109.42 20096109.53 0.1696 0.1255

Saturn 50312-03-23 04:05 G 20097221.55 20097221.67 20097221.79 0.0289 0.0237

Saturn 50312-11-08 00:29 G 20097451.31 20097451.52 20097451.73 0.0292 0.0048

Mars 50313-10-19 14:38 G 20097797.01 20097797.11 20097797.22 0.1822 0.1460

Moon 50314-08-18 02:24 G 20098099.51 20098099.60 20098099.69 0.2691 0.2252

Earth 50314-08-18 07:55 G 20098099.78 20098099.83 20098099.89 0.2692 0.2491

Jupiter 50314-08-18 09:36 G 20098099.83 20098099.90 20098099.98 0.0527 0.0486 *

Jupiter 50320-06-23 21:50 G 20100236.24 20100236.41 20100236.59 0.0498 0.0251

Uranus 50322-08-01 19:55 G 20101005.24 20101005.33 20101005.43 0.0135 0.0121

Moon 50322-08-15 17:02 G 20101019.11 20101019.21 20101019.31 0.2696 0.1996

Earth 50322-08-15 21:36 G 20101019.26 20101019.40 20101019.54 0.2692 0.1333 *

Uranus 50323-03-16 02:24 G 20101231.45 20101231.60 20101231.76 0.0135 0.0094

Uranus 50323-10-28 08:24 G 20101457.68 20101457.85 20101458.05 0.0135 0.0068

Uranus 50324-06-10 14:53 G 20101683.92 20101684.12 20101684.33 0.0135 0.0041

Uranus 50325-01-22 21:07 G 20101910.16 20101910.38 20101910.60 0.0135 0.0014

Neptune 50325-02-13 11:31 G 20101931.91 20101931.98 20101932.08 0.0090 0.0083

Uranus 50325-09-06 03:07 G 20102136.41 20102136.63 20102136.85 0.0134 0.0013

Neptune 50325-09-27 00:43 G 20102157.43 20102157.53 20102157.68 0.0090 0.0074

Saturn 50326-01-27 18:29 G 20102280.06 20102280.27 20102280.48 0.0271 0.0068

Uranus 50326-04-20 08:53 G 20102362.67 20102362.87 20102363.09 0.0134 0.0040

Neptune 50326-05-10 14:10 G 20102382.96 20102383.09 20102383.26 0.0090 0.0064

Saturn 50326-09-13 22:34 G 20102509.28 20102509.44 20102509.62 0.0269 0.0160

Uranus 50326-12-02 14:53 G 20102588.93 20102589.12 20102589.31 0.0134 0.0066

Jupiter 50326-12-16 19:12 G 20102603.22 20102603.30 20102603.39 0.0531 0.0481

Neptune 50326-12-22 03:36 G 20102608.49 20102608.65 20102608.84 0.0090 0.0055

Uranus 50327-07-16 20:24 G 20102815.21 20102815.35 20102815.52 0.0134 0.0093

Neptune 50327-08-04 17:17 G 20102834.04 20102834.22 20102834.42 0.0090 0.0045

Uranus 50328-02-28 01:55 G 20103041.50 20103041.58 20103041.70 0.0134 0.0119

Neptune 50328-03-17 06:58 G 20103059.59 20103059.79 20103059.99 0.0090 0.0035

Neptune 50328-10-28 20:10 G 20103285.14 20103285.34 20103285.56 0.0090 0.0026

Neptune 50329-06-11 09:50 G 20103510.69 20103510.91 20103511.12 0.0090 0.0016

Neptune 50330-01-22 23:02 G 20103736.25 20103736.46 20103736.68 0.0090 0.0007

Neptune 50330-09-05 12:29 G 20103961.80 20103962.02 20103962.24 0.0090 0.0003

Neptune 50331-04-19 01:41 G 20104187.36 20104187.57 20104187.79 0.0090 0.0013

Neptune 50331-11-30 14:53 G 20104412.92 20104413.12 20104413.35 0.0090 0.0023

Neptune 50332-07-13 04:34 G 20104638.49 20104638.69 20104638.90 0.0090 0.0032

Neptune 50333-02-23 17:46 G 20104864.06 20104864.24 20104864.45 0.0090 0.0042

Neptune 50333-10-07 07:12 G 20105089.62 20105089.80 20105089.99 0.0090 0.0051

Neptune 50334-05-20 20:10 G 20105315.20 20105315.34 20105315.52 0.0090 0.0061

Neptune 50335-01-01 09:36 G 20105540.78 20105540.90 20105541.05 0.0090 0.0070

Neptune 50335-08-14 22:48 G 20105766.38 20105766.45 20105766.58 0.0090 0.0080

Neptune 50336-03-27 12:29 G 20105992.01 20105992.02 20105992.06 0.0090 0.0089

Jupiter 50338-08-21 11:46 G 20106868.80 20106868.99 20106869.19 0.0530 0.0111

Mars 50341-03-05 21:50 G 20107796.32 20107796.41 20107796.49 0.1707 0.1456

Saturn 50341-10-03 05:02 G 20108007.57 20108007.71 20108007.86 0.0289 0.0209

Saturn 50342-05-21 01:12 G 20108237.35 20108237.55 20108237.76 0.0292 0.0076

Jupiter 50344-06-26 07:55 G 20109004.66 20109004.83 20109005.01 0.0496 0.0241

Jupiter 50350-04-26 04:19 G 20111134.51 20111134.68 20111134.86 0.0528 0.0260

Saturn 50355-08-09 17:17 G 20113066.01 20113066.22 20113066.43 0.0271 0.0047

Jupiter 50356-03-01 10:05 G 20113270.72 20113270.92 20113271.12 0.0497 0.0065

Saturn 50356-03-25 21:07 G 20113295.24 20113295.38 20113295.55 0.0269 0.0181

Uranus 50365-12-14 02:10 G 20116845.56 20116845.59 20116845.64 0.0143 0.0140

Uranus 50366-07-28 13:26 G 20117071.92 20117072.06 20117072.20 0.0143 0.0108

Uranus 50367-03-12 00:29 G 20117298.34 20117298.52 20117298.71 0.0143 0.0076

Uranus 50367-10-24 12:00 G 20117524.79 20117525.00 20117525.20 0.0143 0.0044

Jupiter 50367-11-05 11:46 G 20117536.86 20117536.99 20117537.13 0.0499 0.0371

Uranus 50368-06-06 23:17 G 20117751.25 20117751.47 20117751.69 0.0144 0.0011

Uranus 50369-01-19 10:48 G 20117977.73 20117977.95 20117978.16 0.0144 0.0022

Uranus 50369-09-02 22:05 G 20118204.23 20118204.42 20118204.63 0.0144 0.0055

Uranus 50370-04-17 09:36 G 20118430.74 20118430.90 20118431.09 0.0144 0.0088

Uranus 50370-11-29 21:50 G 20118657.29 20118657.41 20118657.53 0.0144 0.0121

Saturn 50371-04-15 08:24 G 20118793.69 20118793.85 20118794.02 0.0289 0.0179

Saturn 50371-12-01 05:02 G 20119023.51 20119023.71 20119023.90 0.0292 0.0107

Jupiter 50374-04-29 05:31 G 20119903.58 20119903.73 20119903.89 0.0530 0.0336

Mars 50375-01-02 08:24 G 20120151.80 20120151.85 20120151.90 0.1693 0.1613

Mars 50379-08-16 20:10 G 20121839.18 20121839.34 20121839.50 0.1826 0.0795

Jupiter 50380-03-03 19:55 G 20122039.24 20122039.33 20122039.44 0.0496 0.0426

Saturn 50384-07-04 14:24 G 20123623.03 20123623.10 20123623.19 0.0274 0.0253

Saturn 50385-02-18 20:53 G 20123852.15 20123852.37 20123852.58 0.0271 0.0018

Saturn 50385-10-06 00:58 G 20124081.41 20124081.54 20124081.67 0.0269 0.0209

Jupiter 50386-01-01 19:41 G 20124169.11 20124169.32 20124169.52 0.0529 0.0046

Jupiter 50391-11-07 23:02 G 20126305.27 20126305.46 20126305.66 0.0496 0.0127

Jupiter 50397-09-06 12:29 G 20128434.90 20128435.02 20128435.15 0.0528 0.0412

Pluto 50399-01-14 02:24 G 20128929.44 20128929.60 20128929.79 0.0063 0.0038

Pluto 50399-08-27 06:29 G 20129154.55 20129154.77 20129154.99 0.0063 0.0001

Pluto 50400-04-08 09:50 G 20129379.75 20129379.91 20129380.10 0.0063 0.0038

Saturn 50400-10-25 09:50 G 20129579.73 20129579.91 20129580.09 0.0289 0.0149

Saturn 50401-06-12 06:14 G 20129809.58 20129809.76 20129809.95 0.0292 0.0136

Jupiter 50403-07-14 00:29 G 20130571.33 20130571.52 20130571.71 0.0498 0.0182

Uranus 50406-04-01 06:00 G 20131563.71 20131563.75 20131563.81 0.0135 0.0132

Neptune 50406-08-19 12:43 G 20131704.00 20131704.03 20131704.11 0.0088 0.0085

Uranus 50406-11-13 12:29 G 20131789.89 20131790.02 20131790.17 0.0135 0.0105

Mars 50407-01-01 07:41 G 20131838.69 20131838.82 20131838.96 0.1704 0.1064

Neptune 50407-04-02 01:26 G 20131929.47 20131929.56 20131929.69 0.0088 0.0076

Uranus 50407-06-27 18:58 G 20132016.12 20132016.29 20132016.48 0.0135 0.0078

Neptune 50407-11-13 14:10 G 20132154.97 20132155.09 20132155.25 0.0088 0.0067

Uranus 50408-02-09 01:26 G 20132242.36 20132242.56 20132242.76 0.0135 0.0050

Neptune 50408-06-26 02:53 G 20132380.47 20132380.62 20132380.80 0.0088 0.0058

Uranus 50408-09-22 07:26 G 20132468.61 20132468.81 20132469.03 0.0135 0.0024

Neptune 50409-02-06 15:36 G 20132605.98 20132606.15 20132606.34 0.0088 0.0049

Uranus 50409-05-06 13:55 G 20132694.86 20132695.08 20132695.30 0.0135 0.0004

Neptune 50409-09-20 04:19 G 20132831.49 20132831.68 20132831.88 0.0088 0.0040

Uranus 50409-12-18 19:55 G 20132921.12 20132921.33 20132921.54 0.0134 0.0031

Neptune 50410-05-03 16:48 G 20133057.01 20133057.20 20133057.42 0.0088 0.0032

Uranus 50410-08-02 01:41 G 20133147.38 20133147.57 20133147.78 0.0134 0.0057

Neptune 50410-12-15 05:31 G 20133282.53 20133282.73 20133282.96 0.0088 0.0023

Uranus 50411-03-16 07:41 G 20133373.65 20133373.82 20133373.99 0.0134 0.0084

Neptune 50411-07-28 18:14 G 20133508.05 20133508.26 20133508.49 0.0088 0.0014

Uranus 50411-10-28 12:58 G 20133599.94 20133600.04 20133600.18 0.0134 0.0111

Neptune 50412-03-10 06:58 G 20133733.57 20133733.79 20133734.01 0.0088 0.0004

Neptune 50412-10-21 19:41 G 20133959.10 20133959.32 20133959.54 0.0088 0.0005

Neptune 50413-06-04 08:10 G 20134184.62 20134184.84 20134185.06 0.0088 0.0014

Saturn 50414-01-14 13:26 G 20134408.95 20134409.06 20134409.17 0.0273 0.0232

Neptune 50414-01-15 20:53 G 20134410.16 20134410.37 20134410.59 0.0088 0.0023

Neptune 50414-08-29 09:22 G 20134635.70 20134635.89 20134636.11 0.0088 0.0032

Saturn 50414-08-31 19:41 G 20134638.10 20134638.32 20134638.53 0.0271 0.0006

Jupiter 50415-03-19 01:41 G 20134837.54 20134837.57 20134837.61 0.0499 0.0490

Neptune 50415-04-11 22:05 G 20134861.23 20134861.42 20134861.63 0.0088 0.0041

Saturn 50415-04-17 23:31 G 20134867.38 20134867.48 20134867.60 0.0269 0.0230

Neptune 50415-11-23 10:34 G 20135086.78 20135086.94 20135087.14 0.0088 0.0050

Neptune 50416-07-05 23:02 G 20135312.32 20135312.46 20135312.65 0.0088 0.0059

Neptune 50417-02-16 11:46 G 20135537.88 20135537.99 20135538.16 0.0088 0.0068

Neptune 50417-09-30 00:58 G 20135763.44 20135763.54 20135763.65 0.0088 0.0076

Neptune 50418-05-13 13:26 G 20135989.02 20135989.06 20135989.12 0.0088 0.0085

Jupiter 50421-09-09 15:07 G 20137203.95 20137204.13 20137204.32 0.0530 0.0189

Jupiter 50427-07-16 10:19 G 20139339.77 20139339.93 20139340.09 0.0496 0.0308

Saturn 50430-05-07 13:12 G 20140365.86 20140366.05 20140366.25 0.0290 0.0119

Saturn 50430-12-23 09:50 G 20140595.75 20140595.91 20140596.09 0.0292 0.0169

Jupiter 50433-05-15 06:29 G 20141469.58 20141469.77 20141469.96 0.0528 0.0186

Moon 50436-02-17 03:07 G 20142477.56 20142477.63 20142477.71 0.2646 0.2268

Jupiter 50439-03-21 12:43 G 20143605.83 20143606.03 20143606.24 0.0497 0.0013

Saturn 50443-07-27 17:17 G 20145195.08 20145195.22 20145195.37 0.0273 0.0201

Earth 50444-02-14 22:19 G 20145397.27 20145397.43 20145397.58 0.2640 0.0550

Moon 50444-02-15 00:00 G 20145397.35 20145397.50 20145397.65 0.2646 0.0563 *

Saturn 50444-03-12 23:17 G 20145424.26 20145424.47 20145424.68 0.0271 0.0034

Saturn 50444-10-28 03:22 G 20145653.59 20145653.64 20145653.70 0.0269 0.0259

Mars 50445-06-13 01:41 G 20145881.39 20145881.57 20145881.74 0.1831 0.0140

Uranus 50450-03-27 21:07 G 20147630.28 20147630.38 20147630.50 0.0143 0.0121

Uranus 50450-11-09 08:10 G 20147856.69 20147856.84 20147857.03 0.0143 0.0090

Jupiter 50450-11-24 15:22 G 20147871.98 20147872.14 20147872.31 0.0498 0.0297

Uranus 50451-06-23 19:41 G 20148083.12 20148083.32 20148083.52 0.0143 0.0057

Uranus 50452-02-05 06:43 G 20148309.57 20148309.78 20148310.00 0.0143 0.0025

Uranus 50452-09-18 18:14 G 20148536.04 20148536.26 20148536.48 0.0144 0.0009

Uranus 50453-05-03 05:31 G 20148762.53 20148762.73 20148762.94 0.0144 0.0042

Uranus 50453-12-15 17:02 G 20148989.04 20148989.21 20148989.41 0.0144 0.0075

Uranus 50454-07-30 05:02 G 20149215.56 20149215.71 20149215.85 0.0144 0.0108

Uranus 50455-03-13 16:19 G 20149442.15 20149442.18 20149442.24 0.0144 0.0141

Jupiter 50457-05-18 08:10 G 20150238.71 20150238.84 20150238.97 0.0531 0.0409

Saturn 50459-11-17 16:19 G 20151151.98 20151152.18 20151152.39 0.0289 0.0085

Saturn 50460-07-04 12:58 G 20151381.90 20151382.04 20151382.20 0.0292 0.0202

Jupiter 50463-03-23 22:05 G 20152374.40 20152374.42 20152374.45 0.0495 0.0489

Jupiter 50469-01-21 00:29 G 20154504.32 20154504.52 20154504.72 0.0530 0.0039

Mars 50472-10-28 18:14 G 20155881.10 20155881.26 20155881.41 0.1700 0.0694

Saturn 50473-02-05 16:19 G 20155981.03 20155981.18 20155981.35 0.0273 0.0180

Saturn 50473-09-22 22:19 G 20156210.23 20156210.43 20156210.64 0.0271 0.0055

Jupiter 50474-11-27 00:14 G 20156640.32 20156640.51 20156640.70 0.0496 0.0189

Jupiter 50480-09-25 15:36 G 20158770.00 20158770.15 20158770.31 0.0528 0.0333

Jupiter 50486-08-02 01:55 G 20160906.39 20160906.58 20160906.78 0.0498 0.0117

Pluto 50489-02-28 15:50 G 20161848.07 20161848.16 20161848.28 0.0081 0.0072

Neptune 50489-05-17 19:26 G 20161926.26 20161926.31 20161926.39 0.0090 0.0085

Saturn 50489-05-29 20:24 G 20161938.14 20161938.35 20161938.56 0.0290 0.0053

Pluto 50489-10-12 03:07 G 20162073.41 20162073.63 20162073.85 0.0081 0.0010

Neptune 50489-12-29 08:38 G 20162151.77 20162151.86 20162152.00 0.0090 0.0076

Saturn 50490-01-14 17:02 G 20162168.10 20162168.21 20162168.34 0.0292 0.0235

Uranus 50490-07-13 22:19 G 20162348.34 20162348.43 20162348.56 0.0135 0.0116

Neptune 50490-08-11 22:34 G 20162377.29 20162377.44 20162377.59 0.0090 0.0066

Uranus 50491-02-25 05:02 G 20162574.55 20162574.71 20162574.88 0.0135 0.0088

Neptune 50491-03-25 11:31 G 20162602.83 20162602.98 20162603.17 0.0090 0.0057

Uranus 50491-10-09 11:31 G 20162800.79 20162800.98 20162801.18 0.0135 0.0061

Neptune 50491-11-06 00:58 G 20162828.37 20162828.54 20162828.74 0.0090 0.0048

Uranus 50492-05-22 18:00 G 20163027.05 20163027.25 20163027.47 0.0135 0.0034

Neptune 50492-06-18 14:38 G 20163053.92 20163054.11 20163054.32 0.0090 0.0038

Uranus 50493-01-04 00:29 G 20163253.30 20163253.52 20163253.73 0.0135 0.0007

Neptune 50493-01-30 03:50 G 20163279.47 20163279.66 20163279.88 0.0090 0.0029

Uranus 50493-08-18 06:29 G 20163479.55 20163479.77 20163479.98 0.0135 0.0020

Neptune 50493-09-12 17:31 G 20163505.02 20163505.23 20163505.45 0.0090 0.0019

Uranus 50494-04-01 12:14 G 20163705.82 20163706.01 20163706.22 0.0134 0.0048

Neptune 50494-04-26 06:58 G 20163730.57 20163730.79 20163731.01 0.0090 0.0009

Uranus 50494-11-13 18:00 G 20163932.09 20163932.25 20163932.45 0.0134 0.0075

Neptune 50494-12-07 20:24 G 20163956.13 20163956.35 20163956.57 0.0090 0.0001

Uranus 50495-06-28 00:00 G 20164158.37 20164158.50 20164158.66 0.0134 0.0101

Neptune 50495-07-21 09:50 G 20164181.70 20164181.91 20164182.13 0.0090 0.0010

Uranus 50496-02-09 06:00 G 20164384.68 20164384.75 20164384.82 0.0134 0.0126

Neptune 50496-03-02 23:02 G 20164407.26 20164407.46 20164407.69 0.0090 0.0020

Neptune 50496-10-14 12:29 G 20164632.82 20164633.02 20164633.24 0.0090 0.0029

Neptune 50497-05-28 01:41 G 20164858.39 20164858.57 20164858.78 0.0090 0.0039

Neptune 50498-01-08 15:07 G 20165083.96 20165084.13 20165084.33 0.0090 0.0048

Jupiter 50498-04-07 04:19 G 20165172.57 20165172.68 20165172.79 0.0499 0.0420

Neptune 50498-08-22 04:19 G 20165309.53 20165309.68 20165309.87 0.0090 0.0058

Neptune 50499-04-04 17:46 G 20165535.11 20165535.24 20165535.40 0.0090 0.0067

Neptune 50499-11-16 07:12 G 20165760.70 20165760.80 20165760.93 0.0090 0.0076

Neptune 50500-06-29 20:53 G 20165986.30 20165986.37 20165986.44 0.0090 0.0085

Saturn 50502-08-19 20:38 G 20166767.19 20166767.36 20166767.55 0.0273 0.0147

Saturn 50503-04-06 02:38 G 20166996.41 20166996.61 20166996.81 0.0271 0.0087

Jupiter 50504-09-29 14:38 G 20167538.93 20167539.11 20167539.29 0.0530 0.0249

Jupiter 50510-08-05 12:58 G 20169674.91 20169675.04 20169675.17 0.0496 0.0375

Mars 50511-04-11 06:29 G 20169923.60 20169923.77 20169923.93 0.1835 0.0573

Jupiter 50516-06-04 07:12 G 20171804.60 20171804.80 20171804.99 0.0529 0.0122

Saturn 50518-12-11 00:58 G 20172724.33 20172724.54 20172724.75 0.0289 0.0016

Saturn 50519-07-28 21:36 G 20172954.33 20172954.40 20172954.49 0.0292 0.0271

Jupiter 50522-04-10 13:55 G 20173940.88 20173941.08 20173941.29 0.0497 0.0070

Jupiter 50528-02-08 00:00 G 20176070.43 20176070.50 20176070.58 0.0528 0.0484

Saturn 50532-02-29 20:38 G 20177553.18 20177553.36 20177553.56 0.0273 0.0124

Saturn 50532-10-16 02:24 G 20177782.41 20177782.60 20177782.80 0.0271 0.0110

Uranus 50533-11-26 06:00 G 20178188.68 20178188.75 20178188.83 0.0143 0.0133

Jupiter 50533-12-14 15:36 G 20178206.97 20178207.15 20178207.33 0.0498 0.0237

Uranus 50534-07-10 17:02 G 20178415.06 20178415.21 20178415.36 0.0143 0.0101

Uranus 50535-02-22 03:50 G 20178641.48 20178641.66 20178641.86 0.0143 0.0069

Uranus 50535-10-06 15:07 G 20178867.92 20178868.13 20178868.34 0.0143 0.0037

Uranus 50536-05-20 02:24 G 20179094.38 20179094.60 20179094.82 0.0143 0.0004

Uranus 50537-01-01 13:41 G 20179320.86 20179321.07 20179321.29 0.0144 0.0029

Uranus 50537-08-16 00:58 G 20179547.35 20179547.54 20179547.74 0.0144 0.0062

Uranus 50538-03-30 12:14 G 20179773.86 20179774.01 20179774.19 0.0144 0.0095

Mars 50538-08-27 04:19 G 20179923.51 20179923.68 20179923.85 0.1697 0.0315

Uranus 50538-11-11 23:46 G 20180000.41 20180000.49 20180000.61 0.0144 0.0128

Jupiter 50540-06-07 10:05 G 20180573.85 20180573.92 20180574.01 0.0531 0.0482

Saturn 50547-11-05 11:02 G 20183280.88 20183280.96 20183281.05 0.0288 0.0260

Saturn 50548-06-22 06:00 G 20183510.54 20183510.75 20183510.96 0.0290 0.0019

Jupiter 50552-02-11 00:43 G 20184839.33 20184839.53 20184839.73 0.0529 0.0104

Earth 50557-08-19 07:26 G 20186855.73 20186855.81 20186855.89 0.2692 0.2307

Moon 50557-08-19 12:00 G 20186855.97 20186856.00 20186856.03 0.2696 0.2612

Jupiter 50557-12-17 01:41 G 20186975.39 20186975.57 20186975.75 0.0496 0.0251

Saturn 50561-09-11 01:55 G 20188339.38 20188339.58 20188339.78 0.0273 0.0089

Saturn 50562-04-28 07:41 G 20188568.64 20188568.82 20188569.00 0.0271 0.0143

Jupiter 50563-10-16 13:12 G 20189104.88 20189105.05 20189105.23 0.0528 0.0281

Earth 50565-08-16 21:07 G 20189775.25 20189775.38 20189775.51 0.2692 0.1516

Moon 50565-08-17 02:38 G 20189775.45 20189775.61 20189775.76 0.2691 0.0600 *

Jupiter 50569-08-22 04:05 G 20191241.47 20191241.67 20191241.87 0.0497 0.0049

Neptune 50570-11-21 22:05 G 20191698.40 20191698.42 20191698.48 0.0088 0.0086

Neptune 50571-07-05 11:02 G 20191923.87 20191923.96 20191924.07 0.0088 0.0077

Neptune 50572-02-16 00:00 G 20192149.36 20192149.50 20192149.63 0.0088 0.0068

Neptune 50572-09-28 12:00 G 20192374.86 20192375.00 20192375.19 0.0088 0.0060

Neptune 50573-05-12 00:58 G 20192600.37 20192600.54 20192600.73 0.0088 0.0051

Neptune 50573-12-23 13:41 G 20192825.89 20192826.07 20192826.28 0.0088 0.0042

Uranus 50574-03-14 07:41 G 20192906.76 20192906.82 20192906.91 0.0136 0.0127

Neptune 50574-08-06 02:38 G 20193051.41 20193051.61 20193051.81 0.0088 0.0033

Uranus 50574-10-26 14:24 G 20193132.96 20193133.10 20193133.26 0.0135 0.0099

Neptune 50575-03-19 14:53 G 20193276.92 20193277.12 20193277.35 0.0088 0.0025

Uranus 50575-06-09 20:53 G 20193359.20 20193359.37 20193359.57 0.0135 0.0073

Neptune 50575-10-31 03:36 G 20193502.44 20193502.65 20193502.87 0.0088 0.0016

Uranus 50576-01-22 03:22 G 20193585.45 20193585.64 20193585.86 0.0135 0.0045

Neptune 50576-06-12 16:19 G 20193727.96 20193728.18 20193728.40 0.0088 0.0007

Uranus 50576-09-04 09:50 G 20193811.70 20193811.91 20193812.13 0.0135 0.0018

Neptune 50577-01-24 05:02 G 20193953.49 20193953.71 20193953.93 0.0088 0.0003

Mars 50577-02-05 11:17 G 20193965.85 20193965.97 20193966.10 0.1839 0.1281

Uranus 50577-04-18 16:19 G 20194037.96 20194038.18 20194038.40 0.0135 0.0010

Saturn 50577-05-17 17:17 G 20194067.10 20194067.22 20194067.37 0.0287 0.0218

Neptune 50577-09-06 17:31 G 20194179.02 20194179.23 20194179.46 0.0088 0.0012

Uranus 50577-11-30 22:19 G 20194264.22 20194264.43 20194264.64 0.0135 0.0037

Saturn 50578-01-02 12:14 G 20194296.81 20194297.01 20194297.22 0.0290 0.0061

Neptune 50578-04-20 06:14 G 20194404.55 20194404.76 20194404.98 0.0088 0.0020

Uranus 50578-07-15 04:19 G 20194490.49 20194490.68 20194490.88 0.0134 0.0064

Neptune 50578-12-01 18:58 G 20194630.08 20194630.29 20194630.50 0.0088 0.0029

Uranus 50579-02-26 10:05 G 20194716.77 20194716.92 20194717.09 0.0134 0.0090

Neptune 50579-07-15 07:26 G 20194855.62 20194855.81 20194856.01 0.0088 0.0038

Uranus 50579-10-10 15:50 G 20194943.06 20194943.16 20194943.28 0.0134 0.0117

Neptune 50580-02-25 19:55 G 20195081.16 20195081.33 20195081.53 0.0088 0.0047

Neptune 50580-10-08 08:24 G 20195306.70 20195306.85 20195307.04 0.0088 0.0056

Jupiter 50581-04-27 04:19 G 20195507.54 20195507.68 20195507.82 0.0498 0.0359

Neptune 50581-05-21 20:53 G 20195532.25 20195532.37 20195532.55 0.0088 0.0065

Neptune 50582-01-02 10:19 G 20195757.81 20195757.93 20195758.05 0.0088 0.0073

Neptune 50582-08-15 22:34 G 20195983.38 20195983.44 20195983.53 0.0088 0.0082

Jupiter 50587-10-19 17:17 G 20197874.07 20197874.22 20197874.39 0.0530 0.0324

Saturn 50591-03-24 03:07 G 20199125.42 20199125.63 20199125.83 0.0273 0.0064

Saturn 50591-11-08 08:24 G 20199354.69 20199354.85 20199355.02 0.0270 0.0168

Jupiter 50593-08-24 11:31 G 20200009.88 20200009.98 20200010.09 0.0496 0.0427

Jupiter 50599-06-24 08:24 G 20202139.65 20202139.85 20202140.05 0.0529 0.0051

Mars 50604-06-24 14:53 G 20203965.95 20203966.12 20203966.29 0.1694 0.0045

Jupiter 50605-04-30 13:12 G 20204275.85 20204276.05 20204276.24 0.0497 0.0125

Saturn 50606-11-28 22:48 G 20204853.30 20204853.45 20204853.62 0.0288 0.0184

Saturn 50607-07-16 18:14 G 20205083.06 20205083.26 20205083.46 0.0291 0.0097

Jupiter 50611-02-27 23:02 G 20206405.34 20206405.46 20206405.58 0.0527 0.0423

Jupiter 50617-01-03 15:36 G 20208541.96 20208542.15 20208542.34 0.0498 0.0178

Uranus 50618-03-11 01:55 G 20208973.46 20208973.58 20208973.72 0.0143 0.0113

Uranus 50618-10-23 12:58 G 20209199.87 20209200.04 20209200.23 0.0143 0.0081

Uranus 50619-06-07 00:00 G 20209426.30 20209426.50 20209426.71 0.0143 0.0049

Uranus 50620-01-19 11:17 G 20209652.76 20209652.97 20209653.19 0.0143 0.0016

Saturn 50620-02-18 01:41 G 20209682.53 20209682.57 20209682.63 0.0275 0.0266

Uranus 50620-09-01 22:34 G 20209879.22 20209879.44 20209879.66 0.0144 0.0017

Saturn 50620-10-04 09:07 G 20209911.67 20209911.88 20209912.09 0.0272 0.0027

Uranus 50621-04-16 09:36 G 20210105.71 20210105.90 20210106.12 0.0144 0.0050

Saturn 50621-05-21 14:24 G 20210140.96 20210141.10 20210141.24 0.0270 0.0203

Uranus 50621-11-28 21:07 G 20210332.22 20210332.38 20210332.57 0.0144 0.0083

Uranus 50622-07-13 08:53 G 20210558.75 20210558.87 20210559.00 0.0144 0.0115

Jupiter 50623-06-28 06:29 G 20210908.75 20210908.77 20210908.80 0.0531 0.0527

Jupiter 50628-09-08 17:17 G 20212808.17 20212808.22 20212808.27 0.0499 0.0482

Jupiter 50635-03-02 21:50 G 20215174.22 20215174.41 20215174.61 0.0530 0.0155

Saturn 50636-06-10 07:12 G 20215639.62 20215639.80 20215639.99 0.0288 0.0138

Saturn 50637-01-26 02:24 G 20215869.43 20215869.60 20215869.79 0.0290 0.0143

Jupiter 50641-01-06 00:00 G 20217310.34 20217310.50 20217310.66 0.0496 0.0303

Pluto 50645-09-26 02:24 G 20219034.44 20219034.60 20219034.81 0.0063 0.0036

Pluto 50646-05-09 06:29 G 20219259.55 20219259.77 20219259.99 0.0063 0.0002

Jupiter 50646-11-05 14:24 G 20219439.92 20219440.10 20219440.29 0.0529 0.0212

Pluto 50646-12-20 09:50 G 20219484.75 20219484.91 20219485.10 0.0063 0.0040

Saturn 50649-08-30 04:34 G 20220468.60 20220468.69 20220468.81 0.0275 0.0238

Saturn 50650-04-16 11:46 G 20220697.78 20220697.99 20220698.20 0.0272 0.0001

Saturn 50650-12-01 16:48 G 20220927.09 20220927.20 20220927.31 0.0270 0.0230

Jupiter 50652-09-11 01:12 G 20221576.35 20221576.55 20221576.76 0.0497 0.0003

Neptune 50653-08-21 03:50 G 20221920.63 20221920.66 20221920.73 0.0090 0.0087

Neptune 50654-04-03 17:02 G 20222146.12 20222146.21 20222146.34 0.0090 0.0078

Neptune 50654-11-15 06:14 G 20222371.65 20222371.76 20222371.93 0.0090 0.0069

Neptune 50655-06-28 20:10 G 20222597.18 20222597.34 20222597.51 0.0090 0.0059

Neptune 50656-02-09 09:22 G 20222822.72 20222822.89 20222823.09 0.0090 0.0050

Neptune 50656-09-21 22:34 G 20223048.26 20223048.44 20223048.65 0.0090 0.0041

Neptune 50657-05-05 12:14 G 20223273.81 20223274.01 20223274.22 0.0090 0.0031

Neptune 50657-12-17 01:26 G 20223499.36 20223499.56 20223499.79 0.0090 0.0022

Uranus 50658-06-27 00:58 G 20223691.43 20223691.54 20223691.68 0.0135 0.0110

Neptune 50658-07-30 15:22 G 20223724.92 20223725.14 20223725.35 0.0090 0.0012

Uranus 50659-02-08 07:26 G 20223917.65 20223917.81 20223918.00 0.0135 0.0083

Neptune 50659-03-13 04:34 G 20223950.47 20223950.69 20223950.91 0.0090 0.0003

Uranus 50659-09-22 13:55 G 20224143.90 20224144.08 20224144.29 0.0135 0.0055

Neptune 50659-10-24 18:00 G 20224176.03 20224176.25 20224176.47 0.0090 0.0007

Uranus 50660-05-05 20:38 G 20224370.15 20224370.36 20224370.58 0.0135 0.0027

Neptune 50660-06-06 07:26 G 20224401.60 20224401.81 20224402.03 0.0090 0.0016

Uranus 50660-12-18 02:53 G 20224596.41 20224596.62 20224596.84 0.0135 0.0003

Neptune 50661-01-17 20:53 G 20224627.16 20224627.37 20224627.58 0.0090 0.0026

Uranus 50661-08-01 09:07 G 20224822.67 20224822.88 20224823.09 0.0135 0.0027

Neptune 50661-08-31 10:05 G 20224852.73 20224852.92 20224853.13 0.0090 0.0036

Uranus 50662-03-15 15:07 G 20225048.93 20225049.13 20225049.33 0.0135 0.0054

Neptune 50662-04-13 23:31 G 20225078.30 20225078.48 20225078.68 0.0090 0.0045

Uranus 50662-10-27 20:53 G 20225275.20 20225275.37 20225275.55 0.0134 0.0081

Neptune 50662-11-25 12:58 G 20225303.87 20225304.04 20225304.22 0.0090 0.0054

Uranus 50663-06-11 02:38 G 20225501.49 20225501.61 20225501.75 0.0134 0.0107

Neptune 50663-07-09 02:10 G 20225529.45 20225529.59 20225529.76 0.0090 0.0064

Uranus 50664-01-23 08:10 G 20225727.84 20225727.84 20225727.89 0.0134 0.0134

Neptune 50664-02-19 15:36 G 20225755.04 20225755.15 20225755.29 0.0090 0.0073

Jupiter 50664-05-17 01:55 G 20225842.42 20225842.58 20225842.74 0.0498 0.0310

Neptune 50664-10-02 04:48 G 20225980.63 20225980.70 20225980.81 0.0090 0.0082

Saturn 50665-12-21 13:41 G 20226425.87 20226426.07 20226426.27 0.0289 0.0102

Saturn 50666-08-08 09:22 G 20226655.73 20226655.89 20226656.06 0.0291 0.0182

Mars 50670-04-22 01:26 G 20228008.39 20228008.56 20228008.72 0.1691 0.0409

Jupiter 50670-11-08 14:53 G 20228208.98 20228209.12 20228209.26 0.0530 0.0376

Jupiter 50676-09-13 10:19 G 20230344.88 20230344.93 20230344.98 0.0496 0.0478

Saturn 50679-03-12 11:17 G 20231254.84 20231254.97 20231255.13 0.0274 0.0199

Saturn 50679-10-27 18:14 G 20231484.05 20231484.26 20231484.47 0.0272 0.0039

Saturn 50680-06-12 23:17 G 20231713.45 20231713.47 20231713.50 0.0270 0.0267

Jupiter 50682-07-14 02:53 G 20232474.42 20232474.62 20232474.82 0.0529 0.0011

Moon 50687-02-17 00:43 G 20234153.37 20234153.53 20234153.70 0.2633 0.0467

Earth 50687-02-17 00:58 G 20234153.39 20234153.54 20234153.70 0.2640 0.0418 *

Jupiter 50688-05-19 12:29 G 20234610.83 20234611.02 20234611.21 0.0497 0.0180

Jupiter 50694-03-18 18:14 G 20236740.13 20236740.26 20236740.41 0.0528 0.0380

Saturn 50695-07-03 23:31 G 20237212.27 20237212.48 20237212.69 0.0288 0.0052

Saturn 50696-02-18 19:26 G 20237442.18 20237442.31 20237442.43 0.0291 0.0231

Jupiter 50700-01-23 12:29 G 20238876.83 20238877.02 20238877.22 0.0498 0.0130

Uranus 50701-11-09 10:48 G 20239531.86 20239531.95 20239532.07 0.0143 0.0125

Uranus 50702-06-23 21:50 G 20239758.25 20239758.41 20239758.58 0.0143 0.0093

Uranus 50703-02-05 08:38 G 20239984.67 20239984.86 20239985.07 0.0143 0.0061

Uranus 50703-09-19 19:55 G 20240211.12 20240211.33 20240211.54 0.0143 0.0028

Uranus 50704-05-03 06:58 G 20240437.58 20240437.79 20240438.01 0.0143 0.0005

Uranus 50704-12-15 18:14 G 20240664.06 20240664.26 20240664.48 0.0144 0.0038

Uranus 50705-07-30 05:46 G 20240890.55 20240890.74 20240890.93 0.0144 0.0070

Uranus 50706-03-13 17:02 G 20241117.07 20241117.21 20241117.37 0.0144 0.0103

Uranus 50706-10-26 04:19 G 20241343.63 20241343.68 20241343.77 0.0144 0.0136

Saturn 50708-09-22 15:50 G 20242041.00 20242041.16 20242041.34 0.0274 0.0167

Saturn 50709-05-09 22:19 G 20242270.23 20242270.43 20242270.64 0.0272 0.0070

Jupiter 50711-09-29 13:12 G 20243142.95 20243143.05 20243143.15 0.0499 0.0437

Jupiter 50718-03-22 20:53 G 20245509.19 20245509.37 20245509.56 0.0530 0.0214

Jupiter 50724-01-26 20:24 G 20247645.20 20247645.35 20247645.49 0.0496 0.0347

Saturn 50725-01-14 06:29 G 20247998.56 20247998.77 20247998.98 0.0289 0.0015

Saturn 50725-09-01 02:38 G 20248228.54 20248228.61 20248228.69 0.0292 0.0272

Jupiter 50729-11-25 11:02 G 20249774.77 20249774.96 20249775.16 0.0528 0.0162

Neptune 50735-02-25 07:41 G 20251692.80 20251692.82 20251692.85 0.0088 0.0087

Jupiter 50735-10-01 22:34 G 20251911.24 20251911.44 20251911.65 0.0497 0.0047

Neptune 50735-10-08 19:55 G 20251918.26 20251918.33 20251918.45 0.0088 0.0079

Pluto 50735-11-12 15:07 G 20251953.04 20251953.13 20251953.26 0.0081 0.0071

Mars 50736-02-18 12:14 G 20252050.86 20252051.01 20252051.17 0.1688 0.0750

Neptune 50736-05-21 08:53 G 20252143.75 20252143.87 20252144.02 0.0088 0.0070

Pluto 50736-06-25 02:24 G 20252178.39 20252178.60 20252178.82 0.0081 0.0010

Neptune 50737-01-01 21:50 G 20252369.26 20252369.41 20252369.58 0.0088 0.0061

Neptune 50737-08-15 10:19 G 20252594.77 20252594.93 20252595.13 0.0088 0.0053

Neptune 50738-03-28 23:02 G 20252820.29 20252820.46 20252820.67 0.0088 0.0044

Saturn 50738-04-04 23:31 G 20252827.30 20252827.48 20252827.67 0.0273 0.0126

Neptune 50738-11-09 12:00 G 20253045.80 20253046.00 20253046.21 0.0088 0.0035

Saturn 50738-11-20 05:46 G 20253056.55 20253056.74 20253056.94 0.0271 0.0109

Neptune 50739-06-23 00:43 G 20253271.32 20253271.53 20253271.74 0.0088 0.0026

Neptune 50740-02-03 13:41 G 20253496.85 20253497.07 20253497.28 0.0088 0.0017

Neptune 50740-09-16 02:10 G 20253722.37 20253722.59 20253722.81 0.0088 0.0008

Mars 50740-10-01 13:55 G 20253737.95 20253738.08 20253738.20 0.1834 0.1303

Neptune 50741-04-29 14:53 G 20253947.90 20253948.12 20253948.34 0.0088 0.0001

Neptune 50741-12-11 03:22 G 20254173.43 20254173.64 20254173.87 0.0088 0.0010

Uranus 50742-02-25 11:02 G 20254249.87 20254249.96 20254250.07 0.0136 0.0120

Neptune 50742-07-24 16:05 G 20254398.96 20254399.17 20254399.39 0.0088 0.0018

Uranus 50742-10-09 17:31 G 20254476.09 20254476.23 20254476.40 0.0135 0.0093

Neptune 50743-03-07 04:34 G 20254624.49 20254624.69 20254624.91 0.0088 0.0027

Uranus 50743-05-24 00:14 G 20254702.33 20254702.51 20254702.71 0.0135 0.0065

Neptune 50743-10-18 17:02 G 20254850.02 20254850.21 20254850.42 0.0088 0.0036

Uranus 50744-01-05 06:58 G 20254928.58 20254928.79 20254929.00 0.0135 0.0037

Neptune 50744-05-31 05:31 G 20255075.56 20255075.73 20255075.94 0.0088 0.0045

Uranus 50744-08-18 13:12 G 20255154.83 20255155.05 20255155.27 0.0135 0.0010

Neptune 50745-01-11 18:43 G 20255301.11 20255301.28 20255301.46 0.0088 0.0053

Uranus 50745-04-01 19:12 G 20255381.09 20255381.30 20255381.52 0.0135 0.0017

Neptune 50745-08-25 07:12 G 20255526.65 20255526.80 20255526.96 0.0088 0.0062

Uranus 50745-11-14 01:12 G 20255607.35 20255607.55 20255607.76 0.0135 0.0044

Neptune 50746-04-07 19:41 G 20255752.21 20255752.32 20255752.46 0.0088 0.0071

Uranus 50746-06-28 07:12 G 20255833.63 20255833.80 20255834.00 0.0135 0.0071

Neptune 50746-11-19 07:55 G 20255977.77 20255977.83 20255977.95 0.0088 0.0080

Uranus 50747-02-09 12:58 G 20256059.91 20256060.04 20256060.20 0.0134 0.0098

Jupiter 50747-06-07 00:00 G 20256177.33 20256177.50 20256177.68 0.0498 0.0258

Uranus 50747-09-23 18:43 G 20256286.21 20256286.28 20256286.38 0.0134 0.0124

Jupiter 50753-11-28 09:22 G 20258543.76 20258543.89 20258544.01 0.0530 0.0414

Saturn 50753-12-09 22:48 G 20258555.34 20258555.45 20258555.57 0.0287 0.0239

Saturn 50754-07-27 17:31 G 20258785.02 20258785.23 20258785.44 0.0289 0.0038

Jupiter 50765-08-03 01:26 G 20262809.36 20262809.56 20262809.77 0.0529 0.0049

Saturn 50767-10-16 05:17 G 20263613.52 20263613.72 20263613.92 0.0273 0.0092

Saturn 50768-06-01 11:02 G 20263842.78 20263842.96 20263843.14 0.0271 0.0142

Jupiter 50771-06-09 07:12 G 20264945.62 20264945.80 20264945.98 0.0496 0.0218

Jupiter 50777-04-07 16:48 G 20267075.04 20267075.20 20267075.36 0.0528 0.0321

Jupiter 50783-02-12 07:55 G 20269211.63 20269211.83 20269212.03 0.0498 0.0088

Saturn 50783-06-22 05:31 G 20269341.59 20269341.73 20269341.89 0.0288 0.0203

Saturn 50784-02-07 00:29 G 20269571.32 20269571.52 20269571.73 0.0290 0.0077

Uranus 50785-07-09 18:58 G 20270090.24 20270090.29 20270090.35 0.0143 0.0137

Uranus 50786-02-21 05:17 G 20270316.59 20270316.72 20270316.88 0.0143 0.0106

Uranus 50786-10-05 16:34 G 20270543.00 20270543.19 20270543.38 0.0143 0.0073

Uranus 50787-05-20 03:22 G 20270769.44 20270769.64 20270769.86 0.0143 0.0041

Uranus 50788-01-01 14:38 G 20270995.89 20270996.11 20270996.33 0.0143 0.0008

Uranus 50788-08-15 01:41 G 20271222.36 20271222.57 20271222.79 0.0144 0.0025

Uranus 50789-03-29 12:58 G 20271448.85 20271449.04 20271449.25 0.0144 0.0057

Uranus 50789-11-11 00:29 G 20271675.36 20271675.52 20271675.70 0.0144 0.0090

Uranus 50790-06-25 11:46 G 20271901.90 20271901.99 20271902.12 0.0144 0.0123

Jupiter 50794-10-18 09:22 G 20273477.77 20273477.89 20273478.02 0.0499 0.0393

Saturn 50797-04-27 12:58 G 20274399.84 20274400.04 20274400.25 0.0273 0.0052

Saturn 50797-12-12 18:29 G 20274629.13 20274629.27 20274629.44 0.0271 0.0182

Moon 50800-08-21 04:05 G 20275611.55 20275611.67 20275611.80 0.2687 0.1746

Earth 50800-08-21 07:12 G 20275611.71 20275611.80 20275611.90 0.2692 0.2143 *

Jupiter 50801-04-10 13:41 G 20275843.89 20275844.07 20275844.25 0.0530 0.0247

Mars 50801-12-15 22:48 G 20276093.32 20276093.45 20276093.58 0.1685 0.1099

Mars 50806-07-29 18:29 G 20277780.11 20277780.27 20277780.44 0.1838 0.0605

Jupiter 50807-02-14 17:31 G 20277980.11 20277980.23 20277980.36 0.0496 0.0394

Moon 50808-08-18 15:22 G 20278531.10 20278531.14 20278531.18 0.2691 0.2582

Earth 50808-08-18 20:53 G 20278531.24 20278531.37 20278531.49 0.2692 0.1677

Jupiter 50812-12-14 04:48 G 20280109.50 20280109.70 20280109.90 0.0528 0.0124

Saturn 50813-01-01 16:34 G 20280128.02 20280128.19 20280128.38 0.0288 0.0152

Saturn 50813-08-19 12:00 G 20280357.81 20280358.00 20280358.19 0.0290 0.0129

Neptune 50817-11-23 13:12 G 20281915.03 20281915.05 20281915.10 0.0090 0.0088

Neptune 50818-07-07 02:38 G 20282140.52 20282140.61 20282140.73 0.0090 0.0079

Jupiter 50818-10-20 17:31 G 20282246.03 20282246.23 20282246.43 0.0497 0.0087

Neptune 50819-02-17 15:50 G 20282366.04 20282366.16 20282366.32 0.0090 0.0070

Neptune 50819-10-01 05:02 G 20282591.57 20282591.71 20282591.89 0.0090 0.0061

Neptune 50820-05-13 18:29 G 20282817.11 20282817.27 20282817.47 0.0090 0.0052

Neptune 50820-12-25 08:10 G 20283042.65 20283042.84 20283043.04 0.0090 0.0042

Neptune 50821-08-07 21:22 G 20283268.20 20283268.39 20283268.61 0.0090 0.0033

Neptune 50822-03-21 10:48 G 20283493.74 20283493.95 20283494.17 0.0090 0.0023

Neptune 50822-11-02 00:14 G 20283719.29 20283719.51 20283719.73 0.0090 0.0014

Neptune 50823-06-15 13:41 G 20283944.85 20283945.07 20283945.29 0.0090 0.0005

Neptune 50824-01-27 03:07 G 20284170.41 20284170.63 20284170.85 0.0090 0.0005

Jupiter 50824-08-18 21:22 G 20284375.31 20284375.39 20284375.47 0.0527 0.0484

Neptune 50824-09-08 16:34 G 20284395.97 20284396.19 20284396.40 0.0090 0.0014

Neptune 50825-04-22 05:31 G 20284621.53 20284621.73 20284621.96 0.0090 0.0024

Uranus 50825-10-25 21:36 G 20284808.36 20284808.40 20284808.48 0.0136 0.0130

Neptune 50825-12-03 18:58 G 20284847.10 20284847.29 20284847.51 0.0090 0.0033

Saturn 50826-03-23 12:58 G 20284956.96 20284957.04 20284957.11 0.0275 0.0254

Uranus 50826-06-09 04:48 G 20285034.56 20285034.70 20285034.84 0.0136 0.0102

Neptune 50826-07-17 08:38 G 20285072.67 20285072.86 20285073.06 0.0090 0.0042

Saturn 50826-11-07 19:55 G 20285186.12 20285186.33 20285186.54 0.0273 0.0016

Uranus 50827-01-21 11:02 G 20285260.79 20285260.96 20285261.15 0.0135 0.0075

Neptune 50827-02-27 21:50 G 20285298.25 20285298.41 20285298.60 0.0090 0.0052

Saturn 50827-06-25 00:58 G 20285415.42 20285415.54 20285415.67 0.0270 0.0215

Uranus 50827-09-04 17:31 G 20285487.04 20285487.23 20285487.44 0.0135 0.0047

Neptune 50827-10-11 11:02 G 20285523.82 20285523.96 20285524.14 0.0090 0.0061

Uranus 50828-04-18 00:00 G 20285713.29 20285713.50 20285713.72 0.0135 0.0020

Neptune 50828-05-24 00:29 G 20285749.40 20285749.52 20285749.67 0.0090 0.0070

Uranus 50828-11-30 06:14 G 20285939.54 20285939.76 20285939.98 0.0135 0.0008

Neptune 50829-01-04 13:55 G 20285974.99 20285975.08 20285975.20 0.0090 0.0079

Uranus 50829-07-14 12:14 G 20286165.81 20286166.01 20286166.23 0.0135 0.0035

Neptune 50829-08-18 03:36 G 20286200.62 20286200.65 20286200.69 0.0090 0.0088

Uranus 50830-02-25 18:00 G 20286392.07 20286392.25 20286392.46 0.0135 0.0062

Jupiter 50830-06-25 18:29 G 20286512.09 20286512.27 20286512.45 0.0498 0.0218

Uranus 50830-10-09 23:46 G 20286618.35 20286618.49 20286618.67 0.0134 0.0089

Uranus 50831-05-24 06:00 G 20286844.65 20286844.75 20286844.87 0.0134 0.0114

Mars 50833-12-14 21:22 G 20287780.32 20287780.39 20287780.46 0.1695 0.1527

Jupiter 50836-12-17 07:26 G 20288878.72 20288878.81 20288878.90 0.0530 0.0470

Saturn 50842-07-14 23:17 G 20290914.28 20290914.47 20290914.66 0.0288 0.0115

Saturn 50843-03-01 18:43 G 20291144.11 20291144.28 20291144.46 0.0291 0.0168

Jupiter 50848-08-21 21:36 G 20293144.20 20293144.40 20293144.60 0.0529 0.0095

Jupiter 50854-06-28 03:07 G 20295280.46 20295280.63 20295280.81 0.0497 0.0260

Saturn 50855-10-03 20:10 G 20295743.22 20295743.34 20295743.48 0.0274 0.0214

Saturn 50856-05-20 03:07 G 20295972.42 20295972.63 20295972.85 0.0272 0.0025

Saturn 50857-01-04 08:10 G 20296201.78 20296201.84 20296201.92 0.0270 0.0254

Jupiter 50860-04-26 10:05 G 20297409.75 20297409.92 20297410.09 0.0527 0.0284

Jupiter 50866-03-03 04:34 G 20299546.49 20299546.69 20299546.90 0.0498 0.0043

Mars 50867-10-13 09:50 G 20300135.82 20300135.91 20300136.00 0.1682 0.1440

Uranus 50869-10-21 12:43 G 20300874.91 20300875.03 20300875.15 0.0143 0.0118

Uranus 50870-06-04 23:02 G 20301101.30 20301101.46 20301101.65 0.0143 0.0087

Uranus 50871-01-17 10:05 G 20301327.73 20301327.92 20301328.13 0.0143 0.0054

Uranus 50871-08-31 21:07 G 20301554.17 20301554.38 20301554.60 0.0143 0.0022

Saturn 50872-01-25 10:19 G 20301700.73 20301700.93 20301701.14 0.0288 0.0064

Uranus 50872-04-14 08:10 G 20301780.63 20301780.84 20301781.06 0.0143 0.0011

Mars 50872-05-25 23:31 G 20301822.31 20301822.48 20301822.66 0.1842 0.0100

Saturn 50872-09-11 06:14 G 20301930.63 20301930.76 20301930.90 0.0291 0.0221

Uranus 50872-11-26 19:26 G 20302007.11 20302007.31 20302007.53 0.0144 0.0044

Uranus 50873-07-11 06:43 G 20302233.61 20302233.78 20302233.97 0.0144 0.0077

Uranus 50874-02-22 18:14 G 20302460.12 20302460.26 20302460.40 0.0144 0.0109

Uranus 50874-10-07 05:31 G 20302686.71 20302686.73 20302686.77 0.0144 0.0142

Jupiter 50877-11-06 04:05 G 20303812.53 20303812.67 20303812.82 0.0499 0.0351

Jupiter 50884-04-29 11:46 G 20306178.82 20306178.99 20306179.15 0.0530 0.0303

Saturn 50885-04-15 04:05 G 20306529.51 20306529.67 20306529.83 0.0274 0.0176

Saturn 50885-11-30 10:19 G 20306758.73 20306758.93 20306759.14 0.0272 0.0061

Jupiter 50890-03-05 11:31 G 20308314.89 20308314.98 20308315.09 0.0496 0.0430

Pluto 50892-06-07 04:05 G 20309139.48 20309139.67 20309139.87 0.0063 0.0029

Pluto 50893-01-18 07:41 G 20309364.60 20309364.82 20309365.04 0.0063 0.0008

Pluto 50893-08-31 11:31 G 20309589.83 20309589.98 20309590.13 0.0063 0.0046

Jupiter 50896-01-03 03:22 G 20310444.44 20310444.64 20310444.84 0.0529 0.0066

Mars 50899-10-12 07:55 G 20311822.71 20311822.83 20311822.96 0.1691 0.1166

Neptune 50900-01-10 06:00 G 20311912.68 20311912.75 20311912.86 0.0088 0.0080

Neptune 50900-08-23 18:58 G 20312138.17 20312138.29 20312138.43 0.0088 0.0071

Neptune 50901-04-06 07:12 G 20312363.67 20312363.80 20312363.98 0.0088 0.0063

Saturn 50901-08-07 15:36 G 20312486.94 20312487.15 20312487.36 0.0289 0.0030

Jupiter 50901-11-09 12:43 G 20312580.83 20312581.03 20312581.23 0.0497 0.0127

Neptune 50901-11-17 20:10 G 20312589.18 20312589.34 20312589.53 0.0088 0.0054

Saturn 50902-03-25 11:31 G 20312716.90 20312716.98 20312717.09 0.0292 0.0257

Neptune 50902-07-01 09:07 G 20312814.70 20312814.88 20312815.07 0.0088 0.0045

Neptune 50903-02-11 22:05 G 20313040.22 20313040.42 20313040.62 0.0088 0.0036

Neptune 50903-09-25 10:19 G 20313265.74 20313265.93 20313266.15 0.0088 0.0028

Neptune 50904-05-07 23:17 G 20313491.26 20313491.47 20313491.69 0.0088 0.0019

Neptune 50904-12-19 12:14 G 20313716.79 20313717.01 20313717.23 0.0088 0.0010

Neptune 50905-08-02 00:43 G 20313942.31 20313942.53 20313942.76 0.0088 0.0002

Neptune 50906-03-15 13:26 G 20314167.84 20314168.06 20314168.28 0.0088 0.0007

Neptune 50906-10-27 01:41 G 20314393.37 20314393.57 20314393.80 0.0088 0.0017

Neptune 50907-06-09 14:38 G 20314618.90 20314619.11 20314619.32 0.0088 0.0025

Jupiter 50907-09-08 18:14 G 20314710.15 20314710.26 20314710.37 0.0527 0.0433

Neptune 50908-01-21 03:07 G 20314844.44 20314844.63 20314844.85 0.0088 0.0034

Neptune 50908-09-02 15:36 G 20315069.98 20315070.15 20315070.36 0.0088 0.0043

Neptune 50909-04-16 04:34 G 20315295.52 20315295.69 20315295.87 0.0088 0.0051

Neptune 50909-11-27 16:48 G 20315521.06 20315521.20 20315521.38 0.0088 0.0060

Uranus 50910-02-07 13:41 G 20315592.97 20315593.07 20315593.20 0.0136 0.0113

Neptune 50910-07-11 05:46 G 20315746.61 20315746.74 20315746.88 0.0088 0.0068

Uranus 50910-09-21 20:10 G 20315819.19 20315819.34 20315819.53 0.0136 0.0086

Neptune 50911-02-21 18:14 G 20315972.17 20315972.26 20315972.38 0.0088 0.0077

Uranus 50911-05-06 03:07 G 20316045.44 20316045.63 20316045.83 0.0135 0.0058

Neptune 50911-10-05 06:43 G 20316197.76 20316197.78 20316197.85 0.0088 0.0086

Uranus 50911-12-18 09:36 G 20316271.69 20316271.90 20316272.11 0.0135 0.0030

Uranus 50912-07-31 15:50 G 20316497.94 20316498.16 20316498.38 0.0135 0.0003

Uranus 50913-03-14 21:50 G 20316724.20 20316724.41 20316724.63 0.0135 0.0024

Jupiter 50913-07-15 14:10 G 20316846.90 20316847.09 20316847.29 0.0498 0.0176

Uranus 50913-10-27 04:05 G 20316950.47 20316950.67 20316950.87 0.0135 0.0051

Uranus 50914-06-10 10:05 G 20317176.75 20317176.92 20317177.10 0.0135 0.0078

Saturn 50914-10-27 10:34 G 20317315.77 20317315.94 20317316.13 0.0273 0.0137

Uranus 50915-01-22 15:50 G 20317403.03 20317403.16 20317403.30 0.0134 0.0105

Saturn 50915-06-13 17:02 G 20317545.01 20317545.21 20317545.41 0.0271 0.0098

Uranus 50915-09-05 21:50 G 20317629.36 20317629.41 20317629.46 0.0134 0.0131

Jupiter 50920-01-07 01:26 G 20319213.50 20319213.56 20319213.61 0.0530 0.0507

Moon 50922-02-21 06:29 G 20319989.69 20319989.77 20319989.85 0.2643 0.2212

Jupiter 50925-03-20 15:07 G 20321113.08 20321113.13 20321113.18 0.0500 0.0480

Moon 50930-02-19 02:24 G 20322909.45 20322909.60 20322909.75 0.2646 0.0187

Earth 50930-02-19 03:50 G 20322909.50 20322909.66 20322909.82 0.2640 0.0280 *

Saturn 50930-07-03 07:41 G 20323043.73 20323043.82 20323043.91 0.0287 0.0257

Saturn 50931-02-18 02:10 G 20323273.38 20323273.59 20323273.80 0.0289 0.0020

Jupiter 50931-09-11 16:05 G 20323478.97 20323479.17 20323479.36 0.0529 0.0136

Jupiter 50937-07-17 22:05 G 20325615.26 20325615.42 20325615.59 0.0496 0.0301

Mars 50938-03-24 03:50 G 20325864.50 20325864.66 20325864.81 0.1846 0.0841

Jupiter 50943-05-17 07:55 G 20327744.65 20327744.83 20327745.02 0.0528 0.0228

Saturn 50944-05-08 18:14 G 20328102.07 20328102.26 20328102.47 0.0273 0.0101

Saturn 50944-12-24 00:14 G 20328331.33 20328331.51 20328331.70 0.0271 0.0134

Jupiter 50949-03-22 23:46 G 20329881.29 20329881.49 20329881.69 0.0497 0.0001

Uranus 50953-06-21 18:58 G 20331433.22 20331433.29 20331433.38 0.0142 0.0132

Uranus 50954-02-03 05:46 G 20331659.59 20331659.74 20331659.89 0.0143 0.0100

Uranus 50954-09-17 16:19 G 20331885.99 20331886.18 20331886.37 0.0143 0.0068

Uranus 50955-05-02 03:07 G 20332112.43 20332112.63 20332112.85 0.0143 0.0036

Uranus 50955-12-14 14:24 G 20332338.88 20332339.10 20332339.32 0.0143 0.0003

Uranus 50956-07-28 01:26 G 20332565.35 20332565.56 20332565.77 0.0143 0.0030

Uranus 50957-03-11 12:29 G 20332791.83 20332792.02 20332792.22 0.0144 0.0063

Uranus 50957-10-23 23:46 G 20333018.34 20333018.49 20333018.66 0.0144 0.0096

Uranus 50958-06-07 11:17 G 20333244.88 20333244.97 20333245.08 0.0144 0.0128

Saturn 50960-01-13 11:46 G 20333829.87 20333829.99 20333830.13 0.0287 0.0225

Saturn 50960-08-30 06:29 G 20334059.57 20334059.77 20334059.99 0.0290 0.0054

Jupiter 50960-11-26 00:14 G 20334147.35 20334147.51 20334147.67 0.0499 0.0307

Mars 50965-08-09 18:29 G 20335865.11 20335865.27 20335865.42 0.1688 0.0796

Jupiter 50967-05-20 09:36 G 20336513.75 20336513.90 20336514.05 0.0530 0.0357

Jupiter 50973-03-25 08:24 G 20338649.79 20338649.85 20338649.91 0.0496 0.0473

Saturn 50973-11-18 23:46 G 20338888.28 20338888.49 20338888.70 0.0273 0.0064

Saturn 50974-07-06 05:17 G 20339117.56 20339117.72 20339117.89 0.0271 0.0168

Jupiter 50979-01-22 22:48 G 20340779.24 20340779.45 20340779.65 0.0528 0.0020

Neptune 50982-02-25 23:02 G 20341909.44 20341909.46 20341909.49 0.0090 0.0089

Pluto 50982-07-24 18:29 G 20342058.13 20342058.27 20342058.45 0.0081 0.0055

Neptune 50982-10-09 12:14 G 20342134.92 20342135.01 20342135.12 0.0090 0.0080

Pluto 50983-03-07 05:31 G 20342283.54 20342283.73 20342283.96 0.0081 0.0026

Neptune 50983-05-23 01:41 G 20342360.44 20342360.57 20342360.71 0.0090 0.0071

Neptune 50984-01-03 14:53 G 20342585.98 20342586.12 20342586.29 0.0090 0.0062

Neptune 50984-08-16 04:19 G 20342811.51 20342811.68 20342811.87 0.0090 0.0053

Jupiter 50984-11-28 10:05 G 20342915.73 20342915.92 20342916.12 0.0497 0.0177

Neptune 50985-03-29 17:31 G 20343037.05 20343037.23 20343037.44 0.0090 0.0044

Neptune 50985-11-10 06:43 G 20343262.60 20343262.78 20343263.00 0.0090 0.0035

Neptune 50986-06-23 20:24 G 20343488.15 20343488.35 20343488.57 0.0090 0.0025

Neptune 50987-02-04 09:50 G 20343713.70 20343713.91 20343714.13 0.0090 0.0016

Neptune 50987-09-17 23:17 G 20343939.25 20343939.47 20343939.69 0.0090 0.0007

Neptune 50988-04-30 12:29 G 20344164.80 20344165.02 20344165.24 0.0090 0.0003

Neptune 50988-12-12 01:55 G 20344390.36 20344390.58 20344390.80 0.0090 0.0012

Neptune 50989-07-25 15:07 G 20344615.93 20344616.13 20344616.36 0.0090 0.0022

Saturn 50989-07-25 20:38 G 20344616.20 20344616.36 20344616.53 0.0287 0.0181 *

Neptune 50990-03-08 04:34 G 20344841.49 20344841.69 20344841.91 0.0090 0.0031

Saturn 50990-03-12 15:36 G 20344845.96 20344846.15 20344846.35 0.0290 0.0099

Jupiter 50990-09-27 13:55 G 20345044.95 20345045.08 20345045.22 0.0527 0.0385

Neptune 50990-10-19 18:00 G 20345067.06 20345067.25 20345067.45 0.0090 0.0040

Neptune 50991-06-02 07:26 G 20345292.63 20345292.81 20345293.00 0.0090 0.0049

Neptune 50992-01-13 20:53 G 20345518.21 20345518.37 20345518.54 0.0090 0.0058

Neptune 50992-08-26 10:05 G 20345743.80 20345743.92 20345744.08 0.0090 0.0068

Neptune 50993-04-08 23:17 G 20345969.38 20345969.47 20345969.61 0.0090 0.0077

Uranus 50993-10-07 22:48 G 20346151.37 20346151.45 20346151.54 0.0136 0.0124

Neptune 50993-11-20 12:43 G 20346194.99 20346195.03 20346195.12 0.0090 0.0086

Uranus 50994-05-22 05:31 G 20346377.59 20346377.73 20346377.89 0.0136 0.0097

Uranus 50995-01-03 12:00 G 20346603.83 20346604.00 20346604.20 0.0136 0.0070

Uranus 50995-08-17 18:43 G 20346830.07 20346830.28 20346830.49 0.0135 0.0042

Uranus 50996-03-31 00:58 G 20347056.33 20347056.54 20347056.76 0.0135 0.0014

Jupiter 50996-08-03 10:34 G 20347181.74 20347181.94 20347182.14 0.0498 0.0129

Uranus 50996-11-12 07:12 G 20347282.59 20347282.80 20347283.02 0.0135 0.0014

Uranus 50997-06-26 13:26 G 20347508.86 20347509.06 20347509.27 0.0135 0.0041

Uranus 50998-02-07 19:26 G 20347735.13 20347735.31 20347735.51 0.0135 0.0068

Uranus 50998-09-22 01:12 G 20347961.41 20347961.55 20347961.72 0.0135 0.0095

Uranus 50999-05-06 07:26 G 20348187.72 20348187.81 20348187.91 0.0134 0.0121

52ND MILLENNIUM CE

This is a list of transits of Venus in the 52nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Saturn 51002-10-15 23:17 G 20349445.44 20349445.47 20349445.53 0.0275 0.0268

Saturn 51003-06-02 06:43 G 20349674.57 20349674.78 20349675.00 0.0273 0.0029

Saturn 51004-01-17 12:00 G 20349903.88 20349904.00 20349904.16 0.0271 0.0204

Mars 51004-01-20 08:24 G 20349906.76 20349906.85 20349906.94 0.1850 0.1579

Jupiter 51008-04-09 11:46 G 20351447.89 20351447.99 20351448.09 0.0499 0.0431

Jupiter 51014-10-01 16:19 G 20353813.99 20353814.18 20353814.37 0.0530 0.0201

Saturn 51019-02-05 23:31 G 20355402.31 20355402.48 20355402.67 0.0288 0.0152

Saturn 51019-09-23 18:43 G 20355632.09 20355632.28 20355632.47 0.0290 0.0130

Jupiter 51020-08-06 19:26 G 20355950.17 20355950.31 20355950.45 0.0496 0.0347

Jupiter 51026-06-06 07:41 G 20358079.63 20358079.82 20358080.02 0.0528 0.0166

Mars 51031-06-08 05:02 G 20359907.54 20359907.71 20359907.88 0.1685 0.0450

Jupiter 51032-04-11 21:07 G 20360216.18 20360216.38 20360216.59 0.0498 0.0049

Saturn 51032-04-27 03:22 G 20360231.54 20360231.64 20360231.75 0.0275 0.0235

Saturn 51032-12-12 10:48 G 20360460.73 20360460.95 20360461.16 0.0272 0.0006

Saturn 51033-07-29 15:50 G 20360690.06 20360690.16 20360690.27 0.0270 0.0234

Uranus 51037-10-04 12:43 G 20362217.91 20362218.03 20362218.17 0.0142 0.0114

Uranus 51038-05-18 23:17 G 20362444.31 20362444.47 20362444.66 0.0143 0.0082

Uranus 51038-12-31 10:05 G 20362670.73 20362670.92 20362671.14 0.0143 0.0050

Uranus 51039-08-14 21:07 G 20362897.17 20362897.38 20362897.60 0.0143 0.0017

Uranus 51040-03-28 08:10 G 20363123.63 20363123.84 20363124.06 0.0143 0.0016

Uranus 51040-11-09 19:26 G 20363350.11 20363350.31 20363350.52 0.0143 0.0049

Uranus 51041-06-24 06:29 G 20363576.60 20363576.77 20363576.96 0.0143 0.0082

Uranus 51042-02-05 17:46 G 20363803.12 20363803.24 20363803.38 0.0144 0.0115

Earth 51043-08-24 06:58 G 20364367.68 20364367.79 20364367.90 0.2692 0.1963

Moon 51043-08-24 07:55 G 20364367.77 20364367.83 20364367.90 0.2699 0.2387 *

Jupiter 51043-12-16 22:34 G 20364482.27 20364482.44 20364482.62 0.0499 0.0253

Saturn 51048-08-18 07:12 G 20366188.61 20366188.80 20366189.00 0.0288 0.0110

Saturn 51049-04-05 02:38 G 20366418.45 20366418.61 20366418.79 0.0291 0.0173

Jupiter 51050-06-09 06:58 G 20366848.67 20366848.79 20366848.92 0.0530 0.0410

Earth 51051-08-21 20:24 G 20367287.24 20367287.35 20367287.47 0.2692 0.1850

Moon 51051-08-22 01:12 G 20367287.42 20367287.55 20367287.69 0.2696 0.1219 *

Saturn 51061-11-07 10:05 G 20371017.77 20371017.92 20371018.06 0.0275 0.0200

Jupiter 51062-02-11 22:19 G 20371114.23 20371114.43 20371114.63 0.0529 0.0043

Saturn 51062-06-24 16:48 G 20371247.00 20371247.20 20371247.42 0.0272 0.0039

Saturn 51063-02-08 21:50 G 20371476.39 20371476.41 20371476.45 0.0270 0.0267

Neptune 51064-04-14 16:05 G 20371907.11 20371907.17 20371907.28 0.0088 0.0081

Neptune 51064-11-26 05:02 G 20372132.60 20372132.71 20372132.85 0.0088 0.0072

Neptune 51065-07-09 17:31 G 20372358.10 20372358.23 20372358.41 0.0088 0.0064

Neptune 51066-02-20 06:29 G 20372583.61 20372583.77 20372583.96 0.0088 0.0055

Neptune 51066-10-03 19:26 G 20372809.13 20372809.31 20372809.50 0.0088 0.0046

Neptune 51067-05-17 07:55 G 20373034.64 20373034.83 20373035.04 0.0088 0.0038

Jupiter 51067-12-19 08:10 G 20373250.66 20373250.84 20373251.02 0.0497 0.0227

Neptune 51067-12-28 20:53 G 20373260.17 20373260.37 20373260.59 0.0088 0.0029

Neptune 51068-08-10 09:50 G 20373485.70 20373485.91 20373486.12 0.0088 0.0020

Neptune 51069-03-23 22:19 G 20373711.22 20373711.43 20373711.66 0.0088 0.0012

Neptune 51069-11-04 11:02 G 20373936.74 20373936.96 20373937.19 0.0088 0.0003

Neptune 51070-06-17 23:46 G 20374162.27 20374162.49 20374162.72 0.0088 0.0006

Neptune 51071-01-29 12:29 G 20374387.81 20374388.02 20374388.25 0.0088 0.0015

Neptune 51071-09-12 01:12 G 20374613.35 20374613.55 20374613.77 0.0088 0.0024

Neptune 51072-04-24 13:55 G 20374838.88 20374839.08 20374839.29 0.0088 0.0032

Neptune 51072-12-06 02:24 G 20375064.42 20375064.60 20375064.81 0.0088 0.0041

Neptune 51073-07-19 15:22 G 20375289.96 20375290.14 20375290.32 0.0088 0.0049

Jupiter 51073-10-17 14:53 G 20375379.96 20375380.12 20375380.29 0.0528 0.0318

Neptune 51074-03-02 03:36 G 20375515.50 20375515.65 20375515.83 0.0088 0.0058

Neptune 51074-10-13 16:05 G 20375741.05 20375741.17 20375741.33 0.0088 0.0067

Neptune 51075-05-27 04:48 G 20375966.60 20375966.70 20375966.83 0.0088 0.0075

Neptune 51076-01-07 18:00 G 20376192.18 20376192.25 20376192.32 0.0088 0.0083

Uranus 51078-01-20 12:43 G 20376935.93 20376936.03 20376936.18 0.0136 0.0110

Saturn 51078-02-28 09:07 G 20376974.68 20376974.88 20376975.08 0.0288 0.0082

Uranus 51078-09-03 19:41 G 20377162.16 20377162.32 20377162.50 0.0136 0.0082

Saturn 51078-10-16 04:34 G 20377204.53 20377204.69 20377204.84 0.0291 0.0200

Uranus 51079-04-18 02:10 G 20377388.41 20377388.59 20377388.80 0.0136 0.0055

Jupiter 51079-08-24 09:07 G 20377516.68 20377516.88 20377517.09 0.0498 0.0076

Uranus 51079-11-30 08:53 G 20377614.66 20377614.87 20377615.09 0.0135 0.0027

Uranus 51080-07-13 15:22 G 20377840.92 20377841.14 20377841.36 0.0135 0.0002

Uranus 51081-02-24 21:36 G 20378067.19 20378067.40 20378067.62 0.0135 0.0028

Uranus 51081-10-09 03:36 G 20378293.46 20378293.65 20378293.86 0.0135 0.0056

Uranus 51082-05-23 09:50 G 20378519.75 20378519.91 20378520.09 0.0135 0.0083

Uranus 51083-01-04 15:50 G 20378746.05 20378746.16 20378746.30 0.0135 0.0110

Jupiter 51091-04-29 10:19 G 20381782.80 20381782.93 20381783.07 0.0499 0.0378

Saturn 51091-05-20 12:00 G 20381803.84 20381804.00 20381804.17 0.0274 0.0171

Saturn 51092-01-04 18:58 G 20382033.09 20382033.29 20382033.50 0.0272 0.0067

Mars 51097-04-04 15:50 G 20383949.99 20383950.16 20383950.33 0.1682 0.0100

Jupiter 51097-10-20 15:22 G 20384148.96 20384149.14 20384149.32 0.0529 0.0261

Mars 51101-11-17 06:00 G 20385636.69 20385636.75 20385636.80 0.1841 0.1748

Jupiter 51103-08-27 18:58 G 20386285.18 20386285.29 20386285.41 0.0496 0.0405

Saturn 51107-09-11 14:53 G 20387760.92 20387761.12 20387761.33 0.0288 0.0045

Saturn 51108-04-28 10:34 G 20387990.83 20387990.94 20387991.07 0.0291 0.0240

Jupiter 51109-06-26 06:43 G 20388414.58 20388414.78 20388414.98 0.0528 0.0106

Jupiter 51115-05-02 20:24 G 20390551.15 20390551.35 20390551.55 0.0497 0.0105

Saturn 51120-11-30 17:46 G 20392590.06 20392590.24 20392590.43 0.0274 0.0138

Jupiter 51121-02-28 21:50 G 20392680.32 20392680.41 20392680.50 0.0527 0.0469

Uranus 51121-06-04 20:38 G 20392776.27 20392776.36 20392776.47 0.0142 0.0126

Saturn 51121-07-18 00:29 G 20392819.33 20392819.52 20392819.72 0.0272 0.0099

Uranus 51122-01-17 07:12 G 20393002.64 20393002.80 20393002.97 0.0142 0.0095

Uranus 51122-08-31 17:46 G 20393229.05 20393229.24 20393229.44 0.0143 0.0063

Uranus 51123-04-15 04:34 G 20393455.49 20393455.69 20393455.91 0.0143 0.0031

Uranus 51123-11-27 15:50 G 20393681.95 20393682.16 20393682.38 0.0143 0.0003

Uranus 51124-07-11 02:53 G 20393908.41 20393908.62 20393908.84 0.0143 0.0035

Uranus 51125-02-22 13:55 G 20394134.90 20394135.08 20394135.28 0.0143 0.0068

Uranus 51125-10-07 01:26 G 20394361.41 20394361.56 20394361.71 0.0143 0.0101

Uranus 51126-05-21 12:29 G 20394587.96 20394588.02 20394588.11 0.0144 0.0134

Jupiter 51127-01-05 22:34 G 20394817.26 20394817.44 20394817.63 0.0498 0.0193

Jupiter 51133-06-29 09:36 G 20397183.82 20397183.90 20397183.98 0.0531 0.0483

Saturn 51137-03-23 16:05 G 20398546.96 20398547.17 20398547.39 0.0288 0.0019

Saturn 51137-11-08 11:46 G 20398776.91 20398776.99 20398777.08 0.0291 0.0266

Pluto 51138-07-09 04:19 G 20399019.57 20399019.68 20399019.83 0.0063 0.0051

Jupiter 51138-09-10 23:02 G 20399083.45 20399083.46 20399083.48 0.0500 0.0498

Pluto 51139-02-19 08:10 G 20399244.63 20399244.84 20399245.07 0.0063 0.0014

Pluto 51139-10-02 11:46 G 20399469.80 20399469.99 20399470.21 0.0063 0.0024

Pluto 51140-05-14 15:22 G 20399695.11 20399695.14 20399695.21 0.0063 0.0062

Jupiter 51145-03-04 01:12 G 20401449.36 20401449.55 20401449.75 0.0529 0.0118

Neptune 51147-01-12 22:34 G 20402129.36 20402129.44 20402129.54 0.0090 0.0081

Neptune 51147-08-26 11:46 G 20402354.88 20402354.99 20402355.14 0.0090 0.0072

Neptune 51148-04-08 01:12 G 20402580.41 20402580.55 20402580.72 0.0090 0.0063

Neptune 51148-11-19 14:24 G 20402805.94 20402806.10 20402806.29 0.0090 0.0054

Neptune 51149-07-03 03:50 G 20403031.49 20403031.66 20403031.87 0.0090 0.0045

Neptune 51150-02-13 17:17 G 20403257.03 20403257.22 20403257.43 0.0090 0.0036

Saturn 51150-06-12 18:14 G 20403376.07 20403376.26 20403376.46 0.0274 0.0112

Neptune 51150-09-27 06:29 G 20403482.57 20403482.77 20403482.99 0.0090 0.0027

Jupiter 51151-01-08 07:55 G 20403585.67 20403585.83 20403586.00 0.0497 0.0284

Saturn 51151-01-28 01:12 G 20403605.36 20403605.55 20403605.74 0.0272 0.0124

Neptune 51151-05-10 19:55 G 20403708.12 20403708.33 20403708.55 0.0090 0.0018

Neptune 51151-12-22 09:22 G 20403933.67 20403933.89 20403934.11 0.0090 0.0008

Neptune 51152-08-03 22:48 G 20404159.23 20404159.45 20404159.67 0.0090 0.0001

Neptune 51153-03-17 12:00 G 20404384.79 20404385.00 20404385.22 0.0090 0.0010

Neptune 51153-10-29 01:12 G 20404610.35 20404610.55 20404610.77 0.0090 0.0020

Neptune 51154-06-11 14:38 G 20404835.91 20404836.11 20404836.33 0.0090 0.0029

Neptune 51155-01-23 03:50 G 20405061.48 20405061.66 20405061.87 0.0090 0.0038

Neptune 51155-09-05 17:17 G 20405287.05 20405287.22 20405287.42 0.0090 0.0047

Neptune 51156-04-18 06:43 G 20405512.62 20405512.78 20405512.96 0.0090 0.0056

Jupiter 51156-11-06 16:05 G 20405714.99 20405715.17 20405715.34 0.0527 0.0249

Neptune 51156-11-29 20:10 G 20405738.20 20405738.34 20405738.50 0.0090 0.0065

Neptune 51157-07-13 09:36 G 20405963.79 20405963.90 20405964.03 0.0090 0.0074

Neptune 51158-02-23 23:02 G 20406189.39 20406189.46 20406189.55 0.0090 0.0083

Uranus 51161-09-20 21:36 G 20407494.31 20407494.40 20407494.50 0.0136 0.0121

Uranus 51162-05-05 04:19 G 20407720.53 20407720.68 20407720.84 0.0136 0.0094

Jupiter 51162-09-13 09:50 G 20407851.70 20407851.91 20407852.11 0.0498 0.0013

Uranus 51162-12-17 10:48 G 20407946.77 20407946.95 20407947.15 0.0136 0.0067

Mars 51163-02-01 02:53 G 20407992.45 20407992.62 20407992.79 0.1680 0.0233

Uranus 51163-07-31 17:31 G 20408173.03 20408173.23 20408173.44 0.0135 0.0039

Uranus 51164-03-14 00:00 G 20408399.29 20408399.50 20408399.72 0.0135 0.0011

Uranus 51164-10-26 06:14 G 20408625.55 20408625.76 20408625.98 0.0135 0.0017

Uranus 51165-06-09 12:43 G 20408851.83 20408852.03 20408852.24 0.0135 0.0044

Uranus 51166-01-21 18:58 G 20409078.11 20409078.29 20409078.48 0.0135 0.0071

Saturn 51166-02-16 02:53 G 20409103.54 20409103.62 20409103.72 0.0286 0.0259

Uranus 51166-09-05 01:12 G 20409304.40 20409304.55 20409304.70 0.0135 0.0098

Saturn 51166-10-03 20:53 G 20409333.16 20409333.37 20409333.58 0.0289 0.0017

Uranus 51167-04-19 07:12 G 20409530.72 20409530.80 20409530.88 0.0135 0.0125

Mars 51167-09-14 11:17 G 20409678.83 20409678.97 20409679.12 0.1845 0.1067

Earth 51173-02-21 06:29 G 20411665.61 20411665.77 20411665.93 0.2640 0.0145

Moon 51173-02-21 09:36 G 20411665.73 20411665.90 20411666.07 0.2634 0.0172 *

Jupiter 51174-05-19 11:17 G 20412117.81 20412117.97 20412118.13 0.0499 0.0314

Saturn 51179-12-23 23:17 G 20414162.27 20414162.47 20414162.67 0.0274 0.0080

Saturn 51180-08-09 05:46 G 20414391.56 20414391.74 20414391.91 0.0272 0.0155

Jupiter 51180-11-09 16:34 G 20414484.03 20414484.19 20414484.35 0.0530 0.0329

Jupiter 51186-09-15 19:55 G 20416620.27 20416620.33 20416620.40 0.0496 0.0464

Jupiter 51192-07-15 09:22 G 20418749.69 20418749.89 20418750.10 0.0529 0.0033

Saturn 51195-08-29 03:50 G 20419889.54 20419889.66 20419889.79 0.0286 0.0231

Saturn 51196-04-14 21:36 G 20420119.19 20420119.40 20420119.61 0.0289 0.0043

Jupiter 51198-05-21 21:36 G 20420886.21 20420886.40 20420886.59 0.0497 0.0167

Jupiter 51204-03-20 01:55 G 20423015.45 20423015.58 20423015.72 0.0527 0.0390

Uranus 51205-02-02 04:34 G 20423334.67 20423334.69 20423334.76 0.0142 0.0140

Uranus 51205-09-16 15:22 G 20423561.01 20423561.14 20423561.29 0.0142 0.0107

Uranus 51206-05-01 01:55 G 20423787.41 20423787.58 20423787.78 0.0142 0.0076

Uranus 51206-12-13 12:58 G 20424013.84 20424014.04 20424014.26 0.0143 0.0044

Uranus 51207-07-28 00:00 G 20424240.29 20424240.50 20424240.72 0.0143 0.0011

Uranus 51208-03-10 11:02 G 20424466.75 20424466.96 20424467.18 0.0143 0.0022

Uranus 51208-10-22 22:05 G 20424693.23 20424693.42 20424693.63 0.0143 0.0055

Uranus 51209-06-06 09:07 G 20424919.73 20424919.88 20424920.07 0.0143 0.0089

Saturn 51209-07-04 22:34 G 20424948.23 20424948.44 20424948.65 0.0274 0.0058

Uranus 51210-01-18 20:53 G 20425146.26 20425146.37 20425146.49 0.0143 0.0121

Jupiter 51210-01-24 23:31 G 20425152.28 20425152.48 20425152.68 0.0498 0.0131

Saturn 51210-02-19 05:02 G 20425177.56 20425177.71 20425177.88 0.0271 0.0178

Jupiter 51221-09-30 00:29 G 20429418.43 20429418.52 20429418.63 0.0500 0.0433

Saturn 51225-03-10 07:26 G 20430675.66 20430675.81 20430675.96 0.0286 0.0201

Saturn 51225-10-26 01:26 G 20430905.35 20430905.56 20430905.76 0.0289 0.0075

Jupiter 51228-03-23 02:38 G 20431784.42 20431784.61 20431784.80 0.0529 0.0187

Neptune 51228-07-18 03:07 G 20431901.56 20431901.63 20431901.72 0.0088 0.0081

Mars 51228-11-28 13:55 G 20432034.92 20432035.08 20432035.24 0.1677 0.0567

Neptune 51229-02-28 15:36 G 20432127.05 20432127.15 20432127.29 0.0088 0.0073

Pluto 51229-04-06 00:58 G 20432163.35 20432163.54 20432163.77 0.0081 0.0027

Neptune 51229-10-12 04:34 G 20432352.55 20432352.69 20432352.84 0.0088 0.0064

Pluto 51229-11-17 11:46 G 20432388.84 20432388.99 20432389.17 0.0081 0.0054

Neptune 51230-05-25 17:02 G 20432578.05 20432578.21 20432578.39 0.0088 0.0056

Neptune 51231-01-06 06:00 G 20432803.57 20432803.75 20432803.94 0.0088 0.0047

Neptune 51231-08-19 18:29 G 20433029.09 20433029.27 20433029.48 0.0088 0.0039

Neptune 51232-04-01 07:26 G 20433254.61 20433254.81 20433255.02 0.0088 0.0030

Neptune 51232-11-12 19:55 G 20433480.13 20433480.33 20433480.56 0.0088 0.0022

Neptune 51233-06-26 08:53 G 20433705.65 20433705.87 20433706.09 0.0088 0.0013

Mars 51233-07-11 15:36 G 20433720.98 20433721.15 20433721.32 0.1849 0.0332

Jupiter 51234-01-27 09:36 G 20433920.76 20433920.90 20433921.05 0.0496 0.0348

Neptune 51234-02-06 21:36 G 20433931.19 20433931.40 20433931.63 0.0088 0.0005

Neptune 51234-09-20 10:19 G 20434156.72 20434156.93 20434157.16 0.0088 0.0005

Neptune 51235-05-03 23:02 G 20434382.25 20434382.46 20434382.68 0.0088 0.0013

Neptune 51235-12-15 11:46 G 20434607.78 20434607.99 20434608.21 0.0088 0.0022

Neptune 51236-07-28 00:14 G 20434833.32 20434833.51 20434833.73 0.0088 0.0031

Neptune 51237-03-10 13:12 G 20435058.86 20435059.05 20435059.25 0.0088 0.0039

Neptune 51237-10-22 01:41 G 20435284.40 20435284.57 20435284.77 0.0088 0.0048

Saturn 51238-05-30 18:14 G 20435505.22 20435505.26 20435505.32 0.0276 0.0269

Neptune 51238-06-04 14:24 G 20435509.94 20435510.10 20435510.28 0.0088 0.0056

Saturn 51239-01-15 02:53 G 20435734.41 20435734.62 20435734.84 0.0274 0.0027

Neptune 51239-01-16 02:53 G 20435735.50 20435735.62 20435735.79 0.0088 0.0065

Neptune 51239-08-29 15:50 G 20435961.05 20435961.16 20435961.29 0.0088 0.0073

Saturn 51239-09-01 09:22 G 20435963.75 20435963.89 20435964.02 0.0272 0.0208

Jupiter 51239-11-26 16:48 G 20436050.02 20436050.20 20436050.40 0.0528 0.0184

Neptune 51240-04-11 04:48 G 20436186.62 20436186.70 20436186.78 0.0088 0.0081

Uranus 51245-05-21 06:00 G 20438052.71 20438052.75 20438052.79 0.0136 0.0133

Jupiter 51245-10-02 12:29 G 20438186.82 20438187.02 20438187.22 0.0497 0.0055

Uranus 51246-01-02 12:29 G 20438278.90 20438279.02 20438279.17 0.0136 0.0106

Uranus 51246-08-16 19:26 G 20438505.14 20438505.31 20438505.49 0.0136 0.0078

Uranus 51247-03-31 01:55 G 20438731.39 20438731.58 20438731.79 0.0136 0.0051

Uranus 51247-11-12 08:38 G 20438957.65 20438957.86 20438958.07 0.0135 0.0023

Uranus 51248-06-25 15:07 G 20439183.91 20439184.13 20439184.35 0.0135 0.0005

Uranus 51249-02-06 21:22 G 20439410.18 20439410.39 20439410.61 0.0135 0.0033

Uranus 51249-09-21 03:36 G 20439636.46 20439636.65 20439636.85 0.0135 0.0060

Uranus 51250-05-05 09:50 G 20439862.75 20439862.91 20439863.08 0.0135 0.0087

Uranus 51250-12-17 16:05 G 20440089.06 20440089.17 20440089.29 0.0135 0.0114

Saturn 51254-09-20 08:24 G 20441461.69 20441461.85 20441462.02 0.0286 0.0172

Saturn 51255-05-08 02:10 G 20441691.39 20441691.59 20441691.79 0.0289 0.0103

Jupiter 51257-06-07 13:41 G 20442452.89 20442453.07 20442453.25 0.0498 0.0247

Jupiter 51263-11-29 21:36 G 20444819.28 20444819.40 20444819.53 0.0530 0.0411

Saturn 51267-12-10 16:48 G 20446291.12 20446291.20 20446291.30 0.0276 0.0248

Saturn 51268-07-27 01:26 G 20446520.35 20446520.56 20446520.77 0.0274 0.0006

Saturn 51269-03-13 07:41 G 20446749.71 20446749.82 20446749.94 0.0271 0.0228

Jupiter 51275-08-04 12:43 G 20449084.83 20449085.03 20449085.23 0.0529 0.0045

Jupiter 51281-06-09 23:46 G 20451221.31 20451221.49 20451221.67 0.0497 0.0233

Saturn 51284-04-01 11:17 G 20452247.79 20452247.97 20452248.16 0.0287 0.0144

Saturn 51284-11-17 05:31 G 20452477.54 20452477.73 20452477.91 0.0289 0.0134

Earth 51286-08-25 06:29 G 20453123.66 20453123.77 20453123.89 0.2692 0.1805

Moon 51286-08-25 07:12 G 20453123.66 20453123.80 20453123.94 0.2685 0.1494 *

Jupiter 51287-04-09 04:05 G 20453350.51 20453350.67 20453350.83 0.0527 0.0317

Uranus 51289-05-16 23:02 G 20454119.36 20454119.46 20454119.59 0.0142 0.0120

Uranus 51289-12-29 09:50 G 20454345.75 20454345.91 20454346.09 0.0142 0.0088

Uranus 51290-08-12 20:24 G 20454572.17 20454572.35 20454572.57 0.0143 0.0057

Uranus 51291-03-27 07:41 G 20454798.60 20454798.82 20454799.03 0.0143 0.0024

Uranus 51291-11-08 18:43 G 20455025.06 20455025.28 20455025.50 0.0143 0.0009

Uranus 51292-06-22 05:46 G 20455251.54 20455251.74 20455251.95 0.0143 0.0042

Uranus 51293-02-03 16:48 G 20455478.03 20455478.20 20455478.40 0.0143 0.0075

Jupiter 51293-02-13 02:10 G 20455487.39 20455487.59 20455487.79 0.0498 0.0063

Uranus 51293-09-18 04:19 G 20455704.54 20455704.68 20455704.82 0.0143 0.0108

Uranus 51294-05-02 15:36 G 20455931.12 20455931.15 20455931.20 0.0144 0.0141

Moon 51294-08-22 16:05 G 20456043.09 20456043.17 20456043.25 0.2687 0.2348

Earth 51294-08-22 20:10 G 20456043.23 20456043.34 20456043.44 0.2692 0.2014 *

Mars 51294-09-26 01:12 G 20456077.40 20456077.55 20456077.69 0.1674 0.0894

Saturn 51297-06-21 20:53 G 20457077.25 20457077.37 20457077.51 0.0276 0.0216

Saturn 51298-02-06 05:31 G 20457306.52 20457306.73 20457306.94 0.0274 0.0026

Saturn 51298-09-23 11:31 G 20457535.93 20457535.98 20457536.05 0.0271 0.0259

Mars 51299-05-08 20:10 G 20457763.17 20457763.34 20457763.51 0.1853 0.0398

Jupiter 51304-10-20 04:34 G 20459753.55 20459753.69 20459753.83 0.0499 0.0359

Jupiter 51311-04-13 05:31 G 20462119.56 20462119.73 20462119.91 0.0530 0.0260

Neptune 51311-04-17 08:38 G 20462123.79 20462123.86 20462123.97 0.0089 0.0082

Neptune 51311-11-28 22:05 G 20462349.31 20462349.42 20462349.57 0.0090 0.0073

Neptune 51312-07-11 11:46 G 20462574.85 20462574.99 20462575.16 0.0090 0.0064

Neptune 51313-02-22 01:12 G 20462800.39 20462800.55 20462800.73 0.0090 0.0055

Neptune 51313-10-05 14:24 G 20463025.93 20463026.10 20463026.30 0.0090 0.0046

Saturn 51313-10-13 12:43 G 20463033.84 20463034.03 20463034.23 0.0286 0.0114

Neptune 51314-05-19 03:50 G 20463251.47 20463251.66 20463251.87 0.0090 0.0037

Saturn 51314-05-31 06:43 G 20463263.61 20463263.78 20463263.96 0.0289 0.0163

Neptune 51314-12-30 17:17 G 20463477.02 20463477.22 20463477.44 0.0090 0.0028

Neptune 51315-08-13 06:43 G 20463702.57 20463702.78 20463703.00 0.0090 0.0019

Neptune 51316-03-25 20:10 G 20463928.12 20463928.34 20463928.56 0.0090 0.0009

Neptune 51316-11-06 09:36 G 20464153.68 20464153.90 20464154.12 0.0090 0.0001

Jupiter 51317-02-16 12:00 G 20464255.89 20464256.00 20464256.12 0.0496 0.0413

Neptune 51317-06-19 22:48 G 20464379.24 20464379.45 20464379.67 0.0090 0.0009

Neptune 51318-01-31 12:14 G 20464604.80 20464605.01 20464605.23 0.0090 0.0018

Neptune 51318-09-14 01:26 G 20464830.36 20464830.56 20464830.78 0.0090 0.0027

Neptune 51319-04-27 14:53 G 20465055.92 20465056.12 20465056.32 0.0090 0.0036

Neptune 51319-12-09 04:05 G 20465281.49 20465281.67 20465281.86 0.0090 0.0045

Neptune 51320-07-21 17:31 G 20465507.06 20465507.23 20465507.41 0.0090 0.0054

Neptune 51321-03-04 06:58 G 20465732.64 20465732.79 20465732.95 0.0090 0.0063

Neptune 51321-10-15 20:10 G 20465958.22 20465958.34 20465958.48 0.0090 0.0072

Neptune 51322-05-29 09:22 G 20466183.81 20466183.89 20466184.00 0.0090 0.0081

Jupiter 51322-12-16 22:19 G 20466385.23 20466385.43 20466385.63 0.0529 0.0099

Mars 51326-09-25 22:34 G 20467764.42 20467764.44 20467764.46 0.1683 0.1668

Saturn 51327-01-02 19:26 G 20467863.17 20467863.31 20467863.47 0.0276 0.0196

Saturn 51327-08-20 03:50 G 20468092.45 20468092.66 20468092.87 0.0274 0.0046

Jupiter 51328-10-22 14:10 G 20468521.89 20468522.09 20468522.29 0.0497 0.0118

Uranus 51329-09-02 21:50 G 20468837.32 20468837.41 20468837.53 0.0136 0.0117

Uranus 51330-04-17 04:48 G 20469063.55 20469063.70 20469063.87 0.0136 0.0089

Uranus 51330-11-29 11:31 G 20469289.79 20469289.98 20469290.18 0.0136 0.0061

Uranus 51331-07-13 18:14 G 20469516.05 20469516.26 20469516.47 0.0135 0.0033

Uranus 51332-02-25 00:43 G 20469742.31 20469742.53 20469742.75 0.0135 0.0006

Uranus 51332-10-08 06:58 G 20469968.58 20469968.79 20469969.01 0.0135 0.0023

Uranus 51333-05-22 13:41 G 20470194.87 20470195.07 20470195.27 0.0135 0.0049

Uranus 51334-01-03 19:41 G 20470421.15 20470421.32 20470421.51 0.0135 0.0077

Uranus 51334-08-18 01:41 G 20470647.45 20470647.57 20470647.72 0.0135 0.0104

Jupiter 51334-08-21 14:10 G 20470650.99 20470651.09 20470651.19 0.0527 0.0456

Uranus 51335-04-01 07:41 G 20470873.79 20470873.82 20470873.89 0.0135 0.0131

Jupiter 51340-06-27 15:36 G 20472787.96 20472788.15 20472788.35 0.0499 0.0181

Saturn 51343-04-25 15:50 G 20473819.96 20473820.16 20473820.37 0.0287 0.0085

Saturn 51343-12-11 10:05 G 20474049.77 20474049.92 20474050.08 0.0289 0.0194

Jupiter 51346-12-19 23:46 G 20475154.41 20475154.49 20475154.58 0.0530 0.0481

Jupiter 51352-03-02 17:46 G 20477054.19 20477054.24 20477054.30 0.0500 0.0478

Saturn 51356-07-14 23:31 G 20478649.31 20478649.48 20478649.65 0.0276 0.0164

Saturn 51357-03-01 07:41 G 20478878.62 20478878.82 20478879.03 0.0274 0.0078

Jupiter 51358-08-24 12:58 G 20479419.85 20479420.04 20479420.24 0.0530 0.0109

Mars 51360-07-24 12:14 G 20480119.89 20480120.01 20480120.13 0.1671 0.1223

Jupiter 51364-06-30 03:07 G 20481556.48 20481556.63 20481556.80 0.0496 0.0303

Mars 51365-03-06 00:14 G 20481805.37 20481805.51 20481805.64 0.1856 0.1167

Jupiter 51370-04-29 05:46 G 20483685.57 20483685.74 20483685.92 0.0528 0.0250

Saturn 51372-11-04 18:43 G 20484606.07 20484606.28 20484606.49 0.0286 0.0052

Uranus 51373-01-15 06:00 G 20484677.70 20484677.75 20484677.84 0.0142 0.0134

Saturn 51373-06-22 12:29 G 20484835.90 20484836.02 20484836.16 0.0289 0.0226

Uranus 51373-08-29 16:48 G 20484904.06 20484904.20 20484904.36 0.0142 0.0101

Uranus 51374-04-13 03:22 G 20485130.46 20485130.64 20485130.84 0.0143 0.0070

Uranus 51374-11-25 14:38 G 20485356.90 20485357.11 20485357.32 0.0143 0.0037

Uranus 51375-07-10 01:41 G 20485583.35 20485583.57 20485583.79 0.0143 0.0004

Uranus 51376-02-21 12:29 G 20485809.81 20485810.02 20485810.24 0.0143 0.0029

Jupiter 51376-03-05 04:34 G 20485822.49 20485822.69 20485822.90 0.0497 0.0006

Uranus 51376-10-04 23:46 G 20486036.30 20486036.49 20486036.69 0.0143 0.0062

Uranus 51377-05-19 10:48 G 20486262.80 20486262.95 20486263.12 0.0143 0.0095

Uranus 51377-12-31 22:19 G 20486489.34 20486489.43 20486489.54 0.0144 0.0128

Pluto 51385-03-20 09:36 G 20489124.73 20489124.90 20489125.11 0.0063 0.0032

Pluto 51385-10-31 13:26 G 20489349.85 20489350.06 20489350.29 0.0063 0.0006

Saturn 51386-01-24 22:19 G 20489435.26 20489435.43 20489435.62 0.0276 0.0143

Pluto 51386-06-13 16:48 G 20489575.06 20489575.20 20489575.38 0.0063 0.0044

Saturn 51386-09-11 06:29 G 20489664.58 20489664.77 20489664.97 0.0273 0.0098

Jupiter 51387-11-09 05:46 G 20490088.58 20490088.74 20490088.91 0.0499 0.0296

Mars 51392-07-23 09:07 G 20491806.77 20491806.88 20491806.99 0.1680 0.1306

Neptune 51392-10-20 14:24 G 20491896.03 20491896.10 20491896.19 0.0088 0.0081

Neptune 51393-06-03 02:53 G 20492121.52 20492121.62 20492121.76 0.0088 0.0073

Neptune 51394-01-14 15:36 G 20492347.02 20492347.15 20492347.32 0.0088 0.0065

Jupiter 51394-05-02 09:07 G 20492454.72 20492454.88 20492455.03 0.0530 0.0336

Neptune 51394-08-28 04:34 G 20492572.53 20492572.69 20492572.87 0.0088 0.0056

Neptune 51395-04-10 17:02 G 20492798.04 20492798.21 20492798.41 0.0088 0.0048

Neptune 51395-11-22 06:00 G 20493023.56 20493023.75 20493023.95 0.0088 0.0039

Neptune 51396-07-04 18:29 G 20493249.07 20493249.27 20493249.49 0.0088 0.0031

Neptune 51397-02-15 07:26 G 20493474.60 20493474.81 20493475.02 0.0088 0.0022

Neptune 51397-09-28 19:55 G 20493700.12 20493700.33 20493700.56 0.0088 0.0014

Neptune 51398-05-12 08:38 G 20493925.65 20493925.86 20493926.09 0.0088 0.0006

Neptune 51398-12-23 21:36 G 20494151.18 20494151.40 20494151.62 0.0088 0.0003

Neptune 51399-08-06 10:19 G 20494376.71 20494376.93 20494377.15 0.0088 0.0012

Jupiter 51400-03-08 13:41 G 20494591.02 20494591.07 20494591.13 0.0496 0.0475

Neptune 51400-03-19 22:48 G 20494602.24 20494602.45 20494602.67 0.0088 0.0021

Neptune 51400-10-31 11:31 G 20494827.78 20494827.98 20494828.19 0.0088 0.0029

Neptune 51401-06-14 00:00 G 20495053.31 20495053.50 20495053.71 0.0088 0.0038

Neptune 51402-01-25 12:58 G 20495278.86 20495279.04 20495279.24 0.0088 0.0046

Saturn 51402-05-18 21:50 G 20495392.20 20495392.41 20495392.62 0.0287 0.0023

Neptune 51402-09-08 01:26 G 20495504.41 20495504.56 20495504.75 0.0088 0.0055

Saturn 51403-01-03 15:50 G 20495622.08 20495622.16 20495622.27 0.0290 0.0257

Neptune 51403-04-21 14:10 G 20495729.95 20495730.09 20495730.26 0.0088 0.0063

Neptune 51403-12-03 03:07 G 20495955.51 20495955.63 20495955.76 0.0088 0.0071

Neptune 51404-07-15 15:22 G 20496181.07 20496181.14 20496181.25 0.0088 0.0080

Jupiter 51406-01-06 00:00 G 20496720.30 20496720.50 20496720.71 0.0529 0.0031

Jupiter 51411-11-12 16:34 G 20498857.00 20498857.19 20498857.38 0.0497 0.0184

Uranus 51413-05-04 06:43 G 20499395.73 20499395.78 20499395.87 0.0136 0.0128

Uranus 51413-12-16 13:55 G 20499621.94 20499622.08 20499622.23 0.0136 0.0100

Uranus 51414-07-30 20:24 G 20499848.18 20499848.35 20499848.55 0.0136 0.0073

Uranus 51415-03-14 03:07 G 20500074.43 20500074.63 20500074.84 0.0135 0.0045

Saturn 51415-08-08 03:07 G 20500221.43 20500221.63 20500221.82 0.0276 0.0109

Uranus 51415-10-26 09:50 G 20500300.69 20500300.91 20500301.13 0.0135 0.0017

Moon 51416-02-24 05:02 G 20500421.56 20500421.71 20500421.87 0.2644 0.0148

Earth 51416-02-24 09:22 G 20500421.73 20500421.89 20500422.05 0.2640 0.0015 *

Saturn 51416-03-24 10:48 G 20500450.77 20500450.95 20500451.15 0.0273 0.0132

Uranus 51416-06-08 16:19 G 20500526.97 20500527.18 20500527.40 0.0135 0.0012

Uranus 51417-01-20 22:34 G 20500753.24 20500753.44 20500753.66 0.0135 0.0039

Uranus 51417-09-04 04:48 G 20500979.52 20500979.70 20500979.90 0.0135 0.0066

Jupiter 51417-09-10 13:12 G 20500985.92 20500986.05 20500986.18 0.0527 0.0399

Uranus 51418-04-18 11:02 G 20501205.81 20501205.96 20501206.13 0.0135 0.0093

Uranus 51418-11-30 17:17 G 20501432.13 20501432.22 20501432.32 0.0135 0.0120

Jupiter 51423-07-18 19:12 G 20503123.11 20503123.30 20503123.51 0.0498 0.0110

Mars 51426-05-22 23:17 G 20504162.41 20504162.47 20504162.53 0.1669 0.1550

Saturn 51431-04-13 10:05 G 20505948.82 20505948.92 20505949.01 0.0284 0.0253

Saturn 51431-11-29 01:55 G 20506178.37 20506178.58 20506178.80 0.0286 0.0016

Jupiter 51435-03-23 19:41 G 20507389.21 20507389.32 20507389.44 0.0499 0.0411

Jupiter 51441-09-13 17:31 G 20509755.04 20509755.23 20509755.42 0.0530 0.0188

Saturn 51445-02-17 02:38 G 20511007.41 20511007.61 20511007.81 0.0276 0.0087

Saturn 51445-10-04 10:34 G 20511236.76 20511236.94 20511237.11 0.0273 0.0153

Jupiter 51447-07-21 03:36 G 20511891.52 20511891.65 20511891.80 0.0496 0.0360

Jupiter 51453-05-19 08:53 G 20514020.68 20514020.87 20514021.06 0.0528 0.0174

Uranus 51457-04-29 22:48 G 20515462.33 20515462.45 20515462.58 0.0142 0.0115

Uranus 51457-12-12 09:36 G 20515688.73 20515688.90 20515689.08 0.0142 0.0083

Mars 51458-05-21 20:10 G 20515849.20 20515849.34 20515849.48 0.1677 0.0978

Uranus 51458-07-26 20:10 G 20515915.15 20515915.34 20515915.56 0.0143 0.0052

Uranus 51459-03-10 07:12 G 20516141.59 20516141.80 20516142.02 0.0143 0.0019

Jupiter 51459-03-26 05:17 G 20516157.52 20516157.72 20516157.92 0.0497 0.0064

Uranus 51459-10-22 18:14 G 20516368.05 20516368.26 20516368.48 0.0143 0.0014

Uranus 51460-06-05 05:17 G 20516594.52 20516594.72 20516594.93 0.0143 0.0047

Saturn 51460-10-23 13:41 G 20516734.95 20516735.07 20516735.20 0.0285 0.0224

Uranus 51461-01-17 16:19 G 20516821.01 20516821.18 20516821.37 0.0143 0.0081

Saturn 51461-06-10 06:14 G 20516964.55 20516964.76 20516964.97 0.0287 0.0046

Uranus 51461-09-01 03:22 G 20517047.53 20517047.64 20517047.79 0.0143 0.0114

Jupiter 51470-11-29 07:41 G 20520423.64 20520423.82 20520424.00 0.0499 0.0231

Saturn 51474-08-30 07:41 G 20521793.61 20521793.82 20521794.03 0.0275 0.0052

Saturn 51475-04-16 15:22 G 20522022.99 20522023.14 20522023.30 0.0273 0.0187

Pluto 51475-05-07 00:00 G 20522043.37 20522043.50 20522043.65 0.0081 0.0062

Neptune 51475-07-20 19:41 G 20522118.25 20522118.32 20522118.42 0.0090 0.0082

Pluto 51475-12-18 10:48 G 20522268.75 20522268.95 20522269.18 0.0081 0.0019

Neptune 51476-03-02 09:22 G 20522343.77 20522343.89 20522344.02 0.0090 0.0073

Neptune 51476-10-13 22:05 G 20522569.29 20522569.42 20522569.60 0.0090 0.0065

Jupiter 51477-05-22 07:12 G 20522789.67 20522789.80 20522789.94 0.0531 0.0389

Neptune 51477-05-27 11:46 G 20522794.83 20522794.99 20522795.18 0.0090 0.0055

Neptune 51478-01-08 01:12 G 20523020.38 20523020.55 20523020.75 0.0090 0.0047

Neptune 51478-08-21 14:38 G 20523245.92 20523246.11 20523246.32 0.0090 0.0038

Neptune 51479-04-04 04:05 G 20523471.47 20523471.67 20523471.89 0.0090 0.0029

Neptune 51479-11-15 17:31 G 20523697.02 20523697.23 20523697.45 0.0090 0.0019

Neptune 51480-06-28 06:58 G 20523922.58 20523922.79 20523923.01 0.0090 0.0011

Neptune 51481-02-08 20:24 G 20524148.13 20524148.35 20524148.57 0.0090 0.0001

Neptune 51481-09-22 09:36 G 20524373.69 20524373.90 20524374.12 0.0090 0.0008

Neptune 51482-05-05 22:48 G 20524599.24 20524599.45 20524599.67 0.0090 0.0017

Neptune 51482-12-17 12:00 G 20524824.80 20524825.00 20524825.22 0.0090 0.0026

Neptune 51483-07-31 01:26 G 20525050.37 20525050.56 20525050.78 0.0090 0.0035

Neptune 51484-03-12 14:38 G 20525275.94 20525276.11 20525276.32 0.0090 0.0044

Neptune 51484-10-24 03:50 G 20525501.51 20525501.66 20525501.86 0.0090 0.0053

Neptune 51485-06-06 17:17 G 20525727.08 20525727.22 20525727.40 0.0090 0.0062

Neptune 51486-01-18 06:58 G 20525952.66 20525952.79 20525952.93 0.0090 0.0070

Neptune 51486-08-31 20:10 G 20526178.25 20526178.34 20526178.46 0.0090 0.0079

Neptune 51487-04-14 09:22 G 20526403.87 20526403.89 20526403.95 0.0090 0.0088

Jupiter 51489-01-24 23:17 G 20527055.27 20527055.47 20527055.68 0.0529 0.0029

Saturn 51490-05-05 19:12 G 20527521.15 20527521.30 20527521.47 0.0284 0.0185

Saturn 51490-12-21 11:46 G 20527750.79 20527750.99 20527751.19 0.0287 0.0086

Jupiter 51494-12-01 17:17 G 20529192.04 20529192.22 20529192.40 0.0496 0.0243

Uranus 51497-08-15 22:19 G 20530180.33 20530180.43 20530180.57 0.0136 0.0112

Uranus 51498-03-30 05:17 G 20530406.56 20530406.72 20530406.90 0.0136 0.0084

Uranus 51498-11-11 12:14 G 20530632.81 20530633.01 20530633.21 0.0136 0.0056

Uranus 51499-06-25 18:58 G 20530859.08 20530859.29 20530859.51 0.0135 0.0028

Uranus 51500-02-07 01:26 G 20531085.35 20531085.56 20531085.78 0.0135 0.0002

Uranus 51500-09-21 07:41 G 20531311.62 20531311.82 20531312.04 0.0135 0.0028

Jupiter 51500-09-30 16:19 G 20531321.02 20531321.18 20531321.34 0.0528 0.0324

Uranus 51501-05-05 14:24 G 20531537.90 20531538.10 20531538.30 0.0135 0.0055

Uranus 51501-12-17 20:24 G 20531764.19 20531764.35 20531764.53 0.0135 0.0083

Uranus 51502-08-01 02:24 G 20531990.49 20531990.60 20531990.74 0.0135 0.0110

Saturn 51503-07-26 22:48 G 20532350.43 20532350.45 20532350.49 0.0278 0.0274

Saturn 51504-03-12 08:38 G 20532579.65 20532579.86 20532580.07 0.0275 0.0027

Saturn 51504-10-27 16:05 G 20532809.04 20532809.17 20532809.31 0.0273 0.0211

Jupiter 51506-08-07 18:43 G 20533458.07 20533458.28 20533458.48 0.0498 0.0055

Jupiter 51518-04-12 19:12 G 20537724.16 20537724.30 20537724.44 0.0499 0.0355

Saturn 51519-11-17 00:00 G 20538307.33 20538307.50 20538307.68 0.0285 0.0153

Saturn 51520-07-03 16:48 G 20538537.01 20538537.20 20538537.40 0.0288 0.0120

Mars 51524-03-19 07:26 G 20539891.65 20539891.81 20539891.97 0.1674 0.0642

Jupiter 51524-10-03 17:02 G 20540090.03 20540090.21 20540090.39 0.0530 0.0248

Mars 51528-10-30 02:53 G 20541577.52 20541577.62 20541577.73 0.1852 0.1492

Moon 51529-08-28 04:05 G 20541879.56 20541879.67 20541879.79 0.2699 0.1721

Earth 51529-08-28 06:14 G 20541879.63 20541879.76 20541879.89 0.2692 0.1625 *

Jupiter 51530-08-10 04:19 G 20542226.57 20542226.68 20542226.79 0.0496 0.0417

Saturn 51533-02-05 05:02 G 20543136.60 20543136.71 20543136.82 0.0277 0.0236

Saturn 51533-09-22 14:38 G 20543365.90 20543366.11 20543366.32 0.0275 0.0010

Saturn 51534-05-09 21:50 G 20543595.33 20543595.41 20543595.51 0.0273 0.0247

Jupiter 51536-06-08 05:31 G 20544355.53 20544355.73 20544355.92 0.0528 0.0127

Earth 51537-08-25 19:41 G 20544799.23 20544799.32 20544799.41 0.2692 0.2176

Moon 51537-08-25 22:19 G 20544799.35 20544799.43 20544799.52 0.2698 0.2223 *

Uranus 51540-12-29 05:02 G 20546020.63 20546020.71 20546020.81 0.0142 0.0129

Uranus 51541-08-12 15:36 G 20546247.00 20546247.15 20546247.32 0.0142 0.0098

Uranus 51542-03-27 02:10 G 20546473.41 20546473.59 20546473.79 0.0142 0.0066

Jupiter 51542-04-15 06:43 G 20546492.58 20546492.78 20546492.98 0.0497 0.0126

Uranus 51542-11-08 13:12 G 20546699.84 20546700.05 20546700.26 0.0143 0.0033

Uranus 51543-06-23 00:14 G 20546926.29 20546926.51 20546926.72 0.0143 0.0003

Uranus 51544-02-04 10:48 G 20547152.75 20547152.95 20547153.17 0.0143 0.0033

Uranus 51544-09-17 21:50 G 20547379.23 20547379.41 20547379.61 0.0143 0.0066

Uranus 51545-05-02 09:07 G 20547605.73 20547605.88 20547606.04 0.0143 0.0099

Uranus 51545-12-14 20:24 G 20547832.27 20547832.35 20547832.44 0.0143 0.0132

Jupiter 51548-02-11 21:36 G 20548621.32 20548621.40 20548621.48 0.0527 0.0481

Saturn 51549-05-29 07:55 G 20549093.63 20549093.83 20549094.02 0.0285 0.0108

Saturn 51550-01-14 00:29 G 20549323.36 20549323.52 20549323.70 0.0287 0.0165

Jupiter 51553-12-19 07:12 G 20550758.61 20550758.80 20550758.99 0.0498 0.0175

Neptune 51557-01-24 01:26 G 20551890.50 20551890.56 20551890.66 0.0088 0.0082

Neptune 51557-09-06 14:38 G 20552115.99 20552116.11 20552116.23 0.0088 0.0073

Neptune 51558-04-20 03:07 G 20552341.49 20552341.63 20552341.79 0.0088 0.0065

Neptune 51558-12-01 15:36 G 20552567.00 20552567.15 20552567.34 0.0088 0.0057

Neptune 51559-07-15 04:34 G 20552792.52 20552792.69 20552792.88 0.0088 0.0048

Neptune 51560-02-25 17:17 G 20553018.03 20553018.22 20553018.42 0.0088 0.0040

Jupiter 51560-06-11 09:07 G 20553124.78 20553124.88 20553124.98 0.0531 0.0458

Neptune 51560-10-08 05:46 G 20553243.55 20553243.74 20553243.96 0.0088 0.0032

Neptune 51561-05-21 18:43 G 20553469.07 20553469.28 20553469.49 0.0088 0.0023

Neptune 51562-01-02 07:26 G 20553694.60 20553694.81 20553695.03 0.0088 0.0015

Neptune 51562-08-15 20:10 G 20553920.12 20553920.34 20553920.56 0.0088 0.0006

Saturn 51562-08-18 07:41 G 20553922.69 20553922.82 20553922.96 0.0277 0.0208

Neptune 51563-03-29 08:53 G 20554145.65 20554145.87 20554146.09 0.0088 0.0002

Saturn 51563-04-04 16:48 G 20554151.99 20554152.20 20554152.41 0.0275 0.0037

Neptune 51563-11-09 21:22 G 20554371.18 20554371.39 20554371.62 0.0088 0.0011

Neptune 51564-06-22 10:05 G 20554596.71 20554596.92 20554597.14 0.0088 0.0019

Neptune 51565-02-02 22:48 G 20554822.25 20554822.45 20554822.67 0.0088 0.0028

Jupiter 51565-08-24 07:26 G 20555024.76 20555024.81 20555024.88 0.0500 0.0476

Neptune 51565-09-16 11:46 G 20555047.79 20555047.99 20555048.19 0.0088 0.0036

Neptune 51566-04-30 00:14 G 20555273.33 20555273.51 20555273.71 0.0088 0.0045

Neptune 51566-12-11 12:58 G 20555498.88 20555499.04 20555499.22 0.0088 0.0053

Neptune 51567-07-25 01:26 G 20555724.42 20555724.56 20555724.74 0.0088 0.0062

Neptune 51568-03-06 14:24 G 20555949.98 20555950.10 20555950.24 0.0088 0.0070

Neptune 51568-10-18 03:07 G 20556175.54 20556175.63 20556175.74 0.0088 0.0078

Neptune 51569-05-31 15:22 G 20556401.13 20556401.14 20556401.21 0.0088 0.0087

Jupiter 51572-02-15 00:14 G 20557390.31 20557390.51 20557390.71 0.0529 0.0095

Jupiter 51577-12-21 15:22 G 20559526.98 20559527.14 20559527.31 0.0497 0.0293

Saturn 51578-12-09 12:58 G 20559879.84 20559880.04 20559880.25 0.0286 0.0075

Saturn 51579-07-27 06:14 G 20560109.62 20560109.76 20560109.92 0.0288 0.0200

Uranus 51581-04-16 06:00 G 20560738.67 20560738.75 20560738.84 0.0136 0.0125

Uranus 51581-11-28 12:43 G 20560964.89 20560965.03 20560965.20 0.0136 0.0097

Uranus 51582-07-12 19:41 G 20561191.14 20561191.32 20561191.52 0.0136 0.0069

Uranus 51583-02-24 02:24 G 20561417.40 20561417.60 20561417.82 0.0136 0.0041

Uranus 51583-10-08 09:07 G 20561643.67 20561643.88 20561644.10 0.0135 0.0013

Jupiter 51583-10-20 14:53 G 20561655.95 20561656.12 20561656.30 0.0527 0.0267

Uranus 51584-05-21 15:50 G 20561869.95 20561870.16 20561870.38 0.0135 0.0016

Uranus 51585-01-02 22:05 G 20562096.22 20562096.42 20562096.64 0.0135 0.0044

Uranus 51585-08-17 04:19 G 20562322.51 20562322.68 20562322.88 0.0135 0.0071

Uranus 51586-03-31 10:34 G 20562548.80 20562548.94 20562549.10 0.0135 0.0098

Uranus 51586-11-12 16:34 G 20562775.12 20562775.19 20562775.28 0.0135 0.0125

Jupiter 51589-08-26 17:46 G 20563793.04 20563793.24 20563793.44 0.0498 0.0001

Mars 51590-01-14 18:43 G 20563934.11 20563934.28 20563934.45 0.1672 0.0323

Saturn 51592-02-28 14:38 G 20564708.94 20564709.11 20564709.27 0.0277 0.0168

Saturn 51592-10-14 23:31 G 20564938.28 20564938.48 20564938.69 0.0275 0.0076

Mars 51594-08-27 08:10 G 20565619.68 20565619.84 20565619.99 0.1855 0.0783

Jupiter 51601-05-01 19:12 G 20568059.14 20568059.30 20568059.47 0.0499 0.0296

Jupiter 51607-10-23 12:58 G 20570424.88 20570425.04 20570425.21 0.0530 0.0292

Saturn 51608-06-20 22:19 G 20570666.22 20570666.43 20570666.64 0.0285 0.0027

Saturn 51609-02-05 15:36 G 20570896.05 20570896.15 20570896.26 0.0288 0.0248

Jupiter 51613-08-29 01:55 G 20572561.51 20572561.58 20572561.65 0.0496 0.0464

Jupiter 51619-06-28 05:46 G 20574690.54 20574690.74 20574690.94 0.0529 0.0063

Saturn 51621-09-09 18:43 G 20575495.10 20575495.28 20575495.47 0.0277 0.0138

Saturn 51622-04-27 03:36 G 20575724.45 20575724.65 20575724.84 0.0274 0.0106

Uranus 51625-04-11 22:19 G 20576805.30 20576805.43 20576805.57 0.0142 0.0111

Jupiter 51625-05-04 03:07 G 20576827.44 20576827.63 20576827.82 0.0497 0.0171

Uranus 51625-11-24 08:53 G 20577031.70 20577031.87 20577032.06 0.0142 0.0080

Uranus 51626-07-08 19:26 G 20577258.12 20577258.31 20577258.53 0.0142 0.0048

Uranus 51627-02-20 06:14 G 20577484.55 20577484.76 20577484.98 0.0143 0.0015

Uranus 51627-10-04 17:02 G 20577711.00 20577711.21 20577711.43 0.0143 0.0019

Uranus 51628-05-18 04:05 G 20577937.47 20577937.67 20577937.88 0.0143 0.0051

Uranus 51628-12-30 15:07 G 20578163.96 20578164.13 20578164.31 0.0143 0.0084

Uranus 51629-08-14 02:10 G 20578390.48 20578390.59 20578390.72 0.0143 0.0117

Jupiter 51631-03-02 21:36 G 20578956.28 20578956.40 20578956.52 0.0527 0.0418

Pluto 51631-04-20 13:41 G 20579004.92 20579005.07 20579005.25 0.0063 0.0041

Pluto 51631-12-01 17:31 G 20579230.01 20579230.23 20579230.45 0.0063 0.0004

Pluto 51632-07-13 20:53 G 20579455.20 20579455.37 20579455.57 0.0063 0.0033

Jupiter 51637-01-07 03:50 G 20581093.46 20581093.66 20581093.86 0.0498 0.0129

Saturn 51637-05-16 12:43 G 20581222.95 20581223.03 20581223.12 0.0284 0.0258

Saturn 51638-01-01 04:34 G 20581452.48 20581452.69 20581452.90 0.0286 0.0010

Saturn 51638-08-18 22:05 G 20581682.41 20581682.42 20581682.46 0.0289 0.0286

Neptune 51639-10-23 07:12 G 20582112.72 20582112.80 20582112.89 0.0090 0.0082

Neptune 51640-06-04 20:10 G 20582338.23 20582338.34 20582338.48 0.0090 0.0074

Neptune 51641-01-16 09:36 G 20582563.76 20582563.90 20582564.07 0.0090 0.0065

Neptune 51641-08-29 23:02 G 20582789.30 20582789.46 20582789.64 0.0090 0.0056

Neptune 51642-04-12 12:29 G 20583014.84 20583015.02 20583015.21 0.0090 0.0047

Neptune 51642-11-24 01:55 G 20583240.38 20583240.58 20583240.78 0.0090 0.0038

Jupiter 51643-07-01 06:14 G 20583459.71 20583459.76 20583459.83 0.0530 0.0508

Neptune 51643-07-07 15:07 G 20583465.94 20583466.13 20583466.35 0.0090 0.0030

Neptune 51644-02-18 04:34 G 20583691.49 20583691.69 20583691.92 0.0090 0.0021

Neptune 51644-09-30 18:00 G 20583917.04 20583917.25 20583917.48 0.0090 0.0012

Neptune 51645-05-14 07:41 G 20584142.60 20584142.82 20584143.04 0.0090 0.0003

Neptune 51645-12-25 20:53 G 20584368.15 20584368.37 20584368.59 0.0090 0.0007

Neptune 51646-08-08 10:19 G 20584593.72 20584593.93 20584594.15 0.0090 0.0016

Neptune 51647-03-21 23:31 G 20584819.28 20584819.48 20584819.70 0.0090 0.0025

Neptune 51647-11-02 12:43 G 20585044.84 20585045.03 20585045.25 0.0090 0.0034

Neptune 51648-06-15 01:55 G 20585270.41 20585270.58 20585270.79 0.0090 0.0043

Jupiter 51648-09-12 05:02 G 20585359.61 20585359.71 20585359.82 0.0500 0.0427

Neptune 51649-01-26 15:36 G 20585495.98 20585496.15 20585496.34 0.0090 0.0051

Neptune 51649-09-09 04:48 G 20585721.55 20585721.70 20585721.88 0.0090 0.0060

Neptune 51650-04-22 18:00 G 20585947.13 20585947.25 20585947.41 0.0090 0.0069

Neptune 51650-12-04 07:12 G 20586172.71 20586172.80 20586172.93 0.0090 0.0078

Saturn 51651-03-23 02:10 G 20586281.39 20586281.59 20586281.79 0.0276 0.0096

Neptune 51651-07-17 20:53 G 20586398.32 20586398.37 20586398.44 0.0090 0.0086

Saturn 51651-11-07 10:34 G 20586510.77 20586510.94 20586511.12 0.0274 0.0146

Jupiter 51655-03-05 18:00 G 20587725.06 20587725.25 20587725.45 0.0529 0.0132

Mars 51655-11-12 06:00 G 20587976.58 20587976.75 20587976.92 0.1669 0.0008

Earth 51659-02-25 11:46 G 20589177.83 20589177.99 20589178.15 0.2640 0.0108

Moon 51659-02-25 17:02 G 20589178.05 20589178.21 20589178.36 0.2639 0.0567 *

Mars 51660-06-23 12:00 G 20589661.82 20589662.00 20589662.17 0.1859 0.0036

Jupiter 51661-01-09 14:10 G 20589861.94 20589862.09 20589862.24 0.0497 0.0344

Uranus 51665-07-28 20:24 G 20591523.23 20591523.35 20591523.48 0.0136 0.0110

Uranus 51666-03-12 03:07 G 20591749.47 20591749.63 20591749.82 0.0136 0.0082

Uranus 51666-10-24 10:05 G 20591975.73 20591975.92 20591976.13 0.0136 0.0053

Jupiter 51666-11-08 09:22 G 20591990.71 20591990.89 20591991.08 0.0528 0.0227

Saturn 51666-11-26 22:48 G 20592009.32 20592009.45 20592009.60 0.0284 0.0210

Moon 51667-02-23 07:12 G 20592097.76 20592097.80 20592097.84 0.2635 0.2554

Uranus 51667-06-07 17:02 G 20592202.00 20592202.21 20592202.43 0.0136 0.0025

Saturn 51667-07-14 14:53 G 20592238.92 20592239.12 20592239.33 0.0286 0.0059

Uranus 51668-01-19 23:46 G 20592428.27 20592428.49 20592428.71 0.0135 0.0003

Uranus 51668-09-02 06:00 G 20592654.54 20592654.75 20592654.97 0.0135 0.0031

Uranus 51669-04-16 12:29 G 20592880.83 20592881.02 20592881.22 0.0135 0.0058

Uranus 51669-11-28 18:29 G 20593107.12 20593107.27 20593107.45 0.0135 0.0086

Uranus 51670-07-13 00:43 G 20593333.43 20593333.53 20593333.66 0.0135 0.0113

Jupiter 51672-09-14 14:10 G 20594127.88 20594128.09 20594128.29 0.0498 0.0046

Saturn 51680-10-02 07:41 G 20597067.62 20597067.82 20597068.04 0.0276 0.0063

Saturn 51681-05-19 15:50 G 20597297.00 20597297.16 20597297.32 0.0274 0.0178

Jupiter 51684-05-20 14:38 G 20598393.94 20598394.11 20598394.29 0.0499 0.0254

Jupiter 51690-11-11 12:00 G 20600759.85 20600760.00 20600760.15 0.0530 0.0350

Saturn 51696-06-08 04:48 G 20602795.54 20602795.70 20602795.87 0.0285 0.0175

Saturn 51697-01-23 21:07 G 20603025.18 20603025.38 20603025.58 0.0287 0.0096

Jupiter 51702-07-18 02:24 G 20605025.40 20605025.60 20605025.80 0.0528 0.0014

Jupiter 51708-05-23 23:46 G 20607162.31 20607162.49 20607162.68 0.0497 0.0214

Uranus 51708-12-11 05:31 G 20607363.64 20607363.73 20607363.84 0.0142 0.0125

Uranus 51709-07-25 16:05 G 20607590.01 20607590.17 20607590.34 0.0142 0.0093

Saturn 51709-08-29 05:46 G 20607624.69 20607624.74 20607624.80 0.0278 0.0268

Uranus 51710-03-09 02:24 G 20607816.42 20607816.60 20607816.81 0.0142 0.0062

Saturn 51710-04-15 15:36 G 20607853.94 20607854.15 20607854.36 0.0275 0.0021

Uranus 51710-10-21 13:26 G 20608042.85 20608043.06 20608043.27 0.0143 0.0028

Saturn 51710-11-30 23:17 G 20608083.35 20608083.47 20608083.60 0.0273 0.0218

Uranus 51711-06-05 00:14 G 20608269.29 20608269.51 20608269.73 0.0143 0.0004

Uranus 51712-01-17 11:02 G 20608495.75 20608495.96 20608496.17 0.0143 0.0037

Uranus 51712-08-30 21:50 G 20608722.23 20608722.41 20608722.61 0.0143 0.0071

Uranus 51713-04-14 08:53 G 20608948.73 20608948.87 20608949.03 0.0143 0.0103

Uranus 51713-11-26 19:55 G 20609175.28 20609175.33 20609175.42 0.0143 0.0137

Jupiter 51714-03-22 14:53 G 20609290.98 20609291.12 20609291.26 0.0526 0.0381

Jupiter 51720-01-28 01:12 G 20611428.35 20611428.55 20611428.76 0.0499 0.0081

Neptune 51721-04-28 12:58 G 20611884.98 20611885.04 20611885.14 0.0088 0.0082

Mars 51721-09-09 17:31 G 20612019.06 20612019.23 20612019.40 0.1667 0.0313

Neptune 51721-12-10 02:10 G 20612110.48 20612110.59 20612110.72 0.0088 0.0073

Pluto 51722-01-17 12:58 G 20612148.82 20612149.04 20612149.27 0.0081 0.0005

Neptune 51722-07-23 14:53 G 20612335.98 20612336.12 20612336.27 0.0088 0.0065

Pluto 51722-08-30 23:46 G 20612374.42 20612374.49 20612374.57 0.0081 0.0075

Neptune 51723-03-06 03:22 G 20612561.49 20612561.64 20612561.82 0.0088 0.0057

Neptune 51723-10-17 15:50 G 20612787.00 20612787.16 20612787.37 0.0088 0.0049

Neptune 51724-05-30 05:02 G 20613012.52 20613012.71 20613012.91 0.0088 0.0040

Neptune 51725-01-10 17:46 G 20613238.04 20613238.24 20613238.45 0.0088 0.0032

Neptune 51725-08-24 06:14 G 20613463.56 20613463.76 20613463.99 0.0088 0.0024

Saturn 51725-12-20 15:50 G 20613581.97 20613582.16 20613582.35 0.0285 0.0125

Neptune 51726-04-06 19:12 G 20613689.08 20613689.30 20613689.52 0.0088 0.0015

Mars 51726-04-21 16:19 G 20613704.02 20613704.18 20613704.34 0.1863 0.0742

Saturn 51726-08-07 08:24 G 20613811.68 20613811.85 20613812.04 0.0287 0.0148

Neptune 51726-11-18 07:41 G 20613914.61 20613914.82 20613915.05 0.0088 0.0007

Neptune 51727-07-01 20:24 G 20614140.13 20614140.35 20614140.57 0.0088 0.0002

Neptune 51728-02-12 09:07 G 20614365.67 20614365.88 20614366.10 0.0088 0.0010

Neptune 51728-09-24 21:36 G 20614591.20 20614591.40 20614591.63 0.0088 0.0019

Neptune 51729-05-08 10:19 G 20614816.73 20614816.93 20614817.15 0.0088 0.0027

Neptune 51729-12-19 23:02 G 20615042.27 20615042.46 20615042.67 0.0088 0.0035

Neptune 51730-08-02 11:31 G 20615267.81 20615267.98 20615268.19 0.0088 0.0044

Neptune 51731-03-16 00:14 G 20615493.35 20615493.51 20615493.70 0.0088 0.0052

Jupiter 51731-10-03 00:29 G 20615694.40 20615694.52 20615694.66 0.0500 0.0383

Neptune 51731-10-27 12:58 G 20615718.89 20615719.04 20615719.21 0.0088 0.0060

Neptune 51732-06-09 01:26 G 20615944.45 20615944.56 20615944.72 0.0088 0.0069

Neptune 51733-01-20 14:24 G 20616170.01 20616170.10 20616170.22 0.0088 0.0077

Neptune 51733-09-03 03:07 G 20616395.59 20616395.63 20616395.70 0.0088 0.0085

Jupiter 51738-03-25 16:19 G 20618059.99 20618060.18 20618060.37 0.0529 0.0188

Saturn 51739-03-11 12:43 G 20618410.93 20618411.03 20618411.16 0.0278 0.0232

Saturn 51739-10-26 22:19 G 20618640.22 20618640.43 20618640.65 0.0275 0.0016

Saturn 51740-06-12 05:46 G 20618869.66 20618869.74 20618869.82 0.0273 0.0252

Jupiter 51744-01-30 08:38 G 20620196.73 20620196.86 20620196.99 0.0496 0.0381

Uranus 51749-03-29 03:50 G 20622081.57 20622081.66 20622081.76 0.0136 0.0122

Uranus 51749-11-10 10:48 G 20622307.80 20622307.95 20622308.11 0.0136 0.0094

Jupiter 51749-11-28 07:55 G 20622325.64 20622325.83 20622326.02 0.0528 0.0170

Uranus 51750-06-24 17:46 G 20622534.06 20622534.24 20622534.44 0.0136 0.0066

Uranus 51751-02-06 00:29 G 20622760.32 20622760.52 20622760.74 0.0136 0.0038

Uranus 51751-09-20 07:12 G 20622986.58 20622986.80 20622987.02 0.0135 0.0010

Uranus 51752-05-03 13:41 G 20623212.86 20623213.07 20623213.29 0.0135 0.0019

Uranus 51752-12-15 19:55 G 20623439.14 20623439.33 20623439.55 0.0135 0.0047

Uranus 51753-07-30 02:10 G 20623665.42 20623665.59 20623665.79 0.0135 0.0074

Uranus 51754-03-13 08:24 G 20623891.72 20623891.85 20623892.01 0.0135 0.0101

Uranus 51754-10-25 14:24 G 20624118.05 20624118.10 20624118.18 0.0135 0.0128

Saturn 51755-07-02 21:36 G 20624368.20 20624368.40 20624368.61 0.0285 0.0090

Jupiter 51755-10-05 09:07 G 20624462.68 20624462.88 20624463.08 0.0498 0.0084

Saturn 51756-02-17 14:38 G 20624597.95 20624598.11 20624598.27 0.0288 0.0184

Jupiter 51761-08-02 23:02 G 20626591.45 20626591.46 20626591.48 0.0526 0.0524

Jupiter 51767-06-10 10:19 G 20628728.75 20628728.93 20628729.12 0.0499 0.0213

Saturn 51768-09-20 20:24 G 20629197.21 20629197.35 20629197.52 0.0277 0.0190

Saturn 51769-05-08 05:46 G 20629426.53 20629426.74 20629426.95 0.0275 0.0055

Earth 51772-08-29 05:46 G 20630635.61 20630635.74 20630635.87 0.2692 0.1452

Moon 51772-08-29 09:22 G 20630635.77 20630635.89 20630636.02 0.2686 0.1735 *

Jupiter 51773-12-01 05:02 G 20631094.58 20631094.71 20631094.85 0.0530 0.0383

Moon 51780-08-26 18:00 G 20633555.15 20633555.25 20633555.36 0.2684 0.2092

Earth 51780-08-26 19:26 G 20633555.23 20633555.31 20633555.38 0.2692 0.2355 *

Saturn 51785-01-12 08:38 G 20635154.65 20635154.86 20635155.07 0.0286 0.0041

Jupiter 51785-08-05 20:10 G 20635360.13 20635360.34 20635360.54 0.0528 0.0025

Saturn 51785-08-30 01:55 G 20635384.46 20635384.58 20635384.70 0.0288 0.0235

Mars 51787-07-08 04:48 G 20636061.54 20636061.70 20636061.86 0.1664 0.0633

Jupiter 51791-06-12 18:43 G 20637497.11 20637497.28 20637497.46 0.0497 0.0254

Mars 51792-02-16 19:55 G 20637746.23 20637746.33 20637746.43 0.1866 0.1538

Uranus 51792-08-10 12:58 G 20637922.00 20637922.04 20637922.10 0.0142 0.0138

Uranus 51793-03-24 23:31 G 20638148.34 20638148.48 20638148.63 0.0142 0.0106

Uranus 51793-11-06 09:50 G 20638374.74 20638374.91 20638375.11 0.0142 0.0075

Uranus 51794-06-20 20:53 G 20638601.16 20638601.37 20638601.57 0.0142 0.0042

Uranus 51795-02-02 07:26 G 20638827.59 20638827.81 20638828.03 0.0143 0.0009

Uranus 51795-09-16 18:00 G 20639054.04 20639054.25 20639054.47 0.0143 0.0024

Uranus 51796-04-30 04:48 G 20639280.51 20639280.70 20639280.91 0.0143 0.0057

Uranus 51796-12-12 16:05 G 20639507.01 20639507.17 20639507.35 0.0143 0.0090

Jupiter 51797-04-10 12:14 G 20639625.85 20639626.01 20639626.17 0.0527 0.0329

Uranus 51797-07-27 03:07 G 20639733.53 20639733.63 20639733.75 0.0143 0.0122

Saturn 51798-04-03 04:34 G 20639983.52 20639983.69 20639983.87 0.0277 0.0151

Saturn 51798-11-18 13:12 G 20640212.85 20640213.05 20640213.25 0.0274 0.0092

Jupiter 51803-02-16 19:55 G 20641763.13 20641763.33 20641763.53 0.0498 0.0041

Neptune 51804-01-26 18:00 G 20642107.19 20642107.25 20642107.36 0.0090 0.0083

Neptune 51804-09-08 07:26 G 20642332.70 20642332.81 20642332.95 0.0090 0.0074

Neptune 51805-04-21 20:53 G 20642558.23 20642558.37 20642558.53 0.0090 0.0065

Neptune 51805-12-03 09:50 G 20642783.76 20642783.91 20642784.10 0.0090 0.0057

Neptune 51806-07-16 23:31 G 20643009.31 20643009.48 20643009.68 0.0090 0.0048

Neptune 51807-02-27 12:58 G 20643234.85 20643235.04 20643235.25 0.0090 0.0039

Neptune 51807-10-11 02:24 G 20643460.40 20643460.60 20643460.81 0.0090 0.0030

Neptune 51808-05-23 15:50 G 20643685.95 20643686.16 20643686.37 0.0090 0.0021

Neptune 51809-01-04 05:02 G 20643911.50 20643911.71 20643911.94 0.0090 0.0013

Neptune 51809-08-17 18:43 G 20644137.06 20644137.28 20644137.50 0.0090 0.0003

Neptune 51810-03-31 08:10 G 20644362.62 20644362.84 20644363.06 0.0090 0.0006

Neptune 51810-11-11 21:22 G 20644588.18 20644588.39 20644588.61 0.0090 0.0015

Neptune 51811-06-25 10:34 G 20644813.74 20644813.94 20644814.17 0.0090 0.0024

Neptune 51812-02-06 00:00 G 20645039.31 20645039.50 20645039.72 0.0090 0.0033

Neptune 51812-09-18 13:41 G 20645264.88 20645265.07 20645265.27 0.0090 0.0041

Neptune 51813-05-02 02:38 G 20645490.44 20645490.61 20645490.81 0.0090 0.0050

Saturn 51813-12-08 22:05 G 20645711.37 20645711.42 20645711.48 0.0284 0.0272

Neptune 51813-12-13 15:50 G 20645716.02 20645716.16 20645716.35 0.0090 0.0059

Saturn 51814-07-26 13:55 G 20645940.86 20645941.08 20645941.29 0.0286 0.0008

Neptune 51814-07-27 05:46 G 20645941.60 20645941.74 20645941.89 0.0090 0.0067

Jupiter 51814-10-22 19:41 G 20646029.18 20646029.32 20646029.47 0.0500 0.0343

Neptune 51815-03-09 18:43 G 20646167.18 20646167.28 20646167.41 0.0090 0.0076

Saturn 51815-03-13 07:12 G 20646170.74 20646170.80 20646170.88 0.0289 0.0271

Neptune 51815-10-21 07:55 G 20646392.78 20646392.83 20646392.92 0.0090 0.0085

Jupiter 51821-04-14 12:58 G 20648394.86 20648395.04 20648395.22 0.0529 0.0236

Jupiter 51827-02-19 04:19 G 20650531.58 20650531.68 20650531.79 0.0497 0.0421

Saturn 51827-10-15 11:31 G 20650769.79 20650769.98 20650770.18 0.0276 0.0111

Saturn 51828-05-31 19:55 G 20650999.15 20650999.33 20650999.53 0.0274 0.0131

Uranus 51832-11-27 12:14 G 20652639.99 20652640.01 20652640.05 0.0136 0.0134

Jupiter 51832-12-18 01:55 G 20652660.38 20652660.58 20652660.78 0.0527 0.0131

Uranus 51833-07-11 19:12 G 20652866.18 20652866.30 20652866.45 0.0136 0.0106

Uranus 51834-02-23 02:10 G 20653092.42 20653092.59 20653092.78 0.0136 0.0078

Uranus 51834-10-07 08:53 G 20653318.68 20653318.87 20653319.08 0.0136 0.0050

Uranus 51835-05-21 15:50 G 20653544.95 20653545.16 20653545.38 0.0136 0.0022

Uranus 51836-01-02 22:19 G 20653771.22 20653771.43 20653771.65 0.0135 0.0007

Uranus 51836-08-16 04:48 G 20653997.49 20653997.70 20653997.91 0.0135 0.0034

Uranus 51837-03-30 10:48 G 20654223.77 20654223.95 20654224.16 0.0135 0.0062

Uranus 51837-11-11 17:17 G 20654450.06 20654450.22 20654450.38 0.0135 0.0089

Uranus 51838-06-25 23:31 G 20654676.38 20654676.48 20654676.59 0.0135 0.0116

Jupiter 51838-10-25 05:46 G 20654797.55 20654797.74 20654797.94 0.0498 0.0130

Saturn 51843-06-21 08:10 G 20656497.72 20656497.84 20656497.97 0.0284 0.0226

Saturn 51844-02-06 00:14 G 20656727.30 20656727.51 20656727.72 0.0286 0.0043

Jupiter 51844-08-22 17:31 G 20656926.15 20656926.23 20656926.30 0.0526 0.0483

Jupiter 51850-06-30 05:46 G 20659063.55 20659063.74 20659063.93 0.0499 0.0170

Mars 51853-05-05 16:19 G 20660104.03 20660104.18 20660104.32 0.1662 0.0944

Jupiter 51856-12-21 02:53 G 20661429.51 20661429.62 20661429.74 0.0530 0.0437

Saturn 51857-04-26 19:41 G 20661556.11 20661556.32 20661556.52 0.0276 0.0073

Saturn 51857-12-12 03:36 G 20661785.49 20661785.65 20661785.82 0.0274 0.0168

Jupiter 51862-03-05 06:29 G 20663329.71 20663329.77 20663329.85 0.0500 0.0467

Jupiter 51868-08-25 18:58 G 20665695.09 20665695.29 20665695.49 0.0529 0.0081

Saturn 51872-12-31 12:14 G 20667283.86 20667284.01 20667284.17 0.0284 0.0194

Saturn 51873-08-18 04:34 G 20667513.49 20667513.69 20667513.89 0.0287 0.0076

Jupiter 51874-07-02 14:24 G 20667831.94 20667832.10 20667832.27 0.0497 0.0294

Uranus 51876-11-23 06:14 G 20668706.66 20668706.76 20668706.89 0.0142 0.0120

Pluto 51877-05-20 18:29 G 20668885.14 20668885.27 20668885.41 0.0063 0.0049

Uranus 51877-07-07 16:48 G 20668933.04 20668933.20 20668933.38 0.0142 0.0088

Pluto 51877-12-31 22:05 G 20669110.20 20669110.42 20669110.64 0.0063 0.0012

Uranus 51878-02-19 03:22 G 20669159.45 20669159.64 20669159.85 0.0142 0.0056

Pluto 51878-08-14 01:26 G 20669335.37 20669335.56 20669335.78 0.0063 0.0025

Uranus 51878-10-03 14:10 G 20669385.88 20669386.09 20669386.31 0.0143 0.0023

Pluto 51879-03-27 05:02 G 20669560.70 20669560.71 20669560.76 0.0063 0.0063

Uranus 51879-05-18 00:58 G 20669612.32 20669612.54 20669612.76 0.0143 0.0010

Uranus 51879-12-30 11:46 G 20669838.79 20669838.99 20669839.21 0.0143 0.0043

Jupiter 51880-04-30 10:05 G 20669960.75 20669960.92 20669961.10 0.0527 0.0275

Uranus 51880-08-12 22:34 G 20670065.27 20670065.44 20670065.64 0.0143 0.0076

Uranus 51881-03-27 09:50 G 20670291.78 20670291.91 20670292.06 0.0143 0.0109

Uranus 51881-11-08 20:53 G 20670518.35 20670518.37 20670518.42 0.0143 0.0142

Mars 51885-05-04 12:29 G 20671790.96 20671791.02 20671791.09 0.1670 0.1546

Neptune 51885-08-01 00:29 G 20671879.47 20671879.52 20671879.63 0.0088 0.0082

Jupiter 51886-03-07 15:50 G 20672097.96 20672098.16 20672098.37 0.0498 0.0006

Neptune 51886-03-14 13:55 G 20672104.96 20672105.08 20672105.20 0.0088 0.0073

Neptune 51886-10-26 02:24 G 20672330.46 20672330.60 20672330.76 0.0088 0.0065

Saturn 51886-11-07 01:12 G 20672342.34 20672342.55 20672342.77 0.0276 0.0036

Neptune 51887-06-08 15:07 G 20672555.97 20672556.13 20672556.31 0.0088 0.0057

Saturn 51887-06-24 09:07 G 20672571.75 20672571.88 20672572.03 0.0273 0.0204

Neptune 51888-01-20 03:50 G 20672781.50 20672781.66 20672781.86 0.0088 0.0049

Neptune 51888-09-01 16:34 G 20673007.01 20673007.19 20673007.41 0.0088 0.0041

Neptune 51889-04-15 05:31 G 20673232.53 20673232.73 20673232.94 0.0088 0.0032

Neptune 51889-11-26 18:14 G 20673458.05 20673458.26 20673458.48 0.0088 0.0024

Neptune 51890-07-10 06:58 G 20673683.58 20673683.79 20673684.01 0.0088 0.0016

Neptune 51891-02-20 19:55 G 20673909.11 20673909.33 20673909.55 0.0088 0.0007

Neptune 51891-10-04 08:24 G 20674134.63 20674134.85 20674135.08 0.0088 0.0002

Neptune 51892-05-16 21:07 G 20674360.16 20674360.38 20674360.60 0.0088 0.0009

Neptune 51892-12-28 09:50 G 20674585.70 20674585.91 20674586.13 0.0088 0.0018

Neptune 51893-08-10 22:19 G 20674811.23 20674811.43 20674811.65 0.0088 0.0026

Neptune 51894-03-24 11:02 G 20675036.76 20675036.96 20675037.17 0.0088 0.0034

Neptune 51894-11-04 23:17 G 20675262.30 20675262.47 20675262.68 0.0088 0.0043

Neptune 51895-06-18 12:00 G 20675487.84 20675488.00 20675488.20 0.0088 0.0051

Neptune 51896-01-30 00:58 G 20675713.39 20675713.54 20675713.72 0.0088 0.0059

Neptune 51896-09-11 13:41 G 20675938.94 20675939.07 20675939.22 0.0088 0.0067

Neptune 51897-04-25 02:24 G 20676164.50 20676164.60 20676164.72 0.0088 0.0075

Jupiter 51897-11-10 16:34 G 20676364.03 20676364.19 20676364.36 0.0500 0.0296

Neptune 51897-12-06 14:38 G 20676390.07 20676390.11 20676390.20 0.0088 0.0084

Moon 51902-02-28 09:36 G 20677933.74 20677933.90 20677934.05 0.2639 0.0412

Earth 51902-02-28 14:38 G 20677933.95 20677934.11 20677934.27 0.2640 0.0270 *

Saturn 51902-07-14 21:22 G 20678070.21 20678070.39 20678070.57 0.0285 0.0151

Saturn 51903-03-01 13:55 G 20678299.89 20678300.08 20678300.27 0.0287 0.0121

Jupiter 51904-05-04 08:10 G 20678729.67 20678729.84 20678730.01 0.0529 0.0279

Jupiter 51910-03-11 00:00 G 20680866.44 20680866.50 20680866.58 0.0496 0.0463

Saturn 51915-10-03 23:46 G 20682899.39 20682899.49 20682899.59 0.0278 0.0244

Jupiter 51916-01-07 23:46 G 20682995.29 20682995.49 20682995.70 0.0528 0.0077

Saturn 51916-05-20 09:22 G 20683128.68 20683128.89 20683129.10 0.0275 0.0003

Saturn 51917-01-04 16:48 G 20683358.11 20683358.20 20683358.30 0.0273 0.0240

Uranus 51917-03-12 04:05 G 20683424.56 20683424.67 20683424.78 0.0136 0.0117

Uranus 51917-10-24 10:48 G 20683650.79 20683650.95 20683651.12 0.0136 0.0089

Uranus 51918-06-07 17:46 G 20683877.05 20683877.24 20683877.44 0.0136 0.0061

Uranus 51919-01-20 00:29 G 20684103.31 20684103.52 20684103.73 0.0136 0.0033

Mars 51919-03-04 03:50 G 20684146.55 20684146.66 20684146.77 0.1659 0.1245

Uranus 51919-09-03 06:58 G 20684329.57 20684329.79 20684330.01 0.0135 0.0005

Uranus 51920-04-16 13:12 G 20684555.84 20684556.05 20684556.27 0.0135 0.0023

Uranus 51920-11-28 19:41 G 20684782.12 20684782.32 20684782.52 0.0135 0.0051

Uranus 51921-07-13 01:55 G 20685008.41 20685008.58 20685008.76 0.0135 0.0078

Jupiter 51921-11-14 02:10 G 20685132.40 20685132.59 20685132.78 0.0497 0.0173

Uranus 51922-02-24 07:55 G 20685234.71 20685234.83 20685234.98 0.0135 0.0105

Uranus 51922-10-08 13:55 G 20685461.05 20685461.08 20685461.13 0.0135 0.0132

Jupiter 51927-09-12 16:34 G 20687261.08 20687261.19 20687261.31 0.0526 0.0425

Saturn 51932-01-25 00:29 G 20688856.33 20688856.52 20688856.72 0.0285 0.0120

Saturn 51932-09-10 17:02 G 20689086.04 20689086.21 20689086.40 0.0287 0.0153

Jupiter 51933-07-20 02:38 G 20689398.41 20689398.61 20689398.81 0.0499 0.0124

Jupiter 51940-01-11 02:10 G 20691764.52 20691764.59 20691764.66 0.0530 0.0494

Jupiter 51945-03-25 03:07 G 20693664.53 20693664.63 20693664.75 0.0501 0.0422

Saturn 51945-04-15 03:50 G 20693685.53 20693685.66 20693685.80 0.0277 0.0211

Saturn 51945-11-30 13:26 G 20693914.85 20693915.06 20693915.27 0.0275 0.0036

Saturn 51946-07-17 20:53 G 20694144.36 20694144.37 20694144.38 0.0273 0.0272

Mars 51951-03-02 23:46 G 20695833.37 20695833.49 20695833.61 0.1667 0.1216

Jupiter 51951-09-15 15:36 G 20696029.96 20696030.15 20696030.35 0.0528 0.0130

Mars 51955-10-12 23:17 G 20697518.34 20697518.47 20697518.61 0.1862 0.1191

Jupiter 51957-07-22 12:29 G 20698166.87 20698167.02 20698167.16 0.0497 0.0344

Uranus 51960-07-24 12:14 G 20699264.96 20699265.01 20699265.10 0.0142 0.0134

Uranus 51961-03-07 22:34 G 20699491.31 20699491.44 20699491.61 0.0142 0.0102

Saturn 51961-08-06 08:24 G 20699642.65 20699642.85 20699643.05 0.0285 0.0079

Uranus 51961-10-20 09:22 G 20699717.70 20699717.89 20699718.08 0.0142 0.0070

Saturn 51962-03-24 01:12 G 20699872.40 20699872.55 20699872.71 0.0288 0.0195

Uranus 51962-06-03 19:55 G 20699944.13 20699944.33 20699944.55 0.0143 0.0037

Uranus 51963-01-16 06:43 G 20700170.57 20700170.78 20700171.00 0.0143 0.0005

Jupiter 51963-05-21 06:58 G 20700295.61 20700295.79 20700295.97 0.0527 0.0225

Uranus 51963-08-30 17:31 G 20700397.02 20700397.23 20700397.45 0.0143 0.0029

Uranus 51964-04-13 04:34 G 20700623.49 20700623.69 20700623.89 0.0143 0.0061

Uranus 51964-11-25 15:36 G 20700849.99 20700850.15 20700850.32 0.0143 0.0094

Uranus 51965-07-10 02:38 G 20701076.52 20701076.61 20701076.72 0.0143 0.0128

Pluto 51968-02-17 16:48 G 20702028.99 20702029.20 20702029.42 0.0081 0.0018

Neptune 51968-04-30 06:14 G 20702101.67 20702101.76 20702101.84 0.0090 0.0082

Pluto 51968-09-30 03:22 G 20702254.51 20702254.64 20702254.80 0.0081 0.0061

Neptune 51968-12-11 18:58 G 20702327.19 20702327.29 20702327.43 0.0090 0.0074

Jupiter 51969-03-27 13:12 G 20702432.85 20702433.05 20702433.25 0.0498 0.0049

Neptune 51969-07-25 08:38 G 20702552.72 20702552.86 20702553.02 0.0090 0.0065

Neptune 51970-03-07 21:36 G 20702778.25 20702778.40 20702778.59 0.0090 0.0057

Neptune 51970-10-19 11:02 G 20703003.79 20703003.96 20703004.16 0.0090 0.0048

Neptune 51971-06-02 00:14 G 20703229.33 20703229.51 20703229.72 0.0090 0.0040

Neptune 51972-01-13 13:41 G 20703454.88 20703455.07 20703455.29 0.0090 0.0031

Neptune 51972-08-26 03:07 G 20703680.43 20703680.63 20703680.85 0.0090 0.0022

Neptune 51973-04-08 16:34 G 20703905.98 20703906.19 20703906.41 0.0090 0.0013

Neptune 51973-11-20 06:00 G 20704131.53 20704131.75 20704131.97 0.0090 0.0004

Neptune 51974-07-03 19:26 G 20704357.09 20704357.31 20704357.53 0.0090 0.0005

Saturn 51974-10-26 11:17 G 20704471.81 20704471.97 20704472.14 0.0277 0.0173

Neptune 51975-02-14 08:38 G 20704582.65 20704582.86 20704583.08 0.0090 0.0014

Saturn 51975-06-12 20:38 G 20704701.15 20704701.36 20704701.56 0.0275 0.0072

Neptune 51975-09-27 21:50 G 20704808.21 20704808.41 20704808.64 0.0090 0.0023

Neptune 51976-05-10 11:31 G 20705033.77 20705033.98 20705034.19 0.0090 0.0031

Neptune 51976-12-22 00:43 G 20705259.34 20705259.53 20705259.73 0.0090 0.0040

Neptune 51977-08-04 13:55 G 20705484.92 20705485.08 20705485.29 0.0090 0.0049

Neptune 51978-03-18 03:50 G 20705710.49 20705710.66 20705710.83 0.0090 0.0057

Neptune 51978-10-29 16:48 G 20705936.06 20705936.20 20705936.36 0.0090 0.0066

Neptune 51979-06-12 06:00 G 20706161.65 20706161.75 20706161.89 0.0090 0.0075

Neptune 51980-01-23 19:26 G 20706387.24 20706387.31 20706387.41 0.0090 0.0083

Jupiter 51980-11-30 14:53 G 20706698.94 20706699.12 20706699.30 0.0499 0.0243

Mars 51984-12-29 15:07 G 20708189.08 20708189.13 20708189.19 0.1657 0.1555

Jupiter 51987-05-24 08:53 G 20709064.72 20709064.87 20709065.03 0.0530 0.0343

Saturn 51991-02-16 10:19 G 20710428.72 20710428.93 20710429.14 0.0285 0.0050

Saturn 51991-10-04 03:22 G 20710658.51 20710658.64 20710658.77 0.0288 0.0223

Jupiter 51999-01-27 00:43 G 20713330.33 20713330.53 20713330.73 0.0528 0.0012

Uranus 52000-11-09 12:29 G 20713982.98 20713983.02 20713983.11 0.0136 0.0130

53RD MILLENNIUM CE

This is a list of transits of Venus in the 53rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 52001-06-23 19:41 G 20714209.19 20714209.32 20714209.48 0.0136 0.0101

Uranus 52002-02-05 02:24 G 20714435.43 20714435.60 20714435.80 0.0136 0.0073

Uranus 52002-09-19 09:07 G 20714661.69 20714661.88 20714662.10 0.0136 0.0045

Uranus 52003-05-03 15:50 G 20714887.95 20714888.16 20714888.38 0.0136 0.0017

Uranus 52003-12-15 22:34 G 20715114.22 20715114.44 20715114.65 0.0135 0.0012

Saturn 52004-05-07 14:10 G 20715257.91 20715258.09 20715258.27 0.0277 0.0142

Uranus 52004-07-29 04:48 G 20715340.49 20715340.70 20715340.91 0.0135 0.0040

Jupiter 52004-12-03 00:00 G 20715467.33 20715467.50 20715467.69 0.0497 0.0223

Saturn 52004-12-22 23:17 G 20715487.28 20715487.47 20715487.67 0.0275 0.0102

Uranus 52005-03-12 10:48 G 20715566.77 20715566.95 20715567.15 0.0135 0.0068

Uranus 52005-10-24 17:17 G 20715793.06 20715793.22 20715793.37 0.0135 0.0094

Uranus 52006-06-07 23:02 G 20716019.39 20716019.46 20716019.57 0.0135 0.0122

Jupiter 52010-10-01 15:36 G 20717596.00 20717596.15 20717596.29 0.0526 0.0366

Moon 52015-09-01 00:58 G 20719391.39 20719391.54 20719391.69 0.2697 0.0702

Earth 52015-09-01 05:31 G 20719391.59 20719391.73 20719391.87 0.2692 0.1292 *

Jupiter 52016-08-08 01:26 G 20719733.36 20719733.56 20719733.76 0.0499 0.0071

Mars 52016-12-28 11:17 G 20719875.83 20719875.97 20719876.12 0.1665 0.0908

Saturn 52020-01-12 01:12 G 20720985.53 20720985.55 20720985.60 0.0283 0.0278

Saturn 52020-08-28 16:48 G 20721214.99 20721215.20 20721215.41 0.0286 0.0013

Saturn 52021-04-15 09:50 G 20721444.84 20721444.91 20721445.01 0.0288 0.0264

Mars 52021-08-09 03:50 G 20721560.49 20721560.66 20721560.83 0.1865 0.0450

Earth 52023-08-29 18:58 G 20722311.23 20722311.29 20722311.35 0.2691 0.2506

Jupiter 52028-04-13 02:10 G 20723999.46 20723999.59 20723999.73 0.0500 0.0367

Saturn 52033-11-17 20:38 G 20726044.17 20726044.36 20726044.57 0.0277 0.0106

Saturn 52034-07-05 05:31 G 20726273.55 20726273.73 20726273.92 0.0275 0.0138

Jupiter 52034-10-04 15:07 G 20726364.94 20726365.13 20726365.32 0.0529 0.0189

Jupiter 52040-08-10 11:46 G 20728501.87 20728501.99 20728502.11 0.0496 0.0396

Uranus 52044-11-05 04:05 G 20730049.56 20730049.67 20730049.81 0.0142 0.0117

Uranus 52045-06-19 14:38 G 20730275.94 20730276.11 20730276.29 0.0142 0.0084

Uranus 52046-02-01 00:58 G 20730502.35 20730502.54 20730502.75 0.0142 0.0053

Jupiter 52046-06-09 08:10 G 20730630.64 20730630.84 20730631.03 0.0528 0.0160

Uranus 52046-09-15 11:46 G 20730728.78 20730728.99 20730729.21 0.0143 0.0020

Uranus 52047-04-29 22:34 G 20730955.22 20730955.44 20730955.66 0.0143 0.0013

Uranus 52047-12-12 09:36 G 20731181.70 20731181.90 20731182.11 0.0143 0.0046

Uranus 52048-07-25 20:38 G 20731408.18 20731408.36 20731408.54 0.0143 0.0079

Uranus 52049-03-09 07:26 G 20731634.69 20731634.81 20731634.96 0.0143 0.0113

Saturn 52049-07-24 03:07 G 20731771.54 20731771.63 20731771.74 0.0283 0.0249

Neptune 52049-11-03 12:14 G 20731873.95 20731874.01 20731874.11 0.0088 0.0082

Saturn 52050-03-10 18:29 G 20732001.06 20732001.27 20732001.48 0.0285 0.0016

Neptune 52050-06-17 00:58 G 20732099.45 20732099.54 20732099.68 0.0088 0.0074

Neptune 52051-01-28 14:10 G 20732324.95 20732325.09 20732325.25 0.0088 0.0065

Neptune 52051-09-11 02:53 G 20732550.46 20732550.62 20732550.80 0.0088 0.0057

Jupiter 52052-04-15 12:43 G 20732767.83 20732768.03 20732768.23 0.0498 0.0104

Neptune 52052-04-23 15:36 G 20732775.98 20732776.15 20732776.34 0.0088 0.0049

Neptune 52052-12-05 04:19 G 20733001.50 20733001.68 20733001.89 0.0088 0.0041

Neptune 52053-07-18 17:02 G 20733227.02 20733227.21 20733227.43 0.0088 0.0033

Neptune 52054-03-01 06:00 G 20733452.54 20733452.75 20733452.97 0.0088 0.0024

Neptune 52054-10-12 18:43 G 20733678.07 20733678.28 20733678.50 0.0088 0.0016

Neptune 52055-05-26 07:26 G 20733903.59 20733903.81 20733904.03 0.0088 0.0008

Neptune 52056-01-06 20:24 G 20734129.13 20734129.35 20734129.57 0.0088 0.0001

Neptune 52056-08-19 08:53 G 20734354.66 20734354.87 20734355.10 0.0088 0.0009

Neptune 52057-04-01 21:36 G 20734580.19 20734580.40 20734580.62 0.0088 0.0017

Neptune 52057-11-13 10:19 G 20734805.72 20734805.93 20734806.14 0.0088 0.0025

Jupiter 52058-02-12 00:58 G 20734896.49 20734896.54 20734896.60 0.0526 0.0504

Neptune 52058-06-26 23:02 G 20735031.25 20735031.46 20735031.66 0.0088 0.0033

Neptune 52059-02-07 11:17 G 20735256.80 20735256.97 20735257.18 0.0088 0.0042

Neptune 52059-09-21 00:00 G 20735482.34 20735482.50 20735482.70 0.0088 0.0050

Neptune 52060-05-03 12:43 G 20735707.88 20735708.03 20735708.21 0.0088 0.0058

Neptune 52060-12-15 01:12 G 20735933.43 20735933.55 20735933.71 0.0088 0.0066

Neptune 52061-07-28 13:55 G 20736158.98 20736159.08 20736159.22 0.0088 0.0074

Neptune 52062-03-11 02:38 G 20736384.55 20736384.61 20736384.70 0.0088 0.0082

Saturn 52063-05-30 21:50 G 20736830.21 20736830.41 20736830.61 0.0277 0.0079

Jupiter 52063-12-20 14:10 G 20737033.90 20737034.09 20737034.28 0.0499 0.0190

Saturn 52064-01-15 06:43 G 20737059.62 20737059.78 20737059.96 0.0274 0.0163

Jupiter 52070-06-12 09:22 G 20739399.76 20739399.89 20739400.02 0.0529 0.0405

Jupiter 52075-08-25 14:24 G 20741300.06 20741300.10 20741300.16 0.0501 0.0486

Saturn 52079-02-03 07:41 G 20742557.69 20742557.82 20742557.96 0.0283 0.0217

Saturn 52079-09-20 23:17 G 20742787.26 20742787.47 20742787.68 0.0286 0.0050

Jupiter 52082-02-15 00:29 G 20743665.32 20743665.52 20743665.72 0.0528 0.0049

Mars 52082-10-25 22:48 G 20743918.29 20743918.45 20743918.61 0.1662 0.0596

Uranus 52085-02-21 03:36 G 20744767.54 20744767.65 20744767.78 0.0136 0.0113

Uranus 52085-10-05 10:19 G 20744993.78 20744993.93 20744994.12 0.0136 0.0085

Uranus 52086-05-19 17:17 G 20745220.03 20745220.22 20745220.43 0.0136 0.0057

Uranus 52087-01-01 00:00 G 20745446.29 20745446.50 20745446.72 0.0136 0.0029

Mars 52087-06-06 07:26 G 20745602.64 20745602.81 20745602.98 0.1869 0.0349

Uranus 52087-08-15 06:43 G 20745672.56 20745672.78 20745673.00 0.0135 0.0002

Jupiter 52087-12-23 00:14 G 20745802.35 20745802.51 20745802.68 0.0497 0.0278

Uranus 52088-03-28 12:58 G 20745898.83 20745899.04 20745899.26 0.0135 0.0028

Uranus 52088-11-09 19:12 G 20746125.11 20746125.30 20746125.50 0.0135 0.0056

Uranus 52089-06-24 01:26 G 20746351.40 20746351.56 20746351.74 0.0135 0.0083

Uranus 52090-02-05 07:41 G 20746577.70 20746577.82 20746577.95 0.0135 0.0110

Saturn 52092-12-10 03:50 G 20747616.45 20747616.66 20747616.87 0.0277 0.0044

Saturn 52093-07-27 12:29 G 20747845.88 20747846.02 20747846.17 0.0274 0.0197

Jupiter 52093-10-20 14:53 G 20747930.96 20747931.12 20747931.29 0.0527 0.0308

Jupiter 52099-08-28 02:53 G 20750068.41 20750068.62 20750068.82 0.0498 0.0012

Saturn 52108-08-16 09:07 G 20753343.73 20753343.88 20753344.04 0.0283 0.0188

Saturn 52109-04-03 00:29 G 20753573.32 20753573.52 20753573.72 0.0286 0.0078

Jupiter 52111-05-04 03:22 G 20754334.48 20754334.64 20754334.80 0.0500 0.0305

Jupiter 52117-10-24 18:58 G 20756700.11 20756700.29 20756700.46 0.0529 0.0265

Saturn 52121-11-05 16:34 G 20758173.15 20758173.19 20758173.25 0.0279 0.0271

Saturn 52122-06-23 03:36 G 20758402.43 20758402.65 20758402.86 0.0276 0.0021

Saturn 52123-02-07 12:14 G 20758631.89 20758632.01 20758632.14 0.0274 0.0220

Pluto 52123-06-21 00:29 G 20758765.42 20758765.52 20758765.68 0.0063 0.0051

Jupiter 52123-08-31 11:46 G 20758836.92 20758836.99 20758837.08 0.0496 0.0452

Pluto 52124-02-01 04:34 G 20758990.48 20758990.69 20758990.91 0.0063 0.0014

Pluto 52124-09-13 08:10 G 20759215.65 20759215.84 20759216.06 0.0063 0.0024

Pluto 52125-04-26 12:14 G 20759440.95 20759441.01 20759441.07 0.0063 0.0061

Uranus 52128-07-06 09:36 G 20760607.84 20760607.90 20760608.00 0.0142 0.0131

Uranus 52129-02-17 19:55 G 20760834.19 20760834.33 20760834.50 0.0142 0.0100

Jupiter 52129-06-29 10:05 G 20760965.72 20760965.92 20760966.12 0.0527 0.0090

Uranus 52129-10-02 06:29 G 20761060.59 20761060.77 20761060.97 0.0142 0.0067

Uranus 52130-05-16 17:02 G 20761287.01 20761287.21 20761287.43 0.0142 0.0035

Uranus 52130-12-29 04:05 G 20761513.45 20761513.67 20761513.89 0.0143 0.0002

Uranus 52131-08-12 14:38 G 20761739.91 20761740.11 20761740.33 0.0143 0.0032

Uranus 52132-03-26 01:41 G 20761966.38 20761966.57 20761966.77 0.0143 0.0064

Neptune 52132-08-02 17:31 G 20762096.15 20762096.23 20762096.32 0.0089 0.0082

Uranus 52132-11-07 12:58 G 20762192.88 20762193.04 20762193.19 0.0143 0.0098

Neptune 52133-03-16 06:29 G 20762321.66 20762321.77 20762321.91 0.0089 0.0074

Uranus 52133-06-22 00:00 G 20762419.42 20762419.50 20762419.59 0.0143 0.0131

Neptune 52133-10-27 19:41 G 20762547.19 20762547.32 20762547.49 0.0090 0.0066

Neptune 52134-06-10 09:07 G 20762772.73 20762772.88 20762773.06 0.0090 0.0057

Neptune 52135-01-21 22:48 G 20762998.27 20762998.45 20762998.64 0.0090 0.0048

Jupiter 52135-05-06 13:41 G 20763102.88 20763103.07 20763103.26 0.0498 0.0164

Neptune 52135-09-04 11:46 G 20763223.81 20763223.99 20763224.20 0.0090 0.0040

Neptune 52136-04-17 01:12 G 20763449.35 20763449.55 20763449.76 0.0090 0.0031

Neptune 52136-11-28 14:24 G 20763674.90 20763675.10 20763675.32 0.0090 0.0023

Neptune 52137-07-12 04:05 G 20763900.45 20763900.67 20763900.89 0.0090 0.0014

Neptune 52138-02-22 17:31 G 20764126.01 20764126.23 20764126.45 0.0090 0.0005

Saturn 52138-02-26 12:58 G 20764129.87 20764130.04 20764130.22 0.0284 0.0158

Neptune 52138-10-06 06:43 G 20764351.56 20764351.78 20764352.00 0.0090 0.0004

Saturn 52138-10-14 04:34 G 20764359.50 20764359.69 20764359.89 0.0286 0.0110

Neptune 52139-05-19 19:55 G 20764577.12 20764577.33 20764577.55 0.0090 0.0013

Neptune 52139-12-31 09:07 G 20764802.68 20764802.88 20764803.11 0.0090 0.0022

Neptune 52140-08-12 22:48 G 20765028.25 20765028.45 20765028.66 0.0090 0.0030

Jupiter 52141-03-04 01:41 G 20765231.47 20765231.57 20765231.69 0.0526 0.0439

Neptune 52141-03-26 12:00 G 20765253.82 20765254.00 20765254.21 0.0090 0.0039

Neptune 52141-11-07 01:12 G 20765479.38 20765479.55 20765479.76 0.0090 0.0048

Neptune 52142-06-20 14:53 G 20765704.96 20765705.12 20765705.30 0.0090 0.0056

Neptune 52143-02-01 04:05 G 20765930.54 20765930.67 20765930.84 0.0090 0.0065

Neptune 52143-09-14 17:46 G 20766156.12 20766156.24 20766156.37 0.0090 0.0073

Neptune 52144-04-27 06:43 G 20766381.72 20766381.78 20766381.89 0.0090 0.0082

Earth 52145-03-01 17:02 G 20766690.06 20766690.21 20766690.37 0.2640 0.0370

Moon 52145-03-01 21:22 G 20766690.25 20766690.39 20766690.53 0.2644 0.1129 *

Jupiter 52147-01-09 15:36 G 20767368.95 20767369.15 20767369.35 0.0499 0.0127

Mars 52148-08-23 10:34 G 20767960.77 20767960.94 20767961.11 0.1660 0.0286

Saturn 52151-05-18 21:50 G 20768959.31 20768959.41 20768959.53 0.0279 0.0236

Saturn 52152-01-03 08:38 G 20769188.65 20769188.86 20769189.08 0.0276 0.0015

Saturn 52152-08-19 17:02 G 20769418.14 20769418.21 20769418.30 0.0274 0.0253

Moon 52153-02-27 15:07 G 20769610.07 20769610.13 20769610.20 0.2640 0.2391

Mars 52153-04-03 11:17 G 20769644.83 20769644.97 20769645.11 0.1873 0.1143

Jupiter 52153-07-02 09:50 G 20769734.82 20769734.91 20769735.01 0.0531 0.0468

Jupiter 52158-09-14 17:31 G 20771635.13 20771635.23 20771635.35 0.0500 0.0417

Jupiter 52165-03-07 02:38 G 20774000.41 20774000.61 20774000.81 0.0529 0.0118

Saturn 52167-09-08 14:10 G 20774915.91 20774916.09 20774916.28 0.0283 0.0129

Saturn 52168-04-25 05:31 G 20775145.55 20775145.73 20775145.92 0.0286 0.0138

Uranus 52168-10-22 10:48 G 20775325.89 20775325.95 20775326.05 0.0136 0.0127

Uranus 52169-06-05 18:00 G 20775552.11 20775552.25 20775552.41 0.0136 0.0098

Uranus 52170-01-18 00:43 G 20775778.36 20775778.53 20775778.73 0.0136 0.0070

Uranus 52170-09-01 07:26 G 20776004.62 20776004.81 20776005.03 0.0136 0.0042

Jupiter 52171-01-12 02:10 G 20776137.44 20776137.59 20776137.74 0.0497 0.0340

Uranus 52171-04-15 14:10 G 20776230.88 20776231.09 20776231.31 0.0136 0.0014

Uranus 52171-11-27 20:53 G 20776457.15 20776457.37 20776457.59 0.0135 0.0015

Uranus 52172-07-11 03:07 G 20776683.43 20776683.63 20776683.85 0.0135 0.0044

Uranus 52173-02-22 09:22 G 20776909.72 20776909.89 20776910.09 0.0135 0.0071

Uranus 52173-10-06 15:50 G 20777136.02 20777136.16 20777136.31 0.0135 0.0098

Uranus 52174-05-20 21:50 G 20777362.35 20777362.41 20777362.50 0.0135 0.0126

Jupiter 52176-11-09 19:41 G 20778266.14 20778266.32 20778266.50 0.0527 0.0228

Saturn 52180-11-27 20:38 G 20779745.23 20779745.36 20779745.50 0.0279 0.0215

Saturn 52181-07-15 07:26 G 20779974.60 20779974.81 20779975.02 0.0276 0.0034

Jupiter 52182-09-17 03:50 G 20780403.45 20780403.66 20780403.86 0.0498 0.0052

Jupiter 52194-05-23 04:48 G 20784669.52 20784669.70 20784669.88 0.0500 0.0242

Saturn 52197-03-20 17:17 G 20785702.03 20785702.22 20785702.42 0.0284 0.0100

Saturn 52197-11-05 08:53 G 20785931.71 20785931.87 20785932.05 0.0286 0.0169

Jupiter 52200-11-13 20:24 G 20787035.20 20787035.35 20787035.51 0.0529 0.0332

Saturn 52210-06-11 01:26 G 20790531.41 20790531.56 20790531.73 0.0279 0.0181

Saturn 52211-01-26 12:14 G 20790760.81 20790761.01 20790761.22 0.0276 0.0068

Jupiter 52212-07-19 10:19 G 20791300.73 20791300.93 20791301.13 0.0528 0.0030

Uranus 52212-10-19 02:10 G 20791392.47 20791392.59 20791392.73 0.0142 0.0114

Uranus 52213-06-02 12:29 G 20791618.86 20791619.02 20791619.21 0.0142 0.0082

Uranus 52214-01-14 23:17 G 20791845.27 20791845.47 20791845.68 0.0142 0.0049

Neptune 52214-02-07 00:43 G 20791868.45 20791868.53 20791868.62 0.0088 0.0081

Pluto 52214-03-19 22:48 G 20791909.26 20791909.45 20791909.68 0.0081 0.0024

Mars 52214-06-21 21:50 G 20792003.24 20792003.41 20792003.58 0.1657 0.0028

Uranus 52214-08-29 09:50 G 20792071.70 20792071.91 20792072.13 0.0142 0.0017

Neptune 52214-09-20 13:26 G 20792093.94 20792094.06 20792094.18 0.0088 0.0073

Pluto 52214-10-31 09:36 G 20792134.76 20792134.90 20792135.08 0.0081 0.0057

Uranus 52215-04-12 20:38 G 20792298.15 20792298.36 20792298.58 0.0143 0.0017

Neptune 52215-05-04 02:10 G 20792319.45 20792319.59 20792319.74 0.0088 0.0065

Uranus 52215-11-25 07:41 G 20792524.62 20792524.82 20792525.03 0.0143 0.0050

Neptune 52215-12-15 14:53 G 20792544.96 20792545.12 20792545.29 0.0088 0.0057

Uranus 52216-07-08 18:29 G 20792751.11 20792751.27 20792751.46 0.0143 0.0083

Neptune 52216-07-28 03:36 G 20792770.47 20792770.65 20792770.84 0.0088 0.0049

Uranus 52217-02-20 05:31 G 20792977.62 20792977.73 20792977.87 0.0143 0.0116

Neptune 52217-03-10 16:05 G 20792995.99 20792996.17 20792996.38 0.0088 0.0041

Neptune 52217-10-22 04:48 G 20793221.51 20793221.70 20793221.92 0.0088 0.0033

Jupiter 52218-05-26 17:02 G 20793438.03 20793438.21 20793438.39 0.0497 0.0231

Neptune 52218-06-04 17:31 G 20793447.03 20793447.23 20793447.46 0.0088 0.0025

Neptune 52219-01-16 06:29 G 20793672.57 20793672.77 20793673.00 0.0088 0.0017

Neptune 52219-08-29 19:26 G 20793898.09 20793898.31 20793898.53 0.0088 0.0008

Neptune 52220-04-11 08:10 G 20794123.62 20794123.84 20794124.06 0.0088 0.0001

Neptune 52220-11-22 20:53 G 20794349.15 20794349.37 20794349.59 0.0088 0.0008

Neptune 52221-07-06 09:36 G 20794574.68 20794574.90 20794575.12 0.0088 0.0016

Neptune 52222-02-16 22:05 G 20794800.22 20794800.42 20794800.64 0.0088 0.0025

Neptune 52222-09-30 10:48 G 20795025.76 20795025.95 20795026.17 0.0088 0.0033

Neptune 52223-05-13 23:17 G 20795251.29 20795251.47 20795251.68 0.0088 0.0041

Neptune 52223-12-25 12:00 G 20795476.83 20795477.00 20795477.20 0.0088 0.0049

Jupiter 52224-03-24 03:36 G 20795566.51 20795566.65 20795566.79 0.0527 0.0373

Neptune 52224-08-07 00:43 G 20795702.38 20795702.53 20795702.71 0.0088 0.0057

Neptune 52225-03-20 13:12 G 20795927.92 20795928.05 20795928.22 0.0088 0.0065

Neptune 52225-11-01 01:55 G 20796153.47 20796153.58 20796153.72 0.0088 0.0073

Neptune 52226-06-14 14:24 G 20796379.04 20796379.10 20796379.21 0.0088 0.0081

Saturn 52226-10-01 19:12 G 20796488.10 20796488.30 20796488.51 0.0283 0.0069

Saturn 52227-05-19 10:34 G 20796717.80 20796717.94 20796718.10 0.0286 0.0199

Jupiter 52230-01-29 18:14 G 20797704.06 20797704.26 20797704.46 0.0498 0.0060

Saturn 52239-12-22 00:00 G 20801317.33 20801317.50 20801317.68 0.0279 0.0161

Saturn 52240-08-07 10:34 G 20801546.74 20801546.94 20801547.14 0.0276 0.0088

Jupiter 52241-10-04 18:58 G 20801970.15 20801970.29 20801970.44 0.0500 0.0354

Jupiter 52248-03-27 06:14 G 20804335.57 20804335.76 20804335.95 0.0529 0.0193

Uranus 52253-02-04 00:58 G 20806110.43 20806110.54 20806110.68 0.0136 0.0112

Uranus 52253-09-18 07:55 G 20806336.67 20806336.83 20806337.01 0.0136 0.0083

Jupiter 52254-02-01 03:50 G 20806472.55 20806472.66 20806472.78 0.0497 0.0402

Uranus 52254-05-02 14:38 G 20806562.93 20806563.11 20806563.32 0.0136 0.0055

Uranus 52254-12-14 21:36 G 20806789.19 20806789.40 20806789.62 0.0136 0.0026

Uranus 52255-07-29 04:19 G 20807015.46 20807015.68 20807015.90 0.0136 0.0002

Uranus 52256-03-11 10:34 G 20807241.74 20807241.94 20807242.16 0.0135 0.0031

Saturn 52256-04-12 22:05 G 20807274.21 20807274.42 20807274.63 0.0284 0.0041

Uranus 52256-10-23 17:02 G 20807468.02 20807468.21 20807468.41 0.0135 0.0058

Saturn 52256-11-28 13:41 G 20807503.95 20807504.07 20807504.20 0.0287 0.0228

Uranus 52257-06-06 23:17 G 20807694.32 20807694.47 20807694.65 0.0135 0.0086

Uranus 52258-01-19 05:46 G 20807920.63 20807920.74 20807920.87 0.0135 0.0113

Earth 52258-09-03 05:02 G 20808147.56 20808147.71 20808147.85 0.2692 0.1108

Moon 52258-09-03 10:19 G 20808147.83 20808147.93 20808148.04 0.2690 0.1996 *

Jupiter 52259-11-30 21:36 G 20808601.21 20808601.40 20808601.60 0.0527 0.0160

Jupiter 52265-10-07 06:29 G 20810738.57 20810738.77 20810738.97 0.0498 0.0117

Earth 52266-08-31 18:29 G 20811067.26 20811067.27 20811067.28 0.2691 0.2679

Moon 52266-08-31 20:53 G 20811067.29 20811067.37 20811067.45 0.2685 0.2325

Saturn 52269-07-03 04:19 G 20812103.50 20812103.68 20812103.88 0.0279 0.0127

Saturn 52270-02-17 15:07 G 20812332.94 20812333.13 20812333.32 0.0276 0.0121

Jupiter 52271-08-05 11:31 G 20812866.95 20812866.98 20812867.02 0.0526 0.0514

Jupiter 52277-06-12 08:53 G 20815004.68 20815004.87 20815005.06 0.0499 0.0171

Mars 52280-04-18 09:36 G 20816045.73 20816045.90 20816046.07 0.1655 0.0329

Jupiter 52283-12-03 22:19 G 20817370.30 20817370.43 20817370.57 0.0530 0.0398

Saturn 52285-03-08 11:02 G 20817830.91 20817830.96 20817831.03 0.0281 0.0267

Saturn 52285-10-24 00:43 G 20818060.32 20818060.53 20818060.74 0.0283 0.0010

Saturn 52286-06-10 16:05 G 20818290.09 20818290.17 20818290.26 0.0286 0.0260

Jupiter 52289-02-15 09:22 G 20819270.82 20819270.89 20819270.96 0.0501 0.0465

Jupiter 52295-08-08 15:22 G 20821635.94 20821636.14 20821636.34 0.0529 0.0052

Uranus 52296-06-18 09:07 G 20821950.80 20821950.88 20821950.99 0.0142 0.0128

Neptune 52296-11-05 04:48 G 20822090.62 20822090.70 20822090.79 0.0089 0.0082

Uranus 52297-01-30 19:26 G 20822177.16 20822177.31 20822177.48 0.0142 0.0096

Neptune 52297-06-18 17:46 G 20822316.14 20822316.24 20822316.38 0.0089 0.0074

Uranus 52297-09-14 06:00 G 20822403.56 20822403.75 20822403.95 0.0142 0.0064

Neptune 52298-01-30 06:58 G 20822541.67 20822541.79 20822541.97 0.0090 0.0066

Uranus 52298-04-28 16:48 G 20822629.99 20822630.20 20822630.41 0.0142 0.0031

Neptune 52298-09-12 20:38 G 20822767.20 20822767.36 20822767.54 0.0090 0.0057

Uranus 52298-12-11 03:50 G 20822856.44 20822856.66 20822856.87 0.0143 0.0004

Saturn 52299-01-13 03:07 G 20822889.44 20822889.63 20822889.84 0.0279 0.0107

Neptune 52299-04-26 09:50 G 20822992.74 20822992.91 20822993.11 0.0090 0.0049

Uranus 52299-07-25 14:24 G 20823082.90 20823083.10 20823083.32 0.0143 0.0036

Saturn 52299-08-30 13:41 G 20823118.89 20823119.07 20823119.25 0.0276 0.0141

Neptune 52299-12-07 23:17 G 20823218.28 20823218.47 20823218.67 0.0090 0.0040

Uranus 52300-03-09 01:12 G 20823309.37 20823309.55 20823309.76 0.0143 0.0069

Neptune 52300-07-21 12:29 G 20823443.83 20823444.02 20823444.24 0.0090 0.0032

Uranus 52300-10-21 12:14 G 20823535.87 20823536.01 20823536.18 0.0143 0.0102

Neptune 52301-03-04 02:10 G 20823669.38 20823669.59 20823669.80 0.0090 0.0023

Uranus 52301-06-04 23:17 G 20823762.42 20823762.47 20823762.56 0.0143 0.0136

Jupiter 52301-06-15 18:14 G 20823773.10 20823773.26 20823773.43 0.0497 0.0291

Neptune 52301-10-15 15:22 G 20823894.93 20823895.14 20823895.36 0.0090 0.0014

Neptune 52302-05-29 04:48 G 20824120.48 20824120.70 20824120.92 0.0090 0.0006

Neptune 52303-01-09 18:00 G 20824346.03 20824346.25 20824346.47 0.0090 0.0003

Neptune 52303-08-23 07:26 G 20824571.59 20824571.81 20824572.03 0.0090 0.0012

Neptune 52304-04-04 20:24 G 20824797.15 20824797.35 20824797.58 0.0090 0.0021

Neptune 52304-11-16 09:50 G 20825022.71 20825022.91 20825023.13 0.0090 0.0029

Neptune 52305-06-29 23:02 G 20825248.28 20825248.46 20825248.68 0.0090 0.0038

Neptune 52306-02-10 12:43 G 20825473.85 20825474.03 20825474.22 0.0090 0.0046

Neptune 52306-09-24 01:41 G 20825699.42 20825699.57 20825699.77 0.0090 0.0055

Jupiter 52307-04-14 07:26 G 20825901.64 20825901.81 20825901.98 0.0527 0.0296

Neptune 52307-05-07 15:22 G 20825924.99 20825925.14 20825925.30 0.0090 0.0063

Neptune 52307-12-19 04:19 G 20826150.57 20826150.68 20826150.84 0.0090 0.0072

Neptune 52308-07-31 18:14 G 20826376.17 20826376.26 20826376.37 0.0090 0.0080

Neptune 52309-03-14 07:12 G 20826601.79 20826601.80 20826601.86 0.0090 0.0089

Jupiter 52313-02-18 19:41 G 20828039.11 20828039.32 20828039.52 0.0499 0.0007

Saturn 52314-09-19 13:41 G 20828616.97 20828617.07 20828617.19 0.0282 0.0240

Saturn 52315-05-07 03:36 G 20828846.44 20828846.65 20828846.86 0.0284 0.0020

Mars 52316-11-27 14:24 G 20829417.01 20829417.10 20829417.19 0.1868 0.1588

Jupiter 52324-10-24 21:36 G 20832305.24 20832305.40 20832305.57 0.0500 0.0288

Saturn 52328-07-26 07:55 G 20833675.63 20833675.83 20833676.04 0.0278 0.0071

Saturn 52329-03-12 18:14 G 20833905.10 20833905.26 20833905.42 0.0276 0.0175

Jupiter 52331-04-17 05:31 G 20834670.55 20834670.73 20834670.91 0.0530 0.0249

Uranus 52336-10-05 08:38 G 20836668.79 20836668.86 20836668.97 0.0136 0.0124

Jupiter 52337-02-21 07:12 G 20836807.74 20836807.80 20836807.87 0.0496 0.0467

Uranus 52337-05-19 16:05 G 20836895.02 20836895.17 20836895.33 0.0136 0.0096

Uranus 52337-12-31 22:48 G 20837121.27 20837121.45 20837121.65 0.0136 0.0067

Uranus 52338-08-15 05:31 G 20837347.53 20837347.73 20837347.95 0.0136 0.0039

Uranus 52339-03-29 12:14 G 20837573.80 20837574.01 20837574.23 0.0136 0.0011

Uranus 52339-11-10 18:58 G 20837800.07 20837800.29 20837800.50 0.0135 0.0018

Uranus 52340-06-24 01:12 G 20838026.36 20838026.55 20838026.77 0.0135 0.0046

Uranus 52341-02-05 07:55 G 20838252.65 20838252.83 20838253.01 0.0135 0.0074

Uranus 52341-09-19 13:55 G 20838478.95 20838479.08 20838479.24 0.0135 0.0101

Uranus 52342-05-03 20:10 G 20838705.29 20838705.34 20838705.42 0.0135 0.0129

Jupiter 52342-12-20 22:05 G 20838936.22 20838936.42 20838936.62 0.0528 0.0099

Saturn 52344-03-31 17:46 G 20839403.11 20839403.24 20839403.39 0.0281 0.0204

Saturn 52344-11-16 07:26 G 20839632.61 20839632.81 20839633.02 0.0284 0.0057

Mars 52346-02-14 21:22 G 20840088.23 20840088.39 20840088.55 0.1653 0.0625

Jupiter 52348-10-27 08:24 G 20841073.66 20841073.85 20841074.04 0.0497 0.0180

Jupiter 52354-08-25 15:50 G 20843202.05 20843202.16 20843202.28 0.0526 0.0436

Saturn 52358-02-05 07:12 G 20844461.59 20844461.80 20844462.01 0.0278 0.0050

Saturn 52358-09-22 17:02 G 20844691.07 20844691.21 20844691.37 0.0276 0.0196

Jupiter 52360-07-02 09:36 G 20845339.70 20845339.90 20845340.10 0.0499 0.0111

Jupiter 52366-12-24 01:41 G 20847705.48 20847705.57 20847705.66 0.0530 0.0470

Pluto 52369-07-21 07:12 G 20848645.69 20848645.80 20848645.94 0.0063 0.0052

Pluto 52370-03-03 11:02 G 20848870.75 20848870.96 20848871.18 0.0063 0.0015

Pluto 52370-10-14 14:38 G 20849095.92 20849096.11 20849096.33 0.0063 0.0022

Pluto 52371-05-27 18:14 G 20849321.21 20849321.26 20849321.36 0.0063 0.0060

Jupiter 52372-03-07 09:50 G 20849605.80 20849605.91 20849606.03 0.0501 0.0406

Saturn 52373-10-11 20:53 G 20850189.21 20850189.37 20850189.54 0.0282 0.0176

Saturn 52374-05-29 10:48 G 20850418.75 20850418.95 20850419.16 0.0284 0.0086

Neptune 52378-05-12 12:00 G 20851862.93 20851863.00 20851863.10 0.0088 0.0081

Jupiter 52378-08-28 16:34 G 20851970.99 20851971.19 20851971.39 0.0528 0.0117

Neptune 52378-12-24 00:58 G 20852088.43 20852088.54 20852088.67 0.0088 0.0073

Neptune 52379-08-06 13:41 G 20852313.93 20852314.07 20852314.23 0.0088 0.0065

Uranus 52380-02-17 16:19 G 20852509.17 20852509.18 20852509.21 0.0142 0.0141

Neptune 52380-03-19 02:24 G 20852539.44 20852539.60 20852539.77 0.0088 0.0057

Uranus 52380-10-01 02:38 G 20852735.48 20852735.61 20852735.75 0.0142 0.0109

Neptune 52380-10-30 15:07 G 20852764.95 20852765.13 20852765.32 0.0088 0.0049

Uranus 52381-05-15 12:58 G 20852961.87 20852962.04 20852962.23 0.0142 0.0078

Neptune 52381-06-13 03:50 G 20852990.47 20852990.66 20852990.86 0.0088 0.0041

Uranus 52381-12-28 00:00 G 20853188.29 20853188.50 20853188.71 0.0142 0.0045

Neptune 52382-01-24 16:34 G 20853215.99 20853216.19 20853216.40 0.0088 0.0033

Uranus 52382-08-11 10:34 G 20853414.73 20853414.94 20853415.16 0.0142 0.0012

Neptune 52382-09-07 05:17 G 20853441.52 20853441.72 20853441.94 0.0088 0.0025

Mars 52382-09-24 18:14 G 20853459.10 20853459.26 20853459.42 0.1872 0.0799

Uranus 52383-03-25 21:22 G 20853641.18 20853641.39 20853641.61 0.0143 0.0022

Neptune 52383-04-20 18:00 G 20853667.04 20853667.25 20853667.47 0.0088 0.0017

Uranus 52383-11-07 08:24 G 20853867.65 20853867.85 20853868.06 0.0143 0.0055

Neptune 52383-12-02 06:58 G 20853892.57 20853892.79 20853893.01 0.0088 0.0009

Uranus 52384-06-20 19:26 G 20854094.15 20854094.31 20854094.49 0.0143 0.0088

Jupiter 52384-07-04 20:10 G 20854108.20 20854108.34 20854108.48 0.0497 0.0351

Neptune 52384-07-14 19:41 G 20854118.10 20854118.32 20854118.54 0.0088 0.0001

Uranus 52385-02-02 06:29 G 20854320.67 20854320.77 20854320.90 0.0143 0.0121

Neptune 52385-02-25 08:24 G 20854343.63 20854343.85 20854344.07 0.0088 0.0007

Neptune 52385-10-08 21:07 G 20854569.17 20854569.38 20854569.60 0.0088 0.0016

Neptune 52386-05-22 09:36 G 20854794.70 20854794.90 20854795.13 0.0088 0.0024

Saturn 52387-01-01 00:14 G 20855018.45 20855018.51 20855018.57 0.0281 0.0268

Neptune 52387-01-02 22:34 G 20855020.24 20855020.44 20855020.65 0.0088 0.0032

Neptune 52387-08-16 11:02 G 20855245.78 20855245.96 20855246.17 0.0088 0.0040

Saturn 52387-08-18 12:14 G 20855247.80 20855248.01 20855248.23 0.0278 0.0015

Moon 52388-03-03 16:34 G 20855446.03 20855446.19 20855446.36 0.2635 0.0122

Earth 52388-03-03 19:55 G 20855446.18 20855446.33 20855446.49 0.2640 0.0535 *

Neptune 52388-03-28 23:46 G 20855471.32 20855471.49 20855471.69 0.0088 0.0048

Saturn 52388-04-03 22:05 G 20855477.31 20855477.42 20855477.54 0.0276 0.0231

Neptune 52388-11-09 12:29 G 20855696.86 20855697.02 20855697.20 0.0088 0.0056

Neptune 52389-06-23 00:58 G 20855922.41 20855922.54 20855922.71 0.0088 0.0064

Neptune 52390-02-03 13:41 G 20856147.97 20856148.07 20856148.22 0.0088 0.0072

Jupiter 52390-05-03 05:17 G 20856236.54 20856236.72 20856236.90 0.0527 0.0245

Neptune 52390-09-17 02:24 G 20856373.53 20856373.60 20856373.71 0.0088 0.0080

Neptune 52391-04-30 15:22 G 20856599.13 20856599.14 20856599.17 0.0088 0.0087

Jupiter 52396-03-09 22:48 G 20858374.24 20858374.45 20858374.65 0.0498 0.0069

Saturn 52403-04-24 02:24 G 20860975.42 20860975.60 20860975.78 0.0281 0.0137

Saturn 52403-12-09 16:19 G 20861204.99 20861205.18 20861205.37 0.0284 0.0125

Jupiter 52407-11-13 23:02 G 20862640.28 20862640.46 20862640.64 0.0500 0.0225

Mars 52411-12-13 08:53 G 20864130.73 20864130.87 20864131.01 0.1651 0.0928

Jupiter 52414-05-06 08:53 G 20865005.72 20865005.87 20865006.04 0.0530 0.0324

Saturn 52416-07-13 00:43 G 20865804.44 20865804.53 20865804.64 0.0280 0.0245

Saturn 52417-02-27 12:58 G 20866033.82 20866034.04 20866034.25 0.0278 0.0010

Saturn 52417-10-14 22:34 G 20866263.36 20866263.44 20866263.52 0.0276 0.0254

Uranus 52420-06-04 17:46 G 20867227.22 20867227.24 20867227.25 0.0136 0.0136

Uranus 52421-01-17 00:29 G 20867453.40 20867453.52 20867453.66 0.0136 0.0108

Uranus 52421-08-31 07:12 G 20867679.64 20867679.80 20867679.99 0.0136 0.0079

Uranus 52422-04-14 14:10 G 20867905.89 20867906.09 20867906.30 0.0136 0.0051

Uranus 52422-11-26 20:53 G 20868132.16 20868132.37 20868132.59 0.0136 0.0022

Uranus 52423-07-11 03:36 G 20868358.44 20868358.65 20868358.87 0.0135 0.0006

Uranus 52424-02-22 10:05 G 20868584.71 20868584.92 20868585.13 0.0135 0.0034

Uranus 52424-10-05 16:19 G 20868811.00 20868811.18 20868811.38 0.0135 0.0062

Uranus 52425-05-19 22:48 G 20869037.30 20869037.45 20869037.62 0.0135 0.0090

Uranus 52426-01-01 05:17 G 20869263.62 20869263.72 20869263.83 0.0135 0.0117

Jupiter 52426-01-09 00:58 G 20869271.34 20869271.54 20869271.74 0.0528 0.0027

Jupiter 52431-11-16 08:10 G 20871408.66 20871408.84 20871409.02 0.0498 0.0234

Saturn 52432-11-03 06:14 G 20871761.56 20871761.76 20871761.95 0.0282 0.0108

Saturn 52433-06-20 20:24 G 20871991.18 20871991.35 20871991.53 0.0285 0.0157

Jupiter 52437-09-13 16:19 G 20873537.04 20873537.18 20873537.32 0.0526 0.0374

Jupiter 52443-07-22 10:34 G 20875674.74 20875674.94 20875675.14 0.0499 0.0052

Mars 52443-12-12 04:19 G 20875817.61 20875817.68 20875817.75 0.1658 0.1498

Saturn 52446-01-23 06:43 G 20876590.64 20876590.78 20876590.93 0.0280 0.0206

Saturn 52446-09-09 18:29 G 20876820.06 20876820.27 20876820.48 0.0278 0.0047

Mars 52448-07-21 22:05 G 20877501.25 20877501.42 20877501.60 0.1875 0.0053

Jupiter 52450-01-11 22:34 G 20878040.40 20878040.44 20878040.49 0.0530 0.0517

Jupiter 52455-03-27 12:00 G 20879940.86 20879941.00 20879941.15 0.0501 0.0341

Pluto 52460-04-18 06:14 G 20881789.55 20881789.76 20881789.98 0.0081 0.0023

Pluto 52460-11-29 16:48 G 20882015.06 20882015.20 20882015.38 0.0081 0.0056

Neptune 52461-02-07 16:05 G 20882085.08 20882085.17 20882085.25 0.0089 0.0082

Jupiter 52461-09-16 14:24 G 20882305.91 20882306.10 20882306.29 0.0529 0.0167

Neptune 52461-09-21 05:02 G 20882310.60 20882310.71 20882310.84 0.0089 0.0074

Neptune 52462-05-04 18:14 G 20882536.13 20882536.26 20882536.43 0.0089 0.0066

Saturn 52462-05-16 13:12 G 20882547.85 20882548.05 20882548.26 0.0282 0.0066

Neptune 52462-12-16 07:55 G 20882761.67 20882761.83 20882762.00 0.0089 0.0057

Saturn 52463-01-01 03:36 G 20882777.50 20882777.65 20882777.80 0.0284 0.0199

Neptune 52463-07-29 21:07 G 20882987.21 20882987.38 20882987.58 0.0089 0.0049

Neptune 52464-03-11 10:34 G 20883212.76 20883212.94 20883213.15 0.0090 0.0040

Uranus 52464-05-31 09:07 G 20883293.79 20883293.88 20883294.00 0.0142 0.0123

Neptune 52464-10-23 00:00 G 20883438.30 20883438.50 20883438.71 0.0090 0.0032

Uranus 52465-01-12 19:41 G 20883520.17 20883520.32 20883520.50 0.0142 0.0091

Neptune 52465-06-05 13:12 G 20883663.85 20883664.05 20883664.28 0.0090 0.0024

Uranus 52465-08-27 06:29 G 20883746.57 20883746.77 20883746.97 0.0142 0.0058

Neptune 52466-01-17 02:38 G 20883889.40 20883889.61 20883889.84 0.0090 0.0015

Uranus 52466-04-10 17:17 G 20883973.00 20883973.22 20883973.43 0.0142 0.0026

Neptune 52466-08-30 16:05 G 20884114.96 20884115.17 20884115.40 0.0090 0.0007

Uranus 52466-11-23 04:19 G 20884199.46 20884199.68 20884199.89 0.0143 0.0008

Neptune 52467-04-13 05:31 G 20884340.51 20884340.73 20884340.95 0.0090 0.0002

Uranus 52467-07-07 15:07 G 20884425.92 20884426.13 20884426.34 0.0143 0.0041

Jupiter 52467-07-24 19:55 G 20884443.22 20884443.33 20884443.45 0.0496 0.0406

Neptune 52467-11-24 18:43 G 20884566.07 20884566.28 20884566.50 0.0090 0.0011

Uranus 52468-02-19 01:55 G 20884652.41 20884652.58 20884652.78 0.0143 0.0074

Neptune 52468-07-07 07:55 G 20884791.63 20884791.83 20884792.06 0.0090 0.0020

Uranus 52468-10-02 13:12 G 20884878.91 20884879.05 20884879.20 0.0143 0.0107

Neptune 52469-02-17 21:22 G 20885017.19 20885017.39 20885017.61 0.0090 0.0028

Uranus 52469-05-17 00:14 G 20885105.48 20885105.51 20885105.56 0.0143 0.0141

Neptune 52469-10-01 10:34 G 20885242.75 20885242.94 20885243.15 0.0090 0.0037

Neptune 52470-05-14 23:46 G 20885468.31 20885468.49 20885468.69 0.0090 0.0045

Neptune 52470-12-26 12:58 G 20885693.88 20885694.04 20885694.24 0.0090 0.0054

Neptune 52471-08-09 02:38 G 20885919.46 20885919.61 20885919.78 0.0090 0.0062

Neptune 52472-03-21 16:05 G 20886145.04 20886145.17 20886145.31 0.0090 0.0070

Neptune 52472-11-02 05:02 G 20886370.63 20886370.71 20886370.84 0.0090 0.0079

Jupiter 52473-05-22 07:26 G 20886571.62 20886571.81 20886572.00 0.0527 0.0175

Neptune 52473-06-15 18:29 G 20886596.24 20886596.27 20886596.34 0.0090 0.0087

Saturn 52475-08-05 08:53 G 20887376.72 20887376.87 20887377.04 0.0280 0.0179

Saturn 52476-03-21 20:24 G 20887606.15 20887606.35 20887606.56 0.0278 0.0073

Mars 52477-10-09 20:53 G 20888173.26 20888173.37 20888173.49 0.1648 0.1209

Jupiter 52479-03-29 21:07 G 20888709.19 20888709.38 20888709.58 0.0498 0.0119

Jupiter 52485-01-25 00:14 G 20890837.47 20890837.51 20890837.55 0.0525 0.0514

Jupiter 52490-12-02 21:22 G 20892975.21 20892975.39 20892975.59 0.0500 0.0175

Saturn 52491-11-26 17:31 G 20893334.02 20893334.23 20893334.44 0.0283 0.0034

Saturn 52492-07-13 08:24 G 20893563.73 20893563.85 20893563.97 0.0285 0.0232

Jupiter 52497-05-25 08:10 G 20895340.70 20895340.84 20895340.98 0.0530 0.0379

Moon 52501-09-04 23:17 G 20896903.31 20896903.47 20896903.63 0.2692 0.0043

Earth 52501-09-05 04:48 G 20896903.55 20896903.70 20896903.85 0.2691 0.0975 *

Jupiter 52502-08-08 22:34 G 20897241.38 20897241.44 20897241.52 0.0501 0.0466

Uranus 52504-09-17 09:22 G 20898011.81 20898011.89 20898012.01 0.0136 0.0119

Saturn 52505-02-15 15:50 G 20898162.98 20898163.16 20898163.35 0.0279 0.0139

Uranus 52505-05-01 16:48 G 20898238.04 20898238.20 20898238.36 0.0136 0.0090

Saturn 52505-10-03 03:07 G 20898392.44 20898392.63 20898392.82 0.0277 0.0112

Uranus 52505-12-13 23:31 G 20898464.29 20898464.48 20898464.68 0.0136 0.0062

Uranus 52506-07-28 06:14 G 20898690.56 20898690.76 20898690.98 0.0136 0.0034

Uranus 52507-03-11 12:58 G 20898916.83 20898917.04 20898917.26 0.0135 0.0006

Uranus 52507-10-23 19:26 G 20899143.10 20899143.31 20899143.53 0.0135 0.0024

Uranus 52508-06-06 02:10 G 20899369.39 20899369.59 20899369.79 0.0135 0.0051

Uranus 52509-01-18 08:24 G 20899595.68 20899595.85 20899596.03 0.0135 0.0079

Jupiter 52509-01-28 20:24 G 20899606.15 20899606.35 20899606.55 0.0528 0.0016

Uranus 52509-09-01 14:24 G 20899821.99 20899822.10 20899822.25 0.0135 0.0107

Mars 52509-10-09 15:50 G 20899860.05 20899860.16 20899860.28 0.1655 0.1193

Uranus 52510-04-15 20:38 G 20900048.35 20900048.36 20900048.40 0.0135 0.0134

Mars 52514-05-20 01:12 G 20901543.39 20901543.55 20901543.71 0.1878 0.0821

Jupiter 52514-12-06 08:53 G 20901743.71 20901743.87 20901744.03 0.0497 0.0292

Jupiter 52520-10-03 12:29 G 20903871.86 20903872.02 20903872.18 0.0526 0.0329

Saturn 52520-10-22 13:26 G 20903890.96 20903891.06 20903891.16 0.0280 0.0246

Saturn 52521-06-09 02:24 G 20904120.38 20904120.60 20904120.81 0.0283 0.0013

Saturn 52522-01-24 17:17 G 20904350.18 20904350.22 20904350.27 0.0285 0.0278

Jupiter 52526-08-11 09:07 G 20906009.68 20906009.88 20906010.08 0.0499 0.0001

Saturn 52534-08-28 19:41 G 20908949.13 20908949.32 20908949.52 0.0279 0.0109

Saturn 52535-04-15 06:29 G 20909178.59 20909178.77 20909178.96 0.0277 0.0141

Jupiter 52538-04-16 09:22 G 20910275.73 20910275.89 20910276.06 0.0500 0.0292

Neptune 52542-08-14 23:46 G 20911857.43 20911857.49 20911857.59 0.0088 0.0081

Neptune 52543-03-28 12:29 G 20912082.92 20912083.02 20912083.16 0.0088 0.0073

Mars 52543-08-08 08:38 G 20912215.79 20912215.86 20912215.93 0.1646 0.1507

Neptune 52543-11-09 01:12 G 20912308.42 20912308.55 20912308.71 0.0088 0.0065

Neptune 52544-06-21 14:10 G 20912533.93 20912534.09 20912534.26 0.0088 0.0057

Jupiter 52544-10-06 14:53 G 20912640.94 20912641.12 20912641.30 0.0529 0.0230

Neptune 52545-02-02 02:53 G 20912759.45 20912759.62 20912759.81 0.0088 0.0049

Neptune 52545-09-15 15:22 G 20912984.96 20912985.14 20912985.35 0.0088 0.0042

Neptune 52546-04-29 04:05 G 20913210.48 20913210.67 20913210.89 0.0088 0.0034

Neptune 52546-12-10 16:48 G 20913436.00 20913436.20 20913436.42 0.0088 0.0026

Neptune 52547-07-24 05:31 G 20913661.52 20913661.73 20913661.96 0.0088 0.0018

Uranus 52548-01-30 15:22 G 20913852.10 20913852.14 20913852.20 0.0142 0.0137

Neptune 52548-03-05 18:14 G 20913887.05 20913887.26 20913887.49 0.0088 0.0010

Uranus 52548-09-13 01:41 G 20914078.43 20914078.57 20914078.72 0.0142 0.0105

Neptune 52548-10-17 07:12 G 20914112.58 20914112.80 20914113.02 0.0088 0.0002

Uranus 52549-04-27 12:29 G 20914304.83 20914305.02 20914305.21 0.0142 0.0073

Neptune 52549-05-30 19:41 G 20914338.11 20914338.32 20914338.55 0.0088 0.0007

Uranus 52549-12-09 23:02 G 20914531.26 20914531.46 20914531.68 0.0142 0.0040

Neptune 52550-01-11 08:38 G 20914563.64 20914563.86 20914564.08 0.0088 0.0015

Saturn 52550-05-04 18:00 G 20914677.12 20914677.25 20914677.39 0.0281 0.0214

Uranus 52550-07-24 10:05 G 20914757.70 20914757.92 20914758.14 0.0143 0.0007

Jupiter 52550-08-13 17:02 G 20914778.14 20914778.21 20914778.30 0.0497 0.0451

Neptune 52550-08-24 21:07 G 20914789.18 20914789.38 20914789.61 0.0088 0.0023

Saturn 52550-12-20 07:12 G 20914906.60 20914906.80 20914907.01 0.0284 0.0046

Uranus 52551-03-07 20:53 G 20914984.16 20914984.37 20914984.58 0.0143 0.0026

Neptune 52551-04-07 09:50 G 20915014.71 20915014.91 20915015.13 0.0088 0.0031

Uranus 52551-10-20 07:41 G 20915210.63 20915210.82 20915211.02 0.0143 0.0060

Neptune 52551-11-18 22:34 G 20915240.25 20915240.44 20915240.65 0.0088 0.0039

Uranus 52552-06-02 18:43 G 20915437.12 20915437.28 20915437.45 0.0143 0.0093

Neptune 52552-07-01 11:02 G 20915465.79 20915465.96 20915466.16 0.0088 0.0047

Uranus 52553-01-15 06:00 G 20915663.66 20915663.75 20915663.86 0.0143 0.0126

Neptune 52553-02-12 00:00 G 20915691.34 20915691.50 20915691.69 0.0088 0.0055

Neptune 52553-09-25 12:29 G 20915916.89 20915917.02 20915917.20 0.0088 0.0063

Neptune 52554-05-09 01:41 G 20916142.44 20916142.57 20916142.70 0.0088 0.0070

Neptune 52554-12-20 14:10 G 20916368.00 20916368.09 20916368.20 0.0088 0.0078

Neptune 52555-08-03 02:38 G 20916593.58 20916593.61 20916593.67 0.0088 0.0086

Jupiter 52556-06-11 05:46 G 20916906.54 20916906.74 20916906.94 0.0527 0.0121

Jupiter 52562-04-18 19:12 G 20919044.11 20919044.30 20919044.50 0.0498 0.0167

Saturn 52564-03-10 03:07 G 20919735.42 20919735.63 20919735.84 0.0279 0.0067

Saturn 52564-10-25 13:41 G 20919964.91 20919965.07 20919965.23 0.0276 0.0181

Jupiter 52568-02-14 18:43 G 20921172.20 20921172.28 20921172.37 0.0525 0.0474

Jupiter 52573-12-22 20:38 G 20923310.16 20923310.36 20923310.56 0.0500 0.0120

Mars 52575-08-07 03:36 G 20923902.51 20923902.65 20923902.80 0.1653 0.0886

Saturn 52579-11-15 03:36 G 20925463.48 20925463.65 20925463.82 0.0281 0.0168

Mars 52580-03-16 04:34 G 20925585.61 20925585.69 20925585.77 0.1882 0.1643

Jupiter 52580-06-14 03:22 G 20925675.51 20925675.64 20925675.76 0.0530 0.0419

Saturn 52580-07-01 17:02 G 20925693.02 20925693.21 20925693.41 0.0283 0.0093

Jupiter 52585-08-27 19:55 G 20927576.22 20927576.33 20927576.45 0.0501 0.0415

Uranus 52588-05-17 18:43 G 20928570.23 20928570.28 20928570.36 0.0136 0.0130

Uranus 52588-12-30 02:10 G 20928796.45 20928796.59 20928796.73 0.0136 0.0102

Uranus 52589-08-13 08:53 G 20929022.69 20929022.87 20929023.06 0.0136 0.0073

Uranus 52590-03-27 15:36 G 20929248.95 20929249.15 20929249.36 0.0136 0.0045

Uranus 52590-11-08 22:19 G 20929475.22 20929475.43 20929475.65 0.0136 0.0016

Uranus 52591-06-23 05:02 G 20929701.50 20929701.71 20929701.93 0.0135 0.0012

Uranus 52592-02-04 11:31 G 20929927.78 20929927.98 20929928.19 0.0135 0.0040

Jupiter 52592-02-17 19:41 G 20929941.12 20929941.32 20929941.52 0.0528 0.0075

Uranus 52592-09-17 17:46 G 20930154.06 20930154.24 20930154.44 0.0135 0.0068

Uranus 52593-05-02 00:00 G 20930380.36 20930380.50 20930380.66 0.0135 0.0096

Saturn 52593-09-20 08:53 G 20930521.66 20930521.87 20930522.08 0.0279 0.0033

Uranus 52593-12-14 06:00 G 20930606.68 20930606.75 20930606.85 0.0135 0.0124

Saturn 52594-05-07 19:12 G 20930751.17 20930751.30 20930751.43 0.0276 0.0214

Jupiter 52597-12-25 04:48 G 20932078.55 20932078.70 20932078.85 0.0497 0.0333

Jupiter 52603-10-24 11:46 G 20934206.82 20934206.99 20934207.17 0.0526 0.0269

Saturn 52609-05-28 08:38 G 20936249.68 20936249.86 20936250.05 0.0282 0.0135

Jupiter 52609-08-31 05:02 G 20936344.51 20936344.71 20936344.92 0.0499 0.0042

Saturn 52610-01-12 22:34 G 20936479.25 20936479.44 20936479.63 0.0284 0.0127

Pluto 52615-08-21 16:05 G 20938526.03 20938526.17 20938526.33 0.0063 0.0046

Pluto 52616-04-02 19:55 G 20938751.12 20938751.33 20938751.55 0.0063 0.0010

Pluto 52616-11-13 23:31 G 20938976.29 20938976.48 20938976.69 0.0063 0.0028

Jupiter 52621-05-06 06:00 G 20940610.58 20940610.75 20940610.93 0.0500 0.0248

Saturn 52622-08-17 04:19 G 20941078.59 20941078.68 20941078.79 0.0280 0.0246

Saturn 52623-04-03 16:34 G 20941307.98 20941308.19 20941308.40 0.0278 0.0009

Saturn 52623-11-19 02:24 G 20941537.53 20941537.60 20941537.69 0.0276 0.0254

Neptune 52625-05-14 02:10 G 20942079.53 20942079.59 20942079.70 0.0089 0.0083

Neptune 52625-12-25 15:50 G 20942305.05 20942305.16 20942305.29 0.0089 0.0074

Neptune 52626-08-08 05:17 G 20942530.58 20942530.72 20942530.88 0.0089 0.0066

Neptune 52627-03-21 18:29 G 20942756.12 20942756.27 20942756.45 0.0089 0.0058

Jupiter 52627-10-27 08:24 G 20942975.68 20942975.85 20942976.03 0.0529 0.0265

Neptune 52627-11-02 08:10 G 20942981.66 20942981.84 20942982.02 0.0089 0.0049

Neptune 52628-06-14 21:22 G 20943207.21 20943207.39 20943207.60 0.0090 0.0041

Neptune 52629-01-26 10:34 G 20943432.75 20943432.94 20943433.16 0.0090 0.0033

Neptune 52629-09-09 00:14 G 20943658.30 20943658.51 20943658.73 0.0090 0.0024

Neptune 52630-04-22 13:26 G 20943883.85 20943884.06 20943884.29 0.0090 0.0016

Neptune 52630-12-04 03:07 G 20944109.41 20944109.63 20944109.85 0.0090 0.0007

Earth 52631-03-06 22:34 G 20944202.28 20944202.44 20944202.59 0.2641 0.0652

Moon 52631-03-07 00:14 G 20944202.37 20944202.51 20944202.65 0.2647 0.0981 *

Neptune 52631-07-17 16:34 G 20944334.97 20944335.19 20944335.41 0.0090 0.0002

Neptune 52632-02-28 05:46 G 20944560.52 20944560.74 20944560.96 0.0090 0.0010

Uranus 52632-05-14 07:12 G 20944636.70 20944636.80 20944636.93 0.0142 0.0120

Neptune 52632-10-10 18:58 G 20944786.08 20944786.29 20944786.51 0.0090 0.0019

Uranus 52632-12-26 18:00 G 20944863.09 20944863.25 20944863.43 0.0142 0.0087

Neptune 52633-05-24 08:10 G 20945011.64 20945011.84 20945012.06 0.0090 0.0027

Uranus 52633-08-10 04:48 G 20945089.50 20945089.70 20945089.90 0.0142 0.0055

Neptune 52634-01-04 21:22 G 20945237.20 20945237.39 20945237.61 0.0090 0.0036

Uranus 52634-03-24 15:22 G 20945315.93 20945316.14 20945316.36 0.0143 0.0022

Neptune 52634-08-18 10:48 G 20945462.77 20945462.95 20945463.16 0.0090 0.0044

Uranus 52634-11-06 02:10 G 20945542.38 20945542.59 20945542.81 0.0143 0.0012

Neptune 52635-04-01 00:14 G 20945688.34 20945688.51 20945688.70 0.0090 0.0052

Uranus 52635-06-20 12:58 G 20945768.84 20945769.04 20945769.25 0.0143 0.0045

Neptune 52635-11-12 13:12 G 20945913.91 20945914.05 20945914.23 0.0090 0.0061

Uranus 52636-02-02 00:00 G 20945995.32 20945995.50 20945995.69 0.0143 0.0078

Neptune 52636-06-25 02:38 G 20946139.49 20946139.61 20946139.77 0.0090 0.0069

Uranus 52636-09-15 11:02 G 20946221.83 20946221.96 20946222.10 0.0143 0.0112

Neptune 52637-02-05 16:05 G 20946365.08 20946365.17 20946365.30 0.0090 0.0077

Neptune 52637-09-19 05:46 G 20946590.68 20946590.74 20946590.81 0.0090 0.0085

Saturn 52638-12-08 19:12 G 20947036.10 20947036.30 20947036.51 0.0282 0.0087

Earth 52639-03-04 15:07 G 20947122.10 20947122.13 20947122.16 0.2641 0.2593

Moon 52639-03-04 20:10 G 20947122.29 20947122.34 20947122.39 0.2644 0.2467

Jupiter 52639-07-01 23:46 G 20947241.29 20947241.49 20947241.69 0.0527 0.0083

Saturn 52639-07-26 09:36 G 20947265.74 20947265.90 20947266.07 0.0284 0.0177

Mars 52641-06-04 15:07 G 20947944.97 20947945.13 20947945.30 0.1651 0.0583

Jupiter 52645-05-08 15:07 G 20949378.95 20949379.13 20949379.32 0.0498 0.0210

Jupiter 52651-03-06 16:34 G 20951507.07 20951507.19 20951507.31 0.0526 0.0421

Saturn 52652-02-27 11:46 G 20951864.86 20951864.99 20951865.14 0.0280 0.0208

Saturn 52652-10-13 23:31 G 20952094.27 20952094.48 20952094.69 0.0278 0.0045

Jupiter 52657-01-11 16:05 G 20953644.97 20953645.17 20953645.37 0.0499 0.0079

Jupiter 52663-07-05 02:10 G 20956010.50 20956010.59 20956010.68 0.0530 0.0474

Saturn 52668-06-20 00:14 G 20957822.31 20957822.51 20957822.72 0.0283 0.0054

Jupiter 52668-09-16 15:22 G 20957911.00 20957911.14 20957911.27 0.0501 0.0375

Saturn 52669-02-04 14:53 G 20958051.98 20958052.12 20958052.26 0.0285 0.0212

Uranus 52672-08-30 10:19 G 20959354.83 20959354.93 20959355.07 0.0136 0.0114

Uranus 52673-04-13 17:31 G 20959581.07 20959581.23 20959581.41 0.0136 0.0085

Uranus 52673-11-26 00:29 G 20959807.33 20959807.52 20959807.73 0.0136 0.0057

Uranus 52674-07-10 07:26 G 20960033.60 20960033.81 20960034.03 0.0136 0.0028

Uranus 52675-02-21 14:10 G 20960259.87 20960260.09 20960260.31 0.0136 0.0001

Jupiter 52675-03-09 16:34 G 20960276.00 20960276.19 20960276.39 0.0528 0.0123

Uranus 52675-10-05 20:24 G 20960486.15 20960486.35 20960486.57 0.0135 0.0030

Uranus 52676-05-19 03:07 G 20960712.44 20960712.63 20960712.83 0.0135 0.0057

Uranus 52676-12-31 09:22 G 20960938.73 20960938.89 20960939.07 0.0135 0.0085

Uranus 52677-08-14 15:22 G 20961165.04 20961165.14 20961165.28 0.0135 0.0113

Jupiter 52681-01-14 00:43 G 20962413.40 20962413.53 20962413.67 0.0497 0.0373

Saturn 52681-09-08 19:41 G 20962651.16 20962651.32 20962651.50 0.0280 0.0166

Saturn 52682-04-26 07:12 G 20962880.60 20962880.80 20962881.00 0.0277 0.0086

Jupiter 52686-11-12 05:31 G 20964541.55 20964541.73 20964541.92 0.0526 0.0231

Jupiter 52692-09-19 01:55 G 20966679.38 20966679.58 20966679.78 0.0499 0.0088

Saturn 52697-05-15 22:05 G 20968379.35 20968379.42 20968379.49 0.0280 0.0262

Saturn 52697-12-31 11:02 G 20968608.75 20968608.96 20968609.17 0.0283 0.0006

Saturn 52698-08-18 02:10 G 20968838.51 20968838.59 20968838.68 0.0285 0.0262

Jupiter 52704-05-26 01:26 G 20970945.38 20970945.56 20970945.75 0.0500 0.0206

Pluto 52706-05-20 15:50 G 20971669.94 20971670.16 20971670.38 0.0081 0.0012

Neptune 52706-11-18 10:48 G 20971851.88 20971851.95 20971852.05 0.0088 0.0081

Pluto 52707-01-01 02:10 G 20971895.49 20971895.59 20971895.74 0.0081 0.0067

Mars 52707-04-03 03:07 G 20971987.46 20971987.63 20971987.80 0.1649 0.0282

Neptune 52707-07-01 23:31 G 20972077.38 20972077.48 20972077.62 0.0088 0.0073

Neptune 52708-02-12 12:29 G 20972302.89 20972303.02 20972303.18 0.0088 0.0065

Neptune 52708-09-25 01:26 G 20972528.40 20972528.56 20972528.73 0.0088 0.0057

Neptune 52709-05-08 13:41 G 20972753.91 20972754.07 20972754.28 0.0088 0.0050

Neptune 52709-12-20 02:38 G 20972979.43 20972979.61 20972979.82 0.0088 0.0042

Neptune 52710-08-02 15:22 G 20973204.95 20973205.14 20973205.36 0.0088 0.0034

Jupiter 52710-11-16 06:00 G 20973310.59 20973310.75 20973310.91 0.0529 0.0317

Neptune 52711-03-16 04:05 G 20973430.47 20973430.67 20973430.89 0.0088 0.0026

Saturn 52711-03-23 04:19 G 20973437.49 20973437.68 20973437.86 0.0280 0.0126

Neptune 52711-10-27 16:48 G 20973655.99 20973656.20 20973656.42 0.0088 0.0018

Saturn 52711-11-07 15:07 G 20973666.94 20973667.13 20973667.32 0.0277 0.0124

Neptune 52712-06-09 05:31 G 20973881.52 20973881.73 20973881.96 0.0088 0.0010

Neptune 52713-01-20 18:29 G 20974107.05 20974107.27 20974107.49 0.0088 0.0002

Neptune 52713-09-03 07:12 G 20974332.58 20974332.80 20974333.02 0.0088 0.0006

Neptune 52714-04-16 19:41 G 20974558.11 20974558.32 20974558.55 0.0088 0.0014

Neptune 52714-11-28 08:24 G 20974783.64 20974783.85 20974784.07 0.0088 0.0022

Neptune 52715-07-11 21:07 G 20975009.18 20975009.38 20975009.59 0.0088 0.0030

Uranus 52716-01-13 13:41 G 20975195.01 20975195.07 20975195.15 0.0142 0.0134

Jupiter 52716-01-30 01:41 G 20975211.55 20975211.57 20975211.60 0.0502 0.0497

Neptune 52716-02-22 09:50 G 20975234.72 20975234.91 20975235.12 0.0088 0.0038

Uranus 52716-08-27 00:00 G 20975421.36 20975421.50 20975421.66 0.0142 0.0102

Neptune 52716-10-04 22:19 G 20975460.26 20975460.43 20975460.64 0.0088 0.0046

Uranus 52717-04-10 10:34 G 20975647.76 20975647.94 20975648.13 0.0142 0.0070

Neptune 52717-05-18 11:02 G 20975685.81 20975685.96 20975686.15 0.0088 0.0054

Uranus 52717-11-22 21:22 G 20975874.18 20975874.39 20975874.60 0.0142 0.0037

Neptune 52717-12-29 23:46 G 20975911.35 20975911.49 20975911.67 0.0088 0.0062

Uranus 52718-07-07 08:10 G 20976100.62 20976100.84 20976101.05 0.0143 0.0004

Neptune 52718-08-12 12:43 G 20976136.91 20976137.03 20976137.18 0.0088 0.0069

Uranus 52719-02-18 18:43 G 20976327.07 20976327.28 20976327.50 0.0143 0.0030

Neptune 52719-03-26 01:26 G 20976362.47 20976362.56 20976362.68 0.0088 0.0077

Uranus 52719-10-03 05:31 G 20976553.54 20976553.73 20976553.93 0.0143 0.0063

Neptune 52719-11-06 13:55 G 20976588.04 20976588.08 20976588.16 0.0088 0.0085

Uranus 52720-05-16 16:48 G 20976780.04 20976780.20 20976780.36 0.0143 0.0097

Uranus 52720-12-29 03:36 G 20977006.58 20977006.65 20977006.75 0.0143 0.0130

Jupiter 52722-07-21 22:19 G 20977576.22 20977576.43 20977576.63 0.0527 0.0030

Saturn 52726-11-27 02:38 G 20979165.50 20979165.61 20979165.74 0.0281 0.0230

Saturn 52727-07-14 16:05 G 20979394.96 20979395.17 20979395.39 0.0283 0.0030

Jupiter 52728-05-28 10:19 G 20979713.75 20979713.93 20979714.11 0.0498 0.0247

Jupiter 52734-03-26 13:41 G 20981841.93 20981842.07 20981842.22 0.0525 0.0371

Jupiter 52740-02-01 11:31 G 20983979.77 20983979.98 20983980.18 0.0500 0.0041

Saturn 52740-10-02 11:31 G 20984223.78 20984223.98 20984224.18 0.0279 0.0085

Saturn 52741-05-19 22:05 G 20984453.26 20984453.42 20984453.60 0.0277 0.0164

Mars 52743-11-10 07:55 G 20985357.70 20985357.83 20985357.97 0.1877 0.1131

Earth 52744-09-07 04:19 G 20985659.53 20985659.68 20985659.83 0.2691 0.0801

Moon 52744-09-07 09:22 G 20985659.76 20985659.89 20985660.02 0.2694 0.1523 *

Jupiter 52746-07-24 19:55 G 20986345.28 20986345.33 20986345.38 0.0529 0.0509

Jupiter 52751-10-07 11:31 G 20988245.83 20988245.98 20988246.13 0.0501 0.0331

Uranus 52756-04-30 18:43 G 20989913.21 20989913.28 20989913.37 0.0136 0.0127

Saturn 52756-06-08 12:29 G 20989951.88 20989952.02 20989952.19 0.0281 0.0186

Uranus 52756-12-13 01:41 G 20990139.44 20990139.57 20990139.74 0.0136 0.0098

Saturn 52757-01-24 02:24 G 20990181.40 20990181.60 20990181.80 0.0284 0.0076

Uranus 52757-07-27 08:53 G 20990365.69 20990365.87 20990366.06 0.0136 0.0069

Uranus 52758-03-10 15:36 G 20990591.95 20990592.15 20990592.37 0.0136 0.0041

Jupiter 52758-03-29 10:34 G 20990610.75 20990610.94 20990611.14 0.0528 0.0161

Uranus 52758-10-22 22:34 G 20990818.22 20990818.44 20990818.66 0.0136 0.0012

Uranus 52759-06-06 05:17 G 20991044.50 20991044.72 20991044.94 0.0135 0.0017

Uranus 52760-01-18 11:31 G 20991270.79 20991270.98 20991271.20 0.0135 0.0046

Uranus 52760-08-31 17:46 G 20991497.07 20991497.24 20991497.44 0.0135 0.0074

Uranus 52761-04-15 00:00 G 20991723.37 20991723.50 20991723.66 0.0135 0.0101

Uranus 52761-11-27 06:29 G 20991949.71 20991949.77 20991949.84 0.0135 0.0128

Jupiter 52764-02-03 20:10 G 20992748.22 20992748.34 20992748.45 0.0497 0.0411

Jupiter 52769-12-02 02:38 G 20994876.42 20994876.61 20994876.80 0.0527 0.0182

Saturn 52770-04-14 20:10 G 20995010.13 20995010.34 20995010.55 0.0279 0.0045

Saturn 52770-11-30 06:14 G 20995239.62 20995239.76 20995239.91 0.0276 0.0203

Mars 52773-01-28 14:53 G 20996029.94 20996030.12 20996030.29 0.1647 0.0025

Jupiter 52775-10-09 21:22 G 20997014.19 20997014.39 20997014.59 0.0498 0.0128

Jupiter 52781-08-06 19:41 G 20999142.29 20999142.32 20999142.36 0.0525 0.0517

Saturn 52785-12-19 16:48 G 21000738.03 21000738.20 21000738.38 0.0281 0.0153

Saturn 52786-08-06 06:43 G 21000967.59 21000967.78 21000967.98 0.0284 0.0109

Jupiter 52787-06-14 21:07 G 21001280.19 21001280.38 21001280.57 0.0500 0.0166

Neptune 52789-08-16 13:12 G 21002073.99 21002074.05 21002074.16 0.0089 0.0083

Neptune 52790-03-30 02:53 G 21002299.50 21002299.62 21002299.75 0.0089 0.0074

Neptune 52790-11-10 16:05 G 21002525.03 21002525.17 21002525.33 0.0089 0.0066

Neptune 52791-06-24 05:17 G 21002750.57 21002750.72 21002750.91 0.0089 0.0058

Neptune 52792-02-04 18:43 G 21002976.11 21002976.28 21002976.48 0.0089 0.0050

Neptune 52792-09-17 08:24 G 21003201.65 21003201.85 21003202.04 0.0090 0.0041

Neptune 52793-04-30 21:36 G 21003427.20 21003427.40 21003427.61 0.0090 0.0033

Jupiter 52793-12-05 03:50 G 21003645.51 21003645.66 21003645.80 0.0529 0.0367

Neptune 52793-12-12 10:48 G 21003652.75 21003652.95 21003653.17 0.0090 0.0025

Neptune 52794-07-26 00:29 G 21003878.31 21003878.52 21003878.74 0.0090 0.0016

Neptune 52795-03-08 13:55 G 21004103.86 21004104.08 21004104.30 0.0090 0.0008

Neptune 52795-10-20 03:22 G 21004329.42 21004329.64 21004329.86 0.0090 0.0002

Neptune 52796-06-01 16:34 G 21004554.97 21004555.19 21004555.41 0.0090 0.0009

Neptune 52797-01-13 05:46 G 21004780.53 21004780.74 21004780.96 0.0090 0.0018

Neptune 52797-08-26 19:12 G 21005006.10 21005006.30 21005006.52 0.0090 0.0026

Neptune 52798-04-09 08:24 G 21005231.66 21005231.85 21005232.07 0.0090 0.0035

Neptune 52798-11-20 21:36 G 21005457.22 21005457.40 21005457.61 0.0090 0.0043

Jupiter 52799-02-17 21:07 G 21005546.30 21005546.38 21005546.47 0.0502 0.0457

Saturn 52799-03-10 13:41 G 21005567.01 21005567.07 21005567.16 0.0281 0.0262

Neptune 52799-07-04 11:02 G 21005682.79 21005682.96 21005683.15 0.0090 0.0051

Saturn 52799-10-26 02:10 G 21005796.38 21005796.59 21005796.81 0.0278 0.0007

Neptune 52800-02-15 00:29 G 21005908.36 21005908.52 21005908.69 0.0090 0.0059

Uranus 52800-04-26 06:58 G 21005979.66 21005979.79 21005979.91 0.0142 0.0116

Saturn 52800-06-11 12:29 G 21006025.92 21006026.02 21006026.12 0.0276 0.0239

Neptune 52800-09-27 13:26 G 21006133.94 21006134.06 21006134.23 0.0090 0.0068

Uranus 52800-12-08 17:17 G 21006206.05 21006206.22 21006206.40 0.0142 0.0084

Neptune 52801-05-11 02:38 G 21006359.52 21006359.61 21006359.75 0.0090 0.0076

Uranus 52801-07-23 03:50 G 21006432.46 21006432.66 21006432.87 0.0142 0.0051

Neptune 52801-12-22 16:05 G 21006585.11 21006585.17 21006585.27 0.0090 0.0084

Uranus 52802-03-06 14:24 G 21006658.89 21006659.10 21006659.32 0.0142 0.0019

Uranus 52802-10-19 01:12 G 21006885.33 21006885.55 21006885.77 0.0143 0.0015

Uranus 52803-06-02 11:46 G 21007111.80 21007111.99 21007112.21 0.0143 0.0049

Uranus 52804-01-14 22:48 G 21007338.28 21007338.45 21007338.64 0.0143 0.0082

Uranus 52804-08-28 09:50 G 21007564.79 21007564.91 21007565.05 0.0143 0.0116

Jupiter 52805-08-09 17:17 G 21007911.02 21007911.22 21007911.43 0.0527 0.0016

Mars 52809-09-06 11:17 G 21009399.80 21009399.97 21009400.15 0.1881 0.0309

Jupiter 52811-06-17 06:58 G 21010048.63 21010048.79 21010048.96 0.0498 0.0292

Saturn 52815-07-02 02:10 G 21011524.40 21011524.59 21011524.79 0.0282 0.0109

Saturn 52816-02-16 16:19 G 21011754.01 21011754.18 21011754.36 0.0284 0.0154

Jupiter 52817-04-14 08:53 G 21012176.71 21012176.87 21012177.02 0.0525 0.0328

Jupiter 52823-02-20 07:26 G 21014314.60 21014314.81 21014315.01 0.0499 0.0008

Saturn 52828-09-19 22:48 G 21016353.33 21016353.45 21016353.59 0.0281 0.0220

Saturn 52829-05-07 10:48 G 21016582.74 21016582.95 21016583.16 0.0278 0.0033

Jupiter 52834-10-26 08:10 G 21018580.68 21018580.84 21018581.01 0.0501 0.0285

Mars 52838-11-26 02:38 G 21020072.44 21020072.61 21020072.78 0.1645 0.0307

Uranus 52840-08-12 10:19 G 21020697.81 21020697.93 21020698.06 0.0136 0.0111

Uranus 52841-03-26 17:02 G 21020924.05 21020924.21 21020924.40 0.0136 0.0082

Jupiter 52841-04-17 09:36 G 21020945.72 21020945.90 21020946.09 0.0529 0.0217

Uranus 52841-11-08 00:14 G 21021150.32 21021150.51 21021150.72 0.0136 0.0053

Uranus 52842-06-22 07:12 G 21021376.59 21021376.80 21021377.02 0.0136 0.0024

Uranus 52843-02-03 13:55 G 21021602.86 21021603.08 21021603.30 0.0136 0.0004

Uranus 52843-09-17 20:24 G 21021829.14 21021829.35 21021829.56 0.0135 0.0033

Uranus 52844-05-01 02:38 G 21022055.42 21022055.61 21022055.81 0.0135 0.0061

Uranus 52844-12-13 08:53 G 21022281.72 21022281.87 21022282.05 0.0135 0.0089

Saturn 52845-01-11 05:31 G 21022310.52 21022310.73 21022310.93 0.0282 0.0078

Uranus 52845-07-27 15:07 G 21022508.04 21022508.13 21022508.25 0.0135 0.0117

Saturn 52845-08-28 19:41 G 21022540.17 21022540.32 21022540.48 0.0285 0.0186

Jupiter 52847-02-22 16:19 G 21023083.11 21023083.18 21023083.27 0.0497 0.0452

Jupiter 52852-12-21 01:41 G 21025211.37 21025211.57 21025211.76 0.0527 0.0127

Saturn 52858-04-02 03:22 G 21027139.48 21027139.64 21027139.80 0.0280 0.0185

Jupiter 52858-10-28 17:31 G 21027349.04 21027349.23 21027349.43 0.0499 0.0170

Saturn 52858-11-17 15:07 G 21027368.93 21027369.13 21027369.34 0.0278 0.0068

Pluto 52861-09-20 00:43 G 21028406.38 21028406.53 21028406.71 0.0063 0.0041

Pluto 52862-05-03 04:34 G 21028631.48 21028631.69 21028631.92 0.0063 0.0005

Pluto 52862-12-14 07:41 G 21028856.66 21028856.82 21028857.03 0.0063 0.0034

Jupiter 52864-08-25 16:48 G 21029477.11 21029477.20 21029477.29 0.0524 0.0467

Jupiter 52870-07-03 18:14 G 21031615.06 21031615.26 21031615.46 0.0500 0.0119

Neptune 52871-02-19 21:36 G 21031846.34 21031846.40 21031846.51 0.0088 0.0081

Neptune 52871-10-03 10:34 G 21032071.84 21032071.94 21032072.08 0.0088 0.0073

Neptune 52872-05-15 23:31 G 21032297.34 21032297.48 21032297.63 0.0088 0.0065

Neptune 52872-12-27 12:00 G 21032522.86 21032523.00 21032523.19 0.0088 0.0058

Neptune 52873-08-10 00:58 G 21032748.37 21032748.54 21032748.73 0.0088 0.0050

Moon 52874-03-08 00:58 G 21032958.38 21032958.54 21032958.70 0.2634 0.0835

Earth 52874-03-08 01:12 G 21032958.40 21032958.55 21032958.70 0.2641 0.0804 *

Neptune 52874-03-23 13:41 G 21032973.89 21032974.07 21032974.27 0.0088 0.0042

Saturn 52874-07-24 13:26 G 21033096.85 21033097.06 21033097.27 0.0282 0.0037

Neptune 52874-11-04 02:24 G 21033199.40 21033199.60 21033199.81 0.0088 0.0034

Saturn 52875-03-11 03:50 G 21033326.55 21033326.66 21033326.80 0.0285 0.0228

Neptune 52875-06-17 15:07 G 21033424.93 21033425.13 21033425.35 0.0088 0.0026

Mars 52875-07-04 14:53 G 21033441.95 21033442.12 21033442.29 0.1884 0.0508

Neptune 52876-01-29 03:50 G 21033650.46 21033650.66 21033650.89 0.0088 0.0019

Neptune 52876-09-10 16:34 G 21033875.98 21033876.19 21033876.42 0.0088 0.0011

Jupiter 52876-12-24 00:00 G 21033980.37 21033980.50 21033980.62 0.0529 0.0411

Neptune 52877-04-24 05:17 G 21034101.50 21034101.72 21034101.95 0.0088 0.0003

Neptune 52877-12-05 18:00 G 21034327.03 21034327.25 21034327.47 0.0088 0.0005

Neptune 52878-07-19 06:43 G 21034552.56 21034552.78 21034553.00 0.0088 0.0013

Neptune 52879-03-01 19:12 G 21034778.10 21034778.30 21034778.52 0.0088 0.0021

Neptune 52879-10-13 07:55 G 21035003.63 21035003.83 21035004.05 0.0088 0.0029

Neptune 52880-05-25 20:24 G 21035229.16 21035229.35 21035229.57 0.0088 0.0037

Neptune 52881-01-06 09:07 G 21035454.71 21035454.88 21035455.09 0.0088 0.0045

Neptune 52881-08-19 22:05 G 21035680.25 21035680.42 21035680.60 0.0088 0.0052

Moon 52882-03-05 13:26 G 21035878.02 21035878.06 21035878.10 0.2637 0.2539

Earth 52882-03-05 18:00 G 21035878.19 21035878.25 21035878.30 0.2641 0.2446

Jupiter 52882-03-08 18:14 G 21035881.15 21035881.26 21035881.38 0.0502 0.0410

Neptune 52882-04-02 10:34 G 21035905.79 21035905.94 21035906.11 0.0088 0.0060

Neptune 52882-11-13 23:02 G 21036131.34 21036131.46 21036131.62 0.0088 0.0068

Neptune 52883-06-27 11:46 G 21036356.90 21036356.99 21036357.12 0.0088 0.0076

Uranus 52883-12-25 14:24 G 21036538.02 21036538.10 21036538.19 0.0142 0.0130

Neptune 52884-02-08 00:43 G 21036582.48 21036582.53 21036582.62 0.0088 0.0083

Uranus 52884-08-08 00:29 G 21036764.38 21036764.52 21036764.70 0.0142 0.0098

Uranus 52885-03-22 11:02 G 21036990.78 21036990.96 21036991.17 0.0142 0.0066

Uranus 52885-11-03 21:50 G 21037217.20 21037217.41 21037217.62 0.0142 0.0032

Uranus 52886-06-18 08:38 G 21037443.64 21037443.86 21037444.08 0.0143 0.0002

Uranus 52887-01-30 19:12 G 21037670.09 21037670.30 21037670.52 0.0143 0.0035

Uranus 52887-09-14 06:00 G 21037896.57 21037896.75 21037896.95 0.0143 0.0068

Saturn 52887-10-13 12:00 G 21037925.82 21037926.00 21037926.18 0.0280 0.0144

Uranus 52888-04-27 17:02 G 21038123.06 21038123.21 21038123.37 0.0143 0.0101

Saturn 52888-05-29 23:17 G 21038155.28 21038155.47 21038155.67 0.0278 0.0107

Jupiter 52888-08-28 15:07 G 21038245.93 21038246.13 21038246.33 0.0528 0.0065

Uranus 52888-12-10 04:19 G 21038349.61 21038349.68 21038349.76 0.0143 0.0135

Jupiter 52894-07-06 04:34 G 21040383.54 21040383.69 21040383.84 0.0497 0.0337

Jupiter 52900-05-04 08:10 G 21042511.67 21042511.84 21042512.01 0.0526 0.0272

Saturn 52903-06-20 03:22 G 21043653.57 21043653.64 21043653.71 0.0280 0.0262

Saturn 52904-02-04 15:50 G 21043882.95 21043883.16 21043883.38 0.0282 0.0009

Saturn 52904-09-21 06:29 G 21044112.69 21044112.77 21044112.86 0.0285 0.0258

Mars 52904-09-23 14:53 G 21044114.96 21044115.12 21044115.28 0.1643 0.0581

Jupiter 52906-03-12 05:17 G 21044649.51 21044649.72 21044649.92 0.0499 0.0051

Saturn 52917-04-25 14:38 G 21048711.93 21048712.11 21048712.31 0.0280 0.0114

Jupiter 52917-11-15 05:46 G 21048915.56 21048915.74 21048915.92 0.0501 0.0239

Saturn 52917-12-11 02:10 G 21048941.41 21048941.59 21048941.78 0.0277 0.0138

Uranus 52924-04-12 19:12 G 21051256.22 21051256.30 21051256.41 0.0136 0.0123

Jupiter 52924-05-07 07:55 G 21051280.66 21051280.83 21051281.01 0.0528 0.0269

Uranus 52924-11-25 02:10 G 21051482.45 21051482.59 21051482.76 0.0136 0.0094

Uranus 52925-07-09 09:22 G 21051708.71 21051708.89 21051709.09 0.0136 0.0065

Uranus 52926-02-20 16:19 G 21051934.97 21051935.18 21051935.39 0.0136 0.0036

Uranus 52926-10-04 23:02 G 21052161.24 21052161.46 21052161.67 0.0136 0.0008

Uranus 52927-05-19 05:31 G 21052387.52 21052387.73 21052387.95 0.0135 0.0021

Uranus 52927-12-31 12:00 G 21052613.80 21052614.00 21052614.20 0.0135 0.0049

Uranus 52928-08-13 18:14 G 21052840.09 21052840.26 21052840.44 0.0135 0.0078

Uranus 52929-03-28 00:14 G 21053066.39 21053066.51 21053066.66 0.0135 0.0105

Uranus 52929-11-09 06:14 G 21053292.74 21053292.76 21053292.82 0.0135 0.0133

Saturn 52932-12-30 09:22 G 21054439.78 21054439.89 21054440.02 0.0280 0.0228

Saturn 52933-08-16 22:34 G 21054669.23 21054669.44 21054669.65 0.0283 0.0031

Jupiter 52936-01-10 23:17 G 21055546.27 21055546.47 21055546.67 0.0526 0.0075

Mars 52941-05-01 17:17 G 21057484.10 21057484.22 21057484.34 0.1887 0.1387

Jupiter 52941-11-17 15:50 G 21057683.98 21057684.16 21057684.35 0.0498 0.0219

Saturn 52946-11-05 22:05 G 21059498.22 21059498.42 21059498.63 0.0280 0.0075

Saturn 52947-06-23 09:07 G 21059727.73 21059727.88 21059728.05 0.0277 0.0176

Jupiter 52947-09-15 14:24 G 21059811.99 21059812.10 21059812.23 0.0525 0.0417

Pluto 52951-11-06 15:07 G 21061325.09 21061325.13 21061325.19 0.0082 0.0079

Pluto 52952-06-19 02:10 G 21061550.37 21061550.59 21061550.81 0.0081 0.0001

Pluto 52953-01-30 12:14 G 21061776.00 21061776.01 21061776.08 0.0081 0.0080

Jupiter 52953-07-23 18:00 G 21061950.05 21061950.25 21061950.45 0.0500 0.0064

Neptune 52953-11-18 23:31 G 21062068.42 21062068.48 21062068.59 0.0089 0.0083

Neptune 52954-07-02 12:43 G 21062293.94 21062294.03 21062294.18 0.0089 0.0075

Neptune 52955-02-13 02:10 G 21062519.47 21062519.59 21062519.76 0.0089 0.0067

Neptune 52955-09-26 15:50 G 21062745.00 21062745.16 21062745.33 0.0089 0.0058

Neptune 52956-05-09 05:02 G 21062970.54 21062970.71 21062970.90 0.0090 0.0050

Neptune 52956-12-20 18:14 G 21063196.08 21063196.26 21063196.47 0.0090 0.0042

Neptune 52957-08-03 07:41 G 21063421.63 21063421.82 21063422.04 0.0090 0.0034

Neptune 52958-03-16 21:07 G 21063647.18 21063647.38 21063647.60 0.0090 0.0025

Neptune 52958-10-28 10:34 G 21063872.73 21063872.94 21063873.16 0.0090 0.0017

Neptune 52959-06-11 00:00 G 21064098.28 21064098.50 21064098.72 0.0090 0.0009

Jupiter 52960-01-14 00:43 G 21064315.44 21064315.53 21064315.62 0.0530 0.0472

Neptune 52960-01-22 13:26 G 21064323.84 21064324.06 21064324.28 0.0090 0.0000

Neptune 52960-09-04 02:53 G 21064549.40 21064549.62 21064549.84 0.0090 0.0008

Neptune 52961-04-17 16:05 G 21064774.96 21064775.17 21064775.39 0.0090 0.0017

Neptune 52961-11-29 05:31 G 21065000.52 21065000.73 21065000.95 0.0090 0.0025

Saturn 52962-07-12 11:31 G 21065225.84 21065225.98 21065226.13 0.0280 0.0198

Neptune 52962-07-12 18:58 G 21065226.09 21065226.29 21065226.50 0.0090 0.0033 *

Neptune 52963-02-23 08:10 G 21065451.66 21065451.84 21065452.05 0.0090 0.0042

Saturn 52963-02-27 00:29 G 21065455.31 21065455.52 21065455.72 0.0283 0.0059

Neptune 52963-10-06 21:22 G 21065677.23 21065677.39 21065677.59 0.0090 0.0050

Neptune 52964-05-19 10:48 G 21065902.80 21065902.95 21065903.13 0.0090 0.0058

Neptune 52964-12-31 00:14 G 21066128.37 21066128.51 21066128.67 0.0090 0.0066

Jupiter 52965-03-28 17:46 G 21066216.10 21066216.24 21066216.39 0.0501 0.0356

Neptune 52965-08-13 13:41 G 21066353.96 21066354.07 21066354.20 0.0090 0.0074

Neptune 52966-03-27 02:53 G 21066579.55 21066579.62 21066579.72 0.0090 0.0082

Uranus 52968-04-08 07:55 G 21067322.71 21067322.83 21067322.97 0.0142 0.0111

Uranus 52968-11-20 18:14 G 21067549.10 21067549.26 21067549.46 0.0142 0.0079

Uranus 52969-07-05 05:02 G 21067775.51 21067775.71 21067775.92 0.0142 0.0046

Uranus 52970-02-16 15:36 G 21068001.94 21068002.15 21068002.37 0.0143 0.0013

Mars 52970-07-22 02:24 G 21068157.46 21068157.60 21068157.75 0.1641 0.0876

Uranus 52970-10-01 02:24 G 21068228.39 21068228.60 21068228.82 0.0143 0.0020

Uranus 52971-05-15 13:12 G 21068454.85 21068455.05 21068455.26 0.0143 0.0054

Jupiter 52971-09-18 17:02 G 21068581.01 21068581.21 21068581.41 0.0528 0.0131

Uranus 52971-12-28 00:14 G 21068681.35 21068681.51 21068681.69 0.0143 0.0088

Uranus 52972-08-10 11:31 G 21068907.87 21068907.98 21068908.10 0.0143 0.0121

Saturn 52976-05-17 23:31 G 21070284.27 21070284.48 21070284.69 0.0279 0.0047

Saturn 52977-01-02 10:34 G 21070513.80 21070513.94 21070514.09 0.0277 0.0202

Jupiter 52977-07-26 03:22 G 21070718.51 21070718.64 21070718.77 0.0497 0.0386

Jupiter 52983-05-24 08:24 G 21072846.67 21072846.85 21072847.04 0.0526 0.0210

Moon 52987-09-09 00:14 G 21074415.35 21074415.51 21074415.68 0.2686 0.0271

Earth 52987-09-09 04:19 G 21074415.53 21074415.68 21074415.84 0.2691 0.0675 *

Jupiter 52989-03-31 04:19 G 21074984.48 21074984.68 21074984.88 0.0499 0.0104

Saturn 52992-01-22 16:19 G 21076012.02 21076012.18 21076012.36 0.0281 0.0166

Saturn 52992-09-08 05:31 G 21076241.54 21076241.73 21076241.94 0.0283 0.0094

Jupiter 53000-12-05 05:31 G 21079250.54 21079250.73 21079250.92 0.0500 0.0183

54TH MILLENNIUM CE

This is a list of transits of Venus in the 54th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Mars 53002-07-21 21:07 G 21079844.30 21079844.38 21079844.45 0.1647 0.1487

Saturn 53005-04-13 17:17 G 21080841.16 21080841.22 21080841.29 0.0282 0.0266

Saturn 53005-11-29 06:14 G 21081070.55 21081070.76 21081070.97 0.0279 0.0010

Saturn 53006-07-16 17:02 G 21081300.11 21081300.21 21081300.32 0.0277 0.0238

Jupiter 53007-05-28 07:12 G 21081615.64 21081615.80 21081615.96 0.0529 0.0325

Uranus 53007-12-13 05:17 G 21081814.69 21081814.72 21081814.77 0.0136 0.0134

Uranus 53008-07-26 12:29 G 21082040.89 21082041.02 21082041.16 0.0136 0.0105

Uranus 53009-03-09 19:12 G 21082267.13 21082267.30 21082267.49 0.0136 0.0076

Uranus 53009-10-22 02:10 G 21082493.39 21082493.59 21082493.80 0.0136 0.0047

Uranus 53010-06-05 08:53 G 21082719.66 21082719.87 21082720.10 0.0136 0.0019

Uranus 53011-01-17 15:36 G 21082945.94 21082946.15 21082946.37 0.0136 0.0010

Uranus 53011-08-31 22:05 G 21083172.21 21083172.42 21083172.63 0.0135 0.0039

Uranus 53012-04-14 04:19 G 21083398.49 21083398.68 21083398.87 0.0135 0.0067

Jupiter 53012-08-10 06:58 G 21083516.73 21083516.79 21083516.87 0.0502 0.0468

Uranus 53012-11-26 10:34 G 21083624.79 21083624.94 21083625.10 0.0135 0.0094

Uranus 53013-07-10 16:34 G 21083851.12 21083851.19 21083851.30 0.0135 0.0122

Jupiter 53019-01-31 00:29 G 21085881.31 21085881.52 21085881.72 0.0528 0.0017

Saturn 53021-08-04 18:14 G 21086798.07 21086798.26 21086798.44 0.0280 0.0136

Saturn 53022-03-22 06:58 G 21087027.61 21087027.79 21087027.99 0.0283 0.0123

Jupiter 53024-12-07 16:34 G 21088019.02 21088019.19 21088019.36 0.0498 0.0274

Jupiter 53030-10-05 17:46 G 21090147.09 21090147.24 21090147.39 0.0526 0.0346

Saturn 53034-10-24 17:02 G 21091627.11 21091627.21 21091627.32 0.0282 0.0243

Neptune 53035-05-26 08:10 G 21091840.78 21091840.84 21091840.95 0.0088 0.0081

Saturn 53035-06-11 06:00 G 21091856.54 21091856.75 21091856.96 0.0279 0.0014

Neptune 53036-01-06 21:22 G 21092066.28 21092066.39 21092066.52 0.0088 0.0073

Saturn 53036-01-26 16:48 G 21092086.14 21092086.20 21092086.28 0.0277 0.0262

Mars 53036-05-19 14:38 G 21092199.99 21092200.11 21092200.24 0.1639 0.1145

Jupiter 53036-08-12 17:46 G 21092285.04 21092285.24 21092285.45 0.0499 0.0011

Neptune 53036-08-19 10:19 G 21092291.79 21092291.93 21092292.08 0.0088 0.0065

Neptune 53037-04-01 22:34 G 21092517.30 21092517.44 21092517.63 0.0088 0.0058

Neptune 53037-11-13 11:31 G 21092742.81 21092742.98 21092743.17 0.0088 0.0050

Neptune 53038-06-27 00:29 G 21092968.33 21092968.52 21092968.72 0.0088 0.0042

Neptune 53039-02-07 12:58 G 21093193.86 21093194.04 21093194.26 0.0088 0.0035

Neptune 53039-09-21 01:55 G 21093419.38 21093419.58 21093419.80 0.0088 0.0027

Neptune 53040-05-03 14:38 G 21093644.90 21093645.11 21093645.33 0.0088 0.0019

Neptune 53040-12-15 03:36 G 21093870.43 21093870.65 21093870.87 0.0088 0.0011

Neptune 53041-07-28 16:05 G 21094095.96 21094096.17 21094096.40 0.0088 0.0004

Neptune 53042-03-11 04:48 G 21094321.48 21094321.70 21094321.93 0.0088 0.0005

Neptune 53042-10-22 17:17 G 21094547.01 21094547.22 21094547.45 0.0088 0.0013

Neptune 53043-06-05 06:14 G 21094772.54 21094772.76 21094772.97 0.0088 0.0020

Neptune 53044-01-16 18:43 G 21094998.08 21094998.28 21094998.50 0.0088 0.0028

Neptune 53044-08-29 07:12 G 21095223.62 21095223.80 21095224.02 0.0088 0.0036

Neptune 53045-04-11 20:10 G 21095449.15 21095449.34 21095449.53 0.0088 0.0043

Neptune 53045-11-23 08:38 G 21095674.69 21095674.86 21095675.05 0.0088 0.0051

Neptune 53046-07-06 21:07 G 21095900.23 21095900.38 21095900.56 0.0088 0.0059

Neptune 53047-02-17 10:19 G 21096125.79 21096125.93 21096126.07 0.0088 0.0066

Neptune 53047-09-30 22:34 G 21096351.34 21096351.44 21096351.58 0.0088 0.0074

Jupiter 53048-04-17 18:00 G 21096551.09 21096551.25 21096551.41 0.0501 0.0299

Neptune 53048-05-13 11:02 G 21096576.91 21096576.96 21096577.07 0.0088 0.0082

Saturn 53051-02-14 21:50 G 21097584.22 21097584.41 21097584.61 0.0281 0.0106

Saturn 53051-10-02 11:17 G 21097813.79 21097813.97 21097814.15 0.0284 0.0154

Uranus 53051-12-08 15:07 G 21097881.05 21097881.13 21097881.25 0.0142 0.0125

Uranus 53052-07-22 01:41 G 21098107.41 21098107.57 21098107.74 0.0142 0.0092

Uranus 53053-03-05 12:14 G 21098333.81 21098334.01 21098334.21 0.0142 0.0060

Uranus 53053-10-17 22:48 G 21098560.24 21098560.45 21098560.67 0.0143 0.0027

Uranus 53054-06-01 09:36 G 21098786.68 21098786.90 21098787.12 0.0143 0.0007

Jupiter 53054-10-08 17:31 G 21098916.04 21098916.23 21098916.42 0.0528 0.0192

Uranus 53055-01-13 20:24 G 21099013.14 21099013.35 21099013.56 0.0143 0.0040

Uranus 53055-08-28 07:12 G 21099239.62 21099239.80 21099239.99 0.0143 0.0074

Uranus 53056-04-10 18:14 G 21099466.13 21099466.26 21099466.41 0.0143 0.0107

Uranus 53056-11-23 05:31 G 21099692.70 21099692.73 21099692.78 0.0143 0.0141

Jupiter 53060-08-15 04:19 G 21101053.59 21101053.68 21101053.77 0.0497 0.0442

Saturn 53064-05-05 23:02 G 21102413.32 21102413.46 21102413.61 0.0282 0.0206

Saturn 53064-12-21 12:00 G 21102642.79 21102643.00 21102643.21 0.0279 0.0051

Jupiter 53066-06-13 07:41 G 21103181.63 21103181.82 21103182.02 0.0527 0.0156

Mars 53068-05-18 08:53 G 21103886.75 21103886.87 21103886.99 0.1645 0.1195

Jupiter 53072-04-20 06:58 G 21105319.59 21105319.79 21105319.98 0.0498 0.0166

Jupiter 53078-02-16 01:26 G 21107447.49 21107447.56 21107447.64 0.0525 0.0485

Saturn 53080-08-26 23:17 G 21108370.27 21108370.47 21108370.68 0.0280 0.0077

Saturn 53081-04-13 12:29 G 21108599.86 21108600.02 21108600.18 0.0283 0.0182

Jupiter 53083-12-25 07:26 G 21109585.62 21109585.81 21109586.01 0.0500 0.0121

Jupiter 53090-06-16 11:31 G 21111950.86 21111950.98 21111951.12 0.0529 0.0400

Uranus 53092-03-25 22:34 G 21112599.34 21112599.44 21112599.57 0.0136 0.0116

Uranus 53092-11-07 05:46 G 21112825.58 21112825.74 21112825.91 0.0136 0.0086

Uranus 53093-06-21 12:29 G 21113051.84 21113052.02 21113052.23 0.0136 0.0058

Saturn 53093-11-15 21:50 G 21113199.26 21113199.41 21113199.58 0.0281 0.0185

Uranus 53094-02-02 19:26 G 21113278.10 21113278.31 21113278.52 0.0136 0.0029

Saturn 53094-07-03 10:48 G 21113428.75 21113428.95 21113429.16 0.0279 0.0072

Uranus 53094-09-17 01:55 G 21113504.37 21113504.58 21113504.80 0.0136 0.0002

Uranus 53095-05-01 08:24 G 21113730.64 21113730.85 21113731.07 0.0135 0.0028

Jupiter 53095-08-30 07:55 G 21113851.71 21113851.83 21113851.95 0.0502 0.0409

Uranus 53095-12-13 14:38 G 21113956.92 21113957.11 21113957.32 0.0135 0.0057

Uranus 53096-07-26 21:07 G 21114183.21 21114183.38 21114183.55 0.0135 0.0084

Uranus 53097-03-10 03:07 G 21114409.52 21114409.63 21114409.76 0.0135 0.0112

Jupiter 53102-02-20 03:22 G 21116216.44 21116216.64 21116216.84 0.0527 0.0058

Mars 53102-03-18 02:53 G 21116242.53 21116242.62 21116242.70 0.1637 0.1422

Mars 53104-12-25 20:53 G 21117256.26 21117256.37 21117256.48 0.1883 0.1417

Pluto 53107-10-22 11:46 G 21118286.81 21118286.99 21118287.20 0.0063 0.0028

Jupiter 53107-12-28 17:46 G 21118354.09 21118354.24 21118354.39 0.0498 0.0332

Pluto 53108-06-03 15:36 G 21118511.94 21118512.15 21118512.37 0.0063 0.0009

Pluto 53109-01-14 18:43 G 21118737.16 21118737.28 21118737.46 0.0063 0.0047

Saturn 53110-03-10 02:24 G 21119156.40 21119156.60 21119156.81 0.0281 0.0048

Saturn 53110-10-25 15:50 G 21119386.03 21119386.16 21119386.30 0.0284 0.0213

Jupiter 53113-10-25 19:12 G 21120482.13 21120482.30 21120482.47 0.0525 0.0280

Moon 53117-03-11 02:38 G 21121714.46 21121714.61 21121714.76 0.2648 0.0562

Earth 53117-03-11 03:50 G 21121714.52 21121714.66 21121714.81 0.2641 0.0950 *

Neptune 53118-02-22 09:36 G 21122062.85 21122062.90 21122063.01 0.0089 0.0083

Neptune 53118-10-05 23:02 G 21122288.36 21122288.46 21122288.60 0.0089 0.0075

Neptune 53119-05-19 12:14 G 21122513.89 21122514.01 21122514.18 0.0089 0.0067

Jupiter 53119-09-02 19:41 G 21122620.12 21122620.32 21122620.53 0.0499 0.0052

Neptune 53119-12-31 01:41 G 21122739.42 21122739.57 21122739.75 0.0090 0.0059

Neptune 53120-08-12 14:53 G 21122964.96 21122965.12 21122965.32 0.0090 0.0051

Neptune 53121-03-26 04:19 G 21123190.50 21123190.68 21123190.89 0.0090 0.0043

Neptune 53121-11-06 18:00 G 21123416.04 21123416.25 21123416.45 0.0090 0.0034

Neptune 53122-06-20 07:12 G 21123641.59 21123641.80 21123642.01 0.0090 0.0026

Neptune 53123-01-31 20:24 G 21123867.14 21123867.35 21123867.57 0.0090 0.0018

Saturn 53123-05-30 03:22 G 21123985.46 21123985.64 21123985.82 0.0281 0.0148

Neptune 53123-09-14 09:50 G 21124092.70 21124092.91 21124093.13 0.0090 0.0010

Saturn 53124-01-14 16:05 G 21124214.98 21124215.17 21124215.37 0.0279 0.0107

Neptune 53124-04-26 23:17 G 21124318.25 21124318.47 21124318.69 0.0090 0.0001

Neptune 53124-12-08 12:29 G 21124543.81 21124544.02 21124544.24 0.0090 0.0007

Earth 53125-03-08 20:24 G 21124634.28 21124634.35 21124634.43 0.2642 0.2310

Moon 53125-03-08 23:17 G 21124634.39 21124634.47 21124634.55 0.2648 0.2192 *

Neptune 53125-07-22 01:55 G 21124769.37 21124769.58 21124769.80 0.0090 0.0015

Neptune 53126-03-04 15:22 G 21124994.93 21124995.14 21124995.36 0.0090 0.0023

Neptune 53126-10-16 04:34 G 21125220.50 21125220.69 21125220.91 0.0090 0.0032

Neptune 53127-05-29 18:00 G 21125446.06 21125446.25 21125446.45 0.0090 0.0040

Neptune 53128-01-10 07:26 G 21125671.63 21125671.81 21125672.00 0.0090 0.0048

Neptune 53128-08-22 21:07 G 21125897.21 21125897.38 21125897.55 0.0090 0.0056

Neptune 53129-04-05 09:50 G 21126122.78 21126122.91 21126123.09 0.0090 0.0065

Neptune 53129-11-16 23:46 G 21126348.36 21126348.49 21126348.62 0.0090 0.0072

Neptune 53130-06-30 12:29 G 21126573.95 21126574.02 21126574.14 0.0090 0.0081

Neptune 53131-02-11 02:24 G 21126799.57 21126799.60 21126799.64 0.0090 0.0088

Jupiter 53131-05-08 21:36 G 21126886.23 21126886.40 21126886.59 0.0501 0.0230

Mars 53134-03-16 20:53 G 21127929.23 21127929.37 21127929.52 0.1643 0.0903

Uranus 53135-08-08 21:22 G 21128439.36 21128439.39 21128439.44 0.0142 0.0139

Uranus 53136-03-22 07:26 G 21128665.69 21128665.81 21128665.97 0.0142 0.0107

Uranus 53136-11-03 18:00 G 21128892.08 21128892.25 21128892.45 0.0142 0.0074

Uranus 53137-06-18 04:34 G 21129118.49 21129118.69 21129118.91 0.0142 0.0042

Jupiter 53137-10-28 18:58 G 21129251.12 21129251.29 21129251.47 0.0529 0.0256

Uranus 53138-01-30 15:22 G 21129344.93 21129345.14 21129345.36 0.0143 0.0009

Uranus 53138-09-14 02:10 G 21129571.38 21129571.59 21129571.81 0.0143 0.0026

Saturn 53139-02-02 17:02 G 21129713.16 21129713.21 21129713.27 0.0278 0.0267

Uranus 53139-04-28 12:58 G 21129797.85 21129798.04 21129798.25 0.0143 0.0059

Saturn 53139-09-20 04:19 G 21129942.47 21129942.68 21129942.90 0.0281 0.0018

Uranus 53139-12-11 00:00 G 21130024.35 21130024.50 21130024.68 0.0143 0.0093

Saturn 53140-05-06 17:46 G 21130172.13 21130172.24 21130172.34 0.0283 0.0243

Uranus 53140-07-24 11:17 G 21130250.88 21130250.97 21130251.08 0.0143 0.0127

Jupiter 53149-07-03 12:29 G 21133516.82 21133517.02 21133517.23 0.0527 0.0079

Saturn 53152-12-09 01:41 G 21134771.39 21134771.57 21134771.77 0.0281 0.0129

Saturn 53153-07-26 14:24 G 21135000.92 21135001.10 21135001.29 0.0279 0.0127

Jupiter 53155-05-11 07:55 G 21135654.65 21135654.83 21135655.02 0.0498 0.0225

Jupiter 53161-03-08 05:17 G 21137782.60 21137782.72 21137782.85 0.0525 0.0410

Jupiter 53167-01-14 08:53 G 21139920.67 21139920.87 21139921.07 0.0500 0.0061

Saturn 53168-08-14 19:12 G 21140499.20 21140499.30 21140499.41 0.0279 0.0242

Saturn 53169-04-01 06:43 G 21140728.57 21140728.78 21140728.99 0.0281 0.0011

Saturn 53169-11-16 20:10 G 21140958.29 21140958.34 21140958.41 0.0284 0.0271

Mars 53170-10-23 00:29 G 21141298.36 21141298.52 21141298.69 0.1886 0.0603

Jupiter 53173-07-06 13:41 G 21142285.97 21142286.07 21142286.16 0.0529 0.0465

Uranus 53175-11-25 08:53 G 21143157.81 21143157.87 21143157.97 0.0136 0.0127

Uranus 53176-07-08 16:05 G 21143384.03 21143384.17 21143384.34 0.0136 0.0097

Uranus 53177-02-19 23:02 G 21143610.28 21143610.46 21143610.66 0.0136 0.0068

Uranus 53177-10-04 05:46 G 21143836.54 21143836.74 21143836.96 0.0136 0.0040

Uranus 53178-05-18 12:43 G 21144062.81 21144063.03 21144063.25 0.0136 0.0011

Jupiter 53178-09-19 10:19 G 21144186.79 21144186.93 21144187.08 0.0502 0.0345

Uranus 53178-12-30 19:12 G 21144289.08 21144289.30 21144289.52 0.0136 0.0018

Uranus 53179-08-14 01:26 G 21144515.36 21144515.56 21144515.77 0.0135 0.0046

Uranus 53180-03-27 07:41 G 21144741.65 21144741.82 21144742.01 0.0135 0.0074

Uranus 53180-11-08 13:55 G 21144967.95 21144968.08 21144968.23 0.0135 0.0102

Uranus 53181-06-22 19:55 G 21145194.29 21145194.33 21145194.41 0.0135 0.0130

Saturn 53182-06-21 06:58 G 21145557.59 21145557.79 21145557.99 0.0281 0.0092

Saturn 53183-02-05 19:26 G 21145787.15 21145787.31 21145787.49 0.0279 0.0163

Jupiter 53185-03-11 02:38 G 21146551.42 21146551.61 21146551.81 0.0528 0.0114

Jupiter 53191-01-16 21:22 G 21148689.28 21148689.39 21148689.52 0.0497 0.0398

Jupiter 53196-11-13 19:55 G 21150817.15 21150817.33 21150817.52 0.0526 0.0220

Pluto 53197-12-07 05:02 G 21151205.54 21151205.71 21151205.89 0.0081 0.0051

Saturn 53198-02-24 22:05 G 21151285.29 21151285.42 21151285.57 0.0278 0.0209

Pluto 53198-07-20 15:50 G 21151430.96 21151431.16 21151431.38 0.0081 0.0029

Saturn 53198-10-12 09:36 G 21151514.69 21151514.90 21151515.11 0.0281 0.0042

Neptune 53199-08-28 18:29 G 21151835.21 21151835.27 21151835.37 0.0088 0.0081

Mars 53200-01-12 08:53 G 21151971.71 21151971.87 21151972.03 0.1641 0.0618

Neptune 53200-04-10 07:26 G 21152060.70 21152060.81 21152060.94 0.0088 0.0073

Neptune 53200-11-21 19:55 G 21152286.20 21152286.33 21152286.49 0.0088 0.0066

Neptune 53201-07-05 08:53 G 21152511.71 21152511.87 21152512.04 0.0088 0.0058

Neptune 53202-02-15 21:22 G 21152737.23 21152737.39 21152737.59 0.0088 0.0051

Jupiter 53202-09-21 22:34 G 21152955.24 21152955.44 21152955.64 0.0499 0.0117

Neptune 53202-09-29 10:19 G 21152962.75 21152962.93 21152963.14 0.0088 0.0043

Neptune 53203-05-12 23:17 G 21153188.27 21153188.47 21153188.68 0.0088 0.0035

Neptune 53203-12-24 12:14 G 21153413.80 21153414.01 21153414.22 0.0088 0.0027

Neptune 53204-08-06 00:43 G 21153639.32 21153639.53 21153639.75 0.0088 0.0020

Neptune 53205-03-19 13:26 G 21153864.85 21153865.06 21153865.29 0.0088 0.0012

Neptune 53205-10-31 02:10 G 21154090.37 21154090.59 21154090.82 0.0088 0.0005

Neptune 53206-06-13 14:53 G 21154315.90 21154316.12 21154316.34 0.0088 0.0004

Neptune 53207-01-25 03:36 G 21154541.44 21154541.65 21154541.88 0.0088 0.0012

Neptune 53207-09-07 16:19 G 21154766.97 21154767.18 21154767.40 0.0088 0.0019

Neptune 53208-04-20 04:48 G 21154992.50 21154992.70 21154992.92 0.0088 0.0027

Neptune 53208-12-01 17:17 G 21155218.04 21155218.22 21155218.44 0.0088 0.0035

Neptune 53209-07-15 06:14 G 21155443.57 21155443.76 21155443.96 0.0088 0.0042

Neptune 53210-02-25 18:43 G 21155669.12 21155669.28 21155669.48 0.0088 0.0050

Neptune 53210-10-09 07:41 G 21155894.66 21155894.82 21155894.99 0.0088 0.0057

Neptune 53211-05-22 19:55 G 21156120.20 21156120.33 21156120.50 0.0088 0.0065

Saturn 53212-01-01 05:31 G 21156343.53 21156343.73 21156343.94 0.0281 0.0072

Neptune 53212-01-03 09:07 G 21156345.76 21156345.88 21156346.00 0.0088 0.0072

Neptune 53212-08-15 21:22 G 21156571.32 21156571.39 21156571.50 0.0088 0.0080

Saturn 53212-08-17 18:00 G 21156573.09 21156573.25 21156573.41 0.0279 0.0182

Neptune 53213-03-29 10:19 G 21156796.92 21156796.93 21156796.96 0.0088 0.0087

Jupiter 53214-05-27 23:17 G 21157221.27 21157221.47 21157221.66 0.0500 0.0168

Uranus 53219-11-20 14:24 G 21159224.00 21159224.10 21159224.22 0.0142 0.0121

Uranus 53220-07-04 00:43 G 21159450.37 21159450.53 21159450.71 0.0142 0.0089

Jupiter 53220-11-16 23:02 G 21159586.30 21159586.46 21159586.62 0.0529 0.0329

Uranus 53221-02-15 11:17 G 21159676.77 21159676.97 21159677.17 0.0142 0.0056

Uranus 53221-09-29 21:50 G 21159903.20 21159903.41 21159903.63 0.0142 0.0022

Uranus 53222-05-14 08:38 G 21160129.64 21160129.86 21160130.07 0.0143 0.0011

Uranus 53222-12-26 19:26 G 21160356.11 21160356.31 21160356.52 0.0143 0.0045

Uranus 53223-08-10 06:29 G 21160582.59 21160582.77 21160582.96 0.0143 0.0078

Uranus 53224-03-23 17:17 G 21160809.10 21160809.22 21160809.37 0.0143 0.0112

Jupiter 53226-01-30 23:02 G 21161487.38 21161487.46 21161487.54 0.0502 0.0458

Saturn 53227-09-07 00:29 G 21162071.36 21162071.52 21162071.68 0.0279 0.0183

Saturn 53228-04-23 12:00 G 21162300.80 21162301.00 21162301.21 0.0282 0.0071

Earth 53230-09-11 03:50 G 21163171.51 21163171.66 21163171.82 0.2690 0.0523

Moon 53230-09-11 06:14 G 21163171.61 21163171.76 21163171.91 0.2697 0.0489 *

Jupiter 53232-07-22 14:38 G 21163851.90 21163852.11 21163852.31 0.0527 0.0013

Mars 53236-08-19 03:22 G 21165340.47 21165340.64 21165340.81 0.1889 0.0251

Jupiter 53238-05-30 10:19 G 21165989.77 21165989.93 21165990.10 0.0498 0.0286

Saturn 53241-07-13 10:34 G 21167129.73 21167129.94 21167130.15 0.0281 0.0036

Saturn 53242-02-27 23:02 G 21167359.33 21167359.46 21167359.59 0.0278 0.0217

Jupiter 53244-03-27 04:05 G 21168117.52 21168117.67 21168117.82 0.0525 0.0356

Jupiter 53250-02-02 12:58 G 21170255.84 21170256.04 21170256.25 0.0500 0.0009

Jupiter 53256-07-25 14:10 G 21172621.07 21172621.09 21172621.12 0.0530 0.0524

Saturn 53257-03-19 04:19 G 21172857.50 21172857.68 21172857.86 0.0278 0.0149

Saturn 53257-11-03 15:50 G 21173086.96 21173087.16 21173087.35 0.0281 0.0104

Uranus 53260-03-08 01:55 G 21173942.45 21173942.58 21173942.71 0.0136 0.0109

Uranus 53260-10-20 08:38 G 21174168.69 21174168.86 21174169.04 0.0136 0.0080

Uranus 53261-06-03 15:36 G 21174394.96 21174395.15 21174395.36 0.0136 0.0051

Jupiter 53261-10-08 13:12 G 21174521.88 21174522.05 21174522.21 0.0501 0.0278

Uranus 53262-01-15 22:34 G 21174621.22 21174621.44 21174621.65 0.0136 0.0022

Uranus 53262-08-30 05:02 G 21174847.50 21174847.71 21174847.93 0.0136 0.0007

Uranus 53263-04-13 11:17 G 21175073.77 21175073.97 21175074.19 0.0135 0.0036

Uranus 53263-11-25 17:46 G 21175300.06 21175300.24 21175300.44 0.0135 0.0063

Uranus 53264-07-09 00:14 G 21175526.36 21175526.51 21175526.68 0.0135 0.0091

Uranus 53265-02-20 06:29 G 21175752.68 21175752.77 21175752.88 0.0135 0.0119

Mars 53265-11-08 20:53 G 21176014.20 21176014.37 21176014.54 0.1639 0.0332

Jupiter 53268-03-30 07:26 G 21176886.62 21176886.81 21176887.00 0.0528 0.0191

Saturn 53270-06-07 19:12 G 21177686.27 21177686.30 21177686.36 0.0283 0.0277

Saturn 53271-01-23 09:50 G 21177915.70 21177915.91 21177916.13 0.0281 0.0015

Saturn 53271-09-09 21:50 G 21178145.31 21178145.41 21178145.53 0.0278 0.0238

Jupiter 53274-02-04 22:19 G 21179024.35 21179024.43 21179024.51 0.0497 0.0454

Jupiter 53279-12-03 23:46 G 21181152.30 21181152.49 21181152.69 0.0526 0.0146

Neptune 53282-05-26 19:12 G 21182057.23 21182057.30 21182057.40 0.0089 0.0083

Neptune 53283-01-07 08:38 G 21182282.75 21182282.86 21182282.99 0.0089 0.0075

Neptune 53283-08-20 22:05 G 21182508.29 21182508.42 21182508.58 0.0089 0.0067

Neptune 53284-04-02 11:17 G 21182733.82 21182733.97 21182734.15 0.0089 0.0059

Neptune 53284-11-14 00:43 G 21182959.36 21182959.53 21182959.72 0.0089 0.0051

Neptune 53285-06-27 14:10 G 21183184.90 21183185.09 21183185.29 0.0090 0.0043

Jupiter 53285-10-10 23:17 G 21183290.28 21183290.47 21183290.66 0.0499 0.0174

Neptune 53286-02-08 03:22 G 21183410.45 21183410.64 21183410.85 0.0090 0.0035

Neptune 53286-09-21 16:48 G 21183635.99 21183636.20 21183636.41 0.0090 0.0027

Saturn 53286-09-29 06:43 G 21183643.59 21183643.78 21183643.97 0.0279 0.0122

Neptune 53287-05-05 06:00 G 21183861.54 21183861.75 21183861.97 0.0090 0.0019

Saturn 53287-05-16 18:29 G 21183873.09 21183873.27 21183873.46 0.0282 0.0133

Neptune 53287-12-16 19:26 G 21184087.09 21184087.31 21184087.53 0.0090 0.0010

Neptune 53288-07-29 08:53 G 21184312.65 21184312.87 21184313.09 0.0090 0.0002

Neptune 53289-03-11 22:05 G 21184538.21 21184538.42 21184538.64 0.0090 0.0006

Neptune 53289-10-23 11:31 G 21184763.76 21184763.98 21184764.20 0.0090 0.0014

Neptune 53290-06-06 00:29 G 21184989.32 21184989.52 21184989.75 0.0090 0.0023

Neptune 53291-01-17 13:55 G 21185214.89 21185215.08 21185215.30 0.0090 0.0031

Jupiter 53291-08-08 16:19 G 21185418.10 21185418.18 21185418.26 0.0524 0.0476

Neptune 53291-08-31 03:22 G 21185440.46 21185440.64 21185440.85 0.0090 0.0039

Neptune 53292-04-12 16:48 G 21185666.03 21185666.20 21185666.40 0.0090 0.0047

Neptune 53292-11-24 06:00 G 21185891.60 21185891.75 21185891.94 0.0090 0.0055

Neptune 53293-07-07 19:26 G 21186117.18 21186117.31 21186117.49 0.0090 0.0063

Neptune 53294-02-18 08:53 G 21186342.76 21186342.87 21186343.02 0.0090 0.0071

Neptune 53294-10-01 22:19 G 21186568.35 21186568.43 21186568.55 0.0090 0.0079

Neptune 53295-05-15 11:31 G 21186793.95 21186793.98 21186794.06 0.0090 0.0087

Jupiter 53297-06-16 01:12 G 21187556.35 21187556.55 21187556.75 0.0500 0.0107

Saturn 53299-12-19 00:43 G 21188472.42 21188472.53 21188472.65 0.0283 0.0239

Saturn 53300-08-05 15:07 G 21188701.91 21188702.13 21188702.34 0.0280 0.0022

Saturn 53301-03-23 02:53 G 21188931.60 21188931.62 21188931.67 0.0278 0.0273

Mars 53302-06-17 06:43 G 21189382.64 21189382.78 21189382.92 0.1892 0.1089

Uranus 53303-07-21 20:38 G 21189782.32 21189782.36 21189782.45 0.0142 0.0136

Jupiter 53303-12-07 21:07 G 21189921.25 21189921.38 21189921.53 0.0529 0.0380

Uranus 53304-03-04 07:12 G 21190008.66 21190008.80 21190008.95 0.0142 0.0103

Uranus 53304-10-16 17:31 G 21190235.05 21190235.23 21190235.43 0.0142 0.0071

Uranus 53305-05-31 04:05 G 21190461.46 21190461.67 21190461.88 0.0142 0.0038

Uranus 53306-01-12 14:53 G 21190687.90 21190688.12 21190688.34 0.0143 0.0004

Uranus 53306-08-27 01:41 G 21190914.36 21190914.57 21190914.79 0.0143 0.0030

Uranus 53307-04-10 12:29 G 21191140.83 21191141.02 21191141.22 0.0143 0.0063

Uranus 53307-11-22 23:31 G 21191367.33 21191367.48 21191367.65 0.0143 0.0097

Uranus 53308-07-06 10:48 G 21191593.87 21191593.95 21191594.05 0.0143 0.0131

Jupiter 53309-02-20 02:38 G 21191822.48 21191822.61 21191822.74 0.0502 0.0388

Jupiter 53315-08-12 13:55 G 21194186.87 21194187.08 21194187.28 0.0528 0.0045

Saturn 53316-04-11 12:14 G 21194429.81 21194430.01 21194430.21 0.0279 0.0084

Saturn 53316-11-27 00:00 G 21194659.33 21194659.50 21194659.67 0.0281 0.0171

Jupiter 53321-06-19 12:00 G 21196324.86 21196325.00 21196325.15 0.0498 0.0345

Jupiter 53327-04-17 07:41 G 21198452.65 21198452.82 21198452.99 0.0526 0.0283

Saturn 53329-07-01 01:26 G 21199258.42 21199258.56 21199258.69 0.0283 0.0215

Saturn 53330-02-15 15:22 G 21199487.93 21199488.14 21199488.35 0.0280 0.0045

Mars 53331-09-07 09:22 G 21200056.71 21200056.89 21200057.06 0.1638 0.0067

Jupiter 53333-02-22 13:12 G 21200590.85 21200591.05 21200591.25 0.0499 0.0065

Uranus 53343-11-07 10:48 G 21204500.87 21204500.95 21204501.07 0.0137 0.0122

Uranus 53344-06-20 18:00 G 21204727.11 21204727.25 21204727.43 0.0136 0.0093

Jupiter 53344-10-28 12:58 G 21204856.86 21204857.04 21204857.22 0.0501 0.0223

Uranus 53345-02-02 01:12 G 21204953.36 21204953.55 21204953.75 0.0136 0.0063

Uranus 53345-09-16 08:10 G 21205179.63 21205179.84 21205180.05 0.0136 0.0034

Saturn 53345-10-22 14:53 G 21205215.92 21205216.12 21205216.33 0.0280 0.0056

Uranus 53346-04-30 14:53 G 21205405.90 21205406.12 21205406.33 0.0136 0.0006

Saturn 53346-06-09 02:53 G 21205445.48 21205445.62 21205445.78 0.0282 0.0201

Uranus 53346-12-12 21:22 G 21205632.18 21205632.39 21205632.61 0.0136 0.0023

Uranus 53347-07-27 03:36 G 21205858.47 21205858.65 21205858.87 0.0135 0.0053

Uranus 53348-03-09 10:05 G 21206084.76 21206084.92 21206085.11 0.0135 0.0081

Uranus 53348-10-21 16:34 G 21206311.07 21206311.19 21206311.32 0.0135 0.0108

Jupiter 53351-04-20 08:10 G 21207221.66 21207221.84 21207222.02 0.0528 0.0252

Pluto 53353-04-09 18:58 G 21207942.17 21207942.29 21207942.42 0.0063 0.0052

Pluto 53353-11-20 22:34 G 21208167.23 21208167.44 21208167.66 0.0063 0.0016

Pluto 53354-07-04 01:55 G 21208392.39 21208392.58 21208392.81 0.0063 0.0022

Pluto 53355-02-14 05:31 G 21208617.67 21208617.73 21208617.84 0.0063 0.0059

Saturn 53359-01-11 06:58 G 21210044.63 21210044.79 21210044.96 0.0282 0.0177

Saturn 53359-08-28 20:53 G 21210274.17 21210274.37 21210274.58 0.0280 0.0083

Earth 53360-03-12 06:29 G 21210470.63 21210470.77 21210470.92 0.2642 0.1076

Moon 53360-03-12 09:36 G 21210470.78 21210470.90 21210471.03 0.2636 0.1705 *

Jupiter 53362-12-23 20:53 G 21211487.17 21211487.37 21211487.57 0.0526 0.0098

Neptune 53363-12-01 04:34 G 21211829.62 21211829.69 21211829.79 0.0088 0.0081

Neptune 53364-07-13 17:46 G 21212055.12 21212055.24 21212055.36 0.0088 0.0073

Neptune 53365-02-24 06:00 G 21212280.62 21212280.75 21212280.91 0.0088 0.0066

Neptune 53365-10-07 18:58 G 21212506.13 21212506.29 21212506.46 0.0088 0.0058

Neptune 53366-05-21 07:26 G 21212731.65 21212731.81 21212732.01 0.0088 0.0051

Neptune 53367-01-01 20:24 G 21212957.17 21212957.35 21212957.55 0.0088 0.0043

Neptune 53367-08-15 09:07 G 21213182.69 21213182.88 21213183.09 0.0088 0.0036

Moon 53368-03-09 22:05 G 21213390.34 21213390.42 21213390.49 0.2636 0.2338

Earth 53368-03-09 23:02 G 21213390.37 21213390.46 21213390.55 0.2642 0.2165 *

Neptune 53368-03-27 21:50 G 21213408.21 21213408.41 21213408.63 0.0088 0.0028

Jupiter 53368-10-31 01:26 G 21213625.39 21213625.56 21213625.75 0.0499 0.0237

Neptune 53368-11-08 10:48 G 21213633.73 21213633.95 21213634.16 0.0088 0.0020

Neptune 53369-06-21 23:17 G 21213859.26 21213859.47 21213859.70 0.0088 0.0013

Neptune 53370-02-02 12:14 G 21214084.79 21214085.01 21214085.24 0.0088 0.0005

Neptune 53370-09-16 00:58 G 21214310.32 21214310.54 21214310.77 0.0088 0.0003

Neptune 53371-04-29 13:41 G 21214535.85 21214536.07 21214536.29 0.0088 0.0010

Neptune 53371-12-11 02:24 G 21214761.38 21214761.60 21214761.82 0.0088 0.0018

Neptune 53372-07-23 14:53 G 21214986.92 21214987.12 21214987.34 0.0088 0.0026

Neptune 53373-03-06 03:50 G 21215212.45 21215212.66 21215212.86 0.0088 0.0033

Neptune 53373-10-17 16:05 G 21215437.99 21215438.17 21215438.38 0.0088 0.0041

Neptune 53374-05-31 04:34 G 21215663.53 21215663.69 21215663.90 0.0088 0.0049

Jupiter 53374-08-28 13:55 G 21215752.97 21215753.08 21215753.20 0.0524 0.0426

Saturn 53374-09-17 11:31 G 21215772.91 21215772.98 21215773.04 0.0277 0.0262

Neptune 53375-01-11 17:31 G 21215889.07 21215889.23 21215889.41 0.0088 0.0056

Saturn 53375-05-04 21:50 G 21216002.19 21216002.41 21216002.62 0.0279 0.0016

Neptune 53375-08-25 06:29 G 21216114.62 21216114.77 21216114.92 0.0088 0.0063

Saturn 53375-12-20 09:50 G 21216231.81 21216231.91 21216232.02 0.0282 0.0241

Neptune 53376-04-06 18:29 G 21216340.16 21216340.27 21216340.42 0.0088 0.0071

Neptune 53376-11-18 07:26 G 21216565.72 21216565.81 21216565.91 0.0088 0.0078

Neptune 53377-07-01 19:41 G 21216791.29 21216791.32 21216791.39 0.0088 0.0086

Jupiter 53380-07-06 01:55 G 21217891.38 21217891.58 21217891.78 0.0500 0.0048

Jupiter 53386-12-26 23:46 G 21220256.39 21220256.49 21220256.60 0.0530 0.0449

Uranus 53387-11-02 15:07 G 21220567.02 21220567.13 21220567.27 0.0142 0.0117

Uranus 53388-06-16 01:41 G 21220793.40 21220793.57 21220793.75 0.0142 0.0084

Saturn 53388-07-23 09:07 G 21220830.70 21220830.88 21220831.06 0.0282 0.0150

Uranus 53389-01-28 12:00 G 21221019.81 21221020.00 21221020.21 0.0142 0.0052

Saturn 53389-03-09 22:48 G 21221060.25 21221060.45 21221060.65 0.0280 0.0108

Uranus 53389-09-11 22:48 G 21221246.24 21221246.45 21221246.67 0.0142 0.0018

Uranus 53390-04-26 09:36 G 21221472.68 21221472.90 21221473.12 0.0143 0.0016

Uranus 53390-12-08 20:24 G 21221699.15 21221699.35 21221699.56 0.0143 0.0050

Uranus 53391-07-23 07:26 G 21221925.64 21221925.81 21221925.99 0.0143 0.0083

Uranus 53392-03-05 18:14 G 21222152.16 21222152.26 21222152.40 0.0143 0.0118

Jupiter 53392-03-11 01:55 G 21222157.43 21222157.58 21222157.74 0.0502 0.0334

Mars 53397-07-04 21:07 G 21224099.21 21224099.38 21224099.55 0.1636 0.0226

Jupiter 53398-08-31 16:05 G 21224521.97 21224522.17 21224522.37 0.0527 0.0112

Saturn 53404-03-30 14:24 G 21226559.00 21226559.10 21226559.22 0.0278 0.0235

Jupiter 53404-07-09 10:48 G 21226659.83 21226659.95 21226660.08 0.0498 0.0395

Saturn 53404-11-15 01:12 G 21226788.34 21226788.55 21226788.76 0.0280 0.0015

Saturn 53405-07-02 13:41 G 21227018.03 21227018.07 21227018.13 0.0283 0.0273

Jupiter 53410-05-07 07:41 G 21228787.63 21228787.82 21228788.00 0.0525 0.0225

Jupiter 53416-03-14 12:58 G 21230925.84 21230926.04 21230926.24 0.0499 0.0118

Saturn 53418-02-03 15:50 G 21231616.96 21231617.16 21231617.35 0.0282 0.0110

Saturn 53418-09-21 05:02 G 21231846.53 21231846.71 21231846.89 0.0280 0.0147

Uranus 53427-07-08 20:38 G 21235059.32 21235059.36 21235059.41 0.0137 0.0133

Jupiter 53427-11-18 14:10 G 21235191.89 21235192.09 21235192.28 0.0501 0.0162

Uranus 53428-02-20 03:22 G 21235285.52 21235285.64 21235285.80 0.0136 0.0105

Uranus 53428-10-03 10:34 G 21235511.77 21235511.94 21235512.13 0.0136 0.0075

Uranus 53429-05-17 17:31 G 21235738.04 21235738.23 21235738.45 0.0136 0.0046

Uranus 53429-12-30 00:29 G 21235964.31 21235964.52 21235964.74 0.0136 0.0017

Uranus 53430-08-13 07:12 G 21236190.59 21236190.80 21236191.02 0.0136 0.0012

Uranus 53431-03-27 13:41 G 21236416.87 21236417.07 21236417.28 0.0135 0.0041

Uranus 53431-11-08 19:55 G 21236643.16 21236643.33 21236643.53 0.0135 0.0070

Uranus 53432-06-22 02:38 G 21236869.47 21236869.61 21236869.77 0.0135 0.0097

Uranus 53433-02-03 08:53 G 21237095.80 21237095.87 21237095.96 0.0135 0.0125

Saturn 53433-10-10 22:48 G 21237345.30 21237345.45 21237345.60 0.0278 0.0192

Jupiter 53434-05-10 04:48 G 21237556.53 21237556.70 21237556.87 0.0528 0.0297

Saturn 53434-05-28 09:22 G 21237574.69 21237574.89 21237575.10 0.0280 0.0058

Jupiter 53439-07-24 13:26 G 21239457.97 21239458.06 21239458.15 0.0503 0.0450

Pluto 53444-01-07 18:29 G 21241086.06 21241086.27 21241086.49 0.0081 0.0023

Pluto 53444-08-20 05:17 G 21241311.57 21241311.72 21241311.89 0.0081 0.0055

Jupiter 53446-01-12 22:05 G 21241822.22 21241822.42 21241822.62 0.0527 0.0034

Neptune 53446-08-30 04:19 G 21242051.61 21242051.68 21242051.77 0.0089 0.0083

Neptune 53447-04-12 17:17 G 21242277.12 21242277.22 21242277.36 0.0089 0.0076

Saturn 53447-08-16 19:12 G 21242403.10 21242403.30 21242403.51 0.0282 0.0081

Neptune 53447-11-24 06:43 G 21242502.65 21242502.78 21242502.94 0.0089 0.0068

Saturn 53448-04-02 08:10 G 21242632.68 21242632.84 21242633.01 0.0280 0.0176

Neptune 53448-07-06 20:10 G 21242728.19 21242728.34 21242728.52 0.0089 0.0060

Neptune 53449-02-17 09:36 G 21242953.73 21242953.90 21242954.09 0.0089 0.0052

Neptune 53449-09-30 22:48 G 21243179.27 21243179.45 21243179.66 0.0090 0.0044

Neptune 53450-05-14 12:14 G 21243404.81 21243405.01 21243405.22 0.0090 0.0036

Neptune 53450-12-26 01:26 G 21243630.36 21243630.56 21243630.78 0.0090 0.0028

Neptune 53451-08-08 14:53 G 21243855.92 21243856.12 21243856.34 0.0090 0.0020

Jupiter 53451-11-20 23:31 G 21243960.31 21243960.48 21243960.65 0.0498 0.0283

Neptune 53452-03-21 04:19 G 21244081.47 21244081.68 21244081.90 0.0090 0.0012

Neptune 53452-11-01 17:46 G 21244307.02 21244307.24 21244307.46 0.0090 0.0004

Neptune 53453-06-15 06:58 G 21244532.57 21244532.79 21244533.01 0.0090 0.0004

Neptune 53454-01-26 20:10 G 21244758.13 21244758.34 21244758.56 0.0090 0.0013

Neptune 53454-09-09 09:36 G 21244983.69 21244983.90 21244984.12 0.0090 0.0021

Neptune 53455-04-22 22:48 G 21245209.25 21245209.45 21245209.67 0.0090 0.0029

Neptune 53455-12-04 12:00 G 21245434.81 21245435.00 21245435.21 0.0090 0.0037

Neptune 53456-07-17 01:26 G 21245660.38 21245660.56 21245660.76 0.0090 0.0045

Neptune 53457-02-27 14:53 G 21245885.96 21245886.12 21245886.31 0.0090 0.0053

Jupiter 53457-09-17 14:53 G 21246087.98 21246088.12 21246088.28 0.0525 0.0363

Neptune 53457-10-11 04:05 G 21246111.53 21246111.67 21246111.85 0.0090 0.0061

Neptune 53458-05-24 17:31 G 21246337.11 21246337.23 21246337.39 0.0090 0.0069

Neptune 53459-01-05 06:43 G 21246562.69 21246562.78 21246562.92 0.0090 0.0077

Neptune 53459-08-18 20:10 G 21246788.30 21246788.34 21246788.44 0.0090 0.0085

Saturn 53463-04-23 02:24 G 21248131.43 21248131.60 21248131.77 0.0279 0.0163

Mars 53463-05-03 09:36 G 21248141.74 21248141.90 21248142.07 0.1634 0.0482

Jupiter 53463-07-26 23:31 G 21248226.28 21248226.48 21248226.68 0.0500 0.0001

Saturn 53463-12-08 13:41 G 21248360.87 21248361.07 21248361.27 0.0281 0.0089

Mars 53466-02-09 10:34 G 21249154.88 21249154.94 21249155.01 0.1888 0.1745

Jupiter 53470-01-15 22:34 G 21250591.38 21250591.44 21250591.51 0.0529 0.0501

Uranus 53471-07-03 23:02 G 21251125.39 21251125.46 21251125.56 0.0142 0.0130

Uranus 53472-02-15 09:07 G 21251351.74 21251351.88 21251352.06 0.0142 0.0098

Uranus 53472-09-28 19:41 G 21251578.14 21251578.32 21251578.53 0.0142 0.0065

Uranus 53473-05-13 06:29 G 21251804.56 21251804.77 21251804.99 0.0142 0.0032

Moon 53473-09-13 03:07 G 21251927.47 21251927.63 21251927.80 0.2683 0.0671

Earth 53473-09-13 03:50 G 21251927.50 21251927.66 21251927.82 0.2690 0.0378 *

Uranus 53473-12-25 17:31 G 21252031.01 21252031.23 21252031.44 0.0142 0.0003

Uranus 53474-08-09 04:05 G 21252257.47 21252257.67 21252257.89 0.0143 0.0036

Uranus 53475-03-23 15:07 G 21252483.94 21252484.13 21252484.32 0.0143 0.0069

Jupiter 53475-04-01 00:14 G 21252492.34 21252492.51 21252492.68 0.0502 0.0285

Uranus 53475-11-05 01:55 G 21252710.44 21252710.58 21252710.74 0.0143 0.0103

Uranus 53476-06-18 13:26 G 21252937.00 21252937.06 21252937.12 0.0143 0.0137

Saturn 53477-02-26 02:24 G 21253189.39 21253189.60 21253189.81 0.0281 0.0039

Saturn 53477-10-13 15:22 G 21253419.01 21253419.14 21253419.27 0.0279 0.0215

Jupiter 53481-09-20 11:02 G 21254856.76 21254856.96 21254857.15 0.0527 0.0151

Jupiter 53487-07-29 10:34 G 21256994.86 21256994.94 21256995.03 0.0498 0.0447

Saturn 53492-11-02 11:31 G 21258917.79 21258917.98 21258918.18 0.0279 0.0118

Jupiter 53493-05-26 02:53 G 21259122.44 21259122.62 21259122.82 0.0525 0.0183

Saturn 53493-06-19 23:02 G 21259147.28 21259147.46 21259147.65 0.0281 0.0135

Jupiter 53499-04-03 10:48 G 21261260.76 21261260.95 21261261.14 0.0499 0.0167

Jupiter 53505-01-29 20:53 G 21263388.32 21263388.37 21263388.42 0.0524 0.0504

Saturn 53506-01-22 17:17 G 21263746.17 21263746.22 21263746.30 0.0284 0.0268

Saturn 53506-09-09 07:55 G 21263975.62 21263975.83 21263976.04 0.0281 0.0006

Saturn 53507-04-26 19:55 G 21264205.25 21264205.33 21264205.44 0.0279 0.0248

Jupiter 53510-12-08 11:02 G 21265526.76 21265526.96 21265527.16 0.0501 0.0117

Uranus 53511-10-21 14:10 G 21265843.98 21265844.09 21265844.21 0.0137 0.0115

Uranus 53512-06-03 21:07 G 21266070.23 21266070.38 21266070.56 0.0136 0.0086

Uranus 53513-01-16 04:19 G 21266296.49 21266296.68 21266296.88 0.0136 0.0057

Uranus 53513-08-30 11:17 G 21266522.76 21266522.97 21266523.18 0.0136 0.0028

Uranus 53514-04-13 18:00 G 21266749.03 21266749.25 21266749.47 0.0136 0.0001

Uranus 53514-11-26 00:43 G 21266975.32 21266975.53 21266975.74 0.0136 0.0030

Uranus 53515-07-10 07:12 G 21267201.61 21267201.80 21267202.00 0.0135 0.0059

Uranus 53516-02-21 13:26 G 21267427.91 21267428.06 21267428.24 0.0135 0.0087

Uranus 53516-10-04 19:41 G 21267654.23 21267654.32 21267654.45 0.0135 0.0115

Jupiter 53517-05-30 04:48 G 21267891.55 21267891.70 21267891.85 0.0529 0.0355

Saturn 53522-05-16 16:05 G 21269703.97 21269704.17 21269704.37 0.0279 0.0086

Jupiter 53522-08-13 09:50 G 21269792.80 21269792.91 21269793.03 0.0503 0.0407

Saturn 53523-01-01 03:36 G 21269933.49 21269933.65 21269933.82 0.0282 0.0168

Neptune 53528-03-05 14:10 G 21271824.02 21271824.09 21271824.19 0.0088 0.0081

Neptune 53528-10-17 02:38 G 21272049.52 21272049.61 21272049.75 0.0088 0.0074

Jupiter 53529-02-01 20:10 G 21272157.13 21272157.34 21272157.54 0.0527 0.0019

Mars 53529-02-28 21:50 G 21272184.26 21272184.41 21272184.57 0.1632 0.0753

Neptune 53529-05-30 15:50 G 21272275.02 21272275.16 21272275.31 0.0088 0.0066

Neptune 53530-01-11 04:19 G 21272500.53 21272500.68 21272500.86 0.0088 0.0059

Neptune 53530-08-24 17:17 G 21272726.05 21272726.22 21272726.40 0.0088 0.0051

Neptune 53531-04-07 05:46 G 21272951.56 21272951.74 21272951.94 0.0088 0.0044

Neptune 53531-11-18 18:43 G 21273177.08 21273177.28 21273177.48 0.0088 0.0036

Mars 53531-12-08 13:12 G 21273196.89 21273197.05 21273197.20 0.1891 0.0876

Neptune 53532-07-01 07:12 G 21273402.60 21273402.80 21273403.02 0.0088 0.0029

Neptune 53533-02-11 20:10 G 21273628.13 21273628.34 21273628.56 0.0088 0.0021

Neptune 53533-09-25 08:53 G 21273853.66 21273853.87 21273854.09 0.0088 0.0014

Neptune 53534-05-08 21:36 G 21274079.18 21274079.40 21274079.62 0.0088 0.0006

Jupiter 53534-12-10 20:38 G 21274295.21 21274295.36 21274295.52 0.0499 0.0327

Neptune 53534-12-20 10:19 G 21274304.71 21274304.93 21274305.15 0.0088 0.0002

Neptune 53535-08-02 23:02 G 21274530.24 21274530.46 21274530.68 0.0088 0.0009

Saturn 53535-08-05 00:58 G 21274532.42 21274532.54 21274532.67 0.0283 0.0225

Neptune 53536-03-15 11:46 G 21274755.78 21274755.99 21274756.21 0.0088 0.0017

Saturn 53536-03-21 15:22 G 21274761.93 21274762.14 21274762.35 0.0281 0.0036

Neptune 53536-10-27 00:14 G 21274981.31 21274981.51 21274981.74 0.0088 0.0025

Neptune 53537-06-09 13:12 G 21275206.85 21275207.05 21275207.26 0.0088 0.0032

Neptune 53538-01-21 01:41 G 21275432.39 21275432.57 21275432.78 0.0088 0.0040

Neptune 53538-09-03 14:38 G 21275657.93 21275658.11 21275658.30 0.0088 0.0047

Neptune 53539-04-17 02:53 G 21275883.47 21275883.62 21275883.81 0.0088 0.0055

Neptune 53539-11-28 15:36 G 21276109.01 21276109.15 21276109.32 0.0088 0.0062

Neptune 53540-07-11 04:34 G 21276334.56 21276334.69 21276334.83 0.0088 0.0069

Jupiter 53540-10-07 09:22 G 21276422.74 21276422.89 21276423.06 0.0524 0.0323

Neptune 53541-02-21 16:48 G 21276560.12 21276560.20 21276560.33 0.0088 0.0077

Neptune 53541-10-05 05:31 G 21276785.69 21276785.73 21276785.81 0.0088 0.0084

Jupiter 53546-08-15 21:50 G 21278561.20 21278561.41 21278561.61 0.0500 0.0050

Saturn 53551-11-27 01:55 G 21280490.37 21280490.58 21280490.79 0.0279 0.0041

Saturn 53552-07-13 13:55 G 21280719.95 21280720.08 21280720.22 0.0282 0.0216

Uranus 53555-10-16 18:14 G 21281910.14 21281910.26 21281910.41 0.0142 0.0110

Uranus 53556-05-30 04:48 G 21282136.52 21282136.70 21282136.89 0.0142 0.0077

Uranus 53557-01-11 15:22 G 21282362.94 21282363.14 21282363.35 0.0142 0.0044

Uranus 53557-08-26 02:10 G 21282589.37 21282589.59 21282589.81 0.0142 0.0011

Uranus 53558-04-09 12:58 G 21282815.82 21282816.04 21282816.26 0.0143 0.0023

Jupiter 53558-04-20 20:53 G 21282827.20 21282827.37 21282827.55 0.0502 0.0239

Uranus 53558-11-21 23:46 G 21283042.30 21283042.49 21283042.70 0.0143 0.0057

Uranus 53559-07-06 11:02 G 21283268.79 21283268.96 21283269.13 0.0143 0.0090

Uranus 53560-02-17 21:50 G 21283495.32 21283495.41 21283495.53 0.0143 0.0124

Mars 53561-02-27 15:36 G 21283871.10 21283871.15 21283871.20 0.1638 0.1551

Jupiter 53564-10-10 09:22 G 21285191.71 21285191.89 21285192.08 0.0528 0.0205

Saturn 53565-02-14 08:38 G 21285318.70 21285318.86 21285319.01 0.0283 0.0187

Saturn 53565-10-01 22:19 G 21285548.22 21285548.43 21285548.63 0.0280 0.0072

Jupiter 53570-08-18 06:29 G 21287329.73 21287329.77 21287329.81 0.0497 0.0485

Jupiter 53576-06-15 02:10 G 21289457.39 21289457.59 21289457.78 0.0526 0.0127

Saturn 53580-10-21 19:41 G 21291047.26 21291047.32 21291047.41 0.0278 0.0257

Saturn 53581-06-08 06:29 G 21291276.55 21291276.77 21291276.98 0.0280 0.0010

Saturn 53582-01-23 18:43 G 21291506.18 21291506.28 21291506.38 0.0282 0.0249

Jupiter 53582-04-23 06:14 G 21291595.58 21291595.76 21291595.95 0.0499 0.0206

Jupiter 53588-02-18 18:14 G 21293723.17 21293723.26 21293723.36 0.0524 0.0455

Jupiter 53593-12-27 06:58 G 21295861.59 21295861.79 21295862.00 0.0501 0.0077

Saturn 53594-08-27 16:19 G 21296105.00 21296105.18 21296105.36 0.0282 0.0144

Mars 53594-12-27 10:19 G 21296226.80 21296226.93 21296227.07 0.1631 0.1014

Saturn 53595-04-14 05:46 G 21296334.55 21296334.74 21296334.94 0.0280 0.0114

Uranus 53595-06-21 00:58 G 21296402.47 21296402.54 21296402.64 0.0137 0.0126

Uranus 53596-02-02 08:10 G 21296628.70 21296628.84 21296629.01 0.0136 0.0097

Uranus 53596-09-15 15:22 G 21296854.96 21296855.14 21296855.34 0.0136 0.0067

Uranus 53597-04-29 22:19 G 21297081.23 21297081.43 21297081.64 0.0136 0.0038

Mars 53597-10-04 16:34 G 21297239.02 21297239.19 21297239.37 0.1894 0.0049

Uranus 53597-12-12 05:17 G 21297307.50 21297307.72 21297307.94 0.0136 0.0009

Uranus 53598-07-26 12:00 G 21297533.79 21297534.00 21297534.22 0.0136 0.0020

Uranus 53599-03-09 18:29 G 21297760.07 21297760.27 21297760.48 0.0135 0.0049

Pluto 53599-05-11 06:58 G 21297822.63 21297822.79 21297822.99 0.0063 0.0035

Uranus 53599-10-22 00:43 G 21297986.37 21297986.53 21297986.73 0.0135 0.0078

Pluto 53599-12-22 11:02 G 21298047.74 21298047.96 21298048.18 0.0063 0.0002

Uranus 53600-06-04 07:26 G 21298212.68 21298212.81 21298212.95 0.0135 0.0105

Jupiter 53600-06-17 22:48 G 21298226.31 21298226.45 21298226.58 0.0528 0.0390

Pluto 53600-08-03 14:38 G 21298272.94 21298273.11 21298273.29 0.0063 0.0039

Uranus 53601-01-16 13:41 G 21298439.05 21298439.07 21298439.11 0.0135 0.0133

Moon 53603-03-15 04:48 G 21299226.55 21299226.70 21299226.85 0.2645 0.0564

Earth 53603-03-15 09:07 G 21299226.74 21299226.88 21299227.02 0.2642 0.1218 *

Jupiter 53605-09-01 06:43 G 21300127.64 21300127.78 21300127.92 0.0503 0.0362

Saturn 53610-05-04 05:46 G 21301833.62 21301833.74 21301833.89 0.0278 0.0212

Neptune 53610-12-02 12:14 G 21302045.95 21302046.01 21302046.10 0.0089 0.0084

Saturn 53610-12-19 16:48 G 21302062.99 21302063.20 21302063.41 0.0280 0.0039

Moon 53611-03-13 00:29 G 21302146.42 21302146.52 21302146.63 0.2649 0.1883

Earth 53611-03-13 01:41 G 21302146.47 21302146.57 21302146.67 0.2642 0.2037 *

Neptune 53611-07-16 01:55 G 21302271.47 21302271.58 21302271.70 0.0089 0.0076

Jupiter 53612-02-21 14:10 G 21302491.88 21302492.09 21302492.29 0.0526 0.0055

Neptune 53612-02-26 14:53 G 21302497.00 21302497.12 21302497.29 0.0089 0.0069

Neptune 53612-10-09 04:19 G 21302722.54 21302722.68 21302722.86 0.0089 0.0061

Neptune 53613-05-22 17:46 G 21302948.08 21302948.24 21302948.43 0.0089 0.0053

Neptune 53614-01-03 07:12 G 21303173.62 21303173.80 21303174.00 0.0089 0.0045

Neptune 53614-08-16 20:38 G 21303399.17 21303399.36 21303399.57 0.0090 0.0037

Neptune 53615-03-30 10:05 G 21303624.72 21303624.92 21303625.14 0.0090 0.0029

Neptune 53615-11-10 23:31 G 21303850.27 21303850.48 21303850.70 0.0090 0.0021

Neptune 53616-06-23 12:58 G 21304075.82 21304076.04 21304076.26 0.0090 0.0013

Neptune 53617-02-04 02:10 G 21304301.37 21304301.59 21304301.81 0.0090 0.0005

Neptune 53617-09-17 15:36 G 21304526.93 21304527.15 21304527.37 0.0090 0.0003

Jupiter 53617-12-29 16:34 G 21304630.05 21304630.19 21304630.32 0.0498 0.0367

Neptune 53618-05-01 04:48 G 21304752.49 21304752.70 21304752.92 0.0090 0.0011

Neptune 53618-12-12 18:14 G 21304978.04 21304978.26 21304978.47 0.0090 0.0019

Neptune 53619-07-26 07:41 G 21305203.61 21305203.82 21305204.03 0.0090 0.0027

Neptune 53620-03-07 20:53 G 21305429.17 21305429.37 21305429.57 0.0090 0.0035

Neptune 53620-10-19 10:05 G 21305654.73 21305654.92 21305655.12 0.0090 0.0043

Neptune 53621-06-01 23:17 G 21305880.30 21305880.47 21305880.66 0.0090 0.0051

Neptune 53622-01-13 12:29 G 21306105.87 21306106.02 21306106.20 0.0090 0.0059

Neptune 53622-08-27 01:55 G 21306331.45 21306331.58 21306331.74 0.0090 0.0067

Neptune 53623-04-09 15:07 G 21306557.04 21306557.13 21306557.28 0.0090 0.0075

Jupiter 53623-10-27 06:43 G 21306757.61 21306757.78 21306757.95 0.0525 0.0274

Neptune 53623-11-21 05:02 G 21306782.63 21306782.71 21306782.80 0.0090 0.0082

Saturn 53624-03-09 00:43 G 21306891.33 21306891.53 21306891.73 0.0282 0.0104

Saturn 53624-10-24 13:41 G 21307120.90 21307121.07 21307121.25 0.0280 0.0153

Mars 53626-12-26 03:50 G 21307913.55 21307913.66 21307913.76 0.1636 0.1276

Jupiter 53629-09-03 17:17 G 21308896.02 21308896.22 21308896.42 0.0500 0.0088

Uranus 53639-06-16 01:55 G 21312468.48 21312468.58 21312468.69 0.0142 0.0123

Saturn 53639-11-14 10:05 G 21312619.77 21312619.92 21312620.09 0.0278 0.0180

Uranus 53640-01-28 12:00 G 21312694.85 21312695.00 21312695.18 0.0142 0.0091

Saturn 53640-06-30 21:22 G 21312849.19 21312849.39 21312849.60 0.0281 0.0071

Uranus 53640-09-10 22:34 G 21312921.25 21312921.44 21312921.65 0.0142 0.0058

Uranus 53641-04-25 09:22 G 21313147.68 21313147.89 21313148.11 0.0142 0.0024

Jupiter 53641-05-09 16:19 G 21313161.99 21313162.18 21313162.37 0.0502 0.0200

Uranus 53641-12-07 20:10 G 21313374.13 21313374.34 21313374.56 0.0143 0.0009

Uranus 53642-07-22 06:58 G 21313600.59 21313600.79 21313601.00 0.0143 0.0043

Uranus 53643-03-05 17:46 G 21313827.07 21313827.24 21313827.43 0.0143 0.0077

Uranus 53643-10-18 05:02 G 21314053.57 21314053.71 21314053.85 0.0143 0.0111

Jupiter 53647-10-30 06:43 G 21315526.60 21315526.78 21315526.96 0.0528 0.0252

Jupiter 53653-01-12 15:50 G 21317428.11 21317428.16 21317428.21 0.0504 0.0487

Saturn 53653-09-19 08:10 G 21317677.63 21317677.84 21317678.05 0.0282 0.0063

Saturn 53654-05-06 20:53 G 21317907.22 21317907.37 21317907.53 0.0279 0.0193

Jupiter 53659-07-04 20:24 G 21319792.15 21319792.35 21319792.55 0.0525 0.0088

Mars 53660-10-23 22:48 G 21320269.35 21320269.45 21320269.56 0.1629 0.1275

Mars 53663-08-01 19:12 G 21321281.14 21321281.30 21321281.45 0.1896 0.0839

Jupiter 53665-05-12 02:53 G 21321930.44 21321930.62 21321930.80 0.0499 0.0248

Saturn 53669-05-26 19:41 G 21323406.15 21323406.32 21323406.51 0.0279 0.0137

Saturn 53670-01-11 07:26 G 21323635.62 21323635.81 21323636.00 0.0281 0.0117

Jupiter 53671-03-09 12:29 G 21324057.90 21324058.02 21324058.15 0.0523 0.0416

Jupiter 53677-01-15 02:38 G 21326196.41 21326196.61 21326196.82 0.0501 0.0036

Uranus 53679-02-18 12:58 G 21326961.01 21326961.04 21326961.07 0.0137 0.0135

Uranus 53679-10-02 20:10 G 21327187.20 21327187.34 21327187.48 0.0137 0.0106

Uranus 53680-05-16 03:22 G 21327413.46 21327413.64 21327413.82 0.0136 0.0077

Uranus 53680-12-28 10:19 G 21327639.73 21327639.93 21327640.14 0.0136 0.0047

Uranus 53681-08-11 17:17 G 21327866.00 21327866.22 21327866.43 0.0136 0.0018

Uranus 53682-03-26 00:00 G 21328092.28 21328092.50 21328092.72 0.0136 0.0011

Saturn 53682-08-15 02:38 G 21328234.61 21328234.61 21328234.63 0.0284 0.0283

Uranus 53682-11-07 06:29 G 21328318.57 21328318.77 21328318.98 0.0136 0.0040

Saturn 53683-04-01 17:17 G 21328464.01 21328464.22 21328464.44 0.0281 0.0021

Uranus 53683-06-21 12:58 G 21328544.87 21328545.04 21328545.24 0.0135 0.0069

Jupiter 53683-07-07 19:55 G 21328561.22 21328561.33 21328561.44 0.0529 0.0438

Saturn 53683-11-17 05:46 G 21328693.63 21328693.74 21328693.86 0.0279 0.0233

Uranus 53684-02-02 19:26 G 21328771.17 21328771.31 21328771.47 0.0135 0.0097

Uranus 53684-09-16 01:55 G 21328997.50 21328997.58 21328997.67 0.0135 0.0124

Jupiter 53688-09-20 02:38 G 21330462.46 21330462.61 21330462.77 0.0502 0.0319

Pluto 53689-06-25 23:46 G 21330741.37 21330741.49 21330741.65 0.0081 0.0063

Pluto 53690-02-06 11:02 G 21330966.75 21330966.96 21330967.18 0.0081 0.0017

Neptune 53692-06-06 23:31 G 21331818.42 21331818.48 21331818.58 0.0088 0.0081

Mars 53692-10-22 16:05 G 21331956.03 21331956.17 21331956.31 0.1635 0.0998

Neptune 53693-01-18 12:29 G 21332043.92 21332044.02 21332044.15 0.0088 0.0074

Neptune 53693-09-01 00:58 G 21332269.42 21332269.54 21332269.71 0.0088 0.0067

Neptune 53694-04-14 13:55 G 21332494.93 21332495.08 21332495.25 0.0088 0.0059

Neptune 53694-11-26 02:24 G 21332720.44 21332720.60 21332720.80 0.0088 0.0052

Jupiter 53695-03-12 12:14 G 21332826.82 21332827.01 21332827.21 0.0527 0.0106

Neptune 53695-07-09 15:22 G 21332945.96 21332946.14 21332946.34 0.0088 0.0044

Neptune 53696-02-20 04:05 G 21333171.48 21333171.67 21333171.88 0.0088 0.0037

Neptune 53696-10-02 16:34 G 21333397.00 21333397.19 21333397.41 0.0088 0.0030

Neptune 53697-05-16 05:17 G 21333622.52 21333622.72 21333622.94 0.0088 0.0022

Neptune 53697-12-27 18:00 G 21333848.04 21333848.25 21333848.48 0.0088 0.0015

Neptune 53698-08-10 06:58 G 21334073.57 21334073.79 21334074.01 0.0088 0.0007

Saturn 53698-12-07 00:00 G 21334192.30 21334192.50 21334192.70 0.0279 0.0104

Neptune 53699-03-23 19:26 G 21334299.09 21334299.31 21334299.54 0.0088 0.0002

Saturn 53699-07-24 11:31 G 21334421.81 21334421.98 21334422.17 0.0281 0.0150

Neptune 53699-11-04 08:10 G 21334524.62 21334524.84 21334525.06 0.0088 0.0008

Neptune 53700-06-17 20:38 G 21334750.15 21334750.36 21334750.59 0.0088 0.0016

Jupiter 53701-01-18 12:00 G 21334964.88 21334965.00 21334965.12 0.0498 0.0403

Neptune 53701-01-29 09:36 G 21334975.69 21334975.90 21334976.12 0.0088 0.0023

Neptune 53701-09-11 22:05 G 21335201.23 21335201.42 21335201.64 0.0088 0.0031

Neptune 53702-04-25 11:02 G 21335426.76 21335426.96 21335427.16 0.0088 0.0038

Neptune 53702-12-06 23:17 G 21335652.30 21335652.47 21335652.68 0.0088 0.0046

Neptune 53703-07-20 12:00 G 21335877.84 21335878.00 21335878.19 0.0088 0.0053

Neptune 53704-03-02 01:12 G 21336103.39 21336103.55 21336103.71 0.0088 0.0060

Neptune 53704-10-13 13:26 G 21336328.94 21336329.06 21336329.22 0.0088 0.0068

Neptune 53705-05-27 02:10 G 21336554.49 21336554.59 21336554.72 0.0088 0.0075

Neptune 53706-01-07 14:53 G 21336780.05 21336780.12 21336780.21 0.0088 0.0082

Jupiter 53706-11-16 04:34 G 21337092.51 21337092.69 21337092.87 0.0525 0.0224

Saturn 53712-02-26 09:07 G 21339020.78 21339020.88 21339020.99 0.0283 0.0244

Jupiter 53712-09-23 12:43 G 21339230.83 21339231.03 21339231.23 0.0500 0.0126

Saturn 53712-10-12 23:46 G 21339250.28 21339250.49 21339250.70 0.0281 0.0018

Saturn 53713-05-30 12:00 G 21339479.96 21339480.00 21339480.05 0.0278 0.0270

Moon 53716-09-15 02:24 G 21340683.45 21340683.60 21340683.75 0.2697 0.0195

Earth 53716-09-15 03:36 G 21340683.49 21340683.65 21340683.80 0.2690 0.0245 *

Uranus 53723-02-14 10:05 G 21343026.87 21343026.92 21343026.99 0.0141 0.0136

Uranus 53723-09-28 20:10 G 21343253.21 21343253.34 21343253.50 0.0142 0.0104

Uranus 53724-05-12 06:29 G 21343479.60 21343479.77 21343479.97 0.0142 0.0071

Jupiter 53724-05-29 12:14 G 21343496.82 21343497.01 21343497.21 0.0502 0.0158

Uranus 53724-12-24 17:31 G 21343706.02 21343706.23 21343706.44 0.0142 0.0038

Uranus 53725-08-08 04:05 G 21343932.45 21343932.67 21343932.89 0.0142 0.0004

Uranus 53726-03-22 14:38 G 21344158.90 21344159.11 21344159.33 0.0143 0.0030

Mars 53726-08-22 11:31 G 21344311.92 21344311.98 21344312.03 0.1628 0.1536

Uranus 53726-11-04 01:26 G 21344385.37 21344385.56 21344385.76 0.0143 0.0064

Uranus 53727-06-18 12:29 G 21344611.87 21344612.02 21344612.18 0.0143 0.0097

Uranus 53728-01-30 23:31 G 21344838.41 21344838.48 21344838.58 0.0143 0.0131

Saturn 53728-06-19 09:07 G 21344978.68 21344978.88 21344979.09 0.0279 0.0062

Saturn 53729-02-03 21:07 G 21345208.24 21345208.38 21345208.54 0.0282 0.0195

Mars 53729-05-29 22:05 G 21345323.35 21345323.42 21345323.50 0.1899 0.1704

Jupiter 53730-11-19 01:26 G 21345861.39 21345861.56 21345861.73 0.0527 0.0291

Jupiter 53736-02-02 11:46 G 21347762.90 21347762.99 21347763.09 0.0504 0.0444

Saturn 53741-09-07 18:43 G 21349807.14 21349807.28 21349807.44 0.0283 0.0200

Saturn 53742-04-25 08:53 G 21350036.67 21350036.87 21350037.08 0.0281 0.0061

Jupiter 53742-07-24 17:02 G 21350127.01 21350127.21 21350127.42 0.0526 0.0044

Jupiter 53748-05-31 23:02 G 21352265.30 21352265.46 21352265.63 0.0499 0.0288

Jupiter 53754-03-29 10:34 G 21354392.80 21354392.94 21354393.09 0.0524 0.0366

Saturn 53757-05-15 02:10 G 21355535.59 21355535.59 21355535.61 0.0277 0.0277

Saturn 53757-12-30 12:29 G 21355764.81 21355765.02 21355765.23 0.0279 0.0030

Saturn 53758-08-17 00:29 G 21355994.40 21355994.52 21355994.65 0.0282 0.0226

Mars 53758-08-21 04:34 G 21355998.53 21355998.69 21355998.84 0.1633 0.0733

Jupiter 53760-02-04 23:02 G 21356531.25 21356531.46 21356531.66 0.0501 0.0008

Uranus 53763-06-03 06:58 G 21357745.70 21357745.79 21357745.92 0.0137 0.0117

Uranus 53764-01-15 14:24 G 21357971.94 21357972.10 21357972.28 0.0136 0.0087

Uranus 53764-08-28 21:22 G 21358198.21 21358198.39 21358198.60 0.0136 0.0058

Uranus 53765-04-12 04:19 G 21358424.48 21358424.68 21358424.91 0.0136 0.0030

Uranus 53765-11-24 11:31 G 21358650.76 21358650.98 21358651.20 0.0136 0.0001

Uranus 53766-07-08 18:14 G 21358877.05 21358877.26 21358877.48 0.0136 0.0030

Jupiter 53766-07-27 18:29 G 21358896.20 21358896.27 21358896.35 0.0529 0.0489

Uranus 53767-02-20 00:43 G 21359103.34 21359103.53 21359103.73 0.0135 0.0059

Uranus 53767-10-04 06:58 G 21359329.64 21359329.79 21359329.97 0.0135 0.0087

Uranus 53768-05-17 13:26 G 21359555.96 21359556.06 21359556.18 0.0135 0.0115

Saturn 53771-03-21 00:00 G 21360593.33 21360593.50 21360593.67 0.0283 0.0164

Jupiter 53771-10-10 22:34 G 21360797.27 21360797.44 21360797.61 0.0503 0.0279

Saturn 53771-11-05 13:55 G 21360822.89 21360823.08 21360823.28 0.0280 0.0096

Neptune 53775-03-06 19:55 G 21362040.28 21362040.33 21362040.42 0.0089 0.0085

Neptune 53775-10-18 09:22 G 21362265.79 21362265.89 21362266.01 0.0089 0.0077

Neptune 53776-05-30 22:19 G 21362491.32 21362491.43 21362491.60 0.0089 0.0070

Neptune 53777-01-11 12:00 G 21362716.86 21362717.00 21362717.17 0.0089 0.0062

Neptune 53777-08-25 01:26 G 21362942.40 21362942.56 21362942.75 0.0089 0.0054

Jupiter 53778-04-01 08:38 G 21363161.67 21363161.86 21363162.06 0.0526 0.0151

Neptune 53778-04-07 14:53 G 21363167.94 21363168.12 21363168.32 0.0089 0.0046

Neptune 53778-11-19 04:19 G 21363393.49 21363393.68 21363393.88 0.0089 0.0038

Neptune 53779-07-02 17:31 G 21363619.04 21363619.23 21363619.45 0.0090 0.0031

Neptune 53780-02-13 06:58 G 21363844.59 21363844.79 21363845.02 0.0090 0.0023

Neptune 53780-09-25 20:24 G 21364070.14 21364070.35 21364070.58 0.0090 0.0015

Neptune 53781-05-09 09:50 G 21364295.70 21364295.91 21364296.13 0.0090 0.0007

Neptune 53781-12-20 23:17 G 21364521.25 21364521.47 21364521.69 0.0090 0.0002

Neptune 53782-08-03 12:43 G 21364746.81 21364747.03 21364747.25 0.0090 0.0009

Neptune 53783-03-17 01:55 G 21364972.37 21364972.58 21364972.80 0.0090 0.0018

Neptune 53783-10-28 15:07 G 21365197.93 21365198.13 21365198.35 0.0090 0.0025

Jupiter 53784-02-07 08:53 G 21365299.78 21365299.87 21365299.96 0.0498 0.0446

Neptune 53784-06-10 04:34 G 21365423.49 21365423.69 21365423.90 0.0090 0.0033

Neptune 53785-01-21 17:46 G 21365649.06 21365649.24 21365649.45 0.0090 0.0041

Neptune 53785-09-04 07:12 G 21365874.63 21365874.80 21365874.99 0.0090 0.0049

Neptune 53786-04-17 20:24 G 21366100.20 21366100.35 21366100.54 0.0090 0.0057

Saturn 53786-11-25 09:50 G 21366321.82 21366321.91 21366322.03 0.0278 0.0239

Neptune 53786-11-29 09:36 G 21366325.77 21366325.90 21366326.07 0.0090 0.0065

Saturn 53787-07-12 20:38 G 21366551.15 21366551.36 21366551.58 0.0280 0.0013

Neptune 53787-07-12 23:31 G 21366551.35 21366551.48 21366551.61 0.0090 0.0072 *

Neptune 53788-02-23 12:29 G 21366776.94 21366777.02 21366777.14 0.0090 0.0080

Saturn 53788-02-27 09:22 G 21366780.82 21366780.89 21366780.95 0.0282 0.0268

Neptune 53788-10-06 01:41 G 21367002.55 21367002.57 21367002.64 0.0090 0.0088

Jupiter 53789-12-05 00:14 G 21367427.32 21367427.51 21367427.71 0.0525 0.0181

Jupiter 53795-10-13 09:07 G 21369565.69 21369565.88 21369566.08 0.0500 0.0169

Saturn 53800-10-01 09:22 G 21371379.70 21371379.89 21371380.09 0.0282 0.0120

Saturn 53801-05-18 22:48 G 21371609.28 21371609.45 21371609.64 0.0280 0.0138

Jupiter 53801-08-10 16:19 G 21371693.14 21371693.18 21371693.23 0.0523 0.0506

Uranus 53807-05-30 03:22 G 21373811.53 21373811.64 21373811.77 0.0141 0.0117

Jupiter 53807-06-19 10:19 G 21373831.73 21373831.93 21373832.13 0.0501 0.0110

Uranus 53808-01-11 13:41 G 21374037.91 21374038.07 21374038.25 0.0142 0.0085

Uranus 53808-08-25 00:00 G 21374264.31 21374264.50 21374264.71 0.0142 0.0052

Uranus 53809-04-08 10:48 G 21374490.73 21374490.95 21374491.16 0.0142 0.0019

Uranus 53809-11-20 21:22 G 21374717.17 21374717.39 21374717.61 0.0142 0.0015

Uranus 53810-07-05 08:10 G 21374943.63 21374943.84 21374944.04 0.0143 0.0049

Uranus 53811-02-16 18:43 G 21375170.11 21375170.28 21375170.47 0.0143 0.0083

Uranus 53811-10-01 05:31 G 21375396.62 21375396.73 21375396.87 0.0143 0.0117

Jupiter 53813-12-09 00:29 G 21376196.37 21376196.52 21376196.67 0.0528 0.0344

Saturn 53816-06-07 12:58 G 21377107.91 21377108.04 21377108.19 0.0277 0.0207

Saturn 53817-01-22 23:31 G 21377337.28 21377337.48 21377337.69 0.0280 0.0042

Jupiter 53819-02-22 09:22 G 21378097.77 21378097.89 21378098.02 0.0503 0.0397

Mars 53824-06-18 16:34 G 21380041.02 21380041.19 21380041.35 0.1631 0.0454

Jupiter 53825-08-13 17:02 G 21380462.01 21380462.21 21380462.41 0.0526 0.0015

Saturn 53830-04-13 12:43 G 21382165.83 21382166.03 21382166.23 0.0282 0.0088

Saturn 53830-11-29 02:10 G 21382395.43 21382395.59 21382395.76 0.0280 0.0169

Jupiter 53831-06-21 19:55 G 21382600.18 21382600.33 21382600.49 0.0499 0.0330

Jupiter 53837-04-18 08:53 G 21384727.71 21384727.87 21384728.03 0.0524 0.0313

Jupiter 53843-02-24 20:24 G 21386866.15 21386866.35 21386866.55 0.0501 0.0052

Pluto 53844-10-28 15:07 G 21387478.05 21387478.13 21387478.24 0.0063 0.0056

Pluto 53845-06-10 18:43 G 21387703.08 21387703.28 21387703.50 0.0063 0.0020

Saturn 53845-12-18 19:26 G 21387894.15 21387894.31 21387894.48 0.0278 0.0172

Pluto 53846-01-21 22:34 G 21387928.23 21387928.44 21387928.66 0.0063 0.0017

Earth 53846-03-17 11:31 G 21387982.85 21387982.98 21387983.12 0.2642 0.1346

Moon 53846-03-17 16:48 G 21387983.09 21387983.20 21387983.32 0.2642 0.1827 *

Saturn 53846-08-05 06:29 G 21388123.57 21388123.77 21388123.97 0.0280 0.0079

Pluto 53846-09-04 02:10 G 21388153.49 21388153.59 21388153.72 0.0064 0.0054

Uranus 53847-02-01 17:31 G 21388304.17 21388304.23 21388304.32 0.0137 0.0128

Uranus 53847-09-16 00:43 G 21388530.40 21388530.53 21388530.70 0.0137 0.0099

Uranus 53848-04-29 08:24 G 21388756.66 21388756.85 21388757.04 0.0136 0.0069

Uranus 53848-12-11 15:22 G 21388982.94 21388983.14 21388983.35 0.0136 0.0040

Uranus 53849-07-25 22:34 G 21389209.22 21389209.44 21389209.66 0.0136 0.0010

Uranus 53850-03-09 05:17 G 21389435.51 21389435.72 21389435.94 0.0136 0.0019

Uranus 53850-10-21 12:00 G 21389661.80 21389662.00 21389662.20 0.0136 0.0048

Uranus 53851-06-04 18:29 G 21389888.10 21389888.27 21389888.46 0.0135 0.0077

Uranus 53852-01-17 00:43 G 21390114.41 21390114.53 21390114.68 0.0135 0.0106

Uranus 53852-08-30 07:12 G 21390340.78 21390340.80 21390340.84 0.0135 0.0133

Earth 53854-03-15 04:05 G 21390902.56 21390902.67 21390902.78 0.2643 0.1910

Moon 53854-03-15 07:26 G 21390902.69 21390902.81 21390902.92 0.2638 0.1875 *

Jupiter 53854-10-30 20:24 G 21391132.18 21391132.35 21391132.54 0.0502 0.0232

Neptune 53856-09-10 08:53 G 21391812.80 21391812.87 21391812.96 0.0088 0.0081

Neptune 53857-04-23 21:36 G 21392038.29 21392038.40 21392038.52 0.0088 0.0074

Neptune 53857-12-05 10:05 G 21392263.80 21392263.92 21392264.08 0.0088 0.0067

Neptune 53858-07-18 22:48 G 21392489.31 21392489.45 21392489.63 0.0088 0.0060

Neptune 53859-03-01 11:46 G 21392714.82 21392714.99 21392715.18 0.0088 0.0052

Neptune 53859-10-13 00:14 G 21392940.34 21392940.51 21392940.72 0.0088 0.0045

Saturn 53859-10-24 21:22 G 21392952.18 21392952.39 21392952.60 0.0282 0.0046

Neptune 53860-05-25 12:58 G 21393165.86 21393166.04 21393166.25 0.0088 0.0038

Saturn 53860-06-10 10:34 G 21393181.81 21393181.94 21393182.08 0.0280 0.0210

Neptune 53861-01-06 01:55 G 21393391.38 21393391.58 21393391.79 0.0088 0.0030

Jupiter 53861-04-21 06:14 G 21393496.57 21393496.76 21393496.95 0.0527 0.0198

Neptune 53861-08-19 14:38 G 21393616.90 21393617.11 21393617.33 0.0088 0.0023

Neptune 53862-04-02 03:22 G 21393842.42 21393842.64 21393842.86 0.0088 0.0015

Neptune 53862-11-13 15:50 G 21394067.95 21394068.16 21394068.39 0.0088 0.0008

Neptune 53863-06-27 04:34 G 21394293.47 21394293.69 21394293.91 0.0088 0.0001

Neptune 53864-02-07 17:31 G 21394519.01 21394519.23 21394519.45 0.0088 0.0007

Neptune 53864-09-20 06:00 G 21394744.54 21394744.75 21394744.97 0.0088 0.0014

Neptune 53865-05-03 18:29 G 21394970.07 21394970.27 21394970.49 0.0088 0.0022

Neptune 53865-12-15 06:58 G 21395195.60 21395195.79 21395196.02 0.0088 0.0030

Neptune 53866-07-28 19:41 G 21395421.14 21395421.32 21395421.54 0.0088 0.0037

Jupiter 53867-02-27 07:41 G 21395634.80 21395634.82 21395634.85 0.0498 0.0493

Neptune 53867-03-11 08:38 G 21395646.68 21395646.86 21395647.06 0.0088 0.0044

Neptune 53867-10-22 21:07 G 21395872.22 21395872.38 21395872.58 0.0088 0.0052

Neptune 53868-06-04 09:50 G 21396097.76 21396097.91 21396098.09 0.0088 0.0059

Neptune 53869-01-15 22:34 G 21396323.31 21396323.44 21396323.60 0.0088 0.0066

Neptune 53869-08-29 11:31 G 21396548.86 21396548.98 21396549.10 0.0088 0.0073

Neptune 53870-04-11 23:31 G 21396774.42 21396774.48 21396774.60 0.0088 0.0081

Neptune 53870-11-23 12:29 G 21397000.02 21397000.02 21397000.05 0.0088 0.0088

Jupiter 53872-12-24 23:31 G 21397762.29 21397762.48 21397762.68 0.0526 0.0128

Saturn 53875-06-30 21:50 G 21398680.23 21398680.41 21398680.60 0.0278 0.0141

Saturn 53876-02-15 08:38 G 21398909.67 21398909.86 21398910.06 0.0280 0.0109

Jupiter 53878-11-02 07:55 G 21399900.65 21399900.83 21399901.02 0.0499 0.0218

Jupiter 53884-08-29 17:31 G 21402028.13 21402028.23 21402028.34 0.0523 0.0444

Saturn 53888-09-18 07:55 G 21403508.81 21403508.83 21403508.85 0.0284 0.0282

Saturn 53889-05-05 23:02 G 21403738.25 21403738.46 21403738.68 0.0282 0.0019

Saturn 53889-12-21 12:14 G 21403967.91 21403968.01 21403968.13 0.0279 0.0237

Mars 53890-04-16 05:17 G 21404083.55 21404083.72 21404083.89 0.1630 0.0200

Jupiter 53890-07-08 08:24 G 21404166.65 21404166.85 21404167.06 0.0501 0.0063

Uranus 53891-01-27 12:14 G 21404369.95 21404370.01 21404370.11 0.0141 0.0130

Uranus 53891-09-10 22:34 G 21404596.29 21404596.44 21404596.60 0.0142 0.0098

Uranus 53892-04-24 08:53 G 21404822.68 21404822.87 21404823.07 0.0142 0.0065

Uranus 53892-12-06 19:12 G 21405049.10 21405049.30 21405049.52 0.0142 0.0032

Mars 53893-01-22 02:38 G 21405095.47 21405095.61 21405095.74 0.1896 0.1189

Uranus 53893-07-21 06:00 G 21405275.53 21405275.75 21405275.97 0.0142 0.0002

Uranus 53894-03-04 16:19 G 21405501.98 21405502.18 21405502.40 0.0143 0.0036

Uranus 53894-10-17 02:53 G 21405728.44 21405728.62 21405728.82 0.0143 0.0070

Uranus 53895-05-31 13:55 G 21405954.94 21405955.08 21405955.24 0.0143 0.0103

Uranus 53896-01-13 00:43 G 21406181.49 21406181.53 21406181.61 0.0143 0.0137

Jupiter 53896-12-28 00:00 G 21406531.37 21406531.50 21406531.64 0.0528 0.0399

Jupiter 53902-03-14 07:41 G 21408432.68 21408432.82 21408432.97 0.0503 0.0348

Saturn 53905-01-11 03:07 G 21409466.44 21409466.63 21409466.83 0.0278 0.0109

Saturn 53905-08-28 14:24 G 21409695.92 21409696.10 21409696.29 0.0281 0.0144

Jupiter 53908-09-02 15:36 G 21410796.95 21410797.15 21410797.36 0.0526 0.0068

Jupiter 53914-07-11 19:12 G 21412935.17 21412935.30 21412935.43 0.0499 0.0378

Saturn 53918-04-01 15:36 G 21414295.05 21414295.15 21414295.27 0.0284 0.0240

Saturn 53918-11-17 06:43 G 21414524.57 21414524.78 21414525.00 0.0282 0.0024

Saturn 53919-07-04 19:41 G 21414754.30 21414754.32 21414754.35 0.0279 0.0277

Jupiter 53920-05-08 06:29 G 21415062.60 21415062.77 21415062.95 0.0525 0.0266

Jupiter 53926-03-16 21:07 G 21417201.19 21417201.38 21417201.59 0.0500 0.0108

Uranus 53931-05-17 11:17 G 21419088.84 21419088.97 21419089.10 0.0137 0.0110

Uranus 53931-12-29 18:29 G 21419315.10 21419315.27 21419315.45 0.0137 0.0081

Uranus 53932-08-12 01:41 G 21419541.38 21419541.57 21419541.78 0.0136 0.0051

Uranus 53933-03-26 08:53 G 21419767.65 21419767.87 21419768.09 0.0136 0.0021

Uranus 53933-11-07 15:50 G 21419993.94 21419994.16 21419994.37 0.0136 0.0008

Uranus 53934-06-21 22:34 G 21420220.24 21420220.44 21420220.65 0.0136 0.0037

Saturn 53934-07-24 05:17 G 21420252.52 21420252.72 21420252.93 0.0278 0.0078

Uranus 53935-02-03 05:17 G 21420446.53 21420446.72 21420446.91 0.0136 0.0066

Saturn 53935-03-10 16:19 G 21420482.02 21420482.18 21420482.35 0.0280 0.0173

Pluto 53935-07-28 14:53 G 21420621.93 21420622.12 21420622.34 0.0081 0.0030

Uranus 53935-09-17 11:31 G 21420672.84 21420672.98 21420673.15 0.0135 0.0095

Pluto 53936-03-10 01:55 G 21420847.42 21420847.58 21420847.77 0.0081 0.0049

Uranus 53936-04-30 18:00 G 21420899.17 21420899.25 21420899.34 0.0135 0.0123

Jupiter 53937-11-19 21:07 G 21421467.19 21421467.38 21421467.57 0.0502 0.0174

Neptune 53939-06-10 03:22 G 21422034.61 21422034.64 21422034.73 0.0089 0.0086

Neptune 53940-01-21 17:02 G 21422260.12 21422260.21 21422260.33 0.0089 0.0078

Neptune 53940-09-03 06:43 G 21422485.64 21422485.78 21422485.91 0.0089 0.0070

Neptune 53941-04-16 19:26 G 21422711.17 21422711.31 21422711.49 0.0089 0.0063

Neptune 53941-11-28 08:53 G 21422936.71 21422936.87 21422937.06 0.0089 0.0055

Neptune 53942-07-11 22:34 G 21423162.26 21423162.44 21423162.63 0.0089 0.0047

Neptune 53943-02-22 11:31 G 21423387.80 21423387.98 21423388.20 0.0089 0.0040

Neptune 53943-10-06 00:58 G 21423613.35 21423613.54 21423613.76 0.0090 0.0032

Jupiter 53944-05-11 08:53 G 21423831.70 21423831.87 21423832.05 0.0528 0.0265

Neptune 53944-05-18 14:24 G 21423838.90 21423839.10 21423839.32 0.0090 0.0024

Neptune 53944-12-30 03:50 G 21424064.45 21424064.66 21424064.88 0.0090 0.0016

Neptune 53945-08-12 17:31 G 21424290.01 21424290.23 21424290.45 0.0090 0.0008

Neptune 53946-03-26 06:43 G 21424515.56 21424515.78 21424516.00 0.0090 0.0002

Neptune 53946-11-06 20:10 G 21424741.12 21424741.34 21424741.56 0.0090 0.0008

Neptune 53947-06-20 09:22 G 21424966.68 21424966.89 21424967.11 0.0090 0.0016

Saturn 53947-10-12 15:36 G 21425081.03 21425081.15 21425081.30 0.0284 0.0217

Neptune 53948-01-31 22:34 G 21425192.24 21425192.44 21425192.66 0.0090 0.0024

Saturn 53948-05-29 06:58 G 21425310.58 21425310.79 21425311.00 0.0282 0.0047

Neptune 53948-09-13 12:00 G 21425417.81 21425418.00 21425418.22 0.0090 0.0032

Neptune 53949-04-27 01:26 G 21425643.37 21425643.56 21425643.76 0.0090 0.0039

Jupiter 53949-07-25 20:38 G 21425733.28 21425733.36 21425733.45 0.0504 0.0458

Neptune 53949-12-08 14:38 G 21425868.93 21425869.11 21425869.31 0.0090 0.0047

Neptune 53950-07-22 03:50 G 21426094.50 21426094.66 21426094.85 0.0090 0.0055

Neptune 53951-03-04 17:31 G 21426320.08 21426320.23 21426320.39 0.0090 0.0062

Neptune 53951-10-16 06:43 G 21426545.65 21426545.78 21426545.93 0.0090 0.0070

Neptune 53952-05-28 19:41 G 21426771.23 21426771.32 21426771.45 0.0090 0.0078

Neptune 53953-01-09 09:22 G 21426996.83 21426996.89 21426996.97 0.0090 0.0085

Jupiter 53956-01-15 01:12 G 21428097.34 21428097.55 21428097.75 0.0525 0.0064

Mars 53956-02-12 17:31 G 21428126.05 21428126.23 21428126.40 0.1628 0.0072

Mars 53958-11-20 04:48 G 21429137.53 21429137.70 21429137.88 0.1898 0.0293

Earth 53959-09-18 03:22 G 21429439.48 21429439.64 21429439.80 0.2689 0.0103

Moon 53959-09-18 06:00 G 21429439.59 21429439.75 21429439.92 0.2683 0.0503 *

Jupiter 53961-11-22 07:41 G 21430235.65 21430235.82 21430235.99 0.0500 0.0268

Saturn 53964-02-03 09:22 G 21431038.68 21431038.89 21431039.10 0.0279 0.0048

Saturn 53964-09-19 20:38 G 21431268.22 21431268.36 21431268.51 0.0281 0.0205

Jupiter 53967-09-19 17:46 G 21432363.10 21432363.24 21432363.37 0.0523 0.0386

Jupiter 53973-07-28 09:07 G 21434501.67 21434501.88 21434502.08 0.0501 0.0009

Uranus 53975-05-12 06:58 G 21435154.67 21435154.79 21435154.94 0.0141 0.0111

Uranus 53975-12-24 17:31 G 21435381.05 21435381.23 21435381.41 0.0142 0.0078

Uranus 53976-08-07 03:36 G 21435607.45 21435607.65 21435607.86 0.0142 0.0045

Uranus 53977-03-21 13:55 G 21435833.87 21435834.08 21435834.30 0.0142 0.0012

Saturn 53977-04-23 22:34 G 21435867.29 21435867.44 21435867.62 0.0284 0.0176

Uranus 53977-11-03 00:29 G 21436060.31 21436060.52 21436060.74 0.0142 0.0022

Saturn 53977-12-09 13:41 G 21436096.87 21436097.07 21436097.27 0.0281 0.0087

Uranus 53978-06-17 11:02 G 21436286.76 21436286.96 21436287.16 0.0143 0.0056

Uranus 53979-01-29 21:36 G 21436513.25 21436513.40 21436513.58 0.0143 0.0090

Uranus 53979-09-13 08:38 G 21436739.76 21436739.86 21436739.98 0.0143 0.0123

Jupiter 53980-01-17 23:02 G 21436866.36 21436866.46 21436866.56 0.0529 0.0450

Jupiter 53985-04-02 10:34 G 21438767.77 21438767.94 21438768.10 0.0503 0.0284

Jupiter 53991-09-22 16:19 G 21441131.98 21441132.18 21441132.37 0.0527 0.0125

Saturn 53992-12-29 01:55 G 21441595.53 21441595.58 21441595.66 0.0276 0.0260

Saturn 53993-08-15 11:31 G 21441824.77 21441824.98 21441825.19 0.0278 0.0017

Saturn 53994-04-01 22:34 G 21442054.33 21442054.44 21442054.56 0.0280 0.0235

Jupiter 53997-07-30 20:38 G 21443270.26 21443270.36 21443270.46 0.0498 0.0435

55TH MILLENNIUM CE

This is a list of transits of Venus in the 55th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	54003-05-28 10:05	G	21445397.74	21445397.92	21445398.11	0.0525	0.0195	
Saturn	54006-11-03 21:50	G	21446653.24	21446653.41	21446653.60	0.0284	0.0154	
Saturn	54007-06-21 12:43	G	21446882.84	21446883.03	21446883.23	0.0281	0.0109	
Jupiter	54009-04-04 21:36	G	21447536.21	21447536.40	21447536.59	0.0500	0.0161	
Uranus	54015-01-14 21:36	G	21449647.31	21449647.40	21449647.51	0.0137	0.0121	
Jupiter	54015-01-31 03:50	G	21449663.62	21449663.66	21449663.70	0.0522	0.0510	
Uranus	54015-08-29 04:48	G	21449873.56	21449873.70	21449873.88	0.0137	0.0092	
Uranus	54016-04-11 12:29	G	21450099.82	21450100.02	21450100.21	0.0137	0.0062	
Uranus	54016-11-23 19:26	G	21450326.10	21450326.31	21450326.53	0.0136	0.0032	
Uranus	54017-07-08 02:38	G	21450552.39	21450552.61	21450552.83	0.0136	0.0003	
Uranus	54018-02-19 09:22	G	21450778.68	21450778.89	21450779.11	0.0136	0.0026	
Uranus	54018-10-03 15:50	G	21451004.97	21451005.16	21451005.37	0.0136	0.0056	
Uranus	54019-05-17 22:19	G	21451231.28	21451231.43	21451231.62	0.0136	0.0085	
Uranus	54019-12-30 04:48	G	21451457.60	21451457.70	21451457.83	0.0135	0.0113	
Jupiter	54020-12-08 21:22	G	21451802.20	21451802.39	21451802.59	0.0502	0.0120	
Neptune	54020-12-13 17:02	G	21451807.16	21451807.21	21451807.32	0.0088	0.0082	
Neptune	54021-07-27 05:46	G	21452032.66	21452032.74	21452032.89	0.0088	0.0075	
Mars	54021-12-10 06:14	G	21452168.59	21452168.76	21452168.93	0.1627	0.0327	
Neptune	54022-03-09 18:58	G	21452258.16	21452258.29	21452258.44	0.0088	0.0067	
Saturn	54022-07-11 05:02	G	21452381.61	21452381.71	21452381.83	0.0277	0.0233	
Neptune	54022-10-21 07:41	G	21452483.67	21452483.82	21452483.99	0.0088	0.0060	
Saturn	54023-02-25 14:38	G	21452610.90	21452611.11	21452611.32	0.0279	0.0012	
Neptune	54023-06-03 20:24	G	21452709.19	21452709.35	21452709.54	0.0088	0.0053	
Saturn	54023-10-13 01:55	G	21452840.52	21452840.58	21452840.65	0.0281	0.0265	
Neptune	54024-01-15 09:07	G	21452934.71	21452934.88	21452935.09	0.0088	0.0046	

Neptune 54024-08-27 22:05 G 21453160.23 21453160.42 21453160.62 0.0088 0.0038

Mars 54024-09-16 07:55 G 21453179.66 21453179.83 21453180.00 0.1900 0.0571

Neptune 54025-04-10 10:34 G 21453385.75 21453385.94 21453386.16 0.0088 0.0031

Neptune 54025-11-21 23:17 G 21453611.27 21453611.47 21453611.69 0.0088 0.0024

Neptune 54026-07-05 12:00 G 21453836.79 21453837.00 21453837.22 0.0088 0.0016

Neptune 54027-02-16 00:58 G 21454062.32 21454062.54 21454062.76 0.0088 0.0009

Jupiter 54027-05-31 09:50 G 21454166.76 21454166.91 21454167.07 0.0528 0.0325

Neptune 54027-09-29 13:26 G 21454287.84 21454288.06 21454288.29 0.0088 0.0003

Neptune 54028-05-12 02:10 G 21454513.37 21454513.59 21454513.81 0.0088 0.0006

Neptune 54028-12-23 14:53 G 21454738.90 21454739.12 21454739.33 0.0088 0.0013

Neptune 54029-08-06 03:07 G 21454964.43 21454964.63 21454964.86 0.0088 0.0021

Neptune 54030-03-19 15:50 G 21455189.96 21455190.16 21455190.38 0.0088 0.0028

Neptune 54030-10-31 04:48 G 21455415.50 21455415.70 21455415.90 0.0088 0.0035

Neptune 54031-06-13 17:02 G 21455641.03 21455641.21 21455641.42 0.0088 0.0043

Neptune 54032-01-25 05:46 G 21455866.58 21455866.74 21455866.94 0.0088 0.0050

Jupiter 54032-08-13 22:19 G 21456068.31 21456068.43 21456068.55 0.0504 0.0399

Neptune 54032-09-06 18:43 G 21456092.12 21456092.28 21456092.45 0.0088 0.0057

Neptune 54033-04-20 07:26 G 21456317.66 21456317.81 21456317.96 0.0088 0.0064

Neptune 54033-12-01 19:26 G 21456543.21 21456543.31 21456543.47 0.0088 0.0072

Neptune 54034-07-15 08:10 G 21456768.77 21456768.84 21456768.96 0.0088 0.0079

Neptune 54035-02-25 21:07 G 21456994.36 21456994.38 21456994.45 0.0088 0.0086

Saturn 54036-05-16 03:50 G 21457439.47 21457439.66 21457439.86 0.0284 0.0116

Saturn 54036-12-31 18:43 G 21457669.10 21457669.28 21457669.46 0.0281 0.0146

Jupiter 54039-02-03 00:00 G 21458432.30 21458432.50 21458432.70 0.0526 0.0012

Jupiter 54044-12-11 10:48 G 21460570.80 21460570.95 21460571.11 0.0499 0.0331

Jupiter 54050-10-08 18:00 G 21462698.09 21462698.25 21462698.41 0.0524 0.0330

Saturn 54052-01-21 07:12 G 21463167.67 21463167.80 21463167.95 0.0276 0.0202

Saturn 54052-09-06 16:48 G 21463396.99 21463397.20 21463397.41 0.0278 0.0042

Jupiter 54056-08-16 11:31 G 21464836.78 21464836.98 21464837.19 0.0500 0.0055

Uranus 54059-01-09 17:02 G 21465713.12 21465713.21 21465713.33 0.0141 0.0123

Uranus 54059-08-24 03:22 G 21465939.48 21465939.64 21465939.81 0.0141 0.0090

Uranus 54060-04-06 13:26 G 21466165.87 21466166.06 21466166.26 0.0142 0.0057

Uranus 54060-11-18 23:46 G 21466392.28 21466392.49 21466392.71 0.0142 0.0024

Uranus 54061-07-03 10:19 G 21466618.71 21466618.93 21466619.15 0.0142 0.0010

Uranus 54062-02-14 20:38 G 21466845.16 21466845.36 21466845.58 0.0142 0.0044

Uranus 54062-09-29 07:26 G 21467071.63 21467071.81 21467072.00 0.0143 0.0077

Jupiter 54063-02-06 03:36 G 21467201.63 21467201.65 21467201.68 0.0529 0.0524

Uranus 54063-05-13 18:00 G 21467298.13 21467298.25 21467298.40 0.0143 0.0111

Saturn 54065-11-26 02:24 G 21468225.41 21468225.60 21468225.81 0.0284 0.0096

Saturn 54066-07-13 17:17 G 21468455.05 21468455.22 21468455.39 0.0281 0.0166

Jupiter 54068-04-21 11:31 G 21469102.80 21469102.98 21469103.17 0.0502 0.0225

Jupiter 54074-10-11 19:41 G 21471467.14 21471467.32 21471467.51 0.0527 0.0196

Jupiter 54080-08-18 21:36 G 21473605.37 21473605.40 21473605.44 0.0498 0.0490

Saturn 54081-08-02 09:36 G 21473953.74 21473953.90 21473954.07 0.0277 0.0176

Saturn 54082-03-19 19:12 G 21474183.10 21474183.30 21474183.51 0.0279 0.0070

Jupiter 54086-06-16 12:00 G 21475732.80 21475733.00 21475733.20 0.0525 0.0131

Mars 54087-10-07 18:43 G 21476211.12 21476211.28 21476211.44 0.1625 0.0581

Moon 54089-03-18 08:53 G 21476738.73 21476738.87 21476739.01 0.2641 0.1191

Earth 54089-03-18 14:10 G 21476738.96 21476739.09 21476739.22 0.2642 0.1474 *

Mars 54090-07-14 10:05 G 21477221.81 21477221.92 21477222.03 0.1902 0.1477

Pluto 54090-11-28 04:05 G 21477358.51 21477358.67 21477358.86 0.0063 0.0037

Pluto 54091-07-11 08:10 G 21477583.62 21477583.84 21477584.06 0.0063 0.0001

Pluto 54092-02-21 11:17 G 21477808.81 21477808.97 21477809.17 0.0063 0.0037

Jupiter 54092-04-23 23:46 G 21477871.30 21477871.49 21477871.67 0.0500 0.0220

Saturn 54095-06-08 08:10 G 21479011.63 21479011.84 21479012.04 0.0283 0.0058

Saturn 54096-01-23 22:34 G 21479241.30 21479241.44 21479241.59 0.0281 0.0202

Moon 54097-03-16 02:10 G 21479658.49 21479658.59 21479658.68 0.2647 0.2050

Earth 54097-03-16 06:43 G 21479658.66 21479658.78 21479658.90 0.2643 0.1763 *

Jupiter 54098-02-19 02:24 G 21479998.51 21479998.60 21479998.70 0.0523 0.0460

Uranus 54098-09-14 08:24 G 21480205.81 21480205.85 21480205.92 0.0137 0.0132

Uranus 54099-04-28 16:05 G 21480432.04 21480432.17 21480432.32 0.0137 0.0102

Uranus 54099-12-10 23:17 G 21480658.30 21480658.47 21480658.67 0.0137 0.0073

Uranus 54100-07-25 06:43 G 21480884.58 21480884.78 21480884.99 0.0137 0.0043

Uranus 54101-03-08 13:55 G 21481110.86 21481111.08 21481111.29 0.0136 0.0013

Uranus 54101-10-20 20:38 G 21481337.15 21481337.36 21481337.58 0.0136 0.0016

Uranus 54102-06-04 03:36 G 21481563.44 21481563.65 21481563.85 0.0136 0.0045

Uranus 54103-01-16 10:19 G 21481789.74 21481789.93 21481790.11 0.0136 0.0074

Uranus 54103-08-30 16:34 G 21482016.06 21482016.19 21482016.34 0.0136 0.0103

Neptune 54103-09-12 11:17 G 21482028.91 21482028.97 21482029.03 0.0089 0.0086

Jupiter 54103-12-30 01:41 G 21482137.37 21482137.57 21482137.77 0.0501 0.0051

Uranus 54104-04-12 23:02 G 21482242.41 21482242.46 21482242.51 0.0135 0.0131

Neptune 54104-04-25 00:00 G 21482254.42 21482254.50 21482254.62 0.0089 0.0079

Neptune 54104-12-06 13:12 G 21482479.94 21482480.05 21482480.21 0.0089 0.0072

Neptune 54105-07-20 02:53 G 21482705.48 21482705.62 21482705.78 0.0089 0.0064

Neptune 54106-03-02 16:19 G 21482931.01 21482931.18 21482931.36 0.0089 0.0056

Neptune 54106-10-14 05:17 G 21483156.55 21483156.72 21483156.92 0.0089 0.0049

Neptune 54107-05-27 18:43 G 21483382.09 21483382.28 21483382.48 0.0089 0.0041

Neptune 54108-01-08 08:10 G 21483607.64 21483607.84 21483608.05 0.0089 0.0033

Neptune 54108-08-20 21:22 G 21483833.19 21483833.39 21483833.62 0.0089 0.0026

Neptune 54109-04-03 10:48 G 21484058.75 21484058.95 21484059.18 0.0090 0.0018

Neptune 54109-11-15 00:14 G 21484284.30 21484284.51 21484284.73 0.0090 0.0010

Jupiter 54110-06-20 10:48 G 21484501.81 21484501.95 21484502.09 0.0528 0.0384

Neptune 54110-06-28 13:41 G 21484509.86 21484510.07 21484510.29 0.0090 0.0003

Neptune 54111-02-09 03:07 G 21484735.41 21484735.63 21484735.85 0.0090 0.0006

Saturn 54111-02-13 12:43 G 21484739.85 21484740.03 21484740.21 0.0276 0.0143

Neptune 54111-09-22 16:34 G 21484960.98 21484961.19 21484961.41 0.0090 0.0014

Saturn 54111-09-30 22:05 G 21484969.23 21484969.42 21484969.62 0.0278 0.0102

Neptune 54112-05-05 05:46 G 21485186.54 21485186.74 21485186.96 0.0090 0.0022

Neptune 54112-12-16 18:58 G 21485412.10 21485412.29 21485412.51 0.0090 0.0030

Neptune 54113-07-30 08:53 G 21485637.67 21485637.87 21485638.07 0.0090 0.0037

Neptune 54114-03-12 22:05 G 21485863.24 21485863.42 21485863.62 0.0090 0.0045

Neptune 54114-10-24 11:02 G 21486088.80 21486088.96 21486089.16 0.0090 0.0053

Neptune 54115-06-07 00:43 G 21486314.37 21486314.53 21486314.70 0.0090 0.0060

Jupiter 54115-09-04 01:26 G 21486403.41 21486403.56 21486403.71 0.0503 0.0332

Neptune 54116-01-18 13:41 G 21486539.95 21486540.07 21486540.24 0.0090 0.0068

Neptune 54116-08-31 03:36 G 21486765.54 21486765.65 21486765.77 0.0090 0.0075

Neptune 54117-04-13 16:34 G 21486991.13 21486991.19 21486991.29 0.0090 0.0083

Jupiter 54122-02-23 04:34 G 21488767.49 21488767.69 21488767.90 0.0526 0.0064

Saturn 54124-12-19 06:29 G 21489797.56 21489797.77 21489797.98 0.0283 0.0039

Saturn 54125-08-05 20:38 G 21490027.24 21490027.36 21490027.50 0.0281 0.0221

Jupiter 54128-01-01 12:14 G 21490905.88 21490906.01 21490906.14 0.0499 0.0387

Jupiter 54133-10-28 22:05 G 21493033.24 21493033.42 21493033.59 0.0524 0.0257

Jupiter 54139-09-06 12:43 G 21495171.83 21495172.03 21495172.22 0.0501 0.0112

Saturn 54140-08-25 14:38 G 21495525.92 21495526.11 21495526.30 0.0277 0.0118

Saturn 54141-04-12 00:14 G 21495755.32 21495755.51 21495755.70 0.0279 0.0129

Uranus 54142-09-10 02:10 G 21496271.54 21496271.59 21496271.67 0.0141 0.0134

Uranus 54143-04-24 12:14 G 21496497.86 21496498.01 21496498.16 0.0141 0.0102

Uranus 54143-12-06 22:05 G 21496724.25 21496724.42 21496724.63 0.0142 0.0070

Uranus 54144-07-20 08:38 G 21496950.65 21496950.86 21496951.07 0.0142 0.0036

Uranus 54145-03-03 18:58 G 21497177.07 21497177.29 21497177.51 0.0142 0.0003

Uranus 54145-10-16 05:17 G 21497403.51 21497403.72 21497403.94 0.0142 0.0031

Uranus 54146-05-30 15:50 G 21497629.97 21497630.16 21497630.36 0.0143 0.0064

Uranus 54147-01-12 02:53 G 21497856.46 21497856.62 21497856.78 0.0143 0.0098

Uranus 54147-08-26 13:26 G 21498082.99 21498083.06 21498083.16 0.0143 0.0132

Jupiter 54151-05-12 13:41 G 21499437.88 21499438.07 21499438.27 0.0502 0.0165

Mars 54153-08-05 07:12 G 21500253.66 21500253.80 21500253.95 0.1624 0.0844

Saturn 54153-11-13 18:58 G 21500354.23 21500354.29 21500354.37 0.0285 0.0268

Saturn 54154-07-01 11:31 G 21500583.77 21500583.98 21500584.20 0.0283 0.0005

Saturn 54155-02-16 02:10 G 21500813.51 21500813.59 21500813.67 0.0281 0.0257

Jupiter 54157-10-31 18:29 G 21501802.09 21501802.27 21501802.45 0.0527 0.0247

Jupiter 54163-01-15 14:53 G 21503704.03 21503704.12 21503704.22 0.0504 0.0440

Jupiter 54169-07-06 12:00 G 21506067.80 21506068.00 21506068.20 0.0525 0.0074

Saturn 54170-03-07 18:14 G 21506312.06 21506312.26 21506312.46 0.0276 0.0084

Saturn 54170-10-23 03:50 G 21506541.49 21506541.66 21506541.83 0.0279 0.0162

Jupiter 54175-05-15 02:10 G 21508206.43 21508206.59 21508206.76 0.0499 0.0283

Pluto 54181-01-13 21:22 G 21510277.26 21510277.39 21510277.52 0.0081 0.0066

Jupiter 54181-03-11 06:43 G 21510333.65 21510333.78 21510333.92 0.0523 0.0386

Pluto 54181-08-27 08:10 G 21510502.63 21510502.84 21510503.07 0.0081 0.0013

Uranus 54182-12-28 03:36 G 21510990.54 21510990.65 21510990.79 0.0137 0.0112

Saturn 54183-05-26 18:29 G 21511140.18 21511140.27 21511140.38 0.0286 0.0248

Uranus 54183-08-11 11:02 G 21511216.80 21511216.96 21511217.14 0.0137 0.0082

Saturn 54184-01-11 10:48 G 21511369.74 21511369.95 21511370.17 0.0283 0.0020

Uranus 54184-03-24 18:14 G 21511443.07 21511443.26 21511443.47 0.0137 0.0053

Saturn 54184-08-28 00:58 G 21511599.52 21511599.54 21511599.57 0.0281 0.0277

Uranus 54184-11-06 01:26 G 21511669.35 21511669.56 21511669.78 0.0136 0.0023

Neptune 54185-03-18 01:55 G 21511801.52 21511801.58 21511801.67 0.0088 0.0082

Uranus 54185-06-20 08:38 G 21511895.64 21511895.86 21511896.08 0.0136 0.0007

Mars 54185-08-04 00:00 G 21511940.41 21511940.50 21511940.58 0.1629 0.1407

Neptune 54185-10-29 14:38 G 21512027.01 21512027.11 21512027.24 0.0088 0.0075

Uranus 54186-02-01 15:07 G 21512121.93 21512122.13 21512122.35 0.0136 0.0037

Neptune 54186-06-12 03:22 G 21512252.52 21512252.64 21512252.80 0.0088 0.0068

Uranus 54186-09-15 21:50 G 21512348.23 21512348.41 21512348.61 0.0136 0.0065

Jupiter 54187-01-18 02:53 G 21512472.42 21512472.62 21512472.83 0.0501 0.0013

Neptune 54187-01-23 16:19 G 21512478.04 21512478.18 21512478.36 0.0088 0.0061

Uranus 54187-04-30 04:19 G 21512574.53 21512574.68 21512574.85 0.0136 0.0094

Neptune 54187-09-06 05:31 G 21512703.55 21512703.73 21512703.90 0.0088 0.0053

Uranus 54187-12-12 10:48 G 21512800.87 21512800.95 21512801.05 0.0135 0.0122

Neptune 54188-04-18 18:00 G 21512929.07 21512929.25 21512929.45 0.0088 0.0046

Neptune 54188-11-30 06:43 G 21513154.59 21513154.78 21513154.98 0.0088 0.0039

Neptune 54189-07-13 19:26 G 21513380.11 21513380.31 21513380.52 0.0088 0.0032

Neptune 54190-02-24 08:24 G 21513605.64 21513605.85 21513606.06 0.0088 0.0024

Neptune 54190-10-07 21:07 G 21513831.17 21513831.38 21513831.60 0.0088 0.0017

Neptune 54191-05-21 09:50 G 21514056.69 21514056.91 21514057.13 0.0088 0.0010

Neptune 54192-01-01 22:34 G 21514282.22 21514282.44 21514282.66 0.0088 0.0003

Neptune 54192-08-14 11:17 G 21514507.74 21514507.97 21514508.19 0.0088 0.0005

Neptune 54193-03-27 23:46 G 21514733.27 21514733.49 21514733.71 0.0088 0.0012

Jupiter 54193-07-09 14:53 G 21514837.02 21514837.12 21514837.22 0.0528 0.0454

Neptune 54193-11-08 12:14 G 21514958.80 21514959.01 21514959.23 0.0088 0.0020

Neptune 54194-06-22 00:43 G 21515184.33 21515184.53 21515184.75 0.0088 0.0027

Neptune 54195-02-02 13:41 G 21515409.87 21515410.07 21515410.28 0.0088 0.0034

Neptune 54195-09-16 02:10 G 21515635.41 21515635.59 21515635.80 0.0088 0.0041

Neptune 54196-04-28 14:53 G 21515860.94 21515861.12 21515861.31 0.0088 0.0048

Neptune 54196-12-10 03:07 G 21516086.48 21516086.63 21516086.82 0.0088 0.0056

Neptune 54197-07-23 15:50 G 21516312.02 21516312.16 21516312.33 0.0088 0.0063

Neptune 54198-03-06 04:34 G 21516537.58 21516537.69 21516537.84 0.0088 0.0070

Jupiter 54198-09-23 02:10 G 21516738.42 21516738.59 21516738.76 0.0503 0.0275

Neptune 54198-10-17 17:17 G 21516763.13 21516763.22 21516763.34 0.0088 0.0077

Neptune 54199-05-31 05:46 G 21516988.70 21516988.74 21516988.83 0.0088 0.0084

Saturn 54199-09-17 20:10 G 21517098.14 21517098.34 21517098.55 0.0277 0.0059

Saturn 54200-05-05 06:14 G 21517327.60 21517327.76 21517327.91 0.0280 0.0190

Moon 54202-09-19 23:17 G 21518195.32 21518195.47 21518195.62 0.2694 0.0343

Earth 54202-09-20 03:07 G 21518195.47 21518195.63 21518195.79 0.2689 0.0064 *

Jupiter 54205-03-15 06:29 G 21519102.57 21519102.77 21519102.97 0.0526 0.0127

Jupiter 54211-01-21 14:10 G 21521241.00 21521241.09 21521241.18 0.0499 0.0444

Saturn 54212-12-06 23:31 G 21521926.35 21521926.48 21521926.63 0.0285 0.0210

Saturn 54213-07-24 15:50 G 21522155.95 21522156.16 21522156.37 0.0283 0.0057

Jupiter 54216-11-17 20:10 G 21523368.15 21523368.34 21523368.52 0.0524 0.0207

Mars 54219-06-03 19:41 G 21524296.20 21524296.32 21524296.45 0.1623 0.1101

Jupiter 54222-09-26 16:19 G 21525506.99 21525507.18 21525507.37 0.0500 0.0178

Uranus 54226-12-23 21:50 G 21527056.28 21527056.41 21527056.54 0.0141 0.0114

Uranus 54227-08-07 07:26 G 21527282.65 21527282.81 21527283.00 0.0142 0.0082

Uranus 54228-03-20 17:46 G 21527509.04 21527509.24 21527509.45 0.0142 0.0049

Jupiter 54228-07-23 14:10 G 21527634.07 21527634.09 21527634.12 0.0522 0.0518

Saturn 54228-08-13 17:02 G 21527655.16 21527655.21 21527655.28 0.0275 0.0261

Uranus 54228-11-02 04:05 G 21527735.45 21527735.67 21527735.89 0.0142 0.0015

Saturn 54229-03-31 01:12 G 21527884.34 21527884.55 21527884.77 0.0277 0.0023

Uranus 54229-06-16 14:24 G 21527961.89 21527962.10 21527962.32 0.0142 0.0018

Saturn 54229-11-15 11:02 G 21528113.84 21528113.96 21528114.09 0.0279 0.0226

Uranus 54230-01-29 00:58 G 21528188.34 21528188.54 21528188.75 0.0142 0.0052

Uranus 54230-09-12 11:31 G 21528414.82 21528414.98 21528415.17 0.0143 0.0086

Uranus 54231-04-26 22:19 G 21528641.33 21528641.43 21528641.56 0.0143 0.0120

Jupiter 54234-06-01 16:05 G 21529772.97 21529773.17 21529773.37 0.0502 0.0100

Jupiter 54240-11-20 22:19 G 21532137.27 21532137.43 21532137.60 0.0528 0.0319

Saturn 54242-06-19 00:00 G 21532712.35 21532712.50 21532712.67 0.0285 0.0187

Saturn 54243-02-03 16:05 G 21532941.97 21532942.17 21532942.38 0.0283 0.0079

Jupiter 54246-02-04 15:50 G 21534039.03 21534039.16 21534039.30 0.0504 0.0380

Mars 54251-06-02 12:00 G 21535982.88 21535983.00 21535983.13 0.1627 0.1133

Jupiter 54252-07-26 15:36 G 21536402.94 21536403.15 21536403.35 0.0526 0.0008

Mars 54254-03-09 14:53 G 21536994.00 21536994.12 21536994.23 0.1900 0.1440

Saturn 54258-02-23 18:29 G 21538441.18 21538441.27 21538441.39 0.0275 0.0238

Jupiter 54258-06-04 02:24 G 21538541.45 21538541.60 21538541.75 0.0499 0.0335

Saturn 54258-10-11 03:22 G 21538670.43 21538670.64 21538670.85 0.0278 0.0006

Saturn 54259-05-28 13:26 G 21538899.97 21538900.06 21538900.15 0.0280 0.0253

Jupiter 54264-03-31 08:10 G 21540668.68 21540668.84 21540669.00 0.0523 0.0324

Uranus 54266-08-28 15:22 G 21541549.06 21541549.14 21541549.25 0.0137 0.0122

Uranus 54267-04-11 22:48 G 21541775.30 21541775.45 21541775.62 0.0137 0.0092

Uranus 54267-11-24 06:00 G 21542001.57 21542001.75 21542001.96 0.0137 0.0063

Neptune 54267-12-15 18:14 G 21542023.22 21542023.26 21542023.33 0.0089 0.0087

Uranus 54268-07-07 13:26 G 21542227.85 21542228.06 21542228.28 0.0137 0.0033

Neptune 54268-07-28 07:26 G 21542248.73 21542248.81 21542248.93 0.0089 0.0080

Uranus 54269-02-18 20:38 G 21542454.14 21542454.36 21542454.57 0.0136 0.0004

Neptune 54269-03-10 21:07 G 21542474.26 21542474.38 21542474.51 0.0089 0.0072

Uranus 54269-10-03 03:22 G 21542680.43 21542680.64 21542680.86 0.0136 0.0026

Neptune 54269-10-22 10:05 G 21542699.78 21542699.92 21542700.09 0.0089 0.0065

Jupiter 54270-02-07 04:05 G 21542807.47 21542807.67 21542807.87 0.0501 0.0064

Uranus 54270-05-17 09:50 G 21542906.72 21542906.91 21542907.12 0.0136 0.0056

Neptune 54270-06-04 23:31 G 21542925.32 21542925.48 21542925.65 0.0089 0.0057

Uranus 54270-12-29 16:19 G 21543133.03 21543133.18 21543133.37 0.0136 0.0085

Neptune 54271-01-16 12:29 G 21543150.86 21543151.02 21543151.22 0.0089 0.0050

Uranus 54271-08-12 23:17 G 21543359.36 21543359.47 21543359.59 0.0136 0.0113

Neptune 54271-08-30 02:10 G 21543376.40 21543376.59 21543376.79 0.0089 0.0042

Saturn 54271-12-30 06:00 G 21543498.57 21543498.75 21543498.93 0.0285 0.0148

Neptune 54272-04-11 15:07 G 21543601.94 21543602.13 21543602.35 0.0089 0.0035

Saturn 54272-08-15 21:36 G 21543728.22 21543728.40 21543728.60 0.0282 0.0118

Neptune 54272-11-23 04:34 G 21543827.49 21543827.69 21543827.91 0.0090 0.0027

Neptune 54273-07-06 18:14 G 21544053.04 21544053.26 21544053.47 0.0090 0.0019

Neptune 54274-02-17 07:26 G 21544278.59 21544278.81 21544279.03 0.0090 0.0011

Neptune 54274-09-30 20:53 G 21544504.15 21544504.37 21544504.59 0.0090 0.0004

Neptune 54275-05-14 10:05 G 21544729.70 21544729.92 21544730.14 0.0090 0.0004

Neptune 54275-12-25 23:31 G 21544955.26 21544955.48 21544955.70 0.0090 0.0012

Jupiter 54276-07-29 12:14 G 21545171.95 21545172.01 21545172.07 0.0528 0.0500

Neptune 54276-08-07 12:43 G 21545180.83 21545181.03 21545181.25 0.0090 0.0020

Neptune 54277-03-21 01:55 G 21545406.39 21545406.58 21545406.81 0.0090 0.0028

Neptune 54277-11-01 15:36 G 21545631.95 21545632.15 21545632.36 0.0090 0.0035

Neptune 54278-06-15 04:48 G 21545857.52 21545857.70 21545857.90 0.0090 0.0043

Neptune 54279-01-26 18:29 G 21546083.09 21546083.27 21546083.45 0.0090 0.0050

Neptune 54279-09-09 07:41 G 21546308.66 21546308.82 21546309.00 0.0090 0.0058

Neptune 54280-04-21 20:38 G 21546534.24 21546534.36 21546534.54 0.0090 0.0066

Neptune 54280-12-03 10:19 G 21546759.82 21546759.93 21546760.07 0.0090 0.0073

Neptune 54281-07-16 23:17 G 21546985.40 21546985.47 21546985.60 0.0090 0.0081

Jupiter 54281-10-13 04:48 G 21547073.52 21547073.70 21547073.89 0.0503 0.0210

Neptune 54282-02-27 12:58 G 21547211.01 21547211.04 21547211.10 0.0090 0.0088

Mars 54285-03-31 08:24 G 21548338.75 21548338.85 21548338.94 0.1622 0.1362

Saturn 54287-09-06 00:58 G 21549227.41 21549227.54 21549227.70 0.0275 0.0199

Jupiter 54288-04-03 04:34 G 21549437.50 21549437.69 21549437.89 0.0527 0.0177

Saturn 54288-04-22 09:50 G 21549456.70 21549456.91 21549457.12 0.0277 0.0043

Jupiter 54293-06-18 03:50 G 21551339.62 21551339.66 21551339.71 0.0505 0.0491

Jupiter 54299-12-07 22:34 G 21553703.25 21553703.44 21553703.64 0.0525 0.0140

Saturn 54301-07-12 07:41 G 21554284.63 21554284.82 21554285.02 0.0285 0.0122

Saturn 54302-02-26 23:17 G 21554514.29 21554514.47 21554514.66 0.0282 0.0142

Jupiter 54305-10-16 15:50 G 21555841.98 21555842.16 21555842.34 0.0500 0.0230

Uranus 54310-08-24 06:00 G 21557614.66 21557614.75 21557614.85 0.0141 0.0126

Uranus 54311-04-07 15:36 G 21557841.00 21557841.15 21557841.32 0.0141 0.0094

Jupiter 54311-08-13 16:48 G 21557969.10 21557969.20 21557969.30 0.0522 0.0451

Uranus 54311-11-20 01:41 G 21558067.38 21558067.57 21558067.77 0.0142 0.0062

Uranus 54312-07-03 11:46 G 21558293.79 21558293.99 21558294.21 0.0142 0.0029

Uranus 54313-02-14 22:19 G 21558520.21 21558520.43 21558520.65 0.0142 0.0005

Uranus 54313-09-29 08:38 G 21558746.65 21558746.86 21558747.07 0.0142 0.0039

Uranus 54314-05-13 18:58 G 21558973.12 21558973.29 21558973.49 0.0142 0.0073

Uranus 54314-12-26 06:14 G 21559199.61 21559199.76 21559199.90 0.0143 0.0106

Uranus 54315-08-09 16:48 G 21559426.17 21559426.20 21559426.25 0.0143 0.0140

Saturn 54317-03-19 03:36 G 21560013.49 21560013.65 21560013.82 0.0276 0.0172

Mars 54317-03-31 00:43 G 21560025.39 21560025.53 21560025.68 0.1626 0.0879

Jupiter 54317-06-21 15:22 G 21560107.93 21560108.14 21560108.34 0.0502 0.0050

Saturn 54317-11-03 12:29 G 21560242.82 21560243.02 21560243.22 0.0278 0.0071

Mars 54320-01-05 17:02 G 21561036.05 21561036.21 21561036.38 0.1902 0.0547

Jupiter 54323-12-11 22:48 G 21562472.31 21562472.45 21562472.59 0.0528 0.0376

Jupiter 54329-02-24 15:36 G 21564374.00 21564374.15 21564374.31 0.0504 0.0327

Saturn 54331-01-22 14:10 G 21565070.89 21565071.09 21565071.29 0.0284 0.0082

Saturn 54331-09-09 05:17 G 21565300.57 21565300.72 21565300.89 0.0282 0.0181

Earth 54332-03-21 16:34 G 21565495.07 21565495.19 21565495.32 0.2643 0.1625

Moon 54332-03-21 21:07 G 21565495.26 21565495.38 21565495.49 0.2647 0.1706 *

Jupiter 54335-08-16 12:00 G 21566737.80 21566738.00 21566738.20 0.0525 0.0041

Pluto 54336-05-18 11:46 G 21567013.94 21567013.99 21567014.11 0.0063 0.0058

Pluto 54336-12-29 16:05 G 21567238.97 21567239.17 21567239.38 0.0063 0.0021

Pluto 54337-08-11 19:26 G 21567464.11 21567464.31 21567464.54 0.0063 0.0016

Pluto 54338-03-24 23:31 G 21567689.36 21567689.48 21567689.61 0.0063 0.0052

Earth 54340-03-19 08:53 G 21568414.75 21568414.87 21568415.00 0.2644 0.1650

Moon 54340-03-19 14:24 G 21568414.95 21568415.10 21568415.25 0.2643 0.1017 *

Jupiter 54341-06-24 03:50 G 21568876.54 21568876.66 21568876.79 0.0499 0.0393

Saturn 54346-09-29 11:02 G 21570799.78 21570799.96 21570800.15 0.0276 0.0132

Jupiter 54347-04-21 05:02 G 21571003.54 21571003.71 21571003.88 0.0523 0.0277

Saturn 54347-05-16 19:55 G 21571029.14 21571029.33 21571029.53 0.0278 0.0112

Neptune 54349-06-21 10:05 G 21571795.87 21571795.92 21571796.02 0.0088 0.0083

Neptune 54350-02-01 23:31 G 21572021.37 21572021.48 21572021.59 0.0088 0.0075

Uranus 54350-04-29 01:41 G 21572107.54 21572107.57 21572107.64 0.0138 0.0134

Neptune 54350-09-15 12:14 G 21572246.87 21572247.01 21572247.15 0.0088 0.0068

Uranus 54350-12-11 09:22 G 21572333.76 21572333.89 21572334.05 0.0137 0.0104

Mars 54351-01-27 20:53 G 21572381.36 21572381.37 21572381.38 0.1620 0.1611

Neptune 54351-04-29 00:58 G 21572472.38 21572472.54 21572472.70 0.0088 0.0061

Uranus 54351-07-25 17:02 G 21572560.03 21572560.21 21572560.40 0.0137 0.0073

Neptune 54351-12-10 13:26 G 21572697.90 21572698.06 21572698.25 0.0088 0.0054

Uranus 54352-03-08 00:14 G 21572786.31 21572786.51 21572786.72 0.0137 0.0043

Neptune 54352-07-23 02:10 G 21572923.42 21572923.59 21572923.79 0.0088 0.0047

Uranus 54352-10-20 07:26 G 21573012.59 21573012.81 21573013.03 0.0137 0.0014

Jupiter 54353-02-27 03:50 G 21573142.47 21573142.66 21573142.86 0.0501 0.0120

Neptune 54353-03-05 14:53 G 21573148.94 21573149.12 21573149.34 0.0088 0.0040

Uranus 54353-06-03 14:24 G 21573238.89 21573239.10 21573239.32 0.0136 0.0016

Neptune 54353-10-17 03:50 G 21573374.47 21573374.66 21573374.87 0.0088 0.0033

Uranus 54354-01-15 21:22 G 21573465.19 21573465.39 21573465.60 0.0136 0.0045

Neptune 54354-05-30 16:48 G 21573599.99 21573600.20 21573600.41 0.0088 0.0025

Uranus 54354-08-30 03:50 G 21573691.49 21573691.66 21573691.86 0.0136 0.0075

Neptune 54355-01-11 05:31 G 21573825.52 21573825.73 21573825.95 0.0088 0.0018

Uranus 54355-04-13 10:19 G 21573917.81 21573917.93 21573918.09 0.0136 0.0104

Neptune 54355-08-24 18:14 G 21574051.05 21574051.26 21574051.48 0.0088 0.0011

Uranus 54355-11-25 17:02 G 21574144.17 21574144.21 21574144.27 0.0136 0.0132

Neptune 54356-04-06 06:58 G 21574276.57 21574276.79 21574277.01 0.0088 0.0004

Neptune 54356-11-17 19:41 G 21574502.10 21574502.32 21574502.54 0.0088 0.0004

Neptune 54357-07-01 08:24 G 21574727.63 21574727.85 21574728.07 0.0088 0.0011

Neptune 54358-02-11 21:07 G 21574953.17 21574953.38 21574953.60 0.0088 0.0018

Neptune 54358-09-25 09:36 G 21575178.70 21575178.90 21575179.12 0.0088 0.0026

Neptune 54359-05-08 22:05 G 21575404.23 21575404.42 21575404.64 0.0088 0.0033

Neptune 54359-12-20 10:48 G 21575629.77 21575629.95 21575630.16 0.0088 0.0040

Neptune 54360-08-01 23:17 G 21575855.30 21575855.47 21575855.68 0.0088 0.0047

Saturn 54360-08-03 17:46 G 21575857.03 21575857.24 21575857.45 0.0284 0.0053

Neptune 54361-03-15 12:14 G 21576080.85 21576081.01 21576081.19 0.0088 0.0054

Saturn 54361-03-21 08:53 G 21576086.73 21576086.87 21576087.01 0.0282 0.0209

Neptune 54361-10-27 00:43 G 21576306.39 21576306.53 21576306.70 0.0088 0.0061

Neptune 54362-06-09 13:26 G 21576531.93 21576532.06 21576532.21 0.0088 0.0068

Neptune 54363-01-21 02:10 G 21576757.49 21576757.59 21576757.71 0.0088 0.0075

Neptune 54363-09-03 14:38 G 21576983.05 21576983.11 21576983.20 0.0088 0.0082

Jupiter 54364-11-02 03:36 G 21577408.46 21577408.65 21577408.85 0.0503 0.0159

Jupiter 54371-04-24 06:14 G 21579772.58 21579772.76 21579772.94 0.0527 0.0240

Saturn 54376-04-10 14:10 G 21581585.89 21581586.09 21581586.29 0.0276 0.0104

Jupiter 54376-07-08 01:55 G 21581674.49 21581674.58 21581674.68 0.0505 0.0443

Saturn 54376-11-25 23:17 G 21581815.29 21581815.47 21581815.66 0.0279 0.0142

Jupiter 54382-12-27 22:19 G 21584038.23 21584038.43 21584038.63 0.0525 0.0084

Mars 54383-01-26 12:58 G 21584067.88 21584068.04 21584068.20 0.1624 0.0612

Mars 54385-11-01 19:12 G 21585078.13 21585078.30 21585078.47 0.1904 0.0380

Jupiter 54388-11-04 14:24 G 21586176.94 21586177.10 21586177.28 0.0500 0.0278

Saturn 54389-06-29 07:41 G 21586413.79 21586413.82 21586413.87 0.0286 0.0280

Saturn 54390-02-14 00:43 G 21586643.32 21586643.53 21586643.74 0.0284 0.0012

Saturn 54390-10-01 15:22 G 21586873.05 21586873.14 21586873.25 0.0281 0.0249

Uranus 54394-04-23 14:53 G 21588173.10 21588173.12 21588173.16 0.0141 0.0139

Jupiter 54394-09-01 12:29 G 21588303.90 21588304.02 21588304.15 0.0522 0.0407

Uranus 54394-12-06 00:29 G 21588399.40 21588399.52 21588399.68 0.0141 0.0108

Uranus 54395-07-20 10:34 G 21588625.76 21588625.94 21588626.13 0.0141 0.0075

Uranus 54396-03-02 20:38 G 21588852.16 21588852.36 21588852.57 0.0142 0.0042

Uranus 54396-10-15 06:43 G 21589078.57 21589078.78 21589079.00 0.0142 0.0009

Uranus 54397-05-29 17:17 G 21589305.00 21589305.22 21589305.43 0.0142 0.0025

Uranus 54398-01-11 03:36 G 21589531.46 21589531.65 21589531.86 0.0142 0.0059

Uranus 54398-08-25 14:24 G 21589757.94 21589758.10 21589758.27 0.0142 0.0093

Uranus 54399-04-09 00:58 G 21589984.46 21589984.54 21589984.65 0.0143 0.0127

Jupiter 54400-07-10 15:22 G 21590442.93 21590443.14 21590443.34 0.0502 0.0009

Saturn 54405-10-21 22:48 G 21592372.25 21592372.45 21592372.66 0.0276 0.0061

Saturn 54406-06-08 08:24 G 21592601.70 21592601.85 21592602.01 0.0279 0.0186

Jupiter 54406-12-30 18:43 G 21592807.16 21592807.28 21592807.40 0.0528 0.0417

Jupiter 54412-03-15 14:24 G 21594708.93 21594709.10 21594709.27 0.0504 0.0274

Jupiter 54418-09-04 12:00 G 21597072.80 21597073.00 21597073.20 0.0526 0.0099

Saturn 54419-01-09 13:26 G 21597199.96 21597200.06 21597200.17 0.0286 0.0246

Saturn 54419-08-27 06:00 G 21597429.54 21597429.75 21597429.96 0.0284 0.0022

Saturn 54420-04-12 20:24 G 21597659.34 21597659.35 21597659.36 0.0281 0.0280

Jupiter 54424-07-13 01:12 G 21599211.46 21599211.55 21599211.65 0.0499 0.0437

Pluto 54427-02-14 12:00 G 21600157.81 21600158.00 21600158.21 0.0081 0.0035

Pluto 54427-09-27 23:02 G 21600383.28 21600383.46 21600383.65 0.0081 0.0044

Jupiter 54430-05-10 05:17 G 21601338.54 21601338.72 21601338.91 0.0524 0.0218

Neptune 54432-03-19 01:26 G 21602017.54 21602017.56 21602017.63 0.0089 0.0088

Neptune 54432-10-30 14:38 G 21602243.04 21602243.11 21602243.23 0.0089 0.0081

Neptune 54433-06-13 04:19 G 21602468.57 21602468.68 21602468.82 0.0089 0.0073

Neptune 54434-01-24 17:31 G 21602694.10 21602694.23 21602694.39 0.0089 0.0065

Uranus 54434-08-10 19:26 G 21602892.21 21602892.31 21602892.44 0.0137 0.0116

Neptune 54434-09-07 06:58 G 21602919.63 21602919.79 21602919.97 0.0089 0.0058

Saturn 54434-09-16 18:14 G 21602929.23 21602929.26 21602929.30 0.0275 0.0270

Uranus 54435-03-25 03:07 G 21603118.47 21603118.63 21603118.81 0.0137 0.0085

Neptune 54435-04-20 20:10 G 21603145.17 21603145.34 21603145.53 0.0089 0.0050

Saturn 54435-05-04 02:24 G 21603158.39 21603158.60 21603158.81 0.0277 0.0031

Uranus 54435-11-06 10:34 G 21603344.75 21603344.94 21603345.14 0.0137 0.0055

Neptune 54435-12-02 09:36 G 21603370.71 21603370.90 21603371.10 0.0089 0.0043

Saturn 54435-12-19 12:14 G 21603387.88 21603388.01 21603388.14 0.0279 0.0217

Jupiter 54436-03-18 00:58 G 21603477.34 21603477.54 21603477.73 0.0501 0.0162

Uranus 54436-06-19 18:00 G 21603571.04 21603571.25 21603571.47 0.0137 0.0025

Neptune 54436-07-14 22:48 G 21603596.26 21603596.45 21603596.66 0.0089 0.0036

Uranus 54437-02-01 01:12 G 21603797.33 21603797.55 21603797.77 0.0137 0.0005

Neptune 54437-02-25 12:14 G 21603821.81 21603822.01 21603822.22 0.0089 0.0028

Uranus 54437-09-15 07:55 G 21604023.63 21604023.83 21604024.05 0.0136 0.0034

Neptune 54437-10-09 01:26 G 21604047.35 21604047.56 21604047.78 0.0089 0.0020

Uranus 54438-04-29 14:53 G 21604249.93 21604250.12 21604250.31 0.0136 0.0063

Neptune 54438-05-22 14:53 G 21604272.90 21604273.12 21604273.33 0.0090 0.0013

Uranus 54438-12-11 21:22 G 21604476.25 21604476.39 21604476.56 0.0136 0.0093

Neptune 54439-01-03 04:05 G 21604498.45 21604498.67 21604498.89 0.0090 0.0005

Uranus 54439-07-26 04:05 G 21604702.59 21604702.67 21604702.78 0.0136 0.0122

Neptune 54439-08-16 17:31 G 21604724.01 21604724.23 21604724.45 0.0090 0.0003

Neptune 54440-03-29 06:43 G 21604949.57 21604949.78 21604950.00 0.0090 0.0010

Neptune 54440-11-09 20:10 G 21605175.13 21605175.34 21605175.56 0.0090 0.0018

Neptune 54441-06-23 09:22 G 21605400.69 21605400.89 21605401.11 0.0090 0.0025

Neptune 54442-02-03 22:48 G 21605626.25 21605626.45 21605626.66 0.0090 0.0033

Neptune 54442-09-17 12:00 G 21605851.82 21605852.00 21605852.21 0.0090 0.0041

Neptune 54443-05-01 01:12 G 21606077.39 21606077.55 21606077.76 0.0090 0.0049

Neptune 54443-12-12 14:53 G 21606302.96 21606303.12 21606303.30 0.0090 0.0056

Neptune 54444-07-25 04:05 G 21606528.54 21606528.67 21606528.85 0.0090 0.0064

Neptune 54445-03-07 17:31 G 21606754.12 21606754.23 21606754.38 0.0090 0.0071

Earth 54445-09-21 03:07 G 21606951.47 21606951.63 21606951.79 0.2688 0.0153

Moon 54445-09-21 08:10 G 21606951.68 21606951.84 21606952.01 0.2685 0.0105 *

Neptune 54445-10-19 07:12 G 21606979.70 21606979.80 21606979.91 0.0090 0.0078

Neptune 54446-06-01 20:10 G 21607205.30 21607205.34 21607205.43 0.0090 0.0086

Jupiter 54447-11-22 00:58 G 21607743.34 21607743.54 21607743.74 0.0503 0.0114

Saturn 54448-07-21 20:53 G 21607986.23 21607986.37 21607986.52 0.0285 0.0204

Mars 54448-11-23 01:55 G 21608110.41 21608110.58 21608110.74 0.1623 0.0357

Saturn 54449-03-08 13:26 G 21608215.85 21608216.06 21608216.26 0.0283 0.0063

Mars 54451-08-29 21:50 G 21609120.28 21609120.41 21609120.54 0.1906 0.1272

Jupiter 54454-05-13 00:58 G 21610107.37 21610107.54 21610107.72 0.0526 0.0278

Jupiter 54459-07-28 00:14 G 21612009.39 21612009.51 21612009.64 0.0505 0.0393

Saturn 54464-03-29 03:22 G 21613715.54 21613715.64 21613715.77 0.0275 0.0229

Saturn 54464-11-13 12:00 G 21613944.79 21613945.00 21613945.21 0.0277 0.0013

Saturn 54465-06-30 21:50 G 21614174.35 21614174.41 21614174.49 0.0279 0.0262

Jupiter 54466-01-15 17:17 G 21614373.02 21614373.22 21614373.42 0.0524 0.0044

Jupiter 54471-11-24 11:46 G 21616511.84 21616511.99 21616512.15 0.0500 0.0322

Jupiter 54477-09-20 10:48 G 21618638.81 21618638.95 21618639.10 0.0523 0.0356

Saturn 54478-02-01 04:34 G 21618772.52 21618772.69 21618772.86 0.0285 0.0165

Uranus 54478-08-05 09:36 G 21618957.80 21618957.90 21618958.03 0.0141 0.0120

Saturn 54478-09-18 20:24 G 21619002.15 21619002.35 21619002.55 0.0283 0.0100

Uranus 54479-03-19 19:26 G 21619184.15 21619184.31 21619184.49 0.0141 0.0087

Uranus 54479-11-01 05:31 G 21619410.53 21619410.73 21619410.93 0.0141 0.0055

Uranus 54480-06-14 15:36 G 21619636.93 21619637.15 21619637.37 0.0141 0.0022

Uranus 54481-01-27 01:55 G 21619863.36 21619863.58 21619863.80 0.0142 0.0012

Uranus 54481-09-10 12:00 G 21620089.81 21620090.00 21620090.22 0.0142 0.0046

Uranus 54482-04-24 22:34 G 21620316.27 21620316.44 21620316.63 0.0142 0.0079

Uranus 54482-12-07 09:07 G 21620542.77 21620542.88 21620543.03 0.0142 0.0114

Jupiter 54483-07-30 12:00 G 21620777.80 21620778.00 21620778.21 0.0502 0.0050

Jupiter 54490-01-18 18:14 G 21623142.17 21623142.26 21623142.35 0.0528 0.0471

Saturn 54493-10-09 07:12 G 21624501.66 21624501.80 21624501.96 0.0275 0.0198

Saturn 54494-05-26 16:05 G 21624730.96 21624731.17 21624731.38 0.0278 0.0045

Jupiter 54495-04-04 10:34 G 21625043.76 21625043.94 21625044.12 0.0504 0.0234

Jupiter 54501-09-24 09:50 G 21627407.72 21627407.91 21627408.11 0.0526 0.0148

Jupiter 54507-08-02 21:50 G 21629546.35 21629546.41 21629546.46 0.0499 0.0475

Saturn 54507-08-15 12:00 G 21629558.81 21629559.00 21629559.20 0.0285 0.0123

Saturn 54508-04-01 03:50 G 21629788.47 21629788.66 21629788.84 0.0282 0.0141

Jupiter 54513-05-30 00:00 G 21631673.31 21631673.50 21631673.70 0.0523 0.0179

Neptune 54513-09-23 18:58 G 21631790.24 21631790.29 21631790.39 0.0088 0.0083

Neptune 54514-05-07 07:41 G 21632015.73 21632015.82 21632015.95 0.0088 0.0076

Mars 54514-09-21 14:24 G 21632152.93 21632153.10 21632153.28 0.1622 0.0102

Neptune 54514-12-18 20:24 G 21632241.24 21632241.35 21632241.51 0.0088 0.0069

Neptune 54515-08-01 09:07 G 21632466.75 21632466.88 21632467.06 0.0088 0.0062

Neptune 54516-03-13 22:05 G 21632692.26 21632692.42 21632692.61 0.0088 0.0055

Neptune 54516-10-25 10:48 G 21632917.78 21632917.95 21632918.15 0.0088 0.0048

Neptune 54517-06-08 00:00 G 21633143.30 21633143.50 21633143.69 0.0088 0.0040

Neptune 54518-01-19 12:43 G 21633368.83 21633369.03 21633369.24 0.0088 0.0033

Uranus 54518-04-11 04:34 G 21633450.62 21633450.69 21633450.77 0.0138 0.0128

Neptune 54518-09-02 01:26 G 21633594.35 21633594.56 21633594.78 0.0088 0.0026

Uranus 54518-11-23 12:14 G 21633676.86 21633677.01 21633677.17 0.0137 0.0098

Jupiter 54519-04-07 22:05 G 21633812.24 21633812.42 21633812.61 0.0501 0.0207

Neptune 54519-04-15 14:10 G 21633819.88 21633820.09 21633820.31 0.0088 0.0019

Uranus 54519-07-07 19:55 G 21633903.14 21633903.33 21633903.52 0.0137 0.0068

Neptune 54519-11-27 02:53 G 21634045.41 21634045.62 21634045.84 0.0088 0.0012

Uranus 54520-02-19 03:07 G 21634129.43 21634129.63 21634129.85 0.0137 0.0038

Neptune 54520-07-09 15:36 G 21634270.93 21634271.15 21634271.38 0.0088 0.0005

Uranus 54520-10-02 10:34 G 21634355.72 21634355.94 21634356.16 0.0137 0.0008

Neptune 54521-02-20 04:34 G 21634496.47 21634496.69 21634496.91 0.0088 0.0003

Uranus 54521-05-16 17:46 G 21634582.02 21634582.24 21634582.45 0.0136 0.0022

Neptune 54521-10-03 17:17 G 21634722.00 21634722.22 21634722.44 0.0088 0.0010

Uranus 54521-12-29 00:29 G 21634808.33 21634808.52 21634808.73 0.0136 0.0052

Neptune 54522-05-17 06:00 G 21634947.53 21634947.75 21634947.97 0.0088 0.0017

Uranus 54522-08-12 07:41 G 21635034.65 21635034.82 21635035.00 0.0136 0.0081

Neptune 54522-12-28 18:43 G 21635173.07 21635173.28 21635173.49 0.0088 0.0024

Uranus 54523-03-26 14:24 G 21635260.98 21635261.10 21635261.23 0.0136 0.0110

Saturn 54523-04-22 17:02 G 21635288.04 21635288.21 21635288.39 0.0276 0.0154

Neptune 54523-08-11 06:58 G 21635398.60 21635398.79 21635399.01 0.0088 0.0032

Saturn 54523-12-08 01:55 G 21635517.39 21635517.58 21635517.79 0.0278 0.0090

Neptune 54524-03-23 19:41 G 21635624.14 21635624.32 21635624.53 0.0088 0.0039

Neptune 54524-11-04 08:10 G 21635849.67 21635849.84 21635850.05 0.0088 0.0046

Jupiter 54525-02-01 17:02 G 21635939.15 21635939.21 21635939.28 0.0521 0.0490

Neptune 54525-06-17 20:53 G 21636075.21 21636075.37 21636075.56 0.0088 0.0053

Neptune 54526-01-29 09:36 G 21636300.76 21636300.90 21636301.08 0.0088 0.0060

Neptune 54526-09-11 22:05 G 21636526.30 21636526.42 21636526.59 0.0088 0.0067

Neptune 54527-04-25 10:34 G 21636751.85 21636751.94 21636752.09 0.0088 0.0074

Neptune 54527-12-06 23:31 G 21636977.40 21636977.48 21636977.58 0.0088 0.0080

Neptune 54528-07-19 12:00 G 21637202.99 21637203.00 21637203.04 0.0088 0.0087

Jupiter 54530-12-11 21:22 G 21638078.19 21638078.39 21638078.59 0.0503 0.0071

Saturn 54537-02-24 20:38 G 21640345.16 21640345.36 21640345.57 0.0284 0.0082

Jupiter 54537-06-01 22:34 G 21640442.29 21640442.44 21640442.60 0.0527 0.0326

Saturn 54537-10-12 11:46 G 21640574.84 21640574.99 21640575.16 0.0282 0.0181

Jupiter 54542-08-16 20:53 G 21642344.23 21642344.37 21642344.52 0.0505 0.0350

Jupiter 54549-02-04 15:50 G 21644707.96 21644708.16 21644708.36 0.0525 0.0008

Saturn 54552-11-01 20:53 G 21646074.18 21646074.37 21646074.56 0.0276 0.0123

Saturn 54553-06-19 06:00 G 21646303.56 21646303.75 21646303.94 0.0278 0.0122

Jupiter 54554-12-14 07:26 G 21646846.67 21646846.81 21646846.95 0.0500 0.0359

Jupiter 54560-10-10 08:38 G 21648973.70 21648973.86 21648974.03 0.0523 0.0308

Uranus 54562-04-05 19:26 G 21649516.25 21649516.31 21649516.40 0.0141 0.0132

Uranus 54562-11-18 05:02 G 21649742.58 21649742.71 21649742.88 0.0141 0.0100

Uranus 54563-07-02 15:07 G 21649968.95 21649969.13 21649969.33 0.0141 0.0067

Uranus 54564-02-14 01:12 G 21650195.35 21650195.55 21650195.77 0.0141 0.0034

Uranus 54564-09-27 11:31 G 21650421.76 21650421.98 21650422.20 0.0142 0.0001

Uranus 54565-05-11 21:50 G 21650648.20 21650648.41 21650648.62 0.0142 0.0033

Uranus 54565-12-24 08:10 G 21650874.66 21650874.84 21650875.04 0.0142 0.0067

Uranus 54566-08-07 18:43 G 21651101.14 21651101.28 21651101.45 0.0142 0.0101

Jupiter 54566-08-19 07:41 G 21651112.62 21651112.82 21651113.02 0.0502 0.0087

Saturn 54566-09-07 04:05 G 21651131.46 21651131.67 21651131.88 0.0284 0.0040

Uranus 54567-03-22 05:17 G 21651327.67 21651327.72 21651327.81 0.0142 0.0134

Saturn 54567-04-24 19:12 G 21651361.17 21651361.30 21651361.43 0.0282 0.0221

Jupiter 54573-02-07 12:43 G 21653476.98 21653477.03 21653477.08 0.0527 0.0507

Moon 54575-03-23 15:50 G 21654251.03 21654251.16 21654251.28 0.2638 0.1712

Earth 54575-03-23 19:12 G 21654251.18 21654251.30 21654251.42 0.2643 0.1750 *

Jupiter 54578-04-24 06:43 G 21655378.59 21655378.78 21655378.97 0.0504 0.0192

Mars 54580-07-19 02:53 G 21656195.45 21656195.62 21656195.79 0.1621 0.0165

Saturn 54582-05-15 06:29 G 21656860.57 21656860.77 21656860.97 0.0277 0.0080

Pluto 54582-06-18 01:41 G 21656894.41 21656894.57 21656894.76 0.0063 0.0037

Saturn 54582-12-30 16:05 G 21657090.00 21657090.17 21657090.34 0.0279 0.0167

Pluto 54583-01-29 05:31 G 21657119.51 21657119.73 21657119.95 0.0063 0.0001

Moon 54583-03-21 06:14 G 21657170.68 21657170.76 21657170.83 0.2643 0.2298

Earth 54583-03-21 11:46 G 21657170.86 21657170.99 21657171.12 0.2644 0.1479

Pluto 54583-09-11 09:07 G 21657344.71 21657344.88 21657345.07 0.0063 0.0036

Jupiter 54584-10-13 04:05 G 21657742.48 21657742.67 21657742.86 0.0525 0.0183

Jupiter 54589-12-28 05:17 G 21659644.65 21659644.72 21659644.79 0.0506 0.0473

Saturn 54595-08-02 20:38 G 21661688.30 21661688.36 21661688.45 0.0286 0.0265

Saturn 54596-03-19 13:41 G 21661917.85 21661918.07 21661918.28 0.0284 0.0006

Jupiter 54596-06-17 20:38 G 21662008.16 21662008.36 21662008.56 0.0524 0.0135

Neptune 54596-06-21 09:22 G 21662011.86 21662011.89 21662011.94 0.0089 0.0088

Saturn 54596-11-04 03:50 G 21662147.60 21662147.66 21662147.75 0.0281 0.0263

Neptune 54597-02-01 22:34 G 21662237.36 21662237.44 21662237.55 0.0089 0.0081

Neptune 54597-09-15 11:46 G 21662462.89 21662462.99 21662463.14 0.0089 0.0074

Neptune 54598-04-29 01:26 G 21662688.42 21662688.56 21662688.71 0.0089 0.0066

Neptune 54598-12-10 14:24 G 21662913.95 21662914.10 21662914.28 0.0089 0.0059

Neptune 54599-07-24 03:50 G 21663139.49 21663139.66 21663139.85 0.0089 0.0051

Neptune 54600-03-06 17:17 G 21663365.04 21663365.22 21663365.42 0.0089 0.0044

Neptune 54600-10-18 06:29 G 21663590.58 21663590.77 21663590.98 0.0089 0.0036

Neptune 54601-05-31 19:55 G 21663816.12 21663816.33 21663816.54 0.0089 0.0029

Neptune 54602-01-12 08:53 G 21664041.67 21664041.87 21664042.09 0.0089 0.0022

Jupiter 54602-04-27 18:14 G 21664147.08 21664147.26 21664147.44 0.0500 0.0245

Uranus 54602-07-24 22:19 G 21664235.31 21664235.43 21664235.57 0.0138 0.0110

Neptune 54602-08-25 22:19 G 21664267.22 21664267.43 21664267.66 0.0089 0.0014

Uranus 54603-03-08 05:46 G 21664461.58 21664461.74 21664461.93 0.0137 0.0080

Neptune 54603-04-08 11:46 G 21664492.77 21664492.99 21664493.21 0.0089 0.0007

Uranus 54603-10-20 13:26 G 21664687.86 21664688.06 21664688.27 0.0137 0.0049

Neptune 54603-11-20 00:58 G 21664718.32 21664718.54 21664718.76 0.0090 0.0001

Uranus 54604-06-02 20:53 G 21664914.16 21664914.37 21664914.59 0.0137 0.0019

Neptune 54604-07-02 14:10 G 21664943.88 21664944.09 21664944.32 0.0090 0.0009

Uranus 54605-01-15 04:05 G 21665140.46 21665140.67 21665140.89 0.0137 0.0012

Neptune 54605-02-13 03:36 G 21665169.44 21665169.65 21665169.87 0.0090 0.0016

Uranus 54605-08-29 11:17 G 21665366.76 21665366.97 21665367.18 0.0136 0.0041

Neptune 54605-09-26 16:48 G 21665395.00 21665395.20 21665395.42 0.0090 0.0024

Uranus 54606-04-12 18:00 G 21665593.08 21665593.25 21665593.45 0.0136 0.0071

Neptune 54606-05-10 06:00 G 21665620.56 21665620.75 21665620.97 0.0090 0.0031

Uranus 54606-11-25 01:12 G 21665819.40 21665819.55 21665819.70 0.0136 0.0099

Neptune 54606-12-21 19:26 G 21665846.12 21665846.31 21665846.52 0.0090 0.0039

Uranus 54607-07-09 07:55 G 21666045.77 21666045.83 21666045.91 0.0136 0.0128

Neptune 54607-08-04 09:07 G 21666071.69 21666071.88 21666072.07 0.0090 0.0046

Jupiter 54608-02-22 14:53 G 21666274.01 21666274.12 21666274.22 0.0522 0.0443

Neptune 54608-03-16 22:05 G 21666297.26 21666297.42 21666297.61 0.0090 0.0054

Neptune 54608-10-28 11:46 G 21666522.83 21666522.99 21666523.15 0.0090 0.0061

Neptune 54609-06-11 00:43 G 21666748.41 21666748.53 21666748.69 0.0090 0.0069

Neptune 54610-01-22 14:24 G 21666973.99 21666974.10 21666974.23 0.0090 0.0076

Neptune 54610-09-05 04:05 G 21667199.59 21667199.67 21667199.75 0.0090 0.0083

Saturn 54611-11-26 10:19 G 21667646.72 21667646.93 21667647.14 0.0277 0.0048

Saturn 54612-07-12 19:55 G 21667876.19 21667876.33 21667876.48 0.0279 0.0199

Jupiter 54613-12-31 17:17 G 21668413.01 21668413.22 21668413.42 0.0502 0.0034

Mars 54615-04-25 02:24 G 21668892.52 21668892.60 21668892.68 0.1904 0.1664

Jupiter 54620-06-21 20:38 G 21670777.22 21670777.36 21670777.50 0.0527 0.0373

Saturn 54625-02-13 03:07 G 21672474.51 21672474.63 21672474.76 0.0286 0.0226

Jupiter 54625-09-05 16:05 G 21672679.01 21672679.17 21672679.33 0.0505 0.0312

Saturn 54625-09-30 19:41 G 21672704.11 21672704.32 21672704.53 0.0283 0.0042

Jupiter 54632-02-25 11:17 G 21675042.77 21675042.97 21675043.17 0.0524 0.0048

Jupiter 54638-01-03 03:36 G 21677181.53 21677181.65 21677181.77 0.0500 0.0399

Saturn 54640-10-21 11:02 G 21678203.87 21678203.96 21678204.06 0.0275 0.0247

Saturn 54641-06-07 19:26 G 21678433.10 21678433.31 21678433.52 0.0277 0.0006

Saturn 54642-01-23 05:17 G 21678662.63 21678662.72 21678662.83 0.0279 0.0243

Jupiter 54643-10-31 03:36 G 21679308.47 21679308.65 21679308.82 0.0522 0.0268

Mars 54646-05-17 15:36 G 21680237.98 21680238.15 21680238.32 0.1620 0.0416

Uranus 54646-07-19 15:22 G 21680301.01 21680301.14 21680301.28 0.0141 0.0111

Uranus 54647-03-03 00:58 G 21680527.37 21680527.54 21680527.73 0.0141 0.0079

Uranus 54647-10-15 10:48 G 21680753.75 21680753.95 21680754.17 0.0141 0.0046

Uranus 54648-05-28 21:07 G 21680980.16 21680980.38 21680980.60 0.0141 0.0013

Uranus 54649-01-10 07:26 G 21681206.60 21681206.81 21681207.03 0.0142 0.0021

Uranus 54649-08-24 17:46 G 21681433.04 21681433.24 21681433.44 0.0142 0.0054

Jupiter 54649-09-08 03:36 G 21681447.45 21681447.65 21681447.85 0.0502 0.0126

Uranus 54650-04-08 04:05 G 21681659.51 21681659.67 21681659.85 0.0142 0.0088

Uranus 54650-11-20 14:53 G 21681886.01 21681886.12 21681886.23 0.0142 0.0122

Saturn 54654-08-26 13:41 G 21683260.90 21683261.07 21683261.23 0.0285 0.0179

Saturn 54655-04-13 05:46 G 21683490.54 21683490.74 21683490.94 0.0283 0.0086

Jupiter 54661-05-14 03:36 G 21685713.46 21685713.65 21685713.85 0.0503 0.0149

Jupiter 54667-11-03 02:10 G 21688077.41 21688077.59 21688077.78 0.0526 0.0232

Saturn 54670-05-03 14:24 G 21688989.97 21688990.10 21688990.23 0.0275 0.0215

Saturn 54670-12-18 22:48 G 21689219.24 21689219.45 21689219.66 0.0277 0.0026

Saturn 54671-08-05 08:38 G 21689448.84 21689448.86 21689448.91 0.0279 0.0275

Pluto 54672-08-03 18:43 G 21689813.17 21689813.28 21689813.41 0.0082 0.0069

Jupiter 54673-01-17 01:55 G 21689979.47 21689979.58 21689979.68 0.0505 0.0431

Pluto 54673-03-17 06:00 G 21690038.53 21690038.75 21690038.97 0.0081 0.0010

Neptune 54677-12-27 03:36 G 21691784.60 21691784.65 21691784.74 0.0088 0.0083

Neptune 54678-08-09 16:19 G 21692010.09 21692010.18 21692010.31 0.0088 0.0076

Neptune 54679-03-23 05:17 G 21692235.60 21692235.72 21692235.87 0.0088 0.0069

Jupiter 54679-07-08 19:12 G 21692343.10 21692343.30 21692343.50 0.0524 0.0084

Neptune 54679-11-03 18:00 G 21692461.11 21692461.25 21692461.42 0.0088 0.0062

Neptune 54680-06-16 06:43 G 21692686.62 21692686.78 21692686.97 0.0088 0.0055

Neptune 54681-01-27 19:41 G 21692912.15 21692912.32 21692912.52 0.0088 0.0048

Mars 54681-02-19 04:34 G 21692934.53 21692934.69 21692934.85 0.1906 0.0743

Neptune 54681-09-10 08:24 G 21693137.67 21693137.85 21693138.06 0.0088 0.0041

Neptune 54682-04-23 21:07 G 21693363.19 21693363.38 21693363.60 0.0088 0.0034

Neptune 54682-12-05 09:50 G 21693588.71 21693588.91 21693589.13 0.0088 0.0027

Neptune 54683-07-18 22:48 G 21693814.24 21693814.45 21693814.67 0.0088 0.0020

Neptune 54684-02-29 11:31 G 21694039.77 21694039.98 21694040.21 0.0088 0.0013

Saturn 54684-03-07 18:43 G 21694047.10 21694047.28 21694047.47 0.0285 0.0143

Neptune 54684-10-12 00:29 G 21694265.30 21694265.52 21694265.74 0.0088 0.0006

Saturn 54684-10-23 10:48 G 21694276.76 21694276.95 21694277.14 0.0283 0.0122

Jupiter 54685-05-16 13:55 G 21694481.91 21694482.08 21694482.25 0.0501 0.0283

Neptune 54685-05-25 13:12 G 21694490.83 21694491.05 21694491.27 0.0088 0.0002

Neptune 54686-01-06 01:55 G 21694716.37 21694716.58 21694716.81 0.0088 0.0009

Uranus 54686-03-24 07:41 G 21694793.73 21694793.82 21694793.94 0.0138 0.0122

Neptune 54686-08-19 14:38 G 21694941.90 21694942.11 21694942.34 0.0088 0.0016

Uranus 54686-11-05 15:22 G 21695019.99 21695020.14 21695020.32 0.0137 0.0092

Neptune 54687-04-02 03:36 G 21695167.44 21695167.65 21695167.86 0.0088 0.0023

Uranus 54687-06-19 23:31 G 21695246.28 21695246.48 21695246.67 0.0137 0.0061

Neptune 54687-11-13 16:19 G 21695392.97 21695393.18 21695393.39 0.0088 0.0030

Uranus 54688-02-01 06:58 G 21695472.58 21695472.79 21695473.00 0.0137 0.0030

Neptune 54688-06-26 05:02 G 21695618.51 21695618.71 21695618.91 0.0088 0.0037

Uranus 54688-09-14 14:10 G 21695698.88 21695699.09 21695699.31 0.0137 0.0002

Moon 54688-09-22 21:36 G 21695707.24 21695707.40 21695707.55 0.2689 0.0474

Earth 54688-09-23 03:07 G 21695707.47 21695707.63 21695707.79 0.2688 0.0265 *

Neptune 54689-02-06 17:46 G 21695844.05 21695844.24 21695844.43 0.0088 0.0044

Uranus 54689-04-28 21:22 G 21695925.18 21695925.39 21695925.61 0.0137 0.0030

Neptune 54689-09-20 06:29 G 21696069.59 21696069.77 21696069.95 0.0088 0.0051

Uranus 54689-12-11 04:19 G 21696151.49 21696151.68 21696151.89 0.0136 0.0060

Neptune 54690-05-03 18:58 G 21696295.13 21696295.29 21696295.46 0.0088 0.0058

Uranus 54690-07-25 11:17 G 21696377.82 21696377.97 21696378.15 0.0136 0.0089

Neptune 54690-12-15 07:26 G 21696520.68 21696520.81 21696520.97 0.0088 0.0065

Uranus 54691-03-08 18:00 G 21696604.16 21696604.25 21696604.38 0.0136 0.0118

Jupiter 54691-03-13 11:31 G 21696608.85 21696608.98 21696609.11 0.0521 0.0397

Neptune 54691-07-28 20:10 G 21696746.22 21696746.34 21696746.47 0.0088 0.0072

Neptune 54692-03-10 08:38 G 21696971.79 21696971.86 21696971.98 0.0088 0.0079

Neptune 54692-10-21 21:07 G 21697197.36 21697197.38 21697197.45 0.0088 0.0086

Jupiter 54697-01-19 13:26 G 21698747.85 21698748.06 21698748.26 0.0503 0.0010

Saturn 54699-11-13 22:19 G 21699776.27 21699776.43 21699776.59 0.0276 0.0177

Saturn 54700-07-01 06:58 G 21700005.59 21700005.79 21700006.00 0.0278 0.0066

Jupiter 54703-07-12 16:05 G 21701112.05 21701112.17 21701112.30 0.0527 0.0412

Jupiter 54708-09-25 12:29 G 21703013.86 21703014.02 21703014.20 0.0505 0.0271

Mars 54712-03-15 04:05 G 21704280.51 21704280.67 21704280.83 0.1619 0.0676

Saturn 54713-09-19 04:48 G 21704833.50 21704833.70 21704833.90 0.0285 0.0098

Saturn 54714-05-06 20:24 G 21705063.18 21705063.35 21705063.52 0.0282 0.0166

Jupiter 54715-03-17 07:26 G 21705377.61 21705377.81 21705378.01 0.0525 0.0090

Jupiter 54721-01-23 01:12 G 21707516.46 21707516.55 21707516.65 0.0499 0.0440

Jupiter 54726-11-20 01:26 G 21709643.38 21709643.56 21709643.74 0.0523 0.0221

Saturn 54729-05-27 01:12 G 21710562.38 21710562.55 21710562.74 0.0275 0.0146

Saturn 54730-01-11 10:05 G 21710791.72 21710791.92 21710792.12 0.0278 0.0097

Uranus 54730-03-20 00:58 G 21710859.44 21710859.54 21710859.65 0.0141 0.0123

Uranus 54730-11-01 10:34 G 21711085.78 21711085.94 21711086.11 0.0141 0.0091

Uranus 54731-06-15 20:24 G 21711312.16 21711312.35 21711312.56 0.0141 0.0058

Uranus 54732-01-28 06:29 G 21711538.56 21711538.77 21711538.99 0.0141 0.0026

Uranus 54732-09-10 16:48 G 21711764.98 21711765.20 21711765.42 0.0142 0.0008

Jupiter 54732-09-28 00:43 G 21711782.34 21711782.53 21711782.73 0.0501 0.0169

Uranus 54733-04-25 03:07 G 21711991.42 21711991.63 21711991.84 0.0142 0.0042

Uranus 54733-12-07 13:12 G 21712217.88 21712218.05 21712218.25 0.0142 0.0076

Uranus 54734-07-22 00:00 G 21712444.37 21712444.50 21712444.64 0.0142 0.0109

Saturn 54743-04-01 08:24 G 21715619.64 21715619.85 21715620.06 0.0285 0.0065

Saturn 54743-11-16 23:46 G 21715849.35 21715849.49 21715849.65 0.0282 0.0198

Mars 54744-03-13 20:24 G 21715967.30 21715967.35 21715967.39 0.1622 0.1547

Jupiter 54744-06-03 00:14 G 21716048.31 21716048.51 21716048.71 0.0503 0.0108

Mars 54746-12-18 06:29 G 21716976.60 21716976.77 21716976.95 0.1907 0.0180

Jupiter 54750-11-23 00:00 G 21718412.33 21718412.50 21718412.67 0.0526 0.0279

Jupiter 54756-02-06 22:19 G 21720314.31 21720314.43 21720314.56 0.0506 0.0389

Saturn 54758-12-07 07:55 G 21721348.64 21721348.83 21721349.03 0.0276 0.0110

Saturn 54759-07-24 17:02 G 21721578.03 21721578.21 21721578.39 0.0278 0.0134

Neptune 54760-09-24 17:17 G 21722006.21 21722006.22 21722006.28 0.0089 0.0089

Neptune 54761-05-08 06:58 G 21722231.71 21722231.79 21722231.89 0.0089 0.0081

Neptune 54761-12-19 20:10 G 21722457.23 21722457.34 21722457.47 0.0089 0.0074

Jupiter 54762-07-28 16:05 G 21722677.97 21722678.17 21722678.38 0.0524 0.0040

Neptune 54762-08-02 09:22 G 21722682.76 21722682.89 21722683.06 0.0089 0.0067

Neptune 54763-03-15 22:34 G 21722908.30 21722908.44 21722908.63 0.0089 0.0060

Neptune 54763-10-27 12:14 G 21723133.84 21723134.01 21723134.19 0.0089 0.0052

Neptune 54764-06-09 01:26 G 21723359.38 21723359.56 21723359.76 0.0089 0.0045

Neptune 54765-01-20 14:38 G 21723584.92 21723585.11 21723585.32 0.0089 0.0037

Neptune 54765-09-03 04:05 G 21723810.47 21723810.67 21723810.89 0.0089 0.0030

Neptune 54766-04-16 17:17 G 21724036.02 21724036.22 21724036.45 0.0089 0.0023

Neptune 54766-11-28 06:43 G 21724261.57 21724261.78 21724262.00 0.0089 0.0015

Neptune 54767-07-11 20:10 G 21724487.12 21724487.34 21724487.56 0.0089 0.0007

Neptune 54768-02-22 09:22 G 21724712.67 21724712.89 21724713.11 0.0089 0.0001

Jupiter 54768-06-05 11:17 G 21724816.82 21724816.97 21724817.13 0.0500 0.0325

Neptune 54768-10-04 22:34 G 21724938.23 21724938.44 21724938.66 0.0090 0.0008

Neptune 54769-05-18 12:00 G 21725163.78 21725164.00 21725164.21 0.0090 0.0015

Uranus 54769-11-22 18:43 G 21725352.23 21725352.28 21725352.35 0.0138 0.0132

Neptune 54769-12-30 00:58 G 21725389.34 21725389.54 21725389.76 0.0090 0.0023

Uranus 54770-07-07 02:38 G 21725578.47 21725578.61 21725578.76 0.0138 0.0102

Neptune 54770-08-12 14:24 G 21725614.90 21725615.10 21725615.31 0.0090 0.0030

Uranus 54771-02-18 10:19 G 21725804.75 21725804.93 21725805.12 0.0137 0.0071

Neptune 54771-03-26 03:50 G 21725840.46 21725840.66 21725840.86 0.0090 0.0037

Uranus 54771-10-02 17:46 G 21726031.04 21726031.24 21726031.46 0.0137 0.0041

Neptune 54771-11-06 16:48 G 21726066.02 21726066.20 21726066.40 0.0090 0.0045

Uranus 54772-05-16 01:26 G 21726257.34 21726257.56 21726257.78 0.0137 0.0011

Neptune 54772-06-19 06:14 G 21726291.59 21726291.76 21726291.95 0.0090 0.0052

Saturn 54772-10-11 18:00 G 21726406.04 21726406.25 21726406.46 0.0284 0.0020

Uranus 54772-12-28 08:38 G 21726483.65 21726483.86 21726484.08 0.0137 0.0019

Neptune 54773-01-30 19:12 G 21726517.16 21726517.30 21726517.49 0.0090 0.0060

Saturn 54773-05-29 09:07 G 21726635.78 21726635.88 21726635.99 0.0282 0.0241

Uranus 54773-08-11 15:36 G 21726709.96 21726710.15 21726710.37 0.0136 0.0050

Neptune 54773-09-13 08:53 G 21726742.74 21726742.87 21726743.03 0.0090 0.0067

Uranus 54774-03-25 22:34 G 21726936.28 21726936.44 21726936.63 0.0136 0.0079

Jupiter 54774-04-02 07:41 G 21726943.68 21726943.82 21726943.97 0.0522 0.0356

Neptune 54774-04-26 22:19 G 21726968.32 21726968.43 21726968.56 0.0090 0.0074

Uranus 54774-11-07 05:31 G 21727162.61 21727162.73 21727162.87 0.0136 0.0108

Neptune 54774-12-08 11:46 G 21727193.91 21727193.99 21727194.09 0.0090 0.0081

Neptune 54775-07-22 00:43 G 21727419.52 21727419.53 21727419.59 0.0090 0.0089

Mars 54778-01-10 16:48 G 21728323.06 21728323.20 21728323.34 0.1618 0.0924

Jupiter 54780-02-09 12:29 G 21729082.82 21729083.02 21729083.23 0.0502 0.0058

Jupiter 54786-07-31 15:07 G 21731447.04 21731447.13 21731447.23 0.0528 0.0463

Saturn 54788-06-18 10:34 G 21732134.74 21732134.94 21732135.15 0.0276 0.0079

Saturn 54789-02-02 19:26 G 21732364.15 21732364.31 21732364.49 0.0278 0.0165

Jupiter 54791-10-15 11:31 G 21733348.79 21733348.98 21733349.16 0.0504 0.0220

Jupiter 54798-04-05 08:24 G 21735712.65 21735712.85 21735713.04 0.0525 0.0148

Saturn 54801-09-06 02:24 G 21736962.53 21736962.60 21736962.69 0.0286 0.0262

Saturn 54802-04-23 19:55 G 21737192.11 21737192.33 21737192.54 0.0284 0.0010

Saturn 54802-12-09 10:48 G 21737421.90 21737421.95 21737422.02 0.0282 0.0269

Jupiter 54803-06-20 09:50 G 21737614.89 21737614.91 21737614.94 0.0506 0.0501

Jupiter 54804-02-11 22:48 G 21737851.40 21737851.45 21737851.50 0.0499 0.0482

Jupiter 54809-12-09 00:58 G 21739978.35 21739978.54 21739978.73 0.0523 0.0166

Mars 54810-01-09 08:38 G 21740009.76 21740009.86 21740009.97 0.1621 0.1283

Mars 54812-10-14 08:24 G 21741018.71 21741018.85 21741018.99 0.1909 0.1127

Uranus 54813-11-17 09:50 G 21741417.87 21741417.91 21741417.99 0.0140 0.0135

Uranus 54814-07-01 19:41 G 21741644.18 21741644.32 21741644.48 0.0141 0.0103

Uranus 54815-02-13 05:17 G 21741870.55 21741870.72 21741870.92 0.0141 0.0071

Uranus 54815-09-27 15:22 G 21742096.93 21742097.14 21742097.35 0.0141 0.0038

Jupiter 54815-10-17 22:34 G 21742117.26 21742117.44 21742117.63 0.0501 0.0213

Uranus 54816-05-11 01:26 G 21742323.34 21742323.56 21742323.78 0.0141 0.0004

Uranus 54816-12-23 11:31 G 21742549.78 21742549.98 21742550.20 0.0142 0.0030

Uranus 54817-08-06 21:50 G 21742776.22 21742776.41 21742776.61 0.0142 0.0063

Saturn 54817-12-29 16:05 G 21742920.96 21742921.17 21742921.38 0.0276 0.0046

Uranus 54818-03-21 08:24 G 21743002.69 21743002.85 21743003.01 0.0142 0.0096

Earth 54818-03-25 21:36 G 21743007.30 21743007.40 21743007.51 0.2644 0.1901

Moon 54818-03-25 23:17 G 21743007.37 21743007.47 21743007.57 0.2650 0.1969 *

Saturn 54818-08-16 01:26 G 21743150.42 21743150.56 21743150.71 0.0279 0.0200

Uranus 54818-11-02 18:29 G 21743229.20 21743229.27 21743229.37 0.0142 0.0131

Jupiter 54821-08-13 18:14 G 21744244.18 21744244.26 21744244.34 0.0521 0.0474

Earth 54826-03-23 13:55 G 21745926.95 21745927.08 21745927.22 0.2645 0.1373

Moon 54826-03-23 18:43 G 21745927.13 21745927.28 21745927.43 0.2648 0.0537 *

Jupiter 54827-06-22 22:48 G 21746383.25 21746383.45 21746383.66 0.0503 0.0060

Pluto 54827-12-06 10:48 G 21746549.86 21746549.95 21746550.06 0.0063 0.0056

Pluto 54828-07-18 14:24 G 21746774.90 21746775.10 21746775.32 0.0063 0.0021

Pluto 54829-02-28 18:00 G 21747000.05 21747000.25 21747000.48 0.0063 0.0016

Pluto 54829-10-11 21:50 G 21747225.30 21747225.41 21747225.55 0.0064 0.0053

Saturn 54831-03-19 11:31 G 21747748.84 21747748.98 21747749.11 0.0286 0.0216

Saturn 54831-11-04 04:19 G 21747978.48 21747978.68 21747978.89 0.0284 0.0052

Jupiter 54833-12-11 21:22 G 21748747.23 21748747.39 21748747.55 0.0527 0.0324

Jupiter 54839-02-25 23:31 G 21750649.33 21750649.48 21750649.63 0.0505 0.0331

Neptune 54842-03-31 12:29 G 21751778.97 21751779.02 21751779.12 0.0088 0.0083

Neptune 54842-11-12 01:12 G 21752004.47 21752004.55 21752004.69 0.0088 0.0077

Neptune 54843-06-25 14:10 G 21752229.97 21752230.09 21752230.24 0.0088 0.0069

Mars 54843-11-08 05:17 G 21752365.61 21752365.72 21752365.84 0.1617 0.1181

Neptune 54844-02-06 03:07 G 21752455.49 21752455.63 21752455.80 0.0088 0.0062

Neptune 54844-09-18 16:05 G 21752681.01 21752681.17 21752681.35 0.0088 0.0055

Neptune 54845-05-02 04:48 G 21752906.52 21752906.70 21752906.89 0.0088 0.0048

Jupiter 54845-08-16 15:22 G 21753012.93 21753013.14 21753013.34 0.0525 0.0017

Neptune 54845-12-13 17:31 G 21753132.04 21753132.23 21753132.43 0.0088 0.0041

Neptune 54846-07-27 06:14 G 21753357.57 21753357.76 21753357.97 0.0088 0.0034

Saturn 54846-11-24 10:48 G 21753477.88 21753477.95 21753478.04 0.0274 0.0252

Neptune 54847-03-09 19:12 G 21753583.09 21753583.30 21753583.51 0.0088 0.0027

Saturn 54847-07-11 18:29 G 21753707.05 21753707.27 21753707.48 0.0276 0.0016

Neptune 54847-10-21 07:55 G 21753808.62 21753808.83 21753809.05 0.0088 0.0020

Saturn 54848-02-26 03:22 G 21753936.53 21753936.64 21753936.77 0.0278 0.0229

Neptune 54848-06-02 20:38 G 21754034.14 21754034.36 21754034.58 0.0088 0.0013

Neptune 54849-01-14 09:22 G 21754259.67 21754259.89 21754260.12 0.0088 0.0006

Neptune 54849-08-27 22:19 G 21754485.21 21754485.43 21754485.65 0.0088 0.0002

Neptune 54850-04-10 10:48 G 21754710.74 21754710.95 21754711.18 0.0088 0.0008

Neptune 54850-11-21 23:31 G 21754936.27 21754936.48 21754936.70 0.0088 0.0015

Jupiter 54851-06-25 11:17 G 21755151.84 21755151.97 21755152.10 0.0500 0.0375

Neptune 54851-07-05 12:14 G 21755161.80 21755162.01 21755162.23 0.0088 0.0022

Neptune 54852-02-16 01:12 G 21755387.35 21755387.55 21755387.76 0.0088 0.0029

Neptune 54852-09-28 13:55 G 21755612.88 21755613.08 21755613.29 0.0088 0.0036

Neptune 54853-05-12 02:38 G 21755838.42 21755838.61 21755838.81 0.0088 0.0043

Neptune 54853-12-23 15:07 G 21756063.96 21756064.13 21756064.32 0.0088 0.0050

Uranus 54854-03-06 12:14 G 21756136.90 21756137.01 21756137.14 0.0138 0.0114

Neptune 54854-08-06 03:50 G 21756289.51 21756289.66 21756289.84 0.0088 0.0057

Uranus 54854-10-18 19:55 G 21756363.17 21756363.33 21756363.52 0.0138 0.0084

Neptune 54855-03-19 16:34 G 21756515.06 21756515.19 21756515.36 0.0088 0.0064

Uranus 54855-06-02 03:50 G 21756589.47 21756589.66 21756589.87 0.0137 0.0053

Neptune 54855-10-31 05:02 G 21756740.61 21756740.71 21756740.86 0.0088 0.0071

Uranus 54856-01-14 11:31 G 21756815.77 21756815.98 21756816.20 0.0137 0.0022

Neptune 54856-06-12 17:46 G 21756966.16 21756966.24 21756966.36 0.0088 0.0078

Uranus 54856-08-27 18:58 G 21757042.07 21757042.29 21757042.51 0.0137 0.0008

Neptune 54857-01-24 06:43 G 21757191.73 21757191.78 21757191.85 0.0088 0.0084

Uranus 54857-04-11 01:55 G 21757268.38 21757268.58 21757268.80 0.0137 0.0038

Jupiter 54857-04-21 09:36 G 21757278.74 21757278.90 21757279.07 0.0522 0.0294

Uranus 54857-11-23 08:53 G 21757494.70 21757494.87 21757495.07 0.0136 0.0068

Uranus 54858-07-07 16:05 G 21757721.03 21757721.17 21757721.33 0.0136 0.0098

Uranus 54859-02-18 23:17 G 21757947.39 21757947.47 21757947.54 0.0136 0.0126

Saturn 54860-09-28 12:14 G 21758534.85 21758535.01 21758535.17 0.0286 0.0192

Saturn 54861-05-16 05:02 G 21758764.51 21758764.71 21758764.92 0.0284 0.0077

Jupiter 54863-02-28 11:31 G 21759417.78 21759417.98 21759418.18 0.0502 0.0106

Jupiter 54869-08-19 16:05 G 21761782.14 21761782.17 21761782.20 0.0527 0.0519

Jupiter 54874-11-03 10:05 G 21763683.73 21763683.92 21763684.12 0.0504 0.0172

Mars 54875-11-06 21:36 G 21764052.26 21764052.40 21764052.53 0.1620 0.1033

Saturn 54876-06-05 14:53 G 21764264.00 21764264.12 21764264.25 0.0275 0.0223

Saturn 54877-01-20 22:34 G 21764493.23 21764493.44 21764493.66 0.0277 0.0016

Saturn 54877-09-07 07:55 G 21764722.77 21764722.83 21764722.91 0.0279 0.0262

Jupiter 54881-04-24 07:55 G 21766047.64 21766047.83 21766048.01 0.0525 0.0201

Jupiter 54886-07-09 09:50 G 21767949.82 21767949.91 21767950.01 0.0506 0.0448

Saturn 54890-04-10 19:41 G 21769321.15 21769321.32 21769321.51 0.0286 0.0149

Saturn 54890-11-26 12:29 G 21769550.84 21769551.02 21769551.22 0.0284 0.0119

Jupiter 54892-12-27 22:34 G 21770313.24 21770313.44 21770313.64 0.0524 0.0121

Uranus 54898-03-01 04:19 G 21772202.56 21772202.68 21772202.80 0.0140 0.0116

Uranus 54898-10-13 13:41 G 21772428.91 21772429.07 21772429.25 0.0141 0.0084

Jupiter 54898-11-06 00:29 G 21772452.35 21772452.52 21772452.69 0.0501 0.0270

Uranus 54899-05-27 23:31 G 21772655.28 21772655.48 21772655.69 0.0141 0.0051

Uranus 54900-01-09 09:36 G 21772881.69 21772881.90 21772882.12 0.0141 0.0018

Uranus 54900-08-23 19:41 G 21773108.10 21773108.32 21773108.54 0.0141 0.0016

Uranus 54901-04-07 05:46 G 21773334.54 21773334.74 21773334.95 0.0142 0.0049

Uranus 54901-11-19 15:50 G 21773560.99 21773561.16 21773561.35 0.0142 0.0083

Uranus 54902-07-04 02:24 G 21773787.48 21773787.60 21773787.73 0.0142 0.0117

Jupiter 54904-09-02 17:31 G 21774579.11 21774579.23 21774579.34 0.0521 0.0423

Saturn 54905-12-17 17:31 G 21775050.08 21775050.23 21775050.38 0.0274 0.0191

Saturn 54906-08-04 01:12 G 21775279.34 21775279.55 21775279.76 0.0276 0.0046

Mars 54909-09-05 18:14 G 21776408.18 21776408.26 21776408.34 0.1616 0.1420

Jupiter 54910-07-13 00:14 G 21776718.31 21776718.51 21776718.72 0.0503 0.0011

Jupiter 54917-01-01 00:43 G 21779082.39 21779082.53 21779082.66 0.0527 0.0390

Pluto 54918-09-04 10:19 G 21779693.75 21779693.93 21779694.15 0.0081 0.0034

Pluto 54919-04-17 21:22 G 21779919.22 21779919.39 21779919.59 0.0081 0.0044

Saturn 54919-10-22 19:26 G 21780107.12 21780107.31 21780107.50 0.0286 0.0127

Saturn 54920-06-08 12:00 G 21780336.82 21780337.00 21780337.19 0.0284 0.0141

Jupiter 54922-03-17 23:31 G 21780984.31 21780984.48 21780984.65 0.0505 0.0277

Neptune 54924-12-28 01:55 G 21782000.57 21782000.58 21782000.64 0.0089 0.0089

Neptune 54925-08-10 15:22 G 21782226.07 21782226.14 21782226.25 0.0089 0.0081

Neptune 54926-03-24 05:02 G 21782451.59 21782451.71 21782451.84 0.0089 0.0074

Neptune 54926-11-04 18:14 G 21782677.12 21782677.26 21782677.41 0.0089 0.0067

Neptune 54927-06-18 07:12 G 21782902.65 21782902.80 21782902.98 0.0089 0.0060

Neptune 54928-01-29 20:24 G 21783128.19 21783128.35 21783128.55 0.0089 0.0053

Jupiter 54928-09-05 17:31 G 21783348.03 21783348.23 21783348.44 0.0525 0.0077

Neptune 54928-09-11 09:50 G 21783353.74 21783353.91 21783354.12 0.0089 0.0045

Neptune 54929-04-24 23:17 G 21783579.28 21783579.47 21783579.68 0.0089 0.0038

Neptune 54929-12-06 12:29 G 21783804.83 21783805.02 21783805.24 0.0089 0.0031

Neptune 54930-07-20 01:55 G 21784030.38 21784030.58 21784030.80 0.0089 0.0023

Neptune 54931-03-02 15:22 G 21784255.93 21784256.14 21784256.36 0.0089 0.0016

Earth 54931-09-26 03:07 G 21784463.47 21784463.63 21784463.79 0.2687 0.0366

Moon 54931-09-26 08:10 G 21784463.69 21784463.84 21784464.00 0.2690 0.0053 *

Neptune 54931-10-14 04:48 G 21784481.48 21784481.70 21784481.92 0.0089 0.0008

Neptune 54932-05-26 18:00 G 21784707.03 21784707.25 21784707.47 0.0089 0.0001

Neptune 54933-01-07 07:12 G 21784932.59 21784932.80 21784933.02 0.0089 0.0007

Neptune 54933-08-20 20:38 G 21785158.15 21785158.36 21785158.58 0.0089 0.0014

Neptune 54934-04-03 09:50 G 21785383.70 21785383.91 21785384.13 0.0089 0.0021

Jupiter 54934-07-15 11:02 G 21785486.86 21785486.96 21785487.07 0.0500 0.0424

Neptune 54934-11-14 23:02 G 21785609.26 21785609.46 21785609.68 0.0090 0.0029

Neptune 54935-06-28 12:29 G 21785834.82 21785835.02 21785835.22 0.0090 0.0036

Saturn 54935-06-29 20:10 G 21785836.18 21785836.34 21785836.52 0.0275 0.0165

Neptune 54936-02-09 01:26 G 21786060.38 21786060.56 21786060.77 0.0090 0.0044

Saturn 54936-02-14 04:05 G 21786065.47 21786065.67 21786065.88 0.0277 0.0075

Neptune 54936-09-21 14:53 G 21786285.95 21786286.12 21786286.31 0.0090 0.0051

Neptune 54937-05-05 04:19 G 21786511.52 21786511.68 21786511.85 0.0090 0.0058

Uranus 54937-11-04 21:50 G 21786695.33 21786695.41 21786695.50 0.0138 0.0126

Neptune 54937-12-16 17:46 G 21786737.09 21786737.24 21786737.39 0.0090 0.0065

Uranus 54938-06-19 05:46 G 21786921.60 21786921.74 21786921.91 0.0138 0.0096

Neptune 54938-07-30 06:43 G 21786962.67 21786962.78 21786962.93 0.0090 0.0073

Uranus 54939-01-31 13:55 G 21787147.89 21787148.08 21787148.27 0.0137 0.0065

Neptune 54939-03-12 19:55 G 21787188.26 21787188.33 21787188.46 0.0090 0.0080

Uranus 54939-09-14 21:22 G 21787374.18 21787374.39 21787374.61 0.0137 0.0034

Neptune 54939-10-24 09:22 G 21787413.86 21787413.89 21787413.97 0.0090 0.0087

Uranus 54940-04-28 05:02 G 21787600.49 21787600.71 21787600.92 0.0137 0.0004

Jupiter 54940-05-11 10:34 G 21787613.76 21787613.94 21787614.12 0.0522 0.0236

Uranus 54940-12-10 12:14 G 21787826.80 21787827.01 21787827.23 0.0137 0.0027

Uranus 54941-07-24 19:26 G 21788053.12 21788053.31 21788053.52 0.0137 0.0057

Mars 54941-09-04 10:19 G 21788094.78 21788094.93 21788095.08 0.1619 0.0778

Uranus 54942-03-08 02:24 G 21788279.44 21788279.60 21788279.78 0.0136 0.0086

Uranus 54942-10-20 09:22 G 21788505.79 21788505.89 21788506.01 0.0136 0.0116

Jupiter 54946-03-20 12:14 G 21789752.82 21789753.01 21789753.21 0.0502 0.0160

Saturn 54949-05-04 02:10 G 21790893.39 21790893.59 21790893.80 0.0286 0.0086

Saturn 54949-12-19 18:43 G 21791123.12 21791123.28 21791123.45 0.0283 0.0181

Jupiter 54957-11-23 13:26 G 21794018.87 21794019.06 21794019.27 0.0504 0.0109

Jupiter 54964-05-14 07:55 G 21796382.65 21796382.83 21796383.01 0.0526 0.0255

Saturn 54965-01-08 23:02 G 21796622.28 21796622.46 21796622.65 0.0274 0.0133

Saturn 54965-08-26 06:43 G 21796851.59 21796851.78 21796851.98 0.0276 0.0106

Jupiter 54969-07-29 12:29 G 21798284.90 21798285.02 21798285.16 0.0506 0.0384

Jupiter 54976-01-18 02:24 G 21800648.40 21800648.60 21800648.81 0.0524 0.0052

Mars 54976-06-08 14:24 G 21800791.09 21800791.10 21800791.11 0.1907 0.1902

Saturn 54978-11-14 01:12 G 21801679.34 21801679.55 21801679.76 0.0286 0.0065

Saturn 54979-07-01 17:46 G 21801909.09 21801909.24 21801909.39 0.0283 0.0201

Uranus 54981-10-30 12:43 G 21802760.96 21802761.03 21802761.13 0.0140 0.0129

Jupiter 54981-11-26 01:12 G 21802787.40 21802787.55 21802787.71 0.0500 0.0324

Uranus 54982-06-13 22:34 G 21802987.28 21802987.44 21802987.60 0.0140 0.0097

Uranus 54983-01-26 07:55 G 21803213.65 21803213.83 21803214.04 0.0141 0.0065

Uranus 54983-09-09 17:46 G 21803440.04 21803440.24 21803440.46 0.0141 0.0032

Uranus 54984-04-23 03:50 G 21803666.44 21803666.66 21803666.88 0.0141 0.0002

Uranus 54984-12-05 13:41 G 21803892.87 21803893.07 21803893.29 0.0141 0.0036

Uranus 54985-07-20 00:00 G 21804119.31 21804119.50 21804119.69 0.0142 0.0069

Uranus 54986-03-03 09:50 G 21804345.78 21804345.91 21804346.08 0.0142 0.0103

Uranus 54986-10-15 20:10 G 21804572.30 21804572.34 21804572.42 0.0142 0.0137

Jupiter 54987-09-22 20:38 G 21804914.22 21804914.36 21804914.52 0.0521 0.0356

Jupiter 54993-08-01 00:43 G 21807053.33 21807053.53 21807053.74 0.0503 0.0053

Saturn 54994-07-22 01:26 G 21807408.37 21807408.56 21807408.75 0.0275 0.0107

Saturn 54995-03-08 09:22 G 21807637.71 21807637.89 21807638.08 0.0277 0.0133

Jupiter 55000-01-21 01:55 G 21809417.49 21809417.58 21809417.69 0.0527 0.0449

56TH MILLENNIUM CE

This is a list of transits of Venus in the 56th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 55005-04-07 01:12 G 21811319.37 21811319.55 21811319.74 0.0505 0.0220

Neptune 55006-07-04 21:22 G 21811773.35 21811773.39 21811773.49 0.0088 0.0083

Neptune 55007-02-15 10:34 G 21811998.85 21811998.94 21811999.07 0.0088 0.0076

Mars 55007-07-03 22:48 G 21812137.28 21812137.45 21812137.61 0.1618 0.0520

Neptune 55007-09-28 23:31 G 21812224.36 21812224.48 21812224.63 0.0088 0.0069

Neptune 55008-05-11 12:29 G 21812449.88 21812450.02 21812450.19 0.0088 0.0062

Saturn 55008-05-27 07:12 G 21812465.59 21812465.80 21812466.01 0.0285 0.0026

Neptune 55008-12-23 01:12 G 21812675.40 21812675.55 21812675.74 0.0088 0.0056

Saturn 55009-01-11 23:17 G 21812695.37 21812695.47 21812695.60 0.0283 0.0239

Neptune 55009-08-05 14:10 G 21812900.92 21812901.09 21812901.28 0.0088 0.0048

Neptune 55010-03-19 03:07 G 21813126.44 21813126.63 21813126.83 0.0088 0.0041

Neptune 55010-10-30 15:50 G 21813351.96 21813352.16 21813352.37 0.0088 0.0034

Neptune 55011-06-13 04:19 G 21813577.49 21813577.68 21813577.91 0.0088 0.0028

Jupiter 55011-09-26 16:05 G 21813682.97 21813683.17 21813683.37 0.0525 0.0125

Neptune 55012-01-24 17:17 G 21813803.02 21813803.22 21813803.45 0.0088 0.0021

Neptune 55012-09-06 06:00 G 21814028.54 21814028.75 21814028.98 0.0088 0.0014

Neptune 55013-04-19 18:58 G 21814254.07 21814254.29 21814254.51 0.0088 0.0007

Neptune 55013-12-01 07:41 G 21814479.60 21814479.82 21814480.04 0.0088 0.0001

Neptune 55014-07-14 20:24 G 21814705.13 21814705.35 21814705.57 0.0088 0.0007

Neptune 55015-02-25 09:07 G 21814930.67 21814930.88 21814931.10 0.0088 0.0015

Neptune 55015-10-08 22:05 G 21815156.20 21815156.42 21815156.63 0.0088 0.0021

Neptune 55016-05-21 10:48 G 21815381.74 21815381.95 21815382.16 0.0088 0.0028

Jupiter 55016-12-11 01:41 G 21815585.52 21815585.57 21815585.62 0.0507 0.0490

Neptune 55017-01-01 23:31 G 21815607.28 21815607.48 21815607.68 0.0088 0.0035

Jupiter 55017-08-04 14:53 G 21815822.07 21815822.12 21815822.16 0.0499 0.0486

Neptune 55017-08-15 12:00 G 21815832.82 21815833.00 21815833.20 0.0088 0.0042

Neptune 55018-03-29 00:58 G 21816058.36 21816058.54 21816058.73 0.0088 0.0049

Neptune 55018-11-09 13:26 G 21816283.90 21816284.06 21816284.24 0.0088 0.0056

Neptune 55019-06-23 02:10 G 21816509.45 21816509.59 21816509.76 0.0088 0.0063

Neptune 55020-02-03 14:53 G 21816735.00 21816735.12 21816735.27 0.0088 0.0070

Neptune 55020-09-16 03:50 G 21816960.56 21816960.66 21816960.77 0.0088 0.0076

Neptune 55021-04-29 16:19 G 21817186.13 21817186.18 21817186.26 0.0088 0.0083

Uranus 55022-02-17 13:26 G 21817479.95 21817480.06 21817480.21 0.0138 0.0110

Uranus 55022-10-01 21:36 G 21817706.23 21817706.40 21817706.58 0.0138 0.0079

Uranus 55023-05-16 05:17 G 21817932.52 21817932.72 21817932.93 0.0137 0.0048

Jupiter 55023-06-01 10:05 G 21817948.74 21817948.92 21817949.12 0.0523 0.0182

Uranus 55023-12-28 13:12 G 21818158.83 21818159.05 21818159.26 0.0137 0.0017

Saturn 55024-02-02 04:34 G 21818194.49 21818194.69 21818194.89 0.0274 0.0074

Uranus 55024-08-10 20:38 G 21818385.14 21818385.36 21818385.58 0.0137 0.0013

Saturn 55024-09-18 12:14 G 21818423.85 21818424.01 21818424.19 0.0276 0.0165

Uranus 55025-03-25 03:36 G 21818611.46 21818611.65 21818611.87 0.0137 0.0044

Uranus 55025-11-06 10:48 G 21818837.78 21818837.95 21818838.14 0.0137 0.0074

Uranus 55026-06-20 17:46 G 21819064.12 21819064.24 21819064.40 0.0136 0.0104

Uranus 55027-02-02 00:43 G 21819290.50 21819290.53 21819290.60 0.0136 0.0133

Jupiter 55029-04-09 15:07 G 21820087.95 21820088.13 21820088.32 0.0501 0.0221

Jupiter 55035-02-04 06:00 G 21822214.67 21822214.75 21822214.83 0.0521 0.0477

Saturn 55037-04-21 11:31 G 21823021.94 21823021.98 21823022.03 0.0288 0.0279

Saturn 55037-12-07 05:46 G 21823251.53 21823251.74 21823251.95 0.0286 0.0007

Saturn 55038-07-24 22:05 G 21823481.34 21823481.42 21823481.51 0.0283 0.0258

Jupiter 55040-12-13 15:07 G 21824353.92 21824354.13 21824354.33 0.0503 0.0050

Mars 55042-04-06 15:50 G 21824833.00 21824833.16 21824833.31 0.1908 0.0939

Jupiter 55047-06-04 11:46 G 21826717.84 21826717.99 21826718.15 0.0526 0.0324

Jupiter 55052-08-18 13:26 G 21828619.91 21828620.06 21828620.22 0.0506 0.0328

Saturn 55053-08-14 06:14 G 21828980.55 21828980.76 21828980.97 0.0275 0.0050

Saturn 55054-03-31 14:24 G 21829209.95 21829210.10 21829210.25 0.0277 0.0191

Jupiter 55059-02-07 04:34 G 21830983.48 21830983.69 21830983.89 0.0524 0.0012

Earth 55061-03-28 00:00 G 21831763.40 21831763.50 21831763.60 0.2644 0.2028

Moon 55061-03-28 00:29 G 21831763.40 21831763.52 21831763.63 0.2638 0.1909 *

Jupiter 55064-12-16 03:07 G 21833122.50 21833122.63 21833122.77 0.0500 0.0380

Uranus 55066-02-12 06:58 G 21833545.67 21833545.79 21833545.94 0.0140 0.0110

Uranus 55066-09-26 16:34 G 21833772.02 21833772.19 21833772.38 0.0140 0.0078

Saturn 55066-11-01 17:17 G 21833808.11 21833808.22 21833808.34 0.0287 0.0240

Uranus 55067-05-11 02:24 G 21833998.39 21833998.60 21833998.80 0.0141 0.0045

Saturn 55067-06-19 11:31 G 21834037.77 21834037.98 21834038.19 0.0285 0.0033

Uranus 55067-12-23 12:14 G 21834224.79 21834225.01 21834225.23 0.0141 0.0012

Uranus 55068-08-05 22:05 G 21834451.20 21834451.42 21834451.64 0.0141 0.0021

Uranus 55069-03-20 07:55 G 21834677.63 21834677.83 21834678.04 0.0141 0.0055

Moon 55069-03-25 12:29 G 21834682.91 21834683.02 21834683.14 0.2640 0.1873

Earth 55069-03-25 16:34 G 21834683.05 21834683.19 21834683.33 0.2645 0.1217 *

Uranus 55069-11-01 17:46 G 21834904.09 21834904.24 21834904.43 0.0142 0.0089

Uranus 55070-06-16 04:05 G 21835130.58 21835130.67 21835130.79 0.0142 0.0122

Jupiter 55070-10-12 19:12 G 21835249.13 21835249.30 21835249.46 0.0522 0.0306

Mars 55073-04-30 11:31 G 21836179.81 21836179.98 21836180.15 0.1617 0.0273

Pluto 55074-01-05 23:46 G 21836430.33 21836430.49 21836430.69 0.0063 0.0037

Pluto 55074-08-19 03:50 G 21836655.44 21836655.66 21836655.88 0.0063 0.0001

Pluto 55075-04-01 07:12 G 21836880.64 21836880.80 21836881.00 0.0063 0.0036

Jupiter 55076-08-21 05:02 G 21837388.51 21837388.71 21837388.91 0.0502 0.0118

Saturn 55082-07-10 03:50 G 21839537.58 21839537.66 21839537.75 0.0272 0.0248

Jupiter 55083-02-10 02:10 G 21839752.53 21839752.59 21839752.65 0.0528 0.0503

Saturn 55083-02-24 10:19 G 21839766.72 21839766.93 21839767.14 0.0274 0.0016

Saturn 55083-10-11 18:29 G 21839996.15 21839996.27 21839996.39 0.0276 0.0225

Jupiter 55088-04-26 04:19 G 21841654.49 21841654.68 21841654.88 0.0504 0.0155

Neptune 55089-04-01 12:00 G 21841994.97 21841995.00 21841995.06 0.0089 0.0087

Neptune 55089-11-13 01:12 G 21842220.47 21842220.55 21842220.65 0.0089 0.0081

Neptune 55090-06-26 14:24 G 21842445.99 21842446.10 21842446.23 0.0089 0.0074

Neptune 55091-02-07 03:36 G 21842671.52 21842671.65 21842671.81 0.0089 0.0067

Neptune 55091-09-20 16:48 G 21842897.05 21842897.20 21842897.38 0.0089 0.0059

Neptune 55092-05-03 05:46 G 21843122.58 21843122.74 21843122.94 0.0089 0.0053

Neptune 55092-12-14 18:58 G 21843348.12 21843348.29 21843348.50 0.0089 0.0046

Neptune 55093-07-28 08:53 G 21843573.67 21843573.87 21843574.07 0.0089 0.0038

Neptune 55094-03-10 22:05 G 21843799.22 21843799.42 21843799.63 0.0089 0.0031

Jupiter 55094-10-15 20:24 G 21844018.16 21844018.35 21844018.54 0.0526 0.0196

Neptune 55094-10-22 11:17 G 21844024.76 21844024.97 21844025.19 0.0089 0.0023

Neptune 55095-06-05 00:29 G 21844250.31 21844250.52 21844250.74 0.0089 0.0016

Neptune 55096-01-16 13:55 G 21844475.86 21844476.08 21844476.30 0.0089 0.0009

Saturn 55096-05-13 16:34 G 21844594.06 21844594.19 21844594.33 0.0287 0.0219

Neptune 55096-08-29 03:22 G 21844701.42 21844701.64 21844701.86 0.0089 0.0001

Saturn 55096-12-29 10:34 G 21844823.73 21844823.94 21844824.15 0.0285 0.0053

Neptune 55097-04-11 16:34 G 21844926.97 21844927.19 21844927.41 0.0089 0.0006

Neptune 55097-11-23 05:46 G 21845152.53 21845152.74 21845152.96 0.0089 0.0013

Neptune 55098-07-06 18:58 G 21845378.09 21845378.29 21845378.51 0.0089 0.0021

Neptune 55099-02-17 08:24 G 21845603.65 21845603.85 21845604.06 0.0089 0.0028

Neptune 55099-09-30 21:50 G 21845829.21 21845829.41 21845829.61 0.0090 0.0035

Jupiter 55099-12-31 03:22 G 21845920.54 21845920.64 21845920.75 0.0506 0.0429

Neptune 55100-05-14 10:34 G 21846054.77 21846054.94 21846055.15 0.0090 0.0043

Neptune 55100-12-26 00:00 G 21846280.33 21846280.50 21846280.70 0.0090 0.0050

Neptune 55101-08-08 13:26 G 21846505.90 21846506.06 21846506.24 0.0090 0.0057

Neptune 55102-03-22 02:38 G 21846731.47 21846731.61 21846731.78 0.0090 0.0064

Neptune 55102-11-02 16:05 G 21846957.04 21846957.17 21846957.31 0.0090 0.0071

Neptune 55103-06-16 05:17 G 21847182.62 21847182.72 21847182.84 0.0090 0.0078

Neptune 55104-01-27 18:43 G 21847408.22 21847408.28 21847408.35 0.0090 0.0085

Uranus 55105-10-18 21:50 G 21848038.32 21848038.41 21848038.52 0.0138 0.0123

Uranus 55106-06-02 06:00 G 21848264.60 21848264.75 21848264.92 0.0138 0.0092

Jupiter 55106-06-21 14:24 G 21848283.90 21848284.10 21848284.30 0.0523 0.0111

Uranus 55107-01-14 13:41 G 21848490.89 21848491.07 21848491.28 0.0138 0.0062

Uranus 55107-08-28 21:36 G 21848717.19 21848717.40 21848717.62 0.0137 0.0031

Mars 55108-02-02 17:31 G 21848875.06 21848875.23 21848875.41 0.1910 0.0036

Uranus 55108-04-11 05:17 G 21848943.50 21848943.72 21848943.94 0.0137 0.0001

Uranus 55108-11-23 12:29 G 21849169.81 21849170.02 21849170.24 0.0137 0.0031

Uranus 55109-07-07 19:41 G 21849396.14 21849396.32 21849396.53 0.0137 0.0061

Uranus 55110-02-19 02:53 G 21849622.47 21849622.62 21849622.79 0.0137 0.0091

Uranus 55110-10-03 09:36 G 21849848.82 21849848.90 21849849.02 0.0136 0.0120

Saturn 55112-01-21 05:17 G 21850323.60 21850323.72 21850323.84 0.0273 0.0225

Jupiter 55112-04-29 15:50 G 21850422.99 21850423.16 21850423.33 0.0501 0.0274

Saturn 55112-09-06 12:00 G 21850552.79 21850553.00 21850553.21 0.0275 0.0010

Saturn 55113-04-23 19:55 G 21850782.25 21850782.33 21850782.43 0.0277 0.0252

Jupiter 55118-02-24 07:55 G 21852549.72 21852549.83 21852549.96 0.0521 0.0415

Jupiter 55124-01-03 16:48 G 21854689.00 21854689.20 21854689.40 0.0503 0.0008

Saturn 55125-11-24 21:36 G 21855380.25 21855380.40 21855380.58 0.0287 0.0181

Saturn 55126-07-12 15:36 G 21855609.96 21855610.15 21855610.36 0.0285 0.0091

Jupiter 55130-06-24 10:05 G 21857052.78 21857052.92 21857053.06 0.0526 0.0372

Jupiter 55135-09-08 17:17 G 21858955.05 21858955.22 21858955.40 0.0505 0.0261

Mars 55139-02-27 00:14 G 21860222.33 21860222.51 21860222.68 0.1616 0.0034

Saturn 55141-08-02 10:05 G 21861109.78 21861109.92 21861110.08 0.0273 0.0190

Jupiter 55142-02-27 03:36 G 21861318.45 21861318.65 21861318.85 0.0524 0.0063

Saturn 55142-03-19 16:48 G 21861339.00 21861339.20 21861339.41 0.0275 0.0045

Jupiter 55148-01-06 05:46 G 21863457.64 21863457.74 21863457.83 0.0500 0.0439

Uranus 55149-10-13 16:05 G 21864104.08 21864104.17 21864104.29 0.0140 0.0123

Uranus 55150-05-28 01:41 G 21864330.41 21864330.57 21864330.74 0.0140 0.0091

Uranus 55151-01-09 11:31 G 21864556.78 21864556.98 21864557.18 0.0141 0.0058

Uranus 55151-08-23 21:07 G 21864783.17 21864783.38 21864783.59 0.0141 0.0025

Uranus 55152-04-06 06:58 G 21865009.57 21865009.79 21865010.00 0.0141 0.0009

Uranus 55152-11-18 16:34 G 21865235.99 21865236.19 21865236.41 0.0141 0.0042

Uranus 55153-07-03 02:38 G 21865462.43 21865462.61 21865462.80 0.0142 0.0075

Jupiter 55153-11-01 22:34 G 21865584.26 21865584.44 21865584.62 0.0522 0.0237

Uranus 55154-02-14 12:43 G 21865688.91 21865689.03 21865689.18 0.0142 0.0109

Uranus 55154-09-28 23:17 G 21865915.47 21865915.47 21865915.47 0.0142 0.0142

Saturn 55155-06-06 22:19 G 21866166.26 21866166.43 21866166.61 0.0287 0.0158

Saturn 55156-01-22 15:50 G 21866395.97 21866396.16 21866396.36 0.0285 0.0113

Jupiter 55159-09-11 06:00 G 21867723.56 21867723.75 21867723.94 0.0502 0.0174

Pluto 55164-02-22 18:00 G 21869349.13 21869349.25 21869349.38 0.0081 0.0067

Pluto 55164-10-05 05:02 G 21869574.49 21869574.71 21869574.93 0.0081 0.0011

Neptune 55170-10-07 07:12 G 21871767.74 21871767.80 21871767.90 0.0088 0.0083

Saturn 55171-02-12 11:31 G 21871895.82 21871895.98 21871896.15 0.0274 0.0166

Jupiter 55171-05-17 04:34 G 21871989.49 21871989.69 21871989.89 0.0504 0.0101

Neptune 55171-05-20 20:24 G 21871993.24 21871993.35 21871993.47 0.0088 0.0075

Saturn 55171-09-29 18:29 G 21872125.07 21872125.27 21872125.48 0.0276 0.0071

Neptune 55172-01-01 08:53 G 21872218.76 21872218.87 21872219.03 0.0088 0.0069

Neptune 55172-08-13 21:50 G 21872444.27 21872444.41 21872444.58 0.0088 0.0062

Neptune 55173-03-27 10:48 G 21872669.79 21872669.95 21872670.13 0.0088 0.0055

Neptune 55173-11-07 23:46 G 21872895.31 21872895.49 21872895.68 0.0088 0.0048

Mars 55173-11-29 19:41 G 21872917.16 21872917.32 21872917.47 0.1911 0.0931

Neptune 55174-06-21 12:43 G 21873120.84 21873121.03 21873121.22 0.0088 0.0041

Moon 55174-09-27 23:02 G 21873219.31 21873219.46 21873219.62 0.2682 0.0922

Earth 55174-09-28 03:07 G 21873219.48 21873219.63 21873219.79 0.2687 0.0473 *

Neptune 55175-02-02 01:41 G 21873346.37 21873346.57 21873346.77 0.0088 0.0034

Neptune 55175-09-15 14:10 G 21873571.89 21873572.09 21873572.31 0.0088 0.0028

Neptune 55176-04-28 02:53 G 21873797.42 21873797.62 21873797.85 0.0088 0.0021

Neptune 55176-12-09 15:50 G 21874022.94 21874023.16 21874023.38 0.0088 0.0014

Neptune 55177-07-23 04:34 G 21874248.47 21874248.69 21874248.91 0.0088 0.0007

Jupiter 55177-11-04 21:50 G 21874353.24 21874353.41 21874353.59 0.0525 0.0256

Neptune 55178-03-05 17:31 G 21874474.01 21874474.23 21874474.45 0.0088 0.0000

Neptune 55178-10-17 06:14 G 21874699.54 21874699.76 21874699.98 0.0088 0.0007

Neptune 55179-05-30 18:43 G 21874925.07 21874925.28 21874925.51 0.0088 0.0014

Neptune 55180-01-11 07:26 G 21875150.60 21875150.81 21875151.03 0.0088 0.0021

Neptune 55180-08-23 20:10 G 21875376.14 21875376.34 21875376.56 0.0088 0.0028

Neptune 55181-04-06 08:53 G 21875601.68 21875601.87 21875602.08 0.0088 0.0035

Neptune 55181-11-17 21:50 G 21875827.22 21875827.41 21875827.61 0.0088 0.0041

Neptune 55182-07-01 10:34 G 21876052.76 21876052.94 21876053.13 0.0088 0.0048

Jupiter 55183-01-20 04:19 G 21876255.55 21876255.68 21876255.82 0.0506 0.0373

Neptune 55183-02-11 23:17 G 21876278.31 21876278.47 21876278.65 0.0088 0.0055

Neptune 55183-09-25 11:46 G 21876503.86 21876503.99 21876504.17 0.0088 0.0062

Neptune 55184-05-08 00:29 G 21876729.40 21876729.52 21876729.68 0.0088 0.0069

Saturn 55184-12-17 03:50 G 21876952.47 21876952.66 21876952.86 0.0287 0.0119

Neptune 55184-12-19 13:26 G 21876954.96 21876955.06 21876955.18 0.0088 0.0075

Neptune 55185-08-02 01:55 G 21877180.52 21877180.58 21877180.68 0.0088 0.0082

Saturn 55185-08-03 21:22 G 21877182.22 21877182.39 21877182.58 0.0284 0.0151

Uranus 55189-06-18 05:17 G 21878596.72 21878596.72 21878596.77 0.0138 0.0138

Jupiter 55189-07-10 12:00 G 21878618.80 21878619.00 21878619.20 0.0523 0.0064

Uranus 55190-01-30 13:41 G 21878822.94 21878823.07 21878823.22 0.0138 0.0106

Uranus 55190-09-13 21:36 G 21879049.23 21879049.40 21879049.59 0.0138 0.0075

Uranus 55191-04-28 05:17 G 21879275.53 21879275.72 21879275.94 0.0137 0.0045

Uranus 55191-12-10 13:12 G 21879501.83 21879502.05 21879502.27 0.0137 0.0013

Uranus 55192-07-23 20:38 G 21879728.15 21879728.36 21879728.58 0.0137 0.0017

Uranus 55193-03-07 03:50 G 21879954.46 21879954.66 21879954.87 0.0137 0.0048

Uranus 55193-10-19 10:48 G 21880180.79 21880180.95 21880181.14 0.0137 0.0078

Uranus 55194-06-02 17:46 G 21880407.13 21880407.24 21880407.39 0.0136 0.0108

Jupiter 55195-05-19 18:43 G 21880758.13 21880758.28 21880758.44 0.0501 0.0336

Saturn 55200-08-24 17:46 G 21882682.06 21882682.24 21882682.43 0.0273 0.0128

Jupiter 55201-03-15 06:00 G 21882884.61 21882884.75 21882884.90 0.0521 0.0365

Saturn 55201-04-11 00:43 G 21882911.34 21882911.53 21882911.73 0.0275 0.0108

Mars 55204-12-24 12:58 G 21884264.87 21884265.04 21884265.22 0.1615 0.0230

Jupiter 55207-01-22 18:43 G 21885024.07 21885024.28 21885024.48 0.0503 0.0069

Jupiter 55213-07-13 12:58 G 21887387.94 21887388.04 21887388.16 0.0527 0.0438

Saturn 55214-06-29 05:31 G 21887738.53 21887738.73 21887738.93 0.0287 0.0094

Saturn 55215-02-13 22:34 G 21887968.29 21887968.44 21887968.62 0.0285 0.0176

Jupiter 55218-09-27 17:46 G 21889290.06 21889290.24 21889290.43 0.0505 0.0204

Jupiter 55225-03-18 06:29 G 21891653.58 21891653.77 21891653.97 0.0525 0.0130

Saturn 55230-03-06 19:26 G 21893468.12 21893468.31 21893468.51 0.0274 0.0103

Jupiter 55230-06-02 15:07 G 21893556.08 21893556.13 21893556.19 0.0507 0.0484

Saturn 55230-10-22 02:38 G 21893697.43 21893697.61 21893697.80 0.0276 0.0135

Jupiter 55231-01-25 05:02 G 21893792.67 21893792.71 21893792.76 0.0500 0.0487

Uranus 55233-06-13 01:12 G 21894662.50 21894662.55 21894662.61 0.0140 0.0135

Uranus 55234-01-25 10:34 G 21894888.80 21894888.94 21894889.09 0.0140 0.0103

Uranus 55234-09-08 20:10 G 21895115.15 21895115.34 21895115.53 0.0140 0.0071

Uranus 55235-04-23 05:31 G 21895341.53 21895341.73 21895341.95 0.0141 0.0038

Uranus 55235-12-05 15:22 G 21895567.92 21895568.14 21895568.36 0.0141 0.0005

Uranus 55236-07-19 01:12 G 21895794.34 21895794.55 21895794.77 0.0141 0.0028

Jupiter 55236-11-20 23:31 G 21895919.29 21895919.48 21895919.67 0.0522 0.0178

Uranus 55237-03-02 11:02 G 21896020.77 21896020.96 21896021.16 0.0141 0.0062

Uranus 55237-10-14 20:53 G 21896247.23 21896247.37 21896247.55 0.0142 0.0096

Uranus 55238-05-29 07:12 G 21896473.73 21896473.80 21896473.91 0.0142 0.0129

Mars 55239-09-26 21:22 G 21896959.36 21896959.39 21896959.41 0.1913 0.1889

Jupiter 55242-09-30 06:00 G 21898058.57 21898058.75 21898058.94 0.0502 0.0225

Saturn 55244-01-09 11:31 G 21898524.78 21898524.98 21898525.19 0.0286 0.0054

Saturn 55244-08-26 04:48 G 21898754.56 21898754.70 21898754.84 0.0284 0.0213

Jupiter 55248-07-26 14:53 G 21900185.05 21900185.12 21900185.19 0.0519 0.0485

Neptune 55253-07-04 22:19 G 21901989.38 21901989.43 21901989.48 0.0089 0.0087

Neptune 55254-02-15 10:48 G 21902214.88 21902214.95 21902215.07 0.0089 0.0081

Jupiter 55254-06-05 06:14 G 21902324.56 21902324.76 21902324.97 0.0504 0.0041

Neptune 55254-09-29 00:00 G 21902440.40 21902440.50 21902440.65 0.0089 0.0074

Neptune 55255-05-12 13:12 G 21902665.93 21902666.05 21902666.22 0.0089 0.0067

Neptune 55255-12-24 02:24 G 21902891.46 21902891.60 21902891.79 0.0089 0.0060

Neptune 55256-08-05 15:50 G 21903117.00 21903117.16 21903117.35 0.0089 0.0052

Neptune 55257-03-19 05:02 G 21903342.54 21903342.71 21903342.92 0.0089 0.0045

Neptune 55257-10-30 18:43 G 21903568.08 21903568.28 21903568.47 0.0089 0.0038

Neptune 55258-06-13 07:41 G 21903793.62 21903793.82 21903794.03 0.0089 0.0031

Neptune 55259-01-24 20:53 G 21904019.17 21904019.37 21904019.59 0.0089 0.0024

Neptune 55259-09-07 10:19 G 21904244.72 21904244.93 21904245.15 0.0089 0.0016

Saturn 55259-09-17 02:38 G 21904254.40 21904254.61 21904254.82 0.0274 0.0064

Neptune 55260-04-19 23:31 G 21904470.27 21904470.48 21904470.71 0.0089 0.0010

Saturn 55260-05-03 10:05 G 21904483.76 21904483.92 21904484.08 0.0276 0.0174

Jupiter 55260-11-23 18:58 G 21904688.13 21904688.29 21904688.46 0.0526 0.0302

Neptune 55260-12-01 12:58 G 21904695.82 21904696.04 21904696.26 0.0089 0.0002

Neptune 55261-07-15 02:24 G 21904921.38 21904921.60 21904921.82 0.0089 0.0006

Neptune 55262-02-25 15:50 G 21905146.94 21905147.16 21905147.37 0.0089 0.0013

Neptune 55262-10-09 04:48 G 21905372.50 21905372.70 21905372.93 0.0089 0.0021

Neptune 55263-05-22 18:00 G 21905598.06 21905598.25 21905598.47 0.0089 0.0028

Neptune 55264-01-03 07:26 G 21905823.62 21905823.81 21905824.02 0.0089 0.0035

Neptune 55264-08-15 20:53 G 21906049.18 21906049.37 21906049.57 0.0089 0.0042

Neptune 55265-03-29 10:05 G 21906274.75 21906274.92 21906275.12 0.0090 0.0049

Neptune 55265-11-09 23:31 G 21906500.31 21906500.48 21906500.66 0.0090 0.0056

Jupiter 55266-02-08 05:02 G 21906590.56 21906590.71 21906590.87 0.0506 0.0315

Neptune 55266-06-23 12:43 G 21906725.88 21906726.03 21906726.19 0.0090 0.0063

Neptune 55267-02-04 01:55 G 21906951.46 21906951.58 21906951.73 0.0090 0.0070

Neptune 55267-09-17 15:22 G 21907177.04 21907177.14 21907177.26 0.0090 0.0077

Neptune 55268-04-30 04:34 G 21907402.63 21907402.69 21907402.78 0.0090 0.0084

Mars 55270-10-22 01:55 G 21908307.41 21908307.58 21908307.74 0.1615 0.0475

Jupiter 55272-07-29 13:26 G 21908953.86 21908954.06 21908954.26 0.0524 0.0002

Saturn 55273-07-21 14:53 G 21909310.91 21909311.12 21909311.33 0.0286 0.0025

Uranus 55273-09-29 22:48 G 21909381.35 21909381.45 21909381.57 0.0138 0.0118

Saturn 55274-03-08 07:41 G 21909540.72 21909540.82 21909540.94 0.0284 0.0242

Uranus 55274-05-14 06:58 G 21909607.62 21909607.79 21909607.96 0.0138 0.0087

Uranus 55274-12-26 14:24 G 21909833.92 21909834.10 21909834.31 0.0138 0.0057

Uranus 55275-08-09 22:19 G 21910060.22 21910060.43 21910060.65 0.0137 0.0026

Uranus 55276-03-23 05:46 G 21910286.53 21910286.74 21910286.96 0.0137 0.0006

Uranus 55276-11-04 13:12 G 21910512.84 21910513.05 21910513.26 0.0137 0.0035

Uranus 55277-06-18 20:10 G 21910739.16 21910739.34 21910739.55 0.0137 0.0066

Uranus 55278-01-31 03:22 G 21910965.50 21910965.64 21910965.81 0.0137 0.0096

Jupiter 55278-06-07 18:00 G 21911093.12 21911093.25 21911093.38 0.0501 0.0385

Uranus 55278-09-14 10:34 G 21911191.86 21911191.94 21911192.03 0.0136 0.0125

Jupiter 55284-04-03 07:55 G 21913219.67 21913219.83 21913220.00 0.0521 0.0303

Saturn 55288-08-11 22:34 G 21914811.43 21914811.44 21914811.49 0.0273 0.0270

Saturn 55289-03-29 05:02 G 21915040.50 21915040.71 21915040.92 0.0274 0.0037

Saturn 55289-11-13 12:29 G 21915269.88 21915270.02 21915270.17 0.0276 0.0203

Jupiter 55290-02-10 17:02 G 21915359.01 21915359.21 21915359.41 0.0503 0.0115

Jupiter 55296-08-01 13:12 G 21917722.98 21917723.05 21917723.12 0.0527 0.0491

Jupiter 55301-10-17 16:34 G 21919624.99 21919625.19 21919625.38 0.0505 0.0156

Saturn 55302-06-17 02:53 G 21919867.53 21919867.62 21919867.72 0.0288 0.0258

Saturn 55303-02-01 21:36 G 21920097.19 21920097.40 21920097.61 0.0286 0.0016

Saturn 55303-09-19 13:55 G 21920327.06 21920327.08 21920327.12 0.0283 0.0281

Moon 55304-03-30 00:14 G 21920519.43 21920519.51 21920519.58 0.2651 0.2261

Earth 55304-03-30 02:24 G 21920519.52 21920519.60 21920519.69 0.2645 0.2165 *

Jupiter 55308-04-07 02:38 G 21921988.42 21921988.61 21921988.80 0.0524 0.0171

Earth 55312-03-27 18:43 G 21923439.14 21923439.28 21923439.42 0.2646 0.1101

Moon 55312-03-27 20:38 G 21923439.22 21923439.36 21923439.50 0.2652 0.0865 *

Jupiter 55313-06-22 15:22 G 21923891.03 21923891.14 21923891.24 0.0508 0.0429

Uranus 55317-09-25 18:58 G 21925447.18 21925447.29 21925447.42 0.0140 0.0116

Saturn 55318-02-23 06:43 G 21925597.68 21925597.78 21925597.90 0.0273 0.0230

Uranus 55318-05-10 04:05 G 21925673.52 21925673.67 21925673.86 0.0140 0.0085

Saturn 55318-10-10 13:12 G 21925826.84 21925827.05 21925827.26 0.0275 0.0005

Uranus 55318-12-22 13:55 G 21925899.89 21925900.08 21925900.29 0.0141 0.0052

Saturn 55319-05-27 20:53 G 21926056.28 21926056.37 21926056.48 0.0276 0.0245

Pluto 55319-06-26 07:55 G 21926085.77 21926085.83 21926085.93 0.0063 0.0058

Uranus 55319-08-05 23:46 G 21926126.27 21926126.49 21926126.71 0.0141 0.0018

Jupiter 55319-12-11 19:41 G 21926254.13 21926254.32 21926254.52 0.0522 0.0135

Pluto 55320-02-06 11:46 G 21926310.79 21926310.99 21926311.21 0.0063 0.0023

Uranus 55320-03-19 09:22 G 21926352.68 21926352.89 21926353.11 0.0141 0.0015

Pluto 55320-09-18 15:22 G 21926535.94 21926536.14 21926536.37 0.0063 0.0014

Uranus 55320-10-31 19:12 G 21926579.10 21926579.30 21926579.51 0.0141 0.0048

Pluto 55321-05-01 18:58 G 21926761.18 21926761.29 21926761.45 0.0063 0.0051

Uranus 55321-06-15 05:17 G 21926805.55 21926805.72 21926805.90 0.0142 0.0082

Uranus 55322-01-27 15:22 G 21927032.04 21927032.14 21927032.28 0.0142 0.0116

Jupiter 55325-10-20 05:17 G 21928393.55 21928393.72 21928393.89 0.0502 0.0276

Jupiter 55331-08-16 14:38 G 21930520.00 21930520.11 21930520.23 0.0520 0.0430

Saturn 55331-12-28 08:24 G 21930653.72 21930653.85 21930653.98 0.0288 0.0224

Saturn 55332-08-14 02:38 G 21930883.40 21930883.61 21930883.82 0.0286 0.0048

Neptune 55335-01-09 17:46 G 21931762.16 21931762.24 21931762.32 0.0088 0.0082

Neptune 55335-08-23 06:00 G 21931987.66 21931987.75 21931987.89 0.0088 0.0076

Neptune 55336-04-04 19:12 G 21932213.17 21932213.30 21932213.45 0.0088 0.0068

Mars 55336-08-19 14:53 G 21932349.96 21932350.12 21932350.27 0.1614 0.0712

Neptune 55336-11-16 08:10 G 21932438.69 21932438.84 21932439.00 0.0088 0.0061

Jupiter 55337-06-25 04:48 G 21932659.49 21932659.70 21932659.90 0.0504 0.0010

Neptune 55337-06-29 20:38 G 21932664.21 21932664.36 21932664.55 0.0088 0.0055

Neptune 55338-02-10 09:50 G 21932889.74 21932889.91 21932890.11 0.0088 0.0048

Neptune 55338-09-23 22:48 G 21933115.26 21933115.45 21933115.65 0.0088 0.0041

Neptune 55339-05-07 11:46 G 21933340.79 21933340.99 21933341.20 0.0088 0.0034

Neptune 55339-12-19 00:29 G 21933566.32 21933566.52 21933566.74 0.0088 0.0027

Neptune 55340-07-31 13:12 G 21933791.85 21933792.05 21933792.27 0.0088 0.0021

Neptune 55341-03-14 02:10 G 21934017.38 21934017.59 21934017.81 0.0088 0.0014

Neptune 55341-10-25 15:07 G 21934242.91 21934243.13 21934243.35 0.0088 0.0007

Neptune 55342-06-08 03:50 G 21934468.44 21934468.66 21934468.88 0.0088 0.0000

Neptune 55343-01-19 16:34 G 21934693.97 21934694.19 21934694.41 0.0088 0.0007

Neptune 55343-09-02 05:17 G 21934919.50 21934919.72 21934919.94 0.0088 0.0014

Jupiter 55343-12-14 20:10 G 21935023.19 21935023.34 21935023.48 0.0526 0.0359

Neptune 55344-04-14 17:46 G 21935145.04 21935145.24 21935145.47 0.0088 0.0021

Neptune 55344-11-26 06:43 G 21935370.57 21935370.78 21935370.99 0.0088 0.0027

Neptune 55345-07-09 19:12 G 21935596.11 21935596.30 21935596.51 0.0088 0.0034

Neptune 55346-02-20 07:55 G 21935821.65 21935821.83 21935822.04 0.0088 0.0041

Neptune 55346-10-03 20:38 G 21936047.19 21936047.36 21936047.56 0.0088 0.0048

Neptune 55347-05-17 09:36 G 21936272.73 21936272.90 21936273.08 0.0088 0.0054

Saturn 55347-09-05 09:07 G 21936383.75 21936383.88 21936384.03 0.0273 0.0203

Neptune 55347-12-28 22:05 G 21936498.27 21936498.42 21936498.59 0.0088 0.0061

Saturn 55348-04-21 16:05 G 21936612.96 21936613.17 21936613.38 0.0275 0.0032

Neptune 55348-08-10 10:34 G 21936723.82 21936723.94 21936724.10 0.0088 0.0068

Saturn 55348-12-06 23:46 G 21936842.47 21936842.49 21936842.54 0.0277 0.0273

Jupiter 55349-02-28 02:24 G 21936925.43 21936925.60 21936925.78 0.0506 0.0270

Neptune 55349-03-23 23:17 G 21936949.38 21936949.47 21936949.61 0.0088 0.0075

Neptune 55349-11-04 12:14 G 21937174.95 21937175.01 21937175.11 0.0088 0.0081

Neptune 55350-06-18 00:58 G 21937400.54 21937400.54 21937400.58 0.0088 0.0088

Jupiter 55355-08-19 12:43 G 21939288.83 21939289.03 21939289.23 0.0523 0.0050

Uranus 55357-05-31 07:12 G 21939939.75 21939939.80 21939939.88 0.0138 0.0131

Uranus 55358-01-12 15:22 G 21940166.00 21940166.14 21940166.30 0.0138 0.0100

Uranus 55358-08-26 23:17 G 21940392.29 21940392.47 21940392.66 0.0138 0.0069

Uranus 55359-04-10 06:43 G 21940618.58 21940618.78 21940619.00 0.0138 0.0039

Uranus 55359-11-22 14:24 G 21940844.89 21940845.10 21940845.32 0.0137 0.0008

Uranus 55360-07-05 22:05 G 21941071.21 21941071.42 21941071.63 0.0137 0.0023

Uranus 55361-02-17 05:17 G 21941297.52 21941297.72 21941297.92 0.0137 0.0053

Jupiter 55361-06-27 15:36 G 21941428.05 21941428.15 21941428.26 0.0501 0.0427

Saturn 55361-07-09 15:36 G 21941440.00 21941440.15 21941440.32 0.0287 0.0182

Uranus 55361-10-01 12:00 G 21941523.85 21941524.00 21941524.19 0.0137 0.0084

Saturn 55362-02-24 09:50 G 21941669.71 21941669.91 21941670.12 0.0285 0.0090

Uranus 55362-05-15 19:26 G 21941750.19 21941750.31 21941750.43 0.0136 0.0113

Jupiter 55367-04-24 03:36 G 21943554.48 21943554.65 21943554.83 0.0521 0.0260

Mars 55368-08-18 06:29 G 21944036.70 21944036.77 21944036.84 0.1616 0.1476

Jupiter 55373-03-02 15:50 G 21945693.96 21945694.16 21945694.35 0.0503 0.0164

Saturn 55377-03-17 18:14 G 21947170.09 21947170.26 21947170.43 0.0273 0.0162

Saturn 55377-11-02 01:12 G 21947399.34 21947399.55 21947399.75 0.0275 0.0075

Jupiter 55384-11-05 14:24 G 21949959.90 21949960.10 21949960.30 0.0505 0.0108

Saturn 55391-01-19 23:02 G 21952226.28 21952226.46 21952226.65 0.0287 0.0144

Jupiter 55391-04-27 01:26 G 21952323.38 21952323.56 21952323.74 0.0525 0.0222

Saturn 55391-09-06 16:34 G 21952456.00 21952456.19 21952456.38 0.0285 0.0126

Jupiter 55396-07-11 12:58 G 21954225.92 21954226.04 21954226.18 0.0507 0.0382

Uranus 55401-05-27 02:24 G 21956005.54 21956005.60 21956005.70 0.0140 0.0130

Uranus 55402-01-08 12:14 G 21956231.86 21956232.01 21956232.17 0.0140 0.0098

Mars 55402-06-18 03:22 G 21956392.50 21956392.64 21956392.78 0.1613 0.0963

Uranus 55402-08-22 21:22 G 21956458.21 21956458.39 21956458.60 0.0141 0.0066

Jupiter 55402-12-31 19:26 G 21956589.11 21956589.31 21956589.51 0.0523 0.0081

Uranus 55403-04-06 06:58 G 21956684.59 21956684.79 21956685.01 0.0141 0.0033

Mars 55403-05-23 03:36 G 21956731.52 21956731.65 21956731.79 0.1911 0.1178

Uranus 55403-11-18 16:48 G 21956910.99 21956911.20 21956911.42 0.0141 0.0002

Uranus 55404-07-02 02:38 G 21957137.40 21957137.61 21957137.83 0.0141 0.0034

Uranus 55405-02-13 12:43 G 21957363.84 21957364.03 21957364.22 0.0141 0.0068

Uranus 55405-09-27 22:34 G 21957590.31 21957590.44 21957590.61 0.0142 0.0102

Uranus 55406-05-12 09:07 G 21957816.82 21957816.88 21957816.95 0.0142 0.0135

Saturn 55406-09-28 21:22 G 21957956.21 21957956.39 21957956.58 0.0274 0.0132

Saturn 55407-05-16 04:19 G 21958185.49 21958185.68 21958185.88 0.0276 0.0105

Jupiter 55408-11-09 01:41 G 21958728.41 21958728.57 21958728.73 0.0502 0.0315

Moon 55409-10-02 11:02 G 21959055.92 21959055.96 21959056.00 0.2694 0.2581

Pluto 55410-03-25 08:38 G 21959229.67 21959229.86 21959230.06 0.0081 0.0037

Pluto 55410-11-05 19:12 G 21959455.13 21959455.30 21959455.51 0.0081 0.0041

Jupiter 55414-09-05 13:12 G 21960854.92 21960855.05 21960855.19 0.0520 0.0380

Earth 55417-09-30 03:22 G 21961975.48 21961975.64 21961975.79 0.2686 0.0577

Moon 55417-09-30 05:31 G 21961975.58 21961975.73 21961975.88 0.2693 0.0061 *

Neptune 55417-10-08 08:10 G 21961983.81 21961983.84 21961983.92 0.0089 0.0086

Neptune 55418-05-21 21:22 G 21962209.31 21962209.39 21962209.51 0.0089 0.0079

Neptune 55419-01-02 10:34 G 21962434.83 21962434.94 21962435.09 0.0089 0.0073

Neptune 55419-08-16 00:00 G 21962660.37 21962660.50 21962660.66 0.0089 0.0065

Neptune 55420-03-28 13:12 G 21962885.90 21962886.05 21962886.23 0.0089 0.0059

Jupiter 55420-07-15 01:12 G 21962994.34 21962994.55 21962994.75 0.0504 0.0047

Saturn 55420-08-02 06:14 G 21963012.57 21963012.76 21963012.96 0.0287 0.0102

Neptune 55420-11-09 02:24 G 21963111.43 21963111.60 21963111.79 0.0089 0.0052

Saturn 55421-03-19 23:46 G 21963242.33 21963242.49 21963242.67 0.0284 0.0168

Neptune 55421-06-22 15:36 G 21963336.97 21963337.15 21963337.35 0.0089 0.0045

Neptune 55422-02-03 04:48 G 21963562.51 21963562.70 21963562.91 0.0089 0.0038

Neptune 55422-09-16 18:00 G 21963788.05 21963788.25 21963788.47 0.0089 0.0031

Neptune 55423-04-30 07:12 G 21964013.60 21964013.80 21964014.02 0.0089 0.0023

Neptune 55423-12-11 20:24 G 21964239.14 21964239.35 21964239.57 0.0089 0.0016

Neptune 55424-07-24 09:50 G 21964464.70 21964464.91 21964465.13 0.0089 0.0009

Neptune 55425-03-06 23:17 G 21964690.25 21964690.47 21964690.69 0.0089 0.0002

Neptune 55425-10-18 12:29 G 21964915.80 21964916.02 21964916.24 0.0089 0.0005

Neptune 55426-06-01 01:41 G 21965141.35 21965141.57 21965141.79 0.0089 0.0012

Jupiter 55427-01-03 14:53 G 21965357.99 21965358.12 21965358.26 0.0525 0.0396

Neptune 55427-01-12 14:53 G 21965366.91 21965367.12 21965367.34 0.0089 0.0020

Neptune 55427-08-26 04:19 G 21965592.48 21965592.68 21965592.90 0.0089 0.0027

Neptune 55428-04-07 17:46 G 21965818.04 21965818.24 21965818.44 0.0089 0.0034

Neptune 55428-11-19 06:43 G 21966043.60 21966043.78 21966043.99 0.0089 0.0041

Neptune 55429-07-02 19:55 G 21966269.17 21966269.33 21966269.53 0.0089 0.0049

Neptune 55430-02-13 09:22 G 21966494.73 21966494.89 21966495.08 0.0090 0.0055

Neptune 55430-09-26 22:34 G 21966720.31 21966720.44 21966720.62 0.0090 0.0063

Neptune 55431-05-10 11:46 G 21966945.88 21966945.99 21966946.15 0.0090 0.0070

Neptune 55431-12-22 00:58 G 21967171.46 21967171.54 21967171.68 0.0090 0.0077

Jupiter 55432-03-19 23:31 G 21967260.30 21967260.48 21967260.67 0.0506 0.0226

Neptune 55432-08-03 14:53 G 21967397.05 21967397.12 21967397.21 0.0090 0.0083

Mars 55434-06-16 19:12 G 21968079.19 21968079.30 21968079.41 0.1616 0.1226

Saturn 55436-04-10 06:29 G 21968742.57 21968742.77 21968742.97 0.0274 0.0091

Saturn 55436-11-25 13:41 G 21968971.90 21968972.07 21968972.26 0.0276 0.0148

Jupiter 55438-09-08 07:26 G 21969623.61 21969623.81 21969624.01 0.0523 0.0088

Uranus 55441-09-13 00:14 G 21970724.40 21970724.51 21970724.64 0.0138 0.0113

Uranus 55442-04-27 08:10 G 21970950.67 21970950.84 21970951.02 0.0138 0.0082

Uranus 55442-12-09 16:05 G 21971176.97 21971177.17 21971177.37 0.0138 0.0051

Uranus 55443-07-23 23:46 G 21971403.28 21971403.49 21971403.71 0.0137 0.0020

Jupiter 55443-11-23 21:22 G 21971526.37 21971526.39 21971526.42 0.0508 0.0502

Uranus 55444-03-06 07:12 G 21971629.59 21971629.80 21971630.02 0.0137 0.0011

Jupiter 55444-07-17 12:14 G 21971762.95 21971763.01 21971763.09 0.0501 0.0467

Uranus 55444-10-18 14:24 G 21971855.90 21971856.10 21971856.32 0.0137 0.0041

Uranus 55445-06-01 21:50 G 21972082.23 21972082.41 21972082.60 0.0137 0.0071

Uranus 55446-01-14 04:34 G 21972308.56 21972308.69 21972308.85 0.0137 0.0102

Uranus 55446-08-28 11:46 G 21972534.94 21972534.99 21972535.06 0.0136 0.0131

Saturn 55450-02-12 15:22 G 21973798.94 21973799.14 21973799.35 0.0286 0.0060

Jupiter 55450-05-14 00:58 G 21973889.35 21973889.54 21973889.72 0.0521 0.0215

Saturn 55450-09-30 08:24 G 21974028.71 21974028.85 21974029.00 0.0284 0.0208

Jupiter 55456-03-22 12:29 G 21976028.83 21976029.02 21976029.21 0.0503 0.0205

Jupiter 55462-01-16 19:55 G 21978155.30 21978155.33 21978155.38 0.0519 0.0507

Saturn 55465-10-21 10:05 G 21979528.71 21979528.92 21979529.13 0.0274 0.0060

Saturn 55466-06-07 17:31 G 21979758.07 21979758.23 21979758.39 0.0276 0.0179

Jupiter 55467-11-26 10:34 G 21980294.74 21980294.94 21980295.14 0.0505 0.0069

Mars 55468-04-14 16:34 G 21980435.08 21980435.19 21980435.30 0.1613 0.1196

Mars 55469-03-19 05:17 G 21980773.54 21980773.72 21980773.89 0.1912 0.0215

Jupiter 55474-05-16 23:31 G 21982658.31 21982658.48 21982658.66 0.0525 0.0269

Jupiter 55479-08-01 08:38 G 21984560.71 21984560.86 21984561.01 0.0507 0.0344

Saturn 55479-08-25 22:19 G 21984585.22 21984585.43 21984585.65 0.0286 0.0020

Saturn 55480-04-11 15:07 G 21984815.04 21984815.13 21984815.25 0.0284 0.0248

Uranus 55485-09-07 19:26 G 21986790.20 21986790.31 21986790.46 0.0140 0.0112

Jupiter 55486-01-19 14:38 G 21986923.91 21986924.11 21986924.32 0.0522 0.0043

Uranus 55486-04-22 04:48 G 21987016.53 21987016.70 21987016.89 0.0140 0.0080

Uranus 55486-12-04 14:24 G 21987242.90 21987243.10 21987243.31 0.0141 0.0047

Uranus 55487-07-19 00:14 G 21987469.29 21987469.51 21987469.73 0.0141 0.0014

Uranus 55488-03-01 09:50 G 21987695.70 21987695.91 21987696.13 0.0141 0.0020

Uranus 55488-10-13 19:41 G 21987922.13 21987922.32 21987922.53 0.0141 0.0053

Uranus 55489-05-28 06:00 G 21988148.58 21988148.75 21988148.92 0.0141 0.0087

Uranus 55490-01-09 16:05 G 21988375.07 21988375.17 21988375.29 0.0142 0.0121

Jupiter 55491-11-28 22:05 G 21989063.28 21989063.42 21989063.56 0.0502 0.0355

Saturn 55494-09-16 13:12 G 21990085.97 21990086.05 21990086.13 0.0273 0.0251

Saturn 55495-05-03 19:26 G 21990315.10 21990315.31 21990315.53 0.0275 0.0019

Saturn 55495-12-19 03:22 G 21990544.52 21990544.64 21990544.77 0.0277 0.0223

Jupiter 55497-09-24 07:55 G 21991189.68 21991189.83 21991189.99 0.0520 0.0342

Neptune 55498-08-31 14:53 G 21991531.11 21991531.12 21991531.16 0.0088 0.0088

Neptune 55499-04-14 03:22 G 21991756.58 21991756.64 21991756.75 0.0088 0.0082

Neptune 55499-11-25 16:34 G 21991982.08 21991982.19 21991982.32 0.0088 0.0074

Mars 55500-04-14 08:10 G 21992121.71 21992121.84 21992121.98 0.1615 0.0983

Neptune 55500-07-09 05:02 G 21992207.60 21992207.71 21992207.88 0.0088 0.0068

Neptune 55501-02-19 18:14 G 21992433.12 21992433.26 21992433.44 0.0088 0.0061

Neptune 55501-10-03 07:12 G 21992658.64 21992658.80 21992658.99 0.0088 0.0054

Neptune 55502-05-16 20:24 G 21992884.16 21992884.35 21992884.53 0.0088 0.0048

Neptune 55502-12-28 08:53 G 21993109.69 21993109.87 21993110.08 0.0088 0.0041

Jupiter 55503-08-04 21:22 G 21993329.19 21993329.39 21993329.59 0.0504 0.0087

Neptune 55503-08-10 21:50 G 21993335.22 21993335.41 21993335.62 0.0088 0.0034

Neptune 55504-03-23 10:48 G 21993560.75 21993560.95 21993561.17 0.0088 0.0027

Neptune 55504-11-03 23:46 G 21993786.28 21993786.49 21993786.71 0.0088 0.0020

Neptune 55505-06-17 12:29 G 21994011.81 21994012.02 21994012.25 0.0088 0.0014

Neptune 55506-01-29 01:26 G 21994237.35 21994237.56 21994237.79 0.0088 0.0007

Neptune 55506-09-11 14:24 G 21994462.88 21994463.10 21994463.32 0.0088 0.0000

Neptune 55507-04-25 03:07 G 21994688.41 21994688.63 21994688.85 0.0088 0.0007

Neptune 55507-12-06 15:36 G 21994913.94 21994914.15 21994914.38 0.0088 0.0014

Neptune 55508-07-19 04:19 G 21995139.48 21995139.68 21995139.91 0.0088 0.0021

Saturn 55508-07-21 13:55 G 21995141.98 21995142.08 21995142.19 0.0288 0.0247

Neptune 55509-03-01 17:31 G 21995365.02 21995365.23 21995365.44 0.0088 0.0027

Saturn 55509-03-08 08:24 G 21995371.64 21995371.85 21995372.06 0.0286 0.0026

Neptune 55509-10-13 06:00 G 21995590.56 21995590.75 21995590.96 0.0088 0.0034

Jupiter 55510-01-23 11:46 G 21995692.88 21995692.99 21995693.10 0.0526 0.0438

Neptune 55510-05-26 18:29 G 21995816.09 21995816.27 21995816.49 0.0088 0.0041

Neptune 55511-01-07 07:41 G 21996041.63 21996041.82 21996042.00 0.0088 0.0047

Neptune 55511-08-20 20:10 G 21996267.18 21996267.34 21996267.52 0.0088 0.0054

Neptune 55512-04-02 08:38 G 21996492.72 21996492.86 21996493.04 0.0088 0.0061

Neptune 55512-11-13 21:36 G 21996718.27 21996718.40 21996718.55 0.0088 0.0067

Neptune 55513-06-27 10:05 G 21996943.82 21996943.92 21996944.06 0.0088 0.0074

Neptune 55514-02-07 23:17 G 21997169.39 21997169.47 21997169.56 0.0088 0.0080

Neptune 55514-09-21 11:46 G 21997394.98 21997394.99 21997395.04 0.0088 0.0087

Jupiter 55515-04-09 20:38 G 21997595.17 21997595.36 21997595.55 0.0506 0.0183

Jupiter 55521-09-28 05:31 G 21999958.53 21999958.73 21999958.92 0.0524 0.0134

Saturn 55524-03-29 16:34 G 22000872.07 22000872.19 22000872.31 0.0273 0.0220

Saturn 55524-11-13 23:02 G 22001101.25 22001101.46 22001101.67 0.0275 0.0014

Uranus 55525-05-14 07:26 G 22001282.74 22001282.81 22001282.90 0.0138 0.0128

Saturn 55525-07-01 06:43 G 22001330.71 22001330.78 22001330.87 0.0277 0.0254

Uranus 55525-12-26 15:36 G 22001509.00 22001509.15 22001509.31 0.0138 0.0096

Uranus 55526-08-09 23:31 G 22001735.29 22001735.48 22001735.67 0.0138 0.0065

Jupiter 55526-12-13 17:31 G 22001861.15 22001861.23 22001861.32 0.0508 0.0461

Uranus 55527-03-24 07:12 G 22001961.59 22001961.80 22001962.01 0.0138 0.0034

Uranus 55527-11-05 14:53 G 22002187.90 22002188.12 22002188.34 0.0137 0.0004

Uranus 55528-06-18 22:19 G 22002414.22 22002414.43 22002414.65 0.0137 0.0027

Uranus 55529-01-31 05:31 G 22002640.54 22002640.73 22002640.94 0.0137 0.0058

Uranus 55529-09-14 12:43 G 22002866.88 22002867.03 22002867.21 0.0137 0.0088

Uranus 55530-04-28 19:55 G 22003093.23 22003093.33 22003093.44 0.0137 0.0118

Jupiter 55533-06-02 23:02 G 22004224.27 22004224.46 22004224.65 0.0521 0.0167

Mars 55534-02-11 05:17 G 22004477.64 22004477.72 22004477.79 0.1612 0.1441

Mars 55535-01-15 06:58 G 22004815.62 22004815.79 22004815.95 0.1913 0.0735

Saturn 55538-01-31 20:24 G 22005928.21 22005928.35 22005928.50 0.0287 0.0207

Saturn 55538-09-18 14:53 G 22006157.91 22006158.12 22006158.33 0.0285 0.0065

Jupiter 55539-04-12 07:41 G 22006363.65 22006363.82 22006364.01 0.0503 0.0241

Jupiter 55545-02-05 16:05 G 22008490.09 22008490.17 22008490.26 0.0518 0.0464

Earth 55547-04-02 04:48 G 22009275.62 22009275.70 22009275.77 0.2645 0.2288

Moon 55547-04-02 09:07 G 22009275.81 22009275.88 22009275.94 0.2642 0.2402

Jupiter 55550-12-16 06:14 G 22010629.56 22010629.76 22010629.96 0.0505 0.0031

Saturn 55553-10-10 01:12 G 22011658.39 22011658.55 22011658.71 0.0274 0.0181

Saturn 55554-05-27 07:55 G 22011887.63 22011887.83 22011888.04 0.0275 0.0055

Earth 55555-03-30 20:53 G 22012195.23 22012195.37 22012195.52 0.2646 0.0979

Moon 55555-03-30 21:22 G 22012195.23 22012195.39 22012195.55 0.2640 0.0756 *

Jupiter 55557-06-05 18:14 G 22012993.09 22012993.26 22012993.42 0.0524 0.0305

Jupiter 55562-08-21 04:34 G 22014895.53 22014895.69 22014895.86 0.0507 0.0305

Pluto 55565-07-26 20:24 G 22015966.20 22015966.35 22015966.52 0.0063 0.0043

Mars 55566-02-09 20:53 G 22016164.22 22016164.37 22016164.52 0.1614 0.0730

Pluto 55566-03-09 00:14 G 22016191.29 22016191.51 22016191.73 0.0063 0.0008

Pluto 55566-10-20 03:50 G 22016416.47 22016416.66 22016416.87 0.0063 0.0029

Saturn 55567-08-14 07:26 G 22016714.64 22016714.81 22016714.99 0.0287 0.0159

Saturn 55568-03-31 01:26 G 22016944.37 22016944.56 22016944.76 0.0285 0.0112

Jupiter 55569-02-08 10:34 G 22017258.74 22017258.94 22017259.15 0.0523 0.0009

Uranus 55569-05-09 02:53 G 22017348.54 22017348.62 22017348.73 0.0140 0.0126

Uranus 55569-12-21 12:14 G 22017574.86 22017575.01 22017575.19 0.0140 0.0094

Uranus 55570-08-04 21:50 G 22017801.22 22017801.41 22017801.61 0.0140 0.0061

Uranus 55571-03-19 07:12 G 22018027.59 22018027.80 22018028.02 0.0141 0.0029

Uranus 55571-10-31 17:02 G 22018253.99 22018254.21 22018254.43 0.0141 0.0005

Uranus 55572-06-14 02:53 G 22018480.41 22018480.62 22018480.83 0.0141 0.0038

Uranus 55573-01-26 12:43 G 22018706.86 22018707.03 22018707.23 0.0141 0.0072

Uranus 55573-09-09 23:02 G 22018933.32 22018933.46 22018933.61 0.0141 0.0106

Uranus 55574-04-24 08:53 G 22019159.86 22019159.87 22019159.93 0.0142 0.0140

Jupiter 55574-12-18 18:43 G 22019398.16 22019398.28 22019398.41 0.0501 0.0394

Jupiter 55580-10-14 05:17 G 22021524.56 22021524.72 22021524.89 0.0520 0.0299

Neptune 55582-01-10 18:43 G 22021978.25 22021978.28 22021978.37 0.0089 0.0086

Neptune 55582-08-24 08:10 G 22022203.76 22022203.84 22022203.97 0.0089 0.0079

Neptune 55583-04-06 21:36 G 22022429.28 22022429.40 22022429.54 0.0089 0.0071

Saturn 55583-04-22 04:34 G 22022444.52 22022444.69 22022444.88 0.0273 0.0150

Neptune 55583-11-18 10:48 G 22022654.81 22022654.95 22022655.11 0.0089 0.0065

Saturn 55583-12-07 11:31 G 22022673.78 22022673.98 22022674.18 0.0275 0.0087

Neptune 55584-07-01 00:14 G 22022880.35 22022880.51 22022880.68 0.0089 0.0058

Neptune 55585-02-11 13:26 G 22023105.88 22023106.06 22023106.24 0.0089 0.0051

Neptune 55585-09-25 02:38 G 22023331.42 22023331.61 22023331.81 0.0089 0.0044

Neptune 55586-05-08 15:50 G 22023556.96 22023557.16 22023557.36 0.0089 0.0037

Jupiter 55586-08-23 17:46 G 22023664.04 22023664.24 22023664.44 0.0503 0.0126

Neptune 55586-12-20 05:02 G 22023782.50 22023782.71 22023782.92 0.0089 0.0030

Neptune 55587-08-02 18:29 G 22024008.05 22024008.27 22024008.48 0.0089 0.0023

Neptune 55588-03-15 07:41 G 22024233.60 22024233.82 22024234.03 0.0089 0.0016

Neptune 55588-10-26 20:38 G 22024459.15 22024459.36 22024459.58 0.0089 0.0009

Neptune 55589-06-09 09:50 G 22024684.69 22024684.91 22024685.13 0.0089 0.0002

Neptune 55590-01-20 23:02 G 22024910.25 22024910.46 22024910.69 0.0089 0.0006

Neptune 55590-09-03 12:29 G 22025135.81 22025136.02 22025136.24 0.0089 0.0013

Neptune 55591-04-17 01:41 G 22025361.36 22025361.57 22025361.79 0.0089 0.0020

Neptune 55591-11-28 14:53 G 22025586.92 22025587.12 22025587.34 0.0089 0.0027

Neptune 55592-07-11 04:19 G 22025812.48 22025812.68 22025812.89 0.0089 0.0034

Jupiter 55593-02-11 10:19 G 22026027.86 22026027.93 22026028.01 0.0526 0.0485

Neptune 55593-02-21 17:31 G 22026038.04 22026038.23 22026038.43 0.0089 0.0041

Neptune 55593-10-05 06:58 G 22026263.61 22026263.79 22026263.98 0.0089 0.0048

Neptune 55594-05-18 20:10 G 22026489.18 22026489.34 22026489.52 0.0089 0.0055

Neptune 55594-12-30 09:36 G 22026714.75 22026714.90 22026715.06 0.0090 0.0062

Neptune 55595-08-12 22:48 G 22026940.33 22026940.45 22026940.60 0.0090 0.0069

Neptune 55596-03-25 12:00 G 22027165.90 22027166.00 22027166.14 0.0090 0.0076

Neptune 55596-11-06 01:12 G 22027391.49 22027391.55 22027391.66 0.0090 0.0083

Saturn 55597-02-23 12:43 G 22027500.84 22027501.03 22027501.23 0.0287 0.0123

Neptune 55597-06-19 14:38 G 22027617.11 22027617.11 22027617.14 0.0090 0.0089

Saturn 55597-10-11 06:43 G 22027730.60 22027730.78 22027730.96 0.0285 0.0147

Jupiter 55598-04-28 16:05 G 22027929.98 22027930.17 22027930.37 0.0506 0.0146

Mars 55600-11-11 08:53 G 22028857.79 22028857.87 22028857.96 0.1914 0.1673

Jupiter 55604-10-17 01:55 G 22030293.39 22030293.58 22030293.77 0.0523 0.0176

Uranus 55609-08-25 22:34 G 22032067.33 22032067.44 22032067.58 0.0138 0.0111

Jupiter 55610-01-01 13:12 G 22032195.94 22032196.05 22032196.16 0.0508 0.0424

Uranus 55610-04-09 06:29 G 22032293.61 22032293.77 22032293.96 0.0138 0.0080

Uranus 55610-11-21 14:24 G 22032519.91 22032520.10 22032520.31 0.0138 0.0049

Uranus 55611-07-05 22:34 G 22032746.22 22032746.44 22032746.65 0.0138 0.0018

Uranus 55612-02-17 06:00 G 22032972.54 22032972.75 22032972.97 0.0137 0.0013

Uranus 55612-09-30 13:12 G 22033198.86 22033199.05 22033199.27 0.0137 0.0044

Saturn 55612-11-01 12:43 G 22033230.84 22033231.03 22033231.22 0.0274 0.0111

Uranus 55613-05-14 20:38 G 22033425.19 22033425.36 22033425.55 0.0137 0.0074

Saturn 55613-06-18 19:41 G 22033460.14 22033460.32 22033460.52 0.0276 0.0127

Uranus 55613-12-27 04:05 G 22033651.53 22033651.67 22033651.81 0.0137 0.0104

Uranus 55614-08-10 11:17 G 22033877.93 22033877.97 22033878.01 0.0136 0.0134

Jupiter 55616-06-21 18:43 G 22034559.08 22034559.28 22034559.48 0.0521 0.0128

Jupiter 55622-05-01 04:05 G 22036698.50 22036698.67 22036698.84 0.0503 0.0277

Saturn 55626-09-05 23:31 G 22038287.28 22038287.48 22038287.69 0.0287 0.0074

Saturn 55627-04-23 17:02 G 22038517.06 22038517.21 22038517.36 0.0285 0.0194

Jupiter 55628-02-25 11:31 G 22038824.87 22038824.98 22038825.09 0.0519 0.0428

Mars 55631-12-08 09:50 G 22040206.75 22040206.91 22040207.08 0.1613 0.0494

Jupiter 55634-01-04 04:19 G 22040964.47 22040964.68 22040964.88 0.0504 0.0014

Jupiter 55640-06-24 16:05 G 22043328.02 22043328.17 22043328.32 0.0525 0.0350

Saturn 55642-05-14 15:50 G 22044016.96 22044017.16 22044017.37 0.0274 0.0079

Saturn 55642-12-29 23:02 G 22044246.29 22044246.46 22044246.63 0.0276 0.0158

Jupiter 55645-09-09 02:10 G 22045230.42 22045230.59 22045230.77 0.0507 0.0260

Jupiter 55652-02-28 10:05 G 22047593.71 22047593.92 22047594.12 0.0523 0.0049

Uranus 55653-08-20 20:10 G 22048133.22 22048133.34 22048133.49 0.0140 0.0108

Uranus 55654-04-04 05:46 G 22048359.55 22048359.74 22048359.92 0.0140 0.0076

Uranus 55654-11-16 15:07 G 22048585.92 22048586.13 22048586.34 0.0140 0.0043

Uranus 55655-07-01 00:43 G 22048812.32 22048812.53 22048812.75 0.0141 0.0010

Pluto 55655-09-11 13:41 G 22048885.03 22048885.07 22048885.13 0.0082 0.0079

Uranus 55656-02-12 10:34 G 22049038.73 22049038.94 22049039.16 0.0141 0.0024

Saturn 55656-03-18 03:36 G 22049073.44 22049073.65 22049073.86 0.0287 0.0041

Pluto 55656-04-24 00:58 G 22049110.32 22049110.54 22049110.76 0.0081 0.0001

Uranus 55656-09-25 20:24 G 22049265.16 22049265.35 22049265.56 0.0141 0.0057

Saturn 55656-11-02 20:53 G 22049303.25 22049303.37 22049303.50 0.0284 0.0226

Pluto 55656-12-05 11:02 G 22049335.92 22049335.96 22049336.07 0.0081 0.0076

Uranus 55657-05-10 06:14 G 22049491.61 22049491.76 22049491.94 0.0141 0.0091

Uranus 55657-12-22 16:34 G 22049718.10 22049718.19 22049718.30 0.0141 0.0125

Jupiter 55658-01-06 15:07 G 22049733.03 22049733.13 22049733.24 0.0501 0.0431

Moon 55660-10-01 02:38 G 22050731.46 22050731.61 22050731.77 0.2678 0.1097

Earth 55660-10-01 03:22 G 22050731.48 22050731.64 22050731.79 0.2686 0.0675 *

Neptune 55662-12-04 01:55 G 22051525.55 22051525.58 22051525.64 0.0088 0.0086

Neptune 55663-07-17 14:24 G 22051751.04 22051751.10 22051751.22 0.0088 0.0081

Jupiter 55663-11-03 03:22 G 22051859.46 22051859.64 22051859.81 0.0520 0.0251

Neptune 55664-02-28 03:36 G 22051976.55 22051976.65 22051976.79 0.0088 0.0074

Neptune 55664-10-10 16:19 G 22052202.06 22052202.18 22052202.35 0.0088 0.0067

Neptune 55665-05-24 05:17 G 22052427.58 22052427.72 22052427.90 0.0088 0.0060

Neptune 55666-01-04 18:14 G 22052653.10 22052653.26 22052653.45 0.0088 0.0054

Neptune 55666-08-18 06:58 G 22052878.62 22052878.79 22052878.99 0.0088 0.0047

Neptune 55667-03-31 19:55 G 22053104.14 22053104.33 22053104.54 0.0088 0.0040

Neptune 55667-11-12 08:53 G 22053329.67 22053329.87 22053330.08 0.0088 0.0033

Neptune 55668-06-24 21:22 G 22053555.20 22053555.39 22053555.62 0.0088 0.0028

Neptune 55669-02-05 10:34 G 22053780.73 22053780.94 22053781.16 0.0088 0.0020

Jupiter 55669-09-11 13:55 G 22053998.89 22053999.08 22053999.28 0.0504 0.0165

Neptune 55669-09-18 23:31 G 22054006.27 22054006.48 22054006.70 0.0088 0.0013

Neptune 55670-05-02 12:14 G 22054231.80 22054232.01 22054232.24 0.0088 0.0007

Neptune 55670-12-14 01:12 G 22054457.33 22054457.55 22054457.77 0.0088 0.0001

Neptune 55671-07-27 13:55 G 22054682.86 22054683.08 22054683.30 0.0088 0.0007

Saturn 55671-11-24 22:48 G 22054803.24 22054803.45 22054803.66 0.0274 0.0043

Neptune 55672-03-09 02:53 G 22054908.40 22054908.62 22054908.84 0.0088 0.0014

Saturn 55672-07-11 06:14 G 22055032.62 22055032.76 22055032.91 0.0276 0.0196

Neptune 55672-10-20 15:22 G 22055133.94 22055134.14 22055134.37 0.0088 0.0021

Neptune 55673-06-03 04:19 G 22055359.48 22055359.68 22055359.90 0.0088 0.0027

Neptune 55674-01-14 17:02 G 22055585.01 22055585.21 22055585.42 0.0088 0.0034

Neptune 55674-08-28 05:31 G 22055810.55 22055810.73 22055810.94 0.0088 0.0041

Neptune 55675-04-10 18:29 G 22056036.09 22056036.27 22056036.46 0.0088 0.0047

Neptune 55675-11-22 06:58 G 22056261.63 22056261.79 22056261.98 0.0088 0.0054

Jupiter 55676-03-02 06:43 G 22056362.78 22056362.78 22056362.79 0.0526 0.0525

Neptune 55676-07-04 19:55 G 22056487.18 22056487.33 22056487.50 0.0088 0.0060

Neptune 55677-02-15 08:24 G 22056712.73 22056712.85 22056713.01 0.0088 0.0067

Neptune 55677-09-28 21:22 G 22056938.28 22056938.39 22056938.52 0.0088 0.0073

Neptune 55678-05-12 09:50 G 22057163.84 22057163.91 22057164.02 0.0088 0.0080

Neptune 55678-12-23 22:34 G 22057389.41 22057389.44 22057389.50 0.0088 0.0086

Jupiter 55681-05-17 13:12 G 22058264.85 22058265.05 22058265.25 0.0506 0.0105

Saturn 55685-02-10 18:43 G 22059630.21 22059630.28 22059630.37 0.0288 0.0268

Saturn 55685-09-28 13:55 G 22059859.87 22059860.08 22059860.29 0.0286 0.0007

Saturn 55686-05-16 06:43 G 22060089.73 22060089.78 22060089.85 0.0284 0.0272

Jupiter 55687-11-05 21:50 G 22060628.23 22060628.41 22060628.60 0.0524 0.0214

Jupiter 55693-01-20 12:43 G 22062530.90 22062531.03 22062531.17 0.0508 0.0373

Uranus 55693-04-25 05:02 G 22062625.64 22062625.71 22062625.81 0.0138 0.0126

Uranus 55693-12-07 13:12 G 22062851.91 22062852.05 22062852.22 0.0138 0.0095

Uranus 55694-07-21 21:22 G 22063078.20 22063078.39 22063078.59 0.0138 0.0064

Uranus 55695-03-05 05:02 G 22063304.51 22063304.71 22063304.93 0.0138 0.0033

Uranus 55695-10-17 12:58 G 22063530.82 22063531.04 22063531.26 0.0137 0.0002

Uranus 55696-05-30 20:24 G 22063757.14 22063757.35 22063757.57 0.0137 0.0030

Uranus 55697-01-12 03:50 G 22063983.47 22063983.66 22063983.86 0.0137 0.0060

Uranus 55697-08-26 11:17 G 22064209.81 22064209.97 22064210.14 0.0137 0.0090

Mars 55697-10-04 22:48 G 22064249.28 22064249.45 22064249.62 0.1613 0.0246

Uranus 55698-04-09 18:00 G 22064436.17 22064436.25 22064436.37 0.0137 0.0121

Jupiter 55699-07-11 16:34 G 22064893.99 22064894.19 22064894.39 0.0522 0.0084

Saturn 55700-10-20 19:55 G 22065360.24 22065360.33 22065360.43 0.0272 0.0242

Saturn 55701-06-07 01:55 G 22065589.37 22065589.58 22065589.79 0.0274 0.0011

Saturn 55702-01-22 09:07 G 22065818.77 22065818.88 22065819.01 0.0276 0.0226

Jupiter 55705-05-21 02:24 G 22067033.45 22067033.60 22067033.76 0.0502 0.0322

Jupiter 55711-03-17 11:46 G 22069159.85 22069159.99 22069160.13 0.0519 0.0374

Saturn 55714-08-24 20:53 G 22070416.26 22070416.37 22070416.49 0.0288 0.0239

Saturn 55715-04-11 16:05 G 22070645.96 22070646.17 22070646.38 0.0286 0.0035

Jupiter 55717-01-24 01:41 G 22071299.37 22071299.57 22071299.77 0.0504 0.0056

Jupiter 55723-07-15 15:07 G 22073663.01 22073663.13 22073663.27 0.0525 0.0399

Jupiter 55728-09-28 23:02 G 22075565.28 22075565.46 22075565.65 0.0507 0.0219

Saturn 55730-05-03 01:26 G 22076146.43 22076146.56 22076146.69 0.0273 0.0210

Saturn 55730-12-18 07:26 G 22076375.60 22076375.81 22076376.02 0.0275 0.0023

Saturn 55731-08-04 15:07 G 22076605.07 22076605.13 22076605.20 0.0277 0.0262

Jupiter 55735-03-20 07:41 G 22077928.62 22077928.82 22077929.02 0.0523 0.0095

Uranus 55737-04-21 04:05 G 22078691.58 22078691.67 22078691.79 0.0140 0.0122

Uranus 55737-12-03 13:41 G 22078917.91 22078918.07 22078918.24 0.0140 0.0089

Uranus 55738-07-17 23:02 G 22079144.27 22079144.46 22079144.66 0.0140 0.0057

Uranus 55739-03-01 08:38 G 22079370.65 22079370.86 22079371.08 0.0140 0.0024

Uranus 55739-10-13 18:29 G 22079597.05 22079597.27 22079597.48 0.0141 0.0010

Uranus 55740-05-27 04:19 G 22079823.47 22079823.68 22079823.88 0.0141 0.0043

Jupiter 55740-06-03 21:36 G 22079831.35 22079831.40 22079831.45 0.0509 0.0491

Uranus 55741-01-08 14:10 G 22080049.92 22080050.09 22080050.28 0.0141 0.0077

Jupiter 55741-01-26 13:26 G 22080068.00 22080068.06 22080068.13 0.0501 0.0472

Uranus 55741-08-23 00:14 G 22080276.39 22080276.51 22080276.66 0.0141 0.0111

Saturn 55744-03-06 06:43 G 22081202.63 22081202.78 22081202.94 0.0288 0.0192

Saturn 55744-10-22 01:26 G 22081432.36 22081432.56 22081432.77 0.0286 0.0081

Neptune 55746-04-15 05:46 G 22081972.69 22081972.74 22081972.84 0.0089 0.0084

Jupiter 55746-11-22 23:31 G 22082194.29 22082194.48 22082194.66 0.0521 0.0212

Neptune 55746-11-26 18:58 G 22082198.20 22082198.29 22082198.42 0.0089 0.0078

Neptune 55747-07-10 08:24 G 22082423.73 22082423.85 22082424.00 0.0089 0.0071

Neptune 55748-02-20 21:50 G 22082649.27 22082649.41 22082649.57 0.0089 0.0064

Neptune 55748-10-03 11:17 G 22082874.80 22082874.97 22082875.14 0.0089 0.0057

Neptune 55749-05-17 00:00 G 22083100.34 22083100.50 22083100.70 0.0089 0.0050

Neptune 55749-12-28 13:12 G 22083325.87 22083326.05 22083326.26 0.0089 0.0044

Neptune 55750-08-11 02:38 G 22083551.42 22083551.61 22083551.82 0.0089 0.0036

Neptune 55751-03-24 15:50 G 22083776.96 22083777.16 22083777.38 0.0089 0.0030

Neptune 55751-11-05 05:02 G 22084002.51 22084002.71 22084002.93 0.0089 0.0023

Neptune 55752-06-17 18:14 G 22084228.05 22084228.26 22084228.49 0.0089 0.0016

Jupiter 55752-10-01 14:24 G 22084333.92 22084334.10 22084334.29 0.0503 0.0215

Neptune 55753-01-29 07:41 G 22084453.60 22084453.82 22084454.04 0.0089 0.0008

Neptune 55753-09-11 20:53 G 22084679.15 22084679.37 22084679.59 0.0089 0.0002

Neptune 55754-04-25 10:05 G 22084904.70 22084904.92 22084905.14 0.0089 0.0006

Neptune 55754-12-06 23:17 G 22085130.26 22085130.47 22085130.69 0.0089 0.0013

Neptune 55755-07-20 12:29 G 22085355.81 22085356.02 22085356.24 0.0089 0.0020

Neptune 55756-03-02 01:41 G 22085581.37 22085581.57 22085581.79 0.0089 0.0027

Neptune 55756-10-13 15:07 G 22085806.93 22085807.13 22085807.34 0.0089 0.0034

Neptune 55757-05-27 04:19 G 22086032.49 22086032.68 22086032.88 0.0089 0.0041

Neptune 55758-01-07 17:31 G 22086258.05 22086258.23 22086258.43 0.0089 0.0048

Jupiter 55758-07-28 18:58 G 22086460.24 22086460.29 22086460.35 0.0518 0.0498

Neptune 55758-08-21 06:58 G 22086483.63 22086483.79 22086483.97 0.0089 0.0055

Neptune 55759-04-03 20:10 G 22086709.20 22086709.34 22086709.52 0.0089 0.0062

Saturn 55759-11-13 04:19 G 22086932.52 22086932.68 22086932.84 0.0272 0.0178

Neptune 55759-11-15 09:22 G 22086934.77 22086934.89 22086935.05 0.0089 0.0069

Neptune 55760-06-27 23:17 G 22087160.35 22087160.47 22087160.58 0.0090 0.0075

Saturn 55760-06-29 10:19 G 22087161.72 22087161.93 22087162.14 0.0274 0.0054

Neptune 55761-02-08 12:14 G 22087385.94 22087386.01 22087386.11 0.0090 0.0082

Neptune 55761-09-22 01:41 G 22087611.56 22087611.57 22087611.61 0.0090 0.0089

Mars 55763-08-03 11:46 G 22088291.81 22088291.99 22088292.16 0.1612 0.0036

Jupiter 55764-06-06 13:12 G 22088599.85 22088600.05 22088600.25 0.0505 0.0052

Mars 55764-07-06 15:07 G 22088630.01 22088630.13 22088630.25 0.1913 0.1380

Jupiter 55770-11-25 23:31 G 22090963.31 22090963.48 22090963.65 0.0524 0.0273

Saturn 55773-09-16 07:41 G 22091988.65 22091988.82 22091989.00 0.0288 0.0166

Saturn 55774-05-04 02:10 G 22092218.40 22092218.59 22092218.79 0.0286 0.0107

Jupiter 55776-02-10 11:31 G 22092865.82 22092865.98 22092866.13 0.0507 0.0325

Uranus 55777-08-07 20:38 G 22093410.25 22093410.36 22093410.51 0.0138 0.0109

Uranus 55778-03-22 04:48 G 22093636.53 22093636.70 22093636.89 0.0138 0.0078

Uranus 55778-11-03 12:43 G 22093862.83 22093863.03 22093863.24 0.0138 0.0047

Uranus 55779-06-17 20:38 G 22094089.15 22094089.36 22094089.58 0.0138 0.0016

Uranus 55780-01-30 04:19 G 22094315.47 22094315.68 22094315.90 0.0137 0.0016

Uranus 55780-09-12 12:00 G 22094541.79 22094542.00 22094542.20 0.0137 0.0047

Uranus 55781-04-26 19:12 G 22094768.13 22094768.30 22094768.48 0.0137 0.0077

Uranus 55781-12-09 02:38 G 22094994.48 22094994.61 22094994.74 0.0137 0.0107

Jupiter 55782-07-31 17:17 G 22095229.01 22095229.22 22095229.42 0.0522 0.0028

Jupiter 55788-06-09 00:43 G 22097368.39 22097368.53 22097368.67 0.0502 0.0365

Saturn 55789-05-25 08:24 G 22097718.68 22097718.85 22097719.03 0.0273 0.0149

Saturn 55790-01-09 14:38 G 22097947.91 22097948.11 22097948.32 0.0275 0.0085

Moon 55790-04-03 01:55 G 22098031.48 22098031.58 22098031.68 0.2647 0.2053

Earth 55790-04-03 07:12 G 22098031.74 22098031.80 22098031.86 0.2646 0.2424

Jupiter 55794-04-05 10:48 G 22099494.80 22099494.95 22099495.11 0.0519 0.0323

Moon 55798-03-31 20:38 G 22100951.24 22100951.36 22100951.49 0.2652 0.1417

Earth 55798-03-31 23:17 G 22100951.32 22100951.47 22100951.62 0.2647 0.0843 *

Jupiter 55800-02-13 00:58 G 22101634.34 22101634.54 22101634.74 0.0504 0.0103

Saturn 55803-03-30 15:50 G 22102774.98 22102775.16 22102775.36 0.0288 0.0122

Saturn 55803-11-15 10:34 G 22103004.76 22103004.94 22103005.12 0.0286 0.0150

Jupiter 55806-08-04 12:29 G 22103997.92 22103998.02 22103998.13 0.0526 0.0441

Pluto 55811-08-27 06:58 G 22105846.62 22105846.79 22105846.99 0.0063 0.0033

Jupiter 55811-10-20 01:12 G 22105900.36 22105900.55 22105900.75 0.0506 0.0160

Pluto 55812-04-08 10:48 G 22106071.74 22106071.95 22106072.18 0.0063 0.0004

Pluto 55812-11-19 14:24 G 22106296.95 22106297.10 22106297.29 0.0063 0.0040

Jupiter 55818-04-09 06:43 G 22108263.58 22108263.78 22108263.97 0.0524 0.0143

Saturn 55818-12-06 11:17 G 22108504.79 22108504.97 22108505.17 0.0272 0.0117

Saturn 55819-07-23 17:17 G 22108734.04 22108734.22 22108734.42 0.0274 0.0116

Uranus 55820-12-20 12:14 G 22109249.97 22109250.01 22109250.08 0.0140 0.0135

Uranus 55821-08-03 21:22 G 22109476.26 22109476.39 22109476.55 0.0140 0.0103

Uranus 55822-03-18 06:58 G 22109702.61 22109702.79 22109702.98 0.0140 0.0070

Uranus 55822-10-30 16:34 G 22109928.98 22109929.19 22109929.40 0.0140 0.0037

Uranus 55823-06-14 02:10 G 22110155.38 22110155.59 22110155.81 0.0141 0.0005

Jupiter 55823-06-24 23:17 G 22110166.36 22110166.47 22110166.57 0.0508 0.0432

Uranus 55824-01-26 12:14 G 22110381.79 22110382.01 22110382.22 0.0141 0.0029

Uranus 55824-09-08 21:50 G 22110608.23 22110608.41 22110608.62 0.0141 0.0063

Uranus 55825-04-23 07:55 G 22110834.68 22110834.83 22110835.00 0.0141 0.0097

Uranus 55825-12-05 18:00 G 22111061.18 22111061.25 22111061.34 0.0142 0.0131

Neptune 55827-03-09 12:58 G 22111520.01 22111520.04 22111520.12 0.0088 0.0085

Neptune 55827-10-21 02:10 G 22111745.50 22111745.59 22111745.69 0.0088 0.0079

Neptune 55828-06-02 14:53 G 22111971.01 22111971.12 22111971.26 0.0088 0.0072

Neptune 55829-01-14 04:05 G 22112196.53 22112196.67 22112196.82 0.0088 0.0066

Mars 55829-06-01 00:29 G 22112334.35 22112334.52 22112334.69 0.1612 0.0238

Neptune 55829-08-27 16:34 G 22112422.04 22112422.19 22112422.37 0.0088 0.0059

Jupiter 55829-12-13 01:41 G 22112529.38 22112529.57 22112529.77 0.0521 0.0150

Neptune 55830-04-10 05:46 G 22112647.56 22112647.74 22112647.91 0.0088 0.0053

Mars 55830-05-04 17:02 G 22112672.04 22112672.21 22112672.38 0.1914 0.0445

Neptune 55830-11-21 18:14 G 22112873.08 22112873.26 22112873.46 0.0088 0.0046

Neptune 55831-07-05 07:12 G 22113098.61 22113098.80 22113099.00 0.0088 0.0039

Neptune 55832-02-15 19:55 G 22113324.14 22113324.33 22113324.55 0.0088 0.0033

Neptune 55832-09-28 08:53 G 22113549.67 22113549.87 22113550.09 0.0088 0.0026

Saturn 55832-10-09 15:50 G 22113560.97 22113561.16 22113561.37 0.0288 0.0099

Neptune 55833-05-11 21:50 G 22113775.20 22113775.41 22113775.63 0.0088 0.0019

Saturn 55833-05-27 10:05 G 22113790.76 22113790.92 22113791.10 0.0286 0.0173

Neptune 55833-12-23 10:34 G 22114000.73 22114000.94 22114001.16 0.0088 0.0013

Neptune 55834-08-05 23:31 G 22114226.26 22114226.48 22114226.70 0.0088 0.0006

Neptune 55835-03-19 12:29 G 22114451.80 22114452.02 22114452.24 0.0088 0.0001

Jupiter 55835-10-22 13:55 G 22114668.91 22114669.08 22114669.26 0.0503 0.0265

Neptune 55835-10-31 01:12 G 22114677.33 22114677.55 22114677.77 0.0088 0.0008

Neptune 55836-06-12 14:10 G 22114902.87 22114903.09 22114903.31 0.0088 0.0014

Neptune 55837-01-24 02:53 G 22115128.41 22115128.62 22115128.84 0.0088 0.0021

Neptune 55837-09-06 15:36 G 22115353.95 22115354.15 22115354.37 0.0088 0.0028

Neptune 55838-04-20 04:19 G 22115579.49 22115579.68 22115579.89 0.0088 0.0034

Neptune 55838-12-01 17:02 G 22115805.03 22115805.21 22115805.42 0.0088 0.0041

Neptune 55839-07-15 06:00 G 22116030.57 22116030.75 22116030.94 0.0088 0.0047

Neptune 55840-02-25 18:43 G 22116256.12 22116256.28 22116256.47 0.0088 0.0054

Neptune 55840-10-08 07:41 G 22116481.66 22116481.82 22116481.98 0.0088 0.0060

Neptune 55841-05-21 19:55 G 22116707.21 22116707.33 22116707.49 0.0088 0.0067

Jupiter 55841-08-17 21:07 G 22116795.27 22116795.38 22116795.49 0.0518 0.0437

Neptune 55842-01-02 08:53 G 22116932.76 22116932.87 22116933.00 0.0088 0.0073

Neptune 55842-08-15 21:07 G 22117158.32 22117158.38 22117158.50 0.0088 0.0080

Neptune 55843-03-29 10:05 G 22117383.90 22117383.92 22117383.99 0.0088 0.0086

Jupiter 55847-06-27 12:14 G 22118934.81 22118935.01 22118935.22 0.0505 0.0010

Saturn 55848-06-17 14:10 G 22119290.89 22119291.09 22119291.29 0.0273 0.0090

Saturn 55849-02-01 20:38 G 22119520.18 22119520.36 22119520.54 0.0275 0.0144

Jupiter 55853-12-15 23:46 G 22121298.33 22121298.49 22121298.65 0.0524 0.0326

Jupiter 55859-03-02 11:46 G 22123200.82 22123200.99 22123201.16 0.0507 0.0272

Uranus 55861-04-08 04:34 G 22123968.60 22123968.69 22123968.80 0.0138 0.0122

Uranus 55861-11-20 12:29 G 22124194.87 22124195.02 22124195.20 0.0138 0.0092

Saturn 55862-04-21 23:17 G 22124347.27 22124347.47 22124347.68 0.0287 0.0056

Uranus 55862-07-04 20:38 G 22124421.18 22124421.36 22124421.57 0.0138 0.0060

Saturn 55862-12-07 17:31 G 22124577.10 22124577.23 22124577.37 0.0285 0.0214

Uranus 55863-02-16 04:34 G 22124647.49 22124647.69 22124647.91 0.0138 0.0029

Uranus 55863-09-30 12:29 G 22124873.80 22124874.02 22124874.23 0.0137 0.0003

Uranus 55864-05-13 19:55 G 22125100.12 22125100.33 22125100.54 0.0137 0.0033

Uranus 55864-12-26 03:07 G 22125326.45 22125326.63 22125326.83 0.0137 0.0064

Uranus 55865-08-09 10:19 G 22125552.80 22125552.93 22125553.11 0.0137 0.0095

Jupiter 55865-08-20 14:38 G 22125563.91 22125564.11 22125564.32 0.0522 0.0018

Uranus 55866-03-23 17:31 G 22125779.16 22125779.23 22125779.34 0.0137 0.0125

Jupiter 55871-06-30 03:22 G 22127703.54 22127703.64 22127703.75 0.0502 0.0423

Jupiter 55877-04-25 09:50 G 22129829.74 22129829.91 22129830.08 0.0520 0.0273

Saturn 55877-12-28 17:17 G 22130077.02 22130077.22 22130077.43 0.0272 0.0058

Saturn 55878-08-14 23:46 G 22130306.33 22130306.49 22130306.65 0.0274 0.0176

Jupiter 55883-03-05 03:07 G 22131969.44 22131969.63 22131969.83 0.0504 0.0163

Jupiter 55889-08-23 16:05 G 22134333.12 22134333.17 22134333.23 0.0526 0.0506

Saturn 55891-11-01 22:19 G 22135133.22 22135133.43 22135133.64 0.0288 0.0036

Saturn 55892-06-18 16:19 G 22135363.07 22135363.18 22135363.31 0.0285 0.0234

Jupiter 55894-11-08 01:55 G 22136235.38 22136235.58 22136235.78 0.0506 0.0105

Mars 55895-03-29 13:26 G 22136376.90 22136377.06 22136377.23 0.1611 0.0474

Moon 55895-10-06 08:24 G 22136567.80 22136567.85 22136567.90 0.2690 0.2508

Mars 55896-02-29 18:29 G 22136714.10 22136714.27 22136714.44 0.1914 0.0529

Jupiter 55901-04-29 09:36 G 22138598.72 22138598.90 22138599.09 0.0524 0.0207

Pluto 55901-10-13 02:38 G 22138765.46 22138765.61 22138765.76 0.0081 0.0059

Pluto 55902-05-26 13:41 G 22138990.86 22138991.07 22138991.29 0.0081 0.0018

Moon 55903-10-05 02:24 G 22139487.45 22139487.60 22139487.75 0.2692 0.0566

Earth 55903-10-05 03:36 G 22139487.49 22139487.65 22139487.80 0.2685 0.0757 *

Uranus 55905-04-04 04:48 G 22140034.60 22140034.70 22140034.84 0.0140 0.0117

Uranus 55905-11-16 14:24 G 22140260.93 22140261.10 22140261.28 0.0140 0.0084

Uranus 55906-07-01 00:00 G 22140487.30 22140487.50 22140487.70 0.0140 0.0051

Jupiter 55906-07-14 23:02 G 22140501.33 22140501.46 22140501.60 0.0508 0.0381

Saturn 55906-11-24 14:10 G 22140634.04 22140634.09 22140634.16 0.0271 0.0261

Uranus 55907-02-12 09:36 G 22140713.69 22140713.90 22140714.12 0.0141 0.0018

Saturn 55907-07-11 19:26 G 22140863.10 22140863.31 22140863.52 0.0273 0.0032

Uranus 55907-09-26 19:12 G 22140940.09 22140940.30 22140940.53 0.0141 0.0016

Saturn 55908-02-26 01:55 G 22141092.44 22141092.58 22141092.72 0.0275 0.0203

Uranus 55908-05-10 05:02 G 22141166.51 22141166.71 22141166.92 0.0141 0.0049

Uranus 55908-12-22 15:22 G 22141392.96 22141393.14 22141393.31 0.0141 0.0083

Uranus 55909-08-06 00:58 G 22141619.44 22141619.54 22141619.68 0.0141 0.0117

Neptune 55909-12-06 04:19 G 22141741.68 22141741.68 22141741.68 0.0089 0.0089

Neptune 55910-07-19 17:31 G 22141967.16 22141967.23 22141967.32 0.0089 0.0083

Neptune 55911-03-02 06:29 G 22142192.67 22142192.77 22142192.90 0.0089 0.0076

Neptune 55911-10-13 19:41 G 22142418.20 22142418.32 22142418.47 0.0089 0.0070

Neptune 55912-05-26 09:07 G 22142643.73 22142643.88 22142644.04 0.0089 0.0063

Jupiter 55913-01-02 03:07 G 22142864.43 22142864.63 22142864.83 0.0521 0.0092

Neptune 55913-01-06 21:50 G 22142869.26 22142869.41 22142869.61 0.0089 0.0057

Neptune 55913-08-20 11:17 G 22143094.81 22143094.97 22143095.17 0.0089 0.0050

Neptune 55914-04-03 00:43 G 22143320.35 22143320.53 22143320.74 0.0089 0.0042

Neptune 55914-11-14 13:55 G 22143545.89 22143546.08 22143546.29 0.0089 0.0036

Neptune 55915-06-28 03:22 G 22143771.43 22143771.64 22143771.85 0.0089 0.0028

Neptune 55916-02-08 16:34 G 22143996.98 22143997.19 22143997.41 0.0089 0.0022

Neptune 55916-09-21 06:00 G 22144222.53 22144222.75 22144222.96 0.0089 0.0015

Neptune 55917-05-04 19:12 G 22144448.08 22144448.30 22144448.52 0.0089 0.0008

Neptune 55917-12-16 08:24 G 22144673.63 22144673.85 22144674.07 0.0089 0.0002

Neptune 55918-07-29 21:36 G 22144899.18 22144899.40 22144899.62 0.0089 0.0006

Jupiter 55918-11-11 15:07 G 22145003.98 22145004.13 22145004.29 0.0503 0.0317

Neptune 55919-03-12 10:34 G 22145124.73 22145124.94 22145125.17 0.0089 0.0014

Neptune 55919-10-24 00:00 G 22145350.29 22145350.50 22145350.72 0.0089 0.0020

Neptune 55920-06-05 13:12 G 22145575.84 22145576.05 22145576.26 0.0089 0.0027

Saturn 55920-09-27 08:53 G 22145689.80 22145689.87 22145689.94 0.0289 0.0271

Neptune 55921-01-17 02:10 G 22145801.40 22145801.59 22145801.80 0.0089 0.0034

Saturn 55921-05-15 04:48 G 22145919.49 22145919.70 22145919.91 0.0287 0.0005

Neptune 55921-08-30 15:36 G 22146026.96 22146027.15 22146027.35 0.0089 0.0041

Saturn 55921-12-30 22:48 G 22146149.40 22146149.45 22146149.51 0.0285 0.0274

Neptune 55922-04-13 04:48 G 22146252.52 22146252.70 22146252.90 0.0089 0.0048

Neptune 55922-11-24 17:46 G 22146478.09 22146478.24 22146478.43 0.0089 0.0055

Neptune 55923-07-08 06:58 G 22146703.65 22146703.79 22146703.97 0.0089 0.0062

Neptune 55924-02-18 20:38 G 22146929.23 22146929.36 22146929.51 0.0090 0.0068

Jupiter 55924-09-06 18:58 G 22147130.16 22147130.29 22147130.42 0.0519 0.0391

Neptune 55924-10-01 09:50 G 22147154.81 22147154.91 22147155.05 0.0090 0.0075

Neptune 55925-05-14 23:02 G 22147380.39 22147380.46 22147380.57 0.0090 0.0082

Neptune 55925-12-26 12:43 G 22147606.00 22147606.03 22147606.07 0.0090 0.0088

Jupiter 55930-07-17 16:05 G 22149269.97 22149270.17 22149270.38 0.0505 0.0059

Saturn 55936-06-05 17:46 G 22151420.13 22151420.24 22151420.36 0.0271 0.0228

Jupiter 55937-01-04 23:17 G 22151633.34 22151633.47 22151633.62 0.0525 0.0377

Saturn 55937-01-20 22:48 G 22151649.24 22151649.45 22151649.66 0.0273 0.0002

Saturn 55937-09-07 05:02 G 22151878.61 22151878.71 22151878.83 0.0274 0.0234

Jupiter 55942-03-22 14:53 G 22153535.94 22153536.12 22153536.31 0.0507 0.0208

Uranus 55944-12-07 12:58 G 22154527.02 22154527.04 22154527.10 0.0138 0.0136

Uranus 55945-07-21 21:22 G 22154753.26 22154753.39 22154753.54 0.0138 0.0104

Uranus 55946-03-05 05:17 G 22154979.55 22154979.72 22154979.92 0.0138 0.0073

Uranus	55946-10-17 13:12 G	22155205.85	22155206.05	22155206.27	0.0138	0.0042
Uranus	55947-05-31 21:07 G	22155432.17	22155432.38	22155432.60	0.0137	0.0010
Uranus	55948-01-13 04:48 G	22155658.49	22155658.70	22155658.92	0.0137	0.0021
Uranus	55948-08-26 12:00 G	22155884.81	22155885.00	22155885.22	0.0137	0.0052
Jupiter	55948-09-09 18:29 G	22155899.07	22155899.27	22155899.47	0.0523	0.0085
Uranus	55949-04-09 19:26 G	22156111.15	22156111.31	22156111.49	0.0137	0.0082
Uranus	55949-11-22 02:24 G	22156337.50	22156337.60	22156337.74	0.0137	0.0113
Saturn	55950-04-09 07:55 G	22156475.74	22156475.83	22156475.94	0.0289	0.0252
Saturn	55950-11-25 03:50 G	22156705.45	22156705.66	22156705.87	0.0287	0.0025
Jupiter	55953-11-25 12:43 G	22157801.97	22157802.03	22157802.10	0.0509	0.0479
Jupiter	55954-07-20 04:34 G	22158038.63	22158038.69	22158038.75	0.0501	0.0475
Jupiter	55960-05-15 13:26 G	22160164.88	22160165.06	22160165.25	0.0520	0.0207
Mars	55961-01-25 02:10 G	22160419.44	22160419.59	22160419.75	0.1611	0.0719
Mars	55961-12-27 19:55 G	22160756.22	22160756.33	22160756.44	0.1915	0.1485
Saturn	55965-12-16 18:58 G	22162206.16	22162206.29	22162206.43	0.0272	0.0205
Jupiter	55966-03-25 03:36 G	22162304.47	22162304.65	22162304.84	0.0504	0.0214
Saturn	55966-08-03 00:14 G	22162435.30	22162435.51	22162435.72	0.0273	0.0024
Saturn	55967-03-20 06:58 G	22162664.72	22162664.79	22162664.86	0.0275	0.0260
Jupiter	55972-01-19 08:24 G	22164430.79	22164430.85	22164430.91	0.0518	0.0493
Jupiter	55977-11-28 03:36 G	22166570.44	22166570.65	22166570.85	0.0506	0.0050
Saturn	55979-10-20 13:55 G	22167261.94	22167262.08	22167262.23	0.0289	0.0212
Saturn	55980-06-06 09:36 G	22167491.69	22167491.90	22167492.11	0.0287	0.0064
Jupiter	55984-05-18 07:55 G	22168933.65	22168933.83	22168934.01	0.0524	0.0253
Uranus	55988-12-02 12:00 G	22170592.94	22170593.00	22170593.09	0.0140	0.0131
Uranus	55989-07-16 21:07 G	22170819.25	22170819.38	22170819.56	0.0140	0.0099
Jupiter	55989-08-03 03:22 G	22170836.48	22170836.64	22170836.80	0.0508	0.0313
Uranus	55990-02-28 06:43 G	22171045.60	22171045.78	22171045.98	0.0140	0.0066
Uranus	55990-10-12 16:34 G	22171271.97	22171272.19	22171272.40	0.0140	0.0033
Uranus	55991-05-27 02:10 G	22171498.37	22171498.59	22171498.81	0.0141	0.0002
Neptune	55991-06-12 00:14 G	22171514.47	22171514.51	22171514.60	0.0088	0.0084

Uranus	55992-01-08 12:00 G	22171724.79	22171725.00	22171725.21	0.0141	0.0034
Neptune	55992-01-23 13:26 G	22171739.97	22171740.06	22171740.18	0.0088	0.0078
Uranus	55992-08-21 21:36 G	22171951.22	22171951.40	22171951.60	0.0141	0.0068
Neptune	55992-09-05 02:10 G	22171965.49	22171965.59	22171965.74	0.0088	0.0072
Mars	55993-01-23 17:46 G	22172106.17	22172106.24	22172106.31	0.1613	0.1448
Uranus	55993-04-05 07:41 G	22172177.68	22172177.82	22172177.98	0.0141	0.0102
Neptune	55993-04-18 15:22 G	22172191.00	22172191.14	22172191.30	0.0088	0.0065
Uranus	55993-11-17 17:31 G	22172404.18	22172404.23	22172404.31	0.0142	0.0136
Neptune	55993-11-30 03:50 G	22172416.52	22172416.66	22172416.85	0.0088	0.0059
Neptune	55994-07-13 17:02 G	22172642.04	22172642.21	22172642.40	0.0088	0.0052
Neptune	55995-02-24 05:46 G	22172867.57	22172867.74	22172867.95	0.0088	0.0045
Saturn	55995-06-28 23:17 G	22172992.31	22172992.47	22172992.63	0.0271	0.0172
Neptune	55995-10-07 18:58 G	22173093.09	22173093.29	22173093.49	0.0088	0.0038
Jupiter	55996-01-22 02:24 G	22173199.40	22173199.60	22173199.80	0.0522	0.0041
Saturn	55996-02-13 04:19 G	22173221.48	22173221.68	22173221.89	0.0273	0.0057
Neptune	55996-05-20 07:26 G	22173318.62	22173318.81	22173319.03	0.0088	0.0032
Neptune	55996-12-31 20:24 G	22173544.14	22173544.35	22173544.57	0.0088	0.0025
Neptune	55997-08-14 09:07 G	22173769.67	22173769.88	22173770.10	0.0088	0.0019
Neptune	55998-03-27 22:05 G	22173995.21	22173995.42	22173995.64	0.0088	0.0012
Neptune	55998-11-08 10:48 G	22174220.74	22174220.95	22174221.18	0.0088	0.0006
Neptune	55999-06-21 23:46 G	22174446.27	22174446.49	22174446.71	0.0088	0.0001
Neptune	56000-02-02 12:29 G	22174671.81	22174672.02	22174672.25	0.0088	0.0008
Neptune	56000-09-15 01:26 G	22174897.34	22174897.56	22174897.78	0.0088	0.0014

57TH MILLENNIUM CE

This is a list of transits of Venus in the 57th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Neptune	**56001-04-28 14:10**	**G**	**22175122.88**	**22175123.09**	**22175123.31**	**0.0088**	**0.0021**	
Jupiter	**56001-11-30 18:00**	**G**	**22175339.13**	**22175339.25**	**22175339.39**	**0.0502**	**0.0378**	
Neptune	**56001-12-10 02:38**	**G**	**22175348.41**	**22175348.61**	**22175348.83**	**0.0088**	**0.0028**	
Neptune	**56002-07-23 15:36**	**G**	**22175573.96**	**22175574.15**	**22175574.36**	**0.0088**	**0.0034**	
Neptune	**56003-03-06 04:19**	**G**	**22175799.50**	**22175799.68**	**22175799.89**	**0.0088**	**0.0041**	
Neptune	**56003-10-17 17:31**	**G**	**22176025.05**	**22176025.23**	**22176025.42**	**0.0088**	**0.0047**	
Neptune	**56004-05-30 06:00**	**G**	**22176250.59**	**22176250.75**	**22176250.94**	**0.0088**	**0.0054**	
Neptune	**56005-01-10 18:58**	**G**	**22176476.14**	**22176476.29**	**22176476.45**	**0.0088**	**0.0060**	
Neptune	**56005-08-24 07:12**	**G**	**22176701.68**	**22176701.80**	**22176701.97**	**0.0088**	**0.0067**	
Neptune	**56006-04-06 20:24**	**G**	**22176927.24**	**22176927.35**	**22176927.48**	**0.0088**	**0.0073**	
Neptune	**56006-11-18 09:22**	**G**	**22177152.80**	**22177152.89**	**22177152.98**	**0.0088**	**0.0079**	
Neptune	**56007-07-01 21:22**	**G**	**22177378.37**	**22177378.39**	**22177378.47**	**0.0088**	**0.0086**	
Jupiter	**56007-09-26 22:34**	**G**	**22177465.28**	**22177465.44**	**22177465.60**	**0.0519**	**0.0324**	
Saturn	**56009-05-01 13:12**	**G**	**22178047.90**	**22178048.05**	**22178048.21**	**0.0289**	**0.0191**	
Saturn	**56009-12-17 08:38**	**G**	**22178277.66**	**22178277.86**	**22178278.07**	**0.0287**	**0.0085**	
Jupiter	**56013-08-05 17:46**	**G**	**22179605.04**	**22179605.24**	**22179605.44**	**0.0504**	**0.0116**	
Jupiter	**56020-01-25 03:22**	**G**	**22181968.54**	**22181968.64**	**22181968.75**	**0.0525**	**0.0443**	
Saturn	**56025-01-07 23:46**	**G**	**22183778.32**	**22183778.49**	**22183778.67**	**0.0272**	**0.0149**	
Jupiter	**56025-04-10 15:36**	**G**	**22183870.95**	**22183871.15**	**22183871.34**	**0.0507**	**0.0154**	
Saturn	**56025-08-25 05:17**	**G**	**22184007.52**	**22184007.72**	**22184007.93**	**0.0274**	**0.0081**	
Mars	**56026-11-22 15:22**	**G**	**22184462.00**	**22184462.14**	**22184462.28**	**0.1611**	**0.0957**	
Uranus	**56029-03-21 05:02**	**G**	**22185311.61**	**22185311.71**	**22185311.84**	**0.0138**	**0.0118**	
Uranus	**56029-11-02 13:12**	**G**	**22185537.89**	**22185538.05**	**22185538.23**	**0.0138**	**0.0087**	
Uranus	**56030-06-16 21:36**	**G**	**22185764.20**	**22185764.40**	**22185764.60**	**0.0138**	**0.0055**	
Uranus	**56031-01-29 05:17**	**G**	**22185990.51**	**22185990.72**	**22185990.94**	**0.0138**	**0.0024**	
Uranus	**56031-09-12 13:12**	**G**	**22186216.83**	**22186217.05**	**22186217.26**	**0.0137**	**0.0008**	

Jupiter 56031-09-29 20:38 G 22186234.16 22186234.36 22186234.56 0.0523 0.0145

Uranus 56032-04-25 20:38 G 22186443.15 22186443.36 22186443.57 0.0137 0.0038

Uranus 56032-12-08 03:50 G 22186669.48 22186669.66 22186669.85 0.0137 0.0069

Earth 56033-04-05 09:07 G 22186787.84 22186787.88 22186787.93 0.2646 0.2531

Uranus 56033-07-22 11:02 G 22186895.83 22186895.96 22186896.12 0.0137 0.0100

Uranus 56034-03-05 18:14 G 22187122.21 22187122.26 22187122.34 0.0137 0.0130

Jupiter 56036-12-14 14:10 G 22188136.98 22188137.09 22188137.21 0.0509 0.0423

Saturn 56038-11-11 18:58 G 22188834.12 22188834.29 22188834.48 0.0289 0.0152

Saturn 56039-06-29 14:24 G 22189063.91 22189064.10 22189064.29 0.0287 0.0123

Earth 56041-04-03 01:26 G 22189707.41 22189707.56 22189707.71 0.2647 0.0732

Moon 56041-04-03 06:00 G 22189707.58 22189707.75 22189707.91 0.2644 0.0041 *

Jupiter 56043-06-04 11:31 G 22190499.79 22190499.98 22190500.18 0.0520 0.0159

Jupiter 56049-04-13 07:26 G 22192639.64 22192639.81 22192639.98 0.0503 0.0277

Saturn 56054-07-21 04:48 G 22194564.52 22194564.70 22194564.90 0.0271 0.0115

Jupiter 56055-02-07 07:12 G 22194765.70 22194765.80 22194765.90 0.0518 0.0442

Saturn 56055-03-07 10:05 G 22194793.74 22194793.92 22194794.12 0.0273 0.0117

Pluto 56057-02-12 13:55 G 22195502.01 22195502.08 22195502.18 0.0063 0.0058

Pluto 56057-09-25 17:31 G 22195727.04 22195727.23 22195727.46 0.0063 0.0023

Pluto 56058-05-08 21:36 G 22195952.19 22195952.40 22195952.62 0.0063 0.0013

Mars 56058-11-21 06:43 G 22196148.67 22196148.78 22196148.90 0.1612 0.1211

Pluto 56058-12-20 01:12 G 22196177.43 22196177.55 22196177.71 0.0064 0.0050

Jupiter 56060-12-17 06:43 G 22196905.57 22196905.78 22196905.98 0.0505 0.0018

Jupiter 56067-06-07 11:31 G 22199268.82 22199268.98 22199269.14 0.0524 0.0320

Saturn 56068-05-23 19:12 G 22199620.12 22199620.30 22199620.49 0.0289 0.0130

Saturn 56069-01-08 14:24 G 22199849.92 22199850.10 22199850.28 0.0287 0.0145

Jupiter 56072-08-22 05:02 G 22201171.54 22201171.71 22201171.89 0.0508 0.0254

Uranus 56073-03-16 04:19 G 22201377.56 22201377.68 22201377.81 0.0140 0.0113

Uranus 56073-10-28 13:26 G 22201603.89 22201604.06 22201604.25 0.0140 0.0081

Neptune 56074-03-09 15:22 G 22201736.13 22201736.14 22201736.19 0.0089 0.0088

Uranus 56074-06-11 22:48 G 22201830.26 22201830.45 22201830.67 0.0140 0.0048

Neptune 56074-10-21 04:34 G 22201961.62 22201961.69 22201961.79 0.0089 0.0082

Uranus 56075-01-24 08:38 G 22202056.65 22202056.86 22202057.08 0.0141 0.0015

Neptune 56075-06-03 17:31 G 22202187.13 22202187.23 22202187.37 0.0089 0.0075

Uranus 56075-09-07 18:14 G 22202283.05 22202283.26 22202283.48 0.0141 0.0019

Neptune 56076-01-15 06:58 G 22202412.66 22202412.79 22202412.94 0.0089 0.0068

Uranus 56076-04-21 03:50 G 22202509.47 22202509.66 22202509.87 0.0141 0.0053

Neptune 56076-08-27 20:24 G 22202638.20 22202638.35 22202638.51 0.0089 0.0062

Uranus 56076-12-03 13:41 G 22202735.91 22202736.07 22202736.25 0.0141 0.0087

Neptune 56077-04-10 09:07 G 22202863.73 22202863.88 22202864.07 0.0089 0.0056

Uranus 56077-07-17 23:31 G 22202962.39 22202962.48 22202962.61 0.0141 0.0121

Neptune 56077-11-21 22:34 G 22203089.27 22203089.44 22203089.64 0.0089 0.0048

Neptune 56078-07-05 12:00 G 22203314.81 22203315.00 22203315.20 0.0089 0.0041

Jupiter 56079-02-10 06:14 G 22203534.56 22203534.76 22203534.97 0.0522 0.0028

Neptune 56079-02-16 01:12 G 22203540.35 22203540.55 22203540.76 0.0089 0.0035

Neptune 56079-09-29 14:38 G 22203765.90 22203766.11 22203766.32 0.0089 0.0028

Neptune 56080-05-12 03:36 G 22203991.45 22203991.65 22203991.87 0.0089 0.0021

Neptune 56080-12-23 17:02 G 22204217.00 22204217.21 22204217.43 0.0089 0.0014

Neptune 56081-08-06 06:29 G 22204442.55 22204442.77 22204442.99 0.0089 0.0007

Neptune 56082-03-19 19:41 G 22204668.10 22204668.32 22204668.54 0.0089 0.0001

Neptune 56082-10-31 08:53 G 22204893.65 22204893.87 22204894.09 0.0089 0.0007

Neptune 56083-06-13 22:05 G 22205119.21 22205119.42 22205119.64 0.0089 0.0013

Neptune 56084-01-25 11:17 G 22205344.76 22205344.97 22205345.19 0.0089 0.0020

Saturn 56084-01-31 05:46 G 22205350.55 22205350.74 22205350.94 0.0272 0.0091

Neptune 56084-09-07 00:29 G 22205570.32 22205570.52 22205570.74 0.0089 0.0027

Saturn 56084-09-16 11:31 G 22205579.80 22205579.98 22205580.16 0.0274 0.0141

Jupiter 56084-12-19 18:29 G 22205674.17 22205674.27 22205674.38 0.0502 0.0427

Neptune 56085-04-20 13:55 G 22205795.88 22205796.08 22205796.28 0.0089 0.0034

Neptune 56085-12-02 02:53 G 22206021.44 22206021.62 22206021.83 0.0089 0.0041

Neptune 56086-07-15 16:05 G 22206247.00 22206247.17 22206247.37 0.0089 0.0048

Neptune 56087-02-26 05:17 G 22206472.56 22206472.72 22206472.91 0.0089 0.0055

Neptune 56087-10-09 18:29 G 22206698.13 22206698.27 22206698.45 0.0089 0.0062

Neptune 56088-05-22 07:55 G 22206923.70 22206923.83 22206923.99 0.0090 0.0068

Neptune 56089-01-02 21:07 G 22207149.28 22207149.38 22207149.52 0.0090 0.0075

Neptune 56089-08-16 10:19 G 22207374.87 22207374.93 22207375.05 0.0090 0.0082

Neptune 56090-03-30 00:00 G 22207600.47 22207600.50 22207600.55 0.0090 0.0088

Jupiter 56090-10-16 00:29 G 22207800.35 22207800.52 22207800.70 0.0519 0.0264

Mars 56092-09-19 04:19 G 22208504.57 22208504.68 22208504.80 0.1610 0.1196

Jupiter 56096-08-24 18:43 G 22209940.09 22209940.28 22209940.48 0.0504 0.0171

Saturn 56097-12-04 00:43 G 22210406.33 22210406.53 22210406.74 0.0288 0.0091

Saturn 56098-07-21 19:55 G 22210636.17 22210636.33 22210636.49 0.0286 0.0182

Jupiter 56103-02-14 01:12 G 22212303.48 22212303.55 22212303.63 0.0525 0.0488

Jupiter 56108-04-30 18:43 G 22214206.08 22214206.28 22214206.48 0.0507 0.0091

Uranus 56112-11-19 12:29 G 22215869.97 22215870.02 22215870.09 0.0138 0.0133

Uranus 56113-07-03 20:53 G 22216096.23 22216096.37 22216096.52 0.0138 0.0101

Saturn 56113-08-13 11:46 G 22216136.78 22216136.99 22216137.20 0.0272 0.0055

Uranus 56114-02-15 04:48 G 22216322.53 22216322.70 22216322.90 0.0138 0.0070

Saturn 56114-03-30 17:17 G 22216366.07 22216366.22 22216366.39 0.0274 0.0177

Uranus 56114-09-29 12:43 G 22216548.83 22216549.03 22216549.25 0.0138 0.0039

Jupiter 56114-10-19 18:58 G 22216569.10 22216569.29 22216569.48 0.0523 0.0193

Uranus 56115-05-13 20:38 G 22216775.15 22216775.36 22216775.58 0.0138 0.0008

Uranus 56115-12-26 04:19 G 22217001.47 22217001.68 22217001.90 0.0137 0.0024

Uranus 56116-08-08 11:46 G 22217227.80 22217227.99 22217228.20 0.0137 0.0056

Uranus 56117-03-22 18:58 G 22217454.14 22217454.29 22217454.47 0.0137 0.0086

Uranus 56117-11-04 02:24 G 22217680.49 22217680.60 22217680.72 0.0137 0.0116

Jupiter 56120-01-04 16:48 G 22218472.06 22218472.20 22218472.35 0.0509 0.0359

Mars 56124-09-18 19:41 G 22220191.18 22220191.32 22220191.46 0.1612 0.0961

Mars 56125-08-22 02:24 G 22220528.50 22220528.60 22220528.69 0.1914 0.1576

Jupiter 56126-06-24 14:24 G 22220834.90 22220835.10 22220835.30 0.0521 0.0095

Saturn 56127-06-17 02:24 G 22221192.40 22221192.60 22221192.81 0.0288 0.0066

Saturn 56128-02-01 21:07 G 22221422.24 22221422.38 22221422.53 0.0286 0.0207

Jupiter 56132-05-03 08:10 G 22222974.69 22222974.84 22222975.00 0.0503 0.0330

Jupiter 56138-02-27 10:05 G 22225100.79 22225100.92 22225101.06 0.0518 0.0379

Saturn 56142-07-09 08:24 G 22226693.79 22226693.85 22226693.91 0.0271 0.0257

Saturn 56143-02-23 12:58 G 22226922.83 22226923.04 22226923.25 0.0272 0.0031

Saturn 56143-10-10 18:43 G 22227152.15 22227152.28 22227152.43 0.0274 0.0202

Jupiter 56144-01-07 06:14 G 22227240.56 22227240.76 22227240.97 0.0505 0.0066

Earth 56146-10-06 03:36 G 22228243.50 22228243.65 22228243.80 0.2684 0.0846

Moon 56146-10-06 06:43 G 22228243.61 22228243.78 22228243.94 0.2678 0.0628 *

Pluto 56147-11-12 16:19 G 22228645.99 22228646.18 22228646.39 0.0081 0.0033

Pluto 56148-06-25 03:22 G 22228871.46 22228871.64 22228871.83 0.0081 0.0043

Jupiter 56150-06-27 12:58 G 22229603.90 22229604.04 22229604.18 0.0524 0.0377

Jupiter 56155-09-12 05:17 G 22231506.53 22231506.72 22231506.91 0.0508 0.0202

Neptune 56155-09-14 12:14 G 22231508.94 22231509.01 22231509.09 0.0088 0.0083

Neptune 56156-04-27 00:43 G 22231734.44 22231734.53 22231734.66 0.0088 0.0077

Uranus 56156-11-14 11:02 G 22231935.89 22231935.96 22231936.06 0.0140 0.0129

Neptune 56156-12-08 13:41 G 22231959.96 22231960.07 22231960.22 0.0088 0.0070

Saturn 56156-12-27 08:24 G 22231978.64 22231978.85 22231979.06 0.0288 0.0026

Uranus 56157-06-28 20:24 G 22232162.20 22232162.35 22232162.52 0.0140 0.0096

Neptune 56157-07-22 02:53 G 22232185.48 22232185.62 22232185.78 0.0088 0.0063

Saturn 56157-08-14 03:07 G 22232208.52 22232208.63 22232208.74 0.0286 0.0245

Uranus 56158-02-10 05:46 G 22232388.55 22232388.74 22232388.94 0.0140 0.0063

Neptune 56158-03-04 15:36 G 22232411.01 22232411.15 22232411.34 0.0088 0.0057

Mars 56158-07-18 17:02 G 22232547.14 22232547.21 22232547.28 0.1610 0.1443

Uranus 56158-09-24 15:07 G 22232614.93 22232615.13 22232615.35 0.0140 0.0031

Neptune 56158-10-16 04:48 G 22232636.53 22232636.70 22232636.89 0.0088 0.0050

Uranus 56159-05-09 00:58 G 22232841.32 22232841.54 22232841.75 0.0141 0.0004

Neptune 56159-05-29 17:31 G 22232862.05 22232862.23 22232862.44 0.0088 0.0044

Uranus 56159-12-21 10:34 G 22233067.73 22233067.94 22233068.15 0.0141 0.0037

Neptune 56160-01-10 06:29 G 22233087.58 22233087.77 22233087.98 0.0088 0.0038

Uranus 56160-08-03 20:10 G 22233294.16 22233294.34 22233294.54 0.0141 0.0071

Neptune 56160-08-22 19:12 G 22233313.11 22233313.30 22233313.52 0.0088 0.0031

Uranus 56161-03-18 06:14 G 22233520.62 22233520.76 22233520.91 0.0141 0.0105

Neptune 56161-04-05 08:10 G 22233538.64 22233538.84 22233539.06 0.0088 0.0025

Uranus 56161-10-30 15:50 G 22233747.14 22233747.16 22233747.22 0.0142 0.0139

Neptune 56161-11-16 20:53 G 22233764.17 22233764.37 22233764.60 0.0088 0.0018

Jupiter 56162-03-02 03:36 G 22233869.45 22233869.65 22233869.86 0.0522 0.0073

Neptune 56162-06-30 09:50 G 22233989.70 22233989.91 22233990.13 0.0088 0.0011

Neptune 56163-02-10 22:48 G 22234215.23 22234215.45 22234215.67 0.0088 0.0005

Neptune 56163-09-24 11:46 G 22234440.77 22234440.99 22234441.21 0.0088 0.0002

Neptune 56164-05-07 00:14 G 22234666.30 22234666.51 22234666.74 0.0088 0.0009

Neptune 56164-12-18 12:58 G 22234891.83 22234892.04 22234892.26 0.0088 0.0015

Neptune 56165-08-01 01:55 G 22235117.37 22235117.58 22235117.79 0.0088 0.0021

Neptune 56166-03-14 14:38 G 22235342.91 22235343.11 22235343.33 0.0088 0.0028

Neptune 56166-10-26 03:22 G 22235568.45 22235568.64 22235568.85 0.0088 0.0035

Jupiter 56167-05-18 03:22 G 22235772.56 22235772.64 22235772.72 0.0510 0.0469

Neptune 56167-06-08 16:05 G 22235793.99 22235794.17 22235794.38 0.0088 0.0041

Jupiter 56168-01-09 20:38 G 22236009.31 22236009.36 22236009.41 0.0502 0.0483

Neptune 56168-01-20 04:48 G 22236019.53 22236019.70 22236019.90 0.0088 0.0048

Neptune 56168-09-01 17:46 G 22236245.08 22236245.24 22236245.42 0.0088 0.0054

Neptune 56169-04-15 06:43 G 22236470.63 22236470.78 22236470.95 0.0088 0.0060

Neptune 56169-11-26 19:12 G 22236696.17 22236696.30 22236696.46 0.0088 0.0067

Neptune 56170-07-10 07:55 G 22236921.73 22236921.83 22236921.97 0.0088 0.0073

Neptune 56171-02-20 21:07 G 22237147.29 22237147.38 22237147.48 0.0088 0.0079

Neptune 56171-10-04 09:22 G 22237372.87 22237372.89 22237372.96 0.0088 0.0086

Saturn 56172-01-19 14:53 G 22237480.01 22237480.12 22237480.25 0.0271 0.0221

Saturn 56172-09-04 19:55 G 22237709.12 22237709.33 22237709.54 0.0272 0.0007

Saturn 56173-04-22 01:55 G 22237938.49 22237938.58 22237938.69 0.0274 0.0240

Jupiter 56173-11-04 22:05 G 22238135.24 22238135.42 22238135.61 0.0519 0.0217

Jupiter 56179-09-14 19:55 G 22240275.15 22240275.33 22240275.52 0.0504 0.0226

Jupiter 56185-07-10 18:14 G 22242401.21 22242401.26 22242401.32 0.0517 0.0495

Saturn 56185-11-21 15:22 G 22242535.08 22242535.14 22242535.21 0.0290 0.0275

Saturn 56186-07-09 11:31 G 22242764.77 22242764.98 22242765.19 0.0288 0.0003

Saturn 56187-02-24 05:46 G 22242994.69 22242994.74 22242994.81 0.0286 0.0273

Mars 56190-07-17 08:24 G 22244233.70 22244233.85 22244234.00 0.1611 0.0721

Jupiter 56191-05-20 18:58 G 22244541.08 22244541.29 22244541.49 0.0506 0.0038

Mars 56191-06-19 03:36 G 22244570.49 22244570.65 22244570.82 0.1915 0.0609

Uranus 56197-03-03 03:22 G 22246654.54 22246654.64 22246654.77 0.0138 0.0117

Uranus 56197-10-15 11:31 G 22246880.82 22246880.98 22246881.17 0.0138 0.0085

Jupiter 56197-11-07 21:22 G 22246904.21 22246904.39 22246904.57 0.0523 0.0253

Uranus 56198-05-29 19:55 G 22247107.13 22247107.33 22247107.53 0.0138 0.0053

Uranus 56199-01-11 03:36 G 22247333.44 22247333.65 22247333.87 0.0138 0.0022

Uranus 56199-08-25 11:31 G 22247559.76 22247559.98 22247560.20 0.0137 0.0010

Uranus 56200-04-08 18:43 G 22247786.08 22247786.28 22247786.50 0.0137 0.0041

Uranus 56200-11-21 02:24 G 22248012.41 22248012.60 22248012.78 0.0137 0.0071

Uranus 56201-07-05 09:36 G 22248238.76 22248238.90 22248239.05 0.0137 0.0102

Saturn 56201-08-01 16:34 G 22248266.05 22248266.19 22248266.34 0.0271 0.0196

Uranus 56202-02-16 16:48 G 22248465.15 22248465.20 22248465.26 0.0137 0.0132

Saturn 56202-03-18 21:36 G 22248495.19 22248495.40 22248495.61 0.0273 0.0033

Saturn 56202-11-03 03:36 G 22248724.61 22248724.65 22248724.71 0.0275 0.0267

Jupiter 56203-01-24 15:50 G 22248807.00 22248807.16 22248807.32 0.0509 0.0311

Jupiter 56209-07-14 15:07 G 22251169.93 22251170.13 22251170.33 0.0521 0.0039

Jupiter 56215-05-24 07:12 G 22253309.67 22253309.80 22253309.94 0.0503 0.0376

Saturn 56215-06-04 21:50 G 22253321.29 22253321.41 22253321.53 0.0289 0.0234

Saturn 56216-01-20 17:46 G 22253551.03 22253551.24 22253551.45 0.0287 0.0043

Jupiter 56221-03-19 07:12 G 22255435.65 22255435.80 22255435.96 0.0518 0.0333

Jupiter 56227-01-27 06:58 G 22257575.59 22257575.79 22257575.99 0.0506 0.0119

Saturn 56231-02-12 00:14 G 22259052.34 22259052.51 22259052.68 0.0271 0.0158

Saturn 56231-09-29 05:31 G 22259281.52 22259281.73 22259281.93 0.0273 0.0072

Jupiter 56233-07-17 09:36 G 22259938.78 22259938.90 22259939.03 0.0524 0.0418

Neptune 56238-06-13 03:07 G 22261730.60 22261730.63 22261730.70 0.0089 0.0087

Jupiter 56238-10-02 05:02 G 22261841.52 22261841.71 22261841.91 0.0508 0.0149

Neptune 56239-01-24 16:05 G 22261956.10 22261956.17 22261956.29 0.0089 0.0080

Neptune 56239-09-07 05:31 G 22262181.62 22262181.73 22262181.86 0.0089 0.0074

Neptune 56240-04-19 18:29 G 22262407.14 22262407.27 22262407.43 0.0089 0.0067

Neptune 56240-12-01 07:41 G 22262632.67 22262632.82 22262632.99 0.0089 0.0061

Uranus 56241-02-27 03:22 G 22262720.53 22262720.64 22262720.79 0.0140 0.0111

Neptune 56241-07-14 20:38 G 22262858.21 22262858.36 22262858.56 0.0089 0.0055

Uranus 56241-10-11 12:43 G 22262946.86 22262947.03 22262947.22 0.0140 0.0078

Neptune 56242-02-25 10:05 G 22263083.75 22263083.92 22263084.12 0.0089 0.0047

Uranus 56242-05-25 22:05 G 22263173.22 22263173.42 22263173.64 0.0140 0.0045

Neptune 56242-10-08 23:17 G 22263309.29 22263309.47 22263309.68 0.0089 0.0041

Uranus 56243-01-07 07:55 G 22263399.61 22263399.83 22263400.05 0.0140 0.0012

Neptune 56243-05-22 12:43 G 22263534.83 22263535.03 22263535.23 0.0089 0.0034

Uranus 56243-08-21 17:31 G 22263626.01 22263626.23 22263626.45 0.0141 0.0022

Neptune 56244-01-03 01:41 G 22263760.37 22263760.57 22263760.79 0.0089 0.0027

Uranus 56244-04-04 02:53 G 22263852.43 22263852.62 22263852.83 0.0141 0.0056

Neptune 56244-08-15 15:07 G 22263985.92 22263986.13 22263986.35 0.0089 0.0020

Uranus 56244-11-16 12:43 G 22264078.87 22264079.03 22264079.21 0.0141 0.0089

Saturn 56244-12-15 03:07 G 22264107.48 22264107.63 22264107.78 0.0289 0.0200

Jupiter 56245-03-22 04:05 G 22264204.47 22264204.67 22264204.86 0.0522 0.0127

Neptune 56245-03-29 04:34 G 22264211.47 22264211.69 22264211.91 0.0089 0.0013

Uranus 56245-06-30 22:34 G 22264305.35 22264305.44 22264305.56 0.0141 0.0123

Saturn 56245-08-01 22:48 G 22264337.24 22264337.45 22264337.65 0.0287 0.0076

Neptune 56245-11-09 17:46 G 22264437.02 22264437.24 22264437.46 0.0089 0.0007

Neptune 56246-06-23 06:58 G 22264662.57 22264662.79 22264663.01 0.0089 0.0000

Neptune 56247-02-03 20:10 G 22264888.12 22264888.34 22264888.56 0.0089 0.0007

Neptune 56247-09-17 09:36 G 22265113.68 22265113.90 22265114.12 0.0089 0.0014

Neptune 56248-04-29 22:48 G 22265339.24 22265339.45 22265339.66 0.0089 0.0021

Neptune 56248-12-11 11:46 G 22265564.79 22265564.99 22265565.21 0.0089 0.0028

Neptune 56249-07-25 00:58 G 22265790.35 22265790.54 22265790.76 0.0089 0.0035

Neptune 56250-03-07 14:24 G 22266015.91 22266016.10 22266016.30 0.0089 0.0041

Jupiter 56250-06-07 02:53 G 22266107.51 22266107.62 22266107.74 0.0510 0.0417

Neptune 56250-10-19 03:36 G 22266241.47 22266241.65 22266241.85 0.0089 0.0048

Neptune 56251-06-01 16:34 G 22266467.04 22266467.19 22266467.38 0.0089 0.0055

Neptune 56252-01-13 06:14 G 22266692.60 22266692.76 22266692.92 0.0089 0.0061

Neptune 56252-08-25 19:12 G 22266918.18 22266918.30 22266918.46 0.0090 0.0068

Neptune 56253-04-08 08:24 G 22267143.75 22267143.85 22267143.99 0.0090 0.0075

Neptune 56253-11-19 21:50 G 22267369.33 22267369.41 22267369.52 0.0090 0.0081

Neptune 56254-07-03 10:48 G 22267594.93 22267594.95 22267595.02 0.0090 0.0088

Mars 56256-05-14 21:07 G 22268276.22 22268276.38 22268276.55 0.1611 0.0475

Jupiter 56256-11-24 23:02 G 22268470.27 22268470.46 22268470.65 0.0520 0.0161

Mars 56257-04-16 05:31 G 22268612.56 22268612.73 22268612.90 0.1915 0.0340

Saturn 56260-08-24 02:24 G 22269838.41 22269838.60 22269838.78 0.0272 0.0131

Saturn 56261-04-10 07:41 G 22270067.63 22270067.82 22270068.02 0.0273 0.0099

Jupiter 56262-10-04 17:46 G 22270610.08 22270610.24 22270610.42 0.0504 0.0269

Jupiter 56268-07-30 18:14 G 22272736.16 22272736.26 22272736.36 0.0517 0.0443

Jupiter 56274-06-09 16:34 G 22274875.99 22274876.19 22274876.40 0.0506 0.0011

Saturn 56274-06-27 09:50 G 22274893.74 22274893.91 22274894.09 0.0289 0.0160

Saturn 56275-02-12 05:31 G 22275123.54 22275123.73 22275123.93 0.0287 0.0116

Moon 56276-04-07 06:43 G 22275543.67 22275543.78 22275543.90 0.2643 0.1894

Uranus 56280-11-01 10:05 G 22277212.88 22277212.92 22277213.01 0.0138 0.0132

Jupiter 56280-11-27 17:17 G 22277239.06 22277239.22 22277239.39 0.0523 0.0294

Uranus 56281-06-15 18:43 G 22277439.14 22277439.28 22277439.44 0.0138 0.0100

Uranus 56282-01-28 02:53 G 22277665.44 22277665.62 22277665.82 0.0138 0.0068

Uranus 56282-09-11 10:48 G 22277891.74 22277891.95 22277892.16 0.0138 0.0036

Uranus 56283-04-25 18:29 G 22278118.06 22278118.27 22278118.49 0.0138 0.0006

Uranus 56283-12-08 02:10 G 22278344.38 22278344.59 22278344.81 0.0137 0.0026

Moon 56284-04-04 22:05 G 22278463.29 22278463.42 22278463.56 0.2650 0.1206

Earth 56284-04-05 03:36 G 22278463.50 22278463.65 22278463.81 0.2648 0.0600 *

Uranus 56284-07-21 09:36 G 22278570.71 22278570.90 22278571.11 0.0137 0.0057

Uranus 56285-03-04 16:48 G 22278797.05 22278797.20 22278797.38 0.0137 0.0088

Uranus 56285-10-17 00:14 G 22279023.40 22279023.51 22279023.62 0.0137 0.0118

Jupiter 56286-02-12 14:38 G 22279141.93 22279142.11 22279142.28 0.0509 0.0262

Saturn 56290-03-06 10:48 G 22280624.75 22280624.95 22280625.15 0.0272 0.0091

Saturn 56290-10-21 16:19 G 22280854.01 22280854.18 22280854.37 0.0274 0.0141

Jupiter 56292-08-02 11:02 G 22281504.76 22281504.96 22281505.16 0.0520 0.0004

Jupiter 56298-06-12 05:46 G 22283644.63 22283644.74 22283644.85 0.0503 0.0421

Pluto 56303-03-17 00:00 G 22285382.38 22285382.50 22285382.63 0.0063 0.0051

Pluto 56303-10-28 03:36 G 22285607.44 22285607.65 22285607.87 0.0063 0.0016

Saturn 56304-01-08 16:48 G 22285680.02 22285680.20 22285680.40 0.0289 0.0122

Jupiter 56304-04-08 05:46 G 22285770.57 22285770.74 22285770.91 0.0518 0.0285

Pluto 56304-06-09 07:12 G 22285832.60 22285832.80 22285833.02 0.0063 0.0020

Saturn 56304-08-25 12:00 G 22285909.83 22285910.00 22285910.18 0.0287 0.0152

Pluto 56305-01-20 10:34 G 22286057.87 22286057.94 22286058.07 0.0064 0.0057

Jupiter 56310-02-16 05:02 G 22287910.52 22287910.71 22287910.91 0.0505 0.0164

Jupiter 56316-08-06 09:50 G 22290273.83 22290273.91 22290274.00 0.0525 0.0470

Neptune 56319-05-07 10:34 G 22291277.93 22291277.94 22291277.98 0.0088 0.0088

Saturn 56319-09-17 13:26 G 22291410.85 22291411.06 22291411.27 0.0272 0.0063

Neptune 56319-12-18 23:17 G 22291503.41 22291503.47 22291503.57 0.0088 0.0081

Saturn 56320-05-03 19:12 G 22291640.13 22291640.30 22291640.47 0.0274 0.0169

Neptune 56320-07-31 12:00 G 22291728.91 22291729.00 22291729.14 0.0088 0.0076

Neptune 56321-03-14 01:26 G 22291954.43 22291954.56 22291954.71 0.0088 0.0069

Jupiter 56321-10-22 02:10 G 22292176.40 22292176.59 22292176.80 0.0507 0.0107

Neptune 56321-10-25 14:10 G 22292179.95 22292180.09 22292180.26 0.0088 0.0062

Mars 56322-03-13 10:05 G 22292318.75 22292318.92 22292319.09 0.1611 0.0235

Neptune 56322-06-08 02:53 G 22292405.48 22292405.62 22292405.82 0.0088 0.0057

Neptune 56323-01-19 16:19 G 22292631.00 22292631.18 22292631.37 0.0088 0.0049

Mars 56323-02-12 06:43 G 22292654.65 22292654.78 22292654.90 0.1916 0.1325

Neptune 56323-09-02 05:02 G 22292856.53 22292856.71 22292856.92 0.0088 0.0043

Neptune 56324-04-14 18:00 G 22293082.06 22293082.25 22293082.46 0.0088 0.0037

Uranus 56324-10-28 10:48 G 22293278.87 22293278.95 22293279.06 0.0140 0.0125

Neptune 56324-11-26 06:43 G 22293307.59 22293307.78 22293308.00 0.0088 0.0030

Uranus 56325-06-11 20:10 G 22293505.19 22293505.34 22293505.51 0.0140 0.0092

Neptune 56325-07-09 19:55 G 22293533.12 22293533.33 22293533.54 0.0088 0.0023

Uranus 56326-01-24 05:46 G 22293731.54 22293731.74 22293731.94 0.0140 0.0059

Neptune 56326-02-20 08:38 G 22293758.65 22293758.86 22293759.09 0.0088 0.0017

Uranus 56326-09-07 15:07 G 22293957.92 22293958.13 22293958.34 0.0140 0.0026

Neptune 56326-10-03 21:36 G 22293984.19 22293984.40 22293984.62 0.0088 0.0011

Uranus 56327-04-22 00:29 G 22294184.31 22294184.52 22294184.74 0.0141 0.0008

Neptune 56327-05-17 10:34 G 22294209.72 22294209.94 22294210.16 0.0088 0.0004

Uranus 56327-12-04 10:05 G 22294410.72 22294410.92 22294411.14 0.0141 0.0041

Neptune 56327-12-28 23:17 G 22294435.25 22294435.47 22294435.69 0.0088 0.0003

Jupiter 56328-04-11 03:07 G 22294539.44 22294539.63 22294539.82 0.0522 0.0176

Uranus 56328-07-17 19:55 G 22294637.15 22294637.33 22294637.52 0.0141 0.0074

Neptune 56328-08-10 12:00 G 22294660.78 22294661.00 22294661.22 0.0088 0.0009

Uranus 56329-03-01 05:46 G 22294863.61 22294863.74 22294863.89 0.0141 0.0108

Neptune 56329-03-24 00:58 G 22294886.32 22294886.54 22294886.75 0.0088 0.0015

Neptune 56329-11-04 13:26 G 22295111.86 22295112.06 22295112.28 0.0088 0.0022

Neptune 56330-06-18 02:24 G 22295337.39 22295337.60 22295337.81 0.0088 0.0028

Neptune 56331-01-29 14:53 G 22295562.93 22295563.12 22295563.34 0.0088 0.0035

Neptune 56331-09-12 03:50 G 22295788.47 22295788.66 22295788.86 0.0088 0.0041

Neptune 56332-04-24 16:19 G 22296014.02 22296014.18 22296014.39 0.0088 0.0048

Neptune 56332-12-06 05:17 G 22296239.56 22296239.72 22296239.91 0.0088 0.0054

Jupiter 56333-06-26 23:31 G 22296442.34 22296442.48 22296442.62 0.0510 0.0376

Neptune 56333-07-19 18:14 G 22296465.11 22296465.26 22296465.42 0.0088 0.0060

Saturn 56333-07-21 00:00 G 22296466.30 22296466.50 22296466.70 0.0288 0.0080

Neptune 56334-03-02 06:43 G 22296690.66 22296690.78 22296690.95 0.0088 0.0067

Saturn 56334-03-07 19:12 G 22296696.15 22296696.30 22296696.46 0.0286 0.0193

Neptune 56334-10-13 19:41 G 22296916.22 22296916.32 22296916.46 0.0088 0.0073

Neptune 56335-05-27 08:38 G 22297141.78 22297141.86 22297141.96 0.0088 0.0079

Neptune 56336-01-07 21:22 G 22297367.35 22297367.39 22297367.45 0.0088 0.0085

Jupiter 56339-12-15 18:58 G 22298805.10 22298805.29 22298805.49 0.0519 0.0120

Jupiter 56345-10-24 15:22 G 22300944.99 22300945.14 22300945.31 0.0504 0.0312

Saturn 56348-08-12 17:31 G 22301968.15 22301968.23 22301968.31 0.0271 0.0249

Saturn 56349-03-29 22:19 G 22302197.22 22302197.43 22302197.64 0.0273 0.0022

Saturn 56349-11-14 04:19 G 22302426.55 22302426.68 22302426.82 0.0274 0.0211

Jupiter 56351-08-20 13:41 G 22303070.94 22303071.07 22303071.19 0.0517 0.0403

Jupiter 56357-06-29 13:55 G 22305210.88 22305211.08 22305211.28 0.0506 0.0049

Saturn 56363-01-31 09:07 G 22307252.67 22307252.88 22307253.09 0.0288 0.0038

Saturn 56363-09-18 03:36 G 22307482.53 22307482.65 22307482.77 0.0286 0.0233

Jupiter 56363-12-18 15:07 G 22307573.98 22307574.13 22307574.28 0.0523 0.0338

Uranus 56365-02-14 02:10 G 22307997.48 22307997.59 22307997.72 0.0138 0.0114

Uranus 56365-09-28 10:05 G 22308223.76 22308223.92 22308224.11 0.0138 0.0082

Uranus 56366-05-12 18:14 G 22308450.06 22308450.26 22308450.47 0.0138 0.0050

Uranus 56366-12-25 02:10 G 22308676.37 22308676.59 22308676.80 0.0138 0.0019

Uranus 56367-08-08 09:50 G 22308902.69 22308902.91 22308903.13 0.0137 0.0013

Uranus 56368-03-21 17:17 G 22309129.01 22309129.22 22309129.43 0.0137 0.0043

Uranus 56368-11-03 00:29 G 22309355.34 22309355.52 22309355.71 0.0137 0.0074

Jupiter 56369-03-04 12:14 G 22309476.83 22309477.01 22309477.20 0.0509 0.0217

Uranus 56369-06-17 07:41 G 22309581.69 22309581.82 22309581.97 0.0137 0.0105

Uranus 56370-01-29 14:38 G 22309808.10 22309808.11 22309808.16 0.0137 0.0135

Jupiter 56375-08-23 09:50 G 22311839.70 22311839.91 22311840.11 0.0521 0.0050

Saturn 56378-02-22 20:10 G 22312754.23 22312754.34 22312754.47 0.0271 0.0220

Saturn 56378-10-10 01:26 G 22312983.35 22312983.56 22312983.77 0.0273 0.0008

Saturn 56379-05-27 07:26 G 22313212.72 22313212.81 22313212.92 0.0274 0.0241

Jupiter 56380-11-07 08:10 G 22313742.79 22313742.84 22313742.90 0.0511 0.0491

Jupiter 56381-07-02 01:55 G 22313979.50 22313979.58 22313979.67 0.0503 0.0458

Moon 56381-10-10 08:10 G 22314079.79 22314079.84 22314079.90 0.2684 0.2502

Jupiter 56387-04-28 04:19 G 22316105.50 22316105.68 22316105.86 0.0518 0.0236

Mars 56388-01-08 22:48 G 22316361.28 22316361.45 22316361.63 0.1610 0.0046

Moon 56389-10-07 23:46 G 22316999.37 22316999.49 22316999.62 0.2688 0.1482

Earth 56389-10-08 04:05 G 22316999.52 22316999.67 22316999.82 0.2683 0.0891 *

Saturn 56391-12-26 18:58 G 22317809.24 22317809.29 22317809.37 0.0289 0.0276

Saturn 56392-08-12 15:36 G 22318038.93 22318039.15 22318039.36 0.0288 0.0005

Jupiter 56393-03-07 00:58 G 22318245.35 22318245.54 22318245.73 0.0505 0.0200

Saturn 56393-03-30 10:05 G 22318268.87 22318268.92 22318268.99 0.0286 0.0272

Pluto 56393-12-13 02:53 G 22318526.42 22318526.62 22318526.84 0.0081 0.0022

Pluto 56394-07-26 13:41 G 22318751.92 22318752.07 22318752.24 0.0081 0.0054

Jupiter 56399-08-26 05:17 G 22320608.67 22320608.72 22320608.77 0.0524 0.0506

Neptune 56402-09-15 14:24 G 22321725.06 22321725.10 22321725.19 0.0089 0.0086

Neptune 56403-04-29 04:05 G 22321950.57 22321950.67 22321950.77 0.0089 0.0079

Neptune 56403-12-10 16:48 G 22322176.09 22322176.20 22322176.35 0.0089 0.0073

Neptune 56404-07-23 06:29 G 22322401.62 22322401.77 22322401.92 0.0089 0.0066

Jupiter 56404-11-09 22:19 G 22322511.23 22322511.43 22322511.64 0.0508 0.0067

Neptune 56405-03-05 19:12 G 22322627.16 22322627.30 22322627.48 0.0089 0.0060

Neptune 56405-10-17 08:38 G 22322852.69 22322852.86 22322853.04 0.0089 0.0053

Neptune 56406-05-30 21:36 G 22323078.22 22323078.40 22323078.60 0.0089 0.0046

Neptune 56407-01-11 10:48 G 22323303.76 22323303.95 22323304.15 0.0089 0.0040

Neptune 56407-08-25 00:00 G 22323529.31 22323529.50 22323529.72 0.0089 0.0033

Saturn 56407-09-05 05:02 G 22323540.56 22323540.71 22323540.88 0.0272 0.0181

Neptune 56408-04-06 13:12 G 22323754.85 22323755.05 22323755.27 0.0089 0.0027

Saturn 56408-04-21 10:34 G 22323769.73 22323769.94 22323770.15 0.0273 0.0049

Uranus 56408-06-27 18:14 G 22323837.25 22323837.26 22323837.29 0.0140 0.0139

Neptune 56408-11-18 02:38 G 22323980.40 22323980.61 22323980.82 0.0089 0.0019

Uranus 56409-02-09 03:36 G 22324063.51 22324063.65 22324063.79 0.0140 0.0106

Neptune 56409-07-01 15:50 G 22324205.94 22324206.16 22324206.38 0.0089 0.0013

Uranus 56409-09-23 12:29 G 22324289.85 22324290.02 22324290.22 0.0140 0.0074

Neptune 56410-02-12 05:02 G 22324431.49 22324431.71 22324431.93 0.0089 0.0006

Uranus 56410-05-07 22:05 G 22324516.21 22324516.42 22324516.63 0.0140 0.0041

Neptune 56410-09-25 18:29 G 22324657.05 22324657.27 22324657.49 0.0089 0.0001

Uranus 56410-12-20 07:41 G 22324742.60 22324742.82 22324743.04 0.0141 0.0007

Jupiter 56411-04-30 21:50 G 22324874.23 22324874.41 22324874.60 0.0522 0.0211

Neptune 56411-05-09 07:41 G 22324882.60 22324882.82 22324883.04 0.0089 0.0008

Uranus 56411-08-03 17:17 G 22324969.01 22324969.22 22324969.44 0.0141 0.0026

Neptune 56411-12-20 20:53 G 22325108.16 22325108.37 22325108.59 0.0089 0.0014

Uranus 56412-03-17 02:53 G 22325195.43 22325195.62 22325195.82 0.0141 0.0060

Neptune 56412-08-02 10:05 G 22325333.72 22325333.92 22325334.14 0.0089 0.0021

Uranus 56412-10-29 12:29 G 22325421.88 22325422.02 22325422.20 0.0141 0.0095

Neptune 56413-03-15 23:31 G 22325559.28 22325559.48 22325559.69 0.0089 0.0028

Uranus 56413-06-12 22:48 G 22325648.37 22325648.45 22325648.55 0.0141 0.0128

Neptune 56413-10-27 12:43 G 22325784.84 22325785.03 22325785.24 0.0089 0.0035

Neptune 56414-06-10 01:41 G 22326010.39 22326010.57 22326010.78 0.0089 0.0042

Neptune 56415-01-21 15:22 G 22326235.96 22326236.14 22326236.33 0.0089 0.0048

Neptune 56415-09-04 04:19 G 22326461.53 22326461.68 22326461.87 0.0089 0.0055

Neptune 56416-04-16 17:31 G 22326687.09 22326687.23 22326687.41 0.0089 0.0062

Jupiter 56416-07-15 19:55 G 22326777.18 22326777.33 22326777.48 0.0510 0.0336

Neptune 56416-11-28 06:58 G 22326912.66 22326912.79 22326912.94 0.0090 0.0068

Neptune 56417-07-11 19:55 G 22327138.23 22327138.33 22327138.47 0.0090 0.0075

Neptune 56418-02-22 09:22 G 22327363.81 22327363.89 22327364.00 0.0090 0.0081

Neptune 56418-10-05 22:19 G 22327589.41 22327589.43 22327589.51 0.0090 0.0088

Saturn 56421-07-08 05:46 G 22328595.62 22328595.74 22328595.88 0.0289 0.0228

Saturn 56422-02-23 01:55 G 22328825.37 22328825.58 22328825.79 0.0287 0.0048

Jupiter 56423-01-03 15:22 G 22329139.94 22329140.14 22329140.34 0.0520 0.0080

Jupiter 56428-11-12 12:29 G 22331279.88 22331280.02 22331280.17 0.0504 0.0351

Jupiter 56434-09-08 11:02 G 22333405.82 22333405.96 22333406.11 0.0517 0.0360

Saturn 56437-03-17 08:10 G 22334326.67 22334326.84 22334327.02 0.0271 0.0150

Saturn 56437-11-01 13:41 G 22334555.87 22334556.07 22334556.27 0.0273 0.0079

Jupiter 56440-07-18 10:05 G 22335545.72 22335545.92 22335546.13 0.0506 0.0088

Jupiter 56447-01-06 13:26 G 22337908.92 22337909.06 22337909.20 0.0523 0.0384

Uranus 56448-10-14 10:05 G 22338555.85 22338555.92 22338556.02 0.0138 0.0127

Uranus 56449-05-28 18:14 G 22338782.12 22338782.26 22338782.43 0.0138 0.0096

Uranus 56450-01-10 02:10 G 22339008.41 22339008.59 22339008.80 0.0138 0.0064

Uranus 56450-08-24 10:19 G 22339234.72 22339234.93 22339235.14 0.0138 0.0032

Saturn 56451-01-18 12:14 G 22339381.85 22339382.01 22339382.17 0.0289 0.0189

Uranus 56451-04-07 18:00 G 22339461.03 22339461.25 22339461.47 0.0138 0.0001

Saturn 56451-09-05 07:55 G 22339611.63 22339611.83 22339612.04 0.0287 0.0087

Uranus 56451-11-20 01:26 G 22339687.35 22339687.56 22339687.77 0.0137 0.0030

Jupiter 56452-03-23 07:41 G 22339811.63 22339811.82 22339812.01 0.0509 0.0180

Uranus 56452-07-03 08:53 G 22339913.68 22339913.87 22339914.07 0.0137 0.0061

Uranus 56453-02-14 16:05 G 22340140.02 22340140.17 22340140.34 0.0137 0.0092

Uranus 56453-09-28 23:17 G 22340366.38 22340366.47 22340366.57 0.0137 0.0122

Mars 56453-11-05 12:00 G 22340403.83 22340404.00 22340404.17 0.1610 0.0250

Jupiter 56458-09-11 05:46 G 22342174.54 22342174.74 22342174.94 0.0520 0.0088

Jupiter 56463-11-27 03:36 G 22344077.56 22344077.65 22344077.74 0.0511 0.0455

Jupiter 56464-07-20 21:50 G 22344314.38 22344314.41 22344314.45 0.0503 0.0493

Saturn 56466-09-27 16:48 G 22345113.02 22345113.20 22345113.40 0.0272 0.0112

Saturn 56467-05-14 22:34 G 22345342.25 22345342.44 22345342.63 0.0274 0.0120

Jupiter 56470-05-16 23:17 G 22346440.29 22346440.47 22346440.66 0.0518 0.0200

Jupiter 56476-03-25 20:53 G 22348580.19 22348580.37 22348580.55 0.0505 0.0236

Saturn 56480-07-30 23:31 G 22350168.29 22350168.48 22350168.66 0.0289 0.0140

Saturn 56481-03-17 18:58 G 22350398.10 22350398.29 22350398.48 0.0287 0.0134

Jupiter 56482-01-19 17:31 G 22350706.16 22350706.23 22350706.30 0.0516 0.0482

Neptune 56483-08-08 21:50 G 22351272.39 22351272.41 22351272.49 0.0088 0.0087

Neptune 56484-03-21 11:17 G 22351497.89 22351497.97 22351498.07 0.0088 0.0080

Neptune 56484-11-02 00:00 G 22351723.39 22351723.50 22351723.63 0.0088 0.0074

Neptune 56485-06-15 12:58 G 22351948.91 22351949.04 22351949.19 0.0088 0.0067

Neptune 56486-01-27 01:41 G 22352174.44 22352174.57 22352174.75 0.0088 0.0062

Neptune 56486-09-09 15:07 G 22352399.96 22352400.13 22352400.31 0.0088 0.0054

Mars 56486-10-06 12:14 G 22352426.93 22352427.01 22352427.09 0.1914 0.1696

Neptune 56487-04-23 03:50 G 22352625.48 22352625.66 22352625.85 0.0088 0.0048

Jupiter 56487-11-29 19:55 G 22352846.13 22352846.33 22352846.54 0.0507 0.0025

Neptune 56487-12-04 16:34 G 22352851.01 22352851.19 22352851.40 0.0088 0.0042

Neptune 56488-07-17 05:46 G 22353076.54 22353076.74 22353076.95 0.0088 0.0035

Neptune 56489-02-27 18:43 G 22353302.08 22353302.28 22353302.50 0.0088 0.0029

Neptune 56489-10-11 07:41 G 22353527.61 22353527.82 22353528.04 0.0088 0.0022

Neptune 56490-05-24 20:24 G 22353753.14 22353753.35 22353753.58 0.0088 0.0016

Neptune 56491-01-05 09:22 G 22353978.67 22353978.89 22353979.11 0.0088 0.0010

Neptune 56491-08-18 22:19 G 22354204.21 22354204.43 22354204.65 0.0088 0.0003

Neptune 56492-03-31 11:02 G 22354429.74 22354429.96 22354430.18 0.0088 0.0004

Uranus 56492-10-09 10:05 G 22354621.83 22354621.92 22354622.04 0.0140 0.0121

Neptune 56492-11-11 23:46 G 22354655.28 22354655.49 22354655.72 0.0088 0.0010

Uranus 56493-05-23 19:26 G 22354848.15 22354848.31 22354848.48 0.0140 0.0088

Neptune 56493-06-25 12:29 G 22354880.81 22354881.02 22354881.25 0.0088 0.0016

Uranus 56494-01-05 04:48 G 22355074.51 22355074.70 22355074.91 0.0140 0.0056

Neptune 56494-02-06 01:12 G 22355106.35 22355106.55 22355106.78 0.0088 0.0023

Jupiter 56494-05-19 19:26 G 22355209.13 22355209.31 22355209.48 0.0523 0.0254

Uranus 56494-08-19 14:10 G 22355300.88 22355301.09 22355301.31 0.0140 0.0023

Neptune 56494-09-19 14:10 G 22355331.89 22355332.09 22355332.30 0.0088 0.0029

Uranus 56495-04-02 23:46 G 22355527.28 22355527.49 22355527.71 0.0141 0.0012

Neptune 56495-05-03 02:53 G 22355557.42 22355557.62 22355557.83 0.0088 0.0035

Uranus 56495-11-15 09:22 G 22355753.69 22355753.89 22355754.11 0.0141 0.0045

Neptune 56495-12-14 15:22 G 22355782.96 22355783.14 22355783.35 0.0088 0.0042

Saturn 56496-04-08 20:24 G 22355899.15 22355899.35 22355899.55 0.0272 0.0079

Uranus 56496-06-28 19:12 G 22355980.13 22355980.30 22355980.49 0.0141 0.0079

Neptune 56496-07-27 04:05 G 22356008.50 22356008.67 22356008.87 0.0088 0.0048

Saturn 56496-11-24 01:55 G 22356128.41 22356128.58 22356128.76 0.0274 0.0151

Uranus 56497-02-10 05:17 G 22356206.61 22356206.72 22356206.86 0.0141 0.0113

Neptune 56497-03-09 17:02 G 22356234.05 22356234.21 22356234.40 0.0088 0.0054

Neptune 56497-10-21 06:00 G 22356459.60 22356459.75 22356459.91 0.0088 0.0060

Neptune 56498-06-03 18:14 G 22356685.14 22356685.26 22356685.43 0.0088 0.0067

Neptune 56499-01-15 07:12 G 22356910.69 22356910.80 22356910.94 0.0088 0.0073

Jupiter 56499-08-04 16:48 G 22357112.03 22357112.20 22357112.36 0.0509 0.0295

Neptune 56499-08-28 19:55 G 22357136.25 22357136.33 22357136.44 0.0088 0.0079

Neptune 56500-04-11 08:53 G 22357361.83 22357361.87 22357361.94 0.0088 0.0085

Jupiter 56506-01-23 13:55 G 22359474.88 22359475.08 22359475.28 0.0520 0.0034

Saturn 56510-02-11 04:48 G 22360954.50 22360954.70 22360954.90 0.0289 0.0104

Saturn 56510-09-29 00:00 G 22361184.34 22361184.50 22361184.68 0.0287 0.0170

Jupiter 56511-12-03 07:55 G 22361614.70 22361614.83 22361614.96 0.0504 0.0385

Jupiter 56517-09-28 07:55 G 22363740.68 22363740.83 22363741.00 0.0517 0.0317

Mars 56519-09-04 00:58 G 22364446.37 22364446.54 22364446.70 0.1610 0.0493

Jupiter 56523-08-08 05:46 G 22365880.54 22365880.74 22365880.94 0.0506 0.0122

Saturn 56525-03-05 23:17 G 22366456.45 22366456.47 22366456.51 0.0271 0.0268

Saturn 56525-10-21 04:05 G 22366685.47 22366685.67 22366685.88 0.0273 0.0042

Saturn 56526-06-07 10:05 G 22366914.77 22366914.92 22366915.07 0.0274 0.0191

Earth 56527-04-08 05:46 G 22367219.59 22367219.74 22367219.90 0.2649 0.0473

Moon 56527-04-08 11:31 G 22367219.83 22367219.98 22367220.14 0.2650 0.0120 *

Jupiter 56530-01-26 08:53 G 22368243.75 22368243.87 22368243.99 0.0523 0.0418

Uranus 56533-01-27 02:53 G 22369340.49 22369340.62 22369340.76 0.0138 0.0109

Uranus 56533-09-10 10:48 G 22369566.78 22369566.95 22369567.14 0.0138 0.0077

Uranus 56534-04-24 18:43 G 22369793.08 22369793.28 22369793.49 0.0138 0.0045

Uranus 56534-12-07 02:24 G 22370019.39 22370019.60 22370019.82 0.0138 0.0014

Jupiter 56535-04-13 03:50 G 22370146.46 22370146.66 22370146.85 0.0509 0.0143

Uranus 56535-07-21 10:05 G 22370245.71 22370245.92 22370246.14 0.0137 0.0018

Uranus 56536-03-03 17:31 G 22370472.03 22370472.23 22370472.44 0.0137 0.0048

Uranus 56536-10-16 00:43 G 22370698.36 22370698.53 22370698.71 0.0137 0.0079

Uranus 56537-05-30 07:41 G 22370924.71 22370924.82 22370924.97 0.0137 0.0110

Saturn 56539-08-24 16:19 G 22371740.98 22371741.18 22371741.39 0.0288 0.0053

Saturn 56540-04-10 11:17 G 22371970.84 22371970.97 22371971.11 0.0286 0.0219

Jupiter 56541-10-01 01:12 G 22372509.35 22372509.55 22372509.74 0.0521 0.0124

Jupiter 56546-12-17 01:55 G 22374412.47 22374412.58 22374412.71 0.0511 0.0409

Pluto 56549-04-15 09:07 G 22375262.75 22375262.88 22375263.04 0.0063 0.0046

Pluto 56549-11-26 13:12 G 22375487.83 22375488.05 22375488.27 0.0063 0.0011

Pluto 56550-07-09 16:34 G 22375713.00 22375713.19 22375713.41 0.0063 0.0026

Pluto 56551-02-19 20:10 G 22375938.31 22375938.34 22375938.41 0.0064 0.0062

Mars 56552-08-03 14:24 G 22376468.94 22376469.10 22376469.26 0.1915 0.0772

Jupiter 56553-06-05 20:24 G 22376775.15 22376775.35 22376775.54 0.0519 0.0160

Saturn 56554-09-16 02:53 G 22377242.53 22377242.62 22377242.73 0.0271 0.0236

Saturn 56555-05-03 07:41 G 22377471.61 22377471.82 22377472.03 0.0272 0.0010

Saturn 56555-12-18 13:12 G 22377700.94 22377701.05 22377701.19 0.0274 0.0222

Jupiter 56559-04-15 18:14 G 22378915.09 22378915.26 22378915.43 0.0505 0.0276

Jupiter 56565-02-08 16:19 G 22381041.08 22381041.18 22381041.29 0.0516 0.0434

Neptune 56566-12-19 02:10 G 22381719.53 22381719.59 22381719.68 0.0089 0.0084

Neptune 56567-08-01 15:22 G 22381945.05 22381945.14 22381945.26 0.0089 0.0077

Neptune 56568-03-14 04:19 G 22382170.57 22382170.68 22382170.83 0.0089 0.0071

Neptune 56568-10-25 17:46 G 22382396.10 22382396.24 22382396.40 0.0089 0.0064

Saturn 56569-03-05 20:24 G 22382527.14 22382527.35 22382527.56 0.0288 0.0021

Neptune 56569-06-08 06:29 G 22382621.63 22382621.77 22382621.96 0.0089 0.0059

Saturn 56569-10-21 15:07 G 22382757.04 22382757.13 22382757.24 0.0286 0.0251

Neptune 56570-01-19 19:55 G 22382847.16 22382847.33 22382847.52 0.0089 0.0052

Neptune 56570-09-02 09:07 G 22383072.70 22383072.88 22383073.08 0.0089 0.0045

Jupiter 56570-12-19 16:05 G 22383180.97 22383181.17 22383181.37 0.0507 0.0013

Neptune 56571-04-15 22:19 G 22383298.24 22383298.43 22383298.64 0.0089 0.0039

Neptune 56571-11-27 11:17 G 22383523.78 22383523.97 22383524.19 0.0089 0.0032

Neptune 56572-07-10 00:43 G 22383749.32 22383749.53 22383749.74 0.0089 0.0025

Neptune 56573-02-20 13:55 G 22383974.87 22383975.08 22383975.30 0.0089 0.0019

Neptune 56573-10-04 03:07 G 22384200.42 22384200.63 22384200.85 0.0089 0.0012

Neptune 56574-05-17 16:19 G 22384425.96 22384426.18 22384426.40 0.0089 0.0005

Neptune 56574-12-29 05:31 G 22384651.51 22384651.73 22384651.95 0.0089 0.0001

Neptune 56575-08-11 18:43 G 22384877.07 22384877.28 22384877.51 0.0089 0.0008

Neptune 56576-03-24 08:10 G 22385102.62 22385102.84 22385103.06 0.0089 0.0015

Uranus 56576-06-09 16:34 G 22385180.16 22385180.19 22385180.25 0.0140 0.0136

Neptune 56576-11-04 21:07 G 22385328.18 22385328.38 22385328.60 0.0089 0.0022

Uranus 56577-01-22 02:10 G 22385406.44 22385406.59 22385406.73 0.0140 0.0103

Jupiter 56577-06-08 17:02 G 22385544.04 22385544.21 22385544.38 0.0522 0.0296

Neptune 56577-06-18 10:19 G 22385553.73 22385553.93 22385554.15 0.0089 0.0028

Uranus 56577-09-05 11:02 G 22385632.78 22385632.96 22385633.16 0.0140 0.0071

Neptune 56578-01-29 23:46 G 22385779.29 22385779.49 22385779.70 0.0089 0.0035

Uranus 56578-04-19 20:38 G 22385859.15 22385859.36 22385859.57 0.0140 0.0038

Neptune 56578-09-12 12:58 G 22386004.86 22386005.04 22386005.25 0.0089 0.0042

Uranus 56578-12-02 06:14 G 22386085.54 22386085.76 22386085.97 0.0141 0.0005

Neptune 56579-04-26 02:38 G 22386230.43 22386230.61 22386230.80 0.0089 0.0048

Uranus 56579-07-16 15:50 G 22386311.95 22386312.16 22386312.37 0.0141 0.0030

Neptune 56579-12-07 15:36 G 22386455.99 22386456.15 22386456.34 0.0089 0.0055

Uranus 56580-02-28 01:26 G 22386538.38 22386538.56 22386538.77 0.0141 0.0064

Neptune 56580-07-20 04:34 G 22386681.56 22386681.69 22386681.88 0.0089 0.0062

Uranus 56580-10-11 11:46 G 22386764.83 22386764.99 22386765.14 0.0141 0.0098

Neptune 56581-03-02 18:14 G 22386907.13 22386907.26 22386907.41 0.0089 0.0068

Uranus 56581-05-25 21:36 G 22386991.33 22386991.40 22386991.49 0.0141 0.0132

Neptune 56581-10-14 07:12 G 22387132.71 22387132.80 22387132.95 0.0089 0.0075

Neptune 56582-05-27 20:38 G 22387358.29 22387358.36 22387358.47 0.0090 0.0081

Jupiter 56582-08-24 12:14 G 22387446.84 22387447.01 22387447.19 0.0510 0.0259

Neptune 56583-01-08 10:05 G 22387583.88 22387583.92 22387583.98 0.0090 0.0087

Saturn 56584-03-28 09:36 G 22388028.77 22388028.90 22388029.05 0.0271 0.0201

Saturn 56584-11-12 14:38 G 22388257.90 22388258.11 22388258.32 0.0273 0.0027

Saturn 56585-06-29 20:38 G 22388487.30 22388487.36 22388487.44 0.0275 0.0260

Mars 56585-07-01 13:26 G 22388488.91 22388489.06 22388489.22 0.1610 0.0742

Jupiter 56589-02-11 10:19 G 22389809.73 22389809.93 22389810.14 0.0520 0.0008

Jupiter 56594-12-22 04:34 G 22391949.59 22391949.69 22391949.81 0.0504 0.0421

Saturn 56598-01-29 10:48 G 22393083.86 22393083.95 22393084.07 0.0289 0.0248

Saturn 56598-09-16 07:26 G 22393313.60 22393313.81 22393314.02 0.0288 0.0029

Jupiter 56600-10-18 03:07 G 22394075.46 22394075.63 22394075.80 0.0518 0.0283

Jupiter 56606-08-28 04:48 G 22396215.51 22396215.70 22396215.89 0.0506 0.0168

Jupiter 56613-02-15 06:29 G 22398578.68 22398578.77 22398578.86 0.0524 0.0460

Saturn 56613-10-09 12:58 G 22398814.88 22398815.04 22398815.21 0.0271 0.0169

Saturn 56614-05-26 17:46 G 22399044.04 22399044.24 22399044.45 0.0272 0.0058

Uranus 56616-09-27 11:02 G 22399898.86 22399898.96 22399899.06 0.0138 0.0123

Uranus 56617-05-11 18:43 G 22400125.13 22400125.28 22400125.46 0.0138 0.0091

Mars 56617-07-01 04:48 G 22400175.62 22400175.70 22400175.78 0.1611 0.1423

Uranus 56617-12-24 02:53 G 22400351.43 22400351.62 22400351.82 0.0138 0.0059

Jupiter 56618-05-03 02:24 G 22400481.40 22400481.60 22400481.80 0.0508 0.0097

Mars 56618-06-01 15:22 G 22400510.97 22400511.14 22400511.32 0.1915 0.0217

Uranus 56618-08-07 10:48 G 22400577.74 22400577.95 22400578.16 0.0138 0.0028

Uranus 56619-03-21 18:29 G 22400804.05 22400804.27 22400804.49 0.0138 0.0004

Uranus 56619-11-03 01:41 G 22401030.37 22401030.57 22401030.79 0.0137 0.0036

Uranus 56620-06-16 09:07 G 22401256.70 22401256.88 22401257.09 0.0137 0.0067

Uranus 56621-01-28 16:34 G 22401483.05 22401483.19 22401483.35 0.0137 0.0097

Uranus 56621-09-11 23:46 G 22401709.42 22401709.49 22401709.58 0.0137 0.0127

Earth 56624-10-12 14:10 G 22402836.07 22402836.09 22402836.11 0.2684 0.2642

Jupiter 56624-10-21 00:58 G 22402844.35 22402844.54 22402844.74 0.0522 0.0175

Saturn 56627-08-12 13:41 G 22403869.94 22403870.07 22403870.21 0.0290 0.0218

Saturn 56628-03-29 10:05 G 22404099.72 22404099.92 22404100.13 0.0288 0.0059

Jupiter 56630-01-05 23:17 G 22404747.33 22404747.47 22404747.61 0.0510 0.0365

Earth 56632-10-10 04:19 G 22405755.53 22405755.68 22405755.83 0.2683 0.0981

Moon 56632-10-10 09:36 G 22405755.74 22405755.90 22405756.06 0.2682 0.0103 *

Jupiter 56636-06-25 19:26 G 22407110.11 22407110.31 22407110.51 0.0519 0.0111

Pluto 56640-01-13 14:53 G 22408406.91 22408407.12 22408407.35 0.0081 0.0006

Pluto 56640-08-26 01:12 G 22408632.47 22408632.55 22408632.69 0.0081 0.0070

Jupiter 56642-05-05 14:38 G 22409249.96 22409250.11 22409250.27 0.0505 0.0313

Saturn 56643-04-21 18:29 G 22409601.10 22409601.27 22409601.46 0.0272 0.0137

Saturn 56643-12-06 23:31 G 22409830.29 22409830.48 22409830.69 0.0273 0.0092

Neptune 56647-11-12 09:36 G 22411266.85 22411266.90 22411266.97 0.0088 0.0085

Jupiter 56648-02-29 14:10 G 22411375.96 22411376.09 22411376.22 0.0516 0.0390

Neptune 56648-06-24 22:19 G 22411492.35 22411492.43 22411492.55 0.0088 0.0079

Neptune 56649-02-05 11:31 G 22411717.87 22411717.98 22411718.12 0.0088 0.0072

Neptune 56649-09-19 00:14 G 22411943.39 22411943.51 22411943.68 0.0088 0.0066

Neptune 56650-05-02 12:58 G 22412168.90 22412169.04 22412169.23 0.0088 0.0061

Neptune 56650-12-14 02:10 G 22412394.43 22412394.59 22412394.78 0.0088 0.0054

Mars 56651-04-30 02:38 G 22412531.48 22412531.61 22412531.75 0.1610 0.0977

Neptune 56651-07-27 14:53 G 22412619.95 22412620.12 22412620.32 0.0088 0.0048

Neptune 56652-03-09 03:50 G 22412845.49 22412845.66 22412845.88 0.0088 0.0042

Neptune 56652-10-20 17:02 G 22413071.02 22413071.21 22413071.42 0.0088 0.0035

Neptune 56653-06-03 06:00 G 22413296.55 22413296.75 22413296.96 0.0088 0.0028

Jupiter 56654-01-08 13:41 G 22413515.87 22413516.07 22413516.28 0.0507 0.0055

Neptune 56654-01-14 18:43 G 22413522.08 22413522.28 22413522.51 0.0088 0.0022

Neptune 56654-08-28 07:55 G 22413747.61 22413747.83 22413748.05 0.0088 0.0015

Neptune 56655-04-10 20:38 G 22413973.15 22413973.36 22413973.59 0.0088 0.0009

Neptune 56655-11-22 09:36 G 22414198.68 22414198.90 22414199.13 0.0088 0.0003

Neptune 56656-07-04 22:34 G 22414424.22 22414424.44 22414424.66 0.0088 0.0004

Neptune 56657-02-15 11:31 G 22414649.76 22414649.98 22414650.20 0.0088 0.0010

Saturn 56657-02-22 00:14 G 22414656.35 22414656.51 22414656.69 0.0289 0.0169

Neptune 56657-09-29 00:14 G 22414875.30 22414875.51 22414875.73 0.0088 0.0017

Saturn 56657-10-09 20:24 G 22414886.15 22414886.35 22414886.55 0.0287 0.0107

Neptune 56658-05-12 12:58 G 22415100.83 22415101.04 22415101.26 0.0088 0.0023

Neptune 56658-12-24 01:55 G 22415326.37 22415326.58 22415326.79 0.0088 0.0029

Neptune 56659-08-06 14:24 G 22415551.91 22415552.10 22415552.31 0.0088 0.0036

Neptune 56660-03-19 03:22 G 22415777.46 22415777.64 22415777.84 0.0088 0.0042

Jupiter 56660-06-28 12:58 G 22415878.88 22415879.04 22415879.20 0.0523 0.0333

Uranus 56660-09-22 08:10 G 22415964.74 22415964.84 22415964.97 0.0140 0.0119

Neptune 56660-10-30 16:05 G 22416003.00 22416003.17 22416003.37 0.0088 0.0048

Uranus 56661-05-06 17:31 G 22416191.07 22416191.23 22416191.41 0.0140 0.0086

Neptune 56661-06-13 05:02 G 22416228.54 22416228.71 22416228.88 0.0088 0.0054

Uranus 56661-12-19 02:53 G 22416417.43 22416417.62 22416417.83 0.0140 0.0053

Neptune 56662-01-24 17:17 G 22416454.08 22416454.22 22416454.40 0.0088 0.0061

Uranus 56662-08-02 12:29 G 22416643.81 22416644.02 22416644.24 0.0140 0.0020

Neptune 56662-09-07 06:00 G 22416679.63 22416679.75 22416679.92 0.0088 0.0067

Uranus 56663-03-16 22:05 G 22416870.20 22416870.42 22416870.64 0.0141 0.0014

Neptune 56663-04-20 18:58 G 22416905.19 22416905.29 22416905.43 0.0088 0.0073

Uranus 56663-10-29 07:41 G 22417096.62 22417096.82 22417097.03 0.0141 0.0048

Neptune 56663-12-02 07:41 G 22417130.74 22417130.82 22417130.93 0.0088 0.0079

Uranus 56664-06-11 17:31 G 22417323.06 22417323.23 22417323.42 0.0141 0.0082

Neptune 56664-07-14 20:24 G 22417356.32 22417356.35 22417356.42 0.0088 0.0085

Uranus 56665-01-24 03:36 G 22417549.54 22417549.65 22417549.79 0.0141 0.0116

Jupiter 56665-09-13 12:58 G 22417781.86 22417782.04 22417782.23 0.0509 0.0206

Jupiter 56672-03-03 07:55 G 22420144.63 22420144.83 22420145.03 0.0520 0.0049

Saturn 56672-10-31 22:05 G 22420387.23 22420387.42 22420387.62 0.0271 0.0104

Saturn 56673-06-18 02:53 G 22420616.44 22420616.62 22420616.81 0.0273 0.0124

Jupiter 56677-05-19 09:36 G 22422047.84 22422047.90 22422047.98 0.0512 0.0475

Jupiter 56678-01-11 04:05 G 22422284.60 22422284.67 22422284.75 0.0503 0.0467

Mars 56683-04-28 17:46 G 22424218.12 22424218.24 22424218.36 0.1610 0.1175

Jupiter 56683-11-07 03:50 G 22424410.48 22424410.66 22424410.84 0.0518 0.0229

Mars 56684-03-28 17:17 G 22424553.09 22424553.22 22424553.36 0.1915 0.1159

Saturn 56686-09-04 01:41 G 22425442.38 22425442.57 22425442.75 0.0289 0.0143

Saturn 56687-04-21 21:36 G 22425672.21 22425672.40 22425672.59 0.0288 0.0133

Jupiter 56689-09-16 02:53 G 22426550.44 22426550.62 22426550.81 0.0505 0.0212

Jupiter 56695-07-13 00:00 G 22428676.46 22428676.50 22428676.55 0.0515 0.0500

Jupiter 56696-03-06 06:43 G 22428913.74 22428913.78 22428913.83 0.0524 0.0511

Uranus 56700-05-28 18:00 G 22430457.24 22430457.25 22430457.28 0.0139 0.0138

Uranus 56701-01-10 01:55 G 22430683.46 22430683.58 22430683.74 0.0138 0.0107

Jupiter 56701-05-23 00:00 G 22430816.29 22430816.50 22430816.70 0.0508 0.0057

Uranus 56701-08-24 10:19 G 22430909.75 22430909.93 22430910.12 0.0138 0.0074

Uranus 56702-04-07 18:00 G 22431136.06 22431136.25 22431136.47 0.0138 0.0043

Saturn 56702-05-15 02:10 G 22431173.39 22431173.59 22431173.80 0.0272 0.0075

Uranus 56702-11-20 02:10 G 22431362.37 22431362.59 22431362.80 0.0138 0.0011

Saturn 56702-12-30 07:12 G 22431402.64 22431402.80 22431402.98 0.0273 0.0156

Uranus 56703-07-04 09:50 G 22431588.69 22431588.91 22431589.13 0.0137 0.0021

Uranus 56704-02-15 17:02 G 22431815.02 22431815.21 22431815.43 0.0137 0.0053

Uranus 56704-09-29 00:29 G 22432041.36 22432041.52 22432041.70 0.0137 0.0083

Uranus 56705-05-13 07:26 G 22432267.71 22432267.81 22432267.95 0.0137 0.0114

Jupiter 56707-11-10 23:46 G 22433179.31 22433179.49 22433179.67 0.0521 0.0221

Jupiter 56713-01-25 21:50 G 22435082.26 22435082.41 22435082.58 0.0511 0.0321

Saturn 56716-03-17 11:02 G 22436228.76 22436228.96 22436229.16 0.0289 0.0095

Saturn 56716-11-02 06:43 G 22436458.62 22436458.78 22436458.95 0.0287 0.0179

Mars 56717-02-25 15:07 G 22436574.02 22436574.13 22436574.24 0.1610 0.1229

Jupiter 56719-07-16 15:36 G 22437444.95 22437445.15 22437445.36 0.0519 0.0073

Jupiter 56725-05-25 16:19 G 22439585.04 22439585.18 22439585.32 0.0504 0.0365

Neptune 56730-08-11 00:14 G 22441488.50 22441488.51 22441488.55 0.0089 0.0088

Jupiter 56731-03-21 11:46 G 22441710.84 22441710.99 22441711.14 0.0517 0.0347

Neptune 56731-03-24 13:26 G 22441713.99 22441714.06 22441714.16 0.0089 0.0082

Saturn 56731-04-10 01:55 G 22441730.55 22441730.58 22441730.63 0.0270 0.0265

Neptune 56731-11-05 02:24 G 22441939.51 22441939.60 22441939.74 0.0089 0.0076

Saturn 56731-11-25 05:46 G 22441959.53 22441959.74 22441959.95 0.0271 0.0042

Neptune 56732-06-17 15:50 G 22442165.04 22442165.16 22442165.31 0.0089 0.0070

Saturn 56732-07-11 10:48 G 22442188.79 22442188.95 22442189.10 0.0273 0.0186

Neptune 56733-01-29 04:48 G 22442390.57 22442390.70 22442390.87 0.0089 0.0064

Neptune 56733-09-11 18:29 G 22442616.10 22442616.27 22442616.44 0.0089 0.0057

Neptune 56734-04-25 07:26 G 22442841.64 22442841.81 22442842.00 0.0089 0.0050

Neptune 56734-12-06 20:24 G 22443067.18 22443067.35 22443067.56 0.0089 0.0044

Neptune 56735-07-20 09:50 G 22443292.72 22443292.91 22443293.12 0.0089 0.0037

Neptune 56736-03-01 22:48 G 22443518.26 22443518.45 22443518.67 0.0089 0.0032

Neptune 56736-10-13 12:14 G 22443743.80 22443744.01 22443744.23 0.0089 0.0024

Jupiter 56737-01-28 14:53 G 22443850.92 22443851.12 22443851.32 0.0506 0.0108

Neptune 56737-05-27 01:26 G 22443969.35 22443969.56 22443969.78 0.0089 0.0018

Neptune 56738-01-07 14:24 G 22444194.89 22444195.10 22444195.33 0.0089 0.0012

Neptune 56738-08-21 03:50 G 22444420.44 22444420.66 22444420.88 0.0089 0.0005

Neptune 56739-04-03 17:02 G 22444645.99 22444646.21 22444646.43 0.0089 0.0002

Neptune 56739-11-15 06:14 G 22444871.54 22444871.76 22444871.98 0.0089 0.0009

Neptune 56740-06-27 19:12 G 22445097.09 22445097.30 22445097.53 0.0089 0.0016

Neptune 56741-02-08 08:38 G 22445322.65 22445322.86 22445323.07 0.0089 0.0022

Neptune 56741-09-21 21:50 G 22445548.21 22445548.41 22445548.62 0.0089 0.0028

Neptune 56742-05-05 10:48 G 22445773.77 22445773.95 22445774.17 0.0089 0.0036

Neptune 56742-12-17 00:14 G 22445999.33 22445999.51 22445999.71 0.0089 0.0042

Jupiter 56743-07-19 14:53 G 22446213.99 22446214.12 22446214.26 0.0523 0.0391

Neptune 56743-07-30 13:26 G 22446224.89 22446225.06 22446225.26 0.0089 0.0048

Neptune 56744-03-12 02:53 G 22446450.46 22446450.62 22446450.80 0.0089 0.0055

Uranus 56744-05-23 15:07 G 22446523.08 22446523.13 22446523.19 0.0140 0.0134

Neptune 56744-10-23 15:50 G 22446676.03 22446676.16 22446676.34 0.0089 0.0062

Uranus 56745-01-05 00:00 G 22446749.37 22446749.50 22446749.67 0.0140 0.0102

Neptune 56745-06-06 05:17 G 22446901.60 22446901.72 22446901.88 0.0089 0.0068

Uranus 56745-08-19 09:22 G 22446975.71 22446975.89 22446976.09 0.0140 0.0069

Saturn 56745-09-27 11:17 G 22447014.76 22447014.97 22447015.18 0.0289 0.0072

Neptune 56746-01-17 18:58 G 22447127.17 22447127.29 22447127.41 0.0089 0.0074

Uranus 56746-04-02 18:58 G 22447202.08 22447202.29 22447202.50 0.0140 0.0035

Saturn 56746-05-15 06:43 G 22447244.64 22447244.78 22447244.94 0.0287 0.0203

Neptune 56746-08-31 07:55 G 22447352.76 22447352.83 22447352.94 0.0090 0.0081

Uranus 56746-11-15 04:34 G 22447428.47 22447428.69 22447428.91 0.0140 0.0002

Neptune 56747-04-13 21:22 G 22447578.35 22447578.39 22447578.46 0.0090 0.0087

Uranus 56747-06-29 14:10 G 22447654.88 22447655.09 22447655.31 0.0141 0.0032

Uranus 56748-02-11 00:00 G 22447881.32 22447881.50 22447881.70 0.0141 0.0066

Uranus 56748-09-24 10:05 G 22448107.77 22448107.92 22448108.08 0.0141 0.0100

Jupiter 56748-10-03 12:29 G 22448116.83 22448117.02 22448117.22 0.0509 0.0156

Mars 56749-02-24 06:29 G 22448260.63 22448260.77 22448260.91 0.1610 0.0935

Uranus 56749-05-08 19:55 G 22448334.28 22448334.33 22448334.41 0.0141 0.0135

Jupiter 56755-03-24 09:36 G 22450479.70 22450479.90 22450480.10 0.0520 0.0105

Jupiter 56760-06-08 08:10 G 22452382.74 22452382.84 22452382.95 0.0512 0.0429

Saturn 56760-10-20 05:02 G 22452516.61 22452516.71 22452516.80 0.0270 0.0238

Saturn 56761-06-06 08:53 G 22452745.66 22452745.87 22452746.08 0.0272 0.0014

Saturn 56762-01-21 13:55 G 22452974.96 22452975.08 22452975.22 0.0274 0.0216

Moon 56762-04-12 13:55 G 22453056.02 22453056.08 22453056.13 0.2642 0.2480

Jupiter 56766-11-27 03:50 G 22454745.47 22454745.66 22454745.85 0.0518 0.0177

Moon 56770-04-10 02:24 G 22455975.44 22455975.60 22455975.76 0.2647 0.0561

Earth 56770-04-10 07:55 G 22455975.67 22455975.83 22455975.99 0.2649 0.0355 *

Jupiter 56772-10-06 02:38 G 22456885.44 22456885.61 22456885.79 0.0506 0.0258

Saturn 56775-04-09 19:12 G 22457801.09 22457801.30 22457801.52 0.0289 0.0028

Saturn 56775-11-25 14:53 G 22458031.02 22458031.12 22458031.23 0.0287 0.0245

Jupiter 56778-08-01 20:53 G 22459011.28 22459011.37 22459011.46 0.0515 0.0459

Mars 56782-12-24 04:19 G 22460616.61 22460616.68 22460616.75 0.1610 0.1462

Jupiter 56784-06-11 02:38 G 22461151.40 22461151.61 22461151.81 0.0508 0.0004

Uranus 56784-09-09 09:36 G 22461241.80 22461241.90 22461242.00 0.0138 0.0121

Uranus 56785-04-23 17:17 G 22461468.07 22461468.22 22461468.40 0.0138 0.0090

Uranus 56785-12-06 01:26 G 22461694.37 22461694.56 22461694.77 0.0138 0.0057

Uranus 56786-07-20 09:36 G 22461920.69 22461920.90 22461921.12 0.0138 0.0026

Uranus 56787-03-03 17:17 G 22462147.01 22462147.22 22462147.44 0.0138 0.0007

Uranus 56787-10-16 00:58 G 22462373.33 22462373.54 22462373.75 0.0137 0.0037

Uranus 56788-05-29 08:24 G 22462599.66 22462599.85 22462600.04 0.0137 0.0069

Uranus 56789-01-10 15:50 G 22462826.01 22462826.16 22462826.31 0.0137 0.0099

Uranus 56789-08-24 23:02 G 22463052.40 22463052.46 22463052.53 0.0137 0.0130

Saturn 56790-05-02 08:24 G 22463302.73 22463302.85 22463303.00 0.0270 0.0206

Jupiter 56790-11-29 22:19 G 22463514.26 22463514.43 22463514.61 0.0522 0.0267

Saturn 56790-12-17 12:29 G 22463531.81 22463532.02 22463532.23 0.0271 0.0018

Saturn 56791-08-03 17:17 G 22463761.15 22463761.22 22463761.32 0.0273 0.0247

Pluto 56795-05-16 17:31 G 22465143.09 22465143.23 22465143.40 0.0063 0.0044

Pluto 56795-12-27 21:36 G 22465368.18 22465368.40 22465368.62 0.0063 0.0009

Jupiter 56796-02-15 00:29 G 22465417.35 22465417.52 22465417.70 0.0510 0.0259

Pluto 56796-08-09 00:58 G 22465593.36 22465593.54 22465593.76 0.0063 0.0028

Pluto 56797-03-22 05:02 G 22465818.71 22465818.71 22465818.72 0.0064 0.0064

Jupiter 56802-08-04 18:29 G 22467780.06 22467780.27 22467780.47 0.0520 0.0014

Saturn 56804-03-03 21:36 G 22468357.37 22468357.40 22468357.44 0.0291 0.0286

Saturn 56804-10-19 18:43 G 22468587.07 22468587.28 22468587.49 0.0289 0.0007

Saturn 56805-06-06 14:10 G 22468817.02 22468817.09 22468817.17 0.0287 0.0266

Jupiter 56808-06-13 16:34 G 22469920.08 22469920.19 22469920.30 0.0504 0.0414

Neptune 56812-02-14 20:53 G 22471261.33 22471261.37 22471261.47 0.0088 0.0084

Neptune 56812-09-27 10:34 G 22471486.83 22471486.94 22471487.04 0.0088 0.0077

Neptune 56813-05-10 23:17 G 22471712.34 22471712.47 22471712.60 0.0088 0.0071

Neptune 56813-12-22 12:00 G 22471937.86 22471938.00 22471938.16 0.0088 0.0065

Jupiter 56814-04-09 14:24 G 22472045.93 22472046.10 22472046.27 0.0517 0.0286

Neptune 56814-08-05 00:43 G 22472163.38 22472163.53 22472163.71 0.0088 0.0059

Mars 56814-12-22 19:26 G 22472303.15 22472303.31 22472303.47 0.1610 0.0692

Neptune 56815-03-18 13:41 G 22472388.91 22472389.07 22472389.26 0.0088 0.0052

Neptune 56815-10-30 02:24 G 22472614.43 22472614.60 22472614.81 0.0088 0.0046

Neptune 56816-06-11 15:36 G 22472839.96 22472840.15 22472840.35 0.0088 0.0040

Neptune 56817-01-23 04:19 G 22473065.49 22473065.68 22473065.90 0.0088 0.0034

Neptune 56817-09-05 17:17 G 22473291.02 22473291.22 22473291.44 0.0088 0.0027

Neptune 56818-04-19 06:00 G 22473516.55 22473516.75 22473516.98 0.0088 0.0021

Neptune 56818-11-30 19:12 G 22473742.08 22473742.30 22473742.52 0.0088 0.0014

Neptune 56819-07-14 07:55 G 22473967.61 22473967.83 22473968.05 0.0088 0.0008

Saturn 56819-11-12 10:34 G 22474088.78 22474088.94 22474089.09 0.0270 0.0181

Jupiter 56820-02-17 14:24 G 22474185.90 22474186.10 22474186.29 0.0506 0.0155

Neptune 56820-02-24 21:07 G 22474193.16 22474193.38 22474193.60 0.0088 0.0002

Saturn 56820-06-28 14:24 G 22474317.90 22474318.10 22474318.31 0.0272 0.0044

Neptune 56820-10-07 09:50 G 22474418.69 22474418.91 22474419.13 0.0088 0.0005

Saturn 56821-02-12 19:55 G 22474547.33 22474547.33 22474547.33 0.0274 0.0274

Neptune 56821-05-20 22:34 G 22474644.23 22474644.44 22474644.67 0.0088 0.0011

Neptune 56822-01-01 11:31 G 22474869.76 22474869.98 22474870.20 0.0088 0.0017

Neptune 56822-08-15 00:00 G 22475095.30 22475095.50 22475095.73 0.0088 0.0024

Neptune 56823-03-28 12:58 G 22475320.85 22475321.04 22475321.26 0.0088 0.0030

Neptune 56823-11-09 01:55 G 22475546.39 22475546.58 22475546.79 0.0088 0.0036

Neptune 56824-06-21 14:38 G 22475771.93 22475772.11 22475772.31 0.0088 0.0042

Neptune 56825-02-02 03:07 G 22475997.47 22475997.63 22475997.84 0.0088 0.0049

Neptune 56825-09-15 16:05 G 22476223.01 22476223.17 22476223.36 0.0088 0.0055

Neptune 56826-04-29 04:48 G 22476448.56 22476448.70 22476448.87 0.0088 0.0061

Jupiter 56826-08-07 16:05 G 22476549.06 22476549.17 22476549.27 0.0523 0.0443

Neptune 56826-12-10 17:31 G 22476674.10 22476674.23 22476674.39 0.0088 0.0067

Neptune 56827-07-24 06:14 G 22476899.65 22476899.76 22476899.90 0.0088 0.0073

Neptune 56828-03-05 18:58 G 22477125.22 22477125.29 22477125.41 0.0088 0.0079

Uranus 56828-09-04 07:12 G 22477307.70 22477307.80 22477307.94 0.0140 0.0117

Neptune 56828-10-17 07:41 G 22477350.79 22477350.82 22477350.90 0.0088 0.0085

Uranus 56829-04-18 16:34 G 22477534.03 22477534.19 22477534.38 0.0140 0.0084

Uranus 56829-12-01 02:10 G 22477760.39 22477760.59 22477760.80 0.0140 0.0050

Uranus 56830-07-15 11:46 G 22477986.77 22477986.99 22477987.21 0.0140 0.0017

Uranus 56831-02-26 21:22 G 22478213.18 22478213.39 22478213.61 0.0141 0.0017

Uranus 56831-10-11 06:58 G 22478439.60 22478439.79 22478440.00 0.0141 0.0051

Jupiter 56831-10-23 12:58 G 22478451.85 22478452.04 22478452.25 0.0509 0.0106

Uranus 56832-05-24 16:48 G 22478666.04 22478666.20 22478666.39 0.0141 0.0085

Uranus 56833-01-06 02:53 G 22478892.52 22478892.62 22478892.75 0.0141 0.0119

Saturn 56833-09-14 04:34 G 22479143.58 22479143.69 22479143.81 0.0290 0.0243

Saturn 56834-05-02 01:41 G 22479373.36 22479373.57 22479373.78 0.0289 0.0036

Jupiter 56838-04-12 06:58 G 22480814.60 22480814.79 22480814.99 0.0521 0.0149

Jupiter 56843-06-28 11:46 G 22482717.85 22482717.99 22482718.14 0.0511 0.0365

Mars 56847-11-21 22:48 G 22484325.41 22484325.45 22484325.49 0.1915 0.1848

Saturn 56849-05-24 14:24 G 22484874.93 22484875.10 22484875.28 0.0270 0.0148

Jupiter 56849-12-16 02:38 G 22485080.41 22485080.61 22485080.80 0.0518 0.0129

Saturn 56850-01-08 18:14 G 22485104.06 22485104.26 22485104.47 0.0271 0.0077

Jupiter 56855-10-26 05:31 G 22487220.57 22487220.73 22487220.89 0.0505 0.0317

Jupiter 56861-08-20 23:46 G 22489346.36 22489346.49 22489346.62 0.0516 0.0397

Saturn 56863-03-27 04:05 G 22489929.54 22489929.67 22489929.81 0.0290 0.0223

Saturn 56863-11-12 00:58 G 22490159.33 22490159.54 22490159.75 0.0289 0.0056

Jupiter 56867-07-01 04:05 G 22491486.46 22491486.67 22491486.87 0.0507 0.0060

Moon 56867-10-14 11:31 G 22491591.89 22491591.98 22491592.08 0.2678 0.2216

Earth 56867-10-14 14:24 G 22491592.06 22491592.10 22491592.15 0.2683 0.2576 *

Uranus 56868-05-09 16:34 G 22491800.16 22491800.19 22491800.25 0.0139 0.0136

Uranus 56868-12-22 00:58 G 22492026.40 22492026.54 22492026.69 0.0138 0.0104

Uranus 56869-08-05 08:53 G 22492252.70 22492252.87 22492253.07 0.0138 0.0072

Uranus 56870-03-19 17:02 G 22492479.01 22492479.21 22492479.43 0.0138 0.0040

Uranus 56870-11-01 00:58 G 22492705.32 22492705.54 22492705.76 0.0138 0.0008

Uranus 56871-06-15 08:38 G 22492931.65 22492931.86 22492932.08 0.0137 0.0024

Uranus 56872-01-27 16:05 G 22493157.98 22493158.17 22493158.38 0.0137 0.0055

Uranus 56872-09-09 23:31 G 22493384.33 22493384.48 22493384.66 0.0137 0.0086

Uranus 56873-04-24 06:43 G 22493610.69 22493610.78 22493610.91 0.0137 0.0117

Jupiter 56873-12-19 01:55 G 22493849.42 22493849.58 22493849.74 0.0522 0.0329

Moon 56875-10-11 23:31 G 22494511.37 22494511.48 22494511.60 0.2681 0.1880

Earth 56875-10-12 05:02 G 22494511.56 22494511.71 22494511.85 0.2682 0.1003 *

Saturn 56878-12-04 15:36 G 22495660.96 22495661.15 22495661.34 0.0271 0.0125

Jupiter 56879-03-06 00:29 G 22495752.34 22495752.52 22495752.71 0.0510 0.0209

Saturn 56879-07-21 19:41 G 22495890.13 22495890.32 22495890.52 0.0272 0.0101

Mars 56880-10-19 08:38 G 22496345.69 22496345.86 22496346.02 0.1610 0.0457

Pluto 56885-07-01 12:29 G 22498062.00 22498062.02 22498062.04 0.0081 0.0081

Jupiter 56885-08-23 20:10 G 22498115.14 22498115.34 22498115.54 0.0520 0.0046

Pluto 56886-02-11 23:31 G 22498287.26 22498287.48 22498287.70 0.0081 0.0004

Pluto 56886-09-25 10:05 G 22498512.83 22498512.92 22498513.03 0.0081 0.0071

Jupiter 56890-11-08 22:05 G 22500018.34 22500018.42 22500018.50 0.0512 0.0473

Jupiter 56891-07-03 17:31 G 22500255.16 22500255.23 22500255.31 0.0504 0.0464

Saturn 56892-10-06 09:50 G 22500715.76 22500715.91 22500716.09 0.0290 0.0183

Saturn 56893-05-24 06:58 G 22500945.59 22500945.79 22500945.99 0.0288 0.0096

Neptune 56894-11-12 11:02 G 22501482.94 22501482.96 22501483.03 0.0089 0.0087

Neptune 56895-06-26 00:00 G 22501708.44 22501708.50 22501708.62 0.0089 0.0081

Neptune 56896-02-06 13:41 G 22501933.96 22501934.07 22501934.20 0.0089 0.0075

Neptune 56896-09-19 02:38 G 22502159.49 22502159.61 22502159.77 0.0089 0.0068

Jupiter 56897-04-28 12:14 G 22502380.83 22502381.01 22502381.19 0.0517 0.0240

Neptune 56897-05-02 15:50 G 22502385.02 22502385.16 22502385.33 0.0089 0.0062

Neptune 56897-12-14 05:17 G 22502610.55 22502610.72 22502610.89 0.0089 0.0056

Neptune 56898-07-27 18:14 G 22502836.09 22502836.26 22502836.46 0.0089 0.0050

Neptune 56899-03-10 07:26 G 22503061.64 22503061.81 22503062.02 0.0089 0.0043

Neptune 56899-10-21 20:53 G 22503287.18 22503287.37 22503287.58 0.0089 0.0036

Neptune 56900-06-04 09:50 G 22503512.72 22503512.91 22503513.13 0.0089 0.0030

Neptune 56901-01-15 23:17 G 22503738.26 22503738.47 22503738.68 0.0089 0.0023

Neptune 56901-08-29 12:29 G 22503963.81 22503964.02 22503964.24 0.0089 0.0017

Neptune 56902-04-12 01:41 G 22504189.36 22504189.57 22504189.79 0.0089 0.0011

Neptune 56902-11-23 14:53 G 22504414.90 22504415.12 22504415.34 0.0089 0.0004

Jupiter 56903-03-09 18:00 G 22504521.07 22504521.25 22504521.44 0.0506 0.0218

Neptune 56903-07-07 04:05 G 22504640.45 22504640.67 22504640.89 0.0089 0.0003

Neptune 56904-02-17 17:17 G 22504866.00 22504866.22 22504866.44 0.0089 0.0009

Neptune 56904-09-30 06:29 G 22505091.56 22505091.77 22505091.99 0.0089 0.0016

Neptune 56905-05-13 19:26 G 22505317.11 22505317.31 22505317.53 0.0089 0.0023

Neptune 56905-12-25 08:53 G 22505542.66 22505542.87 22505543.08 0.0089 0.0029

Neptune 56906-08-07 21:50 G 22505768.22 22505768.41 22505768.63 0.0089 0.0036

Neptune 56907-03-21 11:17 G 22505993.78 22505993.97 22505994.17 0.0089 0.0042

Neptune 56907-11-02 00:14 G 22506219.35 22506219.51 22506219.72 0.0089 0.0049

Neptune 56908-06-14 13:41 G 22506444.91 22506445.07 22506445.26 0.0089 0.0055

Saturn 56908-06-16 19:55 G 22506447.13 22506447.33 22506447.53 0.0270 0.0092

Jupiter 56909-01-02 08:53 G 22506646.84 22506646.87 22506646.90 0.0515 0.0507

Neptune 56909-01-26 02:38 G 22506670.48 22506670.61 22506670.80 0.0089 0.0062

Saturn 56909-02-01 00:00 G 22506676.32 22506676.50 22506676.69 0.0272 0.0134

Jupiter 56909-08-27 15:07 G 22506884.07 22506884.13 22506884.20 0.0524 0.0491

Neptune 56909-09-08 16:19 G 22506896.05 22506896.18 22506896.34 0.0089 0.0068

Neptune 56910-04-22 05:46 G 22507121.63 22507121.74 22507121.87 0.0089 0.0074

Neptune 56910-12-03 18:43 G 22507347.21 22507347.28 22507347.40 0.0089 0.0081

Neptune 56911-07-17 08:10 G 22507572.81 22507572.84 22507572.91 0.0089 0.0087

Uranus 56912-05-05 14:38 G 22507866.05 22507866.11 22507866.20 0.0140 0.0131

Uranus 56912-12-18 00:00 G 22508092.36 22508092.50 22508092.67 0.0140 0.0098

Uranus 56913-08-01 09:22 G 22508318.71 22508318.89 22508319.09 0.0140 0.0065

Mars 56913-09-19 00:00 G 22508367.35 22508367.50 22508367.66 0.1915 0.0887

Uranus 56914-03-15 18:58 G 22508545.08 22508545.29 22508545.50 0.0140 0.0032

Uranus 56914-10-28 04:34 G 22508771.47 22508771.69 22508771.91 0.0140 0.0002

Jupiter 56914-11-12 16:34 G 22508786.98 22508787.19 22508787.39 0.0508 0.0042

Uranus 56915-06-11 14:24 G 22508997.89 22508998.10 22508998.31 0.0141 0.0036

Uranus 56916-01-24 00:14 G 22509224.32 22509224.51 22509224.70 0.0141 0.0070

Uranus 56916-09-06 10:05 G 22509450.78 22509450.92 22509451.07 0.0141 0.0104

Uranus 56917-04-20 19:55 G 22509677.31 22509677.33 22509677.39 0.0141 0.0139

Jupiter 56921-05-02 10:34 G 22511149.76 22511149.94 22511150.13 0.0521 0.0213

Saturn 56922-04-19 09:36 G 22511501.73 22511501.90 22511502.08 0.0290 0.0162

Saturn 56922-12-05 06:29 G 22511731.57 22511731.77 22511731.96 0.0289 0.0117

Jupiter 56926-07-18 13:55 G 22513052.92 22513053.08 22513053.25 0.0511 0.0305

Jupiter 56933-01-05 06:14 G 22515415.56 22515415.76 22515415.97 0.0519 0.0066

Saturn 56937-12-27 20:24 G 22517233.15 22517233.35 22517233.56 0.0271 0.0069

Saturn 56938-08-14 00:43 G 22517462.37 22517462.53 22517462.71 0.0272 0.0158

Jupiter 56938-11-15 05:46 G 22517555.61 22517555.74 22517555.89 0.0505 0.0366

Jupiter 56944-09-10 01:55 G 22519681.43 22519681.58 22519681.73 0.0516 0.0338

Mars 56946-08-17 21:22 G 22520388.22 22520388.39 22520388.56 0.1610 0.0213

Jupiter 56950-07-21 05:02 G 22521821.52 22521821.71 22521821.91 0.0507 0.0112

Saturn 56951-10-30 15:36 G 22522287.96 22522288.15 22522288.35 0.0290 0.0122

Saturn 56952-06-16 12:00 G 22522517.83 22522518.00 22522518.19 0.0288 0.0155

Uranus 56952-08-22 09:07 G 22522584.78 22522584.88 22522585.00 0.0138 0.0117

Uranus 56953-04-05 17:17 G 22522811.06 22522811.22 22522811.40 0.0138 0.0085

Uranus 56953-11-18 01:26 G 22523037.36 22523037.56 22523037.76 0.0138 0.0053

Uranus 56954-07-02 09:22 G 22523263.68 22523263.89 22523264.11 0.0138 0.0022

Uranus 56955-02-13 17:17 G 22523490.00 22523490.22 22523490.44 0.0138 0.0010

Uranus 56955-09-28 00:58 G 22523716.33 22523716.54 22523716.75 0.0137 0.0041

Uranus 56956-05-11 08:10 G 22523942.67 22523942.84 22523943.03 0.0137 0.0073

Uranus 56956-12-23 15:22 G 22524169.02 22524169.14 22524169.30 0.0137 0.0104

Jupiter 56957-01-07 23:46 G 22524184.36 22524184.49 22524184.64 0.0522 0.0375

Uranus 56957-08-06 23:02 G 22524395.43 22524395.46 22524395.51 0.0137 0.0134

Jupiter 56962-03-26 04:19 G 22526087.48 22526087.68 22526087.87 0.0510 0.0144

Saturn 56966-11-22 22:19 G 22527790.37 22527790.43 22527790.49 0.0269 0.0256

Saturn 56967-07-10 01:41 G 22528019.36 22528019.57 22528019.78 0.0270 0.0036

Saturn 56968-02-24 06:00 G 22528248.60 22528248.75 22528248.90 0.0272 0.0191

Jupiter 56968-09-12 18:58 G 22528450.09 22528450.29 22528450.49 0.0520 0.0095

Jupiter 56973-11-29 01:26 G 22530353.44 22530353.56 22530353.69 0.0512 0.0408

Neptune 56975-10-06 19:12 G 22531030.29 22531030.30 22531030.34 0.0088 0.0088

Neptune 56976-05-19 08:10 G 22531255.77 22531255.84 22531255.94 0.0088 0.0082

Neptune 56976-12-30 21:07 G 22531481.28 22531481.38 22531481.51 0.0088 0.0076

Neptune 56977-08-13 10:05 G 22531706.80 22531706.92 22531707.07 0.0088 0.0070

Neptune 56978-03-26 23:02 G 22531932.32 22531932.46 22531932.63 0.0088 0.0063

Neptune 56978-11-07 11:46 G 22532157.84 22532157.99 22532158.18 0.0088 0.0058

Neptune 56979-06-21 00:43 G 22532383.37 22532383.53 22532383.73 0.0088 0.0051

Mars 56979-07-17 02:24 G 22532409.42 22532409.60 22532409.78 0.1915 0.0035

Neptune 56980-02-01 13:41 G 22532608.90 22532609.07 22532609.28 0.0088 0.0045

Jupiter 56980-05-18 15:22 G 22532715.95 22532716.14 22532716.33 0.0518 0.0178

Neptune 56980-09-14 02:53 G 22532834.43 22532834.62 22532834.82 0.0088 0.0039

Neptune 56981-04-27 15:36 G 22533059.95 22533060.15 22533060.36 0.0088 0.0032

Saturn 56981-05-11 15:36 G 22533073.95 22533074.15 22533074.35 0.0290 0.0100

Neptune 56981-12-09 04:19 G 22533285.48 22533285.68 22533285.90 0.0088 0.0026

Saturn 56981-12-27 11:46 G 22533303.83 22533303.99 22533304.17 0.0288 0.0177

Neptune 56982-07-22 17:17 G 22533511.01 22533511.22 22533511.44 0.0088 0.0020

Neptune 56983-03-05 06:29 G 22533736.55 22533736.77 22533736.99 0.0088 0.0014

Neptune 56983-10-16 19:12 G 22533962.08 22533962.30 22533962.52 0.0088 0.0007

Neptune 56984-05-29 08:10 G 22534187.62 22534187.84 22534188.06 0.0088 0.0001

Neptune 56985-01-09 20:53 G 22534413.15 22534413.37 22534413.59 0.0088 0.0005

Neptune 56985-08-23 09:36 G 22534638.69 22534638.90 22534639.13 0.0088 0.0012

Jupiter 56986-03-28 19:41 G 22534856.15 22534856.32 22534856.50 0.0506 0.0272

Neptune 56986-04-05 22:34 G 22534864.23 22534864.44 22534864.67 0.0088 0.0018

Neptune 56986-11-17 11:31 G 22535089.77 22535089.98 22535090.20 0.0088 0.0024

Neptune 56987-07-01 00:29 G 22535315.31 22535315.52 22535315.73 0.0088 0.0030

Neptune 56988-02-11 12:58 G 22535540.86 22535541.04 22535541.26 0.0088 0.0037

Neptune 56988-09-24 01:55 G 22535766.40 22535766.58 22535766.78 0.0088 0.0043

Neptune 56989-05-07 14:38 G 22535991.94 22535992.11 22535992.31 0.0088 0.0049

Neptune 56989-12-19 03:22 G 22536217.48 22536217.64 22536217.83 0.0088 0.0055

Neptune 56990-08-01 16:05 G 22536443.03 22536443.17 22536443.35 0.0088 0.0061

Neptune 56991-03-15 05:02 G 22536668.59 22536668.71 22536668.87 0.0088 0.0067

Neptune 56991-10-26 17:46 G 22536894.14 22536894.24 22536894.38 0.0088 0.0073

Jupiter 56992-01-22 12:29 G 22536981.92 22536982.02 22536982.12 0.0515 0.0445

Neptune 56992-06-08 06:29 G 22537119.69 22537119.77 22537119.88 0.0088 0.0079

Neptune 56993-01-19 18:58 G 22537345.26 22537345.29 22537345.37 0.0088 0.0085

Saturn 56996-06-03 22:19 G 22538576.34 22538576.43 22538576.55 0.0270 0.0235

Uranus 56996-08-17 07:41 G 22538650.70 22538650.82 22538650.96 0.0140 0.0112

Saturn 56997-01-19 02:10 G 22538805.37 22538805.59 22538805.80 0.0271 0.0013

Uranus 56997-03-31 17:02 G 22538877.03 22538877.21 22538877.39 0.0140 0.0079

Saturn 56997-09-05 06:43 G 22539034.65 22539034.78 22539034.91 0.0273 0.0215

Uranus 56997-11-13 02:10 G 22539103.40 22539103.59 22539103.81 0.0140 0.0046

Jupiter 56997-12-01 16:48 G 22539122.00 22539122.20 22539122.41 0.0508 0.0010

Uranus 56998-06-27 12:00 G 22539329.78 22539330.00 22539330.22 0.0140 0.0012

Uranus	**56999-02-08 21:36**	**G**	**22539556.19**	**22539556.40**	**22539556.62**	**0.0141**	**0.0022**	
Uranus	**56999-09-23 07:12**	**G**	**22539782.61**	**22539782.80**	**22539783.01**	**0.0141**	**0.0056**	
Uranus	**57000-05-07 17:02**	**G**	**22540009.06**	**22540009.21**	**22540009.39**	**0.0141**	**0.0090**	
Uranus	**57000-12-20 03:07**	**G**	**22540235.54**	**22540235.63**	**22540235.75**	**0.0141**	**0.0124**	

58TH MILLENNIUM CE

This is a list of transits of Venus in the 58th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**57004-05-22 12:29**	**G**	**22541484.85**	**22541485.02**	**22541485.20**	**0.0521**	**0.0271**	
Jupiter	**57009-08-07 14:53**	**G**	**22543387.94**	**22543388.12**	**22543388.29**	**0.0511**	**0.0252**	
Saturn	**57010-11-22 21:22**	**G**	**22543860.18**	**22543860.39**	**22543860.60**	**0.0289**	**0.0061**	
Saturn	**57011-07-10 17:31**	**G**	**22544090.10**	**22544090.23**	**22544090.38**	**0.0288**	**0.0215**	
Mars	**57012-06-15 10:19**	**G**	**22544430.75**	**22544430.93**	**22544431.10**	**0.1610**	**0.0044**	
Earth	**57013-04-12 10:05**	**G**	**22544731.76**	**22544731.92**	**22544732.08**	**0.2650**	**0.0225**	
Moon	**57013-04-12 14:10**	**G**	**22544731.94**	**22544732.09**	**22544732.24**	**0.2654**	**0.0165**	*****
Jupiter	**57016-01-26 04:19**	**G**	**22545750.48**	**22545750.68**	**22545750.89**	**0.0518**	**0.0020**	
Jupiter	**57021-12-05 08:53**	**G**	**22547890.76**	**22547890.87**	**22547890.98**	**0.0505**	**0.0425**	
Saturn	**57025-12-16 04:05**	**G**	**22549362.54**	**22549362.67**	**22549362.82**	**0.0270**	**0.0201**	
Saturn	**57026-08-02 07:41**	**G**	**22549591.61**	**22549591.82**	**22549592.03**	**0.0271**	**0.0023**	
Saturn	**57027-03-19 12:14**	**G**	**22549820.94**	**22549821.01**	**22549821.10**	**0.0272**	**0.0250**	
Jupiter	**57027-10-01 00:14**	**G**	**22550016.35**	**22550016.51**	**22550016.68**	**0.0516**	**0.0290**	
Jupiter	**57033-08-10 07:41**	**G**	**22552156.63**	**22552156.82**	**22552157.02**	**0.0507**	**0.0172**	
Uranus	**57036-04-22 17:46**	**G**	**22553143.19**	**22553143.24**	**22553143.33**	**0.0139**	**0.0131**	

Uranus 57036-12-05 02:10 G 22553369.45 22553369.59 22553369.75 0.0138 0.0099

Uranus 57037-07-19 10:34 G 22553595.75 22553595.94 22553596.13 0.0138 0.0066

Uranus 57038-03-02 18:29 G 22553822.06 22553822.27 22553822.49 0.0138 0.0035

Uranus 57038-10-15 02:24 G 22554048.38 22554048.60 22554048.82 0.0138 0.0003

Uranus 57039-05-29 09:50 G 22554274.71 22554274.91 22554275.13 0.0137 0.0029

Uranus 57040-01-10 17:31 G 22554501.04 22554501.23 22554501.43 0.0137 0.0060

Jupiter 57040-01-29 02:38 G 22554519.51 22554519.61 22554519.73 0.0523 0.0435

Saturn 57040-06-03 22:48 G 22554646.24 22554646.45 22554646.67 0.0290 0.0036

Uranus 57040-08-24 00:58 G 22554727.38 22554727.54 22554727.71 0.0137 0.0091

Saturn 57041-01-19 18:43 G 22554876.17 22554876.28 22554876.40 0.0288 0.0239

Uranus 57041-04-07 08:10 G 22554953.75 22554953.84 22554953.94 0.0137 0.0122

Pluto 57041-06-16 00:29 G 22555023.40 22555023.52 22555023.70 0.0063 0.0046

Pluto 57042-01-27 04:48 G 22555248.48 22555248.70 22555248.92 0.0063 0.0011

Pluto 57042-09-09 08:10 G 22555473.65 22555473.84 22555474.06 0.0063 0.0025

Pluto 57043-04-22 11:46 G 22555698.96 22555698.99 22555699.07 0.0064 0.0062

Jupiter 57045-04-15 05:46 G 22556422.54 22556422.74 22556422.95 0.0509 0.0088

Mars 57045-05-14 03:22 G 22556451.50 22556451.64 22556451.79 0.1915 0.1017

Jupiter 57051-10-03 22:05 G 22558785.23 22558785.42 22558785.62 0.0520 0.0157

Saturn 57055-06-28 04:34 G 22560148.54 22560148.69 22560148.86 0.0270 0.0178

Saturn 57056-02-12 08:24 G 22560377.64 22560377.85 22560378.06 0.0271 0.0046

Jupiter 57056-12-19 01:41 G 22560688.43 22560688.57 22560688.72 0.0512 0.0356

Neptune 57059-02-15 22:19 G 22561477.38 22561477.43 22561477.50 0.0089 0.0085

Neptune 57059-09-29 11:17 G 22561702.89 22561702.97 22561703.09 0.0089 0.0080

Neptune 57060-05-12 00:29 G 22561928.41 22561928.52 22561928.66 0.0089 0.0073

Neptune 57060-12-23 13:26 G 22562153.93 22562154.06 22562154.22 0.0089 0.0067

Neptune 57061-08-06 02:38 G 22562379.47 22562379.61 22562379.79 0.0089 0.0061

Neptune 57062-03-19 16:05 G 22562605.01 22562605.17 22562605.35 0.0089 0.0054

Neptune 57062-10-31 05:02 G 22562830.54 22562830.71 22562830.91 0.0089 0.0049

Jupiter 57063-06-08 17:02 G 22563051.01 22563051.21 22563051.41 0.0518 0.0121

Neptune 57063-06-13 18:14 G 22563056.08 22563056.26 22563056.47 0.0089 0.0042

Neptune 57064-01-25 07:41 G 22563281.62 22563281.82 22563282.03 0.0089 0.0035

Neptune 57064-09-06 20:53 G 22563507.17 22563507.37 22563507.59 0.0089 0.0029

Neptune 57065-04-20 10:19 G 22563732.72 22563732.93 22563733.14 0.0089 0.0022

Neptune 57065-12-01 23:17 G 22563958.26 22563958.47 22563958.69 0.0089 0.0016

Neptune 57066-07-15 12:43 G 22564183.81 22564184.03 22564184.25 0.0089 0.0010

Neptune 57067-02-26 01:55 G 22564409.36 22564409.58 22564409.80 0.0089 0.0003

Neptune 57067-10-09 15:07 G 22564634.91 22564635.13 22564635.35 0.0089 0.0003

Neptune 57068-05-22 04:05 G 22564860.46 22564860.67 22564860.89 0.0089 0.0010

Neptune 57069-01-02 17:17 G 22565086.01 22565086.22 22565086.44 0.0089 0.0016

Jupiter 57069-04-17 19:55 G 22565191.18 22565191.33 22565191.49 0.0506 0.0321

Saturn 57069-04-29 06:58 G 22565202.74 22565202.79 22565202.86 0.0291 0.0277

Neptune 57069-08-16 06:29 G 22565311.57 22565311.77 22565311.99 0.0089 0.0023

Saturn 57069-12-15 04:34 G 22565432.48 22565432.69 22565432.90 0.0289 0.0004

Neptune 57070-03-29 19:26 G 22565537.12 22565537.31 22565537.54 0.0089 0.0030

Saturn 57070-08-02 00:14 G 22565662.46 22565662.51 22565662.58 0.0287 0.0276

Neptune 57070-11-10 08:53 G 22565762.67 22565762.87 22565763.08 0.0089 0.0036

Neptune 57071-06-23 22:05 G 22565988.23 22565988.42 22565988.62 0.0089 0.0042

Neptune 57072-02-04 11:02 G 22566213.79 22566213.96 22566214.16 0.0089 0.0049

Neptune 57072-09-17 00:29 G 22566439.36 22566439.52 22566439.70 0.0089 0.0055

Neptune 57073-04-30 13:26 G 22566664.92 22566665.06 22566665.24 0.0089 0.0062

Neptune 57073-12-12 02:38 G 22566890.49 22566890.61 22566890.78 0.0089 0.0068

Neptune 57074-07-25 16:05 G 22567116.06 22567116.17 22567116.31 0.0089 0.0074

Jupiter 57075-02-11 10:19 G 22567316.81 22567316.93 22567317.06 0.0515 0.0397

Neptune 57075-03-08 05:31 G 22567341.65 22567341.73 22567341.84 0.0089 0.0080

Neptune 57075-10-19 18:29 G 22567567.24 22567567.27 22567567.36 0.0089 0.0087

Mars 57078-04-12 23:17 G 22568473.30 22568473.47 22568473.64 0.1611 0.0267

Uranus 57080-04-17 14:24 G 22569209.03 22569209.10 22569209.21 0.0140 0.0127

Uranus 57080-11-29 23:46 G 22569435.34 22569435.49 22569435.66 0.0140 0.0094

Jupiter 57080-12-21 18:43 G 22569457.08 22569457.28 22569457.49 0.0508 0.0069

Uranus 57081-07-14 09:07 G 22569661.69 22569661.88 22569662.09 0.0140 0.0061

Uranus 57082-02-25 18:43 G 22569888.07 22569888.28 22569888.50 0.0140 0.0027

Uranus 57082-10-10 04:19 G 22570114.46 22570114.68 22570114.90 0.0141 0.0007

Uranus 57083-05-24 13:55 G 22570340.88 22570341.08 22570341.29 0.0141 0.0041

Uranus 57084-01-05 23:46 G 22570567.32 22570567.49 22570567.68 0.0141 0.0075

Uranus 57084-08-19 09:36 G 22570793.78 22570793.90 22570794.05 0.0141 0.0110

Saturn 57085-01-07 11:17 G 22570934.79 22570934.97 22570935.15 0.0270 0.0142

Saturn 57085-08-24 15:22 G 22571163.94 22571164.14 22571164.34 0.0271 0.0083

Jupiter 57087-06-11 10:19 G 22571819.77 22571819.93 22571820.10 0.0521 0.0315

Jupiter 57092-08-26 16:34 G 22573723.00 22573723.19 22573723.38 0.0511 0.0193

Saturn 57098-11-09 10:05 G 22575988.83 22575988.92 22575989.04 0.0291 0.0249

Jupiter 57099-02-14 06:00 G 22576085.55 22576085.75 22576085.95 0.0519 0.0039

Saturn 57099-06-27 07:26 G 22576218.60 22576218.81 22576219.02 0.0289 0.0031

Jupiter 57104-05-02 13:26 G 22577988.97 22577989.06 22577989.15 0.0513 0.0458

Jupiter 57104-12-25 09:22 G 22578225.83 22578225.89 22578225.96 0.0504 0.0474

Earth 57110-10-17 14:53 G 22580348.07 22580348.12 22580348.18 0.2682 0.2510

Jupiter 57110-10-21 02:24 G 22580351.42 22580351.60 22580351.78 0.0517 0.0232

Saturn 57114-07-21 12:00 G 22581720.81 22581721.00 22581721.19 0.0270 0.0118

Saturn 57115-03-07 16:05 G 22581949.98 22581950.17 22581950.37 0.0272 0.0107

Jupiter 57116-08-30 06:58 G 22582491.61 22582491.79 22582491.98 0.0507 0.0218

Earth 57118-10-15 05:17 G 22583267.57 22583267.72 22583267.86 0.2681 0.1081

Moon 57118-10-15 09:50 G 22583267.76 22583267.91 22583268.06 0.2686 0.0493 *

Uranus 57120-08-05 11:31 G 22583927.87 22583927.98 22583928.12 0.0138 0.0112

Uranus 57121-03-19 19:55 G 22584154.16 22584154.33 22584154.51 0.0138 0.0079

Uranus 57121-11-01 04:05 G 22584380.46 22584380.67 22584380.87 0.0138 0.0047

Uranus 57122-06-15 11:46 G 22584606.78 22584606.99 22584607.21 0.0138 0.0016

Jupiter 57122-06-25 22:34 G 22584617.40 22584617.44 22584617.50 0.0514 0.0497

Uranus 57123-01-27 19:41 G 22584833.11 22584833.32 22584833.54 0.0137 0.0016

Jupiter 57123-02-18 03:50 G 22584854.60 22584854.66 22584854.74 0.0523 0.0488

Uranus 57123-09-11 03:07 G 22585059.43 22585059.63 22585059.84 0.0137 0.0048

Uranus 57124-04-24 10:34 G 22585285.77 22585285.94 22585286.12 0.0137 0.0079

Uranus 57124-12-06 17:46 G 22585512.12 22585512.24 22585512.38 0.0137 0.0110

Jupiter 57128-05-05 05:02 G 22586757.51 22586757.71 22586757.91 0.0509 0.0040

Saturn 57128-05-22 16:34 G 22586775.05 22586775.19 22586775.34 0.0290 0.0209

Saturn 57129-01-07 13:41 G 22587004.86 22587005.07 22587005.28 0.0289 0.0070

Pluto 57131-08-02 20:24 G 22587942.32 22587942.35 22587942.41 0.0081 0.0080

Pluto 57132-03-15 07:41 G 22588167.60 22588167.82 22588168.04 0.0081 0.0003

Pluto 57132-10-26 18:14 G 22588393.17 22588393.26 22588393.37 0.0081 0.0072

Jupiter 57134-10-23 19:26 G 22589120.12 22589120.31 22589120.50 0.0520 0.0200

Jupiter 57140-01-09 02:10 G 22591023.42 22591023.59 22591023.75 0.0512 0.0303

Neptune 57140-01-10 05:46 G 22591024.72 22591024.74 22591024.81 0.0088 0.0087

Neptune 57140-08-22 18:43 G 22591250.22 22591250.28 22591250.40 0.0088 0.0081

Neptune 57141-04-05 07:41 G 22591475.73 22591475.82 22591475.96 0.0088 0.0075

Neptune 57141-11-16 20:38 G 22591701.24 22591701.36 22591701.52 0.0088 0.0069

Neptune 57142-06-30 09:36 G 22591926.77 22591926.90 22591927.08 0.0088 0.0063

Neptune 57143-02-10 22:48 G 22592152.30 22592152.45 22592152.64 0.0088 0.0056

Neptune 57143-09-24 11:31 G 22592377.82 22592377.98 22592378.19 0.0088 0.0051

Saturn 57144-01-31 19:26 G 22592507.11 22592507.31 22592507.51 0.0271 0.0081

Mars 57144-02-09 12:00 G 22592515.84 22592516.00 22592516.16 0.1611 0.0515

Neptune 57144-05-07 00:58 G 22592603.35 22592603.54 22592603.73 0.0088 0.0044

Saturn 57144-09-16 23:46 G 22592736.31 22592736.49 22592736.67 0.0272 0.0145

Neptune 57144-12-18 13:41 G 22592828.87 22592829.07 22592829.27 0.0088 0.0037

Neptune 57145-08-01 02:24 G 22593054.40 22593054.60 22593054.81 0.0088 0.0031

Neptune 57146-03-14 15:22 G 22593279.94 22593280.14 22593280.36 0.0088 0.0025

Jupiter 57146-06-28 14:10 G 22593385.89 22593386.09 22593386.29 0.0517 0.0077

Neptune 57146-10-26 04:19 G 22593505.47 22593505.68 22593505.90 0.0088 0.0019

Neptune 57147-06-08 17:02 G 22593731.00 22593731.21 22593731.43 0.0088 0.0013

Neptune 57148-01-20 06:00 G 22593956.53 22593956.75 22593956.97 0.0088 0.0007

Neptune 57148-09-01 18:43 G 22594182.06 22594182.28 22594182.51 0.0088 0.0002

Neptune 57149-04-15 07:41 G 22594407.60 22594407.82 22594408.04 0.0088 0.0006

Neptune 57149-11-26 20:24 G 22594633.14 22594633.35 22594633.57 0.0088 0.0012

Neptune 57150-07-10 09:22 G 22594858.67 22594858.89 22594859.10 0.0088 0.0018

Neptune 57151-02-20 22:19 G 22595084.22 22595084.43 22595084.64 0.0088 0.0024

Neptune 57151-10-04 10:48 G 22595309.76 22595309.95 22595310.17 0.0088 0.0031

Jupiter 57152-05-07 20:10 G 22595526.21 22595526.34 22595526.48 0.0506 0.0372

Neptune 57152-05-16 23:31 G 22595535.30 22595535.48 22595535.70 0.0088 0.0037

Neptune 57152-12-28 12:29 G 22595760.84 22595761.02 22595761.22 0.0088 0.0043

Neptune 57153-08-11 01:12 G 22595986.38 22595986.55 22595986.75 0.0088 0.0049

Neptune 57154-03-24 14:10 G 22596211.94 22596212.09 22596212.28 0.0088 0.0055

Neptune 57154-11-05 03:07 G 22596437.48 22596437.63 22596437.80 0.0088 0.0061

Neptune 57155-06-18 15:50 G 22596663.03 22596663.16 22596663.31 0.0088 0.0067

Neptune 57156-01-30 04:34 G 22596888.58 22596888.69 22596888.83 0.0088 0.0073

Neptune 57156-09-11 17:17 G 22597114.14 22597114.22 22597114.33 0.0088 0.0079

Neptune 57157-04-25 06:00 G 22597339.72 22597339.75 22597339.83 0.0088 0.0085

Saturn 57157-12-02 21:36 G 22597561.24 22597561.40 22597561.57 0.0290 0.0175

Jupiter 57158-03-03 10:34 G 22597651.79 22597651.94 22597652.09 0.0515 0.0345

Saturn 57158-07-20 18:29 G 22597791.07 22597791.27 22597791.47 0.0289 0.0103

Jupiter 57164-01-11 18:43 G 22599792.09 22599792.28 22599792.48 0.0508 0.0118

Uranus 57164-07-31 06:58 G 22599993.67 22599993.79 22599993.94 0.0140 0.0109

Uranus 57165-03-14 16:05 G 22600220.00 22600220.17 22600220.37 0.0140 0.0076

Uranus 57165-10-27 01:41 G 22600446.37 22600446.57 22600446.78 0.0140 0.0042

Uranus 57166-06-10 11:17 G 22600672.75 22600672.97 22600673.19 0.0140 0.0009

Uranus 57167-01-22 20:53 G 22600899.16 22600899.37 22600899.59 0.0141 0.0026

Uranus 57167-09-06 06:29 G 22601125.58 22601125.77 22601125.98 0.0141 0.0060

Uranus 57168-04-19 16:05 G 22601352.03 22601352.17 22601352.35 0.0141 0.0094

Uranus 57168-12-02 01:55 G 22601578.51 22601578.58 22601578.69 0.0141 0.0129

Jupiter 57170-07-01 11:46 G 22602154.86 22602154.99 22602155.14 0.0522 0.0370

Saturn 57173-08-12 20:53 G 22603293.17 22603293.37 22603293.58 0.0271 0.0056

Saturn 57174-03-30 01:12 G 22603522.40 22603522.55 22603522.72 0.0272 0.0171

Jupiter 57175-09-16 15:07 G 22604057.94 22604058.13 22604058.33 0.0510 0.0147

Jupiter 57182-03-06 06:29 G 22606420.57 22606420.77 22606420.97 0.0519 0.0091

Jupiter 57187-05-22 11:31 G 22608323.86 22608323.98 22608324.10 0.0513 0.0413

Saturn 57187-06-15 04:05 G 22608347.48 22608347.67 22608347.86 0.0290 0.0135

Saturn 57188-01-31 00:43 G 22608577.35 22608577.53 22608577.72 0.0288 0.0142

Jupiter 57193-11-08 23:31 G 22610686.29 22610686.48 22610686.67 0.0516 0.0188

Jupiter 57199-09-19 06:14 G 22612826.59 22612826.76 22612826.94 0.0507 0.0266

Saturn 57202-07-09 01:12 G 22613850.46 22613850.55 22613850.65 0.0270 0.0240

Saturn 57203-02-23 05:02 G 22614079.50 22614079.71 22614079.92 0.0271 0.0018

Saturn 57203-10-10 09:36 G 22614308.77 22614308.90 22614309.04 0.0272 0.0210

Uranus 57204-04-04 20:10 G 22614486.27 22614486.34 22614486.45 0.0139 0.0126

Uranus 57204-11-17 04:34 G 22614712.54 22614712.69 22614712.86 0.0138 0.0093

Uranus 57205-07-01 12:43 G 22614938.85 22614939.03 22614939.24 0.0138 0.0062

Jupiter 57205-07-14 19:26 G 22614952.22 22614952.31 22614952.40 0.0513 0.0454

Uranus 57206-02-12 20:53 G 22615165.16 22615165.37 22615165.59 0.0138 0.0029

Uranus 57206-09-27 04:48 G 22615391.48 22615391.70 22615391.92 0.0138 0.0003

Uranus 57207-05-11 12:29 G 22615617.81 22615618.02 22615618.23 0.0137 0.0035

Uranus 57207-12-23 19:41 G 22615844.14 22615844.32 22615844.52 0.0137 0.0067

Uranus 57208-08-06 03:22 G 22616070.49 22616070.64 22616070.80 0.0137 0.0097

Uranus 57209-03-20 10:19 G 22616296.87 22616296.93 22616297.02 0.0137 0.0128

Mars 57209-12-07 01:12 G 22616558.40 22616558.55 22616558.70 0.1611 0.0745

Jupiter 57211-05-25 04:05 G 22617092.46 22617092.67 22617092.87 0.0509 0.0008

Saturn 57216-12-25 11:02 G 22619133.77 22619133.96 22619134.17 0.0290 0.0097

Saturn 57217-08-12 07:26 G 22619363.65 22619363.81 22619363.98 0.0288 0.0179

Jupiter 57217-11-11 18:29 G 22619455.09 22619455.27 22619455.45 0.0521 0.0247

Jupiter 57223-01-28 01:26 G 22621358.39 22621358.56 22621358.74 0.0512 0.0254

Neptune 57223-05-21 08:38 G 22621471.81 22621471.86 22621471.95 0.0089 0.0084

Neptune 57224-01-01 21:36 G 22621697.32 22621697.40 22621697.52 0.0089 0.0078

Neptune 57224-08-14 10:48 G 22621922.84 22621922.95 22621923.10 0.0089 0.0072

Neptune 57225-03-27 23:46 G 22622148.37 22622148.49 22622148.66 0.0089 0.0067

Neptune 57225-11-08 12:58 G 22622373.90 22622374.04 22622374.22 0.0089 0.0060

Neptune 57226-06-22 02:24 G 22622599.43 22622599.60 22622599.78 0.0089 0.0053

Neptune 57227-02-02 15:22 G 22622824.97 22622825.14 22622825.34 0.0089 0.0047

Neptune 57227-09-16 04:34 G 22623050.51 22623050.69 22623050.90 0.0089 0.0041

Neptune 57228-04-28 18:00 G 22623276.05 22623276.25 22623276.46 0.0089 0.0035

Neptune 57228-12-10 06:58 G 22623501.59 22623501.79 22623502.01 0.0089 0.0029

Jupiter 57229-07-17 14:10 G 22623720.89 22623721.09 22623721.30 0.0518 0.0028

Neptune 57229-07-23 20:10 G 22623727.14 22623727.34 22623727.57 0.0089 0.0023

Neptune 57230-03-06 09:36 G 22623952.69 22623952.90 22623953.12 0.0089 0.0016

Neptune 57230-10-17 23:02 G 22624178.24 22624178.46 22624178.68 0.0089 0.0009

Neptune 57231-05-31 12:14 G 22624403.79 22624404.01 22624404.23 0.0089 0.0003

Neptune 57232-01-12 01:26 G 22624629.34 22624629.56 22624629.78 0.0089 0.0004

Saturn 57232-01-19 03:07 G 22624636.51 22624636.63 22624636.77 0.0270 0.0213

Neptune 57232-08-24 14:38 G 22624854.90 22624855.11 22624855.33 0.0089 0.0011

Saturn 57232-09-04 07:12 G 22624865.59 22624865.80 22624866.01 0.0271 0.0010

Neptune 57233-04-07 04:05 G 22625080.45 22625080.67 22625080.88 0.0089 0.0017

Saturn 57233-04-21 11:46 G 22625094.90 22625094.99 22625095.10 0.0273 0.0238

Neptune 57233-11-18 17:02 G 22625306.00 22625306.21 22625306.43 0.0089 0.0023

Neptune 57234-07-02 06:14 G 22625531.56 22625531.76 22625531.97 0.0089 0.0029

Neptune 57235-02-12 19:26 G 22625757.11 22625757.31 22625757.52 0.0089 0.0036

Jupiter 57235-05-27 17:46 G 22625861.13 22625861.24 22625861.36 0.0505 0.0411

Neptune 57235-09-26 08:24 G 22625982.68 22625982.85 22625983.06 0.0089 0.0043

Neptune 57236-05-08 21:50 G 22626208.24 22626208.41 22626208.60 0.0089 0.0049

Neptune 57236-12-20 11:02 G 22626433.80 22626433.96 22626434.14 0.0089 0.0055

Neptune 57237-08-03 00:00 G 22626659.36 22626659.50 22626659.68 0.0089 0.0062

Neptune 57238-03-16 13:12 G 22626884.93 22626885.05 22626885.22 0.0089 0.0068

Neptune 57238-10-28 02:38 G 22627110.50 22627110.61 22627110.75 0.0089 0.0074

Neptune 57239-06-10 16:05 G 22627336.08 22627336.17 22627336.28 0.0089 0.0080

Neptune 57240-01-22 05:17 G 22627561.67 22627561.72 22627561.79 0.0089 0.0086

Jupiter 57241-03-22 10:05 G 22627986.76 22627986.92 22627987.09 0.0515 0.0296

Mars 57241-12-05 16:19 G 22628245.10 22628245.18 22628245.26 0.1611 0.1412

Saturn 57246-07-07 17:46 G 22629920.03 22629920.24 22629920.45 0.0289 0.0057

Jupiter 57247-01-30 15:50 G 22630126.97 22630127.16 22630127.36 0.0508 0.0157

Saturn 57247-02-22 13:55 G 22630149.95 22630150.08 22630150.23 0.0288 0.0219

Uranus 57248-03-30 13:55 G 22630551.99 22630552.08 22630552.18 0.0140 0.0124

Uranus 57248-11-11 23:02 G 22630778.30 22630778.46 22630778.63 0.0140 0.0091

Uranus 57249-06-26 08:10 G 22631004.65 22631004.84 22631005.05 0.0140 0.0058

Uranus 57250-02-07 17:46 G 22631231.03 22631231.24 22631231.46 0.0140 0.0024

Uranus 57250-09-22 03:22 G 22631457.42 22631457.64 22631457.86 0.0141 0.0010

Uranus 57251-05-06 12:43 G 22631683.83 22631684.03 22631684.25 0.0141 0.0044

Uranus 57251-12-18 22:34 G 22631910.27 22631910.44 22631910.63 0.0141 0.0078

Uranus 57252-08-01 08:24 G 22632136.73 22632136.85 22632136.99 0.0141 0.0112

Jupiter 57253-07-20 08:10 G 22632489.72 22632489.84 22632489.97 0.0521 0.0408

Moon 57256-04-13 09:22 G 22633487.72 22633487.89 22633488.06 0.2645 0.0174

Earth 57256-04-13 12:00 G 22633487.84 22633488.00 22633488.16 0.2651 0.0132 *

Jupiter 57258-10-05 12:29 G 22634392.82 22634393.02 22634393.22 0.0511 0.0105

Saturn 57261-07-31 11:46 G 22635422.83 22635422.99 22635423.15 0.0270 0.0174

Saturn 57262-03-17 15:50 G 22635651.95 22635652.16 22635652.37 0.0272 0.0050

Jupiter 57265-03-25 02:10 G 22636755.39 22636755.59 22636755.79 0.0519 0.0128

Jupiter 57270-06-10 09:07 G 22638658.74 22638658.88 22638659.02 0.0513 0.0369

Mars 57274-11-03 11:17 G 22640265.83 22640265.97 22640266.12 0.1914 0.1077

Mars 57275-10-04 13:55 G 22640600.95 22640601.08 22640601.22 0.1611 0.0991

Saturn 57276-01-18 02:38 G 22640706.40 22640706.61 22640706.82 0.0289 0.0014

Saturn 57276-09-03 22:19 G 22640936.35 22640936.43 22640936.53 0.0287 0.0259

Jupiter 57276-11-27 20:53 G 22641021.18 22641021.37 22641021.57 0.0517 0.0147

Jupiter 57282-10-08 04:19 G 22643161.52 22643161.68 22643161.85 0.0507 0.0307

Pluto 57287-07-16 06:29 G 22644903.66 22644903.77 22644903.90 0.0063 0.0052

Pluto 57288-02-26 10:05 G 22645128.72 22645128.92 22645129.14 0.0063 0.0017

Uranus 57288-07-17 13:12 G 22645270.93 22645271.05 22645271.20 0.0138 0.0107

Jupiter 57288-08-02 17:46 G 22645287.12 22645287.24 22645287.37 0.0514 0.0410

Pluto 57288-10-08 13:55 G 22645353.88 22645354.08 22645354.30 0.0063 0.0019

Uranus 57289-02-28 21:22 G 22645497.22 22645497.39 22645497.59 0.0138 0.0076

Pluto 57289-05-21 17:31 G 22645579.14 22645579.23 22645579.36 0.0064 0.0055

Uranus 57289-10-13 05:31 G 22645723.53 22645723.73 22645723.95 0.0138 0.0043

Uranus 57290-05-27 13:41 G 22645949.85 22645950.07 22645950.28 0.0138 0.0011

Uranus 57291-01-08 21:07 G 22646176.17 22646176.38 22646176.60 0.0138 0.0022

Saturn 57291-02-10 14:10 G 22646208.92 22646209.09 22646209.27 0.0270 0.0145

Uranus 57291-08-23 05:02 G 22646402.51 22646402.71 22646402.91 0.0137 0.0053

Saturn 57291-09-27 18:29 G 22646438.07 22646438.27 22646438.47 0.0271 0.0079

Uranus 57292-04-05 12:14 G 22646628.85 22646629.01 22646629.19 0.0137 0.0084

Uranus 57292-11-17 19:26 G 22646855.20 22646855.31 22646855.44 0.0137 0.0115

Jupiter 57294-06-13 00:58 G 22647427.34 22647427.54 22647427.75 0.0509 0.0048

Jupiter 57300-12-01 17:17 G 22649790.06 22649790.22 22649790.39 0.0521 0.0294

Neptune 57304-04-13 16:34 G 22651019.14 22651019.19 22651019.26 0.0088 0.0085

Neptune 57304-11-25 05:31 G 22651244.64 22651244.73 22651244.84 0.0088 0.0079

Saturn 57304-12-13 11:31 G 22651262.89 22651262.98 22651263.09 0.0290 0.0254

Neptune 57305-07-08 18:43 G 22651470.16 22651470.28 22651470.40 0.0088 0.0073

Saturn 57305-07-31 08:53 G 22651492.66 22651492.87 22651493.09 0.0289 0.0026

Jupiter 57306-02-16 21:36 G 22651693.22 22651693.40 22651693.59 0.0512 0.0216

Neptune 57306-02-19 07:55 G 22651695.68 22651695.83 22651695.97 0.0088 0.0067

Neptune 57306-10-02 20:53 G 22651921.21 22651921.37 22651921.53 0.0088 0.0061

Neptune 57307-05-16 09:36 G 22652146.73 22652146.90 22652147.08 0.0088 0.0055

Mars 57307-10-04 05:31 G 22652287.61 22652287.73 22652287.85 0.1611 0.1176

Neptune 57307-12-27 22:34 G 22652372.26 22652372.44 22652372.63 0.0088 0.0049

Neptune 57308-08-09 11:31 G 22652597.79 22652597.98 22652598.17 0.0088 0.0042

Neptune 57309-03-23 00:29 G 22652823.32 22652823.52 22652823.72 0.0088 0.0036

Neptune 57309-11-03 13:12 G 22653048.85 22653049.05 22653049.27 0.0088 0.0030

Neptune 57310-06-17 02:10 G 22653274.38 22653274.59 22653274.81 0.0088 0.0024

Neptune 57311-01-28 15:07 G 22653499.92 22653500.13 22653500.35 0.0088 0.0018

Neptune 57311-09-11 03:50 G 22653725.45 22653725.66 22653725.89 0.0088 0.0012

Neptune 57312-04-23 16:48 G 22653950.98 22653951.20 22653951.42 0.0088 0.0006

Jupiter 57312-08-06 10:48 G 22654055.74 22654055.95 22654056.15 0.0517 0.0014

Neptune 57312-12-05 05:31 G 22654176.51 22654176.73 22654176.95 0.0088 0.0002

Neptune 57313-07-18 18:14 G 22654402.05 22654402.26 22654402.49 0.0088 0.0007

Neptune 57314-03-01 07:12 G 22654627.59 22654627.80 22654628.03 0.0088 0.0013

Neptune 57314-10-12 19:55 G 22654853.12 22654853.33 22654853.56 0.0088 0.0019

Neptune 57315-05-26 08:38 G 22655078.66 22655078.86 22655079.08 0.0088 0.0025

Neptune 57316-01-06 21:22 G 22655304.20 22655304.39 22655304.61 0.0088 0.0031

Neptune 57316-08-19 10:19 G 22655529.74 22655529.93 22655530.14 0.0088 0.0037

Neptune 57317-04-01 23:17 G 22655755.28 22655755.47 22655755.67 0.0088 0.0043

Jupiter 57317-10-22 16:19 G 22655959.12 22655959.18 22655959.24 0.0515 0.0486

Neptune 57317-11-13 12:00 G 22655980.83 22655981.00 22655981.19 0.0088 0.0049

Jupiter 57318-06-16 14:24 G 22656196.01 22656196.10 22656196.19 0.0506 0.0448

Neptune 57318-06-27 00:43 G 22656206.37 22656206.53 22656206.71 0.0088 0.0055

Neptune 57319-02-07 13:41 G 22656431.92 22656432.07 22656432.24 0.0088 0.0061

Neptune 57319-09-21 02:24 G 22656657.47 22656657.60 22656657.75 0.0088 0.0067

Neptune 57320-05-03 15:07 G 22656883.02 22656883.13 22656883.27 0.0088 0.0073

Saturn 57320-08-23 22:48 G 22656995.26 22656995.45 22656995.65 0.0271 0.0107

Neptune 57320-12-15 03:50 G 22657108.58 22657108.66 22657108.77 0.0088 0.0079

Saturn 57321-04-10 03:22 G 22657224.45 22657224.64 22657224.83 0.0272 0.0119

Neptune 57321-07-28 16:19 G 22657334.15 22657334.18 22657334.27 0.0088 0.0085

Jupiter 57324-04-11 05:31 G 22658321.56 22658321.73 22658321.91 0.0515 0.0259

Jupiter 57330-02-19 12:29 G 22660461.84 22660462.02 22660462.21 0.0508 0.0195

Uranus 57331-11-29 21:36 G 22661110.39 22661110.40 22661110.44 0.0139 0.0139

Uranus 57332-07-13 06:43 G 22661336.65 22661336.78 22661336.93 0.0140 0.0106

Uranus 57333-02-24 15:50 G 22661562.99 22661563.16 22661563.36 0.0140 0.0073

Uranus 57333-10-09 01:12 G 22661789.35 22661789.55 22661789.77 0.0140 0.0039

Uranus 57334-05-23 10:48 G 22662015.73 22662015.95 22662016.17 0.0140 0.0006

Saturn 57334-06-25 22:34 G 22662049.30 22662049.44 22662049.60 0.0290 0.0205

Uranus 57335-01-04 20:10 G 22662242.14 22662242.34 22662242.56 0.0141 0.0029

Saturn 57335-02-10 19:26 G 22662279.11 22662279.31 22662279.52 0.0289 0.0073

Uranus 57335-08-19 05:46 G 22662468.56 22662468.74 22662468.95 0.0141 0.0063

Uranus 57336-04-01 15:36 G 22662695.00 22662695.15 22662695.32 0.0141 0.0097

Jupiter 57336-08-09 05:02 G 22662824.61 22662824.71 22662824.81 0.0522 0.0446

Uranus 57336-11-14 01:26 G 22662921.49 22662921.56 22662921.65 0.0141 0.0131

Mars 57340-08-31 12:43 G 22664307.86 22664308.03 22664308.21 0.1914 0.0128

Mars 57341-08-02 02:53 G 22664643.51 22664643.62 22664643.73 0.1612 0.1227

Jupiter 57341-10-25 10:34 G 22664727.74 22664727.94 22664728.14 0.0510 0.0062

Jupiter 57348-04-14 00:00 G 22667090.31 22667090.50 22667090.69 0.0519 0.0171

Saturn 57350-03-06 01:55 G 22667781.38 22667781.58 22667781.79 0.0271 0.0076

Saturn 57350-10-21 06:29 G 22668010.59 22668010.77 22668010.94 0.0272 0.0149

Jupiter 57353-06-30 06:00 G 22668993.60 22668993.75 22668993.91 0.0513 0.0328

Earth 57353-10-18 15:22 G 22669104.08 22669104.14 22669104.20 0.2682 0.2455

Moon 57353-10-18 16:34 G 22669104.09 22669104.19 22669104.28 0.2675 0.2180 *

Jupiter 57359-12-18 19:26 G 22671356.11 22671356.31 22671356.51 0.0517 0.0101

Moon 57361-10-16 02:10 G 22672023.45 22672023.59 22672023.73 0.2675 0.1376

Earth 57361-10-16 05:46 G 22672023.60 22672023.74 22672023.89 0.2681 0.1112 *

Saturn 57364-01-06 04:19 G 22672835.52 22672835.68 22672835.86 0.0290 0.0168

Saturn 57364-08-23 01:26 G 22673065.36 22673065.56 22673065.75 0.0288 0.0109

Jupiter 57365-10-28 00:00 G 22673496.35 22673496.50 22673496.65 0.0507 0.0341

Jupiter 57371-08-23 14:38 G 22675621.97 22675622.11 22675622.25 0.0514 0.0369

Uranus 57372-03-17 21:22 G 22675829.30 22675829.39 22675829.51 0.0139 0.0122

Uranus 57372-10-30 05:46 G 22676055.58 22676055.74 22676055.91 0.0138 0.0089

Uranus 57373-06-13 13:55 G 22676281.89 22676282.08 22676282.29 0.0138 0.0057

Mars 57373-07-31 18:14 G 22676330.12 22676330.26 22676330.40 0.1611 0.0934

Uranus 57374-01-25 22:05 G 22676508.21 22676508.42 22676508.64 0.0138 0.0025

Uranus 57374-09-09 06:00 G 22676734.53 22676734.75 22676734.97 0.0138 0.0007

Uranus 57375-04-23 13:26 G 22676960.86 22676961.06 22676961.27 0.0137 0.0039

Uranus 57375-12-05 20:53 G 22677187.19 22677187.37 22677187.56 0.0137 0.0071

Uranus 57376-07-19 04:05 G 22677413.55 22677413.67 22677413.83 0.0137 0.0102

Uranus 57377-03-02 11:46 G 22677639.94 22677639.99 22677640.04 0.0137 0.0132

Jupiter 57377-07-02 20:24 G 22677762.15 22677762.35 22677762.55 0.0509 0.0083

Pluto 57378-04-14 11:31 G 22678047.77 22678047.98 22678048.20 0.0081 0.0020

Pluto 57378-11-25 22:34 G 22678273.28 22678273.44 22678273.60 0.0081 0.0055

Saturn 57379-01-30 06:29 G 22678338.73 22678338.77 22678338.84 0.0270 0.0259

Saturn 57379-09-16 10:34 G 22678567.73 22678567.94 22678568.15 0.0271 0.0037

Saturn 57380-05-02 15:07 G 22678796.98 22678797.13 22678797.29 0.0273 0.0190

Jupiter 57383-12-21 12:29 G 22680124.87 22680125.02 22680125.18 0.0520 0.0327

Neptune 57387-01-10 06:14 G 22681240.74 22681240.76 22681240.78 0.0089 0.0088

Neptune 57387-08-23 18:43 G 22681466.23 22681466.28 22681466.39 0.0089 0.0083

Neptune 57388-04-05 07:55 G 22681691.74 22681691.83 22681691.96 0.0089 0.0077

Neptune 57388-11-16 20:53 G 22681917.26 22681917.37 22681917.53 0.0089 0.0071

Jupiter 57389-03-07 17:31 G 22682028.04 22682028.23 22682028.42 0.0512 0.0180

Neptune 57389-06-30 10:34 G 22682142.79 22682142.94 22682143.09 0.0089 0.0065

Neptune 57390-02-10 23:31 G 22682368.32 22682368.48 22682368.65 0.0089 0.0058

Neptune 57390-09-24 12:29 G 22682593.85 22682594.02 22682594.21 0.0089 0.0052

Neptune 57391-05-08 01:26 G 22682819.39 22682819.56 22682819.76 0.0089 0.0047

Neptune 57391-12-19 14:38 G 22683044.93 22683045.11 22683045.32 0.0089 0.0040

Neptune 57392-08-01 04:05 G 22683270.47 22683270.67 22683270.88 0.0089 0.0034

Neptune 57393-03-14 17:17 G 22683496.01 22683496.22 22683496.43 0.0089 0.0027

Saturn 57393-07-18 16:05 G 22683621.98 22683622.17 22683622.37 0.0290 0.0117

Neptune 57393-10-26 06:14 G 22683721.56 22683721.76 22683721.98 0.0089 0.0021

Saturn 57394-03-05 12:43 G 22683851.85 22683852.03 22683852.21 0.0288 0.0159

Neptune 57394-06-08 19:26 G 22683947.10 22683947.31 22683947.53 0.0089 0.0015

Neptune 57395-01-20 08:38 G 22684172.65 22684172.86 22684173.08 0.0089 0.0009

Jupiter 57395-08-26 06:14 G 22684390.56 22684390.76 22684390.96 0.0518 0.0048

Neptune 57395-09-02 22:05 G 22684398.20 22684398.42 22684398.64 0.0089 0.0002

Neptune 57396-04-15 11:17 G 22684623.75 22684623.97 22684624.19 0.0089 0.0004

Neptune 57396-11-27 00:29 G 22684849.30 22684849.52 22684849.74 0.0089 0.0011

Neptune 57397-07-10 13:26 G 22685074.86 22685075.06 22685075.29 0.0089 0.0018

Neptune 57398-02-21 02:53 G 22685300.41 22685300.62 22685300.84 0.0089 0.0023

Neptune 57398-10-04 16:19 G 22685525.97 22685526.18 22685526.39 0.0089 0.0030

Neptune 57399-05-18 05:02 G 22685751.53 22685751.71 22685751.93 0.0089 0.0037

Neptune 57399-12-29 18:29 G 22685977.09 22685977.27 22685977.47 0.0089 0.0042

Neptune 57400-08-12 07:41 G 22686202.65 22686202.82 22686203.02 0.0089 0.0049

Jupiter 57400-11-11 14:24 G 22686294.00 22686294.10 22686294.21 0.0514 0.0441

Neptune 57401-03-25 21:07 G 22686428.21 22686428.38 22686428.56 0.0089 0.0055

Jupiter 57401-07-06 11:46 G 22686530.94 22686530.99 22686531.05 0.0505 0.0486

Neptune 57401-11-06 10:34 G 22686653.78 22686653.94 22686654.10 0.0089 0.0061

Neptune 57402-06-19 23:02 G 22686879.34 22686879.46 22686879.63 0.0089 0.0068

Neptune 57403-01-31 12:14 G 22687104.91 22687105.01 22687105.16 0.0089 0.0074

Neptune 57403-09-14 01:41 G 22687330.49 22687330.57 22687330.69 0.0089 0.0080

Neptune 57404-04-26 14:53 G 22687556.08 22687556.12 22687556.21 0.0089 0.0086

Mars 57406-06-29 15:22 G 22688349.98 22688350.14 22688350.30 0.1913 0.0790

Jupiter 57407-05-02 02:24 G 22688656.42 22688656.60 22688656.78 0.0516 0.0220

Mars 57407-05-31 15:50 G 22688686.09 22688686.16 22688686.23 0.1612 0.1469

Saturn 57408-08-12 10:05 G 22689124.82 22689124.92 22689125.04 0.0270 0.0228

Saturn 57409-03-29 13:55 G 22689353.87 22689354.08 22689354.29 0.0271 0.0007

Saturn 57409-11-13 18:14 G 22689583.15 22689583.26 22689583.39 0.0272 0.0221

Jupiter 57413-03-11 09:22 G 22690796.71 22690796.89 22690797.07 0.0507 0.0233

Uranus 57416-03-13 14:10 G 22691895.00 22691895.09 22691895.22 0.0140 0.0121

Uranus 57416-10-25 23:02 G 22692121.31 22692121.46 22692121.65 0.0140 0.0088

Uranus 57417-06-09 08:38 G 22692347.66 22692347.86 22692348.06 0.0140 0.0054

Uranus 57418-01-21 18:14 G 22692574.04 22692574.26 22692574.47 0.0140 0.0021

Uranus 57418-09-05 03:36 G 22692800.43 22692800.65 22692800.87 0.0141 0.0013

Jupiter 57419-01-04 23:17 G 22692922.40 22692922.47 22692922.54 0.0513 0.0479

Uranus 57419-04-19 12:58 G 22693026.84 22693027.04 22693027.25 0.0141 0.0048

Jupiter 57419-08-30 03:36 G 22693159.58 22693159.65 22693159.72 0.0522 0.0490

Uranus 57419-12-01 22:34 G 22693253.28 22693253.44 22693253.63 0.0141 0.0082

Uranus 57420-07-15 08:24 G 22693479.74 22693479.85 22693479.99 0.0141 0.0116

Saturn 57423-01-29 21:22 G 22694408.18 22694408.39 22694408.59 0.0290 0.0082

Saturn 57423-09-16 17:31 G 22694638.09 22694638.23 22694638.40 0.0288 0.0194

Jupiter 57424-11-14 06:00 G 22695062.55 22695062.75 22695062.96 0.0510 0.0027

Jupiter 57431-05-04 20:53 G 22697425.19 22697425.37 22697425.56 0.0519 0.0210

Jupiter 57436-07-20 00:58 G 22699328.37 22699328.54 22699328.71 0.0513 0.0295

Saturn 57438-02-22 17:31 G 22699911.09 22699911.23 22699911.39 0.0270 0.0192

Saturn 57438-10-09 21:36 G 22700140.20 22700140.40 22700140.62 0.0272 0.0033

Saturn 57439-05-27 02:38 G 22700369.55 22700369.61 22700369.68 0.0273 0.0260

Mars 57439-05-30 07:26 G 22700372.65 22700372.81 22700372.96 0.1611 0.0697

Jupiter 57443-01-07 15:07 G 22701690.93 22701691.13 22701691.34 0.0516 0.0065

Jupiter 57448-11-16 19:55 G 22703831.20 22703831.33 22703831.47 0.0507 0.0375

Saturn 57452-08-11 09:22 G 22705194.68 22705194.89 22705195.10 0.0289 0.0029

Saturn 57453-03-29 05:31 G 22705424.62 22705424.73 22705424.85 0.0288 0.0244

Jupiter 57454-09-12 09:22 G 22705956.74 22705956.89 22705957.05 0.0514 0.0336

Uranus 57455-11-17 06:14 G 22706387.72 22706387.76 22706387.82 0.0139 0.0135

Uranus 57456-06-30 14:38 G 22706613.98 22706614.11 22706614.27 0.0139 0.0103

Uranus 57457-02-11 23:02 G 22706840.28 22706840.46 22706840.65 0.0138 0.0070

Uranus 57457-09-26 06:58 G 22707066.59 22707066.79 22707067.01 0.0138 0.0038

Uranus 57458-05-10 14:53 G 22707292.91 22707293.12 22707293.34 0.0138 0.0006

Uranus 57458-12-22 22:34 G 22707519.23 22707519.44 22707519.66 0.0138 0.0026

Uranus 57459-08-06 06:14 G 22707745.57 22707745.76 22707745.96 0.0137 0.0058

Uranus 57460-03-19 13:26 G 22707971.91 22707972.06 22707972.24 0.0137 0.0089

Jupiter 57460-07-22 18:43 G 22708097.08 22708097.28 22708097.48 0.0509 0.0124

Uranus 57460-10-31 20:38 G 22708198.27 22708198.36 22708198.48 0.0137 0.0120

Jupiter 57467-01-10 09:22 G 22710459.75 22710459.89 22710460.04 0.0521 0.0366

Saturn 57467-09-04 21:22 G 22710697.23 22710697.39 22710697.57 0.0270 0.0159

Saturn 57468-04-21 01:12 G 22710926.35 22710926.55 22710926.76 0.0271 0.0064

Neptune 57468-07-17 02:24 G 22711013.55 22711013.60 22711013.69 0.0088 0.0084

Neptune 57469-02-27 15:36 G 22711239.06 22711239.15 22711239.27 0.0088 0.0078

Neptune 57469-10-11 04:34 G 22711464.58 22711464.69 22711464.83 0.0088 0.0072

Neptune 57470-05-24 17:31 G 22711690.09 22711690.23 22711690.39 0.0088 0.0066

Neptune 57471-01-05 06:29 G 22711915.62 22711915.77 22711915.94 0.0088 0.0060

Neptune 57471-08-18 19:41 G 22712141.15 22712141.32 22712141.49 0.0088 0.0054

Jupiter 57472-03-27 15:07 G 22712362.94 22712363.13 22712363.33 0.0511 0.0137

Neptune 57472-03-31 08:38 G 22712366.68 22712366.86 22712367.05 0.0088 0.0048

Mars 57472-04-25 16:34 G 22712392.12 22712392.19 22712392.26 0.1913 0.1755

Neptune 57472-11-11 21:22 G 22712592.20 22712592.39 22712592.59 0.0088 0.0042

Neptune 57473-06-25 10:19 G 22712817.74 22712817.93 22712818.14 0.0088 0.0036

Neptune 57474-02-05 23:17 G 22713043.27 22713043.47 22713043.69 0.0088 0.0030

Neptune 57474-09-19 12:14 G 22713268.80 22713269.01 22713269.23 0.0088 0.0023

Neptune 57475-05-03 01:12 G 22713494.34 22713494.55 22713494.77 0.0088 0.0017

Neptune 57475-12-14 13:55 G 22713719.87 22713720.08 22713720.31 0.0088 0.0011

Neptune 57476-07-27 02:53 G 22713945.40 22713945.62 22713945.84 0.0088 0.0005

Neptune 57477-03-09 15:50 G 22714170.94 22714171.16 22714171.39 0.0088 0.0002

Neptune 57477-10-21 04:48 G 22714396.48 22714396.70 22714396.92 0.0088 0.0007

Neptune 57478-06-03 17:31 G 22714622.01 22714622.23 22714622.45 0.0088 0.0013

Jupiter 57478-09-15 05:02 G 22714725.51 22714725.71 22714725.91 0.0518 0.0094

Neptune 57479-01-15 06:14 G 22714847.55 22714847.76 22714847.98 0.0088 0.0019

Neptune 57479-08-28 18:58 G 22715073.08 22715073.29 22715073.51 0.0088 0.0025

Neptune 57480-04-10 07:55 G 22715298.63 22715298.83 22715299.04 0.0088 0.0031

Neptune 57480-11-21 20:38 G 22715524.16 22715524.36 22715524.56 0.0088 0.0037

Neptune 57481-07-05 09:22 G 22715749.71 22715749.89 22715750.09 0.0088 0.0043

Saturn 57481-07-06 15:22 G 22715751.09 22715751.14 22715751.22 0.0291 0.0277

Neptune 57482-02-15 22:19 G 22715975.25 22715975.43 22715975.62 0.0088 0.0049

Saturn 57482-02-21 13:12 G 22715980.84 22715981.05 22715981.26 0.0289 0.0003

Neptune 57482-09-29 11:02 G 22716200.80 22716200.96 22716201.14 0.0088 0.0055

Saturn 57482-10-09 09:07 G 22716210.83 22716210.88 22716210.95 0.0288 0.0276

Neptune 57483-05-12 23:46 G 22716426.34 22716426.49 22716426.66 0.0088 0.0061

Jupiter 57483-12-01 10:48 G 22716628.82 22716628.95 22716629.07 0.0514 0.0402

Neptune 57483-12-24 12:29 G 22716651.89 22716652.02 22716652.17 0.0088 0.0067

Neptune 57484-08-06 01:12 G 22716877.44 22716877.55 22716877.69 0.0088 0.0073

Neptune 57485-03-19 13:55 G 22717103.01 22717103.08 22717103.20 0.0088 0.0079

Neptune 57485-10-31 03:22 G 22717328.58 22717328.64 22717328.70 0.0088 0.0084

Jupiter 57490-05-21 00:14 G 22718991.32 22718991.51 22718991.70 0.0515 0.0176

Moon 57491-04-18 18:14 G 22719324.23 22719324.26 22719324.28 0.2655 0.2605

Jupiter 57496-03-30 04:48 G 22721131.52 22721131.70 22721131.87 0.0508 0.0266

Saturn 57497-03-17 04:05 G 22721483.49 22721483.67 22721483.86 0.0271 0.0124

Saturn 57497-11-01 08:24 G 22721712.65 22721712.85 22721713.04 0.0272 0.0100

Earth 57499-04-16 13:55 G 22722243.92 22722244.08 22722244.24 0.2651 0.0050

Moon 57499-04-16 13:55 G 22722243.93 22722244.08 22722244.23 0.2658 0.0070 *

Uranus 57499-11-11 22:48 G 22722453.41 22722453.45 22722453.53 0.0139 0.0134

Uranus 57500-06-26 07:55 G 22722679.69 22722679.83 22722679.99 0.0140 0.0101

Uranus 57501-02-07 17:02 G 22722906.03 22722906.21 22722906.41 0.0140 0.0068

Uranus 57501-09-22 02:24 G 22723132.39 22723132.60 22723132.82 0.0140 0.0035

Jupiter 57502-01-24 19:55 G 22723257.23 22723257.33 22723257.44 0.0513 0.0440

Uranus 57502-05-06 11:46 G 22723358.78 22723358.99 22723359.21 0.0140 0.0003

Uranus 57502-12-18 21:22 G 22723585.18 22723585.39 22723585.61 0.0141 0.0034

Uranus 57503-08-02 06:58 G 22723811.61 22723811.79 22723811.99 0.0141 0.0068

Uranus 57504-03-15 16:48 G 22724038.06 22724038.20 22724038.36 0.0141 0.0102

Uranus 57504-10-28 02:38 G 22724264.57 22724264.61 22724264.68 0.0141 0.0137

Mars 57505-03-27 20:24 G 22724415.18 22724415.35 22724415.51 0.1612 0.0460

Jupiter 57507-12-05 02:24 G 22725397.39 22725397.60 22725397.80 0.0510 0.0011

Saturn 57511-01-18 03:36 G 22726537.52 22726537.65 22726537.79 0.0290 0.0223

Saturn 57511-09-05 00:58 G 22726767.33 22726767.54 22726767.75 0.0289 0.0054

Jupiter 57514-05-24 16:05 G 22727759.99 22727760.17 22727760.34 0.0520 0.0243

Jupiter 57519-08-10 00:14 G 22729663.34 22729663.51 22729663.69 0.0513 0.0248

Jupiter 57526-01-27 11:46 G 22732025.79 22732025.99 22732026.19 0.0517 0.0027

Saturn 57526-09-28 07:55 G 22732269.63 22732269.83 22732270.03 0.0270 0.0092

Saturn 57527-05-15 11:46 G 22732498.81 22732498.99 22732499.18 0.0271 0.0132

Jupiter 57531-04-14 19:41 G 22733929.31 22733929.32 22733929.35 0.0515 0.0512

Jupiter 57531-12-07 18:00 G 22734166.14 22734166.25 22734166.37 0.0506 0.0416

Pluto 57534-03-29 14:24 G 22735008.92 22735009.10 22735009.31 0.0063 0.0029

Pluto 57534-11-09 18:29 G 22735234.05 22735234.27 22735234.49 0.0063 0.0006

Pluto 57535-06-22 21:36 G 22735459.26 22735459.40 22735459.59 0.0063 0.0043

Jupiter 57537-10-02 08:38 G 22736291.70 22736291.86 22736292.03 0.0515 0.0288

Uranus 57540-03-01 00:00 G 22737172.40 22737172.50 22737172.63 0.0139 0.0116

Saturn 57540-07-30 06:29 G 22737323.62 22737323.77 22737323.93 0.0291 0.0194

Uranus 57540-10-13 08:10 G 22737398.68 22737398.84 22737399.03 0.0138 0.0084

Saturn 57541-03-17 03:50 G 22737553.46 22737553.66 22737553.87 0.0289 0.0084

Uranus 57541-05-27 16:19 G 22737624.99 22737625.18 22737625.39 0.0138 0.0051

Uranus 57542-01-09 00:29 G 22737851.30 22737851.52 22737851.74 0.0138 0.0019

Uranus 57542-08-23 08:10 G 22738077.63 22738077.84 22738078.06 0.0138 0.0014

Uranus 57543-04-06 15:36 G 22738303.96 22738304.15 22738304.37 0.0138 0.0046

Jupiter 57543-08-12 15:36 G 22738431.96 22738432.15 22738432.35 0.0509 0.0163

Uranus 57543-11-18 23:17 G 22738530.29 22738530.47 22738530.65 0.0137 0.0077

Uranus 57544-07-02 06:29 G 22738756.65 22738756.77 22738756.92 0.0137 0.0108

Jupiter 57550-01-30 08:10 G 22740794.73 22740794.84 22740794.97 0.0521 0.0410

Neptune 57551-04-15 15:36 G 22741235.12 22741235.15 22741235.20 0.0089 0.0087

Neptune 57551-11-27 04:48 G 22741460.62 22741460.70 22741460.79 0.0089 0.0081

Neptune 57552-07-09 18:00 G 22741686.14 22741686.25 22741686.36 0.0089 0.0075

Neptune 57553-02-20 07:12 G 22741911.66 22741911.80 22741911.93 0.0089 0.0070

Neptune 57553-10-03 20:10 G 22742137.19 22742137.34 22742137.50 0.0089 0.0063

Neptune 57554-05-17 09:07 G 22742362.72 22742362.88 22742363.05 0.0089 0.0057

Neptune 57554-12-28 22:05 G 22742588.25 22742588.42 22742588.61 0.0089 0.0052

Jupiter 57555-04-17 11:02 G 22742697.76 22742697.96 22742698.16 0.0511 0.0101

Neptune 57555-08-11 11:17 G 22742813.79 22742813.97 22742814.17 0.0089 0.0045

Neptune 57556-03-24 00:29 G 22743039.33 22743039.52 22743039.73 0.0089 0.0039

Saturn 57556-04-09 13:26 G 22743055.86 22743056.06 22743056.27 0.0271 0.0059

Neptune 57556-11-04 13:26 G 22743264.87 22743265.06 22743265.28 0.0089 0.0033

Saturn 57556-11-24 17:31 G 22743285.07 22743285.23 22743285.41 0.0272 0.0166

Neptune 57557-06-18 02:38 G 22743490.41 22743490.61 22743490.83 0.0089 0.0027

Neptune 57558-01-29 15:50 G 22743715.95 22743716.16 22743716.38 0.0089 0.0021

Neptune 57558-09-12 05:02 G 22743941.50 22743941.71 22743941.94 0.0089 0.0015

Neptune 57559-04-25 18:14 G 22744167.05 22744167.26 22744167.49 0.0089 0.0008

Neptune 57559-12-07 07:26 G 22744392.60 22744392.81 22744393.04 0.0089 0.0003

Neptune 57560-07-19 20:38 G 22744618.15 22744618.36 22744618.59 0.0089 0.0005

Neptune 57561-03-02 09:50 G 22744843.70 22744843.91 22744844.14 0.0089 0.0011

Jupiter 57561-10-05 02:24 G 22745060.40 22745060.60 22745060.80 0.0518 0.0134

Neptune 57561-10-13 23:17 G 22745069.26 22745069.47 22745069.69 0.0089 0.0017

Neptune 57562-05-27 12:29 G 22745294.81 22745295.02 22745295.23 0.0089 0.0024

Neptune 57563-01-08 01:26 G 22745520.37 22745520.56 22745520.78 0.0089 0.0030

Neptune 57563-08-21 14:53 G 22745745.93 22745746.12 22745746.33 0.0089 0.0036

Neptune 57564-04-03 04:05 G 22745971.49 22745971.67 22745971.88 0.0089 0.0043

Neptune 57564-11-14 17:31 G 22746197.05 22746197.23 22746197.42 0.0089 0.0049

Neptune 57565-06-28 06:43 G 22746422.61 22746422.78 22746422.96 0.0089 0.0055

Neptune 57566-02-08 19:55 G 22746648.18 22746648.33 22746648.50 0.0089 0.0061

Neptune 57566-09-22 08:53 G 22746873.75 22746873.87 22746874.04 0.0089 0.0068

Jupiter 57566-12-21 07:41 G 22746963.68 22746963.82 22746963.97 0.0514 0.0363

Neptune 57567-05-05 22:05 G 22747099.32 22747099.42 22747099.57 0.0089 0.0074

Neptune 57567-12-17 11:17 G 22747324.89 22747324.97 22747325.09 0.0089 0.0080

Neptune 57568-07-30 00:29 G 22747550.48 22747550.52 22747550.61 0.0090 0.0086

Saturn 57570-02-09 17:31 G 22748110.04 22748110.23 22748110.41 0.0290 0.0143

Saturn 57570-09-27 14:24 G 22748339.92 22748340.10 22748340.29 0.0289 0.0134

Mars 57571-01-23 09:07 G 22748457.71 22748457.88 22748458.05 0.1612 0.0214

Jupiter 57573-06-09 19:26 G 22749326.11 22749326.31 22749326.51 0.0516 0.0143

Jupiter 57579-04-20 04:48 G 22751466.54 22751466.70 22751466.86 0.0507 0.0313

Uranus 57584-02-24 15:36 G 22753238.04 22753238.15 22753238.28 0.0140 0.0115

Uranus 57584-10-08 00:43 G 22753464.36 22753464.53 22753464.71 0.0140 0.0082

Jupiter 57585-02-12 16:34 G 22753592.06 22753592.19 22753592.31 0.0513 0.0401

Saturn 57585-03-05 14:10 G 22753613.01 22753613.09 22753613.18 0.0269 0.0246

Uranus 57585-05-22 09:50 G 22753690.71 22753690.91 22753691.12 0.0140 0.0049

Saturn 57585-10-20 17:17 G 22753842.01 22753842.22 22753842.44 0.0270 0.0027

Uranus 57586-01-03 19:26 G 22753917.09 22753917.31 22753917.53 0.0140 0.0015

Saturn 57586-06-06 21:07 G 22754071.25 22754071.38 22754071.54 0.0271 0.0198

Uranus 57586-08-18 04:48 G 22754143.49 22754143.70 22754143.92 0.0141 0.0019

Uranus 57587-04-01 14:24 G 22754369.90 22754370.10 22754370.31 0.0141 0.0053

Uranus 57587-11-14 00:14 G 22754596.34 22754596.51 22754596.68 0.0141 0.0087

Uranus 57588-06-27 09:50 G 22754822.82 22754822.91 22754823.04 0.0141 0.0122

Jupiter 57590-12-24 02:10 G 22755732.39 22755732.59 22755732.79 0.0510 0.0058

Moon 57596-10-20 13:12 G 22757859.99 22757860.05 22757860.11 0.2687 0.2450

Earth 57596-10-20 15:50 G 22757860.09 22757860.16 22757860.23 0.2681 0.2396 *

Jupiter 57597-06-12 16:19 G 22758095.02 22758095.18 22758095.35 0.0520 0.0294

Saturn 57599-08-22 18:58 G 22758896.10 22758896.29 22758896.49 0.0290 0.0118

Saturn 57600-04-08 16:05 G 22759126.00 22759126.17 22759126.35 0.0289 0.0160

Jupiter 57602-08-28 22:34 G 22759998.26 22759998.44 22759998.63 0.0512 0.0202

Earth 57604-10-18 06:14 G 22760779.62 22760779.76 22760779.90 0.2680 0.1161

Moon 57604-10-18 08:10 G 22760779.71 22760779.84 22760779.97 0.2687 0.1283 *

Jupiter 57609-02-15 12:00 G 22762360.80 22762361.00 22762361.20 0.0517 0.0023

Jupiter 57614-05-03 16:34 G 22764264.12 22764264.19 22764264.28 0.0515 0.0473

Saturn 57614-09-15 18:14 G 22764399.14 22764399.26 22764399.38 0.0270 0.0217

Jupiter 57614-12-26 15:07 G 22764501.05 22764501.13 22764501.22 0.0506 0.0452

Saturn 57615-05-02 21:36 G 22764628.19 22764628.40 22764628.61 0.0271 0.0004

Saturn 57615-12-18 01:41 G 22764857.46 22764857.57 22764857.69 0.0272 0.0229

Jupiter 57620-10-21 07:26 G 22766626.63 22766626.81 22766626.99 0.0514 0.0243

Uranus 57623-10-30 10:05 G 22767730.85 22767730.92 22767731.02 0.0139 0.0128

Pluto 57624-05-14 13:55 G 22767927.91 22767928.08 22767928.28 0.0081 0.0044

Uranus 57624-06-12 18:29 G 22767957.13 22767957.27 22767957.44 0.0139 0.0096

Pluto 57624-12-26 00:58 G 22768153.35 22768153.54 22768153.75 0.0081 0.0032

Uranus 57625-01-25 02:53 G 22768183.43 22768183.62 22768183.82 0.0138 0.0063

Uranus 57625-09-08 11:02 G 22768409.74 22768409.96 22768410.17 0.0138 0.0031

Uranus 57626-04-22 18:43 G 22768636.06 22768636.28 22768636.50 0.0138 0.0002

Jupiter 57626-08-31 13:41 G 22768766.89 22768767.07 22768767.26 0.0509 0.0204

Uranus 57626-12-05 02:10 G 22768862.39 22768862.59 22768862.81 0.0138 0.0034

Uranus 57627-07-19 09:50 G 22769088.73 22769088.91 22769089.11 0.0137 0.0065

Uranus 57628-03-01 17:17 G 22769315.08 22769315.22 22769315.38 0.0137 0.0096

Uranus 57628-10-14 00:29 G 22769541.45 22769541.52 22769541.61 0.0137 0.0127

Saturn 57629-03-04 05:02 G 22769682.51 22769682.71 22769682.92 0.0290 0.0069

Saturn 57629-10-20 01:55 G 22769912.44 22769912.58 22769912.73 0.0288 0.0207

Neptune 57632-03-07 23:46 G 22770782.48 22770782.49 22770782.53 0.0088 0.0088

Jupiter 57632-06-26 01:26 G 22770892.54 22770892.56 22770892.58 0.0512 0.0508

Neptune 57632-10-19 12:29 G 22771007.96 22771008.02 22771008.12 0.0088 0.0082

Jupiter 57633-02-18 04:19 G 22771129.58 22771129.68 22771129.78 0.0521 0.0444

Neptune 57633-06-02 01:26 G 22771233.47 22771233.56 22771233.69 0.0088 0.0077

Neptune 57634-01-13 14:24 G 22771458.99 22771459.10 22771459.25 0.0088 0.0071

Neptune 57634-08-27 03:36 G 22771684.51 22771684.65 22771684.81 0.0088 0.0064

Neptune 57635-04-09 16:34 G 22771910.03 22771910.19 22771910.36 0.0088 0.0058

Neptune 57635-11-21 05:31 G 22772135.56 22772135.73 22772135.91 0.0088 0.0053

Mars 57635-12-19 21:50 G 22772164.28 22772164.41 22772164.55 0.1913 0.1247

Neptune 57636-07-03 18:29 G 22772361.09 22772361.27 22772361.46 0.0088 0.0047

Mars 57636-11-19 22:19 G 22772500.25 22772500.43 22772500.60 0.1612 0.0027

Neptune 57637-02-14 07:26 G 22772586.62 22772586.81 22772587.01 0.0088 0.0041

Neptune 57637-09-27 20:24 G 22772812.15 22772812.35 22772812.56 0.0088 0.0035

Jupiter 57638-05-06 12:29 G 22773032.82 22773033.02 22773033.23 0.0511 0.0048

Neptune 57638-05-11 09:22 G 22773037.68 22773037.89 22773038.10 0.0088 0.0028

Neptune 57638-12-22 22:19 G 22773263.21 22773263.43 22773263.64 0.0088 0.0022

Neptune 57639-08-05 11:02 G 22773488.75 22773488.96 22773489.18 0.0088 0.0017

Neptune 57640-03-18 00:14 G 22773714.29 22773714.51 22773714.73 0.0088 0.0010

Neptune 57640-10-29 12:58 G 22773939.82 22773940.04 22773940.27 0.0088 0.0005

Neptune 57641-06-12 01:55 G 22774165.36 22774165.58 22774165.80 0.0088 0.0002

Neptune 57642-01-23 14:38 G 22774390.89 22774391.11 22774391.33 0.0088 0.0008

Neptune 57642-09-06 03:22 G 22774616.43 22774616.64 22774616.87 0.0088 0.0014

Neptune 57643-04-19 16:05 G 22774841.97 22774842.17 22774842.40 0.0088 0.0020

Neptune 57643-12-01 04:48 G 22775067.50 22775067.70 22775067.93 0.0088 0.0026

Saturn 57644-03-27 22:19 G 22775185.28 22775185.43 22775185.59 0.0269 0.0184

Neptune 57644-07-13 17:31 G 22775293.04 22775293.23 22775293.45 0.0088 0.0032

Jupiter 57644-10-23 23:46 G 22775395.30 22775395.49 22775395.68 0.0519 0.0175

Saturn 57644-11-12 01:26 G 22775414.35 22775414.56 22775414.77 0.0270 0.0036

Neptune 57645-02-24 06:29 G 22775518.58 22775518.77 22775518.98 0.0088 0.0038

Saturn 57645-06-29 05:31 G 22775643.68 22775643.73 22775643.79 0.0272 0.0260

Neptune 57645-10-07 19:12 G 22775744.12 22775744.30 22775744.51 0.0088 0.0044

Neptune 57646-05-21 08:10 G 22775969.66 22775969.84 22775970.03 0.0088 0.0049

Neptune 57647-01-01 20:53 G 22776195.20 22776195.37 22776195.55 0.0088 0.0055

Neptune 57647-08-15 09:22 G 22776420.75 22776420.89 22776421.06 0.0088 0.0061

Neptune 57648-03-27 22:19 G 22776646.30 22776646.43 22776646.59 0.0088 0.0067

Neptune 57648-11-08 10:48 G 22776871.85 22776871.95 22776872.10 0.0088 0.0073

Neptune 57649-06-22 00:00 G 22777097.41 22777097.50 22777097.60 0.0088 0.0078

Jupiter 57650-01-09 09:07 G 22777298.72 22777298.88 22777299.04 0.0513 0.0307

Neptune 57650-02-02 12:29 G 22777322.98 22777323.02 22777323.10 0.0088 0.0084

Jupiter 57656-06-28 20:38 G 22779661.16 22779661.36 22779661.56 0.0516 0.0089

Saturn 57658-09-14 05:31 G 22780468.52 22780468.73 22780468.94 0.0290 0.0045

Saturn 57659-05-02 02:10 G 22780698.47 22780698.59 22780698.73 0.0289 0.0231

Jupiter 57662-05-09 03:50 G 22781801.52 22781801.66 22781801.81 0.0507 0.0357

Uranus 57667-10-25 00:00 G 22783796.43 22783796.50 22783796.60 0.0139 0.0129

Jupiter 57668-03-03 17:46 G 22783927.09 22783927.24 22783927.39 0.0514 0.0348

Uranus 57668-06-07 08:53 G 22784022.73 22784022.87 22784023.04 0.0140 0.0096

Uranus 57669-01-19 18:14 G 22784249.08 22784249.26 22784249.47 0.0140 0.0063

Uranus 57669-09-03 03:36 G 22784475.44 22784475.65 22784475.87 0.0140 0.0029

Uranus 57670-04-17 13:12 G 22784701.83 22784702.05 22784702.26 0.0140 0.0005

Uranus 57670-11-29 22:34 G 22784928.24 22784928.44 22784928.65 0.0141 0.0039

Uranus 57671-07-14 08:10 G 22785154.67 22785154.84 22785155.04 0.0141 0.0074

Uranus 57672-02-25 18:00 G 22785381.13 22785381.25 22785381.41 0.0141 0.0109

Saturn 57673-10-08 00:58 G 22785971.38 22785971.54 22785971.72 0.0270 0.0158

Jupiter 57674-01-12 00:14 G 22786067.31 22786067.51 22786067.71 0.0510 0.0100

Saturn 57674-05-25 04:34 G 22786200.48 22786200.69 22786200.90 0.0271 0.0064

Jupiter 57680-07-01 16:05 G 22788430.02 22788430.17 22788430.32 0.0520 0.0340

Jupiter 57685-09-16 21:36 G 22790333.21 22790333.40 22790333.60 0.0512 0.0157

Saturn 57687-08-09 16:05 G 22791025.12 22791025.17 22791025.23 0.0291 0.0279

Saturn 57688-03-26 14:24 G 22791254.88 22791255.10 22791255.31 0.0290 0.0005

Saturn 57688-11-11 10:48 G 22791484.90 22791484.95 22791485.02 0.0288 0.0275

Jupiter 57692-03-06 08:24 G 22792695.65 22792695.85 22792696.05 0.0517 0.0062

Jupiter 57697-05-22 19:12 G 22794599.18 22794599.30 22794599.42 0.0515 0.0414

Jupiter 57698-01-14 17:17 G 22794836.22 22794836.22 22794836.24 0.0506 0.0505

Mars 57701-10-17 00:29 G 22796206.35 22796206.52 22796206.69 0.1912 0.0343

Mars 57702-09-18 11:02 G 22796542.79 22796542.96 22796543.13 0.1613 0.0266

Saturn 57703-04-21 05:17 G 22796757.53 22796757.72 22796757.91 0.0269 0.0125

Jupiter 57703-11-11 05:02 G 22796961.52 22796961.71 22796961.90 0.0515 0.0201

Saturn 57703-12-06 08:24 G 22796986.65 22796986.85 22796987.05 0.0270 0.0096

Uranus 57708-02-12 04:48 G 22798515.57 22798515.70 22798515.84 0.0139 0.0108

Uranus 57708-09-25 12:58 G 22798741.86 22798742.04 22798742.23 0.0138 0.0076

Uranus 57709-05-09 20:53 G 22798968.17 22798968.37 22798968.59 0.0138 0.0043

Jupiter 57709-09-20 15:50 G 22799101.99 22799102.16 22799102.34 0.0508 0.0259

Uranus 57709-12-22 05:02 G 22799194.49 22799194.71 22799194.93 0.0138 0.0011

Uranus 57710-08-05 12:43 G 22799420.82 22799421.03 22799421.25 0.0138 0.0022

Uranus 57711-03-19 20:24 G 22799647.16 22799647.35 22799647.56 0.0138 0.0053

Uranus 57711-11-01 04:05 G 22799873.50 22799873.67 22799873.84 0.0137 0.0085

Uranus 57712-06-14 11:02 G 22800099.86 22800099.96 22800100.09 0.0137 0.0116

Jupiter 57715-07-17 03:07 G 22801227.54 22801227.63 22801227.72 0.0513 0.0453

Neptune 57715-07-19 00:29 G 22801229.48 22801229.52 22801229.58 0.0089 0.0086

Neptune 57716-02-29 13:41 G 22801454.99 22801455.07 22801455.17 0.0089 0.0080

Jupiter 57716-03-10 06:43 G 22801464.73 22801464.78 22801464.84 0.0522 0.0501

Neptune 57716-10-12 02:53 G 22801680.51 22801680.62 22801680.74 0.0089 0.0074

Saturn 57717-02-19 16:05 G 22801811.09 22801811.17 22801811.28 0.0291 0.0258

Neptune 57717-05-25 15:36 G 22801906.03 22801906.15 22801906.31 0.0089 0.0069

Saturn 57717-10-07 14:10 G 22802040.88 22802041.09 22802041.31 0.0290 0.0023

Neptune 57718-01-06 04:34 G 22802131.56 22802131.69 22802131.87 0.0089 0.0063

Neptune 57718-08-19 18:00 G 22802357.10 22802357.25 22802357.44 0.0089 0.0057

Neptune 57719-04-02 07:26 G 22802582.63 22802582.81 22802582.99 0.0089 0.0051

Neptune 57719-11-13 20:24 G 22802808.17 22802808.35 22802808.55 0.0089 0.0045

Neptune 57720-06-26 09:36 G 22803033.70 22803033.90 22803034.10 0.0089 0.0038

Neptune 57721-02-06 22:34 G 22803259.24 22803259.44 22803259.65 0.0089 0.0032

Jupiter 57721-05-26 13:12 G 22803367.84 22803368.05 22803368.25 0.0510 0.0012

Neptune 57721-09-20 11:46 G 22803484.79 22803484.99 22803485.21 0.0089 0.0026

Neptune 57722-05-04 00:43 G 22803710.33 22803710.53 22803710.76 0.0089 0.0021

Neptune 57722-12-15 13:55 G 22803935.87 22803936.08 22803936.30 0.0089 0.0014

Neptune 57723-07-29 03:22 G 22804161.42 22804161.64 22804161.86 0.0089 0.0008

Neptune 57724-03-10 16:19 G 22804386.97 22804387.18 22804387.41 0.0089 0.0003

Neptune 57724-10-22 05:31 G 22804612.52 22804612.73 22804612.95 0.0089 0.0005

Neptune 57725-06-04 18:43 G 22804838.06 22804838.28 22804838.50 0.0089 0.0011

Neptune 57726-01-16 07:55 G 22805063.62 22805063.83 22805064.05 0.0089 0.0017

Neptune 57726-08-29 21:07 G 22805289.18 22805289.38 22805289.60 0.0089 0.0024

Neptune 57727-04-12 10:34 G 22805514.73 22805514.94 22805515.15 0.0089 0.0030

Jupiter 57727-11-14 02:10 G 22805730.41 22805730.59 22805730.77 0.0519 0.0231

Neptune 57727-11-23 23:31 G 22805740.29 22805740.48 22805740.69 0.0089 0.0036

Neptune 57728-07-06 12:43 G 22805965.85 22805966.03 22805966.24 0.0089 0.0042

Neptune 57729-02-17 01:55 G 22806191.41 22806191.58 22806191.78 0.0089 0.0049

Neptune 57729-09-30 15:22 G 22806416.98 22806417.14 22806417.33 0.0089 0.0055

Neptune 57730-05-14 04:48 G 22806642.55 22806642.70 22806642.87 0.0089 0.0061

Neptune 57730-12-25 18:00 G 22806868.11 22806868.25 22806868.40 0.0089 0.0067

Neptune 57731-08-08 07:12 G 22807093.69 22807093.80 22807093.94 0.0089 0.0073

Neptune 57732-03-20 20:38 G 22807319.27 22807319.36 22807319.47 0.0089 0.0079

Saturn 57732-10-31 06:58 G 22807543.60 22807543.79 22807543.99 0.0270 0.0100

Neptune 57732-11-01 09:50 G 22807544.85 22807544.91 22807544.99 0.0089 0.0085

Jupiter 57733-01-29 08:10 G 22807633.67 22807633.84 22807634.02 0.0513 0.0261

Saturn 57733-06-17 10:19 G 22807772.75 22807772.93 22807773.12 0.0271 0.0122

Jupiter 57739-07-19 21:22 G 22809996.19 22809996.39 22809996.59 0.0516 0.0037

Earth 57742-04-18 15:36 G 22810999.99 22811000.15 22811000.31 0.2652 0.0091

Moon 57742-04-18 18:14 G 22811000.09 22811000.26 22811000.42 0.2647 0.0067 *

Jupiter 57745-05-29 03:50 G 22812136.54 22812136.66 22812136.79 0.0507 0.0403

Saturn 57746-09-01 23:46 G 22812597.35 22812597.49 22812597.63 0.0291 0.0214

Saturn 57747-04-19 21:36 G 22812827.20 22812827.40 22812827.61 0.0289 0.0066

Jupiter 57751-03-24 14:53 G 22814261.96 22814262.12 22814262.28 0.0514 0.0306

Uranus 57752-02-06 16:34 G 22814581.07 22814581.19 22814581.34 0.0140 0.0111

Uranus 57752-09-20 01:26 G 22814807.40 22814807.56 22814807.76 0.0140 0.0078

Uranus 57753-05-04 10:48 G 22815033.75 22815033.95 22815034.16 0.0140 0.0044

Uranus 57753-12-16 20:24 G 22815260.13 22815260.35 22815260.57 0.0140 0.0010

Uranus 57754-07-31 05:46 G 22815486.53 22815486.74 22815486.96 0.0140 0.0024

Uranus 57755-03-14 15:22 G 22815712.95 22815713.14 22815713.35 0.0141 0.0059

Uranus 57755-10-27 00:58 G 22815939.39 22815939.54 22815939.72 0.0141 0.0093

Uranus 57756-06-09 11:02 G 22816165.88 22816165.96 22816166.07 0.0141 0.0127

Jupiter 57757-02-01 03:22 G 22816402.45 22816402.64 22816402.83 0.0509 0.0159

Saturn 57762-05-13 11:31 G 22818329.77 22818329.98 22818330.18 0.0269 0.0068

Saturn 57762-12-28 14:38 G 22818558.94 22818559.11 22818559.29 0.0270 0.0154

Jupiter 57763-07-22 14:24 G 22818764.97 22818765.10 22818765.24 0.0520 0.0386

Mars 57767-08-14 01:55 G 22820248.42 22820248.58 22820248.75 0.1911 0.0604

Mars 57768-07-15 23:46 G 22820585.33 22820585.49 22820585.66 0.1614 0.0504

Jupiter 57768-10-07 00:43 G 22820668.33 22820668.53 22820668.73 0.0512 0.0096

Jupiter 57775-03-27 11:02 G 22823030.77 22823030.96 22823031.16 0.0518 0.0121

Saturn 57776-03-13 23:17 G 22823383.32 22823383.47 22823383.64 0.0291 0.0194

Saturn 57776-10-29 21:07 G 22823613.18 22823613.38 22823613.58 0.0290 0.0086

Pluto 57780-04-27 17:02 G 22824889.08 22824889.21 22824889.39 0.0063 0.0045

Jupiter 57780-06-11 20:53 G 22824934.23 22824934.37 22824934.52 0.0514 0.0356

Pluto 57780-12-08 21:22 G 22825114.18 22825114.39 22825114.62 0.0063 0.0010

Pluto 57781-07-22 00:43 G 22825339.35 22825339.53 22825339.75 0.0063 0.0027

Pluto 57782-03-04 04:48 G 22825564.66 22825564.70 22825564.75 0.0064 0.0062

Jupiter 57786-11-30 07:55 G 22827296.64 22827296.83 22827297.03 0.0515 0.0142

Saturn 57791-04-08 09:36 G 22828886.87 22828886.90 22828886.95 0.0269 0.0262

Uranus 57791-10-12 14:24 G 22829074.01 22829074.10 22829074.21 0.0139 0.0121

Saturn 57791-11-23 12:14 G 22829115.81 22829116.01 22829116.22 0.0270 0.0045

Uranus 57792-05-25 22:34 G 22829300.29 22829300.44 22829300.62 0.0139 0.0089

Saturn 57792-07-09 15:36 G 22829345.00 22829345.15 22829345.32 0.0271 0.0178

Jupiter 57792-10-09 15:36 G 22829436.99 22829437.15 22829437.32 0.0508 0.0305

Uranus 57793-01-07 06:58 G 22829526.60 22829526.79 22829527.00 0.0138 0.0056

Uranus 57793-08-21 15:22 G 22829752.92 22829753.14 22829753.35 0.0138 0.0024

Uranus 57794-04-04 23:02 G 22829979.25 22829979.46 22829979.68 0.0138 0.0009

Uranus 57794-11-17 06:43 G 22830205.58 22830205.78 22830205.99 0.0138 0.0041

Uranus 57795-07-01 14:24 G 22830431.93 22830432.10 22830432.29 0.0137 0.0073

Uranus 57796-02-12 21:50 G 22830658.28 22830658.41 22830658.56 0.0137 0.0104

Neptune 57796-06-10 09:07 G 22830776.85 22830776.88 22830776.94 0.0088 0.0087

Uranus 57796-09-26 05:17 G 22830884.70 22830884.72 22830884.76 0.0137 0.0135

Neptune 57797-01-21 22:19 G 22831002.35 22831002.43 22831002.53 0.0088 0.0081

Neptune 57797-09-04 10:48 G 22831227.86 22831227.95 22831228.09 0.0088 0.0076

Neptune 57798-04-18 00:00 G 22831453.38 22831453.50 22831453.65 0.0088 0.0069

Jupiter 57798-08-05 04:34 G 22831562.57 22831562.69 22831562.82 0.0513 0.0399

Neptune 57798-11-29 12:58 G 22831678.90 22831679.04 22831679.20 0.0088 0.0063

Neptune 57799-07-13 01:55 G 22831904.42 22831904.58 22831904.76 0.0088 0.0058

Neptune 57800-02-23 15:07 G 22832129.96 22832130.13 22832130.31 0.0088 0.0052

Neptune 57800-10-07 04:05 G 22832355.48 22832355.67 22832355.86 0.0088 0.0046

Neptune 57801-05-20 16:34 G 22832581.01 22832581.19 22832581.40 0.0088 0.0040

Neptune 57802-01-01 05:31 G 22832806.54 22832806.73 22832806.95 0.0088 0.0034

Neptune 57802-08-14 18:29 G 22833032.07 22833032.27 22833032.49 0.0088 0.0028

Neptune 57803-03-28 07:26 G 22833257.61 22833257.81 22833258.04 0.0088 0.0022

Neptune 57803-11-08 20:24 G 22833483.14 22833483.35 22833483.58 0.0088 0.0016

Jupiter 57804-06-15 13:41 G 22833702.87 22833703.07 22833703.27 0.0511 0.0054

Neptune 57804-06-21 09:22 G 22833708.68 22833708.89 22833709.12 0.0088 0.0010

Neptune 57805-02-01 22:34 G 22833934.22 22833934.44 22833934.66 0.0088 0.0004

Neptune 57805-09-15 11:17 G 22834159.76 22834159.97 22834160.20 0.0088 0.0003

Saturn 57805-09-25 06:00 G 22834169.57 22834169.75 22834169.93 0.0291 0.0152

Neptune 57806-04-29 00:14 G 22834385.29 22834385.51 22834385.73 0.0088 0.0008

Saturn 57806-05-13 03:36 G 22834399.47 22834399.65 22834399.85 0.0289 0.0127

Neptune 57806-12-10 12:58 G 22834610.83 22834611.04 22834611.26 0.0088 0.0014

Neptune 57807-07-24 01:55 G 22834836.37 22834836.58 22834836.80 0.0088 0.0020

Neptune 57808-03-05 14:53 G 22835061.91 22835062.12 22835062.33 0.0088 0.0026

Neptune 57808-10-17 03:36 G 22835287.45 22835287.65 22835287.86 0.0088 0.0032

Neptune 57809-05-30 16:19 G 22835512.99 22835513.18 22835513.39 0.0088 0.0038

Neptune 57810-01-11 04:48 G 22835738.53 22835738.70 22835738.91 0.0088 0.0044

Neptune 57810-08-24 17:31 G 22835964.07 22835964.23 22835964.43 0.0088 0.0050

Jupiter 57810-12-03 23:46 G 22836065.32 22836065.49 22836065.66 0.0519 0.0274

Neptune 57811-04-07 06:58 G 22836189.62 22836189.79 22836189.96 0.0088 0.0055

Neptune 57811-11-18 19:26 G 22836415.16 22836415.31 22836415.48 0.0088 0.0061

Neptune 57812-07-01 07:55 G 22836640.71 22836640.83 22836640.99 0.0088 0.0067

Neptune 57813-02-11 20:38 G 22836866.26 22836866.36 22836866.50 0.0088 0.0073

Neptune 57813-09-25 09:36 G 22837091.81 22837091.90 22837092.01 0.0088 0.0078

Neptune 57814-05-08 22:05 G 22837317.38 22837317.42 22837317.51 0.0088 0.0084

Jupiter 57816-02-19 11:46 G 22837968.80 22837968.99 22837969.18 0.0513 0.0198

Saturn 57820-10-19 14:24 G 22839673.00 22839673.10 22839673.22 0.0268 0.0229

Saturn 57821-06-05 17:02 G 22839902.00 22839902.21 22839902.42 0.0269 0.0011

Saturn 57822-01-20 20:10 G 22840131.22 22840131.34 22840131.48 0.0271 0.0211

Jupiter 57822-08-08 19:55 G 22840331.13 22840331.33 22840331.54 0.0517 0.0013

Jupiter 57827-10-25 08:10 G 22842234.75 22842234.84 22842234.93 0.0516 0.0458

Jupiter 57828-06-18 06:58 G 22842471.71 22842471.79 22842471.88 0.0506 0.0460

Mars 57833-06-11 04:19 G 22844290.57 22844290.68 22844290.78 0.1910 0.1520

Jupiter 57834-04-13 17:31 G 22844597.06 22844597.23 22844597.41 0.0514 0.0247

Mars 57834-05-14 12:43 G 22844627.88 22844628.03 22844628.18 0.1614 0.0749

Saturn 57835-04-07 05:46 G 22844955.56 22844955.74 22844955.94 0.0291 0.0131

Uranus 57835-10-08 01:12 G 22845139.47 22845139.55 22845139.67 0.0139 0.0125

Saturn 57835-11-23 03:07 G 22845185.46 22845185.63 22845185.82 0.0290 0.0149

Uranus 57836-05-21 10:19 G 22845365.78 22845365.93 22845366.10 0.0140 0.0091

Uranus 57837-01-02 19:41 G 22845592.12 22845592.32 22845592.52 0.0140 0.0058

Uranus 57837-08-17 05:02 G 22845818.49 22845818.71 22845818.92 0.0140 0.0024

Uranus 57838-03-31 14:24 G 22846044.88 22846045.10 22846045.32 0.0140 0.0010

Uranus 57838-11-12 23:46 G 22846271.29 22846271.49 22846271.70 0.0140 0.0044

Uranus 57839-06-27 09:36 G 22846497.72 22846497.90 22846498.08 0.0141 0.0078

Earth 57839-10-23 16:19 G 22846616.11 22846616.18 22846616.26 0.2680 0.2351

Uranus 57840-02-08 19:12 G 22846724.19 22846724.30 22846724.45 0.0141 0.0113

Jupiter 57840-02-22 05:17 G 22846737.54 22846737.72 22846737.91 0.0509 0.0213

Jupiter 57845-12-17 15:50 G 22848863.11 22848863.16 22848863.20 0.0512 0.0497

Jupiter 57846-08-11 18:14 G 22849100.16 22849100.26 22849100.37 0.0521 0.0445

Moon 57847-10-21 06:43 G 22849535.62 22849535.78 22849535.94 0.2672 0.0842

Earth 57847-10-21 06:58 G 22849535.65 22849535.79 22849535.93 0.2679 0.1190 *

Saturn 57850-05-01 14:53 G 22850458.99 22850459.12 22850459.25 0.0269 0.0207

Saturn 57850-12-16 17:31 G 22850688.02 22850688.23 22850688.44 0.0270 0.0011

Saturn 57851-08-02 20:53 G 22850917.28 22850917.37 22850917.49 0.0271 0.0234

Jupiter 57851-10-28 01:12 G 22851003.34 22851003.55 22851003.75 0.0511 0.0047

Jupiter 57858-04-16 13:12 G 22853365.86 22853366.05 22853366.24 0.0518 0.0176

Jupiter 57863-07-02 21:36 G 22855269.24 22855269.40 22855269.57 0.0514 0.0304

Saturn 57864-10-17 11:46 G 22855741.79 22855741.99 22855742.20 0.0290 0.0091

Saturn 57865-06-04 09:07 G 22855971.72 22855971.88 22855972.05 0.0289 0.0187

Mars 57866-05-13 04:19 G 22856314.60 22856314.68 22856314.76 0.1613 0.1420

Jupiter 57869-12-20 06:00 G 22857631.55 22857631.75 22857631.95 0.0515 0.0096

Pluto 57871-01-26 00:14 G 22858033.29 22858033.51 22858033.73 0.0081 0.0007

Pluto 57871-09-08 10:48 G 22858258.84 22858258.95 22858259.08 0.0081 0.0068

Uranus 57875-06-12 23:31 G 22859632.44 22859632.48 22859632.54 0.0139 0.0135

Jupiter 57875-10-30 19:12 G 22859772.16 22859772.30 22859772.44 0.0508 0.0364

Uranus 57876-01-25 07:41 G 22859858.70 22859858.82 22859858.99 0.0139 0.0103

Uranus 57876-09-07 16:19 G 22860085.00 22860085.18 22860085.38 0.0139 0.0070

Uranus 57877-04-22 00:29 G 22860311.32 22860311.52 22860311.74 0.0138 0.0037

Uranus 57877-12-04 08:38 G 22860537.64 22860537.86 22860538.08 0.0138 0.0005

Uranus 57878-07-18 16:34 G 22860763.98 22860764.19 22860764.41 0.0138 0.0028

Uranus 57879-03-02 00:14 G 22860990.32 22860990.51 22860990.72 0.0138 0.0060

Uranus 57879-10-14 07:55 G 22861216.68 22861216.83 22861217.00 0.0137 0.0091

Neptune 57879-10-21 09:07 G 22861223.83 22861223.88 22861223.95 0.0089 0.0085

Saturn 57879-11-11 20:10 G 22861245.18 22861245.34 22861245.50 0.0269 0.0174

Uranus 57880-05-27 15:22 G 22861443.05 22861443.14 22861443.24 0.0137 0.0123

Neptune 57880-06-02 21:50 G 22861449.34 22861449.41 22861449.53 0.0089 0.0080

Saturn 57880-06-27 22:48 G 22861474.24 22861474.45 22861474.65 0.0270 0.0045

Neptune 57881-01-14 11:02 G 22861674.86 22861674.96 22861675.10 0.0089 0.0074

Saturn 57881-02-12 02:10 G 22861703.56 22861703.59 22861703.63 0.0271 0.0267

Jupiter 57881-08-25 03:22 G 22861897.50 22861897.64 22861897.79 0.0513 0.0351

Neptune 57881-08-28 00:14 G 22861900.39 22861900.51 22861900.67 0.0089 0.0068

Neptune 57882-04-10 13:26 G 22862125.92 22862126.06 22862126.23 0.0089 0.0062

Neptune 57882-11-22 02:38 G 22862351.45 22862351.61 22862351.79 0.0089 0.0056

Neptune 57883-07-05 15:36 G 22862576.99 22862577.15 22862577.35 0.0089 0.0050

Neptune 57884-02-16 04:48 G 22862802.53 22862802.70 22862802.91 0.0089 0.0044

Neptune 57884-09-28 18:00 G 22863028.07 22863028.25 22863028.47 0.0089 0.0038

Neptune 57885-05-12 07:12 G 22863253.61 22863253.80 22863254.02 0.0089 0.0032

Neptune 57885-12-23 20:38 G 22863479.15 22863479.36 22863479.57 0.0089 0.0026

Neptune 57886-08-06 09:50 G 22863704.69 22863704.91 22863705.12 0.0089 0.0019

Neptune 57887-03-19 22:48 G 22863930.24 22863930.45 22863930.67 0.0089 0.0014

Jupiter 57887-07-05 17:02 G 22864038.01 22864038.21 22864038.41 0.0510 0.0115

Neptune 57887-10-31 12:00 G 22864155.78 22864156.00 22864156.22 0.0089 0.0007

Neptune 57888-06-13 00:58 G 22864381.33 22864381.54 22864381.77 0.0089 0.0003

Neptune 57889-01-24 14:10 G 22864606.87 22864607.09 22864607.31 0.0089 0.0005

Neptune 57889-09-07 03:22 G 22864832.43 22864832.64 22864832.86 0.0089 0.0011

Neptune 57890-04-20 16:34 G 22865057.98 22865058.19 22865058.41 0.0089 0.0017

Neptune 57890-12-02 05:46 G 22865283.53 22865283.74 22865283.95 0.0089 0.0023

Neptune 57891-07-15 18:58 G 22865509.08 22865509.29 22865509.50 0.0089 0.0030

Neptune 57892-02-26 08:10 G 22865734.64 22865734.84 22865735.04 0.0089 0.0036

Neptune 57892-10-08 21:07 G 22865960.20 22865960.38 22865960.59 0.0089 0.0042

Neptune 57893-05-22 10:19 G 22866185.76 22866185.93 22866186.13 0.0089 0.0048

Jupiter 57893-12-23 02:53 G 22866400.47 22866400.62 22866400.77 0.0520 0.0333

Neptune 57894-01-02 23:31 G 22866411.32 22866411.48 22866411.67 0.0089 0.0055

Saturn 57894-04-29 12:00 G 22866527.80 22866528.00 22866528.21 0.0291 0.0068

Neptune 57894-08-16 12:58 G 22866636.89 22866637.04 22866637.22 0.0089 0.0060

Saturn 57894-12-15 09:07 G 22866757.74 22866757.88 22866758.03 0.0289 0.0209

Neptune 57895-03-30 02:10 G 22866862.46 22866862.59 22866862.75 0.0089 0.0067

Neptune 57895-11-10 15:22 G 22867088.03 22867088.14 22867088.29 0.0089 0.0073

Neptune 57896-06-23 04:34 G 22867313.61 22867313.69 22867313.82 0.0089 0.0079

Neptune 57897-02-03 17:46 G 22867539.19 22867539.24 22867539.34 0.0089 0.0085

Jupiter 57899-03-10 14:10 G 22868303.89 22868304.09 22868304.29 0.0513 0.0140

Mars 57900-03-12 01:26 G 22868670.42 22868670.56 22868670.69 0.1615 0.0997

Jupiter 57905-08-28 23:31 G 22870666.28 22870666.48 22870666.68 0.0517 0.0070

Saturn 57909-05-24 20:10 G 22872031.16 22872031.34 22872031.51 0.0269 0.0152

Saturn 57910-01-08 22:48 G 22872260.25 22872260.45 22872260.66 0.0270 0.0067

Jupiter 57910-11-14 08:38 G 22872569.74 22872569.86 22872569.99 0.0515 0.0405

Jupiter 57917-05-03 19:41 G 22874932.13 22874932.32 22874932.51 0.0514 0.0190

Uranus 57919-06-08 09:36 G 22875697.89 22875697.90 22875697.94 0.0139 0.0138

Uranus 57920-01-20 18:43 G 22875924.15 22875924.28 22875924.43 0.0139 0.0105

Uranus 57920-09-03 03:36 G 22876150.48 22876150.65 22876150.85 0.0140 0.0073

Uranus 57921-04-17 12:58 G 22876376.83 22876377.04 22876377.25 0.0140 0.0039

Uranus 57921-11-29 22:19 G 22876603.21 22876603.43 22876603.65 0.0140 0.0005

Uranus 57922-07-14 07:41 G 22876829.61 22876829.82 22876830.04 0.0140 0.0029

Uranus 57923-02-25 17:17 G 22877056.04 22877056.22 22877056.43 0.0141 0.0064

Jupiter 57923-03-14 06:00 G 22877072.58 22877072.75 22877072.92 0.0509 0.0263

Uranus 57923-10-10 03:07 G 22877282.48 22877282.63 22877282.79 0.0141 0.0098

Saturn 57923-11-10 17:46 G 22877314.03 22877314.24 22877314.45 0.0290 0.0030

Uranus 57924-05-23 12:58 G 22877508.98 22877509.04 22877509.12 0.0141 0.0132

Saturn 57924-06-27 15:07 G 22877544.02 22877544.13 22877544.23 0.0289 0.0246

Jupiter 57929-01-06 14:10 G 22879198.00 22879198.09 22879198.19 0.0511 0.0450

Jupiter 57929-08-31 16:19 G 22879435.12 22879435.18 22879435.25 0.0521 0.0488

Mars 57932-03-10 17:02 G 22880357.09 22880357.21 22880357.33 0.1613 0.1178

Jupiter 57934-11-17 03:50 G 22881338.46 22881338.66 22881338.87 0.0512 0.0018

Saturn 57938-12-05 01:41 G 22882817.39 22882817.57 22882817.77 0.0269 0.0119

Saturn 57939-07-22 04:48 G 22883046.50 22883046.70 22883046.89 0.0270 0.0102

Jupiter 57941-05-06 11:31 G 22883700.80 22883700.98 22883701.17 0.0518 0.0222

Jupiter 57946-07-23 00:43 G 22885604.35 22885604.53 22885604.71 0.0514 0.0243

Saturn 57952-10-04 21:07 G 22887870.34 22887870.38 22887870.42 0.0291 0.0285

Jupiter 57953-01-09 08:24 G 22887966.65 22887966.85 22887967.05 0.0516 0.0039

Saturn 57953-05-22 19:12 G 22888100.09 22888100.30 22888100.51 0.0290 0.0005

Saturn 57954-01-07 15:50 G 22888330.10 22888330.16 22888330.24 0.0289 0.0271

Jupiter 57958-03-27 20:38 G 22889870.32 22889870.36 22889870.41 0.0516 0.0503

Jupiter 57958-11-19 20:38 G 22890107.25 22890107.36 22890107.48 0.0507 0.0416

Uranus 57959-09-25 17:02 G 22890417.11 22890417.21 22890417.35 0.0139 0.0116

Uranus 57960-05-09 01:41 G 22890643.40 22890643.57 22890643.75 0.0139 0.0083

Neptune 57960-09-13 18:14 G 22890771.23 22890771.26 22890771.34 0.0088 0.0086

Uranus 57960-12-21 09:50 G 22890869.72 22890869.91 22890870.13 0.0139 0.0051

Neptune 57961-04-27 07:26 G 22890996.73 22890996.81 22890996.92 0.0088 0.0080

Uranus 57961-08-04 18:29 G 22891096.05 22891096.27 22891096.49 0.0138 0.0018

Neptune 57961-12-08 20:38 G 22891222.24 22891222.36 22891222.48 0.0088 0.0074

Uranus 57962-03-19 02:24 G 22891322.39 22891322.60 22891322.82 0.0138 0.0015

Neptune 57962-07-22 09:07 G 22891447.76 22891447.88 22891448.04 0.0088 0.0069

Uranus 57962-10-31 10:19 G 22891548.73 22891548.93 22891549.14 0.0138 0.0047

Neptune 57963-03-04 22:19 G 22891673.29 22891673.43 22891673.60 0.0088 0.0063

Uranus 57963-06-14 18:00 G 22891775.08 22891775.25 22891775.43 0.0138 0.0079

Neptune 57963-10-16 11:17 G 22891898.82 22891898.97 22891899.15 0.0088 0.0057

Uranus 57964-01-27 01:26 G 22892001.45 22892001.56 22892001.70 0.0137 0.0111

Neptune 57964-05-29 00:29 G 22892124.34 22892124.52 22892124.70 0.0088 0.0051

Jupiter 57964-09-14 06:14 G 22892232.59 22892232.76 22892232.93 0.0513 0.0293

Neptune 57965-01-09 13:26 G 22892349.87 22892350.06 22892350.25 0.0088 0.0045

Neptune 57965-08-23 01:55 G 22892575.40 22892575.58 22892575.79 0.0088 0.0039

Mars 57966-01-07 14:10 G 22892712.98 22892713.09 22892713.20 0.1615 0.1243

Neptune 57966-04-05 14:53 G 22892800.93 22892801.12 22892801.34 0.0088 0.0033

Neptune 57966-11-17 03:50 G 22893026.46 22893026.66 22893026.88 0.0088 0.0027

Neptune 57967-06-30 16:48 G 22893251.99 22893252.20 22893252.42 0.0088 0.0021

Neptune 57968-02-11 05:46 G 22893477.53 22893477.74 22893477.96 0.0088 0.0015

Saturn 57968-06-16 01:55 G 22893603.38 22893603.58 22893603.78 0.0269 0.0096

Neptune 57968-09-23 18:43 G 22893703.06 22893703.28 22893703.50 0.0088 0.0009

Saturn 57969-01-31 05:02 G 22893832.52 22893832.71 22893832.90 0.0270 0.0125

Neptune 57969-05-07 07:26 G 22893928.59 22893928.81 22893929.04 0.0088 0.0004

Neptune 57969-12-18 20:24 G 22894154.13 22894154.35 22894154.57 0.0088 0.0003

Jupiter 57970-07-25 17:02 G 22894373.02 22894373.21 22894373.41 0.0510 0.0164

Neptune 57970-08-01 09:07 G 22894379.67 22894379.88 22894380.11 0.0088 0.0009

Neptune 57971-03-14 22:19 G 22894605.21 22894605.43 22894605.65 0.0088 0.0014

Neptune 57971-10-26 11:02 G 22894830.75 22894830.96 22894831.18 0.0088 0.0020

Neptune 57972-06-07 23:46 G 22895056.29 22895056.49 22895056.71 0.0088 0.0026

Neptune 57973-01-19 12:43 G 22895281.83 22895282.03 22895282.24 0.0088 0.0032

Neptune 57973-09-02 01:26 G 22895507.37 22895507.56 22895507.77 0.0088 0.0038

Neptune 57974-04-15 14:10 G 22895732.91 22895733.09 22895733.30 0.0088 0.0044

Neptune 57974-11-27 02:53 G 22895958.46 22895958.62 22895958.82 0.0088 0.0050

Neptune 57975-07-10 16:05 G 22896184.00 22896184.17 22896184.34 0.0088 0.0055

Neptune 57976-02-21 04:34 G 22896409.55 22896409.69 22896409.86 0.0088 0.0061

Neptune 57976-10-03 17:17 G 22896635.09 22896635.22 22896635.38 0.0088 0.0067

Jupiter 57977-01-12 04:48 G 22896735.57 22896735.70 22896735.84 0.0520 0.0388

Neptune 57977-05-17 06:14 G 22896860.64 22896860.76 22896860.89 0.0088 0.0072

Neptune 57977-12-28 18:43 G 22897086.19 22897086.28 22897086.39 0.0088 0.0078

Neptune 57978-08-11 07:12 G 22897311.76 22897311.80 22897311.89 0.0088 0.0084

Jupiter 57982-03-30 14:10 G 22898638.89 22898639.09 22898639.30 0.0513 0.0091

Saturn 57982-04-17 02:24 G 22898656.49 22898656.60 22898656.71 0.0291 0.0247

Saturn 57982-12-03 00:43 G 22898886.32 22898886.53 22898886.74 0.0290 0.0033

Moon 57985-04-20 13:26 G 22899755.90 22899756.06 22899756.21 0.2657 0.0155

Earth 57985-04-20 17:31 G 22899756.07 22899756.23 22899756.39 0.2653 0.0202 *

Jupiter 57988-09-16 21:36 G 22901001.20 22901001.40 22901001.60 0.0517 0.0115

Jupiter 57993-12-03 10:19 G 22902904.78 22902904.93 22902905.08 0.0516 0.0349

Mars 57997-02-03 09:22 G 22904062.78 22904062.89 22904063.00 0.1911 0.1459

Saturn 57997-12-27 08:24 G 22904389.65 22904389.85 22904390.06 0.0269 0.0061

Mars 57998-01-06 05:46 G 22904399.60 22904399.74 22904399.88 0.1614 0.0932

Saturn 57998-08-13 11:31 G 22904618.82 22904618.98 22904619.15 0.0270 0.0160

Jupiter 58000-05-22 17:46 G 22905267.05 22905267.24 22905267.44 0.0514 0.0145

59TH MILLENNIUM CE

This is a list of transits of Venus in the 59th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 58003-09-20 04:19 G 22906482.59 22906482.68 22906482.81 0.0139 0.0119

Uranus 58004-05-03 13:26 G 22906708.90 22906709.06 22906709.24 0.0139 0.0085

Uranus 58004-12-15 22:48 G 22906935.25 22906935.45 22906935.65 0.0140 0.0052

Uranus 58005-07-30 07:55 G 22907161.62 22907161.83 22907162.05 0.0140 0.0018

Uranus 58006-03-13 17:17 G 22907388.01 22907388.22 22907388.44 0.0140 0.0016

Jupiter 58006-04-02 07:55 G 22907407.67 22907407.83 22907407.99 0.0509 0.0318

Uranus 58006-10-26 02:38 G 22907614.42 22907614.61 22907614.83 0.0140 0.0051

Uranus 58007-06-09 12:14 G 22907840.85 22907841.01 22907841.20 0.0141 0.0085

Uranus 58008-01-21 22:05 G 22908067.32 22908067.42 22908067.55 0.0141 0.0119

Saturn 58011-10-28 05:46 G 22909442.60 22909442.74 22909442.88 0.0291 0.0218

Jupiter 58012-01-26 15:22 G 22909533.02 22909533.14 22909533.27 0.0512 0.0397

Saturn 58012-06-14 03:36 G 22909672.44 22909672.65 22909672.86 0.0290 0.0062

Jupiter 58017-12-06 05:17 G 22911673.52 22911673.72 22911673.93 0.0511 0.0068

Jupiter 58024-05-25 13:55 G 22914035.92 22914036.08 22914036.26 0.0519 0.0279

Saturn 58026-11-22 06:00 G 22914946.70 22914946.75 22914946.82 0.0269 0.0255

Pluto 58027-01-08 22:19 G 22914994.25 22914994.43 22914994.64 0.0063 0.0031

Saturn 58027-07-09 08:38 G 22915175.65 22915175.86 22915176.07 0.0270 0.0038

Pluto 58027-08-22 02:24 G 22915219.38 22915219.60 22915219.82 0.0063 0.0004

Saturn 58028-02-23 12:00 G 22915404.85 22915405.00 22915405.16 0.0271 0.0184

Pluto 58028-04-03 06:00 G 22915444.59 22915444.75 22915444.93 0.0063 0.0040

Jupiter 58029-08-11 00:29 G 22915939.34 22915939.52 22915939.72 0.0514 0.0194

Mars 58031-11-05 03:07 G 22916755.57 22916755.63 22916755.69 0.1616 0.1489

Jupiter 58036-01-29 09:50 G 22918301.71 22918301.91 22918302.11 0.0516 0.0016

Jupiter 58041-04-15 19:55 G 22920205.24 22920205.33 22920205.43 0.0516 0.0455

Saturn 58041-05-09 11:17 G 22920228.81 22920228.97 22920229.14 0.0291 0.0180

Jupiter 58041-12-08 20:10 G 22920442.26 22920442.34 22920442.42 0.0507 0.0461

Saturn 58041-12-25 09:22 G 22920458.69 22920458.89 22920459.09 0.0290 0.0100

Uranus 58043-05-26 02:38 G 22920975.55 22920975.61 22920975.71 0.0139 0.0129

Uranus 58044-01-07 11:17 G 22921201.83 22921201.97 22921202.14 0.0139 0.0096

Neptune 58044-01-23 16:34 G 22921218.16 22921218.19 22921218.29 0.0089 0.0085

Uranus 58044-08-20 20:10 G 22921428.14 22921428.34 22921428.53 0.0139 0.0063

Neptune 58044-09-05 06:00 G 22921443.67 22921443.75 22921443.87 0.0089 0.0079

Uranus 58045-04-04 04:19 G 22921654.47 22921654.68 22921654.89 0.0138 0.0030

Neptune 58045-04-18 19:12 G 22921669.19 22921669.30 22921669.44 0.0089 0.0073

Uranus 58045-11-16 12:29 G 22921880.80 22921881.02 22921881.24 0.0138 0.0002

Neptune 58045-11-30 08:10 G 22921894.71 22921894.84 22921895.00 0.0089 0.0067

Uranus 58046-06-30 20:24 G 22922107.14 22922107.35 22922107.57 0.0138 0.0035

Neptune 58046-07-13 21:22 G 22922120.25 22922120.39 22922120.56 0.0089 0.0061

Uranus 58047-02-12 04:19 G 22922333.49 22922333.68 22922333.87 0.0138 0.0067

Neptune 58047-02-24 10:48 G 22922345.78 22922345.95 22922346.12 0.0089 0.0055

Uranus 58047-09-26 11:46 G 22922559.85 22922559.99 22922560.15 0.0137 0.0099

Jupiter 58047-10-04 04:19 G 22922567.51 22922567.68 22922567.86 0.0513 0.0247

Neptune 58047-10-07 23:46 G 22922571.32 22922571.49 22922571.68 0.0089 0.0049

Uranus 58048-05-09 19:12 G 22922786.25 22922786.30 22922786.39 0.0137 0.0130

Neptune 58048-05-20 12:58 G 22922796.85 22922797.04 22922797.24 0.0089 0.0043

Neptune 58049-01-01 02:10 G 22923022.39 22923022.59 22923022.79 0.0089 0.0037

Neptune 58049-08-14 15:22 G 22923247.94 22923248.14 22923248.35 0.0089 0.0031

Neptune 58050-03-28 04:34 G 22923473.48 22923473.69 22923473.90 0.0089 0.0025

Neptune 58050-11-08 17:46 G 22923699.03 22923699.24 22923699.45 0.0089 0.0019

Neptune 58051-06-22 06:43 G 22923924.57 22923924.78 22923925.00 0.0089 0.0013

Neptune 58052-02-02 19:55 G 22924150.11 22924150.33 22924150.55 0.0089 0.0007

Neptune 58052-09-15 09:07 G 22924375.66 22924375.88 22924376.10 0.0089 0.0002

Neptune 58053-04-28 22:19 G 22924601.21 22924601.43 22924601.65 0.0089 0.0005

Jupiter 58053-08-13 17:46 G 22924708.06 22924708.24 22924708.43 0.0510 0.0216

Neptune 58053-12-10 11:17 G 22924826.76 22924826.97 22924827.20 0.0089 0.0012

Neptune 58054-07-24 00:29 G 22925052.31 22925052.52 22925052.74 0.0089 0.0017

Neptune 58055-03-06 13:41 G 22925277.86 22925278.07 22925278.29 0.0089 0.0023

Neptune 58055-10-18 02:53 G 22925503.42 22925503.62 22925503.83 0.0089 0.0030

Neptune 58056-05-30 16:05 G 22925728.97 22925729.17 22925729.38 0.0089 0.0036

Saturn 58056-06-03 13:12 G 22925732.94 22925733.05 22925733.18 0.0269 0.0220

Neptune 58057-01-11 05:17 G 22925954.53 22925954.72 22925954.92 0.0089 0.0042

Saturn 58057-01-18 16:05 G 22925961.95 22925962.17 22925962.38 0.0270 0.0005

Neptune 58057-08-24 18:29 G 22926180.09 22926180.27 22926180.46 0.0089 0.0048

Saturn 58057-09-04 19:26 G 22926191.20 22926191.31 22926191.44 0.0271 0.0221

Neptune 58058-04-07 07:41 G 22926405.66 22926405.82 22926406.01 0.0089 0.0054

Neptune 58058-11-18 20:53 G 22926631.22 22926631.37 22926631.54 0.0089 0.0060

Jupiter 58059-06-09 01:26 G 22926833.52 22926833.56 22926833.61 0.0510 0.0497

Neptune 58059-07-02 10:05 G 22926856.79 22926856.92 22926857.08 0.0089 0.0066

Jupiter 58060-02-01 02:10 G 22927070.48 22927070.59 22927070.71 0.0519 0.0429

Neptune 58060-02-12 23:17 G 22927082.36 22927082.47 22927082.62 0.0089 0.0072

Neptune 58060-09-25 12:43 G 22927307.94 22927308.03 22927308.15 0.0089 0.0078

Neptune 58061-05-09 01:55 G 22927533.52 22927533.58 22927533.68 0.0089 0.0084

Neptune 58061-12-20 15:22 G 22927759.14 22927759.14 22927759.17 0.0089 0.0089

Mars 58062-12-01 10:48 G 22928104.78 22928104.95 22928105.12 0.1910 0.0497

Mars 58063-11-03 18:58 G 22928442.13 22928442.29 22928442.44 0.1614 0.0698

Jupiter 58065-04-18 15:07 G 22928973.92 22928974.13 22928974.33 0.0513 0.0039

Saturn 58070-11-19 16:19 G 22931015.00 22931015.18 22931015.37 0.0291 0.0146

Saturn 58071-07-07 13:55 G 22931244.89 22931245.08 22931245.27 0.0289 0.0132

Jupiter 58071-10-06 22:05 G 22931336.23 22931336.42 22931336.61 0.0517 0.0166

Jupiter 58076-12-22 11:17 G 22933239.81 22933239.97 22933240.14 0.0515 0.0296

Moon 58082-10-24 12:00 G 22935371.88 22935372.00 22935372.12 0.2682 0.1684

Earth 58082-10-24 17:02 G 22935372.14 22935372.21 22935372.29 0.2679 0.2331

Jupiter 58083-06-11 18:58 G 22935602.09 22935602.29 22935602.49 0.0515 0.0093

Saturn 58085-12-14 13:55 G 22936518.94 22936519.08 22936519.23 0.0269 0.0196

Saturn 58086-07-31 16:48 G 22936747.99 22936748.20 22936748.42 0.0270 0.0024

Saturn 58087-03-17 20:24 G 22936977.27 22936977.35 22936977.45 0.0271 0.0245

Uranus 58087-05-20 13:26 G 22937041.01 22937041.06 22937041.15 0.0139 0.0131

Uranus 58088-01-01 22:34 G 22937267.30 22937267.44 22937267.61 0.0139 0.0098

Uranus 58088-08-15 07:41 G 22937493.63 22937493.82 22937494.02 0.0139 0.0065

Uranus 58089-03-29 16:48 G 22937719.99 22937720.20 22937720.42 0.0140 0.0031

Jupiter 58089-04-21 06:43 G 22937742.64 22937742.78 22937742.92 0.0508 0.0361

Uranus 58089-11-11 02:10 G 22937946.37 22937946.59 22937946.81 0.0140 0.0003

Uranus 58090-06-25 11:31 G 22938172.77 22938172.98 22938173.19 0.0140 0.0037

Moon 58090-10-22 06:00 G 22938291.63 22938291.75 22938291.86 0.2685 0.1654

Earth 58090-10-22 07:41 G 22938291.68 22938291.82 22938291.96 0.2678 0.1207 *

Uranus 58091-02-06 21:07 G 22938399.20 22938399.38 22938399.57 0.0141 0.0071

Uranus 58091-09-21 06:58 G 22938625.65 22938625.79 22938625.93 0.0141 0.0105

Uranus 58092-05-04 16:48 G 22938852.17 22938852.20 22938852.23 0.0141 0.0139

Jupiter 58095-02-14 16:05 G 22939868.03 22939868.17 22939868.33 0.0512 0.0345

Saturn 58100-06-01 22:05 G 22941801.23 22941801.42 22941801.62 0.0291 0.0108

Jupiter 58100-12-26 03:50 G 22942008.46 22942008.66 22942008.86 0.0511 0.0111

Saturn 58101-01-17 19:26 G 22942031.15 22942031.31 22942031.49 0.0289 0.0171

Jupiter 58107-06-15 11:17 G 22944370.82 22944370.97 22944371.14 0.0518 0.0319

Jupiter 58112-08-30 23:31 G 22946274.29 22946274.48 22946274.68 0.0514 0.0147

Saturn 58115-06-27 21:36 G 22947305.23 22947305.40 22947305.57 0.0269 0.0159

Saturn 58116-02-12 00:43 G 22947534.32 22947534.53 22947534.73 0.0270 0.0061

Pluto 58117-02-24 21:50 G 22947913.24 22947913.41 22947913.58 0.0081 0.0051

Pluto 58117-10-08 08:24 G 22948138.66 22948138.85 22948139.08 0.0081 0.0025

Jupiter 58119-02-18 06:43 G 22948636.58 22948636.78 22948636.99 0.0515 0.0057

Jupiter 58124-05-05 19:12 G 22950540.18 22950540.30 22950540.43 0.0517 0.0407

Neptune 58124-12-17 02:53 G 22950765.58 22950765.62 22950765.71 0.0088 0.0085

Jupiter 58124-12-28 19:26 G 22950777.30 22950777.31 22950777.33 0.0507 0.0505

Neptune 58125-07-30 16:05 G 22950991.09 22950991.17 22950991.28 0.0088 0.0079

Neptune 58126-03-13 05:31 G 22951216.61 22951216.73 22951216.86 0.0088 0.0073

Neptune 58126-10-24 18:00 G 22951442.13 22951442.25 22951442.42 0.0088 0.0068

Neptune 58127-06-07 07:12 G 22951667.66 22951667.80 22951667.97 0.0088 0.0062

Uranus 58127-09-07 21:36 G 22951760.28 22951760.40 22951760.55 0.0139 0.0108

Neptune 58128-01-18 20:24 G 22951893.18 22951893.35 22951893.52 0.0088 0.0056

Uranus 58128-04-21 06:14 G 22951986.59 22951986.76 22951986.95 0.0139 0.0075

Neptune 58128-08-31 09:22 G 22952118.71 22952118.89 22952119.08 0.0088 0.0050

Mars 58128-09-28 13:12 G 22952146.88 22952147.05 22952147.22 0.1909 0.0402

Uranus 58128-12-03 14:53 G 22952212.91 22952213.12 22952213.33 0.0139 0.0042

Neptune 58129-04-13 21:50 G 22952344.24 22952344.41 22952344.62 0.0088 0.0045

Uranus 58129-07-17 23:17 G 22952439.25 22952439.47 22952439.69 0.0138 0.0009

Mars 58129-09-01 07:26 G 22952484.64 22952484.81 22952484.98 0.1615 0.0444

Neptune 58129-11-25 11:02 G 22952569.77 22952569.96 22952570.17 0.0088 0.0038

Saturn 58129-12-13 05:31 G 22952587.52 22952587.73 22952587.93 0.0290 0.0069

Uranus 58130-03-01 07:12 G 22952665.59 22952665.80 22952666.02 0.0138 0.0024

Neptune 58130-07-09 00:00 G 22952795.30 22952795.50 22952795.71 0.0088 0.0032

Saturn 58130-07-31 02:24 G 22952817.46 22952817.60 22952817.75 0.0289 0.0207

Uranus 58130-10-13 14:53 G 22952891.94 22952892.12 22952892.33 0.0138 0.0056

Jupiter 58130-10-24 03:07 G 22952902.45 22952902.63 22952902.82 0.0513 0.0202

Neptune 58131-02-19 12:58 G 22953020.84 22953021.04 22953021.26 0.0088 0.0027

Uranus 58131-05-27 22:34 G 22953118.29 22953118.44 22953118.62 0.0138 0.0088

Neptune 58131-10-03 01:55 G 22953246.37 22953246.58 22953246.80 0.0088 0.0021

Uranus 58132-01-09 06:14 G 22953344.67 22953344.76 22953344.88 0.0137 0.0119

Neptune 58132-05-15 14:38 G 22953471.90 22953472.11 22953472.34 0.0088 0.0015

Neptune 58132-12-27 03:36 G 22953697.43 22953697.65 22953697.87 0.0088 0.0009

Neptune 58133-08-09 16:34 G 22953922.97 22953923.19 22953923.41 0.0088 0.0003

Neptune 58134-03-23 05:31 G 22954148.51 22954148.73 22954148.95 0.0088 0.0003

Neptune 58134-11-03 18:14 G 22954374.05 22954374.26 22954374.49 0.0088 0.0009

Neptune 58135-06-17 06:58 G 22954599.58 22954599.79 22954600.02 0.0088 0.0015

Neptune 58136-01-28 19:55 G 22954825.12 22954825.33 22954825.55 0.0088 0.0021

Jupiter 58136-09-02 17:31 G 22955043.06 22955043.23 22955043.41 0.0510 0.0262

Neptune 58136-09-10 08:38 G 22955050.66 22955050.86 22955051.08 0.0088 0.0027

Neptune 58137-04-23 21:50 G 22955276.21 22955276.41 22955276.62 0.0088 0.0032

Neptune 58137-12-05 10:34 G 22955501.75 22955501.94 22955502.14 0.0088 0.0038

Neptune 58138-07-18 23:17 G 22955727.29 22955727.47 22955727.67 0.0088 0.0044

Neptune 58139-03-01 12:00 G 22955952.84 22955953.00 22955953.20 0.0088 0.0050

Neptune 58139-10-13 01:12 G 22956178.38 22956178.55 22956178.72 0.0088 0.0055

Neptune 58140-05-25 13:41 G 22956403.93 22956404.07 22956404.24 0.0088 0.0061

Neptune 58141-01-06 02:10 G 22956629.47 22956629.59 22956629.76 0.0088 0.0067

Neptune 58141-08-19 15:22 G 22956855.02 22956855.14 22956855.27 0.0088 0.0072

Neptune 58142-04-02 03:50 G 22957080.58 22957080.66 22957080.78 0.0088 0.0078

Jupiter 58142-06-29 01:12 G 22957168.46 22957168.55 22957168.65 0.0511 0.0450

Neptune 58142-11-13 17:02 G 22957306.15 22957306.21 22957306.28 0.0088 0.0083

Jupiter 58143-02-21 02:38 G 22957405.54 22957405.61 22957405.69 0.0520 0.0477

Saturn 58145-01-06 23:02 G 22958091.28 22958091.46 22958091.65 0.0269 0.0133

Saturn 58145-08-24 02:10 G 22958320.40 22958320.59 22958320.80 0.0270 0.0087

Jupiter 58148-05-08 13:12 G 22959308.85 22959309.05 22959309.26 0.0512 0.0011

Jupiter 58154-10-26 22:05 G 22961671.24 22961671.42 22961671.60 0.0517 0.0214

Saturn 58159-06-25 11:02 G 22963373.75 22963373.96 22963374.18 0.0290 0.0032

Jupiter 58160-01-12 08:38 G 22963574.69 22963574.86 22963575.04 0.0515 0.0254

Saturn 58160-02-10 08:10 G 22963603.74 22963603.84 22963603.96 0.0289 0.0244

Jupiter 58166-07-01 16:19 G 22965936.98 22965937.18 22965937.39 0.0514 0.0052

Uranus 58171-09-02 08:38 G 22967825.74 22967825.86 22967826.00 0.0139 0.0111

Uranus 58172-04-15 17:31 G 22968052.06 22968052.23 22968052.42 0.0139 0.0078

Jupiter 58172-05-11 04:34 G 22968077.57 22968077.69 22968077.82 0.0509 0.0401

Uranus 58172-11-28 02:38 G 22968278.41 22968278.61 22968278.82 0.0140 0.0044

Uranus 58173-07-12 12:00 G 22968504.78 22968505.00 22968505.22 0.0140 0.0010

Uranus 58174-02-23 21:22 G 22968731.18 22968731.39 22968731.61 0.0140 0.0024

Saturn 58174-07-20 07:12 G 22968877.60 22968877.80 22968878.00 0.0270 0.0096

Uranus 58174-10-08 06:29 G 22968957.59 22968957.77 22968957.98 0.0140 0.0059

Saturn 58175-03-06 10:34 G 22969106.76 22969106.94 22969107.13 0.0271 0.0126

Uranus 58175-05-22 16:05 G 22969184.02 22969184.17 22969184.35 0.0141 0.0093

Uranus 58176-01-04 01:41 G 22969410.50 22969410.57 22969410.68 0.0141 0.0127

Jupiter 58178-03-06 12:43 G 22970202.87 22970203.03 22970203.20 0.0511 0.0306

Jupiter 58184-01-15 01:55 G 22972343.38 22972343.58 22972343.77 0.0511 0.0153

Saturn 58188-05-19 22:05 G 22973930.35 22973930.42 22973930.52 0.0291 0.0266

Saturn 58189-01-04 20:10 G 22974160.13 22974160.34 22974160.55 0.0290 0.0012

Saturn 58189-08-22 16:48 G 22974390.18 22974390.20 22974390.23 0.0289 0.0286

Jupiter 58190-07-04 09:22 G 22974705.75 22974705.89 22974706.04 0.0519 0.0360

Mars 58194-07-26 14:53 G 22976189.00 22976189.12 22976189.25 0.1908 0.1337

Mars 58195-06-29 20:10 G 22976527.17 22976527.34 22976527.51 0.1616 0.0203

Jupiter 58195-09-19 22:48 G 22976609.25 22976609.45 22976609.65 0.0514 0.0101

Jupiter 58202-03-10 05:46 G 22978971.54 22978971.74 22978971.94 0.0516 0.0100

Saturn 58204-01-31 09:07 G 22979663.68 22979663.88 22979664.09 0.0270 0.0068

Saturn 58204-09-16 12:43 G 22979892.86 22979893.03 22979893.21 0.0271 0.0153

Jupiter 58207-05-26 17:17 G 22980875.08 22980875.22 22980875.36 0.0516 0.0363

Neptune 58208-04-28 00:43 G 22981212.49 22981212.53 22981212.63 0.0089 0.0084

Neptune 58208-12-09 13:55 G 22981438.00 22981438.08 22981438.20 0.0089 0.0078

Neptune 58209-07-23 03:22 G 22981663.52 22981663.64 22981663.77 0.0089 0.0072

Neptune 58210-03-05 16:34 G 22981889.05 22981889.19 22981889.34 0.0089 0.0066

Neptune 58210-10-17 05:02 G 22982114.57 22982114.71 22982114.89 0.0089 0.0061

Uranus 58211-05-09 08:24 G 22982318.76 22982318.85 22982318.98 0.0139 0.0121

Neptune 58211-05-30 18:14 G 22982340.10 22982340.26 22982340.45 0.0089 0.0055

Uranus 58211-12-21 17:17 G 22982545.06 22982545.22 22982545.40 0.0139 0.0087

Neptune 58212-01-11 07:26 G 22982565.64 22982565.81 22982566.00 0.0089 0.0049

Uranus 58212-08-04 01:55 G 22982771.39 22982771.58 22982771.79 0.0139 0.0054

Neptune 58212-08-23 20:38 G 22982791.18 22982791.36 22982791.56 0.0089 0.0043

Uranus 58213-03-18 10:19 G 22982997.72 22982997.93 22982998.15 0.0138 0.0021

Neptune 58213-04-06 09:50 G 22983016.72 22983016.91 22983017.12 0.0089 0.0037

Uranus 58213-10-30 18:29 G 22983224.05 22983224.27 22983224.49 0.0138 0.0012

Jupiter 58213-11-13 02:24 G 22983237.41 22983237.60 22983237.80 0.0513 0.0156

Neptune 58213-11-17 23:02 G 22983242.26 22983242.46 22983242.67 0.0089 0.0031

Uranus 58214-06-14 02:24 G 22983450.40 22983450.60 22983450.81 0.0138 0.0044

Neptune 58214-07-01 12:00 G 22983467.80 22983468.00 22983468.22 0.0089 0.0025

Uranus 58215-01-26 10:05 G 22983676.75 22983676.92 22983677.11 0.0138 0.0077

Neptune 58215-02-12 01:12 G 22983693.34 22983693.55 22983693.77 0.0089 0.0019

Uranus 58215-09-09 17:46 G 22983903.12 22983903.24 22983903.39 0.0138 0.0108

Neptune 58215-09-25 14:38 G 22983918.89 22983919.11 22983919.33 0.0089 0.0013

Neptune 58216-05-08 03:36 G 22984144.44 22984144.65 22984144.88 0.0089 0.0008

Neptune 58216-12-19 16:48 G 22984369.98 22984370.20 22984370.42 0.0089 0.0002

Neptune 58217-08-02 06:00 G 22984595.54 22984595.75 22984595.97 0.0089 0.0005

Saturn 58217-12-01 04:05 G 22984716.55 22984716.67 22984716.81 0.0291 0.0229

Neptune 58218-03-15 19:12 G 22984821.08 22984821.30 22984821.52 0.0089 0.0011

Saturn 58218-07-19 02:10 G 22984946.38 22984946.59 22984946.80 0.0290 0.0050

Neptune 58218-10-27 08:10 G 22985046.64 22985046.84 22985047.07 0.0089 0.0018

Neptune 58219-06-09 21:22 G 22985272.18 22985272.39 22985272.61 0.0089 0.0023

Jupiter 58219-09-23 14:10 G 22985377.93 22985378.09 22985378.26 0.0510 0.0298

Neptune 58220-01-21 10:19 G 22985497.74 22985497.93 22985498.15 0.0089 0.0030

Neptune 58220-09-02 23:31 G 22985723.29 22985723.48 22985723.70 0.0089 0.0036

Neptune 58221-04-16 12:43 G 22985948.85 22985949.03 22985949.24 0.0089 0.0042

Neptune 58221-11-28 01:55 G 22986174.41 22986174.58 22986174.78 0.0089 0.0047

Neptune 58222-07-11 14:53 G 22986399.96 22986400.12 22986400.32 0.0089 0.0054

Neptune 58223-02-22 04:05 G 22986625.53 22986625.67 22986625.85 0.0089 0.0060

Neptune 58223-10-05 17:17 G 22986851.10 22986851.22 22986851.39 0.0089 0.0066

Neptune 58224-05-18 06:58 G 22987076.66 22987076.79 22987076.93 0.0089 0.0071

Neptune 58224-12-29 20:10 G 22987302.24 22987302.34 22987302.46 0.0089 0.0077

Jupiter 58225-07-18 22:48 G 22987503.33 22987503.45 22987503.57 0.0510 0.0408

Neptune 58225-08-12 09:22 G 22987527.82 22987527.89 22987527.98 0.0089 0.0083

Jupiter 58226-03-12 23:17 G 22987740.45 22987740.47 22987740.50 0.0519 0.0513

Neptune 58226-03-25 22:19 G 22987753.43 22987753.43 22987753.49 0.0089 0.0089

Earth 58228-04-22 19:12 G 22988512.14 22988512.30 22988512.46 0.2654 0.0302

Moon 58228-04-23 00:43 G 22988512.38 22988512.53 22988512.69 0.2652 0.0641 *

Jupiter 58231-05-29 09:36 G 22989643.70 22989643.90 22989644.10 0.0513 0.0042

Saturn 58232-12-26 14:24 G 22990221.03 22990221.10 22990221.19 0.0269 0.0249

Saturn 58233-08-12 17:31 G 22990450.02 22990450.23 22990450.44 0.0270 0.0030

Saturn 58234-03-29 21:22 G 22990679.24 22990679.39 22990679.54 0.0271 0.0193

Moon 58236-04-20 13:12 G 22991431.99 22991432.05 22991432.10 0.2649 0.2466

Jupiter 58237-11-15 17:46 G 22992006.06 22992006.24 22992006.42 0.0517 0.0248

Jupiter 58243-02-01 05:31 G 22993909.55 22993909.73 22993909.92 0.0515 0.0216

Saturn 58247-06-13 14:53 G 22995502.97 22995503.12 22995503.30 0.0291 0.0181

Saturn 58248-01-29 12:29 G 22995732.82 22995733.02 22995733.22 0.0289 0.0097

Jupiter 58249-07-21 12:43 G 22996271.83 22996272.03 22996272.24 0.0515 0.0018

Jupiter 58254-10-07 01:26 G 22998175.48 22998175.56 22998175.64 0.0518 0.0473

Uranus 58255-05-03 17:46 G 22998384.15 22998384.24 22998384.35 0.0139 0.0123

Jupiter 58255-06-01 02:38 G 22998412.52 22998412.61 22998412.72 0.0508 0.0441

Uranus 58255-12-16 02:38 G 22998610.45 22998610.61 22998610.78 0.0139 0.0090

Uranus 58256-07-29 11:31 G 22998836.79 22998836.98 22998837.19 0.0139 0.0057

Uranus 58257-03-12 20:38 G 22999063.15 22999063.36 22999063.58 0.0140 0.0024

Uranus 58257-10-25 05:46 G 22999289.53 22999289.74 22999289.96 0.0140 0.0011

Uranus 58258-06-08 15:07 G 22999515.93 22999516.13 22999516.34 0.0140 0.0044

Uranus 58259-01-21 00:43 G 22999742.35 22999742.53 22999742.71 0.0141 0.0079

Uranus 58259-09-04 10:05 G 22999968.80 22999968.92 22999969.06 0.0141 0.0113

Jupiter 58261-03-26 10:19 G 23000537.76 23000537.93 23000538.10 0.0512 0.0266

Mars 58261-04-27 08:53 G 23000569.70 23000569.87 23000570.04 0.1616 0.0050

Saturn 58262-07-08 17:17 G 23001007.11 23001007.22 23001007.35 0.0269 0.0218

Saturn 58263-02-22 20:24 G 23001236.14 23001236.35 23001236.56 0.0270 0.0001

Saturn 58263-10-10 00:00 G 23001465.39 23001465.50 23001465.63 0.0271 0.0222

Jupiter 58267-02-03 23:02 G 23002678.27 23002678.46 23002678.65 0.0511 0.0191

Pluto 58273-02-07 22:05 G 23004874.35 23004874.42 23004874.56 0.0063 0.0056

Jupiter 58273-07-24 08:10 G 23005040.72 23005040.84 23005040.97 0.0519 0.0404

Pluto 58273-09-21 02:10 G 23005099.40 23005099.59 23005099.81 0.0063 0.0021

Pluto 58274-05-04 06:14 G 23005324.55 23005324.76 23005324.98 0.0063 0.0015

Pluto 58274-12-15 09:36 G 23005549.79 23005549.90 23005550.06 0.0063 0.0051

Saturn 58276-12-23 20:24 G 23006289.17 23006289.35 23006289.54 0.0291 0.0144

Saturn 58277-08-10 18:00 G 23006519.07 23006519.25 23006519.44 0.0289 0.0133

Jupiter 58278-10-09 18:43 G 23006944.08 23006944.28 23006944.49 0.0513 0.0065

Jupiter 58285-03-29 02:38 G 23009306.42 23009306.61 23009306.81 0.0516 0.0139

Neptune 58289-03-21 11:17 G 23010759.92 23010759.97 23010760.06 0.0088 0.0084

Neptune 58289-11-02 00:29 G 23010985.43 23010985.52 23010985.64 0.0088 0.0078

Jupiter 58290-06-14 12:14 G 23011209.86 23011210.01 23011210.17 0.0517 0.0330

Neptune 58290-06-15 13:12 G 23011210.95 23011211.05 23011211.20 0.0088 0.0073

Neptune 58291-01-27 02:24 G 23011436.48 23011436.60 23011436.77 0.0088 0.0067

Neptune 58291-09-09 15:36 G 23011662.01 23011662.15 23011662.32 0.0088 0.0061

Saturn 58292-01-19 01:12 G 23011793.40 23011793.55 23011793.71 0.0270 0.0182

Neptune 58292-04-22 04:48 G 23011887.53 23011887.70 23011887.88 0.0088 0.0055

Saturn 58292-09-04 04:34 G 23012022.48 23012022.69 23012022.90 0.0271 0.0038

Neptune 58292-12-03 17:31 G 23012113.06 23012113.23 23012113.43 0.0088 0.0049

Saturn 58293-04-21 08:38 G 23012251.80 23012251.86 23012251.92 0.0272 0.0261

Neptune 58293-07-17 06:29 G 23012338.59 23012338.77 23012338.98 0.0088 0.0044

Neptune 58294-02-27 19:41 G 23012564.13 23012564.32 23012564.53 0.0088 0.0038

Neptune 58294-10-11 08:53 G 23012789.66 23012789.87 23012790.07 0.0088 0.0032

Uranus 58295-01-06 18:58 G 23012877.24 23012877.29 23012877.36 0.0139 0.0133

Neptune 58295-05-24 21:22 G 23013015.19 23013015.39 23013015.61 0.0088 0.0026

Uranus 58295-08-21 03:50 G 23013103.52 23013103.66 23013103.82 0.0139 0.0099

Neptune 58296-01-05 10:19 G 23013240.72 23013240.93 23013241.15 0.0088 0.0020

Uranus 58296-04-03 12:29 G 23013329.83 23013330.02 23013330.22 0.0139 0.0066

Neptune 58296-08-17 23:17 G 23013466.26 23013466.47 23013466.69 0.0088 0.0014

Uranus 58296-11-15 20:53 G 23013556.16 23013556.37 23013556.59 0.0139 0.0033

Jupiter 58296-12-01 22:19 G 23013572.23 23013572.43 23013572.63 0.0513 0.0121

Neptune 58297-03-31 12:14 G 23013691.79 23013692.01 23013692.23 0.0088 0.0009

Uranus 58297-06-30 05:17 G 23013782.51 23013782.72 23013782.94 0.0138 0.0003

Neptune 58297-11-12 01:12 G 23013917.33 23013917.55 23013917.77 0.0088 0.0003

Uranus 58298-02-11 13:12 G 23014008.85 23014009.05 23014009.27 0.0138 0.0034

Neptune 58298-06-25 13:55 G 23014142.86 23014143.08 23014143.30 0.0088 0.0003

Uranus 58298-09-25 21:22 G 23014235.20 23014235.39 23014235.59 0.0138 0.0065

Neptune 58299-02-06 02:53 G 23014368.40 23014368.62 23014368.84 0.0088 0.0009

Uranus 58299-05-10 05:02 G 23014461.56 23014461.71 23014461.87 0.0138 0.0097

Neptune 58299-09-19 15:36 G 23014593.94 23014594.15 23014594.37 0.0088 0.0015

Uranus 58299-12-22 12:29 G 23014687.96 23014688.02 23014688.11 0.0137 0.0129

Neptune 58300-05-03 04:19 G 23014819.48 23014819.68 23014819.91 0.0088 0.0021

Neptune 58300-12-14 17:02 G 23015045.01 23015045.21 23015045.44 0.0088 0.0027

Neptune 58301-07-28 06:14 G 23015270.56 23015270.76 23015270.97 0.0088 0.0032

Neptune 58302-03-10 18:58 G 23015496.10 23015496.29 23015496.50 0.0088 0.0038

Jupiter 58302-10-13 10:19 G 23015712.78 23015712.93 23015713.09 0.0510 0.0331

Neptune 58302-10-22 07:41 G 23015721.65 23015721.82 23015722.03 0.0088 0.0044

Neptune 58303-06-04 20:24 G 23015947.19 23015947.35 23015947.55 0.0088 0.0050

Neptune 58304-01-16 09:36 G 23016172.74 23016172.90 23016173.08 0.0088 0.0055

Neptune 58304-08-28 22:19 G 23016398.28 23016398.43 23016398.60 0.0088 0.0061

Neptune 58305-04-11 11:02 G 23016623.84 23016623.96 23016624.13 0.0088 0.0067

Neptune 58305-11-23 00:00 G 23016849.39 23016849.50 23016849.64 0.0088 0.0072

Neptune 58306-07-06 12:29 G 23017074.95 23017075.02 23017075.15 0.0088 0.0078

Saturn 58306-07-07 08:38 G 23017075.66 23017075.86 23017076.07 0.0290 0.0092

Neptune 58307-02-17 01:41 G 23017300.51 23017300.57 23017300.65 0.0088 0.0083

Saturn 58307-02-22 06:00 G 23017305.59 23017305.75 23017305.91 0.0289 0.0183

Jupiter 58308-08-07 18:00 G 23017838.11 23017838.25 23017838.38 0.0511 0.0375

Jupiter 58314-06-18 07:55 G 23019978.63 23019978.83 23019979.03 0.0512 0.0084

Jupiter 58320-12-05 14:53 G 23022340.95 23022341.12 23022341.29 0.0518 0.0286

Saturn 58321-08-01 04:48 G 23022579.52 23022579.70 23022579.87 0.0269 0.0150

Saturn 58322-03-18 07:41 G 23022808.62 23022808.82 23022809.03 0.0270 0.0069

Earth 58325-10-27 17:46 G 23024128.16 23024128.24 23024128.32 0.2679 0.2289

Jupiter 58326-02-21 03:07 G 23024244.44 23024244.63 23024244.82 0.0515 0.0174

Mars 58327-02-23 21:22 G 23024612.22 23024612.39 23024612.56 0.1617 0.0303

Jupiter 58332-08-10 11:17 G 23026606.77 23026606.97 23026607.18 0.0515 0.0031

Earth 58333-10-25 08:24 G 23027047.71 23027047.85 23027047.99 0.2677 0.1218

Moon 58333-10-25 12:14 G 23027047.86 23027048.01 23027048.17 0.2673 0.0833 *

Saturn 58336-01-17 13:26 G 23027861.86 23027862.06 23027862.27 0.0290 0.0058

Saturn 58336-09-03 10:48 G 23028091.81 23028091.95 23028092.09 0.0289 0.0217

Jupiter 58337-10-26 21:07 G 23028510.28 23028510.38 23028510.50 0.0517 0.0437

Jupiter 58338-06-20 22:19 G 23028747.37 23028747.43 23028747.51 0.0508 0.0473

Uranus 58339-01-02 03:50 G 23028942.63 23028942.66 23028942.71 0.0139 0.0136

Uranus 58339-08-16 12:29 G 23029168.88 23029169.02 23029169.17 0.0139 0.0103

Uranus 58340-03-29 21:07 G 23029395.20 23029395.38 23029395.58 0.0139 0.0071

Uranus 58340-11-11 06:14 G 23029621.55 23029621.76 23029621.97 0.0140 0.0037

Uranus 58341-06-25 15:22 G 23029847.92 23029848.14 23029848.36 0.0140 0.0004

Uranus 58342-02-07 00:29 G 23030074.31 23030074.52 23030074.74 0.0140 0.0031

Uranus 58342-09-21 09:36 G 23030300.72 23030300.90 23030301.11 0.0140 0.0066

Uranus 58343-05-05 18:58 G 23030527.15 23030527.29 23030527.46 0.0141 0.0100

Uranus 58343-12-18 04:34 G 23030753.64 23030753.69 23030753.77 0.0141 0.0134

Jupiter 58344-04-15 07:41 G 23030872.64 23030872.82 23030873.00 0.0512 0.0226

Jupiter 58350-02-23 18:00 G 23033013.07 23033013.25 23033013.44 0.0511 0.0222

Saturn 58351-02-11 12:14 G 23033365.82 23033366.01 23033366.20 0.0270 0.0114

Saturn 58351-09-28 15:36 G 23033594.96 23033595.15 23033595.35 0.0271 0.0107

Jupiter 58355-12-20 04:19 G 23035138.61 23035138.68 23035138.76 0.0509 0.0473

Jupiter 58356-08-13 03:50 G 23035375.56 23035375.66 23035375.77 0.0518 0.0436

Mars 58358-03-21 19:55 G 23035961.24 23035961.33 23035961.42 0.1909 0.1631

Jupiter 58361-10-29 14:24 G 23037278.90 23037279.10 23037279.31 0.0514 0.0033

Pluto 58363-11-08 02:53 G 23038018.43 23038018.62 23038018.84 0.0081 0.0032

Pluto 58364-06-20 13:55 G 23038243.91 23038244.08 23038244.28 0.0081 0.0043

Saturn 58364-12-12 03:36 G 23038418.62 23038418.65 23038418.71 0.0291 0.0283

Saturn 58365-07-30 01:55 G 23038648.37 23038648.58 23038648.79 0.0290 0.0006

Saturn 58366-03-16 22:48 G 23038878.39 23038878.45 23038878.53 0.0289 0.0269

Jupiter 58368-04-17 21:36 G 23039641.21 23039641.40 23039641.59 0.0516 0.0169

Neptune 58371-12-18 20:10 G 23040981.32 23040981.34 23040981.36 0.0089 0.0088

Neptune 58372-07-31 08:38 G 23041206.81 23041206.86 23041206.96 0.0089 0.0083

Neptune 58373-03-13 22:05 G 23041432.32 23041432.42 23041432.53 0.0089 0.0077

Jupiter 58373-07-04 11:02 G 23041544.79 23041544.96 23041545.13 0.0516 0.0285

Neptune 58373-10-25 10:34 G 23041657.84 23041657.94 23041658.09 0.0089 0.0072

Neptune 58374-06-07 23:46 G 23041883.36 23041883.49 23041883.65 0.0089 0.0066

Neptune 58375-01-19 12:58 G 23042108.89 23042109.04 23042109.21 0.0089 0.0060

Neptune 58375-09-02 02:10 G 23042334.42 23042334.59 23042334.77 0.0089 0.0054

Neptune 58376-04-14 14:53 G 23042559.96 23042560.12 23042560.32 0.0089 0.0049

Neptune 58376-11-26 04:05 G 23042785.49 23042785.67 23042785.87 0.0089 0.0043

Neptune 58377-07-09 17:02 G 23043011.03 23043011.21 23043011.43 0.0089 0.0037

Neptune 58378-02-20 06:14 G 23043236.57 23043236.76 23043236.98 0.0089 0.0031

Neptune 58378-10-03 19:26 G 23043462.11 23043462.31 23043462.53 0.0089 0.0025

Uranus 58379-04-21 13:55 G 23043661.96 23043662.08 23043662.21 0.0139 0.0113

Neptune 58379-05-17 08:38 G 23043687.66 23043687.86 23043688.08 0.0089 0.0019

Uranus 58379-12-03 22:34 G 23043888.27 23043888.44 23043888.62 0.0139 0.0079

Jupiter 58379-12-22 18:29 G 23043907.07 23043907.27 23043907.47 0.0514 0.0085

Neptune 58379-12-28 21:50 G 23043913.20 23043913.41 23043913.63 0.0089 0.0013

Uranus 58380-07-17 07:26 G 23044114.60 23044114.81 23044115.01 0.0139 0.0046

Neptune 58380-08-10 11:17 G 23044138.75 23044138.97 23044139.19 0.0089 0.0007

Saturn 58380-08-23 16:05 G 23044151.97 23044152.17 23044152.37 0.0269 0.0082

Uranus 58381-02-28 15:50 G 23044340.94 23044341.16 23044341.38 0.0139 0.0013

Neptune 58381-03-24 00:29 G 23044364.30 23044364.52 23044364.74 0.0089 0.0001

Saturn 58381-04-09 19:12 G 23044381.13 23044381.30 23044381.49 0.0270 0.0138

Uranus 58381-10-12 23:46 G 23044567.28 23044567.49 23044567.71 0.0138 0.0021

Neptune 58381-11-04 13:41 G 23044589.85 23044590.07 23044590.29 0.0089 0.0005

Uranus 58382-05-27 07:55 G 23044793.63 23044793.83 23044794.03 0.0138 0.0053

Neptune 58382-06-18 02:38 G 23044815.40 23044815.61 23044815.83 0.0089 0.0011

Uranus 58383-01-08 15:36 G 23045019.99 23045020.15 23045020.33 0.0138 0.0085

Neptune 58383-01-29 15:50 G 23045040.95 23045041.16 23045041.38 0.0089 0.0017

Uranus 58383-08-22 23:17 G 23045246.37 23045246.47 23045246.60 0.0138 0.0117

Neptune 58383-09-12 05:02 G 23045266.51 23045266.71 23045266.93 0.0089 0.0023

Neptune 58384-04-24 18:00 G 23045492.06 23045492.25 23045492.47 0.0089 0.0030

Neptune 58384-12-06 07:12 G 23045717.61 23045717.80 23045718.01 0.0089 0.0035

Neptune 58385-07-19 20:10 G 23045943.17 23045943.34 23045943.55 0.0089 0.0042

Jupiter 58385-11-01 07:41 G 23046047.69 23046047.82 23046047.97 0.0509 0.0370

Neptune 58386-03-02 09:50 G 23046168.72 23046168.91 23046169.10 0.0089 0.0047

Neptune 58386-10-13 23:02 G 23046394.29 23046394.46 23046394.64 0.0089 0.0053

Neptune 58387-05-27 12:00 G 23046619.84 23046620.00 23046620.17 0.0089 0.0059

Neptune 58388-01-08 00:58 G 23046845.41 23046845.54 23046845.71 0.0089 0.0065

Neptune 58388-08-20 14:10 G 23047070.98 23047071.09 23047071.24 0.0089 0.0071

Neptune 58389-04-03 03:22 G 23047296.55 23047296.64 23047296.78 0.0089 0.0077

Neptune 58389-11-14 17:02 G 23047522.13 23047522.21 23047522.30 0.0089 0.0082

Neptune 58390-06-28 06:00 G 23047747.72 23047747.75 23047747.81 0.0089 0.0088

Jupiter 58391-08-27 16:19 G 23048173.03 23048173.18 23048173.34 0.0511 0.0332

Mars 58392-12-21 10:19 G 23048654.76 23048654.93 23048655.09 0.1618 0.0553

Saturn 58394-06-24 07:55 G 23049204.73 23049204.83 23049204.94 0.0291 0.0251

Saturn 58395-02-09 06:00 G 23049434.54 23049434.75 23049434.96 0.0290 0.0027

Jupiter 58397-07-07 03:50 G 23050313.46 23050313.66 23050313.86 0.0512 0.0120

Jupiter 58403-12-25 12:43 G 23052675.87 23052676.03 23052676.18 0.0517 0.0325

Jupiter 58409-03-11 21:50 G 23054579.22 23054579.41 23054579.61 0.0515 0.0143

Saturn 58409-07-19 19:41 G 23054709.30 23054709.32 23054709.37 0.0269 0.0264

Saturn 58410-03-05 22:48 G 23054938.24 23054938.45 23054938.66 0.0270 0.0047

Saturn 58410-10-21 02:24 G 23055167.44 23055167.60 23055167.76 0.0271 0.0174

Jupiter 58415-08-30 07:55 G 23056941.62 23056941.83 23056942.03 0.0515 0.0066

Jupiter 58420-11-14 17:02 G 23058845.08 23058845.21 23058845.34 0.0518 0.0402

Jupiter 58421-07-09 18:29 G 23059082.25 23059082.27 23059082.30 0.0508 0.0504

Uranus 58423-04-15 21:36 G 23059727.30 23059727.40 23059727.54 0.0139 0.0117

Uranus 58423-11-28 06:14 G 23059953.60 23059953.76 23059953.95 0.0139 0.0084

Saturn 58424-01-04 20:24 G 23059991.19 23059991.35 23059991.50 0.0291 0.0197

Mars 58424-01-16 21:50 G 23060003.24 23060003.41 23060003.57 0.1908 0.0700

Uranus 58424-07-11 15:22 G 23060179.94 23060180.14 23060180.34 0.0139 0.0051

Saturn 58424-08-21 18:14 G 23060221.06 23060221.26 23060221.46 0.0290 0.0080

Uranus 58425-02-23 00:14 G 23060406.30 23060406.51 23060406.73 0.0140 0.0017

Uranus 58425-10-07 09:22 G 23060632.67 23060632.89 23060633.11 0.0140 0.0017

Uranus 58426-05-21 18:14 G 23060859.07 23060859.26 23060859.48 0.0140 0.0051

Uranus 58427-01-03 03:36 G 23061085.49 23061085.65 23061085.84 0.0140 0.0086

Jupiter 58427-05-05 02:10 G 23061207.40 23061207.59 23061207.78 0.0512 0.0195

Uranus 58427-08-17 12:58 G 23061311.95 23061312.04 23061312.17 0.0141 0.0120

Jupiter 58433-03-14 17:02 G 23063348.04 23063348.21 23063348.39 0.0511 0.0265

Jupiter 58439-01-08 00:00 G 23065473.41 23065473.50 23065473.61 0.0510 0.0439

Saturn 58439-01-30 00:14 G 23065495.41 23065495.51 23065495.62 0.0269 0.0231

Jupiter 58439-09-02 00:29 G 23065710.44 23065710.52 23065710.61 0.0519 0.0471

Saturn 58439-09-16 03:07 G 23065724.42 23065724.63 23065724.84 0.0269 0.0014

Saturn 58440-05-02 06:29 G 23065953.63 23065953.77 23065953.91 0.0271 0.0206

Jupiter 58444-11-17 13:12 G 23067613.84 23067614.05 23067614.25 0.0513 0.0017

Jupiter 58451-05-07 20:53 G 23069976.18 23069976.37 23069976.55 0.0517 0.0215

Neptune 58452-11-10 06:43 G 23070528.77 23070528.78 23070528.81 0.0089 0.0088

Neptune 58453-06-23 19:26 G 23070754.25 23070754.31 23070754.41 0.0088 0.0083

Saturn 58453-07-16 23:17 G 23070777.30 23070777.47 23070777.65 0.0291 0.0168

Neptune 58454-02-04 08:53 G 23070979.77 23070979.87 23070979.98 0.0088 0.0077

Saturn 58454-03-03 21:07 G 23071007.19 23071007.38 23071007.58 0.0290 0.0110

Neptune 58454-09-17 21:36 G 23071205.29 23071205.40 23071205.55 0.0088 0.0072

Neptune 58455-05-01 10:48 G 23071430.81 23071430.95 23071431.11 0.0088 0.0066

Neptune 58455-12-13 00:00 G 23071656.34 23071656.50 23071656.66 0.0088 0.0060

Jupiter 58456-07-23 07:55 G 23071879.66 23071879.83 23071880.02 0.0516 0.0245

Neptune 58456-07-25 12:43 G 23071881.87 23071882.03 23071882.22 0.0088 0.0054

Neptune 58457-03-08 01:55 G 23072107.41 23072107.58 23072107.78 0.0088 0.0049

Neptune 58457-10-19 15:07 G 23072332.94 23072333.13 23072333.33 0.0088 0.0043

Neptune 58458-06-02 03:50 G 23072558.48 23072558.66 23072558.88 0.0088 0.0037

Mars 58458-10-18 23:02 G 23072697.31 23072697.46 23072697.61 0.1619 0.0804

Neptune 58459-01-13 16:48 G 23072784.01 23072784.20 23072784.42 0.0088 0.0032

Neptune 58459-08-27 06:00 G 23073009.54 23073009.75 23073009.97 0.0088 0.0025

Neptune 58460-04-08 18:58 G 23073235.08 23073235.29 23073235.51 0.0088 0.0020

Neptune 58460-11-20 07:55 G 23073460.62 23073460.83 23073461.05 0.0088 0.0014

Neptune 58461-07-03 20:53 G 23073686.15 23073686.37 23073686.59 0.0088 0.0008

Neptune 58462-02-14 09:50 G 23073911.69 23073911.91 23073912.13 0.0088 0.0002

Neptune 58462-09-27 22:34 G 23074137.23 23074137.44 23074137.67 0.0088 0.0005

Uranus 58462-12-19 22:48 G 23074220.37 23074220.45 23074220.55 0.0140 0.0127

Jupiter 58463-01-10 17:17 G 23074242.01 23074242.22 23074242.42 0.0514 0.0042

Neptune 58463-05-11 11:31 G 23074362.76 23074362.98 23074363.20 0.0088 0.0009

Uranus 58463-08-03 07:41 G 23074446.67 23074446.82 23074446.99 0.0139 0.0093

Neptune 58463-12-23 00:14 G 23074588.30 23074588.51 23074588.73 0.0088 0.0015

Uranus 58464-03-16 16:19 G 23074673.00 23074673.18 23074673.39 0.0139 0.0060

Neptune 58464-08-04 12:58 G 23074813.83 23074814.04 23074814.26 0.0088 0.0021

Uranus 58464-10-29 00:58 G 23074899.33 23074899.54 23074899.76 0.0139 0.0027

Neptune 58465-03-18 01:55 G 23075039.38 23075039.58 23075039.80 0.0088 0.0027

Uranus 58465-06-12 09:22 G 23075125.68 23075125.89 23075126.11 0.0139 0.0007

Neptune 58465-10-29 14:53 G 23075264.92 23075265.12 23075265.33 0.0088 0.0032

Uranus 58466-01-24 17:31 G 23075352.03 23075352.23 23075352.44 0.0138 0.0040

Neptune 58466-06-12 03:36 G 23075490.46 23075490.65 23075490.86 0.0088 0.0038

Uranus 58466-09-08 01:26 G 23075578.38 23075578.56 23075578.75 0.0138 0.0072

Neptune 58467-01-23 16:19 G 23075716.00 23075716.18 23075716.38 0.0088 0.0044

Uranus 58467-04-22 09:22 G 23075804.75 23075804.89 23075805.03 0.0138 0.0104

Neptune 58467-09-06 04:48 G 23075941.54 23075941.70 23075941.91 0.0088 0.0050

Uranus 58467-12-04 16:48 G 23076031.18 23076031.20 23076031.24 0.0138 0.0136

Jupiter 58468-03-28 00:29 G 23076145.50 23076145.52 23076145.56 0.0519 0.0512

Neptune 58468-04-18 18:00 G 23076167.09 23076167.25 23076167.44 0.0088 0.0055

Saturn 58468-08-11 05:46 G 23076281.60 23076281.74 23076281.88 0.0269 0.0199

Jupiter 58468-11-20 03:22 G 23076382.52 23076382.64 23076382.77 0.0509 0.0401

Neptune 58468-11-30 06:43 G 23076392.64 23076392.78 23076392.96 0.0088 0.0061

Saturn 58469-03-28 08:38 G 23076510.65 23076510.86 23076511.07 0.0270 0.0019

Neptune 58469-07-13 19:55 G 23076618.19 23076618.33 23076618.48 0.0088 0.0066

Saturn 58469-11-12 12:14 G 23076739.92 23076740.01 23076740.11 0.0271 0.0241

Neptune 58470-02-24 08:24 G 23076843.74 23076843.85 23076844.00 0.0088 0.0072

Neptune 58470-10-07 21:36 G 23077069.30 23077069.40 23077069.51 0.0088 0.0077

Moon 58471-04-24 15:22 G 23077267.98 23077268.14 23077268.30 0.2655 0.0139

Earth 58471-04-24 21:07 G 23077268.22 23077268.38 23077268.54 0.2655 0.0426 *

Neptune 58471-05-21 09:50 G 23077294.87 23077294.91 23077295.01 0.0088 0.0083

Jupiter 58474-09-15 13:41 G 23078507.91 23078508.07 23078508.24 0.0511 0.0292

Jupiter 58480-07-26 00:29 G 23080648.33 23080648.52 23080648.71 0.0512 0.0154

Saturn 58483-01-27 10:48 G 23081563.76 23081563.95 23081564.15 0.0291 0.0116

Saturn 58483-09-14 08:38 G 23081793.68 23081793.86 23081794.03 0.0289 0.0161

Jupiter 58487-01-13 07:26 G 23083010.67 23083010.81 23083010.96 0.0518 0.0357

Mars 58489-11-12 23:31 G 23084045.30 23084045.48 23084045.65 0.1906 0.0249

Mars 58490-10-17 14:53 G 23084384.04 23084384.12 23084384.21 0.1617 0.1395

Jupiter 58492-03-30 22:05 G 23084914.22 23084914.42 23084914.62 0.0515 0.0094

Saturn 58498-02-21 10:05 G 23087067.76 23087067.92 23087068.09 0.0269 0.0166

Jupiter 58498-09-18 04:05 G 23087276.47 23087276.67 23087276.87 0.0515 0.0101

Saturn 58498-10-08 12:58 G 23087296.83 23087297.04 23087297.25 0.0270 0.0052

Jupiter 58503-12-05 17:02 G 23089180.07 23089180.21 23089180.36 0.0517 0.0351

Uranus 58506-12-15 08:10 G 23090285.78 23090285.84 23090285.93 0.0139 0.0129

Uranus 58507-07-29 17:02 G 23090512.05 23090512.21 23090512.36 0.0139 0.0096

Uranus 58508-03-12 01:26 G 23090738.37 23090738.56 23090738.76 0.0139 0.0063

Uranus 58508-10-24 10:05 G 23090964.72 23090964.92 23090965.14 0.0139 0.0031

Uranus 58509-06-07 19:12 G 23091191.08 23091191.30 23091191.52 0.0140 0.0004

Uranus 58510-01-20 04:19 G 23091417.48 23091417.68 23091417.90 0.0140 0.0038

Jupiter 58510-05-25 01:41 G 23091542.38 23091542.57 23091542.77 0.0513 0.0148

Uranus 58510-09-03 13:26 G 23091643.88 23091644.06 23091644.26 0.0140 0.0072

Uranus 58511-04-17 23:02 G 23091870.32 23091870.46 23091870.60 0.0140 0.0106

Uranus 58511-11-30 08:38 G 23092096.84 23092096.86 23092096.87 0.0141 0.0140

Saturn 58512-08-09 12:58 G 23092349.84 23092350.04 23092350.24 0.0291 0.0089

Saturn 58513-03-27 10:34 G 23092579.79 23092579.94 23092580.11 0.0290 0.0188

Jupiter 58516-04-03 14:53 G 23093682.96 23093683.12 23093683.28 0.0510 0.0305

Pluto 58519-10-21 23:46 G 23094979.40 23094979.49 23094979.63 0.0063 0.0054

Pluto 58520-06-03 03:50 G 23095204.46 23095204.66 23095204.88 0.0063 0.0019

Pluto 58521-01-14 07:41 G 23095429.61 23095429.82 23095430.04 0.0063 0.0016

Pluto 58521-08-27 11:17 G 23095654.86 23095654.97 23095655.11 0.0064 0.0052

Jupiter 58522-01-28 00:00 G 23095808.37 23095808.50 23095808.63 0.0510 0.0392

Jupiter 58522-09-22 00:14 G 23096045.49 23096045.51 23096045.53 0.0519 0.0516

Mars 58524-08-16 11:31 G 23096739.85 23096739.98 23096740.11 0.1620 0.1056

Saturn 58527-09-04 14:10 G 23097853.92 23097854.09 23097854.29 0.0269 0.0137

Jupiter 58527-12-08 09:36 G 23097948.69 23097948.90 23097949.10 0.0513 0.0051

Saturn 58528-04-20 17:17 G 23098083.02 23098083.22 23098083.43 0.0270 0.0083

Jupiter 58534-05-27 18:58 G 23100311.11 23100311.29 23100311.47 0.0516 0.0255

Neptune 58536-03-22 03:36 G 23100975.64 23100975.65 23100975.71 0.0089 0.0088

Neptune 58536-11-02 16:48 G 23101201.13 23101201.20 23101201.30 0.0089 0.0082

Neptune 58537-06-16 06:00 G 23101426.64 23101426.75 23101426.86 0.0089 0.0076

Neptune 58538-01-27 18:29 G 23101652.16 23101652.27 23101652.42 0.0089 0.0071

Neptune 58538-09-10 07:55 G 23101877.69 23101877.83 23101877.99 0.0089 0.0065

Neptune 58539-04-23 21:07 G 23102103.22 23102103.38 23102103.54 0.0089 0.0059

Jupiter 58539-08-13 05:17 G 23102214.54 23102214.72 23102214.91 0.0516 0.0206

Neptune 58539-12-05 09:36 G 23102328.74 23102328.90 23102329.09 0.0089 0.0054

Neptune 58540-07-17 22:48 G 23102554.28 23102554.45 23102554.65 0.0089 0.0048

Neptune 58541-02-28 12:00 G 23102779.81 23102780.00 23102780.20 0.0089 0.0042

Neptune 58541-10-12 00:58 G 23103005.35 23103005.54 23103005.75 0.0089 0.0036

Saturn 58542-02-19 23:31 G 23103136.27 23103136.48 23103136.69 0.0290 0.0039

Neptune 58542-05-25 14:10 G 23103230.88 23103231.09 23103231.30 0.0089 0.0031

Saturn 58542-10-07 20:53 G 23103366.25 23103366.37 23103366.50 0.0289 0.0236

Neptune 58543-01-06 02:53 G 23103456.42 23103456.62 23103456.84 0.0089 0.0025

Neptune 58543-08-19 16:05 G 23103681.97 23103682.17 23103682.40 0.0089 0.0019

Neptune 58544-04-01 05:17 G 23103907.51 23103907.72 23103907.95 0.0089 0.0013

Neptune 58544-11-12 18:29 G 23104133.06 23104133.27 23104133.49 0.0089 0.0007

Neptune 58545-06-26 07:41 G 23104358.60 23104358.82 23104359.04 0.0089 0.0001

Jupiter 58546-01-30 12:29 G 23104576.82 23104577.02 23104577.22 0.0514 0.0007

Neptune 58546-02-06 20:53 G 23104584.15 23104584.37 23104584.59 0.0089 0.0005

Neptune 58546-09-20 10:05 G 23104809.70 23104809.92 23104810.14 0.0089 0.0011

Uranus 58547-04-03 17:17 G 23105005.09 23105005.22 23105005.37 0.0140 0.0107

Neptune 58547-05-03 23:02 G 23105035.26 23105035.46 23105035.69 0.0089 0.0017

Uranus 58547-11-16 01:55 G 23105231.41 23105231.58 23105231.78 0.0139 0.0074

Neptune 58547-12-15 12:14 G 23105260.81 23105261.01 23105261.23 0.0089 0.0023

Uranus 58548-06-29 10:48 G 23105457.75 23105457.95 23105458.16 0.0139 0.0040

Neptune 58548-07-28 01:12 G 23105486.36 23105486.55 23105486.78 0.0089 0.0030

Uranus 58549-02-10 19:12 G 23105684.09 23105684.30 23105684.52 0.0139 0.0007

Neptune 58549-03-10 14:53 G 23105711.92 23105712.12 23105712.32 0.0089 0.0035

Uranus 58549-09-25 03:36 G 23105910.43 23105910.65 23105910.86 0.0139 0.0027

Neptune 58549-10-22 03:50 G 23105937.47 23105937.66 23105937.86 0.0089 0.0041

Uranus 58550-05-09 11:31 G 23106136.79 23106136.98 23106137.18 0.0138 0.0059

Neptune 58550-06-04 17:02 G 23106163.03 23106163.21 23106163.40 0.0089 0.0047

Uranus 58550-12-21 19:12 G 23106363.15 23106363.30 23106363.47 0.0138 0.0092

Neptune 58551-01-16 06:00 G 23106388.59 23106388.75 23106388.94 0.0089 0.0053

Jupiter 58551-04-18 01:41 G 23106480.48 23106480.57 23106480.67 0.0518 0.0458

Uranus 58551-08-05 02:53 G 23106589.55 23106589.62 23106589.73 0.0138 0.0124

Neptune 58551-08-29 19:12 G 23106614.15 23106614.30 23106614.48 0.0089 0.0059

Jupiter 58551-12-11 04:19 G 23106717.58 23106717.68 23106717.77 0.0509 0.0448

Neptune 58552-04-11 08:53 G 23106839.72 23106839.87 23106840.02 0.0089 0.0064

Neptune 58552-11-22 21:50 G 23107065.28 23107065.41 23107065.55 0.0089 0.0070

Neptune 58553-07-06 10:34 G 23107290.85 23107290.94 23107291.08 0.0089 0.0076

Neptune 58554-02-16 23:46 G 23107516.42 23107516.49 23107516.60 0.0089 0.0082

Neptune 58554-09-30 13:26 G 23107742.02 23107742.06 23107742.12 0.0089 0.0087

Mars 58555-09-11 01:55 G 23108087.44 23108087.58 23108087.72 0.1905 0.1132

Mars 58556-08-15 03:22 G 23108426.52 23108426.64 23108426.76 0.1617 0.1137

Saturn 58557-03-16 18:58 G 23108640.10 23108640.29 23108640.49 0.0269 0.0103

Jupiter 58557-10-05 10:05 G 23108842.75 23108842.92 23108843.10 0.0511 0.0255

Saturn 58557-10-31 21:50 G 23108869.22 23108869.41 23108869.60 0.0270 0.0115

Jupiter 58563-08-16 01:26 G 23110983.37 23110983.56 23110983.74 0.0511 0.0205

Moon 58568-10-28 13:41 G 23112883.94 23112884.07 23112884.21 0.2675 0.1481

Earth 58568-10-28 18:43 G 23112884.20 23112884.28 23112884.36 0.2678 0.2299 *

Jupiter 58569-06-10 09:07 G 23113108.84 23113108.88 23113108.93 0.0509 0.0492

Jupiter 58570-02-02 08:24 G 23113345.73 23113345.85 23113345.98 0.0518 0.0406

Saturn 58571-09-02 00:00 G 23113922.29 23113922.50 23113922.72 0.0291 0.0017

Saturn 58572-04-18 21:36 G 23114152.31 23114152.40 23114152.50 0.0289 0.0260

Jupiter 58575-04-20 21:22 G 23115249.18 23115249.39 23115249.59 0.0514 0.0047

Moon 58576-10-26 04:19 G 23115803.55 23115803.68 23115803.81 0.2679 0.1491

Earth 58576-10-26 09:22 G 23115803.75 23115803.89 23115804.03 0.2676 0.1220 *

Jupiter 58581-10-08 05:02 G 23117611.52 23117611.71 23117611.90 0.0515 0.0151

Saturn 58586-09-26 22:05 G 23119426.22 23119426.42 23119426.62 0.0269 0.0075

Jupiter 58586-12-24 14:38 G 23119514.95 23119515.11 23119515.27 0.0517 0.0310

Saturn 58587-05-14 00:58 G 23119655.36 23119655.54 23119655.72 0.0270 0.0144

Mars 58590-06-14 00:14 G 23120782.41 23120782.51 23120782.61 0.1621 0.1313

Uranus 58591-03-29 02:38 G 23121070.50 23121070.61 23121070.77 0.0139 0.0109

Uranus 58591-11-10 11:17 G 23121296.80 23121296.97 23121297.17 0.0139 0.0076

Uranus 58592-06-23 20:10 G 23121523.14 23121523.34 23121523.55 0.0139 0.0043

Uranus 58593-02-05 05:17 G 23121749.50 23121749.72 23121749.94 0.0139 0.0009

Jupiter 58593-06-13 01:12 G 23121877.35 23121877.55 23121877.75 0.0513 0.0102

Uranus 58593-09-19 14:10 G 23121975.88 23121976.09 23121976.31 0.0140 0.0025

Uranus 58594-05-03 23:02 G 23122202.27 23122202.46 23122202.67 0.0140 0.0059

Uranus 58594-12-16 08:10 G 23122428.69 23122428.84 23122429.02 0.0140 0.0093

Uranus 58595-07-30 17:31 G 23122655.16 23122655.23 23122655.34 0.0140 0.0128

Jupiter 58599-04-23 13:12 G 23124017.91 23124018.05 23124018.21 0.0510 0.0345

Saturn 58600-07-28 10:48 G 23124478.85 23124478.95 23124479.07 0.0291 0.0248

Saturn 58601-03-15 09:36 G 23124708.69 23124708.90 23124709.11 0.0290 0.0032

Jupiter 58605-02-16 19:55 G 23126143.19 23126143.33 23126143.48 0.0510 0.0355

Pluto 58610-07-21 06:14 G 23128123.56 23128123.76 23128123.98 0.0081 0.0024

Jupiter 58610-12-28 11:31 G 23128283.78 23128283.98 23128284.18 0.0513 0.0103

Pluto 58611-03-03 17:02 G 23128349.05 23128349.21 23128349.39 0.0081 0.0050

Saturn 58615-08-24 00:29 G 23129983.47 23129983.52 23129983.58 0.0268 0.0257

Saturn 58616-04-09 02:38 G 23130212.40 23130212.61 23130212.82 0.0269 0.0042

Saturn 58616-11-24 05:17 G 23130441.57 23130441.72 23130441.89 0.0270 0.0176

Neptune 58617-02-13 14:53 G 23130523.08 23130523.12 23130523.16 0.0089 0.0087

Jupiter 58617-06-16 16:19 G 23130646.02 23130646.18 23130646.35 0.0517 0.0295

Neptune 58617-09-27 03:36 G 23130748.58 23130748.65 23130748.75 0.0089 0.0082

Neptune 58618-05-10 16:19 G 23130974.09 23130974.18 23130974.31 0.0089 0.0077

Neptune 58618-12-22 05:31 G 23131199.61 23131199.73 23131199.88 0.0088 0.0071

Neptune 58619-08-04 18:43 G 23131425.14 23131425.28 23131425.44 0.0088 0.0065

Neptune 58620-03-17 07:41 G 23131650.67 23131650.82 23131651.00 0.0088 0.0059

Neptune 58620-10-28 20:53 G 23131876.20 23131876.37 23131876.55 0.0088 0.0054

Neptune 58621-06-11 10:05 G 23132101.73 23132101.92 23132102.10 0.0088 0.0048

Neptune 58622-01-22 22:48 G 23132327.27 23132327.45 23132327.66 0.0088 0.0042

Mars 58622-06-13 16:19 G 23132469.03 23132469.18 23132469.32 0.1618 0.0898

Jupiter 58622-09-02 07:41 G 23132549.63 23132549.82 23132550.02 0.0515 0.0148

Neptune 58622-09-05 11:46 G 23132552.80 23132552.99 23132553.21 0.0088 0.0037

Neptune 58623-04-19 00:58 G 23132778.34 23132778.54 23132778.75 0.0088 0.0031

Neptune 58623-11-30 13:55 G 23133003.88 23133004.08 23133004.30 0.0088 0.0025

Neptune 58624-07-13 02:53 G 23133229.41 23133229.62 23133229.84 0.0088 0.0019

Neptune 58625-02-23 16:05 G 23133454.96 23133455.17 23133455.39 0.0088 0.0013

Neptune 58625-10-07 05:02 G 23133680.49 23133680.71 23133680.93 0.0088 0.0008

Neptune 58626-05-20 18:00 G 23133906.03 23133906.25 23133906.47 0.0088 0.0002

Neptune 58627-01-01 06:58 G 23134131.57 23134131.79 23134132.01 0.0088 0.0004

Neptune 58627-08-14 19:41 G 23134357.11 23134357.32 23134357.54 0.0088 0.0010

Neptune 58628-03-27 08:53 G 23134582.65 23134582.87 23134583.09 0.0088 0.0015

Neptune 58628-11-07 21:36 G 23134808.19 23134808.40 23134808.62 0.0088 0.0021

Jupiter 58629-02-19 13:55 G 23134911.88 23134912.08 23134912.28 0.0514 0.0045

Neptune 58629-06-21 10:19 G 23135033.73 23135033.93 23135034.15 0.0088 0.0027

Neptune 58630-02-01 23:17 G 23135259.27 23135259.47 23135259.68 0.0088 0.0033

Saturn 58630-02-07 11:02 G 23135264.84 23135264.96 23135265.11 0.0292 0.0226

Neptune 58630-09-15 12:00 G 23135484.81 23135485.00 23135485.21 0.0088 0.0038

Saturn 58630-09-25 09:36 G 23135494.69 23135494.90 23135495.11 0.0291 0.0054

Uranus 58630-12-03 02:24 G 23135563.50 23135563.60 23135563.71 0.0140 0.0120

Neptune 58631-04-29 00:43 G 23135710.35 23135710.53 23135710.74 0.0088 0.0044

Uranus 58631-07-17 11:17 G 23135789.81 23135789.97 23135790.15 0.0139 0.0086

Neptune 58631-12-10 13:55 G 23135935.90 23135936.08 23135936.26 0.0088 0.0049

Uranus 58632-02-28 20:10 G 23136016.14 23136016.34 23136016.54 0.0139 0.0053

Neptune 58632-07-23 02:24 G 23136161.44 23136161.60 23136161.78 0.0088 0.0055

Uranus 58632-10-12 04:34 G 23136242.48 23136242.69 23136242.91 0.0139 0.0019

Neptune 58633-03-05 15:07 G 23136386.99 23136387.13 23136387.31 0.0088 0.0061

Uranus 58633-05-26 12:58 G 23136468.82 23136469.04 23136469.26 0.0139 0.0014

Neptune 58633-10-17 04:19 G 23136612.54 23136612.68 23136612.83 0.0088 0.0066

Uranus 58634-01-07 21:07 G 23136695.17 23136695.38 23136695.58 0.0139 0.0047

Jupiter 58634-05-08 02:38 G 23136815.48 23136815.61 23136815.73 0.0518 0.0405

Neptune 58634-05-30 16:48 G 23136838.10 23136838.20 23136838.35 0.0088 0.0072

Uranus 58634-08-22 05:02 G 23136921.54 23136921.71 23136921.90 0.0138 0.0079

Jupiter 58634-12-31 04:05 G 23137052.63 23137052.67 23137052.73 0.0509 0.0494

Neptune 58635-01-11 05:46 G 23137063.65 23137063.74 23137063.86 0.0088 0.0077

Uranus 58635-04-05 12:58 G 23137147.92 23137148.04 23137148.17 0.0138 0.0111

Neptune 58635-08-24 18:58 G 23137289.22 23137289.29 23137289.36 0.0088 0.0082

Neptune 58636-04-06 07:41 G 23137514.82 23137514.82 23137514.84 0.0088 0.0088

Jupiter 58640-10-25 12:00 G 23139177.82 23139178.00 23139178.19 0.0512 0.0201

Saturn 58645-03-05 01:55 G 23140769.49 23140769.58 23140769.70 0.0268 0.0233

Saturn 58645-10-20 04:34 G 23140998.48 23140998.69 23140998.90 0.0269 0.0017

Saturn 58646-06-06 07:12 G 23141227.67 23141227.80 23141227.95 0.0270 0.0203

Jupiter 58646-09-05 00:00 G 23141318.32 23141318.50 23141318.68 0.0511 0.0246

Jupiter 58652-06-30 09:36 G 23143443.81 23143443.90 23143444.00 0.0509 0.0443

Jupiter 58653-02-22 08:38 G 23143680.77 23143680.86 23143680.96 0.0518 0.0453

Mars 58656-04-11 12:58 G 23144824.99 23144825.04 23144825.08 0.1622 0.1562

Jupiter 58658-05-10 20:38 G 23145584.15 23145584.36 23145584.56 0.0514 0.0003

Saturn 58659-08-20 18:58 G 23146051.13 23146051.29 23146051.46 0.0291 0.0182

Saturn 58660-04-06 17:31 G 23146281.03 23146281.23 23146281.43 0.0290 0.0097

Jupiter 58664-10-28 01:41 G 23147946.39 23147946.57 23147946.76 0.0515 0.0190

Jupiter 58670-01-13 17:31 G 23149850.05 23149850.23 23149850.40 0.0517 0.0251

Saturn 58674-09-15 06:58 G 23151555.66 23151555.79 23151555.94 0.0268 0.0200

Uranus 58674-11-27 13:12 G 23151628.96 23151629.05 23151629.18 0.0139 0.0121

Saturn 58675-05-02 09:22 G 23151784.68 23151784.89 23151785.10 0.0269 0.0016

Uranus 58675-07-11 21:50 G 23151855.25 23151855.41 23151855.59 0.0139 0.0088

Saturn 58675-12-17 12:00 G 23152013.90 23152014.00 23152014.11 0.0270 0.0234

Uranus 58676-02-23 06:29 G 23152081.58 23152081.77 23152081.98 0.0139 0.0055

Jupiter 58676-07-02 23:02 G 23152212.26 23152212.46 23152212.66 0.0513 0.0060

Uranus 58676-10-06 15:22 G 23152307.93 23152308.14 23152308.36 0.0139 0.0022

Uranus 58677-05-21 00:14 G 23152534.30 23152534.51 23152534.73 0.0140 0.0013

Uranus 58678-01-02 09:22 G 23152760.69 23152760.89 23152761.10 0.0140 0.0046

Uranus 58678-08-16 18:43 G 23152987.10 23152987.28 23152987.46 0.0140 0.0080

Uranus 58679-03-31 04:05 G 23153213.55 23153213.67 23153213.80 0.0140 0.0115

Jupiter 58681-09-18 12:43 G 23154115.99 23154116.03 23154116.07 0.0519 0.0506

Jupiter 58682-05-13 16:05 G 23154353.04 23154353.17 23154353.29 0.0510 0.0400

Jupiter 58688-03-07 21:50 G 23156478.24 23156478.41 23156478.57 0.0511 0.0301

Mars 58688-04-10 04:48 G 23156511.54 23156511.70 23156511.85 0.1619 0.0642

Saturn 58689-03-01 19:12 G 23156837.12 23156837.30 23156837.47 0.0291 0.0160

Saturn 58689-10-17 17:17 G 23157067.03 23157067.22 23157067.41 0.0290 0.0119

Jupiter 58694-01-16 12:58 G 23158618.84 23158619.04 23158619.23 0.0512 0.0155

Neptune 58700-06-25 11:31 G 23160969.96 23160969.98 23160970.05 0.0089 0.0087

Jupiter 58700-07-06 19:12 G 23160981.15 23160981.30 23160981.45 0.0517 0.0350

Neptune 58701-02-06 00:43 G 23161195.46 23161195.53 23161195.63 0.0089 0.0081

Neptune 58701-09-19 13:41 G 23161420.98 23161421.07 23161421.20 0.0089 0.0076

Neptune 58702-05-03 02:53 G 23161646.50 23161646.62 23161646.76 0.0089 0.0070

Neptune 58702-12-14 16:05 G 23161872.02 23161872.17 23161872.32 0.0089 0.0064

Neptune 58703-07-28 04:48 G 23162097.55 23162097.70 23162097.88 0.0089 0.0059

Neptune 58704-03-09 18:00 G 23162323.08 23162323.25 23162323.43 0.0089 0.0053

Saturn 58704-03-28 07:26 G 23162341.67 23162341.81 23162341.98 0.0268 0.0178

Neptune 58704-10-21 06:58 G 23162548.61 23162548.79 23162548.99 0.0089 0.0047

Saturn 58704-11-12 10:05 G 23162570.71 23162570.92 23162571.13 0.0269 0.0039

Neptune 58705-06-03 19:41 G 23162774.15 23162774.32 23162774.53 0.0089 0.0042

Saturn 58705-06-29 12:58 G 23162799.99 23162800.04 23162800.11 0.0270 0.0258

Jupiter 58705-09-22 07:12 G 23162884.61 23162884.80 23162885.01 0.0515 0.0102

Neptune 58706-01-15 08:53 G 23162999.68 23162999.87 23163000.08 0.0089 0.0036

Neptune 58706-08-28 22:05 G 23163225.22 23163225.42 23163225.64 0.0089 0.0030

Neptune 58707-04-11 11:17 G 23163450.76 23163450.97 23163451.18 0.0089 0.0024

Neptune 58707-11-23 00:14 G 23163676.30 23163676.51 23163676.73 0.0089 0.0018

Neptune 58708-07-05 13:12 G 23163901.84 23163902.05 23163902.27 0.0089 0.0013

Neptune 58709-02-16 02:24 G 23164127.38 23164127.60 23164127.82 0.0089 0.0007

Neptune 58709-09-29 15:36 G 23164352.93 23164353.15 23164353.37 0.0089 0.0001

Neptune 58710-05-13 04:48 G 23164578.48 23164578.70 23164578.92 0.0089 0.0005

Neptune 58710-12-24 17:46 G 23164804.02 23164804.24 23164804.46 0.0089 0.0011

Neptune 58711-08-07 06:58 G 23165029.58 23165029.79 23165030.01 0.0089 0.0017

Jupiter 58712-03-11 15:22 G 23165246.94 23165247.14 23165247.34 0.0514 0.0097

Neptune 58712-03-19 19:55 G 23165255.13 23165255.33 23165255.55 0.0089 0.0023

Neptune 58712-10-31 09:07 G 23165480.68 23165480.88 23165481.10 0.0089 0.0029

Neptune 58713-06-13 22:34 G 23165706.24 23165706.44 23165706.64 0.0089 0.0035

Neptune 58714-01-25 11:31 G 23165931.79 23165931.98 23165932.18 0.0089 0.0041

Earth 58714-04-27 22:34 G 23166024.29 23166024.44 23166024.60 0.2655 0.0501

Moon 58714-04-28 04:05 G 23166024.53 23166024.67 23166024.81 0.2657 0.1274 *

Uranus 58714-08-03 12:29 G 23166121.98 23166122.02 23166122.11 0.0140 0.0133

Neptune 58714-09-08 00:43 G 23166157.36 23166157.53 23166157.73 0.0089 0.0046

Uranus 58715-03-17 21:36 G 23166348.26 23166348.40 23166348.57 0.0140 0.0099

Neptune 58715-04-21 13:41 G 23166382.91 23166383.07 23166383.27 0.0089 0.0053

Uranus 58715-10-30 06:14 G 23166574.58 23166574.76 23166574.97 0.0139 0.0066

Neptune 58715-12-03 03:22 G 23166608.47 23166608.64 23166608.81 0.0089 0.0058

Uranus 58716-06-12 15:07 G 23166800.92 23166801.13 23166801.34 0.0139 0.0032

Neptune 58716-07-15 16:19 G 23166834.03 23166834.18 23166834.34 0.0089 0.0064

Uranus 58717-01-24 23:31 G 23167027.26 23167027.48 23167027.70 0.0139 0.0002

Neptune 58717-02-26 05:17 G 23167059.60 23167059.72 23167059.87 0.0089 0.0069

Jupiter 58717-05-28 02:24 G 23167150.46 23167150.60 23167150.75 0.0518 0.0357

Uranus 58717-09-08 07:41 G 23167253.62 23167253.82 23167254.04 0.0139 0.0035

Neptune 58717-10-09 18:58 G 23167285.17 23167285.29 23167285.41 0.0089 0.0075

Uranus 58718-04-22 15:50 G 23167479.97 23167480.16 23167480.35 0.0138 0.0068

Neptune 58718-05-23 07:41 G 23167510.74 23167510.82 23167510.93 0.0089 0.0081

Saturn 58718-09-13 02:10 G 23167623.39 23167623.59 23167623.78 0.0291 0.0118

Uranus 58718-12-04 23:31 G 23167706.35 23167706.48 23167706.64 0.0138 0.0100

Neptune 58719-01-03 20:38 G 23167736.33 23167736.36 23167736.44 0.0089 0.0087

Saturn 58719-05-01 00:14 G 23167853.34 23167853.51 23167853.69 0.0290 0.0160

Mars 58719-05-07 06:58 G 23167859.74 23167859.79 23167859.84 0.1906 0.1823

Uranus 58719-07-19 07:26 G 23167932.76 23167932.81 23167932.88 0.0138 0.0132

Moon 58722-04-25 19:12 G 23168944.21 23168944.30 23168944.40 0.2653 0.2139

Jupiter 58723-11-15 09:36 G 23169512.71 23169512.90 23169513.09 0.0512 0.0159

Jupiter 58729-09-25 03:07 G 23171653.47 23171653.63 23171653.80 0.0511 0.0304

Saturn 58733-10-08 12:58 G 23173127.86 23173128.04 23173128.22 0.0268 0.0145

Saturn 58734-05-25 15:07 G 23173356.93 23173357.13 23173357.34 0.0269 0.0072

Jupiter 58735-07-21 07:55 G 23173778.71 23173778.83 23173778.96 0.0509 0.0398

Jupiter 58736-03-14 07:12 G 23174015.75 23174015.80 23174015.86 0.0519 0.0496

Jupiter 58741-05-31 00:00 G 23175919.30 23175919.50 23175919.71 0.0514 0.0058

Jupiter 58747-11-18 04:19 G 23178281.50 23178281.68 23178281.86 0.0516 0.0245

Saturn 58748-03-25 01:55 G 23178409.38 23178409.58 23178409.78 0.0291 0.0097

Saturn 58748-11-09 23:46 G 23178639.33 23178639.49 23178639.66 0.0290 0.0181

Jupiter 58753-02-02 19:55 G 23180185.14 23180185.33 23180185.52 0.0516 0.0194

Mars 58754-02-06 17:17 G 23180554.05 23180554.22 23180554.39 0.1620 0.0391

Uranus 58758-07-28 23:31 G 23182187.44 23182187.48 23182187.56 0.0138 0.0133

Uranus 58759-03-12 08:10 G 23182413.70 23182413.84 23182414.00 0.0139 0.0100

Jupiter 58759-07-24 02:10 G 23182547.39 23182547.59 23182547.79 0.0513 0.0003

Uranus 58759-10-24 16:34 G 23182640.01 23182640.19 23182640.39 0.0139 0.0067

Uranus 58760-06-07 01:12 G 23182866.35 23182866.55 23182866.77 0.0139 0.0034

Uranus 58761-01-19 10:19 G 23183092.71 23183092.93 23183093.15 0.0139 0.0000

Uranus 58761-09-02 19:12 G 23183319.09 23183319.30 23183319.52 0.0140 0.0034

Uranus 58762-04-17 04:05 G 23183545.49 23183545.67 23183545.87 0.0140 0.0068

Uranus 58762-11-29 13:12 G 23183771.92 23183772.05 23183772.22 0.0140 0.0103

Saturn 58763-04-20 12:58 G 23183913.86 23183914.04 23183914.23 0.0269 0.0123

Uranus 58763-07-13 22:48 G 23183998.42 23183998.45 23183998.52 0.0140 0.0136

Saturn 58763-12-05 15:22 G 23184142.94 23184143.14 23184143.34 0.0270 0.0094

Jupiter 58764-10-08 12:58 G 23184450.95 23184451.04 23184451.14 0.0519 0.0456

Jupiter 58765-06-02 16:05 G 23184688.08 23184688.17 23184688.27 0.0510 0.0444

Pluto 58766-07-04 00:14 G 23185084.43 23185084.51 23185084.62 0.0063 0.0056

Pluto 58767-02-14 04:19 G 23185309.47 23185309.68 23185309.89 0.0063 0.0022

Pluto 58767-09-27 07:55 G 23185534.62 23185534.83 23185535.05 0.0063 0.0013

Pluto 58768-05-09 11:46 G 23185759.85 23185759.99 23185760.13 0.0064 0.0049

Jupiter 58771-03-28 23:31 G 23186813.31 23186813.48 23186813.66 0.0511 0.0248

Jupiter 58777-02-05 13:26 G 23188953.87 23188954.06 23188954.25 0.0512 0.0203

Saturn 58777-10-05 07:55 G 23189195.62 23189195.83 23189196.04 0.0291 0.0058

Saturn 58778-05-23 05:46 G 23189425.61 23189425.74 23189425.89 0.0290 0.0220

Neptune 58781-05-18 22:48 G 23190517.41 23190517.45 23190517.51 0.0089 0.0086

Neptune 58781-12-30 11:31 G 23190742.91 23190742.98 23190743.09 0.0089 0.0081

Neptune 58782-08-13 00:58 G 23190968.43 23190968.54 23190968.66 0.0089 0.0075

Jupiter 58782-12-01 19:26 G 23191079.26 23191079.31 23191079.36 0.0508 0.0490

Neptune 58783-03-26 13:41 G 23191193.96 23191194.07 23191194.23 0.0089 0.0070

Jupiter 58783-07-26 17:02 G 23191316.08 23191316.21 23191316.34 0.0517 0.0392

Neptune 58783-11-07 03:07 G 23191419.48 23191419.63 23191419.78 0.0089 0.0064

Neptune 58784-06-19 15:50 G 23191645.01 23191645.16 23191645.34 0.0088 0.0059

Neptune 58785-01-31 05:02 G 23191870.54 23191870.71 23191870.89 0.0088 0.0053

Mars 58785-03-03 08:53 G 23191901.72 23191901.87 23191902.03 0.1905 0.0903

Neptune 58785-09-13 17:46 G 23192096.07 23192096.24 23192096.45 0.0088 0.0048

Neptune 58786-04-27 06:58 G 23192321.61 23192321.79 23192322.00 0.0088 0.0042

Neptune 58786-12-08 20:10 G 23192547.14 23192547.34 23192547.54 0.0088 0.0036

Neptune 58787-07-22 08:53 G 23192772.68 23192772.87 23192773.09 0.0088 0.0030

Neptune 58788-03-03 22:05 G 23192998.22 23192998.42 23192998.64 0.0088 0.0025

Jupiter 58788-10-11 10:34 G 23193219.73 23193219.94 23193220.14 0.0515 0.0044

Neptune 58788-10-15 11:17 G 23193223.76 23193223.97 23193224.19 0.0088 0.0019

Neptune 58789-05-29 00:00 G 23193449.29 23193449.50 23193449.73 0.0088 0.0014

Neptune 58790-01-09 13:12 G 23193674.83 23193675.05 23193675.27 0.0088 0.0007

Neptune 58790-08-23 02:10 G 23193900.37 23193900.59 23193900.81 0.0088 0.0002

Neptune 58791-04-05 15:22 G 23194125.92 23194126.14 23194126.36 0.0088 0.0004

Neptune 58791-11-17 04:05 G 23194351.46 23194351.67 23194351.90 0.0088 0.0010

Neptune 58792-06-29 16:48 G 23194577.00 23194577.20 23194577.43 0.0088 0.0017

Saturn 58792-10-30 18:14 G 23194700.06 23194700.26 23194700.46 0.0269 0.0090

Neptune 58793-02-10 06:00 G 23194802.54 23194802.75 23194802.97 0.0088 0.0022

Saturn 58793-06-16 20:38 G 23194929.17 23194929.36 23194929.55 0.0269 0.0127

Neptune 58793-09-23 18:43 G 23195028.08 23195028.28 23195028.50 0.0088 0.0027

Neptune 58794-05-07 07:26 G 23195253.62 23195253.81 23195254.03 0.0088 0.0033

Neptune 58794-12-18 20:24 G 23195479.16 23195479.35 23195479.56 0.0088 0.0038

Jupiter 58795-03-31 13:55 G 23195581.88 23195582.08 23195582.27 0.0514 0.0142

Neptune 58795-08-01 09:07 G 23195704.70 23195704.88 23195705.08 0.0088 0.0044

Neptune 58796-03-13 22:19 G 23195930.25 23195930.43 23195930.62 0.0088 0.0049

Neptune 58796-10-25 10:48 G 23196155.80 23196155.95 23196156.14 0.0088 0.0055

Neptune 58797-06-07 23:46 G 23196381.34 23196381.49 23196381.66 0.0088 0.0061

Neptune 58798-01-19 12:14 G 23196606.89 23196607.01 23196607.18 0.0088 0.0066

Neptune 58798-09-02 01:26 G 23196832.44 23196832.56 23196832.69 0.0088 0.0071

Uranus 58798-11-15 07:12 G 23196906.68 23196906.80 23196906.93 0.0140 0.0112

Neptune 58799-04-15 13:55 G 23197058.00 23197058.08 23197058.21 0.0088 0.0077

Uranus 58799-06-29 15:50 G 23197133.00 23197133.16 23197133.36 0.0140 0.0079

Neptune 58799-11-27 03:07 G 23197283.57 23197283.63 23197283.72 0.0088 0.0082

Uranus 58800-02-11 00:58 G 23197359.33 23197359.54 23197359.75 0.0139 0.0045

Jupiter 58800-06-16 06:14 G 23197485.59 23197485.76 23197485.93 0.0518 0.0295

Neptune 58800-07-09 16:05 G 23197509.15 23197509.17 23197509.20 0.0088 0.0087

Uranus 58800-09-24 09:22 G 23197585.68 23197585.89 23197586.11 0.0139 0.0011

Uranus 58801-05-08 17:46 G 23197812.02 23197812.24 23197812.45 0.0139 0.0022

Uranus 58801-12-21 01:41 G 23198038.38 23198038.57 23198038.78 0.0139 0.0056

Uranus 58802-08-04 09:50 G 23198264.76 23198264.91 23198265.09 0.0138 0.0088

Uranus 58803-03-18 17:46 G 23198491.15 23198491.24 23198491.36 0.0138 0.0120

Jupiter 58806-12-04 11:46 G 23199847.79 23199847.99 23199848.19 0.0512 0.0104

Saturn 58807-04-17 08:38 G 23199981.65 23199981.86 23199982.07 0.0291 0.0034

Saturn 58807-12-03 06:14 G 23200211.65 23200211.76 23200211.88 0.0290 0.0242

Earth 58811-10-31 19:26 G 23201640.23 23201640.31 23201640.39 0.2677 0.2267

Jupiter 58812-10-14 05:17 G 23201988.58 23201988.72 23201988.87 0.0511 0.0357

Jupiter 58818-08-09 10:48 G 23204113.81 23204113.95 23204114.11 0.0510 0.0343

Earth 58819-10-29 10:19 G 23204559.79 23204559.93 23204560.07 0.2675 0.1208

Moon 58819-10-29 15:50 G 23204560.02 23204560.16 23204560.31 0.2676 0.1023 *

Mars 58819-12-05 06:00 G 23204596.58 23204596.75 23204596.93 0.1621 0.0145

Saturn 58822-05-12 18:00 G 23205486.05 23205486.25 23205486.46 0.0269 0.0069

Saturn 58822-12-27 20:24 G 23205715.18 23205715.35 23205715.53 0.0270 0.0149

Jupiter 58824-06-19 00:29 G 23206254.32 23206254.52 23206254.72 0.0513 0.0107

Jupiter 58830-12-07 06:29 G 23208616.61 23208616.77 23208616.94 0.0516 0.0299

Jupiter 58836-02-22 20:24 G 23210520.16 23210520.35 23210520.55 0.0516 0.0144

Saturn 58836-03-11 15:07 G 23210538.08 23210538.13 23210538.21 0.0292 0.0277

Saturn 58836-10-27 14:10 G 23210767.88 23210768.09 23210768.30 0.0291 0.0003

Saturn 58837-06-14 11:46 G 23210997.94 23210997.99 23210998.05 0.0289 0.0278

Jupiter 58842-08-12 00:29 G 23212882.32 23212882.52 23212882.73 0.0513 0.0043

Uranus 58842-11-09 18:00 G 23212972.14 23212972.25 23212972.39 0.0138 0.0113

Uranus 58843-06-24 02:24 G 23213198.43 23213198.60 23213198.79 0.0139 0.0080

Uranus 58844-02-05 11:17 G 23213424.77 23213424.97 23213425.18 0.0139 0.0047

Uranus 58844-09-18 20:10 G 23213651.12 23213651.34 23213651.55 0.0139 0.0013

Uranus 58845-05-03 04:48 G 23213877.49 23213877.70 23213877.92 0.0139 0.0021

Uranus 58845-12-15 13:41 G 23214103.88 23214104.07 23214104.28 0.0140 0.0055

Uranus 58846-07-29 22:48 G 23214330.30 23214330.45 23214330.64 0.0140 0.0089

Uranus 58847-03-13 08:24 G 23214556.76 23214556.85 23214556.97 0.0140 0.0123

Jupiter 58847-10-28 15:22 G 23214786.02 23214786.14 23214786.27 0.0519 0.0398

Jupiter 58848-06-21 18:43 G 23215023.26 23215023.28 23215023.33 0.0510 0.0500

Mars 58850-12-29 11:02 G 23215943.79 23215943.96 23215944.14 0.1903 0.0047

Saturn 58851-04-07 21:50 G 23216043.34 23216043.41 23216043.49 0.0268 0.0250

Saturn 58851-11-23 00:00 G 23216272.29 23216272.50 23216272.71 0.0269 0.0035

Saturn 58852-07-09 02:10 G 23216501.45 23216501.59 23216501.76 0.0270 0.0183

Jupiter 58854-04-16 22:19 G 23217148.24 23217148.43 23217148.62 0.0510 0.0202

Pluto 58857-04-01 05:46 G 23218228.54 23218228.74 23218228.94 0.0081 0.0032

Pluto 58857-11-12 16:19 G 23218454.00 23218454.18 23218454.38 0.0081 0.0042

Jupiter 58860-02-25 16:34 G 23219289.01 23219289.19 23219289.36 0.0512 0.0260

Neptune 58864-09-26 19:41 G 23220964.29 23220964.32 23220964.41 0.0089 0.0086

Neptune 58865-05-10 09:07 G 23221189.80 23221189.88 23221189.98 0.0089 0.0080

Saturn 58865-09-21 16:48 G 23221324.11 23221324.20 23221324.32 0.0292 0.0251

Jupiter 58865-12-20 20:53 G 23221414.28 23221414.37 23221414.48 0.0508 0.0439

Neptune 58865-12-21 21:50 G 23221415.31 23221415.41 23221415.55 0.0089 0.0075

Saturn 58866-05-09 15:36 G 23221553.94 23221554.15 23221554.36 0.0291 0.0029

Neptune 58866-08-04 11:02 G 23221640.84 23221640.96 23221641.11 0.0089 0.0069

Jupiter 58866-08-14 19:41 G 23221651.22 23221651.32 23221651.42 0.0518 0.0446

Neptune 58867-03-18 00:00 G 23221866.37 23221866.50 23221866.67 0.0089 0.0064

Neptune 58867-10-29 12:58 G 23222091.89 23222092.04 23222092.23 0.0089 0.0058

Neptune 58868-06-11 02:10 G 23222317.42 23222317.59 23222317.78 0.0089 0.0052

Neptune 58869-01-22 14:53 G 23222542.95 23222543.12 23222543.33 0.0089 0.0047

Neptune 58869-09-05 04:19 G 23222768.49 23222768.68 23222768.88 0.0089 0.0041

Neptune 58870-04-18 17:17 G 23222994.03 23222994.22 23222994.43 0.0089 0.0035

Neptune 58870-11-30 06:14 G 23223219.56 23223219.76 23223219.98 0.0089 0.0030

Neptune 58871-07-13 19:12 G 23223445.10 23223445.30 23223445.52 0.0089 0.0024

Jupiter 58871-10-31 12:58 G 23223554.84 23223555.04 23223555.24 0.0515 0.0014

Neptune 58872-02-24 08:24 G 23223670.64 23223670.85 23223671.07 0.0089 0.0018

Neptune 58872-10-06 21:36 G 23223896.18 23223896.40 23223896.62 0.0089 0.0012

Neptune 58873-05-20 10:34 G 23224121.72 23224121.94 23224122.16 0.0089 0.0006

Neptune 58873-12-31 23:31 G 23224347.26 23224347.48 23224347.70 0.0089 0.0002

Neptune 58874-08-14 12:43 G 23224572.81 23224573.03 23224573.25 0.0089 0.0005

Neptune 58875-03-28 01:41 G 23224798.36 23224798.57 23224798.80 0.0089 0.0012

Neptune 58875-11-08 14:53 G 23225023.91 23225024.12 23225024.34 0.0089 0.0017

Neptune 58876-06-21 03:50 G 23225249.46 23225249.66 23225249.88 0.0089 0.0023

Neptune 58877-02-01 17:17 G 23225475.01 23225475.22 23225475.42 0.0089 0.0029

Neptune 58877-09-15 06:14 G 23225700.57 23225700.76 23225700.97 0.0089 0.0035

Jupiter 58878-04-19 16:48 G 23225917.02 23225917.20 23225917.39 0.0515 0.0197

Neptune 58878-04-28 19:26 G 23225926.12 23225926.31 23225926.51 0.0089 0.0040

Neptune 58878-12-10 08:24 G 23226151.68 23226151.85 23226152.05 0.0089 0.0046

Neptune 58879-07-23 21:36 G 23226377.24 23226377.40 23226377.59 0.0089 0.0052

Neptune 58880-03-05 11:02 G 23226602.80 23226602.96 23226603.13 0.0089 0.0058

Neptune 58880-10-17 00:00 G 23226828.37 23226828.50 23226828.67 0.0089 0.0064

Saturn 58880-10-17 21:22 G 23226829.28 23226829.39 23226829.50 0.0268 0.0228

Neptune 58881-05-30 13:12 G 23227053.93 23227054.05 23227054.21 0.0089 0.0069

Saturn 58881-06-03 23:31 G 23227058.27 23227058.48 23227058.69 0.0269 0.0014

Neptune 58882-01-11 02:38 G 23227279.50 23227279.61 23227279.74 0.0089 0.0075

Saturn 58882-01-19 02:10 G 23227287.46 23227287.59 23227287.73 0.0270 0.0204

Uranus 58882-07-15 16:48 G 23227465.13 23227465.20 23227465.32 0.0140 0.0126

Neptune 58882-08-24 15:36 G 23227505.08 23227505.15 23227505.27 0.0089 0.0081

Uranus 58883-02-27 02:10 G 23227691.43 23227691.59 23227691.76 0.0140 0.0092

Neptune 58883-04-07 05:02 G 23227730.66 23227730.71 23227730.78 0.0089 0.0086

Jupiter 58883-07-06 06:43 G 23227820.60 23227820.78 23227820.96 0.0517 0.0244

Uranus 58883-10-11 11:02 G 23227917.76 23227917.96 23227918.16 0.0139 0.0058

Uranus 58884-05-24 19:26 G 23228144.10 23228144.31 23228144.53 0.0139 0.0025

Uranus 58885-01-06 04:05 G 23228370.45 23228370.67 23228370.89 0.0139 0.0009

Uranus 58885-08-20 12:29 G 23228596.82 23228597.02 23228597.23 0.0139 0.0043

Mars 58885-10-01 18:43 G 23228639.11 23228639.28 23228639.45 0.1622 0.0114

Uranus 58886-04-03 20:38 G 23228823.18 23228823.36 23228823.55 0.0138 0.0075

Uranus	58886-11-16 04:19 G	23229049.57	23229049.68	23229049.83	0.0138	0.0109
Jupiter	58889-12-23 13:55 G	23230182.88	23230183.08	23230183.28	0.0512	0.0050
Jupiter	58895-03-11 01:12 G	23232086.49	23232086.55	23232086.60	0.0520	0.0500
Saturn	58895-04-03 22:19 G	23232110.29	23232110.43	23232110.58	0.0291	0.0213
Jupiter	58895-11-03 05:31 G	23232323.61	23232323.73	23232323.86	0.0511	0.0403
Saturn	58895-11-19 21:07 G	23232340.17	23232340.38	23232340.58	0.0290	0.0066
Jupiter	58901-08-29 09:36 G	23234448.74	23234448.90	23234449.07	0.0509	0.0296
Jupiter	58907-07-10 02:24 G	23236589.41	23236589.60	23236589.79	0.0514	0.0161
Saturn	58910-05-01 03:50 G	23237615.52	23237615.66	23237615.80	0.0268	0.0195
Saturn	58910-12-16 06:00 G	23237844.54	23237844.75	23237844.96	0.0269	0.0021
Saturn	58911-08-02 08:24 G	23238073.77	23238073.85	23238073.96	0.0270	0.0239
Jupiter	58913-12-27 04:48 G	23238951.55	23238951.70	23238951.85	0.0516	0.0341
Mars	58916-10-26 12:58 G	23239985.89	23239986.04	23239986.19	0.1901	0.0929
Jupiter	58919-03-14 22:48 G	23240855.25	23240855.45	23240855.65	0.0516	0.0089
Saturn	58924-10-15 01:41 G	23242896.41	23242896.57	23242896.74	0.0291	0.0183
Saturn	58925-06-01 23:46 G	23243126.29	23243126.49	23243126.70	0.0290	0.0095
Jupiter	58925-09-01 01:55 G	23243217.38	23243217.58	23243217.78	0.0514	0.0094
Uranus	58926-07-11 04:05 G	23243530.59	23243530.67	23243530.77	0.0138	0.0126
Uranus	58927-02-22 12:43 G	23243756.87	23243757.03	23243757.19	0.0138	0.0093
Uranus	58927-10-06 21:07 G	23243983.18	23243983.38	23243983.57	0.0139	0.0060
Uranus	58928-05-20 05:31 G	23244209.52	23244209.73	23244209.95	0.0139	0.0027
Uranus	58929-01-01 14:24 G	23244435.89	23244436.10	23244436.32	0.0139	0.0008
Uranus	58929-08-15 23:31 G	23244662.27	23244662.48	23244662.69	0.0139	0.0041
Uranus	58930-03-30 08:38 G	23244888.68	23244888.86	23244889.04	0.0140	0.0075
Uranus	58930-11-11 17:46 G	23245115.11	23245115.24	23245115.38	0.0140	0.0109
Jupiter	58930-11-17 17:46 G	23245121.09	23245121.24	23245121.40	0.0519	0.0342
Jupiter	58937-05-07 00:14 G	23247483.32	23247483.51	23247483.71	0.0511	0.0149
Saturn	58939-11-11 03:22 G	23248401.49	23248401.64	23248401.81	0.0268	0.0173
Saturn	58940-06-27 06:00 G	23248630.54	23248630.75	23248630.96	0.0269	0.0044
Saturn	58941-02-11 08:53 G	23248859.82	23248859.87	23248859.92	0.0270	0.0261

Jupiter 58943-03-17 16:34 G 23249624.03 23249624.19 23249624.35 0.0512 0.0306

Neptune 58945-08-21 06:43 G 23250511.73 23250511.78 23250511.85 0.0089 0.0085

Neptune 58946-04-03 19:41 G 23250737.24 23250737.32 23250737.43 0.0089 0.0080

Neptune 58946-11-15 09:07 G 23250962.76 23250962.88 23250963.00 0.0089 0.0074

Neptune 58947-06-28 21:50 G 23251188.29 23251188.41 23251188.56 0.0089 0.0069

Neptune 58948-02-09 11:17 G 23251413.82 23251413.97 23251414.13 0.0089 0.0063

Neptune 58948-09-22 00:00 G 23251639.35 23251639.50 23251639.68 0.0089 0.0058

Jupiter 58949-01-09 22:34 G 23251749.32 23251749.44 23251749.58 0.0508 0.0386

Neptune 58949-05-05 13:12 G 23251864.88 23251865.05 23251865.23 0.0088 0.0052

Jupiter 58949-09-03 21:22 G 23251986.34 23251986.39 23251986.45 0.0518 0.0497

Neptune 58949-12-17 01:55 G 23252090.41 23252090.58 23252090.78 0.0088 0.0047

Neptune 58950-07-30 15:07 G 23252315.94 23252316.13 23252316.33 0.0088 0.0041

Neptune 58951-03-13 04:05 G 23252541.48 23252541.67 23252541.89 0.0088 0.0036

Mars 58951-07-31 07:12 G 23252681.64 23252681.80 23252681.97 0.1623 0.0368

Neptune 58951-10-24 17:17 G 23252767.02 23252767.22 23252767.44 0.0088 0.0030

Neptune 58952-06-06 06:29 G 23252992.56 23252992.77 23252992.98 0.0088 0.0024

Neptune 58953-01-17 19:12 G 23253218.09 23253218.30 23253218.53 0.0088 0.0018

Neptune 58953-08-31 08:24 G 23253443.63 23253443.85 23253444.07 0.0088 0.0012

Neptune 58954-04-13 21:36 G 23253669.18 23253669.40 23253669.62 0.0088 0.0007

Saturn 58954-04-27 06:43 G 23253682.60 23253682.78 23253682.97 0.0291 0.0147

Jupiter 58954-11-20 12:29 G 23253889.82 23253890.02 23253890.22 0.0515 0.0060

Neptune 58954-11-25 10:34 G 23253894.72 23253894.94 23253895.16 0.0088 0.0001

Saturn 58954-12-13 05:02 G 23253912.53 23253912.71 23253912.90 0.0290 0.0131

Neptune 58955-07-08 23:31 G 23254120.26 23254120.48 23254120.70 0.0088 0.0005

Neptune 58956-02-19 12:43 G 23254345.81 23254346.03 23254346.25 0.0088 0.0011

Neptune 58956-10-02 01:26 G 23254571.35 23254571.56 23254571.78 0.0088 0.0016

Moon 58957-04-28 19:55 G 23254780.16 23254780.33 23254780.49 0.2653 0.0182

Earth 58957-04-29 00:29 G 23254780.36 23254780.52 23254780.67 0.2656 0.0628 *

Neptune 58957-05-15 14:10 G 23254796.89 23254797.09 23254797.32 0.0088 0.0023

Neptune 58957-12-27 03:22 G 23255022.43 23255022.64 23255022.85 0.0088 0.0027

Neptune 58958-08-09 16:05 G 23255247.98 23255248.17 23255248.39 0.0088 0.0033

Neptune 58959-03-23 05:02 G 23255473.53 23255473.71 23255473.92 0.0088 0.0039

Neptune 58959-11-03 18:00 G 23255699.07 23255699.25 23255699.45 0.0088 0.0044

Neptune 58960-06-16 06:43 G 23255924.61 23255924.78 23255924.98 0.0088 0.0050

Neptune 58961-01-27 19:41 G 23256150.16 23256150.32 23256150.50 0.0088 0.0055

Jupiter 58961-05-09 15:07 G 23256251.95 23256252.13 23256252.31 0.0515 0.0240

Neptune 58961-09-10 08:10 G 23256375.71 23256375.84 23256376.02 0.0088 0.0061

Neptune 58962-04-23 21:22 G 23256601.26 23256601.39 23256601.55 0.0088 0.0066

Neptune 58962-12-05 10:19 G 23256826.81 23256826.93 23256827.07 0.0088 0.0071

Neptune 58963-07-18 22:48 G 23257052.37 23257052.45 23257052.58 0.0088 0.0077

Neptune 58964-02-29 11:46 G 23257277.93 23257277.99 23257278.08 0.0088 0.0082

Neptune 58964-10-12 00:43 G 23257503.52 23257503.53 23257503.57 0.0088 0.0087

Jupiter 58966-07-26 07:12 G 23258155.61 23258155.80 23258155.99 0.0518 0.0194

Uranus 58966-10-28 10:05 G 23258249.79 23258249.92 23258250.07 0.0140 0.0107

Uranus 58967-06-11 19:12 G 23258476.12 23258476.30 23258476.49 0.0140 0.0073

Uranus 58968-01-24 03:50 G 23258702.46 23258702.66 23258702.88 0.0139 0.0039

Uranus 58968-09-06 12:43 G 23258928.81 23258929.03 23258929.25 0.0139 0.0005

Uranus 58969-04-20 21:07 G 23259155.17 23259155.38 23259155.59 0.0139 0.0028

Saturn 58969-05-23 10:19 G 23259187.76 23259187.93 23259188.12 0.0269 0.0138

Uranus 58969-12-03 05:17 G 23259381.53 23259381.72 23259381.92 0.0139 0.0062

Saturn 58970-01-07 12:43 G 23259416.84 23259417.03 23259417.24 0.0270 0.0080

Uranus 58970-07-17 13:26 G 23259607.92 23259608.06 23259608.23 0.0138 0.0095

Uranus 58971-02-28 21:22 G 23259834.33 23259834.39 23259834.50 0.0138 0.0127

Jupiter 58973-01-12 11:46 G 23260517.79 23260517.99 23260518.20 0.0512 0.0013

Jupiter 58978-03-31 01:55 G 23262421.49 23262421.58 23262421.69 0.0520 0.0448

Jupiter 58978-11-23 06:43 G 23262658.69 23262658.78 23262658.87 0.0511 0.0451

Mars 58982-08-23 15:50 G 23264028.10 23264028.16 23264028.22 0.1899 0.1781

Saturn 58983-11-07 12:00 G 23264468.81 23264469.00 23264469.20 0.0291 0.0113

Saturn 58984-06-24 09:36 G 23264698.74 23264698.90 23264699.09 0.0290 0.0164

Jupiter 58984-09-17 09:50 G 23264783.73 23264783.91 23264784.09 0.0510 0.0249

Jupiter 58990-07-29 03:36 G 23266924.47 23266924.65 23266924.84 0.0513 0.0211

Jupiter 58996-05-23 09:07 G 23269049.82 23269049.88 23269049.95 0.0507 0.0481

Jupiter 58997-01-15 06:14 G 23269286.63 23269286.76 23269286.89 0.0517 0.0392

Saturn 58998-12-03 10:48 G 23269973.76 23269973.95 23269974.14 0.0269 0.0114

Saturn 58999-07-20 13:26 G 23270202.86 23270203.06 23270203.25 0.0269 0.0103

60TH MILLENNIUM CE

This is a list of transits of Venus in the 60th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 59002-04-03 22:19 G 23271190.23 23271190.43 23271190.63 0.0516 0.0041

Jupiter 59008-09-21 03:07 G 23273552.43 23273552.63 23273552.82 0.0514 0.0144

Uranus 59010-10-23 22:05 G 23274315.30 23274315.42 23274315.57 0.0138 0.0106

Uranus 59011-06-07 06:29 G 23274541.60 23274541.77 23274541.97 0.0138 0.0074

Uranus 59012-01-19 15:22 G 23274767.94 23274768.14 23274768.35 0.0139 0.0040

Uranus 59012-09-02 00:14 G 23274994.29 23274994.51 23274994.73 0.0139 0.0007

Uranus 59013-04-16 08:53 G 23275220.66 23275220.87 23275221.09 0.0139 0.0027

Saturn 59013-05-20 17:02 G 23275255.01 23275255.21 23275255.42 0.0291 0.0077

Pluto 59013-10-27 00:58 G 23275414.37 23275414.54 23275414.74 0.0063 0.0035

Uranus 59013-11-28 17:46 G 23275447.05 23275447.24 23275447.44 0.0139 0.0061

Jupiter 59013-12-07 16:34 G 23275456.02 23275456.19 23275456.36 0.0519 0.0296

Saturn 59014-01-05 15:07 G 23275484.98 23275485.13 23275485.29 0.0290 0.0200

Pluto 59014-06-09 05:02 G 23275639.49 23275639.71 23275639.93 0.0063 0.0001

Uranus 59014-07-13 03:07 G 23275673.47 23275673.63 23275673.79 0.0140 0.0095

Pluto 59015-01-20 08:53 G 23275864.69 23275864.87 23275865.05 0.0063 0.0036

Uranus 59015-02-24 12:29 G 23275899.95 23275900.02 23275900.11 0.0140 0.0129

Mars 59017-05-28 19:55 G 23276724.17 23276724.33 23276724.49 0.1625 0.0622

Jupiter 59020-05-26 22:34 G 23277818.25 23277818.44 23277818.64 0.0511 0.0106

Jupiter 59026-04-06 15:50 G 23279959.01 23279959.16 23279959.31 0.0512 0.0351

Saturn 59028-06-15 18:14 G 23280760.06 23280760.26 23280760.47 0.0269 0.0078

Neptune 59028-12-31 05:02 G 23280958.65 23280958.71 23280958.79 0.0089 0.0084

Saturn 59029-01-30 20:53 G 23280989.20 23280989.37 23280989.56 0.0270 0.0140

Neptune 59029-08-13 18:00 G 23281184.17 23281184.25 23281184.36 0.0089 0.0079

Neptune 59030-03-27 06:43 G 23281409.68 23281409.78 23281409.93 0.0089 0.0074

Neptune 59030-11-07 19:55 G 23281635.20 23281635.33 23281635.49 0.0089 0.0068

Neptune 59031-06-21 08:38 G 23281860.73 23281860.86 23281861.04 0.0089 0.0063

Jupiter 59032-01-30 20:24 G 23282084.21 23282084.35 23282084.50 0.0508 0.0344

Neptune 59032-02-01 21:50 G 23282086.26 23282086.41 23282086.59 0.0089 0.0057

Neptune 59032-09-14 11:17 G 23282311.79 23282311.97 23282312.15 0.0089 0.0051

Neptune 59033-04-28 00:00 G 23282537.33 23282537.50 23282537.70 0.0089 0.0046

Neptune 59033-12-09 13:12 G 23282762.86 23282763.05 23282763.25 0.0089 0.0040

Neptune 59034-07-23 02:24 G 23282988.40 23282988.60 23282988.80 0.0089 0.0034

Neptune 59035-03-05 15:07 G 23283213.94 23283214.13 23283214.35 0.0089 0.0029

Neptune 59035-10-17 04:19 G 23283439.47 23283439.68 23283439.90 0.0089 0.0023

Neptune 59036-05-29 17:17 G 23283665.01 23283665.22 23283665.44 0.0089 0.0017

Neptune 59037-01-10 06:29 G 23283890.55 23283890.77 23283890.99 0.0089 0.0011

Neptune 59037-08-23 19:26 G 23284116.10 23284116.31 23284116.53 0.0089 0.0006

Jupiter 59037-12-10 12:00 G 23284224.81 23284225.00 23284225.21 0.0515 0.0107

Neptune 59038-04-06 08:38 G 23284341.64 23284341.86 23284342.08 0.0089 0.0001

Neptune 59038-11-17 21:36 G 23284567.18 23284567.40 23284567.62 0.0089 0.0006

Neptune 59039-07-01 10:19 G 23284792.72 23284792.93 23284793.16 0.0089 0.0012

Neptune 59040-02-11 23:31 G 23285018.27 23285018.48 23285018.70 0.0089 0.0017

Neptune 59040-09-24 12:43 G 23285243.82 23285244.03 23285244.25 0.0089 0.0023

Neptune 59041-05-08 01:41 G 23285469.37 23285469.57 23285469.79 0.0089 0.0029

Neptune 59041-12-19 14:53 G 23285694.92 23285695.12 23285695.32 0.0089 0.0035

Neptune 59042-08-02 03:50 G 23285920.47 23285920.66 23285920.86 0.0089 0.0041

Saturn 59042-12-01 00:29 G 23286041.31 23286041.52 23286041.73 0.0290 0.0038

Neptune 59043-03-15 16:48 G 23286146.03 23286146.20 23286146.40 0.0089 0.0047

Saturn 59043-07-18 21:36 G 23286271.29 23286271.40 23286271.53 0.0290 0.0238

Neptune 59043-10-27 06:00 G 23286371.59 23286371.75 23286371.95 0.0089 0.0052

Jupiter 59044-05-29 14:24 G 23286586.93 23286587.10 23286587.27 0.0515 0.0284

Neptune 59044-06-08 19:26 G 23286597.15 23286597.31 23286597.48 0.0089 0.0057

Neptune 59045-01-20 08:24 G 23286822.71 23286822.85 23286823.02 0.0089 0.0063

Neptune 59045-09-02 21:50 G 23287048.28 23287048.41 23287048.56 0.0089 0.0069

Neptune 59046-04-16 10:48 G 23287273.85 23287273.95 23287274.09 0.0089 0.0075

Neptune 59046-11-28 00:29 G 23287499.42 23287499.52 23287499.61 0.0089 0.0080

Neptune 59047-07-11 13:12 G 23287725.00 23287725.05 23287725.13 0.0089 0.0086

Mars 59049-05-27 12:14 G 23288410.99 23288411.01 23288411.04 0.1621 0.1605

Jupiter 59049-08-15 07:55 G 23288490.64 23288490.83 23288491.03 0.0517 0.0144

Uranus 59050-06-28 18:43 G 23288808.19 23288808.28 23288808.40 0.0140 0.0122

Uranus 59051-02-10 04:05 G 23289034.50 23289034.67 23289034.84 0.0140 0.0087

Uranus 59051-09-24 12:43 G 23289260.84 23289261.03 23289261.24 0.0140 0.0053

Uranus 59052-05-07 21:36 G 23289487.19 23289487.40 23289487.62 0.0139 0.0019

Uranus 59052-12-20 06:14 G 23289713.54 23289713.76 23289713.98 0.0139 0.0014

Uranus 59053-08-03 14:38 G 23289939.91 23289940.11 23289940.32 0.0139 0.0048

Uranus 59054-03-17 23:02 G 23290166.29 23290166.46 23290166.64 0.0139 0.0081

Uranus 59054-10-30 06:58 G 23290392.68 23290392.79 23290392.93 0.0138 0.0114

Moon 59054-11-02 18:29 G 23290396.17 23290396.27 23290396.36 0.2669 0.2184

Earth 59054-11-02 20:24 G 23290396.27 23290396.35 23290396.43 0.2676 0.2274 *

Jupiter 59056-02-02 12:00 G 23290852.80 23290853.00 23290853.20 0.0513 0.0039

Saturn 59057-05-11 17:02 G 23291317.19 23291317.21 23291317.24 0.0268 0.0266

Saturn 59057-12-26 19:12 G 23291546.10 23291546.30 23291546.52 0.0269 0.0053

Saturn 59058-08-12 22:05 G 23291775.26 23291775.42 23291775.59 0.0270 0.0165

Jupiter 59061-04-20 01:12 G 23292756.43 23292756.55 23292756.68 0.0520 0.0401

Jupiter 59061-12-13 05:17 G 23292993.67 23292993.72 23292993.77 0.0510 0.0491

Moon 59062-10-31 06:00 G 23293315.61 23293315.75 23293315.88 0.2672 0.1426

Earth 59062-10-31 11:17 G 23293315.83 23293315.97 23293316.11 0.2675 0.1209 *

Jupiter 59067-10-08 10:05 G 23295118.73 23295118.92 23295119.11 0.0510 0.0201

Saturn 59071-10-26 06:58 G 23296597.73 23296597.79 23296597.85 0.0291 0.0280

Saturn 59072-06-12 05:31 G 23296827.51 23296827.73 23296827.94 0.0291 0.0006

Saturn 59073-01-28 02:53 G 23297057.56 23297057.62 23297057.70 0.0289 0.0273

Jupiter 59073-08-18 01:26 G 23297259.38 23297259.56 23297259.74 0.0513 0.0250

Jupiter 59079-06-13 07:26 G 23299384.71 23299384.81 23299384.92 0.0507 0.0438

Jupiter 59080-02-05 03:50 G 23299621.55 23299621.66 23299621.77 0.0516 0.0430

Mars 59083-03-26 08:38 G 23300766.71 23300766.86 23300767.00 0.1626 0.0875

Jupiter 59085-04-22 19:55 G 23301525.12 23301525.33 23301525.53 0.0516 0.0008

Saturn 59086-11-22 00:29 G 23302103.43 23302103.52 23302103.64 0.0269 0.0231

Saturn 59087-07-09 03:07 G 23302332.42 23302332.63 23302332.85 0.0270 0.0016

Saturn 59088-02-23 06:00 G 23302561.62 23302561.75 23302561.90 0.0270 0.0204

Jupiter 59091-10-10 23:46 G 23303887.31 23303887.49 23303887.69 0.0513 0.0181

Uranus 59094-06-23 08:38 G 23304873.75 23304873.86 23304873.97 0.0138 0.0119

Uranus 59095-02-04 16:48 G 23305100.04 23305100.20 23305100.38 0.0138 0.0086

Uranus 59095-09-19 01:12 G 23305326.36 23305326.55 23305326.77 0.0139 0.0054

Uranus 59096-05-02 10:05 G 23305552.71 23305552.92 23305553.14 0.0139 0.0020

Uranus 59096-12-14 18:43 G 23305779.07 23305779.28 23305779.50 0.0139 0.0014

Jupiter 59096-12-26 14:38 G 23305790.94 23305791.11 23305791.29 0.0519 0.0255

Uranus 59097-07-29 03:36 G 23306005.45 23306005.65 23306005.86 0.0139 0.0048

Uranus 59098-03-12 12:43 G 23306231.86 23306232.03 23306232.21 0.0140 0.0082

Uranus 59098-10-24 21:50 G 23306458.30 23306458.41 23306458.54 0.0140 0.0116

Saturn 59101-05-08 16:19 G 23307384.06 23307384.18 23307384.31 0.0291 0.0234

Saturn 59101-12-24 14:38 G 23307613.90 23307614.11 23307614.32 0.0290 0.0043

Jupiter 59103-06-16 20:24 G 23308153.15 23308153.35 23308153.55 0.0511 0.0066

Pluto 59103-12-14 00:58 G 23308333.40 23308333.54 23308333.71 0.0081 0.0056

Pluto 59104-07-26 12:14 G 23308558.80 23308559.01 23308559.23 0.0081 0.0018

Jupiter 59108-09-01 09:22 G 23310056.85 23310056.89 23310056.94 0.0521 0.0508

Jupiter 59109-04-26 15:07 G 23310294.01 23310294.13 23310294.27 0.0512 0.0394

Neptune 59109-11-24 14:53 G 23310506.07 23310506.12 23310506.21 0.0089 0.0084

Neptune 59110-07-08 03:50 G 23310731.58 23310731.66 23310731.79 0.0089 0.0079

Neptune 59111-02-18 17:17 G 23310957.11 23310957.22 23310957.36 0.0089 0.0073

Neptune 59111-10-02 06:14 G 23311182.64 23311182.76 23311182.93 0.0089 0.0068

Neptune 59112-05-14 19:41 G 23311408.17 23311408.32 23311408.48 0.0089 0.0062

Neptune 59112-12-26 08:24 G 23311633.70 23311633.85 23311634.04 0.0089 0.0057

Neptune 59113-08-08 21:36 G 23311859.23 23311859.40 23311859.59 0.0089 0.0051

Neptune 59114-03-22 10:34 G 23312084.77 23312084.94 23312085.15 0.0089 0.0046

Neptune 59114-11-02 23:46 G 23312310.30 23312310.49 23312310.70 0.0089 0.0040

Jupiter 59115-02-19 18:58 G 23312419.13 23312419.29 23312419.46 0.0509 0.0303

Mars 59115-03-26 00:43 G 23312453.43 23312453.53 23312453.62 0.1622 0.1345

Neptune 59115-06-16 12:43 G 23312535.84 23312536.03 23312536.24 0.0088 0.0034

Neptune 59116-01-28 01:41 G 23312761.37 23312761.57 23312761.79 0.0088 0.0029

Saturn 59116-06-04 02:24 G 23312889.47 23312889.60 23312889.74 0.0269 0.0204

Neptune 59116-09-09 14:53 G 23312986.91 23312987.12 23312987.34 0.0088 0.0023

Saturn 59117-01-19 05:02 G 23313118.50 23313118.71 23313118.92 0.0269 0.0012

Neptune 59117-04-23 03:50 G 23313212.45 23313212.66 23313212.88 0.0088 0.0017

Saturn 59117-09-05 08:10 G 23313347.73 23313347.84 23313347.95 0.0270 0.0230

Neptune 59117-12-04 16:48 G 23313437.99 23313438.20 23313438.42 0.0088 0.0012

Neptune 59118-07-18 05:46 G 23313663.53 23313663.74 23313663.97 0.0088 0.0006

Neptune 59119-02-28 18:58 G 23313889.07 23313889.29 23313889.51 0.0088 0.0001

Neptune 59119-10-12 07:55 G 23314114.61 23314114.83 23314115.05 0.0088 0.0006

Neptune 59120-05-24 20:53 G 23314340.15 23314340.37 23314340.59 0.0088 0.0011

Jupiter 59120-12-30 10:19 G 23314559.74 23314559.93 23314560.13 0.0514 0.0147

Neptune 59121-01-05 09:50 G 23314565.70 23314565.91 23314566.13 0.0088 0.0017

Neptune 59121-08-18 22:48 G 23314791.24 23314791.45 23314791.67 0.0088 0.0022

Neptune 59122-04-01 11:46 G 23315016.79 23315016.99 23315017.21 0.0088 0.0028

Neptune 59122-11-13 00:58 G 23315242.34 23315242.54 23315242.75 0.0088 0.0033

Neptune 59123-06-26 13:26 G 23315467.88 23315468.06 23315468.28 0.0088 0.0040

Neptune 59124-02-07 02:38 G 23315693.43 23315693.61 23315693.81 0.0088 0.0045

Neptune 59124-09-19 15:22 G 23315918.98 23315919.14 23315919.34 0.0088 0.0050

Neptune 59125-05-03 04:34 G 23316144.53 23316144.69 23316144.87 0.0088 0.0055

Neptune 59125-12-14 17:02 G 23316370.07 23316370.21 23316370.39 0.0088 0.0061

Neptune 59126-07-28 06:00 G 23316595.62 23316595.75 23316595.91 0.0088 0.0067

Neptune 59127-03-10 19:12 G 23316821.18 23316821.30 23316821.43 0.0088 0.0072

Jupiter 59127-06-19 13:55 G 23316921.93 23316922.08 23316922.24 0.0515 0.0329

Neptune 59127-10-22 07:41 G 23317046.74 23317046.82 23317046.95 0.0088 0.0077

Neptune 59128-06-03 20:38 G 23317272.30 23317272.36 23317272.45 0.0088 0.0082

Neptune 59129-01-15 09:22 G 23317497.88 23317497.89 23317497.93 0.0088 0.0087

Saturn 59130-11-18 21:36 G 23318170.25 23318170.40 23318170.56 0.0291 0.0199

Saturn 59131-07-06 19:41 G 23318400.12 23318400.32 23318400.53 0.0290 0.0078

Jupiter 59132-09-04 05:02 G 23318825.51 23318825.71 23318825.91 0.0517 0.0105

Uranus 59134-02-27 02:24 G 23319366.55 23319366.60 23319366.64 0.0140 0.0137

Uranus 59134-10-11 11:02 G 23319592.83 23319592.96 23319593.13 0.0140 0.0103

Uranus 59135-05-25 20:10 G 23319819.16 23319819.34 23319819.54 0.0140 0.0069

Uranus 59136-01-07 05:17 G 23320045.51 23320045.72 23320045.93 0.0139 0.0034

Uranus 59136-08-20 14:10 G 23320271.87 23320272.09 23320272.31 0.0139 0.0001

Uranus 59137-04-03 22:48 G 23320498.24 23320498.45 23320498.66 0.0139 0.0033

Uranus 59137-11-16 06:58 G 23320724.61 23320724.79 23320724.99 0.0139 0.0067

Uranus 59138-06-30 15:07 G 23320951.00 23320951.13 23320951.30 0.0138 0.0100

Uranus 59139-02-11 23:46 G 23321177.43 23321177.49 23321177.55 0.0138 0.0132

Jupiter 59139-02-22 09:36 G 23321187.70 23321187.90 23321188.10 0.0512 0.0079

Jupiter 59144-05-09 21:07 G 23323091.24 23323091.38 23323091.53 0.0520 0.0366

Saturn 59145-12-15 10:19 G 23323675.77 23323675.93 23323676.10 0.0269 0.0167

Mars 59146-04-18 20:53 G 23323800.23 23323800.37 23323800.51 0.1901 0.1157

Saturn 59146-08-01 13:12 G 23323904.84 23323905.05 23323905.26 0.0270 0.0050

Saturn 59147-03-18 16:19 G 23324134.17 23324134.18 23324134.21 0.0271 0.0269

Mars 59149-01-21 20:53 G 23324809.25 23324809.37 23324809.49 0.1627 0.1139

Jupiter 59150-10-28 06:43 G 23325453.59 23325453.78 23325453.97 0.0509 0.0164

Jupiter 59156-09-06 22:34 G 23327594.27 23327594.44 23327594.61 0.0513 0.0286

Saturn 59160-05-31 08:24 G 23328956.67 23328956.85 23328957.03 0.0291 0.0150

Saturn 59161-01-16 06:14 G 23329186.57 23329186.76 23329186.95 0.0290 0.0125

Jupiter 59162-07-03 03:36 G 23329719.54 23329719.65 23329719.78 0.0507 0.0403

Jupiter 59163-02-25 00:43 G 23329956.45 23329956.53 23329956.62 0.0517 0.0464

Jupiter 59168-05-12 18:58 G 23331860.09 23331860.29 23331860.49 0.0516 0.0042

Jupiter 59174-10-30 21:36 G 23334222.22 23334222.40 23334222.59 0.0514 0.0220

Saturn 59175-06-27 12:58 G 23334461.86 23334462.04 23334462.22 0.0269 0.0138

Saturn 59176-02-11 15:36 G 23334690.95 23334691.15 23334691.36 0.0270 0.0079

Uranus 59178-02-21 18:29 G 23335432.22 23335432.27 23335432.35 0.0138 0.0131

Uranus 59178-10-06 03:07 G 23335658.48 23335658.63 23335658.78 0.0138 0.0099

Uranus 59179-05-20 11:31 G 23335884.79 23335884.98 23335885.17 0.0138 0.0066

Uranus 59180-01-01 19:55 G 23336111.12 23336111.33 23336111.55 0.0139 0.0033

Jupiter 59180-01-16 12:58 G 23336125.85 23336126.04 23336126.22 0.0518 0.0212

Uranus 59180-08-15 04:48 G 23336337.48 23336337.70 23336337.91 0.0139 0.0003

Mars 59181-01-20 13:26 G 23336495.93 23336496.06 23336496.18 0.1624 0.1098

Uranus 59181-03-29 13:26 G 23336563.85 23336564.06 23336564.27 0.0139 0.0035

Uranus 59181-11-10 22:19 G 23336790.25 23336790.43 23336790.62 0.0139 0.0069

Uranus 59182-06-25 07:12 G 23337016.67 23337016.80 23337016.96 0.0140 0.0103

Uranus 59183-02-06 16:34 G 23337243.16 23337243.19 23337243.24 0.0140 0.0137

Jupiter 59186-07-05 19:12 G 23338488.10 23338488.30 23338488.51 0.0511 0.0025

Saturn 59189-12-11 13:26 G 23339742.87 23339743.06 23339743.26 0.0291 0.0116

Saturn 59190-07-29 11:31 G 23339972.80 23339972.98 23339973.16 0.0290 0.0160

Jupiter 59191-09-21 06:00 G 23340391.67 23340391.75 23340391.84 0.0521 0.0469

Jupiter 59192-05-15 11:31 G 23340628.87 23340628.98 23340629.09 0.0511 0.0427

Neptune 59192-08-22 01:26 G 23340727.55 23340727.56 23340727.60 0.0089 0.0088

Neptune 59193-04-04 14:24 G 23340953.04 23340953.10 23340953.19 0.0089 0.0083

Neptune 59193-11-16 03:07 G 23341178.55 23341178.63 23341178.76 0.0089 0.0078

Neptune 59194-06-29 16:19 G 23341404.06 23341404.18 23341404.31 0.0089 0.0072

Neptune 59195-02-10 05:02 G 23341629.58 23341629.71 23341629.87 0.0089 0.0067

Neptune 59195-09-23 18:14 G 23341855.11 23341855.26 23341855.43 0.0089 0.0061

Neptune 59196-05-06 06:58 G 23342080.64 23342080.79 23342080.98 0.0089 0.0056

Neptune 59196-12-17 20:10 G 23342306.17 23342306.34 23342306.53 0.0089 0.0050

Neptune 59197-07-31 09:07 G 23342531.70 23342531.88 23342532.08 0.0089 0.0045

Jupiter 59198-03-10 16:48 G 23342754.03 23342754.20 23342754.38 0.0508 0.0263

Neptune 59198-03-13 22:19 G 23342757.24 23342757.43 23342757.63 0.0089 0.0039

Neptune 59198-10-25 11:31 G 23342982.78 23342982.98 23342983.18 0.0089 0.0033

Neptune 59199-06-08 00:14 G 23343208.31 23343208.51 23343208.73 0.0089 0.0028

Neptune 59200-01-19 13:26 G 23343433.85 23343434.06 23343434.28 0.0089 0.0022

Earth 59200-05-01 01:41 G 23343536.42 23343536.57 23343536.73 0.2657 0.0685

Moon 59200-05-01 04:19 G 23343536.55 23343536.68 23343536.82 0.2663 0.1234 *

Neptune 59200-09-01 02:38 G 23343659.40 23343659.61 23343659.83 0.0089 0.0016

Neptune 59201-04-14 15:36 G 23343884.94 23343885.15 23343885.38 0.0089 0.0011

Neptune 59201-11-26 04:48 G 23344110.48 23344110.70 23344110.92 0.0089 0.0005

Neptune 59202-07-09 17:46 G 23344336.02 23344336.24 23344336.46 0.0089 0.0001

Neptune 59203-02-20 06:43 G 23344561.56 23344561.78 23344562.00 0.0089 0.0007

Neptune 59203-10-03 19:55 G 23344787.11 23344787.33 23344787.55 0.0089 0.0012

Jupiter 59204-01-19 05:46 G 23344894.55 23344894.74 23344894.93 0.0515 0.0179

Neptune 59204-05-16 08:53 G 23345012.66 23345012.87 23345013.09 0.0089 0.0018

Neptune 59204-12-27 21:36 G 23345238.20 23345238.40 23345238.63 0.0089 0.0024

Saturn 59205-01-06 20:38 G 23345248.16 23345248.36 23345248.56 0.0270 0.0101

Neptune 59205-08-10 11:02 G 23345463.75 23345463.96 23345464.17 0.0089 0.0029

Saturn 59205-08-23 23:31 G 23345477.29 23345477.48 23345477.68 0.0270 0.0117

Neptune 59206-03-24 00:00 G 23345689.30 23345689.50 23345689.71 0.0089 0.0035

Neptune 59206-11-04 12:58 G 23345914.86 23345915.04 23345915.25 0.0089 0.0041

Neptune 59207-06-18 02:10 G 23346140.41 23346140.59 23346140.78 0.0089 0.0046

Neptune 59208-01-29 15:07 G 23346365.97 23346366.13 23346366.32 0.0089 0.0052

Moon 59208-04-28 22:34 G 23346456.38 23346456.44 23346456.51 0.2660 0.2399

Neptune 59208-09-11 04:34 G 23346591.53 23346591.69 23346591.86 0.0089 0.0058

Neptune 59209-04-24 17:31 G 23346817.09 23346817.23 23346817.40 0.0089 0.0063

Jupiter 59209-11-13 14:53 G 23347020.09 23347020.12 23347020.17 0.0506 0.0494

Neptune 59209-12-06 06:29 G 23347042.65 23347042.77 23347042.93 0.0089 0.0069

Jupiter 59210-07-08 09:50 G 23347256.77 23347256.91 23347257.06 0.0515 0.0361

Neptune 59210-07-19 19:41 G 23347268.22 23347268.32 23347268.46 0.0089 0.0075

Neptune 59211-03-02 08:38 G 23347493.79 23347493.86 23347493.99 0.0089 0.0081

Neptune 59211-10-13 22:19 G 23347719.38 23347719.43 23347719.51 0.0089 0.0085

Mars 59212-02-13 23:17 G 23347842.29 23347842.47 23347842.64 0.1899 0.0265

Mars 59214-11-19 09:36 G 23348851.81 23348851.90 23348851.99 0.1629 0.1386

Jupiter 59215-09-24 00:58 G 23349160.34 23349160.54 23349160.75 0.0517 0.0071

Uranus 59218-06-10 20:10 G 23350151.23 23350151.34 23350151.47 0.0140 0.0117

Uranus 59219-01-23 05:02 G 23350377.55 23350377.71 23350377.90 0.0140 0.0083

Saturn 59219-06-24 01:41 G 23350529.37 23350529.57 23350529.78 0.0290 0.0063

Uranus 59219-09-06 14:10 G 23350603.90 23350604.09 23350604.31 0.0140 0.0049

Saturn 59220-02-08 23:17 G 23350759.33 23350759.47 23350759.62 0.0289 0.0211

Uranus 59220-04-19 23:17 G 23350830.25 23350830.47 23350830.68 0.0139 0.0014

Uranus 59220-12-02 07:55 G 23351056.61 23351056.83 23351057.04 0.0139 0.0020

Uranus 59221-07-16 16:34 G 23351282.99 23351283.19 23351283.39 0.0139 0.0053

Uranus 59222-02-28 00:29 G 23351509.37 23351509.52 23351509.71 0.0139 0.0087

Jupiter 59222-03-13 05:17 G 23351522.52 23351522.72 23351522.92 0.0513 0.0110

Uranus 59222-10-12 08:38 G 23351735.77 23351735.86 23351735.99 0.0138 0.0120

Jupiter 59227-05-29 20:10 G 23353426.19 23353426.34 23353426.50 0.0520 0.0322

Jupiter 59233-11-16 03:22 G 23355788.44 23355788.64 23355788.83 0.0510 0.0129

Saturn 59234-07-20 00:00 G 23356034.30 23356034.50 23356034.71 0.0269 0.0070

Saturn 59235-03-06 02:38 G 23356263.45 23356263.61 23356263.80 0.0270 0.0147

Jupiter 59239-09-26 20:10 G 23357929.18 23357929.34 23357929.50 0.0513 0.0324

Jupiter 59245-07-22 02:10 G 23360054.45 23360054.59 23360054.73 0.0508 0.0361

Jupiter 59246-03-15 23:31 G 23360291.45 23360291.48 23360291.52 0.0517 0.0506

Mars 59246-11-18 02:10 G 23360538.44 23360538.59 23360538.74 0.1625 0.0849

Saturn 59249-01-03 06:00 G 23361315.54 23361315.75 23361315.96 0.0291 0.0031

Saturn 59249-08-21 03:36 G 23361545.54 23361545.65 23361545.77 0.0290 0.0243

Jupiter 59251-06-01 15:07 G 23362194.93 23362195.13 23362195.33 0.0515 0.0077

Jupiter 59257-11-18 19:12 G 23364557.13 23364557.30 23364557.48 0.0514 0.0257

Pluto 59260-07-07 19:55 G 23365519.24 23365519.33 23365519.49 0.0063 0.0052

Pluto 59261-02-18 00:00 G 23365744.30 23365744.50 23365744.73 0.0063 0.0018

Pluto 59261-10-01 03:50 G 23365969.46 23365969.66 23365969.89 0.0063 0.0018

Pluto 59262-05-14 07:26 G 23366194.72 23366194.81 23366194.95 0.0064 0.0054

Uranus 59262-06-05 12:43 G 23366216.92 23366217.03 23366217.18 0.0138 0.0112

Uranus 59263-01-17 21:22 G 23366443.22 23366443.39 23366443.58 0.0138 0.0078

Jupiter 59263-02-04 07:26 G 23366460.62 23366460.81 23366461.00 0.0519 0.0182

Saturn 59263-06-15 04:34 G 23366591.62 23366591.69 23366591.78 0.0269 0.0250

Uranus 59263-09-01 05:46 G 23366669.54 23366669.74 23366669.96 0.0139 0.0046

Saturn 59264-01-30 07:26 G 23366820.60 23366820.81 23366821.02 0.0270 0.0034

Uranus 59264-04-14 14:24 G 23366895.89 23366896.10 23366896.32 0.0139 0.0012

Saturn 59264-09-15 10:34 G 23367049.79 23367049.94 23367050.10 0.0271 0.0184

Uranus 59264-11-26 23:02 G 23367122.25 23367122.46 23367122.68 0.0139 0.0022

Uranus 59265-07-11 07:41 G 23367348.64 23367348.82 23367349.04 0.0139 0.0057

Uranus 59266-02-22 17:02 G 23367575.05 23367575.21 23367575.38 0.0140 0.0090

Uranus 59266-10-07 01:55 G 23367801.50 23367801.58 23367801.69 0.0140 0.0124

Jupiter 59269-07-24 15:36 G 23368822.95 23368823.15 23368823.35 0.0511 0.0012

Neptune 59273-07-15 10:19 G 23370274.92 23370274.93 23370274.97 0.0089 0.0088

Neptune 59274-02-25 23:31 G 23370500.42 23370500.48 23370500.58 0.0089 0.0083

Neptune 59274-10-09 12:58 G 23370725.94 23370726.04 23370726.16 0.0089 0.0077

Jupiter 59274-10-10 01:26 G 23370726.45 23370726.56 23370726.67 0.0521 0.0437

Neptune 59275-05-23 01:55 G 23370951.47 23370951.58 23370951.72 0.0089 0.0072

Jupiter 59275-06-04 07:12 G 23370963.72 23370963.80 23370963.89 0.0512 0.0457

Neptune 59276-01-03 14:53 G 23371177.00 23371177.12 23371177.29 0.0089 0.0067

Neptune 59276-08-16 04:19 G 23371402.53 23371402.68 23371402.85 0.0089 0.0061

Neptune 59277-03-29 17:17 G 23371628.07 23371628.22 23371628.41 0.0089 0.0056

Neptune 59277-11-10 06:29 G 23371853.60 23371853.77 23371853.97 0.0089 0.0050

Saturn 59277-11-28 20:24 G 23371872.26 23371872.35 23371872.47 0.0291 0.0253

Mars 59277-12-11 01:55 G 23371884.41 23371884.58 23371884.75 0.1897 0.0611

Neptune 59278-06-23 19:26 G 23372079.14 23372079.31 23372079.52 0.0089 0.0045

Saturn 59278-07-16 18:43 G 23372102.07 23372102.28 23372102.50 0.0290 0.0024

Neptune 59279-02-04 08:38 G 23372304.68 23372304.86 23372305.07 0.0089 0.0039

Neptune 59279-09-17 22:05 G 23372530.21 23372530.42 23372530.62 0.0088 0.0033

Neptune 59280-04-30 10:48 G 23372755.75 23372755.95 23372756.17 0.0088 0.0028

Neptune 59280-12-12 00:00 G 23372981.29 23372981.50 23372981.71 0.0088 0.0022

Jupiter 59281-03-29 11:31 G 23373088.80 23373088.98 23373089.16 0.0509 0.0232

Neptune 59281-07-25 12:58 G 23373206.83 23373207.04 23373207.26 0.0088 0.0016

Neptune 59282-03-08 02:10 G 23373432.37 23373432.59 23373432.81 0.0088 0.0011

Neptune 59282-10-19 15:07 G 23373657.91 23373658.13 23373658.35 0.0088 0.0005

Neptune 59283-06-02 04:05 G 23373883.45 23373883.67 23373883.89 0.0088 0.0001

Neptune 59284-01-13 17:02 G 23374108.99 23374109.21 23374109.43 0.0088 0.0006

Neptune 59284-08-26 06:00 G 23374334.53 23374334.75 23374334.97 0.0088 0.0012

Neptune 59285-04-08 18:58 G 23374560.08 23374560.29 23374560.51 0.0088 0.0017

Neptune 59285-11-20 07:55 G 23374785.62 23374785.83 23374786.05 0.0088 0.0023

Neptune 59286-07-03 20:53 G 23375011.17 23375011.37 23375011.59 0.0088 0.0029

Jupiter 59287-02-07 04:19 G 23375229.50 23375229.68 23375229.87 0.0514 0.0221

Neptune 59287-02-14 09:50 G 23375236.72 23375236.91 23375237.12 0.0088 0.0034

Neptune 59287-09-27 23:02 G 23375462.26 23375462.46 23375462.66 0.0088 0.0040

Neptune 59288-05-10 11:46 G 23375687.81 23375687.99 23375688.19 0.0088 0.0045

Neptune 59288-12-22 00:43 G 23375913.36 23375913.53 23375913.72 0.0088 0.0051

Neptune 59289-08-04 13:26 G 23376138.91 23376139.06 23376139.25 0.0088 0.0056

Neptune 59290-03-18 02:38 G 23376364.46 23376364.61 23376364.78 0.0088 0.0061

Neptune 59290-10-29 15:50 G 23376590.02 23376590.16 23376590.30 0.0088 0.0067

Neptune 59291-06-12 04:05 G 23376815.57 23376815.67 23376815.82 0.0088 0.0072

Neptune 59292-01-23 17:02 G 23377041.12 23377041.21 23377041.33 0.0088 0.0077

Neptune 59292-09-05 06:00 G 23377266.69 23377266.75 23377266.84 0.0088 0.0082

Jupiter 59292-12-02 10:34 G 23377354.86 23377354.94 23377355.02 0.0506 0.0461

Saturn 59292-12-25 08:38 G 23377377.75 23377377.86 23377377.99 0.0269 0.0217

Neptune 59293-04-18 19:12 G 23377492.28 23377492.30 23377492.33 0.0088 0.0087

Jupiter 59293-07-27 06:14 G 23377591.64 23377591.76 23377591.90 0.0516 0.0395

Saturn 59293-08-11 11:17 G 23377606.76 23377606.97 23377607.18 0.0269 0.0003

Saturn 59294-03-28 14:10 G 23377835.97 23377836.09 23377836.22 0.0270 0.0214

Moon 59297-11-03 21:22 G 23379152.29 23379152.39 23379152.49 0.2682 0.1985

Earth 59297-11-03 21:22 G 23379152.30 23379152.39 23379152.47 0.2675 0.2273 *

Jupiter 59298-10-12 23:17 G 23379495.27 23379495.47 23379495.67 0.0517 0.0029

Uranus 59302-02-09 04:05 G 23380709.62 23380709.67 23380709.77 0.0140 0.0132

Uranus 59302-09-23 13:26 G 23380935.92 23380936.06 23380936.23 0.0140 0.0097

Uranus 59303-05-07 22:34 G 23381162.25 23381162.44 23381162.64 0.0140 0.0063

Uranus 59303-12-20 07:26 G 23381388.60 23381388.81 23381389.03 0.0139 0.0029

Uranus 59304-08-02 16:34 G 23381614.97 23381615.19 23381615.41 0.0139 0.0006

Uranus 59305-03-17 01:12 G 23381841.34 23381841.55 23381841.76 0.0139 0.0039

Jupiter 59305-04-02 03:50 G 23381857.47 23381857.66 23381857.85 0.0513 0.0152

Uranus 59305-10-29 09:22 G 23382067.71 23382067.89 23382068.08 0.0139 0.0073

Earth 59305-11-02 12:14 G 23382071.87 23382072.01 23382072.15 0.2674 0.1193

Moon 59305-11-02 16:19 G 23382072.04 23382072.18 23382072.33 0.2679 0.0870 *

Uranus 59306-06-12 17:31 G 23382294.10 23382294.23 23382294.38 0.0139 0.0106

Uranus 59307-01-25 01:41 G 23382520.57 23382520.57 23382520.59 0.0138 0.0138

Saturn 59307-06-12 00:29 G 23382658.39 23382658.52 23382658.66 0.0291 0.0222

Saturn 59308-01-27 22:48 G 23382888.24 23382888.45 23382888.66 0.0290 0.0055

Jupiter 59310-06-18 16:48 G 23383761.03 23383761.20 23383761.37 0.0519 0.0283

Mars 59312-09-15 14:38 G 23384580.95 23384581.11 23384581.27 0.1626 0.0593

Jupiter 59316-12-06 01:26 G 23386123.36 23386123.56 23386123.76 0.0510 0.0089

Saturn 59322-07-08 15:07 G 23388163.98 23388164.13 23388164.28 0.0269 0.0183

Jupiter 59322-10-16 14:53 G 23388263.98 23388264.12 23388264.27 0.0513 0.0353

Saturn 59323-02-22 17:46 G 23388393.03 23388393.24 23388393.45 0.0270 0.0033

Saturn 59323-10-09 20:53 G 23388622.31 23388622.37 23388622.46 0.0271 0.0251

Jupiter 59328-08-10 23:02 G 23390389.31 23390389.46 23390389.62 0.0507 0.0324

Jupiter 59334-06-21 10:48 G 23392529.75 23392529.95 23392530.15 0.0516 0.0109

Saturn 59336-12-22 12:58 G 23393444.88 23393445.04 23393445.22 0.0291 0.0168

Saturn 59337-08-09 11:17 G 23393674.77 23393674.97 23393675.17 0.0290 0.0108

Jupiter 59340-12-08 13:55 G 23394891.91 23394892.08 23394892.24 0.0514 0.0285

Mars 59343-10-09 03:50 G 23395926.56 23395926.66 23395926.77 0.1895 0.1511

Uranus 59346-02-03 22:34 G 23396775.36 23396775.44 23396775.55 0.0138 0.0124

Jupiter 59346-02-24 06:43 G 23396795.59 23396795.78 23396795.98 0.0518 0.0137

Uranus 59346-09-18 06:58 G 23397001.63 23397001.79 23397001.96 0.0138 0.0091

Uranus 59347-05-02 15:07 G 23397227.94 23397228.13 23397228.34 0.0138 0.0059

Uranus 59347-12-14 23:46 G 23397454.28 23397454.49 23397454.70 0.0139 0.0025

Uranus 59348-07-28 08:24 G 23397680.63 23397680.85 23397681.07 0.0139 0.0008

Uranus 59349-03-11 17:02 G 23397907.01 23397907.21 23397907.42 0.0139 0.0043

Uranus 59349-10-24 01:41 G 23398133.40 23398133.57 23398133.77 0.0139 0.0077

Uranus 59350-06-07 10:34 G 23398359.83 23398359.94 23398360.09 0.0140 0.0111

Pluto 59351-04-07 03:36 G 23398663.45 23398663.65 23398663.88 0.0081 0.0022

Pluto 59351-11-18 14:24 G 23398888.95 23398889.10 23398889.28 0.0081 0.0052

Saturn 59352-01-18 19:41 G 23398950.15 23398950.32 23398950.50 0.0269 0.0150

Jupiter 59352-08-13 11:31 G 23399157.77 23399157.98 23399158.18 0.0512 0.0046

Saturn 59352-09-03 22:19 G 23399179.23 23399179.43 23399179.64 0.0269 0.0065

Neptune 59356-11-24 12:00 G 23400721.95 23400722.00 23400722.05 0.0089 0.0086

Neptune 59357-07-08 00:29 G 23400947.45 23400947.52 23400947.62 0.0089 0.0081

Jupiter 59357-10-30 00:29 G 23401061.39 23401061.52 23401061.66 0.0521 0.0390

Neptune 59358-02-18 13:12 G 23401172.96 23401173.05 23401173.18 0.0089 0.0076

Jupiter 59358-06-24 05:31 G 23401298.69 23401298.73 23401298.79 0.0511 0.0496

Neptune 59358-10-02 02:10 G 23401398.48 23401398.59 23401398.74 0.0089 0.0071

Neptune 59359-05-15 15:07 G 23401624.00 23401624.13 23401624.29 0.0089 0.0065

Neptune 59359-12-27 03:50 G 23401849.52 23401849.66 23401849.84 0.0089 0.0060

Neptune 59360-08-08 17:17 G 23402075.05 23402075.22 23402075.40 0.0089 0.0054

Neptune 59361-03-22 06:00 G 23402300.58 23402300.75 23402300.95 0.0089 0.0049

Neptune 59361-11-02 19:12 G 23402526.11 23402526.30 23402526.50 0.0089 0.0043

Neptune 59362-06-16 07:55 G 23402751.64 23402751.83 23402752.04 0.0089 0.0038

Neptune 59363-01-27 21:07 G 23402977.18 23402977.38 23402977.59 0.0089 0.0032

Neptune 59363-09-10 10:19 G 23403202.72 23403202.93 23403203.14 0.0089 0.0026

Jupiter 59364-04-18 10:05 G 23403423.73 23403423.92 23403424.11 0.0509 0.0190

Neptune 59364-04-22 23:17 G 23403428.26 23403428.47 23403428.69 0.0089 0.0021

Neptune 59364-12-04 12:14 G 23403653.80 23403654.01 23403654.23 0.0089 0.0015

Neptune 59365-07-18 01:12 G 23403879.34 23403879.55 23403879.78 0.0089 0.0010

Neptune 59366-02-28 14:24 G 23404104.88 23404105.10 23404105.32 0.0089 0.0004

Saturn 59366-07-04 16:19 G 23404230.99 23404231.18 23404231.37 0.0291 0.0139

Neptune 59366-10-12 03:36 G 23404330.43 23404330.65 23404330.87 0.0089 0.0002

Saturn 59367-02-19 14:10 G 23404460.91 23404461.09 23404461.28 0.0290 0.0137

Neptune 59367-05-25 16:19 G 23404555.97 23404556.18 23404556.41 0.0089 0.0008

Neptune 59368-01-06 05:31 G 23404781.51 23404781.73 23404781.95 0.0089 0.0013

Neptune 59368-08-18 18:29 G 23405007.06 23405007.27 23405007.49 0.0089 0.0019

Neptune 59369-04-01 07:41 G 23405232.61 23405232.82 23405233.03 0.0089 0.0025

Neptune 59369-11-12 20:38 G 23405458.16 23405458.36 23405458.57 0.0089 0.0030

Jupiter 59370-02-27 01:12 G 23405564.38 23405564.55 23405564.73 0.0514 0.0257

Neptune 59370-06-26 09:22 G 23405683.71 23405683.89 23405684.11 0.0089 0.0036

Neptune 59371-02-06 22:34 G 23405909.26 23405909.44 23405909.64 0.0089 0.0041

Neptune 59371-09-20 11:31 G 23406134.81 23406134.98 23406135.19 0.0089 0.0048

Neptune 59372-05-03 00:58 G 23406360.37 23406360.54 23406360.72 0.0089 0.0052

Neptune 59372-12-14 13:41 G 23406585.92 23406586.07 23406586.25 0.0089 0.0058

Neptune 59373-07-28 03:07 G 23406811.48 23406811.63 23406811.79 0.0089 0.0064

Neptune 59374-03-10 15:50 G 23407037.04 23407037.16 23407037.32 0.0089 0.0069

Neptune 59374-10-22 05:17 G 23407262.61 23407262.72 23407262.85 0.0089 0.0075

Neptune 59375-06-04 18:14 G 23407488.19 23407488.26 23407488.38 0.0089 0.0080

Jupiter 59375-12-23 09:07 G 23407689.77 23407689.88 23407690.00 0.0506 0.0420

Neptune 59376-01-16 07:26 G 23407713.77 23407713.81 23407713.89 0.0089 0.0086

Jupiter 59376-08-16 05:02 G 23407926.61 23407926.71 23407926.82 0.0515 0.0434

Mars 59378-07-14 03:07 G 23408623.47 23408623.63 23408623.80 0.1627 0.0342

Saturn 59381-07-31 00:58 G 23409736.35 23409736.54 23409736.73 0.0269 0.0119

Jupiter 59381-11-01 18:14 G 23409830.06 23409830.26 23409830.47 0.0517 0.0013

Saturn 59382-03-17 03:36 G 23409965.46 23409965.65 23409965.85 0.0270 0.0098

Uranus 59386-05-23 22:34 G 23411494.32 23411494.44 23411494.58 0.0140 0.0111

Uranus 59387-01-05 07:41 G 23411720.65 23411720.82 23411721.01 0.0140 0.0077

Uranus 59387-08-19 16:48 G 23411947.00 23411947.20 23411947.42 0.0140 0.0043

Uranus 59388-04-02 01:55 G 23412173.36 23412173.58 23412173.80 0.0139 0.0008

Jupiter 59388-04-21 00:58 G 23412192.35 23412192.54 23412192.73 0.0513 0.0188

Uranus 59388-11-14 10:19 G 23412399.73 23412399.93 23412400.15 0.0139 0.0027

Uranus 59389-06-28 18:43 G 23412626.10 23412626.28 23412626.49 0.0139 0.0060

Uranus 59390-02-10 03:07 G 23412852.48 23412852.63 23412852.80 0.0139 0.0093

Uranus 59390-09-24 11:17 G 23413078.90 23413078.97 23413079.08 0.0138 0.0126

Jupiter 59393-07-07 12:29 G 23414095.85 23414096.02 23414096.21 0.0520 0.0250

Saturn 59396-01-15 04:19 G 23415017.48 23415017.68 23415017.88 0.0291 0.0086

Saturn 59396-09-01 02:10 G 23415247.44 23415247.59 23415247.76 0.0290 0.0189

Jupiter 59399-12-25 19:41 G 23416458.12 23416458.32 23416458.53 0.0510 0.0060

Jupiter 59405-03-13 07:41 G 23418361.76 23418361.82 23418361.88 0.0522 0.0499

Jupiter 59405-11-05 14:38 G 23418598.99 23418599.11 23418599.24 0.0513 0.0396

Saturn 59411-02-11 05:46 G 23420522.55 23420522.74 23420522.95 0.0269 0.0085

Jupiter 59411-08-31 18:43 G 23420724.11 23420724.28 23420724.44 0.0508 0.0291

Saturn 59411-09-28 08:24 G 23420751.67 23420751.85 23420752.04 0.0269 0.0131

Jupiter 59417-07-11 10:19 G 23422864.74 23422864.93 23422865.13 0.0515 0.0155

Jupiter 59423-12-29 13:12 G 23425226.90 23425227.05 23425227.21 0.0515 0.0330

Saturn 59425-07-28 06:29 G 23425803.56 23425803.77 23425803.98 0.0291 0.0059

Saturn 59426-03-15 04:19 G 23426033.55 23426033.68 23426033.83 0.0290 0.0216

Jupiter 59429-03-16 04:48 G 23427130.50 23427130.70 23427130.91 0.0518 0.0095

Uranus 59429-10-05 07:55 G 23427333.83 23427333.83 23427333.86 0.0138 0.0138

Uranus 59430-05-19 16:05 G 23427560.04 23427560.17 23427560.32 0.0138 0.0105

Uranus 59431-01-01 00:14 G 23427786.34 23427786.51 23427786.71 0.0138 0.0073

Uranus 59431-08-15 08:53 G 23428012.66 23428012.87 23428013.08 0.0139 0.0039

Uranus 59432-03-28 17:31 G 23428239.01 23428239.23 23428239.44 0.0139 0.0006

Uranus 59432-11-10 01:55 G 23428465.37 23428465.58 23428465.80 0.0139 0.0028

Uranus 59433-06-24 10:34 G 23428691.75 23428691.94 23428692.14 0.0139 0.0062

Uranus 59434-02-05 19:26 G 23428918.17 23428918.31 23428918.48 0.0140 0.0097

Uranus 59434-09-20 04:19 G 23429144.63 23429144.68 23429144.78 0.0140 0.0131

Jupiter 59435-09-03 11:02 G 23429492.76 23429492.96 23429493.16 0.0512 0.0089

Neptune 59437-10-18 19:55 G 23430269.28 23430269.33 23430269.38 0.0089 0.0086

Neptune 59438-06-01 08:38 G 23430494.79 23430494.86 23430494.96 0.0089 0.0081

Neptune 59439-01-12 21:36 G 23430720.31 23430720.40 23430720.54 0.0089 0.0076

Neptune 59439-08-26 10:48 G 23430945.84 23430945.95 23430946.11 0.0089 0.0071

Saturn 59440-01-07 07:41 G 23431079.82 23431079.82 23431079.83 0.0269 0.0269

Neptune 59440-04-08 00:14 G 23431171.37 23431171.51 23431171.67 0.0089 0.0065

Saturn 59440-08-23 10:05 G 23431308.72 23431308.92 23431309.13 0.0269 0.0055

Jupiter 59440-11-18 20:24 G 23431396.21 23431396.35 23431396.50 0.0521 0.0355

Neptune 59440-11-19 13:12 G 23431396.91 23431397.05 23431397.23 0.0089 0.0060

Saturn 59441-04-09 12:58 G 23431537.87 23431538.04 23431538.21 0.0270 0.0161

Neptune 59441-07-03 02:38 G 23431622.44 23431622.61 23431622.79 0.0089 0.0054

Neptune 59442-02-13 15:36 G 23431847.98 23431848.15 23431848.35 0.0089 0.0049

Neptune 59442-09-27 05:02 G 23432073.52 23432073.71 23432073.91 0.0089 0.0043

Moon 59443-05-04 02:53 G 23432292.45 23432292.62 23432292.78 0.2652 0.0673

Earth 59443-05-04 03:22 G 23432292.49 23432292.64 23432292.79 0.2658 0.0792 *

Neptune 59443-05-10 17:46 G 23432299.06 23432299.24 23432299.46 0.0089 0.0038

Neptune 59443-12-22 06:58 G 23432524.59 23432524.79 23432525.01 0.0089 0.0032

Mars 59444-05-11 15:50 G 23432665.99 23432666.16 23432666.33 0.1629 0.0082

Neptune 59444-08-03 19:55 G 23432750.13 23432750.33 23432750.55 0.0088 0.0027

Neptune 59445-03-17 09:22 G 23432975.68 23432975.89 23432976.11 0.0088 0.0021

Neptune 59445-10-28 22:19 G 23433201.22 23433201.43 23433201.65 0.0088 0.0015

Neptune 59446-06-11 11:17 G 23433426.76 23433426.97 23433427.19 0.0088 0.0010

Neptune 59447-01-23 00:14 G 23433652.29 23433652.51 23433652.74 0.0088 0.0005

Jupiter 59447-05-09 08:10 G 23433758.65 23433758.84 23433759.04 0.0509 0.0150

Neptune 59447-09-05 13:26 G 23433877.84 23433878.06 23433878.28 0.0088 0.0002

Neptune 59448-04-18 02:24 G 23434103.38 23434103.60 23434103.82 0.0088 0.0007

Neptune 59448-11-29 15:22 G 23434328.92 23434329.14 23434329.36 0.0088 0.0013

Neptune 59449-07-13 04:05 G 23434554.46 23434554.67 23434554.90 0.0088 0.0018

Neptune 59450-02-23 17:17 G 23434780.01 23434780.22 23434780.44 0.0088 0.0024

Neptune 59450-10-07 06:00 G 23435005.56 23435005.75 23435005.97 0.0088 0.0030

Earth 59451-05-01 18:29 G 23435212.24 23435212.27 23435212.30 0.2659 0.2591

Neptune 59451-05-20 19:12 G 23435231.10 23435231.30 23435231.51 0.0088 0.0035

Neptune 59452-01-01 07:55 G 23435456.65 23435456.83 23435457.04 0.0088 0.0040

Neptune 59452-08-13 21:07 G 23435682.20 23435682.38 23435682.57 0.0088 0.0046

Jupiter 59453-03-18 22:19 G 23435899.26 23435899.43 23435899.60 0.0514 0.0291

Neptune 59453-03-27 09:50 G 23435907.75 23435907.91 23435908.11 0.0088 0.0052

Neptune 59453-11-07 23:02 G 23436133.30 23436133.46 23436133.64 0.0088 0.0057

Neptune 59454-06-21 11:46 G 23436358.85 23436358.99 23436359.17 0.0088 0.0062

Saturn 59454-06-22 18:43 G 23436360.25 23436360.28 23436360.33 0.0291 0.0285

Neptune 59455-02-02 00:43 G 23436584.41 23436584.53 23436584.69 0.0088 0.0067

Saturn 59455-02-07 17:17 G 23436590.01 23436590.22 23436590.44 0.0290 0.0011

Neptune 59455-09-15 13:55 G 23436809.96 23436810.08 23436810.21 0.0088 0.0072

Saturn 59455-09-25 15:07 G 23436820.05 23436820.13 23436820.22 0.0290 0.0265

Neptune 59456-04-28 03:07 G 23437035.53 23437035.63 23437035.73 0.0088 0.0078

Neptune 59456-12-09 15:22 G 23437261.10 23437261.14 23437261.24 0.0088 0.0083

Neptune 59457-07-23 04:34 G 23437486.69 23437486.69 23437486.72 0.0088 0.0088

Jupiter 59459-01-12 04:05 G 23438024.55 23438024.67 23438024.81 0.0506 0.0387

Jupiter 59459-09-06 00:00 G 23438261.42 23438261.50 23438261.59 0.0516 0.0465

Jupiter 59464-11-21 18:58 G 23440165.09 23440165.29 23440165.50 0.0517 0.0052

Saturn 59469-07-19 12:58 G 23441865.95 23441866.04 23441866.15 0.0268 0.0235

Uranus 59470-01-22 06:14 G 23442052.68 23442052.76 23442052.86 0.0140 0.0127

Saturn 59470-03-05 15:07 G 23442094.92 23442095.13 23442095.34 0.0269 0.0022

Uranus 59470-09-05 15:36 G 23442278.99 23442279.15 23442279.32 0.0140 0.0092

Saturn 59470-10-20 17:46 G 23442324.10 23442324.24 23442324.39 0.0269 0.0193

Uranus 59471-04-20 00:43 G 23442505.34 23442505.53 23442505.73 0.0140 0.0058

Jupiter 59471-05-11 21:22 G 23442527.21 23442527.39 23442527.57 0.0513 0.0224

Uranus 59471-12-02 09:36 G 23442731.69 23442731.90 23442732.12 0.0140 0.0024

Uranus 59472-07-15 18:29 G 23442958.06 23442958.27 23442958.49 0.0139 0.0011

Uranus 59473-02-27 03:07 G 23443184.43 23443184.63 23443184.84 0.0139 0.0044

Uranus 59473-10-11 11:31 G 23443410.80 23443410.98 23443411.16 0.0139 0.0078

Uranus 59474-05-25 19:41 G 23443637.20 23443637.32 23443637.45 0.0139 0.0111

Jupiter 59476-07-27 13:41 G 23444430.88 23444431.07 23444431.26 0.0519 0.0197

Jupiter 59483-01-14 19:41 G 23446793.12 23446793.32 23446793.53 0.0511 0.0013

Saturn 59484-01-02 20:10 G 23447146.25 23447146.34 23447146.44 0.0292 0.0261

Saturn 59484-08-19 18:43 G 23447376.07 23447376.28 23447376.49 0.0291 0.0016

Saturn 59485-04-06 16:34 G 23447606.19 23447606.19 23447606.20 0.0290 0.0289

Jupiter 59488-04-01 06:58 G 23448696.70 23448696.79 23448696.90 0.0522 0.0451

Jupiter 59488-11-24 13:26 G 23448933.96 23448934.06 23448934.17 0.0512 0.0437

Jupiter 59494-09-19 18:58 G 23451059.11 23451059.29 23451059.47 0.0508 0.0244

Saturn 59499-01-29 15:50 G 23452652.03 23452652.16 23452652.29 0.0269 0.0208

Saturn 59499-09-15 18:14 G 23452881.05 23452881.26 23452881.47 0.0269 0.0006

Saturn 59500-05-02 20:53 G 23453110.26 23453110.37 23453110.49 0.0270 0.0222

Jupiter 59500-07-31 07:26 G 23453199.62 23453199.81 23453200.00 0.0515 0.0191

Jupiter 59506-05-26 17:46 G 23455325.17 23455325.24 23455325.31 0.0505 0.0470

Jupiter 59507-01-18 12:14 G 23455561.88 23455562.01 23455562.15 0.0514 0.0371

Mars 59507-06-04 09:50 G 23455698.80 23455698.91 23455699.02 0.1897 0.1469

Pluto 59507-11-01 16:34 G 23455849.04 23455849.19 23455849.35 0.0063 0.0044

Pluto 59508-06-13 20:10 G 23456074.14 23456074.34 23456074.57 0.0063 0.0011

Pluto 59509-01-25 00:00 G 23456299.31 23456299.50 23456299.72 0.0063 0.0026

Pluto 59509-09-07 03:50 G 23456524.62 23456524.66 23456524.74 0.0064 0.0061

Mars 59510-03-10 04:19 G 23456708.50 23456708.68 23456708.85 0.1630 0.0179

Jupiter 59512-04-05 02:38 G 23457465.41 23457465.61 23457465.81 0.0518 0.0055

Saturn 59513-07-16 05:46 G 23457932.61 23457932.74 23457932.90 0.0291 0.0213

Uranus 59514-01-18 00:58 G 23458118.44 23458118.54 23458118.66 0.0138 0.0119

Saturn 59514-03-03 04:34 G 23458162.48 23458162.69 23458162.90 0.0290 0.0064

Uranus 59514-09-01 09:07 G 23458344.72 23458344.88 23458345.06 0.0138 0.0087

Uranus 59515-04-15 17:17 G 23458571.03 23458571.22 23458571.43 0.0138 0.0054

Uranus 59515-11-28 01:55 G 23458797.36 23458797.58 23458797.79 0.0139 0.0020

Uranus 59516-07-11 10:19 G 23459023.72 23459023.93 23459024.15 0.0139 0.0014

Uranus 59517-02-22 19:12 G 23459250.10 23459250.30 23459250.51 0.0139 0.0047

Uranus 59517-10-07 03:50 G 23459476.49 23459476.66 23459476.84 0.0139 0.0081

Uranus 59518-05-21 12:29 G 23459702.92 23459703.02 23459703.16 0.0140 0.0116

Jupiter 59518-09-23 06:43 G 23459827.58 23459827.78 23459827.97 0.0512 0.0123

Neptune 59521-02-27 21:36 G 23460716.36 23460716.40 23460716.49 0.0089 0.0085

Neptune 59521-10-11 11:02 G 23460941.87 23460941.96 23460942.06 0.0089 0.0079

Neptune 59522-05-24 23:46 G 23461167.38 23461167.49 23461167.62 0.0089 0.0074

Neptune 59523-01-05 12:29 G 23461392.90 23461393.02 23461393.17 0.0089 0.0069

Neptune 59523-08-19 01:26 G 23461618.43 23461618.56 23461618.73 0.0089 0.0064

Jupiter 59523-12-09 21:50 G 23461731.25 23461731.41 23461731.58 0.0521 0.0301

Neptune 59524-03-31 14:38 G 23461843.95 23461844.11 23461844.28 0.0089 0.0058

Neptune 59524-11-12 03:22 G 23462069.48 23462069.64 23462069.83 0.0089 0.0053

Neptune 59525-06-25 16:19 G 23462295.00 23462295.18 23462295.37 0.0089 0.0047

Neptune 59526-02-06 05:02 G 23462520.53 23462520.71 23462520.92 0.0089 0.0042

Neptune 59526-09-19 18:29 G 23462746.07 23462746.27 23462746.47 0.0089 0.0036

Neptune 59527-05-03 07:12 G 23462971.61 23462971.80 23462972.02 0.0089 0.0031

Neptune 59527-12-14 20:24 G 23463197.14 23463197.35 23463197.56 0.0089 0.0025

Neptune 59528-07-27 09:07 G 23463422.68 23463422.88 23463423.11 0.0089 0.0020

Saturn 59528-08-11 21:22 G 23463438.23 23463438.39 23463438.55 0.0268 0.0175

Neptune 59529-03-09 22:19 G 23463648.22 23463648.43 23463648.65 0.0089 0.0014

Saturn 59529-03-28 23:17 G 23463667.27 23463667.47 23463667.68 0.0269 0.0040

Neptune 59529-10-21 11:31 G 23463873.76 23463873.98 23463874.20 0.0089 0.0008

Saturn 59529-11-13 01:55 G 23463896.52 23463896.58 23463896.65 0.0270 0.0254

Jupiter 59530-05-29 04:48 G 23464093.51 23464093.70 23464093.90 0.0509 0.0112

Neptune 59530-06-04 00:29 G 23464099.30 23464099.52 23464099.74 0.0089 0.0003

Neptune 59531-01-15 13:41 G 23464324.85 23464325.07 23464325.29 0.0089 0.0003

Neptune 59531-08-29 02:38 G 23464550.40 23464550.61 23464550.84 0.0089 0.0009

Neptune 59532-04-10 15:50 G 23464775.95 23464776.16 23464776.38 0.0089 0.0014

Neptune 59532-11-22 04:48 G 23465001.49 23465001.70 23465001.92 0.0089 0.0020

Neptune 59533-07-05 18:00 G 23465227.04 23465227.25 23465227.46 0.0089 0.0026

Neptune 59534-02-16 06:43 G 23465452.59 23465452.78 23465453.00 0.0089 0.0032

Neptune 59534-09-29 19:55 G 23465678.14 23465678.33 23465678.54 0.0089 0.0037

Neptune 59535-05-13 09:07 G 23465903.69 23465903.88 23465904.08 0.0089 0.0042

Neptune 59535-12-24 21:50 G 23466129.24 23466129.41 23466129.61 0.0089 0.0048

Jupiter 59536-04-08 00:00 G 23466234.35 23466234.50 23466234.65 0.0513 0.0342

Neptune 59536-08-06 11:02 G 23466354.80 23466354.96 23466355.15 0.0089 0.0054

Neptune 59537-03-20 00:00 G 23466580.35 23466580.50 23466580.68 0.0089 0.0059

Neptune 59537-10-31 13:12 G 23466805.91 23466806.05 23466806.22 0.0089 0.0065

Neptune 59538-06-14 02:38 G 23467031.47 23467031.61 23467031.74 0.0089 0.0070

Neptune 59539-01-25 15:07 G 23467257.04 23467257.13 23467257.27 0.0089 0.0076

Neptune 59539-09-08 04:34 G 23467482.61 23467482.69 23467482.80 0.0089 0.0081

Neptune 59540-04-20 18:00 G 23467708.19 23467708.25 23467708.31 0.0089 0.0086

Earth 59540-11-06 22:19 G 23467908.34 23467908.43 23467908.51 0.2674 0.2266

Jupiter 59542-02-01 04:34 G 23468359.54 23468359.69 23468359.84 0.0507 0.0339

Jupiter 59542-09-26 01:12 G 23468596.53 23468596.55 23468596.58 0.0516 0.0513

Saturn 59543-01-26 06:29 G 23468718.61 23468718.77 23468718.93 0.0291 0.0190

Saturn 59543-09-13 04:48 G 23468948.50 23468948.70 23468948.91 0.0291 0.0087

Jupiter 59547-12-12 19:12 G 23470500.10 23470500.30 23470500.51 0.0516 0.0101

Moon 59548-11-04 10:19 G 23470827.79 23470827.93 23470828.06 0.2667 0.1590

Earth 59548-11-04 13:12 G 23470827.91 23470828.05 23470828.19 0.2673 0.1175 *

Uranus 59554-05-06 23:02 G 23472837.34 23472837.46 23472837.61 0.0140 0.0108

Jupiter 59554-05-31 22:48 G 23472862.28 23472862.45 23472862.62 0.0514 0.0273

Uranus 59554-12-19 08:24 G 23473063.67 23473063.85 23473064.04 0.0140 0.0073

Uranus 59555-08-02 17:46 G 23473290.03 23473290.24 23473290.45 0.0140 0.0039

Uranus 59556-03-16 02:38 G 23473516.39 23473516.61 23473516.82 0.0139 0.0005

Uranus 59556-10-28 11:02 G 23473742.75 23473742.96 23473743.18 0.0139 0.0030

Uranus 59557-06-11 19:26 G 23473969.13 23473969.31 23473969.51 0.0139 0.0063

Uranus 59558-01-24 03:36 G 23474195.51 23474195.65 23474195.82 0.0139 0.0097

Saturn 59558-02-21 22:48 G 23474224.28 23474224.45 23474224.63 0.0269 0.0150

Uranus 59558-09-07 11:46 G 23474421.94 23474421.99 23474422.09 0.0139 0.0130

Saturn 59558-10-09 01:12 G 23474453.35 23474453.55 23474453.76 0.0269 0.0065

Jupiter 59559-08-17 12:00 G 23474765.81 23474766.00 23474766.20 0.0519 0.0155

Jupiter 59566-02-03 19:55 G 23477128.13 23477128.33 23477128.53 0.0511 0.0034

Jupiter 59571-04-22 05:46 G 23479031.62 23479031.74 23479031.87 0.0522 0.0407

Jupiter 59571-12-15 12:14 G 23479268.94 23479269.01 23479269.09 0.0512 0.0477

Saturn 59572-08-07 14:38 G 23479504.94 23479505.11 23479505.30 0.0291 0.0146

Saturn 59573-03-25 13:26 G 23479734.87 23479735.06 23479735.25 0.0290 0.0130

Mars 59573-03-31 12:00 G 23479740.83 23479741.00 23479741.17 0.1895 0.0570

Mars 59576-01-05 16:34 G 23480751.02 23480751.19 23480751.36 0.1631 0.0444

Jupiter 59577-10-09 15:36 G 23481393.96 23481394.15 23481394.34 0.0508 0.0206

Jupiter 59583-08-20 09:36 G 23483534.72 23483534.90 23483535.08 0.0515 0.0245

Saturn 59587-09-04 04:34 G 23485010.50 23485010.69 23485010.88 0.0268 0.0116

Saturn 59588-04-20 06:29 G 23485239.58 23485239.77 23485239.97 0.0269 0.0098

Jupiter 59589-06-14 14:53 G 23485660.03 23485660.12 23485660.23 0.0505 0.0431

Jupiter 59590-02-06 09:36 G 23485896.79 23485896.90 23485897.03 0.0515 0.0410

Jupiter 59595-04-25 05:31 G 23487800.52 23487800.73 23487800.93 0.0517 0.0006

Uranus 59597-09-17 10:05 G 23488676.87 23488676.92 23488676.98 0.0138 0.0133

Pluto 59597-12-17 14:38 G 23488768.08 23488768.11 23488768.20 0.0081 0.0079

Uranus 59598-05-01 18:14 G 23488903.11 23488903.26 23488903.41 0.0138 0.0100

Pluto 59598-07-31 02:24 G 23488993.38 23488993.60 23488993.82 0.0081 0.0004

Uranus 59598-12-14 02:24 G 23489129.41 23489129.60 23489129.79 0.0138 0.0068

Pluto 59599-03-13 12:43 G 23489218.94 23489219.03 23489219.16 0.0080 0.0070

Uranus 59599-07-28 10:34 G 23489355.73 23489355.94 23489356.16 0.0138 0.0035

Uranus 59600-03-10 19:12 G 23489582.08 23489582.30 23489582.52 0.0139 0.0001

Uranus 59600-10-23 03:36 G 23489808.44 23489808.65 23489808.87 0.0139 0.0033

Uranus 59601-06-06 12:00 G 23490034.83 23490035.00 23490035.21 0.0139 0.0067

Jupiter 59601-10-12 08:10 G 23490162.65 23490162.84 23490163.03 0.0512 0.0173

Uranus 59602-01-18 21:07 G 23490261.24 23490261.38 23490261.54 0.0139 0.0101

Neptune 59602-01-21 05:17 G 23490263.68 23490263.72 23490263.80 0.0089 0.0085

Saturn 59602-02-17 15:07 G 23490290.94 23490291.13 23490291.33 0.0291 0.0123

Uranus 59602-09-02 06:00 G 23490487.71 23490487.75 23490487.82 0.0140 0.0135

Neptune 59602-09-03 18:58 G 23490489.19 23490489.29 23490489.38 0.0089 0.0079

Saturn 59602-10-05 13:26 G 23490520.89 23490521.06 23490521.25 0.0291 0.0153

Neptune 59603-04-17 07:41 G 23490714.71 23490714.82 23490714.95 0.0089 0.0074

Neptune 59603-11-28 20:38 G 23490940.24 23490940.36 23490940.52 0.0089 0.0069

Neptune 59604-07-11 09:36 G 23491165.77 23491165.90 23491166.08 0.0089 0.0064

Neptune 59605-02-21 23:17 G 23491391.31 23491391.47 23491391.65 0.0089 0.0058

Neptune 59605-10-05 12:14 G 23491616.85 23491617.01 23491617.20 0.0089 0.0053

Neptune 59606-05-19 01:41 G 23491842.39 23491842.57 23491842.76 0.0089 0.0047

Jupiter 59606-12-28 23:46 G 23492066.31 23492066.49 23492066.67 0.0520 0.0247

Neptune 59606-12-30 14:24 G 23492067.92 23492068.10 23492068.31 0.0089 0.0042

Neptune 59607-08-13 03:50 G 23492293.46 23492293.66 23492293.87 0.0089 0.0036

Neptune 59608-03-25 17:02 G 23492519.01 23492519.21 23492519.42 0.0089 0.0030

Neptune 59608-11-06 06:14 G 23492744.55 23492744.76 23492744.97 0.0089 0.0025

Neptune 59609-06-19 19:12 G 23492970.09 23492970.30 23492970.52 0.0088 0.0019

Neptune 59610-01-31 08:24 G 23493195.63 23493195.85 23493196.07 0.0088 0.0014

Neptune 59610-09-13 21:22 G 23493421.17 23493421.39 23493421.61 0.0088 0.0008

Neptune 59611-04-27 10:19 G 23493646.72 23493646.93 23493647.16 0.0088 0.0004

Neptune 59611-12-08 23:31 G 23493872.26 23493872.48 23493872.70 0.0088 0.0003

Neptune 59612-07-21 12:14 G 23494097.80 23494098.01 23494098.24 0.0088 0.0009

Neptune 59613-03-04 01:26 G 23494323.34 23494323.56 23494323.78 0.0088 0.0014

Jupiter 59613-06-17 06:58 G 23494428.59 23494428.79 23494428.99 0.0510 0.0060

Neptune 59613-10-15 14:24 G 23494548.89 23494549.10 23494549.32 0.0088 0.0019

Neptune 59614-05-29 03:22 G 23494774.43 23494774.64 23494774.85 0.0088 0.0025

Neptune 59615-01-09 16:05 G 23494999.97 23495000.17 23495000.38 0.0088 0.0030

Neptune 59615-08-23 05:02 G 23495225.51 23495225.71 23495225.92 0.0088 0.0036

Neptune 59616-04-04 18:00 G 23495451.07 23495451.25 23495451.46 0.0088 0.0041

Neptune 59616-11-16 06:58 G 23495676.61 23495676.79 23495676.99 0.0088 0.0047

Saturn 59617-03-16 05:02 G 23495796.52 23495796.71 23495796.91 0.0269 0.0093

Neptune 59617-06-29 20:10 G 23495902.16 23495902.34 23495902.52 0.0088 0.0052

Saturn 59617-10-31 07:26 G 23496025.63 23496025.81 23496026.00 0.0269 0.0121

Neptune 59618-02-10 08:38 G 23496127.71 23496127.86 23496128.05 0.0088 0.0058

Jupiter 59618-09-02 15:22 G 23496332.09 23496332.14 23496332.19 0.0523 0.0505

Neptune 59618-09-23 21:50 G 23496353.26 23496353.41 23496353.57 0.0088 0.0062

Jupiter 59619-04-27 23:02 G 23496569.33 23496569.46 23496569.60 0.0513 0.0384

Neptune 59619-05-07 11:02 G 23496578.82 23496578.96 23496579.10 0.0088 0.0068

Neptune 59619-12-18 23:31 G 23496804.38 23496804.48 23496804.62 0.0088 0.0073

Neptune 59620-07-31 12:29 G 23497029.94 23497030.02 23497030.14 0.0088 0.0078

Neptune 59621-03-14 01:26 G 23497255.51 23497255.56 23497255.65 0.0088 0.0084

Jupiter 59625-02-20 05:31 G 23498694.57 23498694.73 23498694.90 0.0507 0.0290

Jupiter 59630-12-31 18:43 G 23500835.09 23500835.28 23500835.48 0.0516 0.0145

Saturn 59631-08-30 22:19 G 23501077.23 23501077.43 23501077.64 0.0291 0.0082

Saturn 59632-04-16 20:53 G 23501307.21 23501307.37 23501307.53 0.0290 0.0194

Jupiter 59637-06-19 19:55 G 23503197.17 23503197.33 23503197.49 0.0513 0.0311

Uranus 59638-01-04 05:31 G 23503395.65 23503395.73 23503395.85 0.0140 0.0125

Uranus 59638-08-18 14:53 G 23503621.97 23503622.12 23503622.30 0.0140 0.0090

Mars 59639-01-26 14:38 G 23503782.94 23503783.11 23503783.28 0.1893 0.0299

Uranus 59639-04-02 00:14 G 23503848.32 23503848.51 23503848.72 0.0140 0.0055

Uranus 59639-11-14 09:07 G 23504074.67 23504074.88 23504075.10 0.0140 0.0021

Uranus 59640-06-27 18:00 G 23504301.03 23504301.25 23504301.47 0.0139 0.0013

Uranus 59641-02-09 02:24 G 23504527.40 23504527.60 23504527.81 0.0139 0.0047

Uranus 59641-09-23 10:48 G 23504753.78 23504753.95 23504754.14 0.0139 0.0081

Mars 59641-11-02 05:02 G 23504793.56 23504793.71 23504793.87 0.1633 0.0699

Uranus 59642-05-07 18:58 G 23504980.18 23504980.29 23504980.43 0.0139 0.0114

Jupiter 59642-09-05 14:38 G 23505100.91 23505101.11 23505101.31 0.0519 0.0098

Saturn 59646-09-26 10:48 G 23506582.75 23506582.95 23506583.16 0.0268 0.0060

Saturn 59647-05-13 12:58 G 23506811.87 23506812.04 23506812.22 0.0269 0.0154

Jupiter 59649-02-22 18:00 G 23507463.04 23507463.25 23507463.45 0.0511 0.0076

Jupiter 59654-05-11 09:22 G 23509366.74 23509366.89 23509367.04 0.0522 0.0347

Jupiter 59660-10-28 17:02 G 23511729.02 23511729.21 23511729.41 0.0508 0.0156

Saturn 59661-03-11 22:34 G 23511863.23 23511863.44 23511863.65 0.0291 0.0059

Saturn 59661-10-27 20:38 G 23512093.22 23512093.36 23512093.51 0.0290 0.0216

Jupiter 59666-09-08 11:46 G 23513869.83 23513869.99 23513870.16 0.0514 0.0296

Jupiter 59672-07-03 17:17 G 23515995.09 23515995.22 23515995.36 0.0506 0.0379

Jupiter 59673-02-25 12:43 G 23516231.95 23516232.03 23516232.12 0.0515 0.0462

Mars 59673-10-31 21:50 G 23516480.37 23516480.41 23516480.46 0.1629 0.1554

Saturn 59675-08-22 08:38 G 23517139.80 23517139.86 23517139.94 0.0268 0.0250

Saturn 59676-04-07 10:48 G 23517368.74 23517368.95 23517369.16 0.0269 0.0038

Saturn 59676-11-22 13:12 G 23517597.89 23517598.05 23517598.21 0.0269 0.0177

Jupiter 59678-05-14 05:31 G 23518135.53 23518135.73 23518135.93 0.0517 0.0049

Uranus 59681-12-30 02:53 G 23519461.51 23519461.62 23519461.75 0.0138 0.0114

Uranus 59682-08-13 11:02 G 23519687.79 23519687.96 23519688.14 0.0138 0.0082

Uranus 59683-03-27 19:12 G 23519914.10 23519914.30 23519914.51 0.0138 0.0049

Uranus 59683-11-09 03:36 G 23520140.44 23520140.65 23520140.87 0.0139 0.0015

Uranus 59684-06-22 12:00 G 23520366.79 23520367.00 23520367.22 0.0139 0.0019

Neptune 59684-10-18 19:26 G 23520485.31 23520485.31 23520485.37 0.0089 0.0088

Jupiter 59684-10-31 09:50 G 23520497.73 23520497.91 23520498.09 0.0512 0.0224

Uranus 59685-02-03 20:53 G 23520593.17 23520593.37 23520593.57 0.0139 0.0052

Neptune 59685-06-01 08:24 G 23520710.79 23520710.85 23520710.95 0.0089 0.0083

Uranus 59685-09-18 05:31 G 23520819.57 23520819.73 23520819.91 0.0139 0.0086

Neptune 59686-01-12 21:07 G 23520936.30 23520936.38 23520936.51 0.0089 0.0078

Uranus 59686-05-02 14:10 G 23521046.00 23521046.09 23521046.21 0.0139 0.0121

Moon 59686-05-05 02:53 G 23521048.47 23521048.62 23521048.77 0.2665 0.0501

Earth 59686-05-05 04:34 G 23521048.54 23521048.69 23521048.84 0.2659 0.0865 *

Neptune 59686-08-26 10:34 G 23521161.83 23521161.94 23521162.08 0.0089 0.0072

Neptune 59687-04-08 23:31 G 23521387.35 23521387.48 23521387.63 0.0089 0.0067

Neptune 59687-11-20 12:14 G 23521612.87 23521613.01 23521613.18 0.0089 0.0062

Neptune 59688-07-03 01:26 G 23521838.39 23521838.56 23521838.73 0.0089 0.0056

Neptune 59689-02-13 14:10 G 23522063.92 23522064.09 23522064.28 0.0089 0.0051

Neptune 59689-09-27 02:53 G 23522289.45 23522289.62 23522289.83 0.0089 0.0046

Jupiter 59690-01-16 23:46 G 23522401.31 23522401.49 23522401.68 0.0520 0.0199

Neptune 59690-05-10 16:05 G 23522514.98 23522515.17 23522515.37 0.0089 0.0040

Saturn 59690-09-22 04:48 G 23522649.49 23522649.70 23522649.91 0.0291 0.0020

Neptune 59690-12-22 04:48 G 23522740.51 23522740.70 23522740.92 0.0089 0.0035

Saturn 59691-05-10 03:07 G 23522879.53 23522879.63 23522879.73 0.0290 0.0254

Neptune 59691-08-04 18:00 G 23522966.05 23522966.25 23522966.46 0.0089 0.0029

Neptune 59692-03-17 06:43 G 23523191.58 23523191.78 23523192.01 0.0089 0.0024

Neptune 59692-10-28 19:55 G 23523417.12 23523417.33 23523417.55 0.0089 0.0018

Neptune 59693-06-11 08:53 G 23523642.66 23523642.87 23523643.09 0.0089 0.0013

Neptune 59694-01-22 21:50 G 23523868.19 23523868.41 23523868.63 0.0089 0.0007

Earth 59694-05-02 19:55 G 23523968.28 23523968.33 23523968.38 0.2660 0.2509

Moon 59694-05-02 22:19 G 23523968.39 23523968.43 23523968.48 0.2666 0.2505

Neptune 59694-09-05 11:02 G 23524093.74 23524093.96 23524094.18 0.0089 0.0001

Neptune 59695-04-19 00:00 G 23524319.29 23524319.50 23524319.72 0.0089 0.0005

Neptune 59695-11-30 12:58 G 23524544.83 23524545.04 23524545.27 0.0089 0.0010

Jupiter 59696-07-06 05:02 G 23524763.51 23524763.71 23524763.92 0.0509 0.0019

Neptune 59696-07-13 02:10 G 23524770.37 23524770.59 23524770.81 0.0089 0.0015

Neptune 59697-02-23 15:07 G 23524995.92 23524996.13 23524996.35 0.0089 0.0021

Neptune 59697-10-07 04:05 G 23525221.48 23525221.67 23525221.89 0.0089 0.0027

Neptune 59698-05-20 17:17 G 23525447.03 23525447.22 23525447.43 0.0089 0.0032

Neptune 59699-01-01 06:14 G 23525672.58 23525672.76 23525672.97 0.0089 0.0038

Neptune 59699-08-14 19:26 G 23525898.13 23525898.31 23525898.51 0.0089 0.0043

Neptune 59700-03-28 08:24 G 23526123.68 23526123.85 23526124.05 0.0089 0.0049

Neptune 59700-11-08 21:36 G 23526349.24 23526349.40 23526349.59 0.0089 0.0054

Neptune 59701-06-22 10:48 G 23526574.79 23526574.95 23526575.12 0.0089 0.0060

Jupiter 59701-09-22 17:46 G 23526667.14 23526667.24 23526667.35 0.0523 0.0449

Neptune 59702-02-02 23:31 G 23526800.35 23526800.48 23526800.65 0.0089 0.0065

Jupiter 59702-05-18 01:55 G 23526904.48 23526904.58 23526904.69 0.0513 0.0438

Neptune 59702-09-16 12:58 G 23527025.92 23527026.04 23527026.18 0.0089 0.0070

Neptune 59703-04-30 02:10 G 23527251.48 23527251.59 23527251.71 0.0089 0.0076

Neptune 59703-12-11 14:53 G 23527477.05 23527477.12 23527477.23 0.0089 0.0081

Neptune 59704-07-24 03:50 G 23527702.63 23527702.66 23527702.74 0.0089 0.0087

Mars 59704-11-23 17:31 G 23527825.09 23527825.23 23527825.37 0.1890 0.1156

Saturn 59705-03-04 14:24 G 23527925.99 23527926.10 23527926.23 0.0268 0.0218

Saturn 59705-10-19 16:34 G 23528154.98 23528155.19 23528155.40 0.0269 0.0006

Saturn 59706-06-05 18:43 G 23528384.16 23528384.28 23528384.42 0.0269 0.0210

Mars 59707-08-31 17:17 G 23528836.08 23528836.22 23528836.35 0.1635 0.0974

Jupiter 59708-03-12 04:19 G 23529029.50 23529029.68 23529029.85 0.0507 0.0246

Jupiter 59714-01-20 22:19 G 23531170.24 23531170.43 23531170.62 0.0516 0.0201

Saturn 59719-08-18 06:58 G 23533205.72 23533205.79 23533205.86 0.0291 0.0273

Jupiter 59719-11-16 04:19 G 23533295.61 23533295.68 23533295.76 0.0505 0.0467

Saturn 59720-04-04 05:46 G 23533435.52 23533435.74 23533435.95 0.0291 0.0006

Jupiter 59720-07-09 22:05 G 23533532.28 23533532.42 23533532.57 0.0514 0.0363

Saturn 59720-11-20 03:22 G 23533665.59 23533665.64 23533665.71 0.0290 0.0277

Uranus 59721-09-04 12:58 G 23533954.03 23533954.04 23533954.06 0.0140 0.0140

Uranus 59722-04-18 22:05 G 23534180.29 23534180.42 23534180.58 0.0140 0.0106

Uranus 59722-12-01 07:12 G 23534406.63 23534406.80 23534407.00 0.0140 0.0071

Uranus 59723-07-15 16:34 G 23534632.98 23534633.19 23534633.40 0.0140 0.0036

Uranus 59724-02-27 01:26 G 23534859.34 23534859.56 23534859.78 0.0140 0.0002

Uranus 59724-10-10 09:50 G 23535085.71 23535085.91 23535086.13 0.0139 0.0032

Uranus 59725-05-24 18:14 G 23535312.08 23535312.26 23535312.46 0.0139 0.0066

Jupiter 59725-09-25 17:31 G 23535436.03 23535436.23 23535436.44 0.0518 0.0043

Uranus 59726-01-06 02:38 G 23535538.47 23535538.61 23535538.77 0.0139 0.0099

Uranus 59726-08-20 11:02 G 23535764.90 23535764.96 23535765.03 0.0139 0.0132

Jupiter 59732-03-14 20:53 G 23537798.17 23537798.37 23537798.56 0.0511 0.0129

Saturn 59734-09-14 14:10 G 23538711.95 23538712.09 23538712.23 0.0268 0.0196

Saturn 59735-05-01 16:05 G 23538940.96 23538941.17 23538941.39 0.0269 0.0017

Saturn 59735-12-16 18:43 G 23539170.17 23539170.28 23539170.38 0.0269 0.0231

Jupiter 59737-05-31 10:05 G 23539701.75 23539701.92 23539702.09 0.0521 0.0296

Mars 59739-08-30 10:19 G 23540522.82 23540522.93 23540523.03 0.1630 0.1293

Jupiter 59743-11-18 19:12 G 23542064.10 23542064.30 23542064.50 0.0509 0.0103

Saturn 59749-02-27 12:00 G 23543991.88 23543992.00 23543992.13 0.0291 0.0237

Jupiter 59749-09-28 12:00 G 23544204.86 23544205.00 23544205.16 0.0514 0.0342

Saturn 59749-10-15 10:48 G 23544221.74 23544221.95 23544222.16 0.0291 0.0040

Pluto 59755-02-23 11:17 G 23546178.82 23546178.97 23546179.15 0.0063 0.0041

Jupiter 59755-07-24 16:19 G 23546330.03 23546330.18 23546330.33 0.0506 0.0333

Pluto 59755-10-06 15:22 G 23546403.92 23546404.14 23546404.36 0.0063 0.0007

Jupiter 59756-03-17 11:02 G 23546566.92 23546566.96 23546567.01 0.0515 0.0502

Pluto 59756-05-18 18:43 G 23546629.10 23546629.28 23546629.49 0.0063 0.0029

Jupiter 59761-06-03 07:55 G 23548470.63 23548470.83 23548471.03 0.0518 0.0103

Saturn 59764-03-26 20:10 G 23549498.18 23549498.34 23549498.51 0.0268 0.0164

Saturn 59764-11-10 22:19 G 23549727.22 23549727.43 23549727.64 0.0269 0.0050

Saturn 59765-06-28 00:29 G 23549956.49 23549956.52 23549956.57 0.0270 0.0265

Uranus 59765-08-30 11:46 G 23550019.92 23550019.99 23550020.08 0.0138 0.0128

Neptune 59765-09-12 02:24 G 23550032.59 23550032.60 23550032.65 0.0089 0.0088

Uranus 59766-04-13 19:41 G 23550246.18 23550246.32 23550246.49 0.0138 0.0095

Neptune 59766-04-25 15:22 G 23550258.08 23550258.14 23550258.24 0.0089 0.0083

Uranus 59766-11-26 03:50 G 23550472.48 23550472.66 23550472.87 0.0138 0.0063

Neptune 59766-12-07 04:19 G 23550483.60 23550483.68 23550483.81 0.0089 0.0078

Uranus 59767-07-10 12:14 G 23550698.80 23550699.01 23550699.23 0.0138 0.0029

Neptune 59767-07-20 18:00 G 23550709.13 23550709.25 23550709.38 0.0089 0.0072

Jupiter 59767-11-21 08:24 G 23550832.67 23550832.85 23550833.02 0.0512 0.0265

Uranus 59768-02-21 20:53 G 23550925.15 23550925.37 23550925.59 0.0139 0.0005

Neptune 59768-03-02 06:58 G 23550934.66 23550934.79 23550934.95 0.0089 0.0067

Uranus 59768-10-05 05:31 G 23551151.52 23551151.73 23551151.94 0.0139 0.0038

Neptune 59768-10-13 19:55 G 23551160.19 23551160.33 23551160.51 0.0089 0.0062

Uranus 59769-05-19 13:55 G 23551377.90 23551378.08 23551378.28 0.0139 0.0072

Neptune 59769-05-27 08:53 G 23551385.73 23551385.87 23551386.06 0.0089 0.0057

Uranus 59769-12-31 22:48 G 23551604.32 23551604.45 23551604.60 0.0139 0.0106

Neptune 59770-01-07 22:19 G 23551611.26 23551611.43 23551611.62 0.0089 0.0051

Neptune 59770-08-21 11:17 G 23551836.80 23551836.97 23551837.18 0.0089 0.0046

Neptune 59771-04-04 00:43 G 23552062.34 23552062.53 23552062.73 0.0089 0.0040

Neptune 59771-11-15 13:41 G 23552287.88 23552288.07 23552288.29 0.0089 0.0035

Neptune 59772-06-28 03:07 G 23552513.42 23552513.63 23552513.84 0.0089 0.0029

Jupiter 59773-02-06 03:07 G 23552736.43 23552736.63 23552736.82 0.0520 0.0142

Neptune 59773-02-08 16:05 G 23552738.97 23552739.17 23552739.39 0.0089 0.0024

Mars 59773-06-28 05:31 G 23552878.62 23552878.73 23552878.84 0.1636 0.1240

Neptune 59773-09-22 05:17 G 23552964.51 23552964.72 23552964.94 0.0088 0.0018

Neptune 59774-05-05 18:29 G 23553190.05 23553190.27 23553190.49 0.0088 0.0012

Neptune 59774-12-17 07:26 G 23553415.59 23553415.81 23553416.04 0.0088 0.0007

Neptune 59775-07-30 20:38 G 23553641.14 23553641.36 23553641.58 0.0088 0.0001

Neptune 59776-03-12 09:50 G 23553866.69 23553866.91 23553867.13 0.0088 0.0004

Neptune 59776-10-23 22:48 G 23554092.23 23554092.45 23554092.67 0.0088 0.0010

Neptune 59777-06-06 11:31 G 23554317.77 23554317.98 23554318.21 0.0088 0.0016

Neptune 59778-01-18 00:43 G 23554543.32 23554543.53 23554543.75 0.0088 0.0020

Neptune 59778-08-31 13:26 G 23554768.86 23554769.06 23554769.28 0.0088 0.0026

Saturn 59778-09-09 14:10 G 23554777.95 23554778.09 23554778.24 0.0291 0.0210

Neptune 59779-04-14 02:38 G 23554994.41 23554994.61 23554994.83 0.0088 0.0031

Saturn 59779-04-27 12:43 G 23555007.82 23555008.03 23555008.24 0.0291 0.0066

Jupiter 59779-07-27 06:43 G 23555098.58 23555098.78 23555098.99 0.0510 0.0034

Neptune 59779-11-25 15:50 G 23555219.96 23555220.16 23555220.36 0.0088 0.0037

Neptune 59780-07-08 04:19 G 23555445.50 23555445.68 23555445.89 0.0088 0.0042

Neptune 59781-02-18 17:31 G 23555671.05 23555671.23 23555671.42 0.0088 0.0047

Neptune 59781-10-02 06:29 G 23555896.60 23555896.77 23555896.95 0.0088 0.0053

Neptune 59782-05-15 19:12 G 23556122.15 23556122.30 23556122.48 0.0088 0.0058

Neptune 59782-12-27 08:10 G 23556347.70 23556347.84 23556348.01 0.0088 0.0063

Neptune 59783-08-09 21:07 G 23556573.26 23556573.38 23556573.53 0.0088 0.0069

Moon 59783-11-08 20:10 G 23556664.23 23556664.34 23556664.46 0.2679 0.1755

Earth 59783-11-08 23:17 G 23556664.40 23556664.47 23556664.55 0.2673 0.2301 *

Neptune 59784-03-22 10:34 G 23556798.82 23556798.94 23556799.06 0.0088 0.0074

Jupiter 59784-10-11 21:07 G 23557002.25 23557002.38 23557002.51 0.0522 0.0391

Neptune 59784-11-02 22:48 G 23557024.38 23557024.45 23557024.57 0.0088 0.0079

Jupiter 59785-06-06 04:19 G 23557239.62 23557239.68 23557239.74 0.0513 0.0487

Neptune 59785-06-16 11:46 G 23557249.95 23557249.99 23557250.08 0.0088 0.0084

Jupiter 59791-04-01 06:29 G 23559364.59 23559364.77 23559364.96 0.0508 0.0195

Earth 59791-11-06 14:24 G 23559583.96 23559584.10 23559584.24 0.2672 0.1148

Moon 59791-11-06 15:22 G 23559584.00 23559584.14 23559584.29 0.2679 0.0741 *

Saturn 59793-10-06 19:26 G 23560284.13 23560284.31 23560284.49 0.0268 0.0143

Saturn 59794-05-23 21:36 G 23560513.20 23560513.40 23560513.60 0.0269 0.0071

Jupiter 59797-02-08 23:02 G 23561505.28 23561505.46 23561505.64 0.0515 0.0249

Jupiter 59802-12-06 06:14 G 23563630.65 23563630.76 23563630.88 0.0505 0.0416

Jupiter 59803-07-31 00:14 G 23563867.40 23563867.51 23563867.64 0.0514 0.0414

Mars 59805-06-27 22:48 G 23564565.32 23564565.45 23564565.58 0.1631 0.1034

Uranus 59805-12-18 05:17 G 23564738.62 23564738.72 23564738.83 0.0140 0.0121

Uranus 59806-08-01 14:24 G 23564964.94 23564965.10 23564965.28 0.0140 0.0086

Uranus 59807-03-15 23:31 G 23565191.29 23565191.48 23565191.69 0.0140 0.0052

Uranus 59807-10-28 08:24 G 23565417.64 23565417.85 23565418.07 0.0140 0.0018

Saturn 59808-03-22 19:12 G 23565564.13 23565564.30 23565564.47 0.0291 0.0174

Uranus 59808-06-10 17:02 G 23565644.00 23565644.21 23565644.43 0.0139 0.0017

Jupiter 59808-10-15 17:46 G 23565771.04 23565771.24 23565771.44 0.0518 0.0005

Saturn 59808-11-07 17:46 G 23565794.04 23565794.24 23565794.44 0.0290 0.0102

Uranus 59809-01-23 01:41 G 23565870.37 23565870.57 23565870.77 0.0139 0.0051

Uranus 59809-09-06 10:05 G 23566096.75 23566096.92 23566097.10 0.0139 0.0084

Uranus 59810-04-20 18:00 G 23566323.16 23566323.25 23566323.39 0.0139 0.0118

Jupiter 59815-04-04 19:41 G 23568133.13 23568133.32 23568133.51 0.0511 0.0171

Jupiter 59820-06-20 11:17 G 23570036.79 23570036.97 23570037.15 0.0522 0.0244

Saturn 59823-04-20 01:55 G 23571070.39 23571070.58 23571070.77 0.0269 0.0109

Saturn 59823-12-05 04:05 G 23571299.48 23571299.67 23571299.87 0.0269 0.0105

Jupiter 59826-12-08 17:46 G 23572399.04 23572399.24 23572399.45 0.0508 0.0061

Jupiter 59832-02-24 05:17 G 23574302.65 23574302.72 23574302.78 0.0524 0.0494

Jupiter 59832-10-18 14:38 G 23574539.98 23574540.11 23574540.24 0.0514 0.0393

Saturn 59837-10-02 22:19 G 23576350.25 23576350.43 23576350.62 0.0291 0.0144

Saturn 59838-05-20 20:38 G 23576580.17 23576580.36 23576580.55 0.0290 0.0131

Jupiter 59838-08-13 17:17 G 23576665.05 23576665.22 23576665.39 0.0506 0.0286

Mars 59839-04-26 17:31 G 23576921.17 23576921.23 23576921.30 0.1638 0.1516

Jupiter 59844-06-23 10:19 G 23578805.74 23578805.93 23578806.13 0.0517 0.0156

Pluto 59845-04-11 10:05 G 23579097.85 23579097.92 23579098.03 0.0081 0.0074

Pluto 59845-11-22 21:36 G 23579323.18 23579323.40 23579323.62 0.0081 0.0001

Pluto 59846-07-06 08:24 G 23579548.76 23579548.85 23579548.94 0.0080 0.0073

Neptune 59849-01-22 06:29 G 23580479.73 23580479.77 23580479.84 0.0089 0.0086

Neptune 59849-09-04 19:26 G 23580705.24 23580705.31 23580705.42 0.0089 0.0081

Uranus 59849-12-13 04:05 G 23580804.56 23580804.67 23580804.82 0.0138 0.0109

Neptune 59850-04-18 08:24 G 23580930.75 23580930.85 23580930.98 0.0089 0.0076

Jupiter 59850-04-18 17:46 G 23580931.24 23580931.24 23580931.26 0.0504 0.0503

Uranus 59850-07-27 12:29 G 23581030.84 23581031.02 23581031.21 0.0138 0.0076

Neptune 59850-11-29 21:07 G 23581156.27 23581156.38 23581156.54 0.0089 0.0071

Jupiter 59850-12-11 10:34 G 23581167.78 23581167.94 23581168.10 0.0513 0.0316

Uranus 59851-03-10 20:38 G 23581257.16 23581257.36 23581257.58 0.0138 0.0043

Neptune 59851-07-13 10:34 G 23581381.80 23581381.94 23581382.09 0.0089 0.0065

Uranus 59851-10-23 05:17 G 23581483.50 23581483.72 23581483.93 0.0139 0.0010

Neptune 59852-02-23 23:17 G 23581607.32 23581607.47 23581607.65 0.0089 0.0060

Uranus 59852-06-05 13:41 G 23581709.86 23581710.07 23581710.29 0.0139 0.0024

Neptune 59852-10-06 12:14 G 23581832.85 23581833.01 23581833.20 0.0089 0.0055

Saturn 59852-10-30 01:12 G 23581856.36 23581856.55 23581856.76 0.0269 0.0088

Uranus 59853-01-17 22:19 G 23581936.24 23581936.43 23581936.63 0.0139 0.0058

Neptune 59853-05-20 01:12 G 23582058.38 23582058.55 23582058.75 0.0089 0.0049

Saturn 59853-06-16 03:36 G 23582085.47 23582085.65 23582085.84 0.0269 0.0127

Uranus 59853-09-01 06:58 G 23582162.64 23582162.79 23582162.97 0.0139 0.0092

Neptune 59853-12-31 14:10 G 23582283.91 23582284.09 23582284.29 0.0089 0.0044

Uranus 59854-04-15 15:50 G 23582389.09 23582389.16 23582389.27 0.0139 0.0127

Neptune 59854-08-14 03:22 G 23582509.45 23582509.64 23582509.84 0.0089 0.0038

Neptune 59855-03-27 16:05 G 23582734.98 23582735.17 23582735.39 0.0089 0.0033

Neptune 59855-11-08 05:17 G 23582960.51 23582960.72 23582960.93 0.0089 0.0027

Jupiter 59856-02-27 03:50 G 23583071.45 23583071.66 23583071.86 0.0519 0.0093

Neptune 59856-06-20 18:00 G 23583186.05 23583186.25 23583186.47 0.0089 0.0022

Neptune 59857-02-01 06:58 G 23583411.58 23583411.79 23583412.01 0.0089 0.0017

Neptune 59857-09-14 20:10 G 23583637.12 23583637.34 23583637.56 0.0089 0.0011

Neptune 59858-04-28 09:07 G 23583862.66 23583862.88 23583863.10 0.0089 0.0005

Neptune 59858-12-09 22:05 G 23584088.20 23584088.42 23584088.64 0.0089 0.0001

Neptune 59859-07-23 11:02 G 23584313.74 23584313.96 23584314.18 0.0089 0.0006

Neptune 59860-03-05 00:00 G 23584539.29 23584539.50 23584539.72 0.0089 0.0011

Neptune 59860-10-16 12:58 G 23584764.83 23584765.04 23584765.27 0.0089 0.0017

Neptune 59861-05-30 02:10 G 23584990.38 23584990.59 23584990.81 0.0089 0.0022

Neptune 59862-01-10 14:53 G 23585215.93 23585216.12 23585216.34 0.0089 0.0028

Jupiter 59862-08-16 08:38 G 23585433.66 23585433.86 23585434.06 0.0510 0.0084

Neptune 59862-08-24 04:19 G 23585441.48 23585441.68 23585441.89 0.0089 0.0033

Neptune 59863-04-06 17:17 G 23585667.03 23585667.22 23585667.43 0.0089 0.0039

Neptune 59863-11-18 06:29 G 23585892.59 23585892.77 23585892.97 0.0089 0.0044

Neptune 59864-06-30 19:12 G 23586118.14 23586118.30 23586118.50 0.0089 0.0050

Neptune 59865-02-11 08:24 G 23586343.69 23586343.85 23586344.04 0.0089 0.0055

Neptune 59865-09-24 21:50 G 23586569.26 23586569.41 23586569.58 0.0089 0.0061

Neptune 59866-05-08 10:34 G 23586794.82 23586794.94 23586795.11 0.0089 0.0067

Neptune 59866-12-19 23:46 G 23587020.38 23587020.49 23587020.64 0.0089 0.0071

Saturn 59867-04-15 03:07 G 23587136.44 23587136.63 23587136.83 0.0291 0.0110

Neptune 59867-08-02 12:58 G 23587245.94 23587246.04 23587246.16 0.0089 0.0077

Jupiter 59867-11-01 20:53 G 23587337.22 23587337.37 23587337.52 0.0522 0.0343

Saturn 59867-12-01 01:26 G 23587366.39 23587366.56 23587366.74 0.0290 0.0166

Neptune 59868-03-15 01:41 G 23587471.51 23587471.57 23587471.68 0.0089 0.0082

Mars 59868-07-18 22:19 G 23587597.36 23587597.43 23587597.49 0.1892 0.1749

Neptune 59868-10-26 14:53 G 23587697.10 23587697.12 23587697.19 0.0089 0.0087

Mars 59871-04-25 11:02 G 23588607.81 23588607.96 23588608.11 0.1633 0.0768

Jupiter 59874-04-21 05:46 G 23589699.54 23589699.74 23589699.93 0.0507 0.0150

Jupiter 59880-02-29 23:31 G 23591840.32 23591840.48 23591840.65 0.0516 0.0296

Saturn 59881-09-25 05:46 G 23592413.72 23592413.74 23592413.78 0.0269 0.0266

Saturn 59882-05-12 08:10 G 23592642.63 23592642.84 23592643.05 0.0269 0.0053

Saturn 59882-12-27 10:34 G 23592871.77 23592871.94 23592872.11 0.0270 0.0162

Jupiter 59885-12-25 05:02 G 23593965.57 23593965.71 23593965.84 0.0504 0.0373

Jupiter 59886-08-18 22:34 G 23594202.34 23594202.44 23594202.53 0.0514 0.0452

Uranus 59889-08-17 13:12 G 23595297.00 23595297.05 23595297.11 0.0140 0.0136

Uranus 59890-03-31 22:19 G 23595523.29 23595523.43 23595523.59 0.0140 0.0101

Uranus 59890-11-13 07:12 G 23595749.62 23595749.80 23595750.01 0.0140 0.0067

Uranus 59891-06-27 16:19 G 23595975.97 23595976.18 23595976.40 0.0140 0.0032

Jupiter 59891-11-04 18:58 G 23596106.09 23596106.29 23596106.50 0.0518 0.0055

Uranus 59892-02-09 01:12 G 23596202.33 23596202.55 23596202.77 0.0140 0.0002

Uranus 59892-09-22 09:50 G 23596428.70 23596428.91 23596429.12 0.0139 0.0036

Uranus 59893-05-06 18:00 G 23596655.08 23596655.25 23596655.45 0.0139 0.0071

Uranus 59893-12-19 02:38 G 23596881.47 23596881.61 23596881.76 0.0139 0.0103

Uranus 59894-08-02 10:34 G 23597107.92 23597107.94 23597108.00 0.0139 0.0137

Saturn 59896-10-25 08:24 G 23597922.65 23597922.85 23597923.06 0.0291 0.0075

Saturn 59897-06-12 06:14 G 23598152.61 23598152.76 23598152.92 0.0290 0.0199

Jupiter 59898-04-23 19:55 G 23598468.15 23598468.33 23598468.52 0.0511 0.0217

Jupiter 59903-07-11 13:26 G 23600371.88 23600372.06 23600372.26 0.0521 0.0191

Jupiter 59909-12-28 18:58 G 23602734.09 23602734.29 23602734.49 0.0509 0.0013

Saturn 59911-04-08 05:46 G 23603199.66 23603199.74 23603199.83 0.0268 0.0243

Saturn 59911-11-23 07:55 G 23603428.63 23603428.83 23603429.05 0.0269 0.0031

Saturn 59912-07-09 10:34 G 23603657.79 23603657.94 23603658.10 0.0269 0.0184

Jupiter 59915-03-16 05:46 G 23604637.64 23604637.74 23604637.85 0.0523 0.0444

Jupiter 59915-11-08 14:24 G 23604875.00 23604875.10 23604875.21 0.0514 0.0436

Jupiter 59921-09-02 18:14 G 23607000.09 23607000.26 23607000.45 0.0506 0.0238

Saturn 59926-05-08 12:58 G 23608708.83 23608709.04 23608709.25 0.0291 0.0041

Saturn 59926-12-24 10:48 G 23608938.84 23608938.95 23608939.09 0.0290 0.0233

Jupiter 59927-07-14 09:22 G 23609140.70 23609140.89 23609141.08 0.0517 0.0199

Earth 59929-05-08 06:00 G 23609804.60 23609804.75 23609804.90 0.2660 0.0943

Moon 59929-05-08 09:50 G 23609804.78 23609804.91 23609805.04 0.2655 0.1667 *

Neptune 59929-12-16 12:58 G 23610027.01 23610027.04 23610027.11 0.0089 0.0086

Neptune 59930-07-30 02:10 G 23610252.52 23610252.59 23610252.70 0.0089 0.0081

Neptune 59931-03-12 15:22 G 23610478.05 23610478.14 23610478.28 0.0089 0.0076

Neptune 59931-10-24 05:02 G 23610703.58 23610703.71 23610703.84 0.0089 0.0070

Neptune 59932-06-05 17:46 G 23610929.11 23610929.24 23610929.40 0.0089 0.0065

Neptune 59933-01-17 06:43 G 23611154.64 23611154.78 23611154.96 0.0089 0.0060

Jupiter 59933-05-08 17:02 G 23611266.13 23611266.21 23611266.30 0.0503 0.0459

Uranus 59933-08-13 12:43 G 23611362.94 23611363.03 23611363.13 0.0138 0.0123

Neptune 59933-08-30 19:55 G 23611380.17 23611380.33 23611380.52 0.0089 0.0055

Jupiter 59933-12-31 09:07 G 23611502.74 23611502.88 23611503.03 0.0512 0.0356

Uranus 59934-03-27 20:53 G 23611589.21 23611589.37 23611589.53 0.0138 0.0090

Neptune 59934-04-13 09:22 G 23611605.71 23611605.89 23611606.08 0.0089 0.0049

Mars 59934-05-17 00:58 G 23611639.39 23611639.54 23611639.70 0.1890 0.0886

Uranus 59934-11-09 04:48 G 23611815.51 23611815.70 23611815.91 0.0138 0.0058

Neptune 59934-11-24 22:05 G 23611831.25 23611831.42 23611831.63 0.0089 0.0044

Uranus 59935-06-23 13:12 G 23612041.84 23612042.05 23612042.27 0.0138 0.0024

Neptune 59935-07-08 11:17 G 23612056.78 23612056.97 23612057.18 0.0089 0.0038

Uranus 59936-02-04 21:50 G 23612268.19 23612268.41 23612268.63 0.0139 0.0010

Neptune 59936-02-19 00:29 G 23612282.33 23612282.52 23612282.74 0.0089 0.0033

Uranus 59936-09-18 06:29 G 23612494.56 23612494.77 23612494.98 0.0139 0.0043

Neptune 59936-10-01 13:26 G 23612507.87 23612508.06 23612508.29 0.0089 0.0028

Mars 59937-02-20 23:17 G 23612650.31 23612650.47 23612650.64 0.1635 0.0506

Uranus 59937-05-02 15:07 G 23612720.96 23612721.13 23612721.32 0.0139 0.0078

Moon 59937-05-05 20:38 G 23612724.30 23612724.36 23612724.42 0.2655 0.2476

Earth 59937-05-05 21:07 G 23612724.32 23612724.38 23612724.44 0.2661 0.2437 *

Neptune 59937-05-15 02:53 G 23612733.41 23612733.62 23612733.83 0.0089 0.0022

Uranus 59937-12-15 00:00 G 23612947.38 23612947.50 23612947.64 0.0139 0.0112

Neptune 59937-12-26 15:50 G 23612958.95 23612959.16 23612959.38 0.0089 0.0016

Neptune 59938-08-09 05:02 G 23613184.49 23613184.71 23613184.93 0.0088 0.0011

Jupiter 59939-03-19 02:38 G 23613406.41 23613406.61 23613406.82 0.0520 0.0050

Neptune 59939-03-22 18:14 G 23613410.04 23613410.26 23613410.48 0.0088 0.0006

Neptune 59939-11-03 07:26 G 23613635.59 23613635.81 23613636.03 0.0088 0.0001

Neptune 59940-06-15 20:24 G 23613861.13 23613861.35 23613861.57 0.0088 0.0005

Saturn 59940-10-18 12:58 G 23613985.91 23613986.04 23613986.18 0.0269 0.0208

Neptune 59941-01-27 09:22 G 23614086.67 23614086.89 23614087.11 0.0088 0.0011

Saturn 59941-06-04 15:22 G 23614214.93 23614215.14 23614215.35 0.0269 0.0006

Neptune 59941-09-09 22:19 G 23614312.22 23614312.43 23614312.65 0.0088 0.0017

Saturn 59942-01-19 18:00 G 23614444.14 23614444.25 23614444.37 0.0270 0.0221

Neptune 59942-04-23 11:31 G 23614537.77 23614537.98 23614538.20 0.0088 0.0022

Neptune 59942-12-05 00:14 G 23614763.31 23614763.51 23614763.73 0.0088 0.0028

Neptune 59943-07-18 13:26 G 23614988.86 23614989.06 23614989.27 0.0088 0.0033

Neptune 59944-02-29 02:10 G 23615214.41 23615214.59 23615214.81 0.0088 0.0038

Neptune 59944-10-11 15:07 G 23615439.95 23615440.13 23615440.34 0.0088 0.0044

Neptune 59945-05-25 04:19 G 23615665.50 23615665.68 23615665.87 0.0088 0.0049

Jupiter 59945-09-05 06:29 G 23615768.58 23615768.77 23615768.97 0.0510 0.0123

Neptune 59946-01-05 17:17 G 23615891.05 23615891.22 23615891.40 0.0088 0.0054

Neptune 59946-08-19 05:46 G 23616116.60 23616116.74 23616116.92 0.0088 0.0059

Neptune 59947-04-01 18:58 G 23616342.15 23616342.29 23616342.46 0.0088 0.0064

Neptune 59947-11-13 07:55 G 23616567.71 23616567.83 23616567.98 0.0088 0.0069

Neptune 59948-06-25 20:53 G 23616793.26 23616793.37 23616793.50 0.0088 0.0074

Neptune 59949-02-06 09:50 G 23617018.82 23617018.91 23617019.01 0.0088 0.0079

Neptune 59949-09-19 22:48 G 23617244.40 23617244.45 23617244.51 0.0088 0.0084

Jupiter 59950-11-21 20:38 G 23617672.19 23617672.36 23617672.52 0.0523 0.0298

Saturn 59955-04-02 21:50 G 23619265.35 23619265.41 23619265.48 0.0291 0.0275

Saturn 59955-11-18 20:10 G 23619495.13 23619495.34 23619495.55 0.0290 0.0001

Saturn 59956-07-05 17:46 G 23619725.17 23619725.24 23619725.31 0.0290 0.0270

Jupiter 59957-05-11 04:34 G 23620034.50 23620034.69 23620034.89 0.0507 0.0109

Jupiter 59963-03-22 00:29 G 23622175.38 23622175.52 23622175.68 0.0515 0.0343

Jupiter 59969-01-14 04:34 G 23624300.54 23624300.69 23624300.85 0.0505 0.0330

Jupiter 59969-09-07 23:02 G 23624537.41 23624537.46 23624537.51 0.0515 0.0496

Saturn 59970-04-30 13:26 G 23624771.91 23624772.06 23624772.22 0.0269 0.0184

Saturn 59970-12-15 15:50 G 23625000.95 23625001.16 23625001.37 0.0269 0.0030

Saturn 59971-08-01 18:14 G 23625230.19 23625230.26 23625230.36 0.0270 0.0245

Uranus 59973-11-30 05:31 G 23626081.62 23626081.73 23626081.86 0.0140 0.0117

Uranus 59974-07-14 14:53 G 23626307.95 23626308.12 23626308.30 0.0140 0.0082

Jupiter 59974-11-24 18:29 G 23626441.07 23626441.27 23626441.47 0.0518 0.0100

Uranus 59975-02-25 23:46 G 23626534.30 23626534.49 23626534.71 0.0140 0.0048

Uranus 59975-10-10 08:53 G 23626760.65 23626760.87 23626761.09 0.0140 0.0013

Uranus 59976-05-23 17:17 G 23626987.01 23626987.22 23626987.45 0.0139 0.0022

Uranus 59977-01-05 01:55 G 23627213.39 23627213.58 23627213.79 0.0139 0.0055

Uranus 59977-08-19 10:19 G 23627439.78 23627439.93 23627440.11 0.0139 0.0089

Uranus 59978-04-02 18:43 G 23627666.19 23627666.28 23627666.39 0.0139 0.0122

Jupiter 59981-05-13 20:38 G 23628803.19 23628803.36 23628803.53 0.0512 0.0263

Saturn 59984-10-13 02:10 G 23630051.49 23630051.59 23630051.72 0.0291 0.0242

Saturn 59985-05-31 00:43 G 23630281.32 23630281.53 23630281.75 0.0290 0.0033

Jupiter 59986-07-30 11:46 G 23630706.79 23630706.99 23630707.19 0.0521 0.0149

Jupiter 59993-01-16 17:31 G 23633069.03 23633069.23 23633069.43 0.0508 0.0029

Jupiter 59998-04-04 02:53 G 23634972.50 23634972.62 23634972.75 0.0524 0.0406

Jupiter 59998-11-27 12:14 G 23635209.94 23635210.01 23635210.09 0.0514 0.0474

Saturn 59999-11-10 20:38 G 23635558.20 23635558.36 23635558.55 0.0269 0.0149

Mars 60000-03-13 03:07 G 23635681.46 23635681.63 23635681.81 0.1887 0.0051

Saturn 60000-06-26 23:31 G 23635787.28 23635787.48 23635787.69 0.0270 0.0067

61ST MILLENNIUM CE

This is a list of transits of Venus in the 61st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Pluto	**60002-06-18 03:22**	**G**	**23636508.51**	**23636508.64**	**23636508.80**	**0.0063**	**0.0047**	
Mars	**60002-12-19 11:31**	**G**	**23636692.81**	**23636692.98**	**23636693.15**	**0.1636**	**0.0233**	
Pluto	**60003-01-29 07:12**	**G**	**23636733.60**	**23636733.80**	**23636734.03**	**0.0063**	**0.0013**	
Pluto	**60003-09-11 11:02**	**G**	**23636958.76**	**23636958.96**	**23636959.18**	**0.0063**	**0.0022**	
Pluto	**60004-04-23 14:24**	**G**	**23637184.04**	**23637184.10**	**23637184.22**	**0.0064**	**0.0058**	
Jupiter	**60004-09-21 16:05**	**G**	**23637334.98**	**23637335.17**	**23637335.36**	**0.0506**	**0.0199**	
Jupiter	**60010-08-02 07:55**	**G**	**23639475.65**	**23639475.83**	**23639476.01**	**0.0517**	**0.0238**	
Neptune	**60013-04-26 17:46**	**G**	**23640474.19**	**23640474.24**	**23640474.32**	**0.0089**	**0.0084**	
Neptune	**60013-12-08 06:29**	**G**	**23640699.69**	**23640699.77**	**23640699.89**	**0.0089**	**0.0079**	
Saturn	**60014-04-25 11:46**	**G**	**23640837.84**	**23640837.99**	**23640838.16**	**0.0290**	**0.0196**	
Neptune	**60014-07-21 19:26**	**G**	**23640925.21**	**23640925.31**	**23640925.45**	**0.0089**	**0.0074**	
Saturn	**60014-12-11 09:50**	**G**	**23641067.71**	**23641067.91**	**23641068.12**	**0.0290**	**0.0077**	
Neptune	**60015-03-04 08:10**	**G**	**23641150.73**	**23641150.84**	**23641151.01**	**0.0089**	**0.0069**	
Neptune	**60015-10-15 21:36**	**G**	**23641376.25**	**23641376.40**	**23641376.56**	**0.0089**	**0.0063**	
Jupiter	**60016-05-27 14:38**	**G**	**23641601.00**	**23641601.11**	**23641601.22**	**0.0504**	**0.0421**	
Neptune	**60016-05-28 10:19**	**G**	**23641601.78**	**23641601.93**	**23641602.11**	**0.0089**	**0.0058**	
Neptune	**60017-01-08 23:17**	**G**	**23641827.31**	**23641827.47**	**23641827.66**	**0.0089**	**0.0053**	
Jupiter	**60017-01-19 07:12**	**G**	**23641837.67**	**23641837.80**	**23641837.93**	**0.0513**	**0.0393**	

Neptune 60017-08-22 12:43 G 23642052.84 23642053.03 23642053.21 0.0089 0.0047

Uranus 60017-11-25 04:19 G 23642147.56 23642147.68 23642147.83 0.0138 0.0106

Neptune 60018-04-05 01:26 G 23642278.38 23642278.56 23642278.76 0.0089 0.0042

Uranus 60018-07-09 12:43 G 23642373.85 23642374.03 23642374.22 0.0138 0.0073

Neptune 60018-11-16 14:10 G 23642503.91 23642504.09 23642504.31 0.0089 0.0037

Uranus 60019-02-20 21:07 G 23642600.18 23642600.38 23642600.59 0.0138 0.0039

Neptune 60019-06-30 03:22 G 23642729.44 23642729.64 23642729.85 0.0089 0.0031

Uranus 60019-10-05 05:31 G 23642826.52 23642826.73 23642826.95 0.0139 0.0006

Neptune 60020-02-10 16:05 G 23642954.97 23642955.17 23642955.39 0.0089 0.0026

Uranus 60020-05-18 14:10 G 23643052.88 23643053.09 23643053.30 0.0139 0.0028

Neptune 60020-09-23 05:31 G 23643180.51 23643180.73 23643180.94 0.0089 0.0020

Uranus 60020-12-30 22:48 G 23643279.26 23643279.45 23643279.65 0.0139 0.0062

Neptune 60021-05-06 18:14 G 23643406.05 23643406.26 23643406.48 0.0089 0.0015

Uranus 60021-08-14 07:26 G 23643505.67 23643505.81 23643505.98 0.0139 0.0097

Neptune 60021-12-18 07:12 G 23643631.59 23643631.80 23643632.02 0.0089 0.0010

Uranus 60022-03-28 16:34 G 23643732.13 23643732.19 23643732.28 0.0139 0.0131

Jupiter 60022-04-07 03:07 G 23643741.43 23643741.63 23643741.84 0.0519 0.0006

Neptune 60022-07-31 20:24 G 23643857.13 23643857.35 23643857.56 0.0089 0.0004

Neptune 60023-03-14 09:22 G 23644082.67 23644082.89 23644083.11 0.0089 0.0002

Neptune 60023-10-25 22:19 G 23644308.21 23644308.43 23644308.65 0.0089 0.0007

Neptune 60024-06-07 11:02 G 23644533.75 23644533.96 23644534.19 0.0089 0.0013

Neptune 60025-01-19 00:00 G 23644759.29 23644759.50 23644759.72 0.0089 0.0018

Neptune 60025-09-01 12:58 G 23644984.84 23644985.04 23644985.27 0.0089 0.0024

Neptune 60026-04-15 02:10 G 23645210.39 23645210.59 23645210.81 0.0089 0.0029

Earth 60026-11-11 00:29 G 23645420.44 23645420.52 23645420.59 0.2672 0.2305

Neptune 60026-11-26 15:22 G 23645435.94 23645436.14 23645436.35 0.0089 0.0034

Neptune 60027-07-10 04:05 G 23645661.49 23645661.67 23645661.88 0.0089 0.0040

Neptune 60028-02-20 17:17 G 23645887.04 23645887.22 23645887.42 0.0089 0.0046

Jupiter 60028-09-24 05:31 G 23646103.54 23646103.73 23646103.93 0.0510 0.0163

Neptune 60028-10-03 06:14 G 23646112.60 23646112.76 23646112.96 0.0089 0.0052

Neptune 60029-05-16 19:41 G 23646338.16 23646338.32 23646338.50 0.0089 0.0056

Saturn 60029-05-22 22:34 G 23646344.25 23646344.44 23646344.63 0.0269 0.0121

Neptune 60029-12-28 08:53 G 23646563.72 23646563.87 23646564.03 0.0089 0.0062

Saturn 60030-01-07 01:12 G 23646573.35 23646573.55 23646573.74 0.0269 0.0093

Neptune 60030-08-10 21:36 G 23646789.28 23646789.40 23646789.57 0.0089 0.0067

Neptune 60031-03-24 10:48 G 23647014.84 23647014.95 23647015.10 0.0089 0.0073

Neptune 60031-11-05 00:14 G 23647240.41 23647240.51 23647240.63 0.0089 0.0078

Neptune 60032-06-17 13:26 G 23647465.99 23647466.06 23647466.14 0.0089 0.0083

Neptune 60033-01-29 01:55 G 23647691.58 23647691.58 23647691.65 0.0089 0.0089

Jupiter 60033-12-10 19:41 G 23648007.15 23648007.32 23648007.50 0.0522 0.0252

Earth 60034-11-08 15:36 G 23648340.01 23648340.15 23648340.30 0.2671 0.1102

Moon 60034-11-08 16:48 G 23648340.05 23648340.20 23648340.35 0.2665 0.1305 *

Jupiter 60040-05-30 04:19 G 23650369.48 23650369.68 23650369.89 0.0508 0.0065

Saturn 60043-11-05 16:19 G 23651624.01 23651624.18 23651624.36 0.0291 0.0164

Saturn 60044-06-22 14:24 G 23651853.91 23651854.10 23651854.30 0.0290 0.0110

Jupiter 60045-08-15 11:31 G 23652272.93 23652272.98 23652273.03 0.0525 0.0506

Jupiter 60046-04-09 21:50 G 23652510.28 23652510.41 23652510.55 0.0515 0.0378

Jupiter 60052-02-03 03:07 G 23654635.46 23654635.63 23654635.80 0.0505 0.0289

Uranus 60057-07-30 12:43 G 23656639.98 23656640.03 23656640.11 0.0140 0.0133

Jupiter 60057-12-13 14:53 G 23656775.92 23656776.12 23656776.31 0.0518 0.0134

Uranus 60058-03-13 22:19 G 23656866.27 23656866.43 23656866.58 0.0140 0.0099

Uranus 60058-10-26 07:12 G 23657092.61 23657092.80 23657093.00 0.0140 0.0064

Saturn 60058-12-03 06:00 G 23657130.55 23657130.75 23657130.95 0.0270 0.0085

Uranus 60059-06-09 16:05 G 23657318.96 23657319.17 23657319.39 0.0140 0.0030

Saturn 60059-07-20 08:38 G 23657359.68 23657359.86 23657360.05 0.0270 0.0130

Uranus 60060-01-22 00:58 G 23657545.33 23657545.54 23657545.76 0.0139 0.0006

Uranus 60060-09-04 09:50 G 23657771.70 23657771.91 23657772.12 0.0139 0.0039

Uranus 60061-04-18 18:14 G 23657998.08 23657998.26 23657998.45 0.0139 0.0073

Uranus 60061-12-01 02:24 G 23658224.48 23658224.60 23658224.76 0.0139 0.0107

Jupiter 60064-06-01 17:17 G 23659138.06 23659138.22 23659138.39 0.0511 0.0297

Mars 60066-01-08 06:14 G 23659723.60 23659723.76 23659723.92 0.1885 0.0834

Mars 60068-10-15 23:46 G 23660735.32 23660735.49 23660735.67 0.1638 0.0038

Jupiter 60069-08-18 08:53 G 23661041.67 23661041.87 23661042.07 0.0521 0.0113

Saturn 60073-05-18 03:22 G 23662410.45 23662410.64 23662410.84 0.0290 0.0114

Saturn 60074-01-03 01:12 G 23662640.37 23662640.55 23662640.73 0.0290 0.0158

Jupiter 60076-02-05 14:10 G 23663403.89 23663404.09 23663404.29 0.0509 0.0062

Jupiter 60081-04-23 02:53 G 23665307.47 23665307.62 23665307.77 0.0524 0.0359

Jupiter 60081-12-16 11:31 G 23665544.98 23665544.98 23665544.99 0.0514 0.0514

Jupiter 60087-10-11 13:26 G 23667669.87 23667670.06 23667670.26 0.0506 0.0162

Saturn 60087-10-29 06:00 G 23667687.75 23667687.75 23667687.76 0.0269 0.0269

Saturn 60088-06-14 08:24 G 23667916.65 23667916.85 23667917.06 0.0269 0.0057

Saturn 60089-01-29 11:17 G 23668145.80 23668145.97 23668146.14 0.0270 0.0158

Pluto 60093-03-16 13:26 G 23669652.85 23669653.06 23669653.29 0.0081 0.0010

Jupiter 60093-08-21 06:00 G 23669810.59 23669810.75 23669810.93 0.0516 0.0278

Pluto 60093-10-27 23:46 G 23669878.38 23669878.49 23669878.65 0.0080 0.0064

Neptune 60094-03-19 23:46 G 23670021.44 23670021.49 23670021.58 0.0089 0.0084

Neptune 60094-10-31 12:58 G 23670246.96 23670247.04 23670247.16 0.0089 0.0079

Neptune 60095-06-14 02:10 G 23670472.49 23670472.59 23670472.73 0.0089 0.0074

Neptune 60096-01-25 15:22 G 23670698.02 23670698.14 23670698.30 0.0089 0.0069

Neptune 60096-09-07 04:48 G 23670923.55 23670923.70 23670923.86 0.0089 0.0063

Neptune 60097-04-20 17:46 G 23671149.09 23671149.24 23671149.42 0.0089 0.0058

Neptune 60097-12-02 06:43 G 23671374.62 23671374.78 23671374.98 0.0089 0.0053

Neptune 60098-07-15 20:24 G 23671600.16 23671600.35 23671600.53 0.0089 0.0047

Neptune 60099-02-26 09:22 G 23671825.70 23671825.89 23671826.09 0.0089 0.0042

Jupiter 60099-06-16 13:26 G 23671935.93 23671936.06 23671936.20 0.0504 0.0380

Neptune 60099-10-09 22:19 G 23672051.24 23672051.43 23672051.64 0.0089 0.0037

Jupiter 60100-02-08 06:29 G 23672172.67 23672172.77 23672172.88 0.0513 0.0435

Neptune 60100-05-23 11:46 G 23672276.78 23672276.99 23672277.19 0.0089 0.0031

Neptune 60101-01-04 00:29 G 23672502.32 23672502.52 23672502.74 0.0089 0.0026

Uranus 60101-07-26 12:14 G 23672705.92 23672706.01 23672706.13 0.0138 0.0121

Neptune 60101-08-17 13:41 G 23672727.86 23672728.07 23672728.29 0.0089 0.0020

Uranus 60102-03-09 20:24 G 23672932.20 23672932.35 23672932.53 0.0138 0.0088

Neptune 60102-03-31 02:53 G 23672953.41 23672953.62 23672953.84 0.0089 0.0015

Uranus 60102-10-22 04:34 G 23673158.51 23673158.69 23673158.91 0.0138 0.0056

Neptune 60102-11-11 16:05 G 23673178.95 23673179.17 23673179.39 0.0089 0.0009

Saturn 60102-11-29 07:55 G 23673196.63 23673196.83 23673197.04 0.0291 0.0082

Uranus 60103-06-05 13:12 G 23673384.84 23673385.05 23673385.27 0.0138 0.0021

Neptune 60103-06-25 05:02 G 23673404.49 23673404.71 23673404.93 0.0088 0.0004

Saturn 60103-07-17 05:46 G 23673426.59 23673426.74 23673426.90 0.0290 0.0191

Uranus 60104-01-17 21:50 G 23673611.19 23673611.41 23673611.63 0.0139 0.0013

Neptune 60104-02-05 18:14 G 23673630.04 23673630.26 23673630.48 0.0088 0.0002

Uranus 60104-08-31 06:14 G 23673837.57 23673837.76 23673837.98 0.0139 0.0047

Neptune 60104-09-18 07:12 G 23673855.59 23673855.80 23673856.03 0.0088 0.0007

Uranus 60105-04-14 14:53 G 23674063.96 23674064.12 23674064.32 0.0139 0.0082

Jupiter 60105-04-27 00:00 G 23674076.29 23674076.50 23674076.70 0.0519 0.0036

Neptune 60105-05-01 20:24 G 23674081.13 23674081.35 23674081.57 0.0088 0.0012

Uranus 60105-11-26 23:46 G 23674290.39 23674290.49 23674290.63 0.0139 0.0116

Neptune 60105-12-13 09:36 G 23674306.68 23674306.90 23674307.11 0.0088 0.0018

Neptune 60106-07-26 22:19 G 23674532.23 23674532.43 23674532.65 0.0088 0.0024

Neptune 60107-03-09 11:31 G 23674757.78 23674757.98 23674758.20 0.0088 0.0029

Neptune 60107-10-21 00:29 G 23674983.33 23674983.52 23674983.74 0.0088 0.0034

Neptune 60108-06-02 13:26 G 23675208.87 23675209.06 23675209.27 0.0088 0.0040

Neptune 60109-01-14 02:24 G 23675434.42 23675434.60 23675434.80 0.0088 0.0045

Neptune 60109-08-27 15:07 G 23675659.97 23675660.13 23675660.33 0.0088 0.0051

Neptune 60110-04-10 04:19 G 23675885.53 23675885.68 23675885.87 0.0088 0.0056

Neptune 60110-11-21 17:17 G 23676111.08 23676111.22 23676111.40 0.0088 0.0061

Neptune 60111-07-05 06:14 G 23676336.63 23676336.76 23676336.92 0.0088 0.0066

Jupiter 60111-10-15 03:36 G 23676438.46 23676438.65 23676438.83 0.0510 0.0200

Neptune 60112-02-15 19:12 G 23676562.18 23676562.30 23676562.44 0.0088 0.0071

Neptune 60112-09-28 08:10 G 23676787.74 23676787.84 23676787.96 0.0088 0.0076

Neptune 60113-05-11 21:07 G 23677013.30 23677013.38 23677013.48 0.0088 0.0081

Neptune 60113-12-23 10:05 G 23677238.88 23677238.92 23677238.98 0.0088 0.0086

Jupiter 60116-12-30 14:53 G 23678341.93 23678342.12 23678342.30 0.0522 0.0222

Saturn 60117-05-11 13:12 G 23678473.96 23678474.05 23678474.16 0.0270 0.0234

Saturn 60117-12-26 16:05 G 23678702.96 23678703.17 23678703.38 0.0270 0.0020

Saturn 60118-08-12 18:58 G 23678932.15 23678932.29 23678932.44 0.0270 0.0195

Jupiter 60123-06-20 01:12 G 23680704.34 23680704.55 23680704.75 0.0507 0.0031

Jupiter 60128-09-04 07:12 G 23682607.72 23682607.80 23682607.90 0.0525 0.0473

Jupiter 60129-04-29 18:00 G 23682845.14 23682845.25 23682845.38 0.0515 0.0410

Mars 60131-11-06 09:07 G 23683765.80 23683765.88 23683765.96 0.1882 0.1669

Saturn 60132-06-10 20:10 G 23683983.13 23683983.34 23683983.55 0.0290 0.0029

Saturn 60133-01-26 17:31 G 23684213.12 23684213.23 23684213.35 0.0289 0.0242

Mars 60134-08-14 11:31 G 23684777.81 23684777.98 23684778.15 0.1640 0.0317

Jupiter 60135-02-22 22:34 G 23684970.27 23684970.44 23684970.62 0.0505 0.0258

Jupiter 60141-01-02 13:55 G 23687110.89 23687111.08 23687111.27 0.0518 0.0175

Uranus 60141-11-12 04:19 G 23687424.57 23687424.68 23687424.82 0.0140 0.0116

Uranus 60142-06-26 13:55 G 23687650.90 23687651.08 23687651.25 0.0140 0.0080

Uranus 60143-02-07 22:48 G 23687877.25 23687877.45 23687877.66 0.0140 0.0046

Uranus 60143-09-22 07:55 G 23688103.61 23688103.83 23688104.04 0.0140 0.0011

Uranus 60144-05-05 16:34 G 23688329.98 23688330.19 23688330.41 0.0139 0.0023

Uranus 60144-12-18 01:12 G 23688556.35 23688556.55 23688556.75 0.0139 0.0057

Uranus 60145-08-01 09:36 G 23688782.75 23688782.90 23688783.08 0.0139 0.0091

Uranus 60146-03-15 18:14 G 23689009.17 23689009.26 23689009.36 0.0139 0.0124

Jupiter 60146-10-28 22:48 G 23689236.39 23689236.45 23689236.52 0.0503 0.0472

Saturn 60146-11-21 16:48 G 23689260.07 23689260.20 23689260.34 0.0269 0.0203

Jupiter 60147-06-22 14:10 G 23689472.94 23689473.09 23689473.25 0.0512 0.0331

Saturn 60147-07-08 19:26 G 23689489.10 23689489.31 23689489.52 0.0269 0.0010

Saturn 60148-02-22 22:05 G 23689718.31 23689718.42 23689718.54 0.0270 0.0225

Jupiter 60152-09-07 07:26 G 23691376.61 23691376.81 23691377.01 0.0520 0.0070

Jupiter 60159-02-25 12:43 G 23693738.83 23693739.03 23693739.23 0.0509 0.0103

Saturn 60161-05-06 02:10 G 23694539.52 23694539.59 23694539.67 0.0291 0.0270

Saturn 60161-12-22 00:14 G 23694769.30 23694769.51 23694769.73 0.0290 0.0005

Saturn 60162-08-08 22:05 G 23694999.35 23694999.42 23694999.48 0.0290 0.0273

Jupiter 60164-05-12 23:31 G 23695642.32 23695642.48 23695642.64 0.0523 0.0321

Jupiter 60170-10-31 11:31 G 23698004.79 23698004.98 23698005.18 0.0506 0.0124

Moon 60172-05-09 02:24 G 23698560.45 23698560.60 23698560.76 0.2665 0.0217

Earth 60172-05-09 07:26 G 23698560.66 23698560.81 23698560.96 0.2661 0.1039 *

Saturn 60176-06-02 23:46 G 23700046.33 23700046.49 23700046.66 0.0270 0.0168

Jupiter 60176-09-10 00:58 G 23700145.38 23700145.54 23700145.70 0.0517 0.0305

Neptune 60176-12-16 16:19 G 23700243.16 23700243.18 23700243.24 0.0088 0.0087

Saturn 60177-01-18 02:38 G 23700275.40 23700275.61 23700275.82 0.0270 0.0046

Neptune 60177-07-30 05:17 G 23700468.66 23700468.72 23700468.82 0.0089 0.0082

Saturn 60177-09-04 05:31 G 23700504.69 23700504.73 23700504.79 0.0271 0.0262

Neptune 60178-03-12 18:00 G 23700694.17 23700694.25 23700694.38 0.0089 0.0077

Neptune 60178-10-24 06:58 G 23700919.68 23700919.79 23700919.94 0.0089 0.0072

Neptune 60179-06-06 19:41 G 23701145.20 23701145.32 23701145.49 0.0089 0.0067

Neptune 60180-01-18 09:07 G 23701370.72 23701370.88 23701371.04 0.0089 0.0061

Moon 60180-05-06 21:07 G 23701480.30 23701480.38 23701480.45 0.2669 0.2280

Earth 60180-05-06 22:19 G 23701480.36 23701480.43 23701480.51 0.2662 0.2361 *

Neptune 60180-08-30 22:05 G 23701596.26 23701596.42 23701596.60 0.0089 0.0056

Neptune 60181-04-13 10:48 G 23701821.79 23701821.95 23701822.15 0.0089 0.0051

Neptune 60181-11-24 23:46 G 23702047.32 23702047.49 23702047.69 0.0089 0.0046

Jupiter 60182-07-06 10:19 G 23702270.79 23702270.93 23702271.08 0.0504 0.0345

Neptune 60182-07-08 12:43 G 23702272.85 23702273.03 23702273.24 0.0089 0.0040

Neptune 60183-02-19 01:41 G 23702498.38 23702498.57 23702498.79 0.0089 0.0035

Jupiter 60183-02-28 02:38 G 23702507.53 23702507.61 23702507.70 0.0513 0.0465

Neptune 60183-10-02 15:07 G 23702723.92 23702724.13 23702724.33 0.0089 0.0029

Neptune 60184-05-15 03:50 G 23702949.46 23702949.66 23702949.88 0.0089 0.0024

Neptune 60184-12-26 16:48 G 23703174.99 23703175.20 23703175.42 0.0089 0.0019

Uranus 60185-03-25 20:24 G 23703264.32 23703264.35 23703264.40 0.0138 0.0135

Neptune 60185-08-09 06:00 G 23703400.53 23703400.75 23703400.97 0.0089 0.0013

Uranus 60185-11-07 04:19 G 23703490.55 23703490.68 23703490.84 0.0138 0.0103

Neptune 60186-03-22 18:58 G 23703626.07 23703626.29 23703626.51 0.0089 0.0007

Uranus 60186-06-21 12:29 G 23703716.84 23703717.02 23703717.22 0.0138 0.0070

Neptune 60186-11-03 07:55 G 23703851.61 23703851.83 23703852.05 0.0089 0.0002

Uranus 60187-02-02 21:07 G 23703943.17 23703943.38 23703943.59 0.0138 0.0036

Neptune 60187-06-16 20:53 G 23704077.15 23704077.37 23704077.59 0.0089 0.0004

Uranus 60187-09-17 05:31 G 23704169.51 23704169.73 23704169.95 0.0138 0.0003

Neptune 60188-01-28 09:36 G 23704302.69 23704302.90 23704303.13 0.0089 0.0009

Uranus 60188-04-30 13:55 G 23704395.88 23704396.08 23704396.30 0.0139 0.0032

Jupiter 60188-05-15 19:12 G 23704411.10 23704411.30 23704411.51 0.0519 0.0066

Neptune 60188-09-09 22:48 G 23704528.24 23704528.45 23704528.67 0.0089 0.0014

Uranus 60188-12-12 22:48 G 23704622.26 23704622.45 23704622.64 0.0139 0.0065

Neptune 60189-04-23 11:31 G 23704753.78 23704753.98 23704754.21 0.0089 0.0020

Uranus 60189-07-27 07:26 G 23704848.67 23704848.81 23704848.97 0.0139 0.0100

Neptune 60189-12-05 00:43 G 23704979.32 23704979.53 23704979.74 0.0089 0.0025

Uranus 60190-03-10 16:34 G 23705075.14 23705075.19 23705075.26 0.0139 0.0134

Neptune 60190-07-18 13:41 G 23705204.87 23705205.07 23705205.28 0.0089 0.0030

Saturn 60190-11-16 15:07 G 23705326.00 23705326.13 23705326.28 0.0290 0.0216

Neptune 60191-03-01 02:24 G 23705430.41 23705430.60 23705430.81 0.0089 0.0036

Saturn 60191-07-04 13:12 G 23705555.84 23705556.05 23705556.26 0.0290 0.0057

Neptune 60191-10-12 15:36 G 23705655.97 23705656.15 23705656.36 0.0089 0.0041

Neptune 60192-05-25 04:19 G 23705881.52 23705881.68 23705881.89 0.0089 0.0048

Neptune 60193-01-05 17:31 G 23706107.07 23706107.23 23706107.42 0.0089 0.0052

Neptune 60193-08-19 06:43 G 23706332.63 23706332.78 23706332.96 0.0089 0.0058

Neptune 60194-04-01 20:10 G 23706558.18 23706558.34 23706558.49 0.0089 0.0063

Jupiter 60194-11-02 22:19 G 23706773.25 23706773.43 23706773.61 0.0510 0.0229

Neptune 60194-11-13 08:53 G 23706783.75 23706783.87 23706784.03 0.0089 0.0068

Neptune 60195-06-26 22:05 G 23707009.31 23707009.42 23707009.56 0.0089 0.0073

Neptune 60196-02-07 11:17 G 23707234.88 23707234.97 23707235.08 0.0089 0.0078

Neptune 60196-09-20 00:29 G 23707460.46 23707460.52 23707460.61 0.0089 0.0084

Neptune 60197-05-03 13:41 G 23707686.06 23707686.07 23707686.10 0.0089 0.0089

Jupiter 60200-01-19 13:55 G 23708676.89 23708677.08 23708677.27 0.0522 0.0178

Mars 60200-06-11 23:46 G 23708820.33 23708820.49 23708820.65 0.1642 0.0590

Saturn 60205-12-15 04:05 G 23710832.49 23710832.67 23710832.85 0.0269 0.0136

Jupiter 60206-07-09 21:07 G 23711039.17 23711039.38 23711039.58 0.0508 0.0012

Saturn 60206-08-01 06:43 G 23711061.58 23711061.78 23711061.98 0.0269 0.0078

Jupiter 60211-09-25 06:29 G 23712942.65 23712942.77 23712942.89 0.0524 0.0427

Jupiter 60212-05-19 16:19 G 23713180.08 23713180.18 23713180.28 0.0515 0.0447

Jupiter 60218-03-14 20:38 G 23715305.19 23715305.36 23715305.55 0.0505 0.0219

Saturn 60220-05-29 18:43 G 23716112.13 23716112.28 23716112.45 0.0291 0.0186

Saturn 60221-01-14 16:48 G 23716342.00 23716342.20 23716342.41 0.0290 0.0087

Jupiter 60224-01-23 10:19 G 23717445.75 23717445.93 23717446.12 0.0518 0.0210

Uranus 60225-07-13 11:02 G 23717982.89 23717982.96 23717983.04 0.0140 0.0132

Uranus 60226-02-24 20:10 G 23718209.20 23718209.34 23718209.51 0.0140 0.0097

Uranus 60226-10-09 05:31 G 23718435.54 23718435.73 23718435.93 0.0140 0.0062

Uranus 60227-05-23 14:24 G 23718661.89 23718662.10 23718662.32 0.0140 0.0028

Uranus 60228-01-04 23:17 G 23718888.26 23718888.47 23718888.69 0.0139 0.0008

Uranus 60228-08-18 08:10 G 23719114.64 23719114.84 23719115.06 0.0139 0.0041

Uranus 60229-04-01 16:48 G 23719341.03 23719341.20 23719341.39 0.0139 0.0075

Uranus 60229-11-14 00:58 G 23719567.43 23719567.54 23719567.69 0.0139 0.0109

Jupiter 60229-11-17 21:07 G 23719571.28 23719571.38 23719571.48 0.0503 0.0434

Jupiter 60230-07-12 12:14 G 23719807.88 23719808.01 23719808.16 0.0512 0.0368

Saturn 60235-06-27 10:19 G 23721618.74 23721618.93 23721619.13 0.0270 0.0102

Jupiter 60235-09-28 01:55 G 23721711.37 23721711.58 23721711.78 0.0521 0.0042

Saturn 60236-02-11 13:12 G 23721847.86 23721848.05 23721848.24 0.0270 0.0113

Jupiter 60242-03-17 09:36 G 23724073.70 23724073.90 23724074.09 0.0509 0.0136

Jupiter 60247-06-02 18:43 G 23725977.11 23725977.28 23725977.45 0.0523 0.0291

Pluto 60249-10-10 18:43 G 23726838.19 23726838.28 23726838.39 0.0063 0.0056

Saturn 60249-12-10 07:41 G 23726898.63 23726898.82 23726899.01 0.0290 0.0131

Pluto 60250-05-23 22:19 G 23727063.23 23727063.43 23727063.65 0.0063 0.0022

Saturn 60250-07-28 05:31 G 23727128.55 23727128.73 23727128.92 0.0290 0.0140

Pluto 60251-01-04 02:24 G 23727288.38 23727288.60 23727288.82 0.0063 0.0013

Pluto 60251-08-17 06:00 G 23727513.62 23727513.75 23727513.90 0.0063 0.0048

Jupiter 60253-11-20 06:00 G 23728339.55 23728339.75 23728339.95 0.0506 0.0095

Neptune 60257-11-09 21:36 G 23729790.38 23729790.40 23729790.46 0.0089 0.0087

Neptune 60258-06-23 10:48 G 23730015.89 23730015.95 23730016.05 0.0089 0.0082

Neptune 60259-02-04 00:00 G 23730241.41 23730241.50 23730241.63 0.0089 0.0077

Neptune 60259-09-17 13:12 G 23730466.95 23730467.05 23730467.20 0.0089 0.0072

Jupiter 60259-10-01 00:00 G 23730480.35 23730480.50 23730480.65 0.0516 0.0347

Neptune 60260-04-30 02:53 G 23730692.48 23730692.62 23730692.77 0.0089 0.0066

Neptune 60260-12-11 15:50 G 23730918.01 23730918.16 23730918.33 0.0089 0.0061

Neptune 60261-07-25 05:02 G 23731143.55 23731143.71 23731143.89 0.0089 0.0056

Neptune 60262-03-07 18:14 G 23731369.09 23731369.26 23731369.45 0.0089 0.0051

Neptune 60262-10-19 07:41 G 23731594.63 23731594.82 23731595.01 0.0089 0.0045

Neptune 60263-06-01 20:38 G 23731820.17 23731820.36 23731820.56 0.0089 0.0040

Neptune 60264-01-13 09:36 G 23732045.71 23732045.90 23732046.11 0.0089 0.0035

Neptune 60264-08-25 22:34 G 23732271.25 23732271.44 23732271.66 0.0089 0.0030

Saturn 60265-01-06 15:22 G 23732404.94 23732405.14 23732405.34 0.0269 0.0069

Neptune 60265-04-08 12:00 G 23732496.79 23732497.00 23732497.22 0.0089 0.0024

Jupiter 60265-07-26 05:46 G 23732605.58 23732605.74 23732605.90 0.0504 0.0313

Saturn 60265-08-23 17:46 G 23732634.07 23732634.24 23732634.43 0.0269 0.0145

Neptune 60265-11-20 00:58 G 23732722.33 23732722.54 23732722.76 0.0089 0.0019

Jupiter 60266-03-19 22:34 G 23732842.40 23732842.44 23732842.50 0.0513 0.0497

Mars 60266-04-09 11:31 G 23732862.84 23732862.98 23732863.13 0.1643 0.0876

Neptune 60266-07-03 14:10 G 23732947.87 23732948.09 23732948.31 0.0089 0.0013

Neptune 60267-02-14 03:07 G 23733173.41 23733173.63 23733173.85 0.0089 0.0008

Neptune 60267-09-27 16:19 G 23733398.96 23733399.18 23733399.40 0.0089 0.0002

Neptune 60268-05-10 05:17 G 23733624.50 23733624.72 23733624.94 0.0088 0.0003

Neptune 60268-12-21 18:14 G 23733850.04 23733850.26 23733850.48 0.0088 0.0009

Uranus 60269-07-08 12:29 G 23734048.92 23734049.02 23734049.14 0.0138 0.0117

Neptune 60269-08-04 07:26 G 23734075.59 23734075.81 23734076.03 0.0088 0.0014

Moon 60269-11-12 20:38 G 23734176.26 23734176.36 23734176.45 0.2672 0.2084

Earth 60269-11-13 01:55 G 23734176.51 23734176.58 23734176.65 0.2671 0.2365

Uranus 60270-02-19 20:53 G 23734275.20 23734275.37 23734275.54 0.0138 0.0084

Neptune 60270-03-17 20:24 G 23734301.14 23734301.35 23734301.57 0.0088 0.0019

Uranus 60270-10-04 05:02 G 23734501.51 23734501.71 23734501.92 0.0138 0.0051

Neptune 60270-10-29 09:36 G 23734526.69 23734526.90 23734527.11 0.0088 0.0025

Uranus 60271-05-18 13:26 G 23734727.84 23734728.06 23734728.28 0.0138 0.0018

Jupiter 60271-06-05 18:14 G 23734746.07 23734746.26 23734746.47 0.0519 0.0109

Neptune 60271-06-11 22:19 G 23734752.24 23734752.43 23734752.65 0.0088 0.0030

Uranus 60271-12-30 21:50 G 23734954.20 23734954.41 23734954.63 0.0139 0.0016

Neptune 60272-01-23 11:17 G 23734977.78 23734977.97 23734978.19 0.0088 0.0036

Uranus 60272-08-13 06:29 G 23735180.57 23735180.77 23735180.98 0.0139 0.0050

Neptune 60272-09-05 00:29 G 23735203.34 23735203.52 23735203.73 0.0088 0.0041

Uranus 60273-03-27 15:22 G 23735406.97 23735407.14 23735407.31 0.0139 0.0084

Neptune 60273-04-18 13:55 G 23735428.89 23735429.08 23735429.27 0.0088 0.0046

Uranus 60273-11-09 00:14 G 23735633.40 23735633.51 23735633.62 0.0139 0.0119

Neptune 60273-11-30 02:24 G 23735654.44 23735654.60 23735654.80 0.0088 0.0052

Neptune 60274-07-13 15:36 G 23735879.99 23735880.15 23735880.33 0.0088 0.0056

Neptune 60275-02-24 04:34 G 23736105.55 23736105.69 23736105.86 0.0088 0.0062

Neptune 60275-10-07 17:31 G 23736331.10 23736331.23 23736331.39 0.0088 0.0067

Neptune 60276-05-20 06:43 G 23736556.66 23736556.78 23736556.91 0.0088 0.0072

Neptune 60276-12-31 19:41 G 23736782.22 23736782.32 23736782.43 0.0088 0.0077

Neptune 60277-08-14 08:24 G 23737007.78 23737007.85 23737007.94 0.0088 0.0082

Moon 60277-11-10 13:55 G 23737095.95 23737096.08 23737096.22 0.2675 0.1187

Earth 60277-11-10 17:02 G 23737096.06 23737096.21 23737096.36 0.2670 0.1048 *

Jupiter 60277-11-22 20:53 G 23737108.20 23737108.37 23737108.55 0.0511 0.0269

Neptune 60278-03-27 21:22 G 23737233.36 23737233.39 23737233.44 0.0088 0.0087

Saturn 60279-06-22 10:48 G 23737684.76 23737684.95 23737685.15 0.0291 0.0103

Saturn 60280-02-07 08:38 G 23737914.69 23737914.86 23737915.04 0.0290 0.0169

Jupiter 60283-02-08 11:17 G 23739011.77 23739011.97 23739012.17 0.0522 0.0138

Jupiter 60289-07-28 19:41 G 23741374.12 23741374.32 23741374.52 0.0508 0.0042

Saturn 60293-12-02 17:46 G 23742962.17 23742962.24 23742962.33 0.0269 0.0249

Saturn 60294-07-19 20:24 G 23743191.15 23743191.35 23743191.57 0.0270 0.0037

Jupiter 60294-10-14 01:12 G 23743277.42 23743277.55 23743277.68 0.0524 0.0396

Saturn 60295-03-05 23:17 G 23743420.32 23743420.47 23743420.63 0.0270 0.0178

Jupiter 60295-06-08 11:17 G 23743514.89 23743514.97 23743515.05 0.0515 0.0474

Mars 60295-07-01 13:12 G 23743537.91 23743538.05 23743538.19 0.1885 0.1172

Mars 60298-04-08 05:17 G 23744549.64 23744549.72 23744549.80 0.1638 0.1430

Jupiter 60301-04-03 18:14 G 23745640.07 23745640.26 23745640.45 0.0505 0.0182

Jupiter 60307-02-12 06:00 G 23747780.58 23747780.75 23747780.94 0.0518 0.0241

Saturn 60309-01-02 23:17 G 23748471.26 23748471.47 23748471.68 0.0290 0.0050

Saturn 60309-08-20 20:53 G 23748701.24 23748701.37 23748701.51 0.0290 0.0222

Uranus 60309-10-26 02:38 G 23748767.50 23748767.61 23748767.75 0.0140 0.0114

Uranus 60310-06-09 12:00 G 23748993.83 23748994.00 23748994.19 0.0140 0.0079

Uranus 60311-01-21 21:07 G 23749220.18 23749220.38 23749220.59 0.0140 0.0044

Uranus 60311-09-05 06:14 G 23749446.55 23749446.76 23749446.98 0.0140 0.0009

Uranus 60312-04-18 15:07 G 23749672.92 23749673.13 23749673.35 0.0139 0.0025

Uranus 60312-11-30 23:46 G 23749899.30 23749899.49 23749899.69 0.0139 0.0059

Jupiter 60312-12-07 15:22 G 23749906.03 23749906.14 23749906.27 0.0503 0.0404

Uranus 60313-07-15 08:24 G 23750125.69 23750125.85 23750126.01 0.0139 0.0093

Jupiter 60313-08-01 06:43 G 23750142.66 23750142.78 23750142.91 0.0512 0.0395

Uranus 60314-02-26 16:19 G 23750352.11 23750352.18 23750352.29 0.0139 0.0127

Jupiter 60318-10-18 01:26 G 23752046.36 23752046.56 23752046.77 0.0521 0.0012

Saturn 60323-06-15 23:31 G 23753748.36 23753748.48 23753748.61 0.0269 0.0215

Saturn 60324-01-31 01:55 G 23753977.37 23753977.58 23753977.79 0.0269 0.0003

Saturn 60324-09-16 04:34 G 23754206.56 23754206.69 23754206.82 0.0269 0.0211

Jupiter 60325-04-06 05:17 G 23754408.52 23754408.72 23754408.91 0.0509 0.0169

Jupiter 60330-06-22 18:43 G 23756312.11 23756312.28 23756312.47 0.0523 0.0242

Mars 60332-02-05 23:17 G 23756905.35 23756905.47 23756905.60 0.1645 0.1165

Jupiter 60336-12-10 04:34 G 23758674.49 23758674.69 23758674.90 0.0507 0.0055

Saturn 60338-07-16 01:26 G 23759257.35 23759257.56 23759257.77 0.0291 0.0023

Saturn 60339-03-02 23:02 G 23759487.36 23759487.46 23759487.57 0.0290 0.0248

Pluto 60340-07-10 02:10 G 23759982.40 23759982.59 23759982.81 0.0081 0.0032

Pluto 60341-02-20 12:58 G 23760207.87 23760208.04 23760208.24 0.0081 0.0041

Neptune 60341-03-22 03:50 G 23760237.62 23760237.66 23760237.75 0.0088 0.0085

Neptune 60341-11-02 16:48 G 23760463.13 23760463.20 23760463.32 0.0089 0.0080

Jupiter 60342-02-25 10:48 G 23760577.88 23760577.95 23760578.02 0.0525 0.0492

Neptune 60342-06-16 05:31 G 23760688.64 23760688.73 23760688.87 0.0089 0.0075

Jupiter 60342-10-20 21:50 G 23760815.28 23760815.41 23760815.55 0.0516 0.0384

Neptune 60343-01-27 18:29 G 23760914.15 23760914.27 23760914.42 0.0089 0.0070

Neptune 60343-09-10 07:26 G 23761139.68 23761139.81 23761139.98 0.0089 0.0065

Neptune 60344-04-22 20:38 G 23761365.20 23761365.36 23761365.53 0.0089 0.0059

Neptune 60344-12-04 09:22 G 23761590.73 23761590.89 23761591.07 0.0089 0.0054

Neptune 60345-07-17 22:19 G 23761816.26 23761816.43 23761816.62 0.0089 0.0049

Neptune 60346-02-28 11:02 G 23762041.79 23762041.96 23762042.17 0.0089 0.0044

Neptune 60346-10-12 00:14 G 23762267.32 23762267.51 23762267.72 0.0089 0.0038

Neptune 60347-05-25 13:12 G 23762492.85 23762493.05 23762493.26 0.0089 0.0033

Neptune 60348-01-06 02:10 G 23762718.39 23762718.59 23762718.81 0.0089 0.0028

Jupiter 60348-08-15 04:48 G 23762940.54 23762940.70 23762940.88 0.0504 0.0272

Neptune 60348-08-18 15:22 G 23762943.93 23762944.14 23762944.36 0.0089 0.0022

Neptune 60349-04-01 04:19 G 23763169.47 23763169.68 23763169.90 0.0089 0.0017

Neptune 60349-11-12 17:17 G 23763395.01 23763395.22 23763395.44 0.0089 0.0011

Neptune 60350-06-26 06:14 G 23763620.55 23763620.76 23763620.98 0.0089 0.0006

Neptune 60351-02-06 19:26 G 23763846.09 23763846.31 23763846.53 0.0089 0.0001

Neptune 60351-09-20 08:24 G 23764071.63 23764071.85 23764072.07 0.0089 0.0005

Neptune 60352-05-02 21:22 G 23764297.18 23764297.39 23764297.61 0.0089 0.0011

Neptune 60352-12-14 10:19 G 23764522.72 23764522.93 23764523.15 0.0089 0.0016

Saturn 60352-12-26 03:36 G 23764534.50 23764534.65 23764534.81 0.0269 0.0185

Uranus 60353-03-08 20:24 G 23764607.30 23764607.35 23764607.43 0.0138 0.0132

Neptune 60353-07-27 23:17 G 23764748.26 23764748.47 23764748.69 0.0089 0.0021

Saturn 60353-08-12 06:14 G 23764763.55 23764763.76 23764763.97 0.0270 0.0028

Uranus 60353-10-21 04:34 G 23764833.55 23764833.69 23764833.85 0.0138 0.0099

Neptune 60354-03-10 12:00 G 23764973.81 23764974.00 23764974.23 0.0089 0.0027

Saturn 60354-03-29 08:53 G 23764992.78 23764992.87 23764992.97 0.0270 0.0242

Uranus 60354-06-04 12:58 G 23765059.85 23765060.04 23765060.23 0.0138 0.0066

Jupiter 60354-06-25 13:55 G 23765080.89 23765081.08 23765081.28 0.0519 0.0140

Neptune 60354-10-22 01:12 G 23765199.36 23765199.55 23765199.77 0.0089 0.0032

Uranus 60355-01-16 21:07 G 23765286.18 23765286.38 23765286.60 0.0138 0.0033

Neptune 60355-06-04 14:24 G 23765424.90 23765425.10 23765425.30 0.0089 0.0037

Uranus 60355-08-31 05:46 G 23765512.52 23765512.74 23765512.96 0.0139 0.0002

Neptune 60356-01-16 03:07 G 23765650.45 23765650.63 23765650.84 0.0089 0.0043

Uranus 60356-04-13 14:10 G 23765738.89 23765739.09 23765739.31 0.0139 0.0036

Neptune 60356-08-28 16:05 G 23765876.00 23765876.17 23765876.37 0.0089 0.0049

Uranus 60356-11-25 22:34 G 23765965.27 23765965.44 23765965.64 0.0139 0.0070

Neptune 60357-04-11 05:17 G 23766101.56 23766101.72 23766101.91 0.0089 0.0053

Uranus 60357-07-10 07:26 G 23766191.68 23766191.81 23766191.97 0.0139 0.0104

Neptune 60357-11-22 18:43 G 23766327.11 23766327.28 23766327.44 0.0089 0.0059

Uranus 60358-02-21 16:19 G 23766418.17 23766418.18 23766418.23 0.0139 0.0139

Neptune 60358-07-06 07:12 G 23766552.67 23766552.80 23766552.97 0.0089 0.0064

Neptune 60359-02-16 20:24 G 23766778.23 23766778.35 23766778.50 0.0089 0.0069

Neptune 60359-09-30 09:36 G 23767003.80 23767003.90 23767004.04 0.0089 0.0074

Jupiter 60360-04-20 04:48 G 23767206.65 23767206.70 23767206.75 0.0502 0.0484

Neptune 60360-05-12 22:48 G 23767229.37 23767229.45 23767229.56 0.0089 0.0080

Jupiter 60360-12-12 18:58 G 23767443.13 23767443.29 23767443.45 0.0511 0.0305

Neptune 60360-12-24 12:00 G 23767454.94 23767455.00 23767455.08 0.0089 0.0085

Mars 60361-04-28 16:19 G 23767580.01 23767580.18 23767580.36 0.1882 0.0338

Mars 60364-02-04 17:31 G 23768592.11 23768592.23 23768592.35 0.1640 0.1165

Jupiter 60366-02-28 07:26 G 23769346.62 23769346.81 23769347.02 0.0522 0.0105

Saturn 60367-06-10 14:24 G 23769813.99 23769814.10 23769814.22 0.0291 0.0245

Saturn 60368-01-26 12:43 G 23770043.82 23770044.03 23770044.24 0.0290 0.0027

Jupiter 60372-08-17 14:24 G 23771708.90 23771709.10 23771709.30 0.0508 0.0073

Jupiter 60377-11-03 01:26 G 23773612.41 23773612.56 23773612.72 0.0525 0.0347

Saturn 60382-07-08 09:07 G 23775320.72 23775320.88 23775321.06 0.0269 0.0152

Saturn 60383-02-22 11:31 G 23775549.78 23775549.98 23775550.19 0.0269 0.0061

Jupiter 60384-04-22 13:55 G 23775974.89 23775975.08 23775975.28 0.0505 0.0148

Jupiter 60390-03-03 06:58 G 23778115.62 23778115.79 23778115.96 0.0517 0.0288

Uranus 60393-06-25 10:05 G 23779325.84 23779325.92 23779326.01 0.0140 0.0129

Uranus 60394-02-06 19:12 G 23779552.15 23779552.30 23779552.47 0.0140 0.0094

Uranus 60394-09-21 04:34 G 23779778.50 23779778.69 23779778.89 0.0140 0.0059

Uranus 60395-05-05 13:26 G 23780004.86 23780005.06 23780005.28 0.0140 0.0025

Uranus 60395-12-17 22:34 G 23780231.22 23780231.44 23780231.66 0.0139 0.0010

Jupiter 60395-12-27 14:38 G 23780240.97 23780241.11 23780241.25 0.0503 0.0362

Uranus 60396-07-31 07:26 G 23780457.60 23780457.81 23780458.01 0.0139 0.0044

Jupiter 60396-08-20 06:43 G 23780477.67 23780477.78 23780477.88 0.0513 0.0438

Saturn 60396-12-20 16:05 G 23780600.04 23780600.17 23780600.31 0.0291 0.0220

Uranus 60397-03-14 15:50 G 23780683.99 23780684.16 23780684.35 0.0139 0.0079

Saturn 60397-08-07 14:24 G 23780829.89 23780830.10 23780830.31 0.0291 0.0053

Uranus 60397-10-27 00:14 G 23780910.39 23780910.51 23780910.64 0.0139 0.0112

Mars 60397-12-03 11:31 G 23780947.90 23780947.98 23780948.06 0.1647 0.1447

Jupiter 60401-11-06 00:43 G 23782381.33 23782381.53 23782381.73 0.0520 0.0048

Jupiter 60408-04-25 05:17 G 23784743.54 23784743.72 23784743.91 0.0510 0.0212

Saturn 60412-01-18 12:14 G 23786106.82 23786107.01 23786107.20 0.0269 0.0124

Saturn 60412-09-03 14:38 G 23786335.91 23786336.11 23786336.31 0.0270 0.0089

Jupiter 60413-07-11 15:36 G 23786646.96 23786647.15 23786647.34 0.0523 0.0205

Earth 60415-05-12 08:38 G 23787316.71 23787316.86 23787317.00 0.2662 0.1106

Moon 60415-05-12 14:24 G 23787316.98 23787317.10 23787317.22 0.2660 0.1823 *

Jupiter 60419-12-30 03:36 G 23789009.44 23789009.65 23789009.85 0.0507 0.0014

Neptune 60422-02-12 08:53 G 23789784.82 23789784.87 23789784.95 0.0089 0.0085

Neptune 60422-09-25 22:05 G 23790010.34 23790010.42 23790010.53 0.0089 0.0080

Neptune 60423-05-09 11:02 G 23790235.87 23790235.96 23790236.10 0.0089 0.0075

Earth 60423-05-09 23:46 G 23790236.41 23790236.49 23790236.57 0.2663 0.2284

Moon 60423-05-10 02:53 G 23790236.54 23790236.62 23790236.70 0.2657 0.2311 *

Neptune 60423-12-21 00:14 G 23790461.40 23790461.51 23790461.67 0.0089 0.0070

Neptune 60424-08-02 13:26 G 23790686.93 23790687.06 23790687.24 0.0089 0.0065

Neptune 60425-03-16 03:07 G 23790912.48 23790912.63 23790912.81 0.0089 0.0059

Jupiter 60425-03-16 07:41 G 23790912.72 23790912.82 23790912.93 0.0526 0.0454 *

Neptune 60425-10-27 16:19 G 23791138.02 23791138.18 23791138.37 0.0089 0.0054

Jupiter 60425-11-08 19:12 G 23791150.18 23791150.30 23791150.42 0.0516 0.0418

Neptune 60426-06-10 05:17 G 23791363.56 23791363.72 23791363.92 0.0089 0.0049

Saturn 60426-07-03 02:10 G 23791386.42 23791386.59 23791386.76 0.0290 0.0173

Neptune 60427-01-21 18:58 G 23791589.10 23791589.29 23791589.48 0.0089 0.0043

Saturn 60427-02-18 00:14 G 23791616.31 23791616.51 23791616.71 0.0290 0.0099

Mars 60427-02-23 18:58 G 23791622.12 23791622.29 23791622.46 0.1879 0.0507

Neptune 60427-09-04 07:55 G 23791814.64 23791814.83 23791815.04 0.0089 0.0038

Neptune 60428-04-16 21:07 G 23792040.18 23792040.38 23792040.59 0.0089 0.0033

Neptune 60428-11-28 10:05 G 23792265.72 23792265.92 23792266.14 0.0089 0.0028

Neptune 60429-07-11 23:31 G 23792491.27 23792491.48 23792491.69 0.0089 0.0022

Mars 60429-12-02 05:31 G 23792634.59 23792634.73 23792634.88 0.1642 0.0887

Neptune 60430-02-22 12:29 G 23792716.81 23792717.02 23792717.25 0.0089 0.0017

Neptune 60430-10-06 01:41 G 23792942.35 23792942.57 23792942.79 0.0089 0.0011

Neptune 60431-05-19 14:53 G 23793167.89 23793168.12 23793168.34 0.0089 0.0006

Jupiter 60431-09-04 00:29 G 23793275.34 23793275.52 23793275.70 0.0504 0.0237

Neptune 60431-12-31 03:50 G 23793393.44 23793393.66 23793393.88 0.0089 0.0001

Neptune 60432-08-12 16:48 G 23793618.98 23793619.20 23793619.42 0.0089 0.0005

Neptune 60433-03-26 06:00 G 23793844.53 23793844.75 23793844.97 0.0088 0.0010

Neptune 60433-11-06 18:58 G 23794070.08 23794070.29 23794070.51 0.0088 0.0016

Neptune 60434-06-20 07:55 G 23794295.62 23794295.83 23794296.05 0.0088 0.0021

Neptune 60435-01-31 20:38 G 23794521.16 23794521.36 23794521.59 0.0088 0.0027

Neptune 60435-09-14 09:50 G 23794746.71 23794746.91 23794747.13 0.0088 0.0032

Neptune 60436-04-26 23:02 G 23794972.27 23794972.46 23794972.67 0.0088 0.0037

Neptune 60436-12-08 11:46 G 23795197.82 23795197.99 23795198.20 0.0088 0.0043

Uranus 60437-06-20 12:29 G 23795391.91 23795392.02 23795392.15 0.0138 0.0113

Jupiter 60437-07-14 15:07 G 23795415.94 23795416.13 23795416.32 0.0519 0.0189

Neptune 60437-07-22 00:58 G 23795423.37 23795423.54 23795423.74 0.0088 0.0047

Uranus 60438-02-01 20:38 G 23795618.19 23795618.36 23795618.55 0.0138 0.0080

Neptune 60438-03-04 14:10 G 23795648.92 23795649.09 23795649.27 0.0088 0.0053

Uranus 60438-09-16 04:48 G 23795844.51 23795844.70 23795844.92 0.0138 0.0048

Neptune 60438-10-16 03:07 G 23795874.47 23795874.63 23795874.81 0.0088 0.0058

Uranus 60439-04-30 13:26 G 23796070.84 23796071.06 23796071.28 0.0138 0.0013

Neptune 60439-05-29 16:19 G 23796100.03 23796100.18 23796100.34 0.0088 0.0063

Uranus 60439-12-12 21:50 G 23796297.19 23796297.41 23796297.62 0.0139 0.0021

Neptune 60440-01-10 04:48 G 23796325.58 23796325.70 23796325.86 0.0088 0.0068

Uranus 60440-07-26 06:14 G 23796523.57 23796523.76 23796523.97 0.0139 0.0055

Neptune 60440-08-22 17:46 G 23796551.14 23796551.24 23796551.39 0.0088 0.0073

Uranus 60441-03-09 14:53 G 23796749.97 23796750.12 23796750.30 0.0139 0.0089

Neptune 60441-04-05 06:43 G 23796776.71 23796776.78 23796776.91 0.0088 0.0079

Saturn 60441-07-30 18:00 G 23796893.06 23796893.25 23796893.46 0.0269 0.0091

Uranus 60441-10-21 23:46 G 23796976.40 23796976.49 23796976.60 0.0139 0.0123

Neptune 60441-11-16 20:24 G 23797002.27 23797002.35 23797002.42 0.0088 0.0083

Saturn 60442-03-16 20:24 G 23797122.16 23797122.35 23797122.54 0.0269 0.0122

Neptune 60442-06-30 09:07 G 23797227.86 23797227.88 23797227.91 0.0088 0.0088

Jupiter 60443-05-10 00:58 G 23797541.46 23797541.54 23797541.64 0.0502 0.0448

Jupiter 60444-01-01 15:22 G 23797777.99 23797778.14 23797778.29 0.0511 0.0339

Jupiter 60449-03-19 09:36 G 23799681.69 23799681.90 23799682.10 0.0521 0.0052

Jupiter 60455-09-06 14:38 G 23802043.91 23802044.11 23802044.31 0.0509 0.0117

Saturn 60456-01-13 02:53 G 23802172.44 23802172.62 23802172.80 0.0291 0.0149

Saturn 60456-08-30 00:58 G 23802402.35 23802402.54 23802402.74 0.0290 0.0123

Jupiter 60460-11-22 02:10 G 23803947.43 23803947.59 23803947.76 0.0524 0.0297

Jupiter 60467-05-12 14:38 G 23806309.91 23806310.11 23806310.31 0.0506 0.0103

Saturn 60471-02-09 19:41 G 23807679.11 23807679.32 23807679.52 0.0269 0.0066

Saturn 60471-09-26 22:05 G 23807908.25 23807908.42 23807908.60 0.0269 0.0148

Jupiter 60473-03-22 04:48 G 23808450.54 23808450.70 23808450.86 0.0517 0.0324

Uranus 60477-10-07 02:53 G 23810110.50 23810110.62 23810110.77 0.0140 0.0110

Uranus 60478-05-21 12:14 G 23810336.83 23810337.01 23810337.20 0.0140 0.0074

Uranus 60479-01-02 21:07 G 23810563.18 23810563.38 23810563.60 0.0140 0.0040

Jupiter 60479-01-15 14:24 G 23810575.94 23810576.10 23810576.26 0.0503 0.0317

Uranus 60479-08-17 06:29 G 23810789.55 23810789.77 23810789.99 0.0140 0.0005

Jupiter 60479-09-09 06:29 G 23810812.70 23810812.77 23810812.84 0.0512 0.0479

Uranus 60480-03-30 15:07 G 23811015.92 23811016.13 23811016.35 0.0139 0.0030

Uranus 60480-11-11 23:31 G 23811242.30 23811242.48 23811242.68 0.0139 0.0064

Uranus 60481-06-26 07:41 G 23811468.69 23811468.82 23811469.00 0.0139 0.0098

Uranus 60482-02-07 16:19 G 23811695.12 23811695.18 23811695.26 0.0139 0.0131

Jupiter 60484-11-24 22:48 G 23812716.25 23812716.45 23812716.66 0.0520 0.0088

Saturn 60485-07-25 11:46 G 23812958.79 23812958.99 23812959.19 0.0291 0.0105

Saturn 60486-03-12 10:05 G 23813188.74 23813188.92 23813189.09 0.0290 0.0167

Jupiter 60491-05-15 01:26 G 23815078.39 23815078.56 23815078.74 0.0510 0.0246

Mars 60492-12-20 22:34 G 23815664.31 23815664.44 23815664.56 0.1876 0.1313

Mars 60495-09-29 17:46 G 23816677.08 23816677.24 23816677.40 0.1643 0.0619

Jupiter 60496-07-30 17:02 G 23816982.02 23816982.21 23816982.41 0.0523 0.0153

Pluto 60497-09-14 10:19 G 23817392.79 23817392.93 23817393.13 0.0063 0.0040

Pluto 60498-04-27 14:38 G 23817617.89 23817618.11 23817618.33 0.0063 0.0005

Pluto 60498-12-08 18:14 G 23817843.08 23817843.26 23817843.47 0.0063 0.0030

Saturn 60500-01-05 23:31 G 23818236.40 23818236.48 23818236.58 0.0269 0.0243

Saturn 60500-08-23 01:41 G 23818465.36 23818465.57 23818465.78 0.0269 0.0032

Saturn 60501-04-09 03:50 G 23818694.51 23818694.66 23818694.82 0.0269 0.0181

Jupiter 60503-01-19 00:29 G 23819344.32 23819344.52 23819344.73 0.0507 0.0027

Neptune 60504-11-11 03:22 G 23820006.61 23820006.64 23820006.69 0.0088 0.0087

Neptune 60505-06-24 16:19 G 23820232.10 23820232.18 23820232.26 0.0088 0.0082

Neptune 60506-02-05 04:34 G 23820457.61 23820457.69 23820457.82 0.0089 0.0078

Neptune 60506-09-18 18:00 G 23820683.13 23820683.25 23820683.38 0.0089 0.0072

Neptune 60507-05-02 06:58 G 23820908.65 23820908.79 23820908.93 0.0089 0.0067

Neptune 60507-12-13 19:41 G 23821134.17 23821134.32 23821134.48 0.0089 0.0062

Jupiter 60508-04-05 10:34 G 23821247.81 23821247.94 23821248.07 0.0525 0.0397

Neptune 60508-07-26 08:24 G 23821359.69 23821359.85 23821360.03 0.0089 0.0057

Jupiter 60508-11-28 21:36 G 23821485.32 23821485.40 23821485.49 0.0516 0.0469

Neptune 60509-03-08 21:07 G 23821585.22 23821585.38 23821585.57 0.0089 0.0052

Neptune 60509-10-20 10:05 G 23821810.75 23821810.92 23821811.12 0.0089 0.0047

Neptune 60510-06-02 22:48 G 23822036.27 23822036.45 23822036.66 0.0089 0.0042

Neptune 60511-01-14 12:00 G 23822261.80 23822262.00 23822262.20 0.0089 0.0036

Neptune 60511-08-28 00:58 G 23822487.34 23822487.54 23822487.75 0.0089 0.0031

Neptune 60512-04-09 13:55 G 23822712.88 23822713.08 23822713.30 0.0089 0.0026

Earth 60512-11-15 03:07 G 23822932.56 23822932.63 23822932.69 0.2670 0.2392

Moon 60512-11-15 08:10 G 23822932.80 23822932.84 23822932.88 0.2673 0.2543

Neptune 60512-11-21 02:53 G 23822938.41 23822938.62 23822938.84 0.0089 0.0020

Neptune 60513-07-04 15:50 G 23823163.95 23823164.16 23823164.38 0.0089 0.0015

Neptune 60514-02-15 04:48 G 23823389.48 23823389.70 23823389.92 0.0089 0.0010

Jupiter 60514-09-24 00:58 G 23823610.35 23823610.54 23823610.73 0.0505 0.0192

Neptune 60514-09-28 18:00 G 23823615.03 23823615.25 23823615.47 0.0089 0.0004

Saturn 60515-02-05 12:14 G 23823744.80 23823745.01 23823745.21 0.0291 0.0082

Neptune 60515-05-12 06:58 G 23823840.57 23823840.79 23823841.01 0.0089 0.0001

Saturn 60515-09-23 10:19 G 23823974.77 23823974.93 23823975.09 0.0290 0.0190

Neptune 60515-12-23 19:55 G 23824066.11 23824066.33 23824066.55 0.0089 0.0007

Neptune 60516-08-05 08:53 G 23824291.66 23824291.87 23824292.09 0.0089 0.0012

Neptune 60517-03-18 21:50 G 23824517.20 23824517.41 23824517.63 0.0089 0.0018

Neptune 60517-10-30 10:48 G 23824742.75 23824742.95 23824743.17 0.0089 0.0023

Neptune 60518-06-12 23:46 G 23824968.29 23824968.49 23824968.71 0.0089 0.0028

Neptune 60519-01-24 12:58 G 23825193.84 23825194.04 23825194.24 0.0089 0.0033

Neptune 60519-09-07 01:41 G 23825419.39 23825419.57 23825419.78 0.0089 0.0039

Neptune 60520-04-19 14:53 G 23825644.94 23825645.12 23825645.32 0.0089 0.0044

Jupiter 60520-08-03 16:19 G 23825751.00 23825751.18 23825751.36 0.0518 0.0237

Earth 60520-11-12 18:14 G 23825852.12 23825852.26 23825852.41 0.2669 0.1004

Moon 60520-11-12 23:17 G 23825852.30 23825852.47 23825852.63 0.2666 0.0405 *

Neptune 60520-12-01 03:50 G 23825870.49 23825870.66 23825870.85 0.0089 0.0049

Uranus 60521-02-18 20:24 G 23825950.27 23825950.35 23825950.42 0.0138 0.0128

Neptune 60521-07-14 17:02 G 23826096.04 23826096.21 23826096.38 0.0089 0.0054

Uranus 60521-10-03 04:19 G 23826176.53 23826176.68 23826176.84 0.0138 0.0095

Neptune 60522-02-25 05:31 G 23826321.59 23826321.73 23826321.91 0.0089 0.0060

Uranus 60522-05-17 12:14 G 23826402.82 23826403.01 23826403.21 0.0138 0.0062

Neptune 60522-10-08 18:43 G 23826547.15 23826547.28 23826547.45 0.0089 0.0065

Uranus 60522-12-29 20:38 G 23826629.15 23826629.36 23826629.58 0.0138 0.0029

Neptune 60523-05-22 07:55 G 23826772.71 23826772.83 23826772.98 0.0089 0.0070

Uranus 60523-08-13 05:02 G 23826855.50 23826855.71 23826855.93 0.0139 0.0006

Neptune 60524-01-02 20:53 G 23826998.27 23826998.37 23826998.50 0.0089 0.0076

Uranus 60524-03-26 13:41 G 23827081.86 23827082.07 23827082.28 0.0139 0.0039

Neptune 60524-08-15 10:05 G 23827223.84 23827223.92 23827224.03 0.0089 0.0080

Uranus 60524-11-07 22:19 G 23827308.25 23827308.43 23827308.61 0.0139 0.0074

Neptune 60525-03-28 23:17 G 23827449.42 23827449.47 23827449.54 0.0089 0.0085

Uranus 60525-06-22 06:58 G 23827534.66 23827534.79 23827534.93 0.0139 0.0108

Jupiter 60526-05-30 02:10 G 23827876.47 23827876.59 23827876.72 0.0502 0.0401

Jupiter 60527-01-21 17:02 G 23828113.09 23828113.21 23828113.35 0.0511 0.0388

Saturn 60529-07-19 00:00 G 23829022.39 23829022.50 23829022.62 0.0269 0.0220

Saturn 60530-03-05 02:24 G 23829251.39 23829251.60 23829251.81 0.0269 0.0009

Saturn 60530-10-20 05:02 G 23829480.57 23829480.71 23829480.84 0.0269 0.0204

Jupiter 60532-04-08 08:38 G 23830016.65 23830016.86 23830017.06 0.0521 0.0011

Jupiter 60538-09-26 15:22 G 23832378.95 23832379.14 23832379.34 0.0509 0.0163

Jupiter 60543-12-13 01:12 G 23834282.37 23834282.55 23834282.73 0.0524 0.0253

Saturn 60544-08-17 19:26 G 23834531.10 23834531.31 23834531.53 0.0290 0.0042

Saturn 60545-04-04 17:46 G 23834761.11 23834761.24 23834761.37 0.0290 0.0230

Jupiter 60550-06-01 12:00 G 23836644.80 23836645.00 23836645.20 0.0506 0.0063

Jupiter 60555-08-17 17:46 G 23838548.18 23838548.24 23838548.30 0.0527 0.0499

Jupiter 60556-04-11 06:58 G 23838785.65 23838785.79 23838785.93 0.0517 0.0376

Saturn 60559-01-29 06:14 G 23839808.61 23839808.76 23839808.91 0.0269 0.0187

Saturn 60559-09-15 08:24 G 23840037.64 23840037.85 23840038.06 0.0269 0.0025

Saturn 60560-05-01 10:48 G 23840266.85 23840266.95 23840267.05 0.0269 0.0237

Uranus 60561-06-07 10:19 G 23840668.85 23840668.93 23840669.04 0.0140 0.0126

Mars 60561-07-28 05:31 G 23840719.56 23840719.73 23840719.90 0.1645 0.0332

Uranus 60562-01-19 19:55 G 23840895.16 23840895.33 23840895.49 0.0140 0.0090

Jupiter 60562-02-04 12:14 G 23840910.84 23840911.01 23840911.18 0.0503 0.0277

Uranus 60562-09-03 04:48 G 23841121.52 23841121.70 23841121.91 0.0140 0.0056

Uranus 60563-04-17 14:10 G 23841347.87 23841348.09 23841348.31 0.0140 0.0021

Uranus 60563-11-29 22:48 G 23841574.24 23841574.45 23841574.67 0.0139 0.0015

Uranus 60564-07-13 07:41 G 23841800.62 23841800.82 23841801.02 0.0139 0.0048

Uranus 60565-02-24 16:05 G 23842027.00 23842027.17 23842027.35 0.0139 0.0082

Uranus 60565-10-09 00:29 G 23842253.41 23842253.52 23842253.64 0.0139 0.0116

Jupiter 60567-12-16 01:55 G 23843051.39 23843051.58 23843051.78 0.0520 0.0143

Saturn 60573-07-12 21:36 G 23845087.40 23845087.40 23845087.43 0.0291 0.0290

Jupiter 60573-10-10 13:26 G 23845177.02 23845177.06 23845177.12 0.0501 0.0484

Saturn 60574-02-27 20:10 G 23845317.13 23845317.34 23845317.56 0.0291 0.0018

Jupiter 60574-06-04 02:53 G 23845413.46 23845413.62 23845413.79 0.0510 0.0294

Saturn 60574-10-15 18:00 G 23845547.16 23845547.25 23845547.36 0.0290 0.0253

Jupiter 60579-08-20 19:41 G 23847317.12 23847317.32 23847317.52 0.0522 0.0099

Neptune 60585-10-04 06:43 G 23849553.78 23849553.78 23849553.84 0.0089 0.0088

Jupiter 60586-02-07 02:38 G 23849679.41 23849679.61 23849679.81 0.0508 0.0074

Neptune 60586-05-17 19:55 G 23849779.28 23849779.33 23849779.43 0.0089 0.0083

Neptune 60586-12-29 09:07 G 23850004.80 23850004.88 23850005.01 0.0089 0.0078

Neptune 60587-08-11 22:19 G 23850230.33 23850230.43 23850230.58 0.0089 0.0073

Pluto 60587-11-01 12:29 G 23850311.90 23850312.02 23850312.16 0.0081 0.0065

Neptune 60588-03-24 11:31 G 23850455.86 23850455.98 23850456.15 0.0089 0.0068

Pluto 60588-06-13 23:31 G 23850537.27 23850537.48 23850537.71 0.0081 0.0008

Saturn 60588-08-10 05:46 G 23850594.58 23850594.74 23850594.91 0.0269 0.0166

Neptune 60588-11-05 01:12 G 23850681.40 23850681.55 23850681.71 0.0089 0.0062

Pluto 60589-01-25 10:19 G 23850762.91 23850762.93 23850762.95 0.0080 0.0080

Saturn 60589-03-27 08:10 G 23850823.63 23850823.84 23850824.05 0.0269 0.0046

Neptune 60589-06-18 14:24 G 23850906.93 23850907.10 23850907.27 0.0089 0.0057

Saturn 60589-11-11 10:34 G 23851052.89 23851052.94 23851053.01 0.0269 0.0259

Neptune 60590-01-30 03:22 G 23851132.48 23851132.64 23851132.83 0.0089 0.0052

Neptune 60590-09-12 16:34 G 23851358.02 23851358.19 23851358.39 0.0089 0.0047

Jupiter 60591-04-25 10:48 G 23851582.80 23851582.95 23851583.10 0.0525 0.0348

Neptune 60591-04-26 05:46 G 23851583.56 23851583.74 23851583.95 0.0089 0.0042

Neptune 60591-12-07 19:12 G 23851809.10 23851809.30 23851809.50 0.0089 0.0036

Jupiter 60591-12-18 21:22 G 23851820.37 23851820.39 23851820.42 0.0515 0.0510

Neptune 60592-07-20 08:10 G 23852034.64 23852034.84 23852035.06 0.0089 0.0031

Neptune 60593-03-02 21:22 G 23852260.19 23852260.39 23852260.62 0.0089 0.0026

Neptune 60593-10-14 10:48 G 23852485.74 23852485.95 23852486.17 0.0089 0.0020

Neptune 60594-05-27 23:46 G 23852711.28 23852711.49 23852711.71 0.0089 0.0015

Neptune 60595-01-08 12:58 G 23852936.82 23852937.04 23852937.26 0.0089 0.0009

Neptune 60595-08-22 01:55 G 23853162.37 23853162.58 23853162.81 0.0089 0.0005

Neptune 60596-04-03 15:22 G 23853387.92 23853388.14 23853388.36 0.0089 0.0002

Neptune 60596-11-15 04:19 G 23853613.46 23853613.68 23853613.90 0.0089 0.0007

Neptune 60597-06-28 17:17 G 23853839.00 23853839.22 23853839.44 0.0089 0.0012

Jupiter 60597-10-13 02:24 G 23853945.41 23853945.60 23853945.80 0.0505 0.0143

Neptune 60598-02-09 06:14 G 23854064.55 23854064.76 23854064.98 0.0088 0.0017

Neptune 60598-09-22 19:12 G 23854290.09 23854290.30 23854290.52 0.0088 0.0023

Neptune 60599-05-06 08:24 G 23854515.64 23854515.85 23854516.06 0.0088 0.0028

Neptune 60599-12-17 21:07 G 23854741.19 23854741.38 23854741.60 0.0088 0.0033

Neptune 60600-07-31 10:05 G 23854966.74 23854966.92 23854967.14 0.0088 0.0039

Neptune 60601-03-13 23:17 G 23855192.29 23855192.47 23855192.68 0.0088 0.0044

Neptune 60601-10-25 12:29 G 23855417.84 23855418.02 23855418.21 0.0088 0.0049

Neptune 60602-06-08 01:26 G 23855643.39 23855643.56 23855643.74 0.0088 0.0054

Neptune 60603-01-19 14:10 G 23855868.95 23855869.09 23855869.27 0.0088 0.0059

Saturn 60603-01-24 03:50 G 23855873.56 23855873.66 23855873.77 0.0291 0.0252

Jupiter 60603-08-24 16:05 G 23856086.00 23856086.17 23856086.34 0.0518 0.0280

Neptune 60603-09-02 03:07 G 23856094.50 23856094.63 23856094.80 0.0088 0.0064

Saturn 60603-09-11 02:24 G 23856103.39 23856103.60 23856103.81 0.0290 0.0021

Neptune 60604-04-14 16:19 G 23856320.07 23856320.18 23856320.34 0.0088 0.0069

Neptune 60604-11-26 05:17 G 23856545.63 23856545.72 23856545.86 0.0088 0.0075

Uranus 60605-06-03 11:31 G 23856734.86 23856734.98 23856735.12 0.0138 0.0111

Neptune 60605-07-09 18:14 G 23856771.19 23856771.26 23856771.38 0.0088 0.0079

Uranus 60606-01-15 19:26 G 23856961.15 23856961.31 23856961.50 0.0138 0.0078

Neptune 60606-02-20 07:12 G 23856996.76 23856996.80 23856996.89 0.0088 0.0084

Uranus 60606-08-30 03:50 G 23857187.46 23857187.66 23857187.87 0.0138 0.0045

Uranus 60607-04-13 12:14 G 23857413.79 23857414.01 23857414.23 0.0138 0.0011

Uranus 60607-11-25 20:24 G 23857640.15 23857640.35 23857640.58 0.0139 0.0024

Uranus 60608-07-09 05:17 G 23857866.52 23857866.72 23857866.92 0.0139 0.0057

Uranus 60609-02-20 13:41 G 23858092.92 23858093.07 23858093.25 0.0139 0.0092

Jupiter 60609-06-19 00:43 G 23858211.39 23858211.53 23858211.67 0.0502 0.0359

Uranus 60609-10-04 22:19 G 23858319.36 23858319.43 23858319.54 0.0139 0.0127

Jupiter 60610-02-10 14:53 G 23858448.01 23858448.12 23858448.24 0.0511 0.0425

Jupiter 60615-04-29 10:48 G 23860351.74 23860351.95 23860352.15 0.0521 0.0046

Saturn 60618-02-21 12:14 G 23861380.82 23861381.01 23861381.19 0.0269 0.0132

Saturn 60618-10-08 14:24 G 23861609.90 23861610.10 23861610.30 0.0269 0.0080

Jupiter 60621-10-16 13:41 G 23862713.88 23862714.07 23862714.25 0.0509 0.0203

Jupiter 60627-01-02 04:34 G 23864617.50 23864617.69 23864617.88 0.0524 0.0196

Mars 60627-05-26 17:31 G 23864762.06 23864762.23 23864762.40 0.1647 0.0056

Saturn 60632-08-05 05:02 G 23866659.59 23866659.71 23866659.85 0.0291 0.0227

Saturn 60633-03-23 03:22 G 23866889.44 23866889.64 23866889.86 0.0290 0.0046

Jupiter 60633-06-21 13:26 G 23866979.85 23866980.06 23866980.26 0.0506 0.0020

Jupiter 60638-09-06 21:22 G 23868883.28 23868883.39 23868883.50 0.0526 0.0441

Jupiter 60639-05-02 09:36 G 23869120.79 23869120.90 23869121.02 0.0517 0.0426

Jupiter 60645-02-24 14:10 G 23871245.92 23871246.09 23871246.28 0.0504 0.0229

Uranus 60645-09-20 03:07 G 23871453.49 23871453.63 23871453.77 0.0140 0.0107

Uranus 60646-05-04 12:00 G 23871679.83 23871680.00 23871680.20 0.0140 0.0072

Uranus 60646-12-16 21:07 G 23871906.18 23871906.38 23871906.60 0.0140 0.0037

Uranus 60647-07-31 06:14 G 23872132.55 23872132.76 23872132.98 0.0140 0.0004

Saturn 60647-09-03 11:17 G 23872166.78 23872166.97 23872167.16 0.0269 0.0111

Uranus 60648-03-13 15:07 G 23872358.92 23872359.13 23872359.34 0.0139 0.0033

Saturn 60648-04-19 13:41 G 23872395.87 23872396.07 23872396.27 0.0269 0.0100

Uranus 60648-10-25 23:17 G 23872585.29 23872585.47 23872585.68 0.0139 0.0067

Uranus 60649-06-09 07:41 G 23872811.68 23872811.82 23872811.98 0.0139 0.0101

Uranus 60650-01-21 16:05 G 23873038.12 23873038.17 23873038.23 0.0139 0.0134

Jupiter 60651-01-05 02:24 G 23873386.42 23873386.60 23873386.80 0.0519 0.0189

Mars 60656-08-16 02:38 G 23875436.51 23875436.61 23875436.71 0.1879 0.1512

Jupiter 60656-10-30 15:07 G 23875512.04 23875512.13 23875512.24 0.0501 0.0436

Jupiter 60657-06-24 04:48 G 23875748.56 23875748.70 23875748.85 0.0510 0.0342

Moon 60658-05-14 04:05 G 23876072.52 23876072.67 23876072.83 0.2663 0.0671

Earth 60658-05-14 09:50 G 23876072.77 23876072.91 23876073.06 0.2663 0.1194 *

Saturn 60662-02-15 10:05 G 23877445.77 23877445.92 23877446.09 0.0291 0.0192

Jupiter 60662-09-09 19:55 G 23877652.13 23877652.33 23877652.53 0.0522 0.0052

Saturn 60662-10-03 08:38 G 23877675.66 23877675.86 23877676.07 0.0290 0.0081

Moon 60666-05-11 20:24 G 23878992.28 23878992.35 23878992.43 0.2669 0.2317

Earth 60666-05-12 00:58 G 23878992.45 23878992.54 23878992.62 0.2664 0.2214

Neptune 60669-02-13 14:53 G 23880001.07 23880001.12 23880001.18 0.0088 0.0085

Jupiter 60669-02-27 01:26 G 23880014.36 23880014.56 23880014.76 0.0507 0.0115

Neptune 60669-09-27 03:50 G 23880226.57 23880226.66 23880226.76 0.0088 0.0080

Neptune 60670-05-10 16:48 G 23880452.09 23880452.20 23880452.32 0.0088 0.0075

Neptune 60670-12-22 05:31 G 23880677.60 23880677.73 23880677.87 0.0088 0.0070

Neptune 60671-08-04 18:29 G 23880903.13 23880903.27 23880903.43 0.0089 0.0065

Neptune 60672-03-17 07:26 G 23881128.65 23881128.81 23881128.98 0.0089 0.0060

Neptune 60672-10-28 20:10 G 23881354.18 23881354.34 23881354.52 0.0089 0.0055

Neptune 60673-06-11 08:53 G 23881579.70 23881579.87 23881580.06 0.0089 0.0050

Neptune 60674-01-22 21:36 G 23881805.23 23881805.40 23881805.61 0.0089 0.0045

Jupiter 60674-05-15 12:14 G 23881917.85 23881918.01 23881918.18 0.0526 0.0297

Neptune 60674-09-05 10:48 G 23882030.77 23882030.95 23882031.16 0.0089 0.0040

Neptune 60675-04-19 00:00 G 23882256.30 23882256.50 23882256.70 0.0089 0.0034

Neptune 60675-11-30 12:43 G 23882481.83 23882482.03 23882482.24 0.0089 0.0029

Neptune 60676-07-13 01:26 G 23882707.36 23882707.56 23882707.78 0.0089 0.0024

Neptune 60677-02-23 14:24 G 23882932.89 23882933.10 23882933.32 0.0089 0.0019

Saturn 60677-03-15 17:46 G 23882953.04 23882953.24 23882953.44 0.0269 0.0078

Neptune 60677-10-07 03:36 G 23883158.43 23883158.65 23883158.87 0.0089 0.0013

Saturn 60677-10-30 19:55 G 23883182.16 23883182.33 23883182.52 0.0269 0.0135

Neptune 60678-05-20 16:34 G 23883383.97 23883384.19 23883384.41 0.0089 0.0008

Neptune 60679-01-01 05:31 G 23883609.51 23883609.73 23883609.95 0.0089 0.0002

Neptune 60679-08-14 18:29 G 23883835.05 23883835.27 23883835.49 0.0089 0.0003

Neptune 60680-03-27 07:26 G 23884060.60 23884060.81 23884061.03 0.0089 0.0009

Jupiter 60680-11-02 01:12 G 23884280.35 23884280.55 23884280.75 0.0505 0.0101

Neptune 60680-11-07 20:24 G 23884286.14 23884286.35 23884286.58 0.0089 0.0014

Neptune 60681-06-21 09:36 G 23884511.69 23884511.90 23884512.11 0.0089 0.0019

Neptune 60682-02-01 22:34 G 23884737.23 23884737.44 23884737.65 0.0089 0.0024

Neptune 60682-09-15 11:31 G 23884962.79 23884962.98 23884963.20 0.0089 0.0030

Neptune 60683-04-29 00:43 G 23885188.33 23885188.53 23885188.74 0.0089 0.0035

Neptune 60683-12-10 13:41 G 23885413.88 23885414.07 23885414.27 0.0089 0.0040

Neptune 60684-07-23 02:24 G 23885639.43 23885639.60 23885639.81 0.0089 0.0046

Neptune 60685-03-05 15:22 G 23885864.98 23885865.14 23885865.34 0.0089 0.0051

Neptune 60685-10-17 04:34 G 23886090.54 23886090.69 23886090.88 0.0089 0.0056

Neptune 60686-05-30 17:46 G 23886316.09 23886316.24 23886316.41 0.0089 0.0061

Jupiter 60686-09-12 19:12 G 23886421.15 23886421.30 23886421.46 0.0518 0.0333

Neptune 60687-01-11 06:43 G 23886541.64 23886541.78 23886541.93 0.0089 0.0066

Neptune 60687-08-24 19:41 G 23886767.20 23886767.32 23886767.46 0.0089 0.0072

Neptune 60688-04-06 08:53 G 23886992.77 23886992.87 23886992.99 0.0089 0.0077

Neptune 60688-11-17 22:05 G 23887218.34 23887218.42 23887218.51 0.0089 0.0082

Uranus 60689-01-31 18:43 G 23887293.21 23887293.28 23887293.38 0.0138 0.0127

Neptune 60689-07-01 11:02 G 23887443.92 23887443.96 23887444.01 0.0089 0.0087

Uranus 60689-09-15 02:38 G 23887519.47 23887519.61 23887519.78 0.0138 0.0094

Uranus 60690-04-29 11:02 G 23887745.76 23887745.96 23887746.16 0.0138 0.0060

Uranus 60690-12-11 19:12 G 23887972.09 23887972.30 23887972.51 0.0138 0.0027

Uranus 60691-07-26 03:36 G 23888198.43 23888198.65 23888198.87 0.0139 0.0007

Saturn 60691-08-28 12:29 G 23888231.86 23888232.02 23888232.21 0.0290 0.0164

Uranus 60692-03-08 12:14 G 23888424.80 23888425.01 23888425.22 0.0139 0.0041

Saturn 60692-04-14 10:48 G 23888461.76 23888461.95 23888462.15 0.0290 0.0108

Jupiter 60692-07-08 01:41 G 23888546.41 23888546.57 23888546.73 0.0502 0.0313

Uranus 60692-10-20 20:38 G 23888651.18 23888651.36 23888651.55 0.0139 0.0075

Jupiter 60693-03-01 16:34 G 23888783.12 23888783.19 23888783.27 0.0512 0.0472

Mars 60693-03-23 05:02 G 23888804.54 23888804.71 23888804.88 0.1649 0.0241

Uranus 60693-06-04 05:31 G 23888877.60 23888877.73 23888877.86 0.0139 0.0110

Jupiter 60698-05-18 13:55 G 23890686.88 23890687.08 23890687.28 0.0521 0.0099

Jupiter 60704-11-05 16:05 G 23893048.99 23893049.17 23893049.35 0.0509 0.0252

Saturn 60706-02-09 14:10 G 23893510.09 23893510.09 23893510.11 0.0269 0.0268

Saturn 60706-09-26 16:48 G 23893738.99 23893739.20 23893739.41 0.0269 0.0057

Saturn 60707-05-13 19:12 G 23893968.13 23893968.30 23893968.48 0.0269 0.0155

Jupiter 60710-01-22 05:46 G 23894952.54 23894952.74 23894952.93 0.0523 0.0146

Jupiter 60716-07-11 15:22 G 23897314.94 23897315.14 23897315.34 0.0506 0.0034

Saturn 60721-03-10 17:02 G 23899018.03 23899018.21 23899018.41 0.0291 0.0130

Jupiter 60721-09-26 21:36 G 23899218.27 23899218.40 23899218.54 0.0526 0.0393

Saturn 60721-10-26 15:22 G 23899247.96 23899248.14 23899248.33 0.0290 0.0142

Jupiter 60722-05-22 09:36 G 23899455.82 23899455.90 23899455.99 0.0516 0.0469

Mars 60722-06-14 05:31 G 23899478.56 23899478.73 23899478.89 0.1876 0.0680

Jupiter 60728-03-16 13:41 G 23901580.88 23901581.07 23901581.26 0.0503 0.0185

Uranus 60729-05-21 09:36 G 23902011.81 23902011.90 23902012.01 0.0140 0.0123

Uranus 60730-01-02 18:58 G 23902238.13 23902238.29 23902238.46 0.0140 0.0088

Uranus 60730-08-17 04:19 G 23902464.48 23902464.68 23902464.88 0.0140 0.0053

Uranus 60731-03-31 13:12 G 23902690.84 23902691.05 23902691.27 0.0140 0.0019

Uranus 60731-11-12 22:05 G 23902917.20 23902917.42 23902917.64 0.0139 0.0016

Uranus 60732-06-26 06:43 G 23903143.58 23903143.78 23903143.98 0.0139 0.0051

Uranus 60733-02-07 14:53 G 23903369.96 23903370.12 23903370.30 0.0139 0.0085

Uranus 60733-09-21 23:31 G 23903596.37 23903596.48 23903596.60 0.0139 0.0118

Jupiter 60734-01-25 03:50 G 23903721.48 23903721.66 23903721.85 0.0520 0.0237

Saturn 60735-08-22 21:07 G 23904296.28 23904296.38 23904296.48 0.0269 0.0235

Saturn 60736-04-07 23:17 G 23904525.26 23904525.47 23904525.69 0.0269 0.0024

Saturn 60736-11-23 01:41 G 23904754.43 23904754.57 23904754.73 0.0270 0.0190

Jupiter 60739-11-20 14:24 G 23905846.98 23905847.10 23905847.23 0.0501 0.0393

Jupiter 60740-07-14 03:22 G 23906083.51 23906083.64 23906083.78 0.0510 0.0381

Pluto 60745-01-07 21:36 G 23907722.38 23907722.40 23907722.48 0.0063 0.0061

Pluto 60745-08-21 01:41 G 23907947.38 23907947.57 23907947.78 0.0063 0.0027

Jupiter 60745-09-29 22:19 G 23907987.23 23907987.43 23907987.64 0.0522 0.0002

Pluto 60746-04-03 05:46 G 23908172.52 23908172.74 23908172.96 0.0063 0.0008

Pluto 60746-11-14 09:07 G 23908397.73 23908397.88 23908398.06 0.0063 0.0043

Neptune 60750-01-07 18:14 G 23909548.23 23909548.26 23909548.34 0.0089 0.0086

Neptune 60750-08-21 07:26 G 23909773.74 23909773.81 23909773.93 0.0089 0.0081

Saturn 60750-09-20 20:38 G 23909804.17 23909804.36 23909804.56 0.0290 0.0099

Neptune 60751-04-03 20:38 G 23909999.27 23909999.36 23909999.50 0.0089 0.0076

Saturn 60751-05-08 18:29 G 23910034.11 23910034.27 23910034.45 0.0290 0.0172

Neptune 60751-11-15 10:19 G 23910224.80 23910224.93 23910225.07 0.0089 0.0070

Jupiter 60752-03-19 02:24 G 23910349.41 23910349.60 23910349.79 0.0508 0.0160

Neptune 60752-06-27 23:31 G 23910450.33 23910450.48 23910450.63 0.0089 0.0065

Neptune 60753-02-08 12:29 G 23910675.87 23910676.02 23910676.19 0.0089 0.0060

Neptune 60753-09-22 01:41 G 23910901.41 23910901.57 23910901.75 0.0089 0.0055

Neptune 60754-05-05 14:53 G 23911126.95 23911127.12 23911127.31 0.0089 0.0050

Neptune 60754-12-17 03:50 G 23911352.49 23911352.66 23911352.87 0.0089 0.0045

Neptune 60755-07-30 17:02 G 23911578.03 23911578.21 23911578.42 0.0089 0.0040

Moon 60755-11-18 00:14 G 23911688.43 23911688.51 23911688.59 0.2665 0.2293

Earth 60755-11-18 04:34 G 23911688.63 23911688.69 23911688.75 0.2669 0.2453

Neptune 60756-03-12 06:43 G 23911803.58 23911803.78 23911803.98 0.0089 0.0034

Neptune 60756-10-23 19:41 G 23912029.12 23912029.32 23912029.54 0.0089 0.0029

Jupiter 60757-06-04 15:36 G 23912252.98 23912253.15 23912253.34 0.0525 0.0242

Neptune 60757-06-06 08:53 G 23912254.66 23912254.87 23912255.09 0.0089 0.0024

Neptune 60758-01-17 21:50 G 23912480.21 23912480.41 23912480.64 0.0089 0.0019

Neptune 60758-08-31 11:17 G 23912705.75 23912705.97 23912706.19 0.0089 0.0013

Mars 60759-01-19 17:02 G 23912847.04 23912847.21 23912847.37 0.1651 0.0530

Neptune 60759-04-14 00:29 G 23912931.30 23912931.52 23912931.74 0.0089 0.0008

Neptune 60759-11-25 13:41 G 23913156.85 23913157.07 23913157.29 0.0089 0.0002

Neptune 60760-07-08 02:38 G 23913382.39 23913382.61 23913382.83 0.0089 0.0003

Neptune 60761-02-18 15:50 G 23913607.94 23913608.16 23913608.38 0.0089 0.0008

Neptune 60761-10-02 04:48 G 23913833.49 23913833.70 23913833.92 0.0089 0.0014

Neptune 60762-05-15 17:46 G 23914059.03 23914059.24 23914059.46 0.0089 0.0019

Neptune 60762-12-27 06:43 G 23914284.58 23914284.78 23914285.00 0.0088 0.0024

Neptune 60763-08-09 19:41 G 23914510.12 23914510.32 23914510.54 0.0088 0.0030

Moon 60763-11-15 14:24 G 23914607.99 23914608.10 23914608.22 0.2669 0.1759

Earth 60763-11-15 19:55 G 23914608.18 23914608.33 23914608.48 0.2668 0.0917 *

Jupiter 60763-11-23 02:53 G 23914615.42 23914615.62 23914615.82 0.0505 0.0054

Neptune 60764-03-22 08:53 G 23914735.68 23914735.87 23914736.08 0.0088 0.0035

Neptune 60764-11-02 21:50 G 23914961.22 23914961.41 23914961.62 0.0088 0.0040

Saturn 60765-03-03 19:55 G 23915082.21 23915082.33 23915082.46 0.0269 0.0214

Neptune 60765-06-16 11:02 G 23915186.77 23915186.96 23915187.15 0.0088 0.0045

Saturn 60765-10-18 22:34 G 23915311.23 23915311.44 23915311.66 0.0269 0.0005

Neptune 60766-01-27 23:31 G 23915412.32 23915412.48 23915412.68 0.0088 0.0050

Saturn 60766-06-05 01:12 G 23915540.42 23915540.55 23915540.68 0.0269 0.0210

Neptune 60766-09-10 12:29 G 23915637.87 23915638.02 23915638.21 0.0088 0.0056

Neptune 60767-04-24 01:41 G 23915863.43 23915863.57 23915863.75 0.0088 0.0061

Neptune 60767-12-05 14:38 G 23916088.98 23916089.11 23916089.28 0.0088 0.0066

Neptune 60768-07-18 03:36 G 23916314.54 23916314.65 23916314.80 0.0088 0.0071

Jupiter 60769-02-07 06:29 G 23916518.70 23916518.77 23916518.85 0.0527 0.0490

Neptune 60769-02-28 16:34 G 23916540.10 23916540.19 23916540.33 0.0088 0.0076

Jupiter 60769-10-02 19:55 G 23916756.20 23916756.33 23916756.47 0.0518 0.0378

Neptune 60769-10-12 05:31 G 23916765.66 23916765.73 23916765.84 0.0088 0.0081

Neptune 60770-05-25 18:29 G 23916991.24 23916991.27 23916991.35 0.0088 0.0086

Uranus 60773-05-16 10:19 G 23918077.81 23918077.93 23918078.07 0.0138 0.0109

Uranus 60773-12-28 18:14 G 23918304.09 23918304.26 23918304.45 0.0138 0.0076

Uranus 60774-08-12 02:38 G 23918530.40 23918530.61 23918530.82 0.0138 0.0042

Uranus 60775-03-26 10:48 G 23918756.74 23918756.95 23918757.17 0.0138 0.0009

Jupiter 60775-07-29 03:22 G 23918881.47 23918881.64 23918881.82 0.0503 0.0265

Uranus 60775-11-07 19:12 G 23918983.09 23918983.30 23918983.52 0.0139 0.0025

Uranus 60776-06-21 03:50 G 23919209.46 23919209.66 23919209.86 0.0139 0.0059

Uranus 60777-02-02 12:14 G 23919435.86 23919436.01 23919436.19 0.0139 0.0094

Uranus 60777-09-16 21:07 G 23919662.31 23919662.38 23919662.48 0.0139 0.0128

Saturn 60780-04-02 00:58 G 23920590.34 23920590.54 23920590.75 0.0290 0.0066

Saturn 60780-11-17 22:48 G 23920820.31 23920820.45 23920820.61 0.0290 0.0205

Jupiter 60781-06-07 13:41 G 23921021.88 23921022.07 23921022.27 0.0521 0.0143

Jupiter 60787-04-03 03:22 G 23923147.59 23923147.64 23923147.71 0.0500 0.0472

Jupiter 60787-11-25 15:07 G 23923383.97 23923384.13 23923384.30 0.0509 0.0292

Mars 60788-04-10 09:07 G 23923520.71 23923520.88 23923521.06 0.1873 0.0110

Jupiter 60793-02-10 05:46 G 23925287.54 23925287.74 23925287.94 0.0524 0.0101

Saturn 60794-09-14 02:53 G 23925868.46 23925868.62 23925868.78 0.0269 0.0180

Saturn 60795-05-01 05:31 G 23926097.52 23926097.73 23926097.94 0.0270 0.0033

Saturn 60795-12-16 07:55 G 23926326.75 23926326.83 23926326.93 0.0270 0.0245

Jupiter 60799-07-31 14:10 G 23927649.89 23927650.09 23927650.29 0.0506 0.0074

Jupiter 60804-10-15 22:48 G 23929553.30 23929553.45 23929553.60 0.0527 0.0345

Jupiter 60805-06-10 11:02 G 23929790.95 23929790.96 23929790.98 0.0517 0.0514

Saturn 60809-10-13 06:14 G 23931376.55 23931376.76 23931376.98 0.0290 0.0031

Saturn 60810-05-31 04:05 G 23931606.55 23931606.67 23931606.79 0.0290 0.0238

Jupiter 60811-04-05 13:41 G 23931915.88 23931916.07 23931916.27 0.0504 0.0143

Uranus 60813-01-18 16:19 G 23932570.17 23932570.18 23932570.20 0.0140 0.0140

Uranus 60813-09-02 01:55 G 23932796.44 23932796.58 23932796.72 0.0140 0.0105

Uranus 60814-04-16 10:48 G 23933022.77 23933022.95 23933023.15 0.0140 0.0070

Uranus 60814-11-28 19:55 G 23933249.13 23933249.33 23933249.55 0.0140 0.0035

Uranus 60815-07-13 05:02 G 23933475.49 23933475.71 23933475.92 0.0140 0.0002

Uranus 60816-02-24 13:41 G 23933701.86 23933702.07 23933702.28 0.0139 0.0035

Uranus 60816-10-07 22:05 G 23933928.24 23933928.42 23933928.62 0.0139 0.0069

Jupiter 60817-02-13 06:14 G 23934056.60 23934056.76 23934056.94 0.0519 0.0287

Uranus 60817-05-22 06:14 G 23934154.63 23934154.76 23934154.92 0.0139 0.0103

Uranus 60818-01-03 14:53 G 23934381.08 23934381.12 23934381.16 0.0139 0.0136

Jupiter 60822-12-09 15:07 G 23936181.98 23936182.13 23936182.27 0.0502 0.0349

Jupiter 60823-08-03 05:02 G 23936418.60 23936418.71 23936418.82 0.0511 0.0426

Saturn 60824-03-26 02:24 G 23936654.43 23936654.60 23936654.78 0.0269 0.0157

Saturn 60824-11-10 05:02 G 23936883.51 23936883.71 23936883.92 0.0269 0.0055

Mars 60824-11-16 05:02 G 23936889.56 23936889.71 23936889.86 0.1653 0.0816

Saturn 60825-06-27 07:41 G 23937112.80 23937112.82 23937112.86 0.0270 0.0267

Jupiter 60828-10-18 23:02 G 23938322.26 23938322.46 23938322.67 0.0522 0.0048

Neptune 60832-10-05 13:26 G 23939770.05 23939770.06 23939770.11 0.0088 0.0088

Neptune 60833-05-19 02:10 G 23939995.54 23939995.59 23939995.69 0.0088 0.0083

Neptune 60833-12-30 15:07 G 23940221.04 23940221.13 23940221.25 0.0088 0.0078

Neptune 60834-08-13 04:19 G 23940446.57 23940446.68 23940446.81 0.0088 0.0073

Neptune 60835-03-26 17:17 G 23940672.09 23940672.22 23940672.37 0.0088 0.0068

Jupiter 60835-04-08 03:50 G 23940684.48 23940684.66 23940684.85 0.0508 0.0208

Pluto 60835-10-07 06:00 G 23940866.57 23940866.75 23940866.96 0.0081 0.0039

Neptune 60835-11-07 06:00 G 23940897.61 23940897.75 23940897.92 0.0089 0.0063

Pluto 60836-05-19 16:48 G 23941092.01 23941092.20 23941092.41 0.0080 0.0034

Neptune 60836-06-19 18:43 G 23941123.13 23941123.28 23941123.46 0.0089 0.0058

Neptune 60837-01-31 07:41 G 23941348.66 23941348.82 23941349.01 0.0089 0.0053

Neptune 60837-09-13 20:38 G 23941574.19 23941574.36 23941574.56 0.0089 0.0048

Neptune 60838-04-27 09:36 G 23941799.72 23941799.90 23941800.10 0.0089 0.0043

Saturn 60838-09-07 11:46 G 23941932.92 23941932.99 23941933.08 0.0290 0.0269

Neptune 60838-12-08 22:19 G 23942025.25 23942025.43 23942025.65 0.0089 0.0038

Saturn 60839-04-25 10:19 G 23942162.71 23942162.93 23942163.14 0.0290 0.0006

Neptune 60839-07-22 11:31 G 23942250.78 23942250.98 23942251.19 0.0089 0.0032

Saturn 60839-12-11 07:55 G 23942392.76 23942392.83 23942392.91 0.0290 0.0270

Neptune 60840-03-04 00:14 G 23942476.31 23942476.51 23942476.73 0.0089 0.0027

Jupiter 60840-06-23 15:07 G 23942587.94 23942588.13 23942588.32 0.0525 0.0197

Neptune 60840-10-15 13:12 G 23942701.84 23942702.05 23942702.27 0.0089 0.0022

Neptune 60841-05-29 01:55 G 23942927.38 23942927.58 23942927.81 0.0089 0.0017

Neptune 60842-01-09 15:07 G 23943152.91 23943153.13 23943153.35 0.0089 0.0011

Neptune 60842-08-23 04:05 G 23943378.45 23943378.67 23943378.89 0.0089 0.0006

Neptune 60843-04-05 17:02 G 23943603.99 23943604.21 23943604.43 0.0089 0.0001

Neptune 60843-11-17 06:00 G 23943829.53 23943829.75 23943829.97 0.0089 0.0005

Neptune 60844-06-29 18:58 G 23944055.07 23944055.29 23944055.51 0.0089 0.0010

Neptune 60845-02-10 07:55 G 23944280.61 23944280.83 23944281.04 0.0089 0.0015

Neptune 60845-09-23 20:53 G 23944506.16 23944506.37 23944506.59 0.0089 0.0021

Neptune 60846-05-07 09:50 G 23944731.71 23944731.91 23944732.13 0.0089 0.0026

Jupiter 60846-12-12 02:10 G 23944950.39 23944950.59 23944950.80 0.0505 0.0014

Neptune 60846-12-18 22:48 G 23944957.26 23944957.45 23944957.67 0.0089 0.0031

Neptune 60847-08-01 12:00 G 23945182.80 23945183.00 23945183.20 0.0089 0.0036

Neptune 60848-03-14 00:43 G 23945408.35 23945408.53 23945408.74 0.0089 0.0042

Neptune 60848-10-25 13:55 G 23945633.91 23945634.08 23945634.28 0.0089 0.0047

Neptune 60849-06-08 03:07 G 23945859.46 23945859.63 23945859.82 0.0089 0.0052

Neptune 60850-01-19 16:05 G 23946085.01 23946085.17 23946085.35 0.0089 0.0057

Neptune 60850-09-02 05:17 G 23946310.57 23946310.72 23946310.88 0.0089 0.0063

Neptune 60851-04-15 18:29 G 23946536.13 23946536.27 23946536.41 0.0089 0.0068

Neptune 60851-11-27 06:58 G 23946761.69 23946761.79 23946761.94 0.0089 0.0073

Jupiter 60852-02-27 05:02 G 23946853.61 23946853.71 23946853.82 0.0528 0.0449

Neptune 60852-07-09 19:55 G 23946987.25 23946987.33 23946987.46 0.0089 0.0078

Jupiter 60852-10-21 19:26 G 23947091.19 23947091.31 23947091.43 0.0518 0.0419

Neptune 60853-02-20 09:36 G 23947212.82 23947212.90 23947212.98 0.0089 0.0083

Neptune 60853-10-03 22:34 G 23947438.41 23947438.44 23947438.49 0.0089 0.0088

Saturn 60853-10-06 09:22 G 23947440.71 23947440.89 23947441.09 0.0270 0.0123

Mars 60854-02-05 12:14 G 23947562.86 23947563.01 23947563.16 0.1870 0.0916

Saturn 60854-05-23 12:14 G 23947669.82 23947670.01 23947670.21 0.0270 0.0091

Mars 60856-11-14 23:31 G 23948576.43 23948576.48 23948576.54 0.1647 0.1548

Uranus 60857-01-13 17:46 G 23948636.16 23948636.24 23948636.34 0.0138 0.0124

Uranus 60857-08-28 01:41 G 23948862.42 23948862.57 23948862.74 0.0138 0.0091

Uranus 60858-04-11 09:36 G 23949088.72 23949088.90 23949089.11 0.0138 0.0059

Jupiter 60858-08-17 02:10 G 23949216.41 23949216.59 23949216.78 0.0502 0.0225

Uranus 60858-11-23 18:00 G 23949315.04 23949315.25 23949315.47 0.0138 0.0024

Uranus 60859-07-08 02:24 G 23949541.39 23949541.60 23949541.82 0.0139 0.0010

Uranus 60860-02-19 11:02 G 23949767.76 23949767.96 23949768.17 0.0139 0.0044

Uranus 60860-10-02 19:41 G 23949994.15 23949994.32 23949994.50 0.0139 0.0078

Uranus 60861-05-17 04:19 G 23950220.56 23950220.68 23950220.82 0.0139 0.0113

Jupiter 60864-06-26 13:41 G 23951356.89 23951357.07 23951357.27 0.0521 0.0187

Saturn 60868-03-19 19:55 G 23952719.20 23952719.33 23952719.46 0.0290 0.0227

Saturn 60868-11-04 17:31 G 23952949.02 23952949.23 23952949.44 0.0290 0.0041

Jupiter 60870-04-22 02:24 G 23953482.50 23953482.60 23953482.70 0.0500 0.0432

Jupiter 60870-12-14 14:24 G 23953718.95 23953719.10 23953719.26 0.0509 0.0332

Jupiter 60876-03-01 07:55 G 23955622.63 23955622.83 23955623.03 0.0523 0.0051

Jupiter 60882-08-19 14:10 G 23957984.90 23957985.09 23957985.29 0.0507 0.0116

Saturn 60883-04-18 09:50 G 23958226.71 23958226.91 23958227.11 0.0269 0.0099

Saturn 60883-12-03 12:29 G 23958455.83 23958456.02 23958456.22 0.0269 0.0114

Jupiter 60887-11-04 23:17 G 23959888.31 23959888.47 23959888.64 0.0526 0.0296

Mars 60890-09-13 16:34 G 23960932.06 23960932.19 23960932.32 0.1656 0.1111

Jupiter 60894-04-24 14:24 G 23962250.90 23962251.10 23962251.30 0.0504 0.0097

Uranus 60897-05-02 08:38 G 23963354.76 23963354.86 23963354.98 0.0140 0.0121

Saturn 60897-09-29 23:17 G 23963505.32 23963505.47 23963505.63 0.0290 0.0197

Uranus 60897-12-14 18:00 G 23963581.08 23963581.25 23963581.42 0.0140 0.0086

Saturn 60898-05-17 21:22 G 23963735.19 23963735.39 23963735.60 0.0290 0.0073

Uranus 60898-07-29 02:53 G 23963807.43 23963807.62 23963807.84 0.0140 0.0051

Uranus 60899-03-12 12:00 G 23964033.79 23964034.00 23964034.22 0.0140 0.0016

Uranus 60899-10-24 20:53 G 23964260.15 23964260.37 23964260.59 0.0140 0.0019

Jupiter 60900-03-05 05:02 G 23964391.55 23964391.71 23964391.86 0.0519 0.0326

Uranus 60900-06-08 05:17 G 23964486.53 23964486.72 23964486.93 0.0139 0.0054

Uranus 60901-01-20 13:55 G 23964712.91 23964713.08 23964713.25 0.0139 0.0087

Earth 60901-05-16 10:48 G 23964828.81 23964828.95 23964829.09 0.2664 0.1256

Moon 60901-05-16 15:50 G 23964829.03 23964829.16 23964829.29 0.2667 0.1459 *

Uranus 60901-09-03 22:19 G 23964939.33 23964939.43 23964939.54 0.0139 0.0121

Jupiter 60905-12-29 14:24 G 23966516.94 23966517.10 23966517.26 0.0501 0.0308

Jupiter 60906-08-23 03:36 G 23966753.58 23966753.65 23966753.74 0.0510 0.0463

Earth 60909-05-14 01:41 G 23967748.48 23967748.57 23967748.66 0.2665 0.2169

Moon 60909-05-14 07:12 G 23967748.68 23967748.80 23967748.92 0.2663 0.1763

Jupiter 60911-11-08 20:38 G 23968657.16 23968657.36 23968657.56 0.0522 0.0084

Saturn 60912-10-29 17:02 G 23969013.01 23969013.21 23969013.42 0.0270 0.0063

Saturn 60913-06-15 19:55 G 23969242.16 23969242.33 23969242.51 0.0270 0.0150

Neptune 60913-08-29 16:34 G 23969317.17 23969317.19 23969317.22 0.0089 0.0088

Neptune 60914-04-12 05:46 G 23969542.68 23969542.74 23969542.83 0.0089 0.0083

Neptune 60914-11-23 18:58 G 23969768.20 23969768.29 23969768.40 0.0089 0.0078

Neptune 60915-07-07 08:10 G 23969993.73 23969993.84 23969993.97 0.0089 0.0073

Neptune 60916-02-17 21:36 G 23970219.26 23970219.40 23970219.54 0.0089 0.0068

Neptune 60916-09-30 10:34 G 23970444.80 23970444.94 23970445.11 0.0089 0.0063

Neptune 60917-05-13 23:46 G 23970670.33 23970670.49 23970670.66 0.0089 0.0058

Neptune 60917-12-25 12:43 G 23970895.87 23970896.03 23970896.22 0.0089 0.0053

Jupiter 60918-04-28 01:55 G 23971019.40 23971019.58 23971019.76 0.0507 0.0243

Neptune 60918-08-08 01:55 G 23971121.41 23971121.58 23971121.78 0.0089 0.0048

Neptune 60919-03-21 15:07 G 23971346.95 23971347.13 23971347.34 0.0089 0.0043

Neptune 60919-11-02 04:19 G 23971572.49 23971572.68 23971572.89 0.0089 0.0038

Mars 60919-12-04 16:19 G 23971605.10 23971605.18 23971605.25 0.1867 0.1684

Neptune 60920-06-14 17:46 G 23971798.03 23971798.24 23971798.44 0.0089 0.0032

Neptune 60921-01-26 06:43 G 23972023.58 23972023.78 23972024.00 0.0089 0.0027

Neptune 60921-09-08 19:55 G 23972249.12 23972249.33 23972249.55 0.0089 0.0022

Neptune 60922-04-22 09:07 G 23972474.67 23972474.88 23972475.10 0.0089 0.0016

Mars 60922-09-13 11:31 G 23972618.88 23972618.98 23972619.09 0.1649 0.1278

Neptune 60922-12-03 22:19 G 23972700.21 23972700.43 23972700.65 0.0089 0.0011

Jupiter 60923-07-14 13:26 G 23972922.87 23972923.06 23972923.26 0.0525 0.0158

Neptune 60923-07-17 11:31 G 23972925.76 23972925.98 23972926.20 0.0089 0.0006

Neptune 60924-02-28 00:43 G 23973151.31 23973151.53 23973151.75 0.0089 0.0001

Neptune 60924-10-10 13:55 G 23973376.86 23973377.08 23973377.30 0.0089 0.0005

Neptune 60925-05-24 02:53 G 23973602.41 23973602.62 23973602.85 0.0089 0.0010

Neptune 60926-01-04 15:50 G 23973827.95 23973828.16 23973828.39 0.0089 0.0016

Neptune 60926-08-18 05:02 G 23974053.50 23974053.71 23974053.93 0.0088 0.0021

Neptune 60927-03-31 18:29 G 23974279.06 23974279.27 23974279.48 0.0088 0.0026

Saturn 60927-04-13 08:53 G 23974291.69 23974291.87 23974292.05 0.0290 0.0152

Neptune 60927-11-12 07:12 G 23974504.61 23974504.80 23974505.02 0.0088 0.0031

Saturn 60927-11-29 06:14 G 23974521.57 23974521.76 23974521.96 0.0289 0.0116

Neptune 60928-06-24 20:10 G 23974730.15 23974730.34 23974730.55 0.0088 0.0037

Neptune 60929-02-05 09:07 G 23974955.70 23974955.88 23974956.09 0.0088 0.0042

Neptune 60929-09-18 22:19 G 23975181.25 23975181.43 23975181.62 0.0088 0.0047

Jupiter 60930-01-01 00:14 G 23975285.30 23975285.51 23975285.71 0.0505 0.0025

Neptune 60930-05-02 11:17 G 23975406.80 23975406.97 23975407.16 0.0088 0.0052

Neptune 60930-12-14 00:14 G 23975632.36 23975632.51 23975632.69 0.0088 0.0057

Neptune 60931-07-27 13:12 G 23975857.91 23975858.05 23975858.22 0.0088 0.0062

Neptune 60932-03-09 02:24 G 23976083.46 23976083.60 23976083.75 0.0088 0.0067

Neptune 60932-10-20 15:22 G 23976309.02 23976309.14 23976309.28 0.0088 0.0072

Neptune 60933-06-03 04:05 G 23976534.58 23976534.67 23976534.80 0.0088 0.0077

Neptune 60934-01-14 17:02 G 23976760.14 23976760.21 23976760.31 0.0088 0.0082

Neptune 60934-08-28 06:00 G 23976985.72 23976985.75 23976985.81 0.0088 0.0086

Jupiter 60935-03-19 06:29 G 23977188.64 23977188.77 23977188.90 0.0527 0.0399

Jupiter 60935-11-11 20:10 G 23977426.25 23977426.34 23977426.43 0.0518 0.0461

Uranus 60941-04-28 09:22 G 23979420.76 23979420.89 23979421.04 0.0138 0.0106

Jupiter 60941-09-06 00:58 G 23979551.35 23979551.54 23979551.73 0.0503 0.0186

Saturn 60941-09-24 15:36 G 23979570.08 23979570.15 23979570.23 0.0269 0.0249

Uranus 60941-12-10 17:17 G 23979647.05 23979647.22 23979647.42 0.0138 0.0073

Saturn 60942-05-11 18:29 G 23979799.06 23979799.27 23979799.48 0.0269 0.0037

Uranus 60942-07-25 01:41 G 23979873.36 23979873.57 23979873.78 0.0138 0.0039

Saturn 60942-12-26 21:22 G 23980028.23 23980028.39 23980028.55 0.0270 0.0175

Uranus 60943-03-08 10:05 G 23980099.71 23980099.92 23980100.14 0.0138 0.0006

Uranus 60943-10-20 18:29 G 23980326.06 23980326.27 23980326.49 0.0139 0.0029

Uranus 60944-06-03 03:07 G 23980552.44 23980552.63 23980552.83 0.0139 0.0063

Uranus 60945-01-15 11:46 G 23980778.84 23980778.99 23980779.15 0.0139 0.0097

Uranus 60945-08-29 20:53 G 23981005.30 23981005.37 23981005.44 0.0139 0.0132

Jupiter 60947-07-17 13:12 G 23981691.87 23981692.05 23981692.24 0.0520 0.0229

Jupiter 60953-05-12 02:10 G 23983817.46 23983817.59 23983817.72 0.0501 0.0390

Jupiter 60954-01-03 14:38 G 23984053.98 23984054.11 23984054.25 0.0510 0.0374

Mars 60956-07-12 04:19 G 23984974.59 23984974.68 23984974.77 0.1658 0.1402

Saturn 60956-10-23 12:43 G 23985077.84 23985078.03 23985078.22 0.0290 0.0121

Saturn 60957-06-10 10:19 G 23985307.75 23985307.93 23985308.11 0.0290 0.0148

Jupiter 60959-03-22 05:46 G 23985957.54 23985957.74 23985957.95 0.0523 0.0012

Jupiter 60965-09-08 12:58 G 23988319.85 23988320.04 23988320.24 0.0506 0.0154

Jupiter 60970-11-24 19:26 G 23990223.13 23990223.31 23990223.48 0.0526 0.0263

Saturn 60971-04-06 22:34 G 23990356.31 23990356.44 23990356.56 0.0270 0.0214

Saturn 60971-11-22 01:41 G 23990585.36 23990585.57 23990585.78 0.0270 0.0005

Saturn 60972-07-08 04:34 G 23990814.57 23990814.69 23990814.83 0.0270 0.0212

Jupiter 60977-05-14 12:14 G 23992585.80 23992586.01 23992586.21 0.0504 0.0062

Uranus 60980-12-31 15:50 G 23993913.13 23993913.16 23993913.23 0.0141 0.0137

Uranus 60981-08-15 01:26 G 23994139.42 23994139.56 23994139.72 0.0140 0.0101

Uranus 60982-03-29 10:34 G 23994365.76 23994365.94 23994366.14 0.0140 0.0066

Jupiter 60982-07-30 10:34 G 23994488.89 23994488.94 23994489.00 0.0529 0.0510

Uranus 60982-11-10 19:41 G 23994592.11 23994592.32 23994592.54 0.0140 0.0031

Jupiter 60983-03-25 02:24 G 23994726.46 23994726.60 23994726.75 0.0519 0.0360

Uranus 60983-06-25 04:34 G 23994818.47 23994818.69 23994818.91 0.0140 0.0004

Uranus 60984-02-06 13:12 G 23995044.84 23995045.05 23995045.26 0.0139 0.0038

Uranus 60984-09-19 21:36 G 23995271.23 23995271.40 23995271.60 0.0139 0.0073

Uranus 60985-05-04 06:00 G 23995497.63 23995497.75 23995497.90 0.0139 0.0107

Saturn 60986-05-05 23:46 G 23995864.29 23995864.49 23995864.70 0.0289 0.0072

Saturn 60986-12-21 21:07 G 23996094.23 23996094.38 23996094.54 0.0289 0.0195

Mars 60988-07-10 23:17 G 23996661.34 23996661.47 23996661.61 0.1651 0.0989

Jupiter 60989-01-17 11:02 G 23996851.79 23996851.96 23996852.13 0.0501 0.0274

Jupiter 60989-09-11 00:43 G 23997088.49 23997088.53 23997088.58 0.0511 0.0496

Pluto 60992-12-12 10:19 G 23998276.84 23998276.93 23998277.03 0.0063 0.0056

Pluto 60993-07-25 14:10 G 23998501.89 23998502.09 23998502.30 0.0063 0.0022

Pluto 60994-03-07 17:46 G 23998727.04 23998727.24 23998727.47 0.0063 0.0013

Pluto 60994-10-18 21:07 G 23998952.27 23998952.38 23998952.56 0.0064 0.0048

Jupiter 60994-11-27 20:53 G 23998992.17 23998992.37 23998992.57 0.0522 0.0128

Neptune 60997-01-08 00:43 G 23999764.50 23999764.53 23999764.61 0.0088 0.0086

Neptune 60997-08-21 13:55 G 23999990.01 23999990.08 23999990.18 0.0088 0.0081

Neptune 60998-04-04 02:53 G 24000215.52 24000215.62 24000215.74 0.0088 0.0076

Neptune 60998-11-15 15:36 G 24000441.03 24000441.15 24000441.30 0.0088 0.0071

Earth 60998-11-19 05:46 G 24000444.69 24000444.74 24000444.80 0.2668 0.2490

Neptune 60999-06-29 04:34 G 24000666.55 24000666.69 24000666.85 0.0088 0.0066

Neptune 61000-02-09 17:31 G 24000892.08 24000892.23 24000892.40 0.0088 0.0061

Neptune 61000-09-23 06:29 G 24001117.61 24001117.77 24001117.95 0.0088 0.0056

Jupiter 61000-09-23 12:29 G 24001117.97 24001118.02 24001118.09 0.0499 0.0475

Saturn 61000-10-18 00:58 G 24001142.39 24001142.54 24001142.70 0.0270 0.0186

62ND MILLENNIUM CE

This is a list of transits of Venus in the 62nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Neptune	61001-05-06 19:12	G	24001343.14	24001343.30	24001343.50	0.0089	0.0051	
Jupiter	61001-05-17 23:46	G	24001354.32	24001354.49	24001354.66	0.0508	0.0279	
Saturn	61001-06-04 04:05	G	24001371.46	24001371.67	24001371.88	0.0270	0.0026	
Neptune	61001-12-18 08:10	G	24001568.67	24001568.84	24001569.04	0.0089	0.0046	
Saturn	61002-01-19 06:58	G	24001600.70	24001600.79	24001600.89	0.0270	0.0238	
Neptune	61002-07-31 21:07	G	24001794.20	24001794.38	24001794.59	0.0089	0.0041	
Neptune	61003-03-14 10:05	G	24002019.73	24002019.92	24002020.13	0.0089	0.0035	
Neptune	61003-10-25 23:17	G	24002245.26	24002245.47	24002245.68	0.0089	0.0030	
Neptune	61004-06-07 12:00	G	24002470.80	24002471.00	24002471.22	0.0089	0.0025	
Neptune	61005-01-19 00:58	G	24002696.33	24002696.54	24002696.76	0.0089	0.0020	
Neptune	61005-09-01 13:55	G	24002921.87	24002922.08	24002922.30	0.0089	0.0015	
Neptune	61006-04-15 02:53	G	24003147.41	24003147.62	24003147.84	0.0089	0.0009	
Jupiter	61006-08-03 12:58	G	24003257.84	24003258.04	24003258.24	0.0524	0.0113	
Earth	61006-11-17 21:07	G	24003364.23	24003364.38	24003364.53	0.2667	0.0884	
Moon	61006-11-18 02:24	G	24003364.45	24003364.60	24003364.76	0.2670	0.0078	*
Neptune	61006-11-26 15:50	G	24003372.94	24003373.16	24003373.38	0.0089	0.0004	
Neptune	61007-07-10 04:34	G	24003598.48	24003598.69	24003598.91	0.0089	0.0002	
Neptune	61008-02-20 17:31	G	24003824.01	24003824.23	24003824.45	0.0089	0.0007	
Neptune	61008-10-03 06:29	G	24004049.56	24004049.77	24004049.99	0.0089	0.0012	
Neptune	61009-05-16 19:26	G	24004275.10	24004275.31	24004275.53	0.0089	0.0017	

Neptune 61009-12-28 08:24 G 24004500.64 24004500.85 24004501.07 0.0089 0.0022

Neptune 61010-08-10 21:07 G 24004726.19 24004726.38 24004726.60 0.0089 0.0028

Neptune 61011-03-24 10:19 G 24004951.73 24004951.93 24004952.14 0.0089 0.0033

Neptune 61011-11-04 23:17 G 24005177.28 24005177.47 24005177.68 0.0089 0.0038

Neptune 61012-06-17 12:29 G 24005402.83 24005403.02 24005403.21 0.0089 0.0043

Jupiter 61013-01-20 23:17 G 24005620.27 24005620.47 24005620.68 0.0506 0.0066

Neptune 61013-01-29 01:26 G 24005628.38 24005628.56 24005628.75 0.0089 0.0048

Neptune 61013-09-11 14:10 G 24005853.94 24005854.09 24005854.29 0.0089 0.0054

Neptune 61014-04-25 03:22 G 24006079.50 24006079.64 24006079.82 0.0089 0.0059

Neptune 61014-12-06 16:19 G 24006305.05 24006305.18 24006305.35 0.0089 0.0064

Neptune 61015-07-20 05:17 G 24006530.61 24006530.72 24006530.88 0.0089 0.0070

Saturn 61015-11-17 03:36 G 24006650.44 24006650.65 24006650.86 0.0290 0.0042

Neptune 61016-03-01 18:29 G 24006756.17 24006756.27 24006756.41 0.0089 0.0074

Saturn 61016-07-04 00:58 G 24006880.41 24006880.54 24006880.67 0.0290 0.0226

Neptune 61016-10-13 07:41 G 24006981.74 24006981.82 24006981.94 0.0089 0.0079

Neptune 61017-05-26 20:38 G 24007207.31 24007207.36 24007207.45 0.0089 0.0084

Mars 61017-10-01 16:05 G 24007335.16 24007335.17 24007335.18 0.1873 0.1869

Neptune 61018-01-07 09:50 G 24007432.91 24007432.91 24007432.94 0.0089 0.0089

Jupiter 61018-04-08 04:05 G 24007523.52 24007523.67 24007523.81 0.0527 0.0359

Jupiter 61018-12-01 17:02 G 24007761.16 24007761.21 24007761.27 0.0517 0.0495

Jupiter 61024-09-25 23:31 G 24009886.28 24009886.48 24009886.67 0.0503 0.0148

Uranus 61024-12-27 16:48 G 24009979.11 24009979.20 24009979.31 0.0138 0.0121

Uranus 61025-08-11 00:43 G 24010205.38 24010205.53 24010205.71 0.0138 0.0088

Uranus 61026-03-25 09:07 G 24010431.68 24010431.88 24010432.08 0.0138 0.0054

Uranus 61026-11-06 17:17 G 24010658.01 24010658.22 24010658.44 0.0138 0.0021

Uranus 61027-06-21 01:41 G 24010884.36 24010884.57 24010884.79 0.0139 0.0014

Uranus 61028-02-02 10:19 G 24011110.73 24011110.93 24011111.14 0.0139 0.0048

Uranus 61028-09-15 18:58 G 24011337.12 24011337.29 24011337.47 0.0139 0.0082

Uranus 61029-04-30 03:50 G 24011563.55 24011563.66 24011563.79 0.0139 0.0117

Saturn 61030-04-30 07:55 G 24011928.66 24011928.83 24011929.01 0.0270 0.0151

Jupiter 61030-08-06 08:38 G 24012026.68 24012026.86 24012027.04 0.0521 0.0258

Saturn 61030-12-15 11:17 G 24012157.76 24012157.97 24012158.17 0.0270 0.0062

Jupiter 61036-05-31 23:31 G 24014152.34 24014152.48 24014152.63 0.0500 0.0354

Jupiter 61037-01-23 11:31 G 24014388.86 24014388.98 24014389.11 0.0509 0.0405

Jupiter 61042-04-11 01:55 G 24016292.37 24016292.58 24016292.78 0.0523 0.0021

Saturn 61044-10-11 18:00 G 24017207.16 24017207.25 24017207.35 0.0289 0.0256

Saturn 61045-05-29 15:36 G 24017436.94 24017437.15 24017437.37 0.0289 0.0012

Saturn 61046-01-14 12:43 G 24017666.98 24017667.03 24017667.10 0.0289 0.0276

Jupiter 61048-09-28 08:53 G 24018654.68 24018654.87 24018655.06 0.0507 0.0184

Jupiter 61053-12-14 18:58 G 24020558.11 24020558.29 24020558.48 0.0526 0.0219

Mars 61054-05-09 11:17 G 24020703.81 24020703.97 24020704.12 0.1654 0.0710

Saturn 61059-11-10 11:31 G 24022714.79 24022714.98 24022715.17 0.0270 0.0121

Jupiter 61060-06-03 08:38 G 24022920.66 24022920.86 24022921.06 0.0504 0.0028

Saturn 61060-06-26 14:24 G 24022943.90 24022944.10 24022944.30 0.0270 0.0091

Uranus 61065-04-15 09:22 G 24024697.78 24024697.89 24024698.02 0.0140 0.0117

Jupiter 61065-08-19 10:05 G 24024823.83 24024823.92 24024824.02 0.0528 0.0463

Uranus 61065-11-27 18:43 G 24024924.10 24024924.28 24024924.46 0.0140 0.0082

Jupiter 61066-04-14 00:58 G 24025061.42 24025061.54 24025061.67 0.0519 0.0398

Uranus 61066-07-12 03:50 G 24025150.45 24025150.66 24025150.86 0.0140 0.0046

Uranus 61067-02-23 12:43 G 24025376.81 24025377.03 24025377.25 0.0140 0.0011

Uranus 61067-10-07 21:22 G 24025603.18 24025603.39 24025603.61 0.0139 0.0024

Uranus 61068-05-21 05:46 G 24025829.56 24025829.74 24025829.95 0.0139 0.0059

Uranus 61069-01-02 14:24 G 24026055.95 24026056.10 24026056.27 0.0139 0.0092

Uranus 61069-08-16 22:48 G 24026282.38 24026282.45 24026282.55 0.0139 0.0126

Jupiter 61072-02-07 09:36 G 24027186.72 24027186.90 24027187.08 0.0502 0.0235

Saturn 61074-04-23 22:05 G 24027993.29 24027993.42 24027993.55 0.0290 0.0227

Saturn 61074-12-09 19:41 G 24028223.11 24028223.32 24028223.53 0.0290 0.0041

Neptune 61077-12-02 03:22 G 24029311.61 24029311.64 24029311.71 0.0089 0.0086

Jupiter 61077-12-17 17:46 G 24029327.05 24029327.24 24029327.43 0.0521 0.0164

Neptune 61078-07-15 16:48 G 24029537.13 24029537.20 24029537.30 0.0089 0.0081

Neptune 61079-02-26 06:14 G 24029762.66 24029762.76 24029762.88 0.0089 0.0076

Neptune 61079-10-09 19:26 G 24029988.19 24029988.31 24029988.45 0.0089 0.0071

Neptune 61080-05-22 08:38 G 24030213.72 24030213.86 24030214.02 0.0089 0.0066

Neptune 61081-01-02 21:50 G 24030439.26 24030439.41 24030439.58 0.0089 0.0061

Neptune 61081-08-16 10:48 G 24030664.80 24030664.95 24030665.14 0.0089 0.0056

Neptune 61082-03-30 00:14 G 24030890.34 24030890.51 24030890.70 0.0089 0.0051

Neptune 61082-11-10 13:12 G 24031115.88 24031116.05 24031116.26 0.0089 0.0046

Neptune 61083-06-24 02:24 G 24031341.42 24031341.60 24031341.81 0.0089 0.0041

Mars 61083-07-29 20:10 G 24031377.20 24031377.34 24031377.48 0.1870 0.1101

Pluto 61083-09-11 21:07 G 24031421.18 24031421.38 24031421.60 0.0081 0.0024

Jupiter 61083-10-13 11:02 G 24031452.87 24031452.96 24031453.06 0.0499 0.0437

Neptune 61084-02-04 15:50 G 24031566.96 24031567.16 24031567.36 0.0089 0.0035

Pluto 61084-04-24 07:55 G 24031646.66 24031646.83 24031647.01 0.0080 0.0049

Jupiter 61084-06-05 21:50 G 24031689.26 24031689.41 24031689.57 0.0508 0.0314

Neptune 61084-09-17 04:48 G 24031792.50 24031792.70 24031792.92 0.0089 0.0030

Neptune 61085-04-30 18:00 G 24032018.04 24032018.25 24032018.47 0.0089 0.0025

Neptune 61085-12-12 06:58 G 24032243.58 24032243.79 24032244.02 0.0089 0.0020

Neptune 61086-07-25 20:10 G 24032469.13 24032469.34 24032469.56 0.0089 0.0015

Neptune 61087-03-08 09:22 G 24032694.68 24032694.89 24032695.12 0.0089 0.0010

Neptune 61087-10-19 22:34 G 24032920.22 24032920.44 24032920.66 0.0089 0.0004

Neptune 61088-06-01 11:46 G 24033145.77 24033145.99 24033146.21 0.0089 0.0001

Neptune 61089-01-13 00:43 G 24033371.31 24033371.53 24033371.75 0.0089 0.0007

Saturn 61089-05-22 18:14 G 24033501.06 24033501.26 24033501.46 0.0270 0.0086

Jupiter 61089-08-22 07:26 G 24033592.61 24033592.81 24033593.01 0.0525 0.0085

Neptune 61089-08-26 13:55 G 24033596.86 24033597.08 24033597.30 0.0089 0.0012

Saturn 61090-01-06 21:22 G 24033730.20 24033730.39 24033730.58 0.0271 0.0127

Neptune 61090-04-09 03:07 G 24033822.42 24033822.63 24033822.85 0.0089 0.0017

Neptune 61090-11-20 16:05 G 24034047.97 24034048.17 24034048.39 0.0088 0.0023

Neptune 61091-07-04 05:17 G 24034273.52 24034273.72 24034273.93 0.0088 0.0027

Neptune 61092-02-14 18:14 G 24034499.06 24034499.26 24034499.48 0.0088 0.0033

Neptune 61092-09-27 07:26 G 24034724.62 24034724.81 24034725.01 0.0088 0.0038

Neptune 61093-05-10 20:38 G 24034950.17 24034950.36 24034950.55 0.0088 0.0043

Neptune 61093-12-22 09:07 G 24035175.72 24035175.88 24035176.09 0.0088 0.0049

Neptune 61094-08-04 22:05 G 24035401.27 24035401.42 24035401.62 0.0088 0.0054

Neptune 61095-03-18 11:17 G 24035626.82 24035626.97 24035627.16 0.0088 0.0059

Neptune 61095-10-30 00:14 G 24035852.38 24035852.51 24035852.68 0.0088 0.0063

Jupiter 61096-02-09 20:24 G 24035955.15 24035955.35 24035955.55 0.0505 0.0097

Neptune 61096-06-11 12:58 G 24036077.93 24036078.04 24036078.21 0.0088 0.0069

Neptune 61097-01-23 02:38 G 24036303.48 24036303.61 24036303.73 0.0088 0.0073

Neptune 61097-09-05 15:22 G 24036529.05 24036529.14 24036529.25 0.0088 0.0078

Neptune 61098-04-19 04:19 G 24036754.62 24036754.68 24036754.77 0.0088 0.0083

Neptune 61098-11-30 17:02 G 24036980.20 24036980.21 24036980.27 0.0088 0.0088

Jupiter 61101-04-27 23:02 G 24037858.30 24037858.46 24037858.62 0.0527 0.0329

Saturn 61103-11-05 11:02 G 24038779.79 24038779.96 24038780.13 0.0289 0.0173

Saturn 61104-06-22 08:10 G 24039009.65 24039009.84 24039010.05 0.0289 0.0094

Jupiter 61107-10-16 18:14 G 24040221.07 24040221.26 24040221.46 0.0503 0.0119

Uranus 61108-08-28 00:43 G 24040537.50 24040537.53 24040537.56 0.0138 0.0136

Uranus 61109-04-11 08:38 G 24040763.72 24040763.86 24040764.00 0.0138 0.0103

Uranus 61109-11-23 16:19 G 24040990.01 24040990.18 24040990.38 0.0138 0.0071

Uranus 61110-07-08 00:43 G 24041216.33 24041216.53 24041216.75 0.0138 0.0036

Uranus 61111-02-19 09:22 G 24041442.67 24041442.89 24041443.11 0.0138 0.0002

Uranus 61111-10-03 17:46 G 24041669.03 24041669.24 24041669.46 0.0139 0.0032

Uranus 61112-05-17 02:24 G 24041895.41 24041895.60 24041895.79 0.0139 0.0066

Uranus 61112-12-29 10:48 G 24042121.82 24042121.95 24042122.12 0.0139 0.0102

Uranus 61113-08-12 19:55 G 24042348.29 24042348.33 24042348.39 0.0139 0.0136

Jupiter 61113-08-26 07:41 G 24042361.66 24042361.82 24042361.99 0.0520 0.0299

Saturn 61118-04-18 19:26 G 24044058.29 24044058.31 24044058.35 0.0270 0.0266

Saturn 61118-12-03 22:34 G 24044287.24 24044287.44 24044287.65 0.0270 0.0055

Jupiter 61119-06-21 19:12 G 24044487.15 24044487.30 24044487.45 0.0501 0.0323

Saturn 61119-07-21 01:26 G 24044516.40 24044516.56 24044516.74 0.0270 0.0158

Jupiter 61120-02-13 07:41 G 24044723.72 24044723.82 24044723.93 0.0510 0.0436

Mars 61120-03-06 22:48 G 24044746.28 24044746.45 24044746.61 0.1656 0.0412

Jupiter 61125-05-01 00:58 G 24046627.33 24046627.54 24046627.74 0.0523 0.0064

Jupiter 61131-10-19 07:12 G 24048989.62 24048989.80 24048989.98 0.0507 0.0222

Saturn 61133-05-17 14:24 G 24049565.92 24049566.10 24049566.29 0.0290 0.0144

Saturn 61134-01-02 11:46 G 24049795.80 24049795.99 24049796.19 0.0290 0.0123

Jupiter 61137-01-03 16:05 G 24050892.98 24050893.17 24050893.37 0.0525 0.0181

Jupiter 61143-06-24 06:58 G 24053255.59 24053255.79 24053255.99 0.0504 0.0009

Moon 61144-05-18 08:10 G 24053584.70 24053584.84 24053584.99 0.2660 0.1284

Earth 61144-05-18 12:00 G 24053584.86 24053585.00 24053585.14 0.2665 0.1310 *

Saturn 61147-10-30 01:12 G 24054844.46 24054844.55 24054844.67 0.0270 0.0234

Saturn 61148-06-15 04:34 G 24055073.48 24055073.69 24055073.90 0.0270 0.0021

Jupiter 61148-09-08 04:34 G 24055158.57 24055158.69 24055158.80 0.0528 0.0435

Uranus 61148-12-14 16:48 G 24055256.15 24055256.20 24055256.28 0.0141 0.0133

Saturn 61149-01-30 07:41 G 24055302.68 24055302.82 24055302.97 0.0271 0.0192

Jupiter 61149-05-03 19:26 G 24055396.20 24055396.31 24055396.43 0.0519 0.0424

Mars 61149-05-26 23:31 G 24055419.31 24055419.48 24055419.66 0.1867 0.0307

Uranus 61149-07-29 02:24 G 24055482.45 24055482.60 24055482.76 0.0140 0.0097

Uranus 61150-03-12 11:31 G 24055708.79 24055708.98 24055709.18 0.0140 0.0062

Uranus 61150-10-24 20:38 G 24055935.15 24055935.36 24055935.58 0.0140 0.0027

Uranus 61151-06-08 05:31 G 24056161.51 24056161.73 24056161.95 0.0140 0.0008

Uranus 61152-01-20 14:10 G 24056387.89 24056388.09 24056388.30 0.0139 0.0043

Earth 61152-05-16 02:53 G 24056504.52 24056504.62 24056504.72 0.2666 0.2095

Uranus 61152-09-02 22:48 G 24056614.28 24056614.45 24056614.64 0.0139 0.0077

Uranus 61153-04-17 07:26 G 24056840.69 24056840.81 24056840.95 0.0139 0.0111

Jupiter 61155-02-27 06:43 G 24057521.59 24057521.78 24057521.97 0.0502 0.0201

Neptune 61160-08-30 23:46 G 24059533.48 24059533.49 24059533.52 0.0088 0.0088

Jupiter 61161-01-06 12:43 G 24059661.84 24059662.03 24059662.22 0.0522 0.0192

Neptune 61161-04-13 12:14 G 24059758.96 24059759.01 24059759.11 0.0088 0.0084

Neptune 61161-11-25 00:58 G 24059984.47 24059984.54 24059984.66 0.0088 0.0079

Neptune 61162-07-08 13:55 G 24060209.98 24060210.08 24060210.22 0.0088 0.0074

Saturn 61162-11-28 03:22 G 24060352.45 24060352.64 24060352.85 0.0289 0.0091

Neptune 61163-02-19 02:53 G 24060435.49 24060435.62 24060435.77 0.0088 0.0069

Saturn 61163-07-16 00:58 G 24060582.37 24060582.54 24060582.71 0.0289 0.0176

Neptune 61163-10-02 15:50 G 24060661.02 24060661.16 24060661.32 0.0088 0.0064

Neptune 61164-05-15 04:34 G 24060886.54 24060886.69 24060886.87 0.0088 0.0059

Neptune 61164-12-26 17:31 G 24061112.07 24061112.23 24061112.41 0.0088 0.0054

Neptune 61165-08-09 06:29 G 24061337.60 24061337.77 24061337.96 0.0089 0.0049

Neptune 61166-03-22 19:26 G 24061563.13 24061563.31 24061563.51 0.0089 0.0044

Jupiter 61166-11-02 05:31 G 24061787.61 24061787.73 24061787.84 0.0499 0.0408

Neptune 61166-11-03 08:10 G 24061788.66 24061788.84 24061789.05 0.0089 0.0039

Neptune 61167-06-16 21:07 G 24062014.19 24062014.38 24062014.60 0.0089 0.0034

Jupiter 61167-06-26 16:19 G 24062024.03 24062024.18 24062024.33 0.0508 0.0341

Neptune 61168-01-28 10:05 G 24062239.72 24062239.92 24062240.14 0.0089 0.0028

Neptune 61168-09-09 23:17 G 24062465.26 24062465.47 24062465.69 0.0089 0.0023

Neptune 61169-04-23 12:14 G 24062690.80 24062691.01 24062691.23 0.0089 0.0018

Neptune 61169-12-05 01:12 G 24062916.33 24062916.55 24062916.77 0.0089 0.0013

Neptune 61170-07-18 13:55 G 24063141.87 24063142.08 24063142.31 0.0089 0.0008

Neptune 61171-03-01 02:53 G 24063367.41 24063367.62 24063367.85 0.0089 0.0003

Neptune 61171-10-12 16:05 G 24063592.95 24063593.17 24063593.39 0.0089 0.0003

Neptune 61172-05-25 04:48 G 24063818.49 24063818.70 24063818.92 0.0089 0.0009

Jupiter 61172-09-11 06:43 G 24063927.58 24063927.78 24063927.98 0.0524 0.0042

Neptune 61173-01-05 17:46 G 24064044.03 24064044.24 24064044.46 0.0089 0.0013

Neptune 61173-08-19 06:43 G 24064269.57 24064269.78 24064270.00 0.0089 0.0019

Neptune 61174-04-01 19:41 G 24064495.11 24064495.32 24064495.53 0.0089 0.0024

Neptune 61174-11-13 08:38 G 24064720.66 24064720.86 24064721.07 0.0089 0.0029

Neptune 61175-06-26 21:36 G 24064946.20 24064946.40 24064946.60 0.0089 0.0034

Neptune 61176-02-07 10:19 G 24065171.75 24065171.93 24065172.14 0.0089 0.0040

Neptune 61176-09-19 23:17 G 24065397.30 24065397.47 24065397.68 0.0089 0.0045

Neptune 61177-05-03 12:29 G 24065622.85 24065623.02 24065623.21 0.0089 0.0050

Saturn 61177-05-11 06:58 G 24065630.65 24065630.79 24065630.93 0.0270 0.0199

Neptune 61177-12-15 01:26 G 24065848.40 24065848.56 24065848.75 0.0089 0.0055

Saturn 61177-12-26 09:50 G 24065859.70 24065859.91 24065860.12 0.0270 0.0012

Neptune 61178-07-28 14:24 G 24066073.96 24066074.10 24066074.28 0.0089 0.0060

Saturn 61178-08-12 12:43 G 24066088.92 24066089.03 24066089.15 0.0270 0.0224

Jupiter 61179-03-01 15:50 G 24066289.96 24066290.16 24066290.35 0.0506 0.0128

Neptune 61179-03-11 03:36 G 24066299.51 24066299.65 24066299.81 0.0089 0.0065

Neptune 61179-10-22 16:48 G 24066525.08 24066525.20 24066525.35 0.0089 0.0070

Neptune 61180-06-04 05:46 G 24066750.64 24066750.74 24066750.87 0.0089 0.0075

Neptune 61181-01-15 18:43 G 24066976.21 24066976.28 24066976.40 0.0089 0.0081

Neptune 61181-08-29 07:55 G 24067201.79 24067201.83 24067201.91 0.0089 0.0085

Jupiter 61184-05-16 22:48 G 24068193.27 24068193.45 24068193.62 0.0527 0.0283

Mars 61186-01-02 10:34 G 24068788.77 24068788.94 24068789.11 0.1658 0.0121

Jupiter 61190-11-04 16:19 G 24070555.98 24070556.18 24070556.38 0.0503 0.0081

Saturn 61192-06-09 06:29 G 24071138.57 24071138.77 24071138.98 0.0290 0.0062

Uranus 61192-12-09 15:50 G 24071322.05 24071322.16 24071322.27 0.0138 0.0119

Saturn 61193-01-25 03:50 G 24071368.51 24071368.66 24071368.81 0.0290 0.0205

Uranus 61193-07-23 23:31 G 24071548.32 24071548.48 24071548.66 0.0138 0.0086

Uranus 61194-03-07 08:10 G 24071774.64 24071774.84 24071775.04 0.0138 0.0052

Uranus 61194-10-19 16:19 G 24072000.97 24072001.18 24072001.40 0.0138 0.0019

Uranus 61195-06-03 00:43 G 24072227.32 24072227.53 24072227.75 0.0139 0.0016

Uranus 61196-01-15 09:22 G 24072453.69 24072453.89 24072454.10 0.0139 0.0050

Jupiter 61196-01-20 12:58 G 24072459.04 24072459.04 24072459.04 0.0529 0.0529

Uranus 61196-08-28 18:14 G 24072680.09 24072680.26 24072680.43 0.0139 0.0084

Jupiter 61196-09-14 05:02 G 24072696.56 24072696.71 24072696.87 0.0520 0.0333

Uranus 61197-04-12 02:53 G 24072906.52 24072906.62 24072906.74 0.0139 0.0119

Jupiter 61202-07-10 17:31 G 24074822.07 24074822.23 24074822.40 0.0501 0.0286

Jupiter 61203-03-04 06:14 G 24075058.69 24075058.76 24075058.84 0.0510 0.0471

Saturn 61206-11-21 11:46 G 24076416.84 24076416.99 24076417.17 0.0270 0.0168

Saturn 61207-07-08 15:07 G 24076645.92 24076646.13 24076646.34 0.0270 0.0045

Saturn 61208-02-22 18:00 G 24076875.20 24076875.25 24076875.33 0.0271 0.0258

Jupiter 61208-05-19 19:26 G 24076962.11 24076962.31 24076962.51 0.0523 0.0091

Jupiter 61214-03-15 18:43 G 24079088.23 24079088.28 24079088.32 0.0498 0.0485

Jupiter 61214-11-07 04:19 G 24079324.51 24079324.68 24079324.86 0.0507 0.0256

Mars 61215-03-24 03:36 G 24079461.48 24079461.65 24079461.82 0.1864 0.0447

Jupiter 61220-01-23 11:17 G 24081227.78 24081227.97 24081228.17 0.0526 0.0150

Saturn 61221-05-04 21:22 G 24081695.34 24081695.39 24081695.46 0.0289 0.0276

Saturn 61221-12-20 18:58 G 24081925.08 24081925.29 24081925.51 0.0289 0.0011

Saturn 61222-08-07 16:05 G 24082155.09 24082155.17 24082155.28 0.0289 0.0257

Jupiter 61226-07-13 01:26 G 24083590.35 24083590.56 24083590.76 0.0504 0.0039

Jupiter 61231-09-28 03:50 G 24085493.53 24085493.66 24085493.80 0.0528 0.0389

Jupiter 61232-05-22 18:43 G 24085731.20 24085731.28 24085731.38 0.0519 0.0465

Uranus 61233-03-28 10:05 G 24086040.80 24086040.92 24086041.05 0.0140 0.0114

Uranus 61233-11-09 19:12 G 24086267.13 24086267.30 24086267.49 0.0140 0.0078

Uranus 61234-06-24 04:19 G 24086493.48 24086493.68 24086493.89 0.0140 0.0043

Uranus 61235-02-05 13:26 G 24086719.84 24086720.06 24086720.28 0.0140 0.0008

Uranus 61235-09-19 22:19 G 24086946.22 24086946.43 24086946.65 0.0139 0.0027

Uranus 61236-05-03 06:58 G 24087172.60 24087172.79 24087172.99 0.0139 0.0062

Saturn 61236-06-02 18:00 G 24087203.07 24087203.25 24087203.44 0.0270 0.0134

Uranus 61236-12-15 15:22 G 24087399.00 24087399.14 24087399.31 0.0139 0.0096

Saturn 61237-01-17 20:53 G 24087432.17 24087432.37 24087432.57 0.0270 0.0078

Uranus 61237-07-29 23:46 G 24087625.43 24087625.49 24087625.58 0.0139 0.0130

Jupiter 61238-03-18 01:55 G 24087856.39 24087856.58 24087856.77 0.0502 0.0170

Pluto 61240-11-16 20:53 G 24088831.29 24088831.37 24088831.48 0.0063 0.0056

Pluto 61241-06-30 00:43 G 24089056.33 24089056.53 24089056.75 0.0063 0.0022

Neptune 61241-07-24 01:12 G 24089080.55 24089080.55 24089080.55 0.0089 0.0089

Moon 61241-11-21 06:14 G 24089200.67 24089200.76 24089200.85 0.2660 0.2244

Earth 61241-11-21 07:12 G 24089200.76 24089200.80 24089200.85 0.2668 0.2557 *

Pluto 61242-02-10 04:48 G 24089281.49 24089281.70 24089281.92 0.0063 0.0012

Neptune 61242-03-06 14:10 G 24089306.04 24089306.09 24089306.18 0.0089 0.0084

Pluto 61242-09-23 08:10 G 24089506.72 24089506.84 24089507.01 0.0063 0.0048

Neptune 61242-10-18 03:36 G 24089531.56 24089531.65 24089531.76 0.0089 0.0079

Neptune 61243-05-31 16:48 G 24089757.09 24089757.20 24089757.33 0.0089 0.0074

Neptune 61244-01-12 06:00 G 24089982.63 24089982.75 24089982.90 0.0089 0.0069

Jupiter 61244-01-26 12:43 G 24089996.85 24089997.03 24089997.21 0.0521 0.0236

Neptune 61244-08-24 19:26 G 24090208.17 24090208.31 24090208.47 0.0089 0.0064

Neptune 61245-04-07 08:38 G 24090433.71 24090433.86 24090434.04 0.0089 0.0059

Neptune 61245-11-18 21:50 G 24090659.25 24090659.41 24090659.60 0.0089 0.0054

Neptune 61246-07-02 11:02 G 24090884.79 24090884.96 24090885.15 0.0089 0.0049

Neptune 61247-02-13 00:14 G 24091110.33 24091110.51 24091110.71 0.0089 0.0044

Neptune 61247-09-26 13:26 G 24091335.87 24091336.06 24091336.27 0.0089 0.0039

Neptune 61248-05-09 02:24 G 24091561.41 24091561.60 24091561.82 0.0089 0.0034

Neptune 61248-12-20 15:50 G 24091786.96 24091787.16 24091787.37 0.0089 0.0028

Neptune 61249-08-03 05:02 G 24092012.50 24092012.71 24092012.92 0.0089 0.0023

Moon 61249-11-18 18:00 G 24092120.12 24092120.25 24092120.38 0.2662 0.1512

Earth 61249-11-18 22:48 G 24092120.30 24092120.45 24092120.60 0.2666 0.0786 *

Jupiter 61249-11-21 03:22 G 24092122.51 24092122.64 24092122.78 0.0500 0.0371

Neptune 61250-03-16 18:14 G 24092238.05 24092238.26 24092238.48 0.0089 0.0018

Jupiter 61250-07-15 15:07 G 24092358.99 24092359.13 24092359.26 0.0509 0.0379

Neptune 61250-10-28 07:12 G 24092463.59 24092463.80 24092464.03 0.0089 0.0013

Saturn 61250-11-14 23:46 G 24092481.39 24092481.49 24092481.60 0.0290 0.0250

Neptune 61251-06-10 20:24 G 24092689.13 24092689.35 24092689.57 0.0089 0.0008

Saturn 61251-07-02 21:22 G 24092711.18 24092711.39 24092711.60 0.0290 0.0018

Mars 61251-10-30 22:19 G 24092831.26 24092831.43 24092831.60 0.1660 0.0174

Neptune 61252-01-22 09:36 G 24092914.68 24092914.90 24092915.12 0.0089 0.0002

Saturn 61252-02-17 18:43 G 24092941.24 24092941.28 24092941.32 0.0290 0.0283

Neptune 61252-09-03 22:34 G 24093140.22 24093140.44 24093140.67 0.0089 0.0004

Neptune 61253-04-17 11:46 G 24093365.78 24093365.99 24093366.22 0.0089 0.0009

Neptune 61253-11-29 00:58 G 24093591.32 24093591.54 24093591.76 0.0089 0.0014

Neptune 61254-07-12 13:55 G 24093816.87 24093817.08 24093817.30 0.0089 0.0019

Neptune 61255-02-23 03:22 G 24094042.42 24094042.64 24094042.85 0.0088 0.0024

Jupiter 61255-10-01 05:02 G 24094262.51 24094262.71 24094262.91 0.0524 0.0002

Neptune 61255-10-06 16:05 G 24094267.97 24094268.17 24094268.39 0.0088 0.0029

Neptune 61256-05-19 05:17 G 24094493.53 24094493.72 24094493.93 0.0088 0.0034

Neptune 61256-12-30 18:14 G 24094719.08 24094719.26 24094719.47 0.0088 0.0040

Neptune 61257-08-13 07:26 G 24094944.63 24094944.81 24094945.01 0.0088 0.0045

Neptune 61258-03-26 20:38 G 24095170.19 24095170.36 24095170.55 0.0088 0.0050

Neptune 61258-11-07 09:36 G 24095395.74 24095395.90 24095396.09 0.0088 0.0055

Neptune 61259-06-20 22:34 G 24095621.29 24095621.44 24095621.62 0.0088 0.0060

Neptune 61260-02-01 11:31 G 24095846.84 24095846.98 24095847.14 0.0088 0.0065

Neptune 61260-09-14 00:29 G 24096072.40 24096072.52 24096072.67 0.0088 0.0070

Neptune 61261-04-27 13:26 G 24096297.96 24096298.06 24096298.20 0.0088 0.0075

Neptune 61261-12-09 02:24 G 24096523.53 24096523.60 24096523.72 0.0088 0.0079

Jupiter 61262-03-20 14:53 G 24096624.93 24096625.12 24096625.31 0.0506 0.0166

Neptune 61262-07-22 15:50 G 24096749.09 24096749.16 24096749.23 0.0088 0.0084

Saturn 61265-12-13 22:05 G 24097989.23 24097989.42 24097989.62 0.0270 0.0104

Saturn 61266-07-31 00:58 G 24098218.35 24098218.54 24098218.74 0.0270 0.0109

Jupiter 61267-06-05 18:00 G 24098528.08 24098528.25 24098528.43 0.0527 0.0251

Jupiter 61273-11-23 14:24 G 24100890.90 24100891.10 24100891.30 0.0503 0.0045

Uranus 61276-08-08 23:17 G 24101880.45 24101880.47 24101880.53 0.0137 0.0135

Uranus 61277-03-23 07:26 G 24102106.68 24102106.81 24102106.97 0.0138 0.0102

Uranus 61277-11-04 15:36 G 24102332.97 24102333.15 24102333.35 0.0138 0.0068

Uranus 61278-06-19 00:00 G 24102559.29 24102559.50 24102559.71 0.0138 0.0034

Uranus 61279-01-31 08:24 G 24102785.63 24102785.85 24102786.07 0.0138 0.0002

Jupiter 61279-02-08 08:38 G 24102793.79 24102793.86 24102793.93 0.0529 0.0496

Uranus 61279-09-14 17:02 G 24103012.00 24103012.21 24103012.42 0.0139 0.0034

Jupiter 61279-10-04 00:58 G 24103031.40 24103031.54 24103031.69 0.0520 0.0364

Uranus 61280-04-28 01:12 G 24103238.38 24103238.55 24103238.76 0.0139 0.0069

Saturn 61280-05-27 11:31 G 24103267.83 24103267.98 24103268.13 0.0290 0.0199

Uranus 61280-12-10 10:05 G 24103464.79 24103464.92 24103465.08 0.0139 0.0103

Saturn 61281-01-12 09:07 G 24103497.67 24103497.88 24103498.09 0.0289 0.0068

Mars 61281-01-18 07:26 G 24103503.68 24103503.81 24103503.94 0.1861 0.1210

Uranus 61281-07-24 18:58 G 24103691.27 24103691.29 24103691.33 0.0139 0.0138

Jupiter 61285-07-29 12:29 G 24105156.84 24105157.02 24105157.19 0.0501 0.0254

Jupiter 61286-03-23 00:58 G 24105393.50 24105393.54 24105393.58 0.0510 0.0498

Jupiter 61291-06-08 19:26 G 24107297.11 24107297.31 24107297.51 0.0523 0.0136

Saturn 61295-06-26 04:19 G 24108775.48 24108775.68 24108775.89 0.0269 0.0070

Saturn 61296-02-10 07:12 G 24109004.62 24109004.80 24109004.98 0.0270 0.0142

Jupiter 61297-04-03 14:10 G 24109423.01 24109423.09 24109423.17 0.0498 0.0452

Jupiter 61297-11-26 00:00 G 24109659.33 24109659.50 24109659.67 0.0507 0.0286

Jupiter 61303-02-12 12:14 G 24111562.81 24111563.01 24111563.21 0.0525 0.0101

Jupiter 61309-08-02 00:14 G 24113925.31 24113925.51 24113925.71 0.0505 0.0077

Saturn 61309-12-08 13:12 G 24114053.89 24114054.05 24114054.23 0.0290 0.0174

Saturn 61310-07-26 10:48 G 24114283.75 24114283.95 24114284.15 0.0290 0.0093

Jupiter 61314-10-18 03:36 G 24115828.50 24115828.65 24115828.80 0.0528 0.0343

Jupiter 61315-06-12 17:46 G 24116066.19 24116066.24 24116066.29 0.0518 0.0502

Uranus 61316-11-26 16:48 G 24116599.14 24116599.20 24116599.30 0.0141 0.0131

Uranus 61317-07-11 02:38 G 24116825.45 24116825.61 24116825.77 0.0140 0.0095

Mars 61317-08-28 09:36 G 24116873.74 24116873.90 24116874.07 0.1662 0.0479

Uranus 61318-02-22 11:46 G 24117051.80 24117051.99 24117052.20 0.0140 0.0060

Uranus 61318-10-06 21:07 G 24117278.17 24117278.38 24117278.59 0.0140 0.0024

Uranus 61319-05-21 06:00 G 24117504.53 24117504.75 24117504.97 0.0140 0.0011

Uranus 61320-01-02 14:38 G 24117730.91 24117731.11 24117731.32 0.0139 0.0046

Uranus 61320-08-15 23:31 G 24117957.31 24117957.48 24117957.66 0.0139 0.0080

Uranus 61321-03-30 07:41 G 24118183.72 24118183.82 24118183.97 0.0139 0.0115

Jupiter 61321-04-07 01:26 G 24118191.37 24118191.56 24118191.76 0.0502 0.0129

Saturn 61324-05-22 04:19 G 24119332.62 24119332.68 24119332.76 0.0270 0.0253

Neptune 61324-12-03 11:02 G 24119527.92 24119527.96 24119528.02 0.0088 0.0086

Saturn 61325-01-06 07:26 G 24119561.60 24119561.81 24119562.02 0.0270 0.0042

Neptune 61325-07-17 00:00 G 24119753.42 24119753.50 24119753.59 0.0088 0.0081

Saturn 61325-08-23 10:05 G 24119790.76 24119790.92 24119791.09 0.0270 0.0170

Neptune 61326-02-27 12:14 G 24119978.93 24119979.01 24119979.14 0.0088 0.0077

Neptune 61326-10-11 01:12 G 24120204.44 24120204.55 24120204.70 0.0088 0.0072

Jupiter 61327-02-15 09:07 G 24120331.71 24120331.88 24120332.05 0.0521 0.0269

Neptune 61327-05-24 14:10 G 24120429.96 24120430.09 24120430.25 0.0088 0.0067

Neptune 61328-01-05 02:53 G 24120655.48 24120655.62 24120655.79 0.0088 0.0062

Neptune 61328-08-17 15:50 G 24120881.01 24120881.16 24120881.34 0.0088 0.0057

Neptune 61329-03-31 04:48 G 24121106.53 24121106.70 24121106.89 0.0088 0.0052

Neptune 61329-11-11 17:31 G 24121332.06 24121332.23 24121332.43 0.0089 0.0047

Neptune 61330-06-25 06:29 G 24121557.58 24121557.77 24121557.97 0.0089 0.0042

Neptune 61331-02-05 19:12 G 24121783.11 24121783.30 24121783.51 0.0089 0.0037

Pluto 61331-08-17 07:55 G 24121975.64 24121975.83 24121976.06 0.0081 0.0025

Neptune 61331-09-19 08:24 G 24122008.65 24122008.85 24122009.06 0.0089 0.0031

Pluto 61332-03-29 18:43 G 24122201.12 24122201.28 24122201.47 0.0080 0.0048

Neptune 61332-05-01 21:07 G 24122234.19 24122234.38 24122234.61 0.0089 0.0027

Jupiter 61332-12-11 02:10 G 24122457.44 24122457.59 24122457.74 0.0500 0.0331

Neptune 61332-12-13 10:05 G 24122459.72 24122459.92 24122460.15 0.0089 0.0022

Neptune 61333-07-26 23:17 G 24122685.25 24122685.47 24122685.69 0.0089 0.0016

Jupiter 61333-08-04 13:41 G 24122693.96 24122694.07 24122694.19 0.0509 0.0416

Neptune 61334-03-09 12:14 G 24122910.79 24122911.01 24122911.23 0.0089 0.0011

Neptune 61334-10-21 01:12 G 24123136.33 24123136.55 24123136.77 0.0089 0.0006

Neptune 61335-06-03 14:10 G 24123361.87 24123362.09 24123362.31 0.0089 0.0000

Neptune 61336-01-15 03:07 G 24123587.41 24123587.63 24123587.85 0.0089 0.0005

Neptune 61336-08-27 16:05 G 24123812.95 24123813.17 24123813.39 0.0089 0.0010

Neptune 61337-04-10 05:02 G 24124038.49 24124038.71 24124038.93 0.0089 0.0015

Neptune 61337-11-21 17:46 G 24124264.03 24124264.24 24124264.46 0.0089 0.0021

Neptune 61338-07-05 06:29 G 24124489.57 24124489.77 24124489.99 0.0089 0.0026

Jupiter 61338-10-21 01:41 G 24124597.37 24124597.57 24124597.77 0.0524 0.0034

Neptune 61339-02-15 19:26 G 24124715.12 24124715.31 24124715.53 0.0089 0.0031

Saturn 61339-06-20 23:17 G 24124840.29 24124840.47 24124840.67 0.0290 0.0127

Neptune 61339-09-29 08:24 G 24124940.67 24124940.85 24124941.07 0.0089 0.0036

Saturn 61340-02-05 21:07 G 24125070.19 24125070.38 24125070.56 0.0289 0.0140

Neptune 61340-05-11 21:22 G 24125166.21 24125166.39 24125166.60 0.0089 0.0041

Neptune 61340-12-23 10:19 G 24125391.76 24125391.93 24125392.13 0.0089 0.0046

Neptune 61341-08-05 23:17 G 24125617.30 24125617.47 24125617.66 0.0089 0.0051

Neptune 61342-03-19 12:14 G 24125842.86 24125843.01 24125843.19 0.0089 0.0056

Neptune 61342-10-31 01:26 G 24126068.41 24126068.56 24126068.73 0.0089 0.0061

Neptune 61343-06-13 14:24 G 24126293.97 24126294.10 24126294.26 0.0089 0.0066

Neptune 61344-01-25 03:22 G 24126519.53 24126519.64 24126519.78 0.0089 0.0071

Neptune 61344-09-06 16:34 G 24126745.09 24126745.19 24126745.31 0.0089 0.0076

Jupiter 61345-04-09 10:05 G 24126959.74 24126959.92 24126960.11 0.0506 0.0198

Neptune 61345-04-20 05:31 G 24126970.66 24126970.73 24126970.84 0.0089 0.0081

Neptune 61345-12-01 18:29 G 24127196.24 24127196.27 24127196.35 0.0089 0.0087

Jupiter 61350-06-25 18:29 G 24128863.09 24128863.27 24128863.46 0.0527 0.0203

Saturn 61353-12-02 11:17 G 24130118.85 24130118.97 24130119.10 0.0269 0.0218

Saturn 61354-07-19 13:55 G 24130347.87 24130348.08 24130348.29 0.0269 0.0007

Saturn 61355-03-05 16:34 G 24130577.05 24130577.19 24130577.33 0.0270 0.0204

Jupiter 61356-12-13 10:19 G 24131225.73 24131225.93 24131226.14 0.0503 0.0015

Uranus 61360-11-21 14:53 G 24132665.03 24132665.12 24132665.25 0.0138 0.0117

Uranus 61361-07-05 23:02 G 24132891.30 24132891.46 24132891.65 0.0138 0.0084

Uranus 61362-02-17 07:26 G 24133117.61 24133117.81 24133118.02 0.0138 0.0050

Jupiter 61362-02-28 10:19 G 24133128.83 24133128.93 24133129.05 0.0529 0.0444

Uranus 61362-10-01 15:50 G 24133343.95 24133344.16 24133344.38 0.0138 0.0016

Jupiter 61362-10-24 02:24 G 24133366.48 24133366.60 24133366.73 0.0520 0.0411

Uranus 61363-05-16 00:14 G 24133570.29 24133570.51 24133570.73 0.0138 0.0018

Uranus 61363-12-28 08:38 G 24133796.66 24133796.86 24133797.07 0.0139 0.0053

Uranus 61364-08-10 17:17 G 24134023.06 24134023.22 24134023.40 0.0139 0.0087

Uranus 61365-03-25 02:24 G 24134249.50 24134249.60 24134249.70 0.0139 0.0122

Jupiter 61368-08-18 11:46 G 24135491.81 24135491.99 24135492.17 0.0501 0.0214

Saturn 61368-12-31 00:43 G 24135626.34 24135626.53 24135626.73 0.0290 0.0103

Saturn 61369-08-17 22:05 G 24135856.26 24135856.42 24135856.61 0.0290 0.0165

Jupiter 61374-06-28 19:41 G 24137632.13 24137632.32 24137632.52 0.0522 0.0181

Jupiter 61380-04-23 13:55 G 24139757.97 24139758.08 24139758.20 0.0499 0.0411

Jupiter 61380-12-16 00:29 G 24139994.37 24139994.52 24139994.68 0.0508 0.0328

Saturn 61383-06-14 12:43 G 24140904.89 24140905.03 24140905.18 0.0270 0.0193

Mars 61383-06-25 21:36 G 24140916.24 24140916.40 24140916.55 0.1665 0.0774

Saturn 61384-01-29 15:36 G 24141133.94 24141134.15 24141134.36 0.0270 0.0018

Saturn 61384-09-14 18:29 G 24141363.16 24141363.27 24141363.38 0.0270 0.0229

Jupiter 61386-03-03 10:05 G 24141897.72 24141897.92 24141898.12 0.0525 0.0062

Earth 61387-05-20 12:58 G 24142340.90 24142341.04 24142341.17 0.2666 0.1375

Moon 61387-05-20 14:10 G 24142340.96 24142341.09 24142341.22 0.2672 0.1304 *

Jupiter 61392-08-20 23:46 G 24144260.30 24144260.49 24144260.69 0.0505 0.0118

Earth 61395-05-18 03:22 G 24145260.55 24145260.64 24145260.74 0.2667 0.2080

Moon 61395-05-18 08:10 G 24145260.71 24145260.84 24145260.97 0.2670 0.1305 *

Jupiter 61397-11-06 01:12 G 24146163.38 24146163.55 24146163.72 0.0528 0.0304

Saturn 61398-07-13 09:36 G 24146412.70 24146412.90 24146413.11 0.0290 0.0059

Saturn 61399-02-28 07:12 G 24146642.66 24146642.80 24146642.95 0.0289 0.0208

Uranus 61401-03-11 10:05 G 24147383.80 24147383.92 24147384.06 0.0140 0.0111

Uranus 61401-10-23 19:26 G 24147610.14 24147610.31 24147610.50 0.0140 0.0075

Uranus 61402-06-07 04:34 G 24147836.49 24147836.69 24147836.91 0.0140 0.0040

Uranus 61403-01-19 13:55 G 24148062.86 24148063.08 24148063.30 0.0140 0.0005

Uranus 61403-09-02 22:48 G 24148289.24 24148289.45 24148289.67 0.0139 0.0031

Uranus 61404-04-16 07:26 G 24148515.63 24148515.81 24148516.01 0.0139 0.0066

Jupiter 61404-04-26 21:50 G 24148526.21 24148526.41 24148526.61 0.0502 0.0094

Uranus 61404-11-28 16:19 G 24148742.03 24148742.18 24148742.33 0.0139 0.0099

Uranus 61405-07-13 00:43 G 24148968.48 24148968.53 24148968.59 0.0139 0.0133

Neptune 61405-10-27 11:31 G 24149074.96 24149074.98 24149075.05 0.0089 0.0087

Neptune 61406-06-10 00:43 G 24149300.47 24149300.53 24149300.63 0.0089 0.0082

Neptune 61407-01-21 14:10 G 24149525.99 24149526.09 24149526.21 0.0089 0.0077

Neptune 61407-09-04 03:22 G 24149751.53 24149751.64 24149751.78 0.0089 0.0072

Neptune 61408-04-16 16:34 G 24149977.06 24149977.19 24149977.35 0.0089 0.0067

Neptune 61408-11-28 06:00 G 24150202.60 24150202.75 24150202.92 0.0089 0.0062

Neptune 61409-07-11 19:12 G 24150428.14 24150428.30 24150428.48 0.0089 0.0057

Neptune 61410-02-22 08:24 G 24150653.69 24150653.85 24150654.04 0.0089 0.0052

Jupiter 61410-03-07 10:19 G 24150666.77 24150666.93 24150667.09 0.0521 0.0316

Neptune 61410-10-05 21:36 G 24150879.23 24150879.40 24150879.60 0.0089 0.0047

Neptune 61411-05-19 10:48 G 24151104.77 24151104.95 24151105.16 0.0089 0.0042

Neptune 61411-12-31 00:00 G 24151330.31 24151330.50 24151330.71 0.0089 0.0037

Neptune 61412-08-12 13:12 G 24151555.85 24151556.05 24151556.27 0.0089 0.0032

Saturn 61412-12-25 19:26 G 24151691.15 24151691.31 24151691.49 0.0269 0.0159

Neptune 61413-03-26 02:24 G 24151781.40 24151781.60 24151781.83 0.0089 0.0027

Saturn 61413-08-11 22:19 G 24151920.22 24151920.43 24151920.63 0.0269 0.0053

Neptune 61413-11-06 15:50 G 24152006.95 24152007.16 24152007.38 0.0089 0.0021

Saturn 61414-03-29 00:43 G 24152149.49 24152149.53 24152149.58 0.0270 0.0263

Neptune 61414-06-20 04:48 G 24152232.49 24152232.70 24152232.92 0.0089 0.0016

Neptune 61415-01-31 18:00 G 24152458.03 24152458.25 24152458.47 0.0089 0.0011

Mars 61415-06-25 17:02 G 24152603.20 24152603.21 24152603.22 0.1658 0.1648

Neptune 61415-09-14 07:12 G 24152683.58 24152683.80 24152684.02 0.0089 0.0006

Jupiter 61415-12-31 23:02 G 24152792.30 24152792.46 24152792.63 0.0500 0.0295

Neptune 61416-04-26 20:24 G 24152909.13 24152909.35 24152909.57 0.0089 0.0002

Jupiter 61416-08-24 10:34 G 24153028.85 24153028.94 24153029.03 0.0509 0.0449

Neptune 61416-12-08 09:22 G 24153134.67 24153134.89 24153135.11 0.0089 0.0005

Neptune 61417-07-21 22:19 G 24153360.21 24153360.43 24153360.65 0.0089 0.0010

Neptune 61418-03-04 11:17 G 24153585.76 24153585.97 24153586.20 0.0089 0.0016

Neptune 61418-10-16 00:29 G 24153811.31 24153811.52 24153811.74 0.0089 0.0020

Neptune 61419-05-29 13:26 G 24154036.86 24154037.06 24154037.28 0.0089 0.0026

Neptune 61420-01-10 02:38 G 24154262.41 24154262.61 24154262.82 0.0088 0.0031

Neptune 61420-08-22 15:36 G 24154487.96 24154488.15 24154488.36 0.0088 0.0036

Neptune 61421-04-05 05:02 G 24154713.52 24154713.71 24154713.91 0.0088 0.0041

Jupiter 61421-11-10 04:05 G 24154932.47 24154932.67 24154932.87 0.0524 0.0085

Neptune 61421-11-16 18:00 G 24154939.07 24154939.25 24154939.45 0.0088 0.0046

Neptune 61422-06-30 07:12 G 24155164.62 24155164.80 24155164.98 0.0088 0.0051

Neptune 61423-02-10 20:10 G 24155390.18 24155390.34 24155390.52 0.0088 0.0056

Neptune 61423-09-24 09:22 G 24155615.73 24155615.89 24155616.05 0.0088 0.0061

Neptune 61424-05-06 22:19 G 24155841.29 24155841.43 24155841.59 0.0088 0.0066

Neptune 61424-12-18 11:17 G 24156066.85 24156066.97 24156067.11 0.0088 0.0071

Neptune 61425-08-01 00:14 G 24156292.41 24156292.51 24156292.64 0.0088 0.0076

Neptune 61426-03-14 13:12 G 24156517.98 24156518.05 24156518.16 0.0088 0.0081

Neptune 61426-10-26 01:55 G 24156743.55 24156743.58 24156743.67 0.0088 0.0086

Jupiter 61427-09-06 01:26 G 24157058.53 24157058.56 24157058.59 0.0498 0.0489

Saturn 61428-01-24 10:19 G 24157198.72 24157198.93 24157199.15 0.0290 0.0036

Jupiter 61428-04-29 10:34 G 24157294.76 24157294.94 24157295.12 0.0506 0.0240

Saturn 61428-09-10 07:55 G 24157428.71 24157428.83 24157428.96 0.0290 0.0231

Jupiter 61433-07-15 20:24 G 24159198.15 24159198.35 24159198.54 0.0526 0.0153

Jupiter 61440-01-03 11:17 G 24161560.77 24161560.97 24161561.18 0.0504 0.0034

Saturn 61442-07-07 19:55 G 24162477.15 24162477.33 24162477.52 0.0269 0.0136

Saturn 61443-02-21 22:48 G 24162706.25 24162706.45 24162706.66 0.0270 0.0076

Uranus 61444-07-22 23:46 G 24163223.43 24163223.49 24163223.56 0.0137 0.0131

Mars 61444-09-13 10:48 G 24163275.85 24163275.95 24163276.05 0.1864 0.1519

Uranus 61445-03-06 07:41 G 24163449.68 24163449.82 24163449.98 0.0138 0.0098

Jupiter 61445-03-20 09:36 G 24163463.77 24163463.90 24163464.04 0.0529 0.0399

Uranus 61445-10-18 15:36 G 24163675.97 24163676.15 24163676.36 0.0138 0.0065

Jupiter 61445-11-13 01:12 G 24163701.45 24163701.55 24163701.65 0.0519 0.0448

Uranus 61446-06-02 00:00 G 24163902.29 24163902.50 24163902.72 0.0138 0.0031

Uranus 61447-01-14 08:24 G 24164128.63 24164128.85 24164129.07 0.0138 0.0004

Uranus 61447-08-28 16:48 G 24164355.00 24164355.20 24164355.41 0.0139 0.0038

Uranus 61448-04-11 01:26 G 24164581.38 24164581.56 24164581.75 0.0139 0.0072

Uranus 61448-11-23 09:50 G 24164807.79 24164807.91 24164808.06 0.0139 0.0107

Mars 61449-04-23 08:38 G 24164958.73 24164958.86 24164958.99 0.1667 0.1086

Jupiter 61451-09-08 12:00 G 24165826.82 24165827.00 24165827.20 0.0501 0.0171

Saturn 61456-12-18 20:10 G 24167755.26 24167755.34 24167755.43 0.0290 0.0261

Jupiter 61457-07-18 18:14 G 24167967.08 24167967.26 24167967.45 0.0522 0.0221

Saturn 61457-08-05 18:00 G 24167985.04 24167985.25 24167985.47 0.0290 0.0007

Saturn 61458-03-23 15:36 G 24168215.09 24168215.15 24168215.23 0.0289 0.0271

Jupiter 61463-05-14 11:31 G 24170092.85 24170092.98 24170093.12 0.0499 0.0372

Jupiter 61464-01-05 21:22 G 24170329.26 24170329.39 24170329.54 0.0507 0.0363

Jupiter 61469-03-23 11:31 G 24172232.78 24172232.98 24172233.18 0.0525 0.0012

Saturn 61472-01-18 02:38 G 24173263.42 24173263.61 24173263.81 0.0270 0.0102

Saturn 61472-09-03 05:17 G 24173492.53 24173492.72 24173492.92 0.0270 0.0110

Jupiter 61475-09-10 21:22 G 24174595.20 24174595.39 24174595.59 0.0505 0.0154

Jupiter 61480-11-26 04:05 G 24176498.49 24176498.67 24176498.85 0.0528 0.0250

Mars 61481-04-22 04:34 G 24176645.59 24176645.69 24176645.79 0.1660 0.1359

Uranus 61484-11-08 18:00 G 24177942.16 24177942.25 24177942.35 0.0141 0.0126

Earth 61484-11-23 08:53 G 24177956.84 24177956.87 24177956.90 0.2666 0.2609

Uranus 61485-06-23 03:22 G 24178168.48 24178168.64 24178168.81 0.0140 0.0091

Uranus 61486-02-04 12:43 G 24178394.84 24178395.03 24178395.24 0.0140 0.0055

Saturn 61486-06-30 21:36 G 24178541.28 24178541.40 24178541.52 0.0290 0.0236

Uranus 61486-09-18 22:05 G 24178621.21 24178621.42 24178621.64 0.0140 0.0020

Saturn 61487-02-15 18:58 G 24178771.08 24178771.29 24178771.51 0.0290 0.0031

Uranus 61487-05-03 06:58 G 24178847.58 24178847.79 24178848.01 0.0140 0.0016

Jupiter 61487-05-16 22:19 G 24178861.23 24178861.43 24178861.63 0.0503 0.0051

Uranus 61487-12-15 15:50 G 24179073.96 24179074.16 24179074.37 0.0139 0.0050

Neptune 61488-07-25 09:07 G 24179296.88 24179296.88 24179296.88 0.0088 0.0088

Uranus 61488-07-29 00:14 G 24179300.36 24179300.51 24179300.70 0.0139 0.0086

Neptune 61489-03-07 21:36 G 24179522.35 24179522.40 24179522.48 0.0088 0.0084

Uranus 61489-03-12 08:53 G 24179526.77 24179526.87 24179526.99 0.0139 0.0119

Pluto 61489-06-04 09:22 G 24179610.71 24179610.89 24179611.10 0.0063 0.0029

Neptune 61489-10-19 10:48 G 24179747.85 24179747.95 24179748.04 0.0088 0.0079

Pluto 61490-01-15 13:26 G 24179835.84 24179836.06 24179836.28 0.0063 0.0005

Neptune 61490-06-01 23:02 G 24179973.36 24179973.46 24179973.60 0.0088 0.0074

Pluto 61490-08-28 17:02 G 24180061.05 24180061.21 24180061.40 0.0063 0.0040

Neptune 61491-01-13 11:46 G 24180198.88 24180198.99 24180199.15 0.0088 0.0070

Neptune 61491-08-27 00:58 G 24180424.40 24180424.54 24180424.70 0.0088 0.0065

Neptune 61492-04-08 13:41 G 24180649.92 24180650.07 24180650.25 0.0088 0.0060

Jupiter 61492-07-31 19:12 G 24180764.23 24180764.30 24180764.38 0.0530 0.0490

Neptune 61492-11-20 02:38 G 24180875.45 24180875.61 24180875.79 0.0088 0.0055

Earth 61492-11-21 00:14 G 24180876.36 24180876.51 24180876.66 0.2665 0.0729

Moon 61492-11-21 03:36 G 24180876.50 24180876.65 24180876.80 0.2671 0.0387 *

Jupiter 61493-03-26 12:43 G 24181001.88 24181002.03 24181002.17 0.0521 0.0364

Neptune 61493-07-03 15:22 G 24181100.97 24181101.14 24181101.33 0.0088 0.0050

Neptune 61494-02-14 04:19 G 24181326.49 24181326.68 24181326.87 0.0088 0.0045

Neptune 61494-09-27 17:17 G 24181552.03 24181552.22 24181552.42 0.0089 0.0040

Neptune 61495-05-11 06:00 G 24181777.56 24181777.75 24181777.96 0.0089 0.0035

Neptune 61495-12-22 18:58 G 24182003.09 24182003.29 24182003.50 0.0089 0.0030

Neptune 61496-08-04 07:41 G 24182228.62 24182228.82 24182229.04 0.0089 0.0025

Neptune 61497-03-17 20:38 G 24182454.16 24182454.36 24182454.58 0.0089 0.0020

Neptune 61497-10-29 09:36 G 24182679.69 24182679.90 24182680.13 0.0089 0.0015

Neptune 61498-06-11 22:34 G 24182905.23 24182905.44 24182905.67 0.0089 0.0010

Jupiter 61499-01-20 00:14 G 24183127.34 24183127.51 24183127.69 0.0500 0.0250

Neptune 61499-01-23 11:31 G 24183130.77 24183130.98 24183131.21 0.0089 0.0005

Neptune 61499-09-06 00:43 G 24183356.31 24183356.53 24183356.75 0.0089 0.0001

Jupiter 61499-09-13 12:29 G 24183363.98 24183364.02 24183364.07 0.0509 0.0494

Neptune 61500-04-19 13:41 G 24183581.85 24183582.07 24183582.29 0.0089 0.0007

Neptune 61500-12-01 02:38 G 24183807.39 24183807.61 24183807.83 0.0089 0.0012

Neptune 61501-07-14 15:22 G 24184032.93 24184033.14 24184033.37 0.0089 0.0017

Saturn 61501-07-31 02:24 G 24184049.40 24184049.60 24184049.80 0.0269 0.0080

Neptune 61502-02-25 04:19 G 24184258.48 24184258.68 24184258.90 0.0089 0.0022

Saturn 61502-03-17 05:02 G 24184278.53 24184278.71 24184278.90 0.0270 0.0131

Neptune 61502-10-08 17:31 G 24184484.03 24184484.23 24184484.44 0.0089 0.0027

Neptune 61503-05-22 06:29 G 24184709.57 24184709.77 24184709.98 0.0089 0.0032

Neptune 61504-01-02 19:26 G 24184935.11 24184935.31 24184935.51 0.0089 0.0037

Neptune 61504-08-15 07:55 G 24185160.66 24185160.83 24185161.05 0.0089 0.0043

Jupiter 61504-11-30 04:05 G 24185267.47 24185267.67 24185267.86 0.0523 0.0129

Neptune 61505-03-28 20:53 G 24185386.21 24185386.37 24185386.58 0.0089 0.0048

Neptune 61505-11-09 10:05 G 24185611.76 24185611.92 24185612.11 0.0089 0.0053

Neptune 61506-06-22 22:48 G 24185837.31 24185837.45 24185837.64 0.0089 0.0058

Neptune 61507-02-03 11:46 G 24186062.86 24186062.99 24186063.17 0.0089 0.0063

Neptune 61507-09-17 00:58 G 24186288.42 24186288.54 24186288.70 0.0089 0.0068

Neptune 61508-04-29 14:24 G 24186513.98 24186514.10 24186514.23 0.0089 0.0073

Neptune 61508-12-11 03:22 G 24186739.54 24186739.64 24186739.75 0.0089 0.0077

Neptune 61509-07-24 16:05 G 24186965.11 24186965.17 24186965.27 0.0089 0.0083

Neptune 61510-03-07 05:02 G 24187190.69 24187190.71 24187190.77 0.0089 0.0087

Mars 61510-07-12 15:07 G 24187317.97 24187318.13 24187318.29 0.1861 0.0773

Jupiter 61510-09-26 02:24 G 24187393.51 24187393.60 24187393.69 0.0498 0.0444

Jupiter 61511-05-20 11:46 G 24187629.82 24187629.99 24187630.16 0.0507 0.0284

Mars 61515-02-19 20:10 G 24189001.25 24189001.34 24189001.43 0.1670 0.1392

Saturn 61516-01-12 03:22 G 24189327.49 24189327.64 24189327.79 0.0290 0.0200

Jupiter 61516-08-04 19:41 G 24189533.12 24189533.32 24189533.52 0.0526 0.0108

Saturn 61516-08-29 00:58 G 24189557.34 24189557.54 24189557.75 0.0290 0.0067

Jupiter 61523-01-23 09:22 G 24191895.69 24191895.89 24191896.09 0.0503 0.0072

Jupiter 61528-04-09 10:48 G 24193798.80 24193798.95 24193799.11 0.0529 0.0350

Uranus 61528-11-04 15:36 G 24194008.04 24194008.15 24194008.29 0.0138 0.0113

Jupiter 61528-12-03 03:07 G 24194036.57 24194036.63 24194036.69 0.0520 0.0496

Uranus 61529-06-18 23:46 G 24194234.31 24194234.49 24194234.67 0.0138 0.0079

Uranus 61530-01-31 07:55 G 24194460.63 24194460.83 24194461.04 0.0138 0.0046

Saturn 61530-06-26 06:14 G 24194606.71 24194606.76 24194606.83 0.0270 0.0256

Uranus 61530-09-14 16:05 G 24194686.96 24194687.17 24194687.39 0.0138 0.0012

Saturn 61531-02-10 09:07 G 24194835.67 24194835.88 24194836.09 0.0270 0.0046

Uranus 61531-04-29 00:29 G 24194913.31 24194913.52 24194913.74 0.0139 0.0023

Saturn 61531-09-27 11:46 G 24195064.83 24195064.99 24195065.16 0.0270 0.0165

Uranus 61531-12-11 08:53 G 24195139.67 24195139.87 24195140.07 0.0139 0.0057

Uranus 61532-07-24 17:31 G 24195366.07 24195366.23 24195366.40 0.0139 0.0091

Uranus 61533-03-08 02:10 G 24195592.51 24195592.59 24195592.69 0.0139 0.0126

Jupiter 61534-09-28 10:34 G 24196161.74 24196161.94 24196162.13 0.0501 0.0131

Jupiter 61540-08-07 21:22 G 24198302.22 24198302.39 24198302.57 0.0522 0.0272

Saturn 61545-07-24 05:02 G 24200113.55 24200113.71 24200113.89 0.0290 0.0174

Saturn 61546-03-11 02:38 G 24200343.41 24200343.61 24200343.81 0.0290 0.0092

Jupiter 61546-06-03 12:00 G 24200427.85 24200428.00 24200428.16 0.0499 0.0329

Jupiter 61547-01-25 22:34 G 24200664.33 24200664.44 24200664.57 0.0508 0.0406

Mars 61547-02-18 15:50 G 24200688.03 24200688.16 24200688.30 0.1662 0.1055

Jupiter 61552-04-12 14:38 G 24202567.91 24202568.11 24202568.32 0.0525 0.0041

Jupiter 61558-09-30 23:17 G 24204930.29 24204930.47 24204930.66 0.0505 0.0200

Saturn 61560-01-06 05:17 G 24205392.62 24205392.72 24205392.82 0.0270 0.0236

Saturn 61560-08-22 08:10 G 24205621.63 24205621.84 24205622.05 0.0269 0.0026

Saturn 61561-04-08 10:48 G 24205850.80 24205850.95 24205851.11 0.0270 0.0185

Jupiter 61563-12-17 05:02 G 24206833.52 24206833.71 24206833.90 0.0527 0.0201

Uranus 61568-07-10 02:53 G 24208500.62 24208500.62 24208500.62 0.0141 0.0141

Uranus 61569-02-21 12:00 G 24208726.87 24208727.00 24208727.16 0.0140 0.0105

Uranus 61569-10-05 21:36 G 24208953.22 24208953.40 24208953.59 0.0140 0.0070

Neptune 61570-01-29 21:50 G 24209069.37 24209069.41 24209069.50 0.0089 0.0085

Uranus 61570-05-20 06:43 G 24209179.58 24209179.78 24209180.00 0.0140 0.0034

Jupiter 61570-06-05 23:46 G 24209196.29 24209196.49 24209196.70 0.0503 0.0012

Neptune 61570-09-12 11:17 G 24209294.89 24209294.97 24209295.08 0.0089 0.0080

Uranus 61571-01-01 15:50 G 24209405.95 24209406.16 24209406.38 0.0140 0.0003

Neptune 61571-04-26 00:29 G 24209520.42 24209520.52 24209520.65 0.0089 0.0075

Uranus 61571-08-16 00:43 G 24209632.33 24209632.53 24209632.75 0.0140 0.0037

Neptune 61571-12-07 13:41 G 24209745.95 24209746.07 24209746.22 0.0089 0.0070

Uranus 61572-03-29 09:22 G 24209858.72 24209858.89 24209859.09 0.0139 0.0072

Neptune 61572-07-20 03:07 G 24209971.49 24209971.63 24209971.78 0.0089 0.0065

Uranus 61572-11-10 18:00 G 24210085.12 24210085.25 24210085.40 0.0139 0.0106

Neptune 61573-03-02 16:19 G 24210197.03 24210197.18 24210197.35 0.0089 0.0060

Neptune 61573-10-14 05:31 G 24210422.57 24210422.73 24210422.91 0.0089 0.0055

Neptune 61574-05-27 18:43 G 24210648.11 24210648.28 24210648.47 0.0089 0.0050

Neptune 61575-01-08 07:55 G 24210873.65 24210873.83 24210874.03 0.0089 0.0045

Saturn 61575-02-03 09:50 G 24210899.73 24210899.91 24210900.10 0.0290 0.0140

Jupiter 61575-08-21 19:12 G 24211099.20 24211099.30 24211099.42 0.0530 0.0444

Neptune 61575-08-21 21:07 G 24211099.20 24211099.38 24211099.59 0.0089 0.0040 *

Saturn 61575-09-21 07:41 G 24211129.63 24211129.82 24211130.02 0.0290 0.0127

Neptune 61576-04-03 10:34 G 24211324.75 24211324.94 24211325.15 0.0089 0.0035

Jupiter 61576-04-15 12:29 G 24211336.90 24211337.02 24211337.15 0.0520 0.0406

Mars 61576-05-08 18:58 G 24211360.11 24211360.29 24211360.46 0.1857 0.0045

Neptune 61576-11-14 23:46 G 24211550.29 24211550.49 24211550.71 0.0089 0.0030

Neptune 61577-06-28 12:58 G 24211775.84 24211776.04 24211776.26 0.0089 0.0025

Neptune 61578-02-09 02:24 G 24212001.38 24212001.60 24212001.81 0.0089 0.0019

Neptune 61578-09-22 15:36 G 24212226.93 24212227.15 24212227.37 0.0089 0.0014

Neptune 61579-05-06 04:34 G 24212452.48 24212452.69 24212452.92 0.0089 0.0009

Pluto 61579-07-22 16:34 G 24212530.00 24212530.19 24212530.40 0.0081 0.0035

Neptune 61579-12-17 17:46 G 24212678.02 24212678.24 24212678.46 0.0089 0.0004

Pluto 61580-03-04 03:07 G 24212755.46 24212755.63 24212755.85 0.0080 0.0038

Neptune 61580-07-30 06:58 G 24212903.57 24212903.79 24212904.01 0.0089 0.0002

Neptune 61581-03-12 20:10 G 24213129.12 24213129.34 24213129.56 0.0089 0.0007

Neptune 61581-10-24 09:07 G 24213354.66 24213354.88 24213355.10 0.0089 0.0012

Jupiter 61582-02-08 23:17 G 24213462.29 24213462.47 24213462.66 0.0500 0.0209

Neptune 61582-06-06 22:05 G 24213580.21 24213580.42 24213580.64 0.0089 0.0017

Neptune 61583-01-18 11:17 G 24213805.75 24213805.97 24213806.18 0.0089 0.0022

Neptune 61583-09-01 00:00 G 24214031.30 24214031.50 24214031.72 0.0089 0.0027

Neptune 61584-04-13 13:12 G 24214256.86 24214257.05 24214257.27 0.0089 0.0032

Neptune 61584-11-25 02:10 G 24214482.40 24214482.59 24214482.80 0.0088 0.0038

Neptune 61585-07-08 15:07 G 24214707.95 24214708.13 24214708.34 0.0088 0.0043

Neptune 61586-02-19 04:05 G 24214933.50 24214933.67 24214933.88 0.0088 0.0048

Neptune 61586-10-02 17:17 G 24215159.06 24215159.22 24215159.41 0.0088 0.0053

Neptune 61587-05-16 06:29 G 24215384.61 24215384.77 24215384.95 0.0088 0.0057

Jupiter 61587-12-20 05:17 G 24215602.53 24215602.72 24215602.92 0.0524 0.0178

Neptune 61587-12-27 19:26 G 24215610.17 24215610.31 24215610.48 0.0088 0.0062

Neptune 61588-08-09 08:24 G 24215835.73 24215835.85 24215836.01 0.0088 0.0067

Neptune 61589-03-22 21:22 G 24216061.29 24216061.39 24216061.54 0.0088 0.0073

Saturn 61589-07-18 12:00 G 24216178.86 24216179.00 24216179.14 0.0270 0.0202

Neptune 61589-11-03 10:48 G 24216286.85 24216286.95 24216287.07 0.0088 0.0077

Saturn 61590-03-04 14:38 G 24216407.90 24216408.11 24216408.33 0.0270 0.0011

Neptune 61590-06-16 23:46 G 24216512.42 24216512.49 24216512.58 0.0088 0.0082

Saturn 61590-10-19 17:46 G 24216637.12 24216637.24 24216637.36 0.0270 0.0219

Neptune 61591-01-28 12:29 G 24216738.00 24216738.02 24216738.09 0.0088 0.0086

Jupiter 61593-10-15 01:26 G 24217728.44 24217728.56 24217728.68 0.0498 0.0403

Jupiter 61594-06-08 10:05 G 24217964.77 24217964.92 24217965.08 0.0506 0.0322

Jupiter 61599-08-24 22:34 G 24219868.23 24219868.44 24219868.64 0.0526 0.0057

Saturn 61604-08-15 12:29 G 24221685.83 24221686.02 24221686.23 0.0289 0.0112

Saturn 61605-04-02 09:50 G 24221915.74 24221915.91 24221916.10 0.0289 0.0155

Jupiter 61606-02-11 10:19 G 24222230.73 24222230.93 24222231.13 0.0504 0.0115

Jupiter 61611-04-29 14:38 G 24224133.94 24224134.11 24224134.28 0.0529 0.0293

Uranus 61612-07-05 00:14 G 24224566.44 24224566.51 24224566.61 0.0138 0.0127

Mars 61612-12-16 03:22 G 24224730.49 24224730.64 24224730.80 0.1665 0.0756

Uranus 61613-02-16 08:10 G 24224792.70 24224792.84 24224793.02 0.0138 0.0094

Uranus 61613-09-30 16:19 G 24225018.99 24225019.18 24225019.39 0.0138 0.0060

Uranus 61614-05-15 00:29 G 24225245.31 24225245.52 24225245.74 0.0138 0.0026

Uranus 61614-12-27 08:53 G 24225471.65 24225471.87 24225472.09 0.0138 0.0008

Uranus 61615-08-10 17:02 G 24225698.01 24225698.21 24225698.43 0.0139 0.0042

Uranus 61616-03-24 01:41 G 24225924.40 24225924.57 24225924.76 0.0139 0.0077

Uranus 61616-11-05 10:19 G 24226150.81 24226150.93 24226151.07 0.0139 0.0111

Jupiter 61617-10-17 12:00 G 24226496.80 24226497.00 24226497.20 0.0502 0.0086

Saturn 61619-01-28 10:48 G 24226964.79 24226964.95 24226965.10 0.0270 0.0182

Saturn 61619-09-14 13:41 G 24227193.86 24227194.07 24227194.28 0.0270 0.0029

Saturn 61620-04-30 16:34 G 24227423.10 24227423.19 24227423.29 0.0270 0.0239

Jupiter 61623-08-27 22:19 G 24228637.27 24228637.43 24228637.59 0.0522 0.0317

Jupiter 61629-06-22 13:41 G 24230762.91 24230763.07 24230763.24 0.0499 0.0282

Jupiter 61630-02-14 00:43 G 24230999.44 24230999.53 24230999.62 0.0508 0.0452

Earth 61630-05-22 13:41 G 24231096.94 24231097.07 24231097.21 0.2667 0.1419

Moon 61630-05-22 14:53 G 24231096.98 24231097.12 24231097.26 0.2660 0.1466 *

Saturn 61634-02-25 16:34 G 24232471.99 24232472.19 24232472.40 0.0290 0.0080

Saturn 61634-10-13 14:10 G 24232701.94 24232702.09 24232702.26 0.0289 0.0187

Jupiter 61635-05-02 14:53 G 24232902.92 24232903.12 24232903.32 0.0525 0.0086

Moon 61638-05-20 01:12 G 24234016.53 24234016.55 24234016.57 0.2663 0.2641

Earth 61638-05-20 04:34 G 24234016.59 24234016.69 24234016.79 0.2668 0.1997

Jupiter 61641-02-25 14:53 G 24235029.07 24235029.12 24235029.18 0.0497 0.0477

Jupiter 61641-10-19 22:34 G 24235265.26 24235265.44 24235265.62 0.0505 0.0239

Mars 61642-03-05 23:17 G 24235402.31 24235402.47 24235402.63 0.1854 0.0711

Jupiter 61647-01-05 05:31 G 24237168.54 24237168.73 24237168.93 0.0528 0.0155

Saturn 61648-08-09 17:17 G 24237751.05 24237751.22 24237751.40 0.0270 0.0149

Saturn 61649-03-26 20:10 G 24237980.14 24237980.34 24237980.55 0.0270 0.0063

Uranus 61652-10-21 20:38 G 24239285.27 24239285.36 24239285.49 0.0141 0.0121

Neptune 61652-10-27 18:58 G 24239291.27 24239291.29 24239291.36 0.0088 0.0087

Uranus 61653-06-05 06:14 G 24239511.60 24239511.76 24239511.94 0.0140 0.0085

Neptune 61653-06-10 08:10 G 24239516.76 24239516.84 24239516.93 0.0088 0.0082

Jupiter 61653-06-24 22:48 G 24239531.25 24239531.45 24239531.66 0.0502 0.0036

Uranus 61654-01-17 15:36 G 24239737.95 24239738.15 24239738.36 0.0140 0.0049

Neptune 61654-01-21 20:24 G 24239742.27 24239742.35 24239742.49 0.0088 0.0078

Uranus 61654-09-01 00:58 G 24239964.33 24239964.54 24239964.76 0.0140 0.0014

Neptune 61654-09-04 09:36 G 24239967.80 24239967.90 24239968.05 0.0088 0.0073

Uranus 61655-04-15 10:05 G 24240190.70 24240190.92 24240191.13 0.0140 0.0022

Neptune 61655-04-17 22:34 G 24240193.31 24240193.44 24240193.60 0.0088 0.0068

Uranus 61655-11-27 18:43 G 24240417.08 24240417.28 24240417.48 0.0139 0.0057

Neptune 61655-11-29 11:31 G 24240418.83 24240418.98 24240419.14 0.0088 0.0063

Uranus 61656-07-11 03:07 G 24240643.48 24240643.63 24240643.80 0.0139 0.0091

Neptune 61656-07-12 00:14 G 24240644.35 24240644.51 24240644.69 0.0088 0.0058

Neptune 61657-02-22 13:12 G 24240869.88 24240870.05 24240870.23 0.0088 0.0053

Uranus 61657-02-22 11:46 G 24240869.90 24240869.99 24240870.09 0.0139 0.0125 *

Neptune 61657-10-06 01:55 G 24241095.41 24241095.58 24241095.77 0.0088 0.0048

Neptune 61658-05-19 14:53 G 24241320.93 24241321.12 24241321.31 0.0088 0.0043

Jupiter 61658-09-09 21:22 G 24241434.25 24241434.39 24241434.52 0.0530 0.0394

Neptune 61658-12-31 03:36 G 24241546.46 24241546.65 24241546.85 0.0089 0.0038

Jupiter 61659-05-05 14:53 G 24241672.02 24241672.12 24241672.22 0.0521 0.0453

Neptune 61659-08-13 16:34 G 24241771.99 24241772.19 24241772.40 0.0089 0.0033

Neptune 61660-03-26 05:17 G 24241997.52 24241997.72 24241997.94 0.0089 0.0028

Neptune 61660-11-06 18:14 G 24242223.05 24242223.26 24242223.47 0.0089 0.0023

Neptune 61661-06-20 06:58 G 24242448.58 24242448.79 24242449.01 0.0089 0.0018

Neptune 61662-01-31 19:55 G 24242674.11 24242674.33 24242674.55 0.0089 0.0013

Neptune 61662-09-14 08:53 G 24242899.66 24242899.87 24242900.09 0.0089 0.0008

Neptune 61663-04-27 21:50 G 24243125.19 24243125.41 24243125.63 0.0089 0.0003

Saturn 61663-09-07 20:53 G 24243258.16 24243258.37 24243258.58 0.0289 0.0047

Neptune 61663-12-09 10:48 G 24243350.73 24243350.95 24243351.17 0.0089 0.0003

Saturn 61664-04-24 18:00 G 24243488.12 24243488.25 24243488.40 0.0289 0.0217

Neptune 61664-07-21 23:46 G 24243576.27 24243576.49 24243576.71 0.0089 0.0008

Jupiter 61665-02-27 23:46 G 24243797.30 24243797.49 24243797.69 0.0500 0.0167

Neptune 61665-03-04 12:43 G 24243801.81 24243802.03 24243802.24 0.0089 0.0013

Neptune 61665-10-16 01:41 G 24244027.36 24244027.57 24244027.79 0.0089 0.0018

Neptune 61666-05-29 14:24 G 24244252.90 24244253.10 24244253.32 0.0089 0.0024

Neptune 61667-01-10 03:22 G 24244478.44 24244478.64 24244478.86 0.0089 0.0029

Neptune 61667-08-23 16:19 G 24244703.99 24244704.18 24244704.40 0.0089 0.0034

Neptune 61668-04-05 05:17 G 24244929.54 24244929.72 24244929.93 0.0089 0.0039

Neptune 61668-11-16 18:14 G 24245155.08 24245155.26 24245155.47 0.0089 0.0044

Neptune 61669-06-30 07:12 G 24245380.63 24245380.80 24245381.00 0.0089 0.0049

Neptune 61670-02-10 20:10 G 24245606.18 24245606.34 24245606.53 0.0089 0.0054

Neptune 61670-09-24 09:07 G 24245831.74 24245831.88 24245832.06 0.0089 0.0059

Jupiter 61671-01-08 08:38 G 24245937.68 24245937.86 24245938.04 0.0523 0.0228

Neptune 61671-05-07 22:05 G 24246057.29 24246057.42 24246057.59 0.0089 0.0064

Neptune 61671-12-19 11:02 G 24246282.84 24246282.96 24246283.12 0.0089 0.0069

Neptune 61672-07-31 23:46 G 24246508.40 24246508.49 24246508.64 0.0089 0.0074

Neptune 61673-03-14 13:12 G 24246733.96 24246734.05 24246734.16 0.0089 0.0078

Neptune 61673-10-26 02:10 G 24246959.53 24246959.59 24246959.68 0.0089 0.0084

Neptune 61674-06-08 15:07 G 24247185.12 24247185.13 24247185.18 0.0089 0.0088

Jupiter 61676-11-03 02:24 G 24248063.46 24248063.60 24248063.74 0.0498 0.0360

Jupiter 61677-06-27 11:46 G 24248299.86 24248299.99 24248300.14 0.0507 0.0367

Saturn 61678-02-19 16:05 G 24248536.99 24248537.17 24248537.36 0.0270 0.0128

Saturn 61678-10-06 19:26 G 24248766.11 24248766.31 24248766.51 0.0270 0.0083

Mars 61678-10-13 14:53 G 24248772.95 24248773.12 24248773.29 0.1667 0.0451

Jupiter 61682-09-13 00:00 G 24250203.30 24250203.50 24250203.70 0.0526 0.0008

Jupiter 61689-03-02 12:14 G 24252565.82 24252566.01 24252566.20 0.0504 0.0162

Saturn 61692-08-02 02:53 G 24253814.57 24253814.62 24253814.67 0.0289 0.0281

Saturn 61693-03-20 00:14 G 24254044.30 24254044.51 24254044.73 0.0289 0.0017

Saturn 61693-11-04 21:50 G 24254274.30 24254274.41 24254274.51 0.0289 0.0248

Jupiter 61694-05-18 14:38 G 24254468.94 24254469.11 24254469.30 0.0528 0.0248

Uranus 61696-10-16 16:19 G 24255351.05 24255351.18 24255351.32 0.0138 0.0109

Uranus 61697-05-31 00:00 G 24255577.33 24255577.50 24255577.69 0.0138 0.0076

Uranus 61698-01-12 08:10 G 24255803.64 24255803.84 24255804.05 0.0138 0.0042

Uranus 61698-08-26 16:19 G 24256029.97 24256030.18 24256030.40 0.0138 0.0009

Uranus 61699-04-10 00:43 G 24256256.32 24256256.53 24256256.75 0.0139 0.0027

Uranus 61699-11-22 09:07 G 24256482.69 24256482.88 24256483.08 0.0139 0.0061

Uranus 61700-07-06 17:46 G 24256709.08 24256709.24 24256709.40 0.0139 0.0095

Jupiter 61700-11-06 11:46 G 24256831.79 24256831.99 24256832.20 0.0501 0.0046

Uranus 61701-02-18 02:10 G 24256935.53 24256935.59 24256935.68 0.0139 0.0131

Jupiter 61706-01-22 03:22 G 24258734.57 24258734.64 24258734.72 0.0532 0.0495

Jupiter 61706-09-16 22:34 G 24258972.30 24258972.44 24258972.59 0.0522 0.0359

Saturn 61707-09-02 23:02 G 24259323.26 24259323.46 24259323.66 0.0270 0.0094

Mars 61708-01-02 03:22 G 24259444.54 24259444.64 24259444.75 0.1850 0.1444

Saturn 61708-04-19 02:10 G 24259552.40 24259552.59 24259552.78 0.0270 0.0118

Jupiter 61712-07-12 13:12 G 24261097.87 24261098.05 24261098.23 0.0499 0.0242

Jupiter 61713-03-05 23:31 G 24261334.42 24261334.48 24261334.53 0.0508 0.0487

Jupiter 61718-05-22 16:05 G 24263237.97 24263238.17 24263238.37 0.0525 0.0131

Saturn 61722-02-13 08:38 G 24264600.75 24264600.86 24264600.98 0.0289 0.0244

Saturn 61722-10-01 05:46 G 24264830.53 24264830.74 24264830.95 0.0289 0.0019

Saturn 61723-05-19 02:38 G 24265060.58 24265060.61 24265060.67 0.0289 0.0282

Jupiter 61724-03-17 14:53 G 24265364.02 24265364.12 24265364.21 0.0497 0.0436

Jupiter 61724-11-08 22:34 G 24265600.28 24265600.44 24265600.62 0.0505 0.0281

Moon 61727-11-26 13:12 G 24266713.03 24266713.05 24266713.07 0.2660 0.2630

Jupiter 61730-01-25 08:53 G 24267503.67 24267503.87 24267504.07 0.0527 0.0103

Neptune 61733-09-20 18:43 G 24268838.27 24268838.28 24268838.34 0.0089 0.0088

Neptune 61734-05-04 07:55 G 24269063.78 24269063.83 24269063.93 0.0089 0.0083

Neptune 61734-12-15 21:07 G 24269289.30 24269289.38 24269289.51 0.0089 0.0079

Neptune 61735-07-29 10:34 G 24269514.83 24269514.94 24269515.08 0.0089 0.0073

Moon 61735-11-24 00:14 G 24269632.34 24269632.51 24269632.67 0.2658 0.0615

Earth 61735-11-24 02:10 G 24269632.43 24269632.59 24269632.74 0.2664 0.0631 *

Neptune 61736-03-11 00:00 G 24269740.37 24269740.50 24269740.65 0.0089 0.0068

Uranus 61736-06-22 05:31 G 24269843.69 24269843.73 24269843.80 0.0141 0.0136

Jupiter 61736-07-14 23:46 G 24269866.29 24269866.49 24269866.69 0.0503 0.0078

Neptune 61736-10-22 13:12 G 24269965.90 24269966.05 24269966.21 0.0089 0.0063

Uranus 61737-02-03 15:22 G 24270069.99 24270070.14 24270070.29 0.0141 0.0100

Saturn 61737-03-14 22:19 G 24270109.23 24270109.43 24270109.64 0.0270 0.0072

Pluto 61737-05-09 16:19 G 24270165.03 24270165.18 24270165.36 0.0063 0.0041

Neptune 61737-06-05 02:24 G 24270191.44 24270191.60 24270191.77 0.0089 0.0058

Uranus 61737-09-18 00:43 G 24270296.34 24270296.53 24270296.73 0.0140 0.0064

Saturn 61737-10-30 01:41 G 24270338.39 24270338.57 24270338.75 0.0270 0.0139

Pluto 61737-12-20 20:10 G 24270390.13 24270390.34 24270390.57 0.0063 0.0008

Neptune 61738-01-16 15:36 G 24270416.98 24270417.15 24270417.33 0.0089 0.0053

Uranus 61738-05-02 10:05 G 24270522.71 24270522.92 24270523.13 0.0140 0.0028

Pluto 61738-08-03 00:00 G 24270615.31 24270615.50 24270615.71 0.0063 0.0028

Neptune 61738-08-30 04:48 G 24270642.52 24270642.70 24270642.89 0.0089 0.0048

Uranus 61738-12-14 18:58 G 24270749.08 24270749.29 24270749.51 0.0140 0.0008

Pluto 61739-03-16 03:36 G 24270840.64 24270840.65 24270840.71 0.0064 0.0063

Neptune 61739-04-12 18:00 G 24270868.06 24270868.25 24270868.45 0.0089 0.0043

Uranus 61739-07-29 03:50 G 24270975.46 24270975.66 24270975.88 0.0140 0.0042

Neptune 61739-11-24 07:12 G 24271093.61 24271093.80 24271094.00 0.0089 0.0038

Uranus 61740-03-11 12:29 G 24271201.85 24271202.02 24271202.21 0.0139 0.0077

Neptune 61740-07-06 20:24 G 24271319.15 24271319.35 24271319.56 0.0089 0.0033

Uranus 61740-10-23 21:07 G 24271428.26 24271428.38 24271428.52 0.0139 0.0111

Neptune 61741-02-17 09:36 G 24271544.70 24271544.90 24271545.12 0.0089 0.0028

Jupiter 61741-09-29 23:02 G 24271769.31 24271769.46 24271769.62 0.0530 0.0343

Neptune 61741-09-30 22:48 G 24271770.25 24271770.45 24271770.67 0.0089 0.0023

Neptune 61742-05-14 12:00 G 24271995.79 24271996.00 24271996.22 0.0089 0.0018

Jupiter 61742-05-25 15:36 G 24272007.09 24272007.15 24272007.21 0.0520 0.0496

Neptune 61742-12-26 01:12 G 24272221.34 24272221.55 24272221.78 0.0089 0.0013

Neptune 61743-08-08 14:24 G 24272446.89 24272447.10 24272447.33 0.0089 0.0008

Neptune 61744-03-21 03:50 G 24272672.44 24272672.66 24272672.88 0.0089 0.0002

Mars 61744-08-11 01:55 G 24272815.41 24272815.58 24272815.76 0.1670 0.0145

Neptune 61744-11-01 17:02 G 24272897.99 24272898.21 24272898.43 0.0089 0.0003

Neptune 61745-06-15 06:00 G 24273123.53 24273123.75 24273123.97 0.0089 0.0008

Neptune 61746-01-26 18:58 G 24273349.08 24273349.29 24273349.52 0.0089 0.0014

Neptune 61746-09-09 08:10 G 24273574.63 24273574.84 24273575.06 0.0089 0.0018

Neptune 61747-04-22 21:22 G 24273800.18 24273800.39 24273800.61 0.0089 0.0024

Neptune 61747-12-04 10:19 G 24274025.73 24274025.93 24274026.15 0.0089 0.0029

Jupiter 61748-03-20 01:12 G 24274132.35 24274132.55 24274132.75 0.0501 0.0121

Neptune 61748-07-16 23:17 G 24274251.27 24274251.47 24274251.68 0.0089 0.0034

Neptune 61749-02-27 12:29 G 24274476.83 24274477.02 24274477.22 0.0088 0.0039

Neptune 61749-10-11 01:26 G 24274702.38 24274702.56 24274702.76 0.0088 0.0044

Neptune 61750-05-24 14:24 G 24274927.93 24274928.10 24274928.30 0.0088 0.0049

Neptune 61751-01-05 03:22 G 24275153.48 24275153.64 24275153.83 0.0088 0.0054

Neptune 61751-08-18 16:34 G 24275379.03 24275379.19 24275379.36 0.0088 0.0059

Saturn 61751-08-26 11:46 G 24275386.86 24275386.99 24275387.14 0.0289 0.0215

Neptune 61752-03-31 05:31 G 24275604.59 24275604.73 24275604.90 0.0088 0.0064

Saturn 61752-04-12 09:07 G 24275616.68 24275616.88 24275617.10 0.0289 0.0050

Neptune 61752-11-11 18:29 G 24275830.15 24275830.27 24275830.43 0.0088 0.0069

Neptune 61753-06-25 07:26 G 24276055.71 24276055.81 24276055.95 0.0088 0.0074

Jupiter 61754-01-28 08:10 G 24276272.67 24276272.84 24276273.02 0.0523 0.0270

Neptune 61754-02-05 20:24 G 24276281.27 24276281.35 24276281.48 0.0088 0.0078

Neptune 61754-09-19 09:50 G 24276506.84 24276506.91 24276506.99 0.0088 0.0083

Neptune 61755-05-02 22:48 G 24276732.44 24276732.45 24276732.50 0.0088 0.0088

Jupiter 61759-11-24 02:24 G 24278398.45 24278398.60 24278398.76 0.0498 0.0318

Jupiter 61760-07-17 11:31 G 24278634.86 24278634.98 24278635.10 0.0506 0.0404

Jupiter 61765-10-02 22:48 G 24280538.25 24280538.45 24280538.65 0.0526 0.0032

Saturn 61766-02-08 01:41 G 24280666.50 24280666.57 24280666.66 0.0271 0.0249

Saturn 61766-09-25 05:17 G 24280895.51 24280895.72 24280895.93 0.0271 0.0037

Saturn 61767-05-12 08:24 G 24281124.70 24281124.85 24281125.02 0.0271 0.0175

Jupiter 61772-03-22 11:02 G 24282900.77 24282900.96 24282901.15 0.0504 0.0198

Jupiter 61777-06-07 14:38 G 24284803.92 24284804.11 24284804.30 0.0529 0.0206

Uranus 61780-06-17 00:43 G 24285909.46 24285909.53 24285909.64 0.0137 0.0124

Uranus 61781-01-29 08:38 G 24286135.71 24286135.86 24286136.04 0.0138 0.0091

Saturn 61781-03-07 19:26 G 24286173.15 24286173.31 24286173.49 0.0289 0.0174

Uranus 61781-09-12 16:48 G 24286362.01 24286362.20 24286362.41 0.0138 0.0057

Saturn 61781-10-23 16:34 G 24286402.99 24286403.19 24286403.39 0.0289 0.0089

Uranus 61782-04-27 00:58 G 24286588.33 24286588.54 24286588.76 0.0138 0.0023

Uranus 61782-12-09 09:07 G 24286814.66 24286814.88 24286815.10 0.0138 0.0011

Uranus 61783-07-23 17:17 G 24287041.02 24287041.22 24287041.43 0.0139 0.0046

Jupiter 61783-11-26 11:02 G 24287166.76 24287166.96 24287167.16 0.0502 0.0006

Uranus 61784-03-06 01:55 G 24287267.41 24287267.58 24287267.76 0.0139 0.0080

Uranus 61784-10-18 10:19 G 24287493.83 24287493.93 24287494.07 0.0139 0.0115

Jupiter 61789-02-10 06:14 G 24289069.65 24289069.76 24289069.87 0.0531 0.0442

Jupiter 61789-10-06 00:43 G 24289307.41 24289307.53 24289307.66 0.0522 0.0406

Jupiter 61795-08-01 12:58 G 24291432.85 24291433.04 24291433.22 0.0499 0.0203

Saturn 61795-08-21 01:55 G 24291452.47 24291452.58 24291452.70 0.0270 0.0225

Saturn 61796-04-06 05:31 G 24291681.52 24291681.73 24291681.94 0.0270 0.0014

Saturn 61796-11-21 08:38 G 24291910.73 24291910.86 24291911.01 0.0270 0.0197

Jupiter 61801-06-11 16:48 G 24293573.01 24293573.20 24293573.39 0.0524 0.0176

Jupiter 61807-04-07 15:22 G 24295699.02 24295699.14 24295699.27 0.0497 0.0393

Jupiter 61807-11-29 23:46 G 24295935.34 24295935.49 24295935.65 0.0506 0.0323

Mars 61810-06-09 13:26 G 24296857.89 24296858.06 24296858.24 0.1672 0.0176

Saturn 61810-09-18 22:34 G 24296959.26 24296959.44 24296959.63 0.0289 0.0145

Saturn 61811-05-06 19:41 G 24297189.13 24297189.32 24297189.52 0.0289 0.0118

Jupiter 61813-02-14 07:55 G 24297838.63 24297838.83 24297839.04 0.0527 0.0060

Neptune 61817-01-31 05:02 G 24299285.65 24299285.71 24299285.77 0.0088 0.0085

Neptune 61817-09-13 17:31 G 24299511.16 24299511.23 24299511.34 0.0088 0.0080

Neptune 61818-04-27 06:29 G 24299736.67 24299736.77 24299736.90 0.0088 0.0076

Neptune 61818-12-08 19:26 G 24299962.19 24299962.31 24299962.45 0.0088 0.0071

Neptune 61819-07-22 08:24 G 24300187.71 24300187.85 24300188.00 0.0088 0.0066

Jupiter 61819-08-04 23:17 G 24300201.27 24300201.47 24300201.67 0.0503 0.0116

Neptune 61820-03-03 20:53 G 24300413.23 24300413.37 24300413.55 0.0088 0.0061

Uranus 61820-10-04 23:31 G 24300628.37 24300628.48 24300628.61 0.0141 0.0116

Neptune 61820-10-15 09:50 G 24300638.76 24300638.91 24300639.10 0.0088 0.0056

Uranus 61821-05-19 09:07 G 24300854.71 24300854.88 24300855.06 0.0140 0.0080

Neptune 61821-05-28 22:34 G 24300864.28 24300864.44 24300864.64 0.0088 0.0052

Uranus 61821-12-31 18:14 G 24301081.06 24301081.26 24301081.48 0.0140 0.0045

Neptune 61822-01-09 11:31 G 24301089.81 24301089.98 24301090.18 0.0088 0.0047

Uranus 61822-08-15 03:50 G 24301307.44 24301307.66 24301307.87 0.0140 0.0008

Neptune 61822-08-23 00:29 G 24301315.34 24301315.52 24301315.73 0.0088 0.0042

Uranus 61823-03-29 12:43 G 24301533.82 24301534.03 24301534.25 0.0140 0.0027

Neptune 61823-04-05 13:26 G 24301540.87 24301541.06 24301541.27 0.0088 0.0037

Uranus 61823-11-10 21:36 G 24301760.20 24301760.40 24301760.59 0.0140 0.0062

Neptune 61823-11-17 02:10 G 24301766.40 24301766.59 24301766.81 0.0089 0.0032

Uranus 61824-06-24 06:00 G 24301986.60 24301986.75 24301986.91 0.0139 0.0097

Neptune 61824-06-29 15:07 G 24301991.93 24301992.13 24301992.35 0.0089 0.0026

Jupiter 61824-10-19 20:10 G 24302104.18 24302104.34 24302104.51 0.0530 0.0308

Uranus 61825-02-05 14:10 G 24302213.04 24302213.09 24302213.18 0.0139 0.0131

Neptune 61825-02-10 03:50 G 24302217.46 24302217.66 24302217.89 0.0089 0.0022

Saturn 61825-03-03 08:38 G 24302238.72 24302238.86 24302239.02 0.0271 0.0191

Neptune 61825-09-23 16:48 G 24302443.00 24302443.20 24302443.43 0.0089 0.0017

Saturn 61825-10-18 12:29 G 24302467.81 24302468.02 24302468.23 0.0271 0.0022

Neptune 61826-05-07 06:00 G 24302668.53 24302668.75 24302668.97 0.0089 0.0011

Saturn 61826-06-04 15:50 G 24302697.06 24302697.16 24302697.27 0.0271 0.0233

Neptune 61826-12-18 18:43 G 24302894.07 24302894.28 24302894.50 0.0089 0.0006

Pluto 61827-06-26 20:38 G 24303084.25 24303084.36 24303084.53 0.0081 0.0063

Neptune 61827-08-01 07:41 G 24303119.60 24303119.82 24303120.04 0.0089 0.0001

Pluto 61828-02-07 08:10 G 24303309.62 24303309.84 24303310.06 0.0080 0.0010

Neptune 61828-03-13 20:38 G 24303345.14 24303345.36 24303345.58 0.0089 0.0004

Neptune 61828-10-25 09:22 G 24303570.68 24303570.89 24303571.12 0.0089 0.0010

Neptune 61829-06-07 22:19 G 24303796.22 24303796.43 24303796.65 0.0089 0.0015

Neptune 61830-01-19 11:17 G 24304021.76 24304021.97 24304022.19 0.0089 0.0020

Neptune 61830-09-02 00:14 G 24304247.31 24304247.51 24304247.73 0.0089 0.0025

Jupiter 61831-04-10 00:00 G 24304467.30 24304467.50 24304467.70 0.0500 0.0084

Neptune 61831-04-15 13:12 G 24304472.85 24304473.05 24304473.27 0.0089 0.0030

Neptune 61831-11-27 02:10 G 24304698.40 24304698.59 24304698.80 0.0089 0.0035

Neptune 61832-07-09 15:07 G 24304923.94 24304924.13 24304924.34 0.0089 0.0040

Neptune 61833-02-20 04:05 G 24305149.49 24305149.67 24305149.87 0.0089 0.0045

Neptune 61833-10-03 17:17 G 24305375.05 24305375.22 24305375.41 0.0089 0.0050

Neptune 61834-05-17 06:14 G 24305600.60 24305600.76 24305600.94 0.0089 0.0055

Neptune 61834-12-28 19:12 G 24305826.15 24305826.30 24305826.47 0.0089 0.0060

Neptune 61835-08-11 07:55 G 24306051.70 24306051.83 24306052.00 0.0089 0.0065

Neptune 61836-03-23 20:53 G 24306277.25 24306277.37 24306277.52 0.0089 0.0070

Neptune 61836-11-04 09:50 G 24306502.82 24306502.91 24306503.05 0.0089 0.0075

Jupiter 61837-02-17 07:12 G 24306607.63 24306607.80 24306607.96 0.0523 0.0307

Neptune 61837-06-17 22:48 G 24306728.38 24306728.45 24306728.57 0.0089 0.0080

Neptune 61838-01-29 12:00 G 24306953.95 24306954.00 24306954.08 0.0089 0.0084

Saturn 61840-03-31 07:55 G 24307745.63 24307745.83 24307746.03 0.0289 0.0100

Saturn 61840-11-16 04:48 G 24307975.52 24307975.70 24307975.88 0.0289 0.0162

Jupiter 61842-12-14 00:29 G 24308733.35 24308733.52 24308733.69 0.0498 0.0283

Jupiter 61843-08-07 09:50 G 24308969.81 24308969.91 24308970.01 0.0507 0.0438

Jupiter 61848-10-23 00:29 G 24310873.32 24310873.52 24310873.72 0.0526 0.0079

Jupiter 61854-08-19 03:07 G 24312999.57 24312999.63 24312999.70 0.0496 0.0471

Saturn 61854-09-13 10:05 G 24313024.76 24313024.92 24313025.09 0.0270 0.0165

Jupiter 61855-04-12 10:05 G 24313235.74 24313235.92 24313236.10 0.0504 0.0236

Saturn 61855-04-30 13:41 G 24313253.86 24313254.07 24313254.28 0.0270 0.0046

Saturn 61855-12-15 16:48 G 24313483.15 24313483.20 24313483.28 0.0270 0.0257

Jupiter 61860-06-27 15:22 G 24315138.94 24315139.14 24315139.33 0.0528 0.0158

Uranus 61864-09-29 16:48 G 24316694.08 24316694.20 24316694.36 0.0137 0.0106

Uranus 61865-05-14 00:43 G 24316920.35 24316920.53 24316920.72 0.0138 0.0072

Uranus 61865-12-26 08:53 G 24317146.66 24317146.87 24317147.08 0.0138 0.0038

Uranus 61866-08-09 16:48 G 24317372.99 24317373.20 24317373.42 0.0138 0.0006

Jupiter 61866-12-16 11:02 G 24317501.76 24317501.96 24317502.17 0.0502 0.0036

Uranus 61867-03-24 01:12 G 24317599.34 24317599.55 24317599.77 0.0138 0.0030

Uranus 61867-11-05 09:22 G 24317825.71 24317825.89 24317826.10 0.0139 0.0065

Uranus 61868-06-18 17:46 G 24318052.11 24318052.24 24318052.41 0.0139 0.0099

Uranus 61869-01-31 02:38 G 24318278.56 24318278.61 24318278.68 0.0139 0.0133

Saturn 61869-10-11 11:02 G 24318531.76 24318531.96 24318532.17 0.0289 0.0072

Saturn 61870-05-29 08:10 G 24318761.69 24318761.84 24318762.00 0.0289 0.0191

Mars 61871-08-27 06:00 G 24319216.62 24319216.75 24319216.88 0.1854 0.1213

Jupiter 61872-03-02 05:02 G 24319404.58 24319404.71 24319404.84 0.0531 0.0400

Jupiter 61872-10-25 23:02 G 24319642.36 24319642.46 24319642.57 0.0521 0.0442

Moon 61873-05-24 11:31 G 24319852.86 24319852.98 24319853.11 0.2674 0.1475

Earth 61873-05-24 14:38 G 24319852.98 24319853.11 24319853.25 0.2668 0.1487 *

Mars 61876-04-06 00:14 G 24320900.35 24320900.51 24320900.68 0.1675 0.0500

Jupiter 61878-08-21 12:14 G 24321767.82 24321768.01 24321768.21 0.0499 0.0164

Earth 61881-05-22 05:17 G 24322772.61 24322772.72 24322772.82 0.2669 0.1979

Moon 61881-05-22 06:29 G 24322772.66 24322772.77 24322772.89 0.2676 0.1707 *

Saturn 61884-03-25 16:48 G 24323811.02 24323811.20 24323811.39 0.0271 0.0131

Jupiter 61884-06-30 13:12 G 24323907.87 24323908.05 24323908.24 0.0525 0.0207

Saturn 61884-11-09 20:38 G 24324040.16 24324040.36 24324040.57 0.0271 0.0082

Jupiter 61890-04-26 13:55 G 24326033.94 24326034.08 24326034.22 0.0497 0.0357

Jupiter 61890-12-18 21:36 G 24326270.26 24326270.40 24326270.55 0.0505 0.0355

Jupiter 61896-03-05 05:17 G 24328173.51 24328173.72 24328173.92 0.0527 0.0026

Neptune 61897-12-24 04:19 G 24328832.65 24328832.68 24328832.76 0.0089 0.0087

Neptune 61898-08-06 17:46 G 24329058.17 24329058.24 24329058.35 0.0089 0.0081

Saturn 61898-09-06 01:12 G 24329088.52 24329088.55 24329088.60 0.0288 0.0283

Neptune 61899-03-20 07:26 G 24329283.71 24329283.81 24329283.93 0.0089 0.0076

Saturn 61899-04-23 22:05 G 24329318.21 24329318.42 24329318.64 0.0288 0.0023

Neptune 61899-10-31 20:38 G 24329509.24 24329509.36 24329509.50 0.0089 0.0071

Saturn 61899-12-09 18:58 G 24329548.17 24329548.29 24329548.40 0.0288 0.0238

Neptune 61900-06-14 10:05 G 24329734.77 24329734.92 24329735.06 0.0089 0.0066

Neptune 61901-01-25 22:34 G 24329960.31 24329960.44 24329960.63 0.0089 0.0062

Neptune 61901-09-08 12:00 G 24330185.85 24330186.00 24330186.19 0.0089 0.0057

Neptune 61902-04-22 01:12 G 24330411.39 24330411.55 24330411.75 0.0089 0.0052

Jupiter 61902-08-24 20:24 G 24330536.16 24330536.35 24330536.54 0.0503 0.0149

Neptune 61902-12-03 14:24 G 24330636.93 24330637.10 24330637.30 0.0089 0.0047

Neptune 61903-07-17 03:36 G 24330862.47 24330862.65 24330862.86 0.0089 0.0042

Neptune 61904-02-27 17:17 G 24331088.02 24331088.22 24331088.42 0.0089 0.0036

Uranus 61904-06-05 07:41 G 24331186.76 24331186.82 24331186.92 0.0141 0.0131

Neptune 61904-10-10 06:29 G 24331313.56 24331313.77 24331313.97 0.0089 0.0031

Uranus 61905-01-17 17:31 G 24331413.08 24331413.23 24331413.40 0.0141 0.0095

Neptune 61905-05-23 19:26 G 24331539.10 24331539.31 24331539.52 0.0089 0.0026

Uranus 61905-09-01 02:53 G 24331639.44 24331639.62 24331639.83 0.0140 0.0060

Neptune 61906-01-04 08:38 G 24331764.65 24331764.86 24331765.08 0.0089 0.0021

Uranus 61906-04-15 12:29 G 24331865.81 24331866.02 24331866.24 0.0140 0.0023

Neptune 61906-08-17 21:50 G 24331990.19 24331990.41 24331990.63 0.0089 0.0016

Uranus 61906-11-27 21:36 G 24332092.18 24332092.40 24332092.61 0.0140 0.0012

Neptune 61907-03-31 11:02 G 24332215.75 24332215.96 24332216.19 0.0089 0.0011

Uranus 61907-07-12 06:14 G 24332318.56 24332318.76 24332318.97 0.0140 0.0047

Jupiter 61907-11-09 21:22 G 24332439.21 24332439.39 24332439.56 0.0530 0.0261

Neptune 61907-11-12 00:14 G 24332441.29 24332441.51 24332441.74 0.0089 0.0006

Uranus 61908-02-23 14:53 G 24332544.96 24332545.12 24332545.31 0.0139 0.0082

Neptune 61908-06-24 13:26 G 24332666.84 24332667.06 24332667.28 0.0089 0.0001

Uranus 61908-10-06 23:46 G 24332771.38 24332771.49 24332771.61 0.0139 0.0117

Neptune 61909-02-05 02:38 G 24332892.39 24332892.61 24332892.83 0.0089 0.0005

Neptune 61909-09-18 15:50 G 24333117.94 24333118.16 24333118.38 0.0089 0.0010

Neptune 61910-05-02 05:02 G 24333343.49 24333343.71 24333343.93 0.0089 0.0015

Neptune 61910-12-13 17:46 G 24333569.04 24333569.24 24333569.47 0.0089 0.0021

Neptune 61911-07-27 06:58 G 24333794.59 24333794.79 24333795.01 0.0089 0.0025

Neptune 61912-03-08 19:55 G 24334020.14 24334020.33 24334020.56 0.0089 0.0031

Neptune 61912-10-20 09:07 G 24334245.69 24334245.88 24334246.09 0.0089 0.0036

Neptune 61913-06-02 22:05 G 24334471.24 24334471.42 24334471.63 0.0089 0.0041

Saturn 61913-10-06 19:26 G 24334597.12 24334597.31 24334597.51 0.0270 0.0103

Neptune 61914-01-14 11:02 G 24334696.79 24334696.96 24334697.16 0.0088 0.0046

Jupiter 61914-04-29 21:36 G 24334802.20 24334802.40 24334802.61 0.0501 0.0050

Saturn 61914-05-23 23:02 G 24334826.27 24334826.46 24334826.66 0.0270 0.0109

Neptune 61914-08-28 00:00 G 24334922.34 24334922.50 24334922.70 0.0088 0.0051

Neptune 61915-04-10 12:58 G 24335147.89 24335148.04 24335148.24 0.0088 0.0056

Neptune 61915-11-22 02:24 G 24335373.45 24335373.60 24335373.77 0.0088 0.0060

Neptune 61916-07-04 15:22 G 24335599.00 24335599.14 24335599.30 0.0088 0.0065

Neptune 61917-02-15 04:05 G 24335824.55 24335824.67 24335824.82 0.0088 0.0070

Neptune 61917-09-28 17:02 G 24336050.11 24336050.21 24336050.35 0.0088 0.0075

Neptune 61918-05-12 06:00 G 24336275.68 24336275.75 24336275.88 0.0088 0.0080

Neptune 61918-12-23 19:26 G 24336501.25 24336501.31 24336501.39 0.0088 0.0084

Jupiter 61919-07-15 11:02 G 24336704.90 24336704.96 24336705.03 0.0532 0.0500

Neptune 61919-08-06 08:38 G 24336726.86 24336726.86 24336726.86 0.0088 0.0088

Jupiter 61920-03-09 06:43 G 24336942.63 24336942.78 24336942.94 0.0523 0.0348

Jupiter 61926-01-02 23:31 G 24339068.30 24339068.48 24339068.66 0.0498 0.0244

Jupiter 61926-08-27 09:22 G 24339304.83 24339304.89 24339304.96 0.0507 0.0477

Saturn 61928-03-19 04:34 G 24339874.59 24339874.69 24339874.79 0.0289 0.0255

Saturn 61928-11-04 01:12 G 24340104.34 24340104.55 24340104.77 0.0289 0.0007

Saturn 61929-06-21 22:05 G 24340334.34 24340334.42 24340334.50 0.0289 0.0267

Jupiter 61931-11-12 22:19 G 24341208.23 24341208.43 24341208.63 0.0525 0.0116

Mars 61937-06-24 10:19 G 24343258.76 24343258.93 24343259.10 0.1850 0.0491

Jupiter 61937-09-08 02:10 G 24343334.50 24343334.59 24343334.69 0.0496 0.0433

Jupiter 61938-05-02 08:53 G 24343570.71 24343570.87 24343571.05 0.0504 0.0271

Mars 61942-02-02 11:31 G 24344942.83 24344942.98 24344943.14 0.1677 0.0816

Saturn 61943-04-19 02:10 G 24345383.38 24345383.59 24345383.79 0.0271 0.0068

Jupiter 61943-07-18 10:34 G 24345473.74 24345473.94 24345474.14 0.0529 0.0129

Saturn 61943-12-04 05:46 G 24345612.57 24345612.74 24345612.93 0.0271 0.0145

Uranus 61948-05-31 02:10 G 24347252.50 24347252.59 24347252.71 0.0137 0.0119

Uranus 61949-01-12 10:05 G 24347478.76 24347478.92 24347479.10 0.0138 0.0086

Uranus 61949-08-26 17:46 G 24347705.05 24347705.24 24347705.46 0.0138 0.0053

Jupiter 61950-01-05 08:53 G 24347836.67 24347836.87 24347837.07 0.0502 0.0069

Uranus 61950-04-10 02:10 G 24347931.37 24347931.59 24347931.81 0.0138 0.0019

Uranus 61950-11-22 10:19 G 24348157.71 24348157.93 24348158.15 0.0138 0.0016

Uranus 61951-07-06 18:29 G 24348384.07 24348384.27 24348384.48 0.0138 0.0050

Uranus 61952-02-18 02:53 G 24348610.46 24348610.62 24348610.80 0.0139 0.0085

Uranus 61952-10-01 11:31 G 24348836.88 24348836.98 24348837.10 0.0139 0.0119

Jupiter 61955-03-23 00:43 G 24349739.39 24349739.53 24349739.68 0.0531 0.0369

Jupiter 61955-11-15 19:26 G 24349977.23 24349977.31 24349977.40 0.0522 0.0470

Saturn 61957-09-29 16:34 G 24350661.05 24350661.19 24350661.35 0.0288 0.0204

Saturn 61958-05-17 13:26 G 24350890.85 24350891.06 24350891.27 0.0288 0.0057

Jupiter 61961-09-10 08:10 G 24352102.65 24352102.84 24352103.04 0.0499 0.0133

Jupiter 61967-07-21 13:12 G 24354242.87 24354243.05 24354243.23 0.0524 0.0249

Moon 61970-11-28 07:55 G 24355468.78 24355468.83 24355468.88 0.2668 0.2525

Saturn 61972-03-14 01:41 G 24355940.50 24355940.57 24355940.66 0.0271 0.0250

Saturn 61972-10-29 05:46 G 24356169.53 24356169.74 24356169.95 0.0271 0.0038

Jupiter 61973-05-16 10:05 G 24356368.78 24356368.92 24356369.08 0.0497 0.0326

Saturn 61973-06-15 09:07 G 24356398.73 24356398.88 24356399.05 0.0270 0.0173

Jupiter 61974-01-07 18:29 G 24356605.15 24356605.27 24356605.41 0.0506 0.0387

Mars 61974-02-01 07:55 G 24356629.83 24356629.83 24356629.84 0.1670 0.1668

Moon 61978-11-26 03:22 G 24358388.50 24358388.64 24358388.78 0.2670 0.0895

Earth 61978-11-26 03:50 G 24358388.50 24358388.66 24358388.81 0.2663 0.0528 *

Jupiter 61979-03-26 05:02 G 24358508.50 24358508.71 24358508.91 0.0527 0.0019

Neptune 61980-09-22 01:41 G 24359054.56 24359054.57 24359054.60 0.0088 0.0088

Neptune 61981-05-05 14:10 G 24359280.04 24359280.09 24359280.18 0.0088 0.0083

Neptune 61981-12-17 03:07 G 24359505.54 24359505.63 24359505.74 0.0088 0.0078

Neptune 61982-07-30 16:05 G 24359731.06 24359731.17 24359731.30 0.0088 0.0074

Neptune 61983-03-13 04:34 G 24359956.57 24359956.69 24359956.85 0.0088 0.0069

Neptune 61983-10-24 17:17 G 24360182.09 24360182.22 24360182.39 0.0088 0.0065

Neptune 61984-06-06 06:14 G 24360407.62 24360407.76 24360407.94 0.0088 0.0060

Neptune 61985-01-17 19:12 G 24360633.14 24360633.30 24360633.48 0.0088 0.0055

Pluto 61985-04-13 21:36 G 24360719.35 24360719.40 24360719.52 0.0063 0.0058

Neptune 61985-08-31 08:10 G 24360858.67 24360858.84 24360859.03 0.0088 0.0050

Jupiter 61985-09-12 19:12 G 24360871.11 24360871.30 24360871.49 0.0503 0.0186

Pluto 61985-11-25 01:41 G 24360944.38 24360944.57 24360944.79 0.0063 0.0024

Neptune 61986-04-13 21:07 G 24361084.20 24361084.38 24361084.58 0.0088 0.0045

Pluto 61986-07-08 05:46 G 24361169.53 24361169.74 24361169.96 0.0063 0.0011

Neptune 61986-11-25 10:05 G 24361309.73 24361309.92 24361310.12 0.0088 0.0040

Pluto 61987-02-18 09:22 G 24361394.76 24361394.89 24361395.06 0.0064 0.0046

Saturn 61987-04-11 20:10 G 24361447.18 24361447.34 24361447.51 0.0289 0.0175

Neptune 61987-07-08 22:48 G 24361535.25 24361535.45 24361535.66 0.0088 0.0035

Saturn 61987-11-27 16:48 G 24361677.00 24361677.20 24361677.41 0.0289 0.0086

Neptune 61988-02-19 11:46 G 24361760.78 24361760.99 24361761.20 0.0088 0.0030

Uranus 61988-09-17 02:10 G 24361971.46 24361971.59 24361971.72 0.0141 0.0110

Neptune 61988-10-02 00:29 G 24361986.32 24361986.52 24361986.74 0.0089 0.0025

Uranus 61989-05-01 11:17 G 24362197.80 24362197.97 24362198.17 0.0141 0.0075

Neptune 61989-05-15 13:26 G 24362211.85 24362212.06 24362212.28 0.0089 0.0020

Uranus 61989-12-13 20:53 G 24362424.16 24362424.37 24362424.58 0.0140 0.0039

Neptune 61989-12-27 02:10 G 24362437.38 24362437.59 24362437.82 0.0089 0.0015

Uranus 61990-07-28 06:14 G 24362650.54 24362650.76 24362650.97 0.0140 0.0004

Neptune 61990-08-09 15:07 G 24362662.92 24362663.13 24362663.35 0.0089 0.0010

Jupiter 61990-11-28 18:58 G 24362774.11 24362774.29 24362774.48 0.0529 0.0222

Uranus 61991-03-11 15:07 G 24362876.92 24362877.13 24362877.34 0.0140 0.0033

Neptune 61991-03-23 04:05 G 24362888.45 24362888.67 24362888.89 0.0089 0.0005

Uranus 61991-10-23 23:46 G 24363103.31 24363103.49 24363103.69 0.0140 0.0068

Neptune 61991-11-03 17:02 G 24363113.99 24363114.21 24363114.43 0.0089 0.0002

Uranus 61992-06-06 08:24 G 24363329.72 24363329.85 24363330.01 0.0139 0.0103

Neptune 61992-06-16 05:46 G 24363339.52 24363339.74 24363339.96 0.0089 0.0006

Uranus 61993-01-18 17:02 G 24363556.18 24363556.21 24363556.26 0.0139 0.0137

Neptune 61993-01-27 18:29 G 24363565.06 24363565.27 24363565.49 0.0089 0.0011

Neptune 61993-09-10 07:26 G 24363790.60 24363790.81 24363791.03 0.0089 0.0016

Neptune 61994-04-23 20:24 G 24364016.14 24364016.35 24364016.57 0.0089 0.0021

Neptune 61994-12-05 09:22 G 24364241.68 24364241.89 24364242.10 0.0089 0.0026

Neptune 61995-07-18 22:19 G 24364467.23 24364467.43 24364467.64 0.0089 0.0031

Neptune 61996-02-29 11:02 G 24364692.77 24364692.96 24364693.17 0.0089 0.0036

Neptune 61996-10-12 00:14 G 24364918.32 24364918.51 24364918.71 0.0089 0.0041

Jupiter 61997-05-18 20:10 G 24365137.14 24365137.34 24365137.55 0.0501 0.0017

Neptune 61997-05-25 13:12 G 24365143.87 24365144.05 24365144.25 0.0089 0.0046

Neptune 61998-01-06 02:10 G 24365369.42 24365369.59 24365369.78 0.0089 0.0051

Neptune 61998-08-19 15:07 G 24365594.97 24365595.13 24365595.31 0.0089 0.0056

Neptune 61999-04-02 04:05 G 24365820.53 24365820.67 24365820.84 0.0089 0.0061

Neptune 61999-11-13 17:17 G 24366046.08 24366046.22 24366046.38 0.0089 0.0066

Neptune 62000-06-26 06:00 G 24366271.64 24366271.75 24366271.90 0.0089 0.0071

63RD MILLENNIUM CE

This is a list of transits of Venus in the 63rd millennium CE.

FROM MAX- TRANSIT TIME C START MAX END SUNRAD DEPTH S

Neptune 62001-02-06 18:58 G 24366497.20 24366497.29 24366497.43 0.0089 0.0076

Neptune 62001-09-20 08:38 G 24366722.77 24366722.86 24366722.95 0.0089 0.0080

Saturn 62001-09-24 08:10 G 24366726.72 24366726.84 24366726.97 0.0271 0.0216

Neptune 62002-05-03 21:22 G 24366948.34 24366948.39 24366948.46 0.0089 0.0085

Saturn 62002-05-11 12:14 G 24366955.80 24366956.01 24366956.22 0.0271 0.0005

Jupiter 62002-08-03 05:31 G 24367039.64 24367039.73 24367039.82 0.0532 0.0471

Saturn 62002-12-26 15:36 G 24367185.03 24367185.15 24367185.30 0.0271 0.0210

Jupiter 62003-03-29 01:41 G 24367277.43 24367277.57 24367277.71 0.0523 0.0373

Mars 62003-04-21 14:38 G 24367300.93 24367301.11 24367301.28 0.1847 0.0241

Mars 62007-11-30 22:19 G 24368985.31 24368985.43 24368985.56 0.1680 0.1151

Jupiter 62009-01-21 21:07 G 24369403.20 24369403.38 24369403.56 0.0498 0.0210

Jupiter 62009-09-15 06:29 G 24369639.77 24369639.77 24369639.78 0.0507 0.0506

Jupiter	62014-12-01 17:31 G	24371543.04	24371543.23	24371543.43	0.0526	0.0144
Saturn	62016-10-22 08:38 G	24372233.67	24372233.86	24372234.06	0.0288	0.0123
Saturn	62017-06-09 05:31 G	24372463.54	24372463.73	24372463.91	0.0288	0.0138
Jupiter	62020-09-26 21:22 G	24373669.27	24373669.39	24373669.51	0.0496	0.0403
Jupiter	62021-05-21 04:05 G	24373905.51	24373905.67	24373905.84	0.0504	0.0298
Jupiter	62026-08-06 10:05 G	24375808.72	24375808.92	24375809.12	0.0528	0.0086
Saturn	62031-04-06 12:58 G	24377512.89	24377513.04	24377513.20	0.0271	0.0184
Saturn	62031-11-21 16:48 G	24377741.99	24377742.20	24377742.41	0.0271	0.0028
Uranus	62032-01-29 11:17 G	24377810.93	24377810.97	24377811.03	0.0137	0.0133
Saturn	62032-07-07 20:10 G	24377971.25	24377971.34	24377971.45	0.0271	0.0239
Uranus	62032-09-11 18:58 G	24378037.15	24378037.29	24378037.45	0.0137	0.0100
Jupiter	62033-01-24 04:34 G	24378171.49	24378171.69	24378171.89	0.0502	0.0099
Uranus	62033-04-26 02:38 G	24378263.43	24378263.61	24378263.81	0.0138	0.0067
Uranus	62033-12-08 10:34 G	24378489.74	24378489.94	24378490.16	0.0138	0.0033
Uranus	62034-07-22 18:43 G	24378716.07	24378716.28	24378716.50	0.0138	0.0002
Uranus	62035-03-06 03:07 G	24378942.42	24378942.63	24378942.84	0.0138	0.0035
Uranus	62035-10-18 11:31 G	24379168.79	24379168.98	24379169.17	0.0139	0.0070
Uranus	62036-05-31 19:55 G	24379395.19	24379395.33	24379395.48	0.0139	0.0104
Uranus	62037-01-13 04:34 G	24379621.69	24379621.69	24379621.71	0.0139	0.0139
Jupiter	62038-04-11 00:43 G	24380074.37	24380074.53	24380074.69	0.0531	0.0323
Jupiter	62038-12-04 18:29 G	24380312.23	24380312.27	24380312.32	0.0521	0.0508
Mars	62039-11-29 19:12 G	24380672.20	24380672.30	24380672.40	0.1672	0.1357
Jupiter	62044-09-29 06:14 G	24382437.56	24382437.76	24382437.96	0.0500	0.0097
Saturn	62046-05-04 12:14 G	24383019.81	24383020.01	24383020.21	0.0289	0.0095
Saturn	62046-12-20 08:53 G	24383249.69	24383249.87	24383250.04	0.0289	0.0166
Jupiter	62050-08-09 10:34 G	24384577.77	24384577.94	24384578.11	0.0524	0.0284
Jupiter	62056-06-04 08:38 G	24386703.69	24386703.86	24386704.02	0.0497	0.0289
Jupiter	62057-01-26 16:48 G	24386940.10	24386940.20	24386940.32	0.0506	0.0421
Saturn	62060-10-16 18:29 G	24388299.10	24388299.27	24388299.45	0.0271	0.0151
Saturn	62061-06-02 22:34 G	24388528.24	24388528.44	24388528.65	0.0271	0.0061

Neptune 62061-08-15 00:43 G 24388601.53 24388601.53 24388601.53 0.0089 0.0089

Neptune 62062-03-28 13:41 G 24388827.02 24388827.07 24388827.15 0.0089 0.0085

Jupiter 62062-04-13 23:17 G 24388843.27 24388843.47 24388843.67 0.0527 0.0044

Neptune 62062-11-09 03:22 G 24389052.54 24389052.64 24389052.74 0.0089 0.0079

Neptune 62063-06-22 16:05 G 24389278.07 24389278.17 24389278.31 0.0089 0.0075

Neptune 62064-02-03 05:17 G 24389503.61 24389503.72 24389503.88 0.0089 0.0070

Neptune 62064-09-15 18:43 G 24389729.15 24389729.28 24389729.45 0.0089 0.0065

Neptune 62065-04-29 07:55 G 24389954.69 24389954.83 24389955.01 0.0089 0.0060

Neptune 62065-12-10 21:07 G 24390180.23 24390180.38 24390180.57 0.0089 0.0055

Neptune 62066-07-24 10:34 G 24390405.77 24390405.94 24390406.13 0.0089 0.0050

Neptune 62067-03-06 23:46 G 24390631.31 24390631.49 24390631.69 0.0089 0.0045

Neptune 62067-10-18 12:58 G 24390856.86 24390857.04 24390857.25 0.0089 0.0040

Jupiter 62068-02-08 10:19 G 24390969.89 24390969.93 24390969.99 0.0495 0.0476

Neptune 62068-05-31 02:10 G 24391082.40 24391082.59 24391082.80 0.0089 0.0035

Jupiter 62068-10-01 16:19 G 24391206.00 24391206.18 24391206.37 0.0503 0.0218

Neptune 62069-01-11 15:22 G 24391307.94 24391308.14 24391308.35 0.0089 0.0030

Mars 62069-02-15 19:12 G 24391343.15 24391343.30 24391343.46 0.1843 0.0932

Neptune 62069-08-25 04:34 G 24391533.48 24391533.69 24391533.91 0.0089 0.0025

Neptune 62070-04-07 17:46 G 24391759.03 24391759.24 24391759.46 0.0089 0.0020

Neptune 62070-11-19 06:58 G 24391984.58 24391984.79 24391985.01 0.0089 0.0015

Neptune 62071-07-02 20:10 G 24392210.12 24392210.34 24392210.56 0.0089 0.0010

Neptune 62072-02-13 09:22 G 24392435.67 24392435.89 24392436.11 0.0089 0.0005

Uranus 62072-05-17 10:34 G 24392529.86 24392529.94 24392530.06 0.0141 0.0125

Neptune 62072-09-25 22:34 G 24392661.22 24392661.44 24392661.67 0.0089 0.0002

Uranus 62072-12-29 20:24 G 24392756.19 24392756.35 24392756.53 0.0141 0.0089

Neptune 62073-05-09 11:46 G 24392886.77 24392886.99 24392887.22 0.0089 0.0006

Uranus 62073-08-13 06:00 G 24392982.56 24392982.75 24392982.96 0.0141 0.0053

Mars 62073-09-27 09:22 G 24393027.81 24393027.89 24393027.97 0.1683 0.1478

Jupiter 62073-12-17 13:26 G 24393108.88 24393109.06 24393109.26 0.0530 0.0194

Neptune 62073-12-21 00:58 G 24393112.32 24393112.54 24393112.76 0.0089 0.0011

Uranus 62074-03-27 15:22 G 24393208.93 24393209.14 24393209.36 0.0140 0.0017

Neptune 62074-08-03 13:55 G 24393337.87 24393338.08 24393338.31 0.0089 0.0017

Uranus 62074-11-09 00:29 G 24393435.31 24393435.52 24393435.74 0.0140 0.0019

Neptune 62075-03-17 03:22 G 24393563.43 24393563.64 24393563.86 0.0089 0.0021

Uranus 62075-06-23 09:22 G 24393661.69 24393661.89 24393662.09 0.0140 0.0054

Neptune 62075-10-28 16:19 G 24393788.98 24393789.18 24393789.40 0.0089 0.0027

Saturn 62075-11-15 01:12 G 24393806.34 24393806.55 24393806.76 0.0288 0.0042

Pluto 62076-01-11 11:17 G 24393863.76 24393863.97 24393864.18 0.0081 0.0022

Uranus 62076-02-04 18:14 G 24393888.09 24393888.26 24393888.43 0.0140 0.0089

Neptune 62076-06-10 05:31 G 24394014.53 24394014.73 24394014.94 0.0089 0.0032

Saturn 62076-07-01 21:36 G 24394036.27 24394036.40 24394036.54 0.0288 0.0219

Pluto 62076-08-23 21:50 G 24394089.25 24394089.41 24394089.60 0.0080 0.0049

Uranus 62076-09-18 02:38 G 24394114.53 24394114.61 24394114.73 0.0139 0.0124

Neptune 62077-01-21 18:29 G 24394240.08 24394240.27 24394240.48 0.0089 0.0037

Neptune 62077-09-04 07:41 G 24394465.63 24394465.82 24394466.02 0.0088 0.0042

Neptune 62078-04-17 20:53 G 24394691.19 24394691.37 24394691.57 0.0088 0.0047

Neptune 62078-11-29 09:50 G 24394916.74 24394916.91 24394917.10 0.0088 0.0052

Neptune 62079-07-12 22:48 G 24395142.30 24395142.45 24395142.63 0.0088 0.0057

Neptune 62080-02-23 11:46 G 24395367.85 24395367.99 24395368.17 0.0088 0.0062

Jupiter 62080-06-06 14:53 G 24395471.91 24395472.12 24395472.32 0.0501 0.0017

Neptune 62080-10-06 00:43 G 24395593.40 24395593.53 24395593.70 0.0088 0.0066

Neptune 62081-05-19 14:10 G 24395818.96 24395819.09 24395819.23 0.0088 0.0071

Neptune 62081-12-31 02:53 G 24396044.52 24396044.62 24396044.75 0.0088 0.0076

Neptune 62082-08-13 15:36 G 24396270.09 24396270.15 24396270.27 0.0088 0.0081

Neptune 62083-03-27 05:17 G 24396495.66 24396495.72 24396495.78 0.0088 0.0085

Jupiter 62085-08-22 04:34 G 24397374.58 24397374.69 24397374.82 0.0532 0.0428

Jupiter 62086-04-17 00:43 G 24397612.41 24397612.53 24397612.66 0.0523 0.0412

Saturn 62090-04-29 00:29 G 24399085.33 24399085.52 24399085.71 0.0271 0.0117

Saturn 62090-12-14 03:50 G 24399314.47 24399314.66 24399314.87 0.0271 0.0095

Jupiter 62092-02-10 16:19 G 24399737.99 24399738.18 24399738.37 0.0498 0.0180

Jupiter 62097-12-20 17:02 G 24401878.02 24401878.21 24401878.41 0.0525 0.0187

Jupiter 62103-10-17 18:43 G 24404004.15 24404004.28 24404004.42 0.0496 0.0369

Jupiter 62104-06-10 02:10 G 24404240.45 24404240.59 24404240.75 0.0505 0.0334

Saturn 62104-10-10 07:12 G 24404362.74 24404362.80 24404362.87 0.0289 0.0274

Saturn 62105-05-28 04:05 G 24404592.45 24404592.67 24404592.88 0.0289 0.0016

Mars 62105-09-27 06:14 G 24404714.63 24404714.76 24404714.90 0.1675 0.1041

Saturn 62106-01-13 00:29 G 24404822.42 24404822.52 24404822.63 0.0289 0.0246

Jupiter 62109-08-26 07:55 G 24406143.62 24406143.83 24406144.03 0.0528 0.0048

Jupiter 62116-02-14 03:07 G 24408506.44 24408506.63 24408506.83 0.0502 0.0134

Uranus 62116-05-13 05:02 G 24408595.59 24408595.71 24408595.83 0.0137 0.0113

Earth 62116-05-26 15:22 G 24408609.01 24408609.14 24408609.27 0.2669 0.1536

Moon 62116-05-26 20:24 G 24408609.22 24408609.35 24408609.48 0.2665 0.1616 *

Uranus 62116-12-25 12:29 G 24408821.85 24408822.02 24408822.21 0.0138 0.0080

Uranus 62117-08-08 20:38 G 24409048.15 24409048.36 24409048.56 0.0138 0.0046

Uranus 62118-03-23 04:34 G 24409274.48 24409274.69 24409274.91 0.0138 0.0013

Uranus 62118-11-04 12:43 G 24409500.82 24409501.03 24409501.25 0.0138 0.0022

Uranus 62119-06-18 20:53 G 24409727.18 24409727.37 24409727.58 0.0138 0.0057

Saturn 62119-11-10 05:17 G 24409871.53 24409871.72 24409871.93 0.0271 0.0086

Uranus 62120-01-31 05:31 G 24409953.57 24409953.73 24409953.90 0.0139 0.0091

Saturn 62120-06-26 09:07 G 24410100.70 24410100.88 24410101.07 0.0271 0.0126

Uranus 62120-09-13 14:10 G 24410180.01 24410180.09 24410180.19 0.0139 0.0125

Jupiter 62121-04-30 19:12 G 24410409.14 24410409.30 24410409.47 0.0530 0.0293

Earth 62124-05-24 06:00 G 24411528.64 24411528.75 24411528.86 0.2670 0.1918

Moon 62124-05-24 06:43 G 24411528.65 24411528.78 24411528.90 0.2663 0.1762 *

Jupiter 62127-10-20 03:50 G 24412772.46 24412772.66 24412772.86 0.0500 0.0063

Jupiter 62133-08-29 05:31 G 24414912.56 24414912.73 24414912.89 0.0524 0.0311

Saturn 62134-04-22 19:41 G 24415149.20 24415149.32 24415149.47 0.0288 0.0223

Saturn 62134-12-08 16:34 G 24415378.98 24415379.19 24415379.40 0.0288 0.0037

Mars 62134-12-14 23:46 G 24415385.42 24415385.49 24415385.57 0.1840 0.1633

Jupiter 62139-06-25 03:07 G 24417038.46 24417038.63 24417038.80 0.0497 0.0260

Jupiter 62140-02-16 11:17 G 24417274.88 24417274.97 24417275.07 0.0506 0.0446

Neptune 62144-12-25 10:19 G 24419048.91 24419048.93 24419049.00 0.0088 0.0087

Jupiter 62145-05-03 22:34 G 24419178.24 24419178.44 24419178.64 0.0527 0.0087

Neptune 62145-08-07 23:31 G 24419274.41 24419274.48 24419274.57 0.0088 0.0081

Neptune 62146-03-21 12:00 G 24419499.91 24419500.00 24419500.13 0.0088 0.0077

Neptune 62146-11-02 00:43 G 24419725.43 24419725.53 24419725.68 0.0088 0.0073

Neptune 62147-06-15 13:41 G 24419950.94 24419951.07 24419951.22 0.0088 0.0068

Neptune 62148-01-27 02:38 G 24420176.46 24420176.61 24420176.77 0.0088 0.0063

Neptune 62148-09-08 15:07 G 24420401.99 24420402.13 24420402.32 0.0088 0.0059

Saturn 62148-10-05 07:55 G 24420428.80 24420428.83 24420428.89 0.0271 0.0263

Neptune 62149-04-22 04:05 G 24420627.51 24420627.67 24420627.86 0.0088 0.0054

Saturn 62149-05-22 11:46 G 24420657.79 24420657.99 24420658.20 0.0271 0.0052

Neptune 62149-12-03 17:02 G 24420853.04 24420853.21 24420853.41 0.0088 0.0048

Saturn 62150-01-06 15:07 G 24420886.97 24420887.13 24420887.31 0.0270 0.0159

Neptune 62150-07-17 05:46 G 24421078.56 24421078.74 24421078.95 0.0088 0.0044

Neptune 62151-02-27 18:43 G 24421304.09 24421304.28 24421304.49 0.0088 0.0039

Jupiter 62151-02-28 05:46 G 24421304.65 24421304.74 24421304.83 0.0495 0.0445

Neptune 62151-10-11 07:41 G 24421529.63 24421529.82 24421530.03 0.0088 0.0034

Jupiter 62151-10-22 11:31 G 24421540.81 24421540.98 24421541.16 0.0503 0.0247

Neptune 62152-05-23 20:38 G 24421755.16 24421755.36 24421755.58 0.0088 0.0028

Neptune 62153-01-04 09:22 G 24421980.69 24421980.89 24421981.11 0.0088 0.0024

Neptune 62153-08-17 22:19 G 24422206.23 24422206.43 24422206.66 0.0088 0.0019

Neptune 62154-03-31 11:17 G 24422431.76 24422431.97 24422432.19 0.0089 0.0014

Neptune 62154-11-12 00:14 G 24422657.29 24422657.51 24422657.73 0.0089 0.0008

Neptune 62155-06-25 12:58 G 24422882.83 24422883.04 24422883.27 0.0089 0.0004

Uranus 62156-01-16 19:55 G 24423088.31 24423088.33 24423088.38 0.0141 0.0140

Neptune 62156-02-06 01:55 G 24423108.36 24423108.58 24423108.80 0.0089 0.0002

Uranus 62156-08-30 06:00 G 24423314.61 24423314.75 24423314.90 0.0141 0.0103

Neptune 62156-09-18 14:53 G 24423333.90 24423334.12 24423334.34 0.0089 0.0007

Jupiter 62157-01-06 13:55 G 24423443.88 24423444.08 24423444.27 0.0529 0.0147

Uranus 62157-04-13 15:36 G 24423540.96 24423541.15 24423541.34 0.0141 0.0067

Neptune 62157-05-02 03:50 G 24423559.44 24423559.66 24423559.88 0.0089 0.0012

Uranus 62157-11-26 00:43 G 24423767.33 24423767.53 24423767.75 0.0140 0.0032

Neptune 62157-12-13 16:34 G 24423784.98 24423785.19 24423785.41 0.0089 0.0017

Uranus 62158-07-10 10:05 G 24423993.70 24423993.92 24423994.14 0.0140 0.0005

Neptune 62158-07-27 05:17 G 24424010.51 24424010.72 24424010.94 0.0089 0.0022

Uranus 62159-02-21 19:12 G 24424220.09 24424220.30 24424220.51 0.0140 0.0040

Neptune 62159-03-09 18:14 G 24424236.05 24424236.26 24424236.47 0.0089 0.0027

Uranus 62159-10-06 03:50 G 24424446.49 24424446.66 24424446.86 0.0140 0.0076

Neptune 62159-10-21 07:12 G 24424461.60 24424461.80 24424462.01 0.0089 0.0032

Uranus 62160-05-19 12:29 G 24424672.91 24424673.02 24424673.17 0.0139 0.0111

Neptune 62160-06-02 20:10 G 24424687.14 24424687.34 24424687.54 0.0089 0.0037

Neptune 62161-01-14 08:53 G 24424912.69 24424912.87 24424913.07 0.0089 0.0042

Neptune 62161-08-27 22:05 G 24425138.24 24425138.42 24425138.61 0.0089 0.0047

Neptune 62162-04-10 10:48 G 24425363.78 24425363.95 24425364.14 0.0089 0.0052

Neptune 62162-11-21 23:46 G 24425589.34 24425589.49 24425589.67 0.0089 0.0057

Jupiter 62163-06-27 12:43 G 24425806.83 24425807.03 24425807.24 0.0501 0.0050

Neptune 62163-07-05 12:43 G 24425814.89 24425815.03 24425815.20 0.0089 0.0062

Saturn 62163-11-02 22:19 G 24425935.29 24425935.43 24425935.59 0.0289 0.0197

Neptune 62164-02-16 01:41 G 24426040.44 24426040.57 24426040.73 0.0089 0.0067

Saturn 62164-06-19 19:12 G 24426165.09 24426165.30 24426165.51 0.0289 0.0064

Neptune 62164-09-28 14:38 G 24426266.00 24426266.11 24426266.26 0.0089 0.0072

Neptune 62165-05-12 03:36 G 24426491.57 24426491.65 24426491.79 0.0089 0.0077

Neptune 62165-12-23 17:02 G 24426717.13 24426717.21 24426717.30 0.0089 0.0081

Neptune 62166-08-06 05:46 G 24426942.70 24426942.74 24426942.81 0.0089 0.0086

Jupiter 62168-09-11 03:36 G 24427709.51 24427709.65 24427709.79 0.0532 0.0385

Jupiter 62169-05-06 22:48 G 24427947.35 24427947.45 24427947.56 0.0522 0.0448

Mars 62171-07-25 17:17 G 24428757.06 24428757.22 24428757.38 0.1677 0.0718

Jupiter 62175-03-02 14:53 G 24430072.93 24430073.12 24430073.32 0.0499 0.0144

Saturn 62178-04-17 11:46 G 24431214.89 24431214.99 24431215.10 0.0271 0.0233

Saturn 62178-12-02 15:36 G 24431443.94 24431444.15 24431444.37 0.0271 0.0023

Saturn 62179-07-19 19:26 G 24431673.16 24431673.31 24431673.46 0.0271 0.0189

Jupiter 62181-01-09 12:14 G 24432212.83 24432213.01 24432213.20 0.0525 0.0216

Jupiter 62186-11-05 16:48 G 24434339.05 24434339.20 24434339.35 0.0497 0.0332

Jupiter 62187-06-30 00:00 G 24434575.37 24434575.50 24434575.64 0.0505 0.0367

Jupiter 62192-09-14 03:07 G 24436478.43 24436478.63 24436478.84 0.0528 0.0019

Saturn 62193-05-15 10:05 G 24436721.74 24436721.92 24436722.10 0.0288 0.0147

Saturn 62193-12-31 06:43 G 24436951.59 24436951.78 24436951.98 0.0288 0.0113

Jupiter 62199-03-04 21:50 G 24438841.22 24438841.41 24438841.60 0.0502 0.0162

Uranus 62200-01-11 14:10 G 24439154.02 24439154.09 24439154.18 0.0137 0.0127

Uranus 62200-08-25 21:50 G 24439380.26 24439380.41 24439380.58 0.0137 0.0094

Uranus 62201-04-09 05:46 G 24439606.55 24439606.74 24439606.94 0.0138 0.0060

Uranus 62201-11-21 13:26 G 24439832.86 24439833.06 24439833.29 0.0138 0.0027

Uranus 62202-07-05 21:50 G 24440059.19 24440059.41 24440059.62 0.0138 0.0008

Uranus 62203-02-17 06:00 G 24440285.55 24440285.75 24440285.96 0.0138 0.0042

Uranus 62203-10-01 14:10 G 24440511.92 24440512.09 24440512.29 0.0138 0.0077

Uranus 62204-05-14 22:48 G 24440738.33 24440738.45 24440738.59 0.0139 0.0111

Jupiter 62204-05-20 18:43 G 24440744.10 24440744.28 24440744.46 0.0531 0.0249

Saturn 62207-10-29 19:12 G 24442001.16 24442001.30 24442001.45 0.0271 0.0198

Saturn 62208-06-14 22:48 G 24442230.24 24442230.45 24442230.66 0.0270 0.0013

Saturn 62209-01-30 01:55 G 24442459.47 24442459.58 24442459.71 0.0270 0.0223

Jupiter 62210-11-08 23:02 G 24443107.26 24443107.46 24443107.67 0.0500 0.0034

Jupiter 62216-01-24 09:07 G 24445009.80 24445009.88 24445009.97 0.0533 0.0485

Jupiter 62216-09-18 06:00 G 24445247.61 24445247.75 24445247.90 0.0524 0.0355

Earth 62221-11-28 05:31 G 24447144.58 24447144.73 24447144.89 0.2662 0.0434

Moon 62221-11-28 08:24 G 24447144.68 24447144.85 24447145.02 0.2657 0.0096 *

Jupiter 62222-07-15 01:12 G 24447373.37 24447373.55 24447373.74 0.0498 0.0224

Saturn 62222-11-26 12:00 G 24447507.81 24447508.00 24447508.20 0.0289 0.0122

Jupiter 62223-03-08 10:05 G 24447609.86 24447609.92 24447609.98 0.0506 0.0482

Saturn 62223-07-14 08:38 G 24447737.68 24447737.86 24447738.05 0.0289 0.0138

Neptune 62225-11-18 09:22 G 24448595.86 24448595.89 24448595.93 0.0089 0.0088

Neptune 62226-07-01 22:05 G 24448821.37 24448821.42 24448821.52 0.0089 0.0083

Neptune 62227-02-12 11:46 G 24449046.90 24449046.99 24449047.11 0.0089 0.0078

Neptune 62227-09-26 00:58 G 24449272.44 24449272.54 24449272.68 0.0089 0.0074

Neptune 62228-05-08 14:24 G 24449497.97 24449498.10 24449498.25 0.0089 0.0068

Jupiter 62228-05-23 21:50 G 24449513.21 24449513.41 24449513.61 0.0526 0.0128

Neptune 62228-12-20 03:50 G 24449723.51 24449723.66 24449723.82 0.0089 0.0063

Neptune 62229-08-02 17:02 G 24449949.05 24449949.21 24449949.38 0.0089 0.0058

Neptune 62230-03-16 06:29 G 24450174.60 24450174.77 24450174.95 0.0089 0.0053

Neptune 62230-10-27 19:41 G 24450400.14 24450400.32 24450400.51 0.0089 0.0048

Neptune 62231-06-10 08:53 G 24450625.68 24450625.87 24450626.07 0.0089 0.0043

Neptune 62232-01-21 22:05 G 24450851.23 24450851.42 24450851.62 0.0089 0.0038

Neptune 62232-09-03 11:17 G 24451076.77 24451076.97 24451077.18 0.0089 0.0033

Mars 62232-10-11 21:22 G 24451115.32 24451115.39 24451115.46 0.1847 0.1677

Neptune 62233-04-17 00:29 G 24451302.32 24451302.52 24451302.74 0.0089 0.0028

Pluto 62233-10-30 06:00 G 24451498.62 24451498.75 24451498.93 0.0063 0.0044

Neptune 62233-11-28 13:41 G 24451527.86 24451528.07 24451528.29 0.0089 0.0023

Jupiter 62234-03-20 04:34 G 24451639.58 24451639.69 24451639.81 0.0496 0.0408

Pluto 62234-06-12 10:05 G 24451723.71 24451723.92 24451724.15 0.0063 0.0010

Neptune 62234-07-12 02:53 G 24451753.40 24451753.62 24451753.84 0.0089 0.0018

Jupiter 62234-11-11 11:02 G 24451875.79 24451875.96 24451876.13 0.0504 0.0284

Pluto 62235-01-23 13:55 G 24451948.89 24451949.08 24451949.30 0.0063 0.0025

Neptune 62235-02-22 16:05 G 24451978.95 24451979.17 24451979.39 0.0089 0.0013

Pluto 62235-09-05 17:31 G 24452174.18 24452174.23 24452174.33 0.0064 0.0060

Neptune 62235-10-06 05:17 G 24452204.50 24452204.72 24452204.94 0.0089 0.0008

Neptune 62236-05-18 18:14 G 24452430.04 24452430.26 24452430.49 0.0089 0.0003

Neptune 62236-12-30 07:26 G 24452655.59 24452655.81 24452656.03 0.0089 0.0002

Saturn 62237-05-10 21:36 G 24452787.24 24452787.40 24452787.57 0.0271 0.0171

Mars 62237-05-23 04:34 G 24452799.52 24452799.69 24452799.85 0.1680 0.0403

Neptune 62237-08-12 20:24 G 24452881.14 24452881.35 24452881.58 0.0089 0.0008

Saturn 62237-12-26 01:26 G 24453016.35 24453016.56 24453016.77 0.0271 0.0040

Neptune 62238-03-26 09:50 G 24453106.69 24453106.91 24453107.13 0.0089 0.0012

Saturn 62238-08-12 04:48 G 24453245.63 24453245.70 24453245.78 0.0271 0.0251

Neptune 62238-11-06 22:48 G 24453332.24 24453332.45 24453332.68 0.0089 0.0018

Neptune 62239-06-20 12:00 G 24453557.79 24453558.00 24453558.22 0.0089 0.0023

Jupiter 62240-01-27 10:19 G 24453778.73 24453778.93 24453779.13 0.0529 0.0113

Neptune 62240-02-01 01:12 G 24453783.34 24453783.55 24453783.76 0.0089 0.0028

Uranus 62240-04-30 15:07 G 24453873.03 24453873.13 24453873.26 0.0141 0.0118

Neptune 62240-09-13 14:10 G 24454008.90 24454009.09 24454009.31 0.0089 0.0033

Uranus 62240-12-13 00:43 G 24454099.37 24454099.53 24454099.72 0.0141 0.0082

Neptune 62241-04-27 03:36 G 24454234.46 24454234.65 24454234.85 0.0089 0.0038

Uranus 62241-07-27 10:19 G 24454325.74 24454325.93 24454326.15 0.0141 0.0046

Neptune 62241-12-08 16:34 G 24454460.01 24454460.19 24454460.39 0.0089 0.0043

Uranus 62242-03-10 19:55 G 24454552.12 24454552.33 24454552.55 0.0140 0.0010

Neptune 62242-07-22 05:31 G 24454685.56 24454685.73 24454685.93 0.0088 0.0048

Uranus 62242-10-23 05:17 G 24454778.50 24454778.72 24454778.93 0.0140 0.0027

Neptune 62243-03-04 18:43 G 24454911.12 24454911.28 24454911.47 0.0088 0.0053

Uranus 62243-06-06 14:10 G 24455004.90 24455005.09 24455005.29 0.0140 0.0062

Neptune 62243-10-16 07:41 G 24455136.67 24455136.82 24455137.00 0.0088 0.0058

Uranus 62244-01-18 23:02 G 24455231.31 24455231.46 24455231.62 0.0140 0.0097

Neptune 62244-05-28 20:38 G 24455362.23 24455362.36 24455362.54 0.0088 0.0063

Uranus 62244-09-01 07:41 G 24455457.77 24455457.82 24455457.91 0.0139 0.0132

Neptune 62245-01-09 09:36 G 24455587.78 24455587.90 24455588.07 0.0088 0.0068

Neptune 62245-08-22 23:02 G 24455813.34 24455813.46 24455813.59 0.0088 0.0072

Neptune 62246-04-05 12:00 G 24456038.91 24456039.00 24456039.12 0.0088 0.0077

Jupiter 62246-07-17 11:17 G 24456141.77 24456141.97 24456142.17 0.0501 0.0087

Neptune 62246-11-17 00:43 G 24456264.47 24456264.53 24456264.64 0.0088 0.0082

Neptune 62247-06-30 14:10 G 24456490.04 24456490.09 24456490.14 0.0088 0.0086

Jupiter 62251-10-01 23:46 G 24458044.34 24458044.49 24458044.64 0.0532 0.0350

Jupiter 62252-05-26 18:58 G 24458282.22 24458282.29 24458282.38 0.0522 0.0478

Saturn 62252-06-07 22:34 G 24458294.23 24458294.44 24458294.65 0.0289 0.0075

Saturn 62253-01-23 19:26 G 24458524.15 24458524.31 24458524.47 0.0289 0.0185

Jupiter 62258-03-22 10:19 G 24460407.74 24460407.93 24460408.13 0.0499 0.0112

Jupiter 62264-01-30 12:29 G 24462547.84 24462548.02 24462548.19 0.0525 0.0259

Saturn 62266-11-21 05:02 G 24463573.54 24463573.71 24463573.90 0.0271 0.0136

Saturn 62267-07-08 08:24 G 24463802.66 24463802.85 24463803.06 0.0270 0.0076

Jupiter 62269-11-25 12:43 G 24464673.87 24464674.03 24464674.20 0.0496 0.0300

Jupiter 62270-07-19 19:55 G 24464910.21 24464910.33 24464910.45 0.0505 0.0397

Jupiter 62275-10-05 04:48 G 24466813.50 24466813.70 24466813.90 0.0528 0.0032

Jupiter 62281-07-31 15:50 G 24468940.12 24468940.16 24468940.20 0.0495 0.0483

Saturn 62281-12-19 00:14 G 24469080.30 24469080.51 24469080.72 0.0289 0.0051

Jupiter 62282-03-24 20:53 G 24469176.18 24469176.37 24469176.56 0.0503 0.0200

Saturn 62282-08-05 20:38 G 24469310.22 24469310.36 24469310.51 0.0289 0.0210

Uranus 62284-04-25 07:55 G 24469938.71 24469938.83 24469938.98 0.0137 0.0107

Uranus 62284-12-07 15:50 G 24470164.98 24470165.16 24470165.34 0.0137 0.0074

Uranus 62285-07-21 23:31 G 24470391.28 24470391.48 24470391.70 0.0138 0.0040

Uranus 62286-03-05 07:41 G 24470617.61 24470617.82 24470618.04 0.0138 0.0007

Uranus 62286-10-17 15:50 G 24470843.95 24470844.16 24470844.38 0.0138 0.0028

Uranus 62287-06-01 00:00 G 24471070.32 24471070.50 24471070.70 0.0138 0.0063

Jupiter 62287-06-09 19:26 G 24471079.12 24471079.31 24471079.50 0.0530 0.0202

Uranus 62288-01-13 08:38 G 24471296.71 24471296.86 24471297.02 0.0139 0.0097

Uranus 62288-08-26 16:48 G 24471523.15 24471523.20 24471523.29 0.0139 0.0132

Jupiter 62293-11-27 22:48 G 24473442.25 24473442.45 24473442.66 0.0500 0.0014

Saturn 62296-06-02 06:43 G 24474359.59 24474359.78 24474359.97 0.0271 0.0110

Saturn 62297-01-17 10:05 G 24474588.73 24474588.92 24474589.12 0.0271 0.0101

Mars 62298-08-09 01:41 G 24475157.43 24475157.57 24475157.72 0.1843 0.0961

Jupiter 62299-02-12 06:58 G 24475344.69 24475344.79 24475344.91 0.0532 0.0444

Jupiter 62299-10-08 03:22 G 24475582.51 24475582.64 24475582.78 0.0523 0.0389

Mars 62303-03-21 14:53 G 24476841.95 24476842.12 24476842.30 0.1683 0.0070

Jupiter 62305-08-04 00:29 G 24477708.34 24477708.52 24477708.71 0.0498 0.0184

Neptune 62309-03-30 19:26 G 24479043.26 24479043.31 24479043.38 0.0088 0.0085

Neptune 62309-11-11 07:55 G 24479268.76 24479268.83 24479268.94 0.0088 0.0080

Neptune 62310-06-24 20:38 G 24479494.27 24479494.36 24479494.49 0.0088 0.0076

Saturn 62310-11-14 12:00 G 24479636.93 24479637.00 24479637.09 0.0288 0.0267

Neptune 62311-02-05 09:50 G 24479719.78 24479719.91 24479720.04 0.0088 0.0071

Jupiter 62311-06-13 18:58 G 24479848.10 24479848.29 24479848.48 0.0526 0.0163

Saturn 62311-07-02 09:07 G 24479866.66 24479866.88 24479867.09 0.0289 0.0009

Neptune 62311-09-18 22:05 G 24479945.30 24479945.42 24479945.59 0.0088 0.0067

Saturn 62312-02-17 05:46 G 24480096.65 24480096.74 24480096.85 0.0289 0.0252

Neptune 62312-05-01 11:02 G 24480170.82 24480170.96 24480171.13 0.0088 0.0062

Neptune 62312-12-13 00:00 G 24480396.34 24480396.50 24480396.67 0.0088 0.0057

Neptune 62313-07-26 12:43 G 24480621.86 24480622.03 24480622.21 0.0088 0.0052

Neptune 62314-03-09 01:12 G 24480847.38 24480847.55 24480847.76 0.0088 0.0048

Neptune 62314-10-20 14:10 G 24481072.91 24481073.09 24481073.30 0.0088 0.0042

Neptune 62315-06-03 02:53 G 24481298.44 24481298.62 24481298.84 0.0088 0.0038

Neptune 62316-01-14 15:50 G 24481523.97 24481524.16 24481524.38 0.0088 0.0033

Neptune 62316-08-27 04:48 G 24481749.50 24481749.70 24481749.92 0.0088 0.0028

Jupiter 62317-04-09 01:12 G 24481974.42 24481974.55 24481974.68 0.0495 0.0374

Neptune 62317-04-09 17:46 G 24481975.04 24481975.24 24481975.46 0.0088 0.0023

Neptune 62317-11-21 06:43 G 24482200.57 24482200.78 24482201.00 0.0088 0.0017

Jupiter 62317-12-01 06:58 G 24482210.63 24482210.79 24482210.95 0.0504 0.0315

Neptune 62318-07-04 19:26 G 24482426.10 24482426.31 24482426.54 0.0088 0.0013

Neptune 62319-02-15 08:24 G 24482651.64 24482651.85 24482652.08 0.0088 0.0008

Neptune 62319-09-28 21:36 G 24482877.18 24482877.40 24482877.62 0.0089 0.0002

Neptune 62320-05-11 10:19 G 24483102.72 24483102.93 24483103.16 0.0089 0.0004

Neptune 62320-12-22 23:17 G 24483328.25 24483328.47 24483328.69 0.0089 0.0008

Neptune 62321-08-05 12:00 G 24483553.79 24483554.00 24483554.22 0.0089 0.0013

Neptune 62322-03-19 00:58 G 24483779.33 24483779.54 24483779.76 0.0089 0.0018

Neptune 62322-10-30 13:55 G 24484004.87 24484005.08 24484005.29 0.0089 0.0023

Jupiter 62323-02-16 10:34 G 24484113.74 24484113.94 24484114.15 0.0529 0.0067

Neptune 62323-06-13 02:53 G 24484230.41 24484230.62 24484230.82 0.0089 0.0028

Pluto 62323-12-17 10:48 G 24484417.86 24484417.95 24484418.10 0.0081 0.0068

Uranus 62323-12-31 00:14 G 24484431.45 24484431.51 24484431.60 0.0141 0.0133

Neptune 62324-01-24 15:36 G 24484455.95 24484456.15 24484456.36 0.0089 0.0033

Pluto 62324-07-29 22:19 G 24484643.21 24484643.43 24484643.66 0.0080 0.0005

Uranus 62324-08-13 10:34 G 24484657.78 24484657.94 24484658.10 0.0141 0.0096

Neptune 62324-09-06 04:34 G 24484681.50 24484681.69 24484681.89 0.0089 0.0038

Pluto 62325-03-12 08:24 G 24484868.80 24484868.85 24484868.96 0.0080 0.0075

Uranus 62325-03-27 20:10 G 24484884.14 24484884.34 24484884.54 0.0141 0.0060

Neptune 62325-04-19 17:31 G 24484907.04 24484907.23 24484907.42 0.0089 0.0043

Uranus 62325-11-09 05:31 G 24485110.52 24485110.73 24485110.95 0.0141 0.0024

Neptune 62325-12-01 06:14 G 24485132.59 24485132.76 24485132.95 0.0089 0.0048

Saturn 62325-12-14 14:10 G 24485145.89 24485146.09 24485146.29 0.0271 0.0075

Uranus 62326-06-23 14:53 G 24485336.90 24485337.12 24485337.34 0.0140 0.0012

Neptune 62326-07-14 19:12 G 24485358.13 24485358.30 24485358.48 0.0089 0.0053

Saturn 62326-07-31 17:17 G 24485375.04 24485375.22 24485375.41 0.0270 0.0136

Uranus 62327-02-04 23:46 G 24485563.30 24485563.49 24485563.71 0.0140 0.0048

Neptune 62327-02-25 07:55 G 24485583.68 24485583.83 24485584.01 0.0089 0.0058

Uranus 62327-09-19 09:07 G 24485789.71 24485789.88 24485790.06 0.0140 0.0083

Neptune 62327-10-08 20:53 G 24485809.24 24485809.37 24485809.55 0.0089 0.0063

Uranus 62328-05-02 18:00 G 24486016.14 24486016.25 24486016.37 0.0140 0.0118

Neptune 62328-05-21 09:50 G 24486034.79 24486034.91 24486035.07 0.0089 0.0068

Neptune 62329-01-01 22:48 G 24486260.35 24486260.45 24486260.60 0.0089 0.0073

Jupiter 62329-08-06 07:55 G 24486476.63 24486476.83 24486477.03 0.0501 0.0119

Neptune 62329-08-15 12:14 G 24486485.91 24486486.01 24486486.12 0.0089 0.0077

Neptune 62330-03-29 00:58 G 24486711.48 24486711.54 24486711.64 0.0089 0.0082

Neptune 62330-11-09 13:55 G 24486937.06 24486937.08 24486937.15 0.0089 0.0087

Jupiter 62334-10-22 01:55 G 24488379.41 24488379.58 24488379.75 0.0532 0.0300

Saturn 62340-05-26 13:55 G 24490422.97 24490423.08 24490423.19 0.0288 0.0242

Saturn 62341-01-11 10:34 G 24490652.72 24490652.94 24490653.15 0.0289 0.0018

Jupiter 62341-04-11 09:50 G 24490742.71 24490742.91 24490743.11 0.0499 0.0073

Saturn 62341-08-29 06:58 G 24490882.74 24490882.79 24490882.86 0.0289 0.0277

Jupiter 62347-02-19 13:41 G 24492882.91 24492883.07 24492883.24 0.0525 0.0305

Jupiter 62352-12-15 12:43 G 24495008.86 24495009.03 24495009.21 0.0497 0.0260

Jupiter 62353-08-08 20:38 G 24495245.27 24495245.36 24495245.46 0.0505 0.0437

Saturn 62354-11-09 10:48 G 24495702.91 24495702.95 24495703.01 0.0271 0.0262

Saturn 62355-06-26 14:38 G 24495931.90 24495932.11 24495932.32 0.0270 0.0052

Saturn 62356-02-10 18:00 G 24496161.08 24496161.25 24496161.42 0.0270 0.0158

Jupiter 62358-10-25 03:36 G 24497148.45 24497148.65 24497148.85 0.0527 0.0072

Moon 62359-05-29 10:48 G 24497364.82 24497364.95 24497365.09 0.2673 0.1387

Earth 62359-05-29 16:19 G 24497365.06 24497365.18 24497365.31 0.2670 0.1593 *

Mars 62364-06-06 06:43 G 24499199.61 24499199.78 24499199.95 0.1840 0.0268

Jupiter 62364-08-20 15:36 G 24499275.07 24499275.15 24499275.25 0.0495 0.0442

Jupiter 62365-04-13 21:07 G 24499511.20 24499511.38 24499511.56 0.0503 0.0241

Moon 62367-05-27 04:34 G 24500284.63 24500284.69 24500284.76 0.2678 0.2404

Earth 62367-05-27 06:43 G 24500284.67 24500284.78 24500284.89 0.2671 0.1876 *

Uranus 62367-12-25 17:17 G 24500497.14 24500497.22 24500497.34 0.0137 0.0121

Uranus 62368-08-08 01:26 G 24500723.39 24500723.56 24500723.72 0.0137 0.0088

Mars 62369-01-16 02:10 G 24500884.42 24500884.59 24500884.76 0.1685 0.0260

Uranus 62369-03-22 09:07 G 24500949.69 24500949.88 24500950.09 0.0137 0.0054

Uranus 62369-11-03 17:02 G 24501176.00 24501176.21 24501176.43 0.0138 0.0021

Saturn 62369-12-06 20:53 G 24501209.23 24501209.37 24501209.53 0.0289 0.0204

Uranus 62370-06-18 00:58 G 24501402.33 24501402.54 24501402.76 0.0138 0.0014

Jupiter 62370-06-29 17:31 G 24501414.04 24501414.23 24501414.43 0.0530 0.0163

Saturn 62370-07-24 18:00 G 24501439.04 24501439.25 24501439.46 0.0289 0.0057

Uranus 62371-01-30 09:07 G 24501628.68 24501628.88 24501629.09 0.0138 0.0048

Uranus 62371-09-13 17:17 G 24501855.06 24501855.22 24501855.41 0.0138 0.0083

Uranus 62372-04-27 01:55 G 24502081.48 24502081.58 24502081.71 0.0139 0.0117

Jupiter 62376-12-17 20:10 G 24503777.13 24503777.34 24503777.54 0.0500 0.0042

Jupiter 62382-03-04 07:26 G 24505679.68 24505679.81 24505679.95 0.0533 0.0399

Jupiter 62382-10-28 04:34 G 24505917.58 24505917.69 24505917.80 0.0524 0.0433

Saturn 62384-05-21 18:29 G 24506489.16 24506489.27 24506489.38 0.0271 0.0227

Saturn 62385-01-05 22:05 G 24506718.21 24506718.42 24506718.63 0.0271 0.0017

Saturn 62385-08-23 00:58 G 24506947.41 24506947.54 24506947.70 0.0270 0.0194

Jupiter 62388-08-22 22:05 G 24508043.23 24508043.42 24508043.62 0.0498 0.0148

Neptune 62390-02-20 17:17 G 24508590.18 24508590.22 24508590.28 0.0089 0.0086

Neptune 62390-10-04 06:43 G 24508815.70 24508815.78 24508815.87 0.0089 0.0082

Neptune 62391-05-17 19:26 G 24509041.23 24509041.31 24509041.45 0.0089 0.0078

Neptune 62391-12-29 08:53 G 24509266.76 24509266.87 24509267.02 0.0089 0.0072

Neptune 62392-08-10 22:19 G 24509492.30 24509492.43 24509492.59 0.0089 0.0067

Neptune 62393-03-24 11:46 G 24509717.85 24509717.99 24509718.16 0.0089 0.0062

Neptune 62393-11-05 01:12 G 24509943.39 24509943.55 24509943.73 0.0089 0.0057

Neptune 62394-06-18 14:24 G 24510168.94 24510169.10 24510169.29 0.0089 0.0052

Jupiter 62394-07-02 21:36 G 24510183.21 24510183.40 24510183.59 0.0526 0.0212

Neptune 62395-01-30 03:50 G 24510394.48 24510394.66 24510394.85 0.0089 0.0047

Neptune 62395-09-12 17:02 G 24510620.03 24510620.21 24510620.41 0.0089 0.0042

Neptune 62396-04-25 06:29 G 24510845.58 24510845.77 24510845.98 0.0089 0.0037

Neptune 62396-12-06 19:41 G 24511071.12 24511071.32 24511071.53 0.0089 0.0032

Neptune 62397-07-20 08:53 G 24511296.67 24511296.87 24511297.09 0.0089 0.0027

Neptune 62398-03-02 22:05 G 24511522.22 24511522.42 24511522.64 0.0089 0.0022

Neptune 62398-10-14 11:17 G 24511747.76 24511747.97 24511748.20 0.0089 0.0017

Neptune 62399-05-28 00:29 G 24511973.31 24511973.52 24511973.75 0.0089 0.0012

Saturn 62399-06-18 22:48 G 24511995.29 24511995.45 24511995.62 0.0288 0.0177

Neptune 62400-01-08 13:41 G 24512198.85 24512199.07 24512199.29 0.0089 0.0007

Saturn 62400-02-03 19:26 G 24512225.10 24512225.31 24512225.51 0.0289 0.0082

Jupiter 62400-04-28 00:43 G 24512309.39 24512309.53 24512309.69 0.0496 0.0335

Neptune 62400-08-21 02:53 G 24512424.40 24512424.62 24512424.84 0.0089 0.0002

Jupiter 62400-12-20 07:12 G 24512545.66 24512545.80 24512545.95 0.0504 0.0355

Neptune 62401-04-03 16:19 G 24512649.96 24512650.18 24512650.40 0.0089 0.0004

Neptune 62401-11-15 05:17 G 24512875.50 24512875.72 24512875.94 0.0089 0.0009

Neptune 62402-06-28 18:14 G 24513101.05 24513101.26 24513101.49 0.0089 0.0014

Neptune 62403-02-09 07:26 G 24513326.60 24513326.81 24513327.03 0.0089 0.0019

Neptune 62403-09-22 20:38 G 24513552.15 24513552.36 24513552.58 0.0089 0.0024

Neptune 62404-05-05 09:50 G 24513777.71 24513777.91 24513778.12 0.0089 0.0029

Neptune 62404-12-16 23:02 G 24514003.26 24514003.46 24514003.67 0.0089 0.0034

Neptune 62405-07-30 12:00 G 24514228.81 24514229.00 24514229.21 0.0089 0.0039

Jupiter 62406-03-07 13:26 G 24514448.85 24514449.06 24514449.26 0.0529 0.0020

Neptune 62406-03-13 01:12 G 24514454.37 24514454.55 24514454.75 0.0089 0.0044

Neptune 62406-10-24 14:24 G 24514679.92 24514680.10 24514680.29 0.0089 0.0049

Neptune 62407-06-07 03:22 G 24514905.48 24514905.64 24514905.83 0.0088 0.0054

Neptune 62408-01-18 16:34 G 24515131.04 24515131.19 24515131.36 0.0088 0.0059

Uranus 62408-04-12 18:58 G 24515216.17 24515216.29 24515216.44 0.0141 0.0112

Neptune 62408-08-31 05:31 G 24515356.59 24515356.73 24515356.90 0.0088 0.0064

Uranus 62408-11-25 05:02 G 24515442.53 24515442.71 24515442.89 0.0141 0.0075

Neptune 62409-04-13 18:43 G 24515582.16 24515582.28 24515582.44 0.0088 0.0068

Uranus 62409-07-09 14:38 G 24515668.90 24515669.11 24515669.32 0.0141 0.0039

Neptune 62409-11-25 08:10 G 24515807.72 24515807.84 24515807.96 0.0088 0.0073

Uranus 62410-02-21 00:14 G 24515895.29 24515895.51 24515895.72 0.0140 0.0004

Neptune 62410-07-08 20:53 G 24516033.28 24516033.37 24516033.48 0.0088 0.0078

Uranus 62410-10-05 09:22 G 24516121.69 24516121.89 24516122.11 0.0140 0.0034

Neptune 62411-02-19 09:36 G 24516258.84 24516258.90 24516259.00 0.0088 0.0083

Uranus 62411-05-19 18:29 G 24516348.09 24516348.27 24516348.47 0.0140 0.0069

Neptune 62411-10-02 23:02 G 24516484.43 24516484.46 24516484.50 0.0088 0.0087

Uranus 62412-01-01 03:36 G 24516574.51 24516574.65 24516574.80 0.0140 0.0104

Uranus 62412-08-14 12:29 G 24516801.01 24516801.02 24516801.05 0.0139 0.0139

Jupiter 62412-08-25 08:53 G 24516811.68 24516811.87 24516812.07 0.0502 0.0162

Saturn 62413-12-01 17:46 G 24517275.11 24517275.24 24517275.39 0.0271 0.0206

Saturn 62414-07-18 21:36 G 24517504.19 24517504.40 24517504.61 0.0270 0.0005

Saturn 62415-03-05 00:58 G 24517733.42 24517733.54 24517733.67 0.0270 0.0214

Jupiter 62417-11-10 02:10 G 24518714.41 24518714.59 24518714.77 0.0531 0.0254

Jupiter 62424-04-30 10:34 G 24521077.74 24521077.94 24521078.15 0.0499 0.0032

Saturn 62428-12-29 04:19 G 24522781.51 24522781.68 24522781.88 0.0289 0.0143

Jupiter 62429-07-15 14:53 G 24522980.05 24522980.12 24522980.20 0.0534 0.0491

Saturn 62429-08-16 01:26 G 24523011.37 24523011.56 24523011.75 0.0289 0.0118

Jupiter 62430-03-10 12:58 G 24523217.88 24523218.04 24523218.19 0.0525 0.0344

Mars 62430-04-03 11:17 G 24523241.80 24523241.97 24523242.14 0.1836 0.0416

Mars 62434-11-13 12:43 G 24524926.87 24524927.03 24524927.19 0.1688 0.0607

Jupiter 62436-01-04 11:02 G 24525343.79 24525343.96 24525344.15 0.0496 0.0223

Jupiter 62436-08-27 18:29 G 24525580.20 24525580.27 24525580.34 0.0505 0.0470

Jupiter 62441-11-13 04:34 G 24527483.49 24527483.69 24527483.89 0.0528 0.0118

Saturn 62443-06-14 01:12 G 24528061.39 24528061.55 24528061.72 0.0271 0.0171

Saturn 62444-01-29 04:48 G 24528290.49 24528290.70 24528290.91 0.0271 0.0040

Saturn 62444-09-14 08:10 G 24528519.76 24528519.84 24528519.92 0.0271 0.0249

Jupiter 62447-09-09 14:24 G 24529609.98 24529610.10 24529610.22 0.0494 0.0404

Jupiter 62448-05-02 19:12 G 24529846.13 24529846.30 24529846.47 0.0502 0.0276

Uranus 62451-08-25 04:05 G 24531055.64 24531055.67 24531055.73 0.0137 0.0134

Uranus 62452-04-07 11:46 G 24531281.86 24531281.99 24531282.15 0.0137 0.0101

Uranus 62452-11-19 19:26 G 24531508.13 24531508.31 24531508.51 0.0137 0.0068

Uranus 62453-07-04 03:22 G 24531734.43 24531734.64 24531734.86 0.0137 0.0034

Jupiter 62453-07-18 20:24 G 24531749.15 24531749.35 24531749.54 0.0530 0.0113

Uranus 62454-02-15 11:31 G 24531960.76 24531960.98 24531961.20 0.0138 0.0001

Uranus 62454-09-29 19:26 G 24532187.10 24532187.31 24532187.53 0.0138 0.0034

Uranus 62455-05-14 03:36 G 24532413.47 24532413.65 24532413.84 0.0138 0.0069

Uranus 62455-12-26 11:31 G 24532639.86 24532639.98 24532640.15 0.0138 0.0104

Uranus 62456-08-08 20:10 G 24532866.33 24532866.34 24532866.38 0.0139 0.0138

Moon 62456-12-01 10:34 G 24532980.84 24532980.94 24532981.03 0.2661 0.2129

Saturn 62458-07-11 06:58 G 24533567.60 24533567.79 24533567.98 0.0288 0.0114

Saturn 62459-02-26 03:22 G 24533797.46 24533797.64 24533797.83 0.0289 0.0145

Jupiter 62460-01-06 20:24 G 24534112.15 24534112.35 24534112.55 0.0500 0.0082

Moon 62464-11-29 03:07 G 24535900.48 24535900.63 24535900.78 0.2664 0.0772

Earth 62464-11-29 07:41 G 24535900.66 24535900.82 24535900.98 0.2661 0.0304 *

Jupiter 62465-03-23 11:02 G 24536014.81 24536014.96 24536015.12 0.0533 0.0345

Jupiter 62465-11-16 07:26 G 24536252.73 24536252.81 24536252.89 0.0523 0.0480

Jupiter 62471-09-11 23:17 G 24538378.27 24538378.47 24538378.67 0.0498 0.0106

Neptune 62472-11-18 15:07 G 24538812.13 24538812.13 24538812.17 0.0088 0.0088

Saturn 62472-12-24 00:00 G 24538847.33 24538847.50 24538847.68 0.0271 0.0151

Neptune 62473-07-02 03:50 G 24539037.61 24539037.66 24539037.75 0.0088 0.0084

Saturn 62473-08-10 03:50 G 24539076.45 24539076.66 24539076.86 0.0270 0.0060

Neptune 62474-02-12 17:02 G 24539263.11 24539263.21 24539263.31 0.0088 0.0079

Saturn 62474-03-27 07:12 G 24539305.78 24539305.80 24539305.82 0.0270 0.0269

Neptune 62474-09-26 05:17 G 24539488.63 24539488.72 24539488.86 0.0088 0.0075

Neptune 62475-05-09 18:14 G 24539714.14 24539714.26 24539714.41 0.0088 0.0070

Neptune 62475-12-21 07:12 G 24539939.66 24539939.80 24539939.95 0.0088 0.0065

Neptune 62476-08-02 19:26 G 24540165.17 24540165.31 24540165.50 0.0088 0.0061

Neptune 62477-03-16 08:24 G 24540390.70 24540390.85 24540391.04 0.0088 0.0056

Jupiter 62477-07-21 22:19 G 24540518.25 24540518.43 24540518.60 0.0526 0.0256

Neptune 62477-10-27 21:07 G 24540616.22 24540616.38 24540616.58 0.0088 0.0051

Neptune 62478-06-10 10:05 G 24540841.74 24540841.92 24540842.11 0.0088 0.0046

Neptune 62479-01-21 22:48 G 24541067.26 24541067.45 24541067.65 0.0088 0.0041

Neptune 62479-09-04 11:46 G 24541292.79 24541292.99 24541293.20 0.0088 0.0036

Neptune 62480-04-17 00:43 G 24541518.32 24541518.53 24541518.73 0.0088 0.0031

Neptune 62480-11-28 13:12 G 24541743.85 24541744.05 24541744.27 0.0088 0.0026

Neptune 62481-07-12 01:55 G 24541969.38 24541969.58 24541969.81 0.0088 0.0021

Neptune 62482-02-22 14:53 G 24542194.91 24542195.12 24542195.34 0.0088 0.0016

Pluto 62482-05-16 14:10 G 24542277.91 24542278.09 24542278.29 0.0063 0.0032

Neptune 62482-10-06 03:50 G 24542420.45 24542420.66 24542420.89 0.0088 0.0011

Pluto 62482-12-27 18:00 G 24542503.03 24542503.25 24542503.48 0.0063 0.0002

Jupiter 62483-05-18 01:55 G 24542644.42 24542644.58 24542644.75 0.0496 0.0291

Neptune 62483-05-19 16:48 G 24542645.98 24542646.20 24542646.42 0.0088 0.0006

Pluto 62483-08-09 21:36 G 24542728.24 24542728.40 24542728.60 0.0064 0.0037

Neptune 62483-12-31 05:46 G 24542871.52 24542871.74 24542871.96 0.0088 0.0001

Jupiter 62484-01-09 08:38 G 24542880.74 24542880.86 24542880.99 0.0504 0.0398

Neptune 62484-08-12 18:29 G 24543097.06 24543097.27 24543097.49 0.0089 0.0005

Neptune 62485-03-26 07:26 G 24543322.59 24543322.81 24543323.03 0.0089 0.0009

Neptune 62485-11-06 20:10 G 24543548.13 24543548.34 24543548.57 0.0089 0.0015

Neptune 62486-06-20 08:53 G 24543773.67 24543773.87 24543774.10 0.0089 0.0020

Neptune 62487-01-31 22:05 G 24543999.21 24543999.42 24543999.63 0.0089 0.0024

Neptune 62487-09-14 11:02 G 24544224.75 24544224.96 24544225.17 0.0089 0.0029

Saturn 62488-01-21 11:31 G 24544353.78 24544353.98 24544354.18 0.0288 0.0082

Neptune 62488-04-27 00:00 G 24544450.30 24544450.50 24544450.70 0.0089 0.0034

Saturn 62488-09-07 08:10 G 24544583.68 24544583.84 24544584.01 0.0289 0.0178

Neptune 62488-12-08 12:43 G 24544675.84 24544676.03 24544676.23 0.0089 0.0039

Jupiter 62489-03-26 13:12 G 24544783.84 24544784.05 24544784.25 0.0528 0.0028

Neptune 62489-07-22 01:26 G 24544901.38 24544901.56 24544901.76 0.0089 0.0044

Neptune 62490-03-04 14:10 G 24545126.92 24545127.09 24545127.28 0.0089 0.0049

Neptune 62490-10-16 03:07 G 24545352.47 24545352.63 24545352.82 0.0089 0.0054

Neptune 62491-05-29 15:50 G 24545578.02 24545578.16 24545578.35 0.0089 0.0059

Uranus 62491-12-12 04:05 G 24545774.58 24545774.67 24545774.77 0.0141 0.0127

Neptune 62492-01-10 04:48 G 24545803.57 24545803.70 24545803.87 0.0089 0.0064

Uranus 62492-07-25 13:55 G 24546000.92 24546001.08 24546001.26 0.0141 0.0090

Neptune 62492-08-22 18:00 G 24546029.12 24546029.25 24546029.40 0.0089 0.0068

Uranus 62493-03-08 23:46 G 24546227.30 24546227.49 24546227.70 0.0141 0.0054

Neptune 62493-04-05 06:58 G 24546254.68 24546254.79 24546254.92 0.0089 0.0073

Uranus 62493-10-21 09:22 G 24546453.68 24546453.89 24546454.11 0.0141 0.0018

Neptune 62493-11-16 19:41 G 24546480.24 24546480.32 24546480.44 0.0089 0.0078

Uranus 62494-06-04 18:58 G 24546680.07 24546680.29 24546680.51 0.0140 0.0019

Neptune 62494-06-30 08:38 G 24546705.80 24546705.86 24546705.96 0.0089 0.0083

Uranus 62495-01-17 04:05 G 24546906.48 24546906.67 24546906.88 0.0140 0.0055

Jupiter 62495-01-21 04:05 G 24546910.62 24546910.67 24546910.73 0.0493 0.0473

Neptune 62495-02-10 21:50 G 24546931.38 24546931.41 24546931.46 0.0089 0.0087

Uranus 62495-08-31 13:12 G 24547132.90 24547133.05 24547133.23 0.0140 0.0090

Jupiter 62495-09-14 07:55 G 24547146.64 24547146.83 24547147.01 0.0501 0.0198

Mars 62496-01-29 16:48 G 24547284.06 24547284.20 24547284.34 0.1833 0.1069

Uranus 62496-04-13 22:19 G 24547359.34 24547359.43 24547359.53 0.0140 0.0125

Mars 62500-09-10 23:17 G 24548969.33 24548969.47 24548969.61 0.1691 0.0943

Jupiter 62500-11-30 02:38 G 24549049.42 24549049.61 24549049.80 0.0532 0.0209

Saturn 62502-07-07 07:12 G 24549633.61 24549633.80 24549634.00 0.0271 0.0116

Saturn 62503-02-21 10:48 G 24549862.76 24549862.95 24549863.15 0.0271 0.0095

Jupiter 62507-05-21 09:36 G 24551412.69 24551412.90 24551413.10 0.0499 0.0011

Jupiter 62512-08-04 17:02 G 24553315.10 24553315.21 24553315.33 0.0534 0.0443

Jupiter 62513-03-30 15:22 G 24553553.02 24553553.14 24553553.28 0.0525 0.0391

Saturn 62517-08-03 14:24 G 24555139.90 24555140.10 24555140.31 0.0288 0.0053

Saturn 62518-03-21 10:48 G 24555369.81 24555369.95 24555370.10 0.0288 0.0206

Jupiter 62519-01-24 11:31 G 24555678.79 24555678.98 24555679.17 0.0497 0.0181

Jupiter 62524-12-03 08:10 G 24557818.65 24557818.84 24557819.03 0.0527 0.0169

Jupiter 62530-09-29 15:07 G 24559945.00 24559945.13 24559945.27 0.0495 0.0363

Jupiter 62531-05-23 20:38 G 24560181.21 24560181.36 24560181.52 0.0503 0.0318

Saturn 62532-01-17 06:00 G 24560419.56 24560419.75 24560419.95 0.0271 0.0096

Saturn 62532-09-02 09:36 G 24560648.71 24560648.90 24560649.10 0.0271 0.0115

Mars 62532-09-09 21:07 G 24560656.34 24560656.38 24560656.42 0.1683 0.1620

Uranus 62535-12-07 22:19 G 24561840.31 24561840.43 24561840.55 0.0137 0.0113

Uranus 62536-07-21 05:46 G 24562066.57 24562066.74 24562066.92 0.0137 0.0080

Jupiter 62536-08-07 21:50 G 24562084.21 24562084.41 24562084.61 0.0530 0.0064

Uranus 62537-03-04 13:26 G 24562292.87 24562293.06 24562293.28 0.0137 0.0047

Uranus 62537-10-16 21:22 G 24562519.18 24562519.39 24562519.61 0.0137 0.0013

Uranus 62538-05-31 05:17 G 24562745.51 24562745.72 24562745.94 0.0138 0.0021

Uranus 62539-01-12 13:12 G 24562971.86 24562972.05 24562972.26 0.0138 0.0055

Uranus 62539-08-26 21:22 G 24563198.23 24563198.39 24563198.57 0.0138 0.0089

Uranus 62540-04-09 05:46 G 24563424.66 24563424.74 24563424.85 0.0138 0.0124

Jupiter 62543-01-26 22:05 G 24564447.22 24564447.42 24564447.62 0.0501 0.0126

Saturn 62546-06-28 21:36 G 24565696.36 24565696.40 24565696.46 0.0288 0.0279

Saturn 62547-02-13 18:14 G 24565926.05 24565926.26 24565926.47 0.0288 0.0022

Saturn 62547-10-01 14:53 G 24566156.00 24566156.12 24566156.24 0.0289 0.0237

Jupiter 62548-04-12 11:17 G 24566349.81 24566349.97 24566350.14 0.0532 0.0299

Jupiter 62548-12-06 07:12 G 24566587.79 24566587.80 24566587.83 0.0523 0.0520

Neptune 62554-05-26 00:58 G 24568584.50 24568584.54 24568584.62 0.0089 0.0085

Jupiter 62554-10-01 23:02 G 24568713.25 24568713.46 24568713.66 0.0498 0.0067

Neptune 62555-01-06 14:24 G 24568810.02 24568810.10 24568810.21 0.0089 0.0080

Neptune 62555-08-20 03:50 G 24569035.55 24569035.66 24569035.78 0.0089 0.0076

Neptune 62556-04-01 16:48 G 24569261.09 24569261.20 24569261.36 0.0089 0.0071

Neptune 62556-11-13 06:14 G 24569486.63 24569486.76 24569486.92 0.0089 0.0066

Neptune 62557-06-26 19:26 G 24569712.17 24569712.31 24569712.49 0.0089 0.0061

Neptune 62558-02-07 08:53 G 24569937.71 24569937.87 24569938.05 0.0089 0.0056

Neptune 62558-09-20 22:05 G 24570163.26 24570163.42 24570163.62 0.0089 0.0051

Neptune 62559-05-04 11:31 G 24570388.80 24570388.98 24570389.18 0.0089 0.0046

Neptune 62559-12-16 00:43 G 24570614.35 24570614.53 24570614.74 0.0089 0.0041

Neptune 62560-07-28 14:10 G 24570839.90 24570840.09 24570840.30 0.0089 0.0036

Jupiter 62560-08-10 22:48 G 24570853.28 24570853.45 24570853.62 0.0526 0.0298

Neptune 62561-03-11 03:36 G 24571065.45 24571065.65 24571065.86 0.0089 0.0031

Saturn 62561-07-29 12:43 G 24571205.83 24571206.03 24571206.24 0.0271 0.0062

Neptune 62561-10-22 16:48 G 24571291.00 24571291.20 24571291.42 0.0089 0.0026

Mars 62561-11-26 21:36 G 24571326.35 24571326.40 24571326.46 0.1829 0.1733

Saturn 62562-03-15 16:34 G 24571435.01 24571435.19 24571435.37 0.0271 0.0149

Neptune 62562-06-05 06:00 G 24571516.54 24571516.75 24571516.97 0.0089 0.0021

Neptune 62563-01-16 19:12 G 24571742.09 24571742.30 24571742.53 0.0089 0.0016

Neptune 62563-08-30 08:24 G 24571967.64 24571967.85 24571968.08 0.0089 0.0011

Neptune 62564-04-11 21:50 G 24572193.19 24572193.41 24572193.64 0.0089 0.0006

Neptune 62564-11-23 11:02 G 24572418.74 24572418.96 24572419.18 0.0089 0.0001

Neptune 62565-07-07 00:14 G 24572644.29 24572644.51 24572644.73 0.0089 0.0005

Neptune 62566-02-17 13:12 G 24572869.84 24572870.05 24572870.28 0.0089 0.0010

Jupiter 62566-06-07 01:26 G 24572979.39 24572979.56 24572979.74 0.0496 0.0252

Mars 62566-07-09 09:50 G 24573011.80 24573011.91 24573012.02 0.1694 0.1296

Neptune 62566-10-01 02:24 G 24573095.39 24573095.60 24573095.82 0.0089 0.0015

Jupiter 62567-01-29 07:26 G 24573215.72 24573215.81 24573215.92 0.0504 0.0432

Neptune 62567-05-14 15:36 G 24573320.94 24573321.15 24573321.37 0.0089 0.0020

Neptune 62567-12-26 04:48 G 24573546.49 24573546.70 24573546.91 0.0089 0.0025

Neptune 62568-08-07 17:46 G 24573772.04 24573772.24 24573772.46 0.0089 0.0030

Neptune 62569-03-21 06:58 G 24573997.60 24573997.79 24573998.00 0.0089 0.0035

Neptune 62569-11-01 20:10 G 24574223.15 24574223.34 24574223.54 0.0089 0.0040

Neptune 62570-06-15 09:07 G 24574448.70 24574448.88 24574449.08 0.0089 0.0045

Neptune 62571-01-26 22:19 G 24574674.26 24574674.43 24574674.62 0.0089 0.0050

Neptune 62571-09-09 11:17 G 24574899.81 24574899.97 24574900.16 0.0089 0.0055

Jupiter 62572-04-15 15:07 G 24575118.93 24575119.13 24575119.33 0.0529 0.0073

Neptune 62572-04-22 00:29 G 24575125.38 24575125.52 24575125.70 0.0088 0.0060

Pluto 62572-07-02 22:48 G 24575197.27 24575197.45 24575197.66 0.0081 0.0039

Neptune 62572-12-03 13:41 G 24575350.94 24575351.07 24575351.24 0.0088 0.0065

Pluto 62573-02-13 09:36 G 24575422.71 24575422.90 24575423.11 0.0080 0.0033

Neptune 62573-07-17 02:38 G 24575576.50 24575576.61 24575576.77 0.0088 0.0070

Neptune 62574-02-27 16:05 G 24575802.06 24575802.17 24575802.30 0.0088 0.0074

Neptune 62574-10-11 05:02 G 24576027.63 24576027.71 24576027.83 0.0088 0.0079

Neptune 62575-05-24 18:00 G 24576253.20 24576253.25 24576253.35 0.0088 0.0084

Neptune 62576-01-05 07:26 G 24576478.79 24576478.81 24576478.84 0.0088 0.0088

Saturn 62576-01-09 02:24 G 24576482.50 24576482.60 24576482.72 0.0288 0.0245

Uranus 62576-03-25 22:34 G 24576559.31 24576559.44 24576559.59 0.0141 0.0105

Saturn 62576-08-25 22:34 G 24576712.23 24576712.44 24576712.66 0.0288 0.0012

Uranus 62576-11-07 08:38 G 24576785.67 24576785.86 24576786.05 0.0141 0.0069

Saturn 62577-04-12 18:43 G 24576942.22 24576942.28 24576942.37 0.0288 0.0268

Uranus 62577-06-21 18:14 G 24577012.05 24577012.26 24577012.48 0.0141 0.0032

Uranus 62578-02-03 03:50 G 24577238.45 24577238.66 24577238.88 0.0141 0.0005

Jupiter 62578-02-10 04:05 G 24577245.58 24577245.67 24577245.77 0.0494 0.0433

Uranus 62578-09-17 13:26 G 24577464.85 24577465.06 24577465.27 0.0140 0.0040

Jupiter 62578-10-04 08:24 G 24577481.67 24577481.85 24577482.03 0.0502 0.0238

Uranus 62579-05-01 22:34 G 24577691.27 24577691.44 24577691.63 0.0140 0.0076

Uranus 62579-12-14 07:41 G 24577917.70 24577917.82 24577917.96 0.0140 0.0111

Jupiter 62583-12-20 06:29 G 24579384.58 24579384.77 24579384.97 0.0531 0.0156

Jupiter 62590-06-09 10:34 G 24581747.74 24581747.94 24581748.14 0.0499 0.0049

Saturn 62590-06-24 07:41 G 24581762.75 24581762.82 24581762.90 0.0271 0.0252

Saturn 62591-02-08 11:46 G 24581991.78 24581991.99 24581992.20 0.0271 0.0041

Saturn 62591-09-25 15:22 G 24582220.98 24582221.14 24582221.31 0.0271 0.0169

Jupiter 62595-08-24 19:26 G 24583650.17 24583650.31 24583650.45 0.0533 0.0391

Jupiter 62596-04-18 16:48 G 24583888.10 24583888.20 24583888.32 0.0524 0.0434

Mars 62598-07-08 07:55 G 24584698.73 24584698.83 24584698.94 0.1686 0.1295

Jupiter 62602-02-13 12:58 G 24586013.85 24586014.04 24586014.24 0.0497 0.0137

Earth 62602-05-31 17:02 G 24586121.08 24586121.21 24586121.33 0.2671 0.1629

Moon 62602-05-31 22:48 G 24586121.35 24586121.45 24586121.54 0.2671 0.2108

Saturn 62605-07-22 05:02 G 24587268.58 24587268.71 24587268.85 0.0288 0.0218

Saturn 62606-03-09 01:26 G 24587498.35 24587498.56 24587498.77 0.0288 0.0039

Jupiter 62607-12-24 08:10 G 24588153.66 24588153.84 24588154.03 0.0527 0.0211

Earth 62610-05-29 07:26 G 24589040.69 24589040.81 24589040.92 0.2672 0.1851

Moon 62610-05-29 11:17 G 24589040.82 24589040.97 24589041.12 0.2667 0.1076 *

Jupiter 62613-10-19 15:22 G 24590279.99 24590280.14 24590280.30 0.0495 0.0322

Jupiter 62614-06-12 20:24 G 24590516.21 24590516.35 24590516.49 0.0503 0.0355

Uranus 62619-08-08 09:07 G 24592398.81 24592398.88 24592398.98 0.0137 0.0126

Jupiter 62619-08-28 21:22 G 24592419.19 24592419.39 24592419.59 0.0530 0.0023

Saturn 62620-01-05 14:10 G 24592548.98 24592549.09 24592549.22 0.0272 0.0218

Uranus 62620-03-21 16:34 G 24592625.05 24592625.19 24592625.37 0.0137 0.0093

Saturn 62620-08-21 18:29 G 24592778.06 24592778.27 24592778.48 0.0272 0.0007

Uranus 62620-11-03 00:29 G 24592851.33 24592851.52 24592851.72 0.0137 0.0059

Saturn 62621-04-07 22:05 G 24593007.30 24593007.42 24593007.57 0.0271 0.0205

Uranus 62621-06-17 08:10 G 24593077.63 24593077.84 24593078.06 0.0137 0.0026

Uranus 62622-01-29 16:05 G 24593303.95 24593304.17 24593304.39 0.0138 0.0008

Uranus 62622-09-13 00:00 G 24593530.29 24593530.50 24593530.71 0.0138 0.0042

Uranus 62623-04-27 08:10 G 24593756.66 24593756.84 24593757.02 0.0138 0.0077

Uranus 62623-12-09 15:50 G 24593983.05 24593983.16 24593983.31 0.0138 0.0112

Jupiter 62626-02-15 21:22 G 24594782.20 24594782.39 24594782.58 0.0500 0.0163

Jupiter 62631-05-03 12:14 G 24596684.83 24596685.01 24596685.19 0.0533 0.0255

Mars 62632-05-06 20:10 G 24597054.31 24597054.34 24597054.38 0.1697 0.1650

Saturn 62635-02-01 11:02 G 24598054.81 24598054.96 24598055.14 0.0287 0.0181

Saturn 62635-09-19 07:12 G 24598284.60 24598284.80 24598285.01 0.0288 0.0076

Neptune 62637-02-21 23:46 G 24598806.45 24598806.49 24598806.53 0.0088 0.0086

Neptune 62637-10-05 12:00 G 24599031.95 24599032.00 24599032.10 0.0088 0.0082

Jupiter 62637-10-21 22:48 G 24599048.25 24599048.45 24599048.65 0.0498 0.0028

Neptune 62638-05-19 01:12 G 24599257.45 24599257.55 24599257.66 0.0088 0.0077

Neptune 62638-12-30 13:26 G 24599482.96 24599483.06 24599483.21 0.0088 0.0073

Neptune 62639-08-13 02:24 G 24599708.48 24599708.60 24599708.76 0.0088 0.0069

Neptune 62640-03-25 15:22 G 24599934.00 24599934.14 24599934.30 0.0088 0.0064

Neptune 62640-11-06 04:19 G 24600159.52 24600159.68 24600159.84 0.0088 0.0059

Neptune 62641-06-19 16:34 G 24600385.04 24600385.19 24600385.38 0.0088 0.0054

Neptune 62642-01-31 05:31 G 24600610.56 24600610.73 24600610.92 0.0088 0.0049

Neptune 62642-09-13 18:29 G 24600836.09 24600836.27 24600836.47 0.0088 0.0044

Jupiter 62643-01-06 02:38 G 24600950.53 24600950.61 24600950.69 0.0535 0.0486

Neptune 62643-04-27 07:12 G 24601061.61 24601061.80 24601062.00 0.0088 0.0040

Jupiter 62643-09-01 01:55 G 24601188.43 24601188.58 24601188.74 0.0526 0.0347

Neptune 62643-12-08 19:55 G 24601287.14 24601287.33 24601287.54 0.0088 0.0035

Neptune 62644-07-21 08:53 G 24601512.66 24601512.87 24601513.07 0.0088 0.0030

Neptune 62645-03-03 21:22 G 24601738.19 24601738.39 24601738.61 0.0088 0.0025

Neptune 62645-10-15 10:05 G 24601963.72 24601963.92 24601964.15 0.0088 0.0021

Neptune 62646-05-28 23:02 G 24602189.25 24602189.46 24602189.68 0.0088 0.0015

Neptune 62647-01-09 12:00 G 24602414.78 24602415.00 24602415.22 0.0088 0.0010

Neptune 62647-08-23 00:58 G 24602640.32 24602640.54 24602640.76 0.0088 0.0005

Neptune 62648-04-04 13:41 G 24602865.86 24602866.07 24602866.29 0.0088 0.0002

Neptune 62648-11-16 02:38 G 24603091.39 24603091.61 24603091.83 0.0088 0.0005

Jupiter 62649-06-27 01:41 G 24603314.39 24603314.57 24603314.76 0.0496 0.0212

Neptune 62649-06-29 15:22 G 24603316.93 24603317.14 24603317.36 0.0088 0.0010

Saturn 62649-07-17 13:26 G 24603334.92 24603335.06 24603335.21 0.0271 0.0197

Neptune 62650-02-10 04:05 G 24603542.47 24603542.67 24603542.90 0.0089 0.0016

Jupiter 62650-02-18 08:38 G 24603550.79 24603550.86 24603550.93 0.0505 0.0472

Saturn 62650-03-03 17:46 G 24603564.03 24603564.24 24603564.45 0.0271 0.0014

Neptune 62650-09-23 17:02 G 24603768.01 24603768.21 24603768.44 0.0089 0.0021

Saturn 62650-10-18 21:36 G 24603793.29 24603793.40 24603793.52 0.0271 0.0224

Neptune 62651-05-07 06:00 G 24603993.55 24603993.75 24603993.97 0.0089 0.0026

Neptune 62651-12-18 19:12 G 24604219.09 24604219.30 24604219.51 0.0089 0.0030

Neptune 62652-07-31 07:55 G 24604444.63 24604444.83 24604445.04 0.0089 0.0035

Neptune 62653-03-13 20:53 G 24604670.18 24604670.37 24604670.57 0.0089 0.0040

Neptune 62653-10-25 09:36 G 24604895.72 24604895.90 24604896.10 0.0089 0.0045

Neptune 62654-06-07 22:34 G 24605121.27 24605121.44 24605121.63 0.0089 0.0050

Neptune 62655-01-19 11:17 G 24605346.81 24605346.97 24605347.16 0.0089 0.0055

Jupiter 62655-05-06 16:48 G 24605454.00 24605454.20 24605454.40 0.0528 0.0121

Neptune 62655-09-02 00:00 G 24605572.36 24605572.50 24605572.68 0.0089 0.0060

Neptune 62656-04-14 12:58 G 24605797.91 24605798.04 24605798.21 0.0089 0.0065

Neptune 62656-11-26 02:10 G 24606023.46 24606023.59 24606023.73 0.0089 0.0069

Neptune 62657-07-09 14:53 G 24606249.01 24606249.12 24606249.25 0.0089 0.0074

Neptune 62658-02-20 03:36 G 24606474.57 24606474.65 24606474.77 0.0089 0.0079

Neptune 62658-10-03 17:02 G 24606700.14 24606700.21 24606700.29 0.0089 0.0083

Neptune 62659-05-17 05:46 G 24606925.73 24606925.74 24606925.79 0.0089 0.0088

Mars 62659-09-24 18:29 G 24607056.17 24607056.27 24607056.37 0.1836 0.1493

Uranus 62659-11-25 08:10 G 24607117.74 24607117.84 24607117.96 0.0141 0.0120

Uranus 62660-07-08 18:00 G 24607344.09 24607344.25 24607344.44 0.0141 0.0083

Uranus 62661-02-20 04:05 G 24607570.47 24607570.67 24607570.88 0.0141 0.0046

Jupiter 62661-03-02 05:02 G 24607580.60 24607580.71 24607580.84 0.0494 0.0392

Uranus 62661-10-04 13:55 G 24607796.86 24607797.08 24607797.30 0.0141 0.0010

Jupiter 62661-10-24 09:50 G 24607816.74 24607816.91 24607817.08 0.0502 0.0281

Uranus 62662-05-18 23:17 G 24608023.26 24608023.47 24608023.69 0.0141 0.0027

Uranus 62662-12-31 08:38 G 24608249.67 24608249.86 24608250.06 0.0140 0.0062

Uranus 62663-08-14 17:31 G 24608476.09 24608476.23 24608476.40 0.0140 0.0098

Uranus 62664-03-28 02:38 G 24608702.56 24608702.61 24608702.68 0.0140 0.0133

Mars 62664-05-05 18:58 G 24608741.15 24608741.29 24608741.43 0.1688 0.0966

Saturn 62664-08-13 13:55 G 24608840.90 24608841.08 24608841.26 0.0288 0.0153

Saturn 62665-03-31 10:05 G 24609070.73 24609070.92 24609071.12 0.0288 0.0104

Jupiter 62667-01-09 06:29 G 24609719.57 24609719.77 24609719.97 0.0531 0.0112

Jupiter 62673-06-29 10:34 G 24612082.74 24612082.94 24612083.14 0.0499 0.0087

Jupiter 62678-09-13 17:46 G 24613985.09 24613985.24 24613985.39 0.0534 0.0354

Saturn 62679-01-27 19:55 G 24614121.17 24614121.33 24614121.51 0.0272 0.0163

Jupiter 62679-05-09 16:05 G 24614223.08 24614223.17 24614223.25 0.0525 0.0470

Saturn 62679-09-14 00:29 G 24614350.31 24614350.52 24614350.73 0.0272 0.0049

Saturn 62680-04-30 04:19 G 24614579.63 24614579.68 24614579.75 0.0272 0.0259

Jupiter 62685-03-04 12:29 G 24616348.82 24616349.02 24616349.22 0.0497 0.0100

Jupiter 62691-01-12 08:10 G 24618488.66 24618488.84 24618489.02 0.0527 0.0251

Saturn 62694-02-23 21:22 G 24619627.20 24619627.39 24619627.59 0.0287 0.0113

Saturn 62694-10-11 17:17 G 24619857.04 24619857.22 24619857.40 0.0288 0.0143

Jupiter 62696-11-07 14:24 G 24620614.94 24620615.10 24620615.27 0.0495 0.0285

Jupiter 62697-07-01 19:41 G 24620851.20 24620851.32 24620851.45 0.0503 0.0391

Jupiter 62702-09-18 00:14 G 24622754.31 24622754.51 24622754.72 0.0530 0.0027

Uranus 62703-11-21 03:36 G 24623183.52 24623183.65 24623183.80 0.0137 0.0105

Uranus 62704-07-04 11:02 G 24623409.78 24623409.96 24623410.15 0.0137 0.0072

Uranus 62705-02-15 18:43 G 24623636.08 24623636.28 24623636.50 0.0137 0.0038

Uranus 62705-09-30 02:38 G 24623862.39 24623862.61 24623862.83 0.0137 0.0005

Uranus 62706-05-14 10:19 G 24624088.72 24624088.93 24624089.14 0.0138 0.0030

Uranus 62706-12-26 18:00 G 24624315.07 24624315.25 24624315.45 0.0138 0.0064

Uranus 62707-08-10 01:55 G 24624541.45 24624541.58 24624541.75 0.0138 0.0099

Earth 62707-12-03 09:22 G 24624656.73 24624656.89 24624657.05 0.2660 0.0203

Moon 62707-12-03 15:07 G 24624656.97 24624657.13 24624657.29 0.2660 0.0108 *

Uranus 62708-03-23 10:19 G 24624767.89 24624767.93 24624768.01 0.0138 0.0133

Jupiter 62708-07-14 18:14 G 24624881.19 24624881.26 24624881.33 0.0493 0.0461

Saturn 62708-08-09 20:10 G 24624907.17 24624907.34 24624907.53 0.0271 0.0140

Jupiter 62709-03-07 21:22 G 24625117.20 24625117.39 24625117.58 0.0501 0.0201

Saturn 62709-03-27 00:29 G 24625136.32 24625136.52 24625136.73 0.0271 0.0072

Jupiter 62714-05-23 13:55 G 24627019.90 24627020.08 24627020.27 0.0532 0.0206

Neptune 62718-01-15 19:26 G 24628353.30 24628353.31 24628353.34 0.0089 0.0089

Neptune 62718-08-29 08:24 G 24628578.81 24628578.85 24628578.95 0.0089 0.0085

Neptune 62719-04-11 21:50 G 24628804.33 24628804.41 24628804.53 0.0089 0.0080

Neptune 62719-11-23 11:17 G 24629029.87 24629029.97 24629030.11 0.0089 0.0075

Neptune 62720-07-06 00:43 G 24629255.40 24629255.53 24629255.67 0.0089 0.0070

Jupiter 62720-11-10 23:31 G 24629383.28 24629383.48 24629383.69 0.0499 0.0016

Neptune 62721-02-16 13:41 G 24629480.95 24629481.07 24629481.25 0.0089 0.0065

Neptune 62721-09-30 03:07 G 24629706.49 24629706.63 24629706.81 0.0089 0.0060

Neptune 62722-05-13 16:19 G 24629932.03 24629932.18 24629932.37 0.0089 0.0055

Neptune 62722-12-25 05:46 G 24630157.57 24630157.74 24630157.94 0.0089 0.0050

Neptune 62723-08-07 18:58 G 24630383.12 24630383.29 24630383.50 0.0089 0.0045

Saturn 62723-09-07 00:00 G 24630413.29 24630413.50 24630413.70 0.0288 0.0086

Neptune 62724-03-20 08:24 G 24630608.67 24630608.85 24630609.06 0.0089 0.0040

Saturn 62724-04-23 19:55 G 24630643.17 24630643.33 24630643.51 0.0288 0.0170

Neptune 62724-10-31 21:50 G 24630834.22 24630834.41 24630834.62 0.0089 0.0035

Neptune 62725-06-14 11:02 G 24631059.77 24631059.96 24631060.18 0.0089 0.0030

Mars 62725-07-22 23:17 G 24631098.32 24631098.47 24631098.63 0.1832 0.0811

Neptune 62726-01-26 00:29 G 24631285.31 24631285.52 24631285.74 0.0089 0.0025

Jupiter 62726-01-26 02:38 G 24631285.49 24631285.61 24631285.72 0.0534 0.0442 *

Neptune 62726-09-08 13:41 G 24631510.87 24631511.07 24631511.30 0.0089 0.0020

Jupiter 62726-09-21 01:12 G 24631523.42 24631523.55 24631523.70 0.0525 0.0385

Neptune 62727-04-22 03:07 G 24631736.42 24631736.63 24631736.86 0.0089 0.0015

Neptune 62727-12-03 16:19 G 24631961.97 24631962.18 24631962.41 0.0089 0.0010

Neptune 62728-07-16 05:46 G 24632187.52 24632187.74 24632187.96 0.0089 0.0004

Neptune 62729-02-26 18:58 G 24632413.07 24632413.29 24632413.52 0.0089 0.0002

Neptune 62729-10-10 08:10 G 24632638.62 24632638.84 24632639.07 0.0089 0.0006

Mars 62730-03-04 05:17 G 24632783.56 24632783.72 24632783.88 0.1691 0.0622

Pluto 62730-04-21 16:34 G 24632832.14 24632832.19 24632832.31 0.0063 0.0058

Neptune 62730-05-23 21:22 G 24632864.17 24632864.39 24632864.61 0.0089 0.0011

Pluto 62730-12-02 20:38 G 24633057.17 24633057.36 24633057.58 0.0063 0.0024

Neptune 62731-01-04 10:34 G 24633089.72 24633089.94 24633090.16 0.0089 0.0016

Pluto 62731-07-16 00:29 G 24633282.31 24633282.52 24633282.75 0.0063 0.0011

Neptune 62731-08-17 23:46 G 24633315.27 24633315.49 24633315.70 0.0089 0.0021

Pluto 62732-02-26 04:19 G 24633507.54 24633507.68 24633507.85 0.0064 0.0045

Neptune 62732-03-30 12:58 G 24633540.83 24633541.04 24633541.25 0.0089 0.0026

Jupiter 62732-07-17 01:55 G 24633649.39 24633649.58 24633649.77 0.0496 0.0173

Neptune 62732-11-11 01:55 G 24633766.38 24633766.58 24633766.80 0.0089 0.0031

Neptune 62733-06-24 15:07 G 24633991.93 24633992.13 24633992.34 0.0089 0.0036

Neptune 62734-02-05 04:05 G 24634217.48 24634217.67 24634217.87 0.0089 0.0041

Neptune 62734-09-18 17:17 G 24634443.04 24634443.22 24634443.41 0.0089 0.0046

Neptune 62735-05-02 06:29 G 24634668.60 24634668.77 24634668.96 0.0089 0.0051

Neptune 62735-12-13 19:26 G 24634894.15 24634894.31 24634894.49 0.0089 0.0056

Neptune 62736-07-26 08:24 G 24635119.71 24635119.85 24635120.03 0.0089 0.0061

Neptune 62737-03-08 21:36 G 24635345.27 24635345.40 24635345.56 0.0089 0.0066

Neptune 62737-10-20 11:02 G 24635570.83 24635570.96 24635571.10 0.0089 0.0070

Saturn 62738-02-20 02:38 G 24635693.42 24635693.61 24635693.81 0.0272 0.0106

Jupiter 62738-05-26 14:24 G 24635788.90 24635789.10 24635789.29 0.0529 0.0154

Neptune 62738-06-03 00:00 G 24635796.40 24635796.50 24635796.63 0.0088 0.0075

Saturn 62738-10-07 07:12 G 24635922.61 24635922.80 24635923.00 0.0272 0.0106

Neptune 62739-01-14 12:58 G 24636021.96 24636022.04 24636022.15 0.0088 0.0080

Neptune 62739-08-28 01:55 G 24636247.54 24636247.58 24636247.67 0.0088 0.0084

Uranus 62743-07-26 17:02 G 24637676.16 24637676.21 24637676.29 0.0142 0.0135

Uranus	62744-03-09 03:22 G	24637902.49	24637902.64	24637902.80	0.0141	0.0098
Jupiter	62744-03-22 04:34 G	24637915.56	24637915.69	24637915.84	0.0494	0.0354
Uranus	62744-10-21 13:12 G	24638128.86	24638129.05	24638129.25	0.0141	0.0061
Jupiter	62744-11-13 08:38 G	24638151.70	24638151.86	24638152.02	0.0502	0.0314
Uranus	62745-06-04 23:02 G	24638355.25	24638355.46	24638355.68	0.0141	0.0024
Uranus	62746-01-17 08:38 G	24638581.65	24638581.86	24638582.08	0.0141	0.0013
Uranus	62746-08-31 18:14 G	24638808.06	24638808.26	24638808.47	0.0141	0.0049
Uranus	62747-04-15 03:22 G	24639034.47	24639034.64	24639034.82	0.0140	0.0084
Uranus	62747-11-27 12:14 G	24639260.91	24639261.01	24639261.13	0.0140	0.0120
Jupiter	62750-01-29 05:02 G	24640054.51	24640054.71	24640054.91	0.0531	0.0075
Saturn	62753-03-19 09:22 G	24641199.68	24641199.89	24641200.10	0.0287	0.0041
Saturn	62753-11-04 04:48 G	24641429.57	24641429.70	24641429.86	0.0287	0.0214
Jupiter	62756-07-19 08:53 G	24642417.67	24642417.87	24642418.07	0.0499	0.0122
Jupiter	62761-10-03 19:55 G	24644320.17	24644320.33	24644320.50	0.0534	0.0304
Jupiter	62762-05-29 17:31 G	24644558.20	24644558.23	24644558.28	0.0524	0.0514
Saturn	62767-09-02 03:50 G	24646479.46	24646479.66	24646479.87	0.0272	0.0081
Jupiter	62768-03-24 11:17 G	24646683.77	24646683.97	24646684.17	0.0497	0.0064
Saturn	62768-04-18 08:10 G	24646708.66	24646708.84	24646709.03	0.0271	0.0130
Jupiter	62774-02-01 09:07 G	24648823.71	24648823.88	24648824.05	0.0527	0.0294
Jupiter	62779-11-28 14:24 G	24650949.93	24650950.10	24650950.28	0.0495	0.0245
Jupiter	62780-07-21 20:10 G	24651186.24	24651186.34	24651186.44	0.0504	0.0430
Saturn	62782-02-11 16:05 G	24651756.10	24651756.17	24651756.25	0.0287	0.0268
Saturn	62782-09-29 11:46 G	24651985.78	24651985.99	24651986.20	0.0288	0.0015
Saturn	62783-05-17 07:55 G	24652215.71	24652215.83	24652215.94	0.0288	0.0240
Jupiter	62785-10-06 23:17 G	24653089.27	24653089.47	24653089.68	0.0529	0.0067
Uranus	62787-07-21 14:24 G	24653742.01	24653742.10	24653742.23	0.0137	0.0118
Uranus	62788-03-03 22:19 G	24653968.26	24653968.43	24653968.60	0.0137	0.0084
Uranus	62788-10-16 05:31 G	24654194.54	24654194.73	24654194.94	0.0137	0.0052
Uranus	62789-05-30 13:12 G	24654420.84	24654421.05	24654421.27	0.0137	0.0018
Uranus	62790-01-11 20:53 G	24654647.16	24654647.37	24654647.59	0.0138	0.0017

Uranus 62790-08-26 04:34 G 24654873.50 24654873.69 24654873.91 0.0138 0.0051

Uranus 62791-04-09 12:43 G 24655099.87 24655100.03 24655100.21 0.0138 0.0085

Mars 62791-05-20 04:48 G 24655140.53 24655140.70 24655140.88 0.1829 0.0164

Jupiter 62791-08-03 18:00 G 24655216.15 24655216.25 24655216.35 0.0493 0.0423

Uranus 62791-11-21 20:38 G 24655326.27 24655326.36 24655326.49 0.0138 0.0120

Jupiter 62792-03-26 20:53 G 24655452.20 24655452.37 24655452.55 0.0501 0.0237

Mars 62795-12-30 16:19 G 24656826.01 24656826.18 24656826.35 0.1694 0.0300

Saturn 62796-07-28 05:17 G 24657036.67 24657036.72 24657036.80 0.0273 0.0259

Saturn 62797-03-14 10:19 G 24657265.73 24657265.93 24657266.14 0.0272 0.0047

Jupiter 62797-06-11 10:19 G 24657354.74 24657354.93 24657355.12 0.0532 0.0175

Saturn 62797-10-29 14:53 G 24657494.96 24657495.12 24657495.30 0.0272 0.0166

Neptune 62801-05-27 07:55 G 24658800.80 24658800.83 24658800.90 0.0088 0.0085

Neptune 62802-01-07 20:24 G 24659026.29 24659026.35 24659026.46 0.0088 0.0081

Neptune 62802-08-21 09:36 G 24659251.81 24659251.90 24659252.02 0.0088 0.0076

Neptune 62803-04-03 22:34 G 24659477.32 24659477.44 24659477.57 0.0088 0.0071

Neptune 62803-11-15 10:48 G 24659702.83 24659702.95 24659703.12 0.0088 0.0067

Jupiter 62803-11-30 22:19 G 24659718.23 24659718.43 24659718.63 0.0498 0.0048

Neptune 62804-06-27 23:46 G 24659928.35 24659928.49 24659928.66 0.0088 0.0062

Neptune 62805-02-08 12:43 G 24660153.87 24660154.03 24660154.20 0.0088 0.0057

Neptune 62805-09-22 01:41 G 24660379.40 24660379.57 24660379.75 0.0088 0.0053

Neptune 62806-05-05 13:55 G 24660604.92 24660605.08 24660605.29 0.0088 0.0049

Neptune 62806-12-17 02:53 G 24660830.44 24660830.62 24660830.82 0.0088 0.0043

Neptune 62807-07-30 15:36 G 24661055.96 24661056.15 24661056.36 0.0088 0.0038

Neptune 62808-03-12 04:19 G 24661281.49 24661281.68 24661281.89 0.0088 0.0034

Neptune 62808-10-23 17:17 G 24661507.01 24661507.22 24661507.43 0.0088 0.0028

Jupiter 62809-02-13 23:17 G 24661620.35 24661620.47 24661620.61 0.0535 0.0409

Neptune 62809-06-06 06:00 G 24661732.54 24661732.75 24661732.96 0.0088 0.0024

Jupiter 62809-10-09 22:48 G 24661858.34 24661858.45 24661858.58 0.0526 0.0417

Neptune 62810-01-17 18:43 G 24661958.07 24661958.28 24661958.50 0.0088 0.0019

Neptune 62810-08-31 07:41 G 24662183.60 24662183.82 24662184.03 0.0088 0.0014

Neptune 62811-04-13 20:24 G 24662409.13 24662409.35 24662409.57 0.0088 0.0009

Saturn 62811-08-25 03:07 G 24662542.49 24662542.63 24662542.76 0.0287 0.0220

Neptune 62811-11-25 09:07 G 24662634.66 24662634.88 24662635.10 0.0088 0.0004

Saturn 62812-04-10 22:34 G 24662772.23 24662772.44 24662772.65 0.0287 0.0033

Neptune 62812-07-07 21:50 G 24662860.19 24662860.41 24662860.63 0.0088 0.0001

Saturn 62812-11-26 18:00 G 24663002.25 24663002.25 24663002.28 0.0287 0.0287

Neptune 62813-02-18 10:34 G 24663085.72 24663085.94 24663086.16 0.0088 0.0006

Neptune 62813-10-01 23:31 G 24663311.27 24663311.48 24663311.70 0.0088 0.0011

Neptune 62814-05-15 12:14 G 24663536.80 24663537.01 24663537.24 0.0088 0.0017

Neptune 62814-12-27 00:58 G 24663762.34 24663762.54 24663762.77 0.0088 0.0022

Jupiter 62815-08-05 23:02 G 24663984.27 24663984.46 24663984.66 0.0496 0.0140

Neptune 62815-08-09 14:10 G 24663987.88 24663988.09 24663988.30 0.0089 0.0026

Neptune 62816-03-22 02:53 G 24664213.42 24664213.62 24664213.83 0.0089 0.0031

Neptune 62816-11-02 15:50 G 24664438.97 24664439.16 24664439.37 0.0089 0.0036

Neptune 62817-06-16 04:48 G 24664664.51 24664664.70 24664664.90 0.0089 0.0041

Neptune 62818-01-27 17:31 G 24664890.05 24664890.23 24664890.43 0.0089 0.0046

Neptune 62818-09-10 06:29 G 24665115.60 24665115.77 24665115.96 0.0089 0.0051

Neptune 62819-04-23 19:12 G 24665341.15 24665341.30 24665341.49 0.0089 0.0056

Neptune 62819-12-05 07:55 G 24665566.70 24665566.83 24665567.01 0.0089 0.0061

Neptune 62820-07-17 21:07 G 24665792.24 24665792.38 24665792.54 0.0089 0.0065

Pluto 62821-01-18 07:41 G 24665976.60 24665976.82 24665977.03 0.0080 0.0022

Neptune 62821-02-28 09:50 G 24666017.79 24666017.91 24666018.06 0.0089 0.0070

Jupiter 62821-06-14 15:36 G 24666123.96 24666124.15 24666124.34 0.0528 0.0199

Pluto 62821-08-31 17:46 G 24666202.09 24666202.24 24666202.44 0.0080 0.0049

Neptune 62821-10-11 22:48 G 24666243.35 24666243.45 24666243.59 0.0089 0.0075

Neptune 62822-05-25 12:00 G 24666468.91 24666469.00 24666469.10 0.0089 0.0079

Neptune 62823-01-06 00:43 G 24666694.47 24666694.53 24666694.61 0.0089 0.0084

Neptune 62823-08-19 13:26 G 24666920.06 24666920.06 24666920.10 0.0089 0.0089

Saturn 62826-02-07 07:55 G 24667822.73 24667822.83 24667822.95 0.0272 0.0231

Saturn 62826-09-24 12:43 G 24668051.82 24668052.03 24668052.25 0.0272 0.0020

Jupiter 62827-04-11 02:24 G 24668250.45 24668250.60 24668250.75 0.0494 0.0319

Saturn 62827-05-11 17:02 G 24668281.07 24668281.21 24668281.36 0.0271 0.0191

Uranus 62827-11-07 12:58 G 24668460.92 24668461.04 24668461.18 0.0142 0.0113

Jupiter 62827-12-03 06:43 G 24668486.63 24668486.78 24668486.92 0.0502 0.0348

Uranus 62828-06-20 23:02 G 24668687.28 24668687.46 24668687.65 0.0141 0.0076

Uranus 62829-02-02 08:53 G 24668913.67 24668913.87 24668914.09 0.0141 0.0039

Uranus 62829-09-16 18:43 G 24669140.07 24669140.28 24669140.50 0.0141 0.0004

Uranus 62830-05-01 04:19 G 24669366.47 24669366.68 24669366.89 0.0141 0.0034

Uranus 62830-12-13 13:26 G 24669592.88 24669593.06 24669593.26 0.0140 0.0071

Uranus 62831-07-27 22:34 G 24669819.31 24669819.44 24669819.59 0.0140 0.0106

Jupiter 62833-02-17 05:46 G 24670389.54 24670389.74 24670389.95 0.0531 0.0032

Jupiter 62839-08-08 08:24 G 24672752.66 24672752.85 24672753.04 0.0500 0.0159

Saturn 62841-03-06 05:31 G 24673328.58 24673328.73 24673328.89 0.0287 0.0194

Saturn 62841-10-22 01:12 G 24673558.35 24673558.55 24673558.76 0.0288 0.0060

Jupiter 62844-10-22 18:43 G 24674655.11 24674655.28 24674655.46 0.0533 0.0264

Moon 62845-06-01 12:29 G 24674876.87 24674877.02 24674877.17 0.2670 0.1017

Earth 62845-06-01 17:31 G 24674877.11 24674877.23 24674877.36 0.2672 0.1676 *

Jupiter 62851-04-13 10:34 G 24677018.74 24677018.94 24677019.15 0.0497 0.0030

Moon 62853-05-30 02:53 G 24677796.59 24677796.62 24677796.66 0.2677 0.2589

Earth 62853-05-30 07:55 G 24677796.72 24677796.83 24677796.95 0.2673 0.1810

Saturn 62855-08-20 14:10 G 24678608.95 24678609.09 24678609.24 0.0273 0.0198

Saturn 62856-04-05 19:12 G 24678838.08 24678838.30 24678838.51 0.0272 0.0016

Jupiter 62856-06-27 04:05 G 24678920.61 24678920.67 24678920.73 0.0536 0.0508

Saturn 62856-11-20 23:46 G 24679067.38 24679067.49 24679067.61 0.0272 0.0226

Jupiter 62857-02-20 04:34 G 24679158.53 24679158.69 24679158.86 0.0527 0.0321

Mars 62857-03-16 10:05 G 24679182.75 24679182.92 24679183.09 0.1825 0.0484

Mars 62861-10-27 02:38 G 24680868.44 24680868.61 24680868.79 0.1697 0.0063

Jupiter 62862-12-17 12:58 G 24681284.85 24681285.04 24681285.22 0.0495 0.0211

Jupiter 62863-08-10 18:00 G 24681521.18 24681521.25 24681521.34 0.0503 0.0459

Jupiter 62868-10-25 19:26 G 24683424.11 24683424.31 24683424.51 0.0530 0.0096

Saturn 62870-09-16 17:31 G 24684115.05 24684115.23 24684115.42 0.0287 0.0144

Uranus 62871-03-21 01:55 G 24684300.51 24684300.58 24684300.64 0.0136 0.0130

Saturn 62871-05-04 13:12 G 24684344.86 24684345.05 24684345.25 0.0287 0.0109

Uranus 62871-11-02 08:38 G 24684526.73 24684526.86 24684527.03 0.0137 0.0098

Uranus 62872-06-15 16:19 G 24684752.99 24684753.18 24684753.37 0.0137 0.0064

Uranus 62873-01-27 23:46 G 24684979.28 24684979.49 24684979.71 0.0137 0.0031

Uranus 62873-09-11 07:26 G 24685205.59 24685205.81 24685206.03 0.0137 0.0003

Uranus 62874-04-25 15:07 G 24685431.92 24685432.13 24685432.34 0.0138 0.0037

Jupiter 62874-08-22 14:10 G 24685550.98 24685551.09 24685551.22 0.0493 0.0392

Uranus 62874-12-07 23:02 G 24685658.28 24685658.46 24685658.65 0.0138 0.0071

Jupiter 62875-04-15 17:17 G 24685787.05 24685787.22 24685787.39 0.0501 0.0266

Uranus 62875-07-22 06:58 G 24685884.66 24685884.79 24685884.94 0.0138 0.0105

Jupiter 62880-06-30 10:48 G 24687689.75 24687689.95 24687690.14 0.0532 0.0130

Neptune 62882-04-19 02:38 G 24688347.59 24688347.61 24688347.67 0.0089 0.0088

Neptune 62882-11-30 16:19 G 24688573.10 24688573.18 24688573.26 0.0089 0.0083

Neptune 62883-07-14 05:02 G 24688798.63 24688798.71 24688798.84 0.0089 0.0079

Neptune 62884-02-24 18:43 G 24689024.17 24689024.28 24689024.42 0.0089 0.0073

Neptune 62884-10-07 08:10 G 24689249.71 24689249.84 24689249.99 0.0089 0.0069

Saturn 62885-03-01 18:00 G 24689395.09 24689395.25 24689395.42 0.0272 0.0168

Neptune 62885-05-20 21:22 G 24689475.25 24689475.39 24689475.56 0.0089 0.0064

Saturn 62885-10-16 22:48 G 24689624.24 24689624.45 24689624.66 0.0272 0.0044

Neptune 62886-01-01 10:48 G 24689700.79 24689700.95 24689701.12 0.0089 0.0059

Saturn 62886-06-03 02:53 G 24689853.56 24689853.62 24689853.71 0.0271 0.0255

Neptune 62886-08-14 23:46 G 24689926.33 24689926.49 24689926.68 0.0089 0.0054

Jupiter 62886-12-19 18:58 G 24690053.09 24690053.29 24690053.50 0.0498 0.0081

Neptune 62887-03-28 13:12 G 24690151.88 24690152.05 24690152.25 0.0089 0.0049

Neptune 62887-11-09 02:24 G 24690377.43 24690377.60 24690377.81 0.0089 0.0044

Neptune 62888-06-21 15:36 G 24690602.97 24690603.15 24690603.37 0.0089 0.0039

Neptune 62889-02-02 05:02 G 24690828.52 24690828.71 24690828.92 0.0089 0.0034

Neptune 62889-09-15 18:14 G 24691054.07 24691054.26 24691054.48 0.0089 0.0029

Neptune 62890-04-29 07:41 G 24691279.62 24691279.82 24691280.04 0.0089 0.0024

Neptune 62890-12-10 20:53 G 24691505.17 24691505.37 24691505.60 0.0089 0.0019

Neptune 62891-07-24 10:19 G 24691730.72 24691730.93 24691731.16 0.0089 0.0014

Jupiter 62892-03-05 00:14 G 24691955.36 24691955.51 24691955.66 0.0534 0.0361

Neptune 62892-03-05 23:46 G 24691956.28 24691956.49 24691956.72 0.0089 0.0009

Neptune 62892-10-17 13:12 G 24692181.83 24692182.05 24692182.27 0.0089 0.0003

Jupiter 62892-10-28 22:48 G 24692193.36 24692193.45 24692193.55 0.0525 0.0456

Neptune 62893-05-31 02:24 G 24692407.38 24692407.60 24692407.82 0.0089 0.0002

Neptune 62894-01-11 15:36 G 24692632.93 24692633.15 24692633.37 0.0089 0.0007

Neptune 62894-08-25 04:48 G 24692858.49 24692858.70 24692858.92 0.0089 0.0012

Neptune 62895-04-07 18:14 G 24693084.05 24693084.26 24693084.48 0.0089 0.0017

Neptune 62895-11-19 07:26 G 24693309.60 24693309.81 24693310.03 0.0089 0.0022

Neptune 62896-07-01 20:24 G 24693535.15 24693535.35 24693535.57 0.0089 0.0027

Neptune 62897-02-12 09:36 G 24693760.70 24693760.90 24693761.11 0.0089 0.0032

Neptune 62897-09-25 22:48 G 24693986.26 24693986.45 24693986.66 0.0089 0.0037

Neptune 62898-05-09 12:00 G 24694211.82 24694212.00 24694212.20 0.0089 0.0042

Jupiter 62898-08-24 21:36 G 24694319.21 24694319.40 24694319.60 0.0496 0.0105

Neptune 62898-12-21 01:12 G 24694437.37 24694437.55 24694437.74 0.0089 0.0047

Neptune 62899-08-03 14:10 G 24694662.92 24694663.09 24694663.28 0.0089 0.0052

Neptune 62900-03-17 03:22 G 24694888.48 24694888.64 24694888.82 0.0089 0.0057

Saturn 62900-03-29 20:24 G 24694901.16 24694901.35 24694901.55 0.0287 0.0117

Neptune 62900-10-28 16:19 G 24695114.04 24695114.18 24695114.36 0.0089 0.0062

Saturn 62900-11-14 16:05 G 24695130.98 24695131.17 24695131.36 0.0288 0.0137

Neptune 62901-06-11 05:17 G 24695339.60 24695339.72 24695339.89 0.0089 0.0067

Neptune 62902-01-22 18:43 G 24695565.16 24695565.28 24695565.42 0.0089 0.0071

Neptune 62902-09-05 07:41 G 24695790.72 24695790.82 24695790.95 0.0089 0.0076

Neptune 62903-04-18 20:53 G 24696016.30 24696016.37 24696016.48 0.0088 0.0081

Neptune 62903-11-30 10:19 G 24696241.88 24696241.93 24696242.00 0.0088 0.0085

Jupiter 62904-07-04 13:26 G 24696458.88 24696459.06 24696459.24 0.0528 0.0234

Jupiter 62910-05-01 01:12 G 24698585.38 24698585.55 24698585.72 0.0494 0.0284

Jupiter 62910-12-23 05:31 G 24698821.60 24698821.73 24698821.86 0.0502 0.0380

Uranus 62911-07-08 20:53 G 24699019.30 24699019.37 24699019.48 0.0142 0.0129

Uranus 62912-02-20 07:12 G 24699245.65 24699245.80 24699245.98 0.0142 0.0092

Uranus 62912-10-03 17:31 G 24699472.03 24699472.23 24699472.43 0.0141 0.0054

Uranus 62913-05-18 03:07 G 24699698.42 24699698.63 24699698.85 0.0141 0.0018

Uranus 62913-12-30 12:58 G 24699924.82 24699925.04 24699925.25 0.0141 0.0019

Uranus 62914-08-13 22:05 G 24700151.24 24700151.42 24700151.63 0.0141 0.0056

Saturn 62914-09-13 00:00 G 24700181.32 24700181.50 24700181.69 0.0272 0.0134

Uranus 62915-03-28 07:26 G 24700377.66 24700377.81 24700377.99 0.0140 0.0091

Saturn 62915-04-30 04:48 G 24700410.50 24700410.70 24700410.91 0.0272 0.0078

Uranus 62915-11-09 16:48 G 24700604.11 24700604.20 24700604.29 0.0140 0.0127

Jupiter 62916-03-09 00:43 G 24700724.32 24700724.53 24700724.73 0.0531 0.0011

Jupiter 62922-01-04 04:05 G 24702851.61 24702851.67 24702851.74 0.0492 0.0460

Jupiter 62922-08-28 06:00 G 24703087.57 24703087.75 24703087.95 0.0500 0.0192

Mars 62923-01-12 16:05 G 24703225.03 24703225.17 24703225.31 0.1821 0.1097

Mars 62927-08-25 13:12 G 24704910.88 24704911.05 24704911.22 0.1700 0.0399

Jupiter 62927-11-12 13:41 G 24704989.89 24704990.07 24704990.26 0.0533 0.0235

Saturn 62929-10-10 09:07 G 24705687.67 24705687.88 24705688.08 0.0287 0.0066

Saturn 62930-05-28 04:48 G 24705917.54 24705917.70 24705917.86 0.0287 0.0187

Jupiter 62934-05-03 06:00 G 24707353.55 24707353.75 24707353.96 0.0497 0.0009

Jupiter 62939-07-18 03:36 G 24709255.56 24709255.65 24709255.75 0.0536 0.0464

Jupiter 62940-03-12 04:19 G 24709493.54 24709493.68 24709493.83 0.0527 0.0361

Saturn 62944-03-25 05:02 G 24710967.52 24710967.71 24710967.91 0.0272 0.0103

Saturn 62944-11-09 09:50 G 24711196.72 24711196.91 24711197.10 0.0272 0.0109

Jupiter 62946-01-06 08:38 G 24711619.67 24711619.86 24711620.05 0.0495 0.0181

Jupiter 62946-08-30 14:24 G 24711856.05 24711856.10 24711856.14 0.0504 0.0488

Moon 62950-12-04 05:46 G 24713412.58 24713412.74 24713412.90 0.2658 0.0245

Earth 62950-12-04 11:31 G 24713412.82 24713412.98 24713413.14 0.2659 0.0079 *

Jupiter 62951-11-15 19:26 G 24713759.12 24713759.31 24713759.51 0.0529 0.0139

Uranus 62955-07-03 19:26 G 24715085.20 24715085.31 24715085.45 0.0137 0.0111

Uranus 62956-02-15 02:53 G 24715311.45 24715311.62 24715311.81 0.0137 0.0078

Uranus 62956-09-28 10:19 G 24715537.73 24715537.93 24715538.14 0.0137 0.0044

Uranus 62957-05-12 18:00 G 24715764.03 24715764.25 24715764.47 0.0137 0.0010

Jupiter 62957-09-11 12:00 G 24715885.87 24715886.00 24715886.15 0.0493 0.0358

Uranus 62957-12-25 01:26 G 24715990.35 24715990.56 24715990.78 0.0137 0.0024

Jupiter 62958-05-05 15:36 G 24716121.99 24716122.15 24716122.31 0.0501 0.0300

Uranus 62958-08-08 09:07 G 24716216.69 24716216.88 24716217.09 0.0138 0.0058

Uranus 62959-03-22 17:02 G 24716443.07 24716443.21 24716443.39 0.0138 0.0092

Saturn 62959-04-22 12:14 G 24716473.80 24716474.01 24716474.22 0.0287 0.0039

Uranus 62959-11-04 01:12 G 24716669.48 24716669.55 24716669.65 0.0138 0.0126

Saturn 62959-12-08 07:41 G 24716703.68 24716703.82 24716703.96 0.0288 0.0215

Jupiter 62963-07-21 08:53 G 24718024.67 24718024.87 24718025.07 0.0532 0.0092

Neptune 62965-08-29 16:34 G 24718795.15 24718795.19 24718795.28 0.0088 0.0084

Neptune 62966-04-12 05:31 G 24719020.65 24719020.73 24719020.84 0.0088 0.0079

Neptune 62966-11-23 18:00 G 24719246.16 24719246.25 24719246.38 0.0088 0.0075

Neptune 62967-07-07 06:43 G 24719471.67 24719471.78 24719471.93 0.0088 0.0070

Neptune 62968-02-17 19:55 G 24719697.18 24719697.33 24719697.47 0.0088 0.0065

Neptune 62968-09-30 08:24 G 24719922.71 24719922.85 24719923.02 0.0088 0.0061

Neptune 62969-05-13 21:07 G 24720148.23 24720148.38 24720148.57 0.0088 0.0056

Neptune 62969-12-25 10:05 G 24720373.75 24720373.92 24720374.11 0.0088 0.0051

Jupiter 62970-01-08 17:31 G 24720388.04 24720388.23 24720388.43 0.0499 0.0114

Neptune 62970-08-07 23:02 G 24720599.27 24720599.46 24720599.65 0.0088 0.0047

Neptune 62971-03-21 11:31 G 24720824.80 24720824.98 24720825.19 0.0088 0.0042

Neptune 62971-11-02 00:14 G 24721050.33 24721050.51 24721050.72 0.0088 0.0037

Neptune 62972-06-14 12:58 G 24721275.85 24721276.04 24721276.26 0.0088 0.0032

Neptune 62973-01-26 01:41 G 24721501.38 24721501.57 24721501.79 0.0088 0.0028

Neptune 62973-09-08 14:38 G 24721726.91 24721727.11 24721727.33 0.0088 0.0023

Saturn 62973-10-05 10:34 G 24721753.74 24721753.94 24721754.15 0.0272 0.0070

Neptune 62974-04-22 03:36 G 24721952.44 24721952.65 24721952.87 0.0088 0.0017

Saturn 62974-05-22 15:22 G 24721982.96 24721983.14 24721983.32 0.0272 0.0142

Neptune 62974-12-03 16:19 G 24722177.96 24722178.18 24722178.40 0.0088 0.0012

Jupiter 62975-03-25 18:43 G 24722290.12 24722290.28 24722290.44 0.0534 0.0333

Neptune 62975-07-17 05:02 G 24722403.49 24722403.71 24722403.93 0.0088 0.0008

Jupiter 62975-11-18 17:17 G 24722528.15 24722528.22 24722528.31 0.0525 0.0480

Neptune 62976-02-27 17:46 G 24722629.02 24722629.24 24722629.46 0.0088 0.0003

Neptune 62976-10-10 06:43 G 24722854.56 24722854.78 24722855.00 0.0088 0.0002

Neptune 62977-05-23 19:26 G 24723080.09 24723080.31 24723080.53 0.0088 0.0007

Neptune 62978-01-04 08:10 G 24723305.62 24723305.84 24723306.06 0.0088 0.0012

Neptune 62978-08-17 20:53 G 24723531.16 24723531.37 24723531.59 0.0088 0.0017

Pluto 62978-11-05 23:02 G 24723611.35 24723611.46 24723611.61 0.0063 0.0051

Neptune 62979-03-31 09:36 G 24723756.70 24723756.90 24723757.12 0.0088 0.0022

Pluto 62979-06-19 02:53 G 24723836.42 24723836.62 24723836.85 0.0063 0.0018

Neptune 62979-11-11 22:19 G 24723982.24 24723982.43 24723982.65 0.0088 0.0028

Pluto 62980-01-30 06:58 G 24724061.59 24724061.79 24724062.01 0.0063 0.0017

Neptune 62980-06-24 11:02 G 24724207.78 24724207.96 24724208.18 0.0089 0.0033

Pluto 62980-09-11 10:48 G 24724286.84 24724286.95 24724287.09 0.0064 0.0052

Neptune 62981-02-05 00:14 G 24724433.32 24724433.51 24724433.71 0.0089 0.0037

Jupiter 62981-09-13 19:26 G 24724654.11 24724654.31 24724654.51 0.0496 0.0071

Neptune 62981-09-18 13:12 G 24724658.86 24724659.05 24724659.25 0.0089 0.0042

Neptune 62982-05-02 01:55 G 24724884.41 24724884.58 24724884.78 0.0089 0.0047

Neptune 62982-12-13 14:53 G 24725109.95 24725110.12 24725110.31 0.0089 0.0052

Neptune 62983-07-27 03:36 G 24725335.50 24725335.65 24725335.83 0.0089 0.0057

Neptune 62984-03-08 16:19 G 24725561.04 24725561.18 24725561.36 0.0089 0.0062

Neptune 62984-10-20 05:46 G 24725786.60 24725786.74 24725786.89 0.0089 0.0066

Neptune 62985-06-02 18:29 G 24726012.15 24726012.27 24726012.41 0.0089 0.0071

Neptune 62986-01-14 06:58 G 24726237.70 24726237.79 24726237.93 0.0089 0.0076

Neptune 62986-08-27 20:24 G 24726463.26 24726463.35 24726463.44 0.0089 0.0080

Neptune 62987-04-10 08:53 G 24726688.83 24726688.87 24726688.95 0.0089 0.0085

Jupiter 62987-07-24 08:10 G 24726793.67 24726793.84 24726794.02 0.0528 0.0261

Saturn 62988-03-17 05:31 G 24727030.62 24727030.73 24727030.85 0.0287 0.0239

Saturn 62988-11-02 00:58 G 24727260.32 24727260.54 24727260.75 0.0287 0.0014

Mars 62988-11-08 21:22 G 24727267.34 24727267.39 24727267.45 0.1818 0.1725

Saturn 62989-06-19 20:38 G 24727490.28 24727490.36 24727490.44 0.0287 0.0266

Jupiter 62993-05-19 20:10 G 24728920.16 24728920.34 24728920.51 0.0494 0.0255

Mars 62993-06-21 23:31 G 24728953.33 24728953.48 24728953.64 0.1703 0.0762

Jupiter 62994-01-11 00:14 G 24729156.40 24729156.51 24729156.63 0.0502 0.0406

Uranus 62995-10-20 16:19 G 24729804.05 24729804.18 24729804.33 0.0142 0.0107

Uranus 62996-06-03 02:24 G 24730030.42 24730030.60 24730030.79 0.0141 0.0070

Uranus 62997-01-15 12:14 G 24730256.81 24730257.01 24730257.23 0.0141 0.0033

Uranus 62997-08-29 22:19 G 24730483.21 24730483.43 24730483.64 0.0141 0.0004

Uranus 62998-04-13 07:41 G 24730709.62 24730709.82 24730710.03 0.0141 0.0041

Uranus 62998-11-25 16:48 G 24730936.03 24730936.20 24730936.40 0.0141 0.0077

Jupiter 62999-03-29 00:00 G 24731059.29 24731059.50 24731059.70 0.0531 0.0040

Uranus 62999-07-10 01:55 G 24731162.47 24731162.58 24731162.72 0.0140 0.0113

64TH MILLENNIUM CE

This is a list of transits of Venus in the 64th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Saturn 63002-09-01 12:00 G 24732310.92 24732311.00 24732311.09 0.0272 0.0247

Saturn 63003-04-18 16:48 G 24732539.99 24732540.20 24732540.41 0.0272 0.0036

Saturn 63003-12-03 21:07 G 24732769.23 24732769.38 24732769.55 0.0272 0.0175

Jupiter 63005-01-23 23:31 G 24733186.38 24733186.48 24733186.57 0.0492 0.0430

Jupiter 63005-09-17 01:41 G 24733422.39 24733422.57 24733422.75 0.0500 0.0220

Jupiter 63010-12-02 13:55 G 24735324.89 24735325.08 24735325.27 0.0533 0.0190

Jupiter 63017-05-23 03:50 G 24737688.46 24737688.66 24737688.86 0.0498 0.0035

Saturn 63017-09-28 07:55 G 24737816.70 24737816.83 24737816.98 0.0287 0.0213

Saturn 63018-05-16 03:36 G 24738046.44 24738046.65 24738046.86 0.0287 0.0039

Jupiter 63022-08-07 02:24 G 24739590.47 24739590.60 24739590.72 0.0535 0.0423

Jupiter 63023-04-02 02:24 G 24739828.46 24739828.60 24739828.73 0.0526 0.0395

Jupiter 63029-01-26 06:58 G 24741954.60 24741954.79 24741954.98 0.0496 0.0146

Saturn 63032-03-13 16:34 G 24743097.06 24743097.19 24743097.32 0.0272 0.0217

Saturn 63032-10-28 21:36 G 24743326.19 24743326.40 24743326.61 0.0272 0.0005

Saturn 63033-06-15 02:10 G 24743555.46 24743555.59 24743555.73 0.0272 0.0206

Jupiter 63034-12-05 13:55 G 24744093.89 24744094.08 24744094.28 0.0529 0.0166

Uranus 63039-03-04 06:43 G 24745643.69 24745643.78 24745643.88 0.0136 0.0123

Uranus 63039-10-16 13:55 G 24745869.92 24745870.08 24745870.25 0.0137 0.0090

Uranus 63040-05-29 21:07 G 24746096.19 24746096.38 24746096.58 0.0137 0.0057

Jupiter 63040-10-01 09:36 G 24746220.76 24746220.90 24746221.06 0.0493 0.0325

Uranus 63041-01-11 04:34 G 24746322.48 24746322.69 24746322.91 0.0137 0.0024

Jupiter 63041-05-25 13:12 G 24746456.90 24746457.05 24746457.20 0.0501 0.0331

Uranus 63041-08-25 12:14 G 24746548.79 24746549.01 24746549.22 0.0137 0.0010

Uranus 63042-04-08 19:41 G 24746775.12 24746775.32 24746775.54 0.0137 0.0045

Uranus 63042-11-21 03:50 G 24747001.48 24747001.66 24747001.84 0.0138 0.0078

Uranus 63043-07-05 11:46 G 24747227.87 24747227.99 24747228.12 0.0138 0.0112

Neptune 63046-07-23 10:05 G 24748341.88 24748341.92 24748341.99 0.0089 0.0087

Jupiter 63046-08-10 03:22 G 24748359.44 24748359.64 24748359.84 0.0532 0.0063

Neptune 63047-03-05 23:46 G 24748567.41 24748567.49 24748567.58 0.0089 0.0082

Saturn 63047-04-10 20:38 G 24748603.19 24748603.36 24748603.54 0.0287 0.0163

Neptune 63047-10-17 12:43 G 24748792.94 24748793.03 24748793.16 0.0089 0.0077

Saturn 63047-11-26 16:05 G 24748832.97 24748833.17 24748833.38 0.0287 0.0090

Neptune 63048-05-30 02:10 G 24749018.48 24749018.59 24749018.74 0.0089 0.0072

Neptune 63049-01-10 15:36 G 24749244.02 24749244.15 24749244.31 0.0089 0.0067

Neptune 63049-08-24 05:02 G 24749469.56 24749469.71 24749469.88 0.0089 0.0062

Neptune 63050-04-06 18:29 G 24749695.11 24749695.27 24749695.45 0.0089 0.0058

Neptune 63050-11-18 07:55 G 24749920.65 24749920.83 24749921.01 0.0089 0.0053

Neptune 63051-07-01 21:07 G 24750146.20 24750146.38 24750146.57 0.0089 0.0048

Neptune 63052-02-12 10:19 G 24750371.74 24750371.93 24750372.13 0.0089 0.0043

Neptune 63052-09-24 23:46 G 24750597.29 24750597.49 24750597.69 0.0089 0.0038

Jupiter 63053-01-28 12:14 G 24750722.81 24750723.01 24750723.20 0.0499 0.0140

Neptune 63053-05-08 12:58 G 24750822.84 24750823.04 24750823.25 0.0089 0.0033

Neptune 63053-12-20 02:10 G 24751048.39 24751048.59 24751048.80 0.0089 0.0028

Neptune 63054-08-02 15:36 G 24751273.93 24751274.15 24751274.36 0.0089 0.0023

Neptune 63055-03-16 04:48 G 24751499.49 24751499.70 24751499.92 0.0089 0.0018

Neptune 63055-10-27 18:14 G 24751725.04 24751725.26 24751725.48 0.0089 0.0012

Neptune 63056-06-09 07:26 G 24751950.59 24751950.81 24751951.03 0.0089 0.0007

Neptune 63057-01-20 20:38 G 24752176.14 24752176.36 24752176.58 0.0089 0.0002

Neptune 63057-09-03 09:50 G 24752401.69 24752401.91 24752402.13 0.0089 0.0003

Jupiter 63058-04-14 17:31 G 24752625.07 24752625.23 24752625.41 0.0534 0.0291

Neptune 63058-04-16 23:17 G 24752627.25 24752627.47 24752627.69 0.0089 0.0008

Neptune 63058-11-28 12:29 G 24752852.81 24752853.02 24752853.24 0.0089 0.0013

Jupiter 63058-12-08 16:34 G 24752863.16 24752863.19 24752863.23 0.0525 0.0517

Mars 63059-04-20 09:36 G 24752995.77 24752995.90 24752996.03 0.1706 0.1130

Neptune 63059-07-12 01:41 G 24753078.36 24753078.57 24753078.79 0.0089 0.0018

Neptune 63060-02-22 15:07 G 24753303.92 24753304.13 24753304.34 0.0089 0.0023

Neptune 63060-10-05 04:19 G 24753529.47 24753529.68 24753529.89 0.0089 0.0028

Neptune 63061-05-18 17:31 G 24753755.03 24753755.23 24753755.44 0.0089 0.0033

Saturn 63061-09-23 23:46 G 24753883.34 24753883.49 24753883.65 0.0272 0.0182

Neptune 63061-12-30 06:43 G 24753980.58 24753980.78 24753980.98 0.0089 0.0038

Saturn 63062-05-11 04:34 G 24754112.48 24754112.69 24754112.90 0.0272 0.0030

Neptune 63062-08-12 19:41 G 24754206.14 24754206.32 24754206.52 0.0089 0.0043

Saturn 63062-12-26 08:38 G 24754341.77 24754341.86 24754341.96 0.0272 0.0240

Neptune 63063-03-26 08:53 G 24754431.70 24754431.87 24754432.07 0.0089 0.0048

Neptune 63063-11-06 22:05 G 24754657.25 24754657.42 24754657.61 0.0089 0.0053

Neptune 63064-06-19 11:02 G 24754882.81 24754882.96 24754883.14 0.0089 0.0058

Jupiter 63064-10-03 14:38 G 24754988.90 24754989.11 24754989.31 0.0496 0.0043

Neptune 63065-01-31 00:00 G 24755108.36 24755108.50 24755108.68 0.0089 0.0063

Neptune 63065-09-13 13:26 G 24755333.92 24755334.06 24755334.21 0.0089 0.0067

Neptune 63066-04-27 02:38 G 24755559.49 24755559.61 24755559.75 0.0089 0.0072

Neptune 63066-12-08 15:36 G 24755785.06 24755785.15 24755785.28 0.0089 0.0077

Neptune 63067-07-22 05:02 G 24756010.62 24756010.71 24756010.80 0.0089 0.0081

Neptune 63068-03-03 17:46 G 24756236.20 24756236.24 24756236.31 0.0089 0.0086

Pluto 63068-12-23 06:00 G 24756530.68 24756530.75 24756530.86 0.0081 0.0073

Pluto 63069-08-05 17:17 G 24756756.00 24756756.22 24756756.44 0.0080 0.0002

Jupiter 63069-12-18 06:43 G 24756890.74 24756890.78 24756890.83 0.0536 0.0521

Pluto 63070-03-19 03:22 G 24756981.55 24756981.64 24756981.78 0.0080 0.0069

Jupiter 63070-08-13 08:24 G 24757128.68 24757128.85 24757129.02 0.0528 0.0302

Jupiter 63076-06-08 17:31 G 24759255.05 24759255.23 24759255.41 0.0495 0.0222

Saturn 63076-10-20 23:17 G 24759389.28 24759389.47 24759389.65 0.0287 0.0137

Jupiter 63077-01-30 22:19 G 24759491.34 24759491.43 24759491.53 0.0503 0.0439

Saturn 63077-06-07 18:43 G 24759619.09 24759619.28 24759619.48 0.0288 0.0117

Uranus 63079-06-20 23:46 G 24760362.39 24760362.49 24760362.60 0.0142 0.0123

Uranus 63080-02-02 10:05 G 24760588.75 24760588.92 24760589.09 0.0142 0.0086

Uranus 63080-09-15 19:55 G 24760815.14 24760815.33 24760815.54 0.0141 0.0049

Uranus 63081-04-30 06:00 G 24761041.53 24761041.75 24761041.97 0.0141 0.0012

Uranus 63081-12-12 15:22 G 24761267.93 24761268.14 24761268.36 0.0141 0.0025

Jupiter 63082-04-17 22:34 G 24761394.24 24761394.44 24761394.65 0.0530 0.0079

Uranus 63082-07-27 00:58 G 24761494.35 24761494.54 24761494.74 0.0141 0.0061

Uranus 63083-03-10 10:19 G 24761720.78 24761720.93 24761721.09 0.0140 0.0097

Uranus 63083-10-22 19:26 G 24761947.25 24761947.31 24761947.39 0.0140 0.0132

Mars 63086-09-06 17:31 G 24762997.13 24762997.23 24762997.34 0.1825 0.1420

Jupiter 63088-02-12 21:22 G 24763521.28 24763521.39 24763521.52 0.0493 0.0396

Earth 63088-06-03 18:00 G 24763633.13 24763633.25 24763633.38 0.2673 0.1691

Moon 63088-06-03 21:22 G 24763633.32 24763633.39 24763633.46 0.2678 0.2363 *

Jupiter 63088-10-06 00:14 G 24763757.34 24763757.51 24763757.69 0.0500 0.0254

Saturn 63091-04-06 03:22 G 24764669.47 24764669.64 24764669.82 0.0272 0.0152

Mars 63091-04-19 08:53 G 24764682.81 24764682.87 24764682.95 0.1697 0.1535

Saturn 63091-11-21 08:24 G 24764898.64 24764898.85 24764899.06 0.0272 0.0059

Saturn 63092-07-07 12:58 G 24765128.01 24765128.04 24765128.06 0.0272 0.0269

Jupiter 63093-12-21 09:07 G 24765659.69 24765659.88 24765660.08 0.0533 0.0159

Earth 63096-06-01 08:10 G 24766552.73 24766552.84 24766552.96 0.2674 0.1803

Moon 63096-06-01 13:41 G 24766552.94 24766553.07 24766553.21 0.2675 0.1280 *

Jupiter 63100-06-12 01:41 G 24768023.37 24768023.57 24768023.77 0.0498 0.0068

Jupiter 63105-08-26 21:07 G 24769925.25 24769925.38 24769925.52 0.0535 0.0392

Jupiter 63106-04-21 21:22 G 24770163.27 24770163.39 24770163.51 0.0526 0.0422

Saturn 63106-05-04 10:34 G 24770175.74 24770175.94 24770176.15 0.0287 0.0089

Saturn 63106-12-20 06:14 G 24770405.59 24770405.76 24770405.94 0.0287 0.0164

Jupiter 63112-02-16 01:41 G 24772289.38 24772289.57 24772289.77 0.0495 0.0118

Jupiter 63117-12-25 13:12 G 24774428.87 24774429.05 24774429.24 0.0529 0.0207

Saturn 63120-10-17 11:31 G 24775455.79 24775455.98 24775456.17 0.0272 0.0116

Saturn 63121-06-03 16:05 G 24775684.97 24775685.17 24775685.36 0.0272 0.0095

Uranus 63122-11-02 17:17 G 24776202.22 24776202.22 24776202.27 0.0136 0.0136

Uranus 63123-06-17 00:29 G 24776428.39 24776428.52 24776428.68 0.0136 0.0103

Jupiter 63123-10-22 05:02 G 24776555.55 24776555.71 24776555.88 0.0493 0.0294

Uranus 63124-01-29 07:41 G 24776654.65 24776654.82 24776655.02 0.0137 0.0070

Jupiter 63124-06-14 08:24 G 24776791.71 24776791.85 24776791.99 0.0501 0.0359

Uranus 63124-09-11 15:22 G 24776880.93 24776881.14 24776881.35 0.0137 0.0036

Mars 63125-02-15 19:41 G 24777038.24 24777038.32 24777038.40 0.1709 0.1503

Uranus 63125-04-25 22:48 G 24777107.23 24777107.45 24777107.67 0.0137 0.0003

Uranus 63125-12-08 06:14 G 24777333.56 24777333.76 24777333.98 0.0137 0.0032

Uranus 63126-07-22 13:55 G 24777559.90 24777560.08 24777560.28 0.0138 0.0066

Uranus 63127-03-05 22:19 G 24777786.28 24777786.43 24777786.58 0.0138 0.0099

Uranus 63127-10-18 06:14 G 24778012.71 24778012.76 24778012.82 0.0138 0.0133

Neptune 63129-04-21 12:58 G 24778564.04 24778564.04 24778564.10 0.0088 0.0087

Jupiter 63129-08-30 04:05 G 24778694.47 24778694.67 24778694.87 0.0532 0.0018

Neptune 63129-12-03 01:55 G 24778789.52 24778789.58 24778789.67 0.0088 0.0082

Neptune 63130-07-16 14:24 G 24779015.02 24779015.10 24779015.22 0.0088 0.0078

Neptune 63131-02-27 03:22 G 24779240.53 24779240.64 24779240.77 0.0088 0.0073

Neptune 63131-10-10 15:36 G 24779466.04 24779466.15 24779466.31 0.0088 0.0069

Neptune 63132-05-23 04:34 G 24779691.56 24779691.69 24779691.86 0.0088 0.0064

Neptune 63133-01-03 17:31 G 24779917.07 24779917.23 24779917.40 0.0088 0.0059

Neptune 63133-08-17 06:00 G 24780142.60 24780142.75 24780142.94 0.0088 0.0055

Neptune 63134-03-30 18:43 G 24780368.12 24780368.28 24780368.48 0.0088 0.0050

Neptune 63134-11-11 07:41 G 24780593.64 24780593.82 24780594.02 0.0088 0.0045

Neptune 63135-06-24 20:24 G 24780819.16 24780819.35 24780819.55 0.0088 0.0040

Jupiter 63135-06-27 08:38 G 24780821.81 24780821.86 24780821.93 0.0492 0.0467

Saturn 63135-11-14 12:58 G 24780961.83 24780962.04 24780962.25 0.0287 0.0063

Neptune 63136-02-05 09:22 G 24781044.69 24781044.89 24781045.09 0.0088 0.0036

Jupiter 63136-02-18 10:05 G 24781057.73 24781057.92 24781058.12 0.0499 0.0175

Saturn 63136-07-01 08:24 G 24781191.70 24781191.85 24781192.02 0.0288 0.0191

Neptune 63136-09-17 21:50 G 24781270.22 24781270.41 24781270.63 0.0088 0.0031

Neptune 63137-05-01 10:48 G 24781495.75 24781495.95 24781496.17 0.0088 0.0026

Neptune 63137-12-12 23:31 G 24781721.27 24781721.48 24781721.70 0.0088 0.0021

Neptune 63138-07-26 12:14 G 24781946.80 24781947.01 24781947.23 0.0088 0.0016

Neptune 63139-03-09 00:58 G 24782172.33 24782172.54 24782172.77 0.0088 0.0012

Neptune 63139-10-20 13:55 G 24782397.86 24782398.08 24782398.30 0.0088 0.0006

Neptune 63140-06-02 02:38 G 24782623.39 24782623.61 24782623.83 0.0088 0.0002

Neptune 63141-01-13 15:22 G 24782848.92 24782849.14 24782849.36 0.0088 0.0004

Jupiter 63141-05-04 17:17 G 24782960.05 24782960.22 24782960.41 0.0534 0.0248

Neptune 63141-08-27 04:05 G 24783074.46 24783074.67 24783074.89 0.0088 0.0009

Neptune 63142-04-09 16:48 G 24783299.99 24783300.20 24783300.42 0.0088 0.0014

Neptune 63142-11-21 05:31 G 24783525.52 24783525.73 24783525.95 0.0088 0.0019

Neptune 63143-07-04 18:14 G 24783751.06 24783751.26 24783751.48 0.0088 0.0024

Neptune 63144-02-15 06:58 G 24783976.59 24783976.79 24783977.01 0.0088 0.0029

Neptune 63144-09-27 19:55 G 24784202.14 24784202.33 24784202.55 0.0088 0.0033

Neptune 63145-05-11 09:07 G 24784427.68 24784427.88 24784428.08 0.0088 0.0038

Neptune 63145-12-22 21:50 G 24784653.22 24784653.41 24784653.60 0.0089 0.0043

Neptune 63146-08-05 10:34 G 24784878.76 24784878.94 24784879.13 0.0089 0.0048

Neptune 63147-03-18 23:17 G 24785104.31 24785104.47 24785104.66 0.0089 0.0053

Jupiter 63147-10-24 13:12 G 24785323.85 24785324.05 24785324.26 0.0497 0.0011

Neptune 63147-10-30 12:14 G 24785329.86 24785330.01 24785330.19 0.0089 0.0058

Neptune 63148-06-12 00:58 G 24785555.41 24785555.54 24785555.72 0.0089 0.0063

Neptune 63149-01-23 14:10 G 24785780.96 24785781.09 24785781.24 0.0089 0.0067

Neptune 63149-09-06 02:53 G 24786006.51 24786006.62 24786006.77 0.0089 0.0072

Neptune 63150-04-19 15:36 G 24786232.07 24786232.15 24786232.29 0.0089 0.0077

Saturn 63150-04-29 13:55 G 24786241.88 24786242.08 24786242.28 0.0272 0.0089

Neptune 63150-12-01 05:02 G 24786457.63 24786457.71 24786457.80 0.0089 0.0081

Saturn 63150-12-14 18:29 G 24786471.09 24786471.27 24786471.46 0.0272 0.0122

Neptune 63151-07-14 17:31 G 24786683.20 24786683.23 24786683.31 0.0089 0.0086

Mars 63152-07-04 22:48 G 24787039.29 24787039.45 24787039.61 0.1821 0.0768

Jupiter 63153-01-07 03:07 G 24787225.56 24787225.63 24787225.72 0.0536 0.0485

Jupiter 63153-09-02 04:19 G 24787463.53 24787463.68 24787463.84 0.0527 0.0332

Mars 63157-02-14 19:26 G 24788725.19 24788725.31 24788725.43 0.1700 0.1186

Jupiter 63159-06-29 15:50 G 24789589.97 24789590.16 24789590.35 0.0495 0.0186

Jupiter 63160-02-20 20:38 G 24789826.30 24789826.36 24789826.43 0.0503 0.0472

Uranus 63163-02-19 08:38 G 24790920.81 24790920.86 24790920.90 0.0142 0.0138

Uranus 63163-10-03 18:43 G 24791147.13 24791147.28 24791147.44 0.0142 0.0101

Uranus 63164-05-17 04:34 G 24791373.51 24791373.69 24791373.90 0.0142 0.0065

Saturn 63164-10-09 03:36 G 24791518.59 24791518.65 24791518.73 0.0287 0.0269

Uranus 63164-12-29 14:38 G 24791599.90 24791600.11 24791600.33 0.0141 0.0027

Jupiter 63165-05-07 18:14 G 24791729.07 24791729.26 24791729.47 0.0530 0.0111

Saturn 63165-05-26 23:31 G 24791748.27 24791748.48 24791748.69 0.0287 0.0018

Uranus 63165-08-13 00:29 G 24791826.31 24791826.52 24791826.74 0.0141 0.0010

Saturn 63166-01-11 19:12 G 24791978.18 24791978.30 24791978.42 0.0287 0.0236

Uranus 63166-03-27 10:05 G 24792052.72 24792052.92 24792053.13 0.0141 0.0046

Uranus 63166-11-08 19:12 G 24792279.14 24792279.30 24792279.49 0.0141 0.0083

Uranus 63167-06-23 04:34 G 24792505.59 24792505.69 24792505.82 0.0140 0.0118

Jupiter 63171-03-04 17:17 G 24793856.08 24793856.22 24793856.35 0.0492 0.0364

Jupiter 63171-10-26 19:26 G 24794092.14 24794092.31 24794092.48 0.0500 0.0281

Jupiter 63177-01-10 08:24 G 24795994.66 24795994.85 24795995.05 0.0533 0.0117

Saturn 63179-03-25 17:17 G 24796799.18 24796799.22 24796799.28 0.0272 0.0263

Saturn 63179-11-09 22:05 G 24797028.22 24797028.42 24797028.63 0.0272 0.0053

Saturn 63180-06-26 02:24 G 24797257.43 24797257.60 24797257.77 0.0272 0.0158

Jupiter 63183-07-01 21:22 G 24798358.19 24798358.39 24798358.59 0.0498 0.0098

Jupiter 63188-09-14 22:34 G 24800260.28 24800260.44 24800260.59 0.0535 0.0345

Jupiter 63189-05-10 22:34 G 24800498.35 24800498.44 24800498.54 0.0526 0.0465

Earth 63193-12-06 13:12 G 24802168.89 24802169.05 24802169.21 0.2658 0.0064

Moon 63193-12-06 18:00 G 24802169.10 24802169.25 24802169.40 0.2662 0.0164 *

Saturn 63194-04-21 05:46 G 24802304.64 24802304.74 24802304.86 0.0287 0.0244

Saturn 63194-12-07 01:12 G 24802534.34 24802534.55 24802534.77 0.0287 0.0009

Jupiter 63195-03-07 00:00 G 24802624.30 24802624.50 24802624.70 0.0496 0.0083

Saturn 63195-07-24 20:38 G 24802764.28 24802764.36 24802764.46 0.0288 0.0261

Jupiter 63201-01-13 13:41 G 24804763.89 24804764.07 24804764.25 0.0529 0.0248

Moon 63201-12-04 10:48 G 24805088.89 24805088.95 24805089.02 0.2655 0.2390

Jupiter 63206-11-10 04:05 G 24806890.50 24806890.67 24806890.84 0.0494 0.0258

Uranus 63207-02-14 11:46 G 24806986.88 24806986.99 24806987.11 0.0136 0.0115

Jupiter 63207-07-04 07:55 G 24807126.71 24807126.83 24807126.96 0.0502 0.0395

Uranus 63207-09-28 18:58 G 24807213.12 24807213.29 24807213.47 0.0137 0.0082

Uranus 63208-05-12 02:10 G 24807439.39 24807439.59 24807439.80 0.0137 0.0049

Saturn 63208-10-04 18:43 G 24807585.19 24807585.28 24807585.39 0.0272 0.0238

Uranus 63208-12-24 09:36 G 24807665.68 24807665.90 24807666.12 0.0137 0.0015

Saturn 63209-05-21 23:46 G 24807814.28 24807814.49 24807814.70 0.0272 0.0028

Uranus 63209-08-07 17:17 G 24807892.00 24807892.22 24807892.43 0.0137 0.0019

Saturn 63210-01-06 04:05 G 24808043.52 24808043.67 24808043.83 0.0272 0.0183

Uranus 63210-03-22 00:58 G 24808118.34 24808118.54 24808118.74 0.0137 0.0052

Neptune 63210-10-25 17:17 G 24808336.18 24808336.22 24808336.31 0.0089 0.0086

Uranus 63210-11-03 08:38 G 24808344.70 24808344.86 24808345.04 0.0138 0.0087

Neptune 63211-06-08 06:58 G 24808561.71 24808561.79 24808561.89 0.0089 0.0081

Uranus 63211-06-17 16:34 G 24808571.10 24808571.19 24808571.31 0.0138 0.0121

Neptune 63212-01-19 20:38 G 24808787.24 24808787.36 24808787.47 0.0089 0.0076

Neptune 63212-09-01 09:22 G 24809012.78 24809012.89 24809013.05 0.0089 0.0072

Jupiter 63212-09-18 01:26 G 24809029.36 24809029.56 24809029.77 0.0531 0.0021

Neptune 63213-04-14 23:02 G 24809238.33 24809238.46 24809238.62 0.0089 0.0066

Neptune 63213-11-26 12:29 G 24809463.87 24809464.02 24809464.19 0.0089 0.0061

Neptune 63214-07-10 01:55 G 24809689.42 24809689.58 24809689.76 0.0089 0.0056

Neptune 63215-02-20 15:22 G 24809914.97 24809915.14 24809915.33 0.0089 0.0051

Neptune 63215-10-04 04:34 G 24810140.51 24810140.69 24810140.89 0.0089 0.0047

Neptune 63216-05-16 18:00 G 24810366.06 24810366.25 24810366.45 0.0089 0.0041

Neptune 63216-12-28 07:12 G 24810591.61 24810591.80 24810592.01 0.0089 0.0037

Neptune 63217-08-10 20:38 G 24810817.16 24810817.36 24810817.57 0.0089 0.0031

Neptune 63218-03-24 10:05 G 24811042.71 24811042.92 24811043.13 0.0089 0.0026

Mars 63218-05-02 04:48 G 24811081.52 24811081.70 24811081.87 0.1818 0.0155

Jupiter 63218-07-16 07:41 G 24811156.72 24811156.82 24811156.92 0.0492 0.0429

Neptune 63218-11-04 23:17 G 24811268.26 24811268.47 24811268.69 0.0089 0.0021

Jupiter 63219-03-09 09:07 G 24811392.70 24811392.88 24811393.07 0.0499 0.0211

Neptune 63219-06-18 12:29 G 24811493.81 24811494.02 24811494.24 0.0089 0.0016

Neptune 63220-01-30 01:41 G 24811719.36 24811719.57 24811719.79 0.0089 0.0011

Neptune 63220-09-11 15:07 G 24811944.91 24811945.13 24811945.35 0.0089 0.0006

Neptune 63221-04-25 04:34 G 24812170.46 24812170.69 24812170.91 0.0089 0.0002

Neptune 63221-12-06 17:46 G 24812396.02 24812396.24 24812396.46 0.0089 0.0004

Neptune 63222-07-20 06:58 G 24812621.57 24812621.79 24812622.01 0.0089 0.0009

Mars 63222-12-13 06:14 G 24812767.61 24812767.76 24812767.91 0.1703 0.0851

Neptune 63223-03-02 20:10 G 24812847.13 24812847.34 24812847.56 0.0089 0.0014

Neptune 63223-10-14 09:36 G 24813072.68 24813072.90 24813073.12 0.0089 0.0019

Saturn 63223-11-01 14:24 G 24813090.96 24813091.10 24813091.25 0.0287 0.0203

Jupiter 63224-05-23 14:10 G 24813294.90 24813295.09 24813295.28 0.0534 0.0212

Neptune 63224-05-26 22:48 G 24813298.24 24813298.45 24813298.67 0.0089 0.0024

Saturn 63224-06-18 10:19 G 24813320.72 24813320.93 24813321.14 0.0287 0.0050

Neptune 63225-01-07 12:00 G 24813523.80 24813524.00 24813524.21 0.0089 0.0029

Neptune 63225-08-21 01:26 G 24813749.36 24813749.56 24813749.76 0.0089 0.0034

Neptune 63226-04-03 14:38 G 24813974.92 24813975.11 24813975.31 0.0089 0.0039

Neptune 63226-11-15 03:50 G 24814200.48 24814200.66 24814200.86 0.0089 0.0044

Pluto 63227-05-24 04:05 G 24814390.55 24814390.67 24814390.84 0.0063 0.0048

Neptune 63227-06-28 17:02 G 24814426.03 24814426.21 24814426.40 0.0089 0.0049

Pluto 63228-01-04 08:10 G 24814615.63 24814615.84 24814616.07 0.0063 0.0014

Neptune 63228-02-09 06:00 G 24814651.59 24814651.75 24814651.94 0.0089 0.0054

Pluto 63228-08-16 11:46 G 24814840.80 24814840.99 24814841.22 0.0063 0.0021

Neptune 63228-09-21 19:12 G 24814877.15 24814877.30 24814877.48 0.0089 0.0059

Pluto 63229-03-29 15:50 G 24815066.06 24815066.16 24815066.28 0.0064 0.0055

Neptune 63229-05-05 08:24 G 24815102.72 24815102.85 24815103.02 0.0089 0.0064

Neptune 63229-12-16 21:22 G 24815328.28 24815328.39 24815328.56 0.0089 0.0069

Neptune 63230-07-30 10:48 G 24815553.84 24815553.95 24815554.08 0.0089 0.0073

Jupiter 63230-11-12 09:22 G 24815658.69 24815658.89 24815659.10 0.0496 0.0026

Neptune 63231-03-12 23:46 G 24815779.40 24815779.49 24815779.61 0.0089 0.0078

Neptune 63231-10-24 12:43 G 24816004.98 24816005.03 24816005.13 0.0089 0.0083

Neptune 63232-06-06 02:10 G 24816230.56 24816230.59 24816230.64 0.0089 0.0087

Jupiter 63236-01-27 02:38 G 24817560.50 24817560.61 24817560.72 0.0537 0.0443

Jupiter 63236-09-21 04:19 G 24817798.54 24817798.68 24817798.83 0.0528 0.0374

Saturn 63238-04-17 02:53 G 24818371.49 24818371.62 24818371.77 0.0272 0.0202

Saturn 63238-12-02 07:41 G 24818600.61 24818600.82 24818601.03 0.0272 0.0009

Saturn 63239-07-19 11:31 G 24818829.87 24818829.98 24818830.12 0.0272 0.0219

Jupiter 63242-07-18 12:14 G 24819924.82 24819925.01 24819925.21 0.0494 0.0155

Jupiter 63243-03-11 16:48 G 24820161.19 24820161.20 24820161.22 0.0503 0.0501

Uranus 63247-06-03 02:24 G 24821705.48 24821705.60 24821705.72 0.0142 0.0117

Uranus	63248-01-15 12:29 G	24821931.84	24821932.02	24821932.20	0.0142	0.0080
Jupiter	63248-05-26 20:10 G	24822064.14	24822064.34	24822064.53	0.0530	0.0156
Uranus	63248-08-28 22:34 G	24822158.24	24822158.44	24822158.65	0.0142	0.0043
Uranus	63249-04-12 08:38 G	24822384.64	24822384.86	24822385.07	0.0141	0.0007
Uranus	63249-11-24 18:00 G	24822611.05	24822611.25	24822611.47	0.0141	0.0031
Uranus	63250-07-09 03:36 G	24822837.46	24822837.65	24822837.84	0.0141	0.0067
Uranus	63251-02-20 12:43 G	24823063.90	24823064.03	24823064.19	0.0141	0.0104
Uranus	63251-10-04 22:34 G	24823290.41	24823290.44	24823290.47	0.0140	0.0139
Saturn	63253-05-13 16:48 G	24823877.04	24823877.20	24823877.37	0.0287	0.0176
Saturn	63253-12-29 12:14 G	24824106.81	24824107.01	24824107.22	0.0287	0.0076
Jupiter	63254-03-23 15:50 G	24824191.01	24824191.16	24824191.32	0.0493	0.0329
Jupiter	63254-11-14 18:29 G	24824427.12	24824427.27	24824427.43	0.0500	0.0317
Jupiter	63260-01-30 10:19 G	24826329.72	24826329.93	24826330.13	0.0533	0.0070
Jupiter	63266-07-20 21:07 G	24828693.19	24828693.38	24828693.58	0.0498	0.0136
Saturn	63267-10-28 03:22 G	24829157.49	24829157.64	24829157.80	0.0272	0.0179
Saturn	63268-06-13 08:10 G	24829386.63	24829386.84	24829387.05	0.0272	0.0031
Saturn	63269-01-28 12:29 G	24829615.93	24829616.02	24829616.12	0.0272	0.0241
Jupiter	63271-10-04 21:36 G	24830595.23	24830595.40	24830595.57	0.0535	0.0302
Jupiter	63272-05-29 20:53 G	24830833.31	24830833.37	24830833.43	0.0526	0.0499
Jupiter	63278-03-25 23:46 G	24832959.29	24832959.49	24832959.70	0.0496	0.0045
Saturn	63282-11-23 23:46 G	24834663.31	24834663.49	24834663.68	0.0287	0.0139
Jupiter	63283-06-09 08:53 G	24834860.86	24834860.87	24834860.89	0.0537	0.0534
Saturn	63283-07-11 19:26 G	24834893.12	24834893.31	24834893.51	0.0287	0.0113
Jupiter	63284-02-02 11:17 G	24835098.80	24835098.97	24835099.15	0.0529	0.0284
Mars	63284-02-27 10:19 G	24835123.76	24835123.93	24835124.10	0.1814	0.0459
Mars	63288-10-09 16:05 G	24836810.01	24836810.17	24836810.34	0.1706	0.0485
Jupiter	63289-11-29 01:26 G	24837225.38	24837225.56	24837225.74	0.0493	0.0224
Jupiter	63290-07-23 04:48 G	24837461.59	24837461.70	24837461.81	0.0501	0.0425
Uranus	63290-10-14 22:19 G	24837545.37	24837545.43	24837545.52	0.0136	0.0128
Uranus	63291-05-29 05:31 G	24837771.58	24837771.73	24837771.89	0.0136	0.0095

Uranus 63292-01-10 12:43 G 24837997.84 24837998.03 24837998.23 0.0137 0.0062

Uranus 63292-08-23 20:10 G 24838224.13 24838224.34 24838224.56 0.0137 0.0028

Uranus 63293-04-07 03:50 G 24838450.44 24838450.66 24838450.88 0.0137 0.0005

Neptune 63293-07-23 22:48 G 24838558.41 24838558.45 24838558.51 0.0088 0.0085

Uranus 63293-11-19 11:17 G 24838676.77 24838676.97 24838677.19 0.0137 0.0040

Neptune 63294-03-06 11:17 G 24838783.91 24838783.97 24838784.08 0.0088 0.0081

Uranus 63294-07-03 18:58 G 24838903.12 24838903.29 24838903.49 0.0137 0.0074

Neptune 63294-10-18 00:14 G 24839009.41 24839009.51 24839009.63 0.0088 0.0076

Uranus 63295-02-15 02:53 G 24839129.50 24839129.62 24839129.77 0.0138 0.0108

Neptune 63295-05-31 12:29 G 24839234.92 24839235.02 24839235.17 0.0088 0.0072

Jupiter 63295-10-08 01:41 G 24839364.37 24839364.57 24839364.77 0.0532 0.0061

Neptune 63296-01-12 01:26 G 24839460.43 24839460.56 24839460.71 0.0088 0.0067

Neptune 63296-08-24 14:24 G 24839685.95 24839686.10 24839686.26 0.0088 0.0062

Neptune 63297-04-07 02:53 G 24839911.47 24839911.62 24839911.80 0.0088 0.0058

Saturn 63297-05-09 11:31 G 24839943.80 24839943.98 24839944.16 0.0272 0.0143

Neptune 63297-11-18 15:36 G 24840136.99 24840137.15 24840137.34 0.0088 0.0053

Saturn 63297-12-24 16:05 G 24840172.97 24840173.17 24840173.38 0.0272 0.0068

Neptune 63298-07-02 04:19 G 24840362.50 24840362.68 24840362.87 0.0088 0.0048

Neptune 63299-02-12 16:48 G 24840588.03 24840588.20 24840588.41 0.0088 0.0044

Neptune 63299-09-26 05:46 G 24840813.56 24840813.74 24840813.95 0.0088 0.0039

Neptune 63300-05-09 18:29 G 24841039.08 24841039.27 24841039.49 0.0088 0.0035

Neptune 63300-12-21 07:26 G 24841264.61 24841264.81 24841265.02 0.0088 0.0029

Neptune 63301-08-03 20:10 G 24841490.13 24841490.34 24841490.56 0.0088 0.0024

Jupiter 63301-08-05 05:17 G 24841491.61 24841491.72 24841491.84 0.0492 0.0395

Neptune 63302-03-17 08:53 G 24841715.66 24841715.87 24841716.09 0.0088 0.0020

Jupiter 63302-03-29 06:29 G 24841727.59 24841727.77 24841727.95 0.0499 0.0242

Neptune 63302-10-28 21:50 G 24841941.20 24841941.41 24841941.63 0.0088 0.0015

Neptune 63303-06-11 10:34 G 24842166.72 24842166.94 24842167.16 0.0088 0.0010

Neptune 63304-01-22 23:17 G 24842392.25 24842392.47 24842392.69 0.0088 0.0005

Neptune 63304-09-04 12:14 G 24842617.79 24842618.01 24842618.23 0.0088 0.0000

Neptune 63305-04-18 00:58 G 24842843.32 24842843.54 24842843.76 0.0088 0.0005

Neptune 63305-11-29 13:41 G 24843068.85 24843069.07 24843069.29 0.0088 0.0010

Neptune 63306-07-13 02:10 G 24843294.38 24843294.59 24843294.82 0.0088 0.0016

Neptune 63307-02-23 15:07 G 24843519.92 24843520.13 24843520.34 0.0088 0.0020

Jupiter 63307-06-13 16:05 G 24843629.98 24843630.17 24843630.37 0.0534 0.0165

Neptune 63307-10-07 04:05 G 24843745.46 24843745.67 24843745.88 0.0088 0.0025

Neptune 63308-05-19 16:34 G 24843970.99 24843971.19 24843971.41 0.0088 0.0030

Neptune 63308-12-31 05:17 G 24844196.53 24844196.72 24844196.93 0.0088 0.0035

Neptune 63309-08-13 18:00 G 24844422.06 24844422.25 24844422.46 0.0088 0.0040

Neptune 63310-03-27 06:43 G 24844647.60 24844647.78 24844647.98 0.0089 0.0045

Neptune 63310-11-07 19:26 G 24844873.15 24844873.31 24844873.51 0.0089 0.0050

Neptune 63311-06-21 08:38 G 24845098.69 24845098.86 24845099.04 0.0089 0.0054

Neptune 63312-02-01 21:07 G 24845324.24 24845324.38 24845324.56 0.0089 0.0059

Saturn 63312-06-06 02:10 G 24845449.40 24845449.59 24845449.79 0.0287 0.0112

Neptune 63312-09-14 10:05 G 24845549.78 24845549.92 24845550.09 0.0089 0.0064

Saturn 63313-01-21 21:36 G 24845679.21 24845679.40 24845679.58 0.0287 0.0140

Neptune 63313-04-27 22:48 G 24845775.34 24845775.45 24845775.61 0.0089 0.0069

Jupiter 63313-12-02 08:53 G 24845993.67 24845993.87 24845994.07 0.0497 0.0061

Neptune 63313-12-09 12:00 G 24846000.89 24846001.00 24846001.13 0.0089 0.0073

Neptune 63314-07-23 00:43 G 24846226.44 24846226.53 24846226.65 0.0089 0.0078

Neptune 63315-03-05 13:55 G 24846452.00 24846452.08 24846452.16 0.0089 0.0082

Neptune 63315-10-17 02:38 G 24846677.59 24846677.61 24846677.67 0.0089 0.0087

Pluto 63317-07-10 12:14 G 24847309.90 24847310.01 24847310.16 0.0081 0.0066

Pluto 63318-02-20 23:17 G 24847535.26 24847535.47 24847535.70 0.0080 0.0006

Pluto 63318-10-04 09:36 G 24847760.84 24847760.90 24847760.99 0.0080 0.0075

Jupiter 63319-02-16 05:31 G 24847895.60 24847895.73 24847895.87 0.0536 0.0392

Jupiter 63319-10-12 06:43 G 24848133.66 24848133.78 24848133.90 0.0527 0.0418

Jupiter 63325-08-07 12:29 G 24850259.82 24850260.02 24850260.22 0.0495 0.0116

Saturn 63326-11-20 11:02 G 24850729.77 24850729.96 24850730.15 0.0272 0.0122

Saturn 63327-07-07 15:36 G 24850958.95 24850959.15 24850959.35 0.0272 0.0089

Uranus 63331-02-01 10:48 G 24852263.90 24852263.95 24852264.04 0.0142 0.0133

Moon 63331-06-06 17:31 G 24852389.08 24852389.23 24852389.37 0.2668 0.1315

Earth 63331-06-06 18:29 G 24852389.15 24852389.27 24852389.39 0.2674 0.1727 *

Jupiter 63331-06-16 19:55 G 24852399.14 24852399.33 24852399.52 0.0530 0.0197

Uranus 63331-09-15 21:22 G 24852490.24 24852490.39 24852490.56 0.0142 0.0096

Uranus 63332-04-29 07:26 G 24852716.62 24852716.81 24852717.02 0.0142 0.0059

Uranus 63332-12-11 17:31 G 24852943.02 24852943.23 24852943.45 0.0141 0.0021

Uranus 63333-07-26 03:22 G 24853169.42 24853169.64 24853169.86 0.0141 0.0016

Uranus 63334-03-09 12:43 G 24853395.84 24853396.03 24853396.25 0.0141 0.0053

Uranus 63334-10-21 22:34 G 24853622.28 24853622.44 24853622.61 0.0141 0.0089

Uranus 63335-06-05 07:41 G 24853848.74 24853848.82 24853848.93 0.0140 0.0125

Jupiter 63337-04-12 16:05 G 24854526.01 24854526.17 24854526.34 0.0493 0.0289

Jupiter 63337-12-04 19:12 G 24854762.16 24854762.30 24854762.44 0.0501 0.0356

Moon 63339-06-04 03:50 G 24855308.55 24855308.66 24855308.76 0.2672 0.2011

Earth 63339-06-04 08:38 G 24855308.75 24855308.86 24855308.98 0.2675 0.1784 *

Saturn 63341-12-17 07:41 G 24856235.62 24856235.82 24856236.03 0.0287 0.0078

Saturn 63342-08-04 03:22 G 24856465.48 24856465.64 24856465.82 0.0287 0.0175

Jupiter 63343-02-19 09:07 G 24856664.68 24856664.88 24856665.08 0.0532 0.0029

Jupiter 63348-12-16 19:12 G 24858792.23 24858792.30 24858792.37 0.0491 0.0460

Jupiter 63349-08-09 19:12 G 24859028.11 24859028.30 24859028.49 0.0498 0.0169

Mars 63349-12-25 16:48 G 24859166.06 24859166.20 24859166.34 0.1810 0.1045

Mars 63354-08-08 02:24 G 24860852.43 24860852.60 24860852.78 0.1709 0.0135

Jupiter 63354-10-24 21:22 G 24860930.22 24860930.39 24860930.57 0.0535 0.0261

Saturn 63356-06-01 18:43 G 24861516.08 24861516.28 24861516.48 0.0272 0.0086

Saturn 63357-01-16 23:17 G 24861745.28 24861745.47 24861745.66 0.0272 0.0124

Jupiter 63361-04-14 22:05 G 24863294.22 24863294.42 24863294.62 0.0496 0.0010

Jupiter 63366-06-29 10:48 G 24865195.87 24865195.95 24865196.03 0.0537 0.0488

Jupiter 63367-02-22 13:41 G 24865433.92 24865434.07 24865434.23 0.0529 0.0329

Saturn 63371-06-29 10:34 G 24867021.73 24867021.94 24867022.15 0.0287 0.0049

Saturn 63372-02-14 05:46 G 24867251.60 24867251.74 24867251.90 0.0287 0.0202

Jupiter 63372-12-19 01:12 G 24867560.36 24867560.55 24867560.74 0.0494 0.0186

Jupiter 63373-08-12 05:02 G 24867796.63 24867796.71 24867796.78 0.0502 0.0461

Neptune 63374-06-16 12:14 G 24868105.00 24868105.01 24868105.04 0.0089 0.0089

Uranus 63375-01-27 16:19 G 24868330.06 24868330.18 24868330.32 0.0136 0.0108

Neptune 63375-01-28 01:12 G 24868330.51 24868330.55 24868330.65 0.0089 0.0085

Neptune 63375-09-10 14:53 G 24868556.04 24868556.12 24868556.23 0.0089 0.0080

Uranus 63375-09-10 23:31 G 24868556.30 24868556.48 24868556.67 0.0137 0.0075

Neptune 63376-04-23 04:19 G 24868781.57 24868781.68 24868781.81 0.0089 0.0075

Uranus 63376-04-24 06:43 G 24868782.58 24868782.78 24868783.00 0.0137 0.0042

Neptune 63376-12-04 17:46 G 24869007.11 24869007.24 24869007.39 0.0089 0.0070

Uranus 63376-12-06 14:24 G 24869008.88 24869009.10 24869009.32 0.0137 0.0008

Neptune 63377-07-18 06:43 G 24869232.66 24869232.78 24869232.96 0.0089 0.0066

Uranus 63377-07-20 21:50 G 24869235.20 24869235.41 24869235.63 0.0137 0.0026

Neptune 63378-02-28 20:24 G 24869458.21 24869458.35 24869458.53 0.0089 0.0060

Uranus 63378-03-04 05:31 G 24869461.55 24869461.73 24869461.94 0.0137 0.0060

Neptune 63378-10-12 09:50 G 24869683.75 24869683.91 24869684.10 0.0089 0.0055

Uranus 63378-10-16 13:12 G 24869687.91 24869688.05 24869688.23 0.0138 0.0095

Jupiter 63378-10-28 05:02 G 24869699.51 24869699.71 24869699.91 0.0531 0.0110

Neptune 63379-05-25 23:17 G 24869909.30 24869909.47 24869909.66 0.0089 0.0050

Uranus 63379-05-30 21:36 G 24869914.33 24869914.40 24869914.48 0.0138 0.0128

Neptune 63380-01-06 12:29 G 24870134.85 24870135.02 24870135.23 0.0089 0.0046

Neptune 63380-08-19 01:55 G 24870360.40 24870360.58 24870360.79 0.0089 0.0040

Neptune 63381-04-01 15:22 G 24870585.95 24870586.14 24870586.36 0.0089 0.0035

Neptune 63381-11-13 04:48 G 24870811.50 24870811.70 24870811.91 0.0089 0.0030

Neptune 63382-06-26 18:00 G 24871037.05 24871037.25 24871037.47 0.0089 0.0025

Neptune 63383-02-07 07:12 G 24871262.60 24871262.80 24871263.03 0.0089 0.0020

Neptune 63383-09-20 20:38 G 24871488.15 24871488.36 24871488.58 0.0089 0.0015

Neptune 63384-05-03 09:50 G 24871713.70 24871713.91 24871714.14 0.0089 0.0011

Jupiter 63384-08-24 05:31 G 24871826.60 24871826.73 24871826.88 0.0492 0.0357

Neptune 63384-12-14 23:17 G 24871939.25 24871939.47 24871939.69 0.0089 0.0005

Jupiter 63385-04-17 07:26 G 24872062.64 24872062.81 24872062.98 0.0500 0.0281

Neptune 63385-07-28 12:29 G 24872164.80 24872165.02 24872165.24 0.0089 0.0000

Saturn 63385-12-12 17:46 G 24872302.04 24872302.24 24872302.45 0.0272 0.0066

Neptune 63386-03-11 01:41 G 24872390.36 24872390.57 24872390.80 0.0089 0.0006

Saturn 63386-07-29 22:19 G 24872531.25 24872531.43 24872531.61 0.0272 0.0144

Neptune 63386-10-22 15:07 G 24872615.91 24872616.13 24872616.35 0.0089 0.0010

Neptune 63387-06-05 04:19 G 24872841.46 24872841.68 24872841.90 0.0089 0.0015

Neptune 63388-01-16 17:31 G 24873067.01 24873067.23 24873067.44 0.0089 0.0020

Neptune 63388-08-29 06:43 G 24873292.57 24873292.78 24873292.99 0.0089 0.0025

Neptune 63389-04-11 20:10 G 24873518.13 24873518.34 24873518.55 0.0089 0.0030

Neptune 63389-11-23 09:22 G 24873743.69 24873743.89 24873744.10 0.0089 0.0035

Jupiter 63390-07-02 17:17 G 24873965.02 24873965.22 24873965.42 0.0533 0.0118

Neptune 63390-07-06 22:34 G 24873969.25 24873969.44 24873969.64 0.0089 0.0040

Neptune 63391-02-17 11:46 G 24874194.81 24874194.99 24874195.19 0.0089 0.0045

Neptune 63391-10-01 00:58 G 24874420.37 24874420.54 24874420.73 0.0089 0.0050

Neptune 63392-05-13 14:24 G 24874645.93 24874646.10 24874646.28 0.0089 0.0055

Neptune 63392-12-25 03:22 G 24874871.49 24874871.64 24874871.82 0.0089 0.0060

Neptune 63393-08-07 16:34 G 24875097.05 24875097.19 24875097.35 0.0089 0.0065

Neptune 63394-03-21 05:31 G 24875322.62 24875322.73 24875322.89 0.0089 0.0070

Neptune 63394-11-01 19:12 G 24875548.19 24875548.30 24875548.42 0.0089 0.0074

Neptune 63395-06-15 08:10 G 24875773.75 24875773.84 24875773.95 0.0089 0.0079

Neptune 63396-01-26 20:53 G 24875999.33 24875999.37 24875999.47 0.0089 0.0084

Neptune 63396-09-08 10:19 G 24876224.92 24876224.93 24876224.97 0.0089 0.0088

Jupiter 63396-12-21 09:50 G 24876328.72 24876328.91 24876329.11 0.0497 0.0102

Saturn 63400-05-24 19:41 G 24877578.24 24877578.32 24877578.39 0.0287 0.0268

Saturn 63401-01-09 14:53 G 24877807.91 24877808.12 24877808.33 0.0287 0.0018

Saturn 63401-08-27 10:19 G 24878037.82 24878037.93 24878038.06 0.0287 0.0234

Jupiter 63402-03-08 05:31 G 24878230.57 24878230.73 24878230.88 0.0536 0.0348

Jupiter 63402-11-01 06:14 G 24878468.66 24878468.76 24878468.86 0.0527 0.0456

Jupiter 63408-08-27 11:46 G 24880594.79 24880594.99 24880595.19 0.0495 0.0079

Jupiter 63414-07-06 20:10 G 24882734.16 24882734.34 24882734.52 0.0530 0.0237

Saturn 63414-11-08 19:55 G 24882859.24 24882859.33 24882859.44 0.0273 0.0242

Uranus 63415-05-17 04:34 G 24883048.58 24883048.69 24883048.84 0.0142 0.0113

Saturn 63415-06-26 01:12 G 24883088.34 24883088.55 24883088.76 0.0272 0.0031

Mars 63415-10-23 22:34 G 24883208.37 24883208.44 24883208.51 0.1806 0.1644

Uranus 63415-12-29 14:53 G 24883274.95 24883275.12 24883275.32 0.0142 0.0076

Saturn 63416-02-10 05:46 G 24883317.58 24883317.74 24883317.90 0.0272 0.0179

Uranus 63416-08-12 01:12 G 24883501.34 24883501.55 24883501.76 0.0141 0.0038

Uranus 63417-03-26 11:17 G 24883727.75 24883727.97 24883728.19 0.0141 0.0001

Uranus 63417-11-07 20:53 G 24883954.17 24883954.37 24883954.59 0.0141 0.0036

Uranus 63418-06-22 06:29 G 24884180.59 24884180.77 24884180.96 0.0141 0.0073

Uranus 63419-02-03 16:05 G 24884407.03 24884407.17 24884407.31 0.0141 0.0109

Jupiter 63420-05-02 15:22 G 24884860.97 24884861.14 24884861.32 0.0493 0.0252

Mars 63420-06-05 12:29 G 24884894.85 24884895.02 24884895.19 0.1712 0.0245

Jupiter 63420-12-24 17:46 G 24885097.11 24885097.24 24885097.37 0.0500 0.0388

Jupiter 63426-03-11 11:17 G 24886999.76 24886999.97 24887000.17 0.0533 0.0018

Saturn 63429-12-04 23:17 G 24888364.36 24888364.47 24888364.60 0.0286 0.0236

Saturn 63430-07-22 18:29 G 24888594.06 24888594.27 24888594.48 0.0287 0.0013

Saturn 63431-03-09 13:41 G 24888823.99 24888824.07 24888824.16 0.0287 0.0263

Jupiter 63432-01-06 19:12 G 24889127.20 24889127.30 24889127.40 0.0491 0.0422

Jupiter 63432-08-29 19:27 G 24889363.13 24889363.31 24889363.50 0.0498 0.0207

Moon 63436-12-08 12:00 G 24890924.83 24890925.00 24890925.17 0.2652 0.0023

Earth 63436-12-08 15:22 G 24890924.98 24890925.14 24890925.30 0.2657 0.0181 *

Jupiter 63437-11-14 01:27 G 24891265.37 24891265.56 24891265.75 0.0535 0.0208

Jupiter 63444-05-04 23:03 G 24893629.25 24893629.46 24893629.66 0.0496 0.0031

Saturn 63444-05-20 18:43 G 24893645.17 24893645.28 24893645.41 0.0273 0.0222

Saturn 63445-01-05 00:00 G 24893874.28 24893874.50 24893874.71 0.0272 0.0012

Saturn 63445-08-22 04:19 G 24894103.54 24894103.68 24894103.83 0.0272 0.0199

Jupiter 63449-07-19 13:12 G 24895530.93 24895531.05 24895531.17 0.0537 0.0437

Jupiter 63450-03-14 15:07 G 24895768.99 24895769.13 24895769.28 0.0528 0.0372

Jupiter 63456-01-09 02:24 G 24897895.41 24897895.60 24897895.80 0.0494 0.0145

Jupiter 63456-09-01 06:43 G 24898131.77 24898131.78 24898131.78 0.0502 0.0502

Neptune 63457-10-27 08:10 G 24898552.80 24898552.84 24898552.94 0.0088 0.0084

Neptune 63458-06-09 21:07 G 24898778.30 24898778.38 24898778.49 0.0088 0.0079

Uranus 63458-09-28 02:39 G 24898888.52 24898888.61 24898888.71 0.0136 0.0121

Neptune 63459-01-21 09:36 G 24899003.81 24899003.90 24899004.04 0.0088 0.0075

Uranus 63459-05-12 09:36 G 24899114.75 24899114.90 24899115.08 0.0136 0.0089

Saturn 63459-06-17 02:24 G 24899150.46 24899150.60 24899150.75 0.0287 0.0209

Neptune 63459-09-03 22:34 G 24899229.33 24899229.44 24899229.59 0.0088 0.0070

Uranus 63459-12-24 16:48 G 24899341.01 24899341.20 24899341.41 0.0137 0.0056

Saturn 63460-02-01 21:36 G 24899380.20 24899380.40 24899380.62 0.0287 0.0042

Neptune 63460-04-16 11:31 G 24899454.84 24899454.98 24899455.13 0.0088 0.0065

Uranus 63460-08-07 00:29 G 24899567.30 24899567.52 24899567.73 0.0137 0.0022

Neptune 63460-11-27 23:46 G 24899680.35 24899680.49 24899680.67 0.0088 0.0061

Uranus 63461-03-21 08:10 G 24899793.62 24899793.84 24899794.06 0.0137 0.0012

Neptune 63461-07-11 12:29 G 24899905.87 24899906.02 24899906.20 0.0088 0.0056

Uranus 63461-11-02 15:36 G 24900019.95 24900020.15 24900020.36 0.0137 0.0046

Jupiter 63461-11-17 05:03 G 24900034.52 24900034.71 24900034.91 0.0531 0.0152

Neptune 63462-02-22 00:58 G 24900131.38 24900131.54 24900131.74 0.0088 0.0052

Uranus 63462-06-16 23:31 G 24900246.30 24900246.48 24900246.66 0.0137 0.0080

Neptune 63462-10-05 13:55 G 24900356.91 24900357.08 24900357.28 0.0088 0.0047

Uranus 63463-01-29 07:12 G 24900472.69 24900472.80 24900472.93 0.0138 0.0114

Neptune 63463-05-19 02:39 G 24900582.43 24900582.61 24900582.82 0.0088 0.0042

Neptune 63463-12-30 15:22 G 24900807.95 24900808.14 24900808.35 0.0088 0.0038

Neptune 63464-08-12 04:19 G 24901033.48 24901033.68 24901033.89 0.0088 0.0032

Neptune 63465-03-25 16:48 G 24901259.00 24901259.20 24901259.42 0.0088 0.0028

Neptune 63465-11-06 05:31 G 24901484.53 24901484.73 24901484.96 0.0088 0.0023

Neptune 63466-06-19 18:29 G 24901710.06 24901710.27 24901710.49 0.0088 0.0018

Neptune 63467-01-31 07:12 G 24901935.59 24901935.80 24901936.02 0.0088 0.0013

Neptune 63467-09-13 20:10 G 24902161.12 24902161.34 24902161.56 0.0088 0.0008

Jupiter 63467-09-14 05:46 G 24902161.58 24902161.74 24902161.89 0.0492 0.0318

Neptune 63468-04-26 09:07 G 24902386.66 24902386.88 24902387.10 0.0088 0.0003

Jupiter 63468-05-07 06:58 G 24902397.64 24902397.79 24902397.95 0.0499 0.0316

Neptune 63468-12-07 21:51 G 24902612.19 24902612.41 24902612.63 0.0088 0.0002

Neptune 63469-07-21 10:34 G 24902837.72 24902837.94 24902838.16 0.0088 0.0007

Neptune 63470-03-03 23:17 G 24903063.25 24903063.47 24903063.69 0.0088 0.0012

Neptune 63470-10-15 12:15 G 24903288.79 24903289.01 24903289.23 0.0088 0.0016

Neptune 63471-05-29 00:43 G 24903514.33 24903514.53 24903514.75 0.0088 0.0022

Neptune 63472-01-09 13:27 G 24903739.86 24903740.06 24903740.28 0.0088 0.0027

Neptune 63472-08-22 02:10 G 24903965.40 24903965.59 24903965.81 0.0088 0.0032

Neptune 63473-04-04 14:53 G 24904190.94 24904191.12 24904191.34 0.0088 0.0037

Jupiter 63473-07-22 17:03 G 24904300.01 24904300.21 24904300.41 0.0534 0.0078

Neptune 63473-11-16 04:05 G 24904416.48 24904416.67 24904416.86 0.0088 0.0041

Saturn 63473-12-01 01:41 G 24904431.42 24904431.57 24904431.73 0.0273 0.0187

Neptune 63474-06-29 16:34 G 24904642.01 24904642.19 24904642.39 0.0088 0.0046

Saturn 63474-07-18 06:58 G 24904660.58 24904660.79 24904661.00 0.0273 0.0024

Neptune 63475-02-10 05:17 G 24904867.55 24904867.72 24904867.91 0.0089 0.0051

Saturn 63475-03-04 11:17 G 24904889.88 24904889.97 24904890.09 0.0272 0.0235

Neptune 63475-09-23 18:00 G 24905093.10 24905093.25 24905093.44 0.0089 0.0056

Pluto 63475-12-09 08:39 G 24905169.74 24905169.86 24905170.04 0.0063 0.0047

Neptune 63476-05-06 07:27 G 24905318.65 24905318.81 24905318.97 0.0089 0.0060

Pluto 63476-07-21 12:58 G 24905394.83 24905395.04 24905395.26 0.0063 0.0012

Neptune 63476-12-17 19:55 G 24905544.19 24905544.33 24905544.49 0.0089 0.0065

Pluto 63477-03-03 16:48 G 24905620.01 24905620.20 24905620.42 0.0064 0.0023

Neptune 63477-07-31 08:24 G 24905769.74 24905769.85 24905770.01 0.0089 0.0070

Pluto 63477-10-14 20:53 G 24905845.28 24905845.37 24905845.47 0.0064 0.0057

Neptune 63478-03-13 21:07 G 24905995.29 24905995.38 24905995.53 0.0089 0.0075

Neptune 63478-10-25 10:34 G 24906220.85 24906220.94 24906221.05 0.0089 0.0079

Jupiter 63479-05-20 10:05 G 24906427.90 24906427.92 24906427.95 0.0490 0.0484

Neptune 63479-06-07 23:03 G 24906446.42 24906446.46 24906446.56 0.0089 0.0084

Jupiter 63480-01-11 09:22 G 24906663.69 24906663.89 24906664.08 0.0497 0.0137

Neptune 63480-01-19 12:15 G 24906672.00 24906672.01 24906672.05 0.0089 0.0088

Jupiter 63485-03-27 06:43 G 24908565.61 24908565.78 24908565.95 0.0536 0.0304

Jupiter 63485-11-20 08:10 G 24908803.78 24908803.84 24908803.91 0.0527 0.0497

Mars 63486-04-02 22:05 G 24908937.26 24908937.42 24908937.58 0.1716 0.0632

Saturn 63488-12-27 07:27 G 24909936.65 24909936.81 24909936.98 0.0286 0.0174

Saturn 63489-08-14 02:24 G 24910166.39 24910166.60 24910166.80 0.0286 0.0074

Jupiter 63491-09-16 11:46 G 24910929.79 24910929.99 24910930.20 0.0495 0.0042

Jupiter 63496-11-29 19:55 G 24912831.31 24912831.33 24912831.37 0.0538 0.0529

Jupiter 63497-07-26 00:00 G 24913069.33 24913069.50 24913069.67 0.0530 0.0286

Uranus 63499-01-14 12:43 G 24913606.95 24913607.03 24913607.13 0.0142 0.0129

Uranus 63499-08-28 23:03 G 24913833.31 24913833.46 24913833.64 0.0142 0.0092

Uranus 63500-04-12 09:22 G 24914059.70 24914059.89 24914060.10 0.0142 0.0055

Uranus 63500-11-24 19:27 G 24914286.10 24914286.31 24914286.53 0.0141 0.0018

Uranus 63501-07-09 05:31 G 24914512.51 24914512.73 24914512.94 0.0141 0.0020

Uranus 63502-02-20 15:07 G 24914738.93 24914739.13 24914739.33 0.0141 0.0057

Uranus 63502-10-05 00:29 G 24914965.38 24914965.52 24914965.70 0.0141 0.0094

Uranus 63503-05-19 10:05 G 24915191.85 24915191.92 24915192.02 0.0140 0.0130

Jupiter 63503-05-23 15:51 G 24915195.98 24915196.16 24915196.35 0.0493 0.0214

Saturn 63503-06-14 00:43 G 24915217.37 24915217.53 24915217.70 0.0273 0.0167

Jupiter 63504-01-14 18:43 G 24915432.18 24915432.28 24915432.39 0.0501 0.0427

Saturn 63504-01-29 05:46 G 24915446.53 24915446.74 24915446.95 0.0272 0.0044

Saturn 63504-09-14 10:19 G 24915675.86 24915675.93 24915676.01 0.0272 0.0253

Jupiter 63509-03-31 13:27 G 24917334.86 24917335.06 24917335.26 0.0532 0.0064

Mars 63513-08-20 17:46 G 24918938.13 24918938.24 24918938.35 0.1814 0.1405

Jupiter 63515-01-26 20:10 G 24919462.21 24919462.34 24919462.47 0.0491 0.0381

Jupiter 63515-09-19 21:07 G 24919698.21 24919698.38 24919698.56 0.0499 0.0248

Saturn 63518-07-10 09:36 G 24920722.72 24920722.90 24920723.09 0.0286 0.0148

Saturn 63519-02-25 04:48 G 24920952.50 24920952.70 24920952.90 0.0287 0.0101

Jupiter 63520-12-04 01:55 G 24921600.39 24921600.58 24921600.78 0.0534 0.0164

Jupiter 63527-05-25 23:03 G 24923964.26 24923964.46 24923964.67 0.0496 0.0067

Jupiter 63532-08-08 12:00 G 24925865.86 24925866.00 24925866.13 0.0537 0.0400

Saturn 63532-12-24 07:27 G 24926003.62 24926003.81 24926003.99 0.0273 0.0132

Jupiter 63533-04-03 14:53 G 24926103.99 24926104.12 24926104.25 0.0529 0.0409

Saturn 63533-08-10 12:29 G 24926232.82 24926233.02 24926233.23 0.0273 0.0079

Neptune 63538-09-19 20:24 G 24928099.33 24928099.35 24928099.42 0.0089 0.0088

Jupiter 63539-01-29 02:10 G 24928230.40 24928230.59 24928230.79 0.0494 0.0108

Neptune 63539-05-03 10:05 G 24928324.85 24928324.92 24928325.01 0.0089 0.0083

Neptune 63539-12-14 23:03 G 24928550.38 24928550.46 24928550.59 0.0089 0.0079

Neptune 63540-07-27 12:29 G 24928775.92 24928776.02 24928776.16 0.0089 0.0074

Neptune 63541-03-10 02:10 G 24929001.46 24929001.59 24929001.74 0.0089 0.0069

Neptune 63541-10-21 15:36 G 24929227.00 24929227.15 24929227.31 0.0089 0.0064

Uranus 63542-05-29 12:43 G 24929447.02 24929447.03 24929447.08 0.0136 0.0135

Neptune 63542-06-04 05:03 G 24929452.55 24929452.71 24929452.88 0.0089 0.0059

Uranus 63543-01-10 19:55 G 24929673.20 24929673.33 24929673.48 0.0136 0.0102

Neptune 63543-01-15 18:29 G 24929678.09 24929678.27 24929678.44 0.0089 0.0054

Uranus 63543-08-25 03:07 G 24929899.45 24929899.63 24929899.83 0.0136 0.0069

Neptune 63543-08-29 07:27 G 24929903.64 24929903.81 24929904.01 0.0089 0.0049

Uranus 63544-04-07 10:48 G 24930125.74 24930125.95 24930126.16 0.0137 0.0036

Neptune 63544-04-10 20:53 G 24930129.20 24930129.37 24930129.58 0.0089 0.0045

Uranus 63544-11-19 18:15 G 24930352.04 24930352.26 24930352.48 0.0137 0.0002

Neptune 63544-11-22 10:19 G 24930354.75 24930354.93 24930355.15 0.0089 0.0039

Jupiter 63544-12-07 06:00 G 24930369.56 24930369.75 24930369.94 0.0531 0.0193

Uranus 63545-07-04 01:27 G 24930578.36 24930578.56 24930578.78 0.0137 0.0032

Neptune 63545-07-05 23:46 G 24930580.30 24930580.49 24930580.71 0.0089 0.0034

Uranus 63546-02-15 09:07 G 24930804.70 24930804.88 24930805.08 0.0137 0.0066

Neptune 63546-02-16 13:27 G 24930805.85 24930806.06 24930806.27 0.0089 0.0029

Uranus 63546-09-29 17:17 G 24931031.07 24931031.22 24931031.37 0.0137 0.0100

Neptune 63546-09-30 02:53 G 24931031.41 24931031.62 24931031.83 0.0089 0.0024

Neptune 63547-05-13 16:05 G 24931256.96 24931257.17 24931257.39 0.0089 0.0019

Uranus 63547-05-14 01:12 G 24931257.51 24931257.55 24931257.60 0.0138 0.0134

Neptune 63547-12-25 05:31 G 24931482.51 24931482.73 24931482.95 0.0089 0.0014

Saturn 63548-01-20 16:05 G 24931508.98 24931509.17 24931509.37 0.0286 0.0110

Neptune 63548-08-06 18:43 G 24931708.06 24931708.28 24931708.50 0.0089 0.0008

Saturn 63548-09-06 10:48 G 24931738.77 24931738.95 24931739.14 0.0286 0.0138

Neptune 63549-03-20 08:10 G 24931933.62 24931933.84 24931934.06 0.0089 0.0003

Neptune 63549-10-31 21:22 G 24932159.17 24932159.39 24932159.61 0.0089 0.0002

Neptune 63550-06-14 10:34 G 24932384.72 24932384.94 24932385.16 0.0089 0.0007

Jupiter 63550-10-04 05:17 G 24932496.56 24932496.72 24932496.89 0.0492 0.0281

Neptune 63551-01-25 23:31 G 24932610.27 24932610.48 24932610.71 0.0089 0.0012

Jupiter 63551-05-28 06:58 G 24932732.65 24932732.79 24932732.93 0.0499 0.0352

Neptune 63551-09-08 12:43 G 24932835.83 24932836.03 24932836.26 0.0089 0.0017

Mars 63552-01-30 07:55 G 24932979.69 24932979.83 24932979.97 0.1719 0.1020

Neptune 63552-04-21 02:10 G 24933061.39 24933061.59 24933061.81 0.0089 0.0022

Neptune 63552-12-02 15:22 G 24933286.94 24933287.14 24933287.36 0.0089 0.0027

Neptune 63553-07-16 04:34 G 24933512.49 24933512.69 24933512.91 0.0089 0.0032

Neptune 63554-02-26 17:46 G 24933738.05 24933738.24 24933738.45 0.0089 0.0037

Neptune 63554-10-10 06:58 G 24933963.61 24933963.79 24933964.00 0.0089 0.0042

Neptune 63555-05-23 20:10 G 24934189.17 24934189.34 24934189.55 0.0089 0.0047

Neptune 63556-01-04 09:22 G 24934414.73 24934414.89 24934415.09 0.0089 0.0052

Jupiter 63556-08-11 20:53 G 24934635.16 24934635.37 24934635.57 0.0534 0.0029

Neptune 63556-08-16 22:34 G 24934640.29 24934640.44 24934640.63 0.0089 0.0057

Neptune 63557-03-30 12:29 G 24934865.86 24934866.02 24934866.18 0.0089 0.0061

Neptune 63557-11-11 01:27 G 24935091.42 24935091.56 24935091.72 0.0089 0.0066

Neptune 63558-06-24 14:24 G 24935316.99 24935317.10 24935317.25 0.0089 0.0071

Neptune 63559-02-05 03:36 G 24935542.55 24935542.65 24935542.78 0.0089 0.0076

Neptune 63559-09-18 17:03 G 24935768.13 24935768.21 24935768.31 0.0089 0.0080

Neptune 63560-05-01 06:00 G 24935993.71 24935993.75 24935993.84 0.0089 0.0085

Jupiter 63562-06-09 10:05 G 24936762.84 24936762.92 24936763.00 0.0490 0.0446

Saturn 63562-07-06 06:29 G 24936789.59 24936789.77 24936789.97 0.0273 0.0112

Jupiter 63563-01-31 09:36 G 24936998.71 24936998.90 24936999.09 0.0497 0.0175

Saturn 63563-02-20 11:46 G 24937018.80 24937018.99 24937019.19 0.0272 0.0100

Pluto 63566-01-25 19:41 G 24938089.17 24938089.32 24938089.50 0.0081 0.0055

Pluto 63566-09-08 06:43 G 24938314.57 24938314.78 24938315.00 0.0080 0.0016

Jupiter 63568-04-16 09:22 G 24938900.72 24938900.89 24938901.08 0.0535 0.0254

Moon 63574-06-08 17:46 G 24941145.13 24941145.24 24941145.36 0.2682 0.1743

Earth 63574-06-08 18:58 G 24941145.17 24941145.29 24941145.41 0.2675 0.1752 *

Jupiter 63574-10-06 12:58 G 24941264.84 24941265.04 24941265.25 0.0495 0.0009

Saturn 63577-08-01 18:00 G 24942295.05 24942295.25 24942295.46 0.0286 0.0086

Saturn 63578-03-19 12:58 G 24942524.87 24942525.04 24942525.22 0.0287 0.0164

Mars 63579-06-17 23:03 G 24942980.31 24942980.46 24942980.62 0.1810 0.0776

Jupiter 63579-12-20 20:53 G 24943166.28 24943166.37 24943166.46 0.0538 0.0483

Jupiter 63580-08-15 00:15 G 24943404.35 24943404.51 24943404.67 0.0529 0.0326

Earth 63582-06-06 09:07 G 24944064.76 24944064.88 24944065.00 0.2676 0.1754

Moon 63582-06-06 12:29 G 24944064.91 24944065.02 24944065.13 0.2682 0.1820 *

Uranus 63583-04-29 06:00 G 24944391.62 24944391.75 24944391.90 0.0142 0.0109

Uranus 63583-12-11 16:19 G 24944618.00 24944618.18 24944618.37 0.0142 0.0072

Uranus 63584-07-25 02:24 G 24944844.40 24944844.60 24944844.82 0.0141 0.0034

Uranus 63585-03-08 12:29 G 24945070.81 24945071.02 24945071.24 0.0141 0.0004

Uranus 63585-10-20 22:19 G 24945297.23 24945297.43 24945297.65 0.0141 0.0040

Uranus 63586-06-04 07:55 G 24945523.66 24945523.83 24945524.02 0.0141 0.0077

Jupiter 63586-06-11 16:19 G 24945530.99 24945531.18 24945531.37 0.0493 0.0175

Uranus 63587-01-16 17:31 G 24945750.11 24945750.23 24945750.36 0.0141 0.0113

Jupiter 63587-02-02 18:58 G 24945767.21 24945767.29 24945767.37 0.0501 0.0461

Saturn 63592-01-16 13:12 G 24947575.85 24947576.05 24947576.25 0.0273 0.0077

Jupiter 63592-04-19 12:00 G 24947669.80 24947670.00 24947670.20 0.0532 0.0100

Saturn 63592-09-01 18:29 G 24947805.09 24947805.27 24947805.45 0.0273 0.0134

Jupiter 63598-02-14 20:10 G 24949797.20 24949797.34 24949797.49 0.0491 0.0344

Jupiter 63598-10-08 20:39 G 24950033.20 24950033.36 24950033.53 0.0498 0.0282

Jupiter 63603-12-24 01:27 G 24951935.36 24951935.56 24951935.76 0.0535 0.0125

Saturn 63607-02-12 01:41 G 24953081.36 24953081.57 24953081.78 0.0286 0.0045

Saturn 63607-09-29 20:24 G 24953311.20 24953311.35 24953311.50 0.0286 0.0203

Jupiter 63610-06-13 22:19 G 24954299.23 24954299.43 24954299.63 0.0496 0.0102

Jupiter 63615-08-28 15:22 G 24956200.98 24956201.14 24956201.29 0.0537 0.0348

Jupiter 63616-04-22 18:00 G 24956439.15 24956439.25 24956439.35 0.0528 0.0454

Mars 63617-11-26 17:31 G 24957022.13 24957022.23 24957022.33 0.1722 0.1416

Saturn 63620-12-11 07:27 G 24958132.77 24958132.81 24958132.86 0.0273 0.0266

Neptune 63621-06-18 05:31 G 24958321.73 24958321.73 24958321.80 0.0088 0.0087

Saturn 63621-07-28 13:12 G 24958361.85 24958362.05 24958362.26 0.0273 0.0055

Neptune 63622-01-29 18:43 G 24958547.22 24958547.28 24958547.37 0.0088 0.0082

Jupiter 63622-02-17 01:55 G 24958565.37 24958565.58 24958565.78 0.0494 0.0072

Saturn 63622-03-14 18:29 G 24958591.10 24958591.27 24958591.45 0.0272 0.0156

Neptune 63622-09-12 07:12 G 24958772.73 24958772.80 24958772.93 0.0088 0.0078

Neptune 63623-04-25 20:10 G 24958998.24 24958998.34 24958998.48 0.0088 0.0073

Neptune 63623-12-07 09:07 G 24959223.75 24959223.88 24959224.02 0.0088 0.0068

Neptune 63624-07-19 21:22 G 24959449.26 24959449.39 24959449.56 0.0088 0.0064

Neptune 63625-03-02 10:19 G 24959674.78 24959674.93 24959675.10 0.0088 0.0059

Neptune 63625-10-13 23:17 G 24959900.30 24959900.47 24959900.64 0.0088 0.0054

Neptune 63626-05-27 11:31 G 24960125.82 24960125.98 24960126.18 0.0088 0.0050

Uranus 63626-09-10 06:00 G 24960231.65 24960231.75 24960231.88 0.0136 0.0116

Neptune 63627-01-08 00:15 G 24960351.34 24960351.51 24960351.71 0.0088 0.0045

Uranus 63627-04-24 13:12 G 24960457.89 24960458.05 24960458.23 0.0136 0.0083

Neptune 63627-08-21 13:12 G 24960576.86 24960577.05 24960577.25 0.0088 0.0040

Uranus 63627-12-06 20:24 G 24960684.16 24960684.35 24960684.56 0.0136 0.0050

Jupiter 63627-12-27 07:55 G 24960704.65 24960704.83 24960705.02 0.0531 0.0239

Neptune 63628-04-03 01:55 G 24960802.38 24960802.58 24960802.78 0.0088 0.0036

Uranus 63628-07-20 03:51 G 24960910.45 24960910.66 24960910.88 0.0137 0.0016

Neptune 63628-11-14 14:24 G 24961027.90 24961028.10 24961028.32 0.0088 0.0031

Uranus 63629-03-03 11:31 G 24961136.76 24961136.98 24961137.20 0.0137 0.0018

Neptune 63629-06-28 03:07 G 24961253.43 24961253.63 24961253.85 0.0088 0.0026

Uranus 63629-10-15 18:58 G 24961363.09 24961363.29 24961363.50 0.0137 0.0052

Neptune 63630-02-08 15:51 G 24961478.95 24961479.16 24961479.38 0.0088 0.0021

Uranus 63630-05-30 02:24 G 24961589.45 24961589.60 24961589.78 0.0137 0.0086

Neptune 63630-09-22 04:48 G 24961704.49 24961704.70 24961704.92 0.0088 0.0016

Uranus 63631-01-11 10:34 G 24961815.84 24961815.94 24961816.04 0.0138 0.0120

Neptune 63631-05-05 17:31 G 24961930.02 24961930.23 24961930.45 0.0088 0.0011

Neptune 63631-12-17 06:15 G 24962155.54 24962155.76 24962155.98 0.0088 0.0007

Neptune 63632-07-29 18:58 G 24962381.07 24962381.29 24962381.51 0.0088 0.0002

Neptune 63633-03-12 07:41 G 24962606.60 24962606.82 24962607.04 0.0088 0.0004

Jupiter 63633-10-23 06:00 G 24962831.57 24962831.75 24962831.93 0.0492 0.0242

Neptune 63633-10-23 20:39 G 24962832.14 24962832.36 24962832.58 0.0088 0.0008

Neptune 63634-06-06 09:22 G 24963057.68 24963057.89 24963058.11 0.0088 0.0013

Jupiter 63634-06-16 07:55 G 24963067.71 24963067.83 24963067.96 0.0500 0.0391

Neptune 63635-01-17 22:05 G 24963283.21 24963283.42 24963283.64 0.0088 0.0018

Neptune 63635-08-31 10:48 G 24963508.75 24963508.95 24963509.17 0.0088 0.0023

Saturn 63636-01-07 09:07 G 24963637.81 24963637.88 24963637.97 0.0286 0.0266

Neptune 63636-04-12 23:31 G 24963734.28 24963734.48 24963734.70 0.0088 0.0028

Saturn 63636-08-24 03:36 G 24963867.44 24963867.65 24963867.87 0.0286 0.0020

Neptune 63636-11-24 12:29 G 24963959.82 24963960.02 24963960.23 0.0088 0.0033

Saturn 63637-04-10 22:19 G 24964097.31 24964097.43 24964097.57 0.0287 0.0229

Neptune 63637-07-08 01:12 G 24964185.36 24964185.55 24964185.75 0.0088 0.0038

Neptune 63638-02-18 13:55 G 24964410.90 24964411.08 24964411.28 0.0088 0.0043

Neptune 63638-10-02 02:39 G 24964636.44 24964636.61 24964636.81 0.0088 0.0048

Neptune 63639-05-15 15:22 G 24964861.98 24964862.14 24964862.34 0.0089 0.0053

Jupiter 63639-08-31 20:53 G 24964970.17 24964970.37 24964970.57 0.0533 0.0015

Neptune 63639-12-27 04:19 G 24965087.52 24965087.68 24965087.86 0.0089 0.0057

Neptune 63640-08-08 16:48 G 24965313.06 24965313.20 24965313.38 0.0089 0.0062

Neptune 63641-03-22 05:31 G 24965538.61 24965538.73 24965538.90 0.0089 0.0067

Neptune 63641-11-02 18:43 G 24965764.16 24965764.28 24965764.42 0.0089 0.0071

Neptune 63642-06-16 07:27 G 24965989.71 24965989.81 24965989.94 0.0089 0.0076

Neptune 63643-01-27 20:39 G 24966215.27 24966215.36 24966215.45 0.0089 0.0080

Neptune 63643-09-10 09:07 G 24966440.83 24966440.88 24966440.96 0.0089 0.0085

Mars 63645-04-14 05:17 G 24967022.55 24967022.72 24967022.90 0.1806 0.0200

Jupiter 63645-06-28 10:19 G 24967097.82 24967097.93 24967098.04 0.0490 0.0409

Jupiter 63646-02-19 09:51 G 24967333.73 24967333.91 24967334.10 0.0497 0.0211

Mars 63649-11-25 18:58 G 24968709.18 24968709.29 24968709.39 0.1712 0.1369

Saturn 63650-06-23 13:41 G 24968918.96 24968919.07 24968919.18 0.0274 0.0233

Saturn 63651-02-07 19:27 G 24969148.10 24969148.31 24969148.53 0.0273 0.0022

Jupiter 63651-05-06 06:43 G 24969235.59 24969235.78 24969235.97 0.0536 0.0221

Saturn 63651-09-25 00:43 G 24969377.39 24969377.53 24969377.69 0.0273 0.0191

Jupiter 63657-10-25 12:43 G 24971599.82 24971600.03 24971600.23 0.0495 0.0036

Jupiter 63663-01-08 18:43 G 24973501.17 24973501.28 24973501.40 0.0538 0.0448

Jupiter 63663-09-03 22:48 G 24973739.31 24973739.45 24973739.61 0.0530 0.0361

Saturn 63665-07-19 18:29 G 24974424.14 24974424.27 24974424.41 0.0285 0.0221

Saturn 63666-03-06 12:43 G 24974653.82 24974654.03 24974654.24 0.0286 0.0024

Saturn 63666-10-22 07:12 G 24974883.74 24974883.80 24974883.88 0.0286 0.0270

Uranus 63666-12-27 13:41 G 24974949.97 24974950.07 24974950.17 0.0142 0.0125

Uranus 63667-08-10 23:46 G 24975176.33 24975176.49 24975176.67 0.0142 0.0088

Uranus 63668-03-24 10:05 G 24975402.72 24975402.92 24975403.13 0.0142 0.0051

Uranus 63668-11-05 20:10 G 24975629.13 24975629.34 24975629.56 0.0141 0.0014

Uranus 63669-06-20 06:15 G 24975855.54 24975855.76 24975855.97 0.0141 0.0024

Jupiter 63669-06-30 14:39 G 24975865.92 24975866.11 24975866.31 0.0493 0.0141

Uranus 63670-02-01 15:51 G 24976081.97 24976082.16 24976082.36 0.0141 0.0061

Jupiter 63670-02-21 17:17 G 24976102.20 24976102.22 24976102.26 0.0501 0.0493

Uranus 63670-09-16 01:27 G 24976308.42 24976308.56 24976308.73 0.0141 0.0098

Uranus 63671-04-30 10:48 G 24976534.90 24976534.95 24976535.03 0.0141 0.0134

Jupiter 63675-05-09 14:24 G 24978004.90 24978005.10 24978005.30 0.0532 0.0146

Earth 63679-12-10 17:31 G 24979681.07 24979681.23 24979681.39 0.2656 0.0317

Moon 63679-12-10 18:29 G 24979681.13 24979681.27 24979681.42 0.2662 0.0537 *

Saturn 63680-01-03 14:53 G 24979704.99 24979705.12 24979705.26 0.0273 0.0208

Saturn 63680-08-19 20:53 G 24979934.15 24979934.37 24979934.58 0.0273 0.0007

Jupiter 63681-03-05 18:58 G 24980132.13 24980132.29 24980132.45 0.0491 0.0309

Saturn 63681-04-06 01:41 G 24980163.46 24980163.57 24980163.71 0.0273 0.0215

Jupiter 63681-10-27 19:41 G 24980368.17 24980368.32 24980368.48 0.0499 0.0316

Jupiter 63687-01-12 03:36 G 24982270.45 24982270.65 24982270.85 0.0534 0.0078

Moon 63687-12-08 13:55 G 24982601.00 24982601.08 24982601.17 0.2658 0.2207

Jupiter 63692-11-08 23:31 G 24984398.44 24984398.48 24984398.53 0.0490 0.0473

Jupiter 63693-07-02 22:34 G 24984634.24 24984634.44 24984634.63 0.0496 0.0140

Saturn 63695-01-29 20:10 G 24985210.19 24985210.34 24985210.50 0.0286 0.0198

Saturn 63695-09-16 14:39 G 24985439.90 24985440.11 24985440.32 0.0286 0.0049

Jupiter 63698-09-16 15:22 G 24986535.97 24986536.14 24986536.30 0.0536 0.0306

Jupiter 63699-05-12 17:03 G 24986774.15 24986774.21 24986774.29 0.0528 0.0490

Neptune 63702-12-23 06:00 G 24988093.70 24988093.75 24988093.81 0.0089 0.0086

Neptune 63703-08-05 18:58 G 24988319.22 24988319.29 24988319.40 0.0089 0.0082

Neptune 63704-03-18 08:24 G 24988544.76 24988544.85 24988544.98 0.0089 0.0077

Neptune 63704-10-29 22:05 G 24988770.30 24988770.42 24988770.56 0.0089 0.0072

Jupiter 63705-03-09 01:55 G 24988900.37 24988900.58 24988900.78 0.0494 0.0036

Neptune 63705-06-12 11:31 G 24988995.83 24988995.98 24988996.12 0.0089 0.0067

Neptune 63706-01-24 00:15 G 24989221.38 24989221.51 24989221.69 0.0089 0.0063

Neptune 63706-09-06 13:41 G 24989446.92 24989447.07 24989447.26 0.0089 0.0058

Neptune 63707-04-20 03:07 G 24989672.47 24989672.63 24989672.83 0.0089 0.0053

Neptune 63707-12-01 16:34 G 24989898.02 24989898.19 24989898.39 0.0089 0.0047

Neptune 63708-07-14 06:00 G 24990123.56 24990123.75 24990123.95 0.0089 0.0042

Neptune 63709-02-24 19:27 G 24990349.12 24990349.31 24990349.52 0.0089 0.0037

Saturn 63709-07-16 20:53 G 24990491.22 24990491.37 24990491.54 0.0274 0.0175

Neptune 63709-10-08 08:39 G 24990574.67 24990574.86 24990575.08 0.0089 0.0033

Saturn 63710-03-03 02:53 G 24990720.42 24990720.62 24990720.83 0.0274 0.0039

Uranus 63710-05-11 16:19 G 24990790.12 24990790.18 24990790.26 0.0136 0.0128

Neptune 63710-05-21 22:05 G 24990800.22 24990800.42 24990800.64 0.0089 0.0027

Saturn 63710-10-18 08:24 G 24990949.77 24990949.85 24990949.94 0.0273 0.0249

Uranus 63710-12-23 23:03 G 24991016.33 24991016.46 24991016.63 0.0136 0.0096

Neptune 63711-01-02 11:31 G 24991025.77 24991025.98 24991026.20 0.0089 0.0022

Jupiter 63711-01-16 04:34 G 24991039.51 24991039.69 24991039.87 0.0531 0.0268

Mars 63711-02-10 11:31 G 24991064.81 24991064.98 24991065.15 0.1803 0.0389

Uranus 63711-08-07 06:29 G 24991242.58 24991242.77 24991242.97 0.0136 0.0063

Neptune 63711-08-16 00:58 G 24991251.33 24991251.54 24991251.76 0.0089 0.0017

Uranus 63712-03-20 13:55 G 24991468.87 24991469.08 24991469.30 0.0137 0.0030

Neptune 63712-03-28 14:24 G 24991476.88 24991477.10 24991477.32 0.0089 0.0012

Uranus 63712-11-01 21:22 G 24991695.17 24991695.39 24991695.61 0.0137 0.0004

Neptune 63712-11-09 03:36 G 24991702.44 24991702.65 24991702.88 0.0089 0.0008

Uranus 63713-06-16 04:48 G 24991921.49 24991921.70 24991921.91 0.0137 0.0038

Neptune 63713-06-22 17:03 G 24991927.99 24991928.21 24991928.43 0.0089 0.0002

Uranus 63714-01-28 12:15 G 24992147.83 24992148.01 24992148.20 0.0137 0.0072

Neptune 63714-02-03 06:15 G 24992153.54 24992153.76 24992153.98 0.0089 0.0003

Uranus 63714-09-11 19:41 G 24992374.20 24992374.32 24992374.48 0.0137 0.0107

Neptune 63714-09-16 19:27 G 24992379.10 24992379.31 24992379.54 0.0089 0.0009

Neptune 63715-04-30 08:53 G 24992604.65 24992604.87 24992605.09 0.0089 0.0013

Mars 63715-09-24 04:19 G 24992751.54 24992751.68 24992751.82 0.1716 0.0985

Neptune 63715-12-11 22:05 G 24992830.21 24992830.42 24992830.64 0.0089 0.0018

Neptune 63716-07-24 11:17 G 24993055.76 24993055.97 24993056.19 0.0089 0.0023

Jupiter 63716-11-12 05:17 G 24993166.54 24993166.72 24993166.91 0.0492 0.0206

Neptune 63717-03-07 00:29 G 24993281.32 24993281.52 24993281.74 0.0089 0.0028

Jupiter 63717-07-06 06:58 G 24993402.68 24993402.79 24993402.89 0.0499 0.0422

Neptune 63717-10-18 13:41 G 24993506.87 24993507.07 24993507.28 0.0089 0.0033

Neptune 63718-06-01 03:07 G 24993732.43 24993732.63 24993732.83 0.0089 0.0038

Neptune 63719-01-12 16:05 G 24993957.99 24993958.17 24993958.37 0.0089 0.0043

Neptune 63719-08-26 05:17 G 24994183.55 24994183.72 24994183.92 0.0089 0.0048

Neptune 63720-04-07 18:43 G 24994409.11 24994409.28 24994409.46 0.0089 0.0053

Neptune 63720-11-19 07:41 G 24994634.67 24994634.82 24994635.01 0.0089 0.0058

Neptune 63721-07-02 20:53 G 24994860.23 24994860.37 24994860.55 0.0089 0.0063

Neptune 63722-02-13 10:05 G 24995085.80 24995085.92 24995086.08 0.0089 0.0068

Jupiter 63722-09-20 18:00 G 24995305.05 24995305.25 24995305.46 0.0534 0.0048

Neptune 63722-09-26 23:31 G 24995311.37 24995311.48 24995311.62 0.0089 0.0072

Neptune 63723-05-10 12:43 G 24995536.94 24995537.03 24995537.16 0.0089 0.0077

Neptune 63723-12-22 01:55 G 24995762.52 24995762.58 24995762.69 0.0089 0.0082

Pluto 63724-06-25 12:15 G 24995948.89 24995949.01 24995949.17 0.0063 0.0049

Neptune 63724-08-03 15:22 G 24995988.10 24995988.14 24995988.20 0.0089 0.0086

Saturn 63724-08-12 06:58 G 24995996.61 24995996.79 24995996.97 0.0285 0.0151

Pluto 63725-02-05 16:34 G 24996173.98 24996174.19 24996174.41 0.0063 0.0014

Saturn 63725-03-30 01:12 G 24996226.35 24996226.55 24996226.75 0.0286 0.0095

Pluto 63725-09-18 20:24 G 24996399.14 24996399.35 24996399.56 0.0064 0.0020

Pluto 63726-05-01 23:46 G 24996624.40 24996624.49 24996624.63 0.0064 0.0055

Jupiter 63728-07-18 07:55 G 24997432.70 24997432.83 24997432.96 0.0490 0.0375

Jupiter 63729-03-11 07:12 G 24997668.63 24997668.80 24997668.99 0.0497 0.0243

Jupiter 63734-05-26 08:24 G 24999570.66 24999570.85 24999571.04 0.0536 0.0174

Saturn 63739-01-26 23:31 G 25001277.31 25001277.48 25001277.66 0.0273 0.0148

Saturn 63739-09-13 05:17 G 25001506.51 25001506.72 25001506.93 0.0273 0.0064

Jupiter 63740-11-14 10:34 G 25001934.74 25001934.94 25001935.14 0.0495 0.0068

Jupiter 63746-01-28 20:39 G 25003836.23 25003836.36 25003836.50 0.0538 0.0400

Jupiter 63746-09-24 00:00 G 25004074.37 25004074.50 25004074.63 0.0529 0.0401

Uranus 63751-04-11 06:43 G 25005734.64 25005734.78 25005734.93 0.0142 0.0105

Uranus 63751-11-23 16:48 G 25005961.02 25005961.20 25005961.41 0.0142 0.0068

Uranus 63752-07-07 03:07 G 25006187.42 25006187.63 25006187.85 0.0141 0.0030

Jupiter 63752-07-20 13:55 G 25006200.89 25006201.08 25006201.28 0.0493 0.0105

Uranus 63753-02-18 13:12 G 25006413.83 25006414.05 25006414.27 0.0141 0.0007

Uranus 63753-10-02 23:03 G 25006640.26 25006640.46 25006640.67 0.0141 0.0044

Saturn 63754-02-22 09:07 G 25006782.69 25006782.88 25006783.07 0.0286 0.0126

Uranus 63754-05-17 08:39 G 25006866.69 25006866.86 25006867.04 0.0141 0.0081

Saturn 63754-10-10 03:22 G 25007012.45 25007012.64 25007012.84 0.0286 0.0121

Uranus 63754-12-29 17:46 G 25007093.14 25007093.24 25007093.38 0.0141 0.0118

Jupiter 63758-05-29 13:27 G 25008339.87 25008340.06 25008340.25 0.0532 0.0184

Jupiter 63764-03-25 18:29 G 25010467.10 25010467.27 25010467.44 0.0491 0.0274

Jupiter 63764-11-16 19:12 G 25010703.16 25010703.30 25010703.45 0.0499 0.0349

Saturn 63768-08-08 05:17 G 25012063.53 25012063.72 25012063.91 0.0274 0.0115

Saturn 63769-03-25 11:03 G 25012292.77 25012292.96 25012293.17 0.0274 0.0099

Jupiter 63770-01-31 23:03 G 25012605.26 25012605.46 25012605.66 0.0534 0.0049

Jupiter 63775-11-29 22:34 G 25014733.35 25014733.44 25014733.53 0.0490 0.0438

Jupiter 63776-07-22 21:07 G 25014969.19 25014969.38 25014969.57 0.0496 0.0173

Mars 63776-12-07 18:00 G 25015107.11 25015107.25 25015107.40 0.1799 0.0955

Mars 63781-07-21 14:24 G 25016793.94 25016794.10 25016794.26 0.1719 0.0618

Jupiter 63781-10-06 11:03 G 25016870.79 25016870.96 25016871.14 0.0537 0.0275

Jupiter 63782-06-01 13:27 G 25017109.03 25017109.06 25017109.11 0.0528 0.0517

Saturn 63783-09-04 20:39 G 25017569.16 25017569.36 25017569.57 0.0285 0.0077

Saturn 63784-04-21 14:53 G 25017798.96 25017799.12 25017799.30 0.0286 0.0168

Neptune 63785-09-20 16:05 G 25018316.14 25018316.17 25018316.25 0.0088 0.0085

Neptune 63786-05-04 05:17 G 25018541.64 25018541.72 25018541.81 0.0088 0.0080

Neptune 63786-12-15 17:31 G 25018767.14 25018767.23 25018767.36 0.0088 0.0076

Neptune 63787-07-29 06:43 G 25018992.65 25018992.78 25018992.91 0.0088 0.0071

Neptune 63788-03-10 18:58 G 25019218.17 25019218.29 25019218.45 0.0088 0.0067

Jupiter 63788-03-27 22:19 G 25019235.23 25019235.43 25019235.64 0.0494 0.0012

Neptune 63788-10-22 07:55 G 25019443.69 25019443.83 25019444.00 0.0088 0.0062

Neptune 63789-06-04 20:53 G 25019669.21 25019669.37 25019669.54 0.0088 0.0057

Neptune 63790-01-16 09:07 G 25019894.73 25019894.88 25019895.08 0.0088 0.0053

Neptune 63790-08-29 22:05 G 25020120.25 25020120.42 25020120.62 0.0088 0.0048

Neptune 63791-04-12 11:03 G 25020345.77 25020345.96 25020346.16 0.0088 0.0043

Neptune 63791-11-23 23:46 G 25020571.29 25020571.49 25020571.69 0.0088 0.0039

Neptune 63792-07-06 12:00 G 25020796.82 25020797.00 25020797.22 0.0088 0.0034

Neptune 63793-02-17 00:58 G 25021022.34 25021022.54 25021022.75 0.0088 0.0029

Jupiter 63793-06-11 00:15 G 25021136.43 25021136.51 25021136.58 0.0539 0.0497

Neptune 63793-09-30 13:41 G 25021247.87 25021248.07 25021248.29 0.0088 0.0025

Jupiter 63794-02-04 05:17 G 25021374.55 25021374.72 25021374.88 0.0531 0.0309

Neptune 63794-05-14 02:39 G 25021473.40 25021473.61 25021473.83 0.0088 0.0019

Uranus 63794-08-23 09:07 G 25021574.76 25021574.88 25021575.02 0.0136 0.0109

Neptune 63794-12-25 15:22 G 25021698.92 25021699.14 25021699.36 0.0088 0.0014

Uranus 63795-04-06 16:19 G 25021801.01 25021801.18 25021801.37 0.0136 0.0076

Neptune 63795-08-08 04:05 G 25021924.45 25021924.67 25021924.89 0.0088 0.0010

Uranus 63795-11-18 23:17 G 25022027.28 25022027.47 25022027.69 0.0137 0.0044

Neptune 63796-03-20 16:34 G 25022149.98 25022150.19 25022150.42 0.0088 0.0006

Uranus 63796-07-02 06:58 G 25022253.57 25022253.79 25022254.00 0.0137 0.0010

Neptune 63796-11-01 05:31 G 25022375.51 25022375.73 25022375.95 0.0088 0.0001

Uranus 63797-02-13 14:24 G 25022479.88 25022480.10 25022480.31 0.0137 0.0024

Neptune 63797-06-14 18:15 G 25022601.04 25022601.26 25022601.48 0.0088 0.0005

Uranus 63797-09-27 21:36 G 25022706.21 25022706.40 25022706.61 0.0137 0.0059

Neptune 63798-01-26 06:58 G 25022826.58 25022826.79 25022827.01 0.0088 0.0010

Saturn 63798-02-18 09:22 G 25022849.69 25022849.89 25022850.09 0.0273 0.0086

Uranus 63798-05-12 05:17 G 25022932.57 25022932.72 25022932.89 0.0137 0.0093

Neptune 63798-09-08 19:41 G 25023052.11 25023052.32 25023052.55 0.0088 0.0015

Saturn 63798-10-05 15:07 G 25023078.94 25023079.13 25023079.32 0.0273 0.0126

Uranus 63798-12-24 12:43 G 25023158.97 25023159.03 25023159.14 0.0138 0.0127

Neptune 63799-04-22 08:24 G 25023277.65 25023277.85 25023278.08 0.0088 0.0021

Jupiter 63799-12-02 02:10 G 25023501.40 25023501.59 25023501.78 0.0492 0.0174

Neptune 63799-12-03 21:36 G 25023503.19 25023503.40 25023503.61 0.0088 0.0025

Neptune 63800-07-17 10:05 G 25023728.72 25023728.92 25023729.14 0.0088 0.0030

Jupiter 63800-07-26 03:51 G 25023737.58 25023737.66 25023737.75 0.0500 0.0452

Neptune 63801-02-27 22:48 G 25023954.26 25023954.45 25023954.66 0.0088 0.0035

Neptune 63801-10-11 11:46 G 25024179.81 25024179.99 25024180.20 0.0088 0.0040

Neptune 63802-05-25 00:29 G 25024405.35 25024405.52 25024405.73 0.0088 0.0045

Neptune 63803-01-05 13:12 G 25024630.89 25024631.05 25024631.25 0.0088 0.0050

Neptune 63803-08-19 02:10 G 25024856.43 25024856.59 25024856.77 0.0088 0.0054

Neptune 63804-03-31 14:53 G 25025081.97 25025082.12 25025082.30 0.0089 0.0059

Neptune 63804-11-12 03:36 G 25025307.52 25025307.65 25025307.82 0.0089 0.0064

Neptune 63805-06-25 16:48 G 25025533.06 25025533.20 25025533.34 0.0089 0.0068

Jupiter 63805-10-10 19:12 G 25025640.10 25025640.30 25025640.50 0.0533 0.0091

Neptune 63806-02-06 05:17 G 25025758.61 25025758.72 25025758.86 0.0089 0.0073

Neptune 63806-09-19 18:00 G 25025984.16 25025984.25 25025984.38 0.0089 0.0078

Neptune 63807-05-03 06:58 G 25026209.72 25026209.79 25026209.89 0.0089 0.0082

Neptune 63807-12-14 19:27 G 25026435.29 25026435.31 25026435.38 0.0089 0.0087

Jupiter 63811-08-08 06:15 G 25027767.62 25027767.76 25027767.91 0.0491 0.0342

Jupiter 63812-03-31 06:15 G 25028003.60 25028003.76 25028003.93 0.0498 0.0276

Saturn 63813-03-17 23:03 G 25028355.25 25028355.46 25028355.67 0.0286 0.0052

Saturn 63813-11-02 17:17 G 25028585.07 25028585.22 25028585.38 0.0286 0.0194

Pluto 63814-08-12 23:03 G 25028868.33 25028868.46 25028868.64 0.0081 0.0059

Pluto 63815-03-26 10:05 G 25029093.71 25029093.92 25029094.15 0.0080 0.0013

Earth 63817-06-10 19:27 G 25029901.19 25029901.31 25029901.43 0.2676 0.1773

Moon 63817-06-10 22:34 G 25029901.35 25029901.44 25029901.53 0.2670 0.2249 *

Jupiter 63817-06-15 07:12 G 25029905.61 25029905.80 25029906.00 0.0535 0.0134

Jupiter 63823-12-05 09:36 G 25032269.70 25032269.90 25032270.10 0.0495 0.0101

Moon 63825-06-08 07:41 G 25032820.69 25032820.82 25032820.96 0.2671 0.1604

Earth 63825-06-08 09:22 G 25032820.77 25032820.89 25032821.01 0.2678 0.1752 *

Saturn 63827-01-15 08:24 G 25033406.81 25033406.85 25033406.90 0.0274 0.0266

Saturn 63827-09-01 14:39 G 25033635.91 25033636.11 25033636.32 0.0274 0.0053

Saturn 63828-04-17 20:24 G 25033865.19 25033865.35 25033865.53 0.0274 0.0160

Jupiter 63829-02-17 15:36 G 25034171.01 25034171.15 25034171.30 0.0537 0.0370

Jupiter 63829-10-13 18:58 G 25034409.17 25034409.29 25034409.41 0.0529 0.0426

Uranus 63834-12-10 14:24 G 25036292.99 25036293.10 25036293.22 0.0142 0.0121

Uranus 63835-07-25 00:29 G 25036519.36 25036519.52 25036519.71 0.0142 0.0084

Jupiter 63835-08-10 12:29 G 25036535.81 25036536.02 25036536.22 0.0493 0.0073

Uranus 63836-03-07 10:48 G 25036745.75 25036745.95 25036746.16 0.0142 0.0047

Uranus 63836-10-19 21:07 G 25036972.16 25036972.38 25036972.60 0.0141 0.0009

Uranus 63837-06-03 06:58 G 25037198.58 25037198.79 25037199.00 0.0141 0.0028

Uranus 63838-01-15 16:34 G 25037425.00 25037425.19 25037425.39 0.0141 0.0065

Uranus 63838-08-30 02:10 G 25037651.45 25037651.59 25037651.75 0.0141 0.0102

Uranus 63839-04-13 11:31 G 25037877.95 25037877.98 25037878.03 0.0141 0.0138

Jupiter 63841-06-18 08:39 G 25038674.67 25038674.86 25038675.05 0.0532 0.0211

Saturn 63842-02-10 17:46 G 25038912.13 25038912.24 25038912.34 0.0285 0.0245

Saturn 63842-09-28 11:31 G 25039141.77 25039141.98 25039142.19 0.0285 0.0003

Mars 63842-10-06 00:15 G 25039149.42 25039149.51 25039149.60 0.1795 0.1523

Saturn 63843-05-16 06:00 G 25039371.64 25039371.75 25039371.86 0.0286 0.0243

Jupiter 63847-04-15 14:24 G 25040801.92 25040802.10 25040802.27 0.0491 0.0244

Mars 63847-05-19 23:46 G 25040836.32 25040836.49 25040836.66 0.1722 0.0222

Jupiter 63847-12-07 14:53 G 25041037.99 25041038.12 25041038.26 0.0499 0.0376

Jupiter 63853-02-20 23:03 G 25042940.25 25042940.46 25042940.66 0.0534 0.0011

Saturn 63856-07-27 14:10 G 25044192.98 25044193.09 25044193.20 0.0274 0.0233

Saturn 63857-03-13 20:10 G 25044422.13 25044422.34 25044422.55 0.0273 0.0021

Saturn 63857-10-29 01:41 G 25044651.42 25044651.57 25044651.73 0.0273 0.0190

Jupiter 63858-12-19 18:43 G 25045068.17 25045068.28 25045068.39 0.0490 0.0408

Jupiter 63859-08-12 17:17 G 25045304.04 25045304.22 25045304.41 0.0496 0.0201

Jupiter 63864-10-26 12:00 G 25047205.82 25047206.00 25047206.19 0.0536 0.0230

Neptune 63866-08-14 01:55 G 25047862.58 25047862.58 25047862.62 0.0089 0.0089

Neptune 63867-03-27 15:22 G 25048088.09 25048088.14 25048088.23 0.0089 0.0085

Neptune 63867-11-08 04:48 G 25048313.62 25048313.70 25048313.81 0.0089 0.0080

Neptune 63868-06-20 18:29 G 25048539.15 25048539.27 25048539.39 0.0089 0.0075

Neptune 63869-02-01 07:27 G 25048764.69 25048764.81 25048764.96 0.0089 0.0070

Neptune 63869-09-14 20:53 G 25048990.23 25048990.37 25048990.53 0.0089 0.0065

Neptune 63870-04-28 10:19 G 25049215.78 25049215.93 25049216.10 0.0089 0.0060

Neptune 63870-12-09 23:31 G 25049441.32 25049441.48 25049441.67 0.0089 0.0056

Jupiter 63871-04-17 20:39 G 25049570.15 25049570.36 25049570.56 0.0495 0.0030

Neptune 63871-07-23 12:58 G 25049666.87 25049667.04 25049667.23 0.0089 0.0051

Saturn 63871-08-23 19:55 G 25049698.21 25049698.33 25049698.47 0.0285 0.0221

Neptune 63872-03-05 02:24 G 25049892.42 25049892.60 25049892.80 0.0089 0.0046

Saturn 63872-04-09 14:10 G 25049927.87 25049928.09 25049928.30 0.0286 0.0024

Neptune 63872-10-16 15:51 G 25050117.97 25050118.16 25050118.36 0.0089 0.0041

Saturn 63872-11-25 08:24 G 25050157.78 25050157.85 25050157.92 0.0286 0.0269

Neptune 63873-05-30 05:03 G 25050343.51 25050343.71 25050343.92 0.0089 0.0036

Neptune 63874-01-10 18:29 G 25050569.06 25050569.27 25050569.48 0.0089 0.0031

Neptune 63874-08-24 07:41 G 25050794.62 25050794.82 25050795.04 0.0089 0.0026

Neptune 63875-04-06 21:22 G 25051020.17 25051020.39 25051020.60 0.0089 0.0020

Neptune 63875-11-18 10:34 G 25051245.73 25051245.94 25051246.16 0.0089 0.0016

Neptune 63876-07-01 00:00 G 25051471.28 25051471.50 25051471.72 0.0089 0.0010

Jupiter 63876-06-30 23:17 G 25051471.36 25051471.47 25051471.57 0.0538 0.0456 *

Neptune 63877-02-11 13:27 G 25051696.84 25051697.06 25051697.28 0.0089 0.0005

Jupiter 63877-02-24 03:22 G 25051709.49 25051709.64 25051709.80 0.0530 0.0344

Neptune 63877-09-25 02:39 G 25051922.39 25051922.61 25051922.83 0.0089 0.0001

Uranus 63878-04-23 18:43 G 25052133.21 25052133.28 25052133.39 0.0136 0.0124

Neptune 63878-05-08 16:05 G 25052147.95 25052148.17 25052148.39 0.0089 0.0005

Uranus 63878-12-06 01:55 G 25052359.43 25052359.58 25052359.75 0.0136 0.0090

Neptune 63878-12-20 05:17 G 25052373.50 25052373.72 25052373.94 0.0089 0.0010

Uranus 63879-07-20 08:53 G 25052585.69 25052585.87 25052586.08 0.0136 0.0058

Neptune 63879-08-02 18:29 G 25052599.06 25052599.27 25052599.49 0.0089 0.0015

Uranus 63880-03-02 16:19 G 25052811.97 25052812.18 25052812.40 0.0137 0.0024

Neptune 63880-03-15 07:55 G 25052824.62 25052824.83 25052825.05 0.0089 0.0020

Uranus 63880-10-14 23:46 G 25053038.28 25053038.49 25053038.71 0.0137 0.0010

Neptune 63880-10-26 21:07 G 25053050.17 25053050.38 25053050.60 0.0089 0.0025

Uranus 63881-05-29 06:58 G 25053264.59 25053264.79 25053265.01 0.0137 0.0045

Neptune 63881-06-09 10:19 G 25053275.73 25053275.93 25053276.14 0.0089 0.0030

Uranus 63882-01-10 14:24 G 25053490.94 25053491.10 25053491.29 0.0137 0.0079

Neptune 63882-01-20 23:31 G 25053501.28 25053501.48 25053501.69 0.0089 0.0035

Uranus 63882-08-24 22:05 G 25053717.31 25053717.42 25053717.56 0.0138 0.0113

Neptune 63882-09-03 12:43 G 25053726.84 25053727.03 25053727.23 0.0089 0.0040

Jupiter 63882-12-22 00:43 G 25053836.33 25053836.53 25053836.72 0.0493 0.0142

Neptune 63883-04-17 01:55 G 25053952.40 25053952.58 25053952.78 0.0089 0.0045

Jupiter 63883-08-15 02:39 G 25054072.57 25054072.61 25054072.67 0.0500 0.0482

Neptune 63883-11-28 15:07 G 25054177.96 25054178.13 25054178.32 0.0089 0.0050

Neptune 63884-07-11 04:05 G 25054403.52 25054403.67 25054403.86 0.0089 0.0055

Neptune 63885-02-21 17:46 G 25054629.08 25054629.24 25054629.40 0.0089 0.0059

Neptune 63885-10-05 06:43 G 25054854.64 25054854.78 25054854.94 0.0089 0.0064

Saturn 63886-02-06 18:58 G 25054979.15 25054979.29 25054979.44 0.0274 0.0202

Neptune 63886-05-18 19:55 G 25055080.21 25055080.33 25055080.48 0.0089 0.0069

Saturn 63886-09-24 01:12 G 25055208.34 25055208.55 25055208.76 0.0274 0.0011

Neptune 63886-12-30 08:53 G 25055305.77 25055305.87 25055306.02 0.0089 0.0074

Saturn 63887-05-11 06:58 G 25055437.67 25055437.79 25055437.92 0.0273 0.0222

Neptune 63887-08-12 22:05 G 25055531.34 25055531.42 25055531.55 0.0089 0.0079

Neptune 63888-03-25 11:31 G 25055756.92 25055756.98 25055757.07 0.0089 0.0083

Jupiter 63888-10-29 13:41 G 25055974.87 25055975.07 25055975.27 0.0533 0.0118

Neptune 63888-11-06 00:43 G 25055982.52 25055982.53 25055982.58 0.0089 0.0088

Jupiter 63894-08-27 04:19 G 25058102.52 25058102.68 25058102.84 0.0491 0.0308

Jupiter 63895-04-20 04:05 G 25058338.52 25058338.67 25058338.84 0.0498 0.0307

Jupiter 63900-07-05 01:41 G 25060240.37 25060240.57 25060240.77 0.0535 0.0108

Saturn 63901-03-06 08:24 G 25060484.69 25060484.85 25060485.03 0.0285 0.0171

Saturn 63901-10-22 02:39 G 25060714.40 25060714.61 25060714.82 0.0285 0.0073

Jupiter 63906-05-03 06:58 G 25062368.75 25062368.79 25062368.84 0.0489 0.0473

Jupiter 63906-12-25 04:34 G 25062604.50 25062604.69 25062604.89 0.0495 0.0129

Jupiter 63912-03-09 14:53 G 25064505.96 25064506.12 25064506.28 0.0538 0.0328

Jupiter 63912-11-02 18:15 G 25064744.17 25064744.26 25064744.36 0.0529 0.0464

Mars 63913-03-17 09:07 G 25064878.70 25064878.88 25064879.05 0.1726 0.0188

Saturn 63915-08-21 01:41 G 25065765.41 25065765.57 25065765.74 0.0274 0.0168

Saturn 63916-04-06 07:41 G 25065994.61 25065994.82 25065995.03 0.0273 0.0044

Saturn 63916-11-21 12:58 G 25066223.98 25066224.04 25066224.12 0.0273 0.0254

Uranus 63918-08-10 21:36 G 25066851.35 25066851.40 25066851.44 0.0142 0.0139

Jupiter 63918-08-30 07:55 G 25066870.63 25066870.83 25066871.03 0.0493 0.0043

Uranus 63919-03-25 07:41 G 25067077.68 25067077.82 25067077.98 0.0142 0.0101

Uranus 63919-11-06 18:00 G 25067304.06 25067304.25 25067304.45 0.0142 0.0064

Uranus 63920-06-20 04:05 G 25067530.46 25067530.67 25067530.89 0.0141 0.0026

Uranus 63921-02-01 14:10 G 25067756.87 25067757.09 25067757.31 0.0141 0.0011

Uranus 63921-09-16 00:00 G 25067983.30 25067983.50 25067983.71 0.0141 0.0049

Uranus 63922-04-30 09:36 G 25068209.73 25068209.90 25068210.07 0.0141 0.0085

Uranus 63922-12-12 18:43 G 25068436.19 25068436.28 25068436.40 0.0141 0.0122

Earth 63922-12-13 19:41 G 25068437.17 25068437.32 25068437.48 0.2655 0.0481

Moon 63922-12-13 21:36 G 25068437.23 25068437.40 25068437.57 0.2649 0.0330 *

Jupiter 63924-07-08 08:53 G 25069009.69 25069009.87 25069010.05 0.0532 0.0252

Jupiter 63930-05-05 11:46 G 25071136.81 25071136.99 25071137.18 0.0492 0.0212

Saturn 63930-09-16 11:03 G 25071270.79 25071270.96 25071271.15 0.0285 0.0146

Jupiter 63930-12-27 12:58 G 25071372.92 25071373.04 25071373.15 0.0499 0.0407

Saturn 63931-05-04 05:17 G 25071500.53 25071500.72 25071500.93 0.0286 0.0100

Jupiter 63936-03-12 21:36 G 25073275.20 25073275.40 25073275.61 0.0534 0.0034

Mars 63940-08-02 18:15 G 25074879.16 25074879.26 25074879.37 0.1803 0.1428

Jupiter 63942-01-08 16:34 G 25075403.06 25075403.19 25075403.32 0.0490 0.0376

Jupiter 63942-09-01 15:51 G 25075638.98 25075639.16 25075639.34 0.0497 0.0234

Saturn 63945-03-02 06:00 G 25076551.57 25076551.75 25076551.94 0.0274 0.0138

Saturn 63945-10-17 12:00 G 25076780.80 25076781.00 25076781.21 0.0273 0.0075

Jupiter 63947-11-16 06:58 G 25077540.60 25077540.79 25077540.97 0.0536 0.0201

Neptune 63949-05-13 14:24 G 25078085.10 25078085.10 25078085.13 0.0088 0.0088

Neptune 63949-12-25 03:07 G 25078310.57 25078310.63 25078310.71 0.0088 0.0083

Neptune 63950-08-07 15:36 G 25078536.08 25078536.15 25078536.27 0.0088 0.0079

Neptune 63951-03-21 04:34 G 25078761.59 25078761.69 25078761.82 0.0088 0.0074

Neptune 63951-11-01 17:03 G 25078987.10 25078987.21 25078987.36 0.0088 0.0070

Neptune 63952-06-14 05:46 G 25079212.61 25079212.74 25079212.91 0.0088 0.0065

Neptune 63953-01-25 18:43 G 25079438.13 25079438.28 25079438.45 0.0088 0.0060

Neptune 63953-09-08 07:27 G 25079663.66 25079663.81 25079664.00 0.0088 0.0056

Neptune 63954-04-21 20:10 G 25079889.18 25079889.34 25079889.54 0.0088 0.0051

Jupiter 63954-05-07 18:15 G 25079905.06 25079905.26 25079905.47 0.0495 0.0062

Neptune 63954-12-03 09:07 G 25080114.70 25080114.88 25080115.07 0.0088 0.0046

Neptune 63955-07-16 21:51 G 25080340.22 25080340.41 25080340.61 0.0088 0.0042

Neptune 63956-02-27 10:19 G 25080565.74 25080565.93 25080566.14 0.0088 0.0037

Neptune 63956-10-09 23:17 G 25080791.27 25080791.47 25080791.68 0.0088 0.0032

Neptune 63957-05-23 12:00 G 25081016.80 25081017.00 25081017.22 0.0088 0.0027

Neptune 63958-01-04 00:43 G 25081242.32 25081242.53 25081242.75 0.0088 0.0022

Neptune 63958-08-17 13:27 G 25081467.85 25081468.06 25081468.28 0.0088 0.0017

Neptune 63959-03-31 02:10 G 25081693.37 25081693.59 25081693.81 0.0088 0.0013

Jupiter 63959-07-21 17:31 G 25081806.11 25081806.23 25081806.36 0.0538 0.0427

Neptune 63959-11-11 14:53 G 25081918.90 25081919.12 25081919.34 0.0088 0.0008

Jupiter 63960-03-15 22:05 G 25082044.28 25082044.42 25082044.57 0.0530 0.0369

Saturn 63960-03-28 23:17 G 25082057.28 25082057.47 25082057.68 0.0285 0.0097

Neptune 63960-06-24 03:36 G 25082144.43 25082144.65 25082144.87 0.0088 0.0003

Saturn 63960-11-13 17:31 G 25082287.06 25082287.23 25082287.42 0.0286 0.0149

Neptune 63961-02-04 16:19 G 25082369.96 25082370.18 25082370.40 0.0088 0.0002

Neptune 63961-09-18 05:03 G 25082595.49 25082595.71 25082595.93 0.0088 0.0007

Neptune 63962-05-01 17:46 G 25082821.03 25082821.24 25082821.46 0.0088 0.0012

Uranus 63962-08-06 10:48 G 25082917.83 25082917.95 25082918.11 0.0136 0.0105

Neptune 63962-12-13 06:29 G 25083046.56 25083046.77 25083046.99 0.0088 0.0017

Uranus 63963-03-20 18:15 G 25083144.08 25083144.26 25083144.45 0.0136 0.0072

Neptune 63963-07-26 19:12 G 25083272.09 25083272.30 25083272.52 0.0088 0.0022

Uranus 63963-11-02 01:27 G 25083370.36 25083370.56 25083370.77 0.0137 0.0039

Neptune 63964-03-08 07:55 G 25083497.63 25083497.83 25083498.04 0.0088 0.0026

Uranus 63964-06-15 08:39 G 25083596.65 25083596.86 25083597.08 0.0137 0.0006

Neptune 63964-10-19 20:39 G 25083723.17 25083723.36 25083723.58 0.0088 0.0032

Uranus 63965-01-27 16:05 G 25083822.96 25083823.17 25083823.38 0.0137 0.0029

Neptune 63965-06-02 09:22 G 25083948.71 25083948.89 25083949.11 0.0088 0.0037

Uranus 63965-09-10 23:31 G 25084049.29 25084049.48 25084049.68 0.0137 0.0063

Jupiter 63966-01-10 19:41 G 25084171.12 25084171.32 25084171.52 0.0492 0.0114

Neptune 63966-01-13 22:05 G 25084174.25 25084174.42 25084174.64 0.0088 0.0042

Uranus 63966-04-25 06:58 G 25084275.65 25084275.79 25084275.96 0.0137 0.0098

Neptune 63966-08-27 11:17 G 25084399.79 25084399.97 25084400.16 0.0088 0.0046

Uranus 63966-12-07 14:39 G 25084502.07 25084502.11 25084502.19 0.0138 0.0132

Neptune 63967-04-10 00:00 G 25084625.33 25084625.50 25084625.69 0.0088 0.0051

Neptune 63967-11-21 12:43 G 25084850.88 25084851.03 25084851.22 0.0088 0.0056

Neptune 63968-07-04 01:27 G 25085076.42 25085076.56 25085076.74 0.0088 0.0061

Neptune 63969-02-14 14:39 G 25085301.97 25085302.11 25085302.26 0.0089 0.0065

Neptune 63969-09-28 03:22 G 25085527.52 25085527.64 25085527.79 0.0089 0.0070

Neptune 63970-05-11 15:51 G 25085753.07 25085753.16 25085753.31 0.0089 0.0075

Neptune 63970-12-23 05:03 G 25085978.62 25085978.71 25085978.82 0.0089 0.0079

Neptune 63971-08-05 17:31 G 25086204.18 25086204.23 25086204.32 0.0089 0.0084

Jupiter 63971-11-19 12:43 G 25086309.84 25086310.03 25086310.23 0.0533 0.0157

Neptune 63972-03-18 06:29 G 25086429.76 25086429.77 25086429.81 0.0089 0.0088

Pluto 63973-01-10 15:51 G 25086728.04 25086728.16 25086728.30 0.0063 0.0051

Pluto 63973-08-23 19:55 G 25086953.12 25086953.33 25086953.54 0.0063 0.0017

Pluto 63974-04-05 23:31 G 25087178.28 25087178.48 25087178.71 0.0064 0.0018

Saturn 63974-09-12 13:55 G 25087337.89 25087338.08 25087338.28 0.0274 0.0102

Pluto 63974-11-17 03:07 G 25087403.53 25087403.63 25087403.78 0.0064 0.0053

Saturn 63975-04-29 19:27 G 25087567.12 25087567.31 25087567.51 0.0273 0.0110

Jupiter 63977-09-15 23:31 G 25088437.32 25088437.48 25088437.66 0.0491 0.0280

Jupiter 63978-05-09 23:31 G 25088673.33 25088673.48 25088673.63 0.0498 0.0333

Mars 63979-01-12 18:29 G 25088921.11 25088921.27 25088921.44 0.1729 0.0586

Jupiter 63983-07-25 02:10 G 25090575.39 25090575.59 25090575.80 0.0535 0.0064

Jupiter 63989-05-22 04:05 G 25092703.59 25092703.67 25092703.76 0.0489 0.0442

Saturn 63989-10-09 01:55 G 25092843.37 25092843.58 25092843.79 0.0286 0.0071

Jupiter 63990-01-13 02:10 G 25092939.40 25092939.59 25092939.79 0.0496 0.0159

Saturn 63990-05-26 20:10 G 25093073.18 25093073.34 25093073.51 0.0286 0.0174

Jupiter 63995-03-29 14:24 G 25094840.92 25094841.10 25094841.27 0.0537 0.0287

Jupiter 63995-11-22 17:03 G 25095079.15 25095079.21 25095079.28 0.0529 0.0498

65TH MILLENNIUM CE

This is a list of transits of Venus in the 65th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**64001-09-18 06:15**	**G**	**25097205.55**	**25097205.76**	**25097205.96**	**0.0494**	**0.0013**	
Uranus	**64002-11-22 15:07**	**G**	**25097636.01**	**25097636.13**	**25097636.25**	**0.0142**	**0.0118**	
Uranus	**64003-07-07 01:12**	**G**	**25097862.38**	**25097862.55**	**25097862.74**	**0.0142**	**0.0081**	
Uranus	**64004-02-18 11:17**	**G**	**25098088.77**	**25098088.97**	**25098089.19**	**0.0142**	**0.0044**	
Saturn	**64004-03-24 17:17**	**G**	**25098124.02**	**25098124.22**	**25098124.43**	**0.0274**	**0.0073**	
Uranus	**64004-10-01 21:36**	**G**	**25098315.18**	**25098315.40**	**25098315.62**	**0.0141**	**0.0006**	
Saturn	**64004-11-08 23:17**	**G**	**25098353.29**	**25098353.47**	**25098353.65**	**0.0273**	**0.0139**	
Uranus	**64005-05-16 07:27**	**G**	**25098541.60**	**25098541.81**	**25098542.02**	**0.0141**	**0.0032**	
Uranus	**64005-12-28 16:48**	**G**	**25098768.02**	**25098768.20**	**25098768.40**	**0.0141**	**0.0069**	
Mars	**64006-05-31 00:00**	**G**	**25098921.35**	**25098921.50**	**25098921.66**	**0.1799**	**0.0827**	
Uranus	**64006-08-12 02:24**	**G**	**25098994.47**	**25098994.60**	**25098994.75**	**0.0141**	**0.0105**	
Jupiter	**64006-12-01 22:48**	**G**	**25099106.40**	**25099106.45**	**25099106.50**	**0.0539**	**0.0518**	
Jupiter	**64007-07-28 04:05**	**G**	**25099344.50**	**25099344.67**	**25099344.84**	**0.0531**	**0.0280**	
Jupiter	**64013-05-24 09:36**	**G**	**25101471.71**	**25101471.90**	**25101472.09**	**0.0492**	**0.0179**	
Jupiter	**64014-01-15 10:48**	**G**	**25101707.86**	**25101707.95**	**25101708.05**	**0.0499**	**0.0438**	
Saturn	**64018-09-03 19:12**	**G**	**25103400.23**	**25103400.30**	**25103400.37**	**0.0285**	**0.0267**	
Jupiter	**64019-04-01 16:34**	**G**	**25103609.99**	**25103610.19**	**25103610.39**	**0.0534**	**0.0061**	
Saturn	**64019-04-21 13:27**	**G**	**25103629.85**	**25103630.06**	**25103630.27**	**0.0286**	**0.0024**	
Saturn	**64019-12-07 07:55**	**G**	**25103859.70**	**25103859.83**	**25103859.96**	**0.0286**	**0.0221**	

Jupiter 64025-01-27 11:46 G 25105737.85 25105737.99 25105738.14 0.0490 0.0346

Jupiter 64025-09-20 10:34 G 25105973.77 25105973.94 25105974.12 0.0496 0.0260

Neptune 64030-11-16 12:00 G 25107856.97 25107857.00 25107857.06 0.0089 0.0088

Jupiter 64030-12-05 05:31 G 25107875.53 25107875.73 25107875.92 0.0537 0.0161

Neptune 64031-06-30 01:27 G 25108082.49 25108082.56 25108082.65 0.0089 0.0083

Neptune 64032-02-10 14:39 G 25108308.03 25108308.11 25108308.24 0.0089 0.0078

Neptune 64032-09-23 04:05 G 25108533.56 25108533.67 25108533.81 0.0089 0.0074

Saturn 64033-02-17 19:41 G 25108681.24 25108681.32 25108681.42 0.0274 0.0248

Neptune 64033-05-06 17:31 G 25108759.11 25108759.23 25108759.39 0.0089 0.0069

Saturn 64033-10-05 01:55 G 25108910.37 25108910.58 25108910.79 0.0273 0.0036

Neptune 64033-12-18 06:58 G 25108984.65 25108984.79 25108984.95 0.0089 0.0064

Saturn 64034-05-22 07:12 G 25109139.64 25109139.80 25109139.97 0.0273 0.0175

Neptune 64034-07-31 20:24 G 25109210.19 25109210.35 25109210.52 0.0089 0.0059

Neptune 64035-03-14 09:51 G 25109435.74 25109435.91 25109436.09 0.0089 0.0054

Neptune 64035-10-25 22:48 G 25109661.29 25109661.45 25109661.65 0.0089 0.0049

Neptune 64036-06-07 12:00 G 25109886.83 25109887.00 25109887.21 0.0089 0.0045

Neptune 64037-01-19 01:27 G 25110112.38 25110112.56 25110112.77 0.0089 0.0039

Jupiter 64037-05-26 13:41 G 25110239.87 25110240.07 25110240.27 0.0494 0.0088

Neptune 64037-09-01 14:53 G 25110337.93 25110338.12 25110338.33 0.0089 0.0034

Neptune 64038-04-15 04:19 G 25110563.48 25110563.68 25110563.90 0.0089 0.0029

Neptune 64038-11-26 17:31 G 25110789.03 25110789.23 25110789.45 0.0089 0.0024

Neptune 64039-07-10 06:58 G 25111014.58 25111014.79 25111015.01 0.0089 0.0019

Neptune 64040-02-20 20:10 G 25111240.13 25111240.34 25111240.57 0.0089 0.0015

Neptune 64040-10-03 09:36 G 25111465.69 25111465.90 25111466.13 0.0089 0.0009

Neptune 64041-05-16 23:03 G 25111691.25 25111691.46 25111691.69 0.0089 0.0004

Neptune 64041-12-28 12:29 G 25111916.80 25111917.02 25111917.24 0.0089 0.0001

Jupiter 64042-08-09 18:15 G 25112141.12 25112141.26 25112141.40 0.0538 0.0383

Neptune 64042-08-11 01:41 G 25112142.36 25112142.57 25112142.80 0.0089 0.0007

Neptune 64043-03-24 15:07 G 25112367.92 25112368.13 25112368.36 0.0089 0.0012

Jupiter 64043-04-04 22:48 G 25112379.32 25112379.45 25112379.58 0.0530 0.0410

Neptune 64043-11-05 04:19 G 25112593.48 25112593.68 25112593.91 0.0089 0.0017

Neptune 64044-06-17 17:46 G 25112819.03 25112819.24 25112819.46 0.0089 0.0022

Mars 64044-11-09 03:51 G 25112963.52 25112963.66 25112963.80 0.1732 0.0998

Neptune 64045-01-29 06:58 G 25113044.59 25113044.79 25113045.01 0.0089 0.0027

Neptune 64045-09-11 20:10 G 25113270.15 25113270.34 25113270.56 0.0089 0.0032

Uranus 64046-04-05 20:24 G 25113476.25 25113476.35 25113476.46 0.0136 0.0119

Neptune 64046-04-25 09:36 G 25113495.71 25113495.90 25113496.11 0.0089 0.0037

Uranus 64046-11-18 03:22 G 25113702.48 25113702.64 25113702.81 0.0136 0.0087

Neptune 64046-12-06 22:48 G 25113721.27 25113721.45 25113721.66 0.0089 0.0042

Uranus 64047-07-02 10:19 G 25113928.73 25113928.93 25113929.14 0.0136 0.0053

Neptune 64047-07-20 12:00 G 25113946.83 25113947.00 25113947.20 0.0089 0.0047

Uranus 64048-02-13 17:31 G 25114155.02 25114155.23 25114155.45 0.0137 0.0020

Neptune 64048-03-02 01:12 G 25114172.39 25114172.55 25114172.75 0.0089 0.0052

Saturn 64048-03-15 21:51 G 25114186.30 25114186.41 25114186.53 0.0285 0.0241

Uranus 64048-09-27 00:58 G 25114381.32 25114381.54 25114381.76 0.0137 0.0014

Neptune 64048-10-13 14:39 G 25114397.95 25114398.11 25114398.29 0.0089 0.0056

Saturn 64048-10-31 15:51 G 25114415.95 25114416.16 25114416.37 0.0286 0.0003

Jupiter 64049-01-29 17:03 G 25114506.01 25114506.21 25114506.41 0.0493 0.0082

Uranus 64049-05-11 08:10 G 25114607.65 25114607.84 25114608.06 0.0137 0.0048

Neptune 64049-05-27 03:51 G 25114623.51 25114623.66 25114623.83 0.0089 0.0061

Saturn 64049-06-18 10:05 G 25114645.83 25114645.92 25114646.04 0.0286 0.0247

Uranus 64049-12-23 15:36 G 25114833.99 25114834.15 25114834.34 0.0137 0.0083

Neptune 64050-01-07 16:48 G 25114849.07 25114849.20 25114849.37 0.0089 0.0066

Uranus 64050-08-06 23:17 G 25115060.37 25115060.47 25115060.60 0.0137 0.0117

Neptune 64050-08-21 06:00 G 25115074.64 25115074.75 25115074.90 0.0089 0.0071

Neptune 64051-04-03 19:41 G 25115300.21 25115300.32 25115300.44 0.0089 0.0075

Neptune 64051-11-15 08:39 G 25115525.78 25115525.86 25115525.97 0.0089 0.0080

Neptune 64052-06-27 21:36 G 25115751.36 25115751.40 25115751.48 0.0089 0.0085

Jupiter 64054-12-08 12:15 G 25116644.83 25116645.01 25116645.20 0.0532 0.0196

Moon 64060-06-11 15:22 G 25118657.00 25118657.14 25118657.29 0.2682 0.1043

Earth 64060-06-11 19:55 G 25118657.21 25118657.33 25118657.44 0.2677 0.1814 *

Jupiter 64060-10-04 21:51 G 25118772.23 25118772.41 25118772.59 0.0491 0.0247

Jupiter 64061-05-28 22:05 G 25119008.29 25119008.42 25119008.56 0.0498 0.0365

Saturn 64062-08-30 22:05 G 25119467.30 25119467.42 25119467.55 0.0274 0.0221

Pluto 64063-02-27 04:19 G 25119647.54 25119647.68 25119647.85 0.0080 0.0057

Saturn 64063-04-17 04:19 G 25119696.47 25119696.68 25119696.89 0.0273 0.0010

Pluto 64063-10-10 15:22 G 25119872.92 25119873.14 25119873.35 0.0080 0.0014

Saturn 64063-12-02 10:05 G 25119925.78 25119925.92 25119926.06 0.0273 0.0201

Jupiter 64066-08-12 22:34 G 25120910.23 25120910.44 25120910.64 0.0535 0.0031

Moon 64068-06-09 09:22 G 25121576.79 25121576.89 25121577.00 0.2686 0.1849

Earth 64068-06-09 09:51 G 25121576.79 25121576.91 25121577.03 0.2678 0.1714 *

Mars 64072-03-27 06:43 G 25122963.61 25122963.78 25122963.95 0.1795 0.0275

Jupiter 64072-06-10 01:55 G 25123038.48 25123038.58 25123038.70 0.0490 0.0408

Jupiter 64073-02-01 00:15 G 25123274.33 25123274.51 25123274.70 0.0496 0.0193

Saturn 64077-09-26 07:41 G 25124972.67 25124972.82 25124972.98 0.0285 0.0199

Jupiter 64078-04-17 09:51 G 25125175.73 25125175.91 25125176.09 0.0537 0.0255

Saturn 64078-05-14 02:10 G 25125202.38 25125202.59 25125202.80 0.0286 0.0046

Jupiter 64078-12-11 12:29 G 25125414.00 25125414.02 25125414.04 0.0529 0.0525

Jupiter 64084-10-07 01:41 G 25127540.36 25127540.57 25127540.77 0.0493 0.0018

Uranus 64086-07-22 21:22 G 25128194.34 25128194.39 25128194.46 0.0142 0.0136

Uranus 64087-03-06 07:41 G 25128420.68 25128420.82 25128420.99 0.0142 0.0099

Uranus 64087-10-18 18:00 G 25128647.06 25128647.25 25128647.45 0.0142 0.0061

Uranus 64088-06-01 04:05 G 25128873.46 25128873.67 25128873.89 0.0141 0.0023

Uranus 64089-01-13 13:55 G 25129099.87 25129100.08 25129100.30 0.0141 0.0015

Uranus 64089-08-27 23:46 G 25129326.29 25129326.49 25129326.70 0.0141 0.0051

Jupiter 64089-12-20 20:53 G 25129441.29 25129441.37 25129441.47 0.0539 0.0480

Uranus 64090-04-11 09:07 G 25129552.73 25129552.88 25129553.06 0.0141 0.0088

Jupiter 64090-08-16 03:07 G 25129679.47 25129679.63 25129679.79 0.0532 0.0318

Uranus 64090-11-23 18:43 G 25129779.19 25129779.28 25129779.39 0.0141 0.0124

Saturn 64092-03-12 07:12 G 25130253.65 25130253.80 25130253.96 0.0274 0.0183

Saturn 64092-10-27 13:12 G 25130482.84 25130483.05 25130483.26 0.0273 0.0029

Saturn 64093-06-13 18:15 G 25130712.17 25130712.26 25130712.37 0.0273 0.0238

Jupiter 64096-06-12 05:17 G 25131806.53 25131806.72 25131806.92 0.0492 0.0150

Jupiter 64097-02-03 06:15 G 25132042.69 25132042.76 25132042.84 0.0499 0.0463

Jupiter 64102-04-21 17:31 G 25133945.03 25133945.23 25133945.43 0.0534 0.0103

Saturn 64107-04-09 10:19 G 25135758.77 25135758.93 25135759.10 0.0285 0.0172

Saturn 64107-11-25 04:34 G 25135988.48 25135988.69 25135988.89 0.0286 0.0072

Jupiter 64108-02-17 09:22 G 25136072.74 25136072.89 25136073.05 0.0490 0.0314

Jupiter 64108-10-10 08:39 G 25136308.70 25136308.86 25136309.03 0.0497 0.0292

Mars 64110-09-07 12:58 G 25137005.95 25137006.04 25137006.14 0.1736 0.1414

Neptune 64113-08-16 01:27 G 25138079.53 25138079.56 25138079.62 0.0088 0.0086

Jupiter 64113-12-25 06:15 G 25138210.56 25138210.76 25138210.96 0.0536 0.0117

Neptune 64114-03-29 13:55 G 25138305.02 25138305.08 25138305.18 0.0088 0.0082

Neptune 64114-11-10 02:39 G 25138530.53 25138530.61 25138530.73 0.0088 0.0077

Neptune 64115-06-23 15:07 G 25138756.03 25138756.13 25138756.28 0.0088 0.0073

Neptune 64116-02-04 04:05 G 25138981.55 25138981.67 25138981.82 0.0088 0.0068

Neptune 64116-09-16 17:17 G 25139207.07 25139207.22 25139207.37 0.0088 0.0063

Neptune 64117-04-30 05:31 G 25139432.59 25139432.73 25139432.92 0.0088 0.0059

Neptune 64117-12-11 18:29 G 25139658.11 25139658.27 25139658.45 0.0088 0.0054

Neptune 64118-07-25 07:12 G 25139883.63 25139883.80 25139883.99 0.0088 0.0049

Neptune 64119-03-07 19:41 G 25140109.15 25140109.32 25140109.53 0.0088 0.0045

Neptune 64119-10-19 08:39 G 25140334.68 25140334.86 25140335.07 0.0088 0.0040

Jupiter 64119-10-23 14:53 G 25140339.07 25140339.12 25140339.17 0.0489 0.0472

Neptune 64120-05-31 21:36 G 25140560.21 25140560.40 25140560.61 0.0088 0.0035

Jupiter 64120-06-15 12:29 G 25140574.82 25140575.02 25140575.22 0.0495 0.0122

Neptune 64121-01-12 10:19 G 25140785.73 25140785.93 25140786.14 0.0088 0.0030

Neptune 64121-08-25 23:17 G 25141011.26 25141011.47 25141011.68 0.0088 0.0025

Saturn 64121-09-23 08:53 G 25141039.69 25141039.87 25141040.04 0.0274 0.0158

Neptune 64122-04-08 12:00 G 25141236.79 25141237.00 25141237.22 0.0088 0.0020

Saturn 64122-05-10 14:39 G 25141268.90 25141269.11 25141269.32 0.0273 0.0053

Neptune 64122-11-20 00:43 G 25141462.32 25141462.53 25141462.75 0.0088 0.0016

Saturn 64122-12-25 20:10 G 25141498.29 25141498.34 25141498.40 0.0273 0.0262

Neptune 64123-07-03 13:27 G 25141687.84 25141688.06 25141688.28 0.0088 0.0011

Neptune 64124-02-14 02:10 G 25141913.37 25141913.59 25141913.81 0.0088 0.0006

Neptune 64124-09-26 15:07 G 25142138.91 25142139.13 25142139.35 0.0088 0.0001

Neptune 64125-05-10 03:51 G 25142364.44 25142364.66 25142364.88 0.0088 0.0004

Jupiter 64125-08-29 15:51 G 25142476.01 25142476.16 25142476.32 0.0538 0.0345

Neptune 64125-12-21 16:19 G 25142589.97 25142590.18 25142590.40 0.0088 0.0009

Jupiter 64126-04-24 19:41 G 25142714.22 25142714.32 25142714.44 0.0530 0.0441

Neptune 64126-08-04 05:03 G 25142815.50 25142815.71 25142815.93 0.0088 0.0014

Neptune 64127-03-17 17:46 G 25143041.03 25143041.24 25143041.46 0.0088 0.0019

Neptune 64127-10-29 06:29 G 25143266.57 25143266.77 25143266.99 0.0088 0.0024

Neptune 64128-06-10 19:12 G 25143492.10 25143492.30 25143492.52 0.0088 0.0029

Neptune 64129-01-22 07:55 G 25143717.64 25143717.83 25143718.04 0.0088 0.0033

Neptune 64129-09-04 20:39 G 25143943.18 25143943.36 25143943.57 0.0088 0.0038

Uranus 64129-12-05 04:48 G 25144034.68 25144034.70 25144034.75 0.0136 0.0134

Neptune 64130-04-18 09:22 G 25144168.72 25144168.89 25144169.10 0.0088 0.0043

Uranus 64130-07-19 11:46 G 25144260.86 25144260.99 25144261.15 0.0136 0.0102

Neptune 64130-11-29 22:34 G 25144394.26 25144394.44 25144394.62 0.0088 0.0048

Uranus 64131-03-02 18:58 G 25144487.11 25144487.29 25144487.49 0.0136 0.0068

Neptune 64131-07-13 11:03 G 25144619.80 25144619.96 25144620.15 0.0088 0.0053

Uranus 64131-10-15 02:10 G 25144713.39 25144713.59 25144713.81 0.0137 0.0035

Jupiter 64132-02-19 15:36 G 25144840.95 25144841.15 25144841.36 0.0493 0.0048

Neptune 64132-02-23 23:46 G 25144845.34 25144845.49 25144845.67 0.0088 0.0058

Uranus 64132-05-28 09:36 G 25144939.68 25144939.90 25144940.11 0.0137 0.0003

Neptune 64132-10-06 12:43 G 25145070.89 25145071.03 25145071.20 0.0088 0.0062

Uranus 64133-01-09 16:34 G 25145165.99 25145166.19 25145166.41 0.0137 0.0033

Neptune 64133-05-20 01:41 G 25145296.44 25145296.57 25145296.73 0.0089 0.0067

Uranus 64133-08-24 00:00 G 25145392.33 25145392.50 25145392.71 0.0137 0.0067

Neptune 64133-12-31 14:24 G 25145521.99 25145522.10 25145522.24 0.0089 0.0072

Uranus 64134-04-07 08:10 G 25145618.69 25145618.84 25145618.99 0.0137 0.0101

Neptune 64134-08-14 03:36 G 25145747.54 25145747.65 25145747.76 0.0089 0.0076

Uranus 64134-11-19 15:51 G 25145845.13 25145845.16 25145845.20 0.0138 0.0135

Neptune 64135-03-27 16:05 G 25145973.10 25145973.17 25145973.27 0.0089 0.0081

Neptune 64135-11-08 04:48 G 25146198.67 25146198.70 25146198.78 0.0089 0.0086

Saturn 64136-10-19 18:43 G 25146545.10 25146545.28 25146545.47 0.0285 0.0133

Saturn 64137-06-06 13:12 G 25146774.86 25146775.05 25146775.25 0.0286 0.0113

Jupiter 64137-12-28 08:39 G 25146979.68 25146979.86 25146980.05 0.0532 0.0228

Mars 64138-01-23 13:27 G 25147005.89 25147006.06 25147006.23 0.1791 0.0276

Mars 64142-09-06 15:07 G 25148693.04 25148693.13 25148693.23 0.1725 0.1447

Jupiter 64143-10-25 18:15 G 25149107.08 25149107.26 25149107.44 0.0491 0.0216

Jupiter 64144-06-17 18:00 G 25149343.13 25149343.25 25149343.38 0.0498 0.0392

Jupiter 64149-09-01 21:36 G 25151245.19 25151245.40 25151245.60 0.0535 0.0014

Saturn 64151-04-05 17:31 G 25151826.05 25151826.23 25151826.42 0.0274 0.0121

Saturn 64151-11-20 23:31 G 25152055.28 25152055.48 25152055.68 0.0273 0.0091

Jupiter 64155-06-30 22:48 G 25153373.32 25153373.45 25153373.58 0.0489 0.0377

Jupiter 64156-02-21 20:39 G 25153609.18 25153609.36 25153609.54 0.0496 0.0221

Jupiter 64161-05-07 10:48 G 25155510.77 25155510.95 25155511.14 0.0537 0.0211

Moon 64165-12-14 18:15 G 25157193.11 25157193.26 25157193.41 0.2658 0.0565

Earth 64165-12-14 22:05 G 25157193.27 25157193.42 25157193.58 0.2654 0.0630 *

Saturn 64166-05-01 21:36 G 25157331.21 25157331.40 25157331.60 0.0285 0.0105

Saturn 64166-12-17 15:51 G 25157560.97 25157561.16 25157561.34 0.0286 0.0139

Jupiter 64167-10-28 00:00 G 25157875.30 25157875.50 25157875.70 0.0494 0.0051

Uranus 64170-11-04 14:10 G 25158978.98 25158979.09 25158979.23 0.0142 0.0116

Uranus 64171-06-19 00:15 G 25159205.35 25159205.51 25159205.71 0.0142 0.0079

Uranus 64172-01-31 10:48 G 25159431.74 25159431.95 25159432.16 0.0142 0.0041

Uranus 64172-09-13 20:53 G 25159658.15 25159658.37 25159658.59 0.0141 0.0003

Jupiter 64173-01-09 23:03 G 25159776.34 25159776.46 25159776.58 0.0539 0.0432

Uranus 64173-04-28 06:29 G 25159884.57 25159884.77 25159884.99 0.0141 0.0034

Jupiter 64173-09-05 04:19 G 25160014.54 25160014.68 25160014.84 0.0531 0.0360

Uranus 64173-12-10 16:05 G 25160110.99 25160111.17 25160111.37 0.0141 0.0071

Earth 64173-12-12 14:10 G 25160113.06 25160113.09 25160113.13 0.2653 0.2564

Uranus 64174-07-25 01:41 G 25160337.44 25160337.57 25160337.72 0.0141 0.0107

Jupiter 64179-07-03 04:19 G 25162141.49 25162141.68 25162141.88 0.0492 0.0115

Jupiter 64180-02-24 06:00 G 25162377.74 25162377.75 25162377.77 0.0500 0.0497

Saturn 64180-10-15 18:15 G 25162612.07 25162612.26 25162612.46 0.0274 0.0097

Saturn 64181-06-02 00:00 G 25162841.31 25162841.50 25162841.69 0.0273 0.0114

Jupiter 64185-05-10 16:05 G 25164279.97 25164280.17 25164280.37 0.0533 0.0141

Jupiter 64191-03-08 08:39 G 25166407.69 25166407.86 25166408.03 0.0490 0.0278

Jupiter 64191-10-30 08:10 G 25166643.69 25166643.84 25166644.00 0.0497 0.0327

Neptune 64195-02-18 22:34 G 25167851.39 25167851.44 25167851.51 0.0089 0.0086

Neptune 64195-10-02 11:46 G 25168076.92 25168076.99 25168077.10 0.0089 0.0081

Saturn 64195-11-12 04:19 G 25168117.47 25168117.68 25168117.89 0.0286 0.0069

Neptune 64196-05-15 01:12 G 25168302.45 25168302.55 25168302.68 0.0089 0.0077

Saturn 64196-06-28 22:48 G 25168347.29 25168347.45 25168347.62 0.0286 0.0176

Neptune 64196-12-26 14:39 G 25168527.99 25168528.11 25168528.25 0.0089 0.0072

Jupiter 64197-01-13 03:36 G 25168545.45 25168545.65 25168545.86 0.0536 0.0082

Neptune 64197-08-09 04:19 G 25168753.54 25168753.68 25168753.83 0.0089 0.0067

Neptune 64198-03-22 18:00 G 25168979.09 25168979.25 25168979.40 0.0089 0.0062

Neptune 64198-11-03 06:43 G 25169204.63 25169204.78 25169204.97 0.0089 0.0058

Neptune 64199-06-16 20:10 G 25169430.18 25169430.34 25169430.53 0.0089 0.0052

Neptune 64200-01-28 09:22 G 25169655.72 25169655.89 25169656.10 0.0089 0.0048

Neptune 64200-09-10 22:48 G 25169881.27 25169881.45 25169881.66 0.0089 0.0043

Neptune 64201-04-24 12:15 G 25170106.82 25170107.01 25170107.22 0.0089 0.0037

Neptune 64201-12-06 01:27 G 25170332.37 25170332.56 25170332.78 0.0089 0.0033

Neptune 64202-07-19 14:53 G 25170557.92 25170558.12 25170558.34 0.0089 0.0027

Jupiter 64202-11-12 12:15 G 25170673.93 25170674.01 25170674.10 0.0488 0.0439

Neptune 64203-03-02 04:19 G 25170783.47 25170783.68 25170783.90 0.0089 0.0022

Jupiter 64203-07-06 09:22 G 25170909.70 25170909.89 25170910.09 0.0495 0.0152

Neptune 64203-10-13 17:31 G 25171009.02 25171009.23 25171009.46 0.0089 0.0017

Mars 64203-11-21 20:10 G 25171048.19 25171048.34 25171048.50 0.1787 0.0815

Neptune 64204-05-26 06:58 G 25171234.57 25171234.79 25171235.01 0.0089 0.0012

Neptune 64205-01-06 20:10 G 25171460.13 25171460.34 25171460.57 0.0089 0.0007

Neptune 64205-08-20 09:36 G 25171685.68 25171685.90 25171686.12 0.0089 0.0002

Neptune 64206-04-02 23:03 G 25171911.24 25171911.46 25171911.68 0.0089 0.0003

Neptune 64206-11-14 12:15 G 25172136.79 25172137.01 25172137.23 0.0089 0.0008

Neptune 64207-06-28 01:27 G 25172362.35 25172362.56 25172362.78 0.0089 0.0014

Neptune 64208-02-08 14:53 G 25172587.90 25172588.12 25172588.34 0.0089 0.0018

Mars 64208-07-05 01:12 G 25172735.41 25172735.55 25172735.68 0.1729 0.1069

Jupiter 64208-09-18 14:39 G 25172810.95 25172811.11 25172811.28 0.0538 0.0307

Neptune 64208-09-21 04:19 G 25172813.46 25172813.68 25172813.89 0.0089 0.0024

Neptune 64209-05-04 17:17 G 25173039.03 25173039.22 25173039.45 0.0089 0.0029

Jupiter 64209-05-14 19:27 G 25173049.23 25173049.31 25173049.40 0.0530 0.0479

Saturn 64209-09-11 20:39 G 25173169.34 25173169.36 25173169.40 0.0274 0.0271

Neptune 64209-12-16 06:58 G 25173264.59 25173264.79 25173264.99 0.0089 0.0033

Saturn 64210-04-29 02:53 G 25173398.42 25173398.62 25173398.83 0.0274 0.0060

Neptune 64210-07-29 20:10 G 25173490.14 25173490.34 25173490.54 0.0089 0.0038

Saturn 64210-12-14 08:24 G 25173627.69 25173627.85 25173628.04 0.0273 0.0151

Neptune 64211-03-12 09:36 G 25173715.71 25173715.90 25173716.09 0.0089 0.0043

Neptune 64211-10-23 22:48 G 25173941.27 25173941.45 25173941.64 0.0089 0.0048

Neptune 64212-06-05 12:00 G 25174166.83 25174167.00 25174167.18 0.0089 0.0053

Neptune 64213-01-17 00:58 G 25174392.39 25174392.54 25174392.72 0.0089 0.0058

Neptune 64213-08-30 14:10 G 25174617.95 25174618.09 25174618.26 0.0089 0.0063

Uranus 64214-03-19 20:39 G 25174819.26 25174819.36 25174819.49 0.0136 0.0116

Neptune 64214-04-13 03:22 G 25174843.52 25174843.64 25174843.80 0.0089 0.0068

Uranus 64214-11-01 03:36 G 25175045.49 25175045.65 25175045.84 0.0136 0.0083

Neptune 64214-11-24 17:03 G 25175069.08 25175069.21 25175069.34 0.0089 0.0072

Jupiter 64215-03-11 12:58 G 25175175.84 25175176.04 25175176.25 0.0493 0.0018

Uranus 64215-06-15 10:48 G 25175271.75 25175271.95 25175272.16 0.0136 0.0050

Neptune 64215-07-08 05:46 G 25175294.65 25175294.74 25175294.86 0.0089 0.0077

Uranus 64216-01-27 18:00 G 25175498.04 25175498.25 25175498.47 0.0137 0.0016

Neptune 64216-02-18 18:43 G 25175520.22 25175520.28 25175520.39 0.0089 0.0082

Uranus 64216-09-10 01:27 G 25175724.34 25175724.56 25175724.78 0.0137 0.0018

Neptune 64216-10-01 08:24 G 25175745.80 25175745.85 25175745.90 0.0089 0.0086

Uranus 64217-04-24 08:53 G 25175950.67 25175950.87 25175951.08 0.0137 0.0052

Uranus 64217-12-06 16:34 G 25176177.02 25176177.19 25176177.36 0.0137 0.0086

Uranus 64218-07-21 00:15 G 25176403.41 25176403.51 25176403.62 0.0137 0.0120

Jupiter 64220-05-24 03:22 G 25177076.59 25177076.64 25177076.68 0.0540 0.0526

Jupiter 64221-01-17 10:19 G 25177314.76 25177314.93 25177315.11 0.0533 0.0270

Pluto 64221-07-28 17:31 G 25177507.16 25177507.23 25177507.35 0.0063 0.0057

Pluto 64222-03-10 21:51 G 25177732.21 25177732.41 25177732.62 0.0063 0.0023

Pluto 64222-10-22 01:55 G 25177957.36 25177957.58 25177957.80 0.0064 0.0011

Pluto 64223-06-04 05:17 G 25178182.59 25178182.72 25178182.90 0.0064 0.0046

Saturn 64224-10-07 13:41 G 25178674.04 25178674.07 25178674.10 0.0285 0.0281

Saturn 64225-05-25 07:27 G 25178903.60 25178903.81 25178904.02 0.0285 0.0041

Saturn 64226-01-10 01:41 G 25179133.42 25179133.57 25179133.72 0.0286 0.0203

Jupiter 64226-11-14 17:03 G 25179442.02 25179442.21 25179442.40 0.0491 0.0181

Jupiter 64227-07-08 17:03 G 25179678.12 25179678.21 25179678.32 0.0498 0.0426

Jupiter 64232-09-22 00:00 G 25181580.30 25181580.50 25181580.71 0.0535 0.0056

Jupiter 64238-07-20 22:05 G 25183708.28 25183708.42 25183708.57 0.0490 0.0342

Jupiter 64239-03-13 20:39 G 25183944.18 25183944.36 25183944.53 0.0496 0.0257

Saturn 64239-03-24 19:55 G 25183955.26 25183955.33 25183955.43 0.0274 0.0250

Saturn 64239-11-09 02:39 G 25184184.40 25184184.61 25184184.82 0.0273 0.0038

Saturn 64240-06-25 08:10 G 25184413.68 25184413.84 25184414.01 0.0273 0.0172

Jupiter 64244-05-27 11:03 G 25185845.77 25185845.96 25185846.16 0.0537 0.0168

Jupiter 64250-11-17 00:00 G 25188210.30 25188210.50 25188210.70 0.0494 0.0089

Saturn 64254-04-19 18:43 G 25189460.19 25189460.28 25189460.39 0.0285 0.0250

Uranus 64254-07-05 20:10 G 25189537.29 25189537.34 25189537.43 0.0142 0.0134

Saturn 64254-12-05 12:43 G 25189689.82 25189690.03 25189690.25 0.0286 0.0010

Uranus 64255-02-17 06:43 G 25189763.63 25189763.78 25189763.94 0.0142 0.0096

Saturn 64255-07-23 06:58 G 25189919.69 25189919.79 25189919.92 0.0286 0.0237

Uranus 64255-10-01 16:48 G 25189990.02 25189990.20 25189990.41 0.0142 0.0059

Jupiter 64256-01-30 21:51 G 25190111.27 25190111.41 25190111.55 0.0539 0.0392

Uranus 64256-05-15 03:07 G 25190216.42 25190216.63 25190216.85 0.0142 0.0021

Jupiter 64256-09-25 02:39 G 25190349.49 25190349.61 25190349.76 0.0531 0.0395

Uranus 64256-12-27 12:58 G 25190442.82 25190443.04 25190443.26 0.0141 0.0016

Uranus 64257-08-10 22:48 G 25190669.25 25190669.45 25190669.65 0.0141 0.0054

Uranus 64258-03-25 08:10 G 25190895.68 25190895.84 25190896.01 0.0141 0.0090

Uranus 64258-11-06 17:31 G 25191122.15 25191122.23 25191122.34 0.0141 0.0127

Jupiter 64262-07-23 02:39 G 25192476.41 25192476.61 25192476.81 0.0492 0.0081

Jupiter 64268-05-30 15:36 G 25194614.96 25194615.15 25194615.34 0.0534 0.0180

Saturn 64268-10-04 04:34 G 25194741.56 25194741.69 25194741.83 0.0274 0.0213

Saturn 64269-05-21 10:48 G 25194970.74 25194970.95 25194971.16 0.0274 0.0002

Mars 64269-09-18 03:07 G 25195090.51 25195090.63 25195090.74 0.1784 0.1349

Saturn 64270-01-05 16:19 G 25195200.05 25195200.18 25195200.32 0.0273 0.0209

Jupiter 64274-03-28 07:12 G 25196742.62 25196742.80 25196742.98 0.0490 0.0244

Mars 64274-05-02 10:05 G 25196777.76 25196777.92 25196778.08 0.1732 0.0654

Jupiter 64274-11-19 06:00 G 25196978.62 25196978.75 25196978.90 0.0497 0.0357

Neptune 64277-11-18 12:58 G 25198073.99 25198074.04 25198074.11 0.0088 0.0084

Neptune 64278-07-02 01:12 G 25198299.49 25198299.55 25198299.67 0.0088 0.0080

Neptune 64279-02-12 14:10 G 25198524.99 25198525.09 25198525.22 0.0088 0.0075

Neptune 64279-09-26 02:53 G 25198750.51 25198750.62 25198750.77 0.0088 0.0071

Jupiter 64280-02-03 05:17 G 25198880.52 25198880.72 25198880.92 0.0536 0.0037

Neptune 64280-05-08 15:36 G 25198976.02 25198976.15 25198976.31 0.0088 0.0066

Neptune 64280-12-20 04:05 G 25199201.54 25199201.67 25199201.85 0.0088 0.0062

Neptune 64281-08-02 16:48 G 25199427.05 25199427.20 25199427.39 0.0088 0.0057

Neptune 64282-03-16 05:46 G 25199652.57 25199652.74 25199652.93 0.0088 0.0052

Neptune 64282-10-27 18:43 G 25199878.09 25199878.28 25199878.46 0.0088 0.0047

Neptune 64283-06-10 06:58 G 25200103.62 25200103.79 25200104.00 0.0088 0.0043

Saturn 64283-10-30 22:05 G 25200246.30 25200246.42 25200246.57 0.0284 0.0220

Neptune 64284-01-21 19:55 G 25200329.14 25200329.33 25200329.54 0.0088 0.0038

Saturn 64284-06-16 16:05 G 25200475.96 25200476.17 25200476.38 0.0285 0.0022

Neptune 64284-09-03 08:39 G 25200554.67 25200554.86 25200555.08 0.0088 0.0033

Saturn 64285-02-01 10:05 G 25200705.85 25200705.92 25200706.00 0.0286 0.0264

Neptune 64285-04-16 21:36 G 25200780.20 25200780.40 25200780.61 0.0088 0.0028

Neptune 64285-11-28 10:19 G 25201005.72 25201005.93 25201006.15 0.0088 0.0023

Jupiter 64285-12-01 11:46 G 25201008.88 25201008.99 25201009.10 0.0489 0.0404

Neptune 64286-07-11 22:48 G 25201231.25 25201231.45 25201231.68 0.0088 0.0019

Jupiter 64286-07-25 08:53 G 25201244.68 25201244.87 25201245.06 0.0495 0.0187

Neptune 64287-02-22 11:46 G 25201456.78 25201456.99 25201457.21 0.0088 0.0014

Neptune 64287-10-06 00:43 G 25201682.31 25201682.53 25201682.75 0.0088 0.0009

Neptune 64288-05-18 13:27 G 25201907.85 25201908.06 25201908.28 0.0088 0.0004

Neptune 64288-12-30 02:10 G 25202133.37 25202133.59 25202133.81 0.0088 0.0002

Neptune 64289-08-12 14:53 G 25202358.90 25202359.12 25202359.34 0.0088 0.0006

Neptune 64290-03-26 03:36 G 25202584.44 25202584.65 25202584.87 0.0088 0.0011

Neptune 64290-11-06 16:34 G 25202809.97 25202810.19 25202810.40 0.0088 0.0016

Neptune 64291-06-20 05:03 G 25203035.50 25203035.71 25203035.93 0.0088 0.0021

Jupiter 64291-10-08 18:15 G 25203146.09 25203146.26 25203146.44 0.0538 0.0256

Neptune 64292-01-31 17:46 G 25203261.04 25203261.24 25203261.46 0.0088 0.0025

Jupiter 64292-06-02 22:19 G 25203384.41 25203384.43 25203384.47 0.0530 0.0522

Neptune 64292-09-13 06:29 G 25203486.58 25203486.77 25203486.99 0.0088 0.0031

Neptune 64293-04-26 19:12 G 25203712.11 25203712.30 25203712.51 0.0088 0.0035

Neptune 64293-12-08 07:55 G 25203937.65 25203937.83 25203938.04 0.0088 0.0040

Neptune 64294-07-21 20:53 G 25204163.18 25204163.37 25204163.56 0.0088 0.0045

Neptune 64295-03-04 09:22 G 25204388.72 25204388.89 25204389.09 0.0088 0.0050

Neptune 64295-10-15 22:19 G 25204614.27 25204614.43 25204614.62 0.0088 0.0055

Neptune 64296-05-28 11:03 G 25204839.82 25204839.96 25204840.14 0.0088 0.0060

Neptune 64297-01-09 00:00 G 25205065.36 25205065.50 25205065.66 0.0088 0.0064

Neptune 64297-08-22 12:43 G 25205290.91 25205291.03 25205291.18 0.0088 0.0069

Uranus 64297-11-17 05:17 G 25205377.67 25205377.72 25205377.79 0.0136 0.0130

Jupiter 64298-03-30 13:12 G 25205510.84 25205511.05 25205511.25 0.0493 0.0021

Neptune 64298-04-05 01:27 G 25205516.46 25205516.56 25205516.70 0.0089 0.0074

Saturn 64298-04-16 03:51 G 25205527.51 25205527.66 25205527.81 0.0274 0.0193

Uranus 64298-07-01 12:15 G 25205603.87 25205604.01 25205604.17 0.0136 0.0098

Neptune 64298-11-16 14:39 G 25205742.02 25205742.11 25205742.23 0.0089 0.0078

Saturn 64298-12-01 10:05 G 25205756.71 25205756.92 25205757.13 0.0273 0.0019

Uranus 64299-02-12 19:12 G 25205830.12 25205830.30 25205830.50 0.0136 0.0065

Neptune 64299-06-30 03:22 G 25205967.58 25205967.64 25205967.74 0.0089 0.0083

Saturn 64299-07-18 15:36 G 25205986.04 25205986.15 25205986.27 0.0273 0.0228

Uranus 64299-09-27 02:39 G 25206056.40 25206056.61 25206056.82 0.0137 0.0031

Neptune 64300-02-10 16:19 G 25206193.16 25206193.18 25206193.23 0.0089 0.0087

Uranus 64300-05-11 10:05 G 25206282.70 25206282.92 25206283.13 0.0137 0.0004

Uranus 64300-12-23 17:17 G 25206509.01 25206509.22 25206509.43 0.0137 0.0037

Uranus 64301-08-07 00:43 G 25206735.35 25206735.53 25206735.73 0.0137 0.0071

Uranus 64302-03-21 08:24 G 25206961.73 25206961.85 25206962.00 0.0137 0.0105

Jupiter 64303-06-14 04:48 G 25207411.62 25207411.70 25207411.80 0.0540 0.0479

Earth 64303-06-15 19:55 G 25207413.22 25207413.33 25207413.45 0.2678 0.1815

Jupiter 64304-02-07 11:03 G 25207649.80 25207649.96 25207650.13 0.0532 0.0312

Jupiter 64309-12-04 17:31 G 25209777.03 25209777.23 25209777.42 0.0491 0.0143

Jupiter 64310-07-28 18:00 G 25210013.18 25210013.25 25210013.33 0.0499 0.0462

Earth 64311-06-13 09:51 G 25210332.79 25210332.91 25210333.04 0.2680 0.1722

Moon 64311-06-13 12:29 G 25210332.89 25210333.02 25210333.15 0.2673 0.1648 *

Pluto 64311-09-15 05:46 G 25210426.64 25210426.74 25210426.87 0.0081 0.0069

Pluto 64312-04-27 16:48 G 25210651.98 25210652.20 25210652.42 0.0080 0.0002

Pluto 64312-12-09 02:39 G 25210877.53 25210877.61 25210877.73 0.0080 0.0071

Saturn 64313-05-13 02:10 G 25211032.44 25211032.59 25211032.75 0.0285 0.0191

Saturn 64313-12-28 20:10 G 25211262.13 25211262.34 25211262.55 0.0286 0.0051

Jupiter 64315-10-12 23:31 G 25211915.28 25211915.48 25211915.68 0.0534 0.0095

Jupiter 64321-08-09 21:22 G 25214043.24 25214043.39 25214043.55 0.0489 0.0307

Jupiter 64322-04-02 19:27 G 25214279.15 25214279.31 25214279.48 0.0496 0.0288

Jupiter 64327-06-17 10:19 G 25216180.73 25216180.93 25216181.13 0.0537 0.0130

Saturn 64327-10-28 11:17 G 25216313.80 25216313.97 25216314.15 0.0275 0.0157

Saturn 64328-06-13 17:31 G 25216543.03 25216543.23 25216543.44 0.0274 0.0055

Saturn 64329-01-28 23:17 G 25216772.42 25216772.47 25216772.52 0.0273 0.0264

Jupiter 64333-04-15 02:53 G 25218309.56 25218309.62 25218309.68 0.0488 0.0462

Jupiter 64333-12-06 22:48 G 25218545.26 25218545.45 25218545.65 0.0494 0.0122

Uranus 64338-10-18 13:27 G 25220321.93 25220322.06 25220322.19 0.0142 0.0113

Jupiter 64339-02-19 22:48 G 25220446.30 25220446.45 25220446.61 0.0539 0.0350

Uranus 64339-06-01 23:31 G 25220548.30 25220548.48 25220548.67 0.0142 0.0076

Jupiter 64339-10-16 04:34 G 25220684.58 25220684.69 25220684.81 0.0531 0.0436

Uranus 64340-01-14 09:36 G 25220774.69 25220774.90 25220775.11 0.0142 0.0038

Mars 64340-02-28 19:12 G 25220820.13 25220820.30 25220820.47 0.1736 0.0241

Uranus 64340-08-27 19:41 G 25221001.10 25221001.32 25221001.54 0.0141 0.0002

Uranus 64341-04-11 05:31 G 25221227.52 25221227.73 25221227.94 0.0141 0.0037

Uranus 64341-11-23 14:53 G 25221453.95 25221454.12 25221454.32 0.0141 0.0074

Uranus 64342-07-08 00:43 G 25221680.40 25221680.53 25221680.67 0.0141 0.0110

Saturn 64342-11-23 06:43 G 25221818.60 25221818.78 25221818.96 0.0284 0.0158

Saturn 64343-07-11 00:15 G 25222048.31 25222048.51 25222048.72 0.0285 0.0083

Jupiter 64345-08-12 02:24 G 25222811.40 25222811.60 25222811.80 0.0492 0.0046

Jupiter 64351-06-20 19:27 G 25224950.12 25224950.31 25224950.49 0.0534 0.0228

Jupiter 64357-04-17 07:27 G 25227077.62 25227077.81 25227077.99 0.0490 0.0207

Saturn 64357-05-09 10:05 G 25227099.75 25227099.92 25227100.11 0.0274 0.0137

Jupiter 64357-12-09 06:43 G 25227313.66 25227313.78 25227313.91 0.0497 0.0393

Saturn 64357-12-24 16:34 G 25227328.99 25227329.19 25227329.39 0.0274 0.0074

Neptune 64358-10-11 19:55 G 25227620.31 25227620.33 25227620.36 0.0089 0.0089

Neptune 64359-05-25 08:53 G 25227845.82 25227845.87 25227845.96 0.0089 0.0085

Neptune 64360-01-05 22:19 G 25228071.35 25228071.43 25228071.54 0.0089 0.0080

Neptune 64360-08-18 11:46 G 25228296.88 25228296.99 25228297.12 0.0089 0.0075

Neptune 64361-04-01 00:58 G 25228522.43 25228522.54 25228522.70 0.0089 0.0071

Neptune 64361-11-12 14:24 G 25228747.97 25228748.10 25228748.27 0.0089 0.0066

Neptune 64362-06-26 03:51 G 25228973.52 25228973.66 25228973.84 0.0089 0.0061

Neptune 64363-02-06 17:17 G 25229199.07 25229199.22 25229199.41 0.0089 0.0056

Jupiter 64363-02-23 07:27 G 25229215.60 25229215.81 25229216.01 0.0535 0.0011

Neptune 64363-09-20 06:43 G 25229424.62 25229424.78 25229424.98 0.0089 0.0051

Neptune 64364-05-02 20:10 G 25229650.17 25229650.34 25229650.55 0.0089 0.0046

Neptune 64364-12-14 09:36 G 25229875.72 25229875.90 25229876.11 0.0089 0.0041

Neptune 64365-07-27 23:03 G 25230101.27 25230101.46 25230101.67 0.0089 0.0035

Neptune 64366-03-10 12:29 G 25230326.82 25230327.02 25230327.23 0.0089 0.0030

Neptune 64366-10-22 01:41 G 25230552.37 25230552.57 25230552.79 0.0089 0.0026

Neptune 64367-06-04 15:07 G 25230777.92 25230778.13 25230778.35 0.0089 0.0020

Mars 64367-07-16 20:10 G 25230820.25 25230820.34 25230820.43 0.1791 0.1522

Neptune 64368-01-16 04:19 G 25231003.47 25231003.68 25231003.90 0.0089 0.0015

Neptune 64368-08-28 17:46 G 25231229.02 25231229.24 25231229.46 0.0089 0.0010

Jupiter 64368-12-21 12:15 G 25231343.88 25231344.01 25231344.15 0.0489 0.0366

Neptune 64369-04-11 07:12 G 25231454.58 25231454.80 25231455.02 0.0089 0.0005

Jupiter 64369-08-14 10:05 G 25231579.74 25231579.92 25231580.10 0.0495 0.0225

Neptune 64369-11-22 20:24 G 25231680.13 25231680.35 25231680.58 0.0089 0.0002

Neptune 64370-07-06 09:36 G 25231905.69 25231905.90 25231906.13 0.0089 0.0006

Neptune 64371-02-16 23:03 G 25232131.24 25232131.46 25232131.68 0.0089 0.0010

Neptune 64371-09-30 12:15 G 25232356.80 25232357.01 25232357.23 0.0089 0.0015

Neptune 64372-05-13 01:41 G 25232582.36 25232582.57 25232582.79 0.0089 0.0020

Saturn 64372-06-04 09:22 G 25232604.70 25232604.89 25232605.08 0.0285 0.0132

Neptune 64372-12-24 14:53 G 25232807.91 25232808.12 25232808.34 0.0089 0.0025

Saturn 64373-01-20 02:53 G 25232834.43 25232834.62 25232834.83 0.0285 0.0111

Neptune 64373-08-07 04:19 G 25233033.47 25233033.68 25233033.89 0.0089 0.0030

Neptune 64374-03-20 17:31 G 25233259.04 25233259.23 25233259.44 0.0089 0.0036

Jupiter 64374-10-28 18:43 G 25233481.10 25233481.28 25233481.47 0.0538 0.0213

Neptune 64374-11-01 06:58 G 25233484.60 25233484.79 25233484.99 0.0089 0.0040

Neptune 64375-06-14 20:10 G 25233710.16 25233710.34 25233710.54 0.0089 0.0045

Neptune 64376-01-26 09:22 G 25233935.72 25233935.89 25233936.08 0.0089 0.0050

Neptune 64376-09-07 22:34 G 25234161.28 25234161.44 25234161.63 0.0089 0.0055

Neptune 64377-04-21 12:00 G 25234386.85 25234387.00 25234387.18 0.0089 0.0060

Neptune 64377-12-03 01:12 G 25234612.42 25234612.55 25234612.72 0.0089 0.0065

Neptune 64378-07-16 14:10 G 25234837.98 25234838.09 25234838.25 0.0089 0.0070

Neptune 64379-02-27 03:51 G 25235063.55 25235063.66 25235063.78 0.0089 0.0074

Neptune 64379-10-10 16:48 G 25235289.12 25235289.20 25235289.32 0.0089 0.0079

Neptune 64380-05-23 06:00 G 25235514.70 25235514.75 25235514.84 0.0089 0.0084

Neptune 64381-01-03 19:27 G 25235740.30 25235740.31 25235740.34 0.0089 0.0088

Jupiter 64381-04-19 12:58 G 25235845.84 25235846.04 25235846.24 0.0493 0.0056

Uranus 64382-03-01 20:53 G 25236162.26 25236162.37 25236162.51 0.0136 0.0112

Uranus 64382-10-14 03:51 G 25236388.50 25236388.66 25236388.85 0.0136 0.0080

Uranus 64383-05-28 11:17 G 25236614.76 25236614.97 25236615.18 0.0137 0.0046

Uranus 64384-01-09 18:29 G 25236841.05 25236841.27 25236841.49 0.0137 0.0012

Uranus 64384-08-23 01:55 G 25237067.36 25237067.58 25237067.79 0.0137 0.0022

Uranus 64385-04-06 09:22 G 25237293.70 25237293.89 25237294.10 0.0137 0.0056

Uranus 64385-11-18 16:48 G 25237520.05 25237520.20 25237520.38 0.0137 0.0091

Uranus 64386-07-03 00:29 G 25237746.45 25237746.52 25237746.63 0.0137 0.0125

Jupiter 64386-07-03 03:36 G 25237746.54 25237746.65 25237746.77 0.0540 0.0442 *

Saturn 64386-11-19 17:31 G 25237886.04 25237886.23 25237886.43 0.0275 0.0102

Jupiter 64387-02-26 10:34 G 25237984.79 25237984.94 25237985.10 0.0533 0.0348

Saturn 64387-07-06 23:46 G 25238115.30 25238115.49 25238115.69 0.0274 0.0110

Jupiter 64392-12-23 17:17 G 25240112.02 25240112.22 25240112.42 0.0491 0.0108

Jupiter 64393-08-16 17:03 G 25240348.19 25240348.21 25240348.24 0.0498 0.0492

Jupiter 64398-11-01 00:43 G 25242250.34 25242250.53 25242250.73 0.0535 0.0136

Saturn 64401-12-15 14:39 G 25243390.91 25243391.11 25243391.31 0.0284 0.0097

Saturn 64402-08-02 07:55 G 25243620.66 25243620.83 25243621.02 0.0285 0.0144

Jupiter 64404-08-28 21:07 G 25244378.22 25244378.38 25244378.56 0.0489 0.0271

Jupiter 64405-04-21 19:27 G 25244614.16 25244614.31 25244614.46 0.0496 0.0323

Mars 64405-12-26 04:19 G 25244862.51 25244862.68 25244862.86 0.1739 0.0178

Earth 64408-12-17 00:29 G 25245949.37 25245949.52 25245949.67 0.2653 0.0790

Moon 64408-12-17 05:46 G 25245949.60 25245949.74 25245949.89 0.2651 0.1212 *

Jupiter 64410-07-06 14:24 G 25246515.90 25246516.10 25246516.30 0.0537 0.0079

Jupiter 64416-05-04 02:39 G 25248644.52 25248644.61 25248644.72 0.0488 0.0426

Saturn 64416-05-31 16:19 G 25248671.98 25248672.18 25248672.38 0.0274 0.0082

Earth 64416-12-14 16:34 G 25248869.13 25248869.19 25248869.26 0.2652 0.2395

Moon 64416-12-14 18:58 G 25248869.17 25248869.29 25248869.41 0.2646 0.1821 *

Jupiter 64416-12-25 23:17 G 25248880.28 25248880.47 25248880.67 0.0494 0.0158

Saturn 64417-01-15 22:34 G 25248901.26 25248901.44 25248901.63 0.0274 0.0129

Jupiter 64422-03-11 01:55 G 25250781.42 25250781.58 25250781.75 0.0539 0.0300

Uranus 64422-06-17 19:41 G 25250880.25 25250880.32 25250880.42 0.0142 0.0131

Jupiter 64422-11-04 06:43 G 25251019.70 25251019.78 25251019.87 0.0530 0.0478

Uranus 64423-01-30 06:15 G 25251106.60 25251106.76 25251106.92 0.0142 0.0093

Uranus 64423-09-13 16:19 G 25251332.99 25251333.18 25251333.39 0.0142 0.0056

Uranus 64424-04-27 02:39 G 25251559.39 25251559.61 25251559.82 0.0141 0.0018

Uranus 64424-12-09 12:29 G 25251785.80 25251786.02 25251786.23 0.0141 0.0020

Uranus 64425-07-23 21:51 G 25252012.23 25252012.41 25252012.62 0.0141 0.0057

Uranus 64426-03-07 07:27 G 25252238.66 25252238.81 25252238.99 0.0141 0.0094

Uranus 64426-10-19 17:17 G 25252465.15 25252465.22 25252465.31 0.0141 0.0130

Jupiter 64428-08-31 03:36 G 25253146.44 25253146.65 25253146.85 0.0492 0.0011

Saturn 64431-06-27 16:48 G 25254176.99 25254177.20 25254177.40 0.0285 0.0072

Saturn 64432-02-12 10:19 G 25254406.76 25254406.93 25254407.11 0.0285 0.0170

Mars 64433-05-13 02:24 G 25254862.46 25254862.60 25254862.75 0.1787 0.0955

Jupiter 64433-11-13 12:29 G 25255046.97 25255047.02 25255047.07 0.0540 0.0522

Jupiter 64434-07-09 19:41 G 25255285.15 25255285.32 25255285.50 0.0533 0.0268

Jupiter 64440-05-06 07:41 G 25257412.64 25257412.82 25257413.02 0.0490 0.0172

Jupiter 64440-12-28 06:43 G 25257648.69 25257648.78 25257648.89 0.0497 0.0426

Neptune 64441-07-10 11:31 G 25257842.97 25257842.98 25257843.03 0.0088 0.0087

Neptune 64442-02-21 00:15 G 25258068.46 25258068.51 25258068.61 0.0088 0.0083

Neptune 64442-10-04 13:12 G 25258293.97 25258294.05 25258294.17 0.0088 0.0078

Neptune 64443-05-18 01:41 G 25258519.48 25258519.57 25258519.71 0.0088 0.0074

Neptune 64443-12-29 14:39 G 25258744.99 25258745.11 25258745.26 0.0088 0.0069

Neptune 64444-08-11 03:22 G 25258970.50 25258970.64 25258970.80 0.0088 0.0064

Neptune 64445-03-24 15:51 G 25259196.02 25259196.16 25259196.34 0.0088 0.0060

Saturn 64445-04-26 15:51 G 25259229.10 25259229.16 25259229.23 0.0275 0.0260

Neptune 64445-11-05 04:34 G 25259421.54 25259421.69 25259421.88 0.0088 0.0055

Saturn 64445-12-11 23:03 G 25259458.25 25259458.46 25259458.67 0.0275 0.0047

Jupiter 64446-03-14 06:15 G 25259550.56 25259550.76 25259550.96 0.0536 0.0045

Neptune 64446-06-18 17:31 G 25259647.06 25259647.23 25259647.42 0.0088 0.0050

Saturn 64446-07-29 05:17 G 25259687.56 25259687.72 25259687.89 0.0274 0.0164

Neptune 64447-01-30 05:46 G 25259872.58 25259872.74 25259872.95 0.0088 0.0046

Neptune 64447-09-12 18:43 G 25260098.10 25260098.28 25260098.49 0.0088 0.0041

Neptune 64448-04-25 07:41 G 25260323.63 25260323.82 25260324.03 0.0088 0.0036

Neptune 64448-12-06 20:24 G 25260549.15 25260549.35 25260549.56 0.0088 0.0031

Neptune 64449-07-20 09:07 G 25260774.68 25260774.88 25260775.09 0.0088 0.0026

Neptune 64450-03-02 22:05 G 25261000.20 25261000.42 25261000.63 0.0088 0.0022

Neptune 64450-10-14 10:34 G 25261225.74 25261225.94 25261226.17 0.0088 0.0017

Neptune 64451-05-27 23:31 G 25261451.27 25261451.48 25261451.70 0.0088 0.0012

Neptune 64452-01-08 12:15 G 25261676.80 25261677.01 25261677.23 0.0088 0.0007

Jupiter 64452-01-10 12:43 G 25261678.88 25261679.03 25261679.18 0.0489 0.0329

Neptune 64452-08-21 01:12 G 25261902.33 25261902.55 25261902.77 0.0088 0.0002

Jupiter 64452-09-02 09:51 G 25261914.74 25261914.91 25261915.08 0.0495 0.0258

Neptune 64453-04-03 13:55 G 25262127.86 25262128.08 25262128.30 0.0088 0.0003

Neptune 64453-11-15 02:39 G 25262353.39 25262353.61 25262353.83 0.0088 0.0008

Neptune 64454-06-28 15:22 G 25262578.93 25262579.14 25262579.36 0.0088 0.0013

Neptune 64455-02-09 04:05 G 25262804.46 25262804.67 25262804.89 0.0088 0.0018

Neptune 64455-09-22 17:03 G 25263030.00 25263030.21 25263030.42 0.0088 0.0023

Neptune 64456-05-05 05:31 G 25263255.53 25263255.73 25263255.95 0.0088 0.0028

Neptune 64456-12-16 18:15 G 25263481.07 25263481.26 25263481.47 0.0088 0.0033

Neptune 64457-07-30 06:43 G 25263706.60 25263706.78 25263707.00 0.0088 0.0038

Jupiter 64457-11-16 18:58 G 25263816.10 25263816.29 25263816.48 0.0538 0.0174

Neptune 64458-03-12 19:27 G 25263932.13 25263932.31 25263932.52 0.0088 0.0042

Neptune 64458-10-24 08:39 G 25264157.68 25264157.86 25264158.05 0.0088 0.0047

Neptune 64459-06-06 21:07 G 25264383.22 25264383.38 25264383.57 0.0088 0.0052

Neptune 64460-01-18 09:51 G 25264608.76 25264608.91 25264609.09 0.0088 0.0057

Saturn 64460-05-22 06:15 G 25264733.71 25264733.76 25264733.82 0.0283 0.0272

Neptune 64460-08-30 23:03 G 25264834.30 25264834.46 25264834.62 0.0088 0.0061

Saturn 64461-01-06 23:03 G 25264963.25 25264963.46 25264963.67 0.0284 0.0035

Neptune 64461-04-13 11:31 G 25265059.84 25265059.98 25265060.14 0.0088 0.0066

Saturn 64461-08-24 16:19 G 25265193.04 25265193.18 25265193.33 0.0285 0.0205

Neptune 64461-11-25 00:15 G 25265285.40 25265285.51 25265285.66 0.0088 0.0071

Neptune 64462-07-08 13:27 G 25265510.95 25265511.06 25265511.17 0.0089 0.0075

Neptune 64463-02-19 01:55 G 25265736.50 25265736.58 25265736.69 0.0089 0.0080

Jupiter 64463-09-15 17:17 G 25265945.20 25265945.22 25265945.24 0.0487 0.0485

Neptune 64463-10-02 14:39 G 25265962.07 25265962.11 25265962.20 0.0089 0.0085

Jupiter 64464-05-08 12:43 G 25266180.83 25266181.03 25266181.23 0.0493 0.0091

Uranus 64465-10-30 05:17 G 25266720.66 25266720.72 25266720.81 0.0136 0.0127

Uranus 64466-06-13 12:15 G 25266946.87 25266947.01 25266947.18 0.0136 0.0094

Uranus 64467-01-25 19:41 G 25267173.12 25267173.32 25267173.51 0.0136 0.0061

Uranus 64467-09-09 02:39 G 25267399.41 25267399.61 25267399.83 0.0137 0.0028

Uranus 64468-04-22 10:19 G 25267625.71 25267625.93 25267626.15 0.0137 0.0007

Uranus 64468-12-04 17:31 G 25267852.03 25267852.23 25267852.45 0.0137 0.0041

Uranus 64469-07-19 00:58 G 25268078.38 25268078.54 25268078.74 0.0137 0.0076

Jupiter 64469-07-22 07:41 G 25268081.69 25268081.82 25268081.96 0.0540 0.0391

Pluto 64470-02-11 20:10 G 25268286.33 25268286.34 25268286.41 0.0063 0.0062

Uranus 64470-03-02 08:53 G 25268304.75 25268304.87 25268305.01 0.0137 0.0109

Jupiter 64470-03-17 14:24 G 25268319.97 25268320.10 25268320.24 0.0532 0.0394

Pluto 64470-09-25 00:15 G 25268511.33 25268511.51 25268511.72 0.0063 0.0029

Pluto 64471-05-08 04:34 G 25268736.47 25268736.69 25268736.91 0.0064 0.0006

Mars 64471-10-23 13:12 G 25268904.89 25268905.05 25268905.21 0.1743 0.0603

Pluto 64471-12-19 07:55 G 25268961.68 25268961.83 25268962.02 0.0064 0.0041

Saturn 64474-11-06 15:22 G 25270015.05 25270015.14 25270015.25 0.0275 0.0239

Saturn 64475-06-23 22:34 G 25270244.23 25270244.44 25270244.65 0.0274 0.0027

Jupiter 64476-01-12 17:17 G 25270447.02 25270447.22 25270447.42 0.0491 0.0072

Saturn 64476-02-08 04:34 G 25270473.54 25270473.69 25270473.86 0.0274 0.0184

Jupiter 64481-11-20 03:36 G 25272585.46 25272585.65 25272585.84 0.0534 0.0182

Jupiter 64487-09-17 22:05 G 25274713.24 25274713.42 25274713.60 0.0490 0.0232

Jupiter 64488-05-10 20:39 G 25274949.23 25274949.36 25274949.51 0.0497 0.0362

Saturn 64489-12-02 07:27 G 25275519.71 25275519.81 25275519.91 0.0284 0.0249

Saturn 64490-07-20 00:29 G 25275749.31 25275749.52 25275749.73 0.0285 0.0011

Saturn 64491-03-06 18:00 G 25275979.13 25275979.25 25275979.38 0.0285 0.0229

Jupiter 64493-07-25 15:22 G 25276850.93 25276851.14 25276851.34 0.0536 0.0038

Mars 64499-03-10 09:51 G 25278904.74 25278904.91 25278905.08 0.1784 0.0440

Jupiter 64499-05-24 03:22 G 25278979.52 25278979.64 25278979.76 0.0488 0.0390

Jupiter 64500-01-14 23:46 G 25279215.31 25279215.49 25279215.68 0.0494 0.0192

Saturn 64504-05-19 21:36 G 25280801.26 25280801.40 25280801.54 0.0275 0.0206

Saturn 64505-01-04 04:48 G 25281030.49 25281030.70 25281030.91 0.0275 0.0008

Jupiter 64505-03-30 23:46 G 25281116.32 25281116.49 25281116.68 0.0539 0.0267

Saturn 64505-08-21 11:03 G 25281259.84 25281259.96 25281260.09 0.0274 0.0219

Jupiter 64505-11-24 05:17 G 25281354.68 25281354.72 25281354.79 0.0531 0.0509

Uranus 64506-09-30 12:43 G 25281664.91 25281665.03 25281665.18 0.0142 0.0111

Uranus 64507-05-14 23:03 G 25281891.29 25281891.46 25281891.66 0.0142 0.0074

Uranus 64507-12-27 09:22 G 25282117.68 25282117.89 25282118.10 0.0142 0.0036

Uranus 64508-08-09 19:27 G 25282344.09 25282344.31 25282344.53 0.0141 0.0002

Uranus 64509-03-24 05:17 G 25282570.51 25282570.72 25282570.93 0.0141 0.0039

Uranus 64509-11-05 14:39 G 25282796.95 25282797.11 25282797.31 0.0141 0.0077

Uranus 64510-06-20 00:29 G 25283023.40 25283023.52 25283023.66 0.0141 0.0113

Jupiter 64511-09-21 03:36 G 25283481.45 25283481.65 25283481.86 0.0492 0.0030

Jupiter 64516-12-03 11:17 G 25285381.89 25285381.97 25285382.06 0.0541 0.0485

Jupiter 64517-07-29 19:27 G 25285620.15 25285620.31 25285620.48 0.0534 0.0303

Saturn 64519-06-15 15:22 G 25286306.00 25286306.14 25286306.29 0.0283 0.0208

Saturn 64520-01-31 08:24 G 25286535.64 25286535.85 25286536.06 0.0284 0.0029

Saturn 64520-09-17 01:41 G 25286765.50 25286765.57 25286765.64 0.0285 0.0268

Neptune 64523-01-14 06:29 G 25287614.75 25287614.77 25287614.84 0.0090 0.0088

Jupiter 64523-05-27 06:58 G 25287747.60 25287747.79 25287747.99 0.0490 0.0137

Neptune 64523-08-27 20:10 G 25287840.27 25287840.34 25287840.44 0.0089 0.0083

Jupiter 64524-01-18 06:15 G 25287983.69 25287983.76 25287983.84 0.0497 0.0457

Neptune 64524-04-09 09:36 G 25288065.81 25288065.90 25288066.02 0.0089 0.0078

Neptune 64524-11-20 22:34 G 25288291.34 25288291.44 25288291.59 0.0089 0.0074

Neptune 64525-07-04 12:00 G 25288516.88 25288517.00 25288517.16 0.0089 0.0069

Neptune 64526-02-15 01:27 G 25288742.43 25288742.56 25288742.74 0.0089 0.0064

Neptune 64526-09-28 14:53 G 25288967.97 25288968.12 25288968.30 0.0089 0.0059

Neptune 64527-05-12 04:19 G 25289193.52 25289193.68 25289193.87 0.0089 0.0054

Neptune 64527-12-23 17:46 G 25289419.07 25289419.24 25289419.44 0.0089 0.0049

Neptune 64528-08-05 07:12 G 25289644.62 25289644.80 25289645.00 0.0089 0.0044

Neptune 64529-03-18 20:39 G 25289870.17 25289870.36 25289870.57 0.0089 0.0039

Jupiter 64529-04-03 09:51 G 25289885.71 25289885.91 25289886.11 0.0536 0.0093

Neptune 64529-10-30 10:05 G 25290095.72 25290095.92 25290096.13 0.0089 0.0034

Neptune 64530-06-12 23:31 G 25290321.27 25290321.48 25290321.69 0.0089 0.0028

Neptune 64531-01-24 12:43 G 25290546.82 25290547.03 25290547.25 0.0089 0.0023

Neptune 64531-09-07 02:10 G 25290772.38 25290772.59 25290772.81 0.0089 0.0018

Neptune 64532-04-19 15:36 G 25290997.94 25290998.15 25290998.37 0.0089 0.0013

Neptune 64532-12-01 04:48 G 25291223.49 25291223.70 25291223.93 0.0089 0.0009

Neptune 64533-07-14 18:15 G 25291449.04 25291449.26 25291449.48 0.0089 0.0003

Saturn 64533-11-29 21:51 G 25291587.26 25291587.41 25291587.57 0.0275 0.0183

Neptune 64534-02-25 07:27 G 25291674.59 25291674.81 25291675.03 0.0089 0.0002

Saturn 64534-07-17 04:48 G 25291816.49 25291816.70 25291816.91 0.0274 0.0030

Neptune 64534-10-08 20:39 G 25291900.15 25291900.36 25291900.59 0.0089 0.0008

Jupiter 64535-01-30 12:00 G 25292013.84 25292014.00 25292014.17 0.0489 0.0294

Saturn 64535-03-03 11:17 G 25292045.87 25292045.97 25292046.07 0.0274 0.0239

Neptune 64535-05-22 10:05 G 25292125.70 25292125.92 25292126.14 0.0089 0.0012

Jupiter 64535-09-23 09:36 G 25292249.74 25292249.90 25292250.07 0.0495 0.0293

Neptune 64536-01-02 23:17 G 25292351.26 25292351.47 25292351.69 0.0089 0.0017

Neptune 64536-08-15 12:29 G 25292576.81 25292577.02 25292577.24 0.0089 0.0022

Neptune 64537-03-29 01:41 G 25292802.37 25292802.57 25292802.79 0.0089 0.0028

Mars 64537-08-20 22:19 G 25292947.29 25292947.43 25292947.57 0.1746 0.1027

Neptune 64537-11-09 15:07 G 25293027.93 25293028.13 25293028.34 0.0089 0.0032

Neptune 64538-06-23 04:19 G 25293253.49 25293253.68 25293253.89 0.0089 0.0037

Neptune 64539-02-03 17:31 G 25293479.04 25293479.23 25293479.43 0.0089 0.0042

Neptune 64539-09-17 06:43 G 25293704.61 25293704.78 25293704.98 0.0089 0.0047

Neptune 64540-04-29 20:10 G 25293930.17 25293930.34 25293930.53 0.0089 0.0052

Jupiter 64540-12-06 22:05 G 25294151.22 25294151.42 25294151.62 0.0538 0.0125

Neptune 64540-12-11 09:22 G 25294155.74 25294155.89 25294156.08 0.0089 0.0057

Neptune 64541-07-24 22:34 G 25294381.30 25294381.44 25294381.62 0.0089 0.0062

Neptune 64542-03-07 11:46 G 25294606.87 25294606.99 25294607.16 0.0089 0.0067

Neptune 64542-10-19 01:27 G 25294832.44 25294832.56 25294832.70 0.0089 0.0071

Neptune 64543-06-01 14:39 G 25295058.01 25295058.11 25295058.24 0.0089 0.0076

Neptune 64544-01-13 03:36 G 25295283.59 25295283.65 25295283.76 0.0089 0.0081

Neptune 64544-08-25 16:48 G 25295509.17 25295509.20 25295509.28 0.0089 0.0086

Moon 64546-06-16 14:53 G 25296168.97 25296169.12 25296169.26 0.2679 0.1075

Earth 64546-06-16 20:24 G 25296169.23 25296169.35 25296169.46 0.2679 0.1847 *

Jupiter 64546-10-05 17:17 G 25296280.15 25296280.22 25296280.31 0.0488 0.0449

Jupiter 64547-05-29 13:27 G 25296515.87 25296516.06 25296516.26 0.0493 0.0129

Saturn 64548-12-25 16:34 G 25297092.04 25297092.19 25297092.36 0.0284 0.0186

Saturn 64549-08-12 09:36 G 25297321.69 25297321.90 25297322.11 0.0285 0.0052

Uranus 64550-02-11 20:53 G 25297505.25 25297505.37 25297505.50 0.0136 0.0110

Uranus 64550-09-26 03:51 G 25297731.49 25297731.66 25297731.85 0.0136 0.0077

Uranus 64551-05-10 11:17 G 25297957.76 25297957.97 25297958.17 0.0136 0.0043

Uranus 64551-12-22 18:29 G 25298184.05 25298184.27 25298184.49 0.0137 0.0009

Uranus 64552-08-05 01:55 G 25298410.37 25298410.58 25298410.79 0.0137 0.0025

Jupiter 64552-08-11 08:39 G 25298416.71 25298416.86 25298417.02 0.0539 0.0346

Uranus 64553-03-19 09:22 G 25298636.70 25298636.89 25298637.10 0.0137 0.0059

Jupiter 64553-04-06 14:53 G 25298655.00 25298655.12 25298655.24 0.0532 0.0432

Uranus 64553-10-31 17:03 G 25298863.06 25298863.21 25298863.38 0.0137 0.0093

Moon 64554-06-14 06:15 G 25299088.64 25299088.76 25299088.87 0.2685 0.1775

Earth 64554-06-14 10:19 G 25299088.81 25299088.93 25299089.05 0.2681 0.1703 *

Uranus 64554-06-15 00:43 G 25299089.46 25299089.53 25299089.62 0.0137 0.0128

Jupiter 64559-02-01 17:46 G 25300782.04 25300782.24 25300782.44 0.0491 0.0036

Pluto 64560-03-31 09:22 G 25301205.81 25301205.89 25301205.99 0.0080 0.0073

Pluto 64560-11-11 20:10 G 25301431.12 25301431.34 25301431.56 0.0080 0.0003

Pluto 64561-06-25 06:29 G 25301656.66 25301656.77 25301656.90 0.0080 0.0066

Saturn 64563-06-12 03:51 G 25302373.48 25302373.66 25302373.84 0.0275 0.0150

Saturn 64564-01-27 10:48 G 25302602.75 25302602.95 25302603.16 0.0275 0.0064

Saturn 64564-09-12 17:17 G 25302832.22 25302832.22 25302832.24 0.0274 0.0274

Jupiter 64564-12-10 00:58 G 25302920.36 25302920.54 25302920.73 0.0535 0.0213

Mars 64565-01-05 17:03 G 25302947.03 25302947.21 25302947.38 0.1780 0.0093

Jupiter 64570-10-07 22:19 G 25305048.25 25305048.43 25305048.62 0.0489 0.0196

Jupiter 64571-05-31 20:24 G 25305284.23 25305284.35 25305284.48 0.0496 0.0393

Jupiter 64576-08-14 13:27 G 25307185.86 25307186.06 25307186.27 0.0537 0.0010

Saturn 64578-07-08 01:41 G 25307878.39 25307878.57 25307878.76 0.0283 0.0143

Saturn 64579-02-22 18:29 G 25308108.07 25308108.27 25308108.48 0.0284 0.0095

Jupiter 64582-06-13 01:55 G 25309314.45 25309314.58 25309314.73 0.0488 0.0355

Jupiter 64583-02-03 22:19 G 25309550.26 25309550.43 25309550.62 0.0494 0.0225

Jupiter 64588-04-19 02:53 G 25311451.43 25311451.62 25311451.80 0.0539 0.0217

Uranus 64590-05-30 19:12 G 25312223.23 25312223.30 25312223.41 0.0142 0.0129

Uranus 64591-01-12 05:46 G 25312449.58 25312449.74 25312449.91 0.0142 0.0091

Uranus 64591-08-26 15:51 G 25312675.97 25312676.16 25312676.38 0.0142 0.0054

Uranus 64592-04-09 02:10 G 25312902.38 25312902.59 25312902.81 0.0141 0.0016

Uranus 64592-11-21 12:00 G 25313128.79 25313129.00 25313129.22 0.0141 0.0023

Saturn 64592-12-22 05:17 G 25313159.53 25313159.72 25313159.91 0.0275 0.0125

Uranus 64593-07-05 21:51 G 25313355.22 25313355.41 25313355.61 0.0141 0.0059

Saturn 64593-08-08 12:00 G 25313388.81 25313389.00 25313389.21 0.0274 0.0087

Uranus 64594-02-17 07:27 G 25313581.66 25313581.81 25313581.98 0.0141 0.0096

Uranus 64594-10-01 16:48 G 25313808.15 25313808.20 25313808.29 0.0141 0.0133

Jupiter 64594-10-10 02:39 G 25313816.41 25313816.61 25313816.81 0.0492 0.0062

Jupiter 64599-12-23 14:24 G 25315716.98 25315717.10 25315717.22 0.0540 0.0435

Jupiter 64600-08-18 21:51 G 25315955.25 25315955.41 25315955.56 0.0533 0.0346

Mars 64603-06-19 07:12 G 25316989.71 25316989.80 25316989.90 0.1750 0.1462

Neptune 64605-10-13 23:31 G 25317837.44 25317837.48 25317837.54 0.0088 0.0085

Neptune 64606-05-27 11:46 G 25318062.93 25318062.99 25318063.10 0.0088 0.0081

Jupiter 64606-06-16 06:58 G 25318082.59 25318082.79 25318082.99 0.0491 0.0100

Neptune 64607-01-08 00:58 G 25318288.44 25318288.54 25318288.65 0.0088 0.0076

Jupiter 64607-02-07 06:43 G 25318318.76 25318318.78 25318318.81 0.0498 0.0492

Neptune 64607-08-21 13:27 G 25318513.95 25318514.06 25318514.21 0.0088 0.0072

Saturn 64608-01-19 03:07 G 25318664.44 25318664.63 25318664.83 0.0284 0.0120

Neptune 64608-04-03 02:24 G 25318739.47 25318739.60 25318739.75 0.0088 0.0067

Saturn 64608-09-04 20:10 G 25318894.15 25318894.34 25318894.53 0.0285 0.0118

Neptune 64608-11-14 15:07 G 25318964.98 25318965.13 25318965.29 0.0088 0.0062

Neptune 64609-06-28 03:36 G 25319190.50 25319190.65 25319190.83 0.0088 0.0058

Neptune 64610-02-08 16:19 G 25319416.02 25319416.18 25319416.37 0.0088 0.0053

Neptune 64610-09-22 05:17 G 25319641.54 25319641.72 25319641.91 0.0088 0.0048

Neptune 64611-05-05 17:46 G 25319867.06 25319867.24 25319867.45 0.0088 0.0044

Neptune 64611-12-17 06:29 G 25320092.58 25320092.77 25320092.98 0.0088 0.0039

Jupiter 64612-04-23 10:05 G 25320220.72 25320220.92 25320221.11 0.0535 0.0133

Neptune 64612-07-29 19:12 G 25320318.11 25320318.30 25320318.51 0.0088 0.0034

Neptune 64613-03-12 07:55 G 25320543.63 25320543.83 25320544.05 0.0088 0.0029

Neptune 64613-10-23 20:53 G 25320769.16 25320769.37 25320769.58 0.0088 0.0024

Neptune 64614-06-06 09:22 G 25320994.69 25320994.89 25320995.11 0.0088 0.0020

Neptune 64615-01-17 22:05 G 25321220.21 25321220.42 25321220.65 0.0088 0.0015

Neptune 64615-08-31 11:03 G 25321445.74 25321445.96 25321446.18 0.0088 0.0010

Neptune 64616-04-12 23:46 G 25321671.28 25321671.49 25321671.71 0.0088 0.0005

Neptune 64616-11-24 12:43 G 25321896.81 25321897.03 25321897.25 0.0088 0.0001

Neptune 64617-07-08 01:12 G 25322122.34 25322122.55 25322122.78 0.0088 0.0006

Neptune 64618-02-18 13:55 G 25322347.87 25322348.08 25322348.31 0.0088 0.0010

Jupiter 64618-02-19 12:00 G 25322348.84 25322349.00 25322349.18 0.0489 0.0259

Neptune 64618-10-02 03:07 G 25322573.41 25322573.63 25322573.85 0.0088 0.0015

Jupiter 64618-10-13 09:51 G 25322584.76 25322584.91 25322585.06 0.0495 0.0326

Neptune 64619-05-15 15:51 G 25322798.95 25322799.16 25322799.38 0.0088 0.0020

Neptune 64619-12-27 04:34 G 25323024.48 25323024.69 25323024.91 0.0088 0.0024

Neptune 64620-08-08 17:17 G 25323250.02 25323250.22 25323250.43 0.0088 0.0029

Neptune 64621-03-22 05:46 G 25323475.55 25323475.74 25323475.96 0.0088 0.0035

Neptune 64621-11-02 18:43 G 25323701.10 25323701.28 25323701.49 0.0088 0.0039

Neptune 64622-06-16 07:27 G 25323926.64 25323926.81 25323927.02 0.0088 0.0044

Saturn 64622-07-05 10:48 G 25323945.76 25323945.95 25323946.15 0.0275 0.0093

Neptune 64623-01-27 20:24 G 25324152.17 25324152.35 25324152.54 0.0088 0.0049

Saturn 64623-02-19 18:00 G 25324175.06 25324175.25 25324175.44 0.0275 0.0120

Neptune 64623-09-10 09:07 G 25324377.71 25324377.88 25324378.06 0.0088 0.0054

Jupiter 64623-12-27 18:29 G 25324486.07 25324486.27 25324486.47 0.0538 0.0094

Neptune 64624-04-22 21:36 G 25324603.26 25324603.40 25324603.59 0.0088 0.0059

Neptune 64624-12-04 10:19 G 25324828.80 25324828.93 25324829.11 0.0088 0.0064

Neptune 64625-07-17 23:17 G 25325054.34 25325054.47 25325054.62 0.0088 0.0068

Neptune 64626-02-28 11:46 G 25325279.89 25325279.99 25325280.14 0.0088 0.0073

Neptune 64626-10-12 01:12 G 25325505.45 25325505.55 25325505.66 0.0089 0.0077

Neptune 64627-05-25 13:41 G 25325731.01 25325731.07 25325731.17 0.0089 0.0082

Neptune 64628-01-06 02:53 G 25325956.57 25325956.62 25325956.67 0.0089 0.0086

Jupiter 64629-10-25 17:17 G 25326615.12 25326615.22 25326615.33 0.0487 0.0413

Jupiter 64630-06-18 13:12 G 25326850.85 25326851.05 25326851.24 0.0493 0.0161

Mars 64630-11-04 00:15 G 25326989.34 25326989.51 25326989.67 0.1776 0.0588

Uranus 64633-10-13 04:48 G 25328063.63 25328063.70 25328063.79 0.0136 0.0125

Uranus 64634-05-27 11:46 G 25328289.84 25328289.99 25328290.16 0.0136 0.0092

Uranus 64635-01-08 19:12 G 25328516.10 25328516.30 25328516.49 0.0136 0.0059

Mars 64635-06-18 11:17 G 25328676.89 25328676.97 25328677.05 0.1739 0.1513

Uranus 64635-08-23 02:10 G 25328742.39 25328742.59 25328742.81 0.0137 0.0026

Jupiter 64635-09-01 05:31 G 25328751.57 25328751.73 25328751.90 0.0540 0.0314

Uranus 64636-04-05 09:51 G 25328968.70 25328968.91 25328969.13 0.0137 0.0009

Jupiter 64636-04-26 12:15 G 25328989.92 25328990.01 25328990.12 0.0532 0.0461

Uranus 64636-11-17 17:17 G 25329195.02 25329195.22 25329195.43 0.0137 0.0043

Uranus 64637-07-02 00:43 G 25329421.36 25329421.53 25329421.72 0.0137 0.0077

Saturn 64637-07-31 13:27 G 25329450.86 25329451.06 25329451.27 0.0283 0.0075

Uranus 64638-02-13 08:24 G 25329647.74 25329647.85 25329647.99 0.0137 0.0112

Saturn 64638-03-18 06:15 G 25329680.59 25329680.76 25329680.94 0.0284 0.0163

Jupiter 64642-02-21 15:36 G 25331116.94 25331117.15 25331117.35 0.0491 0.0007

Jupiter 64647-05-06 17:46 G 25333017.21 25333017.24 25333017.29 0.0542 0.0528

Jupiter 64647-12-31 02:53 G 25333255.44 25333255.62 25333255.80 0.0534 0.0257

Moon 64651-12-19 21:07 G 25334705.22 25334705.38 25334705.53 0.2652 0.0295

Earth 64651-12-20 02:39 G 25334705.47 25334705.61 25334705.76 0.2652 0.0952 *

Saturn 64652-01-15 13:27 G 25334731.86 25334732.06 25334732.27 0.0275 0.0066

Saturn 64652-08-31 20:10 G 25334961.17 25334961.34 25334961.53 0.0274 0.0147

Jupiter 64653-10-27 20:10 G 25335383.15 25335383.34 25335383.54 0.0490 0.0164

Jupiter 64654-06-20 18:43 G 25335619.18 25335619.28 25335619.39 0.0496 0.0423

Jupiter 64659-09-04 15:36 G 25337520.95 25337521.15 25337521.36 0.0536 0.0044

Earth 64659-12-17 19:12 G 25337625.21 25337625.30 25337625.38 0.2651 0.2212

Jupiter 64665-07-03 01:12 G 25339649.39 25339649.55 25339649.70 0.0488 0.0321

Jupiter 64666-02-23 21:51 G 25339885.25 25339885.41 25339885.59 0.0495 0.0260

Saturn 64667-02-10 15:07 G 25340236.92 25340237.13 25340237.34 0.0284 0.0051

Saturn 64667-09-28 07:55 G 25340466.68 25340466.83 25340467.00 0.0285 0.0187

Jupiter 64671-05-10 02:53 G 25341786.43 25341786.62 25341786.81 0.0538 0.0176

Uranus 64674-09-12 12:15 G 25343007.88 25343008.01 25343008.16 0.0142 0.0109

Uranus 64675-04-26 22:19 G 25343234.26 25343234.43 25343234.64 0.0142 0.0072

Uranus 64675-12-09 08:53 G 25343460.66 25343460.87 25343461.08 0.0141 0.0033

Uranus 64676-07-22 18:43 G 25343687.07 25343687.28 25343687.50 0.0141 0.0005

Uranus 64677-03-06 04:48 G 25343913.49 25343913.70 25343913.91 0.0141 0.0041

Jupiter 64677-03-08 06:58 G 25343915.75 25343915.79 25343915.84 0.0487 0.0473

Uranus 64677-10-18 14:24 G 25344139.93 25344140.10 25344140.29 0.0141 0.0079

Jupiter 64677-10-30 02:24 G 25344151.40 25344151.60 25344151.80 0.0492 0.0095

Uranus 64678-06-02 00:15 G 25344366.39 25344366.51 25344366.63 0.0141 0.0115

Saturn 64680-12-10 11:03 G 25345288.88 25345288.96 25345289.07 0.0276 0.0247

Saturn 64681-07-27 18:58 G 25345518.08 25345518.29 25345518.50 0.0275 0.0033

Saturn 64682-03-14 01:55 G 25345747.43 25345747.58 25345747.75 0.0275 0.0180

Jupiter 64683-01-12 10:05 G 25346051.79 25346051.92 25346052.05 0.0540 0.0404

Jupiter 64683-09-07 17:31 G 25346290.09 25346290.23 25346290.38 0.0533 0.0373

Neptune 64687-04-18 18:00 G 25347609.20 25347609.25 25347609.33 0.0090 0.0086

Neptune 64687-11-30 07:27 G 25347834.73 25347834.81 25347834.91 0.0089 0.0081

Neptune 64688-07-12 20:24 G 25348060.26 25348060.35 25348060.49 0.0089 0.0077

Neptune 64689-02-23 09:51 G 25348285.80 25348285.91 25348286.06 0.0089 0.0072

Jupiter 64689-07-05 06:15 G 25348417.56 25348417.76 25348417.96 0.0490 0.0066

Neptune 64689-10-06 23:17 G 25348511.34 25348511.47 25348511.63 0.0089 0.0067

Neptune 64690-05-20 12:43 G 25348736.88 25348737.03 25348737.20 0.0089 0.0062

Neptune 64691-01-01 02:10 G 25348962.43 25348962.59 25348962.77 0.0089 0.0057

Neptune 64691-08-14 15:36 G 25349187.97 25349188.15 25349188.33 0.0089 0.0052

Neptune 64692-03-27 05:03 G 25349413.53 25349413.71 25349413.90 0.0089 0.0047

Neptune 64692-11-07 18:29 G 25349639.08 25349639.27 25349639.47 0.0089 0.0042

Neptune 64693-06-21 07:55 G 25349864.63 25349864.83 25349865.03 0.0089 0.0037

Neptune 64694-02-01 21:07 G 25350090.18 25350090.38 25350090.59 0.0089 0.0032

Neptune 64694-09-15 10:34 G 25350315.73 25350315.94 25350316.15 0.0089 0.0027

Neptune 64695-04-29 00:00 G 25350541.29 25350541.50 25350541.72 0.0089 0.0022

Jupiter 64695-05-13 06:00 G 25350555.56 25350555.75 25350555.95 0.0536 0.0163

Neptune 64695-12-10 13:27 G 25350766.84 25350767.06 25350767.28 0.0089 0.0016

Saturn 64696-01-06 09:51 G 25350793.81 25350793.91 25350794.03 0.0283 0.0240

Neptune 64696-07-23 02:39 G 25350992.40 25350992.61 25350992.84 0.0089 0.0012

Saturn 64696-08-23 02:24 G 25351023.39 25351023.60 25351023.81 0.0284 0.0005

Mars 64696-08-31 07:41 G 25351031.68 25351031.82 25351031.95 0.1772 0.1090

Neptune 64697-03-05 16:05 G 25351217.96 25351218.17 25351218.40 0.0089 0.0007

Saturn 64697-04-09 19:12 G 25351253.18 25351253.30 25351253.43 0.0284 0.0233

Neptune 64697-10-17 05:31 G 25351443.51 25351443.73 25351443.95 0.0089 0.0001

Neptune 64698-05-30 18:43 G 25351669.07 25351669.28 25351669.51 0.0089 0.0005

Neptune 64699-01-11 08:10 G 25351894.62 25351894.84 25351895.06 0.0089 0.0009

Neptune 64699-08-24 21:22 G 25352120.17 25352120.39 25352120.61 0.0089 0.0014

Neptune 64700-04-07 10:34 G 25352345.73 25352345.94 25352346.17 0.0089 0.0020

Neptune 64700-11-19 00:00 G 25352571.29 25352571.50 25352571.71 0.0089 0.0024

Jupiter 64701-03-11 09:22 G 25352683.71 25352683.89 25352684.07 0.0489 0.0227

Mars 64701-04-15 19:55 G 25352719.19 25352719.33 25352719.46 0.1743 0.1082

Neptune 64701-07-02 13:12 G 25352796.84 25352797.05 25352797.26 0.0089 0.0029

Jupiter 64701-11-02 06:43 G 25352919.64 25352919.78 25352919.92 0.0495 0.0354

Neptune 64702-02-13 02:24 G 25353022.40 25353022.60 25353022.81 0.0089 0.0034

Neptune 64702-09-26 15:36 G 25353247.96 25353248.15 25353248.35 0.0089 0.0039

Neptune 64703-05-10 05:03 G 25353473.52 25353473.71 25353473.91 0.0089 0.0044

Neptune 64703-12-21 18:00 G 25353699.08 25353699.25 25353699.45 0.0089 0.0049

Neptune 64704-08-03 07:12 G 25353924.64 25353924.80 25353924.99 0.0089 0.0054

Neptune 64705-03-16 20:39 G 25354150.21 25354150.36 25354150.54 0.0089 0.0059

Neptune 64705-10-28 09:51 G 25354375.77 25354375.91 25354376.08 0.0089 0.0064

Neptune 64706-06-10 23:03 G 25354601.34 25354601.46 25354601.62 0.0089 0.0069

Jupiter 64707-01-16 19:27 G 25354821.10 25354821.31 25354821.51 0.0538 0.0051

Neptune 64707-01-22 12:43 G 25354826.91 25354827.03 25354827.16 0.0089 0.0073

Neptune 64707-09-05 01:41 G 25355052.48 25355052.57 25355052.69 0.0089 0.0078

Neptune 64708-04-17 14:53 G 25355278.07 25355278.12 25355278.22 0.0089 0.0083

Neptune 64708-11-29 04:34 G 25355503.66 25355503.69 25355503.73 0.0089 0.0087

Saturn 64710-06-23 16:05 G 25356075.04 25356075.17 25356075.30 0.0276 0.0217

Saturn 64711-02-07 23:17 G 25356304.26 25356304.47 25356304.68 0.0275 0.0004

Saturn 64711-09-25 05:46 G 25356533.61 25356533.74 25356533.89 0.0274 0.0208

Jupiter 64712-11-14 14:24 G 25356949.98 25356950.10 25356950.23 0.0487 0.0381

Jupiter 64713-07-08 10:05 G 25357185.74 25357185.92 25357186.11 0.0493 0.0192

Uranus 64718-01-25 20:10 G 25358848.21 25358848.34 25358848.48 0.0136 0.0107

Uranus 64718-09-09 03:07 G 25359074.46 25359074.63 25359074.82 0.0136 0.0075

Jupiter 64718-09-21 07:27 G 25359086.63 25359086.81 25359086.99 0.0539 0.0267

Pluto 64719-04-13 01:55 G 25359290.41 25359290.58 25359290.77 0.0063 0.0037

Uranus 64719-04-23 10:34 G 25359300.73 25359300.94 25359301.15 0.0136 0.0041

Jupiter 64719-05-17 13:41 G 25359325.00 25359325.07 25359325.13 0.0531 0.0500

Pluto 64719-11-24 06:00 G 25359515.53 25359515.75 25359515.97 0.0063 0.0003

Uranus 64719-12-05 17:46 G 25359527.03 25359527.24 25359527.46 0.0137 0.0008

Pluto 64720-07-06 09:36 G 25359740.72 25359740.90 25359741.10 0.0064 0.0032

Uranus 64720-07-19 01:12 G 25359753.34 25359753.55 25359753.77 0.0137 0.0027

Uranus 64721-03-02 08:39 G 25359979.67 25359979.86 25359980.06 0.0137 0.0061

Uranus 64721-10-14 16:19 G 25360206.03 25360206.18 25360206.34 0.0137 0.0096

Uranus 64722-05-29 00:00 G 25360432.44 25360432.50 25360432.58 0.0137 0.0130

Jupiter 64725-03-13 14:10 G 25361451.89 25361452.09 25361452.30 0.0492 0.0029

Saturn 64725-07-19 12:00 G 25361579.86 25361580.00 25361580.13 0.0283 0.0216

Saturn 64726-03-06 04:19 G 25361809.47 25361809.68 25361809.89 0.0284 0.0020

Saturn 64726-10-21 21:07 G 25362039.30 25362039.38 25362039.48 0.0285 0.0258

Jupiter 64730-05-26 17:46 G 25363352.16 25363352.24 25363352.33 0.0541 0.0486

Jupiter 64731-01-20 01:55 G 25363590.42 25363590.58 25363590.76 0.0534 0.0294

Jupiter 64736-11-16 19:12 G 25365718.11 25365718.30 25365718.50 0.0490 0.0131

Jupiter 64737-07-10 18:00 G 25365954.17 25365954.25 25365954.33 0.0497 0.0454

Saturn 64740-01-03 20:24 G 25366861.21 25366861.35 25366861.52 0.0276 0.0186

Saturn 64740-08-20 04:05 G 25367090.46 25367090.67 25367090.88 0.0275 0.0029

Saturn 64741-04-06 11:03 G 25367319.87 25367319.96 25367320.07 0.0275 0.0240

Jupiter 64742-09-24 10:48 G 25367855.75 25367855.95 25367856.15 0.0536 0.0071

Jupiter 64748-07-22 23:46 G 25369984.33 25369984.49 25369984.66 0.0488 0.0287

Jupiter 64749-03-15 20:39 G 25370220.19 25370220.36 25370220.52 0.0494 0.0290

Jupiter 64754-05-29 21:51 G 25372121.22 25372121.41 25372121.61 0.0539 0.0148

Saturn 64755-01-29 23:46 G 25372366.33 25372366.49 25372366.67 0.0283 0.0169

Saturn 64755-09-16 16:19 G 25372595.98 25372596.18 25372596.39 0.0284 0.0068

Uranus 64758-05-13 18:29 G 25373566.19 25373566.27 25373566.38 0.0142 0.0127

Uranus 64758-12-26 05:03 G 25373792.54 25373792.71 25373792.88 0.0142 0.0089

Uranus 64759-08-09 15:07 G 25374018.94 25374019.13 25374019.34 0.0142 0.0052

Uranus 64760-03-23 01:27 G 25374245.34 25374245.56 25374245.78 0.0141 0.0013

Jupiter 64760-03-28 03:22 G 25374250.56 25374250.64 25374250.73 0.0487 0.0442

Uranus 64760-11-04 11:31 G 25374471.76 25374471.98 25374472.19 0.0141 0.0024

Jupiter 64760-11-18 22:19 G 25374486.24 25374486.43 25374486.63 0.0492 0.0124

Uranus 64761-06-18 21:07 G 25374698.19 25374698.38 25374698.58 0.0141 0.0061

Uranus 64762-01-31 06:58 G 25374924.63 25374924.79 25374924.94 0.0141 0.0098

Mars 64762-06-29 15:07 G 25375074.06 25375074.13 25375074.21 0.1769 0.1579

Uranus 64762-09-14 16:19 G 25375151.13 25375151.18 25375151.25 0.0141 0.0135

Jupiter 64766-02-01 09:51 G 25376386.77 25376386.91 25376387.07 0.0541 0.0363

Jupiter 64766-09-27 17:46 G 25376625.11 25376625.24 25376625.37 0.0533 0.0411

Mars 64767-02-11 04:48 G 25376761.54 25376761.70 25376761.86 0.1746 0.0658

Saturn 64769-07-16 02:39 G 25377647.44 25377647.61 25377647.79 0.0275 0.0154

Neptune 64770-01-16 10:48 G 25377831.91 25377831.95 25377832.04 0.0088 0.0084

Saturn 64770-03-02 09:51 G 25377876.71 25377876.91 25377877.12 0.0275 0.0060

Neptune 64770-08-30 00:00 G 25378057.42 25378057.50 25378057.61 0.0088 0.0079

Saturn 64770-10-17 16:34 G 25378106.16 25378106.19 25378106.23 0.0274 0.0270

Neptune 64771-04-12 12:29 G 25378282.93 25378283.02 25378283.16 0.0088 0.0075

Neptune 64771-11-24 01:12 G 25378508.44 25378508.55 25378508.70 0.0088 0.0070

Neptune 64772-07-06 14:10 G 25378733.95 25378734.09 25378734.25 0.0088 0.0065

Jupiter 64772-07-25 02:24 G 25378752.40 25378752.60 25378752.81 0.0491 0.0039

Neptune 64773-02-17 02:39 G 25378959.47 25378959.61 25378959.79 0.0088 0.0061

Neptune 64773-09-30 15:36 G 25379185.00 25379185.15 25379185.34 0.0088 0.0056

Neptune 64774-05-14 04:34 G 25379410.52 25379410.69 25379410.88 0.0088 0.0051

Neptune 64774-12-25 16:48 G 25379636.04 25379636.20 25379636.41 0.0088 0.0047

Neptune 64775-08-08 05:46 G 25379861.56 25379861.74 25379861.95 0.0088 0.0042

Neptune 64776-03-20 18:29 G 25380087.08 25380087.27 25380087.48 0.0088 0.0037

Neptune 64776-11-01 07:12 G 25380312.61 25380312.80 25380313.02 0.0088 0.0032

Neptune 64777-06-14 19:55 G 25380538.13 25380538.33 25380538.55 0.0088 0.0027

Neptune 64778-01-26 08:53 G 25380763.65 25380763.87 25380764.08 0.0088 0.0022

Jupiter 64778-06-02 07:12 G 25380890.61 25380890.80 25380890.99 0.0535 0.0204

Neptune 64778-09-08 21:36 G 25380989.18 25380989.40 25380989.62 0.0088 0.0018

Neptune 64779-04-22 10:05 G 25381214.71 25381214.92 25381215.15 0.0088 0.0013

Neptune 64779-12-03 22:48 G 25381440.24 25381440.45 25381440.68 0.0088 0.0008

Neptune 64780-07-16 11:31 G 25381665.76 25381665.98 25381666.20 0.0088 0.0003

Neptune 64781-02-27 00:15 G 25381891.29 25381891.51 25381891.73 0.0088 0.0002

Neptune 64781-10-10 13:12 G 25382116.83 25382117.05 25382117.27 0.0088 0.0007

Neptune 64782-05-24 01:55 G 25382342.36 25382342.58 25382342.80 0.0088 0.0012

Neptune 64783-01-04 14:39 G 25382567.90 25382568.11 25382568.33 0.0088 0.0017

Neptune 64783-08-18 03:22 G 25382793.43 25382793.64 25382793.86 0.0088 0.0022

Jupiter 64784-03-30 06:58 G 25383018.61 25383018.79 25383018.98 0.0489 0.0196

Neptune 64784-03-30 16:05 G 25383018.97 25383019.17 25383019.39 0.0088 0.0027 *

Saturn 64784-08-11 01:41 G 25383152.40 25383152.57 25383152.76 0.0284 0.0145

Neptune 64784-11-11 04:48 G 25383244.51 25383244.70 25383244.92 0.0088 0.0032

Jupiter 64784-11-21 05:03 G 25383254.59 25383254.71 25383254.84 0.0496 0.0385

Saturn 64785-03-28 18:29 G 25383382.07 25383382.27 25383382.47 0.0284 0.0092

Neptune 64785-06-24 17:31 G 25383470.04 25383470.23 25383470.45 0.0088 0.0037

Neptune 64786-02-05 06:15 G 25383695.58 25383695.76 25383695.97 0.0088 0.0042

Neptune 64786-09-18 18:58 G 25383921.13 25383921.29 25383921.50 0.0088 0.0047

Neptune 64787-05-02 08:10 G 25384146.67 25384146.84 25384147.03 0.0088 0.0051

Neptune 64787-12-13 20:39 G 25384372.21 25384372.36 25384372.55 0.0088 0.0056

Neptune 64788-07-26 09:22 G 25384597.75 25384597.89 25384598.07 0.0088 0.0061

Neptune 64789-03-08 22:34 G 25384823.29 25384823.44 25384823.59 0.0088 0.0065

Earth 64789-06-18 20:24 G 25384925.23 25384925.35 25384925.46 0.2680 0.1837

Moon 64789-06-19 00:58 G 25384925.45 25384925.54 25384925.63 0.2684 0.2202 *

Neptune 64789-10-20 11:03 G 25385048.84 25385048.96 25385049.11 0.0088 0.0070

Jupiter 64790-02-04 18:43 G 25385156.07 25385156.28 25385156.48 0.0537 0.0015

Neptune 64790-06-02 23:46 G 25385274.39 25385274.49 25385274.63 0.0088 0.0075

Neptune 64791-01-14 12:43 G 25385499.94 25385500.03 25385500.14 0.0089 0.0079

Neptune 64791-08-28 01:12 G 25385725.50 25385725.55 25385725.64 0.0089 0.0084

Neptune 64792-04-09 14:10 G 25385951.08 25385951.09 25385951.13 0.0089 0.0088

Mars 64794-06-29 00:00 G 25386761.45 25386761.50 25386761.55 0.1780 0.1705

Jupiter 64795-12-04 12:43 G 25387284.89 25387285.03 25387285.17 0.0488 0.0349

Jupiter 64796-07-27 08:53 G 25387520.69 25387520.87 25387521.05 0.0494 0.0223

Earth 64797-06-16 10:05 G 25387844.80 25387844.92 25387845.04 0.2682 0.1720

Moon 64797-06-16 15:36 G 25387845.02 25387845.15 25387845.29 0.2680 0.1486 *

Saturn 64799-01-26 07:12 G 25388433.62 25388433.80 25388433.99 0.0276 0.0122

Saturn 64799-09-12 14:39 G 25388662.91 25388663.11 25388663.31 0.0275 0.0091

Uranus 64801-09-25 03:51 G 25389406.59 25389406.66 25389406.77 0.0136 0.0123

Jupiter 64801-10-10 02:24 G 25389421.42 25389421.60 25389421.79 0.0539 0.0238

Uranus 64802-05-09 11:17 G 25389632.81 25389632.97 25389633.14 0.0136 0.0090

Jupiter 64802-06-05 08:24 G 25389659.82 25389659.85 25389659.88 0.0531 0.0524

Uranus 64802-12-21 18:15 G 25389859.07 25389859.26 25389859.47 0.0136 0.0056

Uranus 64803-08-05 01:41 G 25390085.35 25390085.57 25390085.78 0.0137 0.0023

Uranus 64804-03-18 09:07 G 25390311.66 25390311.88 25390312.10 0.0137 0.0011

Uranus 64804-10-30 16:19 G 25390537.98 25390538.18 25390538.39 0.0137 0.0046

Uranus 64805-06-13 23:46 G 25390764.32 25390764.49 25390764.68 0.0137 0.0080

Uranus 64806-01-26 07:12 G 25390990.70 25390990.80 25390990.94 0.0137 0.0115

Jupiter 64808-04-01 12:29 G 25391786.82 25391787.02 25391787.22 0.0492 0.0061

Pluto 64809-05-29 20:39 G 25392210.16 25392210.36 25392210.59 0.0080 0.0018

Pluto 64810-01-10 07:27 G 25392435.64 25392435.81 25392435.98 0.0080 0.0051

Jupiter 64813-06-14 12:15 G 25393686.91 25393687.01 25393687.12 0.0541 0.0457

Jupiter 64814-02-07 20:39 G 25393925.20 25393925.36 25393925.53 0.0534 0.0319

Saturn 64814-02-21 14:10 G 25393938.89 25393939.09 25393939.29 0.0283 0.0096

Saturn 64814-10-09 06:58 G 25394168.60 25394168.79 25394168.97 0.0284 0.0140

Jupiter 64819-12-06 14:53 G 25396052.92 25396053.12 25396053.32 0.0490 0.0102

Jupiter 64820-07-29 13:12 G 25396289.01 25396289.05 25396289.11 0.0496 0.0479

Jupiter 64825-10-13 10:05 G 25398190.72 25398190.92 25398191.12 0.0537 0.0111

Saturn 64828-08-07 14:24 G 25399219.90 25399220.10 25399220.30 0.0275 0.0088

Saturn 64829-03-24 21:07 G 25399449.20 25399449.38 25399449.58 0.0275 0.0125

Jupiter 64831-08-11 19:41 G 25400319.15 25400319.32 25400319.49 0.0488 0.0258

Jupiter 64832-04-03 16:19 G 25400555.03 25400555.18 25400555.34 0.0494 0.0316

Mars 64832-12-08 13:55 G 25400803.91 25400804.08 25400804.25 0.1750 0.0233

Jupiter 64837-06-17 22:48 G 25402456.25 25402456.45 25402456.65 0.0538 0.0104

Uranus 64842-08-25 11:17 G 25404350.84 25404350.97 25404351.12 0.0142 0.0107

Uranus 64843-04-08 21:36 G 25404577.22 25404577.40 25404577.60 0.0142 0.0069

Jupiter 64843-04-17 00:29 G 25404585.42 25404585.52 25404585.63 0.0487 0.0412

Saturn 64843-09-03 16:34 G 25404724.99 25404725.19 25404725.40 0.0284 0.0071

Uranus 64843-11-21 07:55 G 25404803.62 25404803.83 25404804.05 0.0141 0.0031

Jupiter 64843-12-08 19:55 G 25404821.14 25404821.33 25404821.53 0.0493 0.0155

Saturn 64844-04-20 09:07 G 25404954.72 25404954.88 25404955.06 0.0284 0.0167

Uranus 64844-07-04 18:00 G 25405030.03 25405030.25 25405030.47 0.0141 0.0007

Uranus 64845-02-16 03:36 G 25405256.45 25405256.65 25405256.87 0.0141 0.0045

Uranus 64845-09-30 13:41 G 25405482.90 25405483.07 25405483.25 0.0141 0.0081

Uranus 64846-05-14 23:03 G 25405709.35 25405709.46 25405709.59 0.0141 0.0118

Jupiter 64849-02-20 09:36 G 25406721.74 25406721.90 25406722.06 0.0540 0.0322

Jupiter 64849-10-16 16:19 G 25406960.08 25406960.18 25406960.30 0.0532 0.0446

Neptune 64850-12-08 15:51 G 25407378.15 25407378.16 25407378.21 0.0090 0.0089

Neptune 64851-07-22 05:17 G 25407603.66 25407603.72 25407603.81 0.0090 0.0084

Neptune 64852-03-03 18:29 G 25407829.20 25407829.27 25407829.40 0.0090 0.0080

Neptune 64852-10-15 07:55 G 25408054.73 25408054.83 25408054.97 0.0089 0.0075

Neptune 64853-05-28 21:22 G 25408280.27 25408280.39 25408280.54 0.0089 0.0070

Neptune 64854-01-09 10:34 G 25408505.81 25408505.94 25408506.11 0.0089 0.0065

Neptune 64854-08-23 00:00 G 25408731.35 25408731.50 25408731.67 0.0089 0.0060

Neptune 64855-04-05 13:41 G 25408956.90 25408957.07 25408957.24 0.0089 0.0055

Jupiter 64855-08-14 00:43 G 25409087.33 25409087.53 25409087.73 0.0491 0.0006

Neptune 64855-11-17 02:53 G 25409182.44 25409182.62 25409182.81 0.0089 0.0050

Neptune 64856-06-29 15:51 G 25409407.99 25409408.16 25409408.37 0.0089 0.0045

Neptune 64857-02-10 05:03 G 25409633.54 25409633.71 25409633.93 0.0089 0.0041

Saturn 64857-07-03 10:48 G 25409776.91 25409776.95 25409776.98 0.0276 0.0271

Neptune 64857-09-23 18:29 G 25409859.09 25409859.27 25409859.49 0.0089 0.0036

Saturn 64858-02-17 18:29 G 25410006.06 25410006.27 25410006.48 0.0275 0.0058

Neptune 64858-05-07 08:24 G 25410084.64 25410084.85 25410085.05 0.0089 0.0030

Saturn 64858-10-05 01:41 G 25410235.39 25410235.57 25410235.74 0.0275 0.0154

Neptune 64858-12-18 21:36 G 25410310.19 25410310.40 25410310.61 0.0089 0.0025

Neptune 64859-08-01 11:03 G 25410535.74 25410535.96 25410536.17 0.0089 0.0020

Neptune 64860-03-14 00:29 G 25410761.30 25410761.52 25410761.74 0.0089 0.0015

Mars 64860-04-25 06:43 G 25410803.65 25410803.78 25410803.91 0.1776 0.1172

Neptune 64860-10-25 13:41 G 25410986.86 25410987.07 25410987.30 0.0089 0.0010

Neptune 64861-06-08 03:07 G 25411212.41 25411212.63 25411212.85 0.0089 0.0004

Jupiter 64861-06-21 01:55 G 25411225.40 25411225.58 25411225.77 0.0535 0.0231

Neptune 64862-01-19 16:34 G 25411437.97 25411438.19 25411438.41 0.0089 0.0002

Neptune 64862-09-02 05:46 G 25411663.52 25411663.74 25411663.96 0.0089 0.0006

Neptune 64863-04-15 19:12 G 25411889.08 25411889.30 25411889.52 0.0089 0.0011

Neptune 64863-11-27 08:24 G 25412114.64 25412114.85 25412115.08 0.0089 0.0016

Neptune 64864-07-09 21:36 G 25412340.20 25412340.40 25412340.62 0.0089 0.0021

Neptune 64865-02-20 11:03 G 25412565.75 25412565.96 25412566.17 0.0089 0.0026

Neptune 64865-10-04 00:15 G 25412791.31 25412791.51 25412791.72 0.0089 0.0031

Neptune 64866-05-17 13:41 G 25413016.87 25413017.07 25413017.28 0.0089 0.0036

Neptune 64866-12-29 02:53 G 25413242.43 25413242.62 25413242.82 0.0089 0.0041

Jupiter 64867-04-19 05:03 G 25413353.52 25413353.71 25413353.90 0.0489 0.0163

Neptune 64867-08-11 16:05 G 25413467.99 25413468.17 25413468.37 0.0089 0.0046

Jupiter 64867-12-11 02:53 G 25413589.52 25413589.62 25413589.74 0.0496 0.0415

Neptune 64868-03-24 05:17 G 25413693.55 25413693.72 25413693.91 0.0089 0.0051

Neptune 64868-11-04 18:29 G 25413919.11 25413919.27 25413919.46 0.0089 0.0056

Neptune 64869-06-18 07:41 G 25414144.68 25414144.82 25414145.00 0.0089 0.0061

Neptune 64870-01-29 20:39 G 25414370.24 25414370.36 25414370.53 0.0089 0.0066

Neptune 64870-09-12 10:34 G 25414595.81 25414595.94 25414596.07 0.0089 0.0070

Neptune 64871-04-25 23:46 G 25414821.38 25414821.49 25414821.61 0.0089 0.0075

Neptune 64871-12-07 12:43 G 25415046.96 25415047.03 25415047.15 0.0089 0.0080

Neptune 64872-07-20 01:55 G 25415272.54 25415272.58 25415272.67 0.0089 0.0085

Saturn 64872-07-29 11:46 G 25415281.91 25415281.99 25415282.08 0.0283 0.0260

Jupiter 64873-02-23 12:58 G 25415490.84 25415491.04 25415491.25 0.0537 0.0017

Saturn 64873-03-16 04:19 G 25415511.47 25415511.68 25415511.89 0.0284 0.0025

Saturn 64873-10-31 21:07 G 25415741.25 25415741.38 25415741.53 0.0284 0.0212

Jupiter 64878-12-23 08:10 G 25417619.69 25417619.84 25417620.00 0.0488 0.0321

Jupiter 64879-08-16 03:51 G 25417855.49 25417855.66 25417855.84 0.0493 0.0249

Jupiter 64884-10-29 00:58 G 25419756.36 25419756.54 25419756.73 0.0540 0.0200

Uranus 64886-01-06 19:41 G 25420191.18 25420191.32 25420191.46 0.0136 0.0105

Uranus 64886-08-21 02:24 G 25420417.42 25420417.60 25420417.80 0.0136 0.0072

Saturn 64887-01-13 19:12 G 25420563.21 25420563.30 25420563.42 0.0276 0.0235

Uranus 64887-04-04 09:51 G 25420643.70 25420643.91 25420644.12 0.0137 0.0038

Saturn 64887-08-31 02:53 G 25420792.41 25420792.62 25420792.83 0.0275 0.0022

Uranus 64887-11-16 17:03 G 25420869.99 25420870.21 25420870.43 0.0137 0.0004

Saturn 64888-04-16 09:22 G 25421021.75 25421021.89 25421022.05 0.0275 0.0190

Uranus 64888-06-30 00:15 G 25421096.30 25421096.51 25421096.73 0.0137 0.0030

Uranus 64889-02-11 07:41 G 25421322.63 25421322.82 25421323.02 0.0137 0.0064

Uranus 64889-09-25 15:22 G 25421548.99 25421549.14 25421549.29 0.0137 0.0099

Uranus 64890-05-09 23:03 G 25421775.42 25421775.46 25421775.52 0.0138 0.0133

Jupiter 64890-08-28 13:27 G 25421886.02 25421886.06 25421886.11 0.0486 0.0471

Jupiter 64891-04-21 07:55 G 25422121.63 25422121.83 25422122.03 0.0492 0.0088

Earth 64894-12-21 05:03 G 25423461.57 25423461.71 25423461.86 0.2651 0.1113

Moon 64894-12-21 10:19 G 25423461.83 25423461.93 25423462.03 0.2654 0.1935 *

Jupiter 64896-07-03 12:43 G 25424021.91 25424022.03 25424022.16 0.0541 0.0415

Jupiter 64897-02-26 21:07 G 25424260.23 25424260.38 25424260.54 0.0534 0.0358

Mars 64898-10-05 22:19 G 25424846.26 25424846.43 25424846.60 0.1753 0.0214

Saturn 64902-02-09 14:39 G 25426067.99 25426068.11 25426068.23 0.0283 0.0233

Saturn 64902-09-27 06:58 G 25426297.58 25426297.79 25426298.01 0.0284 0.0004

Earth 64902-12-19 21:22 G 25426381.29 25426381.39 25426381.49 0.2650 0.2051

Moon 64902-12-20 02:39 G 25426381.47 25426381.61 25426381.74 0.2647 0.1493 *

Jupiter 64902-12-26 12:00 G 25426387.80 25426388.00 25426388.21 0.0490 0.0073

Saturn 64903-05-14 23:46 G 25426527.39 25426527.49 25426527.62 0.0284 0.0239

Jupiter 64908-11-02 09:36 G 25428525.70 25428525.90 25428526.09 0.0536 0.0148

Jupiter 64914-08-31 17:17 G 25430654.05 25430654.22 25430654.41 0.0489 0.0228

Jupiter 64915-04-24 14:39 G 25430889.97 25430890.11 25430890.26 0.0495 0.0346

Saturn 64916-07-26 22:19 G 25431349.30 25431349.43 25431349.57 0.0276 0.0207

Saturn 64917-03-13 05:46 G 25431578.53 25431578.74 25431578.96 0.0275 0.0009

Saturn 64917-10-28 12:43 G 25431807.91 25431808.03 25431808.17 0.0275 0.0218

Jupiter 64920-07-07 18:15 G 25432791.06 25432791.26 25432791.46 0.0538 0.0073

Mars 64926-02-21 14:39 G 25434845.95 25434846.11 25434846.27 0.1772 0.0690

Uranus 64926-04-25 18:00 G 25434909.16 25434909.25 25434909.37 0.0142 0.0124

Jupiter 64926-05-06 22:19 G 25434920.31 25434920.43 25434920.56 0.0487 0.0380

Uranus 64926-12-08 04:34 G 25435135.52 25435135.69 25435135.86 0.0142 0.0086

Jupiter 64926-12-28 18:00 G 25435156.06 25435156.25 25435156.44 0.0493 0.0185

Uranus 64927-07-22 14:39 G 25435361.91 25435362.11 25435362.32 0.0142 0.0048

Uranus 64928-03-05 00:58 G 25435588.32 25435588.54 25435588.75 0.0141 0.0011

Uranus 64928-10-17 10:48 G 25435814.74 25435814.95 25435815.17 0.0141 0.0027

Uranus 64929-05-31 20:39 G 25436041.17 25436041.36 25436041.55 0.0141 0.0064

Uranus 64930-01-13 06:15 G 25436267.61 25436267.76 25436267.91 0.0141 0.0101

Uranus 64930-08-27 15:22 G 25436494.11 25436494.14 25436494.19 0.0141 0.0138

Saturn 64931-08-23 01:41 G 25436854.41 25436854.57 25436854.72 0.0283 0.0190

Jupiter 64932-03-12 04:19 G 25437056.51 25437056.68 25437056.85 0.0540 0.0292

Saturn 64932-04-08 18:15 G 25437084.05 25437084.26 25437084.47 0.0284 0.0046

Jupiter 64932-11-05 11:03 G 25437294.87 25437294.96 25437295.06 0.0532 0.0471

Saturn 64932-11-24 11:31 G 25437313.96 25437313.98 25437314.00 0.0284 0.0283

Neptune 64933-09-07 10:19 G 25437600.90 25437600.93 25437600.97 0.0088 0.0086

Neptune 64934-04-20 22:48 G 25437826.39 25437826.45 25437826.54 0.0088 0.0082

Neptune 64934-12-02 11:46 G 25438051.89 25438051.99 25438052.10 0.0088 0.0077

Neptune 64935-07-16 00:00 G 25438277.40 25438277.50 25438277.64 0.0088 0.0073

Neptune 64936-02-26 12:58 G 25438502.91 25438503.04 25438503.19 0.0088 0.0068

Neptune 64936-10-09 01:27 G 25438728.44 25438728.56 25438728.74 0.0088 0.0064

Neptune 64937-05-22 14:24 G 25438953.96 25438954.10 25438954.28 0.0088 0.0059

Neptune 64938-01-03 03:22 G 25439179.48 25439179.64 25439179.82 0.0088 0.0054

Neptune 64938-08-16 16:19 G 25439405.00 25439405.18 25439405.36 0.0088 0.0049

Jupiter 64938-09-02 19:55 G 25439422.13 25439422.33 25439422.54 0.0491 0.0023

Neptune 64939-03-30 04:48 G 25439630.52 25439630.70 25439630.90 0.0088 0.0045

Neptune 64939-11-10 17:31 G 25439856.05 25439856.23 25439856.44 0.0088 0.0040

Neptune 64940-06-23 06:15 G 25440081.57 25440081.76 25440081.97 0.0088 0.0035

Neptune 64941-02-03 19:12 G 25440307.10 25440307.30 25440307.51 0.0088 0.0030

Neptune 64941-09-17 07:55 G 25440532.63 25440532.83 25440533.05 0.0088 0.0026

Neptune 64942-04-30 20:53 G 25440758.15 25440758.37 25440758.58 0.0088 0.0021

Neptune 64942-12-12 09:22 G 25440983.68 25440983.89 25440984.11 0.0088 0.0016

Neptune 64943-07-25 22:05 G 25441209.20 25441209.42 25441209.64 0.0088 0.0011

Jupiter 64943-11-15 14:53 G 25441322.05 25441322.12 25441322.19 0.0542 0.0508

Neptune 64944-03-07 10:48 G 25441434.73 25441434.95 25441435.17 0.0088 0.0006

Jupiter 64944-07-11 00:29 G 25441560.35 25441560.52 25441560.70 0.0535 0.0267

Neptune 64944-10-18 23:31 G 25441660.27 25441660.48 25441660.71 0.0088 0.0002

Neptune 64945-06-01 12:15 G 25441885.80 25441886.01 25441886.24 0.0088 0.0004

Neptune 64946-01-13 00:58 G 25442111.33 25442111.54 25442111.76 0.0088 0.0009

Saturn 64946-02-06 07:41 G 25442135.66 25442135.82 25442135.99 0.0276 0.0169

Neptune 64946-08-26 13:41 G 25442336.86 25442337.07 25442337.29 0.0088 0.0014

Saturn 64946-09-23 14:53 G 25442364.91 25442365.12 25442365.33 0.0275 0.0044

Neptune 64947-04-09 02:39 G 25442562.39 25442562.61 25442562.82 0.0088 0.0019

Saturn 64947-05-10 21:22 G 25442594.32 25442594.39 25442594.48 0.0275 0.0254

Neptune 64947-11-20 15:22 G 25442787.93 25442788.14 25442788.35 0.0088 0.0024

Neptune 64948-07-03 03:51 G 25443013.46 25443013.66 25443013.88 0.0088 0.0029

Neptune 64949-02-13 16:34 G 25443239.00 25443239.19 25443239.41 0.0088 0.0034

Neptune 64949-09-27 05:31 G 25443464.54 25443464.73 25443464.94 0.0088 0.0038

Jupiter 64950-05-09 00:29 G 25443688.33 25443688.52 25443688.72 0.0489 0.0136

Neptune 64950-05-10 18:15 G 25443690.08 25443690.26 25443690.47 0.0088 0.0043

Neptune 64950-12-22 06:58 G 25443915.62 25443915.79 25443915.99 0.0088 0.0048

Jupiter 64950-12-30 22:05 G 25443924.34 25443924.42 25443924.52 0.0496 0.0439

Neptune 64951-08-04 19:55 G 25444141.16 25444141.33 25444141.51 0.0088 0.0053

Neptune 64952-03-17 08:39 G 25444366.71 25444366.86 25444367.04 0.0088 0.0058

Neptune 64952-10-28 21:22 G 25444592.26 25444592.39 25444592.57 0.0088 0.0063

Neptune 64953-06-11 10:34 G 25444817.80 25444817.94 25444818.09 0.0088 0.0067

Neptune 64954-01-22 23:03 G 25445043.35 25445043.46 25445043.60 0.0088 0.0072

Neptune 64954-09-05 11:31 G 25445268.90 25445268.98 25445269.12 0.0088 0.0077

Neptune 64955-04-19 00:43 G 25445494.45 25445494.53 25445494.63 0.0088 0.0081

Neptune 64955-11-30 13:12 G 25445720.02 25445720.05 25445720.13 0.0089 0.0086

Jupiter 64956-03-15 13:41 G 25445825.86 25445826.07 25445826.27 0.0537 0.0058

Saturn 64961-03-04 04:05 G 25447640.51 25447640.67 25447640.85 0.0283 0.0164

Saturn 64961-10-19 20:53 G 25447870.16 25447870.37 25447870.57 0.0284 0.0072

Jupiter 64962-01-12 05:17 G 25447954.56 25447954.72 25447954.88 0.0488 0.0291

Jupiter 64962-09-05 01:27 G 25448190.39 25448190.56 25448190.73 0.0494 0.0277

Mars 64964-08-03 07:12 G 25448888.64 25448888.80 25448888.96 0.1757 0.0651

Pluto 64967-10-28 04:19 G 25450069.53 25450069.68 25450069.87 0.0063 0.0042

Jupiter 64967-11-19 01:12 G 25450091.36 25450091.55 25450091.75 0.0539 0.0158

Pluto 64968-06-09 08:24 G 25450294.64 25450294.85 25450295.08 0.0064 0.0008

Pluto 64969-01-20 12:29 G 25450519.82 25450520.02 25450520.22 0.0064 0.0027

Pluto 64969-09-02 16:05 G 25450745.14 25450745.17 25450745.24 0.0064 0.0062

Uranus 64969-09-07 03:22 G 25450749.55 25450749.64 25450749.75 0.0136 0.0120

Uranus 64970-04-21 10:48 G 25450975.78 25450975.95 25450976.11 0.0136 0.0087

Uranus 64970-12-03 17:31 G 25451202.04 25451202.23 25451202.44 0.0136 0.0054

Uranus 64971-07-18 00:43 G 25451428.32 25451428.53 25451428.75 0.0137 0.0020

Uranus 64972-02-29 08:10 G 25451654.62 25451654.84 25451655.06 0.0137 0.0014

Uranus 64972-10-12 15:22 G 25451880.95 25451881.14 25451881.35 0.0137 0.0049

Uranus 64973-05-26 22:48 G 25452107.29 25452107.45 25452107.63 0.0137 0.0083

Jupiter 64973-09-17 11:03 G 25452220.88 25452220.96 25452221.05 0.0487 0.0441

Uranus 64974-01-08 06:15 G 25452333.67 25452333.76 25452333.89 0.0137 0.0118

Jupiter 64974-05-11 06:00 G 25452456.55 25452456.75 25452456.95 0.0492 0.0119

Saturn 64975-08-19 09:51 G 25452921.74 25452921.91 25452922.10 0.0275 0.0143

Saturn 64976-04-04 17:17 G 25453151.02 25453151.22 25453151.43 0.0275 0.0070

Jupiter 64979-07-24 09:36 G 25454356.76 25454356.90 25454357.04 0.0540 0.0379

Jupiter 64980-03-18 17:17 G 25454595.08 25454595.22 25454595.36 0.0533 0.0386

Jupiter 64986-01-14 10:05 G 25456722.72 25456722.92 25456723.12 0.0490 0.0040

Saturn 64990-09-14 13:55 G 25458426.89 25458427.08 25458427.27 0.0284 0.0122

Saturn 64991-05-02 06:58 G 25458656.59 25458656.79 25458656.98 0.0284 0.0114

Jupiter 64991-11-22 04:48 G 25458860.51 25458860.70 25458860.89 0.0536 0.0177

Mars 64991-12-19 22:05 G 25458888.25 25458888.42 25458888.59 0.1769 0.0195

Jupiter 64997-09-19 13:12 G 25460988.87 25460989.05 25460989.24 0.0488 0.0199

Jupiter 64998-05-13 10:05 G 25461224.79 25461224.92 25461225.05 0.0495 0.0371

66TH MILLENNIUM CE

This is a list of transits of Venus in the 66th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 65003-07-28 16:34 G 25463125.98 25463126.19 25463126.39 0.0538 0.0039

Saturn 65005-03-01 19:41 G 25463708.13 25463708.32 25463708.52 0.0275 0.0103

Saturn 65005-10-17 02:39 G 25463937.42 25463937.61 25463937.81 0.0275 0.0108

Jupiter 65009-05-26 18:29 G 25465255.13 25465255.27 25465255.41 0.0487 0.0351

Uranus 65009-12-25 00:43 G 25465467.53 25465467.53 25465467.56 0.0142 0.0142

Jupiter 65010-01-17 13:27 G 25465490.88 25465491.06 25465491.25 0.0493 0.0212

Uranus 65010-08-08 11:03 G 25465693.83 25465693.96 25465694.12 0.0142 0.0104

Uranus 65011-03-22 21:36 G 25465920.21 25465920.40 25465920.60 0.0142 0.0066

Uranus 65011-11-04 07:55 G 25466146.62 25466146.83 25466147.04 0.0142 0.0028

Uranus 65012-06-17 17:46 G 25466373.03 25466373.24 25466373.46 0.0141 0.0010

Uranus 65013-01-30 03:36 G 25466599.45 25466599.65 25466599.86 0.0141 0.0047

Uranus 65013-09-13 12:58 G 25466825.89 25466826.04 25466826.23 0.0141 0.0085

Uranus 65014-04-27 22:48 G 25467052.35 25467052.45 25467052.56 0.0141 0.0121

Neptune 65015-03-14 03:22 G 25467372.60 25467372.64 25467372.70 0.0089 0.0087

Jupiter 65015-04-02 04:48 G 25467391.52 25467391.70 25467391.88 0.0540 0.0251

Neptune 65015-10-25 16:19 G 25467598.12 25467598.18 25467598.29 0.0089 0.0083

Jupiter 65015-11-26 11:46 G 25467629.94 25467629.99 25467630.06 0.0533 0.0509

Neptune 65016-06-07 05:46 G 25467823.65 25467823.74 25467823.87 0.0089 0.0078

Neptune 65017-01-18 19:12 G 25468049.19 25468049.30 25468049.44 0.0089 0.0073

Neptune 65017-09-01 08:53 G 25468274.73 25468274.87 25468275.02 0.0089 0.0068

Neptune 65018-04-14 22:19 G 25468500.28 25468500.43 25468500.59 0.0089 0.0063

Neptune 65018-11-26 11:17 G 25468725.82 25468725.97 25468726.16 0.0089 0.0058

Neptune 65019-07-10 00:29 G 25468951.37 25468951.52 25468951.72 0.0089 0.0054

Neptune 65020-02-20 13:55 G 25469176.91 25469177.08 25469177.28 0.0089 0.0049

Saturn 65020-03-27 17:03 G 25469213.01 25469213.21 25469213.41 0.0283 0.0095

Neptune 65020-10-03 03:22 G 25469402.46 25469402.64 25469402.85 0.0089 0.0043

Saturn 65020-11-12 09:51 G 25469442.72 25469442.91 25469443.09 0.0284 0.0141

Neptune 65021-05-16 16:34 G 25469628.01 25469628.19 25469628.41 0.0089 0.0039

Jupiter 65021-09-22 17:31 G 25469757.03 25469757.23 25469757.44 0.0491 0.0052

Neptune 65021-12-28 06:00 G 25469853.56 25469853.75 25469853.97 0.0089 0.0033

Neptune 65022-08-10 19:12 G 25470079.11 25470079.30 25470079.53 0.0089 0.0029

Neptune 65023-03-24 08:39 G 25470304.66 25470304.86 25470305.09 0.0089 0.0024

Neptune 65023-11-04 22:19 G 25470530.22 25470530.43 25470530.65 0.0089 0.0018

Neptune 65024-06-17 11:31 G 25470755.77 25470755.98 25470756.20 0.0089 0.0013

Neptune 65025-01-29 00:58 G 25470981.32 25470981.54 25470981.76 0.0089 0.0008

Neptune 65025-09-11 14:10 G 25471206.88 25471207.09 25471207.32 0.0089 0.0003

Neptune 65026-04-25 03:51 G 25471432.44 25471432.66 25471432.88 0.0089 0.0003

Jupiter 65026-12-05 15:51 G 25471657.06 25471657.16 25471657.27 0.0542 0.0465

Neptune 65026-12-06 17:03 G 25471657.99 25471658.21 25471658.43 0.0089 0.0008

Neptune 65027-07-20 06:15 G 25471883.55 25471883.76 25471883.99 0.0089 0.0013

Jupiter 65027-08-01 00:58 G 25471895.38 25471895.54 25471895.71 0.0535 0.0306

Neptune 65028-03-01 19:41 G 25472109.11 25472109.32 25472109.54 0.0089 0.0018

Neptune 65028-10-13 08:53 G 25472334.67 25472334.87 25472335.09 0.0089 0.0024

Neptune 65029-05-26 22:19 G 25472560.23 25472560.43 25472560.65 0.0089 0.0028

Neptune 65030-01-07 11:31 G 25472785.79 25472785.98 25472786.19 0.0089 0.0034

Mars 65030-06-01 15:36 G 25472931.02 25472931.15 25472931.28 0.1761 0.1105

Neptune 65030-08-21 00:58 G 25473011.34 25473011.54 25473011.74 0.0089 0.0038

Neptune 65031-04-03 14:10 G 25473236.91 25473237.09 25473237.29 0.0089 0.0043

Neptune 65031-11-15 03:22 G 25473462.47 25473462.64 25473462.84 0.0089 0.0048

Moon 65032-06-20 17:31 G 25473681.10 25473681.23 25473681.35 0.2676 0.1833

Earth 65032-06-20 20:39 G 25473681.24 25473681.36 25473681.47 0.2682 0.1844 *

Neptune 65032-06-27 16:34 G 25473688.03 25473688.19 25473688.38 0.0089 0.0053

Neptune 65033-02-08 05:46 G 25473913.59 25473913.74 25473913.92 0.0089 0.0058

Jupiter 65033-05-28 22:48 G 25474023.25 25474023.45 25474023.65 0.0490 0.0104

Neptune 65033-09-21 18:43 G 25474139.15 25474139.28 25474139.46 0.0089 0.0063

Jupiter 65034-01-19 20:53 G 25474259.31 25474259.37 25474259.44 0.0496 0.0469

Neptune 65034-05-05 08:10 G 25474364.72 25474364.84 25474365.00 0.0089 0.0068

Saturn 65034-09-11 20:53 G 25474494.18 25474494.37 25474494.58 0.0275 0.0079

Neptune 65034-12-16 21:51 G 25474590.28 25474590.41 25474590.54 0.0089 0.0072

Saturn 65035-04-29 04:05 G 25474723.49 25474723.67 25474723.86 0.0275 0.0133

Neptune 65035-07-30 10:34 G 25474815.85 25474815.94 25474816.07 0.0089 0.0077

Neptune 65036-03-11 23:46 G 25475041.43 25475041.49 25475041.60 0.0089 0.0082

Neptune 65036-10-23 13:27 G 25475267.01 25475267.06 25475267.11 0.0089 0.0086

Jupiter 65039-04-05 11:03 G 25476160.76 25476160.96 25476161.16 0.0537 0.0091

Moon 65040-06-18 04:34 G 25476600.60 25476600.69 25476600.79 0.2682 0.2148

Earth 65040-06-18 10:19 G 25476600.81 25476600.93 25476601.05 0.2683 0.1714

Jupiter 65045-02-01 03:22 G 25478289.47 25478289.64 25478289.82 0.0488 0.0258

Jupiter 65045-09-25 00:00 G 25478525.35 25478525.50 25478525.66 0.0494 0.0309

Saturn 65049-10-08 01:12 G 25479999.34 25479999.55 25479999.76 0.0284 0.0057

Saturn 65050-05-25 18:15 G 25480229.10 25480229.26 25480229.43 0.0284 0.0180

Jupiter 65050-12-08 21:22 G 25480426.20 25480426.39 25480426.59 0.0539 0.0126

Uranus 65053-05-08 11:46 G 25481307.98 25481307.99 25481308.02 0.0136 0.0135

Uranus 65053-12-20 18:43 G 25481534.14 25481534.28 25481534.43 0.0136 0.0102

Uranus 65054-08-04 01:27 G 25481760.39 25481760.56 25481760.76 0.0136 0.0070

Uranus 65055-03-18 08:53 G 25481986.67 25481986.87 25481987.09 0.0137 0.0035

Uranus 65055-10-30 16:19 G 25482212.96 25482213.18 25482213.39 0.0137 0.0003

Uranus 65056-06-12 23:17 G 25482439.27 25482439.47 25482439.69 0.0137 0.0033

Jupiter 65056-10-07 07:41 G 25482555.72 25482555.82 25482555.93 0.0487 0.0411

Uranus 65057-01-25 06:29 G 25482665.60 25482665.77 25482665.98 0.0137 0.0068

Jupiter 65057-05-31 02:10 G 25482791.40 25482791.59 25482791.79 0.0492 0.0146

Uranus 65057-09-08 14:10 G 25482891.96 25482892.09 25482892.25 0.0137 0.0101

Mars 65057-10-17 06:00 G 25482930.57 25482930.75 25482930.92 0.1765 0.0286

Pluto 65057-12-15 00:15 G 25482989.31 25482989.51 25482989.73 0.0080 0.0022

Uranus 65058-04-22 22:05 G 25483118.40 25483118.42 25483118.46 0.0138 0.0136

Pluto 65058-07-28 10:34 G 25483214.78 25483214.94 25483215.14 0.0080 0.0047

Jupiter 65062-08-13 07:27 G 25484691.66 25484691.81 25484691.97 0.0541 0.0344

Jupiter 65063-04-08 16:05 G 25484930.05 25484930.17 25484930.30 0.0534 0.0421

Saturn 65063-08-07 23:03 G 25485051.38 25485051.46 25485051.55 0.0276 0.0252

Saturn 65064-03-24 06:29 G 25485280.57 25485280.77 25485280.99 0.0275 0.0041

Saturn 65064-11-08 13:41 G 25485509.90 25485510.07 25485510.23 0.0275 0.0171

Jupiter 65069-02-03 06:29 G 25487057.57 25487057.77 25487057.98 0.0490 0.0014

Jupiter 65074-12-12 05:31 G 25489195.55 25489195.73 25489195.92 0.0536 0.0218

Saturn 65078-09-02 12:15 G 25490555.94 25490556.01 25490556.10 0.0283 0.0261

Saturn 65079-04-20 04:34 G 25490785.48 25490785.69 25490785.90 0.0284 0.0028

Saturn 65079-12-05 21:07 G 25491015.24 25491015.38 25491015.53 0.0284 0.0207

Jupiter 65080-10-09 11:17 G 25491323.77 25491323.97 25491324.16 0.0489 0.0168

Jupiter 65081-06-02 08:10 G 25491559.73 25491559.84 25491559.96 0.0495 0.0401

Jupiter 65086-08-16 18:00 G 25493461.05 25493461.25 25493461.46 0.0538 0.0011

Jupiter 65092-06-14 16:34 G 25495590.05 25495590.19 25495590.35 0.0487 0.0320

Jupiter 65093-02-05 12:29 G 25495825.84 25495826.02 25495826.20 0.0493 0.0243

Saturn 65093-02-16 23:46 G 25495837.38 25495837.49 25495837.61 0.0276 0.0229

Saturn 65093-10-04 07:12 G 25496066.59 25496066.80 25496067.01 0.0275 0.0017

Uranus 65094-04-07 18:15 G 25496252.16 25496252.26 25496252.38 0.0142 0.0121

Saturn 65094-05-21 14:10 G 25496295.94 25496296.09 25496296.24 0.0275 0.0193

Uranus 65094-11-20 04:19 G 25496478.52 25496478.68 25496478.87 0.0142 0.0084

Uranus 65095-07-04 14:39 G 25496704.91 25496705.11 25496705.32 0.0142 0.0046

Uranus 65096-02-16 00:43 G 25496931.32 25496931.53 25496931.75 0.0141 0.0008

Mars 65096-03-29 00:00 G 25496973.43 25496973.50 25496973.58 0.1764 0.1564

Uranus 65096-09-29 10:48 G 25497157.74 25497157.95 25497158.17 0.0141 0.0030

Uranus 65097-05-13 20:24 G 25497384.17 25497384.35 25497384.55 0.0141 0.0068

Neptune 65097-12-10 21:51 G 25497595.38 25497595.41 25497595.49 0.0088 0.0085

Uranus 65097-12-26 06:00 G 25497610.61 25497610.75 25497610.90 0.0141 0.0104

Jupiter 65098-04-21 03:51 G 25497726.47 25497726.66 25497726.85 0.0540 0.0211

Neptune 65098-07-24 10:48 G 25497820.87 25497820.95 25497821.05 0.0088 0.0080

Uranus 65098-08-09 15:22 G 25497837.14 25497837.14 25497837.15 0.0141 0.0141

Neptune 65099-03-06 23:03 G 25498046.38 25498046.46 25498046.60 0.0088 0.0076

Neptune 65099-10-18 12:00 G 25498271.89 25498272.00 25498272.15 0.0088 0.0071

Neptune 65100-06-01 01:12 G 25498497.40 25498497.55 25498497.69 0.0088 0.0066

Neptune 65101-01-12 13:27 G 25498722.92 25498723.06 25498723.23 0.0088 0.0062

Neptune 65101-08-26 02:24 G 25498948.44 25498948.60 25498948.78 0.0088 0.0057

Neptune 65102-04-08 15:07 G 25499173.96 25499174.13 25499174.32 0.0088 0.0052

Neptune 65102-11-20 03:36 G 25499399.48 25499399.65 25499399.85 0.0088 0.0048

Neptune 65103-07-03 16:19 G 25499625.01 25499625.18 25499625.39 0.0088 0.0043

Neptune 65104-02-14 05:17 G 25499850.53 25499850.72 25499850.93 0.0088 0.0038

Jupiter 65104-02-19 21:51 G 25499856.37 25499856.41 25499856.47 0.0486 0.0468

Neptune 65104-09-26 18:15 G 25500076.06 25500076.26 25500076.47 0.0088 0.0033

Jupiter 65104-10-12 16:34 G 25500091.99 25500092.19 25500092.39 0.0491 0.0085

Neptune 65105-05-10 06:58 G 25500301.59 25500301.79 25500302.01 0.0088 0.0028

Neptune 65105-12-21 19:55 G 25500527.11 25500527.33 25500527.54 0.0088 0.0023

Neptune 65106-08-04 08:10 G 25500752.64 25500752.84 25500753.07 0.0088 0.0019

Neptune 65107-03-17 21:07 G 25500978.17 25500978.38 25500978.60 0.0088 0.0014

Neptune 65107-10-29 09:51 G 25501203.70 25501203.91 25501204.14 0.0088 0.0009

Saturn 65108-03-15 18:29 G 25501342.15 25501342.27 25501342.40 0.0283 0.0228

Neptune 65108-06-10 22:34 G 25501429.23 25501429.44 25501429.67 0.0088 0.0004

Saturn 65108-10-31 11:17 G 25501571.75 25501571.97 25501572.18 0.0284 0.0008

Neptune 65109-01-22 11:17 G 25501654.75 25501654.97 25501655.19 0.0088 0.0002

Saturn 65109-06-18 04:19 G 25501801.58 25501801.68 25501801.80 0.0284 0.0243

Neptune 65109-09-05 00:00 G 25501880.29 25501880.50 25501880.72 0.0088 0.0006

Jupiter 65109-12-25 13:12 G 25501991.94 25501992.05 25501992.18 0.0541 0.0428

Neptune 65110-04-18 12:43 G 25502105.82 25502106.03 25502106.25 0.0088 0.0011

Jupiter 65110-08-20 22:05 G 25502230.27 25502230.42 25502230.58 0.0534 0.0338

Neptune 65110-11-30 01:12 G 25502331.35 25502331.55 25502331.78 0.0088 0.0017

Neptune 65111-07-13 14:10 G 25502556.88 25502557.09 25502557.31 0.0088 0.0021

Neptune 65112-02-24 02:53 G 25502782.41 25502782.62 25502782.83 0.0088 0.0025

Neptune 65112-10-06 15:36 G 25503007.95 25503008.15 25503008.36 0.0088 0.0030

Neptune 65113-05-20 04:19 G 25503233.49 25503233.68 25503233.89 0.0088 0.0035

Neptune 65113-12-31 16:48 G 25503459.02 25503459.20 25503459.41 0.0088 0.0041

Neptune 65114-08-14 05:31 G 25503684.56 25503684.73 25503684.94 0.0088 0.0046

Neptune 65115-03-27 18:43 G 25503910.10 25503910.28 25503910.46 0.0088 0.0050

Neptune 65115-11-08 07:27 G 25504135.65 25504135.81 25504135.99 0.0088 0.0055

Jupiter 65116-06-17 19:55 G 25504358.13 25504358.33 25504358.53 0.0489 0.0075

Neptune 65116-06-20 20:10 G 25504361.19 25504361.34 25504361.52 0.0088 0.0060

Neptune 65117-02-01 08:53 G 25504586.74 25504586.87 25504587.04 0.0088 0.0064

Jupiter 65117-02-08 17:46 G 25504594.23 25504594.24 25504594.25 0.0496 0.0494

Neptune 65117-09-14 22:05 G 25504812.29 25504812.42 25504812.56 0.0088 0.0069

Neptune 65118-04-28 10:34 G 25505037.84 25505037.94 25505038.08 0.0088 0.0074

Neptune 65118-12-09 23:17 G 25505263.39 25505263.47 25505263.59 0.0088 0.0079

Neptune 65119-07-23 12:15 G 25505488.95 25505489.01 25505489.10 0.0088 0.0083

Neptune 65120-03-05 00:58 G 25505714.53 25505714.54 25505714.59 0.0088 0.0088

Jupiter 65122-04-25 09:36 G 25506495.71 25506495.90 25506496.10 0.0537 0.0127

Saturn 65122-08-31 08:53 G 25506623.72 25506623.87 25506624.03 0.0276 0.0191

Saturn 65123-04-17 16:19 G 25506852.97 25506853.18 25506853.39 0.0275 0.0022

Mars 65123-08-15 13:41 G 25506972.91 25506973.07 25506973.22 0.1761 0.0763

Saturn 65123-12-02 23:03 G 25507082.36 25507082.46 25507082.59 0.0275 0.0232

Jupiter 65128-02-22 00:58 G 25508624.36 25508624.54 25508624.72 0.0488 0.0227

Mars 65128-03-29 05:03 G 25508660.62 25508660.71 25508660.80 0.1753 0.1492

Jupiter 65128-10-14 21:07 G 25508860.23 25508860.38 25508860.53 0.0494 0.0336

Jupiter 65133-12-28 22:19 G 25510761.22 25510761.43 25510761.63 0.0539 0.0085

Uranus 65137-08-21 02:24 G 25512092.50 25512092.60 25512092.71 0.0136 0.0118

Saturn 65137-09-25 22:34 G 25512128.29 25512128.44 25512128.59 0.0283 0.0197

Moon 65137-12-24 03:22 G 25512217.48 25512217.64 25512217.80 0.2646 0.0543

Earth 65137-12-24 07:27 G 25512217.67 25512217.81 25512217.95 0.2650 0.1285 *

Uranus 65138-04-04 09:22 G 25512318.73 25512318.89 25512319.07 0.0136 0.0085

Saturn 65138-05-13 14:53 G 25512357.91 25512358.12 25512358.33 0.0284 0.0036

Uranus 65138-11-16 16:34 G 25512544.99 25512545.19 25512545.39 0.0136 0.0052

Saturn 65138-12-29 07:41 G 25512587.76 25512587.82 25512587.88 0.0284 0.0271

Uranus 65139-06-30 23:46 G 25512771.27 25512771.49 25512771.70 0.0137 0.0018

Jupiter 65139-10-28 06:00 G 25512890.63 25512890.75 25512890.88 0.0487 0.0379

Uranus 65140-02-12 06:58 G 25512997.57 25512997.79 25512998.01 0.0137 0.0016

Jupiter 65140-06-20 00:43 G 25513126.34 25513126.53 25513126.72 0.0492 0.0177

Uranus 65140-09-25 14:24 G 25513223.90 25513224.10 25513224.30 0.0137 0.0050

Uranus 65141-05-09 21:36 G 25513450.24 25513450.40 25513450.59 0.0137 0.0085

Uranus 65141-12-22 05:17 G 25513676.63 25513676.72 25513676.84 0.0137 0.0119

Jupiter 65145-09-02 10:05 G 25515026.75 25515026.92 25515027.09 0.0541 0.0297

Moon 65145-12-21 18:29 G 25515137.19 25515137.27 25515137.35 0.2650 0.2230

Earth 65145-12-22 00:00 G 25515137.39 25515137.50 25515137.61 0.2649 0.1856

Jupiter 65146-04-28 18:15 G 25515265.16 25515265.26 25515265.36 0.0533 0.0462

Jupiter 65152-02-24 05:31 G 25517392.53 25517392.73 25517392.94 0.0490 0.0025

Saturn 65152-03-12 08:53 G 25517409.70 25517409.87 25517410.03 0.0276 0.0169

Saturn 65152-10-27 16:19 G 25517638.97 25517639.18 25517639.39 0.0275 0.0043

Saturn 65153-06-13 23:03 G 25517868.39 25517868.46 25517868.55 0.0274 0.0252

Jupiter 65157-05-07 19:55 G 25519292.26 25519292.33 25519292.39 0.0542 0.0511

Jupiter 65158-01-01 05:31 G 25519530.55 25519530.73 25519530.91 0.0535 0.0255

Jupiter 65163-10-30 10:34 G 25521658.75 25521658.94 25521659.14 0.0489 0.0133

Jupiter 65164-06-22 07:55 G 25521894.74 25521894.83 25521894.93 0.0495 0.0435

Saturn 65167-04-08 03:07 G 25522914.47 25522914.63 25522914.81 0.0283 0.0168

Saturn 65167-11-23 19:55 G 25523144.12 25523144.33 25523144.53 0.0284 0.0067

Jupiter 65169-09-05 16:19 G 25523795.98 25523796.18 25523796.39 0.0538 0.0044

Jupiter 65175-07-05 14:53 G 25525924.96 25525925.12 25525925.29 0.0487 0.0287

Jupiter 65176-02-26 10:19 G 25526160.76 25526160.93 25526161.10 0.0493 0.0272

Uranus 65177-12-07 00:58 G 25526810.51 25526810.54 25526810.58 0.0142 0.0139

Uranus 65178-07-21 11:31 G 25527036.83 25527036.98 25527037.13 0.0142 0.0101

Uranus 65179-03-04 21:22 G 25527263.21 25527263.39 25527263.60 0.0142 0.0064

Neptune 65179-06-16 13:55 G 25527367.04 25527367.08 25527367.16 0.0090 0.0086

Uranus 65179-10-17 07:41 G 25527489.61 25527489.82 25527490.04 0.0142 0.0026

Neptune 65180-01-28 03:22 G 25527592.57 25527592.64 25527592.75 0.0090 0.0081

Uranus 65180-05-30 17:46 G 25527716.03 25527716.24 25527716.46 0.0141 0.0012

Neptune 65180-09-09 17:03 G 25527818.10 25527818.21 25527818.33 0.0089 0.0076

Uranus 65181-01-12 03:22 G 25527942.45 25527942.64 25527942.85 0.0141 0.0050

Neptune 65181-04-23 06:43 G 25528043.65 25528043.78 25528043.91 0.0089 0.0071

Jupiter 65181-05-11 02:10 G 25528061.40 25528061.59 25528061.78 0.0540 0.0176

Uranus 65181-08-26 12:58 G 25528168.88 25528169.04 25528169.22 0.0141 0.0087

Saturn 65181-09-22 17:31 G 25528196.05 25528196.23 25528196.42 0.0276 0.0131

Neptune 65181-12-04 19:27 G 25528269.19 25528269.31 25528269.48 0.0089 0.0067

Uranus 65182-04-09 22:19 G 25528395.35 25528395.43 25528395.55 0.0141 0.0124

Saturn 65182-05-10 00:58 G 25528425.34 25528425.54 25528425.74 0.0275 0.0081

Neptune 65182-07-18 08:53 G 25528494.73 25528494.87 25528495.05 0.0089 0.0062

Neptune 65183-02-28 22:19 G 25528720.28 25528720.43 25528720.62 0.0089 0.0057

Neptune 65183-10-12 11:46 G 25528945.83 25528945.99 25528946.19 0.0089 0.0052

Neptune 65184-05-25 01:12 G 25529171.37 25529171.55 25529171.75 0.0089 0.0046

Neptune 65185-01-05 14:24 G 25529396.92 25529397.10 25529397.31 0.0089 0.0042

Neptune 65185-08-19 03:51 G 25529622.47 25529622.66 25529622.87 0.0089 0.0036

Neptune 65186-04-01 17:17 G 25529848.02 25529848.22 25529848.43 0.0089 0.0031

Neptune 65186-11-13 06:29 G 25530073.57 25530073.77 25530073.99 0.0089 0.0027

Jupiter 65187-03-10 20:53 G 25530191.28 25530191.37 25530191.46 0.0486 0.0434

Neptune 65187-06-26 19:41 G 25530299.12 25530299.32 25530299.55 0.0089 0.0022

Jupiter 65187-11-01 14:39 G 25530426.91 25530427.11 25530427.31 0.0491 0.0115

Neptune 65188-02-07 09:07 G 25530524.67 25530524.88 25530525.10 0.0089 0.0016

Neptune 65188-09-19 22:34 G 25530750.22 25530750.44 25530750.66 0.0089 0.0011

Neptune 65189-05-03 12:00 G 25530975.78 25530976.00 25530976.22 0.0089 0.0006

Mars 65189-06-11 21:36 G 25531015.27 25531015.40 25531015.52 0.1758 0.1234

Neptune 65189-12-15 01:12 G 25531201.34 25531201.55 25531201.78 0.0089 0.0002

Neptune 65190-07-28 14:39 G 25531426.89 25531427.11 25531427.33 0.0089 0.0005

Neptune 65191-03-11 04:05 G 25531652.45 25531652.67 25531652.89 0.0089 0.0010

Neptune 65191-10-22 17:17 G 25531878.01 25531878.22 25531878.44 0.0089 0.0015

Neptune 65192-06-04 06:29 G 25532103.57 25532103.77 25532104.00 0.0089 0.0020

Jupiter 65193-01-13 13:41 G 25532326.93 25532327.07 25532327.22 0.0542 0.0389

Neptune 65193-01-15 19:55 G 25532329.12 25532329.33 25532329.55 0.0089 0.0025

Neptune 65193-08-29 09:07 G 25532554.68 25532554.88 25532555.10 0.0089 0.0030

Jupiter 65193-09-08 23:31 G 25532565.33 25532565.48 25532565.62 0.0535 0.0376

Mars 65194-01-24 13:41 G 25532702.93 25532703.07 25532703.21 0.1757 0.1055

Neptune 65194-04-11 22:34 G 25532780.25 25532780.44 25532780.66 0.0089 0.0035

Neptune 65194-11-23 12:00 G 25533005.81 25533006.00 25533006.21 0.0089 0.0040

Neptune 65195-07-07 01:12 G 25533231.37 25533231.55 25533231.75 0.0089 0.0045

Neptune 65196-02-17 14:24 G 25533456.93 25533457.10 25533457.30 0.0089 0.0050

Neptune 65196-09-30 03:36 G 25533682.50 25533682.65 25533682.84 0.0089 0.0056

Saturn 65196-10-18 07:27 G 25533700.63 25533700.81 25533701.00 0.0283 0.0136

Neptune 65197-05-13 17:03 G 25533908.07 25533908.21 25533908.39 0.0089 0.0060

Saturn 65197-06-04 23:46 G 25533930.29 25533930.49 25533930.69 0.0283 0.0098

Neptune 65197-12-25 06:15 G 25534133.63 25534133.76 25534133.93 0.0089 0.0065

Neptune 65198-08-07 19:27 G 25534359.19 25534359.31 25534359.47 0.0089 0.0070

Neptune 65199-03-21 09:07 G 25534584.76 25534584.88 25534585.00 0.0089 0.0074

Jupiter 65199-07-07 18:58 G 25534693.08 25534693.29 25534693.49 0.0489 0.0042

Neptune 65199-11-01 22:05 G 25534810.34 25534810.42 25534810.53 0.0089 0.0079

Neptune 65200-06-14 11:03 G 25535035.92 25535035.96 25535036.06 0.0089 0.0084

Neptune 65201-01-26 00:43 G 25535261.52 25535261.53 25535261.56 0.0089 0.0088

Jupiter 65205-05-14 12:43 G 25536830.84 25536831.03 25536831.23 0.0537 0.0173

Jupiter 65211-03-13 00:15 G 25538959.33 25538959.51 25538959.70 0.0488 0.0194

Saturn 65211-04-04 16:48 G 25538982.01 25538982.20 25538982.40 0.0276 0.0110

Jupiter 65211-11-03 20:53 G 25539195.24 25539195.37 25539195.51 0.0494 0.0369

Saturn 65211-11-20 00:29 G 25539211.32 25539211.52 25539211.71 0.0275 0.0101

Pluto 65216-05-14 06:15 G 25540848.63 25540848.76 25540848.92 0.0063 0.0048

Pluto 65216-12-25 10:19 G 25541073.72 25541073.93 25541074.15 0.0063 0.0015

Jupiter 65217-01-16 23:31 G 25541096.28 25541096.48 25541096.69 0.0539 0.0041

Pluto 65217-08-07 14:10 G 25541298.89 25541299.09 25541299.31 0.0064 0.0020

Pluto 65218-03-20 17:46 G 25541524.16 25541524.24 25541524.39 0.0064 0.0055

Uranus 65221-04-20 10:19 G 25542650.92 25542650.93 25542650.99 0.0136 0.0134

Uranus 65221-12-02 17:17 G 25542877.09 25542877.22 25542877.38 0.0136 0.0101

Uranus 65222-07-17 00:29 G 25543103.33 25543103.52 25543103.71 0.0136 0.0068

Jupiter 65222-11-16 05:46 G 25543225.60 25543225.74 25543225.89 0.0487 0.0343

Uranus 65223-02-28 07:41 G 25543329.61 25543329.82 25543330.03 0.0137 0.0034

Jupiter 65223-07-10 00:58 G 25543461.36 25543461.54 25543461.72 0.0492 0.0213

Uranus 65223-10-12 14:53 G 25543555.90 25543556.12 25543556.34 0.0137 0.0001

Uranus 65224-05-25 22:05 G 25543782.21 25543782.42 25543782.63 0.0137 0.0034

Uranus 65225-01-07 05:31 G 25544008.54 25544008.73 25544008.92 0.0137 0.0068

Uranus 65225-08-21 13:12 G 25544234.91 25544235.05 25544235.19 0.0137 0.0103

Uranus 65226-04-04 20:53 G 25544461.37 25544461.37 25544461.39 0.0137 0.0137

Saturn 65226-04-30 11:03 G 25544486.77 25544486.96 25544487.16 0.0283 0.0108

Saturn 65226-12-16 03:36 G 25544716.46 25544716.65 25544716.84 0.0284 0.0126

Jupiter 65228-09-21 09:36 G 25545361.73 25545361.90 25545362.08 0.0540 0.0257

Jupiter 65229-05-17 17:17 G 25545600.16 25545600.22 25545600.30 0.0533 0.0496

Jupiter 65235-03-15 04:34 G 25547727.49 25547727.69 25547727.89 0.0490 0.0053

Jupiter 65240-05-26 17:46 G 25549627.15 25549627.24 25549627.34 0.0542 0.0478

Saturn 65240-10-15 00:43 G 25549768.33 25549768.53 25549768.74 0.0276 0.0074

Jupiter 65241-01-20 04:34 G 25549865.52 25549865.69 25549865.86 0.0536 0.0290

Saturn 65241-06-01 08:24 G 25549997.67 25549997.85 25549998.03 0.0275 0.0138

Jupiter 65246-11-18 09:51 G 25551993.71 25551993.91 25551994.11 0.0488 0.0100

Jupiter 65247-07-12 06:29 G 25552229.71 25552229.77 25552229.85 0.0495 0.0462

Jupiter 65252-09-24 17:17 G 25554131.02 25554131.22 25554131.42 0.0538 0.0082

Mars 65255-04-09 05:03 G 25555057.67 25555057.71 25555057.75 0.1754 0.1698

Saturn 65255-11-10 15:51 G 25555272.96 25555273.16 25555273.37 0.0283 0.0075

Saturn 65256-06-27 07:55 G 25555502.67 25555502.83 25555503.02 0.0283 0.0159

Jupiter 65258-07-24 14:24 G 25556259.93 25556260.10 25556260.28 0.0487 0.0253

Jupiter 65259-03-17 09:51 G 25556495.75 25556495.91 25556496.07 0.0493 0.0304

Mars 65259-11-21 22:19 G 25556745.26 25556745.43 25556745.59 0.1761 0.0608

Neptune 65261-08-01 20:53 G 25557364.37 25557364.37 25557364.41 0.0088 0.0088

Neptune 65262-03-15 09:36 G 25557589.85 25557589.90 25557589.99 0.0088 0.0083

Uranus 65262-03-20 18:00 G 25557595.14 25557595.25 25557595.37 0.0142 0.0119

Neptune 65262-10-26 22:05 G 25557815.35 25557815.42 25557815.54 0.0088 0.0079

Uranus 65262-11-02 04:19 G 25557821.51 25557821.68 25557821.86 0.0142 0.0081

Neptune 65263-06-09 11:03 G 25558040.86 25558040.96 25558041.09 0.0088 0.0074

Uranus 65263-06-16 14:39 G 25558047.90 25558048.11 25558048.32 0.0142 0.0043

Neptune 65264-01-21 00:00 G 25558266.37 25558266.50 25558266.64 0.0088 0.0069

Uranus 65264-01-29 00:29 G 25558274.31 25558274.52 25558274.74 0.0141 0.0006

Jupiter 65264-05-30 06:00 G 25558396.55 25558396.75 25558396.95 0.0540 0.0127

Neptune 65264-09-02 12:29 G 25558491.89 25558492.02 25558492.18 0.0088 0.0065

Uranus 65264-09-11 10:34 G 25558500.73 25558500.94 25558501.15 0.0141 0.0032

Neptune 65265-04-16 01:12 G 25558717.41 25558717.55 25558717.73 0.0088 0.0060

Uranus 65265-04-25 20:10 G 25558727.16 25558727.34 25558727.54 0.0141 0.0070

Neptune 65265-11-27 14:10 G 25558942.92 25558943.09 25558943.26 0.0088 0.0055

Uranus 65265-12-08 05:31 G 25558953.61 25558953.73 25558953.89 0.0141 0.0107

Neptune 65266-07-11 02:24 G 25559168.44 25559168.60 25559168.80 0.0088 0.0051

Neptune 65267-02-21 15:07 G 25559393.96 25559394.13 25559394.34 0.0088 0.0046

Neptune 65267-10-05 04:19 G 25559619.49 25559619.68 25559619.88 0.0088 0.0041

Neptune 65268-05-17 17:03 G 25559845.02 25559845.21 25559845.42 0.0088 0.0036

Neptune 65268-12-29 06:00 G 25560070.54 25560070.75 25560070.95 0.0088 0.0031

Neptune 65269-08-11 18:15 G 25560296.07 25560296.26 25560296.49 0.0088 0.0027

Saturn 65269-09-09 15:36 G 25560325.11 25560325.15 25560325.22 0.0276 0.0267

Neptune 65270-03-25 07:12 G 25560521.60 25560521.80 25560522.02 0.0088 0.0022

Jupiter 65270-03-29 20:24 G 25560526.24 25560526.35 25560526.47 0.0486 0.0400

Saturn 65270-04-27 00:00 G 25560554.29 25560554.50 25560554.71 0.0276 0.0054

Neptune 65270-11-05 19:55 G 25560747.13 25560747.33 25560747.56 0.0088 0.0017

Jupiter 65270-11-20 14:39 G 25560761.92 25560762.11 25560762.30 0.0491 0.0150

Saturn 65270-12-12 07:27 G 25560783.64 25560783.81 25560783.99 0.0275 0.0158

Neptune 65271-06-19 08:53 G 25560972.66 25560972.87 25560973.09 0.0088 0.0012

Neptune 65272-01-30 21:36 G 25561198.18 25561198.40 25561198.62 0.0088 0.0007

Neptune 65272-09-12 10:34 G 25561423.72 25561423.94 25561424.16 0.0088 0.0002

Neptune 65273-04-25 23:17 G 25561649.25 25561649.47 25561649.69 0.0088 0.0003

Neptune 65273-12-07 12:00 G 25561874.78 25561875.00 25561875.22 0.0088 0.0008

Neptune 65274-07-21 00:29 G 25562100.31 25562100.52 25562100.74 0.0088 0.0013

Neptune 65275-03-03 13:12 G 25562325.84 25562326.05 25562326.27 0.0088 0.0018

Earth 65275-06-22 20:24 G 25562437.24 25562437.35 25562437.47 0.2682 0.1842

Moon 65275-06-22 21:22 G 25562437.27 25562437.39 25562437.51 0.2689 0.1570 *

Neptune 65275-10-15 02:10 G 25562551.38 25562551.59 25562551.80 0.0088 0.0023

Jupiter 65276-02-02 16:34 G 25562662.03 25562662.19 25562662.35 0.0541 0.0341

Neptune 65276-05-27 14:53 G 25562776.91 25562777.12 25562777.33 0.0088 0.0028

Jupiter 65276-09-28 00:58 G 25562900.43 25562900.54 25562900.68 0.0534 0.0418

Neptune 65277-01-08 03:22 G 25563002.45 25563002.64 25563002.85 0.0088 0.0033

Neptune 65277-08-21 16:05 G 25563227.98 25563228.17 25563228.38 0.0088 0.0037

Neptune 65278-04-04 04:34 G 25563453.52 25563453.69 25563453.90 0.0088 0.0043

Neptune 65278-11-15 17:17 G 25563679.06 25563679.22 25563679.43 0.0088 0.0048

Neptune 65279-06-29 06:29 G 25563904.60 25563904.77 25563904.95 0.0088 0.0052

Neptune 65280-02-09 18:58 G 25564130.14 25564130.29 25564130.47 0.0088 0.0057

Neptune 65280-09-22 07:41 G 25564355.68 25564355.82 25564356.00 0.0088 0.0062

Neptune 65281-05-05 20:24 G 25564581.23 25564581.35 25564581.52 0.0088 0.0067

Neptune 65281-12-17 09:36 G 25564806.78 25564806.90 25564807.04 0.0088 0.0071

Jupiter 65282-07-26 19:27 G 25565028.10 25565028.31 25565028.51 0.0490 0.0008

Neptune 65282-07-30 22:05 G 25565032.33 25565032.42 25565032.55 0.0088 0.0076

Neptune 65283-03-13 10:48 G 25565257.88 25565257.95 25565258.06 0.0088 0.0080

Earth 65283-06-20 10:05 G 25565356.80 25565356.92 25565357.04 0.2684 0.1738

Moon 65283-06-20 14:53 G 25565356.98 25565357.12 25565357.26 0.2688 0.1096 *

Neptune 65283-10-25 00:00 G 25565483.45 25565483.50 25565483.57 0.0088 0.0085

Saturn 65284-10-05 02:10 G 25565829.58 25565829.59 25565829.62 0.0283 0.0281

Saturn 65285-05-22 18:15 G 25566059.05 25566059.26 25566059.47 0.0283 0.0050

Saturn 65286-01-07 10:34 G 25566288.79 25566288.94 25566289.11 0.0284 0.0184

Mars 65287-04-08 12:15 G 25566744.91 25566745.01 25566745.10 0.1765 0.1446

Jupiter 65288-06-02 12:58 G 25567165.85 25567166.04 25567166.23 0.0536 0.0211

Jupiter 65294-04-01 00:15 G 25569294.32 25569294.51 25569294.70 0.0488 0.0160

Jupiter 65294-11-22 20:39 G 25569530.24 25569530.36 25569530.47 0.0494 0.0399

Saturn 65299-03-22 23:03 G 25571111.35 25571111.46 25571111.58 0.0277 0.0231

Saturn 65299-11-07 07:27 G 25571340.60 25571340.81 25571341.02 0.0276 0.0018

Jupiter 65300-02-05 22:05 G 25571431.22 25571431.42 25571431.63 0.0539 0.0008

Saturn 65300-06-24 14:53 G 25571569.98 25571570.12 25571570.27 0.0276 0.0194

Uranus 65305-08-03 00:43 G 25573435.44 25573435.53 25573435.66 0.0136 0.0117

Jupiter 65305-12-06 06:00 G 25573560.60 25573560.75 25573560.91 0.0487 0.0308

Uranus 65306-03-17 08:10 G 25573661.67 25573661.84 25573662.02 0.0136 0.0083

Pluto 65306-07-02 02:10 G 25573768.39 25573768.59 25573768.79 0.0080 0.0034

Jupiter 65306-07-30 00:29 G 25573796.34 25573796.52 25573796.70 0.0492 0.0244

Uranus 65306-10-29 15:07 G 25573887.93 25573888.13 25573888.34 0.0136 0.0050

Pluto 65307-02-12 12:15 G 25573993.83 25573994.01 25573994.23 0.0080 0.0036

Uranus 65307-06-12 22:19 G 25574114.21 25574114.43 25574114.65 0.0137 0.0016

Uranus 65308-01-25 05:31 G 25574340.52 25574340.73 25574340.95 0.0137 0.0018

Uranus 65308-09-07 12:58 G 25574566.84 25574567.04 25574567.24 0.0137 0.0052

Uranus 65309-04-21 20:39 G 25574793.19 25574793.36 25574793.53 0.0137 0.0086

Uranus 65309-12-04 04:19 G 25575019.58 25575019.68 25575019.78 0.0137 0.0121

Jupiter 65311-10-12 09:51 G 25575696.73 25575696.91 25575697.10 0.0541 0.0219

Jupiter 65312-06-06 18:15 G 25575935.26 25575935.26 25575935.28 0.0534 0.0533

Saturn 65314-04-18 08:24 G 25576615.75 25576615.85 25576615.96 0.0282 0.0244

Saturn 65314-12-04 00:00 G 25576845.29 25576845.50 25576845.71 0.0283 0.0014

Saturn 65315-07-21 16:05 G 25577075.04 25577075.17 25577075.31 0.0283 0.0218

Jupiter 65317-08-11 11:03 G 25577826.90 25577826.96 25577827.03 0.0485 0.0456

Jupiter 65318-04-04 04:19 G 25578062.48 25578062.68 25578062.88 0.0490 0.0087

Jupiter 65323-06-16 21:51 G 25579962.30 25579962.41 25579962.54 0.0542 0.0428

Jupiter 65324-02-10 08:24 G 25580200.69 25580200.85 25580201.01 0.0536 0.0335

Mars 65325-09-19 06:15 G 25580787.59 25580787.76 25580787.93 0.1764 0.0140

Saturn 65328-10-02 22:19 G 25581897.30 25581897.43 25581897.56 0.0276 0.0211

Saturn 65329-05-20 06:29 G 25582126.56 25582126.77 25582126.98 0.0276 0.0003

Jupiter 65329-12-08 09:36 G 25582328.70 25582328.90 25582329.11 0.0489 0.0066

Saturn 65330-01-04 13:55 G 25582355.95 25582356.08 25582356.21 0.0275 0.0212

Jupiter 65330-08-01 06:58 G 25582564.79 25582564.79 25582564.79 0.0495 0.0495

Jupiter 65335-10-15 20:10 G 25584466.14 25584466.34 25584466.54 0.0538 0.0128

Jupiter 65341-08-13 14:53 G 25586594.94 25586595.12 25586595.31 0.0488 0.0217

Jupiter 65342-04-06 10:48 G 25586830.81 25586830.95 25586831.10 0.0493 0.0340

Neptune 65343-02-05 11:46 G 25587135.98 25587135.99 25587136.04 0.0090 0.0089

Neptune 65343-09-19 01:27 G 25587361.49 25587361.56 25587361.64 0.0090 0.0084

Saturn 65343-10-29 09:51 G 25587401.78 25587401.91 25587402.04 0.0283 0.0222

Neptune 65344-05-01 14:24 G 25587587.02 25587587.10 25587587.22 0.0090 0.0080

Saturn 65344-06-15 01:41 G 25587631.36 25587631.57 25587631.78 0.0283 0.0009

Neptune 65344-12-13 03:51 G 25587812.56 25587812.66 25587812.80 0.0089 0.0075

Saturn 65345-01-30 18:00 G 25587861.14 25587861.25 25587861.36 0.0284 0.0242

Neptune 65345-07-26 17:17 G 25588038.10 25588038.22 25588038.37 0.0089 0.0070

Uranus 65345-11-19 00:15 G 25588153.47 25588153.51 25588153.59 0.0142 0.0137

Neptune 65346-03-09 06:43 G 25588263.65 25588263.78 25588263.95 0.0089 0.0065

Uranus 65346-07-03 10:48 G 25588379.81 25588379.95 25588380.12 0.0142 0.0099

Neptune 65346-10-20 20:10 G 25588489.19 25588489.34 25588489.52 0.0089 0.0060

Uranus 65347-02-14 21:07 G 25588606.19 25588606.38 25588606.58 0.0142 0.0061

Neptune 65347-06-03 09:36 G 25588714.74 25588714.90 25588715.08 0.0089 0.0055

Jupiter 65347-06-20 06:58 G 25588731.59 25588731.79 25588731.99 0.0539 0.0085

Uranus 65347-09-29 07:27 G 25588832.60 25588832.81 25588833.03 0.0142 0.0023

Neptune 65348-01-14 23:03 G 25588940.28 25588940.46 25588940.65 0.0089 0.0050

Uranus 65348-05-12 17:31 G 25589059.01 25589059.23 25589059.45 0.0141 0.0015

Neptune 65348-08-27 12:15 G 25589165.83 25589166.01 25589166.21 0.0089 0.0045

Uranus 65348-12-25 03:22 G 25589285.44 25589285.64 25589285.84 0.0141 0.0053

Neptune 65349-04-10 01:41 G 25589391.39 25589391.57 25589391.78 0.0089 0.0040

Uranus 65349-08-08 12:43 G 25589511.87 25589512.03 25589512.21 0.0141 0.0090

Neptune 65349-11-21 15:07 G 25589616.94 25589617.13 25589617.34 0.0089 0.0035

Uranus 65350-03-22 22:05 G 25589738.35 25589738.42 25589738.53 0.0141 0.0127

Neptune 65350-07-05 04:19 G 25589842.48 25589842.68 25589842.90 0.0089 0.0030

Neptune 65351-02-15 17:46 G 25590068.04 25590068.24 25590068.46 0.0089 0.0024

Neptune 65351-09-29 06:58 G 25590293.59 25590293.79 25590294.02 0.0089 0.0020

Neptune 65352-05-11 20:24 G 25590519.14 25590519.35 25590519.58 0.0089 0.0014

Neptune 65352-12-23 09:36 G 25590744.69 25590744.90 25590745.13 0.0089 0.0010

Mars 65353-02-03 20:24 G 25590787.21 25590787.35 25590787.50 0.1761 0.0986

Jupiter 65353-04-18 20:53 G 25590861.24 25590861.37 25590861.51 0.0486 0.0365

Neptune 65353-08-05 23:03 G 25590970.24 25590970.46 25590970.68 0.0089 0.0004

Jupiter 65353-12-10 14:53 G 25591096.93 25591097.12 25591097.31 0.0491 0.0182

Neptune 65354-03-19 12:29 G 25591195.80 25591196.02 25591196.24 0.0089 0.0001

Neptune 65354-10-31 01:41 G 25591421.35 25591421.57 25591421.79 0.0089 0.0007

Neptune 65355-06-13 15:07 G 25591646.91 25591647.13 25591647.34 0.0089 0.0012

Neptune 65356-01-25 04:05 G 25591872.46 25591872.67 25591872.89 0.0089 0.0017

Neptune 65356-09-06 17:17 G 25592098.02 25592098.22 25592098.45 0.0089 0.0022

Neptune 65357-04-20 06:43 G 25592323.58 25592323.78 25592324.00 0.0089 0.0027

Neptune 65357-12-01 19:55 G 25592549.14 25592549.33 25592549.55 0.0089 0.0033

Saturn 65358-04-15 04:34 G 25592683.54 25592683.69 25592683.87 0.0277 0.0177

Neptune 65358-07-15 09:22 G 25592774.70 25592774.89 25592775.10 0.0089 0.0037

Saturn 65358-11-30 13:12 G 25592912.85 25592913.05 25592913.26 0.0276 0.0038

Jupiter 65359-02-22 14:39 G 25592996.94 25592997.11 25592997.28 0.0542 0.0307

Neptune 65359-02-25 22:34 G 25593000.26 25593000.44 25593000.65 0.0089 0.0042

Saturn 65359-07-17 20:53 G 25593142.28 25593142.37 25593142.46 0.0276 0.0248

Neptune 65359-10-09 12:00 G 25593225.83 25593226.00 25593226.20 0.0089 0.0047

Jupiter 65359-10-19 00:00 G 25593235.39 25593235.50 25593235.61 0.0535 0.0448

Neptune 65360-05-22 01:27 G 25593451.39 25593451.56 25593451.75 0.0089 0.0052

Neptune 65361-01-02 14:39 G 25593676.96 25593677.11 25593677.29 0.0089 0.0057

Neptune 65361-08-16 03:51 G 25593902.52 25593902.66 25593902.84 0.0089 0.0062

Neptune 65362-03-29 17:03 G 25594128.09 25594128.21 25594128.38 0.0089 0.0067

Neptune 65362-11-10 06:15 G 25594353.66 25594353.76 25594353.92 0.0089 0.0072

Neptune 65363-06-23 19:55 G 25594579.23 25594579.33 25594579.45 0.0089 0.0076

Neptune 65364-02-04 08:53 G 25594804.80 25594804.87 25594804.98 0.0089 0.0081

Neptune 65364-09-16 21:51 G 25595030.38 25595030.41 25595030.50 0.0089 0.0086

Jupiter 65365-08-15 19:41 G 25595363.11 25595363.32 25595363.52 0.0489 0.0029

Jupiter 65370-10-28 01:27 G 25597262.50 25597262.56 25597262.62 0.0543 0.0518

Jupiter 65371-06-23 12:58 G 25597500.86 25597501.04 25597501.23 0.0537 0.0247

Saturn 65373-05-10 16:34 G 25598188.04 25598188.19 25598188.36 0.0282 0.0184

Saturn 65373-12-26 08:10 G 25598417.63 25598417.84 25598418.05 0.0282 0.0046

Saturn 65374-08-13 00:00 G 25598647.47 25598647.50 25598647.55 0.0283 0.0277

Jupiter 65377-04-21 00:00 G 25599629.30 25599629.50 25599629.70 0.0488 0.0125

Jupiter 65377-12-12 20:10 G 25599865.25 25599865.34 25599865.44 0.0494 0.0431

Earth 65380-12-25 10:05 G 25600973.79 25600973.92 25600974.05 0.2649 0.1466

Moon 65380-12-25 12:00 G 25600973.89 25600974.00 25600974.11 0.2655 0.1839 *

Jupiter 65383-02-26 02:10 G 25601766.39 25601766.59 25601766.79 0.0539 0.0042

Saturn 65387-10-26 04:34 G 25603469.52 25603469.69 25603469.87 0.0277 0.0156

Saturn 65388-06-11 12:43 G 25603698.83 25603699.03 25603699.24 0.0276 0.0058

Earth 65388-12-23 02:24 G 25603893.48 25603893.60 25603893.72 0.2648 0.1674

Moon 65388-12-23 07:27 G 25603893.68 25603893.81 25603893.93 0.2650 0.1540 *

Jupiter 65388-12-25 05:46 G 25603895.57 25603895.74 25603895.91 0.0487 0.0274

Saturn 65389-01-26 20:10 G 25603928.30 25603928.34 25603928.40 0.0275 0.0267

Uranus 65389-04-02 09:22 G 25603993.86 25603993.89 25603993.96 0.0136 0.0132

Jupiter 65389-08-18 00:29 G 25604131.35 25604131.52 25604131.69 0.0492 0.0277

Uranus 65389-11-14 16:34 G 25604220.04 25604220.19 25604220.34 0.0136 0.0099

Uranus 65390-06-28 23:17 G 25604446.29 25604446.47 25604446.67 0.0136 0.0065

Uranus 65391-02-10 06:29 G 25604672.56 25604672.77 25604672.98 0.0136 0.0032

Mars 65391-07-17 14:53 G 25604829.95 25604830.12 25604830.29 0.1768 0.0319

Uranus 65391-09-24 13:41 G 25604898.85 25604899.07 25604899.29 0.0137 0.0003

Uranus 65392-05-07 20:53 G 25605125.17 25605125.37 25605125.59 0.0137 0.0037

Uranus 65392-12-20 04:19 G 25605351.51 25605351.68 25605351.88 0.0137 0.0071

Uranus 65393-08-03 12:00 G 25605577.87 25605578.00 25605578.15 0.0137 0.0105

Jupiter 65394-10-31 13:41 G 25606031.87 25606032.07 25606032.26 0.0540 0.0170

Jupiter 65400-08-31 11:31 G 25608161.88 25608161.98 25608162.08 0.0486 0.0420

Jupiter 65401-04-24 05:03 G 25608397.52 25608397.71 25608397.91 0.0491 0.0124

Saturn 65402-11-21 17:31 G 25608974.06 25608974.23 25608974.41 0.0282 0.0162

Saturn 65403-07-09 09:07 G 25609203.68 25609203.88 25609204.10 0.0283 0.0070

Jupiter 65406-07-06 23:31 G 25610297.34 25610297.48 25610297.62 0.0542 0.0383

Jupiter 65407-03-02 09:07 G 25610535.74 25610535.88 25610536.03 0.0535 0.0374

Jupiter 65412-12-28 10:19 G 25612663.73 25612663.93 25612664.13 0.0489 0.0031

Saturn 65417-05-08 10:34 G 25614255.75 25614255.94 25614256.13 0.0277 0.0122

Saturn 65417-12-23 18:58 G 25614485.09 25614485.29 25614485.49 0.0276 0.0092

Jupiter 65418-11-04 18:15 G 25614801.07 25614801.26 25614801.46 0.0538 0.0160

Mars 65418-12-03 04:05 G 25614829.51 25614829.67 25614829.84 0.1758 0.0509

Jupiter 65424-09-02 15:36 G 25616929.97 25616930.15 25616930.34 0.0487 0.0182

Jupiter 65425-04-26 10:48 G 25617165.83 25617165.95 25617166.09 0.0493 0.0371

Neptune 65425-11-05 08:24 G 25617358.83 25617358.85 25617358.91 0.0088 0.0086

Neptune 65426-06-18 21:36 G 25617584.32 25617584.40 25617584.48 0.0088 0.0081

Neptune 65427-01-30 09:51 G 25617809.82 25617809.91 25617810.03 0.0088 0.0077

Neptune 65427-09-12 22:48 G 25618035.34 25618035.45 25618035.59 0.0088 0.0072

Neptune 65428-04-25 11:17 G 25618260.85 25618260.97 25618261.13 0.0088 0.0068

Neptune 65428-12-07 00:00 G 25618486.36 25618486.50 25618486.67 0.0088 0.0063

Neptune 65429-07-20 12:58 G 25618711.88 25618712.04 25618712.20 0.0088 0.0058

Neptune 65430-03-03 01:12 G 25618937.39 25618937.55 25618937.74 0.0088 0.0054

Uranus 65430-03-03 17:31 G 25618938.12 25618938.23 25618938.36 0.0142 0.0116

Jupiter 65430-07-10 06:00 G 25619066.54 25619066.75 25619066.95 0.0540 0.0051

Neptune 65430-10-14 14:10 G 25619162.92 25619163.09 25619163.28 0.0088 0.0049

Uranus 65430-10-16 04:05 G 25619164.49 25619164.67 25619164.86 0.0142 0.0078

Neptune 65431-05-28 02:53 G 25619388.44 25619388.62 25619388.82 0.0088 0.0044

Uranus 65431-05-30 14:24 G 25619390.89 25619391.10 25619391.31 0.0142 0.0040

Neptune 65432-01-08 15:36 G 25619613.96 25619614.15 25619614.35 0.0088 0.0039

Uranus 65432-01-12 00:29 G 25619617.30 25619617.52 25619617.74 0.0141 0.0002

Saturn 65432-06-03 01:41 G 25619760.38 25619760.57 25619760.77 0.0282 0.0122

Neptune 65432-08-21 04:34 G 25619839.48 25619839.69 25619839.89 0.0088 0.0034

Uranus 65432-08-25 10:19 G 25619843.72 25619843.93 25619844.14 0.0141 0.0036

Saturn 65433-01-18 17:03 G 25619990.02 25619990.21 25619990.41 0.0282 0.0108

Neptune 65433-04-03 16:48 G 25620065.01 25620065.20 25620065.42 0.0088 0.0030

Uranus 65433-04-08 19:55 G 25620070.16 25620070.33 25620070.53 0.0141 0.0073

Neptune 65433-11-15 05:46 G 25620290.54 25620290.74 25620290.96 0.0088 0.0025

Uranus 65433-11-21 05:46 G 25620296.61 25620296.74 25620296.88 0.0141 0.0110

Neptune 65434-06-28 18:29 G 25620516.06 25620516.27 25620516.49 0.0088 0.0020

Neptune 65435-02-09 07:12 G 25620741.59 25620741.80 25620742.02 0.0088 0.0015

Neptune 65435-09-22 20:10 G 25620967.13 25620967.34 25620967.56 0.0088 0.0010

Neptune 65436-05-05 09:07 G 25621192.66 25621192.88 25621193.10 0.0088 0.0005

Jupiter 65436-05-08 20:24 G 25621196.20 25621196.35 25621196.50 0.0486 0.0330

Neptune 65436-12-16 21:36 G 25621418.19 25621418.40 25621418.63 0.0088 0.0002

Jupiter 65436-12-30 14:10 G 25621431.91 25621432.09 25621432.28 0.0491 0.0215

Neptune 65437-07-30 10:19 G 25621643.72 25621643.93 25621644.16 0.0088 0.0005

Neptune 65438-03-12 23:03 G 25621869.25 25621869.46 25621869.69 0.0088 0.0010

Neptune 65438-10-24 12:00 G 25622094.79 25622095.00 25622095.22 0.0088 0.0015

Neptune 65439-06-07 00:29 G 25622320.32 25622320.52 25622320.75 0.0088 0.0020

Neptune 65440-01-18 13:27 G 25622545.85 25622546.06 25622546.28 0.0088 0.0025

Neptune 65440-08-31 02:10 G 25622771.39 25622771.59 25622771.80 0.0088 0.0029

Neptune 65441-04-13 14:53 G 25622996.92 25622997.12 25622997.33 0.0088 0.0034

Neptune 65441-11-25 03:22 G 25623222.46 25623222.64 25623222.85 0.0088 0.0040

Jupiter 65442-03-14 18:15 G 25623332.09 25623332.26 25623332.44 0.0542 0.0258

Neptune 65442-07-08 16:05 G 25623448.00 25623448.17 25623448.38 0.0088 0.0044

Jupiter 65442-11-08 03:36 G 25623570.58 25623570.65 25623570.73 0.0534 0.0492

Neptune 65443-02-19 04:48 G 25623673.53 25623673.70 25623673.90 0.0088 0.0049

Neptune 65443-10-02 17:46 G 25623899.08 25623899.24 25623899.42 0.0088 0.0054

Neptune 65444-05-15 06:29 G 25624124.62 25624124.77 25624124.95 0.0088 0.0059

Neptune 65444-12-26 18:58 G 25624350.16 25624350.29 25624350.47 0.0088 0.0064

Neptune 65445-08-09 07:41 G 25624575.70 25624575.82 25624575.98 0.0088 0.0068

Neptune 65446-03-22 20:39 G 25624801.25 25624801.36 25624801.50 0.0088 0.0073

Neptune 65446-11-03 09:22 G 25625026.81 25625026.89 25625027.02 0.0088 0.0078

Saturn 65446-11-18 11:03 G 25625041.77 25625041.96 25625042.16 0.0277 0.0100

Neptune 65447-06-16 22:34 G 25625252.37 25625252.44 25625252.53 0.0088 0.0082

Saturn 65447-07-05 19:12 G 25625271.11 25625271.30 25625271.50 0.0276 0.0113

Jupiter 65448-01-13 02:24 G 25625462.56 25625462.60 25625462.64 0.0485 0.0474

Neptune 65448-01-28 11:03 G 25625477.94 25625477.96 25625478.03 0.0088 0.0087

Jupiter 65448-09-04 19:12 G 25625698.10 25625698.30 25625698.50 0.0490 0.0062

Jupiter 65453-11-17 05:17 G 25627597.63 25627597.72 25627597.83 0.0543 0.0468

Jupiter 65454-07-13 16:05 G 25627836.00 25627836.17 25627836.35 0.0536 0.0292

Mars 65457-05-14 22:34 G 25628872.29 25628872.44 25628872.60 0.1772 0.0798

Jupiter 65460-05-11 00:29 G 25629964.32 25629964.52 25629964.72 0.0488 0.0089

Jupiter 65461-01-01 21:07 G 25630200.32 25630200.38 25630200.45 0.0495 0.0465

Saturn 65461-12-14 02:10 G 25630546.40 25630546.59 25630546.80 0.0282 0.0101

Saturn 65462-07-31 17:46 G 25630776.06 25630776.24 25630776.43 0.0283 0.0130

Pluto 65464-11-29 09:51 G 25631627.80 25631627.91 25631628.06 0.0063 0.0050

Pluto 65465-07-12 13:55 G 25631852.88 25631853.08 25631853.30 0.0064 0.0017

Pluto 65466-02-22 18:00 G 25632078.05 25632078.25 25632078.47 0.0064 0.0018

Jupiter 65466-03-18 03:22 G 25632101.44 25632101.64 25632101.84 0.0538 0.0083

Pluto 65466-10-05 21:36 G 25632303.31 25632303.40 25632303.55 0.0064 0.0053

Jupiter 65472-01-15 06:15 G 25634230.59 25634230.76 25634230.94 0.0487 0.0239

Jupiter 65472-09-07 01:12 G 25634466.39 25634466.55 25634466.70 0.0492 0.0309

Uranus 65473-07-16 00:15 G 25634778.41 25634778.51 25634778.64 0.0136 0.0114

Uranus 65474-02-27 07:27 G 25635004.64 25635004.81 25635004.99 0.0136 0.0081

Uranus 65474-10-11 14:24 G 25635230.90 25635231.10 25635231.31 0.0136 0.0047

Uranus 65475-05-25 21:36 G 25635457.19 25635457.40 25635457.62 0.0137 0.0013

Uranus 65476-01-07 04:48 G 25635683.49 25635683.70 25635683.92 0.0137 0.0021

Saturn 65476-05-30 16:34 G 25635827.99 25635828.19 25635828.40 0.0277 0.0067

Uranus 65476-08-20 12:15 G 25635909.81 25635910.01 25635910.21 0.0137 0.0055

Saturn 65477-01-15 00:58 G 25636057.37 25636057.54 25636057.72 0.0276 0.0147

Uranus 65477-04-03 19:55 G 25636136.17 25636136.33 25636136.50 0.0137 0.0090

Uranus 65477-11-16 03:22 G 25636362.57 25636362.64 25636362.75 0.0137 0.0124

Jupiter 65477-11-20 10:48 G 25636366.76 25636366.95 25636367.15 0.0541 0.0138

Jupiter 65483-09-20 12:15 G 25638496.89 25638497.01 25638497.13 0.0486 0.0384

Jupiter 65484-05-13 05:31 G 25638732.54 25638732.73 25638732.92 0.0490 0.0156

Mars 65484-09-29 12:15 G 25638871.84 25638872.01 25638872.19 0.1754 0.0066

Jupiter 65489-07-25 21:07 G 25640632.23 25640632.38 25640632.54 0.0542 0.0351

Jupiter 65490-03-21 07:41 G 25640870.69 25640870.82 25640870.96 0.0536 0.0405

Saturn 65491-06-26 11:31 G 25641332.77 25641332.98 25641333.19 0.0282 0.0059

Saturn 65492-02-11 02:53 G 25641562.45 25641562.62 25641562.79 0.0282 0.0170

Jupiter 65496-01-17 09:07 G 25642998.68 25642998.88 25642999.09 0.0489 0.0006

Jupiter 65501-11-24 21:22 G 25645136.20 25645136.39 25645136.58 0.0538 0.0205

Saturn 65505-04-26 09:22 G 25646384.81 25646384.89 25646384.97 0.0277 0.0257

Saturn 65505-12-11 18:15 G 25646614.05 25646614.26 25646614.47 0.0277 0.0043

Saturn 65506-07-29 02:24 G 25646843.43 25646843.60 25646843.76 0.0276 0.0169

Neptune 65507-05-11 22:19 G 25647130.41 25647130.43 25647130.51 0.0090 0.0088

Jupiter 65507-09-23 14:39 G 25647264.92 25647265.11 25647265.30 0.0487 0.0148

Neptune 65507-12-23 11:46 G 25647355.93 25647355.99 25647356.09 0.0090 0.0083

Jupiter 65508-05-16 10:05 G 25647500.81 25647500.92 25647501.04 0.0493 0.0402

Neptune 65508-08-05 01:12 G 25647581.46 25647581.55 25647581.67 0.0090 0.0078

Neptune 65509-03-18 14:53 G 25647807.00 25647807.12 25647807.25 0.0090 0.0073

Neptune 65509-10-30 04:19 G 25648032.54 25648032.68 25648032.82 0.0089 0.0068

Neptune 65510-06-12 17:03 G 25648258.08 25648258.21 25648258.39 0.0089 0.0064

Neptune 65511-01-24 06:29 G 25648483.62 25648483.77 25648483.96 0.0089 0.0059

Neptune 65511-09-06 19:55 G 25648709.17 25648709.33 25648709.53 0.0089 0.0054

Neptune 65512-04-19 09:22 G 25648934.73 25648934.89 25648935.10 0.0089 0.0049

Neptune 65512-11-30 22:48 G 25649160.28 25649160.45 25649160.66 0.0089 0.0044

Neptune 65513-07-14 12:15 G 25649385.83 25649386.01 25649386.22 0.0089 0.0038

Jupiter 65513-07-30 09:07 G 25649401.68 25649401.88 25649402.09 0.0539 0.0009

Uranus 65513-11-02 00:43 G 25649496.47 25649496.53 25649496.61 0.0142 0.0134

Neptune 65514-02-25 01:55 G 25649611.38 25649611.58 25649611.79 0.0089 0.0033

Uranus 65514-06-16 11:17 G 25649722.81 25649722.97 25649723.13 0.0142 0.0095

Neptune 65514-10-08 15:22 G 25649836.93 25649837.14 25649837.35 0.0089 0.0028

Uranus 65515-01-28 21:36 G 25649949.20 25649949.40 25649949.60 0.0142 0.0057

Neptune 65515-05-22 04:34 G 25650062.49 25650062.69 25650062.91 0.0089 0.0023

Uranus 65515-09-12 07:55 G 25650175.61 25650175.83 25650176.04 0.0142 0.0019

Neptune 65516-01-02 18:00 G 25650288.04 25650288.25 25650288.47 0.0089 0.0017

Uranus 65516-04-25 17:46 G 25650402.03 25650402.24 25650402.46 0.0141 0.0019

Neptune 65516-08-15 07:12 G 25650513.59 25650513.80 25650514.03 0.0089 0.0013

Uranus 65516-12-08 03:51 G 25650628.46 25650628.66 25650628.86 0.0141 0.0057

Neptune 65517-03-28 20:39 G 25650739.15 25650739.36 25650739.59 0.0089 0.0008

Uranus 65517-07-22 13:12 G 25650854.90 25650855.05 25650855.22 0.0141 0.0094

Neptune 65517-11-09 10:05 G 25650964.70 25650964.92 25650965.14 0.0089 0.0002

Uranus 65518-03-05 22:48 G 25651081.39 25651081.45 25651081.54 0.0141 0.0131

Neptune 65518-06-22 23:17 G 25651190.25 25651190.47 25651190.69 0.0089 0.0003

Earth 65518-06-25 20:39 G 25651193.24 25651193.36 25651193.47 0.2684 0.1840

Moon 65518-06-25 21:51 G 25651193.31 25651193.41 25651193.50 0.2676 0.2173 *

Neptune 65519-02-03 12:29 G 25651415.81 25651416.02 25651416.24 0.0089 0.0009

Jupiter 65519-05-29 20:10 G 25651531.18 25651531.34 25651531.50 0.0486 0.0296

Neptune 65519-09-17 01:55 G 25651641.36 25651641.58 25651641.80 0.0089 0.0013

Jupiter 65520-01-20 14:24 G 25651766.93 25651767.10 25651767.28 0.0492 0.0249

Neptune 65520-04-29 15:22 G 25651866.92 25651867.14 25651867.35 0.0089 0.0019

Saturn 65520-05-21 21:07 G 25651889.33 25651889.38 25651889.47 0.0282 0.0265

Neptune 65520-12-11 04:34 G 25652092.48 25652092.69 25652092.90 0.0089 0.0024

Saturn 65521-01-06 12:29 G 25652118.81 25652119.02 25652119.23 0.0282 0.0037

Neptune 65521-07-24 17:31 G 25652318.03 25652318.23 25652318.45 0.0089 0.0029

Saturn 65521-08-24 03:51 G 25652348.51 25652348.66 25652348.82 0.0283 0.0193

Neptune 65522-03-07 06:43 G 25652543.59 25652543.78 25652544.00 0.0089 0.0034

Neptune 65522-10-18 20:10 G 25652769.15 25652769.34 25652769.55 0.0089 0.0039

Mars 65523-03-13 06:29 G 25652914.66 25652914.77 25652914.89 0.1775 0.1285

Neptune 65523-06-01 09:22 G 25652994.72 25652994.89 25652995.10 0.0089 0.0045

Neptune 65524-01-12 22:48 G 25653220.28 25653220.45 25653220.65 0.0089 0.0049

Neptune 65524-08-25 12:00 G 25653445.84 25653446.00 25653446.19 0.0089 0.0054

Jupiter 65525-04-03 19:27 G 25653667.13 25653667.31 25653667.50 0.0541 0.0215

Neptune 65525-04-08 01:27 G 25653671.41 25653671.56 25653671.74 0.0089 0.0059

Neptune 65525-11-19 14:39 G 25653896.98 25653897.11 25653897.29 0.0089 0.0064

Jupiter 65525-11-28 04:05 G 25653905.64 25653905.67 25653905.70 0.0534 0.0527

Moon 65526-06-23 06:43 G 25654112.71 25654112.78 25654112.85 0.2679 0.2406

Earth 65526-06-23 10:19 G 25654112.81 25654112.93 25654113.05 0.2685 0.1727 *

Neptune 65526-07-03 03:51 G 25654122.55 25654122.66 25654122.82 0.0089 0.0069

Neptune 65527-02-13 17:31 G 25654348.12 25654348.23 25654348.36 0.0089 0.0073

Neptune 65527-09-27 06:43 G 25654573.69 25654573.78 25654573.89 0.0089 0.0078

Neptune 65528-05-09 19:55 G 25654799.27 25654799.33 25654799.43 0.0089 0.0083

Neptune 65528-12-21 09:07 G 25655024.87 25655024.88 25655024.94 0.0089 0.0088

Jupiter 65531-02-02 02:24 G 25655797.52 25655797.60 25655797.69 0.0485 0.0441

Jupiter 65531-09-25 19:27 G 25656033.12 25656033.31 25656033.52 0.0490 0.0097

Saturn 65534-11-06 14:24 G 25657170.98 25657171.10 25657171.22 0.0278 0.0225

Saturn 65535-06-23 23:31 G 25657400.26 25657400.48 25657400.69 0.0277 0.0012

Saturn 65536-02-08 07:27 G 25657629.68 25657629.81 25657629.97 0.0276 0.0203

Jupiter 65536-12-07 01:55 G 25657932.47 25657932.58 25657932.71 0.0543 0.0436

Jupiter 65537-08-02 12:58 G 25658170.88 25658171.04 25658171.20 0.0537 0.0319

Jupiter 65543-06-01 00:29 G 25660299.32 25660299.52 25660299.73 0.0488 0.0057

Jupiter 65549-04-07 00:29 G 25662436.32 25662436.52 25662436.72 0.0539 0.0114

Saturn 65549-12-02 07:12 G 25662675.68 25662675.80 25662675.95 0.0281 0.0221

Saturn 65550-07-19 22:19 G 25662905.22 25662905.43 25662905.64 0.0282 0.0006

Mars 65550-07-28 20:10 G 25662914.17 25662914.34 25662914.51 0.1750 0.0410

Saturn 65551-03-06 13:41 G 25663134.96 25663135.07 25663135.19 0.0282 0.0235

Pluto 65555-01-17 06:58 G 25664547.59 25664547.79 25664547.99 0.0080 0.0032

Jupiter 65555-02-04 04:34 G 25664565.51 25664565.69 25664565.88 0.0487 0.0206

Pluto 65555-08-30 17:31 G 25664773.04 25664773.23 25664773.43 0.0080 0.0036

Jupiter 65555-09-27 23:17 G 25664801.32 25664801.47 25664801.62 0.0492 0.0339

Uranus 65557-03-16 08:53 G 25665336.83 25665336.87 25665336.96 0.0136 0.0129

Uranus 65557-10-28 16:19 G 25665563.02 25665563.18 25665563.33 0.0136 0.0096

Uranus 65558-06-11 23:03 G 25665789.27 25665789.46 25665789.66 0.0136 0.0062

Uranus 65559-01-24 06:15 G 25666015.55 25666015.76 25666015.97 0.0136 0.0028

Uranus 65559-09-07 13:27 G 25666241.84 25666242.06 25666242.28 0.0137 0.0006

Uranus 65560-04-20 20:53 G 25666468.17 25666468.37 25666468.58 0.0137 0.0040

Uranus 65560-12-03 04:19 G 25666694.50 25666694.68 25666694.87 0.0137 0.0074

Jupiter 65560-12-10 12:58 G 25666701.84 25666702.04 25666702.24 0.0541 0.0093

Uranus 65561-07-17 12:00 G 25666920.87 25666921.00 25666921.13 0.0137 0.0109

Saturn 65564-05-18 17:31 G 25667957.09 25667957.23 25667957.38 0.0277 0.0198

Saturn 65565-01-03 02:24 G 25668186.39 25668186.60 25668186.81 0.0277 0.0016

Saturn 65565-08-20 10:19 G 25668415.82 25668415.93 25668416.05 0.0276 0.0227

Jupiter 65566-10-10 10:19 G 25668831.80 25668831.93 25668832.07 0.0486 0.0352

Jupiter 65567-06-03 03:51 G 25669067.47 25669067.66 25669067.85 0.0491 0.0187

Jupiter 65572-08-15 00:15 G 25670967.35 25670967.51 25670967.68 0.0542 0.0302

Jupiter 65573-04-10 10:05 G 25671205.82 25671205.92 25671206.04 0.0535 0.0446

Jupiter 65579-02-06 08:39 G 25673333.65 25673333.86 25673334.06 0.0489 0.0036

Saturn 65579-06-14 08:39 G 25673461.71 25673461.86 25673462.01 0.0282 0.0199

Saturn 65580-01-29 23:31 G 25673691.27 25673691.48 25673691.69 0.0282 0.0029

Saturn 65580-09-15 14:53 G 25673921.04 25673921.12 25673921.21 0.0283 0.0258

Jupiter 65584-04-19 10:05 G 25675232.86 25675232.92 25675232.99 0.0543 0.0512

Jupiter 65584-12-13 21:36 G 25675471.22 25675471.40 25675471.59 0.0537 0.0244

Neptune 65590-02-07 19:12 G 25677353.27 25677353.30 25677353.39 0.0088 0.0085

Neptune 65590-09-21 08:24 G 25677578.78 25677578.85 25677578.96 0.0088 0.0080

Jupiter 65590-10-12 14:24 G 25677599.90 25677600.10 25677600.30 0.0488 0.0115

Neptune 65591-05-04 20:53 G 25677804.29 25677804.37 25677804.51 0.0088 0.0076

Jupiter 65591-06-05 10:19 G 25677835.83 25677835.93 25677836.02 0.0493 0.0433

Neptune 65591-12-16 09:51 G 25678029.80 25678029.91 25678030.06 0.0088 0.0071

Neptune 65592-07-28 22:48 G 25678255.31 25678255.45 25678255.60 0.0088 0.0066

Neptune 65593-03-11 11:03 G 25678480.83 25678480.96 25678481.14 0.0088 0.0062

Neptune 65593-10-23 00:00 G 25678706.35 25678706.50 25678706.69 0.0088 0.0057

Saturn 65593-11-28 22:05 G 25678743.26 25678743.42 25678743.60 0.0277 0.0167

Neptune 65594-06-05 12:43 G 25678931.87 25678932.03 25678932.22 0.0088 0.0052

Saturn 65594-07-16 07:12 G 25678972.59 25678972.80 25678973.01 0.0277 0.0047

Neptune 65595-01-17 01:41 G 25679157.39 25679157.57 25679157.76 0.0088 0.0047

Saturn 65595-03-02 15:22 G 25679202.08 25679202.14 25679202.22 0.0276 0.0259

Neptune 65595-08-30 14:24 G 25679382.91 25679383.10 25679383.30 0.0088 0.0042

Neptune 65596-04-12 02:53 G 25679608.43 25679608.62 25679608.83 0.0088 0.0038

Jupiter 65596-08-18 05:17 G 25679736.51 25679736.72 25679736.92 0.0539 0.0027

Neptune 65596-11-23 15:36 G 25679833.96 25679834.15 25679834.36 0.0088 0.0033

Neptune 65597-07-07 04:19 G 25680059.48 25680059.68 25680059.90 0.0088 0.0028

Uranus 65598-02-13 18:00 G 25680281.14 25680281.25 25680281.40 0.0142 0.0113

Neptune 65598-02-17 17:03 G 25680285.00 25680285.21 25680285.43 0.0088 0.0023

Uranus 65598-09-28 04:48 G 25680507.53 25680507.70 25680507.89 0.0142 0.0075

Neptune 65598-10-01 06:00 G 25680510.54 25680510.75 25680510.97 0.0088 0.0018

Uranus 65599-05-12 15:07 G 25680733.93 25680734.13 25680734.35 0.0142 0.0037

Neptune 65599-05-14 18:43 G 25680736.06 25680736.28 25680736.50 0.0088 0.0013

Uranus 65599-12-25 01:27 G 25680960.34 25680960.56 25680960.78 0.0141 0.0002

Neptune 65599-12-26 07:27 G 25680961.59 25680961.81 25680962.03 0.0088 0.0008

Uranus 65600-08-07 11:17 G 25681186.77 25681186.97 25681187.18 0.0141 0.0040

Neptune 65600-08-07 20:10 G 25681187.12 25681187.34 25681187.56 0.0088 0.0003 *

Neptune 65601-03-21 08:53 G 25681412.65 25681412.87 25681413.09 0.0088 0.0002

Uranus 65601-03-21 21:07 G 25681413.20 25681413.38 25681413.57 0.0141 0.0077

Neptune 65601-11-01 21:36 G 25681638.19 25681638.40 25681638.63 0.0088 0.0007

Uranus 65601-11-03 06:58 G 25681639.67 25681639.79 25681639.92 0.0141 0.0114

Neptune 65602-06-15 10:19 G 25681863.72 25681863.93 25681864.16 0.0088 0.0012

Jupiter 65602-06-17 19:41 G 25681866.15 25681866.32 25681866.50 0.0486 0.0262

Neptune 65603-01-26 23:17 G 25682089.25 25682089.47 25682089.68 0.0088 0.0016

Jupiter 65603-02-08 13:55 G 25682101.92 25682102.08 25682102.25 0.0491 0.0280

Neptune 65603-09-09 12:00 G 25682314.79 25682315.00 25682315.21 0.0088 0.0021

Neptune 65604-04-22 00:43 G 25682540.32 25682540.53 25682540.74 0.0088 0.0026

Neptune 65604-12-03 13:27 G 25682765.86 25682766.06 25682766.27 0.0088 0.0031

Neptune 65605-07-17 01:55 G 25682991.39 25682991.58 25682991.79 0.0088 0.0037

Neptune 65606-02-27 14:39 G 25683216.93 25683217.11 25683217.32 0.0088 0.0041

Neptune 65606-10-11 03:22 G 25683442.47 25683442.64 25683442.85 0.0088 0.0047

Neptune 65607-05-24 16:34 G 25683668.01 25683668.19 25683668.37 0.0088 0.0051

Neptune 65608-01-05 05:03 G 25683893.55 25683893.71 25683893.89 0.0088 0.0056

Jupiter 65608-04-22 15:36 G 25684001.96 25684002.15 25684002.34 0.0541 0.0185

Neptune 65608-08-17 17:31 G 25684119.09 25684119.23 25684119.40 0.0088 0.0061

Saturn 65608-12-24 19:27 G 25684248.14 25684248.31 25684248.50 0.0281 0.0155

Neptune 65609-03-31 06:00 G 25684344.63 25684344.75 25684344.92 0.0088 0.0066

Saturn 65609-08-11 10:34 G 25684477.74 25684477.94 25684478.15 0.0282 0.0073

Neptune 65609-11-11 19:27 G 25684570.18 25684570.31 25684570.44 0.0088 0.0070

Neptune 65610-06-25 07:55 G 25684795.73 25684795.83 25684795.96 0.0088 0.0075

Neptune 65611-02-05 20:24 G 25685021.28 25685021.35 25685021.47 0.0088 0.0080

Neptune 65611-09-19 09:22 G 25685246.84 25685246.89 25685246.97 0.0088 0.0084

Neptune 65612-05-01 22:19 G 25685472.43 25685472.43 25685472.45 0.0088 0.0088

Jupiter 65614-02-21 00:00 G 25686132.40 25686132.50 25686132.61 0.0485 0.0408

Jupiter 65614-10-14 17:03 G 25686368.01 25686368.21 25686368.40 0.0490 0.0126

Mars 65616-05-25 04:19 G 25686956.53 25686956.68 25686956.84 0.1747 0.0861

Jupiter 65619-12-27 02:53 G 25688267.49 25688267.62 25688267.76 0.0543 0.0392

Jupiter 65620-08-21 14:10 G 25688505.94 25688506.09 25688506.24 0.0537 0.0360

Mars 65621-01-06 20:53 G 25688644.27 25688644.37 25688644.48 0.1768 0.1392

Saturn 65623-06-11 03:07 G 25689529.45 25689529.63 25689529.81 0.0277 0.0137

Earth 65623-12-28 12:29 G 25689729.90 25689730.02 25689730.14 0.2648 0.1644

Moon 65623-12-28 12:58 G 25689729.92 25689730.04 25689730.16 0.2642 0.1777 *

Saturn 65624-01-26 11:31 G 25689758.78 25689758.98 25689759.19 0.0277 0.0076

Jupiter 65626-06-19 22:05 G 25690634.21 25690634.42 25690634.62 0.0488 0.0027

Moon 65631-12-26 01:12 G 25692649.42 25692649.55 25692649.69 0.2643 0.1515

Earth 65631-12-26 05:03 G 25692649.58 25692649.71 25692649.84 0.2647 0.1475 *

Jupiter 65632-04-26 02:39 G 25692771.42 25692771.61 25692771.81 0.0538 0.0157

Jupiter 65638-02-23 02:53 G 25694900.44 25694900.62 25694900.82 0.0487 0.0175

Saturn 65638-07-06 20:53 G 25695034.19 25695034.37 25695034.56 0.0282 0.0132

Jupiter 65638-10-16 22:19 G 25695136.30 25695136.43 25695136.56 0.0493 0.0370

Saturn 65639-02-21 12:00 G 25695263.80 25695264.00 25695264.20 0.0282 0.0097

Uranus 65641-06-28 00:15 G 25696121.40 25696121.51 25696121.64 0.0136 0.0111

Uranus	65642-02-09 07:12 G	25696347.63	25696347.80	25696347.99	0.0136	0.0078
Uranus	65642-09-23 14:24 G	25696573.90	25696574.10	25696574.31	0.0136	0.0044
Uranus	65643-05-07 21:36 G	25696800.19	25696800.40	25696800.62	0.0137	0.0011
Uranus	65643-12-20 05:03 G	25697026.49	25697026.71	25697026.92	0.0137	0.0024
Jupiter	65643-12-30 13:12 G	25697036.85	25697037.05	25697037.26	0.0540	0.0053
Uranus	65644-08-02 12:15 G	25697252.82	25697253.01	25697253.21	0.0137	0.0058
Uranus	65645-03-16 19:41 G	25697479.17	25697479.32	25697479.49	0.0137	0.0093
Uranus	65645-10-29 03:22 G	25697705.57	25697705.64	25697705.73	0.0137	0.0127
Jupiter	65649-10-29 09:22 G	25699166.74	25699166.89	25699167.04	0.0486	0.0320
Jupiter	65650-06-22 03:07 G	25699402.45	25699402.63	25699402.81	0.0491	0.0218
Saturn	65652-12-21 07:27 G	25700315.62	25700315.81	25700316.00	0.0277	0.0107
Saturn	65653-08-07 16:05 G	25700544.98	25700545.17	25700545.37	0.0277	0.0108
Jupiter	65655-09-03 19:55 G	25701302.16	25701302.33	25701302.51	0.0542	0.0271
Jupiter	65656-04-29 05:31 G	25701540.64	25701540.73	25701540.83	0.0535	0.0471
Jupiter	65661-07-04 14:53 G	25703433.07	25703433.12	25703433.18	0.0485	0.0462
Jupiter	65662-02-25 07:27 G	25703668.61	25703668.81	25703669.02	0.0489	0.0068
Jupiter	65667-05-09 05:17 G	25705567.63	25705567.72	25705567.82	0.0543	0.0482
Jupiter	65668-01-02 17:03 G	25705806.03	25705806.21	25705806.39	0.0537	0.0270
Saturn	65668-01-17 08:24 G	25705820.65	25705820.85	25705821.06	0.0282	0.0087
Saturn	65668-09-02 23:31 G	25706050.30	25706050.48	25706050.67	0.0282	0.0142
Neptune	65671-08-13 09:36 G	25707124.85	25707124.90	25707124.97	0.0090	0.0086
Neptune	65672-03-25 23:17 G	25707350.38	25707350.47	25707350.56	0.0090	0.0081
Neptune	65672-11-06 12:00 G	25707575.91	25707576.00	25707576.13	0.0090	0.0077
Neptune	65673-06-20 01:12 G	25707801.44	25707801.55	25707801.70	0.0090	0.0072
Jupiter	65673-10-31 11:03 G	25707934.76	25707934.96	25707935.16	0.0487	0.0086
Neptune	65674-01-31 14:39 G	25708026.98	25708027.11	25708027.27	0.0090	0.0067
Jupiter	65674-06-24 06:29 G	25708170.71	25708170.77	25708170.85	0.0493	0.0459
Neptune	65674-09-14 04:05 G	25708252.52	25708252.67	25708252.84	0.0090	0.0062
Neptune	65675-04-27 17:31 G	25708478.07	25708478.23	25708478.41	0.0089	0.0057
Neptune	65675-12-09 06:43 G	25708703.62	25708703.78	25708703.97	0.0089	0.0052

Neptune 65676-07-21 20:10 G 25708929.16 25708929.34 25708929.54 0.0089 0.0047

Neptune 65677-03-04 09:36 G 25709154.71 25709154.90 25709155.10 0.0089 0.0041

Neptune 65677-10-15 22:48 G 25709380.26 25709380.45 25709380.67 0.0089 0.0037

Neptune 65678-05-29 12:15 G 25709605.82 25709606.01 25709606.23 0.0089 0.0031

Neptune 65679-01-10 01:27 G 25709831.37 25709831.56 25709831.79 0.0089 0.0027

Neptune 65679-08-23 14:53 G 25710056.92 25710057.12 25710057.35 0.0089 0.0022

Jupiter 65679-09-07 05:17 G 25710071.52 25710071.72 25710071.93 0.0540 0.0068

Neptune 65680-04-05 04:34 G 25710282.48 25710282.69 25710282.91 0.0089 0.0016

Neptune 65680-11-16 18:00 G 25710508.03 25710508.25 25710508.47 0.0089 0.0011

Neptune 65681-06-30 07:12 G 25710733.58 25710733.80 25710734.02 0.0089 0.0006

Uranus 65681-10-14 01:41 G 25710839.50 25710839.57 25710839.67 0.0142 0.0130

Neptune 65682-02-10 20:39 G 25710959.14 25710959.36 25710959.58 0.0089 0.0001

Mars 65682-03-22 12:29 G 25710998.90 25710999.02 25710999.13 0.1743 0.1304

Uranus 65682-05-28 12:15 G 25711065.86 25711066.01 25711066.19 0.0142 0.0092

Saturn 65682-07-03 13:41 G 25711101.87 25711102.07 25711102.28 0.0277 0.0075

Neptune 65682-09-24 09:51 G 25711184.69 25711184.91 25711185.13 0.0089 0.0005

Uranus 65683-01-09 22:48 G 25711292.25 25711292.45 25711292.66 0.0142 0.0054

Saturn 65683-02-17 22:05 G 25711331.24 25711331.42 25711331.60 0.0276 0.0139

Neptune 65683-05-07 23:17 G 25711410.25 25711410.47 25711410.69 0.0089 0.0010

Uranus 65683-08-24 09:07 G 25711518.67 25711518.88 25711519.10 0.0142 0.0015

Neptune 65683-12-19 12:29 G 25711635.81 25711636.02 25711636.24 0.0089 0.0015

Uranus 65684-04-06 19:12 G 25711745.09 25711745.30 25711745.52 0.0141 0.0023

Neptune 65684-08-01 01:41 G 25711861.36 25711861.57 25711861.79 0.0089 0.0020

Uranus 65684-11-19 05:17 G 25711971.52 25711971.72 25711971.92 0.0141 0.0060

Neptune 65685-03-14 15:07 G 25712086.92 25712087.13 25712087.34 0.0089 0.0025

Uranus 65685-07-03 14:53 G 25712197.97 25712198.12 25712198.29 0.0141 0.0098

Jupiter 65685-07-06 16:19 G 25712201.01 25712201.18 25712201.36 0.0486 0.0233

Neptune 65685-10-26 04:19 G 25712312.48 25712312.68 25712312.89 0.0089 0.0031

Uranus 65686-02-15 00:29 G 25712424.47 25712424.52 25712424.59 0.0141 0.0135

Jupiter 65686-02-27 10:34 G 25712436.78 25712436.94 25712437.10 0.0492 0.0307

Neptune 65686-06-08 17:46 G 25712538.04 25712538.24 25712538.44 0.0089 0.0036

Mars 65686-11-04 05:03 G 25712686.56 25712686.71 25712686.85 0.1772 0.0921

Neptune 65687-01-20 06:58 G 25712763.59 25712763.79 25712763.98 0.0089 0.0041

Neptune 65687-09-02 19:41 G 25712989.15 25712989.32 25712989.53 0.0089 0.0046

Neptune 65688-04-15 09:07 G 25713214.72 25713214.88 25713215.08 0.0089 0.0051

Neptune 65688-11-26 22:19 G 25713440.28 25713440.43 25713440.62 0.0089 0.0056

Neptune 65689-07-10 12:00 G 25713665.84 25713666.00 25713666.16 0.0089 0.0061

Neptune 65690-02-21 01:12 G 25713891.41 25713891.55 25713891.71 0.0089 0.0065

Neptune 65690-10-04 14:24 G 25714116.98 25714117.10 25714117.25 0.0089 0.0070

Jupiter 65691-05-12 17:17 G 25714337.02 25714337.22 25714337.41 0.0541 0.0141

Neptune 65691-05-18 03:51 G 25714342.56 25714342.66 25714342.79 0.0089 0.0075

Neptune 65691-12-29 17:03 G 25714568.13 25714568.21 25714568.32 0.0089 0.0080

Neptune 65692-08-11 06:00 G 25714793.72 25714793.75 25714793.85 0.0089 0.0085

Jupiter 65697-03-11 21:51 G 25716467.28 25716467.41 25716467.54 0.0485 0.0378

Saturn 65697-07-29 10:19 G 25716606.72 25716606.93 25716607.14 0.0282 0.0062

Jupiter 65697-11-02 15:07 G 25716702.94 25716703.13 25716703.32 0.0490 0.0155

Saturn 65698-03-16 01:27 G 25716836.39 25716836.56 25716836.73 0.0283 0.0166

Jupiter 65703-01-16 03:07 G 25718602.48 25718602.63 25718602.79 0.0542 0.0351

Jupiter 65703-09-11 13:41 G 25718840.93 25718841.07 25718841.21 0.0536 0.0395

Jupiter 65709-07-09 20:39 G 25720969.15 25720969.36 25720969.56 0.0489 0.0013

Saturn 65711-05-30 08:24 G 25721658.78 25721658.85 25721658.93 0.0278 0.0259

Saturn 65712-01-14 17:46 G 25721888.03 25721888.24 25721888.45 0.0277 0.0044

Saturn 65712-08-31 02:10 G 25722117.43 25722117.59 25722117.76 0.0277 0.0169

Pluto 65713-06-16 12:58 G 25722406.94 25722407.04 25722407.17 0.0063 0.0054

Pluto 65714-01-27 17:03 G 25722632.01 25722632.21 25722632.43 0.0064 0.0020

Mars 65714-03-22 18:15 G 25722686.24 25722686.26 25722686.27 0.1754 0.1743

Pluto 65714-09-09 20:53 G 25722857.17 25722857.37 25722857.60 0.0064 0.0015

Pluto 65715-04-23 01:12 G 25723082.42 25723082.55 25723082.70 0.0064 0.0049

Jupiter 65715-05-16 21:51 G 25723106.22 25723106.41 25723106.60 0.0538 0.0184

Jupiter 65721-03-15 01:27 G 25725235.37 25725235.56 25725235.76 0.0487 0.0142

Jupiter 65721-11-05 20:39 G 25725471.25 25725471.36 25725471.48 0.0493 0.0399

Uranus 65725-02-26 09:22 G 25726679.82 25726679.89 25726679.97 0.0136 0.0126

Uranus 65725-10-10 16:05 G 25726906.03 25726906.17 25726906.34 0.0136 0.0093

Uranus 65726-05-24 23:17 G 25727132.28 25727132.47 25727132.67 0.0136 0.0060

Saturn 65726-06-25 06:58 G 25727163.70 25727163.79 25727163.91 0.0281 0.0244

Uranus 65727-01-06 06:29 G 25727358.55 25727358.77 25727358.98 0.0136 0.0026

Jupiter 65727-01-19 07:55 G 25727371.63 25727371.83 25727372.03 0.0540 0.0025

Saturn 65727-02-09 22:05 G 25727393.21 25727393.42 25727393.63 0.0282 0.0017

Uranus 65727-08-20 13:41 G 25727584.85 25727585.07 25727585.29 0.0137 0.0008

Saturn 65727-09-27 13:27 G 25727622.92 25727623.06 25727623.20 0.0282 0.0212

Uranus 65728-04-02 20:53 G 25727811.17 25727811.37 25727811.59 0.0137 0.0043

Uranus 65728-11-15 04:19 G 25728037.51 25728037.68 25728037.87 0.0137 0.0077

Uranus 65729-06-29 11:46 G 25728263.88 25728263.99 25728264.13 0.0137 0.0112

Jupiter 65732-11-18 05:31 G 25729501.57 25729501.73 25729501.89 0.0486 0.0291

Jupiter 65733-07-11 22:48 G 25729737.28 25729737.45 25729737.63 0.0491 0.0245

Jupiter 65738-09-23 18:58 G 25731637.11 25731637.29 25731637.48 0.0542 0.0233

Jupiter 65739-05-20 05:03 G 25731875.65 25731875.71 25731875.78 0.0535 0.0506

Saturn 65740-12-09 16:19 G 25732445.07 25732445.18 25732445.32 0.0278 0.0224

Saturn 65741-07-27 01:27 G 25732674.35 25732674.56 25732674.77 0.0277 0.0010

Saturn 65742-03-13 09:22 G 25732903.76 25732903.89 25732904.04 0.0276 0.0202

Jupiter 65744-07-24 11:03 G 25733767.88 25733767.96 25733768.06 0.0485 0.0433

Jupiter 65745-03-17 03:22 G 25734003.45 25734003.64 25734003.85 0.0489 0.0095

Mars 65748-01-18 20:53 G 25735041.37 25735041.37 25735041.38 0.1740 0.1736

Jupiter 65750-05-29 06:15 G 25735902.65 25735902.76 25735902.88 0.0543 0.0439

Jupiter 65751-01-22 18:00 G 25736141.08 25736141.25 25736141.41 0.0537 0.0310

Mars 65752-09-01 12:29 G 25736728.85 25736729.02 25736729.19 0.1775 0.0430

Neptune 65753-09-29 17:46 G 25737122.24 25737122.24 25737122.25 0.0088 0.0088

Neptune 65754-05-13 06:29 G 25737347.71 25737347.77 25737347.84 0.0088 0.0083

Neptune 65754-12-24 18:58 G 25737573.21 25737573.29 25737573.40 0.0088 0.0079

Neptune 65755-08-07 07:55 G 25737798.72 25737798.83 25737798.95 0.0088 0.0074

Saturn 65756-01-05 09:36 G 25737949.77 25737949.90 25737950.03 0.0281 0.0219

Neptune 65756-03-19 20:10 G 25738024.24 25738024.34 25738024.50 0.0088 0.0070

Saturn 65756-08-22 00:15 G 25738179.30 25738179.51 25738179.73 0.0282 0.0010

Neptune 65756-10-31 09:07 G 25738249.75 25738249.88 25738250.05 0.0088 0.0065

Jupiter 65756-11-20 08:24 G 25738269.65 25738269.85 25738270.06 0.0488 0.0056

Saturn 65757-04-08 15:22 G 25738409.04 25738409.14 25738409.27 0.0283 0.0237

Neptune 65757-06-13 22:05 G 25738475.27 25738475.42 25738475.59 0.0088 0.0060

Jupiter 65757-07-14 04:34 G 25738505.66 25738505.69 25738505.72 0.0494 0.0486

Neptune 65758-01-25 11:03 G 25738700.79 25738700.96 25738701.13 0.0088 0.0055

Neptune 65758-09-07 23:31 G 25738926.32 25738926.48 25738926.67 0.0088 0.0051

Neptune 65759-04-21 12:15 G 25739151.84 25739152.01 25739152.21 0.0088 0.0046

Neptune 65759-12-03 00:58 G 25739377.36 25739377.54 25739377.75 0.0088 0.0041

Neptune 65760-07-15 13:41 G 25739602.88 25739603.07 25739603.28 0.0088 0.0036

Neptune 65761-02-26 02:24 G 25739828.40 25739828.60 25739828.81 0.0088 0.0031

Moon 65761-06-26 17:46 G 25739949.11 25739949.24 25739949.36 0.2691 0.1567

Earth 65761-06-26 20:39 G 25739949.24 25739949.36 25739949.47 0.2684 0.1845 *

Neptune 65761-10-09 15:22 G 25740053.93 25740054.14 25740054.35 0.0088 0.0026

Neptune 65762-05-23 04:05 G 25740279.46 25740279.67 25740279.88 0.0088 0.0021

Jupiter 65762-09-27 05:03 G 25740406.51 25740406.71 25740406.91 0.0539 0.0105

Neptune 65763-01-03 16:34 G 25740504.98 25740505.19 25740505.41 0.0088 0.0017

Neptune 65763-08-17 05:17 G 25740730.51 25740730.72 25740730.94 0.0088 0.0012

Neptune 65764-03-29 18:00 G 25740956.03 25740956.25 25740956.47 0.0088 0.0007

Neptune 65764-11-10 06:58 G 25741181.57 25741181.79 25741182.01 0.0088 0.0002

Neptune 65765-06-23 19:41 G 25741407.10 25741407.32 25741407.54 0.0088 0.0004

Uranus 65766-01-26 19:41 G 25741624.19 25741624.32 25741624.46 0.0142 0.0109

Neptune 65766-02-04 08:24 G 25741632.63 25741632.85 25741633.07 0.0088 0.0008

Uranus 65766-09-10 06:15 G 25741850.58 25741850.76 25741850.95 0.0142 0.0071

Neptune 65766-09-17 21:07 G 25741858.16 25741858.38 25741858.60 0.0088 0.0013

Uranus 65767-04-24 16:34 G 25742076.99 25742077.19 25742077.41 0.0142 0.0033

Neptune 65767-05-01 09:51 G 25742083.70 25742083.91 25742084.13 0.0088 0.0018

Uranus 65767-12-07 02:53 G 25742303.40 25742303.62 25742303.84 0.0141 0.0006

Neptune 65767-12-12 22:34 G 25742309.23 25742309.44 25742309.66 0.0088 0.0023

Uranus 65768-07-20 12:58 G 25742529.83 25742530.04 25742530.25 0.0141 0.0043

Neptune 65768-07-25 11:17 G 25742534.77 25742534.97 25742535.18 0.0088 0.0028

Jupiter 65768-07-26 14:10 G 25742535.91 25742536.09 25742536.28 0.0487 0.0203

Uranus 65769-03-03 22:34 G 25742756.28 25742756.44 25742756.63 0.0141 0.0081

Neptune 65769-03-07 23:46 G 25742760.30 25742760.49 25742760.71 0.0088 0.0034

Jupiter 65769-03-19 08:53 G 25742771.73 25742771.87 25742772.02 0.0492 0.0336

Earth 65769-06-24 10:05 G 25742868.80 25742868.92 25742869.04 0.2686 0.1749

Moon 65769-06-24 11:46 G 25742868.85 25742868.99 25742869.12 0.2693 0.1229 *

Uranus 65769-10-16 08:39 G 25742982.75 25742982.86 25742982.98 0.0141 0.0118

Neptune 65769-10-19 12:43 G 25742985.85 25742986.03 25742986.25 0.0088 0.0038

Neptune 65770-06-02 01:27 G 25743211.39 25743211.56 25743211.77 0.0088 0.0043

Saturn 65770-06-21 19:55 G 25743231.19 25743231.33 25743231.49 0.0277 0.0195

Neptune 65771-01-13 14:39 G 25743436.93 25743437.11 25743437.29 0.0088 0.0048

Saturn 65771-02-06 05:03 G 25743460.50 25743460.71 25743460.92 0.0277 0.0019

Neptune 65771-08-27 03:07 G 25743662.46 25743662.63 25743662.82 0.0088 0.0053

Saturn 65771-09-23 13:12 G 25743689.94 25743690.05 25743690.17 0.0276 0.0231

Neptune 65772-04-08 15:51 G 25743888.01 25743888.16 25743888.34 0.0088 0.0057

Neptune 65772-11-20 04:34 G 25744113.55 25744113.69 25744113.86 0.0088 0.0062

Neptune 65773-07-03 17:03 G 25744339.10 25744339.21 25744339.38 0.0088 0.0068

Neptune 65774-02-14 06:15 G 25744564.64 25744564.76 25744564.89 0.0088 0.0072

Jupiter 65774-06-01 12:43 G 25744671.83 25744672.03 25744672.23 0.0541 0.0111

Neptune 65774-09-27 18:43 G 25744790.19 25744790.28 25744790.41 0.0088 0.0077

Neptune 65775-05-11 07:55 G 25745015.75 25745015.83 25745015.92 0.0088 0.0081

Neptune 65775-12-22 20:24 G 25745241.31 25745241.35 25745241.41 0.0088 0.0086

Mars 65780-01-18 02:53 G 25746728.50 25746728.62 25746728.73 0.1751 0.1300

Jupiter 65780-03-31 19:41 G 25746802.18 25746802.32 25746802.46 0.0486 0.0347

Jupiter 65780-11-22 13:12 G 25747037.86 25747038.05 25747038.24 0.0490 0.0186

Saturn 65785-07-17 20:24 G 25748736.19 25748736.35 25748736.52 0.0282 0.0176

Jupiter 65786-02-03 21:36 G 25748937.24 25748937.40 25748937.57 0.0542 0.0322

Saturn 65786-03-04 11:46 G 25748965.78 25748965.99 25748966.20 0.0282 0.0052

Jupiter 65786-09-30 08:10 G 25749175.71 25749175.84 25749175.96 0.0536 0.0419

Saturn 65786-10-20 03:22 G 25749195.62 25749195.64 25749195.66 0.0283 0.0281

Jupiter 65792-07-28 16:05 G 25751303.97 25751304.17 25751304.37 0.0488 0.0033

Jupiter 65797-10-09 07:41 G 25753202.78 25753202.82 25753202.87 0.0544 0.0529

Jupiter 65798-06-04 20:24 G 25753441.17 25753441.35 25753441.54 0.0539 0.0221

Saturn 65800-01-02 05:03 G 25754017.54 25754017.71 25754017.89 0.0277 0.0157

Saturn 65800-08-19 13:41 G 25754246.87 25754247.07 25754247.28 0.0277 0.0056

Saturn 65801-04-05 21:36 G 25754476.35 25754476.40 25754476.46 0.0276 0.0267

Pluto 65803-08-04 11:03 G 25755326.77 25755326.96 25755327.17 0.0080 0.0035

Pluto 65804-03-16 21:51 G 25755552.21 25755552.41 25755552.61 0.0080 0.0034

Jupiter 65804-04-03 21:07 G 25755570.19 25755570.38 25755570.58 0.0487 0.0116

Jupiter 65804-11-25 16:05 G 25755806.08 25755806.17 25755806.28 0.0493 0.0424

Uranus 65809-06-11 00:29 G 25757464.40 25757464.52 25757464.66 0.0136 0.0109

Uranus 65810-01-23 07:27 G 25757690.64 25757690.81 25757691.00 0.0136 0.0075

Jupiter 65810-02-08 08:24 G 25757706.65 25757706.85 25757707.05 0.0540 0.0016

Uranus 65810-09-06 14:39 G 25757916.90 25757917.11 25757917.32 0.0136 0.0042

Uranus 65811-04-20 21:51 G 25758143.20 25758143.41 25758143.63 0.0136 0.0008

Uranus 65811-12-03 05:03 G 25758369.50 25758369.71 25758369.93 0.0137 0.0026

Uranus 65812-07-16 12:15 G 25758595.82 25758596.01 25758596.21 0.0137 0.0061

Uranus 65813-02-27 19:41 G 25758822.17 25758822.32 25758822.48 0.0137 0.0095

Uranus 65813-10-12 03:22 G 25759048.58 25759048.64 25759048.71 0.0137 0.0130

Saturn 65815-01-28 23:31 G 25759522.30 25759522.48 25759522.66 0.0282 0.0149

Saturn 65815-09-15 14:24 G 25759751.90 25759752.10 25759752.31 0.0282 0.0078

Jupiter 65815-12-09 02:24 G 25759836.43 25759836.60 25759836.78 0.0486 0.0262

Jupiter 65816-07-31 20:10 G 25760072.17 25760072.34 25760072.51 0.0491 0.0272

Mars 65818-06-30 20:39 G 25760771.19 25760771.36 25760771.53 0.1779 0.0053

Jupiter 65821-10-13 19:12 G 25761972.11 25761972.30 25761972.49 0.0542 0.0193

Jupiter 65827-08-14 08:24 G 25764102.75 25764102.85 25764102.97 0.0485 0.0405

Jupiter 65828-04-06 01:27 G 25764338.36 25764338.56 25764338.76 0.0489 0.0123

Saturn 65829-07-15 07:55 G 25764803.65 25764803.83 25764804.02 0.0277 0.0130

Saturn 65830-03-01 16:48 G 25765033.00 25765033.20 25765033.40 0.0277 0.0084

Jupiter 65833-06-18 02:24 G 25766237.47 25766237.60 25766237.74 0.0542 0.0406

Jupiter 65834-02-11 13:27 G 25766475.90 25766476.06 25766476.22 0.0537 0.0337

Neptune 65835-04-05 06:43 G 25766893.78 25766893.78 25766893.79 0.0090 0.0089

Neptune 65835-11-16 19:41 G 25767119.27 25767119.32 25767119.41 0.0090 0.0085

Neptune 65836-06-29 09:22 G 25767344.80 25767344.89 25767344.99 0.0090 0.0080

Neptune 65837-02-09 22:48 G 25767570.33 25767570.45 25767570.57 0.0090 0.0075

Neptune 65837-09-23 11:31 G 25767795.87 25767795.98 25767796.14 0.0090 0.0071

Neptune 65838-05-07 00:58 G 25768021.41 25768021.54 25768021.71 0.0090 0.0066

Neptune 65838-12-18 14:10 G 25768246.95 25768247.09 25768247.28 0.0090 0.0061

Neptune 65839-08-01 03:36 G 25768472.50 25768472.65 25768472.84 0.0089 0.0056

Jupiter 65839-12-11 06:15 G 25768604.56 25768604.76 25768604.96 0.0488 0.0025

Neptune 65840-03-13 17:03 G 25768698.05 25768698.21 25768698.41 0.0089 0.0051

Neptune 65840-10-25 06:15 G 25768923.59 25768923.76 25768923.97 0.0089 0.0046

Neptune 65841-06-07 19:41 G 25769149.14 25769149.32 25769149.53 0.0089 0.0040

Neptune 65842-01-19 09:22 G 25769374.69 25769374.89 25769375.09 0.0089 0.0035

Neptune 65842-09-01 22:34 G 25769600.24 25769600.44 25769600.65 0.0089 0.0030

Neptune 65843-04-15 12:00 G 25769825.80 25769826.00 25769826.22 0.0089 0.0025

Neptune 65843-11-27 01:27 G 25770051.35 25770051.56 25770051.78 0.0089 0.0019

Neptune 65844-07-09 14:39 G 25770276.90 25770277.11 25770277.34 0.0089 0.0015

Saturn 65844-08-10 09:51 G 25770308.71 25770308.91 25770309.11 0.0282 0.0108

Neptune 65845-02-20 04:05 G 25770502.46 25770502.67 25770502.89 0.0089 0.0009

Saturn 65845-03-28 00:58 G 25770538.36 25770538.54 25770538.74 0.0282 0.0121

Neptune 65845-10-03 17:31 G 25770728.01 25770728.23 25770728.45 0.0089 0.0004

Jupiter 65845-10-16 23:46 G 25770741.29 25770741.49 25770741.68 0.0539 0.0132

Mars 65845-11-15 10:48 G 25770770.79 25770770.95 25770771.10 0.1747 0.0846

Neptune 65846-05-17 06:58 G 25770953.57 25770953.79 25770954.01 0.0089 0.0002

Neptune 65846-12-28 20:24 G 25771179.13 25771179.35 25771179.57 0.0089 0.0007

Neptune 65847-08-11 09:36 G 25771404.68 25771404.90 25771405.12 0.0089 0.0012

Neptune 65848-03-23 22:48 G 25771630.25 25771630.45 25771630.68 0.0089 0.0018

Neptune 65848-11-04 12:15 G 25771855.80 25771856.01 25771856.23 0.0089 0.0022

Neptune 65849-06-18 01:27 G 25772081.36 25772081.56 25772081.78 0.0089 0.0027

Uranus 65849-09-27 03:22 G 25772182.55 25772182.64 25772182.74 0.0142 0.0126

Neptune 65850-01-29 14:39 G 25772306.92 25772307.11 25772307.33 0.0089 0.0033

Uranus 65850-05-11 13:55 G 25772408.92 25772409.08 25772409.26 0.0142 0.0088

Neptune 65850-09-12 04:05 G 25772532.47 25772532.67 25772532.87 0.0089 0.0037

Uranus 65850-12-24 00:15 G 25772635.32 25772635.51 25772635.73 0.0142 0.0050

Neptune 65851-04-25 17:31 G 25772758.04 25772758.23 25772758.42 0.0089 0.0042

Uranus 65851-08-07 10:48 G 25772861.73 25772861.95 25772862.17 0.0142 0.0011

Jupiter 65851-08-16 09:51 G 25772870.73 25772870.91 25772871.11 0.0486 0.0176

Neptune 65851-12-07 06:43 G 25772983.60 25772983.78 25772983.97 0.0089 0.0047

Uranus 65852-03-20 20:53 G 25773088.16 25773088.37 25773088.59 0.0141 0.0027

Jupiter 65852-04-08 04:05 G 25773106.54 25773106.67 25773106.81 0.0492 0.0360

Neptune 65852-07-19 19:55 G 25773209.16 25773209.33 25773209.51 0.0089 0.0052

Uranus 65852-11-02 07:12 G 25773314.60 25773314.80 25773314.99 0.0141 0.0065

Neptune 65853-03-02 09:07 G 25773434.72 25773434.88 25773435.05 0.0089 0.0057

Uranus 65853-06-16 16:34 G 25773541.06 25773541.19 25773541.36 0.0141 0.0103

Neptune 65853-10-13 22:19 G 25773660.28 25773660.43 25773660.59 0.0089 0.0062

Uranus 65854-01-29 02:24 G 25773767.58 25773767.60 25773767.64 0.0141 0.0139

Neptune 65854-05-27 11:31 G 25773885.85 25773885.98 25773886.14 0.0089 0.0068

Neptune 65855-01-08 00:43 G 25774111.42 25774111.53 25774111.67 0.0089 0.0072

Neptune 65855-08-21 13:55 G 25774336.99 25774337.08 25774337.21 0.0089 0.0077

Neptune 65856-04-03 03:07 G 25774562.57 25774562.63 25774562.74 0.0089 0.0082

Neptune 65856-11-14 17:03 G 25774788.16 25774788.21 25774788.26 0.0089 0.0086

Jupiter 65857-06-21 10:34 G 25775006.74 25775006.94 25775007.14 0.0541 0.0076

Saturn 65859-01-25 18:00 G 25775590.05 25775590.25 25775590.45 0.0277 0.0090

Saturn 65859-09-12 02:10 G 25775819.41 25775819.59 25775819.79 0.0277 0.0122

Jupiter 65863-04-21 15:51 G 25777137.00 25777137.16 25777137.31 0.0485 0.0319

Jupiter 65863-12-13 08:39 G 25777372.68 25777372.86 25777373.04 0.0490 0.0211

Moon 65866-12-30 12:15 G 25778485.88 25778486.01 25778486.15 0.2653 0.1299

Earth 65866-12-30 15:07 G 25778486.02 25778486.13 25778486.24 0.2647 0.1854 *

Jupiter 65869-02-23 21:51 G 25779272.24 25779272.41 25779272.58 0.0543 0.0283

Jupiter 65869-10-20 08:39 G 25779510.75 25779510.86 25779510.96 0.0536 0.0456

Saturn 65874-02-20 12:58 G 25781094.84 25781095.04 25781095.24 0.0282 0.0080

Saturn 65874-10-08 04:05 G 25781324.49 25781324.67 25781324.85 0.0282 0.0147

Jupiter 65874-12-25 21:07 G 25781403.32 25781403.38 25781403.44 0.0485 0.0461

Earth 65874-12-28 07:41 G 25781405.68 25781405.82 25781405.96 0.2646 0.1268

Moon 65874-12-28 08:53 G 25781405.74 25781405.87 25781406.00 0.2652 0.1232 *

Jupiter 65875-08-18 13:12 G 25781638.84 25781639.05 25781639.25 0.0489 0.0061

Jupiter 65880-10-29 08:24 G 25783537.76 25783537.85 25783537.94 0.0543 0.0488

Jupiter 65881-06-24 20:24 G 25783776.18 25783776.35 25783776.53 0.0538 0.0258

Mars 65884-04-27 03:51 G 25784813.50 25784813.66 25784813.83 0.1783 0.0557

Jupiter 65887-04-23 18:58 G 25785905.09 25785905.29 25785905.49 0.0487 0.0086

Jupiter 65887-12-15 14:24 G 25786141.02 25786141.10 25786141.18 0.0493 0.0451

Saturn 65887-12-21 11:03 G 25786146.96 25786146.96 25786146.97 0.0278 0.0277

Saturn 65888-08-06 20:10 G 25786376.14 25786376.34 25786376.55 0.0277 0.0064

Saturn 65889-03-24 04:34 G 25786605.52 25786605.69 25786605.87 0.0276 0.0148

Uranus 65893-02-08 09:51 G 25788022.83 25788022.91 25788023.01 0.0136 0.0123

Jupiter 65893-02-27 05:03 G 25788041.50 25788041.71 25788041.91 0.0540 0.0048

Uranus 65893-09-22 16:34 G 25788249.04 25788249.19 25788249.37 0.0136 0.0090

Uranus 65894-05-06 23:46 G 25788475.30 25788475.49 25788475.69 0.0136 0.0056

Uranus 65894-12-19 06:58 G 25788701.57 25788701.79 25788702.00 0.0136 0.0023

Uranus 65895-08-02 13:55 G 25788927.87 25788928.08 25788928.30 0.0137 0.0012

Uranus 65896-03-15 21:07 G 25789154.18 25789154.38 25789154.59 0.0137 0.0046

Uranus 65896-10-28 04:34 G 25789380.52 25789380.69 25789380.87 0.0137 0.0080

Uranus 65897-06-11 12:00 G 25789606.89 25789607.00 25789607.12 0.0137 0.0114

Jupiter 65898-12-28 00:00 G 25790171.33 25790171.50 25790171.68 0.0486 0.0231

Jupiter 65899-08-20 18:00 G 25790407.10 25790407.25 25790407.42 0.0491 0.0302

Saturn 65903-01-17 07:12 G 25791651.75 25791651.80 25791651.88 0.0282 0.0267

Saturn 65903-09-03 22:19 G 25791881.22 25791881.43 25791881.64 0.0282 0.0041

Saturn 65904-04-20 13:41 G 25792110.92 25792111.07 25792111.24 0.0283 0.0188

Jupiter 65904-11-02 14:24 G 25792306.91 25792307.10 25792307.30 0.0541 0.0162

Jupiter 65910-09-03 04:34 G 25794437.57 25794437.69 25794437.82 0.0485 0.0376

Jupiter 65911-04-26 21:07 G 25794673.19 25794673.38 25794673.57 0.0489 0.0149

Mars 65911-09-13 19:27 G 25794813.14 25794813.31 25794813.48 0.1743 0.0412

Jupiter 65916-07-07 23:46 G 25796572.34 25796572.49 25796572.64 0.0543 0.0373

Jupiter 65917-03-03 11:31 G 25796810.83 25796810.98 25796811.13 0.0537 0.0369

Saturn 65917-07-03 21:22 G 25796933.29 25796933.39 25796933.50 0.0278 0.0238

Neptune 65918-01-03 03:51 G 25797116.65 25797116.66 25797116.71 0.0088 0.0087

Saturn 65918-02-18 06:15 G 25797162.55 25797162.76 25797162.97 0.0277 0.0025

Neptune 65918-08-16 16:48 G 25797342.14 25797342.20 25797342.29 0.0088 0.0082

Saturn 65918-10-05 14:24 G 25797391.95 25797392.10 25797392.26 0.0277 0.0187

Neptune 65919-03-30 05:17 G 25797567.64 25797567.72 25797567.84 0.0088 0.0078

Neptune 65919-11-10 18:15 G 25797793.15 25797793.26 25797793.39 0.0088 0.0073

Neptune 65920-06-23 07:12 G 25798018.67 25798018.80 25798018.94 0.0088 0.0068

Neptune 65921-02-03 19:27 G 25798244.18 25798244.31 25798244.48 0.0088 0.0064

Neptune 65921-09-17 08:24 G 25798469.71 25798469.85 25798470.03 0.0088 0.0059

Neptune 65922-04-30 21:22 G 25798695.23 25798695.39 25798695.57 0.0088 0.0054

Neptune 65922-12-12 10:05 G 25798920.75 25798920.92 25798921.11 0.0088 0.0049

Jupiter 65922-12-31 02:10 G 25798939.39 25798939.59 25798939.80 0.0488 0.0003

Neptune 65923-07-25 23:03 G 25799146.27 25799146.46 25799146.65 0.0088 0.0044

Neptune 65924-03-07 11:17 G 25799371.79 25799371.97 25799372.19 0.0088 0.0040

Neptune 65924-10-19 00:15 G 25799597.32 25799597.51 25799597.73 0.0088 0.0035

Neptune 65925-06-01 12:58 G 25799822.85 25799823.04 25799823.26 0.0088 0.0030

Neptune 65926-01-13 01:41 G 25800048.37 25800048.57 25800048.79 0.0088 0.0025

Neptune 65926-08-26 14:24 G 25800273.89 25800274.10 25800274.32 0.0088 0.0020

Neptune 65927-04-09 03:07 G 25800499.42 25800499.63 25800499.86 0.0088 0.0015

Neptune 65927-11-20 15:51 G 25800724.95 25800725.16 25800725.39 0.0088 0.0010

Neptune 65928-07-03 04:34 G 25800950.47 25800950.69 25800950.91 0.0088 0.0005

Jupiter 65928-11-06 00:00 G 25801076.31 25801076.50 25801076.69 0.0539 0.0170

Neptune 65929-02-13 17:17 G 25801176.00 25801176.22 25801176.44 0.0088 0.0001

Neptune 65929-09-27 06:00 G 25801401.54 25801401.75 25801401.98 0.0088 0.0005

Neptune 65930-05-10 18:43 G 25801627.07 25801627.28 25801627.50 0.0088 0.0010

Neptune 65930-12-22 07:12 G 25801852.59 25801852.80 25801853.03 0.0088 0.0015

Neptune 65931-08-04 19:55 G 25802078.12 25802078.33 25802078.55 0.0088 0.0020

Neptune 65932-03-17 08:39 G 25802303.66 25802303.86 25802304.08 0.0088 0.0025

Saturn 65932-07-29 11:03 G 25802437.85 25802437.96 25802438.08 0.0281 0.0237

Neptune 65932-10-28 21:51 G 25802529.20 25802529.41 25802529.61 0.0088 0.0030

Saturn 65933-03-16 01:41 G 25802667.36 25802667.57 25802667.79 0.0282 0.0014

Neptune 65933-06-11 10:19 G 25802754.74 25802754.93 25802755.14 0.0088 0.0035

Saturn 65933-10-31 16:48 G 25802897.08 25802897.20 25802897.35 0.0282 0.0216

Uranus 65934-01-09 21:07 G 25802967.25 25802967.38 25802967.54 0.0142 0.0105

Neptune 65934-01-22 23:03 G 25802980.27 25802980.46 25802980.67 0.0088 0.0040

Uranus 65934-08-24 07:41 G 25803193.64 25803193.82 25803194.03 0.0142 0.0067

Jupiter 65934-09-05 07:12 G 25803205.60 25803205.80 25803205.99 0.0487 0.0146

Neptune 65934-09-05 11:46 G 25803205.81 25803205.99 25803206.19 0.0088 0.0044 *

Uranus 65935-04-07 18:29 G 25803420.05 25803420.27 25803420.48 0.0142 0.0028

Neptune 65935-04-19 00:29 G 25803431.35 25803431.52 25803431.71 0.0088 0.0049

Jupiter 65935-04-29 01:41 G 25803441.45 25803441.57 25803441.69 0.0492 0.0387

Uranus 65935-11-20 04:34 G 25803646.48 25803646.69 25803646.91 0.0142 0.0011

Neptune 65935-11-30 13:12 G 25803656.89 25803657.05 25803657.24 0.0088 0.0054

Uranus 65936-07-03 14:39 G 25803872.91 25803873.11 25803873.32 0.0141 0.0048

Neptune 65936-07-13 01:55 G 25803882.44 25803882.58 25803882.76 0.0088 0.0059

Uranus 65937-02-15 00:15 G 25804099.36 25804099.51 25804099.70 0.0141 0.0087

Neptune 65937-02-23 15:07 G 25804107.98 25804108.13 25804108.28 0.0088 0.0064

Uranus 65937-09-29 10:19 G 25804325.84 25804325.93 25804326.05 0.0141 0.0123

Neptune 65937-10-07 03:36 G 25804333.53 25804333.65 25804333.80 0.0088 0.0069

Neptune 65938-05-20 16:19 G 25804559.08 25804559.18 25804559.32 0.0088 0.0074

Neptune 65939-01-01 04:48 G 25804784.63 25804784.70 25804784.83 0.0088 0.0079

Neptune 65939-08-14 17:46 G 25805010.18 25805010.24 25805010.33 0.0088 0.0083

Neptune 65940-03-27 06:15 G 25805235.76 25805235.76 25805235.82 0.0088 0.0088

Jupiter 65940-07-11 11:17 G 25805341.77 25805341.97 25805342.17 0.0541 0.0035

Jupiter 65946-05-11 13:12 G 25807471.89 25807472.05 25807472.22 0.0486 0.0289

Jupiter 65947-01-02 06:29 G 25807707.60 25807707.77 25807707.95 0.0490 0.0241

Saturn 65947-01-13 23:03 G 25807719.32 25807719.46 25807719.59 0.0277 0.0213

Saturn 65947-08-31 07:55 G 25807948.62 25807948.83 25807949.04 0.0277 0.0003

Saturn 65948-04-16 15:51 G 25808178.04 25808178.16 25808178.31 0.0276 0.0212

Mars 65950-02-23 11:31 G 25808855.84 25808855.98 25808856.12 0.1786 0.1064

Jupiter 65952-03-15 19:55 G 25809607.15 25809607.33 25809607.51 0.0542 0.0246

Jupiter 65952-11-09 05:31 G 25809845.65 25809845.73 25809845.82 0.0535 0.0485

Jupiter 65958-01-14 18:43 G 25811738.19 25811738.28 25811738.38 0.0485 0.0430

Jupiter 65958-09-07 11:17 G 25811973.77 25811973.97 25811974.17 0.0489 0.0091

Pluto 65962-01-01 18:29 G 25813186.14 25813186.27 25813186.40 0.0063 0.0051

Saturn 65962-02-08 18:29 G 25813224.13 25813224.27 25813224.42 0.0282 0.0203

Pluto 65962-08-14 22:19 G 25813411.22 25813411.43 25813411.65 0.0064 0.0017

Saturn 65962-09-26 09:36 G 25813453.69 25813453.90 25813454.11 0.0282 0.0024

Pluto 65963-03-28 02:24 G 25813636.40 25813636.60 25813636.82 0.0064 0.0018

Saturn 65963-05-14 01:12 G 25813683.46 25813683.55 25813683.65 0.0283 0.0252

Pluto 65963-11-08 06:29 G 25813861.65 25813861.77 25813861.91 0.0064 0.0052

Jupiter 65963-11-19 04:48 G 25813872.59 25813872.70 25813872.81 0.0543 0.0454

Jupiter 65964-07-14 16:19 G 25814111.01 25814111.18 25814111.35 0.0538 0.0286

Jupiter 65970-05-13 15:22 G 25816239.94 25816240.14 25816240.34 0.0487 0.0059

Jupiter 65971-01-04 10:05 G 25816475.88 25816475.92 25816475.98 0.0493 0.0475

Jupiter 65976-03-19 02:39 G 25818376.41 25818376.61 25818376.82 0.0540 0.0081

Saturn 65976-07-26 09:22 G 25818505.72 25818505.89 25818506.05 0.0278 0.0173

Saturn 65977-03-12 18:00 G 25818735.04 25818735.25 25818735.46 0.0277 0.0040

Uranus 65977-05-24 01:27 G 25818807.44 25818807.56 25818807.71 0.0136 0.0105

Mars 65977-07-11 03:36 G 25818855.48 25818855.65 25818855.83 0.1740 0.0032

Saturn 65977-10-28 01:55 G 25818964.50 25818964.58 25818964.68 0.0276 0.0251

Uranus 65978-01-05 08:24 G 25819033.67 25819033.85 25819034.04 0.0136 0.0071

Uranus 65978-08-19 15:22 G 25819259.93 25819260.14 25819260.35 0.0136 0.0038

Uranus 65979-04-02 22:34 G 25819486.22 25819486.44 25819486.66 0.0136 0.0004

Uranus 65979-11-15 05:31 G 25819712.52 25819712.73 25819712.95 0.0137 0.0031

Uranus 65980-06-28 12:29 G 25819938.84 25819939.02 25819939.23 0.0137 0.0065

Uranus 65981-02-09 19:55 G 25820165.19 25820165.33 25820165.49 0.0137 0.0099

Uranus 65981-09-24 03:22 G 25820391.61 25820391.64 25820391.70 0.0137 0.0134

Jupiter 65982-01-16 20:53 G 25820506.19 25820506.37 25820506.56 0.0486 0.0203

Jupiter 65982-09-09 14:24 G 25820741.95 25820742.10 25820742.25 0.0491 0.0326

Jupiter 65987-11-22 14:24 G 25822641.90 25822642.10 25822642.30 0.0542 0.0125

Saturn 65991-08-21 22:19 G 25824010.28 25824010.43 25824010.61 0.0281 0.0174

Saturn 65992-04-07 13:27 G 25824239.85 25824240.06 25824240.27 0.0282 0.0053

Saturn 65992-11-23 04:48 G 25824469.68 25824469.70 25824469.73 0.0282 0.0280

Jupiter 65993-09-22 02:10 G 25824772.46 25824772.59 25824772.74 0.0485 0.0346

Jupiter 65994-05-15 18:43 G 25825008.10 25825008.28 25825008.47 0.0489 0.0178

Neptune 65999-07-08 16:05 G 25826888.16 25826888.17 25826888.23 0.0090 0.0089

Jupiter 65999-07-28 01:27 G 25826907.40 25826907.56 25826907.72 0.0543 0.0330

Neptune 66000-02-19 05:46 G 25827113.68 25827113.74 25827113.83 0.0090 0.0084

Jupiter 66000-03-22 12:43 G 25827145.90 25827146.03 25827146.17 0.0537 0.0408

Neptune 66000-10-01 19:12 G 25827339.21 25827339.30 25827339.41 0.0090 0.0079

67TH MILLENNIUM CE

This is a list of transits of Venus in the 67th millennium CE.

FROM MAX- C START MAX END SUNRAD DEPTH S

TRANSIT

TIME

Neptune 66001-05-15 08:39 G 25827564.74 25827564.86 25827564.99 0.0090 0.0074

Neptune 66001-12-26 21:51 G 25827790.28 25827790.41 25827790.56 0.0090 0.0069

Neptune 66002-08-09 11:17 G 25828015.82 25828015.97 25828016.13 0.0090 0.0064

Neptune 66003-03-23 00:43 G 25828241.37 25828241.53 25828241.70 0.0090 0.0059

Neptune 66003-11-03 13:55 G 25828466.91 25828467.08 25828467.26 0.0090 0.0054

Neptune 66004-06-16 03:22 G 25828692.46 25828692.64 25828692.82 0.0090 0.0049

Earth 66004-06-28 20:39 G 25828705.24 25828705.36 25828705.47 0.2686 0.1842

Moon 66004-06-29 01:12 G 25828705.44 25828705.55 25828705.66 0.2681 0.2028 *

Neptune 66005-01-27 16:34 G 25828918.00 25828918.19 25828918.38 0.0089 0.0044

Neptune 66005-09-10 05:46 G 25829143.55 25829143.74 25829143.94 0.0089 0.0039

Jupiter 66006-01-19 00:15 G 25829274.31 25829274.51 25829274.72 0.0488 0.0034

Saturn 66006-02-05 09:36 G 25829291.74 25829291.90 25829292.09 0.0277 0.0151

Neptune 66006-04-23 19:12 G 25829369.10 25829369.30 25829369.51 0.0089 0.0034

Saturn 66006-09-22 18:43 G 25829521.07 25829521.28 25829521.48 0.0277 0.0063

Neptune 66006-12-05 08:24 G 25829594.65 25829594.85 25829595.07 0.0089 0.0029

Saturn 66007-05-10 02:39 G 25829750.59 25829750.61 25829750.65 0.0276 0.0272

Neptune 66007-07-18 21:36 G 25829820.20 25829820.40 25829820.62 0.0089 0.0024

Neptune 66008-02-29 11:03 G 25830045.75 25830045.96 25830046.18 0.0089 0.0018

Neptune 66008-10-12 00:29 G 25830271.31 25830271.52 25830271.74 0.0089 0.0013

Neptune 66009-05-25 13:55 G 25830496.86 25830497.08 25830497.30 0.0089 0.0008

Neptune 66010-01-06 03:07 G 25830722.42 25830722.63 25830722.86 0.0089 0.0003

Neptune 66010-08-19 16:34 G 25830947.97 25830948.19 25830948.41 0.0089 0.0003

Jupiter 66011-04-01 10:19 G 25831172.90 25831172.93 25831172.97 0.0543 0.0535

Neptune 66011-04-02 06:00 G 25831173.53 25831173.75 25831173.97 0.0089 0.0008

Neptune 66011-11-13 19:12 G 25831399.09 25831399.30 25831399.53 0.0089 0.0014

Jupiter 66011-11-25 22:34 G 25831411.26 25831411.44 25831411.63 0.0539 0.0206

Neptune 66012-06-26 08:39 G 25831624.65 25831624.86 25831625.08 0.0089 0.0018

Earth 66012-06-26 10:05 G 25831624.80 25831624.92 25831625.04 0.2687 0.1745 *

Moon 66012-06-26 10:34 G 25831624.82 25831624.94 25831625.06 0.2680 0.1905 *

Neptune 66013-02-06 22:05 G 25831850.21 25831850.42 25831850.63 0.0089 0.0023

Neptune 66013-09-20 11:17 G 25832075.77 25832075.97 25832076.18 0.0089 0.0029

Neptune 66014-05-04 00:29 G 25832301.33 25832301.52 25832301.74 0.0089 0.0034

Neptune 66014-12-15 13:41 G 25832526.89 25832527.07 25832527.29 0.0089 0.0040

Neptune 66015-07-29 03:07 G 25832752.45 25832752.63 25832752.83 0.0089 0.0044

Mars 66015-12-21 18:58 G 25832898.21 25832898.29 25832898.36 0.1790 0.1581

Neptune 66016-03-10 16:19 G 25832978.01 25832978.18 25832978.38 0.0089 0.0049

Neptune 66016-10-22 05:31 G 25833203.57 25833203.73 25833203.92 0.0089 0.0055

Neptune 66017-06-04 18:58 G 25833429.14 25833429.29 25833429.47 0.0089 0.0059

Uranus 66017-09-09 05:03 G 25833525.61 25833525.71 25833525.84 0.0142 0.0122

Jupiter 66017-09-24 05:31 G 25833540.54 25833540.73 25833540.93 0.0487 0.0115

Neptune 66018-01-16 08:10 G 25833654.70 25833654.84 25833655.01 0.0089 0.0064

Uranus 66018-04-23 15:51 G 25833751.99 25833752.16 25833752.34 0.0142 0.0083

Jupiter 66018-05-18 00:29 G 25833776.42 25833776.52 25833776.63 0.0492 0.0417

Neptune 66018-08-29 21:22 G 25833880.27 25833880.39 25833880.54 0.0089 0.0069

Uranus 66018-12-06 02:24 G 25833978.40 25833978.60 25833978.81 0.0142 0.0044

Neptune 66019-04-12 10:34 G 25834105.84 25834105.94 25834106.08 0.0089 0.0074

Uranus 66019-07-20 12:43 G 25834204.81 25834205.03 25834205.25 0.0142 0.0006

Neptune 66019-11-23 23:46 G 25834331.41 25834331.49 25834331.62 0.0089 0.0079

Uranus 66020-03-02 22:48 G 25834431.24 25834431.45 25834431.67 0.0142 0.0032

Neptune 66020-07-06 13:27 G 25834556.99 25834557.06 25834557.14 0.0089 0.0083

Uranus 66020-10-15 08:53 G 25834657.69 25834657.87 25834658.07 0.0141 0.0070

Neptune 66021-02-17 02:24 G 25834782.59 25834782.60 25834782.64 0.0089 0.0088

Saturn 66021-03-03 04:34 G 25834796.52 25834796.69 25834796.88 0.0282 0.0141

Uranus 66021-05-29 18:43 G 25834884.15 25834884.28 25834884.43 0.0141 0.0108

Saturn 66021-10-18 19:55 G 25835026.13 25835026.33 25835026.53 0.0282 0.0086

Jupiter 66023-07-31 08:24 G 25835676.65 25835676.85 25835677.05 0.0540 0.0004

Jupiter 66029-05-30 10:34 G 25837806.77 25837806.94 25837807.11 0.0486 0.0261

Jupiter 66030-01-21 03:36 G 25838042.48 25838042.65 25838042.82 0.0490 0.0265

Jupiter 66035-04-04 17:17 G 25839942.04 25839942.22 25839942.41 0.0543 0.0214

Saturn 66035-08-18 19:27 G 25840078.12 25840078.31 25840078.51 0.0278 0.0111

Jupiter 66035-11-29 04:05 G 25840180.62 25840180.67 25840180.72 0.0536 0.0516

Saturn 66036-04-04 04:19 G 25840307.48 25840307.68 25840307.88 0.0277 0.0102

Jupiter 66041-02-02 16:34 G 25842073.08 25842073.19 25842073.31 0.0485 0.0400

Jupiter 66041-09-26 08:39 G 25842308.66 25842308.86 25842309.05 0.0488 0.0119

Mars 66043-05-08 12:00 G 25842897.83 25842898.00 25842898.17 0.1736 0.0459

Jupiter 66046-12-08 04:19 G 25844207.55 25844207.68 25844207.81 0.0544 0.0418

Jupiter 66047-08-03 16:48 G 25844446.04 25844446.20 25844446.37 0.0538 0.0323

Mars 66047-12-21 02:39 G 25844585.56 25844585.61 25844585.67 0.1779 0.1675

Saturn 66050-09-13 09:07 G 25845582.68 25845582.88 25845583.07 0.0281 0.0110

Saturn 66051-05-01 00:00 G 25845812.30 25845812.50 25845812.69 0.0282 0.0116

Pluto 66052-02-18 18:15 G 25846106.06 25846106.26 25846106.48 0.0080 0.0024

Pluto 66052-10-01 04:48 G 25846331.53 25846331.70 25846331.90 0.0080 0.0045

Jupiter 66053-06-01 13:27 G 25846574.86 25846575.06 25846575.27 0.0487 0.0029

Jupiter 66059-04-08 05:03 G 25848711.51 25848711.71 25848711.91 0.0540 0.0124

Uranus 66061-01-21 11:31 G 25849365.88 25849365.98 25849366.09 0.0136 0.0118

Uranus 66061-09-04 18:00 G 25849592.09 25849592.25 25849592.43 0.0136 0.0085

Uranus 66062-04-19 00:58 G 25849818.35 25849818.54 25849818.75 0.0136 0.0052

Uranus 66062-12-01 07:55 G 25850044.62 25850044.83 25850045.05 0.0136 0.0018

Uranus 66063-07-15 14:53 G 25850270.91 25850271.12 25850271.34 0.0137 0.0017

Uranus 66064-02-26 21:51 G 25850497.22 25850497.41 25850497.63 0.0137 0.0051

Uranus 66064-10-10 05:31 G 25850723.56 25850723.73 25850723.90 0.0137 0.0084

Jupiter 66065-02-04 19:27 G 25850841.12 25850841.31 25850841.50 0.0486 0.0172

Saturn 66065-02-27 19:41 G 25850864.13 25850864.32 25850864.53 0.0277 0.0089

Uranus 66065-05-24 12:29 G 25850949.93 25850950.02 25850950.15 0.0137 0.0120

Jupiter 66065-09-28 13:27 G 25851076.92 25851077.06 25851077.20 0.0491 0.0356

Saturn 66065-10-15 04:19 G 25851093.50 25851093.68 25851093.88 0.0277 0.0124

Jupiter 66070-12-11 14:53 G 25852976.92 25852977.12 25852977.32 0.0541 0.0084

Jupiter 66076-10-11 00:58 G 25855107.39 25855107.54 25855107.70 0.0485 0.0315

Jupiter 66077-06-03 18:00 G 25855343.07 25855343.25 25855343.44 0.0490 0.0210

Saturn 66080-03-25 13:41 G 25856368.87 25856369.07 25856369.27 0.0282 0.0081

Saturn 66080-11-10 04:48 G 25856598.52 25856598.70 25856598.88 0.0282 0.0146

Neptune 66082-04-06 13:55 G 25857111.05 25857111.08 25857111.14 0.0088 0.0086

Jupiter 66082-08-16 00:00 G 25857242.33 25857242.50 25857242.67 0.0542 0.0292

Neptune 66082-11-18 02:53 G 25857336.54 25857336.62 25857336.71 0.0088 0.0081

Jupiter 66083-04-11 10:48 G 25857480.84 25857480.95 25857481.07 0.0536 0.0439

Neptune 66083-07-01 15:07 G 25857562.05 25857562.13 25857562.26 0.0088 0.0077

Neptune 66084-02-12 04:05 G 25857787.56 25857787.67 25857787.81 0.0088 0.0072

Neptune 66084-09-24 17:03 G 25858013.08 25858013.21 25858013.36 0.0088 0.0067

Neptune 66085-05-08 05:31 G 25858238.59 25858238.73 25858238.90 0.0088 0.0063

Neptune 66085-12-19 18:15 G 25858464.11 25858464.26 25858464.44 0.0088 0.0058

Neptune 66086-08-02 06:58 G 25858689.63 25858689.79 25858689.98 0.0088 0.0053

Neptune 66087-03-15 19:55 G 25858915.15 25858915.33 25858915.52 0.0088 0.0048

Neptune 66087-10-27 08:53 G 25859140.68 25859140.87 25859141.06 0.0088 0.0043

Neptune 66088-06-08 21:07 G 25859366.20 25859366.38 25859366.60 0.0088 0.0039

Jupiter 66088-06-16 06:43 G 25859373.72 25859373.78 25859373.85 0.0484 0.0455

Neptune 66089-01-20 10:05 G 25859591.73 25859591.92 25859592.14 0.0088 0.0034

Jupiter 66089-02-06 22:19 G 25859609.23 25859609.43 25859609.63 0.0488 0.0059

Neptune 66089-09-02 22:48 G 25859817.26 25859817.45 25859817.67 0.0088 0.0029

Neptune 66090-04-16 11:46 G 25860042.78 25860042.99 25860043.21 0.0088 0.0024

Neptune 66090-11-28 00:29 G 25860268.31 25860268.52 25860268.74 0.0088 0.0019

Neptune 66091-07-11 13:12 G 25860493.84 25860494.05 25860494.27 0.0088 0.0014

Neptune 66092-02-22 01:55 G 25860719.36 25860719.58 25860719.80 0.0088 0.0009

Neptune 66092-10-04 14:53 G 25860944.90 25860945.12 25860945.34 0.0088 0.0004

Neptune 66093-05-18 03:36 G 25861170.43 25861170.65 25861170.87 0.0088 0.0001

Neptune 66093-12-29 16:05 G 25861395.96 25861396.17 25861396.39 0.0088 0.0006

Saturn 66094-01-23 19:27 G 25861421.24 25861421.31 25861421.37 0.0278 0.0264

Jupiter 66094-04-20 07:27 G 25861507.74 25861507.81 25861507.89 0.0544 0.0504

Neptune 66094-08-12 04:48 G 25861621.48 25861621.70 25861621.92 0.0088 0.0011

Saturn 66094-09-10 04:34 G 25861650.49 25861650.69 25861650.91 0.0278 0.0051

Jupiter 66094-12-14 20:53 G 25861746.19 25861746.37 25861746.55 0.0539 0.0237

Neptune 66095-03-25 17:31 G 25861847.01 25861847.23 25861847.45 0.0088 0.0016

Saturn 66095-04-27 13:12 G 25861879.89 25861880.05 25861880.23 0.0277 0.0162

Neptune 66095-11-06 06:15 G 25862072.55 25862072.76 25862072.98 0.0088 0.0021

Neptune 66096-06-18 18:58 G 25862298.08 25862298.29 25862298.50 0.0088 0.0026

Neptune 66097-01-30 07:27 G 25862523.62 25862523.81 25862524.03 0.0088 0.0031

Neptune 66097-09-12 20:10 G 25862749.15 25862749.34 25862749.55 0.0088 0.0036

Neptune 66098-04-26 08:53 G 25862974.69 25862974.87 25862975.08 0.0088 0.0041

Neptune 66098-12-07 21:36 G 25863200.23 25863200.40 25863200.60 0.0088 0.0046

Neptune 66099-07-21 10:19 G 25863425.77 25863425.93 25863426.13 0.0088 0.0051

Neptune 66100-03-03 23:17 G 25863651.31 25863651.47 25863651.65 0.0088 0.0056

Jupiter 66100-10-14 04:05 G 25863875.47 25863875.67 25863875.87 0.0486 0.0085

Neptune 66100-10-15 12:15 G 25863876.86 25863877.01 25863877.18 0.0088 0.0060

Uranus 66101-05-10 12:58 G 25864084.01 25864084.04 25864084.10 0.0142 0.0139

Neptune 66101-05-29 00:43 G 25864102.40 25864102.53 25864102.70 0.0088 0.0066

Jupiter 66101-06-06 22:05 G 25864111.34 25864111.42 25864111.52 0.0492 0.0443

Uranus 66101-12-23 00:00 G 25864310.34 25864310.50 25864310.65 0.0142 0.0100

Neptune 66102-01-09 13:27 G 25864327.95 25864328.06 25864328.21 0.0088 0.0070

Uranus 66102-08-06 10:19 G 25864536.74 25864536.93 25864537.13 0.0142 0.0061

Neptune 66102-08-23 02:39 G 25864553.50 25864553.61 25864553.73 0.0088 0.0075

Uranus 66103-03-20 20:53 G 25864763.16 25864763.37 25864763.59 0.0142 0.0022

Neptune 66103-04-05 15:07 G 25864779.05 25864779.13 25864779.24 0.0088 0.0080

Uranus 66103-11-02 07:12 G 25864989.59 25864989.80 25864990.02 0.0142 0.0016

Neptune 66103-11-17 03:51 G 25865004.62 25865004.66 25865004.75 0.0088 0.0085

Uranus 66104-06-15 17:17 G 25865216.02 25865216.22 25865216.42 0.0142 0.0054

Uranus 66105-01-28 03:07 G 25865442.47 25865442.63 25865442.80 0.0141 0.0092

Uranus 66105-09-11 12:43 G 25865668.96 25865669.03 25865669.13 0.0141 0.0129

Jupiter 66106-08-20 08:39 G 25866011.66 25866011.86 25866012.06 0.0541 0.0035

Saturn 66109-02-19 04:19 G 25866925.63 25866925.68 25866925.74 0.0280 0.0270

Mars 66109-03-05 20:39 G 25866940.21 25866940.36 25866940.51 0.1733 0.0876

Saturn 66109-10-06 18:29 G 25867155.07 25867155.27 25867155.49 0.0281 0.0048

Earth 66110-01-01 17:46 G 25867242.14 25867242.24 25867242.34 0.2646 0.2034

Saturn 66110-05-24 09:22 G 25867384.73 25867384.89 25867385.06 0.0282 0.0178

Jupiter 66112-06-19 09:22 G 25868141.71 25868141.89 25868142.07 0.0485 0.0229

Jupiter 66113-02-10 02:10 G 25868377.44 25868377.59 25868377.76 0.0490 0.0296

Mars 66113-10-18 10:19 G 25868627.80 25868627.93 25868628.06 0.1783 0.1180

Earth 66117-12-30 10:19 G 25870161.78 25870161.93 25870162.07 0.2645 0.1062

Moon 66117-12-30 11:17 G 25870161.82 25870161.97 25870162.13 0.2639 0.1145 *

Jupiter 66118-04-24 20:24 G 25870277.16 25870277.35 25870277.55 0.0542 0.0168

Saturn 66123-08-06 18:43 G 25872207.19 25872207.28 25872207.39 0.0278 0.0243

Jupiter 66124-02-23 15:22 G 25872408.01 25872408.14 25872408.28 0.0485 0.0368

Saturn 66124-03-23 04:19 G 25872436.47 25872436.68 25872436.89 0.0277 0.0030

Jupiter 66124-10-16 07:41 G 25872643.63 25872643.82 25872644.02 0.0489 0.0151

Saturn 66124-11-07 12:58 G 25872665.89 25872666.04 25872666.20 0.0277 0.0182

Jupiter 66129-12-28 06:15 G 25874542.61 25874542.76 25874542.91 0.0543 0.0373

Jupiter 66130-08-23 18:00 G 25874781.10 25874781.25 25874781.40 0.0537 0.0361

Jupiter 66136-06-21 12:58 G 25876909.84 25876910.04 25876910.25 0.0488 0.0011

Saturn 66138-09-01 07:12 G 25877711.71 25877711.80 25877711.91 0.0281 0.0245

Saturn 66139-04-18 21:51 G 25877941.20 25877941.41 25877941.62 0.0282 0.0022

Saturn 66139-12-04 12:58 G 25878170.89 25878171.04 25878171.18 0.0282 0.0205

Jupiter 66142-04-28 04:19 G 25879046.49 25879046.68 25879046.88 0.0539 0.0160

Uranus 66144-09-21 20:39 G 25879924.33 25879924.36 25879924.42 0.0136 0.0133

Uranus 66145-05-06 03:22 G 25880150.51 25880150.64 25880150.80 0.0136 0.0100

Uranus 66145-12-18 10:19 G 25880376.74 25880376.93 25880377.12 0.0136 0.0066

Uranus 66146-08-01 16:48 G 25880603.00 25880603.20 25880603.42 0.0136 0.0034

Uranus 66147-03-16 00:00 G 25880829.29 25880829.50 25880829.72 0.0136 0.0003

Uranus 66147-10-28 06:58 G 25881055.59 25881055.79 25881056.01 0.0137 0.0036

Jupiter 66148-02-25 18:15 G 25881176.07 25881176.26 25881176.46 0.0486 0.0142

Uranus 66148-06-10 13:55 G 25881281.91 25881282.08 25881282.28 0.0137 0.0070

Jupiter 66148-10-18 12:00 G 25881411.88 25881412.00 25881412.13 0.0491 0.0384

Uranus 66149-01-22 21:07 G 25881508.26 25881508.38 25881508.54 0.0137 0.0104

Saturn 66153-02-16 03:22 G 25882993.50 25882993.64 25882993.78 0.0278 0.0206

Saturn 66153-10-03 12:43 G 25883222.82 25883223.03 25883223.24 0.0278 0.0008

Jupiter 66153-12-31 12:43 G 25883311.83 25883312.03 25883312.23 0.0542 0.0052

Saturn 66154-05-20 21:22 G 25883452.27 25883452.39 25883452.52 0.0277 0.0219

Jupiter 66159-11-01 00:43 G 25885442.36 25885442.53 25885442.69 0.0485 0.0282

Jupiter 66160-06-23 17:03 G 25885678.03 25885678.21 25885678.39 0.0489 0.0238

Neptune 66163-10-11 01:41 G 25886882.55 25886882.57 25886882.63 0.0090 0.0088

Neptune 66164-05-23 15:07 G 25887108.06 25887108.13 25887108.22 0.0090 0.0083

Neptune 66165-01-04 04:34 G 25887333.59 25887333.69 25887333.81 0.0090 0.0078

Neptune 66165-08-17 18:15 G 25887559.13 25887559.26 25887559.38 0.0090 0.0073

Jupiter 66165-09-04 23:31 G 25887577.31 25887577.48 25887577.66 0.0543 0.0257

Neptune 66166-03-31 07:12 G 25887784.68 25887784.80 25887784.96 0.0090 0.0069

Jupiter 66166-05-01 11:31 G 25887815.89 25887815.98 25887816.08 0.0537 0.0474

Neptune 66166-11-11 20:24 G 25888010.22 25888010.35 25888010.53 0.0090 0.0064

Neptune 66167-06-25 10:19 G 25888235.76 25888235.93 25888236.10 0.0090 0.0058

Neptune 66168-02-05 23:31 G 25888461.31 25888461.48 25888461.66 0.0090 0.0053

Saturn 66168-03-13 12:43 G 25888497.90 25888498.03 25888498.18 0.0280 0.0210

Neptune 66168-09-18 12:58 G 25888686.86 25888687.04 25888687.23 0.0090 0.0048

Saturn 66168-10-29 03:07 G 25888727.42 25888727.63 25888727.84 0.0281 0.0012

Neptune 66169-05-02 02:10 G 25888912.41 25888912.59 25888912.79 0.0089 0.0043

Saturn 66169-06-15 17:46 G 25888957.14 25888957.24 25888957.37 0.0282 0.0237

Neptune 66169-12-13 15:22 G 25889137.96 25889138.14 25889138.35 0.0089 0.0038

Neptune 66170-07-27 04:48 G 25889363.50 25889363.70 25889363.91 0.0089 0.0033

Neptune 66171-03-09 18:00 G 25889589.06 25889589.25 25889589.47 0.0089 0.0028

Jupiter 66171-07-07 06:00 G 25889708.65 25889708.75 25889708.85 0.0484 0.0421

Neptune 66171-10-21 07:27 G 25889814.61 25889814.81 25889815.03 0.0089 0.0022

Jupiter 66172-02-27 21:22 G 25889944.19 25889944.39 25889944.60 0.0488 0.0092

Neptune 66172-06-02 20:53 G 25890040.16 25890040.37 25890040.59 0.0089 0.0017

Neptune 66173-01-14 10:05 G 25890265.71 25890265.92 25890266.14 0.0089 0.0012

Neptune 66173-08-27 23:31 G 25890491.26 25890491.48 25890491.70 0.0089 0.0006

Neptune 66174-04-10 12:58 G 25890716.82 25890717.04 25890717.26 0.0089 0.0001

Neptune 66174-11-22 02:10 G 25890942.37 25890942.59 25890942.81 0.0089 0.0004

Mars 66175-01-01 05:31 G 25890982.61 25890982.73 25890982.84 0.1730 0.1286

Neptune 66175-07-05 15:22 G 25891167.93 25891168.14 25891168.37 0.0089 0.0010

Neptune 66176-02-16 04:48 G 25891393.48 25891393.70 25891393.92 0.0089 0.0015

Neptune 66176-09-28 18:15 G 25891619.04 25891619.26 25891619.47 0.0089 0.0020

Jupiter 66177-05-10 11:17 G 25891842.86 25891842.97 25891843.08 0.0544 0.0456

Neptune 66177-05-12 07:27 G 25891844.61 25891844.81 25891845.03 0.0089 0.0025

Neptune 66177-12-23 20:39 G 25892070.17 25892070.36 25892070.58 0.0089 0.0031

Jupiter 66178-01-04 00:29 G 25892081.35 25892081.52 25892081.69 0.0539 0.0281

Neptune 66178-08-06 10:05 G 25892295.73 25892295.92 25892296.13 0.0089 0.0035

Neptune 66179-03-19 23:31 G 25892521.29 25892521.48 25892521.68 0.0089 0.0041

Mars 66179-08-15 17:46 G 25892670.08 25892670.24 25892670.40 0.1787 0.0676

Neptune 66179-10-31 12:58 G 25892746.85 25892747.04 25892747.23 0.0089 0.0046

Neptune 66180-06-13 02:24 G 25892972.42 25892972.60 25892972.78 0.0089 0.0051

Neptune 66181-01-24 15:36 G 25893197.98 25893198.15 25893198.32 0.0089 0.0056

Neptune 66181-09-07 04:48 G 25893423.54 25893423.70 25893423.86 0.0089 0.0061

Neptune 66182-04-20 18:15 G 25893649.11 25893649.26 25893649.41 0.0089 0.0066

Saturn 66182-08-29 02:39 G 25893779.45 25893779.61 25893779.76 0.0278 0.0185

Neptune 66182-12-02 07:27 G 25893874.68 25893874.81 25893874.94 0.0089 0.0070

Saturn 66183-04-15 11:46 G 25894008.79 25894008.99 25894009.21 0.0277 0.0029

Neptune 66183-07-15 20:24 G 25894100.24 25894100.35 25894100.48 0.0089 0.0075

Jupiter 66183-11-03 03:36 G 25894210.44 25894210.65 25894210.85 0.0487 0.0053

Saturn 66183-11-30 20:24 G 25894238.26 25894238.35 25894238.47 0.0277 0.0239

Neptune 66184-02-26 09:22 G 25894325.82 25894325.89 25894326.00 0.0089 0.0081

Jupiter 66184-06-25 22:05 G 25894446.37 25894446.42 25894446.48 0.0492 0.0473

Neptune 66184-10-08 22:34 G 25894551.40 25894551.44 25894551.52 0.0089 0.0085

Uranus 66185-08-22 07:41 G 25894868.71 25894868.82 25894868.96 0.0142 0.0117

Uranus	66186-04-05 18:43 G	25895095.10	25895095.28	25895095.46	0.0142	0.0078
Uranus	66186-11-18 05:03 G	25895321.51	25895321.71	25895321.93	0.0142	0.0039
Uranus	66187-07-02 15:36 G	25895547.93	25895548.15	25895548.37	0.0142	0.0001
Uranus	66188-02-14 01:41 G	25895774.37	25895774.57	25895774.78	0.0142	0.0038
Uranus	66188-09-27 12:00 G	25896000.81	25896001.00	25896001.18	0.0142	0.0076
Uranus	66189-05-11 21:36 G	25896227.28	25896227.40	25896227.54	0.0141	0.0114
Jupiter	66189-09-08 11:03 G	25896346.76	25896346.96	25896347.16	0.0540	0.0079
Jupiter	66195-07-09 09:07 G	25898476.69	25898476.88	25898477.07	0.0486	0.0195
Jupiter	66196-03-01 02:39 G	25898712.46	25898712.61	25898712.76	0.0491	0.0328
Saturn	66197-09-23 14:53 G	25899283.96	25899284.12	25899284.28	0.0281	0.0187
Saturn	66198-05-11 05:17 G	25899513.51	25899513.72	25899513.94	0.0282	0.0037
Saturn	66198-12-26 20:10 G	25899743.28	25899743.34	25899743.43	0.0282	0.0262
Jupiter	66201-05-14 20:53 G	25900612.17	25900612.37	25900612.57	0.0542	0.0128
Mars	66207-01-01 10:05 G	25902669.88	25902669.92	25902669.97	0.1740	0.1663
Jupiter	66207-03-15 15:07 G	25902742.99	25902743.13	25902743.28	0.0485	0.0336
Jupiter	66207-11-06 07:27 G	25902978.62	25902978.81	25902979.00	0.0489	0.0180
Pluto	66210-07-19 23:17 G	25903965.34	25903965.47	25903965.61	0.0063	0.0049
Pluto	66211-03-02 03:22 G	25904190.43	25904190.64	25904190.86	0.0064	0.0015
Pluto	66211-10-13 06:58 G	25904415.60	25904415.79	25904416.02	0.0064	0.0020
Saturn	66212-03-11 09:51 G	25904565.74	25904565.91	25904566.09	0.0278	0.0150
Pluto	66212-05-25 11:17 G	25904640.87	25904640.97	25904641.09	0.0064	0.0054
Saturn	66212-10-26 19:27 G	25904795.11	25904795.31	25904795.52	0.0278	0.0064
Jupiter	66213-01-17 03:51 G	25904877.51	25904877.66	25904877.82	0.0544	0.0341
Saturn	66213-06-13 04:19 G	25905024.65	25905024.68	25905024.70	0.0277	0.0274
Jupiter	66213-09-12 16:19 G	25905116.04	25905116.18	25905116.32	0.0538	0.0392
Jupiter	66218-11-18 21:51 G	25907009.37	25907009.41	25907009.45	0.0484	0.0472
Jupiter	66219-07-12 12:58 G	25907244.83	25907245.04	25907245.24	0.0487	0.0037
Jupiter	66224-09-21 14:10 G	25909143.08	25909143.09	25909143.11	0.0545	0.0543
Jupiter	66225-05-18 04:19 G	25909381.50	25909381.68	25909381.88	0.0540	0.0195
Saturn	66227-04-06 21:07 G	25910070.20	25910070.38	25910070.56	0.0280	0.0151

Saturn 66227-11-22 11:17 G 25910299.76 25910299.97 25910300.18 0.0281 0.0071

Uranus 66229-01-04 13:27 G 25910708.96 25910709.06 25910709.19 0.0136 0.0114

Uranus 66229-08-18 19:55 G 25910935.17 25910935.33 25910935.52 0.0136 0.0081

Uranus 66230-04-02 03:07 G 25911161.43 25911161.63 25911161.84 0.0136 0.0047

Uranus 66230-11-14 10:05 G 25911387.70 25911387.92 25911388.14 0.0136 0.0013

Jupiter 66231-03-17 17:46 G 25911511.04 25911511.24 25911511.44 0.0486 0.0108

Uranus 66231-06-28 17:03 G 25911613.99 25911614.21 25911614.42 0.0136 0.0021

Jupiter 66231-11-08 11:31 G 25911746.88 25911746.98 25911747.09 0.0491 0.0414

Uranus 66232-02-10 00:00 G 25911840.30 25911840.50 25911840.70 0.0137 0.0055

Uranus 66232-09-23 07:12 G 25912066.64 25912066.80 25912066.97 0.0137 0.0089

Uranus 66233-05-07 14:53 G 25912293.03 25912293.12 25912293.21 0.0137 0.0123

Jupiter 66237-01-20 16:34 G 25913646.99 25913647.19 25913647.40 0.0542 0.0009

Mars 66240-10-29 14:10 G 25915025.06 25915025.09 25915025.13 0.1726 0.1679

Saturn 66241-09-21 09:22 G 25915351.70 25915351.89 25915352.08 0.0278 0.0129

Saturn 66242-05-08 18:43 G 25915581.08 25915581.28 25915581.48 0.0277 0.0084

Jupiter 66242-11-21 00:15 G 25915777.33 25915777.51 25915777.68 0.0485 0.0248

Jupiter 66243-07-14 16:48 G 25916013.03 25916013.20 25916013.37 0.0490 0.0270

Mars 66245-06-13 01:12 G 25916712.38 25916712.55 25916712.72 0.1790 0.0175

Neptune 66246-07-10 23:46 G 25917105.45 25917105.49 25917105.56 0.0088 0.0085

Neptune 66247-02-21 12:43 G 25917330.95 25917331.03 25917331.12 0.0088 0.0080

Moon 66247-07-01 15:07 G 25917461.01 25917461.13 25917461.25 0.2689 0.1673

Earth 66247-07-01 20:24 G 25917461.24 25917461.35 25917461.47 0.2686 0.1834 *

Neptune 66247-10-05 00:58 G 25917556.46 25917556.54 25917556.68 0.0088 0.0076

Neptune 66248-05-17 13:55 G 25917781.97 25917782.08 25917782.22 0.0088 0.0071

Jupiter 66248-09-25 03:07 G 25917912.45 25917912.63 25917912.82 0.0543 0.0209

Neptune 66248-12-29 02:53 G 25918007.48 25918007.62 25918007.76 0.0088 0.0066

Jupiter 66249-05-21 14:10 G 25918151.04 25918151.09 25918151.15 0.0536 0.0513

Neptune 66249-08-11 15:07 G 25918232.99 25918233.13 25918233.30 0.0088 0.0062

Neptune 66250-03-25 03:51 G 25918458.51 25918458.66 25918458.84 0.0088 0.0057

Neptune 66250-11-05 16:34 G 25918684.03 25918684.19 25918684.38 0.0088 0.0052

Neptune 66251-06-19 05:31 G 25918909.55 25918909.73 25918909.92 0.0088 0.0047

Neptune 66252-01-30 18:15 G 25919135.07 25919135.26 25919135.46 0.0088 0.0042

Neptune 66252-09-12 07:12 G 25919360.60 25919360.80 25919361.00 0.0088 0.0037

Neptune 66253-04-25 19:55 G 25919586.12 25919586.33 25919586.53 0.0088 0.0032

Neptune 66253-12-07 08:10 G 25919811.65 25919811.84 25919812.07 0.0088 0.0028

Neptune 66254-07-20 20:53 G 25920037.17 25920037.37 25920037.60 0.0088 0.0023

Jupiter 66254-07-27 06:00 G 25920043.63 25920043.75 25920043.87 0.0485 0.0388

Neptune 66255-03-03 09:51 G 25920262.70 25920262.91 25920263.13 0.0088 0.0018

Jupiter 66255-03-19 21:51 G 25920279.22 25920279.41 25920279.61 0.0488 0.0125

Moon 66255-06-29 07:27 G 25920380.72 25920380.81 25920380.91 0.2694 0.2063

Earth 66255-06-29 10:05 G 25920380.80 25920380.92 25920381.04 0.2688 0.1762 *

Neptune 66255-10-14 22:48 G 25920488.23 25920488.45 25920488.67 0.0088 0.0013

Neptune 66256-05-27 11:31 G 25920713.76 25920713.98 25920714.20 0.0088 0.0008

Saturn 66256-10-16 22:05 G 25920856.24 25920856.42 25920856.61 0.0281 0.0130

Neptune 66257-01-08 00:15 G 25920939.29 25920939.51 25920939.73 0.0088 0.0003

Saturn 66257-06-03 12:43 G 25921085.83 25921086.03 25921086.23 0.0282 0.0094

Neptune 66257-08-21 12:58 G 25921164.82 25921165.04 25921165.26 0.0088 0.0002

Neptune 66258-04-04 01:41 G 25921390.35 25921390.57 25921390.79 0.0088 0.0007

Neptune 66258-11-15 14:24 G 25921615.88 25921616.10 25921616.32 0.0088 0.0012

Neptune 66259-06-29 03:07 G 25921841.41 25921841.63 25921841.84 0.0088 0.0017

Neptune 66260-02-09 15:36 G 25922066.94 25922067.15 25922067.37 0.0088 0.0022

Jupiter 66260-05-30 12:43 G 25922177.90 25922178.03 25922178.16 0.0544 0.0414

Neptune 66260-09-22 04:19 G 25922292.48 25922292.68 25922292.90 0.0088 0.0028

Jupiter 66261-01-24 01:12 G 25922416.39 25922416.55 25922416.71 0.0538 0.0319

Neptune 66261-05-05 17:03 G 25922518.01 25922518.21 25922518.42 0.0088 0.0032

Neptune 66261-12-17 05:46 G 25922743.55 25922743.74 25922743.94 0.0088 0.0037

Neptune 66262-07-30 18:15 G 25922969.08 25922969.26 25922969.46 0.0088 0.0042

Neptune 66263-03-13 06:58 G 25923194.62 25923194.79 25923194.99 0.0088 0.0047

Neptune 66263-10-24 19:41 G 25923420.16 25923420.32 25923420.52 0.0088 0.0052

Neptune 66264-06-06 08:24 G 25923645.70 25923645.85 25923646.04 0.0088 0.0057

Neptune 66265-01-17 21:36 G 25923871.24 25923871.40 25923871.56 0.0088 0.0062

Neptune 66265-08-31 10:05 G 25924096.79 25924096.92 25924097.07 0.0088 0.0067

Neptune 66266-04-13 22:48 G 25924322.34 25924322.45 25924322.59 0.0088 0.0071

Jupiter 66266-11-23 03:36 G 25924545.45 25924545.65 25924545.86 0.0487 0.0023

Neptune 66266-11-25 11:31 G 25924547.89 25924547.98 25924548.11 0.0088 0.0076

Neptune 66267-07-09 00:43 G 25924773.45 25924773.53 25924773.62 0.0088 0.0081

Neptune 66268-02-19 13:12 G 25924999.01 25924999.05 25924999.12 0.0088 0.0086

Uranus 66269-04-22 15:51 G 25925427.10 25925427.16 25925427.25 0.0143 0.0134

Uranus 66269-12-05 02:39 G 25925653.46 25925653.61 25925653.78 0.0142 0.0095

Uranus 66270-07-19 13:12 G 25925879.86 25925880.05 25925880.26 0.0142 0.0056

Uranus 66271-03-02 23:46 G 25926106.28 25926106.49 25926106.71 0.0142 0.0017

Saturn 66271-04-03 15:51 G 25926137.97 25926138.16 25926138.36 0.0278 0.0095

Uranus 66271-10-15 10:05 G 25926332.71 25926332.92 25926333.14 0.0142 0.0022

Saturn 66271-11-19 01:41 G 25926367.38 25926367.57 25926367.76 0.0278 0.0119

Uranus 66272-05-28 20:10 G 25926559.15 25926559.34 25926559.55 0.0142 0.0060

Jupiter 66272-09-28 09:07 G 25926681.68 25926681.88 25926682.08 0.0541 0.0110

Mars 66272-10-28 18:29 G 25926712.15 25926712.27 25926712.40 0.1736 0.1234

Uranus 66273-01-10 06:00 G 25926785.61 25926785.75 25926785.92 0.0141 0.0098

Uranus 66273-08-24 16:05 G 25927012.11 25927012.17 25927012.24 0.0141 0.0134

Jupiter 66278-07-29 09:36 G 25928811.71 25928811.90 25928812.10 0.0485 0.0162

Jupiter 66279-03-22 02:39 G 25929047.47 25929047.61 25929047.75 0.0490 0.0358

Jupiter 66284-06-02 20:10 G 25930947.14 25930947.34 25930947.54 0.0543 0.0093

Saturn 66286-04-29 05:17 G 25931642.52 25931642.72 25931642.92 0.0280 0.0092

Saturn 66286-12-14 19:27 G 25931872.12 25931872.31 25931872.50 0.0281 0.0130

Jupiter 66290-04-03 15:07 G 25933077.97 25933078.13 25933078.29 0.0485 0.0302

Jupiter 66290-11-25 06:58 G 25933313.61 25933313.79 25933313.97 0.0489 0.0212

Jupiter 66296-02-06 07:41 G 25935212.65 25935212.82 25935213.00 0.0544 0.0293

Jupiter 66296-10-01 20:10 G 25935451.23 25935451.34 25935451.46 0.0538 0.0435

Pluto 66300-09-06 01:41 G 25936885.37 25936885.57 25936885.80 0.0080 0.0014

Saturn 66300-10-14 15:51 G 25936923.96 25936924.16 25936924.37 0.0278 0.0074

Pluto 66301-04-19 12:00 G 25937110.86 25937111.00 25937111.18 0.0080 0.0055

Saturn 66301-06-01 01:12 G 25937153.37 25937153.55 25937153.74 0.0277 0.0139

Jupiter 66301-12-08 21:22 G 25937344.31 25937344.39 25937344.48 0.0484 0.0438

Jupiter 66302-08-01 12:29 G 25937579.82 25937580.02 25937580.23 0.0487 0.0070

Jupiter 66307-10-12 18:29 G 25939478.19 25939478.27 25939478.36 0.0544 0.0494

Jupiter 66308-06-07 07:55 G 25939716.65 25939716.83 25939717.02 0.0539 0.0239

Mars 66311-04-11 08:10 G 25940754.67 25940754.84 25940755.01 0.1794 0.0354

Uranus 66312-09-04 23:03 G 25941267.40 25941267.46 25941267.54 0.0136 0.0128

Uranus 66313-04-19 05:46 G 25941493.60 25941493.74 25941493.90 0.0136 0.0095

Uranus 66313-12-01 12:15 G 25941719.83 25941720.01 25941720.22 0.0136 0.0062

Jupiter 66314-04-06 18:15 G 25941846.06 25941846.26 25941846.46 0.0486 0.0074

Uranus 66314-07-15 19:12 G 25941946.09 25941946.30 25941946.52 0.0136 0.0028

Jupiter 66314-11-28 12:29 G 25942081.94 25942082.02 25942082.10 0.0492 0.0446

Uranus 66315-02-27 02:10 G 25942172.37 25942172.59 25942172.81 0.0136 0.0006

Uranus 66315-10-11 09:07 G 25942398.68 25942398.88 25942399.09 0.0136 0.0040

Saturn 66315-11-10 05:46 G 25942428.54 25942428.74 25942428.95 0.0281 0.0071

Uranus 66316-05-24 16:19 G 25942625.00 25942625.18 25942625.37 0.0137 0.0074

Saturn 66316-06-26 19:55 G 25942658.16 25942658.33 25942658.52 0.0281 0.0153

Uranus 66317-01-05 23:46 G 25942851.36 25942851.49 25942851.62 0.0137 0.0108

Jupiter 66320-02-10 18:00 G 25943982.05 25943982.25 25943982.46 0.0541 0.0037

Jupiter 66325-12-11 00:43 G 25946112.35 25946112.53 25946112.71 0.0485 0.0215

Jupiter 66326-08-03 17:17 G 25946348.06 25946348.22 25946348.38 0.0490 0.0301

Neptune 66328-01-14 10:48 G 25946876.90 25946876.95 25946877.00 0.0090 0.0087

Neptune 66328-08-26 23:31 G 25947102.42 25947102.48 25947102.59 0.0090 0.0083

Neptune 66329-04-09 13:12 G 25947327.96 25947328.05 25947328.18 0.0090 0.0078

Saturn 66329-09-09 11:17 G 25947480.89 25947480.97 25947481.06 0.0279 0.0255

Neptune 66329-11-21 02:24 G 25947553.50 25947553.60 25947553.75 0.0090 0.0073

Saturn 66330-04-26 21:36 G 25947710.19 25947710.40 25947710.61 0.0279 0.0040

Neptune 66330-07-04 15:51 G 25947779.04 25947779.16 25947779.32 0.0090 0.0068

Saturn 66330-12-12 07:27 G 25947939.65 25947939.81 25947939.97 0.0278 0.0173

Neptune 66331-02-15 05:17 G 25948004.58 25948004.72 25948004.90 0.0090 0.0063

Neptune 66331-09-28 18:43 G 25948230.13 25948230.28 25948230.47 0.0090 0.0058

Jupiter 66331-10-16 00:58 G 25948247.34 25948247.54 25948247.73 0.0543 0.0177

Neptune 66332-05-11 08:10 G 25948455.68 25948455.84 25948456.03 0.0090 0.0053

Neptune 66332-12-22 21:51 G 25948681.23 25948681.41 25948681.60 0.0090 0.0047

Neptune 66333-08-05 11:03 G 25948906.77 25948906.96 25948907.16 0.0090 0.0042

Neptune 66334-03-19 00:29 G 25949132.33 25949132.52 25949132.73 0.0089 0.0037

Neptune 66334-10-30 13:41 G 25949357.88 25949358.07 25949358.29 0.0089 0.0032

Neptune 66335-06-13 03:07 G 25949583.43 25949583.63 25949583.85 0.0089 0.0026

Neptune 66336-01-24 16:19 G 25949808.98 25949809.18 25949809.40 0.0089 0.0021

Neptune 66336-09-06 05:46 G 25950034.53 25950034.74 25950034.96 0.0089 0.0016

Neptune 66337-04-19 19:12 G 25950260.09 25950260.30 25950260.52 0.0089 0.0011

Jupiter 66337-08-16 06:58 G 25950378.66 25950378.79 25950378.93 0.0484 0.0353

Neptune 66337-12-01 08:39 G 25950485.64 25950485.86 25950486.08 0.0089 0.0005

Jupiter 66338-04-08 22:34 G 25950614.25 25950614.44 25950614.63 0.0488 0.0157

Neptune 66338-07-14 21:51 G 25950711.19 25950711.41 25950711.63 0.0089 0.0000

Mars 66338-08-27 03:36 G 25950754.50 25950754.65 25950754.80 0.1733 0.0820

Neptune 66339-02-25 11:03 G 25950936.74 25950936.96 25950937.18 0.0089 0.0005

Neptune 66339-10-09 00:29 G 25951162.30 25951162.52 25951162.74 0.0089 0.0010

Neptune 66340-05-21 13:55 G 25951387.86 25951388.08 25951388.30 0.0089 0.0016

Neptune 66341-01-02 02:53 G 25951613.42 25951613.62 25951613.85 0.0089 0.0021

Neptune 66341-08-15 16:19 G 25951838.98 25951839.18 25951839.40 0.0089 0.0026

Neptune 66342-03-29 05:46 G 25952064.54 25952064.74 25952064.95 0.0089 0.0031

Neptune 66342-11-09 19:12 G 25952290.10 25952290.30 25952290.51 0.0089 0.0036

Jupiter 66343-06-20 10:48 G 25952512.81 25952512.95 25952513.10 0.0544 0.0380

Neptune 66343-06-23 08:39 G 25952515.67 25952515.86 25952516.06 0.0089 0.0042

Neptune 66344-02-03 21:36 G 25952741.23 25952741.40 25952741.60 0.0089 0.0047

Jupiter 66344-02-14 00:15 G 25952751.36 25952751.51 25952751.66 0.0539 0.0351

Neptune 66344-09-16 10:48 G 25952966.79 25952966.95 25952967.15 0.0089 0.0053

Saturn 66344-10-05 00:29 G 25952985.43 25952985.52 25952985.61 0.0279 0.0251

Neptune 66345-04-30 00:15 G 25953192.36 25953192.51 25953192.70 0.0089 0.0058

Saturn 66345-05-22 13:55 G 25953214.87 25953215.08 25953215.29 0.0280 0.0032

Neptune 66345-12-11 13:41 G 25953417.93 25953418.07 25953418.25 0.0089 0.0062

Saturn 66346-01-07 03:51 G 25953444.51 25953444.66 25953444.82 0.0281 0.0190

Neptune 66346-07-25 02:53 G 25953643.50 25953643.62 25953643.78 0.0089 0.0067

Neptune 66347-03-07 16:05 G 25953869.07 25953869.17 25953869.32 0.0089 0.0072

Neptune 66347-10-19 05:17 G 25954094.64 25954094.72 25954094.86 0.0089 0.0078

Neptune 66348-05-31 18:43 G 25954320.22 25954320.28 25954320.39 0.0089 0.0082

Neptune 66349-01-12 08:24 G 25954545.81 25954545.85 25954545.91 0.0089 0.0086

Jupiter 66349-12-13 03:07 G 25954880.43 25954880.63 25954880.84 0.0487 0.0016

Moon 66353-01-03 15:07 G 25955998.00 25955998.13 25955998.25 0.2647 0.1535

Earth 66353-01-03 20:24 G 25955998.27 25955998.35 25955998.44 0.2646 0.2258

Uranus 66353-08-05 10:34 G 25956211.82 25956211.94 25956212.09 0.0143 0.0112

Uranus 66354-03-19 21:22 G 25956438.22 25956438.39 25956438.59 0.0142 0.0073

Uranus 66354-11-01 08:24 G 25956664.63 25956664.85 25956665.06 0.0142 0.0034

Uranus 66355-06-15 18:43 G 25956891.06 25956891.28 25956891.50 0.0142 0.0005

Jupiter 66355-10-19 12:43 G 25957016.84 25957017.03 25957017.23 0.0541 0.0157

Uranus 66356-01-28 04:48 G 25957117.50 25957117.70 25957117.91 0.0142 0.0044

Uranus 66356-09-10 14:53 G 25957343.95 25957344.12 25957344.30 0.0142 0.0082

Uranus 66357-04-25 00:43 G 25957570.43 25957570.53 25957570.66 0.0141 0.0119

Saturn 66359-03-22 12:29 G 25958266.90 25958267.02 25958267.13 0.0279 0.0232

Saturn 66359-11-06 22:34 G 25958496.23 25958496.44 25958496.65 0.0278 0.0018

Saturn 66360-06-23 07:41 G 25958725.68 25958725.82 25958725.98 0.0278 0.0195

Moon 66361-01-01 10:19 G 25958917.78 25958917.93 25958918.07 0.2650 0.0782

Earth 66361-01-01 13:12 G 25958917.90 25958918.05 25958918.20 0.2644 0.0852 *

Jupiter 66361-08-18 09:07 G 25959146.69 25959146.88 25959147.08 0.0486 0.0128

Jupiter 66362-04-11 02:24 G 25959382.48 25959382.60 25959382.72 0.0491 0.0389

Jupiter 66367-06-24 00:00 G 25961282.30 25961282.50 25961282.71 0.0542 0.0047

Jupiter 66373-04-23 15:07 G 25963412.96 25963413.13 25963413.30 0.0485 0.0268

Jupiter 66373-12-15 07:27 G 25963648.64 25963648.81 25963648.99 0.0489 0.0245

Saturn 66374-04-17 00:15 G 25963771.41 25963771.51 25963771.64 0.0280 0.0232

Saturn 66374-12-02 14:10 G 25964000.87 25964001.09 25964001.30 0.0281 0.0013

Saturn 66375-07-20 04:05 G 25964230.54 25964230.67 25964230.82 0.0281 0.0212

Mars 66377-02-05 15:36 G 25964797.00 25964797.15 25964797.30 0.1798 0.0873

Jupiter 66379-02-26 09:36 G 25965547.73 25965547.90 25965548.09 0.0543 0.0250

Jupiter 66379-10-22 21:22 G 25965786.30 25965786.39 25965786.49 0.0537 0.0472

Jupiter 66384-12-27 21:51 G 25967679.30 25967679.41 25967679.52 0.0484 0.0405

Jupiter 66385-08-20 13:12 G 25967914.85 25967915.05 25967915.25 0.0487 0.0101

Saturn 66388-10-01 17:31 G 25969053.08 25969053.23 25969053.37 0.0279 0.0201

Saturn 66389-05-19 03:36 G 25969282.44 25969282.65 25969282.87 0.0279 0.0016

Saturn 66390-01-03 13:27 G 25969511.94 25969512.06 25969512.18 0.0278 0.0227

Jupiter 66390-10-31 15:51 G 25969813.06 25969813.16 25969813.27 0.0544 0.0461

Jupiter 66391-06-27 05:31 G 25970051.55 25970051.73 25970051.90 0.0540 0.0269

Uranus 66396-12-17 16:05 G 25972052.05 25972052.17 25972052.31 0.0136 0.0109

Jupiter 66397-04-25 18:58 G 25972181.09 25972181.29 25972181.50 0.0486 0.0041

Uranus 66397-07-31 22:34 G 25972278.27 25972278.44 25972278.64 0.0136 0.0076

Jupiter 66397-12-17 12:43 G 25972416.99 25972417.03 25972417.08 0.0491 0.0476

Uranus 66398-03-15 05:31 G 25972504.53 25972504.73 25972504.94 0.0136 0.0042

Uranus 66398-10-27 12:29 G 25972730.80 25972731.02 25972731.24 0.0136 0.0008

Uranus 66399-06-10 19:27 G 25972957.09 25972957.31 25972957.52 0.0136 0.0026

Uranus 66400-01-23 02:24 G 25973183.41 25973183.60 25973183.80 0.0136 0.0060

Uranus 66400-09-05 09:36 G 25973409.75 25973409.90 25973410.06 0.0137 0.0094

Uranus 66401-04-19 17:03 G 25973636.15 25973636.21 25973636.29 0.0137 0.0128

Jupiter 66403-03-01 16:05 G 25974316.97 25974317.17 25974317.37 0.0542 0.0068

Saturn 66403-10-28 09:36 G 25974557.75 25974557.90 25974558.05 0.0279 0.0191

Saturn 66404-06-13 23:17 G 25974787.25 25974787.47 25974787.68 0.0280 0.0029

Mars 66404-06-23 12:15 G 25974796.84 25974797.01 25974797.18 0.1729 0.0402

Saturn 66405-01-29 13:12 G 25975016.96 25975017.05 25975017.15 0.0281 0.0250

Jupiter 66408-12-30 00:00 G 25976447.31 25976447.50 25976447.69 0.0485 0.0182

Jupiter 66409-08-22 16:05 G 25976683.03 25976683.17 25976683.33 0.0490 0.0332

Neptune 66410-10-13 09:22 G 25977099.84 25977099.89 25977099.95 0.0088 0.0084

Neptune 66411-05-26 21:36 G 25977325.33 25977325.40 25977325.51 0.0088 0.0080

Neptune 66412-01-07 10:34 G 25977550.84 25977550.94 25977551.06 0.0088 0.0075

Neptune 66412-08-19 23:31 G 25977776.35 25977776.48 25977776.61 0.0088 0.0070

Neptune 66413-04-02 11:46 G 25978001.86 25978001.99 25978002.16 0.0088 0.0066

Neptune 66413-11-14 00:29 G 25978227.38 25978227.52 25978227.70 0.0088 0.0061

Neptune 66414-06-27 13:12 G 25978452.89 25978453.05 25978453.23 0.0088 0.0056

Jupiter 66414-11-04 03:51 G 25978582.47 25978582.66 25978582.86 0.0543 0.0131

Neptune 66415-02-08 01:55 G 25978678.41 25978678.58 25978678.77 0.0088 0.0051

Neptune 66415-09-21 14:53 G 25978903.94 25978904.12 25978904.31 0.0088 0.0046

Neptune 66416-05-04 03:22 G 25979129.46 25979129.64 25979129.85 0.0088 0.0042

Neptune 66416-12-15 16:05 G 25979354.98 25979355.17 25979355.38 0.0088 0.0037

Neptune 66417-07-29 04:34 G 25979580.50 25979580.69 25979580.91 0.0088 0.0032

Neptune 66418-03-11 17:31 G 25979806.03 25979806.23 25979806.45 0.0088 0.0027

Saturn 66418-04-13 19:27 G 25979839.15 25979839.31 25979839.47 0.0279 0.0176

Neptune 66418-10-23 06:15 G 25980031.56 25980031.76 25980031.99 0.0088 0.0022

Saturn 66418-11-29 05:31 G 25980068.52 25980068.73 25980068.94 0.0278 0.0038

Neptune 66419-06-05 19:12 G 25980257.09 25980257.30 25980257.52 0.0088 0.0017

Saturn 66419-07-16 14:39 G 25980298.03 25980298.11 25980298.21 0.0278 0.0250

Neptune 66420-01-17 07:55 G 25980482.62 25980482.83 25980483.05 0.0088 0.0012

Neptune 66420-08-29 20:39 G 25980708.14 25980708.36 25980708.58 0.0088 0.0007

Jupiter 66420-09-04 06:15 G 25980713.60 25980713.76 25980713.91 0.0484 0.0320

Neptune 66421-04-12 09:36 G 25980933.68 25980933.90 25980934.12 0.0088 0.0002

Jupiter 66421-04-27 21:36 G 25980949.21 25980949.40 25980949.59 0.0488 0.0189

Neptune 66421-11-23 22:19 G 25981159.21 25981159.43 25981159.65 0.0088 0.0004

Neptune 66422-07-07 10:48 G 25981384.74 25981384.95 25981385.18 0.0088 0.0009

Neptune 66423-02-17 23:31 G 25981610.27 25981610.48 25981610.70 0.0088 0.0014

Neptune 66423-10-01 12:15 G 25981835.81 25981836.01 25981836.24 0.0088 0.0019

Neptune 66424-05-14 00:58 G 25982061.34 25982061.54 25982061.76 0.0088 0.0024

Neptune 66424-12-25 13:27 G 25982286.87 25982287.06 25982287.28 0.0088 0.0029

Neptune 66425-08-08 02:10 G 25982512.40 25982512.59 25982512.81 0.0088 0.0034

Neptune 66426-03-21 15:07 G 25982737.93 25982738.13 25982738.33 0.0088 0.0038

Jupiter 66426-07-09 14:53 G 25982847.96 25982848.12 25982848.28 0.0544 0.0332

Neptune 66426-11-02 03:51 G 25982963.47 25982963.66 25982963.86 0.0088 0.0043

Jupiter 66427-03-05 03:36 G 25983086.51 25983086.65 25983086.79 0.0538 0.0393

Neptune 66427-06-15 16:19 G 25983189.01 25983189.18 25983189.38 0.0088 0.0049

Neptune 66428-01-27 05:03 G 25983414.55 25983414.71 25983414.90 0.0088 0.0053

Neptune 66428-09-08 17:31 G 25983640.09 25983640.23 25983640.41 0.0088 0.0059

Neptune 66429-04-22 06:15 G 25983865.63 25983865.76 25983865.93 0.0088 0.0063

Neptune 66429-12-03 18:58 G 25984091.17 25984091.29 25984091.45 0.0088 0.0068

Neptune 66430-07-17 07:55 G 25984316.72 25984316.83 25984316.96 0.0088 0.0073

Neptune 66431-02-27 20:24 G 25984542.27 25984542.35 25984542.48 0.0088 0.0078

Neptune 66431-10-11 09:07 G 25984767.83 25984767.88 25984767.99 0.0088 0.0083

Jupiter 66432-05-10 12:00 G 25984979.94 25984980.00 25984980.07 0.0484 0.0456

Neptune 66432-05-23 22:19 G 25984993.40 25984993.43 25984993.48 0.0088 0.0087

Jupiter 66433-01-01 03:07 G 25985215.43 25985215.63 25985215.83 0.0487 0.0046

Saturn 66433-05-09 09:51 G 25985343.75 25985343.91 25985344.08 0.0280 0.0171

Saturn 66433-12-24 23:31 G 25985573.27 25985573.48 25985573.69 0.0281 0.0050

Saturn 66434-08-11 13:27 G 25985803.02 25985803.06 25985803.12 0.0281 0.0272

Uranus 66437-04-04 18:58 G 25986770.20 25986770.29 25986770.39 0.0143 0.0128

Uranus 66437-11-17 05:46 G 25986996.58 25986996.74 25986996.92 0.0143 0.0089

Jupiter 66438-03-14 00:29 G 25987113.48 25987113.52 25987113.56 0.0544 0.0532

Uranus 66438-07-01 16:19 G 25987222.99 25987223.18 25987223.39 0.0142 0.0050

Jupiter 66438-11-07 14:10 G 25987351.91 25987352.09 25987352.28 0.0540 0.0196

Uranus 66439-02-13 03:07 G 25987449.41 25987449.63 25987449.84 0.0142 0.0011

Uranus 66439-09-27 13:27 G 25987675.85 25987676.06 25987676.28 0.0142 0.0027

Uranus 66440-05-10 23:31 G 25987902.30 25987902.48 25987902.68 0.0142 0.0066

Uranus 66440-12-23 09:36 G 25988128.76 25988128.90 25988129.06 0.0141 0.0103

Uranus 66441-08-06 19:41 G 25988355.30 25988355.32 25988355.34 0.0141 0.0141

Mars 66442-12-03 22:34 G 25988839.34 25988839.44 25988839.55 0.1802 0.1408

Jupiter 66444-09-06 09:22 G 25989481.70 25989481.89 25989482.10 0.0486 0.0096

Jupiter 66445-04-30 02:53 G 25989717.52 25989717.62 25989717.72 0.0491 0.0418

Saturn 66447-10-25 00:00 G 25990625.32 25990625.50 25990625.68 0.0279 0.0145

Saturn 66448-06-10 10:19 G 25990854.73 25990854.93 25990855.14 0.0279 0.0070

Jupiter 66450-07-12 20:53 G 25991617.17 25991617.37 25991617.58 0.0542 0.0016

Jupiter 66456-05-12 15:36 G 25993747.98 25993748.15 25993748.33 0.0485 0.0234

Jupiter 66457-01-03 07:41 G 25993983.66 25993983.82 25993983.99 0.0489 0.0277

Pluto 66459-02-03 06:00 G 25994744.60 25994744.75 25994744.94 0.0064 0.0041

Pluto 66459-09-16 10:19 G 25994969.71 25994969.93 25994970.15 0.0064 0.0007

Pluto 66460-04-28 14:10 G 25995194.91 25995195.09 25995195.30 0.0064 0.0028

Pluto 66460-12-09 18:00 G 25995420.24 25995420.25 25995420.31 0.0064 0.0064

Jupiter 66462-03-17 06:43 G 25995882.59 25995882.78 25995882.97 0.0543 0.0218

Jupiter 66462-11-10 18:43 G 25996121.22 25996121.28 25996121.36 0.0538 0.0500

Saturn 66462-11-19 19:41 G 25996130.13 25996130.32 25996130.51 0.0280 0.0129

Saturn 66463-07-07 09:07 G 25996359.69 25996359.88 25996360.09 0.0280 0.0092

Jupiter 66468-01-16 20:39 G 25998014.23 25998014.36 25998014.49 0.0484 0.0372

Jupiter 66468-09-08 11:46 G 25998249.79 25998249.99 25998250.18 0.0487 0.0132

Mars 66470-04-20 21:07 G 25998839.21 25998839.38 25998839.56 0.1726 0.0031

Jupiter 66473-11-19 17:46 G 26000148.12 26000148.24 26000148.37 0.0545 0.0417

Jupiter 66474-07-16 07:41 G 26000386.66 26000386.82 26000386.99 0.0540 0.0311

Saturn 66477-05-06 03:36 G 26001411.46 26001411.65 26001411.84 0.0279 0.0118

Saturn 66477-12-21 13:27 G 26001640.87 26001641.06 26001641.26 0.0278 0.0097

Jupiter 66480-05-14 17:31 G 26002516.03 26002516.23 26002516.43 0.0486 0.0009

Uranus 66480-08-17 02:24 G 26002610.51 26002610.60 26002610.69 0.0135 0.0122

Uranus 66481-03-31 08:53 G 26002836.71 26002836.87 26002837.04 0.0136 0.0089

Uranus 66481-11-12 15:22 G 26003062.95 26003063.14 26003063.35 0.0136 0.0056

Uranus 66482-06-26 22:19 G 26003289.21 26003289.43 26003289.64 0.0136 0.0022

Uranus 66483-02-08 05:03 G 26003515.49 26003515.71 26003515.93 0.0136 0.0012

Uranus 66483-09-22 12:00 G 26003741.80 26003742.00 26003742.21 0.0136 0.0046

Uranus 66484-05-05 19:12 G 26003968.13 26003968.30 26003968.48 0.0136 0.0080

Uranus 66484-12-18 02:24 G 26004194.49 26004194.60 26004194.73 0.0137 0.0114

Jupiter 66486-03-20 19:12 G 26004652.11 26004652.30 26004652.51 0.0541 0.0115

Earth 66490-07-02 20:10 G 26006217.23 26006217.34 26006217.46 0.2687 0.1817

Moon 66490-07-03 01:41 G 26006217.47 26006217.57 26006217.67 0.2689 0.2086

Jupiter 66492-01-18 23:03 G 26006782.27 26006782.46 26006782.66 0.0485 0.0151

Neptune 66492-04-16 18:58 G 26006871.26 26006871.29 26006871.37 0.0090 0.0087

Saturn 66492-05-31 20:24 G 26006916.16 26006916.35 26006916.55 0.0280 0.0108

Jupiter 66492-09-10 15:51 G 26007018.03 26007018.16 26007018.30 0.0490 0.0362

Neptune 66492-11-28 08:24 G 26007096.78 26007096.85 26007096.95 0.0090 0.0082

Saturn 66493-01-16 09:51 G 26007145.72 26007145.91 26007146.11 0.0281 0.0113

Neptune 66493-07-11 21:51 G 26007322.31 26007322.41 26007322.53 0.0090 0.0077

Neptune 66494-02-22 11:17 G 26007547.85 26007547.97 26007548.11 0.0090 0.0072

Neptune 66494-10-06 00:29 G 26007773.39 26007773.52 26007773.68 0.0090 0.0067

Neptune 66495-05-19 13:55 G 26007998.93 26007999.08 26007999.25 0.0090 0.0062

Neptune 66495-12-31 03:07 G 26008224.48 26008224.63 26008224.82 0.0090 0.0057

Neptune 66496-08-12 16:34 G 26008450.03 26008450.19 26008450.38 0.0090 0.0052

Neptune 66497-03-26 06:00 G 26008675.58 26008675.75 26008675.96 0.0090 0.0047

Neptune 66497-11-06 19:27 G 26008901.13 26008901.31 26008901.52 0.0090 0.0042

Jupiter 66497-11-23 05:17 G 26008917.52 26008917.72 26008917.93 0.0542 0.0090

Neptune 66498-06-20 09:07 G 26009126.68 26009126.88 26009127.08 0.0090 0.0036

Earth 66498-06-30 09:51 G 26009136.79 26009136.91 26009137.02 0.2689 0.1790

Moon 66498-06-30 14:24 G 26009136.94 26009137.10 26009137.25 0.2685 0.1025 *

Neptune 66499-01-31 22:19 G 26009352.23 26009352.43 26009352.64 0.0090 0.0031

Neptune 66499-09-14 11:46 G 26009577.78 26009577.99 26009578.20 0.0089 0.0025

Neptune 66500-04-28 00:58 G 26009803.34 26009803.54 26009803.77 0.0089 0.0021

Neptune 66500-12-09 14:39 G 26010028.89 26010029.11 26010029.33 0.0089 0.0015

Neptune 66501-07-23 03:51 G 26010254.44 26010254.66 26010254.88 0.0089 0.0010

Neptune 66502-03-05 17:17 G 26010480.00 26010480.22 26010480.44 0.0089 0.0004

Neptune 66502-10-17 06:29 G 26010705.55 26010705.77 26010705.99 0.0089 0.0001

Neptune 66503-05-30 19:55 G 26010931.11 26010931.33 26010931.55 0.0089 0.0006

Jupiter 66503-09-25 05:46 G 26011048.58 26011048.74 26011048.91 0.0485 0.0288

Neptune 66504-01-11 09:07 G 26011156.66 26011156.88 26011157.10 0.0089 0.0011

Jupiter 66504-05-17 21:36 G 26011284.22 26011284.40 26011284.59 0.0488 0.0220

Neptune 66504-08-23 22:19 G 26011382.22 26011382.43 26011382.65 0.0089 0.0017

Neptune 66505-04-06 11:31 G 26011607.78 26011607.98 26011608.20 0.0089 0.0022

Neptune 66505-11-18 00:43 G 26011833.34 26011833.53 26011833.76 0.0089 0.0028

Neptune 66506-07-01 14:10 G 26012058.89 26012059.09 26012059.30 0.0089 0.0032

Saturn 66506-11-17 07:41 G 26012197.62 26012197.82 26012198.02 0.0279 0.0088

Neptune 66507-02-12 03:22 G 26012284.45 26012284.64 26012284.85 0.0089 0.0038

Saturn 66507-07-04 18:00 G 26012427.06 26012427.25 26012427.43 0.0278 0.0127

Neptune 66507-09-25 16:48 G 26012510.01 26012510.20 26012510.40 0.0089 0.0043

Neptune 66508-05-08 06:00 G 26012735.58 26012735.75 26012735.95 0.0089 0.0048

Neptune 66508-12-19 19:27 G 26012961.15 26012961.31 26012961.50 0.0089 0.0053

Jupiter 66509-07-29 11:17 G 26013182.81 26013182.97 26013183.15 0.0544 0.0300

Neptune 66509-08-02 08:39 G 26013186.71 26013186.86 26013187.04 0.0089 0.0058

Neptune 66510-03-15 22:05 G 26013412.28 26013412.42 26013412.59 0.0089 0.0063

Jupiter 66510-03-25 00:00 G 26013421.37 26013421.50 26013421.63 0.0538 0.0419

Neptune 66510-10-27 11:17 G 26013637.85 26013637.97 26013638.13 0.0089 0.0069

Neptune 66511-06-10 00:43 G 26013863.43 26013863.53 26013863.67 0.0089 0.0073

Neptune 66512-01-21 13:55 G 26014089.00 26014089.08 26014089.21 0.0089 0.0079

Neptune 66512-09-03 03:07 G 26014314.58 26014314.63 26014314.74 0.0089 0.0083

Neptune 66513-04-16 16:34 G 26014540.18 26014540.19 26014540.25 0.0089 0.0088

Jupiter 66515-05-31 12:00 G 26015314.91 26015315.00 26015315.10 0.0484 0.0422

Jupiter 66516-01-22 03:07 G 26015550.43 26015550.63 26015550.83 0.0487 0.0078

Jupiter 66521-04-02 20:24 G 26017448.28 26017448.35 26017448.43 0.0544 0.0501

Uranus 66521-07-18 13:27 G 26017554.93 26017555.06 26017555.22 0.0143 0.0106

Jupiter 66521-11-27 10:34 G 26017686.76 26017686.94 26017687.13 0.0540 0.0224

Saturn 66521-12-13 06:58 G 26017702.59 26017702.79 26017703.00 0.0280 0.0065

Uranus 66522-03-02 00:15 G 26017781.33 26017781.51 26017781.72 0.0143 0.0067

Saturn 66522-07-30 20:39 G 26017932.19 26017932.36 26017932.54 0.0280 0.0155

Uranus 66522-10-14 11:17 G 26018007.76 26018007.97 26018008.19 0.0142 0.0027

Uranus 66523-05-28 21:51 G 26018234.19 26018234.41 26018234.63 0.0142 0.0011

Uranus 66524-01-10 08:10 G 26018460.64 26018460.84 26018461.05 0.0142 0.0050

Uranus 66524-08-23 18:15 G 26018687.10 26018687.26 26018687.44 0.0142 0.0088

Uranus 66525-04-07 04:19 G 26018913.59 26018913.68 26018913.78 0.0141 0.0126

Jupiter 66527-09-27 07:27 G 26019816.61 26019816.81 26019817.01 0.0486 0.0064

Jupiter 66528-05-20 00:29 G 26020052.44 26020052.52 26020052.61 0.0491 0.0446

Jupiter 66533-08-01 22:19 G 26021952.22 26021952.43 26021952.63 0.0542 0.0029

Saturn 66535-10-13 02:24 G 26022754.56 26022754.60 26022754.64 0.0279 0.0273

Mars 66536-02-17 06:15 G 26022881.59 26022881.76 26022881.94 0.1723 0.0394

Saturn 66536-05-29 12:43 G 26022983.82 26022984.03 26022984.24 0.0279 0.0058

Saturn 66537-01-13 22:34 G 26023213.27 26023213.44 26023213.61 0.0278 0.0156

Jupiter 66539-06-02 13:27 G 26024082.88 26024083.06 26024083.25 0.0485 0.0203

Jupiter 66540-01-24 05:17 G 26024318.57 26024318.72 26024318.89 0.0489 0.0305

Mars 66540-09-30 15:07 G 26024569.02 26024569.13 26024569.23 0.1794 0.1424

Jupiter 66545-04-06 09:22 G 26026217.70 26026217.89 26026218.09 0.0543 0.0174

Pluto 66548-08-10 01:27 G 26027439.42 26027439.56 26027439.70 0.0080 0.0061

Pluto 66549-03-23 12:00 G 26027664.78 26027665.00 26027665.22 0.0080 0.0008

Pluto 66549-11-03 22:05 G 26027890.37 26027890.42 26027890.51 0.0079 0.0076

Saturn 66550-11-07 18:29 G 26028259.21 26028259.27 26028259.36 0.0280 0.0262

Jupiter 66551-02-05 19:12 G 26028349.15 26028349.30 26028349.44 0.0484 0.0341

Saturn 66551-06-25 07:55 G 26028488.62 26028488.83 26028489.04 0.0280 0.0044

Jupiter 66551-09-29 10:34 G 26028584.75 26028584.94 26028585.13 0.0488 0.0163

Saturn 66552-02-09 21:36 G 26028718.24 26028718.40 26028718.57 0.0281 0.0177

Jupiter 66556-12-09 19:12 G 26030483.15 26030483.30 26030483.45 0.0544 0.0374

Jupiter 66557-08-05 08:10 G 26030721.69 26030721.84 26030722.00 0.0539 0.0347

Jupiter 66562-10-12 01:55 G 26032615.54 26032615.58 26032615.62 0.0484 0.0474

Jupiter 66563-06-04 16:48 G 26032851.00 26032851.20 26032851.40 0.0487 0.0022

Uranus 66564-04-17 13:12 G 26033169.05 26033169.05 26033169.08 0.0135 0.0135

Uranus 66564-11-29 19:55 G 26033395.19 26033395.33 26033395.47 0.0136 0.0102

Saturn 66565-04-24 06:00 G 26033540.65 26033540.75 26033540.85 0.0279 0.0244

Uranus 66565-07-14 02:10 G 26033621.41 26033621.59 26033621.79 0.0136 0.0069

Saturn 66565-12-09 16:48 G 26033769.99 26033770.20 26033770.41 0.0279 0.0029

Uranus 66566-02-25 08:53 G 26033847.67 26033847.87 26033848.09 0.0136 0.0036

Saturn 66566-07-27 02:39 G 26033999.46 26033999.61 26033999.77 0.0278 0.0185

Uranus 66566-10-09 15:51 G 26034073.94 26034074.16 26034074.38 0.0136 0.0002

Uranus 66567-05-23 22:48 G 26034300.24 26034300.45 26034300.66 0.0136 0.0032

Uranus 66568-01-05 05:46 G 26034526.56 26034526.74 26034526.94 0.0136 0.0066

Uranus 66568-08-18 12:43 G 26034752.90 26034753.03 26034753.19 0.0137 0.0101

Uranus 66569-04-01 20:10 G 26034979.32 26034979.34 26034979.39 0.0137 0.0135

Jupiter 66569-04-09 15:22 G 26034986.94 26034987.14 26034987.34 0.0541 0.0142

Neptune 66575-01-15 18:00 G 26037094.20 26037094.25 26037094.33 0.0088 0.0084

Jupiter 66575-02-07 22:34 G 26037117.24 26037117.44 26037117.63 0.0486 0.0118

Neptune 66575-08-29 06:58 G 26037319.71 26037319.79 26037319.90 0.0088 0.0079

Jupiter 66575-10-01 15:22 G 26037353.02 26037353.14 26037353.26 0.0490 0.0391

Neptune 66576-04-10 19:55 G 26037545.22 26037545.33 26037545.45 0.0088 0.0074

Neptune 66576-11-22 08:10 G 26037770.73 26037770.84 26037770.99 0.0088 0.0070

Neptune 66577-07-05 20:53 G 26037996.24 26037996.37 26037996.53 0.0088 0.0065

Neptune 66578-02-16 09:36 G 26038221.75 26038221.90 26038222.07 0.0088 0.0060

Neptune 66578-09-29 22:34 G 26038447.28 26038447.44 26038447.62 0.0088 0.0055

Neptune 66579-05-13 10:48 G 26038672.79 26038672.95 26038673.15 0.0088 0.0051

Neptune 66579-12-24 23:31 G 26038898.31 26038898.48 26038898.69 0.0088 0.0046

Saturn 66580-05-20 05:46 G 26039045.61 26039045.74 26039045.87 0.0279 0.0218

Neptune 66580-08-06 12:15 G 26039123.83 26039124.01 26039124.22 0.0088 0.0041

Jupiter 66580-12-13 00:43 G 26039252.33 26039252.53 26039252.74 0.0542 0.0061

Saturn 66581-01-04 19:12 G 26039275.08 26039275.30 26039275.51 0.0280 0.0004

Neptune 66581-03-20 00:58 G 26039349.35 26039349.54 26039349.75 0.0088 0.0036

Saturn 66581-08-22 08:53 G 26039504.74 26039504.87 26039505.00 0.0281 0.0221

Neptune 66581-10-31 13:41 G 26039574.87 26039575.07 26039575.29 0.0088 0.0031

Neptune 66582-06-14 02:24 G 26039800.40 26039800.60 26039800.82 0.0088 0.0026

Neptune 66583-01-25 15:07 G 26040025.92 26040026.13 26040026.35 0.0088 0.0021

Neptune 66583-09-08 03:51 G 26040251.45 26040251.66 26040251.88 0.0088 0.0016

Neptune 66584-04-20 16:34 G 26040476.98 26040477.19 26040477.42 0.0088 0.0011

Neptune 66584-12-02 05:17 G 26040702.51 26040702.72 26040702.95 0.0088 0.0006

Neptune 66585-07-15 18:00 G 26040928.03 26040928.25 26040928.47 0.0088 0.0002

Neptune 66586-02-26 06:43 G 26041153.56 26041153.78 26041154.00 0.0088 0.0005

Neptune 66586-10-09 19:27 G 26041379.10 26041379.31 26041379.54 0.0088 0.0010

Jupiter 66586-10-14 03:07 G 26041383.46 26041383.63 26041383.81 0.0484 0.0257

Neptune 66587-05-23 08:10 G 26041604.63 26041604.84 26041605.07 0.0088 0.0015

Jupiter 66587-06-06 18:43 G 26041619.11 26041619.28 26041619.46 0.0488 0.0247

Neptune 66588-01-03 20:53 G 26041830.17 26041830.37 26041830.60 0.0088 0.0020

Neptune 66588-08-16 09:36 G 26042055.70 26042055.90 26042056.12 0.0088 0.0025

Neptune 66589-03-29 22:34 G 26042281.23 26042281.44 26042281.65 0.0088 0.0029

Neptune 66589-11-10 11:17 G 26042506.77 26042506.97 26042507.18 0.0088 0.0034

Neptune 66590-06-24 00:00 G 26042732.31 26042732.50 26042732.70 0.0088 0.0039

Neptune 66591-02-04 12:43 G 26042957.84 26042958.03 26042958.22 0.0088 0.0044

Neptune 66591-09-18 01:12 G 26043183.38 26043183.55 26043183.74 0.0088 0.0050

Neptune 66592-04-30 13:55 G 26043408.92 26043409.08 26043409.26 0.0088 0.0054

Jupiter 66592-08-17 11:31 G 26043517.80 26043517.98 26043518.15 0.0544 0.0260

Neptune 66592-12-12 02:24 G 26043634.46 26043634.60 26043634.78 0.0088 0.0060

Jupiter 66593-04-13 00:29 G 26043756.42 26043756.52 26043756.63 0.0539 0.0457

Neptune 66593-07-25 15:07 G 26043860.00 26043860.13 26043860.30 0.0088 0.0064

Neptune 66594-03-08 03:36 G 26044085.54 26044085.65 26044085.81 0.0088 0.0069

Neptune 66594-10-19 17:03 G 26044311.09 26044311.21 26044311.33 0.0088 0.0074

Saturn 66594-11-04 12:43 G 26044326.90 26044327.03 26044327.18 0.0279 0.0211

Neptune 66595-06-02 05:31 G 26044536.64 26044536.73 26044536.84 0.0088 0.0078

Saturn 66595-06-21 23:17 G 26044556.25 26044556.47 26044556.68 0.0279 0.0007

Earth 66596-01-05 23:03 G 26044754.40 26044754.46 26044754.52 0.2645 0.2438

Neptune 66596-01-13 18:00 G 26044762.20 26044762.25 26044762.34 0.0088 0.0083

Saturn 66596-02-06 08:39 G 26044785.73 26044785.86 26044786.00 0.0278 0.0216

Neptune 66596-08-26 07:12 G 26044987.78 26044987.80 26044987.82 0.0088 0.0088

Jupiter 66598-06-19 09:07 G 26045649.77 26045649.88 26045650.01 0.0484 0.0393

Jupiter 66599-02-10 00:00 G 26045885.30 26045885.50 26045885.70 0.0487 0.0106

Mars 66601-12-15 15:22 G 26046923.99 26046924.14 26046924.30 0.1720 0.0782

Earth 66604-01-04 15:36 G 26047674.00 26047674.15 26047674.31 0.2644 0.0642

Moon 66604-01-04 20:10 G 26047674.18 26047674.34 26047674.50 0.2639 0.0551 *

Jupiter 66604-04-22 22:19 G 26047783.33 26047783.43 26047783.54 0.0545 0.0458

Jupiter 66604-12-17 12:29 G 26048021.84 26048022.02 26048022.20 0.0540 0.0265

Uranus 66605-03-18 21:51 G 26048113.32 26048113.41 26048113.54 0.0143 0.0122

Uranus 66605-10-31 08:53 G 26048339.71 26048339.87 26048340.06 0.0143 0.0083

Uranus 66606-06-14 19:55 G 26048566.13 26048566.33 26048566.54 0.0142 0.0043

Mars 66606-07-29 22:05 G 26048611.28 26048611.42 26048611.57 0.1798 0.0902

Uranus 66607-01-27 06:29 G 26048792.56 26048792.77 26048792.99 0.0142 0.0006

Uranus 66607-09-10 17:03 G 26049019.00 26049019.21 26049019.42 0.0142 0.0034

Uranus 66608-04-24 03:07 G 26049245.46 26049245.63 26049245.83 0.0142 0.0073

Uranus 66608-12-06 13:27 G 26049471.93 26049472.06 26049472.20 0.0142 0.0111

Saturn 66609-12-01 07:27 G 26049831.66 26049831.81 26049831.97 0.0280 0.0195

Saturn 66610-07-18 20:53 G 26050061.16 26050061.37 26050061.58 0.0280 0.0024

Jupiter 66610-10-17 05:31 G 26050151.53 26050151.73 26050151.93 0.0486 0.0035

Saturn 66611-03-05 10:34 G 26050290.84 26050290.94 26050291.05 0.0281 0.0244

Jupiter 66611-06-09 23:03 G 26050387.41 26050387.46 26050387.51 0.0491 0.0473

Jupiter 66616-08-21 22:48 G 26052287.25 26052287.45 26052287.65 0.0542 0.0066

Jupiter 66622-06-22 11:46 G 26054417.80 26054417.99 26054418.19 0.0485 0.0174

Jupiter 66623-02-13 04:19 G 26054653.54 26054653.68 26054653.83 0.0489 0.0333

Saturn 66624-05-17 16:05 G 26055113.02 26055113.17 26055113.34 0.0279 0.0183

Saturn 66625-01-02 02:39 G 26055342.40 26055342.61 26055342.82 0.0279 0.0033

Saturn 66625-08-19 12:29 G 26055571.93 26055572.02 26055572.12 0.0278 0.0245

Jupiter 66628-04-26 05:31 G 26056552.53 26056552.73 26056552.92 0.0543 0.0142

Jupiter 66634-02-25 17:31 G 26058684.08 26058684.23 26058684.39 0.0485 0.0310

Jupiter 66634-10-19 09:22 G 26058919.70 26058919.89 26058920.08 0.0488 0.0193

Saturn 66639-06-13 18:15 G 26060618.09 26060618.26 26060618.44 0.0280 0.0154

Jupiter 66639-12-30 14:10 G 26060817.93 26060818.09 26060818.24 0.0544 0.0345

Saturn 66640-01-29 07:55 G 26060847.62 26060847.83 26060848.04 0.0280 0.0066

Jupiter 66640-08-25 03:07 G 26061056.49 26061056.63 26061056.78 0.0539 0.0372

Jupiter 66645-10-31 22:34 G 26062950.37 26062950.44 26062950.52 0.0484 0.0445

Jupiter 66646-06-24 13:12 G 26063185.85 26063186.05 26063186.26 0.0486 0.0050

Uranus 66648-07-31 06:29 G 26063953.66 26063953.77 26063953.89 0.0135 0.0115

Uranus 66649-03-14 12:58 G 26064179.88 26064180.04 26064180.22 0.0136 0.0082

Uranus 66649-10-26 19:27 G 26064406.12 26064406.31 26064406.53 0.0136 0.0049

Uranus 66650-06-10 02:24 G 26064632.38 26064632.60 26064632.82 0.0136 0.0015

Uranus 66651-01-22 09:07 G 26064858.67 26064858.88 26064859.10 0.0136 0.0019

Jupiter 66651-09-03 23:46 G 26065083.48 26065083.49 26065083.51 0.0545 0.0542

Uranus 66651-09-05 15:51 G 26065084.97 26065085.16 26065085.38 0.0136 0.0054

Uranus 66652-04-18 23:31 G 26065311.31 26065311.48 26065311.64 0.0136 0.0087

Jupiter 66652-04-29 14:39 G 26065321.92 26065322.11 26065322.30 0.0541 0.0178

Uranus 66652-12-01 06:29 G 26065537.68 26065537.77 26065537.88 0.0137 0.0121

Saturn 66653-11-28 00:43 G 26065899.35 26065899.53 26065899.71 0.0279 0.0147

Saturn 66654-07-15 10:48 G 26066128.75 26066128.95 26066129.16 0.0279 0.0068

Neptune 66656-07-21 02:39 G 26066865.58 26066865.61 26066865.69 0.0090 0.0087

Neptune 66657-03-03 16:05 G 26067091.11 26067091.17 26067091.29 0.0090 0.0082

Neptune 66657-10-15 05:31 G 26067316.64 26067316.73 26067316.86 0.0090 0.0077

Jupiter 66658-02-27 18:43 G 26067452.09 26067452.28 26067452.49 0.0485 0.0091

Neptune 66658-05-28 18:58 G 26067542.18 26067542.29 26067542.44 0.0090 0.0072

Jupiter 66658-10-21 11:31 G 26067687.88 26067687.98 26067688.09 0.0490 0.0416

Neptune 66659-01-09 08:10 G 26067767.71 26067767.84 26067768.00 0.0090 0.0067

Neptune 66659-08-22 21:36 G 26067993.26 26067993.40 26067993.57 0.0090 0.0062

Neptune 66660-04-04 11:03 G 26068218.81 26068218.96 26068219.15 0.0090 0.0057

Neptune 66660-11-16 00:15 G 26068444.35 26068444.51 26068444.71 0.0090 0.0052

Neptune 66661-06-29 13:55 G 26068669.90 26068670.08 26068670.28 0.0090 0.0046

Neptune 66662-02-10 03:22 G 26068895.45 26068895.64 26068895.84 0.0090 0.0041

Neptune 66662-09-23 16:34 G 26069121.00 26069121.19 26069121.41 0.0090 0.0036

Neptune 66663-05-07 06:00 G 26069346.56 26069346.75 26069346.97 0.0090 0.0031

Neptune 66663-12-18 19:41 G 26069572.11 26069572.32 26069572.54 0.0089 0.0025

Jupiter 66664-01-03 01:55 G 26069587.38 26069587.58 26069587.79 0.0543 0.0021

Neptune 66664-07-31 09:07 G 26069797.67 26069797.88 26069798.10 0.0089 0.0020

Neptune 66665-03-13 22:34 G 26070023.22 26070023.44 26070023.66 0.0089 0.0014

Neptune 66665-10-25 12:00 G 26070248.78 26070249.00 26070249.22 0.0089 0.0009

Neptune 66666-06-08 01:12 G 26070474.34 26070474.55 26070474.78 0.0089 0.0004

Neptune 66667-01-19 14:39 G 26070699.89 26070700.11 26070700.33 0.0089 0.0002

Neptune 66667-09-02 03:51 G 26070925.45 26070925.66 26070925.88 0.0089 0.0007

Mars 66667-10-13 00:58 G 26070966.41 26070966.54 26070966.66 0.1716 0.1150

Neptune 66668-04-14 17:17 G 26071151.01 26071151.22 26071151.44 0.0089 0.0012

Neptune 66668-11-26 06:43 G 26071376.56 26071376.78 26071377.00 0.0089 0.0018

Saturn 66668-12-23 20:39 G 26071404.18 26071404.36 26071404.55 0.0280 0.0129

Neptune 66669-07-09 19:55 G 26071602.12 26071602.33 26071602.55 0.0089 0.0023

Saturn 66669-08-10 10:05 G 26071633.72 26071633.92 26071634.12 0.0280 0.0091

Jupiter 66669-11-03 00:29 G 26071718.34 26071718.52 26071718.70 0.0485 0.0229

Neptune 66670-02-20 08:53 G 26071827.68 26071827.87 26071828.09 0.0089 0.0029

Jupiter 66670-06-26 16:19 G 26071954.02 26071954.18 26071954.35 0.0489 0.0275

Neptune 66670-10-03 22:19 G 26072053.24 26072053.43 26072053.65 0.0089 0.0034

Neptune 66671-05-17 11:46 G 26072278.80 26072278.99 26072279.20 0.0089 0.0039

Neptune 66671-12-29 01:12 G 26072504.36 26072504.55 26072504.75 0.0089 0.0044

Mars 66672-05-26 05:17 G 26072653.55 26072653.72 26072653.89 0.1801 0.0380

Neptune 66672-08-10 14:10 G 26072729.92 26072730.09 26072730.29 0.0089 0.0049

Neptune 66673-03-24 03:36 G 26072955.49 26072955.65 26072955.84 0.0089 0.0054

Neptune 66673-11-04 16:48 G 26073181.06 26073181.20 26073181.38 0.0089 0.0060

Neptune 66674-06-18 06:15 G 26073406.63 26073406.76 26073406.93 0.0089 0.0065

Neptune 66675-01-29 19:41 G 26073632.19 26073632.32 26073632.47 0.0089 0.0069

Jupiter 66675-09-07 11:46 G 26073852.81 26073852.99 26073853.18 0.0543 0.0221

Neptune 66675-09-12 08:53 G 26073857.77 26073857.87 26073858.01 0.0089 0.0075

Neptune 66676-04-24 22:19 G 26074083.35 26074083.43 26074083.55 0.0089 0.0079

Jupiter 66676-05-03 00:15 G 26074091.44 26074091.51 26074091.60 0.0538 0.0490

Neptune 66676-12-06 11:31 G 26074308.93 26074308.98 26074309.08 0.0089 0.0085

Neptune 66677-07-20 01:12 G 26074534.55 26074534.55 26074534.57 0.0089 0.0089

Jupiter 66681-07-09 06:58 G 26075984.65 26075984.79 26075984.92 0.0484 0.0364

Jupiter 66682-03-01 22:05 G 26076220.23 26076220.42 26076220.62 0.0487 0.0135

Saturn 66683-06-10 03:36 G 26076685.47 26076685.65 26076685.85 0.0279 0.0119

Saturn 66684-01-25 13:55 G 26076914.88 26076915.08 26076915.28 0.0278 0.0095

Jupiter 66687-05-12 18:43 G 26078118.16 26078118.28 26078118.41 0.0544 0.0424

Jupiter 66688-01-06 07:55 G 26078356.67 26078356.83 26078357.01 0.0540 0.0292

Uranus 66688-11-16 06:00 G 26078671.71 26078671.75 26078671.82 0.0143 0.0138

Uranus 66689-06-30 17:03 G 26078898.07 26078898.21 26078898.38 0.0143 0.0099

Uranus 66690-02-12 04:05 G 26079124.48 26079124.67 26079124.87 0.0143 0.0060

Uranus 66690-09-26 15:07 G 26079350.91 26079351.13 26079351.34 0.0142 0.0021

Uranus 66691-05-11 01:41 G 26079577.35 26079577.57 26079577.79 0.0142 0.0018

Uranus 66691-12-23 12:00 G 26079803.81 26079804.00 26079804.20 0.0142 0.0057

Uranus 66692-08-05 22:05 G 26080030.27 26080030.42 26080030.59 0.0142 0.0096

Uranus 66693-03-20 08:39 G 26080256.79 26080256.86 26080256.93 0.0142 0.0133

Jupiter 66693-11-05 03:36 G 26080486.45 26080486.65 26080486.85 0.0486 0.0004

Saturn 66698-07-06 07:27 G 26082190.61 26082190.81 26082191.01 0.0280 0.0087

Saturn 66699-02-20 21:07 G 26082420.20 26082420.38 26082420.57 0.0281 0.0134

Jupiter 66699-09-10 17:17 G 26082622.02 26082622.22 26082622.42 0.0541 0.0093

Mars 66699-10-12 04:05 G 26082653.64 26082653.67 26082653.71 0.1726 0.1684

Jupiter 66705-07-12 07:55 G 26084752.64 26084752.83 26084753.03 0.0485 0.0146

Jupiter 66706-03-05 00:00 G 26084988.37 26084988.50 26084988.64 0.0489 0.0358

Pluto 66707-08-22 12:29 G 26085523.86 26085524.02 26085524.24 0.0064 0.0034

Pluto 66708-04-03 17:17 G 26085749.00 26085749.22 26085749.44 0.0064 0.0001

Pluto 66708-11-14 20:53 G 26085974.20 26085974.37 26085974.57 0.0064 0.0036

Jupiter 66711-05-17 03:36 G 26086887.45 26086887.65 26086887.85 0.0543 0.0108

Saturn 66712-12-21 13:12 G 26087471.85 26087472.05 26087472.25 0.0279 0.0081

Saturn 66713-08-07 23:03 G 26087701.28 26087701.46 26087701.65 0.0278 0.0132

Jupiter 66717-03-17 13:41 G 26089018.91 26089019.07 26089019.24 0.0484 0.0283

Jupiter 66717-11-08 05:17 G 26089254.54 26089254.72 26089254.90 0.0488 0.0218

Jupiter 66723-01-19 14:24 G 26091152.93 26091153.10 26091153.27 0.0544 0.0306

Jupiter 66723-09-15 03:51 G 26091391.53 26091391.66 26091391.79 0.0539 0.0408

Saturn 66727-06-01 21:07 G 26092747.37 26092747.38 26092747.41 0.0279 0.0278

Saturn 66728-01-17 10:19 G 26092976.72 26092976.93 26092977.14 0.0280 0.0061

Saturn 66728-09-03 00:00 G 26093206.32 26093206.50 26093206.67 0.0281 0.0159

Jupiter 66728-11-20 19:27 G 26093285.21 26093285.31 26093285.42 0.0484 0.0417

Jupiter 66729-07-14 10:19 G 26093520.73 26093520.93 26093521.13 0.0487 0.0077

Uranus 66732-03-31 18:00 G 26094512.19 26094512.25 26094512.33 0.0135 0.0128

Uranus 66732-11-13 00:29 G 26094738.37 26094738.52 26094738.68 0.0135 0.0095

Uranus 66733-06-27 06:58 G 26094964.60 26094964.79 26094964.99 0.0136 0.0062

Moon 66733-07-05 15:22 G 26094973.00 26094973.14 26094973.29 0.2684 0.1385

Earth 66733-07-05 20:10 G 26094973.22 26094973.34 26094973.46 0.2688 0.1801 *

Mars 66733-08-10 10:05 G 26095008.84 26095008.92 26095009.00 0.1713 0.1528

Uranus 66734-02-08 13:41 G 26095190.86 26095191.07 26095191.28 0.0136 0.0028

Uranus 66734-09-22 20:24 G 26095417.14 26095417.35 26095417.57 0.0136 0.0006

Jupiter 66734-09-24 00:29 G 26095418.44 26095418.52 26095418.59 0.0545 0.0502

Uranus 66735-05-07 03:22 G 26095643.44 26095643.64 26095643.85 0.0136 0.0040

Jupiter 66735-05-20 14:39 G 26095656.93 26095657.11 26095657.30 0.0541 0.0216

Uranus 66735-12-19 10:19 G 26095869.76 26095869.93 26095870.12 0.0136 0.0074

Uranus 66736-08-01 17:31 G 26096096.10 26096096.23 26096096.37 0.0136 0.0108

Mars 66738-03-24 12:00 G 26096695.83 26096696.00 26096696.17 0.1805 0.0170

Neptune 66739-04-21 03:22 G 26097088.57 26097088.64 26097088.71 0.0088 0.0083

Neptune 66739-12-02 15:22 G 26097314.07 26097314.14 26097314.26 0.0088 0.0079

Neptune 66740-07-15 04:19 G 26097539.58 26097539.68 26097539.81 0.0088 0.0074

Neptune 66741-02-25 17:17 G 26097765.09 26097765.22 26097765.36 0.0088 0.0069

Jupiter 66741-03-19 16:19 G 26097786.98 26097787.18 26097787.38 0.0486 0.0061

Earth 66741-07-03 09:36 G 26097892.78 26097892.90 26097893.01 0.2690 0.1802

Neptune 66741-10-09 05:46 G 26097990.61 26097990.74 26097990.91 0.0088 0.0065

Jupiter 66741-11-10 09:36 G 26098022.82 26098022.90 26098022.99 0.0490 0.0443

Saturn 66741-11-16 05:17 G 26098028.67 26098028.72 26098028.78 0.0279 0.0268

Neptune 66742-05-22 18:29 G 26098216.13 26098216.27 26098216.45 0.0088 0.0060

Saturn 66742-07-03 16:05 G 26098257.96 26098258.17 26098258.37 0.0279 0.0054

Neptune 66743-01-03 07:12 G 26098441.65 26098441.80 26098441.99 0.0088 0.0055

Saturn 66743-02-18 01:41 G 26098487.41 26098487.57 26098487.75 0.0278 0.0160

Neptune 66743-08-16 19:55 G 26098667.16 26098667.33 26098667.53 0.0088 0.0050

Neptune 66744-03-29 08:39 G 26098892.68 26098892.86 26098893.06 0.0088 0.0045

Neptune 66744-11-09 21:22 G 26099118.21 26099118.39 26099118.60 0.0088 0.0040

Neptune 66745-06-23 10:05 G 26099343.73 26099343.92 26099344.13 0.0088 0.0035

Neptune 66746-02-03 22:48 G 26099569.25 26099569.45 26099569.66 0.0088 0.0030

Neptune 66746-09-17 11:31 G 26099794.77 26099794.98 26099795.20 0.0088 0.0025

Jupiter 66747-01-22 22:05 G 26099922.22 26099922.42 26099922.63 0.0542 0.0014

Neptune 66747-05-01 00:15 G 26100020.30 26100020.51 26100020.73 0.0088 0.0020

Neptune 66747-12-12 12:43 G 26100245.82 26100246.03 26100246.25 0.0088 0.0015

Neptune 66748-07-25 01:27 G 26100471.34 26100471.56 26100471.78 0.0088 0.0010

Neptune 66749-03-07 14:10 G 26100696.87 26100697.09 26100697.31 0.0088 0.0005

Neptune 66749-10-19 02:53 G 26100922.40 26100922.62 26100922.85 0.0088 0.0002

Neptune 66750-06-01 15:36 G 26101147.93 26101148.15 26101148.37 0.0088 0.0005

Neptune 66751-01-13 04:19 G 26101373.46 26101373.68 26101373.90 0.0088 0.0010

Neptune 66751-08-26 17:03 G 26101598.99 26101599.21 26101599.43 0.0088 0.0015

Neptune 66752-04-08 05:46 G 26101824.52 26101824.74 26101824.95 0.0088 0.0020

Neptune 66752-11-19 18:15 G 26102050.06 26102050.26 26102050.48 0.0088 0.0026

Jupiter 66752-11-22 22:05 G 26102053.23 26102053.42 26102053.60 0.0485 0.0199

Neptune 66753-07-03 06:58 G 26102275.59 26102275.79 26102276.01 0.0088 0.0031

Jupiter 66753-07-16 14:10 G 26102288.94 26102289.09 26102289.25 0.0489 0.0303

Neptune 66754-02-13 19:55 G 26102501.13 26102501.33 26102501.53 0.0088 0.0035

Neptune 66754-09-27 08:10 G 26102726.67 26102726.84 26102727.06 0.0088 0.0041

Neptune 66755-05-10 21:22 G 26102952.20 26102952.39 26102952.58 0.0088 0.0045

Neptune 66755-12-22 10:05 G 26103177.74 26103177.92 26103178.10 0.0088 0.0050

Neptune 66756-08-03 22:34 G 26103403.28 26103403.44 26103403.62 0.0088 0.0055

Saturn 66756-12-12 06:29 G 26103533.68 26103533.77 26103533.89 0.0280 0.0240

Neptune 66757-03-17 11:03 G 26103628.82 26103628.96 26103629.13 0.0088 0.0060

Saturn 66757-07-29 20:10 G 26103763.13 26103763.34 26103763.56 0.0280 0.0022

Neptune 66757-10-28 23:46 G 26103854.36 26103854.49 26103854.66 0.0088 0.0065

Saturn 66758-03-16 10:05 G 26103992.78 26103992.92 26103993.08 0.0281 0.0200

Neptune 66758-06-11 12:29 G 26104079.91 26104080.02 26104080.17 0.0088 0.0070

Jupiter 66758-09-27 06:43 G 26104187.59 26104187.78 26104187.97 0.0543 0.0191

Neptune 66759-01-23 01:27 G 26104305.45 26104305.56 26104305.68 0.0088 0.0075

Jupiter 66759-05-23 18:58 G 26104426.23 26104426.29 26104426.35 0.0538 0.0513

Neptune 66759-09-05 13:55 G 26104531.00 26104531.08 26104531.18 0.0088 0.0079

Neptune 66760-04-18 02:24 G 26104756.56 26104756.60 26104756.68 0.0088 0.0084

Jupiter 66764-07-29 02:53 G 26106319.47 26106319.62 26106319.77 0.0484 0.0336

Jupiter 66765-03-21 17:46 G 26106555.05 26106555.24 26106555.43 0.0487 0.0160

Mars 66765-08-09 13:27 G 26106695.95 26106696.06 26106696.18 0.1723 0.1293

Jupiter 66770-06-01 15:51 G 26108453.02 26108453.16 26108453.30 0.0545 0.0392

Jupiter 66771-01-26 05:46 G 26108691.59 26108691.74 26108691.91 0.0540 0.0325

Saturn 66771-05-29 15:51 G 26108815.04 26108815.16 26108815.28 0.0279 0.0228

Saturn 66772-01-14 02:10 G 26109044.38 26109044.59 26109044.80 0.0279 0.0014

Saturn 66772-08-30 11:31 G 26109273.85 26109273.98 26109274.14 0.0278 0.0198

Uranus 66773-03-01 01:55 G 26109456.46 26109456.58 26109456.71 0.0143 0.0115

Uranus 66773-10-13 12:58 G 26109682.86 26109683.04 26109683.23 0.0143 0.0076

Uranus 66774-05-28 00:00 G 26109909.29 26109909.50 26109909.71 0.0143 0.0037

Uranus 66775-01-09 10:48 G 26110135.73 26110135.95 26110136.16 0.0142 0.0003

Uranus 66775-08-23 21:07 G 26110362.18 26110362.38 26110362.59 0.0142 0.0041

Jupiter 66776-04-03 08:53 G 26110585.83 26110585.87 26110585.93 0.0484 0.0469

Uranus 66776-04-06 07:27 G 26110588.64 26110588.81 26110589.00 0.0142 0.0080

Uranus 66776-11-18 17:46 G 26110815.14 26110815.24 26110815.37 0.0142 0.0118

Jupiter 66776-11-24 23:31 G 26110821.27 26110821.48 26110821.68 0.0486 0.0021

Jupiter 66782-09-30 17:31 G 26112957.03 26112957.23 26112957.42 0.0542 0.0130

Saturn 66786-06-24 10:34 G 26114319.80 26114319.94 26114320.08 0.0280 0.0211

Saturn 66787-02-08 23:46 G 26114549.28 26114549.49 26114549.70 0.0280 0.0007

Saturn 66787-09-26 13:12 G 26114778.94 26114779.05 26114779.19 0.0281 0.0227

Jupiter 66788-07-31 04:48 G 26115087.50 26115087.70 26115087.90 0.0485 0.0118

Jupiter 66789-03-23 21:07 G 26115323.26 26115323.38 26115323.51 0.0489 0.0383

Jupiter 66794-06-05 04:05 G 26117222.47 26117222.67 26117222.87 0.0543 0.0068

Pluto 66797-02-25 11:31 G 26118218.80 26118218.98 26118219.19 0.0080 0.0038

Pluto 66797-10-08 22:19 G 26118444.24 26118444.43 26118444.65 0.0080 0.0031

Jupiter 66800-04-05 11:03 G 26119353.79 26119353.96 26119354.13 0.0485 0.0254

Jupiter 66800-11-27 02:53 G 26119589.44 26119589.62 26119589.79 0.0488 0.0245

Saturn 66800-12-08 18:00 G 26119601.11 26119601.25 26119601.40 0.0279 0.0203

Saturn 66801-07-26 04:34 G 26119830.47 26119830.69 26119830.90 0.0278 0.0012

Saturn 66802-03-12 13:55 G 26120059.97 26120060.08 26120060.21 0.0278 0.0223

Mars 66804-01-19 18:58 G 26120738.14 26120738.29 26120738.45 0.1809 0.0706

Jupiter 66806-02-07 11:31 G 26121487.81 26121487.98 26121488.16 0.0543 0.0272

Jupiter 66806-10-04 00:15 G 26121726.39 26121726.51 26121726.63 0.0538 0.0436

Jupiter 66811-12-10 16:34 G 26123620.08 26123620.19 26123620.32 0.0484 0.0389

Jupiter 66812-08-02 07:55 G 26123855.63 26123855.83 26123856.03 0.0487 0.0106

Saturn 66816-01-04 18:58 G 26125106.13 26125106.29 26125106.46 0.0280 0.0175

Uranus 66816-07-13 11:46 G 26125296.86 26125296.99 26125297.12 0.0135 0.0108

Saturn 66816-08-21 08:39 G 26125335.65 26125335.86 26125336.07 0.0281 0.0044

Uranus 66817-02-24 18:15 G 26125523.08 26125523.26 26125523.44 0.0135 0.0075

Saturn 66817-04-07 22:48 G 26125565.38 26125565.45 26125565.52 0.0281 0.0264

Uranus 66817-10-09 00:43 G 26125749.33 26125749.53 26125749.74 0.0136 0.0041

Jupiter 66817-10-12 19:55 G 26125753.24 26125753.33 26125753.43 0.0544 0.0471

Uranus 66818-05-23 07:41 G 26125975.60 26125975.82 26125976.04 0.0136 0.0008

Jupiter 66818-06-08 09:51 G 26125991.73 26125991.91 26125992.09 0.0540 0.0242

Uranus 66819-01-04 14:24 G 26126201.89 26126202.10 26126202.31 0.0136 0.0026

Uranus 66819-08-18 21:07 G 26126428.19 26126428.38 26126428.58 0.0136 0.0060

Uranus 66820-04-01 04:05 G 26126654.53 26126654.67 26126654.84 0.0136 0.0094

Neptune 66820-10-23 11:03 G 26126859.91 26126859.96 26126860.02 0.0090 0.0086

Uranus 66820-11-13 11:03 G 26126880.91 26126880.96 26126881.05 0.0137 0.0129

Neptune 66821-06-05 23:46 G 26127085.43 26127085.49 26127085.61 0.0090 0.0082

Neptune 66822-01-17 13:12 G 26127310.96 26127311.05 26127311.18 0.0090 0.0077

Neptune 66822-08-31 02:24 G 26127536.49 26127536.60 26127536.76 0.0090 0.0072

Neptune 66823-04-13 16:19 G 26127762.04 26127762.18 26127762.33 0.0090 0.0066

Neptune 66823-11-25 05:31 G 26127987.58 26127987.73 26127987.90 0.0090 0.0061

Jupiter 66824-04-07 12:15 G 26128121.81 26128122.01 26128122.22 0.0485 0.0037

Neptune 66824-07-07 18:43 G 26128213.12 26128213.28 26128213.46 0.0090 0.0056

Jupiter 66824-11-29 05:17 G 26128357.66 26128357.72 26128357.78 0.0490 0.0464

Neptune 66825-02-18 08:10 G 26128438.67 26128438.84 26128439.03 0.0090 0.0051

Neptune 66825-10-01 21:22 G 26128664.22 26128664.39 26128664.59 0.0090 0.0046

Neptune 66826-05-15 10:48 G 26128889.77 26128889.95 26128890.16 0.0090 0.0040

Neptune 66826-12-27 00:15 G 26129115.31 26129115.51 26129115.72 0.0090 0.0035

Neptune 66827-08-09 13:41 G 26129340.87 26129341.07 26129341.28 0.0090 0.0030

Neptune 66828-03-22 02:53 G 26129566.42 26129566.62 26129566.85 0.0090 0.0025

Neptune 66828-11-02 16:19 G 26129791.98 26129792.18 26129792.41 0.0090 0.0020

Neptune 66829-06-16 06:00 G 26130017.53 26130017.75 26130017.97 0.0090 0.0014

Neptune 66830-01-27 19:12 G 26130243.09 26130243.30 26130243.52 0.0089 0.0009

Jupiter 66830-02-10 19:27 G 26130257.10 26130257.31 26130257.51 0.0543 0.0044

Saturn 66830-06-21 04:34 G 26130387.53 26130387.69 26130387.88 0.0279 0.0163

Neptune 66830-09-10 08:39 G 26130468.64 26130468.86 26130469.08 0.0089 0.0003

Saturn 66831-02-05 14:53 G 26130616.92 26130617.12 26130617.33 0.0279 0.0052

Neptune 66831-04-23 22:19 G 26130694.21 26130694.43 26130694.65 0.0089 0.0003

Mars 66831-06-06 22:34 G 26130738.29 26130738.44 26130738.58 0.1719 0.0894

Saturn 66831-09-23 00:29 G 26130846.45 26130846.52 26130846.59 0.0278 0.0262

Neptune 66831-12-05 11:31 G 26130919.76 26130919.98 26130920.20 0.0089 0.0008

Neptune 66832-07-18 00:43 G 26131145.32 26131145.53 26131145.76 0.0089 0.0013

Neptune 66833-02-28 14:10 G 26131370.88 26131371.09 26131371.31 0.0089 0.0018

Neptune 66833-10-12 03:22 G 26131596.44 26131596.64 26131596.86 0.0089 0.0024

Neptune 66834-05-25 17:03 G 26131822.00 26131822.21 26131822.42 0.0089 0.0029

Neptune 66835-01-06 06:00 G 26132047.56 26132047.75 26132047.96 0.0089 0.0034

Neptune 66835-08-19 19:12 G 26132273.12 26132273.30 26132273.51 0.0089 0.0040

Jupiter 66835-12-12 18:15 G 26132388.08 26132388.26 26132388.46 0.0485 0.0173

Neptune 66836-04-01 08:39 G 26132498.68 26132498.86 26132499.06 0.0089 0.0045

Jupiter 66836-08-04 10:05 G 26132623.77 26132623.92 26132624.07 0.0488 0.0326

Neptune 66836-11-12 22:05 G 26132724.24 26132724.42 26132724.61 0.0089 0.0050

Neptune 66837-06-26 11:03 G 26132949.81 26132949.96 26132950.15 0.0089 0.0055

Neptune 66838-02-07 00:15 G 26133175.37 26133175.51 26133175.70 0.0089 0.0061

Neptune 66838-09-20 13:41 G 26133400.94 26133401.07 26133401.24 0.0089 0.0065

Moon 66839-01-07 20:53 G 26133510.31 26133510.37 26133510.43 0.2641 0.2426

Neptune 66839-05-04 03:07 G 26133626.52 26133626.63 26133626.78 0.0089 0.0070

Neptune 66839-12-15 16:19 G 26133852.09 26133852.18 26133852.32 0.0089 0.0076

Neptune 66840-07-28 05:46 G 26134077.66 26134077.74 26134077.85 0.0089 0.0080

Neptune 66841-03-10 18:58 G 26134303.25 26134303.29 26134303.38 0.0089 0.0085

Jupiter 66841-10-16 06:15 G 26134522.57 26134522.76 26134522.96 0.0544 0.0156

Saturn 66845-07-16 23:03 G 26135892.28 26135892.46 26135892.65 0.0280 0.0145

Saturn 66846-03-03 12:29 G 26136121.81 26136122.02 26136122.23 0.0280 0.0073

Moon 66847-01-05 13:12 G 26136429.90 26136430.05 26136430.20 0.2645 0.0728

Earth 66847-01-05 18:29 G 26136430.11 26136430.27 26136430.42 0.2643 0.0429 *

Jupiter 66847-08-17 23:46 G 26136654.34 26136654.49 26136654.65 0.0484 0.0309

Jupiter 66848-04-09 14:53 G 26136889.93 26136890.12 26136890.31 0.0487 0.0186

Jupiter 66853-06-20 16:48 G 26138788.05 26138788.20 26138788.36 0.0544 0.0351

Jupiter 66854-02-14 06:29 G 26139026.62 26139026.77 26139026.93 0.0540 0.0360

Uranus 66856-10-29 09:51 G 26140014.83 26140014.91 26140014.99 0.0143 0.0132

Uranus 66857-06-12 20:53 G 26140241.21 26140241.37 26140241.54 0.0143 0.0093

Uranus 66858-01-25 07:55 G 26140467.63 26140467.83 26140468.04 0.0143 0.0054

Uranus 66858-09-08 18:58 G 26140694.07 26140694.29 26140694.51 0.0142 0.0014

Uranus 66859-04-23 05:46 G 26140920.52 26140920.74 26140920.95 0.0142 0.0025

Jupiter 66859-04-23 06:15 G 26140920.68 26140920.76 26140920.84 0.0484 0.0441 *

Uranus 66859-12-05 16:19 G 26141146.98 26141147.18 26141147.37 0.0142 0.0063

Jupiter 66859-12-14 20:53 G 26141156.17 26141156.37 26141156.58 0.0486 0.0049

Saturn 66860-01-01 06:29 G 26141173.59 26141173.77 26141173.95 0.0279 0.0137

Uranus 66860-07-19 02:24 G 26141373.46 26141373.60 26141373.76 0.0142 0.0102

Saturn 66860-08-17 16:34 G 26141402.99 26141403.19 26141403.40 0.0278 0.0077

Uranus 66861-03-02 12:29 G 26141600.01 26141600.02 26141600.07 0.0142 0.0140

Jupiter 66865-10-19 15:07 G 26143291.94 26143292.13 26143292.32 0.0541 0.0162

Mars 66869-11-16 01:41 G 26144780.45 26144780.57 26144780.69 0.1813 0.1260

Jupiter 66871-08-20 02:24 G 26145422.40 26145422.60 26145422.80 0.0485 0.0089

Jupiter 66872-04-11 18:58 G 26145658.19 26145658.29 26145658.41 0.0490 0.0411

Saturn 66875-01-27 06:15 G 26146678.57 26146678.76 26146678.96 0.0280 0.0112

Saturn 66875-09-13 19:55 G 26146908.14 26146908.33 26146908.53 0.0281 0.0108

Jupiter 66877-06-24 00:00 G 26147557.30 26147557.50 26147557.71 0.0542 0.0039

Jupiter 66883-04-25 07:27 G 26149688.64 26149688.81 26149689.00 0.0484 0.0228

Jupiter 66883-12-16 22:48 G 26149924.29 26149924.45 26149924.63 0.0488 0.0269

Jupiter 66889-02-26 08:10 G 26151822.67 26151822.84 26151823.03 0.0544 0.0242

Saturn 66889-07-13 17:03 G 26151960.02 26151960.21 26151960.42 0.0279 0.0097

Jupiter 66889-10-22 21:36 G 26152061.31 26152061.40 26152061.51 0.0539 0.0465

Saturn 66890-02-28 03:07 G 26152189.44 26152189.63 26152189.82 0.0279 0.0117

Jupiter 66894-12-29 13:55 G 26153954.95 26153955.08 26153955.22 0.0484 0.0360

Jupiter 66895-08-22 04:19 G 26154190.49 26154190.68 26154190.88 0.0486 0.0131

Mars 66897-04-03 07:55 G 26154780.66 26154780.83 26154780.99 0.1716 0.0516

Uranus 66900-03-13 23:17 G 26155855.38 26155855.47 26155855.58 0.0135 0.0120

Uranus 66900-10-26 05:46 G 26156081.58 26156081.74 26156081.91 0.0135 0.0088

Jupiter 66900-11-01 18:58 G 26156088.17 26156088.29 26156088.41 0.0545 0.0437

Uranus 66901-06-09 12:15 G 26156307.82 26156308.01 26156308.22 0.0135 0.0054

Jupiter 66901-06-28 09:36 G 26156326.73 26156326.90 26156327.08 0.0541 0.0276

Uranus 66902-01-21 18:58 G 26156534.07 26156534.29 26156534.50 0.0136 0.0021

Uranus 66902-09-05 01:41 G 26156760.35 26156760.57 26156760.78 0.0136 0.0013

Neptune 66902-12-10 22:48 G 26156857.45 26156857.45 26156857.48 0.0088 0.0088

Uranus 66903-04-19 08:24 G 26156986.65 26156986.85 26156987.06 0.0136 0.0047

Neptune 66903-07-24 11:31 G 26157082.92 26157082.98 26157083.06 0.0088 0.0083

Uranus 66903-12-01 15:22 G 26157212.97 26157213.14 26157213.32 0.0136 0.0081

Neptune 66904-03-06 00:29 G 26157308.42 26157308.52 26157308.62 0.0088 0.0078

Uranus 66904-07-14 22:19 G 26157439.32 26157439.43 26157439.55 0.0136 0.0115

Saturn 66904-08-09 10:48 G 26157464.75 26157464.95 26157465.16 0.0280 0.0081

Neptune 66904-10-17 12:43 G 26157533.94 26157534.03 26157534.18 0.0088 0.0074

Saturn 66905-03-27 00:15 G 26157694.33 26157694.51 26157694.70 0.0280 0.0138

Neptune 66905-05-31 01:41 G 26157759.45 26157759.57 26157759.72 0.0088 0.0069

Neptune 66906-01-11 14:24 G 26157984.96 26157985.10 26157985.27 0.0088 0.0064

Neptune 66906-08-25 03:07 G 26158210.48 26158210.63 26158210.81 0.0088 0.0059

Neptune 66907-04-07 16:05 G 26158436.00 26158436.17 26158436.35 0.0088 0.0054

Jupiter 66907-04-28 09:36 G 26158456.70 26158456.90 26158457.11 0.0486 0.0013

Neptune 66907-11-19 04:48 G 26158661.52 26158661.70 26158661.89 0.0088 0.0049

Jupiter 66907-12-20 02:39 G 26158692.60 26158692.61 26158692.62 0.0490 0.0489

Neptune 66908-07-01 17:31 G 26158887.04 26158887.23 26158887.42 0.0088 0.0044

Neptune 66909-02-12 06:15 G 26159112.56 26159112.76 26159112.96 0.0088 0.0039

Neptune 66909-09-25 18:58 G 26159338.09 26159338.29 26159338.50 0.0088 0.0034

Neptune 66910-05-09 07:41 G 26159563.61 26159563.82 26159564.03 0.0088 0.0029

Neptune 66910-12-20 20:24 G 26159789.13 26159789.35 26159789.56 0.0088 0.0024

Neptune 66911-08-03 08:53 G 26160014.66 26160014.87 26160015.09 0.0088 0.0019

Neptune 66912-03-15 21:36 G 26160240.18 26160240.40 26160240.62 0.0088 0.0014

Neptune 66912-10-27 10:19 G 26160465.71 26160465.93 26160466.15 0.0088 0.0009

Jupiter 66913-03-02 20:39 G 26160592.16 26160592.36 26160592.56 0.0542 0.0083

Neptune 66913-06-09 23:03 G 26160691.24 26160691.46 26160691.68 0.0088 0.0004

Neptune 66914-01-21 11:31 G 26160916.76 26160916.98 26160917.20 0.0088 0.0001

Neptune 66914-09-04 00:15 G 26161142.29 26161142.51 26161142.73 0.0088 0.0006

Neptune 66915-04-17 12:58 G 26161367.82 26161368.04 26161368.26 0.0088 0.0011

Neptune 66915-11-29 01:41 G 26161593.35 26161593.57 26161593.78 0.0088 0.0016

Neptune 66916-07-11 14:10 G 26161818.88 26161819.09 26161819.31 0.0088 0.0021

Neptune 66917-02-22 02:53 G 26162044.41 26162044.62 26162044.83 0.0088 0.0026

Neptune 66917-10-05 15:51 G 26162269.95 26162270.16 26162270.37 0.0088 0.0031

Neptune 66918-05-19 04:34 G 26162495.49 26162495.69 26162495.89 0.0088 0.0036

Neptune 66918-12-30 17:17 G 26162721.02 26162721.22 26162721.41 0.0088 0.0041

Jupiter 66919-01-01 16:05 G 26162722.97 26162723.17 26162723.36 0.0485 0.0144

Saturn 66919-01-24 18:00 G 26162746.05 26162746.25 26162746.46 0.0279 0.0073

Neptune 66919-08-13 05:46 G 26162946.56 26162946.74 26162946.93 0.0088 0.0046

Jupiter 66919-08-25 07:55 G 26162958.69 26162958.83 26162958.97 0.0489 0.0353

Saturn 66919-09-11 04:05 G 26162975.49 26162975.67 26162975.85 0.0278 0.0140

Neptune 66920-03-25 18:29 G 26163172.10 26163172.27 26163172.45 0.0088 0.0051

Neptune 66920-11-06 07:12 G 26163397.64 26163397.80 26163397.98 0.0088 0.0056

Neptune 66921-06-19 19:55 G 26163623.19 26163623.33 26163623.50 0.0088 0.0061

Neptune 66922-01-31 08:24 G 26163848.73 26163848.85 26163849.01 0.0088 0.0066

Neptune 66922-09-13 21:07 G 26164074.27 26164074.38 26164074.53 0.0088 0.0071

Neptune 66923-04-27 09:36 G 26164299.82 26164299.90 26164300.04 0.0088 0.0076

Neptune 66923-12-08 22:48 G 26164525.37 26164525.45 26164525.54 0.0088 0.0081

Neptune 66924-07-21 11:17 G 26164750.93 26164750.97 26164751.04 0.0088 0.0085

Jupiter 66924-11-05 05:31 G 26164857.53 26164857.73 26164857.93 0.0543 0.0118

Jupiter 66930-09-06 21:36 G 26166989.24 26166989.40 26166989.57 0.0484 0.0280

Jupiter 66931-04-30 13:12 G 26167224.86 26167225.05 26167225.23 0.0488 0.0215

Saturn 66933-07-05 03:22 G 26168021.59 26168021.64 26168021.71 0.0280 0.0267

Saturn 66934-02-19 16:48 G 26168250.99 26168251.20 26168251.41 0.0280 0.0050

Saturn 66934-10-07 06:29 G 26168480.60 26168480.77 26168480.94 0.0281 0.0170

Mars 66935-09-14 08:24 G 26168822.84 26168822.85 26168822.87 0.1816 0.1809

Jupiter 66936-07-10 14:10 G 26169122.92 26169123.09 26169123.25 0.0544 0.0318

Jupiter 66937-03-06 03:22 G 26169361.50 26169361.64 26169361.78 0.0539 0.0389

Uranus 66941-02-11 05:46 G 26170799.60 26170799.74 26170799.88 0.0143 0.0109

Uranus 66941-09-25 16:48 G 26171026.02 26171026.20 26171026.40 0.0143 0.0070

Uranus 66942-05-10 03:51 G 26171252.45 26171252.66 26171252.88 0.0143 0.0031

Jupiter 66942-05-13 03:22 G 26171255.54 26171255.64 26171255.75 0.0484 0.0413

Uranus 66942-12-22 14:39 G 26171478.90 26171479.11 26171479.33 0.0142 0.0009

Jupiter 66943-01-03 17:46 G 26171491.04 26171491.24 26171491.45 0.0486 0.0076

Uranus 66943-08-06 01:27 G 26171705.35 26171705.56 26171705.76 0.0142 0.0048

Uranus 66944-03-19 11:46 G 26171931.82 26171931.99 26171932.17 0.0142 0.0086

Uranus 66944-10-31 21:51 G 26172158.33 26172158.41 26172158.54 0.0142 0.0125

Saturn 66947-12-20 17:31 G 26173303.14 26173303.23 26173303.34 0.0280 0.0246

Jupiter 66948-03-14 21:22 G 26173388.34 26173388.39 26173388.45 0.0545 0.0519

Saturn 66948-08-06 04:19 G 26173532.47 26173532.68 26173532.89 0.0279 0.0033

Jupiter 66948-11-08 12:29 G 26173626.83 26173627.02 26173627.21 0.0542 0.0191

Saturn 66949-03-23 14:24 G 26173761.94 26173762.10 26173762.26 0.0279 0.0180

Jupiter 66954-09-09 00:00 G 26175757.29 26175757.50 26175757.70 0.0485 0.0062

Jupiter 66955-05-02 15:51 G 26175993.08 26175993.16 26175993.26 0.0489 0.0434

Pluto 66955-07-26 17:17 G 26176078.13 26176078.22 26176078.36 0.0064 0.0054

Pluto 66956-03-07 21:36 G 26176303.20 26176303.40 26176303.62 0.0064 0.0020

Pluto 66956-10-19 01:55 G 26176528.37 26176528.58 26176528.80 0.0064 0.0015

Pluto 66957-06-01 05:31 G 26176753.62 26176753.73 26176753.89 0.0064 0.0051

Jupiter 66960-07-13 23:31 G 26177892.27 26177892.48 26177892.68 0.0543 0.0009

Saturn 66963-01-15 08:24 G 26178807.75 26178807.85 26178807.98 0.0279 0.0234

Mars 66963-01-30 17:17 G 26178823.05 26178823.22 26178823.40 0.1713 0.0138

Saturn 66963-09-01 21:36 G 26179037.18 26179037.40 26179037.61 0.0280 0.0019

Saturn 66964-04-18 11:03 G 26179266.81 26179266.96 26179267.11 0.0280 0.0200

Jupiter 66966-05-15 05:31 G 26180023.55 26180023.73 26180023.92 0.0484 0.0198

Jupiter 66967-01-05 20:39 G 26180259.21 26180259.36 26180259.53 0.0488 0.0296

Mars 66967-09-13 18:58 G 26180510.22 26180510.29 26180510.36 0.1805 0.1638

Jupiter 66972-03-18 10:34 G 26182157.75 26182157.94 26182158.13 0.0544 0.0199

Jupiter 66972-11-11 23:46 G 26182396.42 26182396.49 26182396.56 0.0539 0.0502

Earth 66976-07-06 19:41 G 26183729.20 26183729.32 26183729.44 0.2689 0.1769

Moon 66976-07-06 22:34 G 26183729.36 26183729.44 26183729.52 0.2696 0.2300 *

Saturn 66977-07-01 18:00 G 26184089.13 26184089.25 26184089.38 0.0279 0.0224

Jupiter 66978-01-18 12:00 G 26184289.85 26184290.00 26184290.15 0.0484 0.0331

Saturn 66978-02-16 04:48 G 26184318.49 26184318.70 26184318.91 0.0279 0.0010

Jupiter 66978-09-11 02:39 G 26184525.42 26184525.61 26184525.80 0.0487 0.0159

Saturn 66978-10-03 14:39 G 26184547.97 26184548.11 26184548.26 0.0278 0.0201

Uranus 66983-11-12 10:34 G 26186413.93 26186413.94 26186414.00 0.0135 0.0133

Jupiter 66983-11-21 19:41 G 26186423.19 26186423.32 26186423.46 0.0544 0.0396

Uranus 66984-06-25 17:03 G 26186640.08 26186640.21 26186640.37 0.0135 0.0100

Earth 66984-07-04 09:07 G 26186648.77 26186648.88 26186649.00 0.2691 0.1846

Moon 66984-07-04 14:53 G 26186648.97 26186649.12 26186649.26 0.2693 0.1073 *

Jupiter 66984-07-17 09:36 G 26186661.73 26186661.90 26186662.06 0.0540 0.0312

Neptune 66985-01-25 18:15 G 26186854.20 26186854.26 26186854.32 0.0090 0.0086

Uranus 66985-02-06 23:31 G 26186866.30 26186866.48 26186866.68 0.0135 0.0067

Neptune 66985-09-08 06:58 G 26187079.73 26187079.79 26187079.91 0.0090 0.0082

Uranus 66985-09-21 06:15 G 26187092.55 26187092.76 26187092.97 0.0135 0.0034

Neptune 66986-04-21 21:07 G 26187305.27 26187305.38 26187305.49 0.0090 0.0076

Uranus 66986-05-05 12:58 G 26187318.82 26187319.04 26187319.26 0.0136 0.0002

Neptune 66986-12-03 10:19 G 26187530.80 26187530.93 26187531.07 0.0090 0.0071

Uranus 66986-12-17 19:27 G 26187545.10 26187545.31 26187545.53 0.0136 0.0034

Neptune 66987-07-16 23:31 G 26187756.34 26187756.48 26187756.63 0.0090 0.0066

Uranus 66987-08-01 02:10 G 26187771.41 26187771.59 26187771.78 0.0136 0.0067

Neptune 66988-02-27 12:43 G 26187981.89 26187982.03 26187982.21 0.0090 0.0061

Uranus 66988-03-14 09:07 G 26187997.74 26187997.88 26187998.03 0.0136 0.0101

Neptune 66988-10-10 02:10 G 26188207.43 26188207.59 26188207.77 0.0090 0.0056

Uranus 66988-10-26 15:51 G 26188224.15 26188224.16 26188224.20 0.0136 0.0136

Neptune 66989-05-23 15:22 G 26188432.98 26188433.14 26188433.34 0.0090 0.0051

Jupiter 66989-09-23 17:31 G 26188556.18 26188556.23 26188556.29 0.0484 0.0463

Neptune 66990-01-04 04:34 G 26188658.52 26188658.69 26188658.90 0.0090 0.0046

Jupiter 66990-05-17 08:24 G 26188791.64 26188791.85 26188792.05 0.0486 0.0023

Neptune 66990-08-17 18:15 G 26188884.07 26188884.26 26188884.46 0.0090 0.0040

Neptune 66991-03-31 07:41 G 26189109.62 26189109.82 26189110.03 0.0090 0.0035

Neptune 66991-11-11 20:53 G 26189335.18 26189335.37 26189335.59 0.0090 0.0030

Neptune 66992-06-24 10:34 G 26189560.73 26189560.94 26189561.15 0.0090 0.0024

Saturn 66992-07-27 12:43 G 26189593.89 26189594.03 26189594.18 0.0280 0.0207

Neptune 66993-02-04 23:46 G 26189786.28 26189786.49 26189786.71 0.0090 0.0019

Saturn 66993-03-14 01:55 G 26189823.37 26189823.58 26189823.80 0.0280 0.0011

Neptune 66993-09-18 13:12 G 26190011.83 26190012.05 26190012.27 0.0090 0.0013

Saturn 66993-10-29 15:51 G 26190053.04 26190053.16 26190053.28 0.0281 0.0229

Neptune 66994-05-02 02:39 G 26190237.40 26190237.61 26190237.83 0.0090 0.0008

Neptune 66994-12-13 16:05 G 26190462.95 26190463.17 26190463.39 0.0090 0.0003

Neptune 66995-07-27 05:31 G 26190688.51 26190688.73 26190688.95 0.0089 0.0003

Neptune 66996-03-08 18:43 G 26190914.07 26190914.28 26190914.51 0.0089 0.0009

Jupiter 66996-03-21 18:58 G 26190927.09 26190927.29 26190927.48 0.0542 0.0116

Neptune 66996-10-20 08:10 G 26191139.63 26191139.84 26191140.07 0.0089 0.0014

Neptune 66997-06-02 21:36 G 26191365.19 26191365.40 26191365.62 0.0089 0.0019

Neptune 66998-01-14 10:48 G 26191590.75 26191590.95 26191591.18 0.0089 0.0025

Neptune 66998-08-28 00:15 G 26191816.31 26191816.51 26191816.73 0.0089 0.0030

Neptune 66999-04-10 13:55 G 26192041.88 26192042.08 26192042.28 0.0089 0.0035

Neptune 66999-11-22 02:53 G 26192267.44 26192267.62 26192267.83 0.0089 0.0041

Neptune 67000-07-05 16:19 G 26192493.00 26192493.18 26192493.38 0.0089 0.0046

68TH MILLENNIUM CE

This is a list of transits of Venus in the 68th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 67001-02-16 05:31 G 26192718.56 26192718.73 26192718.92 0.0089 0.0051

Neptune 67001-09-29 18:58 G 26192944.12 26192944.29 26192944.47 0.0089 0.0056

Jupiter 67002-01-21 13:55 G 26193057.88 26193058.08 26193058.28 0.0485 0.0117

Neptune 67002-05-13 07:55 G 26193169.70 26193169.83 26193170.02 0.0089 0.0062

Jupiter 67002-09-14 05:46 G 26193293.61 26193293.74 26193293.86 0.0489 0.0377

Neptune 67002-12-24 21:22 G 26193395.26 26193395.39 26193395.56 0.0089 0.0066

Neptune 67003-08-07 10:34 G 26193620.83 26193620.94 26193621.09 0.0089 0.0071

Neptune 67004-03-19 23:46 G 26193846.40 26193846.49 26193846.63 0.0089 0.0077

Neptune 67004-10-31 13:12 G 26194071.98 26194072.05 26194072.16 0.0089 0.0081

Neptune 67005-06-14 02:39 G 26194297.57 26194297.61 26194297.68 0.0089 0.0086

Saturn 67007-01-13 03:22 G 26194875.49 26194875.64 26194875.80 0.0280 0.0185

Saturn 67007-08-30 14:10 G 26195104.88 26195105.09 26195105.30 0.0279 0.0029

Jupiter 67007-11-26 02:39 G 26195192.41 26195192.61 26195192.81 0.0544 0.0088

Saturn 67008-04-16 00:00 G 26195334.40 26195334.50 26195334.61 0.0279 0.0241

Jupiter 67013-09-26 20:24 G 26197324.18 26197324.35 26197324.52 0.0484 0.0250

Jupiter 67014-05-20 11:03 G 26197559.79 26197559.96 26197560.14 0.0487 0.0241

Jupiter 67019-07-31 12:58 G 26199457.87 26199458.04 26199458.22 0.0545 0.0285

Jupiter 67020-03-26 03:22 G 26199696.51 26199696.64 26199696.76 0.0540 0.0421

Saturn 67022-02-07 18:15 G 26200380.10 26200380.26 26200380.44 0.0279 0.0173

Saturn 67022-09-25 07:12 G 26200609.60 26200609.80 26200610.02 0.0280 0.0044

Saturn 67023-05-12 20:53 G 26200839.30 26200839.37 26200839.45 0.0280 0.0260

Uranus 67024-10-12 13:27 G 26201357.96 26201358.06 26201358.16 0.0143 0.0126

Uranus 67025-05-27 00:29 G 26201584.36 26201584.52 26201584.70 0.0143 0.0087

Jupiter 67025-06-02 01:55 G 26201590.47 26201590.58 26201590.71 0.0483 0.0383

Uranus 67026-01-08 11:31 G 26201810.78 26201810.98 26201811.19 0.0143 0.0048

Jupiter 67026-01-23 16:19 G 26201825.98 26201826.18 26201826.38 0.0486 0.0103

Uranus 67026-08-22 22:34 G 26202037.22 26202037.44 26202037.66 0.0143 0.0008

Uranus 67027-04-06 09:22 G 26202263.68 26202263.89 26202264.10 0.0142 0.0031

Uranus 67027-11-18 19:55 G 26202490.15 26202490.33 26202490.53 0.0142 0.0070

Uranus 67028-07-02 06:29 G 26202716.63 26202716.77 26202716.91 0.0142 0.0108

Mars 67028-11-28 02:39 G 26202865.44 26202865.61 26202865.79 0.1710 0.0236

Jupiter 67031-04-05 00:15 G 26203723.41 26203723.51 26203723.61 0.0545 0.0475

Jupiter 67031-11-29 15:07 G 26203961.95 26203962.13 26203962.32 0.0542 0.0234

Mars 67033-07-12 01:41 G 26204552.43 26204552.57 26204552.71 0.1809 0.1091

Saturn 67036-07-25 03:22 G 26205661.48 26205661.64 26205661.82 0.0279 0.0164

Saturn 67037-03-11 14:10 G 26205890.88 26205891.09 26205891.30 0.0279 0.0050

Jupiter 67037-09-28 22:34 G 26206092.24 26206092.44 26206092.65 0.0485 0.0032

Saturn 67037-10-27 00:00 G 26206120.43 26206120.50 26206120.57 0.0278 0.0260

Jupiter 67038-05-22 15:07 G 26206328.07 26206328.13 26206328.20 0.0490 0.0461

Jupiter 67043-08-04 00:58 G 26208227.34 26208227.54 26208227.75 0.0543 0.0037

Pluto 67045-01-30 14:24 G 26208773.02 26208773.10 26208773.17 0.0080 0.0075

Pluto 67045-09-13 00:58 G 26208998.32 26208998.54 26208998.76 0.0080 0.0006

Pluto 67046-04-26 10:48 G 26209223.83 26209223.95 26209224.11 0.0080 0.0062

Jupiter 67049-06-04 04:34 G 26210358.50 26210358.69 26210358.88 0.0485 0.0168

Jupiter 67050-01-25 20:10 G 26210594.19 26210594.34 26210594.49 0.0488 0.0325

Saturn 67051-08-20 21:07 G 26211166.20 26211166.38 26211166.56 0.0280 0.0149

Saturn 67052-04-06 10:19 G 26211395.72 26211395.93 26211396.13 0.0280 0.0069

Jupiter 67055-04-08 10:05 G 26212492.73 26212492.92 26212493.11 0.0544 0.0162

Jupiter 67055-12-02 22:34 G 26212731.42 26212731.44 26212731.47 0.0538 0.0533

Jupiter 67061-02-07 10:34 G 26214624.79 26214624.94 26214625.10 0.0484 0.0302

Jupiter 67061-10-01 01:27 G 26214860.37 26214860.56 26214860.75 0.0487 0.0186

Saturn 67066-02-04 12:00 G 26216447.82 26216448.00 26216448.19 0.0280 0.0126

Saturn 67066-09-21 22:48 G 26216677.25 26216677.45 26216677.65 0.0279 0.0088

Jupiter 67066-12-11 16:34 G 26216758.05 26216758.19 26216758.35 0.0545 0.0367

Neptune 67067-03-15 07:55 G 26216851.82 26216851.83 26216851.86 0.0088 0.0087

Jupiter 67067-08-07 07:12 G 26216996.65 26216996.80 26216996.96 0.0541 0.0340

Neptune 67067-10-26 20:24 G 26217077.30 26217077.35 26217077.44 0.0088 0.0083

Uranus 67068-02-25 04:48 G 26217198.59 26217198.70 26217198.83 0.0135 0.0112

Neptune 67068-06-08 09:07 G 26217302.80 26217302.88 26217303.00 0.0088 0.0078

Uranus 67068-10-08 11:17 G 26217424.80 26217424.97 26217425.15 0.0135 0.0080

Neptune 67069-01-19 21:51 G 26217528.31 26217528.41 26217528.55 0.0088 0.0073

Uranus 67069-05-22 17:31 G 26217651.04 26217651.23 26217651.44 0.0135 0.0047

Neptune 67069-09-02 10:48 G 26217753.82 26217753.95 26217754.10 0.0088 0.0068

Uranus 67070-01-04 00:15 G 26217877.29 26217877.51 26217877.73 0.0136 0.0013

Neptune 67070-04-15 23:46 G 26217979.33 26217979.49 26217979.64 0.0088 0.0063

Uranus 67070-08-18 06:43 G 26218103.57 26218103.78 26218104.00 0.0136 0.0021

Neptune 67070-11-27 11:46 G 26218204.85 26218204.99 26218205.18 0.0088 0.0059

Uranus 67071-04-01 13:12 G 26218329.86 26218330.05 26218330.26 0.0136 0.0055

Neptune 67071-07-11 00:29 G 26218430.37 26218430.52 26218430.72 0.0088 0.0054

Uranus 67071-11-13 20:10 G 26218556.18 26218556.34 26218556.51 0.0136 0.0088

Neptune 67072-02-21 13:12 G 26218655.89 26218656.05 26218656.25 0.0088 0.0049

Uranus 67072-06-27 02:53 G 26218782.54 26218782.62 26218782.73 0.0136 0.0123

Neptune 67072-10-04 02:10 G 26218881.42 26218881.59 26218881.80 0.0088 0.0044

Jupiter 67072-10-13 17:17 G 26218891.14 26218891.22 26218891.32 0.0483 0.0432

Neptune 67073-05-17 14:53 G 26219106.94 26219107.12 26219107.33 0.0088 0.0039

Jupiter 67073-06-06 07:27 G 26219126.61 26219126.81 26219127.02 0.0485 0.0052

Neptune 67073-12-29 03:36 G 26219332.46 26219332.65 26219332.87 0.0088 0.0034

Neptune 67074-08-11 16:19 G 26219557.98 26219558.18 26219558.40 0.0088 0.0029

Neptune 67075-03-25 04:48 G 26219783.50 26219783.70 26219783.93 0.0088 0.0024

Neptune 67075-11-05 17:46 G 26220009.03 26220009.24 26220009.46 0.0088 0.0019

Neptune 67076-06-18 06:29 G 26220234.56 26220234.77 26220234.99 0.0088 0.0013

Neptune 67077-01-29 18:58 G 26220460.08 26220460.29 26220460.52 0.0088 0.0009

Neptune 67077-09-12 07:41 G 26220685.61 26220685.82 26220686.05 0.0088 0.0004

Neptune 67078-04-25 20:24 G 26220911.13 26220911.35 26220911.57 0.0088 0.0002

Neptune 67078-12-07 09:07 G 26221136.66 26221136.88 26221137.10 0.0088 0.0007

Jupiter 67079-04-11 18:29 G 26221262.07 26221262.27 26221262.46 0.0543 0.0149

Neptune 67079-07-20 21:36 G 26221362.18 26221362.40 26221362.62 0.0088 0.0012

Neptune 67080-03-02 10:19 G 26221587.71 26221587.93 26221588.15 0.0088 0.0017

Neptune 67080-10-13 23:03 G 26221813.25 26221813.46 26221813.68 0.0088 0.0022

Saturn 67081-03-02 03:22 G 26221952.44 26221952.64 26221952.83 0.0279 0.0113

Neptune 67081-05-27 11:46 G 26222038.78 26222038.99 26222039.20 0.0088 0.0027

Saturn 67081-10-17 16:05 G 26222181.98 26222182.17 26222182.37 0.0279 0.0103

Neptune 67082-01-08 00:15 G 26222264.31 26222264.51 26222264.72 0.0088 0.0032

Neptune 67082-08-21 12:58 G 26222489.84 26222490.04 26222490.24 0.0088 0.0037

Neptune 67083-04-04 01:27 G 26222715.38 26222715.56 26222715.76 0.0088 0.0042

Neptune 67083-11-15 14:24 G 26222940.92 26222941.10 26222941.29 0.0088 0.0047

Neptune 67084-06-28 02:53 G 26223166.46 26223166.62 26223166.81 0.0088 0.0052

Neptune 67085-02-08 15:36 G 26223391.99 26223392.15 26223392.33 0.0088 0.0057

Jupiter 67085-02-09 12:58 G 26223392.84 26223393.04 26223393.24 0.0485 0.0085

Neptune 67085-09-22 04:19 G 26223617.54 26223617.68 26223617.85 0.0088 0.0062

Jupiter 67085-10-03 04:34 G 26223628.58 26223628.69 26223628.81 0.0489 0.0405

Neptune 67086-05-05 16:48 G 26223843.08 26223843.20 26223843.36 0.0088 0.0067

Neptune 67086-12-17 05:31 G 26224068.63 26224068.73 26224068.88 0.0088 0.0072

Neptune 67087-07-30 18:15 G 26224294.18 26224294.26 26224294.39 0.0088 0.0077

Neptune 67088-03-12 07:12 G 26224519.73 26224519.80 26224519.89 0.0088 0.0081

Neptune 67088-10-23 19:55 G 26224745.30 26224745.33 26224745.39 0.0088 0.0086

Earth 67090-01-07 21:07 G 26225186.22 26225186.38 26225186.54 0.2642 0.0213

Moon 67090-01-08 02:24 G 26225186.44 26225186.60 26225186.75 0.2643 0.0387 *

Jupiter 67090-12-15 06:00 G 26225527.55 26225527.75 26225527.95 0.0544 0.0044

Mars 67094-09-25 12:29 G 26226907.85 26226908.02 26226908.18 0.1707 0.0589

Saturn 67095-08-17 11:31 G 26227233.79 26227233.98 26227234.18 0.0279 0.0106

Saturn 67096-04-02 22:19 G 26227463.23 26227463.43 26227463.62 0.0279 0.0108

Jupiter 67096-10-15 19:27 G 26227659.13 26227659.31 26227659.49 0.0484 0.0218

Jupiter 67097-06-08 10:34 G 26227894.77 26227894.94 26227895.11 0.0487 0.0271

Moon 67098-01-05 18:00 G 26228106.23 26228106.25 26228106.26 0.2637 0.2620

Mars 67099-05-09 08:24 G 26228594.68 26228594.85 26228595.01 0.1813 0.0546

Jupiter 67102-08-20 16:05 G 26229792.98 26229793.17 26229793.35 0.0544 0.0240

Jupiter 67103-04-16 05:17 G 26230031.62 26230031.72 26230031.83 0.0539 0.0459

Uranus 67108-06-12 22:05 G 26231916.41 26231916.42 26231916.44 0.0143 0.0143

Jupiter 67108-06-22 01:12 G 26231925.42 26231925.55 26231925.70 0.0484 0.0352

Uranus 67109-01-25 09:07 G 26232142.74 26232142.88 26232143.04 0.0143 0.0103

Jupiter 67109-02-12 16:05 G 26232160.97 26232161.17 26232161.37 0.0486 0.0134

Uranus 67109-09-08 20:39 G 26232369.16 26232369.36 26232369.55 0.0143 0.0063

Uranus 67110-04-23 07:27 G 26232595.60 26232595.81 26232596.03 0.0143 0.0024

Saturn 67110-09-13 05:03 G 26232738.51 26232738.71 26232738.91 0.0280 0.0091

Uranus 67110-12-05 18:15 G 26232822.05 26232822.26 26232822.48 0.0143 0.0016

Saturn 67111-04-30 18:00 G 26232968.07 26232968.25 26232968.45 0.0280 0.0126

Uranus 67111-07-20 04:48 G 26233048.51 26233048.70 26233048.91 0.0142 0.0055

Uranus 67112-03-02 15:22 G 26233274.98 26233275.14 26233275.31 0.0142 0.0093

Uranus 67112-10-15 01:55 G 26233501.51 26233501.58 26233501.66 0.0142 0.0131

Jupiter 67114-04-25 00:58 G 26234058.42 26234058.54 26234058.66 0.0545 0.0436

Jupiter 67114-12-19 15:22 G 26234296.97 26234297.14 26234297.32 0.0541 0.0269

Jupiter 67120-02-26 07:41 G 26236191.81 26236191.82 26236191.85 0.0483 0.0481

Jupiter 67120-10-18 22:05 G 26236427.22 26236427.42 26236427.63 0.0485 0.0006

Jupiter 67121-06-11 14:24 G 26236663.09 26236663.10 26236663.12 0.0490 0.0487

Saturn 67125-02-27 19:12 G 26238020.10 26238020.30 26238020.51 0.0280 0.0069

Saturn 67125-10-15 05:46 G 26238249.57 26238249.74 26238249.93 0.0279 0.0146

Jupiter 67126-08-23 22:34 G 26238562.24 26238562.44 26238562.64 0.0543 0.0067

Jupiter 67132-06-24 04:34 G 26240693.50 26240693.69 26240693.89 0.0484 0.0136

Jupiter 67133-02-14 19:55 G 26240929.19 26240929.33 26240929.47 0.0488 0.0352

Jupiter 67138-04-28 08:53 G 26242827.68 26242827.87 26242828.07 0.0544 0.0129

Saturn 67139-08-08 23:03 G 26243295.42 26243295.46 26243295.53 0.0278 0.0268

Saturn 67140-03-25 11:31 G 26243524.77 26243524.98 26243525.19 0.0279 0.0055

Saturn 67140-11-10 00:15 G 26243754.34 26243754.51 26243754.69 0.0279 0.0160

Jupiter 67144-02-28 10:05 G 26244959.76 26244959.92 26244960.10 0.0484 0.0269

Jupiter 67144-10-21 00:43 G 26245195.35 26245195.53 26245195.72 0.0487 0.0217

Neptune 67149-05-01 01:27 G 26246848.50 26246848.56 26246848.62 0.0090 0.0086

Neptune 67149-12-12 14:39 G 26247074.03 26247074.11 26247074.21 0.0090 0.0081

Jupiter 67149-12-31 20:10 G 26247093.18 26247093.34 26247093.51 0.0545 0.0321

Neptune 67150-07-26 04:05 G 26247299.56 26247299.67 26247299.79 0.0090 0.0076

Jupiter 67150-08-27 10:48 G 26247331.82 26247331.95 26247332.10 0.0541 0.0383

Neptune 67151-03-08 17:31 G 26247525.10 26247525.23 26247525.37 0.0090 0.0071

Neptune 67151-10-20 06:43 G 26247750.64 26247750.78 26247750.94 0.0090 0.0066

Uranus 67151-10-26 16:48 G 26247757.12 26247757.20 26247757.28 0.0135 0.0124

Neptune 67152-06-01 19:55 G 26247976.19 26247976.33 26247976.51 0.0090 0.0061

Uranus 67152-06-08 22:34 G 26247983.30 26247983.44 26247983.62 0.0135 0.0093

Neptune 67153-01-13 09:07 G 26248201.73 26248201.88 26248202.07 0.0090 0.0056

Uranus 67153-01-21 05:17 G 26248209.52 26248209.72 26248209.91 0.0135 0.0059

Neptune 67153-08-26 22:34 G 26248427.27 26248427.44 26248427.64 0.0090 0.0051

Uranus 67153-09-04 11:31 G 26248435.77 26248435.98 26248436.20 0.0135 0.0026

Saturn 67154-01-23 07:41 G 26248576.76 26248576.82 26248576.90 0.0280 0.0263

Neptune 67154-04-09 12:15 G 26248652.83 26248653.01 26248653.21 0.0090 0.0045

Uranus 67154-04-18 18:15 G 26248662.04 26248662.26 26248662.48 0.0136 0.0008

Saturn 67154-09-09 18:58 G 26248806.09 26248806.29 26248806.50 0.0280 0.0049

Neptune 67154-11-21 01:27 G 26248878.37 26248878.56 26248878.77 0.0090 0.0040

Uranus 67154-12-01 00:43 G 26248888.33 26248888.53 26248888.74 0.0136 0.0042

Saturn 67155-04-27 05:31 G 26249035.57 26249035.73 26249035.91 0.0279 0.0165

Neptune 67155-07-04 14:39 G 26249103.92 26249104.11 26249104.33 0.0090 0.0035

Uranus 67155-07-15 07:27 G 26249114.63 26249114.81 26249114.99 0.0136 0.0075

Jupiter 67155-11-03 16:48 G 26249226.09 26249226.20 26249226.32 0.0483 0.0399

Neptune 67156-02-15 04:19 G 26249329.47 26249329.68 26249329.89 0.0090 0.0029

Uranus 67156-02-26 13:55 G 26249340.97 26249341.08 26249341.22 0.0136 0.0110

Jupiter 67156-06-26 06:58 G 26249461.59 26249461.79 26249461.99 0.0486 0.0082

Neptune 67156-09-27 17:31 G 26249555.02 26249555.23 26249555.45 0.0090 0.0024

Neptune 67157-05-11 06:43 G 26249780.58 26249780.78 26249781.01 0.0090 0.0019

Neptune 67157-12-22 20:24 G 26250006.13 26250006.35 26250006.57 0.0090 0.0013

Neptune 67158-08-05 09:36 G 26250231.68 26250231.90 26250232.12 0.0090 0.0008

Neptune 67159-03-18 23:03 G 26250457.24 26250457.46 26250457.68 0.0090 0.0002

Neptune 67159-10-30 12:29 G 26250682.80 26250683.02 26250683.24 0.0090 0.0003

Neptune 67160-06-12 01:55 G 26250908.36 26250908.58 26250908.80 0.0089 0.0009

Mars 67160-07-23 21:51 G 26250950.27 26250950.41 26250950.56 0.1704 0.0955

Neptune 67161-01-23 15:07 G 26251133.92 26251134.13 26251134.35 0.0089 0.0014

Jupiter 67161-09-05 06:43 G 26251358.71 26251358.78 26251358.85 0.0545 0.0511

Neptune 67161-09-06 04:34 G 26251359.48 26251359.69 26251359.91 0.0089 0.0019

Neptune 67162-04-19 18:15 G 26251585.05 26251585.26 26251585.47 0.0089 0.0025

Jupiter 67162-05-01 21:51 G 26251597.22 26251597.41 26251597.60 0.0542 0.0192

Neptune 67162-12-01 07:12 G 26251810.61 26251810.80 26251811.02 0.0089 0.0031

Neptune 67163-07-14 20:39 G 26252036.17 26252036.36 26252036.58 0.0089 0.0036

Neptune 67164-02-25 10:05 G 26252261.73 26252261.92 26252262.13 0.0089 0.0041

Neptune 67164-10-07 23:17 G 26252487.30 26252487.47 26252487.68 0.0089 0.0047

Mars 67165-03-06 14:24 G 26252636.93 26252637.10 26252637.28 0.1816 0.0054

Neptune 67165-05-21 12:43 G 26252712.87 26252713.03 26252713.23 0.0089 0.0052

Neptune 67166-01-02 02:10 G 26252938.44 26252938.59 26252938.77 0.0089 0.0057

Neptune 67166-08-15 15:36 G 26253164.00 26253164.15 26253164.32 0.0089 0.0062

Neptune 67167-03-29 05:03 G 26253389.57 26253389.71 26253389.86 0.0089 0.0067

Neptune 67167-11-09 18:00 G 26253615.14 26253615.25 26253615.40 0.0089 0.0072

Jupiter 67168-03-01 12:43 G 26253727.83 26253728.03 26253728.24 0.0485 0.0054

Neptune 67168-06-22 07:12 G 26253840.72 26253840.80 26253840.94 0.0089 0.0078

Jupiter 67168-10-23 04:48 G 26253963.62 26253963.70 26253963.80 0.0489 0.0437

Neptune 67169-02-02 20:39 G 26254066.30 26254066.36 26254066.47 0.0089 0.0082

Saturn 67169-02-18 00:00 G 26254081.41 26254081.50 26254081.60 0.0279 0.0247

Neptune 67169-09-16 09:51 G 26254291.89 26254291.91 26254291.98 0.0089 0.0087

Saturn 67169-10-05 12:29 G 26254310.81 26254311.02 26254311.23 0.0279 0.0034

Saturn 67170-05-23 01:12 G 26254540.40 26254540.55 26254540.72 0.0280 0.0183

Jupiter 67174-01-04 07:12 G 26255862.60 26255862.80 26255863.00 0.0543 0.0005

Jupiter 67179-11-05 19:27 G 26257994.12 26257994.31 26257994.50 0.0484 0.0188

Jupiter 67180-06-28 10:34 G 26258229.78 26258229.94 26258230.10 0.0487 0.0299

Saturn 67183-08-05 13:55 G 26259362.97 26259363.08 26259363.21 0.0280 0.0229

Saturn 67184-03-22 01:27 G 26259592.35 26259592.56 26259592.78 0.0280 0.0015

Saturn 67184-11-06 12:15 G 26259821.87 26259822.01 26259822.16 0.0279 0.0200

Jupiter 67185-09-08 13:27 G 26260127.87 26260128.06 26260128.25 0.0544 0.0209

Jupiter 67186-05-05 03:22 G 26260366.56 26260366.64 26260366.73 0.0540 0.0487

Jupiter 67191-07-12 02:10 G 26262260.44 26262260.59 26262260.75 0.0484 0.0318

Jupiter 67192-03-03 16:19 G 26262495.99 26262496.18 26262496.38 0.0486 0.0166

Uranus 67192-09-24 16:34 G 26262701.09 26262701.19 26262701.32 0.0143 0.0121

Uranus 67193-05-09 04:05 G 26262927.49 26262927.67 26262927.85 0.0143 0.0081

Uranus 67193-12-21 15:07 G 26263153.92 26263154.13 26263154.34 0.0143 0.0041

Uranus 67194-08-05 01:55 G 26263380.36 26263380.58 26263380.80 0.0143 0.0002

Uranus 67195-03-19 12:43 G 26263606.82 26263607.03 26263607.24 0.0143 0.0038

Uranus 67195-10-31 23:31 G 26263833.30 26263833.48 26263833.66 0.0142 0.0077

Uranus 67196-06-14 09:36 G 26264059.79 26264059.90 26264060.04 0.0142 0.0116

Jupiter 67197-05-13 23:17 G 26264393.34 26264393.47 26264393.61 0.0545 0.0403

Jupiter 67198-01-07 14:24 G 26264631.94 26264632.10 26264632.28 0.0542 0.0301

Saturn 67198-08-31 07:41 G 26264867.68 26264867.82 26264867.96 0.0278 0.0209

Saturn 67199-04-17 19:41 G 26265097.11 26265097.32 26265097.54 0.0279 0.0007

Saturn 67199-12-03 08:24 G 26265326.73 26265326.85 26265326.99 0.0279 0.0218

Jupiter 67203-03-17 07:41 G 26266526.75 26266526.82 26266526.90 0.0483 0.0447

Jupiter 67203-11-07 21:51 G 26266762.20 26266762.41 26266762.61 0.0485 0.0030

Pluto 67204-02-11 02:24 G 26266857.44 26266857.60 26266857.79 0.0064 0.0040

Pluto 67204-09-23 06:29 G 26267082.56 26267082.77 26267083.00 0.0064 0.0006

Pluto 67205-05-06 10:34 G 26267307.76 26267307.94 26267308.15 0.0064 0.0030

Jupiter 67209-09-12 02:24 G 26268897.40 26268897.60 26268897.80 0.0543 0.0112

Saturn 67213-02-14 14:24 G 26270148.96 26270149.10 26270149.24 0.0280 0.0208

Saturn 67213-10-02 01:41 G 26270378.36 26270378.57 26270378.78 0.0280 0.0007

Saturn 67214-05-19 12:15 G 26270607.88 26270608.01 26270608.14 0.0279 0.0219

Jupiter 67215-07-14 04:05 G 26271028.47 26271028.67 26271028.87 0.0484 0.0104

Jupiter 67216-03-05 19:27 G 26271264.19 26271264.31 26271264.44 0.0488 0.0382

Moon 67219-07-09 18:29 G 26272485.12 26272485.27 26272485.42 0.2683 0.1263

Earth 67219-07-09 19:27 G 26272485.19 26272485.31 26272485.43 0.2690 0.1756 *

Jupiter 67221-05-17 13:12 G 26273162.85 26273163.05 26273163.25 0.0544 0.0082

Mars 67226-05-21 07:41 G 26274992.71 26274992.82 26274992.93 0.1700 0.1294

Jupiter 67227-03-19 10:05 G 26275294.74 26275294.92 26275295.10 0.0484 0.0237

Moon 67227-07-07 03:51 G 26275404.58 26275404.66 26275404.73 0.2688 0.2371

Earth 67227-07-07 08:53 G 26275404.76 26275404.87 26275404.99 0.2692 0.1860

Jupiter 67227-11-10 01:12 G 26275530.37 26275530.55 26275530.72 0.0487 0.0248

Saturn 67228-03-12 07:27 G 26275653.67 26275653.81 26275653.97 0.0279 0.0191

Saturn 67228-10-27 19:55 G 26275883.12 26275883.33 26275883.54 0.0279 0.0023

Saturn 67229-06-14 08:53 G 26276112.77 26276112.87 26276112.99 0.0280 0.0239

Mars 67231-01-01 21:07 G 26276679.22 26276679.38 26276679.55 0.1820 0.0595

Neptune 67231-06-17 16:34 G 26276846.18 26276846.19 26276846.24 0.0088 0.0087

Neptune 67232-01-29 05:31 G 26277071.66 26277071.73 26277071.81 0.0088 0.0082

Neptune 67232-09-10 18:29 G 26277297.17 26277297.27 26277297.37 0.0088 0.0077

Jupiter 67233-01-19 22:19 G 26277428.26 26277428.43 26277428.61 0.0544 0.0278

Neptune 67233-04-24 06:43 G 26277522.68 26277522.78 26277522.92 0.0088 0.0073

Jupiter 67233-09-15 12:15 G 26277666.89 26277667.01 26277667.14 0.0540 0.0419

Neptune 67233-12-05 19:12 G 26277748.18 26277748.30 26277748.46 0.0088 0.0068

Neptune 67234-07-19 07:55 G 26277973.70 26277973.83 26277974.00 0.0088 0.0063

Neptune 67235-03-01 20:53 G 26278199.21 26278199.37 26278199.54 0.0088 0.0058

Neptune 67235-10-13 09:36 G 26278424.74 26278424.90 26278425.09 0.0088 0.0053

Uranus 67236-02-07 10:34 G 26278541.81 26278541.94 26278542.08 0.0135 0.0104

Neptune 67236-05-25 22:19 G 26278650.26 26278650.43 26278650.63 0.0088 0.0048

Uranus 67236-09-20 16:48 G 26278768.02 26278768.20 26278768.39 0.0135 0.0071

Neptune 67237-01-06 11:03 G 26278875.78 26278875.96 26278876.16 0.0088 0.0043

Uranus 67237-05-04 23:03 G 26278994.26 26278994.46 26278994.68 0.0135 0.0039

Neptune 67237-08-19 23:46 G 26279101.30 26279101.49 26279101.70 0.0088 0.0038

Uranus 67237-12-17 05:31 G 26279220.52 26279220.73 26279220.95 0.0136 0.0006

Neptune 67238-04-02 12:29 G 26279326.82 26279327.02 26279327.23 0.0088 0.0033

Uranus 67238-07-31 12:00 G 26279446.79 26279447.00 26279447.22 0.0136 0.0029

Neptune 67238-11-14 01:12 G 26279552.35 26279552.55 26279552.77 0.0088 0.0028

Jupiter 67238-11-22 17:03 G 26279561.08 26279561.21 26279561.34 0.0484 0.0367

Uranus 67239-03-14 18:29 G 26279673.09 26279673.27 26279673.47 0.0136 0.0063

Neptune 67239-06-27 13:55 G 26279777.87 26279778.08 26279778.30 0.0088 0.0023

Jupiter 67239-07-16 07:27 G 26279796.61 26279796.81 26279797.01 0.0486 0.0113

Uranus 67239-10-27 01:27 G 26279899.41 26279899.56 26279899.72 0.0136 0.0096

Neptune 67240-02-08 02:39 G 26280003.40 26280003.61 26280003.83 0.0088 0.0018

Uranus 67240-06-09 08:10 G 26280125.79 26280125.84 26280125.91 0.0136 0.0131

Neptune 67240-09-20 15:22 G 26280228.93 26280229.14 26280229.37 0.0088 0.0013

Neptune 67241-05-04 04:05 G 26280454.46 26280454.67 26280454.90 0.0088 0.0008

Neptune 67241-12-15 16:48 G 26280679.98 26280680.20 26280680.42 0.0088 0.0003

Neptune 67242-07-29 05:31 G 26280905.51 26280905.73 26280905.95 0.0088 0.0003

Saturn 67242-08-27 19:55 G 26280935.17 26280935.33 26280935.49 0.0280 0.0175

Neptune 67243-03-11 18:00 G 26281131.04 26281131.25 26281131.48 0.0088 0.0008

Saturn 67243-04-14 07:27 G 26281164.60 26281164.81 26281165.02 0.0280 0.0041

Neptune 67243-10-23 06:58 G 26281356.57 26281356.79 26281357.01 0.0088 0.0013

Saturn 67243-11-29 18:15 G 26281394.18 26281394.26 26281394.36 0.0279 0.0253

Neptune 67244-06-04 19:27 G 26281582.10 26281582.31 26281582.53 0.0088 0.0018

Jupiter 67244-09-24 04:05 G 26281693.58 26281693.67 26281693.77 0.0545 0.0479

Neptune 67245-01-16 08:10 G 26281807.63 26281807.84 26281808.05 0.0088 0.0023

Jupiter 67245-05-20 19:27 G 26281932.13 26281932.31 26281932.50 0.0542 0.0221

Neptune 67245-08-29 20:39 G 26282033.16 26282033.36 26282033.57 0.0088 0.0028

Neptune 67246-04-12 09:22 G 26282258.69 26282258.89 26282259.09 0.0088 0.0033

Neptune 67246-11-23 22:05 G 26282484.22 26282484.42 26282484.62 0.0088 0.0038

Neptune 67247-07-07 10:48 G 26282709.76 26282709.95 26282710.14 0.0088 0.0043

Neptune 67248-02-17 23:17 G 26282935.29 26282935.47 26282935.66 0.0088 0.0048

Neptune 67248-09-30 12:00 G 26283160.83 26283161.00 26283161.18 0.0088 0.0053

Neptune 67249-05-14 00:43 G 26283386.37 26283386.53 26283386.70 0.0088 0.0058

Neptune 67249-12-25 13:12 G 26283611.91 26283612.05 26283612.21 0.0088 0.0063

Neptune 67250-08-08 01:55 G 26283837.45 26283837.58 26283837.73 0.0088 0.0068

Jupiter 67251-03-21 13:41 G 26284062.87 26284063.07 26284063.28 0.0485 0.0020

Neptune 67251-03-21 14:24 G 26284063.00 26284063.10 26284063.24 0.0088 0.0073 *

Neptune 67251-11-02 03:07 G 26284288.56 26284288.63 26284288.76 0.0088 0.0078

Jupiter 67251-11-12 05:31 G 26284298.67 26284298.73 26284298.80 0.0489 0.0464

Neptune 67252-06-14 15:51 G 26284514.11 26284514.16 26284514.26 0.0088 0.0083

Neptune 67253-01-26 04:48 G 26284739.69 26284739.70 26284739.74 0.0088 0.0087

Jupiter 67257-01-23 05:31 G 26286197.53 26286197.73 26286197.94 0.0544 0.0029

Saturn 67257-09-22 15:36 G 26286439.98 26286440.15 26286440.34 0.0278 0.0152

Saturn 67258-05-10 04:05 G 26286669.46 26286669.67 26286669.88 0.0279 0.0061

Mars 67258-05-20 09:22 G 26286679.79 26286679.89 26286679.99 0.1710 0.1409

Saturn 67258-12-25 16:34 G 26286899.17 26286899.19 26286899.24 0.0279 0.0276

Jupiter 67262-11-24 19:12 G 26288329.11 26288329.30 26288329.50 0.0484 0.0154

Jupiter 67263-07-18 10:05 G 26288564.77 26288564.92 26288565.07 0.0487 0.0329

Jupiter 67268-09-27 16:48 G 26290463.01 26290463.20 26290463.40 0.0545 0.0164

Jupiter 67269-05-24 06:58 G 26290701.76 26290701.79 26290701.84 0.0540 0.0528

Saturn 67272-03-08 21:07 G 26291721.21 26291721.38 26291721.56 0.0280 0.0152

Saturn 67272-10-24 08:24 G 26291950.64 26291950.85 26291951.05 0.0280 0.0062

Saturn 67273-06-10 18:58 G 26292180.25 26292180.29 26292180.33 0.0279 0.0273

Jupiter 67274-07-31 01:41 G 26292595.41 26292595.57 26292595.74 0.0483 0.0285

Jupiter 67275-03-23 15:51 G 26292830.98 26292831.16 26292831.35 0.0486 0.0196

Uranus 67276-05-25 01:27 G 26293259.50 26293259.56 26293259.62 0.0143 0.0137

Uranus 67277-01-06 12:29 G 26293485.87 26293486.02 26293486.19 0.0143 0.0097

Uranus 67277-08-20 23:46 G 26293712.29 26293712.49 26293712.69 0.0143 0.0057

Uranus 67278-04-04 10:48 G 26293938.73 26293938.95 26293939.17 0.0143 0.0018

Uranus 67278-11-16 21:36 G 26294165.19 26294165.40 26294165.62 0.0143 0.0022

Uranus 67279-07-01 08:24 G 26294391.65 26294391.85 26294392.05 0.0142 0.0061

Uranus 67280-02-12 18:43 G 26294618.13 26294618.28 26294618.44 0.0142 0.0100

Jupiter 67280-06-02 03:51 G 26294728.51 26294728.66 26294728.81 0.0545 0.0355

Uranus 67280-09-26 04:48 G 26294844.67 26294844.70 26294844.77 0.0142 0.0138

Jupiter 67281-01-26 18:43 G 26294967.12 26294967.28 26294967.43 0.0541 0.0344

Jupiter 67286-04-05 07:41 G 26296861.72 26296861.82 26296861.92 0.0483 0.0415

Jupiter 67286-11-26 21:51 G 26297097.21 26297097.41 26297097.62 0.0485 0.0062

Saturn 67287-04-04 15:36 G 26297225.97 26297226.15 26297226.34 0.0279 0.0133

Saturn 67287-11-20 04:05 G 26297455.47 26297455.67 26297455.87 0.0279 0.0081

Jupiter 67292-02-05 13:12 G 26298994.05 26298994.05 26298994.05 0.0545 0.0545

Mars 67292-03-17 17:31 G 26299035.19 26299035.23 26299035.27 0.1697 0.1637

Jupiter 67292-10-01 04:19 G 26299232.49 26299232.68 26299232.88 0.0543 0.0152

Pluto 67293-08-17 03:51 G 26299552.47 26299552.66 26299552.85 0.0080 0.0039

Pluto 67294-03-30 14:10 G 26299777.89 26299778.09 26299778.31 0.0080 0.0029

Mars 67296-10-29 03:07 G 26300721.50 26300721.63 26300721.76 0.1824 0.1181

Jupiter 67298-08-02 04:34 G 26301363.49 26301363.69 26301363.89 0.0484 0.0072

Jupiter 67299-03-25 20:10 G 26301599.23 26301599.34 26301599.45 0.0488 0.0411

Saturn 67301-09-20 01:41 G 26302507.38 26302507.57 26302507.76 0.0280 0.0121

Saturn 67302-05-07 13:12 G 26302736.85 26302737.05 26302737.25 0.0280 0.0094

Jupiter 67304-06-06 10:34 G 26303497.74 26303497.94 26303498.14 0.0544 0.0051

Jupiter 67310-04-08 11:03 G 26305629.78 26305629.96 26305630.15 0.0484 0.0203

Jupiter 67310-11-30 01:55 G 26305865.42 26305865.58 26305865.75 0.0487 0.0279

Neptune 67313-08-03 08:39 G 26306842.81 26306842.86 26306842.92 0.0090 0.0086

Neptune 67314-03-16 22:05 G 26307068.34 26307068.42 26307068.52 0.0090 0.0081

Neptune 67314-10-28 11:31 G 26307293.87 26307293.98 26307294.10 0.0090 0.0076

Neptune 67315-06-11 00:43 G 26307519.41 26307519.53 26307519.67 0.0090 0.0071

Neptune 67316-01-22 13:55 G 26307744.95 26307745.08 26307745.24 0.0090 0.0066

Jupiter 67316-02-09 19:55 G 26307763.15 26307763.33 26307763.51 0.0545 0.0246

Neptune 67316-09-04 03:22 G 26307970.49 26307970.64 26307970.82 0.0090 0.0061

Jupiter 67316-10-05 10:34 G 26308001.83 26308001.94 26308002.05 0.0541 0.0448

Saturn 67316-10-16 00:29 G 26308012.33 26308012.52 26308012.73 0.0278 0.0094

Neptune 67317-04-17 16:48 G 26308196.05 26308196.20 26308196.39 0.0090 0.0056

Saturn 67317-06-02 12:58 G 26308241.85 26308242.04 26308242.23 0.0279 0.0120

Neptune 67317-11-29 06:29 G 26308421.59 26308421.77 26308421.95 0.0090 0.0050

Neptune 67318-07-12 19:41 G 26308647.14 26308647.32 26308647.52 0.0090 0.0045

Neptune 67319-02-23 08:53 G 26308872.69 26308872.87 26308873.08 0.0090 0.0040

Neptune 67319-10-06 22:34 G 26309098.24 26309098.44 26309098.64 0.0090 0.0034

Uranus 67319-10-08 22:05 G 26309100.33 26309100.42 26309100.55 0.0135 0.0117

Neptune 67320-05-19 11:46 G 26309323.79 26309323.99 26309324.21 0.0090 0.0029

Uranus 67320-05-22 04:34 G 26309326.53 26309326.69 26309326.87 0.0135 0.0084

Neptune 67320-12-31 00:58 G 26309549.34 26309549.54 26309549.76 0.0090 0.0024

Uranus 67321-01-03 10:34 G 26309552.75 26309552.94 26309553.16 0.0135 0.0052

Neptune 67321-08-13 14:24 G 26309774.89 26309775.10 26309775.32 0.0090 0.0018

Uranus 67321-08-17 17:17 G 26309779.00 26309779.22 26309779.43 0.0135 0.0018

Jupiter 67321-12-12 16:48 G 26309896.05 26309896.20 26309896.35 0.0483 0.0333

Neptune 67322-03-27 03:51 G 26310000.45 26310000.66 26310000.88 0.0090 0.0013

Uranus 67322-03-31 23:46 G 26310005.27 26310005.49 26310005.70 0.0136 0.0016

Jupiter 67322-08-05 06:43 G 26310131.58 26310131.78 26310131.97 0.0486 0.0144

Neptune 67322-11-07 17:17 G 26310226.00 26310226.22 26310226.44 0.0090 0.0007

Uranus 67322-11-13 06:00 G 26310231.56 26310231.75 26310231.96 0.0136 0.0050

Neptune 67323-06-21 06:29 G 26310451.55 26310451.77 26310451.99 0.0090 0.0002

Uranus 67323-06-27 12:58 G 26310457.87 26310458.04 26310458.21 0.0136 0.0083

Neptune 67324-02-01 19:55 G 26310677.11 26310677.33 26310677.55 0.0090 0.0004

Uranus 67324-02-08 19:27 G 26310684.21 26310684.31 26310684.43 0.0136 0.0117

Mars 67324-03-17 19:12 G 26310722.16 26310722.30 26310722.44 0.1707 0.1046

Neptune 67324-09-14 09:07 G 26310902.67 26310902.88 26310903.10 0.0090 0.0009

Neptune 67325-04-27 22:34 G 26311128.23 26311128.44 26311128.66 0.0090 0.0015

Neptune 67325-12-09 11:46 G 26311353.79 26311353.99 26311354.22 0.0090 0.0021

Neptune 67326-07-23 01:12 G 26311579.35 26311579.55 26311579.77 0.0089 0.0026

Neptune 67327-03-05 14:39 G 26311804.91 26311805.11 26311805.32 0.0089 0.0031

Jupiter 67327-10-15 06:58 G 26312028.67 26312028.79 26312028.91 0.0545 0.0435

Neptune 67327-10-17 03:51 G 26312030.48 26312030.66 26312030.88 0.0089 0.0037

Neptune 67328-05-29 17:31 G 26312256.04 26312256.23 26312256.43 0.0089 0.0042

Jupiter 67328-06-09 22:34 G 26312267.27 26312267.44 26312267.62 0.0542 0.0265

Neptune 67329-01-10 06:58 G 26312481.61 26312481.79 26312481.98 0.0089 0.0047

Neptune 67329-08-23 19:55 G 26312707.17 26312707.33 26312707.53 0.0089 0.0053

Neptune 67330-04-06 09:36 G 26312932.74 26312932.90 26312933.08 0.0089 0.0057

Neptune 67330-11-17 23:03 G 26313158.31 26313158.46 26313158.63 0.0089 0.0063

Saturn 67331-04-02 04:05 G 26313293.48 26313293.67 26313293.87 0.0280 0.0097

Neptune 67331-07-01 12:29 G 26313383.88 26313384.02 26313384.17 0.0089 0.0068

Saturn 67331-11-17 15:22 G 26313522.95 26313523.14 26313523.33 0.0280 0.0118

Neptune 67332-02-12 01:55 G 26313609.45 26313609.58 26313609.70 0.0089 0.0073

Neptune 67332-09-24 14:39 G 26313835.03 26313835.11 26313835.24 0.0089 0.0078

Moon 67333-01-09 19:41 G 26313942.16 26313942.32 26313942.47 0.2637 0.0673

Earth 67333-01-10 00:00 G 26313942.34 26313942.50 26313942.66 0.2641 0.0059 *

Neptune 67333-05-08 04:05 G 26314060.61 26314060.67 26314060.77 0.0089 0.0083

Jupiter 67333-08-17 23:17 G 26314162.41 26314162.47 26314162.53 0.0483 0.0461

Neptune 67333-12-19 17:17 G 26314286.21 26314286.22 26314286.28 0.0089 0.0088

Jupiter 67334-04-10 12:58 G 26314397.83 26314398.04 26314398.24 0.0485 0.0012

Jupiter 67340-02-13 09:36 G 26316532.70 26316532.90 26316533.11 0.0543 0.0074

Jupiter 67345-12-14 18:58 G 26318664.09 26318664.29 26318664.49 0.0484 0.0122

Saturn 67346-04-28 00:29 G 26318798.32 26318798.52 26318798.73 0.0279 0.0074

Jupiter 67346-08-07 10:05 G 26318899.79 26318899.92 26318900.06 0.0488 0.0360

Saturn 67346-12-13 12:43 G 26319027.85 26319028.03 26319028.22 0.0279 0.0140

Jupiter 67351-10-18 19:12 G 26320798.10 26320798.30 26320798.50 0.0544 0.0121

Jupiter 67357-08-20 01:55 G 26322930.40 26322930.58 26322930.75 0.0484 0.0253

Jupiter 67358-04-12 16:19 G 26323166.00 26323166.18 26323166.36 0.0486 0.0226

Uranus 67360-09-06 19:27 G 26324044.20 26324044.31 26324044.45 0.0143 0.0116

Saturn 67360-10-12 08:10 G 26324079.64 26324079.84 26324080.05 0.0280 0.0066

Uranus 67361-04-21 06:58 G 26324270.61 26324270.79 26324270.98 0.0143 0.0075

Saturn 67361-05-29 19:41 G 26324309.14 26324309.32 26324309.50 0.0280 0.0148

Uranus 67361-12-03 17:46 G 26324497.04 26324497.24 26324497.46 0.0143 0.0036

Uranus 67362-07-18 04:48 G 26324723.49 26324723.70 26324723.92 0.0143 0.0005

Mars 67362-08-27 09:36 G 26324763.86 26324763.90 26324763.95 0.1827 0.1755

Uranus 67363-03-01 15:36 G 26324949.95 26324950.15 26324950.36 0.0143 0.0043

Jupiter 67363-06-23 00:58 G 26325063.38 26325063.54 26325063.71 0.0545 0.0322

Uranus 67363-10-14 02:10 G 26325176.43 26325176.59 26325176.78 0.0142 0.0083

Jupiter 67364-02-16 15:36 G 26325302.01 26325302.15 26325302.30 0.0541 0.0371

Uranus 67364-05-27 12:29 G 26325402.93 26325403.02 26325403.15 0.0142 0.0121

Jupiter 67369-04-25 08:24 G 26327196.73 26327196.85 26327196.98 0.0484 0.0381

Jupiter 67369-12-16 22:34 G 26327432.24 26327432.44 26327432.64 0.0485 0.0094

Jupiter 67375-02-25 09:51 G 26329328.86 26329328.91 26329328.99 0.0545 0.0513

Saturn 67375-03-23 22:05 G 26329355.33 26329355.42 26329355.53 0.0278 0.0245

Jupiter 67375-10-22 01:27 G 26329567.37 26329567.56 26329567.75 0.0543 0.0182

Saturn 67375-11-08 10:05 G 26329584.71 26329584.92 26329585.13 0.0278 0.0034

Saturn 67376-06-24 22:19 G 26329814.28 26329814.43 26329814.60 0.0279 0.0180

Jupiter 67381-08-22 03:36 G 26331698.45 26331698.65 26331698.85 0.0484 0.0040

Jupiter 67382-04-14 18:43 G 26331934.20 26331934.28 26331934.37 0.0488 0.0439

Jupiter 67387-06-26 12:43 G 26333832.83 26333833.03 26333833.24 0.0544 0.0013

Saturn 67389-09-07 00:00 G 26334636.42 26334636.50 26334636.60 0.0281 0.0255

Mars 67390-01-13 04:48 G 26334764.54 26334764.70 26334764.86 0.1704 0.0681

Saturn 67390-04-24 11:46 G 26334865.79 26334865.99 26334866.20 0.0280 0.0040

Saturn 67390-12-09 22:48 G 26335095.30 26335095.45 26335095.63 0.0280 0.0175

Jupiter 67393-04-27 09:51 G 26335964.73 26335964.91 26335965.11 0.0484 0.0172

Jupiter 67393-12-19 00:29 G 26336200.37 26336200.52 26336200.68 0.0487 0.0308

Mars 67394-08-26 21:22 G 26336451.36 26336451.39 26336451.42 0.1816 0.1782

Neptune 67395-09-20 02:24 G 26336840.57 26336840.60 26336840.64 0.0088 0.0086

Neptune 67396-05-02 14:39 G 26337066.05 26337066.11 26337066.21 0.0088 0.0082

Neptune 67396-12-14 03:22 G 26337291.55 26337291.64 26337291.76 0.0088 0.0077

Neptune 67397-07-27 16:05 G 26337517.06 26337517.17 26337517.31 0.0088 0.0072

Neptune 67398-03-10 04:48 G 26337742.57 26337742.70 26337742.85 0.0088 0.0067

Neptune 67398-10-21 17:46 G 26337968.09 26337968.24 26337968.39 0.0088 0.0062

Jupiter 67399-02-28 23:31 G 26338098.30 26338098.48 26338098.68 0.0545 0.0201

Neptune 67399-06-04 05:46 G 26338193.60 26338193.74 26338193.93 0.0088 0.0058

Jupiter 67399-10-25 13:55 G 26338337.00 26338337.08 26338337.17 0.0540 0.0488

Neptune 67400-01-15 18:29 G 26338419.12 26338419.27 26338419.47 0.0088 0.0053

Neptune 67400-08-29 07:12 G 26338644.63 26338644.80 26338645.01 0.0088 0.0048

Neptune 67401-04-11 19:55 G 26338870.15 26338870.33 26338870.54 0.0088 0.0043

Neptune 67401-11-23 08:39 G 26339095.68 26339095.86 26339096.08 0.0088 0.0038

Neptune 67402-07-06 21:36 G 26339321.20 26339321.40 26339321.61 0.0088 0.0032

Neptune 67403-02-17 10:19 G 26339546.72 26339546.93 26339547.14 0.0088 0.0027

Uranus 67403-06-09 09:36 G 26339658.86 26339658.90 26339658.98 0.0135 0.0130

Neptune 67403-09-30 23:03 G 26339772.25 26339772.46 26339772.68 0.0088 0.0022

Uranus 67404-01-21 15:51 G 26339885.02 26339885.16 26339885.32 0.0135 0.0097

Neptune 67404-05-13 11:46 G 26339997.78 26339997.99 26339998.21 0.0088 0.0017

Uranus 67404-09-03 22:05 G 26340111.23 26340111.42 26340111.62 0.0135 0.0064

Saturn 67404-10-03 22:34 G 26340141.32 26340141.44 26340141.57 0.0278 0.0224

Neptune 67404-12-25 00:29 G 26340223.30 26340223.52 26340223.74 0.0088 0.0012

Jupiter 67405-01-01 15:51 G 26340231.01 26340231.16 26340231.32 0.0484 0.0303

Uranus 67405-04-18 04:19 G 26340337.48 26340337.68 26340337.90 0.0135 0.0032

Saturn 67405-05-21 10:34 G 26340370.72 26340370.94 26340371.15 0.0279 0.0014

Neptune 67405-08-07 13:12 G 26340448.83 26340449.05 26340449.27 0.0088 0.0007

Jupiter 67405-08-25 06:15 G 26340466.57 26340466.76 26340466.95 0.0486 0.0174

Uranus 67405-11-30 11:03 G 26340563.74 26340563.96 26340564.17 0.0135 0.0003

Saturn 67406-01-05 22:48 G 26340600.31 26340600.45 26340600.60 0.0279 0.0200

Neptune 67406-03-21 01:55 G 26340674.36 26340674.58 26340674.80 0.0088 0.0002

Uranus 67406-07-14 17:17 G 26340790.01 26340790.22 26340790.43 0.0136 0.0036

Neptune 67406-11-01 14:39 G 26340899.89 26340900.11 26340900.33 0.0088 0.0004

Uranus 67407-02-25 23:46 G 26341016.31 26341016.49 26341016.69 0.0136 0.0070

Neptune 67407-06-15 03:22 G 26341125.42 26341125.64 26341125.86 0.0088 0.0009

Uranus 67407-10-10 06:15 G 26341242.64 26341242.76 26341242.92 0.0136 0.0104

Neptune 67408-01-26 15:51 G 26341350.95 26341351.16 26341351.38 0.0088 0.0014

Neptune 67408-09-08 04:34 G 26341576.48 26341576.69 26341576.91 0.0088 0.0019

Neptune 67409-04-21 17:17 G 26341802.01 26341802.22 26341802.43 0.0088 0.0024

Neptune 67409-12-03 05:46 G 26342027.54 26342027.74 26342027.95 0.0088 0.0029

Neptune 67410-07-16 18:29 G 26342253.07 26342253.27 26342253.47 0.0088 0.0034

Jupiter 67410-11-04 09:07 G 26342363.75 26342363.88 26342364.03 0.0545 0.0392

Neptune 67411-02-27 07:12 G 26342478.60 26342478.80 26342478.99 0.0088 0.0039

Jupiter 67411-07-01 00:15 G 26342602.35 26342602.51 26342602.68 0.0542 0.0303

Neptune 67411-10-10 19:55 G 26342704.14 26342704.33 26342704.52 0.0088 0.0044

Neptune 67412-05-23 08:39 G 26342929.67 26342929.86 26342930.04 0.0088 0.0049

Neptune 67413-01-03 21:07 G 26343155.21 26343155.38 26343155.55 0.0088 0.0054

Neptune 67413-08-17 09:36 G 26343380.75 26343380.90 26343381.07 0.0088 0.0059

Neptune 67414-03-30 22:19 G 26343606.29 26343606.43 26343606.58 0.0088 0.0064

Neptune 67414-11-11 11:03 G 26343831.84 26343831.96 26343832.10 0.0088 0.0069

Neptune 67415-06-24 23:31 G 26344057.38 26344057.48 26344057.62 0.0088 0.0074

Neptune 67416-02-05 12:15 G 26344282.93 26344283.01 26344283.12 0.0088 0.0079

Jupiter 67416-09-06 22:48 G 26344497.36 26344497.45 26344497.54 0.0483 0.0430

Neptune 67416-09-18 00:43 G 26344508.49 26344508.53 26344508.62 0.0088 0.0084

Jupiter 67417-04-30 12:43 G 26344732.83 26344733.03 26344733.24 0.0485 0.0043

Saturn 67419-03-21 03:36 G 26345422.53 26345422.65 26345422.78 0.0281 0.0226

Saturn 67419-11-05 15:36 G 26345651.94 26345652.15 26345652.36 0.0280 0.0010

Saturn 67420-06-22 02:53 G 26345881.48 26345881.62 26345881.77 0.0280 0.0204

Jupiter 67423-03-05 06:29 G 26346867.57 26346867.77 26346867.97 0.0543 0.0104

Jupiter 67429-01-03 19:12 G 26348999.10 26348999.30 26348999.50 0.0484 0.0089

Jupiter 67429-08-27 10:05 G 26349234.81 26349234.92 26349235.05 0.0488 0.0390

Saturn 67434-04-16 08:39 G 26350927.70 26350927.86 26350928.02 0.0278 0.0184

Jupiter 67434-11-07 15:36 G 26351132.95 26351133.15 26351133.35 0.0544 0.0091

Saturn 67434-12-01 20:24 G 26351157.14 26351157.35 26351157.57 0.0278 0.0028

Saturn 67435-07-19 09:07 G 26351386.77 26351386.88 26351386.99 0.0279 0.0240

Jupiter 67440-09-09 00:15 G 26353265.33 26353265.51 26353265.70 0.0484 0.0222

Jupiter 67441-05-02 14:24 G 26353500.94 26353501.10 26353501.28 0.0486 0.0256

Uranus 67444-05-08 03:36 G 26354602.59 26354602.65 26354602.75 0.0143 0.0133

Uranus 67444-12-20 15:07 G 26354828.97 26354829.13 26354829.30 0.0143 0.0092

Uranus 67445-08-04 02:10 G 26355055.39 26355055.59 26355055.80 0.0143 0.0053

Uranus 67446-03-18 13:12 G 26355281.84 26355282.05 26355282.27 0.0143 0.0013

Jupiter 67446-07-13 01:55 G 26355398.41 26355398.58 26355398.76 0.0545 0.0282

Uranus 67446-10-31 00:15 G 26355508.30 26355508.51 26355508.73 0.0143 0.0027

Jupiter 67447-03-08 17:03 G 26355637.08 26355637.21 26355637.35 0.0541 0.0410

Uranus 67447-06-14 10:48 G 26355734.77 26355734.95 26355735.15 0.0142 0.0066

Uranus 67448-01-26 21:22 G 26355961.25 26355961.39 26355961.54 0.0142 0.0105

Saturn 67448-09-30 09:07 G 26356208.74 26356208.88 26356209.04 0.0281 0.0196

Saturn 67449-05-17 20:53 G 26356438.16 26356438.37 26356438.58 0.0280 0.0020

Saturn 67450-01-02 07:41 G 26356667.72 26356667.82 26356667.95 0.0280 0.0233

Pluto 67452-01-16 09:07 G 26357411.79 26357411.88 26357412.02 0.0064 0.0054

Jupiter 67452-05-15 06:43 G 26357531.64 26357531.78 26357531.92 0.0483 0.0350

Pluto 67452-08-28 13:27 G 26357636.86 26357637.06 26357637.28 0.0064 0.0019

Jupiter 67453-01-05 20:39 G 26357767.16 26357767.36 26357767.56 0.0485 0.0123

Pluto 67453-04-10 17:46 G 26357862.03 26357862.24 26357862.46 0.0064 0.0015

Pluto 67453-11-21 21:36 G 26358087.28 26358087.40 26358087.55 0.0064 0.0051

Mars 67455-11-11 14:24 G 26358806.93 26358807.10 26358807.27 0.1701 0.0321

Jupiter 67458-03-17 12:58 G 26359663.94 26359664.04 26359664.14 0.0545 0.0469

Jupiter 67458-11-11 04:34 G 26359902.51 26359902.69 26359902.88 0.0543 0.0223

Mars 67460-06-24 03:22 G 26360493.51 26360493.64 26360493.77 0.1820 0.1205

Moon 67462-07-11 18:29 G 26361241.17 26361241.27 26361241.37 0.2698 0.2013

Earth 67462-07-11 19:12 G 26361241.18 26361241.30 26361241.43 0.2691 0.1730 *

Saturn 67463-10-27 09:07 G 26361713.72 26361713.88 26361714.06 0.0278 0.0163

Jupiter 67464-01-19 12:15 G 26361798.00 26361798.01 26361798.05 0.0483 0.0479

Saturn 67464-06-12 21:22 G 26361943.18 26361943.39 26361943.60 0.0279 0.0049

Jupiter 67464-09-11 02:24 G 26362033.39 26362033.60 26362033.80 0.0485 0.0012

Saturn 67465-01-28 09:36 G 26362172.84 26362172.90 26362172.98 0.0279 0.0262

Jupiter 67465-05-04 18:00 G 26362269.19 26362269.25 26362269.31 0.0489 0.0467

Earth 67470-07-09 08:39 G 26364160.74 26364160.86 26364160.97 0.2692 0.1891

Moon 67470-07-09 12:15 G 26364160.90 26364161.01 26364161.13 0.2698 0.1790 *

Jupiter 67470-07-16 14:24 G 26364167.90 26364168.10 26364168.30 0.0544 0.0032

Jupiter 67476-05-17 09:07 G 26366299.69 26366299.88 26366300.08 0.0484 0.0141

Jupiter 67477-01-08 00:15 G 26366535.36 26366535.51 26366535.65 0.0487 0.0337

Neptune 67477-11-05 16:19 G 26366837.13 26366837.18 26366837.24 0.0090 0.0086

Saturn 67478-04-12 12:15 G 26366994.85 26366995.01 26366995.19 0.0281 0.0168

Neptune 67478-06-19 05:31 G 26367062.65 26367062.73 26367062.83 0.0090 0.0081

Saturn 67478-11-28 00:15 G 26367224.31 26367224.51 26367224.72 0.0280 0.0048

Neptune 67479-01-30 18:43 G 26367288.18 26367288.28 26367288.41 0.0090 0.0076

Saturn 67479-07-15 11:17 G 26367453.91 26367453.97 26367454.06 0.0280 0.0261

Neptune 67479-09-13 08:10 G 26367513.72 26367513.84 26367513.98 0.0090 0.0071

Neptune 67480-04-25 21:22 G 26367739.26 26367739.39 26367739.56 0.0090 0.0066

Neptune 67480-12-07 10:48 G 26367964.80 26367964.95 26367965.13 0.0090 0.0061

Neptune 67481-07-21 00:29 G 26368190.35 26368190.52 26368190.69 0.0090 0.0055

Neptune 67482-03-03 13:41 G 26368415.90 26368416.07 26368416.26 0.0090 0.0050

Jupiter 67482-03-20 20:24 G 26368433.16 26368433.35 26368433.55 0.0544 0.0168

Neptune 67482-10-15 03:07 G 26368641.45 26368641.63 26368641.83 0.0090 0.0045

Jupiter 67482-11-14 10:19 G 26368671.87 26368671.93 26368671.99 0.0540 0.0513

Neptune 67483-05-28 16:48 G 26368867.00 26368867.20 26368867.40 0.0090 0.0039

Neptune 67484-01-09 06:00 G 26369092.55 26369092.75 26369092.96 0.0090 0.0034

Neptune 67484-08-21 19:12 G 26369318.10 26369318.30 26369318.52 0.0090 0.0029

Neptune 67485-04-04 08:53 G 26369543.66 26369543.87 26369544.08 0.0090 0.0023

Neptune 67485-11-15 22:05 G 26369769.21 26369769.42 26369769.64 0.0090 0.0018

Neptune 67486-06-29 11:31 G 26369994.76 26369994.98 26369995.20 0.0090 0.0012

Neptune 67487-02-10 00:43 G 26370220.32 26370220.53 26370220.75 0.0090 0.0007

Uranus 67487-09-21 03:22 G 26370443.52 26370443.64 26370443.77 0.0135 0.0110

Neptune 67487-09-23 14:10 G 26370445.87 26370446.09 26370446.31 0.0090 0.0001

Jupiter 67488-01-21 15:22 G 26370565.97 26370566.14 26370566.31 0.0484 0.0270

Uranus 67488-05-04 09:36 G 26370669.73 26370669.90 26370670.08 0.0135 0.0077

Neptune 67488-05-06 03:36 G 26370671.43 26370671.65 26370671.87 0.0090 0.0004

Jupiter 67488-09-13 05:46 G 26370801.56 26370801.74 26370801.93 0.0486 0.0205

Uranus 67488-12-16 15:51 G 26370895.96 26370896.16 26370896.37 0.0135 0.0044

Neptune 67488-12-17 16:48 G 26370896.99 26370897.20 26370897.43 0.0090 0.0010

Uranus 67489-07-30 22:05 G 26371122.21 26371122.42 26371122.64 0.0135 0.0011

Neptune 67489-07-31 06:00 G 26371122.54 26371122.75 26371122.98 0.0090 0.0016 *

Neptune 67490-03-13 19:27 G 26371348.10 26371348.31 26371348.53 0.0090 0.0021

Uranus 67490-03-14 04:34 G 26371348.48 26371348.69 26371348.91 0.0135 0.0023 *

Neptune 67490-10-25 08:39 G 26371573.67 26371573.86 26371574.09 0.0089 0.0027

Uranus 67490-10-26 11:03 G 26371574.77 26371574.96 26371575.17 0.0136 0.0057

Neptune 67491-06-07 22:05 G 26371799.23 26371799.42 26371799.64 0.0089 0.0032

Uranus 67491-06-09 18:00 G 26371801.09 26371801.25 26371801.41 0.0136 0.0090

Neptune 67492-01-19 11:46 G 26372024.79 26372024.99 26372025.19 0.0089 0.0037

Uranus 67492-01-22 00:29 G 26372027.45 26372027.52 26372027.62 0.0136 0.0124

Neptune 67492-09-01 00:43 G 26372250.35 26372250.53 26372250.74 0.0089 0.0043

Neptune 67493-04-14 14:24 G 26372475.93 26372476.10 26372476.30 0.0089 0.0048

Saturn 67493-05-08 19:41 G 26372500.13 26372500.32 26372500.51 0.0278 0.0123

Jupiter 67493-11-23 05:03 G 26372698.56 26372698.71 26372698.87 0.0545 0.0361

Neptune 67493-11-26 04:05 G 26372701.49 26372701.67 26372701.85 0.0089 0.0053

Saturn 67493-12-24 07:55 G 26372729.63 26372729.83 26372730.03 0.0279 0.0090

Neptune 67494-07-09 17:03 G 26372927.06 26372927.21 26372927.39 0.0089 0.0058

Jupiter 67494-07-19 19:55 G 26372937.17 26372937.33 26372937.49 0.0542 0.0329

Neptune 67495-02-20 06:29 G 26373152.63 26373152.77 26373152.94 0.0089 0.0064

Neptune 67495-10-03 19:55 G 26373378.20 26373378.33 26373378.48 0.0089 0.0069

Neptune 67496-05-16 09:36 G 26373603.78 26373603.90 26373604.03 0.0089 0.0074

Neptune 67496-12-27 23:03 G 26373829.36 26373829.46 26373829.56 0.0089 0.0079

Neptune 67497-08-10 11:46 G 26374054.94 26374054.99 26374055.09 0.0089 0.0084

Neptune 67498-03-24 01:27 G 26374280.56 26374280.56 26374280.59 0.0089 0.0089

Jupiter 67499-09-26 20:39 G 26374832.25 26374832.36 26374832.48 0.0483 0.0399

Jupiter 67500-05-20 10:34 G 26375067.74 26375067.94 26375068.14 0.0485 0.0071

Jupiter 67506-03-25 06:43 G 26377202.59 26377202.78 26377202.98 0.0543 0.0141

Saturn 67507-10-24 19:27 G 26377781.13 26377781.31 26377781.50 0.0281 0.0135

Saturn 67508-06-10 06:58 G 26378010.59 26378010.79 26378010.99 0.0280 0.0080

Jupiter 67512-01-24 16:34 G 26379333.99 26379334.19 26379334.40 0.0484 0.0061

Jupiter 67512-09-16 07:27 G 26379569.71 26379569.81 26379569.92 0.0488 0.0415

Jupiter 67517-11-27 17:46 G 26381468.04 26381468.24 26381468.45 0.0544 0.0050

Mars 67521-09-09 00:15 G 26382849.34 26382849.51 26382849.69 0.1697 0.0027

Saturn 67522-11-19 21:07 G 26383286.18 26383286.38 26383286.58 0.0278 0.0100

Saturn 67523-07-07 09:22 G 26383515.70 26383515.89 26383516.09 0.0279 0.0113

Jupiter 67523-09-29 22:19 G 26383600.25 26383600.43 26383600.62 0.0484 0.0193

Jupiter 67524-05-22 12:58 G 26383835.87 26383836.04 26383836.20 0.0487 0.0282

Mars 67526-04-22 09:22 G 26384535.73 26384535.89 26384536.06 0.1824 0.0627

Uranus 67528-08-20 21:51 G 26385387.28 26385387.41 26385387.56 0.0143 0.0111

Uranus 67529-04-04 08:53 G 26385613.70 26385613.87 26385614.08 0.0143 0.0072

Jupiter 67529-08-02 03:22 G 26385733.46 26385733.64 26385733.83 0.0545 0.0242

Uranus 67529-11-16 20:24 G 26385840.14 26385840.35 26385840.56 0.0143 0.0031

Jupiter 67530-03-28 17:46 G 26385972.14 26385972.24 26385972.36 0.0541 0.0445

Uranus 67530-07-01 07:27 G 26386066.59 26386066.81 26386067.02 0.0143 0.0009

Uranus 67531-02-12 18:15 G 26386293.05 26386293.26 26386293.46 0.0143 0.0048

Uranus 67531-09-27 04:34 G 26386519.53 26386519.69 26386519.87 0.0142 0.0087

Uranus 67532-05-10 15:22 G 26386746.04 26386746.14 26386746.24 0.0142 0.0126

Jupiter 67535-06-05 05:03 G 26387866.56 26387866.71 26387866.87 0.0484 0.0321

Jupiter 67536-01-26 19:27 G 26388102.11 26388102.31 26388102.50 0.0486 0.0152

Saturn 67537-05-05 22:34 G 26388567.25 26388567.44 26388567.64 0.0280 0.0107

Saturn 67537-12-21 10:19 G 26388796.74 26388796.93 26388797.12 0.0280 0.0108

Jupiter 67541-04-06 10:05 G 26389998.80 26389998.92 26389999.04 0.0545 0.0435

Pluto 67541-07-23 09:22 G 26390106.76 26390106.89 26390107.02 0.0080 0.0065

Jupiter 67541-12-01 00:43 G 26390237.35 26390237.53 26390237.71 0.0542 0.0252

Pluto 67542-03-05 19:55 G 26390332.11 26390332.33 26390332.55 0.0080 0.0004

Pluto 67542-10-17 05:46 G 26390557.67 26390557.74 26390557.86 0.0079 0.0072

Jupiter 67547-02-08 10:48 G 26392132.88 26392132.95 26392133.03 0.0484 0.0448

Jupiter 67547-10-02 01:12 G 26392368.35 26392368.55 26392368.76 0.0485 0.0021

Saturn 67551-10-15 19:27 G 26393843.27 26393843.31 26393843.36 0.0278 0.0270

Saturn 67552-06-01 07:27 G 26394072.60 26394072.81 26394073.02 0.0278 0.0060

Saturn 67553-01-16 19:41 G 26394302.15 26394302.32 26394302.50 0.0279 0.0153

Jupiter 67553-08-05 09:36 G 26394502.69 26394502.90 26394503.10 0.0543 0.0060

Jupiter 67559-06-07 06:15 G 26396634.56 26396634.76 26396634.96 0.0484 0.0113

Neptune 67559-12-24 11:17 G 26396834.94 26396834.97 26396835.03 0.0088 0.0086

Jupiter 67560-01-28 20:53 G 26396870.24 26396870.37 26396870.51 0.0487 0.0361

Neptune 67560-08-06 00:15 G 26397060.43 26397060.51 26397060.59 0.0088 0.0081

Neptune 67561-03-19 12:29 G 26397285.94 26397286.02 26397286.15 0.0088 0.0077

Neptune 67561-10-31 01:12 G 26397511.45 26397511.55 26397511.70 0.0088 0.0072

Neptune 67562-06-13 13:55 G 26397736.96 26397737.08 26397737.25 0.0088 0.0067

Neptune 67563-01-25 02:39 G 26397962.48 26397962.61 26397962.79 0.0088 0.0062

Neptune 67563-09-07 15:36 G 26398187.99 26398188.15 26398188.33 0.0088 0.0057

Neptune 67564-04-20 04:19 G 26398413.51 26398413.68 26398413.87 0.0088 0.0052

Neptune 67564-12-01 16:48 G 26398639.03 26398639.20 26398639.40 0.0088 0.0047

Jupiter 67565-04-09 19:27 G 26398768.11 26398768.31 26398768.51 0.0545 0.0132

Neptune 67565-07-15 05:31 G 26398864.55 26398864.73 26398864.94 0.0088 0.0042

Neptune 67566-02-25 18:15 G 26399090.07 26399090.26 26399090.47 0.0088 0.0037

Neptune 67566-10-09 06:58 G 26399315.60 26399315.79 26399316.01 0.0088 0.0032

Saturn 67566-11-16 07:27 G 26399353.60 26399353.81 26399354.01 0.0280 0.0070

Neptune 67567-05-22 19:41 G 26399541.12 26399541.32 26399541.54 0.0088 0.0027

Saturn 67567-07-03 18:29 G 26399583.09 26399583.27 26399583.46 0.0280 0.0143

Neptune 67568-01-03 08:24 G 26399766.64 26399766.85 26399767.07 0.0088 0.0021

Neptune 67568-08-15 21:07 G 26399992.17 26399992.38 26399992.60 0.0088 0.0016

Neptune 67569-03-29 09:51 G 26400217.70 26400217.91 26400218.13 0.0088 0.0011

Neptune 67569-11-09 22:48 G 26400443.23 26400443.45 26400443.67 0.0088 0.0006

Neptune 67570-06-23 11:31 G 26400668.76 26400668.98 26400669.20 0.0088 0.0001

Neptune 67571-02-04 00:00 G 26400894.28 26400894.50 26400894.73 0.0088 0.0005

Jupiter 67571-02-10 12:15 G 26400900.84 26400901.01 26400901.19 0.0483 0.0243

Uranus 67571-05-22 14:24 G 26401002.03 26401002.10 26401002.20 0.0135 0.0123

Neptune 67571-09-17 12:43 G 26401119.82 26401120.03 26401120.26 0.0088 0.0010

Jupiter 67571-10-04 02:24 G 26401136.43 26401136.60 26401136.78 0.0486 0.0230

Uranus 67572-01-03 20:39 G 26401228.20 26401228.36 26401228.52 0.0135 0.0090

Neptune 67572-04-30 01:27 G 26401345.35 26401345.56 26401345.78 0.0088 0.0015

Uranus 67572-08-17 02:39 G 26401454.42 26401454.61 26401454.82 0.0135 0.0058

Neptune 67572-12-11 14:10 G 26401570.88 26401571.09 26401571.31 0.0088 0.0020

Uranus 67573-03-31 09:07 G 26401680.67 26401680.88 26401681.10 0.0135 0.0024

Neptune 67573-07-25 02:53 G 26401796.41 26401796.62 26401796.83 0.0088 0.0025

Uranus 67573-11-12 15:36 G 26401906.93 26401907.15 26401907.37 0.0135 0.0009

Neptune 67574-03-07 15:07 G 26402021.94 26402022.13 26402022.35 0.0088 0.0031

Uranus 67574-06-26 22:05 G 26402133.21 26402133.42 26402133.63 0.0136 0.0043

Neptune 67574-10-19 04:05 G 26402247.48 26402247.67 26402247.88 0.0088 0.0036

Uranus 67575-02-08 04:34 G 26402359.52 26402359.69 26402359.88 0.0136 0.0077

Neptune 67575-06-01 16:34 G 26402473.01 26402473.19 26402473.40 0.0088 0.0041

Uranus 67575-09-22 11:03 G 26402585.85 26402585.96 26402586.10 0.0136 0.0111

Earth 67576-01-13 02:53 G 26402698.46 26402698.62 26402698.78 0.2640 0.0253

Neptune 67576-01-13 05:03 G 26402698.54 26402698.71 26402698.92 0.0088 0.0046 *

Moon 67576-01-13 05:03 G 26402698.57 26402698.71 26402698.85 0.2646 0.0767 *

Neptune 67576-08-25 17:46 G 26402924.08 26402924.24 26402924.43 0.0088 0.0051

Jupiter 67576-12-13 06:15 G 26403033.60 26403033.76 26403033.92 0.0545 0.0322

Neptune 67577-04-08 06:15 G 26403149.61 26403149.76 26403149.95 0.0088 0.0056

Jupiter 67577-08-08 21:22 G 26403272.24 26403272.39 26403272.54 0.0542 0.0366

Neptune 67577-11-19 18:58 G 26403375.15 26403375.29 26403375.47 0.0088 0.0061

Neptune 67578-07-03 07:41 G 26403600.69 26403600.82 26403600.98 0.0088 0.0066

Neptune 67579-02-13 20:10 G 26403826.23 26403826.34 26403826.49 0.0088 0.0071

Neptune 67579-09-27 09:22 G 26404051.78 26404051.89 26404052.00 0.0088 0.0075

Neptune 67580-05-09 21:51 G 26404277.33 26404277.41 26404277.51 0.0088 0.0080

Neptune 67580-12-21 10:19 G 26404502.90 26404502.93 26404503.00 0.0088 0.0085

Saturn 67581-04-26 22:05 G 26404629.32 26404629.42 26404629.52 0.0278 0.0245

Saturn 67581-12-12 09:51 G 26404858.70 26404858.91 26404859.12 0.0278 0.0035

Saturn 67582-07-29 21:51 G 26405088.26 26405088.41 26405088.59 0.0279 0.0178

Jupiter 67582-10-16 18:00 G 26405167.13 26405167.25 26405167.39 0.0483 0.0371

Jupiter 67583-06-09 08:10 G 26405402.64 26405402.84 26405403.04 0.0485 0.0098

Moon 67584-01-11 00:29 G 26405618.49 26405618.52 26405618.55 0.2641 0.2592

Mars 67587-07-07 10:05 G 26406891.75 26406891.92 26406892.09 0.1695 0.0380

Jupiter 67588-08-17 16:05 G 26407299.10 26407299.17 26407299.24 0.0545 0.0507

Jupiter 67589-04-13 07:27 G 26407537.62 26407537.81 26407538.01 0.0543 0.0179

Mars 67592-02-17 15:07 G 26408577.96 26408578.13 26408578.30 0.1828 0.0026

Jupiter 67595-02-12 14:39 G 26409668.90 26409669.11 26409669.31 0.0484 0.0034

Jupiter 67595-10-06 05:46 G 26409904.67 26409904.74 26409904.84 0.0488 0.0441

Saturn 67595-10-11 21:51 G 26409910.34 26409910.41 26409910.50 0.0281 0.0259

Saturn 67596-05-28 09:51 G 26410139.71 26410139.91 26410140.12 0.0280 0.0044

Saturn 67597-01-12 21:07 G 26410369.22 26410369.38 26410369.56 0.0280 0.0170

Jupiter 67600-12-16 14:24 G 26411802.89 26411803.10 26411803.30 0.0544 0.0020

Jupiter 67606-10-18 20:24 G 26413935.16 26413935.35 26413935.55 0.0484 0.0163

Jupiter 67607-06-11 11:17 G 26414170.82 26414170.97 26414171.13 0.0487 0.0311

Saturn 67610-11-07 07:41 G 26415415.68 26415415.82 26415415.96 0.0278 0.0207

Saturn 67611-06-24 19:55 G 26415645.12 26415645.33 26415645.55 0.0279 0.0005

Saturn 67612-02-09 08:24 G 26415874.72 26415874.85 26415874.99 0.0279 0.0217

Uranus 67612-04-20 05:46 G 26415945.65 26415945.74 26415945.85 0.0143 0.0128

Jupiter 67612-08-20 22:34 G 26416068.25 26416068.44 26416068.63 0.0544 0.0212

Uranus 67612-12-02 17:03 G 26416172.05 26416172.21 26416172.39 0.0143 0.0088

Jupiter 67613-04-16 12:43 G 26416306.93 26416307.03 26416307.13 0.0541 0.0468

Uranus 67613-07-17 04:05 G 26416398.47 26416398.67 26416398.88 0.0143 0.0048

Uranus 67614-02-28 15:22 G 26416624.92 26416625.14 26416625.36 0.0143 0.0008

Uranus 67614-10-13 02:10 G 26416851.39 26416851.59 26416851.81 0.0143 0.0032

Uranus 67615-05-27 12:58 G 26417077.86 26417078.04 26417078.24 0.0143 0.0071

Uranus 67616-01-08 23:31 G 26417304.35 26417304.48 26417304.63 0.0142 0.0110

Jupiter 67618-06-24 01:41 G 26418201.41 26418201.57 26418201.73 0.0483 0.0294

Jupiter 67619-02-14 15:36 G 26418436.96 26418437.15 26418437.34 0.0485 0.0177

Jupiter 67624-04-25 07:41 G 26420333.68 26420333.82 26420333.95 0.0545 0.0403

Jupiter 67624-12-19 23:03 G 26420572.29 26420572.46 26420572.64 0.0543 0.0284

Saturn 67625-04-23 07:55 G 26420696.71 26420696.83 26420696.97 0.0281 0.0220

Saturn 67625-12-08 19:55 G 26420926.12 26420926.33 26420926.54 0.0280 0.0006

Saturn 67626-07-26 06:58 G 26421155.65 26421155.79 26421155.93 0.0280 0.0207

Jupiter 67630-02-27 07:55 G 26422467.73 26422467.83 26422467.92 0.0483 0.0420

Jupiter 67630-10-20 21:36 G 26422703.20 26422703.40 26422703.61 0.0485 0.0047

Jupiter 67636-08-24 10:05 G 26424837.72 26424837.92 26424838.12 0.0544 0.0096

Saturn 67640-05-19 11:03 G 26426201.80 26426201.96 26426202.12 0.0278 0.0181

Saturn 67641-01-03 22:48 G 26426431.24 26426431.45 26426431.66 0.0279 0.0030

Saturn 67641-08-21 11:17 G 26426660.86 26426660.97 26426661.07 0.0279 0.0242

Neptune 67642-02-08 00:29 G 26426831.47 26426831.52 26426831.59 0.0090 0.0086

Jupiter 67642-06-26 03:22 G 26426969.44 26426969.64 26426969.84 0.0484 0.0086

Neptune 67642-09-21 13:41 G 26427056.99 26427057.07 26427057.18 0.0090 0.0081

Jupiter 67643-02-16 18:00 G 26427205.13 26427205.25 26427205.38 0.0487 0.0386

Neptune 67643-05-05 03:07 G 26427282.53 26427282.63 26427282.76 0.0090 0.0076

Neptune 67643-12-16 16:19 G 26427508.06 26427508.18 26427508.33 0.0090 0.0071

Neptune 67644-07-29 05:31 G 26427733.60 26427733.73 26427733.90 0.0090 0.0066

Neptune 67645-03-11 19:12 G 26427959.15 26427959.30 26427959.47 0.0090 0.0060

Neptune 67645-10-23 08:24 G 26428184.69 26428184.85 26428185.04 0.0090 0.0055

Neptune 67646-06-05 21:36 G 26428410.24 26428410.40 26428410.60 0.0090 0.0050

Neptune 67647-01-17 11:17 G 26428635.78 26428635.97 26428636.17 0.0090 0.0044

Neptune 67647-08-31 00:29 G 26428861.34 26428861.52 26428861.73 0.0090 0.0039

Neptune 67648-04-12 13:55 G 26429086.89 26429087.08 26429087.30 0.0090 0.0034

Jupiter 67648-04-28 20:10 G 26429103.14 26429103.34 26429103.54 0.0544 0.0094

Neptune 67648-11-24 03:36 G 26429312.44 26429312.65 26429312.86 0.0090 0.0028

Neptune 67649-07-07 16:48 G 26429538.00 26429538.20 26429538.42 0.0090 0.0023

Neptune 67650-02-18 06:15 G 26429763.55 26429763.76 26429763.98 0.0090 0.0017

Neptune 67650-10-01 19:41 G 26429989.10 26429989.32 26429989.54 0.0090 0.0011

Neptune 67651-05-15 09:07 G 26430214.66 26430214.88 26430215.10 0.0090 0.0006

Neptune 67651-12-26 22:19 G 26430440.21 26430440.43 26430440.65 0.0090 0.0002

Neptune 67652-08-08 11:46 G 26430665.77 26430665.99 26430666.21 0.0090 0.0005

Neptune 67653-03-22 00:58 G 26430891.33 26430891.54 26430891.76 0.0090 0.0011

Mars 67653-05-03 19:55 G 26430934.18 26430934.33 26430934.49 0.1691 0.0706

Neptune 67653-11-02 14:24 G 26431116.88 26431117.10 26431117.32 0.0090 0.0016

Jupiter 67654-03-01 09:36 G 26431235.72 26431235.90 26431236.09 0.0484 0.0215

Neptune 67654-06-16 03:36 G 26431342.44 26431342.65 26431342.87 0.0090 0.0022

Jupiter 67654-10-23 00:15 G 26431471.34 26431471.51 26431471.68 0.0486 0.0257

Saturn 67654-11-03 10:34 G 26431482.80 26431482.94 26431483.10 0.0281 0.0193

Neptune 67655-01-27 17:03 G 26431568.00 26431568.21 26431568.42 0.0090 0.0027

Saturn 67655-06-20 22:34 G 26431712.23 26431712.44 26431712.65 0.0280 0.0021

Uranus 67655-09-03 07:41 G 26431786.69 26431786.82 26431786.96 0.0135 0.0103

Neptune 67655-09-10 06:00 G 26431793.56 26431793.75 26431793.97 0.0090 0.0033

Saturn 67656-02-05 09:36 G 26431941.79 26431941.90 26431942.01 0.0280 0.0233

Uranus 67656-04-16 13:55 G 26432012.90 26432013.08 26432013.27 0.0135 0.0070

Neptune 67656-04-22 19:41 G 26432019.13 26432019.32 26432019.52 0.0089 0.0038

Uranus 67656-11-28 20:10 G 26432239.13 26432239.34 26432239.55 0.0135 0.0037

Neptune 67656-12-04 09:07 G 26432244.69 26432244.88 26432245.07 0.0089 0.0043

Uranus 67657-07-13 02:24 G 26432465.39 26432465.60 26432465.82 0.0135 0.0005

Neptune 67657-07-17 22:05 G 26432470.25 26432470.42 26432470.62 0.0089 0.0049

Mars 67657-12-14 21:22 G 26432620.23 26432620.39 26432620.56 0.1831 0.0566

Uranus 67658-02-24 08:53 G 26432691.66 26432691.87 26432692.09 0.0135 0.0030

Neptune 67658-02-28 11:31 G 26432695.82 26432695.98 26432696.17 0.0089 0.0054

Uranus 67658-10-08 15:22 G 26432917.96 26432918.14 26432918.34 0.0136 0.0064

Neptune 67658-10-12 01:12 G 26432921.38 26432921.55 26432921.71 0.0089 0.0059

Uranus 67659-05-22 22:19 G 26433144.28 26433144.43 26433144.59 0.0136 0.0097

Neptune 67659-05-25 14:10 G 26433146.96 26433147.09 26433147.26 0.0089 0.0065

Jupiter 67660-01-02 03:22 G 26433368.47 26433368.64 26433368.81 0.0544 0.0288

Uranus 67660-01-04 05:03 G 26433370.67 26433370.71 26433370.78 0.0136 0.0131

Neptune 67660-01-06 03:36 G 26433372.53 26433372.65 26433372.81 0.0089 0.0070

Neptune 67660-08-18 17:03 G 26433598.11 26433598.21 26433598.35 0.0089 0.0075

Jupiter 67660-08-27 17:31 G 26433607.09 26433607.23 26433607.37 0.0541 0.0393

Neptune 67661-04-01 06:43 G 26433823.69 26433823.78 26433823.88 0.0089 0.0080

Neptune 67661-11-12 20:24 G 26434049.28 26434049.35 26434049.41 0.0089 0.0085

Jupiter 67665-11-04 15:22 G 26435502.00 26435502.14 26435502.29 0.0484 0.0343

Jupiter 67666-06-28 05:46 G 26435737.55 26435737.74 26435737.94 0.0485 0.0126

Saturn 67669-11-29 19:55 G 26436988.15 26436988.33 26436988.52 0.0279 0.0144

Saturn 67670-07-17 08:24 G 26437217.64 26437217.85 26437218.06 0.0279 0.0068

Jupiter 67671-09-06 11:31 G 26437633.89 26437633.98 26437634.08 0.0544 0.0477

Jupiter 67672-05-02 02:24 G 26437872.41 26437872.60 26437872.79 0.0543 0.0205

Jupiter 67677-07-10 20:39 G 26439768.32 26439768.36 26439768.41 0.0484 0.0470

Jupiter 67678-03-03 10:34 G 26440003.74 26440003.94 26440004.15 0.0484 0.0009

Jupiter 67678-10-25 01:55 G 26440239.52 26440239.58 26440239.64 0.0488 0.0462

Jupiter 67684-01-05 11:31 G 26442137.78 26442137.98 26442138.19 0.0544 0.0013

Saturn 67684-05-15 21:07 G 26442269.21 26442269.38 26442269.56 0.0281 0.0154

Saturn 67684-12-31 08:53 G 26442498.66 26442498.87 26442499.08 0.0280 0.0061

Saturn 67685-08-17 19:41 G 26442728.28 26442728.32 26442728.37 0.0280 0.0272

Jupiter 67689-11-06 16:48 G 26444270.01 26444270.20 26444270.40 0.0484 0.0137

Jupiter 67690-06-30 07:12 G 26444505.66 26444505.80 26444505.95 0.0487 0.0333

Jupiter 67695-09-09 22:05 G 26446403.23 26446403.42 26446403.61 0.0545 0.0177

Jupiter 67696-05-05 12:58 G 26446641.97 26446642.04 26446642.12 0.0541 0.0501

Uranus 67696-08-01 23:46 G 26446730.35 26446730.49 26446730.64 0.0143 0.0105

Uranus 67697-03-16 10:48 G 26446956.77 26446956.95 26446957.15 0.0143 0.0066

Uranus 67697-10-28 22:05 G 26447183.21 26447183.42 26447183.64 0.0143 0.0026

Uranus 67698-06-12 09:07 G 26447409.67 26447409.88 26447410.10 0.0143 0.0014

Uranus 67699-01-24 19:41 G 26447636.13 26447636.32 26447636.54 0.0143 0.0054

Saturn 67699-06-12 00:00 G 26447774.31 26447774.50 26447774.70 0.0278 0.0115

Uranus 67699-09-08 06:29 G 26447862.62 26447862.77 26447862.95 0.0142 0.0092

Saturn 67700-01-27 12:15 G 26448003.81 26448004.01 26448004.21 0.0279 0.0096

Uranus 67700-04-22 17:17 G 26448089.14 26448089.22 26448089.31 0.0142 0.0131

Pluto 67700-08-02 21:07 G 26448191.20 26448191.38 26448191.59 0.0064 0.0031

Pluto 67701-03-16 01:41 G 26448416.35 26448416.57 26448416.79 0.0064 0.0004

Jupiter 67701-07-13 22:19 G 26448536.27 26448536.43 26448536.61 0.0483 0.0267

Pluto 67701-10-27 05:17 G 26448641.56 26448641.72 26448641.91 0.0064 0.0039

Jupiter 67702-03-06 12:29 G 26448771.84 26448772.02 26448772.21 0.0486 0.0202

Earth 67705-07-13 18:58 G 26449997.17 26449997.29 26449997.41 0.2692 0.1706

Moon 67705-07-13 21:51 G 26449997.29 26449997.41 26449997.53 0.2686 0.1836 *

Jupiter 67707-05-16 08:24 G 26450668.70 26450668.85 26450669.00 0.0545 0.0364

Jupiter 67708-01-09 23:31 G 26450907.32 26450907.48 26450907.65 0.0542 0.0320

Jupiter 67713-03-19 04:34 G 26452802.58 26452802.69 26452802.81 0.0483 0.0393

Moon 67713-07-11 06:15 G 26452916.63 26452916.76 26452916.89 0.2687 0.1746

Earth 67713-07-11 08:24 G 26452916.74 26452916.85 26452916.96 0.2693 0.1912 *

Jupiter 67713-11-09 18:58 G 26453038.09 26453038.29 26453038.49 0.0485 0.0073

Saturn 67713-11-26 23:31 G 26453055.30 26453055.48 26453055.67 0.0280 0.0128

Saturn 67714-07-14 11:03 G 26453284.76 26453284.96 26453285.16 0.0280 0.0086

Mars 67719-03-02 06:00 G 26454976.62 26454976.75 26454976.89 0.1688 0.1037

Jupiter 67719-09-14 07:12 G 26455172.60 26455172.80 26455173.00 0.0543 0.0128

Mars 67723-10-13 02:53 G 26456662.48 26456662.62 26456662.75 0.1835 0.1183

Neptune 67724-03-27 20:24 G 26456829.33 26456829.35 26456829.42 0.0088 0.0086

Neptune 67724-11-08 09:22 G 26457054.82 26457054.89 26457054.99 0.0088 0.0081

Neptune 67725-06-21 22:05 G 26457280.33 26457280.42 26457280.55 0.0088 0.0076

Jupiter 67725-07-16 00:29 G 26457304.32 26457304.52 26457304.72 0.0484 0.0058

Neptune 67726-02-02 11:03 G 26457505.84 26457505.96 26457506.10 0.0088 0.0071

Jupiter 67726-03-08 15:51 G 26457540.05 26457540.16 26457540.27 0.0488 0.0412

Neptune 67726-09-15 23:46 G 26457731.36 26457731.49 26457731.65 0.0088 0.0066

Neptune 67727-04-29 12:29 G 26457956.88 26457957.02 26457957.19 0.0088 0.0061

Neptune 67727-12-11 01:12 G 26458182.39 26458182.55 26458182.73 0.0088 0.0056

Neptune 67728-07-23 13:55 G 26458407.91 26458408.08 26458408.27 0.0088 0.0051

Saturn 67728-12-23 08:10 G 26458560.64 26458560.84 26458561.04 0.0279 0.0081

Neptune 67729-03-06 02:39 G 26458633.43 26458633.61 26458633.80 0.0088 0.0046

Saturn 67729-08-09 20:24 G 26458790.17 26458790.35 26458790.54 0.0279 0.0132

Neptune 67729-10-17 15:22 G 26458858.95 26458859.14 26458859.34 0.0088 0.0041

Neptune 67730-05-31 04:05 G 26459084.47 26459084.67 26459084.88 0.0088 0.0036

Neptune 67731-01-11 16:34 G 26459309.99 26459310.19 26459310.41 0.0088 0.0031

Jupiter 67731-05-19 15:36 G 26459437.95 26459438.15 26459438.35 0.0544 0.0065

Neptune 67731-08-25 05:17 G 26459535.52 26459535.72 26459535.94 0.0088 0.0026

Neptune 67732-04-06 18:00 G 26459761.04 26459761.25 26459761.47 0.0088 0.0020

Neptune 67732-11-18 06:43 G 26459986.57 26459986.78 26459987.00 0.0088 0.0015

Neptune 67733-07-01 19:27 G 26460212.09 26460212.31 26460212.53 0.0088 0.0010

Neptune 67734-02-12 08:10 G 26460437.62 26460437.84 26460438.06 0.0088 0.0005

Neptune 67734-09-25 20:53 G 26460663.15 26460663.37 26460663.60 0.0088 0.0002

Neptune 67735-05-09 09:36 G 26460888.68 26460888.90 26460889.12 0.0088 0.0006

Neptune 67735-12-20 22:19 G 26461114.21 26461114.43 26461114.65 0.0088 0.0011

Neptune 67736-08-02 11:03 G 26461339.74 26461339.96 26461340.18 0.0088 0.0016

Neptune 67737-03-15 23:46 G 26461565.28 26461565.49 26461565.70 0.0088 0.0021

Jupiter 67737-03-21 05:46 G 26461570.55 26461570.74 26461570.93 0.0484 0.0190

Neptune 67737-10-27 12:43 G 26461790.82 26461791.03 26461791.24 0.0088 0.0026

Jupiter 67737-11-11 20:10 G 26461806.18 26461806.34 26461806.51 0.0486 0.0279

Neptune 67738-06-10 00:58 G 26462016.35 26462016.54 26462016.76 0.0088 0.0032

Neptune 67739-01-21 13:41 G 26462241.88 26462242.07 26462242.28 0.0088 0.0037

Uranus 67739-05-04 18:43 G 26462345.17 26462345.28 26462345.39 0.0135 0.0116

Neptune 67739-09-04 02:24 G 26462467.42 26462467.60 26462467.80 0.0088 0.0042

Uranus 67739-12-17 00:29 G 26462571.36 26462571.52 26462571.70 0.0135 0.0084

Neptune 67740-04-16 14:53 G 26462692.95 26462693.12 26462693.32 0.0088 0.0047

Uranus 67740-07-30 06:58 G 26462797.59 26462797.79 26462797.99 0.0135 0.0050

Neptune 67740-11-28 03:51 G 26462918.49 26462918.66 26462918.85 0.0088 0.0052

Uranus 67741-03-13 13:12 G 26463023.84 26463024.05 26463024.27 0.0135 0.0017

Neptune 67741-07-11 16:19 G 26463144.03 26463144.18 26463144.36 0.0088 0.0057

Uranus 67741-10-25 19:41 G 26463250.11 26463250.32 26463250.54 0.0135 0.0016

Neptune 67742-02-22 05:03 G 26463369.57 26463369.71 26463369.88 0.0088 0.0062

Uranus 67742-06-09 02:10 G 26463476.40 26463476.59 26463476.80 0.0136 0.0050

Neptune 67742-10-05 17:46 G 26463595.11 26463595.24 26463595.39 0.0088 0.0067

Uranus 67743-01-21 08:53 G 26463702.70 26463702.87 26463703.05 0.0136 0.0084

Jupiter 67743-01-21 23:31 G 26463703.31 26463703.48 26463703.67 0.0545 0.0260

Neptune 67743-05-19 06:15 G 26463820.66 26463820.76 26463820.91 0.0088 0.0072

Saturn 67743-06-09 10:34 G 26463841.75 26463841.94 26463842.15 0.0281 0.0087

Uranus 67743-09-04 15:22 G 26463929.05 26463929.14 26463929.26 0.0136 0.0118

Jupiter 67743-09-17 14:39 G 26463941.99 26463942.11 26463942.24 0.0542 0.0421

Neptune 67743-12-30 18:58 G 26464046.20 26464046.29 26464046.41 0.0088 0.0077

Saturn 67744-01-24 22:05 G 26464071.24 26464071.42 26464071.61 0.0280 0.0127

Neptune 67744-08-12 07:27 G 26464271.75 26464271.81 26464271.91 0.0088 0.0082

Neptune 67745-03-25 20:24 G 26464497.32 26464497.35 26464497.40 0.0088 0.0086

Jupiter 67748-11-24 12:15 G 26465836.86 26465837.01 26465837.16 0.0483 0.0316

Jupiter 67749-07-18 01:55 G 26466072.39 26466072.58 26466072.78 0.0485 0.0150

Mars 67751-03-01 06:58 G 26466663.73 26466663.79 26466663.85 0.1698 0.1582

Jupiter 67754-09-26 10:05 G 26467968.80 26467968.92 26467969.03 0.0545 0.0445

Jupiter 67755-05-23 01:55 G 26468207.40 26468207.58 26468207.76 0.0543 0.0238

Saturn 67757-11-18 00:43 G 26469117.47 26469117.53 26469117.61 0.0278 0.0260

Saturn 67758-07-05 12:43 G 26469346.82 26469347.03 26469347.24 0.0278 0.0051

Saturn 67759-02-20 00:43 G 26469576.36 26469576.53 26469576.71 0.0279 0.0161

Jupiter 67760-07-30 17:31 G 26470103.16 26470103.23 26470103.32 0.0483 0.0443

Jupiter 67761-03-23 07:27 G 26470338.61 26470338.81 26470339.02 0.0484 0.0019

Jupiter 67761-11-13 22:48 G 26470574.44 26470574.45 26470574.47 0.0488 0.0485

Jupiter 67767-01-25 12:29 G 26472472.81 26472473.02 26472473.22 0.0544 0.0051

Saturn 67772-05-04 00:00 G 26474398.47 26474398.50 26474398.55 0.0281 0.0276

Jupiter 67772-11-26 13:55 G 26474604.88 26474605.08 26474605.28 0.0484 0.0110

Saturn 67772-12-19 12:15 G 26474627.81 26474628.01 26474628.22 0.0280 0.0063

Jupiter 67773-07-20 04:48 G 26474840.56 26474840.70 26474840.83 0.0487 0.0358

Saturn 67773-08-05 23:31 G 26474857.31 26474857.48 26474857.67 0.0280 0.0151

Jupiter 67778-09-29 20:24 G 26476738.16 26476738.35 26476738.55 0.0544 0.0143

Jupiter 67779-05-26 10:19 G 26476976.90 26476976.93 26476976.98 0.0540 0.0528

Uranus 67780-04-02 06:58 G 26477288.70 26477288.79 26477288.92 0.0143 0.0124

Uranus 67780-11-14 18:29 G 26477515.11 26477515.27 26477515.46 0.0143 0.0083

Uranus 67781-06-29 05:46 G 26477741.54 26477741.74 26477741.96 0.0143 0.0043

Uranus 67782-02-10 17:03 G 26477967.99 26477968.21 26477968.43 0.0143 0.0003

Uranus 67782-09-25 03:51 G 26478194.46 26478194.66 26478194.88 0.0143 0.0037

Uranus 67783-05-09 14:39 G 26478420.93 26478421.11 26478421.30 0.0143 0.0076

Uranus 67783-12-22 01:12 G 26478647.44 26478647.55 26478647.69 0.0142 0.0115

Jupiter 67784-08-01 19:27 G 26478871.14 26478871.31 26478871.49 0.0484 0.0239

Mars 67784-12-27 16:34 G 26479019.09 26479019.19 26479019.29 0.1686 0.1349

Jupiter 67785-03-25 10:05 G 26479106.74 26479106.92 26479107.10 0.0486 0.0229

Saturn 67787-05-31 07:41 G 26479903.70 26479903.82 26479903.94 0.0278 0.0228

Saturn 67788-01-15 19:41 G 26480133.11 26480133.32 26480133.54 0.0279 0.0018

Saturn 67788-09-01 08:10 G 26480362.69 26480362.84 26480363.00 0.0279 0.0194

Mars 67789-08-09 08:53 G 26480704.84 26480704.87 26480704.91 0.1838 0.1783

Pluto 67790-02-07 03:36 G 26480886.43 26480886.65 26480886.87 0.0080 0.0012

Jupiter 67790-06-04 04:48 G 26481003.54 26481003.70 26481003.86 0.0544 0.0333

Pluto 67790-09-20 13:27 G 26481111.92 26481112.06 26481112.24 0.0080 0.0056

Jupiter 67791-01-28 19:27 G 26481242.15 26481242.31 26481242.46 0.0542 0.0346

Jupiter 67796-04-07 01:12 G 26483137.42 26483137.55 26483137.68 0.0483 0.0368

Jupiter 67796-11-28 15:07 G 26483372.93 26483373.13 26483373.33 0.0485 0.0096

Saturn 67801-11-15 11:31 G 26485184.87 26485184.98 26485185.10 0.0281 0.0234

Jupiter 67802-02-07 12:15 G 26485268.95 26485269.01 26485269.06 0.0545 0.0523

Saturn 67802-07-02 23:31 G 26485414.27 26485414.48 26485414.69 0.0281 0.0021

Jupiter 67802-10-04 03:51 G 26485507.46 26485507.66 26485507.85 0.0544 0.0155

Saturn 67803-02-17 10:34 G 26485643.79 26485643.94 26485644.10 0.0280 0.0192

Neptune 67806-05-14 09:07 G 26486825.83 26486825.88 26486825.96 0.0090 0.0086

Neptune 67806-12-25 22:19 G 26487051.35 26487051.43 26487051.54 0.0090 0.0081

Neptune 67807-08-08 11:31 G 26487276.88 26487276.98 26487277.11 0.0090 0.0076

Neptune 67808-03-21 00:43 G 26487502.42 26487502.53 26487502.69 0.0090 0.0071

Jupiter 67808-08-04 21:22 G 26487639.19 26487639.39 26487639.60 0.0484 0.0033

Neptune 67808-11-01 14:39 G 26487727.96 26487728.11 26487728.26 0.0090 0.0065

Jupiter 67809-03-28 12:00 G 26487874.91 26487875.00 26487875.10 0.0487 0.0433

Neptune 67809-06-15 03:36 G 26487953.50 26487953.65 26487953.83 0.0090 0.0060

Neptune 67810-01-26 16:48 G 26488179.04 26488179.20 26488179.39 0.0090 0.0055

Neptune 67810-09-09 06:29 G 26488404.59 26488404.77 26488404.96 0.0090 0.0049

Neptune 67811-04-22 19:41 G 26488630.14 26488630.32 26488630.52 0.0090 0.0044

Neptune 67811-12-04 08:53 G 26488855.69 26488855.87 26488856.09 0.0090 0.0039

Neptune 67812-07-16 22:34 G 26489081.24 26489081.44 26489081.65 0.0090 0.0033

Neptune 67813-02-27 11:46 G 26489306.79 26489306.99 26489307.21 0.0090 0.0028

Neptune 67813-10-11 01:27 G 26489532.35 26489532.56 26489532.78 0.0090 0.0022

Neptune 67814-05-24 14:53 G 26489757.91 26489758.12 26489758.34 0.0090 0.0016

Jupiter 67814-06-08 14:24 G 26489772.90 26489773.10 26489773.30 0.0545 0.0033

Neptune 67815-01-05 04:19 G 26489983.46 26489983.68 26489983.90 0.0090 0.0011

Neptune 67815-08-18 17:31 G 26490209.02 26490209.23 26490209.46 0.0090 0.0006

Neptune 67816-03-31 07:12 G 26490434.58 26490434.80 26490435.02 0.0090 0.0001

Neptune 67816-11-11 20:39 G 26490660.14 26490660.36 26490660.57 0.0090 0.0006

Saturn 67816-12-11 12:58 G 26490689.89 26490690.04 26490690.19 0.0278 0.0196

Mars 67816-12-27 16:34 G 26490706.07 26490706.19 26490706.31 0.1695 0.1230

Neptune 67817-06-25 09:36 G 26490885.69 26490885.90 26490886.13 0.0090 0.0012

Saturn 67817-07-29 00:43 G 26490919.31 26490919.53 26490919.74 0.0278 0.0014

Neptune 67818-02-05 23:03 G 26491111.25 26491111.46 26491111.68 0.0090 0.0017

Saturn 67818-03-15 12:58 G 26491148.91 26491149.04 26491149.16 0.0279 0.0224

Neptune 67818-09-19 12:15 G 26491336.81 26491337.01 26491337.23 0.0090 0.0023

Moon 67819-01-15 05:31 G 26491454.56 26491454.73 26491454.89 0.2633 0.0340

Earth 67819-01-15 05:46 G 26491454.58 26491454.74 26491454.89 0.2639 0.0491 *

Neptune 67819-05-03 01:41 G 26491562.37 26491562.57 26491562.79 0.0090 0.0028

Neptune 67819-12-14 14:53 G 26491787.93 26491788.12 26491788.34 0.0090 0.0034

Jupiter 67820-04-10 02:53 G 26491905.43 26491905.62 26491905.82 0.0484 0.0163

Neptune 67820-07-27 04:19 G 26492013.49 26492013.68 26492013.89 0.0090 0.0039

Jupiter 67820-12-01 17:17 G 26492141.07 26492141.22 26492141.38 0.0486 0.0304

Neptune 67821-03-09 17:46 G 26492239.05 26492239.24 26492239.43 0.0089 0.0044

Neptune 67821-10-21 06:43 G 26492464.62 26492464.78 26492464.98 0.0089 0.0050

Neptune 67822-06-03 20:24 G 26492690.19 26492690.35 26492690.53 0.0089 0.0055

Uranus 67823-01-03 05:17 G 26492903.68 26492903.72 26492903.80 0.0135 0.0130

Neptune 67823-01-15 09:22 G 26492915.75 26492915.89 26492916.08 0.0089 0.0061

Uranus 67823-08-17 11:31 G 26493129.84 26493129.98 26493130.14 0.0135 0.0097

Neptune 67823-08-28 22:48 G 26493141.32 26493141.45 26493141.62 0.0089 0.0066

Uranus 67824-03-30 17:46 G 26493356.06 26493356.24 26493356.44 0.0135 0.0064

Neptune 67824-04-10 12:29 G 26493366.89 26493367.02 26493367.16 0.0089 0.0071

Uranus 67824-11-12 00:15 G 26493582.30 26493582.51 26493582.72 0.0135 0.0031

Neptune 67824-11-22 01:55 G 26493592.47 26493592.58 26493592.70 0.0089 0.0076

Uranus 67825-06-26 06:43 G 26493808.56 26493808.78 26493809.00 0.0135 0.0003

Neptune 67825-07-05 14:53 G 26493818.05 26493818.12 26493818.23 0.0089 0.0081

Uranus 67826-02-07 12:58 G 26494034.84 26494035.04 26494035.26 0.0135 0.0037

Jupiter 67826-02-11 00:58 G 26494038.35 26494038.54 26494038.72 0.0545 0.0220

Neptune 67826-02-16 04:19 G 26494043.64 26494043.68 26494043.76 0.0089 0.0086

Uranus 67826-09-21 19:27 G 26494261.14 26494261.31 26494261.51 0.0136 0.0071

Jupiter 67826-10-07 15:51 G 26494277.06 26494277.16 26494277.27 0.0541 0.0456

Moon 67827-01-12 18:15 G 26494374.24 26494374.26 26494374.29 0.2634 0.2590

Earth 67827-01-12 22:34 G 26494374.40 26494374.44 26494374.47 0.2638 0.2567

Uranus 67827-05-06 02:24 G 26494487.47 26494487.60 26494487.74 0.0136 0.0104

Saturn 67831-05-28 12:29 G 26495970.89 26495971.02 26495971.17 0.0281 0.0211

Jupiter 67831-12-15 09:22 G 26496171.73 26496171.89 26496172.06 0.0483 0.0289

Saturn 67832-01-13 00:43 G 26496200.32 26496200.53 26496200.74 0.0280 0.0005

Jupiter 67832-08-06 23:31 G 26496407.29 26496407.48 26496407.67 0.0485 0.0176

Saturn 67832-08-29 11:46 G 26496429.86 26496429.99 26496430.13 0.0280 0.0215

Jupiter 67837-10-16 09:51 G 26498303.78 26498303.91 26498304.05 0.0545 0.0408

Jupiter 67838-06-12 00:58 G 26498542.36 26498542.54 26498542.71 0.0542 0.0271

Jupiter 67843-08-20 14:53 G 26500438.02 26500438.12 26500438.22 0.0484 0.0416

Jupiter 67844-04-12 05:03 G 26500673.51 26500673.71 26500673.92 0.0485 0.0046

Saturn 67846-06-23 18:15 G 26501476.09 26501476.26 26501476.43 0.0278 0.0168

Saturn 67847-02-08 06:15 G 26501705.55 26501705.76 26501705.97 0.0279 0.0043

Saturn 67847-09-25 18:43 G 26501935.20 26501935.28 26501935.37 0.0279 0.0255

Jupiter 67850-02-14 09:22 G 26502807.69 26502807.89 26502808.09 0.0543 0.0081

Mars 67850-10-26 02:53 G 26503061.60 26503061.62 26503061.64 0.1683 0.1664

Jupiter 67855-12-17 10:48 G 26504939.75 26504939.95 26504940.15 0.0484 0.0085

Jupiter 67856-08-09 01:27 G 26505175.43 26505175.56 26505175.68 0.0487 0.0380

Saturn 67860-12-07 23:17 G 26506757.31 26506757.47 26506757.64 0.0281 0.0170

Saturn 67861-07-25 11:17 G 26506986.76 26506986.97 26506987.18 0.0281 0.0044

Jupiter 67861-10-19 16:34 G 26507073.00 26507073.19 26507073.39 0.0545 0.0116

Saturn 67862-03-11 22:19 G 26507216.35 26507216.43 26507216.52 0.0280 0.0255

Uranus 67863-12-02 13:41 G 26507847.05 26507847.07 26507847.12 0.0143 0.0141

Uranus 67864-07-16 01:12 G 26508073.40 26508073.55 26508073.71 0.0143 0.0101

Uranus 67865-02-27 12:29 G 26508299.83 26508300.02 26508300.22 0.0143 0.0062

Uranus 67865-10-11 23:46 G 26508526.28 26508526.49 26508526.71 0.0143 0.0022

Uranus 67866-05-26 10:48 G 26508752.74 26508752.95 26508753.17 0.0143 0.0018

Uranus 67867-01-07 21:36 G 26508979.20 26508979.40 26508979.60 0.0143 0.0058

Uranus 67867-08-22 08:10 G 26509205.69 26509205.84 26509206.01 0.0142 0.0097

Jupiter 67867-08-22 17:17 G 26509206.04 26509206.22 26509206.41 0.0483 0.0212

Uranus 67868-04-04 18:43 G 26509432.23 26509432.28 26509432.36 0.0142 0.0135

Jupiter 67868-04-14 07:12 G 26509441.63 26509441.80 26509441.98 0.0485 0.0252

Jupiter 67873-06-24 02:53 G 26511338.45 26511338.62 26511338.79 0.0545 0.0302

Jupiter 67874-02-17 18:29 G 26511577.13 26511577.27 26511577.42 0.0542 0.0377

Saturn 67876-01-04 00:00 G 26512262.32 26512262.50 26512262.69 0.0278 0.0134

Saturn 67876-08-20 11:46 G 26512491.78 26512491.99 26512492.19 0.0278 0.0075

Jupiter 67879-04-27 23:03 G 26513472.32 26513472.46 26513472.61 0.0483 0.0339

Jupiter 67879-12-19 12:43 G 26513707.84 26513708.03 26513708.23 0.0485 0.0123

Mars 67882-10-25 02:39 G 26514748.46 26514748.61 26514748.76 0.1692 0.0888

Jupiter 67885-02-26 13:41 G 26515603.99 26515604.07 26515604.17 0.0545 0.0483

Jupiter 67885-10-23 05:31 G 26515842.54 26515842.73 26515842.92 0.0544 0.0194

Mars 67887-06-07 03:22 G 26516434.52 26516434.64 26516434.77 0.1831 0.1244

Neptune 67888-06-30 06:43 G 26516823.73 26516823.78 26516823.83 0.0088 0.0085

Neptune 67889-02-10 18:58 G 26517049.23 26517049.29 26517049.40 0.0088 0.0081

Neptune 67889-09-24 07:55 G 26517274.74 26517274.83 26517274.97 0.0088 0.0076

Neptune 67890-05-07 20:39 G 26517500.26 26517500.36 26517500.52 0.0088 0.0071

Saturn 67890-06-19 23:46 G 26517543.32 26517543.49 26517543.68 0.0281 0.0148

Neptune 67890-12-19 09:36 G 26517725.77 26517725.90 26517726.06 0.0088 0.0066

Jupiter 67891-01-01 05:17 G 26517738.67 26517738.72 26517738.78 0.0483 0.0462

Saturn 67891-02-04 11:46 G 26517772.79 26517772.99 26517773.20 0.0280 0.0066

Neptune 67891-08-01 22:19 G 26517951.29 26517951.43 26517951.60 0.0088 0.0061

Jupiter 67891-08-24 19:12 G 26517974.09 26517974.30 26517974.50 0.0484 0.0008

Saturn 67891-09-21 23:03 G 26518002.43 26518002.46 26518002.49 0.0280 0.0276

Neptune 67892-03-14 11:03 G 26518176.81 26518176.96 26518177.15 0.0088 0.0056

Jupiter 67892-04-16 10:05 G 26518209.86 26518209.92 26518209.99 0.0488 0.0458

Neptune 67892-10-25 23:46 G 26518402.33 26518402.49 26518402.69 0.0088 0.0051

Neptune 67893-06-08 12:58 G 26518627.85 26518628.04 26518628.23 0.0088 0.0045

Neptune 67894-01-20 01:41 G 26518853.37 26518853.57 26518853.77 0.0088 0.0040

Neptune 67894-09-02 14:10 G 26519078.90 26519079.09 26519079.30 0.0088 0.0035

Neptune 67895-04-16 02:53 G 26519304.42 26519304.62 26519304.84 0.0088 0.0030

Neptune 67895-11-27 15:36 G 26519529.94 26519530.15 26519530.37 0.0088 0.0025

Neptune 67896-07-10 04:05 G 26519755.47 26519755.67 26519755.90 0.0088 0.0020

Neptune 67897-02-20 17:03 G 26519980.99 26519981.21 26519981.43 0.0088 0.0014

Jupiter 67897-06-27 14:53 G 26520107.92 26520108.12 26520108.32 0.0544 0.0005

Neptune 67897-10-04 05:46 G 26520206.52 26520206.74 26520206.96 0.0088 0.0009

Neptune 67898-05-17 18:29 G 26520432.05 26520432.27 26520432.49 0.0088 0.0004

Neptune 67898-12-29 06:58 G 26520657.57 26520657.79 26520658.02 0.0088 0.0002

Neptune 67899-08-11 19:41 G 26520883.10 26520883.32 26520883.54 0.0088 0.0007

Neptune 67900-03-25 08:24 G 26521108.63 26521108.85 26521109.07 0.0088 0.0012

Neptune 67900-11-05 21:07 G 26521334.17 26521334.38 26521334.60 0.0088 0.0017

Neptune 67901-06-19 09:51 G 26521559.70 26521559.91 26521560.13 0.0088 0.0022

Neptune 67902-01-30 22:19 G 26521785.23 26521785.43 26521785.65 0.0088 0.0028

Neptune 67902-09-13 11:03 G 26522010.77 26522010.96 26522011.17 0.0088 0.0033

Neptune 67903-04-26 23:46 G 26522236.30 26522236.49 26522236.70 0.0088 0.0038

Jupiter 67903-05-01 00:58 G 26522240.34 26522240.54 26522240.73 0.0484 0.0135

Neptune 67903-12-08 12:29 G 26522461.84 26522462.02 26522462.22 0.0088 0.0043

Jupiter 67903-12-22 15:36 G 26522476.01 26522476.15 26522476.30 0.0487 0.0331

Neptune 67904-07-21 01:12 G 26522687.38 26522687.55 26522687.74 0.0088 0.0048

Neptune 67905-03-03 13:55 G 26522912.91 26522913.08 26522913.26 0.0088 0.0053

Saturn 67905-07-17 04:05 G 26523048.47 26523048.67 26523048.86 0.0278 0.0108

Neptune 67905-10-15 02:39 G 26523138.46 26523138.61 26523138.78 0.0088 0.0058

Saturn 67906-03-03 16:05 G 26523277.97 26523278.17 26523278.37 0.0279 0.0103

Neptune 67906-05-28 15:22 G 26523364.00 26523364.14 26523364.30 0.0088 0.0063

Neptune 67907-01-09 04:05 G 26523589.54 26523589.67 26523589.81 0.0088 0.0068

Uranus 67907-04-17 22:05 G 26523688.31 26523688.42 26523688.56 0.0135 0.0111

Neptune 67907-08-22 16:34 G 26523815.08 26523815.19 26523815.32 0.0088 0.0073

Uranus 67907-11-30 04:19 G 26523914.51 26523914.68 26523914.87 0.0135 0.0078

Neptune 67908-04-04 05:03 G 26524040.63 26524040.71 26524040.83 0.0088 0.0078

Uranus 67908-07-13 10:34 G 26524140.74 26524140.94 26524141.15 0.0135 0.0045

Neptune 67908-11-15 17:46 G 26524266.19 26524266.24 26524266.33 0.0088 0.0083

Uranus 67909-02-24 17:03 G 26524366.99 26524367.21 26524367.43 0.0135 0.0011

Jupiter 67909-03-02 23:17 G 26524373.28 26524373.47 26524373.66 0.0544 0.0186

Neptune 67909-06-29 06:43 G 26524491.78 26524491.78 26524491.80 0.0088 0.0088

Uranus 67909-10-08 23:31 G 26524593.27 26524593.48 26524593.70 0.0135 0.0022

Jupiter 67909-10-27 13:27 G 26524611.98 26524612.06 26524612.16 0.0541 0.0484

Uranus 67910-05-23 06:00 G 26524819.56 26524819.75 26524819.96 0.0136 0.0056

Uranus 67911-01-04 12:43 G 26525045.87 26525046.03 26525046.20 0.0136 0.0090

Uranus 67911-08-18 19:12 G 26525272.23 26525272.30 26525272.40 0.0136 0.0124

Jupiter 67915-01-04 06:58 G 26526506.62 26526506.79 26526506.97 0.0483 0.0263

Jupiter 67915-08-27 20:53 G 26526742.19 26526742.37 26526742.56 0.0485 0.0200

Saturn 67920-01-01 09:51 G 26528329.72 26528329.91 26528330.11 0.0281 0.0107

Saturn 67920-08-17 21:36 G 26528559.21 26528559.40 26528559.60 0.0281 0.0106

Jupiter 67920-11-05 06:00 G 26528638.61 26528638.75 26528638.89 0.0545 0.0380

Jupiter 67921-07-01 21:36 G 26528877.23 26528877.40 26528877.57 0.0543 0.0297

Jupiter 67926-09-09 13:41 G 26530772.95 26530773.07 26530773.19 0.0483 0.0387

Jupiter 67927-05-03 03:22 G 26531008.44 26531008.64 26531008.84 0.0484 0.0072

Jupiter 67933-03-06 07:55 G 26533142.64 26533142.83 26533143.03 0.0544 0.0113

Saturn 67935-01-27 10:05 G 26533834.71 26533834.92 26533835.12 0.0278 0.0074

Saturn 67935-09-13 21:51 G 26534064.22 26534064.41 26534064.59 0.0278 0.0136

Jupiter 67939-01-06 09:07 G 26535274.68 26535274.88 26535275.08 0.0484 0.0056

Jupiter 67939-08-29 23:31 G 26535510.37 26535510.48 26535510.59 0.0487 0.0406

Jupiter 67944-11-08 19:12 G 26537408.10 26537408.30 26537408.50 0.0545 0.0074

Uranus 67948-03-16 08:10 G 26538631.73 26538631.84 26538631.97 0.0143 0.0120

Pluto 67948-07-08 07:27 G 26538745.65 26538745.81 26538746.02 0.0064 0.0034

Moon 67948-07-15 14:24 G 26538752.96 26538753.10 26538753.24 0.2698 0.1166

Earth 67948-07-15 18:43 G 26538753.16 26538753.28 26538753.41 0.2693 0.1700 *

Mars 67948-08-22 12:43 G 26538790.87 26538791.03 26538791.20 0.1689 0.0559

Uranus 67948-10-28 19:27 G 26538858.15 26538858.31 26538858.51 0.0143 0.0080

Pluto 67949-02-18 12:00 G 26538970.78 26538971.00 26538971.22 0.0064 0.0001

Uranus 67949-06-12 06:58 G 26539084.59 26539084.79 26539085.01 0.0143 0.0040

Saturn 67949-07-13 10:05 G 26539115.73 26539115.92 26539116.13 0.0281 0.0086

Pluto 67949-10-01 15:36 G 26539195.99 26539196.15 26539196.35 0.0064 0.0037

Uranus 67950-01-24 18:15 G 26539311.04 26539311.26 26539311.47 0.0143 0.0002

Saturn 67950-02-27 21:51 G 26539345.23 26539345.41 26539345.60 0.0280 0.0127

Uranus 67950-09-08 05:03 G 26539537.50 26539537.71 26539537.92 0.0143 0.0040

Jupiter 67950-09-11 15:36 G 26539540.96 26539541.15 26539541.34 0.0483 0.0183

Uranus 67951-04-22 16:05 G 26539763.98 26539764.17 26539764.35 0.0142 0.0079

Jupiter 67951-05-05 05:31 G 26539776.57 26539776.73 26539776.90 0.0486 0.0280

Uranus 67951-12-05 02:24 G 26539990.50 26539990.60 26539990.74 0.0142 0.0118

Mars 67953-04-04 09:07 G 26540476.72 26540476.88 26540477.04 0.1835 0.0638

Earth 67956-07-13 07:55 G 26541672.72 26541672.83 26541672.94 0.2694 0.1934

Moon 67956-07-13 07:41 G 26541672.74 26541672.82 26541672.90 0.2701 0.2285 *

Jupiter 67956-07-14 04:48 G 26541673.53 26541673.70 26541673.88 0.0545 0.0261

Jupiter 67957-03-09 19:41 G 26541912.19 26541912.32 26541912.45 0.0542 0.0411

Jupiter 67962-05-17 21:22 G 26543807.24 26543807.39 26543807.55 0.0484 0.0311

Jupiter 67963-01-08 11:31 G 26544042.78 26544042.98 26544043.17 0.0485 0.0151

Saturn 67963-12-23 01:12 G 26544391.47 26544391.55 26544391.63 0.0278 0.0257

Saturn 67964-08-08 12:43 G 26544620.82 26544621.03 26544621.24 0.0278 0.0049

Saturn 67965-03-26 00:29 G 26544850.35 26544850.52 26544850.70 0.0279 0.0161

Jupiter 67968-03-18 13:41 G 26545938.96 26545939.07 26545939.19 0.0545 0.0447

Jupiter 67968-11-12 04:48 G 26546177.52 26546177.70 26546177.88 0.0543 0.0227

Neptune 67970-08-16 18:15 G 26546820.22 26546820.26 26546820.35 0.0090 0.0086

Neptune 67971-03-30 07:41 G 26547045.75 26547045.82 26547045.94 0.0090 0.0081

Neptune 67971-11-10 21:36 G 26547271.28 26547271.40 26547271.51 0.0090 0.0075

Neptune 67972-06-23 10:34 G 26547496.81 26547496.94 26547497.08 0.0090 0.0070

Neptune 67973-02-03 23:31 G 26547722.35 26547722.48 26547722.65 0.0090 0.0065

Neptune 67973-09-17 12:43 G 26547947.89 26547948.03 26547948.21 0.0090 0.0060

Jupiter 67974-01-21 03:36 G 26548073.57 26548073.65 26548073.74 0.0484 0.0435

Neptune 67974-05-01 02:24 G 26548173.43 26548173.60 26548173.78 0.0090 0.0054

Jupiter 67974-09-13 17:31 G 26548309.03 26548309.23 26548309.44 0.0484 0.0022

Neptune 67974-12-12 15:36 G 26548398.98 26548399.15 26548399.34 0.0090 0.0049

Jupiter 67975-05-07 08:24 G 26548544.82 26548544.85 26548544.88 0.0487 0.0481

Neptune 67975-07-26 04:34 G 26548624.52 26548624.69 26548624.90 0.0090 0.0044

Neptune 67976-03-07 18:15 G 26548850.07 26548850.26 26548850.47 0.0090 0.0038

Neptune 67976-10-19 07:27 G 26549075.62 26549075.81 26549076.03 0.0090 0.0033

Neptune 67977-06-01 20:53 G 26549301.17 26549301.37 26549301.59 0.0090 0.0027

Neptune 67978-01-13 10:05 G 26549526.72 26549526.92 26549527.15 0.0090 0.0022

Saturn 67978-06-08 06:15 G 26549672.69 26549672.76 26549672.84 0.0281 0.0262

Neptune 67978-08-26 23:46 G 26549752.28 26549752.49 26549752.71 0.0090 0.0016

Saturn 67979-01-23 18:58 G 26549902.08 26549902.29 26549902.50 0.0281 0.0047

Neptune 67979-04-09 13:12 G 26549977.84 26549978.05 26549978.27 0.0090 0.0010

Saturn 67979-09-10 06:43 G 26550131.61 26550131.78 26550131.95 0.0281 0.0166

Neptune 67979-11-21 02:39 G 26550203.39 26550203.61 26550203.83 0.0090 0.0005

Neptune 67980-07-03 16:05 G 26550428.95 26550429.17 26550429.39 0.0090 0.0001

Jupiter 67980-07-17 11:31 G 26550442.78 26550442.98 26550443.19 0.0544 0.0033

Neptune 67981-02-14 05:17 G 26550654.50 26550654.72 26550654.94 0.0090 0.0007

Neptune 67981-09-27 18:43 G 26550880.06 26550880.28 26550880.50 0.0090 0.0012

Neptune 67982-05-11 08:10 G 26551105.63 26551105.84 26551106.06 0.0090 0.0018

Neptune 67982-12-22 21:22 G 26551331.19 26551331.39 26551331.61 0.0090 0.0023

Neptune 67983-08-05 10:34 G 26551556.74 26551556.94 26551557.16 0.0090 0.0029

Neptune 67984-03-17 23:46 G 26551782.31 26551782.49 26551782.71 0.0090 0.0035

Neptune 67984-10-29 13:27 G 26552007.87 26552008.06 26552008.26 0.0090 0.0040

Neptune 67985-06-12 02:24 G 26552233.43 26552233.60 26552233.81 0.0089 0.0046

Neptune 67986-01-23 15:51 G 26552459.00 26552459.16 26552459.36 0.0089 0.0051

Jupiter 67986-05-20 00:29 G 26552575.32 26552575.52 26552575.72 0.0483 0.0105

Neptune 67986-09-06 05:17 G 26552684.56 26552684.72 26552684.90 0.0089 0.0056

Jupiter 67987-01-10 14:24 G 26552810.97 26552811.10 26552811.24 0.0486 0.0356

Neptune 67987-04-19 18:29 G 26552910.13 26552910.27 26552910.45 0.0089 0.0062

Neptune 67987-12-01 07:55 G 26553135.70 26553135.83 26553135.99 0.0089 0.0067

Neptune 67988-07-13 21:22 G 26553361.27 26553361.39 26553361.53 0.0089 0.0072

Neptune 67989-02-24 10:48 G 26553586.85 26553586.95 26553587.07 0.0089 0.0077

Neptune 67989-10-07 23:46 G 26553812.43 26553812.49 26553812.60 0.0089 0.0082

Neptune 67990-05-21 13:12 G 26554038.03 26554038.05 26554038.12 0.0089 0.0088

Uranus 67990-12-16 08:24 G 26554246.79 26554246.85 26554246.95 0.0135 0.0125

Uranus 67991-07-30 14:39 G 26554472.97 26554473.11 26554473.28 0.0135 0.0092

Uranus 67992-03-12 20:53 G 26554699.19 26554699.37 26554699.58 0.0135 0.0059

Jupiter 67992-03-21 21:36 G 26554708.20 26554708.40 26554708.59 0.0545 0.0155

Uranus 67992-10-25 03:36 G 26554925.43 26554925.65 26554925.86 0.0135 0.0025

Jupiter 67992-11-15 12:58 G 26554946.98 26554947.04 26554947.10 0.0542 0.0513

Uranus 67993-06-08 10:05 G 26555151.70 26555151.92 26555152.13 0.0135 0.0008

Saturn 67993-07-04 07:55 G 26555177.71 26555177.83 26555177.97 0.0277 0.0221

Uranus 67994-01-20 16:19 G 26555377.98 26555378.18 26555378.39 0.0135 0.0042

Saturn 67994-02-18 19:12 G 26555407.09 26555407.30 26555407.51 0.0278 0.0015

Uranus 67994-09-03 22:48 G 26555604.28 26555604.45 26555604.64 0.0136 0.0076

Saturn 67994-10-06 06:43 G 26555636.64 26555636.78 26555636.94 0.0278 0.0195

Uranus 67995-04-18 05:17 G 26555830.61 26555830.72 26555830.87 0.0136 0.0110

Jupiter 67998-01-23 06:00 G 26556841.58 26556841.75 26556841.94 0.0483 0.0233

Jupiter 67998-09-15 19:41 G 26557077.15 26557077.32 26557077.50 0.0485 0.0228

69TH MILLENNIUM CE

This is a list of transits of Venus in the 69th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 68003-11-25 08:53 G 26558973.71 26558973.87 26558974.03 0.0545 0.0337

Jupiter 68004-07-21 00:43 G 26559212.37 26559212.53 26559212.69 0.0543 0.0337

Saturn 68007-12-19 06:29 G 26560458.67 26560458.77 26560458.89 0.0281 0.0241

Saturn 68008-08-04 18:58 G 26560688.08 26560688.29 26560688.50 0.0281 0.0028

Saturn 68009-03-22 06:43 G 26560917.63 26560917.78 26560917.94 0.0280 0.0185

Jupiter 68009-09-28 12:29 G 26561107.89 26561108.02 26561108.16 0.0483 0.0356

Jupiter 68010-05-22 02:24 G 26561343.40 26561343.60 26561343.80 0.0484 0.0102

Mars 68014-06-19 22:48 G 26562833.27 26562833.45 26562833.62 0.1686 0.0215

Jupiter 68015-07-30 19:12 G 26563239.25 26563239.30 26563239.36 0.0545 0.0518

Jupiter 68016-03-25 10:34 G 26563477.75 26563477.94 26563478.14 0.0544 0.0153

Mars 68019-01-30 14:24 G 26564518.93 26564519.10 26564519.28 0.1838 0.0050

Jupiter 68021-06-03 18:00 G 26565374.24 26565374.25 26565374.28 0.0484 0.0481

Jupiter 68022-01-25 08:10 G 26565609.64 26565609.84 26565610.05 0.0484 0.0028

Jupiter 68022-09-17 22:48 G 26565845.37 26565845.45 26565845.55 0.0487 0.0434

Saturn 68023-01-14 09:22 G 26565963.75 26565963.89 26565964.04 0.0278 0.0200

Saturn 68023-08-31 20:39 G 26566193.15 26566193.36 26566193.58 0.0278 0.0009

Saturn 68024-04-17 08:24 G 26566422.73 26566422.85 26566422.99 0.0279 0.0218

Jupiter 68027-11-28 19:41 G 26567743.12 26567743.32 26567743.52 0.0544 0.0036

Uranus 68031-11-14 14:39 G 26569190.07 26569190.11 26569190.18 0.0143 0.0138

Uranus 68032-06-28 02:10 G 26569416.44 26569416.59 26569416.76 0.0143 0.0098

Uranus 68033-02-09 13:41 G 26569642.87 26569643.07 26569643.27 0.0143 0.0058

Uranus 68033-09-24 00:43 G 26569869.32 26569869.53 26569869.75 0.0143 0.0019

Jupiter 68033-09-30 14:53 G 26569875.93 26569876.12 26569876.31 0.0483 0.0155

Uranus 68034-05-08 11:46 G 26570095.78 26570095.99 26570096.21 0.0143 0.0021

Jupiter 68034-05-24 05:03 G 26570111.55 26570111.71 26570111.86 0.0486 0.0305

Uranus 68034-12-20 22:34 G 26570322.25 26570322.44 26570322.64 0.0143 0.0061

Uranus 68035-08-04 09:22 G 26570548.74 26570548.89 26570549.05 0.0142 0.0100

Uranus 68036-03-17 19:55 G 26570775.29 26570775.33 26570775.38 0.0142 0.0138

Saturn 68037-06-30 14:10 G 26571244.95 26571245.09 26571245.24 0.0282 0.0205

Pluto 68038-01-12 14:24 G 26571440.89 26571441.10 26571441.32 0.0080 0.0017

Saturn 68038-02-15 02:39 G 26571474.40 26571474.61 26571474.83 0.0281 0.0012

Pluto 68038-08-26 00:29 G 26571666.36 26571666.52 26571666.70 0.0079 0.0051

Saturn 68038-10-02 14:24 G 26571703.98 26571704.10 26571704.24 0.0281 0.0223

Jupiter 68039-08-03 01:41 G 26572008.39 26572008.57 26572008.76 0.0545 0.0232

Jupiter 68040-03-28 17:03 G 26572247.10 26572247.21 26572247.33 0.0542 0.0438

Jupiter 68045-06-05 21:51 G 26574142.24 26574142.41 26574142.57 0.0483 0.0279

Jupiter 68046-01-27 11:17 G 26574377.79 26574377.97 26574378.16 0.0485 0.0180

Jupiter 68051-04-07 11:31 G 26576273.86 26576273.98 26576274.11 0.0545 0.0415

Jupiter 68051-12-02 03:36 G 26576512.47 26576512.65 26576512.83 0.0544 0.0258

Saturn 68052-07-26 16:19 G 26576750.02 26576750.18 26576750.36 0.0277 0.0164

Neptune 68052-10-02 16:34 G 26576818.15 26576818.19 26576818.26 0.0088 0.0085

Saturn 68053-03-13 03:36 G 26576979.44 26576979.65 26576979.86 0.0277 0.0043

Neptune 68053-05-16 05:17 G 26577043.65 26577043.72 26577043.83 0.0088 0.0080

Saturn 68053-10-28 15:07 G 26577209.05 26577209.13 26577209.22 0.0278 0.0251

Neptune 68053-12-27 18:00 G 26577269.15 26577269.25 26577269.38 0.0088 0.0075

Neptune 68054-08-10 06:58 G 26577494.67 26577494.79 26577494.93 0.0088 0.0070

Neptune 68055-03-23 19:41 G 26577720.18 26577720.32 26577720.48 0.0088 0.0065

Neptune 68055-11-04 08:24 G 26577945.70 26577945.85 26577946.03 0.0088 0.0060

Neptune 68056-06-16 21:07 G 26578171.22 26578171.38 26578171.57 0.0088 0.0055

Neptune 68057-01-28 09:51 G 26578396.75 26578396.91 26578397.11 0.0088 0.0050

Jupiter 68057-02-09 03:36 G 26578408.53 26578408.65 26578408.76 0.0483 0.0403

Neptune 68057-09-10 22:48 G 26578622.27 26578622.45 26578622.65 0.0088 0.0045

Jupiter 68057-10-02 17:03 G 26578644.01 26578644.21 26578644.41 0.0484 0.0052

Neptune 68058-04-24 11:31 G 26578847.80 26578847.98 26578848.19 0.0088 0.0040

Neptune 68058-12-06 00:29 G 26579073.32 26579073.52 26579073.73 0.0088 0.0034

Neptune 68059-07-19 13:12 G 26579298.84 26579299.05 26579299.26 0.0088 0.0029

Neptune 68060-03-01 01:55 G 26579524.37 26579524.58 26579524.80 0.0088 0.0024

Neptune 68060-10-12 14:39 G 26579749.90 26579750.11 26579750.33 0.0088 0.0019

Neptune 68061-05-26 03:22 G 26579975.43 26579975.64 26579975.87 0.0088 0.0014

Neptune 68062-01-06 16:05 G 26580200.95 26580201.17 26580201.39 0.0088 0.0008

Moon 68062-01-16 06:58 G 26580210.64 26580210.79 26580210.94 0.2645 0.0467

Earth 68062-01-16 08:39 G 26580210.71 26580210.86 26580211.01 0.2638 0.0735 *

Neptune 68062-08-20 04:48 G 26580426.48 26580426.70 26580426.92 0.0088 0.0003

Neptune 68063-04-02 17:31 G 26580652.01 26580652.23 26580652.45 0.0088 0.0003

Jupiter 68063-08-06 14:53 G 26580777.92 26580778.12 26580778.32 0.0545 0.0075

Neptune 68063-11-14 06:15 G 26580877.54 26580877.76 26580877.98 0.0088 0.0008

Neptune 68064-06-26 18:43 G 26581103.07 26581103.28 26581103.51 0.0088 0.0013

Neptune 68065-02-07 07:27 G 26581328.60 26581328.81 26581329.03 0.0088 0.0018

Neptune 68065-09-20 19:55 G 26581554.13 26581554.33 26581554.56 0.0088 0.0024

Neptune 68066-05-04 08:39 G 26581779.67 26581779.86 26581780.08 0.0088 0.0029

Neptune 68066-12-15 21:22 G 26582005.20 26582005.39 26582005.61 0.0088 0.0034

Saturn 68067-01-10 14:39 G 26582030.95 26582031.11 26582031.27 0.0281 0.0183

Neptune 68067-07-29 10:19 G 26582230.74 26582230.93 26582231.13 0.0088 0.0039

Saturn 68067-08-28 02:53 G 26582260.41 26582260.62 26582260.83 0.0281 0.0031

Neptune 68068-03-10 23:03 G 26582456.27 26582456.46 26582456.65 0.0088 0.0044

Saturn 68068-04-13 14:24 G 26582490.01 26582490.10 26582490.22 0.0280 0.0243

Neptune 68068-10-22 12:00 G 26582681.82 26582682.00 26582682.18 0.0088 0.0049

Neptune 68069-06-05 00:15 G 26582907.36 26582907.51 26582907.70 0.0088 0.0055

Jupiter 68069-06-07 23:46 G 26582910.29 26582910.49 26582910.69 0.0483 0.0075

Earth 68070-01-14 01:27 G 26583130.48 26583130.56 26583130.63 0.2637 0.2318

Moon 68070-01-14 03:51 G 26583130.60 26583130.66 26583130.72 0.2644 0.2400 *

Neptune 68070-01-16 12:58 G 26583132.90 26583133.04 26583133.22 0.0088 0.0060

Jupiter 68070-01-29 13:41 G 26583145.95 26583146.07 26583146.20 0.0486 0.0384

Neptune 68070-08-30 01:41 G 26583358.44 26583358.57 26583358.73 0.0088 0.0065

Neptune 68071-04-12 14:10 G 26583583.98 26583584.09 26583584.25 0.0088 0.0070

Neptune 68071-11-24 03:07 G 26583809.54 26583809.63 26583809.76 0.0088 0.0075

Neptune 68072-07-06 15:51 G 26584035.09 26584035.16 26584035.27 0.0088 0.0080

Neptune 68073-02-17 04:19 G 26584260.65 26584260.68 26584260.76 0.0088 0.0085

Uranus 68075-03-30 00:43 G 26585031.41 26585031.53 26585031.68 0.0135 0.0106

Jupiter 68075-04-11 01:27 G 26585043.36 26585043.56 26585043.76 0.0545 0.0111

Uranus 68075-11-11 06:58 G 26585257.62 26585257.79 26585257.99 0.0135 0.0073

Uranus 68076-06-24 13:12 G 26585483.86 26585484.05 26585484.27 0.0135 0.0041

Uranus 68077-02-05 19:41 G 26585710.11 26585710.32 26585710.54 0.0135 0.0007

Uranus 68077-09-20 02:10 G 26585936.38 26585936.59 26585936.81 0.0135 0.0027

Uranus 68078-05-04 08:53 G 26586162.67 26586162.87 26586163.06 0.0136 0.0061

Uranus 68078-12-16 15:07 G 26586388.99 26586389.13 26586389.30 0.0136 0.0095

Uranus 68079-07-30 21:36 G 26586615.35 26586615.40 26586615.49 0.0136 0.0129

Mars 68080-04-16 09:07 G 26586875.71 26586875.88 26586876.06 0.1683 0.0096

Jupiter 68081-02-11 05:31 G 26587176.55 26587176.73 26587176.92 0.0483 0.0202

Jupiter 68081-10-04 19:27 G 26587412.14 26587412.31 26587412.49 0.0485 0.0257

Saturn 68082-02-05 17:03 G 26587536.03 26587536.21 26587536.39 0.0278 0.0144

Saturn 68082-09-23 04:19 G 26587765.47 26587765.68 26587765.89 0.0278 0.0064

Saturn 68083-05-10 16:05 G 26587995.13 26587995.17 26587995.21 0.0279 0.0273

Mars 68084-11-26 20:24 G 26588561.18 26588561.35 26588561.51 0.1842 0.0598

Jupiter	68086-12-14 10:19 G	26589308.77	26589308.93	26589309.11	0.0545	0.0298
Jupiter	68087-08-10 01:41 G	26589547.42	26589547.57	26589547.72	0.0542	0.0372
Jupiter	68092-10-17 12:15 G	26591442.87	26591443.01	26591443.17	0.0483	0.0327
Jupiter	68093-06-10 02:10 G	26591678.40	26591678.59	26591678.79	0.0484	0.0130
Saturn	68096-07-22 20:53 G	26592817.19	26592817.37	26592817.55	0.0282	0.0150
Saturn	68097-03-09 09:22 G	26593046.69	26593046.89	26593047.10	0.0281	0.0065
Saturn	68097-10-24 21:07 G	26593276.36	26593276.38	26593276.42	0.0281	0.0277
Jupiter	68098-08-18 16:19 G	26593574.10	26593574.18	26593574.27	0.0545	0.0487
Jupiter	68099-04-14 08:10 G	26593812.65	26593812.84	26593813.03	0.0544	0.0181
Jupiter	68104-06-23 18:58 G	26595709.22	26595709.29	26595709.37	0.0484	0.0448
Jupiter	68105-02-14 08:53 G	26595944.67	26595944.87	26595945.08	0.0484	0.0006
Jupiter	68105-10-07 23:03 G	26596180.41	26596180.46	26596180.54	0.0487	0.0460
Jupiter	68110-12-18 18:00 G	26598078.05	26598078.25	26598078.45	0.0545	0.0006
Saturn	68111-08-20 00:29 G	26598322.33	26598322.52	26598322.72	0.0277	0.0107
Saturn	68112-04-05 11:31 G	26598551.79	26598551.98	26598552.19	0.0277	0.0100
Uranus	68116-02-27 08:53 G	26599974.76	26599974.87	26599975.01	0.0143	0.0117
Uranus	68116-10-10 20:39 G	26600201.18	26600201.36	26600201.55	0.0143	0.0076
Jupiter	68116-10-20 14:53 G	26600210.92	26600211.12	26600211.31	0.0483	0.0123
Uranus	68117-05-25 07:55 G	26600427.62	26600427.83	26600428.04	0.0143	0.0036
Jupiter	68117-06-13 04:19 G	26600446.54	26600446.68	26600446.84	0.0486	0.0335
Uranus	68118-01-06 18:58 G	26600654.07	26600654.29	26600654.51	0.0143	0.0003
Uranus	68118-08-21 05:46 G	26600880.53	26600880.74	26600880.95	0.0143	0.0043
Uranus	68119-04-04 16:19 G	26601107.02	26601107.18	26601107.37	0.0142	0.0083
Uranus	68119-11-17 03:07 G	26601333.53	26601333.63	26601333.76	0.0142	0.0121
Jupiter	68122-08-23 05:03 G	26602343.52	26602343.71	26602343.90	0.0545	0.0188
Jupiter	68123-04-18 20:39 G	26602582.27	26602582.36	26602582.46	0.0542	0.0478
Saturn	68126-02-02 21:51 G	26603603.22	26603603.41	26603603.59	0.0281	0.0128
Saturn	68126-09-20 10:05 G	26603832.72	26603832.92	26603833.12	0.0281	0.0086
Jupiter	68128-06-25 21:22 G	26604477.21	26604477.39	26604477.57	0.0483	0.0247
Jupiter	68129-02-16 10:48 G	26604712.77	26604712.95	26604713.14	0.0485	0.0209

Jupiter 68134-04-27 15:51 G 26606609.02 26606609.16 26606609.32 0.0545 0.0371

Neptune 68134-11-19 04:05 G 26606814.63 26606814.67 26606814.76 0.0090 0.0086

Jupiter 68134-12-22 07:41 G 26606847.65 26606847.82 26606847.99 0.0543 0.0299

Neptune 68135-07-02 18:00 G 26607040.15 26607040.25 26607040.34 0.0090 0.0080

Neptune 68136-02-13 06:58 G 26607265.68 26607265.79 26607265.92 0.0090 0.0075

Neptune 68136-09-25 20:10 G 26607491.22 26607491.34 26607491.49 0.0090 0.0070

Neptune 68137-05-09 09:22 G 26607716.76 26607716.89 26607717.07 0.0090 0.0065

Neptune 68137-12-20 23:03 G 26607942.30 26607942.46 26607942.63 0.0090 0.0059

Neptune 68138-08-03 12:00 G 26608167.84 26608168.00 26608168.19 0.0090 0.0054

Neptune 68139-03-17 01:41 G 26608393.39 26608393.57 26608393.76 0.0090 0.0048

Neptune 68139-10-28 14:53 G 26608618.94 26608619.12 26608619.32 0.0090 0.0043

Jupiter 68140-03-01 02:53 G 26608743.50 26608743.62 26608743.75 0.0483 0.0372

Neptune 68140-06-10 04:19 G 26608844.48 26608844.68 26608844.88 0.0090 0.0037

Jupiter 68140-10-22 17:03 G 26608979.01 26608979.21 26608979.41 0.0484 0.0082

Neptune 68141-01-21 17:17 G 26609070.03 26609070.22 26609070.44 0.0090 0.0032

Saturn 68141-03-01 00:15 G 26609108.32 26609108.51 26609108.72 0.0278 0.0089

Neptune 68141-09-04 06:58 G 26609295.58 26609295.79 26609296.00 0.0090 0.0026

Saturn 68141-10-16 11:31 G 26609337.79 26609337.98 26609338.18 0.0278 0.0120

Neptune 68142-04-17 20:10 G 26609521.13 26609521.34 26609521.56 0.0090 0.0021

Neptune 68142-11-29 09:36 G 26609746.69 26609746.90 26609747.12 0.0090 0.0015

Neptune 68143-07-12 22:48 G 26609972.24 26609972.45 26609972.67 0.0090 0.0010

Neptune 68144-02-23 12:15 G 26610197.79 26610198.01 26610198.23 0.0090 0.0004

Neptune 68144-10-06 01:41 G 26610423.35 26610423.57 26610423.79 0.0090 0.0002

Neptune 68145-05-19 15:07 G 26610648.91 26610649.13 26610649.35 0.0090 0.0007

Neptune 68145-12-31 04:34 G 26610874.47 26610874.69 26610874.91 0.0090 0.0013

Mars 68146-02-12 19:41 G 26610918.15 26610918.32 26610918.48 0.1680 0.0414

Neptune 68146-08-13 17:46 G 26611100.03 26611100.24 26611100.46 0.0090 0.0019

Jupiter 68146-08-26 17:03 G 26611113.01 26611113.21 26611113.40 0.0544 0.0114

Neptune 68147-03-27 06:58 G 26611325.59 26611325.79 26611326.02 0.0090 0.0025

Neptune 68147-11-07 20:24 G 26611551.15 26611551.35 26611551.57 0.0090 0.0030

Neptune 68148-06-20 09:36 G 26611776.72 26611776.90 26611777.12 0.0090 0.0036

Neptune 68149-01-31 23:17 G 26612002.28 26612002.47 26612002.67 0.0090 0.0041

Neptune 68149-09-14 12:15 G 26612227.84 26612228.01 26612228.22 0.0090 0.0047

Neptune 68150-04-28 01:55 G 26612453.41 26612453.58 26612453.77 0.0089 0.0052

Mars 68150-09-25 01:27 G 26612603.43 26612603.56 26612603.69 0.1845 0.1234

Neptune 68150-12-09 14:53 G 26612678.97 26612679.12 26612679.31 0.0089 0.0058

Neptune 68151-07-23 04:19 G 26612904.54 26612904.68 26612904.85 0.0089 0.0063

Neptune 68152-03-04 17:46 G 26613130.11 26613130.24 26613130.39 0.0089 0.0068

Jupiter 68152-06-27 23:46 G 26613245.29 26613245.49 26613245.70 0.0484 0.0046

Neptune 68152-10-16 06:43 G 26613355.68 26613355.78 26613355.93 0.0089 0.0074

Jupiter 68153-02-18 14:10 G 26613480.98 26613481.09 26613481.20 0.0486 0.0410

Neptune 68153-05-29 20:10 G 26613581.26 26613581.34 26613581.47 0.0089 0.0079

Neptune 68154-01-10 09:36 G 26613806.84 26613806.90 26613806.99 0.0089 0.0084

Neptune 68154-08-23 22:48 G 26614032.44 26614032.45 26614032.50 0.0089 0.0089

Saturn 68155-08-16 02:53 G 26614389.43 26614389.62 26614389.82 0.0282 0.0096

Saturn 68156-04-01 15:22 G 26614618.96 26614619.14 26614619.34 0.0281 0.0120

Jupiter 68158-04-30 22:48 G 26615378.25 26615378.45 26615378.65 0.0545 0.0080

Uranus 68158-11-28 10:48 G 26615589.87 26615589.95 26615590.06 0.0135 0.0120

Uranus 68159-07-12 17:03 G 26615816.05 26615816.21 26615816.38 0.0135 0.0087

Uranus 68160-02-23 23:17 G 26616042.27 26616042.47 26616042.67 0.0135 0.0054

Uranus 68160-10-07 05:31 G 26616268.52 26616268.73 26616268.95 0.0135 0.0021

Uranus 68161-05-21 12:00 G 26616494.79 26616495.00 26616495.22 0.0135 0.0013

Uranus 68162-01-02 18:15 G 26616721.07 26616721.26 26616721.47 0.0136 0.0047

Uranus 68162-08-17 00:43 G 26616947.37 26616947.53 26616947.72 0.0136 0.0080

Uranus 68163-03-31 07:27 G 26617173.70 26617173.81 26617173.94 0.0136 0.0114

Jupiter 68164-03-03 06:43 G 26617511.59 26617511.78 26617511.97 0.0483 0.0169

Jupiter 68164-10-24 20:24 G 26617747.19 26617747.35 26617747.52 0.0485 0.0287

Jupiter 68170-01-03 08:24 G 26619643.67 26619643.85 26619644.02 0.0545 0.0266

Saturn 68170-01-24 22:05 G 26619665.34 26619665.42 26619665.50 0.0277 0.0255

Jupiter 68170-08-30 00:00 G 26619882.37 26619882.50 26619882.64 0.0543 0.0401

Saturn 68170-09-11 08:39 G 26619894.65 26619894.86 26619895.07 0.0277 0.0051

Saturn 68171-04-28 19:41 G 26620124.15 26620124.32 26620124.50 0.0277 0.0156

Jupiter 68175-11-07 12:29 G 26621777.86 26621778.02 26621778.18 0.0483 0.0293

Jupiter 68176-06-30 01:55 G 26622013.39 26622013.58 26622013.78 0.0484 0.0161

Jupiter 68181-09-07 19:12 G 26623909.19 26623909.30 26623909.42 0.0545 0.0444

Jupiter 68182-05-04 11:31 G 26624147.80 26624147.98 26624148.17 0.0544 0.0224

Saturn 68185-02-25 04:19 G 26625175.48 26625175.68 26625175.89 0.0282 0.0073

Saturn 68185-10-12 16:34 G 26625405.01 26625405.19 26625405.38 0.0281 0.0141

Jupiter 68187-07-13 18:43 G 26626044.18 26626044.28 26626044.39 0.0483 0.0415

Jupiter 68188-03-05 08:24 G 26626279.65 26626279.85 26626280.06 0.0484 0.0035

Earth 68191-07-17 18:15 G 26627509.14 26627509.26 26627509.39 0.2694 0.1644

Moon 68191-07-17 23:46 G 26627509.44 26627509.49 26627509.54 0.2693 0.2534

Jupiter 68194-01-06 22:34 G 26628413.23 26628413.44 26628413.64 0.0545 0.0041

Pluto 68196-06-11 19:55 G 26629300.15 26629300.33 26629300.53 0.0064 0.0032

Pluto 68197-01-23 00:00 G 26629525.29 26629525.50 26629525.73 0.0064 0.0003

Pluto 68197-09-05 04:05 G 26629750.50 26629750.67 26629750.86 0.0064 0.0038

Earth 68199-07-15 07:41 G 26630428.71 26630428.82 26630428.93 0.2695 0.1968

Moon 68199-07-15 10:34 G 26630428.81 26630428.94 26630429.08 0.2690 0.1615 *

Saturn 68199-08-06 21:51 G 26630451.30 26630451.41 26630451.51 0.0277 0.0236

Uranus 68199-10-27 15:36 G 26630533.08 26630533.15 26630533.23 0.0143 0.0134

Jupiter 68199-11-09 14:39 G 26630545.91 26630546.11 26630546.31 0.0484 0.0092

Saturn 68200-03-24 08:24 G 26630680.64 26630680.85 26630681.06 0.0277 0.0032

Uranus 68200-06-11 03:07 G 26630759.47 26630759.63 26630759.79 0.0143 0.0094

Jupiter 68200-07-03 04:34 G 26630781.56 26630781.69 26630781.83 0.0486 0.0363

Saturn 68200-11-08 19:27 G 26630910.15 26630910.31 26630910.48 0.0278 0.0176

Uranus 68201-01-23 14:10 G 26630985.89 26630986.09 26630986.30 0.0143 0.0055

Uranus 68201-09-07 01:27 G 26631212.34 26631212.56 26631212.77 0.0143 0.0015

Uranus 68202-04-21 12:15 G 26631438.80 26631439.01 26631439.23 0.0143 0.0025

Uranus 68202-12-03 23:03 G 26631665.27 26631665.46 26631665.66 0.0143 0.0065

Uranus 68203-07-18 09:36 G 26631891.77 26631891.90 26631892.06 0.0142 0.0104

Uranus 68204-02-29 20:10 G 26632118.34 26632118.34 26632118.36 0.0142 0.0142

Jupiter 68205-09-12 07:41 G 26632678.63 26632678.82 26632679.02 0.0545 0.0146

Jupiter 68206-05-08 23:03 G 26632917.39 26632917.46 26632917.52 0.0542 0.0513

Jupiter 68211-07-16 21:22 G 26634812.21 26634812.39 26634812.58 0.0483 0.0216

Mars 68211-12-12 06:15 G 26634960.60 26634960.76 26634960.92 0.1678 0.0711

Jupiter 68212-03-08 11:17 G 26635047.80 26635047.97 26635048.15 0.0485 0.0238

Saturn 68214-01-21 19:41 G 26635732.24 26635732.32 26635732.40 0.0282 0.0257

Saturn 68214-09-08 08:39 G 26635961.66 26635961.86 26635962.07 0.0282 0.0043

Saturn 68215-04-25 21:07 G 26636191.22 26636191.38 26636191.56 0.0281 0.0172

Neptune 68217-01-06 02:53 G 26636812.59 26636812.62 26636812.71 0.0088 0.0085

Jupiter 68217-05-17 13:41 G 26636943.91 26636944.07 26636944.23 0.0545 0.0337

Neptune 68217-08-19 15:36 G 26637038.09 26637038.15 26637038.27 0.0088 0.0080

Jupiter 68218-01-11 05:03 G 26637182.55 26637182.71 26637182.88 0.0543 0.0328

Neptune 68218-04-02 04:34 G 26637263.59 26637263.69 26637263.82 0.0088 0.0075

Neptune 68218-11-13 17:17 G 26637489.11 26637489.22 26637489.37 0.0088 0.0070

Neptune 68219-06-27 06:00 G 26637714.62 26637714.75 26637714.92 0.0088 0.0065

Neptune 68220-02-07 18:43 G 26637940.14 26637940.28 26637940.46 0.0088 0.0060

Neptune 68220-09-20 07:55 G 26638165.67 26638165.83 26638166.01 0.0088 0.0054

Neptune 68221-05-03 20:39 G 26638391.19 26638391.36 26638391.55 0.0088 0.0049

Neptune 68221-12-15 09:22 G 26638616.71 26638616.89 26638617.09 0.0088 0.0044

Neptune 68222-07-28 22:05 G 26638842.23 26638842.42 26638842.63 0.0088 0.0039

Neptune 68223-03-11 10:48 G 26639067.76 26639067.95 26639068.17 0.0088 0.0034

Jupiter 68223-03-22 04:05 G 26639078.53 26639078.67 26639078.82 0.0483 0.0338

Neptune 68223-10-23 00:00 G 26639293.29 26639293.50 26639293.71 0.0088 0.0028

Jupiter 68223-11-12 18:00 G 26639314.05 26639314.25 26639314.45 0.0484 0.0114

Neptune 68224-06-04 12:43 G 26639518.82 26639519.03 26639519.24 0.0088 0.0023

Neptune 68225-01-16 01:12 G 26639744.34 26639744.55 26639744.78 0.0088 0.0018

Neptune 68225-08-29 13:55 G 26639969.87 26639970.08 26639970.31 0.0088 0.0013

Neptune 68226-04-12 02:53 G 26640195.40 26640195.62 26640195.84 0.0088 0.0007

Neptune 68226-11-23 15:36 G 26640420.93 26640421.15 26640421.37 0.0088 0.0002

Neptune 68227-07-07 04:19 G 26640646.46 26640646.68 26640646.90 0.0088 0.0004

Neptune 68228-02-17 16:48 G 26640871.99 26640872.20 26640872.42 0.0088 0.0009

Neptune 68228-09-30 05:46 G 26641097.52 26641097.74 26641097.95 0.0088 0.0014

Jupiter 68229-01-19 23:03 G 26641209.40 26641209.46 26641209.52 0.0545 0.0516

Saturn 68229-02-17 06:15 G 26641237.62 26641237.76 26641237.91 0.0277 0.0199

Neptune 68229-05-13 18:00 G 26641323.05 26641323.25 26641323.48 0.0088 0.0020

Jupiter 68229-09-15 14:39 G 26641447.91 26641448.11 26641448.31 0.0544 0.0145

Saturn 68229-10-04 17:03 G 26641467.00 26641467.21 26641467.42 0.0277 0.0006

Neptune 68229-12-25 06:43 G 26641548.58 26641548.78 26641549.00 0.0088 0.0025

Saturn 68230-05-22 04:05 G 26641696.54 26641696.67 26641696.81 0.0277 0.0212

Neptune 68230-08-07 19:27 G 26641774.11 26641774.31 26641774.52 0.0088 0.0030

Neptune 68231-03-21 08:10 G 26641999.64 26641999.84 26642000.05 0.0088 0.0035

Neptune 68231-11-01 21:07 G 26642225.18 26642225.38 26642225.58 0.0088 0.0040

Neptune 68232-06-14 09:22 G 26642450.72 26642450.89 26642451.10 0.0088 0.0046

Neptune 68233-01-25 22:05 G 26642676.26 26642676.42 26642676.62 0.0088 0.0051

Neptune 68233-09-08 10:48 G 26642901.79 26642901.95 26642902.13 0.0088 0.0056

Neptune 68234-04-21 23:31 G 26643127.34 26643127.48 26643127.65 0.0088 0.0061

Jupiter 68234-11-25 09:51 G 26643344.85 26643344.91 26643344.97 0.0484 0.0459

Neptune 68234-12-03 12:29 G 26643352.89 26643353.02 26643353.17 0.0088 0.0066

Neptune 68235-07-17 01:12 G 26643578.43 26643578.55 26643578.69 0.0088 0.0071

Jupiter 68235-07-18 23:31 G 26643580.28 26643580.48 26643580.69 0.0483 0.0015

Neptune 68236-02-27 13:41 G 26643803.98 26643804.07 26643804.20 0.0088 0.0076

Jupiter 68236-03-10 13:41 G 26643815.98 26643816.07 26643816.15 0.0486 0.0438

Neptune 68236-10-10 02:39 G 26644029.54 26644029.61 26644029.70 0.0088 0.0081

Neptune 68237-05-23 15:07 G 26644255.11 26644255.13 26644255.19 0.0088 0.0086

Jupiter 68241-05-21 01:41 G 26645713.37 26645713.57 26645713.77 0.0545 0.0038

Uranus 68242-07-29 20:24 G 26646148.34 26646148.35 26646148.38 0.0135 0.0134

Uranus 68243-03-13 02:39 G 26646374.47 26646374.61 26646374.76 0.0135 0.0101

Saturn 68243-08-03 22:48 G 26646518.34 26646518.45 26646518.57 0.0282 0.0232

Uranus 68243-10-25 08:53 G 26646600.68 26646600.87 26646601.06 0.0135 0.0068

Saturn	68244-03-20 11:31 G	26646747.77	26646747.98	26646748.19	0.0282	0.0018
Uranus	68244-06-07 15:07 G	26646826.92	26646827.13	26646827.34	0.0135	0.0035
Saturn	68244-11-04 23:46 G	26646977.34	26646977.49	26646977.64	0.0281	0.0196
Uranus	68245-01-19 21:22 G	26647053.17	26647053.39	26647053.61	0.0135	0.0002
Uranus	68245-09-03 03:36 G	26647279.44	26647279.65	26647279.87	0.0135	0.0032
Uranus	68246-04-17 10:05 G	26647505.74	26647505.92	26647506.12	0.0136	0.0066
Uranus	68246-11-29 16:34 G	26647732.06	26647732.19	26647732.35	0.0136	0.0100
Jupiter	68247-03-24 06:00 G	26647846.56	26647846.75	26647846.95	0.0483	0.0137
Uranus	68247-07-13 23:17 G	26647958.44	26647958.47	26647958.52	0.0136	0.0133
Jupiter	68247-11-14 19:41 G	26648082.17	26648082.32	26648082.48	0.0485	0.0316
Jupiter	68253-01-23 12:43 G	26649978.84	26649979.03	26649979.21	0.0545	0.0220
Jupiter	68253-09-19 04:19 G	26650217.56	26650217.68	26650217.80	0.0543	0.0442
Saturn	68258-08-30 06:00 G	26652023.59	26652023.75	26652023.91	0.0277	0.0180
Jupiter	68258-11-27 12:00 G	26652112.83	26652113.00	26652113.17	0.0483	0.0262
Saturn	68259-04-16 16:48 G	26652252.98	26652253.20	26652253.41	0.0277	0.0026
Jupiter	68259-07-21 01:41 G	26652348.39	26652348.57	26652348.76	0.0485	0.0190
Saturn	68259-12-02 03:36 G	26652482.55	26652482.65	26652482.78	0.0278	0.0232
Jupiter	68264-09-27 22:19 G	26654244.30	26654244.43	26654244.57	0.0545	0.0402
Jupiter	68265-05-24 14:10 G	26654482.91	26654483.09	26654483.27	0.0544	0.0262
Jupiter	68270-08-02 18:29 G	26656379.16	26656379.27	26656379.40	0.0484	0.0385
Jupiter	68271-03-26 08:39 G	26656614.66	26656614.86	26656615.06	0.0484	0.0065
Saturn	68273-02-13 01:55 G	26657304.44	26657304.58	26657304.73	0.0282	0.0204
Saturn	68273-09-30 14:53 G	26657533.91	26657534.12	26657534.34	0.0282	0.0013
Saturn	68274-05-18 03:36 G	26657763.52	26657763.65	26657763.77	0.0281	0.0225
Jupiter	68277-01-26 19:55 G	26658748.13	26658748.33	26658748.53	0.0544	0.0071
Mars	68277-10-08 17:03 G	26659003.07	26659003.21	26659003.35	0.1675	0.1010
Jupiter	68282-11-29 15:22 G	26660880.94	26660881.14	26660881.35	0.0484	0.0059
Jupiter	68283-07-23 05:31 G	26661116.61	26661116.73	26661116.85	0.0486	0.0392
Uranus	68284-02-09 09:07 G	26661317.77	26661317.88	26661318.03	0.0143	0.0114
Uranus	68284-09-22 20:39 G	26661544.19	26661544.36	26661544.56	0.0143	0.0073

Pluto 68285-05-06 17:46 G 26661770.19 26661770.24 26661770.35 0.0080 0.0075

Uranus 68285-05-07 07:55 G 26661770.63 26661770.83 26661771.05 0.0143 0.0033

Pluto 68285-12-18 04:48 G 26661995.49 26661995.70 26661995.93 0.0080 0.0007

Uranus 68285-12-19 18:58 G 26661997.08 26661997.29 26661997.51 0.0143 0.0008

Pluto 68286-07-31 15:07 G 26662221.00 26662221.13 26662221.28 0.0079 0.0061

Uranus 68286-08-03 05:46 G 26662223.54 26662223.74 26662223.95 0.0143 0.0047

Uranus 68287-03-17 16:34 G 26662450.02 26662450.19 26662450.37 0.0142 0.0086

Uranus 68287-10-30 03:07 G 26662676.54 26662676.63 26662676.74 0.0142 0.0125

Saturn 68288-03-11 15:07 G 26662809.95 26662810.13 26662810.32 0.0277 0.0142

Jupiter 68288-10-01 04:48 G 26663013.50 26663013.70 26663013.90 0.0545 0.0115

Saturn 68288-10-27 01:55 G 26663039.38 26663039.58 26663039.79 0.0277 0.0064

Jupiter 68289-05-27 20:10 G 26663252.33 26663252.34 26663252.36 0.0542 0.0540

Saturn 68289-06-13 13:12 G 26663269.01 26663269.05 26663269.10 0.0277 0.0270

Jupiter 68294-08-04 20:53 G 26665147.19 26665147.37 26665147.56 0.0483 0.0184

Jupiter 68295-03-28 10:19 G 26665382.77 26665382.93 26665383.11 0.0485 0.0268

Neptune 68299-02-21 14:39 G 26666809.05 26666809.11 26666809.18 0.0090 0.0085

Neptune 68299-10-05 03:51 G 26667034.57 26667034.66 26667034.77 0.0090 0.0080

Neptune 68300-05-18 17:03 G 26667260.11 26667260.21 26667260.35 0.0090 0.0075

Jupiter 68300-06-06 15:22 G 26667278.98 26667279.14 26667279.32 0.0545 0.0297

Neptune 68300-12-30 06:43 G 26667485.64 26667485.78 26667485.92 0.0090 0.0069

Jupiter 68301-01-31 07:41 G 26667517.67 26667517.82 26667517.97 0.0543 0.0367

Neptune 68301-08-12 19:41 G 26667711.18 26667711.32 26667711.49 0.0090 0.0064

Neptune 68302-03-26 08:53 G 26667936.73 26667936.87 26667937.06 0.0090 0.0059

Saturn 68302-08-27 06:15 G 26668090.60 26668090.76 26668090.93 0.0282 0.0177

Neptune 68302-11-06 22:34 G 26668162.27 26668162.44 26668162.62 0.0090 0.0053

Saturn 68303-04-13 18:58 G 26668320.09 26668320.29 26668320.50 0.0282 0.0039

Neptune 68303-06-20 11:31 G 26668387.81 26668387.98 26668388.19 0.0090 0.0048

Saturn 68303-11-29 06:58 G 26668549.71 26668549.79 26668549.90 0.0281 0.0252

Neptune 68304-02-01 00:58 G 26668613.36 26668613.54 26668613.74 0.0090 0.0042

Neptune 68304-09-13 14:10 G 26668838.90 26668839.09 26668839.30 0.0090 0.0037

Earth 68305-01-19 11:17 G 26668966.83 26668966.97 26668967.12 0.2638 0.0961

Moon 68305-01-19 14:53 G 26668966.99 26668967.12 26668967.25 0.2632 0.1585 *

Neptune 68305-04-27 03:51 G 26669064.46 26669064.66 26669064.87 0.0090 0.0031

Neptune 68305-12-08 16:48 G 26669290.00 26669290.20 26669290.43 0.0090 0.0026

Jupiter 68306-04-11 03:22 G 26669413.48 26669413.64 26669413.80 0.0483 0.0306

Neptune 68306-07-22 06:15 G 26669515.55 26669515.76 26669515.98 0.0090 0.0020

Jupiter 68306-12-02 17:03 G 26669649.01 26669649.21 26669649.40 0.0484 0.0143

Neptune 68307-03-04 19:27 G 26669741.10 26669741.31 26669741.54 0.0090 0.0015

Neptune 68307-10-16 08:53 G 26669966.66 26669966.87 26669967.09 0.0090 0.0009

Neptune 68308-05-28 22:19 G 26670192.21 26670192.43 26670192.65 0.0090 0.0003

Neptune 68309-01-09 11:46 G 26670417.77 26670417.99 26670418.21 0.0090 0.0003

Neptune 68309-08-23 00:58 G 26670643.32 26670643.54 26670643.76 0.0090 0.0008

Mars 68309-10-08 16:05 G 26670690.09 26670690.17 26670690.25 0.1683 0.1488

Neptune 68310-04-05 14:24 G 26670868.88 26670869.10 26670869.32 0.0090 0.0014

Neptune 68310-11-17 03:36 G 26671094.44 26671094.65 26671094.87 0.0090 0.0020

Neptune 68311-06-30 16:48 G 26671320.01 26671320.20 26671320.43 0.0090 0.0026

Jupiter 68312-02-10 02:39 G 26671544.52 26671544.61 26671544.71 0.0545 0.0473

Neptune 68312-02-11 06:15 G 26671545.57 26671545.76 26671545.98 0.0090 0.0031

Neptune 68312-09-23 19:41 G 26671771.13 26671771.32 26671771.53 0.0090 0.0036

Jupiter 68312-10-05 18:29 G 26671783.08 26671783.27 26671783.47 0.0544 0.0188

Moon 68313-01-17 03:22 G 26671886.54 26671886.64 26671886.75 0.2630 0.2040

Earth 68313-01-17 04:05 G 26671886.58 26671886.67 26671886.77 0.2637 0.2085 *

Neptune 68313-05-07 09:22 G 26671996.70 26671996.89 26671997.09 0.0089 0.0042

Neptune 68313-12-18 22:19 G 26672222.26 26672222.43 26672222.64 0.0089 0.0048

Mars 68314-05-21 02:39 G 26672375.49 26672375.61 26672375.74 0.1842 0.1250

Neptune 68314-08-01 12:00 G 26672447.83 26672448.00 26672448.18 0.0089 0.0053

Neptune 68315-03-15 00:58 G 26672673.40 26672673.54 26672673.73 0.0089 0.0059

Neptune 68315-10-26 14:39 G 26672898.97 26672899.11 26672899.27 0.0089 0.0064

Neptune 68316-06-08 03:36 G 26673124.54 26673124.65 26673124.82 0.0089 0.0070

Neptune 68317-01-19 17:03 G 26673350.11 26673350.21 26673350.35 0.0089 0.0075

Neptune 68317-09-02 06:29 G 26673575.69 26673575.77 26673575.88 0.0089 0.0080

Saturn 68317-09-22 15:07 G 26673595.95 26673596.13 26673596.33 0.0277 0.0123

Jupiter 68317-12-15 08:53 G 26673679.79 26673679.87 26673679.97 0.0484 0.0429

Neptune 68318-04-15 20:10 G 26673801.28 26673801.34 26673801.41 0.0089 0.0085

Saturn 68318-05-10 01:55 G 26673825.38 26673825.58 26673825.79 0.0277 0.0083

Jupiter 68318-08-07 22:48 G 26673915.25 26673915.45 26673915.66 0.0484 0.0020

Jupiter 68319-03-31 13:12 G 26674151.00 26674151.05 26674151.11 0.0487 0.0466

Jupiter 68324-06-10 04:19 G 26676048.48 26676048.68 26676048.88 0.0545 0.0004

Uranus 68326-11-11 12:15 G 26676932.91 26676933.01 26676933.13 0.0135 0.0116

Uranus 68327-06-25 18:15 G 26677159.10 26677159.26 26677159.45 0.0135 0.0083

Uranus 68328-02-07 00:43 G 26677385.33 26677385.53 26677385.73 0.0135 0.0050

Uranus 68328-09-20 06:43 G 26677611.57 26677611.78 26677612.00 0.0135 0.0017

Uranus 68329-05-04 13:12 G 26677837.84 26677838.05 26677838.27 0.0135 0.0017

Uranus 68329-12-16 19:41 G 26678064.12 26678064.32 26678064.52 0.0136 0.0051

Jupiter 68330-04-13 05:46 G 26678181.54 26678181.74 26678181.94 0.0483 0.0107

Uranus 68330-07-31 01:55 G 26678290.42 26678290.58 26678290.76 0.0136 0.0085

Jupiter 68330-12-04 19:55 G 26678417.19 26678417.33 26678417.48 0.0486 0.0344

Uranus 68331-03-14 08:10 G 26678516.76 26678516.84 26678516.97 0.0136 0.0119

Saturn 68332-03-08 09:22 G 26678876.71 26678876.89 26678877.07 0.0282 0.0149

Saturn 68332-10-23 22:05 G 26679106.22 26679106.42 26679106.63 0.0282 0.0067

Saturn 68333-06-10 10:34 G 26679335.92 26679335.94 26679335.97 0.0281 0.0279

Jupiter 68336-02-13 10:05 G 26680313.73 26680313.92 26680314.11 0.0545 0.0187

Jupiter 68336-10-09 01:12 G 26680552.46 26680552.55 26680552.66 0.0542 0.0469

Jupiter 68341-12-17 12:15 G 26682447.83 26682448.01 26682448.19 0.0484 0.0229

Jupiter 68342-08-10 02:10 G 26682683.41 26682683.59 26682683.77 0.0485 0.0221

Mars 68343-08-07 03:51 G 26683045.56 26683045.66 26683045.77 0.1673 0.1303

Saturn 68347-04-05 00:43 G 26684382.33 26684382.53 26684382.73 0.0277 0.0084

Jupiter 68347-10-18 18:58 G 26684579.14 26684579.29 26684579.44 0.0545 0.0370

Saturn 68347-11-20 11:31 G 26684611.80 26684611.98 26684612.18 0.0277 0.0122

Jupiter 68348-06-13 10:34 G 26684817.77 26684817.94 26684818.11 0.0544 0.0290

Jupiter 68353-08-22 17:46 G 26686714.10 26686714.24 26686714.38 0.0483 0.0353

Jupiter 68354-04-15 07:27 G 26686949.61 26686949.81 26686950.01 0.0484 0.0095

Jupiter 68360-02-16 21:07 G 26689083.18 26689083.38 26689083.58 0.0545 0.0110

Saturn 68361-09-18 14:53 G 26689662.93 26689663.12 26689663.32 0.0282 0.0119

Saturn 68362-05-06 03:36 G 26689892.45 26689892.65 26689892.85 0.0281 0.0096

Jupiter 68365-04-27 23:46 G 26690980.46 26690980.49 26690980.54 0.0484 0.0473

Jupiter 68365-12-19 13:55 G 26691215.88 26691216.08 26691216.28 0.0483 0.0029

Jupiter 68366-08-12 03:36 G 26691451.56 26691451.65 26691451.76 0.0486 0.0419

Uranus 68367-10-10 15:36 G 26691876.08 26691876.15 26691876.25 0.0143 0.0132

Uranus 68368-05-24 03:07 G 26692102.47 26692102.63 26692102.80 0.0143 0.0091

Uranus 68369-01-05 14:24 G 26692328.90 26692329.10 26692329.30 0.0143 0.0051

Uranus 68369-08-20 01:12 G 26692555.34 26692555.55 26692555.77 0.0143 0.0012

Uranus 68370-04-03 12:15 G 26692781.80 26692782.01 26692782.22 0.0143 0.0028

Uranus 68370-11-15 23:03 G 26693008.27 26693008.46 26693008.66 0.0143 0.0068

Uranus 68371-06-30 09:36 G 26693234.77 26693234.90 26693235.05 0.0142 0.0107

Jupiter 68371-10-22 07:55 G 26693348.63 26693348.83 26693349.04 0.0545 0.0074

Mars 68375-08-06 02:39 G 26694732.48 26694732.61 26694732.73 0.1680 0.1174

Saturn 68376-02-28 15:07 G 26694939.08 26694939.13 26694939.19 0.0277 0.0266

Saturn 68376-10-15 01:27 G 26695168.36 26695168.56 26695168.77 0.0277 0.0063

Saturn 68377-06-01 12:29 G 26695397.84 26695398.02 26695398.20 0.0277 0.0143

Jupiter 68377-08-24 19:41 G 26695482.13 26695482.32 26695482.52 0.0483 0.0154

Jupiter 68378-04-17 09:22 G 26695717.73 26695717.89 26695718.06 0.0485 0.0295

Mars 68380-03-17 08:10 G 26696417.67 26696417.84 26696418.00 0.1845 0.0619

Neptune 68381-04-10 13:55 G 26696807.03 26696807.08 26696807.16 0.0088 0.0084

Neptune 68381-11-22 02:39 G 26697032.53 26697032.61 26697032.72 0.0088 0.0079

Neptune 68382-07-05 15:22 G 26697258.04 26697258.14 26697258.27 0.0088 0.0074

Neptune 68383-02-16 04:05 G 26697483.55 26697483.67 26697483.82 0.0088 0.0069

Jupiter 68383-06-26 18:00 G 26697614.07 26697614.25 26697614.43 0.0545 0.0255

Neptune 68383-09-29 17:03 G 26697709.07 26697709.21 26697709.38 0.0088 0.0064

Jupiter 68384-02-20 09:22 G 26697852.76 26697852.89 26697853.03 0.0543 0.0404

Neptune 68384-05-12 05:46 G 26697934.59 26697934.74 26697934.92 0.0088 0.0059

Neptune 68384-12-23 18:29 G 26698160.11 26698160.27 26698160.46 0.0088 0.0054

Neptune 68385-08-06 06:58 G 26698385.63 26698385.79 26698386.00 0.0088 0.0049

Neptune 68386-03-19 20:10 G 26698611.15 26698611.34 26698611.54 0.0088 0.0043

Neptune 68386-10-31 09:07 G 26698836.69 26698836.88 26698837.08 0.0088 0.0038

Neptune 68387-06-13 21:36 G 26699062.21 26699062.40 26699062.62 0.0088 0.0033

Neptune 68388-01-25 10:19 G 26699287.74 26699287.93 26699288.16 0.0088 0.0028

Neptune 68388-09-06 23:31 G 26699513.27 26699513.48 26699513.69 0.0088 0.0022

Neptune 68389-04-20 12:15 G 26699738.80 26699739.01 26699739.23 0.0088 0.0017

Jupiter 68389-04-30 02:24 G 26699748.43 26699748.60 26699748.77 0.0483 0.0277

Neptune 68389-12-02 00:58 G 26699964.33 26699964.54 26699964.77 0.0088 0.0012

Jupiter 68389-12-21 16:19 G 26699983.99 26699984.18 26699984.37 0.0484 0.0172

Neptune 68390-07-15 13:55 G 26700189.86 26700190.08 26700190.30 0.0088 0.0006

Neptune 68391-02-26 02:39 G 26700415.39 26700415.61 26700415.83 0.0088 0.0001

Saturn 68391-03-31 17:46 G 26700449.04 26700449.24 26700449.44 0.0282 0.0092

Neptune 68391-10-09 15:22 G 26700640.92 26700641.14 26700641.36 0.0088 0.0005

Saturn 68391-11-16 06:29 G 26700678.58 26700678.77 26700678.96 0.0281 0.0122

Neptune 68392-05-22 04:05 G 26700866.45 26700866.67 26700866.89 0.0088 0.0010

Neptune 68393-01-02 16:34 G 26701091.98 26701092.19 26701092.42 0.0088 0.0016

Neptune 68393-08-16 05:17 G 26701317.51 26701317.72 26701317.94 0.0088 0.0021

Neptune 68394-03-29 18:00 G 26701543.05 26701543.25 26701543.47 0.0088 0.0026

Neptune 68394-11-10 06:58 G 26701768.58 26701768.79 26701769.00 0.0088 0.0031

Jupiter 68395-03-01 00:29 G 26701879.40 26701879.52 26701879.64 0.0544 0.0439

Neptune 68395-06-23 19:12 G 26701994.12 26701994.30 26701994.52 0.0088 0.0037

Jupiter 68395-10-25 15:36 G 26702117.96 26702118.15 26702118.33 0.0544 0.0217

Neptune 68396-02-04 07:55 G 26702219.65 26702219.83 26702220.04 0.0088 0.0042

Neptune 68396-09-16 20:39 G 26702445.19 26702445.36 26702445.56 0.0088 0.0047

Neptune 68397-04-30 09:22 G 26702670.72 26702670.89 26702671.08 0.0088 0.0052

Neptune 68397-12-11 22:19 G 26702896.27 26702896.43 26702896.60 0.0088 0.0057

Neptune 68398-07-25 10:34 G 26703121.81 26703121.94 26703122.11 0.0088 0.0063

Neptune 68399-03-07 23:17 G 26703347.35 26703347.47 26703347.63 0.0088 0.0068

Neptune 68399-10-19 12:00 G 26703572.90 26703573.00 26703573.15 0.0088 0.0073

Neptune 68400-06-01 00:43 G 26703798.45 26703798.53 26703798.65 0.0088 0.0078

Jupiter 68401-01-03 08:10 G 26704014.74 26704014.84 26704014.97 0.0484 0.0398

Neptune 68401-01-12 13:27 G 26704024.01 26704024.06 26704024.15 0.0088 0.0083

Neptune 68401-08-26 02:24 G 26704249.60 26704249.60 26704249.63 0.0088 0.0088

Jupiter 68401-08-26 22:34 G 26704250.24 26704250.44 26704250.65 0.0484 0.0049

Saturn 68405-09-10 00:43 G 26705725.41 26705725.53 26705725.64 0.0277 0.0229

Saturn 68406-04-27 11:17 G 26705954.76 26705954.97 26705955.18 0.0277 0.0025

Saturn 68406-12-12 22:05 G 26706184.27 26706184.42 26706184.59 0.0277 0.0182

Jupiter 68407-06-30 00:15 G 26706383.31 26706383.51 26706383.71 0.0545 0.0033

Mars 68409-06-03 14:24 G 26707088.06 26707088.10 26707088.15 0.1670 0.1602

Uranus 68410-07-11 21:51 G 26707491.36 26707491.41 26707491.46 0.0135 0.0130

Uranus 68411-02-23 03:22 G 26707717.51 26707717.64 26707717.81 0.0135 0.0098

Uranus 68411-10-07 09:51 G 26707943.72 26707943.91 26707944.10 0.0135 0.0065

Uranus 68412-05-20 16:05 G 26708169.96 26708170.17 26708170.39 0.0135 0.0031

Uranus 68413-01-01 22:19 G 26708396.22 26708396.43 26708396.65 0.0135 0.0003

Jupiter 68413-05-02 04:05 G 26708516.47 26708516.67 26708516.87 0.0483 0.0078

Uranus 68413-08-16 04:48 G 26708622.49 26708622.70 26708622.91 0.0136 0.0036

Jupiter 68413-12-23 17:46 G 26708752.11 26708752.24 26708752.38 0.0485 0.0370

Uranus 68414-03-30 11:03 G 26708848.78 26708848.96 26708849.15 0.0136 0.0070

Uranus 68414-11-11 17:17 G 26709075.10 26709075.22 26709075.38 0.0136 0.0104

Jupiter 68419-03-04 10:05 G 26710648.72 26710648.92 26710649.11 0.0545 0.0151

Jupiter 68419-10-29 01:41 G 26710887.51 26710887.57 26710887.65 0.0543 0.0503

Saturn 68420-02-24 12:00 G 26711005.96 26711006.00 26711006.06 0.0282 0.0273

Saturn 68420-10-11 00:58 G 26711235.34 26711235.54 26711235.75 0.0282 0.0059

Saturn 68421-05-28 13:27 G 26711464.89 26711465.06 26711465.24 0.0281 0.0155

Jupiter 68425-01-05 10:19 G 26712782.75 26712782.93 26712783.12 0.0483 0.0200

Jupiter 68425-08-28 23:46 G 26713018.32 26713018.49 26713018.67 0.0484 0.0248

Jupiter 68430-11-06 21:07 G 26714914.22 26714914.38 26714914.54 0.0545 0.0330

Jupiter 68431-07-03 12:58 G 26715152.89 26715153.04 26715153.21 0.0544 0.0329

Moon 68434-07-19 12:43 G 26716264.87 26716265.03 26716265.18 0.2693 0.0737

Earth 68434-07-19 18:00 G 26716265.13 26716265.25 26716265.38 0.2695 0.1644 *

Saturn 68435-03-23 02:10 G 26716511.45 26716511.59 26716511.73 0.0277 0.0206

Saturn 68435-11-07 12:43 G 26716740.81 26716741.03 26716741.24 0.0277 0.0003

Saturn 68436-06-23 23:46 G 26716970.35 26716970.49 26716970.63 0.0277 0.0203

Jupiter 68436-09-10 15:51 G 26717049.01 26717049.16 26717049.32 0.0483 0.0324

Jupiter 68437-05-04 05:46 G 26717284.54 26717284.74 26717284.94 0.0484 0.0122

Mars 68441-06-02 12:43 G 26718774.88 26718775.03 26718775.18 0.1678 0.0846

Jupiter 68442-07-12 07:27 G 26719179.74 26719179.81 26719179.89 0.0545 0.0505

Moon 68442-07-17 02:39 G 26719184.53 26719184.61 26719184.69 0.2700 0.2261

Earth 68442-07-17 07:12 G 26719184.70 26719184.80 26719184.91 0.2696 0.1998

Jupiter 68443-03-07 22:48 G 26719418.26 26719418.45 26719418.65 0.0544 0.0148

Pluto 68443-10-05 06:15 G 26719629.68 26719629.76 26719629.88 0.0064 0.0057

Pluto 68444-05-17 10:48 G 26719854.75 26719854.95 26719855.16 0.0064 0.0022

Pluto 68444-12-28 15:07 G 26720079.91 26720080.13 26720080.34 0.0064 0.0013

Pluto 68445-08-10 19:12 G 26720305.15 26720305.30 26720305.45 0.0064 0.0048

Mars 68446-01-12 13:12 G 26720459.88 26720460.05 26720460.22 0.1849 0.0025

Jupiter 68448-05-16 22:05 G 26721315.35 26721315.42 26721315.51 0.0484 0.0444

Jupiter 68449-01-07 12:29 G 26721550.82 26721551.02 26721551.23 0.0484 0.0003

Jupiter 68449-08-31 02:39 G 26721786.54 26721786.61 26721786.70 0.0486 0.0445

Saturn 68449-09-05 14:24 G 26721792.01 26721792.10 26721792.21 0.0282 0.0247

Saturn 68450-04-23 03:36 G 26722021.44 26722021.65 26722021.86 0.0282 0.0032

Saturn 68450-12-08 16:05 G 26722251.02 26722251.17 26722251.34 0.0281 0.0181

Uranus 68452-01-22 09:07 G 26722660.75 26722660.88 26722661.03 0.0143 0.0111

Uranus 68452-09-04 20:24 G 26722887.17 26722887.35 26722887.54 0.0143 0.0071

Uranus 68453-04-19 07:27 G 26723113.60 26723113.81 26723114.03 0.0143 0.0031

Uranus 68453-12-01 18:29 G 26723340.06 26723340.27 26723340.49 0.0143 0.0010

Uranus 68454-07-16 05:17 G 26723566.52 26723566.72 26723566.93 0.0143 0.0049

Jupiter 68454-11-10 05:17 G 26723683.52 26723683.72 26723683.92 0.0544 0.0041

Uranus 68455-02-27 15:51 G 26723793.00 26723793.16 26723793.34 0.0142 0.0088

Uranus 68455-10-12 02:24 G 26724019.52 26724019.60 26724019.71 0.0142 0.0127

Jupiter 68460-09-12 18:29 G 26725817.08 26725817.27 26725817.47 0.0484 0.0124

Jupiter 68461-05-06 08:39 G 26726052.71 26726052.86 26726053.01 0.0485 0.0323

Neptune 68463-05-27 00:58 G 26726803.49 26726803.54 26726803.63 0.0090 0.0085

Neptune 68464-01-07 14:10 G 26727029.02 26727029.09 26727029.21 0.0090 0.0080

Neptune 68464-08-20 03:51 G 26727254.55 26727254.66 26727254.79 0.0090 0.0074

Saturn 68464-10-02 11:31 G 26727297.82 26727297.98 26727298.15 0.0277 0.0169

Neptune 68465-04-02 17:03 G 26727480.09 26727480.21 26727480.37 0.0090 0.0069

Saturn 68465-05-19 22:34 G 26727527.23 26727527.44 26727527.65 0.0277 0.0036

Neptune 68465-11-14 06:15 G 26727705.63 26727705.76 26727705.94 0.0090 0.0064

Saturn 68466-01-04 09:51 G 26727756.81 26727756.91 26727757.01 0.0278 0.0242

Neptune 68466-06-27 19:55 G 26727931.17 26727931.33 26727931.50 0.0090 0.0058

Jupiter 68466-07-15 13:41 G 26727948.88 26727949.07 26727949.25 0.0545 0.0225

Neptune 68467-02-08 08:53 G 26728156.71 26728156.87 26728157.07 0.0090 0.0053

Jupiter 68467-03-11 04:48 G 26728187.58 26728187.70 26728187.82 0.0543 0.0428

Neptune 68467-09-21 22:34 G 26728382.26 26728382.44 26728382.63 0.0090 0.0047

Neptune 68468-05-04 11:46 G 26728607.81 26728607.99 26728608.20 0.0090 0.0042

Neptune 68468-12-16 01:12 G 26728833.36 26728833.55 26728833.76 0.0090 0.0036

Neptune 68469-07-29 14:39 G 26729058.90 26729059.11 26729059.32 0.0090 0.0030

Neptune 68470-03-12 03:36 G 26729284.45 26729284.65 26729284.88 0.0090 0.0025

Neptune 68470-10-23 17:17 G 26729510.01 26729510.22 26729510.43 0.0090 0.0019

Neptune 68471-06-06 06:29 G 26729735.56 26729735.77 26729735.99 0.0090 0.0013

Neptune 68472-01-17 19:41 G 26729961.11 26729961.32 26729961.54 0.0090 0.0008

Jupiter 68472-05-19 00:00 G 26730083.33 26730083.50 26730083.68 0.0483 0.0248

Neptune 68472-08-30 09:07 G 26730186.66 26730186.88 26730187.10 0.0090 0.0002

Jupiter 68473-01-09 13:41 G 26730318.88 26730319.07 26730319.26 0.0484 0.0198

Neptune 68473-04-12 22:19 G 26730412.22 26730412.43 26730412.65 0.0090 0.0004

Neptune 68473-11-24 11:31 G 26730637.77 26730637.98 26730638.21 0.0090 0.0010

Neptune 68474-07-08 00:58 G 26730863.32 26730863.54 26730863.76 0.0090 0.0015

Neptune 68475-02-18 14:10 G 26731088.88 26731089.09 26731089.31 0.0090 0.0021

Neptune 68475-10-02 03:22 G 26731314.44 26731314.64 26731314.86 0.0090 0.0027

Neptune 68476-05-14 17:03 G 26731540.01 26731540.21 26731540.42 0.0090 0.0032

Neptune 68476-12-26 06:00 G 26731765.57 26731765.75 26731765.97 0.0090 0.0038

Neptune 68477-08-08 19:41 G 26731991.13 26731991.32 26731991.51 0.0090 0.0043

Jupiter 68478-03-19 22:48 G 26732214.33 26732214.45 26732214.59 0.0545 0.0406

Neptune 68478-03-22 08:53 G 26732216.70 26732216.87 26732217.06 0.0089 0.0049

Neptune 68478-11-02 22:05 G 26732442.26 26732442.42 26732442.61 0.0089 0.0054

Jupiter 68478-11-13 14:53 G 26732452.94 26732453.12 26732453.30 0.0544 0.0250

Saturn 68479-03-18 23:17 G 26732578.34 26732578.47 26732578.62 0.0282 0.0211

Neptune 68479-06-16 11:31 G 26732667.83 26732667.98 26732668.16 0.0089 0.0060

Saturn 68479-11-03 12:15 G 26732807.80 26732808.01 26732808.23 0.0282 0.0008

Neptune 68480-01-28 01:12 G 26732893.40 26732893.55 26732893.70 0.0089 0.0065

Saturn 68480-06-20 00:29 G 26733037.39 26733037.52 26733037.66 0.0281 0.0216

Neptune 68480-09-09 14:10 G 26733118.97 26733119.09 26733119.24 0.0089 0.0071

Neptune 68481-04-23 03:51 G 26733344.55 26733344.66 26733344.78 0.0089 0.0076

Neptune 68481-12-04 16:48 G 26733570.13 26733570.20 26733570.32 0.0089 0.0082

Neptune 68482-07-18 06:15 G 26733795.72 26733795.76 26733795.83 0.0089 0.0087

Jupiter 68484-01-23 06:00 G 26734349.63 26734349.75 26734349.89 0.0484 0.0370

Jupiter 68484-09-14 19:55 G 26734585.13 26734585.33 26734585.53 0.0484 0.0075

Jupiter 68490-07-19 01:41 G 26736718.37 26736718.57 26736718.77 0.0545 0.0071

Saturn 68494-04-14 13:55 G 26738083.91 26738084.08 26738084.27 0.0277 0.0144

Uranus 68494-10-23 12:43 G 26738275.93 26738276.03 26738276.17 0.0135 0.0113

Saturn 68494-11-30 00:43 G 26738313.32 26738313.53 26738313.74 0.0277 0.0060

Uranus 68495-06-06 18:58 G 26738502.13 26738502.29 26738502.48 0.0135 0.0080

Saturn 68495-07-17 12:00 G 26738542.94 26738543.00 26738543.06 0.0278 0.0266

Uranus 68496-01-19 01:27 G 26738728.35 26738728.56 26738728.76 0.0135 0.0046

Jupiter 68496-05-21 01:41 G 26738851.37 26738851.57 26738851.77 0.0483 0.0050

Uranus 68496-09-01 07:27 G 26738954.60 26738954.81 26738955.03 0.0135 0.0014

Jupiter 68497-01-11 15:36 G 26739087.03 26739087.15 26739087.27 0.0486 0.0395

Uranus 68497-04-15 13:55 G 26739180.87 26739181.08 26739181.30 0.0135 0.0021

Uranus 68497-11-27 20:10 G 26739407.15 26739407.34 26739407.55 0.0136 0.0055

Uranus 68498-07-12 02:53 G 26739633.46 26739633.62 26739633.79 0.0136 0.0088

Uranus 68499-02-23 09:22 G 26739859.80 26739859.89 26739859.99 0.0136 0.0122

Jupiter 68502-03-24 11:31 G 26740983.78 26740983.98 26740984.18 0.0545 0.0111

Jupiter 68502-11-18 02:53 G 26741222.59 26741222.62 26741222.65 0.0542 0.0536

Mars 68507-03-31 23:46 G 26742817.32 26742817.49 26742817.65 0.1675 0.0557

Jupiter 68508-01-26 08:10 G 26743117.65 26743117.84 26743118.03 0.0483 0.0173

Jupiter 68508-09-17 22:05 G 26743353.25 26743353.42 26743353.59 0.0485 0.0274

Saturn 68508-09-29 01:41 G 26743364.42 26743364.57 26743364.74 0.0282 0.0185

Saturn 68509-05-16 14:53 G 26743593.91 26743594.12 26743594.33 0.0281 0.0030

Saturn 68510-01-01 03:22 G 26743823.53 26743823.64 26743823.75 0.0281 0.0241

Mars 68511-11-10 18:29 G 26744502.11 26744502.27 26744502.44 0.1852 0.0657

Jupiter 68513-11-26 18:43 G 26745249.11 26745249.28 26745249.45 0.0544 0.0296

Jupiter 68514-07-23 09:36 G 26745487.75 26745487.90 26745488.06 0.0543 0.0356

Jupiter 68519-10-01 13:55 G 26747383.92 26747384.08 26747384.24 0.0484 0.0295

Jupiter 68520-05-24 04:05 G 26747619.48 26747619.67 26747619.86 0.0484 0.0151

Saturn 68523-10-26 23:03 G 26748870.27 26748870.46 26748870.66 0.0277 0.0109

Saturn 68524-06-12 10:19 G 26749099.73 26749099.93 26749100.13 0.0278 0.0098

Jupiter 68525-08-01 03:07 G 26749514.54 26749514.63 26749514.73 0.0544 0.0475

Jupiter 68526-03-27 18:00 G 26749753.06 26749753.25 26749753.44 0.0544 0.0175

Jupiter 68531-06-06 19:12 G 26751650.20 26751650.30 26751650.40 0.0484 0.0417

Jupiter 68532-01-28 09:22 G 26751885.68 26751885.89 26751886.09 0.0484 0.0025

Jupiter 68532-09-19 23:03 G 26752121.42 26752121.46 26752121.53 0.0486 0.0467

Pluto 68533-04-11 12:00 G 26752324.84 26752325.00 26752325.18 0.0080 0.0052

Pluto 68533-11-22 22:34 G 26752550.23 26752550.44 26752550.67 0.0080 0.0016

Uranus 68535-09-22 15:07 G 26753219.05 26753219.13 26753219.23 0.0143 0.0129

Uranus 68536-05-06 02:39 G 26753445.44 26753445.61 26753445.78 0.0143 0.0089

Uranus 68536-12-18 13:27 G 26753671.87 26753672.06 26753672.28 0.0143 0.0050

Uranus 68537-08-02 00:43 G 26753898.31 26753898.53 26753898.75 0.0143 0.0010

Jupiter 68537-11-30 03:07 G 26754018.43 26754018.63 26754018.84 0.0545 0.0011

Uranus 68538-03-16 11:31 G 26754124.77 26754124.98 26754125.20 0.0143 0.0030

Saturn 68538-04-11 12:00 G 26754150.83 26754151.00 26754151.19 0.0282 0.0146

Uranus 68538-10-28 22:19 G 26754351.25 26754351.43 26754351.63 0.0142 0.0070

Saturn 68538-11-27 00:43 G 26754380.33 26754380.53 26754380.74 0.0282 0.0069

Uranus 68539-06-12 08:53 G 26754577.74 26754577.87 26754578.02 0.0142 0.0109

Saturn 68539-07-14 12:43 G 26754610.02 26754610.03 26754610.06 0.0281 0.0280

Jupiter 68543-10-03 15:36 G 26756151.95 26756152.15 26756152.35 0.0483 0.0098

Jupiter 68544-05-26 05:17 G 26756387.58 26756387.72 26756387.86 0.0485 0.0346

Neptune 68545-07-14 00:43 G 26756801.49 26756801.53 26756801.63 0.0088 0.0084

Neptune 68546-02-24 13:41 G 26757027.00 26757027.07 26757027.19 0.0088 0.0079

Neptune 68546-10-08 03:07 G 26757252.51 26757252.63 26757252.75 0.0088 0.0073

Neptune 68547-05-21 15:51 G 26757478.02 26757478.16 26757478.30 0.0088 0.0068

Neptune 68548-01-02 04:19 G 26757703.54 26757703.68 26757703.84 0.0088 0.0063

Moon 68548-01-21 09:51 G 26757722.76 26757722.91 26757723.06 0.2641 0.0450

Earth 68548-01-21 14:24 G 26757722.96 26757723.10 26757723.24 0.2637 0.1218 *

Neptune 68548-08-14 17:03 G 26757929.05 26757929.21 26757929.38 0.0088 0.0058

Neptune 68549-03-28 05:31 G 26758154.57 26758154.73 26758154.93 0.0088 0.0053

Jupiter 68549-08-04 13:41 G 26758283.88 26758284.07 26758284.26 0.0545 0.0190

Neptune 68549-11-08 18:29 G 26758380.10 26758380.27 26758380.47 0.0088 0.0048

Jupiter 68550-03-31 05:31 G 26758522.63 26758522.73 26758522.84 0.0543 0.0461

Neptune 68550-06-22 07:27 G 26758605.62 26758605.81 26758606.01 0.0088 0.0042

Neptune 68551-02-02 20:10 G 26758831.14 26758831.34 26758831.54 0.0088 0.0037

Neptune 68551-09-16 08:53 G 26759056.67 26759056.87 26759057.08 0.0088 0.0032

Neptune 68552-04-28 21:22 G 26759282.20 26759282.39 26759282.62 0.0088 0.0027

Neptune 68552-12-10 10:34 G 26759507.72 26759507.94 26759508.15 0.0088 0.0021

Saturn 68553-05-08 02:24 G 26759656.40 26759656.60 26759656.81 0.0277 0.0081

Neptune 68553-07-23 23:03 G 26759733.25 26759733.46 26759733.69 0.0088 0.0016

Saturn 68553-12-23 13:12 G 26759885.87 26759886.05 26759886.25 0.0277 0.0124

Neptune 68554-03-06 11:46 G 26759958.78 26759958.99 26759959.22 0.0088 0.0011

Neptune 68554-10-18 00:58 G 26760184.32 26760184.54 26760184.76 0.0088 0.0005

Neptune 68555-05-31 13:41 G 26760409.85 26760410.07 26760410.29 0.0088 0.0001

Jupiter 68555-06-08 21:07 G 26760418.20 26760418.38 26760418.57 0.0483 0.0222

Neptune 68556-01-12 02:24 G 26760635.38 26760635.60 26760635.82 0.0088 0.0006

Moon 68556-01-19 05:46 G 26760642.64 26760642.74 26760642.85 0.2643 0.1810

Earth 68556-01-19 07:12 G 26760642.69 26760642.80 26760642.91 0.2636 0.1828 *

Jupiter 68556-01-30 10:48 G 26760653.77 26760653.95 26760654.13 0.0484 0.0223

Neptune 68556-08-24 15:07 G 26760860.91 26760861.13 26760861.35 0.0088 0.0011

Neptune 68557-04-07 03:36 G 26761086.44 26761086.65 26761086.88 0.0088 0.0017

Neptune 68557-11-18 16:34 G 26761311.98 26761312.19 26761312.41 0.0088 0.0022

Neptune 68558-07-02 05:17 G 26761537.52 26761537.72 26761537.94 0.0088 0.0027

Neptune 68559-02-12 17:46 G 26761763.05 26761763.24 26761763.46 0.0088 0.0033

Neptune 68559-09-26 06:29 G 26761988.59 26761988.77 26761988.98 0.0088 0.0038

Neptune 68560-05-08 19:27 G 26762214.12 26762214.31 26762214.51 0.0088 0.0043

Neptune 68560-12-20 08:10 G 26762439.66 26762439.84 26762440.03 0.0088 0.0048

Jupiter 68561-04-09 00:00 G 26762549.36 26762549.50 26762549.66 0.0545 0.0367

Neptune 68561-08-02 20:24 G 26762665.20 26762665.35 26762665.55 0.0088 0.0054

Jupiter 68561-12-03 15:51 G 26762787.99 26762788.16 26762788.33 0.0544 0.0286

Neptune 68562-03-16 09:07 G 26762890.74 26762890.88 26762891.06 0.0088 0.0059

Neptune 68562-10-27 22:05 G 26763116.28 26763116.42 26763116.58 0.0088 0.0064

Neptune 68563-06-10 10:48 G 26763341.83 26763341.95 26763342.10 0.0088 0.0069

Neptune 68564-01-21 23:31 G 26763567.37 26763567.48 26763567.61 0.0088 0.0074

Neptune 68564-09-03 12:00 G 26763792.92 26763793.00 26763793.11 0.0088 0.0079

Neptune 68565-04-17 00:43 G 26764018.49 26764018.53 26764018.61 0.0088 0.0084

Jupiter 68567-02-12 03:22 G 26764684.50 26764684.64 26764684.78 0.0484 0.0343

Jupiter 68567-10-05 17:17 G 26764920.02 26764920.22 26764920.42 0.0484 0.0101

Saturn 68567-10-22 14:10 G 26764936.91 26764937.09 26764937.29 0.0282 0.0121

Saturn 68568-06-08 03:07 G 26765166.43 26765166.63 26765166.83 0.0281 0.0093

Jupiter 68572-12-12 08:24 G 26766814.85 26766814.85 26766814.87 0.0544 0.0542

Mars 68573-01-26 10:19 G 26766859.76 26766859.93 26766860.10 0.1672 0.0251

Jupiter 68573-08-07 22:48 G 26767053.25 26767053.45 26767053.65 0.0544 0.0101

Mars 68577-09-06 23:31 G 26768544.36 26768544.48 26768544.60 0.1855 0.1311

Uranus 68578-06-23 21:51 G 26768834.36 26768834.41 26768834.49 0.0135 0.0128

Jupiter 68578-10-18 08:24 G 26768950.79 26768950.85 26768950.91 0.0485 0.0463

Uranus 68579-02-05 03:51 G 26769060.52 26769060.66 26769060.82 0.0135 0.0095

Jupiter 68579-06-10 23:17 G 26769186.26 26769186.47 26769186.67 0.0484 0.0023

Uranus 68579-09-19 09:51 G 26769286.73 26769286.91 26769287.12 0.0135 0.0062

Jupiter 68580-02-01 13:27 G 26769421.97 26769422.06 26769422.17 0.0486 0.0421

Uranus 68580-05-02 16:34 G 26769512.97 26769513.19 26769513.40 0.0135 0.0029

Uranus 68580-12-14 22:48 G 26769739.23 26769739.45 26769739.67 0.0135 0.0005

Uranus 68581-07-29 05:03 G 26769965.50 26769965.71 26769965.92 0.0135 0.0039

Uranus 68582-03-12 11:17 G 26770191.80 26770191.97 26770192.17 0.0136 0.0073

Saturn 68582-04-03 00:00 G 26770213.42 26770213.50 26770213.60 0.0277 0.0251

Uranus 68582-10-24 17:46 G 26770418.13 26770418.24 26770418.39 0.0136 0.0107

Saturn 68582-11-18 11:03 G 26770442.75 26770442.96 26770443.17 0.0277 0.0046

Saturn 68583-07-05 22:19 G 26770672.26 26770672.43 26770672.61 0.0278 0.0160

Jupiter 68585-04-12 06:58 G 26771318.59 26771318.79 26771318.99 0.0544 0.0083

Jupiter 68591-02-14 04:34 G 26773452.50 26773452.69 26773452.89 0.0483 0.0148

Jupiter 68591-10-07 18:15 G 26773688.10 26773688.26 26773688.43 0.0485 0.0296

Jupiter 68596-12-15 15:22 G 26775583.96 26775584.14 26775584.32 0.0545 0.0268

Saturn 68597-05-04 01:12 G 26775723.35 26775723.55 26775723.76 0.0282 0.0080

Jupiter 68597-08-11 06:58 G 26775822.65 26775822.79 26775822.94 0.0544 0.0384

Saturn 68597-12-19 13:55 G 26775952.90 26775953.08 26775953.27 0.0281 0.0134

Jupiter 68602-10-21 10:48 G 26777718.78 26777718.95 26777719.12 0.0483 0.0269

Jupiter 68603-06-14 00:29 G 26777954.33 26777954.52 26777954.71 0.0484 0.0174

Jupiter 68608-08-21 01:55 G 26779849.47 26779849.58 26779849.70 0.0545 0.0443

Jupiter 68609-04-16 17:46 G 26780088.05 26780088.24 26780088.43 0.0545 0.0207

Saturn 68611-10-15 04:19 G 26780999.57 26780999.68 26780999.82 0.0277 0.0221

Saturn 68612-05-31 15:22 G 26781228.92 26781229.14 26781229.35 0.0277 0.0018

Saturn 68613-01-16 02:10 G 26781458.44 26781458.59 26781458.75 0.0277 0.0188

Jupiter 68614-06-26 16:05 G 26781985.06 26781985.17 26781985.29 0.0484 0.0391

Jupiter 68615-02-17 06:15 G 26782220.55 26782220.76 26782220.96 0.0484 0.0050

Uranus 68620-01-05 08:39 G 26784003.72 26784003.86 26784004.00 0.0143 0.0108

Uranus 68620-08-18 19:27 G 26784230.13 26784230.31 26784230.52 0.0143 0.0069

Jupiter 68620-12-20 04:05 G 26784353.46 26784353.67 26784353.87 0.0545 0.0029

Uranus 68621-04-02 06:43 G 26784456.57 26784456.78 26784457.00 0.0143 0.0029

Uranus 68621-11-14 18:00 G 26784683.03 26784683.25 26784683.47 0.0143 0.0011

Uranus 68622-06-29 04:34 G 26784909.50 26784909.69 26784909.90 0.0143 0.0051

Uranus 68623-02-10 15:22 G 26785135.98 26785136.14 26785136.31 0.0142 0.0090

Uranus 68623-09-25 01:55 G 26785362.50 26785362.58 26785362.68 0.0142 0.0129

Saturn 68626-03-30 14:10 G 26786280.04 26786280.09 26786280.16 0.0282 0.0268

Jupiter 68626-10-23 12:43 G 26786486.82 26786487.03 26786487.23 0.0483 0.0072

Saturn 68626-11-15 03:36 G 26786509.44 26786509.65 26786509.86 0.0282 0.0054

Neptune 68627-01-16 22:48 G 26786572.45 26786572.45 26786572.47 0.0090 0.0090

Jupiter 68627-06-16 02:39 G 26786722.48 26786722.61 26786722.74 0.0485 0.0370

Saturn 68627-07-02 16:05 G 26786739.00 26786739.17 26786739.35 0.0281 0.0158

Neptune 68627-08-30 12:15 G 26786797.94 26786798.01 26786798.09 0.0090 0.0084

Neptune 68628-04-12 01:27 G 26787023.47 26787023.56 26787023.67 0.0090 0.0079

Neptune 68628-11-23 14:24 G 26787249.00 26787249.10 26787249.24 0.0090 0.0074

Neptune 68629-07-07 04:05 G 26787474.53 26787474.67 26787474.81 0.0090 0.0068

Neptune 68630-02-17 17:03 G 26787700.07 26787700.21 26787700.38 0.0090 0.0063

Neptune 68630-10-01 06:15 G 26787925.61 26787925.76 26787925.95 0.0090 0.0058

Neptune 68631-05-14 19:55 G 26788151.16 26788151.33 26788151.52 0.0090 0.0052

Neptune 68631-12-26 09:22 G 26788376.71 26788376.89 26788377.08 0.0090 0.0046

Neptune 68632-08-07 22:34 G 26788602.25 26788602.44 26788602.64 0.0090 0.0041

Jupiter 68632-08-24 11:46 G 26788618.80 26788618.99 26788619.19 0.0545 0.0157

Neptune 68633-03-21 12:00 G 26788827.81 26788828.00 26788828.21 0.0090 0.0035

Jupiter 68633-04-20 02:39 G 26788857.53 26788857.61 26788857.70 0.0542 0.0488

Neptune 68633-11-02 01:12 G 26789053.36 26789053.55 26789053.77 0.0090 0.0030

Neptune 68634-06-15 14:39 G 26789278.91 26789279.11 26789279.33 0.0090 0.0024

Neptune 68635-01-27 04:05 G 26789504.46 26789504.67 26789504.89 0.0090 0.0018

Neptune 68635-09-09 17:17 G 26789730.01 26789730.22 26789730.44 0.0090 0.0012

Neptune 68636-04-22 06:43 G 26789955.56 26789955.78 26789956.00 0.0090 0.0007

Neptune 68636-12-03 20:10 G 26790181.12 26790181.34 26790181.56 0.0090 0.0002

Neptune 68637-07-17 09:22 G 26790406.67 26790406.89 26790407.11 0.0090 0.0005

Neptune 68638-02-27 22:34 G 26790632.22 26790632.44 26790632.66 0.0090 0.0010

Jupiter 68638-06-28 18:00 G 26790753.07 26790753.25 26790753.44 0.0484 0.0196

Neptune 68638-10-11 11:46 G 26790857.78 26790857.99 26790858.21 0.0090 0.0016

Mars 68638-11-24 21:22 G 26790902.21 26790902.39 26790902.56 0.1670 0.0044

Jupiter 68639-02-19 08:10 G 26790988.67 26790988.84 26790989.02 0.0485 0.0249

Neptune 68639-05-25 01:12 G 26791083.34 26791083.55 26791083.77 0.0090 0.0022

Neptune 68640-01-05 14:24 G 26791308.90 26791309.10 26791309.32 0.0090 0.0027

Neptune 68640-08-18 03:51 G 26791534.46 26791534.66 26791534.86 0.0090 0.0033

Neptune 68641-03-31 17:03 G 26791760.02 26791760.21 26791760.41 0.0090 0.0039

Saturn 68641-04-26 11:46 G 26791785.84 26791785.99 26791786.15 0.0277 0.0189

Neptune 68641-11-12 06:15 G 26791985.58 26791985.76 26791985.96 0.0090 0.0045

Saturn 68641-12-11 22:48 G 26792015.24 26792015.45 26792015.66 0.0278 0.0016

Neptune 68642-06-25 19:41 G 26792211.15 26792211.32 26792211.51 0.0090 0.0050

Saturn 68642-07-29 10:05 G 26792244.80 26792244.92 26792245.06 0.0278 0.0222

Neptune 68643-02-06 08:53 G 26792436.71 26792436.87 26792437.06 0.0089 0.0056

Neptune 68643-09-19 22:34 G 26792662.28 26792662.44 26792662.60 0.0089 0.0061

Jupiter 68644-04-28 20:10 G 26792884.19 26792884.34 26792884.50 0.0544 0.0337

Neptune 68644-05-02 11:46 G 26792887.86 26792887.99 26792888.15 0.0089 0.0067

Neptune 68644-12-14 01:12 G 26793113.43 26793113.55 26793113.69 0.0089 0.0072

Jupiter 68644-12-23 11:03 G 26793122.80 26793122.96 26793123.13 0.0543 0.0311

Neptune 68645-07-27 14:24 G 26793339.01 26793339.10 26793339.23 0.0089 0.0077

Neptune 68646-03-10 03:51 G 26793564.59 26793564.66 26793564.76 0.0089 0.0083

Neptune 68646-10-21 17:17 G 26793790.19 26793790.22 26793790.27 0.0089 0.0088

Jupiter 68650-03-03 23:31 G 26795019.33 26795019.48 26795019.63 0.0484 0.0319

Jupiter 68650-10-25 13:27 G 26795254.87 26795255.06 26795255.26 0.0484 0.0124

Saturn 68655-10-11 01:55 G 26797066.46 26797066.58 26797066.71 0.0282 0.0226

Jupiter 68656-01-02 04:05 G 26797149.61 26797149.67 26797149.73 0.0544 0.0517

Saturn 68656-05-27 14:53 G 26797295.91 26797296.12 26797296.34 0.0282 0.0014

Jupiter 68656-08-27 19:12 G 26797388.10 26797388.30 26797388.50 0.0545 0.0128

Saturn 68657-01-12 03:36 G 26797525.50 26797525.65 26797525.79 0.0281 0.0200

Jupiter 68661-11-07 05:46 G 26799285.65 26799285.74 26799285.82 0.0484 0.0437

Jupiter 68662-06-30 19:55 G 26799521.13 26799521.33 26799521.54 0.0483 0.0003

Uranus 68662-10-06 12:58 G 26799618.92 26799619.04 26799619.17 0.0135 0.0110

Jupiter 68663-02-21 09:36 G 26799756.82 26799756.90 26799756.99 0.0486 0.0440

Uranus 68663-05-20 18:58 G 26799845.12 26799845.29 26799845.48 0.0135 0.0077

Uranus 68664-01-02 01:12 G 26800071.35 26800071.55 26800071.76 0.0135 0.0044

Uranus 68664-08-15 07:27 G 26800297.60 26800297.81 26800298.03 0.0135 0.0011

Uranus 68665-03-29 13:55 G 26800523.87 26800524.08 26800524.30 0.0135 0.0023

Uranus 68665-11-10 20:24 G 26800750.16 26800750.35 26800750.55 0.0136 0.0057

Uranus 68666-06-25 02:53 G 26800976.47 26800976.62 26800976.79 0.0136 0.0091

Uranus 68667-02-06 09:22 G 26801202.83 26801202.89 26801202.99 0.0136 0.0125

Jupiter 68668-05-02 05:31 G 26801653.53 26801653.73 26801653.94 0.0545 0.0053

Saturn 68670-11-06 16:48 G 26802572.03 26802572.20 26802572.38 0.0277 0.0158

Saturn 68671-06-24 03:51 G 26802801.45 26802801.66 26802801.87 0.0277 0.0046

Saturn 68672-02-08 14:53 G 26803031.04 26803031.12 26803031.21 0.0277 0.0251

Jupiter 68674-03-06 01:27 G 26803787.36 26803787.56 26803787.76 0.0483 0.0122

Jupiter 68674-10-27 15:07 G 26804022.98 26804023.13 26804023.29 0.0485 0.0320

Earth 68677-07-21 17:31 G 26805021.10 26805021.23 26805021.36 0.2696 0.1574

Moon 68677-07-21 21:51 G 26805021.33 26805021.41 26805021.50 0.2700 0.2200 *

Jupiter 68680-01-05 16:05 G 26805918.99 26805919.17 26805919.36 0.0545 0.0230

Jupiter 68680-08-31 07:55 G 26806157.70 26806157.83 26806157.96 0.0543 0.0418

Saturn 68685-04-22 03:22 G 26807852.50 26807852.64 26807852.80 0.0282 0.0202

Earth 68685-07-19 06:43 G 26807940.68 26807940.78 26807940.88 0.2697 0.2042

Moon 68685-07-19 12:43 G 26807940.91 26807941.03 26807941.14 0.2696 0.1846

Jupiter 68685-11-09 07:41 G 26808053.65 26808053.82 26808054.00 0.0483 0.0243

Saturn 68685-12-07 16:48 G 26808081.99 26808082.20 26808082.41 0.0281 0.0012

Jupiter 68686-07-02 21:36 G 26808289.22 26808289.40 26808289.59 0.0484 0.0199

Saturn 68686-07-25 05:03 G 26808311.59 26808311.71 26808311.84 0.0281 0.0223

Pluto 68691-09-09 22:34 G 26810184.29 26810184.44 26810184.62 0.0064 0.0042

Jupiter 68691-09-10 01:12 G 26810184.42 26810184.55 26810184.68 0.0544 0.0408 *

Pluto 68692-04-22 03:07 G 26810409.42 26810409.63 26810409.85 0.0064 0.0007

Jupiter 68692-05-05 16:05 G 26810422.99 26810423.17 26810423.35 0.0544 0.0238

Pluto 68692-12-03 07:27 G 26810634.61 26810634.81 26810635.01 0.0064 0.0028

Pluto 68693-07-16 11:03 G 26810859.95 26810859.96 26810860.02 0.0065 0.0064

Jupiter 68697-07-15 12:43 G 26812319.90 26812320.03 26812320.16 0.0484 0.0366

Jupiter 68698-03-08 03:07 G 26812555.43 26812555.63 26812555.84 0.0484 0.0076

Saturn 68700-05-19 23:17 G 26813358.29 26813358.47 26813358.67 0.0277 0.0128

Saturn 68701-01-04 10:34 G 26813587.73 26813587.94 26813588.14 0.0278 0.0078

Uranus 68703-09-05 14:24 G 26814562.02 26814562.10 26814562.21 0.0143 0.0127

Jupiter 68704-01-10 00:15 G 26814688.31 26814688.51 26814688.71 0.0544 0.0056

Uranus 68704-04-19 01:41 G 26814788.41 26814788.57 26814788.75 0.0143 0.0088

Mars 68704-09-22 08:10 G 26814944.67 26814944.84 26814945.02 0.1667 0.0327

Uranus 68704-12-01 13:12 G 26815014.84 26815015.05 26815015.25 0.0143 0.0047

Uranus 68705-07-16 00:15 G 26815241.29 26815241.51 26815241.72 0.0143 0.0008

Uranus 68706-02-27 10:48 G 26815467.75 26815467.95 26815468.17 0.0143 0.0033

Uranus 68706-10-11 21:51 G 26815694.23 26815694.41 26815694.60 0.0142 0.0072

Uranus 68707-05-26 08:24 G 26815920.72 26815920.85 26815920.99 0.0142 0.0111

Neptune 68709-10-17 12:29 G 26816795.97 26816796.02 26816796.11 0.0088 0.0083

Jupiter 68709-11-12 08:53 G 26816821.67 26816821.87 26816822.08 0.0483 0.0050

Neptune 68710-05-31 01:12 G 26817021.47 26817021.55 26817021.67 0.0088 0.0078

Jupiter 68710-07-05 22:48 G 26817057.33 26817057.45 26817057.57 0.0485 0.0390

Neptune 68711-01-11 13:55 G 26817246.98 26817247.08 26817247.22 0.0088 0.0073

Neptune 68711-08-25 02:53 G 26817472.50 26817472.62 26817472.77 0.0088 0.0068

Neptune 68712-04-06 15:36 G 26817698.01 26817698.15 26817698.32 0.0088 0.0063

Neptune 68712-11-18 04:48 G 26817923.54 26817923.70 26817923.87 0.0088 0.0057

Neptune 68713-07-01 17:17 G 26818149.05 26818149.22 26818149.41 0.0088 0.0052

Neptune 68714-02-12 06:00 G 26818374.58 26818374.75 26818374.95 0.0088 0.0047

Neptune 68714-09-25 18:43 G 26818600.10 26818600.28 26818600.49 0.0088 0.0042

Saturn 68714-11-03 15:07 G 26818638.96 26818639.13 26818639.31 0.0282 0.0159

Neptune 68715-05-09 07:41 G 26818825.63 26818825.82 26818826.03 0.0088 0.0036

Saturn 68715-06-21 04:05 G 26818868.47 26818868.67 26818868.88 0.0282 0.0055

Jupiter 68715-09-14 07:27 G 26818953.61 26818953.81 26818954.01 0.0545 0.0131

Neptune 68715-12-20 20:24 G 26819051.15 26819051.35 26819051.56 0.0088 0.0031

Saturn 68716-02-05 16:19 G 26819098.12 26819098.18 26819098.26 0.0281 0.0265

Jupiter 68716-05-09 23:17 G 26819192.41 26819192.47 26819192.53 0.0543 0.0512

Neptune 68716-08-02 08:53 G 26819276.67 26819276.87 26819277.10 0.0088 0.0026

Neptune 68717-03-15 21:51 G 26819502.20 26819502.41 26819502.63 0.0088 0.0020

Neptune 68717-10-27 10:48 G 26819727.74 26819727.95 26819728.17 0.0088 0.0015

Neptune 68718-06-09 23:31 G 26819953.27 26819953.48 26819953.71 0.0088 0.0010

Neptune 68719-01-21 12:15 G 26820178.79 26820179.01 26820179.24 0.0088 0.0004

Neptune 68719-09-04 00:58 G 26820404.32 26820404.54 26820404.77 0.0088 0.0003

Neptune 68720-04-16 13:55 G 26820629.86 26820630.08 26820630.30 0.0088 0.0007

Neptune 68720-11-28 02:39 G 26820855.39 26820855.61 26820855.83 0.0088 0.0012

Neptune 68721-07-11 15:22 G 26821080.93 26821081.14 26821081.36 0.0088 0.0018

Jupiter 68721-07-18 15:22 G 26821087.95 26821088.14 26821088.33 0.0483 0.0170

Neptune 68722-02-22 04:05 G 26821306.46 26821306.67 26821306.89 0.0088 0.0023

Jupiter 68722-03-11 04:48 G 26821323.54 26821323.70 26821323.88 0.0484 0.0271

Neptune 68722-10-05 16:48 G 26821532.00 26821532.20 26821532.42 0.0088 0.0029

Neptune 68723-05-19 05:31 G 26821757.54 26821757.73 26821757.94 0.0088 0.0034

Neptune 68723-12-30 18:29 G 26821983.07 26821983.27 26821983.47 0.0088 0.0039

Neptune 68724-08-12 06:43 G 26822208.61 26822208.78 26822208.99 0.0088 0.0045

Neptune 68725-03-25 19:27 G 26822434.15 26822434.31 26822434.51 0.0088 0.0050

Neptune 68725-11-06 08:24 G 26822659.69 26822659.85 26822660.03 0.0088 0.0055

Neptune 68726-06-19 21:22 G 26822885.23 26822885.39 26822885.55 0.0088 0.0060

Neptune 68727-01-31 09:22 G 26823110.77 26823110.89 26823111.06 0.0088 0.0066

Jupiter 68727-05-19 17:46 G 26823219.08 26823219.24 26823219.41 0.0545 0.0308

Neptune 68727-09-13 22:05 G 26823336.31 26823336.42 26823336.57 0.0088 0.0071

Jupiter 68728-01-13 09:51 G 26823457.75 26823457.91 26823458.07 0.0544 0.0340

Neptune 68728-04-26 10:48 G 26823561.86 26823561.95 26823562.08 0.0088 0.0076

Neptune 68728-12-07 23:31 G 26823787.42 26823787.48 26823787.59 0.0088 0.0081

Neptune 68729-07-21 12:15 G 26824012.99 26824013.01 26824013.08 0.0088 0.0086

Saturn 68729-11-30 05:03 G 26824144.51 26824144.71 26824144.91 0.0277 0.0095

Saturn 68730-07-17 15:36 G 26824373.96 26824374.15 26824374.36 0.0277 0.0110

Jupiter 68733-03-23 20:39 G 26825354.20 26825354.36 26825354.53 0.0483 0.0292

Jupiter 68733-11-14 10:34 G 26825589.75 26825589.94 26825590.14 0.0484 0.0149

Jupiter 68739-01-22 04:48 G 26827484.61 26827484.70 26827484.80 0.0545 0.0479

Jupiter 68739-09-17 20:24 G 26827723.15 26827723.35 26827723.54 0.0545 0.0165

Mars 68741-05-03 01:12 G 26828316.42 26828316.55 26828316.68 0.1852 0.1218

Saturn 68744-05-15 16:34 G 26829425.01 26829425.19 26829425.38 0.0282 0.0136

Jupiter 68744-11-27 02:39 G 26829620.51 26829620.61 26829620.72 0.0484 0.0411

Saturn 68744-12-31 05:31 G 26829654.53 26829654.73 26829654.94 0.0281 0.0078

Jupiter 68745-07-20 17:03 G 26829856.01 26829856.21 26829856.41 0.0484 0.0027

Jupiter 68746-03-13 06:58 G 26830091.74 26830091.79 26830091.85 0.0486 0.0464

Uranus 68746-06-06 21:36 G 26830177.33 26830177.40 26830177.48 0.0135 0.0125

Uranus 68747-01-19 03:36 G 26830403.50 26830403.65 26830403.81 0.0135 0.0092

Uranus 68747-09-02 09:36 G 26830629.71 26830629.90 26830630.10 0.0135 0.0059

Uranus 68748-04-15 16:05 G 26830855.96 26830856.17 26830856.39 0.0135 0.0026

Uranus 68748-11-27 22:19 G 26831082.22 26831082.43 26831082.65 0.0135 0.0009

Uranus 68749-07-12 04:48 G 26831308.50 26831308.70 26831308.91 0.0136 0.0042

Uranus 68750-02-23 11:03 G 26831534.80 26831534.96 26831535.16 0.0136 0.0076

Uranus 68750-10-07 18:00 G 26831761.13 26831761.25 26831761.38 0.0136 0.0109

Jupiter 68751-05-23 05:17 G 26831988.52 26831988.72 26831988.92 0.0545 0.0018

Jupiter 68757-03-25 22:34 G 26834122.24 26834122.44 26834122.64 0.0484 0.0097

Jupiter 68757-11-16 12:43 G 26834357.89 26834358.03 26834358.17 0.0485 0.0344

Saturn 68758-10-25 23:17 G 26834701.43 26834701.47 26834701.53 0.0277 0.0269

Saturn 68759-06-12 10:19 G 26834930.72 26834930.93 26834931.13 0.0277 0.0067

Saturn 68760-01-27 21:07 G 26835160.20 26835160.38 26835160.57 0.0278 0.0139

Jupiter 68763-01-25 13:27 G 26836253.88 26836254.06 26836254.25 0.0545 0.0200

Jupiter 68763-09-21 04:34 G 26836492.57 26836492.69 26836492.81 0.0543 0.0443

Jupiter 68768-11-29 04:19 G 26838388.50 26838388.68 26838388.87 0.0484 0.0220

Jupiter 68769-07-22 18:15 G 26838624.08 26838624.26 26838624.45 0.0484 0.0221

Mars 68770-07-20 19:27 G 26838987.15 26838987.31 26838987.47 0.1665 0.0607

Saturn 68773-11-26 03:36 G 26840211.45 26840211.65 26840211.85 0.0282 0.0094

Saturn 68774-07-13 16:34 G 26840441.00 26840441.19 26840441.38 0.0282 0.0119

Jupiter 68774-09-29 20:24 G 26840519.21 26840519.35 26840519.49 0.0545 0.0383

Jupiter 68775-05-26 12:00 G 26840757.83 26840758.00 26840758.18 0.0544 0.0263

Jupiter 68780-08-04 10:34 G 26842654.80 26842654.94 26842655.09 0.0484 0.0339

Pluto 68781-03-17 10:05 G 26842879.70 26842879.92 26842880.14 0.0080 0.0014

Jupiter 68781-03-28 00:43 G 26842890.33 26842890.53 26842890.73 0.0484 0.0100

Pluto 68781-10-28 20:10 G 26843105.20 26843105.34 26843105.52 0.0079 0.0054

Jupiter 68787-01-28 22:05 G 26845023.22 26845023.42 26845023.62 0.0545 0.0086

Uranus 68787-12-18 07:41 G 26845346.69 26845346.82 26845346.98 0.0143 0.0106

Saturn 68788-05-07 06:00 G 26845487.64 26845487.75 26845487.86 0.0276 0.0234

Uranus 68788-07-31 18:58 G 26845573.10 26845573.29 26845573.49 0.0143 0.0066

Saturn 68788-12-22 16:19 G 26845716.97 26845717.18 26845717.39 0.0277 0.0033

Uranus 68789-03-15 06:15 G 26845799.55 26845799.76 26845799.97 0.0143 0.0026

Saturn 68789-08-09 02:53 G 26845946.47 26845946.62 26845946.80 0.0277 0.0171

Uranus 68789-10-27 17:17 G 26846026.01 26846026.22 26846026.44 0.0143 0.0014

Uranus 68790-06-11 04:05 G 26846252.48 26846252.67 26846252.88 0.0142 0.0053

Uranus 68791-01-23 14:53 G 26846478.96 26846479.12 26846479.29 0.0142 0.0092

Earth 68791-01-23 17:03 G 26846479.08 26846479.21 26846479.35 0.2636 0.1441 *

Moon 68791-01-23 22:19 G 26846479.34 26846479.43 26846479.53 0.2636 0.2103 *

Neptune 68791-04-21 10:19 G 26846566.92 26846566.93 26846566.97 0.0090 0.0089

Uranus 68791-09-07 01:12 G 26846705.48 26846705.55 26846705.65 0.0142 0.0132

Neptune 68791-12-02 23:31 G 26846792.42 26846792.48 26846792.57 0.0090 0.0084

Jupiter 68792-04-09 15:51 G 26846921.10 26846921.16 26846921.23 0.0484 0.0457

Neptune 68792-07-15 12:29 G 26847017.94 26847018.02 26847018.15 0.0090 0.0079

Jupiter 68792-12-01 06:29 G 26847156.57 26847156.77 26847156.98 0.0483 0.0023

Neptune 68793-02-26 01:55 G 26847243.47 26847243.58 26847243.72 0.0090 0.0073

Jupiter 68793-07-24 20:10 G 26847392.24 26847392.34 26847392.45 0.0485 0.0414

Neptune 68793-10-09 15:07 G 26847469.00 26847469.13 26847469.29 0.0090 0.0068

Neptune 68794-05-23 04:34 G 26847694.54 26847694.69 26847694.86 0.0090 0.0062

Neptune 68795-01-03 17:31 G 26847920.08 26847920.23 26847920.42 0.0090 0.0057

Neptune 68795-08-17 06:58 G 26848145.62 26848145.79 26848145.98 0.0090 0.0051

Neptune 68796-03-29 20:10 G 26848371.17 26848371.34 26848371.55 0.0090 0.0046

Neptune 68796-11-10 09:36 G 26848596.72 26848596.90 26848597.11 0.0090 0.0040

Neptune 68797-06-23 23:17 G 26848822.27 26848822.47 26848822.67 0.0090 0.0034

Neptune 68798-02-04 12:15 G 26849047.81 26849048.01 26849048.23 0.0090 0.0029

Neptune 68798-09-18 01:41 G 26849273.36 26849273.57 26849273.79 0.0090 0.0023

Jupiter 68798-10-03 08:53 G 26849288.67 26849288.87 26849289.07 0.0545 0.0092

Earth 68799-01-21 09:51 G 26849398.79 26849398.91 26849399.04 0.2636 0.1589

Moon 68799-01-21 13:27 G 26849398.93 26849399.06 26849399.19 0.2631 0.1582 *

Neptune 68799-05-01 15:22 G 26849498.92 26849499.14 26849499.35 0.0090 0.0017

Neptune 68799-12-13 04:19 G 26849724.47 26849724.68 26849724.91 0.0090 0.0012

Neptune 68800-07-25 17:46 G 26849950.02 26849950.24 26849950.46 0.0090 0.0006

Neptune 68801-03-08 07:12 G 26850175.58 26850175.80 26850176.02 0.0090 0.0001

Neptune 68801-10-19 20:24 G 26850401.13 26850401.35 26850401.57 0.0090 0.0006

Neptune 68802-06-02 09:51 G 26850626.69 26850626.91 26850627.13 0.0090 0.0012

Neptune 68803-01-13 22:48 G 26850852.25 26850852.45 26850852.68 0.0090 0.0018

Saturn 68803-06-08 04:34 G 26850997.49 26850997.69 26850997.90 0.0282 0.0072

Neptune 68803-08-27 12:15 G 26851077.80 26851078.01 26851078.22 0.0090 0.0023

Saturn 68804-01-23 17:31 G 26851227.05 26851227.23 26851227.41 0.0281 0.0141

Neptune 68804-04-09 01:27 G 26851303.36 26851303.56 26851303.78 0.0090 0.0029

Jupiter 68804-08-06 12:43 G 26851422.84 26851423.03 26851423.23 0.0483 0.0143

Neptune 68804-11-20 14:39 G 26851528.92 26851529.11 26851529.33 0.0090 0.0035

Jupiter 68805-03-30 02:24 G 26851658.44 26851658.60 26851658.76 0.0484 0.0296

Neptune 68805-07-04 04:05 G 26851754.48 26851754.67 26851754.87 0.0090 0.0040

Neptune 68806-02-14 17:17 G 26851980.04 26851980.22 26851980.42 0.0090 0.0046

Neptune 68806-09-28 06:15 G 26852205.60 26852205.76 26852205.96 0.0090 0.0052

Mars 68807-02-28 06:15 G 26852358.60 26852358.76 26852358.93 0.1856 0.0567

Neptune 68807-05-11 19:55 G 26852431.17 26852431.33 26852431.51 0.0090 0.0057

Neptune 68807-12-23 09:07 G 26852656.74 26852656.88 26852657.05 0.0089 0.0063

Neptune 68808-08-04 22:34 G 26852882.31 26852882.44 26852882.59 0.0089 0.0068

Neptune 68809-03-18 11:31 G 26853107.88 26853107.98 26853108.13 0.0089 0.0074

Neptune 68809-10-30 01:12 G 26853333.46 26853333.55 26853333.67 0.0089 0.0079

Jupiter 68810-06-07 18:43 G 26853554.11 26853554.28 26853554.46 0.0545 0.0270

Neptune 68810-06-12 14:53 G 26853559.05 26853559.12 26853559.20 0.0089 0.0084

Neptune 68811-01-24 04:05 G 26853784.67 26853784.67 26853784.69 0.0089 0.0089

Jupiter 68811-02-01 09:51 G 26853792.77 26853792.91 26853793.06 0.0543 0.0373

Jupiter 68816-04-11 18:00 G 26855689.08 26855689.25 26855689.42 0.0484 0.0266

Jupiter 68816-12-03 08:10 G 26855924.66 26855924.84 26855925.04 0.0484 0.0174

Saturn 68817-11-17 09:22 G 26856273.76 26856273.89 26856274.03 0.0277 0.0210

Saturn 68818-07-04 20:10 G 26856503.13 26856503.34 26856503.55 0.0277 0.0008

Saturn 68819-02-19 07:12 G 26856732.65 26856732.80 26856732.95 0.0278 0.0197

Jupiter 68822-02-10 03:36 G 26857819.54 26857819.65 26857819.77 0.0544 0.0446

Jupiter 68822-10-06 18:15 G 26858058.08 26858058.26 26858058.45 0.0544 0.0195

Jupiter 68827-12-16 23:46 G 26859955.38 26859955.49 26859955.62 0.0484 0.0386

Jupiter 68828-08-08 14:24 G 26860190.89 26860191.10 26860191.30 0.0484 0.0051

Jupiter 68829-04-01 04:19 G 26860426.67 26860426.68 26860426.70 0.0486 0.0483

Uranus 68830-09-18 12:29 G 26860961.89 26860962.02 26860962.15 0.0135 0.0107

Uranus 68831-05-02 18:43 G 26861188.10 26861188.28 26861188.46 0.0135 0.0074

Uranus 68831-12-15 00:43 G 26861414.33 26861414.53 26861414.74 0.0135 0.0041

Saturn 68832-05-03 01:12 G 26861554.45 26861554.55 26861554.66 0.0282 0.0244

Uranus 68832-07-28 07:12 G 26861640.58 26861640.80 26861641.01 0.0135 0.0008

Saturn 68832-12-18 14:53 G 26861783.91 26861784.12 26861784.33 0.0282 0.0031

Uranus 68833-03-11 13:27 G 26861866.85 26861867.06 26861867.28 0.0135 0.0026

Saturn 68833-08-05 03:36 G 26862013.50 26862013.65 26862013.82 0.0282 0.0182

Uranus 68833-10-23 19:55 G 26862093.14 26862093.33 26862093.53 0.0136 0.0060

Uranus 68834-06-07 02:39 G 26862319.46 26862319.61 26862319.77 0.0136 0.0094

Jupiter 68834-06-11 00:58 G 26862323.34 26862323.54 26862323.75 0.0545 0.0013

Uranus 68835-01-19 09:07 G 26862545.83 26862545.88 26862545.97 0.0136 0.0128

Mars 68836-05-17 06:15 G 26863029.61 26863029.76 26863029.90 0.1663 0.0895

Jupiter 68840-04-13 20:53 G 26864457.17 26864457.37 26864457.58 0.0483 0.0070

Jupiter 68840-12-05 10:34 G 26864692.81 26864692.94 26864693.08 0.0485 0.0367

Jupiter 68846-02-13 11:03 G 26866588.76 26866588.96 26866589.15 0.0545 0.0170

Jupiter 68846-10-10 03:07 G 26866827.53 26866827.63 26866827.73 0.0544 0.0471

Saturn 68847-05-30 16:34 G 26867060.02 26867060.19 26867060.35 0.0276 0.0175

Saturn 68848-01-15 02:39 G 26867289.40 26867289.61 26867289.83 0.0277 0.0028

Saturn 68848-08-31 13:12 G 26867518.95 26867519.05 26867519.18 0.0277 0.0230

Jupiter 68851-12-19 02:39 G 26868723.43 26868723.61 26868723.80 0.0483 0.0191

Jupiter 68852-08-10 16:05 G 26868959.00 26868959.17 26868959.35 0.0484 0.0247

Jupiter 68857-10-18 22:05 G 26870854.27 26870854.42 26870854.58 0.0545 0.0344

Jupiter 68858-06-14 14:10 G 26871092.92 26871093.09 26871093.26 0.0544 0.0300

Saturn 68861-11-13 01:55 G 26872340.46 26872340.58 26872340.72 0.0282 0.0223

Saturn 68862-06-30 15:22 G 26872569.93 26872570.14 26872570.35 0.0282 0.0010

Saturn 68863-02-15 03:51 G 26872799.53 26872799.66 26872799.82 0.0281 0.0203

Jupiter 68863-08-24 08:53 G 26872989.71 26872989.87 26872990.02 0.0484 0.0310

Jupiter 68864-04-15 22:48 G 26873225.25 26873225.45 26873225.64 0.0484 0.0127

Mars 68868-05-16 03:36 G 26874716.58 26874716.65 26874716.73 0.1670 0.1506

Jupiter 68869-06-23 09:07 G 26875119.82 26875119.88 26875119.95 0.0544 0.0513

Jupiter 68870-02-16 23:46 G 26875358.29 26875358.49 26875358.69 0.0545 0.0123

Uranus 68871-08-17 13:55 G 26875904.98 26875905.08 26875905.19 0.0143 0.0124

Uranus 68872-03-31 01:12 G 26876131.38 26876131.55 26876131.73 0.0143 0.0084

Uranus 68872-11-12 12:29 G 26876357.82 26876358.02 26876358.23 0.0143 0.0045

Mars 68872-12-25 11:03 G 26876400.78 26876400.96 26876401.13 0.1859 0.0105

Neptune 68873-06-07 10:48 G 26876564.95 26876564.95 26876564.99 0.0088 0.0088

Uranus 68873-06-26 23:46 G 26876584.27 26876584.49 26876584.71 0.0143 0.0005

Neptune 68874-01-18 23:31 G 26876790.43 26876790.48 26876790.58 0.0088 0.0083

Uranus 68874-02-08 10:34 G 26876810.73 26876810.94 26876811.15 0.0143 0.0035

Neptune 68874-09-01 12:58 G 26877015.94 26877016.04 26877016.14 0.0088 0.0077

Uranus 68874-09-22 21:07 G 26877037.21 26877037.38 26877037.58 0.0142 0.0075

Neptune 68875-04-15 01:41 G 26877241.45 26877241.57 26877241.70 0.0088 0.0072

Jupiter 68875-04-29 13:41 G 26877255.98 26877256.07 26877256.16 0.0484 0.0431

Uranus 68875-05-07 07:55 G 26877263.71 26877263.83 26877263.97 0.0142 0.0114

Neptune 68875-11-26 14:24 G 26877466.97 26877467.10 26877467.25 0.0088 0.0067

Jupiter 68875-12-21 04:34 G 26877491.48 26877491.69 26877491.89 0.0484 0.0005

Neptune 68876-07-09 02:53 G 26877692.49 26877692.62 26877692.80 0.0088 0.0062

Jupiter 68876-08-12 18:29 G 26877727.19 26877727.27 26877727.36 0.0486 0.0439

Saturn 68876-12-09 18:43 G 26877846.11 26877846.28 26877846.46 0.0277 0.0152

Neptune 68877-02-19 15:51 G 26877918.01 26877918.16 26877918.34 0.0088 0.0057

Saturn 68877-07-27 05:31 G 26878075.52 26878075.73 26878075.94 0.0277 0.0051

Neptune 68877-10-03 05:03 G 26878143.53 26878143.71 26878143.89 0.0088 0.0051

Saturn 68878-03-13 16:19 G 26878305.10 26878305.18 26878305.27 0.0278 0.0255

Neptune 68878-05-16 17:31 G 26878369.06 26878369.23 26878369.43 0.0088 0.0046

Neptune 68878-12-28 06:15 G 26878594.58 26878594.76 26878594.97 0.0088 0.0041

Neptune 68879-08-10 19:12 G 26878820.10 26878820.30 26878820.51 0.0088 0.0035

Neptune 68880-03-23 07:55 G 26879045.63 26879045.83 26879046.04 0.0088 0.0030

Neptune 68880-11-03 20:39 G 26879271.16 26879271.36 26879271.58 0.0088 0.0025

Neptune 68881-06-17 09:36 G 26879496.69 26879496.90 26879497.12 0.0088 0.0019

Jupiter 68881-10-22 08:24 G 26879623.65 26879623.85 26879624.05 0.0545 0.0058

Neptune 68882-01-28 22:05 G 26879722.21 26879722.42 26879722.65 0.0088 0.0014

Neptune 68882-09-11 11:03 G 26879947.74 26879947.96 26879948.18 0.0088 0.0008

Neptune 68883-04-24 23:46 G 26880173.27 26880173.49 26880173.71 0.0088 0.0003

Neptune 68883-12-06 12:29 G 26880398.80 26880399.02 26880399.24 0.0088 0.0003

Neptune 68884-07-19 01:12 G 26880624.33 26880624.55 26880624.77 0.0088 0.0008

Neptune 68885-03-01 13:55 G 26880849.87 26880850.08 26880850.30 0.0088 0.0014

Neptune 68885-10-13 02:53 G 26881075.41 26881075.62 26881075.84 0.0088 0.0019

Neptune 68886-05-26 15:22 G 26881300.94 26881301.14 26881301.37 0.0088 0.0025

Neptune 68887-01-07 04:19 G 26881526.48 26881526.68 26881526.89 0.0088 0.0030

Neptune 68887-08-20 17:03 G 26881752.01 26881752.21 26881752.42 0.0088 0.0035

Jupiter 68887-08-26 10:48 G 26881757.75 26881757.95 26881758.15 0.0483 0.0118

Neptune 68888-04-02 05:31 G 26881977.55 26881977.73 26881977.94 0.0088 0.0041

Jupiter 68888-04-18 00:29 G 26881993.37 26881993.52 26881993.68 0.0484 0.0318

Neptune 68888-11-13 18:29 G 26882203.10 26882203.27 26882203.47 0.0088 0.0046

Neptune 68889-06-27 07:27 G 26882428.64 26882428.81 26882429.00 0.0088 0.0051

Neptune 68890-02-07 19:55 G 26882654.18 26882654.33 26882654.52 0.0088 0.0057

Neptune 68890-09-21 08:39 G 26882879.72 26882879.86 26882880.03 0.0088 0.0062

Neptune 68891-05-04 21:22 G 26883105.27 26883105.39 26883105.55 0.0088 0.0067

Saturn 68891-05-26 10:48 G 26883126.79 26883126.95 26883127.11 0.0282 0.0185

Neptune 68891-12-16 10:19 G 26883330.82 26883330.93 26883331.06 0.0088 0.0072

Saturn 68892-01-11 00:29 G 26883356.31 26883356.52 26883356.73 0.0282 0.0029

Neptune 68892-07-28 23:03 G 26883556.37 26883556.46 26883556.57 0.0088 0.0077

Saturn 68892-08-27 13:12 G 26883585.95 26883586.05 26883586.17 0.0282 0.0241

Neptune 68893-03-11 11:46 G 26883781.92 26883781.99 26883782.07 0.0088 0.0082

Jupiter 68893-06-26 14:39 G 26883888.93 26883889.11 26883889.29 0.0545 0.0244

Neptune 68893-10-23 00:15 G 26884007.51 26884007.51 26884007.55 0.0088 0.0088

Jupiter 68894-02-20 06:29 G 26884127.63 26884127.77 26884127.91 0.0544 0.0397

Jupiter 68899-05-01 17:31 G 26886024.05 26886024.23 26886024.41 0.0483 0.0236

Jupiter 68899-12-23 07:27 G 26886259.62 26886259.81 26886259.99 0.0484 0.0200

Mars 68902-03-15 17:31 G 26887072.11 26887072.23 26887072.35 0.1661 0.1169

Jupiter 68905-03-02 00:43 G 26888154.40 26888154.53 26888154.66 0.0545 0.0417

Jupiter 68905-10-26 16:19 G 26888393.00 26888393.18 26888393.37 0.0545 0.0223

Saturn 68906-06-23 01:55 G 26888632.39 26888632.58 26888632.78 0.0276 0.0116

Saturn 68907-02-07 12:15 G 26888861.81 26888862.01 26888862.21 0.0276 0.0085

Jupiter 68911-01-05 23:03 G 26890290.33 26890290.46 26890290.60 0.0484 0.0355

Jupiter 68911-08-29 12:58 G 26890525.84 26890526.04 26890526.25 0.0483 0.0080

Uranus 68914-05-19 20:53 G 26891520.29 26891520.37 26891520.47 0.0135 0.0123

Uranus 68915-01-01 02:53 G 26891746.47 26891746.62 26891746.80 0.0135 0.0090

Uranus 68915-08-15 09:07 G 26891972.69 26891972.88 26891973.09 0.0135 0.0057

Uranus 68916-03-28 15:36 G 26892198.94 26892199.15 26892199.37 0.0135 0.0023

Uranus 68916-11-09 22:05 G 26892425.20 26892425.42 26892425.64 0.0135 0.0010

Uranus 68917-06-24 04:19 G 26892651.49 26892651.68 26892651.90 0.0136 0.0045

Jupiter 68917-07-01 03:36 G 26892658.44 26892658.65 26892658.85 0.0545 0.0049

Uranus 68918-02-05 10:48 G 26892877.79 26892877.95 26892878.14 0.0136 0.0079

Uranus 68918-09-19 17:31 G 26893104.12 26893104.23 26893104.36 0.0136 0.0112

Moon 68920-07-23 13:41 G 26893776.93 26893777.07 26893777.22 0.2690 0.1279

Earth 68920-07-23 17:17 G 26893777.09 26893777.22 26893777.34 0.2696 0.1559 *

Saturn 68920-12-06 11:46 G 26893912.82 26893912.99 26893913.16 0.0282 0.0163

Saturn 68921-07-24 01:12 G 26894142.34 26894142.55 26894142.75 0.0282 0.0050

Saturn 68922-03-10 13:41 G 26894372.00 26894372.07 26894372.15 0.0282 0.0261

Jupiter 68922-09-11 04:48 G 26894556.67 26894556.70 26894556.75 0.0484 0.0472

Jupiter 68923-05-04 19:41 G 26894792.11 26894792.32 26894792.52 0.0483 0.0041

Jupiter 68923-12-26 09:22 G 26895027.77 26895027.89 26895028.01 0.0485 0.0392

Moon 68928-07-21 00:15 G 26896696.43 26896696.51 26896696.60 0.2696 0.2300

Earth 68928-07-21 06:29 G 26896696.67 26896696.77 26896696.87 0.2697 0.2073

Jupiter 68929-03-05 13:41 G 26896923.88 26896924.07 26896924.27 0.0545 0.0130

Jupiter 68929-10-30 05:17 G 26897162.65 26897162.72 26897162.79 0.0543 0.0505

Mars 68934-03-14 14:53 G 26898759.01 26898759.12 26898759.24 0.1668 0.1226

Jupiter 68935-01-08 01:12 G 26899058.36 26899058.55 26899058.74 0.0484 0.0163

Jupiter 68935-08-31 15:07 G 26899293.96 26899294.13 26899294.30 0.0484 0.0273

Saturn 68936-01-03 03:22 G 26899418.44 26899418.64 26899418.84 0.0277 0.0095

Saturn 68936-08-19 13:41 G 26899647.87 26899648.07 26899648.27 0.0277 0.0108

Mars 68938-10-23 15:51 G 26900443.00 26900443.16 26900443.32 0.1862 0.0763

Pluto 68939-01-02 13:41 G 26900513.96 26900514.07 26900514.19 0.0064 0.0054

Pluto 68939-08-15 17:31 G 26900739.03 26900739.23 26900739.45 0.0064 0.0020

Pluto 68940-03-27 21:51 G 26900964.21 26900964.41 26900964.63 0.0064 0.0015

Jupiter 68940-11-07 23:03 G 26901189.30 26901189.46 26901189.63 0.0545 0.0307

Pluto 68940-11-08 01:55 G 26901189.46 26901189.58 26901189.73 0.0065 0.0051 *

Jupiter 68941-07-04 14:24 G 26901427.94 26901428.10 26901428.26 0.0544 0.0333

Jupiter 68946-09-13 07:41 G 26903324.65 26903324.82 26903324.98 0.0484 0.0283

Jupiter 68947-05-06 21:36 G 26903560.21 26903560.40 26903560.60 0.0484 0.0152

Saturn 68950-06-18 18:58 G 26904699.11 26904699.29 26904699.49 0.0283 0.0128

Saturn 68951-02-03 08:39 G 26904928.66 26904928.86 26904929.06 0.0282 0.0087

Jupiter 68952-07-13 05:17 G 26905454.64 26905454.72 26905454.82 0.0544 0.0485

Jupiter 68953-03-08 20:24 G 26905693.15 26905693.35 26905693.55 0.0545 0.0149

Neptune 68955-07-24 21:22 G 26906561.38 26906561.39 26906561.44 0.0090 0.0089

Uranus 68955-11-30 07:27 G 26906689.66 26906689.81 26906689.96 0.0143 0.0104

Neptune 68956-03-06 10:34 G 26906786.89 26906786.94 26906787.04 0.0090 0.0084

Uranus 68956-07-13 18:15 G 26906916.08 26906916.26 26906916.47 0.0143 0.0064

Neptune 68956-10-18 00:00 G 26907012.41 26907012.50 26907012.62 0.0090 0.0078

Uranus 68957-02-25 05:46 G 26907142.52 26907142.74 26907142.95 0.0143 0.0024

Neptune 68957-05-31 13:12 G 26907237.94 26907238.05 26907238.20 0.0090 0.0073

Uranus 68957-10-09 16:48 G 26907368.98 26907369.20 26907369.42 0.0143 0.0016

Neptune 68958-01-12 02:39 G 26907463.47 26907463.61 26907463.76 0.0090 0.0067

Jupiter 68958-05-19 14:10 G 26907590.98 26907591.09 26907591.21 0.0484 0.0399

Uranus 68958-05-24 03:36 G 26907595.46 26907595.65 26907595.86 0.0142 0.0056

Neptune 68958-08-25 15:36 G 26907689.01 26907689.15 26907689.33 0.0090 0.0062

Uranus 68959-01-05 14:10 G 26907821.94 26907822.09 26907822.27 0.0142 0.0096

Jupiter 68959-01-10 04:34 G 26907826.49 26907826.69 26907826.89 0.0483 0.0034

Neptune 68959-04-08 05:03 G 26907914.55 26907914.71 26907914.89 0.0090 0.0056

Uranus 68959-08-20 00:43 G 26908048.48 26908048.53 26908048.62 0.0142 0.0134

Jupiter 68959-09-02 18:00 G 26908062.20 26908062.25 26908062.32 0.0485 0.0463

Neptune 68959-11-19 18:15 G 26908140.09 26908140.26 26908140.46 0.0090 0.0051

Neptune 68960-07-02 07:27 G 26908365.64 26908365.81 26908366.02 0.0090 0.0045

Neptune 68961-02-12 20:53 G 26908591.18 26908591.37 26908591.57 0.0090 0.0039

Neptune 68961-09-26 10:05 G 26908816.73 26908816.92 26908817.13 0.0090 0.0034

Neptune 68962-05-09 23:31 G 26909042.28 26909042.48 26909042.70 0.0090 0.0028

Neptune 68962-12-21 12:58 G 26909267.83 26909268.04 26909268.26 0.0090 0.0022

Neptune 68963-08-04 02:10 G 26909493.38 26909493.59 26909493.81 0.0090 0.0016

Neptune 68964-03-16 15:36 G 26909718.94 26909719.15 26909719.37 0.0090 0.0011

Neptune 68964-10-28 05:03 G 26909944.49 26909944.71 26909944.93 0.0090 0.0005

Jupiter 68964-11-11 06:15 G 26909958.55 26909958.76 26909958.96 0.0545 0.0030

Saturn 68964-11-28 00:58 G 26909975.47 26909975.54 26909975.61 0.0276 0.0258

Neptune 68965-06-10 18:29 G 26910170.05 26910170.27 26910170.49 0.0090 0.0001

Saturn 68965-07-15 10:48 G 26910204.75 26910204.95 26910205.16 0.0276 0.0059

Neptune 68966-01-22 07:41 G 26910395.61 26910395.82 26910396.04 0.0090 0.0007

Saturn 68966-03-01 20:53 G 26910434.20 26910434.37 26910434.56 0.0276 0.0143

Neptune 68966-09-04 21:07 G 26910621.16 26910621.38 26910621.60 0.0090 0.0013

Neptune 68967-04-18 10:19 G 26910846.72 26910846.93 26910847.15 0.0090 0.0019

Neptune 68967-11-29 23:31 G 26911072.28 26911072.48 26911072.70 0.0090 0.0025

Mars 68968-01-11 04:34 G 26911114.61 26911114.69 26911114.78 0.1658 0.1441

Neptune 68968-07-12 12:58 G 26911297.84 26911298.04 26911298.25 0.0090 0.0030

Neptune 68969-02-23 02:10 G 26911523.40 26911523.59 26911523.80 0.0090 0.0036

Neptune 68969-10-06 15:22 G 26911748.96 26911749.14 26911749.34 0.0090 0.0041

Neptune 68970-05-20 05:03 G 26911974.52 26911974.71 26911974.90 0.0090 0.0047

Jupiter 68970-09-15 10:19 G 26912092.73 26912092.93 26912093.13 0.0483 0.0087

Neptune 68970-12-31 18:00 G 26912200.08 26912200.25 26912200.44 0.0090 0.0053

Jupiter 68971-05-08 23:46 G 26912328.35 26912328.49 26912328.63 0.0484 0.0345

Neptune 68971-08-14 06:58 G 26912425.65 26912425.79 26912425.98 0.0090 0.0059

Neptune 68972-03-26 20:39 G 26912651.21 26912651.36 26912651.52 0.0090 0.0064

Neptune 68972-11-07 09:36 G 26912876.78 26912876.90 26912877.06 0.0089 0.0070

Neptune 68973-06-20 23:17 G 26913102.36 26913102.47 26913102.60 0.0089 0.0075

Neptune 68974-02-01 12:15 G 26913327.94 26913328.01 26913328.13 0.0089 0.0081

Neptune 68974-09-15 01:41 G 26913553.53 26913553.57 26913553.65 0.0089 0.0086

Jupiter 68976-07-16 17:17 G 26914224.04 26914224.22 26914224.41 0.0545 0.0203

Jupiter	**68977-03-12 09:22**	**G**	**26914462.78**	**26914462.89**	**26914463.02**	**0.0544**	**0.0436**	
Saturn	**68979-12-29 19:55**	**G**	**26915485.14**	**26915485.33**	**26915485.53**	**0.0282**	**0.0106**	
Saturn	**68980-08-15 09:22**	**G**	**26915714.69**	**26915714.89**	**26915715.08**	**0.0282**	**0.0107**	
Jupiter	**68982-05-21 16:48**	**G**	**26916359.02**	**26916359.20**	**26916359.39**	**0.0483**	**0.0206**	
Jupiter	**68983-01-12 06:29**	**G**	**26916594.59**	**26916594.77**	**26916594.95**	**0.0484**	**0.0228**	
Jupiter	**68988-03-21 04:34**	**G**	**26918489.54**	**26918489.69**	**26918489.84**	**0.0545**	**0.0375**	
Jupiter	**68988-11-14 19:55**	**G**	**26918728.15**	**26918728.33**	**26918728.51**	**0.0545**	**0.0263**	
Jupiter	**68994-01-24 22:05**	**G**	**26920625.27**	**26920625.42**	**26920625.57**	**0.0484**	**0.0327**	
Saturn	**68994-06-10 01:12**	**G**	**26920761.45**	**26920761.55**	**26920761.66**	**0.0276**	**0.0239**	
Jupiter	**68994-09-17 12:15**	**G**	**26920860.81**	**26920861.01**	**26920861.21**	**0.0484**	**0.0107**	
Saturn	**68995-01-25 11:17**	**G**	**26920990.76**	**26920990.97**	**26920991.18**	**0.0277**	**0.0039**	
Saturn	**68995-09-11 21:22**	**G**	**26921220.23**	**26921220.39**	**26921220.57**	**0.0277**	**0.0163**	
Uranus	**68998-08-31 12:00**	**G**	**26922304.87**	**26922305.00**	**26922305.14**	**0.0135**	**0.0105**	
Uranus	**68999-04-14 18:15**	**G**	**26922531.08**	**26922531.26**	**26922531.45**	**0.0135**	**0.0072**	
Jupiter	**68999-11-24 14:39**	**G**	**26922755.11**	**26922755.11**	**26922755.12**	**0.0544**	**0.0543**	
Uranus	**68999-11-27 00:29**	**G**	**26922757.32**	**26922757.52**	**26922757.73**	**0.0135**	**0.0039**	
Mars	**69000-01-10 01:41**	**G**	**26922801.42**	**26922801.57**	**26922801.71**	**0.1665**	**0.0927**	
Uranus	**69000-07-11 06:58**	**G**	**26922983.57**	**26922983.79**	**26922984.01**	**0.0135**	**0.0005**	
Jupiter	**69000-07-21 05:03**	**G**	**26922993.51**	**26922993.71**	**26922993.91**	**0.0545**	**0.0085**	

70TH MILLENNIUM CE

This is a list of transits of Venus in the 70th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 69001-02-22 13:12 G 26923209.84 26923210.05 26923210.27 0.0135 0.0029

Uranus 69001-10-06 19:27 G 26923436.13 26923436.31 26923436.52 0.0136 0.0063

Uranus 69002-05-21 02:10 G 26923662.45 26923662.59 26923662.76 0.0136 0.0097

Uranus 69003-01-02 09:07 G 26923888.82 26923888.88 26923888.94 0.0136 0.0130

Mars 69004-08-20 20:24 G 26924485.24 26924485.35 26924485.46 0.1865 0.1445

Jupiter 69005-10-01 04:19 G 26924891.60 26924891.68 26924891.76 0.0485 0.0444

Jupiter 69006-05-24 19:12 G 26925127.09 26925127.30 26925127.50 0.0483 0.0014

Jupiter 69007-01-15 08:53 G 26925362.77 26925362.87 26925362.97 0.0485 0.0417

Saturn 69009-07-12 02:10 G 26926271.39 26926271.59 26926271.80 0.0283 0.0072

Saturn 69010-02-26 15:36 G 26926500.97 26926501.15 26926501.34 0.0282 0.0142

Jupiter 69012-03-25 10:48 G 26927258.75 26927258.95 26927259.15 0.0545 0.0100

Jupiter 69012-11-19 02:24 G 26927497.57 26927497.60 26927497.65 0.0543 0.0531

Jupiter 69018-01-28 01:55 G 26929393.39 26929393.58 26929393.78 0.0483 0.0132

Jupiter 69018-09-20 15:22 G 26929628.99 26929629.14 26929629.31 0.0484 0.0301

Jupiter 69023-11-28 20:39 G 26931524.19 26931524.36 26931524.54 0.0545 0.0276

Saturn 69023-12-22 09:07 G 26931547.74 26931547.88 26931548.03 0.0276 0.0203

Jupiter 69024-07-24 12:29 G 26931762.87 26931763.02 26931763.17 0.0544 0.0362

Saturn 69024-08-07 18:58 G 26931777.08 26931777.29 26931777.51 0.0276 0.0007

Saturn 69025-03-25 05:17 G 26932006.57 26932006.72 26932006.87 0.0276 0.0198

Pluto 69028-07-09 23:17 G 26933209.29 26933209.47 26933209.68 0.0080 0.0035

Pluto 69029-02-20 09:51 G 26933434.72 26933434.91 26933435.12 0.0079 0.0032

Jupiter 69029-10-03 07:41 G 26933659.65 26933659.82 26933660.00 0.0483 0.0250

Jupiter 69030-05-26 21:22 G 26933895.20 26933895.39 26933895.58 0.0483 0.0182

Moon 69034-01-25 15:22 G 26935235.00 26935235.14 26935235.28 0.2633 0.1316

Earth 69034-01-25 20:10 G 26935235.22 26935235.34 26935235.46 0.2636 0.1705 *

Jupiter 69035-08-03 07:55 G 26935789.72 26935789.83 26935789.95 0.0545 0.0445

Jupiter 69036-03-28 23:31 G 26936028.29 26936028.48 26936028.67 0.0545 0.0190

Neptune 69037-09-10 22:34 G 26936559.43 26936559.44 26936559.48 0.0088 0.0087

Neptune 69038-04-24 11:17 G 26936784.91 26936784.97 26936785.07 0.0088 0.0082

Saturn 69038-06-06 13:27 G 26936828.00 26936828.06 26936828.15 0.0283 0.0264

Neptune 69038-12-06 00:15 G 26937010.42 26937010.51 26937010.63 0.0088 0.0077

Saturn 69039-01-22 03:22 G 26937057.44 26937057.64 26937057.86 0.0282 0.0051

Neptune 69039-07-19 12:58 G 26937235.93 26937236.04 26937236.19 0.0088 0.0072

Uranus 69039-07-31 12:58 G 26937247.94 26937248.04 26937248.16 0.0143 0.0123

Saturn 69039-09-08 16:34 G 26937287.03 26937287.19 26937287.37 0.0282 0.0163

Neptune 69040-03-01 02:10 G 26937461.45 26937461.59 26937461.74 0.0088 0.0066

Uranus 69040-03-14 00:15 G 26937474.35 26937474.51 26937474.70 0.0143 0.0083

Neptune 69040-10-12 14:53 G 26937686.98 26937687.12 26937687.29 0.0088 0.0061

Uranus 69040-10-26 11:46 G 26937700.79 26937700.99 26937701.21 0.0143 0.0043

Neptune 69041-05-26 03:36 G 26937912.50 26937912.65 26937912.84 0.0088 0.0056

Jupiter 69041-06-08 13:55 G 26937925.95 26937926.08 26937926.22 0.0484 0.0368

Uranus 69041-06-09 23:03 G 26937927.24 26937927.46 26937927.68 0.0143 0.0003

Neptune 69042-01-06 16:19 G 26938138.02 26938138.18 26938138.38 0.0088 0.0051

Uranus 69042-01-22 10:05 G 26938153.71 26938153.92 26938154.13 0.0143 0.0037

Moon 69042-01-23 08:10 G 26938154.71 26938154.84 26938154.97 0.2637 0.1472

Earth 69042-01-23 12:58 G 26938154.91 26938155.04 26938155.18 0.2635 0.1327 *

Jupiter 69042-01-30 04:05 G 26938161.47 26938161.67 26938161.87 0.0483 0.0063

Neptune 69042-08-20 05:31 G 26938363.54 26938363.73 26938363.92 0.0088 0.0045

Uranus 69042-09-05 20:39 G 26938380.18 26938380.36 26938380.55 0.0142 0.0076

Neptune 69043-04-02 18:00 G 26938589.07 26938589.25 26938589.46 0.0088 0.0040

Uranus 69043-04-20 07:27 G 26938606.69 26938606.81 26938606.94 0.0142 0.0115

Neptune 69043-11-14 07:12 G 26938814.60 26938814.80 26938815.01 0.0088 0.0034

Neptune 69044-06-26 19:55 G 26939040.13 26939040.33 26939040.54 0.0088 0.0029

Neptune 69045-02-07 08:24 G 26939265.65 26939265.85 26939266.08 0.0088 0.0024

Neptune 69045-09-20 21:22 G 26939491.18 26939491.39 26939491.61 0.0088 0.0018

Neptune 69046-05-04 10:05 G 26939716.71 26939716.92 26939717.15 0.0088 0.0013

Neptune 69046-12-15 23:03 G 26939942.24 26939942.46 26939942.68 0.0088 0.0007

Neptune 69047-07-29 11:31 G 26940167.76 26940167.98 26940168.21 0.0088 0.0003

Jupiter 69047-12-02 10:34 G 26940293.73 26940293.94 26940294.14 0.0545 0.0016

Neptune 69048-03-11 00:15 G 26940393.29 26940393.51 26940393.74 0.0088 0.0004

Neptune 69048-10-22 13:12 G 26940618.83 26940619.05 26940619.27 0.0088 0.0009

Neptune 69049-06-05 01:55 G 26940844.36 26940844.58 26940844.80 0.0088 0.0015

Neptune 69050-01-16 14:39 G 26941069.89 26941070.11 26941070.32 0.0088 0.0020

Neptune 69050-08-30 03:07 G 26941295.43 26941295.63 26941295.85 0.0088 0.0026

Neptune 69051-04-12 15:51 G 26941520.96 26941521.16 26941521.37 0.0088 0.0031

Neptune 69051-11-24 04:34 G 26941746.50 26941746.69 26941746.91 0.0088 0.0037

Neptune 69052-07-06 17:31 G 26941972.04 26941972.23 26941972.43 0.0088 0.0042

Neptune 69053-02-17 06:15 G 26942197.58 26942197.76 26942197.95 0.0088 0.0047

Saturn 69053-07-03 08:53 G 26942333.72 26942333.87 26942334.03 0.0276 0.0185

Neptune 69053-09-30 18:43 G 26942423.12 26942423.28 26942423.47 0.0088 0.0053

Jupiter 69053-10-05 09:51 G 26942427.71 26942427.91 26942428.12 0.0483 0.0058

Saturn 69054-02-17 18:43 G 26942563.07 26942563.28 26942563.50 0.0276 0.0017

Neptune 69054-05-14 07:41 G 26942648.67 26942648.82 26942649.00 0.0088 0.0058

Jupiter 69054-05-28 23:31 G 26942663.36 26942663.48 26942663.61 0.0485 0.0372

Saturn 69054-10-05 05:03 G 26942792.58 26942792.71 26942792.84 0.0277 0.0217

Neptune 69054-12-25 20:39 G 26942874.21 26942874.36 26942874.51 0.0088 0.0063

Neptune 69055-08-08 08:53 G 26943099.76 26943099.87 26943100.03 0.0088 0.0069

Neptune 69056-03-20 21:36 G 26943325.31 26943325.40 26943325.54 0.0088 0.0074

Neptune 69056-11-01 10:34 G 26943550.86 26943550.94 26943551.05 0.0088 0.0079

Neptune 69057-06-14 23:17 G 26943776.43 26943776.47 26943776.55 0.0088 0.0084

Jupiter 69059-08-06 19:55 G 26944559.13 26944559.33 26944559.52 0.0545 0.0163

Jupiter 69060-04-01 11:17 G 26944797.88 26944797.97 26944798.08 0.0544 0.0470

Jupiter 69065-06-10 16:48 G 26946694.01 26946694.20 26946694.39 0.0484 0.0177

Mars 69065-11-07 12:58 G 26946843.88 26946844.04 26946844.20 0.1663 0.0652

Jupiter 69066-02-01 06:29 G 26946929.60 26946929.77 26946929.94 0.0484 0.0255

Saturn 69067-12-17 18:15 G 26947614.15 26947614.26 26947614.39 0.0283 0.0233

Saturn 69068-08-03 08:24 G 26947843.64 26947843.85 26947844.06 0.0283 0.0019

Saturn 69069-03-20 21:51 G 26948073.26 26948073.41 26948073.57 0.0282 0.0195

Jupiter 69071-04-11 01:55 G 26948824.43 26948824.58 26948824.74 0.0544 0.0343

Jupiter 69071-12-05 17:17 G 26949063.05 26949063.22 26949063.40 0.0545 0.0291

Jupiter 69077-02-13 23:17 G 26950960.31 26950960.47 26950960.63 0.0484 0.0294

Jupiter 69077-10-07 13:27 G 26951195.86 26951196.06 26951196.25 0.0483 0.0138

Uranus 69082-05-01 20:24 G 26952863.27 26952863.35 26952863.46 0.0135 0.0121

Uranus 69082-12-14 02:39 G 26953089.46 26953089.61 26953089.78 0.0135 0.0088

Jupiter 69082-12-14 12:00 G 26953089.94 26953090.00 26953090.07 0.0544 0.0512

Saturn 69083-01-13 17:17 G 26953120.04 26953120.22 26953120.40 0.0276 0.0148

Uranus 69083-07-28 08:53 G 26953315.68 26953315.87 26953316.07 0.0135 0.0055

Jupiter 69083-08-10 02:53 G 26953328.42 26953328.62 26953328.81 0.0545 0.0116

Saturn 69083-08-31 02:53 G 26953349.41 26953349.62 26953349.83 0.0276 0.0052

Uranus 69084-03-10 15:07 G 26953541.92 26953542.13 26953542.35 0.0135 0.0022

Saturn 69084-04-16 12:58 G 26953578.96 26953579.04 26953579.13 0.0276 0.0252

Uranus 69084-10-22 21:36 G 26953768.19 26953768.40 26953768.62 0.0135 0.0013

Uranus 69085-06-06 04:05 G 26953994.47 26953994.67 26953994.88 0.0136 0.0046

Uranus 69086-01-18 10:19 G 26954220.77 26954220.93 26954221.12 0.0136 0.0081

Uranus 69086-09-01 17:17 G 26954447.11 26954447.22 26954447.34 0.0136 0.0114

Jupiter 69088-10-20 04:48 G 26955226.60 26955226.70 26955226.81 0.0484 0.0410

Jupiter 69089-06-12 19:12 G 26955462.10 26955462.30 26955462.51 0.0483 0.0021

Jupiter 69090-02-03 08:39 G 26955697.78 26955697.86 26955697.94 0.0485 0.0444

Jupiter 69095-04-14 13:41 G 26957593.87 26957594.07 26957594.28 0.0546 0.0060

Saturn 69097-06-28 20:39 G 26958400.22 26958400.36 26958400.51 0.0283 0.0209

Saturn 69098-02-13 10:19 G 26958629.72 26958629.93 26958630.15 0.0283 0.0007

Saturn 69098-09-30 23:31 G 26958859.35 26958859.48 26958859.62 0.0282 0.0217

Jupiter 69101-02-17 01:41 G 26959728.38 26959728.57 26959728.78 0.0483 0.0101

Jupiter 69101-10-10 15:07 G 26959963.98 26959964.13 26959964.28 0.0484 0.0329

Mars 69102-06-18 18:15 G 26960215.22 26960215.26 26960215.30 0.1859 0.1799

Jupiter 69106-12-19 01:12 G 26961859.36 26961859.55 26961859.73 0.0545 0.0232

Jupiter 69107-08-14 17:03 G 26962098.07 26962098.21 26962098.34 0.0544 0.0401

Saturn 69112-07-26 16:34 G 26963906.01 26963906.19 26963906.38 0.0276 0.0130

Jupiter 69112-10-23 07:27 G 26963994.63 26963994.81 26963994.99 0.0484 0.0220

Saturn 69113-03-13 02:24 G 26964135.39 26964135.60 26964135.81 0.0276 0.0070

Jupiter 69113-06-15 21:07 G 26964230.20 26964230.38 26964230.57 0.0484 0.0211

Saturn 69113-10-28 12:29 G 26964364.99 26964365.02 26964365.07 0.0277 0.0271

Jupiter 69118-08-23 11:03 G 26966124.83 26966124.96 26966125.10 0.0544 0.0404

Jupiter 69119-04-19 02:24 G 26966363.42 26966363.60 26966363.78 0.0545 0.0228

Neptune 69119-10-28 09:22 G 26966555.86 26966555.89 26966555.93 0.0090 0.0088

Neptune 69120-06-09 22:19 G 26966781.36 26966781.43 26966781.53 0.0090 0.0083

Neptune 69121-01-21 11:17 G 26967006.89 26967006.97 26967007.10 0.0090 0.0078

Neptune 69121-09-04 00:43 G 26967232.42 26967232.53 26967232.67 0.0090 0.0072

Neptune 69122-04-17 13:55 G 26967457.95 26967458.08 26967458.25 0.0090 0.0067

Neptune 69122-11-29 03:22 G 26967683.49 26967683.64 26967683.81 0.0090 0.0061

Uranus 69123-03-31 18:43 G 26967806.28 26967806.28 26967806.33 0.0143 0.0142

Neptune 69123-07-12 16:48 G 26967909.03 26967909.20 26967909.37 0.0090 0.0055

Uranus 69123-11-13 06:29 G 26968032.63 26968032.77 26968032.93 0.0143 0.0102

Neptune 69124-02-23 05:31 G 26968134.57 26968134.73 26968134.93 0.0090 0.0050

Uranus 69124-06-26 18:00 G 26968259.05 26968259.25 26968259.45 0.0143 0.0062

Jupiter 69124-06-28 13:41 G 26968260.93 26968261.07 26968261.22 0.0484 0.0338

Neptune 69124-10-05 18:58 G 26968360.11 26968360.29 26968360.49 0.0090 0.0044

Uranus 69125-02-08 05:03 G 26968485.50 26968485.71 26968485.93 0.0143 0.0022

Jupiter 69125-02-19 04:19 G 26968496.48 26968496.68 26968496.88 0.0483 0.0092

Neptune 69125-05-19 08:24 G 26968585.66 26968585.85 26968586.05 0.0090 0.0038

Uranus 69125-09-22 16:05 G 26968711.96 26968712.17 26968712.39 0.0143 0.0018

Neptune 69125-12-30 21:22 G 26968811.20 26968811.39 26968811.61 0.0090 0.0033

Uranus 69126-05-07 02:53 G 26968938.43 26968938.62 26968938.83 0.0142 0.0058

Neptune 69126-08-13 10:48 G 26969036.75 26969036.95 26969037.16 0.0090 0.0027

Uranus 69126-12-19 13:55 G 26969164.92 26969165.08 26969165.24 0.0142 0.0097

Saturn 69127-01-10 00:29 G 26969186.36 26969186.52 26969186.68 0.0283 0.0180

Neptune 69127-03-27 00:15 G 26969262.30 26969262.51 26969262.72 0.0090 0.0021

Uranus 69127-08-03 00:29 G 26969391.46 26969391.52 26969391.59 0.0142 0.0135

Saturn 69127-08-27 14:24 G 26969415.89 26969416.10 26969416.31 0.0283 0.0034

Neptune 69127-11-07 13:27 G 26969487.85 26969488.06 26969488.28 0.0090 0.0015

Saturn 69128-04-13 03:51 G 26969645.57 26969645.66 26969645.77 0.0282 0.0247

Neptune 69128-06-20 02:39 G 26969713.40 26969713.61 26969713.84 0.0090 0.0010

Neptune 69129-01-31 16:05 G 26969938.95 26969939.17 26969939.39 0.0090 0.0004

Neptune 69129-09-14 05:31 G 26970164.51 26970164.73 26970164.95 0.0090 0.0003

Neptune 69130-04-27 18:58 G 26970390.07 26970390.29 26970390.51 0.0090 0.0008

Neptune 69130-12-09 08:10 G 26970615.63 26970615.84 26970616.06 0.0090 0.0014

Jupiter 69130-12-22 08:10 G 26970628.64 26970628.84 26970629.04 0.0545 0.0045

Neptune 69131-07-22 21:22 G 26970841.18 26970841.39 26970841.61 0.0090 0.0020

Mars 69131-09-06 00:00 G 26970886.33 26970886.50 26970886.67 0.1660 0.0370

Neptune 69132-03-04 10:34 G 26971066.74 26971066.94 26971067.16 0.0090 0.0026

Neptune 69132-10-16 00:15 G 26971292.30 26971292.51 26971292.71 0.0090 0.0031

Neptune 69133-05-29 13:27 G 26971517.87 26971518.06 26971518.27 0.0090 0.0037

Neptune 69134-01-10 02:39 G 26971743.43 26971743.61 26971743.81 0.0090 0.0043

Neptune 69134-08-23 15:36 G 26971968.99 26971969.15 26971969.36 0.0090 0.0049

Neptune 69135-04-06 05:17 G 26972194.55 26972194.72 26972194.90 0.0090 0.0054

Neptune 69135-11-17 18:29 G 26972420.12 26972420.27 26972420.45 0.0090 0.0060

Jupiter 69136-03-03 19:55 G 26972527.26 26972527.33 26972527.40 0.0485 0.0452

Neptune 69136-06-30 07:41 G 26972645.69 26972645.82 26972645.99 0.0090 0.0065

Jupiter 69136-10-25 11:03 G 26972762.76 26972762.96 26972763.17 0.0483 0.0027

Neptune 69137-02-10 21:07 G 26972871.26 26972871.38 26972871.52 0.0090 0.0071

Jupiter 69137-06-18 00:43 G 26972998.42 26972998.53 26972998.64 0.0485 0.0401

Neptune 69137-09-24 10:05 G 26973096.83 26973096.92 26973097.06 0.0089 0.0077

Neptune 69138-05-07 23:46 G 26973322.41 26973322.49 26973322.59 0.0089 0.0082

Neptune 69138-12-19 13:27 G 26973548.01 26973548.06 26973548.11 0.0089 0.0087

Saturn 69142-02-06 00:58 G 26974692.34 26974692.54 26974692.74 0.0276 0.0094

Jupiter 69142-08-26 17:17 G 26974894.03 26974894.22 26974894.42 0.0545 0.0132

Saturn 69142-09-23 10:48 G 26974921.76 26974921.95 26974922.15 0.0276 0.0106

Jupiter 69143-04-22 09:07 G 26975132.81 26975132.88 26975132.97 0.0544 0.0497

Jupiter 69148-06-30 17:03 G 26977029.01 26977029.21 26977029.40 0.0483 0.0145

Jupiter 69149-02-21 06:15 G 26977264.60 26977264.76 26977264.93 0.0484 0.0284

Jupiter 69154-05-01 04:19 G 26979159.52 26979159.68 26979159.85 0.0545 0.0303

Jupiter 69154-12-25 20:24 G 26979398.19 26979398.35 26979398.51 0.0545 0.0330

Saturn 69156-07-22 03:36 G 26979972.48 26979972.65 26979972.84 0.0283 0.0155

Saturn 69157-03-08 17:17 G 26980202.02 26980202.22 26980202.43 0.0283 0.0060

Saturn 69157-10-24 06:29 G 26980431.72 26980431.77 26980431.83 0.0282 0.0271

Jupiter 69160-03-05 23:03 G 26981295.29 26981295.46 26981295.64 0.0484 0.0262

Jupiter 69160-10-27 12:58 G 26981530.85 26981531.04 26981531.23 0.0483 0.0167

Earth 69163-07-26 16:34 G 26982533.06 26982533.19 26982533.32 0.2697 0.1511

Moon 69163-07-26 18:00 G 26982533.12 26982533.25 26982533.38 0.2704 0.1371 *

Jupiter 69166-01-03 16:19 G 26983425.08 26983425.18 26983425.28 0.0544 0.0469

Uranus 69166-08-14 11:17 G 26983647.85 26983647.97 26983648.12 0.0135 0.0104

Jupiter 69166-08-30 07:12 G 26983663.61 26983663.80 26983664.00 0.0545 0.0158

Uranus 69167-03-28 17:46 G 26983874.06 26983874.24 26983874.43 0.0135 0.0070

Uranus 69167-11-10 00:00 G 26984100.29 26984100.50 26984100.71 0.0135 0.0037

Mars 69168-04-14 22:19 G 26984257.29 26984257.43 26984257.57 0.1862 0.1110

Uranus 69168-06-23 06:15 G 26984326.55 26984326.76 26984326.98 0.0135 0.0005

Uranus 69169-02-04 12:29 G 26984552.82 26984553.02 26984553.24 0.0135 0.0031

Uranus 69169-09-18 18:43 G 26984779.11 26984779.28 26984779.49 0.0136 0.0065

Uranus 69170-05-03 01:41 G 26985005.43 26985005.57 26985005.72 0.0136 0.0098

Uranus 69170-12-15 08:10 G 26985231.80 26985231.84 26985231.90 0.0136 0.0132

Saturn 69171-01-01 14:53 G 26985249.10 26985249.12 26985249.16 0.0276 0.0273

Earth 69171-07-24 05:46 G 26985452.65 26985452.74 26985452.84 0.2698 0.2118

Moon 69171-07-24 11:03 G 26985452.85 26985452.96 26985453.08 0.2702 0.1768

Saturn 69171-08-19 00:29 G 26985478.32 26985478.52 26985478.73 0.0276 0.0075

Jupiter 69171-11-10 04:19 G 26985561.56 26985561.68 26985561.81 0.0484 0.0381

Saturn 69172-04-04 10:19 G 26985707.74 26985707.93 26985708.12 0.0276 0.0125

Jupiter 69172-07-02 18:58 G 26985797.09 26985797.29 26985797.50 0.0483 0.0048

Jupiter 69173-02-23 08:39 G 26986032.81 26986032.86 26986032.91 0.0485 0.0470

Jupiter 69178-05-04 17:03 G 26987929.01 26987929.21 26987929.41 0.0545 0.0018

Jupiter 69184-03-08 01:41 G 26990063.37 26990063.57 26990063.78 0.0483 0.0072

Jupiter 69184-10-29 15:36 G 26990299.01 26990299.15 26990299.29 0.0484 0.0356

Saturn 69186-02-01 06:29 G 26990758.59 26990758.77 26990758.96 0.0283 0.0128

Pluto 69186-04-27 05:17 G 26990843.70 26990843.72 26990843.80 0.0064 0.0062

Saturn 69186-09-18 20:24 G 26990988.15 26990988.35 26990988.55 0.0283 0.0087

Pluto 69186-12-08 09:51 G 26991068.72 26991068.91 26991069.12 0.0064 0.0028

Pluto 69187-07-21 14:10 G 26991293.87 26991294.09 26991294.31 0.0064 0.0008

Pluto 69188-03-02 18:15 G 26991519.10 26991519.26 26991519.43 0.0065 0.0043

Jupiter 69190-01-06 23:03 G 26992194.28 26992194.46 26992194.65 0.0545 0.0199

Jupiter 69190-09-02 14:24 G 26992432.98 26992433.10 26992433.23 0.0544 0.0429

Jupiter 69195-11-12 08:24 G 26994329.66 26994329.85 26994330.04 0.0484 0.0187

Jupiter 69196-07-04 22:19 G 26994565.26 26994565.43 26994565.61 0.0484 0.0241

Mars 69197-07-03 11:17 G 26994928.80 26994928.97 26994929.14 0.1658 0.0090

Saturn 69200-07-13 23:46 G 26996035.39 26996035.49 26996035.60 0.0276 0.0237

Saturn 69201-02-28 09:22 G 26996264.68 26996264.89 26996265.10 0.0276 0.0039

Jupiter 69201-09-11 08:24 G 26996459.71 26996459.85 26996460.00 0.0544 0.0371

Saturn 69201-10-15 19:12 G 26996494.13 26996494.30 26996494.48 0.0276 0.0162

Neptune 69201-12-14 09:51 G 26996553.90 26996553.91 26996553.97 0.0088 0.0087

Jupiter 69202-05-07 23:46 G 26996698.31 26996698.49 26996698.67 0.0545 0.0258

Neptune 69202-07-27 22:34 G 26996779.39 26996779.44 26996779.55 0.0088 0.0082

Neptune 69203-03-10 11:46 G 26997004.89 26997004.99 26997005.11 0.0088 0.0076

Neptune 69203-10-22 00:43 G 26997230.41 26997230.53 26997230.67 0.0088 0.0071

Neptune 69204-06-03 13:27 G 26997455.93 26997456.06 26997456.22 0.0088 0.0066

Neptune 69205-01-15 02:10 G 26997681.45 26997681.59 26997681.77 0.0088 0.0061

Neptune 69205-08-28 15:07 G 26997906.97 26997907.13 26997907.31 0.0088 0.0055

Neptune 69206-04-11 03:51 G 26998132.50 26998132.66 26998132.86 0.0088 0.0050

Neptune 69206-11-22 16:34 G 26998358.02 26998358.19 26998358.41 0.0088 0.0045

Neptune 69207-07-06 05:46 G 26998583.55 26998583.74 26998583.95 0.0088 0.0039

Uranus 69207-07-13 12:29 G 26998590.92 26998591.02 26998591.15 0.0143 0.0121

Jupiter 69207-07-18 13:55 G 26998595.92 26998596.08 26998596.24 0.0484 0.0305

Neptune 69208-02-16 18:29 G 26998809.08 26998809.27 26998809.49 0.0088 0.0034

Uranus 69208-02-25 00:00 G 26998817.33 26998817.50 26998817.69 0.0143 0.0081

Jupiter 69208-03-10 04:05 G 26998831.47 26998831.67 26998831.86 0.0483 0.0123

Neptune 69208-09-29 07:27 G 26999034.61 26999034.81 26999035.03 0.0088 0.0028

Uranus 69208-10-08 11:31 G 26999043.77 26999043.98 26999044.19 0.0143 0.0041

Neptune 69209-05-12 20:10 G 26999260.14 26999260.34 26999260.57 0.0088 0.0023

Uranus 69209-05-22 22:34 G 26999270.23 26999270.44 26999270.66 0.0143 0.0003

Neptune 69209-12-24 09:07 G 26999485.67 26999485.88 26999486.10 0.0088 0.0017

Uranus 69210-01-04 09:36 G 26999496.69 26999496.90 26999497.11 0.0143 0.0039

Neptune 69210-08-06 21:51 G 26999711.19 26999711.41 26999711.63 0.0088 0.0012

Uranus 69210-08-18 20:10 G 26999723.17 26999723.34 26999723.53 0.0142 0.0079

Neptune 69211-03-20 10:48 G 26999936.73 26999936.95 26999937.17 0.0088 0.0006

Uranus 69211-04-02 06:43 G 26999949.67 26999949.78 26999949.92 0.0142 0.0118

Neptune 69211-10-31 23:31 G 27000162.26 27000162.48 27000162.71 0.0088 0.0002

Neptune 69212-06-13 12:15 G 27000387.79 27000388.01 27000388.24 0.0088 0.0005

Neptune 69213-01-25 00:58 G 27000613.32 27000613.54 27000613.76 0.0088 0.0011

Jupiter 69213-05-16 19:41 G 27000725.29 27000725.32 27000725.35 0.0544 0.0536

Neptune 69213-09-07 13:41 G 27000838.85 27000839.07 27000839.29 0.0088 0.0016

Jupiter 69214-01-10 10:19 G 27000963.73 27000963.93 27000964.13 0.0545 0.0085

Neptune 69214-04-21 02:10 G 27001064.39 27001064.59 27001064.82 0.0088 0.0022

Neptune 69214-12-02 15:07 G 27001289.92 27001290.13 27001290.35 0.0088 0.0027

Neptune 69215-07-16 03:36 G 27001515.46 27001515.65 27001515.87 0.0088 0.0033

Saturn 69215-08-14 11:17 G 27001544.78 27001544.97 27001545.17 0.0283 0.0099

Neptune 69216-02-26 16:19 G 27001741.00 27001741.18 27001741.39 0.0088 0.0038

Saturn 69216-03-31 00:43 G 27001774.34 27001774.53 27001774.73 0.0283 0.0114

Neptune 69216-10-09 05:31 G 27001966.54 27001966.73 27001966.92 0.0088 0.0043

Neptune 69217-05-22 17:46 G 27002192.08 27002192.24 27002192.44 0.0088 0.0049

Neptune 69218-01-03 06:43 G 27002417.62 27002417.78 27002417.96 0.0088 0.0054

Neptune 69218-08-16 19:12 G 27002643.16 27002643.30 27002643.48 0.0088 0.0060

Jupiter 69219-03-23 19:41 G 27002862.22 27002862.32 27002862.42 0.0485 0.0421

Neptune 69219-03-30 07:55 G 27002868.70 27002868.83 27002869.00 0.0088 0.0065

Neptune 69219-11-10 21:07 G 27003094.26 27003094.38 27003094.52 0.0088 0.0070

Jupiter 69219-11-14 10:34 G 27003097.74 27003097.94 27003098.15 0.0483 0.0007

Neptune 69220-06-23 10:05 G 27003319.81 27003319.92 27003320.03 0.0088 0.0075

Jupiter 69220-07-06 23:46 G 27003333.40 27003333.49 27003333.59 0.0484 0.0428

Neptune 69221-02-03 22:19 G 27003545.37 27003545.43 27003545.54 0.0088 0.0081

Neptune 69221-09-17 11:03 G 27003770.94 27003770.96 27003771.03 0.0088 0.0086

Jupiter 69225-09-14 21:22 G 27005229.19 27005229.39 27005229.59 0.0545 0.0089

Jupiter 69226-05-11 13:27 G 27005468.03 27005468.06 27005468.10 0.0544 0.0535

Saturn 69230-01-23 23:31 G 27006821.36 27006821.48 27006821.62 0.0276 0.0218

Saturn 69230-09-10 09:07 G 27007050.67 27007050.88 27007051.09 0.0276 0.0019

Saturn 69231-04-27 18:58 G 27007280.13 27007280.29 27007280.45 0.0276 0.0181

Jupiter 69231-07-20 16:19 G 27007363.98 27007364.18 27007364.38 0.0483 0.0115

Jupiter 69232-03-12 06:00 G 27007599.59 27007599.75 27007599.90 0.0484 0.0311

Mars 69234-02-10 02:53 G 27008299.45 27008299.62 27008299.79 0.1865 0.0435

Jupiter 69237-05-20 07:41 G 27009494.64 27009494.82 27009495.00 0.0545 0.0261

Jupiter 69238-01-13 23:03 G 27009733.32 27009733.46 27009733.62 0.0544 0.0368

Jupiter 69243-03-25 22:48 G 27011630.27 27011630.45 27011630.63 0.0484 0.0232

Jupiter 69243-11-16 12:58 G 27011865.86 27011866.04 27011866.23 0.0484 0.0196

Saturn 69245-02-23 13:41 G 27012330.87 27012331.07 27012331.28 0.0283 0.0073

Saturn 69245-10-11 03:22 G 27012560.46 27012560.64 27012560.83 0.0283 0.0141

Jupiter 69249-01-22 14:39 G 27013759.99 27013760.11 27013760.23 0.0543 0.0434

Jupiter 69249-09-18 05:03 G 27013998.52 27013998.71 27013998.90 0.0545 0.0188

Uranus 69250-04-13 19:55 G 27014206.24 27014206.33 27014206.43 0.0135 0.0119

Uranus 69250-11-26 01:55 G 27014432.42 27014432.58 27014432.76 0.0135 0.0086

Uranus 69251-07-10 08:10 G 27014658.64 27014658.84 27014659.04 0.0135 0.0053

Uranus 69252-02-21 14:24 G 27014884.89 27014885.10 27014885.32 0.0135 0.0020

Uranus 69252-10-04 20:39 G 27015111.15 27015111.36 27015111.58 0.0135 0.0015

Uranus 69253-05-19 03:07 G 27015337.43 27015337.63 27015337.84 0.0136 0.0048

Uranus 69253-12-31 09:36 G 27015563.73 27015563.90 27015564.08 0.0136 0.0082

Uranus 69254-08-14 16:05 G 27015790.07 27015790.17 27015790.29 0.0136 0.0116

Jupiter 69254-11-29 04:34 G 27015896.55 27015896.69 27015896.84 0.0485 0.0348

Jupiter 69255-07-22 19:27 G 27016132.11 27016132.31 27016132.52 0.0484 0.0080

Saturn 69259-08-06 08:24 G 27017607.70 27017607.85 27017608.02 0.0276 0.0182

Saturn 69260-03-22 18:15 G 27017837.05 27017837.26 27017837.47 0.0276 0.0017

Saturn 69260-11-07 04:19 G 27018066.55 27018066.68 27018066.81 0.0276 0.0217

Jupiter 69261-05-23 13:55 G 27018263.88 27018264.08 27018264.28 0.0545 0.0013

Mars 69263-04-30 22:19 G 27018971.25 27018971.43 27018971.60 0.1656 0.0192

Jupiter 69266-08-04 09:36 G 27020162.85 27020162.90 27020162.96 0.0485 0.0464

Jupiter 69267-03-28 00:58 G 27020398.34 27020398.54 27020398.75 0.0483 0.0042

Jupiter 69267-11-18 14:39 G 27020633.99 27020634.11 27020634.23 0.0484 0.0383

Jupiter 69273-01-26 00:00 G 27022529.31 27022529.50 27022529.70 0.0545 0.0162

Jupiter 69273-09-21 16:05 G 27022768.07 27022768.17 27022768.28 0.0544 0.0464

Saturn 69274-01-19 05:31 G 27022887.65 27022887.73 27022887.83 0.0283 0.0256

Saturn 69274-09-05 19:41 G 27023117.11 27023117.32 27023117.52 0.0283 0.0043

Saturn 69275-04-23 08:53 G 27023346.71 27023346.87 27023347.04 0.0283 0.0170

Pluto 69275-11-01 17:17 G 27023539.03 27023539.22 27023539.42 0.0080 0.0040

Pluto 69276-06-14 03:22 G 27023764.45 27023764.64 27023764.87 0.0079 0.0028

Earth 69277-01-26 23:03 G 27023991.35 27023991.46 27023991.56 0.2635 0.1945

Moon 69277-01-27 02:10 G 27023991.49 27023991.59 27023991.69 0.2640 0.1950 *

Jupiter 69278-12-01 07:27 G 27024664.62 27024664.81 27024665.01 0.0483 0.0158

Jupiter 69279-07-24 21:07 G 27024900.21 27024900.38 27024900.55 0.0484 0.0268

Neptune 69284-01-29 20:24 G 27026550.32 27026550.35 27026550.40 0.0090 0.0088

Neptune 69284-09-11 09:22 G 27026775.83 27026775.89 27026776.00 0.0090 0.0083

Jupiter 69284-09-30 11:31 G 27026794.82 27026794.98 27026795.14 0.0545 0.0331

Earth 69285-01-24 15:51 G 27026911.01 27026911.16 27026911.30 0.2634 0.1079

Moon 69285-01-24 21:07 G 27026911.23 27026911.38 27026911.53 0.2635 0.0650 *

Neptune 69285-04-24 23:03 G 27027001.36 27027001.46 27027001.58 0.0090 0.0077

Jupiter 69285-05-27 03:07 G 27027033.47 27027033.63 27027033.81 0.0545 0.0297

Neptune 69285-12-06 12:00 G 27027226.89 27027227.00 27027227.16 0.0090 0.0072

Neptune 69286-07-20 01:27 G 27027452.43 27027452.56 27027452.72 0.0090 0.0066

Neptune 69287-03-02 14:39 G 27027677.97 27027678.11 27027678.29 0.0090 0.0061

Neptune 69287-10-14 03:51 G 27027903.51 27027903.66 27027903.85 0.0090 0.0055

Neptune 69288-05-26 17:17 G 27028129.05 27028129.22 27028129.42 0.0090 0.0049

Neptune 69289-01-07 06:43 G 27028354.59 27028354.78 27028354.97 0.0090 0.0043

Saturn 69289-02-15 09:07 G 27028393.72 27028393.88 27028394.06 0.0276 0.0161

Neptune 69289-08-20 19:41 G 27028580.13 27028580.32 27028580.53 0.0090 0.0038

Saturn 69289-10-02 18:43 G 27028623.07 27028623.28 27028623.50 0.0276 0.0039

Neptune 69290-04-03 09:07 G 27028805.68 27028805.88 27028806.09 0.0090 0.0032

Saturn 69290-05-20 04:48 G 27028852.59 27028852.70 27028852.81 0.0276 0.0238

Jupiter 69290-08-06 12:43 G 27028930.86 27028931.03 27028931.20 0.0484 0.0276

Neptune 69290-11-14 22:34 G 27029031.23 27029031.44 27029031.65 0.0090 0.0026

Uranus 69291-03-12 18:58 G 27029149.25 27029149.29 27029149.34 0.0143 0.0139

Jupiter 69291-03-30 02:53 G 27029166.43 27029166.62 27029166.82 0.0483 0.0150

Neptune 69291-06-28 11:46 G 27029256.78 27029256.99 27029257.20 0.0090 0.0020

Uranus 69291-10-25 06:29 G 27029375.62 27029375.77 27029375.93 0.0143 0.0099

Neptune 69292-02-09 00:43 G 27029482.32 27029482.53 27029482.76 0.0090 0.0015

Uranus 69292-06-07 17:31 G 27029602.05 27029602.23 27029602.44 0.0143 0.0060

Neptune 69292-09-21 14:10 G 27029707.87 27029708.09 27029708.31 0.0090 0.0009

Uranus 69293-01-20 04:48 G 27029828.49 27029828.70 27029828.92 0.0143 0.0020

Neptune 69293-05-05 03:36 G 27029933.43 27029933.65 27029933.87 0.0090 0.0003

Uranus 69293-09-03 15:51 G 27030054.95 27030055.16 27030055.38 0.0143 0.0021

Neptune 69293-12-16 16:48 G 27030158.98 27030159.20 27030159.42 0.0090 0.0003

Uranus 69294-04-18 02:53 G 27030281.42 27030281.62 27030281.82 0.0142 0.0060

Neptune 69294-07-30 06:00 G 27030384.54 27030384.75 27030384.97 0.0090 0.0009

Uranus 69294-11-30 13:27 G 27030507.92 27030508.06 27030508.23 0.0142 0.0099

Neptune 69295-03-12 19:27 G 27030610.09 27030610.31 27030610.53 0.0090 0.0015

Uranus 69295-07-15 00:00 G 27030734.46 27030734.50 27030734.56 0.0142 0.0138

Neptune 69295-10-24 08:39 G 27030835.65 27030835.86 27030836.08 0.0090 0.0021

Jupiter 69296-06-04 22:34 G 27031060.36 27031060.44 27031060.53 0.0543 0.0495

Neptune 69296-06-05 22:05 G 27031061.22 27031061.42 27031061.64 0.0090 0.0027

Neptune 69297-01-17 11:17 G 27031286.78 27031286.97 27031287.18 0.0090 0.0033

Jupiter 69297-01-29 12:58 G 27031298.84 27031299.04 27031299.24 0.0545 0.0124

Neptune 69297-08-31 00:29 G 27031512.34 27031512.52 27031512.73 0.0090 0.0039

Neptune 69298-04-13 14:10 G 27031737.90 27031738.09 27031738.28 0.0090 0.0044

Neptune 69298-11-25 03:22 G 27031963.47 27031963.64 27031963.83 0.0090 0.0050

Neptune 69299-07-08 16:34 G 27032189.03 27032189.19 27032189.37 0.0090 0.0056

Mars 69299-12-08 06:58 G 27032341.62 27032341.79 27032341.96 0.1868 0.0268

Neptune 69300-02-19 06:00 G 27032414.60 27032414.75 27032414.91 0.0090 0.0061

Neptune 69300-10-02 18:58 G 27032640.16 27032640.29 27032640.45 0.0090 0.0067

Neptune 69301-05-16 08:10 G 27032865.74 27032865.84 27032866.00 0.0090 0.0073

Neptune 69301-12-27 21:51 G 27033091.31 27033091.41 27033091.53 0.0090 0.0078

Jupiter 69302-04-12 18:43 G 27033197.16 27033197.28 27033197.40 0.0485 0.0392

Neptune 69302-08-10 10:48 G 27033316.89 27033316.95 27033317.05 0.0089 0.0084

Jupiter 69302-12-04 09:51 G 27033432.71 27033432.91 27033433.12 0.0483 0.0034

Neptune 69303-03-24 00:15 G 27033542.50 27033542.51 27033542.55 0.0089 0.0089

Jupiter 69303-07-27 23:31 G 27033668.42 27033668.48 27033668.56 0.0485 0.0454

Saturn 69303-08-02 07:41 G 27033673.71 27033673.82 27033673.95 0.0283 0.0231

Saturn 69304-03-18 21:51 G 27033903.20 27033903.41 27033903.62 0.0283 0.0018

Saturn 69304-11-03 11:17 G 27034132.83 27034132.97 27034133.13 0.0282 0.0196

Jupiter 69308-10-04 19:12 G 27035564.10 27035564.30 27035564.51 0.0545 0.0057

Jupiter 69314-08-09 15:51 G 27037698.96 27037699.16 27037699.37 0.0484 0.0085

Jupiter 69315-04-02 06:00 G 27037934.60 27037934.75 27037934.89 0.0484 0.0340

Saturn 69318-08-29 17:46 G 27039180.06 27039180.24 27039180.44 0.0276 0.0126

Saturn 69319-04-16 03:51 G 27039409.46 27039409.66 27039409.87 0.0276 0.0074

Saturn 69319-12-01 13:55 G 27039639.06 27039639.08 27039639.11 0.0276 0.0274

Jupiter 69320-06-09 04:19 G 27039829.50 27039829.68 27039829.86 0.0544 0.0230

Jupiter 69321-02-02 19:27 G 27040068.17 27040068.31 27040068.45 0.0544 0.0394

Jupiter 69326-04-14 21:22 G 27041965.20 27041965.39 27041965.58 0.0484 0.0203

Jupiter 69326-12-06 11:31 G 27042200.80 27042200.98 27042201.16 0.0484 0.0223

Mars 69329-02-26 09:36 G 27043013.74 27043013.90 27043014.07 0.1654 0.0461

Jupiter	69332-02-12 14:10 G	27044094.96	27044095.09	27044095.23	0.0544	0.0400
Jupiter	69332-10-08 05:17 G	27044333.54	27044333.72	27044333.91	0.0545	0.0223
Saturn	69333-02-11 15:36 G	27044460.00	27044460.15	27044460.30	0.0283	0.0197
Saturn	69333-09-29 05:17 G	27044689.51	27044689.72	27044689.93	0.0283	0.0016
Uranus	69333-12-13 04:19 G	27044764.68	27044764.68	27044764.71	0.0135	0.0135
Saturn	69334-05-16 18:29 G	27044919.15	27044919.27	27044919.40	0.0283	0.0228
Uranus	69334-07-27 10:19 G	27044990.80	27044990.93	27044991.09	0.0135	0.0102
Uranus	69335-03-10 16:48 G	27045217.01	27045217.20	27045217.38	0.0135	0.0069
Uranus	69335-10-22 22:48 G	27045443.25	27045443.45	27045443.66	0.0135	0.0035
Uranus	69336-06-05 05:17 G	27045669.50	27045669.72	27045669.94	0.0135	0.0002
Uranus	69337-01-17 11:17 G	27045895.77	27045895.97	27045896.19	0.0136	0.0033
Uranus	69337-08-31 18:00 G	27046122.06	27046122.25	27046122.44	0.0136	0.0066
Jupiter	69337-12-19 03:22 G	27046231.49	27046231.64	27046231.80	0.0484	0.0319
Uranus	69338-04-15 00:15 G	27046348.37	27046348.51	27046348.67	0.0136	0.0100
Jupiter	69338-08-11 17:46 G	27046467.04	27046467.24	27046467.44	0.0483	0.0106
Uranus	69338-11-27 06:43 G	27046574.76	27046574.78	27046574.83	0.0136	0.0134
Jupiter	69344-06-12 16:19 G	27048598.98	27048599.18	27048599.38	0.0545	0.0051
Saturn	69348-03-10 19:27 G	27049966.12	27049966.31	27049966.51	0.0276	0.0103
Saturn	69348-10-26 05:17 G	27050195.52	27050195.72	27050195.92	0.0276	0.0097
Jupiter	69349-08-24 08:10 G	27050497.75	27050497.84	27050497.93	0.0485	0.0435
Jupiter	69350-04-16 23:31 G	27050733.27	27050733.48	27050733.68	0.0483	0.0014
Jupiter	69350-12-08 12:58 G	27050968.94	27050969.04	27050969.16	0.0484	0.0409
Jupiter	69356-02-16 02:24 G	27052864.40	27052864.60	27052864.80	0.0545	0.0121
Jupiter	69356-10-11 18:00 G	27053103.18	27053103.25	27053103.34	0.0544	0.0499
Jupiter	69361-12-21 06:00 G	27054999.55	27054999.75	27054999.95	0.0484	0.0129
Jupiter	69362-08-13 19:55 G	27055235.17	27055235.33	27055235.49	0.0484	0.0295
Saturn	69362-08-24 17:17 G	27055246.06	27055246.22	27055246.39	0.0283	0.0173
Saturn	69363-04-11 07:12 G	27055475.60	27055475.80	27055476.01	0.0283	0.0041
Saturn	69363-11-26 20:39 G	27055705.28	27055705.36	27055705.46	0.0282	0.0253
Mars	69365-10-05 11:31 G	27056383.83	27056383.98	27056384.12	0.1871	0.0958

Neptune 69366-03-18 21:51 G 27056548.39 27056548.41 27056548.47 0.0088 0.0086

Neptune 69366-10-30 10:48 G 27056773.88 27056773.95 27056774.05 0.0088 0.0081

Neptune 69367-06-12 23:31 G 27056999.39 27056999.48 27056999.61 0.0088 0.0076

Jupiter 69367-10-21 09:51 G 27057129.74 27057129.91 27057130.08 0.0544 0.0296

Neptune 69368-01-24 12:00 G 27057224.90 27057225.00 27057225.16 0.0088 0.0071

Jupiter 69368-06-16 00:29 G 27057368.36 27057368.52 27057368.69 0.0544 0.0326

Neptune 69368-09-06 01:12 G 27057450.42 27057450.55 27057450.71 0.0088 0.0065

Neptune 69369-04-19 13:55 G 27057675.93 27057676.08 27057676.26 0.0088 0.0060

Neptune 69369-12-01 03:07 G 27057901.46 27057901.63 27057901.80 0.0088 0.0054

Neptune 69370-07-14 15:36 G 27058126.98 27058127.15 27058127.35 0.0088 0.0049

Neptune 69371-02-25 04:19 G 27058352.50 27058352.68 27058352.89 0.0088 0.0044

Neptune 69371-10-08 17:31 G 27058578.04 27058578.23 27058578.43 0.0088 0.0038

Neptune 69372-05-21 06:15 G 27058803.56 27058803.76 27058803.97 0.0088 0.0033

Neptune 69373-01-01 19:12 G 27059029.09 27059029.30 27059029.51 0.0088 0.0027

Neptune 69373-08-15 07:41 G 27059254.62 27059254.82 27059255.05 0.0088 0.0022

Jupiter 69373-08-26 11:17 G 27059265.80 27059265.97 27059266.15 0.0484 0.0247

Neptune 69374-03-28 20:39 G 27059480.15 27059480.36 27059480.58 0.0088 0.0016

Jupiter 69374-04-19 02:10 G 27059501.40 27059501.59 27059501.78 0.0484 0.0179

Neptune 69374-11-09 09:36 G 27059705.68 27059705.90 27059706.12 0.0088 0.0011

Neptune 69375-06-22 22:34 G 27059931.22 27059931.44 27059931.66 0.0088 0.0005

Uranus 69375-06-25 12:29 G 27059933.92 27059934.02 27059934.16 0.0143 0.0119

Neptune 69376-02-03 11:17 G 27060156.75 27060156.97 27060157.19 0.0088 0.0001

Uranus 69376-02-07 00:00 G 27060160.33 27060160.50 27060160.69 0.0143 0.0078

Neptune 69376-09-15 23:46 G 27060382.28 27060382.49 27060382.72 0.0088 0.0007

Uranus 69376-09-20 11:17 G 27060386.76 27060386.97 27060387.18 0.0143 0.0038

Saturn 69377-02-03 18:29 G 27060523.23 27060523.27 27060523.34 0.0276 0.0267

Neptune 69377-04-29 12:43 G 27060607.81 27060608.03 27060608.25 0.0088 0.0012

Uranus 69377-05-04 22:19 G 27060613.22 27060613.43 27060613.65 0.0143 0.0003

Saturn 69377-09-21 04:34 G 27060752.48 27060752.69 27060752.90 0.0276 0.0067

Neptune 69377-12-11 01:12 G 27060833.34 27060833.55 27060833.78 0.0088 0.0018

Uranus 69377-12-17 09:22 G 27060839.68 27060839.89 27060840.10 0.0143 0.0042

Saturn 69378-05-08 14:24 G 27060981.92 27060982.10 27060982.29 0.0276 0.0133

Neptune 69378-07-24 13:55 G 27061058.88 27061059.08 27061059.30 0.0088 0.0023

Uranus 69378-07-31 19:55 G 27061066.16 27061066.33 27061066.52 0.0142 0.0082

Neptune 69379-03-07 02:53 G 27061284.41 27061284.62 27061284.83 0.0088 0.0028

Uranus 69379-03-15 06:29 G 27061292.67 27061292.77 27061292.90 0.0142 0.0121

Jupiter 69379-06-25 19:12 G 27061395.20 27061395.30 27061395.41 0.0543 0.0464

Neptune 69379-10-18 15:22 G 27061509.95 27061510.14 27061510.36 0.0088 0.0034

Jupiter 69380-02-19 08:53 G 27061633.68 27061633.87 27061634.07 0.0545 0.0152

Neptune 69380-05-31 04:19 G 27061735.49 27061735.68 27061735.88 0.0088 0.0039

Neptune 69381-01-11 16:48 G 27061961.02 27061961.20 27061961.40 0.0088 0.0045

Neptune 69381-08-25 05:31 G 27062186.56 27062186.73 27062186.92 0.0088 0.0050

Neptune 69382-04-07 18:00 G 27062412.10 27062412.25 27062412.44 0.0088 0.0056

Neptune 69382-11-19 06:58 G 27062637.65 27062637.79 27062637.96 0.0088 0.0061

Neptune 69383-07-02 19:55 G 27062863.19 27062863.33 27062863.48 0.0088 0.0066

Neptune 69384-02-13 08:10 G 27063088.74 27063088.84 27063088.99 0.0088 0.0072

Neptune 69384-09-25 21:07 G 27063314.29 27063314.38 27063314.50 0.0088 0.0077

Jupiter 69385-05-01 16:34 G 27063532.06 27063532.19 27063532.32 0.0485 0.0364

Neptune 69385-05-09 09:51 G 27063539.85 27063539.91 27063540.01 0.0088 0.0082

Neptune 69385-12-20 22:48 G 27063765.44 27063765.45 27063765.49 0.0088 0.0087

Jupiter 69385-12-23 07:41 G 27063767.62 27063767.82 27063768.02 0.0483 0.0060

Jupiter 69386-08-15 21:07 G 27064003.35 27064003.38 27064003.42 0.0485 0.0477

Jupiter 69391-10-24 18:15 G 27065899.05 27065899.26 27065899.46 0.0545 0.0025

Saturn 69392-03-06 02:39 G 27066032.42 27066032.61 27066032.79 0.0283 0.0136

Saturn 69392-10-21 16:05 G 27066261.97 27066262.17 27066262.37 0.0283 0.0077

Mars 69394-12-24 20:53 G 27067056.21 27067056.37 27067056.53 0.1652 0.0726

Jupiter 69397-01-04 21:51 G 27067798.39 27067798.41 27067798.45 0.0486 0.0479

Jupiter 69397-08-28 13:55 G 27068033.87 27068034.08 27068034.28 0.0483 0.0057

Jupiter 69398-04-21 03:22 G 27068269.51 27068269.64 27068269.77 0.0484 0.0364

Jupiter 69403-06-30 05:17 G 27070164.53 27070164.72 27070164.91 0.0545 0.0194

Jupiter 69404-02-23 21:07 G 27070403.26 27070403.38 27070403.50 0.0545 0.0428

Earth 69406-07-28 16:19 G 27071289.05 27071289.18 27071289.31 0.2698 0.1483

Moon 69406-07-28 16:48 G 27071289.08 27071289.20 27071289.32 0.2691 0.1895 *

Saturn 69406-08-17 21:22 G 27071309.29 27071309.39 27071309.49 0.0276 0.0240

Saturn 69407-04-04 06:43 G 27071538.57 27071538.78 27071539.00 0.0276 0.0043

Saturn 69407-11-19 16:34 G 27071768.02 27071768.19 27071768.37 0.0276 0.0157

Jupiter 69409-05-04 19:12 G 27072300.11 27072300.30 27072300.49 0.0484 0.0176

Jupiter 69409-12-26 09:07 G 27072535.71 27072535.88 27072536.06 0.0484 0.0249

Moon 69414-07-26 01:27 G 27074208.52 27074208.56 27074208.60 0.2694 0.2592

Earth 69414-07-26 05:31 G 27074208.64 27074208.73 27074208.83 0.2699 0.2135

Jupiter 69415-03-04 16:05 G 27074430.02 27074430.17 27074430.32 0.0544 0.0362

Jupiter 69415-10-29 06:58 G 27074668.61 27074668.79 27074668.97 0.0545 0.0259

Uranus 69418-03-27 18:58 G 27075549.19 27075549.29 27075549.40 0.0135 0.0117

Uranus 69418-11-09 00:58 G 27075775.38 27075775.54 27075775.71 0.0135 0.0084

Uranus 69419-06-23 06:58 G 27076001.60 27076001.79 27076002.00 0.0135 0.0051

Uranus 69420-02-04 13:12 G 27076227.84 27076228.05 27076228.27 0.0135 0.0017

Uranus 69420-09-17 19:27 G 27076454.10 27076454.31 27076454.53 0.0135 0.0016

Jupiter 69421-01-08 01:12 G 27076566.39 27076566.55 27076566.71 0.0484 0.0291

Uranus 69421-05-02 01:41 G 27076680.38 27076680.57 27076680.78 0.0136 0.0051

Jupiter 69421-08-31 15:51 G 27076801.96 27076802.16 27076802.36 0.0483 0.0133

Saturn 69421-09-17 04:34 G 27076818.50 27076818.69 27076818.89 0.0283 0.0111

Uranus 69421-12-14 08:10 G 27076906.68 27076906.84 27076907.02 0.0136 0.0084

Saturn 69422-05-04 18:15 G 27077048.07 27077048.26 27077048.46 0.0282 0.0102

Uranus 69422-07-28 14:39 G 27077133.01 27077133.11 27077133.23 0.0136 0.0118

Jupiter 69426-11-07 00:58 G 27078695.50 27078695.54 27078695.59 0.0542 0.0526

Mars 69426-12-24 17:17 G 27078743.17 27078743.22 27078743.26 0.1658 0.1597

Jupiter 69427-07-03 13:55 G 27078933.89 27078934.08 27078934.29 0.0545 0.0084

Mars 69431-08-03 15:36 G 27080426.07 27080426.15 27080426.22 0.1874 0.1668

Jupiter 69432-09-13 05:46 G 27080832.63 27080832.74 27080832.85 0.0486 0.0409

Jupiter 69433-05-06 21:36 G 27081068.20 27081068.40 27081068.61 0.0484 0.0016

Pluto 69433-08-19 23:46 G 27081173.48 27081173.49 27081173.57 0.0064 0.0063

Jupiter 69433-12-28 11:46 G 27081303.90 27081303.99 27081304.08 0.0485 0.0434

Pluto 69434-04-02 04:19 G 27081398.50 27081398.68 27081398.89 0.0064 0.0028

Pluto 69434-11-13 08:39 G 27081623.65 27081623.86 27081624.09 0.0064 0.0007

Pluto 69435-06-26 12:43 G 27081848.88 27081849.03 27081849.21 0.0065 0.0043

Saturn 69436-02-28 05:31 G 27082095.60 27082095.73 27082095.88 0.0276 0.0207

Saturn 69436-10-14 15:36 G 27082324.93 27082325.15 27082325.36 0.0276 0.0009

Saturn 69437-06-01 01:27 G 27082554.42 27082554.56 27082554.73 0.0277 0.0193

Jupiter 69439-03-07 22:19 G 27083199.23 27083199.43 27083199.63 0.0544 0.0093

Jupiter 69439-11-01 13:27 G 27083438.01 27083438.06 27083438.12 0.0543 0.0522

Jupiter 69445-01-10 03:07 G 27085334.43 27085334.63 27085334.83 0.0484 0.0104

Jupiter 69445-09-02 16:48 G 27085570.05 27085570.20 27085570.36 0.0484 0.0318

Neptune 69448-05-04 07:27 G 27086544.79 27086544.81 27086544.88 0.0090 0.0088

Neptune 69448-12-15 21:07 G 27086770.30 27086770.38 27086770.47 0.0090 0.0082

Neptune 69449-07-29 09:51 G 27086995.82 27086995.91 27086996.04 0.0090 0.0077

Neptune 69450-03-11 23:31 G 27087221.36 27087221.48 27087221.62 0.0090 0.0071

Neptune 69450-10-23 12:29 G 27087446.89 27087447.02 27087447.19 0.0090 0.0066

Jupiter 69450-11-10 07:12 G 27087464.63 27087464.80 27087464.98 0.0544 0.0268

Saturn 69451-03-30 14:39 G 27087604.91 27087605.11 27087605.32 0.0283 0.0073

Neptune 69451-06-06 01:55 G 27087672.43 27087672.58 27087672.76 0.0090 0.0060

Jupiter 69451-07-06 22:34 G 27087703.30 27087703.44 27087703.60 0.0545 0.0355

Saturn 69451-11-15 04:19 G 27087834.50 27087834.68 27087834.86 0.0283 0.0140

Neptune 69452-01-17 15:22 G 27087897.97 27087898.14 27087898.32 0.0090 0.0054

Neptune 69452-08-30 04:19 G 27088123.51 27088123.68 27088123.88 0.0090 0.0049

Neptune 69453-04-12 17:46 G 27088349.06 27088349.24 27088349.45 0.0090 0.0043

Neptune 69453-11-24 07:12 G 27088574.61 27088574.80 27088575.01 0.0090 0.0037

Neptune 69454-07-07 20:24 G 27088800.15 27088800.35 27088800.56 0.0090 0.0031

Neptune 69455-02-18 09:22 G 27089025.69 27089025.89 27089026.12 0.0090 0.0026

Neptune 69455-10-01 22:48 G 27089251.24 27089251.45 27089251.67 0.0090 0.0019

Neptune 69456-05-14 12:15 G 27089476.80 27089477.01 27089477.23 0.0090 0.0013

Jupiter 69456-09-15 09:07 G 27089600.70 27089600.88 27089601.06 0.0484 0.0220

Neptune 69456-12-26 01:27 G 27089702.34 27089702.56 27089702.78 0.0090 0.0008

Jupiter 69457-05-08 23:17 G 27089836.28 27089836.47 27089836.65 0.0483 0.0202

Neptune 69457-08-08 14:39 G 27089927.89 27089928.11 27089928.33 0.0090 0.0002

Neptune 69458-03-22 03:51 G 27090153.45 27090153.66 27090153.89 0.0090 0.0005

Neptune 69458-11-02 17:17 G 27090379.00 27090379.22 27090379.44 0.0090 0.0010

Uranus 69459-02-23 18:58 G 27090492.24 27090492.29 27090492.36 0.0143 0.0137

Neptune 69459-06-16 06:29 G 27090604.56 27090604.77 27090604.99 0.0090 0.0016

Uranus 69459-10-08 06:29 G 27090718.61 27090718.77 27090718.93 0.0143 0.0097

Neptune 69460-01-27 19:41 G 27090830.12 27090830.32 27090830.54 0.0090 0.0022

Uranus 69460-05-21 17:46 G 27090945.04 27090945.24 27090945.44 0.0143 0.0056

Neptune 69460-09-09 08:53 G 27091055.67 27091055.87 27091056.09 0.0090 0.0028

Mars 69460-10-22 08:10 G 27091098.70 27091098.84 27091098.98 0.1650 0.0995

Uranus 69461-01-03 04:48 G 27091171.49 27091171.70 27091171.92 0.0143 0.0016

Neptune 69461-04-22 22:19 G 27091281.24 27091281.43 27091281.65 0.0090 0.0034

Uranus 69461-08-17 15:36 G 27091397.94 27091398.15 27091398.37 0.0143 0.0024

Neptune 69461-12-04 11:31 G 27091506.80 27091506.98 27091507.20 0.0090 0.0040

Uranus 69462-04-01 02:24 G 27091624.41 27091624.60 27091624.80 0.0143 0.0063

Jupiter 69462-07-15 18:43 G 27091730.16 27091730.28 27091730.40 0.0544 0.0432

Neptune 69462-07-18 01:12 G 27091732.36 27091732.55 27091732.74 0.0090 0.0045

Uranus 69462-11-13 13:12 G 27091850.91 27091851.05 27091851.21 0.0142 0.0103

Neptune 69463-02-28 14:24 G 27091957.93 27091958.10 27091958.29 0.0090 0.0051

Jupiter 69463-03-11 09:07 G 27091968.69 27091968.88 27091969.08 0.0545 0.0185

Uranus 69463-06-27 23:46 G 27092077.48 27092077.49 27092077.53 0.0142 0.0141

Neptune 69463-10-12 03:36 G 27092183.49 27092183.65 27092183.83 0.0090 0.0057

Neptune 69464-05-24 16:48 G 27092409.07 27092409.20 27092409.38 0.0090 0.0063

Neptune 69465-01-05 06:29 G 27092634.64 27092634.77 27092634.92 0.0090 0.0068

Neptune 69465-08-18 19:27 G 27092860.21 27092860.31 27092860.46 0.0089 0.0074

Saturn 69465-09-09 09:07 G 27092881.73 27092881.88 27092882.05 0.0276 0.0180

Neptune 69466-04-01 08:39 G 27093085.79 27093085.86 27093085.99 0.0089 0.0080

Saturn 69466-04-26 18:58 G 27093111.08 27093111.29 27093111.50 0.0276 0.0019

Neptune 69466-11-12 22:19 G 27093311.38 27093311.43 27093311.51 0.0089 0.0085

Saturn 69466-12-12 04:48 G 27093340.58 27093340.70 27093340.84 0.0276 0.0218

Jupiter 69468-05-21 13:55 G 27093866.95 27093867.08 27093867.24 0.0485 0.0338

Jupiter 69469-01-12 05:03 G 27094102.51 27094102.71 27094102.91 0.0483 0.0086

Jupiter 69474-11-13 19:27 G 27096234.11 27096234.31 27096234.52 0.0545 0.0017

Jupiter 69480-01-25 19:27 G 27098133.24 27098133.31 27098133.38 0.0486 0.0452

Saturn 69480-02-23 02:39 G 27098161.54 27098161.61 27098161.70 0.0283 0.0260

Jupiter 69480-09-17 11:17 G 27098368.76 27098368.97 27098369.17 0.0484 0.0031

Saturn 69480-10-09 16:48 G 27098390.99 27098391.20 27098391.41 0.0283 0.0048

Jupiter 69481-05-11 00:58 G 27098604.42 27098604.54 27098604.67 0.0484 0.0388

Saturn 69481-05-27 06:15 G 27098620.59 27098620.76 27098620.94 0.0282 0.0164

Jupiter 69486-07-19 03:36 G 27100499.46 27100499.65 27100499.84 0.0544 0.0161

Jupiter 69487-03-14 18:15 G 27100738.16 27100738.26 27100738.37 0.0544 0.0455

Jupiter 69492-05-23 16:34 G 27102634.99 27102635.19 27102635.38 0.0484 0.0149

Mars 69492-10-21 04:48 G 27102785.60 27102785.70 27102785.80 0.1656 0.1329

Jupiter 69493-01-14 06:58 G 27102870.62 27102870.79 27102870.96 0.0484 0.0274

Saturn 69495-03-22 16:48 G 27103668.03 27103668.20 27103668.39 0.0277 0.0148

Saturn 69495-11-07 03:07 G 27103897.42 27103897.63 27103897.84 0.0277 0.0053

Saturn 69496-06-23 13:12 G 27104126.98 27104127.05 27104127.15 0.0277 0.0253

Jupiter 69498-03-23 12:15 G 27104764.86 27104765.01 27104765.18 0.0543 0.0333

Jupiter 69498-11-17 02:24 G 27105003.43 27105003.60 27105003.78 0.0544 0.0284

Uranus 69501-11-26 04:05 G 27106107.63 27106107.67 27106107.70 0.0135 0.0132

Uranus 69502-07-10 09:22 G 27106333.77 27106333.89 27106334.06 0.0135 0.0100

Uranus 69503-02-21 15:51 G 27106559.97 27106560.16 27106560.35 0.0135 0.0066

Uranus 69503-10-05 21:51 G 27106786.20 27106786.41 27106786.62 0.0135 0.0033

Jupiter 69504-01-28 21:51 G 27106901.24 27106901.41 27106901.58 0.0485 0.0268

Uranus 69504-05-19 04:19 G 27107012.46 27107012.68 27107012.89 0.0135 0.0002

Jupiter 69504-09-20 12:15 G 27107136.82 27107137.01 27107137.21 0.0483 0.0155

Uranus 69504-12-31 10:19 G 27107238.73 27107238.93 27107239.15 0.0136 0.0035

Uranus 69505-08-14 16:34 G 27107465.01 27107465.19 27107465.39 0.0136 0.0068

Uranus 69506-03-28 23:17 G 27107691.33 27107691.47 27107691.61 0.0136 0.0102

Saturn 69509-09-05 14:10 G 27108947.96 27108948.09 27108948.23 0.0283 0.0219

Jupiter 69509-11-26 21:07 G 27109030.31 27109030.38 27109030.46 0.0543 0.0500

Saturn 69510-04-23 04:05 G 27109177.46 27109177.67 27109177.88 0.0283 0.0007

Jupiter 69510-07-23 10:48 G 27109268.75 27109268.95 27109269.15 0.0545 0.0110

Saturn 69510-12-08 17:31 G 27109407.09 27109407.23 27109407.38 0.0283 0.0205

Jupiter 69515-10-04 03:22 G 27111167.52 27111167.64 27111167.77 0.0485 0.0382

Jupiter 69516-05-26 18:43 G 27111403.08 27111403.28 27111403.48 0.0483 0.0039

Jupiter 69517-01-17 08:10 G 27111638.78 27111638.84 27111638.91 0.0484 0.0454

Moon 69520-01-31 00:43 G 27112747.46 27112747.53 27112747.59 0.2628 0.2401

Earth 69520-01-31 02:10 G 27112747.50 27112747.59 27112747.67 0.2634 0.2215 *

Jupiter 69522-03-27 21:22 G 27113534.19 27113534.39 27113534.59 0.0545 0.0062

Pluto 69523-02-25 12:29 G 27113868.85 27113869.02 27113869.23 0.0080 0.0039

Pluto 69523-10-08 23:17 G 27114094.26 27114094.47 27114094.68 0.0079 0.0029

Saturn 69524-10-02 21:36 G 27114454.21 27114454.40 27114454.59 0.0276 0.0118

Saturn 69525-05-20 07:27 G 27114683.61 27114683.81 27114684.01 0.0276 0.0081

Mars 69526-08-20 19:55 G 27115141.22 27115141.33 27115141.44 0.1648 0.1244

Moon 69528-01-28 14:10 G 27115666.95 27115667.09 27115667.22 0.2630 0.1414

Earth 69528-01-28 18:58 G 27115667.14 27115667.29 27115667.44 0.2633 0.0806 *

Jupiter 69528-01-31 00:15 G 27115669.31 27115669.51 27115669.71 0.0483 0.0078

Jupiter 69528-09-22 13:41 G 27115904.93 27115905.07 27115905.22 0.0484 0.0341

Mars 69529-05-31 13:55 G 27116156.00 27116156.08 27116156.16 0.1868 0.1636

Neptune 69530-06-22 09:22 G 27116542.86 27116542.89 27116542.95 0.0088 0.0086

Neptune 69531-02-02 22:05 G 27116768.35 27116768.42 27116768.53 0.0088 0.0081

Neptune 69531-09-16 11:17 G 27116993.86 27116993.97 27116994.09 0.0088 0.0075

Neptune 69532-04-29 00:00 G 27117219.38 27117219.50 27117219.64 0.0088 0.0070

Neptune 69532-12-10 12:29 G 27117444.89 27117445.02 27117445.19 0.0088 0.0065

Neptune 69533-07-24 01:41 G 27117670.41 27117670.57 27117670.74 0.0088 0.0059

Jupiter 69533-11-30 08:10 G 27117799.66 27117799.84 27117800.03 0.0544 0.0231

Neptune 69534-03-06 14:10 G 27117895.93 27117896.09 27117896.28 0.0088 0.0054

Jupiter 69534-07-26 23:31 G 27118038.34 27118038.48 27118038.63 0.0545 0.0388

Neptune 69534-10-18 03:07 G 27118121.46 27118121.63 27118121.83 0.0088 0.0049

Neptune 69535-05-31 16:05 G 27118346.99 27118347.17 27118347.37 0.0088 0.0043

Neptune 69536-01-12 04:34 G 27118572.51 27118572.69 27118572.91 0.0088 0.0038

Neptune 69536-08-24 17:31 G 27118798.04 27118798.23 27118798.45 0.0088 0.0032

Neptune 69537-04-07 06:15 G 27119023.57 27119023.76 27119023.99 0.0088 0.0027

Neptune 69537-11-18 19:27 G 27119249.10 27119249.31 27119249.53 0.0088 0.0021

Neptune 69538-07-02 08:24 G 27119474.63 27119474.85 27119475.07 0.0088 0.0015

Neptune 69539-02-12 21:07 G 27119700.16 27119700.38 27119700.60 0.0088 0.0010

Saturn 69539-03-18 16:05 G 27119734.02 27119734.17 27119734.32 0.0283 0.0195

Neptune 69539-09-26 10:05 G 27119925.70 27119925.92 27119926.14 0.0088 0.0004

Jupiter 69539-10-06 06:00 G 27119935.57 27119935.75 27119935.94 0.0484 0.0195

Saturn 69539-11-03 06:00 G 27119963.54 27119963.75 27119963.96 0.0282 0.0018

Neptune 69540-05-08 22:48 G 27120151.23 27120151.45 27120151.67 0.0088 0.0002

Jupiter 69540-05-28 20:24 G 27120171.17 27120171.35 27120171.53 0.0484 0.0227

Saturn 69540-06-19 19:12 G 27120193.19 27120193.30 27120193.43 0.0282 0.0228

Neptune 69540-12-20 11:31 G 27120376.76 27120376.98 27120377.21 0.0088 0.0008

Neptune 69541-08-03 00:15 G 27120602.30 27120602.51 27120602.74 0.0088 0.0013

Neptune 69542-03-16 12:58 G 27120827.83 27120828.04 27120828.26 0.0088 0.0019

Neptune 69542-10-28 01:55 G 27121053.37 27121053.58 27121053.80 0.0088 0.0024

Uranus 69543-06-08 12:15 G 27121276.90 27121277.01 27121277.15 0.0143 0.0116

Neptune 69543-06-10 14:24 G 27121278.91 27121279.10 27121279.32 0.0088 0.0030

Uranus 69544-01-20 23:31 G 27121503.31 27121503.48 27121503.68 0.0143 0.0076

Neptune 69544-01-22 03:22 G 27121504.44 27121504.64 27121504.85 0.0088 0.0035

Uranus 69544-09-03 10:48 G 27121729.74 27121729.95 27121730.17 0.0143 0.0036

Neptune 69544-09-03 15:51 G 27121729.98 27121730.16 27121730.37 0.0088 0.0041 *

Neptune 69545-04-17 04:34 G 27121955.51 27121955.69 27121955.89 0.0088 0.0046

Uranus 69545-04-17 22:05 G 27121956.20 27121956.42 27121956.63 0.0143 0.0005

Jupiter 69545-08-04 17:46 G 27122065.10 27122065.24 27122065.37 0.0543 0.0398

Neptune 69545-11-28 17:17 G 27122181.06 27122181.22 27122181.42 0.0088 0.0052

Uranus 69545-11-30 08:53 G 27122182.67 27122182.87 27122183.08 0.0143 0.0045

Jupiter 69546-03-31 07:12 G 27122303.62 27122303.80 27122303.99 0.0544 0.0215

Neptune 69546-07-12 06:00 G 27122406.60 27122406.75 27122406.93 0.0088 0.0057

Uranus 69546-07-14 19:41 G 27122409.15 27122409.32 27122409.50 0.0142 0.0084

Neptune 69547-02-22 18:58 G 27122632.14 27122632.29 27122632.45 0.0088 0.0062

Uranus 69547-02-26 06:00 G 27122635.66 27122635.75 27122635.88 0.0142 0.0124

Neptune 69547-10-06 07:12 G 27122857.68 27122857.80 27122857.96 0.0088 0.0068

Neptune 69548-05-18 20:10 G 27123083.23 27123083.34 27123083.48 0.0088 0.0073

Neptune 69548-12-30 09:07 G 27123308.79 27123308.88 27123308.98 0.0088 0.0078

Neptune 69549-08-12 21:22 G 27123534.35 27123534.39 27123534.48 0.0088 0.0084

Jupiter 69551-06-11 10:34 G 27124201.79 27124201.94 27124202.10 0.0485 0.0313

Jupiter 69552-02-02 01:55 G 27124437.38 27124437.58 27124437.78 0.0484 0.0110

Saturn 69554-04-15 04:34 G 27125240.49 27125240.69 27125240.90 0.0277 0.0087

Saturn 69554-11-30 14:39 G 27125469.92 27125470.11 27125470.31 0.0277 0.0114

Jupiter 69557-12-03 15:36 G 27126568.95 27126569.15 27126569.35 0.0544 0.0041

Mars 69558-08-19 16:05 G 27126828.03 27126828.17 27126828.30 0.1654 0.1056

Jupiter 69563-02-14 15:22 G 27128468.05 27128468.14 27128468.24 0.0486 0.0430

Jupiter 69563-10-08 07:27 G 27128703.61 27128703.81 27128704.02 0.0484 0.0010

Jupiter 69564-05-30 21:07 G 27128939.28 27128939.38 27128939.50 0.0484 0.0407

Saturn 69568-09-28 03:36 G 27130520.48 27130520.65 27130520.84 0.0283 0.0153

Saturn 69569-05-15 17:31 G 27130750.03 27130750.23 27130750.44 0.0283 0.0059

Jupiter 69569-08-07 23:17 G 27130834.27 27130834.47 27130834.67 0.0545 0.0136

Saturn 69569-12-31 06:58 G 27130979.73 27130979.79 27130979.85 0.0282 0.0269

Jupiter 69570-04-03 14:39 G 27131073.02 27131073.11 27131073.21 0.0544 0.0479

Jupiter 69575-06-13 13:41 G 27132969.88 27132970.07 27132970.27 0.0484 0.0125

Jupiter 69576-02-04 03:36 G 27133205.49 27133205.65 27133205.81 0.0484 0.0294

Jupiter 69581-04-12 09:51 G 27135099.75 27135099.91 27135100.09 0.0544 0.0304

Jupiter 69581-12-07 01:12 G 27135338.39 27135338.55 27135338.72 0.0545 0.0313

Saturn 69583-03-11 00:15 G 27135797.44 27135797.51 27135797.61 0.0276 0.0252

Saturn 69583-10-26 10:05 G 27136026.71 27136026.92 27136027.13 0.0276 0.0055

Saturn 69584-06-11 19:55 G 27136256.15 27136256.33 27136256.52 0.0276 0.0144

Uranus 69586-03-09 18:15 G 27136892.15 27136892.26 27136892.37 0.0135 0.0115

Uranus 69586-10-22 00:15 G 27137118.34 27137118.51 27137118.68 0.0135 0.0082

Jupiter 69587-02-16 18:58 G 27137236.11 27137236.29 27137236.46 0.0484 0.0242

Uranus 69587-06-05 06:15 G 27137344.56 27137344.76 27137344.97 0.0135 0.0049

Jupiter 69587-10-10 09:07 G 27137471.69 27137471.88 27137472.07 0.0483 0.0179

Uranus 69588-01-17 12:29 G 27137570.80 27137571.02 27137571.24 0.0135 0.0016

Uranus 69588-08-30 18:29 G 27137797.06 27137797.27 27137797.49 0.0135 0.0019

Uranus 69589-04-14 00:43 G 27138023.34 27138023.53 27138023.74 0.0136 0.0053

Uranus 69589-11-26 07:27 G 27138249.65 27138249.81 27138249.98 0.0136 0.0086

Uranus 69590-07-10 13:55 G 27138475.99 27138476.08 27138476.19 0.0136 0.0120

Mars 69592-06-17 06:58 G 27139183.72 27139183.79 27139183.86 0.1646 0.1512

Jupiter 69592-12-15 21:36 G 27139365.30 27139365.40 27139365.51 0.0543 0.0465

Jupiter 69593-08-11 11:31 G 27139603.79 27139603.98 27139604.18 0.0545 0.0145

Mars 69595-03-28 17:31 G 27140198.08 27140198.23 27140198.38 0.1872 0.0914

Saturn 69598-04-10 05:46 G 27141306.55 27141306.74 27141306.92 0.0283 0.0129

Jupiter 69598-10-23 00:15 G 27141502.38 27141502.51 27141502.65 0.0485 0.0356

Saturn 69598-11-25 19:27 G 27141536.11 27141536.31 27141536.51 0.0282 0.0083

Jupiter 69599-06-15 15:36 G 27141737.95 27141738.15 27141738.35 0.0483 0.0064

Jupiter 69600-02-06 05:17 G 27141973.69 27141973.72 27141973.76 0.0485 0.0476

Jupiter 69605-04-15 20:24 G 27143869.15 27143869.35 27143869.55 0.0544 0.0029

Jupiter 69610-06-28 04:05 G 27145768.62 27145768.67 27145768.71 0.0486 0.0474

Jupiter 69611-02-18 20:39 G 27146004.16 27146004.36 27146004.57 0.0484 0.0055

Jupiter 69611-10-12 10:48 G 27146239.82 27146239.95 27146240.09 0.0484 0.0363

Neptune 69612-08-06 18:43 G 27146539.26 27146539.28 27146539.35 0.0090 0.0088

Saturn 69612-09-20 06:15 G 27146583.64 27146583.76 27146583.88 0.0277 0.0224

Neptune 69613-03-20 08:10 G 27146764.77 27146764.84 27146764.94 0.0090 0.0082

Saturn 69613-05-07 16:05 G 27146812.96 27146813.17 27146813.38 0.0277 0.0026

Neptune 69613-10-31 21:07 G 27146990.29 27146990.38 27146990.52 0.0090 0.0077

Saturn 69613-12-23 02:24 G 27147042.44 27147042.60 27147042.76 0.0277 0.0174

Neptune 69614-06-14 10:34 G 27147215.82 27147215.94 27147216.09 0.0090 0.0071

Neptune 69615-01-26 00:00 G 27147441.36 27147441.50 27147441.66 0.0090 0.0065

Neptune 69615-09-08 12:58 G 27147666.90 27147667.04 27147667.22 0.0090 0.0060

Neptune 69616-04-21 02:24 G 27147892.44 27147892.60 27147892.79 0.0090 0.0054

Neptune 69616-12-02 15:51 G 27148117.99 27148118.16 27148118.35 0.0090 0.0048

Jupiter 69616-12-19 05:03 G 27148134.53 27148134.71 27148134.90 0.0544 0.0202

Neptune 69617-07-16 05:17 G 27148343.53 27148343.72 27148343.91 0.0090 0.0042

Jupiter 69617-08-14 19:27 G 27148373.19 27148373.31 27148373.45 0.0544 0.0412

Neptune 69618-02-26 18:29 G 27148569.07 27148569.27 27148569.47 0.0090 0.0036

Neptune 69618-10-10 07:27 G 27148794.62 27148794.81 27148795.03 0.0090 0.0031

Neptune 69619-05-23 20:53 G 27149020.17 27149020.37 27149020.59 0.0090 0.0025

Neptune 69620-01-04 10:05 G 27149245.72 27149245.92 27149246.15 0.0090 0.0019

Neptune 69620-08-16 23:31 G 27149471.26 27149471.48 27149471.70 0.0090 0.0013

Neptune 69621-03-30 12:43 G 27149696.82 27149697.03 27149697.25 0.0090 0.0007

Neptune 69621-11-11 02:10 G 27149922.37 27149922.59 27149922.81 0.0090 0.0001

Neptune 69622-06-24 15:07 G 27150147.92 27150148.13 27150148.36 0.0090 0.0006

Jupiter 69622-10-25 02:10 G 27150270.40 27150270.59 27150270.79 0.0484 0.0173

Neptune 69623-02-05 04:34 G 27150373.47 27150373.69 27150373.91 0.0090 0.0011

Jupiter 69623-06-17 16:34 G 27150506.02 27150506.19 27150506.37 0.0484 0.0247

Neptune 69623-09-18 17:46 G 27150599.02 27150599.24 27150599.45 0.0090 0.0017

Neptune 69624-05-01 06:58 G 27150824.58 27150824.79 27150825.01 0.0090 0.0023

Mars 69624-06-16 03:07 G 27150870.48 27150870.63 27150870.79 0.1652 0.0782

Neptune 69624-12-12 20:10 G 27151050.14 27151050.34 27151050.56 0.0090 0.0029

Neptune 69625-07-26 09:22 G 27151275.70 27151275.89 27151276.10 0.0090 0.0035

Neptune 69626-03-08 22:34 G 27151501.26 27151501.44 27151501.65 0.0090 0.0041

Neptune 69626-10-20 11:46 G 27151726.82 27151726.99 27151727.19 0.0090 0.0046

Uranus 69627-02-05 18:15 G 27151835.20 27151835.26 27151835.34 0.0143 0.0135

Neptune 69627-06-03 01:27 G 27151952.39 27151952.56 27151952.74 0.0090 0.0052

Uranus 69627-09-20 05:31 G 27152061.58 27152061.73 27152061.91 0.0143 0.0095

Saturn 69627-10-21 17:31 G 27152093.03 27152093.23 27152093.43 0.0283 0.0086

Neptune 69628-01-14 14:39 G 27152177.95 27152178.11 27152178.29 0.0090 0.0058

Uranus 69628-05-03 16:48 G 27152288.01 27152288.20 27152288.42 0.0143 0.0055

Saturn 69628-06-07 07:12 G 27152322.61 27152322.80 27152322.99 0.0283 0.0126

Jupiter 69628-08-23 12:29 G 27152399.88 27152400.02 27152400.17 0.0543 0.0375

Neptune 69628-08-27 03:36 G 27152403.52 27152403.65 27152403.83 0.0090 0.0064

Uranus 69628-12-16 04:19 G 27152514.46 27152514.68 27152514.90 0.0143 0.0015

Neptune 69629-04-09 17:03 G 27152629.09 27152629.21 27152629.37 0.0090 0.0070

Jupiter 69629-04-19 02:53 G 27152638.44 27152638.62 27152638.81 0.0545 0.0239

Uranus 69629-07-30 15:07 G 27152740.92 27152741.13 27152741.35 0.0143 0.0026

Neptune 69629-11-21 06:43 G 27152854.67 27152854.78 27152854.91 0.0090 0.0075

Uranus 69630-03-14 01:55 G 27152967.40 27152967.58 27152967.79 0.0143 0.0066

Neptune 69630-07-04 19:41 G 27153080.25 27153080.32 27153080.44 0.0089 0.0081

Uranus 69630-10-26 12:43 G 27153193.90 27153194.03 27153194.19 0.0142 0.0105

Neptune 69631-02-15 09:22 G 27153305.84 27153305.89 27153305.96 0.0089 0.0086

Jupiter 69634-06-30 08:10 G 27154536.68 27154536.84 27154537.01 0.0485 0.0287

Jupiter 69635-02-20 23:03 G 27154772.26 27154772.46 27154772.66 0.0483 0.0133

Jupiter 69640-04-27 23:46 G 27156665.46 27156665.49 27156665.53 0.0542 0.0534

Jupiter 69640-12-22 13:12 G 27156903.85 27156904.05 27156904.25 0.0545 0.0069

Saturn 69642-04-02 12:29 G 27157369.87 27157370.02 27157370.18 0.0276 0.0190

Saturn 69642-11-17 22:05 G 27157599.21 27157599.42 27157599.64 0.0276 0.0009

Saturn 69643-07-05 08:10 G 27157828.70 27157828.84 27157828.99 0.0276 0.0205

Jupiter 69646-03-05 12:43 G 27158802.93 27158803.03 27158803.15 0.0485 0.0403

Jupiter 69646-10-27 04:34 G 27159038.49 27159038.69 27159038.90 0.0483 0.0020

Jupiter 69647-06-19 18:00 G 27159274.17 27159274.25 27159274.35 0.0484 0.0429

Moon 69649-07-29 13:12 G 27160044.91 27160045.05 27160045.20 0.2705 0.0936

Earth 69649-07-29 15:51 G 27160045.03 27160045.16 27160045.30 0.2699 0.1457 *

Jupiter 69652-08-27 00:00 G 27161169.30 27161169.50 27161169.70 0.0545 0.0100

Jupiter 69653-04-22 15:51 G 27161408.09 27161408.16 27161408.23 0.0544 0.0511

Saturn 69656-09-15 04:48 G 27162649.66 27162649.70 27162649.76 0.0283 0.0274

Saturn 69657-05-02 18:58 G 27162879.09 27162879.29 27162879.50 0.0283 0.0063

Earth 69657-07-27 05:03 G 27162964.62 27162964.71 27162964.81 0.2700 0.2180

Moon 69657-07-27 06:58 G 27162964.68 27162964.79 27162964.91 0.2706 0.1714 *

Saturn 69657-12-18 08:39 G 27163108.69 27163108.86 27163109.05 0.0282 0.0149

Jupiter 69658-07-02 10:48 G 27163304.75 27163304.95 27163305.15 0.0484 0.0099

Jupiter 69659-02-23 00:29 G 27163540.37 27163540.52 27163540.68 0.0484 0.0318

Mars 69661-01-22 21:51 G 27164240.24 27164240.41 27164240.58 0.1874 0.0215

Jupiter 69664-05-01 10:05 G 27165434.75 27165434.92 27165435.10 0.0544 0.0269

Jupiter 69664-12-26 00:29 G 27165673.37 27165673.52 27165673.68 0.0544 0.0344

Uranus 69669-11-07 03:07 G 27167450.59 27167450.63 27167450.69 0.0135 0.0131

Jupiter 69670-03-07 15:22 G 27167570.95 27167571.14 27167571.32 0.0485 0.0218

Uranus 69670-06-21 09:07 G 27167676.74 27167676.88 27167677.04 0.0135 0.0098

Jupiter 69670-10-29 06:00 G 27167806.57 27167806.75 27167806.94 0.0484 0.0203

Uranus 69671-02-02 14:53 G 27167902.95 27167903.12 27167903.33 0.0135 0.0066

Uranus 69671-09-16 21:22 G 27168129.18 27168129.39 27168129.60 0.0135 0.0031

Saturn 69671-10-13 17:03 G 27168156.05 27168156.21 27168156.39 0.0277 0.0164

Uranus 69672-04-30 03:36 G 27168355.43 27168355.65 27168355.87 0.0135 0.0003

Saturn 69672-05-30 03:07 G 27168385.42 27168385.63 27168385.85 0.0277 0.0036

Uranus 69672-12-12 09:51 G 27168581.70 27168581.91 27168582.12 0.0135 0.0036

Saturn 69673-01-14 13:27 G 27168614.95 27168615.06 27168615.18 0.0277 0.0234

Uranus 69673-07-26 16:19 G 27168807.99 27168808.18 27168808.36 0.0136 0.0070

Uranus 69674-03-09 22:34 G 27169034.31 27169034.44 27169034.59 0.0136 0.0104

Jupiter 69676-01-04 19:27 G 27169700.20 27169700.31 27169700.44 0.0543 0.0435

Jupiter 69676-08-30 08:39 G 27169938.67 27169938.86 27169939.06 0.0545 0.0172

Pluto 69680-12-11 20:24 G 27171503.28 27171503.35 27171503.47 0.0064 0.0058

Pluto 69681-07-25 00:43 G 27171728.34 27171728.53 27171728.75 0.0064 0.0023

Jupiter 69681-11-10 20:39 G 27171837.21 27171837.36 27171837.51 0.0485 0.0334

Pluto 69682-03-07 05:03 G 27171953.50 27171953.71 27171953.93 0.0065 0.0012

Jupiter 69682-07-04 12:15 G 27172072.80 27172073.01 27172073.21 0.0483 0.0086

Pluto 69682-10-18 09:07 G 27172178.75 27172178.88 27172179.04 0.0065 0.0048

Saturn 69686-03-28 16:05 G 27173436.06 27173436.17 27173436.30 0.0283 0.0232

Saturn 69686-11-13 06:15 G 27173665.55 27173665.76 27173665.98 0.0283 0.0021

Saturn 69687-06-30 19:55 G 27173895.18 27173895.33 27173895.49 0.0283 0.0191

Jupiter 69688-05-04 15:36 G 27174203.95 27174204.15 27174204.36 0.0545 0.0008

Mars 69690-04-13 14:39 G 27174912.94 27174913.11 27174913.27 0.1650 0.0514

Jupiter 69693-07-17 02:10 G 27176103.52 27176103.59 27176103.67 0.0486 0.0447

Jupiter 69694-03-09 18:29 G 27176339.07 27176339.27 27176339.48 0.0484 0.0030

Neptune 69694-09-23 20:24 G 27176537.33 27176537.35 27176537.43 0.0088 0.0086

Jupiter 69694-10-31 08:10 G 27176574.72 27176574.84 27176574.97 0.0484 0.0384

Neptune 69695-05-07 09:51 G 27176762.83 27176762.91 27176763.00 0.0088 0.0080

Neptune 69695-12-18 22:19 G 27176988.33 27176988.43 27176988.56 0.0088 0.0075

Neptune 69696-07-31 11:03 G 27177213.85 27177213.96 27177214.11 0.0088 0.0070

Neptune 69697-03-14 00:00 G 27177439.36 27177439.50 27177439.66 0.0088 0.0064

Neptune 69697-10-25 12:43 G 27177664.89 27177665.03 27177665.22 0.0088 0.0059

Neptune 69698-06-08 01:55 G 27177890.41 27177890.58 27177890.76 0.0088 0.0053

Neptune 69699-01-19 14:24 G 27178115.93 27178116.10 27178116.30 0.0088 0.0048

Neptune 69699-09-02 03:22 G 27178341.45 27178341.64 27178341.84 0.0088 0.0042

Jupiter 69700-01-08 01:55 G 27178469.39 27178469.58 27178469.77 0.0545 0.0175

Neptune 69700-04-15 16:05 G 27178566.98 27178567.17 27178567.38 0.0088 0.0037

Jupiter 69700-09-03 17:17 G 27178708.11 27178708.22 27178708.35 0.0545 0.0438

Neptune 69700-11-27 05:03 G 27178792.51 27178792.71 27178792.92 0.0088 0.0031

Saturn 69701-04-26 00:00 G 27178942.32 27178942.50 27178942.69 0.0276 0.0129

Neptune 69701-07-10 17:31 G 27179018.03 27179018.23 27179018.46 0.0088 0.0026

Saturn 69701-12-11 09:36 G 27179171.70 27179171.90 27179172.11 0.0276 0.0069

Neptune 69702-02-21 06:29 G 27179243.56 27179243.77 27179243.99 0.0088 0.0020

Saturn 69702-07-28 19:55 G 27179401.27 27179401.33 27179401.38 0.0276 0.0265

Neptune 69702-10-04 19:12 G 27179469.10 27179469.30 27179469.53 0.0088 0.0015

Neptune 69703-05-18 08:10 G 27179694.63 27179694.84 27179695.07 0.0088 0.0009

Neptune 69703-12-29 21:07 G 27179920.16 27179920.38 27179920.60 0.0088 0.0003

Neptune 69704-08-11 09:51 G 27180145.69 27180145.91 27180146.13 0.0088 0.0003

Neptune 69705-03-24 22:34 G 27180371.22 27180371.44 27180371.67 0.0088 0.0008

Neptune 69705-11-05 11:31 G 27180596.77 27180596.98 27180597.20 0.0088 0.0014

Jupiter 69705-11-14 00:00 G 27180605.31 27180605.50 27180605.70 0.0484 0.0145

Neptune 69706-06-19 00:15 G 27180822.30 27180822.51 27180822.73 0.0088 0.0020

Jupiter 69706-07-07 13:55 G 27180840.91 27180841.08 27180841.25 0.0483 0.0271

Neptune 69707-01-30 12:58 G 27181047.84 27181048.04 27181048.26 0.0088 0.0025

Neptune 69707-09-13 01:41 G 27181273.37 27181273.57 27181273.79 0.0088 0.0031

Neptune 69708-04-25 14:39 G 27181498.91 27181499.11 27181499.31 0.0088 0.0036

Neptune 69708-12-07 03:07 G 27181724.45 27181724.63 27181724.84 0.0088 0.0042

Neptune 69709-07-20 16:19 G 27181949.99 27181950.18 27181950.37 0.0088 0.0047

Neptune 69710-03-03 04:34 G 27182175.53 27182175.69 27182175.89 0.0088 0.0053

Neptune 69710-10-14 17:31 G 27182401.08 27182401.23 27182401.41 0.0088 0.0058

Uranus 69711-05-21 11:46 G 27182619.87 27182619.99 27182620.13 0.0143 0.0114

Neptune 69711-05-28 06:00 G 27182626.62 27182626.75 27182626.92 0.0088 0.0064

Jupiter 69711-09-13 13:27 G 27182734.90 27182735.06 27182735.22 0.0544 0.0338

Uranus 69712-01-02 23:03 G 27182846.29 27182846.46 27182846.66 0.0143 0.0074

Neptune 69712-01-08 18:58 G 27182852.17 27182852.29 27182852.44 0.0088 0.0069

Jupiter 69712-05-09 04:05 G 27182973.50 27182973.67 27182973.85 0.0545 0.0275

Uranus 69712-08-16 10:19 G 27183072.73 27183072.93 27183073.15 0.0143 0.0034

Neptune 69712-08-21 07:55 G 27183077.71 27183077.83 27183077.94 0.0088 0.0074

Uranus 69713-03-30 21:36 G 27183299.18 27183299.40 27183299.62 0.0143 0.0006

Neptune 69713-04-03 20:10 G 27183303.27 27183303.34 27183303.45 0.0088 0.0080

Uranus 69713-11-12 08:39 G 27183525.66 27183525.86 27183526.07 0.0143 0.0046

Neptune 69713-11-15 09:07 G 27183528.84 27183528.88 27183528.95 0.0088 0.0085

Uranus 69714-06-26 19:41 G 27183752.15 27183752.32 27183752.49 0.0142 0.0086

Uranus 69715-02-08 06:00 G 27183978.66 27183978.75 27183978.87 0.0142 0.0125

Saturn 69715-10-09 17:31 G 27184222.10 27184222.23 27184222.38 0.0283 0.0210

Saturn 69716-05-26 07:41 G 27184451.61 27184451.82 27184452.03 0.0283 0.0003

Saturn 69717-01-10 21:22 G 27184681.26 27184681.39 27184681.53 0.0282 0.0213

Jupiter 69717-07-20 05:31 G 27184871.56 27184871.73 27184871.91 0.0484 0.0261

Jupiter 69718-03-12 20:24 G 27185107.15 27185107.35 27185107.54 0.0483 0.0158

Jupiter 69723-05-19 00:58 G 27187000.46 27187000.54 27187000.62 0.0542 0.0498

Jupiter 69724-01-12 13:41 G 27187238.88 27187239.07 27187239.27 0.0545 0.0103

Mars 69726-11-21 01:27 G 27188282.39 27188282.56 27188282.72 0.1877 0.0516

Jupiter 69729-03-25 09:36 G 27189137.77 27189137.90 27189138.03 0.0486 0.0378

Jupiter 69729-11-16 01:41 G 27189373.37 27189373.57 27189373.78 0.0484 0.0041

Jupiter 69730-07-09 15:36 G 27189609.09 27189609.15 27189609.23 0.0485 0.0451

Saturn 69730-11-06 03:22 G 27189728.45 27189728.64 27189728.84 0.0276 0.0104

Saturn 69731-06-23 13:27 G 27189957.86 27189958.06 27189958.26 0.0277 0.0094

Jupiter 69735-09-16 22:19 G 27191504.23 27191504.43 27191504.64 0.0544 0.0071

Jupiter 69736-05-12 13:27 G 27191743.03 27191743.06 27191743.10 0.0544 0.0536

Jupiter 69741-07-22 07:41 G 27193639.62 27193639.82 27193640.02 0.0484 0.0076

Jupiter 69742-03-14 21:36 G 27193875.26 27193875.40 27193875.55 0.0484 0.0338

Saturn 69745-04-21 03:51 G 27195008.50 27195008.66 27195008.83 0.0283 0.0169

Saturn 69745-12-06 18:15 G 27195238.05 27195238.26 27195238.47 0.0283 0.0043

Saturn 69746-07-24 07:41 G 27195467.74 27195467.82 27195467.92 0.0283 0.0254

Jupiter 69747-05-22 05:17 G 27195769.54 27195769.72 27195769.90 0.0544 0.0244

Jupiter 69748-01-15 20:10 G 27196008.19 27196008.34 27196008.49 0.0545 0.0366

Jupiter 69753-03-27 13:55 G 27197905.89 27197906.08 27197906.27 0.0484 0.0190

Jupiter 69753-11-18 04:19 G 27198141.50 27198141.68 27198141.87 0.0483 0.0226

Uranus 69754-02-19 17:17 G 27198235.13 27198235.22 27198235.36 0.0135 0.0114

Uranus 69754-10-03 23:46 G 27198461.32 27198461.49 27198461.66 0.0135 0.0080

Uranus 69755-05-18 05:46 G 27198687.54 27198687.74 27198687.95 0.0135 0.0047

Uranus 69755-12-30 12:00 G 27198913.79 27198914.00 27198914.22 0.0135 0.0014

Mars 69756-02-10 02:10 G 27198955.42 27198955.59 27198955.76 0.1648 0.0250

Uranus 69756-08-12 18:15 G 27199140.04 27199140.26 27199140.47 0.0135 0.0020

Uranus 69757-03-27 00:29 G 27199366.33 27199366.52 27199366.72 0.0135 0.0054

Uranus 69757-11-08 06:58 G 27199592.63 27199592.79 27199592.96 0.0136 0.0088

Uranus 69758-06-22 13:27 G 27199818.98 27199819.06 27199819.17 0.0136 0.0122

Jupiter 69759-01-24 15:51 G 27200035.03 27200035.16 27200035.29 0.0543 0.0408

Jupiter 69759-09-20 06:00 G 27200273.56 27200273.75 27200273.94 0.0545 0.0199

Saturn 69759-10-02 01:12 G 27200285.51 27200285.55 27200285.62 0.0275 0.0265

Saturn 69760-05-18 10:48 G 27200514.75 27200514.95 27200515.16 0.0276 0.0069

Saturn 69761-01-02 20:24 G 27200744.17 27200744.35 27200744.54 0.0276 0.0128

Moon 69763-02-01 04:19 G 27201503.60 27201503.68 27201503.76 0.2640 0.2234

Earth 69763-02-01 05:03 G 27201503.65 27201503.71 27201503.76 0.2633 0.2469 *

Jupiter 69764-11-30 19:12 G 27202172.14 27202172.30 27202172.46 0.0485 0.0305

Jupiter 69765-07-24 10:05 G 27202407.72 27202407.92 27202408.12 0.0483 0.0112

Pluto 69770-06-19 12:43 G 27204198.83 27204199.03 27204199.26 0.0080 0.0020

Earth 69771-01-29 21:51 G 27204423.26 27204423.41 27204423.57 0.2633 0.0548

Moon 69771-01-30 01:12 G 27204423.40 27204423.55 27204423.70 0.2639 0.0106 *

Pluto 69771-01-30 22:48 G 27204424.29 27204424.45 27204424.65 0.0079 0.0048

Jupiter 69771-05-25 17:03 G 27204539.01 27204539.21 27204539.42 0.0545 0.0033

Saturn 69774-11-01 05:03 G 27205794.54 27205794.71 27205794.90 0.0283 0.0147

Saturn 69775-06-18 19:12 G 27206024.09 27206024.30 27206024.51 0.0283 0.0065

Saturn 69776-02-03 08:39 G 27206253.82 27206253.86 27206253.92 0.0283 0.0275

Jupiter 69776-08-06 00:15 G 27206438.41 27206438.51 27206438.61 0.0486 0.0419

Neptune 69776-11-09 05:46 G 27206533.72 27206533.74 27206533.81 0.0090 0.0088

Jupiter 69777-03-29 16:19 G 27206673.97 27206674.18 27206674.38 0.0483 0.0003

Neptune 69777-06-22 18:58 G 27206759.22 27206759.29 27206759.40 0.0090 0.0082

Jupiter 69777-11-20 06:00 G 27206909.64 27206909.75 27206909.86 0.0484 0.0408

Neptune 69778-02-03 08:24 G 27206984.74 27206984.85 27206984.97 0.0090 0.0076

Neptune 69778-09-16 21:22 G 27207210.27 27207210.39 27207210.54 0.0090 0.0071

Neptune 69779-04-30 10:48 G 27207435.81 27207435.95 27207436.11 0.0090 0.0065

Neptune 69779-12-12 00:15 G 27207661.35 27207661.51 27207661.68 0.0090 0.0059

Neptune 69780-07-24 12:58 G 27207886.89 27207887.04 27207887.24 0.0090 0.0054

Neptune 69781-03-07 02:24 G 27208112.43 27208112.60 27208112.80 0.0090 0.0048

Neptune 69781-10-18 15:51 G 27208337.98 27208338.16 27208338.36 0.0090 0.0042

Neptune 69782-06-01 05:17 G 27208563.53 27208563.72 27208563.93 0.0090 0.0036

Neptune 69783-01-12 18:29 G 27208789.07 27208789.27 27208789.48 0.0090 0.0030

Jupiter 69783-01-28 03:36 G 27208804.46 27208804.65 27208804.85 0.0544 0.0137

Neptune 69783-08-26 07:55 G 27209014.62 27209014.83 27209015.04 0.0090 0.0024

Jupiter 69783-09-23 18:43 G 27209043.18 27209043.28 27209043.38 0.0544 0.0469

Neptune 69784-04-07 21:22 G 27209240.17 27209240.39 27209240.60 0.0090 0.0018

Neptune 69784-11-19 10:34 G 27209465.73 27209465.94 27209466.16 0.0090 0.0012

Neptune 69785-07-02 23:46 G 27209691.27 27209691.49 27209691.71 0.0090 0.0006

Neptune 69786-02-13 12:58 G 27209916.82 27209917.04 27209917.26 0.0090 0.0002

Neptune 69786-09-27 02:24 G 27210142.38 27210142.60 27210142.81 0.0090 0.0006

Neptune 69787-05-10 15:36 G 27210367.94 27210368.15 27210368.37 0.0090 0.0012

Neptune 69787-12-22 04:48 G 27210593.49 27210593.70 27210593.92 0.0090 0.0018

Neptune 69788-08-03 18:00 G 27210819.04 27210819.25 27210819.47 0.0090 0.0024

Jupiter 69788-12-02 21:22 G 27210940.19 27210940.39 27210940.59 0.0484 0.0121

Neptune 69789-03-17 07:12 G 27211044.60 27211044.80 27211045.01 0.0090 0.0030

Saturn 69789-04-13 03:36 G 27211071.55 27211071.65 27211071.75 0.0276 0.0242

Jupiter 69789-07-26 11:46 G 27211175.83 27211175.99 27211176.15 0.0484 0.0294

Neptune 69789-10-28 20:24 G 27211270.16 27211270.35 27211270.56 0.0090 0.0036

Saturn 69789-11-28 13:12 G 27211300.84 27211301.05 27211301.26 0.0276 0.0046

Neptune 69790-06-11 09:36 G 27211495.72 27211495.90 27211496.11 0.0090 0.0042

Saturn 69790-07-15 23:03 G 27211530.28 27211530.46 27211530.64 0.0276 0.0152

Neptune 69791-01-22 22:48 G 27211721.28 27211721.45 27211721.65 0.0090 0.0048

Neptune 69791-09-05 12:29 G 27211946.84 27211947.02 27211947.19 0.0090 0.0053

Neptune 69792-04-18 01:41 G 27212172.41 27212172.57 27212172.74 0.0090 0.0059

Mars 69792-09-17 05:31 G 27212324.60 27212324.73 27212324.86 0.1880 0.1225

Neptune 69792-11-29 14:53 G 27212397.98 27212398.12 27212398.28 0.0090 0.0065

Neptune 69793-07-13 04:05 G 27212623.55 27212623.67 27212623.82 0.0090 0.0071

Neptune 69794-02-23 17:46 G 27212849.13 27212849.24 27212849.35 0.0090 0.0076

Jupiter 69794-10-02 13:12 G 27213069.88 27213070.05 27213070.21 0.0543 0.0304

Neptune 69794-10-07 06:43 G 27213074.71 27213074.78 27213074.88 0.0089 0.0082

Uranus 69795-01-18 18:15 G 27213178.19 27213178.26 27213178.36 0.0143 0.0133

Neptune 69795-05-20 19:55 G 27213300.31 27213300.33 27213300.40 0.0089 0.0088

Jupiter	69795-05-29 03:22 G	27213308.47	27213308.64	27213308.81	0.0545	0.0303
Uranus	69795-09-02 05:46 G	27213404.58	27213404.74	27213404.91	0.0143	0.0092
Uranus	69796-04-15 17:03 G	27213631.01	27213631.21	27213631.42	0.0143	0.0052
Uranus	69796-11-28 04:34 G	27213857.47	27213857.69	27213857.91	0.0143	0.0012
Uranus	69797-07-12 15:36 G	27214083.94	27214084.15	27214084.36	0.0143	0.0028
Uranus	69798-02-24 02:24 G	27214310.42	27214310.60	27214310.80	0.0143	0.0068
Uranus	69798-10-08 12:58 G	27214536.92	27214537.04	27214537.20	0.0142	0.0108
Jupiter	69800-08-09 03:07 G	27215206.45	27215206.63	27215206.81	0.0485	0.0236
Jupiter	69801-04-01 18:00 G	27215442.06	27215442.25	27215442.44	0.0483	0.0180
Saturn	69804-05-14 14:10 G	27216580.90	27216581.09	27216581.29	0.0283	0.0108
Saturn	69804-12-30 04:34 G	27216810.49	27216810.69	27216810.89	0.0283	0.0104
Jupiter	69806-06-07 20:24 G	27217335.25	27217335.35	27217335.45	0.0542	0.0471
Jupiter	69807-02-01 09:22 G	27217573.70	27217573.89	27217574.09	0.0545	0.0128
Jupiter	69812-04-14 09:07 G	27219472.74	27219472.88	27219473.02	0.0485	0.0349
Jupiter	69812-12-06 00:58 G	27219708.34	27219708.54	27219708.74	0.0483	0.0068
Jupiter	69813-07-29 14:24 G	27219944.06	27219944.10	27219944.14	0.0484	0.0473
Jupiter	69818-10-06 19:12 G	27221839.10	27221839.30	27221839.51	0.0545	0.0043
Saturn	69818-10-25 11:17 G	27221857.84	27221857.97	27221858.11	0.0275	0.0206
Saturn	69819-06-11 20:39 G	27222087.15	27222087.36	27222087.58	0.0275	0.0012
Saturn	69820-01-27 06:00 G	27222316.61	27222316.75	27222316.92	0.0276	0.0186
Mars	69821-12-08 13:27 G	27222997.89	27222998.06	27222998.24	0.1646	0.0027
Jupiter	69823-12-19 13:55 G	27223739.02	27223739.08	27223739.14	0.0486	0.0461
Jupiter	69824-08-11 06:29 G	27223974.57	27223974.77	27223974.97	0.0483	0.0047
Jupiter	69825-04-03 20:10 G	27224210.20	27224210.34	27224210.47	0.0484	0.0363
Jupiter	69830-06-11 06:58 G	27226104.60	27226104.79	27226104.97	0.0545	0.0207
Jupiter	69831-02-04 22:19 G	27226343.30	27226343.43	27226343.57	0.0545	0.0402
Saturn	69833-11-24 15:36 G	27227366.95	27227367.15	27227367.35	0.0283	0.0086
Saturn	69834-07-12 05:31 G	27227596.54	27227596.73	27227596.92	0.0283	0.0125
Jupiter	69836-04-16 12:29 G	27228240.82	27228241.02	27228241.21	0.0484	0.0162
Jupiter	69836-12-08 02:39 G	27228476.44	27228476.61	27228476.79	0.0483	0.0252

Uranus 69837-10-21 02:24 G 27228793.56 27228793.60 27228793.69 0.0135 0.0129

Uranus 69838-06-04 08:39 G 27229019.72 27229019.86 27229020.03 0.0135 0.0096

Uranus 69839-01-16 14:53 G 27229245.93 27229246.12 27229246.31 0.0135 0.0062

Uranus 69839-08-30 20:53 G 27229472.16 27229472.37 27229472.59 0.0135 0.0029

Uranus 69840-04-13 03:22 G 27229698.42 27229698.64 27229698.85 0.0135 0.0005

Uranus 69840-11-25 09:36 G 27229924.69 27229924.90 27229925.11 0.0135 0.0038

Uranus 69841-07-09 15:51 G 27230150.99 27230151.16 27230151.35 0.0136 0.0072

Jupiter 69842-02-13 18:29 G 27230370.13 27230370.27 27230370.42 0.0543 0.0369

Uranus 69842-02-20 22:34 G 27230377.31 27230377.44 27230377.57 0.0136 0.0106

Jupiter 69842-10-10 08:24 G 27230608.67 27230608.85 27230609.04 0.0545 0.0236

Jupiter 69847-12-21 17:03 G 27232507.05 27232507.21 27232507.38 0.0485 0.0279

Saturn 69848-05-06 12:15 G 27232643.86 27232644.01 27232644.18 0.0276 0.0186

Jupiter 69848-08-13 08:10 G 27232742.65 27232742.84 27232743.04 0.0483 0.0138

Saturn 69848-12-21 21:51 G 27232873.20 27232873.41 27232873.63 0.0276 0.0011

Saturn 69849-08-08 07:41 G 27233102.68 27233102.82 27233102.96 0.0276 0.0208

Jupiter 69853-10-19 05:17 G 27234635.68 27234635.72 27234635.76 0.0542 0.0527

Jupiter 69854-06-14 17:31 G 27234874.03 27234874.23 27234874.44 0.0545 0.0067

Neptune 69858-12-28 07:12 G 27236531.78 27236531.80 27236531.88 0.0088 0.0086

Neptune 69859-08-10 20:24 G 27236757.28 27236757.35 27236757.45 0.0088 0.0080

Jupiter 69859-08-26 22:19 G 27236773.32 27236773.43 27236773.55 0.0486 0.0393

Neptune 69860-03-23 09:07 G 27236982.79 27236982.88 27236983.02 0.0088 0.0075

Jupiter 69860-04-18 14:39 G 27237008.91 27237009.11 27237009.32 0.0484 0.0023

Neptune 69860-11-03 22:34 G 27237208.31 27237208.44 27237208.58 0.0088 0.0069

Jupiter 69860-12-10 04:34 G 27237244.60 27237244.69 27237244.79 0.0484 0.0429

Neptune 69861-06-17 11:03 G 27237433.83 27237433.96 27237434.13 0.0088 0.0064

Neptune 69862-01-28 23:46 G 27237659.35 27237659.49 27237659.68 0.0088 0.0059

Neptune 69862-09-11 12:43 G 27237884.87 27237885.03 27237885.22 0.0088 0.0053

Saturn 69862-10-20 08:10 G 27237923.77 27237923.84 27237923.92 0.0283 0.0262

Neptune 69863-04-25 01:55 G 27238110.40 27238110.58 27238110.77 0.0088 0.0047

Saturn 69863-06-06 22:48 G 27238153.24 27238153.45 27238153.66 0.0283 0.0051

Neptune 69863-12-06 14:24 G 27238335.92 27238336.10 27238336.31 0.0088 0.0042

Saturn 69864-01-22 13:12 G 27238382.88 27238383.05 27238383.22 0.0283 0.0161

Neptune 69864-07-19 03:22 G 27238561.44 27238561.64 27238561.85 0.0088 0.0036

Neptune 69865-03-01 16:05 G 27238786.97 27238787.17 27238787.39 0.0088 0.0031

Neptune 69865-10-13 05:03 G 27239012.50 27239012.71 27239012.93 0.0088 0.0025

Jupiter 69866-02-16 23:46 G 27239139.29 27239139.49 27239139.69 0.0544 0.0110

Neptune 69866-05-26 18:00 G 27239238.03 27239238.25 27239238.46 0.0088 0.0019

Jupiter 69866-10-13 15:07 G 27239378.05 27239378.13 27239378.22 0.0545 0.0493

Neptune 69867-01-07 06:29 G 27239463.56 27239463.77 27239464.00 0.0088 0.0014

Neptune 69867-08-20 19:27 G 27239689.09 27239689.31 27239689.53 0.0088 0.0008

Neptune 69868-04-02 08:10 G 27239914.62 27239914.84 27239915.06 0.0088 0.0002

Neptune 69868-11-13 21:07 G 27240140.16 27240140.38 27240140.60 0.0088 0.0003

Neptune 69869-06-27 09:51 G 27240365.69 27240365.91 27240366.13 0.0088 0.0009

Neptune 69870-02-07 22:34 G 27240591.22 27240591.44 27240591.66 0.0088 0.0015

Neptune 69870-09-21 11:03 G 27240816.76 27240816.96 27240817.19 0.0088 0.0021

Neptune 69871-05-05 00:00 G 27241042.30 27241042.50 27241042.72 0.0088 0.0026

Neptune 69871-12-16 12:43 G 27241267.84 27241268.03 27241268.25 0.0088 0.0032

Jupiter 69871-12-23 21:22 G 27241275.19 27241275.39 27241275.59 0.0484 0.0091

Neptune 69872-07-29 01:55 G 27241493.38 27241493.58 27241493.78 0.0088 0.0037

Jupiter 69872-08-15 11:17 G 27241510.83 27241510.97 27241511.13 0.0483 0.0321

Neptune 69873-03-11 14:24 G 27241718.92 27241719.10 27241719.30 0.0088 0.0043

Neptune 69873-10-23 03:07 G 27241944.46 27241944.63 27241944.83 0.0088 0.0049

Neptune 69874-06-05 15:51 G 27242170.00 27242170.16 27242170.35 0.0088 0.0054

Neptune 69875-01-17 04:19 G 27242395.54 27242395.68 27242395.87 0.0088 0.0060

Neptune 69875-08-30 17:17 G 27242621.09 27242621.22 27242621.38 0.0088 0.0065

Neptune 69876-04-12 06:15 G 27242846.63 27242846.76 27242846.89 0.0088 0.0070

Neptune 69876-11-23 18:43 G 27243072.19 27243072.28 27243072.41 0.0088 0.0076

Neptune 69877-07-07 07:27 G 27243297.75 27243297.81 27243297.91 0.0088 0.0081

Jupiter 69877-10-22 09:51 G 27243404.74 27243404.91 27243405.09 0.0544 0.0276

Saturn 69877-11-16 20:24 G 27243430.18 27243430.35 27243430.53 0.0275 0.0150

Neptune 69878-02-17 20:24 G 27243523.32 27243523.35 27243523.39 0.0088 0.0086

Jupiter 69878-06-18 00:58 G 27243643.38 27243643.54 27243643.70 0.0545 0.0330

Saturn 69878-07-04 05:46 G 27243659.54 27243659.74 27243659.96 0.0275 0.0046

Saturn 69879-02-18 15:07 G 27243889.04 27243889.13 27243889.24 0.0275 0.0242

Uranus 69879-05-03 12:29 G 27243962.88 27243963.02 27243963.16 0.0143 0.0111

Uranus 69879-12-15 23:46 G 27244189.30 27244189.49 27244189.68 0.0143 0.0070

Uranus 69880-07-29 11:03 G 27244415.75 27244415.96 27244416.18 0.0143 0.0030

Uranus 69881-03-12 22:19 G 27244642.21 27244642.43 27244642.65 0.0143 0.0010

Uranus 69881-10-25 09:22 G 27244868.69 27244868.89 27244869.10 0.0143 0.0050

Uranus 69882-06-08 20:10 G 27245095.18 27245095.34 27245095.52 0.0142 0.0090

Uranus 69883-01-21 06:58 G 27245321.71 27245321.79 27245321.89 0.0142 0.0129

Jupiter 69883-08-29 02:53 G 27245541.43 27245541.62 27245541.80 0.0484 0.0205

Jupiter 69884-04-20 17:17 G 27245777.03 27245777.22 27245777.40 0.0483 0.0208

Mars 69887-10-06 01:12 G 27247040.37 27247040.55 27247040.72 0.1644 0.0272

Jupiter 69889-06-26 22:05 G 27247670.30 27247670.42 27247670.54 0.0543 0.0434

Jupiter 69890-02-20 11:46 G 27247908.80 27247908.99 27247909.19 0.0545 0.0167

Saturn 69892-05-01 09:51 G 27248709.81 27248709.91 27248710.03 0.0283 0.0240

Earth 69892-07-31 15:36 G 27248801.01 27248801.15 27248801.28 0.2699 0.1420

Moon 69892-07-31 20:24 G 27248801.23 27248801.35 27248801.47 0.2696 0.1859 *

Saturn 69892-12-17 00:29 G 27248939.31 27248939.52 27248939.73 0.0283 0.0028

Saturn 69893-08-03 14:24 G 27249168.94 27249169.10 27249169.26 0.0283 0.0183

Jupiter 69895-05-04 08:24 G 27249807.70 27249807.85 27249808.01 0.0485 0.0319

Jupiter 69895-12-25 23:46 G 27250043.29 27250043.49 27250043.70 0.0483 0.0096

Earth 69900-07-30 04:48 G 27251720.61 27251720.70 27251720.79 0.2700 0.2199

Moon 69900-07-30 05:31 G 27251720.66 27251720.73 27251720.80 0.2694 0.2447 *

Jupiter 69901-10-26 22:48 G 27252174.25 27252174.45 27252174.65 0.0545 0.0003

Jupiter 69907-01-08 12:29 G 27254073.93 27254074.02 27254074.11 0.0486 0.0434

Saturn 69907-05-30 20:39 G 27254216.18 27254216.36 27254216.55 0.0276 0.0131

Jupiter 69907-09-01 05:17 G 27254309.51 27254309.72 27254309.92 0.0484 0.0023

Saturn 69908-01-15 06:00 G 27254445.55 27254445.75 27254445.96 0.0276 0.0065

Jupiter 69908-04-23 18:58 G 27254545.18 27254545.29 27254545.42 0.0484 0.0388

Saturn 69908-08-31 15:36 G 27254675.09 27254675.15 27254675.22 0.0276 0.0261

Jupiter 69913-07-01 08:39 G 27256439.67 27256439.86 27256440.06 0.0544 0.0169

Jupiter 69914-02-24 23:31 G 27256678.36 27256678.48 27256678.61 0.0545 0.0434

Jupiter 69919-05-07 11:31 G 27258575.78 27258575.98 27258576.17 0.0484 0.0135

Jupiter 69919-12-29 01:55 G 27258811.42 27258811.58 27258811.75 0.0483 0.0277

Saturn 69921-11-12 15:51 G 27259496.02 27259496.16 27259496.31 0.0283 0.0207

Uranus 69922-02-02 17:17 G 27259578.11 27259578.22 27259578.36 0.0135 0.0111

Saturn 69922-06-30 06:29 G 27259725.56 27259725.77 27259725.98 0.0283 0.0006

Uranus 69922-09-16 23:17 G 27259804.30 27259804.47 27259804.66 0.0135 0.0078

Saturn 69923-02-14 20:53 G 27259955.24 27259955.37 27259955.50 0.0283 0.0216

Uranus 69923-05-01 05:46 G 27260030.53 27260030.74 27260030.94 0.0135 0.0044

Uranus 69923-12-13 11:46 G 27260256.78 27260256.99 27260257.21 0.0135 0.0011

Uranus 69924-07-26 18:00 G 27260483.04 27260483.25 27260483.47 0.0135 0.0023

Jupiter 69925-03-05 15:22 G 27260704.98 27260705.14 27260705.30 0.0543 0.0339

Uranus 69925-03-10 00:15 G 27260709.32 27260709.51 27260709.71 0.0135 0.0057

Uranus 69925-10-22 06:29 G 27260935.63 27260935.77 27260935.95 0.0136 0.0091

Jupiter 69925-10-30 05:17 G 27260943.54 27260943.72 27260943.90 0.0545 0.0262

Uranus 69926-06-05 13:41 G 27261161.98 27261162.07 27261162.15 0.0136 0.0124

Pluto 69928-04-06 19:27 G 27261833.17 27261833.31 27261833.48 0.0064 0.0045

Pluto 69928-11-17 23:46 G 27262058.28 27262058.49 27262058.72 0.0064 0.0011

Pluto 69929-07-01 03:51 G 27262283.48 27262283.66 27262283.88 0.0065 0.0026

Pluto 69930-02-11 08:24 G 27262508.79 27262508.85 27262508.93 0.0065 0.0061

Jupiter 69931-01-10 17:46 G 27262842.07 27262842.24 27262842.42 0.0485 0.0247

Jupiter 69931-09-03 08:53 G 27263077.68 27263077.87 27263078.06 0.0483 0.0166

Jupiter 69936-11-08 02:10 G 27264970.52 27264970.59 27264970.68 0.0542 0.0497

Saturn 69936-12-10 04:48 G 27265002.50 27265002.70 27265002.90 0.0275 0.0095

Jupiter 69937-07-04 14:53 G 27265208.93 27265209.12 27265209.33 0.0545 0.0096

Saturn 69937-07-27 14:10 G 27265231.89 27265232.09 27265232.29 0.0275 0.0101

Neptune 69941-02-12 16:34 G 27266528.17 27266528.19 27266528.27 0.0090 0.0088

Neptune 69941-09-26 06:00 G 27266753.68 27266753.75 27266753.85 0.0090 0.0082

Neptune 69942-05-09 19:27 G 27266979.21 27266979.31 27266979.43 0.0090 0.0076

Jupiter 69942-09-15 22:48 G 27267108.32 27267108.45 27267108.59 0.0486 0.0361

Neptune 69942-12-21 08:10 G 27267204.73 27267204.84 27267205.00 0.0090 0.0071

Jupiter 69943-05-09 14:39 G 27267343.91 27267344.11 27267344.32 0.0483 0.0052

Neptune 69943-08-03 21:36 G 27267430.26 27267430.40 27267430.56 0.0090 0.0065

Jupiter 69943-12-31 04:05 G 27267579.61 27267579.67 27267579.74 0.0484 0.0455

Neptune 69944-03-16 10:48 G 27267655.80 27267655.95 27267656.13 0.0090 0.0059

Neptune 69944-10-28 00:15 G 27267881.34 27267881.51 27267881.69 0.0090 0.0053

Neptune 69945-06-10 13:27 G 27268106.88 27268107.06 27268107.25 0.0090 0.0047

Neptune 69946-01-22 02:24 G 27268332.42 27268332.60 27268332.81 0.0090 0.0042

Neptune 69946-09-04 15:36 G 27268557.96 27268558.15 27268558.37 0.0090 0.0036

Neptune 69947-04-18 05:03 G 27268783.52 27268783.71 27268783.93 0.0090 0.0030

Neptune 69947-11-29 18:29 G 27269009.07 27269009.27 27269009.49 0.0090 0.0024

Neptune 69948-07-12 07:41 G 27269234.61 27269234.82 27269235.04 0.0090 0.0018

Neptune 69949-02-22 20:53 G 27269460.16 27269460.37 27269460.60 0.0090 0.0012

Jupiter 69949-03-09 02:10 G 27269474.39 27269474.59 27269474.79 0.0545 0.0071

Neptune 69949-10-06 10:19 G 27269685.71 27269685.93 27269686.15 0.0090 0.0006

Jupiter 69949-11-02 18:15 G 27269713.21 27269713.26 27269713.30 0.0545 0.0529

Neptune 69950-05-19 23:46 G 27269911.27 27269911.49 27269911.71 0.0090 0.0001

Neptune 69950-12-31 12:58 G 27270136.82 27270137.04 27270137.26 0.0090 0.0007

Saturn 69951-05-25 17:31 G 27270282.08 27270282.23 27270282.40 0.0283 0.0186

Neptune 69951-08-14 02:10 G 27270362.38 27270362.59 27270362.81 0.0090 0.0013

Saturn 69952-01-10 08:10 G 27270511.63 27270511.84 27270512.06 0.0283 0.0028

Neptune 69952-03-26 15:22 G 27270587.93 27270588.14 27270588.36 0.0090 0.0019

Saturn 69952-08-26 22:05 G 27270741.32 27270741.42 27270741.54 0.0283 0.0238

Neptune 69952-11-07 04:34 G 27270813.49 27270813.69 27270813.91 0.0090 0.0025

Neptune 69953-06-20 17:46 G 27271039.05 27271039.24 27271039.46 0.0090 0.0031

Mars 69953-08-03 12:58 G 27271082.87 27271083.04 27271083.21 0.1642 0.0512

Neptune 69954-02-01 06:58 G 27271264.60 27271264.79 27271265.00 0.0090 0.0037

Jupiter 69954-05-22 04:05 G 27271374.62 27271374.67 27271374.72 0.0487 0.0472

Neptune 69954-09-14 20:10 G 27271490.16 27271490.34 27271490.55 0.0090 0.0043

Jupiter 69955-01-12 21:07 G 27271610.17 27271610.38 27271610.58 0.0484 0.0061

Neptune 69955-04-28 09:22 G 27271715.73 27271715.89 27271716.09 0.0090 0.0049

Jupiter 69955-09-05 10:34 G 27271845.81 27271845.94 27271846.09 0.0483 0.0348

Neptune 69955-12-09 23:03 G 27271941.29 27271941.46 27271941.64 0.0090 0.0054

Mars 69956-05-13 08:24 G 27272096.74 27272096.85 27272096.97 0.1877 0.1413

Neptune 69956-07-22 12:00 G 27272166.85 27272167.00 27272167.18 0.0090 0.0060

Neptune 69957-03-05 01:12 G 27272392.42 27272392.55 27272392.71 0.0090 0.0066

Neptune 69957-10-16 14:24 G 27272617.99 27272618.10 27272618.25 0.0090 0.0072

Neptune 69958-05-30 04:19 G 27272843.57 27272843.68 27272843.79 0.0090 0.0077

Neptune 69959-01-10 17:17 G 27273069.15 27273069.22 27273069.31 0.0089 0.0083

Neptune 69959-08-24 06:15 G 27273294.75 27273294.76 27273294.82 0.0089 0.0089

Jupiter 69960-11-11 13:55 G 27273739.90 27273740.08 27273740.27 0.0544 0.0235

Jupiter 69961-07-08 05:03 G 27273978.56 27273978.71 27273978.86 0.0545 0.0369

Uranus 69963-01-01 19:12 G 27274521.21 27274521.30 27274521.40 0.0143 0.0129

Uranus 69963-08-16 06:29 G 27274747.61 27274747.77 27274747.95 0.0143 0.0089

Uranus 69964-03-29 18:00 G 27274974.05 27274974.25 27274974.46 0.0143 0.0048

Uranus 69964-11-11 05:31 G 27275200.51 27275200.73 27275200.95 0.0143 0.0008

Uranus 69965-06-25 16:34 G 27275426.99 27275427.19 27275427.41 0.0143 0.0033

Saturn 69965-11-04 19:27 G 27275559.28 27275559.31 27275559.36 0.0276 0.0270

Uranus 69966-02-07 03:51 G 27275653.47 27275653.66 27275653.84 0.0143 0.0072

Saturn 69966-06-22 04:48 G 27275788.49 27275788.70 27275788.90 0.0276 0.0076

Jupiter 69966-09-18 01:55 G 27275876.39 27275876.58 27275876.78 0.0484 0.0177

Uranus 69966-09-21 14:24 G 27275879.98 27275880.10 27275880.24 0.0142 0.0112

Saturn 69967-02-06 13:55 G 27276017.89 27276018.08 27276018.27 0.0276 0.0120

Jupiter 69967-05-11 16:34 G 27276112.01 27276112.19 27276112.37 0.0483 0.0234

Jupiter 69972-07-17 00:43 G 27278005.40 27278005.53 27278005.67 0.0543 0.0396

Jupiter 69973-03-12 14:10 G 27278243.91 27278244.09 27278244.28 0.0545 0.0203

Jupiter 69978-05-24 07:55 G 27280142.67 27280142.83 27280143.00 0.0485 0.0290

Jupiter	**69979-01-14 23:31**	**G**	**27280378.28**	**27280378.48**	**27280378.68**	**0.0483**	**0.0123**	
Saturn	**69980-12-04 22:19**	**G**	**27281068.25**	**27281068.43**	**27281068.61**	**0.0283**	**0.0155**	
Saturn	**69981-07-22 12:58**	**G**	**27281297.83**	**27281298.04**	**27281298.25**	**0.0283**	**0.0058**	
Saturn	**69982-03-09 03:07**	**G**	**27281527.57**	**27281527.63**	**27281527.70**	**0.0283**	**0.0269**	
Jupiter	**69984-11-14 20:10**	**G**	**27282509.14**	**27282509.34**	**27282509.54**	**0.0545**	**0.0029**	
Jupiter	**69990-01-27 13:27**	**G**	**27284408.95**	**27284409.06**	**27284409.18**	**0.0486**	**0.0402**	
Jupiter	**69990-09-20 06:15**	**G**	**27284644.55**	**27284644.76**	**27284644.96**	**0.0484**	**0.0011**	
Jupiter	**69991-05-13 19:55**	**G**	**27284880.23**	**27284880.33**	**27284880.44**	**0.0484**	**0.0415**	
Saturn	**69995-05-18 03:51**	**G**	**27286345.56**	**27286345.66**	**27286345.77**	**0.0275**	**0.0235**	
Saturn	**69996-01-02 12:58**	**G**	**27286574.83**	**27286575.04**	**27286575.25**	**0.0275**	**0.0041**	
Jupiter	**69996-07-20 06:00**	**G**	**27286774.56**	**27286774.75**	**27286774.95**	**0.0544**	**0.0139**	
Saturn	**69996-08-18 22:05**	**G**	**27286804.25**	**27286804.42**	**27286804.60**	**0.0275**	**0.0154**	
Jupiter	**69997-03-15 21:22**	**G**	**27287013.28**	**27287013.39**	**27287013.49**	**0.0545**	**0.0461**	

71ST MILLENNIUM CE

This is a list of transits of Venus in the 71st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**70002-05-26 12:00**	**G**	**27288910.80**	**27288911.00**	**27288911.20**	**0.0484**	**0.0103**	
Jupiter	**70003-01-17 01:55**	**G**	**27289146.43**	**27289146.58**	**27289146.74**	**0.0483**	**0.0305**	
Uranus	**70005-10-03 03:07**	**G**	**27290136.56**	**27290136.63**	**27290136.71**	**0.0135**	**0.0125**	
Uranus	**70006-05-17 08:53**	**G**	**27290362.73**	**27290362.87**	**27290363.04**	**0.0135**	**0.0093**	
Uranus	**70006-12-29 15:07**	**G**	**27290588.94**	**27290589.13**	**27290589.33**	**0.0135**	**0.0059**	
Uranus	**70007-08-12 21:07**	**G**	**27290815.17**	**27290815.38**	**27290815.60**	**0.0135**	**0.0026**	

Jupiter 70008-03-24 17:31 G 27291040.06 27291040.23 27291040.40 0.0544 0.0301

Uranus 70008-03-26 03:22 G 27291041.43 27291041.64 27291041.86 0.0135 0.0008

Uranus 70008-11-07 09:36 G 27291267.70 27291267.90 27291268.11 0.0135 0.0042

Jupiter 70008-11-18 08:10 G 27291278.67 27291278.84 27291279.01 0.0545 0.0300

Uranus 70009-06-21 15:51 G 27291493.99 27291494.16 27291494.35 0.0135 0.0076

Uranus 70010-02-02 22:05 G 27291720.32 27291720.42 27291720.57 0.0136 0.0110

Saturn 70010-06-17 00:58 G 27291854.36 27291854.54 27291854.73 0.0283 0.0131

Saturn 70011-02-01 15:36 G 27292083.94 27292084.15 27292084.35 0.0283 0.0082

Jupiter 70014-01-29 17:46 G 27293177.06 27293177.24 27293177.43 0.0485 0.0217

Moon 70014-01-31 23:03 G 27293179.30 27293179.46 27293179.62 0.2626 0.0763

Earth 70014-02-01 00:58 G 27293179.38 27293179.54 27293179.69 0.2632 0.0284 *

Jupiter 70014-09-22 08:24 G 27293412.67 27293412.85 27293413.04 0.0483 0.0195

Pluto 70017-03-01 04:34 G 27294303.56 27294303.69 27294303.85 0.0080 0.0060

Pluto 70017-10-12 15:22 G 27294528.92 27294529.14 27294529.36 0.0080 0.0007

Pluto 70018-05-26 01:27 G 27294754.49 27294754.56 27294754.64 0.0079 0.0074

Mars 70019-06-01 00:15 G 27295125.35 27295125.51 27295125.66 0.1640 0.0774

Jupiter 70019-11-28 06:29 G 27295305.66 27295305.77 27295305.87 0.0542 0.0457

Jupiter 70020-07-23 19:27 G 27295544.11 27295544.31 27295544.51 0.0545 0.0136

Mars 70022-03-10 11:46 G 27296138.83 27296138.99 27296139.15 0.1880 0.0670

Neptune 70023-04-01 17:46 G 27296526.22 27296526.24 27296526.31 0.0088 0.0086

Neptune 70023-11-13 06:58 G 27296751.71 27296751.79 27296751.89 0.0088 0.0080

Neptune 70024-06-25 19:41 G 27296977.22 27296977.32 27296977.45 0.0088 0.0075

Saturn 70024-11-27 03:07 G 27297131.51 27297131.63 27297131.77 0.0275 0.0217

Neptune 70025-02-06 08:53 G 27297202.74 27297202.87 27297203.01 0.0088 0.0069

Saturn 70025-07-14 12:29 G 27297360.80 27297361.02 27297361.23 0.0275 0.0023

Neptune 70025-09-19 21:36 G 27297428.26 27297428.40 27297428.57 0.0088 0.0064

Jupiter 70025-10-04 22:19 G 27297443.29 27297443.43 27297443.59 0.0486 0.0331

Saturn 70026-02-28 21:22 G 27297590.23 27297590.39 27297590.56 0.0276 0.0173

Neptune 70026-05-03 10:34 G 27297653.79 27297653.94 27297654.12 0.0088 0.0058

Jupiter 70026-05-28 14:24 G 27297678.89 27297679.10 27297679.30 0.0483 0.0081

Neptune 70026-12-14 23:17 G 27297879.31 27297879.47 27297879.66 0.0088 0.0053

Jupiter 70027-01-19 03:51 G 27297914.65 27297914.66 27297914.69 0.0484 0.0481

Neptune 70027-07-28 12:15 G 27298104.83 27298105.01 27298105.21 0.0088 0.0047

Neptune 70028-03-10 00:58 G 27298330.36 27298330.54 27298330.75 0.0088 0.0042

Neptune 70028-10-21 13:55 G 27298555.89 27298556.08 27298556.30 0.0088 0.0036

Neptune 70029-06-04 02:53 G 27298781.42 27298781.62 27298781.83 0.0088 0.0030

Neptune 70030-01-15 15:36 G 27299006.94 27299007.15 27299007.37 0.0088 0.0025

Neptune 70030-08-29 04:19 G 27299232.47 27299232.68 27299232.90 0.0088 0.0019

Neptune 70031-04-11 17:17 G 27299458.00 27299458.22 27299458.44 0.0088 0.0013

Neptune 70031-11-23 06:00 G 27299683.54 27299683.75 27299683.98 0.0088 0.0008

Jupiter 70032-03-28 05:17 G 27299809.52 27299809.72 27299809.93 0.0545 0.0032

Neptune 70032-07-05 18:58 G 27299909.07 27299909.29 27299909.51 0.0088 0.0002

Neptune 70033-02-16 07:41 G 27300134.60 27300134.82 27300135.04 0.0088 0.0004

Neptune 70033-09-29 20:24 G 27300360.13 27300360.35 27300360.57 0.0088 0.0010

Neptune 70034-05-13 09:07 G 27300585.67 27300585.88 27300586.10 0.0088 0.0015

Neptune 70034-12-24 21:51 G 27300811.20 27300811.41 27300811.63 0.0088 0.0021

Neptune 70035-08-07 10:34 G 27301036.74 27301036.94 27301037.16 0.0088 0.0027

Neptune 70036-03-19 23:17 G 27301262.28 27301262.47 27301262.69 0.0088 0.0033

Neptune 70036-10-31 12:29 G 27301487.82 27301488.02 27301488.22 0.0088 0.0038

Jupiter 70037-06-10 03:36 G 27301709.57 27301709.65 27301709.74 0.0487 0.0443

Neptune 70037-06-14 00:58 G 27301713.36 27301713.54 27301713.75 0.0088 0.0044

Neptune 70038-01-25 13:55 G 27301938.90 27301939.08 27301939.27 0.0088 0.0049

Jupiter 70038-01-31 20:53 G 27301945.17 27301945.37 27301945.58 0.0484 0.0032

Neptune 70038-09-08 02:24 G 27302164.45 27302164.60 27302164.79 0.0088 0.0055

Jupiter 70038-09-24 10:48 G 27302180.83 27302180.95 27302181.08 0.0484 0.0373

Neptune 70039-04-21 15:36 G 27302389.99 27302390.15 27302390.31 0.0088 0.0060

Neptune 70039-12-03 04:05 G 27302615.55 27302615.67 27302615.83 0.0088 0.0066

Saturn 70039-12-28 04:19 G 27302640.49 27302640.68 27302640.88 0.0283 0.0103

Neptune 70040-07-15 17:17 G 27302841.09 27302841.22 27302841.35 0.0088 0.0071

Saturn 70040-08-13 18:58 G 27302870.10 27302870.29 27302870.49 0.0283 0.0109

Neptune 70041-02-26 05:31 G 27303066.65 27303066.73 27303066.86 0.0088 0.0077

Neptune 70041-10-09 18:29 G 27303292.21 27303292.27 27303292.36 0.0088 0.0082

Neptune 70042-05-23 07:12 G 27303517.80 27303517.80 27303517.83 0.0088 0.0088

Jupiter 70043-12-01 12:00 G 27304074.82 27304075.00 27304075.19 0.0544 0.0202

Jupiter 70044-07-27 02:39 G 27304313.47 27304313.61 27304313.75 0.0545 0.0396

Uranus 70047-04-15 12:58 G 27305305.91 27305306.04 27305306.20 0.0143 0.0107

Uranus 70047-11-28 00:58 G 27305532.35 27305532.54 27305532.73 0.0143 0.0066

Uranus 70048-07-11 12:15 G 27305758.80 27305759.01 27305759.23 0.0143 0.0026

Uranus 70049-02-22 23:31 G 27305985.27 27305985.48 27305985.70 0.0143 0.0014

Jupiter 70049-10-07 03:07 G 27306211.44 27306211.63 27306211.83 0.0485 0.0144

Uranus 70049-10-07 10:48 G 27306211.75 27306211.95 27306212.15 0.0143 0.0054 *

Uranus 70050-05-21 21:36 G 27306438.25 27306438.40 27306438.57 0.0143 0.0094

Jupiter 70050-05-30 17:46 G 27306447.07 27306447.24 27306447.42 0.0483 0.0265

Uranus 70051-01-03 08:10 G 27306664.79 27306664.84 27306664.94 0.0142 0.0134

Mars 70051-05-30 19:55 G 27306812.26 27306812.33 27306812.40 0.1646 0.1485

Saturn 70054-06-09 11:46 G 27307917.84 27307917.99 27307918.15 0.0275 0.0182

Saturn 70055-01-24 20:53 G 27308147.16 27308147.37 27308147.58 0.0275 0.0013

Jupiter 70055-08-05 22:19 G 27308340.28 27308340.43 27308340.58 0.0543 0.0364

Saturn 70055-09-11 06:00 G 27308376.61 27308376.75 27308376.89 0.0275 0.0207

Jupiter 70056-03-31 11:46 G 27308578.81 27308578.99 27308579.17 0.0545 0.0232

Jupiter 70061-06-12 08:24 G 27310477.69 27310477.85 27310478.03 0.0485 0.0258

Jupiter 70062-02-02 23:46 G 27310713.30 27310713.49 27310713.68 0.0483 0.0153

Jupiter 70067-04-10 10:19 G 27312605.88 27312605.93 27312605.99 0.0542 0.0518

Jupiter 70067-12-04 22:34 G 27312844.24 27312844.44 27312844.64 0.0545 0.0068

Saturn 70069-07-09 07:55 G 27313426.63 27313426.83 27313427.03 0.0283 0.0077

Saturn 70070-02-23 22:19 G 27313656.24 27313656.43 27313656.61 0.0283 0.0135

Jupiter 70073-02-15 13:55 G 27314743.95 27314744.08 27314744.21 0.0486 0.0370

Jupiter 70073-10-09 06:15 G 27314979.55 27314979.76 27314979.96 0.0483 0.0041

Jupiter 70074-06-01 19:41 G 27315215.24 27315215.32 27315215.40 0.0484 0.0441

Jupiter 70079-08-09 10:19 G 27317109.73 27317109.93 27317110.13 0.0545 0.0097

Jupiter 70080-04-04 01:41 G 27317348.50 27317348.57 27317348.66 0.0545 0.0499

Saturn 70083-12-20 11:17 G 27318703.80 27318703.97 27318704.14 0.0275 0.0164

Saturn 70084-08-05 20:10 G 27318933.13 27318933.34 27318933.56 0.0275 0.0032

Jupiter 70084-10-21 18:00 G 27319010.23 27319010.25 27319010.27 0.0487 0.0482

Saturn 70085-03-23 05:17 G 27319162.60 27319162.72 27319162.85 0.0275 0.0226

Mars 70085-03-28 12:15 G 27319167.88 27319168.01 27319168.15 0.1638 0.1002

Jupiter 70085-06-14 11:31 G 27319245.78 27319245.98 27319246.19 0.0484 0.0075

Jupiter 70086-02-05 01:41 G 27319481.42 27319481.57 27319481.72 0.0483 0.0332

Mars 70088-01-05 15:51 G 27320180.99 27320181.16 27320181.34 0.1883 0.0049

Uranus 70090-01-14 18:00 G 27320921.14 27320921.25 27320921.40 0.0135 0.0108

Uranus 70090-08-29 00:00 G 27321147.33 27321147.50 27321147.70 0.0135 0.0075

Uranus 70091-04-12 06:15 G 27321373.56 27321373.76 27321373.98 0.0135 0.0041

Jupiter 70091-04-13 21:07 G 27321375.21 27321375.38 27321375.56 0.0544 0.0260

Uranus 70091-11-24 12:29 G 27321599.81 27321600.02 27321600.24 0.0135 0.0008

Jupiter 70091-12-08 11:31 G 27321613.82 27321613.98 27321614.14 0.0545 0.0338

Uranus 70092-07-07 18:43 G 27321826.07 27321826.28 27321826.50 0.0135 0.0026

Uranus 70093-02-19 00:58 G 27322052.35 27322052.54 27322052.74 0.0135 0.0060

Uranus 70093-10-03 07:12 G 27322278.65 27322278.80 27322278.96 0.0136 0.0094

Uranus 70094-05-17 13:27 G 27322505.01 27322505.06 27322505.15 0.0136 0.0128

Jupiter 70097-02-17 17:46 G 27323512.05 27323512.24 27323512.43 0.0485 0.0187

Jupiter 70097-10-11 08:39 G 27323747.68 27323747.86 27323748.04 0.0483 0.0222

Saturn 70098-06-03 19:41 G 27323983.24 27323983.32 27323983.40 0.0283 0.0263

Saturn 70099-01-19 10:34 G 27324212.73 27324212.94 27324213.15 0.0283 0.0051

Saturn 70099-09-06 00:58 G 27324442.37 27324442.54 27324442.72 0.0283 0.0161

Jupiter 70102-12-18 05:03 G 27325640.59 27325640.71 27325640.84 0.0542 0.0422

Jupiter 70103-08-13 17:31 G 27325879.04 27325879.23 27325879.42 0.0545 0.0167

Neptune 70105-05-18 03:07 G 27326522.61 27326522.63 27326522.70 0.0090 0.0088

Neptune 70105-12-29 16:34 G 27326748.12 27326748.19 27326748.29 0.0090 0.0082

Neptune 70106-08-12 05:31 G 27326973.64 27326973.73 27326973.86 0.0090 0.0077

Neptune 70107-03-25 18:43 G 27327199.17 27327199.28 27327199.44 0.0090 0.0071

Neptune 70107-11-06 08:10 G 27327424.70 27327424.84 27327425.00 0.0090 0.0065

Neptune 70108-06-18 21:22 G 27327650.24 27327650.39 27327650.57 0.0090 0.0059

Jupiter 70108-10-24 23:17 G 27327778.31 27327778.47 27327778.63 0.0486 0.0299

Neptune 70109-01-30 10:34 G 27327875.77 27327875.94 27327876.13 0.0090 0.0053

Jupiter 70109-06-17 15:22 G 27328013.94 27328014.14 27328014.34 0.0484 0.0112

Neptune 70109-09-13 00:00 G 27328101.31 27328101.50 27328101.68 0.0090 0.0047

Neptune 70110-04-26 13:12 G 27328326.86 27328327.05 27328327.25 0.0090 0.0041

Neptune 70110-12-08 02:10 G 27328552.40 27328552.59 27328552.81 0.0090 0.0036

Neptune 70111-07-21 15:22 G 27328777.95 27328778.14 27328778.36 0.0090 0.0030

Neptune 70112-03-03 04:34 G 27329003.49 27329003.69 27329003.92 0.0090 0.0024

Neptune 70112-10-14 18:00 G 27329229.04 27329229.25 27329229.47 0.0090 0.0017

Neptune 70113-05-28 07:27 G 27329454.60 27329454.81 27329455.03 0.0090 0.0011

Saturn 70113-07-02 19:41 G 27329490.14 27329490.32 27329490.51 0.0275 0.0129

Neptune 70114-01-08 20:39 G 27329680.15 27329680.36 27329680.59 0.0090 0.0006

Saturn 70114-02-17 04:48 G 27329719.49 27329719.70 27329719.91 0.0275 0.0066

Neptune 70114-08-22 10:05 G 27329905.70 27329905.92 27329906.14 0.0090 0.0001

Saturn 70114-10-04 13:41 G 27329949.02 27329949.07 27329949.15 0.0275 0.0260

Neptune 70115-04-04 23:17 G 27330131.26 27330131.47 27330131.69 0.0090 0.0007

Jupiter 70115-04-18 02:53 G 27330144.41 27330144.62 27330144.82 0.0545 0.0011

Neptune 70115-11-16 12:43 G 27330356.81 27330357.03 27330357.25 0.0090 0.0013

Neptune 70116-06-29 01:41 G 27330582.37 27330582.57 27330582.80 0.0090 0.0020

Neptune 70117-02-09 14:53 G 27330807.93 27330808.12 27330808.35 0.0090 0.0026

Mars 70117-03-28 07:41 G 27330854.71 27330854.82 27330854.93 0.1644 0.1232

Neptune 70117-09-23 04:34 G 27331033.48 27331033.69 27331033.89 0.0090 0.0031

Neptune 70118-05-06 17:31 G 27331259.05 27331259.23 27331259.45 0.0090 0.0038

Neptune 70118-12-18 07:12 G 27331484.61 27331484.80 27331484.99 0.0090 0.0043

Neptune 70119-07-31 20:24 G 27331710.17 27331710.35 27331710.53 0.0090 0.0049

Neptune 70120-03-13 09:22 G 27331935.73 27331935.89 27331936.07 0.0090 0.0055

Jupiter 70120-06-30 03:51 G 27332044.56 27332044.66 27332044.78 0.0487 0.0412

Neptune 70120-10-24 22:34 G 27332161.29 27332161.44 27332161.61 0.0090 0.0061

Jupiter 70121-02-20 21:07 G 27332280.17 27332280.38 27332280.58 0.0484 0.0006

Neptune 70121-06-07 11:46 G 27332386.86 27332386.99 27332387.15 0.0090 0.0067

Jupiter 70121-10-14 10:48 G 27332515.84 27332515.95 27332516.06 0.0483 0.0400

Neptune 70122-01-19 00:58 G 27332612.43 27332612.54 27332612.69 0.0090 0.0073

Neptune 70122-09-01 13:55 G 27332838.00 27332838.08 27332838.21 0.0090 0.0079

Neptune 70123-04-15 03:36 G 27333063.59 27333063.65 27333063.74 0.0090 0.0084

Neptune 70123-11-26 17:03 G 27333289.21 27333289.21 27333289.22 0.0090 0.0089

Jupiter 70126-12-21 13:41 G 27334409.88 27334410.07 27334410.26 0.0544 0.0165

Jupiter 70127-08-17 04:48 G 27334648.58 27334648.70 27334648.83 0.0545 0.0432

Saturn 70127-12-16 00:43 G 27334769.42 27334769.53 27334769.65 0.0283 0.0235

Saturn 70128-08-01 15:22 G 27334998.93 27334999.14 27334999.35 0.0283 0.0023

Saturn 70129-03-19 05:17 G 27335228.57 27335228.72 27335228.89 0.0283 0.0189

Uranus 70130-12-14 19:55 G 27335864.23 27335864.33 27335864.44 0.0143 0.0125

Uranus 70131-07-29 07:27 G 27336090.65 27336090.81 27336091.00 0.0143 0.0085

Uranus 70132-03-11 19:12 G 27336317.09 27336317.30 27336317.51 0.0143 0.0045

Uranus 70132-10-24 06:43 G 27336543.56 27336543.78 27336544.00 0.0143 0.0004

Jupiter 70132-10-27 03:07 G 27336546.43 27336546.63 27336546.83 0.0484 0.0114

Uranus 70133-06-07 18:00 G 27336770.04 27336770.25 27336770.46 0.0143 0.0036

Jupiter 70133-06-19 17:17 G 27336782.07 27336782.22 27336782.39 0.0483 0.0292

Uranus 70134-01-20 05:03 G 27336996.53 27336996.71 27336996.89 0.0143 0.0076

Uranus 70134-09-03 15:36 G 27337223.04 27337223.15 27337223.29 0.0143 0.0116

Moon 70135-08-03 09:22 G 27337556.75 27337556.89 27337557.04 0.2701 0.1093

Earth 70135-08-03 15:07 G 27337556.99 27337557.13 27337557.27 0.2700 0.1383 *

Jupiter 70138-08-26 01:55 G 27338675.42 27338675.58 27338675.74 0.0543 0.0324

Jupiter 70139-04-21 15:51 G 27338913.99 27338914.16 27338914.34 0.0545 0.0272

Saturn 70143-01-12 19:41 G 27340276.12 27340276.32 27340276.51 0.0275 0.0109

Moon 70143-08-01 01:27 G 27340476.49 27340476.56 27340476.63 0.2706 0.2370

Earth 70143-08-01 04:34 G 27340476.60 27340476.69 27340476.77 0.2701 0.2235 *

Saturn 70143-08-30 04:34 G 27340505.49 27340505.69 27340505.89 0.0275 0.0085

Jupiter 70144-07-02 08:10 G 27340812.66 27340812.84 27340813.02 0.0485 0.0228

Jupiter 70145-02-22 23:17 G 27341048.28 27341048.47 27341048.66 0.0483 0.0180

Jupiter 70150-04-30 13:55 G 27342940.99 27342941.08 27342941.18 0.0542 0.0478

Jupiter 70150-12-25 02:10 G 27343179.39 27343179.59 27343179.79 0.0545 0.0107

Mars 70151-01-25 00:00 G 27343210.39 27343210.50 27343210.61 0.1637 0.1244

Mars 70153-11-02 18:58 G 27344223.14 27344223.29 27344223.45 0.1885 0.0799

Jupiter 70156-03-07 13:27 G 27345078.92 27345079.06 27345079.21 0.0486 0.0341

Jupiter 70156-10-29 06:00 G 27345314.55 27345314.75 27345314.95 0.0484 0.0069

Jupiter 70157-06-21 19:41 G 27345550.28 27345550.32 27345550.38 0.0484 0.0467

Saturn 70157-06-27 02:24 G 27345555.47 27345555.60 27345555.75 0.0283 0.0210

Saturn 70158-02-11 17:17 G 27345785.01 27345785.22 27345785.43 0.0283 0.0003

Saturn 70158-09-29 07:27 G 27346014.68 27346014.81 27346014.96 0.0283 0.0213

Jupiter 70162-08-29 08:53 G 27347444.67 27347444.87 27347445.07 0.0544 0.0064

Jupiter 70163-04-24 23:46 G 27347683.44 27347683.49 27347683.54 0.0544 0.0525

Jupiter 70167-11-11 18:00 G 27349345.18 27349345.25 27349345.33 0.0488 0.0452

Jupiter 70168-07-04 12:15 G 27349580.80 27349581.01 27349581.21 0.0484 0.0043

Jupiter 70169-02-25 02:24 G 27349816.47 27349816.60 27349816.74 0.0484 0.0361

Saturn 70171-12-08 19:12 G 27350833.25 27350833.30 27350833.34 0.0276 0.0269

Saturn 70172-07-25 04:05 G 27351062.47 27351062.67 27351062.88 0.0275 0.0075

Saturn 70173-03-11 13:12 G 27351291.86 27351292.05 27351292.24 0.0275 0.0120

Uranus 70173-09-15 04:19 G 27351479.60 27351479.68 27351479.78 0.0135 0.0122

Uranus 70174-04-29 10:19 G 27351705.78 27351705.93 27351706.10 0.0135 0.0089

Jupiter 70174-05-03 18:43 G 27351710.09 27351710.28 27351710.46 0.0543 0.0228

Uranus 70174-12-11 16:19 G 27351931.99 27351932.18 27351932.39 0.0135 0.0056

Pluto 70174-12-17 15:51 G 27351938.13 27351938.16 27351938.26 0.0064 0.0062

Jupiter 70174-12-28 08:24 G 27351948.71 27351948.85 27351949.01 0.0545 0.0366

Uranus 70175-07-25 22:34 G 27352158.23 27352158.44 27352158.65 0.0135 0.0022

Pluto 70175-07-30 20:24 G 27352163.17 27352163.35 27352163.57 0.0064 0.0026

Uranus 70176-03-08 04:34 G 27352384.48 27352384.69 27352384.91 0.0135 0.0011

Pluto 70176-03-12 00:43 G 27352388.32 27352388.53 27352388.76 0.0065 0.0010

Uranus 70176-10-20 10:34 G 27352610.75 27352610.94 27352611.16 0.0135 0.0045

Pluto 70176-10-23 05:17 G 27352613.57 27352613.72 27352613.88 0.0065 0.0045

Uranus 70177-06-03 17:03 G 27352837.04 27352837.21 27352837.39 0.0135 0.0079

Uranus 70178-01-15 23:17 G 27353063.36 27353063.47 27353063.60 0.0136 0.0113

Jupiter 70180-03-09 17:31 G 27353847.03 27353847.23 27353847.42 0.0485 0.0157

Jupiter 70180-10-31 08:10 G 27354082.67 27354082.84 27354083.02 0.0483 0.0250

Mars 70183-01-23 19:27 G 27354897.17 27354897.31 27354897.45 0.1642 0.0978

Jupiter 70186-01-06 05:31 G 27355975.59 27355975.73 27355975.87 0.0542 0.0388

Jupiter 70186-09-01 18:43 G 27356214.09 27356214.28 27356214.47 0.0545 0.0202

Saturn 70187-01-07 08:39 G 27356341.71 27356341.86 27356342.03 0.0283 0.0180

Neptune 70187-07-05 04:05 G 27356520.65 27356520.67 27356520.74 0.0088 0.0086

Saturn 70187-08-24 23:17 G 27356571.26 27356571.47 27356571.68 0.0283 0.0032

Neptune 70188-02-15 17:31 G 27356746.14 27356746.23 27356746.32 0.0088 0.0080

Saturn 70188-04-10 13:27 G 27356800.96 27356801.06 27356801.17 0.0283 0.0243

Neptune 70188-09-28 06:00 G 27356971.66 27356971.75 27356971.89 0.0088 0.0075

Neptune 70189-05-11 19:27 G 27357197.17 27357197.31 27357197.44 0.0088 0.0069

Neptune 70189-12-23 07:55 G 27357422.69 27357422.83 27357422.99 0.0088 0.0064

Neptune 70190-08-05 20:53 G 27357648.21 27357648.37 27357648.54 0.0088 0.0058

Neptune 70191-03-19 09:36 G 27357873.74 27357873.90 27357874.09 0.0088 0.0053

Neptune 70191-10-30 22:48 G 27358099.27 27358099.45 27358099.64 0.0088 0.0047

Jupiter 70191-11-13 23:03 G 27358113.29 27358113.46 27358113.63 0.0485 0.0269

Neptune 70192-06-12 11:46 G 27358324.80 27358324.99 27358325.19 0.0088 0.0041

Jupiter 70192-07-06 14:39 G 27358348.92 27358349.11 27358349.31 0.0483 0.0140

Neptune 70193-01-24 00:15 G 27358550.32 27358550.51 27358550.73 0.0088 0.0036

Neptune 70193-09-06 13:12 G 27358775.85 27358776.05 27358776.27 0.0088 0.0030

Neptune 70194-04-20 02:10 G 27359001.38 27359001.59 27359001.81 0.0088 0.0024

Neptune 70194-12-01 14:53 G 27359226.91 27359227.12 27359227.34 0.0088 0.0019

Neptune 70195-07-15 03:36 G 27359452.44 27359452.65 27359452.88 0.0088 0.0013

Neptune 70196-02-25 16:34 G 27359677.97 27359678.19 27359678.41 0.0088 0.0007

Neptune 70196-10-08 05:31 G 27359903.50 27359903.73 27359903.95 0.0088 0.0002

Neptune 70197-05-21 18:15 G 27360129.04 27360129.26 27360129.48 0.0088 0.0005

Jupiter 70197-09-10 18:29 G 27360241.26 27360241.27 27360241.29 0.0541 0.0538

Neptune 70198-01-02 06:43 G 27360354.57 27360354.78 27360355.01 0.0088 0.0011

Jupiter 70198-05-07 06:15 G 27360479.55 27360479.76 27360479.96 0.0545 0.0040

Neptune 70198-08-15 19:27 G 27360580.10 27360580.31 27360580.53 0.0088 0.0016

Neptune 70199-03-29 08:10 G 27360805.63 27360805.84 27360806.06 0.0088 0.0022

Neptune 70199-11-09 20:53 G 27361031.17 27361031.37 27361031.59 0.0088 0.0028

Neptune 70200-06-23 09:51 G 27361256.71 27361256.91 27361257.12 0.0088 0.0033

Neptune 70201-02-03 22:19 G 27361482.25 27361482.43 27361482.64 0.0088 0.0039

Saturn 70201-06-20 19:41 G 27361619.24 27361619.32 27361619.42 0.0275 0.0248

Neptune 70201-09-17 11:03 G 27361707.78 27361707.96 27361708.17 0.0088 0.0045

Saturn 70202-02-05 04:48 G 27361848.49 27361848.70 27361848.90 0.0275 0.0055

Neptune 70202-05-01 00:00 G 27361933.33 27361933.50 27361933.69 0.0088 0.0050

Saturn 70202-09-22 13:27 G 27362077.89 27362078.06 27362078.25 0.0275 0.0141

Neptune 70202-12-12 12:43 G 27362158.87 27362159.03 27362159.22 0.0088 0.0056

Jupiter 70203-07-21 03:22 G 27362379.52 27362379.64 27362379.77 0.0487 0.0382

Neptune 70203-07-26 01:41 G 27362384.42 27362384.57 27362384.73 0.0088 0.0061

Neptune 70204-03-07 14:10 G 27362609.97 27362610.09 27362610.25 0.0088 0.0067

Jupiter 70204-03-12 20:10 G 27362615.14 27362615.34 27362615.55 0.0484 0.0027

Neptune 70204-10-19 03:22 G 27362835.52 27362835.64 27362835.77 0.0088 0.0072

Jupiter 70204-11-03 10:05 G 27362850.82 27362850.92 27362851.01 0.0484 0.0425

Neptune 70205-06-01 15:51 G 27363061.08 27363061.16 27363061.28 0.0088 0.0078

Neptune 70206-01-13 04:48 G 27363286.64 27363286.70 27363286.78 0.0088 0.0083

Jupiter 70210-01-10 17:03 G 27364745.01 27364745.21 27364745.40 0.0544 0.0125

Jupiter 70210-09-06 07:55 G 27364983.73 27364983.83 27364983.93 0.0545 0.0467

Uranus 70215-03-29 13:55 G 27366648.95 27366649.08 27366649.24 0.0143 0.0104

Uranus 70215-11-11 01:55 G 27366875.39 27366875.58 27366875.78 0.0143 0.0063

Jupiter 70215-11-17 02:24 G 27366881.40 27366881.60 27366881.81 0.0484 0.0086

Uranus 70216-06-24 13:27 G 27367101.85 27367102.06 27367102.28 0.0143 0.0023

Jupiter 70216-07-09 17:03 G 27367117.06 27367117.21 27367117.36 0.0483 0.0319

Saturn 70216-07-20 10:34 G 27367127.77 27367127.94 27367128.12 0.0283 0.0155

Mars 70216-11-22 12:00 G 27367252.93 27367253.00 27367253.08 0.1635 0.1476

Uranus 70217-02-06 00:43 G 27367328.32 27367328.53 27367328.75 0.0143 0.0018

Saturn 70217-03-07 01:12 G 27367357.34 27367357.55 27367357.75 0.0283 0.0056

Uranus 70217-09-20 11:46 G 27367554.80 27367554.99 27367555.20 0.0143 0.0058

Saturn 70217-10-22 15:22 G 27367587.07 27367587.14 27367587.21 0.0283 0.0266

Uranus 70218-05-04 22:34 G 27367781.30 27367781.44 27367781.62 0.0143 0.0098

Uranus 70218-12-17 09:51 G 27368007.86 27368007.91 27368007.98 0.0143 0.0137

Mars 70219-08-31 23:03 G 27368265.36 27368265.46 27368265.57 0.1888 0.1523

Jupiter 70221-09-15 00:58 G 27369010.37 27369010.54 27369010.71 0.0542 0.0289

Jupiter 70222-05-11 14:10 G 27369248.92 27369249.09 27369249.26 0.0545 0.0301

Jupiter 70227-07-23 07:41 G 27371147.63 27371147.82 27371148.01 0.0485 0.0198

Jupiter 70228-03-14 23:17 G 27371383.29 27371383.47 27371383.66 0.0484 0.0209

Saturn 70231-01-01 03:51 G 27372405.53 27372405.66 27372405.79 0.0276 0.0215

Saturn 70231-08-18 12:58 G 27372634.83 27372635.04 27372635.25 0.0276 0.0021

Saturn 70232-04-03 22:05 G 27372864.26 27372864.42 27372864.59 0.0276 0.0175

Jupiter 70233-05-20 11:31 G 27373275.87 27373275.98 27373276.09 0.0541 0.0446

Jupiter 70234-01-13 23:03 G 27373514.26 27373514.46 27373514.65 0.0545 0.0135

Jupiter 70239-03-28 12:15 G 27375413.86 27375414.01 27375414.17 0.0486 0.0312

Jupiter 70239-11-19 05:03 G 27375649.51 27375649.71 27375649.91 0.0484 0.0097

Jupiter 70245-09-18 08:53 G 27377779.66 27377779.87 27377780.07 0.0545 0.0032

Saturn 70246-01-30 18:15 G 27377914.07 27377914.26 27377914.45 0.0283 0.0122

Saturn 70246-09-17 08:24 G 27378143.66 27378143.85 27378144.06 0.0283 0.0090

Mars 70248-11-21 07:12 G 27378939.64 27378939.80 27378939.95 0.1640 0.0731

Jupiter 70250-12-01 17:31 G 27379680.13 27379680.23 27379680.33 0.0487 0.0423

Jupiter 70251-07-25 11:03 G 27379915.76 27379915.96 27379916.17 0.0484 0.0017

Jupiter 70252-03-17 00:58 G 27380151.42 27380151.54 27380151.67 0.0483 0.0385

Moon 70257-02-03 03:36 G 27381935.50 27381935.65 27381935.80 0.2638 0.0118

Earth 70257-02-03 03:51 G 27381935.50 27381935.66 27381935.82 0.2632 0.0010 *

Jupiter 70257-05-23 20:39 G 27382045.17 27382045.36 27382045.55 0.0544 0.0192

Uranus 70257-12-28 19:55 G 27382264.21 27382264.33 27382264.48 0.0135 0.0104

Jupiter 70258-01-17 11:17 G 27382283.84 27382283.97 27382284.11 0.0545 0.0401

Uranus 70258-08-12 01:55 G 27382490.41 27382490.58 27382490.77 0.0135 0.0071

Uranus 70259-03-26 07:55 G 27382716.63 27382716.83 27382717.05 0.0135 0.0038

Uranus 70259-11-07 14:10 G 27382942.87 27382943.09 27382943.31 0.0135 0.0004

Uranus 70260-06-20 20:10 G 27383169.13 27383169.34 27383169.56 0.0135 0.0030

Saturn 70260-07-13 05:31 G 27383191.58 27383191.73 27383191.88 0.0275 0.0191

Uranus 70261-02-02 02:24 G 27383395.41 27383395.60 27383395.79 0.0135 0.0063

Saturn 70261-02-27 14:24 G 27383420.89 27383421.10 27383421.32 0.0275 0.0005

Uranus 70261-09-16 08:24 G 27383621.71 27383621.85 27383622.01 0.0135 0.0097

Saturn 70261-10-14 23:31 G 27383650.33 27383650.48 27383650.63 0.0275 0.0196

Uranus 70262-04-30 14:53 G 27383848.08 27383848.12 27383848.19 0.0136 0.0131

Jupiter 70263-03-30 16:05 G 27384181.97 27384182.17 27384182.37 0.0485 0.0128

Jupiter 70263-11-21 06:58 G 27384417.62 27384417.79 27384417.96 0.0483 0.0276

Pluto 70264-06-24 11:31 G 27384633.77 27384633.98 27384634.21 0.0080 0.0015

Pluto 70265-02-04 21:51 G 27384859.26 27384859.41 27384859.58 0.0079 0.0053

Jupiter 70269-01-26 08:10 G 27386310.69 27386310.84 27386311.00 0.0542 0.0350

Neptune 70269-08-20 13:27 G 27386517.03 27386517.06 27386517.11 0.0090 0.0088

Jupiter 70269-09-21 21:22 G 27386549.21 27386549.39 27386549.58 0.0545 0.0240

Neptune 70270-04-03 02:24 G 27386742.54 27386742.60 27386742.71 0.0090 0.0083

Neptune 70270-11-14 15:36 G 27386968.06 27386968.15 27386968.29 0.0090 0.0077

Neptune 70271-06-28 05:03 G 27387193.59 27387193.71 27387193.86 0.0090 0.0071

Neptune 70272-02-08 18:15 G 27387419.12 27387419.26 27387419.42 0.0090 0.0065

Neptune 70272-09-21 07:27 G 27387644.65 27387644.81 27387644.98 0.0090 0.0059

Neptune 70273-05-04 20:53 G 27387870.20 27387870.37 27387870.55 0.0090 0.0053

Neptune 70273-12-16 10:05 G 27388095.73 27388095.92 27388096.11 0.0090 0.0047

Neptune 70274-07-29 22:48 G 27388321.27 27388321.45 27388321.66 0.0090 0.0042

Jupiter 70274-12-03 21:36 G 27388448.23 27388448.40 27388448.58 0.0486 0.0241

Neptune 70275-03-12 12:00 G 27388546.82 27388547.00 27388547.22 0.0090 0.0036

Jupiter 70275-07-27 13:41 G 27388683.87 27388684.07 27388684.26 0.0484 0.0167

Saturn 70275-08-12 19:41 G 27388700.13 27388700.32 27388700.52 0.0283 0.0098

Neptune 70275-10-24 01:12 G 27388772.36 27388772.55 27388772.77 0.0090 0.0030

Saturn 70276-03-29 10:05 G 27388929.73 27388929.92 27388930.12 0.0283 0.0113

Neptune 70276-06-05 14:53 G 27388997.91 27388998.12 27388998.33 0.0090 0.0023

Neptune 70277-01-17 04:05 G 27389223.45 27389223.67 27389223.88 0.0090 0.0017

Neptune 70277-08-30 17:17 G 27389449.00 27389449.22 27389449.44 0.0090 0.0011

Neptune 70278-04-13 06:29 G 27389674.56 27389674.77 27389674.99 0.0090 0.0005

Neptune 70278-11-24 19:55 G 27389900.11 27389900.33 27389900.55 0.0090 0.0001

Neptune 70279-07-08 09:07 G 27390125.66 27390125.88 27390126.10 0.0090 0.0007

Neptune 70280-02-18 22:19 G 27390351.22 27390351.43 27390351.65 0.0090 0.0013

Jupiter 70280-09-30 18:00 G 27390576.19 27390576.25 27390576.33 0.0540 0.0503

Neptune 70280-10-01 11:31 G 27390576.77 27390576.98 27390577.20 0.0090 0.0020

Neptune 70281-05-15 00:58 G 27390802.34 27390802.54 27390802.76 0.0090 0.0026

Jupiter 70281-05-27 04:48 G 27390814.50 27390814.70 27390814.90 0.0544 0.0071

Neptune 70281-12-26 14:10 G 27391027.90 27391028.09 27391028.31 0.0090 0.0032

Neptune 70282-08-09 03:22 G 27391253.45 27391253.64 27391253.85 0.0090 0.0038

Neptune 70283-03-22 16:34 G 27391479.02 27391479.19 27391479.40 0.0090 0.0044

Neptune 70283-11-03 06:00 G 27391704.58 27391704.75 27391704.94 0.0090 0.0050

Neptune 70284-06-15 19:12 G 27391930.15 27391930.30 27391930.49 0.0090 0.0056

Neptune 70285-01-27 08:24 G 27392155.71 27392155.85 27392156.03 0.0090 0.0062

Neptune 70285-09-09 21:36 G 27392381.28 27392381.40 27392381.56 0.0090 0.0068

Neptune 70286-04-23 10:48 G 27392606.85 27392606.95 27392607.10 0.0090 0.0074

Jupiter 70286-08-09 01:41 G 27392714.43 27392714.57 27392714.71 0.0487 0.0354

Neptune 70286-12-05 00:29 G 27392832.43 27392832.52 27392832.63 0.0090 0.0079

Jupiter 70287-04-01 19:12 G 27392950.10 27392950.30 27392950.50 0.0484 0.0055

Neptune 70287-07-18 13:41 G 27393058.01 27393058.07 27393058.15 0.0090 0.0085

Jupiter 70287-11-23 09:36 G 27393185.83 27393185.90 27393185.97 0.0484 0.0451

Saturn 70290-01-23 13:27 G 27393977.89 27393978.06 27393978.24 0.0276 0.0159

Saturn 70290-09-09 22:48 G 27394207.24 27394207.45 27394207.66 0.0276 0.0036

Saturn 70291-04-27 07:55 G 27394436.72 27394436.83 27394436.95 0.0276 0.0231

Jupiter 70293-01-29 13:41 G 27395079.87 27395080.07 27395080.27 0.0543 0.0095

Jupiter 70293-09-25 04:05 G 27395318.59 27395318.67 27395318.75 0.0544 0.0492

Jupiter 70298-04-14 05:46 G 27396980.69 27396980.74 27396980.80 0.0488 0.0466

Uranus 70298-11-26 21:36 G 27397207.28 27397207.40 27397207.51 0.0143 0.0122

Jupiter 70298-12-06 00:43 G 27397216.32 27397216.53 27397216.73 0.0484 0.0059

Uranus 70299-07-11 09:07 G 27397433.70 27397433.88 27397434.06 0.0143 0.0081

Jupiter 70299-07-29 15:07 G 27397451.99 27397452.13 27397452.28 0.0483 0.0342

Uranus 70300-02-22 20:39 G 27397660.15 27397660.36 27397660.57 0.0143 0.0041

Uranus 70300-10-07 08:10 G 27397886.62 27397886.84 27397887.06 0.0143 0.0001

Uranus 70301-05-21 19:12 G 27398113.10 27398113.30 27398113.52 0.0143 0.0040

Uranus 70302-01-03 06:29 G 27398339.60 27398339.77 27398339.96 0.0143 0.0080

Uranus 70302-08-17 17:17 G 27398566.12 27398566.22 27398566.35 0.0143 0.0120

Saturn 70304-07-08 14:10 G 27399257.04 27399257.09 27399257.16 0.0283 0.0272

Jupiter 70304-10-04 23:31 G 27399345.30 27399345.48 27399345.66 0.0543 0.0259

Saturn 70305-02-23 04:48 G 27399486.50 27399486.70 27399486.91 0.0283 0.0062

Jupiter 70305-05-31 13:27 G 27399583.90 27399584.06 27399584.22 0.0545 0.0331

Saturn 70305-10-10 18:58 G 27399716.12 27399716.29 27399716.47 0.0283 0.0149

Jupiter 70310-08-12 06:15 G 27401482.57 27401482.76 27401482.95 0.0485 0.0171

Jupiter 70311-04-04 21:22 G 27401718.21 27401718.39 27401718.57 0.0483 0.0234

Mars 70314-09-19 18:58 G 27402982.12 27402982.29 27402982.46 0.1639 0.0480

Jupiter 70316-06-09 11:46 G 27403610.87 27403610.99 27403611.12 0.0542 0.0414

Jupiter 70317-02-03 00:15 G 27403849.32 27403849.51 27403849.71 0.0545 0.0170

Saturn 70319-08-06 16:05 G 27404763.98 27404764.17 27404764.35 0.0275 0.0134

Saturn 70320-03-23 00:58 G 27404993.34 27404993.54 27404993.75 0.0275 0.0061

Saturn 70320-11-07 10:19 G 27405222.85 27405222.93 27405223.01 0.0275 0.0254

Jupiter 70322-04-17 10:48 G 27405748.78 27405748.95 27405749.11 0.0486 0.0284

Jupiter 70322-12-09 03:07 G 27405984.43 27405984.63 27405984.83 0.0484 0.0123

Jupiter 70328-10-08 11:03 G 27408114.75 27408114.96 27408115.16 0.0544 0.0010

Jupiter 70333-12-21 15:22 G 27410015.03 27410015.14 27410015.26 0.0487 0.0396

Saturn 70334-01-18 15:51 G 27410043.06 27410043.16 27410043.26 0.0283 0.0248

Jupiter 70334-08-14 09:07 G 27410250.68 27410250.88 27410251.09 0.0484 0.0012

Saturn 70334-09-05 06:29 G 27410272.56 27410272.77 27410272.98 0.0283 0.0038

Jupiter 70335-04-06 23:31 G 27410486.37 27410486.48 27410486.58 0.0484 0.0409

Saturn 70335-04-22 20:53 G 27410502.21 27410502.37 27410502.54 0.0283 0.0172

Jupiter 70340-06-12 19:41 G 27412380.12 27412380.32 27412380.51 0.0543 0.0159

Jupiter 70341-02-06 09:07 G 27412618.76 27412618.88 27412619.01 0.0544 0.0428

Uranus 70341-08-29 06:29 G 27412822.68 27412822.77 27412822.88 0.0135 0.0118

Uranus 70342-04-12 12:15 G 27413048.86 27413049.01 27413049.19 0.0135 0.0085

Uranus 70342-11-24 18:15 G 27413275.07 27413275.26 27413275.47 0.0135 0.0052

Uranus 70343-07-09 00:29 G 27413501.30 27413501.52 27413501.73 0.0135 0.0018

Uranus 70344-02-20 06:29 G 27413727.55 27413727.77 27413727.98 0.0135 0.0015

Uranus 70344-10-03 12:15 G 27413953.82 27413954.01 27413954.22 0.0135 0.0049

Uranus 70345-05-17 18:43 G 27414180.11 27414180.28 27414180.46 0.0135 0.0083

Uranus 70345-12-30 00:43 G 27414406.44 27414406.53 27414406.66 0.0136 0.0117

Jupiter 70346-04-19 13:55 G 27414516.88 27414517.08 27414517.28 0.0485 0.0102

Jupiter 70346-12-11 05:17 G 27414752.57 27414752.72 27414752.89 0.0484 0.0302

Saturn 70349-02-15 23:46 G 27415550.30 27415550.49 27415550.69 0.0276 0.0102

Saturn 70349-10-03 09:07 G 27415779.68 27415779.88 27415780.08 0.0276 0.0094

Neptune 70351-10-08 14:24 G 27416515.07 27416515.10 27416515.15 0.0088 0.0086

Jupiter 70352-02-16 05:17 G 27416645.56 27416645.72 27416645.88 0.0542 0.0319

Neptune 70352-05-21 02:53 G 27416740.56 27416740.62 27416740.73 0.0088 0.0081

Jupiter 70352-10-11 17:31 G 27416884.05 27416884.23 27416884.41 0.0544 0.0265

Neptune 70353-01-01 16:05 G 27416966.07 27416966.17 27416966.29 0.0088 0.0075

Neptune 70353-08-15 04:34 G 27417191.58 27417191.69 27417191.84 0.0088 0.0070

Neptune 70354-03-28 17:31 G 27417417.10 27417417.23 27417417.40 0.0088 0.0064

Neptune 70354-11-09 06:29 G 27417642.62 27417642.77 27417642.95 0.0088 0.0059

Neptune 70355-06-22 19:27 G 27417868.15 27417868.31 27417868.50 0.0088 0.0053

Neptune 70356-02-03 08:24 G 27418093.67 27418093.85 27418094.04 0.0088 0.0047

Neptune 70356-09-15 21:07 G 27418319.20 27418319.38 27418319.59 0.0088 0.0042

Neptune 70357-04-29 10:05 G 27418544.73 27418544.92 27418545.13 0.0088 0.0036

Neptune 70357-12-10 23:03 G 27418770.26 27418770.46 27418770.68 0.0088 0.0030

Jupiter 70357-12-23 18:58 G 27418783.11 27418783.29 27418783.47 0.0486 0.0216

Neptune 70358-07-24 12:00 G 27418995.79 27418996.00 27418996.21 0.0088 0.0024

Jupiter 70358-08-16 10:48 G 27419018.77 27419018.95 27419019.14 0.0484 0.0190

Neptune 70359-03-07 00:43 G 27419221.32 27419221.53 27419221.75 0.0088 0.0018

Neptune 70359-10-18 13:41 G 27419446.86 27419447.07 27419447.30 0.0088 0.0013

Neptune 70360-05-31 02:39 G 27419672.39 27419672.61 27419672.83 0.0088 0.0007

Neptune 70361-01-11 15:22 G 27419897.92 27419898.14 27419898.36 0.0088 0.0001

Neptune 70361-08-25 04:05 G 27420123.45 27420123.67 27420123.89 0.0088 0.0005

Neptune 70362-04-07 16:48 G 27420348.98 27420349.20 27420349.42 0.0088 0.0011

Neptune 70362-11-19 05:31 G 27420574.52 27420574.73 27420574.96 0.0088 0.0017

Neptune 70363-07-02 18:29 G 27420800.06 27420800.27 27420800.49 0.0088 0.0022

Saturn 70363-08-01 02:24 G 27420829.46 27420829.60 27420829.74 0.0283 0.0209

Jupiter 70363-10-21 15:07 G 27420911.04 27420911.13 27420911.23 0.0541 0.0477

Neptune 70364-02-13 06:58 G 27421025.59 27421025.79 27421026.01 0.0088 0.0028

Saturn 70364-03-17 16:48 G 27421058.99 27421059.20 27421059.41 0.0283 0.0004

Jupiter 70364-06-16 02:24 G 27421149.40 27421149.60 27421149.80 0.0545 0.0099

Neptune 70364-09-25 19:41 G 27421251.13 27421251.32 27421251.54 0.0088 0.0034

Saturn 70364-11-02 06:43 G 27421288.65 27421288.78 27421288.93 0.0283 0.0211

Neptune 70365-05-09 08:39 G 27421476.67 27421476.86 27421477.06 0.0088 0.0039

Neptune 70365-12-20 21:22 G 27421702.21 27421702.39 27421702.59 0.0088 0.0045

Neptune 70366-08-03 09:51 G 27421927.75 27421927.91 27421928.11 0.0088 0.0051

Neptune 70367-03-16 23:03 G 27422153.29 27422153.46 27422153.63 0.0088 0.0056

Neptune 70367-10-28 11:31 G 27422378.84 27422378.98 27422379.15 0.0088 0.0062

Neptune 70368-06-10 00:00 G 27422604.39 27422604.50 27422604.67 0.0088 0.0068

Neptune 70369-01-21 13:12 G 27422829.94 27422830.05 27422830.18 0.0088 0.0073

Jupiter 70369-08-29 00:00 G 27423049.35 27423049.50 27423049.65 0.0487 0.0327

Neptune 70369-09-04 01:27 G 27423055.49 27423055.56 27423055.68 0.0088 0.0079

Neptune 70370-04-17 14:39 G 27423281.06 27423281.11 27423281.18 0.0088 0.0084

Jupiter 70370-04-21 17:03 G 27423285.01 27423285.21 27423285.41 0.0484 0.0080

Jupiter 70370-12-13 06:58 G 27423520.75 27423520.79 27423520.83 0.0484 0.0472

Jupiter 70376-02-19 13:27 G 27425414.86 27425415.06 27425415.26 0.0544 0.0063

Jupiter 70376-10-15 04:34 G 27425653.64 27425653.69 27425653.75 0.0545 0.0522

Saturn 70378-01-11 18:29 G 27426107.22 27426107.27 27426107.32 0.0275 0.0267

Earth 70378-08-05 14:39 G 27426312.97 27426313.11 27426313.25 0.2701 0.1347

Moon 70378-08-05 20:24 G 27426313.22 27426313.35 27426313.47 0.2703 0.1514 *

Saturn 70378-08-29 03:22 G 27426336.44 27426336.64 27426336.85 0.0275 0.0074

Saturn 70379-04-15 12:29 G 27426565.84 27426566.02 27426566.22 0.0275 0.0120

Mars 70380-07-17 06:58 G 27427024.62 27427024.79 27427024.96 0.1637 0.0244

Jupiter 70381-05-04 03:51 G 27427315.58 27427315.66 27427315.75 0.0488 0.0439

Jupiter 70381-12-25 22:19 G 27427551.22 27427551.43 27427551.63 0.0484 0.0033

Uranus 70382-07-28 04:34 G 27427765.65 27427765.69 27427765.74 0.0144 0.0140

Jupiter 70382-08-18 12:29 G 27427786.89 27427787.02 27427787.16 0.0483 0.0366

Uranus 70383-03-11 16:05 G 27427992.03 27427992.17 27427992.34 0.0143 0.0100

Mars 70383-04-26 02:39 G 27428037.47 27428037.61 27428037.74 0.1885 0.1158

Uranus 70383-10-24 04:05 G 27428218.47 27428218.67 27428218.87 0.0143 0.0059

Uranus 70384-06-06 15:36 G 27428444.93 27428445.15 27428445.37 0.0143 0.0018

Uranus 70385-01-19 02:53 G 27428671.41 27428671.62 27428671.84 0.0143 0.0022

Uranus 70385-09-02 14:10 G 27428897.89 27428898.09 27428898.29 0.0143 0.0062

Uranus 70386-04-17 00:58 G 27429124.40 27429124.54 27429124.70 0.0143 0.0102

Earth 70386-08-03 03:51 G 27429232.58 27429232.66 27429232.74 0.2701 0.2285

Moon 70386-08-03 08:53 G 27429232.75 27429232.87 27429233.00 0.2698 0.1655

Uranus 70386-11-29 12:00 G 27429350.99 27429351.00 27429351.04 0.0143 0.0142

Jupiter 70387-10-25 00:58 G 27429680.36 27429680.54 27429680.73 0.0543 0.0222

Jupiter 70388-06-19 15:07 G 27429918.98 27429919.13 27429919.28 0.0545 0.0365

Saturn 70393-02-10 03:51 G 27431615.51 27431615.66 27431615.83 0.0283 0.0186

Jupiter 70393-08-31 03:36 G 27431817.46 27431817.65 27431817.85 0.0485 0.0145

Saturn 70393-09-27 18:29 G 27431845.06 27431845.27 27431845.48 0.0283 0.0025

Jupiter 70394-04-23 18:58 G 27432053.12 27432053.29 27432053.47 0.0484 0.0258

Saturn 70394-05-15 08:39 G 27432074.75 27432074.86 27432074.99 0.0283 0.0234

Jupiter 70399-06-29 11:17 G 27433945.83 27433945.97 27433946.11 0.0541 0.0380

Jupiter 70400-02-22 22:48 G 27434184.26 27434184.45 27434184.64 0.0544 0.0200

Jupiter 70405-05-06 07:41 G 27436083.65 27436083.82 27436083.99 0.0486 0.0260

Jupiter 70405-12-28 00:29 G 27436319.33 27436319.52 27436319.72 0.0484 0.0147

Saturn 70407-07-25 01:12 G 27436893.45 27436893.55 27436893.66 0.0276 0.0237

Saturn 70408-03-10 10:34 G 27437122.73 27437122.94 27437123.15 0.0276 0.0043

Saturn 70408-10-25 20:10 G 27437352.16 27437352.34 27437352.52 0.0276 0.0152

Jupiter 70411-03-03 21:51 G 27438211.38 27438211.41 27438211.44 0.0539 0.0531

Jupiter 70411-10-28 07:27 G 27438449.60 27438449.81 27438450.01 0.0544 0.0036

Jupiter 70417-01-09 12:00 G 27440349.87 27440350.00 27440350.13 0.0487 0.0372

Jupiter 70417-09-02 05:46 G 27440585.54 27440585.74 27440585.95 0.0484 0.0034

Jupiter 70418-04-25 19:55 G 27440821.25 27440821.33 27440821.43 0.0484 0.0429

Pluto 70422-04-11 19:41 G 27442268.15 27442268.32 27442268.53 0.0064 0.0034

Saturn 70422-08-23 15:36 G 27442401.97 27442402.15 27442402.33 0.0283 0.0145

Pluto 70422-11-23 00:29 G 27442493.30 27442493.52 27442493.74 0.0065 0.0002

Saturn 70423-04-10 06:00 G 27442631.54 27442631.75 27442631.95 0.0283 0.0065

Jupiter 70423-07-02 16:05 G 27442714.97 27442715.17 27442715.36 0.0543 0.0132

Pluto 70423-07-06 04:34 G 27442718.52 27442718.69 27442718.88 0.0065 0.0038

Saturn 70423-11-25 19:41 G 27442861.28 27442861.32 27442861.38 0.0283 0.0275

Jupiter 70424-02-26 06:15 G 27442953.66 27442953.76 27442953.88 0.0545 0.0453

Uranus 70425-04-28 16:34 G 27443381.16 27443381.19 27443381.25 0.0135 0.0132

Uranus 70425-12-10 22:19 G 27443607.30 27443607.43 27443607.59 0.0135 0.0099

Uranus 70426-07-25 04:05 G 27443833.49 27443833.67 27443833.87 0.0135 0.0066

Uranus 70427-03-08 10:05 G 27444059.71 27444059.92 27444060.13 0.0135 0.0033

Uranus 70427-10-20 16:05 G 27444285.95 27444286.17 27444286.39 0.0135 0.0001

Uranus 70428-06-02 22:05 G 27444512.21 27444512.42 27444512.63 0.0135 0.0034

Jupiter 70428-09-14 16:34 G 27444616.16 27444616.19 27444616.22 0.0489 0.0482

Uranus 70429-01-15 04:19 G 27444738.49 27444738.68 27444738.87 0.0135 0.0068

Jupiter 70429-05-08 11:46 G 27444851.78 27444851.99 27444852.19 0.0485 0.0078

Uranus 70429-08-29 10:05 G 27444964.79 27444964.92 27444965.08 0.0135 0.0102

Jupiter 70429-12-30 02:39 G 27445087.46 27445087.61 27445087.76 0.0483 0.0323

Uranus 70430-04-12 16:48 G 27445191.18 27445191.20 27445191.21 0.0136 0.0135

Neptune 70433-11-22 22:48 G 27446511.44 27446511.45 27446511.50 0.0090 0.0089

Neptune 70434-07-06 12:15 G 27446736.94 27446737.01 27446737.10 0.0090 0.0083

Neptune 70435-02-17 01:27 G 27446962.46 27446962.56 27446962.68 0.0090 0.0077

Jupiter 70435-03-07 03:22 G 27446980.47 27446980.64 27446980.81 0.0542 0.0291

Neptune 70435-09-30 14:24 G 27447187.99 27447188.10 27447188.25 0.0090 0.0072

Jupiter 70435-10-31 16:48 G 27447219.03 27447219.20 27447219.37 0.0545 0.0295

Neptune 70436-05-13 03:36 G 27447413.53 27447413.65 27447413.82 0.0090 0.0066

Neptune 70436-12-24 17:03 G 27447639.06 27447639.21 27447639.39 0.0090 0.0060

Saturn 70437-02-03 06:15 G 27447679.63 27447679.76 27447679.90 0.0275 0.0207

Neptune 70437-08-07 06:15 G 27447864.60 27447864.76 27447864.95 0.0090 0.0054

Saturn 70437-09-20 15:22 G 27447908.93 27447909.14 27447909.35 0.0275 0.0014

Neptune 70438-03-20 19:27 G 27448090.14 27448090.31 27448090.51 0.0090 0.0048

Saturn 70438-05-08 00:29 G 27448138.37 27448138.52 27448138.69 0.0275 0.0180

Neptune 70438-11-01 08:39 G 27448315.68 27448315.86 27448316.07 0.0090 0.0042

Neptune 70439-06-14 21:51 G 27448541.23 27448541.41 27448541.63 0.0090 0.0036

Neptune 70440-01-26 11:03 G 27448766.77 27448766.96 27448767.18 0.0090 0.0030

Neptune 70440-09-08 00:15 G 27448992.31 27448992.51 27448992.73 0.0090 0.0024

Jupiter 70441-01-11 16:19 G 27449118.00 27449118.18 27449118.37 0.0485 0.0190

Neptune 70441-04-21 13:55 G 27449217.86 27449218.08 27449218.29 0.0090 0.0017

Jupiter 70441-09-04 07:55 G 27449353.65 27449353.83 27449354.02 0.0483 0.0214

Neptune 70441-12-03 03:07 G 27449443.41 27449443.63 27449443.84 0.0090 0.0011

Neptune 70442-07-16 16:19 G 27449668.96 27449669.18 27449669.39 0.0090 0.0005

Neptune 70443-02-27 05:17 G 27449894.51 27449894.72 27449894.94 0.0090 0.0002

Neptune 70443-10-10 18:29 G 27450120.06 27450120.27 27450120.49 0.0090 0.0008

Neptune 70444-05-23 07:55 G 27450345.62 27450345.83 27450346.05 0.0090 0.0014

Neptune 70445-01-03 21:07 G 27450571.17 27450571.38 27450571.60 0.0090 0.0020

Neptune 70445-08-17 10:19 G 27450796.73 27450796.93 27450797.15 0.0090 0.0026

Neptune 70446-03-30 23:46 G 27451022.29 27451022.49 27451022.70 0.0090 0.0032

Mars 70446-05-14 18:29 G 27451067.09 27451067.27 27451067.44 0.1635 0.0028

Jupiter 70446-11-09 15:51 G 27451246.05 27451246.16 27451246.28 0.0541 0.0442

Neptune 70446-11-11 12:58 G 27451247.85 27451248.04 27451248.25 0.0090 0.0038

Neptune 70447-06-25 02:24 G 27451473.41 27451473.60 27451473.79 0.0090 0.0044

Jupiter 70447-07-06 03:36 G 27451484.45 27451484.65 27451484.84 0.0545 0.0134

Neptune 70448-02-05 15:36 G 27451698.98 27451699.15 27451699.34 0.0090 0.0050

Neptune 70448-09-18 04:48 G 27451924.54 27451924.70 27451924.88 0.0090 0.0056

Mars 70449-02-20 05:46 G 27452079.57 27452079.74 27452079.91 0.1888 0.0403

Neptune 70449-05-01 18:15 G 27452150.11 27452150.26 27452150.42 0.0090 0.0062

Neptune 70449-12-13 07:27 G 27452375.68 27452375.81 27452375.96 0.0090 0.0068

Neptune 70450-07-26 20:39 G 27452601.25 27452601.36 27452601.50 0.0090 0.0074

Neptune 70451-03-09 09:51 G 27452826.83 27452826.91 27452827.02 0.0090 0.0080

Neptune 70451-10-20 22:48 G 27453052.41 27453052.45 27453052.54 0.0090 0.0086

Saturn 70452-03-04 17:03 G 27453188.02 27453188.21 27453188.40 0.0283 0.0122

Jupiter 70452-09-16 21:07 G 27453384.22 27453384.38 27453384.54 0.0487 0.0302

Saturn 70452-10-20 07:27 G 27453417.61 27453417.81 27453418.01 0.0283 0.0089

Jupiter 70453-05-10 14:10 G 27453619.89 27453620.09 27453620.29 0.0484 0.0104

Jupiter 70459-03-10 12:29 G 27455749.82 27455750.02 27455750.23 0.0544 0.0033

Jupiter 70464-05-23 00:00 G 27457650.40 27457650.50 27457650.61 0.0488 0.0416

Jupiter 70465-01-13 18:58 G 27457886.08 27457886.29 27457886.49 0.0485 0.0013

Jupiter 70465-09-06 09:36 G 27458121.79 27458121.90 27458122.03 0.0484 0.0388

Saturn 70466-08-16 12:43 G 27458465.87 27458466.03 27458466.19 0.0276 0.0178

Uranus 70466-11-08 23:46 G 27458550.38 27458550.49 27458550.63 0.0144 0.0117

Saturn 70467-04-02 22:05 G 27458695.21 27458695.42 27458695.63 0.0276 0.0017

Uranus 70467-06-23 11:17 G 27458776.80 27458776.97 27458777.17 0.0144 0.0077

Saturn 70467-11-18 07:27 G 27458924.69 27458924.81 27458924.96 0.0276 0.0212

Uranus 70468-02-04 23:03 G 27459003.26 27459003.46 27459003.68 0.0143 0.0036

Uranus 70468-09-18 10:34 G 27459229.72 27459229.94 27459230.16 0.0143 0.0005

Uranus 70469-05-02 21:51 G 27459456.21 27459456.41 27459456.62 0.0143 0.0045

Uranus 70469-12-15 09:07 G 27459682.71 27459682.88 27459683.06 0.0143 0.0085

Uranus 70470-07-29 19:55 G 27459909.24 27459909.33 27459909.45 0.0143 0.0125

Jupiter 70470-11-12 21:51 G 27460015.22 27460015.41 27460015.60 0.0542 0.0194

Jupiter 70471-07-09 10:48 G 27460253.82 27460253.95 27460254.10 0.0544 0.0390

Jupiter 70476-09-18 23:46 G 27462152.30 27462152.49 27462152.69 0.0485 0.0124

Jupiter 70477-05-12 15:22 G 27462387.97 27462388.14 27462388.30 0.0484 0.0278

Saturn 70481-09-15 05:03 G 27463974.51 27463974.71 27463974.92 0.0283 0.0079

Saturn 70482-05-02 19:12 G 27464204.12 27464204.30 27464204.50 0.0283 0.0132

Jupiter 70482-07-18 06:29 G 27464280.62 27464280.77 27464280.93 0.0541 0.0356

Jupiter 70483-03-13 18:29 G 27464519.09 27464519.27 27464519.46 0.0545 0.0224

Jupiter 70488-05-25 05:17 G 27466418.55 27466418.72 27466418.90 0.0486 0.0234

Jupiter 70489-01-15 21:36 G 27466654.21 27466654.40 27466654.59 0.0484 0.0170

Jupiter 70494-03-22 18:43 G 27468546.21 27468546.28 27468546.35 0.0540 0.0505

Jupiter 70494-11-16 05:03 G 27468784.51 27468784.71 27468784.91 0.0545 0.0063

Saturn 70496-02-26 18:29 G 27469252.09 27469252.27 27469252.45 0.0275 0.0146

Saturn 70496-10-13 03:36 G 27469481.44 27469481.65 27469481.86 0.0275 0.0048

Saturn 70497-05-30 12:58 G 27469710.94 27469711.04 27469711.14 0.0275 0.0241

Jupiter 70500-01-29 09:22 G 27470684.76 27470684.89 27470685.04 0.0487 0.0346

Earth 70500-02-05 06:43 G 27470691.62 27470691.78 27470691.94 0.2631 0.0250

Moon 70500-02-05 09:07 G 27470691.72 27470691.88 27470692.05 0.2626 0.0602 *

Jupiter 70500-09-22 02:53 G 27470920.42 27470920.62 27470920.82 0.0484 0.0059

Jupiter 70501-05-15 16:48 G 27471156.13 27471156.20 27471156.28 0.0484 0.0450

Jupiter 70506-07-22 16:34 G 27473049.99 27473050.19 27473050.39 0.0544 0.0098

Jupiter 70507-03-18 07:12 G 27473288.71 27473288.80 27473288.89 0.0545 0.0484

Uranus 70509-08-11 08:53 G 27474165.77 27474165.87 27474166.00 0.0135 0.0113

Uranus 70510-03-25 14:39 G 27474391.95 27474392.11 27474392.30 0.0135 0.0080

Saturn 70510-08-11 16:34 G 27474531.12 27474531.19 27474531.26 0.0283 0.0264

Uranus 70510-11-06 20:24 G 27474618.16 27474618.35 27474618.57 0.0135 0.0047

Pluto 70511-03-07 10:48 G 27474738.75 27474738.95 27474739.17 0.0080 0.0026

Saturn 70511-03-29 06:58 G 27474760.59 27474760.79 27474761.00 0.0283 0.0056

Uranus 70511-06-21 02:39 G 27474844.39 27474844.61 27474844.83 0.0135 0.0013

Jupiter 70511-10-05 13:27 G 27474951.00 27474951.06 27474951.14 0.0488 0.0457

Pluto 70511-10-18 21:07 G 27474964.20 27474964.38 27474964.58 0.0079 0.0041

Saturn 70511-11-13 21:07 G 27474990.21 27474990.38 27474990.57 0.0283 0.0154

Uranus 70512-02-02 08:24 G 27475070.64 27475070.85 27475071.07 0.0135 0.0020

Mars 70512-03-12 06:43 G 27475109.61 27475109.78 27475109.96 0.1634 0.0232

Jupiter 70512-05-28 08:39 G 27475186.65 27475186.86 27475187.06 0.0485 0.0053

Uranus 70512-09-15 14:10 G 27475296.91 27475297.09 27475297.30 0.0135 0.0054

Jupiter 70513-01-18 23:17 G 27475422.33 27475422.47 27475422.62 0.0483 0.0345

Uranus 70513-04-29 20:24 G 27475523.20 27475523.35 27475523.53 0.0135 0.0088

Uranus 70513-12-12 02:24 G 27475749.53 27475749.60 27475749.72 0.0135 0.0122

Mars 70514-12-19 09:36 G 27476121.72 27476121.90 27476122.07 0.1890 0.0332

Neptune 70516-01-10 23:46 G 27476509.48 27476509.49 27476509.55 0.0088 0.0087

Neptune 70516-08-23 12:43 G 27476734.97 27476735.03 27476735.13 0.0088 0.0081

Neptune 70517-04-06 01:27 G 27476960.47 27476960.56 27476960.70 0.0088 0.0076

Neptune 70517-11-17 14:39 G 27477185.99 27477186.11 27477186.25 0.0088 0.0070

Jupiter 70518-03-27 03:07 G 27477315.45 27477315.63 27477315.81 0.0542 0.0258

Neptune 70518-07-01 03:36 G 27477411.51 27477411.65 27477411.80 0.0088 0.0064

Jupiter 70518-11-20 15:36 G 27477553.99 27477554.15 27477554.32 0.0544 0.0324

Neptune 70519-02-11 16:05 G 27477637.02 27477637.17 27477637.35 0.0088 0.0059

Neptune 70519-09-25 05:03 G 27477862.55 27477862.71 27477862.90 0.0088 0.0053

Neptune 70520-05-07 18:15 G 27478088.07 27478088.26 27478088.44 0.0088 0.0047

Neptune 70520-12-19 06:29 G 27478313.60 27478313.77 27478313.99 0.0088 0.0042

Neptune 70521-08-01 19:27 G 27478539.12 27478539.31 27478539.53 0.0088 0.0036

Neptune 70522-03-15 08:24 G 27478764.65 27478764.85 27478765.07 0.0088 0.0030

Neptune 70522-10-26 21:36 G 27478990.19 27478990.40 27478990.61 0.0088 0.0024

Neptune 70523-06-09 10:05 G 27479215.72 27479215.92 27479216.15 0.0088 0.0019

Neptune 70524-01-20 23:03 G 27479441.25 27479441.46 27479441.69 0.0088 0.0013

Jupiter 70524-02-01 12:29 G 27479452.83 27479453.02 27479453.21 0.0486 0.0167

Neptune 70524-09-02 12:00 G 27479666.78 27479667.00 27479667.22 0.0088 0.0007

Jupiter 70524-09-24 04:34 G 27479688.51 27479688.69 27479688.87 0.0484 0.0235

Neptune 70525-04-16 00:43 G 27479892.31 27479892.53 27479892.75 0.0088 0.0002

Saturn 70525-09-08 23:46 G 27480038.31 27480038.49 27480038.69 0.0276 0.0119

Neptune 70525-11-27 13:41 G 27480117.85 27480118.07 27480118.29 0.0088 0.0005

Saturn 70526-04-26 09:22 G 27480267.69 27480267.89 27480268.10 0.0276 0.0077

Neptune 70526-07-11 02:24 G 27480343.38 27480343.60 27480343.82 0.0088 0.0011

Saturn 70526-12-11 18:43 G 27480497.26 27480497.28 27480497.34 0.0276 0.0272

Neptune 70527-02-21 15:07 G 27480568.92 27480569.13 27480569.35 0.0088 0.0017

Neptune 70527-10-05 03:51 G 27480794.45 27480794.66 27480794.88 0.0088 0.0023

Neptune 70528-05-17 16:48 G 27481019.99 27481020.20 27481020.41 0.0088 0.0028

Neptune 70528-12-29 05:17 G 27481245.53 27481245.72 27481245.93 0.0088 0.0034

Neptune 70529-08-11 18:00 G 27481471.06 27481471.25 27481471.46 0.0088 0.0040

Jupiter 70529-11-29 13:27 G 27481580.94 27481581.06 27481581.20 0.0540 0.0413

Neptune 70530-03-25 06:29 G 27481696.60 27481696.77 27481696.98 0.0088 0.0046

Jupiter 70530-07-26 00:15 G 27481819.32 27481819.51 27481819.70 0.0544 0.0160

Neptune 70530-11-05 19:41 G 27481922.15 27481922.32 27481922.50 0.0088 0.0051

Neptune 70531-06-19 08:10 G 27482147.69 27482147.84 27482148.02 0.0088 0.0057

Neptune 70532-01-30 20:39 G 27482373.23 27482373.36 27482373.54 0.0088 0.0063

Neptune 70532-09-12 09:36 G 27482598.77 27482598.90 27482599.05 0.0088 0.0068

Neptune 70533-04-25 22:05 G 27482824.33 27482824.42 27482824.56 0.0088 0.0074

Neptune 70533-12-07 11:17 G 27483049.89 27483049.97 27483050.08 0.0088 0.0079

Neptune 70534-07-20 23:46 G 27483275.46 27483275.49 27483275.57 0.0088 0.0085

Jupiter 70535-10-07 17:03 G 27483719.04 27483719.21 27483719.38 0.0487 0.0280

Jupiter 70536-05-30 10:19 G 27483954.73 27483954.93 27483955.12 0.0484 0.0124

Saturn 70540-02-22 04:05 G 27485317.55 27485317.67 27485317.81 0.0283 0.0222

Saturn 70540-10-08 18:43 G 27485547.07 27485547.28 27485547.49 0.0283 0.0013

Saturn 70541-05-26 08:53 G 27485776.73 27485776.87 27485777.03 0.0283 0.0197

Jupiter 70542-03-30 07:41 G 27486084.61 27486084.82 27486085.02 0.0544 0.0013

Jupiter 70547-06-12 22:05 G 27487985.30 27487985.42 27487985.54 0.0488 0.0390

Jupiter 70548-02-03 16:19 G 27488220.97 27488221.18 27488221.38 0.0484 0.0014

Jupiter 70548-09-26 06:29 G 27488456.67 27488456.77 27488456.89 0.0483 0.0407

Uranus 70550-07-10 06:58 G 27489108.74 27489108.79 27489108.89 0.0144 0.0135

Uranus 70551-02-21 18:58 G 27489335.14 27489335.29 27489335.47 0.0144 0.0094

Uranus 70551-10-06 06:58 G 27489561.58 27489561.79 27489561.99 0.0144 0.0053

Uranus 70552-05-19 18:15 G 27489788.05 27489788.26 27489788.48 0.0143 0.0013

Uranus 70553-01-01 05:46 G 27490014.53 27490014.74 27490014.96 0.0143 0.0028

Uranus 70553-08-15 17:03 G 27490241.02 27490241.21 27490241.40 0.0143 0.0068

Jupiter 70553-12-02 18:29 G 27490350.08 27490350.27 27490350.46 0.0543 0.0168

Uranus 70554-03-30 04:05 G 27490467.53 27490467.67 27490467.81 0.0143 0.0108

Jupiter 70554-07-29 08:39 G 27490588.73 27490588.86 27490588.99 0.0545 0.0414

Saturn 70555-03-22 06:43 G 27490824.58 27490824.78 27490824.99 0.0275 0.0084

Saturn 70555-11-06 15:51 G 27491053.97 27491054.16 27491054.36 0.0275 0.0110

Jupiter 70559-10-09 21:22 G 27492487.19 27492487.39 27492487.59 0.0485 0.0097

Jupiter 70560-06-01 12:15 G 27492722.85 27492723.01 27492723.17 0.0483 0.0301

Jupiter 70565-08-07 06:43 G 27494615.62 27494615.78 27494615.94 0.0542 0.0322

Jupiter 70566-04-02 19:12 G 27494854.12 27494854.30 27494854.48 0.0545 0.0257

Saturn 70569-09-03 06:00 G 27496103.61 27496103.75 27496103.90 0.0283 0.0199

Saturn 70570-04-20 20:39 G 27496333.15 27496333.36 27496333.57 0.0283 0.0010

Saturn 70570-12-06 10:34 G 27496562.82 27496562.94 27496563.09 0.0283 0.0220

Jupiter 70571-06-15 02:24 G 27496753.42 27496753.60 27496753.79 0.0486 0.0209

Jupiter 70572-02-05 18:29 G 27496989.08 27496989.27 27496989.46 0.0484 0.0193

Jupiter 70577-04-11 18:58 G 27498881.20 27498881.29 27498881.39 0.0540 0.0473

Jupiter 70577-12-06 05:03 G 27499119.51 27499119.71 27499119.91 0.0544 0.0094

Mars 70578-01-07 18:29 G 27499152.11 27499152.27 27499152.44 0.1632 0.0469

Mars 70580-10-15 12:29 G 27500163.88 27500164.02 27500164.16 0.1893 0.1102

Jupiter 70583-02-18 05:17 G 27501019.58 27501019.72 27501019.88 0.0487 0.0325

Jupiter 70583-10-11 23:17 G 27501255.27 27501255.47 27501255.67 0.0484 0.0081

Saturn 70584-02-15 01:41 G 27501381.50 27501381.57 27501381.67 0.0276 0.0252

Jupiter 70584-06-03 13:41 G 27501491.03 27501491.07 27501491.12 0.0484 0.0470

Saturn 70584-10-01 11:17 G 27501610.76 27501610.97 27501611.18 0.0276 0.0058

Saturn 70585-05-18 20:39 G 27501840.18 27501840.36 27501840.55 0.0276 0.0137

Jupiter 70589-08-10 14:10 G 27503384.89 27503385.09 27503385.29 0.0543 0.0070

Jupiter 70590-04-06 03:51 G 27503623.60 27503623.66 27503623.74 0.0544 0.0508

Uranus 70593-04-10 19:41 G 27504724.25 27504724.32 27504724.40 0.0134 0.0126

Uranus 70593-11-23 01:12 G 27504950.41 27504950.55 27504950.72 0.0135 0.0093

Uranus 70594-07-07 06:58 G 27505176.60 27505176.79 27505176.99 0.0135 0.0060

Jupiter 70594-10-24 09:22 G 27505285.80 27505285.89 27505285.99 0.0489 0.0435

Uranus 70595-02-18 12:43 G 27505402.82 27505403.03 27505403.25 0.0135 0.0027

Jupiter 70595-06-17 04:48 G 27505521.49 27505521.70 27505521.90 0.0485 0.0032

Uranus 70595-10-02 18:43 G 27505629.06 27505629.28 27505629.49 0.0135 0.0006

Jupiter 70596-02-07 19:41 G 27505757.19 27505757.32 27505757.45 0.0484 0.0363

Uranus 70596-05-16 00:29 G 27505855.32 27505855.52 27505855.74 0.0135 0.0040

Uranus 70596-12-28 06:29 G 27506081.60 27506081.77 27506081.96 0.0135 0.0073

Uranus 70597-08-11 12:43 G 27506307.90 27506308.03 27506308.17 0.0135 0.0107

Neptune 70598-02-25 07:41 G 27506505.82 27506505.82 27506505.85 0.0090 0.0090

Neptune 70598-10-08 20:39 G 27506731.31 27506731.36 27506731.46 0.0090 0.0084

Saturn 70599-03-16 17:31 G 27506890.06 27506890.23 27506890.41 0.0283 0.0157

Neptune 70599-05-22 10:05 G 27506956.83 27506956.92 27506957.04 0.0090 0.0078

Saturn 70599-11-01 08:10 G 27507119.63 27507119.84 27507120.05 0.0283 0.0053

Neptune 70600-01-02 23:31 G 27507182.36 27507182.48 27507182.61 0.0090 0.0072

Saturn 70600-06-18 22:19 G 27507349.36 27507349.43 27507349.52 0.0283 0.0261

Neptune 70600-08-16 12:43 G 27507407.89 27507408.03 27507408.18 0.0090 0.0066

Neptune 70601-03-30 01:55 G 27507633.43 27507633.58 27507633.75 0.0090 0.0060

Jupiter 70601-04-15 21:51 G 27507650.23 27507650.41 27507650.59 0.0542 0.0234

Neptune 70601-11-10 15:22 G 27507858.97 27507859.14 27507859.32 0.0090 0.0054

Jupiter 70601-12-10 10:48 G 27507888.80 27507888.95 27507889.11 0.0545 0.0345

Neptune 70602-06-24 04:34 G 27508084.51 27508084.69 27508084.88 0.0090 0.0048

Neptune 70603-02-04 17:46 G 27508310.05 27508310.24 27508310.44 0.0090 0.0042

Neptune 70603-09-18 06:58 G 27508535.59 27508535.79 27508535.99 0.0090 0.0036

Neptune 70604-04-30 20:10 G 27508761.14 27508761.34 27508761.56 0.0090 0.0030

Neptune 70604-12-12 09:22 G 27508986.69 27508986.89 27508987.11 0.0090 0.0024

Neptune 70605-07-25 22:34 G 27509212.23 27509212.44 27509212.66 0.0090 0.0018

Neptune 70606-03-08 11:46 G 27509437.78 27509437.99 27509438.21 0.0090 0.0012

Neptune 70606-10-20 00:58 G 27509663.33 27509663.54 27509663.77 0.0090 0.0006

Jupiter 70607-02-21 10:34 G 27509787.74 27509787.94 27509788.13 0.0485 0.0142

Neptune 70607-06-02 14:24 G 27509888.88 27509889.10 27509889.32 0.0090 0.0001

Jupiter 70607-10-15 02:10 G 27510023.42 27510023.59 27510023.76 0.0483 0.0257

Neptune 70608-01-14 03:36 G 27510114.43 27510114.65 27510114.87 0.0090 0.0007

Neptune 70608-08-26 16:34 G 27510339.99 27510340.19 27510340.42 0.0090 0.0014

Neptune 70609-04-09 06:00 G 27510565.54 27510565.75 27510565.97 0.0090 0.0020

Neptune 70609-11-20 19:12 G 27510791.10 27510791.30 27510791.52 0.0090 0.0026

Neptune 70610-07-04 08:39 G 27511016.66 27511016.86 27511017.07 0.0090 0.0032

Neptune 70611-02-14 21:51 G 27511242.22 27511242.41 27511242.61 0.0090 0.0038

Neptune 70611-09-28 11:03 G 27511467.78 27511467.96 27511468.16 0.0090 0.0044

Neptune 70612-05-11 00:43 G 27511693.35 27511693.53 27511693.71 0.0090 0.0050

Jupiter 70612-12-19 09:22 G 27511915.75 27511915.89 27511916.03 0.0541 0.0388

Neptune 70612-12-22 13:27 G 27511918.91 27511919.06 27511919.25 0.0090 0.0057

Neptune 70613-08-05 02:53 G 27512144.48 27512144.62 27512144.79 0.0090 0.0063

Jupiter 70613-08-14 20:53 G 27512154.18 27512154.37 27512154.56 0.0545 0.0186

Saturn 70613-08-28 09:36 G 27512167.77 27512167.90 27512168.03 0.0275 0.0215

Neptune 70614-03-18 16:05 G 27512370.05 27512370.17 27512370.33 0.0090 0.0069

Saturn 70614-04-14 18:29 G 27512397.06 27512397.27 27512397.49 0.0275 0.0024

Neptune 70614-10-30 05:46 G 27512595.63 27512595.74 27512595.87 0.0090 0.0074

Saturn 70614-11-30 03:36 G 27512626.49 27512626.65 27512626.82 0.0275 0.0170

Neptune 70615-06-12 19:12 G 27512821.21 27512821.30 27512821.40 0.0090 0.0080

Neptune 70616-01-24 08:24 G 27513046.80 27513046.85 27513046.92 0.0090 0.0086

Jupiter 70618-10-27 15:07 G 27514053.96 27514054.13 27514054.31 0.0486 0.0253

Jupiter 70619-06-20 07:41 G 27514289.63 27514289.82 27514290.02 0.0484 0.0149

Moon 70621-08-07 09:07 G 27515068.73 27515068.88 27515069.03 0.2697 0.1123

Earth 70621-08-07 14:10 G 27515068.95 27515069.09 27515069.23 0.2701 0.1300 *

Jupiter 70624-08-23 22:34 G 27516181.41 27516181.44 27516181.47 0.0539 0.0533

Jupiter 70625-04-19 08:10 G 27516419.64 27516419.84 27516420.05 0.0544 0.0028

Saturn 70628-09-26 19:12 G 27517676.12 27517676.30 27517676.49 0.0283 0.0134

Saturn 70629-05-14 09:36 G 27517905.70 27517905.90 27517906.11 0.0283 0.0075

Earth 70629-08-05 03:36 G 27517988.57 27517988.65 27517988.73 0.2702 0.2301

Saturn 70629-12-30 00:00 G 27518135.49 27518135.50 27518135.51 0.0283 0.0282

Jupiter 70630-07-02 19:27 G 27518320.18 27518320.31 27518320.45 0.0488 0.0364

Jupiter 70631-02-23 13:27 G 27518555.86 27518556.06 27518556.27 0.0484 0.0040

Jupiter 70631-10-17 03:51 G 27518791.57 27518791.66 27518791.75 0.0484 0.0429

Uranus 70634-10-23 02:10 G 27519893.47 27519893.59 27519893.74 0.0144 0.0112

Uranus 70635-06-06 13:55 G 27520119.90 27520120.08 27520120.28 0.0144 0.0071

Uranus 70636-01-19 01:41 G 27520346.36 27520346.57 27520346.79 0.0144 0.0030

Uranus 70636-09-01 13:12 G 27520572.83 27520573.05 27520573.27 0.0143 0.0011

Jupiter 70636-12-22 19:27 G 27520685.11 27520685.31 27520685.50 0.0543 0.0134

Uranus 70637-04-16 00:29 G 27520799.32 27520799.52 27520799.73 0.0143 0.0051

Jupiter 70637-08-18 08:53 G 27520923.76 27520923.87 27520923.99 0.0545 0.0444

Uranus 70637-11-28 11:46 G 27521025.83 27521025.99 27521026.17 0.0143 0.0091

Uranus 70638-07-12 22:48 G 27521252.38 27521252.45 27521252.55 0.0143 0.0131

Jupiter 70642-03-07 21:36 G 27522586.36 27522586.40 27522586.45 0.0489 0.0477

Jupiter 70642-10-29 17:46 G 27522822.04 27522822.24 27522822.45 0.0485 0.0075

Saturn 70643-03-10 12:43 G 27522953.88 27522954.03 27522954.19 0.0276 0.0192

Jupiter 70643-06-22 09:07 G 27523057.73 27523057.88 27523058.04 0.0484 0.0322

Saturn 70643-10-25 22:05 G 27523183.21 27523183.42 27523183.63 0.0276 0.0002

Mars 70643-11-06 06:58 G 27523194.63 27523194.79 27523194.95 0.1631 0.0692

Saturn 70644-06-11 07:27 G 27523412.66 27523412.81 27523412.96 0.0276 0.0195

Mars 70646-08-13 16:05 G 27524206.14 27524206.17 27524206.21 0.1894 0.1843

Jupiter 70648-08-27 05:31 G 27524950.56 27524950.73 27524950.90 0.0541 0.0292

Jupiter 70649-04-22 17:17 G 27525189.06 27525189.22 27525189.40 0.0544 0.0285

Jupiter 70654-07-04 22:48 G 27527088.27 27527088.45 27527088.64 0.0486 0.0187

Jupiter 70655-02-25 15:07 G 27527323.95 27527324.13 27527324.32 0.0484 0.0213

Saturn 70658-04-09 05:31 G 27528462.53 27528462.73 27528462.93 0.0283 0.0094

Saturn 70658-11-24 20:10 G 27528692.15 27528692.34 27528692.53 0.0283 0.0115

Jupiter 70660-05-01 13:55 G 27529215.97 27529216.08 27529216.19 0.0540 0.0448

Jupiter 70660-12-26 00:00 G 27529454.31 27529454.50 27529454.70 0.0544 0.0118

Jupiter 70666-03-10 04:05 G 27531354.51 27531354.67 27531354.84 0.0487 0.0296

Jupiter 70666-10-31 21:36 G 27531590.20 27531590.40 27531590.60 0.0484 0.0106

Pluto 70668-12-22 21:22 G 27532373.22 27532373.39 27532373.59 0.0064 0.0035

Pluto 70669-08-05 01:55 G 27532598.36 27532598.58 27532598.80 0.0065 0.0001

Pluto 70670-03-18 05:31 G 27532823.57 27532823.73 27532823.94 0.0065 0.0037

Jupiter 70672-08-30 10:19 G 27533719.73 27533719.93 27533720.13 0.0544 0.0044

Saturn 70672-09-19 20:39 G 27533740.20 27533740.36 27533740.54 0.0275 0.0157

Jupiter 70673-04-26 00:58 G 27533958.51 27533958.54 27533958.59 0.0545 0.0531

Saturn 70673-05-07 05:46 G 27533969.53 27533969.74 27533969.95 0.0275 0.0036

Saturn 70673-12-22 14:53 G 27534199.01 27534199.12 27534199.24 0.0275 0.0228

Mars 70675-11-05 01:27 G 27534881.49 27534881.56 27534881.63 0.1635 0.1485

Uranus 70677-07-24 12:29 G 27535508.90 27535509.02 27535509.16 0.0134 0.0107

Jupiter 70677-11-13 08:10 G 27535620.74 27535620.84 27535620.96 0.0488 0.0406

Uranus 70678-03-07 18:00 G 27535735.08 27535735.25 27535735.44 0.0135 0.0074

Jupiter 70678-07-07 03:07 G 27535856.42 27535856.63 27535856.83 0.0484 0.0009

Uranus 70678-10-19 23:46 G 27535961.29 27535961.49 27535961.70 0.0135 0.0041

Jupiter 70679-02-27 17:17 G 27536092.11 27536092.22 27536092.35 0.0483 0.0387

Uranus 70679-06-03 05:46 G 27536187.53 27536187.74 27536187.96 0.0135 0.0008

Uranus 70680-01-15 11:31 G 27536413.77 27536413.98 27536414.20 0.0135 0.0026

Neptune 70680-04-14 09:22 G 27536503.88 27536503.89 27536503.93 0.0088 0.0087

Uranus 70680-08-28 17:31 G 27536640.04 27536640.23 27536640.43 0.0135 0.0059

Neptune 70680-11-25 22:05 G 27536729.36 27536729.42 27536729.52 0.0088 0.0082

Uranus 70681-04-11 23:17 G 27536866.33 27536866.47 27536866.64 0.0135 0.0093

Neptune 70681-07-09 11:03 G 27536954.87 27536954.96 27536955.08 0.0088 0.0076

Uranus 70681-11-24 05:31 G 27537092.67 27537092.73 27537092.82 0.0135 0.0127

Neptune 70682-02-19 23:46 G 27537180.38 27537180.49 27537180.64 0.0088 0.0071

Neptune 70682-10-03 12:43 G 27537405.90 27537406.03 27537406.20 0.0088 0.0065

Neptune 70683-05-17 01:41 G 27537631.42 27537631.57 27537631.74 0.0088 0.0059

Neptune 70683-12-28 14:10 G 27537856.94 27537857.09 27537857.29 0.0088 0.0054

Jupiter 70684-05-04 22:34 G 27537985.25 27537985.44 27537985.62 0.0543 0.0200

Neptune 70684-08-10 03:07 G 27538082.46 27538082.63 27538082.83 0.0088 0.0048

Jupiter 70684-12-29 12:00 G 27538223.86 27538224.00 27538224.15 0.0545 0.0379

Neptune 70685-03-23 16:05 G 27538307.98 27538308.17 27538308.37 0.0088 0.0042

Neptune 70685-11-04 05:03 G 27538533.52 27538533.71 27538533.92 0.0088 0.0036

Neptune 70686-06-17 17:46 G 27538759.04 27538759.24 27538759.46 0.0088 0.0030

Neptune 70687-01-29 06:29 G 27538984.57 27538984.77 27538985.00 0.0088 0.0025

Saturn 70687-03-04 16:48 G 27539019.17 27539019.20 27539019.23 0.0283 0.0279

Neptune 70687-09-11 19:27 G 27539210.10 27539210.31 27539210.53 0.0088 0.0019

Saturn 70687-10-20 07:27 G 27539248.60 27539248.81 27539249.01 0.0283 0.0072

Neptune 70688-04-24 08:24 G 27539435.63 27539435.85 27539436.07 0.0088 0.0013

Saturn 70688-06-05 21:51 G 27539478.23 27539478.41 27539478.59 0.0283 0.0138

Neptune 70688-12-05 21:22 G 27539661.17 27539661.39 27539661.61 0.0088 0.0007

Neptune 70689-07-19 10:05 G 27539886.70 27539886.92 27539887.15 0.0088 0.0002

Neptune 70690-03-01 23:03 G 27540112.24 27540112.46 27540112.68 0.0088 0.0005

Jupiter 70690-03-12 08:24 G 27540122.65 27540122.85 27540123.05 0.0485 0.0115

Neptune 70690-10-13 11:46 G 27540337.77 27540337.99 27540338.21 0.0088 0.0011

Jupiter 70690-11-02 23:46 G 27540358.33 27540358.49 27540358.66 0.0483 0.0281

Neptune 70691-05-27 00:29 G 27540563.31 27540563.52 27540563.74 0.0088 0.0017

Neptune 70692-01-07 13:12 G 27540788.85 27540789.05 27540789.27 0.0088 0.0023

Neptune 70692-08-20 01:55 G 27541014.38 27541014.58 27541014.80 0.0088 0.0029

Neptune 70693-04-02 14:53 G 27541239.92 27541240.12 27541240.33 0.0088 0.0034

Neptune 70693-11-14 03:36 G 27541465.46 27541465.65 27541465.86 0.0088 0.0040

Neptune 70694-06-27 16:19 G 27541691.00 27541691.18 27541691.38 0.0088 0.0046

Neptune 70695-02-08 04:48 G 27541916.54 27541916.70 27541916.90 0.0088 0.0052

Neptune 70695-09-21 17:46 G 27542142.08 27542142.24 27542142.41 0.0088 0.0057

Jupiter 70696-01-08 10:48 G 27542250.81 27542250.95 27542251.11 0.0541 0.0353

Neptune 70696-05-04 06:15 G 27542367.62 27542367.76 27542367.93 0.0088 0.0063

Jupiter 70696-09-02 22:19 G 27542489.25 27542489.43 27542489.62 0.0545 0.0219

Neptune 70696-12-15 18:58 G 27542593.17 27542593.29 27542593.45 0.0088 0.0069

Neptune 70697-07-29 07:55 G 27542818.72 27542818.83 27542818.95 0.0088 0.0074

Neptune 70698-03-11 20:10 G 27543044.28 27543044.34 27543044.46 0.0088 0.0080

Neptune 70698-10-23 09:22 G 27543269.85 27543269.89 27543269.95 0.0088 0.0085

Jupiter 70701-11-16 12:00 G 27544388.82 27544389.00 27544389.18 0.0486 0.0229

Saturn 70702-04-02 22:48 G 27544526.27 27544526.45 27544526.64 0.0276 0.0134

Jupiter 70702-07-10 04:48 G 27544624.52 27544624.70 27544624.90 0.0484 0.0172

Saturn 70702-11-18 07:55 G 27544755.63 27544755.83 27544756.04 0.0276 0.0060

Saturn 70703-07-05 17:17 G 27544985.14 27544985.22 27544985.31 0.0276 0.0252

Jupiter 70707-09-13 22:34 G 27546516.37 27546516.44 27546516.51 0.0539 0.0501

Jupiter 70708-05-09 07:41 G 27546754.62 27546754.82 27546755.03 0.0544 0.0058

Mars 70709-09-03 19:12 G 27547237.15 27547237.30 27547237.44 0.1629 0.0918

Jupiter 70713-07-22 16:19 G 27548655.04 27548655.18 27548655.33 0.0488 0.0341

Jupiter 70714-03-15 10:48 G 27548890.75 27548890.95 27548891.15 0.0484 0.0061

Jupiter 70714-11-06 01:12 G 27549126.48 27549126.55 27549126.63 0.0484 0.0448

Saturn 70716-09-15 01:12 G 27549805.45 27549805.55 27549805.67 0.0283 0.0243

Saturn 70717-05-02 16:19 G 27550034.97 27550035.18 27550035.39 0.0283 0.0033

Saturn 70717-12-18 06:58 G 27550264.63 27550264.79 27550264.96 0.0284 0.0176

Uranus 70718-06-23 09:22 G 27550451.82 27550451.89 27550452.00 0.0144 0.0130

Uranus 70719-02-04 21:22 G 27550678.22 27550678.39 27550678.57 0.0144 0.0089

Uranus 70719-09-19 09:07 G 27550904.67 27550904.88 27550905.09 0.0144 0.0048

Jupiter 70720-01-12 14:39 G 27551019.91 27551020.11 27551020.31 0.0543 0.0109

Uranus 70720-05-02 20:39 G 27551131.14 27551131.36 27551131.58 0.0144 0.0008

Jupiter 70720-09-07 04:19 G 27551258.58 27551258.68 27551258.79 0.0545 0.0465

Uranus 70720-12-15 08:10 G 27551357.63 27551357.84 27551358.06 0.0143 0.0034

Uranus 70721-07-29 19:41 G 27551584.13 27551584.32 27551584.51 0.0143 0.0074

Uranus 70722-03-13 06:29 G 27551810.66 27551810.77 27551810.92 0.0143 0.0114

Jupiter 70725-03-27 20:53 G 27552921.30 27552921.37 27552921.46 0.0489 0.0449

Jupiter 70725-11-18 17:03 G 27553157.01 27553157.21 27553157.41 0.0485 0.0047

Jupiter 70726-07-12 08:10 G 27553392.70 27553392.84 27553392.98 0.0483 0.0345

Jupiter 70731-09-17 01:27 G 27555285.39 27555285.56 27555285.74 0.0542 0.0265

Saturn 70731-10-14 06:58 G 27555312.60 27555312.79 27555313.00 0.0275 0.0099

Jupiter 70732-05-12 14:10 G 27555523.93 27555524.09 27555524.26 0.0545 0.0310

Saturn 70732-05-30 16:05 G 27555541.97 27555542.17 27555542.37 0.0275 0.0094

Jupiter 70737-07-24 22:05 G 27557423.22 27557423.42 27557423.61 0.0486 0.0158

Jupiter 70738-03-17 13:41 G 27557658.90 27557659.07 27557659.25 0.0483 0.0239

Mars 70741-09-02 13:27 G 27558923.95 27558924.06 27558924.17 0.1634 0.1244

Moon 70743-02-08 05:31 G 27559447.57 27559447.73 27559447.88 0.2634 0.0176

Earth 70743-02-08 09:36 G 27559447.75 27559447.90 27559448.06 0.2631 0.0525 *

Jupiter 70743-05-22 14:24 G 27559550.98 27559551.10 27559551.23 0.0541 0.0414

Jupiter 70744-01-16 01:27 G 27559789.37 27559789.56 27559789.76 0.0545 0.0152

Mars 70744-06-10 17:03 G 27559936.13 27559936.21 27559936.30 0.1890 0.1649

Saturn 70746-03-28 03:36 G 27560591.52 27560591.65 27560591.78 0.0283 0.0220

Saturn 70746-11-12 18:15 G 27560821.05 27560821.26 27560821.47 0.0283 0.0011

Saturn 70747-06-30 08:39 G 27561050.71 27561050.86 27561051.01 0.0283 0.0198

Jupiter 70749-03-30 02:53 G 27561689.45 27561689.62 27561689.79 0.0487 0.0268

Jupiter 70749-11-20 19:55 G 27561925.14 27561925.33 27561925.53 0.0484 0.0132

Earth 70751-02-06 02:24 G 27562367.55 27562367.60 27562367.65 0.2630 0.2491

Moon 70751-02-06 01:41 G 27562367.56 27562367.57 27562367.58 0.2636 0.2621 *

Jupiter 70755-09-20 12:43 G 27564054.83 27564055.03 27564055.24 0.0544 0.0013

Pluto 70757-11-17 14:39 G 27564843.91 27564844.11 27564844.33 0.0080 0.0020

Pluto 70758-07-01 00:43 G 27565069.37 27565069.53 27565069.73 0.0079 0.0048

Saturn 70760-09-07 23:03 G 27565869.43 27565869.46 27565869.52 0.0276 0.0269

Jupiter 70760-12-03 05:46 G 27565955.62 27565955.74 27565955.87 0.0488 0.0381

Uranus 70761-03-24 23:46 G 27566067.40 27566067.49 27566067.59 0.0134 0.0120

Saturn 70761-04-25 08:10 G 27566098.64 27566098.84 27566099.05 0.0276 0.0077

Jupiter 70761-07-27 00:43 G 27566191.32 27566191.53 27566191.73 0.0485 0.0020

Uranus 70761-11-06 05:03 G 27566293.56 27566293.71 27566293.89 0.0134 0.0088

Saturn 70761-12-10 17:17 G 27566328.03 27566328.22 27566328.41 0.0276 0.0115

Jupiter 70762-03-19 15:22 G 27566427.04 27566427.14 27566427.25 0.0484 0.0408

Uranus 70762-06-20 10:48 G 27566519.76 27566519.95 27566520.16 0.0135 0.0055

Neptune 70763-01-12 05:17 G 27566725.67 27566725.72 27566725.81 0.0090 0.0085

Uranus 70763-02-01 16:34 G 27566745.98 27566746.19 27566746.41 0.0135 0.0022

Neptune 70763-08-25 18:29 G 27566951.19 27566951.27 27566951.39 0.0090 0.0079

Uranus 70763-09-15 22:19 G 27566972.22 27566972.43 27566972.65 0.0135 0.0013

Neptune 70764-04-07 07:55 G 27567176.72 27567176.83 27567176.97 0.0090 0.0073

Uranus 70764-04-29 04:19 G 27567198.48 27567198.68 27567198.89 0.0135 0.0046

Neptune 70764-11-18 21:07 G 27567402.25 27567402.38 27567402.54 0.0090 0.0067

Uranus 70764-12-11 10:19 G 27567424.76 27567424.93 27567425.11 0.0135 0.0079

Neptune 70765-07-02 10:19 G 27567627.78 27567627.93 27567628.10 0.0090 0.0061

Uranus 70765-07-25 16:34 G 27567651.07 27567651.19 27567651.31 0.0135 0.0112

Neptune 70766-02-12 23:31 G 27567853.32 27567853.48 27567853.67 0.0090 0.0055

Neptune 70766-09-26 12:43 G 27568078.86 27568079.03 27568079.23 0.0090 0.0049

Neptune 70767-05-10 02:10 G 27568304.41 27568304.59 27568304.79 0.0090 0.0043

Jupiter 70767-05-25 23:17 G 27568320.28 27568320.47 27568320.66 0.0543 0.0166

Neptune 70767-12-21 15:22 G 27568529.95 27568530.14 27568530.35 0.0090 0.0037

Jupiter 70768-01-19 12:29 G 27568558.88 27568559.02 27568559.15 0.0545 0.0408

Neptune 70768-08-03 04:34 G 27568755.50 27568755.69 27568755.91 0.0090 0.0031

Neptune 70769-03-16 18:00 G 27568981.04 27568981.25 27568981.46 0.0090 0.0024

Neptune 70769-10-28 07:12 G 27569206.59 27569206.80 27569207.02 0.0090 0.0018

Neptune 70770-06-10 20:24 G 27569432.14 27569432.35 27569432.58 0.0090 0.0012

Neptune 70771-01-22 09:51 G 27569657.69 27569657.91 27569658.13 0.0090 0.0006

Neptune 70771-09-04 23:03 G 27569883.24 27569883.46 27569883.68 0.0090 0.0002

Neptune 70772-04-17 12:15 G 27570108.79 27570109.01 27570109.23 0.0090 0.0007

Neptune 70772-11-29 01:27 G 27570334.35 27570334.56 27570334.78 0.0090 0.0013

Jupiter 70773-04-01 06:15 G 27570457.56 27570457.76 27570457.96 0.0485 0.0091

Neptune 70773-07-12 14:24 G 27570559.90 27570560.10 27570560.33 0.0090 0.0020

Jupiter 70773-11-22 21:51 G 27570693.26 27570693.41 27570693.57 0.0484 0.0304

Neptune 70774-02-23 03:36 G 27570785.45 27570785.65 27570785.87 0.0090 0.0026

Neptune 70774-10-06 16:48 G 27571011.01 27571011.20 27571011.42 0.0090 0.0032

Neptune 70775-05-20 06:15 G 27571236.57 27571236.76 27571236.97 0.0090 0.0038

Mars 70775-07-02 07:12 G 27571279.68 27571279.80 27571279.92 0.1628 0.1147

Saturn 70775-10-08 10:19 G 27571377.78 27571377.93 27571378.10 0.0283 0.0186

Neptune 70775-12-31 19:27 G 27571462.13 27571462.31 27571462.51 0.0090 0.0044

Saturn 70776-05-25 01:27 G 27571607.35 27571607.56 27571607.78 0.0284 0.0025

Neptune 70776-08-13 08:53 G 27571687.69 27571687.87 27571688.05 0.0090 0.0050

Saturn 70777-01-09 16:19 G 27571837.07 27571837.18 27571837.31 0.0284 0.0234

Neptune 70777-03-26 22:05 G 27571913.25 27571913.42 27571913.59 0.0090 0.0056

Neptune 70777-11-07 11:03 G 27572138.82 27572138.96 27572139.13 0.0090 0.0063

Neptune 70778-06-21 00:15 G 27572364.40 27572364.51 27572364.68 0.0090 0.0069

Jupiter 70779-01-28 06:58 G 27572585.63 27572585.79 27572585.95 0.0541 0.0325

Neptune 70779-02-01 13:41 G 27572589.97 27572590.07 27572590.21 0.0090 0.0075

Neptune 70779-09-15 02:53 G 27572815.55 27572815.62 27572815.74 0.0090 0.0081

Jupiter 70779-09-23 18:15 G 27572824.08 27572824.26 27572824.44 0.0545 0.0244

Neptune 70780-04-27 16:48 G 27573041.15 27573041.20 27573041.26 0.0090 0.0086

Jupiter 70784-12-05 12:00 G 27574723.81 27574724.00 27574724.19 0.0486 0.0199

Jupiter 70785-07-29 04:34 G 27574959.51 27574959.69 27574959.88 0.0484 0.0199

Saturn 70790-03-21 07:55 G 27576655.72 27576655.83 27576655.94 0.0275 0.0233

Jupiter 70790-10-02 18:29 G 27576851.19 27576851.27 27576851.38 0.0539 0.0474

Saturn 70790-11-05 16:34 G 27576884.98 27576885.19 27576885.40 0.0275 0.0042

Jupiter 70791-05-29 04:19 G 27577089.48 27577089.68 27577089.88 0.0544 0.0085

Saturn 70791-06-23 01:27 G 27577114.39 27577114.56 27577114.74 0.0275 0.0150

Jupiter 70796-08-10 16:19 G 27578990.03 27578990.18 27578990.34 0.0487 0.0309

Jupiter 70797-04-03 10:19 G 27579225.72 27579225.93 27579226.13 0.0484 0.0090

Jupiter 70797-11-25 00:15 G 27579461.47 27579461.51 27579461.55 0.0483 0.0472

Uranus 70802-10-05 04:19 G 27581236.54 27581236.68 27581236.82 0.0144 0.0107

Jupiter 70803-01-31 16:05 G 27581354.97 27581355.17 27581355.37 0.0544 0.0073

Uranus 70803-05-19 15:51 G 27581462.98 27581463.16 27581463.36 0.0144 0.0067

Jupiter 70803-09-27 06:29 G 27581593.70 27581593.77 27581593.86 0.0545 0.0499

Uranus 70804-01-01 03:51 G 27581689.44 27581689.66 27581689.88 0.0144 0.0025

Uranus 70804-08-14 15:22 G 27581915.92 27581916.14 27581916.36 0.0143 0.0015

Uranus 70805-03-29 02:39 G 27582142.42 27582142.61 27582142.82 0.0143 0.0056

Saturn 70805-04-19 12:43 G 27582163.87 27582164.03 27582164.22 0.0283 0.0163

Uranus 70805-11-10 14:10 G 27582368.94 27582369.09 27582369.26 0.0143 0.0096

Saturn 70805-12-05 03:36 G 27582393.45 27582393.65 27582393.86 0.0284 0.0048

Uranus 70806-06-25 01:12 G 27582595.50 27582595.55 27582595.63 0.0143 0.0136

Saturn 70806-07-22 18:00 G 27582623.17 27582623.25 27582623.35 0.0284 0.0256

Mars 70807-07-01 01:27 G 27582966.42 27582966.56 27582966.70 0.1632 0.1008

Jupiter 70808-04-15 20:24 G 27583256.26 27583256.35 27583256.46 0.0489 0.0419

Jupiter 70808-12-07 16:05 G 27583491.97 27583492.17 27583492.38 0.0485 0.0019

Jupiter 70809-07-31 06:43 G 27583727.66 27583727.78 27583727.92 0.0483 0.0371

Mars 70810-04-07 19:55 G 27583978.17 27583978.33 27583978.48 0.1893 0.0863

Jupiter 70814-10-06 04:34 G 27585620.51 27585620.69 27585620.87 0.0542 0.0227

Jupiter 70815-06-01 17:31 G 27585859.07 27585859.23 27585859.39 0.0545 0.0345

Saturn 70819-10-01 07:55 G 27587441.70 27587441.83 27587441.97 0.0276 0.0214

Saturn 70820-05-17 16:48 G 27587670.99 27587671.20 27587671.41 0.0275 0.0022

Jupiter 70820-08-12 20:10 G 27587758.15 27587758.34 27587758.54 0.0486 0.0132

Saturn 70821-01-02 01:41 G 27587900.40 27587900.57 27587900.74 0.0275 0.0170

Jupiter 70821-04-05 12:15 G 27587993.84 27587994.01 27587994.18 0.0484 0.0263

Jupiter 70826-06-10 16:19 G 27589886.04 27589886.18 27589886.32 0.0540 0.0378

Jupiter 70827-02-04 03:07 G 27590124.44 27590124.63 27590124.82 0.0544 0.0187

Jupiter 70832-04-18 01:12 G 27592024.38 27592024.55 27592024.73 0.0487 0.0242

Jupiter 70832-12-09 18:43 G 27592260.09 27592260.28 27592260.48 0.0484 0.0157

Saturn 70834-10-30 18:29 G 27592950.09 27592950.27 27592950.46 0.0283 0.0130

Saturn 70835-06-17 09:22 G 27593179.69 27593179.89 27593180.10 0.0284 0.0080

Jupiter 70838-02-13 01:12 G 27594151.52 27594151.55 27594151.59 0.0538 0.0527

Jupiter 70838-10-09 09:22 G 27594389.69 27594389.89 27594390.10 0.0544 0.0023

Mars 70841-04-28 19:12 G 27595322.21 27595322.30 27595322.39 0.1627 0.1374

Jupiter 70843-12-23 06:15 G 27596290.62 27596290.76 27596290.90 0.0488 0.0350

Neptune 70844-07-17 18:43 G 27596498.28 27596498.28 27596498.28 0.0088 0.0088

Jupiter 70844-08-15 01:12 G 27596526.34 27596526.55 27596526.75 0.0485 0.0050

Uranus 70844-11-22 11:31 G 27596625.95 27596625.98 27596626.01 0.0134 0.0133

Neptune 70845-02-28 07:27 G 27596723.74 27596723.81 27596723.89 0.0088 0.0082

Jupiter 70845-04-07 15:51 G 27596762.07 27596762.16 27596762.25 0.0483 0.0434

Uranus 70845-07-06 16:48 G 27596852.07 27596852.20 27596852.35 0.0134 0.0100

Neptune 70845-10-11 19:55 G 27596949.25 27596949.33 27596949.46 0.0088 0.0077

Uranus 70846-02-17 22:19 G 27597078.25 27597078.43 27597078.63 0.0134 0.0068

Neptune 70846-05-25 09:07 G 27597174.76 27597174.88 27597175.02 0.0088 0.0071

Uranus 70846-10-02 04:05 G 27597304.47 27597304.67 27597304.89 0.0135 0.0035

Neptune 70847-01-05 22:05 G 27597400.28 27597400.42 27597400.57 0.0088 0.0065

Uranus 70847-05-16 10:05 G 27597530.70 27597530.92 27597531.14 0.0135 0.0002

Neptune 70847-08-19 10:19 G 27597625.79 27597625.93 27597626.12 0.0088 0.0060

Uranus 70847-12-28 16:05 G 27597756.96 27597757.17 27597757.38 0.0135 0.0032

Neptune 70848-03-31 23:17 G 27597851.31 27597851.47 27597851.66 0.0088 0.0054

Uranus 70848-08-10 21:36 G 27597983.22 27597983.40 27597983.60 0.0135 0.0066

Neptune 70848-11-12 12:29 G 27598076.84 27598077.02 27598077.21 0.0088 0.0048

Uranus 70849-03-25 03:36 G 27598209.52 27598209.65 27598209.81 0.0135 0.0099

Saturn 70849-04-12 16:19 G 27598228.02 27598228.18 27598228.35 0.0275 0.0179

Neptune 70849-06-26 00:58 G 27598302.36 27598302.54 27598302.75 0.0088 0.0043

Uranus 70849-11-06 09:51 G 27598435.88 27598435.91 27598435.96 0.0135 0.0133

Saturn 70849-11-28 01:12 G 27598457.33 27598457.55 27598457.76 0.0275 0.0014

Neptune 70850-02-06 13:41 G 27598527.89 27598528.07 27598528.29 0.0088 0.0037

Jupiter 70850-06-13 20:10 G 27598655.14 27598655.34 27598655.53 0.0543 0.0137

Saturn 70850-07-15 09:51 G 27598686.78 27598686.91 27598687.06 0.0275 0.0204

Neptune 70850-09-20 02:39 G 27598753.41 27598753.61 27598753.83 0.0088 0.0031

Jupiter 70851-02-07 09:22 G 27598893.78 27598893.89 27598894.02 0.0545 0.0434

Neptune 70851-05-03 15:36 G 27598978.94 27598979.15 27598979.37 0.0088 0.0025

Neptune 70851-12-15 04:19 G 27599204.47 27599204.68 27599204.90 0.0088 0.0019

Neptune 70852-07-27 17:17 G 27599430.00 27599430.22 27599430.44 0.0088 0.0013

Neptune 70853-03-10 06:00 G 27599655.53 27599655.75 27599655.97 0.0088 0.0007

Neptune 70853-10-21 18:58 G 27599881.07 27599881.29 27599881.51 0.0088 0.0001

Neptune 70854-06-04 07:41 G 27600106.60 27600106.82 27600107.05 0.0088 0.0005

Neptune 70855-01-15 20:24 G 27600332.14 27600332.35 27600332.58 0.0088 0.0011

Jupiter 70855-08-28 09:51 G 27600556.85 27600556.91 27600556.99 0.0490 0.0459

Neptune 70855-08-29 09:07 G 27600557.67 27600557.88 27600558.11 0.0088 0.0017

Neptune 70856-04-10 21:51 G 27600783.21 27600783.41 27600783.64 0.0088 0.0023

Jupiter 70856-04-20 06:29 G 27600792.56 27600792.77 27600792.97 0.0485 0.0060

Neptune 70856-11-22 10:48 G 27601008.75 27601008.95 27601009.17 0.0088 0.0029

Jupiter 70856-12-11 21:51 G 27601028.26 27601028.41 27601028.56 0.0483 0.0330

Neptune 70857-07-05 23:46 G 27601234.29 27601234.49 27601234.70 0.0088 0.0034

Neptune 70858-02-16 12:29 G 27601459.83 27601460.02 27601460.22 0.0088 0.0040

Neptune 70858-09-30 01:12 G 27601685.37 27601685.55 27601685.75 0.0088 0.0046

Neptune 70859-05-13 13:41 G 27601910.91 27601911.07 27601911.27 0.0088 0.0052

Neptune 70859-12-25 02:24 G 27602136.46 27602136.60 27602136.79 0.0088 0.0058

Neptune 70860-08-06 15:22 G 27602362.00 27602362.14 27602362.30 0.0088 0.0063

Neptune 70861-03-20 03:51 G 27602587.55 27602587.66 27602587.82 0.0088 0.0069

Neptune 70861-10-31 16:34 G 27602813.10 27602813.19 27602813.33 0.0088 0.0075

Jupiter 70862-02-16 08:10 G 27602920.68 27602920.84 27602921.02 0.0542 0.0290

Neptune 70862-06-14 05:31 G 27603038.66 27603038.73 27603038.83 0.0088 0.0080

Jupiter 70862-10-12 20:39 G 27603159.18 27603159.36 27603159.53 0.0545 0.0280

Neptune 70863-01-25 18:00 G 27603264.23 27603264.25 27603264.32 0.0088 0.0086

Saturn 70864-05-11 21:07 G 27603736.18 27603736.38 27603736.57 0.0284 0.0107

Earth 70864-08-08 13:41 G 27603824.93 27603825.07 27603825.21 0.2702 0.1266

Moon 70864-08-08 17:17 G 27603825.09 27603825.22 27603825.34 0.2708 0.1525 *

Saturn 70864-12-27 12:00 G 27603965.80 27603966.00 27603966.19 0.0284 0.0103

Jupiter 70867-12-25 11:46 G 27605058.80 27605058.99 27605059.19 0.0486 0.0169

Jupiter 70868-08-17 04:05 G 27605294.49 27605294.67 27605294.85 0.0483 0.0225

Earth 70872-08-06 02:53 G 27606744.55 27606744.62 27606744.70 0.2702 0.2369

Moon 70872-08-06 08:53 G 27606744.74 27606744.87 27606745.01 0.2704 0.1371

Mars 70873-04-27 13:12 G 27607008.89 27607009.05 27607009.20 0.1631 0.0765

Jupiter 70873-10-21 22:05 G 27607186.30 27607186.42 27607186.54 0.0540 0.0436

Jupiter 70874-06-17 08:10 G 27607424.65 27607424.84 27607425.04 0.0544 0.0124

Mars 70876-02-02 22:48 G 27608020.28 27608020.45 27608020.63 0.1895 0.0091

Saturn 70878-10-23 15:51 G 27609014.00 27609014.16 27609014.35 0.0275 0.0161

Saturn 70879-06-10 00:58 G 27609243.33 27609243.54 27609243.75 0.0275 0.0032

Jupiter 70879-08-30 15:22 G 27609324.98 27609325.14 27609325.31 0.0487 0.0281

Saturn 70880-01-25 09:36 G 27609472.78 27609472.90 27609473.03 0.0275 0.0223

Jupiter 70880-04-22 09:07 G 27609560.69 27609560.88 27609561.08 0.0484 0.0117

Jupiter 70886-02-19 18:43 G 27611690.08 27611690.28 27611690.48 0.0543 0.0035

Uranus 70886-06-04 11:46 G 27611794.90 27611794.99 27611795.12 0.0144 0.0125

Jupiter 70886-10-16 08:53 G 27611928.83 27611928.87 27611928.91 0.0545 0.0531

Uranus 70887-01-16 23:46 G 27612021.33 27612021.49 27612021.68 0.0144 0.0084

Uranus 70887-08-31 11:46 G 27612247.78 27612247.99 27612248.20 0.0144 0.0043

Uranus 70888-04-13 23:31 G 27612474.26 27612474.48 27612474.70 0.0144 0.0002

Uranus 70888-11-26 11:17 G 27612700.76 27612700.97 27612701.18 0.0143 0.0039

Uranus 70889-07-10 22:19 G 27612927.26 27612927.43 27612927.63 0.0143 0.0080

Uranus 70890-02-22 09:36 G 27613153.80 27613153.90 27613154.04 0.0143 0.0120

Jupiter 70891-05-05 19:41 G 27613591.20 27613591.32 27613591.44 0.0489 0.0391

Jupiter 70891-12-27 15:22 G 27613826.94 27613827.14 27613827.35 0.0485 0.0008

Jupiter 70892-08-19 06:15 G 27614062.65 27614062.76 27614062.89 0.0483 0.0395

Saturn 70893-11-22 01:27 G 27614522.36 27614522.56 27614522.76 0.0284 0.0077

Saturn 70894-07-09 16:19 G 27614752.00 27614752.18 27614752.37 0.0284 0.0133

Jupiter 70897-10-25 02:10 G 27615955.40 27615955.59 27615955.78 0.0542 0.0196

Jupiter 70898-06-20 14:39 G 27616193.97 27616194.11 27616194.26 0.0545 0.0372

Jupiter 70903-09-02 21:07 G 27618093.18 27618093.38 27618093.58 0.0486 0.0100

Jupiter 70904-04-25 12:58 G 27618328.89 27618329.04 27618329.21 0.0484 0.0293

Mars 70907-02-25 07:41 G 27619364.79 27619364.82 27619364.84 0.1626 0.1598

Saturn 70908-05-06 00:15 G 27619800.32 27619800.51 27619800.70 0.0275 0.0126

Saturn 70908-12-21 08:53 G 27620029.67 27620029.87 27620030.08 0.0275 0.0066

Jupiter 70909-06-30 13:27 G 27620220.91 27620221.06 27620221.22 0.0540 0.0348

Saturn 70909-08-07 17:46 G 27620259.17 27620259.24 27620259.32 0.0275 0.0256

Jupiter 70910-02-24 00:15 G 27620459.33 27620459.51 27620459.70 0.0545 0.0215

Pluto 70915-01-22 21:07 G 27622253.37 27622253.38 27622253.44 0.0064 0.0064

Jupiter 70915-05-09 01:55 G 27622359.40 27622359.58 27622359.77 0.0487 0.0210

Pluto 70915-09-05 01:41 G 27622478.38 27622478.57 27622478.78 0.0065 0.0028

Jupiter 70915-12-30 18:58 G 27622595.11 27622595.29 27622595.49 0.0484 0.0186

Pluto 70916-04-17 06:00 G 27622703.53 27622703.75 27622703.97 0.0065 0.0008

Pluto 70916-11-28 09:51 G 27622928.77 27622928.91 27622929.10 0.0065 0.0044

Jupiter 70921-03-05 02:24 G 27624486.53 27624486.60 27624486.69 0.0539 0.0493

Jupiter 70921-10-29 11:31 G 27624724.78 27624724.98 27624725.18 0.0544 0.0058

Saturn 70922-10-18 13:41 G 27625078.99 27625079.07 27625079.15 0.0283 0.0261

Saturn 70923-06-05 04:34 G 27625308.48 27625308.69 27625308.90 0.0284 0.0053

Saturn 70924-01-20 19:12 G 27625538.13 27625538.30 27625538.48 0.0284 0.0157

Jupiter 70927-01-12 06:43 G 27626625.63 27626625.78 27626625.94 0.0488 0.0319

Neptune 70927-04-16 13:27 G 27626720.02 27626720.06 27626720.14 0.0090 0.0086

Jupiter 70927-09-05 01:12 G 27626861.34 27626861.55 27626861.75 0.0484 0.0079

Neptune 70927-11-28 02:39 G 27626945.53 27626945.61 27626945.72 0.0090 0.0080

Jupiter 70928-04-27 15:07 G 27627097.08 27627097.13 27627097.20 0.0483 0.0459

Neptune 70928-07-10 15:51 G 27627171.05 27627171.16 27627171.29 0.0090 0.0074

Neptune 70929-02-21 05:03 G 27627396.58 27627396.71 27627396.86 0.0090 0.0068

Uranus 70929-03-07 04:05 G 27627410.57 27627410.67 27627410.80 0.0134 0.0113

Neptune 70929-10-04 18:15 G 27627622.11 27627622.26 27627622.43 0.0090 0.0062

Uranus 70929-10-19 09:51 G 27627636.75 27627636.91 27627637.09 0.0134 0.0081

Neptune 70930-05-18 07:27 G 27627847.65 27627847.81 27627847.99 0.0090 0.0056

Uranus 70930-06-02 15:36 G 27627862.95 27627863.15 27627863.36 0.0134 0.0048

Neptune 70930-12-29 20:39 G 27628073.19 27628073.36 27628073.55 0.0090 0.0050

Uranus 70931-01-14 21:22 G 27628089.18 27628089.39 27628089.61 0.0135 0.0015

Neptune 70931-08-12 09:51 G 27628298.73 27628298.91 27628299.11 0.0090 0.0044

Uranus 70931-08-29 03:07 G 27628315.42 27628315.63 27628315.85 0.0135 0.0019

Neptune 70932-03-24 23:03 G 27628524.28 27628524.46 27628524.68 0.0090 0.0038

Uranus 70932-04-11 09:07 G 27628541.68 27628541.88 27628542.08 0.0135 0.0052

Neptune 70932-11-05 12:29 G 27628749.83 27628750.02 27628750.24 0.0090 0.0032

Uranus 70932-11-23 14:53 G 27628767.97 27628768.12 27628768.30 0.0135 0.0086

Neptune 70933-06-19 01:55 G 27628975.38 27628975.58 27628975.80 0.0090 0.0025

Jupiter 70933-07-04 00:00 G 27628990.30 27628990.50 27628990.70 0.0543 0.0097

Uranus 70933-07-07 21:07 G 27628994.29 27628994.38 27628994.49 0.0135 0.0119

Neptune 70934-01-30 15:07 G 27629200.92 27629201.13 27629201.35 0.0090 0.0019

Jupiter 70934-02-27 13:55 G 27629228.98 27629229.08 27629229.18 0.0545 0.0470

Neptune 70934-09-13 04:19 G 27629426.47 27629426.68 27629426.90 0.0090 0.0013

Neptune 70935-04-26 17:46 G 27629652.03 27629652.24 27629652.46 0.0090 0.0007

Neptune 70935-12-08 07:12 G 27629877.58 27629877.80 27629878.02 0.0090 0.0001

Neptune 70936-07-20 20:10 G 27630103.13 27630103.34 27630103.57 0.0090 0.0007

Neptune 70937-03-03 09:22 G 27630328.68 27630328.89 27630329.11 0.0090 0.0013

Neptune 70937-10-14 22:34 G 27630554.23 27630554.44 27630554.66 0.0090 0.0019

Saturn 70937-11-15 23:46 G 27630586.30 27630586.49 27630586.69 0.0275 0.0107

Neptune 70938-05-28 12:00 G 27630779.79 27630780.00 27630780.21 0.0090 0.0025

Saturn 70938-07-03 08:24 G 27630815.65 27630815.85 27630816.06 0.0275 0.0084

Jupiter 70938-09-17 09:36 G 27630891.81 27630891.90 27630892.00 0.0489 0.0430

Neptune 70939-01-09 00:58 G 27631005.35 27631005.54 27631005.76 0.0090 0.0032

Saturn 70939-02-17 17:03 G 27631045.21 27631045.21 27631045.24 0.0275 0.0274

Mars 70939-02-24 01:27 G 27631051.40 27631051.56 27631051.73 0.1629 0.0545

Jupiter 70939-05-11 05:46 G 27631127.54 27631127.74 27631127.95 0.0485 0.0034

Neptune 70939-08-22 14:10 G 27631230.91 27631231.09 27631231.30 0.0090 0.0038

Jupiter 70940-01-01 21:22 G 27631363.25 27631363.39 27631363.52 0.0483 0.0356

Neptune 70940-04-04 03:36 G 27631456.47 27631456.65 27631456.85 0.0090 0.0044

Neptune 70940-11-15 16:48 G 27631682.03 27631682.20 27631682.39 0.0090 0.0050

Neptune 70941-06-29 06:15 G 27631907.59 27631907.76 27631907.93 0.0090 0.0056

Mars 70941-12-01 01:55 G 27632062.42 27632062.58 27632062.75 0.1897 0.0671

Neptune 70942-02-09 19:27 G 27632133.16 27632133.31 27632133.47 0.0090 0.0062

Neptune 70942-09-23 08:10 G 27632358.73 27632358.84 27632359.01 0.0090 0.0069

Neptune 70943-05-06 21:36 G 27632584.31 27632584.40 27632584.55 0.0090 0.0075

Neptune 70943-12-18 11:03 G 27632809.89 27632809.96 27632810.08 0.0090 0.0081

Neptune 70944-07-31 00:15 G 27633035.48 27633035.51 27633035.59 0.0090 0.0087

Jupiter 70945-03-08 11:46 G 27633255.81 27633255.99 27633256.17 0.0542 0.0250

Jupiter 70945-11-01 23:46 G 27633494.32 27633494.49 27633494.65 0.0545 0.0316

Jupiter 70951-01-14 11:17 G 27635393.78 27635393.97 27635394.17 0.0486 0.0141

Jupiter 70951-09-07 03:51 G 27635629.49 27635629.66 27635629.84 0.0484 0.0252

Saturn 70952-04-29 16:05 G 27635865.07 27635865.17 27635865.30 0.0283 0.0236

Saturn 70952-12-15 07:27 G 27636094.60 27636094.81 27636095.03 0.0284 0.0027

Saturn 70953-08-01 22:19 G 27636324.28 27636324.43 27636324.60 0.0284 0.0184

Jupiter 70956-11-10 20:53 G 27637521.23 27637521.37 27637521.50 0.0539 0.0403

Jupiter 70957-07-07 06:15 G 27637759.57 27637759.76 27637759.96 0.0544 0.0153

Jupiter 70962-09-19 16:19 G 27639660.00 27639660.18 27639660.36 0.0488 0.0250

Jupiter 70963-05-13 10:19 G 27639895.74 27639895.93 27639896.13 0.0484 0.0147

Saturn 70966-10-11 23:17 G 27641143.42 27641143.47 27641143.54 0.0275 0.0264

Saturn 70967-05-29 08:10 G 27641372.63 27641372.84 27641373.04 0.0275 0.0073

Saturn 70968-01-13 16:48 G 27641602.01 27641602.20 27641602.39 0.0275 0.0118

Jupiter 70969-03-11 16:05 G 27642024.97 27642025.17 27642025.38 0.0543 0.0010

Uranus 70970-02-02 19:12 G 27642353.28 27642353.30 27642353.34 0.0144 0.0143

Uranus 70970-09-17 06:58 G 27642579.65 27642579.79 27642579.96 0.0144 0.0102

Uranus 70971-05-01 18:58 G 27642806.10 27642806.29 27642806.50 0.0144 0.0061

Uranus 70971-12-14 06:58 G 27643032.58 27643032.79 27643033.01 0.0144 0.0020

Uranus 70972-07-27 18:43 G 27643259.07 27643259.28 27643259.50 0.0144 0.0022

Uranus 70973-03-11 06:15 G 27643485.57 27643485.76 27643485.96 0.0143 0.0062

Uranus 70973-10-23 17:46 G 27643712.10 27643712.24 27643712.40 0.0143 0.0102

Jupiter 70974-05-25 20:39 G 27643926.22 27643926.36 27643926.50 0.0489 0.0359

Uranus 70974-06-07 05:03 G 27643938.70 27643938.71 27643938.74 0.0143 0.0142

Jupiter 70975-01-16 15:51 G 27644161.96 27644162.16 27644162.37 0.0485 0.0039

Jupiter 70975-09-09 06:29 G 27644397.68 27644397.77 27644397.87 0.0483 0.0421

Jupiter 70980-11-14 03:51 G 27646290.47 27646290.66 27646290.85 0.0542 0.0160

Jupiter	**70981-07-10 17:03**	**G**	**27646529.08**	**27646529.21**	**27646529.35**	**0.0545**	**0.0407**	
Saturn	**70981-11-09 20:24**	**G**	**27646651.22**	**27646651.35**	**27646651.50**	**0.0283**	**0.0209**	
Saturn	**70982-06-27 11:31**	**G**	**27646880.76**	**27646880.98**	**27646881.19**	**0.0284**	**0.0006**	
Saturn	**70983-02-12 02:10**	**G**	**27647110.45**	**27647110.59**	**27647110.73**	**0.0284**	**0.0209**	
Jupiter	**70986-01-29 00:29**	**G**	**27648192.47**	**27648192.52**	**27648192.58**	**0.0490**	**0.0467**	
Earth	**70986-02-09 12:29**	**G**	**27648203.87**	**27648204.02**	**27648204.17**	**0.2630**	**0.0777**	
Moon	**70986-02-09 17:46**	**G**	**27648204.11**	**27648204.24**	**27648204.37**	**0.2630**	**0.1558**	*
Jupiter	**70986-09-21 21:36**	**G**	**27648428.19**	**27648428.40**	**27648428.60**	**0.0485**	**0.0070**	
Jupiter	**70987-05-15 13:12**	**G**	**27648663.89**	**27648664.05**	**27648664.20**	**0.0483**	**0.0319**	
Jupiter	**70992-07-19 17:03**	**G**	**27650556.05**	**27650556.21**	**27650556.38**	**0.0541**	**0.0310**	
Jupiter	**70993-03-15 04:34**	**G**	**27650794.51**	**27650794.69**	**27650794.87**	**0.0545**	**0.0254**	
Earth	**70994-02-07 05:17**	**G**	**27651123.63**	**27651123.72**	**27651123.80**	**0.2630**	**0.2237**	
Moon	**70994-02-07 08:39**	**G**	**27651123.76**	**27651123.86**	**27651123.95**	**0.2625**	**0.2150**	*
Saturn	**70996-04-22 22:34**	**G**	**27651929.36**	**27651929.44**	**27651929.55**	**0.0275**	**0.0245**	
Saturn	**70996-12-08 07:27**	**G**	**27652158.60**	**27652158.81**	**27652159.02**	**0.0275**	**0.0055**	
Saturn	**70997-07-25 16:05**	**G**	**27652387.99**	**27652388.17**	**27652388.36**	**0.0275**	**0.0136**	
Jupiter	**70998-05-28 01:55**	**G**	**27652694.39**	**27652694.58**	**27652694.77**	**0.0487**	**0.0181**	
Jupiter	**70999-01-18 18:43**	**G**	**27652930.10**	**27652930.28**	**27652930.46**	**0.0484**	**0.0213**	

72ND MILLENNIUM CE

This is a list of transits of Venus in the 72nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Pluto	**71003-12-18 10:34**	**G**	**27654723.86**	**27654723.94**	**27654724.06**	**0.0080**	**0.0071**	

Jupiter 71004-03-25 06:15 G 27654821.66 27654821.76 27654821.87 0.0539 0.0454

Pluto 71004-07-30 21:22 G 27654949.17 27654949.39 27654949.61 0.0079 0.0003

Jupiter 71004-11-18 15:07 G 27655059.94 27655060.13 27655060.33 0.0544 0.0098

Mars 71004-12-22 13:27 G 27655093.89 27655094.06 27655094.23 0.1628 0.0309

Pluto 71005-03-13 07:12 G 27655174.68 27655174.80 27655174.95 0.0079 0.0063

Mars 71007-09-29 04:34 G 27656104.59 27656104.69 27656104.80 0.1899 0.1464

Neptune 71009-06-03 16:05 G 27656718.12 27656718.17 27656718.25 0.0088 0.0083

Neptune 71010-01-15 04:48 G 27656943.62 27656943.70 27656943.82 0.0088 0.0078

Jupiter 71010-02-01 06:29 G 27656960.61 27656960.77 27656960.93 0.0488 0.0290

Neptune 71010-08-28 17:46 G 27657169.13 27657169.24 27657169.38 0.0088 0.0072

Jupiter 71010-09-25 00:58 G 27657196.34 27657196.54 27657196.74 0.0484 0.0107

Neptune 71011-04-11 06:43 G 27657394.65 27657394.78 27657394.94 0.0088 0.0066

Saturn 71011-05-23 22:19 G 27657437.28 27657437.43 27657437.60 0.0283 0.0185

Neptune 71011-11-22 19:55 G 27657620.17 27657620.33 27657620.49 0.0088 0.0060

Saturn 71012-01-08 13:41 G 27657666.86 27657667.07 27657667.28 0.0284 0.0025

Neptune 71012-07-05 08:24 G 27657845.69 27657845.85 27657846.04 0.0088 0.0055

Saturn 71012-08-25 04:34 G 27657896.58 27657896.69 27657896.81 0.0284 0.0234

Uranus 71012-11-05 16:05 G 27657969.11 27657969.17 27657969.26 0.0134 0.0126

Neptune 71013-02-15 21:07 G 27658071.22 27658071.38 27658071.58 0.0088 0.0049

Uranus 71013-06-19 21:36 G 27658195.26 27658195.40 27658195.57 0.0134 0.0093

Neptune 71013-09-29 10:05 G 27658296.74 27658296.92 27658297.13 0.0088 0.0043

Uranus 71014-02-01 03:22 G 27658421.45 27658421.64 27658421.84 0.0134 0.0060

Neptune 71014-05-12 23:03 G 27658522.27 27658522.46 27658522.67 0.0088 0.0037

Uranus 71014-09-15 09:07 G 27658647.67 27658647.88 27658648.09 0.0134 0.0027

Neptune 71014-12-24 11:46 G 27658747.79 27658747.99 27658748.21 0.0088 0.0031

Uranus 71015-04-29 14:53 G 27658873.91 27658874.12 27658874.34 0.0135 0.0007

Neptune 71015-08-07 00:43 G 27658973.32 27658973.53 27658973.74 0.0088 0.0025

Uranus 71015-12-11 20:39 G 27659100.16 27659100.36 27659100.58 0.0135 0.0040

Neptune 71016-03-19 13:27 G 27659198.85 27659199.06 27659199.28 0.0088 0.0019

Jupiter 71016-07-23 22:48 G 27659325.25 27659325.45 27659325.65 0.0543 0.0064

Uranus 71016-07-25 02:39 G 27659326.44 27659326.61 27659326.80 0.0135 0.0073

Neptune 71016-10-31 02:10 G 27659424.38 27659424.59 27659424.82 0.0088 0.0014

Uranus 71017-03-08 08:39 G 27659552.74 27659552.86 27659553.00 0.0135 0.0106

Jupiter 71017-03-19 12:00 G 27659563.92 27659564.00 27659564.08 0.0545 0.0497

Neptune 71017-06-13 15:07 G 27659649.91 27659650.13 27659650.35 0.0088 0.0007

Neptune 71018-01-25 03:51 G 27659875.44 27659875.66 27659875.88 0.0088 0.0001

Neptune 71018-09-07 16:34 G 27660100.97 27660101.19 27660101.41 0.0088 0.0005

Neptune 71019-04-21 05:17 G 27660326.50 27660326.72 27660326.94 0.0088 0.0011

Neptune 71019-12-02 18:00 G 27660552.04 27660552.25 27660552.48 0.0088 0.0017

Neptune 71020-07-15 06:43 G 27660777.58 27660777.78 27660778.01 0.0088 0.0023

Neptune 71021-02-25 19:27 G 27661003.11 27661003.31 27661003.53 0.0088 0.0029

Jupiter 71021-10-07 10:05 G 27661226.81 27661226.92 27661227.05 0.0490 0.0399

Neptune 71021-10-09 08:39 G 27661228.65 27661228.86 27661229.06 0.0088 0.0034

Neptune 71022-05-22 21:22 G 27661454.19 27661454.39 27661454.59 0.0088 0.0040

Jupiter 71022-05-31 06:43 G 27661462.58 27661462.78 27661462.99 0.0485 0.0009

Neptune 71023-01-03 09:51 G 27661679.74 27661679.91 27661680.11 0.0088 0.0046

Jupiter 71023-01-21 22:19 G 27661698.31 27661698.43 27661698.56 0.0484 0.0384

Neptune 71023-08-16 22:34 G 27661905.28 27661905.44 27661905.63 0.0088 0.0052

Neptune 71024-03-29 11:17 G 27662130.82 27662130.97 27662131.15 0.0088 0.0058

Neptune 71024-11-10 00:00 G 27662356.37 27662356.50 27662356.67 0.0088 0.0064

Neptune 71025-06-23 12:58 G 27662581.92 27662582.04 27662582.19 0.0088 0.0069

Saturn 71025-11-04 06:43 G 27662715.66 27662715.78 27662715.92 0.0275 0.0213

Neptune 71026-02-04 01:27 G 27662807.47 27662807.56 27662807.69 0.0088 0.0075

Saturn 71026-06-21 15:36 G 27662944.94 27662945.15 27662945.37 0.0275 0.0022

Neptune 71026-09-17 13:55 G 27663033.02 27663033.08 27663033.19 0.0088 0.0081

Saturn 71027-02-06 00:15 G 27663174.35 27663174.51 27663174.68 0.0275 0.0170

Neptune 71027-05-01 02:53 G 27663258.59 27663258.62 27663258.68 0.0088 0.0086

Jupiter 71028-03-28 09:22 G 27663590.71 27663590.89 27663591.08 0.0541 0.0220

Jupiter 71028-11-21 21:07 G 27663829.23 27663829.38 27663829.54 0.0545 0.0344

Jupiter 71034-02-03 11:46 G 27665728.79 27665728.99 27665729.19 0.0486 0.0111

Jupiter 71034-09-27 04:05 G 27665964.51 27665964.67 27665964.84 0.0484 0.0280

Jupiter 71039-12-01 21:36 G 27667856.26 27667856.40 27667856.55 0.0540 0.0369

Jupiter 71040-07-27 07:55 G 27668094.64 27668094.83 27668095.02 0.0545 0.0189

Saturn 71040-12-03 03:22 G 27668223.47 27668223.64 27668223.83 0.0284 0.0157

Saturn 71041-07-20 18:29 G 27668453.06 27668453.27 27668453.47 0.0284 0.0053

Saturn 71042-03-07 08:53 G 27668682.80 27668682.87 27668682.96 0.0284 0.0261

Jupiter 71045-10-09 16:48 G 27669995.02 27669995.20 27669995.39 0.0487 0.0219

Jupiter 71046-06-02 10:19 G 27670230.74 27670230.93 27670231.12 0.0484 0.0175

Jupiter 71051-08-06 12:00 G 27672121.94 27672122.00 27672122.06 0.0538 0.0509

Jupiter 71052-03-31 19:55 G 27672360.13 27672360.33 27672360.53 0.0544 0.0034

Uranus 71054-05-18 15:36 G 27673138.03 27673138.15 27673138.28 0.0144 0.0118

Uranus 71054-12-31 03:36 G 27673364.47 27673364.65 27673364.84 0.0144 0.0077

Saturn 71055-05-17 06:58 G 27673501.64 27673501.79 27673501.94 0.0275 0.0192

Uranus 71055-08-14 15:36 G 27673590.94 27673591.15 27673591.36 0.0144 0.0036

Saturn 71056-01-01 15:36 G 27673730.94 27673731.15 27673731.36 0.0275 0.0002

Uranus 71056-03-28 03:22 G 27673817.42 27673817.64 27673817.86 0.0144 0.0005

Saturn 71056-08-18 00:00 G 27673960.36 27673960.50 27673960.67 0.0275 0.0189

Uranus 71056-11-09 15:07 G 27674043.93 27674044.13 27674044.34 0.0143 0.0046

Jupiter 71057-06-14 20:24 G 27674261.21 27674261.35 27674261.51 0.0489 0.0329

Uranus 71057-06-24 02:24 G 27674270.44 27674270.60 27674270.79 0.0143 0.0087

Jupiter 71058-02-05 15:36 G 27674496.95 27674497.15 27674497.35 0.0485 0.0067

Uranus 71058-02-05 13:55 G 27674496.99 27674497.08 27674497.19 0.0143 0.0126 *

Jupiter 71058-09-29 06:15 G 27674732.68 27674732.76 27674732.84 0.0483 0.0446

Jupiter 71063-12-05 07:41 G 27676625.62 27676625.82 27676626.02 0.0542 0.0120

Jupiter 71064-07-30 20:53 G 27676864.25 27676864.37 27676864.48 0.0545 0.0443

Jupiter 71069-02-18 00:00 G 27678527.42 27678527.50 27678527.60 0.0490 0.0438

Jupiter 71069-10-11 21:22 G 27678763.18 27678763.39 27678763.59 0.0486 0.0042

Jupiter 71070-06-04 12:58 G 27678998.90 27678999.04 27678999.19 0.0484 0.0345

Saturn 71070-06-15 05:03 G 27679009.52 27679009.71 27679009.89 0.0283 0.0133

Mars 71070-10-20 01:41 G 27679136.40 27679136.57 27679136.75 0.1627 0.0094

Saturn 71071-01-30 20:10 G 27679239.14 27679239.34 27679239.54 0.0284 0.0076

Jupiter 71075-08-09 16:48 G 27680891.03 27680891.20 27680891.37 0.0540 0.0275

Jupiter 71076-04-04 03:22 G 27681129.47 27681129.64 27681129.81 0.0544 0.0284

Jupiter 71081-06-17 02:10 G 27683029.39 27683029.59 27683029.78 0.0487 0.0150

Jupiter 71082-02-07 19:27 G 27683265.13 27683265.31 27683265.49 0.0484 0.0242

Saturn 71084-11-26 14:39 G 27684287.94 27684288.11 27684288.29 0.0276 0.0161

Saturn 71085-07-13 23:31 G 27684517.27 27684517.48 27684517.70 0.0275 0.0031

Saturn 71086-02-28 08:24 G 27684746.72 27684746.85 27684746.97 0.0275 0.0221

Jupiter 71087-04-14 04:19 G 27685156.56 27685156.68 27685156.81 0.0538 0.0422

Jupiter 71087-12-08 12:43 G 27685394.84 27685395.03 27685395.23 0.0544 0.0127

Neptune 71091-07-19 21:22 G 27686714.35 27686714.39 27686714.45 0.0090 0.0087

Neptune 71092-03-01 10:34 G 27686939.86 27686939.94 27686940.04 0.0090 0.0081

Neptune 71092-10-12 23:46 G 27687165.38 27687165.49 27687165.61 0.0090 0.0075

Jupiter 71093-02-20 06:29 G 27687295.60 27687295.77 27687295.94 0.0488 0.0260

Neptune 71093-05-26 12:58 G 27687390.91 27687391.04 27687391.18 0.0090 0.0069

Jupiter 71093-10-14 00:58 G 27687531.34 27687531.54 27687531.73 0.0484 0.0135

Neptune 71094-01-07 02:10 G 27687616.44 27687616.59 27687616.75 0.0090 0.0063

Neptune 71094-08-20 15:07 G 27687841.97 27687842.13 27687842.31 0.0090 0.0057

Neptune 71095-04-03 04:19 G 27688067.51 27688067.68 27688067.87 0.0090 0.0051

Neptune 71095-11-14 17:31 G 27688293.05 27688293.23 27688293.43 0.0090 0.0045

Neptune 71096-06-27 06:43 G 27688518.59 27688518.78 27688518.99 0.0090 0.0039

Neptune 71097-02-07 20:10 G 27688744.14 27688744.34 27688744.54 0.0090 0.0032

Uranus 71097-02-17 09:36 G 27688753.77 27688753.90 27688754.04 0.0134 0.0105

Neptune 71097-09-21 09:22 G 27688969.68 27688969.89 27688970.10 0.0090 0.0026

Uranus 71097-10-01 15:07 G 27688979.96 27688980.13 27688980.32 0.0134 0.0073

Neptune 71098-05-04 22:34 G 27689195.24 27689195.44 27689195.66 0.0090 0.0020

Uranus 71098-05-15 21:07 G 27689206.17 27689206.38 27689206.58 0.0134 0.0040

Neptune 71098-12-16 11:46 G 27689420.79 27689420.99 27689421.22 0.0090 0.0014

Uranus 71098-12-28 02:39 G 27689432.40 27689432.61 27689432.83 0.0134 0.0007

Neptune 71099-07-30 01:12 G 27689646.33 27689646.55 27689646.77 0.0090 0.0007

Uranus 71099-08-11 08:24 G 27689658.64 27689658.85 27689659.07 0.0135 0.0026

Jupiter 71099-08-12 23:31 G 27689660.28 27689660.48 27689660.68 0.0543 0.0031

Saturn 71099-12-26 11:31 G 27689795.78 27689795.98 27689796.18 0.0284 0.0102

Neptune 71100-03-12 14:24 G 27689871.89 27689872.10 27689872.32 0.0090 0.0002

Uranus 71100-03-25 14:10 G 27689884.90 27689885.09 27689885.29 0.0135 0.0060

Jupiter 71100-04-08 13:27 G 27689899.02 27689899.06 27689899.11 0.0545 0.0529

Saturn 71100-08-13 02:10 G 27690025.40 27690025.59 27690025.79 0.0284 0.0107

Neptune 71100-10-24 03:36 G 27690097.44 27690097.65 27690097.88 0.0090 0.0006

Uranus 71100-11-06 20:10 G 27690111.19 27690111.34 27690111.50 0.0135 0.0093

Neptune 71101-06-06 17:03 G 27690323.00 27690323.21 27690323.43 0.0090 0.0012

Uranus 71101-06-21 02:24 G 27690337.53 27690337.60 27690337.67 0.0135 0.0126

Neptune 71102-01-18 06:00 G 27690548.55 27690548.75 27690548.98 0.0090 0.0019

Neptune 71102-08-31 19:12 G 27690774.10 27690774.30 27690774.52 0.0090 0.0025

Neptune 71103-04-14 08:39 G 27690999.66 27690999.86 27691000.07 0.0090 0.0031

Neptune 71103-11-25 22:05 G 27691225.22 27691225.42 27691225.62 0.0090 0.0037

Neptune 71104-07-08 11:03 G 27691450.78 27691450.96 27691451.16 0.0090 0.0044

Jupiter 71104-10-27 10:48 G 27691561.82 27691561.95 27691562.09 0.0489 0.0368

Neptune 71105-02-19 00:15 G 27691676.34 27691676.51 27691676.70 0.0090 0.0050

Jupiter 71105-06-20 06:43 G 27691797.58 27691797.78 27691797.99 0.0485 0.0029

Neptune 71105-10-02 13:27 G 27691901.90 27691902.06 27691902.24 0.0090 0.0056

Jupiter 71106-02-10 21:36 G 27692033.30 27692033.40 27692033.52 0.0483 0.0410

Neptune 71106-05-16 02:53 G 27692127.47 27692127.62 27692127.79 0.0090 0.0062

Neptune 71106-12-27 16:05 G 27692353.04 27692353.17 27692353.33 0.0090 0.0068

Neptune 71107-08-10 05:31 G 27692578.61 27692578.73 27692578.86 0.0090 0.0074

Moon 71107-08-12 11:31 G 27692580.82 27692580.98 27692581.14 0.2696 0.0898

Earth 71107-08-12 13:12 G 27692580.91 27692581.05 27692581.20 0.2703 0.1230 *

Neptune 71108-03-22 18:43 G 27692804.19 27692804.28 27692804.38 0.0090 0.0080

Neptune 71108-11-03 07:55 G 27693029.78 27693029.83 27693029.90 0.0090 0.0086

Jupiter 71111-04-18 12:15 G 27693925.82 27693926.01 27693926.20 0.0542 0.0182

Jupiter 71111-12-13 00:43 G 27694164.39 27694164.53 27694164.68 0.0545 0.0380

Saturn 71114-06-09 15:22 G 27695073.97 27695074.14 27695074.33 0.0275 0.0139

Saturn 71115-01-25 00:15 G 27695303.30 27695303.51 27695303.72 0.0275 0.0052

Earth 71115-08-10 02:53 G 27695500.54 27695500.62 27695500.69 0.2703 0.2368

Saturn 71115-09-11 08:53 G 27695532.77 27695532.87 27695532.97 0.0275 0.0241

Jupiter 71116-07-02 13:27 G 27695828.02 27695828.06 27695828.11 0.0491 0.0477

Jupiter 71117-02-23 11:17 G 27696063.77 27696063.97 27696064.18 0.0486 0.0082

Jupiter 71117-10-17 03:22 G 27696299.49 27696299.64 27696299.80 0.0484 0.0306

Jupiter 71122-12-22 01:12 G 27698191.39 27698191.55 27698191.71 0.0540 0.0330

Jupiter 71123-08-17 11:31 G 27698429.80 27698429.98 27698430.16 0.0544 0.0227

Jupiter 71128-10-29 16:19 G 27700329.99 27700330.18 27700330.37 0.0487 0.0190

Jupiter 71129-06-22 09:51 G 27700565.73 27700565.91 27700566.10 0.0484 0.0202

Saturn 71129-07-08 12:29 G 27700581.82 27700582.02 27700582.22 0.0283 0.0080

Saturn 71130-02-23 03:22 G 27700811.46 27700811.64 27700811.83 0.0284 0.0129

Jupiter 71134-08-26 12:15 G 27702456.92 27702457.01 27702457.10 0.0537 0.0475

Jupiter 71135-04-21 19:12 G 27702695.10 27702695.30 27702695.50 0.0543 0.0067

Mars 71136-08-17 14:10 G 27703178.91 27703179.09 27703179.26 0.1625 0.0144

Uranus 71138-01-16 22:34 G 27703696.39 27703696.44 27703696.53 0.0144 0.0136

Uranus 71138-08-31 10:34 G 27703922.79 27703922.94 27703923.12 0.0144 0.0095

Uranus 71139-04-14 22:48 G 27704149.25 27704149.45 27704149.66 0.0144 0.0054

Uranus 71139-11-27 11:03 G 27704375.74 27704375.96 27704376.18 0.0144 0.0013

Jupiter 71140-07-04 19:41 G 27704596.17 27704596.32 27704596.49 0.0489 0.0302

Uranus 71140-07-10 22:34 G 27704602.24 27704602.44 27704602.66 0.0144 0.0029

Uranus 71141-02-22 10:05 G 27704828.74 27704828.92 27704829.13 0.0144 0.0070

Jupiter 71141-02-25 15:22 G 27704831.94 27704832.14 27704832.35 0.0485 0.0096

Uranus 71141-10-06 21:36 G 27705055.27 27705055.40 27705055.55 0.0143 0.0110

Jupiter 71141-10-19 06:29 G 27705067.73 27705067.77 27705067.82 0.0484 0.0472

Saturn 71143-12-20 23:17 G 27705860.28 27705860.47 27705860.67 0.0276 0.0107

Saturn 71144-08-06 08:10 G 27706089.64 27706089.84 27706090.05 0.0275 0.0085

Saturn 71145-03-23 17:03 G 27706319.20 27706319.21 27706319.23 0.0275 0.0274

Jupiter 71146-12-25 05:17 G 27706960.53 27706960.72 27706960.92 0.0542 0.0091

Jupiter 71147-08-20 17:46 G 27707199.14 27707199.24 27707199.35 0.0545 0.0468

Jupiter 71152-03-09 23:17 G 27708862.36 27708862.47 27708862.58 0.0490 0.0410

Jupiter 71152-10-31 20:39 G 27709098.15 27709098.36 27709098.56 0.0486 0.0015

Jupiter 71153-06-24 12:15 G 27709333.89 27709334.01 27709334.15 0.0484 0.0370

Saturn 71158-06-03 05:17 G 27711138.63 27711138.72 27711138.81 0.0283 0.0253

Jupiter 71158-08-29 16:19 G 27711226.00 27711226.18 27711226.36 0.0541 0.0244

Saturn 71159-01-18 20:10 G 27711368.13 27711368.34 27711368.55 0.0284 0.0046

Jupiter 71159-04-25 03:36 G 27711464.49 27711464.65 27711464.81 0.0545 0.0315

Saturn 71159-09-05 10:48 G 27711597.78 27711597.95 27711598.13 0.0284 0.0162

Pluto 71161-10-05 01:55 G 27712358.49 27712358.58 27712358.74 0.0064 0.0054

Pluto 71162-05-18 06:43 G 27712583.58 27712583.78 27712584.01 0.0065 0.0018

Pluto 71162-12-29 11:17 G 27712808.76 27712808.97 27712809.18 0.0065 0.0018

Pluto 71163-08-11 15:36 G 27713034.03 27713034.15 27713034.27 0.0065 0.0055

Jupiter 71164-07-07 01:55 G 27713364.38 27713364.58 27713364.78 0.0487 0.0122

Jupiter 71165-02-27 18:29 G 27713600.11 27713600.27 27713600.45 0.0484 0.0267

Jupiter 71170-05-04 05:46 G 27715491.61 27715491.74 27715491.88 0.0539 0.0389

Jupiter 71170-12-28 15:07 G 27715729.94 27715730.13 27715730.33 0.0544 0.0162

Mars 71171-05-24 09:22 G 27715876.77 27715876.89 27715877.02 0.1897 0.1304

Saturn 71172-11-14 15:51 G 27716417.15 27716417.16 27716417.20 0.0275 0.0274

Saturn 71173-07-02 00:58 G 27716646.34 27716646.54 27716646.74 0.0275 0.0084

Neptune 71173-09-06 00:29 G 27716712.47 27716712.52 27716712.60 0.0088 0.0084

Saturn 71174-02-16 09:22 G 27716875.71 27716875.89 27716876.10 0.0275 0.0107

Neptune 71174-04-19 13:41 G 27716937.97 27716938.07 27716938.17 0.0088 0.0078

Neptune 71174-12-01 02:10 G 27717163.49 27717163.59 27717163.73 0.0088 0.0073

Neptune 71175-07-14 15:07 G 27717389.00 27717389.13 27717389.29 0.0088 0.0067

Neptune 71176-02-25 04:05 G 27717614.52 27717614.67 27717614.84 0.0088 0.0061

Jupiter 71176-03-12 05:46 G 27717630.56 27717630.74 27717630.92 0.0488 0.0232

Neptune 71176-10-07 17:17 G 27717840.05 27717840.22 27717840.40 0.0088 0.0055

Jupiter 71176-11-03 00:00 G 27717866.30 27717866.50 27717866.69 0.0484 0.0162

Neptune 71177-05-21 05:46 G 27718065.58 27718065.74 27718065.94 0.0088 0.0050

Neptune 71178-01-01 18:29 G 27718291.10 27718291.27 27718291.48 0.0088 0.0044

Neptune 71178-08-15 07:27 G 27718516.62 27718516.81 27718517.03 0.0088 0.0038

Neptune 71179-03-28 20:24 G 27718742.15 27718742.35 27718742.57 0.0088 0.0032

Neptune 71179-11-09 09:22 G 27718967.69 27718967.89 27718968.11 0.0088 0.0026

Neptune 71180-06-21 22:05 G 27719193.22 27719193.42 27719193.65 0.0088 0.0020

Uranus 71180-10-18 21:36 G 27719312.31 27719312.40 27719312.52 0.0134 0.0118

Neptune 71181-02-02 11:03 G 27719418.74 27719418.96 27719419.18 0.0088 0.0014

Uranus 71181-06-02 03:22 G 27719538.48 27719538.64 27719538.82 0.0134 0.0085

Neptune 71181-09-15 23:46 G 27719644.27 27719644.49 27719644.71 0.0088 0.0008

Jupiter 71182-01-06 20:10 G 27719757.30 27719757.34 27719757.37 0.0537 0.0526

Uranus 71182-01-14 09:07 G 27719764.68 27719764.88 27719765.08 0.0134 0.0052

Neptune 71182-04-29 12:29 G 27719869.80 27719870.02 27719870.25 0.0088 0.0002

Uranus 71182-08-28 14:39 G 27719990.90 27719991.11 27719991.33 0.0134 0.0020

Jupiter 71182-09-02 02:39 G 27719995.41 27719995.61 27719995.81 0.0543 0.0008

Neptune 71182-12-11 01:27 G 27720095.34 27720095.56 27720095.78 0.0088 0.0004

Uranus 71183-04-11 20:24 G 27720217.14 27720217.35 27720217.57 0.0135 0.0014

Neptune 71183-07-24 13:55 G 27720320.87 27720321.08 27720321.31 0.0088 0.0011

Uranus 71183-11-24 02:10 G 27720443.39 27720443.59 27720443.80 0.0135 0.0047

Neptune 71184-03-06 02:39 G 27720546.40 27720546.61 27720546.84 0.0088 0.0017

Uranus 71184-07-07 08:10 G 27720669.67 27720669.84 27720670.02 0.0135 0.0080

Neptune 71184-10-17 15:22 G 27720771.94 27720772.14 27720772.37 0.0088 0.0023

Uranus 71185-02-18 13:41 G 27720895.97 27720896.07 27720896.20 0.0135 0.0114

Neptune 71185-05-31 04:34 G 27720997.48 27720997.69 27720997.90 0.0088 0.0028

Neptune 71186-01-11 17:17 G 27721223.01 27721223.22 27721223.42 0.0088 0.0034

Neptune 71186-08-25 05:46 G 27721448.55 27721448.74 27721448.95 0.0088 0.0040

Neptune 71187-04-07 18:29 G 27721674.09 27721674.27 27721674.47 0.0088 0.0046

Jupiter 71187-11-16 09:36 G 27721896.76 27721896.90 27721897.05 0.0489 0.0341

Neptune 71187-11-19 07:27 G 27721899.64 27721899.81 27721900.00 0.0088 0.0052

Saturn 71187-12-14 06:15 G 27721924.65 27721924.76 27721924.89 0.0283 0.0231

Neptune 71188-07-01 20:10 G 27722125.19 27722125.34 27722125.52 0.0088 0.0058

Jupiter 71188-07-09 05:46 G 27722132.54 27722132.74 27722132.94 0.0485 0.0055

Saturn 71188-07-30 21:22 G 27722154.18 27722154.39 27722154.60 0.0283 0.0024

Neptune 71189-02-12 08:39 G 27722350.73 27722350.86 27722351.04 0.0088 0.0064

Jupiter 71189-03-01 20:53 G 27722368.29 27722368.37 27722368.46 0.0484 0.0433

Saturn 71189-03-17 12:00 G 27722383.85 27722384.00 27722384.17 0.0284 0.0185

Neptune 71189-09-25 21:51 G 27722576.28 27722576.41 27722576.55 0.0088 0.0069

Neptune 71190-05-09 10:19 G 27722801.83 27722801.93 27722802.06 0.0088 0.0075

Neptune 71190-12-20 23:03 G 27723027.40 27723027.46 27723027.57 0.0088 0.0081

Neptune 71191-08-03 12:15 G 27723252.98 27723253.01 27723253.05 0.0088 0.0086

Jupiter 71194-05-07 12:00 G 27724260.81 27724261.00 27724261.20 0.0541 0.0149

Jupiter 71194-12-31 23:31 G 27724499.35 27724499.48 27724499.62 0.0544 0.0409

Jupiter 71199-07-22 11:31 G 27726162.91 27726162.98 27726163.07 0.0491 0.0452

Jupiter 71200-03-14 10:05 G 27726398.72 27726398.92 27726399.13 0.0486 0.0055

Jupiter 71200-11-05 02:53 G 27726634.47 27726634.62 27726634.77 0.0484 0.0332

Saturn 71202-05-27 23:17 G 27727203.38 27727203.47 27727203.58 0.0276 0.0243

Mars 71202-06-15 02:10 G 27727221.42 27727221.59 27727221.76 0.1624 0.0370

Saturn 71203-01-12 08:24 G 27727432.64 27727432.85 27727433.06 0.0276 0.0052

Saturn 71203-08-29 17:17 G 27727662.04 27727662.22 27727662.41 0.0275 0.0139

Jupiter 71206-01-09 23:03 G 27728526.29 27728526.46 27728526.63 0.0539 0.0300

Jupiter 71206-09-05 08:24 G 27728764.67 27728764.85 27728765.03 0.0544 0.0253

Jupiter 71211-11-18 14:39 G 27730664.92 27730665.11 27730665.31 0.0487 0.0165

Jupiter 71212-07-11 08:24 G 27730900.67 27730900.85 27730901.03 0.0484 0.0226

Saturn 71217-06-25 15:22 G 27732711.00 27732711.14 27732711.30 0.0283 0.0195

Jupiter 71217-09-14 10:19 G 27732791.82 27732791.93 27732792.04 0.0538 0.0446

Saturn 71218-02-10 06:15 G 27732940.55 27732940.76 27732940.97 0.0284 0.0013

Jupiter 71218-05-10 18:15 G 27733030.06 27733030.26 27733030.46 0.0544 0.0096

Saturn 71218-09-27 20:39 G 27733170.24 27733170.36 27733170.50 0.0284 0.0220

Uranus 71222-04-30 18:58 G 27734481.16 27734481.29 27734481.43 0.0144 0.0112

Uranus 71222-12-13 07:12 G 27734707.61 27734707.80 27734707.99 0.0144 0.0071

Jupiter 71223-07-24 19:12 G 27734931.13 27734931.30 27734931.47 0.0489 0.0273

Uranus 71223-07-27 19:12 G 27734934.09 27734934.30 27734934.51 0.0144 0.0030

Uranus 71224-03-10 06:58 G 27735160.58 27735160.79 27735161.01 0.0144 0.0011

Jupiter 71224-03-16 14:10 G 27735166.90 27735167.09 27735167.29 0.0485 0.0121

Uranus 71224-10-22 18:43 G 27735387.08 27735387.28 27735387.49 0.0144 0.0052

Uranus 71225-06-06 06:15 G 27735613.60 27735613.76 27735613.94 0.0143 0.0093

Uranus 71226-01-18 18:00 G 27735840.17 27735840.25 27735840.33 0.0143 0.0133

Moon 71229-02-11 10:19 G 27736959.77 27736959.93 27736960.09 0.2628 0.0454

Earth 71229-02-11 15:36 G 27736960.00 27736960.15 27736960.29 0.2630 0.1071 *

Jupiter 71230-01-13 06:15 G 27737295.55 27737295.76 27737295.96 0.0543 0.0058

Jupiter 71230-09-08 19:27 G 27737534.24 27737534.31 27737534.39 0.0545 0.0499

Saturn 71231-12-08 01:55 G 27737989.46 27737989.58 27737989.72 0.0275 0.0218

Saturn 71232-07-24 11:03 G 27738218.75 27738218.96 27738219.18 0.0275 0.0028

Saturn 71233-03-10 19:41 G 27738448.16 27738448.32 27738448.50 0.0275 0.0163

Jupiter 71235-03-29 22:05 G 27739197.30 27739197.42 27739197.56 0.0490 0.0382

Jupiter 71235-11-20 19:12 G 27739433.09 27739433.30 27739433.50 0.0485 0.0014

Jupiter 71236-07-13 10:34 G 27739668.83 27739668.94 27739669.06 0.0483 0.0394

Moon 71237-02-09 03:36 G 27739879.55 27739879.65 27739879.74 0.2632 0.2040

Earth 71237-02-09 08:24 G 27739879.74 27739879.85 27739879.95 0.2629 0.1943 *

Mars 71237-03-20 11:31 G 27739918.81 27739918.98 27739919.15 0.1899 0.0489

Jupiter 71241-09-17 18:43 G 27741561.09 27741561.28 27741561.46 0.0541 0.0208

Jupiter 71242-05-14 06:00 G 27741799.60 27741799.75 27741799.91 0.0545 0.0351

Jupiter 71246-12-03 01:12 G 27743463.54 27743463.55 27743463.57 0.0492 0.0490

Saturn 71247-01-05 16:34 G 27743497.03 27743497.19 27743497.36 0.0283 0.0173

Jupiter 71247-07-27 00:00 G 27743699.30 27743699.50 27743699.71 0.0487 0.0096

Saturn 71247-08-23 07:41 G 27743726.61 27743726.82 27743727.03 0.0283 0.0035

Jupiter 71248-03-18 17:03 G 27743935.05 27743935.21 27743935.37 0.0484 0.0292

Saturn 71248-04-08 22:05 G 27743956.32 27743956.42 27743956.54 0.0284 0.0242

Pluto 71250-08-29 20:24 G 27744829.18 27744829.35 27744829.55 0.0080 0.0042

Pluto 71251-04-12 06:43 G 27745054.59 27745054.78 27745055.00 0.0079 0.0026

Jupiter 71253-05-23 06:00 G 27745826.60 27745826.75 27745826.90 0.0539 0.0356

Jupiter 71254-01-16 14:24 G 27746064.91 27746065.10 27746065.29 0.0543 0.0192

Neptune 71255-10-22 04:48 G 27746708.69 27746708.70 27746708.75 0.0090 0.0089

Neptune 71256-06-03 18:00 G 27746934.19 27746934.25 27746934.35 0.0090 0.0083

Neptune 71257-01-15 06:58 G 27747159.70 27747159.79 27747159.93 0.0090 0.0077

Neptune 71257-08-28 20:10 G 27747385.23 27747385.34 27747385.49 0.0090 0.0071

Neptune 71258-04-11 09:22 G 27747610.76 27747610.89 27747611.06 0.0090 0.0065

Neptune 71258-11-22 23:03 G 27747836.30 27747836.46 27747836.63 0.0090 0.0058

Jupiter 71259-04-01 03:22 G 27747965.45 27747965.64 27747965.82 0.0488 0.0207

Neptune 71259-07-06 12:00 G 27748061.83 27748062.00 27748062.19 0.0090 0.0052

Jupiter 71259-11-22 22:05 G 27748201.24 27748201.42 27748201.62 0.0485 0.0187

Neptune 71260-02-17 00:58 G 27748287.37 27748287.54 27748287.74 0.0090 0.0046

Neptune 71260-09-29 14:10 G 27748512.91 27748513.09 27748513.30 0.0090 0.0040

Neptune 71261-05-13 03:22 G 27748738.45 27748738.64 27748738.86 0.0090 0.0034

Saturn 71261-06-19 09:22 G 27748775.74 27748775.89 27748776.04 0.0276 0.0187

Neptune 71261-12-24 16:48 G 27748964.00 27748964.20 27748964.42 0.0090 0.0027

Saturn 71262-02-03 18:29 G 27749005.06 27749005.27 27749005.48 0.0276 0.0004

Neptune 71262-08-07 06:00 G 27749189.54 27749189.75 27749189.97 0.0090 0.0021

Saturn 71262-09-21 03:22 G 27749234.50 27749234.64 27749234.79 0.0276 0.0195

Neptune 71263-03-20 19:12 G 27749415.09 27749415.30 27749415.52 0.0090 0.0015

Neptune 71263-11-01 08:39 G 27749640.64 27749640.86 27749641.08 0.0090 0.0008

Neptune 71264-06-13 21:51 G 27749866.20 27749866.41 27749866.63 0.0090 0.0003

Uranus 71264-06-18 10:05 G 27749870.88 27749870.92 27749870.98 0.0134 0.0130

Neptune 71265-01-25 11:17 G 27750091.75 27750091.97 27750092.19 0.0090 0.0005

Jupiter 71265-01-25 17:46 G 27750092.18 27750092.24 27750092.32 0.0536 0.0498 *

Uranus 71265-01-30 15:22 G 27750097.01 27750097.14 27750097.30 0.0134 0.0098

Neptune 71265-09-08 00:29 G 27750317.30 27750317.52 27750317.74 0.0090 0.0011

Uranus 71265-09-13 20:53 G 27750323.20 27750323.37 27750323.57 0.0134 0.0066

Jupiter 71265-09-20 23:46 G 27750330.29 27750330.49 27750330.69 0.0542 0.0035

Neptune 71266-04-21 13:41 G 27750542.86 27750543.07 27750543.29 0.0090 0.0018

Uranus 71266-04-28 02:53 G 27750549.41 27750549.62 27750549.83 0.0134 0.0032

Neptune 71266-12-03 03:07 G 27750768.42 27750768.63 27750768.84 0.0090 0.0024

Uranus 71266-12-10 08:39 G 27750775.64 27750775.86 27750776.07 0.0134 0.0002

Neptune 71267-07-16 16:05 G 27750993.98 27750994.17 27750994.39 0.0090 0.0031

Uranus 71267-07-24 14:10 G 27751001.89 27751002.09 27751002.31 0.0135 0.0034

Neptune 71268-02-27 05:17 G 27751219.53 27751219.72 27751219.93 0.0090 0.0037

Uranus 71268-03-06 19:41 G 27751228.15 27751228.32 27751228.52 0.0135 0.0068

Mars 71268-04-11 14:24 G 27751263.94 27751264.10 27751264.26 0.1623 0.0589

Neptune 71268-10-09 18:43 G 27751445.09 27751445.28 27751445.48 0.0090 0.0043

Uranus 71268-10-19 01:27 G 27751454.43 27751454.56 27751454.72 0.0135 0.0101

Neptune 71269-05-23 08:10 G 27751670.66 27751670.84 27751671.02 0.0090 0.0049

Uranus 71269-06-02 07:27 G 27751680.81 27751680.81 27751680.85 0.0135 0.0134

Neptune 71270-01-03 20:53 G 27751896.22 27751896.37 27751896.56 0.0090 0.0056

Neptune 71270-08-17 10:05 G 27752121.78 27752121.92 27752122.10 0.0090 0.0062

Jupiter 71270-12-05 06:58 G 27752231.64 27752231.79 27752231.95 0.0490 0.0317

Neptune 71271-03-30 23:31 G 27752347.35 27752347.48 27752347.64 0.0090 0.0068

Jupiter 71271-07-29 03:22 G 27752467.43 27752467.64 27752467.84 0.0485 0.0078

Neptune 71271-11-11 12:43 G 27752572.92 27752573.03 27752573.17 0.0090 0.0074

Jupiter 71272-03-20 18:29 G 27752703.21 27752703.27 27752703.35 0.0484 0.0454

Neptune 71272-06-24 02:10 G 27752798.50 27752798.59 27752798.70 0.0090 0.0080

Neptune 71273-02-04 15:22 G 27753024.09 27753024.14 27753024.21 0.0090 0.0086

Saturn 71276-07-18 03:07 G 27754283.45 27754283.63 27754283.82 0.0283 0.0134

Saturn 71277-03-04 17:46 G 27754513.04 27754513.24 27754513.45 0.0284 0.0073

Jupiter 71277-05-26 09:36 G 27754595.70 27754595.90 27754596.10 0.0542 0.0122

Saturn 71277-10-20 08:10 G 27754742.82 27754742.84 27754742.88 0.0284 0.0280

Jupiter 71278-01-19 21:36 G 27754834.29 27754834.40 27754834.53 0.0545 0.0435

Jupiter 71282-08-10 10:34 G 27756497.84 27756497.94 27756498.05 0.0491 0.0424

Jupiter 71283-04-03 08:39 G 27756733.65 27756733.86 27756734.06 0.0486 0.0029

Jupiter 71283-11-25 00:58 G 27756969.40 27756969.54 27756969.68 0.0484 0.0354

Jupiter 71289-01-28 22:05 G 27758861.25 27758861.42 27758861.60 0.0540 0.0270

Jupiter 71289-09-24 08:39 G 27759099.68 27759099.86 27759100.03 0.0545 0.0284

Saturn 71290-12-30 13:12 G 27759561.88 27759562.05 27759562.23 0.0275 0.0159

Saturn 71291-08-16 22:19 G 27759791.21 27759791.43 27759791.64 0.0275 0.0031

Saturn 71292-04-02 06:43 G 27760020.67 27760020.78 27760020.92 0.0275 0.0221

Jupiter 71294-12-07 12:58 G 27760999.84 27761000.04 27761000.23 0.0487 0.0138

Jupiter 71295-07-31 06:15 G 27761235.59 27761235.76 27761235.94 0.0484 0.0250

Mars 71300-04-11 07:55 G 27762950.77 27762950.83 27762950.89 0.1626 0.1523

Jupiter 71300-10-04 11:46 G 27763126.86 27763126.99 27763127.12 0.0538 0.0412

Jupiter 71301-05-30 19:55 G 27763365.14 27763365.33 27763365.53 0.0544 0.0132

Mars 71303-01-16 14:10 G 27763960.92 27763961.09 27763961.27 0.1901 0.0306

Uranus 71305-12-30 01:12 G 27765039.47 27765039.55 27765039.65 0.0144 0.0131

Saturn 71306-01-29 04:34 G 27765069.50 27765069.69 27765069.89 0.0283 0.0112

Uranus 71306-08-13 13:27 G 27765265.90 27765266.06 27765266.24 0.0144 0.0090

Jupiter 71306-08-13 16:48 G 27765266.03 27765266.20 27765266.38 0.0488 0.0247 *

Saturn 71306-09-15 19:12 G 27765299.11 27765299.30 27765299.51 0.0283 0.0096

Uranus 71307-03-28 01:27 G 27765492.37 27765492.56 27765492.78 0.0144 0.0049

Jupiter 71307-04-06 12:00 G 27765501.80 27765502.00 27765502.19 0.0485 0.0146

Uranus 71307-11-09 13:41 G 27765718.86 27765719.07 27765719.29 0.0144 0.0008

Uranus 71308-06-23 01:27 G 27765945.36 27765945.56 27765945.78 0.0144 0.0034

Uranus 71309-02-04 12:58 G 27766171.87 27766172.04 27766172.24 0.0144 0.0075

Uranus 71309-09-19 00:43 G 27766398.41 27766398.53 27766398.67 0.0143 0.0115

Jupiter 71313-02-02 05:46 G 27767630.54 27767630.74 27767630.94 0.0542 0.0026

Jupiter 71313-09-28 18:00 G 27767869.20 27767869.25 27767869.31 0.0544 0.0525

Jupiter 71318-04-18 18:43 G 27769532.14 27769532.28 27769532.42 0.0490 0.0359

Jupiter 71318-12-10 16:19 G 27769767.97 27769768.18 27769768.38 0.0486 0.0037

Jupiter 71319-08-03 08:24 G 27770003.75 27770003.85 27770003.96 0.0484 0.0416

Saturn 71320-07-12 19:41 G 27770348.14 27770348.32 27770348.51 0.0276 0.0130

Saturn 71321-02-27 05:03 G 27770577.50 27770577.71 27770577.92 0.0276 0.0062

Saturn 71321-10-14 13:55 G 27770807.01 27770807.08 27770807.18 0.0276 0.0252

Jupiter 71324-10-07 15:51 G 27771895.97 27771896.16 27771896.36 0.0540 0.0180

Jupiter 71325-06-03 02:39 G 27772134.46 27772134.61 27772134.76 0.0544 0.0374

Jupiter 71329-12-22 21:22 G 27773798.34 27773798.39 27773798.46 0.0492 0.0468

Jupiter 71330-08-15 20:39 G 27774034.16 27774034.36 27774034.57 0.0487 0.0074

Jupiter 71331-04-08 13:41 G 27774269.92 27774270.07 27774270.23 0.0484 0.0312

Mars 71334-02-08 02:39 G 27775306.46 27775306.61 27775306.76 0.1622 0.0814

Saturn 71334-12-25 01:12 G 27775626.51 27775626.55 27775626.60 0.0283 0.0276

Saturn 71335-08-11 15:51 G 27775855.96 27775856.16 27775856.37 0.0283 0.0072

Saturn 71336-03-28 06:29 G 27776085.59 27776085.77 27776085.96 0.0284 0.0136

Jupiter 71336-06-12 02:10 G 27776161.43 27776161.59 27776161.75 0.0539 0.0331

Jupiter 71337-02-05 11:03 G 27776399.78 27776399.96 27776400.15 0.0544 0.0217

Neptune 71337-12-09 09:07 G 27776706.84 27776706.88 27776706.95 0.0088 0.0085

Neptune 71338-07-22 22:05 G 27776932.34 27776932.42 27776932.53 0.0088 0.0079

Neptune 71339-03-05 10:34 G 27777157.85 27777157.94 27777158.09 0.0088 0.0074

Neptune 71339-10-16 23:46 G 27777383.37 27777383.49 27777383.65 0.0088 0.0068

Neptune 71340-05-29 12:43 G 27777608.89 27777609.03 27777609.20 0.0088 0.0062

Neptune 71341-01-10 01:41 G 27777834.41 27777834.57 27777834.75 0.0088 0.0056

Neptune 71341-08-23 14:39 G 27778059.93 27778060.11 27778060.30 0.0088 0.0050

Neptune 71342-04-06 03:36 G 27778285.46 27778285.65 27778285.84 0.0088 0.0044

Jupiter 71342-04-21 01:27 G 27778300.37 27778300.56 27778300.75 0.0488 0.0181

Neptune 71342-11-17 16:34 G 27778510.99 27778511.19 27778511.39 0.0088 0.0038

Jupiter 71342-12-12 19:55 G 27778536.15 27778536.33 27778536.52 0.0484 0.0209

Neptune 71343-07-01 05:31 G 27778736.52 27778736.73 27778736.93 0.0088 0.0032

Neptune 71344-02-11 18:15 G 27778962.05 27778962.26 27778962.47 0.0088 0.0026

Neptune 71344-09-24 06:58 G 27779187.58 27779187.79 27779188.01 0.0088 0.0020

Neptune 71345-05-07 19:55 G 27779413.11 27779413.33 27779413.55 0.0088 0.0014

Neptune 71345-12-19 08:39 G 27779638.64 27779638.86 27779639.08 0.0088 0.0008

Neptune 71346-08-01 21:22 G 27779864.17 27779864.39 27779864.61 0.0088 0.0002

Neptune 71347-03-15 10:05 G 27780089.70 27780089.92 27780090.14 0.0088 0.0004

Neptune 71347-10-26 23:03 G 27780315.24 27780315.46 27780315.68 0.0088 0.0010

Jupiter 71348-02-15 15:22 G 27780427.05 27780427.14 27780427.24 0.0537 0.0471

Neptune 71348-06-08 11:46 G 27780540.77 27780540.99 27780541.21 0.0088 0.0016

Uranus 71348-10-01 03:51 G 27780655.55 27780655.66 27780655.79 0.0134 0.0110

Jupiter 71348-10-10 22:05 G 27780665.22 27780665.42 27780665.63 0.0543 0.0065

Neptune 71349-01-20 00:29 G 27780766.30 27780766.52 27780766.73 0.0088 0.0022

Uranus 71349-05-15 09:22 G 27780881.73 27780881.89 27780882.08 0.0134 0.0078

Neptune 71349-09-02 12:58 G 27780991.84 27780992.04 27780992.26 0.0088 0.0028

Uranus 71349-12-27 15:07 G 27781107.93 27781108.13 27781108.34 0.0134 0.0045

Saturn 71350-01-23 00:58 G 27781134.35 27781134.54 27781134.74 0.0275 0.0100

Neptune 71350-04-16 01:41 G 27781217.37 27781217.57 27781217.78 0.0088 0.0034

Uranus 71350-08-10 20:39 G 27781334.15 27781334.36 27781334.58 0.0134 0.0012

Moon 71350-08-13 12:29 G 27781336.89 27781337.02 27781337.14 0.2710 0.1484

Earth 71350-08-13 13:12 G 27781336.90 27781337.05 27781337.19 0.2703 0.1204 *

Saturn 71350-09-09 09:51 G 27781363.72 27781363.91 27781364.12 0.0275 0.0091

Neptune 71350-11-27 14:39 G 27781442.92 27781443.11 27781443.31 0.0088 0.0040

Uranus 71351-03-25 02:10 G 27781560.38 27781560.59 27781560.81 0.0134 0.0022

Neptune 71351-07-11 03:07 G 27781668.46 27781668.63 27781668.83 0.0088 0.0046

Uranus 71351-11-06 07:55 G 27781786.64 27781786.83 27781787.04 0.0135 0.0054

Neptune 71352-02-21 15:51 G 27781894.00 27781894.16 27781894.35 0.0088 0.0052

Uranus 71352-06-19 13:41 G 27782012.92 27782013.07 27782013.25 0.0135 0.0088

Neptune 71352-10-04 04:34 G 27782119.54 27782119.69 27782119.87 0.0088 0.0058

Uranus 71353-01-31 19:27 G 27782239.23 27782239.31 27782239.42 0.0135 0.0121

Neptune 71353-05-17 17:17 G 27782345.09 27782345.22 27782345.39 0.0088 0.0064

Jupiter 71353-12-25 05:03 G 27782566.55 27782566.71 27782566.88 0.0489 0.0289

Neptune 71353-12-29 06:00 G 27782570.64 27782570.75 27782570.91 0.0088 0.0070

Neptune 71354-08-11 18:58 G 27782796.19 27782796.29 27782796.42 0.0088 0.0075

Jupiter 71354-08-18 00:43 G 27782802.33 27782802.53 27782802.73 0.0485 0.0103

Neptune 71355-03-25 07:41 G 27783021.75 27783021.82 27783021.92 0.0088 0.0081

Jupiter 71355-04-10 15:51 G 27783038.13 27783038.16 27783038.20 0.0483 0.0474

Neptune 71355-11-05 20:10 G 27783247.34 27783247.34 27783247.41 0.0088 0.0087

Earth 71358-08-11 02:24 G 27784256.53 27784256.60 27784256.67 0.2703 0.2416

Moon 71358-08-11 06:15 G 27784256.66 27784256.76 27784256.86 0.2708 0.1975 *

Jupiter 71360-06-15 10:34 G 27784930.74 27784930.94 27784931.14 0.0542 0.0087

Jupiter 71361-02-08 22:48 G 27785169.35 27785169.45 27785169.56 0.0545 0.0466

Saturn 71364-07-06 02:39 G 27786412.53 27786412.61 27786412.71 0.0283 0.0254

Saturn 71365-02-20 17:31 G 27786642.02 27786642.23 27786642.44 0.0283 0.0048

Jupiter 71365-08-30 08:10 G 27786832.72 27786832.84 27786832.96 0.0491 0.0398

Saturn 71365-10-08 08:10 G 27786871.67 27786871.84 27786872.02 0.0283 0.0159

Mars 71366-02-06 20:10 G 27786993.24 27786993.34 27786993.44 0.1625 0.1303

Jupiter 71366-04-23 05:46 G 27787068.54 27787068.74 27787068.95 0.0486 0.0006

Jupiter 71366-12-14 22:05 G 27787304.30 27787304.42 27787304.55 0.0484 0.0376

Mars 71368-11-12 17:03 G 27788003.07 27788003.21 27788003.35 0.1902 0.1086

Jupiter 71372-02-18 22:05 G 27789196.24 27789196.42 27789196.60 0.0540 0.0238

Jupiter 71372-10-14 07:41 G 27789434.66 27789434.82 27789434.99 0.0544 0.0312

Jupiter 71377-12-27 09:07 G 27791334.68 27791334.88 27791335.08 0.0487 0.0116

Jupiter 71378-08-20 03:07 G 27791570.46 27791570.63 27791570.80 0.0484 0.0272

Saturn 71378-12-18 21:22 G 27791691.34 27791691.39 27791691.47 0.0277 0.0262

Saturn 71379-08-05 06:58 G 27791920.59 27791920.79 27791921.00 0.0276 0.0071

Saturn 71380-03-21 16:19 G 27792149.99 27792150.18 27792150.37 0.0276 0.0120

Jupiter 71383-10-24 09:22 G 27793461.76 27793461.89 27793462.04 0.0538 0.0384

Jupiter 71384-06-18 16:48 G 27793700.01 27793700.20 27793700.40 0.0543 0.0157

Jupiter 71389-09-01 12:43 G 27795600.85 27795601.03 27795601.21 0.0489 0.0226

Uranus 71390-04-12 21:07 G 27795824.25 27795824.38 27795824.54 0.0144 0.0108

Jupiter 71390-04-25 08:10 G 27795836.65 27795836.84 27795837.03 0.0485 0.0166

Uranus 71390-11-25 09:36 G 27796050.72 27796050.90 27796051.10 0.0144 0.0067

Uranus 71391-07-09 21:51 G 27796277.19 27796277.41 27796277.62 0.0144 0.0025

Uranus 71392-02-21 09:36 G 27796503.69 27796503.90 27796504.12 0.0144 0.0016

Uranus 71392-10-04 21:22 G 27796730.19 27796730.39 27796730.59 0.0144 0.0057

Uranus 71393-05-19 08:53 G 27796956.72 27796956.87 27796957.04 0.0144 0.0098

Uranus 71393-12-31 20:24 G 27797183.31 27797183.35 27797183.42 0.0143 0.0138

Saturn 71394-01-16 15:07 G 27797198.99 27797199.13 27797199.27 0.0283 0.0211

Saturn 71394-09-03 05:46 G 27797428.53 27797428.74 27797428.95 0.0283 0.0006

Saturn 71395-04-20 20:10 G 27797658.20 27797658.34 27797658.50 0.0284 0.0201

Jupiter 71395-06-28 20:10 G 27797727.31 27797727.34 27797727.38 0.0536 0.0526

Jupiter 71396-02-22 01:12 G 27797965.35 27797965.55 27797965.75 0.0542 0.0003

Mars 71399-12-06 14:53 G 27799348.99 27799349.12 27799349.25 0.1621 0.1029

Jupiter 71401-05-08 16:48 G 27799867.05 27799867.20 27799867.35 0.0490 0.0334

Jupiter 71401-12-30 13:55 G 27800102.88 27800103.08 27800103.28 0.0485 0.0060

Jupiter 71402-08-23 05:31 G 27800338.65 27800338.73 27800338.82 0.0484 0.0435

Jupiter 71407-10-28 12:58 G 27802230.84 27802231.04 27802231.23 0.0541 0.0153

Pluto 71408-06-17 09:51 G 27802463.74 27802463.91 27802464.11 0.0065 0.0036

Jupiter 71408-06-23 00:29 G 27802469.39 27802469.52 27802469.66 0.0545 0.0400

Saturn 71408-07-01 04:05 G 27802477.56 27802477.67 27802477.79 0.0276 0.0229

Pluto 71409-01-28 14:39 G 27802688.89 27802689.11 27802689.33 0.0065 0.0001

Saturn 71409-02-15 13:12 G 27802706.84 27802707.05 27802707.26 0.0275 0.0039

Pluto 71409-09-10 18:29 G 27802914.11 27802914.27 27802914.47 0.0065 0.0037

Saturn 71409-10-02 22:05 G 27802936.24 27802936.42 27802936.60 0.0275 0.0150

Jupiter 71413-01-11 19:27 G 27804133.23 27804133.31 27804133.41 0.0492 0.0441

Jupiter 71413-09-04 18:15 G 27804369.06 27804369.26 27804369.46 0.0486 0.0047

Jupiter 71414-04-28 10:48 G 27804604.81 27804604.95 27804605.10 0.0484 0.0334

Jupiter 71419-07-03 02:10 G 27806496.43 27806496.59 27806496.76 0.0539 0.0298

Jupiter 71420-02-26 11:31 G 27806734.81 27806734.98 27806735.17 0.0544 0.0250

Neptune 71420-09-07 01:27 G 27806928.50 27806928.56 27806928.65 0.0090 0.0084

Neptune 71421-04-20 14:53 G 27807154.02 27807154.12 27807154.24 0.0090 0.0078

Neptune 71421-12-02 03:51 G 27807379.55 27807379.66 27807379.81 0.0090 0.0072

Neptune 71422-07-15 17:03 G 27807605.08 27807605.21 27807605.37 0.0090 0.0066

Neptune 71423-02-26 06:00 G 27807830.61 27807830.75 27807830.93 0.0090 0.0060

Saturn 71423-07-30 16:48 G 27807985.05 27807985.20 27807985.36 0.0283 0.0189

Neptune 71423-10-09 19:41 G 27808056.14 27808056.32 27808056.49 0.0090 0.0053

Saturn 71424-03-16 07:27 G 27808214.60 27808214.81 27808215.03 0.0283 0.0018

Neptune 71424-05-22 08:39 G 27808281.68 27808281.86 27808282.05 0.0090 0.0047

Saturn 71424-10-31 21:51 G 27808444.29 27808444.41 27808444.55 0.0283 0.0224

Neptune 71425-01-02 21:36 G 27808507.22 27808507.40 27808507.61 0.0090 0.0041

Jupiter 71425-05-10 22:34 G 27808635.24 27808635.44 27808635.63 0.0488 0.0156

Neptune 71425-08-16 10:48 G 27808732.76 27808732.95 27808733.16 0.0090 0.0035

Jupiter 71426-01-01 16:48 G 27808871.02 27808871.20 27808871.38 0.0484 0.0232

Neptune 71426-03-30 00:15 G 27808958.30 27808958.51 27808958.72 0.0090 0.0028

Neptune 71426-11-10 13:12 G 27809183.85 27809184.05 27809184.27 0.0090 0.0022

Neptune 71427-06-24 02:24 G 27809409.40 27809409.60 27809409.83 0.0090 0.0016

Neptune 71428-02-04 15:51 G 27809634.94 27809635.16 27809635.38 0.0090 0.0009

Neptune 71428-09-17 05:03 G 27809860.49 27809860.71 27809860.93 0.0090 0.0003

Neptune 71429-04-30 18:29 G 27810086.05 27810086.27 27810086.49 0.0090 0.0004

Neptune 71429-12-12 07:41 G 27810311.60 27810311.82 27810312.04 0.0090 0.0010

Neptune 71430-07-25 20:53 G 27810537.16 27810537.37 27810537.59 0.0090 0.0017

Jupiter 71431-03-07 15:22 G 27810762.04 27810762.14 27810762.26 0.0537 0.0440

Neptune 71431-03-08 10:05 G 27810762.71 27810762.92 27810763.14 0.0090 0.0023

Neptune 71431-10-19 23:17 G 27810988.27 27810988.47 27810988.69 0.0090 0.0030

Jupiter 71431-10-31 21:51 G 27811000.21 27811000.41 27811000.61 0.0543 0.0095

Mars 71431-12-06 08:10 G 27811035.71 27811035.84 27811035.97 0.1624 0.1070

Neptune 71432-06-01 12:43 G 27811213.84 27811214.03 27811214.24 0.0090 0.0036

Uranus 71432-06-01 16:34 G 27811214.11 27811214.19 27811214.28 0.0134 0.0122 *

Neptune 71433-01-13 02:10 G 27811439.40 27811439.59 27811439.78 0.0090 0.0042

Uranus 71433-01-13 21:51 G 27811440.26 27811440.41 27811440.58 0.0134 0.0090

Neptune 71433-08-26 15:07 G 27811664.96 27811665.13 27811665.33 0.0090 0.0049

Uranus 71433-08-28 03:22 G 27811666.45 27811666.64 27811666.84 0.0134 0.0058

Neptune 71434-04-09 04:19 G 27811890.52 27811890.68 27811890.87 0.0090 0.0055

Uranus 71434-04-11 08:53 G 27811892.66 27811892.87 27811893.09 0.0134 0.0025

Mars 71434-09-10 19:27 G 27812045.30 27812045.31 27812045.32 0.1904 0.1898

Neptune 71434-11-20 17:46 G 27812116.09 27812116.24 27812116.41 0.0090 0.0061

Uranus 71434-11-23 14:39 G 27812118.89 27812119.11 27812119.32 0.0134 0.0009

Neptune 71435-07-04 06:43 G 27812341.66 27812341.78 27812341.95 0.0090 0.0068

Uranus 71435-07-07 20:10 G 27812345.14 27812345.34 27812345.55 0.0134 0.0042

Neptune 71436-02-14 19:55 G 27812567.23 27812567.33 27812567.48 0.0090 0.0074

Uranus 71436-02-19 01:55 G 27812571.40 27812571.58 27812571.76 0.0135 0.0075

Neptune 71436-09-27 09:22 G 27812792.81 27812792.89 27812793.01 0.0090 0.0080

Uranus 71436-10-02 07:41 G 27812797.69 27812797.82 27812797.95 0.0135 0.0108

Jupiter 71437-01-14 00:43 G 27812901.36 27812901.53 27812901.70 0.0489 0.0268

Neptune 71437-05-10 22:48 G 27813018.40 27813018.45 27813018.53 0.0090 0.0086

Jupiter 71437-09-06 20:53 G 27813137.17 27813137.37 27813137.57 0.0485 0.0124

Saturn 71438-01-11 08:53 G 27813263.73 27813263.87 27813264.02 0.0277 0.0203

Saturn 71438-08-28 18:15 G 27813493.05 27813493.26 27813493.48 0.0276 0.0013

Saturn 71439-04-15 03:36 G 27813722.49 27813722.65 27813722.81 0.0276 0.0179

Jupiter 71443-07-06 07:55 G 27815265.63 27815265.83 27815266.03 0.0541 0.0060

Jupiter 71444-02-29 19:27 G 27815504.23 27815504.31 27815504.40 0.0544 0.0488

Jupiter 71448-09-19 03:36 G 27817167.52 27817167.65 27817167.78 0.0491 0.0378

Jupiter 71449-05-13 01:41 G 27817403.36 27817403.57 27817403.77 0.0486 0.0017

Jupiter 71450-01-03 18:15 G 27817639.14 27817639.26 27817639.38 0.0484 0.0393

Saturn 71453-02-09 04:48 G 27818771.52 27818771.70 27818771.88 0.0283 0.0146

Saturn 71453-09-26 19:27 G 27819001.10 27819001.31 27819001.52 0.0283 0.0060

Saturn 71454-05-14 09:51 G 27819230.85 27819230.91 27819230.99 0.0284 0.0266

Jupiter 71455-03-10 16:34 G 27819531.01 27819531.19 27819531.38 0.0540 0.0215

Jupiter 71455-11-04 02:53 G 27819769.46 27819769.62 27819769.78 0.0544 0.0333

Jupiter 71460-05-25 06:43 G 27821433.75 27821433.78 27821433.82 0.0493 0.0484

Jupiter 71461-01-16 06:43 G 27821669.58 27821669.78 27821669.99 0.0487 0.0091

Jupiter 71461-09-09 00:15 G 27821905.35 27821905.51 27821905.68 0.0484 0.0293

Mars 71465-10-04 03:07 G 27823391.52 27823391.63 27823391.74 0.1620 0.1253

Jupiter 71466-11-13 05:17 G 27823796.57 27823796.72 27823796.87 0.0538 0.0360

Jupiter 71467-07-09 13:27 G 27824034.87 27824035.06 27824035.25 0.0544 0.0182

Saturn 71467-07-24 16:34 G 27824050.02 27824050.19 27824050.36 0.0276 0.0168

Saturn 71468-03-10 01:27 G 27824279.35 27824279.56 27824279.77 0.0275 0.0022

Saturn 71468-10-25 10:05 G 27824508.80 27824508.92 27824509.07 0.0275 0.0211

Earth 71472-02-14 18:29 G 27825716.13 27825716.27 27825716.40 0.2629 0.1336

Moon 71472-02-14 22:48 G 27825716.32 27825716.45 27825716.57 0.2634 0.1599 *

Jupiter 71472-09-21 10:34 G 27825935.75 27825935.94 27825936.13 0.0488 0.0199

Jupiter 71473-05-15 05:17 G 27826171.54 27826171.72 27826171.91 0.0484 0.0189

Uranus 71473-12-12 04:05 G 27826382.58 27826382.67 27826382.79 0.0144 0.0127

Uranus 71474-07-26 16:19 G 27826609.02 27826609.18 27826609.37 0.0144 0.0085

Uranus 71475-03-10 04:34 G 27826835.48 27826835.69 27826835.90 0.0144 0.0044

Uranus 71475-10-22 16:34 G 27827061.97 27827062.19 27827062.41 0.0144 0.0003

Uranus 71476-06-05 04:19 G 27827288.47 27827288.68 27827288.90 0.0144 0.0039

Uranus 71477-01-17 15:51 G 27827514.99 27827515.16 27827515.35 0.0144 0.0080

Uranus 71477-09-01 03:36 G 27827741.54 27827741.65 27827741.77 0.0144 0.0120

Jupiter 71478-07-18 19:41 G 27828062.25 27828062.32 27828062.40 0.0536 0.0496

Jupiter 71479-03-14 01:12 G 27828300.35 27828300.55 27828300.76 0.0543 0.0033

Earth 71480-02-12 11:03 G 27828635.84 27828635.96 27828636.08 0.2629 0.1681

Moon 71480-02-12 16:48 G 27828636.07 27828636.20 27828636.33 0.2629 0.1442 *

Saturn 71482-08-22 06:58 G 27829557.60 27829557.79 27829557.98 0.0283 0.0123

Saturn 71483-04-08 21:36 G 27829787.20 27829787.40 27829787.60 0.0283 0.0083

Jupiter 71484-05-27 14:10 G 27830201.93 27830202.09 27830202.25 0.0490 0.0308

Jupiter 71485-01-18 10:48 G 27830437.75 27830437.95 27830438.15 0.0485 0.0084

Jupiter 71485-09-11 02:10 G 27830673.53 27830673.59 27830673.66 0.0484 0.0456

Jupiter 71490-11-16 13:12 G 27832565.85 27832566.05 27832566.25 0.0541 0.0121

Jupiter 71491-07-13 00:15 G 27832804.39 27832804.51 27832804.64 0.0544 0.0427

Jupiter 71496-01-31 15:07 G 27834468.03 27834468.13 27834468.24 0.0492 0.0420

Jupiter 71496-09-23 13:55 G 27834703.88 27834704.08 27834704.29 0.0487 0.0029

Pluto 71496-09-28 21:22 G 27834709.32 27834709.39 27834709.49 0.0080 0.0073

Saturn 71497-02-02 20:24 G 27834836.17 27834836.35 27834836.53 0.0276 0.0143

Pluto 71497-05-12 08:10 G 27834934.62 27834934.84 27834935.06 0.0079 0.0006

Jupiter 71497-05-17 06:58 G 27834939.66 27834939.79 27834939.94 0.0484 0.0354

Saturn 71497-09-20 05:31 G 27835065.52 27835065.73 27835065.94 0.0276 0.0048

Mars 71497-10-02 20:39 G 27835078.21 27835078.36 27835078.51 0.1623 0.0851

Pluto 71497-12-23 18:00 G 27835160.13 27835160.25 27835160.41 0.0079 0.0061

Saturn 71498-05-07 14:39 G 27835295.01 27835295.11 27835295.22 0.0276 0.0238

Neptune 71502-03-14 17:31 G 27836701.21 27836701.23 27836701.29 0.0088 0.0086

Jupiter 71502-07-23 00:29 G 27836831.34 27836831.52 27836831.69 0.0539 0.0270

Neptune 71502-10-26 06:43 G 27836926.70 27836926.78 27836926.88 0.0088 0.0080

Jupiter 71503-03-18 09:07 G 27837069.71 27837069.88 27837070.06 0.0544 0.0275

Neptune 71503-06-08 19:12 G 27837152.21 27837152.30 27837152.44 0.0088 0.0075

Neptune 71504-01-20 08:10 G 27837377.72 27837377.84 27837378.00 0.0088 0.0069

Neptune 71504-09-01 21:07 G 27837603.24 27837603.38 27837603.55 0.0088 0.0063

Neptune 71505-04-15 10:05 G 27837828.76 27837828.92 27837829.10 0.0088 0.0057

Neptune 71505-11-26 23:03 G 27838054.29 27838054.46 27838054.66 0.0088 0.0051

Neptune 71506-07-10 12:00 G 27838279.82 27838280.00 27838280.20 0.0088 0.0045

Neptune 71507-02-21 00:58 G 27838505.35 27838505.54 27838505.75 0.0088 0.0039

Neptune 71507-10-04 13:55 G 27838730.88 27838731.08 27838731.29 0.0088 0.0033

Neptune 71508-05-17 02:39 G 27838956.41 27838956.61 27838956.83 0.0088 0.0027

Jupiter 71508-05-30 18:15 G 27838970.06 27838970.26 27838970.46 0.0488 0.0136

Neptune 71508-12-28 15:36 G 27839181.94 27839182.15 27839182.37 0.0088 0.0021

Jupiter 71509-01-21 12:43 G 27839205.86 27839206.03 27839206.21 0.0484 0.0250

Neptune 71509-08-11 04:34 G 27839407.47 27839407.69 27839407.91 0.0088 0.0014

Neptune 71510-03-24 17:17 G 27839633.01 27839633.22 27839633.45 0.0088 0.0009

Neptune 71510-11-05 06:29 G 27839858.54 27839858.77 27839858.99 0.0088 0.0003

Neptune 71511-06-18 19:12 G 27840084.08 27840084.30 27840084.52 0.0088 0.0004

Neptune 71512-01-30 07:55 G 27840309.61 27840309.83 27840310.05 0.0088 0.0010

Saturn 71512-03-04 18:15 G 27840344.06 27840344.26 27840344.47 0.0283 0.0082

Neptune 71512-09-11 20:39 G 27840535.14 27840535.36 27840535.58 0.0088 0.0016

Saturn 71512-10-20 09:07 G 27840573.69 27840573.88 27840574.07 0.0283 0.0125

Neptune 71513-04-25 09:22 G 27840760.68 27840760.89 27840761.11 0.0088 0.0022

Neptune 71513-12-06 22:05 G 27840986.22 27840986.42 27840986.64 0.0088 0.0028

Jupiter 71514-03-27 09:51 G 27841096.79 27841096.91 27841097.04 0.0537 0.0417

Neptune 71514-07-20 10:48 G 27841211.75 27841211.95 27841212.16 0.0088 0.0034

Jupiter 71514-11-20 16:34 G 27841334.99 27841335.19 27841335.38 0.0543 0.0116

Neptune 71515-03-02 23:31 G 27841437.29 27841437.48 27841437.68 0.0088 0.0040

Neptune 71515-10-14 12:15 G 27841662.83 27841663.01 27841663.21 0.0088 0.0046

Neptune 71516-05-27 00:58 G 27841888.37 27841888.54 27841888.73 0.0088 0.0052

Uranus 71516-09-14 10:05 G 27841998.78 27841998.92 27841999.06 0.0134 0.0103

Neptune 71517-01-07 13:41 G 27842113.92 27842114.07 27842114.25 0.0088 0.0058

Uranus 71517-04-28 15:22 G 27842224.97 27842225.14 27842225.33 0.0134 0.0070

Neptune 71517-08-21 02:10 G 27842339.46 27842339.59 27842339.76 0.0088 0.0064

Uranus 71517-12-10 20:53 G 27842451.17 27842451.37 27842451.59 0.0134 0.0038

Neptune 71518-04-03 14:53 G 27842565.01 27842565.12 27842565.28 0.0088 0.0070

Uranus 71518-07-25 02:39 G 27842677.39 27842677.61 27842677.83 0.0134 0.0004

Neptune 71518-11-15 03:36 G 27842790.57 27842790.65 27842790.79 0.0088 0.0076

Uranus 71519-03-08 08:10 G 27842903.63 27842903.84 27842904.05 0.0134 0.0029

Neptune 71519-06-28 16:48 G 27843016.13 27843016.20 27843016.29 0.0088 0.0081

Uranus 71519-10-20 13:41 G 27843129.88 27843130.07 27843130.27 0.0135 0.0062

Jupiter 71520-02-03 22:48 G 27843236.27 27843236.45 27843236.63 0.0489 0.0242

Neptune 71520-02-09 05:17 G 27843241.71 27843241.72 27843241.77 0.0088 0.0087

Uranus 71520-06-02 19:41 G 27843356.17 27843356.32 27843356.47 0.0135 0.0095

Jupiter 71520-09-26 18:29 G 27843472.08 27843472.27 27843472.47 0.0485 0.0148

Uranus 71521-01-15 01:27 G 27843582.50 27843582.56 27843582.62 0.0135 0.0128

Jupiter 71526-07-26 03:36 G 27845600.45 27845600.65 27845600.85 0.0542 0.0036

Saturn 71526-08-17 04:19 G 27845622.49 27845622.68 27845622.88 0.0276 0.0108

Jupiter 71527-03-21 16:05 G 27845839.11 27845839.17 27845839.24 0.0545 0.0511

Saturn 71527-04-03 13:27 G 27845851.86 27845852.06 27845852.26 0.0275 0.0082

Saturn 71527-11-18 22:05 G 27846081.39 27846081.42 27846081.47 0.0275 0.0270

Mars 71531-08-02 15:36 G 27847434.08 27847434.15 27847434.23 0.1619 0.1460

Jupiter 71531-10-10 01:55 G 27847502.44 27847502.58 27847502.72 0.0491 0.0350

Jupiter 71532-06-01 23:17 G 27847738.27 27847738.47 27847738.68 0.0486 0.0043

Mars 71532-07-08 21:07 G 27847775.30 27847775.38 27847775.47 0.1901 0.1644

Jupiter 71533-01-23 15:22 G 27847974.04 27847974.14 27847974.25 0.0484 0.0415

Jupiter 71538-03-30 16:19 G 27849865.99 27849866.18 27849866.37 0.0540 0.0184

Jupiter 71538-11-24 03:07 G 27850104.49 27850104.63 27850104.78 0.0545 0.0365

Saturn 71541-01-28 05:46 G 27850900.67 27850900.74 27850900.82 0.0283 0.0263

Saturn 71541-09-14 20:24 G 27851130.15 27851130.35 27851130.56 0.0283 0.0059

Saturn 71542-05-02 11:03 G 27851359.78 27851359.96 27851360.14 0.0283 0.0147

Jupiter 71543-06-15 04:34 G 27851768.62 27851768.69 27851768.77 0.0492 0.0458

Jupiter 71544-02-06 04:05 G 27852004.47 27852004.67 27852004.87 0.0487 0.0066

Jupiter 71544-09-28 21:22 G 27852240.23 27852240.39 27852240.54 0.0484 0.0315

Jupiter 71549-12-03 06:00 G 27854131.59 27854131.75 27854131.91 0.0538 0.0327

Jupiter 71550-07-29 13:55 G 27854369.90 27854370.08 27854370.27 0.0543 0.0214

Saturn 71555-07-12 22:34 G 27856179.41 27856179.44 27856179.47 0.0277 0.0273

Jupiter 71555-10-12 06:43 G 27856270.58 27856270.78 27856270.97 0.0488 0.0178

Saturn 71556-02-27 07:41 G 27856408.62 27856408.82 27856409.02 0.0276 0.0084

Jupiter 71556-06-04 01:41 G 27856506.39 27856506.57 27856506.76 0.0485 0.0210

Saturn 71556-10-13 16:34 G 27856638.00 27856638.19 27856638.39 0.0276 0.0107

Uranus 71557-08-12 12:15 G 27856941.00 27856941.01 27856941.05 0.0144 0.0143

Uranus 71558-03-27 00:29 G 27857167.38 27857167.52 27857167.69 0.0144 0.0102

Uranus 71558-11-08 12:43 G 27857393.84 27857394.03 27857394.24 0.0144 0.0061

Uranus 71559-06-23 00:58 G 27857620.32 27857620.54 27857620.76 0.0144 0.0019

Uranus 71560-02-04 12:43 G 27857846.82 27857847.03 27857847.25 0.0144 0.0022

Uranus 71560-09-18 00:15 G 27858073.33 27858073.51 27858073.72 0.0144 0.0063

Uranus 71561-05-02 11:46 G 27858299.86 27858299.99 27858300.16 0.0144 0.0104

Jupiter 71561-08-07 18:43 G 27858397.18 27858397.28 27858397.38 0.0536 0.0466

Uranus 71561-12-14 23:46 G 27858526.49 27858526.49 27858526.50 0.0143 0.0143

Jupiter 71562-04-02 23:46 G 27858635.29 27858635.49 27858635.70 0.0542 0.0060

Mars 71563-08-01 08:53 G 27859120.71 27859120.87 27859121.03 0.1622 0.0627

Jupiter 71567-06-17 10:05 G 27860536.76 27860536.92 27860537.09 0.0490 0.0286

Jupiter 71568-02-08 06:58 G 27860772.59 27860772.79 27860772.99 0.0486 0.0104

Jupiter 71568-09-30 22:34 G 27861008.41 27861008.44 27861008.49 0.0484 0.0473

Saturn 71570-08-10 15:51 G 27861687.04 27861687.16 27861687.30 0.0283 0.0224

Saturn 71571-03-28 06:58 G 27861916.58 27861916.79 27861917.00 0.0283 0.0019

Saturn 71571-11-12 21:36 G 27862146.25 27862146.40 27862146.56 0.0284 0.0188

Jupiter 71573-12-06 07:41 G 27862900.63 27862900.82 27862901.02 0.0541 0.0098

Jupiter 71574-08-01 19:12 G 27863139.19 27863139.30 27863139.41 0.0545 0.0447

Jupiter 71579-02-20 13:41 G 27864802.95 27864803.07 27864803.19 0.0492 0.0393

Jupiter 71579-10-14 12:29 G 27865038.81 27865039.02 27865039.22 0.0486 0.0002

Jupiter 71580-06-06 05:17 G 27865274.59 27865274.72 27865274.85 0.0484 0.0375

Neptune 71584-12-10 09:07 G 27866922.84 27866922.88 27866922.97 0.0090 0.0086

Saturn 71585-01-22 06:58 G 27866965.69 27866965.79 27866965.90 0.0276 0.0237

Neptune 71585-07-23 22:19 G 27867148.35 27867148.43 27867148.55 0.0090 0.0080

Jupiter 71585-08-10 19:41 G 27867166.14 27867166.32 27867166.50 0.0539 0.0245

Saturn 71585-09-08 15:51 G 27867194.96 27867195.16 27867195.37 0.0275 0.0048

Neptune 71586-03-06 11:46 G 27867373.88 27867373.99 27867374.13 0.0090 0.0073

Jupiter 71586-04-06 05:03 G 27867404.55 27867404.71 27867404.88 0.0544 0.0299

Saturn 71586-04-26 00:43 G 27867424.35 27867424.53 27867424.71 0.0275 0.0141

Neptune 71586-10-18 00:58 G 27867599.41 27867599.54 27867599.69 0.0090 0.0067

Neptune 71587-05-31 13:55 G 27867824.94 27867825.08 27867825.26 0.0090 0.0061

Neptune 71588-01-12 03:07 G 27868050.47 27868050.63 27868050.82 0.0090 0.0055

Neptune 71588-08-24 16:34 G 27868276.01 27868276.19 27868276.38 0.0090 0.0048

Neptune 71589-04-07 05:31 G 27868501.55 27868501.73 27868501.94 0.0090 0.0042

Neptune 71589-11-18 18:43 G 27868727.09 27868727.28 27868727.49 0.0090 0.0036

Neptune 71590-07-02 08:10 G 27868952.63 27868952.84 27868953.05 0.0090 0.0029

Neptune 71591-02-12 21:07 G 27869178.18 27869178.38 27869178.60 0.0090 0.0023

Jupiter 71591-06-19 16:48 G 27869305.00 27869305.20 27869305.40 0.0487 0.0108

Neptune 71591-09-26 10:05 G 27869403.72 27869403.92 27869404.15 0.0090 0.0017

Jupiter 71592-02-10 10:34 G 27869540.78 27869540.94 27869541.11 0.0484 0.0275

Neptune 71592-05-08 23:46 G 27869629.27 27869629.49 27869629.71 0.0090 0.0010

Neptune 71592-12-20 12:58 G 27869854.82 27869855.04 27869855.26 0.0090 0.0004

Neptune 71593-08-03 01:55 G 27870080.37 27870080.58 27870080.80 0.0090 0.0004

Earth 71593-08-15 12:43 G 27870092.88 27870093.03 27870093.17 0.2703 0.1170

Moon 71593-08-15 15:51 G 27870093.01 27870093.16 27870093.31 0.2698 0.1165 *

Neptune 71594-03-16 15:07 G 27870305.92 27870306.13 27870306.35 0.0090 0.0010

Neptune 71594-10-28 04:19 G 27870531.47 27870531.68 27870531.90 0.0090 0.0016

Neptune 71595-06-10 17:31 G 27870757.03 27870757.23 27870757.45 0.0090 0.0023

Neptune 71596-01-22 06:43 G 27870982.58 27870982.78 27870983.00 0.0090 0.0029

Neptune 71596-09-03 20:10 G 27871208.14 27871208.34 27871208.54 0.0090 0.0035

Jupiter 71597-04-15 09:36 G 27871431.76 27871431.90 27871432.04 0.0538 0.0385

Neptune 71597-04-17 09:22 G 27871433.71 27871433.89 27871434.09 0.0090 0.0042

Neptune 71597-11-28 22:48 G 27871659.27 27871659.45 27871659.64 0.0090 0.0048

Jupiter 71597-12-09 16:48 G 27871670.01 27871670.20 27871670.40 0.0543 0.0149

Mars 71598-05-06 00:15 G 27871817.36 27871817.51 27871817.67 0.1903 0.0884

Neptune 71598-07-12 11:46 G 27871884.83 27871884.99 27871885.18 0.0090 0.0055

Neptune 71599-02-23 00:58 G 27872110.40 27872110.54 27872110.72 0.0090 0.0061

Neptune 71599-10-06 14:24 G 27872335.97 27872336.10 27872336.26 0.0090 0.0067

Saturn 71600-02-20 18:29 G 27872473.13 27872473.27 27872473.43 0.0283 0.0201

Uranus 71600-05-14 21:51 G 27872557.32 27872557.41 27872557.54 0.0134 0.0115

Neptune 71600-05-19 04:05 G 27872561.55 27872561.67 27872561.79 0.0090 0.0073

Saturn 71600-10-07 09:22 G 27872702.67 27872702.89 27872703.10 0.0283 0.0007

Uranus 71600-12-27 03:36 G 27872783.48 27872783.65 27872783.82 0.0134 0.0082

Neptune 71600-12-30 16:48 G 27872787.12 27872787.20 27872787.32 0.0090 0.0080

Saturn 71601-05-24 23:46 G 27872932.36 27872932.49 27872932.64 0.0284 0.0211

Uranus 71601-08-10 08:39 G 27873009.68 27873009.86 27873010.08 0.0134 0.0051

Moon 71601-08-13 00:15 G 27873012.44 27873012.51 27873012.59 0.2698 0.2419

Earth 71601-08-13 02:10 G 27873012.52 27873012.59 27873012.66 0.2704 0.2430 *

Neptune 71601-08-13 06:00 G 27873012.71 27873012.75 27873012.84 0.0090 0.0086

Uranus 71602-03-24 14:24 G 27873235.89 27873236.10 27873236.32 0.0134 0.0017

Uranus 71602-11-05 19:55 G 27873462.12 27873462.33 27873462.55 0.0134 0.0016

Jupiter 71603-02-22 20:53 G 27873571.18 27873571.37 27873571.55 0.0489 0.0216

Uranus 71603-06-20 01:27 G 27873688.37 27873688.56 27873688.77 0.0135 0.0050

Jupiter 71603-10-16 16:05 G 27873806.98 27873807.17 27873807.37 0.0485 0.0172

Uranus 71604-02-01 06:58 G 27873914.64 27873914.79 27873914.98 0.0135 0.0083

Uranus 71604-09-14 12:43 G 27874140.93 27874141.03 27874141.15 0.0135 0.0116

Jupiter 71608-12-19 00:43 G 27875697.49 27875697.53 27875697.58 0.0535 0.0519

Jupiter 71609-08-14 05:03 G 27875935.51 27875935.71 27875935.91 0.0542 0.0003

Jupiter 71610-04-09 17:17 G 27876174.20 27876174.22 27876174.25 0.0545 0.0539

Saturn 71614-08-04 08:53 G 27877751.75 27877751.87 27877752.01 0.0276 0.0215

Jupiter 71614-10-28 22:34 G 27877837.29 27877837.44 27877837.59 0.0491 0.0327

Saturn 71615-03-21 18:00 G 27877981.04 27877981.25 27877981.47 0.0276 0.0026

Jupiter 71615-06-21 20:10 G 27878073.13 27878073.34 27878073.54 0.0486 0.0063

Saturn 71615-11-06 03:07 G 27878210.46 27878210.63 27878210.80 0.0276 0.0164

Jupiter 71616-02-12 12:15 G 27878308.93 27878309.01 27878309.10 0.0484 0.0435

Jupiter 71621-04-18 16:05 G 27880200.98 27880201.17 27880201.37 0.0540 0.0152

Jupiter 71621-12-13 02:24 G 27880439.46 27880439.60 27880439.74 0.0544 0.0391

Jupiter 71626-07-04 00:58 G 27882103.45 27882103.54 27882103.64 0.0493 0.0435

Jupiter 71627-02-25 00:43 G 27882339.33 27882339.53 27882339.74 0.0487 0.0044

Jupiter 71627-10-18 18:15 G 27882575.12 27882575.26 27882575.41 0.0484 0.0335

Mars 71629-05-28 21:07 G 27883163.21 27883163.38 27883163.54 0.1621 0.0403

Saturn 71629-09-02 03:07 G 27883259.46 27883259.63 27883259.80 0.0283 0.0164

Saturn 71630-04-19 18:00 G 27883489.04 27883489.25 27883489.46 0.0283 0.0042

Saturn 71630-12-05 08:53 G 27883718.77 27883718.87 27883718.98 0.0284 0.0248

Jupiter 71632-12-22 00:58 G 27884466.38 27884466.54 27884466.71 0.0538 0.0303

Jupiter 71633-08-17 09:07 G 27884704.70 27884704.88 27884705.06 0.0544 0.0236

Jupiter 71638-10-31 05:46 G 27886605.54 27886605.74 27886605.93 0.0488 0.0149

Jupiter 71639-06-24 00:43 G 27886841.35 27886841.53 27886841.71 0.0485 0.0235

Uranus 71641-11-24 07:41 G 27887725.71 27887725.82 27887725.95 0.0144 0.0120

Uranus 71642-07-08 19:41 G 27887952.15 27887952.32 27887952.52 0.0144 0.0079

Uranus 71643-02-20 07:41 G 27888178.62 27888178.82 27888179.04 0.0144 0.0038

Uranus 71643-10-04 19:41 G 27888405.11 27888405.32 27888405.54 0.0144 0.0005

Saturn 71644-02-14 17:46 G 27888538.09 27888538.24 27888538.41 0.0276 0.0180

Uranus 71644-05-18 07:27 G 27888631.61 27888631.81 27888632.02 0.0144 0.0045

Jupiter 71644-08-26 13:55 G 27888731.97 27888732.08 27888732.20 0.0536 0.0442

Saturn 71644-10-01 02:53 G 27888767.40 27888767.62 27888767.83 0.0275 0.0011

Uranus 71644-12-30 19:12 G 27888858.13 27888858.30 27888858.48 0.0144 0.0086

Jupiter 71645-04-21 19:41 G 27888970.12 27888970.32 27888970.52 0.0543 0.0084

Saturn 71645-05-18 11:31 G 27888996.84 27888996.98 27888997.13 0.0275 0.0198

Uranus 71645-08-14 06:43 G 27889084.69 27889084.78 27889084.89 0.0144 0.0126

Jupiter 71650-07-06 09:22 G 27890871.72 27890871.89 27890872.07 0.0490 0.0257

Jupiter 71651-02-27 05:46 G 27891107.54 27891107.74 27891107.94 0.0485 0.0131

Pluto 71654-07-17 13:27 G 27892343.95 27892344.06 27892344.21 0.0065 0.0052

Pluto 71655-02-27 18:00 G 27892569.04 27892569.25 27892569.47 0.0065 0.0016

Pluto 71655-10-10 22:05 G 27892794.22 27892794.42 27892794.64 0.0065 0.0020

Pluto 71656-05-23 02:24 G 27893019.51 27893019.60 27893019.73 0.0065 0.0057

Jupiter 71656-12-25 08:10 G 27893235.64 27893235.84 27893236.04 0.0542 0.0065

Jupiter 71657-08-20 20:10 G 27893474.25 27893474.34 27893474.44 0.0545 0.0479

Saturn 71659-03-15 05:31 G 27894045.56 27894045.73 27894045.92 0.0283 0.0141

Saturn 71659-10-30 20:24 G 27894275.15 27894275.35 27894275.56 0.0283 0.0065

Saturn 71660-06-16 11:03 G 27894504.90 27894504.96 27894505.03 0.0284 0.0270

Jupiter 71662-03-11 12:29 G 27895137.89 27895138.02 27895138.16 0.0491 0.0365

Jupiter 71662-11-02 10:48 G 27895373.75 27895373.95 27895374.16 0.0486 0.0027

Jupiter 71663-06-26 03:07 G 27895609.52 27895609.63 27895609.75 0.0484 0.0398

Mars 71664-03-02 02:24 G 27895859.42 27895859.60 27895859.77 0.1904 0.0074

Neptune 71666-06-16 02:24 G 27896695.59 27896695.60 27896695.65 0.0088 0.0087

Neptune 71667-01-27 15:22 G 27896921.07 27896921.14 27896921.24 0.0088 0.0081

Neptune 71667-09-10 04:19 G 27897146.58 27897146.68 27897146.80 0.0088 0.0075

Neptune 71668-04-22 17:31 G 27897372.09 27897372.23 27897372.36 0.0088 0.0069

Jupiter 71668-08-29 21:36 G 27897501.22 27897501.40 27897501.59 0.0540 0.0211

Neptune 71668-12-04 05:46 G 27897597.61 27897597.74 27897597.92 0.0088 0.0064

Jupiter 71669-04-25 07:12 G 27897739.65 27897739.80 27897739.97 0.0544 0.0331

Neptune 71669-07-17 18:43 G 27897823.13 27897823.28 27897823.47 0.0088 0.0058

Neptune 71670-02-28 07:41 G 27898048.66 27898048.82 27898049.01 0.0088 0.0052

Neptune 71670-10-11 20:39 G 27898274.18 27898274.36 27898274.56 0.0088 0.0046

Neptune 71671-05-25 09:22 G 27898499.71 27898499.89 27898500.11 0.0088 0.0040

Neptune 71672-01-05 22:19 G 27898725.24 27898725.43 27898725.65 0.0088 0.0034

Neptune 71672-08-18 11:03 G 27898950.77 27898950.96 27898951.19 0.0088 0.0028

Neptune 71673-04-01 00:00 G 27899176.30 27899176.50 27899176.73 0.0088 0.0022

Saturn 71673-08-26 19:12 G 27899324.12 27899324.30 27899324.47 0.0276 0.0158

Neptune 71673-11-12 13:27 G 27899401.84 27899402.06 27899402.28 0.0088 0.0015

Jupiter 71673-11-14 13:27 G 27899404.01 27899404.06 27899404.12 0.0493 0.0474

Saturn 71674-04-13 03:51 G 27899553.45 27899553.66 27899553.88 0.0276 0.0031

Neptune 71674-06-26 02:10 G 27899627.37 27899627.59 27899627.81 0.0088 0.0009

Jupiter 71674-07-08 14:10 G 27899639.89 27899640.09 27899640.29 0.0487 0.0084

Saturn 71674-11-28 12:29 G 27899782.91 27899783.02 27899783.16 0.0275 0.0220

Neptune 71675-02-06 14:53 G 27899852.90 27899853.12 27899853.35 0.0088 0.0004

Jupiter 71675-03-01 08:10 G 27899875.68 27899875.84 27899876.00 0.0484 0.0296

Neptune 71675-09-20 03:51 G 27900078.44 27900078.66 27900078.88 0.0088 0.0003

Neptune 71676-05-02 16:34 G 27900303.97 27900304.19 27900304.41 0.0088 0.0010

Neptune 71676-12-14 05:31 G 27900529.51 27900529.73 27900529.95 0.0088 0.0016

Neptune 71677-07-27 18:15 G 27900755.05 27900755.26 27900755.48 0.0088 0.0022

Neptune 71678-03-10 06:58 G 27900980.59 27900980.79 27900981.01 0.0088 0.0028

Neptune 71678-10-21 19:41 G 27901206.13 27901206.32 27901206.53 0.0088 0.0034

Neptune 71679-06-04 08:24 G 27901431.66 27901431.85 27901432.06 0.0088 0.0040

Neptune 71680-01-15 21:07 G 27901657.20 27901657.38 27901657.58 0.0088 0.0046

Jupiter 71680-05-04 10:19 G 27901766.78 27901766.93 27901767.09 0.0537 0.0353

Neptune 71680-08-28 09:51 G 27901882.74 27901882.91 27901883.10 0.0088 0.0052

Jupiter 71680-12-28 17:31 G 27902005.04 27902005.23 27902005.42 0.0543 0.0180

Neptune 71681-04-10 22:34 G 27902108.29 27902108.44 27902108.62 0.0088 0.0058

Neptune 71681-11-22 11:17 G 27902333.84 27902333.97 27902334.14 0.0088 0.0064

Neptune 71682-07-06 00:00 G 27902559.39 27902559.50 27902559.65 0.0088 0.0070

Neptune 71683-02-16 12:29 G 27902784.94 27902785.02 27902785.16 0.0088 0.0076

Neptune 71683-09-30 01:41 G 27903010.50 27903010.57 27903010.66 0.0088 0.0081

Uranus 71684-01-13 10:05 G 27903115.86 27903115.92 27903115.99 0.0134 0.0128

Neptune 71684-05-12 14:10 G 27903236.08 27903236.09 27903236.13 0.0088 0.0087

Uranus 71684-08-26 15:07 G 27903341.99 27903342.13 27903342.29 0.0134 0.0096

Uranus 71685-04-09 20:39 G 27903568.18 27903568.36 27903568.56 0.0134 0.0063

Uranus 71685-11-22 02:10 G 27903794.38 27903794.59 27903794.80 0.0134 0.0030

Jupiter 71686-03-13 18:00 G 27903906.07 27903906.25 27903906.44 0.0489 0.0192

Uranus 71686-07-06 07:41 G 27904020.61 27904020.82 27904021.04 0.0134 0.0004

Jupiter 71686-11-04 13:55 G 27904141.89 27904142.08 27904142.26 0.0485 0.0194

Uranus 71687-02-17 13:12 G 27904246.84 27904247.05 27904247.26 0.0134 0.0036

Uranus 71687-10-01 18:29 G 27904473.10 27904473.27 27904473.47 0.0135 0.0070

Uranus 71688-05-15 00:15 G 27904699.39 27904699.51 27904699.67 0.0135 0.0103

Saturn 71688-09-24 12:43 G 27904831.84 27904832.03 27904832.23 0.0283 0.0107

Saturn 71689-05-12 03:51 G 27905061.47 27905061.66 27905061.86 0.0284 0.0100

Jupiter 71692-01-07 20:39 G 27906032.29 27906032.36 27906032.44 0.0535 0.0492

Jupiter 71692-09-02 00:43 G 27906270.33 27906270.53 27906270.73 0.0542 0.0024

Mars 71695-03-26 09:36 G 27907205.72 27907205.90 27907206.07 0.1620 0.0187

Jupiter 71697-11-16 22:05 G 27908172.26 27908172.42 27908172.59 0.0491 0.0298

Jupiter 71698-07-10 19:41 G 27908408.12 27908408.32 27908408.53 0.0486 0.0092

Jupiter 71699-03-03 11:46 G 27908643.93 27908643.99 27908644.06 0.0484 0.0458

Saturn 71703-03-10 03:51 G 27910110.47 27910110.66 27910110.85 0.0275 0.0123

Saturn 71703-10-25 12:29 G 27910339.82 27910340.02 27910340.23 0.0275 0.0066

Jupiter 71704-05-08 12:15 G 27910535.81 27910536.01 27910536.20 0.0540 0.0125

Saturn 71704-06-10 21:07 G 27910569.31 27910569.38 27910569.47 0.0275 0.0253

Jupiter 71705-01-01 22:48 G 27910774.32 27910774.45 27910774.58 0.0545 0.0416

Jupiter 71709-07-24 00:58 G 27912438.43 27912438.54 27912438.66 0.0492 0.0405

Jupiter 71710-03-17 00:29 G 27912674.31 27912674.52 27912674.72 0.0487 0.0015

Jupiter 71710-11-07 17:31 G 27912910.09 27912910.23 27912910.36 0.0484 0.0360

Moon 71715-02-16 18:29 G 27914472.14 27914472.27 27914472.40 0.2623 0.1633

Earth 71715-02-16 21:22 G 27914472.27 27914472.39 27914472.52 0.2629 0.1625 *

Jupiter 71716-01-12 01:27 G 27914801.39 27914801.56 27914801.74 0.0539 0.0270

Jupiter 71716-09-06 10:19 G 27915039.75 27915039.93 27915040.10 0.0544 0.0269

Saturn 71718-04-07 15:36 G 27915617.95 27915618.15 27915618.35 0.0283 0.0083

Saturn 71718-11-23 06:15 G 27915847.57 27915847.76 27915847.95 0.0284 0.0123

Jupiter 71721-11-20 05:03 G 27916940.51 27916940.71 27916940.91 0.0488 0.0121

Jupiter 71722-07-13 23:31 G 27917176.31 27917176.48 27917176.65 0.0484 0.0260

Moon 71723-02-14 08:24 G 27917391.74 27917391.85 27917391.97 0.2627 0.1790

Earth 71723-02-14 14:10 G 27917391.96 27917392.09 27917392.23 0.2628 0.1388 *

Uranus 71725-07-25 15:36 G 27918284.09 27918284.15 27918284.22 0.0144 0.0137

Uranus 71726-03-09 03:36 G 27918510.50 27918510.65 27918510.82 0.0144 0.0096

Uranus 71726-10-21 15:36 G 27918736.96 27918737.15 27918737.36 0.0144 0.0055

Uranus 71727-06-05 03:51 G 27918963.44 27918963.66 27918963.88 0.0144 0.0014

Jupiter 71727-09-16 16:19 G 27919067.05 27919067.18 27919067.31 0.0537 0.0407

Uranus 71728-01-17 15:36 G 27919189.94 27919190.15 27919190.37 0.0144 0.0028

Jupiter 71728-05-11 22:34 G 27919305.24 27919305.44 27919305.64 0.0543 0.0120

Uranus 71728-08-31 03:07 G 27919416.45 27919416.63 27919416.83 0.0144 0.0069

Uranus 71729-04-14 15:07 G 27919642.99 27919643.13 27919643.27 0.0144 0.0109

Mars 71729-12-29 04:48 G 27919901.53 27919901.70 27919901.86 0.1906 0.0747

Saturn 71732-09-19 04:19 G 27920896.48 27920896.68 27920896.88 0.0276 0.0103

Saturn 71733-05-06 12:58 G 27921125.84 27921126.04 27921126.24 0.0275 0.0086

Jupiter 71733-07-26 07:27 G 27921206.64 27921206.81 27921207.00 0.0490 0.0232

Saturn 71733-12-21 21:22 G 27921355.38 27921355.39 27921355.43 0.0275 0.0273

Jupiter 71734-03-19 03:51 G 27921442.47 27921442.66 27921442.86 0.0485 0.0155

Jupiter 71740-01-15 09:51 G 27923570.71 27923570.91 27923571.11 0.0541 0.0030

Jupiter 71740-09-09 21:36 G 27923809.33 27923809.40 27923809.47 0.0545 0.0508

Pluto 71743-06-12 10:48 G 27924814.75 27924814.95 27924815.16 0.0080 0.0030

Pluto 71744-01-23 21:07 G 27925040.20 27925040.38 27925040.59 0.0079 0.0037

Jupiter 71745-03-31 10:34 G 27925472.80 27925472.94 27925473.09 0.0491 0.0339

Jupiter 71745-11-22 09:07 G 27925708.68 27925708.88 27925709.09 0.0486 0.0051

Jupiter 71746-07-16 01:55 G 27925944.48 27925944.58 27925944.68 0.0484 0.0420

Saturn 71747-03-03 05:46 G 27926174.67 27926174.74 27926174.84 0.0283 0.0257

Saturn 71747-10-18 20:53 G 27926404.17 27926404.37 27926404.58 0.0283 0.0053

Saturn 71748-06-04 12:00 G 27926633.83 27926634.00 27926634.18 0.0284 0.0154

Neptune 71749-03-14 17:03 G 27926917.18 27926917.21 27926917.28 0.0090 0.0087

Neptune 71749-10-26 06:15 G 27927142.69 27927142.76 27927142.87 0.0090 0.0081

Neptune 71750-06-08 19:27 G 27927368.21 27927368.31 27927368.45 0.0090 0.0075

Neptune 71751-01-20 08:53 G 27927593.74 27927593.87 27927594.02 0.0090 0.0068

Neptune 71751-09-02 21:51 G 27927819.27 27927819.41 27927819.58 0.0090 0.0062

Jupiter 71751-09-19 18:15 G 27927836.07 27927836.26 27927836.45 0.0539 0.0182

Neptune 71752-04-15 11:03 G 27928044.81 27928044.96 27928045.15 0.0090 0.0056

Jupiter 71752-05-15 03:51 G 27928074.51 27928074.66 27928074.81 0.0544 0.0356

Neptune 71752-11-27 00:15 G 27928270.35 27928270.51 27928270.71 0.0090 0.0050

Neptune 71753-07-10 13:41 G 27928495.88 27928496.07 27928496.27 0.0090 0.0043

Neptune 71754-02-21 02:39 G 27928721.42 27928721.61 27928721.82 0.0090 0.0037

Neptune 71754-10-04 16:05 G 27928946.96 27928947.17 27928947.38 0.0090 0.0030

Neptune 71755-05-18 05:03 G 27929172.51 27929172.71 27929172.93 0.0090 0.0024

Neptune 71755-12-29 18:29 G 27929398.06 27929398.27 27929398.49 0.0090 0.0017

Neptune 71756-08-11 07:27 G 27929623.60 27929623.81 27929624.03 0.0090 0.0011

Jupiter 71756-12-04 13:27 G 27929738.98 27929739.06 27929739.15 0.0494 0.0445

Neptune 71757-03-24 20:39 G 27929849.15 27929849.36 27929849.58 0.0090 0.0005

Jupiter 71757-07-28 14:24 G 27929974.89 27929975.10 27929975.30 0.0488 0.0054

Neptune 71757-11-05 09:51 G 27930074.70 27930074.91 27930075.13 0.0090 0.0003

Jupiter 71758-03-21 08:10 G 27930210.70 27930210.84 27930211.00 0.0484 0.0324

Neptune 71758-06-18 23:17 G 27930300.25 27930300.47 27930300.69 0.0090 0.0009

Neptune 71759-01-30 12:15 G 27930525.80 27930526.01 27930526.23 0.0090 0.0015

Neptune 71759-09-13 01:27 G 27930751.35 27930751.56 27930751.78 0.0090 0.0022

Neptune 71760-04-25 14:53 G 27930976.91 27930977.12 27930977.33 0.0090 0.0028

Neptune 71760-12-07 03:51 G 27931202.47 27931202.66 27931202.87 0.0090 0.0035

Mars 71761-01-21 21:51 G 27931248.23 27931248.41 27931248.58 0.1619 0.0040

Neptune 71761-07-20 17:17 G 27931428.03 27931428.22 27931428.42 0.0090 0.0041

Saturn 71761-08-15 04:05 G 27931453.61 27931453.67 27931453.76 0.0276 0.0257

Neptune 71762-03-03 06:15 G 27931653.59 27931653.76 27931653.96 0.0090 0.0048

Saturn 71762-04-01 12:58 G 27931682.84 27931683.04 27931683.25 0.0275 0.0069

Neptune 71762-10-14 19:41 G 27931879.15 27931879.32 27931879.50 0.0090 0.0054

Saturn 71762-11-16 21:22 G 27931912.21 27931912.39 27931912.59 0.0275 0.0120

Jupiter 71763-05-25 06:58 G 27932101.63 27932101.79 27932101.95 0.0537 0.0324

Neptune 71763-05-28 08:53 G 27932104.73 27932104.87 27932105.05 0.0090 0.0061

Neptune 71764-01-08 22:05 G 27932330.30 27932330.42 27932330.59 0.0090 0.0067

Jupiter 71764-01-18 13:55 G 27932339.90 27932340.08 27932340.27 0.0543 0.0207

Neptune 71764-08-21 11:31 G 27932555.87 27932555.98 27932556.12 0.0090 0.0073

Neptune 71765-04-04 00:58 G 27932781.45 27932781.54 27932781.65 0.0090 0.0079

Neptune 71765-11-15 13:55 G 27933007.04 27933007.08 27933007.17 0.0090 0.0086

Uranus 71768-04-27 02:53 G 27933900.51 27933900.62 27933900.77 0.0134 0.0109

Uranus 71768-12-09 08:39 G 27934126.68 27934126.86 27934127.04 0.0134 0.0075

Jupiter 71769-04-02 18:29 G 27934241.07 27934241.27 27934241.46 0.0489 0.0161

Uranus 71769-07-23 13:55 G 27934352.88 27934353.08 27934353.29 0.0134 0.0043

Jupiter 71769-11-24 13:55 G 27934476.90 27934477.08 27934477.26 0.0485 0.0222

Uranus 71770-03-06 19:27 G 27934579.09 27934579.31 27934579.53 0.0134 0.0010

Uranus 71770-10-19 00:43 G 27934805.32 27934805.53 27934805.75 0.0134 0.0024

Uranus 71771-06-02 06:29 G 27935031.58 27935031.77 27935031.97 0.0135 0.0057

Uranus 71772-01-14 12:00 G 27935257.85 27935258.00 27935258.17 0.0135 0.0090

Uranus 71772-08-27 17:46 G 27935484.16 27935484.24 27935484.34 0.0135 0.0123

Jupiter 71775-01-27 21:07 G 27936367.28 27936367.38 27936367.48 0.0536 0.0460

Jupiter 71775-09-23 01:55 G 27936605.38 27936605.58 27936605.78 0.0542 0.0058

Saturn 71776-09-12 09:07 G 27936960.77 27936960.88 27936961.01 0.0283 0.0233

Saturn 71777-04-30 00:15 G 27937190.30 27937190.51 27937190.72 0.0283 0.0029

Saturn 71777-12-15 14:53 G 27937419.96 27937420.12 27937420.29 0.0284 0.0178

Jupiter 71780-12-06 22:19 G 27938507.26 27938507.43 27938507.60 0.0490 0.0268

Jupiter 71781-07-30 19:27 G 27938743.11 27938743.31 27938743.51 0.0485 0.0119

Jupiter 71782-03-23 10:48 G 27938978.95 27938978.95 27938978.98 0.0483 0.0482

Jupiter 71787-05-28 15:22 G 27940870.94 27940871.14 27940871.34 0.0541 0.0089

Jupiter 71788-01-22 02:39 G 27941109.50 27941109.61 27941109.72 0.0545 0.0450

Saturn	71791-02-25 04:05 G	27942239.57	27942239.67	27942239.78	0.0276	0.0238
Saturn	71791-10-12 12:43 G	27942468.82	27942469.03	27942469.24	0.0275	0.0050
Saturn	71792-05-28 21:22 G	27942698.21	27942698.39	27942698.57	0.0275	0.0138
Jupiter	71792-08-12 00:00 G	27942773.37	27942773.50	27942773.63	0.0492	0.0377
Jupiter	71793-04-04 23:17 G	27943009.26	27943009.47	27943009.67	0.0487	0.0012
Jupiter	71793-11-26 16:19 G	27943245.06	27943245.18	27943245.31	0.0484	0.0384
Mars	71795-10-26 07:12 G	27943943.70	27943943.80	27943943.90	0.1907	0.1542
Jupiter	71799-01-31 04:05 G	27945136.49	27945136.67	27945136.85	0.0539	0.0233
Jupiter	71799-09-26 12:43 G	27945374.87	27945375.03	27945375.20	0.0544	0.0303
Jupiter	71804-04-18 02:10 G	27947039.55	27947039.59	27947039.63	0.0494	0.0484
Jupiter	71804-12-10 03:51 G	27947275.46	27947275.66	27947275.87	0.0488	0.0095
Jupiter	71805-08-02 22:34 G	27947511.28	27947511.44	27947511.61	0.0484	0.0284
Saturn	71806-03-26 12:43 G	27947746.90	27947747.03	27947747.19	0.0283	0.0206
Saturn	71806-11-11 04:05 G	27947976.46	27947976.67	27947976.88	0.0283	0.0002
Saturn	71807-06-28 18:58 G	27948206.15	27948206.29	27948206.44	0.0284	0.0206
Uranus	71809-11-07 09:51 G	27949068.79	27949068.91	27949069.05	0.0144	0.0115
Uranus	71810-06-21 21:51 G	27949295.24	27949295.41	27949295.61	0.0144	0.0075
Jupiter	71810-10-06 14:24 G	27949401.95	27949402.10	27949402.24	0.0536	0.0376
Uranus	71811-02-03 09:51 G	27949521.71	27949521.91	27949522.13	0.0144	0.0033
Jupiter	71811-06-01 19:55 G	27949640.14	27949640.33	27949640.53	0.0543	0.0149
Uranus	71811-09-17 21:51 G	27949748.19	27949748.41	27949748.63	0.0144	0.0009
Uranus	71812-05-01 09:36 G	27949974.70	27949974.90	27949975.11	0.0144	0.0050
Uranus	71812-12-13 21:22 G	27950201.23	27950201.39	27950201.57	0.0144	0.0091
Uranus	71813-07-28 08:53 G	27950427.80	27950427.87	27950427.97	0.0144	0.0131
Jupiter	71816-08-15 07:55 G	27951541.65	27951541.83	27951542.02	0.0490	0.0201
Jupiter	71817-04-08 04:34 G	27951777.50	27951777.69	27951777.88	0.0485	0.0184
Saturn	71820-09-07 12:15 G	27953025.88	27953026.01	27953026.17	0.0276	0.0205
Saturn	71821-04-24 21:07 G	27953255.17	27953255.38	27953255.59	0.0275	0.0016
Saturn	71821-12-10 05:31 G	27953484.57	27953484.73	27953484.90	0.0275	0.0172
Jupiter	71822-06-11 04:05 G	27953667.62	27953667.67	27953667.73	0.0534	0.0509

Jupiter 71823-02-04 06:58 G 27953905.58 27953905.79 27953905.99 0.0541 0.0007

Jupiter 71823-09-30 18:29 G 27954144.24 27954144.27 27954144.32 0.0545 0.0533

Mars 71826-11-20 10:19 G 27955290.76 27955290.93 27955291.10 0.1618 0.0244

Jupiter 71828-04-20 11:17 G 27955807.82 27955807.97 27955808.14 0.0491 0.0308

Jupiter 71828-12-12 09:51 G 27956043.71 27956043.91 27956044.11 0.0486 0.0080

Jupiter 71829-08-05 01:55 G 27956279.51 27956279.58 27956279.66 0.0484 0.0446

Neptune 71831-05-03 00:29 G 27956915.45 27956915.52 27956915.60 0.0088 0.0082

Neptune 71831-12-14 13:27 G 27957140.96 27957141.06 27957141.17 0.0088 0.0076

Neptune 71832-07-27 02:24 G 27957366.47 27957366.60 27957366.73 0.0088 0.0070

Neptune 71833-03-09 15:22 G 27957591.99 27957592.14 27957592.29 0.0088 0.0064

Neptune 71833-10-21 04:19 G 27957817.51 27957817.68 27957817.85 0.0088 0.0058

Neptune 71834-06-03 17:03 G 27958043.04 27958043.21 27958043.39 0.0088 0.0052

Jupiter 71834-10-09 19:27 G 27958171.12 27958171.31 27958171.51 0.0540 0.0148

Neptune 71835-01-15 05:46 G 27958268.56 27958268.74 27958268.94 0.0088 0.0046

Jupiter 71835-06-05 05:46 G 27958409.60 27958409.74 27958409.88 0.0545 0.0390

Neptune 71835-08-28 18:43 G 27958494.09 27958494.28 27958494.48 0.0088 0.0040

Saturn 71835-10-06 16:34 G 27958533.03 27958533.19 27958533.36 0.0283 0.0180

Neptune 71836-04-10 07:27 G 27958719.61 27958719.81 27958720.02 0.0088 0.0034

Saturn 71836-05-23 07:27 G 27958762.60 27958762.81 27958763.02 0.0284 0.0025

Moon 71836-08-17 07:41 G 27958848.68 27958848.82 27958848.97 0.2707 0.0808

Earth 71836-08-17 12:29 G 27958848.88 27958849.02 27958849.17 0.2704 0.1152 *

Neptune 71836-11-21 20:24 G 27958945.15 27958945.35 27958945.57 0.0088 0.0028

Saturn 71837-01-07 22:19 G 27958992.32 27958992.43 27958992.56 0.0284 0.0231

Neptune 71837-07-05 09:22 G 27959170.68 27959170.89 27959171.11 0.0088 0.0022

Neptune 71838-02-15 22:05 G 27959396.21 27959396.42 27959396.65 0.0088 0.0016

Neptune 71838-09-29 11:03 G 27959621.75 27959621.96 27959622.19 0.0088 0.0010

Neptune 71839-05-13 00:00 G 27959847.28 27959847.50 27959847.73 0.0088 0.0003

Neptune 71839-12-24 12:58 G 27960072.82 27960073.04 27960073.26 0.0088 0.0003

Jupiter 71839-12-25 14:24 G 27960073.99 27960074.10 27960074.21 0.0493 0.0414

Neptune 71840-08-06 01:41 G 27960298.36 27960298.57 27960298.80 0.0088 0.0010

Jupiter 71840-08-17 14:39 G 27960309.91 27960310.11 27960310.32 0.0487 0.0025

Neptune 71841-03-19 14:24 G 27960523.89 27960524.10 27960524.33 0.0088 0.0016

Jupiter 71841-04-10 08:10 G 27960545.70 27960545.84 27960545.98 0.0484 0.0349

Neptune 71841-10-31 03:22 G 27960749.44 27960749.64 27960749.87 0.0088 0.0022

Neptune 71842-06-13 16:19 G 27960974.97 27960975.18 27960975.40 0.0088 0.0028

Neptune 71843-01-25 05:03 G 27961200.51 27961200.71 27961200.92 0.0088 0.0034

Neptune 71843-09-07 17:46 G 27961426.05 27961426.24 27961426.44 0.0088 0.0040

Neptune 71844-04-20 06:29 G 27961651.59 27961651.77 27961651.97 0.0088 0.0046

Earth 71844-08-15 01:55 G 27961768.52 27961768.58 27961768.64 0.2704 0.2453

Neptune 71844-12-01 19:27 G 27961877.14 27961877.31 27961877.50 0.0088 0.0052

Neptune 71845-07-15 08:10 G 27962102.68 27962102.84 27962103.01 0.0088 0.0058

Neptune 71846-02-25 20:53 G 27962328.23 27962328.37 27962328.53 0.0088 0.0064

Jupiter 71846-06-14 10:05 G 27962436.75 27962436.92 27962437.09 0.0538 0.0288

Neptune 71846-10-09 09:22 G 27962553.77 27962553.89 27962554.04 0.0088 0.0070

Jupiter 71847-02-07 18:00 G 27962675.07 27962675.25 27962675.43 0.0544 0.0244

Neptune 71847-05-22 22:05 G 27962779.33 27962779.42 27962779.55 0.0088 0.0076

Neptune 71848-01-03 10:48 G 27963004.89 27963004.95 27963005.05 0.0088 0.0082

Neptune 71848-08-15 23:31 G 27963230.48 27963230.48 27963230.51 0.0088 0.0088

Saturn 71850-03-20 12:00 G 27963811.85 27963812.00 27963812.17 0.0276 0.0186

Saturn 71850-11-04 20:53 G 27964041.15 27964041.37 27964041.58 0.0275 0.0005

Saturn 71851-06-22 05:17 G 27964270.57 27964270.72 27964270.88 0.0275 0.0190

Uranus 71851-12-27 14:39 G 27964459.03 27964459.11 27964459.22 0.0134 0.0121

Jupiter 71852-04-22 17:46 G 27964576.05 27964576.24 27964576.44 0.0489 0.0134

Uranus 71852-08-09 20:10 G 27964685.18 27964685.34 27964685.51 0.0134 0.0089

Jupiter 71852-12-14 13:12 G 27964811.88 27964812.05 27964812.23 0.0485 0.0247

Uranus 71853-03-24 01:12 G 27964911.37 27964911.55 27964911.76 0.0134 0.0057

Uranus 71853-11-05 06:58 G 27965137.58 27965137.79 27965138.00 0.0134 0.0023

Uranus 71854-06-19 12:29 G 27965363.81 27965364.02 27965364.24 0.0134 0.0010

Uranus 71855-01-31 17:46 G 27965590.05 27965590.24 27965590.46 0.0134 0.0044

Uranus 71855-09-14 23:17 G 27965816.31 27965816.47 27965816.67 0.0135 0.0077

Uranus 71856-04-28 05:03 G 27966042.60 27966042.71 27966042.85 0.0135 0.0110

Jupiter 71858-02-17 00:15 G 27966702.40 27966702.51 27966702.64 0.0536 0.0424

Jupiter 71858-10-13 05:17 G 27966940.52 27966940.72 27966940.92 0.0542 0.0096

Jupiter 71863-12-27 21:36 G 27968842.23 27968842.40 27968842.58 0.0490 0.0240

Jupiter 71864-08-19 18:58 G 27969078.09 27969078.29 27969078.48 0.0486 0.0145

Saturn 71865-04-17 19:12 G 27969319.13 27969319.30 27969319.48 0.0283 0.0155

Saturn 71865-12-03 10:19 G 27969548.72 27969548.93 27969549.14 0.0284 0.0051

Saturn 71866-07-21 01:27 G 27969778.47 27969778.56 27969778.65 0.0284 0.0256

Jupiter 71870-06-17 13:55 G 27971205.88 27971206.08 27971206.28 0.0540 0.0057

Jupiter 71871-02-11 00:29 G 27971444.43 27971444.52 27971444.62 0.0544 0.0476

Jupiter 71875-09-02 00:29 G 27973108.38 27973108.52 27973108.67 0.0492 0.0347

Jupiter 71876-04-25 00:00 G 27973344.30 27973344.50 27973344.71 0.0487 0.0043

Jupiter 71876-12-16 17:31 G 27973580.13 27973580.23 27973580.34 0.0484 0.0411

Saturn 71879-09-30 20:24 G 27974598.17 27974598.35 27974598.52 0.0276 0.0153

Saturn 71880-05-17 04:48 G 27974827.49 27974827.70 27974827.92 0.0275 0.0036

Saturn 71881-01-01 13:12 G 27975056.94 27975057.05 27975057.18 0.0275 0.0223

Jupiter 71882-02-20 01:41 G 27975471.39 27975471.57 27975471.76 0.0539 0.0203

Jupiter 71882-10-16 10:05 G 27975709.77 27975709.92 27975710.09 0.0544 0.0331

Jupiter 71887-05-08 02:53 G 27977374.55 27977374.62 27977374.70 0.0494 0.0454

Jupiter 71887-12-30 04:48 G 27977610.49 27977610.70 27977610.90 0.0488 0.0065

Jupiter 71888-08-21 23:03 G 27977846.31 27977846.46 27977846.62 0.0484 0.0312

Mars 71892-09-16 22:48 G 27979333.28 27979333.45 27979333.61 0.1618 0.0460

Uranus 71893-07-07 16:34 G 27979627.13 27979627.19 27979627.29 0.0144 0.0134

Jupiter 71893-10-25 15:07 G 27979736.98 27979737.13 27979737.29 0.0537 0.0343

Uranus 71894-02-19 04:34 G 27979853.54 27979853.69 27979853.88 0.0144 0.0093

Jupiter 71894-06-20 21:36 G 27979975.21 27979975.40 27979975.59 0.0543 0.0183

Uranus 71894-10-03 17:03 G 27980080.00 27980080.21 27980080.41 0.0144 0.0051

Saturn 71894-10-28 23:31 G 27980105.30 27980105.48 27980105.67 0.0283 0.0128

Uranus 71895-05-18 05:03 G 27980306.49 27980306.71 27980306.92 0.0144 0.0010

Saturn 71895-06-15 14:24 G 27980334.90 27980335.10 27980335.31 0.0284 0.0077

Uranus 71895-12-30 16:48 G 27980532.99 27980533.20 27980533.42 0.0144 0.0031

Saturn 71896-01-31 05:17 G 27980564.71 27980564.72 27980564.75 0.0284 0.0282

Uranus 71896-08-13 04:34 G 27980759.51 27980759.69 27980759.89 0.0144 0.0072

Uranus 71897-03-27 16:05 G 27980986.05 27980986.17 27980986.32 0.0144 0.0113

Jupiter 71899-09-04 08:53 G 27981876.68 27981876.87 27981877.06 0.0489 0.0170

Jupiter 71900-04-28 04:48 G 27982112.52 27982112.70 27982112.89 0.0485 0.0212

Pluto 71900-08-17 19:55 G 27982224.26 27982224.33 27982224.42 0.0065 0.0060

Pluto 71901-03-31 00:00 G 27982449.31 27982449.50 27982449.72 0.0065 0.0025

Pluto 71901-11-11 04:19 G 27982674.48 27982674.68 27982674.91 0.0065 0.0012

Pluto 71902-06-24 08:39 G 27982899.74 27982899.86 27982900.03 0.0065 0.0049

Jupiter 71905-07-01 06:43 G 27984002.70 27984002.78 27984002.88 0.0535 0.0475

Jupiter 71906-02-24 10:34 G 27984240.74 27984240.94 27984241.14 0.0542 0.0037

Saturn 71909-04-12 19:41 G 27985384.14 27985384.32 27985384.51 0.0275 0.0134

Saturn 71909-11-28 04:19 G 27985613.47 27985613.68 27985613.89 0.0275 0.0054

Saturn 71910-07-15 12:43 G 27985842.94 27985843.03 27985843.14 0.0275 0.0241

Jupiter 71911-05-11 11:31 G 27986142.81 27986142.98 27986143.15 0.0491 0.0278

Jupiter 71912-01-02 09:22 G 27986378.70 27986378.89 27986379.10 0.0486 0.0108

Jupiter 71912-08-25 01:41 G 27986614.53 27986614.57 27986614.62 0.0484 0.0469

Neptune 71913-06-18 01:55 G 27986911.56 27986911.58 27986911.64 0.0090 0.0088

Neptune 71914-01-29 14:53 G 27987137.05 27987137.12 27987137.23 0.0090 0.0082

Neptune 71914-09-12 04:05 G 27987362.57 27987362.67 27987362.80 0.0090 0.0076

Neptune 71915-04-25 17:03 G 27987588.10 27987588.21 27987588.37 0.0090 0.0070

Neptune 71915-12-07 06:43 G 27987813.63 27987813.78 27987813.94 0.0090 0.0063

Neptune 71916-07-19 19:41 G 27988039.16 27988039.32 27988039.50 0.0090 0.0057

Neptune 71917-03-02 08:39 G 27988264.70 27988264.86 27988265.06 0.0090 0.0051

Neptune 71917-10-13 22:05 G 27988490.24 27988490.42 27988490.62 0.0090 0.0044

Jupiter 71917-10-29 23:17 G 27988506.27 27988506.47 27988506.67 0.0540 0.0109

Neptune 71918-05-27 11:17 G 27988715.78 27988715.97 27988716.18 0.0090 0.0038

Jupiter 71918-06-25 09:36 G 27988744.78 27988744.90 27988745.03 0.0544 0.0425

Neptune 71919-01-08 00:29 G 27988941.32 27988941.52 27988941.73 0.0090 0.0031

Neptune 71919-08-21 13:41 G 27989166.87 27989167.07 27989167.29 0.0090 0.0025

Neptune 71920-04-03 02:53 G 27989392.41 27989392.62 27989392.84 0.0090 0.0018

Neptune 71920-11-14 16:05 G 27989617.96 27989618.17 27989618.39 0.0090 0.0012

Neptune 71921-06-28 05:17 G 27989843.50 27989843.72 27989843.94 0.0090 0.0005

Neptune 71922-02-08 18:29 G 27990069.05 27990069.27 27990069.49 0.0090 0.0002

Neptune 71922-09-22 07:27 G 27990294.60 27990294.81 27990295.03 0.0090 0.0009

Jupiter 71923-01-14 14:10 G 27990408.97 27990409.09 27990409.22 0.0493 0.0385

Neptune 71923-05-05 20:39 G 27990520.15 27990520.36 27990520.59 0.0090 0.0015

Jupiter 71923-09-07 14:24 G 27990644.89 27990645.10 27990645.30 0.0487 0.0004

Neptune 71923-12-17 10:05 G 27990745.71 27990745.92 27990746.13 0.0090 0.0021

Jupiter 71924-04-30 08:10 G 27990880.71 27990880.84 27990880.97 0.0484 0.0374

Saturn 71924-05-11 01:12 G 27990891.36 27990891.55 27990891.75 0.0283 0.0105

Neptune 71924-07-29 23:03 G 27990971.26 27990971.46 27990971.67 0.0090 0.0028

Saturn 71924-12-26 16:19 G 27991120.99 27991121.18 27991121.38 0.0284 0.0101

Neptune 71925-03-12 12:15 G 27991196.81 27991197.01 27991197.22 0.0090 0.0034

Neptune 71925-10-24 01:12 G 27991422.37 27991422.55 27991422.76 0.0090 0.0041

Neptune 71926-06-06 14:39 G 27991647.93 27991648.11 27991648.30 0.0090 0.0047

Neptune 71927-01-18 03:36 G 27991873.49 27991873.65 27991873.84 0.0090 0.0054

Neptune 71927-08-31 17:03 G 27992099.06 27992099.21 27992099.38 0.0090 0.0060

Neptune 71928-04-13 06:00 G 27992324.63 27992324.75 27992324.92 0.0090 0.0067

Neptune 71928-11-24 19:27 G 27992550.20 27992550.31 27992550.45 0.0090 0.0073

Jupiter 71929-07-04 09:36 G 27992771.73 27992771.90 27992772.08 0.0537 0.0255

Neptune 71929-07-08 08:53 G 27992775.78 27992775.87 27992775.99 0.0090 0.0079

Neptune 71930-02-18 22:19 G 27993001.37 27993001.43 27993001.50 0.0090 0.0085

Jupiter 71930-02-27 16:34 G 27993010.02 27993010.19 27993010.37 0.0543 0.0275

Jupiter 71934-09-19 15:22 G 27994675.12 27994675.14 27994675.16 0.0496 0.0492

Jupiter 71935-05-13 18:29 G 27994911.07 27994911.27 27994911.47 0.0489 0.0103

Jupiter 71936-01-04 14:10 G 27995146.93 27995147.09 27995147.26 0.0485 0.0276

Uranus 71936-04-10 07:27 G 27995243.69 27995243.81 27995243.97 0.0134 0.0102

Uranus 71936-11-22 12:58 G 27995469.87 27995470.04 27995470.24 0.0134 0.0069

Uranus 71937-07-06 18:29 G 27995696.07 27995696.27 27995696.49 0.0134 0.0037

Uranus 71938-02-18 00:00 G 27995922.29 27995922.50 27995922.72 0.0134 0.0004

Uranus 71938-10-02 05:31 G 27996148.52 27996148.73 27996148.95 0.0134 0.0030

Saturn 71938-10-24 03:36 G 27996170.46 27996170.65 27996170.85 0.0276 0.0102

Uranus 71939-05-16 11:17 G 27996374.78 27996374.97 27996375.16 0.0134 0.0063

Saturn 71939-06-10 12:15 G 27996399.81 27996400.01 27996400.22 0.0275 0.0087

Uranus 71939-12-28 17:03 G 27996601.06 27996601.21 27996601.36 0.0135 0.0096

Saturn 71940-01-25 20:53 G 27996629.35 27996629.37 27996629.39 0.0275 0.0273

Uranus 71940-08-10 22:48 G 27996827.40 27996827.45 27996827.51 0.0135 0.0129

Jupiter 71941-03-08 22:48 G 27997037.31 27997037.45 27997037.59 0.0535 0.0393

Jupiter 71941-11-02 03:07 G 27997275.43 27997275.63 27997275.83 0.0542 0.0125

Jupiter 71947-01-16 22:19 G 27999177.24 27999177.43 27999177.61 0.0490 0.0210

Jupiter 71947-09-09 19:27 G 27999413.12 27999413.31 27999413.50 0.0486 0.0174

Jupiter 71952-11-11 12:58 G 28001303.01 28001303.04 28001303.08 0.0533 0.0524

Saturn 71953-04-05 15:36 G 28001448.13 28001448.15 28001448.18 0.0283 0.0280

Jupiter 71953-07-07 14:53 G 28001540.92 28001541.12 28001541.33 0.0541 0.0027

Saturn 71953-11-21 06:15 G 28001677.56 28001677.76 28001677.97 0.0283 0.0077

Jupiter 71954-03-03 02:24 G 28001779.53 28001779.60 28001779.67 0.0545 0.0508

Saturn 71954-07-08 21:07 G 28001907.20 28001907.38 28001907.57 0.0284 0.0129

Earth 71958-02-19 00:15 G 28003228.40 28003228.51 28003228.62 0.2628 0.1892

Moon 71958-02-19 01:12 G 28003228.43 28003228.55 28003228.66 0.2635 0.1657 *

Mars 71958-07-16 11:17 G 28003375.81 28003375.97 28003376.13 0.1617 0.0664

Jupiter 71958-09-22 01:41 G 28003443.41 28003443.57 28003443.73 0.0492 0.0316

Jupiter 71959-05-16 00:43 G 28003679.33 28003679.53 28003679.73 0.0487 0.0071

Mars 71959-06-21 11:46 G 28003715.86 28003715.99 28003716.13 0.1905 0.1223

Jupiter 71960-01-06 17:31 G 28003915.15 28003915.23 28003915.32 0.0484 0.0435

Jupiter 71965-03-12 04:48 G 28005806.51 28005806.70 28005806.89 0.0539 0.0166

Jupiter 71965-11-05 14:10 G 28006044.94 28006045.09 28006045.24 0.0544 0.0366

Earth 71966-02-16 16:48 G 28006148.06 28006148.20 28006148.35 0.2628 0.1131

Moon 71966-02-16 21:22 G 28006148.24 28006148.39 28006148.54 0.2632 0.0564 *

Saturn 71967-09-18 18:58 G 28006727.25 28006727.29 28006727.33 0.0276 0.0269

Saturn 71968-05-05 03:36 G 28006956.45 28006956.65 28006956.85 0.0275 0.0082

Saturn 71968-12-20 12:00 G 28007185.81 28007186.00 28007186.20 0.0275 0.0106

Jupiter 71970-05-28 03:36 G 28007709.54 28007709.65 28007709.75 0.0494 0.0423

Jupiter 71971-01-19 04:34 G 28007945.49 28007945.69 28007945.90 0.0488 0.0035

Jupiter 71971-09-11 22:48 G 28008181.31 28008181.45 28008181.60 0.0484 0.0338

Jupiter 71976-11-14 18:58 G 28010072.13 28010072.29 28010072.46 0.0537 0.0305

Jupiter 71977-07-11 01:41 G 28010310.38 28010310.57 28010310.75 0.0543 0.0221

Uranus 71977-10-20 10:48 G 28010411.83 28010411.95 28010412.10 0.0144 0.0112

Uranus 71978-06-03 22:48 G 28010638.28 28010638.45 28010638.66 0.0144 0.0071

Uranus 71979-01-16 11:17 G 28010864.75 28010864.97 28010865.18 0.0144 0.0029

Uranus 71979-08-30 23:03 G 28011091.24 28011091.46 28011091.68 0.0144 0.0012

Uranus 71980-04-13 10:48 G 28011317.75 28011317.95 28011318.16 0.0144 0.0053

Uranus 71980-11-25 22:34 G 28011544.29 28011544.44 28011544.62 0.0144 0.0094

Uranus 71981-07-10 10:05 G 28011770.86 28011770.92 28011771.01 0.0143 0.0134

Jupiter 71982-09-24 08:39 G 28012211.66 28012211.86 28012212.06 0.0489 0.0141

Saturn 71982-10-16 16:19 G 28012234.10 28012234.18 28012234.27 0.0283 0.0258

Jupiter 71983-05-18 04:34 G 28012447.52 28012447.69 28012447.87 0.0485 0.0239

Saturn 71983-06-03 07:27 G 28012463.60 28012463.81 28012464.02 0.0283 0.0055

Saturn 71984-01-18 22:48 G 28012693.27 28012693.45 28012693.63 0.0284 0.0151

Jupiter 71988-07-20 07:27 G 28014337.70 28014337.81 28014337.92 0.0534 0.0441

Jupiter 71989-03-15 10:19 G 28014575.73 28014575.93 28014576.13 0.0541 0.0069

Pluto 71989-07-12 16:48 G 28014695.02 28014695.20 28014695.39 0.0080 0.0044

Pluto 71990-02-23 02:53 G 28014920.42 28014920.62 28014920.84 0.0079 0.0023

Mars 71990-07-15 04:19 G 28015062.59 28015062.68 28015062.76 0.1619 0.1404

Jupiter 71994-05-30 11:17 G 28016477.80 28016477.97 28016478.16 0.0491 0.0250

Jupiter 71995-01-21 09:51 G 28016713.72 28016713.91 28016714.11 0.0486 0.0137

Neptune 71995-08-05 09:07 G 28016909.83 28016909.88 28016909.97 0.0088 0.0083

Neptune 71996-03-17 22:19 G 28017135.33 28017135.43 28017135.54 0.0088 0.0077

Neptune 71996-10-29 11:17 G 28017360.85 28017360.97 28017361.11 0.0088 0.0071

Saturn 71997-03-31 01:55 G 28017513.49 28017513.58 28017513.69 0.0276 0.0240

Neptune 71997-06-12 00:15 G 28017586.37 28017586.51 28017586.67 0.0088 0.0065

Saturn 71997-11-15 11:03 G 28017742.75 28017742.96 28017743.17 0.0276 0.0051

Neptune 71998-01-23 13:12 G 28017811.89 28017812.05 28017812.22 0.0088 0.0059

Saturn 71998-07-02 19:41 G 28017972.14 28017972.32 28017972.51 0.0275 0.0138

Neptune 71998-09-06 01:55 G 28018037.41 28018037.58 28018037.77 0.0088 0.0053

Neptune 71999-04-19 14:53 G 28018262.94 28018263.12 28018263.31 0.0088 0.0047

Neptune 71999-12-01 03:51 G 28018488.47 28018488.66 28018488.86 0.0088 0.0041

Neptune 72000-07-13 16:34 G 28018714.00 28018714.19 28018714.41 0.0088 0.0035

Jupiter 72000-11-17 21:36 G 28018841.20 28018841.40 28018841.60 0.0539 0.0079

73RD MILLENNIUM CE

This is a list of transits of Venus in the 73rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 72001-02-24 05:17 G 28018939.53 28018939.72 28018939.95 0.0088 0.0029

Jupiter 72001-07-14 07:12 G 28019079.69 28019079.80 28019079.91 0.0544 0.0451

Neptune 72001-10-07 18:15 G 28019165.06 28019165.26 28019165.49 0.0088 0.0023

Neptune 72002-05-21 07:27 G 28019390.59 28019390.81 28019391.03 0.0088 0.0016

Neptune 72003-01-01 20:10 G 28019616.12 28019616.34 28019616.57 0.0088 0.0010

Neptune 72003-08-15 09:07 G 28019841.66 28019841.88 28019842.10 0.0088 0.0004

Neptune 72004-03-27 22:05 G 28020067.19 28020067.42 28020067.64 0.0088 0.0003

Neptune 72004-11-08 11:03 G 28020292.74 28020292.96 28020293.18 0.0088 0.0009

Neptune 72005-06-21 23:46 G 28020518.28 28020518.49 28020518.71 0.0088 0.0015

Neptune 72006-02-02 12:29 G 28020743.81 28020744.02 28020744.24 0.0088 0.0022

Jupiter 72006-02-02 14:10 G 28020743.95 28020744.09 28020744.23 0.0493 0.0357 *

Neptune 72006-09-16 01:12 G 28020969.35 28020969.55 28020969.77 0.0088 0.0028

Jupiter 72006-09-26 14:24 G 28020979.90 28020980.10 28020980.31 0.0487 0.0033

Neptune 72007-04-29 14:10 G 28021194.90 28021195.09 28021195.30 0.0088 0.0034

Jupiter 72007-05-20 08:10 G 28021215.73 28021215.84 28021215.96 0.0484 0.0399

Neptune 72007-12-11 03:07 G 28021420.44 28021420.63 28021420.84 0.0088 0.0040

Neptune 72008-07-23 16:05 G 28021645.99 28021646.17 28021646.36 0.0088 0.0046

Neptune 72009-03-06 04:48 G 28021871.53 28021871.70 28021871.89 0.0088 0.0052

Neptune 72009-10-17 17:31 G 28022097.08 28022097.23 28022097.41 0.0088 0.0058

Neptune 72010-05-31 06:29 G 28022322.63 28022322.77 28022322.93 0.0088 0.0064

Neptune 72011-01-11 19:12 G 28022548.18 28022548.30 28022548.44 0.0088 0.0070

Neptune 72011-08-25 07:55 G 28022773.73 28022773.83 28022773.95 0.0088 0.0076

Neptune 72012-04-06 20:39 G 28022999.29 28022999.36 28022999.45 0.0088 0.0082

Saturn 72012-04-27 22:48 G 28023020.34 28023020.45 28023020.59 0.0283 0.0228

Jupiter 72012-07-23 10:05 G 28023106.73 28023106.92 28023107.10 0.0538 0.0223

Saturn 72012-12-13 13:55 G 28023249.87 28023250.08 28023250.29 0.0283 0.0024

Jupiter 72013-03-18 17:46 G 28023345.07 28023345.24 28023345.41 0.0544 0.0306

Saturn 72013-07-31 04:48 G 28023479.54 28023479.70 28023479.86 0.0284 0.0181

Jupiter 72017-10-08 16:34 G 28025010.13 28025010.19 28025010.27 0.0495 0.0462

Jupiter 72018-06-01 19:12 G 28025246.10 28025246.30 28025246.50 0.0489 0.0074

Jupiter 72019-01-23 14:10 G 28025481.94 28025482.09 28025482.26 0.0485 0.0302

Uranus 72019-12-09 18:43 G 28025802.19 28025802.28 28025802.40 0.0134 0.0115

Uranus 72020-07-23 00:29 G 28026028.35 28026028.52 28026028.69 0.0134 0.0083

Uranus 72021-03-06 05:31 G 28026254.54 28026254.73 28026254.94 0.0134 0.0050

Uranus 72021-10-18 11:03 G 28026480.75 28026480.96 28026481.18 0.0134 0.0018

Uranus 72022-06-01 16:48 G 28026706.99 28026707.20 28026707.42 0.0134 0.0016

Uranus 72023-01-13 22:19 G 28026933.24 28026933.43 28026933.64 0.0134 0.0050

Uranus 72023-08-28 03:51 G 28027159.51 28027159.66 28027159.85 0.0135 0.0083

Jupiter 72024-03-28 00:43 G 28027372.38 28027372.53 28027372.68 0.0536 0.0360

Uranus 72024-04-10 09:36 G 28027385.81 28027385.90 28027386.03 0.0135 0.0116

Mars 72024-05-12 23:31 G 28027418.33 28027418.48 28027418.62 0.1616 0.0882

Jupiter 72024-11-21 06:00 G 28027610.56 28027610.75 28027610.95 0.0543 0.0161

Mars 72025-04-17 14:53 G 28027757.95 28027758.12 28027758.29 0.1907 0.0447

Saturn 72026-10-11 02:53 G 28028299.49 28028299.62 28028299.75 0.0276 0.0217

Saturn 72027-05-28 11:46 G 28028528.78 28028528.99 28028529.20 0.0275 0.0030

Saturn 72028-01-12 20:10 G 28028758.17 28028758.34 28028758.52 0.0275 0.0158

Jupiter 72030-02-04 22:19 G 28029512.24 28029512.43 28029512.62 0.0490 0.0180

Jupiter 72030-09-28 18:58 G 28029748.11 28029748.29 28029748.48 0.0485 0.0201

Jupiter 72035-12-01 16:34 G 28031638.11 28031638.19 28031638.27 0.0534 0.0488

Jupiter 72036-07-26 18:43 G 28031876.08 28031876.28 28031876.48 0.0541 0.0016

Jupiter 72037-03-22 06:00 G 28032114.74 28032114.75 28032114.77 0.0545 0.0543

Jupiter 72041-10-11 01:27 G 28033778.39 28033778.56 28033778.72 0.0492 0.0287

Saturn 72041-11-07 23:17 G 28033806.34 28033806.47 28033806.62 0.0283 0.0207

Jupiter 72042-06-04 00:15 G 28034014.31 28034014.51 28034014.71 0.0487 0.0099

Saturn 72042-06-25 14:24 G 28034035.89 28034036.10 28034036.31 0.0283 0.0004

Jupiter 72043-01-25 17:17 G 28034250.16 28034250.22 28034250.28 0.0484 0.0460

Saturn 72043-02-10 05:31 G 28034265.59 28034265.73 28034265.88 0.0284 0.0202

Jupiter 72048-03-31 05:17 G 28036141.52 28036141.72 28036141.91 0.0539 0.0133

Jupiter 72048-11-24 13:27 G 28036379.93 28036380.06 28036380.21 0.0543 0.0395

Jupiter 72053-06-16 02:24 G 28038044.49 28038044.60 28038044.73 0.0494 0.0397

Jupiter 72054-02-07 04:19 G 28038280.47 28038280.68 28038280.88 0.0488 0.0009

Jupiter 72054-09-30 23:03 G 28038516.33 28038516.46 28038516.59 0.0485 0.0364

Saturn 72056-04-22 09:51 G 28039085.76 28039085.91 28039086.07 0.0276 0.0188

Mars 72056-05-11 16:34 G 28039105.08 28039105.19 28039105.31 0.1618 0.1188

Saturn 72056-12-07 18:58 G 28039315.08 28039315.29 28039315.50 0.0276 0.0002

Saturn 72057-07-25 03:36 G 28039544.51 28039544.65 28039544.82 0.0275 0.0190

Jupiter 72059-12-04 17:46 G 28040407.07 28040407.24 28040407.41 0.0536 0.0275

Jupiter 72060-07-29 23:31 G 28040645.30 28040645.48 28040645.66 0.0542 0.0248

Uranus 72061-06-19 18:00 G 28040970.17 28040970.25 28040970.36 0.0144 0.0130

Uranus 72062-02-01 06:00 G 28041196.59 28041196.75 28041196.94 0.0144 0.0089

Uranus 72062-09-15 18:29 G 28041423.06 28041423.27 28041423.47 0.0144 0.0047

Uranus 72063-04-30 06:15 G 28041649.55 28041649.76 28041649.98 0.0144 0.0007

Uranus 72063-12-12 18:29 G 28041876.06 28041876.27 28041876.48 0.0144 0.0035

Uranus 72064-07-26 06:15 G 28042102.58 28042102.76 28042102.95 0.0144 0.0076

Uranus 72065-03-09 17:31 G 28042329.12 28042329.23 28042329.37 0.0143 0.0117

Jupiter 72065-10-13 08:10 G 28042546.64 28042546.84 28042547.04 0.0490 0.0115

Jupiter 72066-06-06 04:19 G 28042782.51 28042782.68 28042782.85 0.0485 0.0264

Saturn 72071-05-21 07:27 G 28044592.64 28044592.81 28044592.98 0.0283 0.0173

Jupiter 72071-08-09 06:29 G 28044672.65 28044672.77 28044672.91 0.0535 0.0413

Saturn 72072-01-05 22:19 G 28044822.22 28044822.43 28044822.64 0.0283 0.0031

Jupiter 72072-04-03 10:05 G 28044910.72 28044910.92 28044911.12 0.0542 0.0099

Saturn 72072-08-22 12:58 G 28045051.93 28045052.04 28045052.16 0.0284 0.0235

Jupiter 72077-06-18 12:00 G 28046812.82 28046813.00 28046813.18 0.0491 0.0220

Neptune 72077-09-19 11:17 G 28046905.95 28046905.97 28046905.99 0.0090 0.0089

Jupiter 72078-02-09 09:51 G 28047048.72 28047048.91 28047049.10 0.0486 0.0163

Neptune 72078-05-03 00:15 G 28047131.44 28047131.51 28047131.60 0.0090 0.0083

Neptune 72078-12-14 13:12 G 28047356.96 28047357.05 28047357.18 0.0090 0.0077

Neptune 72079-07-28 02:10 G 28047582.48 28047582.59 28047582.75 0.0090 0.0071

Earth 72079-08-19 12:00 G 28047604.86 28047605.00 28047605.15 0.2704 0.1103

Moon 72079-08-19 17:46 G 28047605.13 28047605.24 28047605.36 0.2704 0.1868 *

Neptune 72080-03-09 15:36 G 28047808.01 28047808.15 28047808.31 0.0090 0.0064

Neptune 72080-10-21 04:34 G 28048033.54 28048033.69 28048033.87 0.0090 0.0058

Neptune 72081-06-03 17:46 G 28048259.08 28048259.24 28048259.43 0.0090 0.0052

Neptune 72082-01-15 06:58 G 28048484.61 28048484.79 28048484.99 0.0090 0.0045

Neptune 72082-08-28 20:10 G 28048710.15 28048710.34 28048710.55 0.0090 0.0039

Neptune 72083-04-11 09:36 G 28048935.70 28048935.90 28048936.11 0.0090 0.0032

Neptune 72083-11-22 22:34 G 28049161.24 28049161.44 28049161.66 0.0090 0.0026

Jupiter 72083-12-07 23:17 G 28049176.27 28049176.47 28049176.67 0.0540 0.0046

Neptune 72084-07-05 12:00 G 28049386.79 28049387.00 28049387.22 0.0090 0.0019

Jupiter 72084-08-02 09:51 G 28049414.82 28049414.91 28049415.01 0.0545 0.0484

Neptune 72085-02-16 01:12 G 28049612.33 28049612.55 28049612.77 0.0090 0.0012

Neptune 72085-09-29 14:24 G 28049837.88 28049838.10 28049838.32 0.0090 0.0006

Saturn 72085-11-02 11:31 G 28049871.81 28049871.98 28049872.15 0.0276 0.0164

Neptune 72086-05-13 03:36 G 28050063.44 28050063.65 28050063.87 0.0090 0.0002

Saturn 72086-06-19 20:24 G 28050101.14 28050101.35 28050101.56 0.0275 0.0024

Neptune 72086-12-24 16:48 G 28050288.99 28050289.20 28050289.42 0.0090 0.0008

Saturn 72087-02-04 04:48 G 28050330.58 28050330.70 28050330.85 0.0275 0.0211

Neptune 72087-08-07 06:00 G 28050514.53 28050514.75 28050514.97 0.0090 0.0014

Earth 72087-08-17 01:27 G 28050524.51 28050524.56 28050524.62 0.2705 0.2492

Moon 72087-08-17 05:03 G 28050524.59 28050524.71 28050524.83 0.2699 0.1866 *

Neptune 72088-03-19 18:58 G 28050740.08 28050740.29 28050740.51 0.0090 0.0021

Neptune 72088-10-31 07:55 G 28050965.64 28050965.83 28050966.05 0.0090 0.0028

Jupiter 72089-02-21 14:10 G 28051078.94 28051079.09 28051079.25 0.0493 0.0327

Neptune 72089-06-13 21:22 G 28051191.20 28051191.39 28051191.60 0.0090 0.0034

Jupiter 72089-10-15 13:55 G 28051314.88 28051315.08 28051315.29 0.0487 0.0060

Neptune 72090-01-25 10:19 G 28051416.75 28051416.93 28051417.14 0.0090 0.0041

Mars 72090-03-10 12:29 G 28051460.89 28051461.02 28051461.14 0.1616 0.1080

Jupiter 72090-06-08 07:27 G 28051550.71 28051550.81 28051550.91 0.0484 0.0423

Neptune 72090-09-07 23:31 G 28051642.31 28051642.48 28051642.68 0.0090 0.0047

Mars 72091-02-12 16:48 G 28051800.03 28051800.20 28051800.37 0.1908 0.0382

Neptune 72091-04-21 12:43 G 28051867.87 28051868.03 28051868.22 0.0090 0.0054

Neptune 72091-12-03 01:55 G 28052093.43 28052093.58 28052093.76 0.0090 0.0060

Neptune 72092-07-15 15:36 G 28052319.00 28052319.15 28052319.29 0.0090 0.0066

Neptune 72093-02-26 04:19 G 28052544.57 28052544.68 28052544.82 0.0090 0.0073

Neptune 72093-10-09 17:46 G 28052770.15 28052770.24 28052770.35 0.0090 0.0079

Neptune 72094-05-23 07:27 G 28052995.74 28052995.81 28052995.87 0.0090 0.0085

Jupiter 72095-08-12 13:12 G 28053441.86 28053442.05 28053442.24 0.0538 0.0186

Jupiter 72096-04-06 21:07 G 28053680.22 28053680.38 28053680.54 0.0544 0.0341

Jupiter 72100-10-28 16:05 G 28055345.08 28055345.17 28055345.27 0.0495 0.0434

Saturn	72100-12-01 07:55 G	28055378.66	28055378.83	28055379.01	0.0283	0.0153
Jupiter	72101-06-21 18:29 G	28055581.06	28055581.27	28055581.47	0.0488	0.0046
Saturn	72101-07-18 22:48 G	28055608.25	28055608.45	28055608.66	0.0283	0.0052
Jupiter	72102-02-12 13:27 G	28055816.91	28055817.06	28055817.21	0.0485	0.0327
Saturn	72102-03-05 13:41 G	28055837.99	28055838.07	28055838.17	0.0284	0.0256
Uranus	72103-08-10 06:00 G	28056360.70	28056360.75	28056360.82	0.0134	0.0129
Uranus	72104-03-23 11:17 G	28056586.83	28056586.97	28056587.13	0.0134	0.0096
Uranus	72104-11-04 16:48 G	28056813.01	28056813.20	28056813.40	0.0134	0.0063
Uranus	72105-06-18 22:34 G	28057039.23	28057039.44	28057039.65	0.0134	0.0031
Uranus	72106-01-31 04:05 G	28057265.45	28057265.67	28057265.89	0.0134	0.0003
Uranus	72106-09-14 09:36 G	28057491.69	28057491.90	28057492.11	0.0134	0.0036
Jupiter	72107-04-18 01:41 G	28057707.41	28057707.57	28057707.73	0.0535	0.0326
Uranus	72107-04-28 15:22 G	28057717.95	28057718.14	28057718.33	0.0134	0.0069
Uranus	72107-12-10 21:07 G	28057944.24	28057944.38	28057944.52	0.0135	0.0102
Jupiter	72107-12-12 06:15 G	28057945.57	28057945.76	28057945.95	0.0542	0.0191
Jupiter	72113-02-24 20:53 G	28059847.18	28059847.37	28059847.57	0.0490	0.0155
Jupiter	72113-10-18 18:15 G	28060083.08	28060083.26	28060083.44	0.0486	0.0226
Saturn	72115-05-16 18:15 G	28060658.08	28060658.26	28060658.45	0.0277	0.0135
Saturn	72116-01-01 03:22 G	28060887.44	28060887.64	28060887.85	0.0276	0.0055
Saturn	72116-08-17 12:15 G	28061116.92	28061117.01	28061117.12	0.0275	0.0242
Jupiter	72118-12-21 15:22 G	28061973.05	28061973.14	28061973.25	0.0533	0.0459
Jupiter	72119-08-16 16:48 G	28062211.00	28062211.20	28062211.40	0.0540	0.0043
Mars	72122-03-10 05:17 G	28063147.58	28063147.72	28063147.86	0.1617	0.0976
Jupiter	72124-10-30 23:46 G	28064113.32	28064113.49	28064113.67	0.0492	0.0262
Jupiter	72125-06-23 23:03 G	28064349.26	28064349.46	28064349.66	0.0487	0.0123
Jupiter	72126-02-14 16:05 G	28064585.15	28064585.17	28064585.19	0.0484	0.0481
Saturn	72130-06-13 16:48 G	28066165.01	28066165.20	28066165.40	0.0283	0.0117
Saturn	72131-01-29 07:41 G	28066394.62	28066394.82	28066395.02	0.0283	0.0087
Jupiter	72131-04-21 03:51 G	28066476.46	28066476.66	28066476.86	0.0539	0.0105
Jupiter	72131-12-15 12:58 G	28066714.91	28066715.04	28066715.16	0.0544	0.0422

Jupiter 72136-07-06 02:39 G 28068379.48 28068379.61 28068379.75 0.0494 0.0368

Jupiter 72137-02-27 03:51 G 28068615.45 28068615.66 28068615.87 0.0488 0.0019

Jupiter 72137-10-20 22:05 G 28068851.30 28068851.42 28068851.54 0.0484 0.0387

Jupiter 72142-12-24 18:00 G 28070742.07 28070742.25 28070742.43 0.0537 0.0244

Jupiter 72143-08-20 00:43 G 28070980.36 28070980.53 28070980.70 0.0543 0.0280

Saturn 72144-11-25 21:07 G 28071444.19 28071444.38 28071444.58 0.0276 0.0109

Saturn 72145-07-13 06:15 G 28071673.56 28071673.76 28071673.96 0.0275 0.0079

Uranus 72145-10-02 12:43 G 28071754.90 28071755.03 28071755.19 0.0144 0.0107

Saturn 72146-02-27 14:39 G 28071903.07 28071903.11 28071903.18 0.0275 0.0265

Uranus 72146-05-17 00:58 G 28071981.35 28071981.54 28071981.74 0.0144 0.0066

Uranus 72146-12-29 13:12 G 28072207.84 28072208.05 28072208.27 0.0144 0.0024

Pluto 72147-04-30 07:12 G 28072329.62 28072329.80 28072330.01 0.0065 0.0031

Uranus 72147-08-13 01:12 G 28072434.33 28072434.55 28072434.77 0.0144 0.0017

Pluto 72147-12-11 11:46 G 28072554.78 28072554.99 28072555.21 0.0065 0.0005

Jupiter 72148-03-11 03:51 G 28072645.61 28072645.66 28072645.72 0.0496 0.0474

Uranus 72148-03-26 12:43 G 28072660.84 28072661.03 28072661.24 0.0144 0.0058

Pluto 72148-07-23 16:05 G 28072780.01 28072780.17 28072780.35 0.0065 0.0042

Jupiter 72148-11-02 07:12 G 28072881.60 28072881.80 28072882.01 0.0489 0.0088

Uranus 72148-11-08 00:29 G 28072887.37 28072887.52 28072887.69 0.0144 0.0099

Uranus 72149-06-22 12:15 G 28073113.97 28073114.01 28073114.07 0.0143 0.0139

Jupiter 72149-06-26 02:53 G 28073117.47 28073117.62 28073117.79 0.0485 0.0289

Jupiter 72154-08-29 08:53 G 28075007.73 28075007.87 28075008.01 0.0535 0.0378

Jupiter 72155-04-24 12:43 G 28075245.84 28075246.03 28075246.23 0.0542 0.0136

Mars 72156-01-07 00:43 G 28075503.43 28075503.53 28075503.63 0.1615 0.1288

Mars 72156-12-10 18:58 G 28075842.16 28075842.29 28075842.43 0.1909 0.1192

Neptune 72159-11-07 18:43 G 28076904.23 28076904.28 28076904.36 0.0088 0.0084

Saturn 72159-12-24 17:46 G 28076951.04 28076951.24 28076951.44 0.0283 0.0096

Neptune 72160-06-20 07:41 G 28077129.74 28077129.82 28077129.94 0.0088 0.0078

Jupiter 72160-07-08 10:48 G 28077147.76 28077147.95 28077148.14 0.0491 0.0193

Saturn 72160-08-10 08:24 G 28077180.66 28077180.85 28077181.05 0.0283 0.0108

Neptune 72161-01-31 20:39 G 28077355.25 28077355.36 28077355.50 0.0088 0.0072

Jupiter 72161-03-01 08:24 G 28077383.66 28077383.85 28077384.04 0.0486 0.0188

Neptune 72161-09-14 09:36 G 28077580.77 28077580.90 28077581.06 0.0088 0.0066

Neptune 72162-04-27 22:34 G 28077806.29 28077806.44 28077806.62 0.0088 0.0060

Neptune 72162-12-09 11:31 G 28078031.82 28078031.98 28078032.17 0.0088 0.0054

Neptune 72163-07-23 00:29 G 28078257.35 28078257.52 28078257.72 0.0088 0.0048

Neptune 72164-03-04 13:12 G 28078482.87 28078483.05 28078483.27 0.0088 0.0042

Neptune 72164-10-16 02:24 G 28078708.41 28078708.60 28078708.81 0.0088 0.0035

Neptune 72165-05-29 15:22 G 28078933.94 28078934.14 28078934.36 0.0088 0.0029

Neptune 72166-01-10 04:05 G 28079159.46 28079159.67 28079159.89 0.0088 0.0023

Jupiter 72166-05-03 23:46 G 28079273.43 28079273.49 28079273.55 0.0532 0.0506

Neptune 72166-08-23 16:48 G 28079384.99 28079385.20 28079385.43 0.0088 0.0017

Jupiter 72166-12-27 23:46 G 28079511.29 28079511.49 28079511.69 0.0540 0.0013

Neptune 72167-04-06 06:00 G 28079610.53 28079610.75 28079610.97 0.0088 0.0010

Jupiter 72167-08-23 09:22 G 28079749.82 28079749.89 28079749.96 0.0544 0.0510

Neptune 72167-11-17 18:58 G 28079836.07 28079836.29 28079836.51 0.0088 0.0004

Neptune 72168-06-30 07:41 G 28080061.60 28080061.82 28080062.05 0.0088 0.0003

Neptune 72169-02-10 20:24 G 28080287.14 28080287.35 28080287.58 0.0088 0.0009

Neptune 72169-09-24 09:22 G 28080512.67 28080512.89 28080513.11 0.0088 0.0015

Neptune 72170-05-07 22:19 G 28080738.21 28080738.43 28080738.64 0.0088 0.0021

Neptune 72170-12-19 11:03 G 28080963.76 28080963.96 28080964.18 0.0088 0.0027

Neptune 72171-08-01 23:46 G 28081189.30 28081189.49 28081189.71 0.0088 0.0034

Jupiter 72172-03-13 11:31 G 28081413.82 28081413.98 28081414.14 0.0493 0.0304

Neptune 72172-03-14 12:43 G 28081414.84 28081415.03 28081415.24 0.0088 0.0040

Neptune 72172-10-26 01:41 G 28081640.39 28081640.57 28081640.76 0.0088 0.0046

Jupiter 72172-11-04 12:00 G 28081649.80 28081650.00 28081650.20 0.0488 0.0084

Neptune 72173-06-08 14:39 G 28081865.93 28081866.11 28081866.29 0.0088 0.0052

Jupiter 72173-06-28 06:00 G 28081885.68 28081885.75 28081885.83 0.0485 0.0446

Saturn 72173-10-21 18:15 G 28082001.21 28082001.26 28082001.31 0.0277 0.0269

Neptune 72174-01-20 02:53 G 28082091.48 28082091.62 28082091.81 0.0088 0.0059

Saturn 72174-06-08 03:36 G 28082230.45 28082230.65 28082230.86 0.0277 0.0080

Neptune 72174-09-02 15:36 G 28082317.03 28082317.15 28082317.33 0.0088 0.0065

Saturn 72175-01-23 12:43 G 28082459.84 28082460.03 28082460.23 0.0276 0.0109

Neptune 72175-04-16 04:34 G 28082542.58 28082542.69 28082542.84 0.0088 0.0071

Neptune 72175-11-27 17:31 G 28082768.14 28082768.23 28082768.36 0.0088 0.0077

Neptune 72176-07-10 06:15 G 28082993.71 28082993.76 28082993.86 0.0088 0.0083

Jupiter 72178-09-01 11:17 G 28083776.78 28083776.97 28083777.17 0.0538 0.0158

Jupiter 72179-04-27 18:29 G 28084015.12 28084015.27 28084015.42 0.0543 0.0366

Jupiter 72183-11-17 13:12 G 28085679.94 28085680.05 28085680.17 0.0495 0.0411

Jupiter 72184-07-10 16:05 G 28085915.96 28085916.17 28085916.37 0.0489 0.0023

Jupiter 72185-03-03 11:17 G 28086151.83 28086151.97 28086152.11 0.0485 0.0348

Uranus 72187-11-21 22:05 G 28087145.30 28087145.42 28087145.55 0.0134 0.0110

Mars 72188-01-05 17:46 G 28087190.08 28087190.24 28087190.39 0.1617 0.0762

Uranus 72188-07-05 03:22 G 28087371.48 28087371.64 28087371.83 0.0134 0.0077

Saturn 72188-11-18 13:27 G 28087507.98 28087508.06 28087508.15 0.0282 0.0258

Uranus 72189-02-16 08:53 G 28087597.67 28087597.87 28087598.08 0.0134 0.0045

Saturn 72189-07-06 04:05 G 28087737.46 28087737.67 28087737.88 0.0283 0.0057

Uranus 72189-09-30 14:39 G 28087823.89 28087824.11 28087824.32 0.0134 0.0011

Saturn 72190-02-20 18:43 G 28087967.10 28087967.28 28087967.47 0.0283 0.0146

Jupiter 72190-05-06 23:03 G 28088042.30 28088042.46 28088042.63 0.0536 0.0300

Uranus 72190-05-14 20:10 G 28088050.13 28088050.34 28088050.56 0.0134 0.0022

Uranus 72190-12-27 01:41 G 28088276.39 28088276.57 28088276.78 0.0134 0.0056

Jupiter 72190-12-31 04:05 G 28088280.48 28088280.67 28088280.85 0.0542 0.0217

Uranus 72191-08-10 07:27 G 28088502.66 28088502.81 28088502.99 0.0135 0.0089

Uranus 72192-03-23 12:58 G 28088728.97 28088729.04 28088729.16 0.0135 0.0122

Jupiter 72196-03-15 20:10 G 28090182.14 28090182.34 28090182.53 0.0490 0.0129

Jupiter 72196-11-06 17:03 G 28090418.03 28090418.21 28090418.38 0.0486 0.0250

Earth 72201-02-21 03:07 G 28091984.55 28091984.63 28091984.72 0.2628 0.2173

Moon 72201-02-21 04:48 G 28091984.64 28091984.70 28091984.75 0.2622 0.2458 *

Jupiter 72202-01-10 13:55 G 28092307.97 28092308.08 28092308.20 0.0534 0.0432

Jupiter 72202-09-05 16:19 G 28092545.98 28092546.18 28092546.38 0.0541 0.0073

Saturn 72203-05-04 22:34 G 28092787.34 28092787.44 28092787.55 0.0276 0.0240

Saturn 72203-12-20 07:41 G 28093016.61 28093016.82 28093017.03 0.0276 0.0052

Saturn 72204-08-05 16:34 G 28093246.01 28093246.19 28093246.38 0.0275 0.0136

Jupiter 72207-11-20 22:48 G 28094448.27 28094448.45 28094448.63 0.0492 0.0234

Jupiter 72208-07-13 21:22 G 28094684.20 28094684.39 28094684.59 0.0486 0.0148

Moon 72209-02-18 16:48 G 28094904.06 28094904.20 28094904.34 0.2623 0.1402

Earth 72209-02-18 19:41 G 28094904.17 28094904.32 28094904.48 0.2628 0.0845 *

Jupiter 72214-05-11 05:46 G 28096811.54 28096811.74 28096811.94 0.0539 0.0071

Jupiter 72215-01-04 14:53 G 28097050.02 28097050.12 28097050.24 0.0544 0.0455

Saturn 72218-06-01 14:10 G 28098293.99 28098294.09 28098294.21 0.0282 0.0238

Saturn 72219-01-17 05:03 G 28098523.50 28098523.71 28098523.92 0.0283 0.0036

Jupiter 72219-07-27 00:58 G 28098714.39 28098714.54 28098714.69 0.0494 0.0342

Saturn 72219-09-03 19:41 G 28098753.16 28098753.32 28098753.50 0.0283 0.0167

Jupiter 72220-03-19 01:55 G 28098950.37 28098950.58 28098950.78 0.0488 0.0045

Jupiter 72220-11-09 19:55 G 28099186.23 28099186.33 28099186.44 0.0484 0.0410

Mars 72221-11-04 13:27 G 28099546.00 28099546.06 28099546.13 0.1615 0.1490

Jupiter 72226-01-13 18:29 G 28101077.08 28101077.27 28101077.45 0.0537 0.0213

Jupiter 72226-09-09 00:29 G 28101315.35 28101315.52 28101315.68 0.0542 0.0308

Uranus 72229-06-02 19:55 G 28102313.24 28102313.33 28102313.45 0.0144 0.0125

Uranus 72230-01-15 07:55 G 28102539.67 28102539.83 28102540.03 0.0144 0.0084

Uranus 72230-08-29 20:24 G 28102766.14 28102766.35 28102766.56 0.0144 0.0042

Jupiter 72231-04-01 00:15 G 28102980.43 28102980.51 28102980.59 0.0496 0.0452

Uranus 72231-04-13 08:24 G 28102992.63 28102992.85 28102993.07 0.0144 0.0001

Jupiter 72231-11-23 04:19 G 28103216.47 28103216.68 28103216.88 0.0490 0.0064

Uranus 72231-11-25 20:24 G 28103219.14 28103219.35 28103219.56 0.0144 0.0040

Uranus 72232-07-09 08:10 G 28103445.66 28103445.84 28103446.02 0.0144 0.0081

Jupiter 72232-07-16 00:29 G 28103452.37 28103452.52 28103452.68 0.0485 0.0311

Saturn 72232-11-14 04:19 G 28103573.55 28103573.68 28103573.82 0.0277 0.0212

Uranus 72233-02-20 19:27 G 28103672.21 28103672.31 28103672.44 0.0143 0.0122

Saturn 72233-07-01 13:55 G 28103802.87 28103803.08 28103803.29 0.0277 0.0023

Saturn 72234-02-15 23:03 G 28104032.30 28104032.46 28104032.64 0.0276 0.0165

Pluto 72235-08-13 00:15 G 28104575.35 28104575.51 28104575.69 0.0080 0.0051

Pluto 72236-03-25 10:34 G 28104800.73 28104800.94 28104801.16 0.0079 0.0016

Jupiter 72237-09-18 07:12 G 28105342.65 28105342.80 28105342.96 0.0534 0.0350

Jupiter 72238-05-14 10:34 G 28105580.74 28105580.94 28105581.13 0.0541 0.0161

Neptune 72242-08-06 10:05 G 28107125.86 28107125.92 28107126.00 0.0090 0.0084

Neptune 72243-03-19 23:03 G 28107351.37 28107351.46 28107351.58 0.0090 0.0078

Jupiter 72243-07-29 07:12 G 28107482.61 28107482.80 28107482.99 0.0491 0.0172

Neptune 72243-10-31 12:00 G 28107576.89 28107577.00 28107577.15 0.0090 0.0072

Jupiter 72244-03-21 05:17 G 28107718.54 28107718.72 28107718.91 0.0486 0.0209

Neptune 72244-06-13 01:12 G 28107802.41 28107802.55 28107802.71 0.0090 0.0065

Neptune 72245-01-24 14:10 G 28108027.94 28108028.09 28108028.27 0.0090 0.0059

Neptune 72245-09-07 03:36 G 28108253.47 28108253.65 28108253.83 0.0090 0.0052

Neptune 72246-04-20 16:34 G 28108479.01 28108479.19 28108479.39 0.0090 0.0046

Neptune 72246-12-02 06:00 G 28108704.55 28108704.75 28108704.94 0.0090 0.0039

Neptune 72247-07-15 18:43 G 28108930.09 28108930.28 28108930.50 0.0090 0.0033

Saturn 72247-12-13 01:41 G 28109080.43 28109080.57 28109080.73 0.0282 0.0198

Neptune 72248-02-26 08:10 G 28109155.63 28109155.84 28109156.05 0.0090 0.0026

Saturn 72248-07-29 16:19 G 28109309.97 28109310.18 28109310.39 0.0283 0.0004

Neptune 72248-10-08 21:07 G 28109381.18 28109381.38 28109381.60 0.0090 0.0020

Saturn 72249-03-16 06:43 G 28109539.65 28109539.78 28109539.93 0.0283 0.0208

Neptune 72249-05-22 10:34 G 28109606.73 28109606.94 28109607.16 0.0090 0.0013

Jupiter 72249-05-23 19:55 G 28109608.25 28109608.33 28109608.41 0.0532 0.0482

Neptune 72250-01-02 23:46 G 28109832.27 28109832.49 28109832.71 0.0090 0.0006

Jupiter 72250-01-16 20:10 G 28109846.14 28109846.34 28109846.54 0.0540 0.0013

Neptune 72250-08-16 12:58 G 28110057.82 28110058.04 28110058.26 0.0090 0.0000

Jupiter 72250-09-12 06:15 G 28110084.73 28110084.76 28110084.80 0.0544 0.0532

Neptune 72251-03-30 02:10 G 28110283.37 28110283.59 28110283.81 0.0090 0.0007

Neptune 72251-11-10 15:07 G 28110508.92 28110509.13 28110509.36 0.0090 0.0014

Neptune 72252-06-23 04:19 G 28110734.48 28110734.68 28110734.90 0.0090 0.0021

Neptune 72253-02-03 17:31 G 28110960.03 28110960.23 28110960.45 0.0090 0.0027

Neptune 72253-09-17 06:29 G 28111185.58 28111185.77 28111185.99 0.0090 0.0034

Mars 72253-11-03 06:29 G 28111232.60 28111232.77 28111232.93 0.1616 0.0559

Neptune 72254-04-30 20:10 G 28111411.14 28111411.34 28111411.53 0.0090 0.0040

Neptune 72254-12-12 08:53 G 28111636.70 28111636.87 28111637.08 0.0090 0.0047

Jupiter 72255-04-03 10:19 G 28111748.76 28111748.93 28111749.10 0.0493 0.0277

Neptune 72255-07-25 22:34 G 28111862.26 28111862.44 28111862.61 0.0090 0.0053

Jupiter 72255-11-25 10:19 G 28111984.73 28111984.93 28111985.13 0.0487 0.0108

Neptune 72256-03-07 11:17 G 28112087.82 28112087.97 28112088.15 0.0090 0.0060

Jupiter 72256-07-18 03:51 G 28112220.61 28112220.66 28112220.72 0.0484 0.0466

Neptune 72256-10-19 00:43 G 28112313.39 28112313.53 28112313.68 0.0090 0.0066

Neptune 72257-06-01 13:41 G 28112538.96 28112539.07 28112539.22 0.0090 0.0073

Neptune 72258-01-13 03:07 G 28112764.54 28112764.63 28112764.74 0.0090 0.0079

Neptune 72258-08-26 16:34 G 28112990.12 28112990.19 28112990.26 0.0090 0.0085

Jupiter 72261-09-21 09:07 G 28114111.68 28114111.88 28114112.08 0.0538 0.0131

Jupiter 72262-05-17 17:17 G 28114350.08 28114350.22 28114350.36 0.0544 0.0393

Saturn 72262-05-27 09:51 G 28114359.76 28114359.91 28114360.08 0.0276 0.0182

Saturn 72263-01-11 19:12 G 28114589.09 28114589.30 28114589.51 0.0276 0.0007

Saturn 72263-08-29 04:05 G 28114818.53 28114818.67 28114818.83 0.0275 0.0193

Jupiter 72266-12-07 12:00 G 28116014.88 28116015.00 28116015.13 0.0495 0.0384

Jupiter 72267-07-31 14:10 G 28116250.89 28116251.09 28116251.30 0.0488 0.0004

Jupiter 72268-03-23 08:53 G 28116486.75 28116486.87 28116487.01 0.0485 0.0370

Uranus 72271-07-23 08:39 G 28117703.79 28117703.86 28117703.96 0.0134 0.0124

Uranus 72272-03-05 13:55 G 28117929.94 28117930.08 28117930.26 0.0134 0.0092

Uranus 72272-10-17 19:41 G 28118156.13 28118156.32 28118156.52 0.0134 0.0058

Jupiter 72273-05-26 23:46 G 28118377.32 28118377.49 28118377.66 0.0536 0.0268

Uranus 72273-06-01 01:27 G 28118382.35 28118382.56 28118382.77 0.0134 0.0025

Uranus 72274-01-13 06:58 G 28118608.58 28118608.79 28118609.01 0.0134 0.0008

Jupiter 72274-01-20 05:17 G 28118615.54 28118615.72 28118615.90 0.0543 0.0250

Uranus	72274-08-27 12:29 G	28118834.82	28118835.02	28118835.23	0.0134	0.0041
Uranus	72275-04-10 18:00 G	28119061.08	28119061.25	28119061.44	0.0135	0.0075
Uranus	72275-11-22 23:46 G	28119287.37	28119287.49	28119287.63	0.0135	0.0108
Saturn	72277-06-24 03:07 G	28119866.47	28119866.63	28119866.80	0.0282	0.0176
Saturn	72278-02-08 17:46 G	28120096.04	28120096.24	28120096.46	0.0283	0.0027
Jupiter	72278-08-12 12:58 G	28120281.01	28120281.04	28120281.07	0.0497	0.0490
Saturn	72278-09-26 08:39 G	28120325.74	28120325.86	28120325.98	0.0283	0.0229
Jupiter	72279-04-05 17:31 G	28120517.03	28120517.23	28120517.43	0.0490	0.0103
Jupiter	72279-11-27 14:24 G	28120752.93	28120753.10	28120753.27	0.0485	0.0273
Jupiter	72285-01-29 14:24 G	28122642.97	28122643.10	28122643.23	0.0533	0.0401
Jupiter	72285-09-24 16:19 G	28122880.98	28122881.18	28122881.38	0.0541	0.0102
Jupiter	72290-12-09 18:43 G	28124783.10	28124783.28	28124783.46	0.0492	0.0214
Jupiter	72291-08-02 17:46 G	28125019.05	28125019.24	28125019.44	0.0487	0.0169
Saturn	72291-12-07 15:07 G	28125145.96	28125146.13	28125146.31	0.0277	0.0154
Saturn	72292-07-24 00:43 G	28125375.32	28125375.53	28125375.74	0.0277	0.0035
Saturn	72293-03-10 10:05 G	28125604.80	28125604.92	28125605.04	0.0276	0.0222
Jupiter	72296-10-04 04:48 G	28126908.69	28126908.70	28126908.72	0.0531	0.0528
Jupiter	72297-05-30 03:36 G	28127146.45	28127146.65	28127146.85	0.0539	0.0044
Jupiter	72298-01-23 12:00 G	28127384.91	28127385.00	28127385.10	0.0543	0.0477
Jupiter	72302-08-15 20:24 G	28129049.20	28129049.35	28129049.51	0.0494	0.0322
Jupiter	72303-04-08 21:51 G	28129285.21	28129285.41	28129285.62	0.0488	0.0064
Jupiter	72303-11-30 16:34 G	28129521.09	28129521.19	28129521.28	0.0485	0.0427
Saturn	72307-01-05 15:07 G	28130652.94	28130653.13	28130653.32	0.0282	0.0135
Saturn	72307-08-23 05:31 G	28130882.53	28130882.73	28130882.94	0.0283	0.0068
Saturn	72308-04-08 20:10 G	28131112.28	28131112.34	28131112.41	0.0284	0.0270
Jupiter	72309-02-02 13:41 G	28131411.89	28131412.07	28131412.26	0.0537	0.0189
Jupiter	72309-09-28 20:10 G	28131650.18	28131650.34	28131650.50	0.0543	0.0330
Uranus	72313-02-01 02:24 G	28132871.59	28132871.60	28132871.63	0.0144	0.0143
Uranus	72313-09-15 14:39 G	28133097.96	28133098.11	28133098.27	0.0144	0.0102
Jupiter	72314-04-20 22:19 G	28133315.34	28133315.43	28133315.54	0.0496	0.0427

Uranus 72314-04-30 02:39 G 28133324.42 28133324.61 28133324.81 0.0144 0.0061

Uranus 72314-12-12 14:53 G 28133550.91 28133551.12 28133551.34 0.0144 0.0020

Jupiter 72314-12-13 02:24 G 28133551.39 28133551.60 28133551.80 0.0489 0.0040

Uranus 72315-07-27 02:53 G 28133777.40 28133777.62 28133777.84 0.0144 0.0021

Jupiter 72315-08-05 22:19 G 28133787.28 28133787.43 28133787.58 0.0485 0.0331

Uranus 72316-03-09 14:39 G 28134003.91 28134004.11 28134004.31 0.0144 0.0062

Uranus 72316-10-22 02:10 G 28134230.45 28134230.59 28134230.75 0.0144 0.0103

Uranus 72317-06-05 13:41 G 28134457.07 28134457.07 28134457.10 0.0143 0.0143

Mars 72319-09-01 18:58 G 28135275.12 28135275.29 28135275.46 0.1615 0.0347

Mars 72320-08-06 00:29 G 28135614.43 28135614.52 28135614.61 0.1908 0.1607

Jupiter 72320-10-08 03:36 G 28135677.49 28135677.65 28135677.81 0.0535 0.0325

Jupiter 72321-06-03 07:41 G 28135915.63 28135915.82 28135916.01 0.0542 0.0186

Saturn 72321-06-19 22:05 G 28135932.24 28135932.42 28135932.62 0.0276 0.0121

Saturn 72322-02-04 07:12 G 28136161.60 28136161.80 28136162.01 0.0276 0.0067

Moon 72322-08-22 06:00 G 28136360.59 28136360.75 28136360.91 0.2703 0.0164

Earth 72322-08-22 12:00 G 28136360.85 28136361.00 28136361.14 0.2705 0.1095 *

Saturn 72322-09-21 16:05 G 28136391.10 28136391.17 28136391.26 0.0275 0.0252

Neptune 72324-02-11 04:05 G 28136898.63 28136898.67 28136898.74 0.0088 0.0085

Neptune 72324-09-23 17:03 G 28137124.13 28137124.21 28137124.32 0.0088 0.0079

Neptune 72325-05-07 06:00 G 28137349.65 28137349.75 28137349.89 0.0088 0.0073

Neptune 72325-12-18 18:58 G 28137575.17 28137575.29 28137575.45 0.0088 0.0067

Neptune 72326-08-01 07:55 G 28137800.69 28137800.83 28137801.01 0.0088 0.0061

Jupiter 72326-08-18 05:17 G 28137817.52 28137817.72 28137817.92 0.0491 0.0145

Neptune 72327-03-14 20:53 G 28138026.22 28138026.37 28138026.57 0.0088 0.0055

Jupiter 72327-04-11 02:53 G 28138053.44 28138053.62 28138053.80 0.0486 0.0232

Neptune 72327-10-26 10:19 G 28138251.75 28138251.93 28138252.12 0.0088 0.0048

Neptune 72328-06-07 23:17 G 28138477.28 28138477.47 28138477.67 0.0088 0.0042

Neptune 72329-01-19 12:00 G 28138702.81 28138703.00 28138703.22 0.0088 0.0036

Neptune 72329-09-02 00:58 G 28138928.34 28138928.54 28138928.76 0.0088 0.0030

Neptune 72330-04-15 14:10 G 28139153.87 28139154.09 28139154.30 0.0088 0.0023

Earth 72330-08-20 01:27 G 28139280.50 28139280.56 28139280.61 0.2705 0.2509

Neptune 72330-11-27 03:07 G 28139379.41 28139379.63 28139379.85 0.0088 0.0017

Neptune 72331-07-10 15:51 G 28139604.95 28139605.16 28139605.39 0.0088 0.0011

Neptune 72332-02-21 04:48 G 28139830.48 28139830.70 28139830.92 0.0088 0.0004

Jupiter 72332-06-12 19:27 G 28139943.21 28139943.31 28139943.42 0.0533 0.0453

Neptune 72332-10-03 17:46 G 28140056.02 28140056.24 28140056.46 0.0088 0.0002

Jupiter 72333-02-05 20:24 G 28140181.15 28140181.35 28140181.56 0.0540 0.0045

Neptune 72333-05-17 06:29 G 28140281.55 28140281.77 28140281.99 0.0088 0.0008

Neptune 72333-12-28 19:27 G 28140507.09 28140507.31 28140507.53 0.0088 0.0015

Neptune 72334-08-11 08:10 G 28140732.63 28140732.84 28140733.06 0.0088 0.0021

Neptune 72335-03-24 20:53 G 28140958.17 28140958.37 28140958.59 0.0088 0.0028

Neptune 72335-11-05 09:51 G 28141183.72 28141183.91 28141184.13 0.0088 0.0034

Neptune 72336-06-17 22:48 G 28141409.26 28141409.45 28141409.65 0.0088 0.0040

Saturn 72336-07-17 16:48 G 28141439.01 28141439.20 28141439.40 0.0282 0.0113

Neptune 72337-01-29 11:46 G 28141634.80 28141634.99 28141635.18 0.0088 0.0046

Saturn 72337-03-04 07:27 G 28141668.61 28141668.81 28141669.01 0.0283 0.0090

Neptune 72337-09-12 00:00 G 28141860.35 28141860.50 28141860.70 0.0088 0.0053

Jupiter 72338-04-23 07:41 G 28142083.65 28142083.82 28142084.00 0.0492 0.0252

Neptune 72338-04-25 12:58 G 28142085.90 28142086.04 28142086.23 0.0088 0.0059

Neptune 72338-12-07 02:10 G 28142311.46 28142311.59 28142311.75 0.0088 0.0065

Jupiter 72338-12-15 07:27 G 28142319.62 28142319.81 28142320.01 0.0487 0.0131

Neptune 72339-07-20 14:53 G 28142537.01 28142537.12 28142537.27 0.0088 0.0071

Neptune 72340-03-02 03:36 G 28142762.57 28142762.65 28142762.78 0.0088 0.0077

Neptune 72340-10-13 16:34 G 28142988.14 28142988.19 28142988.28 0.0088 0.0083

Jupiter 72344-10-11 09:22 G 28144446.69 28144446.89 28144447.09 0.0538 0.0100

Jupiter 72345-06-06 17:03 G 28144685.09 28144685.21 28144685.34 0.0543 0.0419

Jupiter 72349-12-27 07:27 G 28146349.67 28146349.81 28146349.95 0.0495 0.0363

Jupiter 72350-08-20 09:51 G 28146585.71 28146585.91 28146586.12 0.0489 0.0024

Saturn 72350-12-31 02:39 G 28146718.42 28146718.61 28146718.81 0.0277 0.0095

Jupiter 72351-04-13 05:03 G 28146821.60 28146821.71 28146821.84 0.0485 0.0389

Saturn 72351-08-17 12:15 G 28146947.81 28146948.01 28146948.21 0.0276 0.0094

Uranus 72355-11-05 00:15 G 28148488.40 28148488.51 28148488.66 0.0134 0.0106

Jupiter 72356-06-15 21:51 G 28148712.23 28148712.41 28148712.59 0.0536 0.0241

Uranus 72356-06-18 06:00 G 28148714.58 28148714.75 28148714.94 0.0134 0.0073

Uranus 72357-01-30 11:46 G 28148940.78 28148940.99 28148941.20 0.0134 0.0040

Jupiter 72357-02-09 02:39 G 28148950.44 28148950.61 28148950.79 0.0542 0.0274

Uranus 72357-09-13 17:17 G 28149167.00 28149167.22 28149167.44 0.0134 0.0007

Uranus 72358-04-27 22:48 G 28149393.24 28149393.45 28149393.67 0.0134 0.0027

Uranus 72358-12-10 04:34 G 28149619.50 28149619.69 28149619.88 0.0135 0.0060

Uranus 72359-07-24 10:19 G 28149845.77 28149845.93 28149846.09 0.0135 0.0093

Uranus 72360-03-06 15:51 G 28150072.10 28150072.16 28150072.24 0.0135 0.0126

Jupiter 72361-09-01 07:55 G 28150615.77 28150615.83 28150615.90 0.0497 0.0470

Jupiter 72362-04-25 12:58 G 28150851.84 28150852.04 28150852.25 0.0490 0.0084

Jupiter 72362-12-17 10:05 G 28151087.76 28151087.92 28151088.09 0.0486 0.0291

Saturn 72365-06-12 14:10 G 28151996.04 28151996.09 28151996.15 0.0282 0.0270

Saturn 72366-01-28 04:48 G 28152225.50 28152225.70 28152225.91 0.0283 0.0071

Saturn 72366-09-14 19:27 G 28152455.13 28152455.31 28152455.50 0.0283 0.0132

Jupiter 72368-02-19 08:53 G 28152977.74 28152977.87 28152978.02 0.0534 0.0379

Jupiter 72368-10-14 11:03 G 28153215.77 28153215.96 28153216.16 0.0541 0.0125

Jupiter 72373-12-29 16:48 G 28155118.01 28155118.20 28155118.39 0.0492 0.0188

Jupiter 72374-08-22 15:36 G 28155353.96 28155354.15 28155354.34 0.0487 0.0192

Jupiter 72379-10-25 00:15 G 28157243.45 28157243.51 28157243.57 0.0531 0.0505

Saturn 72379-11-26 00:58 G 28157275.46 28157275.54 28157275.64 0.0277 0.0249

Jupiter 72380-06-18 23:17 G 28157481.27 28157481.47 28157481.68 0.0539 0.0023

Saturn 72380-07-12 10:34 G 28157504.74 28157504.94 28157505.15 0.0276 0.0061

Jupiter 72381-02-12 08:53 G 28157719.79 28157719.87 28157719.94 0.0544 0.0499

Saturn 72381-02-26 19:41 G 28157734.13 28157734.32 28157734.51 0.0276 0.0126

Mars 72385-06-29 07:27 G 28159317.64 28159317.81 28159317.99 0.1615 0.0148

Jupiter 72385-09-03 18:43 G 28159384.12 28159384.28 28159384.45 0.0493 0.0294

Jupiter 72386-04-27 19:27 G 28159620.11 28159620.31 28159620.52 0.0488 0.0090

Mars 72386-06-03 02:39 G 28159656.45 28159656.61 28159656.77 0.1909 0.0799

Jupiter 72386-12-19 13:41 G 28159856.00 28159856.07 28159856.15 0.0484 0.0447

Jupiter 72392-02-22 13:12 G 28161746.86 28161747.05 28161747.25 0.0538 0.0158

Jupiter 72392-10-17 20:24 G 28161985.20 28161985.35 28161985.50 0.0543 0.0360

Pluto 72393-05-30 16:34 G 28162210.02 28162210.19 28162210.41 0.0065 0.0030

Pluto 72394-01-10 21:22 G 28162435.18 28162435.39 28162435.61 0.0065 0.0007

Pluto 72394-08-24 01:27 G 28162660.42 28162660.56 28162660.74 0.0065 0.0044

Saturn 72394-12-23 16:48 G 28162782.11 28162782.20 28162782.31 0.0282 0.0247

Saturn 72395-08-10 07:12 G 28163011.59 28163011.80 28163012.01 0.0283 0.0047

Saturn 72396-03-26 21:36 G 28163241.23 28163241.40 28163241.58 0.0283 0.0155

Jupiter 72397-05-09 20:10 G 28163650.22 28163650.34 28163650.46 0.0495 0.0401

Uranus 72397-05-15 20:24 G 28163656.25 28163656.35 28163656.48 0.0144 0.0122

Uranus 72397-12-28 08:39 G 28163882.70 28163882.86 28163883.06 0.0144 0.0081

Jupiter 72397-12-31 23:31 G 28163886.27 28163886.48 28163886.68 0.0489 0.0016

Uranus 72398-08-11 20:53 G 28164109.17 28164109.37 28164109.59 0.0144 0.0040

Jupiter 72398-08-24 18:58 G 28164122.16 28164122.29 28164122.44 0.0485 0.0353

Uranus 72399-03-26 09:07 G 28164335.66 28164335.88 28164336.10 0.0144 0.0003

Uranus 72399-11-07 20:53 G 28164562.16 28164562.37 28164562.58 0.0144 0.0043

Uranus 72400-06-21 08:39 G 28164788.69 28164788.86 28164789.04 0.0144 0.0084

Uranus 72401-02-02 20:10 G 28165015.25 28165015.34 28165015.46 0.0143 0.0124

Jupiter 72403-10-28 03:51 G 28166012.50 28166012.66 28166012.83 0.0535 0.0295

Jupiter 72404-06-22 07:55 G 28166250.64 28166250.83 28166251.01 0.0542 0.0215

Neptune 72406-11-08 20:24 G 28167120.30 28167120.35 28167120.43 0.0090 0.0085

Neptune 72407-06-22 09:22 G 28167345.81 28167345.89 28167346.01 0.0090 0.0079

Neptune 72408-02-02 22:19 G 28167571.32 28167571.43 28167571.58 0.0090 0.0073

Neptune 72408-09-15 11:31 G 28167796.85 28167796.98 28167797.14 0.0090 0.0066

Neptune 72409-04-29 00:29 G 28168022.38 28168022.52 28168022.71 0.0090 0.0060

Saturn 72409-06-07 04:34 G 28168061.58 28168061.69 28168061.83 0.0277 0.0225

Jupiter 72409-09-06 00:43 G 28168152.33 28168152.53 28168152.73 0.0491 0.0125

Neptune 72409-12-10 13:55 G 28168247.91 28168248.08 28168248.26 0.0090 0.0053

Saturn 72410-01-22 14:24 G 28168290.89 28168291.10 28168291.31 0.0277 0.0036

Jupiter 72410-04-29 22:34 G 28168388.27 28168388.44 28168388.62 0.0486 0.0251

Neptune 72410-07-24 02:39 G 28168473.44 28168473.61 28168473.82 0.0090 0.0047

Saturn 72410-09-08 23:46 G 28168520.32 28168520.49 28168520.67 0.0276 0.0153

Neptune 72411-03-06 15:51 G 28168698.98 28168699.16 28168699.37 0.0090 0.0040

Neptune 72411-10-18 04:48 G 28168924.52 28168924.70 28168924.92 0.0090 0.0034

Neptune 72412-05-30 18:15 G 28169150.06 28169150.26 28169150.48 0.0090 0.0027

Neptune 72413-01-11 07:27 G 28169375.60 28169375.81 28169376.03 0.0090 0.0020

Neptune 72413-08-24 20:24 G 28169601.15 28169601.35 28169601.58 0.0090 0.0014

Neptune 72414-04-07 09:51 G 28169826.69 28169826.91 28169827.13 0.0090 0.0007

Neptune 72414-11-18 23:03 G 28170052.24 28170052.46 28170052.68 0.0090 0.0001

Neptune 72415-07-02 12:15 G 28170277.79 28170278.01 28170278.23 0.0090 0.0007

Jupiter 72415-07-02 18:00 G 28170278.13 28170278.25 28170278.37 0.0532 0.0426 *

Neptune 72416-02-13 01:12 G 28170503.34 28170503.55 28170503.78 0.0090 0.0014

Jupiter 72416-02-25 18:43 G 28170516.08 28170516.28 28170516.48 0.0540 0.0071

Neptune 72416-09-25 14:39 G 28170728.90 28170729.11 28170729.32 0.0090 0.0020

Neptune 72417-05-09 03:51 G 28170954.46 28170954.66 28170954.87 0.0090 0.0027

Neptune 72417-12-20 16:48 G 28171180.01 28171180.20 28171180.42 0.0090 0.0034

Neptune 72418-08-03 06:15 G 28171405.57 28171405.76 28171405.96 0.0090 0.0040

Neptune 72419-03-16 18:58 G 28171631.12 28171631.29 28171631.49 0.0090 0.0047

Neptune 72419-10-28 08:39 G 28171856.68 28171856.86 28171857.03 0.0090 0.0053

Neptune 72420-06-09 21:36 G 28172082.25 28172082.40 28172082.57 0.0090 0.0060

Neptune 72421-01-21 11:03 G 28172307.81 28172307.96 28172308.10 0.0090 0.0066

Jupiter 72421-05-12 02:53 G 28172418.44 28172418.62 28172418.80 0.0493 0.0232

Neptune 72421-09-03 23:46 G 28172533.38 28172533.49 28172533.63 0.0090 0.0073

Jupiter 72422-01-03 03:07 G 28172654.43 28172654.63 28172654.83 0.0487 0.0149

Neptune 72422-04-17 13:12 G 28172758.95 28172759.05 28172759.16 0.0090 0.0079

Neptune 72422-11-29 01:55 G 28172984.54 28172984.58 28172984.67 0.0090 0.0086

Saturn 72424-07-05 03:51 G 28173568.52 28173568.66 28173568.81 0.0282 0.0207

Saturn 72425-02-19 18:29 G 28173798.06 28173798.27 28173798.48 0.0283 0.0006

Saturn 72425-10-07 09:07 G 28174027.73 28174027.88 28174028.03 0.0283 0.0196

Jupiter 72427-10-31 03:51 G 28174781.46 28174781.66 28174781.86 0.0538 0.0078

Jupiter 72428-06-25 11:46 G 28175019.87 28175019.99 28175020.11 0.0543 0.0439

Jupiter 72433-01-15 05:31 G 28176684.58 28176684.73 28176684.88 0.0495 0.0337

Jupiter 72433-09-08 07:41 G 28176920.62 28176920.82 28176921.03 0.0488 0.0048

Jupiter 72434-05-02 02:39 G 28177156.51 28177156.61 28177156.72 0.0485 0.0410

Saturn 72438-12-18 13:27 G 28178847.91 28178848.06 28178848.22 0.0277 0.0188

Uranus 72439-07-05 11:03 G 28179046.87 28179046.96 28179047.07 0.0134 0.0119

Jupiter 72439-07-05 17:03 G 28179047.02 28179047.21 28179047.39 0.0536 0.0217 *

Saturn 72439-08-04 23:03 G 28179077.25 28179077.46 28179077.67 0.0276 0.0001

Uranus 72440-02-16 16:48 G 28179273.03 28179273.20 28179273.36 0.0134 0.0087

Jupiter 72440-02-28 22:19 G 28179285.27 28179285.43 28179285.60 0.0543 0.0298

Saturn 72440-03-21 07:55 G 28179306.68 28179306.83 28179306.99 0.0275 0.0186

Uranus 72440-09-29 21:51 G 28179499.23 28179499.41 28179499.62 0.0134 0.0055

Uranus 72441-05-14 03:36 G 28179725.44 28179725.65 28179725.87 0.0134 0.0021

Uranus 72441-12-26 09:22 G 28179951.67 28179951.89 28179952.11 0.0134 0.0012

Uranus 72442-08-09 14:39 G 28180177.92 28180178.11 28180178.33 0.0134 0.0046

Uranus 72443-03-23 20:10 G 28180404.18 28180404.34 28180404.53 0.0135 0.0079

Uranus 72443-11-05 01:55 G 28180630.47 28180630.58 28180630.71 0.0135 0.0112

Moon 72444-02-23 02:10 G 28180740.52 28180740.59 28180740.68 0.2632 0.2218

Earth 72444-02-23 06:00 G 28180740.69 28180740.75 28180740.80 0.2628 0.2439

Jupiter 72444-09-20 06:43 G 28180950.69 28180950.78 28180950.87 0.0497 0.0443

Jupiter 72445-05-14 11:17 G 28181186.76 28181186.97 28181187.17 0.0490 0.0058

Jupiter 72446-01-05 07:41 G 28181422.67 28181422.82 28181422.98 0.0485 0.0313

Jupiter 72451-03-10 07:55 G 28183312.68 28183312.83 28183312.98 0.0534 0.0349

Mars 72451-04-26 19:55 G 28183360.16 28183360.33 28183360.51 0.1614 0.0067

Jupiter 72451-11-03 10:48 G 28183550.76 28183550.95 28183551.14 0.0541 0.0155

Earth 72452-02-20 22:34 G 28183660.29 28183660.44 28183660.60 0.2627 0.0576

Moon 72452-02-20 22:48 G 28183660.30 28183660.45 28183660.60 0.2634 0.0283 *

Mars 72452-03-30 05:17 G 28183698.55 28183698.72 28183698.90 0.1910 0.0036

Saturn 72454-01-15 06:43 G 28184354.62 28184354.78 28184354.94 0.0282 0.0184

Saturn 72454-09-01 21:07 G 28184584.17 28184584.38 28184584.59 0.0283 0.0017

Saturn 72455-04-19 11:31 G 28184813.85 28184813.98 28184814.12 0.0283 0.0219

Jupiter 72457-01-17 14:10 G 28185452.90 28185453.09 28185453.29 0.0491 0.0162

Jupiter 72457-09-10 12:29 G 28185688.84 28185689.02 28185689.21 0.0486 0.0215

Jupiter 72462-11-13 00:29 G 28187578.43 28187578.52 28187578.61 0.0532 0.0475

Jupiter 72463-07-09 00:00 G 28187816.30 28187816.50 28187816.70 0.0539 0.0012

Jupiter 72464-03-03 09:07 G 28188054.84 28188054.88 28188054.93 0.0544 0.0526

Saturn 72468-06-29 16:19 G 28189634.02 28189634.18 28189634.36 0.0277 0.0165

Jupiter 72468-09-22 14:24 G 28189718.93 28189719.10 28189719.27 0.0493 0.0273

Saturn 72469-02-14 01:55 G 28189863.37 28189863.58 28189863.80 0.0277 0.0025

Jupiter 72469-05-16 15:22 G 28189954.94 28189955.14 28189955.34 0.0488 0.0109

Saturn 72469-10-01 11:03 G 28190092.83 28190092.96 28190093.10 0.0276 0.0211

Jupiter 72470-01-07 09:51 G 28190190.86 28190190.91 28190190.96 0.0485 0.0465

Jupiter 72475-03-13 12:00 G 28192081.81 28192082.00 28192082.20 0.0537 0.0131

Jupiter 72475-11-06 18:43 G 28192320.14 28192320.28 28192320.42 0.0543 0.0385

Jupiter 72480-05-28 15:36 G 28193985.02 28193985.15 28193985.28 0.0496 0.0380

Uranus 72481-01-13 02:10 G 28194214.57 28194214.59 28194214.65 0.0144 0.0141

Jupiter 72481-01-19 19:12 G 28194221.09 28194221.30 28194221.50 0.0489 0.0012

Uranus 72481-08-27 14:24 G 28194440.95 28194441.10 28194441.27 0.0144 0.0100

Pluto 72481-09-11 10:48 G 28194455.79 28194455.95 28194456.15 0.0079 0.0046

Jupiter 72481-09-12 15:07 G 28194457.00 28194457.13 28194457.26 0.0485 0.0370

Uranus 72482-04-11 02:39 G 28194667.41 28194667.61 28194667.81 0.0144 0.0059

Pluto 72482-04-24 21:22 G 28194681.18 28194681.39 28194681.61 0.0079 0.0022

Uranus 72482-11-23 14:53 G 28194893.90 28194894.12 28194894.33 0.0144 0.0018

Uranus 72483-07-08 02:39 G 28195120.40 28195120.61 28195120.83 0.0144 0.0023

Saturn 72483-07-28 16:48 G 28195141.02 28195141.20 28195141.38 0.0282 0.0145

Uranus 72484-02-19 14:10 G 28195346.91 28195347.09 28195347.30 0.0144 0.0065

Saturn 72484-03-14 07:27 G 28195370.60 28195370.81 28195371.02 0.0283 0.0056

Uranus 72484-10-03 01:55 G 28195573.44 28195573.58 28195573.74 0.0143 0.0105

Saturn 72484-10-29 21:51 G 28195600.34 28195600.41 28195600.51 0.0283 0.0259

Jupiter 72486-11-15 22:19 G 28196347.26 28196347.43 28196347.61 0.0535 0.0271

Jupiter 72487-07-12 02:10 G 28196585.42 28196585.59 28196585.78 0.0542 0.0238

Neptune 72488-05-14 14:10 G 28196893.06 28196893.09 28196893.15 0.0088 0.0086

Neptune 72488-12-26 03:07 G 28197118.56 28197118.63 28197118.74 0.0088 0.0080

Neptune 72489-08-08 16:05 G 28197344.07 28197344.17 28197344.31 0.0088 0.0074

Neptune 72490-03-22 05:03 G 28197569.59 28197569.71 28197569.87 0.0088 0.0068

Neptune 72490-11-02 18:29 G 28197795.12 28197795.27 28197795.43 0.0088 0.0061

Neptune 72491-06-16 07:27 G 28198020.64 28198020.81 28198020.99 0.0088 0.0055

Neptune 72492-01-27 20:10 G 28198246.17 28198246.34 28198246.54 0.0088 0.0049

Jupiter 72492-02-01 16:48 G 28198251.16 28198251.20 28198251.25 0.0498 0.0484

Neptune 72492-09-09 09:07 G 28198471.70 28198471.88 28198472.09 0.0088 0.0043

Jupiter 72492-09-24 23:03 G 28198487.26 28198487.46 28198487.66 0.0491 0.0099

Neptune 72493-04-22 22:19 G 28198697.23 28198697.43 28198697.64 0.0088 0.0036

Jupiter 72493-05-18 20:39 G 28198723.19 28198723.36 28198723.53 0.0486 0.0274

Neptune 72493-12-04 11:17 G 28198922.77 28198922.97 28198923.19 0.0088 0.0030

Neptune 72494-07-18 00:15 G 28199148.30 28199148.51 28199148.73 0.0088 0.0024

Neptune 72495-02-28 13:27 G 28199373.84 28199374.06 28199374.27 0.0088 0.0017

Neptune 72495-10-12 02:10 G 28199599.37 28199599.59 28199599.81 0.0088 0.0011

Neptune 72496-05-24 15:07 G 28199824.91 28199825.13 28199825.35 0.0088 0.0004

Neptune 72497-01-05 04:05 G 28200050.44 28200050.67 28200050.89 0.0088 0.0002

Neptune 72497-08-18 16:48 G 28200275.98 28200276.20 28200276.42 0.0088 0.0008

Saturn 72498-01-10 01:41 G 28200420.38 28200420.57 28200420.75 0.0276 0.0129

Neptune 72498-04-01 05:31 G 28200501.52 28200501.73 28200501.96 0.0088 0.0015

Jupiter 72498-07-21 12:43 G 28200612.91 28200613.03 28200613.17 0.0533 0.0402

Saturn 72498-08-27 10:48 G 28200649.74 28200649.95 28200650.16 0.0276 0.0059

Neptune 72498-11-12 18:29 G 28200727.06 28200727.27 28200727.49 0.0088 0.0021

Jupiter 72499-03-16 13:41 G 28200850.87 28200851.07 28200851.27 0.0540 0.0094

Saturn 72499-04-13 19:41 G 28200879.23 28200879.32 28200879.42 0.0275 0.0244

Neptune 72499-06-26 07:12 G 28200952.60 28200952.80 28200953.02 0.0088 0.0028

Neptune 72500-02-06 19:55 G 28201178.14 28201178.33 28201178.55 0.0088 0.0034

Neptune 72500-09-20 08:53 G 28201403.68 28201403.87 28201404.07 0.0088 0.0040

Neptune 72501-05-03 21:51 G 28201629.22 28201629.41 28201629.60 0.0088 0.0046

Neptune 72501-12-15 10:34 G 28201854.78 28201854.94 28201855.13 0.0088 0.0053

Neptune 72502-07-28 23:17 G 28202080.33 28202080.47 28202080.65 0.0088 0.0059

Neptune 72503-03-11 12:15 G 28202305.88 28202306.01 28202306.17 0.0088 0.0065

Neptune 72503-10-23 01:12 G 28202531.43 28202531.55 28202531.69 0.0088 0.0071

Jupiter 72504-06-01 01:41 G 28202753.39 28202753.57 28202753.76 0.0492 0.0204

Neptune 72504-06-04 14:10 G 28202756.99 28202757.09 28202757.20 0.0088 0.0077

Neptune 72505-01-16 03:07 G 28202982.57 28202982.63 28202982.70 0.0088 0.0083

Jupiter 72505-01-23 01:12 G 28202989.36 28202989.55 28202989.74 0.0487 0.0175

Jupiter 72510-03-27 05:03 G 28204878.69 28204878.71 28204878.74 0.0530 0.0525

Jupiter 72510-11-20 03:07 G 28205116.43 28205116.63 28205116.83 0.0539 0.0047

Jupiter 72511-07-16 11:46 G 28205354.89 28205354.99 28205355.09 0.0544 0.0468

Saturn 72513-02-07 19:55 G 28205927.14 28205927.33 28205927.52 0.0282 0.0121

Saturn 72513-09-25 10:19 G 28206156.73 28206156.93 28206157.13 0.0283 0.0080

Saturn 72514-05-13 00:58 G 28206386.51 28206386.54 28206386.56 0.0283 0.0281

Jupiter 72516-02-05 03:51 G 28207019.50 28207019.66 28207019.82 0.0494 0.0310

Jupiter 72516-09-28 05:31 G 28207255.52 28207255.73 28207255.93 0.0488 0.0073

Mars 72517-02-22 08:53 G 28207402.69 28207402.87 28207403.04 0.1614 0.0264

Jupiter 72517-05-22 00:00 G 28207491.41 28207491.50 28207491.59 0.0485 0.0431

Mars 72518-01-26 07:27 G 28207740.65 28207740.81 28207740.97 0.1911 0.0815

Jupiter 72522-07-25 17:46 G 28209382.05 28209382.24 28209382.43 0.0537 0.0185

Uranus 72523-03-05 21:07 G 28209605.37 28209605.38 28209605.40 0.0134 0.0134

Jupiter 72523-03-20 23:31 G 28209620.32 28209620.48 28209620.64 0.0543 0.0327

Uranus 72523-10-18 02:24 G 28209831.47 28209831.60 28209831.75 0.0134 0.0101

Uranus 72524-05-31 08:10 G 28210057.66 28210057.84 28210058.03 0.0134 0.0069

Uranus 72525-01-12 13:41 G 28210283.86 28210284.07 28210284.28 0.0134 0.0036

Uranus 72525-08-26 19:12 G 28210510.08 28210510.30 28210510.52 0.0134 0.0003

Uranus 72526-04-10 00:43 G 28210736.32 28210736.53 28210736.74 0.0134 0.0030

Uranus 72526-11-22 06:15 G 28210962.57 28210962.76 28210962.96 0.0135 0.0064

Uranus 72527-07-06 12:00 G 28211188.86 28211189.00 28211189.16 0.0135 0.0097

Saturn 72527-07-24 03:51 G 28211206.46 28211206.66 28211206.86 0.0277 0.0106

Jupiter 72527-10-11 03:07 G 28211285.52 28211285.63 28211285.74 0.0496 0.0420

Uranus 72528-02-17 17:31 G 28211415.19 28211415.23 28211415.30 0.0135 0.0130

Saturn 72528-03-09 12:58 G 28211435.84 28211436.04 28211436.25 0.0276 0.0082

Jupiter 72528-06-03 07:27 G 28211521.61 28211521.81 28211522.02 0.0490 0.0035

Saturn 72528-10-24 22:05 G 28211665.37 28211665.42 28211665.47 0.0276 0.0267

Jupiter 72529-01-25 04:05 G 28211757.53 28211757.67 28211757.82 0.0485 0.0333

Jupiter 72534-03-30 07:41 G 28213647.66 28213647.82 28213647.98 0.0534 0.0319

Jupiter 72534-11-23 10:19 G 28213885.74 28213885.93 28213886.12 0.0541 0.0184

Jupiter 72540-02-07 10:19 G 28215787.73 28215787.93 28215788.13 0.0492 0.0141

Jupiter 72540-09-30 08:53 G 28216023.69 28216023.87 28216024.05 0.0486 0.0235

Saturn 72542-08-21 04:19 G 28216713.48 28216713.68 28216713.89 0.0282 0.0086

Saturn 72543-04-07 19:12 G 28216943.11 28216943.30 28216943.49 0.0283 0.0116

Jupiter 72545-12-02 19:41 G 28217913.21 28217913.32 28217913.42 0.0531 0.0450

Jupiter 72546-07-28 18:43 G 28218151.08 28218151.28 28218151.49 0.0539 0.0037

Jupiter 72551-10-13 13:12 G 28220053.87 28220054.05 28220054.23 0.0494 0.0245

Jupiter 72552-06-05 14:10 G 28220289.89 28220290.09 28220290.29 0.0488 0.0135

Saturn 72556-06-18 03:36 G 28221763.59 28221763.65 28221763.74 0.0277 0.0258

Saturn 72557-02-02 13:12 G 28221992.84 28221993.05 28221993.25 0.0276 0.0071

Saturn 72557-09-19 22:05 G 28222222.23 28222222.42 28222222.61 0.0276 0.0117

Jupiter 72558-04-02 07:12 G 28222416.61 28222416.80 28222417.00 0.0537 0.0105

Jupiter 72558-11-26 14:10 G 28222654.96 28222655.09 28222655.23 0.0543 0.0408

Jupiter 72563-06-18 15:07 G 28224319.99 28224320.13 28224320.28 0.0495 0.0351

Jupiter 72564-02-09 18:00 G 28224556.05 28224556.25 28224556.46 0.0489 0.0034

Jupiter 72564-10-02 13:27 G 28224791.95 28224792.06 28224792.18 0.0485 0.0394

Uranus 72565-04-27 20:39 G 28224999.24 28224999.36 28224999.48 0.0144 0.0119

Earth 72565-08-23 11:31 G 28225116.83 28225116.98 28225117.12 0.2705 0.1038

Moon 72565-08-23 16:19 G 28225117.08 28225117.18 28225117.29 0.2709 0.1932 *

Uranus 72565-12-10 08:24 G 28225225.68 28225225.85 28225226.05 0.0144 0.0079

Uranus 72566-07-24 20:39 G 28225452.16 28225452.36 28225452.58 0.0144 0.0037

Uranus 72567-03-08 08:39 G 28225678.64 28225678.86 28225679.08 0.0144 0.0004

Uranus 72567-10-20 20:24 G 28225905.14 28225905.35 28225905.56 0.0144 0.0045

Uranus 72568-06-03 07:55 G 28226131.67 28226131.83 28226132.01 0.0143 0.0086

Uranus 72569-01-15 19:27 G 28226358.23 28226358.31 28226358.43 0.0143 0.0126

Jupiter 72569-12-05 21:51 G 28226682.23 28226682.41 28226682.59 0.0536 0.0241

Jupiter 72570-08-01 02:24 G 28226920.43 28226920.60 28226920.78 0.0542 0.0268

Neptune 72571-02-11 06:58 G 28227114.74 28227114.79 28227114.86 0.0090 0.0086

Saturn 72571-07-16 17:17 G 28227270.15 28227270.22 28227270.31 0.0282 0.0260

Neptune 72571-09-24 19:55 G 28227340.25 28227340.33 28227340.45 0.0090 0.0080

Saturn 72572-03-02 07:41 G 28227499.62 28227499.82 28227500.03 0.0283 0.0061

Neptune 72572-05-07 09:22 G 28227565.77 28227565.89 28227566.02 0.0090 0.0073

Saturn 72572-10-17 22:05 G 28227729.24 28227729.42 28227729.61 0.0283 0.0141

Neptune 72572-12-18 22:05 G 28227791.30 28227791.42 28227791.59 0.0090 0.0067

Neptune 72573-08-01 11:31 G 28228016.82 28228016.98 28228017.14 0.0090 0.0060

Earth 72573-08-21 00:58 G 28228036.49 28228036.54 28228036.59 0.2705 0.2541

Moon 72573-08-21 06:58 G 28228036.70 28228036.79 28228036.89 0.2704 0.2152

Neptune 72574-03-15 00:15 G 28228242.35 28228242.51 28228242.70 0.0090 0.0054

Neptune 72574-10-26 13:27 G 28228467.88 28228468.06 28228468.25 0.0090 0.0047

Jupiter 72575-02-21 16:05 G 28228586.09 28228586.17 28228586.25 0.0498 0.0457

Neptune 72575-06-09 02:24 G 28228693.42 28228693.60 28228693.81 0.0090 0.0041

Jupiter 72575-10-15 21:36 G 28228822.20 28228822.40 28228822.60 0.0490 0.0072

Neptune 72576-01-20 15:36 G 28228918.96 28228919.15 28228919.36 0.0090 0.0034

Jupiter 72576-06-07 18:43 G 28229058.12 28229058.28 28229058.44 0.0486 0.0298

Neptune 72576-09-02 04:48 G 28229144.49 28229144.70 28229144.91 0.0090 0.0027

Neptune 72577-04-15 17:46 G 28229370.04 28229370.24 28229370.46 0.0090 0.0021

Neptune 72577-11-27 06:58 G 28229595.58 28229595.79 28229596.01 0.0090 0.0014

Neptune 72578-07-10 20:10 G 28229821.13 28229821.34 28229821.56 0.0090 0.0007

Neptune 72579-02-21 09:22 G 28230046.67 28230046.89 28230047.11 0.0090 0.0000

Neptune 72579-10-04 22:19 G 28230272.22 28230272.43 28230272.66 0.0090 0.0007

Neptune 72580-05-17 11:46 G 28230497.78 28230497.99 28230498.21 0.0090 0.0013

Neptune 72580-12-29 00:58 G 28230723.33 28230723.54 28230723.76 0.0090 0.0020

Jupiter 72581-08-10 13:55 G 28230947.94 28230948.08 28230948.23 0.0533 0.0371

Neptune 72581-08-11 13:55 G 28230948.88 28230949.08 28230949.30 0.0090 0.0027

Neptune 72582-03-25 03:22 G 28231174.44 28231174.64 28231174.84 0.0090 0.0033

Jupiter 72582-04-05 15:22 G 28231185.95 28231186.14 28231186.34 0.0541 0.0126

Neptune 72582-11-05 16:19 G 28231400.00 28231400.18 28231400.39 0.0090 0.0040

Mars 72582-12-20 21:22 G 28231445.22 28231445.39 28231445.55 0.1613 0.0471

Neptune 72583-06-19 05:31 G 28231625.56 28231625.73 28231625.93 0.0090 0.0047

Mars 72583-11-23 09:22 G 28231782.80 28231782.89 28231782.98 0.1911 0.1631

Neptune 72584-01-30 18:58 G 28231851.12 28231851.29 28231851.47 0.0090 0.0053

Neptune 72584-09-12 07:55 G 28232076.68 28232076.83 28232077.01 0.0090 0.0060

Neptune 72585-04-25 20:53 G 28232302.25 28232302.37 28232302.54 0.0090 0.0067

Neptune 72585-12-07 10:19 G 28232527.82 28232527.93 28232528.07 0.0090 0.0073

Saturn 72585-12-29 04:34 G 28232549.59 28232549.69 28232549.81 0.0277 0.0237

Neptune 72586-07-20 23:17 G 28232753.40 28232753.47 28232753.60 0.0090 0.0080

Saturn 72586-08-15 14:10 G 28232778.88 28232779.09 28232779.30 0.0276 0.0049

Neptune 72587-03-03 12:43 G 28232978.98 28232979.03 28232979.11 0.0090 0.0086

Saturn 72587-04-01 23:03 G 28233008.29 28233008.46 28233008.65 0.0276 0.0138

Jupiter 72587-06-20 22:48 G 28233088.26 28233088.45 28233088.64 0.0492 0.0180

Jupiter 72588-02-11 22:19 G 28233324.24 28233324.43 28233324.62 0.0487 0.0197

Jupiter 72593-04-15 05:31 G 28235213.67 28235213.73 28235213.81 0.0530 0.0495

Jupiter 72593-12-09 03:51 G 28235451.45 28235451.66 28235451.86 0.0539 0.0019

Jupiter 72594-08-04 12:00 G 28235689.92 28235690.00 28235690.08 0.0543 0.0495

Jupiter 72599-02-24 00:29 G 28237354.36 28237354.52 28237354.69 0.0494 0.0287

Jupiter 72599-10-18 02:24 G 28237590.40 28237590.60 28237590.80 0.0488 0.0095

Jupiter 72600-06-10 21:22 G 28237826.32 28237826.39 28237826.47 0.0485 0.0450

Saturn 72601-01-27 00:00 G 28238056.39 28238056.50 28238056.63 0.0282 0.0228

Saturn 72601-09-13 14:53 G 28238285.91 28238286.12 28238286.33 0.0283 0.0028

Saturn 72602-05-01 05:31 G 28238515.57 28238515.73 28238515.90 0.0283 0.0174

Jupiter 72605-08-14 13:27 G 28239716.87 28239717.06 28239717.26 0.0536 0.0160

Jupiter 72606-04-09 18:58 G 28239955.14 28239955.29 28239955.44 0.0542 0.0350

Uranus 72607-06-18 12:43 G 28240389.93 28240390.03 28240390.14 0.0134 0.0116

Uranus 72608-01-30 18:00 G 28240616.09 28240616.25 28240616.43 0.0134 0.0083

Uranus 72608-09-12 23:31 G 28240842.29 28240842.48 28240842.69 0.0134 0.0051

Uranus 72609-04-27 05:03 G 28241068.50 28241068.71 28241068.93 0.0134 0.0018

Uranus 72609-12-09 10:48 G 28241294.73 28241294.95 28241295.16 0.0134 0.0016

Uranus 72610-07-23 16:19 G 28241520.98 28241521.18 28241521.38 0.0135 0.0049

Jupiter 72610-10-31 02:10 G 28241620.47 28241620.59 28241620.72 0.0497 0.0392

Uranus 72611-03-06 21:51 G 28241747.24 28241747.41 28241747.59 0.0135 0.0082

Jupiter 72611-06-24 06:58 G 28241856.58 28241856.79 28241856.99 0.0490 0.0011

Uranus 72611-10-19 03:36 G 28241973.54 28241973.65 28241973.76 0.0135 0.0115

Jupiter 72612-02-15 03:22 G 28242092.51 28242092.64 28242092.78 0.0485 0.0358

Mars 72614-12-20 13:55 G 28243132.05 28243132.08 28243132.12 0.1615 0.1567

Saturn 72615-07-12 14:10 G 28243335.95 28243336.09 28243336.24 0.0277 0.0202

Saturn 72616-02-26 23:31 G 28243565.26 28243565.48 28243565.69 0.0276 0.0015

Saturn 72616-10-13 08:10 G 28243794.68 28243794.84 28243795.01 0.0275 0.0172

Jupiter 72617-04-19 03:22 G 28243982.47 28243982.64 28243982.81 0.0534 0.0293

Jupiter 72617-12-13 06:00 G 28244220.56 28244220.75 28244220.94 0.0541 0.0209

Jupiter 72622-07-06 02:53 G 28245886.62 28245886.62 28245886.65 0.0499 0.0497

Jupiter 72623-02-27 10:05 G 28246122.72 28246122.92 28246123.12 0.0491 0.0112

Jupiter 72623-10-21 08:24 G 28246358.67 28246358.85 28246359.02 0.0486 0.0260

Jupiter 72628-12-22 18:58 G 28248248.17 28248248.29 28248248.42 0.0532 0.0421

Jupiter 72629-08-17 18:58 G 28248486.09 28248486.29 28248486.49 0.0540 0.0067

Saturn 72630-08-09 03:22 G 28248842.51 28248842.64 28248842.80 0.0282 0.0204

Saturn 72631-03-26 18:00 G 28249072.04 28249072.25 28249072.46 0.0283 0.0005

Saturn 72631-11-11 08:24 G 28249301.70 28249301.85 28249302.00 0.0283 0.0198

Jupiter 72634-11-02 12:43 G 28250388.85 28250389.03 28250389.22 0.0493 0.0217

Jupiter 72635-06-26 13:12 G 28250624.85 28250625.05 28250625.24 0.0487 0.0161

Pluto 72638-11-17 21:22 G 28251865.39 28251865.39 28251865.42 0.0065 0.0065

Pluto 72639-07-01 01:41 G 28252090.39 28252090.57 28252090.79 0.0065 0.0029

Pluto 72640-02-11 06:29 G 28252315.55 28252315.77 28252315.99 0.0065 0.0008

Pluto 72640-09-23 10:34 G 28252540.80 28252540.94 28252541.12 0.0065 0.0044

Jupiter 72641-04-22 09:22 G 28252751.69 28252751.89 28252752.09 0.0538 0.0071

Jupiter 72641-12-16 16:48 G 28252990.09 28252990.20 28252990.32 0.0543 0.0439

Saturn 72645-01-21 14:53 G 28254121.96 28254122.12 28254122.28 0.0277 0.0181

Saturn 72645-09-08 00:00 G 28254351.29 28254351.50 28254351.71 0.0276 0.0006

Saturn 72646-04-25 08:53 G 28254580.72 28254580.87 28254581.02 0.0276 0.0192

Jupiter 72646-07-08 13:12 G 28254654.90 28254655.05 28254655.21 0.0495 0.0325

Jupiter 72647-03-01 15:51 G 28254890.96 28254891.16 28254891.37 0.0489 0.0058

Jupiter 72647-10-23 11:17 G 28255126.87 28255126.97 28255127.08 0.0485 0.0415

Mars 72648-10-18 10:05 G 28255487.76 28255487.92 28255488.08 0.1613 0.0669

Uranus 72648-12-27 02:39 G 28255557.56 28255557.61 28255557.68 0.0144 0.0138

Uranus 72649-08-10 14:53 G 28255783.96 28255784.12 28255784.29 0.0144 0.0097

Uranus 72650-03-25 02:53 G 28256010.42 28256010.62 28256010.82 0.0144 0.0056

Uranus 72650-11-06 14:53 G 28256236.90 28256237.12 28256237.34 0.0144 0.0015

Uranus 72651-06-21 02:39 G 28256463.40 28256463.61 28256463.83 0.0144 0.0026

Uranus 72652-02-02 14:24 G 28256689.91 28256690.10 28256690.29 0.0144 0.0067

Neptune 72652-08-18 00:15 G 28256887.51 28256887.51 28256887.57 0.0088 0.0087

Uranus 72652-09-16 01:41 G 28256916.44 28256916.57 28256916.73 0.0143 0.0108

Jupiter 72652-12-25 23:17 G 28257017.29 28257017.47 28257017.66 0.0536 0.0207

Neptune 72653-03-31 13:12 G 28257112.99 28257113.05 28257113.16 0.0088 0.0081

Jupiter 72653-08-21 03:51 G 28257255.49 28257255.66 28257255.83 0.0542 0.0300

Neptune 72653-11-12 02:24 G 28257338.51 28257338.60 28257338.74 0.0088 0.0075

Neptune 72654-06-25 15:51 G 28257564.03 28257564.16 28257564.31 0.0088 0.0068

Neptune 72655-02-06 04:34 G 28257789.55 28257789.69 28257789.86 0.0088 0.0062

Neptune 72655-09-19 17:31 G 28258015.07 28258015.23 28258015.42 0.0088 0.0056

Neptune 72656-05-02 06:29 G 28258240.60 28258240.77 28258240.97 0.0088 0.0050

Neptune 72656-12-13 19:41 G 28258466.14 28258466.32 28258466.53 0.0088 0.0043

Neptune 72657-07-27 08:39 G 28258691.67 28258691.86 28258692.07 0.0088 0.0037

Neptune 72658-03-09 21:36 G 28258917.21 28258917.40 28258917.62 0.0088 0.0031

Jupiter 72658-03-13 13:41 G 28258920.98 28258921.07 28258921.18 0.0497 0.0432

Neptune 72658-10-21 10:48 G 28259142.74 28259142.95 28259143.17 0.0088 0.0024

Jupiter 72658-11-04 19:27 G 28259157.10 28259157.31 28259157.51 0.0490 0.0047

Neptune 72659-06-03 23:46 G 28259368.28 28259368.49 28259368.72 0.0088 0.0018

Jupiter 72659-06-28 16:48 G 28259393.05 28259393.20 28259393.35 0.0486 0.0320

Neptune 72660-01-15 12:58 G 28259593.82 28259594.04 28259594.26 0.0088 0.0011

Saturn 72660-02-19 08:39 G 28259628.70 28259628.86 28259629.03 0.0282 0.0174

Neptune 72660-08-28 01:41 G 28259819.35 28259819.57 28259819.80 0.0088 0.0005

Saturn 72660-10-05 23:31 G 28259858.27 28259858.48 28259858.69 0.0283 0.0027

Neptune 72661-04-10 14:39 G 28260044.89 28260045.11 28260045.34 0.0088 0.0002

Saturn 72661-05-23 14:10 G 28260087.97 28260088.09 28260088.22 0.0283 0.0228

Neptune 72661-11-22 03:36 G 28260270.44 28260270.65 28260270.88 0.0088 0.0009

Neptune 72662-07-05 16:34 G 28260495.98 28260496.19 28260496.41 0.0088 0.0015

Neptune 72663-02-16 05:31 G 28260721.51 28260721.73 28260721.94 0.0088 0.0021

Neptune 72663-09-29 18:00 G 28260947.05 28260947.25 28260947.47 0.0088 0.0028

Neptune 72664-05-12 06:58 G 28261172.59 28261172.79 28261173.00 0.0088 0.0034

Jupiter 72664-08-30 10:48 G 28261282.80 28261282.95 28261283.11 0.0533 0.0343

Neptune 72664-12-23 19:55 G 28261398.14 28261398.33 28261398.53 0.0088 0.0040

Jupiter 72665-04-25 11:46 G 28261520.80 28261520.99 28261521.19 0.0540 0.0154

Neptune 72665-08-06 08:24 G 28261623.68 28261623.85 28261624.06 0.0088 0.0047

Neptune 72666-03-19 21:22 G 28261849.23 28261849.39 28261849.58 0.0088 0.0053

Neptune 72666-10-31 10:19 G 28262074.78 28262074.93 28262075.10 0.0088 0.0059

Neptune 72667-06-13 23:17 G 28262300.33 28262300.47 28262300.62 0.0088 0.0065

Neptune 72668-01-25 11:46 G 28262525.88 28262525.99 28262526.14 0.0088 0.0072

Neptune 72668-09-07 00:29 G 28262751.44 28262751.52 28262751.65 0.0088 0.0078

Neptune 72669-04-20 13:27 G 28262977.02 28262977.06 28262977.14 0.0088 0.0084

Jupiter 72670-07-10 22:34 G 28263423.25 28263423.44 28263423.64 0.0492 0.0151

Jupiter 72671-03-03 22:19 G 28263659.25 28263659.43 28263659.61 0.0487 0.0224

Saturn 72674-08-03 23:31 G 28264908.31 28264908.48 28264908.67 0.0277 0.0148

Saturn 72675-03-21 08:39 G 28265137.65 28265137.86 28265138.07 0.0276 0.0040

Saturn 72675-11-05 17:17 G 28265367.11 28265367.22 28265367.35 0.0275 0.0225

Jupiter 72676-05-05 02:10 G 28265548.50 28265548.59 28265548.69 0.0530 0.0467

Jupiter 72676-12-29 00:00 G 28265786.30 28265786.50 28265786.70 0.0539 0.0012

Jupiter 72677-08-24 08:24 G 28266024.79 28266024.85 28266024.91 0.0544 0.0519

Mars 72680-10-17 02:53 G 28267174.53 28267174.62 28267174.71 0.1614 0.1364

Jupiter 72682-03-16 00:58 G 28267689.37 28267689.54 28267689.72 0.0494 0.0257

Jupiter 72682-11-07 02:39 G 28267925.41 28267925.61 28267925.81 0.0488 0.0123

Jupiter 72683-06-30 21:07 G 28268161.34 28268161.38 28268161.42 0.0484 0.0474

Jupiter 72688-09-02 13:41 G 28270051.88 28270052.07 28270052.27 0.0537 0.0128

Jupiter 72689-04-28 19:55 G 28270290.19 28270290.33 28270290.48 0.0543 0.0382

Saturn 72689-08-31 12:29 G 28270414.84 28270415.02 28270415.20 0.0282 0.0150

Saturn 72690-04-18 02:53 G 28270644.42 28270644.62 28270644.83 0.0283 0.0052

Saturn 72690-12-03 17:31 G 28270874.14 28270874.23 28270874.33 0.0284 0.0253

Uranus 72691-02-15 21:51 G 28270948.38 28270948.41 28270948.47 0.0134 0.0131

Uranus 72691-09-30 03:07 G 28271174.50 28271174.63 28271174.79 0.0134 0.0099

Uranus 72692-05-13 08:53 G 28271400.69 28271400.87 28271401.07 0.0134 0.0065

Uranus 72692-12-25 14:24 G 28271626.90 28271627.10 28271627.32 0.0134 0.0033

Uranus 72693-08-08 20:10 G 28271853.12 28271853.34 28271853.55 0.0135 0.0003

Jupiter 72693-11-19 02:39 G 28271955.48 28271955.61 28271955.76 0.0496 0.0363

Uranus 72694-03-23 01:27 G 28272079.36 28272079.56 28272079.77 0.0135 0.0034

Jupiter 72694-07-13 06:43 G 28272191.58 28272191.78 28272191.99 0.0489 0.0023

Uranus 72694-11-04 07:12 G 28272305.61 28272305.80 28272305.99 0.0135 0.0067

Earth 72695-02-23 01:12 G 28272416.40 28272416.55 28272416.71 0.2627 0.0310

Moon 72695-02-23 03:36 G 28272416.48 28272416.65 28272416.82 0.2622 0.0142 *

Jupiter 72695-03-06 02:39 G 28272427.49 28272427.61 28272427.74 0.0485 0.0382

Uranus 72695-06-18 12:58 G 28272531.90 28272532.04 28272532.18 0.0135 0.0100

Uranus 72696-01-30 18:43 G 28272758.25 28272758.28 28272758.31 0.0135 0.0133

Jupiter 72700-05-09 05:31 G 28274317.56 28274317.73 28274317.91 0.0535 0.0260

Jupiter 72701-01-02 09:07 G 28274555.70 28274555.88 28274556.06 0.0542 0.0243

Saturn 72704-02-14 23:46 G 28275694.31 28275694.49 28275694.68 0.0276 0.0128

Saturn 72704-10-01 08:39 G 28275923.66 28275923.86 28275924.07 0.0276 0.0059

Saturn 72705-05-18 17:31 G 28276153.13 28276153.23 28276153.33 0.0275 0.0244

Jupiter 72705-07-26 02:24 G 28276221.53 28276221.60 28276221.66 0.0498 0.0469

Jupiter 72706-03-19 08:53 G 28276457.67 28276457.87 28276458.07 0.0491 0.0085

Jupiter 72706-11-10 06:58 G 28276693.62 28276693.79 28276693.95 0.0486 0.0284

Jupiter 72712-01-12 21:22 G 28278583.25 28278583.39 28278583.52 0.0532 0.0388

Jupiter 72712-09-06 21:22 G 28278821.19 28278821.39 28278821.59 0.0540 0.0102

Mars 72714-08-16 22:48 G 28279530.31 28279530.45 28279530.60 0.1613 0.0871

Jupiter 72717-11-22 11:31 G 28280723.79 28280723.98 28280724.17 0.0493 0.0190

Jupiter 72718-07-16 11:46 G 28280959.80 28280959.99 28280960.18 0.0487 0.0186

Saturn 72719-03-14 15:51 G 28281200.97 28281201.16 28281201.35 0.0282 0.0123

Saturn 72719-10-30 06:29 G 28281430.57 28281430.77 28281430.98 0.0283 0.0078

Saturn 72720-06-15 21:36 G 28281660.37 28281660.40 28281660.43 0.0284 0.0279

Jupiter 72723-09-17 10:48 G 28282848.91 28282848.95 28282849.01 0.0529 0.0511

Jupiter 72724-05-12 07:12 G 28283086.60 28283086.80 28283087.00 0.0537 0.0042

Jupiter 72725-01-05 14:10 G 28283324.99 28283325.09 28283325.19 0.0543 0.0464

Pluto 72727-10-13 21:51 G 28284336.24 28284336.41 28284336.63 0.0079 0.0039

Pluto 72728-05-26 08:39 G 28284561.65 28284561.86 28284562.06 0.0079 0.0029

Jupiter 72729-07-28 13:12 G 28284989.89 28284990.05 28284990.21 0.0495 0.0296

Jupiter 72730-03-21 16:19 G 28285225.98 28285226.18 28285226.38 0.0489 0.0086

Jupiter 72730-11-12 11:46 G 28285461.92 28285461.99 28285462.08 0.0485 0.0441

Uranus 72733-04-10 20:53 G 28286342.26 28286342.37 28286342.51 0.0144 0.0116

Saturn 72733-08-27 08:24 G 28286480.65 28286480.85 28286481.05 0.0276 0.0094

Uranus 72733-11-23 09:07 G 28286568.70 28286568.88 28286569.07 0.0144 0.0075

Saturn 72734-04-13 17:17 G 28286710.02 28286710.22 28286710.42 0.0276 0.0093

Uranus 72734-07-07 21:07 G 28286795.17 28286795.38 28286795.60 0.0144 0.0034

Uranus 72735-02-19 08:53 G 28287021.65 28287021.87 28287022.09 0.0144 0.0007

Neptune 72735-05-17 18:00 G 28287109.22 28287109.25 28287109.32 0.0090 0.0087

Uranus 72735-10-03 20:24 G 28287248.15 28287248.35 28287248.56 0.0144 0.0048

Neptune 72735-12-29 06:58 G 28287334.72 28287334.79 28287334.91 0.0090 0.0081

Jupiter 72736-01-15 20:24 G 28287352.16 28287352.35 28287352.54 0.0535 0.0179

Uranus 72736-05-17 08:10 G 28287474.67 28287474.84 28287475.01 0.0143 0.0089

Neptune 72736-08-10 20:10 G 28287560.24 28287560.34 28287560.48 0.0090 0.0074

Jupiter 72736-09-10 00:43 G 28287590.37 28287590.53 28287590.69 0.0542 0.0325

Uranus 72736-12-29 19:27 G 28287701.24 28287701.31 28287701.42 0.0143 0.0130

Neptune 72737-03-24 09:07 G 28287785.76 28287785.88 28287786.05 0.0090 0.0068

Neptune 72737-11-04 22:19 G 28288011.29 28288011.43 28288011.61 0.0090 0.0061

Neptune 72738-06-18 11:46 G 28288236.82 28288236.99 28288237.17 0.0090 0.0054

Neptune 72739-01-30 00:29 G 28288462.35 28288462.52 28288462.72 0.0090 0.0048

Neptune 72739-09-12 13:41 G 28288687.88 28288688.07 28288688.27 0.0090 0.0041

Neptune 72740-04-25 03:07 G 28288913.43 28288913.63 28288913.83 0.0090 0.0034

Neptune 72740-12-06 15:51 G 28289138.96 28289139.16 28289139.38 0.0090 0.0028

Jupiter 72741-04-02 14:24 G 28289255.98 28289256.10 28289256.22 0.0498 0.0402

Neptune 72741-07-20 05:03 G 28289364.50 28289364.71 28289364.93 0.0090 0.0021

Jupiter 72741-11-24 20:10 G 28289492.13 28289492.34 28289492.54 0.0490 0.0018

Neptune 72742-03-02 18:15 G 28289590.04 28289590.26 28289590.47 0.0090 0.0014

Jupiter 72742-07-18 17:17 G 28289728.08 28289728.22 28289728.36 0.0486 0.0347

Neptune 72742-10-14 07:12 G 28289815.58 28289815.80 28289816.02 0.0090 0.0007

Neptune 72743-05-27 20:24 G 28290041.13 28290041.35 28290041.57 0.0090 0.0001

Neptune 72744-01-08 09:22 G 28290266.68 28290266.89 28290267.11 0.0090 0.0007

Neptune 72744-08-20 22:34 G 28290492.23 28290492.44 28290492.66 0.0090 0.0013

Neptune 72745-04-03 11:31 G 28290717.78 28290717.98 28290718.20 0.0090 0.0020

Neptune 72745-11-15 00:43 G 28290943.33 28290943.53 28290943.75 0.0090 0.0027

Neptune 72746-06-28 13:41 G 28291168.89 28291169.07 28291169.29 0.0090 0.0034

Mars 72746-08-15 15:22 G 28291217.02 28291217.14 28291217.26 0.1614 0.1153

Neptune 72747-02-09 03:07 G 28291394.44 28291394.63 28291394.83 0.0090 0.0040

Mars 72747-07-19 14:53 G 28291554.98 28291555.12 28291555.26 0.1911 0.1167

Jupiter 72747-09-20 11:03 G 28291617.80 28291617.96 28291618.13 0.0533 0.0312

Neptune 72747-09-22 16:05 G 28291620.00 28291620.17 28291620.37 0.0090 0.0047

Neptune 72748-05-05 05:17 G 28291845.56 28291845.72 28291845.91 0.0090 0.0054

Jupiter 72748-05-15 12:58 G 28291855.85 28291856.04 28291856.23 0.0541 0.0185

Saturn 72748-09-23 19:55 G 28291987.13 28291987.33 28291987.53 0.0283 0.0098

Neptune 72748-12-16 18:43 G 28292071.13 28292071.28 28292071.45 0.0090 0.0060

Saturn 72749-05-11 10:34 G 28292216.74 28292216.94 28292217.14 0.0283 0.0104

Neptune 72749-07-30 07:41 G 28292296.70 28292296.82 28292296.99 0.0090 0.0067

Neptune 72750-03-12 21:07 G 28292522.26 28292522.38 28292522.51 0.0090 0.0073

Neptune 72750-10-24 10:05 G 28292747.84 28292747.92 28292748.04 0.0090 0.0080

Neptune 72751-06-06 23:46 G 28292973.44 28292973.49 28292973.55 0.0090 0.0086

Jupiter 72753-07-30 23:17 G 28293758.28 28293758.47 28293758.67 0.0492 0.0122

Jupiter 72754-03-23 22:19 G 28293994.26 28293994.43 28293994.61 0.0487 0.0250

Jupiter 72759-05-26 04:19 G 28295883.57 28295883.68 28295883.79 0.0531 0.0435

Jupiter 72760-01-19 03:07 G 28296121.43 28296121.63 28296121.83 0.0539 0.0046

Saturn 72762-07-22 22:48 G 28297037.39 28297037.45 28297037.53 0.0277 0.0262

Saturn 72763-03-09 08:10 G 28297266.64 28297266.84 28297267.04 0.0276 0.0075

Saturn 72763-10-24 17:03 G 28297496.01 28297496.21 28297496.40 0.0276 0.0111

Jupiter 72765-04-05 00:43 G 28298024.35 28298024.53 28298024.71 0.0494 0.0228

Jupiter 72765-11-27 01:55 G 28298260.39 28298260.58 28298260.78 0.0488 0.0150

Jupiter 72771-09-23 16:48 G 28300387.01 28300387.20 28300387.40 0.0537 0.0092

Jupiter 72772-05-18 23:17 G 28300625.34 28300625.47 28300625.60 0.0543 0.0416

Uranus 72775-05-31 13:12 G 28301732.94 28301733.05 28301733.17 0.0134 0.0113

Uranus 72776-01-12 18:15 G 28301959.10 28301959.26 28301959.45 0.0134 0.0081

Uranus 72776-08-25 23:46 G 28302185.30 28302185.49 28302185.70 0.0134 0.0048

Jupiter 72776-12-09 02:10 G 28302290.44 28302290.59 28302290.74 0.0496 0.0334

Uranus 72777-04-09 05:17 G 28302411.51 28302411.72 28302411.94 0.0135 0.0015

Jupiter 72777-08-02 06:00 G 28302526.55 28302526.75 28302526.96 0.0489 0.0049

Saturn 72777-08-19 07:41 G 28302543.77 28302543.82 28302543.88 0.0282 0.0272

Uranus 72777-11-21 11:03 G 28302637.74 28302637.96 28302638.17 0.0135 0.0019

Jupiter 72778-03-26 02:10 G 28302762.48 28302762.59 28302762.71 0.0485 0.0406

Saturn 72778-04-05 22:19 G 28302773.23 28302773.43 28302773.64 0.0282 0.0073

Uranus 72778-07-05 16:34 G 28302863.99 28302864.19 28302864.39 0.0135 0.0052

Saturn 72778-11-21 12:58 G 28303002.86 28303003.04 28303003.24 0.0283 0.0128

Uranus 72779-02-16 22:19 G 28303090.26 28303090.43 28303090.59 0.0135 0.0085

Uranus 72779-10-01 03:51 G 28303316.56 28303316.66 28303316.77 0.0135 0.0118

Mars 72780-06-13 11:17 G 28303572.84 28303572.97 28303573.10 0.1613 0.1078

Jupiter 72783-05-29 04:48 G 28304652.51 28304652.70 28304652.88 0.0534 0.0229

Jupiter 72784-01-22 07:27 G 28304890.64 28304890.81 28304890.99 0.0541 0.0271

Jupiter 72788-08-14 02:10 G 28306556.50 28306556.59 28306556.68 0.0499 0.0440

Jupiter 72789-04-07 09:22 G 28306792.68 28306792.89 28306793.09 0.0491 0.0056

Jupiter 72789-11-29 07:41 G 28307028.67 28307028.82 28307028.98 0.0486 0.0313

Saturn 72792-02-02 06:58 G 28307823.68 28307823.79 28307823.91 0.0277 0.0230

Saturn 72792-09-18 16:19 G 28308052.97 28308053.18 28308053.39 0.0276 0.0043

Saturn 72793-05-06 00:58 G 28308282.36 28308282.54 28308282.73 0.0276 0.0143

Jupiter 72795-01-31 19:12 G 28308918.16 28308918.30 28308918.45 0.0532 0.0358

Jupiter 72795-09-26 18:58 G 28309156.09 28309156.29 28309156.48 0.0540 0.0130

Jupiter 72800-12-11 12:15 G 28311058.82 28311059.01 28311059.20 0.0493 0.0161

Jupiter 72801-08-04 12:29 G 28311294.84 28311295.02 28311295.21 0.0487 0.0214

Jupiter 72806-10-06 11:03 G 28313183.88 28313183.96 28313184.05 0.0529 0.0482

Saturn 72807-03-01 12:00 G 28313329.91 28313330.00 28313330.12 0.0282 0.0246

Jupiter 72807-06-01 07:55 G 28313421.63 28313421.83 28313422.04 0.0538 0.0015

Saturn 72807-10-17 02:39 G 28313559.40 28313559.61 28313559.82 0.0283 0.0047

Jupiter 72808-01-25 15:36 G 28313660.08 28313660.15 28313660.24 0.0544 0.0496

Saturn 72808-06-02 17:17 G 28313789.04 28313789.22 28313789.40 0.0283 0.0154

Moon 72808-08-25 07:27 G 28313872.65 28313872.81 28313872.98 0.2700 0.0381

Earth 72808-08-25 11:17 G 28313872.83 28313872.97 28313873.12 0.2705 0.1034 *

Mars 72812-06-12 03:51 G 28315259.52 28315259.66 28315259.80 0.1613 0.0950

Jupiter 72812-08-16 14:24 G 28315324.93 28315325.10 28315325.28 0.0495 0.0266

Jupiter 72813-04-09 17:03 G 28315561.01 28315561.21 28315561.41 0.0489 0.0114

Mars 72813-05-15 16:48 G 28315597.03 28315597.20 28315597.37 0.1911 0.0346

Jupiter 72813-12-01 12:15 G 28315796.96 28315797.01 28315797.06 0.0485 0.0465

Earth 72816-08-23 00:58 G 28316792.49 28316792.54 28316792.58 0.2705 0.2564

Neptune 72816-11-20 12:00 G 28316881.98 28316882.00 28316882.02 0.0088 0.0087

Uranus 72816-12-09 03:36 G 28316900.57 28316900.65 28316900.73 0.0144 0.0134

Neptune 72817-07-04 00:43 G 28317107.45 28317107.53 28317107.62 0.0088 0.0081

Uranus 72817-07-23 15:07 G 28317126.98 28317127.13 28317127.31 0.0144 0.0094

Neptune 72818-02-14 13:27 G 28317332.96 28317333.06 28317333.19 0.0088 0.0075

Uranus 72818-03-07 03:07 G 28317353.44 28317353.63 28317353.85 0.0144 0.0053

Neptune 72818-09-28 02:24 G 28317558.48 28317558.60 28317558.75 0.0088 0.0069

Uranus 72818-10-19 15:07 G 28317579.91 28317580.13 28317580.35 0.0144 0.0012

Jupiter 72819-02-03 23:17 G 28317687.27 28317687.47 28317687.66 0.0536 0.0145

Neptune 72819-05-11 15:07 G 28317784.00 28317784.13 28317784.31 0.0088 0.0063

Uranus 72819-06-03 02:53 G 28317806.41 28317806.62 28317806.84 0.0144 0.0030

Jupiter 72819-09-30 04:19 G 28317925.53 28317925.68 28317925.83 0.0543 0.0360

Neptune 72819-12-23 04:34 G 28318009.53 28318009.69 28318009.87 0.0088 0.0056

Uranus 72820-01-15 14:24 G 28318032.92 28318033.10 28318033.30 0.0143 0.0071

Neptune 72820-08-04 17:17 G 28318235.05 28318235.22 28318235.42 0.0088 0.0050

Uranus 72820-08-29 02:10 G 28318259.46 28318259.59 28318259.73 0.0143 0.0111

Neptune 72821-03-18 06:15 G 28318460.58 28318460.76 28318460.97 0.0088 0.0044

Saturn 72821-08-14 06:58 G 28318609.66 28318609.79 28318609.93 0.0277 0.0210

Neptune 72821-10-29 19:27 G 28318686.12 28318686.31 28318686.52 0.0088 0.0037

Saturn 72822-03-31 16:05 G 28318838.96 28318839.17 28318839.38 0.0276 0.0024

Neptune 72822-06-12 08:24 G 28318911.65 28318911.85 28318912.07 0.0088 0.0031

Saturn 72822-11-16 00:58 G 28319068.37 28319068.54 28319068.71 0.0275 0.0162

Neptune 72823-01-23 21:36 G 28319137.18 28319137.40 28319137.61 0.0088 0.0024

Neptune 72823-09-06 10:19 G 28319362.72 28319362.93 28319363.15 0.0088 0.0018

Neptune 72824-04-18 23:17 G 28319588.26 28319588.47 28319588.70 0.0088 0.0012

Jupiter 72824-04-21 14:53 G 28319590.99 28319591.12 28319591.26 0.0497 0.0372

Neptune 72824-11-30 12:29 G 28319813.80 28319814.02 28319814.25 0.0088 0.0005

Jupiter 72824-12-13 20:10 G 28319827.13 28319827.34 28319827.54 0.0490 0.0013

Neptune 72825-07-14 01:27 G 28320039.34 28320039.56 28320039.79 0.0088 0.0002

Jupiter 72825-08-06 16:48 G 28320063.08 28320063.20 28320063.34 0.0485 0.0372

Neptune 72826-02-24 14:24 G 28320264.88 28320265.10 28320265.32 0.0088 0.0008

Neptune 72826-10-08 03:07 G 28320490.42 28320490.63 28320490.86 0.0088 0.0015

Neptune 72827-05-21 16:19 G 28320715.96 28320716.18 28320716.39 0.0088 0.0021

Neptune 72828-01-02 05:03 G 28320941.51 28320941.71 28320941.93 0.0088 0.0028

Neptune 72828-08-14 18:00 G 28321167.05 28321167.25 28321167.46 0.0088 0.0034

Neptune 72829-03-28 06:29 G 28321392.59 28321392.77 28321392.99 0.0088 0.0041

Neptune 72829-11-08 19:27 G 28321618.14 28321618.31 28321618.52 0.0088 0.0047

Neptune 72830-06-22 08:39 G 28321843.69 28321843.86 28321844.04 0.0088 0.0053

Jupiter 72830-10-09 14:39 G 28321952.94 28321953.11 28321953.28 0.0534 0.0275

Neptune 72831-02-02 20:53 G 28322069.24 28322069.37 28322069.56 0.0088 0.0060

Jupiter 72831-06-04 16:48 G 28322191.02 28322191.20 28322191.39 0.0541 0.0222

Neptune 72831-09-16 09:51 G 28322294.78 28322294.91 28322295.08 0.0088 0.0066

Neptune 72832-04-28 22:48 G 28322520.34 28322520.45 28322520.59 0.0088 0.0072

Neptune 72832-12-10 11:46 G 28322745.91 28322745.99 28322746.11 0.0088 0.0078

Neptune 72833-07-24 00:43 G 28322971.48 28322971.53 28322971.60 0.0088 0.0084

Jupiter 72835-12-26 15:07 G 28323857.08 28323857.13 28323857.19 0.0499 0.0477

Jupiter 72836-08-18 23:03 G 28324093.26 28324093.46 28324093.66 0.0492 0.0093

Saturn 72836-09-10 13:27 G 28324115.93 28324116.06 28324116.19 0.0282 0.0224

Jupiter 72837-04-11 22:05 G 28324329.25 28324329.42 28324329.59 0.0487 0.0276

Saturn 72837-04-28 04:05 G 28324345.46 28324345.67 28324345.88 0.0283 0.0025

Saturn 72837-12-13 18:58 G 28324575.13 28324575.29 28324575.45 0.0283 0.0177

Jupiter 72842-06-14 04:34 G 28326218.56 28326218.69 28326218.82 0.0530 0.0403

Jupiter 72843-02-07 02:39 G 28326456.41 28326456.61 28326456.81 0.0539 0.0077

Mars 72846-04-11 00:15 G 28327615.40 28327615.51 28327615.61 0.1612 0.1274

Jupiter 72848-04-24 00:43 G 28328359.34 28328359.53 28328359.72 0.0494 0.0199

Jupiter 72848-12-16 02:39 G 28328595.42 28328595.61 28328595.81 0.0488 0.0178

Saturn 72851-02-24 14:39 G 28329395.95 28329396.11 28329396.27 0.0277 0.0180

Saturn 72851-10-11 23:46 G 28329625.28 28329625.49 28329625.70 0.0276 0.0008

Saturn	72852-05-28 08:39 G	28329854.71	28329854.86	28329855.01	0.0276	0.0193
Jupiter	72854-02-16 20:39 G	28330484.34	28330484.36	28330484.39	0.0528	0.0523
Jupiter	72854-10-12 15:07 G	28330721.93	28330722.13	28330722.34	0.0537	0.0063
Jupiter	72855-06-07 21:07 G	28330960.27	28330960.38	28330960.50	0.0543	0.0441
Uranus	72859-01-28 21:51 G	28332291.37	28332291.41	28332291.49	0.0134	0.0128
Uranus	72859-09-12 03:22 G	28332517.50	28332517.64	28332517.80	0.0134	0.0096
Jupiter	72859-12-29 02:39 G	28332625.45	28332625.61	28332625.77	0.0496	0.0305
Uranus	72860-04-25 08:53 G	28332743.69	28332743.87	28332744.07	0.0134	0.0063
Jupiter	72860-08-21 06:43 G	28332861.58	28332861.78	28332861.98	0.0489	0.0076
Uranus	72860-12-07 14:24 G	28332969.89	28332970.10	28332970.32	0.0135	0.0030
Jupiter	72861-04-14 02:53 G	28333097.53	28333097.62	28333097.71	0.0485	0.0431
Uranus	72861-07-21 19:55 G	28333196.12	28333196.33	28333196.55	0.0135	0.0005
Uranus	72862-03-05 01:27 G	28333422.36	28333422.56	28333422.77	0.0135	0.0037
Uranus	72862-10-17 06:58 G	28333648.61	28333648.79	28333648.98	0.0135	0.0070
Uranus	72863-05-31 12:43 G	28333874.90	28333875.03	28333875.18	0.0135	0.0103
Saturn	72866-03-23 18:58 G	28334902.14	28334902.29	28334902.45	0.0282	0.0195
Jupiter	72866-06-17 05:03 G	28334987.53	28334987.71	28334987.90	0.0535	0.0198
Saturn	72866-11-08 09:22 G	28335131.68	28335131.89	28335132.10	0.0283	0.0004
Jupiter	72867-02-10 08:39 G	28335225.69	28335225.86	28335226.03	0.0542	0.0303
Saturn	72867-06-26 00:00 G	28335361.36	28335361.50	28335361.65	0.0283	0.0205
Jupiter	72871-09-03 03:51 G	28336891.55	28336891.66	28336891.78	0.0498	0.0410
Jupiter	72872-04-26 10:19 G	28337127.73	28337127.93	28337128.14	0.0491	0.0027
Jupiter	72872-12-18 08:24 G	28337363.71	28337363.85	28337364.00	0.0486	0.0338
Jupiter	72878-02-19 21:22 G	28339253.24	28339253.39	28339253.55	0.0532	0.0326
Mars	72878-04-09 16:19 G	28339302.03	28339302.18	28339302.34	0.1613	0.0743
Jupiter	72878-10-15 22:05 G	28339491.23	28339491.42	28339491.61	0.0540	0.0165
Mars	72879-03-12 19:27 G	28339639.14	28339639.31	28339639.48	0.1912	0.0450
Saturn	72880-09-05 14:39 G	28340181.94	28340182.11	28340182.29	0.0276	0.0159
Saturn	72881-04-22 23:46 G	28340411.28	28340411.49	28340411.70	0.0276	0.0028
Saturn	72881-12-08 08:24 G	28340640.72	28340640.85	28340640.99	0.0275	0.0212

Jupiter 72883-12-31 12:29 G 28341393.83 28341394.02 28341394.22 0.0493 0.0132

Jupiter 72884-08-23 12:29 G 28341629.84 28341630.02 28341630.20 0.0487 0.0241

Pluto 72884-12-17 08:39 G 28341745.79 28341745.86 28341745.98 0.0065 0.0058

Pluto 72885-07-30 13:12 G 28341970.86 28341971.05 28341971.27 0.0065 0.0022

Pluto 72886-03-12 17:46 G 28342196.03 28342196.24 28342196.46 0.0065 0.0015

Pluto 72886-10-23 21:51 G 28342421.30 28342421.41 28342421.57 0.0065 0.0052

Jupiter 72889-10-25 14:39 G 28343519.00 28343519.11 28343519.21 0.0530 0.0447

Jupiter 72890-06-20 12:00 G 28343756.80 28343757.00 28343757.20 0.0538 0.0028

Jupiter 72891-02-13 19:55 G 28343995.29 28343995.33 28343995.37 0.0544 0.0529

Jupiter 72895-09-05 14:24 G 28345659.92 28345660.10 28345660.28 0.0495 0.0236

Saturn 72895-10-03 19:12 G 28345688.14 28345688.30 28345688.47 0.0282 0.0175

Jupiter 72896-04-28 16:48 G 28345896.01 28345896.20 28345896.40 0.0489 0.0142

Saturn 72896-05-20 10:05 G 28345917.70 28345917.92 28345918.13 0.0283 0.0025

Saturn 72897-01-05 00:43 G 28346147.41 28346147.53 28346147.67 0.0283 0.0226

Neptune 72899-08-19 04:48 G 28347103.68 28347103.70 28347103.77 0.0090 0.0088

Neptune 72900-04-01 18:15 G 28347329.18 28347329.26 28347329.36 0.0090 0.0081

Neptune 72900-11-13 07:12 G 28347554.70 28347554.80 28347554.94 0.0090 0.0075

Uranus 72901-03-23 20:53 G 28347685.24 28347685.37 28347685.51 0.0144 0.0113

Neptune 72901-06-26 20:39 G 28347780.22 28347780.36 28347780.51 0.0090 0.0068

Uranus 72901-11-05 08:53 G 28347911.69 28347911.87 28347912.06 0.0144 0.0072

Neptune 72902-02-07 09:22 G 28348005.75 28348005.89 28348006.07 0.0090 0.0062

Jupiter 72902-02-23 23:46 G 28348022.29 28348022.49 28348022.69 0.0535 0.0112

Uranus 72902-06-19 20:53 G 28348138.15 28348138.37 28348138.58 0.0144 0.0031

Neptune 72902-09-20 22:34 G 28348231.28 28348231.44 28348231.63 0.0090 0.0055

Jupiter 72902-10-20 04:05 G 28348260.53 28348260.67 28348260.81 0.0542 0.0389

Uranus 72903-02-01 08:39 G 28348364.64 28348364.86 28348365.08 0.0144 0.0010

Neptune 72903-05-04 12:00 G 28348456.82 28348457.00 28348457.19 0.0090 0.0048

Uranus 72903-09-15 20:24 G 28348591.14 28348591.35 28348591.55 0.0144 0.0051

Neptune 72903-12-16 00:58 G 28348682.36 28348682.54 28348682.74 0.0090 0.0042

Uranus 72904-04-29 07:41 G 28348817.67 28348817.82 28348818.00 0.0143 0.0092

Neptune 72904-07-28 13:55 G 28348907.89 28348908.08 28348908.30 0.0090 0.0035

Uranus 72904-12-11 19:41 G 28349044.24 28349044.32 28349044.41 0.0143 0.0132

Neptune 72905-03-11 03:07 G 28349133.43 28349133.63 28349133.84 0.0090 0.0028

Neptune 72905-10-22 16:19 G 28349358.97 28349359.18 28349359.39 0.0090 0.0021

Neptune 72906-06-05 05:17 G 28349584.52 28349584.72 28349584.95 0.0090 0.0015

Neptune 72907-01-16 18:29 G 28349810.06 28349810.27 28349810.49 0.0090 0.0008

Jupiter 72907-05-12 14:24 G 28349925.96 28349926.10 28349926.25 0.0498 0.0345

Neptune 72907-08-30 07:41 G 28350035.60 28350035.82 28350036.04 0.0090 0.0001

Jupiter 72908-01-03 20:10 G 28350162.14 28350162.34 28350162.55 0.0490 0.0039

Neptune 72908-04-11 20:39 G 28350261.15 28350261.36 28350261.58 0.0090 0.0006

Jupiter 72908-08-26 17:31 G 28350398.12 28350398.23 28350398.35 0.0486 0.0398

Neptune 72908-11-23 09:51 G 28350486.70 28350486.91 28350487.13 0.0090 0.0013

Neptune 72909-07-06 22:48 G 28350712.25 28350712.45 28350712.67 0.0090 0.0020

Neptune 72910-02-17 11:46 G 28350937.80 28350937.99 28350938.21 0.0090 0.0027

Saturn 72910-03-19 21:51 G 28350968.23 28350968.41 28350968.60 0.0277 0.0129

Neptune 72910-10-01 00:58 G 28351163.35 28351163.54 28351163.75 0.0090 0.0033

Saturn 72910-11-04 06:58 G 28351197.59 28351197.79 28351198.00 0.0276 0.0059

Neptune 72911-05-14 14:24 G 28351388.91 28351389.10 28351389.30 0.0090 0.0040

Saturn 72911-06-21 16:05 G 28351427.07 28351427.17 28351427.27 0.0276 0.0243

Neptune 72911-12-26 03:22 G 28351614.47 28351614.64 28351614.84 0.0090 0.0047

Mars 72912-02-07 12:43 G 28351657.96 28351658.03 28351658.09 0.1612 0.1481

Neptune 72912-08-07 16:19 G 28351840.03 28351840.18 28351840.38 0.0090 0.0054

Neptune 72913-03-21 06:00 G 28352065.59 28352065.75 28352065.91 0.0090 0.0060

Jupiter 72913-10-29 13:41 G 28352287.89 28352288.07 28352288.25 0.0533 0.0245

Neptune 72913-11-01 18:58 G 28352291.16 28352291.29 28352291.45 0.0090 0.0067

Neptune 72914-06-15 07:55 G 28352516.73 28352516.83 28352516.98 0.0090 0.0074

Jupiter 72914-06-24 15:07 G 28352525.95 28352526.13 28352526.31 0.0540 0.0249

Neptune 72915-01-26 21:36 G 28352742.31 28352742.40 28352742.50 0.0090 0.0080

Neptune 72915-09-09 10:19 G 28352967.90 28352967.93 28352968.01 0.0090 0.0087

Jupiter 72919-01-15 14:53 G 28354192.04 28354192.12 28354192.21 0.0500 0.0450

Jupiter 72919-09-08 23:17 G 28354428.26 28354428.47 28354428.67 0.0492 0.0066

Jupiter 72920-05-01 22:19 G 28354664.27 28354664.43 28354664.59 0.0487 0.0302

Saturn 72925-04-16 01:41 G 28356474.40 28356474.57 28356474.76 0.0282 0.0145

Jupiter 72925-07-04 04:34 G 28356553.55 28356553.69 28356553.83 0.0531 0.0374

Saturn 72925-12-01 16:19 G 28356703.97 28356704.18 28356704.39 0.0283 0.0055

Jupiter 72926-02-27 03:07 G 28356791.43 28356791.63 28356791.83 0.0539 0.0108

Saturn 72926-07-19 06:58 G 28356933.70 28356933.79 28356933.88 0.0284 0.0255

Jupiter 72931-05-15 01:55 G 28358694.39 28358694.58 28358694.78 0.0494 0.0170

Jupiter 72932-01-06 03:22 G 28358930.46 28358930.64 28358930.83 0.0488 0.0205

Jupiter 72937-03-08 21:51 G 28360819.35 28360819.41 28360819.48 0.0528 0.0493

Jupiter 72937-11-01 17:31 G 28361057.03 28361057.23 28361057.43 0.0537 0.0028

Moon 72938-02-25 00:00 G 28361172.35 28361172.50 28361172.65 0.2631 0.0586

Earth 72938-02-25 04:05 G 28361172.51 28361172.67 28361172.83 0.2627 0.0038 *

Jupiter 72938-06-28 00:15 G 28361295.42 28361295.51 28361295.61 0.0543 0.0474

Saturn 72939-09-29 22:34 G 28361754.25 28361754.44 28361754.64 0.0276 0.0108

Saturn 72940-05-16 07:41 G 28361983.62 28361983.82 28361984.03 0.0276 0.0079

Saturn 72940-12-31 16:34 G 28362213.13 28362213.19 28362213.25 0.0275 0.0262

Jupiter 72943-01-18 03:22 G 28362960.47 28362960.64 28362960.81 0.0496 0.0275

Uranus 72943-05-13 12:43 G 28363075.92 28363076.03 28363076.17 0.0134 0.0111

Jupiter 72943-09-11 06:43 G 28363196.58 28363196.78 28363196.98 0.0489 0.0105

Uranus 72943-12-25 18:29 G 28363302.09 28363302.27 28363302.45 0.0134 0.0078

Mars 72944-02-06 05:03 G 28363344.55 28363344.71 28363344.88 0.1613 0.0544

Jupiter 72944-05-04 02:24 G 28363432.54 28363432.60 28363432.68 0.0485 0.0455

Uranus 72944-08-07 23:31 G 28363528.29 28363528.48 28363528.70 0.0134 0.0046

Mars 72945-01-07 21:07 G 28363681.25 28363681.38 28363681.50 0.1912 0.1285

Uranus 72945-03-22 05:17 G 28363754.50 28363754.72 28363754.94 0.0134 0.0012

Uranus 72945-11-03 10:34 G 28363980.74 28363980.94 28363981.16 0.0135 0.0022

Uranus 72946-06-17 16:19 G 28364206.99 28364207.18 28364207.39 0.0135 0.0055

Uranus 72947-01-29 21:51 G 28364433.26 28364433.41 28364433.59 0.0135 0.0088

Uranus 72947-09-13 03:36 G 28364659.57 28364659.65 28364659.76 0.0135 0.0121

Jupiter 72949-07-07 08:39 G 28365322.67 28365322.86 28365323.06 0.0535 0.0161

Jupiter 72950-03-02 12:29 G 28365560.87 28365561.02 28365561.18 0.0542 0.0339

Jupiter 72954-09-23 03:51 G 28367226.54 28367226.66 28367226.80 0.0498 0.0381

Saturn 72954-10-27 01:55 G 28367260.39 28367260.58 28367260.77 0.0282 0.0125

Jupiter 72955-05-17 10:05 G 28367462.72 28367462.92 28367463.13 0.0491 0.0011

Saturn 72955-06-13 16:34 G 28367489.99 28367490.19 28367490.39 0.0283 0.0075

Jupiter 72956-01-08 08:10 G 28367698.71 28367698.84 28367698.98 0.0486 0.0363

Saturn 72956-01-29 07:27 G 28367719.77 28367719.81 28367719.87 0.0283 0.0275

Jupiter 72961-03-11 22:34 G 28369588.28 28369588.44 28369588.62 0.0532 0.0293

Jupiter 72961-11-04 22:34 G 28369826.25 28369826.44 28369826.63 0.0540 0.0196

Jupiter 72966-05-29 01:55 G 28371492.55 28371492.58 28371492.63 0.0501 0.0490

Jupiter 72967-01-20 11:46 G 28371728.79 28371728.99 28371729.20 0.0493 0.0105

Jupiter 72967-09-13 12:29 G 28371964.85 28371965.02 28371965.19 0.0488 0.0267

Saturn 72968-08-24 19:41 G 28372311.27 28372311.32 28372311.39 0.0278 0.0265

Saturn 72969-04-11 05:17 G 28372540.52 28372540.72 28372540.93 0.0277 0.0078

Saturn 72969-11-26 14:39 G 28372769.92 28372770.11 28372770.31 0.0276 0.0109

Jupiter 72972-11-14 14:10 G 28373853.97 28373854.09 28373854.21 0.0529 0.0418

Jupiter 72973-07-10 10:48 G 28374091.74 28374091.95 28374092.15 0.0538 0.0058

Pluto 72973-11-12 12:00 G 28374216.79 28374217.00 28374217.21 0.0079 0.0022

Pluto 72974-06-25 21:36 G 28374442.24 28374442.40 28374442.61 0.0079 0.0045

Jupiter 72978-09-25 13:41 G 28375994.89 28375995.07 28375995.26 0.0495 0.0211

Jupiter 72979-05-19 16:34 G 28376230.99 28376231.19 28376231.38 0.0489 0.0167

Neptune 72981-10-06 11:31 G 28377101.92 28377101.98 28377102.08 0.0088 0.0082

Neptune 72982-05-20 00:29 G 28377327.43 28377327.52 28377327.65 0.0088 0.0076

Neptune 72982-12-31 13:55 G 28377552.95 28377553.08 28377553.22 0.0088 0.0069

Neptune 72983-08-14 02:39 G 28377778.47 28377778.61 28377778.78 0.0088 0.0063

Neptune 72984-03-26 15:22 G 28378003.99 28378004.14 28378004.33 0.0088 0.0057

Saturn 72984-05-08 09:36 G 28378046.71 28378046.90 28378047.11 0.0282 0.0092

Neptune 72984-11-07 04:48 G 28378229.53 28378229.70 28378229.89 0.0088 0.0050

Uranus 72984-11-21 01:55 G 28378243.51 28378243.58 28378243.68 0.0144 0.0133

Saturn 72984-12-24 00:15 G 28378276.31 28378276.51 28378276.70 0.0283 0.0108

Jupiter 72985-03-14 23:17 G 28378357.27 28378357.47 28378357.67 0.0536 0.0083

Neptune 72985-06-20 17:31 G 28378455.06 28378455.23 28378455.44 0.0088 0.0044

Uranus 72985-07-05 14:10 G 28378469.93 28378470.09 28378470.26 0.0144 0.0092

Jupiter 72985-11-08 04:05 G 28378595.55 28378595.67 28378595.81 0.0542 0.0418

Neptune 72986-02-01 06:29 G 28378680.58 28378680.77 28378680.99 0.0088 0.0038

Uranus 72986-02-17 02:10 G 28378696.38 28378696.59 28378696.79 0.0144 0.0051

Neptune 72986-09-14 19:27 G 28378906.11 28378906.31 28378906.53 0.0088 0.0031

Uranus 72986-10-01 13:55 G 28378922.86 28378923.08 28378923.30 0.0144 0.0010

Neptune 72987-04-28 08:24 G 28379131.65 28379131.85 28379132.08 0.0088 0.0025

Uranus 72987-05-16 01:41 G 28379149.36 28379149.57 28379149.79 0.0144 0.0031

Neptune 72987-12-09 21:36 G 28379357.19 28379357.40 28379357.63 0.0088 0.0018

Uranus 72987-12-28 13:27 G 28379375.88 28379376.06 28379376.26 0.0143 0.0072

Neptune 72988-07-22 10:34 G 28379582.73 28379582.94 28379583.17 0.0088 0.0012

Uranus 72988-08-11 00:58 G 28379602.42 28379602.54 28379602.69 0.0143 0.0112

Neptune 72989-03-04 23:46 G 28379808.26 28379808.49 28379808.71 0.0088 0.0005

Neptune 72989-10-16 12:43 G 28380033.80 28380034.03 28380034.25 0.0088 0.0002

Neptune 72990-05-30 01:27 G 28380259.35 28380259.56 28380259.79 0.0088 0.0009

Jupiter 72990-05-31 15:36 G 28380260.99 28380261.15 28380261.31 0.0497 0.0315

Neptune 72991-01-10 14:24 G 28380484.89 28380485.10 28380485.33 0.0088 0.0015

Jupiter 72991-01-22 20:39 G 28380497.16 28380497.36 28380497.57 0.0490 0.0067

Neptune 72991-08-24 03:07 G 28380710.43 28380710.63 28380710.86 0.0088 0.0022

Jupiter 72991-09-15 17:31 G 28380733.13 28380733.23 28380733.33 0.0486 0.0421

Neptune 72992-04-05 16:19 G 28380935.97 28380936.18 28380936.39 0.0088 0.0028

Neptune 72992-11-17 05:31 G 28381161.52 28381161.73 28381161.93 0.0088 0.0034

Neptune 72993-06-30 18:00 G 28381387.07 28381387.25 28381387.46 0.0088 0.0041

Neptune 72994-02-11 06:58 G 28381612.61 28381612.79 28381612.99 0.0088 0.0047

Neptune 72994-09-24 19:27 G 28381838.16 28381838.31 28381838.51 0.0088 0.0054

Neptune 72995-05-08 08:24 G 28382063.71 28382063.85 28382064.03 0.0088 0.0060

Neptune 72995-12-19 21:36 G 28382289.27 28382289.40 28382289.55 0.0088 0.0066

Neptune 72996-08-01 10:05 G 28382514.82 28382514.92 28382515.07 0.0088 0.0073

Jupiter 72996-11-17 14:39 G 28382622.93 28382623.11 28382623.30 0.0534 0.0214

Neptune 72997-03-14 22:48 G 28382740.38 28382740.45 28382740.57 0.0088 0.0079

Jupiter 72997-07-13 17:17 G 28382861.04 28382861.22 28382861.39 0.0541 0.0282

Neptune 72997-10-26 11:46 G 28382965.96 28382965.99 28382966.06 0.0088 0.0085

Saturn 72998-03-06 21:51 G 28383097.30 28383097.41 28383097.51 0.0277 0.0241

Saturn 72998-10-22 07:12 G 28383326.59 28383326.80 28383327.01 0.0276 0.0054

Saturn 72999-06-08 16:05 G 28383555.99 28383556.17 28383556.37 0.0276 0.0132

74TH MILLENNIUM CE

This is a list of transits of Venus in the 74th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**73002-02-04 15:51**	**G**	**28384527.05**	**28384527.16**	**28384527.27**	**0.0499**	**0.0420**	
Jupiter	**73002-09-28 23:17**	**G**	**28384763.26**	**28384763.47**	**28384763.67**	**0.0492**	**0.0037**	
Jupiter	**73003-05-22 21:51**	**G**	**28384999.27**	**28384999.41**	**28384999.57**	**0.0486**	**0.0328**	
Jupiter	**73008-07-24 07:27**	**G**	**28386888.65**	**28386888.81**	**28386888.96**	**0.0531**	**0.0340**	
Jupiter	**73009-03-19 06:29**	**G**	**28387126.58**	**28387126.77**	**28387126.97**	**0.0539**	**0.0145**	
Mars	**73009-12-04 17:31**	**G**	**28387387.06**	**28387387.23**	**28387387.40**	**0.1612**	**0.0339**	
Saturn	**73013-04-03 19:41**	**G**	**28388603.26**	**28388603.32**	**28388603.38**	**0.0281**	**0.0269**	
Saturn	**73013-11-19 09:51**	**G**	**28388832.70**	**28388832.91**	**28388833.11**	**0.0282**	**0.0072**	
Jupiter	**73014-06-04 01:41**	**G**	**28389029.37**	**28389029.57**	**28389029.77**	**0.0494**	**0.0141**	
Saturn	**73014-07-07 00:15**	**G**	**28389062.33**	**28389062.51**	**28389062.70**	**0.0283**	**0.0127**	
Jupiter	**73015-01-26 02:39**	**G**	**28389265.44**	**28389265.61**	**28389265.80**	**0.0488**	**0.0232**	

Jupiter	73020-03-28 23:31 G	28391154.39	28391154.48	28391154.58	0.0528	0.0462
Jupiter	73020-11-21 18:29 G	28391392.07	28391392.27	28391392.48	0.0537	0.0009
Jupiter	73021-07-18 00:29 G	28391630.45	28391630.52	28391630.60	0.0542	0.0501
Jupiter	73026-02-07 01:27 G	28393295.39	28393295.56	28393295.74	0.0496	0.0251
Jupiter	73026-10-01 05:31 G	28393531.54	28393531.73	28393531.93	0.0490	0.0130
Uranus	73027-01-11 21:36 G	28393634.35	28393634.40	28393634.49	0.0134	0.0127
Jupiter	73027-05-25 02:10 G	28393767.55	28393767.59	28393767.62	0.0486	0.0478
Uranus	73027-08-26 03:07 G	28393860.49	28393860.63	28393860.80	0.0134	0.0094
Saturn	73027-09-18 03:36 G	28393883.52	28393883.65	28393883.79	0.0278	0.0213
Uranus	73028-04-08 08:39 G	28394086.67	28394086.86	28394087.06	0.0134	0.0061
Saturn	73028-05-04 13:27 G	28394112.85	28394113.06	28394113.27	0.0277	0.0025
Uranus	73028-11-20 14:10 G	28394312.88	28394313.09	28394313.30	0.0134	0.0028
Saturn	73028-12-19 22:48 G	28394342.28	28394342.45	28394342.63	0.0276	0.0161
Uranus	73029-07-04 19:55 G	28394539.11	28394539.33	28394539.54	0.0135	0.0006
Uranus	73030-02-16 01:12 G	28394765.35	28394765.55	28394765.77	0.0135	0.0039
Uranus	73030-09-30 06:58 G	28394991.61	28394991.79	28394991.98	0.0135	0.0072
Uranus	73031-05-14 12:43 G	28395217.90	28395218.03	28395218.17	0.0135	0.0105
Jupiter	73032-07-27 07:55 G	28395657.63	28395657.83	28395658.02	0.0534	0.0132
Jupiter	73033-03-22 10:48 G	28395895.80	28395895.95	28395896.10	0.0541	0.0364
Jupiter	73037-10-13 02:10 G	28397561.45	28397561.59	28397561.73	0.0498	0.0358
Jupiter	73038-06-06 08:53 G	28397797.66	28397797.87	28397798.07	0.0491	0.0026
Jupiter	73039-01-28 06:58 G	28398033.67	28398033.79	28398033.92	0.0486	0.0386
Saturn	73042-10-15 04:34 G	28399389.58	28399389.69	28399389.81	0.0281	0.0233
Saturn	73043-06-01 18:43 G	28399619.07	28399619.28	28399619.49	0.0282	0.0037
Saturn	73044-01-17 09:07 G	28399848.71	28399848.88	28399849.06	0.0283	0.0163
Jupiter	73044-03-31 21:07 G	28399923.21	28399923.38	28399923.56	0.0532	0.0266
Jupiter	73044-11-24 21:36 G	28400161.22	28400161.40	28400161.58	0.0540	0.0223
Jupiter	73049-06-18 02:39 G	28401827.54	28401827.61	28401827.70	0.0501	0.0462
Jupiter	73050-02-09 12:00 G	28402063.80	28402064.00	28402064.21	0.0493	0.0077
Jupiter	73050-10-03 12:00 G	28402299.84	28402300.00	28402300.17	0.0487	0.0291

Earth 73051-08-28 11:03 G 28402628.82 28402628.96 28402629.11 0.2705 0.1001

Moon 73051-08-28 12:43 G 28402628.90 28402629.03 28402629.17 0.2712 0.1170 *

Jupiter 73055-12-05 13:41 G 28404188.94 28404189.07 28404189.21 0.0530 0.0390

Jupiter 73056-07-30 11:17 G 28404426.77 28404426.97 28404427.17 0.0538 0.0087

Saturn 73057-03-30 06:58 G 28404669.64 28404669.79 28404669.95 0.0277 0.0186

Saturn 73057-11-14 16:34 G 28404898.97 28404899.19 28404899.40 0.0276 0.0004

Saturn 73058-07-02 01:41 G 28405128.41 28405128.57 28405128.73 0.0276 0.0185

Earth 73059-08-26 00:43 G 28405548.49 28405548.53 28405548.58 0.2706 0.2570

Moon 73059-08-26 06:00 G 28405548.69 28405548.75 28405548.82 0.2709 0.2432

Jupiter 73061-10-15 13:55 G 28406329.88 28406330.08 28406330.27 0.0495 0.0182

Jupiter 73062-06-08 15:51 G 28406565.97 28406566.16 28406566.35 0.0488 0.0193

Neptune 73063-11-22 17:03 G 28407098.18 28407098.21 28407098.25 0.0090 0.0088

Neptune 73064-07-05 05:46 G 28407323.67 28407323.74 28407323.84 0.0090 0.0082

Neptune 73065-02-15 18:58 G 28407549.18 28407549.29 28407549.41 0.0090 0.0075

Neptune 73065-09-29 07:41 G 28407774.70 28407774.82 28407774.98 0.0090 0.0069

Neptune 73066-05-12 21:07 G 28408000.23 28408000.38 28408000.54 0.0090 0.0062

Neptune 73066-12-24 09:51 G 28408225.76 28408225.91 28408226.10 0.0090 0.0056

Neptune 73067-08-06 23:03 G 28408451.29 28408451.46 28408451.66 0.0090 0.0049

Jupiter 73067-08-10 07:41 G 28408454.77 28408454.82 28408454.88 0.0527 0.0506

Neptune 73068-03-19 12:15 G 28408676.83 28408677.01 28408677.21 0.0090 0.0042

Jupiter 73068-04-04 01:55 G 28408692.38 28408692.58 28408692.78 0.0536 0.0049

Neptune 73068-10-31 01:27 G 28408902.37 28408902.56 28408902.77 0.0090 0.0035

Jupiter 73068-11-28 07:12 G 28408930.69 28408930.80 28408930.92 0.0542 0.0450

Uranus 73069-03-05 18:43 G 28409028.17 28409028.28 28409028.44 0.0144 0.0113

Neptune 73069-06-13 14:24 G 28409127.91 28409128.10 28409128.32 0.0090 0.0029

Uranus 73069-10-18 06:43 G 28409254.61 28409254.78 28409254.99 0.0144 0.0072

Neptune 73070-01-25 03:36 G 28409353.45 28409353.65 28409353.87 0.0090 0.0022

Uranus 73070-06-01 18:58 G 28409481.08 28409481.29 28409481.51 0.0144 0.0030

Neptune 73070-09-07 16:48 G 28409578.99 28409579.20 28409579.42 0.0090 0.0015

Uranus 73071-01-14 06:58 G 28409707.57 28409707.79 28409708.01 0.0144 0.0011

Neptune 73071-04-21 06:00 G 28409804.53 28409804.75 28409804.97 0.0090 0.0008

Uranus 73071-08-28 18:43 G 28409934.08 28409934.28 28409934.48 0.0143 0.0051

Neptune 73071-12-02 19:12 G 28410030.08 28410030.30 28410030.52 0.0090 0.0002

Uranus 73072-04-11 06:00 G 28410160.60 28410160.75 28410160.94 0.0143 0.0093

Saturn 73072-04-26 04:48 G 28410175.58 28410175.70 28410175.85 0.0281 0.0215

Neptune 73072-07-15 08:10 G 28410255.62 28410255.84 28410256.06 0.0090 0.0006

Uranus 73072-11-23 17:46 G 28410387.18 28410387.24 28410387.34 0.0143 0.0133

Saturn 73072-12-11 19:12 G 28410405.09 28410405.30 28410405.52 0.0282 0.0017

Neptune 73073-02-25 21:07 G 28410481.17 28410481.38 28410481.60 0.0090 0.0013

Jupiter 73073-06-20 14:53 G 28410595.96 28410596.12 28410596.29 0.0497 0.0288

Saturn 73073-07-29 09:51 G 28410634.75 28410634.91 28410635.07 0.0283 0.0182

Neptune 73073-10-09 10:05 G 28410706.72 28410706.92 28410707.14 0.0090 0.0020

Jupiter 73074-02-11 19:41 G 28410832.12 28410832.32 28410832.52 0.0490 0.0093

Neptune 73074-05-22 23:17 G 28410932.27 28410932.47 28410932.69 0.0090 0.0027

Jupiter 73074-10-05 16:19 G 28411068.10 28411068.18 28411068.26 0.0486 0.0444

Neptune 73075-01-03 12:15 G 28411157.82 28411158.01 28411158.23 0.0090 0.0034

Neptune 73075-08-17 01:41 G 28411383.38 28411383.57 28411383.77 0.0090 0.0040

Mars 73075-10-02 06:29 G 28411429.59 28411429.77 28411429.94 0.1612 0.0138

Neptune 73076-03-29 14:39 G 28411608.93 28411609.11 28411609.30 0.0090 0.0047

Neptune 73076-11-10 03:36 G 28411834.49 28411834.65 28411834.84 0.0090 0.0054

Neptune 73077-06-23 16:34 G 28412060.06 28412060.19 28412060.38 0.0090 0.0061

Neptune 73078-02-04 06:15 G 28412285.62 28412285.76 28412285.91 0.0090 0.0067

Neptune 73078-09-17 18:58 G 28412511.19 28412511.29 28412511.44 0.0090 0.0074

Neptune 73079-05-01 08:10 G 28412736.77 28412736.84 28412736.96 0.0090 0.0081

Jupiter 73079-12-08 16:05 G 28412957.98 28412958.17 28412958.36 0.0533 0.0183

Neptune 73079-12-12 21:36 G 28412962.37 28412962.40 28412962.47 0.0090 0.0087

Jupiter 73080-08-02 17:46 G 28413196.08 28413196.24 28413196.40 0.0540 0.0310

Jupiter 73085-02-23 12:58 G 28414861.92 28414862.04 28414862.17 0.0500 0.0398

Jupiter 73085-10-17 21:07 G 28415098.17 28415098.38 28415098.58 0.0492 0.0016

Jupiter 73086-06-10 20:24 G 28415334.21 28415334.35 28415334.49 0.0487 0.0349

Saturn	73086-10-10 12:29 G	28415455.84	28415456.02	28415456.19	0.0278	0.0160
Saturn	73087-05-27 22:05 G	28415685.22	28415685.42	28415685.64	0.0277	0.0030
Saturn	73088-01-12 07:27 G	28415914.69	28415914.81	28415914.96	0.0277	0.0215
Jupiter	73091-08-13 06:43 G	28417223.62	28417223.78	28417223.94	0.0531	0.0312
Jupiter	73092-04-07 05:03 G	28417461.52	28417461.71	28417461.90	0.0539	0.0171
Jupiter	73097-06-22 23:17 G	28419364.27	28419364.47	28419364.67	0.0494	0.0119
Jupiter	73098-02-14 00:43 G	28419600.35	28419600.53	28419600.70	0.0488	0.0253
Saturn	73101-11-07 15:07 G	28420961.97	28420962.13	28420962.30	0.0281	0.0176
Saturn	73102-06-25 05:17 G	28421191.51	28421191.72	28421191.93	0.0282	0.0021
Saturn	73103-02-09 19:41 G	28421421.20	28421421.32	28421421.46	0.0283	0.0220
Jupiter	73103-04-18 21:07 G	28421489.27	28421489.38	28421489.49	0.0528	0.0437
Jupiter	73103-12-12 16:19 G	28421726.98	28421727.18	28421727.38	0.0537	0.0030
Jupiter	73104-08-06 22:34 G	28421965.40	28421965.44	28421965.50	0.0543	0.0525
Mars	73108-09-03 01:41 G	28423453.46	28423453.57	28423453.68	0.1912	0.1468
Jupiter	73109-02-27 01:12 G	28423630.37	28423630.55	28423630.74	0.0496	0.0224
Jupiter	73109-10-21 04:48 G	28423866.51	28423866.70	28423866.90	0.0489	0.0155
Uranus	73111-04-26 12:29 G	28424418.90	28424419.02	28424419.15	0.0134	0.0109
Uranus	73111-12-08 17:46 G	28424645.08	28424645.24	28424645.43	0.0134	0.0076
Uranus	73112-07-21 23:17 G	28424871.28	28424871.47	28424871.69	0.0134	0.0044
Uranus	73113-03-05 05:03 G	28425097.50	28425097.71	28425097.93	0.0134	0.0010
Uranus	73113-10-17 10:34 G	28425323.73	28425323.94	28425324.16	0.0135	0.0023
Uranus	73114-05-31 16:19 G	28425549.99	28425550.18	28425550.38	0.0135	0.0056
Uranus	73115-01-12 21:51 G	28425776.26	28425776.41	28425776.59	0.0135	0.0090
Jupiter	73115-08-17 06:43 G	28425992.58	28425992.78	28425992.98	0.0535	0.0104
Uranus	73115-08-27 03:36 G	28426002.58	28426002.65	28426002.75	0.0135	0.0123
Jupiter	73116-04-11 10:34 G	28426230.81	28426230.94	28426231.08	0.0542	0.0392
Saturn	73116-04-22 17:03 G	28426242.02	28426242.21	28426242.39	0.0277	0.0131
Saturn	73116-12-08 02:24 G	28426471.40	28426471.60	28426471.81	0.0276	0.0056
Saturn	73117-07-25 11:46 G	28426700.89	28426700.99	28426701.10	0.0276	0.0240
Jupiter	73120-11-02 01:55 G	28427896.43	28427896.58	28427896.74	0.0498	0.0329

Jupiter 73121-06-26 07:55 G 28428132.63 28428132.83 28428133.04 0.0491 0.0054

Jupiter 73122-02-17 05:31 G 28428368.63 28428368.73 28428368.84 0.0486 0.0408

Jupiter 73127-04-21 22:34 G 28430258.27 28430258.44 28430258.63 0.0533 0.0234

Jupiter 73127-12-15 23:46 G 28430496.31 28430496.49 28430496.66 0.0540 0.0257

Pluto 73131-01-18 19:12 G 28431626.20 28431626.30 28431626.44 0.0065 0.0054

Saturn 73131-05-20 15:51 G 28431747.99 28431748.16 28431748.34 0.0281 0.0156

Pluto 73131-08-31 23:31 G 28431851.29 28431851.48 28431851.71 0.0065 0.0019

Saturn 73132-01-05 06:15 G 28431977.55 28431977.76 28431977.97 0.0282 0.0042

Pluto 73132-04-13 04:19 G 28432076.47 28432076.68 28432076.89 0.0065 0.0019

Jupiter 73132-07-08 01:55 G 28432162.48 28432162.58 28432162.68 0.0500 0.0435

Saturn 73132-08-21 20:24 G 28432207.25 28432207.35 28432207.47 0.0283 0.0240

Pluto 73132-11-24 08:24 G 28432301.75 28432301.85 28432301.98 0.0066 0.0056

Jupiter 73133-03-01 10:34 G 28432398.74 28432398.94 28432399.15 0.0492 0.0051

Jupiter 73133-10-23 10:19 G 28432634.78 28432634.93 28432635.09 0.0487 0.0314

Jupiter 73138-12-25 14:53 G 28434523.98 28434524.12 28434524.27 0.0530 0.0360

Jupiter 73139-08-20 12:00 G 28434761.80 28434762.00 28434762.20 0.0538 0.0117

Mars 73141-07-30 18:58 G 28435472.12 28435472.29 28435472.47 0.1612 0.0079

Jupiter 73144-11-04 10:34 G 28436664.74 28436664.94 28436665.13 0.0495 0.0160

Jupiter 73145-06-28 13:12 G 28436900.86 28436901.05 28436901.23 0.0489 0.0214

Saturn 73145-11-02 22:05 G 28437028.23 28437028.42 28437028.62 0.0278 0.0104

Neptune 73146-01-09 22:34 G 28437096.39 28437096.44 28437096.54 0.0088 0.0083

Saturn 73146-06-20 08:10 G 28437257.64 28437257.84 28437258.04 0.0277 0.0084

Neptune 73146-08-23 11:46 G 28437321.90 28437321.99 28437322.11 0.0088 0.0076

Saturn 73147-02-04 17:46 G 28437487.19 28437487.24 28437487.28 0.0277 0.0269

Neptune 73147-04-06 00:43 G 28437547.41 28437547.53 28437547.68 0.0088 0.0070

Neptune 73147-11-17 13:41 G 28437772.94 28437773.07 28437773.25 0.0088 0.0064

Neptune 73148-06-30 02:53 G 28437998.47 28437998.62 28437998.80 0.0088 0.0057

Neptune 73149-02-10 15:36 G 28438223.99 28438224.15 28438224.35 0.0088 0.0051

Neptune 73149-09-24 04:48 G 28438449.52 28438449.70 28438449.90 0.0088 0.0044

Neptune 73150-05-07 17:46 G 28438675.05 28438675.24 28438675.45 0.0088 0.0038

Jupiter 73150-08-30 07:12 G 28438789.72 28438789.80 28438789.88 0.0527 0.0479

Neptune 73150-12-19 06:58 G 28438900.59 28438900.79 28438901.00 0.0088 0.0031

Jupiter 73151-04-25 00:29 G 28439027.32 28439027.52 28439027.72 0.0536 0.0021

Neptune 73151-08-01 19:41 G 28439126.12 28439126.32 28439126.55 0.0088 0.0025

Jupiter 73151-12-19 05:03 G 28439265.61 28439265.71 28439265.81 0.0542 0.0472

Neptune 73152-03-14 08:53 G 28439351.65 28439351.87 28439352.09 0.0088 0.0018

Neptune 73152-10-25 21:51 G 28439577.19 28439577.41 28439577.63 0.0088 0.0011

Uranus 73152-11-04 00:29 G 28439586.45 28439586.52 28439586.62 0.0144 0.0132

Neptune 73153-06-08 10:48 G 28439802.73 28439802.95 28439803.17 0.0088 0.0005

Uranus 73153-06-18 12:29 G 28439812.86 28439813.02 28439813.20 0.0144 0.0091

Neptune 73154-01-19 23:46 G 28440028.27 28440028.49 28440028.71 0.0088 0.0002

Uranus 73154-01-31 00:43 G 28440039.32 28440039.53 28440039.73 0.0144 0.0050

Neptune 73154-09-02 12:29 G 28440253.81 28440254.02 28440254.25 0.0088 0.0009

Uranus 73154-09-14 12:29 G 28440265.80 28440266.02 28440266.24 0.0144 0.0009

Neptune 73155-04-16 01:41 G 28440479.35 28440479.57 28440479.79 0.0088 0.0015

Uranus 73155-04-29 00:15 G 28440492.30 28440492.51 28440492.73 0.0143 0.0032

Neptune 73155-11-27 14:39 G 28440704.90 28440705.11 28440705.33 0.0088 0.0021

Uranus 73155-12-11 12:15 G 28440718.83 28440719.01 28440719.20 0.0143 0.0073

Neptune 73156-07-10 03:36 G 28440930.45 28440930.65 28440930.87 0.0088 0.0028

Jupiter 73156-07-10 11:17 G 28440930.80 28440930.97 28440931.14 0.0497 0.0267 *

Uranus 73156-07-24 23:46 G 28440945.37 28440945.49 28440945.63 0.0143 0.0113

Neptune 73157-02-20 16:19 G 28441155.99 28441156.18 28441156.40 0.0088 0.0035

Jupiter 73157-03-03 16:19 G 28441166.98 28441167.18 28441167.38 0.0490 0.0113

Neptune 73157-10-04 05:17 G 28441381.54 28441381.72 28441381.93 0.0088 0.0041

Jupiter 73157-10-25 13:27 G 28441403.00 28441403.06 28441403.13 0.0486 0.0462

Neptune 73158-05-17 18:00 G 28441607.08 28441607.25 28441607.46 0.0088 0.0048

Neptune 73158-12-29 07:12 G 28441832.64 28441832.80 28441832.99 0.0088 0.0054

Neptune 73159-08-11 20:24 G 28442058.19 28442058.35 28442058.51 0.0088 0.0060

Neptune 73160-03-24 08:53 G 28442283.74 28442283.87 28442284.03 0.0088 0.0067

Neptune 73160-11-04 21:51 G 28442509.30 28442509.41 28442509.55 0.0088 0.0073

Saturn 73160-11-30 03:07 G 28442534.44 28442534.63 28442534.83 0.0281 0.0116

Neptune 73161-06-18 10:48 G 28442734.87 28442734.95 28442735.05 0.0088 0.0079

Saturn 73161-07-17 17:17 G 28442764.02 28442764.22 28442764.42 0.0282 0.0081

Neptune 73162-01-29 23:17 G 28442960.45 28442960.47 28442960.54 0.0088 0.0086

Saturn 73162-03-04 07:27 G 28442993.79 28442993.81 28442993.85 0.0283 0.0279

Jupiter 73162-12-28 12:29 G 28443292.83 28443293.02 28443293.22 0.0534 0.0158

Jupiter 73163-08-23 14:39 G 28443530.95 28443531.11 28443531.27 0.0541 0.0334

Jupiter 73168-03-15 12:15 G 28445196.87 28445197.01 28445197.14 0.0499 0.0372

Jupiter 73168-11-06 19:55 G 28445433.13 28445433.33 28445433.54 0.0492 0.0012

Jupiter 73169-06-30 18:43 G 28445669.15 28445669.28 28445669.42 0.0487 0.0371

Mars 73174-07-01 04:05 G 28447495.51 28447495.67 28447495.84 0.1912 0.0680

Jupiter 73174-09-02 04:05 G 28447558.50 28447558.67 28447558.84 0.0531 0.0287

Saturn 73174-09-28 17:46 G 28447585.17 28447585.24 28447585.32 0.0278 0.0260

Jupiter 73175-04-28 03:07 G 28447796.44 28447796.63 28447796.82 0.0539 0.0197

Saturn 73175-05-16 03:51 G 28447814.46 28447814.66 28447814.86 0.0277 0.0073

Saturn 73175-12-31 13:12 G 28448043.87 28448044.05 28448044.25 0.0276 0.0114

Jupiter 73179-11-19 11:46 G 28449462.93 28449462.99 28449463.06 0.0502 0.0476

Jupiter 73180-07-12 22:05 G 28449699.22 28449699.42 28449699.62 0.0493 0.0092

Earth 73181-02-27 06:43 G 28449928.62 28449928.78 28449928.94 0.2627 0.0253

Moon 73181-02-27 12:15 G 28449928.86 28449929.01 28449929.16 0.2625 0.1094 *

Jupiter 73181-03-05 22:48 G 28449935.29 28449935.45 28449935.62 0.0488 0.0276

Jupiter 73186-05-07 21:07 G 28451824.26 28451824.38 28451824.51 0.0529 0.0408

Jupiter 73186-12-31 17:17 G 28452062.02 28452062.22 28452062.42 0.0538 0.0062

Moon 73189-02-25 01:41 G 28452848.54 28452848.57 28452848.61 0.2621 0.2555

Saturn 73190-06-12 04:19 G 28453320.49 28453320.68 28453320.89 0.0281 0.0096

Saturn 73191-01-27 18:43 G 28453550.08 28453550.28 28453550.48 0.0282 0.0102

Jupiter 73192-03-17 23:31 G 28453965.29 28453965.48 28453965.67 0.0495 0.0198

Jupiter 73192-11-09 02:39 G 28454201.42 28454201.61 28454201.81 0.0489 0.0178

Uranus 73194-12-24 21:07 G 28454977.32 28454977.38 28454977.48 0.0134 0.0124

Uranus 73195-08-08 02:39 G 28455203.46 28455203.61 28455203.78 0.0134 0.0092

Uranus 73196-03-21 08:10 G 28455429.65 28455429.84 28455430.04 0.0134 0.0059

Uranus 73196-11-02 13:55 G 28455655.87 28455656.08 28455656.29 0.0134 0.0026

Uranus 73197-06-16 19:41 G 28455882.10 28455882.32 28455882.53 0.0135 0.0008

Jupiter 73198-01-10 15:22 G 28456090.13 28456090.14 28456090.16 0.0526 0.0523

Uranus 73198-01-29 01:12 G 28456108.35 28456108.55 28456108.76 0.0135 0.0041

Jupiter 73198-09-05 07:27 G 28456327.61 28456327.81 28456328.01 0.0535 0.0074

Uranus 73198-09-12 06:43 G 28456334.61 28456334.78 28456334.97 0.0135 0.0074

Uranus 73199-04-26 12:29 G 28456560.90 28456561.02 28456561.16 0.0135 0.0107

Jupiter 73199-05-01 10:48 G 28456565.83 28456565.95 28456566.08 0.0541 0.0418

Jupiter 73203-11-21 21:51 G 28458231.25 28458231.41 28458231.57 0.0498 0.0308

Saturn 73204-04-09 22:05 G 28458371.32 28458371.42 28458371.55 0.0279 0.0235

Jupiter 73204-07-15 04:05 G 28458467.47 28458467.67 28458467.88 0.0491 0.0074

Saturn 73204-11-25 08:39 G 28458600.65 28458600.86 28458601.07 0.0278 0.0046

Jupiter 73205-03-08 02:24 G 28458703.50 28458703.60 28458703.69 0.0486 0.0427

Saturn 73205-07-12 18:29 G 28458830.10 28458830.27 28458830.46 0.0277 0.0141

Mars 73207-05-28 07:27 G 28459514.64 28459514.81 28459514.98 0.1612 0.0276

Jupiter 73210-05-10 21:22 G 28460593.21 28460593.39 28460593.58 0.0532 0.0207

Jupiter 73211-01-03 21:36 G 28460831.23 28460831.40 28460831.58 0.0540 0.0281

Jupiter 73215-07-27 21:07 G 28462497.27 28462497.38 28462497.49 0.0501 0.0415

Jupiter 73216-03-20 06:29 G 28462733.56 28462733.77 28462733.97 0.0493 0.0032

Jupiter 73216-11-11 06:29 G 28462969.63 28462969.77 28462969.92 0.0487 0.0332

Pluto 73219-05-02 13:55 G 28463872.04 28463872.08 28463872.16 0.0080 0.0077

Saturn 73219-05-08 02:10 G 28463877.50 28463877.59 28463877.69 0.0281 0.0249

Pluto 73219-12-14 00:43 G 28464097.32 28464097.53 28464097.76 0.0079 0.0010

Saturn 73219-12-23 16:05 G 28464106.96 28464107.17 28464107.38 0.0282 0.0054

Pluto 73220-07-26 10:48 G 28464322.81 28464322.95 28464323.11 0.0079 0.0057

Saturn 73220-08-09 06:00 G 28464336.58 28464336.75 28464336.94 0.0282 0.0143

Jupiter 73222-01-13 10:34 G 28464858.78 28464858.94 28464859.09 0.0530 0.0336

Jupiter 73222-09-08 07:41 G 28465096.62 28465096.82 28465097.01 0.0538 0.0140

Jupiter 73227-11-24 08:53 G 28466999.68 28466999.87 28467000.07 0.0495 0.0135

Neptune 73228-02-25 04:19 G 28467092.67 28467092.68 28467092.72 0.0090 0.0089

Jupiter 73228-07-17 11:17 G 28467235.79 28467235.97 28467236.15 0.0488 0.0237

Neptune 73228-10-07 17:03 G 28467318.15 28467318.21 28467318.32 0.0090 0.0083

Neptune 73229-05-21 06:29 G 28467543.67 28467543.77 28467543.90 0.0090 0.0076

Neptune 73230-01-01 19:12 G 28467769.19 28467769.30 28467769.46 0.0090 0.0070

Neptune 73230-08-15 08:24 G 28467994.71 28467994.85 28467995.02 0.0090 0.0063

Neptune 73231-03-28 21:36 G 28468220.24 28468220.40 28468220.58 0.0090 0.0056

Neptune 73231-11-09 10:48 G 28468445.77 28468445.95 28468446.14 0.0090 0.0049

Neptune 73232-06-21 23:46 G 28468671.31 28468671.49 28468671.69 0.0090 0.0042

Neptune 73233-02-02 12:43 G 28468896.85 28468897.03 28468897.25 0.0090 0.0036

Neptune 73233-09-16 01:55 G 28469122.39 28469122.58 28469122.80 0.0090 0.0029

Jupiter 73233-09-18 03:07 G 28469124.53 28469124.63 28469124.73 0.0527 0.0456

Saturn 73233-10-21 05:46 G 28469157.60 28469157.74 28469157.89 0.0278 0.0201

Neptune 73234-04-29 15:22 G 28469347.93 28469348.14 28469348.36 0.0090 0.0022

Jupiter 73234-05-13 21:07 G 28469362.18 28469362.38 28469362.58 0.0536 0.0004

Saturn 73234-06-07 15:51 G 28469386.95 28469387.16 28469387.37 0.0277 0.0014

Neptune 73234-12-11 04:34 G 28469573.48 28469573.69 28469573.91 0.0090 0.0015

Jupiter 73235-01-07 02:39 G 28469600.53 28469600.61 28469600.69 0.0542 0.0496

Saturn 73235-01-23 01:27 G 28469616.39 28469616.56 28469616.72 0.0276 0.0172

Neptune 73235-07-24 17:46 G 28469799.02 28469799.24 28469799.45 0.0090 0.0008

Neptune 73236-03-06 06:43 G 28470024.56 28470024.78 28470025.00 0.0090 0.0001

Neptune 73236-10-17 19:55 G 28470250.11 28470250.33 28470250.54 0.0090 0.0006

Uranus 73237-02-15 18:29 G 28470371.13 28470371.27 28470371.41 0.0144 0.0110

Neptune 73237-05-31 08:53 G 28470475.66 28470475.87 28470476.09 0.0090 0.0013

Uranus 73237-09-30 06:29 G 28470597.58 28470597.77 28470597.96 0.0144 0.0069

Neptune 73238-01-11 22:05 G 28470701.21 28470701.42 28470701.64 0.0090 0.0020

Uranus 73238-05-14 18:15 G 28470824.05 28470824.26 28470824.48 0.0144 0.0029

Neptune 73238-08-25 11:03 G 28470926.76 28470926.96 28470927.17 0.0090 0.0027

Uranus 73238-12-27 06:29 G 28471050.55 28471050.77 28471050.99 0.0143 0.0013

Neptune 73239-04-08 00:00 G 28471152.31 28471152.50 28471152.71 0.0090 0.0034

Jupiter 73239-07-30 10:05 G 28471265.74 28471265.92 28471266.10 0.0497 0.0240

Uranus 73239-08-10 18:15 G 28471277.06 28471277.26 28471277.47 0.0143 0.0054

Neptune 73239-11-19 12:58 G 28471377.86 28471378.04 28471378.25 0.0090 0.0041

Jupiter 73240-03-22 14:39 G 28471501.91 28471502.11 28471502.30 0.0490 0.0138

Uranus 73240-03-24 05:46 G 28471503.59 28471503.74 28471503.91 0.0143 0.0094

Mars 73240-04-27 05:46 G 28471537.56 28471537.74 28471537.91 0.1912 0.0159

Neptune 73240-07-02 02:24 G 28471603.42 28471603.60 28471603.79 0.0090 0.0047

Uranus 73240-11-05 17:17 G 28471730.16 28471730.22 28471730.31 0.0143 0.0135

Jupiter 73240-11-13 11:03 G 28471737.95 28471737.96 28471737.98 0.0485 0.0482

Neptune 73241-02-12 15:22 G 28471828.98 28471829.14 28471829.32 0.0090 0.0054

Neptune 73241-09-26 04:19 G 28472054.54 28472054.68 28472054.86 0.0090 0.0061

Neptune 73242-05-09 17:31 G 28472280.10 28472280.23 28472280.39 0.0090 0.0068

Neptune 73242-12-21 06:58 G 28472505.67 28472505.79 28472505.92 0.0090 0.0074

Neptune 73243-08-03 19:55 G 28472731.25 28472731.33 28472731.44 0.0090 0.0081

Neptune 73244-03-16 08:53 G 28472956.84 28472956.87 28472956.94 0.0090 0.0088

Jupiter 73246-01-16 12:29 G 28473627.82 28473628.02 28473628.21 0.0534 0.0128

Jupiter 73246-09-11 15:07 G 28473865.98 28473866.13 28473866.28 0.0541 0.0363

Saturn 73248-11-17 04:05 G 28474663.56 28474663.67 28474663.81 0.0281 0.0228

Saturn 73249-07-04 18:00 G 28474893.04 28474893.25 28474893.46 0.0282 0.0033

Saturn 73250-02-19 07:55 G 28475122.67 28475122.83 28475123.01 0.0282 0.0166

Jupiter 73251-04-04 10:05 G 28475531.78 28475531.92 28475532.07 0.0499 0.0346

Jupiter 73251-11-26 17:31 G 28475768.02 28475768.23 28475768.44 0.0491 0.0036

Jupiter 73252-07-19 16:05 G 28476004.05 28476004.17 28476004.29 0.0486 0.0392

Jupiter 73257-09-21 04:19 G 28477893.51 28477893.68 28477893.86 0.0531 0.0257

Jupiter 73258-05-17 03:22 G 28478131.46 28478131.64 28478131.83 0.0539 0.0226

Jupiter 73262-12-08 07:12 G 28479797.72 28479797.80 28479797.88 0.0501 0.0456

Saturn 73263-05-03 09:51 G 28479943.74 28479943.91 28479944.07 0.0278 0.0176

Jupiter 73263-08-01 17:31 G 28480034.03 28480034.23 28480034.44 0.0494 0.0073

Saturn 73263-12-18 19:55 G 28480173.12 28480173.33 28480173.54 0.0278 0.0012

Jupiter 73264-03-24 18:43 G 28480270.12 28480270.28 28480270.44 0.0488 0.0294

Saturn 73264-08-04 05:46 G 28480402.60 28480402.74 28480402.89 0.0277 0.0198

Jupiter 73269-05-26 20:10 G 28482159.20 28482159.34 28482159.48 0.0529 0.0381

Jupiter 73270-01-19 15:36 G 28482396.95 28482397.15 28482397.35 0.0537 0.0088

Mars 73273-03-24 20:24 G 28483557.18 28483557.35 28483557.52 0.1612 0.0474

Jupiter 73275-04-06 18:29 G 28484300.08 28484300.27 28484300.46 0.0496 0.0178

Jupiter 73275-11-28 22:19 G 28484536.24 28484536.43 28484536.62 0.0489 0.0196

Saturn 73278-05-30 15:36 G 28485450.00 28485450.15 28485450.31 0.0281 0.0187

Saturn 73279-01-15 05:46 G 28485679.53 28485679.74 28485679.95 0.0282 0.0008

Uranus 73279-04-07 11:46 G 28485761.87 28485761.99 28485762.13 0.0134 0.0107

Saturn 73279-09-01 19:55 G 28485909.19 28485909.33 28485909.48 0.0283 0.0206

Uranus 73279-11-19 17:31 G 28485988.05 28485988.23 28485988.41 0.0134 0.0074

Uranus 73280-07-02 22:48 G 28486214.26 28486214.45 28486214.67 0.0134 0.0042

Jupiter 73281-01-29 10:19 G 28486424.87 28486424.93 28486424.99 0.0526 0.0500

Uranus 73281-02-14 04:34 G 28486440.48 28486440.69 28486440.91 0.0135 0.0008

Jupiter 73281-09-24 02:10 G 28486662.39 28486662.59 28486662.80 0.0535 0.0053

Uranus 73281-09-28 10:05 G 28486666.72 28486666.92 28486667.14 0.0135 0.0026

Uranus 73282-05-12 15:51 G 28486892.97 28486893.16 28486893.36 0.0135 0.0059

Jupiter 73282-05-20 05:46 G 28486900.63 28486900.74 28486900.86 0.0542 0.0439

Uranus 73282-12-24 21:36 G 28487119.25 28487119.40 28487119.57 0.0135 0.0092

Uranus 73283-08-08 03:22 G 28487345.57 28487345.64 28487345.73 0.0135 0.0125

Jupiter 73286-12-10 19:55 G 28488566.17 28488566.33 28488566.50 0.0498 0.0283

Jupiter 73287-08-04 02:10 G 28488802.39 28488802.59 28488802.79 0.0491 0.0097

Jupiter 73288-03-27 00:00 G 28489038.42 28489038.50 28489038.58 0.0486 0.0446

Saturn 73292-11-12 18:15 G 28490730.08 28490730.26 28490730.44 0.0278 0.0141

Jupiter 73293-05-29 16:48 G 28490928.02 28490928.20 28490928.39 0.0533 0.0183

Saturn 73293-06-30 04:05 G 28490959.46 28490959.67 28490959.88 0.0277 0.0046

Jupiter 73294-01-22 17:46 G 28491166.07 28491166.24 28491166.41 0.0540 0.0304

Saturn 73294-02-14 13:41 G 28491188.96 28491189.07 28491189.19 0.0276 0.0230

Earth 73294-08-29 11:03 G 28491384.82 28491384.96 28491385.11 0.2706 0.0992

Moon 73294-08-29 11:46 G 28491384.85 28491384.99 28491385.14 0.2699 0.1314 *

Jupiter 73298-08-15 19:55 G 28492832.20 28492832.33 28492832.46 0.0500 0.0388

Jupiter 73299-04-09 04:34 G 28493068.49 28493068.69 28493068.90 0.0492 0.0009

Jupiter 73299-12-01 04:19 G 28493304.54 28493304.68 28493304.82 0.0487 0.0354

Earth 73302-08-28 00:43 G 28494304.49 28494304.53 28494304.57 0.2706 0.2590

Jupiter 73305-02-02 09:22 G 28495193.72 28495193.89 28495194.05 0.0530 0.0309

Mars 73305-03-24 12:29 G 28495243.97 28495244.02 28495244.07 0.1612 0.1533

Jupiter 73305-09-28 07:12 G 28495431.61 28495431.80 28495431.99 0.0539 0.0169

Mars 73306-02-23 08:24 G 28495579.70 28495579.85 28495580.00 0.1912 0.0952

Saturn 73307-12-11 18:15 G 28496236.10 28496236.26 28496236.44 0.0281 0.0165

Saturn 73308-07-28 08:10 G 28496465.63 28496465.84 28496466.05 0.0282 0.0031

Saturn 73309-03-14 22:19 G 28496695.30 28496695.43 28496695.55 0.0283 0.0228

Neptune 73310-04-14 10:05 G 28497090.87 28497090.92 28497091.01 0.0088 0.0083

Jupiter 73310-04-21 18:58 G 28497098.25 28497098.29 28497098.32 0.0503 0.0493

Neptune 73310-11-25 23:17 G 28497316.38 28497316.47 28497316.59 0.0088 0.0077

Jupiter 73310-12-14 06:29 G 28497334.57 28497334.77 28497334.98 0.0494 0.0110

Neptune 73311-07-09 12:43 G 28497541.90 28497542.03 28497542.16 0.0088 0.0070

Jupiter 73311-08-07 08:24 G 28497570.68 28497570.85 28497571.02 0.0488 0.0259

Neptune 73312-02-20 01:27 G 28497767.42 28497767.56 28497767.72 0.0088 0.0064

Neptune 73312-10-02 14:10 G 28497992.95 28497993.09 28497993.28 0.0088 0.0058

Neptune 73313-05-16 03:22 G 28498218.48 28498218.64 28498218.84 0.0088 0.0051

Neptune 73313-12-27 16:48 G 28498444.01 28498444.20 28498444.39 0.0088 0.0044

Neptune 73314-08-10 05:17 G 28498669.54 28498669.72 28498669.94 0.0088 0.0038

Neptune 73315-03-23 18:29 G 28498895.07 28498895.27 28498895.48 0.0088 0.0031

Neptune 73315-11-04 07:27 G 28499120.61 28499120.81 28499121.03 0.0088 0.0025

Neptune 73316-06-16 20:24 G 28499346.14 28499346.35 28499346.58 0.0088 0.0018

Jupiter 73316-10-08 03:07 G 28499459.52 28499459.63 28499459.75 0.0528 0.0428

Neptune 73317-01-28 09:22 G 28499571.67 28499571.89 28499572.11 0.0088 0.0011

Jupiter 73317-06-02 21:36 G 28499697.20 28499697.40 28499697.60 0.0536 0.0035

Neptune 73317-09-10 22:19 G 28499797.21 28499797.43 28499797.65 0.0088 0.0005

Jupiter 73318-01-27 02:39 G 28499935.56 28499935.61 28499935.67 0.0542 0.0521

Neptune 73318-04-24 11:17 G 28500022.75 28500022.97 28500023.19 0.0088 0.0002

Neptune 73318-12-06 00:15 G 28500248.29 28500248.51 28500248.73 0.0088 0.0008

Neptune 73319-07-19 13:12 G 28500473.83 28500474.05 28500474.27 0.0088 0.0015

Neptune 73320-03-01 01:55 G 28500699.37 28500699.58 28500699.80 0.0088 0.0022

Neptune 73320-10-12 14:53 G 28500924.92 28500925.12 28500925.34 0.0088 0.0028

Uranus 73320-10-17 00:29 G 28500929.44 28500929.52 28500929.63 0.0144 0.0129

Neptune 73321-05-26 03:36 G 28501150.46 28501150.65 28501150.87 0.0088 0.0035

Uranus 73321-05-31 12:43 G 28501155.86 28501156.03 28501156.21 0.0144 0.0088

Neptune 73322-01-06 17:03 G 28501376.01 28501376.21 28501376.40 0.0088 0.0041

Uranus 73322-01-13 00:43 G 28501382.33 28501382.53 28501382.74 0.0144 0.0047

Saturn 73322-05-26 21:51 G 28501516.22 28501516.41 28501516.60 0.0278 0.0116

Jupiter 73322-08-19 05:17 G 28501600.54 28501600.72 28501600.91 0.0497 0.0219

Neptune 73322-08-20 05:31 G 28501601.56 28501601.73 28501601.93 0.0088 0.0048

Uranus 73322-08-27 12:43 G 28501608.81 28501609.03 28501609.25 0.0143 0.0006

Saturn 73323-01-11 07:55 G 28501745.62 28501745.83 28501746.03 0.0277 0.0071

Neptune 73323-04-02 18:43 G 28501827.11 28501827.28 28501827.46 0.0088 0.0054

Uranus 73323-04-11 00:29 G 28501835.31 28501835.52 28501835.74 0.0143 0.0035

Jupiter 73323-04-12 10:05 G 28501836.72 28501836.92 28501837.11 0.0490 0.0157

Saturn 73323-08-28 17:46 G 28501975.16 28501975.24 28501975.32 0.0277 0.0256

Neptune 73323-11-14 07:27 G 28502052.67 28502052.81 28502052.99 0.0088 0.0061

Uranus 73323-11-23 12:29 G 28502061.83 28502062.02 28502062.20 0.0143 0.0076

Neptune 73324-06-26 20:24 G 28502278.22 28502278.35 28502278.51 0.0088 0.0067

Uranus 73324-07-06 23:46 G 28502288.38 28502288.49 28502288.63 0.0143 0.0117

Neptune 73325-02-07 09:07 G 28502503.78 28502503.88 28502504.02 0.0088 0.0074

Neptune 73325-09-20 22:05 G 28502729.35 28502729.42 28502729.53 0.0088 0.0080

Neptune 73326-05-04 11:03 G 28502954.93 28502954.96 28502955.01 0.0088 0.0086

Jupiter 73329-02-05 11:03 G 28503962.76 28503962.96 28503963.16 0.0534 0.0101

Jupiter 73329-10-01 12:58 G 28504200.91 28504201.04 28504201.19 0.0541 0.0387

Jupiter 73334-04-24 05:03 G 28505866.55 28505866.71 28505866.86 0.0499 0.0326

Jupiter 73334-12-16 12:43 G 28506102.82 28506103.03 28506103.23 0.0492 0.0055

Jupiter 73335-08-09 11:31 G 28506338.88 28506338.98 28506339.10 0.0487 0.0409

Saturn 73337-06-23 05:03 G 28507022.52 28507022.71 28507022.90 0.0281 0.0125

Saturn 73338-02-07 19:12 G 28507252.10 28507252.30 28507252.51 0.0282 0.0071

Saturn 73338-09-25 09:22 G 28507481.84 28507481.89 28507481.97 0.0283 0.0268

Mars 73339-01-21 08:39 G 28507599.71 28507599.86 28507600.02 0.1612 0.0683

Jupiter 73340-10-10 22:48 G 28508228.27 28508228.45 28508228.63 0.0531 0.0234

Jupiter 73341-06-05 21:51 G 28508466.24 28508466.41 28508466.60 0.0539 0.0248

Jupiter 73345-12-28 04:48 G 28510132.61 28510132.70 28510132.82 0.0502 0.0431

Jupiter 73346-08-21 15:36 G 28510368.94 28510369.15 28510369.35 0.0494 0.0047

Jupiter 73347-04-14 16:19 G 28510605.03 28510605.18 28510605.34 0.0488 0.0317

Saturn 73351-04-21 20:39 G 28512073.31 28512073.36 28512073.42 0.0278 0.0268

Saturn 73351-12-07 06:58 G 28512302.59 28512302.79 28512302.99 0.0278 0.0081

Jupiter 73352-06-15 14:53 G 28512493.97 28512494.12 28512494.26 0.0529 0.0358

Saturn 73352-07-23 16:34 G 28512532.00 28512532.19 28512532.39 0.0277 0.0106

Jupiter 73353-02-08 10:34 G 28512731.75 28512731.94 28512732.14 0.0537 0.0111

Jupiter 73358-04-26 17:03 G 28514635.02 28514635.21 28514635.41 0.0495 0.0151

Jupiter 73358-12-18 20:24 G 28514871.16 28514871.35 28514871.53 0.0489 0.0220

Uranus 73362-12-06 20:24 G 28516320.28 28516320.35 28516320.45 0.0134 0.0123

Uranus 73363-07-21 01:55 G 28516546.44 28516546.58 28516546.76 0.0134 0.0090

Jupiter 73364-02-19 08:24 G 28516759.77 28516759.85 28516759.94 0.0526 0.0475

Uranus 73364-03-03 07:41 G 28516772.63 28516772.82 28516773.02 0.0134 0.0057

Jupiter 73364-10-14 01:12 G 28516997.34 28516997.55 28516997.75 0.0536 0.0024

Uranus 73364-10-15 13:12 G 28516998.84 28516999.05 28516999.27 0.0135 0.0024

Uranus 73365-05-29 18:58 G 28517225.08 28517225.29 28517225.51 0.0135 0.0010

Jupiter 73365-06-09 05:31 G 28517235.63 28517235.73 28517235.84 0.0542 0.0466

Uranus 73366-01-11 00:29 G 28517451.32 28517451.52 28517451.73 0.0135 0.0043

Uranus 73366-08-25 06:15 G 28517677.59 28517677.76 28517677.94 0.0135 0.0076

Saturn 73367-01-03 08:39 G 28517808.66 28517808.86 28517809.05 0.0281 0.0102

Uranus 73367-04-08 11:46 G 28517903.88 28517903.99 28517904.13 0.0135 0.0109

Saturn 73367-08-20 22:19 G 28518038.23 28518038.43 28518038.63 0.0282 0.0095

Jupiter 73369-12-30 18:00 G 28518901.07 28518901.25 28518901.42 0.0497 0.0257

Jupiter 73370-08-23 23:31 G 28519137.28 28519137.48 28519137.68 0.0490 0.0121

Mars 73371-01-20 00:58 G 28519286.45 28519286.54 28519286.64 0.1612 0.1334

Jupiter 73371-04-16 20:53 G 28519373.32 28519373.37 28519373.43 0.0486 0.0466

Mars 73371-12-21 09:51 G 28519621.85 28519621.91 28519621.97 0.1912 0.1788

Jupiter 73376-06-18 17:03 G 28521263.02 28521263.21 28521263.41 0.0533 0.0154

Jupiter 73377-02-11 18:15 G 28521501.10 28521501.26 28521501.42 0.0540 0.0332

Pluto 73377-02-17 07:12 G 28521506.66 28521506.80 28521506.98 0.0065 0.0044

Pluto 73377-09-30 11:46 G 28521731.78 28521731.99 28521732.22 0.0065 0.0008

Pluto 73378-05-13 16:05 G 28521956.99 28521957.17 28521957.39 0.0065 0.0030

Saturn 73380-10-31 23:17 G 28522859.38 28522859.47 28522859.58 0.0279 0.0245

Saturn 73381-06-18 09:51 G 28523088.70 28523088.91 28523089.12 0.0278 0.0057

Jupiter 73381-09-04 15:36 G 28523167.01 28523167.15 28523167.29 0.0500 0.0366

Saturn 73382-02-02 19:41 G 28523318.14 28523318.32 28523318.51 0.0277 0.0130

Jupiter 73382-04-29 00:00 G 28523403.30 28523403.50 28523403.71 0.0492 0.0018

Jupiter 73382-12-21 00:00 G 28523639.37 28523639.50 28523639.63 0.0487 0.0372

Jupiter 73388-02-22 08:24 G 28525528.68 28525528.85 28525529.02 0.0530 0.0280

Jupiter 73388-10-17 06:00 G 28525766.56 28525766.75 28525766.94 0.0538 0.0196

Neptune 73392-05-29 16:19 G 28527087.18 28527087.18 28527087.19 0.0090 0.0090

Neptune 73393-01-10 05:17 G 28527312.65 28527312.72 28527312.81 0.0090 0.0083

Jupiter 73393-05-10 13:55 G 28527433.01 28527433.08 28527433.15 0.0503 0.0473

Neptune 73393-08-23 18:00 G 28527538.15 28527538.25 28527538.38 0.0090 0.0077

Jupiter 73394-01-02 01:41 G 28527669.37 28527669.57 28527669.77 0.0494 0.0090

Neptune 73394-04-06 07:12 G 28527763.67 28527763.80 28527763.94 0.0090 0.0070

Jupiter 73394-08-26 03:51 G 28527905.50 28527905.66 28527905.83 0.0488 0.0277

Neptune 73394-11-17 20:24 G 28527989.20 28527989.35 28527989.51 0.0090 0.0063

Neptune 73395-07-01 08:53 G 28528214.73 28528214.87 28528215.06 0.0090 0.0057

Saturn 73395-11-29 04:19 G 28528365.60 28528365.68 28528365.76 0.0280 0.0258

Neptune 73396-02-11 22:05 G 28528440.25 28528440.42 28528440.62 0.0090 0.0050

Saturn 73396-07-15 18:00 G 28528595.05 28528595.25 28528595.46 0.0281 0.0065

Neptune 73396-09-24 11:17 G 28528665.79 28528665.97 28528666.17 0.0090 0.0043

Saturn 73397-03-02 08:24 G 28528824.66 28528824.85 28528825.03 0.0282 0.0132

Neptune 73397-05-08 00:29 G 28528891.33 28528891.52 28528891.73 0.0090 0.0036

Neptune 73397-12-19 13:41 G 28529116.87 28529117.07 28529117.28 0.0090 0.0029

Neptune 73398-08-02 02:39 G 28529342.40 28529342.61 28529342.83 0.0090 0.0022

Neptune 73399-03-15 15:51 G 28529567.94 28529568.16 28529568.37 0.0090 0.0015

Neptune 73399-10-27 04:48 G 28529793.49 28529793.70 28529793.92 0.0090 0.0009

Jupiter 73399-10-27 21:51 G 28529794.28 28529794.41 28529794.54 0.0527 0.0404

Neptune 73400-06-09 18:15 G 28530019.04 28530019.26 28530019.48 0.0090 0.0001

Jupiter 73400-06-22 15:51 G 28530031.96 28530032.16 28530032.36 0.0536 0.0056

Neptune 73401-01-21 07:12 G 28530244.59 28530244.80 28530245.02 0.0090 0.0006

Jupiter 73401-02-15 20:53 G 28530270.37 28530270.37 28530270.40 0.0542 0.0541

Neptune 73401-09-03 20:24 G 28530470.13 28530470.35 28530470.57 0.0090 0.0013

Neptune 73402-04-17 09:22 G 28530695.68 28530695.89 28530696.11 0.0090 0.0020

Neptune 73402-11-28 22:34 G 28530921.24 28530921.44 28530921.65 0.0090 0.0027

Neptune 73403-07-12 11:31 G 28531146.79 28531146.98 28531147.20 0.0090 0.0034

Neptune 73404-02-23 00:29 G 28531372.34 28531372.52 28531372.73 0.0090 0.0041

Neptune 73404-10-05 13:27 G 28531597.90 28531598.06 28531598.27 0.0090 0.0048

Mars 73404-11-18 21:36 G 28531642.25 28531642.40 28531642.54 0.1612 0.0877

Uranus 73405-01-29 18:43 G 28531714.14 28531714.28 28531714.43 0.0144 0.0107

Neptune 73405-05-19 03:07 G 28531823.46 28531823.63 28531823.81 0.0090 0.0054

Jupiter 73405-09-08 03:22 G 28531935.45 28531935.64 28531935.83 0.0497 0.0193

Uranus 73405-09-13 06:43 G 28531940.59 28531940.78 28531940.98 0.0144 0.0066

Neptune 73405-12-30 16:05 G 28532049.02 28532049.17 28532049.34 0.0090 0.0061

Uranus 73406-04-27 18:43 G 28532167.07 28532167.28 28532167.50 0.0144 0.0025

Jupiter 73406-05-02 07:55 G 28532171.64 28532171.83 28532172.03 0.0490 0.0182

Neptune 73406-08-13 05:03 G 28532274.58 28532274.71 28532274.87 0.0090 0.0068

Uranus 73406-12-10 06:43 G 28532393.57 28532393.78 28532394.00 0.0143 0.0017

Neptune 73407-03-26 18:00 G 28532500.15 28532500.25 28532500.39 0.0090 0.0075

Uranus 73407-07-24 18:43 G 28532620.08 28532620.28 28532620.48 0.0143 0.0057

Neptune 73407-11-07 07:27 G 28532725.73 28532725.81 28532725.91 0.0090 0.0081

Uranus 73408-03-07 06:15 G 28532846.61 28532846.76 28532846.92 0.0143 0.0097

Neptune 73408-06-19 20:24 G 28532951.33 28532951.35 28532951.41 0.0090 0.0088

Uranus 73408-10-19 17:46 G 28533073.19 28533073.24 28533073.31 0.0143 0.0138

Saturn 73410-05-15 09:22 G 28533645.76 28533645.89 28533646.03 0.0278 0.0208

Saturn 73410-12-30 19:27 G 28533875.10 28533875.31 28533875.52 0.0277 0.0021

Jupiter 73411-07-03 15:07 G 28534060.10 28534060.13 28534060.16 0.0525 0.0518

Saturn 73411-08-17 05:03 G 28534104.55 28534104.71 28534104.88 0.0276 0.0165

Jupiter 73412-02-26 05:31 G 28534297.53 28534297.73 28534297.93 0.0534 0.0078

Jupiter 73412-10-21 08:10 G 28534535.71 28534535.84 28534535.97 0.0541 0.0408

Jupiter 73417-05-14 03:51 G 28536201.50 28536201.66 28536201.83 0.0499 0.0299

Jupiter 73418-01-05 11:17 G 28536437.76 28536437.97 28536438.17 0.0491 0.0081

Jupiter 73418-08-29 09:36 G 28536673.81 28536673.90 28536673.99 0.0486 0.0430

Jupiter 73423-10-31 21:22 G 28538563.20 28538563.39 28538563.57 0.0532 0.0207

Moon 73424-03-01 04:05 G 28538684.51 28538684.67 28538684.82 0.2627 0.0328

Earth 73424-03-01 09:36 G 28538684.75 28538684.90 28538685.06 0.2627 0.0545 *

Jupiter 73424-06-25 21:07 G 28538801.21 28538801.38 28538801.56 0.0540 0.0276

Saturn 73425-06-11 07:55 G 28539151.72 28539151.83 28539151.95 0.0281 0.0234

Saturn 73426-01-26 21:36 G 28539381.19 28539381.40 28539381.62 0.0282 0.0041

Saturn 73426-09-13 11:31 G 28539610.81 28539610.98 28539611.16 0.0282 0.0157

Jupiter 73429-01-17 03:36 G 28540467.53 28540467.65 28540467.77 0.0501 0.0403

Jupiter 73429-09-10 13:27 G 28540703.85 28540704.06 28540704.27 0.0493 0.0021

Jupiter 73430-05-04 13:55 G 28540939.94 28540940.08 28540940.23 0.0487 0.0339

Moon 73432-02-27 22:19 G 28541604.43 28541604.43 28541604.43 0.2632 0.2631

Earth 73432-02-28 02:10 G 28541604.55 28541604.59 28541604.64 0.2626 0.2487

Jupiter 73435-07-06 14:53 G 28542828.97 28542829.12 28542829.28 0.0529 0.0329

Jupiter 73436-02-29 11:17 G 28543066.78 28543066.97 28543067.17 0.0538 0.0141

Mars 73436-11-17 13:41 G 28543328.95 28543329.07 28543329.19 0.1612 0.1127

Saturn 73439-11-25 11:31 G 28544431.83 28544431.98 28544432.14 0.0278 0.0185

Saturn 73440-07-11 21:51 G 28544661.19 28544661.41 28544661.62 0.0278 0.0006

Saturn 73441-02-26 07:27 G 28544890.65 28544890.81 28544890.96 0.0277 0.0187

Jupiter 73441-05-16 13:12 G 28544969.85 28544970.05 28544970.25 0.0495 0.0129

Jupiter 73442-01-07 16:19 G 28545206.00 28545206.18 28545206.36 0.0489 0.0240

Jupiter 73447-03-11 07:55 G 28547094.73 28547094.83 28547094.94 0.0526 0.0447

Uranus 73447-03-21 11:17 G 28547104.84 28547104.97 28547105.11 0.0134 0.0105

Uranus 73447-11-02 16:34 G 28547331.02 28547331.19 28547331.39 0.0134 0.0073

Jupiter 73447-11-04 00:43 G 28547332.33 28547332.53 28547332.73 0.0535 0.0008

Uranus 73448-06-15 22:19 G 28547557.23 28547557.43 28547557.65 0.0134 0.0040

Jupiter 73448-06-29 04:48 G 28547570.62 28547570.70 28547570.79 0.0542 0.0491

Uranus 73449-01-28 04:05 G 28547783.45 28547783.67 28547783.89 0.0135 0.0006

Uranus 73449-09-11 09:36 G 28548009.69 28548009.90 28548010.11 0.0135 0.0027

Uranus 73450-04-25 14:53 G 28548235.94 28548236.12 28548236.33 0.0135 0.0061

Uranus 73450-12-07 20:39 G 28548462.22 28548462.36 28548462.53 0.0135 0.0094

Uranus 73451-07-22 02:24 G 28548688.54 28548688.60 28548688.69 0.0135 0.0127

Jupiter 73453-01-19 13:27 G 28549235.88 28549236.06 28549236.25 0.0498 0.0235

Jupiter 73453-09-12 19:12 G 28549472.11 28549472.30 28549472.50 0.0491 0.0142

Jupiter 73454-05-06 16:48 G 28549708.20 28549708.20 28549708.23 0.0486 0.0484

Saturn 73454-12-22 16:05 G 28549938.03 28549938.17 28549938.33 0.0281 0.0200

Saturn 73455-08-09 06:15 G 28550167.55 28550167.76 28550167.97 0.0282 0.0006

Saturn 73456-03-25 20:24 G 28550397.20 28550397.35 28550397.51 0.0282 0.0192

Jupiter 73459-07-09 12:00 G 28551597.81 28551598.00 28551598.20 0.0533 0.0129

Jupiter 73460-03-03 12:58 G 28551835.89 28551836.04 28551836.19 0.0540 0.0354

Jupiter 73464-09-24 13:41 G 28553501.92 28553502.07 28553502.22 0.0500 0.0340

Jupiter 73465-05-18 22:34 G 28553738.24 28553738.44 28553738.65 0.0492 0.0041

Pluto 73465-06-02 04:48 G 28553752.57 28553752.70 28553752.89 0.0079 0.0055

Jupiter 73466-01-09 22:34 G 28553974.32 28553974.44 28553974.56 0.0487 0.0395

Pluto 73466-01-13 15:36 G 28553977.94 28553978.15 28553978.38 0.0079 0.0013

Pluto 73466-08-27 01:55 G 28554203.56 28554203.58 28554203.60 0.0079 0.0078

Saturn 73469-06-06 21:22 G 28555218.22 28555218.39 28555218.58 0.0278 0.0150

Mars 73469-10-18 12:29 G 28555351.96 28555352.02 28555352.09 0.1913 0.1777

Saturn 73470-01-22 07:27 G 28555447.60 28555447.81 28555448.02 0.0277 0.0038

Saturn 73470-09-08 16:48 G 28555677.08 28555677.20 28555677.33 0.0276 0.0222

Mars 73470-09-16 10:05 G 28555684.79 28555684.92 28555685.05 0.1613 0.1081

Jupiter 73471-03-14 03:07 G 28555863.46 28555863.63 28555863.81 0.0530 0.0256

Jupiter 73471-11-07 00:43 G 28556101.35 28556101.53 28556101.72 0.0539 0.0220

Neptune 73474-07-17 21:07 G 28557085.34 28557085.38 28557085.47 0.0088 0.0084

Neptune 73475-02-28 10:34 G 28557310.84 28557310.94 28557311.05 0.0088 0.0077

Neptune 73475-10-11 23:31 G 28557536.36 28557536.48 28557536.62 0.0088 0.0071

Neptune 73476-05-24 12:15 G 28557761.89 28557762.01 28557762.19 0.0088 0.0065

Jupiter 73476-05-30 13:12 G 28557767.96 28557768.05 28557768.15 0.0503 0.0445

Neptune 73477-01-05 01:41 G 28557987.42 28557987.57 28557987.75 0.0088 0.0058

Jupiter 73477-01-22 00:58 G 28558004.33 28558004.54 28558004.74 0.0494 0.0062

Neptune 73477-08-18 14:53 G 28558212.94 28558213.12 28558213.30 0.0088 0.0051

Jupiter 73477-09-15 02:24 G 28558240.45 28558240.60 28558240.77 0.0488 0.0302

Neptune 73478-04-01 03:36 G 28558438.48 28558438.65 28558438.86 0.0088 0.0045

Neptune 73478-11-12 17:03 G 28558664.02 28558664.21 28558664.42 0.0088 0.0038

Neptune 73479-06-26 05:46 G 28558889.55 28558889.74 28558889.96 0.0088 0.0032

Neptune 73480-02-06 18:58 G 28559115.08 28559115.29 28559115.51 0.0088 0.0025

Neptune 73480-09-19 07:41 G 28559340.62 28559340.82 28559341.05 0.0088 0.0019

Neptune 73481-05-02 20:53 G 28559566.15 28559566.37 28559566.59 0.0088 0.0012

Neptune 73481-12-14 10:05 G 28559791.70 28559791.92 28559792.14 0.0088 0.0005

Neptune 73482-07-27 23:03 G 28560017.23 28560017.46 28560017.68 0.0088 0.0002

Jupiter 73482-11-16 20:10 G 28560129.20 28560129.34 28560129.48 0.0528 0.0378

Neptune 73483-03-10 11:46 G 28560242.77 28560242.99 28560243.22 0.0088 0.0008

Jupiter 73483-07-12 14:53 G 28560366.92 28560367.12 28560367.32 0.0537 0.0085

Neptune 73483-10-22 00:43 G 28560468.31 28560468.53 28560468.75 0.0088 0.0015

Neptune 73484-06-03 13:27 G 28560693.86 28560694.06 28560694.29 0.0088 0.0022

Saturn 73484-07-03 19:55 G 28560724.17 28560724.33 28560724.50 0.0281 0.0176

Neptune 73485-01-15 02:24 G 28560919.40 28560919.60 28560919.82 0.0088 0.0029

Saturn 73485-02-18 09:51 G 28560953.70 28560953.91 28560954.12 0.0282 0.0020

Neptune 73485-08-28 15:22 G 28561144.94 28561145.14 28561145.35 0.0088 0.0035

Saturn 73485-10-06 00:00 G 28561183.36 28561183.50 28561183.63 0.0283 0.0216

Neptune 73486-04-11 04:05 G 28561370.49 28561370.67 28561370.88 0.0088 0.0042

Neptune 73486-11-22 17:17 G 28561596.05 28561596.22 28561596.42 0.0088 0.0048

Neptune 73487-07-06 06:00 G 28561821.60 28561821.75 28561821.94 0.0088 0.0055

Neptune 73488-02-16 19:12 G 28562047.15 28562047.30 28562047.46 0.0088 0.0061

Jupiter 73488-09-27 02:10 G 28562270.40 28562270.59 28562270.78 0.0496 0.0166

Uranus 73488-09-29 00:00 G 28562272.41 28562272.50 28562272.62 0.0144 0.0127

Neptune 73488-09-29 07:41 G 28562272.70 28562272.82 28562272.98 0.0088 0.0068

Neptune 73489-05-12 20:53 G 28562498.26 28562498.37 28562498.50 0.0088 0.0074

Uranus 73489-05-13 12:15 G 28562498.84 28562499.01 28562499.19 0.0144 0.0086

Jupiter 73489-05-21 06:15 G 28562506.58 28562506.76 28562506.95 0.0489 0.0205

Neptune 73489-12-24 09:36 G 28562723.84 28562723.90 28562724.01 0.0088 0.0081

Uranus 73489-12-26 00:29 G 28562725.32 28562725.52 28562725.73 0.0144 0.0045

Neptune 73490-08-06 22:34 G 28562949.43 28562949.44 28562949.50 0.0088 0.0087

Uranus 73490-08-09 12:29 G 28562951.80 28562952.02 28562952.24 0.0144 0.0004

Uranus 73491-03-24 00:15 G 28563178.31 28563178.51 28563178.73 0.0143 0.0038

Uranus 73491-11-05 11:46 G 28563404.82 28563404.99 28563405.19 0.0143 0.0079

Uranus 73492-06-18 23:31 G 28563631.37 28563631.48 28563631.62 0.0143 0.0119

Jupiter 73494-07-22 15:07 G 28564395.07 28564395.13 28564395.20 0.0525 0.0491

Jupiter 73495-03-17 06:29 G 28564632.57 28564632.77 28564632.97 0.0535 0.0047

Jupiter 73495-11-10 09:36 G 28564870.78 28564870.90 28564871.02 0.0541 0.0438

Saturn 73498-12-17 22:48 G 28566004.27 28566004.45 28566004.64 0.0278 0.0128

Saturn 73499-08-04 08:53 G 28566233.66 28566233.87 28566234.08 0.0277 0.0059

Saturn 73500-03-21 18:29 G 28566463.17 28566463.27 28566463.37 0.0276 0.0243

Jupiter 73500-06-03 00:58 G 28566536.37 28566536.54 28566536.71 0.0498 0.0274

Jupiter 73501-01-25 07:55 G 28566772.63 28566772.83 28566773.03 0.0491 0.0104

Jupiter 73501-09-18 06:15 G 28567008.69 28567008.76 28567008.84 0.0486 0.0450

Mars 73502-09-16 02:39 G 28567371.46 28567371.61 28567371.75 0.1612 0.0931

Jupiter 73506-11-20 21:36 G 28568898.21 28568898.40 28568898.59 0.0532 0.0176

Jupiter 73507-07-16 21:22 G 28569136.23 28569136.39 28569136.56 0.0540 0.0305

Jupiter 73512-02-07 00:15 G 28570802.38 28570802.51 28570802.64 0.0501 0.0380

Jupiter 73512-09-30 10:05 G 28571038.71 28571038.92 28571039.12 0.0493 0.0011

Jupiter 73513-05-24 10:34 G 28571274.81 28571274.94 28571275.08 0.0488 0.0359

Saturn 73514-01-15 02:39 G 28571510.43 28571510.61 28571510.80 0.0281 0.0144

Saturn 73514-09-01 16:48 G 28571739.99 28571740.20 28571740.41 0.0282 0.0052

Saturn 73515-04-19 06:58 G 28571969.70 28571969.79 28571969.90 0.0283 0.0248

Jupiter 73518-07-26 10:48 G 28573163.79 28573163.95 28573164.12 0.0529 0.0303

Jupiter 73519-03-21 06:43 G 28573401.59 28573401.78 28573401.98 0.0537 0.0166

Jupiter 73523-10-12 22:34 G 28575068.40 28575068.44 28575068.50 0.0504 0.0485

Jupiter 73524-06-05 12:00 G 28575304.80 28575305.00 28575305.20 0.0495 0.0102

Jupiter 73525-01-27 15:22 G 28575540.97 28575541.14 28575541.31 0.0489 0.0266

Saturn 73528-06-30 08:39 G 28576790.67 28576790.86 28576791.07 0.0278 0.0093

Saturn 73529-02-14 18:15 G 28577020.07 28577020.26 28577020.47 0.0277 0.0094

Jupiter 73530-03-31 03:22 G 28577429.53 28577429.64 28577429.77 0.0526 0.0422

Uranus 73530-11-19 20:10 G 28577663.25 28577663.34 28577663.44 0.0134 0.0121

Jupiter 73530-11-23 19:55 G 28577667.13 28577667.33 28577667.54 0.0535 0.0033

Uranus 73531-07-04 01:27 G 28577889.41 28577889.56 28577889.74 0.0134 0.0088

Jupiter 73531-07-20 00:15 G 28577905.45 28577905.51 28577905.58 0.0542 0.0513

Uranus 73532-02-15 06:58 G 28578115.61 28578115.79 28578116.00 0.0134 0.0056

Uranus 73532-09-28 12:43 G 28578341.82 28578342.03 28578342.25 0.0134 0.0022

Uranus 73533-05-12 18:15 G 28578568.05 28578568.26 28578568.48 0.0135 0.0011

Uranus 73533-12-24 23:46 G 28578794.29 28578794.49 28578794.70 0.0135 0.0044

Uranus 73534-08-08 05:17 G 28579020.56 28579020.72 28579020.91 0.0135 0.0078

Uranus 73535-03-22 10:48 G 28579246.85 28579246.95 28579247.09 0.0135 0.0111

Mars 73535-08-16 14:24 G 28579393.95 28579394.10 28579394.25 0.1912 0.0957

Jupiter 73536-02-09 13:12 G 28579570.87 28579571.05 28579571.24 0.0497 0.0206

Mars 73536-07-14 22:48 G 28579727.35 28579727.45 28579727.56 0.1613 0.1276

Jupiter 73536-10-02 18:43 G 28579807.09 28579807.28 28579807.48 0.0490 0.0168

Moon 73537-09-01 07:55 G 28580140.68 28580140.83 28580140.98 0.2711 0.0338

Earth 73537-09-01 11:03 G 28580140.81 28580140.96 28580141.11 0.2706 0.0984 *

Jupiter 73542-07-29 11:17 G 28581932.77 28581932.97 28581933.16 0.0533 0.0100

Jupiter 73543-03-24 12:43 G 28582170.89 28582171.03 28582171.17 0.0541 0.0383

Saturn 73543-07-28 06:29 G 28582296.59 28582296.77 28582296.97 0.0281 0.0120

Saturn 73544-03-13 20:24 G 28582526.15 28582526.35 28582526.56 0.0282 0.0077

Saturn 73544-10-29 10:34 G 28582755.89 28582755.94 28582756.00 0.0283 0.0273

Earth 73545-08-30 00:43 G 28583060.49 28583060.53 28583060.58 0.2706 0.2585

Moon 73545-08-30 02:10 G 28583060.52 28583060.59 28583060.66 0.2712 0.2381 *

Jupiter 73547-10-15 13:41 G 28583836.91 28583837.07 28583837.23 0.0500 0.0311

Jupiter 73548-06-07 21:51 G 28584073.21 28584073.41 28584073.61 0.0492 0.0068

Jupiter 73549-01-29 21:07 G 28584309.28 28584309.38 28584309.48 0.0487 0.0418

Jupiter 73554-04-03 04:05 G 28586198.49 28586198.67 28586198.86 0.0531 0.0226

Jupiter 73554-11-27 02:39 G 28586436.44 28586436.61 28586436.79 0.0539 0.0251

Neptune 73557-04-15 17:03 G 28587307.15 28587307.21 28587307.30 0.0090 0.0084

Saturn 73557-05-25 23:31 G 28587347.40 28587347.48 28587347.56 0.0278 0.0258

Neptune 73557-11-27 06:15 G 28587532.66 28587532.76 28587532.88 0.0090 0.0077

Saturn 73558-01-10 09:36 G 28587576.69 28587576.90 28587577.10 0.0278 0.0072

Neptune 73558-07-10 18:58 G 28587758.17 28587758.29 28587758.44 0.0090 0.0071

Saturn 73558-08-27 19:12 G 28587806.11 28587806.30 28587806.50 0.0277 0.0114

Neptune 73559-02-21 07:55 G 28587983.69 28587983.83 28587984.00 0.0090 0.0064

Jupiter 73559-06-20 11:31 G 28588102.87 28588102.98 28588103.10 0.0502 0.0418

Neptune 73559-10-04 21:07 G 28588209.22 28588209.38 28588209.55 0.0090 0.0057

Jupiter 73560-02-11 22:34 G 28588339.24 28588339.44 28588339.65 0.0494 0.0037

Neptune 73560-05-17 10:19 G 28588434.75 28588434.93 28588435.11 0.0090 0.0050

Jupiter 73560-10-05 00:00 G 28588575.35 28588575.50 28588575.66 0.0488 0.0324

Neptune 73560-12-28 23:31 G 28588660.28 28588660.48 28588660.67 0.0090 0.0043

Neptune 73561-08-11 12:00 G 28588885.82 28588886.00 28588886.22 0.0090 0.0037

Neptune 73562-03-25 00:58 G 28589111.35 28589111.54 28589111.76 0.0090 0.0030

Neptune 73562-11-05 14:10 G 28589336.89 28589337.09 28589337.31 0.0090 0.0023

Neptune 73563-06-19 03:22 G 28589562.43 28589562.64 28589562.86 0.0090 0.0016

Neptune 73564-01-30 16:34 G 28589787.98 28589788.19 28589788.41 0.0090 0.0008

Neptune 73564-09-12 05:46 G 28590013.52 28590013.74 28590013.96 0.0090 0.0002

Neptune 73565-04-25 18:58 G 28590239.07 28590239.29 28590239.50 0.0090 0.0006

Jupiter 73565-12-06 21:22 G 28590464.24 28590464.39 28590464.54 0.0528 0.0346

Neptune 73565-12-07 07:55 G 28590464.62 28590464.83 28590465.05 0.0090 0.0013

Neptune 73566-07-20 21:07 G 28590690.17 28590690.38 28590690.59 0.0090 0.0020

Jupiter 73566-08-01 16:19 G 28590701.98 28590702.18 28590702.37 0.0537 0.0117

Neptune 73567-03-03 10:05 G 28590915.72 28590915.92 28590916.14 0.0090 0.0027

Neptune 73567-10-14 23:03 G 28591141.27 28591141.46 28591141.68 0.0090 0.0034

Neptune 73568-05-27 12:15 G 28591366.83 28591367.01 28591367.22 0.0090 0.0041

Mars 73568-07-13 15:07 G 28591413.97 28591414.13 28591414.28 0.1612 0.0726

Neptune 73569-01-08 01:27 G 28591592.39 28591592.56 28591592.76 0.0090 0.0048

Neptune 73569-08-21 14:24 G 28591817.94 28591818.10 28591818.29 0.0090 0.0055

Neptune 73570-04-04 03:51 G 28592043.50 28592043.66 28592043.82 0.0090 0.0061

Neptune 73570-11-15 16:48 G 28592269.07 28592269.20 28592269.35 0.0090 0.0068

Neptune 73571-06-29 05:46 G 28592494.64 28592494.74 28592494.88 0.0090 0.0075

Jupiter 73571-10-17 23:46 G 28592605.29 28592605.49 28592605.68 0.0496 0.0141

Neptune 73572-02-09 18:43 G 28592720.21 28592720.28 28592720.39 0.0090 0.0082

Jupiter 73572-06-10 03:51 G 28592841.48 28592841.66 28592841.84 0.0490 0.0228

Neptune 73572-09-22 07:41 G 28592945.81 28592945.82 28592945.88 0.0090 0.0089

Uranus 73573-01-11 17:31 G 28593057.09 28593057.23 28593057.39 0.0144 0.0106

Saturn 73573-02-06 11:46 G 28593082.79 28593082.99 28593083.19 0.0281 0.0090

Uranus 73573-08-26 05:46 G 28593283.54 28593283.74 28593283.94 0.0144 0.0065

Saturn 73573-09-24 01:41 G 28593312.38 28593312.57 28593312.78 0.0282 0.0106

Uranus 73574-04-09 17:46 G 28593510.02 28593510.24 28593510.46 0.0144 0.0024

Uranus 73574-11-22 05:46 G 28593736.52 28593736.74 28593736.96 0.0143 0.0017

Uranus 73575-07-06 17:17 G 28593963.03 28593963.22 28593963.43 0.0143 0.0058

Uranus 73576-02-18 05:03 G 28594189.56 28594189.71 28594189.88 0.0143 0.0099

Uranus 73576-10-01 16:48 G 28594416.15 28594416.20 28594416.25 0.0143 0.0139

Jupiter 73577-08-11 12:29 G 28594729.93 28594730.02 28594730.12 0.0525 0.0464

Jupiter 73578-04-06 03:22 G 28594967.43 28594967.64 28594967.84 0.0534 0.0023

Jupiter 73578-11-30 05:46 G 28595205.64 28595205.74 28595205.85 0.0541 0.0461

Jupiter 73583-06-23 00:15 G 28596871.33 28596871.51 28596871.69 0.0499 0.0246

Jupiter 73584-02-14 07:27 G 28597107.61 28597107.81 28597108.01 0.0491 0.0131

Jupiter 73584-10-07 06:00 G 28597343.71 28597343.75 28597343.79 0.0486 0.0474

Saturn 73586-12-06 08:39 G 28598133.74 28598133.86 28598133.99 0.0278 0.0224

Saturn 73587-07-23 18:43 G 28598363.07 28598363.28 28598363.49 0.0277 0.0038

Saturn 73588-03-09 04:19 G 28598592.50 28598592.68 28598592.86 0.0277 0.0148

Jupiter 73589-12-09 18:00 G 28599233.05 28599233.25 28599233.44 0.0532 0.0149

Jupiter 73590-08-04 17:31 G 28599471.07 28599471.23 28599471.39 0.0540 0.0329

Jupiter 73595-02-26 00:15 G 28601137.37 28601137.51 28601137.66 0.0501 0.0352

Jupiter 73595-10-20 10:05 G 28601373.72 28601373.92 28601374.13 0.0493 0.0030

Jupiter 73596-06-12 10:34 G 28601609.82 28601609.94 28601610.07 0.0487 0.0383

Mars 73601-06-12 17:03 G 28603436.03 28603436.21 28603436.38 0.1912 0.0172

Jupiter 73601-08-14 10:05 G 28603498.75 28603498.92 28603499.10 0.0529 0.0275

Saturn 73602-01-02 02:10 G 28603639.51 28603639.59 28603639.68 0.0281 0.0258

Jupiter 73602-04-09 06:43 G 28603736.60 28603736.78 28603736.97 0.0538 0.0195

Mars 73602-05-12 11:17 G 28603769.90 28603769.97 28603770.04 0.1613 0.1482

Saturn 73602-08-19 15:51 G 28603868.95 28603869.16 28603869.37 0.0281 0.0065

Saturn 73603-04-06 05:31 G 28604098.55 28604098.73 28604098.93 0.0282 0.0131

Jupiter 73606-10-31 23:31 G 28605403.40 28605403.48 28605403.57 0.0503 0.0456

Jupiter 73607-06-25 12:15 G 28605639.81 28605640.01 28605640.22 0.0495 0.0074

Jupiter 73608-02-16 14:53 G 28605875.96 28605876.12 28605876.29 0.0489 0.0291

Jupiter 73613-04-19 04:48 G 28607764.56 28607764.70 28607764.83 0.0527 0.0392

Jupiter 73613-12-12 22:05 G 28608002.22 28608002.42 28608002.62 0.0536 0.0064

Uranus 73615-03-03 10:48 G 28608447.83 28608447.95 28608448.10 0.0134 0.0104

Uranus 73615-10-15 16:19 G 28608674.01 28608674.18 28608674.37 0.0134 0.0071

Uranus 73616-05-28 22:05 G 28608900.21 28608900.42 28608900.63 0.0134 0.0038

Saturn 73616-06-17 09:07 G 28608919.74 28608919.88 28608920.03 0.0278 0.0204

Uranus 73617-01-10 03:36 G 28609126.43 28609126.65 28609126.87 0.0134 0.0005

Saturn 73617-02-01 19:12 G 28609149.09 28609149.30 28609149.51 0.0277 0.0018

Uranus 73617-08-24 09:07 G 28609352.67 28609352.88 28609353.09 0.0135 0.0029

Saturn 73617-09-19 04:34 G 28609378.53 28609378.69 28609378.86 0.0276 0.0167

Uranus 73618-04-07 14:24 G 28609578.92 28609579.10 28609579.30 0.0135 0.0062

Uranus 73618-11-19 19:55 G 28609805.19 28609805.33 28609805.50 0.0135 0.0095

Jupiter 73619-02-28 12:15 G 28609905.82 28609906.01 28609906.20 0.0497 0.0179

Uranus 73619-07-04 01:41 G 28610031.52 28610031.57 28610031.65 0.0135 0.0128

Jupiter 73619-10-22 17:17 G 28610142.03 28610142.22 28610142.41 0.0490 0.0193

Pluto 73623-03-20 18:58 G 28611387.11 28611387.29 28611387.48 0.0065 0.0036

Pluto 73623-10-31 23:17 G 28611612.25 28611612.47 28611612.70 0.0065 0.0001

Pluto 73624-06-13 03:51 G 28611837.48 28611837.66 28611837.85 0.0065 0.0037

Jupiter 73624-12-22 23:31 G 28612030.43 28612030.48 28612030.54 0.0524 0.0503

Jupiter 73625-08-17 13:12 G 28612267.85 28612268.05 28612268.25 0.0534 0.0067

Jupiter 73626-04-12 14:53 G 28612506.00 28612506.12 28612506.25 0.0541 0.0414

Jupiter 73630-11-03 12:15 G 28614171.84 28614172.01 28614172.18 0.0499 0.0284

Jupiter 73631-06-27 20:10 G 28614408.14 28614408.34 28614408.55 0.0492 0.0094

Saturn 73631-07-15 05:03 G 28614425.60 28614425.71 28614425.84 0.0281 0.0234

Jupiter 73632-02-18 19:27 G 28614644.23 28614644.31 28614644.40 0.0487 0.0441

Saturn 73632-02-29 19:12 G 28614655.09 28614655.30 28614655.51 0.0281 0.0039

Saturn 73632-10-16 09:22 G 28614884.72 28614884.89 28614885.07 0.0282 0.0157

Mars 73634-05-11 03:51 G 28615456.49 28615456.66 28615456.82 0.1612 0.0525

Jupiter 73637-04-22 02:24 G 28616533.41 28616533.60 28616533.79 0.0530 0.0196

Jupiter 73637-12-16 00:15 G 28616771.34 28616771.51 28616771.68 0.0539 0.0277

Neptune 73638-10-20 08:53 G 28617079.82 28617079.87 28617079.94 0.0088 0.0084

Neptune 73639-06-02 21:36 G 28617305.32 28617305.40 28617305.52 0.0088 0.0078

Neptune 73640-01-14 10:34 G 28617530.83 28617530.94 28617531.09 0.0088 0.0072

Neptune 73640-08-26 23:46 G 28617756.36 28617756.49 28617756.65 0.0088 0.0065

Neptune 73641-04-09 13:12 G 28617981.88 28617982.05 28617982.21 0.0088 0.0058

Neptune 73641-11-21 01:55 G 28618207.42 28618207.58 28618207.78 0.0088 0.0052

Neptune 73642-07-04 15:07 G 28618432.95 28618433.13 28618433.33 0.0088 0.0045

Jupiter 73642-07-09 11:03 G 28618437.83 28618437.96 28618438.08 0.0502 0.0391

Neptune 73643-02-15 04:05 G 28618658.48 28618658.67 28618658.88 0.0088 0.0039

Jupiter 73643-03-02 22:34 G 28618674.23 28618674.44 28618674.64 0.0494 0.0013

Neptune 73643-09-28 17:03 G 28618884.02 28618884.21 28618884.43 0.0088 0.0032

Jupiter 73643-10-25 00:15 G 28618910.37 28618910.51 28618910.65 0.0488 0.0350

Neptune 73644-05-11 06:15 G 28619109.55 28619109.76 28619109.98 0.0088 0.0025

Neptune 73644-12-22 19:12 G 28619335.09 28619335.30 28619335.53 0.0088 0.0019

Neptune 73645-08-05 08:24 G 28619560.63 28619560.85 28619561.07 0.0088 0.0012

Saturn 73645-12-28 17:46 G 28619706.08 28619706.24 28619706.42 0.0278 0.0172

Neptune 73646-03-18 21:22 G 28619786.17 28619786.39 28619786.61 0.0088 0.0005

Saturn 73646-08-15 03:51 G 28619935.45 28619935.66 28619935.87 0.0277 0.0016

Neptune 73646-10-30 10:19 G 28620011.71 28620011.93 28620012.15 0.0088 0.0002

Saturn 73647-04-01 13:12 G 28620164.91 28620165.05 28620165.20 0.0276 0.0200

Neptune 73647-06-12 23:17 G 28620237.25 28620237.47 28620237.69 0.0088 0.0008

Neptune 73648-01-24 12:15 G 28620462.79 28620463.01 28620463.23 0.0088 0.0015

Neptune 73648-09-06 00:58 G 28620688.33 28620688.54 28620688.76 0.0088 0.0022

Jupiter 73648-12-25 18:43 G 28620799.12 28620799.28 28620799.44 0.0528 0.0319

Neptune 73649-04-19 13:41 G 28620913.87 28620914.07 28620914.29 0.0088 0.0029

Jupiter 73649-08-20 13:12 G 28621036.85 28621037.05 28621037.24 0.0537 0.0144

Neptune 73649-12-01 02:53 G 28621139.42 28621139.62 28621139.83 0.0088 0.0035

Neptune 73650-07-14 15:36 G 28621364.97 28621365.15 28621365.36 0.0088 0.0042

Neptune 73651-02-25 04:48 G 28621590.51 28621590.70 28621590.88 0.0088 0.0048

Neptune 73651-10-08 17:17 G 28621816.06 28621816.22 28621816.41 0.0088 0.0055

Neptune 73652-05-21 06:00 G 28622041.62 28622041.75 28622041.93 0.0088 0.0062

Neptune 73653-01-01 19:12 G 28622267.18 28622267.30 28622267.46 0.0088 0.0068

Neptune 73653-08-15 07:55 G 28622492.74 28622492.83 28622492.97 0.0088 0.0075

Jupiter 73654-03-14 09:36 G 28622703.87 28622703.90 28622703.94 0.0505 0.0496

Neptune 73654-03-28 20:53 G 28622718.31 28622718.37 28622718.48 0.0088 0.0081

Jupiter 73654-11-06 00:15 G 28622940.31 28622940.51 28622940.71 0.0496 0.0112

Neptune 73654-11-09 10:19 G 28622943.91 28622943.93 28622943.96 0.0088 0.0087

Jupiter 73655-06-30 04:19 G 28623176.51 28623176.68 28623176.86 0.0489 0.0255

Uranus 73656-09-10 22:34 G 28623615.35 28623615.44 28623615.56 0.0144 0.0126

Uranus 73657-04-25 10:48 G 28623841.78 28623841.95 28623842.13 0.0144 0.0085

Uranus 73657-12-07 23:03 G 28624068.25 28624068.46 28624068.67 0.0144 0.0044

Uranus 73658-07-22 11:03 G 28624294.74 28624294.96 28624295.18 0.0144 0.0003

Uranus 73659-03-05 22:34 G 28624521.24 28624521.44 28624521.66 0.0143 0.0039

Uranus 73659-10-18 10:34 G 28624747.76 28624747.94 28624748.12 0.0143 0.0079

Uranus 73660-05-31 21:51 G 28624974.31 28624974.41 28624974.54 0.0143 0.0119

Jupiter 73660-08-30 12:00 G 28625064.89 28625065.00 28625065.11 0.0525 0.0437

Saturn 73661-01-24 10:05 G 28625211.78 28625211.92 28625212.06 0.0281 0.0207

Jupiter 73661-04-25 03:22 G 28625302.44 28625302.64 28625302.84 0.0535 0.0011

Saturn 73661-09-10 23:46 G 28625441.27 28625441.49 28625441.70 0.0282 0.0014

Jupiter 73661-12-19 06:43 G 28625540.70 28625540.78 28625540.86 0.0542 0.0490

Saturn 73662-04-28 13:41 G 28625670.91 28625671.07 28625671.23 0.0282 0.0183

Jupiter 73666-07-12 01:27 G 28627206.38 28627206.56 28627206.75 0.0498 0.0216

Earth 73667-03-03 12:15 G 28627440.86 28627441.01 28627441.16 0.2626 0.0810

Moon 73667-03-03 17:31 G 28627441.10 28627441.23 28627441.36 0.2629 0.1436 *

Jupiter 73667-03-05 07:55 G 28627442.64 28627442.83 28627443.03 0.0491 0.0158

Mars 73667-04-09 18:29 G 28627478.11 28627478.27 28627478.44 0.1912 0.0664

Jupiter 73672-12-28 19:55 G 28629568.14 28629568.33 28629568.53 0.0532 0.0117

Jupiter 73673-08-23 20:24 G 28629806.21 28629806.35 28629806.50 0.0540 0.0362

Earth 73675-03-01 04:34 G 28630360.61 28630360.69 28630360.78 0.2626 0.2232

Moon 73675-03-01 09:51 G 28630360.82 28630360.91 28630361.01 0.2624 0.2113

Saturn 73675-07-10 18:00 G 28630492.07 28630492.25 28630492.42 0.0278 0.0151

Saturn 73676-02-25 03:36 G 28630721.44 28630721.65 28630721.86 0.0277 0.0035

Saturn 73676-10-11 12:43 G 28630950.91 28630951.03 28630951.17 0.0276 0.0219

Jupiter 73678-03-17 00:15 G 28631472.36 28631472.51 28631472.67 0.0501 0.0323

Jupiter 73678-11-08 09:36 G 28631708.70 28631708.90 28631709.11 0.0493 0.0057

Jupiter 73679-07-02 09:36 G 28631944.80 28631944.90 28631945.02 0.0487 0.0407

Jupiter 73684-09-02 12:43 G 28633833.86 28633834.03 28633834.21 0.0530 0.0241

Jupiter 73685-04-28 09:51 G 28634071.73 28634071.91 28634072.09 0.0538 0.0230

Jupiter 73689-11-19 23:03 G 28635738.36 28635738.46 28635738.57 0.0503 0.0428

Jupiter 73690-07-14 11:31 G 28635974.78 28635974.98 28635975.19 0.0495 0.0046

Saturn 73690-08-06 11:31 G 28635997.83 28635997.98 28635998.15 0.0281 0.0185

Jupiter 73691-03-07 14:10 G 28636210.93 28636211.09 28636211.24 0.0489 0.0316

Saturn 73691-03-24 01:41 G 28636227.36 28636227.57 28636227.78 0.0282 0.0010

Saturn 73691-11-08 16:05 G 28636457.02 28636457.17 28636457.31 0.0282 0.0206

Jupiter 73696-05-08 04:19 G 28638099.54 28638099.68 28638099.83 0.0526 0.0362

Jupiter 73696-12-31 21:07 G 28638337.18 28638337.38 28638337.58 0.0535 0.0093

Uranus 73698-10-31 19:55 G 28639006.24 28639006.33 28639006.43 0.0134 0.0119

Uranus 73699-06-15 01:12 G 28639232.40 28639232.55 28639232.73 0.0134 0.0087

Uranus 73700-01-27 06:43 G 28639458.59 28639458.78 28639458.99 0.0134 0.0054

Mars 73700-03-08 16:34 G 28639499.02 28639499.19 28639499.36 0.1612 0.0325

Uranus 73700-09-10 12:15 G 28639684.80 28639685.01 28639685.23 0.0134 0.0021

Uranus 73701-04-24 17:46 G 28639911.03 28639911.24 28639911.46 0.0135 0.0013

Uranus 73701-12-06 23:17 G 28640137.27 28640137.47 28640137.68 0.0135 0.0046

Jupiter 73702-03-20 12:00 G 28640240.81 28640241.00 28640241.20 0.0497 0.0151

Uranus 73702-07-21 04:48 G 28640363.54 28640363.70 28640363.88 0.0135 0.0079

Jupiter 73702-11-11 17:46 G 28640477.06 28640477.24 28640477.42 0.0491 0.0220

Uranus 73703-03-04 10:19 G 28640589.83 28640589.93 28640590.06 0.0135 0.0112

Saturn 73705-01-21 01:55 G 28641278.39 28641278.58 28641278.77 0.0278 0.0120

Saturn 73705-09-07 11:46 G 28641507.79 28641507.99 28641508.20 0.0277 0.0067

Saturn 73706-04-24 20:53 G 28641737.29 28641737.37 28641737.47 0.0276 0.0250

Jupiter 73708-01-12 22:05 G 28642365.34 28642365.42 28642365.51 0.0523 0.0475

Jupiter 73708-09-06 11:17 G 28642602.77 28642602.97 28642603.17 0.0533 0.0039

Jupiter 73709-05-02 12:29 G 28642840.90 28642841.02 28642841.13 0.0540 0.0439

Pluto 73711-07-03 18:58 G 28643633.10 28643633.29 28643633.49 0.0079 0.0037

Pluto 73712-02-14 05:03 G 28643858.52 28643858.71 28643858.93 0.0079 0.0030

Jupiter 73713-11-23 12:43 G 28644506.86 28644507.03 28644507.21 0.0500 0.0256

Jupiter 73714-07-17 20:53 G 28644743.18 28644743.37 28644743.57 0.0492 0.0122

Jupiter 73715-03-10 20:10 G 28644979.28 28644979.34 28644979.40 0.0487 0.0464

Saturn 73720-02-17 16:34 G 28646784.02 28646784.19 28646784.37 0.0281 0.0158

Jupiter 73720-05-12 02:39 G 28646868.42 28646868.61 28646868.80 0.0531 0.0167

Saturn 73720-10-04 06:29 G 28647013.56 28647013.77 28647013.98 0.0282 0.0037

Jupiter 73721-01-05 01:12 G 28647106.38 28647106.55 28647106.71 0.0539 0.0307

Saturn 73721-05-21 20:24 G 28647243.24 28647243.35 28647243.47 0.0283 0.0232

Neptune 73721-07-19 04:19 G 28647301.63 28647301.68 28647301.77 0.0090 0.0085

Neptune 73722-03-01 17:31 G 28647527.14 28647527.23 28647527.35 0.0090 0.0078

Neptune 73722-10-13 06:43 G 28647752.65 28647752.78 28647752.91 0.0090 0.0071

Neptune 73723-05-26 19:27 G 28647978.18 28647978.31 28647978.48 0.0090 0.0065

Neptune 73724-01-07 08:24 G 28648203.71 28648203.85 28648204.04 0.0090 0.0058

Neptune 73724-08-19 21:36 G 28648429.23 28648429.40 28648429.59 0.0090 0.0051

Neptune 73725-04-02 10:34 G 28648654.76 28648654.94 28648655.14 0.0090 0.0044

Jupiter 73725-07-29 12:43 G 28648772.89 28648773.03 28648773.17 0.0502 0.0361

Neptune 73725-11-13 23:46 G 28648880.30 28648880.49 28648880.69 0.0090 0.0037

Jupiter 73726-03-22 23:46 G 28649009.28 28649009.49 28649009.69 0.0494 0.0022

Neptune 73726-06-27 12:43 G 28649105.83 28649106.03 28649106.24 0.0090 0.0030

Jupiter 73726-11-14 00:58 G 28649245.41 28649245.54 28649245.67 0.0488 0.0375

Neptune 73727-02-08 01:55 G 28649331.37 28649331.58 28649331.79 0.0090 0.0023

Neptune 73727-09-21 14:53 G 28649556.91 28649557.12 28649557.34 0.0090 0.0016

Neptune 73728-05-04 04:05 G 28649782.45 28649782.67 28649782.89 0.0090 0.0009

Neptune 73728-12-15 17:03 G 28650008.00 28650008.21 28650008.43 0.0090 0.0003

Neptune 73729-07-29 06:15 G 28650233.54 28650233.76 28650233.98 0.0090 0.0005

Neptune 73730-03-11 19:12 G 28650459.09 28650459.30 28650459.52 0.0090 0.0012

Neptune 73730-10-23 08:10 G 28650684.64 28650684.84 28650685.06 0.0090 0.0020

Neptune 73731-06-05 21:22 G 28650910.20 28650910.39 28650910.61 0.0090 0.0027

Jupiter 73732-01-15 20:24 G 28651134.18 28651134.35 28651134.52 0.0529 0.0288

Neptune 73732-01-17 10:34 G 28651135.75 28651135.94 28651136.15 0.0090 0.0034

Neptune 73732-08-29 23:31 G 28651361.30 28651361.48 28651361.69 0.0090 0.0041

Jupiter 73732-09-09 15:51 G 28651371.97 28651372.16 28651372.35 0.0537 0.0177

Mars 73733-02-04 21:22 G 28651520.27 28651520.39 28651520.50 0.1912 0.1443

Neptune 73733-04-12 12:43 G 28651586.86 28651587.03 28651587.23 0.0090 0.0048

Neptune 73733-11-24 01:41 G 28651812.42 28651812.57 28651812.77 0.0090 0.0055

Neptune 73734-07-07 14:53 G 28652037.99 28652038.12 28652038.30 0.0090 0.0062

Saturn 73734-08-03 02:10 G 28652064.39 28652064.59 28652064.79 0.0278 0.0099

Neptune 73735-02-18 04:34 G 28652263.55 28652263.69 28652263.83 0.0090 0.0068

Saturn 73735-03-20 11:46 G 28652293.79 28652293.99 28652294.19 0.0277 0.0086

Neptune 73735-10-01 17:31 G 28652489.12 28652489.23 28652489.35 0.0090 0.0075

Saturn 73735-11-04 20:53 G 28652523.33 28652523.37 28652523.42 0.0276 0.0268

Neptune 73736-05-14 06:29 G 28652714.70 28652714.77 28652714.87 0.0090 0.0082

Neptune 73736-12-25 19:27 G 28652940.31 28652940.31 28652940.36 0.0090 0.0089

Jupiter 73737-04-03 10:48 G 28653038.87 28653038.95 28653039.03 0.0504 0.0465

Jupiter 73737-11-26 00:43 G 28653275.32 28653275.53 28653275.73 0.0496 0.0083

Jupiter 73738-07-20 04:19 G 28653511.51 28653511.68 28653511.84 0.0489 0.0281

Uranus 73740-12-24 16:48 G 28654400.05 28654400.20 28654400.35 0.0144 0.0104

Uranus 73741-08-08 04:34 G 28654626.51 28654626.69 28654626.90 0.0144 0.0064

Uranus 73742-03-22 16:34 G 28654852.98 28654853.19 28654853.42 0.0144 0.0023

Uranus 73742-11-04 04:34 G 28655079.48 28655079.69 28655079.91 0.0144 0.0019

Uranus 73743-06-18 16:19 G 28655305.99 28655306.18 28655306.38 0.0143 0.0059

Jupiter 73743-09-20 14:53 G 28655400.00 28655400.12 28655400.25 0.0526 0.0404

Uranus 73744-01-31 03:51 G 28655532.52 28655532.66 28655532.83 0.0143 0.0100

Jupiter 73744-05-15 06:58 G 28655637.59 28655637.79 28655637.99 0.0535 0.0047

Uranus 73744-09-13 15:22 G 28655759.12 28655759.14 28655759.20 0.0143 0.0141

Jupiter 73745-01-08 10:34 G 28655875.89 28655875.94 28655875.99 0.0542 0.0523

Jupiter 73749-08-01 01:12 G 28657541.36 28657541.55 28657541.75 0.0498 0.0188

Saturn 73749-08-29 17:31 G 28657570.05 28657570.23 28657570.42 0.0281 0.0137

Jupiter 73750-03-25 07:41 G 28657777.63 28657777.82 28657778.01 0.0491 0.0185

Saturn 73750-04-16 07:27 G 28657799.60 28657799.81 28657800.02 0.0282 0.0058

Saturn 73750-12-01 21:36 G 28658029.32 28658029.40 28658029.50 0.0283 0.0254

Jupiter 73755-05-26 08:39 G 28659665.84 28659665.86 28659665.90 0.0522 0.0514

Jupiter 73756-01-18 20:10 G 28659903.15 28659903.34 28659903.54 0.0532 0.0087

Jupiter 73756-09-12 19:55 G 28660141.19 28660141.33 28660141.47 0.0540 0.0389

Jupiter 73761-04-06 00:00 G 28661807.33 28661807.50 28661807.66 0.0501 0.0295

Jupiter 73761-11-28 09:51 G 28662043.71 28662043.91 28662044.12 0.0493 0.0085

Jupiter 73762-07-22 10:34 G 28662279.85 28662279.94 28662280.03 0.0488 0.0433

Saturn 73763-06-28 23:03 G 28662621.38 28662621.46 28662621.54 0.0279 0.0256

Saturn 73764-02-13 09:22 G 28662850.69 28662850.89 28662851.09 0.0278 0.0069

Saturn 73764-09-29 19:12 G 28663080.10 28663080.30 28663080.49 0.0277 0.0117

Mars 73766-01-04 05:03 G 28663541.53 28663541.71 28663541.88 0.1613 0.0121

Jupiter 73767-09-23 11:46 G 28664168.81 28664168.99 28664169.18 0.0529 0.0212

Jupiter 73768-05-18 08:10 G 28664406.66 28664406.84 28664407.02 0.0538 0.0257

Jupiter 73772-12-09 23:17 G 28666073.35 28666073.47 28666073.59 0.0504 0.0401

Jupiter 73773-08-03 12:00 G 28666309.80 28666310.00 28666310.21 0.0495 0.0021

Jupiter 73774-03-27 14:53 G 28666545.97 28666546.12 28666546.26 0.0489 0.0341

Saturn 73779-03-11 23:03 G 28668356.27 28668356.46 28668356.66 0.0281 0.0108

Jupiter 73779-05-29 04:19 G 28668434.53 28668434.68 28668434.84 0.0527 0.0334

Saturn 73779-10-27 12:43 G 28668585.84 28668586.03 28668586.24 0.0282 0.0087

Jupiter 73780-01-21 21:36 G 28668672.21 28668672.40 28668672.60 0.0536 0.0124

Saturn 73780-06-13 02:39 G 28668815.61 28668815.61 28668815.65 0.0283 0.0282

Earth 73780-09-02 11:03 G 28668896.81 28668896.96 28668897.11 0.2706 0.0962

Moon 73780-09-02 16:05 G 28668897.05 28668897.17 28668897.30 0.2703 0.1681 *

Uranus 73782-07-02 05:31 G 28669564.71 28669564.73 28669564.75 0.0134 0.0134

Uranus 73783-02-13 10:34 G 28669790.81 28669790.94 28669791.09 0.0134 0.0102

Uranus 73783-09-27 16:05 G 28670016.99 28670017.17 28670017.36 0.0134 0.0069

Uranus 73784-05-10 21:36 G 28670243.19 28670243.40 28670243.61 0.0135 0.0036

Jupiter 73784-08-14 22:05 G 28670339.41 28670339.42 28670339.43 0.0506 0.0504

Uranus 73784-12-23 03:07 G 28670469.41 28670469.63 28670469.85 0.0135 0.0003

Jupiter 73785-04-08 13:41 G 28670575.87 28670576.07 28670576.27 0.0497 0.0121

Uranus 73785-08-06 08:24 G 28670695.65 28670695.85 28670696.07 0.0135 0.0031

Jupiter 73785-11-30 18:58 G 28670812.11 28670812.29 28670812.47 0.0490 0.0247

Uranus 73786-03-20 13:55 G 28670921.90 28670922.08 28670922.28 0.0135 0.0064

Uranus 73786-11-01 19:27 G 28671148.17 28671148.31 28671148.47 0.0135 0.0097

Uranus 73787-06-16 00:58 G 28671374.51 28671374.54 28671374.62 0.0135 0.0130

Earth 73788-08-31 00:43 G 28671816.49 28671816.53 28671816.57 0.2706 0.2599

Jupiter 73791-01-31 23:17 G 28672700.37 28672700.47 28672700.58 0.0524 0.0447

Jupiter 73791-09-26 13:27 G 28672937.86 28672938.06 28672938.26 0.0534 0.0006

Jupiter 73792-05-21 15:36 G 28673176.06 28673176.15 28673176.26 0.0541 0.0471

Saturn 73793-01-07 23:31 G 28673407.37 28673407.48 28673407.59 0.0278 0.0234

Saturn 73793-08-25 09:51 G 28673636.70 28673636.91 28673637.11 0.0277 0.0049

Saturn 73794-04-11 19:12 G 28673866.12 28673866.30 28673866.49 0.0277 0.0136

Jupiter 73796-12-12 13:41 G 28674841.89 28674842.07 28674842.26 0.0499 0.0227

Jupiter 73797-08-05 21:22 G 28675078.20 28675078.39 28675078.59 0.0492 0.0149

Neptune 73803-01-23 19:55 G 28677074.29 28677074.33 28677074.39 0.0088 0.0085

Jupiter 73803-06-02 06:15 G 28677203.56 28677203.76 28677203.95 0.0531 0.0131

Neptune 73803-09-06 08:39 G 28677299.79 28677299.86 28677299.98 0.0088 0.0079

Jupiter 73804-01-26 05:17 G 28677441.56 28677441.72 28677441.87 0.0539 0.0342

Neptune 73804-04-18 22:05 G 28677525.30 28677525.42 28677525.55 0.0088 0.0072

Neptune 73804-11-30 10:48 G 28677750.83 28677750.95 28677751.12 0.0088 0.0066

Neptune 73805-07-14 00:15 G 28677976.35 28677976.51 28677976.68 0.0088 0.0059

Neptune 73806-02-24 13:27 G 28678201.88 28678202.06 28678202.24 0.0088 0.0052

Neptune 73806-10-08 02:10 G 28678427.41 28678427.59 28678427.79 0.0088 0.0046

Neptune 73807-05-21 15:22 G 28678652.95 28678653.14 28678653.35 0.0088 0.0039

Neptune 73808-01-02 04:34 G 28678878.49 28678878.69 28678878.90 0.0088 0.0032

Neptune 73808-08-14 17:17 G 28679104.02 28679104.22 28679104.45 0.0088 0.0026

Jupiter 73808-08-18 12:58 G 28679107.90 28679108.04 28679108.20 0.0502 0.0332

Saturn 73808-09-21 23:03 G 28679142.26 28679142.46 28679142.66 0.0281 0.0089

Neptune 73809-03-28 06:29 G 28679329.56 28679329.77 28679330.00 0.0088 0.0019

Jupiter 73809-04-11 23:46 G 28679344.28 28679344.49 28679344.69 0.0494 0.0049

Saturn 73809-05-09 12:58 G 28679371.85 28679372.04 28679372.24 0.0282 0.0106

Neptune 73809-11-08 19:41 G 28679555.11 28679555.32 28679555.55 0.0088 0.0012

Jupiter 73809-12-04 00:58 G 28679580.43 28679580.54 28679580.66 0.0488 0.0401

Neptune 73810-06-22 08:39 G 28679780.65 28679780.86 28679781.09 0.0088 0.0006

Neptune 73811-02-02 21:51 G 28680006.18 28680006.41 28680006.63 0.0088 0.0002

Neptune 73811-09-16 10:34 G 28680231.72 28680231.94 28680232.17 0.0088 0.0009

Neptune 73812-04-28 23:46 G 28680457.27 28680457.49 28680457.71 0.0088 0.0015

Neptune 73812-12-10 12:43 G 28680682.82 28680683.03 28680683.25 0.0088 0.0022

Neptune 73813-07-24 01:27 G 28680908.36 28680908.56 28680908.78 0.0088 0.0029

Neptune 73814-03-06 14:39 G 28681133.90 28681134.11 28681134.31 0.0088 0.0035

Neptune 73814-10-18 03:07 G 28681359.45 28681359.63 28681359.84 0.0088 0.0042

Jupiter 73815-02-04 21:36 G 28681469.23 28681469.40 28681469.58 0.0528 0.0257

Neptune 73815-05-31 15:51 G 28681584.99 28681585.16 28681585.36 0.0088 0.0049

Jupiter 73815-09-30 16:34 G 28681707.00 28681707.19 28681707.37 0.0537 0.0207

Neptune 73816-01-12 05:17 G 28681810.55 28681810.72 28681810.89 0.0088 0.0055

Neptune 73816-08-24 17:46 G 28682036.10 28682036.24 28682036.41 0.0088 0.0062

Neptune 73817-04-07 06:29 G 28682261.65 28682261.77 28682261.93 0.0088 0.0069

Neptune 73817-11-18 19:41 G 28682487.22 28682487.32 28682487.45 0.0088 0.0075

Neptune 73818-07-02 08:10 G 28682712.79 28682712.84 28682712.95 0.0088 0.0082

Neptune 73819-02-12 21:36 G 28682938.40 28682938.40 28682938.41 0.0088 0.0088

Jupiter 73820-04-23 09:36 G 28683373.81 28683373.90 28683374.01 0.0505 0.0441

Jupiter 73820-12-16 00:29 G 28683610.31 28683610.52 28683610.72 0.0496 0.0057

Jupiter 73821-08-09 04:34 G 28683846.53 28683846.69 28683846.85 0.0490 0.0307

Saturn 73822-07-22 06:15 G 28684193.62 28684193.76 28684193.90 0.0279 0.0206

Saturn 73823-03-08 16:34 G 28684422.98 28684423.19 28684423.40 0.0278 0.0019

Saturn 73823-10-24 02:10 G 28684652.43 28684652.59 28684652.77 0.0277 0.0166

Uranus 73824-08-24 22:34 G 28684958.34 28684958.44 28684958.56 0.0144 0.0123

Uranus 73825-04-08 10:34 G 28685184.77 28685184.94 28685185.13 0.0144 0.0083

Uranus 73825-11-20 22:34 G 28685411.24 28685411.44 28685411.66 0.0144 0.0042

Uranus 73826-07-05 10:48 G 28685637.73 28685637.95 28685638.17 0.0144 0.0000

Jupiter 73826-10-10 14:53 G 28685734.98 28685735.12 28685735.26 0.0525 0.0375

Uranus 73827-02-16 22:34 G 28685864.23 28685864.44 28685864.65 0.0144 0.0041

Jupiter 73827-06-05 06:00 G 28685972.55 28685972.75 28685972.95 0.0534 0.0075

Uranus 73827-10-01 10:05 G 28686090.75 28686090.92 28686091.11 0.0143 0.0081

Uranus 73828-05-14 21:51 G 28686317.30 28686317.41 28686317.53 0.0143 0.0122

Mars 73831-11-02 18:00 G 28687584.07 28687584.25 28687584.42 0.1613 0.0076

Jupiter 73832-08-21 01:12 G 28687876.36 28687876.55 28687876.75 0.0498 0.0161

Jupiter 73833-04-14 07:55 G 28688112.65 28688112.83 28688113.02 0.0491 0.0211

Saturn 73837-08-17 16:05 G 28689699.09 28689699.17 28689699.27 0.0280 0.0250

Saturn 73838-04-04 05:31 G 28689928.53 28689928.73 28689928.94 0.0281 0.0059

Jupiter 73838-06-15 08:24 G 28690000.78 28690000.85 28690000.92 0.0523 0.0488

Saturn 73838-11-19 19:12 G 28690158.12 28690158.30 28690158.49 0.0282 0.0136

Jupiter 73839-02-07 20:24 G 28690238.15 28690238.35 28690238.55 0.0532 0.0057

Jupiter 73839-10-03 20:39 G 28690476.23 28690476.36 28690476.49 0.0540 0.0417

Jupiter 73844-04-26 01:41 G 28692142.40 28692142.57 28692142.75 0.0501 0.0266

Jupiter 73844-12-18 11:17 G 28692378.77 28692378.97 28692379.17 0.0493 0.0113

Jupiter 73845-08-11 11:17 G 28692614.90 28692614.97 28692615.04 0.0487 0.0457

Jupiter 73850-10-13 13:12 G 28694503.86 28694504.05 28694504.24 0.0530 0.0181

Jupiter 73851-06-08 10:34 G 28694741.78 28694741.94 28694742.12 0.0538 0.0290

Saturn 73852-02-01 07:12 G 28694979.65 28694979.80 28694979.96 0.0278 0.0184

Saturn 73852-09-17 17:31 G 28695209.01 28695209.23 28695209.44 0.0277 0.0006

Saturn 73853-05-05 02:53 G 28695438.47 28695438.62 28695438.78 0.0276 0.0186

Jupiter 73855-12-31 00:43 G 28696408.40 28696408.53 28696408.67 0.0503 0.0371

Jupiter 73856-08-23 12:58 G 28696644.83 28696645.04 28696645.24 0.0494 0.0015

Jupiter 73857-04-16 14:53 G 28696880.99 28696881.12 28696881.26 0.0488 0.0367

Jupiter 73862-06-18 07:27 G 28698769.65 28698769.81 28698769.98 0.0527 0.0300

Jupiter 73863-02-11 01:27 G 28699007.37 28699007.56 28699007.75 0.0536 0.0159

Uranus 73866-10-14 19:27 G 28700349.21 28700349.31 28700349.42 0.0134 0.0117

Saturn 73867-02-27 15:36 G 28700485.04 28700485.15 28700485.28 0.0280 0.0232

Uranus 73867-05-29 00:43 G 28700575.38 28700575.53 28700575.71 0.0134 0.0085

Jupiter 73867-09-04 22:34 G 28700674.38 28700674.44 28700674.52 0.0506 0.0476

Saturn 73867-10-15 05:17 G 28700714.51 28700714.72 28700714.93 0.0281 0.0040

Uranus 73868-01-10 06:15 G 28700801.57 28700801.76 28700801.97 0.0134 0.0052

Jupiter 73868-04-28 13:55 G 28700910.88 28700911.08 28700911.29 0.0497 0.0092

Saturn 73868-05-31 18:58 G 28700944.13 28700944.29 28700944.48 0.0282 0.0155

Uranus 73868-08-23 11:46 G 28701027.78 28701027.99 28701028.21 0.0135 0.0018

Pluto 73868-09-07 03:36 G 28701042.58 28701042.65 28701042.76 0.0065 0.0059

Jupiter 73868-12-20 18:58 G 28701147.12 28701147.29 28701147.46 0.0490 0.0274

Uranus 73869-04-06 17:17 G 28701254.00 28701254.22 28701254.43 0.0135 0.0015

Pluto 73869-04-20 07:55 G 28701267.64 28701267.83 28701268.05 0.0065 0.0023

Uranus 73869-11-18 22:34 G 28701480.24 28701480.44 28701480.65 0.0135 0.0048

Pluto 73869-12-01 12:29 G 28701492.82 28701493.02 28701493.25 0.0065 0.0014

Uranus 73870-07-03 04:05 G 28701706.51 28701706.67 28701706.85 0.0135 0.0081

Pluto 73870-07-14 16:34 G 28701718.09 28701718.19 28701718.36 0.0066 0.0052

Uranus 73871-02-14 09:36 G 28701932.80 28701932.90 28701933.03 0.0135 0.0114

Jupiter 73874-02-21 01:12 G 28703035.43 28703035.55 28703035.68 0.0524 0.0416

Jupiter 73874-10-16 14:53 G 28703272.92 28703273.12 28703273.32 0.0533 0.0026

Jupiter 73875-06-11 16:34 G 28703511.11 28703511.19 28703511.26 0.0540 0.0498

Jupiter 73880-01-02 12:43 G 28705176.84 28705177.03 28705177.22 0.0500 0.0201

Jupiter 73880-08-25 20:53 G 28705413.18 28705413.37 28705413.57 0.0492 0.0175

Saturn 73881-08-13 13:12 G 28705765.88 28705766.05 28705766.23 0.0279 0.0156

Saturn 73882-03-30 23:31 G 28705995.27 28705995.48 28705995.69 0.0278 0.0032

Saturn 73882-11-15 09:22 G 28706224.76 28706224.89 28706225.03 0.0277 0.0216

Neptune 73885-10-21 15:51 G 28707296.12 28707296.16 28707296.24 0.0090 0.0086

Neptune 73886-06-04 05:03 G 28707521.63 28707521.71 28707521.83 0.0090 0.0079

Jupiter 73886-06-21 06:00 G 28707538.55 28707538.75 28707538.94 0.0531 0.0103

Neptune 73887-01-15 18:15 G 28707747.14 28707747.26 28707747.40 0.0090 0.0072

Jupiter 73887-02-14 04:05 G 28707776.53 28707776.67 28707776.82 0.0539 0.0368

Neptune 73887-08-29 07:27 G 28707972.66 28707972.81 28707972.96 0.0090 0.0065

Neptune 73888-04-10 19:55 G 28708198.19 28708198.33 28708198.52 0.0090 0.0059

Neptune 73888-11-22 09:07 G 28708423.72 28708423.88 28708424.08 0.0090 0.0052

Neptune 73889-07-05 22:05 G 28708649.25 28708649.42 28708649.63 0.0090 0.0045

Neptune 73890-02-16 11:03 G 28708874.78 28708874.96 28708875.18 0.0090 0.0038

Neptune 73890-09-30 00:15 G 28709100.32 28709100.51 28709100.73 0.0090 0.0031

Neptune 73891-05-13 13:27 G 28709325.86 28709326.06 28709326.28 0.0090 0.0023

Jupiter 73891-09-07 12:00 G 28709442.84 28709443.00 28709443.17 0.0502 0.0307

Neptune 73891-12-25 02:24 G 28709551.40 28709551.60 28709551.82 0.0090 0.0017

Jupiter 73892-04-30 23:17 G 28709679.27 28709679.47 28709679.67 0.0494 0.0074

Neptune 73892-08-06 15:36 G 28709776.93 28709777.15 28709777.37 0.0090 0.0009

Jupiter 73892-12-23 00:43 G 28709915.44 28709915.53 28709915.64 0.0488 0.0423

Neptune 73893-03-20 04:34 G 28710002.47 28710002.69 28710002.91 0.0090 0.0002

Neptune 73893-10-31 17:31 G 28710228.02 28710228.23 28710228.45 0.0090 0.0005

Neptune 73894-06-14 06:43 G 28710453.57 28710453.78 28710454.00 0.0090 0.0012

Neptune 73895-01-25 19:41 G 28710679.11 28710679.32 28710679.54 0.0090 0.0019

Neptune 73895-09-08 08:39 G 28710904.66 28710904.86 28710905.08 0.0090 0.0026

Neptune 73896-04-20 21:36 G 28711130.21 28711130.40 28711130.62 0.0090 0.0034

Saturn 73896-09-08 23:31 G 28711271.33 28711271.48 28711271.63 0.0280 0.0199

Mars 73896-09-30 01:41 G 28711292.45 28711292.57 28711292.70 0.1912 0.1291

Neptune 73896-12-02 10:48 G 28711355.77 28711355.95 28711356.16 0.0090 0.0041

Saturn 73897-04-26 12:43 G 28711500.82 28711501.03 28711501.24 0.0281 0.0008

Neptune 73897-07-15 23:46 G 28711581.33 28711581.49 28711581.70 0.0090 0.0048

Mars 73897-08-30 06:29 G 28711626.60 28711626.77 28711626.94 0.1613 0.0276

Saturn 73897-12-12 02:24 G 28711730.45 28711730.60 28711730.76 0.0282 0.0186

Jupiter 73898-02-23 21:07 G 28711804.20 28711804.38 28711804.56 0.0528 0.0229

Neptune 73898-02-26 12:58 G 28711806.89 28711807.04 28711807.23 0.0090 0.0055

Neptune 73898-10-10 01:55 G 28712032.45 28712032.58 28712032.76 0.0090 0.0062

Jupiter 73898-10-19 16:19 G 28712042.00 28712042.18 28712042.36 0.0537 0.0235

Neptune 73899-05-23 15:22 G 28712258.02 28712258.14 28712258.30 0.0090 0.0069

Neptune 73900-01-04 05:03 G 28712483.59 28712483.71 28712483.82 0.0090 0.0075

Neptune 73900-08-17 18:00 G 28712709.17 28712709.25 28712709.34 0.0090 0.0082

Neptune 73901-03-31 06:43 G 28712934.77 28712934.78 28712934.83 0.0090 0.0089

Jupiter 73903-05-14 11:31 G 28713708.86 28713708.98 28713709.10 0.0504 0.0411

Jupiter 73904-01-06 01:41 G 28713945.36 28713945.57 28713945.77 0.0496 0.0029

Jupiter 73904-08-29 05:17 G 28714181.57 28714181.72 28714181.87 0.0489 0.0332

Uranus 73908-04-25 04:48 G 28715516.68 28715516.70 28715516.75 0.0144 0.0142

Uranus 73908-12-07 17:03 G 28715743.07 28715743.21 28715743.38 0.0144 0.0101

Uranus 73909-07-22 05:17 G 28715969.53 28715969.72 28715969.92 0.0144 0.0060

Jupiter 73909-10-30 15:22 G 28716069.99 28716070.14 28716070.29 0.0526 0.0346

Uranus 73910-03-05 17:17 G 28716196.00 28716196.22 28716196.44 0.0144 0.0019

Moon 73910-03-06 11:03 G 28716196.80 28716196.96 28716197.11 0.2622 0.0793

Earth 73910-03-06 15:07 G 28716196.98 28716197.13 28716197.27 0.2626 0.1093 *

Jupiter 73910-06-25 07:27 G 28716307.61 28716307.81 28716308.01 0.0535 0.0106

Uranus 73910-10-18 05:03 G 28716422.49 28716422.71 28716422.93 0.0144 0.0022

Saturn 73911-02-24 15:36 G 28716551.96 28716552.15 28716552.33 0.0278 0.0132

Uranus 73911-06-01 16:48 G 28716649.01 28716649.20 28716649.40 0.0144 0.0063

Saturn 73911-10-12 01:41 G 28716781.36 28716781.57 28716781.77 0.0277 0.0054

Uranus 73912-01-14 04:34 G 28716875.55 28716875.69 28716875.85 0.0143 0.0104

Saturn 73912-05-28 11:03 G 28717010.86 28717010.96 28717011.07 0.0276 0.0237

Jupiter 73915-09-11 02:10 G 28718211.39 28718211.59 28718211.79 0.0498 0.0131

Jupiter 73916-05-04 08:10 G 28718447.66 28718447.84 28718448.02 0.0491 0.0237

Moon 73918-03-04 01:55 G 28719116.49 28719116.58 28719116.67 0.2627 0.2132

Earth 73918-03-04 07:27 G 28719116.71 28719116.81 28719116.92 0.2626 0.1946

Jupiter 73921-07-05 10:48 G 28720335.86 28720335.95 28720336.05 0.0523 0.0457

Jupiter 73922-02-27 23:31 G 28720573.28 28720573.48 28720573.68 0.0533 0.0022

Jupiter 73922-10-24 00:15 G 28720811.41 28720811.51 28720811.62 0.0540 0.0451

Saturn 73926-03-22 22:34 G 28722057.29 28722057.44 28722057.61 0.0280 0.0182

Saturn 73926-11-07 12:15 G 28722286.80 28722287.01 28722287.22 0.0281 0.0011

Jupiter 73927-05-17 01:55 G 28722477.40 28722477.58 28722477.77 0.0500 0.0237

Saturn 73927-06-25 01:55 G 28722516.45 28722516.58 28722516.74 0.0282 0.0205

Jupiter 73928-01-08 11:03 G 28722713.77 28722713.96 28722714.16 0.0493 0.0140

Jupiter 73928-08-31 10:48 G 28722949.93 28722949.95 28722949.99 0.0487 0.0480

Jupiter 73933-11-02 15:07 G 28724838.94 28724839.13 28724839.32 0.0530 0.0149

Jupiter 73934-06-28 12:00 G 28725076.84 28725077.00 28725077.16 0.0538 0.0318

Jupiter 73939-01-19 22:48 G 28726743.31 28726743.45 28726743.60 0.0503 0.0347

Jupiter 73939-09-13 11:17 G 28726979.77 28726979.97 28726980.18 0.0495 0.0037

Jupiter 73940-05-06 14:10 G 28727215.97 28727216.09 28727216.22 0.0489 0.0389

Saturn 73940-09-05 20:53 G 28727338.18 28727338.37 28727338.57 0.0279 0.0104

Saturn 73941-04-23 07:12 G 28727567.60 28727567.80 28727568.01 0.0278 0.0083

Saturn 73941-12-08 17:03 G 28727797.16 28727797.21 28727797.27 0.0277 0.0266

Jupiter 73945-07-08 07:41 G 28729104.65 28729104.82 28729104.99 0.0527 0.0272

Jupiter 73946-03-03 00:43 G 28729342.34 28729342.53 28729342.72 0.0536 0.0186

Uranus 73950-06-15 05:03 G 28730907.68 28730907.71 28730907.76 0.0134 0.0132

Jupiter 73950-09-24 20:39 G 28731009.27 28731009.36 28731009.45 0.0506 0.0454

Uranus 73951-01-27 10:05 G 28731133.79 28731133.92 28731134.08 0.0134 0.0100

Jupiter 73951-05-19 12:29 G 28731245.81 28731246.02 28731246.22 0.0497 0.0069

Uranus 73951-09-10 15:36 G 28731359.97 28731360.15 28731360.34 0.0134 0.0067

Jupiter 73952-01-10 18:00 G 28731482.08 28731482.25 28731482.41 0.0490 0.0296

Uranus 73952-04-23 20:53 G 28731586.17 28731586.37 28731586.59 0.0134 0.0034

Uranus 73952-12-06 02:24 G 28731812.39 28731812.60 28731812.82 0.0135 0.0001

Uranus 73953-07-20 07:55 G 28732038.62 28732038.83 28732039.04 0.0135 0.0032

Uranus 73954-03-03 13:12 G 28732264.87 28732265.05 28732265.25 0.0135 0.0066

Uranus 73954-10-15 18:43 G 28732491.15 28732491.28 28732491.44 0.0135 0.0099

Uranus 73955-05-30 00:15 G 28732717.49 28732717.51 28732717.58 0.0135 0.0132

Saturn 73955-10-03 07:55 G 28732843.65 28732843.83 28732844.01 0.0280 0.0147

Saturn 73956-05-19 21:07 G 28733073.17 28733073.38 28733073.59 0.0281 0.0045

Pluto 73956-12-21 01:27 G 28733288.51 28733288.56 28733288.65 0.0079 0.0076

Saturn 73957-01-04 10:48 G 28733302.85 28733302.95 28733303.07 0.0282 0.0239

Jupiter 73957-03-12 23:46 G 28733370.36 28733370.49 28733370.63 0.0524 0.0390

Pluto 73957-08-03 12:15 G 28733513.79 28733514.01 28733514.23 0.0079 0.0008

Jupiter 73957-11-05 13:41 G 28733607.87 28733608.07 28733608.27 0.0534 0.0054

Pluto 73958-03-16 22:05 G 28733739.28 28733739.42 28733739.58 0.0079 0.0058

Jupiter 73958-07-01 15:51 G 28733846.11 28733846.16 28733846.21 0.0541 0.0523

Mars 73962-07-29 03:36 G 28735334.48 28735334.65 28735334.82 0.1912 0.0477

Jupiter 73963-01-22 13:27 G 28735511.87 28735512.06 28735512.26 0.0499 0.0173

Mars 73963-06-28 19:12 G 28735669.13 28735669.30 28735669.47 0.1614 0.0469

Jupiter 73963-09-15 21:22 G 28735748.20 28735748.39 28735748.58 0.0492 0.0200

Neptune 73967-04-28 06:43 G 28737068.76 28737068.78 28737068.84 0.0088 0.0086

Neptune 73967-12-09 19:41 G 28737294.26 28737294.32 28737294.44 0.0088 0.0080

Neptune 73968-07-22 08:53 G 28737519.77 28737519.87 28737520.01 0.0088 0.0073

Jupiter 73968-11-15 19:12 G 28737636.25 28737636.30 28737636.36 0.0521 0.0499

Neptune 73969-03-04 22:19 G 28737745.28 28737745.43 28737745.57 0.0088 0.0066

Jupiter 73969-07-11 06:00 G 28737873.55 28737873.75 28737873.95 0.0531 0.0074

Saturn 73969-08-01 13:27 G 28737895.00 28737895.06 28737895.13 0.0279 0.0265

Neptune 73969-10-16 10:48 G 28737970.81 28737970.95 28737971.13 0.0088 0.0060

Jupiter 73970-03-06 05:03 G 28738111.58 28738111.71 28738111.85 0.0539 0.0397

Saturn 73970-03-19 00:15 G 28738124.31 28738124.51 28738124.71 0.0278 0.0078

Neptune 73970-05-30 00:00 G 28738196.34 28738196.50 28738196.69 0.0088 0.0053

Saturn 73970-11-03 10:19 G 28738353.74 28738353.93 28738354.13 0.0277 0.0107

Neptune 73971-01-10 13:12 G 28738421.87 28738422.05 28738422.25 0.0088 0.0046

Neptune 73971-08-24 01:55 G 28738647.40 28738647.58 28738647.80 0.0088 0.0040

Neptune 73972-04-05 15:07 G 28738872.93 28738873.13 28738873.35 0.0088 0.0033

Neptune 73972-11-17 04:19 G 28739098.48 28739098.68 28739098.90 0.0088 0.0026

Neptune 73973-06-30 17:31 G 28739324.01 28739324.23 28739324.45 0.0088 0.0019

Neptune 73974-02-11 06:15 G 28739549.55 28739549.76 28739549.99 0.0088 0.0013

Neptune 73974-09-24 19:27 G 28739775.09 28739775.31 28739775.54 0.0088 0.0006

Jupiter 73974-09-27 12:58 G 28739777.88 28739778.04 28739778.22 0.0501 0.0278

Neptune 73975-05-08 08:39 G 28740000.63 28740000.86 28740001.08 0.0088 0.0002

Jupiter 73975-05-21 23:31 G 28740014.27 28740014.48 28740014.68 0.0493 0.0102

Neptune 73975-12-19 21:36 G 28740226.18 28740226.40 28740226.63 0.0088 0.0008

Jupiter 73976-01-13 00:29 G 28740250.44 28740250.52 28740250.60 0.0488 0.0446

Neptune 73976-08-01 10:34 G 28740451.73 28740451.94 28740452.16 0.0088 0.0015

Neptune 73977-03-14 23:31 G 28740677.27 28740677.48 28740677.70 0.0088 0.0022

Neptune 73977-10-26 12:15 G 28740902.82 28740903.01 28740903.24 0.0088 0.0029

Neptune 73978-06-09 01:27 G 28741128.36 28741128.56 28741128.77 0.0088 0.0035

Neptune 73979-01-20 14:24 G 28741353.91 28741354.10 28741354.30 0.0088 0.0042

Neptune 73979-09-03 03:07 G 28741579.46 28741579.63 28741579.83 0.0088 0.0049

Neptune 73980-04-15 16:19 G 28741805.01 28741805.18 28741805.35 0.0088 0.0055

Neptune 73980-11-27 05:03 G 28742030.57 28742030.71 28742030.88 0.0088 0.0062

Jupiter 73981-03-15 23:17 G 28742139.29 28742139.47 28742139.66 0.0529 0.0196

Neptune 73981-07-10 17:46 G 28742256.12 28742256.24 28742256.40 0.0088 0.0069

Jupiter 73981-11-08 19:12 G 28742377.13 28742377.30 28742377.48 0.0538 0.0269

Neptune 73982-02-21 06:58 G 28742481.68 28742481.79 28742481.91 0.0088 0.0075

Neptune 73982-10-04 19:27 G 28742707.25 28742707.31 28742707.41 0.0088 0.0082

Saturn 73985-04-14 07:41 G 28743629.63 28743629.82 28743630.01 0.0280 0.0129

Saturn 73985-11-29 20:53 G 28743859.17 28743859.37 28743859.58 0.0281 0.0064

Jupiter 73986-06-02 11:46 G 28744043.86 28744043.99 28744044.12 0.0504 0.0383

Saturn 73986-07-17 10:34 G 28744088.87 28744088.94 28744089.04 0.0282 0.0257

Jupiter 73987-01-25 01:12 G 28744280.34 28744280.55 28744280.75 0.0495 0.0009

Jupiter 73987-09-18 04:19 G 28744516.55 28744516.68 28744516.83 0.0489 0.0357

Uranus 73992-08-06 23:03 G 28746301.35 28746301.46 28746301.59 0.0144 0.0120

Jupiter 73992-11-18 17:03 G 28746405.05 28746405.21 28746405.37 0.0526 0.0316

Uranus 73993-03-21 11:03 G 28746527.79 28746527.96 28746528.15 0.0144 0.0079

Jupiter 73993-07-14 08:53 G 28746642.68 28746642.87 28746643.07 0.0535 0.0136

Uranus 73993-11-02 23:17 G 28746754.26 28746754.47 28746754.68 0.0144 0.0038

Uranus 73994-06-17 11:17 G 28746980.75 28746980.97 28746981.19 0.0144 0.0003

Uranus 73995-01-29 23:03 G 28747207.26 28747207.46 28747207.67 0.0144 0.0044

Mars 73995-06-27 11:31 G 28747355.93 28747355.98 28747356.03 0.1612 0.1528

Uranus 73995-09-13 10:48 G 28747433.78 28747433.95 28747434.13 0.0143 0.0085

Uranus 73996-04-26 22:19 G 28747660.34 28747660.43 28747660.55 0.0143 0.0126

Jupiter 73998-02-05 06:15 G 28748309.73 28748309.76 28748309.82 0.0507 0.0495

Jupiter 73998-09-29 23:46 G 28748546.29 28748546.49 28748546.69 0.0498 0.0109

Saturn 73999-02-11 18:00 G 28748681.16 28748681.25 28748681.37 0.0280 0.0240

Jupiter 73999-05-24 06:15 G 28748782.59 28748782.76 28748782.93 0.0491 0.0259

Saturn 73999-09-29 05:17 G 28748910.51 28748910.72 28748910.93 0.0279 0.0051

Saturn 74000-05-15 15:51 G 28749139.97 28749140.16 28749140.34 0.0278 0.0136

75TH MILLENNIUM CE

This is a list of transits of Venus in the 75th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 74004-07-24 11:03 G 28750670.85 28750670.96 28750671.08 0.0523 0.0430

Jupiter 74005-03-18 23:03 G 28750908.26 28750908.46 28750908.66 0.0532 0.0007

Jupiter 74005-11-11 23:03 G 28751146.37 28751146.46 28751146.56 0.0539 0.0474

Jupiter 74010-06-04 23:17 G 28752812.29 28752812.47 28752812.66 0.0501 0.0215

Jupiter 74011-01-27 08:53 G 28753048.67 28753048.87 28753049.06 0.0493 0.0161

Saturn 74014-10-25 17:17 G 28754416.02 28754416.22 28754416.43 0.0280 0.0092

Saturn 74015-06-12 06:43 G 28754645.58 28754645.78 28754645.98 0.0281 0.0101

Jupiter 74016-11-21 12:58 G 28755173.84 28755174.04 28755174.24 0.0530 0.0124

Jupiter 74017-07-17 10:05 G 28755411.77 28755411.92 28755412.08 0.0538 0.0343

Jupiter 74022-02-07 23:03 G 28757078.31 28757078.46 28757078.62 0.0503 0.0319

Jupiter 74022-10-02 11:17 G 28757314.77 28757314.97 28757315.18 0.0495 0.0062

Jupiter 74023-05-26 13:41 G 28757550.96 28757551.07 28757551.18 0.0489 0.0412

Moon 74023-09-05 05:17 G 28757652.56 28757652.72 28757652.87 0.2707 0.0380

Earth 74023-09-05 11:03 G 28757652.81 28757652.96 28757653.11 0.2706 0.0959 *

Mars 74028-05-25 06:29 G 28759376.59 28759376.77 28759376.94 0.1911 0.0300

Jupiter 74028-07-27 06:00 G 28759439.58 28759439.75 28759439.94 0.0527 0.0246

Saturn 74028-08-23 23:17 G 28759467.33 28759467.47 28759467.61 0.0279 0.0210

Jupiter 74029-03-22 00:00 G 28759677.32 28759677.50 28759677.69 0.0536 0.0214

Saturn 74029-04-10 10:05 G 28759696.71 28759696.92 28759697.13 0.0278 0.0023

Mars 74029-04-25 07:55 G 28759711.67 28759711.83 28759711.99 0.1614 0.0668

Saturn 74029-11-25 19:55 G 28759926.17 28759926.33 28759926.51 0.0277 0.0163

Moon 74031-09-02 21:36 G 28760572.36 28760572.40 28760572.44 0.2712 0.2573

Earth 74031-09-03 00:58 G 28760572.50 28760572.54 28760572.58 0.2706 0.2598

Jupiter 74033-10-13 21:22 G 28761344.29 28761344.39 28761344.51 0.0505 0.0425

Jupiter 74034-06-07 12:29 G 28761580.82 28761581.02 28761581.23 0.0497 0.0041

Uranus 74034-09-26 19:12 G 28761692.20 28761692.30 28761692.42 0.0134 0.0115

Jupiter 74035-01-29 17:03 G 28761817.06 28761817.21 28761817.37 0.0490 0.0320

Uranus 74035-05-11 00:29 G 28761918.36 28761918.52 28761918.70 0.0134 0.0082

Uranus 74035-12-23 06:00 G 28762144.55 28762144.75 28762144.95 0.0134 0.0049

Uranus 74036-08-05 11:17 G 28762370.76 28762370.97 28762371.19 0.0134 0.0017

Uranus 74037-03-19 16:48 G 28762596.99 28762597.20 28762597.42 0.0134 0.0017

Uranus 74037-10-31 22:05 G 28762823.23 28762823.42 28762823.63 0.0135 0.0050

Uranus 74038-06-15 03:51 G 28763049.49 28763049.66 28763049.83 0.0135 0.0083

Uranus 74039-01-27 09:22 G 28763275.79 28763275.89 28763276.01 0.0135 0.0116

Jupiter 74040-04-01 00:58 G 28763705.39 28763705.54 28763705.68 0.0525 0.0361

Jupiter 74040-11-24 15:36 G 28763942.95 28763943.15 28763943.35 0.0534 0.0085

Saturn 74043-09-20 05:17 G 28764972.64 28764972.72 28764972.79 0.0279 0.0261

Saturn 74044-05-06 18:00 G 28765202.05 28765202.25 28765202.46 0.0280 0.0072

Saturn 74044-12-22 07:12 G 28765431.62 28765431.80 28765432.00 0.0281 0.0121

Jupiter 74046-02-10 12:43 G 28765846.84 28765847.03 28765847.23 0.0499 0.0145

Jupiter 74046-10-04 19:55 G 28766083.15 28766083.33 28766083.52 0.0491 0.0226

Neptune 74050-01-24 03:07 G 28767290.59 28767290.63 28767290.70 0.0089 0.0087

Neptune 74050-09-06 16:05 G 28767516.09 28767516.17 28767516.28 0.0089 0.0080

Neptune 74051-04-20 05:17 G 28767741.61 28767741.72 28767741.86 0.0090 0.0073

Neptune 74051-12-01 18:29 G 28767967.13 28767967.27 28767967.42 0.0090 0.0066

Jupiter 74051-12-05 20:39 G 28767971.28 28767971.36 28767971.45 0.0522 0.0471

Neptune 74052-07-14 07:41 G 28768192.66 28768192.82 28768192.98 0.0090 0.0059

Jupiter 74052-07-30 07:27 G 28768208.61 28768208.81 28768209.01 0.0531 0.0044

Neptune 74053-02-24 20:10 G 28768418.19 28768418.34 28768418.54 0.0090 0.0053

Jupiter 74053-03-25 06:00 G 28768446.63 28768446.75 28768446.88 0.0539 0.0424

Neptune 74053-10-08 09:22 G 28768643.72 28768643.89 28768644.09 0.0090 0.0045

Neptune 74054-05-21 22:48 G 28768869.26 28768869.45 28768869.65 0.0090 0.0038

Neptune 74055-01-02 12:00 G 28769094.79 28769095.00 28769095.20 0.0090 0.0031

Neptune 74055-08-16 00:58 G 28769320.33 28769320.54 28769320.75 0.0090 0.0024

Neptune 74056-03-28 13:55 G 28769545.87 28769546.08 28769546.29 0.0090 0.0017

Neptune 74056-11-09 02:53 G 28769771.41 28769771.62 28769771.84 0.0090 0.0010

Neptune 74057-06-22 16:05 G 28769996.95 28769997.17 28769997.39 0.0090 0.0003

Jupiter 74057-10-16 09:36 G 28770112.73 28770112.90 28770113.08 0.0502 0.0256

Neptune 74058-02-03 05:03 G 28770222.49 28770222.71 28770222.93 0.0090 0.0005

Saturn 74058-03-06 03:36 G 28770253.50 28770253.65 28770253.81 0.0280 0.0184

Jupiter 74058-06-09 20:24 G 28770349.15 28770349.35 28770349.55 0.0494 0.0122

Neptune 74058-09-16 18:00 G 28770448.04 28770448.25 28770448.47 0.0090 0.0012

Saturn 74058-10-21 14:39 G 28770482.90 28770483.11 28770483.32 0.0279 0.0006

Jupiter 74059-01-31 21:51 G 28770585.36 28770585.41 28770585.47 0.0488 0.0466

Neptune 74059-04-30 06:58 G 28770673.58 28770673.79 28770674.01 0.0090 0.0019

Saturn 74059-06-08 00:58 G 28770712.40 28770712.54 28770712.70 0.0278 0.0190

Neptune 74059-12-11 20:10 G 28770899.13 28770899.34 28770899.55 0.0090 0.0026

Neptune 74060-07-24 09:22 G 28771124.69 28771124.89 28771125.09 0.0090 0.0033

Neptune 74061-03-06 22:19 G 28771350.24 28771350.43 28771350.63 0.0090 0.0040

Mars 74061-04-24 00:29 G 28771398.42 28771398.52 28771398.61 0.1613 0.1333

Neptune 74061-10-18 11:03 G 28771575.79 28771575.96 28771576.16 0.0090 0.0048

Neptune 74062-06-01 00:15 G 28771801.36 28771801.51 28771801.70 0.0090 0.0055

Neptune 74063-01-12 13:12 G 28772026.92 28772027.05 28772027.23 0.0090 0.0062

Neptune 74063-08-26 02:24 G 28772252.48 28772252.60 28772252.76 0.0090 0.0069

Jupiter 74064-04-03 22:48 G 28772474.27 28772474.45 28772474.65 0.0528 0.0170

Neptune 74064-04-07 15:22 G 28772478.05 28772478.14 28772478.28 0.0090 0.0076

Neptune 74064-11-19 05:03 G 28772703.63 28772703.71 28772703.80 0.0090 0.0082

Jupiter 74064-11-27 18:00 G 28772712.09 28772712.25 28772712.42 0.0537 0.0294

Neptune 74065-07-02 18:15 G 28772929.25 28772929.26 28772929.29 0.0090 0.0089

Jupiter 74069-06-21 07:41 G 28774378.68 28774378.82 28774378.97 0.0504 0.0363

Jupiter 74070-02-12 21:36 G 28774615.20 28774615.40 28774615.61 0.0496 0.0021

Jupiter 74070-10-07 01:27 G 28774851.43 28774851.56 28774851.69 0.0489 0.0375

Saturn 74073-04-01 15:36 G 28775759.03 28775759.15 28775759.28 0.0279 0.0223

Saturn 74073-11-17 04:34 G 28775988.48 28775988.69 28775988.90 0.0280 0.0034

Saturn 74074-07-04 18:00 G 28776218.08 28776218.25 28776218.42 0.0281 0.0158

Jupiter 74075-12-08 13:55 G 28776739.92 28776740.08 28776740.25 0.0526 0.0292

Uranus 74076-04-06 04:19 G 28776859.65 28776859.68 28776859.75 0.0144 0.0140

Jupiter 74076-08-02 05:46 G 28776977.55 28776977.74 28776977.94 0.0535 0.0161

Uranus 74076-11-18 16:34 G 28777086.05 28777086.19 28777086.36 0.0144 0.0099

Uranus 74077-07-03 04:48 G 28777312.51 28777312.70 28777312.91 0.0144 0.0058

Uranus 74078-02-14 17:03 G 28777538.99 28777539.21 28777539.43 0.0144 0.0016

Uranus 74078-09-29 05:03 G 28777765.49 28777765.71 28777765.92 0.0144 0.0025

Uranus 74079-05-13 16:48 G 28777992.01 28777992.20 28777992.40 0.0144 0.0066

Uranus 74079-12-26 04:34 G 28778218.56 28778218.69 28778218.85 0.0143 0.0107

Jupiter 74081-02-24 06:00 G 28778644.68 28778644.75 28778644.83 0.0507 0.0467

Jupiter 74081-10-18 23:03 G 28778881.26 28778881.46 28778881.66 0.0498 0.0082

Jupiter 74082-06-12 05:17 G 28779117.55 28779117.72 28779117.89 0.0491 0.0283

Jupiter 74087-08-13 08:24 G 28781005.72 28781005.85 28781005.97 0.0523 0.0405

Saturn 74087-09-16 09:51 G 28781039.74 28781039.91 28781040.09 0.0279 0.0153

Jupiter 74088-04-06 20:53 G 28781243.16 28781243.37 28781243.57 0.0533 0.0034

Saturn 74088-05-02 20:39 G 28781269.15 28781269.36 28781269.57 0.0278 0.0034

Jupiter 74088-11-30 21:36 G 28781481.33 28781481.40 28781481.48 0.0540 0.0498

Saturn 74088-12-18 06:43 G 28781498.66 28781498.78 28781498.92 0.0277 0.0218

Jupiter 74093-06-23 23:03 G 28783147.28 28783147.46 28783147.66 0.0500 0.0187

Jupiter 74094-02-15 07:55 G 28783383.64 28783383.83 28783384.02 0.0492 0.0187

Mars 74094-03-22 08:10 G 28783418.70 28783418.84 28783418.98 0.1910 0.1120

Mars 74095-02-20 20:39 G 28783754.21 28783754.36 28783754.51 0.1615 0.0864

Jupiter 74099-04-18 04:19 G 28785271.65 28785271.68 28785271.71 0.0520 0.0512

Jupiter 74099-12-11 13:27 G 28785508.87 28785509.06 28785509.26 0.0530 0.0094

Jupiter 74100-08-06 11:17 G 28785746.83 28785746.97 28785747.12 0.0539 0.0373

Saturn 74102-10-13 17:03 G 28786545.07 28786545.21 28786545.36 0.0279 0.0202

Saturn 74103-05-31 06:00 G 28786774.53 28786774.75 28786774.96 0.0280 0.0014

Saturn 74104-01-15 19:12 G 28787004.14 28787004.30 28787004.47 0.0281 0.0179

Jupiter 74105-02-27 22:05 G 28787413.25 28787413.42 28787413.59 0.0502 0.0293

Jupiter 74105-10-22 09:36 G 28787649.70 28787649.90 28787650.11 0.0494 0.0087

Jupiter 74106-06-15 11:31 G 28787885.89 28787885.98 28787886.08 0.0488 0.0433

Jupiter 74111-08-17 07:12 G 28789774.62 28789774.80 28789774.98 0.0527 0.0216

Jupiter 74112-04-11 00:58 G 28790012.36 28790012.54 28790012.72 0.0536 0.0242

Pluto 74114-10-08 16:19 G 28790923.04 28790923.18 28790923.33 0.0065 0.0048

Pluto 74115-05-21 20:39 G 28791148.15 28791148.36 28791148.59 0.0065 0.0012

Pluto 74116-01-02 00:58 G 28791373.35 28791373.54 28791373.76 0.0065 0.0026

Pluto 74116-08-14 05:31 G 28791598.69 28791598.73 28791598.81 0.0066 0.0063

Jupiter 74116-11-02 17:17 G 28791679.10 28791679.22 28791679.35 0.0505 0.0404

Saturn 74117-03-29 14:10 G 28791825.90 28791826.09 28791826.28 0.0280 0.0127

Jupiter 74117-06-27 08:24 G 28791915.65 28791915.85 28791916.06 0.0497 0.0023

Saturn 74117-11-14 01:12 G 28792055.34 28792055.55 28792055.76 0.0279 0.0061

Jupiter 74118-02-18 13:27 G 28792151.92 28792152.06 28792152.21 0.0490 0.0339

Uranus 74118-05-28 05:03 G 28792250.67 28792250.71 28792250.78 0.0134 0.0129

Saturn 74118-07-01 11:31 G 28792284.89 28792284.98 28792285.09 0.0278 0.0245

Uranus 74119-01-09 10:05 G 28792476.79 28792476.92 28792477.09 0.0134 0.0098

Uranus 74119-08-23 15:36 G 28792702.97 28792703.15 28792703.35 0.0134 0.0064

Uranus 74120-04-05 20:53 G 28792929.17 28792929.37 28792929.59 0.0134 0.0032

Uranus 74120-11-18 02:24 G 28793155.38 28793155.60 28793155.82 0.0134 0.0001

Uranus 74121-07-02 07:55 G 28793381.62 28793381.83 28793382.04 0.0134 0.0034

Uranus 74122-02-13 13:12 G 28793607.87 28793608.05 28793608.25 0.0135 0.0068

Uranus 74122-09-27 18:43 G 28793834.15 28793834.28 28793834.44 0.0135 0.0101

Jupiter 74123-04-22 00:29 G 28794040.36 28794040.52 28794040.67 0.0524 0.0334

Uranus 74123-05-12 00:15 G 28794060.50 28794060.51 28794060.56 0.0135 0.0134

Jupiter 74123-12-15 14:39 G 28794277.91 28794278.11 28794278.30 0.0534 0.0112

Mars 74127-02-20 13:12 G 28795440.93 28795441.05 28795441.17 0.1613 0.1137

Jupiter 74129-03-02 08:24 G 28796181.65 28796181.85 28796182.05 0.0499 0.0126

Jupiter 74129-10-24 16:05 G 28796417.99 28796418.17 28796418.35 0.0492 0.0243

Neptune 74131-07-31 17:46 G 28797063.23 28797063.24 28797063.28 0.0088 0.0087

Neptune 74132-03-13 06:29 G 28797288.71 28797288.77 28797288.89 0.0088 0.0081

Saturn 74132-04-25 04:05 G 28797331.50 28797331.67 28797331.84 0.0279 0.0164

Neptune 74132-10-24 19:55 G 28797514.23 28797514.33 28797514.47 0.0088 0.0074

Saturn 74132-12-10 17:03 G 28797561.00 28797561.21 28797561.42 0.0280 0.0027

Neptune 74133-06-07 09:07 G 28797739.75 28797739.88 28797740.03 0.0088 0.0067

Saturn 74133-07-28 06:15 G 28797790.64 28797790.76 28797790.91 0.0281 0.0219

Neptune 74134-01-18 21:51 G 28797965.27 28797965.41 28797965.59 0.0088 0.0061

Neptune 74134-09-01 10:48 G 28798190.79 28798190.95 28798191.15 0.0088 0.0054

Jupiter 74134-12-25 16:34 G 28798306.10 28798306.19 28798306.30 0.0522 0.0448

Neptune 74135-04-15 00:00 G 28798416.32 28798416.50 28798416.70 0.0088 0.0047

Jupiter 74135-08-20 03:07 G 28798543.43 28798543.63 28798543.83 0.0531 0.0021

Neptune 74135-11-26 13:12 G 28798641.86 28798642.05 28798642.26 0.0088 0.0040

Jupiter 74136-04-14 01:55 G 28798781.47 28798781.58 28798781.70 0.0539 0.0445

Neptune 74136-07-09 01:55 G 28798867.39 28798867.58 28798867.81 0.0088 0.0034

Neptune 74137-02-19 15:07 G 28799092.93 28799093.13 28799093.35 0.0088 0.0027

Neptune 74137-10-03 04:05 G 28799318.46 28799318.67 28799318.90 0.0088 0.0020

Neptune 74138-05-16 17:17 G 28799544.00 28799544.22 28799544.44 0.0088 0.0013

Neptune 74138-12-28 06:29 G 28799769.55 28799769.77 28799769.99 0.0088 0.0006

Neptune 74139-08-10 19:27 G 28799995.09 28799995.31 28799995.53 0.0088 0.0001

Neptune 74140-03-23 08:24 G 28800220.63 28800220.85 28800221.07 0.0088 0.0008

Neptune 74140-11-03 21:22 G 28800446.17 28800446.39 28800446.61 0.0088 0.0015

Jupiter 74140-11-05 08:24 G 28800447.67 28800447.85 28800448.04 0.0502 0.0230

Neptune 74141-06-17 10:19 G 28800671.72 28800671.93 28800672.15 0.0088 0.0022

Jupiter 74141-06-29 18:58 G 28800684.09 28800684.29 28800684.49 0.0494 0.0147

Neptune 74142-01-28 23:03 G 28800897.27 28800897.46 28800897.69 0.0088 0.0029

Jupiter 74142-02-20 19:55 G 28800920.32 28800920.33 28800920.35 0.0488 0.0486

Neptune 74142-09-11 12:15 G 28801122.81 28801123.01 28801123.22 0.0088 0.0035

Neptune 74143-04-25 01:12 G 28801348.36 28801348.55 28801348.75 0.0088 0.0042

Neptune 74143-12-06 14:10 G 28801573.92 28801574.09 28801574.29 0.0088 0.0049

Neptune 74144-07-19 02:53 G 28801799.47 28801799.62 28801799.81 0.0088 0.0056

Neptune 74145-03-01 15:51 G 28802025.02 28802025.16 28802025.33 0.0088 0.0062

Neptune 74145-10-13 04:34 G 28802250.57 28802250.69 28802250.85 0.0088 0.0069

Neptune 74146-05-26 17:46 G 28802476.14 28802476.24 28802476.36 0.0088 0.0075

Saturn 74146-10-09 21:51 G 28802612.21 28802612.41 28802612.61 0.0279 0.0094

Neptune 74147-01-07 06:29 G 28802701.71 28802701.77 28802701.87 0.0088 0.0082

Jupiter 74147-04-24 19:12 G 28802809.11 28802809.30 28802809.50 0.0529 0.0145

Saturn 74147-05-27 08:24 G 28802841.65 28802841.85 28802842.05 0.0278 0.0092

Jupiter 74147-12-18 14:53 G 28803046.96 28803047.12 28803047.29 0.0537 0.0318

Saturn 74148-01-11 18:29 G 28803071.25 28803071.27 28803071.30 0.0277 0.0275

Jupiter 74152-07-11 07:27 G 28804713.65 28804713.81 28804713.96 0.0504 0.0335

Jupiter 74153-03-04 20:24 G 28804950.15 28804950.35 28804950.56 0.0495 0.0047

Earth 74153-03-07 17:31 G 28804953.09 28804953.23 28804953.36 0.2626 0.1355

Moon 74153-03-07 19:12 G 28804953.16 28804953.30 28804953.43 0.2632 0.1225 *

Jupiter 74153-10-26 23:31 G 28805186.37 28805186.48 28805186.60 0.0489 0.0397

Jupiter 74158-12-28 13:12 G 28807074.88 28807075.05 28807075.23 0.0526 0.0264

Jupiter 74159-08-23 06:00 G 28807312.56 28807312.75 28807312.93 0.0535 0.0190

Mars 74160-01-18 10:48 G 28807460.93 28807460.95 28807460.98 0.1909 0.1885

Uranus 74160-07-19 21:36 G 28807644.29 28807644.40 28807644.54 0.0144 0.0119

Mars 74160-12-19 09:22 G 28807796.76 28807796.89 28807797.02 0.1615 0.1065

Uranus 74161-03-03 09:51 G 28807870.74 28807870.91 28807871.10 0.0144 0.0078

Earth 74161-03-05 09:51 G 28807872.79 28807872.91 28807873.03 0.2626 0.1699

Moon 74161-03-05 14:39 G 28807872.97 28807873.11 28807873.24 0.2629 0.1331 *

Uranus 74161-10-15 22:05 G 28808097.21 28808097.42 28808097.63 0.0144 0.0037

Saturn 74161-11-05 06:15 G 28808117.58 28808117.76 28808117.95 0.0280 0.0142

Uranus 74162-05-30 10:05 G 28808323.71 28808323.92 28808324.15 0.0144 0.0006

Saturn 74162-06-22 19:12 G 28808347.09 28808347.30 28808347.51 0.0281 0.0048

Uranus 74163-01-11 22:19 G 28808550.22 28808550.43 28808550.64 0.0144 0.0046

Saturn 74163-02-07 08:39 G 28808576.76 28808576.86 28808576.97 0.0281 0.0240

Uranus 74163-08-26 10:05 G 28808776.76 28808776.92 28808777.10 0.0144 0.0087

Jupiter 74164-03-16 04:48 G 28808979.60 28808979.70 28808979.80 0.0506 0.0441

Uranus 74164-04-08 22:05 G 28809003.32 28809003.42 28809003.52 0.0143 0.0127

Jupiter 74164-11-07 21:07 G 28809216.18 28809216.38 28809216.59 0.0497 0.0058

Jupiter 74165-07-02 02:53 G 28809452.46 28809452.62 28809452.78 0.0491 0.0305

Jupiter 74170-09-02 08:39 G 28811340.72 28811340.86 28811341.00 0.0523 0.0379

Jupiter 74171-04-27 21:22 G 28811578.19 28811578.39 28811578.59 0.0533 0.0060

Jupiter 74171-12-21 22:05 G 28811816.37 28811816.42 28811816.47 0.0540 0.0523

Saturn 74175-09-04 13:55 G 28813169.00 28813169.08 28813169.17 0.0281 0.0257

Saturn 74176-04-21 01:27 G 28813398.36 28813398.56 28813398.76 0.0280 0.0069

Jupiter 74176-07-13 18:29 G 28813482.08 28813482.27 28813482.47 0.0500 0.0167

Saturn 74176-12-06 12:15 G 28813627.82 28813628.01 28813628.21 0.0279 0.0118

Jupiter 74177-03-07 03:22 G 28813718.46 28813718.64 28813718.83 0.0493 0.0205

Jupiter 74182-05-08 03:36 G 28815606.58 28815606.65 28815606.72 0.0520 0.0486

Jupiter 74182-12-31 12:29 G 28815843.82 28815844.02 28815844.22 0.0530 0.0067

Jupiter 74183-08-26 09:51 G 28816081.77 28816081.91 28816082.04 0.0538 0.0396

Jupiter 74188-03-18 16:48 G 28817748.03 28817748.20 28817748.37 0.0503 0.0274

Jupiter 74188-11-10 04:48 G 28817984.50 28817984.70 28817984.90 0.0495 0.0105

Jupiter 74189-07-04 07:12 G 28818220.73 28818220.80 28818220.88 0.0489 0.0449

Saturn 74191-05-18 17:17 G 28818904.03 28818904.22 28818904.42 0.0280 0.0103

Saturn 74192-01-03 06:29 G 28819133.57 28819133.77 28819133.97 0.0281 0.0088

Saturn 74192-08-19 19:55 G 28819363.31 28819363.33 28819363.36 0.0282 0.0279

Mars 74192-12-18 01:41 G 28819483.43 28819483.57 28819483.71 0.1613 0.0936

Jupiter 74194-09-05 02:10 G 28820109.41 28820109.59 28820109.78 0.0527 0.0194

Jupiter 74195-04-30 20:10 G 28820347.16 28820347.34 28820347.51 0.0536 0.0263

Jupiter 74199-11-22 15:22 G 28822014.01 28822014.14 28822014.28 0.0505 0.0379

Jupiter 74200-07-17 06:43 G 28822250.57 28822250.78 28822250.99 0.0497 0.0005

Jupiter 74201-03-10 11:17 G 28822486.84 28822486.97 28822487.11 0.0490 0.0361

Uranus 74202-09-09 19:41 G 28823035.22 28823035.32 28823035.45 0.0134 0.0112

Pluto 74203-01-21 17:03 G 28823169.06 28823169.21 28823169.39 0.0079 0.0052

Uranus 74203-04-24 00:58 G 28823261.38 28823261.54 28823261.72 0.0134 0.0080

Pluto 74203-09-04 03:36 G 28823394.43 28823394.65 28823394.87 0.0079 0.0015

Uranus 74203-12-06 06:29 G 28823487.57 28823487.77 28823487.97 0.0134 0.0047

Uranus 74204-07-19 11:46 G 28823713.78 28823713.99 28823714.21 0.0134 0.0015

Uranus 74205-03-02 17:17 G 28823940.01 28823940.22 28823940.44 0.0134 0.0019

Saturn 74205-03-17 23:03 G 28823955.34 28823955.46 28823955.59 0.0280 0.0222

Uranus 74205-10-14 22:48 G 28824166.25 28824166.45 28824166.65 0.0134 0.0052

Saturn 74205-11-02 10:05 G 28824184.72 28824184.92 28824185.14 0.0279 0.0035

Jupiter 74206-05-11 19:41 G 28824375.16 28824375.32 28824375.48 0.0525 0.0311

Uranus 74206-05-29 04:19 G 28824392.52 28824392.68 28824392.85 0.0134 0.0085

Saturn 74206-06-19 20:53 G 28824414.19 28824414.37 28824414.55 0.0278 0.0151

Jupiter 74207-01-04 10:05 G 28824612.73 28824612.92 28824613.12 0.0534 0.0135

Uranus 74207-01-10 09:51 G 28824618.82 28824618.91 28824619.02 0.0135 0.0118

Jupiter 74211-07-29 12:58 G 28826279.99 28826280.04 28826280.11 0.0508 0.0483

Jupiter 74212-03-22 07:12 G 28826516.60 28826516.80 28826517.00 0.0499 0.0099

Jupiter 74212-11-13 14:10 G 28826752.92 28826753.09 28826753.27 0.0491 0.0267

Neptune 74214-04-29 14:10 G 28827285.07 28827285.09 28827285.15 0.0090 0.0088

Neptune 74214-12-11 03:22 G 28827510.56 28827510.64 28827510.74 0.0090 0.0081

Neptune 74215-07-24 16:19 G 28827736.07 28827736.18 28827736.31 0.0090 0.0074

Neptune 74216-03-06 05:31 G 28827961.58 28827961.73 28827961.87 0.0090 0.0067

Neptune 74216-10-17 18:00 G 28828187.11 28828187.25 28828187.43 0.0090 0.0061

Neptune 74217-05-31 07:41 G 28828412.64 28828412.82 28828412.99 0.0090 0.0053

Neptune 74218-01-11 20:39 G 28828638.17 28828638.36 28828638.55 0.0090 0.0046

Jupiter 74218-01-14 14:53 G 28828641.00 28828641.12 28828641.24 0.0522 0.0423

Neptune 74218-08-25 09:36 G 28828863.71 28828863.90 28828864.10 0.0090 0.0039

Jupiter 74218-09-09 02:10 G 28828878.39 28828878.59 28828878.79 0.0532 0.0011

Neptune 74219-04-07 22:34 G 28829089.24 28829089.44 28829089.65 0.0090 0.0032

Jupiter 74219-05-05 01:41 G 28829116.48 28829116.57 28829116.67 0.0540 0.0472

Neptune 74219-11-19 11:31 G 28829314.78 28829314.98 28829315.20 0.0090 0.0025

Saturn 74220-04-13 07:41 G 28829460.77 28829460.82 28829460.89 0.0279 0.0267

Neptune 74220-07-02 00:43 G 28829540.32 28829540.53 28829540.75 0.0090 0.0018

Saturn 74220-11-28 20:10 G 28829690.14 28829690.34 28829690.55 0.0280 0.0080

Neptune 74221-02-12 13:41 G 28829765.86 28829766.07 28829766.29 0.0090 0.0011

Saturn 74221-07-16 09:07 G 28829919.69 28829919.88 28829920.08 0.0281 0.0111

Neptune 74221-09-26 02:53 G 28829991.40 28829991.62 28829991.84 0.0090 0.0003

Neptune 74222-05-09 15:51 G 28830216.95 28830217.16 28830217.38 0.0090 0.0005

Neptune 74222-12-21 05:03 G 28830442.49 28830442.71 28830442.93 0.0090 0.0011

Neptune 74223-08-03 17:46 G 28830668.04 28830668.24 28830668.47 0.0090 0.0019

Jupiter 74223-11-26 06:43 G 28830782.59 28830782.78 28830782.97 0.0501 0.0204

Neptune 74224-03-16 06:43 G 28830893.58 28830893.78 28830894.00 0.0090 0.0026

Jupiter 74224-07-19 16:34 G 28831019.00 28831019.19 28831019.38 0.0493 0.0170

Neptune 74224-10-27 19:55 G 28831119.13 28831119.33 28831119.54 0.0090 0.0033

Neptune 74225-06-10 09:07 G 28831344.69 28831344.88 28831345.08 0.0090 0.0040

Neptune 74226-01-21 22:05 G 28831570.24 28831570.42 28831570.62 0.0090 0.0047

Neptune 74226-09-04 11:03 G 28831795.80 28831795.96 28831796.15 0.0090 0.0054

Mars 74226-10-17 22:05 G 28831839.32 28831839.42 28831839.53 0.1616 0.1261

Neptune 74227-04-18 00:15 G 28832021.36 28832021.51 28832021.68 0.0090 0.0061

Neptune 74227-11-29 13:27 G 28832246.92 28832247.06 28832247.20 0.0090 0.0068

Neptune 74228-07-12 02:39 G 28832472.50 28832472.61 28832472.73 0.0090 0.0075

Neptune 74229-02-22 15:36 G 28832698.08 28832698.15 28832698.25 0.0090 0.0082

Neptune 74229-10-06 04:34 G 28832923.68 28832923.69 28832923.73 0.0090 0.0089

Jupiter 74230-05-14 19:27 G 28833144.11 28833144.31 28833144.51 0.0529 0.0116

Jupiter 74231-01-07 15:22 G 28833381.99 28833382.14 28833382.30 0.0537 0.0344

Saturn 74234-09-28 02:10 G 28834741.45 28834741.59 28834741.75 0.0280 0.0198

Saturn 74235-05-15 13:41 G 28834970.86 28834971.07 28834971.28 0.0279 0.0009

Jupiter 74235-08-01 02:39 G 28835048.45 28835048.61 28835048.77 0.0504 0.0315

Saturn 74235-12-31 00:29 G 28835200.36 28835200.52 28835200.68 0.0278 0.0177

Jupiter 74236-03-24 15:51 G 28835284.95 28835285.16 28835285.36 0.0495 0.0066

Jupiter 74236-11-15 18:58 G 28835521.19 28835521.29 28835521.40 0.0489 0.0414

Jupiter 74242-01-17 12:15 G 28837409.83 28837410.01 28837410.19 0.0526 0.0237

Jupiter 74242-09-12 04:34 G 28837647.51 28837647.69 28837647.87 0.0535 0.0215

Uranus 74244-03-20 03:22 G 28838202.59 28838202.64 28838202.70 0.0144 0.0138

Uranus 74244-11-01 15:36 G 28838428.99 28838429.15 28838429.31 0.0144 0.0097

Uranus 74245-06-16 03:51 G 28838655.46 28838655.66 28838655.86 0.0144 0.0056

Uranus 74246-01-28 16:05 G 28838881.95 28838882.17 28838882.39 0.0144 0.0015

Uranus 74246-09-12 04:05 G 28839108.46 28839108.67 28839108.89 0.0144 0.0026

Jupiter 74247-04-05 23:17 G 28839314.36 28839314.47 28839314.58 0.0506 0.0422

Uranus 74247-04-26 15:51 G 28839334.98 28839335.16 28839335.37 0.0144 0.0068

Jupiter 74247-11-28 16:05 G 28839550.96 28839551.17 28839551.37 0.0498 0.0039

Uranus 74247-12-09 04:05 G 28839561.53 28839561.67 28839561.82 0.0143 0.0108

Jupiter 74248-07-21 22:05 G 28839787.27 28839787.42 28839787.58 0.0491 0.0322

Saturn 74249-10-24 18:15 G 28840247.14 28840247.26 28840247.38 0.0279 0.0229

Saturn 74250-06-11 06:58 G 28840476.58 28840476.79 28840477.00 0.0280 0.0042

Saturn 74251-01-26 20:10 G 28840706.17 28840706.34 28840706.53 0.0281 0.0150

Jupiter 74253-09-22 03:22 G 28841675.50 28841675.64 28841675.79 0.0523 0.0355

Jupiter 74254-05-17 16:05 G 28841912.97 28841913.17 28841913.37 0.0533 0.0083

Mars 74257-11-15 12:43 G 28843190.94 28843191.03 28843191.13 0.1912 0.1618

Mars 74258-10-16 14:39 G 28843525.96 28843526.11 28843526.27 0.1614 0.0749

Jupiter 74259-08-03 16:34 G 28843816.99 28843817.19 28843817.38 0.0500 0.0141

Jupiter 74260-03-27 01:12 G 28844053.37 28844053.55 28844053.74 0.0492 0.0229

Saturn 74264-04-09 12:00 G 28845527.83 28845528.00 28845528.17 0.0280 0.0162

Saturn 74264-11-24 23:03 G 28845757.25 28845757.46 28845757.67 0.0279 0.0026

Jupiter 74265-05-27 22:19 G 28845941.34 28845941.43 28845941.52 0.0520 0.0464

Saturn 74265-07-12 09:22 G 28845986.76 28845986.89 28845987.03 0.0278 0.0210

Jupiter 74266-01-20 07:12 G 28846178.60 28846178.80 28846179.01 0.0530 0.0046

Earth 74266-09-07 11:03 G 28846408.81 28846408.96 28846409.11 0.2706 0.0941

Moon 74266-09-07 16:48 G 28846409.07 28846409.20 28846409.34 0.2708 0.1261 *

Jupiter 74266-09-15 04:48 G 28846416.58 28846416.70 28846416.83 0.0538 0.0417

Jupiter 74271-04-08 15:36 G 28848082.98 28848083.15 28848083.33 0.0502 0.0247

Jupiter 74271-12-01 03:22 G 28848319.44 28848319.64 28848319.84 0.0494 0.0130

Jupiter 74272-07-24 05:03 G 28848555.66 28848555.71 28848555.77 0.0488 0.0470

Earth 74274-09-05 00:43 G 28849328.50 28849328.53 28849328.57 0.2706 0.2616

Moon 74274-09-05 05:46 G 28849328.66 28849328.74 28849328.83 0.2702 0.2323

Jupiter 74277-09-25 00:15 G 28850444.32 28850444.51 28850444.70 0.0528 0.0167

Jupiter 74278-05-20 18:58 G 28850682.12 28850682.29 28850682.46 0.0537 0.0291

Saturn 74279-05-06 21:51 G 28851033.28 28851033.41 28851033.56 0.0279 0.0206

Saturn 74279-12-22 10:34 G 28851262.73 28851262.94 28851263.15 0.0280 0.0018

Saturn 74280-08-07 23:31 G 28851492.32 28851492.48 28851492.65 0.0281 0.0173

Jupiter 74282-12-12 13:55 G 28852348.94 28852349.08 28852349.23 0.0505 0.0352

Jupiter 74283-08-06 04:34 G 28852585.48 28852585.69 28852585.89 0.0496 0.0030

Jupiter 74284-03-29 08:39 G 28852821.74 28852821.86 28852821.99 0.0490 0.0382

Uranus 74286-05-10 05:46 G 28853593.69 28853593.74 28853593.83 0.0134 0.0127

Uranus 74286-12-22 11:03 G 28853819.82 28853819.96 28853820.13 0.0134 0.0094

Uranus 74287-08-05 16:34 G 28854046.00 28854046.19 28854046.39 0.0134 0.0061

Uranus 74288-03-18 21:51 G 28854272.21 28854272.41 28854272.63 0.0134 0.0029

Uranus 74288-10-31 03:22 G 28854498.42 28854498.64 28854498.86 0.0134 0.0004

Jupiter 74289-05-30 19:27 G 28854710.14 28854710.31 28854710.48 0.0525 0.0284

Uranus 74289-06-14 08:53 G 28854724.67 28854724.87 28854725.08 0.0134 0.0037

Jupiter 74290-01-23 10:19 G 28854947.74 28854947.93 28854948.13 0.0534 0.0163

Uranus 74290-01-26 14:10 G 28854950.92 28854951.09 28854951.29 0.0134 0.0071

Uranus 74290-09-09 19:41 G 28855177.20 28855177.32 28855177.47 0.0135 0.0104

Mars 74292-08-14 11:03 G 28855881.88 28855881.96 28855882.03 0.1616 0.1459

Saturn 74293-10-20 14:39 G 28856313.94 28856314.11 28856314.30 0.0280 0.0138

Saturn 74294-06-07 01:55 G 28856543.37 28856543.58 28856543.79 0.0279 0.0050

Jupiter 74294-08-17 08:39 G 28856614.78 28856614.86 28856614.95 0.0507 0.0461

Saturn 74295-01-22 12:29 G 28856772.91 28856773.02 28856773.14 0.0278 0.0234

Jupiter 74295-04-11 02:24 G 28856851.40 28856851.60 28856851.81 0.0498 0.0079

Jupiter 74295-12-03 09:36 G 28857087.74 28857087.90 28857088.07 0.0491 0.0286

Neptune 74296-06-15 17:03 G 28857283.15 28857283.21 28857283.31 0.0088 0.0082

Neptune 74297-01-27 06:15 G 28857508.66 28857508.76 28857508.89 0.0088 0.0075

Neptune 74297-09-09 19:27 G 28857734.18 28857734.31 28857734.46 0.0088 0.0068

Neptune 74298-04-23 08:10 G 28857959.70 28857959.84 28857960.02 0.0088 0.0062

Neptune 74298-12-04 21:22 G 28858185.24 28858185.39 28858185.58 0.0088 0.0055

Neptune 74299-07-18 10:34 G 28858410.77 28858410.94 28858411.14 0.0088 0.0048

Neptune 74300-02-28 23:31 G 28858636.29 28858636.48 28858636.69 0.0088 0.0041

Neptune 74300-10-12 12:43 G 28858861.83 28858862.03 28858862.24 0.0088 0.0034

Jupiter 74301-02-03 13:55 G 28858975.95 28858976.08 28858976.21 0.0522 0.0396

Neptune 74301-05-26 01:27 G 28859087.36 28859087.56 28859087.78 0.0088 0.0028

Jupiter 74301-09-29 00:58 G 28859213.34 28859213.54 28859213.75 0.0532 0.0037

Neptune 74302-01-06 14:39 G 28859312.90 28859313.11 28859313.33 0.0088 0.0021

Jupiter 74302-05-25 00:15 G 28859451.44 28859451.51 28859451.59 0.0539 0.0495

Neptune 74302-08-20 03:36 G 28859538.44 28859538.65 28859538.88 0.0088 0.0014

Neptune 74303-04-02 16:48 G 28859763.98 28859764.20 28859764.42 0.0088 0.0007

Neptune 74303-11-14 05:46 G 28859989.52 28859989.74 28859989.97 0.0088 0.0001

Neptune 74304-06-26 18:43 G 28860215.06 28860215.28 28860215.51 0.0088 0.0007

Neptune 74305-02-07 07:41 G 28860440.60 28860440.82 28860441.04 0.0088 0.0014

Neptune 74305-09-20 20:39 G 28860666.15 28860666.36 28860666.58 0.0088 0.0021

Neptune 74306-05-04 09:36 G 28860891.70 28860891.90 28860892.12 0.0088 0.0028

Neptune 74306-12-15 22:34 G 28861117.25 28861117.44 28861117.66 0.0088 0.0035

Jupiter 74306-12-16 01:27 G 28861117.37 28861117.56 28861117.75 0.0501 0.0184 *

Neptune 74307-07-29 11:31 G 28861342.80 28861342.98 28861343.19 0.0088 0.0042

Jupiter 74307-08-09 11:31 G 28861353.79 28861353.98 28861354.17 0.0493 0.0189

Neptune 74308-03-11 00:29 G 28861568.35 28861568.52 28861568.72 0.0088 0.0049

Neptune 74308-10-22 13:41 G 28861793.90 28861794.07 28861794.25 0.0088 0.0055

Saturn 74308-11-17 07:12 G 28861819.63 28861819.80 28861819.97 0.0279 0.0170

Neptune 74309-06-05 02:24 G 28862019.46 28862019.60 28862019.77 0.0088 0.0062

Saturn 74309-07-04 19:55 G 28862049.12 28862049.33 28862049.55 0.0280 0.0019

Neptune 74310-01-16 15:22 G 28862245.02 28862245.14 28862245.30 0.0088 0.0069

Saturn 74310-02-19 09:36 G 28862278.76 28862278.90 28862279.04 0.0281 0.0210

Neptune 74310-08-30 04:34 G 28862470.59 28862470.69 28862470.81 0.0088 0.0075

Neptune 74311-04-12 17:17 G 28862696.16 28862696.22 28862696.31 0.0088 0.0082

Jupiter 74312-10-09 06:43 G 28863241.74 28863241.78 28863241.83 0.0519 0.0504

Jupiter 74313-06-03 14:10 G 28863478.89 28863479.09 28863479.29 0.0529 0.0093

Jupiter 74314-01-27 09:51 G 28863716.76 28863716.91 28863717.06 0.0537 0.0365

Jupiter 74318-08-21 00:15 G 28865383.34 28865383.51 28865383.68 0.0504 0.0289

Jupiter 74319-04-14 13:41 G 28865619.87 28865620.07 28865620.27 0.0495 0.0091

Jupiter 74319-12-06 17:03 G 28865856.12 28865856.21 28865856.30 0.0489 0.0436

Saturn 74323-05-04 01:12 G 28867100.35 28867100.55 28867100.75 0.0279 0.0101

Mars 74323-09-13 15:36 G 28867233.00 28867233.15 28867233.31 0.1911 0.0846

Saturn 74323-12-19 12:00 G 28867329.80 28867330.00 28867330.20 0.0278 0.0085

Saturn 74324-08-04 22:05 G 28867559.38 28867559.42 28867559.48 0.0277 0.0269

Mars 74324-08-14 03:22 G 28867568.47 28867568.64 28867568.80 0.1614 0.0544

Jupiter 74325-02-06 06:43 G 28867744.60 28867744.78 28867744.96 0.0526 0.0215

Jupiter 74325-10-01 23:03 G 28867982.28 28867982.46 28867982.64 0.0535 0.0237

Uranus 74328-07-02 21:36 G 28868987.28 28868987.40 28868987.54 0.0144 0.0116

Uranus 74329-02-14 09:51 G 28869213.73 28869213.91 28869214.10 0.0144 0.0075

Uranus 74329-09-28 22:05 G 28869440.21 28869440.42 28869440.64 0.0144 0.0034

Jupiter 74330-04-25 22:19 G 28869649.30 28869649.43 28869649.56 0.0506 0.0394

Uranus 74330-05-13 10:19 G 28869666.71 28869666.93 28869667.15 0.0144 0.0007

Jupiter 74330-12-18 14:39 G 28869885.91 28869886.11 28869886.32 0.0497 0.0017

Uranus 74330-12-25 22:19 G 28869893.24 28869893.43 28869893.65 0.0144 0.0049

Uranus 74331-08-09 10:34 G 28870119.77 28870119.94 28870120.11 0.0144 0.0089

Jupiter 74331-08-11 20:24 G 28870122.21 28870122.35 28870122.49 0.0490 0.0345

Uranus 74332-03-22 22:05 G 28870346.35 28870346.42 28870346.53 0.0143 0.0130

Jupiter 74336-10-12 00:58 G 28872010.38 28872010.54 28872010.69 0.0524 0.0331

Jupiter 74337-06-06 14:24 G 28872247.90 28872248.10 28872248.30 0.0533 0.0110

Saturn 74338-05-30 11:17 G 28872605.79 28872605.97 28872606.15 0.0279 0.0146

Saturn 74339-01-15 00:15 G 28872835.30 28872835.51 28872835.72 0.0280 0.0044

Saturn 74339-09-01 13:12 G 28873064.94 28873065.05 28873065.17 0.0281 0.0234

Jupiter 74341-12-29 19:12 G 28873915.27 28873915.30 28873915.34 0.0509 0.0499

Jupiter 74342-08-23 14:39 G 28874151.91 28874152.11 28874152.32 0.0500 0.0116

Jupiter 74343-04-16 23:03 G 28874388.28 28874388.46 28874388.64 0.0492 0.0251

Jupiter 74348-06-16 21:22 G 28876276.29 28876276.39 28876276.50 0.0521 0.0439

Jupiter 74349-02-09 07:12 G 28876513.60 28876513.80 28876514.01 0.0531 0.0019

Jupiter 74349-10-05 05:17 G 28876751.61 28876751.72 28876751.84 0.0539 0.0444

Saturn 74352-03-28 15:51 G 28877657.10 28877657.16 28877657.23 0.0280 0.0266

Saturn 74352-11-13 03:22 G 28877886.43 28877886.64 28877886.84 0.0279 0.0078

Saturn 74353-06-30 14:10 G 28878115.90 28878116.09 28878116.29 0.0279 0.0108

Jupiter 74354-04-28 11:46 G 28878417.81 28878417.99 28878418.17 0.0502 0.0224

Jupiter 74354-12-20 23:03 G 28878654.27 28878654.46 28878654.66 0.0494 0.0151

Jupiter 74355-08-14 00:58 G 28878890.54 28878890.54 28878890.55 0.0488 0.0488

Jupiter 74360-10-14 23:46 G 28880779.29 28880779.49 28880779.68 0.0528 0.0138

Pluto 74360-11-08 06:15 G 28880803.57 28880803.76 28880803.95 0.0065 0.0033

Jupiter 74361-06-09 18:15 G 28881017.10 28881017.26 28881017.43 0.0537 0.0318

Pluto 74361-06-21 10:48 G 28881028.73 28881028.95 28881029.17 0.0065 0.0004

Pluto 74362-02-01 14:53 G 28881253.97 28881254.12 28881254.31 0.0066 0.0042

Jupiter 74366-01-01 09:07 G 28882683.73 28882683.88 28882684.04 0.0505 0.0331

Jupiter 74366-08-25 23:46 G 28882920.29 28882920.49 28882920.70 0.0496 0.0051

Jupiter 74367-04-19 04:19 G 28883156.56 28883156.68 28883156.80 0.0490 0.0400

Saturn 74367-12-10 19:27 G 28883392.12 28883392.31 28883392.51 0.0279 0.0112

Saturn 74368-07-27 08:24 G 28883621.65 28883621.85 28883622.06 0.0280 0.0078

Saturn 74369-03-13 21:51 G 28883851.36 28883851.41 28883851.48 0.0281 0.0269

Uranus 74370-08-22 20:53 G 28884378.26 28884378.37 28884378.51 0.0134 0.0109

Uranus 74371-04-06 02:10 G 28884604.42 28884604.59 28884604.78 0.0134 0.0076

Uranus 74371-11-18 07:41 G 28884830.62 28884830.82 28884831.03 0.0134 0.0043

Jupiter 74372-06-19 14:39 G 28885044.93 28885045.11 28885045.28 0.0525 0.0260

Uranus 74372-07-01 13:12 G 28885056.83 28885057.05 28885057.27 0.0134 0.0010

Jupiter 74373-02-12 05:03 G 28885282.53 28885282.71 28885282.90 0.0534 0.0186

Uranus 74373-02-12 18:29 G 28885283.06 28885283.27 28885283.49 0.0134 0.0023

Uranus 74373-09-26 23:46 G 28885509.31 28885509.49 28885509.70 0.0134 0.0056

Uranus 74374-05-11 05:17 G 28885735.57 28885735.72 28885735.89 0.0134 0.0089

Uranus 74374-12-23 11:03 G 28885961.87 28885961.96 28885962.06 0.0135 0.0121

Jupiter 74377-09-06 06:15 G 28886949.66 28886949.76 28886949.87 0.0508 0.0436

Jupiter 74378-05-01 00:29 G 28887186.32 28887186.52 28887186.73 0.0499 0.0052

Neptune 74378-08-02 00:58 G 28887279.54 28887279.54 28887279.57 0.0090 0.0089

Jupiter 74378-12-23 07:55 G 28887422.67 28887422.83 28887422.99 0.0491 0.0310

Neptune 74379-03-15 13:41 G 28887505.01 28887505.07 28887505.17 0.0090 0.0083

Neptune 74379-10-27 02:39 G 28887730.51 28887730.61 28887730.75 0.0090 0.0076

Neptune 74380-06-08 15:51 G 28887956.04 28887956.16 28887956.31 0.0090 0.0069

Neptune 74381-01-20 04:48 G 28888181.56 28888181.70 28888181.87 0.0090 0.0062

Neptune 74381-09-02 17:46 G 28888407.08 28888407.24 28888407.43 0.0090 0.0055

Saturn 74381-10-09 02:39 G 28888443.49 28888443.61 28888443.73 0.0280 0.0230

Neptune 74382-04-16 06:43 G 28888632.62 28888632.78 28888632.99 0.0090 0.0048

Saturn 74382-05-26 13:41 G 28888672.86 28888673.07 28888673.28 0.0279 0.0042

Neptune 74382-11-27 19:55 G 28888858.15 28888858.33 28888858.54 0.0090 0.0040

Saturn 74383-01-11 00:15 G 28888902.33 28888902.51 28888902.69 0.0278 0.0143

Neptune 74383-07-11 09:22 G 28889083.69 28889083.89 28889084.09 0.0090 0.0033

Neptune 74384-02-21 22:19 G 28889309.22 28889309.43 28889309.64 0.0090 0.0026

Jupiter 74384-02-23 08:39 G 28889310.72 28889310.86 28889311.00 0.0522 0.0373

Neptune 74384-10-04 11:17 G 28889534.76 28889534.97 28889535.19 0.0090 0.0019

Jupiter 74384-10-17 19:41 G 28889548.12 28889548.32 28889548.52 0.0532 0.0058

Neptune 74385-05-18 00:29 G 28889760.31 28889760.52 28889760.74 0.0090 0.0012

Jupiter 74385-06-12 19:12 G 28889786.24 28889786.30 28889786.35 0.0539 0.0516

Neptune 74385-12-29 13:41 G 28889985.85 28889986.07 28889986.29 0.0090 0.0004

Neptune 74386-08-12 02:39 G 28890211.40 28890211.61 28890211.83 0.0090 0.0004

Neptune 74387-03-25 15:36 G 28890436.94 28890437.15 28890437.37 0.0090 0.0011

Neptune 74387-11-06 04:34 G 28890662.49 28890662.69 28890662.91 0.0090 0.0018

Neptune 74388-06-18 17:46 G 28890888.04 28890888.24 28890888.46 0.0090 0.0025

Neptune 74389-01-30 06:58 G 28891113.59 28891113.79 28891113.99 0.0090 0.0032

Mars 74389-07-10 17:31 G 28891275.05 28891275.23 28891275.40 0.1910 0.0043

Neptune 74389-09-12 19:41 G 28891339.14 28891339.32 28891339.53 0.0090 0.0040

Jupiter 74390-01-04 00:29 G 28891452.33 28891452.52 28891452.72 0.0501 0.0157

Neptune 74390-04-26 08:39 G 28891564.69 28891564.86 28891565.06 0.0090 0.0047

Mars 74390-06-11 15:51 G 28891610.99 28891611.16 28891611.33 0.1615 0.0352

Jupiter 74390-08-28 10:19 G 28891688.75 28891688.93 28891689.12 0.0493 0.0214

Neptune 74390-12-07 21:36 G 28891790.25 28891790.40 28891790.59 0.0090 0.0054

Neptune 74391-07-21 10:48 G 28892015.81 28892015.95 28892016.12 0.0090 0.0061

Neptune 74392-03-02 23:46 G 28892241.37 28892241.49 28892241.65 0.0090 0.0068

Neptune 74392-10-14 12:58 G 28892466.93 28892467.04 28892467.17 0.0090 0.0075

Neptune 74393-05-28 02:10 G 28892692.52 28892692.59 28892692.69 0.0090 0.0082

Neptune 74394-01-08 15:07 G 28892918.12 28892918.13 28892918.18 0.0090 0.0089

Jupiter 74395-10-29 04:05 G 28893576.60 28893576.67 28893576.75 0.0519 0.0481

Earth 74396-03-09 19:55 G 28893709.21 28893709.33 28893709.46 0.2626 0.1625

Moon 74396-03-09 21:07 G 28893709.27 28893709.38 28893709.49 0.2620 0.1988 *

Jupiter 74396-06-22 12:15 G 28893813.81 28893814.01 28893814.21 0.0530 0.0068

Saturn 74396-11-04 11:03 G 28893948.93 28893948.96 28893949.00 0.0279 0.0274

Jupiter 74397-02-15 08:39 G 28894051.73 28894051.86 28894052.00 0.0538 0.0391

Saturn 74397-06-21 23:31 G 28894178.28 28894178.48 28894178.68 0.0280 0.0088

Saturn 74398-02-06 12:29 G 28894407.83 28894408.02 28894408.22 0.0281 0.0102

Jupiter 74401-09-08 23:17 G 28895718.30 28895718.47 28895718.65 0.0503 0.0262

Jupiter 74402-05-03 12:00 G 28895954.80 28895955.00 28895955.20 0.0495 0.0116

Jupiter 74402-12-25 15:07 G 28896191.06 28896191.13 28896191.20 0.0489 0.0457

Moon 74404-03-07 08:53 G 28896628.76 28896628.87 28896628.99 0.2622 0.1897

Earth 74404-03-07 12:29 G 28896628.88 28896629.02 28896629.15 0.2626 0.1421 *

Jupiter 74408-02-26 06:29 G 28898079.58 28898079.77 28898079.96 0.0527 0.0187

Jupiter	74408-10-20 23:46 G	28898317.32	28898317.49	28898317.67	0.0536	0.0266
Saturn	74411-04-21 04:05 G	28899229.54	28899229.67	28899229.82	0.0280	0.0207
Saturn	74411-12-06 15:22 G	28899458.93	28899459.14	28899459.35	0.0279	0.0020
Uranus	74412-03-02 04:19 G	28899545.61	28899545.68	28899545.76	0.0144	0.0134
Saturn	74412-07-23 02:10 G	28899688.42	28899688.59	28899688.76	0.0278	0.0165
Uranus	74412-10-14 16:34 G	28899772.03	28899772.19	28899772.36	0.0144	0.0093
Jupiter	74413-05-14 19:27 G	28899984.17	28899984.31	28899984.45	0.0506	0.0370
Uranus	74413-05-29 04:48 G	28899998.50	28899998.70	28899998.91	0.0144	0.0052
Jupiter	74414-01-06 11:17 G	28900220.77	28900220.97	28900221.18	0.0497	0.0016
Uranus	74414-01-10 17:17 G	28900225.01	28900225.22	28900225.44	0.0144	0.0011
Uranus	74414-08-25 05:31 G	28900451.52	28900451.73	28900451.95	0.0144	0.0030
Jupiter	74414-08-30 16:48 G	28900457.06	28900457.20	28900457.34	0.0490	0.0365
Uranus	74415-04-08 17:31 G	28900678.04	28900678.23	28900678.42	0.0144	0.0071
Uranus	74415-11-21 05:17 G	28900904.60	28900904.72	28900904.87	0.0144	0.0112
Jupiter	74419-11-01 00:43 G	28902345.37	28902345.53	28902345.70	0.0524	0.0302
Jupiter	74420-06-25 14:24 G	28902582.91	28902583.10	28902583.30	0.0533	0.0139
Jupiter	74425-01-17 15:36 G	28904250.08	28904250.15	28904250.22	0.0509	0.0476
Jupiter	74425-09-11 10:48 G	28904486.75	28904486.95	28904487.15	0.0499	0.0092
Jupiter	74426-05-05 19:12 G	28904723.13	28904723.30	28904723.47	0.0492	0.0272
Saturn	74426-05-17 17:31 G	28904735.13	28904735.23	28904735.33	0.0279	0.0244
Saturn	74427-01-02 06:15 G	28904964.55	28904964.76	28904964.97	0.0280	0.0057
Saturn	74427-08-19 19:12 G	28905194.12	28905194.30	28905194.50	0.0281	0.0134
Jupiter	74431-07-06 17:46 G	28906611.12	28906611.24	28906611.36	0.0521	0.0414
Jupiter	74432-02-29 02:53 G	28906848.42	28906848.62	28906848.82	0.0530	0.0012
Jupiter	74432-10-24 00:29 G	28907086.43	28907086.52	28907086.63	0.0538	0.0466
Jupiter	74437-05-17 09:51 G	28908752.73	28908752.91	28908753.10	0.0502	0.0198
Jupiter	74438-01-08 21:36 G	28908989.21	28908989.40	28908989.60	0.0494	0.0177
Saturn	74440-10-31 14:39 G	28910015.94	28910016.11	28910016.28	0.0280	0.0172
Saturn	74441-06-18 01:27 G	28910245.35	28910245.56	28910245.77	0.0279	0.0016
Saturn	74442-02-02 11:46 G	28910474.85	28910474.99	28910475.14	0.0278	0.0200

Jupiter 74443-03-11 13:27 G 28910877.06 28910877.06 28910877.06 0.0518 0.0517

Jupiter 74443-11-03 18:58 G 28911114.09 28911114.29 28911114.49 0.0528 0.0114

Jupiter 74444-06-28 13:27 G 28911351.91 28911352.06 28911352.22 0.0537 0.0340

Jupiter 74449-01-20 08:39 G 28913018.70 28913018.86 28913019.03 0.0505 0.0303

Pluto 74449-02-20 11:03 G 28913049.75 28913049.96 28913050.18 0.0079 0.0018

Jupiter 74449-09-13 23:17 G 28913255.26 28913255.47 28913255.67 0.0496 0.0077

Pluto 74449-10-03 20:53 G 28913275.21 28913275.37 28913275.56 0.0079 0.0049

Jupiter 74450-05-08 03:22 G 28913491.54 28913491.64 28913491.75 0.0490 0.0423

Uranus 74454-04-22 07:27 G 28914936.73 28914936.81 28914936.90 0.0134 0.0122

Uranus 74454-12-04 12:29 G 28915162.88 28915163.02 28915163.20 0.0134 0.0090

Mars 74455-05-07 20:10 G 28915317.18 28915317.34 28915317.51 0.1909 0.0734

Jupiter 74455-07-09 12:43 G 28915379.85 28915380.03 28915380.21 0.0525 0.0234

Uranus 74455-07-18 18:00 G 28915389.07 28915389.25 28915389.46 0.0134 0.0058

Saturn 74455-11-27 21:51 G 28915521.29 28915521.41 28915521.55 0.0279 0.0219

Uranus 74456-02-29 23:31 G 28915615.27 28915615.48 28915615.69 0.0134 0.0025

Jupiter 74456-03-03 03:51 G 28915617.48 28915617.66 28915617.85 0.0535 0.0213

Mars 74456-04-08 04:34 G 28915653.52 28915653.69 28915653.87 0.1615 0.0156

Saturn 74456-07-14 10:34 G 28915750.73 28915750.94 28915751.15 0.0280 0.0032

Uranus 74456-10-13 04:48 G 28915841.49 28915841.70 28915841.92 0.0134 0.0008

Saturn 74457-02-28 23:31 G 28915980.32 28915980.48 28915980.66 0.0281 0.0159

Uranus 74457-05-27 10:05 G 28916067.73 28916067.92 28916068.14 0.0134 0.0042

Uranus 74458-01-08 15:51 G 28916293.98 28916294.16 28916294.34 0.0134 0.0074

Uranus 74458-08-22 21:07 G 28916520.26 28916520.38 28916520.52 0.0135 0.0107

Neptune 74460-09-18 03:07 G 28917277.58 28917277.63 28917277.72 0.0088 0.0083

Jupiter 74460-09-25 06:15 G 28917284.65 28917284.76 28917284.89 0.0507 0.0409

Neptune 74461-05-01 16:34 G 28917503.09 28917503.19 28917503.31 0.0088 0.0076

Jupiter 74461-05-20 00:00 G 28917521.29 28917521.50 28917521.70 0.0498 0.0025

Neptune 74461-12-13 06:00 G 28917728.61 28917728.75 28917728.88 0.0088 0.0069

Jupiter 74462-01-11 06:43 G 28917757.63 28917757.78 28917757.93 0.0491 0.0333

Neptune 74462-07-26 18:29 G 28917954.14 28917954.27 28917954.45 0.0088 0.0063

Neptune 74463-03-09 07:41 G 28918179.66 28918179.82 28918180.00 0.0088 0.0056

Neptune 74463-10-20 20:39 G 28918405.19 28918405.36 28918405.56 0.0088 0.0049

Neptune 74464-06-02 09:51 G 28918630.73 28918630.91 28918631.12 0.0088 0.0042

Neptune 74465-01-13 23:03 G 28918856.26 28918856.46 28918856.67 0.0088 0.0035

Neptune 74465-08-27 12:00 G 28919081.79 28919082.00 28919082.21 0.0088 0.0028

Neptune 74466-04-10 00:58 G 28919307.33 28919307.54 28919307.76 0.0088 0.0021

Neptune 74466-11-21 13:55 G 28919532.87 28919533.08 28919533.31 0.0088 0.0015

Jupiter 74467-03-14 08:24 G 28919645.71 28919645.85 28919646.01 0.0523 0.0346

Neptune 74467-07-05 02:53 G 28919758.41 28919758.62 28919758.85 0.0088 0.0008

Jupiter 74467-11-06 20:24 G 28919883.15 28919883.35 28919883.55 0.0532 0.0088

Neptune 74468-02-15 15:51 G 28919983.94 28919984.16 28919984.39 0.0088 0.0002

Neptune 74468-09-28 04:48 G 28920209.48 28920209.70 28920209.92 0.0088 0.0007

Neptune 74469-05-11 17:31 G 28920435.02 28920435.23 28920435.46 0.0088 0.0014

Neptune 74469-12-23 06:43 G 28920660.57 28920660.78 28920661.00 0.0088 0.0021

Saturn 74470-05-13 15:36 G 28920801.98 28920802.15 28920802.33 0.0280 0.0150

Neptune 74470-08-05 19:55 G 28920886.12 28920886.33 28920886.54 0.0088 0.0027

Saturn 74470-12-29 02:39 G 28921031.40 28921031.61 28921031.82 0.0279 0.0036

Neptune 74471-03-19 08:39 G 28921111.66 28921111.86 28921112.07 0.0088 0.0034

Saturn 74471-08-15 12:58 G 28921260.92 28921261.04 28921261.17 0.0278 0.0220

Neptune 74471-10-30 21:36 G 28921337.21 28921337.40 28921337.60 0.0088 0.0041

Neptune 74472-06-12 10:34 G 28921562.76 28921562.94 28921563.14 0.0088 0.0048

Jupiter 74473-01-22 22:19 G 28921787.23 28921787.43 28921787.63 0.0500 0.0131

Neptune 74473-01-23 23:31 G 28921788.32 28921788.48 28921788.67 0.0088 0.0055

Neptune 74473-09-06 12:15 G 28922013.87 28922014.01 28922014.19 0.0088 0.0062

Jupiter 74473-09-16 07:41 G 28922023.64 28922023.82 28922024.00 0.0493 0.0237

Neptune 74474-04-20 01:41 G 28922239.43 28922239.57 28922239.71 0.0088 0.0068

Neptune 74474-12-01 14:24 G 28922465.00 28922465.10 28922465.23 0.0088 0.0075

Neptune 74475-07-15 03:07 G 28922690.58 28922690.63 28922690.73 0.0088 0.0082

Jupiter 74478-11-17 04:34 G 28923911.60 28923911.69 28923911.79 0.0520 0.0453

Jupiter 74479-07-12 12:58 G 28924148.84 28924149.04 28924149.24 0.0530 0.0036

Jupiter 74480-03-06 09:36 G 28924386.78 28924386.90 28924387.03 0.0538 0.0420

Jupiter 74484-09-27 20:24 G 28926053.18 28926053.35 28926053.54 0.0503 0.0237

Jupiter 74485-05-22 09:07 G 28926289.69 28926289.88 28926290.08 0.0495 0.0139

Saturn 74485-06-09 02:24 G 28926307.45 28926307.60 28926307.75 0.0279 0.0193

Jupiter 74486-01-13 12:15 G 28926525.97 28926526.01 28926526.05 0.0489 0.0477

Saturn 74486-01-24 15:22 G 28926536.93 28926537.14 28926537.36 0.0280 0.0007

Saturn 74486-09-11 04:48 G 28926766.54 28926766.70 28926766.86 0.0281 0.0186

Jupiter 74491-03-17 03:36 G 28928414.46 28928414.65 28928414.84 0.0526 0.0160

Jupiter 74491-11-09 20:10 G 28928652.17 28928652.34 28928652.51 0.0535 0.0290

Jupiter 74496-06-02 17:46 G 28930319.10 28930319.24 28930319.40 0.0506 0.0344

Uranus 74496-06-13 23:31 G 28930330.35 28930330.48 28930330.63 0.0144 0.0111

Jupiter 74497-01-25 10:19 G 28930555.72 28930555.93 28930556.13 0.0497 0.0039

Uranus 74497-01-26 12:00 G 28930556.81 28930557.00 28930557.20 0.0144 0.0070

Uranus 74497-09-10 00:15 G 28930783.30 28930783.51 28930783.73 0.0144 0.0029

Jupiter 74497-09-18 15:51 G 28930792.05 28930792.16 28930792.29 0.0491 0.0391

Uranus 74498-04-24 12:29 G 28931009.81 28931010.02 28931010.24 0.0144 0.0013

Uranus 74498-12-07 00:29 G 28931236.33 28931236.52 28931236.74 0.0144 0.0054

Uranus 74499-07-21 12:43 G 28931462.87 28931463.03 28931463.20 0.0144 0.0094

Saturn 74499-11-24 01:27 G 28931588.37 28931588.56 28931588.76 0.0280 0.0116

Uranus 74500-03-05 00:29 G 28931689.46 28931689.52 28931689.60 0.0144 0.0135

Saturn 74500-07-11 12:15 G 28931817.81 28931818.01 28931818.22 0.0279 0.0071

Saturn 74501-02-25 22:19 G 28932047.36 28932047.43 28932047.53 0.0278 0.0254

Jupiter 74502-11-20 21:07 G 28932680.21 28932680.38 28932680.56 0.0524 0.0277

Jupiter 74503-07-16 10:19 G 28932917.74 28932917.93 28932918.12 0.0533 0.0163

Jupiter 74508-02-07 15:07 G 28934585.04 28934585.13 28934585.23 0.0509 0.0449

Jupiter 74508-10-01 10:34 G 28934821.74 28934821.94 28934822.15 0.0500 0.0066

Jupiter 74509-05-25 18:58 G 28935058.13 28935058.29 28935058.46 0.0492 0.0298

Moon 74509-09-09 05:46 G 28935164.58 28935164.74 28935164.90 0.2703 0.0780

Earth 74509-09-09 11:03 G 28935164.82 28935164.96 28935165.11 0.2706 0.0938 *

Jupiter 74514-07-26 16:05 G 28936946.04 28936946.17 28936946.31 0.0521 0.0389

Saturn 74514-12-21 06:58 G 28937093.63 28937093.79 28937093.97 0.0279 0.0167

Jupiter 74515-03-21 01:55 G 28937183.38 28937183.58 28937183.78 0.0531 0.0037

Saturn 74515-08-07 19:55 G 28937323.11 28937323.33 28937323.54 0.0280 0.0022

Jupiter 74515-11-14 00:15 G 28937421.43 28937421.51 28937421.59 0.0539 0.0492

Saturn 74516-03-24 08:53 G 28937552.74 28937552.87 28937553.02 0.0281 0.0212

Earth 74517-09-07 00:58 G 28938084.50 28938084.54 28938084.58 0.2706 0.2605

Jupiter 74520-06-06 10:34 G 28939087.74 28939087.94 28939088.13 0.0502 0.0169

Jupiter 74521-01-28 21:36 G 28939324.21 28939324.40 28939324.59 0.0494 0.0203

Mars 74521-03-04 22:05 G 28939359.32 28939359.42 28939359.53 0.1907 0.1537

Mars 74522-02-04 17:17 G 28939696.04 28939696.22 28939696.39 0.1616 0.0050

Jupiter 74526-03-31 13:12 G 28941212.00 28941212.05 28941212.12 0.0518 0.0493

Jupiter 74526-11-23 19:55 G 28941449.13 28941449.33 28941449.53 0.0529 0.0085

Jupiter 74527-07-19 15:07 G 28941686.99 28941687.13 28941687.28 0.0537 0.0370

Saturn 74529-06-06 02:10 G 28942374.39 28942374.59 28942374.79 0.0279 0.0095

Saturn 74530-01-21 12:58 G 28942603.84 28942604.04 28942604.24 0.0278 0.0091

Saturn 74530-09-07 22:48 G 28942833.43 28942833.45 28942833.50 0.0277 0.0274

Jupiter 74532-02-10 07:55 G 28943353.66 28943353.83 28943354.00 0.0504 0.0275

Jupiter 74532-10-03 21:51 G 28943590.21 28943590.41 28943590.61 0.0496 0.0103

Jupiter 74533-05-28 01:27 G 28943826.48 28943826.56 28943826.65 0.0489 0.0445

Jupiter 74538-07-29 14:10 G 28945714.91 28945715.09 28945715.28 0.0526 0.0202

Uranus 74538-08-04 22:48 G 28945721.33 28945721.45 28945721.60 0.0134 0.0105

Uranus 74539-03-19 04:05 G 28945947.50 28945947.67 28945947.87 0.0134 0.0072

Jupiter 74539-03-24 05:46 G 28945952.56 28945952.74 28945952.92 0.0535 0.0245

Uranus 74539-10-31 09:36 G 28946173.70 28946173.90 28946174.11 0.0134 0.0039

Uranus 74540-06-13 15:07 G 28946399.91 28946400.13 28946400.34 0.0134 0.0006

Uranus 74541-01-25 20:24 G 28946626.14 28946626.35 28946626.56 0.0134 0.0026

Uranus 74541-09-09 01:27 G 28946852.38 28946852.56 28946852.77 0.0134 0.0060

Uranus 74542-04-23 06:43 G 28947078.64 28947078.78 28947078.95 0.0134 0.0093

Uranus 74542-12-05 12:15 G 28947304.95 28947305.01 28947305.10 0.0135 0.0125

Neptune 74543-06-18 00:15 G 28947499.45 28947499.51 28947499.59 0.0090 0.0084

Jupiter 74543-10-16 04:48 G 28947619.57 28947619.70 28947619.84 0.0507 0.0382

Neptune 74544-01-29 13:12 G 28947724.95 28947725.05 28947725.17 0.0090 0.0077

Jupiter 74544-06-08 22:05 G 28947856.22 28947856.42 28947856.63 0.0498 0.0007

Saturn 74544-07-02 10:05 G 28947879.74 28947879.92 28947880.10 0.0279 0.0143

Neptune 74544-09-11 02:10 G 28947950.46 28947950.59 28947950.73 0.0090 0.0070

Jupiter 74545-01-31 04:48 G 28948092.56 28948092.70 28948092.84 0.0491 0.0356

Saturn 74545-02-16 23:17 G 28948109.26 28948109.47 28948109.68 0.0280 0.0046

Neptune 74545-04-24 15:07 G 28948175.98 28948176.13 28948176.29 0.0090 0.0063

Saturn 74545-10-04 12:58 G 28948338.92 28948339.04 28948339.15 0.0281 0.0237

Neptune 74545-12-06 04:05 G 28948401.51 28948401.67 28948401.85 0.0090 0.0056

Neptune 74546-07-19 17:03 G 28948627.04 28948627.21 28948627.40 0.0090 0.0049

Neptune 74547-03-02 06:00 G 28948852.57 28948852.75 28948852.95 0.0090 0.0042

Neptune 74547-10-13 18:58 G 28949078.10 28949078.29 28949078.50 0.0090 0.0034

Neptune 74548-05-26 08:24 G 28949303.64 28949303.85 28949304.06 0.0090 0.0027

Neptune 74549-01-06 21:22 G 28949529.18 28949529.39 28949529.61 0.0090 0.0020

Neptune 74549-08-20 10:19 G 28949754.72 28949754.93 28949755.15 0.0090 0.0013

Neptune 74550-04-02 23:31 G 28949980.26 28949980.48 28949980.70 0.0090 0.0005

Jupiter 74550-04-03 06:58 G 28949980.63 28949980.79 28949980.95 0.0522 0.0318 *

Neptune 74550-11-14 12:43 G 28950205.81 28950206.03 28950206.24 0.0090 0.0003

Jupiter 74550-11-26 18:15 G 28950218.07 28950218.26 28950218.46 0.0532 0.0115

Neptune 74551-06-28 01:41 G 28950431.36 28950431.57 28950431.79 0.0090 0.0010

Neptune 74552-02-08 14:39 G 28950656.91 28950657.11 28950657.33 0.0090 0.0017

Neptune 74552-09-21 03:51 G 28950882.45 28950882.66 28950882.87 0.0090 0.0024

Neptune 74553-05-04 16:48 G 28951108.01 28951108.20 28951108.41 0.0090 0.0031

Neptune 74553-12-16 05:46 G 28951333.56 28951333.74 28951333.95 0.0090 0.0039

Neptune 74554-07-29 18:58 G 28951559.11 28951559.29 28951559.49 0.0090 0.0046

Neptune 74555-03-12 07:55 G 28951784.67 28951784.83 28951785.02 0.0090 0.0053

Jupiter 74555-06-21 00:00 G 28951885.45 28951885.50 28951885.56 0.0510 0.0490

Neptune 74555-10-23 21:07 G 28952010.23 28952010.38 28952010.55 0.0090 0.0060

Jupiter 74556-02-12 21:22 G 28952122.19 28952122.39 28952122.60 0.0501 0.0104

Neptune 74556-06-05 10:34 G 28952235.79 28952235.94 28952236.08 0.0090 0.0067

Jupiter 74556-10-06 07:27 G 28952358.64 28952358.81 28952358.98 0.0493 0.0263

Neptune 74557-01-16 23:03 G 28952461.36 28952461.46 28952461.60 0.0090 0.0075

Neptune 74557-08-30 12:00 G 28952686.94 28952687.00 28952687.12 0.0090 0.0082

Neptune 74558-04-13 00:58 G 28952912.54 28952912.54 28952912.60 0.0090 0.0089

Saturn 74558-05-01 23:46 G 28952931.41 28952931.49 28952931.59 0.0281 0.0250

Saturn 74558-12-17 11:03 G 28953160.76 28953160.96 28953161.17 0.0280 0.0063

Saturn 74559-08-03 21:51 G 28953390.22 28953390.41 28953390.60 0.0278 0.0124

Jupiter 74561-12-07 02:24 G 28954246.49 28954246.60 28954246.72 0.0519 0.0427

Jupiter 74562-08-01 10:05 G 28954483.72 28954483.92 28954484.12 0.0529 0.0010

Jupiter 74563-03-27 06:15 G 28954721.65 28954721.76 28954721.87 0.0538 0.0444

Jupiter 74567-10-18 20:39 G 28956388.17 28956388.36 28956388.55 0.0503 0.0209

Jupiter 74568-06-11 09:22 G 28956624.70 28956624.89 28956625.09 0.0495 0.0166

Saturn 74574-01-12 14:53 G 28958665.93 28958666.12 28958666.32 0.0279 0.0116

Jupiter 74574-04-06 02:39 G 28958749.42 28958749.61 28958749.81 0.0527 0.0133

Saturn 74574-08-30 03:51 G 28958895.45 28958895.66 28958895.86 0.0280 0.0073

Jupiter 74574-11-29 19:55 G 28958987.17 28958987.33 28958987.50 0.0536 0.0318

Saturn 74575-04-16 17:03 G 28959125.14 28959125.21 28959125.29 0.0281 0.0262

Jupiter 74579-06-23 19:27 G 28960654.15 28960654.31 28960654.47 0.0506 0.0314

Uranus 74580-02-13 05:46 G 28960888.67 28960888.74 28960888.86 0.0144 0.0130

Jupiter 74580-02-15 11:03 G 28960890.76 28960890.96 28960891.17 0.0497 0.0067

Uranus 74580-09-26 18:15 G 28961115.11 28961115.26 28961115.45 0.0144 0.0089

Jupiter 74580-10-08 16:19 G 28961127.07 28961127.18 28961127.28 0.0490 0.0414

Uranus 74581-05-11 06:58 G 28961341.59 28961341.79 28961342.00 0.0144 0.0047

Uranus 74581-12-23 19:27 G 28961568.09 28961568.31 28961568.53 0.0144 0.0006

Uranus 74582-08-07 07:41 G 28961794.61 28961794.82 28961795.03 0.0144 0.0035

Uranus 74583-03-21 19:41 G 28962021.14 28962021.32 28962021.51 0.0144 0.0076

Uranus 74583-11-03 07:27 G 28962247.70 28962247.81 28962247.95 0.0144 0.0117

Jupiter 74585-12-09 22:05 G 28963015.25 28963015.42 28963015.60 0.0524 0.0248

Jupiter 74586-08-04 12:15 G 28963252.82 28963253.01 28963253.20 0.0534 0.0195

Saturn 74587-11-12 00:29 G 28963717.40 28963717.52 28963717.64 0.0280 0.0228

Mars 74587-12-03 06:00 G 28963738.57 28963738.75 28963738.92 0.1617 0.0252

Saturn 74588-06-28 11:46 G 28963946.78 28963946.99 28963947.20 0.0279 0.0042

Saturn 74589-02-12 22:19 G 28964176.25 28964176.43 28964176.61 0.0278 0.0143

Jupiter 74591-02-26 15:36 G 28964920.05 28964920.15 28964920.27 0.0508 0.0421

Jupiter 74591-10-21 10:34 G 28965156.73 28965156.94 28965157.14 0.0499 0.0037

Jupiter 74592-06-13 18:00 G 28965393.11 28965393.25 28965393.41 0.0492 0.0323

Jupiter 74597-08-14 18:00 G 28967281.11 28967281.25 28967281.40 0.0522 0.0358

Jupiter 74598-04-09 04:34 G 28967518.49 28967518.69 28967518.89 0.0531 0.0071

Jupiter 74598-12-03 03:07 G 28967756.59 28967756.63 28967756.68 0.0539 0.0524

Jupiter 74603-06-27 09:36 G 28969422.71 28969422.90 28969423.10 0.0502 0.0142

Saturn 74603-07-26 16:19 G 28969451.99 28969452.18 28969452.39 0.0279 0.0095

Jupiter 74604-02-18 20:24 G 28969659.17 28969659.35 28969659.54 0.0494 0.0229

Saturn 74604-03-12 05:31 G 28969681.54 28969681.73 28969681.94 0.0280 0.0095

Pluto 74606-04-28 14:24 G 28970459.00 28970459.10 28970459.20 0.0065 0.0057

Pluto 74606-12-09 18:15 G 28970684.07 28970684.26 28970684.49 0.0065 0.0022

Pluto 74607-07-22 23:03 G 28970909.26 28970909.46 28970909.68 0.0065 0.0016

Pluto 74608-03-04 03:22 G 28971134.53 28971134.64 28971134.78 0.0066 0.0054

Jupiter 74609-04-20 13:12 G 28971546.97 28971547.05 28971547.14 0.0518 0.0464

Jupiter 74609-12-13 19:12 G 28971784.10 28971784.30 28971784.50 0.0528 0.0056

Jupiter 74610-08-08 13:55 G 28972021.95 28972022.08 28972022.22 0.0537 0.0396

Jupiter 74615-03-02 06:58 G 28973688.62 28973688.79 28973688.97 0.0505 0.0249

Jupiter 74615-10-24 21:36 G 28973925.20 28973925.40 28973925.60 0.0496 0.0130

Jupiter 74616-06-17 01:41 G 28974161.52 28974161.57 28974161.63 0.0490 0.0470

Saturn 74617-05-25 08:24 G 28974503.71 28974503.85 28974504.01 0.0281 0.0198

Saturn 74618-01-09 19:55 G 28974733.12 28974733.33 28974733.54 0.0279 0.0011

Saturn 74618-08-27 06:15 G 28974962.61 28974962.76 28974962.94 0.0278 0.0176

Jupiter 74621-08-18 12:29 G 28976049.83 28976050.02 28976050.21 0.0525 0.0175

Uranus 74622-04-05 09:36 G 28976279.82 28976279.90 28976280.02 0.0134 0.0118

Jupiter 74622-04-13 03:22 G 28976287.47 28976287.64 28976287.82 0.0534 0.0271

Uranus 74622-11-17 14:53 G 28976505.97 28976506.12 28976506.30 0.0134 0.0086

Uranus 74623-07-01 20:24 G 28976732.16 28976732.35 28976732.56 0.0134 0.0053

Uranus 74624-02-13 01:41 G 28976958.36 28976958.57 28976958.79 0.0134 0.0021

Uranus 74624-09-26 06:58 G 28977184.58 28977184.79 28977185.01 0.0134 0.0012

Neptune 74624-12-22 13:12 G 28977272.00 28977272.05 28977272.11 0.0088 0.0084

Uranus 74625-05-10 12:00 G 28977410.81 28977411.00 28977411.22 0.0134 0.0046

Neptune 74625-08-05 01:55 G 28977497.50 28977497.58 28977497.70 0.0088 0.0078

Uranus 74625-12-22 17:31 G 28977637.06 28977637.23 28977637.41 0.0134 0.0078

Neptune 74626-03-18 15:07 G 28977723.02 28977723.13 28977723.28 0.0088 0.0071

Uranus 74626-08-05 22:48 G 28977863.34 28977863.45 28977863.58 0.0134 0.0111

Neptune 74626-10-30 04:19 G 28977948.54 28977948.68 28977948.84 0.0088 0.0064

Jupiter 74626-11-05 04:48 G 28977954.56 28977954.70 28977954.85 0.0507 0.0356

Neptune 74627-06-12 17:31 G 28978174.07 28978174.23 28978174.41 0.0088 0.0057

Jupiter 74627-06-29 22:34 G 28978191.24 28978191.44 28978191.65 0.0498 0.0028

Neptune 74628-01-24 06:43 G 28978399.60 28978399.78 28978399.96 0.0088 0.0050

Jupiter 74628-02-21 05:17 G 28978427.60 28978427.72 28978427.85 0.0491 0.0381

Neptune 74628-09-05 19:41 G 28978625.13 28978625.32 28978625.52 0.0088 0.0043

Neptune 74629-04-19 08:53 G 28978850.67 28978850.87 28978851.07 0.0088 0.0036

Neptune 74629-11-30 21:36 G 28979076.21 28979076.40 28979076.63 0.0088 0.0030

Neptune 74630-07-14 10:48 G 28979301.74 28979301.95 28979302.18 0.0088 0.0023

Neptune 74631-02-24 23:46 G 28979527.28 28979527.49 28979527.72 0.0088 0.0016

Neptune 74631-10-08 12:43 G 28979752.82 28979753.03 28979753.26 0.0088 0.0009

Neptune 74632-05-21 01:55 G 28979978.36 28979978.58 28979978.80 0.0088 0.0001

Saturn 74632-06-20 09:07 G 28980008.80 28980008.88 28980008.98 0.0278 0.0253

Neptune 74633-01-01 14:53 G 28980203.90 28980204.12 28980204.35 0.0088 0.0006

Saturn 74633-02-04 21:51 G 28980238.20 28980238.41 28980238.62 0.0279 0.0067

Jupiter 74633-04-23 06:29 G 28980315.61 28980315.77 28980315.94 0.0523 0.0291

Neptune 74633-08-15 03:51 G 28980429.44 28980429.66 28980429.88 0.0088 0.0013

Saturn 74633-09-22 10:48 G 28980467.76 28980467.95 28980468.14 0.0281 0.0122

Jupiter 74633-12-16 18:15 G 28980553.07 28980553.26 28980553.46 0.0532 0.0144

Neptune 74634-03-28 16:34 G 28980654.98 28980655.19 28980655.42 0.0088 0.0020

Neptune 74634-11-09 05:31 G 28980880.53 28980880.73 28980880.95 0.0088 0.0027

Neptune 74635-06-22 18:29 G 28981106.08 28981106.27 28981106.49 0.0088 0.0034

Neptune 74636-02-03 07:12 G 28981331.62 28981331.80 28981332.02 0.0088 0.0041

Neptune 74636-09-15 20:10 G 28981557.17 28981557.34 28981557.55 0.0088 0.0048

Neptune 74637-04-29 09:36 G 28981782.73 28981782.90 28981783.07 0.0088 0.0054

Neptune 74637-12-10 22:34 G 28982008.29 28982008.44 28982008.60 0.0088 0.0061

Jupiter 74638-07-11 02:10 G 28982220.51 28982220.59 28982220.68 0.0510 0.0460

Neptune 74638-07-24 11:17 G 28982233.85 28982233.97 28982234.13 0.0088 0.0068

Jupiter 74639-03-04 23:03 G 28982457.26 28982457.46 28982457.66 0.0501 0.0074

Neptune 74639-03-07 00:00 G 28982459.41 28982459.50 28982459.64 0.0088 0.0075

Moon 74639-03-12 19:12 G 28982465.18 28982465.30 28982465.43 0.2631 0.1499

Earth 74639-03-12 22:34 G 28982465.33 28982465.44 28982465.55 0.2626 0.1893 *

Neptune 74639-10-18 12:43 G 28982684.98 28982685.03 28982685.14 0.0088 0.0082

Jupiter 74639-10-27 08:24 G 28982693.68 28982693.85 28982694.02 0.0493 0.0289

Jupiter 74644-12-27 03:07 G 28984581.51 28984581.63 28984581.76 0.0520 0.0399

Jupiter 74645-08-21 11:46 G 28984818.79 28984818.99 28984819.19 0.0530 0.0022

Jupiter 74646-04-16 08:53 G 28985056.78 28985056.87 28985056.97 0.0538 0.0474

Saturn 74646-12-05 09:07 G 28985289.72 28985289.88 28985290.05 0.0280 0.0176

Earth 74647-03-10 14:39 G 28985384.97 28985385.11 28985385.26 0.2626 0.1172

Moon 74647-03-10 15:36 G 28985385.01 28985385.15 28985385.30 0.2633 0.0757 *

Saturn 74647-07-22 20:24 G 28985519.14 28985519.35 28985519.56 0.0279 0.0011

Saturn 74648-03-08 06:43 G 28985748.63 28985748.78 28985748.93 0.0278 0.0194

Jupiter 74650-11-07 21:36 G 28986723.21 28986723.40 28986723.59 0.0503 0.0179

Jupiter 74651-07-02 09:36 G 28986959.72 28986959.90 28986960.09 0.0495 0.0193

Mars 74653-09-30 18:43 G 28987781.11 28987781.28 28987781.45 0.1618 0.0445

Jupiter 74656-09-01 00:43 G 28988847.48 28988847.53 28988847.58 0.0517 0.0500

Jupiter 74657-04-26 05:46 G 28989084.54 28989084.74 28989084.94 0.0527 0.0098

Jupiter 74657-12-19 23:31 G 28989322.33 28989322.48 28989322.63 0.0536 0.0352

Saturn 74661-12-31 09:36 G 28990794.79 28990794.90 28990795.02 0.0279 0.0234

Jupiter 74662-07-13 19:27 G 28990989.15 28990989.31 28990989.48 0.0505 0.0286

Saturn 74662-08-17 22:19 G 28991024.22 28991024.43 28991024.64 0.0280 0.0048

Jupiter 74663-03-07 10:48 G 28991225.75 28991225.95 28991226.15 0.0497 0.0094

Saturn 74663-04-04 11:17 G 28991253.79 28991253.97 28991254.16 0.0281 0.0142

Jupiter 74663-10-29 15:51 G 28991462.07 28991462.16 28991462.25 0.0490 0.0438

Uranus 74664-05-28 00:29 G 28991673.39 28991673.52 28991673.68 0.0144 0.0108

Uranus 74665-01-09 12:58 G 28991899.86 28991900.04 28991900.25 0.0144 0.0067

Uranus 74665-08-24 01:41 G 28992126.35 28992126.57 28992126.79 0.0144 0.0025

Uranus 74666-04-07 13:55 G 28992352.86 28992353.08 28992353.30 0.0144 0.0016

Uranus 74666-11-20 01:55 G 28992579.39 28992579.58 28992579.79 0.0144 0.0057

Uranus 74667-07-04 13:55 G 28992805.93 28992806.08 28992806.25 0.0144 0.0098

Uranus 74668-02-16 01:55 G 28993032.54 28993032.58 28993032.65 0.0144 0.0139

Jupiter 74668-12-29 22:48 G 28993350.27 28993350.45 28993350.64 0.0524 0.0218

Jupiter 74669-08-24 12:15 G 28993587.83 28993588.01 28993588.20 0.0533 0.0223

Jupiter 74674-03-18 14:39 G 28995254.99 28995255.11 28995255.24 0.0509 0.0396

Jupiter 74674-11-10 10:05 G 28995491.72 28995491.92 28995492.13 0.0500 0.0012

Jupiter 74675-07-04 18:29 G 28995728.13 28995728.27 28995728.42 0.0492 0.0348

Saturn 74676-06-16 16:05 G 28996076.00 28996076.17 28996076.36 0.0281 0.0147

Saturn 74677-02-01 03:22 G 28996305.44 28996305.64 28996305.85 0.0279 0.0041

Saturn 74677-09-18 13:55 G 28996534.97 28996535.08 28996535.21 0.0278 0.0225

Jupiter 74680-09-03 17:31 G 28997616.08 28997616.23 28997616.39 0.0521 0.0331

Jupiter 74681-04-29 03:22 G 28997853.44 28997853.64 28997853.84 0.0531 0.0098

Mars 74684-10-28 02:39 G 28999131.47 28999131.61 28999131.75 0.1909 0.1173

Mars 74685-09-29 11:17 G 28999467.93 28999467.97 28999468.02 0.1615 0.1561

Jupiter 74685-11-21 11:03 G 28999520.93 28999520.96 28999521.00 0.0512 0.0501

Jupiter 74686-07-16 09:51 G 28999757.71 28999757.91 28999758.11 0.0502 0.0115

Jupiter 74687-03-09 20:53 G 28999994.20 28999994.37 28999994.55 0.0494 0.0254

Saturn 74691-07-13 15:36 G 29001581.01 29001581.15 29001581.29 0.0278 0.0205

Saturn 74692-02-28 04:05 G 29001810.46 29001810.67 29001810.88 0.0280 0.0019

Jupiter 74692-05-09 12:58 G 29001881.94 29001882.04 29001882.15 0.0518 0.0438

Saturn 74692-10-14 17:03 G 29002040.04 29002040.21 29002040.38 0.0281 0.0170

Jupiter 74693-01-01 19:12 G 29002119.10 29002119.30 29002119.51 0.0528 0.0029

Jupiter 74693-08-27 14:24 G 29002356.98 29002357.10 29002357.23 0.0537 0.0424

Pluto 74694-08-10 16:05 G 29002705.04 29002705.17 29002705.33 0.0079 0.0060

Pluto 74695-03-24 02:24 G 29002930.39 29002930.60 29002930.83 0.0079 0.0007

Pluto 74695-11-04 11:46 G 29003155.94 29003155.99 29003156.11 0.0079 0.0073

Jupiter 74698-03-21 09:07 G 29004023.70 29004023.88 29004024.07 0.0504 0.0219

Jupiter 74698-11-12 23:03 G 29004260.27 29004260.46 29004260.66 0.0496 0.0158

Jupiter 74704-09-07 13:55 G 29006384.88 29006385.08 29006385.27 0.0526 0.0145

Jupiter 74705-05-03 05:46 G 29006622.58 29006622.74 29006622.91 0.0535 0.0302

Uranus 74705-12-04 20:24 G 29006838.34 29006838.35 29006838.41 0.0134 0.0132

Saturn 74705-12-28 17:03 G 29006862.03 29006862.21 29006862.40 0.0280 0.0125

Uranus 74706-07-19 02:10 G 29007064.45 29007064.59 29007064.73 0.0134 0.0099

Saturn 74706-08-15 04:19 G 29007091.47 29007091.68 29007091.88 0.0279 0.0062

Uranus 74707-03-02 07:12 G 29007290.62 29007290.80 29007290.99 0.0134 0.0067

Saturn 74707-04-01 14:39 G 29007321.01 29007321.11 29007321.21 0.0278 0.0244

Neptune 74707-09-21 09:51 G 29007493.87 29007493.91 29007493.99 0.0090 0.0086

Uranus 74707-10-14 12:15 G 29007516.81 29007517.01 29007517.22 0.0134 0.0035

Neptune 74708-05-03 23:03 G 29007719.37 29007719.46 29007719.58 0.0090 0.0079

Uranus 74708-05-27 17:31 G 29007743.02 29007743.23 29007743.45 0.0134 0.0003

Neptune 74708-12-15 12:00 G 29007944.88 29007945.00 29007945.14 0.0090 0.0072

Uranus 74709-01-08 22:34 G 29007969.24 29007969.44 29007969.66 0.0134 0.0032

Neptune 74709-07-29 00:43 G 29008170.40 29008170.53 29008170.70 0.0090 0.0065

Uranus 74709-08-23 04:05 G 29008195.48 29008195.67 29008195.86 0.0134 0.0063

Jupiter 74709-11-25 06:43 G 29008289.63 29008289.78 29008289.94 0.0507 0.0324

Neptune 74710-03-11 13:41 G 29008395.92 29008396.07 29008396.26 0.0090 0.0058

Uranus 74710-04-06 09:07 G 29008421.74 29008421.88 29008422.04 0.0134 0.0096

Jupiter 74710-07-19 23:31 G 29008526.28 29008526.48 29008526.69 0.0498 0.0059

Neptune 74710-10-23 02:39 G 29008621.45 29008621.61 29008621.81 0.0090 0.0051

Uranus 74710-11-18 14:39 G 29008648.05 29008648.11 29008648.17 0.0134 0.0129

Jupiter 74711-03-13 05:46 G 29008762.63 29008762.74 29008762.85 0.0491 0.0406

Neptune 74711-06-05 16:05 G 29008846.98 29008847.17 29008847.37 0.0090 0.0043

Neptune 74712-01-17 05:03 G 29009072.52 29009072.71 29009072.92 0.0090 0.0036

Neptune 74712-08-29 17:46 G 29009298.05 29009298.24 29009298.46 0.0090 0.0029

Neptune 74713-04-12 06:58 G 29009523.58 29009523.79 29009524.01 0.0090 0.0021

Neptune 74713-11-23 20:10 G 29009749.12 29009749.34 29009749.55 0.0090 0.0014

Neptune 74714-07-07 09:07 G 29009974.67 29009974.88 29009975.10 0.0090 0.0007

Neptune 74715-02-17 22:19 G 29010200.21 29010200.43 29010200.65 0.0090 0.0001

Neptune 74715-10-01 11:17 G 29010425.75 29010425.97 29010426.19 0.0090 0.0008

Jupiter 74716-05-13 09:36 G 29010650.72 29010650.90 29010651.07 0.0523 0.0259

Neptune 74716-05-14 00:15 G 29010651.31 29010651.51 29010651.74 0.0090 0.0016

Neptune 74716-12-25 13:27 G 29010876.86 29010877.06 29010877.28 0.0090 0.0023

Jupiter 74717-01-05 22:05 G 29010888.23 29010888.42 29010888.61 0.0533 0.0179

Neptune 74717-08-08 02:24 G 29011102.41 29011102.60 29011102.82 0.0090 0.0031

Neptune 74718-03-21 15:22 G 29011327.96 29011328.14 29011328.35 0.0090 0.0038

Neptune 74718-11-02 04:34 G 29011553.51 29011553.69 29011553.89 0.0090 0.0045

Neptune 74719-06-15 17:46 G 29011779.07 29011779.24 29011779.43 0.0090 0.0052

Mars 74719-07-30 07:12 G 29011823.65 29011823.80 29011823.96 0.1618 0.0649

Neptune 74720-01-27 06:29 G 29012004.63 29012004.77 29012004.96 0.0090 0.0060

Neptune 74720-09-08 19:41 G 29012230.19 29012230.32 29012230.48 0.0090 0.0067

Saturn 74721-01-23 14:53 G 29012366.98 29012367.12 29012367.29 0.0279 0.0188

Neptune 74721-04-22 08:39 G 29012455.76 29012455.86 29012456.00 0.0090 0.0074

Jupiter 74721-07-31 03:22 G 29012555.53 29012555.64 29012555.75 0.0509 0.0431

Saturn 74721-09-10 03:51 G 29012596.45 29012596.66 29012596.87 0.0280 0.0002

Neptune 74721-12-03 21:51 G 29012681.33 29012681.41 29012681.52 0.0090 0.0081

Jupiter 74722-03-24 23:31 G 29012792.27 29012792.48 29012792.68 0.0500 0.0046

Saturn 74722-04-27 16:48 G 29012826.05 29012826.20 29012826.36 0.0281 0.0188

Neptune 74722-07-17 11:03 G 29012906.93 29012906.96 29012907.02 0.0090 0.0088

Jupiter 74722-11-16 08:24 G 29013028.70 29013028.85 29013029.01 0.0493 0.0316

Jupiter 74728-01-17 04:48 G 29014916.57 29014916.70 29014916.85 0.0520 0.0370

Jupiter 74728-09-10 12:58 G 29015153.84 29015154.04 29015154.24 0.0530 0.0052

Jupiter 74729-05-06 09:36 G 29015391.83 29015391.90 29015391.97 0.0538 0.0500

Jupiter 74733-11-27 20:53 G 29017058.18 29017058.37 29017058.57 0.0503 0.0154

Jupiter 74734-07-22 09:36 G 29017294.72 29017294.90 29017295.09 0.0495 0.0219

Saturn 74735-07-10 23:31 G 29017648.28 29017648.48 29017648.68 0.0281 0.0096

Saturn 74736-02-25 10:34 G 29017877.75 29017877.94 29017878.15 0.0279 0.0092

Saturn 74736-10-11 21:22 G 29018107.36 29018107.39 29018107.42 0.0278 0.0274

Jupiter 74739-09-22 01:12 G 29019182.48 29019182.55 29019182.63 0.0517 0.0474

Jupiter 74740-05-16 05:46 G 29019419.54 29019419.74 29019419.94 0.0527 0.0071

Jupiter 74741-01-08 22:34 G 29019657.30 29019657.44 29019657.59 0.0536 0.0377

Jupiter 74745-08-02 18:58 G 29021324.12 29021324.29 29021324.47 0.0506 0.0261

Jupiter 74746-03-27 11:03 G 29021560.76 29021560.96 29021561.16 0.0497 0.0119

Jupiter 74746-11-18 16:05 G 29021797.11 29021797.17 29021797.25 0.0490 0.0461

Uranus 74748-01-27 06:15 G 29022231.67 29022231.76 29022231.87 0.0144 0.0127

Uranus 74748-09-09 18:43 G 29022458.11 29022458.28 29022458.46 0.0144 0.0086

Uranus 74749-04-24 07:12 G 29022684.60 29022684.80 29022685.01 0.0144 0.0045

Uranus 74749-12-06 19:41 G 29022911.10 29022911.32 29022911.54 0.0144 0.0004

Uranus 74750-07-21 07:55 G 29023137.62 29023137.83 29023138.05 0.0144 0.0038

Saturn 74750-08-05 21:51 G 29023153.24 29023153.41 29023153.59 0.0278 0.0156

Mars 74750-08-26 05:17 G 29023173.55 29023173.72 29023173.89 0.1908 0.0406

Uranus 74751-03-04 19:55 G 29023364.16 29023364.33 29023364.52 0.0144 0.0079

Saturn 74751-03-23 10:19 G 29023382.72 29023382.93 29023383.14 0.0280 0.0030

Mars 74751-07-28 23:46 G 29023510.40 29023510.49 29023510.58 0.1616 0.1354

Uranus 74751-10-17 07:55 G 29023590.72 29023590.83 29023590.96 0.0144 0.0120

Saturn 74751-11-07 23:03 G 29023612.34 29023612.46 29023612.60 0.0281 0.0219

Jupiter 74752-01-19 22:34 G 29023685.26 29023685.44 29023685.63 0.0524 0.0191

Earth 74752-09-11 11:17 G 29023920.82 29023920.97 29023921.11 0.2706 0.0934

Moon 74752-09-11 14:53 G 29023920.98 29023921.12 29023921.26 0.2712 0.0965 *

Jupiter 74752-09-13 12:29 G 29023922.84 29023923.02 29023923.20 0.0534 0.0251

Jupiter 74757-04-07 17:03 G 29025590.07 29025590.21 29025590.35 0.0508 0.0365

Jupiter 74757-11-30 12:00 G 29025826.80 29025827.00 29025827.21 0.0499 0.0021

Jupiter 74758-07-24 19:41 G 29026063.20 29026063.32 29026063.46 0.0492 0.0374

Earth 74760-09-09 01:12 G 29026840.51 29026840.55 29026840.58 0.2706 0.2620

Moon 74760-09-09 06:58 G 29026840.67 29026840.79 29026840.90 0.2706 0.1791

Jupiter 74763-09-24 18:29 G 29027951.11 29027951.27 29027951.43 0.0522 0.0302

Jupiter 74764-05-19 05:03 G 29028188.51 29028188.71 29028188.91 0.0532 0.0129

Saturn 74764-06-04 12:58 G 29028204.97 29028205.04 29028205.12 0.0281 0.0260

Saturn 74765-01-20 00:43 G 29028434.33 29028434.53 29028434.74 0.0280 0.0073

Saturn 74765-09-06 11:46 G 29028663.80 29028663.99 29028664.19 0.0279 0.0112

Jupiter 74768-12-11 13:41 G 29029855.99 29029856.07 29029856.15 0.0511 0.0470

Jupiter 74769-08-05 11:31 G 29030092.78 29030092.98 29030093.18 0.0501 0.0084

Jupiter 74770-03-29 21:51 G 29030329.24 29030329.41 29030329.58 0.0493 0.0281

Jupiter 74775-05-30 15:36 G 29032217.03 29032217.15 29032217.28 0.0519 0.0408

Jupiter 74776-01-22 22:48 G 29032454.25 29032454.45 29032454.65 0.0529 0.0010

Jupiter 74776-09-16 18:29 G 29032692.17 29032692.27 29032692.38 0.0537 0.0457

Saturn 74780-02-15 21:07 G 29033939.20 29033939.38 29033939.57 0.0279 0.0140

Saturn 74780-10-02 09:36 G 29034168.70 29034168.90 29034169.11 0.0280 0.0048

Jupiter 74781-04-10 10:05 G 29034358.73 29034358.92 29034359.11 0.0504 0.0190

Saturn 74781-05-19 22:34 G 29034398.34 29034398.44 29034398.56 0.0281 0.0236

Jupiter 74781-12-02 23:31 G 29034595.29 29034595.48 29034595.67 0.0495 0.0185

Mars 74785-05-26 19:41 G 29035866.18 29035866.32 29035866.47 0.1619 0.0855

Jupiter 74787-02-02 12:58 G 29036483.02 29036483.04 29036483.07 0.0516 0.0510

Jupiter 74787-09-27 15:51 G 29036719.97 29036720.16 29036720.36 0.0526 0.0115

Jupiter 74788-05-22 07:27 G 29036957.65 29036957.81 29036957.97 0.0535 0.0330

Neptune 74789-03-26 22:19 G 29037266.40 29037266.43 29037266.49 0.0088 0.0086

Neptune 74789-11-07 11:31 G 29037491.90 29037491.98 29037492.09 0.0088 0.0079

Uranus 74790-03-18 13:12 G 29037622.95 29037623.05 29037623.18 0.0134 0.0113

Neptune 74790-06-21 00:43 G 29037717.41 29037717.53 29037717.66 0.0088 0.0072

Uranus 74790-10-30 18:43 G 29037849.11 29037849.28 29037849.45 0.0134 0.0080

Neptune 74791-02-01 13:55 G 29037942.93 29037943.08 29037943.23 0.0088 0.0065

Uranus 74791-06-13 23:46 G 29038075.29 29038075.49 29038075.70 0.0134 0.0048

Neptune 74791-09-15 02:24 G 29038168.46 29038168.60 29038168.79 0.0088 0.0059

Uranus 74792-01-26 05:03 G 29038301.49 29038301.71 29038301.92 0.0134 0.0016

Neptune 74792-04-27 15:36 G 29038393.99 29038394.15 29038394.35 0.0088 0.0052

Uranus 74792-09-08 10:05 G 29038527.71 29038527.92 29038528.14 0.0134 0.0017

Neptune 74792-12-09 04:48 G 29038619.53 29038619.70 29038619.91 0.0088 0.0045

Jupiter 74792-12-14 05:17 G 29038624.56 29038624.72 29038624.89 0.0507 0.0301

Uranus 74793-04-22 15:07 G 29038753.94 29038754.13 29038754.34 0.0134 0.0050

Neptune 74793-07-22 18:00 G 29038845.06 29038845.25 29038845.46 0.0088 0.0038

Jupiter 74793-08-07 22:48 G 29038861.25 29038861.45 29038861.66 0.0498 0.0082

Uranus 74793-12-04 20:24 G 29038980.19 29038980.35 29038980.53 0.0134 0.0082

Saturn 74793-12-15 18:15 G 29038991.15 29038991.26 29038991.38 0.0282 0.0234

Neptune 74794-03-05 06:58 G 29039070.60 29039070.79 29039071.01 0.0088 0.0031

Jupiter 74794-04-01 05:31 G 29039097.64 29039097.73 29039097.83 0.0491 0.0429

Uranus 74794-07-19 01:27 G 29039206.47 29039206.56 29039206.69 0.0134 0.0116

Saturn 74794-08-02 06:29 G 29039220.56 29039220.77 29039220.98 0.0281 0.0046

Neptune 74794-10-16 20:10 G 29039296.13 29039296.34 29039296.56 0.0088 0.0024

Saturn 74795-03-19 17:46 G 29039450.06 29039450.24 29039450.42 0.0279 0.0141

Neptune 74795-05-30 09:07 G 29039521.67 29039521.88 29039522.11 0.0088 0.0017

Neptune 74796-01-10 22:19 G 29039747.21 29039747.43 29039747.66 0.0088 0.0010

Neptune 74796-08-23 11:17 G 29039972.75 29039972.97 29039973.20 0.0088 0.0003

Neptune 74797-04-06 00:15 G 29040198.29 29040198.51 29040198.74 0.0088 0.0005

Neptune 74797-11-17 13:12 G 29040423.84 29040424.05 29040424.28 0.0088 0.0012

Neptune 74798-07-01 02:10 G 29040649.38 29040649.59 29040649.81 0.0088 0.0019

Neptune 74799-02-11 14:53 G 29040874.92 29040875.12 29040875.35 0.0088 0.0026

Jupiter 74799-06-02 10:05 G 29040985.75 29040985.92 29040986.11 0.0523 0.0231

Neptune 74799-09-25 03:51 G 29041100.46 29041100.66 29041100.88 0.0088 0.0033

Jupiter 74800-01-25 21:51 G 29041223.23 29041223.41 29041223.60 0.0532 0.0206

Neptune 74800-05-07 16:48 G 29041326.01 29041326.20 29041326.41 0.0088 0.0040

Neptune 74800-12-19 05:46 G 29041551.57 29041551.74 29041551.94 0.0088 0.0047

Neptune 74801-08-01 18:29 G 29041777.12 29041777.27 29041777.47 0.0088 0.0054

Neptune 74802-03-15 07:55 G 29042002.67 29042002.83 29042002.99 0.0088 0.0060

Neptune 74802-10-26 20:39 G 29042228.23 29042228.36 29042228.51 0.0088 0.0067

Neptune 74803-06-09 09:22 G 29042453.79 29042453.89 29042454.03 0.0088 0.0074

Neptune 74804-01-20 22:19 G 29042679.37 29042679.43 29042679.54 0.0088 0.0081

Jupiter 74804-08-19 01:55 G 29042890.46 29042890.58 29042890.70 0.0510 0.0408

Neptune 74804-09-02 11:31 G 29042904.98 29042904.98 29042905.01 0.0088 0.0087

Jupiter 74805-04-12 22:48 G 29043127.24 29043127.45 29043127.65 0.0501 0.0022

Jupiter 74805-12-05 08:24 G 29043363.70 29043363.85 29043364.00 0.0493 0.0338

Saturn 74809-08-28 04:34 G 29044725.50 29044725.69 29044725.89 0.0279 0.0107

Saturn 74810-04-14 17:03 G 29044955.01 29044955.21 29044955.42 0.0280 0.0079

Saturn 74810-11-30 05:46 G 29045184.69 29045184.74 29045184.81 0.0281 0.0267

Jupiter 74811-02-05 04:19 G 29045251.53 29045251.68 29045251.83 0.0520 0.0343

Jupiter 74811-09-30 12:43 G 29045488.83 29045489.03 29045489.23 0.0530 0.0080

Jupiter 74812-05-25 09:36 G 29045726.86 29045726.90 29045726.94 0.0538 0.0526

Jupiter 74816-04-23 22:19 G 29047156.43 29047156.43 29047156.45 0.0513 0.0512

Mars 74816-06-22 07:12 G 29047215.63 29047215.80 29047215.97 0.1906 0.0392

Jupiter 74816-12-16 22:48 G 29047393.25 29047393.45 29047393.65 0.0503 0.0125

Mars 74817-05-25 12:29 G 29047552.90 29047553.02 29047553.14 0.1617 0.1159

Jupiter 74817-08-10 10:48 G 29047629.78 29047629.95 29047630.14 0.0495 0.0246

Jupiter 74822-10-11 01:12 G 29049517.46 29049517.55 29049517.65 0.0517 0.0447

Jupiter 74823-06-05 06:29 G 29049754.57 29049754.77 29049754.97 0.0528 0.0041

Saturn 74823-06-27 20:53 G 29049777.24 29049777.37 29049777.52 0.0281 0.0209

Jupiter 74824-01-29 00:15 G 29049992.39 29049992.51 29049992.65 0.0536 0.0407

Saturn 74824-02-12 08:39 G 29050006.65 29050006.86 29050007.08 0.0280 0.0023

Saturn 74824-09-28 19:41 G 29050236.15 29050236.32 29050236.50 0.0279 0.0163

Jupiter 74828-08-21 20:53 G 29051659.19 29051659.37 29051659.56 0.0505 0.0230

Jupiter 74829-04-15 12:00 G 29051895.80 29051896.00 29051896.20 0.0496 0.0148

Jupiter 74829-12-07 16:34 G 29052132.17 29052132.19 29052132.22 0.0490 0.0485

Uranus 74832-05-10 00:58 G 29053016.41 29053016.54 29053016.71 0.0144 0.0105

Uranus 74832-12-22 13:55 G 29053242.88 29053243.08 29053243.28 0.0144 0.0064

Uranus 74833-08-06 02:10 G 29053469.38 29053469.59 29053469.81 0.0144 0.0023

Uranus 74834-03-20 14:24 G 29053695.89 29053696.10 29053696.32 0.0144 0.0019

Uranus 74834-11-02 02:39 G 29053922.41 29053922.61 29053922.81 0.0144 0.0060

Jupiter 74835-02-08 01:27 G 29054020.37 29054020.56 29054020.75 0.0525 0.0158

Uranus 74835-06-16 14:39 G 29054148.96 29054149.11 29054149.27 0.0144 0.0101

Jupiter 74835-10-03 16:05 G 29054258.00 29054258.17 29054258.34 0.0534 0.0285

Uranus 74836-01-29 02:39 G 29054375.59 29054375.61 29054375.66 0.0144 0.0142

Saturn 74838-07-23 15:51 G 29055282.14 29055282.16 29055282.21 0.0278 0.0273

Saturn 74839-03-10 04:05 G 29055511.47 29055511.67 29055511.87 0.0279 0.0090

Saturn 74839-10-25 16:19 G 29055740.99 29055741.18 29055741.39 0.0280 0.0097

Jupiter 74840-04-26 18:00 G 29055925.10 29055925.25 29055925.41 0.0508 0.0336

Jupiter 74840-12-19 12:29 G 29056161.82 29056162.02 29056162.23 0.0499 0.0048

Jupiter 74841-08-12 19:55 G 29056398.21 29056398.33 29056398.45 0.0492 0.0398

Jupiter 74846-10-13 20:39 G 29058286.19 29058286.36 29058286.54 0.0522 0.0273

Jupiter 74847-06-08 07:12 G 29058523.61 29058523.80 29058523.99 0.0531 0.0158

Mars 74851-03-24 08:39 G 29059908.72 29059908.86 29059908.99 0.1620 0.1052

Jupiter 74851-12-31 11:31 G 29060190.88 29060190.98 29060191.08 0.0511 0.0448

Pluto 74852-05-28 03:36 G 29060339.50 29060339.65 29060339.82 0.0065 0.0043

Jupiter 74852-08-24 09:51 G 29060427.71 29060427.91 29060428.11 0.0502 0.0061

Saturn 74853-01-07 01:12 G 29060563.40 29060563.55 29060563.72 0.0282 0.0184

Pluto 74853-01-08 08:10 G 29060564.63 29060564.84 29060565.06 0.0065 0.0007

Jupiter 74853-04-17 20:53 G 29060664.21 29060664.37 29060664.53 0.0494 0.0303

Pluto 74853-08-21 12:43 G 29060789.84 29060790.03 29060790.23 0.0066 0.0031

Saturn 74853-08-24 13:27 G 29060792.85 29060793.06 29060793.27 0.0281 0.0006

Saturn 74854-04-11 00:29 G 29061022.38 29061022.52 29061022.69 0.0279 0.0192

Jupiter 74858-06-18 16:48 G 29062552.06 29062552.20 29062552.33 0.0519 0.0381

Jupiter 74859-02-10 23:03 G 29062789.26 29062789.46 29062789.66 0.0528 0.0035

Jupiter 74859-10-06 18:00 G 29063027.16 29063027.25 29063027.34 0.0537 0.0480

Jupiter 74864-04-29 08:10 G 29064693.65 29064693.84 29064694.03 0.0504 0.0167

Jupiter 74864-12-21 22:19 G 29064930.25 29064930.43 29064930.62 0.0496 0.0207

Saturn 74868-02-03 00:43 G 29066068.43 29066068.53 29066068.64 0.0277 0.0238

Saturn 74868-09-19 12:43 G 29066297.82 29066298.03 29066298.23 0.0279 0.0056

Saturn 74869-05-07 00:43 G 29066527.35 29066527.53 29066527.73 0.0280 0.0131

Jupiter 74870-02-21 11:46 G 29066817.93 29066817.99 29066818.06 0.0516 0.0485

Jupiter 74870-10-16 14:53 G 29067054.92 29067055.12 29067055.32 0.0526 0.0088

Jupiter 74871-06-11 06:43 G 29067292.63 29067292.78 29067292.93 0.0535 0.0356

Neptune 74871-12-23 19:12 G 29067488.27 29067488.30 29067488.35 0.0089 0.0088

Neptune 74872-08-05 08:10 G 29067713.76 29067713.84 29067713.94 0.0090 0.0081

Neptune 74873-03-18 20:53 G 29067939.27 29067939.37 29067939.51 0.0090 0.0074

Neptune 74873-10-30 09:51 G 29068164.79 29068164.91 29068165.08 0.0090 0.0067

Uranus 74873-11-16 00:29 G 29068181.46 29068181.52 29068181.61 0.0134 0.0126

Neptune 74874-06-12 22:48 G 29068390.31 29068390.45 29068390.64 0.0090 0.0060

Uranus 74874-06-30 05:46 G 29068407.60 29068407.74 29068407.90 0.0134 0.0094

Neptune 74875-01-24 12:15 G 29068615.84 29068616.01 29068616.19 0.0090 0.0052

Uranus 74875-02-11 11:03 G 29068633.77 29068633.96 29068634.15 0.0134 0.0061

Neptune 74875-09-07 01:12 G 29068841.37 29068841.55 29068841.74 0.0090 0.0045

Uranus 74875-09-25 16:05 G 29068859.96 29068860.17 29068860.38 0.0134 0.0029

Jupiter 74876-01-03 06:43 G 29068959.61 29068959.78 29068959.96 0.0507 0.0272

Neptune 74876-04-19 13:55 G 29069066.90 29069067.08 29069067.29 0.0090 0.0038

Uranus 74876-05-08 21:07 G 29069086.17 29069086.38 29069086.60 0.0134 0.0004

Jupiter 74876-08-26 23:46 G 29069196.29 29069196.49 29069196.69 0.0498 0.0110

Neptune 74876-12-01 02:53 G 29069292.43 29069292.62 29069292.84 0.0090 0.0031

Uranus 74876-12-21 02:10 G 29069312.39 29069312.59 29069312.81 0.0134 0.0037

Jupiter 74877-04-20 06:15 G 29069432.68 29069432.76 29069432.83 0.0491 0.0452

Neptune 74877-07-14 16:05 G 29069517.97 29069518.17 29069518.39 0.0090 0.0023

Uranus 74877-08-04 07:12 G 29069538.63 29069538.80 29069539.00 0.0134 0.0070

Neptune 74878-02-25 05:03 G 29069743.50 29069743.71 29069743.93 0.0090 0.0016

Uranus 74878-03-18 12:43 G 29069764.90 29069765.03 29069765.18 0.0134 0.0101

Neptune 74878-10-08 18:15 G 29069969.04 29069969.26 29069969.48 0.0090 0.0008

Uranus 74878-10-30 17:46 G 29069991.24 29069991.24 29069991.27 0.0134 0.0134

Neptune 74879-05-22 07:27 G 29070194.59 29070194.81 29070195.03 0.0090 0.0001

Neptune 74880-01-02 20:24 G 29070420.14 29070420.35 29070420.57 0.0090 0.0007

Neptune 74880-08-15 09:36 G 29070645.68 29070645.90 29070646.11 0.0090 0.0014

Neptune 74881-03-28 22:19 G 29070871.23 29070871.43 29070871.65 0.0090 0.0022

Neptune 74881-11-09 11:31 G 29071096.78 29071096.98 29071097.19 0.0090 0.0029

Earth 74882-03-14 00:58 G 29071221.45 29071221.54 29071221.63 0.2626 0.2168

Moon 74882-03-14 06:00 G 29071221.70 29071221.75 29071221.81 0.2623 0.2456

Mars 74882-04-19 09:51 G 29071257.77 29071257.91 29071258.05 0.1905 0.1164

Jupiter 74882-06-21 09:51 G 29071320.72 29071320.91 29071321.09 0.0523 0.0203

Neptune 74882-06-23 00:58 G 29071322.34 29071322.54 29071322.74 0.0090 0.0036

Saturn 74882-07-20 05:17 G 29071349.54 29071349.72 29071349.89 0.0281 0.0156

Neptune 74883-02-03 13:41 G 29071547.89 29071548.07 29071548.27 0.0090 0.0044

Jupiter 74883-02-13 22:19 G 29071558.25 29071558.43 29071558.61 0.0533 0.0234

Saturn 74883-03-06 17:03 G 29071579.00 29071579.21 29071579.42 0.0280 0.0031

Mars 74883-03-23 00:58 G 29071595.40 29071595.54 29071595.68 0.1617 0.0955

Neptune 74883-09-17 02:53 G 29071773.45 29071773.62 29071773.81 0.0090 0.0051

Saturn 74883-10-22 03:51 G 29071808.53 29071808.66 29071808.80 0.0279 0.0215

Neptune 74884-04-29 16:05 G 29071999.01 29071999.17 29071999.34 0.0090 0.0058

Neptune 74884-12-11 04:48 G 29072224.57 29072224.70 29072224.87 0.0090 0.0066

Neptune 74885-07-24 18:00 G 29072450.14 29072450.25 29072450.40 0.0090 0.0073

Neptune 74886-03-07 07:12 G 29072675.72 29072675.80 29072675.91 0.0090 0.0080

Neptune 74886-10-18 20:10 G 29072901.31 29072901.34 29072901.41 0.0090 0.0087

Jupiter 74887-09-08 03:51 G 29073225.52 29073225.66 29073225.80 0.0509 0.0377

Jupiter 74888-05-01 23:46 G 29073462.29 29073462.49 29073462.70 0.0500 0.0011

Jupiter 74888-12-24 08:39 G 29073698.73 29073698.86 29073699.00 0.0492 0.0364

Earth 74890-03-11 17:17 G 29074141.07 29074141.22 29074141.37 0.2626 0.0897

Moon 74890-03-11 18:29 G 29074141.11 29074141.27 29074141.42 0.2620 0.1048 *

Jupiter 74894-02-24 06:00 G 29075586.59 29075586.75 29075586.91 0.0521 0.0314

Jupiter 74894-10-19 15:07 G 29075823.94 29075824.13 29075824.33 0.0531 0.0113

Saturn 74897-08-15 00:00 G 29076854.39 29076854.50 29076854.64 0.0278 0.0222

Saturn 74898-04-01 12:00 G 29077083.79 29077084.00 29077084.21 0.0279 0.0038

Saturn 74898-11-17 00:29 G 29077313.34 29077313.52 29077313.70 0.0280 0.0148

Jupiter 74899-05-13 23:31 G 29077491.42 29077491.48 29077491.55 0.0512 0.0483

Jupiter 74900-01-05 23:03 G 29077728.26 29077728.46 29077728.66 0.0502 0.0096

Jupiter 74900-08-30 10:48 G 29077964.78 29077964.95 29077965.12 0.0494 0.0271

Jupiter 74905-10-31 03:22 G 29079852.53 29079852.64 29079852.76 0.0517 0.0420

Jupiter 74906-06-25 08:39 G 29080089.66 29080089.86 29080090.06 0.0527 0.0012

Jupiter 74907-02-18 02:10 G 29080327.47 29080327.59 29080327.71 0.0536 0.0433

Jupiter 74911-09-11 18:29 G 29081994.08 29081994.27 29081994.45 0.0505 0.0208

Saturn 74912-01-31 09:22 G 29082135.71 29082135.89 29082136.08 0.0282 0.0131

Jupiter 74912-05-05 09:51 G 29082230.72 29082230.91 29082231.10 0.0497 0.0169

Saturn 74912-09-16 21:36 G 29082365.19 29082365.40 29082365.60 0.0280 0.0058

Saturn 74913-05-04 08:39 G 29082594.77 29082594.86 29082594.97 0.0279 0.0243

Uranus 74916-01-09 07:41 G 29083574.73 29083574.82 29083574.95 0.0144 0.0124

Uranus 74916-08-22 20:10 G 29083801.18 29083801.34 29083801.54 0.0144 0.0082

Mars 74917-01-19 20:39 G 29083951.25 29083951.36 29083951.47 0.1621 0.1265

Uranus 74917-04-06 08:53 G 29084027.66 29084027.87 29084028.08 0.0144 0.0041

Uranus 74917-11-18 21:07 G 29084254.16 29084254.38 29084254.60 0.0144 0.0003

Jupiter 74918-02-28 01:55 G 29084355.39 29084355.58 29084355.78 0.0524 0.0130

Uranus 74918-07-03 09:22 G 29084480.69 29084480.89 29084481.11 0.0144 0.0042

Jupiter 74918-10-23 15:51 G 29084593.00 29084593.16 29084593.32 0.0534 0.0310

Uranus 74919-02-14 21:36 G 29084707.23 29084707.40 29084707.58 0.0144 0.0083

Uranus 74919-09-29 09:36 G 29084933.80 29084933.90 29084934.02 0.0144 0.0124

Jupiter 74923-05-17 15:07 G 29086259.97 29086260.13 29086260.29 0.0508 0.0315

Jupiter 74924-01-09 10:05 G 29086496.72 29086496.92 29086497.13 0.0499 0.0068

Jupiter 74924-09-01 18:00 G 29086733.15 29086733.25 29086733.36 0.0492 0.0417

Saturn 74927-02-26 09:36 G 29087640.75 29087640.90 29087641.06 0.0278 0.0186

Saturn 74927-10-13 21:36 G 29087870.18 29087870.40 29087870.61 0.0279 0.0005

Saturn 74928-05-30 09:51 G 29088099.76 29088099.91 29088100.07 0.0280 0.0184

Jupiter 74929-11-02 18:58 G 29088621.11 29088621.29 29088621.46 0.0522 0.0247

Jupiter 74930-06-28 05:17 G 29088858.54 29088858.72 29088858.91 0.0531 0.0184

Jupiter 74935-01-20 12:00 G 29090525.89 29090526.00 29090526.12 0.0511 0.0420

Jupiter 74935-09-14 10:19 G 29090762.72 29090762.93 29090763.13 0.0501 0.0033

Jupiter 74936-05-07 20:53 G 29090999.22 29090999.37 29090999.52 0.0494 0.0328

Pluto 74940-09-10 09:36 G 29092585.70 29092585.90 29092586.11 0.0079 0.0029

Pluto 74941-04-23 19:27 G 29092811.12 29092811.31 29092811.52 0.0079 0.0037

Jupiter 74941-07-08 14:53 G 29092886.98 29092887.12 29092887.27 0.0519 0.0356

Saturn 74941-08-12 14:24 G 29092921.90 29092922.10 29092922.30 0.0281 0.0102

Jupiter 74942-03-02 22:05 G 29093124.22 29093124.42 29093124.62 0.0529 0.0063

Saturn 74942-03-30 02:10 G 29093151.39 29093151.59 29093151.79 0.0280 0.0085

Jupiter 74942-10-26 17:46 G 29093362.18 29093362.24 29093362.30 0.0537 0.0506

Saturn 74942-11-14 12:58 G 29093380.99 29093381.04 29093381.10 0.0278 0.0268

Jupiter 74947-05-20 09:07 G 29095028.68 29095028.88 29095029.08 0.0504 0.0138

Jupiter 74948-01-11 22:34 G 29095265.26 29095265.44 29095265.62 0.0495 0.0233

Mars 74949-01-18 13:27 G 29095637.91 29095638.06 29095638.21 0.1618 0.0754

Jupiter 74953-03-13 12:29 G 29097152.93 29097153.02 29097153.11 0.0516 0.0458

Neptune 74953-06-29 07:41 G 29097260.82 29097260.82 29097260.85 0.0088 0.0088

Jupiter 74953-11-05 16:19 G 29097389.98 29097390.18 29097390.38 0.0527 0.0058

Neptune 74954-02-09 20:39 G 29097486.29 29097486.36 29097486.46 0.0088 0.0081

Jupiter 74954-07-01 08:53 G 29097627.74 29097627.87 29097628.01 0.0535 0.0387

Neptune 74954-09-23 09:36 G 29097711.80 29097711.90 29097712.04 0.0088 0.0074

Neptune 74955-05-06 22:48 G 29097937.32 29097937.45 29097937.60 0.0088 0.0067

Neptune 74955-12-18 12:00 G 29098162.85 29098163.00 29098163.17 0.0088 0.0060

Neptune 74956-07-31 01:12 G 29098388.38 29098388.55 29098388.73 0.0088 0.0053

Saturn 74956-09-07 10:05 G 29098426.75 29098426.92 29098427.09 0.0278 0.0168

Neptune 74957-03-13 14:10 G 29098613.91 29098614.09 29098614.29 0.0088 0.0046

Saturn 74957-04-24 21:51 G 29098656.20 29098656.41 29098656.62 0.0279 0.0016

Neptune 74957-10-25 03:22 G 29098839.44 29098839.64 29098839.84 0.0088 0.0039

Saturn 74957-12-10 10:05 G 29098885.78 29098885.92 29098886.07 0.0280 0.0202

Uranus 74958-02-28 17:17 G 29098966.11 29098966.22 29098966.37 0.0134 0.0107

Neptune 74958-06-07 16:19 G 29099064.98 29099065.18 29099065.39 0.0088 0.0032

Uranus 74958-10-12 22:34 G 29099192.27 29099192.44 29099192.62 0.0134 0.0074

Neptune 74959-01-19 05:31 G 29099290.52 29099290.73 29099290.94 0.0088 0.0025

Jupiter 74959-01-23 06:43 G 29099294.61 29099294.78 29099294.97 0.0506 0.0244

Uranus 74959-05-27 03:36 G 29099418.45 29099418.65 29099418.86 0.0134 0.0042

Neptune 74959-09-01 18:29 G 29099516.06 29099516.27 29099516.49 0.0088 0.0018

Jupiter 74959-09-16 23:17 G 29099531.27 29099531.47 29099531.67 0.0497 0.0135

Uranus 74960-01-08 08:53 G 29099644.65 29099644.87 29099645.09 0.0134 0.0009

Neptune 74960-04-14 07:27 G 29099741.60 29099741.81 29099742.04 0.0088 0.0011

Jupiter 74960-05-10 05:03 G 29099767.67 29099767.71 29099767.77 0.0491 0.0475

Uranus 74960-08-21 13:55 G 29099870.87 29099871.08 29099871.30 0.0134 0.0023

Neptune 74960-11-25 20:39 G 29099967.14 29099967.36 29099967.59 0.0088 0.0004

Uranus 74961-04-04 18:43 G 29100097.10 29100097.28 29100097.49 0.0134 0.0057

Neptune 74961-07-09 09:36 G 29100192.68 29100192.90 29100193.13 0.0088 0.0004

Uranus 74961-11-17 00:00 G 29100323.35 29100323.50 29100323.68 0.0134 0.0089

Neptune 74962-02-19 22:34 G 29100418.22 29100418.44 29100418.66 0.0088 0.0011

Uranus 74962-07-01 05:46 G 29100549.65 29100549.74 29100549.83 0.0134 0.0121

Neptune 74962-10-03 11:17 G 29100643.76 29100643.97 29100644.20 0.0088 0.0018

Neptune 74963-05-17 00:15 G 29100869.31 29100869.51 29100869.74 0.0088 0.0025

Neptune 74963-12-28 13:27 G 29101094.86 29101095.06 29101095.27 0.0088 0.0032

Neptune 74964-08-10 02:10 G 29101320.41 29101320.59 29101320.80 0.0088 0.0039

Neptune 74965-03-23 15:07 G 29101545.95 29101546.13 29101546.33 0.0088 0.0046

Jupiter 74965-07-11 11:31 G 29101655.79 29101655.98 29101656.17 0.0523 0.0174

Neptune 74965-11-04 03:51 G 29101771.50 29101771.66 29101771.86 0.0088 0.0053

Jupiter 74966-03-06 00:00 G 29101893.33 29101893.50 29101893.68 0.0533 0.0262

Neptune 74966-06-17 16:48 G 29101997.05 29101997.20 29101997.38 0.0088 0.0060

Neptune 74967-01-29 05:31 G 29102222.61 29102222.73 29102222.90 0.0088 0.0067

Neptune 74967-09-11 18:29 G 29102448.17 29102448.27 29102448.41 0.0088 0.0074

Neptune 74968-04-24 07:41 G 29102673.74 29102673.82 29102673.92 0.0088 0.0080

Neptune 74968-12-05 20:39 G 29102899.34 29102899.36 29102899.40 0.0088 0.0087

Saturn 74970-07-08 05:17 G 29103478.67 29103478.72 29103478.80 0.0283 0.0266

Jupiter 74970-09-28 00:29 G 29103560.37 29103560.52 29103560.67 0.0509 0.0356

Saturn 74971-02-22 18:15 G 29103708.06 29103708.26 29103708.47 0.0282 0.0077

Jupiter 74971-05-22 20:39 G 29103797.16 29103797.36 29103797.57 0.0500 0.0029

Saturn 74971-10-10 06:15 G 29103937.57 29103937.76 29103937.96 0.0280 0.0111

Jupiter 74972-01-14 06:00 G 29104033.63 29104033.75 29104033.88 0.0493 0.0383

Jupiter 74977-03-16 06:29 G 29105921.61 29105921.77 29105921.94 0.0520 0.0287

Jupiter 74977-11-08 15:07 G 29106158.94 29106159.13 29106159.33 0.0530 0.0138

Jupiter 74982-06-02 19:27 G 29107826.23 29107826.31 29107826.40 0.0512 0.0464

Mars 74982-11-17 09:22 G 29107993.82 29107993.89 29107993.96 0.1623 0.1463

Jupiter 74983-01-25 19:27 G 29108063.10 29108063.31 29108063.51 0.0503 0.0076

Jupiter 74983-09-19 07:41 G 29108299.65 29108299.82 29108299.98 0.0495 0.0290

Saturn 74986-03-20 19:55 G 29109213.14 29109213.33 29109213.52 0.0278 0.0131

Saturn 74986-11-05 07:41 G 29109442.62 29109442.82 29109443.03 0.0279 0.0054

Saturn 74987-06-22 20:10 G 29109672.24 29109672.34 29109672.46 0.0280 0.0239

Jupiter 74988-11-19 00:43 G 29110187.40 29110187.53 29110187.66 0.0517 0.0396

Jupiter 74989-07-14 05:46 G 29110424.54 29110424.74 29110424.94 0.0527 0.0014

Jupiter 74990-03-08 23:17 G 29110662.37 29110662.47 29110662.58 0.0536 0.0456

Jupiter 74994-09-30 18:15 G 29112329.06 29112329.26 29112329.45 0.0505 0.0180

Jupiter 74995-05-25 09:22 G 29112565.70 29112565.89 29112566.08 0.0497 0.0195

Moon 74995-09-13 09:51 G 29112676.76 29112676.91 29112677.07 0.2700 0.0901

Earth 74995-09-13 11:31 G 29112676.83 29112676.98 29112677.13 0.2706 0.0939 *

Uranus 74999-09-08 15:36 G 29114133.11 29114133.15 29114133.21 0.0144 0.0140

Saturn 75000-01-18 12:15 G 29114264.90 29114265.01 29114265.13 0.0282 0.0234

Uranus 75000-04-23 04:05 G 29114359.52 29114359.67 29114359.84 0.0144 0.0099

Jupiter 75000-07-25 21:51 G 29114453.37 29114453.41 29114453.47 0.0515 0.0496

Saturn 75000-09-05 00:43 G 29114494.33 29114494.53 29114494.74 0.0281 0.0046

Uranus 75000-12-05 16:48 G 29114586.00 29114586.20 29114586.40 0.0144 0.0058

76TH MILLENNIUM CE

This is a list of transits of Venus in the 76th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**75001-03-19 23:31**	**G**	**29114690.28**	**29114690.48**	**29114690.68**	**0.0525**	**0.0105**	
Saturn	**75001-04-22 12:29**	**G**	**29114723.84**	**29114724.02**	**29114724.20**	**0.0280**	**0.0141**	
Uranus	**75001-07-20 05:17**	**G**	**29114812.50**	**29114812.72**	**29114812.93**	**0.0144**	**0.0016**	
Jupiter	**75001-11-12 13:55**	**G**	**29114927.92**	**29114928.08**	**29114928.24**	**0.0534**	**0.0335**	
Uranus	**75002-03-03 17:17**	**G**	**29115039.01**	**29115039.22**	**29115039.44**	**0.0144**	**0.0026**	
Uranus	**75002-10-16 05:31**	**G**	**29115265.54**	**29115265.73**	**29115265.93**	**0.0144**	**0.0066**	
Uranus	**75003-05-30 17:46**	**G**	**29115492.10**	**29115492.24**	**29115492.39**	**0.0144**	**0.0107**	
Earth	**75003-09-12 01:41**	**G**	**29115596.52**	**29115596.57**	**29115596.61**	**0.2706**	**0.2580**	
Jupiter	**75006-06-06 15:51**	**G**	**29116594.99**	**29116595.16**	**29116595.33**	**0.0508**	**0.0286**	
Jupiter	**75007-01-29 10:05**	**G**	**29116831.72**	**29116831.92**	**29116832.12**	**0.0499**	**0.0096**	
Jupiter	**75007-09-22 17:03**	**G**	**29117068.13**	**29117068.21**	**29117068.31**	**0.0491**	**0.0440**	
Jupiter	**75012-11-22 18:58**	**G**	**29118956.11**	**29118956.29**	**29118956.47**	**0.0522**	**0.0219**	
Jupiter	**75013-07-18 06:15**	**G**	**29119193.58**	**29119193.76**	**29119193.95**	**0.0532**	**0.0213**	
Mars	**75014-11-17 01:55**	**G**	**29119680.42**	**29119680.58**	**29119680.75**	**0.1619**	**0.0550**	
Saturn	**75015-10-01 21:07**	**G**	**29119999.19**	**29119999.38**	**29119999.58**	**0.0278**	**0.0112**	
Saturn	**75016-05-18 08:53**	**G**	**29120228.67**	**29120228.87**	**29120229.08**	**0.0279**	**0.0073**	
Saturn	**75017-01-02 21:22**	**G**	**29120458.32**	**29120458.39**	**29120458.47**	**0.0280**	**0.0259**	
Jupiter	**75018-02-09 12:00**	**G**	**29120860.87**	**29120861.00**	**29120861.13**	**0.0510**	**0.0393**	
Jupiter	**75018-10-04 09:22**	**G**	**29121097.69**	**29121097.89**	**29121098.10**	**0.0501**	**0.0008**	
Jupiter	**75019-05-28 19:27**	**G**	**29121334.17**	**29121334.31**	**29121334.45**	**0.0493**	**0.0351**	

Jupiter 75024-07-28 16:05 G 29123222.01 29123222.17 29123222.32 0.0519 0.0328

Jupiter 75025-03-22 23:17 G 29123459.27 29123459.47 29123459.67 0.0529 0.0091

Jupiter 75025-11-15 18:43 G 29123697.26 29123697.28 29123697.32 0.0537 0.0531

Saturn 75029-07-31 15:51 G 29125051.02 29125051.16 29125051.30 0.0282 0.0210

Jupiter 75029-10-15 04:05 G 29125126.64 29125126.67 29125126.71 0.0513 0.0504

Saturn 75030-03-18 04:19 G 29125280.47 29125280.68 29125280.90 0.0281 0.0022

Jupiter 75030-06-09 05:17 G 29125363.52 29125363.72 29125363.92 0.0504 0.0117

Saturn 75030-11-02 16:19 G 29125510.01 29125510.18 29125510.35 0.0280 0.0166

Jupiter 75031-01-31 18:43 G 29125600.11 29125600.28 29125600.46 0.0496 0.0253

Jupiter 75036-04-02 12:43 G 29127487.92 29127488.03 29127488.13 0.0516 0.0433

Neptune 75036-11-08 16:48 G 29127708.13 29127708.20 29127708.29 0.0089 0.0083

Jupiter 75036-11-25 16:05 G 29127724.97 29127725.17 29127725.37 0.0526 0.0031

Neptune 75037-06-22 05:46 G 29127933.64 29127933.74 29127933.87 0.0090 0.0076

Jupiter 75037-07-21 08:10 G 29127962.71 29127962.84 29127962.97 0.0535 0.0410

Neptune 75038-02-02 18:43 G 29128159.16 29128159.28 29128159.44 0.0090 0.0069

Neptune 75038-09-16 07:41 G 29128384.68 29128384.82 29128385.00 0.0090 0.0062

Neptune 75039-04-29 21:07 G 29128610.21 29128610.38 29128610.55 0.0090 0.0054

Neptune 75039-12-11 09:51 G 29128835.74 29128835.91 29128836.11 0.0090 0.0047

Neptune 75040-07-23 22:48 G 29129061.27 29129061.45 29129061.66 0.0090 0.0040

Neptune 75041-03-06 12:00 G 29129286.80 29129287.00 29129287.20 0.0090 0.0032

Neptune 75041-10-18 00:43 G 29129512.33 29129512.53 29129512.75 0.0090 0.0025

Uranus 75041-10-30 05:03 G 29129524.63 29129524.71 29129524.82 0.0134 0.0119

Jupiter 75042-02-12 02:10 G 29129629.41 29129629.59 29129629.78 0.0506 0.0224

Neptune 75042-05-31 13:55 G 29129737.87 29129738.08 29129738.30 0.0090 0.0017

Uranus 75042-06-13 10:19 G 29129750.77 29129750.93 29129751.10 0.0134 0.0087

Jupiter 75042-10-06 18:58 G 29129866.10 29129866.29 29129866.49 0.0498 0.0154

Neptune 75043-01-12 03:07 G 29129963.41 29129963.63 29129963.84 0.0090 0.0010

Uranus 75043-01-25 15:07 G 29129976.95 29129977.13 29129977.34 0.0134 0.0055

Jupiter 75043-05-31 01:27 G 29130102.56 29130102.56 29130102.56 0.0491 0.0491

Neptune 75043-08-25 16:05 G 29130188.95 29130189.17 29130189.39 0.0090 0.0003

Uranus 75043-09-08 20:24 G 29130203.14 29130203.35 29130203.56 0.0134 0.0022

Neptune 75044-04-07 05:03 G 29130414.49 29130414.71 29130414.92 0.0090 0.0005

Uranus 75044-04-22 01:27 G 29130429.34 29130429.56 29130429.77 0.0134 0.0010

Saturn 75044-08-26 20:10 G 29130556.27 29130556.34 29130556.43 0.0277 0.0255

Neptune 75044-11-18 17:46 G 29130640.03 29130640.24 29130640.47 0.0090 0.0013

Uranus 75044-12-04 06:29 G 29130655.57 29130655.77 29130655.98 0.0134 0.0043

Saturn 75045-04-13 07:41 G 29130785.62 29130785.82 29130786.03 0.0278 0.0074

Neptune 75045-07-02 06:58 G 29130865.58 29130865.79 29130866.01 0.0090 0.0020

Uranus 75045-07-18 11:31 G 29130881.81 29130881.98 29130882.17 0.0134 0.0076

Saturn 75045-11-28 19:27 G 29131015.12 29131015.31 29131015.51 0.0279 0.0111

Mars 75045-12-13 14:10 G 29131029.98 29131030.09 29131030.19 0.1907 0.1529

Neptune 75046-02-12 20:10 G 29131091.13 29131091.34 29131091.55 0.0090 0.0027

Uranus 75046-03-01 17:03 G 29131108.08 29131108.21 29131108.34 0.0134 0.0108

Neptune 75046-09-26 08:53 G 29131316.68 29131316.87 29131317.08 0.0090 0.0035

Neptune 75047-05-09 22:05 G 29131542.24 29131542.42 29131542.62 0.0090 0.0042

Neptune 75047-12-21 11:03 G 29131767.79 29131767.96 29131768.16 0.0090 0.0050

Jupiter 75048-07-31 07:41 G 29131990.63 29131990.82 29131991.02 0.0523 0.0151

Neptune 75048-08-03 00:15 G 29131993.36 29131993.51 29131993.69 0.0090 0.0057

Neptune 75049-03-16 13:27 G 29132218.92 29132219.06 29132219.22 0.0090 0.0064

Jupiter 75049-03-25 20:10 G 29132228.17 29132228.34 29132228.51 0.0533 0.0285

Neptune 75049-10-28 02:10 G 29132444.48 29132444.59 29132444.75 0.0090 0.0072

Neptune 75050-06-10 15:36 G 29132670.06 29132670.15 29132670.27 0.0090 0.0079

Neptune 75051-01-22 04:48 G 29132895.65 29132895.70 29132895.78 0.0090 0.0086

Jupiter 75053-10-17 23:17 G 29133895.32 29133895.47 29133895.63 0.0509 0.0330

Jupiter 75054-06-11 19:41 G 29134132.11 29134132.32 29134132.52 0.0500 0.0055

Jupiter 75055-02-03 04:34 G 29134368.58 29134368.69 29134368.81 0.0493 0.0405

Saturn 75059-02-10 23:46 G 29135837.33 29135837.49 29135837.66 0.0282 0.0177

Saturn 75059-09-28 12:15 G 29136066.80 29136067.01 29136067.22 0.0281 0.0013

Jupiter 75060-04-05 02:39 G 29136256.44 29136256.61 29136256.79 0.0521 0.0264

Saturn 75060-05-14 23:31 G 29136296.34 29136296.48 29136296.64 0.0279 0.0198

Jupiter 75060-11-28 11:46 G 29136493.80 29136493.99 29136494.18 0.0530 0.0162

Jupiter 75065-06-22 19:41 G 29138161.22 29138161.32 29138161.43 0.0512 0.0436

Jupiter 75066-02-14 18:58 G 29138398.09 29138398.29 29138398.50 0.0502 0.0048

Jupiter 75066-10-09 06:29 G 29138634.62 29138634.77 29138634.93 0.0494 0.0314

Jupiter 75071-12-09 23:31 G 29140522.34 29140522.48 29140522.62 0.0518 0.0371

Jupiter 75072-08-03 05:17 G 29140759.52 29140759.72 29140759.92 0.0528 0.0042

Jupiter 75073-03-28 23:46 G 29140997.41 29140997.49 29140997.58 0.0537 0.0483

Saturn 75074-03-08 22:19 G 29141342.33 29141342.43 29141342.55 0.0277 0.0234

Saturn 75074-10-24 09:36 G 29141571.70 29141571.90 29141572.12 0.0278 0.0053

Saturn 75075-06-10 21:22 G 29141801.21 29141801.39 29141801.59 0.0279 0.0133

Jupiter 75077-10-20 17:03 G 29142664.02 29142664.21 29142664.41 0.0505 0.0154

Jupiter 75078-06-14 07:41 G 29142900.64 29142900.82 29142901.00 0.0496 0.0218

Mars 75080-09-13 14:39 G 29143722.94 29143723.11 29143723.28 0.1620 0.0347

Jupiter 75083-08-14 22:05 G 29144788.34 29144788.42 29144788.50 0.0515 0.0471

Uranus 75083-12-22 11:31 G 29144917.85 29144917.98 29144918.11 0.0144 0.0117

Jupiter 75084-04-08 00:00 G 29145025.31 29145025.50 29145025.70 0.0525 0.0078

Uranus 75084-08-04 23:46 G 29145144.31 29145144.49 29145144.69 0.0144 0.0076

Jupiter 75084-12-01 14:53 G 29145262.97 29145263.12 29145263.27 0.0534 0.0361

Uranus 75085-03-19 12:15 G 29145370.80 29145371.01 29145371.23 0.0144 0.0034

Uranus 75085-11-01 00:43 G 29145597.31 29145597.53 29145597.75 0.0144 0.0007

Uranus 75086-06-15 12:43 G 29145823.84 29145824.03 29145824.25 0.0144 0.0050

Uranus 75087-01-28 01:12 G 29146050.39 29146050.55 29146050.73 0.0144 0.0090

Uranus 75087-09-11 13:12 G 29146276.98 29146277.05 29146277.16 0.0144 0.0131

Saturn 75088-08-23 03:22 G 29146623.46 29146623.64 29146623.81 0.0282 0.0152

Saturn 75089-04-09 15:36 G 29146852.95 29146853.15 29146853.37 0.0281 0.0038

Jupiter 75089-06-25 11:31 G 29146929.80 29146929.98 29146930.15 0.0507 0.0265

Saturn 75089-11-25 03:22 G 29147082.52 29147082.64 29147082.77 0.0280 0.0223

Jupiter 75090-02-17 05:31 G 29147166.53 29147166.73 29147166.93 0.0499 0.0115

Jupiter 75090-10-11 12:58 G 29147402.97 29147403.04 29147403.11 0.0492 0.0457

Jupiter 75095-12-12 18:29 G 29149291.09 29149291.27 29149291.46 0.0522 0.0193

Jupiter 75096-08-06 05:31 G 29149528.55 29149528.73 29149528.91 0.0532 0.0239

Pluto 75098-06-28 15:36 G 29150219.97 29150220.15 29150220.35 0.0065 0.0033

Pluto 75099-02-08 20:24 G 29150445.13 29150445.35 29150445.57 0.0065 0.0004

Pluto 75099-09-22 00:15 G 29150670.37 29150670.51 29150670.71 0.0066 0.0042

Jupiter 75101-03-01 06:43 G 29151195.64 29151195.78 29151195.92 0.0510 0.0374

Jupiter 75101-10-24 04:19 G 29151432.47 29151432.68 29151432.89 0.0501 0.0012

Jupiter 75102-06-17 14:39 G 29151668.98 29151669.11 29151669.25 0.0494 0.0368

Saturn 75103-09-20 08:39 G 29152128.72 29152128.86 29152129.02 0.0277 0.0197

Saturn 75104-05-06 20:24 G 29152358.13 29152358.35 29152358.56 0.0278 0.0017

Saturn 75104-12-22 08:24 G 29152587.68 29152587.85 29152588.02 0.0279 0.0169

Jupiter 75107-08-18 11:31 G 29153556.82 29153556.98 29153557.15 0.0519 0.0306

Jupiter 75108-04-11 18:43 G 29153794.08 29153794.28 29153794.47 0.0529 0.0113

Mars 75111-10-11 16:05 G 29155072.01 29155072.17 29155072.33 0.1905 0.0721

Jupiter 75112-11-04 02:10 G 29155461.52 29155461.59 29155461.67 0.0513 0.0479

Jupiter 75113-06-29 03:36 G 29155698.44 29155698.65 29155698.85 0.0504 0.0091

Jupiter 75114-02-20 17:03 G 29155935.04 29155935.21 29155935.38 0.0495 0.0276

Saturn 75118-03-06 12:43 G 29157409.83 29157410.03 29157410.22 0.0282 0.0117

Neptune 75118-05-16 05:17 G 29157480.67 29157480.72 29157480.82 0.0088 0.0083

Saturn 75118-10-22 00:43 G 29157639.32 29157639.53 29157639.73 0.0280 0.0071

Neptune 75118-12-27 18:29 G 29157706.18 29157706.27 29157706.40 0.0088 0.0076

Jupiter 75119-04-23 07:55 G 29157822.71 29157822.83 29157822.95 0.0516 0.0410

Saturn 75119-06-08 12:00 G 29157868.92 29157869.00 29157869.09 0.0279 0.0255

Neptune 75119-08-10 07:27 G 29157931.70 29157931.81 29157931.97 0.0088 0.0069

Jupiter 75119-12-16 11:31 G 29158059.78 29158059.98 29158060.18 0.0526 0.0007

Neptune 75120-03-22 20:39 G 29158157.22 29158157.36 29158157.53 0.0088 0.0062

Jupiter 75120-08-10 03:51 G 29158297.55 29158297.66 29158297.78 0.0535 0.0432

Neptune 75120-11-03 09:36 G 29158382.74 29158382.90 29158383.09 0.0088 0.0055

Neptune 75121-06-16 22:48 G 29158608.27 29158608.45 29158608.65 0.0088 0.0048

Neptune 75122-01-28 11:46 G 29158833.80 29158833.99 29158834.20 0.0088 0.0041

Neptune 75122-09-11 00:43 G 29159059.34 29159059.53 29159059.75 0.0088 0.0034

Neptune 75123-04-24 13:55 G 29159284.87 29159285.08 29159285.30 0.0088 0.0027

Neptune 75123-12-06 03:07 G 29159510.42 29159510.63 29159510.85 0.0088 0.0020

Neptune 75124-07-18 16:05 G 29159735.96 29159736.17 29159736.40 0.0088 0.0013

Neptune 75125-03-01 05:17 G 29159961.50 29159961.72 29159961.94 0.0088 0.0005

Jupiter 75125-03-04 01:27 G 29159964.38 29159964.56 29159964.76 0.0506 0.0197

Moon 75125-03-16 21:51 G 29159977.33 29159977.41 29159977.49 0.2628 0.2246

Earth 75125-03-17 03:36 G 29159977.59 29159977.65 29159977.70 0.2626 0.2436

Uranus 75125-06-30 17:03 G 29160083.20 29160083.21 29160083.26 0.0134 0.0132

Neptune 75125-10-12 18:15 G 29160187.04 29160187.26 29160187.48 0.0088 0.0002

Jupiter 75125-10-26 17:46 G 29160201.05 29160201.24 29160201.43 0.0497 0.0179

Uranus 75126-02-11 22:05 G 29160309.29 29160309.42 29160309.58 0.0134 0.0100

Neptune 75126-05-26 07:12 G 29160412.58 29160412.80 29160413.03 0.0088 0.0009

Uranus 75126-09-26 03:07 G 29160535.45 29160535.63 29160535.83 0.0134 0.0068

Neptune 75127-01-06 20:10 G 29160638.13 29160638.34 29160638.57 0.0088 0.0017

Uranus 75127-05-10 08:24 G 29160761.64 29160761.85 29160762.06 0.0134 0.0035

Neptune 75127-08-20 09:07 G 29160863.68 29160863.88 29160864.11 0.0088 0.0024

Uranus 75127-12-22 13:27 G 29160987.84 29160988.06 29160988.27 0.0134 0.0003

Neptune 75128-04-01 22:05 G 29161089.22 29161089.42 29161089.64 0.0088 0.0031

Uranus 75128-08-04 18:15 G 29161214.06 29161214.26 29161214.48 0.0134 0.0030

Neptune 75128-11-13 11:03 G 29161314.77 29161314.96 29161315.18 0.0088 0.0038

Uranus 75129-03-18 23:31 G 29161440.29 29161440.48 29161440.68 0.0134 0.0062

Neptune 75129-06-27 00:00 G 29161540.32 29161540.50 29161540.71 0.0088 0.0045

Uranus 75129-10-31 04:48 G 29161666.55 29161666.70 29161666.85 0.0134 0.0095

Neptune 75130-02-07 12:58 G 29161765.87 29161766.04 29161766.23 0.0088 0.0052

Uranus 75130-06-14 09:51 G 29161892.86 29161892.91 29161892.99 0.0134 0.0127

Neptune 75130-09-21 01:41 G 29161991.43 29161991.57 29161991.75 0.0088 0.0059

Jupiter 75130-12-27 05:46 G 29162088.72 29162088.74 29162088.77 0.0514 0.0509

Neptune 75131-05-04 14:39 G 29162216.98 29162217.11 29162217.27 0.0088 0.0066

Jupiter 75131-08-21 06:15 G 29162325.56 29162325.76 29162325.95 0.0524 0.0125

Neptune 75131-12-16 03:36 G 29162442.55 29162442.65 29162442.79 0.0088 0.0073

Jupiter 75132-04-14 19:27 G 29162563.14 29162563.31 29162563.47 0.0533 0.0312

Neptune 75132-07-28 16:19 G 29162668.12 29162668.18 29162668.30 0.0088 0.0080

Neptune 75133-03-11 05:31 G 29162893.70 29162893.73 29162893.78 0.0088 0.0086

Moon 75133-03-14 16:48 G 29162897.05 29162897.20 29162897.34 0.2633 0.0819

Earth 75133-03-14 19:41 G 29162897.16 29162897.32 29162897.47 0.2626 0.0632 *

Saturn 75133-04-01 12:00 G 29162914.84 29162915.00 29162915.17 0.0277 0.0175

Saturn 75133-11-16 23:17 G 29163144.26 29163144.47 29163144.69 0.0278 0.0008

Saturn 75134-07-04 11:03 G 29163373.82 29163373.96 29163374.12 0.0279 0.0193

Jupiter 75136-11-06 22:19 G 29164230.27 29164230.43 29164230.60 0.0509 0.0303

Jupiter 75137-07-01 17:46 G 29164467.04 29164467.24 29164467.45 0.0500 0.0079

Jupiter 75138-02-23 02:10 G 29164703.49 29164703.59 29164703.70 0.0492 0.0426

Jupiter 75143-04-26 02:39 G 29166591.43 29166591.61 29166591.79 0.0521 0.0237

Jupiter 75143-12-19 12:00 G 29166828.82 29166829.00 29166829.19 0.0531 0.0190

Mars 75146-07-13 03:07 G 29167765.45 29167765.63 29167765.80 0.1621 0.0146

Saturn 75147-01-30 02:39 G 29167966.59 29167966.61 29167966.63 0.0283 0.0281

Saturn 75147-09-16 15:36 G 29168195.95 29168196.15 29168196.35 0.0282 0.0092

Saturn 75148-05-03 03:51 G 29168425.46 29168425.66 29168425.86 0.0281 0.0096

Jupiter 75148-07-12 15:22 G 29168496.03 29168496.14 29168496.26 0.0511 0.0414

Jupiter 75149-03-06 14:24 G 29168732.89 29168733.10 29168733.30 0.0502 0.0030

Jupiter 75149-10-29 01:41 G 29168969.42 29168969.57 29168969.73 0.0494 0.0332

Jupiter 75154-12-29 22:34 G 29170857.30 29170857.44 29170857.60 0.0518 0.0345

Jupiter 75155-08-24 04:19 G 29171094.49 29171094.68 29171094.89 0.0528 0.0070

Jupiter 75156-04-17 22:19 G 29171332.38 29171332.43 29171332.50 0.0536 0.0506

Jupiter 75160-11-09 11:31 G 29172998.79 29172998.98 29172999.18 0.0505 0.0135

Jupiter 75161-07-04 02:24 G 29173235.42 29173235.60 29173235.78 0.0496 0.0237

Saturn 75162-10-12 21:36 G 29173701.23 29173701.40 29173701.60 0.0277 0.0140

Saturn 75163-05-30 09:22 G 29173930.69 29173930.89 29173931.11 0.0278 0.0045

Saturn 75164-01-14 21:51 G 29174160.29 29174160.41 29174160.53 0.0280 0.0229

Jupiter 75166-09-03 17:17 G 29175123.13 29175123.22 29175123.32 0.0515 0.0449

Jupiter 75167-04-28 18:58 G 29175360.09 29175360.29 29175360.49 0.0525 0.0055

Uranus 75167-08-22 18:43 G 29175476.22 29175476.28 29175476.37 0.0144 0.0135

Jupiter 75167-12-22 09:22 G 29175597.76 29175597.89 29175598.04 0.0534 0.0382

Uranus 75168-04-05 07:12 G 29175702.65 29175702.80 29175702.98 0.0144 0.0094

Uranus 75168-11-17 19:55 G 29175929.13 29175929.33 29175929.54 0.0144 0.0052

Uranus 75169-07-02 08:24 G 29176155.63 29176155.85 29176156.07 0.0144 0.0010

Uranus 75170-02-13 20:53 G 29176382.16 29176382.37 29176382.59 0.0144 0.0031

Uranus 75170-09-28 09:22 G 29176608.70 29176608.89 29176609.08 0.0144 0.0073

Uranus 75171-05-12 21:36 G 29176835.27 29176835.40 29176835.53 0.0144 0.0114

Jupiter 75172-07-15 09:07 G 29177264.70 29177264.88 29177265.06 0.0508 0.0240

Jupiter 75173-03-09 03:22 G 29177501.44 29177501.64 29177501.84 0.0499 0.0140

Jupiter 75173-10-31 10:34 G 29177737.90 29177737.94 29177737.99 0.0492 0.0479

Saturn 75176-08-11 12:58 G 29178752.95 29178753.04 29178753.16 0.0282 0.0246

Saturn 75177-03-29 01:55 G 29178982.37 29178982.58 29178982.78 0.0281 0.0057

Mars 75177-08-07 18:43 G 29179114.10 29179114.28 29179114.45 0.1904 0.0058

Saturn 75177-11-13 13:41 G 29179211.89 29179212.07 29179212.26 0.0280 0.0131

Jupiter 75179-01-01 13:12 G 29179625.86 29179626.05 29179626.25 0.0522 0.0170

Jupiter 75179-08-27 00:15 G 29179863.34 29179863.51 29179863.69 0.0532 0.0261

Jupiter 75184-03-20 05:46 G 29181530.59 29181530.74 29181530.89 0.0510 0.0347

Jupiter 75184-11-12 03:07 G 29181767.43 29181767.63 29181767.84 0.0501 0.0038

Jupiter 75185-07-06 12:58 G 29182003.92 29182004.04 29182004.17 0.0493 0.0390

Pluto 75186-02-28 12:29 G 29182241.01 29182241.02 29182241.07 0.0079 0.0079

Pluto 75186-10-11 23:17 G 29182466.25 29182466.47 29182466.69 0.0079 0.0011

Pluto 75187-05-25 08:53 G 29182691.73 29182691.87 29182692.05 0.0079 0.0055

Jupiter 75190-09-06 09:07 G 29183891.71 29183891.88 29183892.05 0.0520 0.0282

Jupiter 75191-05-01 16:48 G 29184129.01 29184129.20 29184129.40 0.0530 0.0139

Saturn 75192-04-24 01:41 G 29184487.38 29184487.57 29184487.77 0.0278 0.0115

Saturn 75192-12-09 13:12 G 29184716.84 29184717.05 29184717.26 0.0279 0.0068

Saturn 75193-07-27 00:58 G 29184946.47 29184946.54 29184946.64 0.0280 0.0253

Jupiter 75195-11-24 01:12 G 29185796.46 29185796.55 29185796.65 0.0513 0.0453

Jupiter 75196-07-18 01:55 G 29186033.38 29186033.58 29186033.78 0.0503 0.0065

Jupiter 75197-03-11 14:39 G 29186269.95 29186270.11 29186270.27 0.0495 0.0299

Neptune 75201-02-11 00:43 G 29187702.49 29187702.53 29187702.62 0.0089 0.0086

Neptune 75201-09-24 13:41 G 29187927.99 29187928.07 29187928.20 0.0089 0.0079

Neptune 75202-05-08 03:07 G 29188153.51 29188153.63 29188153.77 0.0089 0.0071

Jupiter 75202-05-12 06:58 G 29188157.66 29188157.79 29188157.92 0.0517 0.0386

Neptune 75202-12-19 16:05 G 29188379.03 29188379.17 29188379.34 0.0090 0.0064

Jupiter 75203-01-04 11:17 G 29188394.77 29188394.97 29188395.17 0.0527 0.0020

Neptune 75203-08-02 05:03 G 29188604.56 29188604.71 29188604.89 0.0090 0.0057

Jupiter 75203-08-30 04:05 G 29188632.57 29188632.67 29188632.78 0.0536 0.0458

Neptune 75204-03-14 18:15 G 29188830.08 29188830.26 29188830.45 0.0090 0.0049

Neptune 75204-10-26 06:58 G 29189055.61 29189055.79 29189056.00 0.0090 0.0042

Neptune 75205-06-08 20:10 G 29189281.15 29189281.34 29189281.55 0.0090 0.0035

Neptune 75206-01-20 09:22 G 29189506.69 29189506.89 29189507.10 0.0090 0.0027

Saturn 75206-02-21 16:05 G 29189539.04 29189539.17 29189539.30 0.0282 0.0221

Neptune 75206-09-02 22:19 G 29189732.22 29189732.43 29189732.65 0.0090 0.0019

Saturn 75206-10-09 04:34 G 29189768.49 29189768.69 29189768.91 0.0281 0.0033

Neptune 75207-04-16 11:17 G 29189957.76 29189957.97 29189958.19 0.0090 0.0012

Saturn 75207-05-26 16:34 G 29189998.02 29189998.19 29189998.37 0.0280 0.0155

Neptune 75207-11-28 00:15 G 29190183.30 29190183.51 29190183.73 0.0090 0.0005

Jupiter 75208-03-22 21:07 G 29190299.19 29190299.38 29190299.57 0.0506 0.0175

Neptune 75208-07-10 13:27 G 29190408.84 29190409.06 29190409.28 0.0090 0.0003

Jupiter 75208-11-14 13:12 G 29190535.86 29190536.05 29190536.24 0.0497 0.0199

Neptune 75209-02-21 02:24 G 29190634.38 29190634.60 29190634.82 0.0090 0.0011

Neptune 75209-10-04 15:22 G 29190859.93 29190860.14 29190860.35 0.0090 0.0018

Uranus 75209-10-12 10:05 G 29190867.82 29190867.92 29190868.05 0.0134 0.0113

Neptune 75210-05-18 04:19 G 29191085.48 29191085.68 29191085.90 0.0090 0.0026

Uranus 75210-05-26 15:22 G 29191093.97 29191094.14 29191094.31 0.0134 0.0080

Neptune 75210-12-29 17:31 G 29191311.03 29191311.23 29191311.43 0.0090 0.0033

Uranus 75211-01-07 20:24 G 29191320.15 29191320.35 29191320.55 0.0134 0.0048

Neptune 75211-08-12 06:15 G 29191536.58 29191536.76 29191536.97 0.0090 0.0041

Uranus 75211-08-22 01:12 G 29191546.34 29191546.55 29191546.77 0.0134 0.0016

Neptune 75212-03-24 19:27 G 29191762.13 29191762.31 29191762.50 0.0090 0.0048

Uranus 75212-04-04 06:15 G 29191772.55 29191772.76 29191772.98 0.0134 0.0017

Mars 75212-05-09 15:36 G 29191807.97 29191808.15 29191808.32 0.1622 0.0074

Neptune 75212-11-05 08:39 G 29191987.69 29191987.86 29191988.03 0.0090 0.0055

Uranus 75212-11-16 11:17 G 29191998.78 29191998.97 29191999.18 0.0134 0.0049

Neptune 75213-06-18 21:22 G 29192213.26 29192213.39 29192213.57 0.0090 0.0063

Uranus 75213-06-30 16:19 G 29192225.03 29192225.18 29192225.37 0.0134 0.0082

Jupiter 75214-01-15 04:34 G 29192423.63 29192423.69 29192423.76 0.0514 0.0485

Neptune 75214-01-30 10:48 G 29192438.82 29192438.95 29192439.09 0.0090 0.0070

Uranus 75214-02-11 21:36 G 29192451.30 29192451.40 29192451.53 0.0134 0.0114

Jupiter 75214-09-09 05:17 G 29192660.52 29192660.72 29192660.92 0.0524 0.0097

Neptune 75214-09-13 00:00 G 29192664.40 29192664.50 29192664.61 0.0090 0.0077

Neptune 75215-04-26 12:29 G 29192889.98 29192890.02 29192890.12 0.0090 0.0085

Jupiter 75215-05-04 18:15 G 29192898.11 29192898.26 29192898.42 0.0533 0.0337

Jupiter 75219-11-26 17:03 G 29194565.04 29194565.21 29194565.38 0.0509 0.0283

Jupiter 75220-07-20 12:29 G 29194801.82 29194802.02 29194802.22 0.0500 0.0099

Jupiter 75221-03-13 21:07 G 29195038.30 29195038.38 29195038.47 0.0492 0.0443

Saturn 75221-03-19 23:17 G 29195044.41 29195044.47 29195044.55 0.0277 0.0261

Saturn 75221-11-04 10:48 G 29195273.75 29195273.95 29195274.15 0.0278 0.0081

Saturn 75222-06-21 22:34 G 29195503.25 29195503.44 29195503.64 0.0279 0.0103

Jupiter 75226-05-14 21:36 G 29196926.22 29196926.40 29196926.59 0.0521 0.0214

Jupiter 75227-01-07 06:43 G 29197163.60 29197163.78 29197163.97 0.0530 0.0212

Jupiter 75231-08-01 12:29 G 29198830.90 29198831.02 29198831.16 0.0512 0.0390

Jupiter 75232-03-25 12:00 G 29199067.79 29199068.00 29199068.20 0.0502 0.0011

Jupiter 75232-11-16 23:31 G 29199304.34 29199304.48 29199304.63 0.0494 0.0355

Saturn 75235-09-04 02:53 G 29200325.47 29200325.62 29200325.79 0.0282 0.0184

Saturn 75236-04-20 15:22 G 29200554.93 29200555.14 29200555.35 0.0281 0.0004

Saturn 75236-12-06 03:07 G 29200784.47 29200784.63 29200784.78 0.0280 0.0190

Jupiter 75238-01-17 17:17 G 29201192.07 29201192.22 29201192.38 0.0518 0.0323

Jupiter 75238-09-11 22:48 G 29201429.25 29201429.45 29201429.65 0.0528 0.0090

Moon 75238-09-15 10:48 G 29201432.81 29201432.95 29201433.08 0.2712 0.1022

Earth 75238-09-15 11:46 G 29201432.85 29201432.99 29201433.14 0.2706 0.0956 *

Jupiter 75239-05-07 17:03 G 29201667.17 29201667.21 29201667.25 0.0536 0.0526

Jupiter 75243-04-06 07:41 G 29203096.77 29203096.82 29203096.88 0.0515 0.0496

Mars 75243-06-04 20:39 G 29203156.20 29203156.36 29203156.52 0.1902 0.0823

Jupiter 75243-11-29 10:34 G 29203333.74 29203333.94 29203334.14 0.0505 0.0107

Jupiter 75244-07-23 00:58 G 29203570.37 29203570.54 29203570.72 0.0496 0.0261

Earth 75246-09-13 01:55 G 29204352.53 29204352.58 29204352.62 0.2706 0.2586

Moon 75246-09-13 05:03 G 29204352.61 29204352.71 29204352.81 0.2711 0.2014 *

Jupiter 75249-09-22 14:10 G 29205457.98 29205458.09 29205458.20 0.0515 0.0427

Jupiter 75250-05-17 16:34 G 29205694.99 29205695.19 29205695.39 0.0526 0.0029

Saturn 75250-09-30 04:05 G 29205830.57 29205830.67 29205830.78 0.0277 0.0236

Jupiter 75251-01-10 07:41 G 29205932.70 29205932.82 29205932.96 0.0535 0.0407

Saturn 75251-05-17 15:07 G 29206059.93 29206060.13 29206060.34 0.0278 0.0056

Uranus 75251-12-04 12:58 G 29206260.92 29206261.04 29206261.19 0.0144 0.0113

Saturn 75252-01-02 02:53 G 29206289.44 29206289.62 29206289.81 0.0279 0.0128

Uranus 75252-07-18 01:41 G 29206487.39 29206487.57 29206487.77 0.0144 0.0071

Uranus 75253-03-01 14:24 G 29206713.88 29206714.10 29206714.31 0.0144 0.0029

Uranus 75253-10-14 02:53 G 29206940.40 29206940.62 29206940.84 0.0144 0.0012

Uranus 75254-05-28 15:22 G 29207166.94 29207167.14 29207167.34 0.0144 0.0054

Uranus 75255-01-10 03:36 G 29207393.50 29207393.65 29207393.83 0.0144 0.0095

Jupiter 75255-08-04 07:55 G 29207599.65 29207599.83 29207600.02 0.0507 0.0214

Uranus 75255-08-24 15:51 G 29207620.11 29207620.16 29207620.25 0.0144 0.0136

Jupiter 75256-03-28 01:27 G 29207836.37 29207836.56 29207836.76 0.0498 0.0164

Jupiter 75262-01-20 12:29 G 29209960.83 29209961.02 29209961.22 0.0523 0.0144

Jupiter 75262-09-15 00:15 G 29210198.34 29210198.51 29210198.68 0.0532 0.0288

Saturn 75265-03-16 05:17 G 29211111.55 29211111.72 29211111.89 0.0282 0.0161

Saturn 75265-10-31 17:46 G 29211341.03 29211341.24 29211341.45 0.0281 0.0028

Saturn 75266-06-18 05:17 G 29211570.59 29211570.72 29211570.86 0.0280 0.0213

Jupiter 75267-04-09 02:10 G 29211865.43 29211865.59 29211865.75 0.0510 0.0323

Jupiter 75267-12-01 23:03 G 29212102.25 29212102.46 29212102.66 0.0500 0.0060

Jupiter 75268-07-25 08:39 G 29212338.75 29212338.86 29212338.98 0.0493 0.0409

Jupiter 75273-09-25 08:10 G 29214226.66 29214226.84 29214227.02 0.0520 0.0255

Jupiter 75274-05-20 16:05 G 29214463.98 29214464.17 29214464.37 0.0530 0.0167

Mars 75278-03-07 04:05 G 29215850.50 29215850.67 29215850.84 0.1623 0.0265

Jupiter 75278-12-12 20:39 G 29216131.25 29216131.36 29216131.47 0.0513 0.0431

Jupiter 75279-08-06 21:07 G 29216368.17 29216368.38 29216368.58 0.0503 0.0045

Jupiter 75280-03-30 09:51 G 29216604.75 29216604.91 29216605.07 0.0495 0.0318

Saturn 75280-04-11 11:31 G 29216616.85 29216616.98 29216617.13 0.0277 0.0205

Saturn 75280-11-26 23:03 G 29216846.25 29216846.46 29216846.67 0.0278 0.0024

Saturn 75281-07-14 11:03 G 29217075.79 29217075.96 29217076.14 0.0279 0.0160

Neptune 75282-08-17 14:10 G 29217475.06 29217475.09 29217475.17 0.0088 0.0085

Neptune 75283-03-31 03:07 G 29217700.55 29217700.63 29217700.76 0.0088 0.0078

Neptune 75283-11-11 16:19 G 29217926.07 29217926.18 29217926.33 0.0088 0.0071

Neptune 75284-06-24 05:17 G 29218151.59 29218151.72 29218151.90 0.0088 0.0064

Neptune 75285-02-04 18:15 G 29218377.12 29218377.26 29218377.45 0.0088 0.0057

Jupiter 75285-05-31 02:24 G 29218492.47 29218492.60 29218492.75 0.0517 0.0363

Neptune 75285-09-18 07:27 G 29218602.64 29218602.81 29218603.01 0.0088 0.0050

Jupiter 75286-01-23 06:29 G 29218729.57 29218729.77 29218729.97 0.0527 0.0044

Neptune 75286-05-01 20:24 G 29218828.17 29218828.35 29218828.56 0.0088 0.0043

Jupiter 75286-09-17 22:48 G 29218967.36 29218967.45 29218967.54 0.0535 0.0478

Neptune 75286-12-13 09:36 G 29219053.71 29219053.90 29219054.12 0.0088 0.0036

Neptune 75287-07-26 22:48 G 29219279.24 29219279.45 29219279.67 0.0088 0.0028

Neptune 75288-03-08 11:46 G 29219504.78 29219504.99 29219505.21 0.0088 0.0021

Neptune 75288-10-20 00:43 G 29219730.32 29219730.53 29219730.76 0.0088 0.0014

Neptune 75289-06-02 13:55 G 29219955.86 29219956.08 29219956.30 0.0088 0.0007

Neptune 75290-01-14 02:53 G 29220181.40 29220181.62 29220181.85 0.0088 0.0002

Neptune 75290-08-27 15:51 G 29220406.94 29220407.16 29220407.39 0.0088 0.0008

Neptune 75291-04-10 05:03 G 29220632.49 29220632.71 29220632.93 0.0088 0.0015

Jupiter 75291-04-11 18:29 G 29220634.08 29220634.27 29220634.47 0.0506 0.0150

Neptune 75291-11-21 18:00 G 29220858.04 29220858.25 29220858.47 0.0088 0.0022

Jupiter 75291-12-04 11:03 G 29220870.78 29220870.96 29220871.14 0.0497 0.0224

Neptune 75292-07-04 06:43 G 29221083.58 29221083.78 29221084.00 0.0088 0.0030

Neptune 75293-02-14 19:41 G 29221309.13 29221309.32 29221309.54 0.0088 0.0037

Uranus 75293-06-11 22:34 G 29221426.38 29221426.44 29221426.53 0.0134 0.0125

Neptune 75293-09-28 08:39 G 29221534.68 29221534.86 29221535.07 0.0088 0.0044

Uranus 75294-01-24 03:36 G 29221652.51 29221652.65 29221652.81 0.0134 0.0093

Neptune 75294-05-11 21:36 G 29221760.23 29221760.40 29221760.59 0.0088 0.0051

Uranus 75294-09-07 08:39 G 29221878.67 29221878.86 29221879.06 0.0134 0.0061

Saturn 75294-09-26 16:34 G 29221898.00 29221898.19 29221898.38 0.0282 0.0124

Neptune 75294-12-23 10:34 G 29221985.79 29221985.94 29221986.12 0.0088 0.0058

Uranus 75295-04-21 13:27 G 29222104.86 29222105.06 29222105.28 0.0134 0.0029

Saturn 75295-05-14 04:34 G 29222127.49 29222127.69 29222127.90 0.0281 0.0064

Neptune 75295-08-05 23:31 G 29222211.35 29222211.48 29222211.65 0.0088 0.0065

Uranus 75295-12-03 18:43 G 29222331.06 29222331.28 29222331.50 0.0134 0.0004

Saturn 75295-12-29 15:51 G 29222357.08 29222357.16 29222357.27 0.0280 0.0249

Neptune 75296-03-18 12:15 G 29222436.90 29222437.01 29222437.16 0.0088 0.0072

Uranus 75296-07-16 23:46 G 29222557.29 29222557.49 29222557.70 0.0134 0.0037

Neptune 75296-10-30 00:58 G 29222662.47 29222662.54 29222662.66 0.0088 0.0079

Jupiter 75297-02-02 23:31 G 29222758.40 29222758.48 29222758.57 0.0514 0.0463

Uranus 75297-02-28 04:48 G 29222783.53 29222783.70 29222783.90 0.0134 0.0069

Neptune 75297-06-12 13:41 G 29222888.05 29222888.07 29222888.15 0.0088 0.0086

Jupiter 75297-09-27 23:46 G 29222995.29 29222995.49 29222995.69 0.0524 0.0075

Uranus 75297-10-12 10:05 G 29223009.79 29223009.92 29223010.07 0.0134 0.0101

Jupiter 75298-05-23 12:43 G 29223232.89 29223233.03 29223233.18 0.0533 0.0358

Uranus 75298-05-26 15:22 G 29223236.13 29223236.14 29223236.16 0.0134 0.0133

Jupiter 75302-12-16 15:51 G 29224899.99 29224900.16 29224900.34 0.0509 0.0256

Jupiter 75303-08-10 11:31 G 29225136.78 29225136.98 29225137.18 0.0500 0.0125

Jupiter 75304-04-02 19:41 G 29225373.26 29225373.32 29225373.39 0.0492 0.0465

Mars 75309-04-01 23:17 G 29227198.38 29227198.47 29227198.57 0.1900 0.1578

Jupiter 75309-06-03 18:58 G 29227261.10 29227261.29 29227261.48 0.0521 0.0189

Saturn 75309-10-23 16:34 G 29227403.03 29227403.19 29227403.35 0.0277 0.0180

Jupiter 75310-01-27 04:48 G 29227498.52 29227498.70 29227498.88 0.0531 0.0237

Saturn 75310-06-10 03:51 G 29227632.44 29227632.66 29227632.87 0.0278 0.0004

Saturn 75311-01-25 15:36 G 29227862.00 29227862.15 29227862.32 0.0279 0.0186

Jupiter 75314-08-21 12:00 G 29229165.86 29229166.00 29229166.15 0.0511 0.0363

Jupiter 75315-04-15 10:48 G 29229402.74 29229402.95 29229403.15 0.0502 0.0024

Jupiter 75315-12-07 21:51 G 29229639.28 29229639.41 29229639.54 0.0494 0.0377

Jupiter 75321-02-06 16:05 G 29231527.01 29231527.17 29231527.34 0.0519 0.0298

Jupiter 75321-10-01 22:34 G 29231764.24 29231764.44 29231764.64 0.0529 0.0118

Saturn 75324-04-08 18:15 G 29232684.07 29232684.26 29232684.46 0.0281 0.0102

Saturn 75324-11-24 06:29 G 29232913.57 29232913.77 29232913.97 0.0280 0.0086

Saturn 75325-07-11 17:46 G 29233143.20 29233143.24 29233143.31 0.0279 0.0271

Jupiter 75326-04-26 05:17 G 29233431.64 29233431.72 29233431.80 0.0514 0.0470

Jupiter 75326-12-19 07:27 G 29233668.60 29233668.81 29233669.01 0.0504 0.0084

Jupiter 75327-08-12 21:22 G 29233905.22 29233905.39 29233905.56 0.0496 0.0282

Jupiter 75332-10-12 13:27 G 29235792.94 29235793.06 29235793.19 0.0516 0.0400

Jupiter 75333-06-06 16:19 G 29236029.98 29236030.18 29236030.39 0.0526 0.0009

Jupiter 75334-01-30 07:41 G 29236267.71 29236267.82 29236267.94 0.0535 0.0434

Uranus 75335-08-04 19:55 G 29236819.25 29236819.33 29236819.43 0.0144 0.0131

Uranus 75336-03-18 08:24 G 29237045.69 29237045.85 29237046.04 0.0144 0.0090

Uranus 75336-10-30 21:07 G 29237272.18 29237272.38 29237272.59 0.0144 0.0048

Uranus 75337-06-14 09:51 G 29237498.69 29237498.91 29237499.13 0.0144 0.0006

Uranus 75338-01-26 22:34 G 29237725.23 29237725.44 29237725.65 0.0144 0.0035

Jupiter 75338-08-24 03:51 G 29237934.47 29237934.66 29237934.85 0.0507 0.0191

Uranus 75338-09-10 11:03 G 29237951.78 29237951.96 29237952.15 0.0144 0.0076

Jupiter 75339-04-17 21:22 G 29238171.20 29238171.39 29238171.58 0.0498 0.0185

Uranus 75339-04-24 23:17 G 29238178.35 29238178.47 29238178.60 0.0144 0.0118

Saturn 75339-05-05 22:34 G 29238189.27 29238189.44 29238189.62 0.0277 0.0151

Saturn 75339-12-21 10:19 G 29238418.72 29238418.93 29238419.14 0.0278 0.0032

Saturn 75340-08-06 22:19 G 29238648.31 29238648.43 29238648.57 0.0279 0.0216

Pluto 75343-12-16 23:31 G 29239875.40 29239875.48 29239875.61 0.0065 0.0057

Mars 75344-01-03 16:19 G 29239893.01 29239893.18 29239893.34 0.1625 0.0481

Jupiter 75344-06-17 09:51 G 29240058.87 29240058.91 29240058.96 0.0512 0.0499

Pluto 75344-07-29 04:19 G 29240100.48 29240100.68 29240100.90 0.0065 0.0020

Jupiter 75345-02-09 08:24 G 29240295.66 29240295.85 29240296.05 0.0522 0.0120

Pluto 75345-03-11 08:53 G 29240325.67 29240325.87 29240326.09 0.0066 0.0018

Jupiter 75345-10-04 19:41 G 29240533.16 29240533.32 29240533.48 0.0532 0.0310

Pluto 75345-10-22 13:27 G 29240550.95 29240551.06 29240551.19 0.0066 0.0055

Jupiter 75350-04-28 23:31 G 29242200.32 29242200.48 29242200.65 0.0510 0.0298

Jupiter 75350-12-21 21:07 G 29242437.18 29242437.38 29242437.58 0.0501 0.0086

Jupiter 75351-08-15 06:58 G 29242673.70 29242673.79 29242673.89 0.0493 0.0433

Saturn 75353-03-04 16:05 G 29243241.10 29243241.17 29243241.27 0.0283 0.0255

Saturn 75353-10-20 05:03 G 29243470.50 29243470.71 29243470.91 0.0282 0.0066

Saturn 75354-06-06 16:48 G 29243700.01 29243700.20 29243700.39 0.0280 0.0122

Jupiter 75356-10-15 03:36 G 29244561.47 29244561.65 29244561.83 0.0520 0.0231

Jupiter 75357-06-09 11:17 G 29244798.78 29244798.97 29244799.16 0.0529 0.0189

Jupiter 75362-01-01 19:12 G 29246466.19 29246466.30 29246466.44 0.0513 0.0406

Jupiter 75362-08-26 20:10 G 29246703.13 29246703.34 29246703.55 0.0503 0.0018

Jupiter 75363-04-20 08:53 G 29246939.73 29246939.87 29246940.02 0.0495 0.0342

Neptune 75365-05-16 08:53 G 29247696.84 29247696.87 29247696.93 0.0089 0.0088

Neptune 75365-12-27 21:51 G 29247922.33 29247922.41 29247922.52 0.0089 0.0081

Neptune 75366-08-10 10:34 G 29248147.84 29248147.94 29248148.09 0.0089 0.0074

Neptune 75367-03-24 00:00 G 29248373.36 29248373.50 29248373.65 0.0090 0.0066

Neptune 75367-11-04 12:43 G 29248598.88 29248599.03 29248599.21 0.0090 0.0059

Neptune 75368-06-17 01:41 G 29248824.41 29248824.57 29248824.77 0.0090 0.0052

Jupiter 75368-06-20 00:00 G 29248827.35 29248827.50 29248827.65 0.0517 0.0339

Saturn 75368-11-15 03:36 G 29248975.46 29248975.65 29248975.84 0.0277 0.0125

Neptune 75369-01-28 15:07 G 29249049.94 29249050.13 29249050.32 0.0090 0.0044

Jupiter 75369-02-12 04:19 G 29249064.48 29249064.68 29249064.88 0.0527 0.0069

Saturn 75369-07-02 15:07 G 29249204.92 29249205.13 29249205.34 0.0278 0.0058

Neptune 75369-09-11 03:51 G 29249275.47 29249275.66 29249275.87 0.0090 0.0037

Jupiter 75369-10-07 21:22 G 29249302.32 29249302.39 29249302.46 0.0536 0.0502

Saturn 75370-02-17 03:07 G 29249434.53 29249434.63 29249434.74 0.0280 0.0242

Neptune 75370-04-24 17:17 G 29249501.01 29249501.22 29249501.42 0.0090 0.0029

Neptune 75370-12-06 06:00 G 29249726.55 29249726.75 29249726.97 0.0090 0.0022

Neptune 75371-07-19 19:12 G 29249952.09 29249952.30 29249952.52 0.0090 0.0014

Neptune 75372-03-01 08:10 G 29250177.62 29250177.84 29250178.06 0.0090 0.0007

Neptune 75372-10-12 21:07 G 29250403.16 29250403.38 29250403.60 0.0090 0.0001

Neptune 75373-05-26 10:19 G 29250628.71 29250628.93 29250629.15 0.0090 0.0009

Jupiter 75373-09-06 14:10 G 29250732.07 29250732.09 29250732.12 0.0516 0.0511

Neptune 75374-01-06 23:17 G 29250854.26 29250854.47 29250854.69 0.0090 0.0016

Jupiter 75374-05-01 18:15 G 29250969.06 29250969.26 29250969.46 0.0506 0.0122

Neptune 75374-08-20 12:00 G 29251079.80 29251080.00 29251080.22 0.0090 0.0024

Jupiter 75374-12-24 10:05 G 29251205.75 29251205.92 29251206.10 0.0497 0.0249

Neptune 75375-04-03 01:12 G 29251305.35 29251305.55 29251305.76 0.0090 0.0031

Neptune 75375-11-14 13:55 G 29251530.90 29251531.08 29251531.29 0.0090 0.0039

Mars 75376-01-02 09:07 G 29251579.83 29251579.88 29251579.93 0.1621 0.1542

Earth 75376-03-15 21:51 G 29251653.26 29251653.41 29251653.57 0.2627 0.0378

Moon 75376-03-16 02:24 G 29251653.44 29251653.60 29251653.77 0.2622 0.0222 *

Neptune 75376-06-27 03:07 G 29251756.46 29251756.63 29251756.83 0.0090 0.0046

Neptune 75377-02-07 16:05 G 29251982.01 29251982.17 29251982.36 0.0090 0.0054

Neptune 75377-09-21 05:03 G 29252207.57 29252207.71 29252207.89 0.0090 0.0061

Uranus 75377-09-24 16:05 G 29252211.05 29252211.17 29252211.31 0.0134 0.0105

Neptune 75378-05-04 18:29 G 29252433.13 29252433.27 29252433.41 0.0090 0.0068

Uranus 75378-05-08 21:07 G 29252437.20 29252437.38 29252437.56 0.0134 0.0073

Neptune 75378-12-16 07:12 G 29252658.70 29252658.80 29252658.93 0.0090 0.0076

Uranus 75378-12-21 02:10 G 29252663.39 29252663.59 29252663.80 0.0134 0.0041

Neptune 75379-07-29 20:24 G 29252884.29 29252884.35 29252884.45 0.0090 0.0083

Uranus 75379-08-04 07:12 G 29252889.59 29252889.80 29252890.02 0.0134 0.0009

Jupiter 75380-02-23 22:19 G 29253093.33 29253093.43 29253093.54 0.0514 0.0439

Uranus 75380-03-17 12:15 G 29253115.80 29253116.01 29253116.23 0.0134 0.0024

Jupiter 75380-10-17 23:31 G 29253330.28 29253330.48 29253330.68 0.0525 0.0047

Uranus 75380-10-29 17:31 G 29253342.03 29253342.23 29253342.42 0.0134 0.0056

Jupiter 75381-06-12 13:27 G 29253567.92 29253568.06 29253568.20 0.0534 0.0386

Uranus 75381-06-12 22:19 G 29253568.28 29253568.43 29253568.61 0.0134 0.0089

Uranus 75382-01-25 03:36 G 29253794.57 29253794.65 29253794.75 0.0134 0.0121

Saturn 75382-09-14 17:46 G 29254027.13 29254027.24 29254027.37 0.0282 0.0231

Saturn 75383-05-02 06:29 G 29254256.56 29254256.77 29254256.98 0.0281 0.0043

Saturn 75383-12-17 18:15 G 29254486.09 29254486.26 29254486.45 0.0280 0.0143

Jupiter 75386-01-04 13:55 G 29255234.90 29255235.08 29255235.27 0.0508 0.0230

Jupiter 75386-08-29 08:53 G 29255471.67 29255471.87 29255472.07 0.0499 0.0149

Jupiter 75387-04-22 16:48 G 29255708.17 29255708.20 29255708.23 0.0492 0.0485

Jupiter 75392-06-22 19:12 G 29257596.11 29257596.30 29257596.49 0.0522 0.0160

Jupiter 75393-02-15 05:17 G 29257833.55 29257833.72 29257833.90 0.0531 0.0267

Jupiter 75397-09-09 09:07 G 29259500.73 29259500.88 29259501.04 0.0511 0.0338

Jupiter 75398-05-04 07:27 G 29259737.61 29259737.81 29259738.02 0.0502 0.0048

Saturn 75398-05-28 07:55 G 29259761.64 29259761.83 29259762.03 0.0278 0.0099

Jupiter 75398-12-26 18:29 G 29259974.16 29259974.27 29259974.40 0.0494 0.0399

Saturn 75399-01-12 19:55 G 29259991.13 29259991.33 29259991.53 0.0279 0.0084

Saturn 75399-08-30 08:10 G 29260220.79 29260220.84 29260220.91 0.0280 0.0269

Jupiter 75404-02-27 13:27 G 29261861.89 29261862.06 29261862.23 0.0518 0.0272

Jupiter 75404-10-21 19:12 G 29262099.11 29262099.30 29262099.50 0.0528 0.0143

Mars 75407-01-29 01:12 G 29262928.52 29262928.55 29262928.58 0.1904 0.1864

Jupiter 75409-05-16 02:53 G 29263766.52 29263766.62 29263766.72 0.0514 0.0447

Mars 75409-11-01 04:48 G 29263935.55 29263935.70 29263935.86 0.1626 0.0679

Jupiter 75410-01-08 05:31 G 29264003.53 29264003.73 29264003.93 0.0505 0.0058

Jupiter 75410-09-01 19:55 G 29264240.18 29264240.33 29264240.50 0.0496 0.0308

Saturn 75412-03-28 04:05 G 29264813.53 29264813.67 29264813.83 0.0282 0.0197

Saturn 75412-11-12 16:34 G 29265042.98 29265043.19 29265043.40 0.0281 0.0010

Saturn 75413-06-30 04:19 G 29265272.52 29265272.68 29265272.85 0.0280 0.0178

Jupiter 75415-11-02 10:05 G 29266127.79 29266127.92 29266128.06 0.0515 0.0377

Jupiter 75416-06-26 12:29 G 29266364.82 29266365.02 29266365.22 0.0525 0.0024

Jupiter 75417-02-19 03:22 G 29266602.54 29266602.64 29266602.74 0.0534 0.0455

Uranus 75419-11-17 14:24 G 29267603.97 29267604.10 29267604.26 0.0144 0.0109

Uranus 75420-07-01 03:07 G 29267830.45 29267830.63 29267830.84 0.0144 0.0068

Uranus 75421-02-12 16:05 G 29268056.96 29268057.17 29268057.39 0.0144 0.0025

Jupiter 75421-09-13 03:07 G 29268269.44 29268269.63 29268269.83 0.0507 0.0164

Uranus 75421-09-27 04:48 G 29268283.48 29268283.70 29268283.92 0.0144 0.0016

Jupiter 75422-05-07 20:53 G 29268506.19 29268506.37 29268506.56 0.0498 0.0211

Uranus 75422-05-11 17:17 G 29268510.02 29268510.22 29268510.42 0.0144 0.0058

Uranus 75422-12-24 05:31 G 29268736.59 29268736.73 29268736.90 0.0144 0.0100

Uranus 75423-08-07 18:00 G 29268963.22 29268963.25 29268963.31 0.0144 0.0140

Saturn 75427-04-24 01:55 G 29270318.50 29270318.58 29270318.68 0.0277 0.0252

Jupiter 75427-07-08 07:27 G 29270393.75 29270393.81 29270393.89 0.0513 0.0477

Saturn 75427-12-09 13:12 G 29270547.84 29270548.05 29270548.25 0.0278 0.0072

Jupiter 75428-03-01 06:29 G 29270630.58 29270630.77 29270630.97 0.0523 0.0094

Saturn 75428-07-26 00:43 G 29270777.34 29270777.53 29270777.73 0.0279 0.0111

Jupiter 75428-10-24 18:15 G 29270868.11 29270868.26 29270868.42 0.0532 0.0336

Pluto 75432-03-31 04:48 G 29272121.54 29272121.70 29272121.88 0.0079 0.0051

Pluto 75432-11-11 15:07 G 29272346.91 29272347.13 29272347.35 0.0079 0.0015

Jupiter 75433-05-19 00:15 G 29272535.34 29272535.51 29272535.68 0.0510 0.0270

Jupiter 75434-01-10 21:07 G 29272772.18 29272772.38 29272772.58 0.0500 0.0113

Jupiter 75434-09-04 06:29 G 29273008.70 29273008.77 29273008.85 0.0493 0.0455

Jupiter 75439-11-05 03:22 G 29274896.45 29274896.64 29274896.82 0.0520 0.0204

Jupiter 75440-06-29 12:00 G 29275133.81 29275134.00 29275134.18 0.0530 0.0218

Saturn 75441-10-08 05:17 G 29275599.56 29275599.72 29275599.88 0.0282 0.0175

Mars 75441-10-30 21:51 G 29275622.31 29275622.41 29275622.50 0.1622 0.1338

Saturn 75442-05-25 17:31 G 29275829.02 29275829.23 29275829.44 0.0281 0.0013

Saturn 75443-01-10 05:03 G 29276058.57 29276058.71 29276058.86 0.0280 0.0198

Jupiter 75445-01-21 18:58 G 29276801.16 29276801.29 29276801.43 0.0512 0.0377

Jupiter 75445-09-15 18:58 G 29277038.08 29277038.29 29277038.50 0.0503 0.0010

Jupiter 75446-05-10 07:12 G 29277274.66 29277274.80 29277274.94 0.0495 0.0365

Neptune 75446-11-20 22:19 G 29277469.43 29277469.43 29277469.49 0.0088 0.0087

Neptune 75447-07-04 11:31 G 29277694.91 29277694.98 29277695.10 0.0088 0.0080

Neptune 75448-02-15 00:29 G 29277920.42 29277920.52 29277920.67 0.0088 0.0073

Neptune 75448-09-27 13:41 G 29278145.94 29278146.07 29278146.24 0.0088 0.0066

Neptune 75449-05-11 02:39 G 29278371.47 29278371.61 29278371.80 0.0088 0.0059

Neptune 75449-12-22 15:51 G 29278597.00 29278597.16 29278597.36 0.0088 0.0052

Neptune 75450-08-05 05:17 G 29278822.53 29278822.72 29278822.92 0.0088 0.0044

Neptune 75451-03-18 18:15 G 29279048.06 29279048.26 29279048.47 0.0088 0.0037

Jupiter 75451-07-11 00:29 G 29279162.37 29279162.52 29279162.69 0.0517 0.0311

Neptune 75451-10-30 07:12 G 29279273.60 29279273.80 29279274.02 0.0088 0.0030

Jupiter 75452-03-04 05:31 G 29279399.53 29279399.73 29279399.93 0.0527 0.0100

Neptune 75452-06-11 20:10 G 29279499.13 29279499.34 29279499.56 0.0088 0.0023

Jupiter 75452-10-27 23:03 G 29279637.44 29279637.46 29279637.48 0.0536 0.0531

Neptune 75453-01-23 09:07 G 29279724.67 29279724.88 29279725.11 0.0088 0.0016

Neptune 75453-09-05 22:19 G 29279950.21 29279950.43 29279950.65 0.0088 0.0008

Neptune 75454-04-19 11:17 G 29280175.75 29280175.97 29280176.20 0.0088 0.0001

Neptune 75454-12-01 00:29 G 29280401.30 29280401.52 29280401.74 0.0088 0.0006

Neptune 75455-07-14 13:27 G 29280626.84 29280627.06 29280627.28 0.0088 0.0013

Neptune 75456-02-25 02:10 G 29280852.39 29280852.59 29280852.82 0.0088 0.0021

Jupiter 75456-09-26 12:58 G 29281066.97 29281067.04 29281067.11 0.0515 0.0485

Neptune 75456-10-07 15:22 G 29281077.93 29281078.14 29281078.35 0.0088 0.0028

Saturn 75456-11-03 04:19 G 29281104.58 29281104.68 29281104.81 0.0277 0.0230

Neptune 75457-05-21 04:19 G 29281303.48 29281303.68 29281303.89 0.0088 0.0035

Jupiter 75457-05-21 16:19 G 29281303.98 29281304.18 29281304.39 0.0505 0.0097

Saturn 75457-06-20 16:05 G 29281333.96 29281334.17 29281334.38 0.0278 0.0049

Neptune 75458-01-01 17:31 G 29281529.04 29281529.23 29281529.43 0.0088 0.0042

Jupiter 75458-01-13 08:10 G 29281540.67 29281540.84 29281541.01 0.0497 0.0272

Saturn 75458-02-05 04:05 G 29281563.49 29281563.67 29281563.86 0.0279 0.0134

Neptune 75458-08-15 06:15 G 29281754.59 29281754.76 29281754.96 0.0088 0.0050

Neptune 75459-03-28 18:58 G 29281980.14 29281980.29 29281980.48 0.0088 0.0057

Neptune 75459-11-09 07:55 G 29282205.70 29282205.83 29282206.01 0.0088 0.0064

Neptune 75460-06-21 20:53 G 29282431.26 29282431.37 29282431.52 0.0088 0.0071

Neptune 75461-02-02 09:51 G 29282656.83 29282656.91 29282657.04 0.0088 0.0078

Uranus 75461-05-26 04:48 G 29282769.60 29282769.70 29282769.80 0.0134 0.0117

Neptune 75461-09-15 22:48 G 29282882.42 29282882.45 29282882.53 0.0088 0.0085

Uranus 75462-01-07 09:51 G 29282995.75 29282995.91 29282996.08 0.0134 0.0085

Uranus 75462-08-21 14:53 G 29283221.92 29283222.12 29283222.32 0.0134 0.0053

Jupiter 75463-03-15 20:53 G 29283428.26 29283428.37 29283428.50 0.0514 0.0414

Uranus 75463-04-04 19:41 G 29283448.11 29283448.32 29283448.54 0.0134 0.0021

Jupiter 75463-11-07 21:36 G 29283665.20 29283665.40 29283665.60 0.0524 0.0022

Uranus 75463-11-17 00:58 G 29283674.32 29283674.54 29283674.75 0.0134 0.0012

Uranus 75464-06-30 06:00 G 29283900.55 29283900.75 29283900.96 0.0134 0.0044

Jupiter 75464-07-02 11:03 G 29283902.83 29283902.96 29283903.09 0.0533 0.0410

Uranus 75465-02-11 11:17 G 29284126.79 29284126.97 29284127.15 0.0134 0.0076

Uranus 75465-09-25 16:05 G 29284353.06 29284353.17 29284353.31 0.0134 0.0109

Jupiter 75469-01-24 12:15 G 29285569.83 29285570.01 29285570.20 0.0509 0.0205

Jupiter 75469-09-18 07:41 G 29285806.63 29285806.82 29285807.02 0.0500 0.0175

Saturn 75471-04-20 14:10 G 29286385.92 29286386.09 29286386.28 0.0282 0.0143

Saturn 75471-12-06 02:39 G 29286615.40 29286615.61 29286615.82 0.0281 0.0046

Saturn 75472-07-22 14:10 G 29286844.98 29286845.09 29286845.22 0.0280 0.0231

Mars 75472-11-25 03:36 G 29286970.51 29286970.65 29286970.79 0.1902 0.1094

Jupiter 75474-11-18 19:27 G 29287694.30 29287694.31 29287694.33 0.0511 0.0510

Jupiter 75475-07-13 16:34 G 29287930.99 29287931.19 29287931.38 0.0521 0.0135

Mars 75475-08-29 17:03 G 29287978.07 29287978.21 29287978.36 0.1627 0.0894

Jupiter 75476-03-07 01:55 G 29288168.42 29288168.58 29288168.75 0.0531 0.0290

Jupiter 75480-09-29 08:39 G 29289835.70 29289835.86 29289836.02 0.0511 0.0313

Jupiter 75481-05-24 07:27 G 29290072.61 29290072.81 29290073.01 0.0502 0.0073

Earth 75481-09-17 12:15 G 29290188.86 29290189.01 29290189.15 0.2706 0.0967

Moon 75481-09-17 15:51 G 29290189.01 29290189.16 29290189.32 0.2701 0.0968 *

Jupiter 75482-01-15 18:43 G 29290309.18 29290309.28 29290309.39 0.0494 0.0422

Saturn 75486-05-16 09:51 G 29291890.77 29291890.91 29291891.06 0.0277 0.0203

Saturn 75486-12-31 21:07 G 29292120.17 29292120.38 29292120.60 0.0278 0.0023

Jupiter 75487-03-18 12:00 G 29292196.82 29292197.00 29292197.17 0.0519 0.0247

Saturn 75487-08-18 08:53 G 29292349.70 29292349.87 29292350.05 0.0279 0.0161

Jupiter 75487-11-10 18:15 G 29292434.07 29292434.26 29292434.45 0.0529 0.0169

Moon 75489-09-15 01:27 G 29293108.53 29293108.56 29293108.58 0.2699 0.2652

Earth 75489-09-15 02:24 G 29293108.55 29293108.60 29293108.65 0.2706 0.2545 *

Jupiter 75492-06-04 04:19 G 29294101.57 29294101.68 29294101.80 0.0514 0.0419

Jupiter 75493-01-27 06:29 G 29294338.57 29294338.77 29294338.98 0.0504 0.0030

Jupiter 75493-09-20 20:24 G 29294575.21 29294575.35 29294575.51 0.0496 0.0333

Jupiter 75498-11-21 10:05 G 29296462.77 29296462.92 29296463.06 0.0516 0.0351

Jupiter 75499-07-16 13:12 G 29296699.85 29296700.05 29296700.25 0.0526 0.0053

Jupiter 75500-03-11 05:03 G 29296937.63 29296937.71 29296937.79 0.0535 0.0484

Saturn 75500-10-31 15:22 G 29297171.95 29297172.14 29297172.33 0.0282 0.0120

Saturn 75501-06-18 03:36 G 29297401.44 29297401.65 29297401.85 0.0280 0.0067

Saturn 75502-02-02 14:53 G 29297631.04 29297631.12 29297631.22 0.0279 0.0250

Uranus 75503-07-18 22:34 G 29298162.35 29298162.44 29298162.57 0.0144 0.0126

Uranus 75504-03-01 11:31 G 29298388.81 29298388.98 29298389.17 0.0144 0.0084

Jupiter 75504-10-03 03:22 G 29298604.44 29298604.64 29298604.84 0.0507 0.0135

Uranus 75504-10-14 00:15 G 29298615.30 29298615.51 29298615.72 0.0144 0.0042

Jupiter 75505-05-27 20:24 G 29298841.17 29298841.35 29298841.53 0.0498 0.0237

Uranus 75505-05-28 12:58 G 29298841.82 29298842.04 29298842.26 0.0144 0.0001

Uranus 75506-01-10 01:41 G 29299068.36 29299068.57 29299068.78 0.0144 0.0041

Uranus 75506-08-24 13:55 G 29299294.91 29299295.08 29299295.27 0.0144 0.0082

Uranus 75507-04-08 02:10 G 29299521.50 29299521.59 29299521.72 0.0144 0.0124

Mars 75507-08-29 10:19 G 29299664.81 29299664.93 29299665.05 0.1623 0.1135

Jupiter 75510-07-28 08:39 G 29300728.77 29300728.86 29300728.96 0.0513 0.0449

Jupiter 75511-03-22 08:24 G 29300965.65 29300965.85 29300966.05 0.0523 0.0062

Jupiter 75511-11-14 20:39 G 29301203.22 29301203.36 29301203.51 0.0533 0.0368

Saturn 75515-11-27 10:48 G 29302676.80 29302676.95 29302677.12 0.0277 0.0183

Jupiter 75516-06-07 23:46 G 29302870.31 29302870.49 29302870.67 0.0509 0.0243

Saturn 75516-07-13 22:34 G 29302906.23 29302906.44 29302906.65 0.0278 0.0002

Jupiter 75517-01-30 20:10 G 29303107.14 29303107.34 29303107.54 0.0500 0.0139

Saturn 75517-02-28 10:34 G 29303135.79 29303135.94 29303136.11 0.0279 0.0183

Jupiter 75517-09-24 05:17 G 29303343.68 29303343.72 29303343.77 0.0493 0.0478

Jupiter 75522-11-25 02:53 G 29305231.43 29305231.62 29305231.81 0.0520 0.0177

Jupiter 75523-07-20 11:03 G 29305468.78 29305468.96 29305469.14 0.0530 0.0244

Jupiter 75528-02-11 17:17 G 29307136.08 29307136.22 29307136.38 0.0513 0.0354

Jupiter 75528-10-05 18:00 G 29307373.04 29307373.25 29307373.45 0.0503 0.0035

Jupiter 75529-05-30 06:43 G 29307609.66 29307609.78 29307609.91 0.0495 0.0390

Saturn 75529-09-26 10:05 G 29307728.90 29307728.92 29307728.97 0.0283 0.0279

Neptune 75530-04-02 05:31 G 29307916.67 29307916.73 29307916.83 0.0089 0.0084

Saturn 75530-05-13 23:17 G 29307958.27 29307958.47 29307958.67 0.0282 0.0089

Neptune 75530-11-13 18:43 G 29308142.18 29308142.28 29308142.40 0.0089 0.0076

Saturn 75530-12-29 11:31 G 29308187.79 29308187.98 29308188.18 0.0281 0.0098

Neptune 75531-06-27 07:41 G 29308367.70 29308367.82 29308367.97 0.0089 0.0069

Neptune 75532-02-07 20:24 G 29308593.22 29308593.35 29308593.53 0.0090 0.0062

Neptune 75532-09-20 09:36 G 29308818.74 29308818.90 29308819.09 0.0090 0.0054

Neptune 75533-05-03 22:34 G 29309044.27 29309044.44 29309044.64 0.0090 0.0047

Neptune 75533-12-15 11:46 G 29309269.80 29309269.99 29309270.20 0.0090 0.0039

Neptune 75534-07-29 00:43 G 29309495.34 29309495.53 29309495.75 0.0090 0.0032

Jupiter 75534-07-30 23:17 G 29309497.31 29309497.47 29309497.64 0.0517 0.0285

Neptune 75535-03-11 13:55 G 29309720.87 29309721.08 29309721.29 0.0090 0.0024

Jupiter 75535-03-25 03:36 G 29309734.45 29309734.65 29309734.84 0.0527 0.0125

Neptune 75535-10-23 02:53 G 29309946.41 29309946.62 29309946.84 0.0090 0.0016

Neptune 75536-06-04 16:05 G 29310171.96 29310172.17 29310172.39 0.0090 0.0009

Neptune 75537-01-16 05:17 G 29310397.50 29310397.72 29310397.93 0.0090 0.0002

Neptune 75537-08-29 18:00 G 29310623.04 29310623.25 29310623.47 0.0090 0.0007

Neptune 75538-04-12 07:12 G 29310848.58 29310848.80 29310849.01 0.0090 0.0014

Mars 75538-09-23 05:31 G 29311012.56 29311012.73 29311012.91 0.1900 0.0306

Neptune 75538-11-23 19:55 G 29311074.13 29311074.33 29311074.55 0.0090 0.0022

Neptune 75539-07-07 09:07 G 29311299.68 29311299.88 29311300.09 0.0090 0.0029

Jupiter 75539-10-17 12:00 G 29311401.92 29311402.00 29311402.10 0.0516 0.0462

Neptune 75540-02-17 21:51 G 29311525.23 29311525.41 29311525.62 0.0090 0.0037

Jupiter 75540-06-10 16:19 G 29311638.97 29311639.18 29311639.38 0.0506 0.0071

Neptune 75540-09-30 11:03 G 29311750.78 29311750.96 29311751.15 0.0090 0.0044

Jupiter 75541-02-02 08:10 G 29311875.68 29311875.84 29311876.01 0.0497 0.0297

Neptune 75541-05-13 23:46 G 29311976.33 29311976.49 29311976.69 0.0090 0.0052

Mars 75541-06-27 05:17 G 29312020.60 29312020.72 29312020.85 0.1629 0.1102

Neptune 75541-12-25 12:58 G 29312201.89 29312202.04 29312202.21 0.0090 0.0059

Neptune 75542-08-08 01:55 G 29312427.45 29312427.58 29312427.74 0.0090 0.0067

Neptune 75543-03-21 14:53 G 29312653.02 29312653.12 29312653.26 0.0090 0.0074

Neptune 75543-11-02 03:36 G 29312878.59 29312878.65 29312878.77 0.0090 0.0082

Neptune 75544-06-14 17:03 G 29313104.20 29313104.21 29313104.26 0.0090 0.0089

Uranus 75545-01-24 17:31 G 29313328.18 29313328.23 29313328.28 0.0134 0.0129

Saturn 75545-06-08 16:34 G 29313463.03 29313463.19 29313463.38 0.0277 0.0155

Uranus 75545-09-07 22:05 G 29313554.29 29313554.42 29313554.58 0.0134 0.0098

Saturn 75546-01-24 04:19 G 29313692.46 29313692.68 29313692.89 0.0278 0.0027

Jupiter 75546-04-04 20:10 G 29313763.21 29313763.34 29313763.47 0.0514 0.0389

Uranus 75546-04-22 03:22 G 29313780.45 29313780.64 29313780.83 0.0134 0.0065

Saturn 75546-09-10 16:05 G 29313922.03 29313922.17 29313922.31 0.0279 0.0209

Jupiter 75546-11-27 20:53 G 29314000.17 29314000.37 29314000.58 0.0524 0.0014

Uranus 75546-12-04 08:24 G 29314006.64 29314006.85 29314007.06 0.0134 0.0033

Uranus 75547-07-18 13:41 G 29314232.85 29314233.07 29314233.28 0.0134 0.0002

Jupiter 75547-07-23 10:48 G 29314237.84 29314237.95 29314238.07 0.0534 0.0436

Uranus 75548-02-29 18:29 G 29314459.07 29314459.27 29314459.49 0.0134 0.0032

Uranus 75548-10-12 23:31 G 29314685.30 29314685.48 29314685.68 0.0134 0.0064

Uranus 75549-05-27 04:48 G 29314911.56 29314911.70 29314911.85 0.0134 0.0096

Uranus 75550-01-08 09:36 G 29315137.86 29315137.90 29315137.98 0.0134 0.0129

Jupiter 75552-02-14 14:10 G 29315904.90 29315905.09 29315905.28 0.0508 0.0175

Jupiter 75552-10-08 09:07 G 29316141.69 29316141.88 29316142.07 0.0499 0.0202

Jupiter 75557-12-08 19:27 G 29318029.25 29318029.31 29318029.37 0.0512 0.0485

Jupiter 75558-08-02 17:17 G 29318266.02 29318266.22 29318266.41 0.0522 0.0107

Jupiter 75559-03-28 03:36 G 29318503.49 29318503.65 29318503.81 0.0532 0.0320

Saturn 75559-04-08 11:17 G 29318514.90 29318514.97 29318515.07 0.0283 0.0256

Saturn 75559-11-24 00:15 G 29318744.31 29318744.51 29318744.72 0.0281 0.0068

Saturn 75560-07-10 12:15 G 29318973.83 29318974.01 29318974.21 0.0280 0.0119

Jupiter 75563-10-20 10:05 G 29320170.75 29320170.92 29320171.09 0.0511 0.0282

Jupiter 75564-06-13 07:55 G 29320407.63 29320407.83 29320408.04 0.0501 0.0103

Jupiter 75565-02-04 18:29 G 29320644.20 29320644.27 29320644.37 0.0493 0.0447

Jupiter 75570-04-07 14:10 G 29322531.90 29322532.09 29322532.27 0.0519 0.0216

Jupiter 75570-11-30 21:07 G 29322769.19 29322769.38 29322769.57 0.0529 0.0202

Mars 75573-06-25 22:34 G 29323707.30 29323707.44 29323707.58 0.1624 0.0929

Saturn 75574-12-19 16:34 G 29324249.01 29324249.19 29324249.38 0.0277 0.0137

Jupiter 75575-06-25 05:03 G 29324436.58 29324436.71 29324436.85 0.0513 0.0390

Saturn 75575-08-06 04:05 G 29324478.46 29324478.67 29324478.88 0.0278 0.0045

Jupiter 75576-02-17 06:29 G 29324673.57 29324673.77 29324673.98 0.0504 0.0005

Saturn 75576-03-22 16:05 G 29324708.06 29324708.17 29324708.31 0.0279 0.0228

Jupiter 75576-10-10 20:10 G 29324910.20 29324910.34 29324910.48 0.0496 0.0358

Jupiter 75581-12-11 10:48 G 29326797.80 29326797.95 29326798.11 0.0516 0.0324

Jupiter 75582-08-05 13:41 G 29327034.87 29327035.07 29327035.27 0.0526 0.0081

Jupiter 75583-03-31 04:48 G 29327272.65 29327272.70 29327272.77 0.0535 0.0509

Jupiter 75587-02-27 20:39 G 29328702.32 29328702.36 29328702.41 0.0517 0.0502

Uranus 75587-03-18 06:00 G 29328720.73 29328720.75 29328720.80 0.0144 0.0143

Jupiter 75587-10-23 02:24 G 29328939.40 29328939.60 29328939.80 0.0507 0.0110

Uranus 75587-10-30 18:43 G 29328947.14 29328947.28 29328947.45 0.0144 0.0102

Uranus 75588-06-13 07:27 G 29329173.62 29329173.81 29329174.02 0.0144 0.0060

Jupiter 75588-06-15 19:55 G 29329176.16 29329176.33 29329176.51 0.0498 0.0262

Saturn 75588-10-18 18:29 G 29329301.14 29329301.27 29329301.39 0.0283 0.0227

Uranus 75589-01-25 20:24 G 29329400.13 29329400.35 29329400.57 0.0144 0.0018

Saturn 75589-06-05 07:27 G 29329530.60 29329530.81 29329531.02 0.0282 0.0038

Uranus 75589-09-09 08:53 G 29329626.66 29329626.87 29329627.09 0.0144 0.0023

Pluto 75590-01-16 11:31 G 29329755.86 29329755.98 29329756.16 0.0065 0.0048

Saturn 75590-01-20 19:41 G 29329760.14 29329760.32 29329760.50 0.0281 0.0149

Uranus 75590-04-23 21:22 G 29329853.20 29329853.39 29329853.59 0.0144 0.0065

Pluto 75590-08-29 16:19 G 29329980.98 29329981.18 29329981.41 0.0065 0.0011

Uranus 75590-12-06 09:51 G 29330079.77 29330079.91 29330080.06 0.0144 0.0106

Pluto 75591-04-11 20:39 G 29330206.18 29330206.36 29330206.58 0.0066 0.0028

Pluto 75591-11-23 01:12 G 29330431.55 29330431.55 29330431.59 0.0066 0.0066

Jupiter 75593-08-16 08:53 G 29331063.76 29331063.87 29331063.99 0.0513 0.0424

Jupiter 75594-04-10 07:55 G 29331300.63 29331300.83 29331301.03 0.0523 0.0036

Jupiter 75594-12-03 19:27 G 29331538.18 29331538.31 29331538.45 0.0532 0.0391

Jupiter 75599-06-27 23:17 G 29333205.28 29333205.47 29333205.66 0.0510 0.0218

Jupiter 75600-02-19 20:10 G 29333442.15 29333442.34 29333442.54 0.0501 0.0164

Saturn 75604-06-30 22:34 G 29335035.25 29335035.44 29335035.64 0.0277 0.0108

Mars 75604-07-20 08:39 G 29335054.68 29335054.86 29335055.03 0.1898 0.0435

Saturn 75605-02-15 10:05 G 29335264.72 29335264.92 29335265.13 0.0278 0.0074

Saturn 75605-10-02 22:05 G 29335494.34 29335494.42 29335494.51 0.0279 0.0256

Jupiter 75605-12-14 02:39 G 29335566.41 29335566.61 29335566.80 0.0520 0.0150

Jupiter 75606-08-08 10:48 G 29335803.78 29335803.95 29335804.13 0.0530 0.0272

Mars 75607-04-24 17:46 G 29336063.14 29336063.24 29336063.34 0.1630 0.1313

Jupiter 75611-03-02 19:55 G 29337471.17 29337471.33 29337471.49 0.0512 0.0324

Neptune 75611-10-06 19:41 G 29337689.26 29337689.32 29337689.42 0.0088 0.0082

Jupiter 75611-10-25 19:55 G 29337708.12 29337708.33 29337708.53 0.0503 0.0064

Neptune 75612-05-19 08:53 G 29337914.77 29337914.87 29337915.00 0.0088 0.0075

Jupiter 75612-06-18 08:10 G 29337944.73 29337944.84 29337944.95 0.0495 0.0415

Neptune 75612-12-30 22:05 G 29338140.30 29338140.42 29338140.58 0.0088 0.0068

Neptune 75613-08-13 11:03 G 29338365.82 29338365.96 29338366.14 0.0088 0.0061

Neptune 75614-03-27 00:29 G 29338591.35 29338591.52 29338591.70 0.0088 0.0053

Neptune 75614-11-07 13:27 G 29338816.88 29338817.06 29338817.26 0.0088 0.0046

Neptune 75615-06-21 02:24 G 29339042.41 29339042.60 29339042.81 0.0088 0.0039

Neptune 75616-02-01 15:22 G 29339267.95 29339268.14 29339268.36 0.0088 0.0032

Neptune 75616-09-14 04:19 G 29339493.48 29339493.68 29339493.91 0.0088 0.0025

Neptune 75617-04-27 17:46 G 29339719.02 29339719.24 29339719.45 0.0088 0.0017

Jupiter 75617-08-19 00:00 G 29339832.33 29339832.50 29339832.67 0.0518 0.0257

Neptune 75617-12-09 06:43 G 29339944.56 29339944.78 29339945.00 0.0088 0.0010

Jupiter 75618-04-13 04:48 G 29340069.51 29340069.70 29340069.90 0.0528 0.0156

Saturn 75618-04-30 19:41 G 29340087.18 29340087.32 29340087.47 0.0283 0.0204

Neptune 75618-07-22 19:41 G 29340170.10 29340170.32 29340170.55 0.0088 0.0003

Saturn 75618-12-16 08:39 G 29340316.65 29340316.86 29340317.07 0.0281 0.0017

Neptune 75619-03-05 08:39 G 29340395.64 29340395.86 29340396.08 0.0088 0.0005

Moon 75619-03-18 19:12 G 29340409.15 29340409.30 29340409.44 0.2629 0.0906

Earth 75619-03-19 00:15 G 29340409.35 29340409.51 29340409.67 0.2627 0.0107 *

Saturn 75619-08-02 20:24 G 29340546.19 29340546.35 29340546.53 0.0280 0.0170

Neptune 75619-10-16 21:36 G 29340621.18 29340621.40 29340621.62 0.0088 0.0012

Neptune 75620-05-29 10:34 G 29340846.72 29340846.94 29340847.16 0.0088 0.0019

Neptune 75621-01-09 23:31 G 29341072.28 29341072.48 29341072.70 0.0088 0.0027

Neptune 75621-08-23 12:29 G 29341297.82 29341298.02 29341298.24 0.0088 0.0034

Neptune 75622-04-06 01:27 G 29341523.37 29341523.56 29341523.77 0.0088 0.0041

Jupiter 75622-11-05 14:53 G 29341737.01 29341737.12 29341737.23 0.0515 0.0430

Neptune 75622-11-17 14:39 G 29341748.93 29341749.11 29341749.30 0.0088 0.0048

Jupiter 75623-06-30 18:00 G 29341974.05 29341974.25 29341974.46 0.0505 0.0040

Neptune 75623-07-01 03:36 G 29341974.48 29341974.65 29341974.83 0.0088 0.0055

Neptune 75624-02-11 16:05 G 29342200.04 29342200.17 29342200.35 0.0088 0.0063

Jupiter 75624-02-22 09:07 G 29342210.73 29342210.88 29342211.04 0.0496 0.0324

Neptune 75624-09-24 05:03 G 29342425.60 29342425.71 29342425.87 0.0088 0.0070

Neptune 75625-05-07 18:00 G 29342651.17 29342651.25 29342651.39 0.0088 0.0077

Neptune 75625-12-19 07:12 G 29342876.76 29342876.80 29342876.89 0.0088 0.0084

Jupiter 75629-04-23 22:19 G 29344098.29 29344098.43 29344098.58 0.0515 0.0360

Uranus 75629-05-08 10:34 G 29344112.84 29344112.94 29344113.08 0.0134 0.0110

Jupiter 75629-12-17 00:00 G 29344335.30 29344335.50 29344335.70 0.0525 0.0039

Uranus 75629-12-20 15:36 G 29344338.99 29344339.15 29344339.34 0.0134 0.0078

Uranus 75630-08-03 21:07 G 29344565.18 29344565.38 29344565.58 0.0134 0.0045

Jupiter 75630-08-11 14:24 G 29344573.01 29344573.10 29344573.20 0.0534 0.0468

Uranus 75631-03-18 02:10 G 29344791.37 29344791.59 29344791.80 0.0134 0.0013

Uranus 75631-10-30 06:58 G 29345017.58 29345017.79 29345018.01 0.0134 0.0020

Uranus 75632-06-12 12:00 G 29345243.81 29345244.00 29345244.21 0.0134 0.0052

Uranus 75633-01-24 17:17 G 29345470.06 29345470.22 29345470.39 0.0134 0.0084

Saturn 75633-05-26 11:03 G 29345591.92 29345591.96 29345592.02 0.0276 0.0268

Uranus 75633-09-07 22:19 G 29345696.33 29345696.43 29345696.54 0.0134 0.0116

Saturn 75634-01-10 22:05 G 29345821.22 29345821.42 29345821.62 0.0277 0.0091

Saturn 75634-08-28 09:36 G 29346050.70 29346050.90 29346051.10 0.0278 0.0091

Jupiter 75635-03-05 15:07 G 29346239.93 29346240.13 29346240.33 0.0508 0.0146

Saturn 75635-04-14 21:36 G 29346280.37 29346280.40 29346280.45 0.0279 0.0273

Jupiter 75635-10-28 09:22 G 29346476.71 29346476.89 29346477.08 0.0499 0.0229

Mars 75639-04-23 11:17 G 29347749.81 29347749.97 29347750.12 0.1625 0.0725

Jupiter 75640-12-27 21:22 G 29348364.30 29348364.39 29348364.48 0.0512 0.0458

Jupiter 75641-08-21 18:43 G 29348601.09 29348601.28 29348601.48 0.0522 0.0079

Jupiter 75642-04-16 04:48 G 29348838.55 29348838.70 29348838.85 0.0531 0.0347

Jupiter 75646-11-08 08:53 G 29350505.70 29350505.87 29350506.05 0.0511 0.0259

Jupiter 75647-07-03 07:27 G 29350742.61 29350742.81 29350743.01 0.0502 0.0126

Saturn 75647-11-11 01:27 G 29350873.40 29350873.56 29350873.72 0.0283 0.0176

Jupiter 75648-02-24 18:29 G 29350979.22 29350979.27 29350979.34 0.0494 0.0469

Saturn 75648-06-27 14:24 G 29351102.89 29351103.10 29351103.31 0.0282 0.0014

Saturn 75649-02-12 02:39 G 29351332.47 29351332.61 29351332.76 0.0281 0.0199

Jupiter 75653-04-26 14:39 G 29352866.93 29352867.11 29352867.30 0.0519 0.0189

Jupiter 75653-12-19 20:53 G 29353104.19 29353104.37 29353104.56 0.0528 0.0228

Jupiter 75658-07-14 04:05 G 29354771.53 29354771.67 29354771.82 0.0514 0.0367

Jupiter 75659-03-08 06:15 G 29355008.55 29355008.76 29355008.96 0.0504 0.0025

Jupiter 75659-10-30 20:10 G 29355245.22 29355245.34 29355245.48 0.0496 0.0381

Saturn 75662-12-06 17:46 G 29356378.14 29356378.24 29356378.35 0.0276 0.0238

Saturn 75663-07-24 04:34 G 29356607.48 29356607.69 29356607.90 0.0277 0.0061

Saturn 75664-03-09 16:05 G 29356836.97 29356837.17 29356837.36 0.0278 0.0120

Jupiter 75664-12-30 10:34 G 29357132.78 29357132.94 29357133.11 0.0516 0.0297

Jupiter 75665-08-24 13:27 G 29357369.87 29357370.06 29357370.26 0.0526 0.0109

Jupiter 75666-04-19 05:03 G 29357607.71 29357607.71 29357607.72 0.0535 0.0535

Jupiter 75670-03-18 23:03 G 29359037.39 29359037.46 29359037.55 0.0517 0.0473

Mars 75670-05-17 10:48 G 29359096.81 29359096.95 29359097.08 0.1896 0.1198

Jupiter 75670-11-11 04:48 G 29359274.49 29359274.70 29359274.90 0.0507 0.0081

Uranus 75671-06-30 03:07 G 29359505.52 29359505.63 29359505.77 0.0144 0.0119

Jupiter 75671-07-05 21:51 G 29359511.24 29359511.41 29359511.58 0.0498 0.0289

Uranus 75672-02-11 16:05 G 29359731.99 29359732.17 29359732.36 0.0144 0.0077

Uranus 75672-09-25 04:48 G 29359958.49 29359958.70 29359958.92 0.0144 0.0035

Mars 75673-02-19 06:00 G 29360105.69 29360105.75 29360105.81 0.1631 0.1526

Uranus 75673-05-09 17:31 G 29360185.01 29360185.23 29360185.45 0.0144 0.0006

Uranus 75673-12-22 06:00 G 29360411.55 29360411.75 29360411.96 0.0144 0.0048

Uranus 75674-08-05 18:29 G 29360638.11 29360638.27 29360638.45 0.0144 0.0089

Uranus 75675-03-20 06:43 G 29360864.70 29360864.78 29360864.89 0.0144 0.0130

Jupiter 75676-09-04 09:07 G 29361398.76 29361398.88 29361399.01 0.0513 0.0398

Jupiter 75677-04-29 08:53 G 29361635.66 29361635.87 29361636.07 0.0523 0.0013

Saturn 75677-05-23 03:22 G 29361659.47 29361659.64 29361659.82 0.0283 0.0153

Jupiter 75677-12-22 21:07 G 29361873.26 29361873.38 29361873.51 0.0533 0.0421

Saturn 75678-01-07 16:19 G 29361888.97 29361889.18 29361889.39 0.0281 0.0036

Pluto 75678-04-30 18:29 G 29362002.08 29362002.27 29362002.48 0.0079 0.0034

Saturn 75678-08-25 04:05 G 29362118.56 29362118.67 29362118.81 0.0280 0.0220

Pluto 75678-12-12 04:19 G 29362227.49 29362227.68 29362227.90 0.0079 0.0033

Jupiter 75682-07-17 01:41 G 29363540.38 29363540.57 29363540.77 0.0509 0.0187

Jupiter 75683-03-10 21:36 G 29363777.22 29363777.40 29363777.60 0.0500 0.0193

Jupiter 75688-05-10 08:53 G 29365664.82 29365664.87 29365664.92 0.0511 0.0492

Jupiter 75689-01-02 05:17 G 29365901.53 29365901.72 29365901.92 0.0521 0.0119

Jupiter 75689-08-27 14:24 G 29366138.94 29366139.10 29366139.27 0.0531 0.0305

Saturn 75692-06-17 16:34 G 29367164.07 29367164.19 29367164.32 0.0276 0.0222

Saturn 75693-02-02 03:36 G 29367393.44 29367393.65 29367393.86 0.0277 0.0044

Saturn 75693-09-19 14:53 G 29367622.94 29367623.12 29367623.31 0.0278 0.0137

Jupiter 75694-03-21 21:22 G 29367806.22 29367806.39 29367806.56 0.0512 0.0294

Neptune 75694-07-04 13:41 G 29367911.02 29367911.07 29367911.14 0.0089 0.0086

Jupiter 75694-11-13 20:53 G 29368043.17 29368043.37 29368043.57 0.0502 0.0092

Neptune 75695-02-15 02:24 G 29368136.51 29368136.60 29368136.72 0.0089 0.0079

Jupiter 75695-07-08 08:39 G 29368279.77 29368279.86 29368279.96 0.0494 0.0439

Neptune 75695-09-28 15:07 G 29368362.02 29368362.13 29368362.28 0.0089 0.0072

Neptune 75696-05-11 04:19 G 29368587.55 29368587.68 29368587.85 0.0089 0.0064

Neptune 75696-12-22 17:17 G 29368813.07 29368813.22 29368813.41 0.0089 0.0057

Neptune 75697-08-05 06:29 G 29369038.59 29369038.77 29369038.96 0.0090 0.0049

Neptune 75698-03-18 19:12 G 29369264.12 29369264.30 29369264.51 0.0090 0.0042

Neptune 75698-10-30 08:24 G 29369489.65 29369489.85 29369490.06 0.0090 0.0034

Neptune 75699-06-12 21:22 G 29369715.19 29369715.39 29369715.61 0.0090 0.0027

Neptune 75700-01-24 10:34 G 29369940.73 29369940.94 29369941.16 0.0090 0.0019

Neptune 75700-09-06 23:31 G 29370166.27 29370166.48 29370166.70 0.0090 0.0011

Jupiter 75700-09-08 02:10 G 29370167.42 29370167.59 29370167.78 0.0517 0.0229

Neptune 75701-04-20 12:43 G 29370391.81 29370392.03 29370392.25 0.0090 0.0004

Jupiter 75701-05-03 06:58 G 29370404.61 29370404.79 29370404.98 0.0527 0.0184

Neptune 75701-12-02 01:41 G 29370617.35 29370617.57 29370617.79 0.0090 0.0004

Neptune 75702-07-15 14:53 G 29370842.90 29370843.12 29370843.33 0.0090 0.0012

Neptune 75703-02-26 03:36 G 29371068.45 29371068.65 29371068.87 0.0090 0.0020

Neptune 75703-10-09 16:48 G 29371293.99 29371294.20 29371294.41 0.0090 0.0027

Neptune 75704-05-22 05:46 G 29371519.55 29371519.74 29371519.95 0.0090 0.0035

Neptune 75705-01-02 18:58 G 29371745.10 29371745.29 29371745.48 0.0090 0.0042

Mars 75705-02-18 23:31 G 29371792.32 29371792.48 29371792.65 0.1627 0.0523

Neptune 75705-08-16 07:41 G 29371970.65 29371970.82 29371971.01 0.0090 0.0050

Jupiter 75705-11-25 13:27 G 29372071.93 29372072.06 29372072.18 0.0515 0.0408

Neptune 75706-03-29 20:24 G 29372196.21 29372196.35 29372196.54 0.0090 0.0058

Jupiter 75706-07-20 16:48 G 29372309.00 29372309.20 29372309.41 0.0505 0.0018

Neptune 75706-11-10 09:36 G 29372421.77 29372421.90 29372422.07 0.0090 0.0065

Saturn 75706-12-04 08:10 G 29372445.66 29372445.84 29372446.04 0.0283 0.0126

Jupiter 75707-03-14 08:24 G 29372545.71 29372545.85 29372546.00 0.0497 0.0347

Neptune 75707-06-23 23:03 G 29372647.34 29372647.46 29372647.59 0.0090 0.0072

Saturn 75707-07-21 21:36 G 29372675.19 29372675.40 29372675.60 0.0282 0.0063

Neptune 75708-02-04 11:46 G 29372872.91 29372872.99 29372873.11 0.0090 0.0080

Saturn 75708-03-07 09:51 G 29372904.82 29372904.91 29372905.01 0.0281 0.0248

Neptune 75708-09-17 00:58 G 29373098.50 29373098.54 29373098.60 0.0090 0.0087

Jupiter 75712-05-13 23:46 G 29374433.34 29374433.49 29374433.65 0.0514 0.0333

Jupiter 75713-01-06 00:43 G 29374670.34 29374670.53 29374670.73 0.0524 0.0068

Uranus 75713-01-06 23:17 G 29374671.40 29374671.47 29374671.57 0.0134 0.0122

Uranus 75713-08-21 04:19 G 29374897.54 29374897.68 29374897.85 0.0134 0.0090

Jupiter 75713-08-31 14:24 G 29374908.03 29374908.10 29374908.18 0.0533 0.0492

Uranus 75714-04-04 09:22 G 29375123.71 29375123.89 29375124.10 0.0134 0.0058

Uranus 75714-11-16 14:24 G 29375349.90 29375350.10 29375350.32 0.0134 0.0026

Uranus 75715-06-30 19:41 G 29375576.11 29375576.32 29375576.54 0.0134 0.0007

Uranus 75716-02-12 00:43 G 29375802.33 29375802.53 29375802.74 0.0134 0.0039

Uranus 75716-09-25 05:31 G 29376028.56 29376028.73 29376028.92 0.0134 0.0072

Uranus 75717-05-09 10:19 G 29376254.81 29376254.93 29376255.08 0.0134 0.0104

Jupiter 75717-07-31 06:43 G 29376337.76 29376337.78 29376337.80 0.0518 0.0515

Jupiter 75718-03-25 13:55 G 29376574.88 29376575.08 29376575.28 0.0508 0.0123

Jupiter 75718-11-17 08:53 G 29376811.69 29376811.87 29376812.05 0.0499 0.0251

Saturn 75721-12-30 00:15 G 29377950.36 29377950.51 29377950.66 0.0276 0.0190

Saturn 75722-08-16 10:48 G 29378179.74 29378179.95 29378180.17 0.0277 0.0014

Saturn 75723-04-02 22:05 G 29378409.26 29378409.42 29378409.60 0.0278 0.0169

Jupiter 75724-01-17 20:53 G 29378699.27 29378699.37 29378699.48 0.0512 0.0433

Jupiter 75724-09-10 18:29 G 29378936.07 29378936.27 29378936.47 0.0522 0.0051

Moon 75724-09-19 07:41 G 29378944.67 29378944.82 29378944.96 0.2709 0.0837

Earth 75724-09-19 12:43 G 29378944.88 29378945.03 29378945.18 0.2706 0.0987 *

Jupiter 75725-05-06 04:34 G 29379173.55 29379173.69 29379173.84 0.0531 0.0374

Jupiter 75729-11-28 11:03 G 29380840.78 29380840.96 29380841.15 0.0511 0.0229

Jupiter 75730-07-23 09:22 G 29381077.69 29381077.89 29381078.08 0.0501 0.0155

Jupiter 75731-03-16 19:55 G 29381314.33 29381314.33 29381314.34 0.0494 0.0493

Earth 75732-09-17 02:39 G 29381864.56 29381864.61 29381864.67 0.2705 0.2533

Jupiter 75736-05-16 14:53 G 29383201.93 29383202.12 29383202.32 0.0519 0.0161

Saturn 75736-06-15 11:03 G 29383231.77 29383231.96 29383232.16 0.0283 0.0101

Jupiter 75737-01-08 21:51 G 29383439.24 29383439.41 29383439.59 0.0529 0.0257

Saturn 75737-01-31 00:00 G 29383461.30 29383461.50 29383461.70 0.0281 0.0087

Saturn 75737-09-17 12:00 G 29383690.95 29383691.00 29383691.06 0.0280 0.0270

Jupiter 75741-08-03 06:58 G 29385106.64 29385106.79 29385106.95 0.0513 0.0336

Jupiter 75742-03-28 08:10 G 29385343.63 29385343.84 29385344.04 0.0504 0.0053

Jupiter 75742-11-19 21:22 G 29385580.28 29385580.39 29385580.51 0.0495 0.0406

Jupiter 75748-01-20 12:58 G 29387467.87 29387468.04 29387468.21 0.0517 0.0268

Jupiter 75748-09-13 16:34 G 29387705.00 29387705.19 29387705.38 0.0527 0.0141

Saturn 75751-07-11 22:48 G 29388736.30 29388736.45 29388736.63 0.0276 0.0175

Saturn 75752-02-26 09:51 G 29388965.70 29388965.91 29388966.12 0.0277 0.0004

Saturn 75752-10-12 21:07 G 29389195.23 29389195.38 29389195.54 0.0278 0.0184

Jupiter 75753-04-08 01:12 G 29389372.45 29389372.55 29389372.65 0.0516 0.0443

Jupiter 75753-12-01 06:00 G 29389609.54 29389609.75 29389609.95 0.0506 0.0052

Jupiter 75754-07-25 22:34 G 29389846.28 29389846.44 29389846.59 0.0497 0.0315

Uranus 75755-02-28 09:51 G 29390063.85 29390063.91 29390063.98 0.0144 0.0137

Uranus 75755-10-12 22:19 G 29390290.28 29390290.43 29390290.60 0.0144 0.0096

Uranus 75756-05-26 11:03 G 29390516.77 29390516.96 29390517.17 0.0144 0.0054

Uranus 75757-01-08 00:00 G 29390743.28 29390743.50 29390743.72 0.0144 0.0013

Uranus 75757-08-22 12:29 G 29390969.81 29390970.02 29390970.24 0.0144 0.0029

Uranus 75758-04-06 00:58 G 29391196.35 29391196.54 29391196.74 0.0144 0.0070

Uranus 75758-11-18 13:27 G 29391422.93 29391423.06 29391423.20 0.0144 0.0112

Jupiter 75759-09-25 11:31 G 29391733.85 29391733.98 29391734.12 0.0513 0.0371

Jupiter 75760-05-19 11:17 G 29391970.77 29391970.97 29391971.17 0.0523 0.0024

Jupiter 75761-01-11 23:31 G 29392208.37 29392208.48 29392208.59 0.0532 0.0447

Saturn 75765-05-11 01:12 G 29393788.49 29393788.55 29393788.63 0.0285 0.0265

Jupiter 75765-08-06 00:00 G 29393875.30 29393875.50 29393875.69 0.0509 0.0164

Saturn 75765-12-26 15:07 G 29394017.93 29394018.13 29394018.34 0.0283 0.0076

Jupiter 75766-03-30 20:24 G 29394112.16 29394112.35 29394112.53 0.0500 0.0214

Saturn 75766-08-13 04:34 G 29394247.50 29394247.69 29394247.88 0.0282 0.0114

Mars 75770-12-17 11:46 G 29395834.82 29395834.99 29395835.17 0.1628 0.0314

Jupiter 75771-05-31 10:34 G 29395999.87 29395999.94 29396000.03 0.0510 0.0467

Jupiter 75772-01-23 06:43 G 29396236.58 29396236.78 29396236.98 0.0520 0.0091

Jupiter 75772-09-16 15:07 G 29396473.97 29396474.13 29396474.28 0.0530 0.0330

Neptune 75776-01-09 03:51 G 29397683.62 29397683.66 29397683.74 0.0088 0.0084

Neptune 75776-08-21 17:03 G 29397909.12 29397909.21 29397909.33 0.0088 0.0077

Neptune 75777-04-04 06:00 G 29398134.64 29398134.75 29398134.91 0.0088 0.0070

Jupiter 75777-04-10 19:12 G 29398141.13 29398141.30 29398141.48 0.0512 0.0273

Neptune 75777-11-15 19:12 G 29398360.17 29398360.30 29398360.48 0.0088 0.0063

Jupiter 75777-12-03 19:27 G 29398378.11 29398378.31 29398378.51 0.0503 0.0114

Neptune 75778-06-29 08:53 G 29398585.70 29398585.87 29398586.04 0.0088 0.0055

Jupiter 75778-07-28 07:41 G 29398614.75 29398614.82 29398614.90 0.0495 0.0459

Neptune 75779-02-09 21:36 G 29398811.23 29398811.40 29398811.60 0.0088 0.0048

Neptune 75779-09-23 10:48 G 29399036.76 29399036.95 29399037.15 0.0088 0.0041

Neptune 75780-05-05 23:46 G 29399262.30 29399262.49 29399262.71 0.0088 0.0034

Neptune 75780-12-17 13:12 G 29399487.84 29399488.05 29399488.27 0.0088 0.0026

Saturn 75781-01-21 07:27 G 29399522.63 29399522.81 29399522.99 0.0276 0.0141

Neptune 75781-07-31 02:10 G 29399713.38 29399713.59 29399713.81 0.0088 0.0019

Saturn 75781-09-07 18:00 G 29399752.04 29399752.25 29399752.46 0.0277 0.0037

Neptune 75782-03-13 15:07 G 29399938.91 29399939.13 29399939.36 0.0088 0.0012

Saturn 75782-04-25 05:03 G 29399981.59 29399981.71 29399981.85 0.0278 0.0217

Neptune 75782-10-25 04:05 G 29400164.45 29400164.67 29400164.90 0.0088 0.0005

Neptune 75783-06-07 17:17 G 29400389.99 29400390.22 29400390.44 0.0088 0.0003

Jupiter 75783-09-28 01:27 G 29400502.37 29400502.56 29400502.74 0.0518 0.0203

Neptune 75784-01-19 06:15 G 29400615.54 29400615.76 29400615.98 0.0088 0.0010

Jupiter 75784-05-22 06:15 G 29400739.58 29400739.76 29400739.95 0.0528 0.0210

Neptune 75784-08-31 19:12 G 29400841.08 29400841.30 29400841.52 0.0088 0.0018

Neptune 75785-04-14 08:10 G 29401066.63 29401066.84 29401067.06 0.0088 0.0025

Neptune 75785-11-25 20:53 G 29401292.18 29401292.37 29401292.59 0.0088 0.0033

Neptune 75786-07-09 09:51 G 29401517.73 29401517.91 29401518.13 0.0088 0.0040

Neptune 75787-02-19 22:48 G 29401743.28 29401743.45 29401743.65 0.0088 0.0047

Neptune 75787-10-03 12:00 G 29401968.83 29401969.00 29401969.18 0.0088 0.0054

Neptune 75788-05-16 00:58 G 29402194.39 29402194.54 29402194.71 0.0088 0.0061

Jupiter 75788-12-14 14:53 G 29402406.99 29402407.12 29402407.27 0.0515 0.0379

Neptune 75788-12-27 13:41 G 29402419.96 29402420.07 29402420.23 0.0088 0.0069

Jupiter 75789-08-08 18:29 G 29402644.06 29402644.27 29402644.47 0.0505 0.0014

Neptune 75789-08-10 02:39 G 29402645.53 29402645.61 29402645.75 0.0088 0.0076

Neptune 75790-03-23 15:36 G 29402871.10 29402871.15 29402871.25 0.0088 0.0083

Jupiter 75790-04-02 09:36 G 29402880.77 29402880.90 29402881.04 0.0497 0.0372

Saturn 75794-11-21 05:31 G 29404574.62 29404574.73 29404574.85 0.0284 0.0238

Jupiter 75795-06-02 23:17 G 29404768.31 29404768.47 29404768.63 0.0515 0.0307

Saturn 75795-07-08 19:12 G 29404804.10 29404804.30 29404804.51 0.0283 0.0049

Jupiter 75796-01-26 00:43 G 29405005.33 29405005.53 29405005.73 0.0525 0.0094

Saturn 75796-02-23 07:55 G 29405033.66 29405033.83 29405034.03 0.0281 0.0140

Jupiter 75796-09-19 15:07 G 29405243.09 29405243.13 29405243.18 0.0534 0.0518

Uranus 75797-04-20 16:34 G 29405456.07 29405456.19 29405456.35 0.0134 0.0103

Uranus 75797-12-02 21:36 G 29405682.23 29405682.40 29405682.60 0.0134 0.0071

Uranus 75798-07-17 03:07 G 29405908.42 29405908.63 29405908.84 0.0134 0.0038

Uranus 75799-02-28 07:55 G 29406134.62 29406134.83 29406135.05 0.0134 0.0007

Uranus 75799-10-12 12:43 G 29406360.83 29406361.03 29406361.25 0.0134 0.0027

Uranus 75800-05-26 17:46 G 29406587.05 29406587.24 29406587.44 0.0134 0.0059

Jupiter 75800-08-20 09:22 G 29406672.83 29406672.89 29406672.97 0.0518 0.0485

Uranus 75801-01-07 22:48 G 29406813.30 29406813.45 29406813.61 0.0134 0.0091

Jupiter 75801-04-14 16:05 G 29406909.97 29406910.17 29406910.37 0.0508 0.0092

Uranus 75801-08-22 03:51 G 29407039.59 29407039.66 29407039.75 0.0134 0.0123

Jupiter 75801-12-07 10:05 G 29407146.76 29407146.92 29407147.10 0.0499 0.0279

Jupiter 75807-02-06 22:05 G 29409034.30 29409034.42 29409034.54 0.0512 0.0407

Jupiter 75807-10-01 20:39 G 29409271.16 29409271.36 29409271.56 0.0522 0.0022

Jupiter 75808-05-26 07:41 G 29409508.69 29409508.82 29409508.95 0.0532 0.0404

Saturn 75810-08-04 06:29 G 29410308.59 29410308.77 29410308.97 0.0276 0.0125

Saturn 75811-03-21 17:17 G 29410538.02 29410538.22 29410538.43 0.0277 0.0054

Saturn 75811-11-06 04:19 G 29410767.58 29410767.68 29410767.81 0.0278 0.0235

Jupiter 75812-12-18 12:29 G 29411175.83 29411176.02 29411176.21 0.0510 0.0199

Jupiter 75813-08-12 09:51 G 29411412.72 29411412.91 29411413.10 0.0501 0.0181

Jupiter 75818-10-12 22:34 G 29413300.41 29413300.44 29413300.47 0.0509 0.0501

Jupiter 75819-06-06 17:31 G 29413537.03 29413537.23 29413537.42 0.0519 0.0132

Jupiter 75820-01-30 00:29 G 29413774.35 29413774.52 29413774.69 0.0529 0.0285

Saturn 75824-06-03 08:53 G 29415360.74 29415360.87 29415361.02 0.0284 0.0214

Jupiter 75824-08-23 04:34 G 29415441.53 29415441.69 29415441.85 0.0513 0.0313

Saturn 75825-01-18 23:03 G 29415590.25 29415590.46 29415590.67 0.0283 0.0023

Jupiter 75825-04-17 05:46 G 29415678.54 29415678.74 29415678.95 0.0504 0.0076

Saturn 75825-09-05 12:15 G 29415819.84 29415820.01 29415820.18 0.0282 0.0165

Jupiter 75825-12-09 19:41 G 29415915.22 29415915.32 29415915.43 0.0496 0.0426

Jupiter 75831-02-09 14:10 G 29417802.91 29417803.09 29417803.27 0.0516 0.0241

Jupiter 75831-10-04 17:17 G 29418040.03 29418040.22 29418040.42 0.0526 0.0168

Mars 75834-01-10 15:36 G 29418869.04 29418869.15 29418869.25 0.1899 0.1476

Pluto 75836-02-17 00:00 G 29419636.34 29419636.50 29419636.70 0.0065 0.0037

Jupiter 75836-04-27 22:05 G 29419707.30 29419707.42 29419707.54 0.0516 0.0422

Pluto 75836-09-29 04:48 G 29419861.49 29419861.70 29419861.93 0.0066 0.0002

Mars 75836-10-15 00:29 G 29419877.35 29419877.52 29419877.70 0.1630 0.0118

Jupiter 75836-12-21 03:22 G 29419944.43 29419944.64 29419944.84 0.0506 0.0030

Pluto 75837-05-12 09:22 G 29420086.71 29420086.89 29420087.07 0.0066 0.0038

Jupiter 75837-08-14 20:24 G 29420181.20 29420181.35 29420181.50 0.0498 0.0335

Uranus 75839-06-13 05:03 G 29420848.59 29420848.71 29420848.86 0.0144 0.0114

Saturn 75839-06-30 05:31 G 29420865.68 29420865.73 29420865.79 0.0275 0.0264

Uranus 75840-01-25 18:15 G 29421075.07 29421075.26 29421075.45 0.0144 0.0073

Saturn 75840-02-14 15:51 G 29421094.96 29421095.16 29421095.36 0.0276 0.0090

Uranus 75840-09-08 06:43 G 29421301.57 29421301.78 29421302.00 0.0144 0.0031

Saturn 75840-10-01 02:24 G 29421324.40 29421324.60 29421324.80 0.0277 0.0088

Uranus 75841-04-22 19:27 G 29421528.09 29421528.31 29421528.53 0.0144 0.0010

Saturn 75841-05-18 13:27 G 29421554.02 29421554.06 29421554.13 0.0278 0.0268

Uranus 75841-12-05 07:41 G 29421754.63 29421754.82 29421755.04 0.0144 0.0053

Uranus 75842-07-19 20:10 G 29421981.19 29421981.34 29421981.52 0.0144 0.0094

Jupiter 75842-10-15 10:05 G 29422068.77 29422068.92 29422069.07 0.0513 0.0345

Uranus 75843-03-03 08:39 G 29422207.80 29422207.86 29422207.95 0.0144 0.0135

Jupiter 75843-06-09 09:51 G 29422305.71 29422305.91 29422306.11 0.0523 0.0049

Jupiter 75844-02-01 22:05 G 29422543.33 29422543.42 29422543.52 0.0533 0.0471

Jupiter 75848-08-26 00:43 G 29424210.34 29424210.53 29424210.73 0.0509 0.0135

Jupiter 75849-04-19 20:53 G 29424447.20 29424447.37 29424447.56 0.0500 0.0241

Saturn 75853-12-14 14:10 G 29426146.94 29426147.09 29426147.26 0.0284 0.0185

Jupiter 75854-06-20 08:53 G 29426334.78 29426334.87 29426334.98 0.0511 0.0443

Saturn 75854-08-01 04:05 G 29426376.46 29426376.67 29426376.88 0.0283 0.0006

Jupiter 75855-02-12 05:17 G 29426571.52 29426571.72 29426571.92 0.0521 0.0065

Saturn 75855-03-18 17:03 G 29426606.06 29426606.21 29426606.36 0.0281 0.0192

Jupiter 75855-10-07 14:10 G 29426808.95 29426809.09 29426809.25 0.0531 0.0356

Neptune 75858-10-07 21:36 G 29427905.39 29427905.40 29427905.46 0.0089 0.0089

Neptune 75859-05-21 11:03 G 29428130.88 29428130.96 29428131.06 0.0089 0.0081

Neptune 75860-01-01 23:46 G 29428356.39 29428356.49 29428356.63 0.0089 0.0074

Jupiter 75860-04-30 21:07 G 29428476.20 29428476.38 29428476.56 0.0512 0.0242

Neptune 75860-08-14 12:29 G 29428581.90 29428582.02 29428582.19 0.0089 0.0067

Jupiter 75860-12-23 20:24 G 29428713.16 29428713.35 29428713.55 0.0502 0.0143

Neptune 75861-03-28 01:41 G 29428807.41 29428807.57 29428807.74 0.0089 0.0059

Jupiter 75861-08-17 08:10 G 29428949.80 29428949.84 29428949.88 0.0494 0.0483

Neptune 75861-11-08 14:24 G 29429032.94 29429033.10 29429033.29 0.0090 0.0051

Earth 75862-03-21 02:24 G 29429165.44 29429165.60 29429165.76 0.2627 0.0145

Moon 75862-03-21 07:41 G 29429165.67 29429165.82 29429165.97 0.2628 0.0932 *

Neptune 75862-06-22 03:36 G 29429258.47 29429258.65 29429258.85 0.0090 0.0044

Neptune 75863-02-02 16:19 G 29429484.00 29429484.18 29429484.40 0.0090 0.0037

Neptune 75863-09-16 05:31 G 29429709.53 29429709.73 29429709.94 0.0090 0.0029

Neptune 75864-04-28 18:29 G 29429935.06 29429935.27 29429935.49 0.0090 0.0021

Neptune 75864-12-10 07:27 G 29430160.60 29430160.81 29430161.03 0.0090 0.0013

Neptune 75865-07-23 20:39 G 29430386.14 29430386.36 29430386.58 0.0090 0.0006

Neptune 75866-03-06 09:36 G 29430611.68 29430611.90 29430612.12 0.0090 0.0002

Neptune 75866-10-17 22:34 G 29430837.22 29430837.44 29430837.66 0.0090 0.0010

Jupiter 75866-10-18 02:24 G 29430837.41 29430837.60 29430837.79 0.0518 0.0174 *

Neptune 75867-05-31 11:31 G 29431062.78 29431062.98 29431063.20 0.0090 0.0018

Jupiter 75867-06-12 08:10 G 29431074.66 29431074.84 29431075.02 0.0528 0.0240

Neptune 75868-01-12 00:43 G 29431288.32 29431288.53 29431288.74 0.0090 0.0025

Neptune 75868-08-24 13:41 G 29431513.87 29431514.07 29431514.28 0.0090 0.0033

Saturn 75869-01-09 06:15 G 29431651.67 29431651.76 29431651.85 0.0275 0.0246

Neptune 75869-04-07 02:24 G 29431739.42 29431739.60 29431739.81 0.0090 0.0041

Saturn 75869-08-26 16:05 G 29431880.96 29431881.17 29431881.37 0.0276 0.0072

Neptune 75869-11-18 15:36 G 29431964.97 29431965.15 29431965.34 0.0090 0.0048

Saturn 75870-04-13 02:39 G 29432110.41 29432110.61 29432110.80 0.0277 0.0107

Neptune 75870-07-02 04:34 G 29432190.54 29432190.69 29432190.88 0.0090 0.0056

Neptune 75871-02-12 17:46 G 29432416.09 29432416.24 29432416.40 0.0090 0.0063

Neptune 75871-09-26 06:29 G 29432641.66 29432641.77 29432641.92 0.0090 0.0071

Jupiter 75872-01-04 16:05 G 29432742.02 29432742.17 29432742.32 0.0514 0.0350

Neptune 75872-05-08 19:41 G 29432867.22 29432867.32 29432867.44 0.0090 0.0078

Jupiter 75872-08-28 18:43 G 29432979.08 29432979.28 29432979.49 0.0505 0.0040

Neptune 75872-12-20 08:24 G 29433092.81 29433092.85 29433092.94 0.0090 0.0086

Jupiter 75873-04-22 09:22 G 29433215.77 29433215.89 29433216.02 0.0496 0.0395

Jupiter 75878-06-23 00:58 G 29435103.37 29435103.54 29435103.71 0.0515 0.0280

Jupiter 75879-02-15 02:53 G 29435340.43 29435340.62 29435340.82 0.0525 0.0123

Uranus 75880-12-20 05:17 G 29436014.62 29436014.72 29436014.84 0.0134 0.0115

Uranus 75881-08-03 10:19 G 29436240.77 29436240.93 29436241.11 0.0134 0.0083

Uranus 75882-03-17 15:22 G 29436466.94 29436467.14 29436467.34 0.0134 0.0051

Uranus 75882-10-29 20:10 G 29436693.13 29436693.34 29436693.56 0.0134 0.0019

Uranus 75883-06-13 01:27 G 29436919.34 29436919.56 29436919.77 0.0134 0.0014

Saturn 75883-06-26 17:46 G 29436933.06 29436933.24 29436933.41 0.0284 0.0160

Jupiter 75883-09-09 06:29 G 29437007.68 29437007.77 29437007.86 0.0517 0.0463

Uranus 75884-01-25 06:15 G 29437145.56 29437145.76 29437145.97 0.0134 0.0046

Saturn 75884-02-11 07:41 G 29437162.61 29437162.82 29437163.03 0.0283 0.0031

Jupiter 75884-05-03 12:58 G 29437244.83 29437245.04 29437245.24 0.0508 0.0071

Uranus 75884-09-07 11:17 G 29437371.80 29437371.97 29437372.15 0.0134 0.0078

Saturn 75884-09-27 20:39 G 29437392.24 29437392.36 29437392.50 0.0282 0.0218

Jupiter 75884-12-26 07:27 G 29437481.65 29437481.81 29437481.97 0.0499 0.0299

Uranus 75885-04-21 15:51 G 29437598.06 29437598.16 29437598.30 0.0134 0.0111

Jupiter 75890-02-25 23:03 G 29439369.33 29439369.46 29439369.60 0.0512 0.0381

Jupiter 75890-10-20 21:22 G 29439606.19 29439606.39 29439606.59 0.0522 0.0009

Jupiter 75891-06-15 07:55 G 29439843.72 29439843.83 29439843.95 0.0531 0.0428

Jupiter 75896-01-07 08:39 G 29441510.67 29441510.86 29441511.05 0.0510 0.0179

Jupiter 75896-08-31 06:29 G 29441747.59 29441747.77 29441747.96 0.0501 0.0201

Saturn 75898-07-22 15:07 G 29442438.01 29442438.13 29442438.28 0.0275 0.0212

Saturn 75899-03-09 01:27 G 29442667.35 29442667.56 29442667.78 0.0276 0.0037

Saturn 75899-10-24 12:00 G 29442896.83 29442897.00 29442897.19 0.0277 0.0142

Mars 75899-11-07 18:15 G 29442911.10 29442911.26 29442911.43 0.1897 0.0733

Jupiter 75901-11-01 20:10 G 29443635.28 29443635.34 29443635.42 0.0509 0.0477

Jupiter 75902-06-26 15:07 G 29443871.93 29443872.13 29443872.33 0.0519 0.0107

Mars 75902-08-13 12:43 G 29443919.86 29443920.03 29443920.20 0.1631 0.0100

Jupiter 75903-02-18 22:05 G 29444109.26 29444109.42 29444109.58 0.0529 0.0309

Jupiter 75907-09-13 04:34 G 29445776.52 29445776.69 29445776.86 0.0513 0.0286

Jupiter 75908-05-07 05:46 G 29446013.54 29446013.74 29446013.95 0.0504 0.0102

Jupiter 75908-12-29 19:27 G 29446250.23 29446250.31 29446250.40 0.0495 0.0449

Saturn 75913-01-07 00:29 G 29447719.34 29447719.52 29447719.71 0.0284 0.0129

Saturn 75913-08-24 14:24 G 29447948.89 29447949.10 29447949.30 0.0282 0.0061

Jupiter 75914-03-01 11:46 G 29448137.80 29448137.99 29448138.17 0.0517 0.0216

Saturn 75914-04-11 02:53 G 29448178.53 29448178.62 29448178.73 0.0281 0.0246

Jupiter 75914-10-24 15:22 G 29448374.95 29448375.14 29448375.32 0.0527 0.0193

Jupiter 75919-05-18 23:31 G 29450042.35 29450042.48 29450042.61 0.0516 0.0393

Jupiter 75920-01-11 04:05 G 29450279.47 29450279.67 29450279.88 0.0506 0.0006

Jupiter 75920-09-03 20:24 G 29450516.21 29450516.35 29450516.49 0.0497 0.0359

Uranus 75923-02-11 10:48 G 29451406.88 29451406.95 29451407.05 0.0144 0.0133

Uranus 75923-09-25 23:31 G 29451633.32 29451633.48 29451633.66 0.0144 0.0092

Pluto 75923-10-19 23:31 G 29451657.45 29451657.48 29451657.53 0.0079 0.0077

Uranus 75924-05-09 12:15 G 29451859.81 29451860.01 29451860.22 0.0144 0.0051

Pluto 75924-06-01 09:51 G 29451882.69 29451882.91 29451883.13 0.0079 0.0010

Uranus 75924-12-22 00:58 G 29452086.32 29452086.54 29452086.76 0.0144 0.0009

Pluto 75925-01-12 19:41 G 29452108.18 29452108.32 29452108.49 0.0079 0.0056

Uranus 75925-08-05 13:27 G 29452312.85 29452313.06 29452313.28 0.0144 0.0032

Jupiter 75925-11-04 09:36 G 29452403.75 29452403.90 29452404.06 0.0514 0.0320

Uranus 75926-03-20 01:55 G 29452539.39 29452539.58 29452539.77 0.0144 0.0074

Jupiter 75926-06-29 10:19 G 29452640.73 29452640.93 29452641.13 0.0524 0.0077

Uranus 75926-11-01 14:10 G 29452765.97 29452766.09 29452766.23 0.0144 0.0115

Jupiter 75927-02-21 23:31 G 29452878.41 29452878.48 29452878.55 0.0533 0.0499

Saturn 75928-02-02 16:48 G 29453224.06 29453224.20 29453224.36 0.0275 0.0193

Saturn 75928-09-19 02:53 G 29453453.41 29453453.62 29453453.83 0.0276 0.0017

Saturn 75929-05-06 13:12 G 29453682.89 29453683.05 29453683.23 0.0277 0.0162

Jupiter 75931-01-21 17:03 G 29454308.16 29454308.21 29454308.26 0.0519 0.0500

Jupiter 75931-09-16 00:58 G 29454545.33 29454545.54 29454545.74 0.0509 0.0108

Jupiter 75932-05-09 20:24 G 29454782.18 29454782.35 29454782.52 0.0500 0.0266

Jupiter 75937-07-10 09:36 G 29456669.80 29456669.90 29456670.03 0.0511 0.0419

Jupiter 75938-03-04 06:43 G 29456906.58 29456906.78 29456906.98 0.0521 0.0037

Jupiter 75938-10-27 15:51 G 29457144.03 29457144.16 29457144.30 0.0530 0.0383

Neptune 75940-04-13 12:00 G 29457677.97 29457678.00 29457678.05 0.0088 0.0086

Neptune 75940-11-25 01:12 G 29457903.47 29457903.55 29457903.65 0.0088 0.0079

Neptune 75941-07-08 14:10 G 29458128.98 29458129.09 29458129.23 0.0088 0.0072

Neptune 75942-02-19 03:07 G 29458354.50 29458354.63 29458354.80 0.0088 0.0065

Saturn 75942-07-20 03:36 G 29458505.45 29458505.65 29458505.84 0.0284 0.0104

Neptune 75942-10-02 16:19 G 29458580.03 29458580.18 29458580.37 0.0088 0.0058

Saturn 75943-03-06 17:17 G 29458735.02 29458735.22 29458735.43 0.0283 0.0086

Neptune 75943-05-16 05:46 G 29458805.56 29458805.74 29458805.93 0.0088 0.0050

Jupiter 75943-05-21 17:31 G 29458811.04 29458811.23 29458811.42 0.0511 0.0220

Saturn 75943-10-22 06:15 G 29458964.72 29458964.76 29458964.82 0.0282 0.0272

Neptune 75943-12-27 18:58 G 29459031.10 29459031.29 29459031.49 0.0088 0.0043

Jupiter 75944-01-13 16:48 G 29459048.01 29459048.20 29459048.40 0.0502 0.0162

Neptune 75944-08-09 07:55 G 29459256.64 29459256.83 29459257.05 0.0088 0.0036

Neptune 75945-03-22 21:22 G 29459482.18 29459482.39 29459482.60 0.0088 0.0028

Neptune 75945-11-03 10:19 G 29459707.72 29459707.93 29459708.15 0.0088 0.0021

Neptune 75946-06-16 23:17 G 29459933.26 29459933.47 29459933.70 0.0088 0.0014

Neptune 75947-01-28 12:29 G 29460158.80 29460159.02 29460159.25 0.0088 0.0006

Neptune 75947-09-11 01:27 G 29460384.34 29460384.56 29460384.79 0.0088 0.0002

Neptune 75948-04-23 14:24 G 29460609.89 29460610.10 29460610.33 0.0088 0.0009

Neptune 75948-12-05 03:36 G 29460835.43 29460835.65 29460835.87 0.0088 0.0016

Neptune 75949-07-18 16:19 G 29461060.98 29461061.18 29461061.41 0.0088 0.0024

Jupiter 75949-11-07 02:39 G 29461172.42 29461172.61 29461172.81 0.0518 0.0148

Neptune 75950-03-01 05:17 G 29461286.53 29461286.72 29461286.94 0.0088 0.0031

Jupiter 75950-07-02 08:24 G 29461409.67 29461409.85 29461410.02 0.0528 0.0266

Neptune 75950-10-12 18:29 G 29461512.07 29461512.27 29461512.47 0.0088 0.0038

Neptune 75951-05-26 07:12 G 29461737.62 29461737.80 29461738.00 0.0088 0.0046

Neptune 75952-01-06 20:24 G 29461963.18 29461963.35 29461963.54 0.0088 0.0053

Neptune 75952-08-19 09:22 G 29462188.74 29462188.89 29462189.06 0.0088 0.0060

Neptune 75953-04-01 22:19 G 29462414.30 29462414.43 29462414.58 0.0088 0.0067

Neptune 75953-11-13 11:31 G 29462639.87 29462639.98 29462640.10 0.0088 0.0074

Neptune 75954-06-27 00:00 G 29462865.44 29462865.50 29462865.61 0.0088 0.0082

Jupiter 75955-01-24 11:17 G 29463076.82 29463076.97 29463077.13 0.0514 0.0330

Jupiter 75955-09-18 14:10 G 29463313.89 29463314.09 29463314.30 0.0505 0.0061

Jupiter 75956-05-12 05:31 G 29463550.61 29463550.73 29463550.84 0.0497 0.0413

Saturn 75957-08-15 02:24 G 29464010.44 29464010.60 29464010.79 0.0275 0.0157

Saturn 75958-04-01 12:43 G 29464239.82 29464240.03 29464240.24 0.0276 0.0019

Saturn 75958-11-16 23:31 G 29464469.33 29464469.48 29464469.63 0.0277 0.0198

Jupiter 75961-07-12 21:51 G 29465438.23 29465438.41 29465438.58 0.0515 0.0256

Jupiter 75962-03-06 23:32 G 29465675.29 29465675.48 29465675.67 0.0525 0.0147

Uranus 75964-08-20 17:17 G 29466573.17 29466573.22 29466573.30 0.0134 0.0128

Uranus 75965-04-03 22:20 G 29466799.29 29466799.43 29466799.59 0.0134 0.0096

Mars 75965-09-04 20:39 G 29466953.18 29466953.36 29466953.53 0.1894 0.0059

Uranus 75965-11-16 03:08 G 29467025.46 29467025.63 29467025.84 0.0134 0.0064

Uranus 75966-06-30 08:39 G 29467251.65 29467251.86 29467252.07 0.0134 0.0031

Jupiter 75966-09-29 05:32 G 29467342.62 29467342.73 29467342.84 0.0517 0.0437

Uranus 75967-02-11 13:27 G 29467477.85 29467478.06 29467478.28 0.0134 0.0003

Jupiter 75967-05-24 12:00 G 29467579.80 29467580.00 29467580.21 0.0508 0.0044

Earth 75967-09-22 12:58 G 29467700.89 29467701.04 29467701.19 0.2706 0.0989

Moon 75967-09-22 18:58 G 29467701.15 29467701.29 29467701.42 0.2705 0.1438 *

Uranus 75967-09-25 18:29 G 29467704.06 29467704.27 29467704.48 0.0134 0.0033

Jupiter 75968-01-16 06:29 G 29467816.62 29467816.77 29467816.93 0.0499 0.0323

Uranus 75968-05-08 23:03 G 29467930.29 29467930.46 29467930.66 0.0134 0.0066

Mars 75968-06-10 00:58 G 29467962.37 29467962.54 29467962.71 0.1633 0.0308

Uranus 75968-12-21 04:05 G 29468156.54 29468156.67 29468156.83 0.0134 0.0098

Uranus 75969-08-04 09:08 G 29468382.85 29468382.88 29468382.95 0.0134 0.0130

Saturn	75971-06-14 21:36 G	29469062.32	29469062.40	29469062.48	0.0285	0.0262
Saturn	75972-01-30 11:46 G	29469291.79	29469291.99	29469292.20	0.0284	0.0071
Saturn	75972-09-16 01:27 G	29469521.37	29469521.56	29469521.75	0.0282	0.0118
Jupiter	75973-03-17 19:41 G	29469704.17	29469704.32	29469704.46	0.0512	0.0358
Jupiter	75973-11-09 18:00 G	29469941.04	29469941.25	29469941.45	0.0522	0.0034
Jupiter	75974-07-05 05:03 G	29470178.60	29470178.71	29470178.81	0.0532	0.0451
Earth	75975-09-20 03:22 G	29470620.58	29470620.64	29470620.69	0.2705	0.2510
Moon	75975-09-20 06:44 G	29470620.65	29470620.78	29470620.90	0.2699	0.1788 *
Jupiter	75979-01-27 08:53 G	29471845.68	29471845.87	29471846.07	0.0510	0.0151
Jupiter	75979-09-21 06:15 G	29472082.58	29472082.76	29472082.95	0.0501	0.0227
Jupiter	75984-11-20 18:44 G	29473970.20	29473970.28	29473970.37	0.0510	0.0455
Jupiter	75985-07-15 14:10 G	29474206.89	29474207.09	29474207.29	0.0520	0.0081
Jupiter	75986-03-09 21:51 G	29474444.26	29474444.41	29474444.57	0.0530	0.0336
Saturn	75987-02-25 04:48 G	29474796.52	29474796.70	29474796.89	0.0275	0.0136
Saturn	75987-10-12 14:53 G	29475025.91	29475026.12	29475026.33	0.0276	0.0040
Saturn	75988-05-29 01:27 G	29475255.44	29475255.56	29475255.70	0.0278	0.0218
Jupiter	75990-10-02 04:20 G	29476111.50	29476111.68	29476111.86	0.0513	0.0258
Jupiter	75991-05-27 04:48 G	29476348.50	29476348.70	29476348.90	0.0503	0.0127
Jupiter	75992-01-18 18:00 G	29476585.19	29476585.25	29476585.31	0.0495	0.0470
Jupiter	75997-03-20 12:00 G	29478472.81	29478473.00	29478473.19	0.0517	0.0189
Jupiter	75997-11-12 16:05 G	29478709.99	29478710.17	29478710.36	0.0527	0.0220
Saturn	76000-12-25 00:15 G	29479848.40	29479848.51	29479848.63	0.0285	0.0238

77TH MILLENNIUM CE

This is a list of transits of Venus in the 77th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**76001-08-11 14:53**	**G**	**29480077.92**	**29480078.12**	**29480078.33**	**0.0284**	**0.0047**	
Saturn	**76002-03-29 04:34**	**G**	**29480307.51**	**29480307.69**	**29480307.88**	**0.0283**	**0.0143**	
Jupiter	**76002-06-06 19:41**	**G**	**29480377.18**	**29480377.32**	**29480377.46**	**0.0515**	**0.0371**	
Jupiter	**76003-01-29 23:46**	**G**	**29480614.29**	**29480614.49**	**29480614.70**	**0.0506**	**0.0021**	
Jupiter	**76003-09-23 16:05**	**G**	**29480851.04**	**29480851.17**	**29480851.31**	**0.0497**	**0.0378**	
Uranus	**76007-05-26 06:29**	**G**	**29482191.64**	**29482191.77**	**29482191.92**	**0.0144**	**0.0110**	
Uranus	**76008-01-07 19:27**	**G**	**29482418.12**	**29482418.31**	**29482418.51**	**0.0144**	**0.0069**	
Uranus	**76008-08-21 07:56**	**G**	**29482644.62**	**29482644.83**	**29482645.05**	**0.0144**	**0.0028**	
Jupiter	**76008-11-23 09:36**	**G**	**29482738.74**	**29482738.90**	**29482739.07**	**0.0514**	**0.0294**	
Uranus	**76009-04-04 20:24**	**G**	**29482871.14**	**29482871.35**	**29482871.57**	**0.0144**	**0.0015**	
Jupiter	**76009-07-18 10:05**	**G**	**29482975.72**	**29482975.92**	**29482976.12**	**0.0524**	**0.0104**	
Uranus	**76009-11-17 08:53**	**G**	**29483097.67**	**29483097.87**	**29483098.08**	**0.0144**	**0.0056**	
Jupiter	**76010-03-12 22:48**	**G**	**29483213.42**	**29483213.45**	**29483213.49**	**0.0533**	**0.0521**	
Uranus	**76010-07-01 21:22**	**G**	**29483324.23**	**29483324.39**	**29483324.56**	**0.0144**	**0.0097**	
Uranus	**76011-02-13 09:51**	**G**	**29483550.85**	**29483550.91**	**29483550.98**	**0.0144**	**0.0138**	
Jupiter	**76014-02-09 11:46**	**G**	**29484642.92**	**29484642.99**	**29484643.07**	**0.0518**	**0.0480**	
Jupiter	**76014-10-04 19:41**	**G**	**29484880.11**	**29484880.32**	**29484880.52**	**0.0509**	**0.0088**	
Jupiter	**76015-05-29 15:22**	**G**	**29485116.97**	**29485117.14**	**29485117.31**	**0.0500**	**0.0284**	
Saturn	**76016-01-21 05:03**	**G**	**29485353.71**	**29485353.71**	**29485353.73**	**0.0274**	**0.0274**	
Saturn	**76016-09-06 14:53**	**G**	**29485582.92**	**29485583.12**	**29485583.32**	**0.0275**	**0.0101**	
Saturn	**76017-04-24 00:58**	**G**	**29485812.34**	**29485812.54**	**29485812.75**	**0.0276**	**0.0076**	
Saturn	**76017-12-09 11:46**	**G**	**29486041.92**	**29486041.99**	**29486042.08**	**0.0278**	**0.0254**	
Jupiter	**76020-07-29 06:00**	**G**	**29487004.63**	**29487004.75**	**29487004.88**	**0.0511**	**0.0394**	
Jupiter	**76021-03-23 02:39**	**G**	**29487241.41**	**29487241.61**	**29487241.81**	**0.0521**	**0.0015**	
Jupiter	**76021-11-15 11:32**	**G**	**29487478.86**	**29487478.98**	**29487479.11**	**0.0530**	**0.0404**	
Neptune	**76023-08-23 19:12**	**G**	**29488125.25**	**29488125.30**	**29488125.40**	**0.0089**	**0.0084**	
Neptune	**76024-04-05 08:39**	**G**	**29488350.75**	**29488350.86**	**29488350.97**	**0.0089**	**0.0076**	

Neptune 76024-11-16 21:08 G 29488576.26 29488576.38 29488576.54 0.0089 0.0069

Neptune 76025-06-30 10:05 G 29488801.78 29488801.92 29488802.10 0.0089 0.0061

Neptune 76026-02-10 23:03 G 29489027.30 29489027.46 29489027.65 0.0089 0.0054

Jupiter 76026-06-09 15:51 G 29489145.97 29489146.16 29489146.35 0.0512 0.0195

Neptune 76026-09-24 12:15 G 29489252.82 29489253.01 29489253.20 0.0089 0.0046

Jupiter 76027-02-01 15:08 G 29489382.94 29489383.13 29489383.32 0.0502 0.0188

Neptune 76027-05-08 00:58 G 29489478.35 29489478.54 29489478.75 0.0089 0.0039

Neptune 76027-12-19 14:10 G 29489703.89 29489704.09 29489704.29 0.0090 0.0031

Neptune 76028-08-01 02:53 G 29489929.42 29489929.62 29489929.84 0.0090 0.0023

Neptune 76029-03-14 15:51 G 29490154.95 29490155.16 29490155.38 0.0090 0.0016

Neptune 76029-10-26 05:03 G 29490380.49 29490380.71 29490380.92 0.0090 0.0008

Neptune 76030-06-08 18:00 G 29490606.04 29490606.25 29490606.47 0.0090 0.0001

Saturn 76030-07-07 10:05 G 29490634.78 29490634.92 29490635.07 0.0285 0.0203

Neptune 76031-01-20 06:58 G 29490831.58 29490831.79 29490832.01 0.0090 0.0008

Saturn 76031-02-22 00:15 G 29490864.30 29490864.51 29490864.72 0.0283 0.0013

Mars 76031-07-03 00:00 G 29490995.34 29490995.50 29490995.66 0.1892 0.0741

Neptune 76031-09-02 19:56 G 29491057.12 29491057.33 29491057.55 0.0090 0.0015

Saturn 76031-10-09 13:27 G 29491093.90 29491094.06 29491094.23 0.0282 0.0176

Jupiter 76032-04-03 05:03 G 29491270.66 29491270.71 29491270.76 0.0508 0.0489

Neptune 76032-04-15 09:08 G 29491282.67 29491282.88 29491283.09 0.0090 0.0023

Jupiter 76032-11-25 22:20 G 29491507.23 29491507.43 29491507.62 0.0518 0.0124

Neptune 76032-11-26 21:51 G 29491508.21 29491508.41 29491508.62 0.0090 0.0031

Neptune 76033-07-10 10:48 G 29491733.77 29491733.95 29491734.16 0.0090 0.0039

Jupiter 76033-07-21 04:05 G 29491744.50 29491744.67 29491744.84 0.0528 0.0288

Neptune 76034-02-21 00:15 G 29491959.32 29491959.51 29491959.70 0.0090 0.0046

Mars 76034-04-07 13:27 G 29492004.89 29492005.06 29492005.22 0.1634 0.0519

Neptune 76034-10-04 12:58 G 29492184.88 29492185.04 29492185.23 0.0090 0.0054

Neptune 76035-05-18 01:56 G 29492410.44 29492410.58 29492410.75 0.0090 0.0062

Neptune 76035-12-29 15:08 G 29492636.00 29492636.13 29492636.28 0.0090 0.0069

Neptune 76036-08-11 03:51 G 29492861.57 29492861.66 29492861.80 0.0090 0.0077

Neptune 76037-03-24 17:03 G 29493087.15 29493087.21 29493087.30 0.0090 0.0084

Jupiter 76038-02-12 11:03 G 29493411.80 29493411.96 29493412.13 0.0514 0.0303

Jupiter 76038-10-07 13:41 G 29493648.87 29493649.07 29493649.27 0.0504 0.0086

Jupiter 76039-06-01 04:20 G 29493885.58 29493885.68 29493885.77 0.0496 0.0436

Jupiter 76044-07-31 19:41 G 29495773.14 29495773.32 29495773.50 0.0516 0.0232

Jupiter 76045-03-25 22:05 G 29496010.23 29496010.42 29496010.61 0.0526 0.0173

Saturn 76045-08-02 08:24 G 29496139.78 29496139.85 29496139.94 0.0275 0.0252

Saturn 76046-03-19 18:00 G 29496369.05 29496369.25 29496369.46 0.0276 0.0079

Saturn 76046-11-04 04:20 G 29496598.48 29496598.68 29496598.88 0.0277 0.0099

Saturn 76047-06-21 14:53 G 29496828.11 29496828.12 29496828.14 0.0278 0.0277

Uranus 76048-12-02 10:34 G 29497357.82 29497357.94 29497358.07 0.0134 0.0108

Uranus 76049-07-16 15:36 G 29497583.98 29497584.15 29497584.33 0.0134 0.0076

Jupiter 76049-10-18 05:03 G 29497677.59 29497677.71 29497677.84 0.0517 0.0411

Uranus 76050-02-27 20:24 G 29497810.16 29497810.35 29497810.56 0.0134 0.0044

Jupiter 76050-06-12 11:03 G 29497914.75 29497914.96 29497915.16 0.0507 0.0021

Uranus 76050-10-12 01:27 G 29498036.35 29498036.56 29498036.78 0.0134 0.0012

Jupiter 76051-02-04 04:48 G 29498151.55 29498151.70 29498151.84 0.0498 0.0345

Uranus 76051-05-26 06:15 G 29498262.56 29498262.76 29498262.98 0.0134 0.0021

Uranus 76052-01-07 11:17 G 29498488.78 29498488.97 29498489.18 0.0134 0.0053

Uranus 76052-08-20 16:20 G 29498715.02 29498715.18 29498715.35 0.0134 0.0085

Uranus 76053-04-03 21:22 G 29498941.30 29498941.39 29498941.50 0.0134 0.0117

Jupiter 76056-04-05 18:44 G 29500039.13 29500039.28 29500039.44 0.0513 0.0334

Jupiter 76056-11-28 18:00 G 29500276.05 29500276.25 29500276.45 0.0523 0.0059

Jupiter 76057-07-24 05:32 G 29500513.64 29500513.73 29500513.82 0.0532 0.0476

Saturn 76060-01-17 12:44 G 29501420.88 29501421.03 29501421.20 0.0285 0.0179

Saturn 76060-09-03 03:08 G 29501650.42 29501650.63 29501650.85 0.0283 0.0014

Saturn 76061-04-20 16:34 G 29501880.05 29501880.19 29501880.34 0.0282 0.0200

Jupiter 76062-02-15 04:34 G 29502180.49 29502180.69 29502180.89 0.0510 0.0128

Jupiter 76062-10-10 01:27 G 29502417.39 29502417.56 29502417.74 0.0501 0.0247

Mars 76066-04-06 06:58 G 29503691.74 29503691.79 29503691.85 0.1629 0.1527

Jupiter 76067-12-10 18:00 G 29504305.14 29504305.25 29504305.36 0.0510 0.0430

Jupiter 76068-08-03 13:27 G 29504541.86 29504542.06 29504542.26 0.0520 0.0054

Jupiter 76069-03-28 21:08 G 29504779.24 29504779.38 29504779.53 0.0529 0.0361

Jupiter 76073-10-20 22:48 G 29506446.27 29506446.45 29506446.63 0.0513 0.0238

Jupiter 76074-06-14 23:17 G 29506683.28 29506683.47 29506683.67 0.0503 0.0147

Jupiter 76075-02-06 12:44 G 29506920.00 29506920.03 29506920.07 0.0495 0.0487

Saturn 76075-02-12 17:32 G 29506926.11 29506926.23 29506926.37 0.0275 0.0218

Saturn 76075-09-30 03:36 G 29507155.44 29507155.65 29507155.86 0.0276 0.0044

Saturn 76076-05-16 13:41 G 29507384.89 29507385.07 29507385.27 0.0277 0.0134

Jupiter 76080-04-08 07:27 G 29508807.62 29508807.81 29508808.00 0.0517 0.0166

Jupiter 76080-12-01 11:17 G 29509044.79 29509044.97 29509045.15 0.0527 0.0242

Pluto 76082-03-18 10:34 G 29509516.76 29509516.94 29509517.14 0.0065 0.0031

Pluto 76082-10-29 15:08 G 29509741.92 29509742.13 29509742.36 0.0066 0.0006

Pluto 76083-06-11 19:27 G 29509967.16 29509967.31 29509967.49 0.0066 0.0044

Jupiter 76085-06-25 17:03 G 29510712.06 29510712.21 29510712.36 0.0516 0.0347

Jupiter 76086-02-17 21:36 G 29510949.19 29510949.40 29510949.60 0.0506 0.0046

Jupiter 76086-10-12 13:56 G 29511185.96 29511186.08 29511186.20 0.0497 0.0401

Saturn 76089-07-29 23:46 G 29512207.32 29512207.49 29512207.68 0.0284 0.0143

Saturn 76090-03-16 13:56 G 29512436.87 29512437.08 29512437.28 0.0283 0.0048

Saturn 76090-11-01 02:39 G 29512666.51 29512666.61 29512666.74 0.0282 0.0235

Uranus 76091-01-23 13:41 G 29512749.98 29512750.07 29512750.18 0.0144 0.0128

Uranus 76091-09-07 02:24 G 29512976.42 29512976.60 29512976.77 0.0144 0.0087

Jupiter 76091-12-13 04:34 G 29513073.52 29513073.69 29513073.86 0.0514 0.0272

Uranus 76092-04-20 14:39 G 29513202.91 29513203.11 29513203.32 0.0144 0.0046

Jupiter 76092-08-06 04:48 G 29513310.51 29513310.70 29513310.90 0.0524 0.0127

Uranus 76092-12-03 03:08 G 29513429.42 29513429.63 29513429.85 0.0144 0.0005

Uranus 76093-07-17 15:36 G 29513655.94 29513656.15 29513656.37 0.0144 0.0037

Uranus 76094-03-01 04:05 G 29513882.49 29513882.67 29513882.86 0.0144 0.0078

Uranus 76094-10-13 16:20 G 29514109.07 29514109.18 29514109.31 0.0144 0.0120

Jupiter 76097-02-28 10:48 G 29514977.86 29514977.95 29514978.05 0.0519 0.0455

Mars 76097-04-29 02:10 G 29515037.49 29515037.59 29515037.70 0.1889 0.1487

Jupiter 76097-10-23 18:44 G 29515215.07 29515215.28 29515215.48 0.0508 0.0061

Jupiter 76098-06-17 14:10 G 29515451.93 29515452.09 29515452.25 0.0499 0.0308

Mars 76100-02-03 01:27 G 29516047.40 29516047.56 29516047.71 0.1636 0.0736

Jupiter 76103-08-19 02:53 G 29517339.49 29517339.62 29517339.76 0.0511 0.0373

Jupiter 76104-04-12 00:00 G 29517576.30 29517576.50 29517576.70 0.0521 0.0013

Saturn 76104-08-25 21:36 G 29517712.26 29517712.40 29517712.56 0.0275 0.0195

Jupiter 76104-12-05 09:51 G 29517813.79 29517813.91 29517814.03 0.0531 0.0428

Neptune 76105-02-27 09:36 G 29517897.83 29517897.90 29517897.99 0.0088 0.0081

Moon 76105-03-23 00:15 G 29517921.34 29517921.51 29517921.67 0.2624 0.0139

Earth 76105-03-23 04:34 G 29517921.53 29517921.69 29517921.85 0.2627 0.0399 *

Saturn 76105-04-12 07:27 G 29517941.60 29517941.81 29517942.03 0.0276 0.0021

Neptune 76105-10-10 22:34 G 29518123.34 29518123.44 29518123.57 0.0088 0.0074

Saturn 76105-11-27 17:46 G 29518171.07 29518171.24 29518171.42 0.0277 0.0158

Neptune 76106-05-24 11:32 G 29518348.86 29518348.98 29518349.14 0.0088 0.0067

Neptune 76107-01-05 00:44 G 29518574.39 29518574.53 29518574.72 0.0088 0.0060

Neptune 76107-08-18 14:10 G 29518799.92 29518800.09 29518800.28 0.0088 0.0052

Neptune 76108-03-31 03:08 G 29519025.45 29519025.63 29519025.84 0.0088 0.0045

Neptune 76108-11-11 16:20 G 29519250.99 29519251.18 29519251.40 0.0088 0.0038

Neptune 76109-06-25 05:46 G 29519476.53 29519476.74 29519476.95 0.0088 0.0030

Jupiter 76109-06-29 14:39 G 29519480.92 29519481.11 29519481.31 0.0511 0.0168

Neptune 76110-02-05 18:44 G 29519702.07 29519702.28 29519702.50 0.0088 0.0023

Jupiter 76110-02-21 13:27 G 29519717.87 29519718.06 29519718.24 0.0502 0.0212

Neptune 76110-09-19 07:56 G 29519927.61 29519927.83 29519928.05 0.0088 0.0015

Neptune 76111-05-02 21:08 G 29520153.16 29520153.38 29520153.60 0.0088 0.0008

Neptune 76111-12-14 10:20 G 29520378.71 29520378.93 29520379.15 0.0088 0.0000

Neptune 76112-07-26 23:17 G 29520604.25 29520604.47 29520604.70 0.0088 0.0007

Neptune 76113-03-09 12:15 G 29520829.79 29520830.01 29520830.23 0.0088 0.0015

Neptune 76113-10-21 01:12 G 29521055.34 29521055.55 29521055.77 0.0088 0.0022

Neptune 76114-06-03 13:56 G 29521280.89 29521281.08 29521281.31 0.0088 0.0030

Neptune 76115-01-15 03:08 G 29521506.44 29521506.63 29521506.85 0.0088 0.0037

Jupiter 76115-04-24 03:22 G 29521605.57 29521605.64 29521605.72 0.0509 0.0467

Neptune 76115-08-28 16:20 G 29521731.99 29521732.18 29521732.38 0.0088 0.0044

Jupiter 76115-12-16 21:22 G 29521842.20 29521842.39 29521842.59 0.0519 0.0099

Neptune 76116-04-10 04:48 G 29521957.54 29521957.70 29521957.90 0.0088 0.0052

Jupiter 76116-08-10 03:51 G 29522079.50 29522079.66 29522079.82 0.0528 0.0314

Neptune 76116-11-21 18:00 G 29522183.10 29522183.25 29522183.43 0.0088 0.0059

Neptune 76117-07-05 06:58 G 29522408.66 29522408.79 29522408.95 0.0088 0.0066

Neptune 76118-02-15 20:10 G 29522634.23 29522634.34 29522634.47 0.0088 0.0073

Neptune 76118-09-29 08:39 G 29522859.80 29522859.86 29522859.97 0.0088 0.0081

Saturn 76119-02-10 02:24 G 29522993.42 29522993.60 29522993.80 0.0284 0.0118

Neptune 76119-05-12 21:51 G 29523085.41 29523085.41 29523085.44 0.0088 0.0087

Saturn 76119-09-27 16:34 G 29523222.98 29523223.19 29523223.39 0.0283 0.0072

Saturn 76120-05-14 05:32 G 29523452.66 29523452.73 29523452.82 0.0282 0.0259

Jupiter 76121-03-04 06:58 G 29523746.63 29523746.79 29523746.97 0.0514 0.0280

Jupiter 76121-10-27 09:08 G 29523983.68 29523983.88 29523984.08 0.0504 0.0108

Jupiter 76122-06-20 23:17 G 29524220.40 29524220.47 29524220.56 0.0496 0.0453

Jupiter 76127-08-21 18:29 G 29526108.09 29526108.27 29526108.46 0.0516 0.0206

Jupiter 76128-04-14 21:08 G 29526345.19 29526345.38 29526345.57 0.0526 0.0199

Mars 76132-02-02 19:27 G 29527734.21 29527734.31 29527734.41 0.1631 0.1323

Uranus 76132-08-02 22:05 G 29527916.34 29527916.42 29527916.52 0.0134 0.0121

Jupiter 76132-11-06 23:46 G 29528012.36 29528012.49 29528012.63 0.0517 0.0390

Uranus 76133-03-17 03:08 G 29528142.48 29528142.63 29528142.80 0.0134 0.0089

Jupiter 76133-07-02 05:32 G 29528249.52 29528249.73 29528249.94 0.0507 0.0003

Uranus 76133-10-29 07:56 G 29528368.65 29528368.83 29528369.04 0.0134 0.0057

Jupiter 76134-02-23 23:17 G 29528486.33 29528486.47 29528486.61 0.0498 0.0364

Saturn 76134-03-08 06:15 G 29528498.59 29528498.76 29528498.94 0.0275 0.0162

Uranus 76134-06-12 12:58 G 29528594.84 29528595.04 29528595.26 0.0134 0.0025

Saturn 76134-10-23 16:20 G 29528727.97 29528728.18 29528728.40 0.0276 0.0014

Uranus 76135-01-24 18:15 G 29528821.04 29528821.26 29528821.47 0.0134 0.0008

Saturn 76135-06-10 02:53 G 29528957.47 29528957.62 29528957.78 0.0277 0.0191

Uranus 76135-09-07 23:03 G 29529047.26 29529047.46 29529047.67 0.0134 0.0040

Uranus 76136-04-21 04:05 G 29529273.49 29529273.67 29529273.85 0.0134 0.0072

Uranus 76136-12-03 09:08 G 29529499.75 29529499.88 29529500.02 0.0134 0.0104

Jupiter 76139-04-26 14:24 G 29530373.94 29530374.10 29530374.26 0.0513 0.0311

Jupiter 76139-12-19 12:58 G 29530610.84 29530611.04 29530611.24 0.0523 0.0081

Jupiter 76140-08-13 00:00 G 29530848.44 29530848.50 29530848.58 0.0532 0.0496

Jupiter 76144-07-12 16:05 G 29532278.12 29532278.17 29532278.23 0.0520 0.0498

Jupiter 76145-03-07 01:41 G 29532515.37 29532515.57 29532515.77 0.0510 0.0104

Jupiter 76145-10-29 23:03 G 29532752.29 29532752.46 29532752.63 0.0501 0.0270

Saturn 76148-01-05 23:17 G 29533550.42 29533550.47 29533550.55 0.0285 0.0272

Saturn 76148-08-22 13:56 G 29533779.88 29533780.08 29533780.28 0.0284 0.0081

Saturn 76149-04-09 03:22 G 29534009.45 29534009.64 29534009.84 0.0283 0.0109

Jupiter 76150-12-30 12:58 G 29534639.92 29534640.04 29534640.16 0.0510 0.0409

Jupiter 76151-08-24 07:56 G 29534876.63 29534876.83 29534877.03 0.0520 0.0033

Jupiter 76152-04-17 15:22 G 29535114.01 29535114.14 29535114.28 0.0529 0.0382

Jupiter 76156-11-09 21:36 G 29536781.21 29536781.40 29536781.58 0.0513 0.0212

Jupiter 76157-07-04 22:05 G 29537018.23 29537018.42 29537018.61 0.0503 0.0172

Jupiter 76162-09-04 12:15 G 29538905.99 29538906.01 29538906.03 0.0507 0.0502

Jupiter 76163-04-29 04:20 G 29539142.49 29539142.68 29539142.87 0.0517 0.0143

Saturn 76163-09-18 10:48 G 29539284.78 29539284.95 29539285.15 0.0275 0.0138

Jupiter 76163-12-22 08:39 G 29539379.69 29539379.86 29539380.04 0.0527 0.0266

Saturn 76164-05-04 20:53 G 29539514.16 29539514.37 29539514.58 0.0276 0.0038

Saturn 76164-12-20 07:12 G 29539743.68 29539743.80 29539743.94 0.0277 0.0216

Mars 76165-12-01 13:41 G 29540089.93 29540090.07 29540090.21 0.1637 0.0952

Jupiter 76168-07-15 16:05 G 29541047.02 29541047.17 29541047.34 0.0515 0.0321

Jupiter 76169-03-09 19:56 G 29541284.13 29541284.33 29541284.54 0.0505 0.0071

Jupiter 76169-11-01 11:46 G 29541520.89 29541520.99 29541521.10 0.0497 0.0422

Pluto 76169-11-18 11:03 G 29541537.86 29541537.96 29541538.08 0.0079 0.0068

Pluto 76170-07-01 21:22 G 29541763.17 29541763.39 29541763.62 0.0079 0.0002

Pluto 76171-02-12 07:12 G 29541988.70 29541988.80 29541988.94 0.0078 0.0066

Jupiter 76175-01-02 03:08 G 29543408.45 29543408.63 29543408.80 0.0515 0.0248

Uranus 76175-05-08 10:05 G 29543534.77 29543534.92 29543535.08 0.0144 0.0104

Jupiter 76175-08-27 04:05 G 29543645.48 29543645.67 29543645.86 0.0525 0.0152

Uranus 76175-12-20 22:34 G 29543761.25 29543761.44 29543761.65 0.0144 0.0063

Uranus 76176-08-03 11:17 G 29543987.75 29543987.97 29543988.19 0.0144 0.0021

Uranus 76177-03-17 23:32 G 29544214.27 29544214.48 29544214.70 0.0144 0.0021

Saturn 76177-07-18 02:24 G 29544336.50 29544336.60 29544336.70 0.0285 0.0247

Uranus 76177-10-30 12:00 G 29544440.80 29544441.00 29544441.20 0.0144 0.0061

Saturn 76178-03-04 16:34 G 29544565.99 29544566.19 29544566.40 0.0284 0.0057

Uranus 76178-06-14 00:15 G 29544667.37 29544667.51 29544667.67 0.0144 0.0103

Saturn 76178-10-20 06:00 G 29544795.57 29544795.75 29544795.95 0.0283 0.0133

Uranus 76179-01-26 12:44 G 29544894.02 29544894.03 29544894.07 0.0144 0.0143

Jupiter 76180-03-20 07:41 G 29545312.71 29545312.82 29545312.94 0.0518 0.0430

Jupiter 76180-11-12 14:53 G 29545549.91 29545550.12 29545550.32 0.0508 0.0039

Jupiter 76181-07-07 09:36 G 29545786.75 29545786.90 29545787.06 0.0499 0.0328

Jupiter 76186-09-07 01:41 G 29547674.42 29547674.57 29547674.71 0.0512 0.0348

Jupiter 76187-05-01 23:03 G 29547911.26 29547911.46 29547911.67 0.0522 0.0040

Neptune 76187-11-26 04:34 G 29548119.64 29548119.69 29548119.76 0.0089 0.0086

Jupiter 76187-12-25 08:53 G 29548148.78 29548148.87 29548148.98 0.0531 0.0454

Neptune 76188-07-08 17:17 G 29548345.14 29548345.22 29548345.34 0.0089 0.0079

Neptune 76189-02-19 06:29 G 29548570.65 29548570.77 29548570.91 0.0089 0.0071

Neptune 76189-10-02 18:58 G 29548796.16 29548796.29 29548796.47 0.0089 0.0064

Neptune 76190-05-16 08:10 G 29549021.68 29549021.84 29549022.02 0.0089 0.0056

Neptune 76190-12-27 20:53 G 29549247.21 29549247.37 29549247.57 0.0089 0.0049

Neptune 76191-08-10 10:05 G 29549472.73 29549472.92 29549473.12 0.0089 0.0041

Neptune 76192-03-22 23:03 G 29549698.26 29549698.46 29549698.66 0.0090 0.0033

Jupiter 76192-07-18 09:51 G 29549815.71 29549815.91 29549816.11 0.0511 0.0146

Neptune 76192-11-03 11:46 G 29549923.79 29549923.99 29549924.21 0.0090 0.0025

Jupiter 76193-03-12 08:10 G 29550052.66 29550052.84 29550053.02 0.0502 0.0232

Saturn 76193-03-30 18:15 G 29550071.06 29550071.26 29550071.46 0.0275 0.0108

Neptune 76193-06-17 00:58 G 29550149.33 29550149.54 29550149.76 0.0090 0.0017

Saturn 76193-11-15 04:34 G 29550300.48 29550300.69 29550300.90 0.0276 0.0069

Neptune 76194-01-28 13:56 G 29550374.86 29550375.08 29550375.30 0.0090 0.0010

Saturn 76194-07-02 15:22 G 29550530.05 29550530.14 29550530.24 0.0277 0.0247

Neptune 76194-09-11 02:53 G 29550600.40 29550600.62 29550600.83 0.0090 0.0002

Neptune 76195-04-24 15:36 G 29550825.94 29550826.15 29550826.37 0.0090 0.0006

Neptune 76195-12-06 04:34 G 29551051.48 29551051.69 29551051.91 0.0090 0.0013

Neptune 76196-07-18 17:32 G 29551277.03 29551277.23 29551277.45 0.0090 0.0021

Neptune 76197-03-01 06:29 G 29551502.57 29551502.77 29551502.98 0.0090 0.0029

Neptune 76197-10-12 19:27 G 29551728.12 29551728.31 29551728.52 0.0090 0.0037

Mars 76197-11-30 07:41 G 29551776.69 29551776.82 29551776.94 0.1632 0.1112

Jupiter 76198-05-12 23:17 G 29551940.38 29551940.47 29551940.57 0.0509 0.0445

Neptune 76198-05-26 08:24 G 29551953.68 29551953.85 29551954.05 0.0090 0.0045

Jupiter 76199-01-04 16:48 G 29552177.00 29552177.20 29552177.40 0.0518 0.0076

Neptune 76199-01-06 21:36 G 29552179.23 29552179.40 29552179.59 0.0090 0.0052

Neptune 76199-08-20 10:34 G 29552404.79 29552404.94 29552405.12 0.0090 0.0060

Jupiter 76199-08-29 22:34 G 29552414.29 29552414.44 29552414.60 0.0528 0.0336

Neptune 76200-04-02 23:17 G 29552630.35 29552630.47 29552630.64 0.0090 0.0068

Neptune 76200-11-14 12:44 G 29552855.92 29552856.03 29552856.16 0.0090 0.0075

Neptune 76201-06-28 01:27 G 29553081.51 29553081.56 29553081.67 0.0090 0.0083

Jupiter 76204-03-24 03:51 G 29554081.49 29554081.66 29554081.84 0.0514 0.0256

Jupiter 76204-11-16 06:29 G 29554318.57 29554318.77 29554318.97 0.0504 0.0132

Jupiter 76205-07-10 21:08 G 29554555.32 29554555.38 29554555.44 0.0496 0.0475

Saturn 76207-01-29 13:56 G 29555122.95 29555123.08 29555123.23 0.0285 0.0211

Saturn 76207-09-16 04:05 G 29555352.46 29555352.67 29555352.88 0.0284 0.0020

Saturn 76208-05-02 17:17 G 29555582.06 29555582.22 29555582.39 0.0282 0.0169

Jupiter 76210-09-10 13:27 G 29556442.87 29556443.06 29556443.25 0.0516 0.0184

Moon 76210-09-24 07:41 G 29556456.66 29556456.82 29556456.98 0.2705 0.0366

Earth 76210-09-24 13:41 G 29556456.92 29556457.07 29556457.21 0.2705 0.1026 *

Jupiter 76211-05-05 15:36 G 29556679.97 29556680.15 29556680.33 0.0525 0.0220

Jupiter 76215-11-27 22:05 G 29558347.29 29558347.42 29558347.57 0.0517 0.0365

Uranus 76216-04-03 10:05 G 29558474.92 29558474.92 29558474.92 0.0134 0.0134

Jupiter 76216-07-22 04:05 G 29558584.47 29558584.67 29558584.88 0.0507 0.0030

Uranus 76216-11-15 14:39 G 29558700.98 29558701.11 29558701.26 0.0134 0.0102

Jupiter 76217-03-15 21:36 G 29558821.28 29558821.40 29558821.54 0.0498 0.0388

Uranus 76217-06-29 19:41 G 29558927.15 29558927.32 29558927.52 0.0134 0.0070

Uranus 76218-02-11 00:44 G 29559153.33 29559153.53 29559153.75 0.0134 0.0038

Earth 76218-09-22 03:51 G 29559376.60 29559376.66 29559376.72 0.2705 0.2477

Uranus 76218-09-25 05:46 G 29559379.53 29559379.74 29559379.96 0.0134 0.0006

Uranus 76219-05-09 10:48 G 29559605.74 29559605.95 29559606.16 0.0134 0.0027

Uranus 76219-12-21 15:36 G 29559831.97 29559832.15 29559832.35 0.0134 0.0059

Uranus 76220-08-03 20:53 G 29560058.22 29560058.37 29560058.53 0.0134 0.0091

Uranus 76221-03-18 02:10 G 29560284.51 29560284.59 29560284.67 0.0134 0.0124

Saturn 76222-02-24 13:56 G 29560628.01 29560628.08 29560628.16 0.0274 0.0255

Jupiter 76222-05-16 10:48 G 29560708.79 29560708.95 29560709.12 0.0513 0.0289

Saturn 76222-10-11 23:32 G 29560857.28 29560857.48 29560857.68 0.0275 0.0082

Jupiter 76223-01-08 10:05 G 29560945.72 29560945.92 29560946.11 0.0523 0.0105

Saturn 76223-05-29 09:36 G 29561086.70 29561086.90 29561087.10 0.0277 0.0095

Jupiter 76223-09-02 21:36 G 29561183.37 29561183.40 29561183.45 0.0532 0.0519

Saturn 76224-01-13 20:10 G 29561316.31 29561316.34 29561316.39 0.0278 0.0273

Jupiter 76227-08-02 15:51 G 29562613.07 29562613.16 29562613.24 0.0520 0.0472

Jupiter 76228-03-27 00:44 G 29562850.33 29562850.53 29562850.74 0.0509 0.0079

Jupiter 76228-11-18 21:36 G 29563087.23 29563087.40 29563087.56 0.0500 0.0294

Mars 76231-09-30 02:10 G 29564132.47 29564132.59 29564132.71 0.1639 0.1165

Jupiter 76234-01-19 10:48 G 29564974.82 29564974.95 29564975.08 0.0510 0.0387

Jupiter 76234-09-13 06:44 G 29565211.58 29565211.78 29565211.98 0.0520 0.0008

Jupiter 76235-05-08 15:08 G 29565449.00 29565449.13 29565449.26 0.0530 0.0407

Saturn 76236-08-10 16:20 G 29565909.03 29565909.18 29565909.34 0.0284 0.0186

Saturn 76237-03-28 06:29 G 29566138.55 29566138.77 29566138.98 0.0283 0.0007

Saturn 76237-11-12 19:27 G 29566368.16 29566368.31 29566368.47 0.0282 0.0191

Jupiter 76239-11-30 18:44 G 29567116.09 29567116.28 29567116.47 0.0512 0.0187

Jupiter 76240-07-24 18:29 G 29567353.09 29567353.27 29567353.47 0.0503 0.0195

Jupiter 76245-09-24 10:48 G 29569240.89 29569240.95 29569241.01 0.0508 0.0479

Jupiter 76246-05-19 03:36 G 29569477.45 29569477.65 29569477.84 0.0518 0.0116

Jupiter 76247-01-11 08:24 G 29569714.68 29569714.85 29569715.01 0.0527 0.0293

Jupiter 76251-08-05 12:15 G 29571381.85 29571382.01 29571382.18 0.0515 0.0297

Saturn 76251-09-06 18:58 G 29571414.19 29571414.29 29571414.42 0.0275 0.0229

Jupiter 76252-03-29 15:36 G 29571618.95 29571619.15 29571619.36 0.0505 0.0093

Saturn 76252-04-23 05:03 G 29571643.51 29571643.71 29571643.93 0.0276 0.0055

Jupiter 76252-11-21 07:27 G 29571855.72 29571855.81 29571855.90 0.0497 0.0441

Saturn 76252-12-08 15:36 G 29571872.96 29571873.15 29571873.34 0.0277 0.0123

Jupiter 76258-01-21 23:17 G 29573743.29 29573743.47 29573743.65 0.0514 0.0224

Jupiter 76258-09-15 23:46 G 29573980.30 29573980.49 29573980.68 0.0524 0.0175

Uranus 76259-01-06 17:03 G 29574093.10 29574093.21 29574093.33 0.0144 0.0122

Uranus 76259-08-21 05:32 G 29574319.56 29574319.73 29574319.92 0.0144 0.0081

Uranus 76260-04-03 18:00 G 29574546.04 29574546.25 29574546.47 0.0144 0.0039

Uranus 76260-11-16 06:29 G 29574772.55 29574772.77 29574772.99 0.0144 0.0002

Mars 76260-12-23 06:58 G 29574809.66 29574809.79 29574809.93 0.1893 0.1165

Uranus 76261-06-30 18:58 G 29574999.08 29574999.29 29574999.50 0.0144 0.0043

Uranus 76262-02-12 07:27 G 29575225.64 29575225.81 29575225.99 0.0144 0.0084

Uranus 76262-09-26 19:41 G 29575452.23 29575452.32 29575452.44 0.0144 0.0125

Jupiter 76263-04-10 04:20 G 29575647.56 29575647.68 29575647.81 0.0518 0.0408

Mars 76263-09-28 20:10 G 29575819.20 29575819.34 29575819.49 0.1634 0.0914

Jupiter 76263-12-03 12:00 G 29575884.80 29575885.00 29575885.21 0.0508 0.0016

Jupiter 76264-07-27 07:27 G 29576121.67 29576121.81 29576121.96 0.0499 0.0352

Saturn 76266-02-21 03:36 G 29576695.48 29576695.65 29576695.83 0.0285 0.0150

Saturn 76266-10-08 17:32 G 29576925.02 29576925.23 29576925.44 0.0283 0.0040

Saturn 76267-05-26 06:44 G 29577154.65 29577154.78 29577154.90 0.0282 0.0227

Neptune 76269-06-01 17:46 G 29577892.20 29577892.24 29577892.33 0.0088 0.0084

Jupiter 76269-09-26 21:22 G 29578009.23 29578009.39 29578009.54 0.0511 0.0327

Neptune 76270-01-13 07:12 G 29578117.70 29578117.80 29578117.92 0.0088 0.0076

Jupiter 76270-05-21 18:15 G 29578246.06 29578246.26 29578246.46 0.0521 0.0061

Neptune 76270-08-26 20:10 G 29578343.22 29578343.34 29578343.49 0.0088 0.0069

Jupiter 76271-01-14 03:36 G 29578483.57 29578483.65 29578483.75 0.0531 0.0474

Neptune 76271-04-09 09:08 G 29578568.74 29578568.88 29578569.06 0.0088 0.0062

Neptune 76271-11-20 22:48 G 29578794.28 29578794.45 29578794.63 0.0088 0.0054

Neptune 76272-07-03 11:46 G 29579019.81 29579019.99 29579020.19 0.0088 0.0047

Neptune 76273-02-14 00:44 G 29579245.35 29579245.53 29579245.74 0.0088 0.0040

Neptune 76273-09-27 13:56 G 29579470.88 29579471.08 29579471.30 0.0088 0.0032

Neptune 76274-05-11 03:08 G 29579696.42 29579696.63 29579696.85 0.0088 0.0025

Jupiter 76274-12-13 21:08 G 29579913.36 29579913.38 29579913.41 0.0521 0.0516

Neptune 76274-12-22 16:34 G 29579921.97 29579922.19 29579922.41 0.0088 0.0017

Neptune 76275-08-05 05:32 G 29580147.52 29580147.73 29580147.96 0.0088 0.0010

Jupiter 76275-08-08 08:24 G 29580150.65 29580150.85 29580151.05 0.0511 0.0121

Neptune 76276-03-17 18:44 G 29580373.06 29580373.28 29580373.51 0.0088 0.0003

Jupiter 76276-04-01 07:12 G 29580387.62 29580387.80 29580387.97 0.0502 0.0256

Neptune 76276-10-29 07:56 G 29580598.61 29580598.83 29580599.05 0.0088 0.0005

Neptune 76277-06-11 20:53 G 29580824.16 29580824.37 29580824.60 0.0088 0.0013

Neptune 76278-01-23 10:05 G 29581049.71 29581049.92 29581050.14 0.0088 0.0021

Neptune 76278-09-05 23:03 G 29581275.26 29581275.46 29581275.68 0.0088 0.0028

Neptune 76279-04-19 12:00 G 29581500.81 29581501.00 29581501.22 0.0088 0.0036

Neptune 76279-12-01 01:12 G 29581726.36 29581726.55 29581726.75 0.0088 0.0043

Neptune 76280-07-13 14:24 G 29581951.92 29581952.10 29581952.28 0.0088 0.0050

Neptune 76281-02-24 02:53 G 29582177.47 29582177.62 29582177.81 0.0088 0.0058

Saturn 76281-03-19 00:44 G 29582200.39 29582200.53 29582200.68 0.0275 0.0202

Jupiter 76281-06-01 19:56 G 29582275.23 29582275.33 29582275.45 0.0509 0.0424

Neptune 76281-10-07 16:05 G 29582403.03 29582403.17 29582403.33 0.0088 0.0065

Saturn 76281-11-03 10:34 G 29582429.73 29582429.94 29582430.15 0.0276 0.0028

Jupiter 76282-01-24 13:56 G 29582511.88 29582512.08 29582512.28 0.0519 0.0052

Neptune 76282-05-21 05:03 G 29582628.60 29582628.71 29582628.85 0.0088 0.0072

Saturn 76282-06-20 20:53 G 29582659.19 29582659.37 29582659.55 0.0277 0.0149

Jupiter 76282-09-18 20:10 G 29582749.20 29582749.34 29582749.49 0.0529 0.0360

Neptune 76283-01-01 18:29 G 29582854.18 29582854.27 29582854.36 0.0088 0.0079

Neptune 76283-08-15 06:44 G 29583079.78 29583079.78 29583079.85 0.0088 0.0087

Jupiter 76287-04-13 03:51 G 29584416.47 29584416.66 29584416.84 0.0514 0.0229

Jupiter 76287-12-06 05:46 G 29584653.55 29584653.74 29584653.94 0.0504 0.0158

Jupiter 76293-09-29 12:00 G 29586777.81 29586778.00 29586778.19 0.0516 0.0159

Jupiter 76294-05-24 14:53 G 29587014.95 29587015.12 29587015.30 0.0526 0.0247

Saturn 76295-09-03 05:46 G 29587481.56 29587481.74 29587481.93 0.0284 0.0127

Saturn 76296-04-19 19:27 G 29587711.11 29587711.31 29587711.52 0.0283 0.0063

Saturn 76296-12-05 08:24 G 29587940.76 29587940.85 29587940.95 0.0282 0.0248

Mars 76297-07-27 14:10 G 29588175.00 29588175.09 29588175.19 0.1641 0.1381

Jupiter 76298-12-16 20:53 G 29588682.22 29588682.37 29588682.53 0.0516 0.0338

Jupiter 76299-08-11 01:56 G 29588919.38 29588919.58 29588919.79 0.0506 0.0053

Jupiter 76300-04-04 18:58 G 29589156.17 29589156.29 29589156.40 0.0498 0.0408

Uranus 76300-07-17 01:41 G 29589259.48 29589259.57 29589259.70 0.0134 0.0116

Uranus 76301-02-28 06:44 G 29589485.63 29589485.78 29589485.97 0.0134 0.0084

Uranus 76301-10-12 12:00 G 29589711.80 29589712.00 29589712.20 0.0134 0.0051

Uranus 76302-05-26 17:03 G 29589938.00 29589938.21 29589938.42 0.0134 0.0019

Uranus 76303-01-07 22:05 G 29590164.20 29590164.42 29590164.63 0.0134 0.0013

Uranus 76303-08-22 02:53 G 29590390.43 29590390.62 29590390.83 0.0134 0.0046

Uranus 76304-04-04 07:56 G 29590616.67 29590616.83 29590617.02 0.0134 0.0078

Uranus 76304-11-16 12:58 G 29590842.93 29590843.04 29590843.17 0.0134 0.0110

Jupiter 76305-06-05 10:20 G 29591043.76 29591043.93 29591044.11 0.0513 0.0263

Jupiter 76306-01-28 10:05 G 29591280.73 29591280.92 29591281.11 0.0523 0.0133

Jupiter 76310-08-22 13:12 G 29592947.94 29592948.05 29592948.15 0.0519 0.0447

Saturn 76310-09-30 04:48 G 29592986.54 29592986.70 29592986.86 0.0275 0.0178

Jupiter 76311-04-16 21:36 G 29593185.20 29593185.40 29593185.61 0.0509 0.0054

Saturn 76311-05-17 14:53 G 29593215.91 29593216.12 29593216.33 0.0276 0.0003

Jupiter 76311-12-09 18:00 G 29593422.10 29593422.25 29593422.42 0.0500 0.0316

Saturn 76312-01-02 01:27 G 29593445.40 29593445.56 29593445.73 0.0277 0.0175

Jupiter 76317-02-08 08:10 G 29595309.70 29595309.84 29595309.98 0.0510 0.0363

Jupiter 76317-10-03 03:36 G 29595546.45 29595546.65 29595546.85 0.0520 0.0018

Jupiter 76318-05-28 11:17 G 29595783.86 29595783.97 29595784.10 0.0530 0.0430

Jupiter 76322-12-20 16:05 G 29597450.98 29597451.17 29597451.37 0.0512 0.0163

Jupiter 76323-08-14 16:34 G 29597688.01 29597688.19 29597688.38 0.0503 0.0218

Saturn 76324-07-30 01:41 G 29598038.55 29598038.57 29598038.61 0.0285 0.0282

Saturn 76325-03-16 16:20 G 29598267.98 29598268.18 29598268.38 0.0284 0.0092

Saturn 76325-11-01 05:46 G 29598497.55 29598497.74 29598497.94 0.0283 0.0098

Mars 76326-10-21 10:05 G 29598851.75 29598851.92 29598852.09 0.1890 0.0438

Pluto 76327-09-06 16:05 G 29599172.17 29599172.17 29599172.17 0.0065 0.0065

Pluto 76328-04-18 20:10 G 29599397.16 29599397.34 29599397.55 0.0065 0.0029

Jupiter 76328-10-14 07:41 G 29599575.74 29599575.82 29599575.91 0.0507 0.0457

Pluto 76328-11-30 00:44 G 29599622.32 29599622.53 29599622.76 0.0066 0.0010

Jupiter 76329-06-07 23:46 G 29599812.30 29599812.49 29599812.69 0.0517 0.0094

Pluto 76329-07-13 05:03 G 29599847.58 29599847.71 29599847.89 0.0066 0.0048

Mars 76329-07-27 08:10 G 29599861.68 29599861.84 29599862.00 0.1635 0.0696

Jupiter 76330-01-31 04:05 G 29600049.51 29600049.67 29600049.83 0.0527 0.0315

Jupiter 76334-08-25 10:48 G 29601716.78 29601716.95 29601717.12 0.0515 0.0273

Jupiter 76335-04-19 14:53 G 29601953.92 29601954.12 29601954.32 0.0506 0.0117

Jupiter 76335-12-12 06:44 G 29602190.71 29602190.78 29602190.85 0.0497 0.0464

Saturn 76340-04-11 10:20 G 29603772.76 29603772.93 29603773.11 0.0275 0.0151

Saturn 76340-11-26 20:10 G 29604002.13 29604002.34 29604002.56 0.0276 0.0025

Jupiter 76341-02-10 20:39 G 29604078.18 29604078.36 29604078.55 0.0515 0.0201

Saturn 76341-07-14 06:44 G 29604231.64 29604231.78 29604231.93 0.0277 0.0201

Jupiter 76341-10-05 21:36 G 29604315.22 29604315.40 29604315.59 0.0525 0.0199

Uranus 76342-09-06 23:17 G 29604651.44 29604651.47 29604651.53 0.0144 0.0140

Uranus 76343-04-21 11:46 G 29604877.85 29604877.99 29604878.16 0.0144 0.0099

Uranus 76343-12-04 00:29 G 29605104.32 29605104.52 29605104.73 0.0144 0.0058

Uranus 76344-07-17 12:58 G 29605330.83 29605331.04 29605331.27 0.0144 0.0017

Uranus 76345-03-01 01:41 G 29605557.35 29605557.57 29605557.79 0.0144 0.0025

Uranus 76345-10-13 13:56 G 29605783.90 29605784.08 29605784.29 0.0144 0.0066

Jupiter 76346-04-30 05:03 G 29605982.57 29605982.71 29605982.85 0.0518 0.0381

Uranus 76346-05-28 02:24 G 29606010.47 29606010.60 29606010.76 0.0144 0.0107

Jupiter 76346-12-23 12:29 G 29606219.81 29606220.02 29606220.22 0.0508 0.0017

Jupiter 76347-08-17 07:12 G 29606456.67 29606456.80 29606456.94 0.0499 0.0376

Earth 76348-03-25 06:44 G 29606677.62 29606677.78 29606677.93 0.2627 0.0645

Moon 76348-03-25 09:08 G 29606677.73 29606677.88 29606678.02 0.2633 0.0702 *

Neptune 76352-02-29 14:24 G 29608114.06 29608114.10 29608114.13 0.0089 0.0088

Neptune 76352-10-12 02:53 G 29608339.54 29608339.62 29608339.73 0.0089 0.0081

Jupiter 76352-10-16 19:56 G 29608344.17 29608344.33 29608344.49 0.0512 0.0302

Neptune 76353-05-25 16:20 G 29608565.06 29608565.18 29608565.30 0.0089 0.0073

Jupiter 76353-06-10 17:46 G 29608581.04 29608581.24 29608581.44 0.0522 0.0088

Neptune 76354-01-06 04:48 G 29608790.57 29608790.70 29608790.87 0.0089 0.0066

Jupiter 76354-02-03 04:05 G 29608818.62 29608818.67 29608818.75 0.0532 0.0501

Saturn 76354-02-09 03:22 G 29608824.57 29608824.64 29608824.74 0.0285 0.0259

Neptune 76354-08-19 18:00 G 29609016.09 29609016.25 29609016.42 0.0089 0.0058

Saturn 76354-09-26 18:00 G 29609054.04 29609054.25 29609054.45 0.0284 0.0069

Neptune 76355-04-02 06:29 G 29609241.61 29609241.77 29609241.97 0.0089 0.0051

Saturn 76355-05-14 07:27 G 29609283.62 29609283.81 29609284.00 0.0282 0.0119

Neptune 76355-11-13 19:41 G 29609467.14 29609467.32 29609467.52 0.0089 0.0043

Earth 76356-03-22 22:20 G 29609597.38 29609597.43 29609597.48 0.2628 0.2478

Moon 76356-03-23 03:36 G 29609597.57 29609597.65 29609597.73 0.2630 0.2249

Neptune 76356-06-26 08:53 G 29609692.67 29609692.87 29609693.07 0.0089 0.0035

Neptune 76357-02-06 21:36 G 29609918.20 29609918.40 29609918.62 0.0089 0.0027

Neptune 76357-09-20 10:34 G 29610143.73 29610143.94 29610144.16 0.0090 0.0019

Jupiter 76358-01-02 21:08 G 29610248.32 29610248.38 29610248.46 0.0520 0.0489

Neptune 76358-05-03 23:32 G 29610369.27 29610369.48 29610369.70 0.0090 0.0012

Jupiter 76358-08-28 07:41 G 29610485.62 29610485.82 29610486.02 0.0510 0.0093

Neptune 76358-12-15 12:29 G 29610594.80 29610595.02 29610595.24 0.0090 0.0004

Jupiter 76359-04-22 05:32 G 29610722.56 29610722.73 29610722.90 0.0501 0.0280

Neptune 76359-07-29 01:27 G 29610820.34 29610820.56 29610820.78 0.0090 0.0004

Neptune 76360-03-10 14:10 G 29611045.88 29611046.09 29611046.31 0.0090 0.0012

Neptune 76360-10-22 03:08 G 29611271.42 29611271.63 29611271.85 0.0090 0.0020

Neptune 76361-06-04 16:05 G 29611496.97 29611497.17 29611497.38 0.0090 0.0027

Neptune 76362-01-16 05:17 G 29611722.52 29611722.72 29611722.92 0.0090 0.0035

Neptune 76362-08-29 18:00 G 29611948.07 29611948.25 29611948.45 0.0090 0.0043

Neptune 76363-04-12 06:44 G 29612173.62 29612173.78 29612173.98 0.0090 0.0051

Mars 76363-05-26 02:10 G 29612217.56 29612217.59 29612217.63 0.1643 0.1605

Neptune 76363-11-23 19:41 G 29612399.17 29612399.32 29612399.50 0.0090 0.0059

Jupiter 76364-06-21 19:56 G 29612610.21 29612610.33 29612610.45 0.0509 0.0399

Neptune 76364-07-06 09:08 G 29612624.74 29612624.88 29612625.03 0.0090 0.0066

Jupiter 76365-02-13 14:24 G 29612846.90 29612847.10 29612847.31 0.0519 0.0025

Neptune 76365-02-16 21:51 G 29612850.31 29612850.41 29612850.55 0.0090 0.0074

Neptune 76365-09-30 11:17 G 29613075.88 29613075.97 29613076.06 0.0090 0.0081

Jupiter 76365-10-08 21:22 G 29613084.26 29613084.39 29613084.53 0.0529 0.0389

Neptune 76366-05-13 23:46 G 29613301.48 29613301.49 29613301.54 0.0090 0.0089

Saturn 76369-10-22 12:44 G 29614558.85 29614559.03 29614559.23 0.0275 0.0129

Jupiter 76370-05-03 01:56 G 29614751.40 29614751.58 29614751.77 0.0513 0.0203

Saturn 76370-06-08 23:03 G 29614788.25 29614788.46 29614788.67 0.0276 0.0047

Jupiter 76370-12-26 03:36 G 29614988.46 29614988.65 29614988.84 0.0504 0.0182

Saturn 76371-01-24 09:36 G 29615017.79 29615017.90 29615018.04 0.0277 0.0225

Jupiter 76376-02-25 19:27 G 29616876.27 29616876.31 29616876.36 0.0506 0.0491

Jupiter 76376-10-19 10:20 G 29617112.73 29617112.93 29617113.12 0.0516 0.0134

Jupiter 76377-06-13 12:58 G 29617349.87 29617350.04 29617350.21 0.0526 0.0271

Jupiter 76382-01-05 18:15 G 29619017.10 29619017.26 29619017.43 0.0517 0.0316

Jupiter 76382-08-31 00:00 G 29619254.30 29619254.50 29619254.71 0.0507 0.0078

Jupiter 76383-04-24 17:32 G 29619491.14 29619491.23 29619491.34 0.0498 0.0431

Saturn 76383-08-22 12:58 G 29619610.92 29619611.04 29619611.17 0.0285 0.0226

Uranus 76384-03-16 12:58 G 29619818.00 29619818.04 29619818.11 0.0134 0.0130

Saturn 76384-04-08 03:22 G 29619840.43 29619840.64 29619840.85 0.0284 0.0035

Uranus 76384-10-28 18:00 G 29620044.12 29620044.25 29620044.41 0.0134 0.0098

Saturn 76384-11-23 17:03 G 29620070.03 29620070.21 29620070.38 0.0283 0.0153

Uranus 76385-06-11 23:17 G 29620270.29 29620270.47 29620270.66 0.0134 0.0065

Uranus 76386-01-24 04:20 G 29620496.48 29620496.68 29620496.89 0.0134 0.0033

Uranus 76386-09-07 09:22 G 29620722.68 29620722.89 29620723.11 0.0134 0.0003

Uranus 76387-04-21 14:24 G 29620948.89 29620949.10 29620949.31 0.0134 0.0032

Uranus 76387-12-03 19:27 G 29621175.12 29621175.31 29621175.50 0.0134 0.0064

Jupiter 76388-06-24 08:10 G 29621378.66 29621378.84 29621379.02 0.0513 0.0239

Uranus 76388-07-17 00:15 G 29621401.38 29621401.51 29621401.68 0.0134 0.0097

Jupiter 76389-02-16 06:58 G 29621615.60 29621615.79 29621615.99 0.0523 0.0157

Uranus 76389-02-28 05:32 G 29621627.69 29621627.73 29621627.80 0.0134 0.0129

Mars 76392-08-17 12:29 G 29622893.84 29622894.02 29622894.19 0.1887 0.0311

Jupiter 76393-09-10 11:32 G 29623282.86 29623282.98 29623283.09 0.0520 0.0425

Jupiter 76394-05-05 20:53 G 29623520.16 29623520.37 29623520.57 0.0510 0.0029

Jupiter 76394-12-28 17:46 G 29623757.09 29623757.24 29623757.39 0.0500 0.0340

Mars 76395-05-24 20:24 G 29623904.19 29623904.35 29623904.52 0.1637 0.0489

Saturn 76398-09-17 09:08 G 29625115.87 29625115.88 29625115.91 0.0274 0.0273

Saturn 76399-05-04 18:44 G 29625345.08 29625345.28 29625345.48 0.0275 0.0101

Saturn 76399-12-20 04:34 G 29625574.49 29625574.69 29625574.90 0.0276 0.0074

Jupiter 76400-02-28 06:15 G 29625644.61 29625644.76 29625644.91 0.0510 0.0340

Saturn 76400-08-05 15:08 G 29625804.05 29625804.13 29625804.22 0.0277 0.0251

Jupiter 76400-10-22 01:56 G 29625881.38 29625881.58 29625881.78 0.0520 0.0042

Jupiter 76401-06-16 10:05 G 29626118.83 29626118.92 29626119.03 0.0530 0.0454

Jupiter 76406-01-08 17:17 G 29627786.02 29627786.22 29627786.42 0.0512 0.0135

Jupiter 76406-09-02 17:17 G 29628023.04 29628023.22 29628023.40 0.0503 0.0245

Jupiter 76411-11-03 06:44 G 29629910.68 29629910.78 29629910.88 0.0508 0.0434

Jupiter 76412-06-26 23:32 G 29630147.28 29630147.48 29630147.68 0.0518 0.0066

Jupiter 76413-02-19 04:34 G 29630384.54 29630384.69 29630384.84 0.0528 0.0343

Saturn 76413-03-03 14:39 G 29630396.98 29630397.11 29630397.27 0.0285 0.0203

Saturn 76413-10-19 05:03 G 29630626.50 29630626.71 29630626.92 0.0283 0.0013

Saturn 76414-06-05 18:15 G 29630856.10 29630856.26 29630856.43 0.0282 0.0174

Pluto 76415-12-19 22:48 G 29631418.30 29631418.45 29631418.61 0.0079 0.0057

Pluto 76416-08-01 08:53 G 29631643.66 29631643.87 29631644.10 0.0079 0.0011

Pluto 76417-03-14 18:58 G 29631869.25 29631869.29 29631869.35 0.0078 0.0076

Jupiter 76417-09-13 11:32 G 29632051.80 29632051.98 29632052.16 0.0515 0.0243

Jupiter 76418-05-08 14:39 G 29632288.91 29632289.11 29632289.31 0.0505 0.0145

Jupiter 76418-12-31 05:46 G 29632525.71 29632525.74 29632525.78 0.0496 0.0487

Jupiter 76424-03-01 21:36 G 29634413.21 29634413.40 29634413.59 0.0515 0.0173

Jupiter 76424-10-24 23:17 G 29634650.29 29634650.47 29634650.65 0.0525 0.0230

Uranus 76426-12-19 17:32 G 29635436.11 29635436.23 29635436.36 0.0144 0.0118

Uranus 76427-08-03 06:00 G 29635662.57 29635662.75 29635662.94 0.0144 0.0077

Uranus 76428-03-16 18:29 G 29635889.06 29635889.27 29635889.49 0.0144 0.0036

Saturn 76428-03-29 09:51 G 29635901.84 29635901.91 29635902.00 0.0274 0.0254

Uranus 76428-10-29 06:58 G 29636115.58 29636115.79 29636116.01 0.0144 0.0006

Saturn 76428-11-13 19:41 G 29636131.12 29636131.32 29636131.52 0.0275 0.0082

Jupiter 76429-05-19 04:48 G 29636317.55 29636317.70 29636317.85 0.0517 0.0353

Uranus 76429-06-12 19:27 G 29636342.11 29636342.31 29636342.53 0.0144 0.0046

Saturn 76429-07-01 05:46 G 29636360.55 29636360.74 29636360.95 0.0276 0.0094

Jupiter 76430-01-11 11:32 G 29636554.77 29636554.98 29636555.19 0.0508 0.0041

Uranus 76430-01-25 08:10 G 29636568.67 29636568.84 29636569.02 0.0144 0.0087

Saturn 76430-02-15 17:03 G 29636590.17 29636590.21 29636590.25 0.0277 0.0271

Jupiter 76430-09-05 06:00 G 29636791.63 29636791.75 29636791.87 0.0499 0.0399

Uranus 76430-09-08 20:24 G 29636795.27 29636795.35 29636795.46 0.0144 0.0128

Neptune 76433-09-04 02:53 G 29637886.59 29637886.62 29637886.69 0.0088 0.0086

Neptune 76434-04-17 16:20 G 29638112.09 29638112.18 29638112.29 0.0088 0.0078

Neptune 76434-11-29 05:17 G 29638337.61 29638337.72 29638337.87 0.0088 0.0071

Neptune 76435-07-12 18:15 G 29638563.13 29638563.26 29638563.44 0.0088 0.0064

Jupiter 76435-11-05 19:41 G 29638679.15 29638679.32 29638679.49 0.0512 0.0277

Neptune 76436-02-23 07:41 G 29638788.66 29638788.82 29638789.00 0.0088 0.0056

Jupiter 76436-06-29 17:17 G 29638916.02 29638916.22 29638916.42 0.0522 0.0114

Neptune 76436-10-05 20:39 G 29639014.19 29639014.36 29639014.56 0.0088 0.0049

Jupiter 76437-02-22 03:08 G 29639153.60 29639153.63 29639153.66 0.0531 0.0523

Neptune 76437-05-19 10:05 G 29639239.72 29639239.92 29639240.12 0.0088 0.0041

Neptune 76437-12-30 23:03 G 29639465.27 29639465.46 29639465.68 0.0088 0.0034

Neptune 76438-08-13 12:29 G 29639690.81 29639691.02 29639691.23 0.0088 0.0026

Neptune 76439-03-27 01:12 G 29639916.34 29639916.55 29639916.78 0.0088 0.0019

Neptune 76439-11-07 14:39 G 29640141.89 29640142.11 29640142.33 0.0088 0.0011

Neptune 76440-06-20 03:51 G 29640367.43 29640367.66 29640367.88 0.0088 0.0004

Jupiter 76441-01-21 18:58 G 29640583.20 29640583.29 29640583.38 0.0521 0.0467

Neptune 76441-01-31 16:48 G 29640592.98 29640593.20 29640593.43 0.0088 0.0004

Neptune 76441-09-14 05:46 G 29640818.53 29640818.74 29640818.97 0.0088 0.0012

Jupiter 76441-09-16 05:46 G 29640820.54 29640820.74 29640820.95 0.0511 0.0070

Neptune 76442-04-27 18:58 G 29641044.08 29641044.29 29641044.51 0.0088 0.0019

Jupiter 76442-05-11 04:20 G 29641057.52 29641057.68 29641057.85 0.0502 0.0304

Saturn 76442-09-13 22:20 G 29641183.28 29641183.43 29641183.61 0.0285 0.0173

Neptune 76442-12-09 08:10 G 29641269.63 29641269.84 29641270.06 0.0088 0.0027

Saturn 76443-05-01 12:58 G 29641412.83 29641413.04 29641413.25 0.0284 0.0019

Neptune 76443-07-22 21:22 G 29641495.19 29641495.39 29641495.60 0.0088 0.0034

Saturn 76443-12-17 02:24 G 29641642.46 29641642.60 29641642.74 0.0283 0.0206

Neptune 76444-03-04 10:05 G 29641720.74 29641720.92 29641721.13 0.0088 0.0042

Neptune 76444-10-15 23:17 G 29641946.29 29641946.47 29641946.66 0.0088 0.0049

Neptune 76445-05-29 12:29 G 29642171.85 29642172.02 29642172.19 0.0088 0.0056

Neptune 76446-01-10 01:12 G 29642397.42 29642397.55 29642397.72 0.0088 0.0064

Neptune 76446-08-23 14:24 G 29642622.98 29642623.10 29642623.24 0.0088 0.0071

Neptune 76447-04-06 03:36 G 29642848.55 29642848.65 29642848.75 0.0088 0.0078

Jupiter 76447-07-11 18:58 G 29642945.16 29642945.29 29642945.43 0.0509 0.0375

Neptune 76447-11-17 16:05 G 29643074.15 29643074.17 29643074.24 0.0088 0.0086

Jupiter 76448-03-04 12:58 G 29643181.84 29643182.04 29643182.24 0.0519 0.0004

Jupiter 76448-10-27 19:12 G 29643419.17 29643419.30 29643419.42 0.0528 0.0411

Jupiter 76453-05-22 00:58 G 29645086.35 29645086.54 29645086.74 0.0514 0.0179

Earth 76453-09-25 13:56 G 29645212.94 29645213.08 29645213.23 0.2705 0.1027

Moon 76453-09-25 18:58 G 29645213.17 29645213.29 29645213.40 0.2709 0.1827 *

Jupiter 76454-01-14 03:22 G 29645323.45 29645323.64 29645323.83 0.0504 0.0206

Saturn 76457-10-09 16:20 G 29646688.06 29646688.18 29646688.30 0.0274 0.0225

Saturn 76458-05-27 01:41 G 29646917.36 29646917.57 29646917.78 0.0275 0.0053

Mars 76458-06-14 16:05 G 29646936.02 29646936.17 29646936.32 0.1884 0.0992

Saturn 76459-01-11 11:32 G 29647146.80 29647146.98 29647147.18 0.0276 0.0123

Jupiter 76459-03-16 18:15 G 29647211.19 29647211.26 29647211.34 0.0506 0.0468

Jupiter 76459-11-08 09:08 G 29647447.68 29647447.88 29647448.08 0.0516 0.0108

Jupiter 76460-07-02 12:00 G 29647684.84 29647685.00 29647685.17 0.0526 0.0297

Mars 76461-03-21 08:39 G 29647946.69 29647946.86 29647947.03 0.1639 0.0271

Earth 76461-09-23 04:20 G 29648132.62 29648132.68 29648132.75 0.2704 0.2455

Moon 76461-09-23 09:51 G 29648132.79 29648132.91 29648133.03 0.2702 0.1790

Jupiter 76465-01-24 20:10 G 29649352.17 29649352.34 29649352.52 0.0516 0.0286

Jupiter 76465-09-19 01:41 G 29649589.36 29649589.57 29649589.77 0.0507 0.0107

Jupiter 76466-05-13 18:44 G 29649826.20 29649826.28 29649826.36 0.0498 0.0456

Uranus 76468-06-28 04:48 G 29650602.60 29650602.70 29650602.84 0.0134 0.0111

Uranus 76469-02-09 09:51 G 29650828.76 29650828.91 29650829.10 0.0134 0.0080

Uranus 76469-09-23 15:22 G 29651054.94 29651055.14 29651055.34 0.0134 0.0046

Uranus 76470-05-07 20:24 G 29651281.13 29651281.35 29651281.56 0.0134 0.0014

Uranus 76470-12-20 01:27 G 29651507.34 29651507.56 29651507.77 0.0134 0.0018

Jupiter 76471-07-14 07:56 G 29651713.65 29651713.83 29651714.01 0.0514 0.0213

Uranus 76471-08-03 06:15 G 29651733.57 29651733.76 29651733.97 0.0134 0.0051

Jupiter 76472-03-07 07:41 G 29651950.63 29651950.82 29651951.01 0.0524 0.0185

Uranus 76472-03-16 11:17 G 29651959.82 29651959.97 29651960.16 0.0134 0.0083

Saturn 76472-03-26 00:15 G 29651969.34 29651969.51 29651969.69 0.0284 0.0149

Uranus 76472-10-28 16:34 G 29652186.09 29652186.19 29652186.31 0.0134 0.0115

Saturn 76472-11-10 14:24 G 29652198.89 29652199.10 29652199.31 0.0283 0.0041

Saturn 76473-06-28 03:36 G 29652428.53 29652428.65 29652428.78 0.0282 0.0227

Jupiter 76476-09-29 13:27 G 29653617.94 29653618.06 29653618.20 0.0519 0.0395

Jupiter 76477-05-24 22:05 G 29653855.21 29653855.42 29653855.62 0.0509 0.0003

Jupiter 76478-01-16 18:15 G 29654092.12 29654092.26 29654092.40 0.0500 0.0366

Jupiter 76483-03-19 07:27 G 29655979.65 29655979.81 29655979.97 0.0511 0.0313

Jupiter 76483-11-11 04:05 G 29656216.47 29656216.67 29656216.86 0.0521 0.0074

Jupiter 76484-07-05 12:58 G 29656453.97 29656454.04 29656454.13 0.0531 0.0484

Saturn 76487-04-21 15:36 G 29657474.03 29657474.15 29657474.30 0.0274 0.0209

Saturn 76487-12-07 01:27 G 29657703.35 29657703.56 29657703.77 0.0275 0.0036

Jupiter 76488-06-04 05:32 G 29657883.69 29657883.73 29657883.79 0.0522 0.0504

Saturn 76488-07-23 11:46 G 29657932.80 29657932.99 29657933.17 0.0276 0.0140

Jupiter 76489-01-27 17:32 G 29658121.03 29658121.23 29658121.44 0.0512 0.0107

Jupiter 76489-09-21 17:03 G 29658358.04 29658358.21 29658358.39 0.0502 0.0271

Jupiter 76494-11-22 07:27 G 29660245.70 29660245.81 29660245.93 0.0508 0.0410

Jupiter 76495-07-17 00:15 G 29660482.31 29660482.51 29660482.71 0.0518 0.0039

Jupiter 76496-03-10 04:48 G 29660719.56 29660719.70 29660719.85 0.0527 0.0368

Jupiter 76500-10-03 09:51 G 29662386.72 29662386.91 29662387.10 0.0515 0.0220

Jupiter 76501-05-28 13:27 G 29662623.87 29662624.06 29662624.26 0.0505 0.0169

Saturn 76501-10-07 06:58 G 29662755.60 29662755.79 29662755.99 0.0285 0.0119

Saturn 76502-05-24 21:22 G 29662985.18 29662985.39 29662985.59 0.0284 0.0071

Saturn 76503-01-09 10:34 G 29663214.87 29663214.94 29663215.03 0.0283 0.0258

Jupiter 76506-07-29 08:24 G 29664511.83 29664511.85 29664511.88 0.0505 0.0499

Jupiter 76507-03-22 21:36 G 29664748.21 29664748.40 29664748.59 0.0515 0.0147

Jupiter 76507-11-14 22:34 G 29664985.26 29664985.44 29664985.61 0.0524 0.0254

Uranus 76510-08-19 23:17 G 29665994.41 29665994.47 29665994.54 0.0144 0.0137

Uranus 76511-04-03 11:32 G 29666220.83 29666220.98 29666221.16 0.0144 0.0097

Uranus 76511-11-16 00:00 G 29666447.31 29666447.50 29666447.72 0.0144 0.0056

Jupiter 76512-06-08 03:22 G 29666652.49 29666652.64 29666652.81 0.0518 0.0331

Uranus 76512-06-29 12:44 G 29666673.82 29666674.03 29666674.26 0.0144 0.0015

Jupiter 76513-01-31 11:03 G 29666889.75 29666889.96 29666890.16 0.0508 0.0065

Uranus 76513-02-11 01:27 G 29666900.35 29666900.56 29666900.78 0.0144 0.0027

Jupiter 76513-09-25 06:00 G 29667126.65 29667126.75 29667126.86 0.0499 0.0422

Uranus 76513-09-25 13:41 G 29667126.89 29667127.07 29667127.28 0.0144 0.0069

Uranus 76514-05-10 02:10 G 29667353.46 29667353.59 29667353.75 0.0144 0.0109

Saturn 76516-11-01 22:20 G 29668260.27 29668260.43 29668260.59 0.0274 0.0179

Neptune 76517-01-14 12:58 G 29668333.97 29668334.04 29668334.13 0.0089 0.0083

Saturn 76517-06-19 07:41 G 29668489.61 29668489.82 29668490.04 0.0275 0.0008

Neptune 76517-08-28 01:27 G 29668559.47 29668559.56 29668559.71 0.0089 0.0076

Saturn 76518-02-03 18:00 G 29668719.08 29668719.25 29668719.42 0.0276 0.0169

Neptune 76518-04-10 14:39 G 29668784.98 29668785.11 29668785.27 0.0089 0.0068

Neptune 76518-11-22 03:51 G 29669010.50 29669010.66 29669010.82 0.0089 0.0060

Jupiter 76518-11-25 18:58 G 29669014.12 29669014.29 29669014.47 0.0512 0.0252

Neptune 76519-07-05 16:34 G 29669236.03 29669236.19 29669236.38 0.0089 0.0052

Jupiter 76519-07-20 16:48 G 29669251.00 29669251.20 29669251.39 0.0522 0.0140

Neptune 76520-02-16 05:32 G 29669461.55 29669461.73 29669461.93 0.0089 0.0045

Neptune 76520-09-28 18:29 G 29669687.08 29669687.27 29669687.48 0.0089 0.0037

Neptune 76521-05-12 07:41 G 29669912.61 29669912.82 29669913.03 0.0089 0.0029

Neptune 76521-12-23 20:24 G 29670138.15 29670138.35 29670138.57 0.0089 0.0021

Neptune 76522-08-06 09:22 G 29670363.68 29670363.89 29670364.11 0.0089 0.0014

Neptune 76523-03-19 22:20 G 29670589.22 29670589.43 29670589.65 0.0090 0.0006

Neptune 76523-10-31 11:17 G 29670814.75 29670814.97 29670815.19 0.0090 0.0002

Jupiter 76524-02-11 21:22 G 29670918.28 29670918.39 29670918.50 0.0521 0.0438

Mars 76524-04-11 18:29 G 29670978.21 29670978.27 29670978.34 0.1881 0.1717

Neptune 76524-06-13 00:15 G 29671040.30 29671040.51 29671040.73 0.0090 0.0010

Jupiter 76524-10-06 07:56 G 29671155.63 29671155.83 29671156.04 0.0511 0.0040

Neptune 76525-01-24 13:12 G 29671265.84 29671266.05 29671266.27 0.0090 0.0018

Jupiter 76525-05-31 06:15 G 29671392.60 29671392.76 29671392.91 0.0501 0.0331

Neptune 76525-09-07 01:56 G 29671491.38 29671491.58 29671491.80 0.0090 0.0026

Neptune 76526-04-20 14:53 G 29671716.92 29671717.12 29671717.33 0.0090 0.0034

Neptune 76526-12-02 03:36 G 29671942.47 29671942.65 29671942.86 0.0090 0.0042

Mars 76527-01-17 20:24 G 29671989.18 29671989.35 29671989.53 0.1641 0.0067

Neptune 76527-07-15 17:03 G 29672168.03 29672168.21 29672168.39 0.0090 0.0049

Neptune 76528-02-26 05:46 G 29672393.58 29672393.74 29672393.92 0.0090 0.0057

Neptune 76528-10-08 18:29 G 29672619.14 29672619.27 29672619.44 0.0090 0.0065

Neptune 76529-05-22 07:27 G 29672844.71 29672844.81 29672844.96 0.0090 0.0073

Neptune 76530-01-02 20:39 G 29673070.28 29673070.36 29673070.47 0.0090 0.0080

Jupiter 76530-07-31 18:58 G 29673280.15 29673280.29 29673280.44 0.0509 0.0349

Neptune 76530-08-16 09:36 G 29673295.88 29673295.90 29673295.96 0.0090 0.0088

Jupiter 76531-03-25 13:27 G 29673516.86 29673517.06 29673517.26 0.0519 0.0030

Saturn 76531-04-19 08:39 G 29673541.66 29673541.86 29673542.06 0.0284 0.0096

Jupiter 76531-11-17 20:24 G 29673754.24 29673754.35 29673754.46 0.0529 0.0439

Saturn 76531-12-04 22:34 G 29673771.25 29673771.44 29673771.64 0.0283 0.0093

Saturn 76532-07-21 12:00 G 29674000.97 29674001.00 29674001.03 0.0282 0.0277

Jupiter 76536-06-11 03:36 G 29675421.45 29675421.65 29675421.85 0.0513 0.0147

Jupiter 76537-02-03 04:48 G 29675658.52 29675658.70 29675658.88 0.0503 0.0235

Jupiter 76542-04-05 19:41 G 29677546.23 29677546.32 29677546.42 0.0507 0.0443

Jupiter 76542-11-28 11:17 G 29677782.77 29677782.97 29677783.17 0.0517 0.0079

Jupiter 76543-07-23 15:08 G 29678019.97 29678020.13 29678020.29 0.0527 0.0328

Saturn 76546-05-14 21:22 G 29679046.22 29679046.39 29679046.56 0.0274 0.0163

Saturn 76546-12-30 06:58 G 29679275.57 29679275.79 29679276.00 0.0275 0.0010

Saturn 76547-08-16 16:48 G 29679505.06 29679505.20 29679505.37 0.0276 0.0186

Jupiter 76548-02-14 21:36 G 29679687.23 29679687.40 29679687.59 0.0516 0.0257

Jupiter 76548-10-09 02:24 G 29679924.40 29679924.60 29679924.80 0.0506 0.0134

Jupiter 76549-06-02 18:44 G 29680161.24 29680161.28 29680161.34 0.0497 0.0481

Uranus 76552-02-27 16:05 G 29681161.10 29681161.17 29681161.25 0.0134 0.0125

Uranus 76552-10-10 21:08 G 29681387.23 29681387.38 29681387.54 0.0134 0.0092

Uranus 76553-05-25 02:10 G 29681613.40 29681613.59 29681613.79 0.0134 0.0060

Uranus 76554-01-06 07:12 G 29681839.60 29681839.80 29681840.02 0.0134 0.0028

Jupiter 76554-08-03 09:36 G 29682048.72 29682048.90 29682049.09 0.0513 0.0186

Uranus 76554-08-20 12:29 G 29682065.81 29682066.02 29682066.24 0.0134 0.0005

Jupiter	76555-03-28 09:08 G	29682285.70	29682285.88	29682286.07	0.0523	0.0212
Uranus	76555-04-03 17:32 G	29682292.03	29682292.23	29682292.44	0.0134	0.0037
Uranus	76555-11-15 22:34 G	29682518.26	29682518.44	29682518.63	0.0134	0.0069
Uranus	76556-06-29 03:51 G	29682744.53	29682744.66	29682744.81	0.0134	0.0101
Uranus	76557-02-10 09:08 G	29682970.87	29682970.88	29682970.90	0.0134	0.0133
Jupiter	76559-10-20 12:00 G	29683952.86	29683953.00	29683953.14	0.0519	0.0372
Saturn	76560-03-13 22:48 G	29684098.37	29684098.45	29684098.54	0.0286	0.0260
Jupiter	76560-06-13 20:53 G	29684190.16	29684190.37	29684190.58	0.0509	0.0025
Saturn	76560-10-29 14:10 G	29684327.88	29684328.09	29684328.29	0.0285	0.0068
Jupiter	76561-02-05 17:32 G	29684427.11	29684427.23	29684427.36	0.0500	0.0388
Saturn	76561-06-16 04:20 G	29684557.49	29684557.68	29684557.87	0.0284	0.0122
Jupiter	76566-04-08 08:39 G	29686314.70	29686314.86	29686315.03	0.0511	0.0287
Jupiter	76566-12-01 04:34 G	29686551.49	29686551.69	29686551.89	0.0520	0.0099
Jupiter	76567-07-26 12:44 G	29686788.98	29686789.03	29686789.09	0.0530	0.0507
Jupiter	76571-06-25 04:05 G	29688218.60	29688218.67	29688218.75	0.0522	0.0482
Jupiter	76572-02-17 16:34 G	29688455.99	29688456.19	29688456.40	0.0512	0.0083
Jupiter	76572-10-11 16:48 G	29688693.03	29688693.20	29688693.37	0.0503	0.0294
Pluto	76574-05-19 04:20 G	29689277.50	29689277.68	29689277.89	0.0065	0.0030
Pluto	76574-12-30 09:08 G	29689502.66	29689502.88	29689503.10	0.0066	0.0008
Pluto	76575-08-12 13:27 G	29689727.92	29689728.06	29689728.23	0.0066	0.0046
Saturn	76575-11-25 03:51 G	29689832.48	29689832.66	29689832.85	0.0274	0.0133
Saturn	76576-07-11 13:12 G	29690061.84	29690062.05	29690062.26	0.0275	0.0040
Saturn	76577-02-25 23:17 G	29690291.35	29690291.47	29690291.61	0.0276	0.0215
Jupiter	76577-12-12 07:12 G	29690580.68	29690580.80	29690580.94	0.0508	0.0385
Jupiter	76578-08-06 00:00 G	29690817.30	29690817.50	29690817.70	0.0518	0.0013
Jupiter	76579-03-31 04:48 G	29691054.57	29691054.70	29691054.83	0.0528	0.0394
Jupiter	76583-10-23 12:29 G	29692721.82	29692722.02	29692722.21	0.0515	0.0190
Jupiter	76584-06-16 15:36 G	29692958.97	29692959.15	29692959.35	0.0505	0.0198
Jupiter	76589-08-17 08:24 G	29694846.79	29694846.85	29694846.92	0.0505	0.0475
Saturn	76589-09-24 01:27 G	29694884.45	29694884.56	29694884.68	0.0286	0.0235

Jupiter 76590-04-10 21:51 G 29695083.22 29695083.41 29695083.61 0.0515 0.0120

Saturn 76590-05-11 16:20 G 29695113.98 29695114.18 29695114.39 0.0284 0.0045

Jupiter 76590-12-03 23:32 G 29695320.31 29695320.48 29695320.65 0.0525 0.0283

Saturn 76590-12-27 06:29 G 29695343.59 29695343.77 29695343.95 0.0283 0.0144

Moon 76591-03-27 08:10 G 29695433.69 29695433.84 29695433.99 0.2621 0.1167

Earth 76591-03-27 08:39 G 29695433.71 29695433.86 29695434.01 0.2628 0.0884 *

Mars 76592-11-14 08:39 G 29696031.69 29696031.86 29696032.03 0.1642 0.0171

Uranus 76594-12-01 17:46 G 29696779.12 29696779.24 29696779.38 0.0144 0.0115

Jupiter 76595-06-28 06:58 G 29696987.62 29696987.79 29696987.96 0.0517 0.0299

Uranus 76595-07-16 06:29 G 29697005.59 29697005.77 29697005.96 0.0144 0.0074

Jupiter 76596-02-20 13:27 G 29697224.85 29697225.06 29697225.26 0.0507 0.0096

Uranus 76596-02-27 18:58 G 29697232.08 29697232.29 29697232.51 0.0144 0.0033

Uranus 76596-10-11 07:27 G 29697458.60 29697458.81 29697459.04 0.0144 0.0009

Jupiter 76596-10-14 07:27 G 29697461.73 29697461.81 29697461.90 0.0498 0.0448

Uranus 76597-05-25 19:56 G 29697685.13 29697685.33 29697685.54 0.0144 0.0049

Neptune 76597-12-07 12:29 G 29697881.02 29697881.02 29697881.04 0.0088 0.0088

Uranus 76598-01-07 08:24 G 29697911.69 29697911.85 29697912.03 0.0144 0.0090

Neptune 76598-07-21 01:56 G 29698106.49 29698106.58 29698106.67 0.0088 0.0080

Uranus 76598-08-21 20:39 G 29698138.29 29698138.36 29698138.47 0.0144 0.0131

Neptune 76599-03-03 14:39 G 29698332.00 29698332.11 29698332.25 0.0088 0.0073

Moon 76599-03-24 19:56 G 29698353.31 29698353.33 29698353.36 0.2624 0.2588

Earth 76599-03-25 00:29 G 29698353.44 29698353.52 29698353.60 0.2628 0.2224

Neptune 76599-10-15 03:36 G 29698557.53 29698557.65 29698557.82 0.0088 0.0066

Neptune 76600-05-28 17:03 G 29698783.06 29698783.21 29698783.39 0.0088 0.0058

Neptune 76601-01-09 06:00 G 29699008.59 29699008.75 29699008.95 0.0088 0.0051

Neptune 76601-08-22 19:27 G 29699234.12 29699234.31 29699234.51 0.0088 0.0043

Jupiter 76601-12-15 21:08 G 29699349.20 29699349.38 29699349.56 0.0513 0.0223

Neptune 76602-04-05 08:24 G 29699459.66 29699459.85 29699460.07 0.0088 0.0036

Jupiter 76602-08-09 19:41 G 29699586.13 29699586.32 29699586.51 0.0523 0.0172

Neptune 76602-11-16 21:36 G 29699685.20 29699685.40 29699685.62 0.0088 0.0028

Neptune 76603-06-30 10:48 G 29699910.74 29699910.95 29699911.17 0.0088 0.0021

Neptune 76604-02-11 00:00 G 29700136.28 29700136.50 29700136.72 0.0088 0.0013

Neptune 76604-09-23 13:12 G 29700361.83 29700362.05 29700362.27 0.0088 0.0005

Neptune 76605-05-07 02:10 G 29700587.37 29700587.59 29700587.82 0.0088 0.0003

Saturn 76605-06-07 02:39 G 29700618.42 29700618.61 29700618.80 0.0274 0.0118

Neptune 76605-12-18 15:36 G 29700812.93 29700813.15 29700813.37 0.0088 0.0010

Saturn 76606-01-22 12:15 G 29700847.80 29700848.01 29700848.22 0.0275 0.0055

Neptune 76606-08-01 04:34 G 29701038.48 29701038.69 29701038.91 0.0088 0.0018

Saturn 76606-09-08 22:20 G 29701077.31 29701077.43 29701077.55 0.0277 0.0230

Jupiter 76607-03-03 23:46 G 29701253.37 29701253.49 29701253.62 0.0520 0.0408

Neptune 76607-03-14 17:46 G 29701264.03 29701264.24 29701264.45 0.0088 0.0025

Neptune 76607-10-26 06:29 G 29701489.58 29701489.77 29701489.99 0.0088 0.0033

Jupiter 76607-10-27 09:36 G 29701490.69 29701490.90 29701491.11 0.0510 0.0010

Neptune 76608-06-07 19:56 G 29701715.14 29701715.33 29701715.53 0.0088 0.0040

Jupiter 76608-06-20 07:12 G 29701727.65 29701727.80 29701727.94 0.0501 0.0357

Neptune 76609-01-19 08:53 G 29701940.70 29701940.87 29701941.07 0.0088 0.0048

Neptune 76609-09-01 22:05 G 29702166.26 29702166.42 29702166.60 0.0088 0.0055

Neptune 76610-04-15 10:48 G 29702391.82 29702391.95 29702392.13 0.0088 0.0063

Neptune 76610-11-27 00:15 G 29702617.39 29702617.51 29702617.65 0.0088 0.0070

Neptune 76611-07-10 12:58 G 29702842.96 29702843.04 29702843.16 0.0088 0.0078

Neptune 76612-02-21 02:10 G 29703068.55 29703068.59 29703068.66 0.0088 0.0085

Jupiter 76613-08-20 21:22 G 29703615.24 29703615.39 29703615.55 0.0509 0.0323

Jupiter 76614-04-14 15:51 G 29703851.96 29703852.16 29703852.36 0.0519 0.0059

Jupiter 76614-12-07 22:34 G 29704089.35 29704089.44 29704089.54 0.0529 0.0465

Jupiter 76618-11-06 12:15 G 29705519.01 29705519.01 29705519.02 0.0523 0.0522

Saturn 76619-04-07 05:17 G 29705670.59 29705670.72 29705670.87 0.0286 0.0211

Jupiter 76619-07-02 02:10 G 29705756.39 29705756.59 29705756.79 0.0513 0.0124

Saturn 76619-11-22 20:39 G 29705900.15 29705900.36 29705900.57 0.0285 0.0018

Jupiter 76620-02-24 03:51 G 29705993.48 29705993.66 29705993.84 0.0504 0.0258

Saturn 76620-07-09 11:03 G 29706129.79 29706129.96 29706130.13 0.0284 0.0171

Mars	76622-02-07 19:56 G	29706708.24	29706708.33	29706708.42	0.1888	0.1602
Jupiter	76625-04-25 21:51 G	29707881.30	29707881.41	29707881.52	0.0507	0.0417
Jupiter	76625-12-18 12:58 G	29708117.84	29708118.04	29708118.24	0.0516	0.0052
Jupiter	76626-08-12 15:51 G	29708355.02	29708355.16	29708355.31	0.0526	0.0353
Jupiter	76631-03-06 20:10 G	29710022.16	29710022.34	29710022.53	0.0516	0.0234
Jupiter	76631-10-30 01:27 G	29710259.36	29710259.56	29710259.75	0.0506	0.0157
Saturn	76634-05-03 00:44 G	29711175.48	29711175.53	29711175.62	0.0273	0.0256
Saturn	76634-12-18 09:36 G	29711404.71	29711404.90	29711405.11	0.0274	0.0087
Saturn	76635-08-04 19:12 G	29711634.10	29711634.30	29711634.50	0.0275	0.0086
Saturn	76636-03-21 05:17 G	29711863.66	29711863.72	29711863.79	0.0276	0.0260
Uranus	76636-06-11 07:27 G	29711945.68	29711945.81	29711945.94	0.0134	0.0107
Uranus	76637-01-23 12:29 G	29712171.85	29712172.02	29712172.21	0.0134	0.0074
Jupiter	76637-08-23 09:36 G	29712383.70	29712383.90	29712384.09	0.0514	0.0159
Uranus	76637-09-06 17:32 G	29712398.04	29712398.23	29712398.45	0.0134	0.0043
Jupiter	76638-04-17 08:53 G	29712620.70	29712620.87	29712621.05	0.0524	0.0239
Uranus	76638-04-20 22:48 G	29712624.24	29712624.45	29712624.67	0.0134	0.0010
Uranus	76638-12-03 03:51 G	29712850.46	29712850.66	29712850.88	0.0134	0.0023
Uranus	76639-07-17 09:08 G	29713076.69	29713076.88	29713077.09	0.0134	0.0055
Uranus	76640-02-28 14:24 G	29713302.94	29713303.10	29713303.27	0.0134	0.0087
Uranus	76640-10-11 19:27 G	29713529.22	29713529.31	29713529.42	0.0134	0.0120
Jupiter	76642-11-09 14:39 G	29714287.95	29714288.11	29714288.26	0.0519	0.0342
Jupiter	76643-07-04 23:03 G	29714525.26	29714525.46	29714525.67	0.0509	0.0056
Jupiter	76644-02-26 19:27 G	29714762.20	29714762.31	29714762.43	0.0500	0.0414
Saturn	76648-10-17 08:39 G	29716456.70	29716456.86	29716457.02	0.0286	0.0185
Jupiter	76649-04-28 08:39 G	29716649.69	29716649.86	29716650.03	0.0511	0.0261
Saturn	76649-06-03 23:32 G	29716686.27	29716686.48	29716686.69	0.0284	0.0007
Jupiter	76649-12-21 05:03 G	29716886.51	29716886.71	29716886.90	0.0521	0.0128
Saturn	76650-01-19 13:41 G	29716915.92	29716916.07	29716916.22	0.0283	0.0194
Jupiter	76654-07-15 07:56 G	29718553.73	29718553.83	29718553.93	0.0522	0.0450
Jupiter	76655-03-09 19:41 G	29718791.11	29718791.32	29718791.52	0.0511	0.0052

Jupiter 76655-11-01 18:44 G 29719028.13 29719028.28 29719028.44 0.0502 0.0322

Mars 76658-09-12 20:53 G 29720074.20 29720074.37 29720074.53 0.1644 0.0393

Jupiter 76661-01-01 08:53 G 29720915.74 29720915.87 29720916.02 0.0508 0.0359

Jupiter 76661-08-26 02:24 G 29721152.40 29721152.60 29721152.80 0.0518 0.0018

Pluto 76662-01-19 06:29 G 29721298.65 29721298.77 29721298.93 0.0079 0.0061

Jupiter 76662-04-20 07:56 G 29721389.72 29721389.83 29721389.96 0.0528 0.0425

Pluto 76662-09-01 17:03 G 29721523.99 29721524.21 29721524.44 0.0079 0.0006

Pluto 76663-04-15 02:53 G 29721749.54 29721749.62 29721749.72 0.0078 0.0072

Saturn 76663-11-12 23:32 G 29721961.39 29721961.48 29721961.59 0.0273 0.0241

Saturn 76664-06-29 08:24 G 29722190.64 29722190.85 29722191.06 0.0274 0.0071

Saturn 76665-02-13 18:00 G 29722420.05 29722420.25 29722420.45 0.0275 0.0102

Saturn 76665-10-01 03:51 G 29722649.65 29722649.66 29722649.68 0.0277 0.0276

Jupiter 76666-11-12 14:24 G 29723056.91 29723057.10 29723057.30 0.0514 0.0161

Jupiter 76667-07-07 17:03 G 29723294.03 29723294.21 29723294.40 0.0505 0.0225

Jupiter 76672-09-06 10:34 G 29725181.86 29725181.94 29725182.04 0.0506 0.0451

Jupiter 76673-05-01 00:44 G 29725418.33 29725418.53 29725418.73 0.0515 0.0091

Jupiter 76673-12-24 02:24 G 29725655.44 29725655.60 29725655.76 0.0525 0.0310

Saturn 76678-04-29 12:00 G 29727242.83 29727243.00 29727243.18 0.0286 0.0160

Jupiter 76678-07-18 05:03 G 29727322.54 29727322.71 29727322.89 0.0517 0.0277

Uranus 76678-08-02 00:44 G 29727337.46 29727337.53 29727337.63 0.0144 0.0133

Saturn 76678-12-15 03:22 G 29727472.43 29727472.64 29727472.85 0.0285 0.0032

Jupiter 76679-03-12 11:46 G 29727559.79 29727559.99 29727560.19 0.0508 0.0118

Uranus 76679-03-16 13:12 G 29727563.89 29727564.05 29727564.23 0.0144 0.0092

Saturn 76679-08-01 17:46 G 29727702.12 29727702.24 29727702.38 0.0284 0.0221

Uranus 76679-10-29 01:56 G 29727790.38 29727790.58 29727790.79 0.0144 0.0051

Jupiter 76679-11-04 06:29 G 29727796.70 29727796.77 29727796.84 0.0499 0.0468

Uranus 76680-06-11 14:24 G 29728016.88 29728017.10 29728017.32 0.0144 0.0010

Uranus 76681-01-24 02:53 G 29728243.41 29728243.62 29728243.84 0.0144 0.0031

Neptune 76681-04-18 23:32 G 29728328.43 29728328.48 29728328.56 0.0089 0.0085

Uranus 76681-09-07 15:08 G 29728469.95 29728470.13 29728470.33 0.0144 0.0072

Neptune 76681-11-30 12:44 G 29728553.92 29728554.03 29728554.14 0.0089 0.0077

Uranus 76682-04-22 03:22 G 29728696.52 29728696.64 29728696.79 0.0144 0.0113

Neptune 76682-07-14 01:12 G 29728779.43 29728779.55 29728779.71 0.0089 0.0070

Neptune 76683-02-24 14:10 G 29729004.95 29729005.09 29729005.26 0.0089 0.0062

Neptune 76683-10-08 03:22 G 29729230.47 29729230.64 29729230.81 0.0089 0.0054

Neptune 76684-05-20 16:05 G 29729456.00 29729456.17 29729456.37 0.0089 0.0046

Neptune 76685-01-01 05:03 G 29729681.53 29729681.71 29729681.92 0.0089 0.0039

Jupiter 76685-01-03 23:17 G 29729684.28 29729684.47 29729684.65 0.0512 0.0195

Neptune 76685-08-14 18:00 G 29729907.06 29729907.25 29729907.47 0.0089 0.0031

Jupiter 76685-08-28 21:08 G 29729921.19 29729921.38 29729921.57 0.0522 0.0198

Neptune 76686-03-28 06:58 G 29730132.59 29730132.79 29730133.01 0.0089 0.0023

Neptune 76686-11-08 20:10 G 29730358.12 29730358.34 29730358.55 0.0089 0.0015

Neptune 76687-06-22 09:08 G 29730583.66 29730583.88 29730584.10 0.0089 0.0007

Mars 76687-12-05 23:03 G 29730750.30 29730750.46 29730750.61 0.1885 0.0886

Neptune 76688-02-02 22:05 G 29730809.20 29730809.42 29730809.64 0.0090 0.0001

Neptune 76688-09-15 10:48 G 29731034.74 29731034.95 29731035.17 0.0090 0.0009

Neptune 76689-04-28 23:32 G 29731260.28 29731260.48 29731260.70 0.0090 0.0017

Neptune 76689-12-10 12:29 G 29731485.82 29731486.02 29731486.24 0.0090 0.0025

Jupiter 76690-03-22 21:22 G 29731588.26 29731588.39 29731588.53 0.0520 0.0387

Neptune 76690-07-24 01:27 G 29731711.37 29731711.56 29731711.77 0.0090 0.0032

Jupiter 76690-11-15 07:56 G 29731825.62 29731825.83 29731826.03 0.0510 0.0015

Neptune 76691-03-06 14:10 G 29731936.91 29731937.09 29731937.30 0.0090 0.0041

Jupiter 76691-07-10 05:46 G 29732062.61 29732062.74 29732062.88 0.0501 0.0378

Neptune 76691-10-18 03:08 G 29732162.46 29732162.63 29732162.83 0.0090 0.0048

Neptune 76692-05-30 16:05 G 29732388.01 29732388.17 29732388.35 0.0090 0.0056

Neptune 76693-01-11 04:48 G 29732613.57 29732613.70 29732613.88 0.0090 0.0064

Saturn 76693-05-25 07:12 G 29732747.68 29732747.80 29732747.95 0.0273 0.0209

Neptune 76693-08-24 17:46 G 29732839.13 29732839.24 29732839.39 0.0090 0.0072

Saturn 76694-01-09 16:05 G 29732976.96 29732977.17 29732977.39 0.0274 0.0040

Neptune 76694-04-07 06:58 G 29733064.70 29733064.79 29733064.90 0.0090 0.0079

Saturn 76694-08-27 01:27 G 29733206.38 29733206.56 29733206.75 0.0275 0.0134

Neptune 76694-11-18 19:41 G 29733290.29 29733290.32 29733290.40 0.0090 0.0087

Jupiter 76696-09-08 20:53 G 29733950.21 29733950.37 29733950.54 0.0509 0.0297

Moon 76696-09-27 11:17 G 29733968.81 29733968.97 29733969.13 0.2700 0.0380

Earth 76696-09-27 14:39 G 29733968.97 29733969.11 29733969.26 0.2705 0.1076 *

Jupiter 76697-05-03 15:22 G 29734186.94 29734187.14 29734187.34 0.0519 0.0085

Jupiter 76697-12-26 22:20 G 29734424.36 29734424.43 29734424.50 0.0529 0.0489

Jupiter 76701-11-26 14:10 G 29735854.03 29735854.09 29735854.16 0.0523 0.0494

Jupiter 76702-07-22 04:05 G 29736091.47 29736091.67 29736091.88 0.0513 0.0094

Jupiter 76703-03-16 05:32 G 29736328.56 29736328.73 29736328.90 0.0504 0.0285

Earth 76704-09-26 05:17 G 29736888.65 29736888.72 29736888.79 0.2704 0.2406

Saturn 76707-11-10 16:20 G 29738029.00 29738029.18 29738029.37 0.0286 0.0133

Jupiter 76708-05-15 21:08 G 29738216.26 29738216.38 29738216.51 0.0507 0.0392

Saturn 76708-06-27 07:12 G 29738258.60 29738258.80 29738259.01 0.0284 0.0058

Jupiter 76709-01-07 12:44 G 29738452.82 29738453.03 29738453.23 0.0517 0.0027

Saturn 76709-02-11 21:08 G 29738488.29 29738488.38 29738488.50 0.0283 0.0246

Jupiter 76709-09-01 16:05 G 29738690.04 29738690.17 29738690.31 0.0527 0.0380

Jupiter 76714-03-26 23:17 G 29740357.28 29740357.47 29740357.66 0.0516 0.0203

Jupiter 76714-11-19 03:36 G 29740594.46 29740594.65 29740594.85 0.0506 0.0186

Jupiter 76720-01-19 22:34 G 29742482.38 29742482.44 29742482.49 0.0505 0.0483

Uranus 76720-02-10 18:00 G 29742504.16 29742504.25 29742504.35 0.0134 0.0121

Jupiter 76720-09-12 11:03 G 29742718.77 29742718.96 29742719.16 0.0514 0.0131

Uranus 76720-09-23 23:03 G 29742730.31 29742730.46 29742730.63 0.0134 0.0089

Jupiter 76721-05-07 11:32 G 29742955.81 29742955.98 29742956.15 0.0524 0.0269

Uranus 76721-05-08 04:05 G 29742956.49 29742956.67 29742956.88 0.0134 0.0057

Uranus 76721-12-20 09:22 G 29743182.69 29743182.89 29743183.11 0.0134 0.0024

Uranus 76722-08-03 14:39 G 29743408.90 29743409.11 29743409.33 0.0134 0.0010

Saturn 76722-12-06 06:29 G 29743533.63 29743533.77 29743533.93 0.0273 0.0194

Uranus 76723-03-17 19:41 G 29743635.13 29743635.32 29743635.54 0.0134 0.0042

Saturn 76723-07-23 15:22 G 29743762.93 29743763.14 29743763.35 0.0274 0.0023

Uranus 76723-10-30 00:58 G 29743861.36 29743861.54 29743861.72 0.0134 0.0073

Saturn 76724-03-09 00:44 G 29743992.36 29743992.53 29743992.71 0.0275 0.0150

Uranus 76724-06-12 06:00 G 29744087.63 29744087.75 29744087.89 0.0134 0.0106

Mars 76724-07-11 08:39 G 29744116.70 29744116.86 29744117.02 0.1646 0.0615

Jupiter 76725-11-29 16:48 G 29744623.04 29744623.20 29744623.37 0.0518 0.0313

Jupiter 76726-07-25 00:44 G 29744860.33 29744860.53 29744860.73 0.0508 0.0083

Jupiter 76727-03-18 20:24 G 29745097.25 29745097.35 29745097.44 0.0499 0.0439

Jupiter 76732-05-18 11:03 G 29746984.79 29746984.96 29746985.14 0.0511 0.0233

Jupiter 76733-01-10 07:56 G 29747221.63 29747221.83 29747222.02 0.0521 0.0156

Saturn 76737-05-22 19:12 G 29748815.10 29748815.30 29748815.49 0.0286 0.0109

Jupiter 76737-08-04 05:46 G 29748888.63 29748888.74 29748888.86 0.0521 0.0428

Saturn 76738-01-07 10:20 G 29749044.73 29749044.93 29749045.13 0.0285 0.0083

Jupiter 76738-03-29 17:32 G 29749126.02 29749126.23 29749126.43 0.0511 0.0029

Saturn 76738-08-25 00:44 G 29749274.48 29749274.53 29749274.60 0.0284 0.0271

Jupiter 76738-11-21 16:48 G 29749363.05 29749363.20 29749363.35 0.0502 0.0342

Jupiter 76744-01-22 11:03 G 29751250.81 29751250.96 29751251.11 0.0508 0.0331

Jupiter 76744-09-15 04:05 G 29751487.47 29751487.67 29751487.87 0.0518 0.0046

Jupiter 76745-05-10 09:22 G 29751724.78 29751724.89 29751724.99 0.0528 0.0449

Jupiter 76749-12-02 11:46 G 29753391.79 29753391.99 29753392.19 0.0514 0.0138

Jupiter 76750-07-27 14:53 G 29753628.94 29753629.12 29753629.30 0.0505 0.0245

Saturn 76752-06-17 14:53 G 29754319.95 29754320.12 29754320.29 0.0273 0.0160

Saturn 76753-02-01 23:32 G 29754549.27 29754549.48 29754549.70 0.0274 0.0012

Saturn 76753-09-19 08:53 G 29754778.72 29754778.87 29754779.03 0.0275 0.0182

Mars 76753-10-03 02:10 G 29754792.41 29754792.59 29754792.76 0.1882 0.0183

Jupiter 76755-09-27 09:51 G 29755516.80 29755516.91 29755517.02 0.0506 0.0426

Jupiter 76756-05-20 23:46 G 29755753.29 29755753.49 29755753.68 0.0515 0.0066

Mars 76756-07-10 02:53 G 29755803.55 29755803.62 29755803.70 0.1640 0.1475

Jupiter 76757-01-13 01:12 G 29755990.40 29755990.55 29755990.71 0.0525 0.0336

Jupiter 76761-08-07 06:29 G 29757657.59 29757657.77 29757657.95 0.0517 0.0247

Jupiter 76762-04-01 12:58 G 29757894.84 29757895.04 29757895.24 0.0507 0.0146

Neptune 76762-10-24 11:17 G 29758100.91 29758100.97 29758101.06 0.0088 0.0082

Uranus 76762-11-14 20:39 G 29758122.22 29758122.36 29758122.50 0.0144 0.0109

Jupiter 76762-11-24 07:27 G 29758131.78 29758131.81 29758131.84 0.0499 0.0492

Neptune 76763-06-07 00:15 G 29758326.42 29758326.51 29758326.65 0.0088 0.0075

Uranus 76763-06-29 08:53 G 29758348.69 29758348.87 29758349.07 0.0144 0.0069

Neptune 76764-01-18 13:56 G 29758551.94 29758552.08 29758552.23 0.0088 0.0067

Uranus 76764-02-10 21:36 G 29758575.19 29758575.40 29758575.62 0.0144 0.0028

Neptune 76764-08-31 02:39 G 29758777.47 29758777.61 29758777.79 0.0088 0.0060

Uranus 76764-09-24 10:05 G 29758801.70 29758801.92 29758802.14 0.0144 0.0013

Neptune 76765-04-13 16:05 G 29759003.00 29759003.17 29759003.36 0.0088 0.0052

Uranus 76765-05-08 22:20 G 29759028.23 29759028.43 29759028.64 0.0144 0.0054

Neptune 76765-11-25 05:03 G 29759228.54 29759228.71 29759228.92 0.0088 0.0045

Uranus 76765-12-21 10:34 G 29759254.78 29759254.94 29759255.11 0.0144 0.0095

Saturn 76766-04-17 09:08 G 29759371.82 29759371.88 29759371.94 0.0287 0.0272

Neptune 76766-07-08 18:29 G 29759454.07 29759454.27 29759454.48 0.0088 0.0037

Uranus 76766-08-04 23:03 G 29759481.39 29759481.46 29759481.53 0.0144 0.0135

Saturn 76766-12-03 00:44 G 29759601.33 29759601.53 29759601.73 0.0286 0.0080

Neptune 76767-02-19 07:27 G 29759679.61 29759679.81 29759680.03 0.0088 0.0030

Saturn 76767-07-20 15:36 G 29759830.96 29759831.15 29759831.35 0.0284 0.0111

Neptune 76767-10-02 20:39 G 29759905.15 29759905.36 29759905.58 0.0088 0.0022

Jupiter 76768-01-24 22:05 G 29760019.23 29760019.42 29760019.61 0.0513 0.0170

Neptune 76768-05-15 09:51 G 29760130.69 29760130.91 29760131.13 0.0088 0.0014

Jupiter 76768-09-17 20:10 G 29760256.16 29760256.34 29760256.53 0.0523 0.0225

Neptune 76768-12-26 23:03 G 29760356.24 29760356.46 29760356.68 0.0088 0.0007

Neptune 76769-08-09 12:15 G 29760581.78 29760582.01 29760582.23 0.0088 0.0002

Neptune 76770-03-23 00:58 G 29760807.33 29760807.54 29760807.77 0.0088 0.0009

Neptune 76770-11-03 14:10 G 29761032.88 29761033.09 29761033.31 0.0088 0.0016

Neptune 76771-06-17 03:08 G 29761258.43 29761258.63 29761258.86 0.0088 0.0024

Neptune 76772-01-28 16:20 G 29761483.98 29761484.18 29761484.40 0.0088 0.0032

Neptune 76772-09-10 05:32 G 29761709.54 29761709.73 29761709.94 0.0088 0.0039

Jupiter 76773-04-12 00:15 G 29761923.36 29761923.51 29761923.66 0.0520 0.0356

Neptune 76773-04-23 18:29 G 29761935.10 29761935.27 29761935.47 0.0088 0.0047

Neptune 76773-12-05 07:56 G 29762160.66 29762160.83 29762161.01 0.0088 0.0054

Jupiter 76773-12-05 10:05 G 29762160.71 29762160.92 29762161.12 0.0510 0.0043 *

Neptune 76774-07-18 20:39 G 29762386.22 29762386.36 29762386.54 0.0088 0.0062

Jupiter 76774-07-30 07:12 G 29762397.69 29762397.80 29762397.93 0.0501 0.0404

Neptune 76775-03-01 10:05 G 29762611.79 29762611.92 29762612.06 0.0088 0.0069

Neptune 76775-10-12 22:48 G 29762837.36 29762837.45 29762837.58 0.0088 0.0077

Neptune 76776-05-25 12:00 G 29763062.95 29763063.00 29763063.08 0.0088 0.0084

Jupiter 76779-09-29 21:22 G 29764285.22 29764285.39 29764285.56 0.0510 0.0271

Jupiter 76780-05-23 16:48 G 29764522.00 29764522.20 29764522.40 0.0520 0.0114

Jupiter 76781-01-16 00:29 G 29764759.48 29764759.52 29764759.56 0.0530 0.0518

Saturn 76781-12-28 14:53 G 29765105.94 29765106.12 29765106.31 0.0273 0.0143

Saturn 76782-08-14 23:32 G 29765335.27 29765335.48 29765335.69 0.0274 0.0027

Saturn 76783-04-01 08:53 G 29765564.73 29765564.87 29765565.02 0.0276 0.0200

Jupiter 76784-12-15 16:34 G 29766189.10 29766189.19 29766189.28 0.0522 0.0465

Jupiter 76785-08-10 05:32 G 29766426.53 29766426.73 29766426.94 0.0512 0.0065

Jupiter 76786-04-04 06:00 G 29766663.59 29766663.75 29766663.92 0.0503 0.0311

Mars 76790-05-08 20:39 G 29768159.21 29768159.36 29768159.50 0.1648 0.0845

Jupiter 76791-06-04 22:48 G 29768551.32 29768551.45 29768551.59 0.0507 0.0367

Jupiter 76792-01-27 14:53 G 29768787.92 29768788.12 29768788.32 0.0517 0.0005

Jupiter 76792-09-20 18:44 G 29769025.16 29769025.28 29769025.41 0.0527 0.0407

Saturn 76795-10-28 11:32 G 29770157.88 29770157.98 29770158.08 0.0287 0.0249

Saturn 76796-06-14 03:22 G 29770387.43 29770387.64 29770387.85 0.0286 0.0056

Saturn 76797-01-29 18:29 G 29770617.09 29770617.27 29770617.46 0.0285 0.0136

Jupiter 76797-04-14 20:39 G 29770692.17 29770692.36 29770692.55 0.0515 0.0180

Jupiter 76797-12-08 00:58 G 29770929.36 29770929.54 29770929.73 0.0506 0.0207

Jupiter 76803-02-07 23:46 G 29772817.42 29772817.49 29772817.58 0.0505 0.0458

Jupiter 76803-10-02 12:29 G 29773053.83 29773054.02 29773054.22 0.0514 0.0103

Uranus 76804-05-24 08:53 G 29773288.75 29773288.87 29773289.02 0.0134 0.0103

Jupiter 76804-05-26 12:44 G 29773290.86 29773291.03 29773291.20 0.0524 0.0295

Uranus 76805-01-05 14:24 G 29773514.92 29773515.10 29773515.28 0.0134 0.0071

Uranus 76805-08-19 19:27 G 29773741.11 29773741.31 29773741.52 0.0134 0.0038

Uranus 76806-04-03 00:44 G 29773967.31 29773967.53 29773967.75 0.0134 0.0006

Uranus 76806-11-15 05:46 G 29774193.53 29774193.74 29774193.95 0.0134 0.0027

Uranus 76807-06-29 10:48 G 29774419.77 29774419.95 29774420.15 0.0134 0.0059

Uranus 76808-02-10 15:51 G 29774646.02 29774646.16 29774646.33 0.0134 0.0092

Uranus 76808-09-23 21:08 G 29774872.31 29774872.38 29774872.47 0.0134 0.0123

Jupiter 76808-12-18 13:12 G 29774957.88 29774958.05 29774958.22 0.0518 0.0292

Jupiter 76809-08-12 21:22 G 29775195.19 29775195.39 29775195.59 0.0509 0.0104

Jupiter 76810-04-06 17:17 G 29775432.14 29775432.22 29775432.30 0.0500 0.0457

Saturn 76811-07-10 23:32 G 29775892.29 29775892.48 29775892.68 0.0273 0.0110

Saturn 76812-02-25 08:24 G 29776121.65 29776121.85 29776122.06 0.0274 0.0061

Saturn 76812-10-11 17:46 G 29776351.14 29776351.24 29776351.36 0.0275 0.0233

Jupiter 76815-06-07 09:22 G 29777319.71 29777319.89 29777320.08 0.0511 0.0208

Jupiter 76816-01-30 06:00 G 29777556.56 29777556.75 29777556.94 0.0521 0.0181

Mars 76819-07-31 04:34 G 29778834.52 29778834.69 29778834.86 0.1879 0.0549

Pluto 76820-06-18 11:32 G 29779157.81 29779157.98 29779158.18 0.0065 0.0035

Jupiter 76820-08-23 06:00 G 29779223.63 29779223.75 29779223.89 0.0521 0.0401

Pluto 76821-01-29 16:20 G 29779382.96 29779383.18 29779383.40 0.0066 0.0002

Jupiter 76821-04-17 17:46 G 29779461.04 29779461.24 29779461.45 0.0511 0.0004

Pluto 76821-09-11 20:24 G 29779608.20 29779608.35 29779608.55 0.0066 0.0041

Jupiter 76821-12-10 17:03 G 29779698.08 29779698.21 29779698.36 0.0502 0.0368

Mars 76822-05-07 15:08 G 29779846.02 29779846.13 29779846.24 0.1642 0.1263

Saturn 76825-05-09 18:29 G 29780944.14 29780944.27 29780944.41 0.0287 0.0218

Saturn 76825-12-25 10:20 G 29781173.72 29781173.93 29781174.14 0.0286 0.0025

Saturn 76826-08-12 01:12 G 29781403.38 29781403.55 29781403.72 0.0284 0.0165

Jupiter 76827-02-10 08:39 G 29781585.71 29781585.86 29781586.02 0.0509 0.0308

Jupiter 76827-10-05 02:10 G 29781822.39 29781822.59 29781822.78 0.0518 0.0072

Jupiter 76828-05-29 07:27 G 29782059.73 29782059.81 29782059.90 0.0528 0.0474

Jupiter 76832-04-27 22:20 G 29783489.39 29783489.43 29783489.48 0.0524 0.0509

Jupiter 76832-12-21 13:27 G 29783726.86 29783727.06 29783727.26 0.0514 0.0108

Jupiter 76833-08-15 16:05 G 29783963.99 29783964.17 29783964.34 0.0504 0.0273

Moon 76834-03-29 09:08 G 29784189.73 29784189.88 29784190.03 0.2635 0.0668

Earth 76834-03-29 10:34 G 29784189.80 29784189.94 29784190.09 0.2628 0.1140 *

Jupiter 76838-10-16 09:08 G 29785851.76 29785851.88 29785852.00 0.0506 0.0403

Jupiter 76839-06-09 23:46 G 29786088.29 29786088.49 29786088.69 0.0516 0.0038

Jupiter 76840-02-02 02:10 G 29786325.45 29786325.59 29786325.74 0.0526 0.0364

Saturn 76840-06-04 16:34 G 29786449.14 29786449.19 29786449.27 0.0272 0.0258

Saturn 76841-01-20 00:44 G 29786678.33 29786678.53 29786678.74 0.0273 0.0091

Saturn 76841-09-06 09:22 G 29786907.69 29786907.89 29786908.10 0.0274 0.0080

Earth 76842-03-27 02:24 G 29787109.49 29787109.60 29787109.70 0.2629 0.2005

Moon 76842-03-27 05:03 G 29787109.59 29787109.71 29787109.83 0.2635 0.1535 *

Saturn 76842-04-23 18:29 G 29787137.20 29787137.27 29787137.36 0.0276 0.0252

Jupiter 76844-08-26 07:27 G 29787992.63 29787992.81 29787993.00 0.0517 0.0219

Jupiter 76845-04-20 13:12 G 29788229.86 29788230.05 29788230.25 0.0507 0.0173

Neptune 76845-07-22 10:20 G 29788322.90 29788322.93 29788323.00 0.0089 0.0087

Neptune 76846-03-04 23:17 G 29788548.38 29788548.47 29788548.58 0.0089 0.0079

Uranus 76846-07-15 02:53 G 29788680.53 29788680.62 29788680.73 0.0144 0.0128

Neptune 76846-10-16 11:46 G 29788773.89 29788773.99 29788774.15 0.0089 0.0072

Uranus 76847-02-26 15:36 G 29788906.98 29788907.15 29788907.32 0.0144 0.0087

Neptune 76847-05-30 00:58 G 29788999.41 29788999.54 29788999.71 0.0089 0.0064

Uranus 76847-10-11 03:51 G 29789133.46 29789133.66 29789133.87 0.0144 0.0047

Neptune 76848-01-10 14:10 G 29789224.93 29789225.09 29789225.27 0.0089 0.0056

Uranus 76848-05-24 16:20 G 29789359.96 29789360.18 29789360.40 0.0144 0.0006

Neptune 76848-08-23 03:08 G 29789450.45 29789450.63 29789450.81 0.0089 0.0048

Uranus 76849-01-06 04:48 G 29789586.49 29789586.70 29789586.92 0.0144 0.0036

Neptune 76849-04-05 15:36 G 29789675.97 29789676.15 29789676.36 0.0089 0.0041

Uranus 76849-08-20 17:17 G 29789813.03 29789813.22 29789813.40 0.0144 0.0076

Neptune 76849-11-17 04:34 G 29789901.50 29789901.69 29789901.91 0.0089 0.0033

Uranus 76850-04-04 05:17 G 29790039.60 29790039.72 29790039.86 0.0144 0.0117

Jupiter 76850-06-21 11:46 G 29790117.95 29790117.99 29790118.03 0.0504 0.0491

Neptune 76850-06-30 17:46 G 29790127.04 29790127.24 29790127.46 0.0089 0.0025

Neptune 76851-02-11 06:44 G 29790352.57 29790352.78 29790353.00 0.0089 0.0017

Jupiter 76851-02-12 23:17 G 29790354.28 29790354.47 29790354.66 0.0513 0.0143

Neptune 76851-09-24 19:41 G 29790578.11 29790578.32 29790578.54 0.0089 0.0009

Jupiter 76851-10-07 22:05 G 29790591.25 29790591.42 29790591.60 0.0523 0.0252

Neptune 76852-05-07 08:53 G 29790803.65 29790803.87 29790804.08 0.0089 0.0002

Neptune 76852-12-18 21:36 G 29791029.19 29791029.40 29791029.62 0.0089 0.0008

Neptune 76853-08-01 10:34 G 29791254.73 29791254.94 29791255.16 0.0090 0.0015

Neptune 76854-03-14 23:17 G 29791480.27 29791480.47 29791480.69 0.0090 0.0024

Neptune 76854-10-26 12:29 G 29791705.82 29791706.02 29791706.23 0.0090 0.0031

Saturn 76854-11-19 20:53 G 29791730.22 29791730.37 29791730.53 0.0287 0.0194

Neptune 76855-06-09 01:27 G 29791931.37 29791931.56 29791931.76 0.0090 0.0039

Saturn 76855-07-07 12:58 G 29791959.83 29791960.04 29791960.25 0.0286 0.0003

Neptune 76856-01-20 14:24 G 29792156.92 29792157.10 29792157.29 0.0090 0.0047

Saturn 76856-02-22 04:05 G 29792189.52 29792189.67 29792189.83 0.0285 0.0190

Mars 76856-03-05 08:24 G 29792201.72 29792201.85 29792201.98 0.1651 0.1067

Jupiter 76856-04-30 21:08 G 29792258.23 29792258.38 29792258.54 0.0519 0.0333

Neptune 76856-09-02 03:08 G 29792382.47 29792382.63 29792382.81 0.0090 0.0055

Jupiter 76856-12-24 06:44 G 29792495.57 29792495.78 29792495.98 0.0510 0.0064

Neptune 76857-04-15 15:51 G 29792608.02 29792608.16 29792608.33 0.0090 0.0063

Jupiter 76857-08-18 03:51 G 29792732.56 29792732.66 29792732.78 0.0501 0.0423

Neptune 76857-11-27 04:34 G 29792833.58 29792833.69 29792833.85 0.0090 0.0071

Neptune 76858-07-10 18:00 G 29793059.16 29793059.25 29793059.37 0.0090 0.0078

Neptune 76859-02-21 06:44 G 29793284.74 29793284.78 29793284.86 0.0090 0.0086

Jupiter 76862-10-18 22:20 G 29794620.25 29794620.43 29794620.61 0.0510 0.0244

Jupiter 76863-06-12 17:46 G 29794857.04 29794857.24 29794857.43 0.0520 0.0141

Jupiter 76868-01-04 12:15 G 29796523.91 29796524.01 29796524.12 0.0522 0.0444

Jupiter 76868-08-29 01:12 G 29796761.34 29796761.55 29796761.75 0.0512 0.0044

Jupiter 76869-04-23 01:56 G 29796998.43 29796998.58 29796998.74 0.0503 0.0330

Saturn 76869-12-16 01:27 G 29797235.45 29797235.56 29797235.69 0.0272 0.0225

Saturn 76870-08-02 09:51 G 29797464.70 29797464.91 29797465.12 0.0273 0.0057

Saturn 76871-03-19 18:44 G 29797694.09 29797694.28 29797694.48 0.0274 0.0114

Jupiter 76874-06-23 20:24 G 29798886.20 29798886.35 29798886.50 0.0507 0.0343

Jupiter 76875-02-15 12:15 G 29799122.80 29799123.01 29799123.21 0.0517 0.0031

Jupiter 76875-10-10 15:36 G 29799360.04 29799360.15 29799360.27 0.0527 0.0430

Jupiter 76880-05-03 19:56 G 29801027.13 29801027.33 29801027.53 0.0516 0.0153

Jupiter 76880-12-27 00:29 G 29801264.34 29801264.52 29801264.70 0.0506 0.0234

Saturn 76884-06-01 05:46 G 29802516.57 29802516.74 29802516.92 0.0287 0.0161

Saturn 76885-01-16 21:22 G 29802746.18 29802746.39 29802746.60 0.0286 0.0032

Mars 76885-05-27 08:24 G 29802876.71 29802876.85 29802876.98 0.1876 0.1216

Saturn 76885-09-03 12:00 G 29802975.88 29802976.00 29802976.14 0.0284 0.0222

Jupiter 76886-02-26 20:39 G 29803152.27 29803152.36 29803152.46 0.0505 0.0436

Jupiter 76886-10-21 09:22 G 29803388.69 29803388.89 29803389.09 0.0514 0.0079

Jupiter 76887-06-15 09:36 G 29803625.75 29803625.90 29803626.07 0.0524 0.0319

Uranus 76888-01-22 19:12 G 29803847.21 29803847.30 29803847.42 0.0134 0.0118

Mars 76888-03-04 02:53 G 29803888.49 29803888.62 29803888.76 0.1644 0.1038

Uranus 76888-09-05 00:29 G 29804073.36 29804073.52 29804073.69 0.0134 0.0085

Uranus 76889-04-19 05:32 G 29804299.54 29804299.73 29804299.94 0.0134 0.0053

Uranus 76889-12-01 10:48 G 29804525.74 29804525.95 29804526.17 0.0134 0.0021

Uranus 76890-07-15 16:05 G 29804751.96 29804752.17 29804752.39 0.0134 0.0012

Uranus 76891-02-26 21:08 G 29804978.18 29804978.38 29804978.59 0.0134 0.0044

Uranus 76891-10-11 02:10 G 29805204.42 29805204.59 29805204.77 0.0134 0.0077

Jupiter 76892-01-07 14:10 G 29805292.91 29805293.09 29805293.27 0.0518 0.0263

Uranus 76892-05-24 07:12 G 29805430.68 29805430.80 29805430.93 0.0134 0.0109

Jupiter 76892-08-31 21:51 G 29805530.21 29805530.41 29805530.61 0.0508 0.0132

Jupiter 76893-04-25 17:17 G 29805767.17 29805767.22 29805767.27 0.0499 0.0480

Jupiter 76898-06-26 08:10 G 29807654.65 29807654.84 29807655.03 0.0512 0.0183

Jupiter 76899-02-18 05:32 G 29807891.54 29807891.73 29807891.91 0.0522 0.0208

Saturn 76899-06-28 03:51 G 29808021.53 29808021.66 29808021.81 0.0272 0.0205

Saturn 76900-02-12 12:15 G 29808250.80 29808251.01 29808251.22 0.0274 0.0037

Saturn 76900-09-29 20:53 G 29808480.19 29808480.37 29808480.56 0.0275 0.0134

Jupiter 76903-09-13 06:44 G 29809558.64 29809558.78 29809558.93 0.0521 0.0373

Jupiter 76904-05-07 17:46 G 29809796.03 29809796.24 29809796.45 0.0511 0.0027

Jupiter 76904-12-30 16:20 G 29810033.06 29810033.18 29810033.32 0.0502 0.0392

Pluto 76908-02-19 14:24 G 29811179.00 29811179.10 29811179.24 0.0079 0.0066

Pluto 76908-10-02 00:58 G 29811404.32 29811404.54 29811404.76 0.0079 0.0001

Pluto 76909-05-15 10:34 G 29811629.84 29811629.94 29811630.07 0.0078 0.0067

Jupiter 76910-03-02 08:39 G 29811920.70 29811920.86 29811921.03 0.0509 0.0283

Jupiter 76910-10-25 02:53 G 29812157.42 29812157.62 29812157.81 0.0519 0.0098

Jupiter 76911-06-19 08:53 G 29812394.81 29812394.87 29812394.94 0.0528 0.0498

Saturn 76913-12-13 08:10 G 29813302.66 29813302.84 29813303.03 0.0287 0.0137

Saturn 76914-07-31 00:00 G 29813532.30 29813532.50 29813532.71 0.0286 0.0057

Saturn 76915-03-17 14:53 G 29813762.03 29813762.12 29813762.23 0.0284 0.0246

Jupiter 76915-05-18 19:27 G 29813824.24 29813824.31 29813824.38 0.0523 0.0485

Jupiter 76916-01-11 09:51 G 29814061.70 29814061.91 29814062.11 0.0514 0.0086

Jupiter 76916-09-04 12:00 G 29814298.83 29814299.00 29814299.16 0.0504 0.0292

Jupiter 76921-11-05 09:08 G 29816186.75 29816186.88 29816187.01 0.0506 0.0377

Mars 76922-01-01 19:56 G 29816244.23 29816244.33 29816244.43 0.1653 0.1308

Jupiter 76922-06-30 00:00 G 29816423.30 29816423.50 29816423.70 0.0516 0.0010

Jupiter 76923-02-22 02:24 G 29816660.47 29816660.60 29816660.73 0.0526 0.0389

Neptune 76927-01-26 21:22 G 29818095.34 29818095.39 29818095.47 0.0088 0.0084

Neptune 76927-09-09 10:20 G 29818320.85 29818320.93 29818321.06 0.0088 0.0077

Jupiter 76927-09-16 02:24 G 29818327.42 29818327.60 29818327.80 0.0516 0.0198

Neptune 76928-04-21 23:46 G 29818546.37 29818546.49 29818546.64 0.0088 0.0069

Jupiter 76928-05-10 08:24 G 29818564.66 29818564.85 29818565.04 0.0507 0.0192

Neptune 76928-12-03 13:27 G 29818771.90 29818772.06 29818772.22 0.0088 0.0061

Saturn 76929-01-08 12:58 G 29818807.88 29818808.04 29818808.21 0.0272 0.0172

Neptune 76929-07-17 02:10 G 29818997.43 29818997.59 29818997.79 0.0088 0.0054

Saturn 76929-08-25 21:22 G 29819037.18 29819037.39 29819037.61 0.0273 0.0004

Neptune 76930-02-27 15:36 G 29819222.97 29819223.15 29819223.35 0.0088 0.0046

Saturn 76930-04-12 06:15 G 29819266.60 29819266.76 29819266.93 0.0275 0.0168

Neptune 76930-10-11 04:34 G 29819448.50 29819448.69 29819448.90 0.0088 0.0039

Uranus 76930-10-27 20:39 G 29819465.23 29819465.36 29819465.53 0.0144 0.0107

Neptune 76931-05-24 17:46 G 29819674.04 29819674.24 29819674.46 0.0088 0.0031

Uranus 76931-06-11 09:22 G 29819691.70 29819691.89 29819692.09 0.0144 0.0066

Neptune 76932-01-05 07:12 G 29819899.59 29819899.80 29819900.02 0.0088 0.0023

Uranus 76932-01-23 22:05 G 29819918.20 29819918.42 29819918.64 0.0144 0.0025

Neptune 76932-08-17 20:10 G 29820125.13 29820125.34 29820125.57 0.0088 0.0016

Uranus 76932-09-06 10:20 G 29820144.72 29820144.93 29820145.15 0.0144 0.0016

Neptune 76933-03-31 09:22 G 29820350.67 29820350.89 29820351.12 0.0088 0.0008

Uranus 76933-04-20 22:34 G 29820371.25 29820371.44 29820371.65 0.0144 0.0057

Jupiter 76933-07-11 08:24 G 29820452.79 29820452.85 29820452.93 0.0504 0.0469

Neptune 76933-11-11 22:34 G 29820576.22 29820576.44 29820576.66 0.0088 0.0000

Uranus 76933-12-03 10:34 G 29820597.80 29820597.94 29820598.12 0.0144 0.0098

Jupiter 76934-03-04 19:41 G 29820689.13 29820689.32 29820689.52 0.0513 0.0119

Neptune 76934-06-25 11:32 G 29820801.76 29820801.98 29820802.21 0.0088 0.0008

Uranus 76934-07-17 23:03 G 29820824.41 29820824.46 29820824.53 0.0144 0.0138

Jupiter 76934-10-27 18:15 G 29820926.09 29820926.26 29820926.43 0.0523 0.0275

Neptune 76935-02-06 00:44 G 29821027.31 29821027.53 29821027.75 0.0088 0.0015

Neptune 76935-09-19 13:41 G 29821252.86 29821253.07 29821253.29 0.0088 0.0023

Neptune 76936-05-02 02:39 G 29821478.41 29821478.61 29821478.83 0.0088 0.0031

Neptune 76936-12-13 15:51 G 29821703.97 29821704.16 29821704.37 0.0088 0.0038

Neptune 76937-07-27 04:48 G 29821929.53 29821929.70 29821929.91 0.0088 0.0046

Neptune 76938-03-09 18:15 G 29822155.08 29822155.26 29822155.44 0.0088 0.0053

Neptune 76938-10-21 06:58 G 29822380.65 29822380.79 29822380.96 0.0088 0.0061

Jupiter 76939-05-21 19:27 G 29822593.14 29822593.31 29822593.47 0.0520 0.0308

Neptune 76939-06-03 20:24 G 29822606.21 29822606.35 29822606.49 0.0088 0.0068

Earth 76939-09-30 15:22 G 29822725.00 29822725.14 29822725.29 0.2704 0.1109

Moon 76939-09-30 16:20 G 29822725.06 29822725.18 29822725.31 0.2711 0.1398 *

Jupiter 76940-01-14 05:03 G 29822830.51 29822830.71 29822830.92 0.0510 0.0091

Neptune 76940-01-15 09:22 G 29822831.79 29822831.89 29822832.01 0.0088 0.0076

Neptune 76940-08-27 22:34 G 29823057.38 29823057.44 29823057.52 0.0088 0.0083

Jupiter 76940-09-07 02:39 G 29823067.52 29823067.61 29823067.70 0.0501 0.0446

Saturn 76943-06-25 18:15 G 29824089.06 29824089.26 29824089.46 0.0287 0.0102

Saturn 76944-02-10 09:36 G 29824318.70 29824318.90 29824319.10 0.0285 0.0090

Saturn 76944-09-27 00:15 G 29824548.48 29824548.51 29824548.56 0.0284 0.0278

Jupiter 76945-11-07 18:00 G 29824955.08 29824955.25 29824955.44 0.0510 0.0222

Jupiter 76946-07-02 13:27 G 29825191.87 29825192.06 29825192.26 0.0520 0.0164

Earth 76947-09-28 06:00 G 29825644.67 29825644.75 29825644.82 0.2704 0.2362

Moon 76947-09-28 10:34 G 29825644.86 29825644.94 29825645.02 0.2707 0.2251

Jupiter 76951-01-24 12:15 G 29826858.89 29826859.01 29826859.13 0.0522 0.0418

Jupiter 76951-09-19 00:58 G 29827096.34 29827096.54 29827096.75 0.0512 0.0018

Jupiter 76952-05-13 01:27 G 29827333.42 29827333.56 29827333.71 0.0503 0.0354

Mars 76953-12-31 14:53 G 29827930.97 29827931.12 29827931.27 0.1646 0.0814

Jupiter 76957-07-13 18:00 G 29829221.09 29829221.25 29829221.40 0.0508 0.0321

Jupiter 76958-03-07 10:20 G 29829457.73 29829457.93 29829458.13 0.0518 0.0054

Saturn 76958-07-21 16:20 G 29829594.01 29829594.18 29829594.36 0.0273 0.0150

Jupiter 76958-10-30 14:39 G 29829695.01 29829695.11 29829695.21 0.0527 0.0454

Saturn 76959-03-08 00:44 G 29829823.32 29829823.53 29829823.75 0.0274 0.0020

Saturn 76959-10-23 09:22 G 29830052.75 29830052.89 29830053.05 0.0275 0.0191

Jupiter 76963-05-24 19:27 G 29831362.12 29831362.31 29831362.52 0.0515 0.0126

Jupiter 76964-01-16 23:32 G 29831599.30 29831599.48 29831599.66 0.0505 0.0258

Jupiter 76969-03-18 19:27 G 29833487.20 29833487.31 29833487.43 0.0505 0.0414

Jupiter 76969-11-10 08:53 G 29833723.67 29833723.87 29833724.07 0.0515 0.0054

Jupiter 76970-07-05 10:05 G 29833960.77 29833960.92 29833961.07 0.0525 0.0345

Uranus 76971-09-23 04:48 G 29834405.68 29834405.70 29834405.75 0.0134 0.0132

Uranus 76972-05-06 09:51 G 29834631.78 29834631.91 29834632.07 0.0134 0.0101

Saturn 76972-05-20 04:34 G 29834645.63 29834645.69 29834645.77 0.0287 0.0271

Uranus 76972-12-18 15:08 G 29834857.95 29834858.13 29834858.32 0.0134 0.0068

Saturn 76973-01-04 20:53 G 29834875.17 29834875.37 29834875.57 0.0286 0.0077

Uranus 76973-08-01 20:39 G 29835084.15 29835084.36 29835084.56 0.0134 0.0036

Saturn 76973-08-22 12:29 G 29835104.83 29835105.02 29835105.22 0.0285 0.0115

Uranus 76974-03-16 01:41 G 29835310.35 29835310.57 29835310.78 0.0134 0.0003

Uranus 76974-10-28 06:29 G 29835536.57 29835536.77 29835536.99 0.0134 0.0029

Jupiter 76975-01-27 10:20 G 29835627.75 29835627.93 29835628.12 0.0518 0.0239

Uranus 76975-06-11 11:46 G 29835762.80 29835762.99 29835763.18 0.0134 0.0061

Jupiter 76975-09-21 17:32 G 29835865.03 29835865.23 29835865.43 0.0508 0.0153

Uranus 76976-01-23 16:48 G 29835989.05 29835989.20 29835989.36 0.0134 0.0094

Jupiter 76976-05-15 12:29 G 29836102.02 29836102.02 29836102.04 0.0499 0.0499

Uranus 76976-09-05 22:05 G 29836215.35 29836215.42 29836215.49 0.0134 0.0126

Jupiter 76980-11-21 20:53 G 29837753.36 29837753.37 29837753.39 0.0503 0.0501

Jupiter 76981-07-16 07:41 G 29837989.62 29837989.82 29837990.01 0.0512 0.0157

Jupiter 76982-03-10 05:03 G 29838226.53 29838226.71 29838226.89 0.0522 0.0234

Jupiter 76986-10-02 01:41 G 29839893.42 29839893.57 29839893.72 0.0520 0.0352

Jupiter 76987-05-27 12:15 G 29840130.81 29840131.01 29840131.22 0.0511 0.0047

Mars 76987-10-30 07:41 G 29840286.76 29840286.82 29840286.89 0.1655 0.1536

Jupiter 76988-01-19 11:03 G 29840367.85 29840367.96 29840368.08 0.0502 0.0410

Saturn 76988-02-01 01:12 G 29840380.36 29840380.55 29840380.75 0.0273 0.0117

Saturn 76988-09-17 09:51 G 29840609.70 29840609.91 29840610.12 0.0274 0.0052

Saturn 76989-05-04 18:44 G 29840839.17 29840839.28 29840839.41 0.0275 0.0224

Jupiter 76993-03-21 04:48 G 29842255.53 29842255.70 29842255.87 0.0509 0.0259

Jupiter 76993-11-12 22:20 G 29842492.24 29842492.43 29842492.63 0.0519 0.0122

Jupiter 76994-07-08 04:20 G 29842729.65 29842729.68 29842729.72 0.0528 0.0519

Jupiter 76998-06-06 16:34 G 29844159.10 29844159.19 29844159.28 0.0524 0.0463

Jupiter 76999-01-30 07:12 G 29844396.60 29844396.80 29844397.01 0.0514 0.0061

Jupiter 76999-09-24 09:36 G 29844633.75 29844633.90 29844634.06 0.0504 0.0317

78TH MILLENNIUM CE

This is a list of transits of Venus in the 78th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**77001-12-01 16:05**	**G**	**29845432.06**	**29845432.17**	**29845432.30**	**0.0287**	**0.0234**	
Saturn	**77002-07-19 08:10**	**G**	**29845661.63**	**29845661.84**	**29845662.05**	**0.0286**	**0.0041**	
Saturn	**77003-03-05 23:17**	**G**	**29845891.30**	**29845891.47**	**29845891.65**	**0.0285**	**0.0151**	
Jupiter	**77004-11-25 04:34**	**G**	**29846521.55**	**29846521.69**	**29846521.83**	**0.0506**	**0.0356**	
Jupiter	**77005-07-19 18:58**	**G**	**29846758.09**	**29846758.29**	**29846758.49**	**0.0516**	**0.0014**	
Jupiter	**77006-03-13 21:08**	**G**	**29846995.26**	**29846995.38**	**29846995.51**	**0.0526**	**0.0410**	
Neptune	**77009-10-25 21:36**	**G**	**29848317.39**	**29848317.40**	**29848317.46**	**0.0089**	**0.0088**	
Neptune	**77010-06-08 10:48**	**G**	**29848542.87**	**29848542.95**	**29848543.06**	**0.0089**	**0.0080**	
Jupiter	**77010-10-06 01:41**	**G**	**29848662.37**	**29848662.57**	**29848662.76**	**0.0517**	**0.0170**	
Neptune	**77011-01-19 23:46**	**G**	**29848768.37**	**29848768.49**	**29848768.62**	**0.0089**	**0.0073**	
Jupiter	**77011-05-31 07:27**	**G**	**29848899.62**	**29848899.81**	**29848899.99**	**0.0507**	**0.0218**	
Neptune	**77011-09-02 12:44**	**G**	**29848993.88**	**29848994.03**	**29848994.18**	**0.0089**	**0.0065**	
Neptune	**77012-04-15 01:12**	**G**	**29849219.40**	**29849219.55**	**29849219.73**	**0.0089**	**0.0057**	
Neptune	**77012-11-26 13:56**	**G**	**29849444.92**	**29849445.08**	**29849445.28**	**0.0089**	**0.0050**	
Neptune	**77013-07-10 03:08**	**G**	**29849670.45**	**29849670.63**	**29849670.83**	**0.0089**	**0.0042**	
Neptune	**77014-02-20 16:05**	**G**	**29849895.97**	**29849896.17**	**29849896.38**	**0.0089**	**0.0034**	
Uranus	**77014-06-28 01:27**	**G**	**29850023.48**	**29850023.56**	**29850023.68**	**0.0144**	**0.0127**	
Neptune	**77014-10-04 05:03**	**G**	**29850121.50**	**29850121.71**	**29850121.92**	**0.0089**	**0.0026**	
Uranus	**77015-02-09 14:10**	**G**	**29850249.92**	**29850250.09**	**29850250.27**	**0.0144**	**0.0086**	
Neptune	**77015-05-17 18:00**	**G**	**29850347.04**	**29850347.25**	**29850347.46**	**0.0089**	**0.0018**	

Uranus 77015-09-24 02:39 G 29850476.40 29850476.61 29850476.82 0.0144 0.0045

Neptune 77015-12-29 06:58 G 29850572.57 29850572.79 29850573.00 0.0089 0.0010

Uranus 77016-05-07 15:08 G 29850702.91 29850703.13 29850703.35 0.0144 0.0005

Jupiter 77016-07-31 05:03 G 29850787.62 29850787.71 29850787.80 0.0504 0.0449

Neptune 77016-08-10 19:56 G 29850798.11 29850798.33 29850798.54 0.0089 0.0002

Uranus 77016-12-20 03:08 G 29850929.43 29850929.63 29850929.85 0.0144 0.0037

Saturn 77016-12-27 21:51 G 29850937.35 29850937.41 29850937.47 0.0272 0.0259

Neptune 77017-03-24 08:39 G 29851023.65 29851023.86 29851024.08 0.0089 0.0006

Jupiter 77017-03-24 16:48 G 29851024.00 29851024.20 29851024.39 0.0513 0.0096 *

Uranus 77017-08-03 15:36 G 29851155.97 29851156.15 29851156.34 0.0144 0.0077

Saturn 77017-08-14 05:46 G 29851166.53 29851166.74 29851166.94 0.0273 0.0093

Neptune 77017-11-04 21:22 G 29851249.19 29851249.39 29851249.62 0.0089 0.0015

Jupiter 77017-11-16 15:51 G 29851261.00 29851261.16 29851261.33 0.0523 0.0299

Uranus 77018-03-18 03:36 G 29851382.54 29851382.65 29851382.79 0.0144 0.0118

Saturn 77018-03-31 13:56 G 29851395.88 29851396.08 29851396.29 0.0274 0.0077

Neptune 77018-06-18 10:48 G 29851474.74 29851474.95 29851475.16 0.0090 0.0022

Saturn 77018-11-15 22:48 G 29851625.37 29851625.45 29851625.55 0.0275 0.0248

Neptune 77019-01-29 23:46 G 29851700.28 29851700.49 29851700.69 0.0090 0.0030

Neptune 77019-09-12 12:29 G 29851925.83 29851926.02 29851926.22 0.0090 0.0038

Mars 77019-10-30 02:53 G 29851973.45 29851973.62 29851973.78 0.1648 0.0590

Neptune 77020-04-25 01:12 G 29852151.38 29852151.55 29852151.75 0.0090 0.0046

Neptune 77020-12-06 14:10 G 29852376.93 29852377.09 29852377.27 0.0090 0.0054

Neptune 77021-07-20 03:08 G 29852602.49 29852602.63 29852602.80 0.0090 0.0062

Neptune 77022-03-02 15:51 G 29852828.05 29852828.16 29852828.32 0.0090 0.0070

Jupiter 77022-06-10 18:58 G 29852928.12 29852928.29 29852928.46 0.0519 0.0281

Neptune 77022-10-14 05:17 G 29853053.61 29853053.72 29853053.83 0.0090 0.0077

Jupiter 77023-02-03 03:51 G 29853165.47 29853165.66 29853165.87 0.0509 0.0116

Neptune 77023-05-27 18:00 G 29853279.19 29853279.25 29853279.33 0.0090 0.0085

Jupiter 77023-09-28 00:44 G 29853402.46 29853402.53 29853402.60 0.0500 0.0467

Jupiter 77028-11-27 16:34 G 29855290.01 29855290.19 29855290.38 0.0511 0.0198

Jupiter	77029-07-22 12:44 G	29855526.85	29855527.03	29855527.22	0.0521	0.0190
Saturn	77031-06-13 18:44 G	29856218.14	29856218.28	29856218.42	0.0287	0.0209
Saturn	77032-01-29 10:34 G	29856447.73	29856447.94	29856448.15	0.0286	0.0018
Saturn	77032-09-15 01:56 G	29856677.42	29856677.58	29856677.75	0.0285	0.0175
Jupiter	77034-02-13 08:39 G	29857193.74	29857193.86	29857194.00	0.0522	0.0394
Jupiter	77034-10-08 20:53 G	29857431.16	29857431.37	29857431.57	0.0512	0.0007
Jupiter	77035-06-02 20:53 G	29857668.23	29857668.37	29857668.51	0.0503	0.0374
Jupiter	77040-08-02 16:34 G	29859556.03	29859556.19	29859556.35	0.0508	0.0296
Jupiter	77041-03-27 09:22 G	29859792.69	29859792.89	29859793.09	0.0518	0.0081
Jupiter	77041-11-19 13:56 G	29860030.00	29860030.08	29860030.16	0.0527	0.0478
Jupiter	77045-10-18 22:34 G	29861459.39	29861459.44	29861459.50	0.0524	0.0505
Jupiter	77046-06-13 14:10 G	29861696.89	29861697.09	29861697.29	0.0515	0.0104
Saturn	77046-07-10 05:17 G	29861723.61	29861723.72	29861723.84	0.0272	0.0230
Jupiter	77047-02-05 17:46 G	29861934.07	29861934.24	29861934.42	0.0505	0.0278
Saturn	77047-02-24 13:56 G	29861952.87	29861953.08	29861953.28	0.0273	0.0063
Saturn	77047-10-11 22:34 G	29862182.25	29862182.44	29862182.64	0.0274	0.0108
Mars	77049-01-20 11:46 G	29862648.86	29862648.99	29862649.11	0.1879	0.1327
Jupiter	77052-04-07 15:22 G	29863822.02	29863822.14	29863822.27	0.0505	0.0392
Jupiter	77052-11-30 04:34 G	29864058.48	29864058.69	29864058.89	0.0515	0.0032
Jupiter	77053-07-25 05:17 G	29864295.57	29864295.72	29864295.86	0.0524	0.0366
Uranus	77056-01-05 20:10 G	29865190.23	29865190.34	29865190.45	0.0134	0.0115
Uranus	77056-08-19 01:12 G	29865416.39	29865416.55	29865416.73	0.0134	0.0083
Uranus	77057-04-02 06:15 G	29865642.57	29865642.76	29865642.97	0.0134	0.0051
Uranus	77057-11-14 11:32 G	29865868.77	29865868.98	29865869.19	0.0134	0.0018
Jupiter	77058-02-16 06:58 G	29865962.61	29865962.79	29865962.98	0.0518	0.0216
Uranus	77058-06-28 16:34 G	29866094.98	29866095.19	29866095.41	0.0134	0.0015
Jupiter	77058-10-11 14:39 G	29866199.92	29866200.11	29866200.30	0.0508	0.0177
Uranus	77059-02-09 21:51 G	29866321.20	29866321.41	29866321.61	0.0134	0.0047
Uranus	77059-09-24 02:24 G	29866547.44	29866547.60	29866547.79	0.0134	0.0080
Uranus	77060-05-07 07:27 G	29866773.71	29866773.81	29866773.95	0.0134	0.0112

Saturn 77060-12-24 06:44 G 29867004.62 29867004.78 29867004.95 0.0287 0.0172

Saturn 77061-08-10 22:34 G 29867234.23 29867234.44 29867234.65 0.0286 0.0021

Saturn 77062-03-28 13:27 G 29867463.93 29867464.06 29867464.21 0.0285 0.0211

Jupiter 77063-12-12 16:20 G 29868088.13 29868088.18 29868088.24 0.0502 0.0481

Jupiter 77064-08-05 02:24 G 29868324.41 29868324.60 29868324.79 0.0512 0.0136

Jupiter 77065-03-29 23:32 G 29868561.30 29868561.48 29868561.65 0.0522 0.0255

Pluto 77066-07-19 17:17 G 29869038.08 29869038.22 29869038.40 0.0065 0.0045

Pluto 77067-03-01 22:05 G 29869263.21 29869263.42 29869263.64 0.0066 0.0007

Pluto 77067-10-13 02:39 G 29869488.42 29869488.61 29869488.81 0.0066 0.0031

Jupiter 77069-10-22 00:00 G 29870228.34 29870228.50 29870228.66 0.0521 0.0327

Jupiter 77070-06-16 10:48 G 29870465.75 29870465.95 29870466.16 0.0511 0.0074

Jupiter 77071-02-08 09:36 G 29870702.80 29870702.90 29870703.01 0.0502 0.0432

Saturn 77076-01-20 10:48 G 29872509.81 29872509.95 29872510.09 0.0272 0.0205

Jupiter 77076-04-10 01:12 G 29872590.37 29872590.55 29872590.72 0.0509 0.0238

Saturn 77076-09-05 18:44 G 29872739.07 29872739.28 29872739.50 0.0273 0.0037

Jupiter 77076-12-02 19:12 G 29872827.11 29872827.30 29872827.49 0.0519 0.0144

Earth 77077-03-31 12:44 G 29872945.89 29872946.03 29872946.16 0.2628 0.1380

Moon 77077-03-31 16:05 G 29872946.05 29872946.17 29872946.29 0.2623 0.1844 *

Saturn 77077-04-23 03:22 G 29872968.45 29872968.64 29872968.83 0.0274 0.0133

Jupiter 77081-06-26 16:05 G 29874494.06 29874494.17 29874494.28 0.0523 0.0437

Jupiter 77082-02-19 06:15 G 29874731.55 29874731.76 29874731.96 0.0513 0.0034

Jupiter 77082-10-14 07:56 G 29874968.68 29874968.83 29874968.99 0.0504 0.0340

Moon 77085-03-29 03:22 G 29875865.54 29875865.64 29875865.73 0.2622 0.2177

Earth 77085-03-29 04:20 G 29875865.56 29875865.68 29875865.80 0.2629 0.1749 *

Mars 77085-08-26 14:39 G 29876015.94 29876016.11 29876016.28 0.1650 0.0362

Jupiter 77087-12-15 02:10 G 29876856.44 29876856.59 29876856.74 0.0507 0.0335

Jupiter 77088-08-07 17:32 G 29877093.03 29877093.23 29877093.43 0.0517 0.0037

Jupiter 77089-04-01 20:24 G 29877330.24 29877330.35 29877330.47 0.0526 0.0434

Saturn 77090-07-06 09:51 G 29877790.73 29877790.91 29877791.09 0.0287 0.0147

Saturn 77091-02-21 01:27 G 29878020.35 29878020.56 29878020.77 0.0286 0.0045

Neptune 77091-05-01 07:12 G 29878089.78 29878089.80 29878089.88 0.0088 0.0087

Saturn 77091-10-08 16:20 G 29878250.07 29878250.18 29878250.30 0.0284 0.0235

Neptune 77091-12-12 20:53 G 29878315.29 29878315.37 29878315.48 0.0088 0.0078

Neptune 77092-07-25 09:51 G 29878540.80 29878540.91 29878541.07 0.0088 0.0071

Neptune 77093-03-07 23:17 G 29878766.33 29878766.47 29878766.64 0.0088 0.0063

Neptune 77093-10-19 12:44 G 29878991.86 29878992.03 29878992.21 0.0088 0.0055

Jupiter 77093-10-24 22:05 G 29878997.23 29878997.42 29878997.62 0.0516 0.0147

Neptune 77094-06-02 01:41 G 29879217.40 29879217.57 29879217.77 0.0088 0.0048

Jupiter 77094-06-19 03:08 G 29879234.45 29879234.63 29879234.81 0.0506 0.0239

Neptune 77095-01-13 15:08 G 29879442.94 29879443.13 29879443.34 0.0088 0.0040

Neptune 77095-08-27 04:34 G 29879668.48 29879668.69 29879668.90 0.0088 0.0032

Neptune 77096-04-08 17:17 G 29879894.02 29879894.22 29879894.45 0.0088 0.0025

Neptune 77096-11-20 06:44 G 29880119.57 29880119.78 29880120.00 0.0088 0.0017

Neptune 77097-07-03 19:56 G 29880345.11 29880345.33 29880345.56 0.0088 0.0009

Neptune 77098-02-14 09:08 G 29880570.66 29880570.88 29880571.10 0.0088 0.0001

Neptune 77098-09-27 22:05 G 29880796.20 29880796.42 29880796.65 0.0088 0.0007

Uranus 77098-10-09 18:58 G 29880808.16 29880808.29 29880808.45 0.0144 0.0106

Neptune 77099-05-11 11:17 G 29881021.75 29881021.97 29881022.19 0.0088 0.0014

Uranus 77099-05-24 07:27 G 29881034.62 29881034.81 29881035.02 0.0144 0.0065

Jupiter 77099-08-20 03:08 G 29881122.53 29881122.63 29881122.74 0.0504 0.0426

Neptune 77099-12-23 00:15 G 29881247.31 29881247.51 29881247.74 0.0088 0.0022

Uranus 77100-01-05 20:10 G 29881261.12 29881261.34 29881261.55 0.0144 0.0024

Jupiter 77100-04-13 15:22 G 29881358.94 29881359.14 29881359.34 0.0514 0.0070

Neptune 77100-08-05 13:12 G 29881472.86 29881473.05 29881473.28 0.0088 0.0030

Uranus 77100-08-20 08:24 G 29881487.63 29881487.85 29881488.07 0.0144 0.0017

Jupiter 77100-12-06 14:53 G 29881595.97 29881596.12 29881596.28 0.0523 0.0325

Neptune 77101-03-19 02:24 G 29881698.41 29881698.60 29881698.81 0.0088 0.0037

Uranus 77101-04-03 20:24 G 29881714.16 29881714.35 29881714.56 0.0144 0.0058

Neptune 77101-10-30 15:22 G 29881923.96 29881924.14 29881924.34 0.0088 0.0045

Uranus 77101-11-16 08:39 G 29881940.71 29881940.86 29881941.03 0.0144 0.0098

Neptune 77102-06-13 04:48 G 29882149.52 29882149.70 29882149.88 0.0088 0.0052

Uranus 77102-06-30 20:39 G 29882167.32 29882167.36 29882167.44 0.0144 0.0139

Neptune 77103-01-24 17:46 G 29882375.09 29882375.24 29882375.41 0.0088 0.0060

Neptune 77103-09-07 06:29 G 29882600.65 29882600.77 29882600.94 0.0088 0.0068

Neptune 77104-04-19 19:56 G 29882826.23 29882826.33 29882826.45 0.0088 0.0075

Neptune 77104-12-01 08:39 G 29883051.81 29883051.86 29883051.96 0.0088 0.0083

Jupiter 77105-06-30 14:10 G 29883262.91 29883263.09 29883263.27 0.0519 0.0259

Saturn 77105-08-02 17:17 G 29883296.06 29883296.22 29883296.39 0.0273 0.0177

Jupiter 77106-02-22 22:48 G 29883500.25 29883500.45 29883500.65 0.0509 0.0137

Saturn 77106-03-20 01:56 G 29883525.37 29883525.58 29883525.79 0.0274 0.0008

Jupiter 77106-10-17 19:12 G 29883737.26 29883737.30 29883737.35 0.0500 0.0486

Saturn 77106-11-04 10:48 G 29883754.79 29883754.95 29883755.13 0.0275 0.0163

Jupiter 77111-12-18 12:29 G 29885624.83 29885625.02 29885625.21 0.0511 0.0176

Jupiter 77112-08-11 08:10 G 29885861.65 29885861.84 29885862.02 0.0520 0.0211

Mars 77114-11-18 15:08 G 29886690.97 29886691.13 29886691.30 0.1877 0.0639

Jupiter 77117-03-05 04:48 G 29887528.56 29887528.70 29887528.85 0.0522 0.0372

Jupiter 77117-10-28 17:32 G 29887766.03 29887766.23 29887766.44 0.0512 0.0030

Jupiter 77118-06-22 18:00 G 29888003.13 29888003.25 29888003.38 0.0503 0.0396

Saturn 77120-01-17 21:36 G 29888577.20 29888577.40 29888577.59 0.0287 0.0110

Saturn 77120-09-03 12:58 G 29888806.84 29888807.04 29888807.25 0.0286 0.0083

Saturn 77121-04-21 03:36 G 29889036.60 29889036.65 29889036.72 0.0284 0.0271

Jupiter 77123-08-23 11:46 G 29889890.82 29889890.99 29889891.16 0.0508 0.0275

Jupiter 77124-04-16 03:51 G 29890127.47 29890127.66 29890127.86 0.0517 0.0101

Jupiter 77124-12-09 08:10 G 29890364.78 29890364.84 29890364.90 0.0527 0.0497

Jupiter 77128-11-07 20:10 G 29891794.27 29891794.34 29891794.43 0.0525 0.0483

Jupiter 77129-07-03 12:29 G 29892031.82 29892032.02 29892032.22 0.0515 0.0079

Jupiter 77130-02-25 16:20 G 29892269.02 29892269.18 29892269.35 0.0505 0.0301

Saturn 77135-02-12 23:03 G 29894082.29 29894082.46 29894082.65 0.0273 0.0151

Jupiter 77135-04-28 11:32 G 29894156.85 29894156.98 29894157.12 0.0505 0.0372

Saturn 77135-09-30 07:27 G 29894311.60 29894311.81 29894312.03 0.0274 0.0020

Jupiter 77135-12-21 00:58 G 29894393.33 29894393.54 29894393.74 0.0515 0.0013

Saturn 77136-05-16 16:20 G 29894541.03 29894541.18 29894541.34 0.0275 0.0189

Jupiter 77136-08-14 01:56 G 29894630.45 29894630.58 29894630.72 0.0525 0.0388

Uranus 77139-09-06 05:17 G 29895748.67 29895748.72 29895748.78 0.0134 0.0130

Uranus 77140-04-19 10:20 G 29895974.79 29895974.93 29895975.08 0.0134 0.0098

Uranus 77140-12-01 15:22 G 29896200.96 29896201.14 29896201.34 0.0134 0.0066

Jupiter 77141-03-08 06:15 G 29896297.58 29896297.76 29896297.96 0.0518 0.0190

Uranus 77141-07-15 20:39 G 29896427.16 29896427.36 29896427.58 0.0134 0.0034

Jupiter 77141-10-31 13:27 G 29896534.87 29896535.06 29896535.25 0.0508 0.0202

Uranus 77142-02-27 01:56 G 29896653.36 29896653.58 29896653.80 0.0134 0.0001

Uranus 77142-10-11 06:58 G 29896879.58 29896879.79 29896880.00 0.0134 0.0031

Uranus 77143-05-25 12:00 G 29897105.81 29897106.00 29897106.19 0.0134 0.0064

Uranus 77144-01-06 16:48 G 29897332.07 29897332.20 29897332.36 0.0134 0.0096

Uranus 77144-08-19 22:05 G 29897558.37 29897558.42 29897558.50 0.0134 0.0128

Jupiter 77147-01-01 13:41 G 29898422.99 29898423.07 29898423.15 0.0503 0.0461

Jupiter 77147-08-26 00:15 G 29898659.31 29898659.51 29898659.71 0.0512 0.0112

Jupiter 77148-04-18 22:05 G 29898896.25 29898896.42 29898896.59 0.0522 0.0280

Saturn 77148-12-12 08:24 G 29899133.80 29899133.85 29899133.90 0.0287 0.0277

Saturn 77149-07-30 00:29 G 29899363.32 29899363.52 29899363.72 0.0286 0.0085

Saturn 77150-03-16 15:51 G 29899592.96 29899593.16 29899593.35 0.0285 0.0106

Mars 77151-06-25 02:24 G 29900058.43 29900058.60 29900058.77 0.1652 0.0133

Jupiter 77152-11-10 21:51 G 29900563.24 29900563.41 29900563.57 0.0520 0.0301

Jupiter 77153-07-06 07:41 G 29900800.62 29900800.82 29900801.03 0.0510 0.0097

Jupiter 77154-02-28 05:46 G 29901037.66 29901037.74 29901037.83 0.0501 0.0452

Pluto 77154-11-02 04:34 G 29901284.49 29901284.69 29901284.92 0.0079 0.0018

Pluto 77155-06-15 14:53 G 29901509.95 29901510.12 29901510.29 0.0078 0.0049

Jupiter 77159-04-30 23:32 G 29902925.30 29902925.48 29902925.67 0.0510 0.0214

Jupiter 77159-12-23 18:15 G 29903162.07 29903162.26 29903162.45 0.0520 0.0171

Jupiter 77164-07-16 12:15 G 29904828.89 29904829.01 29904829.14 0.0523 0.0414

Saturn 77164-08-25 04:20 G 29904868.50 29904868.68 29904868.88 0.0273 0.0125

Jupiter 77165-03-11 01:56 G 29905066.37 29905066.58 29905066.78 0.0513 0.0013

Saturn 77165-04-11 12:58 G 29905097.83 29905098.04 29905098.26 0.0274 0.0046

Jupiter 77165-11-03 03:08 G 29905303.50 29905303.63 29905303.78 0.0504 0.0361

Saturn 77165-11-26 22:20 G 29905327.30 29905327.43 29905327.56 0.0275 0.0216

Jupiter 77171-01-03 22:34 G 29907191.29 29907191.44 29907191.60 0.0507 0.0313

Jupiter 77171-08-28 13:27 G 29907427.86 29907428.06 29907428.26 0.0516 0.0059

Jupiter 77172-04-21 15:51 G 29907665.07 29907665.16 29907665.26 0.0526 0.0455

Neptune 77174-09-10 22:05 G 29908537.36 29908537.42 29908537.53 0.0089 0.0083

Neptune 77175-04-24 11:03 G 29908762.86 29908762.96 29908763.10 0.0089 0.0075

Neptune 77175-12-06 00:00 G 29908988.37 29908988.50 29908988.66 0.0089 0.0067

Neptune 77176-07-18 12:58 G 29909213.89 29909214.04 29909214.22 0.0089 0.0059

Jupiter 77176-11-13 18:44 G 29909332.08 29909332.28 29909332.48 0.0516 0.0124

Neptune 77177-03-01 01:56 G 29909439.41 29909439.58 29909439.76 0.0089 0.0051

Jupiter 77177-07-09 00:15 G 29909569.34 29909569.51 29909569.69 0.0507 0.0262

Neptune 77177-10-12 14:24 G 29909664.93 29909665.10 29909665.31 0.0089 0.0044

Neptune 77178-05-26 03:22 G 29909890.46 29909890.64 29909890.86 0.0089 0.0036

Saturn 77178-06-24 19:56 G 29909920.23 29909920.33 29909920.45 0.0288 0.0242

Neptune 77179-01-06 16:20 G 29910115.99 29910116.18 29910116.40 0.0089 0.0028

Saturn 77179-02-09 12:00 G 29910149.80 29910150.00 29910150.21 0.0287 0.0049

Neptune 77179-08-20 05:17 G 29910341.52 29910341.72 29910341.94 0.0089 0.0020

Saturn 77179-09-27 03:22 G 29910379.46 29910379.64 29910379.82 0.0285 0.0143

Neptune 77180-04-01 18:15 G 29910567.05 29910567.26 29910567.48 0.0089 0.0011

Mars 77180-09-14 18:15 G 29910733.09 29910733.26 29910733.44 0.1873 0.0057

Neptune 77180-11-13 07:12 G 29910792.59 29910792.80 29910793.02 0.0089 0.0003

Neptune 77181-06-26 20:10 G 29911018.13 29911018.34 29911018.56 0.0089 0.0006

Neptune 77182-02-07 09:22 G 29911243.67 29911243.89 29911244.10 0.0089 0.0013

Uranus 77182-06-10 00:15 G 29911366.42 29911366.51 29911366.64 0.0144 0.0125

Jupiter 77182-09-08 23:17 G 29911457.35 29911457.47 29911457.59 0.0504 0.0406

Neptune 77182-09-20 22:05 G 29911469.21 29911469.42 29911469.64 0.0089 0.0021

Earth 77182-10-02 16:20 G 29911481.03 29911481.18 29911481.32 0.2704 0.1148

Moon 77182-10-02 18:00 G 29911481.10 29911481.25 29911481.39 0.2698 0.1394 *

Uranus 77183-01-22 13:12 G 29911592.87 29911593.05 29911593.23 0.0144 0.0084

Jupiter 77183-05-03 10:48 G 29911693.75 29911693.95 29911694.15 0.0513 0.0049

Neptune 77183-05-04 11:03 G 29911694.76 29911694.96 29911695.17 0.0090 0.0029

Uranus 77183-09-06 01:12 G 29911819.35 29911819.55 29911819.77 0.0144 0.0044

Neptune 77183-12-16 00:00 G 29911920.30 29911920.50 29911920.70 0.0090 0.0037

Jupiter 77183-12-26 09:36 G 29911930.76 29911930.90 29911931.06 0.0523 0.0345

Uranus 77184-04-19 13:41 G 29912045.85 29912046.07 29912046.29 0.0144 0.0003

Neptune 77184-07-28 12:58 G 29912145.86 29912146.04 29912146.23 0.0090 0.0045

Uranus 77184-12-02 01:56 G 29912272.37 29912272.58 29912272.79 0.0144 0.0038

Neptune 77185-03-11 01:56 G 29912371.41 29912371.58 29912371.76 0.0090 0.0053

Uranus 77185-07-16 13:56 G 29912498.91 29912499.08 29912499.28 0.0144 0.0079

Neptune 77185-10-22 14:39 G 29912596.97 29912597.11 29912597.28 0.0090 0.0061

Uranus 77186-02-28 02:24 G 29912725.49 29912725.60 29912725.73 0.0144 0.0119

Neptune 77186-06-05 03:36 G 29912822.53 29912822.65 29912822.80 0.0090 0.0069

Neptune 77187-01-16 16:34 G 29913048.09 29913048.19 29913048.32 0.0090 0.0077

Neptune 77187-08-30 05:17 G 29913273.67 29913273.72 29913273.82 0.0090 0.0085

Jupiter 77188-07-19 12:00 G 29913597.82 29913598.00 29913598.19 0.0519 0.0235

Jupiter 77189-03-13 21:08 G 29913835.18 29913835.38 29913835.57 0.0509 0.0161

Moon 77190-09-30 03:51 G 29914400.57 29914400.66 29914400.75 0.2698 0.2266

Earth 77190-09-30 06:58 G 29914400.71 29914400.79 29914400.87 0.2703 0.2306 *

Saturn 77193-07-21 02:24 G 29915425.56 29915425.60 29915425.66 0.0272 0.0263

Saturn 77194-03-07 10:20 G 29915654.74 29915654.93 29915655.14 0.0273 0.0098

Jupiter 77194-05-15 00:00 G 29915723.48 29915723.50 29915723.54 0.0502 0.0495

Saturn 77194-10-22 18:58 G 29915884.09 29915884.29 29915884.50 0.0274 0.0072

Jupiter 77195-01-06 08:53 G 29915959.68 29915959.87 29915960.07 0.0511 0.0154

Saturn 77195-06-09 03:51 G 29916113.57 29916113.66 29916113.77 0.0275 0.0243

Jupiter 77195-08-31 04:48 G 29916196.52 29916196.70 29916196.88 0.0521 0.0234

Jupiter 77200-03-24 04:48 G 29917863.55 29917863.70 29917863.85 0.0522 0.0346

Jupiter 77200-11-16 17:03 G 29918101.01 29918101.21 29918101.42 0.0512 0.0056

Jupiter 77201-07-11 16:48 G 29918338.10 29918338.20 29918338.32 0.0502 0.0420

Jupiter 77206-09-11 09:22 G 29920225.72 29920225.89 29920226.07 0.0508 0.0253

Jupiter 77207-05-06 02:24 G 29920462.40 29920462.60 29920462.79 0.0518 0.0126

Jupiter 77207-12-29 07:27 G 29920699.78 29920699.81 29920699.83 0.0528 0.0522

Saturn 77208-01-04 22:34 G 29920706.32 29920706.44 29920706.59 0.0287 0.0217

Saturn 77208-08-21 14:39 G 29920935.90 29920936.11 29920936.32 0.0286 0.0024

Saturn 77209-04-08 05:46 G 29921165.57 29921165.74 29921165.91 0.0285 0.0166

Jupiter 77211-11-27 19:27 G 29922129.21 29922129.31 29922129.41 0.0524 0.0456

Jupiter 77212-07-22 10:34 G 29922366.74 29922366.94 29922367.15 0.0514 0.0054

Jupiter 77213-03-16 13:27 G 29922603.91 29922604.06 29922604.22 0.0505 0.0325

Mars 77217-04-21 14:10 G 29924100.91 29924101.09 29924101.26 0.1654 0.0102

Jupiter 77218-05-17 10:20 G 29924491.78 29924491.93 29924492.07 0.0506 0.0348

Jupiter 77219-01-09 00:15 G 29924728.31 29924728.51 29924728.71 0.0515 0.0020

Jupiter 77219-09-03 01:56 G 29924965.46 29924965.58 29924965.70 0.0525 0.0415

Saturn 77223-01-31 06:00 G 29926211.66 29926211.75 29926211.85 0.0272 0.0241

Saturn 77223-09-17 14:24 G 29926440.89 29926441.10 29926441.31 0.0273 0.0074

Uranus 77223-12-18 19:41 G 29926533.22 29926533.32 29926533.45 0.0135 0.0113

Jupiter 77224-03-27 03:22 G 29926632.45 29926632.64 29926632.84 0.0517 0.0165

Saturn 77224-05-03 23:03 G 29926670.27 29926670.46 29926670.67 0.0274 0.0096

Uranus 77224-08-01 00:58 G 29926759.38 29926759.54 29926759.72 0.0134 0.0081

Jupiter 77224-11-19 09:51 G 29926869.73 29926869.91 29926870.10 0.0507 0.0225

Saturn 77224-12-19 08:24 G 29926899.81 29926899.85 29926899.91 0.0275 0.0267

Uranus 77225-03-15 06:15 G 29926985.56 29926985.76 29926985.97 0.0134 0.0048

Uranus 77225-10-27 11:17 G 29927211.76 29927211.97 29927212.19 0.0134 0.0016

Uranus 77226-06-10 16:34 G 29927437.97 29927438.19 29927438.40 0.0134 0.0017

Uranus 77227-01-22 21:22 G 29927664.20 29927664.39 29927664.60 0.0134 0.0049

Uranus 77227-09-06 02:24 G 29927890.45 29927890.60 29927890.79 0.0134 0.0082

Uranus 77228-04-19 07:41 G 29928116.72 29928116.82 29928116.94 0.0134 0.0114

Jupiter 77230-01-20 11:03 G 29928757.86 29928757.96 29928758.05 0.0503 0.0440

Jupiter 77230-09-13 21:22 G 29928994.19 29928994.39 29928994.59 0.0512 0.0090

Jupiter 77231-05-08 18:44 G 29929231.12 29929231.28 29929231.44 0.0522 0.0302

Jupiter 77235-11-30 18:00 G 29930898.08 29930898.25 29930898.43 0.0520 0.0280

Jupiter 77236-07-25 04:48 G 29931135.50 29931135.70 29931135.90 0.0511 0.0120

Jupiter 77237-03-19 03:22 G 29931372.58 29931372.64 29931372.71 0.0502 0.0474

Saturn 77237-07-17 09:22 G 29931492.74 29931492.89 29931493.06 0.0287 0.0182

Saturn 77238-03-04 01:27 G 29931722.35 29931722.56 29931722.77 0.0286 0.0012

Saturn 77238-10-19 16:20 G 29931952.04 29931952.18 29931952.33 0.0285 0.0202

Jupiter 77242-05-19 20:10 G 29933260.16 29933260.34 29933260.53 0.0509 0.0192

Jupiter 77243-01-11 14:10 G 29933496.91 29933497.09 29933497.28 0.0519 0.0192

Mars 77246-07-12 21:22 G 29934775.23 29934775.39 29934775.55 0.1870 0.0744

Jupiter 77247-08-05 09:51 G 29935163.78 29935163.91 29935164.05 0.0523 0.0392

Jupiter 77248-03-30 00:15 G 29935401.30 29935401.51 29935401.71 0.0513 0.0014

Jupiter 77248-11-22 02:10 G 29935638.46 29935638.59 29935638.72 0.0504 0.0383

Saturn 77252-08-12 12:15 G 29936997.88 29936998.01 29936998.14 0.0272 0.0213

Saturn 77253-03-29 20:24 G 29937227.14 29937227.35 29937227.56 0.0273 0.0046

Saturn 77253-11-14 04:48 G 29937456.51 29937456.70 29937456.90 0.0274 0.0124

Jupiter 77254-01-22 19:41 G 29937526.15 29937526.32 29937526.48 0.0507 0.0291

Jupiter 77254-09-16 10:34 G 29937762.74 29937762.94 29937763.14 0.0516 0.0082

Jupiter 77255-05-11 13:27 G 29937999.98 29938000.06 29938000.14 0.0526 0.0477

Neptune 77255-08-03 18:44 G 29938084.27 29938084.28 29938084.31 0.0088 0.0087

Neptune 77256-03-16 07:27 G 29938309.75 29938309.81 29938309.93 0.0088 0.0080

Neptune 77256-10-27 20:53 G 29938535.26 29938535.37 29938535.51 0.0088 0.0072

Neptune 77257-06-10 09:51 G 29938760.79 29938760.91 29938761.09 0.0088 0.0065

Neptune 77258-01-21 23:17 G 29938986.32 29938986.47 29938986.66 0.0088 0.0057

Neptune 77258-09-04 12:44 G 29939211.85 29939212.03 29939212.22 0.0088 0.0049

Jupiter 77259-04-10 01:12 G 29939429.50 29939429.55 29939429.62 0.0526 0.0501

Neptune 77259-04-18 02:10 G 29939437.39 29939437.59 29939437.78 0.0088 0.0041

Neptune 77259-11-29 15:08 G 29939662.94 29939663.13 29939663.35 0.0088 0.0034

Jupiter 77259-12-03 18:58 G 29939667.09 29939667.29 29939667.49 0.0516 0.0096

Neptune 77260-07-12 04:20 G 29939888.48 29939888.68 29939888.90 0.0088 0.0026

Jupiter 77260-07-28 00:00 G 29939904.34 29939904.50 29939904.68 0.0506 0.0288

Neptune 77261-02-22 17:32 G 29940114.02 29940114.23 29940114.46 0.0088 0.0018

Neptune 77261-10-06 06:58 G 29940339.56 29940339.79 29940340.01 0.0088 0.0010

Neptune 77262-05-19 19:56 G 29940565.11 29940565.33 29940565.56 0.0088 0.0003

Neptune 77262-12-31 09:22 G 29940790.67 29940790.89 29940791.11 0.0088 0.0005

Neptune 77263-08-13 22:20 G 29941016.21 29941016.43 29941016.65 0.0088 0.0013

Neptune 77264-03-26 11:17 G 29941241.76 29941241.97 29941242.19 0.0088 0.0021

Neptune 77264-11-07 00:15 G 29941467.31 29941467.51 29941467.73 0.0088 0.0029

Neptune 77265-06-20 13:41 G 29941692.86 29941693.07 29941693.27 0.0088 0.0036

Jupiter 77265-09-27 21:08 G 29941792.25 29941792.38 29941792.51 0.0504 0.0385

Neptune 77266-02-01 02:39 G 29941918.42 29941918.61 29941918.81 0.0088 0.0044

Uranus 77266-02-07 06:44 G 29941924.78 29941924.78 29941924.83 0.0144 0.0143

Jupiter 77266-05-22 09:22 G 29942028.68 29942028.89 29942029.09 0.0514 0.0026

Neptune 77266-09-14 15:22 G 29942143.98 29942144.14 29942144.34 0.0088 0.0052

Uranus 77266-09-21 19:27 G 29942151.16 29942151.31 29942151.47 0.0144 0.0102

Jupiter 77267-01-14 08:53 G 29942265.74 29942265.87 29942266.02 0.0524 0.0371

Saturn 77267-01-27 12:15 G 29942278.83 29942279.01 29942279.18 0.0287 0.0157

Neptune 77267-04-28 04:48 G 29942369.54 29942369.70 29942369.87 0.0088 0.0059

Uranus 77267-05-06 07:27 G 29942377.62 29942377.81 29942378.02 0.0144 0.0062

Saturn 77267-09-14 03:51 G 29942508.45 29942508.66 29942508.87 0.0286 0.0035

Neptune 77267-12-09 17:32 G 29942595.11 29942595.23 29942595.39 0.0088 0.0067

Uranus 77267-12-18 19:56 G 29942604.12 29942604.33 29942604.55 0.0144 0.0021

Saturn 77268-04-30 18:44 G 29942738.15 29942738.28 29942738.41 0.0284 0.0224

Neptune 77268-07-22 06:29 G 29942820.68 29942820.77 29942820.91 0.0088 0.0075

Uranus 77268-08-01 08:10 G 29942830.63 29942830.84 29942831.06 0.0144 0.0020

Neptune 77269-03-04 19:41 G 29943046.26 29943046.32 29943046.41 0.0088 0.0082

Uranus 77269-03-15 20:10 G 29943057.16 29943057.34 29943057.56 0.0144 0.0061

Uranus 77269-10-28 08:39 G 29943283.71 29943283.86 29943284.02 0.0144 0.0101

Uranus 77270-06-11 20:53 G 29943510.34 29943510.37 29943510.42 0.0144 0.0141

Jupiter 77271-08-08 11:46 G 29943932.80 29943932.99 29943933.18 0.0518 0.0207

Jupiter 77272-04-01 19:41 G 29944170.13 29944170.32 29944170.52 0.0509 0.0187

Jupiter 77277-06-02 22:48 G 29946058.40 29946058.45 29946058.53 0.0502 0.0474

Jupiter 77278-01-25 08:39 G 29946294.66 29946294.86 29946295.05 0.0511 0.0127

Jupiter 77278-09-19 05:03 G 29946531.54 29946531.71 29946531.89 0.0521 0.0262

Saturn 77282-02-22 14:10 G 29947783.95 29947784.09 29947784.25 0.0272 0.0194

Saturn 77282-10-09 22:34 G 29948013.23 29948013.44 29948013.66 0.0273 0.0027

Mars 77283-02-17 01:41 G 29948143.40 29948143.57 29948143.74 0.1657 0.0331

Jupiter 77283-04-13 03:08 G 29948198.48 29948198.63 29948198.80 0.0521 0.0320

Saturn 77283-05-27 07:27 G 29948242.64 29948242.81 29948243.00 0.0274 0.0145

Jupiter 77283-12-06 14:53 G 29948435.92 29948436.12 29948436.33 0.0511 0.0081

Jupiter 77284-07-30 14:24 G 29948673.01 29948673.10 29948673.20 0.0502 0.0441

Jupiter 77289-09-30 07:41 G 29950560.64 29950560.82 29950561.00 0.0508 0.0230

Jupiter 77290-05-25 00:15 G 29950797.32 29950797.51 29950797.70 0.0518 0.0150

Jupiter 77294-12-16 15:51 G 29952464.06 29952464.16 29952464.28 0.0524 0.0437

Jupiter 77295-08-11 07:56 G 29952701.62 29952701.83 29952702.03 0.0515 0.0032

Jupiter 77296-04-04 11:32 G 29952938.83 29952938.98 29952939.13 0.0505 0.0347

Saturn 77296-08-08 21:36 G 29953065.21 29953065.40 29953065.59 0.0287 0.0123

Saturn 77297-03-26 13:27 G 29953294.85 29953295.06 29953295.26 0.0286 0.0070

Saturn 77297-11-11 04:05 G 29953524.59 29953524.67 29953524.76 0.0285 0.0258

Jupiter 77301-06-06 08:10 G 29954826.69 29954826.84 29954827.00 0.0505 0.0326

Jupiter 77302-01-28 21:36 G 29955063.20 29955063.40 29955063.60 0.0515 0.0042

Jupiter 77302-09-22 22:20 G 29955300.32 29955300.43 29955300.55 0.0525 0.0436

Jupiter 77307-04-17 01:27 G 29956967.37 29956967.56 29956967.76 0.0518 0.0142

Uranus 77307-08-19 05:03 G 29957091.65 29957091.71 29957091.77 0.0135 0.0128

Jupiter 77307-12-10 08:39 G 29957204.69 29957204.86 29957205.05 0.0508 0.0249

Uranus 77308-04-01 10:05 G 29957317.77 29957317.92 29957318.07 0.0135 0.0096

Uranus 77308-11-13 15:08 G 29957543.95 29957544.13 29957544.32 0.0134 0.0064

Uranus 77309-06-27 20:24 G 29957770.14 29957770.35 29957770.56 0.0134 0.0031

Uranus 77310-02-09 01:27 G 29957996.35 29957996.56 29957996.78 0.0134 0.0003

Uranus 77310-09-23 06:44 G 29958222.57 29958222.78 29958222.99 0.0134 0.0034

Uranus 77311-05-07 11:32 G 29958448.80 29958448.98 29958449.18 0.0134 0.0066

Saturn 77311-09-05 20:39 G 29958570.19 29958570.36 29958570.53 0.0272 0.0165

Uranus 77311-12-19 16:34 G 29958675.06 29958675.19 29958675.35 0.0134 0.0099

Saturn 77312-04-22 04:48 G 29958799.48 29958799.70 29958799.91 0.0273 0.0003

Mars 77312-05-10 01:12 G 29958817.43 29958817.55 29958817.67 0.1866 0.1386

Uranus 77312-08-01 21:51 G 29958901.38 29958901.41 29958901.48 0.0134 0.0131

Pluto 77312-08-18 21:22 G 29958918.32 29958918.39 29958918.52 0.0065 0.0059

Saturn 77312-12-07 13:27 G 29959028.90 29959029.06 29959029.23 0.0274 0.0173

Jupiter 77313-02-09 08:39 G 29959092.75 29959092.86 29959092.97 0.0503 0.0419

Pluto 77313-04-01 02:24 G 29959143.40 29959143.60 29959143.81 0.0066 0.0021

Jupiter 77313-10-03 18:58 G 29959329.09 29959329.29 29959329.49 0.0512 0.0066

Pluto 77313-11-12 06:44 G 29959368.58 29959368.78 29959369.00 0.0066 0.0018

Jupiter 77314-05-28 16:34 G 29959566.04 29959566.19 29959566.35 0.0522 0.0326

Pluto 77314-06-25 11:03 G 29959593.87 29959593.96 29959594.10 0.0066 0.0056

Jupiter 77318-12-20 19:12 G 29961233.12 29961233.30 29961233.48 0.0520 0.0252

Jupiter 77319-08-15 05:32 G 29961470.54 29961470.73 29961470.93 0.0510 0.0148

Moon 77320-04-02 10:05 G 29961701.78 29961701.92 29961702.05 0.2633 0.1278

Earth 77320-04-02 14:39 G 29961701.98 29961702.11 29961702.23 0.2629 0.1624 *

Jupiter 77320-04-08 03:51 G 29961707.64 29961707.66 29961707.68 0.0501 0.0498

Jupiter 77325-06-08 18:58 G 29963595.10 29963595.29 29963595.48 0.0510 0.0167

Jupiter 77326-01-31 13:41 G 29963831.89 29963832.07 29963832.25 0.0520 0.0218

Saturn 77326-02-19 23:46 G 29963851.30 29963851.49 29963851.70 0.0286 0.0100

Saturn 77326-10-07 15:22 G 29964080.95 29964081.14 29964081.34 0.0285 0.0093

Saturn 77327-05-25 06:00 G 29964310.72 29964310.75 29964310.79 0.0284 0.0279

Moon 77328-03-31 05:03 G 29964621.58 29964621.71 29964621.84 0.2636 0.1327

Earth 77328-03-31 06:00 G 29964621.62 29964621.75 29964621.88 0.2629 0.1534 *

Jupiter 77330-08-25 11:03 G 29965498.82 29965498.96 29965499.11 0.0523 0.0363

Jupiter 77331-04-20 00:29 G 29965736.31 29965736.52 29965736.73 0.0513 0.0040

Jupiter 77331-12-13 01:27 G 29965973.45 29965973.56 29965973.68 0.0503 0.0408

Jupiter 77337-02-11 19:27 G 29967861.14 29967861.31 29967861.49 0.0507 0.0266

Jupiter 77337-10-06 11:17 G 29968097.77 29968097.97 29968098.17 0.0517 0.0110

Jupiter 77338-05-31 14:53 G 29968335.07 29968335.12 29968335.17 0.0527 0.0505

Neptune 77338-12-14 10:05 G 29968531.86 29968531.92 29968532.01 0.0089 0.0084

Neptune 77339-07-27 23:03 G 29968757.35 29968757.46 29968757.58 0.0089 0.0076

Neptune 77340-03-09 11:32 G 29968982.86 29968982.98 29968983.14 0.0089 0.0068

Neptune 77340-10-21 00:29 G 29969208.38 29969208.52 29969208.70 0.0089 0.0060

Saturn 77341-03-17 21:22 G 29969356.21 29969356.39 29969356.57 0.0272 0.0147

Neptune 77341-06-03 13:27 G 29969433.90 29969434.06 29969434.25 0.0089 0.0053

Saturn 77341-11-02 05:32 G 29969585.52 29969585.73 29969585.95 0.0273 0.0022

Neptune 77342-01-15 02:24 G 29969659.42 29969659.60 29969659.80 0.0089 0.0044

Jupiter 77342-04-30 01:27 G 29969764.48 29969764.56 29969764.65 0.0525 0.0474

Saturn 77342-06-19 14:24 G 29969814.96 29969815.10 29969815.26 0.0275 0.0192

Neptune 77342-08-28 15:08 G 29969884.95 29969885.13 29969885.34 0.0089 0.0037

Jupiter 77342-12-23 18:29 G 29970002.06 29970002.27 29970002.47 0.0515 0.0070

Neptune 77343-04-11 04:05 G 29970110.47 29970110.67 29970110.88 0.0089 0.0028

Jupiter 77343-08-17 22:48 G 29970239.29 29970239.45 29970239.62 0.0506 0.0313

Neptune 77343-11-22 16:48 G 29970336.00 29970336.20 29970336.42 0.0089 0.0021

Neptune 77344-07-05 06:00 G 29970561.54 29970561.75 29970561.97 0.0089 0.0012

Neptune 77345-02-15 18:58 G 29970787.07 29970787.29 29970787.51 0.0089 0.0004

Neptune 77345-09-29 07:41 G 29971012.61 29971012.82 29971013.04 0.0089 0.0004

Neptune 77346-05-12 20:39 G 29971238.14 29971238.36 29971238.58 0.0089 0.0012

Neptune 77346-12-24 09:36 G 29971463.69 29971463.90 29971464.11 0.0089 0.0020

Neptune 77347-08-06 22:34 G 29971689.23 29971689.44 29971689.65 0.0090 0.0028

Neptune 77348-03-19 11:17 G 29971914.78 29971914.97 29971915.18 0.0090 0.0036

Jupiter 77348-10-17 20:24 G 29972127.22 29972127.35 29972127.49 0.0504 0.0362

Neptune 77348-10-31 00:15 G 29972140.33 29972140.51 29972140.71 0.0090 0.0044

Mars 77348-12-15 13:12 G 29972185.89 29972186.05 29972186.21 0.1659 0.0574

Jupiter 77349-06-11 08:39 G 29972363.66 29972363.86 29972364.06 0.0514 0.0007

Neptune 77349-06-13 13:12 G 29972365.89 29972366.05 29972366.24 0.0090 0.0052

Neptune 77350-01-25 02:10 G 29972591.44 29972591.59 29972591.76 0.0090 0.0060

Jupiter 77350-02-03 08:10 G 29972600.71 29972600.84 29972600.97 0.0523 0.0394

Uranus 77350-05-23 01:12 G 29972709.45 29972709.55 29972709.69 0.0144 0.0121

Neptune 77350-09-07 15:08 G 29972817.00 29972817.13 29972817.28 0.0090 0.0068

Uranus 77351-01-04 13:56 G 29972935.90 29972936.08 29972936.27 0.0144 0.0080

Neptune 77351-04-21 04:05 G 29973042.57 29973042.67 29973042.80 0.0090 0.0076

Uranus 77351-08-19 02:10 G 29973162.38 29973162.59 29973162.81 0.0144 0.0040

Neptune 77351-12-02 16:48 G 29973268.15 29973268.20 29973268.30 0.0090 0.0084

Uranus 77352-04-01 14:24 G 29973388.88 29973389.10 29973389.32 0.0144 0.0003

Uranus 77352-11-14 02:39 G 29973615.40 29973615.61 29973615.82 0.0144 0.0042

Uranus 77353-06-28 14:39 G 29973841.95 29973842.11 29973842.31 0.0144 0.0083

Uranus 77354-02-10 03:08 G 29974068.53 29974068.63 29974068.76 0.0144 0.0123

Jupiter 77354-08-28 09:08 G 29974267.69 29974267.88 29974268.07 0.0519 0.0186

Saturn 77355-01-15 15:36 G 29974408.06 29974408.15 29974408.24 0.0288 0.0261

Jupiter 77355-04-22 17:46 G 29974505.06 29974505.24 29974505.43 0.0509 0.0209

Saturn 77355-09-02 08:10 G 29974637.63 29974637.84 29974638.04 0.0287 0.0067

Saturn 77356-04-18 23:32 G 29974867.30 29974867.48 29974867.68 0.0286 0.0125

Jupiter 77360-06-22 22:34 G 29976393.36 29976393.44 29976393.53 0.0502 0.0451

Jupiter 77361-02-14 07:27 G 29976629.61 29976629.81 29976630.01 0.0511 0.0104

Jupiter 77361-10-09 03:08 G 29976866.47 29976866.63 29976866.81 0.0521 0.0285

Jupiter 77366-05-03 01:12 G 29978533.38 29978533.55 29978533.72 0.0522 0.0298

Jupiter 77366-12-26 13:56 G 29978770.87 29978771.08 29978771.28 0.0512 0.0105

Jupiter 77367-08-20 13:56 G 29979008.01 29979008.08 29979008.16 0.0503 0.0463

Saturn 77370-09-28 03:36 G 29980142.46 29980142.65 29980142.85 0.0272 0.0118

Saturn 77371-05-15 11:46 G 29980371.78 29980371.99 29980372.20 0.0273 0.0050

Saturn 77371-12-30 20:24 G 29980601.23 29980601.35 29980601.48 0.0274 0.0219

Jupiter 77372-10-20 06:00 G 29980895.57 29980895.75 29980895.94 0.0508 0.0206

Jupiter 77373-06-13 22:48 G 29981132.27 29981132.45 29981132.64 0.0518 0.0175

Jupiter 77378-01-05 17:32 G 29982799.11 29982799.23 29982799.37 0.0524 0.0409

Jupiter 77378-08-31 09:22 G 29983036.69 29983036.89 29983037.10 0.0515 0.0005

Jupiter 77379-04-25 12:29 G 29983273.89 29983274.02 29983274.17 0.0505 0.0373

Mars 77380-12-14 08:39 G 29983872.81 29983872.86 29983872.91 0.1652 0.1567

Jupiter 77384-06-25 07:12 G 29985161.65 29985161.80 29985161.97 0.0506 0.0303

Saturn 77384-07-27 18:00 G 29985194.14 29985194.25 29985194.38 0.0288 0.0237

Jupiter 77385-02-16 21:08 G 29985398.18 29985398.38 29985398.58 0.0515 0.0068

Saturn 77385-03-14 10:20 G 29985423.73 29985423.93 29985424.14 0.0286 0.0044

Jupiter 77385-10-11 22:48 G 29985635.36 29985635.45 29985635.54 0.0525 0.0462

Saturn 77385-10-30 01:41 G 29985653.40 29985653.57 29985653.75 0.0285 0.0147

Jupiter 77389-09-10 08:53 G 29987064.83 29987064.87 29987064.91 0.0527 0.0517

Jupiter 77390-05-06 03:22 G 29987302.44 29987302.64 29987302.84 0.0517 0.0111

Jupiter 77390-12-29 09:36 G 29987539.73 29987539.90 29987540.08 0.0507 0.0276

Uranus 77391-11-30 19:27 G 29987876.19 29987876.31 29987876.43 0.0135 0.0111

Uranus 77392-07-14 00:44 G 29988102.36 29988102.53 29988102.71 0.0134 0.0079

Uranus 77393-02-25 05:46 G 29988328.54 29988328.74 29988328.95 0.0134 0.0047

Uranus 77393-10-09 10:48 G 29988554.74 29988554.95 29988555.17 0.0134 0.0015

Uranus 77394-05-23 16:05 G 29988780.95 29988781.17 29988781.38 0.0134 0.0018

Uranus 77395-01-04 21:08 G 29989007.18 29989007.38 29989007.58 0.0134 0.0051

Uranus 77395-08-19 02:10 G 29989233.43 29989233.59 29989233.77 0.0134 0.0083

Jupiter 77396-02-29 08:53 G 29989427.75 29989427.87 29989428.00 0.0504 0.0395

Uranus 77396-04-01 07:12 G 29989459.71 29989459.80 29989459.93 0.0134 0.0116

Jupiter 77396-10-22 20:10 G 29989664.14 29989664.34 29989664.54 0.0513 0.0039

Jupiter 77397-06-16 18:44 G 29989901.13 29989901.28 29989901.42 0.0523 0.0355

Saturn 77399-08-23 19:27 G 29990699.28 29990699.31 29990699.36 0.0272 0.0266

Saturn 77400-04-10 03:08 G 29990928.44 29990928.63 29990928.83 0.0272 0.0101

Saturn 77400-11-25 11:32 G 29991157.77 29991157.98 29991158.19 0.0274 0.0067

Pluto 77400-12-02 07:56 G 29991164.66 29991164.83 29991165.05 0.0079 0.0038

Saturn 77401-07-12 20:24 G 29991387.25 29991387.35 29991387.46 0.0275 0.0237

Pluto 77401-07-15 18:00 G 29991390.06 29991390.25 29991390.47 0.0078 0.0030

Jupiter 77402-01-09 19:56 G 29991568.15 29991568.33 29991568.52 0.0520 0.0224

Jupiter 77402-09-04 05:46 G 29991805.55 29991805.74 29991805.93 0.0510 0.0174

Jupiter 77407-11-05 11:32 G 29993693.94 29993693.98 29993694.04 0.0501 0.0483

Jupiter 77408-06-28 19:41 G 29993930.13 29993930.32 29993930.51 0.0510 0.0142

Jupiter 77409-02-20 14:10 G 29994166.91 29994167.09 29994167.27 0.0519 0.0243

Mars 77410-03-08 01:27 G 29994547.52 29994547.56 29994547.60 0.1874 0.1806

Jupiter 77413-09-14 08:39 G 29995833.71 29995833.86 29995834.02 0.0523 0.0342

Saturn 77414-02-08 00:15 G 29995980.38 29995980.51 29995980.66 0.0288 0.0208

Jupiter 77414-05-09 22:34 G 29996071.24 29996071.44 29996071.65 0.0513 0.0064

Saturn 77414-09-25 17:03 G 29996210.00 29996210.21 29996210.42 0.0287 0.0014

Mars 77414-10-14 00:58 G 29996228.39 29996228.54 29996228.69 0.1662 0.0802

Jupiter 77415-01-02 00:15 G 29996308.41 29996308.51 29996308.63 0.0504 0.0430

Saturn 77415-05-13 08:24 G 29996439.69 29996439.85 29996440.02 0.0286 0.0178

Jupiter 77420-03-03 19:56 G 29998196.15 29998196.33 29998196.51 0.0507 0.0241

Neptune 77420-06-19 18:44 G 29998304.21 29998304.28 29998304.38 0.0088 0.0082

Jupiter 77420-10-26 11:03 G 29998432.76 29998432.96 29998433.15 0.0516 0.0135

Neptune 77421-01-31 07:41 G 29998529.72 29998529.82 29998529.96 0.0088 0.0074

Jupiter 77421-06-20 13:56 G 29998670.08 29998670.08 29998670.08 0.0526 0.0526

Neptune 77421-09-13 20:53 G 29998755.25 29998755.37 29998755.54 0.0088 0.0066

Neptune 77422-04-27 10:20 G 29998980.77 29998980.93 29998981.11 0.0088 0.0058

Neptune 77422-12-08 23:46 G 29999206.31 29999206.49 29999206.68 0.0088 0.0050

Neptune 77423-07-22 12:44 G 29999431.85 29999432.03 29999432.24 0.0088 0.0043

Neptune 77424-03-04 01:56 G 29999657.39 29999657.58 29999657.80 0.0088 0.0035

Neptune 77424-10-15 15:08 G 29999882.93 29999883.13 29999883.35 0.0088 0.0027

Jupiter 77425-05-19 23:32 G 30000099.38 30000099.48 30000099.58 0.0526 0.0454

Neptune 77425-05-29 04:34 G 30000108.47 30000108.69 30000108.91 0.0088 0.0019

Moon 77425-10-04 13:41 G 30000236.92 30000237.07 30000237.22 0.2709 0.0557

Earth 77425-10-04 17:17 G 30000237.08 30000237.22 30000237.36 0.2703 0.1212 *

Neptune 77426-01-09 17:46 G 30000334.03 30000334.24 30000334.47 0.0088 0.0012

Jupiter 77426-01-12 17:03 G 30000337.00 30000337.21 30000337.42 0.0516 0.0046

Neptune 77426-08-23 07:12 G 30000559.57 30000559.80 30000560.02 0.0088 0.0004

Jupiter 77426-09-06 22:20 G 30000574.28 30000574.43 30000574.58 0.0506 0.0335

Neptune 77427-04-05 20:10 G 30000785.12 30000785.34 30000785.57 0.0088 0.0005

Neptune 77427-11-17 09:22 G 30001010.67 30001010.89 30001011.11 0.0088 0.0012

Neptune 77428-06-29 22:34 G 30001236.23 30001236.44 30001236.66 0.0088 0.0020

Neptune 77429-02-10 11:32 G 30001461.78 30001461.98 30001462.20 0.0088 0.0028

Saturn 77429-03-06 01:56 G 30001485.49 30001485.58 30001485.69 0.0271 0.0236

Neptune 77429-09-24 00:29 G 30001687.33 30001687.52 30001687.74 0.0088 0.0036

Saturn 77429-10-21 09:36 G 30001714.70 30001714.90 30001715.11 0.0272 0.0072

Neptune 77430-05-07 13:56 G 30001912.89 30001913.08 30001913.28 0.0088 0.0043

Saturn 77430-06-07 17:32 G 30001944.04 30001944.23 30001944.44 0.0273 0.0097

Neptune 77430-12-19 02:53 G 30002138.45 30002138.62 30002138.81 0.0088 0.0051

Saturn 77431-01-23 02:24 G 30002173.56 30002173.60 30002173.66 0.0275 0.0265

Neptune 77431-08-01 15:51 G 30002364.01 30002364.16 30002364.34 0.0088 0.0059

Jupiter 77431-11-07 19:41 G 30002462.18 30002462.32 30002462.47 0.0504 0.0337

Neptune 77432-03-14 04:48 G 30002589.58 30002589.70 30002589.87 0.0088 0.0067

Jupiter 77432-07-01 07:56 G 30002698.63 30002698.83 30002699.03 0.0514 0.0027

Neptune 77432-10-25 18:00 G 30002815.15 30002815.25 30002815.38 0.0088 0.0074

Jupiter 77433-02-23 07:27 G 30002935.70 30002935.81 30002935.93 0.0524 0.0419

Neptune 77433-06-08 06:44 G 30003040.73 30003040.78 30003040.89 0.0088 0.0082

Earth 77433-10-02 07:56 G 30003156.74 30003156.83 30003156.91 0.2703 0.2246

Moon 77433-10-02 08:24 G 30003156.78 30003156.85 30003156.93 0.2710 0.2321 *

Uranus 77434-01-21 06:58 G 30003267.76 30003267.79 30003267.86 0.0144 0.0140

Uranus 77434-09-04 19:12 G 30003494.16 30003494.30 30003494.48 0.0144 0.0100

Uranus 77435-04-19 07:41 G 30003720.63 30003720.82 30003721.03 0.0144 0.0059

Uranus 77435-12-01 20:10 G 30003947.13 30003947.34 30003947.56 0.0144 0.0018

Uranus 77436-07-15 08:39 G 30004173.64 30004173.86 30004174.08 0.0144 0.0023

Uranus 77437-02-26 20:53 G 30004400.18 30004400.37 30004400.58 0.0144 0.0064

Jupiter 77437-09-17 11:17 G 30004602.77 30004602.97 30004603.17 0.0519 0.0155

Uranus 77437-10-11 09:08 G 30004626.74 30004626.88 30004627.04 0.0144 0.0104

Jupiter 77438-05-12 19:41 G 30004840.14 30004840.32 30004840.51 0.0509 0.0238

Jupiter 77443-07-13 21:51 G 30006728.31 30006728.41 30006728.52 0.0502 0.0428

Saturn 77443-08-21 02:53 G 30006766.46 30006766.62 30006766.79 0.0288 0.0183

Jupiter 77444-03-06 07:12 G 30006964.60 30006964.80 30006965.00 0.0511 0.0078

Saturn 77444-04-06 19:12 G 30006996.09 30006996.30 30006996.51 0.0286 0.0010

Jupiter 77444-10-29 03:36 G 30007201.49 30007201.65 30007201.81 0.0521 0.0312

Saturn 77444-11-22 10:20 G 30007225.80 30007225.93 30007226.09 0.0285 0.0200

Mars 77446-10-12 20:24 G 30007915.25 30007915.35 30007915.45 0.1654 0.1341

Jupiter 77449-05-23 04:20 G 30008868.51 30008868.68 30008868.86 0.0521 0.0267

Jupiter 77450-01-15 16:05 G 30009105.97 30009106.17 30009106.37 0.0511 0.0134

Jupiter 77450-09-09 15:22 G 30009343.09 30009343.14 30009343.18 0.0502 0.0488

Jupiter 77455-11-10 07:27 G 30011230.62 30011230.81 30011231.00 0.0509 0.0179

Jupiter 77456-07-04 00:58 G 30011467.36 30011467.54 30011467.73 0.0519 0.0205

Saturn 77458-09-16 00:58 G 30012271.43 30012271.54 30012271.67 0.0271 0.0221

Saturn 77459-05-03 08:39 G 30012500.65 30012500.86 30012501.07 0.0272 0.0056

Saturn 77459-12-18 16:48 G 30012730.00 30012730.20 30012730.39 0.0274 0.0112

Jupiter 77461-01-25 19:56 G 30013134.19 30013134.33 30013134.47 0.0524 0.0379

Jupiter 77461-09-20 10:48 G 30013371.74 30013371.95 30013372.15 0.0514 0.0029

Jupiter 77462-05-15 13:12 G 30013608.93 30013609.05 30013609.18 0.0504 0.0398

Jupiter 77467-07-16 08:53 G 30015496.70 30015496.87 30015497.04 0.0506 0.0277

Jupiter 77468-03-08 22:48 G 30015733.25 30015733.45 30015733.65 0.0515 0.0094

Jupiter 77468-11-01 00:00 G 30015970.44 30015970.50 30015970.58 0.0525 0.0486

Jupiter 77472-09-30 06:44 G 30017399.72 30017399.78 30017399.86 0.0527 0.0496

Saturn 77473-03-02 07:56 G 30017552.66 30017552.83 30017553.01 0.0288 0.0156

Jupiter 77473-05-26 01:41 G 30017637.37 30017637.57 30017637.77 0.0517 0.0089

Saturn 77473-10-18 00:29 G 30017782.32 30017782.52 30017782.73 0.0287 0.0039

Jupiter 77474-01-18 08:39 G 30017874.69 30017874.86 30017875.02 0.0508 0.0298

Saturn 77474-06-04 16:05 G 30018012.05 30018012.17 30018012.30 0.0286 0.0229

Uranus 77475-08-01 04:05 G 30018434.62 30018434.67 30018434.76 0.0135 0.0127

Mars 77476-01-03 04:34 G 30018589.55 30018589.69 30018589.83 0.1870 0.1120

Uranus 77476-03-14 09:22 G 30018660.75 30018660.89 30018661.05 0.0134 0.0095

Uranus 77476-10-26 14:24 G 30018886.92 30018887.10 30018887.30 0.0134 0.0063

Uranus 77477-06-09 19:56 G 30019113.12 30019113.33 30019113.54 0.0134 0.0030

Uranus 77478-01-22 00:58 G 30019339.33 30019339.54 30019339.76 0.0134 0.0003

Uranus 77478-09-05 06:00 G 30019565.55 30019565.75 30019565.97 0.0134 0.0035

Jupiter 77479-03-21 10:20 G 30019762.80 30019762.93 30019763.07 0.0503 0.0370

Uranus 77479-04-19 11:03 G 30019791.79 30019791.96 30019792.16 0.0134 0.0068

Jupiter 77479-11-12 21:08 G 30019999.18 30019999.38 30019999.58 0.0512 0.0011

Uranus 77479-12-01 16:20 G 30020018.04 30020018.18 30020018.33 0.0134 0.0100

Jupiter 77480-07-06 18:58 G 30020236.16 30020236.29 30020236.43 0.0522 0.0379

Uranus 77480-07-14 21:36 G 30020244.37 30020244.40 30020244.45 0.0134 0.0132

Mars 77480-08-10 12:15 G 30020270.88 30020271.01 30020271.15 0.1664 0.1050

Jupiter 77485-01-28 18:29 G 30021903.08 30021903.27 30021903.46 0.0520 0.0201

Jupiter 77485-09-23 04:48 G 30022140.51 30022140.70 30022140.89 0.0510 0.0197

Saturn 77488-03-28 07:27 G 30023057.67 30023057.81 30023057.97 0.0271 0.0191

Saturn 77488-11-12 15:08 G 30023286.92 30023287.13 30023287.34 0.0272 0.0026

Saturn 77489-06-29 23:03 G 30023516.29 30023516.46 30023516.65 0.0273 0.0142

Jupiter 77490-11-24 11:32 G 30024028.90 30024028.98 30024029.06 0.0501 0.0459

Jupiter 77491-07-18 19:12 G 30024265.11 30024265.30 30024265.50 0.0510 0.0117

Jupiter 77492-03-11 13:41 G 30024501.91 30024502.07 30024502.25 0.0520 0.0270

Jupiter 77496-10-03 11:17 G 30026168.80 30026168.97 30026169.13 0.0523 0.0312

Jupiter 77497-05-29 00:58 G 30026406.34 30026406.54 30026406.74 0.0513 0.0093

Jupiter 77498-01-21 02:24 G 30026643.52 30026643.60 30026643.69 0.0503 0.0456

Saturn 77502-09-13 11:03 G 30028338.77 30028338.96 30028339.14 0.0288 0.0131

Neptune 77503-03-19 21:36 G 30028526.36 30028526.40 30028526.49 0.0089 0.0086

Jupiter 77503-03-24 19:41 G 30028531.14 30028531.32 30028531.50 0.0507 0.0215

Saturn 77503-05-01 03:08 G 30028568.43 30028568.63 30028568.84 0.0286 0.0062

Neptune 77503-10-31 10:34 G 30028751.85 30028751.94 30028752.07 0.0089 0.0078

Jupiter 77503-11-16 11:17 G 30028767.78 30028767.97 30028768.16 0.0517 0.0162

Saturn 77503-12-16 18:29 G 30028798.18 30028798.27 30028798.38 0.0285 0.0251

Neptune 77504-06-12 23:46 G 30028977.37 30028977.49 30028977.64 0.0089 0.0070

Neptune 77505-01-24 12:44 G 30029202.88 30029203.03 30029203.20 0.0089 0.0062

Neptune 77505-09-07 01:27 G 30029428.40 30029428.56 30029428.75 0.0089 0.0054

Neptune 77506-04-20 14:24 G 30029653.92 30029654.10 30029654.29 0.0089 0.0046

Neptune 77506-12-02 03:22 G 30029879.45 30029879.64 30029879.84 0.0089 0.0038

Neptune 77507-07-15 16:20 G 30030104.98 30030105.18 30030105.39 0.0089 0.0030

Neptune 77508-02-26 05:03 G 30030330.51 30030330.71 30030330.93 0.0089 0.0022

Jupiter 77508-06-09 03:22 G 30030434.52 30030434.64 30030434.76 0.0525 0.0423

Neptune 77508-10-08 18:00 G 30030556.04 30030556.25 30030556.47 0.0089 0.0014

Jupiter 77509-02-01 20:10 G 30030672.13 30030672.34 30030672.55 0.0515 0.0015

Neptune 77509-05-22 06:58 G 30030781.57 30030781.79 30030782.00 0.0089 0.0006

Jupiter 77509-09-27 00:29 G 30030909.38 30030909.52 30030909.67 0.0506 0.0363

Neptune 77510-01-02 19:41 G 30031007.11 30031007.32 30031007.54 0.0089 0.0003

Neptune 77510-08-16 08:39 G 30031232.64 30031232.86 30031233.08 0.0090 0.0011

Neptune 77511-03-29 21:22 G 30031458.18 30031458.39 30031458.61 0.0090 0.0019

Neptune 77511-11-10 10:20 G 30031683.72 30031683.93 30031684.14 0.0090 0.0027

Neptune 77512-06-22 23:17 G 30031909.27 30031909.47 30031909.67 0.0090 0.0035

Mars 77512-08-10 08:10 G 30031957.71 30031957.84 30031957.96 0.1656 0.1112

Neptune 77513-02-03 12:15 G 30032134.82 30032135.01 30032135.20 0.0090 0.0043

Neptune 77513-09-17 01:12 G 30032360.37 30032360.55 30032360.73 0.0090 0.0051

Neptune 77514-04-30 13:56 G 30032585.92 30032586.08 30032586.25 0.0090 0.0059

Jupiter 77514-11-27 21:08 G 30032797.22 30032797.38 30032797.54 0.0505 0.0312

Neptune 77514-12-12 02:53 G 30032811.48 30032811.62 30032811.77 0.0090 0.0067

Jupiter 77515-07-22 10:05 G 30033033.72 30033033.92 30033034.12 0.0515 0.0056

Neptune 77515-07-25 15:51 G 30033037.05 30033037.16 30033037.29 0.0090 0.0075

Neptune 77516-03-07 04:48 G 30033262.63 30033262.70 30033262.79 0.0090 0.0083

Jupiter 77516-03-15 10:34 G 30033270.84 30033270.94 30033271.04 0.0524 0.0448

Saturn 77517-10-09 06:29 G 30033843.61 30033843.77 30033843.93 0.0271 0.0176

Uranus 77518-05-05 23:46 G 30034052.39 30034052.49 30034052.63 0.0144 0.0120

Saturn 77518-05-26 13:56 G 30034072.86 30034073.08 30034073.29 0.0272 0.0012

Uranus 77518-12-18 12:29 G 30034278.84 30034279.02 30034279.21 0.0144 0.0079

Saturn 77519-01-10 21:51 G 30034302.24 30034302.41 30034302.59 0.0274 0.0157

Uranus 77519-08-02 00:44 G 30034505.33 30034505.53 30034505.75 0.0144 0.0039

Uranus	77520-03-15 13:27 G	30034731.84	30034732.06	30034732.28	0.0144	0.0003
Jupiter	77520-10-07 13:27 G	30034937.87	30034938.06	30034938.26	0.0518	0.0126
Uranus	77520-10-28 01:27 G	30034958.36	30034958.56	30034958.78	0.0144	0.0044
Jupiter	77521-06-01 21:22 G	30035175.21	30035175.39	30035175.56	0.0508	0.0265
Uranus	77521-06-11 13:56 G	30035184.91	30035185.08	30035185.27	0.0144	0.0084
Uranus	77522-01-24 02:24 G	30035411.50	30035411.60	30035411.72	0.0144	0.0124
Jupiter	77526-08-03 00:00 G	30037063.38	30037063.50	30037063.62	0.0502	0.0403
Jupiter	77527-03-27 09:36 G	30037299.70	30037299.90	30037300.10	0.0511	0.0050
Jupiter	77527-11-19 06:00 G	30037536.60	30037536.75	30037536.91	0.0521	0.0338
Saturn	77532-03-25 14:39 G	30039124.91	30039125.11	30039125.31	0.0288	0.0105
Jupiter	77532-06-12 02:39 G	30039203.43	30039203.61	30039203.80	0.0521	0.0244
Saturn	77532-11-10 07:12 G	30039354.60	30039354.80	30039355.00	0.0287	0.0089
Jupiter	77533-02-04 14:39 G	30039440.91	30039441.11	30039441.31	0.0511	0.0157
Saturn	77533-06-27 22:48 G	30039584.41	30039584.45	30039584.50	0.0286	0.0278
Jupiter	77538-04-08 02:53 G	30041329.58	30041329.62	30041329.66	0.0500	0.0489
Jupiter	77538-11-30 09:22 G	30041565.70	30041565.89	30041566.09	0.0509	0.0152
Jupiter	77539-07-25 02:39 G	30041802.43	30041802.61	30041802.79	0.0518	0.0230
Mars	77541-10-31 08:24 G	30042631.68	30042631.85	30042632.02	0.1867	0.0465
Jupiter	77544-02-15 17:46 G	30043469.09	30043469.24	30043469.39	0.0524	0.0357
Jupiter	77544-10-10 09:08 G	30043706.68	30043706.88	30043707.09	0.0514	0.0051
Jupiter	77545-06-04 12:15 G	30043943.91	30043944.01	30043944.13	0.0505	0.0420
Mars	77546-06-08 23:32 G	30044313.38	30044313.48	30044313.59	0.1667	0.1296
Saturn	77547-04-21 13:12 G	30044629.87	30044630.05	30044630.23	0.0271	0.0146
Saturn	77547-12-06 20:39 G	30044859.15	30044859.36	30044859.57	0.0272	0.0019
Saturn	77548-07-23 04:34 G	30045088.54	30045088.69	30045088.85	0.0273	0.0187
Jupiter	77550-08-05 08:53 G	30045831.69	30045831.87	30045832.04	0.0506	0.0251
Jupiter	77551-03-29 22:34 G	30046068.25	30046068.44	30046068.64	0.0515	0.0121
Jupiter	77551-11-22 00:15 G	30046305.46	30046305.51	30046305.55	0.0525	0.0511
Jupiter	77555-10-21 09:22 G	30047734.80	30047734.89	30047734.98	0.0527	0.0467
Jupiter	77556-06-15 04:05 G	30047972.46	30047972.67	30047972.87	0.0517	0.0058

Jupiter 77557-02-07 10:48 G 30048209.79 30048209.95 30048210.11 0.0507 0.0326

Pluto 77559-05-02 05:03 G 30049023.56 30049023.71 30049023.92 0.0065 0.0039

Uranus 77559-11-13 18:44 G 30049219.17 30049219.28 30049219.41 0.0134 0.0110

Pluto 77559-12-13 10:05 G 30049248.70 30049248.92 30049249.14 0.0066 0.0000

Uranus 77560-06-27 00:00 G 30049445.33 30049445.50 30049445.68 0.0134 0.0077

Pluto 77560-07-25 14:24 G 30049473.93 30049474.10 30049474.29 0.0066 0.0038

Uranus 77561-02-08 05:03 G 30049671.52 30049671.71 30049671.93 0.0134 0.0046

Saturn 77561-02-18 00:58 G 30049681.49 30049681.54 30049681.61 0.0289 0.0274

Uranus 77561-09-22 10:20 G 30049897.72 30049897.93 30049898.15 0.0134 0.0013

Saturn 77561-10-05 18:15 G 30049911.06 30049911.26 30049911.46 0.0288 0.0079

Jupiter 77562-04-10 10:05 G 30050097.78 30050097.92 30050098.07 0.0503 0.0346

Uranus 77562-05-06 15:36 G 30050123.94 30050124.15 30050124.36 0.0134 0.0020

Saturn 77562-05-23 10:34 G 30050140.75 30050140.94 30050141.13 0.0286 0.0114

Jupiter 77562-12-02 21:08 G 30050334.18 30050334.38 30050334.58 0.0513 0.0017

Uranus 77562-12-18 20:24 G 30050350.17 30050350.35 30050350.56 0.0134 0.0053

Earth 77563-04-05 16:20 G 30050458.07 30050458.18 30050458.29 0.2629 0.1857

Moon 77563-04-05 21:51 G 30050458.31 30050458.41 30050458.51 0.2628 0.2050

Jupiter 77563-07-27 19:41 G 30050571.20 30050571.32 30050571.45 0.0523 0.0406

Uranus 77563-08-02 01:41 G 30050576.42 30050576.57 30050576.75 0.0134 0.0085

Uranus 77564-03-15 06:58 G 30050802.70 30050802.79 30050802.91 0.0134 0.0116

Jupiter 77568-02-18 22:05 G 30052238.22 30052238.42 30052238.61 0.0520 0.0169

Jupiter 77568-10-13 07:41 G 30052475.63 30052475.82 30052476.00 0.0510 0.0227

Earth 77571-04-03 07:56 G 30053377.69 30053377.83 30053377.97 0.2630 0.1301

Moon 77571-04-03 11:03 G 30053377.81 30053377.96 30053378.12 0.2625 0.1078 *

Jupiter 77573-12-14 12:44 G 30054363.93 30054364.03 30054364.12 0.0501 0.0436

Jupiter 77574-08-07 21:08 G 30054600.18 30054600.38 30054600.58 0.0510 0.0088

Jupiter 77575-04-01 16:20 G 30054837.02 30054837.18 30054837.35 0.0520 0.0299

Saturn 77576-10-31 12:00 G 30055415.82 30055416.00 30055416.19 0.0271 0.0131

Saturn 77577-06-17 19:27 G 30055645.10 30055645.31 30055645.52 0.0272 0.0034

Saturn 77578-02-02 03:22 G 30055874.50 30055874.64 30055874.79 0.0274 0.0202

Mars 77578-06-07 19:56 G 30056000.18 30056000.33 30056000.47 0.1659 0.0883

Jupiter 77579-10-24 14:10 G 30056503.92 30056504.09 30056504.27 0.0522 0.0282

Jupiter 77580-06-18 03:08 G 30056741.43 30056741.63 30056741.83 0.0512 0.0122

Jupiter 77581-02-10 03:51 G 30056978.61 30056978.66 30056978.72 0.0503 0.0480

Neptune 77584-09-22 05:46 G 30058298.69 30058298.74 30058298.84 0.0088 0.0083

Neptune 77585-05-05 18:58 G 30058524.20 30058524.29 30058524.43 0.0088 0.0075

Neptune 77585-12-17 08:24 G 30058749.72 30058749.85 30058750.01 0.0088 0.0068

Jupiter 77586-04-12 22:20 G 30058866.24 30058866.43 30058866.62 0.0508 0.0189

Neptune 77586-07-30 21:22 G 30058975.25 30058975.39 30058975.58 0.0088 0.0060

Jupiter 77586-12-05 14:10 G 30059102.90 30059103.09 30059103.28 0.0517 0.0190

Neptune 77587-03-13 10:34 G 30059200.78 30059200.94 30059201.14 0.0088 0.0052

Neptune 77587-10-24 23:46 G 30059426.31 30059426.49 30059426.70 0.0088 0.0044

Neptune 77588-06-06 12:58 G 30059651.85 30059652.04 30059652.26 0.0088 0.0036

Neptune 77589-01-18 02:24 G 30059877.40 30059877.60 30059877.82 0.0088 0.0028

Neptune 77589-08-31 15:22 G 30060102.94 30060103.14 30060103.37 0.0088 0.0021

Neptune 77590-04-14 04:34 G 30060328.48 30060328.69 30060328.92 0.0088 0.0013

Saturn 77590-08-31 03:51 G 30060467.56 30060467.66 30060467.77 0.0289 0.0249

Neptune 77590-11-25 18:00 G 30060554.03 30060554.25 30060554.48 0.0088 0.0005

Saturn 77591-04-17 21:22 G 30060697.18 30060697.39 30060697.59 0.0288 0.0054

Jupiter 77591-06-29 01:56 G 30060769.45 30060769.58 30060769.71 0.0525 0.0399

Neptune 77591-07-09 07:12 G 30060779.58 30060779.80 30060780.03 0.0088 0.0003

Saturn 77591-12-03 13:56 G 30060926.90 30060927.08 30060927.26 0.0287 0.0139

Neptune 77592-02-19 20:24 G 30061005.13 30061005.35 30061005.57 0.0088 0.0011

Jupiter 77592-02-21 18:29 G 30061007.07 30061007.27 30061007.48 0.0515 0.0011

Neptune 77592-10-02 09:36 G 30061230.68 30061230.90 30061231.12 0.0088 0.0019

Jupiter 77592-10-15 23:03 G 30061244.33 30061244.46 30061244.60 0.0506 0.0384

Neptune 77593-05-15 22:34 G 30061456.24 30061456.44 30061456.66 0.0088 0.0027

Neptune 77593-12-27 11:46 G 30061681.80 30061681.99 30061682.21 0.0088 0.0035

Neptune 77594-08-10 00:44 G 30061907.35 30061907.53 30061907.74 0.0088 0.0043

Neptune 77595-03-23 14:10 G 30062132.91 30062133.09 30062133.28 0.0088 0.0050

Neptune 77595-11-04 03:08 G 30062358.47 30062358.63 30062358.80 0.0088 0.0058

Neptune 77596-06-16 16:05 G 30062584.04 30062584.17 30062584.33 0.0088 0.0066

Neptune 77597-01-28 05:03 G 30062809.62 30062809.71 30062809.86 0.0088 0.0074

Neptune 77597-09-10 18:29 G 30063035.20 30063035.27 30063035.36 0.0088 0.0081

Jupiter 77597-12-16 23:32 G 30063132.32 30063132.48 30063132.65 0.0505 0.0285

Jupiter 77598-08-10 12:15 G 30063368.81 30063369.01 30063369.21 0.0514 0.0084

Jupiter 77599-04-04 12:00 G 30063605.92 30063606.00 30063606.09 0.0524 0.0472

Uranus 77602-01-03 04:05 G 30064610.64 30064610.67 30064610.75 0.0144 0.0140

Uranus 77602-08-17 17:03 G 30064837.05 30064837.21 30064837.37 0.0144 0.0099

Jupiter 77603-03-03 15:22 G 30065035.10 30065035.14 30065035.19 0.0528 0.0511

Uranus 77603-04-01 05:17 G 30065063.52 30065063.72 30065063.93 0.0144 0.0059

Jupiter 77603-10-27 11:32 G 30065272.78 30065272.98 30065273.18 0.0518 0.0103

Uranus 77603-11-13 17:46 G 30065290.02 30065290.24 30065290.46 0.0144 0.0018

Jupiter 77604-06-20 19:41 G 30065510.15 30065510.32 30065510.49 0.0509 0.0287

Uranus 77604-06-27 06:15 G 30065516.54 30065516.76 30065516.98 0.0144 0.0023

Uranus 77605-02-08 18:29 G 30065743.08 30065743.27 30065743.48 0.0144 0.0064

Uranus 77605-09-23 06:58 G 30065969.65 30065969.79 30065969.95 0.0144 0.0104

Saturn 77605-09-26 12:29 G 30065972.98 30065973.02 30065973.08 0.0270 0.0262

Saturn 77606-05-13 19:12 G 30066202.11 30066202.30 30066202.51 0.0271 0.0100

Saturn 77606-12-29 02:39 G 30066431.41 30066431.61 30066431.82 0.0272 0.0066

Saturn 77607-08-15 10:34 G 30066660.84 30066660.94 30066661.06 0.0273 0.0233

Mars 77607-08-28 12:00 G 30066673.82 30066674.00 30066674.17 0.1863 0.0194

Jupiter 77609-08-21 23:46 G 30067398.37 30067398.49 30067398.63 0.0502 0.0378

Jupiter 77610-04-15 09:22 G 30067634.69 30067634.89 30067635.09 0.0511 0.0023

Jupiter 77610-12-08 05:46 G 30067871.60 30067871.74 30067871.89 0.0521 0.0364

Mars 77612-04-05 11:17 G 30068355.90 30068355.97 30068356.03 0.1669 0.1542

Jupiter 77615-07-02 04:48 G 30069538.52 30069538.70 30069538.89 0.0521 0.0214

Jupiter 77616-02-24 16:34 G 30069776.00 30069776.19 30069776.39 0.0511 0.0187

Saturn 77620-03-12 08:24 G 30071253.72 30071253.85 30071253.98 0.0289 0.0223

Saturn 77620-10-28 01:27 G 30071483.35 30071483.56 30071483.77 0.0288 0.0028

Jupiter 77621-04-27 02:10 G 30071664.53 30071664.59 30071664.67 0.0500 0.0466

Saturn 77621-06-14 17:46 G 30071713.07 30071713.24 30071713.41 0.0286 0.0164

Jupiter 77621-12-19 09:08 G 30071900.68 30071900.88 30071901.07 0.0509 0.0126

Jupiter 77622-08-13 02:24 G 30072137.43 30072137.60 30072137.78 0.0519 0.0258

Jupiter 77627-03-06 21:36 G 30073804.24 30073804.40 30073804.56 0.0524 0.0325

Jupiter 77627-10-30 12:15 G 30074041.81 30074042.01 30074042.22 0.0514 0.0081

Jupiter 77628-06-23 14:39 G 30074279.02 30074279.11 30074279.21 0.0504 0.0446

Jupiter 77633-08-24 09:51 G 30076166.74 30076166.91 30076167.10 0.0506 0.0225

Jupiter 77634-04-18 00:29 G 30076403.33 30076403.52 30076403.71 0.0516 0.0150

Saturn 77635-04-08 12:00 G 30076758.92 30076759.00 30076759.09 0.0270 0.0246

Saturn 77635-11-23 18:29 G 30076988.07 30076988.27 30076988.48 0.0271 0.0085

Saturn 77636-07-10 01:56 G 30077217.38 30077217.58 30077217.78 0.0272 0.0082

Saturn 77637-02-24 09:51 G 30077446.83 30077446.91 30077447.01 0.0274 0.0248

Jupiter 77638-11-09 12:44 G 30078069.92 30078070.03 30078070.14 0.0526 0.0437

Jupiter 77639-07-05 06:29 G 30078307.57 30078307.77 30078307.98 0.0516 0.0030

Jupiter 77640-02-27 12:15 G 30078544.87 30078545.01 30078545.16 0.0507 0.0353

Uranus 77643-07-14 03:51 G 30079777.59 30079777.66 30079777.75 0.0134 0.0125

Uranus 77644-02-25 09:08 G 30080003.73 30080003.88 30080004.04 0.0134 0.0093

Mars 77644-04-04 07:27 G 30080042.65 30080042.81 30080042.97 0.1661 0.0649

Uranus 77644-10-08 14:10 G 30080229.91 30080230.09 30080230.29 0.0134 0.0061

Jupiter 77645-04-29 12:29 G 30080432.87 30080433.02 30080433.18 0.0504 0.0320

Uranus 77645-05-22 19:27 G 30080456.10 30080456.31 30080456.52 0.0134 0.0028

Jupiter 77645-12-22 00:00 G 30080669.30 30080669.50 30080669.70 0.0513 0.0044

Uranus 77646-01-04 00:44 G 30080682.31 30080682.53 30080682.74 0.0134 0.0004

Jupiter 77646-08-15 22:48 G 30080906.34 30080906.45 30080906.56 0.0523 0.0432

Uranus 77646-08-18 05:46 G 30080908.54 30080908.74 30080908.96 0.0134 0.0037

Pluto 77647-01-01 08:39 G 30081044.78 30081044.86 30081044.98 0.0079 0.0070

Uranus 77647-04-01 11:03 G 30081134.78 30081134.96 30081135.15 0.0134 0.0069

Pluto 77647-08-14 18:58 G 30081270.07 30081270.29 30081270.52 0.0079 0.0004

Uranus 77647-11-13 16:20 G 30081361.04 30081361.18 30081361.32 0.0134 0.0101

Pluto 77648-03-27 04:34 G 30081495.58 30081495.69 30081495.84 0.0078 0.0064

Uranus 77648-06-26 21:22 G 30081587.37 30081587.39 30081587.43 0.0134 0.0133

Saturn 77649-09-22 10:20 G 30082039.79 30082039.93 30082040.09 0.0289 0.0199

Saturn 77650-05-10 03:51 G 30082269.45 30082269.66 30082269.87 0.0288 0.0005

Saturn 77650-12-25 20:24 G 30082499.20 30082499.35 30082499.52 0.0287 0.0190

Jupiter 77651-03-09 20:10 G 30082573.15 30082573.34 30082573.54 0.0519 0.0145

Jupiter 77651-11-02 05:46 G 30082810.56 30082810.74 30082810.92 0.0510 0.0249

Jupiter 77657-01-02 14:53 G 30084699.01 30084699.12 30084699.24 0.0501 0.0409

Jupiter 77657-08-26 23:17 G 30084935.27 30084935.47 30084935.67 0.0510 0.0060

Jupiter 77658-04-20 18:15 G 30085172.11 30085172.26 30085172.42 0.0520 0.0326

Jupiter 77662-11-12 11:32 G 30086838.80 30086838.98 30086839.16 0.0522 0.0259

Jupiter 77663-07-08 00:44 G 30087076.33 30087076.53 30087076.73 0.0512 0.0144

Jupiter 77664-03-01 01:56 G 30087313.56 30087313.58 30087313.60 0.0503 0.0500

Saturn 77664-10-18 19:27 G 30087545.19 30087545.31 30087545.45 0.0270 0.0215

Saturn 77665-06-05 02:24 G 30087774.39 30087774.60 30087774.81 0.0271 0.0053

Saturn 77666-01-20 09:36 G 30088003.71 30088003.90 30088004.10 0.0272 0.0113

Neptune 77667-06-21 09:51 G 30088520.86 30088520.91 30088520.96 0.0089 0.0087

Neptune 77668-02-01 22:05 G 30088746.35 30088746.42 30088746.55 0.0089 0.0080

Jupiter 77668-09-07 16:05 G 30088965.16 30088965.17 30088965.20 0.0499 0.0496

Neptune 77668-09-14 11:03 G 30088971.85 30088971.96 30088972.11 0.0089 0.0072

Earth 77668-10-05 18:00 G 30088993.11 30088993.25 30088993.39 0.2703 0.1233

Moon 77668-10-05 23:17 G 30088993.37 30088993.47 30088993.56 0.2700 0.2115 *

Neptune 77669-04-28 00:00 G 30089197.37 30089197.50 30089197.67 0.0089 0.0064

Jupiter 77669-05-01 21:51 G 30089201.22 30089201.41 30089201.60 0.0507 0.0162

Neptune 77669-12-09 12:58 G 30089422.89 30089423.04 30089423.23 0.0089 0.0056

Jupiter 77669-12-24 13:27 G 30089437.88 30089438.06 30089438.24 0.0517 0.0216

Neptune 77670-07-23 01:56 G 30089648.41 30089648.58 30089648.78 0.0089 0.0048

Neptune 77671-03-05 14:53 G 30089873.94 30089874.12 30089874.33 0.0089 0.0039

Neptune 77671-10-17 03:51 G 30090099.47 30090099.66 30090099.87 0.0089 0.0031

Neptune 77672-05-29 17:03 G 30090325.00 30090325.21 30090325.42 0.0089 0.0023

Neptune 77673-01-10 06:00 G 30090550.53 30090550.75 30090550.96 0.0089 0.0015

Mars 77673-06-24 15:36 G 30090715.99 30090716.15 30090716.31 0.1860 0.0849

Neptune 77673-08-23 18:44 G 30090776.06 30090776.28 30090776.50 0.0089 0.0007

Neptune 77674-04-06 07:27 G 30091001.60 30091001.81 30091002.03 0.0089 0.0003

Jupiter 77674-07-18 03:22 G 30091104.50 30091104.64 30091104.79 0.0525 0.0370

Neptune 77674-11-17 20:24 G 30091227.13 30091227.35 30091227.57 0.0089 0.0010

Jupiter 77675-03-12 19:56 G 30091342.13 30091342.33 30091342.54 0.0515 0.0039

Neptune 77675-07-01 09:22 G 30091452.68 30091452.89 30091453.11 0.0089 0.0018

Jupiter 77675-11-05 00:29 G 30091579.40 30091579.52 30091579.64 0.0506 0.0411

Neptune 77676-02-11 22:20 G 30091678.22 30091678.43 30091678.64 0.0090 0.0026

Neptune 77676-09-24 11:03 G 30091903.76 30091903.96 30091904.17 0.0090 0.0034

Earth 77676-10-03 08:53 G 30091912.78 30091912.87 30091912.96 0.2702 0.2197

Moon 77676-10-03 10:20 G 30091912.83 30091912.93 30091913.03 0.2695 0.2177 *

Neptune 77677-05-08 00:00 G 30092129.31 30092129.50 30092129.69 0.0090 0.0042

Neptune 77677-12-19 12:29 G 30092354.86 30092355.02 30092355.22 0.0090 0.0051

Neptune 77678-08-02 01:27 G 30092580.42 30092580.56 30092580.74 0.0090 0.0059

Neptune 77679-03-15 14:24 G 30092805.97 30092806.10 30092806.26 0.0090 0.0067

Saturn 77679-04-04 16:34 G 30092826.03 30092826.19 30092826.36 0.0289 0.0170

Neptune 77679-10-27 03:08 G 30093031.54 30093031.63 30093031.78 0.0090 0.0075

Saturn 77679-11-20 09:36 G 30093055.69 30093055.90 30093056.11 0.0288 0.0025

Neptune 77680-06-08 16:05 G 30093257.12 30093257.17 30093257.28 0.0090 0.0083

Saturn 77680-07-07 01:56 G 30093285.45 30093285.58 30093285.72 0.0286 0.0217

Jupiter 77681-01-04 22:34 G 30093467.27 30093467.44 30093467.61 0.0505 0.0260

Jupiter 77681-08-29 11:17 G 30093703.77 30093703.97 30093704.17 0.0514 0.0110

Jupiter 77682-04-23 11:32 G 30093940.92 30093940.98 30093941.04 0.0524 0.0497

Jupiter 77686-03-22 18:44 G 30095370.20 30095370.28 30095370.36 0.0528 0.0481

Uranus 77686-04-16 21:36 G 30095395.28 30095395.40 30095395.53 0.0144 0.0119

Jupiter 77686-11-15 14:24 G 30095607.90 30095608.10 30095608.31 0.0518 0.0072

Uranus 77686-11-29 09:51 G 30095621.74 30095621.91 30095622.10 0.0144 0.0079

Jupiter 77687-07-10 21:51 G 30095845.26 30095845.41 30095845.58 0.0508 0.0315

Uranus	77687-07-13 22:34 G	30095848.23	30095848.44	30095848.65	0.0144	0.0038
Uranus	77688-02-25 11:03 G	30096074.74	30096074.96	30096075.18	0.0144	0.0003
Uranus	77688-10-08 23:17 G	30096301.27	30096301.47	30096301.69	0.0144	0.0043
Uranus	77689-05-23 11:32 G	30096527.81	30096527.98	30096528.17	0.0144	0.0084
Uranus	77690-01-05 00:00 G	30096754.40	30096754.50	30096754.62	0.0144	0.0124
Jupiter	77692-09-10 00:15 G	30097733.37	30097733.51	30097733.65	0.0503	0.0354
Jupiter	77693-05-04 10:20 G	30097969.73	30097969.93	30097970.13	0.0512	0.0005
Jupiter	77693-12-27 07:27 G	30098206.69	30098206.81	30098206.95	0.0522	0.0392
Saturn	77694-04-30 19:41 G	30098331.18	30098331.32	30098331.47	0.0270	0.0198
Saturn	77694-12-16 02:24 G	30098560.39	30098560.60	30098560.81	0.0271	0.0035
Saturn	77695-08-02 09:36 G	30098789.72	30098789.90	30098790.09	0.0272	0.0130
Jupiter	77698-07-21 07:27 G	30099873.62	30099873.81	30099874.00	0.0520	0.0183
Jupiter	77699-03-15 18:15 G	30100111.07	30100111.26	30100111.45	0.0511	0.0215
Jupiter	77704-05-17 03:36 G	30101999.57	30101999.65	30101999.75	0.0501	0.0443
Jupiter	77705-01-08 11:17 G	30102235.77	30102235.97	30102236.17	0.0509	0.0098
Jupiter	77705-09-02 05:03 G	30102472.55	30102472.71	30102472.88	0.0519	0.0285
Saturn	77708-10-15 18:00 G	30103612.08	30103612.25	30103612.44	0.0289	0.0148
Saturn	77709-06-02 11:32 G	30103841.77	30103841.98	30103842.19	0.0288	0.0049
Saturn	77710-01-18 03:51 G	30104071.56	30104071.66	30104071.79	0.0287	0.0241
Mars	77710-01-31 18:58 G	30104085.12	30104085.29	30104085.46	0.1664	0.0417
Jupiter	77710-03-26 19:41 G	30104139.15	30104139.32	30104139.49	0.0523	0.0301
Jupiter	77710-11-19 09:51 G	30104376.71	30104376.91	30104377.12	0.0514	0.0105
Jupiter	77711-07-14 12:29 G	30104613.94	30104614.02	30104614.09	0.0504	0.0466
Jupiter	77716-09-13 11:46 G	30106501.81	30106501.99	30106502.18	0.0507	0.0198
Jupiter	77717-05-08 02:24 G	30106738.41	30106738.60	30106738.79	0.0516	0.0178
Jupiter	77721-11-29 09:22 G	30108404.77	30108404.89	30108405.02	0.0526	0.0415
Jupiter	77722-07-25 03:22 G	30108642.43	30108642.64	30108642.84	0.0516	0.0011
Jupiter	77723-03-19 09:08 G	30108879.75	30108879.88	30108880.03	0.0507	0.0373
Saturn	77723-11-12 03:36 G	30109117.49	30109117.65	30109117.82	0.0270	0.0167
Saturn	77724-06-28 10:34 G	30109346.73	30109346.94	30109347.15	0.0271	0.0003

Saturn 77725-02-12 18:00 G 30109576.08 30109576.25 30109576.42 0.0272 0.0162

Uranus 77727-10-26 18:15 G 30110562.14 30110562.26 30110562.40 0.0135 0.0108

Jupiter 77728-05-19 11:17 G 30110767.81 30110767.97 30110768.14 0.0504 0.0295

Uranus 77728-06-08 23:32 G 30110788.31 30110788.48 30110788.67 0.0134 0.0076

Jupiter 77729-01-10 22:34 G 30111004.25 30111004.44 30111004.64 0.0513 0.0071

Uranus 77729-01-21 04:48 G 30111014.50 30111014.70 30111014.91 0.0134 0.0043

Uranus 77729-09-04 10:05 G 30111240.71 30111240.92 30111241.14 0.0134 0.0011

Jupiter 77729-09-04 21:08 G 30111241.29 30111241.38 30111241.48 0.0523 0.0457

Uranus 77730-04-18 15:22 G 30111466.93 30111467.14 30111467.35 0.0134 0.0021

Uranus 77730-11-30 20:24 G 30111693.16 30111693.35 30111693.55 0.0134 0.0054

Uranus 77731-07-15 01:41 G 30111919.41 30111919.57 30111919.74 0.0134 0.0086

Uranus 77732-02-26 06:58 G 30112145.69 30112145.79 30112145.89 0.0134 0.0118

Jupiter 77733-08-03 23:32 G 30112670.46 30112670.48 30112670.50 0.0529 0.0525

Jupiter 77734-03-29 20:53 G 30112908.17 30112908.37 30112908.57 0.0519 0.0117

Jupiter 77734-11-22 06:15 G 30113145.59 30113145.76 30113145.94 0.0510 0.0276

Saturn 77738-04-28 01:27 G 30114398.37 30114398.56 30114398.76 0.0289 0.0117

Saturn 77738-12-13 18:29 G 30114628.07 30114628.27 30114628.48 0.0288 0.0079

Mars 77739-04-22 19:56 G 30114758.22 30114758.33 30114758.43 0.1856 0.1462

Saturn 77739-07-31 10:48 G 30114857.89 30114857.95 30114858.03 0.0286 0.0270

Jupiter 77740-01-23 12:58 G 30115033.92 30115034.04 30115034.18 0.0501 0.0387

Jupiter 77740-09-15 21:36 G 30115270.20 30115270.40 30115270.60 0.0510 0.0035

Jupiter 77741-05-10 16:48 G 30115507.05 30115507.20 30115507.35 0.0520 0.0350

Jupiter 77745-12-02 13:56 G 30117173.90 30117174.08 30117174.27 0.0522 0.0228

Jupiter 77746-07-28 02:39 G 30117411.42 30117411.61 30117411.80 0.0512 0.0174

Neptune 77748-12-25 17:17 G 30118293.17 30118293.22 30118293.30 0.0088 0.0084

Neptune 77749-08-08 06:44 G 30118518.68 30118518.78 30118518.89 0.0088 0.0077

Neptune 77750-03-21 19:27 G 30118744.19 30118744.31 30118744.47 0.0088 0.0069

Neptune 77750-11-02 08:39 G 30118969.72 30118969.86 30118970.04 0.0088 0.0061

Neptune 77751-06-15 22:05 G 30119195.25 30119195.42 30119195.61 0.0088 0.0053

Jupiter 77751-09-28 15:22 G 30119300.08 30119300.14 30119300.20 0.0499 0.0475

Neptune 77752-01-27 11:17 G 30119420.79 30119420.97 30119421.17 0.0088 0.0045

Jupiter 77752-05-21 21:36 G 30119536.20 30119536.40 30119536.59 0.0508 0.0137

Neptune 77752-09-09 00:29 G 30119646.33 30119646.52 30119646.73 0.0088 0.0037

Jupiter 77753-01-13 13:56 G 30119772.91 30119773.08 30119773.26 0.0518 0.0243

Neptune 77753-04-22 13:27 G 30119871.86 30119872.06 30119872.28 0.0088 0.0030

Saturn 77753-05-24 04:48 G 30119903.52 30119903.70 30119903.88 0.0271 0.0149

Neptune 77753-12-04 02:39 G 30120097.41 30120097.61 30120097.84 0.0088 0.0022

Saturn 77754-01-08 11:32 G 30120132.77 30120132.98 30120133.19 0.0271 0.0015

Neptune 77754-07-17 16:05 G 30120322.95 30120323.17 30120323.39 0.0088 0.0014

Saturn 77754-08-25 18:44 G 30120362.12 30120362.28 30120362.44 0.0273 0.0181

Neptune 77755-02-28 05:17 G 30120548.50 30120548.72 30120548.94 0.0088 0.0006

Neptune 77755-10-11 18:29 G 30120774.04 30120774.27 30120774.49 0.0088 0.0002

Neptune 77756-05-24 07:41 G 30120999.60 30120999.82 30121000.04 0.0088 0.0010

Neptune 77757-01-04 20:53 G 30121225.15 30121225.37 30121225.59 0.0088 0.0018

Jupiter 77757-08-07 05:32 G 30121439.58 30121439.73 30121439.89 0.0524 0.0341

Neptune 77757-08-18 10:05 G 30121450.71 30121450.92 30121451.13 0.0088 0.0026

Neptune 77758-03-31 23:03 G 30121676.26 30121676.46 30121676.67 0.0088 0.0034

Jupiter 77758-04-01 21:22 G 30121677.19 30121677.39 30121677.59 0.0515 0.0067

Neptune 77758-11-12 12:00 G 30121901.82 30121902.00 30121902.21 0.0088 0.0042

Jupiter 77758-11-25 00:58 G 30121914.44 30121914.54 30121914.65 0.0505 0.0435

Neptune 77759-06-26 01:12 G 30122127.38 30122127.55 30122127.75 0.0088 0.0050

Neptune 77760-02-06 14:24 G 30122352.95 30122353.10 30122353.29 0.0088 0.0058

Neptune 77760-09-19 03:51 G 30122578.52 30122578.66 30122578.81 0.0088 0.0065

Neptune 77761-05-02 16:34 G 30122804.09 30122804.19 30122804.33 0.0088 0.0073

Neptune 77761-12-14 05:32 G 30123029.67 30123029.73 30123029.84 0.0088 0.0081

Jupiter 77764-01-25 23:32 G 30123802.31 30123802.48 30123802.66 0.0506 0.0235

Jupiter 77764-09-18 12:58 G 30124038.85 30124039.04 30124039.24 0.0515 0.0137

Jupiter 77765-05-13 13:41 G 30124276.06 30124276.07 30124276.09 0.0524 0.0523

Saturn 77767-03-23 09:22 G 30124954.89 30124954.89 30124954.92 0.0290 0.0289

Saturn 77767-11-08 03:22 G 30125184.45 30125184.64 30125184.84 0.0289 0.0093

Saturn 77768-06-24 20:39 G 30125414.17 30125414.36 30125414.56 0.0288 0.0103

Jupiter 77769-04-11 16:34 G 30125705.10 30125705.19 30125705.30 0.0527 0.0457

Jupiter 77769-12-05 11:46 G 30125942.78 30125942.99 30125943.19 0.0517 0.0048

Uranus 77769-12-16 02:53 G 30125953.58 30125953.62 30125953.70 0.0143 0.0138

Uranus 77770-07-30 15:22 G 30126180.00 30126180.14 30126180.32 0.0144 0.0098

Jupiter 77770-07-30 18:58 G 30126180.14 30126180.29 30126180.45 0.0508 0.0336 *

Uranus 77771-03-14 04:05 G 30126406.47 30126406.67 30126406.87 0.0144 0.0057

Uranus 77771-10-26 16:34 G 30126632.97 30126633.19 30126633.41 0.0144 0.0017

Uranus 77772-06-09 04:48 G 30126859.49 30126859.70 30126859.92 0.0144 0.0024

Uranus 77773-01-21 17:17 G 30127086.03 30127086.22 30127086.42 0.0144 0.0065

Uranus 77773-09-05 05:32 G 30127312.59 30127312.73 30127312.89 0.0144 0.0105

Jupiter 77775-10-01 01:12 G 30128068.40 30128068.55 30128068.70 0.0503 0.0328

Mars 77775-11-29 06:29 G 30128127.60 30128127.77 30128127.94 0.1666 0.0174

Jupiter 77776-05-24 11:32 G 30128304.78 30128304.98 30128305.19 0.0512 0.0034

Jupiter 77777-01-16 08:53 G 30128541.75 30128541.87 30128541.99 0.0522 0.0418

Jupiter 77781-08-10 03:22 G 30130208.44 30130208.64 30130208.84 0.0520 0.0161

Jupiter 77782-04-04 14:10 G 30130445.91 30130446.09 30130446.27 0.0511 0.0235

Saturn 77782-12-04 12:58 G 30130689.85 30130690.04 30130690.24 0.0270 0.0117

Saturn 77783-07-21 19:56 G 30130919.12 30130919.33 30130919.54 0.0271 0.0047

Saturn 77784-03-07 03:36 G 30131148.52 30131148.65 30131148.78 0.0272 0.0213

Jupiter 77787-06-06 01:56 G 30132334.48 30132334.58 30132334.69 0.0500 0.0419

Jupiter 77788-01-28 09:08 G 30132570.68 30132570.88 30132571.08 0.0509 0.0073

Jupiter 77788-09-21 02:53 G 30132807.46 30132807.62 30132807.78 0.0519 0.0309

Jupiter 77793-04-14 18:58 G 30134474.12 30134474.29 30134474.47 0.0523 0.0274

Jupiter 77793-12-08 09:36 G 30134711.70 30134711.90 30134712.10 0.0514 0.0131

Jupiter 77794-08-02 12:00 G 30134948.96 30134949.00 30134949.05 0.0504 0.0490

Saturn 77796-10-02 18:29 G 30135741.18 30135741.27 30135741.37 0.0290 0.0256

Saturn 77797-05-20 12:15 G 30135970.80 30135971.01 30135971.21 0.0289 0.0060

Saturn 77798-01-05 05:03 G 30136200.53 30136200.71 30136200.90 0.0288 0.0135

Jupiter 77799-10-03 09:08 G 30136836.69 30136836.88 30136837.07 0.0507 0.0174

Jupiter 77800-05-27 23:32 G 30137073.30 30137073.48 30137073.67 0.0516 0.0202

Jupiter 77804-12-19 10:34 G 30138739.81 30138739.94 30138740.09 0.0526 0.0387

Pluto 77805-06-01 06:15 G 30138903.73 30138903.76 30138903.86 0.0065 0.0063

Jupiter 77805-08-14 04:34 G 30138977.48 30138977.69 30138977.89 0.0516 0.0025

Pluto 77806-01-12 11:03 G 30139128.77 30139128.96 30139129.18 0.0066 0.0025

Moon 77806-04-07 12:58 G 30139213.93 30139214.04 30139214.14 0.2628 0.1941

Earth 77806-04-07 18:00 G 30139214.16 30139214.25 30139214.35 0.2630 0.2086

Jupiter 77806-04-08 09:51 G 30139214.79 30139214.91 30139215.04 0.0507 0.0399

Pluto 77806-08-25 15:51 G 30139353.95 30139354.16 30139354.38 0.0066 0.0014

Pluto 77807-04-07 20:24 G 30139579.23 30139579.35 30139579.49 0.0066 0.0052

Jupiter 77811-06-09 09:51 G 30141102.75 30141102.91 30141103.09 0.0504 0.0272

Uranus 77811-06-27 03:22 G 30141120.56 30141120.64 30141120.73 0.0135 0.0123

Saturn 77811-10-31 09:08 G 30141246.82 30141246.88 30141246.94 0.0270 0.0257

Jupiter 77812-01-31 21:51 G 30141339.21 30141339.41 30141339.61 0.0514 0.0095

Uranus 77812-02-08 08:39 G 30141346.71 30141346.86 30141347.02 0.0134 0.0091

Saturn 77812-06-16 15:22 G 30141475.94 30141476.14 30141476.34 0.0271 0.0097

Uranus 77812-09-21 13:56 G 30141572.89 30141573.08 30141573.28 0.0134 0.0059

Jupiter 77812-09-24 21:08 G 30141576.30 30141576.38 30141576.45 0.0523 0.0482

Saturn 77813-01-31 22:20 G 30141705.22 30141705.43 30141705.63 0.0272 0.0068

Uranus 77813-05-05 18:58 G 30141799.09 30141799.29 30141799.51 0.0134 0.0027

Saturn 77813-09-18 05:32 G 30141934.63 30141934.73 30141934.84 0.0273 0.0233

Uranus 77813-12-18 00:15 G 30142025.30 30142025.51 30142025.73 0.0134 0.0006

Moon 77814-04-05 04:48 G 30142133.58 30142133.70 30142133.82 0.2634 0.1687

Earth 77814-04-05 09:36 G 30142133.75 30142133.90 30142134.04 0.2630 0.1086 *

Uranus 77814-08-01 05:32 G 30142251.53 30142251.73 30142251.94 0.0134 0.0038

Uranus 77815-03-15 10:34 G 30142477.77 30142477.94 30142478.13 0.0134 0.0071

Uranus 77815-10-27 15:36 G 30142704.03 30142704.15 30142704.30 0.0134 0.0103

Uranus 77816-06-09 20:53 G 30142930.37 30142930.37 30142930.38 0.0134 0.0134

Jupiter 77816-08-24 00:58 G 30143005.48 30143005.54 30143005.61 0.0528 0.0498

Jupiter 77817-04-18 21:51 G 30143243.20 30143243.41 30143243.61 0.0519 0.0088

Jupiter 77817-12-12 06:29 G 30143480.61 30143480.77 30143480.94 0.0509 0.0302

Jupiter 77823-02-12 12:44 G 30145368.90 30145369.03 30145369.17 0.0502 0.0364

Jupiter 77823-10-06 22:05 G 30145605.22 30145605.42 30145605.62 0.0511 0.0011

Jupiter 77824-05-30 18:00 G 30145842.11 30145842.25 30145842.39 0.0521 0.0376

Saturn 77826-04-15 20:24 G 30146527.23 30146527.35 30146527.48 0.0290 0.0232

Saturn 77826-12-01 14:10 G 30146756.88 30146757.09 30146757.30 0.0289 0.0036

Saturn 77827-07-19 07:12 G 30146986.63 30146986.80 30146986.98 0.0288 0.0159

Jupiter 77828-12-22 11:03 G 30147508.77 30147508.96 30147509.15 0.0521 0.0204

Jupiter 77829-08-16 23:03 G 30147746.27 30147746.46 30147746.65 0.0512 0.0196

Neptune 77831-09-24 21:22 G 30148515.38 30148515.39 30148515.44 0.0089 0.0089

Neptune 77832-05-07 10:20 G 30148740.85 30148740.93 30148741.04 0.0089 0.0081

Neptune 77832-12-18 23:17 G 30148966.35 30148966.47 30148966.61 0.0089 0.0073

Neptune 77833-08-01 12:15 G 30149191.87 30149192.01 30149192.17 0.0089 0.0065

Neptune 77834-03-15 00:58 G 30149417.38 30149417.54 30149417.72 0.0089 0.0057

Jupiter 77834-10-18 15:08 G 30149635.05 30149635.13 30149635.22 0.0500 0.0451

Neptune 77834-10-26 13:56 G 30149642.91 30149643.08 30149643.27 0.0089 0.0049

Neptune 77835-06-09 02:53 G 30149868.44 30149868.62 30149868.82 0.0089 0.0041

Jupiter 77835-06-11 21:51 G 30149871.22 30149871.41 30149871.61 0.0508 0.0111

Neptune 77836-01-20 15:51 G 30150093.97 30150094.16 30150094.37 0.0089 0.0032

Jupiter 77836-02-03 14:39 G 30150107.94 30150108.11 30150108.28 0.0518 0.0270

Neptune 77836-09-02 04:34 G 30150319.49 30150319.69 30150319.91 0.0089 0.0025

Mars 77837-02-17 19:27 G 30150488.23 30150488.31 30150488.39 0.1864 0.1662

Neptune 77837-04-15 17:32 G 30150545.02 30150545.23 30150545.45 0.0089 0.0016

Neptune 77837-11-27 06:29 G 30150770.56 30150770.77 30150770.99 0.0089 0.0008

Neptune 77838-07-10 19:41 G 30150996.10 30150996.32 30150996.53 0.0089 0.0001

Neptune 77839-02-21 08:24 G 30151221.64 30151221.85 30151222.07 0.0089 0.0009

Neptune 77839-10-04 21:08 G 30151447.17 30151447.38 30151447.60 0.0090 0.0017

Neptune 77840-05-17 10:05 G 30151672.71 30151672.92 30151673.13 0.0090 0.0025

Jupiter 77840-08-27 00:58 G 30151774.38 30151774.54 30151774.71 0.0524 0.0319

Neptune 77840-12-28 23:03 G 30151898.26 30151898.46 30151898.66 0.0090 0.0033

Jupiter 77841-04-21 16:34 G 30152011.99 30152012.19 30152012.39 0.0515 0.0088

Saturn 77841-05-12 17:03 G 30152033.10 30152033.21 30152033.32 0.0270 0.0227

Neptune 77841-08-11 11:32 G 30152123.80 30152123.98 30152124.19 0.0090 0.0042

Mars 77841-09-26 18:00 G 30152170.08 30152170.25 30152170.43 0.1669 0.0064

Jupiter 77841-12-14 20:24 G 30152249.26 30152249.35 30152249.44 0.0505 0.0454

Saturn 77841-12-27 23:32 G 30152262.27 30152262.48 30152262.69 0.0271 0.0065

Neptune 77842-03-25 00:15 G 30152349.35 30152349.51 30152349.71 0.0090 0.0050

Saturn 77842-08-14 06:44 G 30152491.58 30152491.78 30152491.98 0.0272 0.0099

Neptune 77842-11-05 13:12 G 30152574.90 30152575.05 30152575.23 0.0090 0.0058

Saturn 77843-03-31 14:10 G 30152721.05 30152721.09 30152721.15 0.0273 0.0265

Neptune 77843-06-19 02:10 G 30152800.46 30152800.59 30152800.75 0.0090 0.0066

Neptune 77844-01-30 15:08 G 30153026.02 30153026.13 30153026.27 0.0090 0.0074

Neptune 77844-09-12 03:51 G 30153251.60 30153251.66 30153251.77 0.0090 0.0082

Neptune 77845-04-25 17:03 G 30153477.21 30153477.21 30153477.23 0.0090 0.0089

Jupiter 77847-02-14 20:53 G 30154137.18 30154137.37 30154137.55 0.0505 0.0211

Jupiter 77847-10-09 09:51 G 30154373.72 30154373.91 30154374.10 0.0515 0.0161

Jupiter 77852-05-01 14:53 G 30156040.00 30156040.12 30156040.23 0.0527 0.0432

Jupiter 77852-12-25 10:20 G 30156277.72 30156277.93 30156278.13 0.0518 0.0022

Jupiter 77853-08-19 17:46 G 30156515.10 30156515.24 30156515.38 0.0508 0.0361

Uranus 77854-03-30 21:51 G 30156738.30 30156738.41 30156738.55 0.0144 0.0116

Uranus 77854-11-12 10:20 G 30156964.75 30156964.93 30156965.12 0.0144 0.0075

Uranus 77855-06-26 22:48 G 30157191.24 30157191.45 30157191.67 0.0144 0.0035

Saturn 77855-10-27 06:58 G 30157313.64 30157313.79 30157313.95 0.0290 0.0198

Uranus 77856-02-08 11:17 G 30157417.75 30157417.97 30157418.20 0.0144 0.0006

Saturn 77856-06-13 00:29 G 30157543.31 30157543.52 30157543.73 0.0289 0.0001

Uranus 77856-09-21 23:46 G 30157644.28 30157644.49 30157644.70 0.0144 0.0046

Saturn 77857-01-28 17:03 G 30157773.06 30157773.21 30157773.37 0.0287 0.0193

Uranus 77857-05-06 11:46 G 30157870.82 30157870.99 30157871.17 0.0144 0.0087

Uranus 77857-12-19 00:00 G 30158097.41 30158097.50 30158097.61 0.0144 0.0127

Jupiter 77858-10-20 21:36 G 30158403.24 30158403.40 30158403.56 0.0503 0.0306

Jupiter 77859-06-14 07:56 G 30158639.63 30158639.83 30158640.03 0.0512 0.0055

Jupiter 77860-02-06 05:03 G 30158876.61 30158876.71 30158876.82 0.0522 0.0440

Jupiter 77864-08-30 03:36 G 30160543.45 30160543.65 30160543.85 0.0520 0.0134

Jupiter 77865-04-24 14:10 G 30160780.92 30160781.09 30160781.27 0.0511 0.0261

Jupiter 77870-06-25 23:17 G 30162669.35 30162669.47 30162669.60 0.0501 0.0398

Saturn 77870-11-22 20:24 G 30162819.22 30162819.35 30162819.49 0.0270 0.0205

Jupiter 77871-02-17 06:58 G 30162905.59 30162905.79 30162905.99 0.0510 0.0050

Saturn 77871-07-10 02:53 G 30163048.41 30163048.62 30163048.83 0.0271 0.0043

Jupiter 77871-10-12 01:12 G 30163142.40 30163142.55 30163142.71 0.0519 0.0333

Saturn 77872-02-24 10:05 G 30163277.73 30163277.92 30163278.11 0.0272 0.0121

Jupiter 77876-05-04 19:27 G 30164809.13 30164809.31 30164809.49 0.0523 0.0246

Jupiter 77876-12-28 09:36 G 30165046.70 30165046.90 30165047.09 0.0513 0.0158

Jupiter 77882-03-01 02:53 G 30166935.58 30166935.62 30166935.67 0.0499 0.0484

Jupiter 77882-10-23 08:10 G 30167171.65 30167171.84 30167172.03 0.0507 0.0150

Jupiter 77883-06-16 23:32 G 30167408.30 30167408.48 30167408.66 0.0517 0.0228

Saturn 77885-05-08 09:08 G 30168099.72 30168099.88 30168100.06 0.0289 0.0174

Saturn 77885-12-24 02:53 G 30168329.41 30168329.62 30168329.83 0.0288 0.0023

Saturn 77886-08-10 19:41 G 30168559.19 30168559.32 30168559.46 0.0287 0.0216

Jupiter 77888-01-08 07:56 G 30169074.69 30169074.83 30169074.98 0.0525 0.0362

Jupiter 77888-09-02 00:44 G 30169312.33 30169312.53 30169312.74 0.0516 0.0047

Jupiter 77889-04-27 05:46 G 30169549.63 30169549.74 30169549.86 0.0506 0.0418

Pluto 77893-09-13 17:46 G 30171150.07 30171150.24 30171150.44 0.0079 0.0041

Pluto 77894-04-27 03:51 G 30171375.46 30171375.66 30171375.88 0.0078 0.0026

Jupiter 77894-06-28 09:22 G 30171437.71 30171437.89 30171438.06 0.0505 0.0246

Jupiter 77895-02-19 21:36 G 30171674.21 30171674.40 30171674.60 0.0514 0.0122

Uranus 77895-10-08 18:15 G 30171905.13 30171905.26 30171905.39 0.0135 0.0106

Jupiter 77895-10-14 20:53 G 30171911.33 30171911.37 30171911.42 0.0523 0.0507

Uranus 77896-05-21 23:17 G 30172131.30 30172131.47 30172131.66 0.0134 0.0074

Uranus 77897-01-03 04:34 G 30172357.49 30172357.69 30172357.90 0.0134 0.0042

Uranus 77897-08-17 09:51 G 30172583.70 30172583.91 30172584.13 0.0134 0.0010

Uranus 77898-03-31 14:53 G 30172809.92 30172810.12 30172810.34 0.0134 0.0023

Uranus 77898-11-12 19:56 G 30173036.14 30173036.33 30173036.54 0.0134 0.0055

Uranus 77899-06-27 00:58 G 30173262.39 30173262.54 30173262.72 0.0134 0.0088

Jupiter 77899-09-12 20:24 G 30173340.27 30173340.35 30173340.44 0.0528 0.0476

Uranus 77900-02-08 06:00 G 30173488.67 30173488.75 30173488.87 0.0134 0.0120

Jupiter 77900-05-08 16:34 G 30173577.99 30173578.19 30173578.40 0.0518 0.0066

Saturn 77900-06-05 04:20 G 30173605.52 30173605.68 30173605.84 0.0270 0.0176

Jupiter 77901-01-01 01:12 G 30173815.40 30173815.55 30173815.72 0.0509 0.0322

Saturn 77901-01-20 11:03 G 30173834.75 30173834.96 30173835.18 0.0271 0.0013

Saturn 77901-09-06 18:15 G 30174064.09 30174064.26 30174064.44 0.0272 0.0153

Mars 77902-12-16 23:03 G 30174530.32 30174530.46 30174530.61 0.1861 0.1015

Jupiter 77906-03-04 09:22 G 30175703.74 30175703.89 30175704.04 0.0502 0.0341

Jupiter 77906-10-26 18:15 G 30175940.06 30175940.26 30175940.46 0.0511 0.0015

Jupiter 77907-06-20 13:56 G 30176176.96 30176177.08 30176177.21 0.0520 0.0398

Mars 77907-07-26 05:03 G 30176212.55 30176212.71 30176212.88 0.1671 0.0317

Moon 77911-10-09 13:27 G 30177748.91 30177749.06 30177749.21 0.2704 0.0463

Earth 77911-10-09 19:12 G 30177749.16 30177749.30 30177749.43 0.2703 0.1308 *

Jupiter 77912-01-12 08:24 G 30177843.66 30177843.85 30177844.04 0.0522 0.0180

Jupiter 77912-09-05 20:53 G 30178081.18 30178081.37 30178081.56 0.0512 0.0220

Neptune 77913-03-31 03:51 G 30178287.64 30178287.66 30178287.74 0.0088 0.0087

Neptune 77913-11-11 17:17 G 30178513.14 30178513.22 30178513.34 0.0088 0.0078

Neptune 77914-06-25 06:44 G 30178738.66 30178738.78 30178738.93 0.0088 0.0070

Saturn 77914-11-19 20:53 G 30178886.19 30178886.37 30178886.55 0.0289 0.0137

Neptune 77915-02-05 19:56 G 30178964.19 30178964.33 30178964.50 0.0088 0.0063

Saturn 77915-07-07 14:10 G 30179115.88 30179116.09 30179116.29 0.0288 0.0059

Neptune 77915-09-19 09:22 G 30179189.72 30179189.89 30179190.07 0.0088 0.0054

Saturn 77916-02-22 06:29 G 30179345.68 30179345.77 30179345.88 0.0287 0.0252

Neptune 77916-05-01 22:05 G 30179415.25 30179415.42 30179415.63 0.0088 0.0047

Neptune 77916-12-13 11:32 G 30179640.79 30179640.98 30179641.19 0.0088 0.0039

Neptune 77917-07-27 00:44 G 30179866.33 30179866.53 30179866.75 0.0088 0.0031

Jupiter 77917-11-07 11:17 G 30179969.87 30179969.97 30179970.07 0.0500 0.0431

Neptune 77918-03-09 13:56 G 30180091.87 30180092.08 30180092.30 0.0088 0.0023

Jupiter 77918-07-01 17:32 G 30180206.03 30180206.23 30180206.43 0.0508 0.0088

Neptune 77918-10-21 02:53 G 30180317.41 30180317.62 30180317.85 0.0088 0.0015

Jupiter 77919-02-23 09:51 G 30180442.75 30180442.91 30180443.08 0.0518 0.0292

Neptune 77919-06-03 16:20 G 30180542.96 30180543.18 30180543.40 0.0088 0.0007

Moon 77919-10-07 06:44 G 30180668.69 30180668.78 30180668.87 0.2708 0.2117

Earth 77919-10-07 09:51 G 30180668.82 30180668.91 30180669.01 0.2702 0.2129 *

Neptune 77920-01-15 05:32 G 30180768.51 30180768.73 30180768.96 0.0088 0.0002

Neptune 77920-08-27 18:44 G 30180994.06 30180994.28 30180994.50 0.0088 0.0009

Neptune 77921-04-10 07:41 G 30181219.61 30181219.82 30181220.04 0.0088 0.0017

Neptune 77921-11-21 20:53 G 30181445.16 30181445.37 30181445.59 0.0088 0.0025

Neptune 77922-07-05 09:51 G 30181670.72 30181670.91 30181671.13 0.0088 0.0033

Neptune 77923-02-15 23:03 G 30181896.28 30181896.46 30181896.67 0.0088 0.0041

Jupiter 77923-09-17 00:00 G 30182109.33 30182109.50 30182109.67 0.0524 0.0293

Neptune 77923-09-29 12:15 G 30182121.84 30182122.01 30182122.21 0.0088 0.0049

Jupiter 77924-05-11 15:51 G 30182346.96 30182347.16 30182347.36 0.0515 0.0114

Neptune 77924-05-12 01:12 G 30182347.40 30182347.55 30182347.74 0.0088 0.0057

Neptune 77924-12-23 14:24 G 30182572.97 30182573.10 30182573.27 0.0088 0.0065

Jupiter 77925-01-03 19:27 G 30182584.25 30182584.31 30182584.38 0.0505 0.0477

Neptune 77925-08-06 04:05 G 30182798.55 30182798.67 30182798.80 0.0088 0.0072

Neptune 77926-03-19 16:48 G 30183024.13 30183024.20 30183024.31 0.0088 0.0080

Neptune 77926-10-31 06:15 G 30183249.76 30183249.76 30183249.77 0.0088 0.0088

Saturn 77929-12-16 08:39 G 30184391.69 30184391.86 30184392.04 0.0270 0.0152

Jupiter 77930-03-06 17:32 G 30184472.04 30184472.23 30184472.42 0.0506 0.0189

Saturn 77930-08-02 15:22 G 30184620.93 30184621.14 30184621.36 0.0271 0.0011

Jupiter 77930-10-29 06:58 G 30184708.61 30184708.79 30184708.98 0.0515 0.0184

Saturn 77931-03-19 22:34 G 30184850.28 30184850.44 30184850.61 0.0272 0.0176

Jupiter 77935-05-22 14:53 G 30186374.99 30186375.12 30186375.25 0.0527 0.0406

Jupiter 77936-01-15 09:51 G 30186612.70 30186612.91 30186613.11 0.0517 0.0006

Jupiter 77936-09-08 16:34 G 30186850.06 30186850.19 30186850.33 0.0508 0.0385

Uranus 77937-11-29 04:20 G 30187296.61 30187296.68 30187296.76 0.0144 0.0134

Uranus 77938-07-13 16:34 G 30187523.03 30187523.19 30187523.37 0.0144 0.0094

Uranus 77939-02-25 05:03 G 30187749.52 30187749.71 30187749.92 0.0144 0.0054

Uranus 77939-10-09 17:32 G 30187976.02 30187976.23 30187976.45 0.0144 0.0013

Uranus 77940-05-23 05:46 G 30188202.53 30188202.74 30188202.96 0.0144 0.0028

Uranus 77941-01-04 18:15 G 30188429.07 30188429.26 30188429.46 0.0144 0.0068

Uranus 77941-08-19 06:15 G 30188655.63 30188655.76 30188655.92 0.0144 0.0109

Jupiter 77941-11-09 19:27 G 30188738.15 30188738.31 30188738.48 0.0504 0.0284

Jupiter 77942-07-04 06:44 G 30188974.58 30188974.78 30188974.97 0.0513 0.0081

Jupiter 77943-02-26 04:34 G 30189211.61 30189211.69 30189211.78 0.0522 0.0464

Saturn 77944-05-31 23:32 G 30189672.29 30189672.48 30189672.68 0.0289 0.0112

Saturn 77945-01-16 16:48 G 30189902.00 30189902.20 30189902.40 0.0288 0.0084

Saturn 77945-09-03 09:22 G 30190131.85 30190131.89 30190131.96 0.0287 0.0275

Jupiter 77947-01-25 02:39 G 30190640.58 30190640.61 30190640.65 0.0529 0.0518

Jupiter 77947-09-20 00:00 G 30190878.30 30190878.50 30190878.71 0.0519 0.0110

Jupiter 77948-05-14 10:05 G 30191115.75 30191115.92 30191116.09 0.0510 0.0283

Jupiter 77953-07-15 21:36 G 30193004.27 30193004.40 30193004.53 0.0501 0.0375

Jupiter 77954-03-09 05:46 G 30193240.54 30193240.74 30193240.95 0.0510 0.0026

Jupiter 77954-11-01 00:29 G 30193477.38 30193477.52 30193477.67 0.0520 0.0359

Jupiter 77959-05-25 14:24 G 30195143.92 30195144.10 30195144.29 0.0522 0.0225

Saturn 77959-06-28 15:51 G 30195177.97 30195178.16 30195178.35 0.0271 0.0123

Jupiter 77960-01-18 04:05 G 30195381.48 30195381.67 30195381.87 0.0513 0.0179

Saturn 77960-02-12 23:03 G 30195407.25 30195407.46 30195407.67 0.0271 0.0041

Saturn 77960-09-29 06:15 G 30195636.64 30195636.76 30195636.91 0.0272 0.0207

Jupiter 77965-03-20 22:48 G 30197270.39 30197270.45 30197270.53 0.0499 0.0464

Jupiter 77965-11-12 04:05 G 30197506.48 30197506.67 30197506.87 0.0507 0.0127

Jupiter 77966-07-06 19:12 G 30197743.13 30197743.30 30197743.48 0.0516 0.0250

Mars 77968-10-13 03:36 G 30198572.47 30198572.65 30198572.82 0.1857 0.0391

Jupiter 77971-01-28 04:05 G 30199409.52 30199409.67 30199409.83 0.0525 0.0340

Jupiter 77971-09-22 21:36 G 30199647.20 30199647.40 30199647.60 0.0516 0.0070

Jupiter 77972-05-17 03:08 G 30199884.53 30199884.63 30199884.73 0.0506 0.0441

Saturn 77973-04-26 18:00 G 30200229.19 30200229.25 30200229.34 0.0290 0.0270

Mars 77973-05-22 16:34 G 30200255.03 30200255.19 30200255.35 0.1674 0.0560

Saturn 77973-12-12 11:46 G 30200458.79 30200458.99 30200459.20 0.0289 0.0074

Saturn 77974-07-30 04:48 G 30200688.52 30200688.70 30200688.90 0.0288 0.0122

Jupiter 77977-07-18 04:34 G 30201772.51 30201772.69 30201772.87 0.0504 0.0226

Jupiter 77978-03-11 16:20 G 30202008.99 30202009.18 30202009.38 0.0514 0.0143

Uranus 77979-06-09 03:08 G 30202463.55 30202463.63 30202463.74 0.0134 0.0121

Uranus 77980-01-21 08:24 G 30202689.70 30202689.85 30202690.02 0.0134 0.0089

Uranus 77980-09-03 13:56 G 30202915.88 30202916.08 30202916.27 0.0134 0.0057

Uranus 77981-04-17 18:58 G 30203142.08 30203142.29 30203142.50 0.0134 0.0025

Uranus 77981-11-30 00:00 G 30203368.29 30203368.50 30203368.72 0.0134 0.0008

Uranus 77982-07-14 05:17 G 30203594.51 30203594.72 30203594.92 0.0134 0.0040

Jupiter 77982-10-02 18:15 G 30203675.16 30203675.26 30203675.37 0.0528 0.0453

Uranus 77983-02-25 10:20 G 30203820.75 30203820.93 30203821.11 0.0134 0.0072

Jupiter 77983-05-28 14:53 G 30203912.92 30203913.12 30203913.33 0.0519 0.0043

Uranus 77983-10-09 15:22 G 30204047.01 30204047.14 30204047.28 0.0134 0.0104

Jupiter 77984-01-21 00:00 G 30204150.35 30204150.50 30204150.65 0.0509 0.0345

Saturn 77988-05-23 14:53 G 30205735.07 30205735.12 30205735.19 0.0270 0.0259

Saturn 77989-01-07 21:22 G 30205964.19 30205964.39 30205964.59 0.0271 0.0098

Jupiter 77989-03-23 05:17 G 30206038.57 30206038.72 30206038.88 0.0502 0.0322

Saturn 77989-08-25 04:05 G 30206193.47 30206193.67 30206193.89 0.0272 0.0067

Jupiter 77989-11-14 14:39 G 30206274.91 30206275.11 30206275.31 0.0511 0.0037

Saturn 77990-04-11 11:32 G 30206422.88 30206422.98 30206423.10 0.0273 0.0231

Jupiter 77990-07-09 10:48 G 30206511.83 30206511.95 30206512.07 0.0521 0.0420

Jupiter 77995-01-31 07:41 G 30208178.62 30208178.82 30208179.02 0.0521 0.0153

Jupiter 77995-09-25 19:41 G 30208416.14 30208416.32 30208416.50 0.0511 0.0245

Neptune 77996-08-09 21:51 G 30208735.35 30208735.41 30208735.52 0.0089 0.0083

Neptune 77997-03-23 10:48 G 30208960.85 30208960.95 30208961.09 0.0089 0.0074

Neptune 77997-11-03 23:32 G 30209186.36 30209186.48 30209186.65 0.0089 0.0067

Neptune 77998-06-17 12:44 G 30209411.88 30209412.03 30209412.21 0.0089 0.0058

Neptune 77999-01-29 01:27 G 30209637.40 30209637.56 30209637.76 0.0089 0.0051

Neptune 77999-09-11 14:24 G 30209862.92 30209863.10 30209863.31 0.0089 0.0042

Neptune 78000-04-24 03:36 G 30210088.45 30210088.65 30210088.85 0.0089 0.0034

Jupiter 78000-11-26 08:10 G 30210304.74 30210304.84 30210304.96 0.0500 0.0411

Neptune 78000-12-05 16:20 G 30210313.98 30210314.18 30210314.40 0.0089 0.0026

79TH MILLENNIUM CE

This is a list of transits of Venus in the 79th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 78001-07-19 05:17 G 30210539.52 30210539.72 30210539.94 0.0089 0.0018

Jupiter 78001-07-20 15:08 G 30210540.94 30210541.13 30210541.33 0.0509 0.0066

Neptune 78002-03-01 18:15 G 30210765.05 30210765.26 30210765.48 0.0089 0.0010

Jupiter 78002-03-14 08:24 G 30210777.69 30210777.85 30210778.01 0.0518 0.0316

Neptune 78002-10-13 07:12 G 30210990.59 30210990.80 30210991.02 0.0089 0.0002

Saturn 78002-11-06 21:08 G 30211015.28 30211015.38 30211015.50 0.0289 0.0245

Neptune 78003-05-26 20:10 G 30211216.13 30211216.34 30211216.56 0.0089 0.0007

Saturn 78003-06-24 14:53 G 30211244.91 30211245.12 30211245.33 0.0288 0.0049

Neptune 78004-01-07 09:08 G 30211441.67 30211441.88 30211442.10 0.0089 0.0015

Saturn 78004-02-09 07:41 G 30211474.65 30211474.82 30211475.01 0.0287 0.0146

Neptune 78004-08-19 22:05 G 30211667.21 30211667.42 30211667.63 0.0089 0.0024

Neptune 78005-04-02 10:48 G 30211892.75 30211892.95 30211893.16 0.0090 0.0032

Mars 78005-05-21 13:12 G 30211942.03 30211942.05 30211942.08 0.1665 0.1641

Neptune 78005-11-13 23:17 G 30212118.30 30212118.47 30212118.69 0.0090 0.0041

Neptune 78006-06-27 12:29 G 30212343.85 30212344.02 30212344.22 0.0090 0.0049

Jupiter 78006-10-05 21:08 G 30212444.21 30212444.38 30212444.56 0.0523 0.0269

Neptune 78007-02-08 01:27 G 30212569.40 30212569.56 30212569.74 0.0090 0.0057

Jupiter 78007-05-31 12:15 G 30212681.81 30212682.01 30212682.21 0.0514 0.0138

Neptune 78007-09-21 14:10 G 30212794.96 30212795.09 30212795.26 0.0090 0.0065

Jupiter 78008-01-23 15:08 G 30212919.10 30212919.13 30212919.17 0.0505 0.0497

Neptune 78008-05-04 03:08 G 30213020.52 30213020.63 30213020.77 0.0090 0.0073

Neptune 78008-12-15 15:51 G 30213246.09 30213246.16 30213246.27 0.0090 0.0081

Neptune 78009-07-29 04:48 G 30213471.69 30213471.70 30213471.75 0.0090 0.0089

Jupiter 78012-08-01 11:03 G 30214570.95 30214570.96 30214570.98 0.0498 0.0496

Jupiter 78013-03-25 15:36 G 30214806.96 30214807.15 30214807.34 0.0506 0.0165

Jupiter 78013-11-17 05:46 G 30215043.56 30215043.74 30215043.92 0.0516 0.0210

Saturn 78017-12-03 20:39 G 30216521.26 30216521.36 30216521.48 0.0270 0.0233

Jupiter 78018-06-10 10:34 G 30216709.80 30216709.94 30216710.08 0.0526 0.0384

Saturn 78018-07-21 03:36 G 30216750.44 30216750.65 30216750.86 0.0271 0.0071

Jupiter 78019-02-03 04:48 G 30216947.49 30216947.70 30216947.91 0.0517 0.0027

Saturn 78019-03-07 11:03 G 30216979.76 30216979.96 30216980.16 0.0272 0.0094

Jupiter 78019-09-28 11:03 G 30217184.85 30217184.96 30217185.09 0.0507 0.0405

Saturn 78019-10-22 18:44 G 30217209.22 30217209.28 30217209.35 0.0273 0.0259

Uranus 78022-03-12 22:20 G 30218081.30 30218081.43 30218081.57 0.0144 0.0113

Uranus 78022-10-25 10:34 G 30218307.76 30218307.94 30218308.14 0.0144 0.0073

Uranus 78023-06-08 23:17 G 30218534.25 30218534.47 30218534.68 0.0144 0.0032

Uranus 78024-01-21 11:46 G 30218760.77 30218760.99 30218761.21 0.0144 0.0009

Uranus 78024-09-04 00:00 G 30218987.30 30218987.50 30218987.71 0.0144 0.0049

Jupiter 78024-11-28 15:36 G 30219072.98 30219073.15 30219073.32 0.0503 0.0263

Uranus 78025-04-18 12:00 G 30219213.84 30219214.00 30219214.18 0.0144 0.0090

Jupiter 78025-07-23 02:10 G 30219309.40 30219309.59 30219309.79 0.0512 0.0102

Uranus 78025-12-01 00:15 G 30219440.43 30219440.51 30219440.62 0.0144 0.0130

Jupiter 78026-03-16 23:46 G 30219546.42 30219546.49 30219546.57 0.0522 0.0484

Jupiter 78030-02-12 22:05 G 30220975.36 30220975.42 30220975.49 0.0529 0.0499

Jupiter 78030-10-08 20:10 G 30221213.14 30221213.34 30221213.54 0.0520 0.0087

Jupiter 78031-06-03 06:44 G 30221450.62 30221450.78 30221450.94 0.0510 0.0306

Saturn 78032-05-19 09:22 G 30221801.76 30221801.89 30221802.05 0.0290 0.0207

Saturn 78033-01-04 03:08 G 30222031.42 30222031.63 30222031.84 0.0289 0.0011

Saturn 78033-08-21 19:56 G 30222261.18 30222261.33 30222261.50 0.0288 0.0184

Mars 78034-08-10 07:27 G 30222614.64 30222614.81 30222614.98 0.1853 0.0236

Jupiter 78036-08-03 17:17 G 30223339.08 30223339.22 30223339.36 0.0501 0.0356

Jupiter 78037-03-28 00:44 G 30223575.33 30223575.53 30223575.74 0.0510 0.0012

Jupiter 78037-11-19 18:58 G 30223812.16 30223812.29 30223812.43 0.0519 0.0378

Mars 78039-03-20 03:51 G 30224297.51 30224297.66 30224297.81 0.1676 0.0812

Jupiter 78042-06-13 12:00 G 30225478.82 30225479.00 30225479.19 0.0523 0.0201

Jupiter 78043-02-06 02:10 G 30225716.40 30225716.59 30225716.78 0.0513 0.0203

Saturn 78047-06-16 02:53 G 30227307.49 30227307.62 30227307.77 0.0270 0.0206

Saturn 78048-01-31 09:51 G 30227536.70 30227536.91 30227537.12 0.0271 0.0044

Jupiter 78048-04-08 18:58 G 30227605.20 30227605.29 30227605.38 0.0499 0.0445

Saturn 78048-09-16 16:34 G 30227766.01 30227766.19 30227766.39 0.0272 0.0121

Jupiter 78048-12-01 00:00 G 30227841.31 30227841.50 30227841.70 0.0507 0.0107

Earth 78049-04-08 19:41 G 30227970.24 30227970.32 30227970.39 0.2630 0.2303

Moon 78049-04-08 23:17 G 30227970.43 30227970.47 30227970.52 0.2635 0.2504

Jupiter 78049-07-25 15:22 G 30228077.97 30228078.14 30228078.32 0.0517 0.0272

Pluto 78052-02-11 10:20 G 30229008.83 30229008.93 30229009.08 0.0065 0.0054

Pluto 78052-09-23 15:08 G 30229233.93 30229234.13 30229234.36 0.0066 0.0016

Pluto 78053-05-06 19:41 G 30229459.13 30229459.32 30229459.54 0.0066 0.0023

Pluto 78053-12-17 23:46 G 30229684.45 30229684.49 30229684.60 0.0066 0.0063

Jupiter 78054-02-16 03:36 G 30229744.49 30229744.65 30229744.81 0.0525 0.0314

Jupiter 78054-10-11 20:39 G 30229982.16 30229982.36 30229982.56 0.0516 0.0097

Jupiter 78055-06-06 01:41 G 30230219.49 30230219.57 30230219.65 0.0506 0.0464

Earth 78057-04-06 11:03 G 30230889.81 30230889.96 30230890.11 0.2631 0.0880

Moon 78057-04-06 16:34 G 30230890.03 30230890.19 30230890.35 0.2631 0.0060 *

Jupiter 78060-08-06 01:41 G 30232107.39 30232107.57 30232107.75 0.0505 0.0204

Jupiter 78061-03-30 14:10 G 30232343.90 30232344.09 30232344.28 0.0514 0.0167

Saturn 78061-11-29 13:12 G 30232587.89 30232588.05 30232588.21 0.0289 0.0180

Saturn 78062-07-17 06:29 G 30232817.56 30232817.77 30232817.98 0.0288 0.0016

Saturn 78063-03-03 23:17 G 30233047.33 30233047.47 30233047.61 0.0287 0.0207

Uranus 78063-09-20 18:00 G 30233248.13 30233248.25 30233248.40 0.0134 0.0104

Uranus 78064-05-03 23:03 G 30233474.29 30233474.46 30233474.66 0.0134 0.0073

Uranus 78064-12-16 04:20 G 30233700.48 30233700.68 30233700.89 0.0134 0.0040

Uranus 78065-07-30 09:36 G 30233926.69 30233926.90 30233927.12 0.0134 0.0008

Jupiter 78065-10-21 16:48 G 30234010.08 30234010.20 30234010.32 0.0527 0.0428

Uranus 78066-03-13 14:39 G 30234152.90 30234153.11 30234153.33 0.0134 0.0025

Jupiter 78066-06-16 12:15 G 30234247.81 30234248.01 30234248.22 0.0518 0.0020

Uranus 78066-10-25 19:41 G 30234379.13 30234379.32 30234379.52 0.0134 0.0057

Jupiter 78067-02-08 20:24 G 30234485.21 30234485.35 30234485.49 0.0508 0.0367

Uranus 78067-06-09 00:44 G 30234605.37 30234605.53 30234605.69 0.0134 0.0089

Uranus 78068-01-21 05:32 G 30234831.65 30234831.73 30234831.84 0.0134 0.0121

Mars 78071-03-19 00:29 G 30235984.43 30235984.52 30235984.62 0.1668 0.1402

Jupiter 78072-04-11 03:08 G 30236373.47 30236373.63 30236373.80 0.0503 0.0299

Jupiter 78072-12-03 12:58 G 30236609.84 30236610.04 30236610.24 0.0512 0.0063

Jupiter 78073-07-28 09:51 G 30236846.81 30236846.91 30236847.01 0.0521 0.0446

Saturn 78076-12-26 07:41 G 30238093.67 30238093.82 30238093.99 0.0270 0.0182

Neptune 78077-07-02 15:22 G 30238282.13 30238282.14 30238282.17 0.0088 0.0088

Saturn 78077-08-12 14:39 G 30238322.90 30238323.11 30238323.33 0.0271 0.0020

Neptune 78078-02-13 04:05 G 30238507.61 30238507.67 30238507.79 0.0088 0.0080

Jupiter 78078-02-19 03:36 G 30238513.45 30238513.65 30238513.85 0.0521 0.0130

Saturn 78078-03-29 22:05 G 30238552.25 30238552.42 30238552.61 0.0272 0.0147

Neptune 78078-09-26 17:32 G 30238733.12 30238733.23 30238733.38 0.0088 0.0072

Jupiter 78078-10-14 14:53 G 30238750.95 30238751.12 30238751.30 0.0511 0.0267

Neptune 78079-05-10 06:44 G 30238958.65 30238958.78 30238958.96 0.0088 0.0064

Neptune 78079-12-21 20:10 G 30239184.19 30239184.34 30239184.53 0.0088 0.0056

Neptune 78080-08-03 09:36 G 30239409.72 30239409.90 30239410.10 0.0088 0.0048

Neptune 78081-03-16 22:48 G 30239635.26 30239635.45 30239635.66 0.0088 0.0040

Neptune 78081-10-28 12:00 G 30239860.80 30239861.00 30239861.21 0.0088 0.0032

Neptune 78082-06-11 01:12 G 30240086.34 30240086.55 30240086.77 0.0088 0.0024

Neptune 78083-01-22 14:24 G 30240311.89 30240312.10 30240312.33 0.0088 0.0016

Neptune 78083-09-05 03:36 G 30240537.43 30240537.65 30240537.88 0.0088 0.0008

Jupiter 78083-12-16 04:48 G 30240639.58 30240639.70 30240639.82 0.0500 0.0391

Neptune 78084-04-17 16:48 G 30240762.98 30240763.20 30240763.42 0.0088 0.0000

Jupiter 78084-08-08 11:17 G 30240875.77 30240875.97 30240876.18 0.0509 0.0045

Neptune 78084-11-29 06:00 G 30240988.52 30240988.75 30240988.97 0.0088 0.0008

Jupiter 78085-04-02 04:05 G 30241112.52 30241112.67 30241112.83 0.0518 0.0337

Neptune 78085-07-12 18:58 G 30241214.07 30241214.29 30241214.51 0.0088 0.0016

Neptune 78086-02-23 08:10 G 30241439.63 30241439.84 30241440.06 0.0088 0.0024

Neptune 78086-10-06 21:08 G 30241665.18 30241665.38 30241665.59 0.0088 0.0032

Neptune 78087-05-20 10:05 G 30241890.73 30241890.92 30241891.13 0.0088 0.0040

Neptune 78087-12-31 23:17 G 30242116.30 30242116.47 30242116.67 0.0088 0.0048

Neptune 78088-08-13 12:29 G 30242341.86 30242342.02 30242342.20 0.0088 0.0056

Neptune 78089-03-27 01:27 G 30242567.43 30242567.56 30242567.73 0.0088 0.0064

Jupiter 78089-10-24 17:03 G 30242779.03 30242779.21 30242779.39 0.0524 0.0248

Neptune 78089-11-07 14:24 G 30242793.00 30242793.10 30242793.25 0.0088 0.0072

Jupiter 78090-06-19 08:24 G 30243016.66 30243016.85 30243017.05 0.0514 0.0160

Neptune 78090-06-21 04:05 G 30243018.58 30243018.67 30243018.77 0.0088 0.0079

Neptune 78091-02-01 17:17 G 30243244.20 30243244.22 30243244.25 0.0088 0.0087

Saturn 78091-06-12 00:58 G 30243374.36 30243374.54 30243374.73 0.0290 0.0143

Saturn 78092-01-27 18:29 G 30243604.06 30243604.27 30243604.47 0.0289 0.0053

Saturn 78092-09-13 10:48 G 30243833.86 30243833.95 30243834.07 0.0287 0.0246

Jupiter 78095-08-21 07:27 G 30244905.76 30244905.81 30244905.87 0.0498 0.0477

Jupiter 78096-04-13 11:17 G 30245141.78 30245141.97 30245142.17 0.0506 0.0145

Jupiter 78096-12-06 00:44 G 30245378.36 30245378.53 30245378.72 0.0515 0.0231

Mars 78100-06-07 11:17 G 30246656.82 30246656.97 30246657.13 0.1850 0.0868

Jupiter 78101-06-30 07:27 G 30247044.66 30247044.81 30247044.96 0.0527 0.0363

Jupiter 78102-02-23 02:24 G 30247282.40 30247282.60 30247282.81 0.0517 0.0051

Jupiter 78102-10-18 09:22 G 30247519.78 30247519.89 30247520.00 0.0508 0.0426

Mars 78105-01-15 14:39 G 30248339.98 30248340.11 30248340.24 0.1679 0.1075

Uranus 78105-11-11 02:39 G 30248639.54 30248639.61 30248639.70 0.0144 0.0133

Uranus 78106-06-25 15:08 G 30248865.97 30248866.13 30248866.31 0.0144 0.0093

Saturn 78106-07-09 14:24 G 30248879.93 30248880.10 30248880.28 0.0270 0.0154

Uranus 78107-02-07 03:36 G 30249092.46 30249092.65 30249092.87 0.0144 0.0053

Saturn 78107-02-23 21:22 G 30249109.18 30249109.39 30249109.60 0.0271 0.0009

Uranus 78107-09-21 16:20 G 30249318.96 30249319.18 30249319.40 0.0144 0.0012

Saturn 78107-10-11 04:34 G 30249338.53 30249338.69 30249338.85 0.0272 0.0173

Jupiter 78107-12-19 11:46 G 30249407.81 30249407.99 30249408.17 0.0503 0.0243

Uranus 78108-05-05 04:34 G 30249545.47 30249545.69 30249545.91 0.0144 0.0029

Jupiter 78108-08-11 22:34 G 30249644.24 30249644.44 30249644.63 0.0513 0.0123

Uranus 78108-12-17 16:48 G 30249772.01 30249772.20 30249772.40 0.0144 0.0069

Jupiter 78109-04-05 20:10 G 30249881.30 30249881.34 30249881.40 0.0522 0.0506

Uranus 78109-08-01 04:48 G 30249998.58 30249998.70 30249998.86 0.0144 0.0110

Jupiter 78113-03-04 21:51 G 30251310.32 30251310.41 30251310.50 0.0529 0.0474

Jupiter 78113-10-28 19:41 G 30251548.11 30251548.32 30251548.52 0.0520 0.0060

Jupiter 78114-06-23 05:46 G 30251785.59 30251785.74 30251785.90 0.0510 0.0330

Jupiter 78119-08-24 14:10 G 30253673.94 30253674.09 30253674.24 0.0501 0.0335

Jupiter 78120-04-16 22:20 G 30253910.23 30253910.43 30253910.63 0.0510 0.0020

Jupiter 78120-12-09 17:03 G 30254147.09 30254147.21 30254147.34 0.0520 0.0403

Saturn 78120-12-23 04:05 G 30254160.49 30254160.67 30254160.87 0.0289 0.0118

Saturn 78121-08-09 21:22 G 30254390.20 30254390.39 30254390.60 0.0288 0.0078

Saturn 78122-03-27 13:56 G 30254620.01 30254620.08 30254620.16 0.0287 0.0268

Jupiter 78125-07-03 10:48 G 30255813.76 30255813.95 30255814.15 0.0522 0.0174

Jupiter 78126-02-25 23:46 G 30256051.31 30256051.49 30256051.68 0.0512 0.0228

Jupiter 78131-04-29 16:34 G 30257940.09 30257940.19 30257940.30 0.0499 0.0425

Jupiter 78131-12-21 22:34 G 30258176.24 30258176.44 30258176.64 0.0508 0.0082

Jupiter 78132-08-14 14:39 G 30258412.94 30258413.11 30258413.27 0.0517 0.0298

Saturn 78136-01-19 18:00 G 30259666.07 30259666.25 30259666.44 0.0271 0.0132

Saturn 78136-09-05 00:58 G 30259895.33 30259895.54 30259895.76 0.0271 0.0032

Mars 78137-01-14 12:00 G 30260026.88 30260027.00 30260027.13 0.1671 0.1169

Jupiter 78137-03-08 00:58 G 30260079.37 30260079.54 30260079.71 0.0525 0.0290

Saturn 78137-04-22 08:24 G 30260124.71 30260124.85 30260125.00 0.0272 0.0197

Jupiter 78137-10-31 17:03 G 30260317.01 30260317.21 30260317.42 0.0515 0.0120

Jupiter 78138-06-25 21:36 G 30260554.35 30260554.40 30260554.46 0.0506 0.0484

Pluto 78140-05-26 23:17 G 30261255.26 30261255.47 30261255.68 0.0079 0.0026

Pluto 78141-01-07 08:53 G 30261480.70 30261480.87 30261481.08 0.0078 0.0041

Jupiter 78143-08-26 22:34 G 30262442.26 30262442.44 30262442.63 0.0505 0.0183

Jupiter 78144-04-19 10:48 G 30262678.77 30262678.95 30262679.14 0.0514 0.0189

Uranus 78147-05-22 03:22 G 30263806.56 30263806.64 30263806.75 0.0134 0.0119

Uranus 78148-01-03 08:24 G 30264032.70 30264032.85 30264033.03 0.0134 0.0088

Uranus 78148-08-16 13:41 G 30264258.89 30264259.07 30264259.28 0.0134 0.0056

Jupiter 78148-11-10 12:15 G 30264344.89 30264345.01 30264345.14 0.0528 0.0409

Uranus 78149-03-30 18:58 G 30264485.08 30264485.29 30264485.50 0.0134 0.0023

Jupiter 78149-07-06 08:39 G 30264582.65 30264582.86 30264583.07 0.0518 0.0006

Uranus 78149-11-12 00:00 G 30264711.28 30264711.50 30264711.71 0.0134 0.0009

Saturn 78149-11-17 21:22 G 30264717.34 30264717.39 30264717.46 0.0290 0.0277

Jupiter 78150-02-28 17:17 G 30264820.09 30264820.22 30264820.35 0.0509 0.0389

Uranus 78150-06-26 04:48 G 30264937.50 30264937.70 30264937.91 0.0134 0.0041

Saturn 78150-07-05 15:22 G 30264946.94 30264947.14 30264947.34 0.0289 0.0081

Uranus 78151-02-07 09:51 G 30265163.74 30265163.91 30265164.10 0.0134 0.0073

Saturn 78151-02-20 08:24 G 30265176.66 30265176.85 30265177.05 0.0288 0.0114

Uranus 78151-09-21 14:39 G 30265390.00 30265390.11 30265390.26 0.0134 0.0106

Earth 78154-10-10 19:56 G 30266505.20 30266505.33 30266505.47 0.2702 0.1339

Moon 78154-10-11 01:41 G 30266505.46 30266505.57 30266505.68 0.2703 0.1915 *

Jupiter 78155-05-02 00:00 G 30266708.34 30266708.50 30266708.67 0.0502 0.0279

Jupiter 78155-12-24 09:22 G 30266944.69 30266944.89 30266945.08 0.0511 0.0083

Jupiter 78156-08-17 05:17 G 30267181.64 30267181.72 30267181.81 0.0521 0.0464

Jupiter 78160-07-16 01:27 G 30268610.53 30268610.56 30268610.59 0.0530 0.0522

Neptune 78160-11-12 09:36 G 30268729.85 30268729.90 30268730.00 0.0089 0.0084

Jupiter 78161-03-11 00:58 G 30268848.34 30268848.54 30268848.74 0.0521 0.0108

Neptune 78161-06-25 22:34 G 30268955.35 30268955.44 30268955.58 0.0089 0.0076

Jupiter 78161-11-03 12:58 G 30269085.87 30269086.04 30269086.21 0.0512 0.0290

Neptune 78162-02-06 11:17 G 30269180.86 30269180.97 30269181.14 0.0089 0.0069

Neptune 78162-09-20 00:44 G 30269406.37 30269406.53 30269406.69 0.0089 0.0060

Earth 78162-10-08 10:48 G 30269424.85 30269424.95 30269425.05 0.2701 0.2078

Moon 78162-10-08 15:36 G 30269425.04 30269425.15 30269425.26 0.2697 0.1981 *

Neptune 78163-05-03 13:12 G 30269631.88 30269632.05 30269632.24 0.0089 0.0052

Neptune 78163-12-15 02:10 G 30269857.41 30269857.59 30269857.79 0.0089 0.0044

Neptune 78164-07-27 14:53 G 30270082.93 30270083.12 30270083.33 0.0089 0.0036

Saturn 78164-12-14 18:15 G 30270223.22 30270223.26 30270223.31 0.0270 0.0263

Neptune 78165-03-10 03:51 G 30270308.46 30270308.66 30270308.88 0.0089 0.0027

Saturn 78165-08-01 00:29 G 30270452.33 30270452.52 30270452.72 0.0270 0.0104

Neptune 78165-10-21 16:34 G 30270533.99 30270534.19 30270534.42 0.0089 0.0020

Saturn 78166-03-18 07:27 G 30270681.61 30270681.81 30270682.02 0.0271 0.0060

Mars 78166-04-04 16:05 G 30270699.06 30270699.17 30270699.28 0.1846 0.1449

Neptune 78166-06-04 05:46 G 30270759.53 30270759.74 30270759.96 0.0089 0.0011

Saturn 78166-11-02 14:39 G 30270911.00 30270911.11 30270911.24 0.0272 0.0225

Jupiter 78167-01-05 01:27 G 30270974.43 30270974.56 30270974.70 0.0500 0.0371

Neptune 78167-01-15 18:44 G 30270985.06 30270985.28 30270985.50 0.0089 0.0003

Neptune 78167-08-29 07:41 G 30271210.60 30271210.82 30271211.04 0.0089 0.0006

Jupiter 78167-08-29 07:56 G 30271210.63 30271210.83 30271211.04 0.0509 0.0025 *

Neptune 78168-04-10 20:24 G 30271436.14 30271436.35 30271436.57 0.0089 0.0014

Jupiter 78168-04-22 00:58 G 30271447.40 30271447.54 30271447.68 0.0518 0.0359

Neptune 78168-11-22 09:22 G 30271661.68 30271661.89 30271662.10 0.0089 0.0022

Neptune 78169-07-05 22:20 G 30271887.23 30271887.43 30271887.64 0.0089 0.0031

Neptune 78170-02-16 11:32 G 30272112.78 30272112.98 30272113.17 0.0090 0.0039

Neptune 78170-09-29 23:46 G 30272338.33 30272338.49 30272338.70 0.0090 0.0048

Mars 78170-11-13 01:56 G 30272382.48 30272382.58 30272382.69 0.1682 0.1332

Neptune 78171-05-13 12:44 G 30272563.88 30272564.03 30272564.22 0.0090 0.0056

Neptune 78171-12-25 01:41 G 30272789.43 30272789.57 30272789.74 0.0090 0.0064

Neptune 78172-08-06 14:39 G 30273015.00 30273015.11 30273015.25 0.0090 0.0072

Jupiter 78172-11-13 17:03 G 30273114.03 30273114.21 30273114.40 0.0524 0.0221

Neptune 78173-03-20 03:36 G 30273240.57 30273240.65 30273240.76 0.0090 0.0080

Jupiter 78173-07-09 08:24 G 30273351.66 30273351.85 30273352.04 0.0514 0.0186

Neptune 78173-10-31 16:20 G 30273466.16 30273466.18 30273466.24 0.0090 0.0088

Jupiter 78178-09-10 04:48 G 30275240.62 30275240.70 30275240.78 0.0498 0.0458

Jupiter 78179-05-04 08:53 G 30275476.68 30275476.87 30275477.07 0.0506 0.0122

Saturn 78179-05-31 00:58 G 30275503.44 30275503.54 30275503.65 0.0290 0.0251

Jupiter 78179-12-26 23:03 G 30275713.29 30275713.46 30275713.64 0.0516 0.0254

Saturn 78180-01-15 18:44 G 30275733.07 30275733.28 30275733.48 0.0289 0.0056

Saturn 78180-09-01 11:46 G 30275962.81 30275962.99 30275963.17 0.0288 0.0138

Jupiter 78184-07-19 07:41 G 30277379.66 30277379.82 30277379.98 0.0526 0.0335

Jupiter 78185-03-14 01:41 G 30277617.36 30277617.57 30277617.77 0.0516 0.0078

Jupiter 78185-11-06 07:41 G 30277854.73 30277854.82 30277854.91 0.0507 0.0449

Uranus 78190-02-22 19:41 G 30279424.20 30279424.32 30279424.47 0.0144 0.0113

Uranus 78190-10-07 07:56 G 30279650.66 30279650.83 30279651.04 0.0144 0.0073

Jupiter 78191-01-07 10:20 G 30279742.75 30279742.93 30279743.12 0.0504 0.0220

Uranus 78191-05-21 20:39 G 30279877.15 30279877.36 30279877.58 0.0144 0.0032

Jupiter 78191-08-31 21:51 G 30279979.22 30279979.41 30279979.60 0.0513 0.0150

Uranus 78192-01-03 09:08 G 30280103.66 30280103.88 30280104.10 0.0144 0.0009

Uranus 78192-08-16 21:22 G 30280330.19 30280330.39 30280330.60 0.0144 0.0049

Uranus 78193-03-31 09:36 G 30280556.74 30280556.90 30280557.08 0.0144 0.0090

Uranus 78193-11-12 21:51 G 30280783.33 30280783.41 30280783.52 0.0144 0.0130

Saturn 78194-06-26 20:10 G 30281009.26 30281009.34 30281009.44 0.0270 0.0244

Saturn 78195-02-11 02:53 G 30281238.42 30281238.62 30281238.83 0.0271 0.0083

Saturn 78195-09-28 10:05 G 30281467.71 30281467.92 30281468.12 0.0272 0.0081

Jupiter 78196-03-23 20:39 G 30281645.26 30281645.36 30281645.47 0.0528 0.0450

Saturn 78196-05-14 17:17 G 30281697.14 30281697.22 30281697.32 0.0273 0.0246

Jupiter 78196-11-16 17:46 G 30281883.03 30281883.24 30281883.45 0.0519 0.0035

Jupiter 78197-07-12 03:08 G 30282120.49 30282120.63 30282120.78 0.0509 0.0353

Jupiter 78202-09-13 12:15 G 30284008.85 30284009.01 30284009.17 0.0501 0.0315

Mars 78202-11-12 23:17 G 30284069.33 30284069.47 30284069.62 0.1673 0.0920

Jupiter 78203-05-07 20:10 G 30284245.14 30284245.34 30284245.55 0.0510 0.0044

Jupiter 78203-12-30 14:39 G 30284482.01 30284482.11 30284482.23 0.0520 0.0424

Jupiter 78208-07-23 07:12 G 30286148.60 30286148.80 30286149.00 0.0522 0.0154

Saturn 78208-12-11 10:05 G 30286289.79 30286289.92 30286290.06 0.0290 0.0218

Jupiter 78209-03-17 20:53 G 30286386.19 30286386.37 30286386.55 0.0513 0.0249

Saturn 78209-07-29 04:05 G 30286519.46 30286519.67 30286519.88 0.0289 0.0021

Saturn 78210-03-15 21:08 G 30286749.22 30286749.38 30286749.55 0.0288 0.0173

Jupiter 78214-05-19 15:08 G 30288275.01 30288275.13 30288275.24 0.0499 0.0404

Jupiter 78215-01-10 20:10 G 30288511.14 30288511.34 30288511.54 0.0507 0.0061

Jupiter 78215-09-04 11:32 G 30288747.82 30288747.98 30288748.14 0.0517 0.0318

Jupiter 78220-03-27 21:51 G 30290414.24 30290414.41 30290414.59 0.0525 0.0270

Jupiter 78220-11-20 15:08 G 30290651.93 30290652.13 30290652.33 0.0516 0.0142

Jupiter 78221-07-15 20:10 G 30290889.34 30290889.34 30290889.36 0.0506 0.0505

Saturn 78224-01-08 02:53 G 30291795.50 30291795.62 30291795.76 0.0270 0.0215

Saturn 78224-08-24 09:22 G 30292024.69 30292024.89 30292025.11 0.0270 0.0054

Saturn 78225-04-10 16:20 G 30292253.99 30292254.18 30292254.38 0.0271 0.0109

Jupiter 78226-01-22 17:17 G 30292541.20 30292541.22 30292541.26 0.0497 0.0490

Jupiter 78226-09-15 20:10 G 30292777.15 30292777.34 30292777.53 0.0505 0.0160

Jupiter 78227-05-10 08:24 G 30293013.66 30293013.85 30293014.03 0.0514 0.0212

Uranus 78231-01-20 13:12 G 30294365.04 30294365.05 30294365.09 0.0134 0.0134

Uranus 78231-09-03 18:29 G 30294591.14 30294591.27 30294591.42 0.0134 0.0102

Jupiter 78231-12-01 12:58 G 30294679.90 30294680.04 30294680.19 0.0528 0.0382

Uranus 78232-04-16 23:46 G 30294817.30 30294817.49 30294817.67 0.0134 0.0070

Jupiter 78232-07-26 09:22 G 30294917.68 30294917.89 30294918.09 0.0518 0.0034

Uranus 78232-11-29 04:34 G 30295043.49 30295043.69 30295043.90 0.0134 0.0038

Jupiter 78233-03-20 17:32 G 30295155.12 30295155.23 30295155.35 0.0509 0.0414

Uranus 78233-07-13 09:51 G 30295269.69 30295269.91 30295270.12 0.0134 0.0006

Uranus 78234-02-24 14:53 G 30295495.91 30295496.12 30295496.33 0.0134 0.0026

Uranus 78234-10-08 19:41 G 30295722.13 30295722.32 30295722.52 0.0134 0.0059

Uranus 78235-05-23 00:29 G 30295948.37 30295948.52 30295948.69 0.0134 0.0091

Uranus 78236-01-04 05:32 G 30296174.66 30296174.73 30296174.83 0.0134 0.0122

Mars 78236-09-10 12:58 G 30296424.99 30296425.04 30296425.10 0.1685 0.1595

Jupiter 78238-05-21 22:05 G 30297043.25 30297043.42 30297043.60 0.0503 0.0256

Saturn 78238-06-23 13:27 G 30297075.91 30297076.06 30297076.22 0.0290 0.0192

Jupiter 78239-01-13 07:41 G 30297279.63 30297279.82 30297280.02 0.0512 0.0108

Saturn 78239-02-08 07:12 G 30297305.59 30297305.80 30297306.01 0.0289 0.0005

Jupiter 78239-09-07 04:34 G 30297516.62 30297516.69 30297516.75 0.0521 0.0489

Saturn 78239-09-26 00:00 G 30297535.36 30297535.50 30297535.66 0.0287 0.0197

Neptune 78242-05-19 15:08 G 30298502.06 30298502.13 30298502.22 0.0088 0.0081

Neptune 78242-12-31 04:34 G 30298727.58 30298727.69 30298727.82 0.0088 0.0074

Jupiter 78243-08-06 03:08 G 30298945.56 30298945.63 30298945.70 0.0530 0.0494

Neptune 78243-08-13 17:17 G 30298953.10 30298953.22 30298953.39 0.0088 0.0066

Neptune 78244-03-26 06:44 G 30299178.63 30299178.78 30299178.96 0.0088 0.0058

Jupiter 78244-03-31 01:41 G 30299183.37 30299183.57 30299183.78 0.0521 0.0079

Neptune 78244-11-06 19:56 G 30299404.17 30299404.33 30299404.53 0.0088 0.0050

Jupiter 78244-11-23 12:58 G 30299420.88 30299421.04 30299421.20 0.0511 0.0315

Neptune 78245-06-20 09:08 G 30299629.70 30299629.88 30299630.10 0.0088 0.0042

Neptune 78246-01-31 22:34 G 30299855.25 30299855.44 30299855.66 0.0088 0.0034

Neptune 78246-09-14 11:46 G 30300080.79 30300080.99 30300081.22 0.0088 0.0026

Neptune 78247-04-28 01:12 G 30300306.33 30300306.55 30300306.77 0.0088 0.0017

Neptune 78247-12-09 14:24 G 30300531.88 30300532.10 30300532.33 0.0088 0.0009

Neptune 78248-07-22 03:36 G 30300757.43 30300757.65 30300757.88 0.0088 0.0002

Neptune 78249-03-04 16:48 G 30300982.98 30300983.20 30300983.42 0.0088 0.0007

Neptune 78249-10-16 05:46 G 30301208.53 30301208.74 30301208.97 0.0088 0.0015

Jupiter 78250-01-25 00:29 G 30301309.38 30301309.52 30301309.67 0.0501 0.0349

Neptune 78250-05-29 18:58 G 30301434.08 30301434.29 30301434.51 0.0088 0.0023

Jupiter 78250-09-18 07:41 G 30301545.62 30301545.82 30301546.03 0.0509 0.0012

Neptune 78251-01-10 08:10 G 30301659.64 30301659.84 30301660.05 0.0088 0.0031

Jupiter 78251-05-13 01:12 G 30301782.43 30301782.55 30301782.69 0.0519 0.0386

Neptune 78251-08-23 21:08 G 30301885.19 30301885.38 30301885.59 0.0088 0.0039

Neptune 78252-04-05 10:05 G 30302110.75 30302110.92 30302111.12 0.0088 0.0047

Neptune 78252-11-16 23:17 G 30302336.31 30302336.47 30302336.66 0.0088 0.0055

Neptune 78253-06-30 12:15 G 30302561.88 30302562.01 30302562.18 0.0088 0.0063

Saturn 78253-07-20 03:51 G 30302581.51 30302581.66 30302581.80 0.0270 0.0197

Neptune 78254-02-11 01:27 G 30302787.45 30302787.56 30302787.71 0.0088 0.0071

Saturn 78254-03-06 10:20 G 30302810.72 30302810.93 30302811.14 0.0271 0.0036

Neptune 78254-09-24 14:24 G 30303013.03 30303013.10 30303013.23 0.0088 0.0079

Saturn 78254-10-21 17:17 G 30303040.04 30303040.22 30303040.41 0.0272 0.0128

Neptune 78255-05-08 04:20 G 30303238.64 30303238.68 30303238.71 0.0088 0.0086

Jupiter 78255-12-04 16:48 G 30303449.01 30303449.20 30303449.39 0.0523 0.0194

Jupiter 78256-07-29 07:27 G 30303686.62 30303686.81 30303687.00 0.0513 0.0212

Jupiter 78261-09-30 03:51 G 30305575.57 30305575.66 30305575.76 0.0498 0.0438

Jupiter 78262-05-24 08:10 G 30305811.65 30305811.84 30305812.04 0.0506 0.0099

Jupiter 78263-01-15 22:05 G 30306048.26 30306048.42 30306048.59 0.0516 0.0277

Mars 78264-01-31 14:53 G 30306429.03 30306429.12 30306429.20 0.1854 0.1594

Jupiter 78267-08-09 04:20 G 30307714.52 30307714.68 30307714.85 0.0526 0.0315

Saturn 78268-01-03 21:22 G 30307862.22 30307862.39 30307862.57 0.0290 0.0160

Jupiter 78268-04-02 22:48 G 30307952.25 30307952.45 30307952.65 0.0517 0.0099

Saturn 78268-08-20 15:22 G 30308091.93 30308092.14 30308092.35 0.0289 0.0037

Mars 78268-09-09 10:48 G 30308111.79 30308111.95 30308112.10 0.1676 0.0680

Jupiter 78268-11-26 05:32 G 30308189.66 30308189.73 30308189.81 0.0507 0.0470

Saturn 78269-04-07 08:24 G 30308321.73 30308321.85 30308321.98 0.0288 0.0230

Uranus 78273-10-24 00:29 G 30309982.44 30309982.52 30309982.61 0.0144 0.0132

Jupiter 78274-01-27 09:36 G 30310077.72 30310077.90 30310078.09 0.0504 0.0197

Uranus 78274-06-07 12:58 G 30310208.87 30310209.04 30310209.21 0.0144 0.0092

Jupiter 78274-09-20 20:24 G 30310314.16 30310314.35 30310314.54 0.0513 0.0172

Uranus 78275-01-20 01:27 G 30310435.36 30310435.56 30310435.77 0.0144 0.0052

Uranus 78275-09-03 13:56 G 30310661.86 30310662.08 30310662.30 0.0144 0.0011

Uranus 78276-04-17 02:10 G 30310888.38 30310888.59 30310888.81 0.0144 0.0029

Uranus 78276-11-29 14:24 G 30311114.91 30311115.10 30311115.30 0.0144 0.0070

Uranus 78277-07-14 02:39 G 30311341.48 30311341.61 30311341.76 0.0144 0.0110

Jupiter 78279-04-13 17:46 G 30311980.12 30311980.24 30311980.36 0.0529 0.0430

Jupiter 78279-12-07 15:36 G 30312217.95 30312218.15 30312218.36 0.0520 0.0015

Jupiter 78280-08-01 01:56 G 30312455.44 30312455.58 30312455.72 0.0510 0.0375

Saturn 78283-01-30 10:20 G 30313367.77 30313367.93 30313368.11 0.0270 0.0168

Saturn 78283-09-16 16:48 G 30313596.99 30313597.20 30313597.42 0.0270 0.0007

Saturn 78284-05-02 23:32 G 30313826.31 30313826.48 30313826.66 0.0271 0.0157

Jupiter 78285-10-02 10:34 G 30314343.78 30314343.94 30314344.10 0.0501 0.0292

Jupiter 78286-05-26 18:29 G 30314580.07 30314580.27 30314580.47 0.0510 0.0067

Jupiter 78287-01-18 12:58 G 30314816.95 30314817.04 30314817.15 0.0520 0.0447

Jupiter 78291-08-12 08:39 G 30316483.66 30316483.86 30316484.06 0.0522 0.0125

Jupiter 78292-04-05 22:05 G 30316721.25 30316721.42 30316721.59 0.0513 0.0276

Moon 78292-04-10 19:12 G 30316726.21 30316726.30 30316726.39 0.2624 0.2235

Earth 78292-04-10 21:22 G 30316726.35 30316726.39 30316726.43 0.2631 0.2530 *

Jupiter 78297-06-07 13:27 G 30318609.94 30318610.06 30318610.20 0.0499 0.0382

Saturn 78297-07-16 00:15 G 30318648.33 30318648.51 30318648.70 0.0290 0.0135

Jupiter 78298-01-29 19:12 G 30318846.10 30318846.30 30318846.50 0.0508 0.0036

Saturn 78298-03-02 18:00 G 30318878.04 30318878.25 30318878.45 0.0288 0.0060

Jupiter 78298-09-23 10:48 G 30319082.80 30319082.95 30319083.10 0.0517 0.0344

Saturn 78298-10-18 10:34 G 30319107.86 30319107.94 30319108.05 0.0287 0.0252

Pluto 78298-10-24 11:32 G 30319113.88 30319113.98 30319114.13 0.0065 0.0054

Pluto 78299-06-06 16:20 G 30319338.98 30319339.18 30319339.40 0.0066 0.0016

Pluto 78300-01-17 20:53 G 30319564.17 30319564.37 30319564.58 0.0066 0.0023

Moon 78300-04-09 07:12 G 30319645.67 30319645.80 30319645.94 0.2629 0.1471

Earth 78300-04-09 12:29 G 30319645.87 30319646.02 30319646.18 0.2631 0.0665 *

Pluto 78300-08-31 01:12 G 30319789.50 30319789.55 30319789.65 0.0066 0.0062

Jupiter 78303-04-18 00:15 G 30320749.33 30320749.51 30320749.70 0.0525 0.0239

Jupiter 78303-12-11 16:34 G 30320987.00 30320987.19 30320987.39 0.0515 0.0171

Jupiter 78309-02-11 16:48 G 30322876.14 30322876.20 30322876.27 0.0497 0.0469

Jupiter 78309-10-05 20:24 G 30323112.15 30323112.35 30323112.54 0.0505 0.0136

Jupiter 78310-05-30 09:22 G 30323348.71 30323348.89 30323349.07 0.0515 0.0239

Saturn 78312-08-12 10:05 G 30324153.75 30324153.92 30324154.10 0.0270 0.0152

Saturn 78313-03-29 16:34 G 30324382.98 30324383.19 30324383.41 0.0271 0.0012

Saturn 78313-11-13 23:32 G 30324612.32 30324612.48 30324612.65 0.0272 0.0173

Jupiter 78314-12-21 14:24 G 30325014.95 30325015.10 30325015.25 0.0527 0.0354

Uranus 78315-05-05 03:51 G 30325149.56 30325149.66 30325149.77 0.0135 0.0117

Jupiter 78315-08-16 09:51 G 30325252.71 30325252.91 30325253.12 0.0518 0.0061

Uranus 78315-12-17 08:53 G 30325375.71 30325375.87 30325376.04 0.0134 0.0085

Jupiter 78316-04-09 17:17 G 30325490.12 30325490.22 30325490.33 0.0508 0.0438

Uranus 78316-07-30 14:10 G 30325601.90 30325602.09 30325602.29 0.0134 0.0053

Uranus 78317-03-13 19:12 G 30325828.09 30325828.30 30325828.51 0.0134 0.0021

Uranus 78317-10-26 00:15 G 30326054.29 30326054.51 30326054.72 0.0134 0.0011

Uranus 78318-06-09 05:03 G 30326280.51 30326280.71 30326280.92 0.0134 0.0044

Uranus 78319-01-21 10:05 G 30326506.75 30326506.92 30326507.10 0.0134 0.0076

Uranus 78319-09-04 15:08 G 30326733.01 30326733.13 30326733.27 0.0134 0.0107

Jupiter 78321-06-10 22:34 G 30327378.26 30327378.44 30327378.62 0.0503 0.0233

Jupiter 78322-02-02 08:10 G 30327614.65 30327614.84 30327615.04 0.0512 0.0132

Jupiter 78322-09-27 04:34 G 30327851.66 30327851.69 30327851.73 0.0521 0.0511

Neptune 78325-02-15 21:51 G 30328724.36 30328724.41 30328724.47 0.0089 0.0086

Neptune 78325-09-29 10:34 G 30328949.84 30328949.94 30328950.05 0.0089 0.0078

Neptune 78326-05-12 23:17 G 30329175.34 30329175.47 30329175.61 0.0089 0.0070

Jupiter 78326-08-26 00:15 G 30329280.43 30329280.51 30329280.60 0.0530 0.0474

Neptune 78326-12-24 12:00 G 30329400.86 30329401.00 30329401.17 0.0089 0.0062

Saturn 78327-01-27 06:29 G 30329434.58 30329434.77 30329434.97 0.0290 0.0105

Jupiter 78327-04-20 23:17 G 30329518.27 30329518.47 30329518.68 0.0521 0.0058

Neptune 78327-08-07 00:58 G 30329626.37 30329626.54 30329626.72 0.0089 0.0053

Saturn 78327-09-14 00:29 G 30329664.32 30329664.52 30329664.72 0.0289 0.0091

Jupiter 78327-12-14 11:03 G 30329755.81 30329755.96 30329756.12 0.0511 0.0337

Neptune 78328-03-19 13:41 G 30329851.89 30329852.07 30329852.27 0.0089 0.0045

Saturn 78328-04-30 17:32 G 30329894.20 30329894.23 30329894.27 0.0288 0.0283

Neptune 78328-10-31 02:24 G 30330077.42 30330077.60 30330077.81 0.0089 0.0037

Neptune 78329-06-13 15:36 G 30330302.95 30330303.15 30330303.36 0.0089 0.0029

Mars 78329-11-28 18:58 G 30330471.14 30330471.29 30330471.44 0.1850 0.0974

Neptune 78330-01-25 04:20 G 30330528.48 30330528.68 30330528.90 0.0089 0.0021

Neptune 78330-09-07 17:17 G 30330754.01 30330754.22 30330754.44 0.0089 0.0012

Neptune 78331-04-21 06:15 G 30330979.54 30330979.76 30330979.98 0.0089 0.0004

Neptune 78331-12-02 18:58 G 30331205.08 30331205.29 30331205.51 0.0089 0.0005

Neptune 78332-07-15 08:10 G 30331430.62 30331430.84 30331431.05 0.0089 0.0013

Jupiter 78333-02-14 01:12 G 30331644.40 30331644.55 30331644.70 0.0500 0.0325

Neptune 78333-02-25 20:53 G 30331656.16 30331656.37 30331656.59 0.0089 0.0021

Jupiter 78333-10-08 07:56 G 30331880.63 30331880.83 30331881.03 0.0509 0.0029

Neptune 78333-10-09 09:36 G 30331881.71 30331881.90 30331882.12 0.0089 0.0030

Neptune 78334-05-22 22:34 G 30332107.25 30332107.44 30332107.65 0.0089 0.0038

Jupiter 78334-06-02 00:58 G 30332117.42 30332117.54 30332117.66 0.0518 0.0407

Mars 78334-07-08 21:36 G 30332154.23 30332154.40 30332154.57 0.1679 0.0420

Neptune 78335-01-03 11:46 G 30332332.80 30332332.99 30332333.18 0.0090 0.0046

Neptune 78335-08-17 00:15 G 30332558.36 30332558.51 30332558.70 0.0090 0.0055

Neptune 78336-03-29 13:12 G 30332783.91 30332784.05 30332784.22 0.0090 0.0063

Neptune 78336-11-10 02:10 G 30333009.47 30333009.59 30333009.74 0.0090 0.0071

Neptune 78337-06-23 15:08 G 30333235.04 30333235.13 30333235.25 0.0090 0.0079

Neptune 78338-02-04 04:05 G 30333460.63 30333460.67 30333460.73 0.0090 0.0087

Jupiter 78338-12-24 14:39 G 30333783.92 30333784.11 30333784.31 0.0524 0.0172

Jupiter 78339-08-19 06:00 G 30334021.57 30334021.75 30334021.93 0.0514 0.0234

Saturn	78342-02-22 16:34 G	30334940.00	30334940.19	30334940.39	0.0269	0.0122
Saturn	78342-10-09 22:48 G	30335169.24	30335169.45	30335169.67	0.0270	0.0039
Saturn	78343-05-27 05:32 G	30335398.60	30335398.73	30335398.88	0.0271	0.0202
Jupiter	78344-10-20 03:08 G	30335910.52	30335910.63	30335910.74	0.0498	0.0415
Jupiter	78345-06-13 07:27 G	30336146.61	30336146.81	30336147.01	0.0506	0.0073
Jupiter	78346-02-04 21:22 G	30336383.23	30336383.39	30336383.55	0.0516	0.0302
Jupiter	78350-08-29 06:15 G	30338049.59	30338049.76	30338049.94	0.0526	0.0286
Jupiter	78351-04-24 00:44 G	30338287.33	30338287.53	30338287.73	0.0517	0.0128
Jupiter	78351-12-17 07:12 G	30338524.76	30338524.80	30338524.84	0.0507	0.0495
Saturn	78355-12-22 15:22 G	30339991.08	30339991.14	30339991.20	0.0290	0.0277
Saturn	78356-08-08 09:51 G	30340220.71	30340220.91	30340221.11	0.0290	0.0080
Jupiter	78357-02-16 08:53 G	30340412.68	30340412.87	30340413.06	0.0504	0.0172
Saturn	78357-03-26 03:22 G	30340450.45	30340450.64	30340450.84	0.0288	0.0115
Jupiter	78357-10-10 20:10 G	30340649.15	30340649.34	30340649.52	0.0513	0.0198
Uranus	78358-02-05 18:44 G	30340767.16	30340767.28	30340767.44	0.0144	0.0111
Uranus	78358-09-20 07:27 G	30340993.62	30340993.81	30340994.00	0.0144	0.0070
Uranus	78359-05-04 19:41 G	30341220.11	30341220.32	30341220.54	0.0144	0.0030
Uranus	78359-12-17 08:10 G	30341446.62	30341446.84	30341447.06	0.0144	0.0011
Uranus	78360-07-30 20:39 G	30341673.15	30341673.36	30341673.56	0.0144	0.0051
Uranus	78361-03-14 08:53 G	30341899.71	30341899.87	30341900.05	0.0144	0.0092
Uranus	78361-10-26 21:08 G	30342126.31	30342126.38	30342126.48	0.0144	0.0132
Jupiter	78362-05-03 21:08 G	30342315.25	30342315.38	30342315.52	0.0529	0.0400
Jupiter	78362-12-27 18:29 G	30342553.07	30342553.27	30342553.48	0.0519	0.0019
Jupiter	78363-08-22 03:51 G	30342790.54	30342790.66	30342790.79	0.0509	0.0402
Jupiter	78368-10-22 11:03 G	30344678.79	30344678.96	30344679.13	0.0502	0.0268
Jupiter	78369-06-15 19:56 G	30344915.13	30344915.33	30344915.53	0.0511	0.0094
Jupiter	78370-02-07 15:22 G	30345152.06	30345152.14	30345152.22	0.0520	0.0474
Saturn	78371-01-18 09:51 G	30345496.88	30345496.91	30345496.94	0.0269	0.0265
Saturn	78371-09-04 15:36 G	30345725.96	30345726.15	30345726.35	0.0270	0.0107
Saturn	78372-04-20 21:51 G	30345955.20	30345955.41	30345955.62	0.0271	0.0055

Saturn 78372-12-06 04:48 G 30346184.57 30346184.70 30346184.83 0.0272 0.0217

Jupiter 78374-01-06 10:34 G 30346580.89 30346580.94 30346580.99 0.0531 0.0512

Jupiter 78374-09-01 10:34 G 30346818.74 30346818.94 30346819.14 0.0522 0.0095

Jupiter 78375-04-26 23:03 G 30347056.30 30347056.46 30347056.63 0.0512 0.0303

Jupiter 78380-06-27 14:39 G 30348944.98 30348945.11 30348945.26 0.0499 0.0360

Jupiter 78381-02-18 20:39 G 30349181.16 30349181.36 30349181.56 0.0508 0.0010

Jupiter 78381-10-13 12:15 G 30349417.88 30349418.01 30349418.16 0.0517 0.0369

Saturn 78385-07-03 19:41 G 30350777.22 30350777.32 30350777.43 0.0291 0.0250

Saturn 78386-02-18 14:24 G 30351006.90 30351007.10 30351007.31 0.0290 0.0053

Jupiter 78386-05-06 22:20 G 30351084.24 30351084.43 30351084.62 0.0525 0.0217

Saturn 78386-10-06 08:24 G 30351236.67 30351236.85 30351237.03 0.0289 0.0143

Jupiter 78386-12-30 14:53 G 30351321.93 30351322.12 30351322.32 0.0515 0.0194

Pluto 78387-02-07 01:12 G 30351360.35 30351360.55 30351360.78 0.0079 0.0023

Pluto 78387-09-20 11:03 G 30351585.79 30351585.96 30351586.16 0.0078 0.0044

Jupiter 78392-03-02 18:29 G 30353211.19 30353211.27 30353211.36 0.0497 0.0445

Jupiter 78392-10-24 21:36 G 30353447.21 30353447.40 30353447.60 0.0505 0.0110

Jupiter 78393-06-18 10:20 G 30353683.76 30353683.93 30353684.10 0.0514 0.0264

Mars 78395-09-25 23:32 G 30354513.31 30354513.48 30354513.65 0.1847 0.0372

Moon 78397-10-12 16:20 G 30355261.04 30355261.18 30355261.33 0.2698 0.1130

Earth 78397-10-12 21:22 G 30355261.25 30355261.39 30355261.52 0.2701 0.1416 *

Jupiter 78398-01-09 12:15 G 30355349.85 30355350.01 30355350.17 0.0527 0.0333

Jupiter 78398-09-04 08:10 G 30355587.64 30355587.84 30355588.05 0.0518 0.0084

Uranus 78399-01-02 13:56 G 30355708.04 30355708.08 30355708.13 0.0135 0.0131

Jupiter 78399-04-29 16:20 G 30355825.10 30355825.18 30355825.28 0.0509 0.0460

Uranus 78399-08-16 18:44 G 30355934.15 30355934.28 30355934.44 0.0135 0.0100

Uranus 78400-03-30 00:00 G 30356160.32 30356160.50 30356160.69 0.0134 0.0067

Mars 78400-05-05 08:39 G 30356196.69 30356196.86 30356197.04 0.1682 0.0170

Saturn 78400-07-30 16:05 G 30356283.08 30356283.17 30356283.28 0.0269 0.0236

Uranus 78400-11-11 05:03 G 30356386.51 30356386.71 30356386.92 0.0134 0.0035

Saturn 78401-03-16 22:05 G 30356512.22 30356512.42 30356512.63 0.0269 0.0078

Uranus 78401-06-25 10:05 G 30356612.71 30356612.92 30356613.14 0.0134 0.0004

Saturn 78401-11-01 04:20 G 30356741.48 30356741.68 30356741.88 0.0270 0.0083

Uranus 78402-02-06 15:08 G 30356838.92 30356839.13 30356839.34 0.0134 0.0029

Saturn 78402-06-18 11:03 G 30356970.88 30356970.96 30356971.05 0.0271 0.0245

Uranus 78402-09-20 19:56 G 30357065.15 30357065.33 30357065.54 0.0134 0.0062

Uranus 78403-05-05 00:58 G 30357291.40 30357291.54 30357291.71 0.0134 0.0093

Uranus 78403-12-17 06:15 G 30357517.69 30357517.76 30357517.84 0.0134 0.0125

Jupiter 78404-06-29 22:20 G 30357713.25 30357713.43 30357713.62 0.0503 0.0207

Jupiter 78405-02-21 07:56 G 30357949.64 30357949.83 30357950.02 0.0512 0.0158

Moon 78405-10-10 06:58 G 30358180.71 30358180.79 30358180.87 0.2703 0.2266

Earth 78405-10-10 12:15 G 30358180.91 30358181.01 30358181.12 0.2700 0.1989

Neptune 78406-08-22 01:41 G 30358496.52 30358496.57 30358496.66 0.0088 0.0084

Neptune 78407-04-04 14:53 G 30358722.02 30358722.12 30358722.25 0.0088 0.0076

Neptune 78407-11-16 04:20 G 30358947.55 30358947.68 30358947.83 0.0088 0.0067

Neptune 78408-06-28 17:32 G 30359173.08 30359173.23 30359173.40 0.0088 0.0059

Neptune 78409-02-09 06:44 G 30359398.61 30359398.78 30359398.97 0.0088 0.0051

Jupiter 78409-09-14 02:24 G 30359615.50 30359615.60 30359615.72 0.0530 0.0446

Neptune 78409-09-22 19:56 G 30359624.15 30359624.33 30359624.54 0.0088 0.0043

Neptune 78410-05-06 09:08 G 30359849.69 30359849.88 30359850.10 0.0088 0.0035

Jupiter 78410-05-10 01:41 G 30359853.36 30359853.57 30359853.78 0.0521 0.0026

Neptune 78410-12-17 22:34 G 30360075.24 30360075.44 30360075.66 0.0088 0.0027

Jupiter 78411-01-02 13:12 G 30360090.91 30360091.05 30360091.20 0.0511 0.0365

Neptune 78411-07-31 11:46 G 30360300.78 30360300.99 30360301.22 0.0088 0.0019

Neptune 78412-03-13 00:58 G 30360526.32 30360526.54 30360526.77 0.0088 0.0011

Neptune 78412-10-24 14:10 G 30360751.87 30360752.09 30360752.32 0.0088 0.0003

Neptune 78413-06-07 03:22 G 30360977.42 30360977.64 30360977.86 0.0088 0.0006

Neptune 78414-01-18 16:34 G 30361202.98 30361203.19 30361203.42 0.0088 0.0014

Neptune 78414-09-01 05:32 G 30361428.53 30361428.73 30361428.96 0.0088 0.0022

Saturn 78415-01-13 23:17 G 30361563.34 30361563.47 30361563.60 0.0291 0.0225

Neptune 78415-04-14 18:44 G 30361654.08 30361654.28 30361654.50 0.0088 0.0030

Saturn 78415-08-31 17:46 G 30361793.03 30361793.24 30361793.44 0.0290 0.0028

Neptune 78415-11-26 07:41 G 30361879.63 30361879.82 30361880.03 0.0088 0.0038

Jupiter 78416-03-05 00:44 G 30361979.37 30361979.53 30361979.69 0.0500 0.0301

Saturn 78416-04-17 11:17 G 30362022.80 30362022.97 30362023.14 0.0288 0.0167

Neptune 78416-07-08 20:53 G 30362105.19 30362105.37 30362105.57 0.0088 0.0046

Jupiter 78416-10-27 07:41 G 30362215.62 30362215.82 30362216.02 0.0509 0.0056

Neptune 78417-02-19 09:51 G 30362330.75 30362330.91 30362331.10 0.0088 0.0054

Jupiter 78417-06-21 01:12 G 30362452.45 30362452.55 30362452.66 0.0519 0.0434

Neptune 78417-10-02 23:03 G 30362556.32 30362556.46 30362556.63 0.0088 0.0062

Neptune 78418-05-16 12:00 G 30362781.88 30362782.00 30362782.15 0.0088 0.0070

Neptune 78418-12-28 00:58 G 30363007.47 30363007.54 30363007.67 0.0088 0.0078

Neptune 78419-08-10 14:10 G 30363233.07 30363233.09 30363233.16 0.0088 0.0086

Jupiter 78422-01-12 18:29 G 30364119.07 30364119.27 30364119.47 0.0523 0.0140

Jupiter 78422-09-07 09:08 G 30364356.70 30364356.88 30364357.05 0.0513 0.0264

Jupiter 78427-11-09 03:51 G 30366245.54 30366245.66 30366245.78 0.0498 0.0391

Jupiter 78428-07-02 08:53 G 30366481.67 30366481.87 30366482.07 0.0507 0.0047

Jupiter 78429-02-23 23:32 G 30366718.33 30366718.48 30366718.63 0.0516 0.0330

Saturn 78430-02-09 14:53 G 30367069.01 30367069.12 30367069.25 0.0269 0.0222

Saturn 78430-09-26 20:39 G 30367298.15 30367298.36 30367298.57 0.0270 0.0063

Saturn 78431-05-14 02:39 G 30367527.42 30367527.61 30367527.82 0.0271 0.0099

Saturn 78431-12-29 09:08 G 30367756.84 30367756.88 30367756.96 0.0272 0.0261

Jupiter 78433-09-17 09:22 G 30368384.71 30368384.89 30368385.07 0.0526 0.0255

Jupiter 78434-05-13 02:53 G 30368622.43 30368622.62 30368622.82 0.0516 0.0158

Jupiter 78439-07-15 08:39 G 30370511.81 30370511.86 30370511.91 0.0496 0.0477

Jupiter 78440-03-07 11:03 G 30370747.77 30370747.96 30370748.15 0.0504 0.0146

Jupiter 78440-10-29 22:34 G 30370984.26 30370984.44 30370984.62 0.0513 0.0225

Uranus 78441-10-06 01:41 G 30371325.47 30371325.57 30371325.66 0.0144 0.0128

Uranus 78442-05-20 13:56 G 30371551.91 30371552.08 30371552.25 0.0144 0.0088

Uranus 78443-01-02 02:10 G 30371778.39 30371778.59 30371778.81 0.0144 0.0048

Uranus 78443-08-16 14:53 G 30372004.90 30372005.12 30372005.34 0.0144 0.0008

Uranus 78444-03-30 03:22 G 30372231.42 30372231.64 30372231.85 0.0144 0.0033

Saturn 78444-07-26 02:24 G 30372349.45 30372349.60 30372349.76 0.0291 0.0199

Uranus 78444-11-11 15:22 G 30372457.96 30372458.14 30372458.34 0.0144 0.0074

Saturn 78445-03-12 21:08 G 30372579.17 30372579.38 30372579.59 0.0290 0.0005

Jupiter 78445-05-22 19:41 G 30372650.18 30372650.32 30372650.47 0.0528 0.0376

Uranus 78445-06-26 03:51 G 30372684.54 30372684.66 30372684.81 0.0144 0.0114

Saturn 78445-10-28 15:08 G 30372808.98 30372809.13 30372809.29 0.0289 0.0194

Jupiter 78446-01-15 17:03 G 30372888.00 30372888.21 30372888.41 0.0519 0.0042

Jupiter 78446-09-10 02:39 G 30373125.50 30373125.61 30373125.73 0.0510 0.0423

Jupiter 78451-11-11 13:27 G 30375013.88 30375014.06 30375014.23 0.0502 0.0241

Jupiter 78452-07-04 21:51 G 30375250.22 30375250.41 30375250.61 0.0510 0.0122

Jupiter 78453-02-26 16:48 G 30375487.15 30375487.20 30375487.26 0.0520 0.0498

Jupiter 78457-01-25 08:10 G 30376915.77 30376915.84 30376915.92 0.0531 0.0491

Jupiter 78457-09-20 08:39 G 30377153.66 30377153.86 30377154.06 0.0522 0.0072

Jupiter 78458-05-15 21:51 G 30377391.25 30377391.41 30377391.57 0.0512 0.0325

Saturn 78459-08-22 21:08 G 30377855.25 30377855.38 30377855.54 0.0269 0.0193

Saturn 78460-04-08 03:08 G 30378084.42 30378084.63 30378084.84 0.0269 0.0033

Saturn 78460-11-23 09:08 G 30378313.70 30378313.88 30378314.07 0.0270 0.0128

Mars 78461-07-23 03:51 G 30378555.49 30378555.66 30378555.83 0.1843 0.0225

Jupiter 78463-07-17 15:08 G 30379279.98 30379280.13 30379280.28 0.0499 0.0334

Jupiter 78464-03-09 20:39 G 30379516.16 30379516.36 30379516.56 0.0508 0.0018

Jupiter 78464-11-01 12:29 G 30379752.89 30379753.02 30379753.15 0.0517 0.0394

Mars 78466-03-02 19:27 G 30380239.14 30380239.31 30380239.49 0.1684 0.0108

Jupiter 78469-05-26 00:44 G 30381419.34 30381419.53 30381419.72 0.0525 0.0186

Jupiter 78470-01-18 17:32 G 30381657.04 30381657.23 30381657.41 0.0515 0.0223

Saturn 78474-02-05 06:29 G 30383135.61 30383135.77 30383135.94 0.0291 0.0174

Saturn 78474-09-23 00:58 G 30383365.33 30383365.54 30383365.75 0.0290 0.0024

Jupiter 78475-03-22 18:15 G 30383546.16 30383546.26 30383546.37 0.0497 0.0422

Saturn 78475-05-10 18:44 G 30383595.14 30383595.28 30383595.41 0.0288 0.0218

Jupiter 78475-11-13 21:36 G 30383782.20 30383782.40 30383782.60 0.0505 0.0083

Jupiter 78476-07-07 10:34 G 30384018.78 30384018.94 30384019.11 0.0515 0.0291

Jupiter 78481-01-28 16:34 G 30385685.02 30385685.19 30385685.36 0.0527 0.0301

Jupiter 78481-09-23 11:46 G 30385922.80 30385922.99 30385923.20 0.0518 0.0117

Jupiter 78482-05-18 19:27 G 30386160.25 30386160.31 30386160.37 0.0508 0.0486

Uranus 78483-04-16 04:34 G 30386492.59 30386492.69 30386492.82 0.0134 0.0114

Uranus 78483-11-28 09:51 G 30386718.74 30386718.91 30386719.08 0.0134 0.0082

Uranus 78484-07-11 14:53 G 30386944.93 30386945.12 30386945.33 0.0134 0.0050

Uranus 78485-02-22 19:56 G 30387171.12 30387171.33 30387171.55 0.0134 0.0018

Uranus 78485-10-07 00:58 G 30387397.33 30387397.54 30387397.76 0.0134 0.0014

Uranus 78486-05-21 05:46 G 30387623.55 30387623.74 30387623.95 0.0134 0.0047

Uranus 78487-01-02 10:48 G 30387849.79 30387849.95 30387850.13 0.0134 0.0078

Jupiter 78487-07-19 23:32 G 30388048.29 30388048.48 30388048.67 0.0503 0.0181

Uranus 78487-08-16 15:51 G 30388076.05 30388076.16 30388076.30 0.0134 0.0110

Jupiter 78488-03-12 09:51 G 30388284.72 30388284.91 30388285.10 0.0512 0.0186

Saturn 78489-03-03 20:10 G 30388641.19 30388641.34 30388641.51 0.0269 0.0178

Neptune 78489-05-20 08:24 G 30388718.84 30388718.85 30388718.91 0.0089 0.0088

Saturn 78489-10-19 01:56 G 30388870.36 30388870.58 30388870.79 0.0270 0.0019

Neptune 78489-12-31 21:51 G 30388944.31 30388944.41 30388944.50 0.0089 0.0080

Saturn 78490-06-05 07:41 G 30389099.65 30389099.82 30389100.01 0.0271 0.0143

Neptune 78490-08-14 10:20 G 30389169.81 30389169.93 30389170.07 0.0089 0.0072

Neptune 78491-03-27 23:03 G 30389395.32 30389395.46 30389395.63 0.0089 0.0064

Neptune 78491-11-08 11:46 G 30389620.84 30389620.99 30389621.18 0.0089 0.0056

Neptune 78492-06-21 00:44 G 30389846.36 30389846.53 30389846.73 0.0089 0.0048

Jupiter 78492-10-03 06:15 G 30389950.64 30389950.76 30389950.89 0.0529 0.0415

Neptune 78493-02-01 13:56 G 30390071.89 30390072.08 30390072.28 0.0089 0.0039

Jupiter 78493-05-29 04:48 G 30390188.49 30390188.70 30390188.90 0.0520 0.0010

Neptune 78493-09-15 02:39 G 30390297.41 30390297.61 30390297.82 0.0089 0.0031

Jupiter 78494-01-21 15:36 G 30390426.02 30390426.15 30390426.28 0.0510 0.0392

Neptune 78494-04-28 15:22 G 30390522.94 30390523.14 30390523.36 0.0089 0.0022

Neptune 78494-12-10 04:05 G 30390748.47 30390748.67 30390748.90 0.0089 0.0015

Neptune 78495-07-23 17:17 G 30390974.00 30390974.22 30390974.44 0.0089 0.0006

Neptune 78496-03-05 06:15 G 30391199.54 30391199.76 30391199.97 0.0089 0.0003

Neptune 78496-10-16 18:58 G 30391425.08 30391425.29 30391425.51 0.0089 0.0011

Neptune 78497-05-30 07:41 G 30391650.62 30391650.82 30391651.04 0.0089 0.0020

Neptune 78498-01-10 20:39 G 30391876.16 30391876.36 30391876.57 0.0089 0.0028

Neptune 78498-08-24 09:22 G 30392101.71 30392101.89 30392102.11 0.0089 0.0037

Jupiter 78499-03-25 02:53 G 30392314.46 30392314.62 30392314.79 0.0501 0.0276

Neptune 78499-04-06 22:20 G 30392327.26 30392327.43 30392327.63 0.0089 0.0045

Jupiter 78499-11-16 10:34 G 30392550.74 30392550.94 30392551.14 0.0509 0.0083

Neptune 78499-11-18 11:32 G 30392552.81 30392552.98 30392553.16 0.0089 0.0053

Neptune 78500-07-02 00:15 G 30392778.37 30392778.51 30392778.69 0.0090 0.0061

Jupiter 78500-07-11 04:20 G 30392787.59 30392787.68 30392787.78 0.0519 0.0460

Neptune 78501-02-12 13:12 G 30393003.93 30393004.05 30393004.20 0.0090 0.0070

Neptune 78501-09-26 02:10 G 30393229.50 30393229.59 30393229.71 0.0090 0.0078

Neptune 78502-05-09 15:08 G 30393455.08 30393455.13 30393455.20 0.0090 0.0086

Saturn 78503-08-19 08:39 G 30393921.68 30393921.86 30393922.04 0.0291 0.0150

Saturn 78504-04-05 03:22 G 30394151.44 30394151.64 30394151.85 0.0290 0.0049

Saturn 78504-11-20 21:22 G 30394381.28 30394381.39 30394381.51 0.0289 0.0243

Jupiter 78505-02-01 17:03 G 30394454.01 30394454.21 30394454.41 0.0523 0.0116

Jupiter 78505-09-27 07:27 G 30394691.65 30394691.81 30394691.99 0.0513 0.0287

Jupiter 78510-11-29 06:29 G 30396580.64 30396580.77 30396580.91 0.0499 0.0365

Jupiter 78511-07-23 11:32 G 30396816.77 30396816.98 30396817.18 0.0507 0.0022

Jupiter 78512-03-16 01:41 G 30397053.43 30397053.57 30397053.72 0.0516 0.0357

Jupiter 78516-10-07 07:12 G 30398719.62 30398719.80 30398719.98 0.0526 0.0232

Jupiter 78517-06-02 01:12 G 30398957.35 30398957.55 30398957.74 0.0516 0.0181

Saturn 78518-09-15 02:39 G 30399427.44 30399427.61 30399427.80 0.0269 0.0149

Saturn 78519-05-02 08:24 G 30399656.64 30399656.85 30399657.07 0.0269 0.0011

Saturn 78519-12-17 14:24 G 30399885.94 30399886.10 30399886.27 0.0270 0.0172

Jupiter 78522-08-04 09:08 G 30400846.80 30400846.88 30400846.96 0.0496 0.0452

Jupiter 78523-03-28 11:17 G 30401082.77 30401082.97 30401083.16 0.0504 0.0119

Jupiter 78523-11-19 22:34 G 30401319.26 30401319.44 30401319.61 0.0513 0.0251

Uranus 78526-01-18 20:24 G 30402110.21 30402110.35 30402110.50 0.0144 0.0106

Uranus 78526-09-02 08:53 G 30402336.68 30402336.87 30402337.07 0.0144 0.0066

Uranus 78527-04-16 21:22 G 30402563.17 30402563.39 30402563.61 0.0144 0.0025

Mars 78527-05-21 07:56 G 30402597.68 30402597.83 30402597.99 0.1839 0.0833

Uranus 78527-11-29 09:51 G 30402789.69 30402789.91 30402790.13 0.0144 0.0015

Jupiter 78528-06-11 21:51 G 30402985.26 30402985.41 30402985.57 0.0528 0.0347

Uranus 78528-07-12 22:05 G 30403016.23 30403016.42 30403016.64 0.0144 0.0056

Jupiter 78529-02-04 19:12 G 30403223.10 30403223.30 30403223.51 0.0519 0.0072

Uranus 78529-02-24 10:48 G 30403242.80 30403242.95 30403243.13 0.0144 0.0096

Jupiter 78529-09-30 04:48 G 30403460.61 30403460.70 30403460.80 0.0510 0.0451

Uranus 78529-10-08 23:17 G 30403469.42 30403469.47 30403469.55 0.0144 0.0136

Mars 78531-12-30 06:15 G 30404281.59 30404281.76 30404281.93 0.1688 0.0372

Saturn 78533-02-28 13:27 G 30404707.87 30404708.06 30404708.25 0.0291 0.0123

Saturn 78533-10-16 07:56 G 30404937.63 30404937.83 30404938.04 0.0290 0.0075

Saturn 78534-06-03 01:27 G 30405167.50 30405167.56 30405167.65 0.0289 0.0269

Jupiter 78534-12-01 12:58 G 30405348.86 30405349.04 30405349.23 0.0502 0.0216

Jupiter 78535-07-25 21:51 G 30405585.22 30405585.41 30405585.60 0.0511 0.0148

Jupiter 78540-02-15 12:29 G 30407250.92 30407251.02 30407251.12 0.0531 0.0460

Jupiter 78540-10-10 12:29 G 30407488.81 30407489.02 30407489.23 0.0522 0.0040

Jupiter 78541-06-05 00:58 G 30407726.40 30407726.54 30407726.69 0.0512 0.0355

Earth 78543-04-11 13:56 G 30408401.92 30408402.08 30408402.24 0.2632 0.0463

Moon 78543-04-11 18:00 G 30408402.10 30408402.25 30408402.41 0.2637 0.0067 *

Pluto 78545-07-06 11:46 G 30409218.89 30409218.99 30409219.10 0.0065 0.0058

Pluto 78546-02-16 16:20 G 30409443.97 30409444.18 30409444.39 0.0066 0.0020

Jupiter 78546-08-06 15:51 G 30409615.00 30409615.16 30409615.32 0.0500 0.0309

Pluto 78546-09-29 20:39 G 30409669.16 30409669.36 30409669.58 0.0066 0.0019

Jupiter 78547-03-30 22:05 G 30409851.22 30409851.42 30409851.62 0.0508 0.0045

Pluto 78547-05-13 01:12 G 30409894.45 30409894.55 30409894.67 0.0066 0.0057

Jupiter 78547-11-22 14:24 G 30410087.99 30410088.10 30410088.22 0.0518 0.0422

Saturn 78548-03-27 01:56 G 30410213.40 30410213.58 30410213.78 0.0269 0.0133

Saturn 78548-11-11 07:41 G 30410442.60 30410442.82 30410443.03 0.0270 0.0027

Saturn 78549-06-28 13:27 G 30410671.91 30410672.06 30410672.22 0.0271 0.0187

Jupiter 78552-06-15 04:05 G 30411754.48 30411754.67 30411754.87 0.0524 0.0155

Jupiter 78553-02-07 19:56 G 30411992.16 30411992.33 30411992.52 0.0514 0.0253

Jupiter 78558-04-11 20:10 G 30413881.22 30413881.34 30413881.46 0.0498 0.0398

Jupiter 78558-12-04 00:00 G 30414117.30 30414117.50 30414117.71 0.0506 0.0057

Jupiter 78559-07-28 13:41 G 30414353.91 30414354.07 30414354.23 0.0515 0.0318

Saturn 78562-09-10 15:08 G 30415493.94 30415494.13 30415494.33 0.0291 0.0099

Saturn 78563-04-28 09:51 G 30415723.72 30415723.91 30415724.11 0.0290 0.0099

Jupiter 78564-02-18 15:08 G 30416019.96 30416020.13 30416020.31 0.0527 0.0275

Jupiter 78564-10-13 10:20 G 30416257.73 30416257.93 30416258.13 0.0517 0.0140

Jupiter 78565-06-07 17:46 G 30416495.23 30416495.24 30416495.25 0.0508 0.0507

Uranus 78566-12-15 14:53 G 30417051.07 30417051.12 30417051.20 0.0134 0.0128

Uranus 78567-07-29 20:24 G 30417277.20 30417277.35 30417277.50 0.0134 0.0096

Uranus 78568-03-12 01:12 G 30417503.37 30417503.55 30417503.75 0.0134 0.0064

Uranus 78568-10-24 06:15 G 30417729.56 30417729.76 30417729.97 0.0134 0.0032

Uranus 78569-06-07 11:17 G 30417955.76 30417955.97 30417956.19 0.0134 0.0001

Jupiter 78569-12-16 00:29 G 30418147.48 30418147.52 30418147.57 0.0496 0.0481

Uranus 78570-01-19 16:05 G 30418181.97 30418182.17 30418182.39 0.0134 0.0033

Jupiter 78570-08-09 02:10 G 30418383.40 30418383.59 30418383.78 0.0503 0.0153

Uranus 78570-09-02 21:08 G 30418408.21 30418408.38 30418408.58 0.0134 0.0064

Neptune 78570-11-24 12:00 G 30418490.97 30418491.00 30418491.07 0.0088 0.0086

Jupiter 78571-04-02 12:29 G 30418619.84 30418620.02 30418620.20 0.0512 0.0215

Uranus 78571-04-17 02:24 G 30418634.45 30418634.60 30418634.75 0.0134 0.0096

Neptune 78571-07-08 01:27 G 30418716.46 30418716.56 30418716.67 0.0088 0.0077

Uranus 78571-11-29 07:12 G 30418860.75 30418860.80 30418860.88 0.0134 0.0127

Neptune 78572-02-18 14:24 G 30418941.98 30418942.10 30418942.25 0.0088 0.0070

Neptune 78572-10-01 03:36 G 30419167.51 30419167.65 30419167.82 0.0088 0.0061

Neptune 78573-05-14 16:48 G 30419393.04 30419393.20 30419393.39 0.0088 0.0053

Neptune 78573-12-26 06:15 G 30419618.58 30419618.76 30419618.96 0.0088 0.0045

Neptune 78574-08-08 19:27 G 30419844.12 30419844.31 30419844.52 0.0088 0.0037

Neptune 78575-03-22 08:39 G 30420069.66 30420069.86 30420070.08 0.0088 0.0029

Jupiter 78575-10-24 03:51 G 30420285.53 30420285.66 30420285.80 0.0529 0.0392

Neptune 78575-11-02 21:51 G 30420295.20 30420295.41 30420295.64 0.0088 0.0021

Neptune 78576-06-15 11:03 G 30420520.75 30420520.96 30420521.19 0.0088 0.0013

Jupiter 78576-06-18 02:10 G 30420523.39 30420523.59 30420523.80 0.0520 0.0029

Neptune 78577-01-27 00:44 G 30420746.31 30420746.53 30420746.75 0.0088 0.0004

Jupiter 78577-02-10 13:27 G 30420760.94 30420761.06 30420761.18 0.0511 0.0413

Saturn 78577-02-20 03:51 G 30420770.62 30420770.66 30420770.72 0.0268 0.0259

Neptune 78577-09-09 13:56 G 30420971.85 30420972.08 30420972.30 0.0088 0.0004

Saturn 78577-10-07 09:08 G 30420999.68 30420999.88 30421000.08 0.0269 0.0103

Neptune 78578-04-23 02:53 G 30421197.41 30421197.62 30421197.85 0.0088 0.0012

Saturn 78578-05-24 14:39 G 30421228.90 30421229.11 30421229.32 0.0269 0.0056

Neptune 78578-12-04 16:05 G 30421422.96 30421423.17 30421423.39 0.0088 0.0020

Saturn 78579-01-08 20:39 G 30421458.24 30421458.36 30421458.49 0.0270 0.0217

Neptune 78579-07-18 05:32 G 30421648.51 30421648.73 30421648.94 0.0088 0.0028

Neptune 78580-02-28 18:15 G 30421874.07 30421874.26 30421874.48 0.0088 0.0037

Neptune 78580-10-11 07:12 G 30422099.63 30422099.80 30422100.01 0.0088 0.0045

Neptune 78581-05-24 20:24 G 30422325.19 30422325.35 30422325.54 0.0088 0.0053

Neptune 78582-01-05 09:36 G 30422550.76 30422550.90 30422551.08 0.0088 0.0061

Jupiter 78582-04-14 03:08 G 30422649.45 30422649.63 30422649.80 0.0501 0.0249

Neptune 78582-08-18 22:34 G 30422776.33 30422776.44 30422776.60 0.0088 0.0069

Jupiter 78582-12-06 10:20 G 30422885.73 30422885.93 30422886.13 0.0509 0.0110

Neptune 78583-04-01 11:32 G 30423001.90 30423001.98 30423002.11 0.0088 0.0077

Jupiter 78583-07-31 04:05 G 30423122.60 30423122.67 30423122.74 0.0519 0.0485

Neptune 78583-11-13 00:29 G 30423227.49 30423227.52 30423227.61 0.0088 0.0085

Jupiter 78587-06-28 17:17 G 30424551.16 30424551.22 30424551.28 0.0532 0.0505

Jupiter 78588-02-21 18:44 G 30424789.08 30424789.28 30424789.48 0.0523 0.0085

Jupiter 78588-10-16 09:08 G 30425026.72 30425026.88 30425027.05 0.0513 0.0316

Saturn 78591-08-06 02:10 G 30426050.51 30426050.59 30426050.67 0.0292 0.0269

Saturn 78592-03-22 21:08 G 30426280.18 30426280.38 30426280.59 0.0291 0.0071

Saturn 78592-11-07 15:36 G 30426509.96 30426510.15 30426510.34 0.0290 0.0127

Mars 78593-03-17 12:58 G 30426639.93 30426640.04 30426640.16 0.1835 0.1389

Jupiter 78593-12-18 05:46 G 30426915.60 30426915.74 30426915.89 0.0499 0.0341

Jupiter 78594-08-11 10:34 G 30427151.74 30427151.94 30427152.15 0.0507 0.0012

Jupiter 78595-04-05 01:12 G 30427388.42 30427388.55 30427388.69 0.0516 0.0383

Mars 78597-10-26 17:17 G 30428324.06 30428324.22 30428324.38 0.1690 0.0636

Jupiter 78599-10-27 10:48 G 30429054.76 30429054.95 30429055.14 0.0525 0.0200

Jupiter 78600-06-22 04:20 G 30429292.49 30429292.68 30429292.87 0.0516 0.0211

Jupiter 78605-08-24 09:08 G 30431181.78 30431181.88 30431181.98 0.0497 0.0429

Jupiter 78606-04-17 11:46 G 30431417.79 30431417.99 30431418.19 0.0505 0.0093

Saturn 78606-09-03 03:51 G 30431556.59 30431556.66 30431556.76 0.0268 0.0243

Jupiter 78606-12-09 23:46 G 30431654.32 30431654.49 30431654.66 0.0514 0.0279

Saturn 78607-04-20 09:08 G 30431785.68 30431785.88 30431786.08 0.0269 0.0086

Saturn 78607-12-05 14:24 G 30432014.90 30432015.10 30432015.31 0.0270 0.0074

Saturn 78608-07-21 20:24 G 30432244.25 30432244.35 30432244.46 0.0271 0.0234

Uranus 78609-09-19 01:56 G 30432668.48 30432668.58 30432668.69 0.0144 0.0125

Uranus 78610-05-03 14:24 G 30432894.93 30432895.10 30432895.28 0.0144 0.0085

Uranus 78610-12-16 02:53 G 30433121.42 30433121.62 30433121.84 0.0144 0.0045

Jupiter 78611-07-03 01:27 G 30433320.40 30433320.56 30433320.72 0.0528 0.0316

Uranus 78611-07-30 15:36 G 30433347.93 30433348.15 30433348.37 0.0144 0.0004

Jupiter 78612-02-25 21:51 G 30433558.21 30433558.41 30433558.61 0.0518 0.0103

Uranus 78612-03-13 04:05 G 30433574.47 30433574.67 30433574.89 0.0144 0.0037

Jupiter 78612-10-20 06:29 G 30433795.71 30433795.77 30433795.85 0.0509 0.0477

Uranus 78612-10-25 16:48 G 30433801.02 30433801.20 30433801.39 0.0144 0.0077

Uranus 78613-06-09 05:17 G 30434027.60 30434027.72 30434027.86 0.0144 0.0117

Jupiter 78617-12-21 14:53 G 30435683.94 30435684.12 30435684.31 0.0502 0.0189

Jupiter 78618-08-15 00:15 G 30435920.32 30435920.51 30435920.70 0.0511 0.0176

Saturn 78621-02-16 02:53 G 30436836.51 30436836.62 30436836.73 0.0292 0.0247

Saturn 78621-10-03 22:20 G 30437066.22 30437066.43 30437066.64 0.0291 0.0048

Saturn 78622-05-21 17:03 G 30437296.03 30437296.21 30437296.39 0.0290 0.0150

Jupiter 78623-03-07 11:32 G 30437585.87 30437585.98 30437586.10 0.0530 0.0434

Jupiter 78623-10-31 10:48 G 30437823.74 30437823.95 30437824.15 0.0521 0.0016

Jupiter 78624-06-24 22:48 G 30438061.32 30438061.45 30438061.60 0.0512 0.0377

Jupiter 78629-08-26 17:46 G 30439950.08 30439950.24 30439950.41 0.0500 0.0282

Mars 78629-10-26 15:22 G 30440011.10 30440011.14 30440011.17 0.1681 0.1642

Jupiter 78630-04-20 00:29 G 30440186.32 30440186.52 30440186.72 0.0509 0.0075

Jupiter 78630-12-12 16:48 G 30440423.11 30440423.20 30440423.30 0.0518 0.0449

Pluto 78633-10-19 23:46 G 30441465.30 30441465.49 30441465.70 0.0079 0.0034

Pluto 78634-06-02 09:51 G 30441690.71 30441690.91 30441691.11 0.0078 0.0033

Jupiter 78635-07-06 01:12 G 30442089.35 30442089.55 30442089.75 0.0524 0.0131

Jupiter 78636-02-28 17:03 G 30442327.04 30442327.21 30442327.38 0.0514 0.0274

Saturn 78636-03-15 11:17 G 30442342.85 30442342.97 30442343.10 0.0268 0.0213

Saturn 78636-10-30 16:34 G 30442571.98 30442572.19 30442572.40 0.0269 0.0056

Saturn 78637-06-16 22:05 G 30442801.22 30442801.42 30442801.62 0.0269 0.0103

Saturn 78638-02-01 04:05 G 30443030.63 30443030.67 30443030.72 0.0270 0.0263

Earth 78640-10-14 22:20 G 30444017.30 30444017.43 30444017.56 0.2701 0.1473

Moon 78640-10-15 01:12 G 30444017.42 30444017.55 30444017.67 0.2706 0.1414 *

Jupiter 78641-05-01 19:41 G 30444216.19 30444216.32 30444216.46 0.0498 0.0373

Jupiter 78641-12-23 23:32 G 30444452.28 30444452.48 30444452.68 0.0506 0.0029

Jupiter 78642-08-17 12:44 G 30444688.88 30444689.03 30444689.18 0.0515 0.0344

Jupiter 78647-03-10 15:51 G 30446354.98 30446355.16 30446355.35 0.0527 0.0247

Jupiter 78647-11-03 11:03 G 30446592.77 30446592.96 30446593.16 0.0517 0.0169

Earth 78648-10-12 13:27 G 30446936.95 30446937.06 30446937.16 0.2700 0.1932

Moon 78648-10-12 18:29 G 30446937.14 30446937.27 30446937.41 0.2701 0.1371 *

Saturn 78650-08-29 10:48 G 30447622.81 30447622.95 30447623.09 0.0292 0.0216

Uranus 78651-03-30 06:15 G 30447835.65 30447835.76 30447835.89 0.0134 0.0110

Saturn 78651-04-16 06:00 G 30447852.54 30447852.75 30447852.95 0.0291 0.0018

Uranus 78651-11-11 11:17 G 30448061.81 30448061.97 30448062.15 0.0134 0.0078

Saturn 78651-12-02 00:15 G 30448082.35 30448082.51 30448082.68 0.0290 0.0180

Uranus 78652-06-24 16:20 G 30448287.99 30448288.18 30448288.39 0.0134 0.0047

Jupiter 78653-01-04 23:17 G 30448482.40 30448482.47 30448482.55 0.0496 0.0459

Uranus 78653-02-05 21:36 G 30448514.18 30448514.40 30448514.61 0.0134 0.0014

Jupiter 78653-08-29 00:44 G 30448718.34 30448718.53 30448718.73 0.0503 0.0128

Uranus 78653-09-20 02:39 G 30448740.39 30448740.61 30448740.82 0.0134 0.0018

Neptune 78654-04-06 07:56 G 30448938.78 30448938.83 30448938.94 0.0089 0.0083

Jupiter 78654-04-22 11:03 G 30448954.78 30448954.96 30448955.13 0.0512 0.0240

Uranus 78654-05-04 07:27 G 30448966.61 30448966.81 30448967.01 0.0134 0.0049

Neptune 78654-11-17 20:53 G 30449164.27 30449164.37 30449164.52 0.0089 0.0074

Uranus 78654-12-16 12:15 G 30449192.85 30449193.01 30449193.19 0.0134 0.0081

Neptune 78655-07-01 10:20 G 30449389.79 30449389.93 30449390.08 0.0089 0.0066

Uranus 78655-07-30 17:17 G 30449419.12 30449419.22 30449419.35 0.0134 0.0113

Neptune 78656-02-11 23:03 G 30449615.31 30449615.46 30449615.64 0.0089 0.0058

Neptune 78656-09-24 11:46 G 30449840.82 30449840.99 30449841.19 0.0089 0.0050

Neptune 78657-05-08 00:58 G 30450066.35 30450066.54 30450066.73 0.0089 0.0041

Neptune 78657-12-19 13:41 G 30450291.87 30450292.07 30450292.27 0.0089 0.0033

Neptune 78658-08-02 02:24 G 30450517.40 30450517.60 30450517.82 0.0089 0.0024

Jupiter 78658-11-13 06:44 G 30450620.63 30450620.78 30450620.93 0.0529 0.0362

Neptune 78659-03-15 15:22 G 30450742.93 30450743.14 30450743.36 0.0089 0.0016

Jupiter 78659-07-09 04:48 G 30450858.50 30450858.70 30450858.91 0.0520 0.0059

Neptune 78659-10-27 04:05 G 30450968.46 30450968.67 30450968.89 0.0089 0.0008

Jupiter 78660-03-02 15:36 G 30451096.05 30451096.15 30451096.25 0.0510 0.0440

Neptune 78660-06-08 17:03 G 30451194.00 30451194.21 30451194.43 0.0089 0.0002

Neptune 78661-01-20 05:46 G 30451419.53 30451419.74 30451419.96 0.0089 0.0010

Neptune 78661-09-02 18:44 G 30451645.07 30451645.28 30451645.50 0.0089 0.0018

Neptune 78662-04-16 07:27 G 30451870.61 30451870.81 30451871.02 0.0089 0.0026

Neptune 78662-11-27 20:10 G 30452096.15 30452096.34 30452096.55 0.0089 0.0035

Neptune 78663-07-11 09:22 G 30452321.71 30452321.89 30452322.09 0.0090 0.0043

Mars 78663-08-25 03:51 G 30452366.52 30452366.66 30452366.81 0.1693 0.0911

Neptune 78664-02-21 22:05 G 30452547.26 30452547.42 30452547.61 0.0090 0.0052

Neptune 78664-10-04 11:03 G 30452772.81 30452772.96 30452773.13 0.0090 0.0060

Jupiter 78665-05-04 02:39 G 30452984.43 30452984.61 30452984.79 0.0501 0.0225

Neptune 78665-05-18 00:00 G 30452998.37 30452998.50 30452998.65 0.0090 0.0068

Saturn 78665-09-25 12:29 G 30453128.88 30453129.02 30453129.17 0.0268 0.0195

Jupiter 78665-12-26 10:34 G 30453220.74 30453220.94 30453221.13 0.0510 0.0136

Neptune 78665-12-29 12:29 G 30453223.93 30453224.02 30453224.16 0.0090 0.0077

Saturn 78666-05-12 17:32 G 30453358.02 30453358.23 30453358.44 0.0269 0.0038

Neptune 78666-08-12 01:41 G 30453449.52 30453449.57 30453449.66 0.0090 0.0085

Jupiter 78666-08-20 05:03 G 30453457.68 30453457.71 30453457.74 0.0520 0.0511

Saturn 78666-12-27 22:48 G 30453587.26 30453587.45 30453587.64 0.0270 0.0122

Jupiter 78670-07-18 20:24 G 30454886.26 30454886.35 30454886.44 0.0531 0.0475

Jupiter 78671-03-13 21:08 G 30455124.18 30455124.38 30455124.59 0.0522 0.0055

Jupiter 78671-11-06 10:48 G 30455361.80 30455361.95 30455362.10 0.0513 0.0343

Jupiter 78677-01-07 06:29 G 30457250.62 30457250.77 30457250.93 0.0499 0.0317

Jupiter 78677-08-31 12:15 G 30457486.80 30457487.01 30457487.21 0.0508 0.0037

Jupiter 78678-04-25 03:22 G 30457723.52 30457723.64 30457723.76 0.0517 0.0410

Saturn 78680-03-10 12:00 G 30458408.85 30458409.00 30458409.16 0.0292 0.0193

Saturn 78680-10-26 07:12 G 30458638.59 30458638.80 30458639.01 0.0291 0.0007

Saturn 78681-06-13 01:56 G 30458868.43 30458868.58 30458868.73 0.0290 0.0203

Jupiter 78682-11-16 08:53 G 30459389.68 30459389.87 30459390.07 0.0525 0.0175

Jupiter 78683-07-12 01:41 G 30459627.39 30459627.57 30459627.76 0.0515 0.0235

Jupiter 78688-09-12 10:05 G 30461516.81 30461516.92 30461517.04 0.0497 0.0405

Jupiter 78689-05-06 13:27 G 30461752.86 30461753.06 30461753.26 0.0505 0.0065

Jupiter 78689-12-29 01:27 G 30461989.41 30461989.56 30461989.73 0.0514 0.0307

Mars 78691-01-13 10:34 G 30462369.85 30462369.94 30462370.04 0.1843 0.1564

Uranus 78693-12-31 18:58 G 30463453.15 30463453.29 30463453.45 0.0144 0.0105

Jupiter 78694-07-21 22:05 G 30463655.25 30463655.42 30463655.59 0.0527 0.0292

Uranus 78694-08-15 07:56 G 30463679.63 30463679.83 30463680.03 0.0144 0.0064

Jupiter 78695-03-16 18:00 G 30463893.05 30463893.25 30463893.45 0.0518 0.0126

Uranus 78695-03-29 20:24 G 30463906.14 30463906.35 30463906.57 0.0144 0.0024

Saturn 78695-04-07 19:56 G 30463915.16 30463915.33 30463915.50 0.0268 0.0166

Mars 78695-08-24 02:10 G 30464053.50 30464053.59 30464053.69 0.1684 0.1394

Jupiter 78695-11-09 02:53 G 30464130.58 30464130.62 30464130.66 0.0509 0.0496

Uranus 78695-11-11 09:08 G 30464132.66 30464132.88 30464133.10 0.0144 0.0017

Saturn 78695-11-23 01:12 G 30464144.33 30464144.55 30464144.76 0.0269 0.0008

Uranus 78696-06-24 21:51 G 30464359.21 30464359.41 30464359.61 0.0144 0.0057

Saturn 78696-07-09 06:44 G 30464373.61 30464373.78 30464373.96 0.0270 0.0152

Uranus 78697-02-06 10:20 G 30464585.78 30464585.93 30464586.10 0.0144 0.0098

Uranus 78697-09-20 22:48 G 30464812.41 30464812.45 30464812.53 0.0144 0.0138

Jupiter 78700-05-19 12:58 G 30465783.02 30465783.04 30465783.07 0.0495 0.0489

Jupiter 78701-01-10 13:41 G 30466018.88 30466019.07 30466019.26 0.0502 0.0164

Jupiter 78701-09-03 22:34 G 30466255.26 30466255.44 30466255.63 0.0511 0.0202

Jupiter 78706-03-27 11:03 G 30467920.83 30467920.96 30467921.09 0.0530 0.0409

Jupiter 78706-11-20 10:34 G 30468158.73 30468158.94 30468159.14 0.0521 0.0014

Jupiter 78707-07-15 22:48 G 30468396.33 30468396.45 30468396.58 0.0512 0.0403

Saturn 78709-09-21 20:53 G 30469195.20 30469195.37 30469195.55 0.0292 0.0161

Saturn 78710-05-09 15:51 G 30469424.95 30469425.16 30469425.37 0.0291 0.0039

Saturn 78710-12-25 10:05 G 30469654.81 30469654.92 30469655.05 0.0290 0.0235

Jupiter 78712-09-15 15:36 G 30470284.98 30470285.15 30470285.33 0.0500 0.0259

Jupiter 78713-05-09 22:05 G 30470521.22 30470521.42 30470521.61 0.0509 0.0099

Jupiter 78714-01-01 14:24 G 30470758.02 30470758.10 30470758.18 0.0518 0.0472

Jupiter 78717-11-30 00:15 G 30472186.48 30472186.51 30472186.56 0.0532 0.0522

Jupiter 78718-07-26 02:53 G 30472424.42 30472424.62 30472424.82 0.0524 0.0101

Jupiter 78719-03-20 18:29 G 30472662.10 30472662.27 30472662.43 0.0514 0.0302

Jupiter 78724-05-21 18:15 G 30474551.12 30474551.26 30474551.41 0.0498 0.0351

Saturn 78724-10-18 22:20 G 30474701.25 30474701.43 30474701.61 0.0268 0.0146

Jupiter 78725-01-12 22:34 G 30474787.23 30474787.44 30474787.64 0.0506 0.0013

Saturn 78725-06-05 03:22 G 30474930.43 30474930.64 30474930.86 0.0269 0.0013

Jupiter 78725-09-06 12:00 G 30475023.87 30475024.00 30475024.15 0.0516 0.0370

Saturn 78726-01-20 08:53 G 30475159.71 30475159.87 30475160.04 0.0270 0.0172

Mars 78729-06-22 14:39 G 30476408.99 30476409.11 30476409.24 0.1696 0.1183

Jupiter 78730-03-30 17:46 G 30476690.06 30476690.24 30476690.43 0.0526 0.0217

Jupiter 78730-11-23 12:15 G 30476927.82 30476928.01 30476928.20 0.0517 0.0197

Uranus 78734-11-28 17:03 G 30478394.14 30478394.21 30478394.30 0.0134 0.0124

Neptune 78735-02-27 22:20 G 30478485.42 30478485.43 30478485.47 0.0088 0.0087

Uranus 78735-07-12 22:05 G 30478620.28 30478620.42 30478620.59 0.0134 0.0092

Neptune 78735-10-11 11:32 G 30478710.90 30478710.98 30478711.08 0.0088 0.0079

Jupiter 78736-01-25 22:48 G 30478817.36 30478817.45 30478817.55 0.0496 0.0437

Uranus 78736-02-24 03:22 G 30478846.45 30478846.64 30478846.84 0.0134 0.0060

Neptune 78736-05-24 00:44 G 30478936.41 30478936.53 30478936.67 0.0088 0.0071

Jupiter 78736-09-18 00:58 G 30479053.34 30479053.54 30479053.74 0.0504 0.0103

Uranus 78736-10-07 08:24 G 30479072.64 30479072.85 30479073.06 0.0134 0.0028

Neptune 78737-01-04 13:56 G 30479161.94 30479162.08 30479162.25 0.0088 0.0063

Jupiter 78737-05-12 11:46 G 30479289.83 30479289.99 30479290.17 0.0513 0.0267

Uranus 78737-05-21 13:27 G 30479298.84 30479299.06 30479299.27 0.0134 0.0004

Neptune 78737-08-18 03:08 G 30479387.47 30479387.63 30479387.81 0.0088 0.0055

Uranus 78738-01-02 18:15 G 30479525.06 30479525.26 30479525.47 0.0134 0.0035

Neptune 78738-03-31 16:05 G 30479613.00 30479613.17 30479613.37 0.0088 0.0047

Uranus 78738-08-16 23:17 G 30479751.29 30479751.47 30479751.66 0.0134 0.0067

Neptune 78738-11-12 05:17 G 30479838.53 30479838.72 30479838.93 0.0088 0.0039

Uranus 78739-03-31 04:05 G 30479977.54 30479977.67 30479977.83 0.0134 0.0099

Saturn 78739-04-03 22:34 G 30479981.26 30479981.44 30479981.63 0.0291 0.0137

Neptune 78739-06-25 18:29 G 30480064.07 30480064.27 30480064.49 0.0088 0.0031

Uranus 78739-11-12 09:08 G 30480203.84 30480203.88 30480203.94 0.0134 0.0130

Saturn 78739-11-19 17:46 G 30480211.03 30480211.24 30480211.44 0.0291 0.0062

Neptune 78740-02-06 07:41 G 30480289.62 30480289.82 30480290.05 0.0088 0.0023

Saturn 78740-07-06 12:00 G 30480440.92 30480441.00 30480441.10 0.0290 0.0258

Neptune 78740-09-18 21:08 G 30480515.16 30480515.38 30480515.60 0.0088 0.0014

Neptune 78741-05-02 10:20 G 30480740.71 30480740.93 30480741.15 0.0088 0.0006

Jupiter 78741-12-03 05:03 G 30480955.55 30480955.71 30480955.87 0.0528 0.0336

Neptune 78741-12-13 23:32 G 30480966.26 30480966.48 30480966.71 0.0088 0.0003

Neptune 78742-07-27 12:44 G 30481191.81 30481192.03 30481192.26 0.0088 0.0011

Jupiter 78742-07-29 02:10 G 30481193.39 30481193.59 30481193.80 0.0519 0.0083

Neptune 78743-03-10 01:56 G 30481417.37 30481417.58 30481417.80 0.0088 0.0019

Jupiter 78743-03-23 12:15 G 30481430.93 30481431.01 30481431.10 0.0510 0.0461

Neptune 78743-10-21 14:53 G 30481642.92 30481643.12 30481643.35 0.0088 0.0027

Neptune 78744-06-03 04:05 G 30481868.48 30481868.67 30481868.89 0.0088 0.0035

Neptune 78745-01-14 17:32 G 30482094.04 30482094.23 30482094.43 0.0088 0.0043

Neptune 78745-08-28 06:44 G 30482319.60 30482319.78 30482319.96 0.0088 0.0051

Neptune 78746-04-10 19:41 G 30482545.17 30482545.32 30482545.49 0.0088 0.0059

Neptune 78746-11-22 08:53 G 30482770.73 30482770.87 30482771.02 0.0088 0.0067

Neptune 78747-07-05 21:51 G 30482996.31 30482996.41 30482996.53 0.0088 0.0075

Neptune 78748-02-16 11:03 G 30483221.90 30483221.96 30483222.04 0.0088 0.0083

Jupiter 78748-05-24 03:08 G 30483319.45 30483319.63 30483319.81 0.0502 0.0199

Jupiter 78749-01-15 11:17 G 30483555.79 30483555.97 30483556.17 0.0510 0.0165

Jupiter 78753-08-07 16:34 G 30485221.10 30485221.19 30485221.31 0.0531 0.0453

Jupiter 78754-04-02 16:48 G 30485459.00 30485459.20 30485459.41 0.0522 0.0033

Saturn 78754-05-01 05:32 G 30485487.54 30485487.73 30485487.93 0.0268 0.0117

Jupiter 78754-11-26 06:15 G 30485696.62 30485696.76 30485696.91 0.0513 0.0363

Saturn 78754-12-16 11:03 G 30485716.75 30485716.96 30485717.17 0.0269 0.0042

Saturn 78755-08-02 16:48 G 30485946.06 30485946.20 30485946.34 0.0270 0.0202

Mars 78756-11-10 15:22 G 30486411.99 30486412.14 30486412.28 0.1839 0.0969

Jupiter 78760-01-28 04:34 G 30487585.53 30487585.69 30487585.85 0.0499 0.0293

Jupiter 78760-09-20 09:51 G 30487821.71 30487821.91 30487822.11 0.0507 0.0060

Jupiter 78761-05-15 00:44 G 30488058.42 30488058.53 30488058.64 0.0517 0.0433

Mars 78761-06-21 12:58 G 30488095.91 30488096.04 30488096.17 0.1687 0.1124

Jupiter 78765-12-06 07:27 G 30489724.61 30489724.81 30489725.01 0.0525 0.0149

Jupiter 78766-08-01 00:29 G 30489962.35 30489962.52 30489962.71 0.0516 0.0261

Saturn 78768-10-14 09:08 G 30490767.69 30490767.88 30490768.08 0.0291 0.0102

Saturn 78769-06-01 03:51 G 30490997.47 30490997.66 30490997.86 0.0291 0.0098

Jupiter 78771-10-03 07:12 G 30491851.68 30491851.80 30491851.93 0.0497 0.0384

Jupiter 78772-05-26 10:05 G 30492087.72 30492087.92 30492088.12 0.0505 0.0042

Jupiter 78773-01-17 22:05 G 30492324.27 30492324.42 30492324.58 0.0514 0.0329

Jupiter 78777-08-10 22:05 G 30493990.25 30493990.42 30493990.61 0.0528 0.0266

Uranus 78777-09-01 00:00 G 30494011.40 30494011.50 30494011.62 0.0144 0.0124

Jupiter 78778-04-05 18:29 G 30494228.08 30494228.27 30494228.47 0.0518 0.0153

Uranus 78778-04-15 12:29 G 30494237.86 30494238.02 30494238.21 0.0144 0.0084

Uranus 78778-11-28 01:12 G 30494464.35 30494464.55 30494464.77 0.0144 0.0044

Uranus 78779-07-12 14:10 G 30494690.87 30494691.09 30494691.31 0.0144 0.0004

Uranus 78780-02-24 02:39 G 30494917.41 30494917.61 30494917.83 0.0144 0.0038

Uranus 78780-10-07 15:22 G 30495143.96 30495144.14 30495144.33 0.0144 0.0078

Uranus 78781-05-22 04:05 G 30495370.55 30495370.67 30495370.80 0.0144 0.0118

Saturn 78783-03-27 04:20 G 30496044.62 30496044.68 30496044.76 0.0268 0.0250

Jupiter 78783-06-08 10:34 G 30496117.88 30496117.94 30496118.00 0.0495 0.0469

Saturn 78783-11-11 09:22 G 30496273.69 30496273.89 30496274.09 0.0268 0.0094

Jupiter 78784-01-30 11:17 G 30496353.78 30496353.97 30496354.17 0.0503 0.0141

Saturn 78784-06-27 14:39 G 30496502.90 30496503.11 30496503.32 0.0269 0.0065

Jupiter 78784-09-22 20:39 G 30496590.19 30496590.36 30496590.55 0.0512 0.0226

Saturn 78785-02-11 20:24 G 30496732.23 30496732.35 30496732.47 0.0270 0.0224

Moon 78786-04-13 12:29 G 30497157.85 30497158.02 30497158.19 0.2627 0.0405

Earth 78786-04-13 15:22 G 30497157.98 30497158.14 30497158.30 0.2633 0.0259 *

Jupiter 78789-04-15 12:00 G 30498255.87 30498256.00 30498256.15 0.0530 0.0381

Jupiter 78789-12-09 11:17 G 30498493.76 30498493.97 30498494.17 0.0521 0.0042

Jupiter 78790-08-03 23:03 G 30498731.35 30498731.46 30498731.57 0.0511 0.0427

Pluto 78792-10-29 13:27 G 30499548.88 30499549.06 30499549.26 0.0065 0.0033

Pluto 78793-06-11 17:46 G 30499774.03 30499774.24 30499774.47 0.0066 0.0006

Pluto 78794-01-22 22:05 G 30499999.27 30499999.42 30499999.60 0.0066 0.0044

Mars 78795-04-20 01:12 G 30500451.46 30500451.55 30500451.63 0.1700 0.1469

Jupiter 78795-10-05 14:24 G 30500619.93 30500620.10 30500620.28 0.0501 0.0236

Jupiter 78796-05-28 21:36 G 30500856.20 30500856.40 30500856.59 0.0509 0.0124

Jupiter 78797-01-20 14:39 G 30501093.06 30501093.11 30501093.17 0.0519 0.0497

Saturn 78797-09-08 15:36 G 30501324.10 30501324.15 30501324.23 0.0292 0.0277

Saturn 78798-04-26 11:03 G 30501553.76 30501553.96 30501554.17 0.0291 0.0079

Saturn 78798-12-12 06:00 G 30501783.56 30501783.75 30501783.94 0.0290 0.0120

Jupiter 78800-12-18 22:48 G 30502521.39 30502521.45 30502521.53 0.0531 0.0496

Jupiter 78801-08-14 00:15 G 30502759.30 30502759.51 30502759.71 0.0523 0.0076

Jupiter 78802-04-08 14:39 G 30502996.96 30502997.11 30502997.28 0.0514 0.0325

Jupiter 78807-06-10 17:32 G 30504886.08 30504886.23 30504886.38 0.0499 0.0327

Jupiter 78808-02-01 22:20 G 30505122.22 30505122.43 30505122.63 0.0507 0.0025

Jupiter 78808-09-25 12:15 G 30505358.89 30505359.01 30505359.14 0.0516 0.0396

Saturn 78812-10-06 11:17 G 30506830.86 30506830.97 30506831.09 0.0268 0.0223

Jupiter 78813-04-18 13:27 G 30507024.87 30507025.06 30507025.25 0.0526 0.0194

Saturn 78813-05-23 16:34 G 30507059.99 30507060.19 30507060.40 0.0269 0.0066

Jupiter 78813-12-12 07:27 G 30507262.62 30507262.81 30507263.00 0.0516 0.0218

Saturn 78814-01-07 22:05 G 30507289.23 30507289.42 30507289.63 0.0269 0.0094

Saturn 78814-08-25 04:20 G 30507518.61 30507518.68 30507518.75 0.0270 0.0254

Neptune 78818-07-09 18:29 G 30508933.22 30508933.27 30508933.35 0.0089 0.0085

Jupiter 78819-02-13 19:41 G 30509152.22 30509152.32 30509152.43 0.0496 0.0417

Neptune 78819-02-20 07:12 G 30509158.71 30509158.80 30509158.93 0.0089 0.0077

Uranus 78819-03-12 08:53 G 30509178.75 30509178.87 30509179.01 0.0134 0.0106

Neptune 78819-10-03 20:10 G 30509384.22 30509384.34 30509384.50 0.0089 0.0068

Jupiter 78819-10-07 21:51 G 30509388.21 30509388.41 30509388.61 0.0504 0.0080

Uranus 78819-10-24 13:41 G 30509404.91 30509405.07 30509405.26 0.0134 0.0075

Neptune 78820-05-16 08:53 G 30509609.73 30509609.87 30509610.05 0.0089 0.0060

Jupiter 78820-05-31 08:24 G 30509624.69 30509624.85 30509625.02 0.0513 0.0290

Uranus 78820-06-06 18:58 G 30509631.09 30509631.29 30509631.50 0.0134 0.0042

Neptune 78820-12-27 22:05 G 30509835.25 30509835.42 30509835.61 0.0089 0.0052

Uranus 78821-01-19 00:00 G 30509857.29 30509857.50 30509857.72 0.0134 0.0010

Neptune 78821-08-10 10:48 G 30510060.78 30510060.95 30510061.16 0.0089 0.0044

Uranus 78821-09-02 05:03 G 30510083.50 30510083.71 30510083.92 0.0134 0.0022

Neptune 78822-03-24 00:00 G 30510286.30 30510286.50 30510286.70 0.0089 0.0035

Uranus 78822-04-16 09:51 G 30510309.72 30510309.91 30510310.12 0.0134 0.0053

Mars 78822-09-07 19:56 G 30510454.16 30510454.33 30510454.50 0.1836 0.0392

Neptune 78822-11-04 12:44 G 30510511.83 30510512.03 30510512.25 0.0089 0.0027

Uranus 78822-11-28 14:39 G 30510535.96 30510536.11 30510536.29 0.0134 0.0085

Neptune 78823-06-18 01:41 G 30510737.36 30510737.57 30510737.79 0.0089 0.0018

Uranus 78823-07-12 19:56 G 30510762.23 30510762.33 30510762.44 0.0134 0.0116

Neptune 78824-01-29 14:39 G 30510962.90 30510963.11 30510963.33 0.0089 0.0010

Neptune 78824-09-11 03:36 G 30511188.43 30511188.65 30511188.86 0.0089 0.0002

Jupiter 78824-12-22 02:10 G 30511290.43 30511290.59 30511290.75 0.0529 0.0313

Neptune 78825-04-24 16:20 G 30511413.96 30511414.18 30511414.40 0.0089 0.0007

Jupiter 78825-08-16 23:46 G 30511528.29 30511528.49 30511528.69 0.0520 0.0108

Neptune 78825-12-06 05:03 G 30511639.50 30511639.71 30511639.93 0.0089 0.0016

Jupiter 78826-04-11 10:05 G 30511765.86 30511765.92 30511765.98 0.0510 0.0484

Neptune 78826-07-19 18:00 G 30511865.05 30511865.25 30511865.47 0.0089 0.0024

Neptune 78827-03-02 06:44 G 30512090.59 30512090.78 30512090.99 0.0089 0.0033

Saturn 78827-03-22 03:36 G 30512110.54 30512110.65 30512110.77 0.0292 0.0240

Mars 78827-04-18 23:46 G 30512138.34 30512138.49 30512138.64 0.1690 0.0861

Neptune 78827-10-13 19:56 G 30512316.13 30512316.33 30512316.52 0.0089 0.0041

Saturn 78827-11-06 22:48 G 30512340.24 30512340.45 30512340.66 0.0291 0.0041

Neptune 78828-05-26 08:24 G 30512541.68 30512541.85 30512542.04 0.0090 0.0050

Saturn 78828-06-23 17:17 G 30512570.05 30512570.22 30512570.40 0.0290 0.0157

Neptune 78829-01-06 21:22 G 30512767.23 30512767.39 30512767.56 0.0090 0.0058

Neptune 78829-08-20 10:05 G 30512992.79 30512992.92 30512993.08 0.0090 0.0067

Neptune 78830-04-02 23:03 G 30513218.36 30513218.46 30513218.60 0.0090 0.0075

Neptune 78830-11-14 12:00 G 30513443.93 30513444.00 30513444.10 0.0090 0.0083

Jupiter 78831-06-12 23:17 G 30513654.28 30513654.47 30513654.66 0.0501 0.0177

Jupiter 78832-02-04 07:12 G 30513890.61 30513890.80 30513890.99 0.0510 0.0186

Jupiter 78836-08-26 15:22 G 30515556.02 30515556.14 30515556.26 0.0531 0.0429

Jupiter	78837-04-21 16:05 G	30515793.96	30515794.17	30515794.38	0.0522	0.0006
Jupiter	78837-12-15 05:46 G	30516031.61	30516031.74	30516031.87	0.0513	0.0388
Saturn	78842-04-18 16:05 G	30517617.04	30517617.17	30517617.32	0.0268	0.0199
Saturn	78842-12-03 21:22 G	30517846.18	30517846.39	30517846.60	0.0269	0.0041
Jupiter	78843-02-16 00:58 G	30517920.38	30517920.54	30517920.72	0.0499	0.0274
Saturn	78843-07-21 02:39 G	30518075.42	30518075.61	30518075.81	0.0269	0.0118
Jupiter	78843-10-10 06:44 G	30518156.58	30518156.78	30518156.98	0.0508	0.0082
Jupiter	78844-06-02 22:05 G	30518393.33	30518393.42	30518393.52	0.0517	0.0455
Jupiter	78848-12-25 07:41 G	30520059.62	30520059.82	30520060.02	0.0525	0.0121
Jupiter	78849-08-20 00:15 G	30520297.34	30520297.51	30520297.68	0.0515	0.0286
Jupiter	78854-10-22 04:48 G	30522186.57	30522186.70	30522186.84	0.0497	0.0363
Jupiter	78855-06-15 08:24 G	30522422.65	30522422.85	30522423.05	0.0505	0.0018
Jupiter	78856-02-06 21:08 G	30522659.24	30522659.38	30522659.53	0.0515	0.0354
Saturn	78856-10-01 06:29 G	30522896.64	30522896.77	30522896.92	0.0291	0.0215
Saturn	78857-05-19 01:41 G	30523126.36	30523126.57	30523126.78	0.0291	0.0016
Saturn	78858-01-03 20:24 G	30523356.18	30523356.35	30523356.51	0.0290	0.0181
Jupiter	78860-08-29 19:56 G	30524325.15	30524325.33	30524325.51	0.0527	0.0239
Jupiter	78861-04-24 15:08 G	30524562.94	30524563.13	30524563.32	0.0517	0.0176
Uranus	78861-05-01 05:17 G	30524569.71	30524569.72	30524569.76	0.0144	0.0143
Uranus	78861-12-13 17:46 G	30524796.10	30524796.24	30524796.41	0.0144	0.0103
Uranus	78862-07-28 06:29 G	30525022.59	30525022.77	30525022.98	0.0144	0.0063
Uranus	78863-03-11 19:27 G	30525249.10	30525249.31	30525249.53	0.0144	0.0022
Uranus	78863-10-24 08:10 G	30525475.63	30525475.84	30525476.06	0.0144	0.0019
Uranus	78864-06-06 20:39 G	30525702.17	30525702.36	30525702.57	0.0144	0.0059
Uranus	78865-01-19 09:36 G	30525928.74	30525928.90	30525929.06	0.0144	0.0099
Uranus	78865-09-02 21:51 G	30526155.38	30526155.41	30526155.48	0.0144	0.0140
Jupiter	78866-06-27 08:24 G	30526452.77	30526452.85	30526452.93	0.0496	0.0449
Jupiter	78867-02-18 09:51 G	30526688.72	30526688.91	30526689.11	0.0503	0.0117
Jupiter	78867-10-12 19:56 G	30526925.16	30526925.33	30526925.51	0.0512	0.0252
Saturn	78871-10-29 22:34 G	30528403.28	30528403.44	30528403.61	0.0268	0.0173

Jupiter 78872-05-04 07:56 G 30528590.68 30528590.83 30528590.98 0.0529 0.0358

Saturn 78872-06-15 04:05 G 30528632.46 30528632.67 30528632.89 0.0269 0.0014

Jupiter 78872-12-28 06:15 G 30528828.56 30528828.76 30528828.97 0.0520 0.0064

Saturn 78873-01-30 09:51 G 30528861.74 30528861.91 30528862.10 0.0270 0.0146

Jupiter 78873-08-22 17:32 G 30529066.14 30529066.23 30529066.33 0.0511 0.0447

Jupiter 78878-10-24 10:48 G 30530954.77 30530954.95 30530955.13 0.0501 0.0215

Jupiter 78879-06-17 17:46 G 30531191.05 30531191.24 30531191.43 0.0509 0.0146

Jupiter 78880-02-09 10:34 G 30531427.93 30531427.94 30531427.96 0.0518 0.0517

Pluto 78880-06-30 19:27 G 30531570.17 30531570.31 30531570.49 0.0079 0.0056

Pluto 78881-02-11 05:46 G 30531795.53 30531795.74 30531795.97 0.0078 0.0012

Pluto 78881-09-24 15:36 G 30532021.13 30532021.15 30532021.18 0.0078 0.0077

Moon 78883-10-16 23:17 G 30532773.35 30532773.47 30532773.60 0.2694 0.1757

Earth 78883-10-16 23:46 G 30532773.36 30532773.49 30532773.62 0.2700 0.1556 *

Jupiter 78884-01-07 18:58 G 30532856.20 30532856.29 30532856.37 0.0532 0.0476

Jupiter 78884-09-01 20:39 G 30533094.15 30533094.36 30533094.56 0.0523 0.0053

Jupiter 78885-04-27 11:46 G 30533331.84 30533331.99 30533332.14 0.0514 0.0347

Saturn 78886-04-13 18:58 G 30533683.12 30533683.29 30533683.45 0.0292 0.0177

Saturn 78886-11-29 13:56 G 30533912.87 30533913.08 30533913.29 0.0291 0.0023

Saturn 78887-07-17 08:10 G 30534142.71 30534142.84 30534142.98 0.0290 0.0219

Mars 78888-07-05 00:44 G 30534496.36 30534496.53 30534496.71 0.1832 0.0179

Jupiter 78890-06-29 13:12 G 30535220.90 30535221.05 30535221.21 0.0498 0.0308

Jupiter 78891-02-20 17:32 G 30535457.03 30535457.23 30535457.43 0.0506 0.0043

Moon 78891-10-14 10:34 G 30535692.88 30535692.94 30535693.00 0.2695 0.2500

Earth 78891-10-14 14:53 G 30535693.01 30535693.12 30535693.24 0.2699 0.1821

Jupiter 78891-10-15 07:12 G 30535693.69 30535693.80 30535693.92 0.0516 0.0415

Mars 78893-02-13 10:20 G 30536180.76 30536180.93 30536181.09 0.1693 0.0586

Jupiter 78896-05-07 11:17 G 30537359.78 30537359.97 30537360.17 0.0526 0.0170

Jupiter 78896-12-31 06:00 G 30537597.57 30537597.75 30537597.93 0.0517 0.0243

Neptune 78900-01-12 21:51 G 30538705.33 30538705.41 30538705.49 0.0088 0.0082

Neptune 78900-08-26 10:48 G 30538930.84 30538930.95 30538931.08 0.0088 0.0074

Neptune 78901-04-09 00:00 G 30539156.35 30539156.50 30539156.65 0.0088 0.0065

Saturn 78901-05-12 04:34 G 30539189.51 30539189.69 30539189.87 0.0268 0.0146

Neptune 78901-11-20 12:58 G 30539381.88 30539382.04 30539382.22 0.0088 0.0057

Saturn 78901-12-27 09:51 G 30539418.69 30539418.91 30539419.12 0.0269 0.0012

Jupiter 78902-03-05 15:51 G 30539487.04 30539487.16 30539487.28 0.0496 0.0398

Neptune 78902-07-04 02:10 G 30539607.42 30539607.59 30539607.78 0.0088 0.0049

Saturn 78902-08-13 15:08 G 30539647.98 30539648.13 30539648.31 0.0270 0.0172

Jupiter 78902-10-27 17:46 G 30539723.04 30539723.24 30539723.44 0.0504 0.0060

Uranus 78902-11-10 19:41 G 30539737.24 30539737.32 30539737.43 0.0134 0.0119

Neptune 78903-02-14 15:22 G 30539832.95 30539833.14 30539833.35 0.0088 0.0041

Jupiter 78903-06-21 05:03 G 30539959.55 30539959.71 30539959.87 0.0513 0.0311

Uranus 78903-06-25 00:58 G 30539963.39 30539963.54 30539963.71 0.0134 0.0087

Neptune 78903-09-28 04:20 G 30540058.49 30540058.68 30540058.90 0.0088 0.0033

Uranus 78904-02-06 06:15 G 30540189.56 30540189.76 30540189.95 0.0134 0.0056

Neptune 78904-05-10 17:32 G 30540284.03 30540284.23 30540284.46 0.0088 0.0025

Uranus 78904-09-19 11:03 G 30540415.76 30540415.96 30540416.18 0.0134 0.0024

Neptune 78904-12-22 06:58 G 30540509.58 30540509.79 30540510.01 0.0088 0.0016

Uranus 78905-05-03 16:05 G 30540641.96 30540642.17 30540642.39 0.0134 0.0008

Neptune 78905-08-04 20:10 G 30540735.12 30540735.34 30540735.57 0.0088 0.0008

Uranus 78905-12-15 20:53 G 30540868.17 30540868.37 30540868.58 0.0134 0.0040

Neptune 78906-03-18 09:22 G 30540960.67 30540960.89 30540961.11 0.0088 0.0000

Uranus 78906-07-30 02:10 G 30541094.41 30541094.59 30541094.77 0.0134 0.0071

Neptune 78906-10-29 22:20 G 30541186.22 30541186.43 30541186.66 0.0088 0.0009

Uranus 78907-03-13 06:44 G 30541320.66 30541320.78 30541320.93 0.0134 0.0103

Neptune 78907-06-12 11:32 G 30541411.77 30541411.98 30541412.21 0.0088 0.0017

Jupiter 78908-01-12 01:41 G 30541625.40 30541625.57 30541625.75 0.0528 0.0287

Neptune 78908-01-24 00:58 G 30541637.33 30541637.54 30541637.76 0.0088 0.0025

Neptune 78908-09-05 14:10 G 30541862.89 30541863.09 30541863.30 0.0088 0.0033

Jupiter 78908-09-05 23:03 G 30541863.26 30541863.46 30541863.66 0.0519 0.0134 *

Neptune 78909-04-19 03:22 G 30542088.44 30542088.64 30542088.84 0.0088 0.0041

Jupiter 78909-05-01 08:53 G 30542100.85 30542100.87 30542100.89 0.0510 0.0507

Neptune 78909-11-30 16:05 G 30542314.00 30542314.17 30542314.37 0.0088 0.0050

Neptune 78910-07-14 05:17 G 30542539.57 30542539.72 30542539.90 0.0088 0.0058

Neptune 78911-02-24 18:29 G 30542765.14 30542765.27 30542765.43 0.0088 0.0066

Neptune 78911-10-08 07:41 G 30542990.71 30542990.82 30542990.95 0.0088 0.0074

Neptune 78912-05-20 20:39 G 30543216.30 30543216.36 30543216.46 0.0088 0.0082

Jupiter 78913-11-08 19:56 G 30543753.29 30543753.33 30543753.38 0.0495 0.0482

Jupiter 78914-07-02 20:24 G 30543989.16 30543989.35 30543989.54 0.0502 0.0156

Jupiter 78915-02-24 05:03 G 30544225.53 30544225.71 30544225.89 0.0511 0.0209

Saturn 78915-10-25 22:20 G 30544469.26 30544469.43 30544469.61 0.0291 0.0151

Saturn 78916-06-11 17:17 G 30544699.01 30544699.22 30544699.42 0.0290 0.0048

Saturn 78917-01-27 11:32 G 30544928.87 30544928.98 30544929.09 0.0289 0.0243

Jupiter 78919-09-16 13:41 G 30545890.94 30545891.07 30545891.20 0.0530 0.0403

Jupiter 78920-05-11 13:12 G 30546128.84 30546129.05 30546129.26 0.0521 0.0019

Jupiter 78921-01-04 01:56 G 30546366.46 30546366.58 30546366.70 0.0512 0.0410

Jupiter 78926-03-07 22:34 G 30548255.27 30548255.44 30548255.62 0.0500 0.0251

Jupiter 78926-10-30 05:03 G 30548491.51 30548491.71 30548491.90 0.0508 0.0107

Jupiter 78927-06-23 21:08 G 30548728.31 30548728.38 30548728.45 0.0518 0.0480

Saturn 78930-11-22 09:51 G 30549975.73 30549975.91 30549976.11 0.0269 0.0122

Jupiter 78931-05-22 00:44 G 30550156.49 30550156.53 30550156.58 0.0532 0.0519

Saturn 78931-07-09 15:36 G 30550204.94 30550205.15 30550205.37 0.0269 0.0038

Jupiter 78932-01-15 03:08 G 30550394.43 30550394.63 30550394.83 0.0524 0.0098

Saturn 78932-02-23 21:36 G 30550434.26 30550434.40 30550434.55 0.0270 0.0198

Jupiter 78932-09-08 19:12 G 30550632.13 30550632.30 30550632.46 0.0515 0.0307

Jupiter 78937-11-11 00:44 G 30552521.39 30552521.53 30552521.68 0.0497 0.0344

Jupiter 78938-07-05 04:20 G 30552757.48 30552757.68 30552757.88 0.0505 0.0007

Jupiter 78939-02-26 16:48 G 30552994.07 30552994.20 30552994.34 0.0514 0.0374

Jupiter 78943-09-19 15:22 G 30554659.95 30554660.14 30554660.33 0.0527 0.0219

Jupiter 78944-05-14 11:17 G 30554897.78 30554897.97 30554898.16 0.0518 0.0198

Saturn 78945-05-07 10:48 G 30555255.76 30555255.95 30555256.15 0.0292 0.0112

Uranus	78945-08-14 00:58 G	30555354.43	30555354.54	30555354.67	0.0144	0.0120
Saturn	78945-12-23 05:32 G	30555485.54	30555485.73	30555485.94	0.0291	0.0087
Uranus	78946-03-28 13:41 G	30555580.89	30555581.07	30555581.26	0.0144	0.0080
Saturn	78946-08-09 23:46 G	30555715.46	30555715.49	30555715.55	0.0290	0.0282
Uranus	78946-11-10 02:10 G	30555807.39	30555807.59	30555807.81	0.0144	0.0040
Uranus	78947-06-24 15:08 G	30556033.91	30556034.13	30556034.35	0.0144	0.0002
Uranus	78948-02-06 03:51 G	30556260.45	30556260.66	30556260.87	0.0144	0.0041
Uranus	78948-09-19 16:05 G	30556487.00	30556487.17	30556487.37	0.0144	0.0082
Uranus	78949-05-04 04:34 G	30556713.59	30556713.69	30556713.82	0.0144	0.0122
Jupiter	78949-07-17 04:20 G	30556787.58	30556787.68	30556787.78	0.0495	0.0431
Jupiter	78950-03-10 05:17 G	30557023.52	30557023.72	30557023.92	0.0503	0.0097
Jupiter	78950-11-01 14:39 G	30557259.95	30557260.11	30557260.29	0.0512	0.0271
Mars	78954-05-03 05:03 G	30558538.55	30558538.71	30558538.87	0.1828	0.0762
Jupiter	78955-05-25 04:34 G	30558925.54	30558925.69	30558925.85	0.0530	0.0337
Jupiter	78956-01-18 03:51 G	30559163.46	30559163.66	30559163.86	0.0521	0.0087
Jupiter	78956-09-11 15:36 G	30559401.07	30559401.15	30559401.23	0.0511	0.0469
Mars	78958-12-12 20:53 G	30560223.20	30560223.37	30560223.54	0.1696	0.0308
Saturn	78959-10-18 11:32 G	30560532.91	30560532.98	30560533.06	0.0268	0.0250
Saturn	78960-06-03 16:34 G	30560761.99	30560762.19	30560762.39	0.0268	0.0094
Saturn	78961-01-18 22:05 G	30560991.21	30560991.42	30560991.63	0.0269	0.0065
Saturn	78961-09-05 03:36 G	30561220.55	30561220.65	30561220.78	0.0270	0.0225
Jupiter	78961-11-13 06:29 G	30561289.59	30561289.77	30561289.96	0.0501	0.0195
Jupiter	78962-07-07 13:27 G	30561525.88	30561526.06	30561526.26	0.0509	0.0168
Jupiter	78967-01-27 18:00 G	30563191.15	30563191.25	30563191.36	0.0532	0.0452
Jupiter	78967-09-22 19:41 G	30563429.12	30563429.32	30563429.53	0.0523	0.0028
Jupiter	78968-05-17 10:34 G	30563666.80	30563666.94	30563667.08	0.0514	0.0372
Jupiter	78973-07-19 09:51 G	30565555.75	30565555.91	30565556.07	0.0499	0.0288
Jupiter	78974-03-12 14:39 G	30565791.91	30565792.11	30565792.31	0.0507	0.0066
Saturn	78974-04-01 19:41 G	30565812.28	30565812.32	30565812.37	0.0291	0.0283
Jupiter	78974-11-04 05:03 G	30566028.60	30566028.71	30566028.81	0.0516	0.0438

Saturn 78974-11-17 14:53 G 30566041.92 30566042.12 30566042.32 0.0291 0.0086

Saturn 78975-07-05 09:22 G 30566271.70 30566271.89 30566272.09 0.0290 0.0112

Jupiter 78979-05-28 09:22 G 30567694.69 30567694.89 30567695.09 0.0525 0.0144

Jupiter 78980-01-21 02:53 G 30567932.45 30567932.62 30567932.80 0.0516 0.0266

Neptune 78982-10-12 04:05 G 30568927.65 30568927.67 30568927.74 0.0089 0.0088

Neptune 78983-05-25 17:03 G 30569153.13 30569153.21 30569153.33 0.0089 0.0079

Neptune 78984-01-06 06:15 G 30569378.63 30569378.76 30569378.90 0.0089 0.0071

Neptune 78984-08-18 18:58 G 30569604.15 30569604.29 30569604.46 0.0089 0.0062

Jupiter 78985-03-24 12:44 G 30569821.90 30569822.03 30569822.16 0.0497 0.0378

Neptune 78985-04-01 07:41 G 30569829.66 30569829.82 30569830.01 0.0089 0.0054

Neptune 78985-11-12 20:53 G 30570055.19 30570055.37 30570055.56 0.0089 0.0046

Jupiter 78985-11-15 15:36 G 30570057.95 30570058.15 30570058.35 0.0505 0.0036

Neptune 78986-06-26 09:36 G 30570280.72 30570280.90 30570281.11 0.0089 0.0038

Jupiter 78986-07-10 03:22 G 30570294.49 30570294.64 30570294.79 0.0514 0.0336

Uranus 78986-07-11 06:44 G 30570295.77 30570295.78 30570295.84 0.0134 0.0133

Neptune 78987-02-06 22:48 G 30570506.25 30570506.45 30570506.66 0.0089 0.0029

Uranus 78987-02-22 12:15 G 30570521.87 30570522.01 30570522.15 0.0134 0.0101

Neptune 78987-09-20 11:32 G 30570731.77 30570731.98 30570732.20 0.0089 0.0020

Uranus 78987-10-06 17:03 G 30570748.04 30570748.21 30570748.41 0.0134 0.0069

Neptune 78988-05-03 00:15 G 30570957.30 30570957.51 30570957.74 0.0089 0.0013

Uranus 78988-05-19 22:05 G 30570974.22 30570974.42 30570974.63 0.0134 0.0037

Neptune 78988-12-14 13:12 G 30571182.84 30571183.05 30571183.27 0.0089 0.0004

Uranus 78989-01-01 03:08 G 30571200.42 30571200.63 30571200.85 0.0134 0.0006

Saturn 78989-04-29 15:51 G 30571319.05 30571319.16 30571319.27 0.0268 0.0228

Neptune 78989-07-28 02:10 G 30571408.38 30571408.59 30571408.81 0.0089 0.0005

Uranus 78989-08-15 08:10 G 30571426.63 30571426.84 30571427.05 0.0134 0.0026

Saturn 78989-12-14 21:08 G 30571548.18 30571548.38 30571548.59 0.0269 0.0070

Neptune 78990-03-10 15:08 G 30571633.91 30571634.13 30571634.34 0.0089 0.0013

Uranus 78990-03-29 12:58 G 30571652.85 30571653.04 30571653.24 0.0134 0.0058

Saturn 78990-08-01 02:53 G 30571777.42 30571777.62 30571777.82 0.0270 0.0090

Neptune 78990-10-22 03:36 G 30571859.45 30571859.65 30571859.87 0.0089 0.0023

Uranus 78990-11-10 18:00 G 30571879.09 30571879.25 30571879.41 0.0134 0.0090

Jupiter 78991-01-30 22:05 G 30571960.25 30571960.42 30571960.60 0.0528 0.0264

Saturn 78991-03-18 09:08 G 30572006.81 30572006.88 30572006.97 0.0270 0.0250

Neptune 78991-06-04 16:34 G 30572084.99 30572085.19 30572085.40 0.0089 0.0031

Uranus 78991-06-24 22:20 G 30572105.36 30572105.43 30572105.54 0.0134 0.0122

Jupiter 78991-09-25 18:44 G 30572198.08 30572198.28 30572198.48 0.0519 0.0156

Neptune 78992-01-16 05:32 G 30572310.54 30572310.73 30572310.93 0.0090 0.0039

Neptune 78992-08-28 18:15 G 30572536.09 30572536.26 30572536.45 0.0090 0.0048

Neptune 78993-04-11 07:12 G 30572761.64 30572761.80 30572761.97 0.0090 0.0056

Neptune 78993-11-22 19:41 G 30572987.19 30572987.32 30572987.49 0.0090 0.0065

Neptune 78994-07-06 08:39 G 30573212.76 30573212.86 30573213.01 0.0090 0.0073

Neptune 78995-02-16 21:51 G 30573438.33 30573438.41 30573438.51 0.0090 0.0081

Neptune 78995-09-30 10:34 G 30573663.94 30573663.94 30573663.98 0.0090 0.0089

Jupiter 78996-11-27 16:05 G 30574088.11 30574088.17 30574088.24 0.0495 0.0465

Jupiter 78997-07-21 16:34 G 30574324.00 30574324.19 30574324.39 0.0502 0.0136

Jupiter 78998-03-15 00:58 G 30574560.36 30574560.54 30574560.72 0.0511 0.0230

80TH MILLENNIUM CE

This is a list of transits of Venus in the 80th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 79002-10-06 08:24 G 30576225.72 30576225.85 30576225.99 0.0531 0.0386

Jupiter 79003-06-01 08:39 G 30576463.66 30576463.86 30576464.07 0.0522 0.0041

Saturn 79003-10-14 07:27 G 30576598.71 30576598.81 30576598.93 0.0292 0.0246

Jupiter 79004-01-24 22:05 G 30576701.32 30576701.42 30576701.54 0.0512 0.0430

Saturn 79004-05-31 02:53 G 30576828.41 30576828.62 30576828.82 0.0291 0.0048

Saturn 79005-01-15 21:22 G 30577058.21 30577058.39 30577058.57 0.0291 0.0151

Jupiter 79009-03-27 18:44 G 30578590.10 30578590.28 30578590.46 0.0499 0.0231

Jupiter 79009-11-19 00:15 G 30578826.32 30578826.51 30578826.71 0.0508 0.0127

Jupiter 79010-07-13 15:51 G 30579063.11 30579063.16 30579063.22 0.0517 0.0497

Jupiter 79014-06-10 20:24 G 30580491.29 30580491.35 30580491.43 0.0533 0.0502

Jupiter 79015-02-03 23:46 G 30580729.29 30580729.49 30580729.70 0.0525 0.0077

Jupiter 79015-09-29 16:34 G 30580967.03 30580967.19 30580967.35 0.0515 0.0329

Saturn 79018-11-10 22:34 G 30582105.31 30582105.44 30582105.59 0.0268 0.0199

Saturn 79019-06-28 03:51 G 30582334.45 30582334.66 30582334.88 0.0269 0.0043

Saturn 79020-02-12 09:36 G 30582563.71 30582563.90 30582564.09 0.0269 0.0117

Mars 79020-02-29 10:34 G 30582580.82 30582580.94 30582581.06 0.1823 0.1285

Jupiter 79020-11-30 20:53 G 30582856.22 30582856.37 30582856.52 0.0497 0.0324

Jupiter 79021-07-25 00:15 G 30583092.31 30583092.51 30583092.71 0.0505 0.0024

Jupiter 79022-03-18 12:44 G 30583328.91 30583329.03 30583329.16 0.0515 0.0395

Mars 79024-10-10 07:27 G 30584265.64 30584265.81 30584265.99 0.1699 0.0038

Jupiter 79026-10-09 14:39 G 30584994.92 30584995.11 30584995.30 0.0527 0.0193

Jupiter 79027-06-04 10:20 G 30585232.74 30585232.93 30585233.11 0.0518 0.0224

Uranus 79029-04-14 08:10 G 30585912.78 30585912.84 30585912.91 0.0144 0.0137

Earth 79029-04-15 16:48 G 30585914.04 30585914.20 30585914.36 0.2633 0.0049

Moon 79029-04-15 17:32 G 30585914.08 30585914.23 30585914.39 0.2640 0.0292 *

Uranus 79029-11-26 20:53 G 30586139.21 30586139.37 30586139.53 0.0144 0.0097

Uranus 79030-07-11 09:22 G 30586365.69 30586365.89 30586366.10 0.0144 0.0057

Uranus 79031-02-22 22:05 G 30586592.21 30586592.42 30586592.65 0.0144 0.0018

Uranus 79031-10-07 10:48 G 30586818.74 30586818.95 30586819.17 0.0144 0.0024

Uranus 79032-05-20 23:17 G 30587045.28 30587045.47 30587045.68 0.0144 0.0065

Jupiter 79032-08-06 00:44 G 30587122.42 30587122.53 30587122.64 0.0496 0.0412

Uranus 79033-01-02 11:46 G 30587271.85 30587271.99 30587272.15 0.0144 0.0105

Jupiter 79033-03-30 01:56 G 30587358.38 30587358.58 30587358.78 0.0503 0.0076

Saturn 79033-04-25 11:46 G 30587384.86 30587384.99 30587385.13 0.0291 0.0219

Jupiter 79033-11-21 12:00 G 30587594.84 30587595.00 30587595.17 0.0512 0.0293

Saturn 79033-12-11 06:58 G 30587614.58 30587614.79 30587615.00 0.0291 0.0021

Saturn 79034-07-29 01:27 G 30587844.40 30587844.56 30587844.73 0.0290 0.0176

Jupiter 79038-06-14 03:51 G 30589260.50 30589260.66 30589260.83 0.0529 0.0311

Jupiter 79039-02-07 01:56 G 30589498.38 30589498.58 30589498.79 0.0520 0.0113

Pluto 79039-07-12 09:22 G 30589653.77 30589653.89 30589654.06 0.0065 0.0049

Jupiter 79039-10-02 12:44 G 30589735.98 30589736.03 30589736.09 0.0510 0.0491

Pluto 79040-02-22 14:24 G 30589878.88 30589879.10 30589879.32 0.0066 0.0011

Pluto 79040-10-04 18:44 G 30590104.09 30590104.28 30590104.49 0.0066 0.0028

Jupiter 79044-12-03 04:05 G 30591624.48 30591624.67 30591624.86 0.0501 0.0173

Jupiter 79045-07-27 11:46 G 30591860.81 30591860.99 30591861.18 0.0510 0.0191

Saturn 79048-05-23 01:56 G 30592891.42 30592891.58 30592891.74 0.0269 0.0178

Saturn 79049-01-07 07:27 G 30593120.59 30593120.81 30593121.02 0.0269 0.0020

Saturn 79049-08-24 13:12 G 30593349.87 30593350.05 30593350.23 0.0270 0.0140

Jupiter 79050-02-16 15:51 G 30593526.04 30593526.16 30593526.28 0.0531 0.0428

Jupiter 79050-10-12 16:34 G 30593763.98 30593764.19 30593764.40 0.0522 0.0003

Jupiter 79051-06-07 06:44 G 30594001.65 30594001.78 30594001.91 0.0513 0.0393

Jupiter 79056-08-08 06:29 G 30595890.60 30595890.77 30595890.94 0.0499 0.0269

Jupiter 79057-04-01 11:17 G 30596126.77 30596126.97 30596127.16 0.0507 0.0086

Jupiter 79057-11-24 01:12 G 30596363.47 30596363.55 30596363.65 0.0516 0.0457

Jupiter 79062-06-17 04:34 G 30598029.49 30598029.69 30598029.89 0.0526 0.0126

Saturn 79062-11-05 23:03 G 30598171.30 30598171.46 30598171.62 0.0292 0.0182

Jupiter 79063-02-09 22:48 G 30598267.29 30598267.45 30598267.63 0.0516 0.0287

Saturn 79063-06-23 18:00 G 30598401.05 30598401.25 30598401.46 0.0291 0.0018

Saturn 79064-02-08 12:29 G 30598630.89 30598631.02 30598631.17 0.0290 0.0214

Neptune 79064-04-17 06:29 G 30598699.73 30598699.77 30598699.85 0.0088 0.0084

Neptune 79064-11-28 19:41 G 30598925.23 30598925.32 30598925.45 0.0088 0.0076

Neptune 79065-07-12 08:53 G 30599150.75 30599150.87 30599151.03 0.0088 0.0068

Neptune 79066-02-22 22:05 G 30599376.28 30599376.42 30599376.60 0.0088 0.0060

Neptune 79066-10-06 11:32 G 30599601.81 30599601.98 30599602.17 0.0088 0.0051

Neptune 79067-05-20 00:44 G 30599827.34 30599827.53 30599827.73 0.0088 0.0043

Neptune 79067-12-31 13:56 G 30600052.88 30600053.08 30600053.29 0.0088 0.0035

Jupiter 79068-04-13 09:36 G 30600156.77 30600156.90 30600157.05 0.0496 0.0360

Neptune 79068-08-13 02:53 G 30600278.42 30600278.62 30600278.85 0.0088 0.0027

Jupiter 79068-12-05 12:00 G 30600392.80 30600393.00 30600393.20 0.0504 0.0015

Neptune 79069-03-26 16:20 G 30600503.96 30600504.18 30600504.40 0.0088 0.0018

Jupiter 79069-07-29 23:03 G 30600629.32 30600629.46 30600629.61 0.0513 0.0355

Neptune 79069-11-07 05:32 G 30600729.51 30600729.73 30600729.95 0.0088 0.0010

Neptune 79070-06-20 18:29 G 30600955.05 30600955.27 30600955.50 0.0088 0.0003

Uranus 79070-10-23 23:46 G 30601080.39 30601080.49 30601080.61 0.0134 0.0114

Neptune 79071-02-01 07:41 G 30601180.61 30601180.82 30601181.05 0.0088 0.0007

Uranus 79071-06-07 04:34 G 30601306.54 30601306.69 30601306.87 0.0134 0.0083

Neptune 79071-09-14 20:53 G 30601406.16 30601406.37 30601406.60 0.0088 0.0015

Uranus 79072-01-19 09:51 G 30601532.71 30601532.91 30601533.11 0.0134 0.0050

Neptune 79072-04-27 10:05 G 30601631.71 30601631.92 30601632.14 0.0088 0.0023

Uranus 79072-09-01 14:53 G 30601758.91 30601759.12 30601759.33 0.0134 0.0019

Neptune 79072-12-08 23:17 G 30601857.26 30601857.47 30601857.68 0.0088 0.0031

Uranus 79073-04-15 19:41 G 30601985.11 30601985.32 30601985.54 0.0134 0.0013

Neptune 79073-07-22 12:00 G 30602082.82 30602083.00 30602083.22 0.0088 0.0040

Uranus 79073-11-28 00:15 G 30602211.32 30602211.51 30602211.73 0.0134 0.0046

Jupiter 79074-02-19 18:15 G 30602295.08 30602295.26 30602295.44 0.0528 0.0244

Neptune 79074-03-05 01:27 G 30602308.39 30602308.56 30602308.76 0.0088 0.0048

Uranus 79074-07-12 05:17 G 30602437.55 30602437.72 30602437.90 0.0134 0.0077

Jupiter 79074-10-15 15:36 G 30602532.96 30602533.15 30602533.35 0.0519 0.0178

Neptune 79074-10-16 14:39 G 30602533.95 30602534.11 30602534.29 0.0088 0.0056

Uranus 79075-02-23 09:51 G 30602663.80 30602663.91 30602664.06 0.0134 0.0109

Neptune 79075-05-30 03:51 G 30602759.52 30602759.66 30602759.82 0.0088 0.0064

Neptune 79076-01-10 17:03 G 30602985.10 30602985.21 30602985.35 0.0088 0.0072

Neptune 79076-08-23 06:15 G 30603210.68 30603210.76 30603210.86 0.0088 0.0080

Saturn 79077-12-03 08:53 G 30603677.70 30603677.87 30603678.05 0.0268 0.0149

Saturn 79078-07-20 14:10 G 30603906.88 30603907.09 30603907.31 0.0269 0.0011

Saturn 79079-03-06 20:10 G 30604136.17 30604136.34 30604136.50 0.0270 0.0168

Jupiter 79079-12-18 12:44 G 30604422.95 30604423.03 30604423.12 0.0495 0.0446

Jupiter 79080-08-10 12:58 G 30604658.84 30604659.04 30604659.23 0.0502 0.0115

Jupiter 79081-04-03 21:08 G 30604895.21 30604895.38 30604895.56 0.0511 0.0251

Jupiter 79085-10-25 08:10 G 30606560.69 30606560.84 30606560.99 0.0531 0.0360

Jupiter 79086-06-20 08:24 G 30606798.64 30606798.85 30606799.05 0.0522 0.0067

Jupiter 79087-02-12 21:36 G 30607036.31 30607036.40 30607036.49 0.0512 0.0454

Mars 79090-08-07 17:46 G 30608308.07 30608308.24 30608308.41 0.1702 0.0254

Jupiter 79092-04-15 15:36 G 30608924.97 30608925.15 30608925.33 0.0500 0.0210

Saturn 79092-05-18 03:08 G 30608957.45 30608957.63 30608957.81 0.0291 0.0156

Jupiter 79092-12-07 21:36 G 30609161.21 30609161.40 30609161.59 0.0508 0.0149

Saturn 79093-01-02 22:05 G 30609187.21 30609187.42 30609187.62 0.0291 0.0043

Saturn 79093-08-20 16:34 G 30609417.07 30609417.19 30609417.31 0.0290 0.0238

Jupiter 79097-06-29 20:53 G 30610826.29 30610826.37 30610826.47 0.0532 0.0476

Jupiter 79098-02-22 23:32 G 30611064.27 30611064.48 30611064.68 0.0524 0.0050

Jupiter 79098-10-18 15:08 G 30611301.99 30611302.13 30611302.28 0.0514 0.0354

Jupiter 79103-12-21 18:29 G 30613191.11 30613191.27 30613191.43 0.0498 0.0304

Jupiter 79104-08-13 22:34 G 30613427.24 30613427.44 30613427.64 0.0506 0.0048

Jupiter 79105-04-07 11:46 G 30613663.88 30613663.99 30613664.11 0.0515 0.0420

Saturn 79107-06-16 11:03 G 30614463.77 30614463.96 30614464.15 0.0269 0.0130

Saturn 79108-01-31 16:34 G 30614692.98 30614693.19 30614693.40 0.0269 0.0029

Saturn 79108-09-16 22:05 G 30614922.28 30614922.42 30614922.58 0.0270 0.0189

Jupiter 79109-10-29 12:58 G 30615329.85 30615330.04 30615330.24 0.0526 0.0168

Jupiter 79110-06-24 07:56 G 30615567.65 30615567.83 30615568.01 0.0517 0.0248

Uranus 79113-07-28 03:51 G 30616697.55 30616697.66 30616697.81 0.0144 0.0115

Uranus 79114-03-11 17:03 G 30616924.02 30616924.21 30616924.40 0.0144 0.0074

Uranus 79114-10-24 05:32 G 30617150.52 30617150.73 30617150.95 0.0144 0.0034

Uranus 79115-06-07 18:15 G 30617377.04 30617377.26 30617377.48 0.0144 0.0006

Jupiter 79115-08-26 22:20 G 30617457.31 30617457.43 30617457.55 0.0496 0.0394

Uranus 79116-01-20 06:44 G 30617603.58 30617603.78 30617604.00 0.0144 0.0048

Jupiter 79116-04-18 23:46 G 30617693.29 30617693.49 30617693.69 0.0503 0.0055

Uranus 79116-09-02 19:27 G 30617830.14 30617830.31 30617830.49 0.0144 0.0088

Jupiter 79116-12-11 09:36 G 30617929.74 30617929.90 30617930.06 0.0512 0.0314

Uranus 79117-04-17 07:41 G 30618056.74 30618056.82 30618056.94 0.0144 0.0129

Mars 79117-12-27 07:27 G 30618310.73 30618310.81 30618310.90 0.1832 0.1586

Jupiter 79121-07-03 23:17 G 30619595.31 30619595.47 30619595.65 0.0529 0.0293

Saturn 79121-11-29 12:44 G 30619743.84 30619744.03 30619744.22 0.0292 0.0121

Jupiter 79122-02-26 22:05 G 30619833.22 30619833.42 30619833.62 0.0520 0.0133

Saturn 79122-07-17 07:56 G 30619973.63 30619973.83 30619974.03 0.0291 0.0079

Jupiter 79122-10-22 09:36 G 30620070.89 30620070.90 30620070.91 0.0511 0.0510

Saturn 79123-03-04 02:24 G 30620203.53 30620203.60 30620203.67 0.0290 0.0274

Moon 79126-10-19 23:03 G 30621529.34 30621529.46 30621529.59 0.2706 0.1434

Earth 79126-10-20 00:58 G 30621529.42 30621529.54 30621529.67 0.2699 0.1632 *

Jupiter 79127-05-02 02:39 G 30621723.57 30621723.61 30621723.66 0.0494 0.0478

Pluto 79127-10-25 22:48 G 30621900.25 30621900.45 30621900.68 0.0078 0.0021

Jupiter 79127-12-24 01:56 G 30621959.39 30621959.58 30621959.77 0.0501 0.0152

Pluto 79128-06-07 08:39 G 30622125.70 30622125.86 30622126.05 0.0078 0.0046

Jupiter 79128-08-16 08:53 G 30622195.69 30622195.87 30622196.06 0.0509 0.0212

Jupiter 79133-03-08 11:46 G 30623860.86 30623860.99 30623861.12 0.0532 0.0410

Jupiter 79133-11-01 13:27 G 30624098.85 30624099.06 30624099.26 0.0523 0.0020

Jupiter 79134-06-27 04:20 G 30624336.56 30624336.68 30624336.80 0.0514 0.0414

Earth 79134-10-17 16:20 G 30624449.06 30624449.18 30624449.30 0.2698 0.1747

Moon 79134-10-17 18:29 G 30624449.14 30624449.27 30624449.41 0.2705 0.1194 *

Saturn 79136-05-11 12:44 G 30625020.98 30625021.03 30625021.11 0.0268 0.0256

Saturn 79136-12-26 18:00 G 30625250.05 30625250.25 30625250.45 0.0268 0.0100

Saturn 79137-08-12 23:17 G 30625479.26 30625479.47 30625479.68 0.0269 0.0058

Saturn 79138-03-30 04:48 G 30625708.59 30625708.70 30625708.84 0.0270 0.0217

Jupiter 79139-08-29 03:36 G 30626225.48 30626225.65 30626225.83 0.0498 0.0248

Jupiter 79140-04-21 08:10 G 30626461.65 30626461.84 30626462.04 0.0507 0.0108

Jupiter 79140-12-13 22:20 G 30626698.36 30626698.43 30626698.51 0.0516 0.0478

Jupiter 79144-11-11 00:29 G 30628126.49 30628126.52 30628126.57 0.0534 0.0524

Jupiter 79145-07-07 04:48 G 30628364.50 30628364.70 30628364.91 0.0526 0.0099

Jupiter 79146-03-01 23:03 G 30628602.30 30628602.46 30628602.62 0.0516 0.0313

Neptune 79147-08-29 02:10 G 30629147.54 30629147.59 30629147.70 0.0089 0.0083

Neptune 79148-04-10 15:22 G 30629373.03 30629373.14 30629373.27 0.0089 0.0074

Neptune 79148-11-22 04:05 G 30629598.54 30629598.67 30629598.83 0.0089 0.0066

Neptune 79149-07-05 17:03 G 30629824.06 30629824.21 30629824.40 0.0089 0.0057

Neptune 79150-02-16 06:15 G 30630049.58 30630049.76 30630049.95 0.0089 0.0048

Neptune 79150-09-29 18:44 G 30630275.11 30630275.28 30630275.49 0.0089 0.0041

Saturn 79150-10-24 21:22 G 30630300.39 30630300.39 30630300.40 0.0292 0.0292

Jupiter 79151-05-04 07:12 G 30630491.66 30630491.80 30630491.95 0.0497 0.0339

Neptune 79151-05-13 07:56 G 30630500.63 30630500.83 30630501.04 0.0089 0.0032

Saturn 79151-06-11 16:34 G 30630530.00 30630530.19 30630530.40 0.0291 0.0095

Neptune 79151-12-24 20:39 G 30630726.16 30630726.36 30630726.58 0.0089 0.0024

Jupiter 79151-12-26 09:36 G 30630727.70 30630727.90 30630728.10 0.0504 0.0011

Saturn 79152-01-27 11:32 G 30630759.79 30630759.98 30630760.18 0.0290 0.0104

Neptune 79152-08-06 09:51 G 30630951.70 30630951.91 30630952.13 0.0089 0.0015

Jupiter 79152-08-18 21:08 G 30630964.25 30630964.38 30630964.52 0.0514 0.0379

Neptune 79153-03-19 22:48 G 30631177.23 30631177.45 30631177.67 0.0089 0.0006

Neptune 79153-10-31 11:32 G 30631402.77 30631402.98 30631403.20 0.0089 0.0003

Neptune 79154-06-14 00:29 G 30631628.31 30631628.52 30631628.74 0.0089 0.0011

Uranus 79154-06-24 11:17 G 30631638.91 30631638.97 30631639.05 0.0134 0.0127

Neptune 79155-01-25 13:27 G 30631853.85 30631854.06 30631854.27 0.0089 0.0020

Uranus 79155-02-05 16:05 G 30631865.04 30631865.17 30631865.34 0.0134 0.0096

Neptune 79155-09-08 02:10 G 30632079.39 30632079.59 30632079.80 0.0089 0.0028

Uranus 79155-09-19 21:22 G 30632091.21 30632091.39 30632091.59 0.0134 0.0063

Neptune 79156-04-20 14:53 G 30632304.93 30632305.12 30632305.33 0.0089 0.0037

Uranus 79156-05-03 02:10 G 30632317.39 30632317.59 30632317.81 0.0134 0.0032

Mars 79156-06-05 04:34 G 30632350.52 30632350.69 30632350.85 0.1705 0.0532

Neptune 79156-12-02 03:36 G 30632530.48 30632530.65 30632530.85 0.0090 0.0046

Uranus 79156-12-15 07:12 G 30632543.58 30632543.80 30632544.01 0.0134 0.0001

Jupiter 79157-03-11 19:27 G 30632630.12 30632630.31 30632630.50 0.0528 0.0215

Neptune 79157-07-15 16:48 G 30632756.03 30632756.20 30632756.38 0.0090 0.0054

Uranus 79157-07-29 12:00 G 30632769.80 30632770.00 30632770.21 0.0134 0.0032

Jupiter 79157-11-04 15:51 G 30632867.98 30632868.16 30632868.35 0.0518 0.0205

Neptune 79158-02-26 05:46 G 30632981.59 30632981.74 30632981.90 0.0090 0.0062

Uranus 79158-03-12 16:48 G 30632996.02 30632996.20 30632996.39 0.0134 0.0063

Neptune 79158-10-09 18:15 G 30633207.15 30633207.26 30633207.41 0.0090 0.0071

Uranus 79158-10-24 21:22 G 30633222.25 30633222.39 30633222.55 0.0134 0.0095

Neptune 79159-05-23 07:12 G 30633432.71 30633432.80 30633432.91 0.0090 0.0079

Uranus 79159-06-08 01:56 G 30633448.53 30633448.58 30633448.67 0.0134 0.0126

Neptune 79160-01-03 20:24 G 30633658.30 30633658.35 30633658.39 0.0090 0.0087

Jupiter 79163-01-07 10:48 G 30634757.86 30634757.95 30634758.06 0.0495 0.0427

Jupiter 79163-08-31 11:32 G 30634993.79 30634993.98 30634994.18 0.0502 0.0092

Jupiter 79164-04-23 20:39 G 30635230.19 30635230.36 30635230.53 0.0511 0.0276

Saturn 79165-11-21 13:56 G 30635806.98 30635807.08 30635807.18 0.0268 0.0238

Saturn 79166-07-08 18:44 G 30636036.08 30636036.28 30636036.49 0.0268 0.0083

Saturn 79167-02-23 00:29 G 30636265.31 30636265.52 30636265.72 0.0269 0.0076

Saturn 79167-10-10 06:00 G 30636494.66 30636494.75 30636494.86 0.0270 0.0235

Jupiter 79168-11-14 08:10 G 30636895.68 30636895.84 30636896.00 0.0530 0.0334

Jupiter 79169-07-10 07:41 G 30637133.61 30637133.82 30637134.02 0.0521 0.0093

Jupiter 79170-03-04 20:10 G 30637371.27 30637371.34 30637371.41 0.0512 0.0477

Jupiter 79175-05-06 14:24 G 30639259.91 30639260.10 30639260.29 0.0500 0.0190

Jupiter 79175-12-28 20:24 G 30639496.16 30639496.35 30639496.54 0.0508 0.0171

Saturn 79180-05-06 05:03 G 30641086.62 30641086.71 30641086.81 0.0293 0.0260

Jupiter 79180-07-19 17:03 G 30641161.12 30641161.21 30641161.32 0.0533 0.0457

Saturn 79180-12-22 00:44 G 30641316.33 30641316.53 30641316.74 0.0292 0.0061

Jupiter 79181-03-14 19:56 G 30641399.12 30641399.33 30641399.53 0.0524 0.0030

Saturn 79181-08-08 19:56 G 30641546.15 30641546.33 30641546.52 0.0291 0.0138

Jupiter 79181-11-07 12:15 G 30641636.87 30641637.01 30641637.15 0.0515 0.0374

Mars 79183-10-24 12:29 G 30642352.87 30642353.02 30642353.16 0.1828 0.1019

Jupiter 79187-01-09 17:46 G 30643526.08 30643526.24 30643526.41 0.0498 0.0282

Jupiter 79187-09-02 21:22 G 30643762.19 30643762.39 30643762.59 0.0506 0.0070

Jupiter 79188-04-26 09:51 G 30643998.81 30643998.91 30643999.02 0.0515 0.0440

Jupiter 79192-11-17 09:51 G 30645664.71 30645664.91 30645665.11 0.0527 0.0148

Jupiter 79193-07-13 05:32 G 30645902.55 30645902.73 30645902.91 0.0518 0.0269

Saturn 79195-06-03 20:39 G 30646593.24 30646593.36 30646593.50 0.0267 0.0209

Saturn 79196-01-19 01:41 G 30646822.36 30646822.57 30646822.78 0.0268 0.0053

Saturn 79196-09-04 06:58 G 30647051.59 30647051.79 30647051.99 0.0269 0.0105

Uranus 79197-03-27 09:36 G 30647255.83 30647255.90 30647255.99 0.0144 0.0133

Saturn 79197-04-21 12:15 G 30647280.98 30647281.01 30647281.07 0.0270 0.0264

Uranus 79197-11-08 22:20 G 30647482.27 30647482.43 30647482.61 0.0144 0.0093

Uranus 79198-06-23 11:03 G 30647708.76 30647708.96 30647709.17 0.0144 0.0053

Jupiter 79198-09-14 20:39 G 30647792.23 30647792.36 30647792.49 0.0496 0.0372

Uranus 79199-02-05 00:00 G 30647935.28 30647935.50 30647935.72 0.0144 0.0012

Jupiter 79199-05-08 21:36 G 30648028.20 30648028.40 30648028.61 0.0503 0.0033

Uranus 79199-09-19 12:44 G 30648161.81 30648162.03 30648162.25 0.0144 0.0028

Jupiter 79199-12-31 07:27 G 30648264.66 30648264.81 30648264.96 0.0512 0.0337

Uranus 79200-05-03 00:58 G 30648388.36 30648388.54 30648388.75 0.0144 0.0070

Uranus 79200-12-15 13:41 G 30648614.94 30648615.07 30648615.23 0.0144 0.0110

Jupiter 79204-07-23 00:15 G 30649930.34 30649930.51 30649930.69 0.0529 0.0264

Jupiter 79205-03-17 23:03 G 30650168.26 30650168.46 30650168.65 0.0520 0.0161

Saturn 79209-11-16 08:53 G 30651872.75 30651872.87 30651873.00 0.0292 0.0234

Jupiter 79210-05-21 00:44 G 30652058.47 30652058.53 30652058.61 0.0494 0.0458

Saturn 79210-07-04 04:20 G 30652102.47 30652102.68 30652102.89 0.0291 0.0036

Jupiter 79211-01-12 00:15 G 30652294.31 30652294.51 30652294.70 0.0501 0.0129

Saturn 79211-02-18 23:03 G 30652332.30 30652332.46 30652332.64 0.0290 0.0163

Jupiter 79211-09-05 07:27 G 30652530.64 30652530.81 30652530.99 0.0510 0.0236

Jupiter 79216-03-27 14:10 G 30654195.95 30654196.09 30654196.23 0.0531 0.0381

Jupiter 79216-11-20 15:08 G 30654433.93 30654434.13 30654434.34 0.0523 0.0048

Jupiter 79217-07-16 05:17 G 30654671.62 30654671.72 30654671.83 0.0513 0.0440

Mars 79222-04-02 14:39 G 30656392.96 30656393.11 30656393.26 0.1709 0.0825

Jupiter 79222-09-17 02:53 G 30656560.45 30656560.62 30656560.81 0.0499 0.0225

Jupiter 79223-05-11 08:10 G 30656796.64 30656796.84 30656797.03 0.0507 0.0133

Jupiter 79224-01-02 23:03 G 30657033.42 30657033.46 30657033.50 0.0517 0.0504

Saturn 79224-12-13 20:39 G 30657379.22 30657379.36 30657379.52 0.0268 0.0193

Saturn 79225-07-31 01:41 G 30657608.36 30657608.57 30657608.78 0.0268 0.0036

Saturn 79226-03-17 06:58 G 30657837.60 30657837.79 30657837.98 0.0269 0.0122

Jupiter 79227-12-01 02:24 G 30658461.53 30658461.60 30658461.67 0.0533 0.0497

Neptune 79228-07-20 16:05 G 30658694.13 30658694.17 30658694.21 0.0088 0.0087

Jupiter 79228-07-26 06:00 G 30658699.54 30658699.75 30658699.95 0.0525 0.0070

Neptune 79229-03-03 05:03 G 30658919.62 30658919.71 30658919.82 0.0088 0.0078

Jupiter 79229-03-20 23:03 G 30658937.31 30658937.46 30658937.62 0.0516 0.0339

Neptune 79229-10-14 18:15 G 30659145.14 30659145.26 30659145.40 0.0088 0.0070

Neptune 79230-05-28 07:27 G 30659370.66 30659370.81 30659370.98 0.0088 0.0062

Neptune 79231-01-08 20:39 G 30659596.20 30659596.36 30659596.55 0.0088 0.0054

Neptune 79231-08-22 09:51 G 30659821.74 30659821.91 30659822.12 0.0088 0.0046

Neptune 79232-04-03 23:17 G 30660047.27 30660047.47 30660047.67 0.0088 0.0037

Neptune 79232-11-15 12:15 G 30660272.81 30660273.01 30660273.23 0.0088 0.0029

Neptune 79233-06-29 01:27 G 30660498.35 30660498.56 30660498.78 0.0088 0.0021

Neptune 79234-02-09 14:53 G 30660723.90 30660724.12 30660724.34 0.0088 0.0012

Jupiter 79234-05-23 07:12 G 30660826.64 30660826.80 30660826.95 0.0497 0.0317

Neptune 79234-09-23 03:51 G 30660949.44 30660949.66 30660949.89 0.0088 0.0004

Jupiter 79235-01-14 09:51 G 30661062.71 30661062.91 30661063.11 0.0505 0.0032

Neptune 79235-05-06 17:03 G 30661174.99 30661175.21 30661175.43 0.0088 0.0004

Jupiter 79235-09-07 21:22 G 30661299.27 30661299.39 30661299.51 0.0514 0.0401

Neptune 79235-12-18 06:00 G 30661400.54 30661400.75 30661400.98 0.0088 0.0013

Neptune 79236-07-30 19:12 G 30661626.09 30661626.30 30661626.52 0.0088 0.0021

Neptune 79237-03-13 08:24 G 30661851.64 30661851.85 30661852.06 0.0088 0.0029

Neptune 79237-10-24 21:08 G 30662077.19 30662077.38 30662077.60 0.0088 0.0038

Neptune 79238-06-07 10:20 G 30662302.75 30662302.93 30662303.13 0.0088 0.0046

Uranus 79238-10-06 04:34 G 30662423.56 30662423.69 30662423.82 0.0134 0.0108

Neptune 79239-01-18 23:32 G 30662528.32 30662528.48 30662528.67 0.0088 0.0054

Uranus 79239-05-20 09:08 G 30662649.72 30662649.88 30662650.07 0.0134 0.0076

Saturn 79239-05-29 14:53 G 30662658.98 30662659.12 30662659.28 0.0293 0.0204

Neptune 79239-09-01 12:44 G 30662753.89 30662754.03 30662754.20 0.0088 0.0062

Uranus 79240-01-01 13:56 G 30662875.89 30662876.08 30662876.30 0.0134 0.0045

Saturn 79240-01-14 10:48 G 30662888.74 30662888.95 30662889.16 0.0292 0.0004

Jupiter 79240-03-30 16:20 G 30662964.99 30662965.18 30662965.38 0.0528 0.0195

Neptune 79240-04-14 02:10 G 30662979.46 30662979.59 30662979.72 0.0088 0.0070

Uranus 79240-08-14 19:12 G 30663102.09 30663102.30 30663102.51 0.0134 0.0013

Saturn 79240-08-31 06:00 G 30663118.60 30663118.75 30663118.91 0.0291 0.0194

Jupiter 79240-11-23 13:12 G 30663202.87 30663203.05 30663203.24 0.0519 0.0227

Neptune 79240-11-25 14:39 G 30663205.04 30663205.11 30663205.23 0.0088 0.0079

Uranus 79241-03-28 23:46 G 30663328.29 30663328.49 30663328.71 0.0134 0.0019

Neptune 79241-07-09 03:51 G 30663430.65 30663430.66 30663430.72 0.0088 0.0087

Uranus 79241-11-10 04:34 G 30663554.50 30663554.69 30663554.90 0.0134 0.0050

Uranus 79242-06-24 09:08 G 30663780.72 30663780.88 30663781.06 0.0134 0.0082

Uranus 79243-02-05 13:56 G 30664006.98 30664007.08 30664007.21 0.0134 0.0113

Jupiter 79246-01-26 11:46 G 30665092.87 30665092.99 30665093.10 0.0495 0.0404

Jupiter 79246-09-19 12:00 G 30665328.80 30665329.00 30665329.20 0.0502 0.0067

Jupiter 79247-05-13 20:24 G 30665565.19 30665565.35 30665565.52 0.0511 0.0299

Mars 79249-08-20 17:32 G 30666395.06 30666395.23 30666395.40 0.1824 0.0478

Jupiter 79251-12-04 05:17 G 30667230.55 30667230.72 30667230.88 0.0530 0.0313

Jupiter 79252-07-29 05:17 G 30667468.52 30667468.72 30667468.92 0.0522 0.0114

Jupiter 79253-03-23 18:15 G 30667706.22 30667706.26 30667706.31 0.0512 0.0498

Mars 79254-04-01 13:56 G 30668080.01 30668080.08 30668080.15 0.1699 0.1543

Saturn 79254-06-26 03:22 G 30668165.47 30668165.64 30668165.81 0.0267 0.0163

Saturn 79255-02-10 08:10 G 30668394.63 30668394.84 30668395.06 0.0268 0.0008

Saturn 79255-09-27 13:12 G 30668623.88 30668624.05 30668624.23 0.0269 0.0151

Jupiter 79257-10-01 15:08 G 30669359.11 30669359.13 30669359.16 0.0493 0.0489

Jupiter 79258-05-25 13:27 G 30669594.87 30669595.06 30669595.25 0.0500 0.0165

Jupiter 79259-01-16 19:12 G 30669831.12 30669831.30 30669831.49 0.0508 0.0196

Jupiter 79263-08-08 18:29 G 30671496.16 30671496.27 30671496.40 0.0533 0.0430

Jupiter 79264-04-02 21:22 G 30671734.19 30671734.39 30671734.60 0.0524 0.0008

Jupiter 79264-11-26 13:41 G 30671971.94 30671972.07 30671972.20 0.0515 0.0401

Saturn 79268-12-08 18:58 G 30673445.12 30673445.29 30673445.45 0.0292 0.0179

Saturn 79269-07-26 14:24 G 30673674.90 30673675.10 30673675.31 0.0291 0.0022

Jupiter 79270-01-28 16:48 G 30673861.03 30673861.20 30673861.37 0.0498 0.0259

Saturn 79270-03-13 09:36 G 30673904.76 30673904.90 30673905.03 0.0290 0.0218

Jupiter 79270-09-21 20:24 G 30674097.15 30674097.35 30674097.55 0.0506 0.0095

Jupiter 79271-05-16 09:22 G 30674333.81 30674333.89 30674333.98 0.0515 0.0465

Earth 79272-04-16 18:00 G 30674670.09 30674670.25 30674670.41 0.2634 0.0136

Moon 79272-04-16 19:27 G 30674670.15 30674670.31 30674670.48 0.2628 0.0600 *

Jupiter 79275-12-07 12:58 G 30675999.84 30676000.04 30676000.24 0.0526 0.0116

Jupiter 79276-08-01 07:56 G 30676237.67 30676237.83 30676238.00 0.0517 0.0298

Uranus 79281-07-09 04:05 G 30678040.55 30678040.67 30678040.82 0.0144 0.0112

Jupiter 79281-10-03 20:24 G 30678127.21 30678127.35 30678127.49 0.0496 0.0351

Uranus 79282-02-20 16:48 G 30678267.02 30678267.20 30678267.41 0.0144 0.0072

Jupiter 79282-05-27 22:05 G 30678363.22 30678363.42 30678363.62 0.0504 0.0006

Uranus 79282-10-05 05:46 G 30678493.53 30678493.74 30678493.96 0.0144 0.0031

Jupiter 79283-01-19 08:39 G 30678599.72 30678599.86 30678600.00 0.0513 0.0363

Uranus 79283-05-19 18:29 G 30678720.05 30678720.27 30678720.49 0.0144 0.0009

Uranus 79284-01-01 06:58 G 30678946.59 30678946.79 30678947.00 0.0144 0.0050

Saturn 79284-01-06 02:39 G 30678951.44 30678951.61 30678951.80 0.0268 0.0148

Uranus 79284-08-14 19:41 G 30679173.16 30679173.32 30679173.50 0.0144 0.0091

Saturn 79284-08-22 07:27 G 30679180.60 30679180.81 30679181.03 0.0268 0.0010

Uranus 79285-03-29 08:39 G 30679399.77 30679399.86 30679399.95 0.0144 0.0131

Saturn 79285-04-08 12:29 G 30679409.86 30679410.02 30679410.20 0.0269 0.0167

Pluto 79286-11-03 07:27 G 30679983.65 30679983.81 30679984.02 0.0065 0.0037

Pluto 79287-06-16 12:29 G 30680208.80 30680209.02 30680209.24 0.0066 0.0002

Jupiter 79287-08-12 02:53 G 30680265.43 30680265.62 30680265.80 0.0529 0.0235

Pluto 79288-01-27 16:48 G 30680434.04 30680434.20 30680434.38 0.0066 0.0041

Mars 79288-01-29 00:44 G 30680435.40 30680435.53 30680435.66 0.1712 0.1117

Jupiter 79288-04-06 00:29 G 30680503.33 30680503.52 30680503.72 0.0520 0.0190

Jupiter 79293-06-09 01:27 G 30682393.47 30682393.56 30682393.66 0.0494 0.0437

Jupiter 79294-01-31 01:12 G 30682629.36 30682629.55 30682629.75 0.0501 0.0105

Jupiter 79294-09-24 08:39 G 30682865.70 30682865.86 30682866.04 0.0510 0.0261

Saturn 79298-06-20 22:48 G 30684231.28 30684231.45 30684231.64 0.0293 0.0152

Saturn 79299-02-05 18:44 G 30684461.08 30684461.28 30684461.49 0.0292 0.0050

Jupiter 79299-04-16 12:00 G 30684530.85 30684531.00 30684531.15 0.0531 0.0359

Saturn 79299-09-23 13:56 G 30684690.99 30684691.08 30684691.21 0.0291 0.0248

Jupiter 79299-12-10 13:12 G 30684768.84 30684769.05 30684769.25 0.0523 0.0070

Jupiter 79300-08-05 03:36 G 30685006.56 30685006.65 30685006.74 0.0513 0.0460

Jupiter 79305-10-07 04:34 G 30686895.51 30686895.69 30686895.88 0.0499 0.0199

Jupiter 79306-05-31 09:22 G 30687131.70 30687131.89 30687132.09 0.0507 0.0159

Jupiter 79310-12-20 23:46 G 30688796.40 30688796.49 30688796.58 0.0533 0.0476

Jupiter 79311-08-16 03:36 G 30689034.45 30689034.65 30689034.86 0.0525 0.0047

Neptune 79311-12-01 11:03 G 30689141.92 30689141.96 30689142.05 0.0089 0.0086

Jupiter 79312-04-09 21:22 G 30689272.25 30689272.39 30689272.54 0.0516 0.0361

Neptune 79312-07-14 00:29 G 30689367.42 30689367.52 30689367.64 0.0089 0.0077

Neptune 79313-02-24 12:58 G 30689592.92 30689593.04 30689593.20 0.0089 0.0069

Saturn 79313-07-19 09:08 G 30689737.69 30689737.88 30689738.08 0.0267 0.0118

Neptune 79313-10-08 01:41 G 30689818.43 30689818.57 30689818.75 0.0089 0.0061

Saturn 79314-03-05 13:56 G 30689966.87 30689967.08 30689967.30 0.0268 0.0038

Neptune 79314-05-21 14:53 G 30690043.95 30690044.12 30690044.30 0.0089 0.0052

Saturn 79314-10-20 18:58 G 30690196.15 30690196.29 30690196.44 0.0269 0.0195

Neptune 79315-01-02 03:22 G 30690269.47 30690269.64 30690269.85 0.0089 0.0044

Mars 79315-06-18 22:48 G 30690437.27 30690437.45 30690437.63 0.1820 0.0067

Neptune 79315-08-15 16:34 G 30690495.00 30690495.19 30690495.40 0.0089 0.0035

Neptune 79316-03-28 05:17 G 30690720.52 30690720.72 30690720.94 0.0089 0.0026

Neptune 79316-11-08 18:15 G 30690946.05 30690946.26 30690946.48 0.0089 0.0018

Jupiter 79317-06-12 07:12 G 30691161.64 30691161.80 30691161.96 0.0497 0.0292

Neptune 79317-06-22 07:12 G 30691171.59 30691171.80 30691172.03 0.0089 0.0010

Neptune 79318-02-02 20:24 G 30691397.13 30691397.35 30691397.56 0.0089 0.0001

Jupiter 79318-02-03 09:36 G 30691397.70 30691397.90 30691398.10 0.0504 0.0057

Neptune 79318-09-16 09:08 G 30691622.67 30691622.88 30691623.10 0.0089 0.0008

Jupiter 79318-09-27 20:53 G 30691634.26 30691634.37 30691634.48 0.0514 0.0426

Neptune 79319-04-29 22:05 G 30691848.21 30691848.42 30691848.63 0.0089 0.0017

Neptune 79319-12-11 10:48 G 30692073.75 30692073.95 30692074.16 0.0089 0.0025

Mars 79320-01-29 00:15 G 30692122.40 30692122.51 30692122.63 0.1702 0.1258

Neptune 79320-07-24 00:00 G 30692299.30 30692299.50 30692299.70 0.0089 0.0034

Neptune 79321-03-06 12:29 G 30692524.85 30692525.02 30692525.23 0.0089 0.0043

Neptune 79321-10-18 01:41 G 30692750.39 30692750.57 30692750.75 0.0090 0.0051

Neptune 79322-05-31 14:10 G 30692975.94 30692976.09 30692976.27 0.0090 0.0060

Uranus 79322-06-06 16:05 G 30692982.09 30692982.17 30692982.28 0.0134 0.0121

Neptune 79323-01-12 03:22 G 30693201.50 30693201.64 30693201.78 0.0090 0.0068

Uranus 79323-01-18 21:08 G 30693208.23 30693208.38 30693208.55 0.0134 0.0089

Jupiter 79323-04-20 18:29 G 30693300.08 30693300.27 30693300.47 0.0528 0.0164

Neptune 79323-08-25 15:51 G 30693427.07 30693427.16 30693427.29 0.0090 0.0077

Uranus 79323-09-02 02:10 G 30693434.40 30693434.59 30693434.79 0.0134 0.0057

Jupiter 79323-12-14 15:36 G 30693537.97 30693538.15 30693538.33 0.0519 0.0256

Neptune 79324-04-07 04:48 G 30693652.65 30693652.70 30693652.78 0.0090 0.0085

Uranus 79324-04-15 06:58 G 30693660.59 30693660.79 30693661.01 0.0134 0.0026

Uranus 79324-11-27 11:46 G 30693886.78 30693886.99 30693887.21 0.0134 0.0006

Uranus 79325-07-11 16:34 G 30694112.99 30694113.19 30694113.40 0.0134 0.0038

Uranus 79326-02-22 21:08 G 30694339.21 30694339.38 30694339.58 0.0134 0.0069

Uranus 79326-10-07 02:10 G 30694565.45 30694565.59 30694565.73 0.0134 0.0100

Uranus 79327-05-21 06:29 G 30694791.75 30694791.77 30694791.83 0.0134 0.0132

Saturn 79328-01-02 02:53 G 30695017.44 30695017.62 30695017.81 0.0292 0.0126

Saturn 79328-08-18 22:48 G 30695247.25 30695247.45 30695247.65 0.0292 0.0074

Jupiter 79329-02-15 11:17 G 30695427.84 30695427.97 30695428.09 0.0495 0.0381

Saturn 79329-04-05 17:46 G 30695477.17 30695477.24 30695477.32 0.0291 0.0271

Jupiter 79329-10-09 11:32 G 30695663.78 30695663.98 30695664.18 0.0502 0.0042

Jupiter 79330-06-02 20:10 G 30695900.19 30695900.34 30695900.50 0.0511 0.0325

Jupiter 79334-12-24 09:22 G 30697565.71 30697565.89 30697566.06 0.0530 0.0281

Jupiter 79335-08-19 08:53 G 30697803.67 30697803.87 30697804.07 0.0521 0.0146

Jupiter 79340-10-21 15:08 G 30699694.08 30699694.13 30699694.20 0.0493 0.0468

Jupiter 79341-06-14 14:10 G 30699929.90 30699930.09 30699930.29 0.0500 0.0140

Jupiter 79342-02-05 20:39 G 30700166.18 30700166.36 30700166.55 0.0509 0.0223

Saturn 79342-06-14 03:51 G 30700294.61 30700294.66 30700294.72 0.0267 0.0257

Saturn 79343-01-29 08:10 G 30700523.65 30700523.84 30700524.04 0.0267 0.0103

Saturn 79343-09-15 12:44 G 30700752.82 30700753.03 30700753.24 0.0268 0.0053

Saturn 79344-05-01 17:32 G 30700982.11 30700982.23 30700982.37 0.0269 0.0210

Jupiter 79346-08-28 22:20 G 30701831.30 30701831.43 30701831.57 0.0532 0.0399

Jupiter 79347-04-24 00:29 G 30702069.31 30702069.52 30702069.72 0.0524 0.0032

Jupiter 79347-12-17 15:51 G 30702307.05 30702307.16 30702307.27 0.0514 0.0428

Jupiter 79353-02-17 18:29 G 30704196.09 30704196.27 30704196.45 0.0498 0.0234

Jupiter 79353-10-11 22:34 G 30704432.24 30704432.44 30704432.63 0.0506 0.0121

Mars 79353-11-26 10:48 G 30704477.86 30704477.95 30704478.04 0.1716 0.1424

Jupiter 79354-06-05 11:46 G 30704668.93 30704668.99 30704669.05 0.0515 0.0489

Saturn 79357-07-14 06:00 G 30705803.55 30705803.75 30705803.95 0.0293 0.0100

Saturn 79358-03-01 01:56 G 30706033.39 30706033.58 30706033.78 0.0292 0.0101

Jupiter 79358-05-03 06:44 G 30706096.74 30706096.78 30706096.83 0.0534 0.0519

Jupiter 79358-12-27 11:32 G 30706334.78 30706334.98 30706335.18 0.0526 0.0092

Jupiter 79359-08-22 06:29 G 30706572.61 30706572.77 30706572.93 0.0517 0.0321

Jupiter 79364-10-23 22:48 G 30708462.30 30708462.45 30708462.60 0.0496 0.0324

Uranus 79365-03-09 09:08 G 30708598.80 30708598.88 30708598.98 0.0144 0.0131

Jupiter 79365-06-17 00:29 G 30708698.32 30708698.52 30708698.72 0.0504 0.0022

Uranus 79365-10-21 21:36 G 30708825.25 30708825.40 30708825.59 0.0144 0.0091

Jupiter 79366-02-08 10:34 G 30708934.82 30708934.94 30708935.08 0.0512 0.0390

Uranus 79366-06-05 10:20 G 30709051.74 30709051.93 30709052.15 0.0144 0.0051

Uranus 79367-01-17 23:17 G 30709278.25 30709278.47 30709278.69 0.0144 0.0010

Uranus 79367-09-01 12:00 G 30709504.79 30709505.00 30709505.22 0.0144 0.0031

Uranus 79368-04-15 00:29 G 30709731.34 30709731.52 30709731.73 0.0144 0.0072

Uranus 79368-11-27 13:27 G 30709957.93 30709958.06 30709958.21 0.0144 0.0111

Earth 79369-10-21 02:39 G 30710285.49 30710285.61 30710285.73 0.2699 0.1722

Moon 79369-10-21 06:44 G 30710285.66 30710285.78 30710285.90 0.2694 0.1852 *

Jupiter 79370-09-01 00:29 G 30710600.34 30710600.52 30710600.71 0.0529 0.0212

Jupiter 79371-04-26 22:48 G 30710838.26 30710838.45 30710838.64 0.0520 0.0212

Saturn 79371-12-25 10:20 G 30711080.82 30711080.93 30711081.04 0.0267 0.0228

Saturn 79372-08-10 14:24 G 30711309.90 30711310.10 30711310.31 0.0267 0.0074

Saturn 79373-03-27 18:58 G 30711539.09 30711539.29 30711539.50 0.0268 0.0082

Saturn 79373-11-12 00:00 G 30711768.41 30711768.50 30711768.60 0.0269 0.0238

Pluto 79374-07-06 13:41 G 30712004.94 30712005.07 30712005.21 0.0079 0.0062

Pluto 79375-02-16 23:46 G 30712230.27 30712230.49 30712230.71 0.0078 0.0005

Pluto 79375-09-30 09:08 G 30712455.81 30712455.88 30712455.99 0.0078 0.0071

Jupiter 79376-06-29 02:10 G 30712728.48 30712728.59 30712728.70 0.0494 0.0412

Jupiter 79377-02-20 01:41 G 30712964.37 30712964.57 30712964.77 0.0501 0.0078

Jupiter 79377-10-14 08:53 G 30713200.71 30713200.87 30713201.04 0.0510 0.0287

Moon 79377-10-18 17:32 G 30713205.12 30713205.23 30713205.35 0.2691 0.1865

Earth 79377-10-18 17:46 G 30713205.12 30713205.24 30713205.37 0.2698 0.1646 *

Mars 79381-04-15 03:51 G 30714479.49 30714479.66 30714479.82 0.1816 0.0616

Jupiter 79382-05-06 14:10 G 30714865.93 30714866.09 30714866.25 0.0531 0.0329

Jupiter 79382-12-30 15:36 G 30715103.95 30715104.15 30715104.35 0.0523 0.0101

Jupiter 79383-08-25 06:00 G 30715341.69 30715341.75 30715341.81 0.0513 0.0489

Mars 79385-11-25 10:48 G 30716164.81 30716164.95 30716165.09 0.1705 0.0979

Saturn 79386-06-08 13:56 G 30716360.01 30716360.08 30716360.16 0.0293 0.0274

Saturn 79387-01-24 10:05 G 30716589.72 30716589.92 30716590.12 0.0292 0.0074

Saturn 79387-09-11 06:00 G 30716819.56 30716819.75 30716819.93 0.0292 0.0126

Jupiter 79388-10-26 04:20 G 30717230.50 30717230.68 30717230.87 0.0499 0.0174

Jupiter 79389-06-19 09:22 G 30717466.71 30717466.89 30717467.08 0.0507 0.0186

Neptune 79393-06-05 13:27 G 30718913.99 30718914.06 30718914.16 0.0088 0.0081

Jupiter 79394-01-09 04:05 G 30719131.57 30719131.67 30719131.79 0.0533 0.0446

Neptune 79394-01-17 02:39 G 30719139.51 30719139.61 30719139.75 0.0088 0.0073

Neptune 79394-08-30 15:51 G 30719365.03 30719365.16 30719365.33 0.0088 0.0065

Jupiter 79394-09-04 07:56 G 30719369.62 30719369.83 30719370.03 0.0525 0.0016

Neptune 79395-04-13 05:32 G 30719590.56 30719590.73 30719590.90 0.0088 0.0056

Jupiter 79395-04-30 00:58 G 30719607.41 30719607.54 30719607.68 0.0516 0.0390

Neptune 79395-11-24 18:29 G 30719816.09 30719816.27 30719816.47 0.0088 0.0048

Neptune 79396-07-07 07:41 G 30720041.63 30720041.82 30720042.03 0.0088 0.0040

Neptune 79397-02-17 20:53 G 30720267.18 30720267.37 30720267.59 0.0088 0.0032

Neptune 79397-10-01 10:20 G 30720492.72 30720492.93 30720493.15 0.0088 0.0023

Neptune 79398-05-14 23:17 G 30720718.26 30720718.47 30720718.70 0.0088 0.0015

Neptune 79398-12-26 12:44 G 30720943.81 30720944.03 30720944.25 0.0088 0.0006

Neptune 79399-08-09 01:56 G 30721169.36 30721169.58 30721169.80 0.0088 0.0002

Neptune 79400-03-22 14:53 G 30721394.90 30721395.12 30721395.35 0.0088 0.0011

Jupiter 79400-07-02 07:56 G 30721496.66 30721496.83 30721497.00 0.0497 0.0268

Neptune 79400-11-03 03:51 G 30721620.45 30721620.66 30721620.89 0.0088 0.0019

Jupiter 79401-02-23 10:48 G 30721732.76 30721732.95 30721733.15 0.0505 0.0085

Neptune 79401-06-16 17:03 G 30721846.00 30721846.21 30721846.43 0.0088 0.0027

Saturn 79401-07-07 09:22 G 30721866.76 30721866.89 30721867.02 0.0267 0.0213

Jupiter 79401-10-17 23:03 G 30721969.37 30721969.46 30721969.55 0.0514 0.0453

Neptune 79402-01-28 06:29 G 30722071.57 30722071.77 30722071.97 0.0088 0.0035

Saturn 79402-02-21 13:27 G 30722095.86 30722096.06 30722096.28 0.0267 0.0060

Neptune 79402-09-10 19:12 G 30722297.12 30722297.30 30722297.51 0.0088 0.0044

Saturn 79402-10-08 18:00 G 30722325.05 30722325.25 30722325.45 0.0268 0.0097

Neptune 79403-04-24 08:24 G 30722522.68 30722522.85 30722523.04 0.0088 0.0052

Saturn 79403-05-25 22:34 G 30722554.38 30722554.44 30722554.52 0.0269 0.0253

Neptune 79403-12-05 21:36 G 30722748.24 30722748.40 30722748.57 0.0088 0.0060

Neptune 79404-07-18 10:48 G 30722973.82 30722973.95 30722974.09 0.0088 0.0068

Neptune 79405-02-28 23:32 G 30723199.40 30723199.48 30723199.61 0.0088 0.0077

Neptune 79405-10-12 12:44 G 30723425.00 30723425.03 30723425.11 0.0088 0.0085

Uranus 79406-02-05 04:34 G 30723540.66 30723540.69 30723540.73 0.0134 0.0133

Jupiter 79406-05-10 22:20 G 30723635.23 30723635.43 30723635.63 0.0527 0.0132

Uranus 79406-09-19 09:22 G 30723766.76 30723766.89 30723767.04 0.0134 0.0101

Jupiter 79407-01-03 18:29 G 30723873.11 30723873.27 30723873.45 0.0518 0.0286

Uranus 79407-05-03 14:24 G 30723992.92 30723993.10 30723993.29 0.0134 0.0070

Uranus 79407-12-15 19:12 G 30724219.10 30724219.30 30724219.51 0.0134 0.0038

Uranus 79408-07-29 00:15 G 30724445.29 30724445.51 30724445.72 0.0134 0.0007

Uranus 79409-03-12 04:48 G 30724671.50 30724671.70 30724671.92 0.0134 0.0025

Uranus 79409-10-24 09:22 G 30724897.71 30724897.89 30724898.10 0.0134 0.0057

Uranus 79410-06-07 14:10 G 30725123.94 30725124.09 30725124.26 0.0134 0.0088

Uranus 79411-01-19 18:58 G 30725350.20 30725350.29 30725350.40 0.0134 0.0119

Jupiter 79412-03-07 12:58 G 30725762.90 30725763.04 30725763.18 0.0495 0.0357

Jupiter 79412-10-29 13:56 G 30725998.88 30725999.08 30725999.28 0.0503 0.0016

Jupiter 79413-06-22 23:17 G 30726235.32 30726235.47 30726235.61 0.0511 0.0352

Saturn 79415-12-20 15:08 G 30727146.03 30727146.13 30727146.25 0.0293 0.0251

Saturn 79416-08-06 12:00 G 30727375.79 30727376.00 30727376.20 0.0293 0.0050

Saturn 79417-03-24 07:56 G 30727605.65 30727605.83 30727606.01 0.0292 0.0151

Jupiter 79418-01-13 08:24 G 30727900.67 30727900.85 30727901.03 0.0530 0.0256

Jupiter 79418-09-08 07:41 G 30728138.62 30728138.82 30728139.01 0.0521 0.0170

Jupiter 79423-11-11 18:00 G 30730029.16 30730029.25 30730029.34 0.0494 0.0442

Jupiter 79424-07-04 17:03 G 30730265.02 30730265.21 30730265.41 0.0500 0.0112

Jupiter 79425-02-25 23:32 G 30730501.31 30730501.48 30730501.66 0.0509 0.0251

Jupiter 79429-09-17 20:10 G 30732166.20 30732166.34 30732166.49 0.0532 0.0376

Jupiter 79430-05-13 22:20 G 30732404.23 30732404.43 30732404.64 0.0524 0.0055

Jupiter 79431-01-06 14:10 G 30732642.00 30732642.09 30732642.19 0.0514 0.0450

Saturn 79431-01-17 15:36 G 30732652.99 30732653.15 30732653.30 0.0267 0.0185

Saturn 79431-09-03 19:41 G 30732882.11 30732882.32 30732882.53 0.0267 0.0031

Saturn 79432-04-20 00:00 G 30733111.32 30733111.50 30733111.70 0.0268 0.0126

Jupiter 79436-03-09 19:12 G 30734531.11 30734531.30 30734531.48 0.0498 0.0208

Jupiter 79436-10-31 22:48 G 30734767.26 30734767.45 30734767.65 0.0506 0.0149

Jupiter 79437-06-25 12:00 G 30735004.00 30735004.00 30735004.01 0.0515 0.0514

Jupiter 79441-05-23 08:39 G 30736431.79 30736431.86 30736431.94 0.0534 0.0491

Jupiter 79442-01-16 13:41 G 30736669.87 30736670.07 30736670.28 0.0526 0.0062

Jupiter 79442-09-11 08:53 G 30736907.72 30736907.87 30736908.02 0.0517 0.0350

Saturn 79445-07-01 20:39 G 30737932.23 30737932.36 30737932.50 0.0293 0.0224

Saturn 79446-02-16 17:03 G 30738162.00 30738162.21 30738162.42 0.0293 0.0023

Saturn 79446-10-04 12:44 G 30738391.87 30738392.03 30738392.20 0.0292 0.0177

Mars 79447-02-11 09:36 G 30738521.77 30738521.90 30738522.04 0.1812 0.1108

Jupiter 79447-11-13 22:34 G 30738797.28 30738797.44 30738797.60 0.0496 0.0300

Jupiter 79448-07-07 00:29 G 30739033.32 30739033.52 30739033.72 0.0504 0.0048

Jupiter 79449-02-28 10:48 G 30739269.84 30739269.95 30739270.07 0.0513 0.0416

Uranus 79449-06-22 04:48 G 30739383.56 30739383.70 30739383.85 0.0144 0.0108

Uranus 79450-02-03 17:32 G 30739610.04 30739610.23 30739610.43 0.0144 0.0068

Uranus 79450-09-18 06:15 G 30739836.55 30739836.76 30739836.98 0.0144 0.0028

Uranus 79451-05-02 18:58 G 30740063.07 30740063.29 30740063.51 0.0144 0.0013

Mars 79451-09-23 21:08 G 30740207.23 30740207.38 30740207.54 0.1708 0.0696

Uranus 79451-12-15 07:41 G 30740289.62 30740289.82 30740290.03 0.0144 0.0053

Uranus 79452-07-28 20:39 G 30740516.19 30740516.36 30740516.52 0.0144 0.0094

Uranus 79453-03-12 09:08 G 30740742.82 30740742.88 30740742.98 0.0144 0.0134

Jupiter 79453-09-21 04:48 G 30740935.51 30740935.70 30740935.90 0.0529 0.0179

Jupiter 79454-05-17 02:53 G 30741173.43 30741173.62 30741173.80 0.0520 0.0244

Jupiter 79459-07-20 02:39 G 30743063.49 30743063.61 30743063.74 0.0495 0.0389

Jupiter 79460-03-12 02:39 G 30743299.41 30743299.61 30743299.81 0.0502 0.0052

Saturn 79460-07-29 14:39 G 30743438.96 30743439.11 30743439.29 0.0267 0.0170

Jupiter 79460-11-03 10:34 G 30743535.79 30743535.94 30743536.10 0.0510 0.0314

Saturn 79461-03-15 18:58 G 30743668.08 30743668.29 30743668.51 0.0267 0.0016

Saturn 79461-10-30 23:17 G 30743897.29 30743897.47 30743897.66 0.0268 0.0141

Jupiter 79465-05-26 18:29 G 30745201.10 30745201.27 30745201.44 0.0531 0.0297

Jupiter 79466-01-19 19:12 G 30745439.10 30745439.30 30745439.50 0.0522 0.0133

Jupiter 79471-03-25 08:10 G 30747329.79 30747329.84 30747329.90 0.0493 0.0473

Jupiter 79471-11-16 06:29 G 30747565.58 30747565.77 30747565.97 0.0500 0.0148

Jupiter 79472-07-09 12:15 G 30747801.83 30747802.01 30747802.20 0.0508 0.0214

Saturn 79475-01-11 21:08 G 30748718.24 30748718.38 30748718.54 0.0293 0.0202

Saturn 79475-08-29 18:00 G 30748948.04 30748948.25 30748948.46 0.0293 0.0004

Neptune 79476-03-04 19:56 G 30749136.33 30749136.33 30749136.38 0.0089 0.0089

Saturn 79476-04-15 13:56 G 30749177.93 30749178.08 30749178.24 0.0292 0.0200

Neptune 79476-10-16 08:39 G 30749361.79 30749361.86 30749361.98 0.0089 0.0081

Jupiter 79477-01-29 03:51 G 30749466.54 30749466.66 30749466.79 0.0533 0.0419

Neptune 79477-05-29 21:51 G 30749587.29 30749587.41 30749587.55 0.0089 0.0072

Jupiter 79477-09-24 06:44 G 30749704.58 30749704.78 30749704.99 0.0525 0.0015

Neptune 79478-01-10 10:34 G 30749812.80 30749812.94 30749813.11 0.0089 0.0063

Jupiter 79478-05-19 23:46 G 30749942.37 30749942.49 30749942.61 0.0515 0.0413

Neptune 79478-08-23 23:32 G 30750038.32 30750038.48 30750038.66 0.0089 0.0055

Neptune 79479-04-06 12:00 G 30750263.83 30750264.00 30750264.21 0.0089 0.0047

Neptune 79479-11-18 01:12 G 30750489.36 30750489.55 30750489.75 0.0089 0.0038

Neptune 79480-06-30 13:56 G 30750714.89 30750715.08 30750715.30 0.0089 0.0029

Neptune 79481-02-11 02:53 G 30750940.42 30750940.62 30750940.84 0.0089 0.0021

Neptune 79481-09-24 15:36 G 30751165.95 30751166.15 30751166.38 0.0089 0.0013

Neptune 79482-05-08 04:48 G 30751391.48 30751391.70 30751391.91 0.0089 0.0004

Neptune 79482-12-19 17:32 G 30751617.01 30751617.23 30751617.45 0.0089 0.0005

Jupiter 79483-07-22 10:34 G 30751831.77 30751831.94 30751832.12 0.0498 0.0240

Neptune 79483-08-02 06:29 G 30751842.56 30751842.77 30751842.99 0.0089 0.0014

Jupiter 79484-03-14 13:56 G 30752067.88 30752068.08 30752068.27 0.0505 0.0114

Neptune 79484-03-14 19:27 G 30752068.10 30752068.31 30752068.52 0.0089 0.0023 *

Neptune 79484-10-26 07:56 G 30752293.64 30752293.83 30752294.05 0.0089 0.0032

Jupiter 79484-11-06 01:56 G 30752304.51 30752304.58 30752304.65 0.0514 0.0479

Neptune 79485-06-08 21:08 G 30752519.19 30752519.38 30752519.58 0.0089 0.0040

Neptune 79486-01-20 09:51 G 30752744.74 30752744.91 30752745.10 0.0089 0.0049

Neptune 79486-09-02 23:03 G 30752970.29 30752970.46 30752970.63 0.0090 0.0057

Neptune 79487-04-16 11:32 G 30753195.85 30753195.98 30753196.14 0.0090 0.0066

Neptune 79487-11-28 00:29 G 30753421.41 30753421.52 30753421.65 0.0090 0.0074

Neptune 79488-07-10 13:12 G 30753646.99 30753647.05 30753647.16 0.0090 0.0083

Jupiter 79489-05-29 20:10 G 30753970.14 30753970.34 30753970.54 0.0527 0.0107

Jupiter 79490-01-22 16:20 G 30754208.02 30754208.18 30754208.35 0.0518 0.0309

Saturn 79490-02-08 21:08 G 30754225.20 30754225.38 30754225.57 0.0267 0.0142

Uranus 79490-05-19 21:22 G 30754325.29 30754325.39 30754325.52 0.0134 0.0114

Saturn 79490-09-26 01:27 G 30754454.34 30754454.56 30754454.77 0.0267 0.0014

Uranus 79491-01-01 02:10 G 30754551.44 30754551.59 30754551.78 0.0134 0.0083

Saturn 79491-05-13 05:46 G 30754683.58 30754683.74 30754683.91 0.0268 0.0169

Uranus 79491-08-15 07:27 G 30754777.62 30754777.81 30754778.01 0.0134 0.0051

Uranus 79492-03-28 12:15 G 30755003.80 30755004.01 30755004.23 0.0134 0.0019

Uranus 79492-11-09 17:03 G 30755230.00 30755230.21 30755230.43 0.0134 0.0013

Uranus 79493-06-23 21:51 G 30755456.21 30755456.41 30755456.62 0.0134 0.0044

Uranus 79494-02-05 02:24 G 30755682.44 30755682.60 30755682.79 0.0134 0.0076

Uranus 79494-09-19 07:27 G 30755908.69 30755908.81 30755908.95 0.0134 0.0107

Jupiter 79495-03-27 13:27 G 30756097.91 30756098.06 30756098.21 0.0495 0.0331

Jupiter 79495-11-18 14:10 G 30756333.89 30756334.09 30756334.30 0.0503 0.0017

Jupiter 79496-07-11 23:32 G 30756570.34 30756570.48 30756570.61 0.0511 0.0378

Jupiter 79501-02-02 10:05 G 30758235.74 30758235.92 30758236.11 0.0530 0.0226

Jupiter 79501-09-28 09:22 G 30758473.71 30758473.89 30758474.09 0.0521 0.0201

Saturn 79504-07-25 03:36 G 30759504.49 30759504.65 30759504.82 0.0293 0.0173

Saturn 79505-03-12 00:00 G 30759734.29 30759734.50 30759734.70 0.0293 0.0029

Saturn 79505-10-27 19:27 G 30759964.19 30759964.31 30759964.45 0.0292 0.0228

Jupiter 79506-12-01 17:46 G 30760364.13 30760364.24 30760364.34 0.0494 0.0419

Jupiter 79507-07-25 16:34 G 30760600.00 30760600.19 30760600.39 0.0500 0.0087

Jupiter 79508-03-17 23:17 G 30760836.30 30760836.47 30760836.64 0.0509 0.0277

Jupiter 79512-10-08 00:00 G 30762501.35 30762501.50 30762501.66 0.0532 0.0344

Mars 79512-12-09 15:22 G 30762564.06 30762564.14 30762564.21 0.1808 0.1613

Jupiter 79513-06-03 02:10 G 30762739.39 30762739.59 30762739.79 0.0523 0.0088

Jupiter 79514-01-26 17:32 G 30762977.16 30762977.23 30762977.31 0.0514 0.0479

Moon 79515-04-20 15:36 G 30763426.00 30763426.15 30763426.31 0.2639 0.0176

Earth 79515-04-20 19:12 G 30763426.14 30763426.30 30763426.46 0.2635 0.0336 *

Mars 79517-07-22 07:12 G 30764249.64 30764249.80 30764249.97 0.1712 0.0405

Jupiter 79519-03-30 19:27 G 30764866.12 30764866.31 30764866.50 0.0499 0.0182

Saturn 79519-08-22 21:08 G 30765011.19 30765011.38 30765011.57 0.0267 0.0125

Jupiter 79519-11-21 23:46 G 30765102.31 30765102.49 30765102.68 0.0507 0.0176

Saturn 79520-04-08 01:12 G 30765240.34 30765240.55 30765240.76 0.0267 0.0030

Saturn 79520-11-23 05:17 G 30765469.57 30765469.72 30765469.88 0.0268 0.0186

Moon 79523-04-18 10:34 G 30766345.92 30766345.94 30766345.97 0.2642 0.2579

Jupiter 79524-06-12 12:58 G 30766766.95 30766767.04 30766767.15 0.0534 0.0461

Jupiter 79525-02-05 17:32 G 30767005.02 30767005.23 30767005.43 0.0526 0.0029

Jupiter 79525-10-01 11:46 G 30767242.85 30767242.99 30767243.13 0.0516 0.0379

Jupiter 79530-12-04 00:15 G 30769132.34 30769132.51 30769132.68 0.0497 0.0274

Jupiter 79531-07-28 02:39 G 30769368.41 30769368.61 30769368.81 0.0504 0.0076

Jupiter 79532-03-20 13:56 G 30769604.98 30769605.08 30769605.18 0.0513 0.0442

Uranus 79533-02-20 12:00 G 30769941.90 30769942.00 30769942.11 0.0144 0.0125

Pluto 79533-07-16 23:46 G 30770088.49 30770088.49 30770088.51 0.0065 0.0065

Uranus 79533-10-05 00:44 G 30770168.35 30770168.53 30770168.71 0.0144 0.0085

Saturn 79534-02-04 04:05 G 30770290.49 30770290.67 30770290.85 0.0293 0.0152

Pluto 79534-02-27 04:05 G 30770313.49 30770313.67 30770313.89 0.0065 0.0028

Uranus 79534-05-19 13:12 G 30770394.85 30770395.05 30770395.27 0.0144 0.0045

Saturn 79534-09-22 00:44 G 30770520.32 30770520.53 30770520.74 0.0293 0.0050

Pluto 79534-10-10 09:08 G 30770538.66 30770538.88 30770539.10 0.0066 0.0011

Uranus 79535-01-01 02:10 G 30770621.37 30770621.59 30770621.81 0.0144 0.0005

Saturn 79535-05-09 20:39 G 30770750.26 30770750.36 30770750.47 0.0292 0.0250

Pluto 79535-05-23 13:27 G 30770763.93 30770764.06 30770764.21 0.0066 0.0050

Uranus 79535-08-15 14:39 G 30770847.90 30770848.11 30770848.33 0.0144 0.0036

Uranus 79536-03-29 03:36 G 30771074.47 30771074.65 30771074.84 0.0144 0.0076

Jupiter 79536-10-11 04:05 G 30771270.47 30771270.67 30771270.87 0.0528 0.0151

Uranus 79536-11-10 16:20 G 30771301.06 30771301.18 30771301.32 0.0144 0.0117

Jupiter 79537-06-06 01:12 G 30771508.38 30771508.55 30771508.73 0.0519 0.0269

Jupiter 79542-08-09 04:48 G 30773398.56 30773398.70 30773398.84 0.0495 0.0362

Jupiter 79543-04-02 05:03 G 30773634.51 30773634.71 30773634.92 0.0502 0.0024

Jupiter 79543-11-24 13:27 G 30773870.91 30773871.06 30773871.21 0.0510 0.0343

Mars 79544-12-09 06:00 G 30774251.69 30774251.75 30774251.81 0.1821 0.1690

Jupiter 79548-06-15 16:20 G 30775536.00 30775536.18 30775536.36 0.0530 0.0272

Saturn 79548-07-17 23:17 G 30775568.41 30775568.47 30775568.55 0.0266 0.0250

Jupiter 79549-02-08 16:34 G 30775773.99 30775774.19 30775774.39 0.0522 0.0156

Saturn 79549-03-04 03:36 G 30775797.45 30775797.65 30775797.85 0.0267 0.0097

Saturn 79549-10-19 07:41 G 30776026.62 30776026.82 30776027.04 0.0267 0.0058

Saturn 79550-06-05 12:00 G 30776255.88 30776256.00 30776256.14 0.0268 0.0214

Jupiter 79554-04-14 08:10 G 30777664.77 30777664.84 30777664.93 0.0493 0.0450

Jupiter 79554-12-06 06:44 G 30777900.58 30777900.78 30777900.97 0.0500 0.0121

Jupiter 79555-07-30 12:00 G 30778136.83 30778137.00 30778137.18 0.0508 0.0241

Neptune 79557-09-08 21:51 G 30778908.36 30778908.41 30778908.49 0.0088 0.0084

Neptune 79558-04-22 10:48 G 30779133.86 30779133.95 30779134.08 0.0088 0.0076

Neptune 79558-12-04 00:29 G 30779359.38 30779359.52 30779359.67 0.0088 0.0068

Neptune 79559-07-17 13:41 G 30779584.91 30779585.07 30779585.24 0.0088 0.0059

Jupiter 79560-02-19 04:34 G 30779801.56 30779801.69 30779801.83 0.0533 0.0391

Neptune 79560-02-28 02:39 G 30779810.45 30779810.61 30779810.81 0.0088 0.0051

Neptune 79560-10-10 15:51 G 30780035.98 30780036.16 30780036.37 0.0088 0.0043

Jupiter 79560-10-14 07:56 G 30780039.62 30780039.83 30780040.03 0.0525 0.0043

Neptune 79561-05-24 05:17 G 30780261.52 30780261.72 30780261.93 0.0088 0.0034

Jupiter 79561-06-09 00:58 G 30780277.44 30780277.54 30780277.64 0.0515 0.0441

Neptune 79562-01-04 18:29 G 30780487.07 30780487.27 30780487.50 0.0088 0.0026

Neptune 79562-08-18 07:56 G 30780712.61 30780712.83 30780713.05 0.0088 0.0017

Neptune 79563-03-31 21:08 G 30780938.16 30780938.38 30780938.60 0.0088 0.0009

Saturn 79563-08-17 11:46 G 30781076.80 30781076.99 30781077.18 0.0293 0.0121

Neptune 79563-11-12 10:05 G 30781163.70 30781163.92 30781164.15 0.0088 0.0002

Saturn 79564-04-03 08:10 G 30781306.63 30781306.84 30781307.04 0.0293 0.0081

Neptune 79564-06-24 23:17 G 30781389.25 30781389.47 30781389.70 0.0088 0.0008

Saturn 79564-11-19 03:51 G 30781536.60 30781536.66 30781536.72 0.0292 0.0279

Neptune 79565-02-05 12:44 G 30781614.81 30781615.03 30781615.25 0.0088 0.0016

Neptune 79565-09-19 01:27 G 30781840.36 30781840.56 30781840.79 0.0088 0.0025

Neptune 79566-05-02 14:39 G 30782065.91 30782066.11 30782066.32 0.0088 0.0033

Jupiter 79566-08-11 09:36 G 30782166.72 30782166.90 30782167.09 0.0497 0.0216

Neptune 79566-12-14 03:36 G 30782291.47 30782291.65 30782291.86 0.0088 0.0042

Jupiter 79567-04-04 12:44 G 30782402.84 30782403.03 30782403.23 0.0505 0.0139

Neptune 79567-07-27 16:34 G 30782517.03 30782517.19 30782517.39 0.0088 0.0050

Jupiter 79567-11-27 00:58 G 30782639.50 30782639.54 30782639.58 0.0514 0.0504

Neptune 79568-03-09 06:00 G 30782742.59 30782742.75 30782742.92 0.0088 0.0058

Neptune 79568-10-20 19:12 G 30782968.16 30782968.30 30782968.45 0.0088 0.0066

Neptune 79569-06-03 07:41 G 30783193.73 30783193.82 30783193.96 0.0088 0.0075

Neptune 79570-01-14 20:53 G 30783419.33 30783419.37 30783419.47 0.0088 0.0083

Jupiter 79571-10-24 17:32 G 30784067.17 30784067.23 30784067.30 0.0535 0.0507

Jupiter 79572-06-18 23:17 G 30784305.26 30784305.47 30784305.67 0.0527 0.0076

Jupiter 79573-02-11 19:12 G 30784543.15 30784543.30 30784543.46 0.0518 0.0339

Uranus 79574-01-18 10:05 G 30784883.85 30784883.92 30784884.00 0.0134 0.0126

Uranus 79574-09-01 14:53 G 30785109.98 30785110.12 30785110.28 0.0134 0.0094

Uranus 79575-04-15 19:56 G 30785336.15 30785336.33 30785336.53 0.0134 0.0063

Uranus 79575-11-28 00:44 G 30785562.33 30785562.53 30785562.75 0.0134 0.0031

Uranus 79576-07-11 05:46 G 30785788.53 30785788.74 30785788.96 0.0134 0.0001

Uranus 79577-02-22 10:34 G 30786014.73 30786014.94 30786015.15 0.0134 0.0032

Uranus 79577-10-06 15:08 G 30786240.95 30786241.13 30786241.33 0.0134 0.0064

Saturn	79578-01-28 00:29 G	30786354.43	30786354.52	30786354.64	0.0266	0.0233
Jupiter	79578-04-16 13:12 G	30786432.89	30786433.05	30786433.20	0.0496	0.0308
Uranus	79578-05-20 19:56 G	30786467.19	30786467.33	30786467.49	0.0134	0.0095
Saturn	79578-09-14 04:34 G	30786583.49	30786583.69	30786583.90	0.0267	0.0079
Jupiter	79578-12-08 14:10 G	30786668.89	30786669.09	30786669.30	0.0503	0.0040
Uranus	79579-01-02 00:44 G	30786693.47	30786693.53	30786693.61	0.0134	0.0126
Saturn	79579-05-01 08:39 G	30786812.65	30786812.86	30786813.06	0.0267	0.0076
Jupiter	79579-08-02 00:00 G	30786905.38	30786905.50	30786905.63	0.0512	0.0405
Saturn	79579-12-16 12:29 G	30787041.93	30787042.02	30787042.14	0.0268	0.0233
Mars	79583-05-19 18:00 G	30788292.07	30788292.25	30788292.42	0.1715	0.0128
Jupiter	79584-02-22 13:27 G	30788570.87	30788571.06	30788571.25	0.0529	0.0194
Jupiter	79584-10-17 12:15 G	30788808.82	30788809.01	30788809.19	0.0520	0.0231
Jupiter	79589-12-20 18:15 G	30790699.15	30790699.26	30790699.39	0.0494	0.0396
Jupiter	79590-08-13 18:00 G	30790935.05	30790935.25	30790935.45	0.0501	0.0060
Jupiter	79591-04-07 01:12 G	30791171.39	30791171.55	30791171.71	0.0509	0.0305
Saturn	79593-02-26 12:15 G	30791862.82	30791863.01	30791863.21	0.0293	0.0099
Saturn	79593-10-14 08:39 G	30792092.67	30792092.86	30792093.06	0.0293	0.0103
Jupiter	79595-10-27 23:32 G	30792836.32	30792836.48	30792836.65	0.0531	0.0316
Jupiter	79596-06-22 00:29 G	30793074.32	30793074.52	30793074.73	0.0523	0.0115
Jupiter	79597-02-14 15:36 G	30793312.11	30793312.15	30793312.19	0.0514	0.0501
Jupiter	79601-08-25 23:03 G	30794965.42	30794965.46	30794965.51	0.0493	0.0479
Jupiter	79602-04-18 21:08 G	30795201.19	30795201.38	30795201.57	0.0499	0.0154
Jupiter	79602-12-11 01:56 G	30795437.40	30795437.58	30795437.77	0.0507	0.0205
Jupiter	79607-07-02 10:34 G	30797101.83	30797101.94	30797102.07	0.0533	0.0437
Saturn	79607-08-10 06:44 G	30797140.65	30797140.78	30797140.92	0.0267	0.0206
Jupiter	79608-02-25 14:24 G	30797339.89	30797340.10	30797340.31	0.0525	0.0004
Saturn	79608-03-26 11:03 G	30797369.75	30797369.96	30797370.17	0.0267	0.0051
Jupiter	79608-10-20 08:24 G	30797577.72	30797577.85	30797577.98	0.0516	0.0401
Saturn	79608-11-10 15:22 G	30797598.94	30797599.14	30797599.34	0.0267	0.0104
Saturn	79609-06-27 19:56 G	30797828.28	30797828.33	30797828.38	0.0268	0.0259

Mars 79610-10-06 11:17 G 30798293.84 30798293.97 30798294.10 0.1816 0.1155

Moon 79612-10-22 22:48 G 30799041.34 30799041.45 30799041.57 0.2702 0.1688

Earth 79612-10-23 04:05 G 30799041.55 30799041.67 30799041.78 0.2698 0.1793 *

Jupiter 79613-12-22 23:32 G 30799467.31 30799467.48 30799467.66 0.0497 0.0249

Jupiter 79614-08-16 01:56 G 30799703.38 30799703.58 30799703.77 0.0504 0.0103

Jupiter 79615-04-09 12:44 G 30799939.95 30799940.03 30799940.11 0.0513 0.0467

Uranus 79616-10-20 20:39 G 30800500.33 30800500.36 30800500.42 0.0144 0.0141

Uranus 79617-06-04 09:22 G 30800726.74 30800726.89 30800727.06 0.0144 0.0101

Uranus 79618-01-16 22:05 G 30800953.23 30800953.42 30800953.63 0.0144 0.0061

Uranus 79618-08-31 11:03 G 30801179.74 30801179.96 30801180.18 0.0144 0.0020

Uranus 79619-04-14 23:46 G 30801406.27 30801406.49 30801406.71 0.0144 0.0020

Jupiter 79619-10-31 03:51 G 30801605.47 30801605.66 30801605.87 0.0528 0.0124

Uranus 79619-11-27 12:29 G 30801632.82 30801633.02 30801633.22 0.0144 0.0061

Jupiter 79620-06-25 01:27 G 30801843.39 30801843.56 30801843.73 0.0519 0.0296

Uranus 79620-07-11 00:58 G 30801859.40 30801859.54 30801859.72 0.0144 0.0102

Moon 79620-10-20 17:46 G 30801961.13 30801961.24 30801961.36 0.2704 0.1747

Earth 79620-10-20 19:27 G 30801961.18 30801961.31 30801961.44 0.2697 0.1548 *

Uranus 79621-02-22 13:56 G 30802086.06 30802086.08 30802086.14 0.0144 0.0142

Pluto 79621-10-29 10:34 G 30802334.79 30802334.94 30802335.14 0.0079 0.0050

Saturn 79622-01-22 00:44 G 30802419.45 30802419.53 30802419.61 0.0294 0.0268

Pluto 79622-06-11 20:53 G 30802560.16 30802560.37 30802560.60 0.0078 0.0018

Saturn 79622-09-08 21:22 G 30802649.18 30802649.39 30802649.59 0.0293 0.0067

Saturn 79623-04-26 17:17 G 30802879.04 30802879.22 30802879.41 0.0293 0.0136

Jupiter 79625-08-28 03:08 G 30803733.49 30803733.63 30803733.78 0.0495 0.0340

Jupiter 79626-04-21 03:22 G 30803969.44 30803969.64 30803969.84 0.0502 0.0005

Jupiter 79626-12-13 11:17 G 30804205.84 30804205.97 30804206.12 0.0510 0.0367

Jupiter 79631-07-05 18:00 G 30805871.07 30805871.25 30805871.44 0.0530 0.0243

Jupiter 79632-02-28 18:29 G 30806109.08 30806109.27 30806109.46 0.0522 0.0187

Saturn 79637-02-19 09:22 G 30807926.74 30807926.89 30807927.05 0.0266 0.0185

Jupiter 79637-05-03 06:58 G 30807999.70 30807999.79 30807999.89 0.0493 0.0428

Saturn 79637-10-06 13:12 G 30808155.84 30808156.05 30808156.27 0.0267 0.0032

Jupiter 79637-12-25 05:32 G 30808235.53 30808235.73 30808235.93 0.0500 0.0097

Saturn 79638-05-23 17:17 G 30808385.03 30808385.22 30808385.41 0.0267 0.0124

Jupiter 79638-08-18 11:32 G 30808471.81 30808471.98 30808472.15 0.0508 0.0265

Neptune 79641-01-18 17:03 G 30809356.15 30809356.21 30809356.30 0.0089 0.0083

Neptune 79641-09-01 05:46 G 30809581.64 30809581.74 30809581.88 0.0089 0.0075

Neptune 79642-04-14 18:44 G 30809807.15 30809807.28 30809807.43 0.0089 0.0067

Neptune 79642-11-26 07:12 G 30810032.66 30810032.80 30810032.99 0.0089 0.0059

Jupiter 79643-03-10 07:27 G 30810136.66 30810136.81 30810136.96 0.0532 0.0361

Neptune 79643-07-09 20:24 G 30810258.18 30810258.35 30810258.54 0.0089 0.0050

Jupiter 79643-11-03 10:05 G 30810374.71 30810374.92 30810375.12 0.0524 0.0073

Neptune 79644-02-20 09:08 G 30810483.70 30810483.88 30810484.09 0.0089 0.0041

Jupiter 79644-06-28 02:24 G 30810612.52 30810612.60 30810612.69 0.0515 0.0468

Neptune 79644-10-02 22:05 G 30810709.23 30810709.42 30810709.63 0.0089 0.0033

Neptune 79645-05-16 11:03 G 30810934.75 30810934.96 30810935.17 0.0089 0.0024

Neptune 79645-12-27 23:46 G 30811160.28 30811160.49 30811160.71 0.0089 0.0015

Neptune 79646-08-10 12:44 G 30811385.82 30811386.03 30811386.25 0.0089 0.0007

Neptune 79647-03-24 01:41 G 30811611.35 30811611.57 30811611.79 0.0089 0.0002

Neptune 79647-11-04 14:24 G 30811836.89 30811837.10 30811837.32 0.0089 0.0011

Neptune 79648-06-17 03:22 G 30812062.43 30812062.64 30812062.85 0.0089 0.0019

Neptune 79649-01-28 16:05 G 30812287.97 30812288.17 30812288.39 0.0089 0.0028

Mars 79649-03-16 03:36 G 30812334.48 30812334.65 30812334.82 0.1719 0.0184

Jupiter 79649-08-30 09:36 G 30812501.72 30812501.90 30812502.09 0.0498 0.0191

Neptune 79649-09-11 05:03 G 30812513.52 30812513.71 30812513.91 0.0089 0.0037

Jupiter 79650-04-23 13:27 G 30812737.87 30812738.06 30812738.25 0.0506 0.0166

Neptune 79650-04-24 17:46 G 30812739.07 30812739.24 30812739.44 0.0089 0.0046

Neptune 79650-12-06 06:58 G 30812964.62 30812964.79 30812964.96 0.0089 0.0054

Neptune 79651-07-19 19:41 G 30813190.18 30813190.32 30813190.49 0.0089 0.0063

Saturn 79651-08-04 01:56 G 30813205.48 30813205.58 30813205.70 0.0293 0.0245

Neptune 79652-03-01 08:24 G 30813415.74 30813415.85 30813416.00 0.0090 0.0072

Saturn 79652-03-20 22:34 G 30813435.24 30813435.44 30813435.65 0.0293 0.0044

Neptune 79652-10-12 21:22 G 30813641.31 30813641.39 30813641.51 0.0090 0.0080

Saturn 79652-11-05 18:58 G 30813665.11 30813665.29 30813665.46 0.0292 0.0158

Neptune 79653-05-26 10:34 G 30813866.91 30813866.94 30813866.98 0.0090 0.0088

Jupiter 79654-11-12 17:17 G 30814402.14 30814402.22 30814402.31 0.0534 0.0479

Jupiter 79655-07-08 21:51 G 30814640.20 30814640.41 30814640.61 0.0526 0.0049

Jupiter 79656-03-02 16:48 G 30814878.06 30814878.20 30814878.35 0.0517 0.0363

Uranus 79658-05-02 03:22 G 30815668.52 30815668.64 30815668.78 0.0134 0.0107

Uranus 79658-12-14 08:39 G 30815894.68 30815894.86 30815895.04 0.0134 0.0075

Uranus 79659-07-28 13:27 G 30816120.86 30816121.06 30816121.27 0.0134 0.0043

Uranus 79660-03-10 18:29 G 30816347.06 30816347.27 30816347.49 0.0134 0.0012

Uranus 79660-10-22 23:17 G 30816573.26 30816573.47 30816573.68 0.0134 0.0020

Jupiter 79661-05-05 13:27 G 30816767.90 30816768.06 30816768.23 0.0496 0.0283

Uranus 79661-06-06 03:51 G 30816799.47 30816799.66 30816799.87 0.0134 0.0052

Jupiter 79661-12-27 15:08 G 30817003.94 30817004.13 30817004.34 0.0504 0.0068

Uranus 79662-01-18 08:39 G 30817025.70 30817025.86 30817026.04 0.0134 0.0083

Jupiter 79662-08-21 01:27 G 30817240.46 30817240.56 30817240.67 0.0512 0.0432

Uranus 79662-09-01 13:41 G 30817251.97 30817252.07 30817252.19 0.0134 0.0114

Saturn 79666-09-01 15:36 G 30818712.98 30818713.15 30818713.32 0.0267 0.0159

Jupiter 79667-03-13 10:05 G 30818905.73 30818905.92 30818906.12 0.0529 0.0170

Saturn 79667-04-18 19:56 G 30818942.11 30818942.33 30818942.54 0.0267 0.0005

Jupiter 79667-11-06 08:10 G 30819143.66 30819143.84 30819144.02 0.0520 0.0254

Saturn 79667-12-04 00:00 G 30819171.33 30819171.50 30819171.68 0.0268 0.0153

Jupiter 79673-01-08 16:34 G 30821034.07 30821034.19 30821034.33 0.0494 0.0374

Jupiter 79673-09-01 16:05 G 30821269.97 30821270.17 30821270.38 0.0501 0.0036

Jupiter 79674-04-25 23:03 G 30821506.32 30821506.46 30821506.62 0.0509 0.0330

Mars 79676-08-02 17:17 G 30822336.05 30822336.22 30822336.38 0.1813 0.0648

Jupiter 79678-11-15 22:05 G 30823171.25 30823171.42 30823171.59 0.0531 0.0292

Jupiter 79679-07-11 23:32 G 30823409.28 30823409.48 30823409.68 0.0523 0.0140

Saturn 79681-02-13 12:15 G 30823991.87 30823992.01 30823992.16 0.0294 0.0211

Saturn	79681-10-01 08:53 G	30824221.66	30824221.87	30824222.08	0.0293	0.0010
Saturn	79682-05-19 04:48 G	30824451.55	30824451.70	30824451.86	0.0292	0.0192
Jupiter	79684-09-13 20:53 G	30825300.30	30825300.37	30825300.45	0.0493	0.0459
Jupiter	79685-05-07 18:29 G	30825536.08	30825536.27	30825536.47	0.0499	0.0132
Jupiter	79685-12-29 23:03 G	30825772.28	30825772.46	30825772.64	0.0507	0.0228
Jupiter	79690-07-21 10:48 G	30827436.83	30827436.95	30827437.09	0.0533	0.0411
Jupiter	79691-03-16 14:53 G	30827674.92	30827675.12	30827675.33	0.0525	0.0027
Jupiter	79691-11-09 08:53 G	30827912.77	30827912.87	30827912.99	0.0516	0.0429
Saturn	79696-03-13 19:12 G	30829499.13	30829499.30	30829499.49	0.0267	0.0137
Saturn	79696-10-28 23:17 G	30829728.26	30829728.47	30829728.69	0.0267	0.0019
Jupiter	79697-01-10 21:22 G	30829802.21	30829802.39	30829802.57	0.0497	0.0227
Saturn	79697-06-15 03:22 G	30829957.48	30829957.64	30829957.81	0.0268	0.0174
Jupiter	79697-09-03 23:46 G	30830038.30	30830038.49	30830038.69	0.0505	0.0126
Jupiter	79698-04-28 11:03 G	30830274.91	30830274.96	30830275.02	0.0514	0.0491
Uranus	79701-02-02 16:34 G	30831285.07	30831285.19	30831285.32	0.0144	0.0118
Uranus	79701-09-17 05:17 G	30831511.54	30831511.72	30831511.91	0.0144	0.0078
Jupiter	79702-03-26 23:17 G	30831702.44	30831702.47	30831702.51	0.0535	0.0526
Uranus	79702-05-01 18:00 G	30831738.04	30831738.25	30831738.46	0.0144	0.0038
Jupiter	79702-11-20 05:32 G	30831940.53	30831940.73	30831940.93	0.0528	0.0094
Uranus	79702-12-14 06:44 G	30831964.56	30831964.78	30831965.00	0.0144	0.0003
Jupiter	79703-07-16 02:24 G	30832178.44	30832178.60	30832178.76	0.0519	0.0324
Uranus	79703-07-28 19:27 G	30832191.11	30832191.31	30832191.53	0.0144	0.0043
Uranus	79704-03-11 08:24 G	30832417.68	30832417.85	30832418.04	0.0144	0.0084
Uranus	79704-10-23 21:22 G	30832644.29	30832644.39	30832644.51	0.0144	0.0124
Jupiter	79708-09-17 01:56 G	30834068.43	30834068.58	30834068.74	0.0495	0.0318
Jupiter	79709-05-11 02:39 G	30834304.41	30834304.61	30834304.81	0.0502	0.0027
Jupiter	79710-01-02 11:32 G	30834540.85	30834540.98	30834541.11	0.0511	0.0393
Saturn	79710-08-27 14:24 G	30834777.94	30834778.10	30834778.26	0.0293	0.0187
Saturn	79711-04-14 10:48 G	30835007.74	30835007.95	30835008.16	0.0293	0.0015
Saturn	79711-11-30 06:44 G	30835237.65	30835237.78	30835237.93	0.0292	0.0215

Jupiter 79714-07-25 16:48 G 30836206.01 30836206.20 30836206.39 0.0529 0.0215

Mars 79715-01-12 13:41 G 30836376.91 30836377.07 30836377.24 0.1722 0.0480

Jupiter 79715-03-20 15:51 G 30836443.98 30836444.16 30836444.35 0.0521 0.0212

Jupiter 79720-05-23 06:00 G 30838334.64 30838334.75 30838334.86 0.0494 0.0406

Jupiter 79721-01-14 05:03 G 30838570.52 30838570.71 30838570.92 0.0500 0.0072

Jupiter 79721-09-07 11:46 G 30838806.82 30838806.99 30838807.15 0.0509 0.0293

Neptune 79721-12-12 05:46 G 30838902.73 30838902.74 30838902.79 0.0088 0.0088

Neptune 79722-07-25 18:58 G 30839128.22 30839128.29 30839128.41 0.0088 0.0079

Neptune 79723-03-08 08:39 G 30839353.73 30839353.86 30839353.99 0.0088 0.0071

Neptune 79723-10-19 21:36 G 30839579.25 30839579.40 30839579.57 0.0088 0.0062

Neptune 79724-06-01 10:34 G 30839804.78 30839804.94 30839805.14 0.0088 0.0054

Neptune 79725-01-13 00:15 G 30840030.33 30840030.51 30840030.71 0.0088 0.0045

Saturn 79725-02-07 21:22 G 30840056.37 30840056.39 30840056.42 0.0267 0.0264

Neptune 79725-08-26 13:27 G 30840255.87 30840256.06 30840256.27 0.0088 0.0037

Saturn 79725-09-25 01:41 G 30840285.37 30840285.57 30840285.76 0.0267 0.0110

Jupiter 79726-03-30 04:05 G 30840471.51 30840471.67 30840471.83 0.0532 0.0337

Neptune 79726-04-09 02:24 G 30840481.41 30840481.60 30840481.83 0.0088 0.0029

Saturn 79726-05-12 05:46 G 30840514.53 30840514.74 30840514.96 0.0267 0.0046

Neptune 79726-11-20 15:51 G 30840706.95 30840707.16 30840707.38 0.0088 0.0020

Jupiter 79726-11-23 05:46 G 30840709.54 30840709.74 30840709.95 0.0524 0.0096

Saturn 79726-12-27 10:05 G 30840743.79 30840743.92 30840744.07 0.0268 0.0202

Neptune 79727-07-04 05:03 G 30840932.50 30840932.71 30840932.94 0.0088 0.0012

Jupiter 79727-07-18 21:36 G 30840947.34 30840947.40 30840947.47 0.0514 0.0488

Neptune 79728-02-14 18:29 G 30841158.05 30841158.27 30841158.50 0.0088 0.0004

Neptune 79728-09-27 07:41 G 30841383.60 30841383.82 30841384.05 0.0088 0.0005

Neptune 79729-05-10 20:39 G 30841609.15 30841609.36 30841609.59 0.0088 0.0014

Neptune 79729-12-22 10:05 G 30841834.71 30841834.92 30841835.14 0.0088 0.0022

Neptune 79730-08-04 23:03 G 30842060.26 30842060.46 30842060.68 0.0088 0.0031

Neptune 79731-03-18 12:15 G 30842285.82 30842286.01 30842286.22 0.0088 0.0039

Neptune 79731-10-30 00:58 G 30842511.38 30842511.54 30842511.75 0.0088 0.0048

Jupiter 79732-01-27 09:51 G 30842600.91 30842600.91 30842600.92 0.0492 0.0491

Neptune 79732-06-11 14:10 G 30842736.94 30842737.09 30842737.28 0.0088 0.0056

Jupiter 79732-09-19 06:58 G 30842836.61 30842836.79 30842836.99 0.0498 0.0169

Neptune 79733-01-23 03:36 G 30842962.51 30842962.65 30842962.81 0.0088 0.0064

Jupiter 79733-05-13 10:48 G 30843072.76 30843072.95 30843073.13 0.0506 0.0189

Neptune 79733-09-05 17:03 G 30843188.08 30843188.21 30843188.33 0.0088 0.0072

Neptune 79734-04-19 05:17 G 30843413.66 30843413.72 30843413.83 0.0088 0.0081

Jupiter 79737-12-02 14:24 G 30844737.00 30844737.10 30844737.21 0.0534 0.0458

Jupiter 79738-07-28 19:12 G 30844975.10 30844975.30 30844975.51 0.0526 0.0027

Jupiter 79739-03-23 14:53 G 30845212.98 30845213.12 30845213.25 0.0518 0.0387

Saturn 79740-03-09 01:41 G 30845564.40 30845564.57 30845564.76 0.0294 0.0151

Saturn 79740-10-24 22:20 G 30845794.22 30845794.43 30845794.63 0.0293 0.0052

Saturn 79741-06-11 18:00 G 30846024.15 30846024.25 30846024.36 0.0292 0.0252

Uranus 79741-12-31 16:05 G 30846227.08 30846227.17 30846227.28 0.0134 0.0118

Mars 79742-05-31 22:48 G 30846378.27 30846378.45 30846378.62 0.1808 0.0136

Uranus 79742-08-14 21:08 G 30846453.23 30846453.38 30846453.56 0.0134 0.0087

Uranus 79743-03-29 02:10 G 30846679.40 30846679.59 30846679.79 0.0134 0.0055

Uranus 79743-11-10 07:12 G 30846905.59 30846905.80 30846906.01 0.0134 0.0024

Jupiter 79744-05-25 10:20 G 30847102.76 30847102.93 30847103.10 0.0496 0.0262

Uranus 79744-06-23 12:00 G 30847131.79 30847132.00 30847132.22 0.0134 0.0008

Jupiter 79745-01-16 11:46 G 30847338.79 30847338.99 30847339.19 0.0503 0.0088

Uranus 79745-02-04 16:48 G 30847358.00 30847358.20 30847358.41 0.0134 0.0039

Jupiter 79745-09-09 21:36 G 30847575.31 30847575.40 30847575.49 0.0512 0.0452

Uranus 79745-09-18 21:36 G 30847584.23 30847584.40 30847584.59 0.0134 0.0071

Uranus 79746-05-03 02:24 G 30847810.47 30847810.60 30847810.75 0.0134 0.0102

Uranus 79746-12-15 07:12 G 30848036.79 30848036.80 30848036.83 0.0134 0.0133

Jupiter 79750-04-02 09:08 G 30849240.69 30849240.88 30849241.08 0.0529 0.0145

Jupiter 79750-11-26 07:41 G 30849478.65 30849478.82 30849479.00 0.0520 0.0280

Saturn 79754-08-21 02:10 G 30850842.51 30850842.59 30850842.70 0.0266 0.0240

Saturn 79755-04-07 06:29 G 30851071.57 30851071.77 30851071.98 0.0267 0.0086

Saturn 79755-11-22 10:34 G 30851300.73 30851300.94 30851301.15 0.0267 0.0070

Jupiter 79756-01-29 13:41 G 30851368.93 30851369.07 30851369.21 0.0494 0.0353

Saturn 79756-07-08 14:53 G 30851530.01 30851530.12 30851530.24 0.0268 0.0225

Jupiter 79756-09-21 13:12 G 30851604.85 30851605.05 30851605.25 0.0501 0.0015

Jupiter 79757-05-15 20:24 G 30851841.21 30851841.35 30851841.50 0.0510 0.0352

Earth 79758-04-21 20:10 G 30852182.18 30852182.34 30852182.50 0.2636 0.0503

Moon 79758-04-22 01:27 G 30852182.41 30852182.56 30852182.72 0.2634 0.0859 *

Jupiter 79761-12-05 22:48 G 30853506.27 30853506.45 30853506.63 0.0531 0.0263

Jupiter 79762-07-31 23:46 G 30853744.30 30853744.49 30853744.69 0.0523 0.0169

Jupiter 79767-10-04 18:15 G 30855635.18 30855635.26 30855635.36 0.0493 0.0440

Jupiter 79768-05-27 16:34 G 30855870.99 30855871.19 30855871.39 0.0499 0.0109

Jupiter 79769-01-18 21:36 G 30856107.23 30856107.40 30856107.58 0.0507 0.0252

Saturn 79769-09-19 04:48 G 30856350.52 30856350.70 30856350.90 0.0293 0.0125

Saturn 79770-05-07 01:12 G 30856580.35 30856580.55 30856580.75 0.0292 0.0077

Saturn 79770-12-22 20:39 G 30856810.31 30856810.36 30856810.44 0.0292 0.0276

Jupiter 79773-08-10 09:51 G 30857771.77 30857771.91 30857772.05 0.0533 0.0384

Jupiter 79774-04-05 12:44 G 30858009.82 30858010.03 30858010.23 0.0525 0.0050

Jupiter 79774-11-29 05:46 G 30858247.64 30858247.74 30858247.84 0.0515 0.0450

Jupiter 79780-01-31 19:41 G 30860137.13 30860137.32 30860137.50 0.0498 0.0204

Jupiter 79780-09-23 22:48 G 30860373.26 30860373.45 30860373.64 0.0505 0.0152

Mars 79780-11-08 23:32 G 30860419.33 30860419.48 30860419.64 0.1726 0.0791

Pluto 79781-06-20 21:36 G 30860643.22 30860643.40 30860643.61 0.0066 0.0029

Pluto 79782-02-01 02:10 G 30860868.38 30860868.59 30860868.82 0.0066 0.0010

Pluto 79782-09-14 06:58 G 30861093.65 30861093.79 30861093.94 0.0066 0.0048

Saturn 79784-03-02 07:56 G 30861628.72 30861628.83 30861628.97 0.0267 0.0215

Uranus 79784-10-02 23:46 G 30861843.43 30861843.49 30861843.57 0.0144 0.0135

Saturn 79784-10-17 12:29 G 30861857.81 30861858.02 30861858.23 0.0267 0.0060

Jupiter 79785-04-14 20:10 G 30862037.28 30862037.34 30862037.41 0.0534 0.0503

Uranus 79785-05-17 12:15 G 30862069.86 30862070.01 30862070.19 0.0144 0.0096

Saturn 79785-06-03 16:48 G 30862087.00 30862087.20 30862087.40 0.0268 0.0096

Jupiter 79785-12-09 01:27 G 30862275.36 30862275.56 30862275.76 0.0527 0.0070

Uranus 79785-12-30 01:12 G 30862296.35 30862296.55 30862296.76 0.0144 0.0055

Saturn 79786-01-18 21:08 G 30862316.33 30862316.38 30862316.47 0.0268 0.0252

Jupiter 79786-08-03 21:36 G 30862513.25 30862513.40 30862513.55 0.0518 0.0345

Uranus 79786-08-13 14:10 G 30862522.87 30862523.09 30862523.31 0.0144 0.0015

Uranus 79787-03-28 03:08 G 30862749.41 30862749.63 30862749.85 0.0144 0.0025

Uranus 79787-11-09 15:36 G 30862975.97 30862976.15 30862976.36 0.0144 0.0067

Uranus 79788-06-23 04:34 G 30863202.56 30863202.69 30863202.85 0.0144 0.0107

Jupiter 79791-10-06 22:34 G 30864403.28 30864403.44 30864403.60 0.0495 0.0299

Jupiter 79792-05-29 23:17 G 30864639.27 30864639.47 30864639.67 0.0502 0.0050

Jupiter 79793-01-21 07:56 G 30864875.71 30864875.83 30864875.95 0.0511 0.0413

Jupiter 79797-08-13 12:58 G 30866540.85 30866541.04 30866541.23 0.0530 0.0194

Jupiter 79798-04-08 12:29 G 30866778.84 30866779.02 30866779.21 0.0521 0.0235

Saturn 79798-08-14 20:24 G 30866907.32 30866907.35 30866907.40 0.0294 0.0288

Saturn 79799-04-01 17:03 G 30867137.01 30867137.21 30867137.41 0.0293 0.0087

Saturn 79799-11-17 13:12 G 30867366.86 30867367.05 30867367.24 0.0293 0.0115

Jupiter 79803-06-13 02:24 G 30868669.48 30868669.60 30868669.73 0.0494 0.0387

Jupiter 79804-02-04 01:12 G 30868905.35 30868905.55 30868905.75 0.0500 0.0050

Jupiter 79804-09-27 07:12 G 30869141.64 30869141.80 30869141.96 0.0508 0.0313

Neptune 79805-04-24 01:41 G 30869350.52 30869350.57 30869350.61 0.0089 0.0087

Neptune 79805-12-05 13:56 G 30869576.00 30869576.08 30869576.20 0.0089 0.0079

Neptune 79806-07-19 02:53 G 30869801.51 30869801.62 30869801.77 0.0089 0.0070

Neptune 79807-03-01 15:51 G 30870027.02 30870027.16 30870027.33 0.0089 0.0062

Neptune 79807-10-13 04:20 G 30870252.53 30870252.68 30870252.88 0.0089 0.0054

Mars 79808-03-29 04:20 G 30870420.51 30870420.68 30870420.85 0.1804 0.0382

Neptune 79808-05-25 17:17 G 30870478.05 30870478.22 30870478.43 0.0089 0.0045

Neptune 79809-01-06 06:29 G 30870703.57 30870703.77 30870703.97 0.0089 0.0036

Jupiter 79809-04-19 01:27 G 30870806.40 30870806.56 30870806.73 0.0532 0.0316

Neptune 79809-08-19 18:58 G 30870929.10 30870929.29 30870929.51 0.0089 0.0028

Jupiter 79809-12-13 04:05 G 30871044.47 30871044.67 30871044.87 0.0524 0.0120

Neptune 79810-04-02 07:56 G 30871154.62 30871154.83 30871155.05 0.0089 0.0019

Jupiter 79810-08-07 20:10 G 30871282.33 30871282.34 30871282.37 0.0515 0.0511

Neptune 79810-11-13 20:53 G 30871380.15 30871380.37 30871380.58 0.0089 0.0010

Neptune 79811-06-27 09:36 G 30871605.69 30871605.90 30871606.12 0.0089 0.0002

Neptune 79812-02-07 22:34 G 30871831.22 30871831.44 30871831.66 0.0089 0.0008

Neptune 79812-09-20 11:17 G 30872056.76 30872056.97 30872057.19 0.0089 0.0016

Mars 79812-11-09 00:29 G 30872106.47 30872106.52 30872106.56 0.1715 0.1653

Neptune 79813-05-03 23:46 G 30872282.30 30872282.49 30872282.71 0.0089 0.0026

Saturn 79813-09-13 14:24 G 30872414.95 30872415.10 30872415.25 0.0267 0.0188

Neptune 79813-12-15 12:44 G 30872507.84 30872508.03 30872508.24 0.0089 0.0034

Saturn 79814-04-30 18:29 G 30872644.06 30872644.27 30872644.48 0.0267 0.0033

Neptune 79814-07-29 01:41 G 30872733.39 30872733.57 30872733.77 0.0089 0.0043

Saturn 79814-12-15 22:34 G 30872873.25 30872873.44 30872873.63 0.0267 0.0122

Jupiter 79815-02-16 06:15 G 30872935.71 30872935.76 30872935.81 0.0492 0.0473

Neptune 79815-03-11 14:53 G 30872958.94 30872959.12 30872959.30 0.0089 0.0051

Jupiter 79815-10-10 03:08 G 30873171.44 30873171.63 30873171.83 0.0498 0.0149

Neptune 79815-10-23 03:22 G 30873184.49 30873184.64 30873184.82 0.0089 0.0060

Jupiter 79816-06-02 06:58 G 30873407.61 30873407.79 30873407.97 0.0506 0.0210

Neptune 79816-06-04 16:05 G 30873410.05 30873410.17 30873410.33 0.0089 0.0069

Neptune 79817-01-16 05:17 G 30873635.62 30873635.72 30873635.84 0.0090 0.0077

Neptune 79817-08-29 18:00 G 30873861.21 30873861.25 30873861.33 0.0090 0.0086

Jupiter 79820-12-22 14:10 G 30875071.98 30875072.09 30875072.21 0.0534 0.0433

Jupiter 79821-08-17 18:58 G 30875310.09 30875310.29 30875310.50 0.0526 0.0004

Jupiter 79822-04-12 13:56 G 30875547.96 30875548.08 30875548.21 0.0517 0.0412

Uranus 79825-09-01 04:48 G 30876785.66 30876785.70 30876785.77 0.0134 0.0130

Uranus 79826-04-15 10:05 G 30877011.78 30877011.92 30877012.07 0.0134 0.0099

Uranus 79826-11-27 14:53 G 30877237.94 30877238.12 30877238.31 0.0134 0.0067

Jupiter 79827-06-15 07:12 G 30877437.62 30877437.80 30877437.98 0.0496 0.0242

Uranus 79827-07-11 19:56 G 30877464.13 30877464.33 30877464.54 0.0134 0.0036

Jupiter 79828-02-06 09:08 G 30877673.68 30877673.88 30877674.07 0.0504 0.0111

Uranus 79828-02-23 00:58 G 30877690.32 30877690.54 30877690.75 0.0134 0.0004

Saturn 79828-02-26 00:15 G 30877693.43 30877693.51 30877693.62 0.0293 0.0262

Jupiter 79828-09-29 19:27 G 30877910.24 30877910.31 30877910.39 0.0513 0.0476

Uranus 79828-10-06 05:46 G 30877916.53 30877916.74 30877916.95 0.0134 0.0027

Saturn 79828-10-12 20:53 G 30877923.17 30877923.37 30877923.58 0.0293 0.0060

Uranus 79829-05-20 10:20 G 30878142.75 30878142.93 30878143.13 0.0134 0.0059

Saturn 79829-05-30 16:48 G 30878153.02 30878153.20 30878153.39 0.0292 0.0141

Uranus 79830-01-01 15:08 G 30878368.98 30878369.13 30878369.30 0.0134 0.0090

Uranus 79830-08-15 19:56 G 30878595.26 30878595.33 30878595.44 0.0134 0.0121

Jupiter 79833-04-22 07:12 G 30879575.61 30879575.80 30879576.01 0.0528 0.0119

Jupiter 79833-12-16 04:48 G 30879813.53 30879813.70 30879813.87 0.0519 0.0303

Jupiter 79839-02-18 10:34 G 30881703.80 30881703.94 30881704.09 0.0495 0.0334

Jupiter 79839-10-12 10:48 G 30881939.75 30881939.95 30881940.16 0.0502 0.0016

Jupiter 79840-06-04 18:58 G 30882176.16 30882176.29 30882176.42 0.0510 0.0376

Saturn 79843-03-26 19:27 G 30883201.14 30883201.31 30883201.48 0.0267 0.0164

Saturn 79843-11-10 23:46 G 30883430.28 30883430.49 30883430.71 0.0267 0.0010

Saturn 79844-06-27 04:05 G 30883659.50 30883659.67 30883659.86 0.0268 0.0148

Jupiter 79844-12-25 19:12 G 30883841.12 30883841.30 30883841.48 0.0530 0.0240

Jupiter 79845-08-20 19:12 G 30884079.11 30884079.30 30884079.50 0.0522 0.0191

Mars 79846-09-07 09:22 G 30884461.76 30884461.89 30884462.02 0.1729 0.1101

Jupiter 79850-10-24 14:10 G 30885970.00 30885970.09 30885970.20 0.0493 0.0423

Jupiter 79851-06-17 12:44 G 30886205.83 30886206.03 30886206.23 0.0499 0.0089

Jupiter 79852-02-08 17:46 G 30886442.07 30886442.24 30886442.41 0.0507 0.0272

Earth 79855-10-26 05:32 G 30887797.62 30887797.73 30887797.84 0.2697 0.1887

Moon 79855-10-26 11:17 G 30887797.87 30887797.97 30887798.06 0.2696 0.2101

Jupiter 79856-08-30 04:48 G 30888106.56 30888106.70 30888106.85 0.0533 0.0366

Jupiter 79857-04-25 08:24 G 30888344.64 30888344.85 30888345.05 0.0525 0.0071

Saturn 79857-09-07 12:58 G 30888479.91 30888480.04 30888480.18 0.0294 0.0223

Jupiter 79857-12-19 01:56 G 30888582.50 30888582.58 30888582.66 0.0516 0.0470

Saturn 79858-04-25 09:22 G 30888709.69 30888709.89 30888710.10 0.0293 0.0022

Saturn 79858-12-11 05:17 G 30888939.57 30888939.72 30888939.89 0.0293 0.0181

Jupiter 79863-02-20 15:36 G 30890471.96 30890472.15 30890472.34 0.0497 0.0186

Jupiter 79863-10-14 18:15 G 30890708.07 30890708.26 30890708.45 0.0505 0.0171

Earth 79863-10-23 20:53 G 30890717.24 30890717.37 30890717.50 0.2696 0.1464

Moon 79863-10-24 00:15 G 30890717.36 30890717.51 30890717.67 0.2690 0.0859 *

Jupiter 79868-05-04 16:05 G 30892372.09 30892372.17 30892372.26 0.0535 0.0485

Jupiter 79868-12-28 22:20 G 30892610.22 30892610.43 30892610.63 0.0528 0.0048

Uranus 79869-01-15 18:00 G 30892628.12 30892628.25 30892628.38 0.0144 0.0114

Pluto 79869-02-21 04:34 G 30892664.53 30892664.69 30892664.88 0.0079 0.0050

Jupiter 79869-08-23 19:12 G 30892848.16 30892848.30 30892848.44 0.0519 0.0368

Uranus 79869-08-30 06:44 G 30892854.59 30892854.78 30892854.97 0.0144 0.0074

Pluto 79869-10-04 14:39 G 30892889.91 30892890.11 30892890.34 0.0078 0.0018

Uranus 79870-04-13 19:27 G 30893081.10 30893081.31 30893081.53 0.0144 0.0034

Uranus 79870-11-26 08:10 G 30893307.62 30893307.84 30893308.07 0.0144 0.0007

Uranus 79871-07-10 21:08 G 30893534.17 30893534.38 30893534.59 0.0144 0.0047

Uranus 79872-02-22 09:51 G 30893760.75 30893760.91 30893761.10 0.0144 0.0087

Uranus 79872-10-05 22:34 G 30893987.36 30893987.44 30893987.56 0.0144 0.0128

Saturn 79872-10-06 02:24 G 30893987.42 30893987.60 30893987.79 0.0267 0.0136 *

Saturn 79873-05-23 06:29 G 30894216.56 30894216.77 30894216.99 0.0267 0.0020

Saturn 79874-01-07 10:48 G 30894445.79 30894445.95 30894446.12 0.0268 0.0175

Mars 79874-01-24 10:34 G 30894462.79 30894462.94 30894463.10 0.1800 0.0846

Jupiter 79874-10-26 18:15 G 30894738.09 30894738.26 30894738.43 0.0495 0.0279

Jupiter 79875-06-19 18:58 G 30894974.09 30894974.29 30894974.49 0.0502 0.0069

Jupiter 79876-02-11 03:36 G 30895210.55 30895210.65 30895210.76 0.0511 0.0434

Mars 79878-09-06 10:34 G 30896148.84 30896148.94 30896149.04 0.1718 0.1360

Jupiter 79880-09-02 12:00 G 30896875.81 30896876.00 30896876.20 0.0530 0.0169

Jupiter 79881-04-28 11:32 G 30897113.81 30897113.98 30897114.16 0.0521 0.0260

Jupiter 79886-07-01 22:48 G 30899004.31 30899004.45 30899004.58 0.0494 0.0369

Neptune 79886-10-28 02:53 G 30899122.56 30899122.62 30899122.72 0.0088 0.0082

Jupiter 79887-02-22 21:36 G 30899240.20 30899240.40 30899240.61 0.0500 0.0032

Saturn 79887-03-20 17:17 G 30899266.07 30899266.22 30899266.38 0.0293 0.0195

Neptune 79887-06-10 15:51 G 30899348.07 30899348.16 30899348.31 0.0088 0.0074

Jupiter 79887-10-17 04:05 G 30899476.53 30899476.67 30899476.83 0.0509 0.0335

Saturn 79887-11-05 13:41 G 30899495.86 30899496.07 30899496.28 0.0293 0.0007

Neptune 79888-01-22 05:32 G 30899573.59 30899573.73 30899573.89 0.0088 0.0065

Saturn 79888-06-22 09:22 G 30899725.75 30899725.89 30899726.04 0.0292 0.0206

Neptune 79888-09-03 18:29 G 30899799.12 30899799.27 30899799.46 0.0088 0.0057

Neptune 79889-04-17 07:56 G 30900024.65 30900024.83 30900025.02 0.0088 0.0049

Neptune 79889-11-28 20:53 G 30900250.19 30900250.37 30900250.58 0.0088 0.0040

Neptune 79890-07-12 10:34 G 30900475.73 30900475.94 30900476.15 0.0088 0.0032

Neptune 79891-02-22 23:32 G 30900701.28 30900701.48 30900701.71 0.0088 0.0023

Neptune 79891-10-06 12:44 G 30900926.82 30900927.03 30900927.26 0.0088 0.0015

Jupiter 79892-05-08 00:15 G 30901141.34 30901141.51 30901141.68 0.0531 0.0289

Neptune 79892-05-19 02:10 G 30901152.37 30901152.59 30901152.81 0.0088 0.0006

Neptune 79892-12-30 15:36 G 30901377.92 30901378.15 30901378.37 0.0088 0.0003

Jupiter 79893-01-01 01:56 G 30901379.38 30901379.58 30901379.77 0.0523 0.0145

Neptune 79893-08-13 04:48 G 30901603.48 30901603.70 30901603.92 0.0088 0.0011

Neptune 79894-03-26 17:46 G 30901829.03 30901829.24 30901829.46 0.0088 0.0020

Neptune 79894-11-07 06:58 G 30902054.58 30902054.79 30902055.01 0.0088 0.0028

Neptune 79895-06-20 19:56 G 30902280.14 30902280.33 30902280.55 0.0088 0.0037

Neptune 79896-02-01 09:22 G 30902505.71 30902505.89 30902506.09 0.0088 0.0045

Neptune 79896-09-13 22:48 G 30902731.27 30902731.45 30902731.62 0.0088 0.0053

Neptune 79897-04-27 11:17 G 30902956.84 30902956.97 30902957.15 0.0088 0.0062

Neptune 79897-12-09 00:44 G 30903182.41 30903182.53 30903182.67 0.0088 0.0070

Jupiter 79898-03-07 02:24 G 30903270.53 30903270.60 30903270.67 0.0493 0.0456

Neptune 79898-07-22 13:56 G 30903407.99 30903408.08 30903408.19 0.0088 0.0078

Jupiter 79898-10-29 00:15 G 30903506.31 30903506.51 30903506.70 0.0499 0.0128

Neptune 79899-03-05 02:39 G 30903633.60 30903633.61 30903633.67 0.0088 0.0087

Jupiter 79899-06-22 04:48 G 30903742.52 30903742.70 30903742.88 0.0507 0.0234

Saturn 79901-09-02 02:24 G 30904544.60 30904544.60 30904544.61 0.0267 0.0267

Saturn 79902-04-19 06:44 G 30904773.59 30904773.78 30904773.98 0.0267 0.0113

Saturn 79902-12-04 11:17 G 30905002.76 30905002.97 30905003.18 0.0268 0.0043

Saturn 79903-07-21 15:36 G 30905232.02 30905232.15 30905232.30 0.0268 0.0199

Jupiter 79904-01-12 11:17 G 30905406.85 30905406.97 30905407.10 0.0533 0.0411

Jupiter 79904-09-06 15:08 G 30905644.93 30905645.13 30905645.34 0.0526 0.0027

Jupiter 79905-05-02 09:22 G 30905882.78 30905882.89 30905883.01 0.0517 0.0432

Uranus 79909-12-14 22:34 G 30907570.32 30907570.44 30907570.56 0.0134 0.0111

Jupiter 79910-07-05 03:08 G 30907772.46 30907772.63 30907772.82 0.0496 0.0224

Uranus 79910-07-29 03:36 G 30907796.49 30907796.65 30907796.83 0.0134 0.0079

Jupiter 79911-02-26 05:03 G 30908008.52 30908008.71 30908008.91 0.0504 0.0131

Uranus 79911-03-12 08:39 G 30908022.66 30908022.86 30908023.07 0.0134 0.0048

Jupiter 79911-10-20 15:08 G 30908245.09 30908245.13 30908245.19 0.0512 0.0495

Uranus 79911-10-24 13:41 G 30908248.86 30908249.07 30908249.28 0.0134 0.0016

Uranus 79912-06-06 18:29 G 30908475.06 30908475.27 30908475.49 0.0134 0.0015

Mars 79912-07-05 18:58 G 30908504.19 30908504.29 30908504.38 0.1733 0.1427

Uranus 79913-01-18 23:03 G 30908701.27 30908701.46 30908701.68 0.0134 0.0047

Uranus 79913-09-02 04:05 G 30908927.51 30908927.67 30908927.85 0.0134 0.0078

Uranus 79914-04-16 08:53 G 30909153.76 30909153.87 30909154.00 0.0134 0.0109

Jupiter 79915-09-16 19:41 G 30909672.30 30909672.32 30909672.34 0.0535 0.0533

Jupiter 79916-05-12 02:10 G 30909910.39 30909910.59 30909910.80 0.0528 0.0100

Saturn 79916-10-01 05:32 G 30910052.56 30910052.73 30910052.91 0.0294 0.0156

Jupiter 79917-01-05 00:15 G 30910148.36 30910148.51 30910148.68 0.0520 0.0324

Saturn 79917-05-19 01:41 G 30910282.37 30910282.57 30910282.78 0.0293 0.0046

Saturn 79918-01-03 21:36 G 30910512.30 30910512.40 30910512.52 0.0292 0.0246

Jupiter 79922-03-10 06:58 G 30912038.64 30912038.79 30912038.95 0.0495 0.0316

Jupiter 79922-11-01 06:44 G 30912274.58 30912274.78 30912274.98 0.0501 0.0030

Jupiter 79923-06-25 14:10 G 30912510.97 30912511.09 30912511.22 0.0510 0.0394

Jupiter 79928-01-15 14:53 G 30914175.94 30914176.12 30914176.31 0.0531 0.0221

Jupiter 79928-09-09 15:51 G 30914413.98 30914414.16 30914414.35 0.0522 0.0212

Saturn 79931-03-15 09:51 G 30915330.82 30915330.91 30915331.01 0.0266 0.0237

Saturn	79931-10-30 14:10 G	30915559.88	30915560.09	30915560.29	0.0267	0.0084
Saturn	79932-06-15 18:15 G	30915789.06	30915789.26	30915789.47	0.0267	0.0071
Saturn	79933-01-30 22:34 G	30916018.34	30916018.44	30916018.56	0.0268	0.0227
Jupiter	79933-11-13 10:20 G	30916304.82	30916304.93	30916305.05	0.0493	0.0404
Jupiter	79934-07-07 08:24 G	30916540.65	30916540.85	30916541.05	0.0499	0.0069
Jupiter	79935-02-28 13:27 G	30916776.90	30916777.06	30916777.22	0.0507	0.0293
Jupiter	79939-09-20 03:51 G	30918441.50	30918441.66	30918441.82	0.0533	0.0341
Mars	79939-11-22 16:48 G	30918505.08	30918505.20	30918505.32	0.1796	0.1323
Jupiter	79940-05-15 07:12 G	30918679.60	30918679.80	30918680.01	0.0525	0.0098
Jupiter	79941-01-08 00:44 G	30918917.48	30918917.53	30918917.59	0.0516	0.0494
Mars	79944-07-04 20:24 G	30920191.22	30920191.35	30920191.49	0.1722	0.1063
Jupiter	79945-07-19 15:08 G	30920571.12	30920571.13	30920571.15	0.0492	0.0489
Jupiter	79946-03-12 11:46 G	30920806.80	30920806.99	30920807.18	0.0497	0.0166
Saturn	79946-04-13 10:34 G	30920838.75	30920838.94	30920839.13	0.0293	0.0128
Jupiter	79946-11-03 14:39 G	30921042.93	30921043.11	30921043.30	0.0505	0.0193
Saturn	79946-11-29 06:44 G	30921068.58	30921068.78	30921068.98	0.0292	0.0073
Saturn	79947-07-17 02:24 G	30921298.53	30921298.60	30921298.68	0.0292	0.0271
Jupiter	79951-05-25 15:51 G	30922707.06	30922707.16	30922707.26	0.0534	0.0459
Jupiter	79952-01-18 21:08 G	30922945.17	30922945.38	30922945.58	0.0527	0.0022
Jupiter	79952-09-12 17:03 G	30923183.07	30923183.21	30923183.34	0.0518	0.0391
Uranus	79952-09-16 00:29 G	30923186.45	30923186.52	30923186.62	0.0144	0.0132
Uranus	79953-04-30 13:12 G	30923412.89	30923413.05	30923413.23	0.0144	0.0092
Uranus	79953-12-13 01:56 G	30923639.39	30923639.58	30923639.80	0.0144	0.0052
Uranus	79954-07-27 14:53 G	30923865.90	30923866.12	30923866.34	0.0144	0.0012
Uranus	79955-03-11 03:51 G	30924092.45	30924092.66	30924092.88	0.0144	0.0029
Uranus	79955-10-23 16:34 G	30924319.01	30924319.19	30924319.39	0.0144	0.0069
Uranus	79956-06-06 05:17 G	30924545.59	30924545.72	30924545.88	0.0144	0.0109
Jupiter	79957-11-15 14:39 G	30925072.95	30925073.11	30925073.29	0.0496	0.0261
Jupiter	79958-07-09 16:20 G	30925308.98	30925309.18	30925309.38	0.0503	0.0092
Jupiter	79959-03-03 01:56 G	30925545.49	30925545.58	30925545.67	0.0512	0.0457

Saturn 79960-09-24 12:58 G 30926116.93 30926117.04 30926117.18 0.0267 0.0217

Saturn 79961-05-11 17:32 G 30926346.02 30926346.23 30926346.44 0.0267 0.0062

Saturn 79961-12-26 21:51 G 30926575.21 30926575.41 30926575.61 0.0268 0.0093

Saturn 79962-08-13 02:24 G 30926804.53 30926804.60 30926804.69 0.0268 0.0249

Jupiter 79963-09-23 09:22 G 30927210.70 30927210.89 30927211.09 0.0529 0.0145

Jupiter 79964-05-18 07:56 G 30927448.67 30927448.83 30927449.01 0.0520 0.0283

Jupiter 79969-07-21 18:58 G 30929339.15 30929339.29 30929339.43 0.0494 0.0352

Neptune 79970-03-09 21:51 G 30929570.35 30929570.41 30929570.52 0.0089 0.0083

Jupiter 79970-03-14 18:15 G 30929575.05 30929575.26 30929575.46 0.0501 0.0015

Neptune 79970-10-21 11:03 G 30929795.85 30929795.96 30929796.09 0.0089 0.0073

Jupiter 79970-11-06 00:29 G 30929811.38 30929811.52 30929811.67 0.0509 0.0354

Neptune 79971-06-03 23:46 G 30930021.36 30930021.49 30930021.66 0.0089 0.0065

Neptune 79972-01-15 12:44 G 30930246.88 30930247.03 30930247.21 0.0089 0.0056

Neptune 79972-08-28 01:56 G 30930472.40 30930472.58 30930472.76 0.0089 0.0048

Neptune 79973-04-10 14:24 G 30930697.92 30930698.10 30930698.31 0.0089 0.0039

Neptune 79973-11-22 03:22 G 30930923.44 30930923.64 30930923.85 0.0089 0.0030

Neptune 79974-07-05 16:20 G 30931148.97 30931149.18 30931149.39 0.0089 0.0022

Neptune 79975-02-16 05:03 G 30931374.50 30931374.71 30931374.93 0.0089 0.0013

Saturn 79975-03-09 00:44 G 30931395.52 30931395.53 30931395.57 0.0294 0.0292

Jupiter 79975-05-28 18:58 G 30931476.11 30931476.29 30931476.46 0.0532 0.0272

Neptune 79975-09-29 18:00 G 30931600.03 30931600.25 30931600.47 0.0089 0.0004

Saturn 79975-10-24 21:36 G 30931625.20 30931625.40 30931625.60 0.0293 0.0091

Jupiter 79976-01-21 21:08 G 30931714.18 30931714.38 30931714.57 0.0524 0.0164

Neptune 79976-05-12 06:44 G 30931825.56 30931825.78 30931826.00 0.0089 0.0004

Saturn 79976-06-10 17:46 G 30931855.05 30931855.24 30931855.43 0.0293 0.0111

Neptune 79976-12-23 19:27 G 30932051.10 30932051.31 30932051.53 0.0089 0.0013

Neptune 79977-08-06 08:24 G 30932276.64 30932276.85 30932277.06 0.0089 0.0022

Neptune 79978-03-19 21:08 G 30932502.18 30932502.38 30932502.59 0.0089 0.0031

Neptune 79978-10-31 09:51 G 30932727.72 30932727.91 30932728.11 0.0089 0.0039

Neptune 79979-06-13 22:34 G 30932953.27 30932953.44 30932953.64 0.0089 0.0048

Neptune 79980-01-25 11:32 G 30933178.82 30933178.98 30933179.16 0.0089 0.0057

Neptune 79980-09-07 00:15 G 30933404.38 30933404.51 30933404.68 0.0089 0.0066

Jupiter 79981-03-26 23:32 G 30933605.40 30933605.48 30933605.57 0.0492 0.0439

Neptune 79981-04-20 13:27 G 30933629.94 30933630.06 30933630.19 0.0089 0.0074

Jupiter 79981-11-17 20:53 G 30933841.17 30933841.37 30933841.57 0.0498 0.0108

Neptune 79981-12-02 01:56 G 30933855.52 30933855.58 30933855.68 0.0089 0.0083

Jupiter 79982-07-12 00:58 G 30934077.36 30934077.54 30934077.71 0.0506 0.0253

Jupiter 79987-01-31 06:15 G 30935741.63 30935741.76 30935741.91 0.0534 0.0394

Jupiter 79987-09-26 11:03 G 30935979.76 30935979.96 30935980.17 0.0526 0.0047

Jupiter 79988-05-21 06:15 G 30936217.67 30936217.76 30936217.86 0.0517 0.0452

Saturn 79990-04-06 20:39 G 30936903.21 30936903.36 30936903.52 0.0266 0.0187

Saturn 79990-11-22 00:58 G 30937132.32 30937132.54 30937132.75 0.0267 0.0033

Saturn 79991-07-09 05:03 G 30937361.53 30937361.71 30937361.91 0.0267 0.0123

Jupiter 79993-07-23 23:32 G 30938107.29 30938107.48 30938107.66 0.0496 0.0204

Uranus 79993-08-14 10:34 G 30938128.88 30938128.94 30938129.05 0.0134 0.0124

Jupiter 79994-03-17 01:12 G 30938343.36 30938343.55 30938343.74 0.0504 0.0151

Uranus 79994-03-28 16:05 G 30938355.02 30938355.17 30938355.33 0.0134 0.0092

Uranus 79994-11-09 20:53 G 30938581.19 30938581.37 30938581.58 0.0134 0.0061

Uranus 79995-06-24 02:10 G 30938807.38 30938807.59 30938807.80 0.0134 0.0029

Uranus 79996-02-05 07:12 G 30939033.58 30939033.80 30939034.01 0.0134 0.0004

Uranus 79996-09-18 12:00 G 30939259.80 30939260.00 30939260.21 0.0134 0.0034

Uranus 79997-05-02 16:34 G 30939486.02 30939486.19 30939486.39 0.0134 0.0066

Uranus 79997-12-14 21:22 G 30939712.26 30939712.39 30939712.55 0.0134 0.0097

Uranus 79998-07-29 02:10 G 30939938.54 30939938.59 30939938.67 0.0134 0.0128

Jupiter 79998-10-05 18:29 G 30940007.21 30940007.27 30940007.33 0.0536 0.0510

Jupiter 79999-06-01 01:27 G 30940245.35 30940245.56 30940245.76 0.0529 0.0073

Jupiter 80000-01-24 23:32 G 30940483.33 30940483.48 30940483.63 0.0520 0.0349

81ST MILLENNIUM CE

This is a list of transits of Venus in the 81st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	80001-04-23 15:36	G	30940937.99	30940938.15	30940938.30	0.2636	0.0473	
Earth	80001-04-23 21:22	G	30940938.23	30940938.39	30940938.54	0.2636	0.0683	*
Saturn	80004-09-18 06:00	G	30942181.66	30942181.75	30942181.84	0.0293	0.0263	
Jupiter	80005-03-29 03:22	G	30942373.48	30942373.64	30942373.80	0.0495	0.0296	
Saturn	80005-05-06 02:24	G	30942411.39	30942411.60	30942411.80	0.0293	0.0063	
Mars	80005-09-18 23:32	G	30942547.45	30942547.48	30942547.50	0.1792	0.1766	
Jupiter	80005-11-20 03:22	G	30942609.44	30942609.64	30942609.84	0.0502	0.0052	
Saturn	80005-12-21 22:20	G	30942641.25	30942641.43	30942641.62	0.0292	0.0138	
Jupiter	80006-07-14 11:17	G	30942845.85	30942845.97	30942846.08	0.0510	0.0416	
Earth	80009-04-21 12:00	G	30943857.98	30943858.00	30943858.02	0.2637	0.2604	
Mars	80010-05-02 06:44	G	30944233.63	30944233.78	30944233.94	0.1725	0.0772	
Jupiter	80011-02-03 14:53	G	30944510.93	30944511.12	30944511.31	0.0530	0.0194	
Jupiter	80011-09-29 15:08	G	30944748.95	30944749.13	30944749.31	0.0522	0.0237	
Jupiter	80016-12-02 06:58	G	30946639.67	30946639.79	30946639.92	0.0493	0.0387	
Jupiter	80017-07-26 05:46	G	30946875.54	30946875.74	30946875.94	0.0500	0.0048	
Jupiter	80018-03-19 11:17	G	30947111.82	30947111.97	30947112.14	0.0508	0.0316	
Saturn	80019-10-17 22:48	G	30947689.29	30947689.45	30947689.62	0.0267	0.0168	
Saturn	80020-06-03 03:08	G	30947918.42	30947918.63	30947918.85	0.0267	0.0013	
Saturn	80021-01-18 07:27	G	30948147.63	30948147.81	30948147.99	0.0268	0.0143	
Jupiter	80022-10-09 02:39	G	30948776.44	30948776.61	30948776.77	0.0532	0.0317	
Jupiter	80023-06-04 05:03	G	30949014.52	30949014.71	30949014.92	0.0524	0.0122	
Jupiter	80028-08-07 12:00	G	30950905.95	30950906.00	30950906.06	0.0492	0.0473	

Pluto 80028-10-13 13:12 G 30950972.89 30950973.05 30950973.25 0.0065 0.0037

Jupiter 80029-03-31 08:53 G 30951141.68 30951141.87 30951142.06 0.0498 0.0146

Pluto 80029-05-26 18:00 G 30951198.03 30951198.25 30951198.47 0.0066 0.0002

Jupiter 80029-11-22 12:00 G 30951377.82 30951378.00 30951378.18 0.0505 0.0212

Pluto 80030-01-06 22:20 G 30951423.27 30951423.43 30951423.61 0.0066 0.0041

Saturn 80034-03-31 15:51 G 30952968.03 30952968.16 30952968.29 0.0294 0.0228

Jupiter 80034-06-13 10:48 G 30953041.84 30953041.95 30953042.06 0.0535 0.0443

Saturn 80034-11-16 12:15 G 30953197.81 30953198.01 30953198.22 0.0293 0.0027

Jupiter 80035-02-06 16:20 G 30953279.98 30953280.18 30953280.39 0.0527 0.0005

Saturn 80035-07-04 08:39 G 30953427.69 30953427.86 30953428.03 0.0293 0.0175

Jupiter 80035-10-02 12:44 G 30953517.91 30953518.03 30953518.16 0.0518 0.0410

Uranus 80036-12-28 19:41 G 30953971.20 30953971.32 30953971.48 0.0144 0.0110

Uranus 80037-08-12 08:39 G 30954197.67 30954197.86 30954198.06 0.0144 0.0070

Mars 80037-09-18 11:46 G 30954234.88 30954234.99 30954235.10 0.1805 0.1365

Uranus 80038-03-26 21:22 G 30954424.18 30954424.39 30954424.61 0.0144 0.0030

Uranus 80038-11-08 10:05 G 30954650.71 30954650.92 30954651.15 0.0144 0.0011

Uranus 80039-06-22 22:48 G 30954877.25 30954877.45 30954877.66 0.0144 0.0051

Uranus 80040-02-04 11:32 G 30955103.82 30955103.98 30955104.16 0.0144 0.0091

Uranus 80040-09-18 00:15 G 30955330.43 30955330.51 30955330.61 0.0144 0.0131

Jupiter 80040-12-04 12:44 G 30955407.86 30955408.03 30955408.21 0.0496 0.0240

Jupiter 80041-07-28 13:41 G 30955643.88 30955644.07 30955644.27 0.0503 0.0112

Jupiter 80042-03-21 22:34 G 30955880.37 30955880.44 30955880.52 0.0511 0.0475

Jupiter 80046-10-12 05:03 G 30957545.51 30957545.71 30957545.91 0.0530 0.0125

Jupiter 80047-06-07 04:34 G 30957783.53 30957783.69 30957783.86 0.0521 0.0303

Saturn 80049-04-29 06:00 G 30958475.58 30958475.75 30958475.94 0.0266 0.0138

Saturn 80049-12-14 10:20 G 30958704.71 30958704.93 30958705.14 0.0267 0.0017

Saturn 80050-07-31 14:24 G 30958933.94 30958934.10 30958934.27 0.0267 0.0172

Neptune 80051-01-30 11:03 G 30959116.92 30959116.96 30959117.03 0.0088 0.0085

Neptune 80051-09-13 00:00 G 30959342.42 30959342.50 30959342.63 0.0088 0.0077

Neptune 80052-04-25 13:27 G 30959567.93 30959568.06 30959568.21 0.0088 0.0069

Jupiter 80052-08-09 16:05 G 30959674.03 30959674.17 30959674.32 0.0494 0.0332

Neptune 80052-12-07 02:24 G 30959793.46 30959793.60 30959793.78 0.0088 0.0061

Jupiter 80053-04-02 14:53 G 30959909.92 30959910.12 30959910.32 0.0500 0.0013

Neptune 80053-07-20 16:05 G 30960018.99 30960019.17 30960019.35 0.0088 0.0052

Jupiter 80053-11-24 21:08 G 30960146.25 30960146.38 30960146.52 0.0509 0.0375

Neptune 80054-03-03 05:03 G 30960244.53 30960244.71 30960244.92 0.0088 0.0043

Neptune 80054-10-14 18:29 G 30960470.07 30960470.27 30960470.48 0.0088 0.0034

Neptune 80055-05-28 07:27 G 30960695.61 30960695.81 30960696.03 0.0088 0.0026

Neptune 80056-01-08 20:53 G 30960921.16 30960921.37 30960921.59 0.0088 0.0017

Neptune 80056-08-21 10:05 G 30961146.70 30961146.92 30961147.15 0.0088 0.0009

Neptune 80057-04-03 23:17 G 30961372.25 30961372.47 30961372.70 0.0088 0.0001

Neptune 80057-11-15 12:29 G 30961597.80 30961598.02 30961598.24 0.0088 0.0008

Jupiter 80058-06-16 18:29 G 30961811.09 30961811.27 30961811.45 0.0532 0.0246

Neptune 80058-06-29 01:41 G 30961823.35 30961823.57 30961823.79 0.0088 0.0017

Neptune 80059-02-09 15:08 G 30962048.92 30962049.13 30962049.34 0.0088 0.0025

Jupiter 80059-02-09 20:39 G 30962049.18 30962049.36 30962049.56 0.0524 0.0192 *

Neptune 80059-09-23 04:05 G 30962274.47 30962274.67 30962274.89 0.0088 0.0034

Neptune 80060-05-05 17:32 G 30962500.03 30962500.23 30962500.42 0.0088 0.0042

Neptune 80060-12-17 06:15 G 30962725.60 30962725.76 30962725.96 0.0088 0.0051

Neptune 80061-07-30 19:41 G 30962951.17 30962951.32 30962951.49 0.0088 0.0059

Neptune 80062-03-13 08:39 G 30963176.74 30963176.86 30963177.02 0.0088 0.0068

Neptune 80062-10-24 21:51 G 30963402.32 30963402.41 30963402.54 0.0088 0.0076

Neptune 80063-06-07 11:17 G 30963627.91 30963627.97 30963628.03 0.0088 0.0084

Saturn 80063-10-11 20:39 G 30963754.21 30963754.36 30963754.51 0.0293 0.0201

Jupiter 80064-04-14 20:39 G 30963940.26 30963940.36 30963940.47 0.0492 0.0419

Saturn 80064-05-28 16:48 G 30963983.99 30963984.20 30963984.41 0.0293 0.0004

Jupiter 80064-12-06 18:00 G 30964176.05 30964176.25 30964176.45 0.0498 0.0086

Saturn 80065-01-13 12:44 G 30964213.89 30964214.03 30964214.19 0.0292 0.0201

Jupiter 80065-07-30 22:05 G 30964412.26 30964412.42 30964412.59 0.0506 0.0276

Jupiter 80070-02-19 07:27 G 30966076.67 30966076.81 30966076.96 0.0534 0.0367

Jupiter 80070-10-15 11:46 G 30966314.78 30966314.99 30966315.19 0.0526 0.0075

Jupiter 80071-06-10 06:00 G 30966552.68 30966552.75 30966552.83 0.0516 0.0477

Mars 80076-02-27 16:05 G 30968276.01 30968276.17 30968276.34 0.1729 0.0455

Jupiter 80076-08-11 21:08 G 30968442.20 30968442.38 30968442.57 0.0497 0.0183

Jupiter 80077-04-04 23:32 G 30968678.29 30968678.48 30968678.67 0.0504 0.0174

Uranus 80077-11-26 03:51 G 30968913.55 30968913.66 30968913.82 0.0135 0.0105

Uranus 80078-07-10 09:22 G 30969139.72 30969139.89 30969140.08 0.0134 0.0073

Saturn 80078-11-09 07:12 G 30969261.62 30969261.80 30969262.00 0.0267 0.0120

Uranus 80079-02-21 14:24 G 30969365.90 30969366.10 30969366.31 0.0134 0.0041

Saturn 80079-06-26 11:32 G 30969490.77 30969490.98 30969491.19 0.0267 0.0035

Uranus 80079-10-05 19:27 G 30969592.10 30969592.31 30969592.53 0.0134 0.0010

Saturn 80080-02-10 15:36 G 30969720.01 30969720.15 30969720.31 0.0268 0.0191

Uranus 80080-05-19 00:15 G 30969818.30 30969818.51 30969818.73 0.0134 0.0022

Uranus 80080-12-31 05:17 G 30970044.52 30970044.72 30970044.92 0.0134 0.0053

Uranus 80081-08-14 09:51 G 30970270.76 30970270.91 30970271.09 0.0134 0.0085

Jupiter 80081-10-24 18:58 G 30970342.20 30970342.29 30970342.37 0.0535 0.0486

Uranus 80082-03-28 14:39 G 30970497.02 30970497.11 30970497.23 0.0134 0.0116

Jupiter 80082-06-20 00:58 G 30970580.34 30970580.54 30970580.75 0.0528 0.0047

Jupiter 80083-02-12 22:20 G 30970818.29 30970818.43 30970818.57 0.0519 0.0373

Jupiter 80088-04-17 01:27 G 30972708.40 30972708.56 30972708.73 0.0495 0.0277

Jupiter 80088-12-09 01:41 G 30972944.37 30972944.57 30972944.77 0.0502 0.0072

Jupiter 80089-08-02 09:36 G 30973180.80 30973180.90 30973181.01 0.0510 0.0436

Saturn 80093-04-23 04:20 G 30974540.51 30974540.68 30974540.85 0.0294 0.0168

Saturn 80093-12-09 00:58 G 30974770.33 30974770.54 30974770.75 0.0293 0.0035

Jupiter 80094-02-22 10:34 G 30974845.75 30974845.94 30974846.14 0.0530 0.0175

Saturn 80094-07-26 21:22 G 30975000.27 30975000.39 30975000.51 0.0293 0.0235

Jupiter 80094-10-18 11:03 G 30975083.79 30975083.96 30975084.15 0.0522 0.0258

Moon 80098-10-27 01:41 G 30976553.44 30976553.57 30976553.70 0.2695 0.1608

Earth 80098-10-27 07:12 G 30976553.69 30976553.80 30976553.90 0.2696 0.1974 *

Jupiter 80099-12-22 06:15 G 30976974.64 30976974.76 30976974.90 0.0493 0.0366

Jupiter 80100-08-15 04:34 G 30977210.49 30977210.69 30977210.90 0.0499 0.0029

Jupiter 80101-04-08 09:51 G 30977446.76 30977446.91 30977447.06 0.0507 0.0336

Mars 80103-07-17 18:15 G 30978277.11 30978277.26 30978277.41 0.1801 0.0885

Jupiter 80105-10-28 22:20 G 30979111.26 30979111.43 30979111.60 0.0533 0.0298

Jupiter 80106-06-24 01:41 G 30979349.37 30979349.57 30979349.77 0.0525 0.0142

Moon 80106-10-25 18:15 G 30979473.17 30979473.26 30979473.35 0.2699 0.2159

Earth 80106-10-25 22:34 G 30979473.31 30979473.44 30979473.58 0.2695 0.1349 *

Saturn 80107-10-06 10:20 G 30979818.85 30979818.93 30979819.03 0.0266 0.0242

Saturn 80108-05-22 14:10 G 30980047.89 30980048.09 30980048.30 0.0266 0.0090

Saturn 80109-01-06 18:15 G 30980277.05 30980277.26 30980277.47 0.0267 0.0064

Saturn 80109-08-23 22:20 G 30980506.31 30980506.43 30980506.56 0.0267 0.0218

Jupiter 80111-08-28 10:34 G 30981240.86 30981240.94 30981241.01 0.0492 0.0452

Jupiter 80112-04-20 06:58 G 30981476.59 30981476.79 30981476.98 0.0497 0.0124

Jupiter 80112-12-12 09:36 G 30981712.72 30981712.90 30981713.08 0.0505 0.0235

Pluto 80116-06-15 18:58 G 30982994.18 30982994.29 30982994.43 0.0079 0.0065

Pluto 80117-01-27 05:03 G 30983219.49 30983219.71 30983219.94 0.0078 0.0003

Jupiter 80117-07-03 10:48 G 30983376.83 30983376.95 30983377.08 0.0535 0.0417

Pluto 80117-09-09 14:24 G 30983445.02 30983445.10 30983445.23 0.0078 0.0069

Jupiter 80118-02-26 16:48 G 30983614.99 30983615.20 30983615.40 0.0527 0.0026

Jupiter 80118-10-22 13:12 G 30983852.94 30983853.05 30983853.16 0.0518 0.0437

Uranus 80120-08-29 04:48 G 30984529.60 30984529.70 30984529.82 0.0144 0.0125

Uranus 80121-04-12 17:17 G 30984756.06 30984756.22 30984756.41 0.0144 0.0086

Uranus 80121-11-25 06:00 G 30984982.55 30984982.75 30984982.97 0.0144 0.0046

Uranus 80122-07-09 18:44 G 30985209.06 30985209.28 30985209.50 0.0144 0.0006

Saturn 80122-11-04 08:53 G 30985326.69 30985326.87 30985327.06 0.0293 0.0141

Uranus 80123-02-21 07:27 G 30985435.60 30985435.81 30985436.03 0.0144 0.0035

Saturn 80123-06-22 05:32 G 30985556.52 30985556.73 30985556.93 0.0293 0.0062

Uranus 80123-10-05 19:56 G 30985662.16 30985662.33 30985662.53 0.0144 0.0076

Jupiter 80123-12-25 10:34 G 30985742.77 30985742.94 30985743.13 0.0496 0.0219

Saturn 80124-02-07 01:27 G 30985786.47 30985786.56 30985786.66 0.0292 0.0261

Uranus 80124-05-19 08:39 G 30985888.74 30985888.86 30985889.01 0.0144 0.0115

Jupiter 80124-08-17 11:32 G 30985978.79 30985978.98 30985979.18 0.0503 0.0136

Jupiter 80125-04-10 20:53 G 30986215.33 30986215.37 30986215.41 0.0512 0.0498

Jupiter 80129-03-07 23:32 G 30987642.47 30987642.48 30987642.51 0.0536 0.0534

Jupiter 80129-11-01 06:58 G 30987880.59 30987880.79 30987881.00 0.0529 0.0096

Jupiter 80130-06-27 05:46 G 30988118.59 30988118.74 30988118.91 0.0520 0.0331

Neptune 80134-06-12 06:29 G 30989564.73 30989564.77 30989564.85 0.0089 0.0085

Neptune 80135-01-23 19:12 G 30989790.21 30989790.30 30989790.43 0.0089 0.0077

Jupiter 80135-08-30 14:24 G 30990008.95 30990009.10 30990009.26 0.0494 0.0312

Neptune 80135-09-06 08:10 G 30990015.72 30990015.84 30990015.99 0.0089 0.0068

Neptune 80136-04-18 21:08 G 30990241.23 30990241.38 30990241.55 0.0089 0.0060

Jupiter 80136-04-22 13:56 G 30990244.87 30990245.08 30990245.28 0.0501 0.0036

Neptune 80136-11-30 09:36 G 30990466.74 30990466.90 30990467.10 0.0089 0.0052

Jupiter 80136-12-14 20:39 G 30990481.24 30990481.36 30990481.49 0.0509 0.0400

Saturn 80137-04-17 10:48 G 30990604.84 30990604.95 30990605.06 0.0266 0.0226

Neptune 80137-07-13 22:48 G 30990692.27 30990692.45 30990692.65 0.0089 0.0043

Saturn 80137-12-02 14:39 G 30990833.90 30990834.11 30990834.31 0.0267 0.0073

Neptune 80138-02-24 11:46 G 30990917.80 30990917.99 30990918.20 0.0089 0.0034

Saturn 80138-07-19 18:29 G 30991063.07 30991063.27 30991063.47 0.0267 0.0081

Neptune 80138-10-08 00:29 G 30991143.32 30991143.52 30991143.74 0.0089 0.0025

Saturn 80139-03-05 22:48 G 30991292.35 30991292.45 30991292.55 0.0268 0.0236

Neptune 80139-05-21 13:12 G 30991368.85 30991369.05 30991369.27 0.0089 0.0017

Neptune 80140-01-02 02:10 G 30991594.38 30991594.59 30991594.81 0.0089 0.0008

Neptune 80140-08-14 15:08 G 30991819.91 30991820.13 30991820.35 0.0089 0.0001

Neptune 80141-03-28 03:51 G 30992045.45 30992045.66 30992045.88 0.0089 0.0010

Jupiter 80141-07-06 19:41 G 30992146.14 30992146.32 30992146.51 0.0531 0.0219

Neptune 80141-11-08 16:34 G 30992270.98 30992271.19 30992271.41 0.0089 0.0019

Mars 80141-12-26 02:10 G 30992318.42 30992318.59 30992318.76 0.1732 0.0150

Jupiter 80142-03-01 21:22 G 30992384.20 30992384.39 30992384.57 0.0523 0.0218

Neptune 80142-06-22 05:17 G 30992496.52 30992496.72 30992496.94 0.0089 0.0028

Neptune 80143-02-02 18:00 G 30992722.06 30992722.25 30992722.46 0.0089 0.0037

Neptune 80143-09-16 06:44 G 30992947.61 30992947.78 30992947.98 0.0089 0.0045

Neptune 80144-04-28 19:41 G 30993173.16 30993173.32 30993173.50 0.0089 0.0054

Neptune 80144-12-10 08:24 G 30993398.71 30993398.85 30993399.02 0.0089 0.0063

Neptune 80145-07-23 21:08 G 30993624.27 30993624.38 30993624.53 0.0089 0.0072

Neptune 80146-03-06 10:20 G 30993849.84 30993849.93 30993850.04 0.0089 0.0080

Neptune 80146-10-17 22:48 G 30994075.44 30994075.45 30994075.51 0.0089 0.0089

Jupiter 80147-05-05 19:41 G 30994275.21 30994275.32 30994275.44 0.0493 0.0400

Jupiter 80147-12-27 17:32 G 30994511.03 30994511.23 30994511.43 0.0499 0.0064

Jupiter 80148-08-19 21:51 G 30994747.25 30994747.41 30994747.58 0.0507 0.0298

Saturn 80152-05-16 14:53 G 30996112.93 30996113.12 30996113.32 0.0294 0.0110

Saturn 80153-01-01 11:46 G 30996342.79 30996342.99 30996343.19 0.0294 0.0093

Jupiter 80153-03-11 04:20 G 30996411.52 30996411.68 30996411.83 0.0533 0.0345

Saturn 80153-08-19 08:10 G 30996572.84 30996572.84 30996572.85 0.0293 0.0293

Jupiter 80153-11-04 08:24 G 30996649.65 30996649.85 30996650.05 0.0526 0.0095

Jupiter 80154-06-30 03:08 G 30996887.58 30996887.63 30996887.69 0.0517 0.0496

Jupiter 80159-01-09 01:27 G 30998541.53 30998541.56 30998541.60 0.0491 0.0483

Jupiter 80159-09-01 21:36 G 30998777.21 30998777.40 30998777.59 0.0497 0.0159

Jupiter 80160-04-24 23:32 G 30999013.29 30999013.48 30999013.66 0.0504 0.0198

Uranus 80161-07-27 16:20 G 30999472.10 30999472.18 30999472.31 0.0135 0.0117

Uranus 80162-03-10 21:51 G 30999698.25 30999698.41 30999698.58 0.0135 0.0085

Uranus 80162-10-23 02:53 G 30999924.43 30999924.62 30999924.82 0.0134 0.0053

Uranus 80163-06-06 07:56 G 31000150.62 31000150.83 31000151.04 0.0134 0.0022

Uranus 80164-01-18 12:44 G 31000376.82 31000377.03 31000377.25 0.0134 0.0010

Uranus 80164-08-31 17:46 G 31000603.04 31000603.24 31000603.45 0.0134 0.0041

Jupiter 80164-11-13 15:08 G 31000677.04 31000677.13 31000677.23 0.0535 0.0466

Uranus 80165-04-14 22:34 G 31000829.26 31000829.44 31000829.62 0.0134 0.0073

Jupiter 80165-07-09 21:51 G 31000915.20 31000915.41 31000915.61 0.0528 0.0028

Uranus 80165-11-27 02:53 G 31001055.51 31001055.62 31001055.78 0.0134 0.0105

Jupiter 80166-03-04 19:41 G 31001153.19 31001153.32 31001153.46 0.0520 0.0394

Saturn 80166-10-28 17:17 G 31001391.08 31001391.22 31001391.37 0.0266 0.0197

Saturn 80167-06-14 21:08 G 31001620.17 31001620.38 31001620.59 0.0266 0.0044

Saturn 80168-01-30 00:44 G 31001849.34 31001849.53 31001849.73 0.0267 0.0111

Saturn 80168-09-15 05:03 G 31002078.68 31002078.71 31002078.74 0.0267 0.0263

Mars 80169-05-14 00:00 G 31002319.33 31002319.50 31002319.67 0.1797 0.0394

Jupiter 80171-05-08 00:44 G 31003043.36 31003043.53 31003043.70 0.0495 0.0253

Jupiter 80171-12-30 00:29 G 31003279.32 31003279.52 31003279.72 0.0502 0.0097

Jupiter 80172-08-22 08:10 G 31003515.76 31003515.84 31003515.93 0.0510 0.0459

Jupiter 80177-03-14 11:32 G 31005180.79 31005180.98 31005181.18 0.0531 0.0146

Jupiter 80177-11-07 12:29 G 31005418.84 31005419.02 31005419.19 0.0522 0.0286

Saturn 80181-04-10 22:34 G 31006669.40 31006669.44 31006669.49 0.0294 0.0285

Saturn 80181-11-26 19:27 G 31006899.11 31006899.31 31006899.51 0.0294 0.0084

Saturn 80182-07-14 15:51 G 31007128.97 31007129.16 31007129.35 0.0293 0.0119

Jupiter 80183-01-11 05:17 G 31007309.57 31007309.72 31007309.86 0.0493 0.0344

Jupiter 80183-09-04 03:22 G 31007545.44 31007545.64 31007545.84 0.0500 0.0003

Jupiter 80184-04-27 08:39 G 31007781.72 31007781.86 31007782.00 0.0508 0.0361

Jupiter 80188-11-17 01:27 G 31009446.38 31009446.56 31009446.74 0.0533 0.0267

Jupiter 80189-07-13 04:20 G 31009684.49 31009684.68 31009684.88 0.0524 0.0173

Jupiter 80194-09-16 09:36 G 31011575.80 31011575.90 31011575.99 0.0492 0.0432

Jupiter 80195-05-10 06:29 G 31011811.57 31011811.77 31011811.96 0.0498 0.0101

Jupiter 80196-01-01 09:36 G 31012047.74 31012047.90 31012048.08 0.0506 0.0261

Saturn 80196-05-09 16:48 G 31012177.05 31012177.20 31012177.36 0.0266 0.0181

Saturn 80196-12-24 20:24 G 31012406.14 31012406.35 31012406.57 0.0266 0.0029

Saturn 80197-08-11 00:15 G 31012635.32 31012635.51 31012635.70 0.0267 0.0126

Jupiter 80200-07-23 13:41 G 31013711.93 31013712.07 31013712.21 0.0534 0.0388

Jupiter 80201-03-18 18:44 G 31013950.08 31013950.28 31013950.49 0.0527 0.0055

Jupiter 80201-11-11 14:24 G 31014188.02 31014188.10 31014188.19 0.0518 0.0463

Uranus 80204-04-29 12:58 G 31015088.01 31015088.04 31015088.08 0.0144 0.0141

Uranus 80204-12-12 01:12 G 31015314.41 31015314.55 31015314.72 0.0144 0.0102

Uranus 80205-07-26 13:56 G 31015540.88 31015541.08 31015541.28 0.0144 0.0062

Uranus 80206-03-10 02:39 G 31015767.40 31015767.61 31015767.83 0.0144 0.0022

Uranus 80206-10-22 15:08 G 31015993.92 31015994.13 31015994.36 0.0144 0.0018

Jupiter 80207-01-14 11:03 G 31016077.78 31016077.96 31016078.15 0.0496 0.0196

Uranus 80207-06-06 03:36 G 31016220.46 31016220.65 31016220.86 0.0144 0.0058

Jupiter 80207-09-07 12:29 G 31016313.83 31016314.02 31016314.21 0.0503 0.0160

Mars 80207-10-24 11:32 G 31016360.81 31016360.98 31016361.15 0.1736 0.0177

Uranus 80208-01-18 16:20 G 31016447.03 31016447.18 31016447.35 0.0144 0.0098

Uranus 80208-09-01 05:17 G 31016673.66 31016673.72 31016673.78 0.0144 0.0138

Saturn 80210-10-23 02:10 G 31017455.50 31017455.59 31017455.70 0.0294 0.0258

Saturn 80211-06-09 23:32 G 31017685.27 31017685.48 31017685.68 0.0294 0.0055

Saturn 80212-01-25 20:24 G 31017915.17 31017915.35 31017915.53 0.0294 0.0148

Jupiter 80212-03-27 21:36 G 31017977.34 31017977.40 31017977.46 0.0536 0.0511

Jupiter 80212-11-21 04:48 G 31018215.49 31018215.70 31018215.90 0.0529 0.0073

Jupiter 80213-07-17 03:36 G 31018453.50 31018453.65 31018453.80 0.0521 0.0352

Neptune 80215-12-17 07:41 G 31019336.75 31019336.82 31019336.93 0.0088 0.0081

Neptune 80216-07-29 20:53 G 31019562.27 31019562.37 31019562.52 0.0088 0.0072

Neptune 80217-03-12 10:20 G 31019787.79 31019787.93 31019788.10 0.0088 0.0063

Neptune 80217-10-23 23:17 G 31020013.32 31020013.47 31020013.67 0.0088 0.0055

Neptune 80218-06-06 12:44 G 31020238.86 31020239.03 31020239.23 0.0088 0.0046

Jupiter 80218-09-19 16:05 G 31020344.01 31020344.17 31020344.34 0.0494 0.0286

Neptune 80219-01-18 02:24 G 31020464.40 31020464.60 31020464.80 0.0088 0.0038

Jupiter 80219-05-13 15:22 G 31020579.94 31020580.14 31020580.34 0.0501 0.0062

Neptune 80219-08-31 15:22 G 31020689.94 31020690.14 31020690.36 0.0088 0.0029

Jupiter 80220-01-04 21:51 G 31020816.30 31020816.41 31020816.52 0.0509 0.0423

Neptune 80220-04-13 04:48 G 31020915.48 31020915.70 31020915.91 0.0088 0.0020

Neptune 80220-11-24 17:46 G 31021141.03 31021141.24 31021141.47 0.0088 0.0012

Neptune 80221-07-08 07:12 G 31021366.57 31021366.80 31021367.02 0.0088 0.0003

Neptune 80222-02-18 20:24 G 31021592.13 31021592.35 31021592.57 0.0088 0.0005

Neptune 80222-10-02 09:36 G 31021817.68 31021817.90 31021818.12 0.0088 0.0014

Neptune 80223-05-15 22:34 G 31022043.24 31022043.44 31022043.67 0.0088 0.0023

Neptune 80223-12-27 12:00 G 31022268.80 31022269.00 31022269.21 0.0088 0.0031

Jupiter 80224-07-26 17:03 G 31022481.02 31022481.21 31022481.40 0.0531 0.0196

Neptune 80224-08-09 00:58 G 31022494.36 31022494.54 31022494.76 0.0088 0.0040

Jupiter 80225-03-21 18:44 G 31022719.10 31022719.28 31022719.47 0.0523 0.0241

Neptune 80225-03-22 14:39 G 31022719.92 31022720.11 31022720.29 0.0088 0.0048

Neptune 80225-11-03 03:22 G 31022945.49 31022945.64 31022945.83 0.0088 0.0057

Saturn 80225-11-20 23:17 G 31022963.29 31022963.47 31022963.64 0.0266 0.0152

Neptune 80226-06-16 16:48 G 31023171.06 31023171.20 31023171.36 0.0088 0.0065

Saturn 80226-07-08 02:53 G 31023192.40 31023192.62 31023192.83 0.0266 0.0005

Neptune 80227-01-28 05:46 G 31023396.65 31023396.74 31023396.89 0.0088 0.0074

Saturn 80227-02-22 06:15 G 31023421.60 31023421.76 31023421.95 0.0266 0.0155

Neptune 80227-09-10 19:12 G 31023622.24 31023622.30 31023622.39 0.0088 0.0082

Jupiter 80230-05-25 19:56 G 31024610.21 31024610.33 31024610.47 0.0492 0.0376

Jupiter 80231-01-16 17:17 G 31024846.02 31024846.22 31024846.43 0.0499 0.0039

Jupiter 80231-09-09 21:22 G 31025082.24 31025082.39 31025082.55 0.0506 0.0323

Mars 80235-03-12 06:00 G 31026361.58 31026361.75 31026361.93 0.1793 0.0092

Jupiter 80236-03-31 05:46 G 31026746.58 31026746.74 31026746.91 0.0534 0.0317

Jupiter 80236-11-24 10:20 G 31026984.73 31026984.93 31026985.13 0.0526 0.0126

Saturn 80240-05-04 06:58 G 31028241.67 31028241.79 31028241.93 0.0294 0.0232

Saturn 80240-12-20 04:05 G 31028471.46 31028471.67 31028471.88 0.0294 0.0029

Saturn 80241-08-07 00:44 G 31028701.36 31028701.53 31028701.70 0.0293 0.0173

Jupiter 80242-01-29 00:58 G 31028876.48 31028876.54 31028876.61 0.0491 0.0461

Jupiter 80242-09-21 20:53 G 31029112.18 31029112.37 31029112.57 0.0497 0.0135

Jupiter 80243-05-15 22:48 G 31029348.27 31029348.45 31029348.63 0.0504 0.0224

Earth 80244-04-25 22:05 G 31029694.27 31029694.42 31029694.57 0.2637 0.0844

Moon 80244-04-26 03:22 G 31029694.50 31029694.64 31029694.79 0.2640 0.0979 *

Uranus 80245-03-28 04:34 G 31030030.64 31030030.69 31030030.76 0.0135 0.0129

Uranus 80245-11-09 09:36 G 31030256.77 31030256.90 31030257.06 0.0135 0.0098

Uranus 80246-06-23 15:08 G 31030482.94 31030483.13 31030483.31 0.0134 0.0066

Uranus 80247-02-04 19:56 G 31030709.13 31030709.33 31030709.54 0.0134 0.0034

Uranus 80247-09-19 00:58 G 31030935.33 31030935.54 31030935.76 0.0134 0.0004

Jupiter 80247-12-04 18:58 G 31031012.18 31031012.29 31031012.41 0.0535 0.0436

Uranus 80248-05-02 06:00 G 31031161.54 31031161.75 31031161.96 0.0134 0.0029

Jupiter 80248-07-30 01:27 G 31031250.36 31031250.56 31031250.77 0.0528 0.0013

Uranus 80248-12-14 10:34 G 31031387.76 31031387.94 31031388.14 0.0134 0.0060

Jupiter 80249-03-24 22:48 G 31031488.34 31031488.45 31031488.58 0.0519 0.0423

Uranus 80249-07-28 15:22 G 31031613.99 31031614.14 31031614.31 0.0134 0.0091

Uranus 80250-03-11 20:10 G 31031840.26 31031840.34 31031840.44 0.0134 0.0122

Earth 80252-04-23 12:44 G 31032613.97 31032614.03 31032614.09 0.2638 0.2452

Moon 80252-04-23 18:15 G 31032614.14 31032614.26 31032614.39 0.2636 0.1713

Jupiter 80254-05-28 00:44 G 31033378.35 31033378.53 31033378.71 0.0495 0.0230

Jupiter 80255-01-19 00:58 G 31033614.35 31033614.54 31033614.74 0.0502 0.0123

Saturn 80255-06-02 22:20 G 31033749.25 31033749.43 31033749.62 0.0266 0.0137

Jupiter 80255-09-12 09:36 G 31033850.84 31033850.90 31033850.96 0.0511 0.0485

Saturn 80256-01-18 01:56 G 31033978.36 31033978.58 31033978.79 0.0266 0.0016

Saturn 80256-09-03 05:17 G 31034207.56 31034207.72 31034207.89 0.0267 0.0170

Jupiter 80260-04-03 15:08 G 31035515.93 31035516.13 31035516.33 0.0530 0.0114

Jupiter 80260-11-27 15:08 G 31035753.97 31035754.13 31035754.29 0.0521 0.0315

Jupiter 80266-01-31 06:15 G 31037644.61 31037644.76 31037644.92 0.0494 0.0321

Jupiter 80266-09-24 04:48 G 31037880.50 31037880.70 31037880.91 0.0500 0.0026

Jupiter 80267-05-18 10:34 G 31038116.81 31038116.94 31038117.07 0.0508 0.0386

Saturn 80269-11-14 09:08 G 31039027.74 31039027.88 31039028.04 0.0294 0.0207

Saturn 80270-07-02 06:29 G 31039257.56 31039257.77 31039257.98 0.0294 0.0005

Saturn 80271-02-17 03:22 G 31039487.50 31039487.64 31039487.80 0.0294 0.0200

Jupiter 80271-12-08 00:15 G 31039781.33 31039781.51 31039781.69 0.0532 0.0242

Jupiter 80272-08-02 02:53 G 31040019.43 31040019.62 31040019.81 0.0524 0.0197

Mars 80273-08-20 20:53 G 31040403.20 31040403.37 31040403.53 0.1740 0.0502

Pluto 80276-02-06 01:41 G 31041302.47 31041302.57 31041302.71 0.0065 0.0055

Pluto 80276-09-18 06:15 G 31041527.56 31041527.76 31041527.99 0.0066 0.0017

Pluto 80277-05-01 10:48 G 31041752.76 31041752.95 31041753.17 0.0066 0.0023

Jupiter 80277-10-06 11:46 G 31041910.88 31041910.99 31041911.10 0.0492 0.0407

Pluto 80277-12-12 15:08 G 31041978.08 31041978.13 31041978.22 0.0066 0.0062

Jupiter 80278-05-30 08:53 G 31042146.67 31042146.87 31042147.07 0.0498 0.0073

Jupiter 80279-01-21 12:00 G 31042382.84 31042383.00 31042383.17 0.0505 0.0288

Jupiter 80283-08-12 11:32 G 31044046.83 31044046.98 31044047.13 0.0534 0.0365

Jupiter 80284-04-06 16:34 G 31044284.99 31044285.19 31044285.39 0.0527 0.0078

Saturn 80284-04-28 00:44 G 31044306.50 31044306.53 31044306.58 0.0266 0.0261

Jupiter 80284-11-30 12:44 G 31044522.96 31044523.03 31044523.10 0.0518 0.0484

Saturn 80284-12-13 04:20 G 31044535.49 31044535.68 31044535.88 0.0266 0.0109

Saturn 80285-07-30 07:41 G 31044764.61 31044764.82 31044765.04 0.0266 0.0044

Saturn 80286-03-16 11:32 G 31044993.84 31044993.98 31044994.12 0.0266 0.0197

Uranus 80288-08-11 08:53 G 31045872.77 31045872.87 31045873.01 0.0144 0.0119

Uranus 80289-03-25 21:36 G 31046099.23 31046099.40 31046099.60 0.0144 0.0079

Uranus 80289-11-07 10:20 G 31046325.72 31046325.93 31046326.15 0.0144 0.0039

Jupiter 80290-02-02 11:46 G 31046412.80 31046412.99 31046413.18 0.0496 0.0169

Uranus 80290-06-21 23:03 G 31046552.24 31046552.46 31046552.68 0.0144 0.0001

Jupiter 80290-09-26 12:44 G 31046648.85 31046649.03 31046649.22 0.0503 0.0187

Uranus 80291-02-03 11:32 G 31046778.78 31046778.98 31046779.20 0.0144 0.0042

Uranus 80291-09-18 00:15 G 31047005.34 31047005.51 31047005.70 0.0144 0.0081

Uranus 80292-05-01 12:44 G 31047231.93 31047232.03 31047232.16 0.0144 0.0121

Jupiter 80295-04-16 23:17 G 31048312.39 31048312.47 31048312.56 0.0536 0.0484

Jupiter 80295-12-11 06:58 G 31048550.58 31048550.79 31048550.99 0.0529 0.0043

Jupiter 80296-08-05 06:00 G 31048788.61 31048788.75 31048788.89 0.0521 0.0382

Neptune 80298-09-14 15:36 G 31049559.14 31049559.15 31049559.18 0.0089 0.0088

Neptune 80299-04-28 04:05 G 31049784.60 31049784.67 31049784.78 0.0089 0.0080

Saturn 80299-05-27 14:10 G 31049813.92 31049814.09 31049814.25 0.0294 0.0181

Neptune 80299-12-09 17:03 G 31050010.09 31050010.21 31050010.35 0.0089 0.0072

Saturn 80300-01-12 11:03 G 31050043.75 31050043.96 31050044.17 0.0294 0.0023

Neptune 80300-07-23 05:46 G 31050235.61 31050235.74 31050235.92 0.0089 0.0063

Saturn 80300-08-30 07:56 G 31050273.70 31050273.83 31050273.97 0.0293 0.0225

Mars 80301-01-07 12:44 G 31050403.86 31050404.03 31050404.20 0.1788 0.0535

Neptune 80301-03-05 18:44 G 31050461.12 31050461.28 31050461.47 0.0089 0.0054

Jupiter 80301-10-09 15:51 G 31050679.00 31050679.16 31050679.34 0.0494 0.0263

Neptune 80301-10-17 07:41 G 31050686.64 31050686.82 31050687.02 0.0089 0.0046

Neptune 80302-05-30 20:24 G 31050912.16 31050912.35 31050912.56 0.0089 0.0037

Jupiter 80302-06-02 15:08 G 31050914.93 31050915.13 31050915.33 0.0501 0.0087

Neptune 80303-01-11 09:22 G 31051137.69 31051137.89 31051138.10 0.0089 0.0028

Jupiter 80303-01-24 21:51 G 31051151.32 31051151.41 31051151.51 0.0509 0.0449

Neptune 80303-08-24 22:20 G 31051363.22 31051363.43 31051363.65 0.0089 0.0019

Neptune 80304-04-06 11:17 G 31051588.75 31051588.97 31051589.18 0.0089 0.0011

Neptune 80304-11-18 00:00 G 31051814.28 31051814.50 31051814.72 0.0089 0.0002

Neptune 80305-07-01 12:44 G 31052039.82 31052040.03 31052040.25 0.0089 0.0008

Neptune 80306-02-12 01:27 G 31052265.36 31052265.56 31052265.79 0.0089 0.0017

Neptune 80306-09-25 14:24 G 31052490.89 31052491.10 31052491.31 0.0089 0.0025

Neptune 80307-05-09 03:08 G 31052716.43 31052716.63 31052716.83 0.0089 0.0033

Jupiter 80307-08-16 21:22 G 31052816.19 31052816.39 31052816.58 0.0531 0.0163

Neptune 80307-12-20 15:36 G 31052941.97 31052942.15 31052942.36 0.0089 0.0043

Jupiter 80308-04-10 22:48 G 31053054.28 31053054.45 31053054.63 0.0523 0.0272

Neptune 80308-08-02 04:20 G 31053167.53 31053167.68 31053167.88 0.0089 0.0052

Neptune 80309-03-15 17:32 G 31053393.08 31053393.23 31053393.40 0.0089 0.0060

Neptune 80309-10-27 06:00 G 31053618.63 31053618.75 31053618.91 0.0089 0.0069

Neptune 80310-06-09 19:12 G 31053844.19 31053844.30 31053844.41 0.0089 0.0077

Neptune 80311-01-21 07:41 G 31054069.78 31054069.82 31054069.90 0.0089 0.0086

Jupiter 80313-06-14 20:24 G 31054945.21 31054945.35 31054945.49 0.0493 0.0353

Saturn 80313-11-09 00:15 G 31055092.44 31055092.51 31055092.60 0.0266 0.0245

Jupiter 80314-02-05 18:15 G 31055181.06 31055181.26 31055181.46 0.0499 0.0014

Saturn 80314-06-26 03:36 G 31055321.45 31055321.65 31055321.85 0.0266 0.0094

Jupiter 80314-09-29 22:48 G 31055417.31 31055417.45 31055417.60 0.0507 0.0350

Saturn 80315-02-10 06:58 G 31055550.58 31055550.79 31055551.00 0.0266 0.0059

Saturn 80315-09-27 10:20 G 31055779.80 31055779.93 31055780.06 0.0267 0.0212

Jupiter 80319-04-21 10:05 G 31057081.75 31057081.92 31057082.10 0.0533 0.0285

Jupiter 80319-12-15 13:56 G 31057319.89 31057320.08 31057320.28 0.0525 0.0158

Jupiter 80325-02-18 02:10 G 31059211.51 31059211.59 31059211.69 0.0492 0.0440

Jupiter 80325-10-11 22:48 G 31059447.26 31059447.45 31059447.65 0.0497 0.0109

Jupiter 80326-06-05 01:12 G 31059683.38 31059683.55 31059683.73 0.0505 0.0251

Saturn 80328-12-07 15:08 G 31060599.96 31060600.13 31060600.31 0.0294 0.0158

Uranus 80329-07-10 22:05 G 31060815.30 31060815.42 31060815.54 0.0135 0.0110

Saturn 80329-07-25 12:29 G 31060829.82 31060830.02 31060830.23 0.0294 0.0048

Uranus 80330-02-22 02:53 G 31061041.46 31061041.62 31061041.81 0.0135 0.0079

Saturn 80330-03-12 09:36 G 31061059.80 31061059.90 31061060.02 0.0294 0.0250

Uranus 80330-10-06 08:10 G 31061267.64 31061267.84 31061268.04 0.0134 0.0047

Jupiter 80330-12-24 18:44 G 31061347.16 31061347.28 31061347.42 0.0535 0.0410

Uranus 80331-05-20 13:12 G 31061493.83 31061494.05 31061494.26 0.0134 0.0016

Jupiter 80331-08-20 00:44 G 31061585.32 31061585.53 31061585.73 0.0528 0.0035

Uranus 80332-01-01 18:00 G 31061720.04 31061720.25 31061720.46 0.0134 0.0016

Jupiter 80332-04-13 21:36 G 31061823.30 31061823.40 31061823.51 0.0519 0.0446

Uranus 80332-08-14 22:48 G 31061946.26 31061946.45 31061946.66 0.0134 0.0048

Uranus 80333-03-29 03:22 G 31062172.48 31062172.64 31062172.83 0.0134 0.0079

Uranus 80333-11-10 08:10 G 31062398.73 31062398.84 31062398.98 0.0134 0.0110

Jupiter 80337-06-17 03:36 G 31063713.47 31063713.65 31063713.84 0.0495 0.0201

Jupiter 80338-02-08 04:05 G 31063949.48 31063949.67 31063949.86 0.0502 0.0152

Mars 80339-06-19 06:15 G 31064445.61 31064445.76 31064445.91 0.1743 0.0840

Earth 80341-10-30 08:39 G 31065309.77 31065309.86 31065309.96 0.2696 0.2070

Moon 80341-10-30 12:44 G 31065310.00 31065310.03 31065310.07 0.2700 0.2609

Jupiter 80342-08-29 05:32 G 31065612.70 31065612.73 31065612.76 0.0536 0.0528

Jupiter 80343-04-24 13:12 G 31065850.85 31065851.05 31065851.25 0.0530 0.0090

Saturn 80343-05-22 05:46 G 31065878.63 31065878.74 31065878.87 0.0265 0.0219

Jupiter 80343-12-18 13:12 G 31066088.89 31066089.05 31066089.21 0.0522 0.0339

Saturn 80344-01-06 09:22 G 31066107.68 31066107.89 31066108.10 0.0265 0.0066

Saturn 80344-08-22 12:29 G 31066336.83 31066337.02 31066337.23 0.0266 0.0087

Saturn 80345-04-08 16:05 G 31066566.09 31066566.17 31066566.27 0.0266 0.0239

Jupiter 80349-02-20 07:27 G 31067979.65 31067979.81 31067979.97 0.0494 0.0294

Jupiter 80349-10-14 05:46 G 31068215.54 31068215.74 31068215.94 0.0500 0.0052

Earth 80349-10-28 00:15 G 31068229.38 31068229.51 31068229.65 0.2694 0.1256

Moon 80349-10-28 05:32 G 31068229.58 31068229.73 31068229.89 0.2694 0.0479 *

Jupiter 80350-06-07 11:03 G 31068451.85 31068451.96 31068452.09 0.0508 0.0413

Jupiter 80354-12-28 02:10 G 31070116.41 31070116.59 31070116.78 0.0532 0.0212

Jupiter 80355-08-23 05:03 G 31070354.53 31070354.71 31070354.90 0.0524 0.0228

Saturn 80358-06-19 20:39 G 31071386.18 31071386.36 31071386.55 0.0295 0.0130

Saturn 80359-02-04 17:46 G 31071616.04 31071616.24 31071616.45 0.0294 0.0074

Saturn 80359-09-22 14:53 G 31071846.05 31071846.12 31071846.19 0.0294 0.0276

Jupiter 80360-10-26 12:00 G 31072245.88 31072246.00 31072246.13 0.0492 0.0383

Jupiter 80361-06-19 08:53 G 31072481.67 31072481.87 31072482.07 0.0498 0.0047

Jupiter 80362-02-10 12:15 G 31072717.85 31072718.01 31072718.17 0.0506 0.0314

Pluto 80364-05-21 15:36 G 31073548.95 31073549.15 31073549.37 0.0078 0.0027

Pluto 80365-01-02 01:12 G 31073774.38 31073774.55 31073774.76 0.0078 0.0041

Jupiter 80366-09-01 15:51 G 31074382.00 31074382.16 31074382.32 0.0534 0.0333

Mars 80366-11-04 18:58 G 31074446.15 31074446.29 31074446.44 0.1784 0.0995

Jupiter 80367-04-27 20:53 G 31074620.17 31074620.37 31074620.57 0.0527 0.0111

Jupiter 80367-12-21 16:34 G 31074858.17 31074858.19 31074858.21 0.0518 0.0514

Mars 80371-06-18 08:39 G 31076132.83 31076132.86 31076132.89 0.1732 0.1695

Uranus 80372-04-11 15:22 G 31076431.08 31076431.14 31076431.21 0.0143 0.0136

Jupiter 80372-07-01 16:48 G 31076512.15 31076512.20 31076512.26 0.0491 0.0469

Uranus 80372-11-24 03:36 G 31076657.50 31076657.65 31076657.82 0.0144 0.0097

Saturn 80372-12-01 05:46 G 31076664.60 31076664.74 31076664.88 0.0265 0.0202

Jupiter 80373-02-22 12:29 G 31076747.83 31076748.02 31076748.22 0.0496 0.0144

Uranus 80373-07-08 16:05 G 31076883.98 31076884.17 31076884.38 0.0144 0.0058

Saturn 80373-07-18 08:53 G 31076893.66 31076893.87 31076894.08 0.0266 0.0050

Jupiter 80373-10-16 13:56 G 31076983.90 31076984.08 31076984.27 0.0504 0.0214

Uranus 80374-02-20 04:48 G 31077110.49 31077110.70 31077110.92 0.0144 0.0018

Saturn 80374-03-04 12:00 G 31077122.81 31077123.00 31077123.21 0.0266 0.0103

Uranus 80374-10-04 17:32 G 31077337.01 31077337.23 31077337.45 0.0144 0.0022

Saturn 80374-10-19 15:22 G 31077352.09 31077352.14 31077352.21 0.0266 0.0255

Uranus 80375-05-19 06:00 G 31077563.55 31077563.75 31077563.95 0.0144 0.0062

Uranus 80375-12-31 18:29 G 31077790.13 31077790.27 31077790.43 0.0144 0.0102

Uranus 80376-08-14 06:58 G 31078016.78 31078016.79 31078016.84 0.0144 0.0143

Jupiter 80378-05-07 04:20 G 31078647.57 31078647.68 31078647.79 0.0536 0.0452

Jupiter 80378-12-31 11:17 G 31078885.76 31078885.97 31078886.18 0.0529 0.0008

Jupiter 80379-08-26 09:36 G 31079123.78 31079123.90 31079124.03 0.0520 0.0412

Neptune 80380-03-20 15:51 G 31079331.11 31079331.16 31079331.25 0.0088 0.0084

Neptune 80380-11-01 04:48 G 31079556.61 31079556.70 31079556.84 0.0088 0.0076

Neptune 80381-06-14 18:29 G 31079782.13 31079782.27 31079782.43 0.0088 0.0066

Neptune 80382-01-26 07:41 G 31080007.67 31080007.82 31080008.00 0.0088 0.0058

Neptune 80382-09-08 21:08 G 31080233.20 31080233.38 31080233.57 0.0088 0.0049

Neptune 80383-04-22 10:34 G 31080458.74 31080458.94 31080459.13 0.0088 0.0041

Neptune 80383-12-03 23:17 G 31080684.28 31080684.47 31080684.69 0.0088 0.0033

Neptune 80384-07-16 12:44 G 31080909.82 31080910.03 31080910.25 0.0088 0.0024

Jupiter 80384-10-28 17:46 G 31081014.06 31081014.24 31081014.42 0.0495 0.0236

Neptune 80385-02-27 01:56 G 31081135.37 31081135.58 31081135.81 0.0088 0.0015

Jupiter 80385-06-21 17:32 G 31081250.04 31081250.23 31081250.43 0.0501 0.0116

Neptune 80385-10-10 15:22 G 31081360.92 31081361.14 31081361.36 0.0088 0.0006

Jupiter 80386-02-13 00:58 G 31081486.47 31081486.54 31081486.61 0.0510 0.0476

Neptune 80386-05-24 04:20 G 31081586.46 31081586.68 31081586.91 0.0088 0.0004

Neptune 80387-01-04 17:46 G 31081812.02 31081812.24 31081812.46 0.0088 0.0011

Neptune 80387-08-18 06:44 G 31082037.57 31082037.78 31082038.01 0.0088 0.0020

Saturn 80387-12-30 20:39 G 31082172.17 31082172.36 31082172.56 0.0295 0.0109

Neptune 80388-03-30 19:41 G 31082263.13 31082263.32 31082263.55 0.0088 0.0029

Saturn 80388-08-16 18:15 G 31082402.07 31082402.26 31082402.46 0.0294 0.0096

Neptune 80388-11-11 09:08 G 31082488.68 31082488.88 31082489.09 0.0088 0.0037

Neptune 80389-06-24 22:05 G 31082714.25 31082714.42 31082714.63 0.0088 0.0046

Neptune 80390-02-05 11:46 G 31082939.82 31082939.99 31082940.17 0.0088 0.0054

Jupiter 80390-09-04 21:08 G 31083151.18 31083151.38 31083151.58 0.0531 0.0135

Neptune 80390-09-19 00:44 G 31083165.39 31083165.53 31083165.70 0.0088 0.0063

Jupiter 80391-04-30 21:51 G 31083389.25 31083389.41 31083389.58 0.0522 0.0298

Neptune 80391-05-02 13:56 G 31083390.96 31083391.08 31083391.22 0.0088 0.0071

Neptune 80391-12-14 02:53 G 31083616.55 31083616.62 31083616.74 0.0088 0.0080

Jupiter 80396-07-03 23:03 G 31085280.31 31085280.46 31085280.61 0.0493 0.0326

Jupiter 80397-02-24 21:22 G 31085516.18 31085516.39 31085516.59 0.0499 0.0019

Jupiter 80397-10-19 01:56 G 31085752.46 31085752.58 31085752.72 0.0507 0.0379

Jupiter 80402-05-10 08:39 G 31087416.68 31087416.86 31087417.04 0.0533 0.0259

Saturn 80402-06-13 11:32 G 31087450.82 31087450.98 31087451.14 0.0265 0.0175

Jupiter 80403-01-03 12:00 G 31087654.81 31087655.00 31087655.20 0.0525 0.0183

Saturn 80403-01-28 14:53 G 31087679.90 31087680.12 31087680.33 0.0265 0.0023

Saturn 80403-09-14 18:00 G 31087909.07 31087909.25 31087909.44 0.0266 0.0130

Mars 80405-04-15 15:08 G 31088488.01 31088488.13 31088488.26 0.1747 0.1186

Jupiter 80408-03-09 03:22 G 31089546.53 31089546.64 31089546.75 0.0492 0.0414

Jupiter 80408-10-30 23:46 G 31089782.29 31089782.49 31089782.69 0.0497 0.0081

Jupiter 80409-06-24 02:10 G 31090018.42 31090018.59 31090018.76 0.0505 0.0278

Uranus 80413-03-10 09:22 G 31091373.82 31091373.89 31091373.99 0.0135 0.0123

Uranus 80413-10-22 14:24 G 31091599.96 31091600.10 31091600.27 0.0135 0.0092

Jupiter 80414-01-12 20:24 G 31091682.21 31091682.35 31091682.50 0.0535 0.0381

Uranus 80414-06-05 19:41 G 31091826.13 31091826.32 31091826.51 0.0135 0.0060

Jupiter 80414-09-08 02:39 G 31091920.40 31091920.61 31091920.81 0.0528 0.0065

Uranus 80415-01-18 00:29 G 31092052.32 31092052.52 31092052.74 0.0134 0.0029

Jupiter 80415-05-03 23:46 G 31092158.41 31092158.49 31092158.57 0.0519 0.0475

Uranus 80415-09-01 05:46 G 31092278.52 31092278.74 31092278.95 0.0134 0.0003

Uranus 80416-04-14 10:34 G 31092504.73 31092504.94 31092505.15 0.0134 0.0034

Saturn 80416-11-24 05:32 G 31092728.69 31092728.73 31092728.80 0.0295 0.0284

Uranus 80416-11-26 15:08 G 31092730.95 31092731.13 31092731.33 0.0134 0.0066

Uranus 80417-07-10 19:56 G 31092957.19 31092957.33 31092957.49 0.0134 0.0097

Saturn 80417-07-12 03:08 G 31092958.43 31092958.63 31092958.83 0.0295 0.0080

Uranus 80418-02-22 00:29 G 31093183.48 31093183.52 31093183.60 0.0134 0.0128

Saturn 80418-02-27 00:29 G 31093188.33 31093188.52 31093188.71 0.0294 0.0125

Jupiter 80420-07-06 03:36 G 31094048.46 31094048.65 31094048.84 0.0495 0.0176

Jupiter 80421-02-27 04:05 G 31094284.48 31094284.67 31094284.86 0.0502 0.0178

Jupiter 80425-09-17 09:08 G 31095947.81 31095947.88 31095947.95 0.0537 0.0499

Jupiter 80426-05-13 17:03 G 31096186.01 31096186.21 31096186.42 0.0530 0.0058

Jupiter 80427-01-06 17:03 G 31096424.07 31096424.21 31096424.36 0.0521 0.0371

Saturn 80431-12-24 11:46 G 31098236.82 31098236.99 31098237.17 0.0265 0.0158

Jupiter 80432-03-11 07:41 G 31098314.65 31098314.82 31098314.99 0.0494 0.0270

Saturn 80432-08-09 14:53 G 31098465.90 31098466.12 31098466.33 0.0266 0.0006

Mars 80432-09-01 02:10 G 31098488.48 31098488.59 31098488.69 0.1780 0.1417

Jupiter 80432-11-02 06:29 G 31098550.57 31098550.77 31098550.97 0.0500 0.0078

Saturn 80433-03-26 18:00 G 31098695.07 31098695.25 31098695.43 0.0266 0.0146

Jupiter 80433-06-26 12:29 G 31098786.93 31098787.02 31098787.12 0.0509 0.0439

Mars 80437-04-14 18:29 G 31100175.17 31100175.27 31100175.37 0.1735 0.1388

Jupiter 80438-01-16 06:44 G 31100451.59 31100451.78 31100451.98 0.0532 0.0178

Jupiter 80438-09-11 09:08 G 31100689.70 31100689.88 31100690.06 0.0524 0.0260

Jupiter 80443-11-15 13:12 G 31102580.92 31102581.05 31102581.19 0.0492 0.0359

Jupiter 80444-07-08 10:48 G 31102816.75 31102816.95 31102817.16 0.0498 0.0022

Jupiter 80445-03-01 14:53 G 31103052.97 31103053.12 31103053.27 0.0506 0.0342

Saturn 80446-06-06 05:32 G 31103514.65 31103514.73 31103514.84 0.0294 0.0263

Saturn 80447-01-22 03:22 G 31103744.43 31103744.64 31103744.84 0.0295 0.0059

Saturn 80447-09-09 00:44 G 31103974.36 31103974.53 31103974.72 0.0294 0.0147

Jupiter 80449-09-20 16:05 G 31104717.01 31104717.17 31104717.34 0.0533 0.0304

Jupiter 80450-05-16 20:24 G 31104955.15 31104955.35 31104955.54 0.0526 0.0139

Jupiter 80455-07-21 18:29 G 31106847.20 31106847.27 31106847.36 0.0491 0.0445

Jupiter 80456-03-13 15:08 G 31107082.93 31107083.13 31107083.32 0.0497 0.0114

Uranus 80456-07-24 09:36 G 31107215.77 31107215.90 31107216.03 0.0144 0.0115

Jupiter 80456-11-04 16:48 G 31107319.03 31107319.20 31107319.38 0.0504 0.0244

Uranus 80457-03-07 22:05 G 31107442.24 31107442.42 31107442.61 0.0144 0.0076

Uranus 80457-10-20 10:34 G 31107668.73 31107668.94 31107669.16 0.0144 0.0036

Uranus 80458-06-03 23:03 G 31107895.24 31107895.46 31107895.68 0.0144 0.0004

Uranus 80459-01-16 11:32 G 31108121.78 31108121.98 31108122.20 0.0144 0.0044

Uranus 80459-08-31 00:00 G 31108348.34 31108348.50 31108348.70 0.0144 0.0084

Uranus 80460-04-13 12:58 G 31108574.94 31108575.04 31108575.16 0.0144 0.0124

Jupiter 80461-05-26 02:53 G 31108982.50 31108982.62 31108982.74 0.0535 0.0426

Saturn 80461-07-05 17:17 G 31109023.04 31109023.22 31109023.42 0.0265 0.0133

Jupiter 80462-01-19 09:22 G 31109220.68 31109220.89 31109221.09 0.0528 0.0021

Saturn 80462-02-19 20:53 G 31109252.15 31109252.37 31109252.58 0.0265 0.0021

Jupiter 80462-09-14 07:12 G 31109458.69 31109458.80 31109458.92 0.0520 0.0435

Saturn 80462-10-07 00:00 G 31109481.34 31109481.50 31109481.67 0.0266 0.0173

Neptune 80463-07-31 13:27 G 31109779.00 31109779.06 31109779.16 0.0089 0.0083

Neptune 80464-03-13 02:39 G 31110004.49 31110004.61 31110004.73 0.0089 0.0074

Mars 80464-08-31 12:58 G 31110175.97 31110176.04 31110176.12 0.1793 0.1616

Neptune 80464-10-24 14:53 G 31110230.00 31110230.12 31110230.29 0.0089 0.0066

Neptune 80465-06-07 03:51 G 31110455.51 31110455.66 31110455.84 0.0089 0.0057

Neptune 80466-01-18 16:48 G 31110681.02 31110681.20 31110681.39 0.0089 0.0049

Neptune 80466-09-01 05:17 G 31110906.55 31110906.72 31110906.93 0.0089 0.0041

Neptune 80467-04-14 18:15 G 31111132.07 31111132.26 31111132.48 0.0089 0.0031

Jupiter 80467-11-17 18:15 G 31111349.08 31111349.26 31111349.44 0.0495 0.0210

Neptune 80467-11-26 07:12 G 31111357.60 31111357.80 31111358.02 0.0089 0.0022

Neptune 80468-07-08 20:10 G 31111583.13 31111583.34 31111583.56 0.0089 0.0014

Jupiter 80468-07-10 18:00 G 31111585.06 31111585.25 31111585.45 0.0501 0.0143

Neptune 80469-02-19 09:08 G 31111808.66 31111808.88 31111809.10 0.0089 0.0005

Jupiter 80469-03-04 01:12 G 31111821.52 31111821.55 31111821.59 0.0510 0.0502

Neptune 80469-10-02 21:51 G 31112034.20 31112034.41 31112034.63 0.0089 0.0005

Neptune 80470-05-16 10:34 G 31112259.73 31112259.94 31112260.16 0.0089 0.0013

Neptune 80470-12-27 23:17 G 31112485.27 31112485.47 31112485.69 0.0089 0.0022

Mars 80471-02-11 00:15 G 31112530.43 31112530.51 31112530.59 0.1751 0.1540

Neptune 80471-08-10 12:29 G 31112710.82 31112711.02 31112711.22 0.0089 0.0031

Neptune 80472-03-23 00:58 G 31112936.36 31112936.54 31112936.75 0.0089 0.0040

Neptune 80472-11-03 13:41 G 31113161.90 31113162.07 31113162.27 0.0089 0.0049

Neptune 80473-06-17 02:24 G 31113387.45 31113387.60 31113387.79 0.0089 0.0057

Jupiter 80473-09-23 22:05 G 31113486.22 31113486.42 31113486.63 0.0531 0.0106

Neptune 80474-01-28 15:22 G 31113613.01 31113613.14 31113613.30 0.0089 0.0066

Jupiter 80474-05-19 23:17 G 31113724.31 31113724.47 31113724.63 0.0523 0.0327

Neptune 80474-09-11 04:05 G 31113838.57 31113838.67 31113838.81 0.0089 0.0075

Neptune 80475-04-24 16:48 G 31114064.14 31114064.20 31114064.30 0.0089 0.0083

Saturn 80475-12-17 12:58 G 31114300.92 31114301.04 31114301.17 0.0295 0.0233

Saturn 80476-08-03 10:34 G 31114530.73 31114530.94 31114531.15 0.0295 0.0028

Saturn 80477-03-21 07:41 G 31114760.66 31114760.82 31114760.99 0.0294 0.0176

Jupiter 80479-07-23 22:34 G 31115615.29 31115615.44 31115615.61 0.0493 0.0302

Jupiter 80480-03-15 20:39 G 31115851.16 31115851.36 31115851.56 0.0499 0.0043

Jupiter 80480-11-07 01:27 G 31116087.44 31116087.56 31116087.68 0.0507 0.0404

Jupiter 80485-05-29 11:32 G 31117751.80 31117751.98 31117752.17 0.0533 0.0228

Jupiter 80486-01-22 15:22 G 31117989.96 31117990.14 31117990.33 0.0525 0.0215

Moon 80487-04-27 18:44 G 31118450.12 31118450.28 31118450.43 0.2633 0.0843

Earth 80487-04-27 23:03 G 31118450.32 31118450.46 31118450.61 0.2638 0.1021 *

Saturn 80490-05-31 15:36 G 31119580.15 31119580.15 31119580.18 0.0265 0.0265

Saturn 80491-01-15 18:44 G 31119809.10 31119809.28 31119809.48 0.0265 0.0114

Jupiter 80491-03-29 02:53 G 31119881.51 31119881.62 31119881.75 0.0492 0.0391

Saturn 80491-09-01 21:51 G 31120038.20 31120038.41 31120038.63 0.0265 0.0040

Jupiter 80491-11-19 23:32 G 31120117.28 31120117.48 31120117.69 0.0497 0.0057

Saturn 80492-04-18 00:58 G 31120267.40 31120267.54 31120267.69 0.0266 0.0192

Jupiter 80492-07-13 02:39 G 31120353.45 31120353.61 31120353.77 0.0505 0.0304

Earth 80495-04-25 13:41 G 31121369.99 31121370.07 31121370.15 0.2639 0.2287

Jupiter 80497-02-01 00:44 G 31122017.37 31122017.53 31122017.68 0.0535 0.0349

Uranus 80497-06-22 01:56 G 31122158.46 31122158.58 31122158.73 0.0135 0.0105

Jupiter 80497-09-27 06:15 G 31122255.56 31122255.76 31122255.96 0.0527 0.0097

Uranus 80498-02-03 07:12 G 31122384.62 31122384.80 31122384.98 0.0135 0.0073

Jupiter 80498-05-23 02:39 G 31122493.57 31122493.61 31122493.66 0.0518 0.0504

Uranus 80498-09-17 12:15 G 31122610.81 31122611.01 31122611.22 0.0135 0.0042

Uranus 80499-05-01 17:17 G 31122837.01 31122837.22 31122837.44 0.0134 0.0010

Uranus 80499-12-13 22:05 G 31123063.21 31123063.42 31123063.64 0.0134 0.0022

Uranus 80500-07-28 02:53 G 31123289.43 31123289.62 31123289.83 0.0134 0.0053

Uranus 80501-03-11 07:41 G 31123515.67 31123515.82 31123516.00 0.0134 0.0085

Uranus 80501-10-23 12:29 G 31123741.93 31123742.02 31123742.14 0.0134 0.0116

Jupiter 80502-12-03 08:53 G 31124147.83 31124147.87 31124147.92 0.0491 0.0476

Mars 80503-02-11 03:22 G 31124217.51 31124217.64 31124217.78 0.1739 0.1057

Jupiter 80503-07-27 04:34 G 31124383.50 31124383.69 31124383.89 0.0496 0.0151

Jupiter 80504-03-19 05:46 G 31124619.56 31124619.74 31124619.92 0.0503 0.0206

Saturn 80505-06-29 13:12 G 31125086.92 31125087.05 31125087.20 0.0294 0.0212

Saturn 80506-02-14 10:48 G 31125316.74 31125316.95 31125317.16 0.0294 0.0008

Saturn 80506-10-02 08:24 G 31125546.70 31125546.85 31125547.00 0.0294 0.0197

Jupiter 80508-10-07 10:05 G 31126282.82 31126282.92 31126283.01 0.0536 0.0470

Jupiter 80509-06-02 16:48 G 31126520.99 31126521.20 31126521.41 0.0529 0.0027

Jupiter 80510-01-26 15:51 G 31126759.03 31126759.16 31126759.30 0.0521 0.0396

Jupiter 80515-04-01 09:08 G 31128649.70 31128649.88 31128650.05 0.0494 0.0243

Jupiter 80515-11-23 08:39 G 31128885.66 31128885.86 31128886.05 0.0501 0.0108

Jupiter 80516-07-16 15:08 G 31129122.06 31129122.13 31129122.21 0.0509 0.0468

Saturn 80519-12-12 20:53 G 31130366.29 31130366.37 31130366.47 0.0266 0.0240

Saturn 80520-07-29 00:29 G 31130595.32 31130595.52 31130595.72 0.0266 0.0088

Jupiter 80521-02-05 04:48 G 31130786.50 31130786.70 31130786.89 0.0531 0.0152

Saturn 80521-03-15 03:51 G 31130824.45 31130824.66 31130824.87 0.0266 0.0066

Jupiter 80521-10-01 06:15 G 31131024.59 31131024.76 31131024.94 0.0523 0.0284

Saturn 80521-10-30 06:58 G 31131053.68 31131053.79 31131053.92 0.0266 0.0218

Pluto 80524-01-11 16:48 G 31131857.05 31131857.20 31131857.40 0.0065 0.0040

Pluto 80524-08-23 21:51 G 31132082.19 31132082.41 31132082.63 0.0066 0.0001

Pluto 80525-04-06 01:41 G 31132307.42 31132307.57 31132307.77 0.0066 0.0039

Jupiter 80526-12-05 12:58 G 31132915.90 31132916.04 31132916.19 0.0493 0.0335

Jupiter 80527-07-29 10:34 G 31133151.74 31133151.94 31133152.15 0.0499 0.0012

Jupiter 80528-03-21 14:24 G 31133387.97 31133388.10 31133388.24 0.0506 0.0368

Mars 80530-06-29 19:41 G 31134218.19 31134218.32 31134218.46 0.1789 0.1153

Jupiter 80532-10-10 16:05 G 31135052.00 31135052.17 31135052.35 0.0534 0.0277

Jupiter 80533-06-05 20:39 G 31135290.16 31135290.36 31135290.55 0.0526 0.0168

Saturn 80535-01-09 22:20 G 31135873.26 31135873.43 31135873.59 0.0295 0.0179

Saturn 80535-08-27 19:41 G 31136103.12 31136103.32 31136103.53 0.0295 0.0027

Saturn 80536-04-13 16:48 G 31136333.08 31136333.20 31136333.34 0.0294 0.0231

Jupiter 80538-08-10 17:46 G 31137182.14 31137182.24 31137182.34 0.0491 0.0423

Jupiter 80539-04-03 13:56 G 31137417.88 31137418.08 31137418.28 0.0497 0.0090

Jupiter 80539-11-25 15:36 G 31137653.98 31137654.15 31137654.32 0.0504 0.0268

Uranus 80540-03-24 15:22 G 31137774.06 31137774.14 31137774.23 0.0143 0.0133

Uranus 80540-11-06 03:36 G 31138000.49 31138000.65 31138000.82 0.0143 0.0094

Uranus 80541-06-20 15:51 G 31138226.97 31138227.16 31138227.37 0.0144 0.0055

Uranus 80542-02-02 04:34 G 31138453.47 31138453.69 31138453.91 0.0144 0.0015

Uranus 80542-09-16 17:03 G 31138680.00 31138680.21 31138680.43 0.0144 0.0025

Uranus 80543-05-01 05:32 G 31138906.54 31138906.73 31138906.93 0.0144 0.0065

Uranus 80543-12-13 18:00 G 31139133.11 31139133.25 31139133.41 0.0144 0.0105

Jupiter 80544-06-15 04:34 G 31139317.56 31139317.69 31139317.83 0.0535 0.0399

Neptune 80544-06-23 00:00 G 31139325.47 31139325.50 31139325.55 0.0088 0.0087

Neptune 80545-02-03 13:12 G 31139550.97 31139551.05 31139551.17 0.0088 0.0078

Jupiter 80545-02-08 11:32 G 31139555.77 31139555.98 31139556.18 0.0528 0.0050

Neptune 80545-09-17 02:39 G 31139776.49 31139776.61 31139776.76 0.0088 0.0070

Jupiter 80545-10-04 09:22 G 31139793.81 31139793.89 31139793.99 0.0520 0.0464

Neptune 80546-04-30 15:36 G 31140002.02 31140002.15 31140002.33 0.0088 0.0062

Neptune 80546-12-12 05:17 G 31140227.55 31140227.72 31140227.91 0.0088 0.0052

Neptune 80547-07-25 18:44 G 31140453.09 31140453.28 31140453.48 0.0088 0.0044

Neptune 80548-03-07 07:41 G 31140678.63 31140678.82 31140679.04 0.0088 0.0036

Neptune 80548-10-18 21:08 G 31140904.18 31140904.38 31140904.60 0.0088 0.0026

Neptune 80549-06-01 10:34 G 31141129.72 31141129.94 31141130.16 0.0088 0.0018

Saturn 80549-06-23 23:46 G 31141152.38 31141152.49 31141152.62 0.0265 0.0219

Neptune 80550-01-12 23:46 G 31141355.27 31141355.49 31141355.72 0.0088 0.0009

Saturn 80550-02-08 03:08 G 31141381.42 31141381.63 31141381.84 0.0265 0.0067

Neptune 80550-08-26 12:58 G 31141580.82 31141581.04 31141581.27 0.0088 0.0002

Saturn 80550-09-25 06:15 G 31141610.55 31141610.76 31141610.96 0.0266 0.0086

Jupiter 80550-12-07 17:17 G 31141684.03 31141684.22 31141684.41 0.0495 0.0186

Neptune 80551-04-09 02:10 G 31141806.37 31141806.59 31141806.81 0.0088 0.0009

Saturn 80551-05-12 09:08 G 31141839.79 31141839.88 31141839.98 0.0266 0.0238

Jupiter 80551-07-31 17:17 G 31141920.03 31141920.22 31141920.41 0.0502 0.0168

Neptune 80551-11-20 15:22 G 31142031.92 31142032.14 31142032.36 0.0088 0.0017

Neptune 80552-07-03 04:20 G 31142257.48 31142257.68 31142257.90 0.0088 0.0026

Neptune 80553-02-13 17:32 G 31142483.04 31142483.23 31142483.45 0.0088 0.0035

Neptune 80553-09-27 06:58 G 31142708.60 31142708.79 31142708.99 0.0088 0.0043

Neptune 80554-05-10 19:56 G 31142934.17 31142934.33 31142934.52 0.0088 0.0052

Neptune 80554-12-22 09:22 G 31143159.73 31143159.89 31143160.06 0.0088 0.0060

Neptune 80555-08-04 22:20 G 31143385.31 31143385.43 31143385.58 0.0088 0.0069

Jupiter 80556-02-18 17:03 G 31143583.16 31143583.21 31143583.26 0.0537 0.0516

Neptune 80556-03-17 11:17 G 31143610.90 31143610.97 31143611.10 0.0088 0.0078

Jupiter 80556-10-14 01:12 G 31143821.35 31143821.55 31143821.75 0.0530 0.0073

Neptune 80556-10-29 00:44 G 31143836.51 31143836.53 31143836.60 0.0088 0.0086

Jupiter 80557-06-09 01:56 G 31144059.43 31144059.58 31144059.73 0.0522 0.0357

Jupiter 80562-08-12 22:34 G 31145950.28 31145950.44 31145950.61 0.0494 0.0278

Jupiter 80563-04-05 21:08 G 31146186.18 31146186.38 31146186.58 0.0500 0.0070

Jupiter 80563-11-28 02:39 G 31146422.50 31146422.61 31146422.71 0.0508 0.0430

Saturn 80564-07-21 23:03 G 31146659.29 31146659.46 31146659.64 0.0294 0.0157

Saturn 80565-03-08 20:24 G 31146889.15 31146889.35 31146889.56 0.0294 0.0048

Saturn 80565-10-24 17:46 G 31147119.14 31147119.24 31147119.35 0.0294 0.0251

Jupiter 80568-06-18 11:32 G 31148086.79 31148086.98 31148087.17 0.0532 0.0199

Mars 80568-12-08 12:58 G 31148259.89 31148260.04 31148260.20 0.1743 0.0742

Jupiter 80569-02-11 14:10 G 31148324.91 31148325.09 31148325.27 0.0524 0.0241

Jupiter 80574-04-18 03:08 G 31150216.50 31150216.63 31150216.76 0.0492 0.0368

Jupiter 80574-12-10 00:29 G 31150452.32 31150452.52 31150452.72 0.0498 0.0028

Jupiter 80575-08-03 04:05 G 31150688.52 31150688.67 31150688.82 0.0506 0.0333

Saturn 80579-01-04 05:17 G 31151938.58 31151938.72 31151938.87 0.0266 0.0194

Saturn 80579-08-21 08:39 G 31152167.65 31152167.86 31152168.08 0.0266 0.0042

Jupiter 80580-02-21 22:34 G 31152352.28 31152352.44 31152352.60 0.0534 0.0323

Saturn 80580-04-06 12:15 G 31152396.81 31152397.01 31152397.20 0.0266 0.0112

Jupiter 80580-10-17 03:08 G 31152590.43 31152590.63 31152590.83 0.0527 0.0122

Saturn 80580-11-21 15:22 G 31152626.13 31152626.14 31152626.17 0.0266 0.0264

Uranus 80581-02-20 12:29 G 31152716.93 31152717.02 31152717.13 0.0135 0.0118

Uranus 80581-10-04 17:32 G 31152943.08 31152943.23 31152943.41 0.0135 0.0087

Uranus 80582-05-18 22:48 G 31153169.26 31153169.45 31153169.65 0.0135 0.0055

Uranus 80582-12-31 03:51 G 31153395.46 31153395.66 31153395.88 0.0135 0.0024

Uranus 80583-08-14 09:08 G 31153621.67 31153621.88 31153622.10 0.0135 0.0008

Uranus 80584-03-27 14:10 G 31153847.88 31153848.09 31153848.29 0.0134 0.0040

Moon 80584-10-31 08:24 G 31154065.73 31154065.85 31154065.98 0.2689 0.1659

Earth 80584-10-31 10:34 G 31154065.85 31154065.94 31154066.03 0.2695 0.2183 *

Uranus 80584-11-08 18:44 G 31154074.11 31154074.28 31154074.48 0.0134 0.0071

Uranus 80585-06-22 23:32 G 31154300.36 31154300.48 31154300.63 0.0134 0.0102

Jupiter 80585-12-22 07:27 G 31154482.74 31154482.81 31154482.89 0.0491 0.0455

Uranus 80586-02-04 04:20 G 31154526.67 31154526.68 31154526.72 0.0134 0.0133

Jupiter 80586-08-15 03:22 G 31154718.45 31154718.64 31154718.84 0.0496 0.0126

Jupiter 80587-04-08 04:20 G 31154954.51 31154954.68 31154954.86 0.0503 0.0231

Jupiter 80591-10-27 08:24 G 31156617.75 31156617.85 31156617.97 0.0536 0.0448

Jupiter 80592-06-21 15:51 G 31156855.95 31156856.16 31156856.36 0.0529 0.0008

Moon 80592-10-28 21:22 G 31156985.26 31156985.39 31156985.51 0.2692 0.1651

Earth 80592-10-29 02:24 G 31156985.45 31156985.60 31156985.74 0.2694 0.1125 *

Jupiter 80593-02-14 15:08 G 31157094.02 31157094.13 31157094.26 0.0521 0.0422

Saturn 80594-02-01 08:53 G 31157445.69 31157445.87 31157446.07 0.0295 0.0123

Saturn 80594-09-19 06:29 G 31157675.57 31157675.77 31157675.97 0.0295 0.0083

Saturn 80595-05-07 03:36 G 31157905.61 31157905.65 31157905.70 0.0294 0.0286

Mars 80596-04-26 01:56 G 31158260.42 31158260.58 31158260.74 0.1785 0.0681

Jupiter 80598-04-20 07:12 G 31158984.62 31158984.80 31158984.98 0.0494 0.0221

Jupiter 80598-12-12 06:15 G 31159220.57 31159220.76 31159220.96 0.0501 0.0131

Jupiter 80599-08-05 12:44 G 31159456.98 31159457.03 31159457.08 0.0509 0.0490

Jupiter 80604-02-26 05:17 G 31161121.52 31161121.72 31161121.92 0.0531 0.0124

Jupiter 80604-10-21 07:12 G 31161359.64 31161359.80 31161359.97 0.0523 0.0312

Saturn 80608-07-17 09:08 G 31162724.72 31162724.88 31162725.05 0.0265 0.0171

Saturn 80609-03-03 12:29 G 31162953.81 31162954.02 31162954.24 0.0265 0.0019

Saturn 80609-10-18 15:36 G 31163182.97 31163183.15 31163183.34 0.0266 0.0134

Jupiter 80609-12-25 11:03 G 31163250.81 31163250.96 31163251.12 0.0493 0.0314

Jupiter 80610-08-18 08:39 G 31163486.66 31163486.86 31163487.07 0.0499 0.0033

Jupiter 80611-04-11 12:44 G 31163722.91 31163723.03 31163723.17 0.0507 0.0392

Pluto 80611-09-13 22:05 G 31163878.35 31163878.42 31163878.54 0.0079 0.0071

Pluto 80612-04-26 08:53 G 31164103.65 31164103.87 31164104.09 0.0078 0.0003

Pluto 80612-12-07 18:15 G 31164329.15 31164329.26 31164329.40 0.0078 0.0064

Jupiter 80615-10-31 18:00 G 31165387.08 31165387.25 31165387.44 0.0533 0.0248

Jupiter 80616-06-25 22:20 G 31165625.24 31165625.43 31165625.62 0.0526 0.0198

Jupiter 80621-08-30 16:20 G 31167517.07 31167517.18 31167517.30 0.0492 0.0402

Jupiter 80622-04-23 12:58 G 31167752.84 31167753.04 31167753.24 0.0497 0.0066

Jupiter 80622-12-15 15:08 G 31167988.97 31167989.13 31167989.30 0.0504 0.0294

Saturn 80623-08-15 11:17 G 31168231.77 31168231.97 31168232.17 0.0294 0.0099

Saturn 80624-04-01 08:24 G 31168461.66 31168461.85 31168462.05 0.0294 0.0106

Uranus 80624-07-07 10:34 G 31168558.81 31168558.94 31168559.09 0.0143 0.0111

Uranus 80625-02-18 23:03 G 31168785.28 31168785.46 31168785.66 0.0143 0.0072

Uranus 80625-10-03 11:17 G 31169011.77 31169011.97 31169012.20 0.0144 0.0033

Uranus 80626-05-18 00:00 G 31169238.28 31169238.50 31169238.72 0.0144 0.0008

Uranus 80626-12-30 12:29 G 31169464.81 31169465.02 31169465.23 0.0144 0.0047

Jupiter 80627-07-06 04:34 G 31169652.55 31169652.69 31169652.84 0.0534 0.0371

Uranus 80627-08-14 00:58 G 31169691.37 31169691.54 31169691.72 0.0144 0.0087

Neptune 80627-11-03 23:32 G 31169773.44 31169773.48 31169773.55 0.0089 0.0086

Jupiter 80628-02-29 10:05 G 31169890.72 31169890.92 31169891.13 0.0527 0.0076

Uranus 80628-03-27 13:27 G 31169917.98 31169918.06 31169918.18 0.0144 0.0127

Neptune 80628-06-16 12:29 G 31169998.92 31169999.02 31169999.14 0.0089 0.0077

Jupiter 80628-10-24 07:12 G 31170128.73 31170128.80 31170128.87 0.0519 0.0487

Neptune 80629-01-28 00:58 G 31170224.42 31170224.54 31170224.70 0.0089 0.0069

Neptune 80629-09-10 13:41 G 31170449.93 31170450.07 31170450.25 0.0089 0.0061

Neptune 80630-04-24 02:39 G 31170675.44 31170675.61 31170675.80 0.0089 0.0051

Neptune 80630-12-05 15:36 G 31170900.96 31170901.15 31170901.34 0.0089 0.0043

Neptune 80631-07-19 04:05 G 31171126.49 31171126.67 31171126.89 0.0089 0.0035

Neptune 80632-02-29 17:03 G 31171352.01 31171352.21 31171352.43 0.0089 0.0025

Neptune 80632-10-12 06:00 G 31171577.54 31171577.75 31171577.97 0.0089 0.0016

Jupiter 80633-05-05 20:39 G 31171783.35 31171783.36 31171783.39 0.0491 0.0488

Neptune 80633-05-25 18:44 G 31171803.07 31171803.28 31171803.50 0.0089 0.0007

Jupiter 80633-12-27 16:34 G 31172019.00 31172019.19 31172019.38 0.0496 0.0162

Neptune 80634-01-06 07:41 G 31172028.60 31172028.82 31172029.04 0.0089 0.0002

Neptune 80634-08-19 20:24 G 31172254.14 31172254.35 31172254.57 0.0089 0.0011

Jupiter 80634-08-20 17:32 G 31172255.04 31172255.23 31172255.41 0.0502 0.0195

Mars 80634-10-06 22:05 G 31172302.25 31172302.42 31172302.59 0.1747 0.0398

Neptune 80635-04-02 09:08 G 31172479.68 31172479.88 31172480.10 0.0089 0.0020

Neptune 80635-11-13 21:51 G 31172705.22 31172705.41 31172705.63 0.0089 0.0029

Neptune 80636-06-26 10:34 G 31172930.76 31172930.94 31172931.16 0.0089 0.0038

Neptune 80637-02-06 23:46 G 31173156.31 31173156.49 31173156.68 0.0089 0.0046

Neptune 80637-09-20 12:29 G 31173381.86 31173382.02 31173382.20 0.0089 0.0055

Saturn 80638-01-27 14:39 G 31173510.93 31173511.11 31173511.29 0.0266 0.0147

Neptune 80638-05-04 00:58 G 31173607.41 31173607.54 31173607.71 0.0089 0.0064

Saturn 80638-09-13 18:00 G 31173740.04 31173740.25 31173740.47 0.0266 0.0009

Neptune 80638-12-15 13:41 G 31173832.96 31173833.07 31173833.22 0.0089 0.0073

Jupiter 80639-03-10 14:53 G 31173918.04 31173918.12 31173918.20 0.0536 0.0492

Saturn 80639-04-30 21:22 G 31173969.23 31173969.39 31173969.57 0.0266 0.0160

Neptune 80639-07-29 02:53 G 31174058.54 31174058.62 31174058.72 0.0089 0.0081

Jupiter 80639-11-03 22:05 G 31174156.21 31174156.42 31174156.62 0.0530 0.0049

Jupiter 80640-06-28 21:51 G 31174394.27 31174394.41 31174394.55 0.0521 0.0380

Jupiter 80645-09-01 20:10 G 31176285.17 31176285.34 31176285.52 0.0494 0.0257

Jupiter 80646-04-25 18:44 G 31176521.09 31176521.28 31176521.48 0.0500 0.0093

Jupiter 80646-12-18 00:15 G 31176757.42 31176757.51 31176757.60 0.0508 0.0453

Jupiter 80651-07-09 09:08 G 31178421.68 31178421.88 31178422.07 0.0532 0.0176

Jupiter 80652-03-03 12:00 G 31178659.82 31178660.00 31178660.18 0.0524 0.0266

Saturn 80652-07-10 00:58 G 31178788.46 31178788.54 31178788.63 0.0295 0.0265

Saturn 80653-02-24 22:20 G 31179018.22 31179018.43 31179018.63 0.0295 0.0062

Saturn 80653-10-12 19:27 G 31179248.13 31179248.31 31179248.50 0.0295 0.0143

Jupiter 80657-05-08 00:29 G 31180551.38 31180551.52 31180551.67 0.0492 0.0348

Jupiter 80657-12-29 21:36 G 31180787.20 31180787.40 31180787.60 0.0498 0.0008

Jupiter 80658-08-23 00:44 G 31181023.39 31181023.53 31181023.67 0.0505 0.0354

Mars 80662-02-22 08:24 G 31182302.67 31182302.85 31182303.02 0.1781 0.0226

Jupiter 80663-03-13 21:08 G 31182687.22 31182687.38 31182687.55 0.0534 0.0300

Jupiter 80663-11-07 02:24 G 31182925.41 31182925.60 31182925.80 0.0527 0.0149

Uranus 80664-10-21 23:46 G 31183275.44 31183275.49 31183275.53 0.0135 0.0132

Uranus 80665-06-05 04:34 G 31183501.56 31183501.69 31183501.85 0.0135 0.0100

Uranus 80666-01-17 09:36 G 31183727.73 31183727.90 31183728.10 0.0135 0.0069

Uranus 80666-08-31 15:08 G 31183953.93 31183954.13 31183954.34 0.0135 0.0037

Uranus 80667-04-14 20:24 G 31184180.13 31184180.35 31184180.56 0.0135 0.0006

Saturn 80667-08-09 19:41 G 31184297.13 31184297.32 31184297.51 0.0266 0.0122

Uranus 80667-11-27 01:12 G 31184406.34 31184406.55 31184406.77 0.0135 0.0026

Saturn 80668-03-25 23:03 G 31184526.25 31184526.46 31184526.68 0.0266 0.0031

Uranus 80668-07-10 06:15 G 31184632.57 31184632.76 31184632.96 0.0134 0.0058

Saturn 80668-11-10 02:10 G 31184755.44 31184755.59 31184755.75 0.0266 0.0184

Jupiter 80669-01-11 04:48 G 31184817.61 31184817.70 31184817.79 0.0491 0.0436

Uranus 80669-02-21 10:48 G 31184858.81 31184858.95 31184859.13 0.0134 0.0090

Jupiter 80669-09-04 00:29 G 31185053.32 31185053.52 31185053.72 0.0496 0.0104

Uranus 80669-10-05 15:51 G 31185085.08 31185085.16 31185085.27 0.0134 0.0120

Jupiter 80670-04-28 01:27 G 31185289.39 31185289.56 31185289.74 0.0503 0.0254

Jupiter 80674-11-16 09:22 G 31186952.77 31186952.89 31186953.02 0.0536 0.0421

Jupiter 80675-07-12 16:34 G 31187190.99 31187191.19 31187191.40 0.0529 0.0028

Jupiter 80676-03-06 15:36 G 31187429.05 31187429.15 31187429.26 0.0520 0.0448

Jupiter 80681-05-10 05:03 G 31189319.52 31189319.71 31189319.89 0.0495 0.0199

Jupiter 80682-01-01 04:34 G 31189555.50 31189555.69 31189555.88 0.0501 0.0155

Saturn 80682-01-20 03:51 G 31189574.55 31189574.66 31189574.79 0.0294 0.0240

Saturn 80682-09-07 01:12 G 31189804.35 31189804.55 31189804.76 0.0294 0.0037

Saturn 80683-04-24 22:20 G 31190034.26 31190034.43 31190034.61 0.0294 0.0167

Jupiter 80687-03-17 04:05 G 31191456.47 31191456.67 31191456.87 0.0531 0.0097

Jupiter 80687-11-10 04:48 G 31191694.55 31191694.70 31191694.86 0.0522 0.0337

Jupiter 80693-01-13 08:53 G 31193585.71 31193585.87 31193586.03 0.0493 0.0293

Jupiter 80693-09-06 07:12 G 31193821.60 31193821.80 31193822.00 0.0499 0.0056

Jupiter 80694-04-30 12:00 G 31194057.90 31194058.00 31194058.12 0.0507 0.0418

Saturn 80696-07-04 20:53 G 31194854.31 31194854.37 31194854.45 0.0266 0.0251

Saturn 80697-02-19 00:44 G 31195083.34 31195083.53 31195083.74 0.0266 0.0098

Saturn 80697-10-06 04:20 G 31195312.47 31195312.68 31195312.89 0.0266 0.0056

Saturn 80698-05-23 07:41 G 31195541.70 31195541.82 31195541.96 0.0266 0.0209

Jupiter 80698-11-19 15:08 G 31195721.95 31195722.13 31195722.32 0.0532 0.0223

Jupiter 80699-07-15 18:15 G 31195960.08 31195960.26 31195960.45 0.0525 0.0220

Mars 80700-08-04 06:58 G 31196344.62 31196344.79 31196344.96 0.1751 0.0056

Jupiter 80704-09-19 12:58 G 31197851.92 31197852.04 31197852.17 0.0492 0.0384

Jupiter 80705-05-13 09:36 G 31198087.70 31198087.90 31198088.11 0.0497 0.0046

Jupiter 80706-01-04 12:00 G 31198323.85 31198324.00 31198324.16 0.0504 0.0315

Uranus 80708-03-07 18:44 G 31199117.18 31199117.28 31199117.38 0.0143 0.0126

Uranus 80708-10-20 06:58 G 31199343.62 31199343.79 31199343.96 0.0143 0.0088

Neptune 80709-05-09 21:36 G 31199545.33 31199545.40 31199545.50 0.0088 0.0081

Uranus 80709-06-03 19:12 G 31199570.09 31199570.30 31199570.51 0.0143 0.0049

Neptune 80709-12-21 11:03 G 31199770.85 31199770.96 31199771.10 0.0088 0.0073

Uranus 80710-01-16 07:41 G 31199796.60 31199796.82 31199797.04 0.0144 0.0009

Jupiter 80710-07-26 00:44 G 31199987.38 31199987.53 31199987.68 0.0535 0.0351

Neptune 80710-08-04 00:15 G 31199996.38 31199996.51 31199996.68 0.0088 0.0064

Uranus 80710-08-30 20:10 G 31200023.13 31200023.34 31200023.56 0.0144 0.0031

Neptune 80711-03-17 13:41 G 31200221.91 31200222.07 31200222.26 0.0088 0.0055

Jupiter 80711-03-21 06:29 G 31200225.57 31200225.77 31200225.98 0.0528 0.0099

Uranus 80711-04-14 08:24 G 31200249.67 31200249.85 31200250.06 0.0144 0.0071

Saturn 80711-08-03 15:51 G 31200361.02 31200361.16 31200361.32 0.0295 0.0203

Neptune 80711-10-29 03:08 G 31200447.45 31200447.63 31200447.83 0.0088 0.0047

Jupiter 80711-11-14 03:51 G 31200463.64 31200463.66 31200463.71 0.0519 0.0510

Uranus 80711-11-26 21:08 G 31200476.25 31200476.38 31200476.53 0.0144 0.0110

Saturn 80712-03-20 13:12 G 31200590.85 31200591.05 31200591.26 0.0295 0.0006

Neptune 80712-06-10 16:05 G 31200672.99 31200673.17 31200673.39 0.0088 0.0039

Saturn 80712-11-05 10:20 G 31200820.79 31200820.93 31200821.09 0.0294 0.0207

Neptune 80713-01-22 05:46 G 31200898.54 31200898.74 31200898.96 0.0088 0.0029

Neptune 80713-09-04 19:12 G 31201124.08 31201124.30 31201124.52 0.0088 0.0020

Neptune 80714-04-18 08:24 G 31201349.63 31201349.85 31201350.07 0.0088 0.0012

Neptune 80714-11-29 21:36 G 31201575.18 31201575.40 31201575.62 0.0088 0.0003

Neptune 80715-07-13 10:48 G 31201800.73 31201800.95 31201801.18 0.0088 0.0006

Neptune 80716-02-24 00:00 G 31202026.29 31202026.50 31202026.73 0.0088 0.0015

Jupiter 80716-05-25 18:00 G 31202118.19 31202118.25 31202118.30 0.0490 0.0470

Neptune 80716-10-06 13:27 G 31202251.84 31202252.06 31202252.27 0.0088 0.0023

Jupiter 80717-01-16 13:12 G 31202353.86 31202354.05 31202354.25 0.0495 0.0142

Neptune 80717-05-20 02:24 G 31202477.40 31202477.60 31202477.81 0.0088 0.0032

Jupiter 80717-09-09 13:27 G 31202589.88 31202590.06 31202590.24 0.0502 0.0215

Neptune 80717-12-31 15:22 G 31202702.96 31202703.14 31202703.36 0.0088 0.0041

Neptune 80718-08-14 05:03 G 31202928.52 31202928.71 31202928.89 0.0088 0.0049

Neptune 80719-03-27 18:00 G 31203154.09 31203154.25 31203154.43 0.0088 0.0058

Neptune 80719-11-08 06:44 G 31203379.66 31203379.78 31203379.95 0.0088 0.0067

Neptune 80720-06-20 20:24 G 31203605.24 31203605.35 31203605.47 0.0088 0.0075

Neptune 80721-02-01 09:22 G 31203830.85 31203830.89 31203830.98 0.0088 0.0084

Jupiter 80722-03-30 11:46 G 31204252.90 31204252.99 31204253.09 0.0536 0.0473

Jupiter 80722-11-23 19:41 G 31204491.12 31204491.32 31204491.53 0.0530 0.0025

Jupiter 80723-07-19 20:10 G 31204729.21 31204729.34 31204729.47 0.0522 0.0403

Saturn 80726-01-16 03:08 G 31205640.53 31205640.63 31205640.76 0.0266 0.0224

Saturn 80726-09-02 06:58 G 31205869.58 31205869.79 31205870.00 0.0266 0.0071

Saturn 80727-04-19 10:20 G 31206098.73 31206098.93 31206099.14 0.0266 0.0082

Saturn 80727-12-04 13:41 G 31206327.97 31206328.07 31206328.17 0.0266 0.0234

Mars 80727-12-21 15:22 G 31206344.97 31206345.14 31206345.32 0.1776 0.0204

Jupiter 80728-09-21 16:34 G 31206620.02 31206620.19 31206620.37 0.0494 0.0237

Jupiter 80729-05-15 15:08 G 31206855.93 31206856.13 31206856.32 0.0500 0.0114

Jupiter 80730-01-06 20:24 G 31207092.29 31207092.35 31207092.43 0.0508 0.0474

Earth 80730-05-01 00:00 G 31207206.35 31207206.50 31207206.64 0.2639 0.1178

Moon 80730-05-01 02:24 G 31207206.48 31207206.60 31207206.73 0.2645 0.1446 *

Jupiter 80734-07-29 08:53 G 31208756.68 31208756.87 31208757.07 0.0532 0.0148

Jupiter 80735-03-24 11:32 G 31208994.82 31208994.98 31208995.16 0.0524 0.0293

Earth 80738-04-28 14:24 G 31210126.01 31210126.10 31210126.19 0.2640 0.2147

Moon 80738-04-28 19:56 G 31210126.19 31210126.33 31210126.47 0.2642 0.1255 *

Jupiter 80740-05-27 21:22 G 31210886.24 31210886.39 31210886.54 0.0492 0.0329

Jupiter 80741-01-18 18:44 G 31211122.07 31211122.28 31211122.48 0.0498 0.0019

Saturn 80741-02-12 20:10 G 31211147.18 31211147.34 31211147.51 0.0294 0.0175

Jupiter 80741-09-11 22:05 G 31211358.29 31211358.42 31211358.56 0.0506 0.0377

Saturn 80741-09-30 17:17 G 31211377.02 31211377.22 31211377.43 0.0294 0.0029

Saturn 80742-05-18 14:10 G 31211606.98 31211607.09 31211607.23 0.0294 0.0232

Jupiter 80746-04-02 20:10 G 31213022.17 31213022.34 31213022.52 0.0533 0.0274

Jupiter 80746-11-27 00:29 G 31213260.33 31213260.52 31213260.71 0.0526 0.0174

Uranus 80749-02-03 14:53 G 31214060.02 31214060.12 31214060.25 0.0135 0.0114

Uranus 80749-09-17 20:24 G 31214286.19 31214286.35 31214286.53 0.0135 0.0082

Uranus 80750-05-02 01:27 G 31214512.37 31214512.56 31214512.77 0.0135 0.0051

Uranus 80750-12-14 06:44 G 31214738.57 31214738.78 31214739.00 0.0135 0.0019

Uranus 80751-07-28 12:00 G 31214964.78 31214965.00 31214965.21 0.0135 0.0013

Jupiter 80752-02-01 01:12 G 31215152.45 31215152.55 31215152.66 0.0491 0.0419

Uranus 80752-03-10 16:48 G 31215191.01 31215191.20 31215191.41 0.0134 0.0045

Jupiter 80752-09-23 21:36 G 31215388.21 31215388.40 31215388.60 0.0497 0.0084

Uranus 80752-10-22 21:51 G 31215417.24 31215417.41 31215417.60 0.0134 0.0076

Jupiter 80753-05-17 23:32 G 31215624.31 31215624.48 31215624.65 0.0504 0.0277

Uranus 80753-06-06 02:53 G 31215643.50 31215643.62 31215643.76 0.0134 0.0107

Saturn 80755-07-29 07:41 G 31216426.69 31216426.82 31216426.97 0.0266 0.0202

Saturn 80756-03-14 11:46 G 31216655.78 31216655.99 31216656.20 0.0266 0.0048

Saturn 80756-10-29 15:22 G 31216884.95 31216885.14 31216885.34 0.0266 0.0106

Saturn 80757-06-15 18:58 G 31217114.25 31217114.29 31217114.34 0.0266 0.0259

Jupiter 80757-12-06 06:44 G 31217287.65 31217287.78 31217287.92 0.0535 0.0398

Jupiter 80758-08-01 12:58 G 31217525.83 31217526.04 31217526.24 0.0528 0.0051

Jupiter 80759-03-27 10:48 G 31217763.87 31217763.95 31217764.04 0.0520 0.0469

Jupiter 80764-05-30 01:12 G 31219654.36 31219654.55 31219654.73 0.0495 0.0181

Jupiter 80765-01-21 00:44 G 31219890.34 31219890.53 31219890.72 0.0501 0.0174

Mars 80766-06-01 16:05 G 31220387.00 31220387.17 31220387.34 0.1754 0.0301

Jupiter 80769-08-10 15:08 G 31221553.09 31221553.13 31221553.18 0.0537 0.0523

Jupiter 80770-04-05 23:17 G 31221791.27 31221791.47 31221791.68 0.0531 0.0078

Saturn 80770-08-26 08:24 G 31221933.67 31221933.85 31221934.04 0.0295 0.0136

Jupiter 80770-11-30 00:44 G 31222029.38 31222029.53 31222029.68 0.0523 0.0357

Saturn 80771-04-13 05:46 G 31222163.53 31222163.74 31222163.94 0.0295 0.0068

Saturn 80771-11-29 02:39 G 31222393.54 31222393.61 31222393.69 0.0294 0.0271

Pluto 80771-12-17 05:32 G 31222411.56 31222411.73 31222411.93 0.0065 0.0034

Pluto 80772-07-29 10:05 G 31222636.71 31222636.92 31222637.15 0.0066 0.0006

Pluto 80773-03-11 14:10 G 31222861.96 31222862.09 31222862.28 0.0066 0.0045

Jupiter 80776-02-03 05:17 G 31223920.56 31223920.72 31223920.89 0.0493 0.0274

Jupiter 80776-09-26 03:08 G 31224156.43 31224156.63 31224156.83 0.0499 0.0075

Jupiter 80777-05-20 07:27 G 31224392.71 31224392.81 31224392.92 0.0507 0.0435

Jupiter 80781-12-09 11:17 G 31226056.78 31226056.97 31226057.16 0.0533 0.0203

Jupiter 80782-08-04 15:22 G 31226294.95 31226295.14 31226295.32 0.0525 0.0243

Saturn 80785-02-07 15:08 G 31227212.97 31227213.13 31227213.30 0.0266 0.0172

Saturn 80785-09-24 18:44 G 31227442.06 31227442.28 31227442.49 0.0266 0.0019

Saturn 80786-05-11 22:05 G 31227671.24 31227671.42 31227671.61 0.0266 0.0134

Jupiter 80787-10-09 09:08 G 31228186.75 31228186.88 31228187.01 0.0492 0.0365

Jupiter 80788-06-01 05:32 G 31228422.53 31228422.73 31228422.93 0.0497 0.0025

Jupiter 80789-01-23 07:41 G 31228658.67 31228658.82 31228658.97 0.0504 0.0335

Uranus 80791-11-06 02:24 G 31229675.59 31229675.60 31229675.62 0.0143 0.0143

Neptune 80792-02-06 09:51 G 31229767.91 31229767.91 31229767.94 0.0089 0.0089

Uranus 80792-06-19 14:24 G 31229901.96 31229902.10 31229902.26 0.0143 0.0104

Neptune 80792-09-18 22:34 G 31229993.37 31229993.44 31229993.55 0.0089 0.0080

Uranus 80793-02-01 02:39 G 31230128.43 31230128.61 31230128.82 0.0143 0.0066

Neptune 80793-05-02 11:32 G 31230218.86 31230218.98 31230219.11 0.0089 0.0072

Jupiter 80793-08-13 23:46 G 31230322.33 31230322.49 31230322.65 0.0535 0.0326

Uranus 80793-09-15 15:22 G 31230354.93 31230355.14 31230355.36 0.0143 0.0026

Mars 80793-10-17 21:51 G 31230387.25 31230387.41 31230387.58 0.1772 0.0641

Neptune 80793-12-14 00:00 G 31230444.36 31230444.50 31230444.67 0.0089 0.0063

Jupiter 80794-04-09 05:32 G 31230560.54 31230560.73 31230560.94 0.0528 0.0126

Uranus 80794-04-30 03:51 G 31230581.44 31230581.66 31230581.88 0.0144 0.0014

Neptune 80794-07-27 12:58 G 31230669.88 31230670.04 31230670.23 0.0089 0.0054

Uranus 80794-12-12 16:20 G 31230807.98 31230808.18 31230808.39 0.0144 0.0053

Neptune 80795-03-10 01:56 G 31230895.40 31230895.58 31230895.77 0.0089 0.0045

Uranus 80795-07-27 04:48 G 31231034.54 31231034.70 31231034.88 0.0144 0.0093

Neptune 80795-10-21 14:39 G 31231120.92 31231121.11 31231121.31 0.0089 0.0037

Uranus 80796-03-09 17:46 G 31231261.16 31231261.24 31231261.33 0.0144 0.0132

Neptune 80796-06-03 03:08 G 31231346.44 31231346.63 31231346.85 0.0089 0.0028

Neptune 80797-01-14 16:05 G 31231571.96 31231572.17 31231572.39 0.0089 0.0019

Neptune 80797-08-28 05:03 G 31231797.49 31231797.71 31231797.93 0.0089 0.0010

Neptune 80798-04-10 17:46 G 31232023.03 31232023.24 31232023.46 0.0089 0.0002

Neptune 80798-11-22 06:29 G 31232248.56 31232248.77 31232248.99 0.0089 0.0008

Jupiter 80799-06-14 13:56 G 31232453.01 31232453.08 31232453.16 0.0491 0.0453

Neptune 80799-07-05 19:12 G 31232474.10 31232474.30 31232474.53 0.0089 0.0018

Jupiter 80800-02-05 09:22 G 31232688.70 31232688.89 31232689.09 0.0495 0.0123

Neptune 80800-02-16 08:24 G 31232699.64 31232699.85 31232700.06 0.0089 0.0026

Saturn 80800-03-07 13:27 G 31232719.86 31232720.06 31232720.25 0.0294 0.0108

Jupiter 80800-09-28 10:05 G 31232924.74 31232924.92 31232925.10 0.0502 0.0237

Neptune 80800-09-28 21:08 G 31232925.18 31232925.38 31232925.58 0.0089 0.0035

Saturn 80800-10-23 10:20 G 31232949.74 31232949.93 31232950.13 0.0294 0.0096

Neptune 80801-05-12 09:51 G 31233150.73 31233150.91 31233151.11 0.0089 0.0044

Neptune 80801-12-23 22:34 G 31233376.28 31233376.44 31233376.63 0.0089 0.0052

Neptune 80802-08-06 11:17 G 31233601.83 31233601.97 31233602.15 0.0089 0.0062

Neptune 80803-03-20 00:00 G 31233827.39 31233827.50 31233827.66 0.0089 0.0071

Neptune 80803-10-31 13:12 G 31234052.96 31234053.05 31234053.16 0.0089 0.0079

Neptune 80804-06-13 01:41 G 31234278.55 31234278.57 31234278.63 0.0089 0.0088

Jupiter 80805-04-18 11:17 G 31234587.86 31234587.97 31234588.08 0.0536 0.0448

Jupiter 80805-12-12 18:15 G 31234826.06 31234826.26 31234826.47 0.0529 0.0006

Jupiter 80806-08-07 17:32 G 31235064.12 31235064.23 31235064.35 0.0521 0.0426

Jupiter 80811-10-11 12:58 G 31236954.86 31236955.04 31236955.22 0.0494 0.0219

Jupiter 80812-06-03 12:00 G 31237190.81 31237191.00 31237191.20 0.0501 0.0136

Jupiter 80813-01-25 18:15 G 31237427.23 31237427.26 31237427.31 0.0509 0.0496

Saturn 80814-08-20 19:12 G 31237999.12 31237999.30 31237999.48 0.0266 0.0150

Saturn 80815-04-06 23:03 G 31238228.24 31238228.46 31238228.67 0.0266 0.0006

Saturn 80815-11-22 02:24 G 31238457.43 31238457.60 31238457.78 0.0266 0.0157

Jupiter 80817-08-17 05:46 G 31239091.55 31239091.74 31239091.94 0.0531 0.0125

Jupiter 80818-04-12 07:27 G 31239329.65 31239329.81 31239329.98 0.0523 0.0315

Jupiter 80823-06-16 17:03 G 31241221.06 31241221.21 31241221.37 0.0493 0.0312

Jupiter 80824-02-07 14:39 G 31241456.91 31241457.11 31241457.31 0.0498 0.0034

Jupiter 80824-09-30 18:15 G 31241693.13 31241693.26 31241693.38 0.0506 0.0395

Earth 80827-11-03 12:29 G 31242821.94 31242822.02 31242822.10 0.2694 0.2295

Moon 80827-11-03 12:00 G 31242821.96 31242822.00 31242822.04 0.2701 0.2572 *

Saturn 80829-01-31 04:20 G 31243276.61 31243276.68 31243276.76 0.0294 0.0271

Jupiter 80829-04-21 14:39 G 31243356.94 31243357.11 31243357.30 0.0534 0.0257

Saturn 80829-09-18 01:41 G 31243506.37 31243506.57 31243506.77 0.0295 0.0068

Jupiter 80829-12-15 19:27 G 31243595.12 31243595.31 31243595.50 0.0526 0.0193

Saturn 80830-05-05 22:48 G 31243736.27 31243736.45 31243736.64 0.0295 0.0136

Mars 80832-03-29 00:29 G 31244429.36 31244429.52 31244429.68 0.1759 0.0659

Uranus 80832-10-04 01:56 G 31244618.52 31244618.58 31244618.66 0.0135 0.0127

Uranus 80833-05-18 06:58 G 31244844.66 31244844.79 31244844.96 0.0135 0.0096

Uranus 80833-12-30 12:29 G 31245070.84 31245071.02 31245071.21 0.0135 0.0064

Uranus 80834-08-13 17:46 G 31245297.04 31245297.24 31245297.46 0.0135 0.0033

Jupiter 80835-02-19 22:05 G 31245487.30 31245487.42 31245487.53 0.0491 0.0401

Uranus 80835-03-27 23:03 G 31245523.25 31245523.46 31245523.68 0.0135 0.0001

Jupiter 80835-10-13 18:00 G 31245723.05 31245723.25 31245723.45 0.0496 0.0065

Earth 80835-11-01 04:20 G 31245741.53 31245741.68 31245741.82 0.2692 0.1002

Moon 80835-11-01 07:56 G 31245741.68 31245741.83 31245741.97 0.2698 0.0912 *

Uranus 80835-11-09 04:05 G 31245749.46 31245749.67 31245749.88 0.0135 0.0031

Jupiter 80836-06-05 19:12 G 31245959.14 31245959.30 31245959.46 0.0503 0.0295

Uranus 80836-06-22 08:53 G 31245975.69 31245975.87 31245976.07 0.0134 0.0062

Uranus 80837-02-03 13:56 G 31246201.94 31246202.08 31246202.25 0.0134 0.0093

Uranus 80837-09-17 18:58 G 31246428.23 31246428.29 31246428.38 0.0134 0.0124

Jupiter 80840-12-25 01:41 G 31247622.43 31247622.57 31247622.72 0.0535 0.0381

Jupiter 80841-08-20 08:39 G 31247860.66 31247860.86 31247861.07 0.0529 0.0071

Jupiter 80842-04-15 07:27 G 31248098.75 31248098.81 31248098.88 0.0520 0.0489

Saturn 80844-03-02 02:39 G 31248785.42 31248785.61 31248785.81 0.0266 0.0120

Saturn 80844-10-17 06:15 G 31249014.55 31249014.76 31249014.98 0.0266 0.0033

Saturn 80845-06-03 09:22 G 31249243.75 31249243.89 31249244.06 0.0266 0.0186

Jupiter 80846-10-26 02:10 G 31249753.57 31249753.59 31249753.60 0.0490 0.0487

Jupiter 80847-06-18 20:53 G 31249989.18 31249989.37 31249989.56 0.0494 0.0161

Jupiter 80848-02-09 20:24 G 31250225.16 31250225.35 31250225.53 0.0501 0.0195

Jupiter 80852-08-29 13:27 G 31251887.99 31251888.06 31251888.14 0.0537 0.0501

Jupiter 80853-04-24 22:05 G 31252126.21 31252126.42 31252126.62 0.0531 0.0052

Jupiter 80853-12-18 23:17 G 31252364.34 31252364.47 31252364.62 0.0523 0.0383

Saturn 80858-08-13 10:05 G 31254062.80 31254062.92 31254063.03 0.0294 0.0242

Jupiter 80859-02-22 01:27 G 31254255.38 31254255.56 31254255.73 0.0493 0.0256

Saturn 80859-03-31 06:58 G 31254292.59 31254292.79 31254293.00 0.0294 0.0040

Mars 80859-08-15 05:32 G 31254429.59 31254429.73 31254429.87 0.1768 0.1036

Pluto 80859-08-18 12:15 G 31254432.89 31254433.01 31254433.19 0.0078 0.0058

Jupiter 80859-10-15 23:17 G 31254491.27 31254491.47 31254491.67 0.0499 0.0095

Saturn 80859-11-16 03:51 G 31254522.50 31254522.66 31254522.84 0.0294 0.0164

Pluto 80860-03-30 22:48 G 31254658.23 31254658.45 31254658.67 0.0078 0.0010

Jupiter 80860-06-08 03:51 G 31254727.58 31254727.66 31254727.75 0.0507 0.0456

Pluto 80860-11-11 07:56 G 31254883.82 31254883.83 31254883.90 0.0078 0.0077

Jupiter 80864-12-28 10:34 G 31256391.75 31256391.94 31256392.14 0.0532 0.0177

Jupiter 80865-08-23 13:41 G 31256629.89 31256630.07 31256630.25 0.0525 0.0268

Jupiter 80870-10-28 04:48 G 31258521.56 31258521.70 31258521.85 0.0492 0.0349

Jupiter 80871-06-21 01:56 G 31258757.38 31258757.58 31258757.79 0.0498 0.0009

Jupiter 80872-02-12 04:48 G 31258993.57 31258993.70 31258993.85 0.0505 0.0357

Saturn 80873-01-26 02:10 G 31259342.53 31259342.59 31259342.67 0.0266 0.0252

Neptune 80873-08-11 06:44 G 31259539.74 31259539.78 31259539.87 0.0088 0.0085

Saturn 80873-09-12 06:00 G 31259571.55 31259571.75 31259571.95 0.0266 0.0099

Neptune 80874-03-24 20:10 G 31259765.24 31259765.34 31259765.47 0.0088 0.0076

Saturn 80874-04-29 09:36 G 31259800.69 31259800.90 31259801.12 0.0266 0.0055

Neptune 80874-11-05 09:36 G 31259990.76 31259990.90 31259991.05 0.0088 0.0067

Saturn 80874-12-14 13:12 G 31260029.92 31260030.05 31260030.19 0.0266 0.0208

Neptune 80875-06-18 22:34 G 31260216.29 31260216.44 31260216.63 0.0088 0.0059

Neptune 80876-01-30 12:15 G 31260441.84 31260442.01 31260442.21 0.0088 0.0049

Uranus 80876-02-17 21:08 G 31260460.28 31260460.38 31260460.52 0.0143 0.0122

Jupiter 80876-09-01 21:36 G 31260657.23 31260657.40 31260657.57 0.0534 0.0303

Neptune 80876-09-12 01:41 G 31260667.38 31260667.57 31260667.77 0.0088 0.0041

Uranus 80876-10-01 09:36 G 31260686.73 31260686.90 31260687.09 0.0143 0.0082

Neptune 80877-04-25 14:39 G 31260892.92 31260893.11 31260893.33 0.0088 0.0032

Jupiter 80877-04-28 02:39 G 31260895.41 31260895.61 31260895.81 0.0527 0.0147

Uranus 80877-05-15 22:05 G 31260913.21 31260913.42 31260913.64 0.0143 0.0043

Neptune 80877-12-07 04:05 G 31261118.47 31261118.67 31261118.90 0.0088 0.0023

Uranus 80877-12-28 10:34 G 31261139.72 31261139.94 31261140.16 0.0143 0.0004

Neptune 80878-07-20 17:32 G 31261344.02 31261344.23 31261344.46 0.0088 0.0014

Uranus 80878-08-11 23:03 G 31261366.25 31261366.46 31261366.68 0.0144 0.0036

Neptune 80879-03-03 06:58 G 31261569.57 31261569.79 31261570.02 0.0088 0.0005

Uranus 80879-03-26 11:32 G 31261592.81 31261592.98 31261593.18 0.0144 0.0076

Neptune 80879-10-14 20:10 G 31261795.12 31261795.34 31261795.57 0.0088 0.0004

Uranus 80879-11-08 00:15 G 31261819.39 31261819.51 31261819.65 0.0144 0.0115

Neptune 80880-05-27 09:22 G 31262020.67 31262020.89 31262021.12 0.0088 0.0012

Neptune 80881-01-07 22:34 G 31262246.23 31262246.44 31262246.67 0.0088 0.0021

Neptune 80881-08-21 11:46 G 31262471.79 31262471.99 31262472.21 0.0088 0.0030

Neptune 80882-04-04 00:44 G 31262697.35 31262697.53 31262697.75 0.0088 0.0039

Jupiter 80882-07-03 09:51 G 31262787.82 31262787.91 31262788.00 0.0491 0.0438

Neptune 80882-11-15 14:10 G 31262922.91 31262923.09 31262923.29 0.0088 0.0047

Jupiter 80883-02-24 05:32 G 31263023.54 31263023.73 31263023.93 0.0496 0.0105

Neptune 80883-06-29 03:08 G 31263148.48 31263148.63 31263148.82 0.0088 0.0056

Jupiter 80883-10-18 06:15 G 31263259.59 31263259.76 31263259.93 0.0502 0.0255

Neptune 80884-02-09 16:20 G 31263374.05 31263374.18 31263374.35 0.0088 0.0065

Neptune 80884-09-22 05:46 G 31263599.63 31263599.74 31263599.87 0.0088 0.0073

Neptune 80885-05-05 18:44 G 31263825.22 31263825.28 31263825.38 0.0088 0.0082

Saturn 80888-02-23 20:53 G 31264849.22 31264849.37 31264849.52 0.0295 0.0205

Jupiter 80888-05-07 05:17 G 31264922.61 31264922.72 31264922.84 0.0536 0.0432

Saturn 80888-10-10 18:15 G 31265079.05 31265079.26 31265079.47 0.0295 0.0003

Jupiter 80888-12-31 12:58 G 31265160.83 31265161.04 31265161.24 0.0530 0.0022

Saturn 80889-05-28 15:08 G 31265308.99 31265309.13 31265309.29 0.0295 0.0204

Jupiter 80889-08-26 12:44 G 31265398.93 31265399.03 31265399.14 0.0521 0.0445

Jupiter 80894-10-30 09:51 G 31267289.72 31267289.91 31267290.09 0.0494 0.0200

Jupiter 80895-06-23 08:24 G 31267525.66 31267525.85 31267526.05 0.0500 0.0155

Mars 80898-01-24 09:08 G 31268471.74 31268471.88 31268472.02 0.1762 0.1029

Jupiter 80900-09-06 00:44 G 31269426.33 31269426.53 31269426.74 0.0532 0.0107

Jupiter 80901-05-02 03:22 G 31269664.49 31269664.64 31269664.80 0.0524 0.0334

Saturn 80902-08-09 10:05 G 31270128.81 31270128.92 31270129.04 0.0266 0.0221

Saturn 80903-03-26 13:56 G 31270357.87 31270358.08 31270358.29 0.0266 0.0069

Saturn 80903-11-10 17:17 G 31270587.02 31270587.22 31270587.43 0.0266 0.0084

Saturn 80904-06-26 20:39 G 31270816.27 31270816.36 31270816.46 0.0266 0.0236

Jupiter 80906-07-06 13:27 G 31271555.90 31271556.06 31271556.22 0.0492 0.0293

Jupiter 80907-02-27 10:34 G 31271791.74 31271791.94 31271792.14 0.0498 0.0054

Jupiter 80907-10-21 13:56 G 31272027.97 31272028.08 31272028.19 0.0506 0.0415

Jupiter 80912-05-11 13:12 G 31273691.87 31273692.05 31273692.24 0.0534 0.0232

Jupiter 80913-01-04 18:15 G 31273930.08 31273930.26 31273930.45 0.0526 0.0219

Uranus 80917-01-16 17:03 G 31275403.11 31275403.21 31275403.35 0.0135 0.0110

Uranus 80917-08-30 22:48 G 31275629.28 31275629.45 31275629.63 0.0135 0.0078

Saturn 80917-09-06 02:39 G 31275635.45 31275635.61 31275635.78 0.0294 0.0176

Jupiter 80918-03-11 18:00 G 31275822.13 31275822.25 31275822.38 0.0491 0.0384

Uranus 80918-04-14 04:05 G 31275855.47 31275855.67 31275855.88 0.0135 0.0047

Saturn 80918-04-23 23:46 G 31275865.29 31275865.49 31275865.70 0.0294 0.0028

Jupiter 80918-11-02 13:56 G 31276057.88 31276058.08 31276058.29 0.0496 0.0046

Uranus 80918-11-26 09:22 G 31276081.68 31276081.89 31276082.10 0.0135 0.0015

Saturn 80918-12-09 20:39 G 31276095.24 31276095.36 31276095.50 0.0294 0.0231

Jupiter 80919-06-26 15:22 G 31276293.99 31276294.14 31276294.30 0.0504 0.0317

Uranus 80919-07-10 14:24 G 31276307.89 31276308.10 31276308.32 0.0135 0.0017

Uranus 80920-02-21 19:12 G 31276534.11 31276534.30 31276534.52 0.0134 0.0049

Uranus 80920-10-05 00:29 G 31276760.36 31276760.52 31276760.70 0.0134 0.0079

Uranus 80921-05-19 05:32 G 31276986.62 31276986.73 31276986.86 0.0134 0.0110

Jupiter 80924-01-15 01:56 G 31277957.43 31277957.58 31277957.73 0.0535 0.0355

Jupiter 80924-09-09 08:10 G 31278195.64 31278195.84 31278196.04 0.0528 0.0098

Jupiter 80925-05-05 06:15 G 31278433.73 31278433.76 31278433.79 0.0520 0.0512

Mars 80925-06-12 12:29 G 31278471.92 31278472.02 31278472.12 0.1764 0.1446

Jupiter 80929-11-14 21:51 G 31280088.37 31280088.41 31280088.47 0.0490 0.0472

Mars 80930-01-24 13:27 G 31280159.00 31280159.06 31280159.12 0.1750 0.1623

Jupiter 80930-07-08 17:17 G 31280324.03 31280324.22 31280324.42 0.0495 0.0143

Jupiter 80931-03-01 17:32 G 31280560.05 31280560.23 31280560.41 0.0502 0.0216

Saturn 80932-02-19 12:44 G 31280914.89 31280915.03 31280915.17 0.0266 0.0202

Saturn 80932-10-05 16:20 G 31281143.97 31281144.18 31281144.39 0.0266 0.0049

Saturn 80933-05-22 19:41 G 31281373.13 31281373.32 31281373.52 0.0266 0.0105

Saturn 80934-01-06 23:17 G 31281602.42 31281602.47 31281602.52 0.0266 0.0257

Jupiter 80935-09-19 12:29 G 31282222.93 31282223.02 31282223.12 0.0536 0.0478

Jupiter 80936-05-14 20:24 G 31282461.14 31282461.35 31282461.55 0.0530 0.0028

Jupiter 80937-01-07 20:53 G 31282699.24 31282699.37 31282699.50 0.0522 0.0405

Jupiter 80942-03-13 21:51 G 31284590.24 31284590.41 31284590.59 0.0493 0.0238

Jupiter 80942-11-04 20:10 G 31284826.14 31284826.34 31284826.53 0.0499 0.0114

Jupiter 80943-06-29 00:44 G 31285062.47 31285062.53 31285062.61 0.0507 0.0474

Saturn 80947-03-19 12:29 G 31286421.84 31286422.02 31286422.21 0.0295 0.0139

Saturn 80947-11-04 09:51 G 31286651.71 31286651.91 31286652.12 0.0295 0.0066

Jupiter 80948-01-18 05:17 G 31286726.52 31286726.72 31286726.91 0.0533 0.0159

Saturn 80948-06-21 07:12 G 31286881.72 31286881.80 31286881.88 0.0294 0.0269

Jupiter 80948-09-12 08:39 G 31286964.69 31286964.86 31286965.04 0.0525 0.0286

Jupiter 80953-11-17 02:53 G 31288856.47 31288856.62 31288856.77 0.0492 0.0329

Jupiter 80954-07-10 23:32 G 31289092.28 31289092.48 31289092.69 0.0497 0.0019

Jupiter 80955-03-04 02:10 G 31289328.45 31289328.59 31289328.72 0.0505 0.0376

Neptune 80956-12-22 09:08 G 31289987.83 31289987.88 31289987.98 0.0089 0.0083

Mars 80957-06-11 22:05 G 31290159.33 31290159.42 31290159.52 0.1777 0.1458

Neptune 80957-08-04 22:05 G 31290213.32 31290213.42 31290213.56 0.0089 0.0075

Neptune 80958-03-18 11:03 G 31290438.83 31290438.96 31290439.12 0.0089 0.0065

Neptune 80958-10-30 00:00 G 31290664.33 31290664.50 31290664.67 0.0089 0.0057

Neptune 80959-06-12 12:15 G 31290889.85 31290890.01 31290890.22 0.0089 0.0049

Jupiter 80959-09-22 16:20 G 31290992.00 31290992.18 31290992.35 0.0535 0.0286

Uranus 80959-10-19 02:53 G 31291018.59 31291018.62 31291018.68 0.0143 0.0139

Neptune 80960-01-24 01:12 G 31291115.37 31291115.55 31291115.76 0.0089 0.0039

Jupiter 80960-05-17 22:05 G 31291230.22 31291230.42 31291230.61 0.0528 0.0167

Uranus 80960-06-01 15:22 G 31291244.99 31291245.14 31291245.30 0.0143 0.0100

Neptune 80960-09-05 13:56 G 31291340.89 31291341.08 31291341.30 0.0089 0.0031

Uranus 80961-01-14 03:36 G 31291471.46 31291471.65 31291471.86 0.0143 0.0062

Neptune 80961-04-19 02:53 G 31291566.41 31291566.62 31291566.83 0.0089 0.0021

Uranus 80961-08-28 16:05 G 31291697.96 31291698.17 31291698.39 0.0143 0.0023

Saturn 80961-08-31 20:24 G 31291701.19 31291701.35 31291701.52 0.0266 0.0171

Neptune 80961-11-30 15:36 G 31291791.94 31291792.15 31291792.37 0.0089 0.0012

Uranus 80962-04-12 04:34 G 31291924.48 31291924.69 31291924.92 0.0143 0.0018

Saturn 80962-04-18 00:00 G 31291930.28 31291930.50 31291930.71 0.0265 0.0019

Neptune 80962-07-14 04:34 G 31292017.47 31292017.69 31292017.91 0.0089 0.0003

Uranus 80962-11-24 17:03 G 31292151.02 31292151.21 31292151.42 0.0144 0.0057

Saturn 80962-12-03 03:08 G 31292159.45 31292159.63 31292159.82 0.0266 0.0134

Neptune 80963-02-24 17:17 G 31292243.00 31292243.22 31292243.44 0.0089 0.0006

Uranus 80963-07-09 05:32 G 31292377.58 31292377.73 31292377.90 0.0144 0.0096

Neptune 80963-10-08 06:00 G 31292468.54 31292468.75 31292468.97 0.0089 0.0015

Mars 80963-11-22 17:46 G 31292514.13 31292514.24 31292514.34 0.1766 0.1401

Uranus 80964-02-20 18:29 G 31292604.20 31292604.27 31292604.34 0.0144 0.0135

Neptune 80964-05-20 18:44 G 31292694.07 31292694.28 31292694.49 0.0089 0.0023

Neptune 80965-01-01 07:27 G 31292919.61 31292919.81 31292920.02 0.0089 0.0032

Jupiter 80965-07-23 06:58 G 31293122.69 31293122.79 31293122.90 0.0490 0.0419

Neptune 80965-08-14 20:10 G 31293145.16 31293145.34 31293145.55 0.0089 0.0042

Jupiter 80966-03-16 02:24 G 31293358.40 31293358.60 31293358.80 0.0495 0.0083

Neptune 80966-03-28 08:53 G 31293370.71 31293370.87 31293371.07 0.0089 0.0051

Jupiter 80966-11-07 02:39 G 31293594.45 31293594.61 31293594.78 0.0502 0.0276

Neptune 80966-11-08 21:36 G 31293596.26 31293596.40 31293596.58 0.0089 0.0060

Neptune 80967-06-22 11:03 G 31293821.82 31293821.96 31293822.10 0.0089 0.0068

Neptune 80968-02-02 23:32 G 31294047.38 31294047.48 31294047.60 0.0089 0.0077

Neptune 80968-09-15 12:15 G 31294272.97 31294273.01 31294273.09 0.0089 0.0086

Jupiter 80971-05-28 04:05 G 31295257.54 31295257.67 31295257.80 0.0536 0.0409

Jupiter 80972-01-21 12:00 G 31295495.80 31295496.00 31295496.21 0.0530 0.0046

Jupiter 80972-09-15 12:00 G 31295733.92 31295734.00 31295734.09 0.0521 0.0470

Moon 80973-05-02 00:15 G 31295962.35 31295962.51 31295962.67 0.2633 0.1047

Earth 80973-05-02 00:44 G 31295962.39 31295962.53 31295962.67 0.2640 0.1343 *

Saturn 80976-09-28 17:46 G 31297208.05 31297208.24 31297208.44 0.0294 0.0111

Saturn 80977-05-16 14:53 G 31297437.93 31297438.12 31297438.32 0.0294 0.0094

Jupiter 80977-11-19 06:29 G 31297624.58 31297624.77 31297624.96 0.0494 0.0179

Jupiter 80978-07-13 05:17 G 31297860.53 31297860.72 31297860.91 0.0500 0.0176

Earth 80981-04-29 15:08 G 31298882.03 31298882.13 31298882.23 0.2641 0.1996

Jupiter 80983-01-30 16:34 G 31299523.16 31299523.19 31299523.23 0.0537 0.0528

Jupiter 80983-09-26 01:27 G 31299761.36 31299761.56 31299761.76 0.0532 0.0079

Jupiter 80984-05-21 03:22 G 31299999.50 31299999.64 31299999.79 0.0523 0.0360

Jupiter 80989-07-25 10:20 G 31301890.76 31301890.93 31301891.10 0.0493 0.0275

Jupiter 80990-03-18 07:56 G 31302126.63 31302126.83 31302127.03 0.0499 0.0075

Jupiter 80990-11-09 12:00 G 31302362.90 31302363.00 31302363.10 0.0506 0.0437

Saturn 80991-03-13 22:05 G 31302487.25 31302487.42 31302487.60 0.0266 0.0152

Saturn 80991-10-29 01:41 G 31302716.35 31302716.57 31302716.78 0.0266 0.0004

Saturn 80992-06-14 04:48 G 31302945.53 31302945.70 31302945.88 0.0266 0.0153

Jupiter 80995-05-31 13:12 G 31304026.86 31304027.05 31304027.24 0.0533 0.0205

Mars 80995-11-21 22:48 G 31304201.34 31304201.45 31304201.57 0.1754 0.1299

Jupiter 80996-01-24 17:32 G 31304265.05 31304265.23 31304265.41 0.0526 0.0244

Uranus 81000-09-17 04:05 G 31305961.59 31305961.67 31305961.76 0.0135 0.0123

82ND MILLENNIUM CE

This is a list of transits of Venus in the 82nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**81001-03-31 15:22**	**G**	**31306157.01**	**31306157.14**	**31306157.28**	**0.0491**	**0.0366**	
Uranus	**81001-05-01 09:08**	**G**	**31306187.74**	**31306187.88**	**31306188.05**	**0.0135**	**0.0092**	
Jupiter	**81001-11-22 11:46**	**G**	**31306392.79**	**31306392.99**	**31306393.19**	**0.0497**	**0.0024**	
Uranus	**81001-12-13 14:24**	**G**	**31306413.92**	**31306414.10**	**31306414.31**	**0.0135**	**0.0061**	
Jupiter	**81002-07-16 13:27**	**G**	**31306628.92**	**31306629.06**	**31306629.22**	**0.0504**	**0.0337**	
Uranus	**81002-07-27 19:56**	**G**	**31306640.13**	**31306640.33**	**31306640.55**	**0.0135**	**0.0029**	
Uranus	**81003-03-11 01:12**	**G**	**31306866.34**	**31306866.55**	**31306866.77**	**0.0135**	**0.0003**	
Uranus	**81003-10-23 06:15**	**G**	**31307092.56**	**31307092.76**	**31307092.97**	**0.0134**	**0.0035**	
Uranus	**81004-06-05 11:17**	**G**	**31307318.79**	**31307318.97**	**31307319.16**	**0.0134**	**0.0066**	
Uranus	**81005-01-17 16:20**	**G**	**31307545.04**	**31307545.18**	**31307545.33**	**0.0134**	**0.0097**	
Saturn	**81005-08-25 04:20**	**G**	**31307764.63**	**31307764.68**	**31307764.75**	**0.0295**	**0.0280**	
Uranus	**81005-08-31 21:22**	**G**	**31307771.33**	**31307771.39**	**31307771.46**	**0.0134**	**0.0128**	
Saturn	**81006-04-12 01:56**	**G**	**31307994.38**	**31307994.58**	**31307994.78**	**0.0295**	**0.0077**	
Saturn	**81006-11-27 23:17**	**G**	**31308224.29**	**31308224.47**	**31308224.67**	**0.0295**	**0.0129**	
Jupiter	**81007-02-03 21:08**	**G**	**31308292.22**	**31308292.38**	**31308292.54**	**0.0535**	**0.0336**	
Jupiter	**81007-09-30 03:36**	**G**	**31308530.45**	**31308530.65**	**31308530.85**	**0.0528**	**0.0117**	
Jupiter	**81012-12-04 21:08**	**G**	**31310423.31**	**31310423.38**	**31310423.46**	**0.0490**	**0.0452**	
Jupiter	**81013-07-28 16:20**	**G**	**31310658.99**	**31310659.18**	**31310659.38**	**0.0495**	**0.0120**	
Jupiter	**81014-03-21 16:05**	**G**	**31310894.99**	**31310895.17**	**31310895.35**	**0.0501**	**0.0237**	
Jupiter	**81018-10-09 07:27**	**G**	**31312557.71**	**31312557.81**	**31312557.92**	**0.0537**	**0.0460**	
Jupiter	**81019-06-04 15:51**	**G**	**31312795.95**	**31312796.16**	**31312796.37**	**0.0531**	**0.0007**	
Pluto	**81019-11-21 16:48**	**G**	**31312966.02**	**31312966.20**	**31312966.40**	**0.0065**	**0.0032**	

Jupiter 81020-01-28 17:17 G 31313034.10 31313034.22 31313034.34 0.0523 0.0425

Pluto 81020-07-03 21:36 G 31313191.18 31313191.40 31313191.61 0.0066 0.0007

Saturn 81020-09-24 05:17 G 31313273.54 31313273.72 31313273.92 0.0265 0.0122

Pluto 81021-02-14 01:27 G 31313416.43 31313416.56 31313416.74 0.0066 0.0047

Saturn 81021-05-11 08:39 G 31313502.65 31313502.86 31313503.07 0.0265 0.0030

Saturn 81021-12-26 11:32 G 31313731.84 31313731.98 31313732.15 0.0265 0.0183

Mars 81023-04-10 04:48 G 31314201.56 31314201.70 31314201.85 0.1773 0.1012

Jupiter 81025-04-02 19:41 G 31314925.15 31314925.32 31314925.51 0.0493 0.0216

Jupiter 81025-11-24 17:46 G 31315161.04 31315161.24 31315161.43 0.0499 0.0137

Jupiter 81026-07-18 22:20 G 31315397.39 31315397.43 31315397.47 0.0507 0.0495

Jupiter 81031-02-07 04:48 G 31317061.51 31317061.70 31317061.90 0.0533 0.0133

Jupiter 81031-10-03 08:39 G 31317299.70 31317299.86 31317300.03 0.0525 0.0313

Saturn 81035-03-07 10:05 G 31318550.82 31318550.92 31318551.03 0.0294 0.0252

Saturn 81035-10-23 07:27 G 31318780.60 31318780.81 31318781.01 0.0295 0.0048

Saturn 81036-06-09 04:34 G 31319010.52 31319010.69 31319010.87 0.0295 0.0156

Jupiter 81036-12-07 00:15 G 31319191.36 31319191.51 31319191.68 0.0492 0.0309

Jupiter 81037-07-30 21:08 G 31319427.18 31319427.38 31319427.58 0.0497 0.0038

Neptune 81037-11-14 16:34 G 31319534.16 31319534.19 31319534.24 0.0088 0.0087

Jupiter 81038-03-23 23:32 G 31319663.36 31319663.48 31319663.61 0.0505 0.0399

Neptune 81038-06-28 05:32 G 31319759.65 31319759.73 31319759.85 0.0088 0.0078

Neptune 81039-02-08 18:58 G 31319985.17 31319985.29 31319985.44 0.0088 0.0070

Neptune 81039-09-22 08:24 G 31320210.70 31320210.85 31320211.02 0.0088 0.0061

Neptune 81040-05-04 21:22 G 31320436.23 31320436.39 31320436.59 0.0088 0.0052

Neptune 81040-12-16 10:48 G 31320661.77 31320661.95 31320662.16 0.0088 0.0043

Neptune 81041-07-30 00:15 G 31320887.31 31320887.51 31320887.72 0.0088 0.0034

Neptune 81042-03-12 13:41 G 31321112.86 31321113.07 31321113.29 0.0088 0.0025

Jupiter 81042-10-12 18:00 G 31321327.07 31321327.25 31321327.43 0.0534 0.0257

Neptune 81042-10-24 02:39 G 31321338.41 31321338.61 31321338.84 0.0088 0.0018

Neptune 81043-06-06 16:05 G 31321563.96 31321564.17 31321564.40 0.0088 0.0008

Jupiter 81043-06-07 23:32 G 31321565.29 31321565.48 31321565.67 0.0527 0.0196

Neptune 81044-01-18 05:46 G 31321789.51 31321789.74 31321789.96 0.0088 0.0002

Uranus 81044-01-31 20:24 G 31321803.24 31321803.35 31321803.48 0.0143 0.0119

Neptune 81044-08-30 18:58 G 31322015.07 31322015.29 31322015.51 0.0088 0.0010

Uranus 81044-09-14 08:53 G 31322029.69 31322029.87 31322030.06 0.0143 0.0080

Neptune 81045-04-13 07:56 G 31322240.63 31322240.83 31322241.06 0.0088 0.0019

Uranus 81045-04-28 21:08 G 31322256.18 31322256.38 31322256.60 0.0143 0.0041

Neptune 81045-11-24 21:08 G 31322466.18 31322466.38 31322466.61 0.0088 0.0028

Uranus 81045-12-11 09:36 G 31322482.68 31322482.90 31322483.12 0.0143 0.0003

Neptune 81046-07-08 10:34 G 31322691.74 31322691.94 31322692.15 0.0088 0.0036

Uranus 81046-07-25 22:05 G 31322709.21 31322709.42 31322709.64 0.0143 0.0037

Neptune 81047-02-18 23:46 G 31322917.31 31322917.49 31322917.70 0.0088 0.0046

Uranus 81047-03-09 10:34 G 31322935.76 31322935.94 31322936.14 0.0144 0.0077

Neptune 81047-10-02 12:58 G 31323142.88 31323143.04 31323143.23 0.0088 0.0054

Uranus 81047-10-21 23:17 G 31323162.34 31323162.47 31323162.60 0.0144 0.0116

Neptune 81048-05-15 01:56 G 31323368.45 31323368.58 31323368.76 0.0088 0.0063

Jupiter 81048-08-12 04:34 G 31323457.58 31323457.69 31323457.81 0.0491 0.0400

Neptune 81048-12-26 15:22 G 31323594.03 31323594.14 31323594.28 0.0088 0.0071

Jupiter 81049-04-05 00:15 G 31323693.31 31323693.51 31323693.72 0.0496 0.0063

Neptune 81049-08-09 04:20 G 31323819.61 31323819.68 31323819.80 0.0088 0.0080

Saturn 81049-08-20 02:39 G 31323830.56 31323830.61 31323830.67 0.0266 0.0256

Jupiter 81049-11-27 01:12 G 31323929.39 31323929.55 31323929.71 0.0503 0.0298

Saturn 81050-04-06 06:15 G 31324059.56 31324059.76 31324059.96 0.0266 0.0104

Saturn 81050-11-21 09:22 G 31324288.68 31324288.89 31324289.10 0.0266 0.0048

Saturn 81051-07-08 12:29 G 31324517.88 31324518.02 31324518.16 0.0266 0.0200

Jupiter 81054-06-17 05:32 G 31325592.59 31325592.73 31325592.88 0.0536 0.0382

Jupiter 81055-02-10 12:44 G 31325830.83 31325831.03 31325831.24 0.0529 0.0075

Jupiter 81055-10-06 12:00 G 31326068.94 31326069.00 31326069.07 0.0521 0.0494

Jupiter 81060-04-17 10:20 G 31327723.91 31327723.93 31327723.96 0.0490 0.0486

Jupiter 81060-12-09 05:17 G 31327959.53 31327959.72 31327959.91 0.0494 0.0158

Jupiter 81061-08-02 04:20 G 31328195.50 31328195.68 31328195.87 0.0501 0.0199

Mars 81061-09-19 07:27 G 31328243.66 31328243.81 31328243.95 0.1758 0.0942

Saturn 81064-09-16 15:22 G 31329337.01 31329337.14 31329337.28 0.0295 0.0222

Saturn 81065-05-04 13:12 G 31329566.84 31329567.05 31329567.26 0.0295 0.0018

Saturn 81065-12-20 10:48 G 31329796.79 31329796.95 31329797.11 0.0295 0.0188

Jupiter 81066-02-19 13:12 G 31329857.99 31329858.05 31329858.11 0.0537 0.0507

Jupiter 81066-10-15 21:51 G 31330096.20 31330096.41 31330096.61 0.0531 0.0057

Jupiter 81067-06-10 23:46 G 31330334.36 31330334.49 31330334.64 0.0524 0.0381

Earth 81070-11-05 14:24 G 31331578.03 31331578.10 31331578.17 0.2693 0.2407

Moon 81070-11-05 17:03 G 31331578.16 31331578.21 31331578.26 0.2687 0.2557 *

Jupiter 81072-08-14 10:34 G 31332225.77 31332225.94 31332226.11 0.0493 0.0251

Jupiter 81073-04-07 07:56 G 31332461.64 31332461.83 31332462.03 0.0498 0.0100

Jupiter 81073-11-29 11:32 G 31332697.90 31332697.98 31332698.07 0.0506 0.0459

Jupiter 81078-06-20 09:08 G 31334361.69 31334361.88 31334362.07 0.0533 0.0185

Moon 81078-11-03 04:20 G 31334497.52 31334497.68 31334497.84 0.2685 0.0699

Earth 81078-11-03 06:15 G 31334497.61 31334497.76 31334497.91 0.2692 0.0876 *

Jupiter 81079-02-13 13:56 G 31334599.90 31334600.08 31334600.26 0.0526 0.0265

Saturn 81079-03-02 09:36 G 31334616.80 31334616.90 31334617.02 0.0265 0.0227

Saturn 81079-10-17 12:58 G 31334845.84 31334846.04 31334846.25 0.0265 0.0075

Saturn 81080-06-02 16:05 G 31335074.97 31335075.17 31335075.38 0.0265 0.0077

Saturn 81081-01-17 18:58 G 31335304.19 31335304.29 31335304.40 0.0265 0.0228

Jupiter 81084-04-19 14:39 G 31336491.97 31336492.11 31336492.26 0.0491 0.0343

Jupiter 81084-12-11 10:34 G 31336727.74 31336727.94 31336728.15 0.0496 0.0007

Uranus 81084-12-29 18:58 G 31336746.16 31336746.29 31336746.42 0.0135 0.0106

Jupiter 81085-08-04 12:15 G 31336963.87 31336964.01 31336964.15 0.0504 0.0360

Uranus 81085-08-13 00:15 G 31336972.34 31336972.51 31336972.70 0.0135 0.0075

Uranus 81086-03-27 05:46 G 31337198.54 31337198.74 31337198.95 0.0135 0.0043

Uranus 81086-11-08 11:03 G 31337424.75 31337424.96 31337425.18 0.0135 0.0012

Uranus 81087-06-22 16:20 G 31337650.96 31337651.18 31337651.39 0.0135 0.0020

Uranus 81088-02-03 21:08 G 31337877.19 31337877.38 31337877.59 0.0135 0.0052

Uranus 81088-09-17 02:10 G 31338103.44 31338103.59 31338103.77 0.0134 0.0083

Mars 81089-02-04 11:46 G 31338243.82 31338243.99 31338244.15 0.1769 0.0581

Uranus 81089-05-01 07:12 G 31338329.70 31338329.80 31338329.93 0.0134 0.0114

Jupiter 81090-02-22 21:22 G 31338627.23 31338627.39 31338627.56 0.0535 0.0310

Jupiter 81090-10-19 04:20 G 31338865.48 31338865.68 31338865.87 0.0529 0.0147

Saturn 81094-03-29 20:39 G 31340123.21 31340123.36 31340123.52 0.0295 0.0195

Saturn 81094-11-14 18:15 G 31340353.05 31340353.26 31340353.47 0.0295 0.0010

Saturn 81095-07-02 15:36 G 31340583.01 31340583.15 31340583.29 0.0295 0.0215

Jupiter 81095-12-24 19:41 G 31340758.23 31340758.32 31340758.42 0.0490 0.0431

Jupiter 81096-08-16 14:39 G 31340993.92 31340994.11 31340994.31 0.0495 0.0098

Jupiter 81097-04-09 14:24 G 31341229.93 31341230.10 31341230.27 0.0501 0.0261

Jupiter 81101-10-29 10:20 G 31342892.81 31342892.93 31342893.05 0.0537 0.0432

Jupiter 81102-06-24 18:29 G 31343131.07 31343131.27 31343131.48 0.0531 0.0024

Jupiter 81103-02-17 19:27 G 31343369.22 31343369.31 31343369.42 0.0522 0.0453

Pluto 81107-07-24 23:03 G 31344987.33 31344987.46 31344987.62 0.0078 0.0058

Pluto 81108-03-06 09:08 G 31345212.67 31345212.88 31345213.11 0.0078 0.0010

Jupiter 81108-04-22 18:29 G 31345260.09 31345260.27 31345260.46 0.0493 0.0194

Saturn 81108-09-12 09:36 G 31345402.79 31345402.90 31345403.05 0.0266 0.0211

Pluto 81108-10-17 18:58 G 31345438.26 31345438.29 31345438.34 0.0078 0.0076

Jupiter 81108-12-14 16:48 G 31345496.01 31345496.20 31345496.40 0.0500 0.0161

Saturn 81109-04-29 12:58 G 31345631.83 31345632.04 31345632.25 0.0265 0.0058

Saturn 81109-12-14 15:51 G 31345860.96 31345861.16 31345861.37 0.0265 0.0094

Saturn 81110-07-31 18:44 G 31346090.21 31346090.28 31346090.37 0.0266 0.0245

Jupiter 81114-02-27 07:27 G 31347396.60 31347396.81 31347397.01 0.0532 0.0102

Jupiter 81114-10-23 10:20 G 31347634.78 31347634.93 31347635.09 0.0525 0.0342

Jupiter 81119-12-28 00:15 G 31349526.35 31349526.51 31349526.67 0.0492 0.0287

Jupiter 81120-08-19 21:22 G 31349762.19 31349762.39 31349762.59 0.0498 0.0062

Neptune 81121-03-27 20:24 G 31349982.31 31349982.35 31349982.43 0.0089 0.0085

Jupiter 81121-04-13 00:15 G 31349998.40 31349998.51 31349998.62 0.0505 0.0421

Neptune 81121-11-08 08:53 G 31350207.79 31350207.87 31350208.01 0.0089 0.0077

Neptune 81122-06-21 21:51 G 31350433.29 31350433.41 31350433.57 0.0089 0.0068

Neptune 81123-02-02 10:48 G 31350658.81 31350658.95 31350659.13 0.0089 0.0059

Neptune 81123-09-15 23:46 G 31350884.32 31350884.49 31350884.68 0.0089 0.0050

Saturn 81123-10-11 00:29 G 31350909.36 31350909.52 31350909.70 0.0295 0.0167

Neptune 81124-04-28 12:29 G 31351109.84 31351110.02 31351110.22 0.0089 0.0041

Saturn 81124-05-27 22:20 G 31351139.23 31351139.43 31351139.64 0.0295 0.0039

Neptune 81124-12-10 01:12 G 31351335.36 31351335.55 31351335.76 0.0089 0.0033

Saturn 81125-01-12 20:10 G 31351369.23 31351369.34 31351369.46 0.0295 0.0244

Neptune 81125-07-23 14:10 G 31351560.89 31351561.09 31351561.31 0.0089 0.0024

Jupiter 81125-11-01 15:36 G 31351661.97 31351662.15 31351662.33 0.0534 0.0233

Neptune 81126-03-06 03:08 G 31351786.41 31351786.63 31351786.84 0.0089 0.0014

Jupiter 81126-06-27 20:53 G 31351900.18 31351900.37 31351900.56 0.0527 0.0219

Neptune 81126-10-17 15:51 G 31352011.94 31352012.16 31352012.38 0.0089 0.0006

Neptune 81127-05-31 04:34 G 31352237.47 31352237.69 31352237.90 0.0089 0.0004

Mars 81127-07-18 16:05 G 31352286.01 31352286.17 31352286.33 0.1762 0.0590

Uranus 81127-10-02 01:56 G 31352361.53 31352361.58 31352361.66 0.0143 0.0137

Neptune 81128-01-11 17:17 G 31352463.00 31352463.22 31352463.43 0.0089 0.0012

Uranus 81128-05-15 14:24 G 31352587.94 31352588.10 31352588.26 0.0143 0.0098

Neptune 81128-08-24 06:00 G 31352688.54 31352688.75 31352688.96 0.0089 0.0021

Uranus 81128-12-28 02:24 G 31352814.41 31352814.60 31352814.81 0.0143 0.0060

Neptune 81129-04-06 18:44 G 31352914.08 31352914.28 31352914.49 0.0089 0.0030

Uranus 81129-08-11 14:53 G 31353040.90 31353041.12 31353041.34 0.0143 0.0021

Neptune 81129-11-18 07:12 G 31353139.62 31353139.80 31353140.01 0.0089 0.0040

Uranus 81130-03-26 03:22 G 31353267.42 31353267.64 31353267.86 0.0143 0.0018

Neptune 81130-07-01 20:10 G 31353365.17 31353365.34 31353365.53 0.0089 0.0048

Uranus 81130-11-07 15:36 G 31353493.96 31353494.15 31353494.36 0.0144 0.0058

Neptune 81131-02-12 08:53 G 31353590.72 31353590.87 31353591.05 0.0089 0.0057

Uranus 81131-06-22 04:05 G 31353720.51 31353720.67 31353720.84 0.0144 0.0097

Jupiter 81131-09-02 06:00 G 31353792.62 31353792.75 31353792.88 0.0491 0.0375

Neptune 81131-09-25 21:36 G 31353816.27 31353816.40 31353816.56 0.0089 0.0066

Uranus 81132-02-03 16:34 G 31353947.13 31353947.19 31353947.27 0.0144 0.0136

Jupiter 81132-04-25 01:41 G 31354028.37 31354028.57 31354028.77 0.0496 0.0036

Neptune 81132-05-08 10:48 G 31354041.84 31354041.95 31354042.07 0.0089 0.0075

Jupiter 81132-12-17 02:39 G 31354264.45 31354264.61 31354264.76 0.0503 0.0324

Neptune 81132-12-19 23:32 G 31354267.41 31354267.48 31354267.56 0.0089 0.0084

Jupiter 81137-07-07 02:24 G 31355927.45 31355927.60 31355927.75 0.0536 0.0360

Jupiter 81138-03-02 09:51 G 31356165.71 31356165.91 31356166.11 0.0529 0.0097

Saturn 81138-03-25 16:20 G 31356189.02 31356189.18 31356189.33 0.0265 0.0182

Jupiter 81138-10-26 09:22 G 31356403.87 31356403.89 31356403.92 0.0521 0.0516

Saturn 81138-11-09 19:12 G 31356418.09 31356418.30 31356418.52 0.0265 0.0031

Saturn 81139-06-26 22:05 G 31356647.23 31356647.42 31356647.61 0.0265 0.0122

Jupiter 81143-05-08 10:48 G 31358058.89 31358058.95 31358059.01 0.0490 0.0463

Jupiter 81143-12-30 05:17 G 31358294.53 31358294.72 31358294.92 0.0494 0.0133

Jupiter 81144-08-22 04:05 G 31358530.49 31358530.67 31358530.85 0.0500 0.0224

Jupiter 81149-03-11 13:56 G 31360193.00 31360193.08 31360193.17 0.0537 0.0482

Jupiter 81149-11-04 23:03 G 31360431.26 31360431.46 31360431.67 0.0532 0.0027

Jupiter 81150-07-01 01:27 G 31360669.44 31360669.56 31360669.69 0.0524 0.0410

Saturn 81153-04-22 05:32 G 31361695.55 31361695.73 31361695.92 0.0295 0.0141

Saturn 81153-12-08 03:08 G 31361925.43 31361925.63 31361925.83 0.0295 0.0065

Saturn 81154-07-26 00:29 G 31362155.45 31362155.52 31362155.61 0.0295 0.0270

Mars 81154-12-03 19:27 G 31362286.13 31362286.31 31362286.48 0.1765 0.0186

Jupiter 81155-09-04 09:51 G 31362560.73 31362560.91 31362561.09 0.0493 0.0227

Jupiter 81156-04-27 07:12 G 31362796.60 31362796.80 31362796.99 0.0498 0.0125

Jupiter 81156-12-19 10:48 G 31363032.90 31363032.95 31363033.01 0.0506 0.0483

Jupiter 81161-07-10 12:44 G 31364696.84 31364697.03 31364697.23 0.0533 0.0153

Jupiter 81162-03-05 17:17 G 31364935.06 31364935.22 31364935.40 0.0526 0.0297

Jupiter 81167-05-10 14:24 G 31366826.94 31366827.10 31366827.25 0.0491 0.0321

Saturn 81167-10-05 15:36 G 31366975.00 31366975.15 31366975.33 0.0265 0.0167

Jupiter 81168-01-01 10:34 G 31367062.74 31367062.94 31367063.14 0.0497 0.0025

Saturn 81168-05-21 18:44 G 31367204.07 31367204.28 31367204.50 0.0265 0.0014

Jupiter 81168-08-24 12:29 G 31367298.90 31367299.02 31367299.15 0.0504 0.0385

Uranus 81168-08-30 05:03 G 31367304.61 31367304.71 31367304.80 0.0135 0.0121

Saturn 81169-01-05 21:36 G 31367433.21 31367433.40 31367433.58 0.0265 0.0138

Uranus 81169-04-13 10:20 G 31367530.78 31367530.93 31367531.10 0.0135 0.0089

Uranus 81169-11-25 15:36 G 31367756.96 31367757.15 31367757.35 0.0135 0.0058

Uranus 81170-07-09 21:08 G 31367983.17 31367983.38 31367983.59 0.0135 0.0026

Uranus 81171-02-21 02:24 G 31368209.38 31368209.60 31368209.81 0.0135 0.0006

Uranus 81171-10-05 07:27 G 31368435.61 31368435.81 31368436.02 0.0135 0.0037

Uranus 81172-05-18 12:15 G 31368661.84 31368662.01 31368662.21 0.0135 0.0069

Uranus 81172-12-30 17:17 G 31368888.09 31368888.22 31368888.38 0.0135 0.0100

Jupiter 81173-03-15 01:12 G 31368962.38 31368962.55 31368962.73 0.0535 0.0278

Uranus 81173-08-13 22:20 G 31369114.40 31369114.43 31369114.49 0.0134 0.0131

Jupiter 81173-11-08 07:27 G 31369200.62 31369200.81 31369201.00 0.0528 0.0178

Jupiter 81179-01-13 20:24 G 31371093.24 31371093.35 31371093.46 0.0490 0.0409

Jupiter 81179-09-06 15:36 G 31371328.95 31371329.15 31371329.35 0.0495 0.0073

Jupiter 81180-04-29 15:51 G 31371564.99 31371565.16 31371565.32 0.0502 0.0287

Saturn 81182-11-02 07:27 G 31372481.62 31372481.81 31372482.00 0.0295 0.0116

Saturn 81183-06-20 05:17 G 31372711.53 31372711.72 31372711.92 0.0295 0.0091

Jupiter 81184-11-17 09:22 G 31373227.76 31373227.89 31373228.02 0.0536 0.0406

Jupiter 81185-07-13 17:03 G 31373466.01 31373466.21 31373466.42 0.0530 0.0049

Jupiter 81186-03-08 17:46 G 31373704.16 31373704.24 31373704.33 0.0522 0.0476

Jupiter 81191-05-12 20:53 G 31375595.18 31375595.37 31375595.56 0.0494 0.0166

Jupiter 81192-01-03 19:27 G 31375831.12 31375831.31 31375831.49 0.0500 0.0189

Mars 81193-05-15 00:44 G 31376328.36 31376328.53 31376328.71 0.1766 0.0231

Jupiter 81196-07-22 19:56 G 31377493.30 31377493.33 31377493.37 0.0537 0.0528

Jupiter 81197-03-18 05:03 G 31377731.50 31377731.71 31377731.91 0.0532 0.0077

Saturn 81197-04-16 21:22 G 31377761.22 31377761.39 31377761.58 0.0265 0.0139

Jupiter 81197-11-11 08:10 G 31377969.69 31377969.84 31377969.98 0.0525 0.0365

Saturn 81197-12-02 00:29 G 31377990.30 31377990.52 31377990.73 0.0265 0.0013

Saturn 81198-07-19 02:53 G 31378219.46 31378219.62 31378219.80 0.0265 0.0165

Neptune 81202-09-30 16:05 G 31379754.09 31379754.17 31379754.27 0.0088 0.0081

Jupiter 81203-01-16 01:12 G 31379861.38 31379861.55 31379861.72 0.0492 0.0261

Neptune 81203-05-14 05:32 G 31379979.60 31379979.73 31379979.86 0.0088 0.0072

Jupiter 81203-09-08 21:51 G 31380097.22 31380097.41 31380097.61 0.0498 0.0090

Neptune 81203-12-25 18:15 G 31380205.13 31380205.26 31380205.44 0.0088 0.0064

Jupiter 81204-05-02 00:29 G 31380333.43 31380333.52 31380333.61 0.0505 0.0447

Neptune 81204-08-07 07:41 G 31380430.66 31380430.82 31380431.01 0.0088 0.0055

Neptune 81205-03-20 21:08 G 31380656.20 31380656.38 31380656.58 0.0088 0.0045

Neptune 81205-11-01 10:20 G 31380881.73 31380881.93 31380882.14 0.0088 0.0037

Neptune 81206-06-14 23:46 G 31381107.28 31381107.49 31381107.70 0.0088 0.0028

Neptune 81207-01-26 12:58 G 31381332.83 31381333.04 31381333.26 0.0088 0.0019

Neptune 81207-09-09 02:10 G 31381558.38 31381558.59 31381558.82 0.0088 0.0011

Neptune 81208-04-21 15:36 G 31381783.93 31381784.15 31381784.37 0.0088 0.0001

Jupiter 81208-11-20 17:17 G 31381997.03 31381997.22 31381997.41 0.0534 0.0204

Neptune 81208-12-03 04:48 G 31382009.48 31382009.70 31382009.92 0.0088 0.0008

Neptune 81209-07-16 18:00 G 31382235.04 31382235.25 31382235.48 0.0088 0.0017

Jupiter 81209-07-16 22:48 G 31382235.28 31382235.45 31382235.64 0.0527 0.0250 *

Neptune 81210-02-27 07:12 G 31382460.60 31382460.80 31382461.03 0.0088 0.0026

Neptune 81210-10-10 20:39 G 31382686.16 31382686.36 31382686.57 0.0088 0.0035

Neptune 81211-05-24 09:51 G 31382911.72 31382911.91 31382912.11 0.0088 0.0043

Saturn 81211-09-27 14:53 G 31383038.11 31383038.12 31383038.16 0.0295 0.0293

Neptune 81212-01-04 23:03 G 31383137.29 31383137.46 31383137.65 0.0088 0.0052

Uranus 81212-01-13 21:08 G 31383146.26 31383146.38 31383146.51 0.0143 0.0115

Saturn 81212-05-14 12:44 G 31383267.83 31383268.03 31383268.23 0.0295 0.0089

Neptune 81212-08-17 12:00 G 31383362.86 31383363.00 31383363.18 0.0088 0.0062

Uranus 81212-08-27 09:08 G 31383372.71 31383372.88 31383373.08 0.0143 0.0077

Saturn 81212-12-30 10:20 G 31383497.75 31383497.93 31383498.13 0.0295 0.0118

Neptune 81213-03-31 01:12 G 31383588.44 31383588.55 31383588.71 0.0088 0.0070

Uranus 81213-04-10 21:36 G 31383599.19 31383599.40 31383599.61 0.0143 0.0038

Neptune 81213-11-11 14:39 G 31383814.03 31383814.11 31383814.23 0.0088 0.0078

Uranus 81213-11-23 09:51 G 31383825.69 31383825.91 31383826.13 0.0143 0.0001

Neptune 81214-06-25 03:36 G 31384039.64 31384039.65 31384039.71 0.0088 0.0087

Uranus 81214-07-07 22:05 G 31384052.21 31384052.42 31384052.64 0.0143 0.0040

Jupiter 81214-09-21 06:00 G 31384127.62 31384127.75 31384127.90 0.0491 0.0352

Uranus 81215-02-19 10:20 G 31384278.76 31384278.93 31384279.13 0.0144 0.0080

Jupiter 81215-05-15 01:41 G 31384363.37 31384363.57 31384363.77 0.0496 0.0009

Uranus 81215-10-03 22:34 G 31384505.34 31384505.44 31384505.58 0.0144 0.0119

Jupiter 81216-01-06 02:24 G 31384599.46 31384599.60 31384599.74 0.0503 0.0350

Moon 81216-05-03 23:32 G 31384718.36 31384718.48 31384718.60 0.2647 0.1664

Earth 81216-05-04 01:27 G 31384718.43 31384718.56 31384718.69 0.2640 0.1487 *

Jupiter 81220-07-26 06:29 G 31386262.61 31386262.77 31386262.94 0.0536 0.0328

Mars 81220-09-30 02:10 G 31386328.42 31386328.59 31386328.76 0.1761 0.0235

Jupiter 81221-03-21 13:56 G 31386500.88 31386501.08 31386501.28 0.0529 0.0130

Earth 81224-05-01 15:51 G 31387638.04 31387638.16 31387638.27 0.2642 0.1858

Moon 81224-05-01 18:29 G 31387638.15 31387638.27 31387638.39 0.2647 0.1670 *

Jupiter 81226-05-27 10:48 G 31388393.87 31388393.95 31388394.04 0.0490 0.0441

Saturn 81226-10-27 21:08 G 31388547.19 31388547.38 31388547.57 0.0265 0.0123

Jupiter 81227-01-18 05:46 G 31388629.54 31388629.74 31388629.93 0.0494 0.0108

Saturn 81227-06-13 23:46 G 31388776.28 31388776.49 31388776.71 0.0265 0.0029

Jupiter 81227-09-11 04:48 G 31388865.53 31388865.70 31388865.88 0.0501 0.0251

Saturn 81228-01-29 02:10 G 31389005.44 31389005.59 31389005.75 0.0265 0.0180

Jupiter 81232-03-30 18:44 G 31390528.17 31390528.28 31390528.39 0.0537 0.0450

Jupiter 81232-11-24 03:22 G 31390766.44 31390766.64 31390766.85 0.0531 0.0009

Jupiter 81233-07-20 05:03 G 31391004.61 31391004.71 31391004.83 0.0523 0.0440

Jupiter 81238-09-23 11:17 G 31392895.79 31392895.97 31392896.16 0.0493 0.0202

Jupiter 81239-05-17 09:08 G 31393131.69 31393131.88 31393132.07 0.0499 0.0152

Saturn 81241-04-08 15:22 G 31393824.07 31393824.14 31393824.23 0.0295 0.0271

Saturn 81241-11-24 13:27 G 31394053.85 31394054.06 31394054.26 0.0295 0.0066

Saturn 81242-07-12 11:17 G 31394283.79 31394283.97 31394284.16 0.0295 0.0141

Jupiter 81244-07-29 12:29 G 31395031.82 31395032.02 31395032.22 0.0533 0.0125

Jupiter 81245-03-24 16:20 G 31395270.02 31395270.18 31395270.35 0.0526 0.0323

Jupiter 81250-05-29 17:03 G 31397162.05 31397162.21 31397162.37 0.0492 0.0293

Jupiter 81251-01-20 13:41 G 31397397.87 31397398.07 31397398.27 0.0497 0.0055

Jupiter 81251-09-13 15:36 G 31397634.04 31397634.15 31397634.27 0.0504 0.0414

Uranus 81252-12-11 19:12 G 31398089.18 31398089.30 31398089.45 0.0135 0.0105

Uranus 81253-07-26 00:58 G 31398315.37 31398315.54 31398315.73 0.0135 0.0072

Uranus 81254-03-09 06:15 G 31398541.57 31398541.76 31398541.97 0.0135 0.0041

Uranus 81254-10-21 11:46 G 31398767.77 31398767.99 31398768.20 0.0135 0.0009

Uranus 81255-06-04 16:48 G 31398993.99 31398994.20 31398994.42 0.0135 0.0023

Saturn 81255-09-22 23:03 G 31399104.40 31399104.46 31399104.54 0.0265 0.0248

Uranus 81256-01-16 21:51 G 31399220.22 31399220.41 31399220.61 0.0135 0.0054

Jupiter 81256-04-02 23:46 G 31399297.31 31399297.49 31399297.67 0.0535 0.0252

Saturn 81256-05-09 02:10 G 31399333.39 31399333.59 31399333.80 0.0265 0.0097

Uranus 81256-08-30 03:08 G 31399446.47 31399446.63 31399446.80 0.0135 0.0085

Jupiter 81256-11-27 05:32 G 31399535.54 31399535.73 31399535.92 0.0528 0.0203

Saturn 81256-12-24 05:03 G 31399562.50 31399562.71 31399562.92 0.0265 0.0055

Uranus 81257-04-13 08:10 G 31399672.74 31399672.84 31399672.95 0.0135 0.0116

Saturn 81257-08-10 07:41 G 31399791.69 31399791.82 31399791.95 0.0265 0.0206

Mars 81259-03-12 08:53 G 31400370.70 31400370.87 31400371.04 0.1770 0.0155

Jupiter 81262-02-01 21:36 G 31401428.28 31401428.40 31401428.53 0.0491 0.0384

Jupiter 81262-09-25 17:03 G 31401664.01 31401664.21 31401664.41 0.0495 0.0044

Jupiter 81263-05-19 16:48 G 31401900.05 31401900.20 31401900.36 0.0502 0.0314

Pluto 81267-10-26 01:56 G 31403520.40 31403520.58 31403520.77 0.0065 0.0037

Jupiter 81267-12-07 11:17 G 31403562.82 31403562.97 31403563.11 0.0536 0.0377

Pluto 81268-06-07 06:29 G 31403745.55 31403745.77 31403745.99 0.0066 0.0002

Jupiter 81268-08-01 19:12 G 31403801.10 31403801.30 31403801.51 0.0530 0.0081

Pluto 81269-01-18 10:48 G 31403970.79 31403970.95 31403971.13 0.0066 0.0041

Jupiter 81269-03-27 20:10 G 31404039.29 31404039.34 31404039.39 0.0522 0.0505

Saturn 81270-10-19 20:53 G 31404610.26 31404610.37 31404610.49 0.0295 0.0244

Saturn 81271-06-06 18:44 G 31404840.07 31404840.28 31404840.49 0.0295 0.0039

Saturn 81272-01-22 16:20 G 31405070.02 31405070.18 31405070.36 0.0295 0.0169

Jupiter 81273-10-08 02:53 G 31405694.58 31405694.62 31405694.68 0.0490 0.0471

Jupiter 81274-05-31 21:22 G 31405930.20 31405930.39 31405930.58 0.0494 0.0141

Jupiter 81275-01-22 19:27 G 31406166.13 31406166.31 31406166.50 0.0500 0.0216

Jupiter 81279-08-11 23:46 G 31407828.42 31407828.49 31407828.57 0.0538 0.0499

Jupiter 81280-04-06 09:22 G 31408066.69 31408066.89 31408067.09 0.0532 0.0043

Jupiter 81280-11-30 12:29 G 31408304.89 31408305.02 31408305.15 0.0524 0.0397

Saturn 81285-04-03 23:03 G 31409890.37 31409890.46 31409890.57 0.0265 0.0231

Neptune 81285-06-29 07:27 G 31409976.80 31409976.81 31409976.87 0.0089 0.0088

Saturn 81285-11-19 01:56 G 31410119.38 31410119.58 31410119.79 0.0265 0.0080

Jupiter 81286-02-04 01:41 G 31410196.40 31410196.57 31410196.75 0.0492 0.0236

Neptune 81286-02-09 20:24 G 31410202.27 31410202.35 31410202.47 0.0089 0.0079

Saturn 81286-07-06 04:34 G 31410348.48 31410348.69 31410348.90 0.0265 0.0071

Mars 81286-07-28 10:20 G 31410370.76 31410370.93 31410371.09 0.1757 0.0606

Neptune 81286-09-23 09:08 G 31410427.77 31410427.88 31410428.03 0.0089 0.0070

Jupiter 81286-09-27 22:48 G 31410432.25 31410432.45 31410432.65 0.0498 0.0116

Saturn 81287-02-20 06:44 G 31410577.68 31410577.78 31410577.91 0.0265 0.0222

Neptune 81287-05-06 22:05 G 31410653.27 31410653.42 31410653.59 0.0089 0.0061

Jupiter 81287-05-22 01:56 G 31410668.51 31410668.58 31410668.65 0.0506 0.0474

Neptune 81287-12-18 11:03 G 31410878.79 31410878.96 31410879.14 0.0089 0.0052

Neptune 81288-07-31 00:00 G 31411104.31 31411104.50 31411104.69 0.0089 0.0043

Neptune 81289-03-13 12:44 G 31411329.83 31411330.03 31411330.24 0.0089 0.0035

Neptune 81289-10-25 01:12 G 31411555.36 31411555.55 31411555.77 0.0089 0.0026

Neptune 81290-06-07 14:10 G 31411780.88 31411781.09 31411781.31 0.0089 0.0017

Neptune 81291-01-19 02:53 G 31412006.41 31412006.62 31412006.84 0.0089 0.0008

Neptune 81291-09-01 15:51 G 31412231.94 31412232.16 31412232.38 0.0089 0.0001

Jupiter 81291-12-10 22:20 G 31412332.24 31412332.43 31412332.63 0.0534 0.0169

Neptune 81292-04-14 04:34 G 31412457.48 31412457.69 31412457.91 0.0089 0.0010

Jupiter 81292-08-05 03:22 G 31412570.47 31412570.64 31412570.82 0.0527 0.0283

Neptune 81292-11-25 17:17 G 31412683.01 31412683.22 31412683.43 0.0089 0.0019

Neptune 81293-07-09 06:00 G 31412908.55 31412908.75 31412908.96 0.0089 0.0028

Neptune 81294-02-19 18:44 G 31413134.09 31413134.28 31413134.49 0.0089 0.0037

Neptune 81294-10-03 07:27 G 31413359.63 31413359.81 31413360.00 0.0089 0.0046

Neptune 81295-05-16 19:56 G 31413585.18 31413585.33 31413585.52 0.0089 0.0056

Uranus 81295-09-13 04:20 G 31413704.61 31413704.68 31413704.77 0.0143 0.0132

Neptune 81295-12-28 08:39 G 31413810.73 31413810.86 31413811.03 0.0089 0.0065

Uranus 81296-04-26 16:20 G 31413931.03 31413931.18 31413931.36 0.0143 0.0094

Neptune 81296-08-09 21:36 G 31414036.30 31414036.40 31414036.55 0.0089 0.0074

Uranus 81296-12-09 04:34 G 31414157.49 31414157.69 31414157.90 0.0143 0.0055

Neptune 81297-03-23 10:20 G 31414261.87 31414261.93 31414262.04 0.0089 0.0083

Uranus 81297-07-23 16:48 G 31414383.98 31414384.20 31414384.42 0.0143 0.0016

Jupiter 81297-10-10 07:41 G 31414462.67 31414462.82 31414462.97 0.0491 0.0327

Uranus 81298-03-07 05:03 G 31414610.50 31414610.71 31414610.94 0.0143 0.0024

Jupiter 81298-06-03 03:51 G 31414698.46 31414698.66 31414698.86 0.0496 0.0019

Uranus 81298-10-19 17:17 G 31414837.03 31414837.22 31414837.43 0.0143 0.0062

Jupiter 81299-01-25 05:03 G 31414934.58 31414934.71 31414934.84 0.0503 0.0378

Uranus 81299-06-03 05:46 G 31415063.59 31415063.74 31415063.90 0.0144 0.0101

Uranus 81300-01-15 18:00 G 31415290.21 31415290.25 31415290.30 0.0144 0.0140

Saturn 81300-05-01 20:39 G 31415396.23 31415396.36 31415396.50 0.0295 0.0224

Saturn 81300-12-17 18:44 G 31415626.07 31415626.28 31415626.48 0.0295 0.0019

Saturn 81301-08-04 16:48 G 31415856.04 31415856.20 31415856.36 0.0296 0.0189

Jupiter 81303-08-16 07:27 G 31416597.64 31416597.81 31416597.98 0.0535 0.0298

Jupiter 81304-04-10 13:41 G 31416835.88 31416836.07 31416836.27 0.0529 0.0159

Jupiter 81309-06-16 13:27 G 31418728.96 31418729.06 31418729.17 0.0490 0.0415

Jupiter 81310-02-07 08:39 G 31418964.66 31418964.86 31418965.06 0.0495 0.0078

Jupiter 81310-10-01 08:10 G 31419200.68 31419200.84 31419201.01 0.0501 0.0281

Moon 81313-11-07 12:29 G 31420333.92 31420334.02 31420334.12 0.2697 0.2026

Earth 81313-11-07 16:34 G 31420334.14 31420334.19 31420334.23 0.2692 0.2543

Saturn 81314-10-16 03:51 G 31420676.54 31420676.66 31420676.80 0.0265 0.0207

Jupiter 81315-04-20 18:00 G 31420863.13 31420863.25 31420863.38 0.0536 0.0423

Saturn 81315-06-02 06:58 G 31420905.58 31420905.79 31420906.00 0.0265 0.0055

Jupiter 81315-12-15 01:56 G 31421101.38 31421101.58 31421101.79 0.0531 0.0035

Saturn 81316-01-17 09:36 G 31421134.70 31421134.90 31421135.10 0.0265 0.0097

Jupiter 81316-08-09 03:22 G 31421339.55 31421339.64 31421339.74 0.0523 0.0464

Saturn 81316-09-02 12:00 G 31421363.93 31421364.00 31421364.08 0.0265 0.0247

Jupiter 81321-10-13 12:44 G 31423230.84 31423231.03 31423231.22 0.0493 0.0174

Earth 81321-11-05 08:10 G 31423253.69 31423253.84 31423253.99 0.2691 0.0749

Moon 81321-11-05 08:10 G 31423253.70 31423253.84 31423253.98 0.2698 0.1051 *

Jupiter 81322-06-06 10:20 G 31423466.75 31423466.93 31423467.12 0.0499 0.0181

Mars 81325-01-07 17:17 G 31424413.06 31424413.22 31424413.39 0.1774 0.0536

Jupiter 81327-08-19 14:24 G 31425366.90 31425367.10 31425367.31 0.0533 0.0094

Jupiter 81328-04-13 18:29 G 31425605.12 31425605.27 31425605.43 0.0526 0.0353

Saturn 81329-11-12 02:53 G 31426182.47 31426182.62 31426182.78 0.0295 0.0196

Saturn 81330-06-30 00:44 G 31426412.32 31426412.53 31426412.74 0.0296 0.0011

Saturn 81331-02-14 22:48 G 31426642.31 31426642.45 31426642.59 0.0296 0.0218

Jupiter 81333-06-18 17:32 G 31427497.06 31427497.23 31427497.40 0.0492 0.0268

Jupiter 81334-02-09 13:56 G 31427732.88 31427733.08 31427733.28 0.0497 0.0081

Jupiter 81334-10-03 15:51 G 31427969.07 31427969.16 31427969.26 0.0504 0.0440

Uranus 81336-08-12 05:17 G 31428647.63 31428647.72 31428647.84 0.0135 0.0119

Uranus 81337-03-26 10:48 G 31428873.80 31428873.95 31428874.12 0.0135 0.0087

Uranus 81337-11-07 16:20 G 31429099.99 31429100.18 31429100.38 0.0135 0.0055

Uranus 81338-06-21 21:22 G 31429326.19 31429326.39 31429326.61 0.0135 0.0024

Uranus 81339-02-03 02:53 G 31429552.40 31429552.62 31429552.83 0.0135 0.0008

Jupiter 81339-04-24 03:36 G 31429632.47 31429632.65 31429632.84 0.0535 0.0220

Uranus 81339-09-17 07:56 G 31429778.63 31429778.83 31429779.04 0.0135 0.0040

Jupiter 81339-12-18 09:51 G 31429870.73 31429870.91 31429871.09 0.0528 0.0236

Uranus 81340-04-30 12:58 G 31430004.87 31430005.04 31430005.23 0.0135 0.0071

Uranus 81340-12-12 18:00 G 31430231.12 31430231.25 31430231.40 0.0135 0.0102

Uranus 81341-07-26 22:48 G 31430457.43 31430457.45 31430457.50 0.0135 0.0133

Saturn 81344-04-27 04:20 G 31431462.54 31431462.68 31431462.84 0.0265 0.0189

Saturn 81344-12-12 07:12 G 31431691.58 31431691.80 31431692.01 0.0265 0.0038

Jupiter 81345-02-21 22:20 G 31431763.29 31431763.43 31431763.57 0.0491 0.0360

Saturn 81345-07-29 09:36 G 31431920.71 31431920.90 31431921.09 0.0265 0.0114

Jupiter 81345-10-15 17:32 G 31431999.03 31431999.23 31431999.44 0.0495 0.0020

Saturn 81346-03-15 11:46 G 31432149.99 31432149.99 31432150.02 0.0265 0.0264

Jupiter 81346-06-08 17:46 G 31432235.10 31432235.24 31432235.39 0.0502 0.0341

Jupiter 81350-12-27 16:20 G 31433898.03 31433898.18 31433898.34 0.0536 0.0344

Jupiter 81351-08-23 00:00 G 31434136.30 31434136.50 31434136.70 0.0530 0.0116

Mars 81352-05-25 17:46 G 31434413.10 31434413.24 31434413.39 0.1752 0.0990

Pluto 81355-06-28 07:56 G 31435541.72 31435541.83 31435541.97 0.0078 0.0065

Pluto 81356-02-08 18:15 G 31435767.04 31435767.26 31435767.49 0.0078 0.0004

Pluto 81356-09-21 03:36 G 31435992.58 31435992.65 31435992.77 0.0078 0.0070

Jupiter 81356-10-28 04:20 G 31436029.60 31436029.68 31436029.76 0.0490 0.0447

Jupiter 81357-06-20 23:03 G 31436265.27 31436265.46 31436265.66 0.0494 0.0114

Jupiter 81358-02-11 21:51 G 31436501.24 31436501.41 31436501.59 0.0500 0.0244

Saturn 81359-05-25 02:24 G 31436968.43 31436968.60 31436968.77 0.0295 0.0175

Saturn 81360-01-10 00:15 G 31437198.30 31437198.51 31437198.72 0.0295 0.0031

Saturn 81360-08-26 22:20 G 31437428.32 31437428.43 31437428.56 0.0296 0.0239

Jupiter 81362-09-01 01:41 G 31438163.47 31438163.57 31438163.67 0.0537 0.0468

Jupiter 81363-04-27 09:51 G 31438401.71 31438401.91 31438402.12 0.0531 0.0016

Jupiter 81363-12-21 12:00 G 31438639.89 31438640.00 31438640.13 0.0524 0.0424

Neptune 81367-01-03 02:39 G 31439748.54 31439748.61 31439748.69 0.0088 0.0083

Neptune 81367-08-16 15:22 G 31439974.05 31439974.14 31439974.29 0.0088 0.0075

Neptune 81368-03-29 04:48 G 31440199.57 31440199.70 31440199.87 0.0088 0.0066

Neptune 81368-11-09 18:15 G 31440425.10 31440425.26 31440425.44 0.0088 0.0057

Jupiter 81369-02-24 04:05 G 31440531.49 31440531.67 31440531.86 0.0493 0.0208

Neptune 81369-06-23 07:27 G 31440650.63 31440650.81 31440651.01 0.0088 0.0048

Jupiter 81369-10-18 01:56 G 31440767.38 31440767.58 31440767.77 0.0498 0.0146

Neptune 81370-02-03 20:39 G 31440876.18 31440876.36 31440876.58 0.0088 0.0039

Jupiter 81370-06-11 05:17 G 31441003.71 31441003.72 31441003.74 0.0506 0.0503

Neptune 81370-09-17 09:51 G 31441101.72 31441101.91 31441102.14 0.0088 0.0031

Neptune 81371-04-30 23:17 G 31441327.26 31441327.47 31441327.69 0.0088 0.0021

Neptune 81371-12-12 12:29 G 31441552.81 31441553.02 31441553.25 0.0088 0.0012

Neptune 81372-07-25 01:56 G 31441778.36 31441778.58 31441778.80 0.0088 0.0003

Neptune 81373-03-07 15:08 G 31442003.92 31442004.13 31442004.36 0.0088 0.0007

Neptune 81373-10-19 04:20 G 31442229.47 31442229.68 31442229.91 0.0088 0.0015

Saturn 81373-11-07 09:08 G 31442248.72 31442248.88 31442249.05 0.0265 0.0165

Neptune 81374-06-01 17:32 G 31442455.03 31442455.23 31442455.46 0.0088 0.0024

Saturn 81374-06-24 12:00 G 31442477.79 31442478.00 31442478.22 0.0265 0.0013

Jupiter 81374-12-30 21:22 G 31442667.19 31442667.39 31442667.59 0.0533 0.0141

Neptune 81375-01-13 06:44 G 31442680.59 31442680.78 31442681.01 0.0088 0.0033

Saturn 81375-02-08 14:39 G 31442706.93 31442707.11 31442707.29 0.0265 0.0139

Jupiter 81375-08-26 01:41 G 31442905.41 31442905.57 31442905.74 0.0526 0.0309

Neptune 81375-08-26 20:24 G 31442906.16 31442906.35 31442906.55 0.0088 0.0041

Neptune 81376-04-08 09:36 G 31443131.72 31443131.90 31443132.09 0.0088 0.0050

Neptune 81376-11-19 22:34 G 31443357.29 31443357.44 31443357.62 0.0088 0.0060

Neptune 81377-07-03 11:46 G 31443582.87 31443582.99 31443583.15 0.0088 0.0068

Neptune 81378-02-14 00:58 G 31443808.46 31443808.54 31443808.68 0.0088 0.0077

Neptune 81378-09-27 14:39 G 31444034.07 31444034.11 31444034.17 0.0088 0.0085

Uranus 81379-12-26 23:32 G 31444489.34 31444489.48 31444489.62 0.0143 0.0110

Uranus 81380-08-09 11:32 G 31444715.80 31444715.98 31444716.18 0.0143 0.0072

Jupiter 81380-10-30 08:39 G 31444797.70 31444797.86 31444798.02 0.0491 0.0301

Uranus 81381-03-24 00:00 G 31444942.28 31444942.50 31444942.71 0.0143 0.0033

Jupiter 81381-06-23 04:48 G 31445033.50 31445033.70 31445033.90 0.0496 0.0046

Uranus 81381-11-05 12:15 G 31445168.79 31445169.01 31445169.23 0.0143 0.0006

Jupiter 81382-02-14 06:00 G 31445269.63 31445269.75 31445269.87 0.0503 0.0405

Uranus 81382-06-20 00:29 G 31445395.31 31445395.52 31445395.73 0.0143 0.0045

Uranus 81383-02-01 12:44 G 31445621.85 31445622.03 31445622.21 0.0143 0.0084

Uranus 81383-09-16 00:58 G 31445848.44 31445848.54 31445848.66 0.0144 0.0123

Jupiter 81386-09-04 08:39 G 31446932.68 31446932.86 31446933.04 0.0535 0.0270

Jupiter 81387-04-30 15:22 G 31447170.95 31447171.14 31447171.33 0.0529 0.0188

Saturn 81388-12-04 09:08 G 31447754.71 31447754.88 31447755.07 0.0295 0.0147

Saturn 81389-07-22 07:12 G 31447984.60 31447984.80 31447985.01 0.0296 0.0062

Saturn 81390-03-09 05:17 G 31448214.64 31448214.72 31448214.81 0.0296 0.0268

Mars 81390-11-05 01:41 G 31448455.42 31448455.57 31448455.72 0.1778 0.0917

Jupiter 81392-07-05 13:56 G 31449063.96 31449064.08 31449064.20 0.0490 0.0391

Jupiter 81393-02-26 08:53 G 31449299.67 31449299.87 31449300.07 0.0495 0.0052

Jupiter 81393-10-20 08:10 G 31449535.68 31449535.84 31449536.00 0.0501 0.0307

Jupiter 81398-05-09 20:53 G 31451198.24 31451198.37 31451198.51 0.0537 0.0395

Jupiter 81399-01-03 05:32 G 31451436.53 31451436.73 31451436.94 0.0531 0.0066

Jupiter 81399-08-29 06:58 G 31451674.74 31451674.79 31451674.86 0.0523 0.0495

Saturn 81403-05-21 10:20 G 31453034.76 31453034.93 31453035.12 0.0265 0.0146

Saturn 81404-01-05 13:12 G 31453263.83 31453264.05 31453264.26 0.0265 0.0006

Jupiter 81404-03-11 18:29 G 31453330.24 31453330.27 31453330.31 0.0489 0.0479

Saturn 81404-08-21 15:36 G 31453492.98 31453493.15 31453493.32 0.0264 0.0157

Jupiter 81404-11-02 12:44 G 31453565.84 31453566.03 31453566.23 0.0493 0.0150

Jupiter 81405-06-26 10:48 G 31453801.77 31453801.95 31453802.13 0.0499 0.0207

Jupiter 81410-01-13 09:36 G 31455463.84 31455463.90 31455463.96 0.0538 0.0514

Jupiter 81410-09-08 18:58 G 31455702.09 31455702.29 31455702.50 0.0533 0.0059

Jupiter 81411-05-04 22:34 G 31455940.30 31455940.44 31455940.58 0.0525 0.0385

Jupiter 81416-07-08 18:29 G 31457832.10 31457832.27 31457832.45 0.0492 0.0243

Jupiter 81417-03-01 15:22 G 31458067.95 31458068.14 31458068.34 0.0498 0.0110

Jupiter 81417-10-23 18:00 G 31458304.18 31458304.25 31458304.33 0.0505 0.0468

Mars 81418-03-24 01:41 G 31458455.47 31458455.57 31458455.68 0.1749 0.1359

Saturn 81418-06-17 09:22 G 31458540.70 31458540.89 31458541.08 0.0295 0.0125

Saturn 81419-02-02 07:12 G 31458770.60 31458770.80 31458771.00 0.0295 0.0082

Saturn 81419-09-20 05:17 G 31459000.69 31459000.72 31459000.78 0.0295 0.0289

Uranus 81420-04-12 14:24 G 31459206.09 31459206.10 31459206.16 0.0135 0.0134

Uranus 81420-11-24 20:24 G 31459432.21 31459432.35 31459432.49 0.0135 0.0102

Uranus 81421-07-09 01:27 G 31459658.39 31459658.56 31459658.75 0.0135 0.0070

Uranus 81422-02-20 06:44 G 31459884.58 31459884.78 31459885.00 0.0135 0.0039

Jupiter 81422-05-14 04:48 G 31459967.51 31459967.70 31459967.89 0.0534 0.0188

Uranus 81422-10-04 12:15 G 31460110.79 31460111.01 31460111.22 0.0135 0.0007

Jupiter 81423-01-07 09:51 G 31460205.73 31460205.91 31460206.09 0.0527 0.0265

Uranus 81423-05-18 17:17 G 31460337.01 31460337.22 31460337.43 0.0135 0.0025

Uranus 81423-12-30 22:20 G 31460563.24 31460563.43 31460563.63 0.0135 0.0056

Uranus 81424-08-13 03:36 G 31460789.49 31460789.65 31460789.81 0.0135 0.0087

Uranus 81425-03-27 08:24 G 31461015.76 31461015.85 31461015.96 0.0135 0.0118

Jupiter 81428-03-13 23:32 G 31462098.33 31462098.48 31462098.63 0.0491 0.0334

Jupiter 81428-11-04 19:41 G 31462334.12 31462334.32 31462334.52 0.0496 0.0011

Jupiter 81429-06-28 20:24 G 31462570.23 31462570.35 31462570.49 0.0503 0.0372

Saturn 81432-11-30 15:08 G 31463820.94 31463821.13 31463821.32 0.0265 0.0122

Saturn 81433-07-17 18:00 G 31464050.04 31464050.25 31464050.47 0.0265 0.0030

Jupiter 81434-01-16 15:36 G 31464232.99 31464233.15 31464233.32 0.0535 0.0316

Saturn 81434-03-03 20:39 G 31464279.21 31464279.36 31464279.52 0.0265 0.0182

Jupiter 81434-09-11 22:20 G 31464471.23 31464471.43 31464471.63 0.0529 0.0142

Jupiter 81439-11-18 04:20 G 31466364.58 31466364.68 31466364.78 0.0490 0.0424

Jupiter 81440-07-10 23:17 G 31466600.28 31466600.47 31466600.67 0.0494 0.0088

Jupiter 81441-03-03 22:20 G 31466836.26 31466836.43 31466836.60 0.0500 0.0271

Jupiter 81445-09-21 01:56 G 31468498.46 31468498.58 31468498.69 0.0537 0.0443

Jupiter 81446-05-17 10:34 G 31468736.73 31468736.94 31468737.14 0.0532 0.0019

Jupiter 81447-01-10 12:58 G 31468974.94 31468975.04 31468975.14 0.0524 0.0452

Saturn 81447-12-28 17:32 G 31469327.03 31469327.23 31469327.43 0.0296 0.0093

Saturn 81448-08-14 15:22 G 31469556.95 31469557.14 31469557.34 0.0296 0.0115

Mars 81450-03-23 09:22 G 31470142.79 31470142.89 31470143.00 0.1761 0.1409

Neptune 81450-05-16 07:56 G 31470196.76 31470196.83 31470196.93 0.0089 0.0081

Neptune 81450-12-27 20:53 G 31470422.25 31470422.37 31470422.50 0.0089 0.0072

Neptune 81451-08-10 09:51 G 31470647.77 31470647.91 31470648.07 0.0089 0.0064

Jupiter 81452-03-16 03:51 G 31470866.47 31470866.66 31470866.85 0.0493 0.0184

Neptune 81452-03-22 22:48 G 31470873.28 31470873.45 31470873.62 0.0089 0.0055

Neptune 81452-11-03 11:17 G 31471098.80 31471098.97 31471099.17 0.0089 0.0046

Jupiter 81452-11-07 00:58 G 31471102.36 31471102.54 31471102.74 0.0498 0.0172

Neptune 81453-06-17 00:00 G 31471324.32 31471324.50 31471324.72 0.0089 0.0037

Neptune 81454-01-28 12:58 G 31471549.84 31471550.04 31471550.26 0.0089 0.0028

Neptune 81454-09-11 01:41 G 31471775.37 31471775.57 31471775.80 0.0089 0.0020

Neptune 81455-04-24 14:53 G 31472000.90 31472001.12 31472001.33 0.0089 0.0010

Neptune 81455-12-06 03:36 G 31472226.43 31472226.65 31472226.87 0.0089 0.0001

Neptune 81456-07-18 16:34 G 31472451.97 31472452.19 31472452.40 0.0089 0.0009

Mars 81456-09-02 10:05 G 31472497.80 31472497.92 31472498.03 0.1782 0.1302

Neptune 81457-03-01 05:17 G 31472677.50 31472677.72 31472677.93 0.0089 0.0018

Neptune 81457-10-12 17:46 G 31472903.04 31472903.24 31472903.45 0.0089 0.0027

Jupiter 81458-01-19 23:32 G 31473002.28 31473002.48 31473002.68 0.0534 0.0111

Neptune 81458-05-26 06:29 G 31473128.58 31473128.77 31473128.97 0.0089 0.0036

Jupiter 81458-09-15 04:20 G 31473240.53 31473240.68 31473240.84 0.0526 0.0339

Neptune 81459-01-06 19:12 G 31473354.12 31473354.30 31473354.49 0.0089 0.0045

Earth 81459-05-07 01:56 G 31473474.45 31473474.58 31473474.71 0.2641 0.1624

Moon 81459-05-07 06:15 G 31473474.64 31473474.76 31473474.88 0.2637 0.1806 *

Neptune 81459-08-20 08:10 G 31473579.67 31473579.84 31473580.02 0.0089 0.0054

Neptune 81460-04-01 20:39 G 31473805.22 31473805.36 31473805.53 0.0089 0.0063

Neptune 81460-11-13 09:22 G 31474030.78 31474030.89 31474031.03 0.0089 0.0072

Neptune 81461-06-26 22:05 G 31474256.34 31474256.42 31474256.53 0.0089 0.0081

Saturn 81461-10-26 14:39 G 31474378.05 31474378.11 31474378.18 0.0265 0.0252

Neptune 81462-02-07 11:03 G 31474481.96 31474481.96 31474481.98 0.0089 0.0089

Saturn 81462-06-12 17:46 G 31474607.04 31474607.24 31474607.44 0.0265 0.0101

Saturn 81463-01-27 20:24 G 31474836.14 31474836.35 31474836.56 0.0265 0.0051

Uranus 81463-08-27 05:17 G 31475047.63 31475047.72 31475047.82 0.0143 0.0128

Saturn 81463-09-13 22:34 G 31475065.31 31475065.44 31475065.59 0.0264 0.0202

Jupiter 81463-11-20 07:56 G 31475132.67 31475132.83 31475133.00 0.0491 0.0278

Uranus 81464-04-09 17:17 G 31475274.06 31475274.22 31475274.40 0.0143 0.0090

Jupiter 81464-07-13 04:20 G 31475368.48 31475368.68 31475368.88 0.0497 0.0072

Uranus 81464-11-22 05:32 G 31475500.52 31475500.73 31475500.93 0.0143 0.0052

Jupiter 81465-03-06 05:46 G 31475604.64 31475604.74 31475604.85 0.0504 0.0430

Uranus 81465-07-06 17:32 G 31475727.02 31475727.23 31475727.46 0.0143 0.0013

Uranus 81466-02-18 06:00 G 31475953.53 31475953.75 31475953.97 0.0143 0.0026

Uranus 81466-10-02 18:00 G 31476180.07 31476180.25 31476180.46 0.0143 0.0066

Moon 81467-05-04 15:51 G 31476394.02 31476394.16 31476394.30 0.2637 0.1489

Earth 81467-05-04 16:05 G 31476394.05 31476394.17 31476394.30 0.2643 0.1743 *

Uranus 81467-05-17 06:15 G 31476406.63 31476406.76 31476406.93 0.0144 0.0105

Uranus 81467-12-29 18:58 G 31476633.28 31476633.29 31476633.31 0.0144 0.0143

Jupiter 81469-09-24 12:15 G 31477267.83 31477268.01 31477268.20 0.0535 0.0237

Jupiter 81470-05-20 18:44 G 31477506.10 31477506.28 31477506.47 0.0528 0.0222

Jupiter 81475-07-26 13:41 G 31479398.94 31479399.07 31479399.21 0.0491 0.0369

Jupiter 81476-03-18 09:08 G 31479634.68 31479634.88 31479635.09 0.0495 0.0028

Jupiter 81476-11-09 09:08 G 31479870.73 31479870.88 31479871.03 0.0502 0.0334

Saturn 81476-11-21 20:10 G 31479883.28 31479883.34 31479883.42 0.0295 0.0277

Saturn 81477-07-09 18:00 G 31480113.05 31480113.25 31480113.45 0.0295 0.0072

Saturn 81478-02-24 15:51 G 31480342.98 31480343.16 31480343.35 0.0295 0.0135

Jupiter 81481-05-29 22:20 G 31481533.29 31481533.43 31481533.58 0.0536 0.0364

Jupiter 81482-01-23 05:46 G 31481771.54 31481771.74 31481771.94 0.0530 0.0096

Jupiter 81482-09-18 06:00 G 31482009.75 31482009.75 31482009.77 0.0522 0.0520

Mars 81484-01-19 09:36 G 31482497.88 31482497.90 31482497.93 0.1745 0.1720

Jupiter 81487-03-31 18:15 G 31483665.20 31483665.26 31483665.34 0.0490 0.0458

Jupiter 81487-11-22 13:27 G 31483900.87 31483901.06 31483901.26 0.0494 0.0123

Jupiter 81488-07-15 12:15 G 31484136.84 31484137.01 31484137.19 0.0500 0.0236

Mars 81488-09-01 16:20 G 31484185.08 31484185.18 31484185.27 0.1769 0.1477

Saturn 81491-05-08 19:12 G 31485164.20 31485164.30 31485164.41 0.0266 0.0230

Saturn 81491-12-23 22:34 G 31485393.23 31485393.44 31485393.64 0.0265 0.0077

Saturn 81492-08-09 01:27 G 31485622.35 31485622.56 31485622.76 0.0265 0.0075

Jupiter 81493-02-01 08:53 G 31485798.79 31485798.87 31485798.96 0.0537 0.0488

Saturn 81493-03-26 03:51 G 31485851.57 31485851.66 31485851.79 0.0265 0.0227

Jupiter 81493-09-27 17:17 G 31486037.01 31486037.22 31486037.42 0.0532 0.0033

Jupiter 81494-05-23 19:41 G 31486275.20 31486275.32 31486275.46 0.0524 0.0410

Jupiter 81499-07-28 17:46 G 31488167.06 31488167.24 31488167.42 0.0492 0.0219

Jupiter 81500-03-21 14:53 G 31488402.92 31488403.12 31488403.31 0.0498 0.0134

Jupiter 81500-11-12 17:17 G 31488639.19 31488639.22 31488639.27 0.0505 0.0492

Uranus 81504-07-26 05:46 G 31489990.64 31489990.74 31489990.86 0.0135 0.0116

Uranus 81505-03-09 11:17 G 31490216.81 31490216.97 31490217.14 0.0135 0.0085

Jupiter 81505-06-03 03:51 G 31490302.47 31490302.66 31490302.86 0.0534 0.0163

Uranus 81505-10-21 16:34 G 31490443.00 31490443.19 31490443.40 0.0135 0.0053

Jupiter 81506-01-27 09:22 G 31490540.72 31490540.89 31490541.06 0.0527 0.0292

Uranus 81506-06-04 21:51 G 31490669.20 31490669.41 31490669.63 0.0135 0.0022

Saturn 81506-06-05 05:46 G 31490669.63 31490669.74 31490669.86 0.0295 0.0243 *

Uranus 81507-01-17 03:08 G 31490895.41 31490895.63 31490895.84 0.0135 0.0010

Saturn 81507-01-21 03:22 G 31490899.44 31490899.64 31490899.85 0.0296 0.0038

Uranus 81507-08-31 08:10 G 31491121.64 31491121.84 31491122.05 0.0135 0.0041

Saturn 81507-09-08 01:27 G 31491129.40 31491129.56 31491129.74 0.0296 0.0171

Uranus 81508-04-13 13:12 G 31491347.88 31491348.05 31491348.24 0.0135 0.0073

Uranus 81508-11-25 18:00 G 31491574.13 31491574.25 31491574.40 0.0135 0.0104

Uranus 81509-07-09 23:03 G 31491800.46 31491800.46 31491800.48 0.0134 0.0134

Jupiter 81511-04-03 22:20 G 31492433.28 31492433.43 31492433.59 0.0491 0.0313

Jupiter 81511-11-25 18:15 G 31492669.06 31492669.26 31492669.46 0.0496 0.0035

Jupiter 81512-07-18 18:44 G 31492905.17 31492905.28 31492905.41 0.0503 0.0395

Pluto 81515-10-01 09:08 G 31494074.76 31494074.88 31494075.06 0.0065 0.0047

Mars 81516-01-19 16:48 G 31494185.06 31494185.20 31494185.35 0.1757 0.1006

Pluto 81516-05-13 14:10 G 31494299.88 31494300.09 31494300.31 0.0066 0.0008

Pluto 81516-12-24 18:29 G 31494525.09 31494525.27 31494525.48 0.0066 0.0032

Jupiter 81517-02-05 16:05 G 31494568.00 31494568.17 31494568.34 0.0536 0.0290

Jupiter 81517-10-01 23:17 G 31494806.28 31494806.47 31494806.67 0.0529 0.0172

Saturn 81520-11-18 23:03 G 31495950.34 31495950.46 31495950.60 0.0265 0.0206

Saturn 81521-07-06 02:10 G 31496179.38 31496179.59 31496179.81 0.0265 0.0055

Saturn 81522-02-20 05:03 G 31496408.51 31496408.71 31496408.91 0.0265 0.0098

Mars 81522-07-01 18:00 G 31496540.20 31496540.25 31496540.30 0.1786 0.1701

Saturn 81522-10-07 07:27 G 31496637.74 31496637.81 31496637.89 0.0265 0.0248

Jupiter 81522-12-08 02:53 G 31496699.51 31496699.62 31496699.73 0.0490 0.0403

Jupiter 81523-07-31 21:51 G 31496935.21 31496935.41 31496935.61 0.0494 0.0064

Jupiter 81524-03-23 20:53 G 31497171.21 31497171.37 31497171.53 0.0501 0.0295

Jupiter 81528-10-11 04:20 G 31498833.55 31498833.68 31498833.81 0.0537 0.0414

Jupiter 81529-06-06 12:58 G 31499071.83 31499072.04 31499072.24 0.0531 0.0048

Jupiter 81530-01-30 15:08 G 31499310.05 31499310.13 31499310.21 0.0524 0.0481

Neptune 81531-04-08 12:44 G 31499743.00 31499743.03 31499743.12 0.0088 0.0086

Neptune 81531-11-20 02:10 G 31499968.50 31499968.59 31499968.72 0.0088 0.0077

Neptune 81532-07-02 15:36 G 31500194.02 31500194.15 31500194.31 0.0088 0.0068

Neptune 81533-02-13 05:03 G 31500419.56 31500419.71 31500419.89 0.0088 0.0059

Neptune 81533-09-26 18:29 G 31500645.09 31500645.27 31500645.46 0.0088 0.0050

Neptune 81534-05-10 07:12 G 31500870.63 31500870.80 31500871.02 0.0088 0.0042

Neptune 81534-12-21 20:39 G 31501096.17 31501096.36 31501096.58 0.0088 0.0032

Jupiter 81535-04-06 02:53 G 31501201.43 31501201.62 31501201.81 0.0493 0.0160

Neptune 81535-08-04 09:51 G 31501321.71 31501321.91 31501322.14 0.0088 0.0024

Jupiter 81535-11-28 00:44 G 31501437.34 31501437.53 31501437.71 0.0499 0.0197

Saturn 81535-12-16 07:41 G 31501455.69 31501455.82 31501455.96 0.0295 0.0220

Neptune 81536-03-16 23:17 G 31501547.26 31501547.47 31501547.70 0.0088 0.0014

Saturn 81536-08-02 05:32 G 31501685.52 31501685.73 31501685.93 0.0295 0.0016

Neptune 81536-10-28 12:29 G 31501772.80 31501773.02 31501773.25 0.0088 0.0006

Saturn 81537-03-20 03:22 G 31501915.48 31501915.64 31501915.80 0.0295 0.0193

Neptune 81537-06-11 01:56 G 31501998.35 31501998.58 31501998.80 0.0088 0.0004

Neptune 81538-01-22 15:08 G 31502223.91 31502224.13 31502224.35 0.0088 0.0013

Neptune 81538-09-05 04:05 G 31502449.47 31502449.67 31502449.90 0.0088 0.0023

Neptune 81539-04-18 17:17 G 31502675.03 31502675.22 31502675.44 0.0088 0.0031

Neptune 81539-11-30 06:29 G 31502900.59 31502900.77 31502900.98 0.0088 0.0040

Jupiter 81540-06-15 14:53 G 31503099.11 31503099.12 31503099.14 0.0537 0.0535

Neptune 81540-07-12 20:10 G 31503126.15 31503126.34 31503126.52 0.0088 0.0049

Jupiter 81541-02-08 23:46 G 31503337.29 31503337.49 31503337.70 0.0533 0.0082

Neptune 81541-02-23 09:22 G 31503351.73 31503351.89 31503352.07 0.0088 0.0057

Jupiter 81541-10-05 03:22 G 31503575.50 31503575.64 31503575.79 0.0525 0.0366

Neptune 81541-10-06 22:34 G 31503577.31 31503577.44 31503577.60 0.0088 0.0066

Neptune 81542-05-20 11:32 G 31503802.89 31503802.98 31503803.12 0.0088 0.0075

Neptune 81543-01-01 00:44 G 31504028.49 31504028.53 31504028.62 0.0088 0.0084

Jupiter 81546-12-10 06:58 G 31505467.62 31505467.79 31505467.97 0.0492 0.0255

Jupiter 81547-08-03 04:05 G 31505703.48 31505703.67 31505703.87 0.0497 0.0099

Uranus 81547-12-09 21:51 G 31505832.28 31505832.41 31505832.56 0.0143 0.0109

Jupiter 81548-03-26 06:29 G 31505939.69 31505939.77 31505939.86 0.0504 0.0457

Uranus 81548-07-23 09:51 G 31506058.73 31506058.91 31506059.11 0.0143 0.0071

Uranus 81549-03-06 22:20 G 31506285.22 31506285.43 31506285.65 0.0143 0.0032

Uranus 81549-10-19 10:34 G 31506511.72 31506511.94 31506512.16 0.0143 0.0007

Saturn 81550-06-01 03:51 G 31506736.51 31506736.66 31506736.82 0.0266 0.0184

Uranus 81550-06-02 22:34 G 31506738.24 31506738.44 31506738.66 0.0143 0.0047

Uranus 81551-01-15 10:48 G 31506964.79 31506964.95 31506965.14 0.0143 0.0086

Saturn 81551-01-16 07:12 G 31506965.58 31506965.80 31506966.01 0.0265 0.0030

Uranus 81551-08-29 23:32 G 31507191.38 31507191.48 31507191.60 0.0143 0.0124

Saturn 81551-09-02 10:05 G 31507194.73 31507194.92 31507195.11 0.0265 0.0122

Jupiter 81552-10-14 10:34 G 31507602.75 31507602.94 31507603.13 0.0534 0.0211

Jupiter 81553-06-09 15:51 G 31507840.98 31507841.16 31507841.35 0.0528 0.0246

Mars 81554-07-01 00:44 G 31508227.40 31508227.53 31508227.66 0.1773 0.1117

Earth 81556-11-09 18:15 G 31509090.23 31509090.26 31509090.29 0.2691 0.2633

Jupiter 81558-08-15 11:32 G 31509733.84 31509733.98 31509734.13 0.0491 0.0349

Jupiter 81559-04-08 07:12 G 31509969.60 31509969.80 31509970.01 0.0495 0.0013

Jupiter 81559-11-30 07:27 G 31510205.67 31510205.81 31510205.95 0.0502 0.0357

Jupiter 81564-06-18 20:10 G 31511868.18 31511868.34 31511868.50 0.0536 0.0342

Earth 81564-11-07 10:20 G 31512009.78 31512009.93 31512010.08 0.2690 0.0616

Moon 81564-11-07 12:29 G 31512009.85 31512010.02 31512010.18 0.2683 0.0351 *

Jupiter 81565-02-12 03:51 G 31512106.46 31512106.66 31512106.86 0.0530 0.0120

Saturn 81565-06-27 18:00 G 31512242.09 31512242.25 31512242.41 0.0295 0.0184

Saturn 81566-02-12 15:36 G 31512471.94 31512472.15 31512472.36 0.0296 0.0023

Saturn 81566-09-30 13:41 G 31512701.95 31512702.07 31512702.21 0.0296 0.0230

Jupiter 81570-04-20 16:34 G 31514000.10 31514000.19 31514000.28 0.0490 0.0438

Jupiter 81570-12-12 11:17 G 31514235.77 31514235.97 31514236.17 0.0494 0.0101

Jupiter 81571-08-05 09:51 G 31514471.74 31514471.91 31514472.08 0.0500 0.0257

Jupiter 81576-02-22 07:27 G 31516133.71 31516133.81 31516133.91 0.0537 0.0467

Jupiter 81576-10-17 16:20 G 31516371.98 31516372.18 31516372.39 0.0532 0.0014

Jupiter 81577-06-12 19:41 G 31516610.21 31516610.32 31516610.44 0.0525 0.0435

Saturn 81579-12-12 09:08 G 31517522.71 31517522.88 31517523.06 0.0265 0.0158

Saturn 81580-07-28 12:15 G 31517751.80 31517752.01 31517752.23 0.0265 0.0006

Saturn 81581-03-14 15:08 G 31517980.95 31517981.13 31517981.31 0.0265 0.0147

Mars 81581-11-16 00:58 G 31518227.37 31518227.54 31518227.70 0.1753 0.0630

Jupiter 81582-08-17 15:08 G 31518501.95 31518502.13 31518502.32 0.0492 0.0198

Jupiter 81583-04-10 12:15 G 31518737.82 31518738.01 31518738.20 0.0498 0.0157

Uranus 81588-03-25 14:39 G 31520549.08 31520549.11 31520549.18 0.0135 0.0132

Jupiter 81588-06-22 05:17 G 31520637.52 31520637.72 31520637.92 0.0534 0.0133

Uranus 81588-11-06 20:24 G 31520775.21 31520775.35 31520775.50 0.0135 0.0100

Jupiter 81589-02-15 10:34 G 31520875.78 31520875.94 31520876.10 0.0527 0.0321

Uranus 81589-06-21 01:27 G 31521001.39 31521001.56 31521001.76 0.0135 0.0069

Uranus 81590-02-02 06:44 G 31521227.58 31521227.78 31521228.00 0.0135 0.0037

Uranus 81590-09-16 12:15 G 31521453.80 31521454.01 31521454.23 0.0135 0.0005

Uranus 81591-04-30 17:17 G 31521680.02 31521680.22 31521680.44 0.0135 0.0027

Uranus 81591-12-12 22:20 G 31521906.24 31521906.43 31521906.63 0.0135 0.0058

Uranus 81592-07-26 03:22 G 31522132.49 31522132.64 31522132.81 0.0135 0.0089

Uranus 81593-03-09 08:10 G 31522358.76 31522358.84 31522358.95 0.0135 0.0120

Jupiter 81594-04-22 20:10 G 31522768.18 31522768.34 31522768.51 0.0491 0.0292

Jupiter 81594-12-14 16:20 G 31523003.98 31523004.18 31523004.38 0.0496 0.0058

Saturn 81595-01-07 21:08 G 31523028.21 31523028.38 31523028.56 0.0295 0.0159

Jupiter 81595-08-07 17:32 G 31523240.13 31523240.23 31523240.35 0.0503 0.0419

Saturn 81595-08-25 18:58 G 31523258.08 31523258.29 31523258.49 0.0295 0.0047

Saturn 81596-04-11 16:48 G 31523488.10 31523488.20 31523488.31 0.0295 0.0254

Jupiter 81600-02-25 16:20 G 31524903.00 31524903.18 31524903.36 0.0535 0.0262

Jupiter 81600-10-20 22:20 G 31525141.24 31525141.43 31525141.62 0.0528 0.0199

Pluto 81604-01-14 00:00 G 31526321.28 31526321.50 31526321.72 0.0078 0.0015

Pluto 81604-08-26 09:22 G 31526546.75 31526546.89 31526547.08 0.0078 0.0052

Jupiter 81605-12-27 00:15 G 31527034.39 31527034.51 31527034.64 0.0491 0.0385

Jupiter 81606-08-19 19:56 G 31527270.13 31527270.33 31527270.54 0.0495 0.0042

Jupiter 81607-04-12 19:41 G 31527506.17 31527506.32 31527506.48 0.0501 0.0321

Saturn 81609-06-23 13:56 G 31528308.90 31528309.08 31528309.27 0.0266 0.0135

Saturn 81610-02-07 17:17 G 31528538.00 31528538.22 31528538.43 0.0265 0.0019

Saturn 81610-09-24 19:56 G 31528767.18 31528767.33 31528767.50 0.0265 0.0171

Jupiter 81611-10-31 02:24 G 31529168.47 31529168.60 31529168.75 0.0536 0.0390

Jupiter 81612-06-25 10:05 G 31529406.71 31529406.92 31529407.12 0.0530 0.0072

Jupiter 81613-02-18 11:17 G 31529644.92 31529644.97 31529645.02 0.0523 0.0503

Neptune 81614-08-18 19:56 G 31530191.26 31530191.33 31530191.41 0.0089 0.0083

Neptune 81615-04-01 08:10 G 31530416.75 31530416.84 31530416.98 0.0089 0.0075

Neptune 81615-11-12 20:53 G 31530642.25 31530642.37 31530642.54 0.0089 0.0067

Neptune 81616-06-25 09:51 G 31530867.76 31530867.91 31530868.10 0.0089 0.0057

Neptune 81617-02-05 22:48 G 31531093.28 31531093.45 31531093.65 0.0089 0.0048

Jupiter 81617-09-01 05:03 G 31531300.66 31531300.71 31531300.76 0.0490 0.0474

Neptune 81617-09-19 11:32 G 31531318.80 31531318.98 31531319.19 0.0089 0.0039

Jupiter 81618-04-24 23:46 G 31531536.30 31531536.49 31531536.69 0.0493 0.0140

Neptune 81618-05-03 00:29 G 31531544.33 31531544.52 31531544.74 0.0089 0.0030

Neptune 81618-12-14 13:12 G 31531769.85 31531770.05 31531770.28 0.0089 0.0021

Jupiter 81618-12-16 21:51 G 31531772.23 31531772.41 31531772.59 0.0499 0.0218

Neptune 81619-07-28 02:24 G 31531995.39 31531995.60 31531995.82 0.0089 0.0012

Neptune 81620-03-09 15:22 G 31532220.92 31532221.14 31532221.36 0.0089 0.0003

Mars 81620-04-27 09:08 G 31532269.72 31532269.88 31532270.04 0.1777 0.0739

Neptune 81620-10-21 04:05 G 31532446.45 31532446.67 31532446.89 0.0089 0.0007

Neptune 81621-06-03 16:48 G 31532671.99 31532672.20 31532672.42 0.0089 0.0016

Neptune 81622-01-15 05:17 G 31532897.53 31532897.72 31532897.94 0.0089 0.0025

Neptune 81622-08-28 18:15 G 31533123.07 31533123.26 31533123.47 0.0089 0.0034

Neptune 81623-04-11 06:58 G 31533348.61 31533348.79 31533349.00 0.0089 0.0043

Jupiter 81623-07-05 11:03 G 31533433.92 31533433.96 31533434.02 0.0537 0.0518

Neptune 81623-11-22 19:41 G 31533574.16 31533574.32 31533574.51 0.0089 0.0052

Jupiter 81624-02-28 20:24 G 31533672.14 31533672.35 31533672.55 0.0533 0.0061

Neptune 81624-07-05 08:24 G 31533799.71 31533799.85 31533800.03 0.0089 0.0061

Saturn 81624-07-20 08:53 G 31533814.68 31533814.87 31533815.06 0.0295 0.0121

Jupiter 81624-10-24 00:15 G 31533910.37 31533910.51 31533910.65 0.0526 0.0388

Neptune 81625-02-15 21:36 G 31534025.27 31534025.40 31534025.53 0.0089 0.0070

Saturn 81625-03-07 06:29 G 31534044.58 31534044.77 31534044.98 0.0296 0.0087

Neptune 81625-09-29 10:20 G 31534250.83 31534250.93 31534251.03 0.0089 0.0079

Saturn 81625-10-23 04:34 G 31534274.67 31534274.69 31534274.72 0.0296 0.0293

Neptune 81626-05-12 23:03 G 31534476.43 31534476.46 31534476.50 0.0089 0.0088

Jupiter 81629-12-29 04:20 G 31535802.50 31535802.68 31535802.86 0.0492 0.0236

Jupiter 81630-08-22 00:58 G 31536038.34 31536038.54 31536038.74 0.0497 0.0118

Jupiter 81631-04-15 02:53 G 31536274.56 31536274.62 31536274.68 0.0504 0.0476

Uranus 81631-08-09 02:10 G 31536390.50 31536390.59 31536390.69 0.0143 0.0128

Uranus 81632-03-22 14:10 G 31536616.93 31536617.09 31536617.27 0.0143 0.0090

Uranus 81632-11-04 02:24 G 31536843.40 31536843.60 31536843.81 0.0143 0.0051

Uranus 81633-06-18 14:24 G 31537069.89 31537070.10 31537070.33 0.0143 0.0014

Uranus 81634-01-31 02:53 G 31537296.40 31537296.62 31537296.84 0.0143 0.0026

Uranus 81634-09-14 14:53 G 31537522.94 31537523.12 31537523.33 0.0143 0.0066

Uranus 81635-04-29 03:22 G 31537749.50 31537749.64 31537749.80 0.0143 0.0104

Jupiter 81635-11-03 07:41 G 31537937.64 31537937.82 31537938.02 0.0535 0.0190

Uranus 81635-12-11 15:51 G 31537976.15 31537976.16 31537976.19 0.0143 0.0143

Jupiter 81636-06-28 13:56 G 31538175.91 31538176.08 31538176.26 0.0528 0.0270

Saturn 81638-05-19 16:48 G 31538866.16 31538866.20 31538866.24 0.0266 0.0259

Saturn 81639-01-03 20:10 G 31539095.15 31539095.34 31539095.54 0.0265 0.0107

Saturn	81639-08-20 23:17 G	31539324.26	31539324.47	31539324.68	0.0265	0.0046
Saturn	81640-04-06 02:24 G	31539553.45	31539553.60	31539553.74	0.0265	0.0197
Jupiter	81641-09-03 08:24 G	31540068.70	31540068.85	31540069.00	0.0491	0.0329
Jupiter	81642-04-27 03:51 G	31540304.46	31540304.66	31540304.86	0.0495	0.0018
Jupiter	81642-12-19 03:51 G	31540540.53	31540540.66	31540540.79	0.0502	0.0378
Jupiter	81647-07-08 20:10 G	31542203.17	31542203.34	31542203.50	0.0536	0.0316
Mars	81647-09-13 08:10 G	31542269.67	31542269.84	31542270.02	0.1749	0.0237
Jupiter	81648-03-03 03:51 G	31542441.46	31542441.66	31542441.86	0.0530	0.0148
Jupiter	81653-05-09 13:27 G	31544334.96	31544335.06	31544335.16	0.0490	0.0420
Jupiter	81653-12-31 08:10 G	31544570.64	31544570.84	31544571.04	0.0494	0.0081
Saturn	81654-01-30 12:58 G	31544600.84	31544601.04	31544601.23	0.0295	0.0094
Jupiter	81654-08-24 06:58 G	31544806.63	31544806.79	31544806.96	0.0500	0.0280
Saturn	81654-09-17 10:34 G	31544830.75	31544830.94	31544831.14	0.0295	0.0113
Jupiter	81659-03-13 07:27 G	31546468.70	31546468.81	31546468.93	0.0537	0.0441
Jupiter	81659-11-06 15:36 G	31546706.94	31546707.15	31546707.35	0.0531	0.0022
Jupiter	81660-07-01 17:46 G	31546945.14	31546945.24	31546945.34	0.0524	0.0459
Jupiter	81665-09-05 11:46 G	31548836.81	31548836.99	31548837.19	0.0493	0.0179
Jupiter	81666-04-29 09:36 G	31549072.71	31549072.90	31549073.09	0.0499	0.0180
Saturn	81667-11-29 21:08 G	31549652.29	31549652.38	31549652.48	0.0266	0.0238
Saturn	81668-07-16 00:44 G	31549881.33	31549881.53	31549881.74	0.0266	0.0084
Saturn	81669-03-02 04:05 G	31550110.47	31550110.67	31550110.88	0.0265	0.0070
Saturn	81669-10-17 06:58 G	31550339.68	31550339.79	31550339.92	0.0265	0.0222
Jupiter	81671-07-12 02:39 G	31550972.41	31550972.61	31550972.81	0.0533	0.0110
Jupiter	81672-03-06 06:44 G	31551210.63	31551210.78	31551210.94	0.0526	0.0343
Uranus	81672-07-07 05:17 G	31551333.62	31551333.72	31551333.85	0.0135	0.0115
Uranus	81673-02-18 10:34 G	31551559.79	31551559.94	31551560.13	0.0135	0.0084
Uranus	81673-10-02 16:20 G	31551785.98	31551786.18	31551786.38	0.0135	0.0051
Uranus	81674-05-16 21:22 G	31552012.19	31552012.39	31552012.61	0.0135	0.0020
Uranus	81674-12-29 02:39 G	31552238.40	31552238.61	31552238.83	0.0135	0.0012
Uranus	81675-08-12 07:56 G	31552464.63	31552464.83	31552465.03	0.0135	0.0043

Uranus 81676-03-25 12:58 G 31552690.87 31552691.04 31552691.22 0.0135 0.0074

Uranus 81676-11-06 18:15 G 31552917.12 31552917.26 31552917.39 0.0135 0.0105

Jupiter 81677-05-11 16:20 G 31553103.01 31553103.18 31553103.34 0.0492 0.0275

Jupiter 81678-01-02 12:29 G 31553338.83 31553339.02 31553339.22 0.0496 0.0078

Jupiter 81678-08-26 13:56 G 31553574.99 31553575.08 31553575.18 0.0503 0.0438

Saturn 81682-12-26 03:36 G 31555157.56 31555157.65 31555157.75 0.0295 0.0258

Jupiter 81683-03-16 11:32 G 31555237.80 31555237.98 31555238.16 0.0535 0.0243

Saturn 81683-08-13 01:12 G 31555387.34 31555387.55 31555387.75 0.0295 0.0054

Jupiter 81683-11-09 17:46 G 31555476.06 31555476.24 31555476.43 0.0529 0.0219

Saturn 81684-03-29 22:48 G 31555617.28 31555617.45 31555617.63 0.0296 0.0153

Mars 81686-02-22 16:48 G 31556312.03 31556312.20 31556312.37 0.1782 0.0348

Jupiter 81689-01-14 21:08 G 31557369.25 31557369.38 31557369.52 0.0490 0.0367

Jupiter 81689-09-07 16:34 G 31557604.98 31557605.19 31557605.39 0.0495 0.0024

Jupiter 81690-05-01 15:36 G 31557841.01 31557841.15 31557841.31 0.0501 0.0339

Jupiter 81694-11-18 22:05 G 31559503.28 31559503.42 31559503.57 0.0537 0.0372

Neptune 81695-07-10 23:46 G 31559737.48 31559737.49 31559737.54 0.0088 0.0088

Jupiter 81695-07-15 06:29 G 31559741.56 31559741.77 31559741.97 0.0531 0.0093

Neptune 81696-02-21 13:12 G 31559962.97 31559963.05 31559963.17 0.0088 0.0079

Neptune 81696-10-04 02:39 G 31560188.49 31560188.61 31560188.76 0.0088 0.0070

Neptune 81697-05-17 16:05 G 31560414.01 31560414.17 31560414.33 0.0088 0.0061

Saturn 81697-06-11 04:20 G 31560438.56 31560438.68 31560438.82 0.0266 0.0208

Neptune 81697-12-29 05:32 G 31560639.55 31560639.73 31560639.91 0.0088 0.0052

Saturn 81698-01-26 07:56 G 31560667.62 31560667.83 31560668.04 0.0265 0.0055

Neptune 81698-08-11 18:15 G 31560865.09 31560865.26 31560865.48 0.0088 0.0044

Saturn 81698-09-12 11:03 G 31560896.76 31560896.96 31560897.16 0.0265 0.0098

Neptune 81699-03-25 07:41 G 31561090.63 31561090.82 31561091.04 0.0088 0.0034

Saturn 81699-04-29 13:41 G 31561126.01 31561126.07 31561126.16 0.0265 0.0249

Neptune 81699-11-05 20:53 G 31561316.17 31561316.37 31561316.60 0.0088 0.0026

Neptune 81700-06-19 10:20 G 31561541.72 31561541.93 31561542.16 0.0088 0.0016

Jupiter 81700-09-21 01:27 G 31561635.49 31561635.56 31561635.63 0.0489 0.0456

Neptune 81701-01-30 23:46 G 31561767.27 31561767.49 31561767.72 0.0088 0.0007

Jupiter 81701-05-14 19:41 G 31561871.13 31561871.32 31561871.52 0.0493 0.0121

Neptune 81701-09-13 12:58 G 31561992.82 31561993.04 31561993.27 0.0088 0.0003

Jupiter 81702-01-05 17:32 G 31562107.05 31562107.23 31562107.41 0.0499 0.0238

Neptune 81702-04-27 02:10 G 31562218.37 31562218.59 31562218.81 0.0088 0.0011

Moon 81702-05-08 21:08 G 31562230.24 31562230.38 31562230.52 0.2645 0.1251

Earth 81702-05-09 02:39 G 31562230.49 31562230.61 31562230.73 0.2642 0.1772 *

Neptune 81702-12-08 15:22 G 31562443.93 31562444.14 31562444.36 0.0088 0.0020

Neptune 81703-07-22 04:34 G 31562669.48 31562669.69 31562669.91 0.0088 0.0029

Neptune 81704-03-03 17:46 G 31562895.05 31562895.24 31562895.45 0.0088 0.0038

Neptune 81704-10-15 06:58 G 31563120.61 31563120.79 31563120.99 0.0088 0.0047

Neptune 81705-05-28 19:56 G 31563346.18 31563346.33 31563346.52 0.0088 0.0057

Neptune 81706-01-09 09:22 G 31563571.76 31563571.89 31563572.06 0.0088 0.0065

Jupiter 81706-07-25 09:51 G 31563768.84 31563768.91 31563769.00 0.0538 0.0495

Neptune 81706-08-22 22:20 G 31563797.34 31563797.43 31563797.58 0.0088 0.0074

Jupiter 81707-03-20 19:12 G 31564007.10 31564007.30 31564007.51 0.0533 0.0035

Neptune 81707-04-05 12:15 G 31564022.94 31564023.01 31564023.09 0.0088 0.0082

Jupiter 81707-11-13 23:03 G 31564245.34 31564245.46 31564245.59 0.0526 0.0415

Moon 81710-05-06 14:39 G 31565150.02 31565150.11 31565150.19 0.2650 0.2155

Earth 81710-05-06 16:48 G 31565150.07 31565150.20 31565150.32 0.2644 0.1605 *

Saturn 81712-07-08 08:53 G 31565943.75 31565943.87 31565944.01 0.0294 0.0230

Jupiter 81713-01-18 00:29 G 31566137.34 31566137.52 31566137.70 0.0492 0.0217

Saturn 81713-02-23 06:29 G 31566173.56 31566173.77 31566173.98 0.0295 0.0026

Mars 81713-07-11 16:48 G 31566312.02 31566312.20 31566312.37 0.1745 0.0117

Jupiter 81713-09-10 21:08 G 31566373.19 31566373.38 31566373.58 0.0497 0.0139

Saturn 81713-10-11 04:05 G 31566403.51 31566403.67 31566403.84 0.0295 0.0181

Jupiter 81714-05-04 23:17 G 31566609.45 31566609.47 31566609.50 0.0504 0.0498

Uranus 81715-11-21 19:12 G 31567175.16 31567175.30 31567175.45 0.0143 0.0108

Uranus 81716-07-05 07:12 G 31567401.61 31567401.80 31567401.99 0.0143 0.0070

Uranus 81717-02-16 19:27 G 31567628.10 31567628.31 31567628.53 0.0143 0.0032

Uranus 81717-10-01 07:41 G 31567854.60 31567854.82 31567855.04 0.0143 0.0007

Uranus 81718-05-15 19:41 G 31568081.12 31568081.32 31568081.54 0.0143 0.0047

Jupiter 81718-11-23 07:12 G 31568272.60 31568272.80 31568272.99 0.0534 0.0163

Uranus 81718-12-28 07:56 G 31568307.67 31568307.83 31568308.02 0.0143 0.0086

Jupiter 81719-07-19 12:15 G 31568510.84 31568511.01 31568511.18 0.0527 0.0295

Uranus 81719-08-11 20:39 G 31568534.26 31568534.36 31568534.48 0.0143 0.0124

Jupiter 81724-09-23 04:05 G 31570403.51 31570403.67 31570403.83 0.0491 0.0313

Jupiter 81725-05-17 00:00 G 31570639.30 31570639.50 31570639.71 0.0496 0.0039

Jupiter 81726-01-08 00:58 G 31570875.42 31570875.54 31570875.66 0.0503 0.0400

Saturn 81726-12-23 08:24 G 31571224.70 31571224.85 31571225.01 0.0266 0.0186

Saturn 81727-08-09 12:00 G 31571453.79 31571454.00 31571454.22 0.0266 0.0033

Saturn 81728-03-25 15:36 G 31571682.95 31571683.15 31571683.34 0.0265 0.0121

Jupiter 81730-07-28 17:46 G 31572538.07 31572538.24 31572538.41 0.0535 0.0293

Jupiter 81731-03-24 00:29 G 31572776.33 31572776.52 31572776.71 0.0529 0.0171

Jupiter 81736-05-29 08:53 G 31574669.76 31574669.87 31574669.98 0.0490 0.0405

Jupiter 81737-01-20 03:51 G 31574905.47 31574905.66 31574905.87 0.0494 0.0065

Jupiter 81737-09-13 02:53 G 31575141.46 31575141.62 31575141.78 0.0500 0.0298

Saturn 81742-01-18 20:53 G 31576730.21 31576730.37 31576730.53 0.0295 0.0190

Jupiter 81742-04-02 01:41 G 31576803.45 31576803.57 31576803.69 0.0537 0.0425

Saturn 81742-09-05 18:29 G 31576960.06 31576960.27 31576960.48 0.0295 0.0015

Jupiter 81742-11-26 10:05 G 31577041.71 31577041.92 31577042.12 0.0532 0.0039

Saturn 81743-04-23 16:20 G 31577190.04 31577190.18 31577190.32 0.0296 0.0222

Jupiter 81743-07-22 12:44 G 31577279.95 31577280.03 31577280.11 0.0524 0.0478

Jupiter 81748-09-25 08:24 G 31579171.66 31579171.85 31579172.04 0.0493 0.0160

Jupiter 81749-05-19 05:46 G 31579407.55 31579407.74 31579407.92 0.0498 0.0198

Mars 81751-12-22 01:12 G 31580354.37 31580354.55 31580354.72 0.1786 0.0054

Jupiter 81754-07-31 21:36 G 31581307.20 31581307.40 31581307.60 0.0534 0.0091

Jupiter 81755-03-27 02:24 G 31581545.46 31581545.60 31581545.75 0.0527 0.0364

Uranus 81756-03-07 13:56 G 31581892.03 31581892.08 31581892.15 0.0135 0.0130

Saturn 81756-07-04 16:20 G 31582011.01 31582011.18 31582011.36 0.0266 0.0155

Uranus 81756-10-19 19:12 G 31582118.17 31582118.30 31582118.46 0.0135 0.0099

Saturn 81757-02-18 19:56 G 31582240.11 31582240.33 31582240.55 0.0265 0.0002

Uranus 81757-06-03 00:29 G 31582344.35 31582344.52 31582344.72 0.0135 0.0067

Saturn 81757-10-05 23:03 G 31582469.28 31582469.46 31582469.64 0.0265 0.0150

Uranus 81758-01-15 06:00 G 31582570.55 31582570.75 31582570.96 0.0135 0.0035

Uranus 81758-08-29 11:32 G 31582796.77 31582796.98 31582797.20 0.0135 0.0004

Uranus 81759-04-12 16:34 G 31583022.99 31583023.19 31583023.41 0.0135 0.0028

Uranus 81759-11-24 21:51 G 31583249.22 31583249.41 31583249.61 0.0135 0.0059

Jupiter 81760-05-31 12:15 G 31583437.84 31583438.01 31583438.18 0.0491 0.0256

Uranus 81760-07-08 02:53 G 31583475.47 31583475.62 31583475.78 0.0135 0.0090

Jupiter 81761-01-22 08:10 G 31583673.64 31583673.84 31583674.04 0.0496 0.0097

Uranus 81761-02-19 07:56 G 31583701.74 31583701.83 31583701.93 0.0135 0.0121

Jupiter 81761-09-15 09:22 G 31583909.81 31583909.89 31583909.97 0.0503 0.0457

Pluto 81763-09-04 15:51 G 31584629.08 31584629.16 31584629.25 0.0065 0.0060

Pluto 81764-04-16 20:10 G 31584854.14 31584854.34 31584854.56 0.0066 0.0021

Pluto 81764-11-28 00:44 G 31585079.33 31585079.53 31585079.75 0.0066 0.0018

Pluto 81765-07-11 04:48 G 31585304.63 31585304.70 31585304.83 0.0066 0.0058

Jupiter 81766-04-05 09:36 G 31585572.72 31585572.90 31585573.09 0.0535 0.0219

Jupiter 81766-11-29 16:20 G 31585811.00 31585811.18 31585811.36 0.0529 0.0244

Saturn 81771-08-01 02:53 G 31587516.45 31587516.62 31587516.80 0.0294 0.0161

Jupiter 81772-02-04 17:03 G 31587704.07 31587704.21 31587704.35 0.0490 0.0349

Saturn 81772-03-18 00:15 G 31587746.31 31587746.51 31587746.72 0.0295 0.0045

Jupiter 81772-09-27 12:15 G 31587939.81 31587940.01 31587940.21 0.0495 0.0003

Saturn 81772-11-02 21:51 G 31587976.31 31587976.41 31587976.53 0.0295 0.0251

Jupiter 81773-05-21 11:32 G 31588175.85 31588175.98 31588176.13 0.0501 0.0360

Jupiter 81777-12-08 21:36 G 31589838.25 31589838.40 31589838.56 0.0536 0.0347

Jupiter 81778-08-04 05:17 G 31590076.52 31590076.72 31590076.92 0.0530 0.0119

Neptune 81778-11-21 07:27 G 31590185.78 31590185.81 31590185.89 0.0089 0.0086

Mars 81779-05-09 00:29 G 31590354.36 31590354.52 31590354.69 0.1741 0.0486

Neptune 81779-07-04 20:10 G 31590411.26 31590411.34 31590411.48 0.0089 0.0077

Neptune 81780-02-15 09:08 G 31590636.76 31590636.88 31590637.04 0.0089 0.0068

Neptune 81780-09-27 21:51 G 31590862.27 31590862.41 31590862.59 0.0089 0.0059

Neptune 81781-05-11 10:34 G 31591087.78 31591087.94 31591088.14 0.0089 0.0050

Neptune 81781-12-22 23:17 G 31591313.30 31591313.47 31591313.68 0.0089 0.0042

Neptune 81782-08-05 12:15 G 31591538.83 31591539.01 31591539.23 0.0089 0.0033

Neptune 81783-03-19 01:12 G 31591764.35 31591764.55 31591764.77 0.0089 0.0023

Jupiter 81783-10-10 20:39 G 31591970.28 31591970.36 31591970.45 0.0490 0.0442

Neptune 81783-10-30 14:10 G 31591989.88 31591990.09 31591990.31 0.0089 0.0014

Jupiter 81784-06-02 15:22 G 31592205.95 31592206.14 31592206.34 0.0494 0.0104

Neptune 81784-06-12 02:53 G 31592215.41 31592215.62 31592215.84 0.0089 0.0005

Neptune 81785-01-23 15:51 G 31592440.94 31592441.16 31592441.38 0.0089 0.0005

Jupiter 81785-01-24 13:56 G 31592441.91 31592442.08 31592442.25 0.0500 0.0258

Neptune 81785-09-06 04:34 G 31592666.48 31592666.69 31592666.91 0.0089 0.0014

Saturn 81786-01-14 19:56 G 31592797.15 31592797.33 31592797.52 0.0266 0.0134

Neptune 81786-04-19 17:17 G 31592892.02 31592892.22 31592892.44 0.0089 0.0023

Saturn 81786-08-31 23:17 G 31593026.26 31593026.47 31593026.69 0.0266 0.0020

Neptune 81786-12-01 06:00 G 31593117.56 31593117.75 31593117.97 0.0089 0.0032

Saturn 81787-04-18 02:24 G 31593255.45 31593255.60 31593255.77 0.0265 0.0173

Neptune 81787-07-14 18:58 G 31593343.11 31593343.29 31593343.49 0.0089 0.0041

Neptune 81788-02-25 07:41 G 31593568.65 31593568.82 31593569.01 0.0089 0.0050

Neptune 81788-10-07 20:24 G 31593794.20 31593794.35 31593794.52 0.0089 0.0060

Neptune 81789-05-21 09:08 G 31594019.76 31594019.88 31594020.03 0.0089 0.0069

Jupiter 81789-08-13 08:10 G 31594103.75 31594103.84 31594103.94 0.0537 0.0473

Neptune 81790-01-01 21:51 G 31594245.32 31594245.41 31594245.53 0.0089 0.0078

Jupiter 81790-04-08 16:48 G 31594341.99 31594342.20 31594342.41 0.0532 0.0010

Neptune 81790-08-15 10:34 G 31594470.91 31594470.94 31594471.02 0.0089 0.0087

Jupiter 81790-12-02 19:56 G 31594580.21 31594580.33 31594580.44 0.0525 0.0435

Jupiter 81796-02-06 20:10 G 31596472.15 31596472.34 31596472.52 0.0492 0.0201

Jupiter 81796-09-29 17:03 G 31596708.02 31596708.21 31596708.40 0.0497 0.0157

Uranus 81799-07-22 00:58 G 31597733.46 31597733.54 31597733.66 0.0143 0.0126

Moon 81799-11-11 15:08 G 31597846.02 31597846.13 31597846.24 0.2691 0.1906

Uranus 81800-03-05 13:12 G 31597959.89 31597960.05 31597960.24 0.0143 0.0088

Uranus 81800-10-18 01:27 G 31598186.36 31598186.56 31598186.77 0.0143 0.0049

Saturn 81801-02-11 14:10 G 31598302.90 31598303.09 31598303.28 0.0295 0.0122

Uranus 81801-06-01 13:41 G 31598412.85 31598413.07 31598413.29 0.0143 0.0011

Saturn 81801-09-29 12:00 G 31598532.80 31598533.00 31598533.20 0.0296 0.0085

Jupiter 81801-12-13 01:12 G 31598607.35 31598607.55 31598607.75 0.0534 0.0146

Uranus 81802-01-14 01:56 G 31598639.36 31598639.58 31598639.80 0.0143 0.0028

Saturn 81802-05-17 09:36 G 31598762.88 31598762.90 31598762.95 0.0296 0.0291

Jupiter 81802-08-08 06:44 G 31598845.62 31598845.78 31598845.95 0.0528 0.0313

Uranus 81802-08-28 13:56 G 31598865.90 31598866.08 31598866.29 0.0143 0.0067

Uranus 81803-04-12 02:39 G 31599092.47 31599092.61 31599092.76 0.0143 0.0106

Jupiter 81807-10-14 00:58 G 31600738.39 31600738.54 31600738.71 0.0491 0.0295

Moon 81807-11-10 08:53 G 31600765.73 31600765.87 31600766.02 0.2694 0.0658

Earth 81807-11-10 12:29 G 31600765.87 31600766.02 31600766.17 0.2689 0.0486 *

Jupiter 81808-06-05 20:53 G 31600974.17 31600974.37 31600974.57 0.0496 0.0057

Jupiter 81809-01-27 20:53 G 31601210.27 31601210.37 31601210.49 0.0502 0.0418

Jupiter 81813-08-17 11:46 G 31602872.82 31602872.99 31602873.17 0.0536 0.0277

Jupiter 81814-04-12 19:12 G 31603111.11 31603111.30 31603111.50 0.0530 0.0190

Saturn 81814-12-12 00:15 G 31603354.46 31603354.51 31603354.57 0.0266 0.0255

Saturn 81815-07-29 04:05 G 31603583.47 31603583.67 31603583.86 0.0265 0.0103

Saturn 81816-03-14 07:27 G 31603812.60 31603812.81 31603813.02 0.0265 0.0050

Saturn 81816-10-29 10:05 G 31604041.79 31604041.92 31604042.07 0.0265 0.0202

Mars 81817-10-19 09:08 G 31604396.71 31604396.88 31604397.04 0.1790 0.0448

Jupiter 81819-06-19 05:17 G 31605004.60 31605004.72 31605004.85 0.0490 0.0386

Jupiter 81820-02-10 00:00 G 31605240.30 31605240.50 31605240.70 0.0494 0.0043

Jupiter 81820-10-02 22:20 G 31605476.28 31605476.43 31605476.59 0.0500 0.0318

Jupiter 81825-04-21 23:32 G 31607138.35 31607138.48 31607138.61 0.0537 0.0403

Jupiter 81825-12-16 08:24 G 31607376.64 31607376.85 31607377.05 0.0532 0.0065

Jupiter 81826-08-11 11:03 G 31607614.91 31607614.96 31607615.02 0.0524 0.0502

Saturn 81830-08-24 20:39 G 31609089.16 31609089.36 31609089.56 0.0295 0.0092

Jupiter 81831-02-22 10:05 G 31609270.88 31609270.92 31609270.97 0.0489 0.0476

Saturn 81831-04-11 18:00 G 31609319.06 31609319.25 31609319.45 0.0295 0.0114

Jupiter 81831-10-16 04:20 G 31609506.49 31609506.68 31609506.87 0.0493 0.0141

Jupiter 81832-06-08 01:27 G 31609742.38 31609742.56 31609742.75 0.0498 0.0218

Jupiter 81836-12-25 11:46 G 31611403.95 31611403.99 31611404.03 0.0538 0.0525

Jupiter 81837-08-20 21:08 G 31611642.18 31611642.38 31611642.58 0.0533 0.0065

Jupiter 81838-04-16 01:27 G 31611880.42 31611880.56 31611880.70 0.0526 0.0388

Uranus 81840-06-20 04:05 G 31612676.57 31612676.67 31612676.80 0.0135 0.0114

Uranus 81841-02-01 09:51 G 31612902.74 31612902.91 31612903.08 0.0135 0.0082

Uranus 81841-09-15 15:22 G 31613128.94 31613129.14 31613129.34 0.0135 0.0050

Uranus 81842-04-29 20:39 G 31613355.15 31613355.36 31613355.58 0.0135 0.0019

Uranus 81842-12-12 01:56 G 31613581.37 31613581.58 31613581.80 0.0135 0.0013

Jupiter 81843-06-21 07:56 G 31613772.65 31613772.83 31613773.01 0.0492 0.0239

Uranus 81843-07-26 07:12 G 31613807.60 31613807.80 31613808.00 0.0135 0.0044

Jupiter 81844-02-12 04:20 G 31614008.49 31614008.68 31614008.88 0.0497 0.0117

Uranus 81844-03-08 12:29 G 31614033.84 31614034.02 31614034.19 0.0135 0.0075

Saturn 81844-06-23 03:08 G 31614140.53 31614140.63 31614140.73 0.0266 0.0236

Jupiter 81844-10-05 06:15 G 31614244.69 31614244.76 31614244.82 0.0504 0.0477

Uranus 81844-10-20 17:17 G 31614260.10 31614260.22 31614260.36 0.0135 0.0107

Saturn 81845-02-07 06:44 G 31614369.58 31614369.78 31614369.99 0.0266 0.0082

Mars 81845-03-06 08:53 G 31614396.72 31614396.87 31614397.03 0.1737 0.0829

Saturn 81845-09-24 10:05 G 31614598.71 31614598.92 31614599.13 0.0265 0.0071

Saturn 81846-05-11 12:58 G 31614827.93 31614828.04 31614828.16 0.0265 0.0223

Jupiter 81849-04-25 08:10 G 31615907.65 31615907.84 31615908.03 0.0535 0.0196

Jupiter 81849-12-19 14:10 G 31616145.92 31616146.09 31616146.27 0.0528 0.0267

Pluto 81851-12-19 05:17 G 31616875.52 31616875.72 31616875.92 0.0078 0.0037

Pluto 81852-07-31 14:53 G 31617100.93 31617101.12 31617101.33 0.0078 0.0031

Jupiter 81855-02-24 12:58 G 31618038.89 31618039.04 31618039.19 0.0491 0.0334

Jupiter 81855-10-18 08:24 G 31618274.65 31618274.85 31618275.06 0.0495 0.0018

Jupiter 81856-06-10 08:10 G 31618510.71 31618510.84 31618510.97 0.0501 0.0377

Saturn 81859-07-20 08:53 G 31619645.78 31619645.87 31619645.97 0.0294 0.0259

Saturn 81860-03-06 06:15 G 31619875.56 31619875.76 31619875.97 0.0295 0.0055

Neptune 81860-05-27 00:00 G 31619957.43 31619957.50 31619957.60 0.0088 0.0081

Saturn 81860-10-22 04:05 G 31620105.50 31620105.67 31620105.85 0.0296 0.0153

Jupiter 81860-12-28 16:05 G 31620173.01 31620173.17 31620173.33 0.0536 0.0330

Neptune 81861-01-07 13:27 G 31620182.94 31620183.06 31620183.20 0.0088 0.0072

Neptune 81861-08-21 02:53 G 31620408.47 31620408.62 31620408.78 0.0088 0.0063

Jupiter 81861-08-23 23:46 G 31620411.29 31620411.49 31620411.69 0.0531 0.0137

Neptune 81862-04-03 16:20 G 31620634.01 31620634.18 31620634.36 0.0088 0.0054

Neptune 81862-11-15 05:32 G 31620859.54 31620859.73 31620859.92 0.0088 0.0045

Neptune 81863-06-28 18:29 G 31621085.08 31621085.27 31621085.49 0.0088 0.0036

Neptune 81864-02-09 07:56 G 31621310.63 31621310.83 31621311.06 0.0088 0.0027

Neptune 81864-09-21 21:36 G 31621536.18 31621536.40 31621536.62 0.0088 0.0018

Neptune 81865-05-05 10:34 G 31621761.73 31621761.94 31621762.17 0.0088 0.0009

Neptune 81865-12-17 00:00 G 31621987.28 31621987.50 31621987.72 0.0088 0.0000

Neptune 81866-07-30 13:12 G 31622212.83 31622213.05 31622213.27 0.0088 0.0009

Jupiter 81866-10-30 18:15 G 31622305.17 31622305.26 31622305.37 0.0490 0.0424

Neptune 81867-03-13 02:24 G 31622438.39 31622438.60 31622438.82 0.0088 0.0019

Jupiter 81867-06-23 13:12 G 31622540.85 31622541.05 31622541.25 0.0493 0.0082

Neptune 81867-10-24 15:36 G 31622663.94 31622664.15 31622664.37 0.0088 0.0028

Jupiter 81868-02-14 11:03 G 31622776.80 31622776.96 31622777.13 0.0499 0.0278

Neptune 81868-06-06 04:48 G 31622889.50 31622889.70 31622889.91 0.0088 0.0036

Neptune 81869-01-17 18:00 G 31623115.07 31623115.25 31623115.45 0.0088 0.0046

Neptune 81869-08-31 07:12 G 31623340.64 31623340.80 31623340.99 0.0088 0.0054

Neptune 81870-04-13 20:24 G 31623566.21 31623566.35 31623566.52 0.0088 0.0063

Neptune 81870-11-25 09:36 G 31623791.79 31623791.90 31623792.04 0.0088 0.0072

Neptune 81871-07-08 22:34 G 31624017.38 31624017.44 31624017.55 0.0088 0.0081

Jupiter 81872-09-02 02:10 G 31624438.49 31624438.59 31624438.70 0.0537 0.0457

Jupiter 81873-04-28 11:17 G 31624676.76 31624676.97 31624677.17 0.0533 0.0011

Jupiter 81873-12-22 15:08 G 31624915.03 31624915.13 31624915.23 0.0525 0.0454

Saturn 81874-01-03 11:03 G 31624926.83 31624926.96 31624927.10 0.0266 0.0204

Saturn 81874-08-20 14:39 G 31625155.90 31625156.11 31625156.32 0.0265 0.0052

Saturn 81875-04-06 17:46 G 31625385.04 31625385.24 31625385.44 0.0265 0.0101

Saturn 81875-11-21 20:24 G 31625614.30 31625614.35 31625614.42 0.0265 0.0252

Jupiter 81879-02-26 17:03 G 31626807.02 31626807.21 31626807.40 0.0492 0.0180

Jupiter 81879-10-20 13:27 G 31627042.87 31627043.06 31627043.25 0.0497 0.0177

Uranus 81883-03-22 07:56 G 31628291.83 31628291.83 31628291.86 0.0143 0.0142

Mars 81883-08-16 17:03 G 31628439.05 31628439.21 31628439.36 0.1794 0.0852

Uranus 81883-11-03 19:56 G 31628518.19 31628518.33 31628518.49 0.0143 0.0105

Uranus 81884-06-17 08:10 G 31628744.65 31628744.84 31628745.04 0.0143 0.0066

Jupiter 81884-12-31 23:32 G 31628942.28 31628942.48 31628942.68 0.0534 0.0121

Uranus 81885-01-29 20:10 G 31628971.13 31628971.34 31628971.57 0.0143 0.0028

Jupiter 81885-08-27 05:32 G 31629180.57 31629180.73 31629180.89 0.0528 0.0339

Uranus 81885-09-13 08:39 G 31629197.64 31629197.86 31629198.08 0.0143 0.0011

Uranus 81886-04-27 20:53 G 31629424.17 31629424.37 31629424.58 0.0143 0.0050

Uranus 81886-12-10 09:08 G 31629650.72 31629650.88 31629651.06 0.0143 0.0088

Uranus 81887-07-24 21:36 G 31629877.31 31629877.40 31629877.51 0.0143 0.0127

Saturn 81889-01-29 15:22 G 31630432.01 31630432.14 31630432.27 0.0294 0.0230

Saturn 81889-09-16 12:44 G 31630661.82 31630662.03 31630662.24 0.0295 0.0025

Saturn 81890-05-04 10:20 G 31630891.77 31630891.93 31630892.10 0.0295 0.0182

Jupiter 81890-11-01 21:22 G 31631073.23 31631073.39 31631073.56 0.0491 0.0276

Jupiter 81891-06-25 17:03 G 31631309.01 31631309.21 31631309.41 0.0496 0.0078

Jupiter 81892-02-16 17:32 G 31631545.13 31631545.23 31631545.32 0.0502 0.0438

Jupiter 81896-09-05 12:15 G 31633207.83 31633208.01 31633208.19 0.0536 0.0250

Jupiter 81897-05-01 19:27 G 31633446.12 31633446.31 31633446.49 0.0529 0.0217

Jupiter 81902-07-09 01:27 G 31635339.43 31635339.56 31635339.69 0.0490 0.0370

Jupiter 81903-03-01 20:24 G 31635575.15 31635575.35 31635575.56 0.0494 0.0026

Saturn 81903-07-17 12:58 G 31635712.90 31635713.04 31635713.20 0.0266 0.0185

Jupiter 81903-10-23 19:27 G 31635811.17 31635811.31 31635811.46 0.0501 0.0338

Saturn 81904-03-02 16:34 G 31635941.98 31635942.19 31635942.41 0.0266 0.0032

Saturn 81904-10-17 19:27 G 31636171.13 31636171.31 31636171.51 0.0265 0.0122

Jupiter 81908-05-11 23:17 G 31637473.33 31637473.47 31637473.62 0.0537 0.0378

Jupiter 81909-01-05 07:41 G 31637711.62 31637711.82 31637712.02 0.0531 0.0090

Mars 81911-01-02 17:32 G 31638439.10 31638439.23 31638439.35 0.1733 0.1169

Jupiter 81914-03-14 06:44 G 31639605.72 31639605.78 31639605.85 0.0489 0.0460

Jupiter 81914-11-05 01:12 G 31639841.36 31639841.55 31639841.75 0.0493 0.0123

Jupiter 81915-06-28 22:48 G 31640077.28 31640077.45 31640077.63 0.0498 0.0238

Saturn 81918-08-12 23:03 G 31641218.32 31641218.46 31641218.63 0.0295 0.0196

Saturn 81919-03-30 20:53 G 31641448.16 31641448.37 31641448.58 0.0295 0.0011

Saturn 81919-11-15 18:44 G 31641678.15 31641678.28 31641678.43 0.0296 0.0218

Jupiter 81920-01-15 06:58 G 31641738.73 31641738.79 31641738.85 0.0538 0.0507

Jupiter 81920-09-09 16:05 G 31641976.97 31641977.17 31641977.38 0.0533 0.0045

Jupiter 81921-05-05 20:39 G 31642215.23 31642215.36 31642215.49 0.0526 0.0407

Uranus 81924-02-19 12:58 G 31643234.99 31643235.04 31643235.12 0.0135 0.0129

Uranus 81924-10-02 18:58 G 31643461.14 31643461.29 31643461.44 0.0135 0.0097

Uranus 81925-05-17 00:15 G 31643687.33 31643687.51 31643687.70 0.0135 0.0065

Uranus 81925-12-29 05:32 G 31643913.53 31643913.73 31643913.94 0.0135 0.0034

Jupiter 81926-07-11 06:44 G 31644107.60 31644107.78 31644107.96 0.0492 0.0217

Uranus 81926-08-12 11:03 G 31644139.75 31644139.96 31644140.18 0.0135 0.0002

Jupiter 81927-03-04 02:53 G 31644343.43 31644343.62 31644343.82 0.0497 0.0139

Uranus 81927-03-26 16:20 G 31644365.97 31644366.18 31644366.39 0.0135 0.0029

Jupiter 81927-10-26 04:20 G 31644579.65 31644579.68 31644579.70 0.0503 0.0497

Uranus 81927-11-07 21:36 G 31644592.21 31644592.40 31644592.59 0.0135 0.0060

Uranus 81928-06-21 02:10 G 31644818.45 31644818.59 31644818.77 0.0135 0.0092

Uranus 81929-02-02 07:41 G 31645044.74 31645044.82 31645044.91 0.0135 0.0122

Jupiter 81932-05-15 02:53 G 31646242.43 31646242.62 31646242.81 0.0535 0.0177

Jupiter 81933-01-08 09:22 G 31646480.72 31646480.89 31646481.07 0.0529 0.0287

Saturn 81933-01-26 20:39 G 31646499.19 31646499.36 31646499.54 0.0265 0.0154

Saturn 81933-09-13 00:00 G 31646728.28 31646728.50 31646728.71 0.0265 0.0002

Saturn 81934-04-30 02:39 G 31646957.45 31646957.61 31646957.80 0.0265 0.0151

Jupiter 81938-03-16 10:48 G 31648373.80 31648373.95 31648374.11 0.0490 0.0312

Jupiter 81938-11-07 06:00 G 31648609.55 31648609.75 31648609.95 0.0495 0.0038

Jupiter 81939-07-01 05:17 G 31648845.60 31648845.72 31648845.84 0.0501 0.0398

Mars 81943-01-01 23:32 G 31650126.39 31650126.48 31650126.57 0.1746 0.1479

Neptune 81943-02-24 19:27 G 31650180.30 31650180.31 31650180.37 0.0089 0.0088

Neptune 81943-10-08 08:10 G 31650405.77 31650405.84 31650405.96 0.0089 0.0079

Jupiter 81944-01-18 14:39 G 31650507.95 31650508.11 31650508.28 0.0536 0.0305

Neptune 81944-05-20 21:08 G 31650631.26 31650631.38 31650631.53 0.0089 0.0070

Jupiter 81944-09-12 22:48 G 31650746.26 31650746.45 31650746.65 0.0531 0.0164

Neptune 81945-01-01 09:51 G 31650856.77 31650856.91 31650857.08 0.0089 0.0061

Earth 81945-05-11 02:39 G 31650986.50 31650986.61 31650986.73 0.2643 0.1874

Neptune 81945-08-14 22:48 G 31651082.29 31651082.45 31651082.64 0.0089 0.0052

Neptune 81946-03-28 11:32 G 31651307.80 31651307.98 31651308.19 0.0089 0.0043

Neptune 81946-11-09 00:15 G 31651533.32 31651533.51 31651533.73 0.0089 0.0034

Neptune 81947-06-22 12:58 G 31651758.85 31651759.04 31651759.27 0.0089 0.0026

Neptune 81948-02-03 02:10 G 31651984.38 31651984.59 31651984.80 0.0089 0.0016

Saturn 81948-02-23 05:17 G 31652004.55 31652004.72 31652004.89 0.0295 0.0167

Neptune 81948-09-15 14:53 G 31652209.91 31652210.12 31652210.34 0.0089 0.0007

Saturn 81948-10-10 02:53 G 31652234.41 31652234.62 31652234.83 0.0295 0.0039

Neptune 81949-04-29 03:51 G 31652435.44 31652435.66 31652435.87 0.0089 0.0003

Saturn 81949-05-28 00:44 G 31652464.42 31652464.53 31652464.64 0.0296 0.0246

Mars 81949-06-14 00:44 G 31652481.41 31652481.53 31652481.65 0.1798 0.1265

Jupiter 81949-11-19 15:36 G 31652640.05 31652640.15 31652640.27 0.0490 0.0404

Neptune 81949-12-10 16:20 G 31652660.97 31652661.18 31652661.41 0.0089 0.0013

Jupiter 81950-07-13 10:20 G 31652875.73 31652875.93 31652876.13 0.0493 0.0061

Neptune 81950-07-24 05:17 G 31652886.52 31652886.72 31652886.94 0.0089 0.0021

Jupiter 81951-03-06 08:10 G 31653111.68 31653111.84 31653112.00 0.0499 0.0300

Neptune 81951-03-06 18:15 G 31653112.06 31653112.26 31653112.47 0.0089 0.0030

Neptune 81951-10-18 06:58 G 31653337.60 31653337.79 31653337.99 0.0089 0.0040

Neptune 81952-05-30 19:41 G 31653563.15 31653563.32 31653563.51 0.0089 0.0049

Neptune 81953-01-11 08:39 G 31653788.70 31653788.86 31653789.03 0.0089 0.0058

Earth 81953-05-08 16:48 G 31653906.07 31653906.20 31653906.34 0.2645 0.1516

Moon 81953-05-08 21:22 G 31653906.23 31653906.39 31653906.55 0.2641 0.0919 *

Neptune 81953-08-24 21:36 G 31654014.26 31654014.40 31654014.55 0.0089 0.0067

Neptune 81954-04-07 10:20 G 31654239.82 31654239.93 31654240.05 0.0089 0.0076

Neptune 81954-11-18 23:03 G 31654465.40 31654465.46 31654465.53 0.0089 0.0085

Jupiter 81955-09-23 03:08 G 31654773.52 31654773.63 31654773.76 0.0538 0.0432

Jupiter 81956-05-18 12:29 G 31655011.81 31655012.02 31655012.22 0.0532 0.0038

Jupiter 81957-01-11 15:51 G 31655250.08 31655250.16 31655250.25 0.0525 0.0480

Jupiter 81962-03-18 14:10 G 31657141.90 31657142.09 31657142.28 0.0492 0.0160

Saturn 81962-08-08 21:51 G 31657285.23 31657285.41 31657285.60 0.0266 0.0136

Jupiter 81962-11-09 11:03 G 31657377.78 31657377.96 31657378.15 0.0498 0.0198

Saturn 81963-03-26 01:12 G 31657514.34 31657514.55 31657514.77 0.0265 0.0017

Saturn 81963-11-10 03:51 G 31657743.50 31657743.66 31657743.83 0.0265 0.0169

Uranus 81967-07-05 02:10 G 31659076.49 31659076.59 31659076.71 0.0143 0.0122

Jupiter 81968-01-22 00:29 G 31659277.32 31659277.52 31659277.72 0.0534 0.0093

Uranus 81968-02-16 14:24 G 31659302.93 31659303.10 31659303.28 0.0143 0.0084

Jupiter 81968-09-16 05:46 G 31659515.59 31659515.74 31659515.89 0.0527 0.0365

Uranus 81968-09-30 02:24 G 31659529.40 31659529.60 31659529.82 0.0143 0.0046

Uranus 81969-05-14 14:53 G 31659755.90 31659756.12 31659756.34 0.0143 0.0007

Uranus 81969-12-27 03:08 G 31659982.42 31659982.63 31659982.85 0.0143 0.0032

Uranus 81970-08-10 15:36 G 31660208.96 31660209.15 31660209.34 0.0143 0.0070

Uranus 81971-03-25 03:51 G 31660435.53 31660435.66 31660435.82 0.0143 0.0110

Jupiter 81973-11-21 19:27 G 31661408.14 31661408.31 31661408.48 0.0491 0.0256

Jupiter 81974-07-15 15:36 G 31661643.95 31661644.15 31661644.35 0.0496 0.0099

Jupiter 81975-03-08 16:05 G 31661880.10 31661880.17 31661880.26 0.0503 0.0459

Mars 81976-10-30 02:10 G 31662481.50 31662481.59 31662481.67 0.1730 0.1501

Saturn 81977-09-04 10:48 G 31662790.78 31662790.95 31662791.14 0.0295 0.0137

Saturn 81978-04-22 08:53 G 31663020.67 31663020.87 31663021.08 0.0296 0.0072

Saturn	**81978-12-08 07:12**	**G**	**31663250.73**	**31663250.80**	**31663250.87**	**0.0296**	**0.0278**	
Jupiter	**81979-09-26 08:24**	**G**	**31663542.66**	**31663542.85**	**31663543.03**	**0.0535**	**0.0228**	
Jupiter	**81980-05-21 15:22**	**G**	**31663780.95**	**31663781.14**	**31663781.32**	**0.0529**	**0.0238**	
Mars	**81981-06-13 08:39**	**G**	**31664168.79**	**31664168.86**	**31664168.93**	**0.1785**	**0.1621**	
Jupiter	**81985-07-28 01:12**	**G**	**31665674.41**	**31665674.55**	**31665674.70**	**0.0490**	**0.0348**	
Jupiter	**81986-03-20 20:24**	**G**	**31665910.15**	**31665910.35**	**31665910.55**	**0.0494**	**0.0001**	
Jupiter	**81986-11-11 19:12**	**G**	**31666146.16**	**31666146.30**	**31666146.44**	**0.0500**	**0.0361**	
Jupiter	**81991-05-31 18:44**	**G**	**31667808.13**	**31667808.28**	**31667808.43**	**0.0537**	**0.0358**	
Saturn	**81991-07-05 01:27**	**G**	**31667842.52**	**31667842.56**	**31667842.61**	**0.0266**	**0.0259**	
Jupiter	**81992-01-25 03:22**	**G**	**31668046.44**	**31668046.64**	**31668046.84**	**0.0532**	**0.0111**	
Saturn	**81992-02-19 05:03**	**G**	**31668071.51**	**31668071.71**	**31668071.91**	**0.0265**	**0.0106**	
Saturn	**81992-10-05 07:56**	**G**	**31668300.62**	**31668300.83**	**31668301.05**	**0.0265**	**0.0046**	
Saturn	**81993-05-22 10:34**	**G**	**31668529.80**	**31668529.94**	**31668530.09**	**0.0264**	**0.0197**	
Jupiter	**81997-04-02 06:00**	**G**	**31669940.66**	**31669940.75**	**31669940.84**	**0.0489**	**0.0438**	
Jupiter	**81997-11-24 00:15**	**G**	**31670176.31**	**31670176.51**	**31670176.70**	**0.0493**	**0.0099**	
Jupiter	**81998-07-17 21:22**	**G**	**31670412.22**	**31670412.39**	**31670412.57**	**0.0498**	**0.0262**	

83RD MILLENNIUM CE

This is a list of transits of Venus in the 83rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**82003-02-03 06:00**	**G**	**31672073.67**	**31672073.75**	**31672073.85**	**0.0538**	**0.0484**	
Jupiter	**82003-09-29 15:51**	**G**	**31672311.96**	**31672312.16**	**31672312.37**	**0.0534**	**0.0018**	
Jupiter	**82004-05-24 20:39**	**G**	**31672550.25**	**31672550.36**	**31672550.48**	**0.0526**	**0.0434**	

Saturn 82007-03-17 17:03 G 31673577.01 31673577.21 31673577.40 0.0295 0.0108

Saturn 82007-11-02 14:39 G 31673806.92 31673807.11 31673807.31 0.0296 0.0100

Uranus 82008-06-02 04:05 G 31674019.56 31674019.67 31674019.80 0.0135 0.0111

Mars 82008-10-29 07:41 G 31674168.68 31674168.82 31674168.95 0.1742 0.1116

Uranus 82009-01-14 09:22 G 31674245.73 31674245.89 31674246.08 0.0135 0.0080

Jupiter 82009-07-30 04:48 G 31674442.52 31674442.70 31674442.89 0.0492 0.0196

Uranus 82009-08-28 15:22 G 31674471.94 31674472.14 31674472.34 0.0135 0.0048

Jupiter 82010-03-23 00:58 G 31674678.35 31674678.54 31674678.73 0.0497 0.0162

Uranus 82010-04-11 20:39 G 31674698.15 31674698.36 31674698.57 0.0135 0.0017

Uranus 82010-11-24 01:56 G 31674924.36 31674924.58 31674924.79 0.0135 0.0014

Uranus 82011-07-08 06:58 G 31675150.59 31675150.79 31675151.00 0.0135 0.0046

Uranus 82012-02-19 12:00 G 31675376.84 31675377.00 31675377.19 0.0135 0.0077

Pluto 82012-03-22 00:58 G 31675408.38 31675408.54 31675408.73 0.0065 0.0040

Uranus 82012-10-02 17:03 G 31675603.10 31675603.21 31675603.36 0.0135 0.0108

Pluto 82012-11-02 06:00 G 31675633.53 31675633.75 31675633.97 0.0066 0.0001

Pluto 82013-06-15 10:05 G 31675858.76 31675858.92 31675859.11 0.0066 0.0039

Mars 82015-04-11 08:39 G 31676523.80 31676523.86 31676523.92 0.1802 0.1671

Jupiter 82015-06-04 05:03 G 31676577.51 31676577.71 31676577.91 0.0535 0.0146

Jupiter 82016-01-28 11:32 G 31676815.82 31676815.98 31676816.15 0.0528 0.0317

Saturn 82021-01-14 01:56 G 31678628.51 31678628.58 31678628.68 0.0266 0.0242

Jupiter 82021-04-04 09:08 G 31678708.72 31678708.88 31678709.04 0.0491 0.0292

Saturn 82021-08-31 05:32 G 31678857.53 31678857.73 31678857.93 0.0265 0.0089

Jupiter 82021-11-26 04:20 G 31678944.48 31678944.68 31678944.88 0.0495 0.0061

Saturn 82022-04-17 08:24 G 31679086.64 31679086.85 31679087.06 0.0265 0.0064

Jupiter 82022-07-20 04:20 G 31679180.57 31679180.68 31679180.79 0.0502 0.0422

Saturn 82022-12-02 10:48 G 31679315.83 31679315.95 31679316.08 0.0265 0.0215

Neptune 82024-08-29 11:17 G 31679951.91 31679951.97 31679952.06 0.0088 0.0083

Neptune 82025-04-12 00:44 G 31680177.41 31680177.53 31680177.65 0.0088 0.0074

Neptune 82025-11-23 13:56 G 31680402.94 31680403.08 31680403.24 0.0088 0.0065

Neptune 82026-07-07 03:22 G 31680628.47 31680628.64 31680628.81 0.0088 0.0056

Jupiter 82027-02-06 17:03 G 31680843.04 31680843.21 31680843.39 0.0536 0.0276

Neptune 82027-02-17 16:48 G 31680854.01 31680854.20 31680854.39 0.0088 0.0047

Neptune 82027-10-01 06:00 G 31681079.55 31681079.75 31681079.96 0.0088 0.0038

Jupiter 82027-10-03 00:44 G 31681081.34 31681081.53 31681081.73 0.0530 0.0194

Neptune 82028-05-13 19:12 G 31681305.10 31681305.30 31681305.52 0.0088 0.0029

Neptune 82028-12-25 08:39 G 31681530.64 31681530.86 31681531.08 0.0088 0.0020

Neptune 82029-08-07 21:51 G 31681756.19 31681756.41 31681756.64 0.0088 0.0011

Neptune 82030-03-21 11:17 G 31681981.75 31681981.97 31681982.19 0.0088 0.0001

Neptune 82030-11-02 00:29 G 31682207.30 31682207.52 31682207.74 0.0088 0.0008

Neptune 82031-06-15 13:27 G 31682432.85 31682433.06 31682433.29 0.0088 0.0017

Neptune 82032-01-27 02:53 G 31682658.41 31682658.62 31682658.84 0.0088 0.0026

Neptune 82032-09-08 16:05 G 31682883.97 31682884.17 31682884.38 0.0088 0.0035

Jupiter 82032-12-08 14:39 G 31682974.99 31682975.11 31682975.24 0.0490 0.0384

Neptune 82033-04-22 05:03 G 31683109.53 31683109.71 31683109.92 0.0088 0.0044

Jupiter 82033-08-01 09:51 G 31683210.70 31683210.91 31683211.11 0.0494 0.0039

Neptune 82033-12-03 18:15 G 31683335.10 31683335.26 31683335.45 0.0088 0.0053

Jupiter 82034-03-25 07:56 G 31683446.69 31683446.83 31683446.99 0.0500 0.0324

Neptune 82034-07-17 07:27 G 31683560.67 31683560.81 31683560.98 0.0088 0.0062

Neptune 82035-02-27 20:39 G 31683786.25 31683786.36 31683786.51 0.0088 0.0071

Neptune 82035-10-11 09:36 G 31684011.84 31684011.90 31684012.02 0.0088 0.0080

Saturn 82036-02-09 23:03 G 31684133.41 31684133.46 31684133.51 0.0294 0.0284

Saturn 82036-09-26 20:39 G 31684363.16 31684363.36 31684363.56 0.0295 0.0080

Saturn 82037-05-14 18:44 G 31684593.10 31684593.28 31684593.47 0.0296 0.0129

Jupiter 82038-10-12 00:58 G 31685108.41 31685108.54 31685108.67 0.0537 0.0407

Jupiter 82039-06-07 09:36 G 31685346.70 31685346.90 31685347.10 0.0532 0.0061

Jupiter 82040-01-31 13:12 G 31685584.99 31685585.05 31685585.10 0.0525 0.0502

Jupiter 82044-08-13 20:39 G 31687241.31 31687241.36 31687241.42 0.0489 0.0471

Jupiter 82045-04-06 15:08 G 31687476.94 31687477.13 31687477.33 0.0492 0.0134

Jupiter 82045-11-28 12:00 G 31687712.83 31687713.00 31687713.19 0.0498 0.0226

Mars 82047-04-10 16:20 G 31688211.06 31688211.18 31688211.31 0.1789 0.1225

Jupiter 82050-06-16 11:17 G 31689373.95 31689373.97 31689374.00 0.0538 0.0532

Saturn 82050-07-27 08:24 G 31689414.73 31689414.85 31689414.98 0.0266 0.0214

Earth 82050-11-11 14:39 G 31689521.96 31689522.11 31689522.27 0.2688 0.0340

Moon 82050-11-11 19:41 G 31689522.16 31689522.32 31689522.48 0.2685 0.0209 *

Jupiter 82051-02-09 20:53 G 31689612.17 31689612.37 31689612.58 0.0534 0.0071

Uranus 82051-03-04 07:27 G 31689634.78 31689634.81 31689634.86 0.0143 0.0140

Saturn 82051-03-13 12:00 G 31689643.79 31689644.00 31689644.21 0.0265 0.0061

Jupiter 82051-10-06 02:24 G 31689850.46 31689850.60 31689850.74 0.0527 0.0387

Uranus 82051-10-16 19:41 G 31689861.17 31689861.32 31689861.47 0.0143 0.0102

Saturn 82051-10-28 14:39 G 31689872.91 31689873.11 31689873.31 0.0264 0.0091

Uranus 82052-05-30 07:41 G 31690087.63 31690087.82 31690088.02 0.0143 0.0064

Saturn 82052-06-13 17:03 G 31690102.13 31690102.21 31690102.30 0.0264 0.0241

Uranus 82053-01-11 19:56 G 31690314.12 31690314.33 31690314.55 0.0143 0.0026

Uranus 82053-08-26 08:24 G 31690540.63 31690540.85 31690541.07 0.0143 0.0013

Uranus 82054-04-09 20:53 G 31690767.16 31690767.37 31690767.57 0.0143 0.0052

Uranus 82054-11-22 08:53 G 31690993.72 31690993.87 31690994.06 0.0143 0.0091

Uranus 82055-07-06 21:36 G 31691220.31 31691220.40 31691220.50 0.0143 0.0129

Jupiter 82056-12-10 19:27 G 31691743.13 31691743.31 31691743.49 0.0491 0.0230

Jupiter 82057-08-03 15:22 G 31691978.94 31691979.14 31691979.33 0.0496 0.0125

Jupiter 82058-03-27 15:36 G 31692215.10 31692215.15 31692215.21 0.0502 0.0483

Jupiter 82062-10-15 08:53 G 31693877.68 31693877.87 31693878.06 0.0536 0.0200

Jupiter 82063-06-10 16:05 G 31694116.00 31694116.17 31694116.35 0.0530 0.0268

Saturn 82065-08-22 04:20 G 31694919.59 31694919.68 31694919.79 0.0295 0.0258

Saturn 82066-04-09 01:56 G 31695149.38 31695149.58 31695149.79 0.0296 0.0052

Saturn 82066-11-25 00:00 G 31695379.32 31695379.50 31695379.68 0.0296 0.0156

Jupiter 82068-08-16 00:44 G 31696009.38 31696009.53 31696009.68 0.0490 0.0325

Jupiter 82069-04-08 19:27 G 31696245.11 31696245.31 31696245.51 0.0494 0.0025

Jupiter 82069-11-30 18:15 G 31696481.13 31696481.26 31696481.38 0.0500 0.0386

Jupiter 82074-06-19 21:51 G 31698143.25 31698143.41 31698143.57 0.0537 0.0328

Mars 82074-08-26 15:22 G 31698210.98 31698211.14 31698211.30 0.1738 0.0742

Jupiter 82075-02-13 06:29 G 31698381.58 31698381.77 31698381.97 0.0531 0.0143

Saturn 82080-02-06 08:53 G 31700200.74 31700200.87 31700201.02 0.0265 0.0196

Jupiter 82080-04-21 05:03 G 31700275.61 31700275.71 31700275.82 0.0489 0.0417

Saturn 82080-09-22 12:00 G 31700429.79 31700430.00 31700430.22 0.0265 0.0044

Jupiter 82080-12-12 23:17 G 31700511.27 31700511.47 31700511.67 0.0493 0.0075

Saturn 82081-05-09 14:39 G 31700658.92 31700659.11 31700659.31 0.0264 0.0108

Jupiter 82081-08-05 21:08 G 31700747.22 31700747.38 31700747.55 0.0499 0.0286

Saturn 82081-12-24 16:48 G 31700888.16 31700888.20 31700888.25 0.0264 0.0258

Jupiter 82086-02-22 09:51 G 31702408.81 31702408.91 31702409.02 0.0538 0.0453

Jupiter 82086-10-18 19:12 G 31702647.10 31702647.30 31702647.51 0.0533 0.0018

Jupiter 82087-06-13 23:32 G 31702885.39 31702885.48 31702885.58 0.0526 0.0464

Uranus 82092-01-31 12:58 G 31704577.99 31704578.04 31704578.14 0.0135 0.0127

Jupiter 82092-08-18 05:17 G 31704777.53 31704777.72 31704777.91 0.0492 0.0171

Uranus 82092-09-13 18:44 G 31704804.14 31704804.28 31704804.45 0.0135 0.0095

Jupiter 82093-04-11 01:41 G 31705013.39 31705013.57 31705013.76 0.0497 0.0187

Uranus 82093-04-28 00:29 G 31705030.33 31705030.52 31705030.71 0.0135 0.0063

Uranus 82093-12-10 05:46 G 31705256.53 31705256.74 31705256.95 0.0135 0.0032

Uranus 82094-07-24 11:03 G 31705482.75 31705482.96 31705483.18 0.0135 0.0002

Saturn 82095-03-04 06:00 G 31705705.63 31705705.75 31705705.89 0.0295 0.0234

Uranus 82095-03-07 16:20 G 31705708.97 31705709.18 31705709.39 0.0135 0.0031

Uranus 82095-10-19 21:22 G 31705935.21 31705935.39 31705935.59 0.0135 0.0062

Saturn 82095-10-20 04:05 G 31705935.46 31705935.67 31705935.88 0.0296 0.0027 *

Uranus 82096-06-02 02:24 G 31706161.46 31706161.60 31706161.77 0.0135 0.0093

Saturn 82096-06-06 02:10 G 31706165.44 31706165.59 31706165.76 0.0296 0.0182

Uranus 82097-01-14 07:12 G 31706387.74 31706387.80 31706387.91 0.0135 0.0124

Jupiter 82098-06-23 03:51 G 31706912.46 31706912.66 31706912.86 0.0534 0.0119

Jupiter 82099-02-16 09:51 G 31707150.76 31707150.91 31707151.07 0.0528 0.0342

Pluto 82099-11-22 06:29 G 31707429.70 31707429.77 31707429.88 0.0078 0.0071

Pluto 82100-07-05 16:48 G 31707654.98 31707655.20 31707655.43 0.0078 0.0003

Pluto 82101-02-16 02:10 G 31707880.49 31707880.59 31707880.74 0.0078 0.0064

Jupiter 82104-04-24 10:48 G 31709043.78 31709043.95 31709044.12 0.0491 0.0265

Jupiter 82104-12-16 06:29 G 31709279.57 31709279.77 31709279.97 0.0495 0.0090

Jupiter 82105-08-09 06:44 G 31709515.69 31709515.78 31709515.86 0.0502 0.0449

Neptune 82108-01-10 20:24 G 31710400.28 31710400.35 31710400.45 0.0089 0.0081

Neptune 82108-08-23 09:08 G 31710625.77 31710625.88 31710626.02 0.0089 0.0072

Neptune 82109-04-05 21:51 G 31710851.28 31710851.41 31710851.58 0.0089 0.0063

Saturn 82109-08-19 14:39 G 31710986.94 31710987.11 31710987.27 0.0265 0.0170

Neptune 82109-11-17 10:34 G 31711076.79 31711076.94 31711077.13 0.0089 0.0055

Jupiter 82110-02-26 14:39 G 31711177.94 31711178.11 31711178.30 0.0536 0.0251

Saturn 82110-04-05 17:46 G 31711216.02 31711216.24 31711216.45 0.0265 0.0017

Neptune 82110-06-30 23:32 G 31711302.30 31711302.48 31711302.68 0.0089 0.0045

Jupiter 82110-10-22 22:20 G 31711416.24 31711416.43 31711416.61 0.0530 0.0219

Saturn 82110-11-20 20:10 G 31711445.16 31711445.34 31711445.53 0.0264 0.0135

Neptune 82111-02-11 12:15 G 31711527.82 31711528.01 31711528.22 0.0089 0.0036

Neptune 82111-09-25 00:58 G 31711753.35 31711753.54 31711753.76 0.0089 0.0027

Neptune 82112-05-07 13:56 G 31711978.87 31711979.08 31711979.30 0.0089 0.0018

Neptune 82112-12-19 02:39 G 31712204.40 31712204.61 31712204.83 0.0089 0.0009

Mars 82113-02-05 23:46 G 31712253.34 31712253.49 31712253.64 0.1794 0.0811

Neptune 82113-08-01 15:36 G 31712429.94 31712430.15 31712430.37 0.0089 0.0002

Neptune 82114-03-15 04:20 G 31712655.47 31712655.68 31712655.90 0.0089 0.0010

Neptune 82114-10-26 17:03 G 31712881.00 31712881.21 31712881.43 0.0089 0.0019

Neptune 82115-06-09 05:46 G 31713106.54 31713106.74 31713106.95 0.0089 0.0029

Jupiter 82115-12-29 15:51 G 31713310.02 31713310.16 31713310.30 0.0490 0.0358

Neptune 82116-01-20 18:44 G 31713332.08 31713332.28 31713332.48 0.0089 0.0038

Jupiter 82116-08-21 10:34 G 31713545.74 31713545.94 31713546.14 0.0494 0.0011

Neptune 82116-09-02 07:12 G 31713557.64 31713557.80 31713558.01 0.0089 0.0048

Jupiter 82117-04-14 08:39 G 31713781.72 31713781.86 31713782.00 0.0499 0.0350

Neptune 82117-04-15 20:10 G 31713783.19 31713783.34 31713783.52 0.0089 0.0056

Neptune 82117-11-27 08:53 G 31714008.74 31714008.87 31714009.04 0.0089 0.0065

Neptune 82118-07-10 21:36 G 31714234.30 31714234.40 31714234.54 0.0089 0.0075

Neptune 82119-02-21 10:34 G 31714459.88 31714459.94 31714460.04 0.0089 0.0083

Jupiter 82121-11-01 01:56 G 31715443.44 31715443.58 31715443.73 0.0537 0.0380

Jupiter 82122-06-27 11:03 G 31715681.76 31715681.96 31715682.16 0.0532 0.0092

Saturn 82124-09-14 11:46 G 31716491.85 31716491.99 31716492.14 0.0295 0.0206

Saturn 82125-05-02 09:36 G 31716721.69 31716721.90 31716722.11 0.0296 0.0001

Saturn 82125-12-18 07:41 G 31716951.68 31716951.82 31716951.97 0.0296 0.0210

Jupiter 82127-09-03 20:53 G 31717576.30 31717576.37 31717576.46 0.0489 0.0448

Jupiter 82128-04-26 15:08 G 31717811.93 31717812.13 31717812.33 0.0492 0.0109

Jupiter 82128-12-18 11:46 G 31718047.82 31718047.99 31718048.17 0.0498 0.0251

Jupiter 82133-07-06 14:53 G 31719709.05 31719709.12 31719709.19 0.0538 0.0503

Jupiter 82134-03-02 00:44 G 31719947.33 31719947.53 31719947.74 0.0534 0.0038

Jupiter 82134-10-26 06:15 G 31720185.64 31720185.76 31720185.89 0.0527 0.0419

Uranus 82135-06-17 00:00 G 31720419.39 31720419.50 31720419.62 0.0143 0.0121

Uranus 82136-01-29 12:15 G 31720645.83 31720646.01 31720646.18 0.0143 0.0083

Uranus 82136-09-12 00:15 G 31720872.31 31720872.51 31720872.72 0.0143 0.0045

Uranus 82137-04-26 12:44 G 31721098.81 31721099.03 31721099.25 0.0143 0.0007

Uranus 82137-12-09 00:44 G 31721325.32 31721325.53 31721325.75 0.0143 0.0033

Uranus 82138-07-23 13:12 G 31721551.86 31721552.05 31721552.25 0.0143 0.0071

Saturn 82139-03-01 14:53 G 31721772.95 31721773.12 31721773.30 0.0265 0.0152

Uranus 82139-03-07 01:27 G 31721778.44 31721778.56 31721778.72 0.0143 0.0110

Saturn 82139-10-16 17:46 G 31722002.02 31722002.24 31722002.45 0.0265 0.0003

Jupiter 82139-12-31 19:27 G 31722078.13 31722078.31 31722078.50 0.0491 0.0207

Saturn 82140-06-01 19:56 G 31722231.16 31722231.33 31722231.51 0.0264 0.0151

Mars 82140-06-24 00:00 G 31722253.33 31722253.50 31722253.68 0.1734 0.0407

Jupiter 82140-08-23 15:36 G 31722313.96 31722314.15 31722314.34 0.0496 0.0151

Jupiter 82145-11-04 13:12 G 31724212.86 31724213.05 31724213.25 0.0535 0.0167

Jupiter 82146-06-30 20:10 G 31724451.18 31724451.34 31724451.52 0.0529 0.0301

Jupiter 82151-09-06 01:27 G 31726344.41 31726344.56 31726344.73 0.0490 0.0300

Jupiter 82152-04-28 20:53 G 31726580.16 31726580.37 31726580.57 0.0495 0.0053

Jupiter 82152-12-20 19:56 G 31726816.23 31726816.33 31726816.45 0.0501 0.0413

Saturn	82154-03-27 11:46 G	31727277.83	31727277.99	31727278.16	0.0295	0.0185
Saturn	82154-11-12 09:51 G	31727507.70	31727507.91	31727508.12	0.0296	0.0023
Saturn	82155-06-30 08:10 G	31727737.72	31727737.84	31727737.97	0.0296	0.0232
Jupiter	82157-07-09 22:05 G	31728478.25	31728478.42	31728478.59	0.0536	0.0299
Jupiter	82158-03-05 06:00 G	31728716.56	31728716.75	31728716.95	0.0531	0.0172
Jupiter	82163-05-12 07:12 G	31730610.68	31730610.80	31730610.92	0.0490	0.0391
Jupiter	82164-01-03 02:10 G	31730846.39	31730846.59	31730846.79	0.0493	0.0045
Jupiter	82164-08-26 00:15 G	31731082.35	31731082.51	31731082.66	0.0499	0.0316
Saturn	82168-09-10 19:56 G	31732559.14	31732559.33	31732559.52	0.0265	0.0127
Jupiter	82169-03-14 08:39 G	31732743.75	31732743.86	31732743.99	0.0537	0.0428
Saturn	82169-04-27 22:48 G	31732788.24	31732788.45	31732788.66	0.0264	0.0026
Jupiter	82169-11-07 17:32 G	31732982.03	31732982.23	31732982.44	0.0533	0.0043
Saturn	82169-12-13 00:58 G	31733017.39	31733017.54	31733017.71	0.0264	0.0177
Jupiter	82170-07-03 21:36 G	31733220.33	31733220.40	31733220.48	0.0526	0.0488
Jupiter	82175-01-15 12:29 G	31734876.98	31734877.02	31734877.05	0.0489	0.0480
Jupiter	82175-09-08 06:44 G	31735112.58	31735112.78	31735112.97	0.0492	0.0143
Jupiter	82176-05-01 02:53 G	31735348.45	31735348.62	31735348.81	0.0497	0.0216
Uranus	82176-05-15 04:05 G	31735362.56	31735362.67	31735362.81	0.0135	0.0110
Uranus	82176-12-27 09:36 G	31735588.74	31735588.90	31735589.09	0.0135	0.0078
Uranus	82177-08-10 15:08 G	31735814.94	31735815.13	31735815.34	0.0135	0.0047
Uranus	82178-03-24 20:39 G	31736041.15	31736041.36	31736041.58	0.0135	0.0016
Uranus	82178-11-06 01:56 G	31736267.37	31736267.58	31736267.80	0.0135	0.0016
Mars	82178-12-04 07:41 G	31736295.65	31736295.82	31736295.98	0.1797	0.0403
Uranus	82179-06-20 07:12 G	31736493.60	31736493.80	31736494.00	0.0135	0.0047
Uranus	82180-02-01 12:15 G	31736719.84	31736720.01	31736720.18	0.0135	0.0078
Uranus	82180-09-14 17:17 G	31736946.10	31736946.22	31736946.35	0.0135	0.0109
Jupiter	82181-07-13 05:32 G	31737247.53	31737247.73	31737247.94	0.0535	0.0089
Jupiter	82182-03-08 11:46 G	31737485.86	31737485.99	31737486.14	0.0528	0.0374
Saturn	82183-10-07 17:32 G	31738064.06	31738064.23	31738064.41	0.0295	0.0157
Saturn	82184-05-24 15:22 G	31738293.94	31738294.14	31738294.35	0.0296	0.0051

Saturn 82185-01-09 13:41 G 31738523.98 31738524.07 31738524.18 0.0297 0.0260

Jupiter 82187-05-14 11:32 G 31739378.81 31739378.98 31739379.16 0.0491 0.0239

Jupiter 82188-01-05 06:58 G 31739614.59 31739614.79 31739614.99 0.0495 0.0116

Moon 82188-05-11 21:51 G 31739742.26 31739742.41 31739742.56 0.2642 0.1105

Earth 82188-05-12 03:22 G 31739742.54 31739742.64 31739742.74 0.2644 0.2023 *

Jupiter 82188-08-28 06:44 G 31739850.73 31739850.78 31739850.85 0.0502 0.0475

Neptune 82188-12-01 21:51 G 31739946.38 31739946.41 31739946.50 0.0088 0.0086

Neptune 82189-07-15 11:03 G 31740171.88 31740171.96 31740172.10 0.0088 0.0077

Neptune 82190-02-26 00:29 G 31740397.40 31740397.52 31740397.69 0.0088 0.0068

Neptune 82190-10-09 13:56 G 31740622.93 31740623.08 31740623.26 0.0088 0.0058

Neptune 82191-05-23 03:08 G 31740848.46 31740848.63 31740848.83 0.0088 0.0049

Neptune 82192-01-03 16:48 G 31741074.01 31741074.20 31741074.40 0.0088 0.0040

Neptune 82192-08-16 06:15 G 31741299.55 31741299.76 31741299.97 0.0088 0.0031

Jupiter 82193-03-17 18:44 G 31741513.09 31741513.28 31741513.47 0.0536 0.0218

Neptune 82193-03-29 19:27 G 31741525.10 31741525.31 31741525.53 0.0088 0.0022

Neptune 82193-11-10 08:39 G 31741750.65 31741750.86 31741751.09 0.0088 0.0013

Jupiter 82193-11-11 02:39 G 31741751.43 31741751.61 31741751.79 0.0530 0.0253

Neptune 82194-06-23 22:05 G 31741976.20 31741976.42 31741976.64 0.0088 0.0003

Neptune 82195-02-04 11:32 G 31742201.76 31742201.98 31742202.20 0.0088 0.0006

Neptune 82195-09-18 00:44 G 31742427.31 31742427.53 31742427.75 0.0088 0.0015

Neptune 82196-04-30 13:56 G 31742652.87 31742653.08 31742653.30 0.0088 0.0024

Moon 82196-05-09 11:46 G 31742661.88 31742661.99 31742662.10 0.2649 0.1869

Earth 82196-05-09 17:17 G 31742662.09 31742662.22 31742662.36 0.2646 0.1386 *

Neptune 82196-12-12 03:08 G 31742878.43 31742878.63 31742878.84 0.0088 0.0033

Neptune 82197-07-25 16:20 G 31743103.99 31743104.18 31743104.38 0.0088 0.0042

Saturn 82197-08-06 16:48 G 31743116.18 31743116.20 31743116.24 0.0266 0.0262

Neptune 82198-03-08 05:46 G 31743329.57 31743329.74 31743329.93 0.0088 0.0051

Saturn 82198-03-23 20:10 G 31743345.15 31743345.34 31743345.54 0.0265 0.0110

Neptune 82198-10-19 18:44 G 31743555.13 31743555.28 31743555.46 0.0088 0.0061

Saturn 82198-11-07 22:48 G 31743574.24 31743574.45 31743574.66 0.0264 0.0043

Jupiter 82199-01-17 16:20 G 31743645.03 31743645.18 31743645.33 0.0490 0.0334

Neptune 82199-06-02 07:56 G 31743780.71 31743780.83 31743780.98 0.0088 0.0069

Saturn 82199-06-25 00:58 G 31743803.40 31743803.54 31743803.69 0.0264 0.0193

Jupiter 82199-09-10 11:03 G 31743880.76 31743880.96 31743881.16 0.0494 0.0017

Neptune 82200-01-13 21:08 G 31744006.30 31744006.38 31744006.50 0.0088 0.0078

Jupiter 82200-05-04 09:22 G 31744116.77 31744116.89 31744117.03 0.0500 0.0377

Neptune 82200-08-27 10:20 G 31744231.92 31744231.93 31744231.98 0.0088 0.0087

Jupiter 82204-11-21 07:12 G 31745778.65 31745778.80 31745778.96 0.0537 0.0346

Jupiter 82205-07-17 16:05 G 31746016.97 31746017.17 31746017.37 0.0532 0.0127

Mars 82206-04-22 08:10 G 31746295.67 31746295.84 31746296.02 0.1730 0.0054

Jupiter 82210-09-23 22:20 G 31747911.33 31747911.43 31747911.53 0.0489 0.0424

Jupiter 82211-05-17 16:48 G 31748147.00 31748147.20 31748147.40 0.0493 0.0082

Jupiter 82212-01-08 14:10 G 31748382.92 31748383.09 31748383.25 0.0498 0.0279

Saturn 82213-04-19 17:03 G 31748850.03 31748850.21 31748850.40 0.0295 0.0138

Saturn 82213-12-05 15:08 G 31749079.93 31749080.13 31749080.34 0.0296 0.0072

Saturn 82214-07-23 13:41 G 31749310.01 31749310.07 31749310.14 0.0296 0.0281

Jupiter 82216-07-26 16:48 G 31750044.10 31750044.20 31750044.29 0.0537 0.0473

Jupiter 82217-03-22 01:27 G 31750282.36 31750282.56 31750282.77 0.0533 0.0010

Jupiter 82217-11-15 06:00 G 31750520.65 31750520.75 31750520.86 0.0527 0.0447

Uranus 82219-02-15 04:05 G 31750977.64 31750977.67 31750977.71 0.0143 0.0140

Uranus 82219-09-29 15:51 G 31751204.02 31751204.16 31751204.33 0.0143 0.0103

Uranus 82220-05-13 04:05 G 31751430.48 31751430.67 31751430.87 0.0143 0.0065

Uranus 82220-12-25 16:20 G 31751656.97 31751657.18 31751657.40 0.0143 0.0026

Uranus 82221-08-09 04:34 G 31751883.48 31751883.69 31751883.92 0.0143 0.0013

Uranus 82222-03-23 16:48 G 31752110.01 31752110.20 31752110.42 0.0143 0.0052

Uranus 82222-11-05 05:17 G 31752336.56 31752336.72 31752336.90 0.0143 0.0090

Jupiter 82223-01-20 22:20 G 31752413.24 31752413.43 31752413.62 0.0492 0.0177

Uranus 82223-06-19 17:46 G 31752563.15 31752563.24 31752563.34 0.0143 0.0128

Jupiter 82223-09-13 18:44 G 31752649.09 31752649.28 31752649.47 0.0497 0.0182

Saturn 82227-02-17 21:22 G 31753902.31 31753902.39 31753902.49 0.0266 0.0239

Saturn 82227-10-05 00:44 G 31754131.33 31754131.53 31754131.74 0.0265 0.0085

Saturn 82228-05-21 03:22 G 31754360.44 31754360.64 31754360.85 0.0264 0.0068

Jupiter 82228-11-24 12:44 G 31754547.83 31754548.03 31754548.22 0.0535 0.0138

Saturn 82229-01-05 05:32 G 31754589.62 31754589.73 31754589.86 0.0264 0.0218

Jupiter 82229-07-20 18:58 G 31754786.13 31754786.29 31754786.45 0.0529 0.0327

Jupiter 82234-09-26 03:08 G 31756679.46 31756679.63 31756679.80 0.0491 0.0273

Jupiter 82235-05-19 22:20 G 31756915.23 31756915.43 31756915.63 0.0495 0.0081

Jupiter 82236-01-10 21:22 G 31757151.31 31757151.39 31757151.49 0.0501 0.0441

Jupiter 82240-07-30 00:00 G 31758813.32 31758813.50 31758813.67 0.0536 0.0270

Jupiter 82241-03-25 08:10 G 31759051.65 31759051.84 31759052.03 0.0531 0.0203

Saturn 82242-10-30 22:48 G 31759636.26 31759636.45 31759636.65 0.0296 0.0109

Saturn 82243-06-17 20:53 G 31759866.18 31759866.37 31759866.57 0.0296 0.0100

Mars 82244-10-01 14:53 G 31760337.95 31760338.12 31760338.30 0.1802 0.0045

Jupiter 82246-06-01 08:10 G 31760945.71 31760945.84 31760945.98 0.0490 0.0367

Jupiter 82247-01-23 02:53 G 31761181.42 31761181.62 31761181.82 0.0493 0.0019

Jupiter 82247-09-16 00:29 G 31761417.38 31761417.52 31761417.67 0.0499 0.0343

Jupiter 82252-04-03 12:29 G 31763078.88 31763079.02 31763079.15 0.0538 0.0397

Jupiter 82252-11-27 21:36 G 31763317.20 31763317.40 31763317.61 0.0533 0.0077

Jupiter 82253-07-24 01:56 G 31763555.56 31763555.58 31763555.61 0.0526 0.0520

Saturn 82256-08-29 22:20 G 31764688.31 31764688.43 31764688.55 0.0265 0.0220

Saturn 82257-04-16 01:27 G 31764917.35 31764917.56 31764917.77 0.0265 0.0067

Saturn 82257-12-01 03:51 G 31765146.46 31765146.66 31765146.87 0.0264 0.0085

Jupiter 82258-02-04 12:58 G 31765211.98 31765212.04 31765212.12 0.0489 0.0458

Saturn 82258-07-18 06:00 G 31765375.66 31765375.75 31765375.85 0.0264 0.0235

Jupiter 82258-09-28 07:12 G 31765447.61 31765447.80 31765448.00 0.0492 0.0117

Jupiter 82259-05-22 03:51 G 31765683.48 31765683.66 31765683.84 0.0497 0.0243

Uranus 82260-01-14 12:58 G 31765920.97 31765921.04 31765921.14 0.0135 0.0124

Pluto 82260-02-25 04:34 G 31765962.65 31765962.69 31765962.80 0.0065 0.0062

Uranus 82260-08-27 18:44 G 31766147.14 31766147.28 31766147.45 0.0135 0.0093

Pluto 82260-10-07 09:22 G 31766187.70 31766187.89 31766188.11 0.0066 0.0023

Uranus 82261-04-11 00:29 G 31766373.33 31766373.52 31766373.71 0.0135 0.0062

Pluto 82261-05-20 14:10 G 31766412.88 31766413.09 31766413.31 0.0066 0.0017

Uranus 82261-11-23 05:46 G 31766599.53 31766599.74 31766599.95 0.0135 0.0030

Pluto 82261-12-31 18:15 G 31766638.17 31766638.26 31766638.39 0.0066 0.0057

Uranus 82262-07-07 11:03 G 31766825.74 31766825.96 31766826.17 0.0135 0.0001

Uranus 82263-02-18 16:05 G 31767051.97 31767052.17 31767052.38 0.0135 0.0032

Uranus 82263-10-02 21:22 G 31767278.20 31767278.39 31767278.58 0.0135 0.0063

Jupiter 82263-12-08 01:12 G 31767344.50 31767344.55 31767344.60 0.0538 0.0519

Uranus 82264-05-16 02:24 G 31767504.45 31767504.60 31767504.76 0.0135 0.0094

Jupiter 82264-08-02 10:48 G 31767582.75 31767582.95 31767583.16 0.0534 0.0054

Uranus 82264-12-28 06:58 G 31767730.73 31767730.79 31767730.89 0.0135 0.0125

Jupiter 82265-03-28 16:48 G 31767821.07 31767821.20 31767821.33 0.0528 0.0407

Jupiter 82270-06-03 13:12 G 31769713.87 31769714.05 31769714.23 0.0491 0.0213

Jupiter 82271-01-25 08:53 G 31769949.68 31769949.87 31769950.07 0.0496 0.0145

Saturn 82271-09-25 00:44 G 31770192.53 31770192.53 31770192.54 0.0294 0.0294

Mars 82272-02-17 17:03 G 31770338.03 31770338.21 31770338.38 0.1726 0.0281

Neptune 82272-04-14 08:24 G 31770394.79 31770394.85 31770394.93 0.0089 0.0083

Saturn 82272-05-11 22:20 G 31770422.23 31770422.43 31770422.63 0.0295 0.0090

Neptune 82272-11-25 21:08 G 31770620.28 31770620.38 31770620.51 0.0089 0.0074

Saturn 82272-12-27 20:24 G 31770652.16 31770652.35 31770652.54 0.0296 0.0119

Neptune 82273-07-09 10:05 G 31770845.78 31770845.92 31770846.08 0.0089 0.0065

Neptune 82274-02-19 22:48 G 31771071.30 31771071.45 31771071.63 0.0089 0.0056

Neptune 82274-10-03 11:32 G 31771296.81 31771296.98 31771297.18 0.0089 0.0047

Neptune 82275-05-17 00:15 G 31771522.33 31771522.51 31771522.72 0.0089 0.0038

Neptune 82275-12-28 12:58 G 31771747.85 31771748.04 31771748.26 0.0089 0.0029

Jupiter 82276-04-06 20:24 G 31771848.16 31771848.35 31771848.55 0.0535 0.0186

Neptune 82276-08-10 02:10 G 31771973.38 31771973.59 31771973.81 0.0089 0.0020

Jupiter 82276-12-01 03:08 G 31772086.46 31772086.63 31772086.81 0.0529 0.0282

Neptune 82277-03-23 14:53 G 31772198.91 31772199.12 31772199.34 0.0089 0.0010

Neptune 82277-11-04 03:36 G 31772424.44 31772424.65 31772424.87 0.0089 0.0002

Neptune 82278-06-17 16:20 G 31772649.97 31772650.18 31772650.40 0.0089 0.0008

Neptune 82279-01-29 05:03 G 31772875.50 31772875.71 31772875.93 0.0089 0.0018

Neptune 82279-09-11 18:00 G 31773101.04 31773101.25 31773101.46 0.0089 0.0027

Neptune 82280-04-24 06:29 G 31773326.58 31773326.77 31773326.98 0.0089 0.0036

Neptune 82280-12-05 19:12 G 31773552.13 31773552.30 31773552.50 0.0089 0.0045

Neptune 82281-07-19 08:10 G 31773777.68 31773777.84 31773778.02 0.0089 0.0054

Jupiter 82282-02-06 18:29 G 31773980.11 31773980.27 31773980.43 0.0491 0.0307

Neptune 82282-03-01 20:53 G 31774003.23 31774003.37 31774003.54 0.0089 0.0064

Jupiter 82282-09-30 13:56 G 31774215.88 31774216.08 31774216.28 0.0495 0.0047

Neptune 82282-10-13 09:51 G 31774228.79 31774228.91 31774229.04 0.0089 0.0073

Jupiter 82283-05-24 12:58 G 31774451.92 31774452.04 31774452.15 0.0500 0.0408

Neptune 82283-05-26 22:34 G 31774454.37 31774454.44 31774454.54 0.0089 0.0082

Saturn 82286-03-12 02:39 G 31775474.46 31775474.61 31775474.75 0.0266 0.0197

Saturn 82286-10-27 05:46 G 31775703.53 31775703.74 31775703.95 0.0265 0.0044

Saturn 82287-06-13 08:10 G 31775932.65 31775932.84 31775933.04 0.0264 0.0109

Jupiter 82287-12-11 07:12 G 31776113.64 31776113.80 31776113.97 0.0536 0.0317

Saturn 82288-01-28 10:20 G 31776161.90 31776161.93 31776161.98 0.0264 0.0259

Jupiter 82288-08-05 15:08 G 31776351.94 31776352.13 31776352.33 0.0531 0.0155

Jupiter 82293-10-12 23:32 G 31778246.36 31778246.48 31778246.59 0.0490 0.0400

Moon 82293-11-13 11:46 G 31778277.83 31778277.99 31778278.14 0.2687 0.0390

Earth 82293-11-13 17:03 G 31778278.05 31778278.21 31778278.36 0.2687 0.0201 *

Jupiter 82294-06-05 18:00 G 31778482.05 31778482.25 31778482.46 0.0493 0.0055

Jupiter 82295-01-27 15:22 G 31778717.99 31778718.14 31778718.30 0.0498 0.0308

Jupiter 82299-08-15 17:46 G 31780379.14 31780379.24 31780379.36 0.0537 0.0447

Jupiter 82300-04-11 03:08 G 31780617.42 31780617.63 31780617.83 0.0533 0.0025

Jupiter 82300-12-05 07:56 G 31780855.75 31780855.83 31780855.92 0.0527 0.0476

Saturn 82301-04-07 07:27 G 31780978.73 31780978.81 31780978.90 0.0295 0.0266

Saturn 82301-11-23 05:03 G 31781208.50 31781208.71 31781208.91 0.0296 0.0060

Saturn 82302-07-11 02:53 G 31781438.45 31781438.62 31781438.81 0.0297 0.0151

Uranus 82303-05-30 21:08 G 31781762.27 31781762.38 31781762.50 0.0143 0.0121

Uranus	82304-01-12 09:08 G	31781988.71	31781988.88	31781989.07	0.0143	0.0083
Uranus	82304-08-25 21:22 G	31782215.18	31782215.39	31782215.60	0.0143	0.0045
Uranus	82305-04-09 09:51 G	31782441.69	31782441.91	31782442.13	0.0143	0.0007
Uranus	82305-11-21 21:51 G	31782668.20	31782668.41	31782668.63	0.0143	0.0032
Jupiter	82306-02-09 23:03 G	31782748.27	31782748.46	31782748.65	0.0492	0.0152
Uranus	82306-07-06 10:05 G	31782894.73	31782894.92	31782895.12	0.0143	0.0071
Jupiter	82306-10-03 18:58 G	31782984.11	31782984.29	31782984.48	0.0496	0.0209
Uranus	82307-02-17 22:05 G	31783121.30	31783121.42	31783121.58	0.0143	0.0110
Mars	82310-07-30 22:20 G	31784380.27	31784380.43	31784380.60	0.1806	0.0449
Jupiter	82311-12-15 16:05 G	31784882.97	31784883.17	31784883.37	0.0535	0.0106
Jupiter	82312-08-09 22:48 G	31785121.30	31785121.45	31785121.60	0.0529	0.0360
Saturn	82315-09-23 03:51 G	31786260.51	31786260.66	31786260.83	0.0265	0.0177
Saturn	82316-05-09 06:58 G	31786489.58	31786489.79	31786490.01	0.0265	0.0024
Saturn	82316-12-24 09:22 G	31786718.71	31786718.89	31786719.08	0.0264	0.0128
Jupiter	82317-10-16 03:22 G	31787014.47	31787014.64	31787014.82	0.0491	0.0249
Jupiter	82318-06-08 22:48 G	31787250.25	31787250.45	31787250.65	0.0495	0.0107
Jupiter	82319-01-30 22:20 G	31787486.36	31787486.43	31787486.50	0.0501	0.0467
Jupiter	82323-08-20 04:48 G	31789148.52	31789148.70	31789148.89	0.0536	0.0235
Jupiter	82324-04-14 12:44 G	31789386.85	31789387.03	31789387.22	0.0531	0.0238
Jupiter	82329-06-21 09:22 G	31791280.75	31791280.89	31791281.04	0.0490	0.0342
Jupiter	82330-02-12 04:20 G	31791516.48	31791516.68	31791516.88	0.0494	0.0009
Jupiter	82330-10-06 02:24 G	31791752.47	31791752.60	31791752.74	0.0499	0.0372
Saturn	82330-10-18 06:58 G	31791764.68	31791764.79	31791764.91	0.0294	0.0246
Saturn	82331-06-05 04:34 G	31791994.48	31791994.69	31791994.89	0.0295	0.0040
Saturn	82332-01-21 02:39 G	31792224.44	31792224.61	31792224.78	0.0296	0.0169
Jupiter	82335-04-24 14:53 G	31793413.98	31793414.12	31793414.27	0.0537	0.0365
Jupiter	82335-12-18 23:03 G	31793652.26	31793652.46	31793652.66	0.0532	0.0108
Mars	82337-12-16 01:41 G	31794380.41	31794380.57	31794380.74	0.1723	0.0606
Jupiter	82341-02-24 14:10 G	31795547.00	31795547.09	31795547.19	0.0490	0.0434
Jupiter	82341-10-18 09:08 G	31795782.68	31795782.88	31795783.08	0.0493	0.0089

Jupiter 82342-06-11 06:29 G 31796018.60 31796018.77 31796018.94 0.0498 0.0273

Uranus 82344-04-28 04:05 G 31796705.55 31796705.67 31796705.80 0.0135 0.0108

Uranus 82344-12-10 09:36 G 31796931.73 31796931.90 31796932.08 0.0135 0.0076

Saturn 82345-04-04 07:56 G 31797046.66 31797046.83 31797047.01 0.0266 0.0155

Uranus 82345-07-24 14:53 G 31797157.92 31797158.12 31797158.33 0.0135 0.0045

Saturn 82345-11-19 11:17 G 31797275.75 31797275.97 31797276.18 0.0265 0.0005

Uranus 82346-03-07 20:24 G 31797384.13 31797384.35 31797384.56 0.0135 0.0014

Saturn 82346-07-06 13:41 G 31797504.90 31797505.07 31797505.25 0.0264 0.0151

Uranus 82346-10-20 01:41 G 31797610.35 31797610.57 31797610.78 0.0135 0.0017

Jupiter 82346-12-28 01:41 G 31797679.50 31797679.57 31797679.66 0.0537 0.0492

Uranus 82347-06-03 06:29 G 31797836.58 31797836.77 31797836.98 0.0135 0.0049

Jupiter 82347-08-23 10:20 G 31797917.73 31797917.93 31797918.14 0.0533 0.0026

Uranus 82348-01-15 11:46 G 31798062.82 31798062.99 31798063.17 0.0135 0.0079

Jupiter 82348-04-17 15:22 G 31798156.02 31798156.14 31798156.25 0.0527 0.0433

Pluto 82348-06-09 18:29 G 31798209.08 31798209.27 31798209.47 0.0078 0.0037

Uranus 82348-08-28 16:48 G 31798289.08 31798289.20 31798289.33 0.0135 0.0110

Pluto 82349-01-21 04:34 G 31798434.49 31798434.69 31798434.89 0.0078 0.0030

Neptune 82353-03-07 09:08 G 31799940.87 31799940.88 31799940.94 0.0088 0.0088

Jupiter 82353-06-23 13:41 G 31800048.89 31800049.07 31800049.26 0.0492 0.0188

Neptune 82353-10-18 22:20 G 31800166.36 31800166.43 31800166.56 0.0088 0.0079

Jupiter 82354-02-14 09:51 G 31800284.72 31800284.91 31800285.10 0.0496 0.0172

Neptune 82354-06-01 11:46 G 31800391.87 31800391.99 31800392.14 0.0088 0.0069

Neptune 82355-01-13 00:58 G 31800617.40 31800617.54 31800617.72 0.0088 0.0061

Neptune 82355-08-26 14:10 G 31800842.93 31800843.09 31800843.29 0.0088 0.0052

Neptune 82356-04-08 03:51 G 31801068.47 31801068.66 31801068.86 0.0088 0.0042

Neptune 82356-11-19 17:03 G 31801294.01 31801294.21 31801294.42 0.0088 0.0033

Neptune 82357-07-03 06:15 G 31801519.55 31801519.76 31801519.98 0.0088 0.0024

Neptune 82358-02-13 19:41 G 31801745.10 31801745.32 31801745.54 0.0088 0.0014

Neptune 82358-09-27 08:53 G 31801970.65 31801970.87 31801971.10 0.0088 0.0006

Jupiter 82359-04-27 21:08 G 31802183.19 31802183.38 31802183.58 0.0535 0.0158

Neptune 82359-05-10 22:05 G 31802196.20 31802196.42 31802196.65 0.0088 0.0005

Jupiter 82359-12-22 04:05 G 31802421.51 31802421.67 31802421.84 0.0530 0.0311

Neptune 82359-12-22 11:17 G 31802421.76 31802421.97 31802422.20 0.0088 0.0014 *

Saturn 82360-04-29 14:24 G 31802550.97 31802551.10 31802551.25 0.0295 0.0216

Neptune 82360-08-04 00:44 G 31802647.32 31802647.53 31802647.75 0.0088 0.0022

Saturn 82360-12-15 12:00 G 31802780.79 31802781.00 31802781.21 0.0296 0.0009

Neptune 82361-03-17 14:10 G 31802872.88 31802873.09 31802873.30 0.0088 0.0031

Saturn 82361-08-02 10:05 G 31803010.78 31803010.92 31803011.08 0.0297 0.0202

Neptune 82361-10-29 03:22 G 31803098.45 31803098.64 31803098.84 0.0088 0.0040

Neptune 82362-06-11 16:34 G 31803324.01 31803324.19 31803324.38 0.0088 0.0050

Neptune 82363-01-23 05:32 G 31803549.58 31803549.73 31803549.91 0.0088 0.0059

Neptune 82363-09-05 18:44 G 31803775.16 31803775.28 31803775.44 0.0088 0.0068

Neptune 82364-04-18 07:56 G 31804000.74 31804000.83 31804000.96 0.0088 0.0077

Neptune 82364-11-29 21:36 G 31804226.35 31804226.40 31804226.45 0.0088 0.0086

Jupiter 82365-02-26 18:44 G 31804315.12 31804315.28 31804315.45 0.0490 0.0283

Jupiter 82365-10-20 13:56 G 31804550.88 31804551.08 31804551.28 0.0494 0.0072

Jupiter 82366-06-13 12:29 G 31804786.93 31804787.02 31804787.13 0.0500 0.0432

Jupiter 82370-12-31 09:22 G 31806448.72 31806448.89 31806449.07 0.0537 0.0288

Jupiter 82371-08-26 17:46 G 31806687.05 31806687.24 31806687.44 0.0532 0.0188

Saturn 82374-10-15 10:34 G 31807832.76 31807832.94 31807833.13 0.0265 0.0133

Saturn 82375-06-01 13:27 G 31808061.85 31808062.06 31808062.28 0.0264 0.0020

Saturn 82376-01-16 15:51 G 31808291.00 31808291.16 31808291.32 0.0264 0.0171

Mars 82376-05-27 05:46 G 31808422.59 31808422.74 31808422.89 0.1810 0.0884

Jupiter 82376-11-01 23:17 G 31808581.35 31808581.47 31808581.60 0.0490 0.0377

Jupiter 82377-06-25 18:00 G 31808817.05 31808817.25 31808817.45 0.0493 0.0029

Jupiter 82378-02-16 15:22 G 31809052.99 31809053.14 31809053.29 0.0498 0.0333

Jupiter 82382-09-04 22:05 G 31810714.29 31810714.42 31810714.55 0.0538 0.0415

Jupiter 82383-05-01 07:12 G 31810952.59 31810952.80 31810953.00 0.0533 0.0059

Jupiter 82383-12-25 11:32 G 31811190.94 31811190.98 31811191.04 0.0526 0.0509

Uranus 82387-01-28 03:22 G 31812320.60 31812320.64 31812320.71 0.0143 0.0138

Uranus 82387-09-11 15:36 G 31812547.00 31812547.15 31812547.31 0.0143 0.0100

Uranus 82388-04-25 03:36 G 31812773.46 31812773.65 31812773.85 0.0143 0.0062

Jupiter 82388-07-08 05:03 G 31812847.65 31812847.71 31812847.77 0.0489 0.0467

Uranus 82388-12-07 15:51 G 31812999.94 31813000.16 31813000.38 0.0143 0.0024

Jupiter 82389-02-28 23:32 G 31813083.28 31813083.48 31813083.67 0.0492 0.0126

Uranus 82389-07-22 04:05 G 31813226.45 31813226.67 31813226.89 0.0143 0.0014

Jupiter 82389-10-22 19:56 G 31813319.16 31813319.33 31813319.51 0.0497 0.0236

Saturn 82389-11-09 14:53 G 31813336.97 31813337.12 31813337.28 0.0294 0.0194

Uranus 82390-03-05 16:20 G 31813452.98 31813453.18 31813453.39 0.0143 0.0053

Saturn 82390-06-27 12:29 G 31813566.81 31813567.02 31813567.23 0.0295 0.0013

Uranus 82390-10-18 04:20 G 31813679.52 31813679.68 31813679.86 0.0143 0.0092

Saturn 82391-02-12 10:34 G 31813796.81 31813796.94 31813797.08 0.0296 0.0222

Uranus 82391-06-01 16:34 G 31813906.11 31813906.19 31813906.30 0.0143 0.0130

Jupiter 82395-01-03 17:46 G 31815218.04 31815218.24 31815218.44 0.0534 0.0073

Jupiter 82395-08-29 23:03 G 31815456.33 31815456.46 31815456.61 0.0528 0.0389

Jupiter 82400-11-04 03:51 G 31817349.48 31817349.66 31817349.84 0.0491 0.0224

Jupiter 82401-06-28 00:00 G 31817585.31 31817585.50 31817585.70 0.0496 0.0136

Jupiter 82402-02-19 00:15 G 31817821.49 31817821.51 31817821.54 0.0502 0.0496

Saturn 82403-09-10 10:34 G 31818389.94 31818389.94 31818389.96 0.0267 0.0266

Mars 82403-10-13 10:34 G 31818422.79 31818422.94 31818423.09 0.1719 0.0927

Saturn 82404-04-26 14:39 G 31818618.91 31818619.11 31818619.30 0.0266 0.0111

Saturn 82404-12-11 17:46 G 31818848.02 31818848.24 31818848.45 0.0265 0.0043

Saturn 82405-07-28 19:56 G 31819077.20 31819077.33 31819077.49 0.0264 0.0196

Jupiter 82406-09-08 04:34 G 31819483.50 31819483.69 31819483.88 0.0535 0.0207

Jupiter 82407-05-04 11:17 G 31819721.79 31819721.97 31819722.15 0.0530 0.0265

Jupiter 82412-07-10 08:53 G 31821615.71 31821615.87 31821616.02 0.0490 0.0320

Jupiter 82413-03-03 04:05 G 31821851.47 31821851.67 31821851.87 0.0494 0.0034

Jupiter 82413-10-25 02:24 G 31822087.48 31822087.60 31822087.72 0.0500 0.0396

Jupiter 82418-05-13 14:24 G 31823748.94 31823749.10 31823749.26 0.0537 0.0341

Jupiter 82419-01-06 22:48 G 31823987.25 31823987.45 31823987.65 0.0532 0.0135

Saturn 82419-05-22 23:46 G 31824123.31 31824123.49 31824123.66 0.0295 0.0161

Saturn 82420-01-07 21:22 G 31824353.18 31824353.39 31824353.59 0.0296 0.0047

Saturn 82420-08-24 19:27 G 31824583.22 31824583.31 31824583.42 0.0297 0.0256

Jupiter 82424-03-15 13:41 G 31825881.97 31825882.07 31825882.19 0.0490 0.0413

Jupiter 82424-11-06 08:24 G 31826117.65 31826117.85 31826118.05 0.0493 0.0066

Jupiter 82425-06-30 05:32 G 31826353.57 31826353.73 31826353.89 0.0498 0.0297

Uranus 82427-12-27 12:58 G 31827263.97 31827264.04 31827264.14 0.0135 0.0123

Uranus 82428-08-09 18:29 G 31827490.13 31827490.27 31827490.45 0.0135 0.0092

Uranus 82429-03-24 00:00 G 31827716.32 31827716.50 31827716.71 0.0135 0.0060

Uranus 82429-11-05 05:32 G 31827942.53 31827942.73 31827942.95 0.0135 0.0029

Jupiter 82430-01-16 02:10 G 31828014.49 31828014.59 31828014.69 0.0538 0.0468

Uranus 82430-06-19 10:48 G 31828168.74 31828168.95 31828169.17 0.0135 0.0003

Jupiter 82430-09-11 11:32 G 31828252.77 31828252.98 31828253.18 0.0534 0.0009

Uranus 82431-01-31 15:51 G 31828394.96 31828395.16 31828395.37 0.0135 0.0034

Jupiter 82431-05-07 16:48 G 31828491.11 31828491.20 31828491.30 0.0527 0.0462

Earth 82431-05-15 03:36 G 31828498.55 31828498.65 31828498.74 0.2645 0.2119

Uranus 82431-09-14 20:53 G 31828621.20 31828621.37 31828621.57 0.0135 0.0065

Uranus 82432-04-28 01:56 G 31828847.44 31828847.58 31828847.75 0.0135 0.0096

Uranus 82432-12-10 06:58 G 31829073.73 31829073.79 31829073.88 0.0135 0.0126

Saturn 82433-03-22 14:39 G 31829176.02 31829176.11 31829176.20 0.0266 0.0241

Saturn 82433-11-06 18:15 G 31829405.06 31829405.26 31829405.46 0.0265 0.0088

Saturn 82434-06-23 21:08 G 31829634.17 31829634.38 31829634.59 0.0264 0.0066

Saturn 82435-02-07 23:17 G 31829863.36 31829863.47 31829863.60 0.0264 0.0217

Mars 82435-10-12 14:53 G 31830110.06 31830110.12 31830110.18 0.1731 0.1616

Jupiter 82436-07-12 12:44 G 31830383.84 31830384.03 31830384.22 0.0491 0.0164

Neptune 82436-07-17 19:41 G 31830389.29 31830389.32 31830389.40 0.0089 0.0086

Neptune 82437-02-28 08:24 G 31830614.77 31830614.85 31830614.99 0.0089 0.0077

Jupiter 82437-03-05 08:39 G 31830619.68 31830619.86 31830620.05 0.0496 0.0197

Neptune 82437-10-11 21:51 G 31830840.27 31830840.41 31830840.55 0.0089 0.0067

Neptune 82438-05-25 10:34 G 31831065.78 31831065.94 31831066.11 0.0089 0.0058

Neptune 82439-01-05 23:17 G 31831291.29 31831291.47 31831291.66 0.0089 0.0049

Earth 82439-05-12 17:32 G 31831418.09 31831418.23 31831418.37 0.2647 0.1293

Moon 82439-05-12 23:46 G 31831418.34 31831418.49 31831418.64 0.2647 0.1008 *

Neptune 82439-08-19 12:00 G 31831516.82 31831517.00 31831517.21 0.0089 0.0040

Neptune 82440-04-01 00:58 G 31831742.34 31831742.54 31831742.75 0.0089 0.0031

Neptune 82440-11-12 13:41 G 31831967.87 31831968.07 31831968.29 0.0089 0.0022

Neptune 82441-06-26 02:39 G 31832193.39 31832193.61 31832193.83 0.0089 0.0012

Neptune 82442-02-06 15:22 G 31832418.92 31832419.14 31832419.36 0.0089 0.0003

Mars 82442-03-24 12:58 G 31832464.93 31832465.04 31832465.16 0.1814 0.1315

Jupiter 82442-05-17 00:15 G 31832518.31 31832518.51 31832518.71 0.0535 0.0126

Neptune 82442-09-20 04:05 G 31832644.46 31832644.67 31832644.89 0.0089 0.0006

Jupiter 82443-01-10 06:58 G 31832756.64 31832756.79 31832756.95 0.0529 0.0344

Neptune 82443-05-03 16:48 G 31832869.99 31832870.20 31832870.42 0.0089 0.0016

Neptune 82443-12-15 05:46 G 31833095.53 31833095.74 31833095.95 0.0089 0.0025

Neptune 82444-07-27 18:15 G 31833321.07 31833321.26 31833321.47 0.0089 0.0034

Neptune 82445-03-10 06:58 G 31833546.62 31833546.79 31833547.00 0.0089 0.0044

Neptune 82445-10-21 19:56 G 31833772.16 31833772.33 31833772.51 0.0089 0.0052

Neptune 82446-06-04 08:39 G 31833997.71 31833997.86 31833998.02 0.0089 0.0062

Neptune 82447-01-15 21:36 G 31834223.27 31834223.40 31834223.53 0.0089 0.0071

Neptune 82447-08-29 09:51 G 31834448.85 31834448.91 31834449.04 0.0089 0.0081

Jupiter 82448-03-17 18:00 G 31834650.08 31834650.25 31834650.43 0.0491 0.0260

Neptune 82448-04-10 23:03 G 31834674.46 31834674.46 31834674.49 0.0089 0.0089

Jupiter 82448-11-08 13:27 G 31834885.86 31834886.06 31834886.26 0.0495 0.0097

Saturn 82448-12-02 01:12 G 31834909.36 31834909.55 31834909.73 0.0295 0.0139

Jupiter 82449-07-02 12:44 G 31835121.95 31835122.03 31835122.11 0.0501 0.0458

Saturn 82449-07-19 22:34 G 31835139.24 31835139.44 31835139.65 0.0296 0.0070

Saturn 82450-03-06 20:53 G 31835369.30 31835369.37 31835369.44 0.0296 0.0277

Jupiter 82454-01-19 11:03 G 31836783.79 31836783.96 31836784.15 0.0536 0.0258

Jupiter 82454-09-14 18:15 G 31837022.08 31837022.26 31837022.45 0.0531 0.0217

Jupiter 82459-11-21 22:05 G 31838916.28 31838916.42 31838916.56 0.0490 0.0356

Jupiter 82460-07-14 17:32 G 31839152.03 31839152.23 31839152.44 0.0494 0.0007

Jupiter 82461-03-07 15:51 G 31839388.03 31839388.16 31839388.30 0.0499 0.0361

Saturn 82462-10-02 18:15 G 31839962.15 31839962.26 31839962.39 0.0267 0.0221

Saturn 82463-05-19 22:05 G 31840191.22 31840191.42 31840191.63 0.0266 0.0065

Saturn 82464-01-04 01:12 G 31840420.35 31840420.55 31840420.76 0.0265 0.0089

Saturn 82464-08-20 03:36 G 31840649.58 31840649.65 31840649.75 0.0264 0.0241

Jupiter 82465-09-23 21:51 G 31841049.27 31841049.41 31841049.55 0.0536 0.0388

Jupiter 82466-05-20 05:46 G 31841287.53 31841287.74 31841287.94 0.0532 0.0086

Mars 82469-08-09 19:12 G 31842465.19 31842465.30 31842465.42 0.1715 0.1246

Uranus 82471-05-11 22:20 G 31843105.31 31843105.43 31843105.56 0.0143 0.0117

Jupiter 82471-07-28 02:53 G 31843182.55 31843182.62 31843182.70 0.0490 0.0449

Uranus 82471-12-24 10:20 G 31843331.75 31843331.93 31843332.12 0.0143 0.0079

Jupiter 82472-03-19 21:51 G 31843418.21 31843418.41 31843418.61 0.0492 0.0104

Uranus 82472-08-06 22:34 G 31843558.23 31843558.44 31843558.65 0.0143 0.0041

Jupiter 82472-11-10 18:44 G 31843654.11 31843654.28 31843654.45 0.0497 0.0259

Uranus 82473-03-21 10:48 G 31843784.73 31843784.95 31843785.17 0.0143 0.0003

Uranus 82473-11-02 23:03 G 31844011.25 31844011.46 31844011.68 0.0143 0.0036

Mars 82474-03-23 22:05 G 31844152.35 31844152.42 31844152.48 0.1801 0.1655

Uranus 82474-06-17 11:03 G 31844237.78 31844237.96 31844238.16 0.0143 0.0074

Uranus 82475-01-29 23:17 G 31844464.35 31844464.47 31844464.62 0.0143 0.0113

Jupiter 82477-05-29 06:44 G 31845314.74 31845314.78 31845314.84 0.0537 0.0519

Jupiter 82478-01-22 16:05 G 31845552.96 31845553.17 31845553.37 0.0534 0.0050

Saturn 82478-06-14 10:48 G 31845695.76 31845695.95 31845696.15 0.0295 0.0104

Jupiter 82478-09-17 21:51 G 31845791.28 31845791.41 31845791.53 0.0528 0.0413

Saturn 82479-01-30 08:39 G 31845925.67 31845925.86 31845926.06 0.0296 0.0106

Jupiter 82483-11-24 02:24 G 31847684.42 31847684.60 31847684.79 0.0491 0.0202

Jupiter 82484-07-16 22:20 G 31847920.24 31847920.43 31847920.62 0.0495 0.0158

Jupiter 82489-09-27 03:36 G 31849818.46 31849818.65 31849818.84 0.0536 0.0182

Jupiter 82490-05-23 11:03 G 31850056.79 31850056.96 31850057.13 0.0530 0.0291

Saturn 82492-04-13 23:32 G 31850748.34 31850748.48 31850748.63 0.0266 0.0194

Saturn	82492-11-29 03:08 G	31850977.42	31850977.63	31850977.85	0.0265	0.0040
Saturn	82493-07-16 06:00 G	31851206.56	31851206.75	31851206.95	0.0264	0.0114
Saturn	82494-03-02 08:39 G	31851435.86	31851435.86	31851435.86	0.0264	0.0264
Jupiter	82495-07-30 06:58 G	31851950.63	31851950.79	31851950.95	0.0490	0.0298
Jupiter	82496-03-22 01:56 G	31852186.38	31852186.58	31852186.78	0.0494	0.0057
Jupiter	82496-11-13 00:15 G	31852422.40	31852422.51	31852422.62	0.0500	0.0419
Jupiter	82501-06-02 15:51 G	31854084.00	31854084.16	31854084.33	0.0537	0.0312
Mars	82501-08-09 23:03 G	31854152.35	31854152.46	31854152.58	0.1727	0.1261
Jupiter	82502-01-27 00:29 G	31854322.33	31854322.52	31854322.72	0.0532	0.0166
Jupiter	82507-04-05 12:00 G	31856216.88	31856217.00	31856217.12	0.0490	0.0392
Saturn	82507-05-10 17:03 G	31856252.16	31856252.21	31856252.27	0.0294	0.0282
Jupiter	82507-11-27 06:44 G	31856452.58	31856452.78	31856452.98	0.0493	0.0043
Saturn	82507-12-26 13:56 G	31856481.88	31856482.08	31856482.28	0.0295	0.0078
Mars	82508-01-20 19:27 G	31856507.28	31856507.31	31856507.34	0.1818	0.1788
Jupiter	82508-07-20 04:05 G	31856688.52	31856688.67	31856688.83	0.0498	0.0322
Saturn	82508-08-12 11:32 G	31856711.80	31856711.98	31856712.18	0.0296	0.0131
Pluto	82508-09-11 11:32 G	31856741.85	31856741.98	31856742.14	0.0065	0.0050
Pluto	82509-04-24 16:05 G	31856966.96	31856967.17	31856967.39	0.0066	0.0011
Pluto	82509-12-05 20:39 G	31857192.17	31857192.36	31857192.57	0.0066	0.0029
Uranus	82512-04-10 04:34 G	31858048.57	31858048.69	31858048.83	0.0135	0.0105
Uranus	82512-11-22 09:51 G	31858274.74	31858274.91	31858275.10	0.0135	0.0075
Jupiter	82513-02-05 03:22 G	31858349.53	31858349.64	31858349.76	0.0537	0.0440
Uranus	82513-07-06 15:22 G	31858500.94	31858501.14	31858501.35	0.0135	0.0043
Jupiter	82513-10-01 11:46 G	31858587.79	31858587.99	31858588.20	0.0533	0.0035
Uranus	82514-02-17 20:39 G	31858727.15	31858727.36	31858727.58	0.0135	0.0012
Jupiter	82514-05-27 15:51 G	31858826.10	31858826.16	31858826.25	0.0526	0.0488
Uranus	82514-10-02 01:56 G	31858953.37	31858953.58	31858953.79	0.0135	0.0019
Uranus	82515-05-16 06:44 G	31859179.60	31859179.78	31859179.99	0.0135	0.0051
Uranus	82515-12-28 12:00 G	31859405.83	31859406.00	31859406.17	0.0135	0.0081
Uranus	82516-08-10 16:48 G	31859632.10	31859632.20	31859632.33	0.0135	0.0112

Neptune 82518-01-21 09:36 G 31860160.82 31860160.90 31860161.00 0.0088 0.0081

Neptune 82518-09-03 22:48 G 31860386.34 31860386.45 31860386.59 0.0088 0.0072

Jupiter 82518-12-09 15:22 G 31860483.12 31860483.14 31860483.17 0.0490 0.0485

Neptune 82519-04-17 12:00 G 31860611.86 31860612.00 31860612.17 0.0088 0.0063

Jupiter 82519-08-02 10:34 G 31860718.75 31860718.94 31860719.14 0.0492 0.0143

Neptune 82519-11-29 01:12 G 31860837.39 31860837.55 31860837.74 0.0088 0.0053

Jupiter 82520-03-25 07:27 G 31860954.63 31860954.81 31860954.99 0.0497 0.0221

Neptune 82520-07-11 14:24 G 31861062.92 31861063.10 31861063.31 0.0088 0.0044

Neptune 82521-02-22 03:51 G 31861288.47 31861288.66 31861288.88 0.0088 0.0035

Neptune 82521-10-05 17:17 G 31861514.01 31861514.22 31861514.43 0.0088 0.0026

Saturn 82521-10-26 03:22 G 31861534.49 31861534.64 31861534.81 0.0267 0.0173

Neptune 82522-05-19 06:29 G 31861739.55 31861739.77 31861739.99 0.0088 0.0017

Saturn 82522-06-12 07:12 G 31861763.59 31861763.80 31861764.02 0.0266 0.0017

Neptune 82522-12-30 19:41 G 31861965.10 31861965.32 31861965.55 0.0088 0.0007

Saturn 82523-01-27 10:20 G 31861992.75 31861992.93 31861993.12 0.0265 0.0137

Neptune 82523-08-13 09:08 G 31862190.65 31862190.88 31862191.10 0.0088 0.0002

Neptune 82524-03-25 22:20 G 31862416.21 31862416.43 31862416.65 0.0088 0.0011

Neptune 82524-11-06 11:32 G 31862641.77 31862641.98 31862642.20 0.0088 0.0020

Jupiter 82525-06-05 22:34 G 31862853.24 31862853.44 31862853.65 0.0534 0.0100

Neptune 82525-06-20 00:44 G 31862867.33 31862867.53 31862867.75 0.0088 0.0030

Jupiter 82526-01-30 04:20 G 31863091.54 31863091.68 31863091.83 0.0528 0.0368

Neptune 82526-01-31 13:56 G 31863092.89 31863093.08 31863093.29 0.0088 0.0039

Neptune 82526-09-14 03:08 G 31863318.46 31863318.63 31863318.84 0.0088 0.0048

Neptune 82527-04-27 16:20 G 31863544.03 31863544.18 31863544.37 0.0088 0.0057

Neptune 82527-12-09 05:32 G 31863769.61 31863769.73 31863769.90 0.0088 0.0066

Neptune 82528-07-21 18:44 G 31863995.19 31863995.28 31863995.42 0.0088 0.0076

Neptune 82529-03-04 08:10 G 31864220.80 31864220.84 31864220.93 0.0088 0.0084

Jupiter 82531-04-07 14:53 G 31864984.95 31864985.12 31864985.30 0.0491 0.0242

Jupiter 82531-11-29 10:48 G 31865220.76 31865220.95 31865221.15 0.0495 0.0118

Jupiter 82532-07-22 10:20 G 31865456.88 31865456.93 31865456.99 0.0501 0.0479

Mars 82535-06-08 04:20 G 31866507.61 31866507.68 31866507.75 0.1712 0.1558

Earth 82536-11-15 19:27 G 31867034.15 31867034.31 31867034.46 0.2686 0.0079

Moon 82536-11-15 23:46 G 31867034.34 31867034.49 31867034.64 0.2690 0.0325 *

Saturn 82536-11-20 03:51 G 31867038.55 31867038.66 31867038.78 0.0294 0.0245

Jupiter 82537-02-08 07:56 G 31867118.65 31867118.83 31867119.01 0.0536 0.0237

Saturn 82537-07-08 00:58 G 31867268.33 31867268.54 31867268.74 0.0295 0.0040

Jupiter 82537-10-04 15:22 G 31867356.96 31867357.14 31867357.32 0.0531 0.0239

Saturn 82538-02-22 22:34 G 31867498.28 31867498.44 31867498.62 0.0296 0.0169

Mars 82540-01-20 05:03 G 31868194.58 31868194.71 31868194.84 0.1806 0.1218

Jupiter 82542-12-11 19:56 G 31869251.18 31869251.33 31869251.48 0.0490 0.0337

Jupiter 82543-08-04 15:08 G 31869486.93 31869487.13 31869487.33 0.0493 0.0017

Jupiter 82544-03-27 12:58 G 31869722.92 31869723.04 31869723.17 0.0499 0.0381

Moon 82544-11-13 16:34 G 31869954.13 31869954.19 31869954.26 0.2683 0.2444

Jupiter 82548-10-13 18:44 G 31871384.14 31871384.28 31871384.43 0.0537 0.0369

Jupiter 82549-06-09 03:22 G 31871622.44 31871622.64 31871622.85 0.0533 0.0110

Saturn 82551-05-08 09:51 G 31872320.73 31872320.91 31872321.09 0.0266 0.0144

Saturn 82551-12-23 13:27 G 31872549.84 31872550.06 31872550.27 0.0265 0.0011

Saturn 82552-08-08 16:20 G 31872779.01 31872779.18 31872779.35 0.0264 0.0163

Jupiter 82554-08-17 00:15 G 31873517.42 31873517.51 31873517.61 0.0489 0.0430

Uranus 82555-01-10 04:34 G 31873663.62 31873663.69 31873663.77 0.0143 0.0134

Jupiter 82555-04-09 18:44 G 31873753.08 31873753.28 31873753.48 0.0492 0.0083

Uranus 82555-08-24 16:20 G 31873890.03 31873890.18 31873890.35 0.0143 0.0097

Jupiter 82555-12-01 15:22 G 31873988.98 31873989.14 31873989.31 0.0497 0.0280

Uranus 82556-04-07 04:34 G 31874116.50 31874116.69 31874116.90 0.0143 0.0059

Uranus 82556-11-19 16:48 G 31874342.99 31874343.20 31874343.42 0.0143 0.0021

Uranus 82557-07-04 05:03 G 31874569.49 31874569.71 31874569.93 0.0143 0.0018

Uranus 82558-02-15 17:17 G 31874796.02 31874796.22 31874796.43 0.0143 0.0057

Uranus 82558-09-30 05:46 G 31875022.58 31875022.74 31875022.91 0.0143 0.0095

Uranus 82559-05-14 18:00 G 31875249.18 31875249.25 31875249.34 0.0144 0.0133

Jupiter 82560-06-18 06:58 G 31875649.71 31875649.79 31875649.86 0.0538 0.0494

Jupiter 82561-02-11 16:20 G 31875887.97 31875888.18 31875888.38 0.0534 0.0022

Jupiter 82561-10-07 22:05 G 31876126.31 31876126.42 31876126.53 0.0528 0.0441

Saturn 82566-06-02 07:41 G 31877824.69 31877824.82 31877824.97 0.0294 0.0219

Jupiter 82566-12-13 23:32 G 31878019.29 31878019.48 31878019.67 0.0491 0.0181

Saturn 82567-01-18 05:03 G 31878054.50 31878054.71 31878054.91 0.0295 0.0014

Mars 82567-06-07 08:10 G 31878194.69 31878194.84 31878194.99 0.1723 0.0937

Jupiter 82567-08-06 19:41 G 31878255.13 31878255.32 31878255.51 0.0496 0.0181

Saturn 82567-09-05 02:53 G 31878284.46 31878284.62 31878284.78 0.0296 0.0195

Jupiter 82572-10-17 03:51 G 31880153.46 31880153.66 31880153.86 0.0535 0.0154

Jupiter 82573-06-12 10:20 G 31880391.76 31880391.93 31880392.09 0.0529 0.0318

Jupiter 82578-08-19 03:08 G 31882285.47 31882285.63 31882285.80 0.0491 0.0281

Jupiter 82579-04-11 22:48 G 31882521.25 31882521.45 31882521.65 0.0495 0.0079

Jupiter 82579-12-03 22:05 G 31882757.33 31882757.42 31882757.52 0.0500 0.0441

Saturn 82580-11-17 13:56 G 31883106.90 31883107.08 31883107.28 0.0267 0.0122

Saturn 82581-07-04 17:46 G 31883336.03 31883336.24 31883336.45 0.0266 0.0034

Saturn 82582-02-18 20:39 G 31883565.22 31883565.36 31883565.52 0.0265 0.0187

Jupiter 82584-06-21 14:24 G 31884418.93 31884419.10 31884419.27 0.0536 0.0288

Jupiter 82585-02-14 21:51 G 31884657.22 31884657.41 31884657.60 0.0531 0.0190

Jupiter 82590-04-24 07:41 G 31886551.69 31886551.82 31886551.95 0.0490 0.0377

Jupiter 82590-12-16 02:53 G 31886787.42 31886787.62 31886787.82 0.0493 0.0024

Jupiter 82591-08-09 00:44 G 31887023.38 31887023.53 31887023.68 0.0498 0.0340

Uranus 82595-12-09 14:10 G 31888607.01 31888607.09 31888607.21 0.0135 0.0120

Saturn 82595-12-13 19:41 G 31888611.15 31888611.32 31888611.48 0.0294 0.0180

Jupiter 82596-02-24 22:48 G 31888684.33 31888684.45 31888684.58 0.0537 0.0422

Uranus 82596-07-22 19:41 G 31888833.17 31888833.32 31888833.49 0.0135 0.0088

Saturn 82596-07-30 16:48 G 31888841.00 31888841.20 31888841.41 0.0295 0.0027

Jupiter 82596-10-20 07:27 G 31888922.60 31888922.81 31888923.01 0.0533 0.0054

Pluto 82596-12-25 02:39 G 31888988.40 31888988.61 31888988.83 0.0078 0.0018

Uranus 82597-03-06 01:12 G 31889059.36 31889059.55 31889059.75 0.0135 0.0057

Saturn 82597-03-17 14:53 G 31889070.99 31889071.12 31889071.24 0.0296 0.0236

Jupiter 82597-06-15 12:00 G 31889160.95 31889161.00 31889161.05 0.0527 0.0507

Pluto 82597-08-07 12:15 G 31889213.85 31889214.01 31889214.19 0.0078 0.0049

Uranus 82597-10-18 06:29 G 31889285.56 31889285.77 31889285.98 0.0135 0.0026

Uranus 82598-06-01 11:46 G 31889511.77 31889511.99 31889512.20 0.0135 0.0006

Uranus 82599-01-13 16:48 G 31889737.99 31889738.20 31889738.41 0.0135 0.0036

Uranus 82599-08-27 21:51 G 31889964.23 31889964.41 31889964.60 0.0135 0.0067

Uranus 82600-04-11 02:39 G 31890190.48 31890190.61 31890190.77 0.0135 0.0098

Neptune 82600-10-21 07:27 G 31890383.80 31890383.81 31890383.85 0.0089 0.0088

Uranus 82600-11-23 07:41 G 31890416.76 31890416.82 31890416.89 0.0135 0.0128

Neptune 82601-06-03 20:10 G 31890609.26 31890609.34 31890609.45 0.0089 0.0079

Jupiter 82601-12-29 12:44 G 31890817.98 31890818.03 31890818.09 0.0489 0.0468

Neptune 82602-01-15 08:53 G 31890834.75 31890834.87 31890835.02 0.0089 0.0070

Jupiter 82602-08-22 07:41 G 31891053.62 31891053.82 31891054.01 0.0492 0.0124

Neptune 82602-08-28 21:51 G 31891060.27 31891060.41 31891060.58 0.0089 0.0061

Neptune 82603-04-11 10:34 G 31891285.78 31891285.94 31891286.14 0.0089 0.0052

Jupiter 82603-04-15 04:05 G 31891289.49 31891289.67 31891289.84 0.0496 0.0240

Neptune 82603-11-22 23:46 G 31891511.30 31891511.49 31891511.69 0.0089 0.0042

Neptune 82604-07-05 12:29 G 31891736.83 31891737.02 31891737.23 0.0089 0.0033

Neptune 82605-02-16 01:12 G 31891962.35 31891962.55 31891962.77 0.0089 0.0024

Neptune 82605-09-29 14:10 G 31892187.88 31892188.09 31892188.31 0.0089 0.0015

Mars 82605-11-17 12:29 G 31892236.86 31892237.02 31892237.17 0.1810 0.0791

Neptune 82606-05-13 03:08 G 31892413.41 31892413.63 31892413.84 0.0089 0.0005

Neptune 82606-12-24 15:51 G 31892638.94 31892639.16 31892639.38 0.0089 0.0004

Neptune 82607-08-07 04:34 G 31892864.48 31892864.69 31892864.91 0.0089 0.0014

Neptune 82608-03-19 17:32 G 31893090.02 31893090.23 31893090.44 0.0089 0.0023

Jupiter 82608-06-25 18:29 G 31893188.07 31893188.27 31893188.47 0.0535 0.0080

Neptune 82608-10-31 05:46 G 31893315.55 31893315.74 31893315.96 0.0089 0.0033

Jupiter 82609-02-19 01:12 G 31893426.41 31893426.55 31893426.69 0.0529 0.0389

Neptune 82609-06-13 18:29 G 31893541.09 31893541.27 31893541.48 0.0089 0.0042

Saturn 82609-10-14 17:03 G 31893664.14 31893664.21 31893664.30 0.0267 0.0247

Neptune 82610-01-25 07:27 G 31893766.64 31893766.81 31893767.00 0.0089 0.0050

Saturn 82610-05-31 21:08 G 31893893.19 31893893.38 31893893.59 0.0266 0.0092

Neptune 82610-09-07 20:24 G 31893992.19 31893992.35 31893992.52 0.0089 0.0060

Saturn 82611-01-16 00:44 G 31894122.32 31894122.53 31894122.74 0.0265 0.0063

Neptune 82611-04-21 08:39 G 31894217.75 31894217.86 31894218.02 0.0089 0.0070

Saturn 82611-09-02 03:36 G 31894351.53 31894351.65 31894351.78 0.0264 0.0215

Neptune 82611-12-02 21:22 G 31894443.31 31894443.39 31894443.52 0.0089 0.0079

Neptune 82612-07-15 10:20 G 31894668.91 31894668.93 31894668.99 0.0089 0.0087

Jupiter 82614-04-27 11:32 G 31895319.80 31895319.98 31895320.16 0.0491 0.0222

Jupiter 82614-12-19 06:58 G 31895555.59 31895555.79 31895555.98 0.0495 0.0138

Jupiter 82615-08-12 06:15 G 31895791.75 31895791.76 31895791.78 0.0501 0.0499

Jupiter 82620-02-29 06:44 G 31897453.59 31897453.78 31897453.97 0.0536 0.0212

Jupiter 82620-10-24 14:24 G 31897691.93 31897692.10 31897692.28 0.0531 0.0266

Saturn 82625-06-26 00:58 G 31899397.37 31899397.54 31899397.72 0.0294 0.0151

Jupiter 82625-12-31 16:05 G 31899586.02 31899586.17 31899586.33 0.0490 0.0319

Saturn 82626-02-10 22:05 G 31899627.22 31899627.42 31899627.63 0.0295 0.0057

Jupiter 82626-08-24 11:17 G 31899821.77 31899821.97 31899822.17 0.0494 0.0038

Saturn 82626-09-28 20:10 G 31899857.25 31899857.34 31899857.44 0.0296 0.0264

Jupiter 82627-04-17 09:22 G 31900057.78 31900057.89 31900058.01 0.0499 0.0402

Jupiter 82631-11-03 18:44 G 31901719.12 31901719.28 31901719.43 0.0537 0.0343

Jupiter 82632-06-29 02:39 G 31901957.41 31901957.61 31901957.81 0.0532 0.0136

Mars 82633-04-04 16:20 G 31902237.02 31902237.18 31902237.35 0.1719 0.0598

Jupiter 82637-09-05 19:27 G 31903852.21 31903852.31 31903852.42 0.0490 0.0415

Jupiter 82638-04-29 14:24 G 31904087.90 31904088.10 31904088.31 0.0493 0.0066

Jupiter 82638-12-21 11:46 G 31904323.84 31904323.99 31904324.16 0.0498 0.0301

Uranus 82639-04-24 21:22 G 31904448.28 31904448.39 31904448.54 0.0143 0.0115

Saturn 82639-04-26 20:53 G 31904450.27 31904450.37 31904450.50 0.0267 0.0226

Uranus 82639-12-07 09:36 G 31904674.72 31904674.90 31904675.09 0.0143 0.0077

Saturn 82639-12-12 01:12 G 31904679.35 31904679.55 31904679.77 0.0266 0.0070

Uranus 82640-07-20 21:51 G 31904901.20 31904901.41 31904901.63 0.0143 0.0039

Saturn 82640-07-28 04:48 G 31904908.50 31904908.70 31904908.91 0.0266 0.0086

Uranus 82641-03-04 10:20 G 31905127.71 31905127.93 31905128.15 0.0143 0.0002

Saturn 82641-03-14 07:56 G 31905137.74 31905137.83 31905137.93 0.0265 0.0238

Uranus 82641-10-16 22:20 G 31905354.23 31905354.43 31905354.65 0.0143 0.0039

Uranus 82642-05-31 10:48 G 31905580.77 31905580.95 31905581.14 0.0143 0.0076

Uranus 82643-01-12 23:17 G 31905807.34 31905807.47 31905807.61 0.0144 0.0115

Jupiter 82643-07-09 05:17 G 31905984.63 31905984.72 31905984.82 0.0537 0.0473

Jupiter 82644-03-03 13:56 G 31906222.87 31906223.08 31906223.28 0.0533 0.0006

Jupiter 82644-10-27 18:44 G 31906461.18 31906461.28 31906461.37 0.0527 0.0462

Jupiter 82650-01-02 18:58 G 31908354.10 31908354.29 31908354.48 0.0492 0.0166

Jupiter 82650-08-26 15:22 G 31908589.96 31908590.14 31908590.33 0.0496 0.0198

Saturn 82655-01-06 12:29 G 31910183.83 31910184.02 31910184.21 0.0295 0.0111

Saturn 82655-08-24 10:05 G 31910413.72 31910413.92 31910414.11 0.0296 0.0097

Jupiter 82655-11-06 22:20 G 31910488.23 31910488.43 31910488.62 0.0535 0.0137

Jupiter 82656-07-02 04:48 G 31910726.55 31910726.70 31910726.87 0.0530 0.0337

Jupiter 82661-09-08 00:00 G 31912620.33 31912620.50 31912620.67 0.0491 0.0262

Jupiter 82662-05-01 19:27 G 31912856.11 31912856.31 31912856.50 0.0494 0.0097

Jupiter 82662-12-23 18:00 G 31913092.18 31913092.25 31913092.33 0.0500 0.0459

Jupiter 82667-07-12 08:53 G 31914753.69 31914753.87 31914754.05 0.0536 0.0271

Jupiter 82668-03-06 17:03 G 31914992.02 31914992.21 31914992.40 0.0532 0.0209

Saturn 82668-11-06 05:32 G 31915236.59 31915236.73 31915236.88 0.0267 0.0193

Saturn 82669-06-23 09:22 G 31915465.68 31915465.89 31915466.11 0.0266 0.0038

Saturn 82670-02-07 12:44 G 31915694.84 31915695.03 31915695.23 0.0265 0.0116

Mars 82671-09-14 19:12 G 31916279.13 31916279.30 31916279.47 0.1814 0.0345

Jupiter 82673-05-14 04:05 G 31916886.53 31916886.67 31916886.81 0.0490 0.0358

Jupiter 82674-01-04 22:48 G 31917122.25 31917122.45 31917122.65 0.0493 0.0006

Moon 82674-05-17 00:58 G 31917254.42 31917254.54 31917254.67 0.2641 0.1832

Earth 82674-05-17 03:51 G 31917254.58 31917254.66 31917254.75 0.2647 0.2256 *

Jupiter 82674-08-28 20:10 G 31917358.20 31917358.34 31917358.48 0.0498 0.0360

Jupiter 82679-03-16 20:24 G 31919019.22 31919019.35 31919019.49 0.0537 0.0401

Uranus 82679-08-10 00:15 G 31919165.49 31919165.51 31919165.57 0.0135 0.0134

Jupiter 82679-11-10 05:32 G 31919257.53 31919257.73 31919257.93 0.0533 0.0079

Uranus 82680-03-23 05:46 G 31919391.62 31919391.74 31919391.90 0.0135 0.0102

Uranus 82680-11-04 11:17 G 31919617.80 31919617.97 31919618.16 0.0135 0.0071

Uranus 82681-06-18 16:34 G 31919843.99 31919844.19 31919844.40 0.0135 0.0040

Uranus 82682-01-30 21:51 G 31920070.20 31920070.41 31920070.62 0.0135 0.0009

Neptune 82682-04-25 20:24 G 31920155.28 31920155.35 31920155.43 0.0088 0.0083

Moon 82682-05-14 12:00 G 31920173.86 31920174.00 31920174.14 0.2647 0.1361

Earth 82682-05-14 18:00 G 31920174.10 31920174.25 31920174.39 0.2648 0.1180 *

Uranus 82682-09-14 03:08 G 31920296.42 31920296.63 31920296.84 0.0135 0.0022

Neptune 82682-12-07 09:36 G 31920380.79 31920380.90 31920381.03 0.0088 0.0074

Uranus 82683-04-28 08:10 G 31920522.64 31920522.84 31920523.04 0.0135 0.0053

Neptune 82683-07-20 22:48 G 31920606.31 31920606.45 31920606.61 0.0088 0.0065

Saturn 82683-12-01 22:20 G 31920740.39 31920740.43 31920740.48 0.0293 0.0284

Uranus 82683-12-10 12:58 G 31920748.88 31920749.04 31920749.22 0.0135 0.0084

Neptune 82684-03-02 12:00 G 31920831.84 31920832.00 31920832.19 0.0088 0.0056

Saturn 82684-07-18 18:58 G 31920970.09 31920970.29 31920970.49 0.0295 0.0081

Uranus 82684-07-23 18:00 G 31920975.14 31920975.25 31920975.37 0.0134 0.0114

Neptune 82684-10-14 01:12 G 31921057.37 31921057.55 31921057.75 0.0088 0.0047

Jupiter 82685-01-17 08:39 G 31921152.79 31921152.86 31921152.94 0.0489 0.0452

Saturn 82685-03-05 16:20 G 31921199.99 31921200.18 31921200.37 0.0295 0.0126

Neptune 82685-05-27 14:24 G 31921282.91 31921283.10 31921283.31 0.0088 0.0037

Jupiter 82685-09-10 03:22 G 31921388.44 31921388.64 31921388.83 0.0492 0.0105

Neptune 82686-01-08 03:36 G 31921508.45 31921508.65 31921508.87 0.0088 0.0028

Jupiter 82686-05-03 23:32 G 31921624.31 31921624.48 31921624.66 0.0497 0.0260

Neptune 82686-08-21 16:48 G 31921734.00 31921734.20 31921734.43 0.0088 0.0019

Neptune 82687-04-04 06:15 G 31921959.54 31921959.76 31921959.99 0.0088 0.0010

Neptune 82687-11-15 19:27 G 31922185.09 31922185.31 31922185.54 0.0088 0.0001

Neptune 82688-06-28 08:39 G 31922410.64 31922410.86 31922411.09 0.0088 0.0009

Neptune 82689-02-08 21:51 G 31922636.20 31922636.41 31922636.64 0.0088 0.0019

Neptune 82689-09-22 11:17 G 31922861.76 31922861.97 31922862.18 0.0088 0.0027

Neptune 82690-05-06 00:29 G 31923087.32 31923087.52 31923087.72 0.0088 0.0037

Jupiter 82690-11-19 08:53 G 31923284.84 31923284.87 31923284.91 0.0538 0.0526

Neptune 82690-12-17 13:27 G 31923312.88 31923313.06 31923313.26 0.0088 0.0046

Jupiter 82691-07-15 17:46 G 31923523.04 31923523.24 31923523.45 0.0534 0.0055

Neptune 82691-07-31 02:39 G 31923538.45 31923538.61 31923538.80 0.0088 0.0055

Jupiter 82692-03-09 23:46 G 31923761.37 31923761.49 31923761.62 0.0528 0.0413

Neptune 82692-03-12 16:05 G 31923764.03 31923764.17 31923764.34 0.0088 0.0064

Neptune 82692-10-24 05:17 G 31923989.62 31923989.72 31923989.86 0.0088 0.0073

Neptune 82693-06-06 18:29 G 31924215.21 31924215.27 31924215.37 0.0088 0.0082

Jupiter 82697-05-16 06:29 G 31925654.59 31925654.77 31925654.96 0.0491 0.0206

Jupiter 82698-01-07 02:24 G 31925890.41 31925890.60 31925890.80 0.0495 0.0157

Saturn 82698-05-19 09:08 G 31926022.72 31926022.88 31926023.05 0.0267 0.0171

Saturn 82699-01-03 13:12 G 31926251.83 31926252.05 31926252.26 0.0266 0.0016

Mars 82699-01-31 01:27 G 31926279.39 31926279.56 31926279.74 0.1716 0.0289

Saturn 82699-08-20 16:20 G 31926481.00 31926481.18 31926481.37 0.0265 0.0139

Jupiter 82703-03-21 04:48 G 31927788.51 31927788.70 31927788.89 0.0535 0.0188

Jupiter 82703-11-14 11:46 G 31928026.82 31928026.99 31928027.16 0.0530 0.0288

Jupiter 82709-01-20 11:17 G 31929920.81 31929920.97 31929921.13 0.0490 0.0304

Jupiter 82709-09-13 06:44 G 31930156.58 31930156.78 31930156.98 0.0494 0.0054

Jupiter 82710-05-07 05:03 G 31930392.61 31930392.71 31930392.82 0.0499 0.0418

Saturn 82713-06-14 09:08 G 31931526.77 31931526.88 31931527.00 0.0294 0.0246

Saturn 82714-01-30 06:15 G 31931756.55 31931756.76 31931756.96 0.0295 0.0041

Saturn 82714-09-17 03:51 G 31931986.50 31931986.66 31931986.84 0.0296 0.0168

Jupiter 82714-11-23 12:29 G 31932053.86 31932054.02 31932054.19 0.0537 0.0327

Jupiter 82715-07-19 20:39 G 31932292.17 31932292.36 31932292.56 0.0532 0.0154

Jupiter 82720-09-25 16:20 G 31934187.07 31934187.18 31934187.31 0.0490 0.0398

Jupiter 82721-05-19 11:17 G 31934422.77 31934422.97 31934423.17 0.0492 0.0046

Jupiter 82722-01-10 08:10 G 31934658.69 31934658.84 31934659.00 0.0497 0.0320

Uranus 82722-12-24 01:56 G 31935006.51 31935006.58 31935006.66 0.0143 0.0133

Uranus 82723-08-07 13:41 G 31935232.92 31935233.07 31935233.25 0.0143 0.0096

Uranus 82724-03-21 02:10 G 31935459.39 31935459.59 31935459.80 0.0143 0.0058

Uranus 82724-11-02 14:24 G 31935685.88 31935686.10 31935686.32 0.0143 0.0020

Uranus 82725-06-17 02:39 G 31935912.39 31935912.61 31935912.83 0.0143 0.0019

Uranus 82726-01-29 14:53 G 31936138.93 31936139.12 31936139.33 0.0143 0.0057

Jupiter 82726-07-28 22:48 G 31936319.36 31936319.45 31936319.57 0.0537 0.0458

Uranus 82726-09-13 03:22 G 31936365.49 31936365.64 31936365.82 0.0143 0.0096

Jupiter 82727-03-24 07:56 G 31936557.62 31936557.83 31936558.03 0.0534 0.0021

Uranus 82727-04-27 16:05 G 31936592.10 31936592.17 31936592.26 0.0144 0.0134

Jupiter 82727-11-17 13:12 G 31936795.98 31936796.05 31936796.14 0.0528 0.0482

Saturn 82727-11-30 17:32 G 31936809.06 31936809.23 31936809.42 0.0266 0.0139

Saturn 82728-07-16 21:22 G 31937038.18 31937038.39 31937038.61 0.0265 0.0017

Saturn 82729-03-03 00:29 G 31937267.36 31937267.52 31937267.69 0.0265 0.0170

Jupiter 82732-05-31 20:53 G 31938453.37 31938453.37 31938453.37 0.0489 0.0489

Jupiter 82733-01-22 15:08 G 31938688.94 31938689.13 31938689.33 0.0491 0.0146

Jupiter 82733-09-15 11:03 G 31938924.78 31938924.96 31938925.14 0.0496 0.0218

Mars 82737-07-13 02:24 G 31940321.43 31940321.60 31940321.77 0.1818 0.0104

Jupiter 82738-11-26 19:41 G 31940823.12 31940823.32 31940823.52 0.0535 0.0113

Jupiter 82739-07-23 02:53 G 31941061.47 31941061.62 31941061.77 0.0530 0.0361

Saturn 82742-12-25 15:51 G 31942313.03 31942313.16 31942313.31 0.0294 0.0216

Saturn 82743-08-12 12:44 G 31942542.83 31942543.03 31942543.24 0.0295 0.0012

Saturn 82744-03-29 10:20 G 31942772.78 31942772.93 31942773.09 0.0296 0.0197

Jupiter 82744-09-27 19:41 G 31942955.15 31942955.32 31942955.50 0.0490 0.0244

Jupiter 82745-05-21 14:53 G 31943190.93 31943191.12 31943191.32 0.0494 0.0117

Jupiter 82746-01-12 13:27 G 31943427.02 31943427.06 31943427.13 0.0500 0.0480

Jupiter 82750-08-01 08:24 G 31945088.67 31945088.85 31945089.03 0.0536 0.0246

Jupiter 82751-03-27 16:05 G 31945326.99 31945327.17 31945327.36 0.0531 0.0235

Jupiter 82756-06-02 23:03 G 31947221.32 31947221.46 31947221.61 0.0490 0.0343

Jupiter 82757-01-24 18:15 G 31947457.05 31947457.26 31947457.46 0.0493 0.0016

Pluto 82757-03-29 17:17 G 31947521.07 31947521.22 31947521.42 0.0065 0.0041

Saturn 82757-06-11 20:53 G 31947595.18 31947595.37 31947595.57 0.0267 0.0118

Jupiter 82757-09-17 16:05 G 31947693.04 31947693.17 31947693.30 0.0499 0.0379

Pluto 82757-11-09 22:20 G 31947746.21 31947746.43 31947746.65 0.0066 0.0001

Saturn 82758-01-27 00:44 G 31947824.32 31947824.53 31947824.74 0.0266 0.0038

Pluto 82758-06-23 02:24 G 31947971.44 31947971.60 31947971.80 0.0066 0.0039

Saturn 82758-09-13 03:36 G 31948053.51 31948053.65 31948053.81 0.0265 0.0191

Jupiter 82762-04-05 19:27 G 31949354.17 31949354.31 31949354.45 0.0537 0.0377

Jupiter 82762-11-30 03:36 G 31949592.45 31949592.65 31949592.86 0.0533 0.0104

Uranus 82763-11-22 15:36 G 31949950.06 31949950.15 31949950.28 0.0135 0.0116

Uranus 82764-07-05 21:08 G 31950176.22 31950176.38 31950176.56 0.0135 0.0085

Mars 82764-11-28 10:34 G 31950321.77 31950321.94 31950322.12 0.1712 0.0035

Uranus 82765-02-17 02:24 G 31950402.41 31950402.60 31950402.81 0.0135 0.0054

Neptune 82765-09-06 06:58 G 31950603.73 31950603.79 31950603.90 0.0089 0.0082

Uranus 82765-10-01 07:56 G 31950628.62 31950628.83 31950629.04 0.0135 0.0023

Neptune 82766-04-19 19:56 G 31950829.23 31950829.33 31950829.47 0.0089 0.0073

Uranus 82766-05-15 12:58 G 31950854.83 31950855.04 31950855.26 0.0135 0.0009

Neptune 82766-12-01 09:08 G 31951054.73 31951054.88 31951055.03 0.0089 0.0063

Uranus 82766-12-27 18:00 G 31951081.05 31951081.25 31951081.46 0.0135 0.0039

Neptune 82767-07-14 21:51 G 31951280.25 31951280.41 31951280.59 0.0089 0.0054

Uranus 82767-08-10 23:03 G 31951307.28 31951307.46 31951307.65 0.0135 0.0070

Jupiter 82768-02-07 03:51 G 31951487.58 31951487.66 31951487.76 0.0490 0.0438

Neptune 82768-02-25 10:34 G 31951505.77 31951505.94 31951506.14 0.0089 0.0045

Uranus 82768-03-24 03:51 G 31951533.53 31951533.66 31951533.82 0.0135 0.0101

Jupiter 82768-09-29 22:48 G 31951723.25 31951723.45 31951723.65 0.0492 0.0088

Neptune 82768-10-07 23:17 G 31951731.29 31951731.47 31951731.69 0.0089 0.0036

Uranus 82768-11-05 08:53 G 31951759.84 31951759.87 31951759.93 0.0134 0.0131

Neptune 82769-05-21 12:29 G 31951956.81 31951957.02 31951957.23 0.0089 0.0026

Jupiter 82769-05-23 19:27 G 31951959.15 31951959.31 31951959.48 0.0497 0.0278

Neptune 82770-01-02 01:12 G 31952182.34 31952182.55 31952182.77 0.0089 0.0017

Neptune 82770-08-15 14:10 G 31952407.88 31952408.09 31952408.32 0.0089 0.0008

Neptune 82771-03-29 03:08 G 31952633.41 31952633.63 31952633.85 0.0089 0.0002

Neptune 82771-11-09 15:51 G 31952858.95 31952859.16 31952859.38 0.0089 0.0011

Neptune 82772-06-22 04:34 G 31953084.48 31953084.69 31953084.91 0.0089 0.0020

Saturn 82772-07-07 01:27 G 31953099.40 31953099.56 31953099.73 0.0294 0.0179

Neptune 82773-02-02 17:32 G 31953310.02 31953310.23 31953310.43 0.0089 0.0030

Saturn 82773-02-21 22:48 G 31953329.24 31953329.45 31953329.66 0.0295 0.0028

Neptune 82773-09-16 06:00 G 31953535.57 31953535.75 31953535.96 0.0089 0.0039

Saturn 82773-10-09 20:53 G 31953559.25 31953559.37 31953559.50 0.0296 0.0237

Jupiter 82773-12-09 03:08 G 31953619.57 31953619.63 31953619.70 0.0537 0.0509

Neptune 82774-04-29 18:44 G 31953761.11 31953761.28 31953761.48 0.0089 0.0049

Jupiter 82774-08-04 12:00 G 31953857.79 31953858.00 31953858.20 0.0534 0.0036

Neptune 82774-12-11 07:41 G 31953986.66 31953986.82 31953986.99 0.0089 0.0058

Jupiter 82775-03-30 18:00 G 31954096.13 31954096.25 31954096.37 0.0528 0.0431

Neptune 82775-07-24 20:39 G 31954212.22 31954212.36 31954212.50 0.0089 0.0067

Neptune 82776-03-06 08:53 G 31954437.78 31954437.87 31954438.01 0.0089 0.0077

Neptune 82776-10-17 21:51 G 31954663.36 31954663.41 31954663.49 0.0089 0.0085

Moon 82779-11-18 18:44 G 31955790.12 31955790.28 31955790.44 0.2679 0.0361

Earth 82779-11-18 21:51 G 31955790.25 31955790.41 31955790.57 0.2685 0.0121 *

Jupiter 82780-06-05 04:05 G 31955989.48 31955989.67 31955989.86 0.0491 0.0186

Jupiter 82781-01-26 23:46 G 31956225.30 31956225.49 31956225.68 0.0495 0.0177

Jupiter 82786-04-08 22:34 G 31958123.24 31958123.44 31958123.63 0.0536 0.0171

Saturn 82786-05-08 00:58 G 31958152.46 31958152.54 31958152.64 0.0267 0.0241

Jupiter 82786-12-03 06:00 G 31958361.58 31958361.75 31958361.91 0.0531 0.0307

Saturn 82786-12-23 05:17 G 31958381.52 31958381.72 31958381.93 0.0266 0.0086

Saturn 82787-08-09 08:53 G 31958610.66 31958610.87 31958611.08 0.0265 0.0069

Saturn 82788-03-25 11:32 G 31958839.88 31958839.98 31958840.11 0.0264 0.0222

Jupiter 82792-02-09 08:24 G 31960255.68 31960255.85 31960256.01 0.0490 0.0284

Jupiter 82792-10-02 03:08 G 31960491.43 31960491.63 31960491.83 0.0494 0.0076

Jupiter 82793-05-26 01:12 G 31960727.45 31960727.55 31960727.64 0.0499 0.0438

Jupiter 82797-12-12 10:05 G 31962388.75 31962388.92 31962389.09 0.0537 0.0304

Jupiter 82798-08-07 18:44 G 31962627.09 31962627.28 31962627.47 0.0532 0.0179

Saturn 82802-01-17 08:39 G 31963885.69 31963885.86 31963886.04 0.0294 0.0148

Saturn 82802-09-04 06:00 G 31964115.55 31964115.75 31964115.95 0.0295 0.0059

Saturn 82803-04-22 03:51 G 31964345.57 31964345.66 31964345.75 0.0296 0.0267

Mars 82803-05-10 09:08 G 31964363.72 31964363.88 31964364.04 0.1822 0.0556

Jupiter 82803-10-15 12:44 G 31964521.91 31964522.03 31964522.17 0.0489 0.0380

Jupiter 82804-06-07 07:27 G 31964757.61 31964757.81 31964758.01 0.0492 0.0026

Jupiter 82805-01-29 04:05 G 31964993.53 31964993.67 31964993.82 0.0497 0.0340

Uranus 82807-04-06 18:00 G 31965791.14 31965791.25 31965791.40 0.0143 0.0115

Uranus 82807-11-19 06:15 G 31966017.58 31966017.76 31966017.96 0.0143 0.0077

Uranus 82808-07-02 18:29 G 31966244.06 31966244.27 31966244.49 0.0143 0.0039

Uranus 82809-02-14 06:58 G 31966470.57 31966470.79 31966471.01 0.0143 0.0001

Jupiter 82809-08-16 22:48 G 31966654.33 31966654.45 31966654.57 0.0538 0.0433

Uranus 82809-09-28 19:12 G 31966697.10 31966697.30 31966697.52 0.0143 0.0038

Jupiter 82810-04-12 07:41 G 31966892.62 31966892.82 31966893.03 0.0534 0.0048

Uranus 82810-05-13 07:41 G 31966923.64 31966923.82 31966924.02 0.0143 0.0077

Jupiter 82810-12-06 12:44 G 31967130.99 31967131.03 31967131.10 0.0527 0.0507

Uranus 82810-12-25 20:10 G 31967150.22 31967150.34 31967150.48 0.0144 0.0115

Jupiter 82815-06-20 16:20 G 31968788.14 31968788.18 31968788.23 0.0489 0.0474

Saturn 82815-11-18 03:36 G 31968938.54 31968938.65 31968938.78 0.0267 0.0221

Jupiter 82816-02-11 11:03 G 31969023.76 31969023.96 31969024.15 0.0492 0.0128

Saturn 82816-07-04 07:56 G 31969167.62 31969167.83 31969168.04 0.0266 0.0065

Jupiter 82816-10-04 07:12 G 31969259.62 31969259.80 31969259.98 0.0496 0.0237

Saturn 82817-02-18 11:17 G 31969396.77 31969396.97 31969397.18 0.0265 0.0090

Saturn 82817-10-05 14:10 G 31969626.01 31969626.09 31969626.18 0.0265 0.0242

Jupiter 82821-12-15 19:12 G 31971158.10 31971158.30 31971158.51 0.0535 0.0087

Jupiter 82822-08-11 01:41 G 31971396.44 31971396.57 31971396.71 0.0529 0.0386

Jupiter 82827-10-17 16:05 G 31973289.99 31973290.17 31973290.35 0.0491 0.0227

Jupiter 82828-06-09 11:32 G 31973525.79 31973525.98 31973526.18 0.0495 0.0135

Jupiter 82829-01-31 10:34 G 31973761.93 31973761.94 31973761.96 0.0500 0.0497

Mars 82830-09-25 19:41 G 31974364.15 31974364.32 31974364.49 0.1708 0.0335

Saturn 82831-07-30 16:34 G 31974672.00 31974672.19 31974672.38 0.0295 0.0114

Saturn 82832-03-16 13:56 G 31974901.89 31974902.08 31974902.28 0.0296 0.0095

Jupiter 82833-08-20 03:08 G 31975423.45 31975423.63 31975423.82 0.0536 0.0226

Jupiter 82834-04-15 10:48 G 31975661.77 31975661.95 31975662.13 0.0531 0.0254

Jupiter 82839-06-22 21:36 G 31977556.25 31977556.40 31977556.55 0.0490 0.0322

Jupiter 82840-02-13 16:34 G 31977791.99 31977792.19 31977792.39 0.0493 0.0036

Jupiter 82840-10-06 14:10 G 31978027.97 31978028.09 31978028.21 0.0498 0.0400

Pluto 82844-11-29 00:29 G 31979542.41 31979542.52 31979542.64 0.0078 0.0067

Jupiter 82845-04-24 13:27 G 31979688.91 31979689.06 31979689.21 0.0537 0.0360

Saturn 82845-05-30 11:46 G 31979724.84 31979724.99 31979725.14 0.0267 0.0190

Pluto 82845-07-12 10:34 G 31979767.72 31979767.94 31979768.16 0.0078 0.0002

Jupiter 82845-12-18 22:05 G 31979927.22 31979927.42 31979927.62 0.0533 0.0123

Saturn 82846-01-14 15:36 G 31979953.94 31979954.15 31979954.37 0.0266 0.0035

Pluto 82846-02-22 19:56 G 31979993.25 31979993.33 31979993.45 0.0078 0.0069

Neptune 82846-07-29 06:29 G 31980149.74 31980149.77 31980149.84 0.0088 0.0086

Saturn 82846-08-31 18:58 G 31980183.10 31980183.29 31980183.48 0.0265 0.0120

Neptune 82847-03-11 19:56 G 31980375.24 31980375.33 31980375.46 0.0088 0.0076

Uranus 82847-07-23 01:41 G 31980508.52 31980508.57 31980508.64 0.0135 0.0130

Neptune 82847-10-23 09:08 G 31980600.75 31980600.88 31980601.04 0.0088 0.0067

Uranus 82848-03-05 06:58 G 31980734.66 31980734.79 31980734.95 0.0135 0.0099

Neptune 82848-06-04 22:20 G 31980826.28 31980826.43 31980826.62 0.0088 0.0058

Uranus 82848-10-17 12:29 G 31980960.84 31980961.02 31980961.22 0.0135 0.0068

Neptune 82849-01-16 12:00 G 31981051.82 31981052.00 31981052.19 0.0088 0.0049

Uranus 82849-05-31 17:46 G 31981187.04 31981187.24 31981187.46 0.0135 0.0037

Neptune 82849-08-30 01:12 G 31981277.36 31981277.55 31981277.75 0.0088 0.0040

Uranus 82850-01-12 23:03 G 31981413.25 31981413.46 31981413.68 0.0135 0.0006

Neptune 82850-04-12 14:24 G 31981502.90 31981503.10 31981503.31 0.0088 0.0030

Uranus 82850-08-27 04:20 G 31981639.47 31981639.68 31981639.90 0.0135 0.0025

Neptune 82850-11-24 03:22 G 31981728.44 31981728.64 31981728.87 0.0088 0.0022

Jupiter 82851-02-26 01:56 G 31981822.48 31981822.58 31981822.69 0.0489 0.0417

Uranus 82851-04-10 09:22 G 31981865.70 31981865.89 31981866.09 0.0135 0.0056

Neptune 82851-07-07 16:48 G 31981953.98 31981954.20 31981954.42 0.0088 0.0012

Jupiter 82851-10-19 20:24 G 31982058.15 31982058.35 31982058.56 0.0492 0.0067

Uranus 82851-11-22 14:24 G 31982091.94 31982092.10 31982092.27 0.0135 0.0087

Neptune 82852-02-18 06:15 G 31982179.54 31982179.76 31982179.98 0.0088 0.0002

Jupiter 82852-06-11 16:48 G 31982294.04 31982294.20 31982294.36 0.0497 0.0299

Uranus 82852-07-05 19:27 G 31982318.21 31982318.31 31982318.42 0.0135 0.0117

Neptune 82852-09-30 19:12 G 31982405.09 31982405.30 31982405.53 0.0088 0.0008

Neptune 82853-05-14 08:24 G 31982630.64 31982630.85 31982631.08 0.0088 0.0016

Neptune 82853-12-25 21:36 G 31982856.19 31982856.40 31982856.62 0.0088 0.0025

Neptune 82854-08-08 10:48 G 31983081.75 31983081.95 31983082.16 0.0088 0.0035

Neptune 82855-03-21 23:46 G 31983307.32 31983307.49 31983307.71 0.0088 0.0045

Neptune 82855-11-02 12:58 G 31983532.88 31983533.04 31983533.24 0.0088 0.0054

Neptune 82856-06-15 02:10 G 31983758.46 31983758.59 31983758.77 0.0088 0.0063

Jupiter 82856-12-28 00:58 G 31983954.46 31983954.54 31983954.62 0.0538 0.0488

Neptune 82857-01-26 15:36 G 31983984.04 31983984.15 31983984.30 0.0088 0.0071

Jupiter 82857-08-23 10:20 G 31984192.72 31984192.93 31984193.13 0.0535 0.0013

Neptune 82857-09-09 05:03 G 31984209.63 31984209.71 31984209.81 0.0088 0.0080

Jupiter 82858-04-18 16:34 G 31984431.09 31984431.19 31984431.30 0.0529 0.0457

Saturn 82860-06-24 02:39 G 31985228.57 31985228.61 31985228.65 0.0293 0.0287

Saturn 82861-02-08 23:17 G 31985458.27 31985458.47 31985458.67 0.0295 0.0084

Saturn 82861-09-26 20:39 G 31985688.18 31985688.36 31985688.55 0.0296 0.0125

Jupiter 82863-06-25 00:58 G 31986324.36 31986324.54 31986324.74 0.0491 0.0166

Jupiter 82864-02-15 20:39 G 31986560.17 31986560.36 31986560.54 0.0495 0.0199

Mars 82869-03-06 16:05 G 31988406.03 31988406.17 31988406.31 0.1826 0.1010

Jupiter 82869-04-27 23:03 G 31988458.27 31988458.46 31988458.66 0.0536 0.0144

Jupiter 82869-12-22 06:29 G 31988696.62 31988696.77 31988696.93 0.0530 0.0335

Saturn 82874-12-10 13:41 G 31990510.91 31990511.07 31990511.24 0.0267 0.0170

Jupiter 82875-02-28 04:48 G 31990590.54 31990590.70 31990590.88 0.0490 0.0265

Saturn	82875-07-27 17:32 G	31990740.02	31990740.23	31990740.45	0.0266	0.0015
Jupiter	82875-10-22 00:00 G	31990826.30	31990826.50	31990826.70	0.0494	0.0096
Saturn	82876-03-12 20:39 G	31990969.19	31990969.36	31990969.55	0.0265	0.0140
Jupiter	82876-06-13 22:20 G	31991062.35	31991062.43	31991062.51	0.0500	0.0459
Jupiter	82880-12-31 10:48 G	31992723.78	31992723.95	31992724.13	0.0537	0.0277
Jupiter	82881-08-26 19:12 G	31992962.11	31992962.30	31992962.49	0.0532	0.0207
Jupiter	82886-11-03 10:05 G	31994856.79	31994856.92	31994857.06	0.0490	0.0361
Jupiter	82887-06-27 05:03 G	31995092.51	31995092.71	31995092.91	0.0493	0.0005
Jupiter	82888-02-18 02:24 G	31995328.46	31995328.60	31995328.73	0.0498	0.0360
Saturn	82890-01-04 08:10 G	31996014.74	31996014.84	31996014.94	0.0294	0.0257
Saturn	82890-08-22 05:17 G	31996244.51	31996244.72	31996244.92	0.0295	0.0052
Uranus	82890-12-04 23:46 G	31996349.43	31996349.49	31996349.59	0.0143	0.0132
Saturn	82891-04-09 03:08 G	31996474.45	31996474.63	31996474.81	0.0296	0.0157
Uranus	82891-07-19 12:00 G	31996575.84	31996576.00	31996576.17	0.0143	0.0094
Uranus	82892-03-02 00:29 G	31996802.31	31996802.52	31996802.72	0.0143	0.0056
Jupiter	82892-09-04 18:58 G	31996989.16	31996989.29	31996989.42	0.0537	0.0411
Uranus	82892-10-14 12:44 G	31997028.81	31997029.03	31997029.25	0.0143	0.0019
Jupiter	82893-05-01 03:22 G	31997227.44	31997227.64	31997227.85	0.0534	0.0070
Uranus	82893-05-29 00:44 G	31997255.32	31997255.53	31997255.76	0.0143	0.0021
Jupiter	82893-12-25 08:24 G	31997465.85	31997465.85	31997465.87	0.0527	0.0527
Uranus	82894-01-10 13:12 G	31997481.85	31997482.05	31997482.26	0.0143	0.0058
Uranus	82894-08-25 01:41 G	31997708.42	31997708.57	31997708.74	0.0143	0.0097
Uranus	82895-04-08 14:24 G	31997935.04	31997935.10	31997935.18	0.0144	0.0135
Mars	82896-07-23 04:48 G	31998406.54	31998406.70	31998406.87	0.1705	0.0640
Jupiter	82898-07-09 15:36 G	31999123.08	31999123.15	31999123.23	0.0489	0.0453
Jupiter	82899-03-02 10:34 G	31999358.74	31999358.94	31999359.14	0.0492	0.0104
Jupiter	82899-10-24 06:44 G	31999594.61	31999594.78	31999594.95	0.0496	0.0262
Saturn	82904-06-22 20:53 G	32001297.20	32001297.37	32001297.56	0.0266	0.0141
Jupiter	82905-01-04 14:24 G	32001492.90	32001493.10	32001493.30	0.0535	0.0066
Saturn	82905-02-07 00:44 G	32001526.31	32001526.53	32001526.75	0.0265	0.0015

Jupiter 82905-08-30 21:08 G 32001731.25 32001731.38 32001731.51 0.0529 0.0406

Saturn 82905-09-24 03:36 G 32001755.49 32001755.65 32001755.82 0.0264 0.0168

Jupiter 82910-11-06 14:53 G 32003624.94 32003625.12 32003625.31 0.0491 0.0203

Jupiter 82911-06-30 10:05 G 32003860.73 32003860.92 32003861.11 0.0494 0.0160

Jupiter 82916-09-09 01:56 G 32005758.40 32005758.58 32005758.77 0.0536 0.0201

Jupiter 82917-05-05 10:05 G 32005996.75 32005996.92 32005997.10 0.0532 0.0282

Earth 82917-05-19 04:05 G 32006010.60 32006010.67 32006010.74 0.2647 0.2357

Moon 82917-05-19 04:34 G 32006010.62 32006010.69 32006010.77 0.2654 0.2274 *

Saturn 82919-07-18 14:39 G 32006800.98 32006801.11 32006801.24 0.0294 0.0228

Saturn 82920-03-04 11:32 G 32007030.77 32007030.98 32007031.19 0.0295 0.0023

Saturn 82920-10-20 09:08 G 32007260.73 32007260.88 32007261.05 0.0296 0.0187

Jupiter 82922-07-12 19:41 G 32007891.17 32007891.32 32007891.49 0.0490 0.0301

Jupiter 82923-03-05 14:24 G 32008126.90 32008127.10 32008127.30 0.0493 0.0059

Jupiter 82923-10-27 11:46 G 32008362.89 32008362.99 32008363.10 0.0498 0.0423

Earth 82925-05-16 17:46 G 32008930.10 32008930.24 32008930.39 0.2649 0.1095

Moon 82925-05-16 22:34 G 32008930.29 32008930.44 32008930.58 0.2653 0.0950 *

Jupiter 82928-05-14 14:53 G 32010023.96 32010024.12 32010024.28 0.0537 0.0332

Jupiter 82929-01-07 23:46 G 32010262.30 32010262.49 32010262.69 0.0533 0.0153

Neptune 82929-12-09 17:46 G 32010598.21 32010598.24 32010598.34 0.0089 0.0085

Neptune 82930-07-23 07:12 G 32010823.69 32010823.80 32010823.92 0.0089 0.0075

Neptune 82931-03-05 19:56 G 32011049.20 32011049.33 32011049.48 0.0089 0.0066

Neptune 82931-10-17 08:24 G 32011274.70 32011274.85 32011275.04 0.0089 0.0057

Uranus 82931-11-04 17:03 G 32011293.10 32011293.21 32011293.33 0.0135 0.0113

Neptune 82932-05-29 21:08 G 32011500.22 32011500.38 32011500.58 0.0089 0.0048

Uranus 82932-06-17 22:34 G 32011519.27 32011519.44 32011519.61 0.0135 0.0082

Neptune 82933-01-10 10:20 G 32011725.74 32011725.93 32011726.13 0.0089 0.0038

Uranus 82933-01-30 03:51 G 32011745.46 32011745.66 32011745.86 0.0135 0.0051

Neptune 82933-08-23 23:03 G 32011951.27 32011951.46 32011951.68 0.0089 0.0030

Uranus 82933-09-13 09:08 G 32011971.68 32011971.88 32011972.10 0.0135 0.0020

Saturn 82934-01-02 22:05 G 32012083.24 32012083.42 32012083.62 0.0266 0.0122

Jupiter 82934-03-17 23:32 G 32012157.37 32012157.48 32012157.61 0.0489 0.0398

Neptune 82934-04-06 12:00 G 32012176.79 32012177.00 32012177.22 0.0089 0.0020

Uranus 82934-04-27 14:24 G 32012197.89 32012198.10 32012198.32 0.0135 0.0012

Saturn 82934-08-20 01:41 G 32012312.36 32012312.57 32012312.79 0.0265 0.0034

Jupiter 82934-11-08 18:15 G 32012393.06 32012393.26 32012393.46 0.0492 0.0044

Neptune 82934-11-18 00:58 G 32012402.32 32012402.54 32012402.76 0.0089 0.0010

Uranus 82934-12-09 19:41 G 32012424.12 32012424.32 32012424.52 0.0135 0.0042

Mars 82935-01-02 22:05 G 32012448.33 32012448.42 32012448.52 0.1831 0.1503

Saturn 82935-04-06 04:34 G 32012541.55 32012541.69 32012541.85 0.0265 0.0187

Neptune 82935-07-01 13:41 G 32012627.86 32012628.07 32012628.29 0.0089 0.0002

Jupiter 82935-07-02 14:53 G 32012628.97 32012629.12 32012629.27 0.0497 0.0322

Uranus 82935-07-24 00:29 G 32012650.35 32012650.52 32012650.71 0.0135 0.0073

Neptune 82936-02-12 02:39 G 32012853.39 32012853.61 32012853.83 0.0089 0.0008

Uranus 82936-03-06 05:46 G 32012876.60 32012876.74 32012876.88 0.0135 0.0103

Neptune 82936-09-24 15:22 G 32013078.93 32013079.14 32013079.36 0.0089 0.0018

Uranus 82936-10-18 10:34 G 32013102.93 32013102.94 32013102.98 0.0134 0.0134

Neptune 82937-05-08 04:05 G 32013304.47 32013304.67 32013304.88 0.0089 0.0027

Neptune 82937-12-19 17:03 G 32013530.01 32013530.21 32013530.41 0.0089 0.0036

Neptune 82938-08-02 05:32 G 32013755.56 32013755.73 32013755.93 0.0089 0.0046

Neptune 82939-03-15 18:29 G 32013981.11 32013981.27 32013981.45 0.0089 0.0055

Neptune 82939-10-27 07:12 G 32014206.66 32014206.80 32014206.96 0.0089 0.0065

Jupiter 82940-01-18 03:08 G 32014289.53 32014289.63 32014289.73 0.0538 0.0460

Neptune 82940-06-08 20:10 G 32014432.22 32014432.34 32014432.46 0.0089 0.0074

Jupiter 82940-09-12 12:15 G 32014527.80 32014528.01 32014528.21 0.0534 0.0021

Neptune 82941-01-20 08:24 G 32014657.80 32014657.85 32014657.95 0.0089 0.0083

Jupiter 82941-05-08 18:00 G 32014766.18 32014766.25 32014766.33 0.0528 0.0485

Jupiter 82945-11-21 05:03 G 32016423.71 32016423.71 32016423.71 0.0489 0.0489

Jupiter 82946-07-14 23:46 G 32016659.30 32016659.49 32016659.69 0.0491 0.0143

Jupiter 82947-03-07 19:41 G 32016895.14 32016895.32 32016895.50 0.0495 0.0222

Saturn 82949-01-27 18:00 G 32017587.10 32017587.25 32017587.40 0.0294 0.0201

Saturn 82949-09-14 15:22 G 32017816.93 32017817.14 32017817.35 0.0295 0.0006

Saturn 82950-05-02 13:27 G 32018046.92 32018047.06 32018047.20 0.0296 0.0215

Jupiter 82952-05-17 20:24 G 32018793.15 32018793.35 32018793.55 0.0535 0.0119

Jupiter 82953-01-11 03:22 G 32019031.50 32019031.64 32019031.80 0.0530 0.0359

Jupiter 82958-03-20 05:32 G 32020925.55 32020925.73 32020925.91 0.0491 0.0240

Jupiter 82958-11-11 00:44 G 32021161.34 32021161.53 32021161.73 0.0494 0.0123

Jupiter 82959-07-04 23:03 G 32021397.42 32021397.46 32021397.51 0.0500 0.0485

Mars 82962-05-21 14:10 G 32022448.95 32022449.09 32022449.24 0.1702 0.0938

Saturn 82962-11-29 00:29 G 32022640.45 32022640.52 32022640.60 0.0267 0.0249

Saturn 82963-07-16 04:34 G 32022869.49 32022869.69 32022869.89 0.0266 0.0093

Jupiter 82964-01-21 07:12 G 32023058.62 32023058.80 32023058.98 0.0536 0.0254

Saturn 82964-03-01 07:56 G 32023098.62 32023098.83 32023099.04 0.0265 0.0062

Jupiter 82964-09-15 15:22 G 32023296.95 32023297.14 32023297.32 0.0532 0.0230

Saturn 82964-10-16 10:34 G 32023327.82 32023327.94 32023328.07 0.0264 0.0214

Mars 82967-01-02 09:08 G 32024135.80 32024135.88 32024135.96 0.1818 0.1587

Jupiter 82969-11-23 10:05 G 32025191.78 32025191.92 32025192.07 0.0490 0.0336

Jupiter 82970-07-17 05:03 G 32025427.50 32025427.71 32025427.91 0.0493 0.0023

Jupiter 82971-03-10 01:41 G 32025663.45 32025663.57 32025663.71 0.0498 0.0386

Uranus 82975-03-19 18:44 G 32027134.16 32027134.28 32027134.44 0.0143 0.0111

Jupiter 82975-09-25 18:29 G 32027324.13 32027324.27 32027324.41 0.0537 0.0386

Uranus 82975-11-01 06:58 G 32027360.61 32027360.79 32027360.99 0.0143 0.0073

Jupiter 82976-05-21 03:36 G 32027562.45 32027562.65 32027562.85 0.0534 0.0098

Uranus 82976-06-14 19:27 G 32027587.09 32027587.31 32027587.52 0.0143 0.0035

Uranus 82977-01-27 07:41 G 32027813.60 32027813.82 32027814.04 0.0143 0.0003

Uranus 82977-09-10 19:56 G 32028040.13 32028040.33 32028040.55 0.0143 0.0042

Uranus 82978-04-25 08:39 G 32028266.68 32028266.86 32028267.05 0.0143 0.0080

Saturn 82978-08-10 00:00 G 32028373.33 32028373.50 32028373.67 0.0294 0.0173

Uranus 82978-12-07 21:08 G 32028493.26 32028493.38 32028493.51 0.0144 0.0118

Saturn 82979-03-27 21:08 G 32028603.18 32028603.38 32028603.59 0.0296 0.0035

Saturn 82979-11-12 18:58 G 32028833.19 32028833.29 32028833.42 0.0296 0.0245

Jupiter 82981-07-29 15:08 G 32029458.04 32029458.13 32029458.23 0.0489 0.0431

Jupiter 82982-03-22 09:36 G 32029693.70 32029693.90 32029694.10 0.0491 0.0080

Jupiter 82982-11-13 05:32 G 32029929.57 32029929.73 32029929.90 0.0496 0.0286

Jupiter 82987-05-31 07:27 G 32031589.75 32031589.81 32031589.87 0.0538 0.0512

Jupiter 82988-01-24 17:03 G 32031828.01 32031828.21 32031828.41 0.0535 0.0034

Jupiter 82988-09-19 00:00 G 32032066.39 32032066.50 32032066.61 0.0529 0.0437

Saturn 82992-06-10 01:12 G 32033426.46 32033426.55 32033426.67 0.0267 0.0231

Saturn 82993-01-25 05:17 G 32033655.52 32033655.72 32033655.93 0.0266 0.0075

Saturn 82993-09-11 08:24 G 32033884.65 32033884.85 32033885.06 0.0265 0.0080

Jupiter 82993-11-25 13:41 G 32033959.88 32033960.07 32033960.26 0.0491 0.0180

Saturn 82994-04-28 11:03 G 32034113.86 32034113.96 32034114.07 0.0264 0.0231

Mars 82994-05-20 17:03 G 32034136.13 32034136.21 32034136.29 0.1712 0.1492

Jupiter 82994-07-19 09:08 G 32034195.70 32034195.88 32034196.07 0.0495 0.0184

Jupiter 82999-09-29 05:17 G 32036093.53 32036093.72 32036093.92 0.0536 0.0168

Jupiter 83000-05-25 13:12 G 32036331.89 32036332.05 32036332.22 0.0531 0.0314

84TH MILLENNIUM CE

This is a list of transits of Venus in the 84th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 83005-08-01 19:41 G 32038226.15 32038226.32 32038226.48 0.0490 0.0278

Pluto 83005-10-14 21:36 G 32038300.23 32038300.40 32038300.60 0.0065 0.0036

Jupiter 83006-03-25 14:39 G 32038461.91 32038462.11 32038462.31 0.0493 0.0084

Pluto 83006-05-28 02:24 G 32038525.38 32038525.60 32038525.82 0.0066 0.0003

Jupiter 83006-11-16 12:29 G 32038697.93 32038698.02 32038698.11 0.0499 0.0447

Pluto 83007-01-08 06:29 G 32038750.62 32038750.77 32038750.95 0.0066 0.0043

Saturn 83008-02-21 01:41 G 32039159.39 32039159.57 32039159.75 0.0294 0.0149

Saturn 83008-10-07 23:17 G 32039389.27 32039389.47 32039389.67 0.0296 0.0059

Saturn 83009-05-25 21:22 G 32039619.32 32039619.39 32039619.49 0.0296 0.0270

Neptune 83010-11-01 16:34 G 32040144.19 32040144.19 32040144.22 0.0088 0.0088

Jupiter 83011-06-04 13:56 G 32040358.92 32040359.08 32040359.25 0.0537 0.0304

Neptune 83011-06-15 05:32 G 32040369.66 32040369.73 32040369.85 0.0088 0.0079

Neptune 83012-01-26 19:27 G 32040595.18 32040595.31 32040595.45 0.0088 0.0070

Jupiter 83012-01-28 22:20 G 32040597.24 32040597.43 32040597.62 0.0533 0.0180

Neptune 83012-09-08 08:39 G 32040820.70 32040820.86 32040821.03 0.0088 0.0061

Neptune 83013-04-21 21:36 G 32041046.24 32041046.40 32041046.60 0.0088 0.0052

Neptune 83013-12-03 10:48 G 32041271.77 32041271.95 32041272.16 0.0088 0.0043

Neptune 83014-07-17 00:00 G 32041497.31 32041497.50 32041497.72 0.0088 0.0034

Neptune 83015-02-27 13:41 G 32041722.86 32041723.07 32041723.29 0.0088 0.0024

Uranus 83015-07-06 03:08 G 32041851.58 32041851.63 32041851.73 0.0135 0.0127

Neptune 83015-10-11 02:53 G 32041948.41 32041948.62 32041948.85 0.0088 0.0014

Uranus 83016-02-17 08:53 G 32042077.73 32042077.87 32042078.03 0.0135 0.0095

Neptune 83016-05-23 16:05 G 32042173.95 32042174.17 32042174.40 0.0088 0.0005

Uranus 83016-09-30 14:24 G 32042303.92 32042304.10 32042304.30 0.0135 0.0064

Neptune 83017-01-04 05:32 G 32042399.50 32042399.73 32042399.95 0.0088 0.0005

Jupiter 83017-04-07 00:58 G 32042492.41 32042492.54 32042492.67 0.0490 0.0371

Uranus 83017-05-14 19:56 G 32042530.12 32042530.33 32042530.54 0.0135 0.0033

Neptune 83017-08-17 18:44 G 32042625.06 32042625.28 32042625.50 0.0088 0.0014

Jupiter 83017-11-28 19:56 G 32042728.13 32042728.33 32042728.54 0.0492 0.0019

Uranus 83017-12-27 01:12 G 32042756.34 32042756.55 32042756.77 0.0135 0.0002

Neptune 83018-03-31 07:41 G 32042850.61 32042850.82 32042851.04 0.0088 0.0023

Jupiter 83018-07-22 17:03 G 32042964.07 32042964.21 32042964.35 0.0497 0.0351

Uranus 83018-08-10 06:15 G 32042982.56 32042982.76 32042982.98 0.0135 0.0029

Neptune 83018-11-11 20:53 G 32043076.17 32043076.37 32043076.59 0.0088 0.0032

Uranus 83019-03-24 11:17 G 32043208.79 32043208.97 32043209.18 0.0135 0.0060

Neptune 83019-06-25 10:05 G 32043301.73 32043301.92 32043302.12 0.0088 0.0041

Uranus 83019-11-05 16:34 G 32043435.04 32043435.19 32043435.36 0.0135 0.0090

Neptune 83020-02-05 23:32 G 32043527.30 32043527.48 32043527.66 0.0088 0.0051

Uranus 83020-06-18 21:22 G 32043661.31 32043661.39 32043661.50 0.0135 0.0120

Neptune 83020-09-18 12:15 G 32043752.87 32043753.01 32043753.19 0.0088 0.0060

Neptune 83021-05-02 01:27 G 32043978.44 32043978.56 32043978.72 0.0088 0.0069

Neptune 83021-12-13 14:39 G 32044204.03 32044204.11 32044204.23 0.0088 0.0078

Saturn 83021-12-22 06:44 G 32044212.65 32044212.78 32044212.92 0.0267 0.0205

Neptune 83022-07-27 03:51 G 32044429.65 32044429.66 32044429.71 0.0088 0.0087

Saturn 83022-08-08 10:34 G 32044441.73 32044441.94 32044442.16 0.0266 0.0049

Earth 83022-11-21 00:15 G 32044546.36 32044546.51 32044546.67 0.2683 0.0280

Moon 83022-11-21 01:27 G 32044546.42 32044546.56 32044546.70 0.2691 0.0744 *

Jupiter 83023-02-07 00:58 G 32044624.43 32044624.54 32044624.66 0.0537 0.0436

Saturn 83023-03-25 13:56 G 32044670.88 32044671.08 32044671.28 0.0265 0.0106

Jupiter 83023-10-03 09:36 G 32044862.70 32044862.90 32044863.11 0.0534 0.0046

Saturn 83023-11-09 16:05 G 32044900.14 32044900.17 32044900.23 0.0264 0.0257

Jupiter 83024-05-28 15:22 G 32045101.09 32045101.14 32045101.19 0.0528 0.0508

Mars 83028-03-18 23:17 G 32046491.35 32046491.47 32046491.59 0.1698 0.1228

Jupiter 83028-12-11 05:46 G 32046758.68 32046758.74 32046758.81 0.0489 0.0465

Jupiter 83029-08-04 00:44 G 32046994.33 32046994.53 32046994.73 0.0491 0.0116

Jupiter 83030-03-27 20:24 G 32047230.18 32047230.35 32047230.53 0.0495 0.0249

Moon 83030-11-18 21:22 G 32047466.34 32047466.39 32047466.44 0.2686 0.2526

Mars 83032-10-30 16:05 G 32048178.04 32048178.17 32048178.30 0.1822 0.1140

Jupiter 83035-06-07 21:22 G 32049128.18 32049128.39 32049128.59 0.0536 0.0090

Jupiter 83036-02-01 04:48 G 32049366.56 32049366.70 32049366.84 0.0530 0.0388

Saturn 83037-09-02 07:12 G 32049945.61 32049945.80 32049945.99 0.0295 0.0122

Saturn 83038-04-20 04:34 G 32050175.50 32050175.69 32050175.90 0.0296 0.0088

Jupiter 83041-04-09 05:32 G 32051260.55 32051260.73 32051260.92 0.0490 0.0215

Jupiter 83041-12-01 00:29 G 32051496.33 32051496.52 32051496.72 0.0494 0.0149

Jupiter	83047-02-10 10:20 G	32053393.75	32053393.93	32053394.12	0.0537	0.0223
Jupiter	83047-10-06 18:58 G	32053632.11	32053632.29	32053632.47	0.0532	0.0263
Saturn	83051-07-04 07:27 G	32054998.66	32054998.81	32054998.97	0.0266	0.0186
Saturn	83052-02-18 11:03 G	32055227.75	32055227.96	32055228.18	0.0265	0.0032
Saturn	83052-10-04 13:56 G	32055456.90	32055457.08	32055457.28	0.0264	0.0123
Jupiter	83052-12-13 09:51 G	32055526.76	32055526.91	32055527.07	0.0490	0.0313
Jupiter	83053-08-06 04:48 G	32055762.50	32055762.70	32055762.90	0.0493	0.0047
Jupiter	83054-03-30 01:56 G	32055998.47	32055998.58	32055998.70	0.0498	0.0411
Jupiter	83058-10-15 23:03 G	32057659.31	32057659.46	32057659.61	0.0537	0.0353
Uranus	83058-11-18 02:10 G	32057692.51	32057692.59	32057692.71	0.0143	0.0127
Jupiter	83059-06-11 07:56 G	32057897.63	32057897.83	32057898.03	0.0534	0.0133
Uranus	83059-07-02 14:39 G	32057918.94	32057919.11	32057919.28	0.0143	0.0089
Uranus	83060-02-14 02:53 G	32058145.42	32058145.62	32058145.83	0.0143	0.0051
Mars	83060-03-18 01:41 G	32058178.44	32058178.57	32058178.70	0.1708	0.1172
Uranus	83060-09-27 15:22 G	32058371.92	32058372.14	32058372.36	0.0143	0.0013
Uranus	83061-05-12 03:36 G	32058598.44	32058598.65	32058598.87	0.0143	0.0025
Uranus	83061-12-24 15:51 G	32058824.98	32058825.16	32058825.37	0.0143	0.0064
Uranus	83062-08-08 04:20 G	32059051.54	32059051.68	32059051.85	0.0144	0.0102
Uranus	83063-03-22 17:03 G	32059278.18	32059278.21	32059278.28	0.0144	0.0140
Jupiter	83064-08-18 15:36 G	32059793.05	32059793.15	32059793.27	0.0489	0.0407
Jupiter	83065-04-11 10:34 G	32060028.74	32060028.94	32060029.14	0.0492	0.0054
Jupiter	83065-12-03 06:58 G	32060264.63	32060264.79	32060264.94	0.0496	0.0313
Saturn	83067-03-15 07:12 G	32060731.61	32060731.80	32060732.00	0.0295	0.0101
Saturn	83067-10-31 05:03 G	32060961.52	32060961.71	32060961.91	0.0296	0.0109
Jupiter	83070-06-20 08:24 G	32061924.77	32061924.85	32061924.94	0.0537	0.0483
Jupiter	83071-02-13 17:03 G	32062163.01	32062163.21	32062163.42	0.0534	0.0013
Jupiter	83071-10-09 23:17 G	32062401.38	32062401.47	32062401.57	0.0529	0.0464
Jupiter	83076-12-15 15:51 G	32064294.97	32064295.16	32064295.36	0.0491	0.0152
Jupiter	83077-08-08 12:00 G	32064530.82	32064531.00	32064531.18	0.0495	0.0215
Saturn	83081-01-13 12:00 G	32065784.84	32065785.00	32065785.18	0.0266	0.0162

Saturn 83081-08-30 15:51 G 32066013.94 32066014.16 32066014.37 0.0265 0.0006

Saturn 83082-04-16 18:58 G 32066243.11 32066243.29 32066243.46 0.0264 0.0148

Jupiter 83082-10-19 04:05 G 32066428.48 32066428.67 32066428.87 0.0536 0.0140

Jupiter 83083-06-14 11:32 G 32066666.82 32066666.98 32066667.13 0.0531 0.0340

Jupiter 83088-08-20 20:53 G 32068561.20 32068561.37 32068561.55 0.0490 0.0251

Jupiter 83089-04-13 16:05 G 32068796.97 32068797.17 32068797.37 0.0493 0.0112

Jupiter 83089-12-05 13:41 G 32069033.02 32069033.07 32069033.14 0.0499 0.0475

Pluto 83093-06-16 04:34 G 32070321.58 32070321.69 32070321.84 0.0078 0.0062

Mars 83094-01-14 08:53 G 32070533.79 32070533.87 32070533.94 0.1695 0.1516

Pluto 83094-01-27 14:53 G 32070546.90 32070547.12 32070547.34 0.0078 0.0006

Neptune 83094-03-14 04:34 G 32070592.68 32070592.69 32070592.75 0.0089 0.0088

Jupiter 83094-06-23 15:22 G 32070693.97 32070694.14 32070694.32 0.0537 0.0276

Pluto 83094-09-10 00:00 G 32070772.46 32070772.50 32070772.59 0.0078 0.0074

Neptune 83094-10-25 17:46 G 32070818.14 32070818.24 32070818.34 0.0089 0.0078

Jupiter 83095-02-17 00:00 G 32070932.32 32070932.50 32070932.69 0.0533 0.0211

Neptune 83095-06-08 06:15 G 32071043.64 32071043.76 32071043.91 0.0089 0.0069

Neptune 83096-01-19 18:58 G 32071269.15 32071269.29 32071269.47 0.0089 0.0060

Saturn 83096-02-07 15:51 G 32071288.11 32071288.16 32071288.23 0.0294 0.0278

Neptune 83096-09-01 07:41 G 32071494.66 32071494.82 32071495.02 0.0089 0.0051

Saturn 83096-09-24 12:58 G 32071517.84 32071518.04 32071518.24 0.0295 0.0073

Neptune 83097-04-14 20:53 G 32071720.18 32071720.37 32071720.57 0.0089 0.0041

Saturn 83097-05-12 10:34 G 32071747.76 32071747.94 32071748.13 0.0296 0.0138

Neptune 83097-11-26 09:36 G 32071945.70 32071945.90 32071946.11 0.0089 0.0032

Neptune 83098-07-09 22:34 G 32072171.23 32072171.44 32072171.65 0.0089 0.0023

Mars 83098-08-27 22:34 G 32072220.28 32072220.44 32072220.60 0.1826 0.0675

Neptune 83099-02-20 11:17 G 32072396.76 32072396.97 32072397.19 0.0089 0.0013

Neptune 83099-10-04 00:15 G 32072622.29 32072622.51 32072622.73 0.0089 0.0004

Uranus 83099-10-17 19:41 G 32072636.21 32072636.32 32072636.46 0.0135 0.0108

Jupiter 83100-04-27 01:56 G 32072827.44 32072827.58 32072827.73 0.0490 0.0347

Neptune 83100-05-17 12:58 G 32072847.82 32072848.04 32072848.26 0.0089 0.0006

Uranus 83100-06-01 01:12 G 32072862.39 32072862.55 32072862.74 0.0135 0.0077

Jupiter 83100-12-18 20:39 G 32073063.16 32073063.36 32073063.56 0.0492 0.0011

Neptune 83100-12-29 01:41 G 32073073.36 32073073.57 32073073.79 0.0089 0.0015

Uranus 83101-01-13 06:44 G 32073088.58 32073088.78 32073088.99 0.0135 0.0046

Neptune 83101-08-11 14:53 G 32073298.91 32073299.12 32073299.33 0.0089 0.0025

Jupiter 83101-08-11 17:17 G 32073299.10 32073299.22 32073299.36 0.0497 0.0377 *

Uranus 83101-08-27 12:15 G 32073314.80 32073315.01 32073315.22 0.0135 0.0015

Neptune 83102-03-25 03:22 G 32073524.45 32073524.64 32073524.85 0.0089 0.0034

Uranus 83102-04-10 17:17 G 32073541.01 32073541.22 32073541.44 0.0135 0.0016

Neptune 83102-11-05 16:05 G 32073750.00 32073750.17 32073750.37 0.0089 0.0044

Uranus 83102-11-22 22:20 G 32073767.24 32073767.43 32073767.64 0.0135 0.0047

Neptune 83103-06-19 05:03 G 32073975.54 32073975.71 32073975.89 0.0089 0.0053

Uranus 83103-07-07 03:22 G 32073993.48 32073993.64 32073993.83 0.0135 0.0077

Neptune 83104-01-30 17:32 G 32074201.10 32074201.23 32074201.41 0.0089 0.0063

Uranus 83104-02-18 08:39 G 32074219.73 32074219.86 32074219.99 0.0135 0.0107

Neptune 83104-09-12 06:29 G 32074426.66 32074426.77 32074426.92 0.0089 0.0072

Neptune 83105-04-25 19:27 G 32074652.23 32074652.31 32074652.41 0.0089 0.0081

Jupiter 83106-02-27 04:20 G 32074959.55 32074959.68 32074959.81 0.0538 0.0406

Jupiter 83106-10-23 13:27 G 32075197.86 32075198.06 32075198.27 0.0534 0.0081

Saturn 83110-07-27 12:44 G 32076570.85 32076571.03 32076571.21 0.0266 0.0143

Saturn 83111-03-13 16:20 G 32076799.96 32076800.18 32076800.39 0.0265 0.0013

Saturn 83111-10-28 18:44 G 32077029.12 32077029.28 32077029.45 0.0264 0.0165

Jupiter 83112-01-01 06:29 G 32077093.69 32077093.77 32077093.86 0.0489 0.0441

Jupiter 83112-08-24 01:12 G 32077329.35 32077329.55 32077329.75 0.0491 0.0090

Jupiter 83113-04-16 20:53 G 32077565.21 32077565.37 32077565.54 0.0496 0.0277

Jupiter 83117-11-01 17:17 G 32079225.19 32079225.22 32079225.25 0.0538 0.0530

Jupiter 83118-06-28 02:24 G 32079463.40 32079463.60 32079463.81 0.0535 0.0053

Jupiter 83119-02-21 09:51 G 32079701.79 32079701.91 32079702.03 0.0530 0.0423

Jupiter 83124-04-29 06:58 G 32081595.60 32081595.79 32081595.98 0.0491 0.0188

Jupiter 83124-12-21 02:24 G 32081831.41 32081831.60 32081831.79 0.0494 0.0177

Saturn	83125-08-20 15:22 G	32082074.05	32082074.14	32082074.24	0.0293	0.0258
Mars	83126-01-14 11:32 G	32082220.83	32082220.98	32082221.13	0.1705	0.0881
Saturn	83126-04-07 12:15 G	32082303.81	32082304.01	32082304.22	0.0295	0.0053
Saturn	83126-11-23 10:05 G	32082533.74	32082533.92	32082534.10	0.0296	0.0157
Jupiter	83130-03-02 12:00 G	32083728.81	32083729.00	32083729.20	0.0536	0.0190
Jupiter	83130-10-26 19:27 G	32083967.15	32083967.31	32083967.49	0.0531	0.0294
Jupiter	83136-01-03 12:15 G	32085861.84	32085862.01	32085862.17	0.0490	0.0285
Jupiter	83136-08-26 07:41 G	32086097.62	32086097.82	32086098.02	0.0493	0.0077
Jupiter	83137-04-19 05:32 G	32086333.64	32086333.73	32086333.82	0.0498	0.0442
Saturn	83140-02-06 16:48 G	32087357.01	32087357.20	32087357.39	0.0266	0.0120
Saturn	83140-09-22 20:10 G	32087586.13	32087586.34	32087586.56	0.0265	0.0036
Saturn	83141-05-09 22:48 G	32087815.31	32087815.45	32087815.61	0.0264	0.0189
Jupiter	83141-11-04 23:03 G	32087994.30	32087994.46	32087994.63	0.0537	0.0324
Jupiter	83142-07-01 07:12 G	32088232.60	32088232.80	32088232.99	0.0533	0.0162
Uranus	83143-03-02 20:53 G	32088477.24	32088477.37	32088477.53	0.0143	0.0106
Uranus	83143-10-15 09:22 G	32088703.70	32088703.89	32088704.08	0.0143	0.0068
Uranus	83144-05-28 21:36 G	32088930.19	32088930.40	32088930.62	0.0143	0.0031
Uranus	83145-01-10 10:05 G	32089156.70	32089156.92	32089157.14	0.0143	0.0008
Uranus	83145-08-24 22:34 G	32089383.23	32089383.44	32089383.65	0.0143	0.0046
Uranus	83146-04-08 10:48 G	32089609.79	32089609.95	32089610.15	0.0144	0.0085
Uranus	83146-11-20 23:32 G	32089836.38	32089836.48	32089836.61	0.0144	0.0123
Jupiter	83147-09-08 17:03 G	32090128.09	32090128.21	32090128.35	0.0490	0.0382
Jupiter	83148-05-01 12:15 G	32090363.81	32090364.01	32090364.21	0.0492	0.0025
Jupiter	83148-12-23 08:39 G	32090599.72	32090599.86	32090600.01	0.0496	0.0342
Jupiter	83153-07-10 10:05 G	32092259.82	32092259.92	32092260.03	0.0537	0.0456
Jupiter	83154-03-05 18:58 G	32092498.09	32092498.29	32092498.50	0.0535	0.0028
Jupiter	83154-10-30 01:27 G	32092736.49	32092736.56	32092736.63	0.0529	0.0495
Saturn	83155-03-02 20:24 G	32092860.23	32092860.35	32092860.49	0.0294	0.0232
Saturn	83155-10-18 17:32 G	32093090.03	32093090.23	32093090.44	0.0295	0.0026
Saturn	83156-06-04 15:36 G	32093319.99	32093320.15	32093320.31	0.0297	0.0186

Jupiter 83159-05-14 22:20 G 32094394.38 32094394.43 32094394.48 0.0489 0.0475

Jupiter 83160-01-05 17:03 G 32094630.02 32094630.21 32094630.41 0.0491 0.0125

Earth 83160-05-21 04:20 G 32094766.62 32094766.68 32094766.74 0.2649 0.2450

Jupiter 83160-08-28 12:44 G 32094865.86 32094866.03 32094866.21 0.0495 0.0242

Mars 83164-06-25 05:32 G 32096262.55 32096262.73 32096262.90 0.1830 0.0220

Jupiter 83165-11-08 07:56 G 32096763.63 32096763.83 32096764.03 0.0536 0.0107

Jupiter 83166-07-04 15:51 G 32097002.01 32097002.16 32097002.30 0.0531 0.0374

Moon 83168-05-18 15:08 G 32097685.98 32097686.13 32097686.29 0.2645 0.1195

Earth 83168-05-18 18:00 G 32097686.10 32097686.25 32097686.40 0.2650 0.0998 *

Saturn 83169-01-01 13:27 G 32097914.01 32097914.06 32097914.12 0.0267 0.0257

Saturn 83169-08-18 17:46 G 32098143.04 32098143.24 32098143.44 0.0266 0.0101

Saturn 83170-04-04 21:08 G 32098372.17 32098372.38 32098372.59 0.0265 0.0054

Saturn 83170-11-19 23:46 G 32098601.35 32098601.49 32098601.62 0.0264 0.0206

Jupiter 83171-09-10 21:51 G 32098896.23 32098896.41 32098896.59 0.0490 0.0224

Jupiter 83172-05-03 16:48 G 32099132.01 32099132.20 32099132.40 0.0494 0.0140

Neptune 83175-09-17 15:51 G 32100364.09 32100364.16 32100364.25 0.0088 0.0082

Neptune 83176-04-30 05:03 G 32100589.59 32100589.71 32100589.84 0.0088 0.0073

Neptune 83176-12-11 18:00 G 32100815.12 32100815.25 32100815.42 0.0088 0.0064

Jupiter 83177-07-13 20:53 G 32101029.19 32101029.37 32101029.55 0.0537 0.0240

Neptune 83177-07-25 07:27 G 32101040.65 32101040.81 32101041.00 0.0088 0.0054

Neptune 83178-03-07 20:39 G 32101266.19 32101266.36 32101266.57 0.0088 0.0045

Jupiter 83178-03-09 05:17 G 32101267.55 32101267.72 32101267.91 0.0532 0.0249

Neptune 83178-10-19 10:20 G 32101491.73 32101491.93 32101492.13 0.0088 0.0036

Neptune 83179-06-01 23:17 G 32101717.27 32101717.47 32101717.69 0.0088 0.0027

Neptune 83180-01-13 12:44 G 32101942.82 32101943.03 32101943.25 0.0088 0.0017

Neptune 83180-08-26 02:10 G 32102168.37 32102168.59 32102168.81 0.0088 0.0008

Neptune 83181-04-08 15:22 G 32102393.92 32102394.14 32102394.36 0.0088 0.0002

Neptune 83181-11-20 04:20 G 32102619.47 32102619.68 32102619.91 0.0088 0.0012

Neptune 83182-07-03 17:32 G 32102845.02 32102845.23 32102845.45 0.0088 0.0021

Neptune 83183-02-14 06:44 G 32103070.58 32103070.78 32103071.00 0.0088 0.0030

Jupiter 83183-05-17 03:22 G 32103162.49 32103162.64 32103162.80 0.0490 0.0321

Uranus 83183-06-18 07:12 G 32103194.71 32103194.80 32103194.90 0.0135 0.0121

Neptune 83183-09-27 19:56 G 32103296.14 32103296.33 32103296.54 0.0088 0.0039

Jupiter 83184-01-07 22:20 G 32103398.23 32103398.43 32103398.64 0.0493 0.0041

Uranus 83184-01-30 12:29 G 32103420.87 32103421.02 32103421.19 0.0135 0.0090

Neptune 83184-05-10 09:08 G 32103521.70 32103521.88 32103522.07 0.0088 0.0048

Jupiter 83184-08-30 19:41 G 32103634.21 32103634.32 32103634.44 0.0498 0.0406

Saturn 83184-09-11 19:41 G 32103646.19 32103646.32 32103646.47 0.0294 0.0213

Uranus 83184-09-12 18:15 G 32103647.07 32103647.26 32103647.46 0.0135 0.0059

Neptune 83184-12-21 22:20 G 32103747.27 32103747.43 32103747.60 0.0088 0.0057

Uranus 83185-04-26 23:32 G 32103873.28 32103873.48 32103873.70 0.0135 0.0028

Saturn 83185-04-29 16:48 G 32103876.00 32103876.20 32103876.41 0.0295 0.0009

Neptune 83185-08-04 11:03 G 32103972.84 32103972.96 32103973.13 0.0088 0.0067

Uranus 83185-12-09 04:48 G 32104099.49 32104099.70 32104099.92 0.0135 0.0003

Saturn 83185-12-15 14:39 G 32104105.97 32104106.11 32104106.27 0.0296 0.0205

Neptune 83186-03-18 00:29 G 32104198.43 32104198.52 32104198.65 0.0088 0.0076

Uranus 83186-07-23 09:51 G 32104325.71 32104325.91 32104326.12 0.0135 0.0033

Neptune 83186-10-29 13:27 G 32104424.03 32104424.06 32104424.14 0.0088 0.0085

Uranus 83187-03-06 14:53 G 32104551.94 32104552.12 32104552.32 0.0135 0.0064

Uranus 83187-10-18 19:41 G 32104778.19 32104778.32 32104778.49 0.0134 0.0095

Uranus 83188-06-01 00:44 G 32105004.47 32105004.53 32105004.63 0.0134 0.0124

Jupiter 83189-03-18 07:12 G 32105294.66 32105294.80 32105294.95 0.0537 0.0373

Jupiter 83189-11-11 15:22 G 32105532.94 32105533.14 32105533.34 0.0533 0.0113

Mars 83191-11-11 20:39 G 32106263.20 32106263.36 32106263.53 0.1702 0.0582

Jupiter 83195-01-20 08:10 G 32107428.74 32107428.84 32107428.95 0.0490 0.0417

Jupiter 83195-09-13 03:36 G 32107664.45 32107664.65 32107664.85 0.0492 0.0060

Jupiter 83196-05-06 00:15 G 32107900.35 32107900.51 32107900.67 0.0496 0.0308

Saturn 83198-07-14 17:03 G 32108700.12 32108700.21 32108700.32 0.0267 0.0236

Saturn 83199-02-28 21:22 G 32108929.19 32108929.39 32108929.60 0.0266 0.0079

Saturn 83199-10-16 00:44 G 32109158.33 32109158.53 32109158.74 0.0265 0.0077

Saturn 83200-06-01 03:22 G 32109387.54 32109387.64 32109387.75 0.0264 0.0230

Jupiter 83200-11-20 18:29 G 32109560.21 32109560.27 32109560.35 0.0537 0.0502

Jupiter 83201-07-17 02:39 G 32109798.41 32109798.61 32109798.81 0.0535 0.0023

Jupiter 83202-03-12 08:53 G 32110036.77 32110036.87 32110036.98 0.0529 0.0450

Jupiter 83207-05-19 08:24 G 32111930.66 32111930.85 32111931.04 0.0491 0.0161

Jupiter 83208-01-10 04:05 G 32112166.49 32112166.67 32112166.85 0.0495 0.0205

Jupiter 83213-03-21 13:41 G 32114063.88 32114064.07 32114064.27 0.0536 0.0160

Jupiter 83213-11-14 21:22 G 32114302.23 32114302.39 32114302.56 0.0531 0.0324

Saturn 83214-03-25 01:41 G 32114432.42 32114432.57 32114432.74 0.0294 0.0185

Saturn 83214-11-09 23:03 G 32114662.25 32114662.46 32114662.66 0.0296 0.0024

Saturn 83215-06-27 20:53 G 32114892.25 32114892.37 32114892.50 0.0297 0.0235

Jupiter 83219-01-22 13:27 G 32116196.89 32116197.06 32116197.24 0.0490 0.0260

Jupiter 83219-09-15 08:39 G 32116432.66 32116432.86 32116433.06 0.0493 0.0104

Jupiter 83220-05-08 06:00 G 32116668.69 32116668.75 32116668.82 0.0498 0.0468

Jupiter 83224-11-24 02:10 G 32118329.42 32118329.59 32118329.76 0.0537 0.0294

Jupiter 83225-07-20 10:48 G 32118567.76 32118567.95 32118568.14 0.0533 0.0195

Uranus 83226-10-31 03:08 G 32119035.52 32119035.63 32119035.74 0.0143 0.0123

Uranus 83227-06-14 14:53 G 32119261.96 32119262.12 32119262.31 0.0143 0.0086

Saturn 83228-01-24 18:44 G 32119486.17 32119486.28 32119486.42 0.0267 0.0215

Uranus 83228-01-27 03:22 G 32119488.44 32119488.64 32119488.85 0.0143 0.0048

Uranus 83228-09-09 15:51 G 32119714.94 32119715.16 32119715.38 0.0143 0.0010

Saturn 83228-09-09 23:03 G 32119715.25 32119715.46 32119715.67 0.0266 0.0058 *

Uranus 83229-04-24 04:20 G 32119941.47 32119941.68 32119941.90 0.0143 0.0028

Saturn 83229-04-27 02:10 G 32119944.39 32119944.59 32119944.79 0.0265 0.0097

Uranus 83229-12-06 16:34 G 32120168.01 32120168.19 32120168.40 0.0144 0.0067

Saturn 83229-12-12 04:34 G 32120173.63 32120173.69 32120173.77 0.0264 0.0248

Mars 83230-04-22 11:46 G 32120304.82 32120304.99 32120305.16 0.1834 0.0264

Uranus 83230-07-21 05:03 G 32120394.58 32120394.71 32120394.88 0.0144 0.0105

Jupiter 83230-09-27 18:00 G 32120463.12 32120463.25 32120463.40 0.0490 0.0357

Uranus 83231-03-04 17:46 G 32120621.23 32120621.24 32120621.28 0.0144 0.0143

Jupiter 83231-05-21 12:58 G 32120698.83 32120699.04 32120699.24 0.0492 0.0009

Jupiter 83232-01-12 09:22 G 32120934.76 32120934.89 32120935.02 0.0497 0.0369

Jupiter 83236-07-29 15:22 G 32122595.02 32122595.14 32122595.26 0.0538 0.0423

Jupiter 83237-03-25 00:15 G 32122833.31 32122833.51 32122833.71 0.0534 0.0064

Jupiter 83242-06-02 23:32 G 32124729.41 32124729.48 32124729.56 0.0489 0.0451

Jupiter 83243-01-24 18:29 G 32124965.08 32124965.27 32124965.47 0.0491 0.0098

Jupiter 83243-09-17 14:39 G 32125200.94 32125201.11 32125201.28 0.0495 0.0270

Saturn 83243-10-05 00:44 G 32125218.37 32125218.53 32125218.71 0.0294 0.0166

Saturn 83244-05-21 22:05 G 32125448.21 32125448.42 32125448.63 0.0295 0.0042

Saturn 83245-01-06 19:56 G 32125678.23 32125678.33 32125678.45 0.0296 0.0253

Jupiter 83248-11-27 10:34 G 32127098.74 32127098.94 32127099.14 0.0535 0.0073

Jupiter 83249-07-23 17:03 G 32127337.08 32127337.21 32127337.35 0.0530 0.0405

Pluto 83254-05-01 01:56 G 32129079.40 32129079.58 32129079.78 0.0065 0.0033

Jupiter 83254-09-29 23:17 G 32129231.29 32129231.47 32129231.66 0.0491 0.0198

Pluto 83254-12-12 06:29 G 32129304.56 32129304.77 32129304.99 0.0066 0.0007

Jupiter 83255-05-23 19:12 G 32129467.11 32129467.30 32129467.49 0.0494 0.0170

Pluto 83255-07-25 10:34 G 32129529.81 32129529.94 32129530.11 0.0066 0.0047

Saturn 83257-08-05 22:34 G 32130272.29 32130272.44 32130272.59 0.0267 0.0194

Mars 83257-09-08 06:15 G 32130305.59 32130305.76 32130305.94 0.1698 0.0295

Saturn 83258-03-23 02:53 G 32130501.40 32130501.62 32130501.83 0.0266 0.0036

Saturn 83258-11-07 06:00 G 32130730.56 32130730.75 32130730.94 0.0265 0.0119

Neptune 83259-01-28 03:08 G 32130812.57 32130812.63 32130812.74 0.0089 0.0082

Neptune 83259-09-10 16:20 G 32131038.06 32131038.18 32131038.31 0.0089 0.0072

Neptune 83260-04-23 05:03 G 32131263.57 32131263.71 32131263.87 0.0089 0.0063

Jupiter 83260-08-01 21:51 G 32131364.22 32131364.41 32131364.60 0.0536 0.0210

Neptune 83260-12-04 17:46 G 32131489.08 32131489.24 32131489.43 0.0089 0.0054

Jupiter 83261-03-28 05:03 G 32131602.54 32131602.71 32131602.89 0.0532 0.0277

Neptune 83261-07-18 06:58 G 32131714.60 32131714.79 32131714.98 0.0089 0.0044

Neptune 83262-02-28 19:27 G 32131940.12 32131940.31 32131940.52 0.0089 0.0035

Neptune 83262-10-12 08:10 G 32132165.64 32132165.84 32132166.06 0.0089 0.0026

Neptune 83263-05-25 21:08 G 32132391.17 32132391.38 32132391.60 0.0089 0.0016

Neptune 83264-01-06 09:51 G 32132616.70 32132616.91 32132617.13 0.0089 0.0007

Neptune 83264-08-18 22:48 G 32132842.23 32132842.45 32132842.67 0.0089 0.0003

Neptune 83265-04-01 11:32 G 32133067.77 32133067.98 32133068.20 0.0089 0.0012

Neptune 83265-11-13 00:29 G 32133293.31 32133293.52 32133293.73 0.0089 0.0021

Earth 83265-11-22 02:53 G 32133302.46 32133302.62 32133302.77 0.2683 0.0446

Moon 83265-11-22 03:36 G 32133302.48 32133302.65 32133302.81 0.2675 0.0187 *

Jupiter 83266-06-05 04:05 G 32133497.51 32133497.67 32133497.84 0.0490 0.0297

Neptune 83266-06-26 12:58 G 32133518.85 32133519.04 32133519.26 0.0089 0.0031

Jupiter 83267-01-26 23:32 G 32133733.28 32133733.48 32133733.68 0.0493 0.0067

Neptune 83267-02-07 01:56 G 32133744.39 32133744.58 32133744.78 0.0089 0.0040

Uranus 83267-02-15 18:15 G 32133753.24 32133753.26 32133753.31 0.0135 0.0134

Jupiter 83267-09-19 20:53 G 32133969.28 32133969.37 32133969.47 0.0498 0.0433

Neptune 83267-09-20 14:39 G 32133969.95 32133970.11 32133970.31 0.0089 0.0050

Uranus 83267-09-30 00:00 G 32133979.37 32133979.50 32133979.65 0.0135 0.0103

Neptune 83268-05-03 03:22 G 32134195.50 32134195.64 32134195.82 0.0089 0.0060

Uranus 83268-05-13 05:17 G 32134205.55 32134205.72 32134205.92 0.0135 0.0072

Neptune 83268-12-14 16:20 G 32134421.06 32134421.18 32134421.33 0.0089 0.0069

Uranus 83268-12-25 10:48 G 32134431.75 32134431.95 32134432.16 0.0135 0.0041

Neptune 83269-07-28 05:32 G 32134646.63 32134646.73 32134646.84 0.0089 0.0078

Uranus 83269-08-08 16:05 G 32134657.96 32134658.17 32134658.39 0.0135 0.0011

Neptune 83270-03-10 17:46 G 32134872.22 32134872.24 32134872.31 0.0089 0.0088

Uranus 83270-03-22 21:22 G 32134884.18 32134884.39 32134884.60 0.0135 0.0021

Uranus 83270-11-04 02:10 G 32135110.41 32135110.59 32135110.80 0.0135 0.0052

Uranus 83271-06-18 07:12 G 32135336.64 32135336.80 32135336.98 0.0134 0.0082

Uranus 83272-01-30 12:00 G 32135562.90 32135563.00 32135563.13 0.0134 0.0112

Jupiter 83272-04-06 08:10 G 32135629.69 32135629.84 32135630.00 0.0537 0.0346

Jupiter 83272-11-30 16:34 G 32135867.99 32135868.19 32135868.38 0.0533 0.0143

Saturn 83273-04-16 07:56 G 32136004.65 32136004.83 32136005.02 0.0294 0.0135

Saturn 83273-12-02 05:03 G 32136234.51 32136234.71 32136234.92 0.0296 0.0074

Saturn	83274-07-20 03:08 G	32136464.58	32136464.63	32136464.69	0.0297	0.0285
Jupiter	83278-02-08 09:22 G	32137763.77	32137763.89	32137764.01	0.0490	0.0393
Jupiter	83278-10-02 04:20 G	32137999.48	32137999.68	32137999.88	0.0492	0.0035
Jupiter	83279-05-26 00:29 G	32138235.37	32138235.52	32138235.67	0.0496	0.0333
Jupiter	83283-12-10 20:24 G	32139895.26	32139895.35	32139895.45	0.0537	0.0476
Jupiter	83284-08-05 05:17 G	32140133.51	32140133.72	32140133.92	0.0535	0.0012
Jupiter	83285-03-31 12:00 G	32140371.92	32140372.00	32140372.09	0.0530	0.0482
Saturn	83287-02-16 01:12 G	32141058.39	32141058.55	32141058.72	0.0267	0.0171
Saturn	83287-10-03 05:03 G	32141287.50	32141287.71	32141287.93	0.0265	0.0016
Saturn	83288-05-19 08:10 G	32141516.66	32141516.84	32141517.03	0.0264	0.0140
Jupiter	83289-10-14 13:41 G	32142030.06	32142030.07	32142030.09	0.0489	0.0486
Jupiter	83290-06-07 08:39 G	32142265.67	32142265.86	32142266.06	0.0491	0.0136
Jupiter	83291-01-29 04:20 G	32142501.50	32142501.68	32142501.86	0.0495	0.0232
Mars	83296-02-17 18:15 G	32144347.10	32144347.26	32144347.42	0.1838	0.0737
Jupiter	83296-04-09 18:15 G	32144399.06	32144399.26	32144399.46	0.0536	0.0125
Jupiter	83296-12-04 01:56 G	32144637.43	32144637.58	32144637.73	0.0531	0.0359
Jupiter	83302-02-11 14:10 G	32146531.92	32146532.09	32146532.27	0.0490	0.0235
Jupiter	83302-10-05 09:36 G	32146767.70	32146767.90	32146768.09	0.0494	0.0132
Saturn	83302-10-28 07:56 G	32146790.65	32146790.83	32146791.03	0.0294	0.0115
Jupiter	83303-05-29 07:27 G	32147003.79	32147003.81	32147003.83	0.0499	0.0496
Saturn	83303-06-15 05:17 G	32147020.53	32147020.72	32147020.92	0.0295	0.0095
Jupiter	83307-12-15 05:17 G	32148664.54	32148664.72	32148664.90	0.0536	0.0261
Jupiter	83308-08-09 12:44 G	32148902.85	32148903.03	32148903.22	0.0532	0.0227
Uranus	83310-07-01 07:12 G	32149593.79	32149593.80	32149593.84	0.0143	0.0142
Uranus	83311-02-12 19:12 G	32149820.17	32149820.30	32149820.47	0.0143	0.0105
Uranus	83311-09-27 07:41 G	32150046.63	32150046.82	32150047.02	0.0143	0.0067
Uranus	83312-05-10 20:10 G	32150273.12	32150273.34	32150273.56	0.0143	0.0029
Uranus	83312-12-23 08:24 G	32150499.63	32150499.85	32150500.08	0.0143	0.0010
Uranus	83313-08-06 20:53 G	32150726.17	32150726.37	32150726.58	0.0144	0.0047
Jupiter	83313-10-17 18:15 G	32150798.11	32150798.26	32150798.41	0.0490	0.0334

Uranus 83314-03-21 09:22 G 32150952.73 32150952.89 32150953.08 0.0144 0.0086

Jupiter 83314-06-10 13:56 G 32151033.88 32151034.08 32151034.28 0.0493 0.0029

Uranus 83314-11-02 21:51 G 32151179.32 32151179.41 32151179.54 0.0144 0.0124

Jupiter 83315-02-01 11:17 G 32151269.85 32151269.97 32151270.09 0.0497 0.0398

Saturn 83316-08-29 04:34 G 32151844.52 32151844.69 32151844.87 0.0267 0.0150

Saturn 83317-04-15 08:53 G 32152073.65 32152073.87 32152074.09 0.0266 0.0008

Saturn 83317-11-30 12:00 G 32152302.83 32152303.00 32152303.17 0.0265 0.0163

Jupiter 83319-08-19 16:34 G 32152930.06 32152930.19 32152930.33 0.0537 0.0394

Jupiter 83320-04-14 00:15 G 32153168.31 32153168.51 32153168.71 0.0533 0.0093

Mars 83323-07-07 15:51 G 32154347.98 32154348.16 32154348.34 0.1695 0.0007

Jupiter 83325-06-22 22:48 G 32155064.37 32155064.45 32155064.56 0.0490 0.0431

Jupiter 83326-02-13 18:29 G 32155300.07 32155300.27 32155300.47 0.0492 0.0074

Jupiter 83326-10-07 14:53 G 32155535.96 32155536.12 32155536.28 0.0496 0.0296

Jupiter 83331-04-24 02:39 G 32157195.57 32157195.61 32157195.65 0.0537 0.0526

Saturn 83331-09-22 19:41 G 32157347.28 32157347.32 32157347.37 0.0293 0.0286

Jupiter 83331-12-18 10:34 G 32157433.74 32157433.94 32157434.15 0.0535 0.0047

Saturn 83332-05-09 15:51 G 32157576.97 32157577.16 32157577.37 0.0295 0.0083

Jupiter 83332-08-12 17:17 G 32157672.11 32157672.22 32157672.34 0.0530 0.0432

Saturn 83332-12-25 13:12 G 32157806.87 32157807.05 32157807.24 0.0296 0.0127

Jupiter 83337-10-19 23:17 G 32159566.29 32159566.47 32159566.67 0.0491 0.0175

Jupiter 83338-06-12 18:58 G 32159802.10 32159802.29 32159802.47 0.0494 0.0194

Neptune 83339-12-21 01:27 G 32160358.50 32160358.56 32160358.62 0.0088 0.0085

Neptune 83340-08-02 14:24 G 32160584.00 32160584.10 32160584.22 0.0088 0.0076

Neptune 83341-03-16 03:36 G 32160809.52 32160809.65 32160809.81 0.0088 0.0067

Neptune 83341-10-27 16:34 G 32161035.04 32161035.19 32161035.38 0.0088 0.0058

Pluto 83342-01-01 09:22 G 32161100.75 32161100.89 32161101.07 0.0078 0.0055

Neptune 83342-06-10 05:46 G 32161260.58 32161260.74 32161260.95 0.0088 0.0049

Pluto 83342-08-14 19:41 G 32161326.10 32161326.32 32161326.54 0.0078 0.0014

Neptune 83343-01-21 19:27 G 32161486.12 32161486.31 32161486.52 0.0088 0.0039

Jupiter 83343-08-22 22:48 G 32161699.25 32161699.45 32161699.64 0.0536 0.0182

Neptune 83343-09-04 08:39 G 32161711.66 32161711.86 32161712.08 0.0088 0.0029

Neptune 83344-04-16 21:51 G 32161937.21 32161937.41 32161937.64 0.0088 0.0020

Jupiter 83344-04-17 06:29 G 32161937.61 32161937.77 32161937.94 0.0532 0.0307 *

Neptune 83344-11-28 11:17 G 32162162.75 32162162.97 32162163.19 0.0088 0.0010

Neptune 83345-07-12 00:29 G 32162388.30 32162388.52 32162388.75 0.0088 0.0003

Neptune 83346-02-22 13:56 G 32162613.86 32162614.08 32162614.31 0.0088 0.0008

Saturn 83346-03-11 08:39 G 32162630.67 32162630.86 32162631.05 0.0267 0.0125

Neptune 83346-10-06 03:08 G 32162839.42 32162839.63 32162839.85 0.0088 0.0018

Saturn 83346-10-26 12:29 G 32162859.81 32162860.02 32162860.24 0.0265 0.0032

Neptune 83347-05-19 16:05 G 32163064.97 32163065.17 32163065.40 0.0088 0.0028

Saturn 83347-06-12 15:22 G 32163088.99 32163089.14 32163089.30 0.0264 0.0186

Neptune 83347-12-31 05:32 G 32163290.53 32163290.73 32163290.94 0.0088 0.0036

Neptune 83348-08-12 18:29 G 32163516.10 32163516.27 32163516.48 0.0088 0.0046

Neptune 83349-03-26 07:41 G 32163741.67 32163741.82 32163742.01 0.0088 0.0055

Jupiter 83349-06-25 03:51 G 32163832.49 32163832.66 32163832.83 0.0490 0.0273

Neptune 83349-11-06 20:53 G 32163967.24 32163967.37 32163967.54 0.0088 0.0064

Jupiter 83350-02-15 22:48 G 32164068.26 32164068.45 32164068.65 0.0493 0.0093

Neptune 83350-06-20 10:05 G 32164192.81 32164192.92 32164193.06 0.0088 0.0074

Jupiter 83350-10-09 20:10 G 32164304.27 32164304.34 32164304.42 0.0498 0.0458

Neptune 83351-01-31 23:32 G 32164418.41 32164418.48 32164418.56 0.0088 0.0083

Uranus 83351-05-31 11:17 G 32164537.87 32164537.97 32164538.09 0.0135 0.0115

Uranus 83352-01-12 16:48 G 32164764.04 32164764.20 32164764.38 0.0135 0.0085

Uranus 83352-08-25 22:20 G 32164990.24 32164990.43 32164990.63 0.0135 0.0054

Uranus 83353-04-09 03:36 G 32165216.45 32165216.65 32165216.87 0.0135 0.0023

Uranus 83353-11-21 08:53 G 32165442.66 32165442.87 32165443.09 0.0135 0.0008

Uranus 83354-07-05 13:41 G 32165668.88 32165669.07 32165669.29 0.0135 0.0039

Uranus 83355-02-16 18:44 G 32165895.11 32165895.28 32165895.47 0.0135 0.0069

Jupiter 83355-04-27 11:32 G 32165964.81 32165964.98 32165965.14 0.0537 0.0315

Uranus 83355-10-01 00:00 G 32166121.36 32166121.50 32166121.65 0.0134 0.0099

Jupiter 83355-12-21 19:56 G 32166203.14 32166203.33 32166203.52 0.0533 0.0177

Uranus 83356-05-14 04:48 G 32166347.65 32166347.70 32166347.76 0.0134 0.0129

Jupiter 83361-02-28 09:08 G 32168098.75 32168098.88 32168099.01 0.0490 0.0370

Saturn 83361-04-03 20:53 G 32168133.29 32168133.37 32168133.46 0.0293 0.0264

Jupiter 83361-10-22 04:05 G 32168334.47 32168334.67 32168334.87 0.0492 0.0010

Saturn 83361-11-19 17:17 G 32168363.01 32168363.22 32168363.42 0.0294 0.0060

Mars 83361-12-16 00:15 G 32168389.38 32168389.51 32168389.63 0.1843 0.1240

Jupiter 83362-06-15 00:44 G 32168570.39 32168570.53 32168570.67 0.0496 0.0360

Saturn 83362-07-07 14:24 G 32168592.93 32168593.10 32168593.29 0.0296 0.0150

Jupiter 83366-12-30 23:17 G 32170230.37 32170230.47 32170230.59 0.0537 0.0446

Jupiter 83367-08-26 07:12 G 32170468.60 32170468.80 32170469.00 0.0534 0.0040

Jupiter 83368-04-20 12:44 G 32170706.98 32170707.03 32170707.08 0.0528 0.0510

Jupiter 83372-11-03 12:15 G 32172364.95 32172365.01 32172365.07 0.0490 0.0468

Jupiter 83373-06-27 08:10 G 32172600.64 32172600.84 32172601.03 0.0492 0.0113

Jupiter 83374-02-18 04:20 G 32172836.52 32172836.68 32172836.86 0.0495 0.0259

Saturn 83375-02-04 06:58 G 32173187.76 32173187.79 32173187.84 0.0269 0.0263

Saturn 83375-09-21 12:15 G 32173416.81 32173417.01 32173417.21 0.0267 0.0103

Saturn 83376-05-07 16:20 G 32173645.97 32173646.18 32173646.39 0.0266 0.0054

Saturn 83376-12-22 19:12 G 32173875.18 32173875.30 32173875.44 0.0265 0.0209

Jupiter 83379-04-30 18:15 G 32174734.06 32174734.26 32174734.46 0.0535 0.0097

Jupiter 83379-12-25 00:44 G 32174972.39 32174972.53 32174972.67 0.0530 0.0385

Jupiter 83385-03-02 12:44 G 32176866.85 32176867.03 32176867.21 0.0491 0.0214

Jupiter 83385-10-24 08:24 G 32177102.66 32177102.85 32177103.05 0.0494 0.0155

Mars 83389-05-04 01:27 G 32178390.39 32178390.56 32178390.74 0.1692 0.0282

Saturn 83390-10-15 06:15 G 32178919.64 32178919.76 32178919.89 0.0293 0.0229

Jupiter 83391-01-03 04:05 G 32178999.48 32178999.67 32178999.85 0.0536 0.0237

Saturn 83391-06-02 02:39 G 32179149.40 32179149.61 32179149.82 0.0295 0.0024

Jupiter 83391-08-29 11:32 G 32179237.81 32179237.98 32179238.17 0.0532 0.0253

Saturn 83392-01-18 00:00 G 32179379.34 32179379.50 32179379.67 0.0296 0.0186

Uranus 83394-10-13 00:58 G 32180378.44 32180378.54 32180378.67 0.0143 0.0122

Uranus 83395-05-27 12:58 G 32180604.88 32180605.04 32180605.23 0.0143 0.0085

Uranus 83396-01-09 01:27 G 32180831.36 32180831.56 32180831.77 0.0143 0.0047

Uranus 83396-08-22 13:56 G 32181057.86 32181058.08 32181058.30 0.0143 0.0009

Jupiter 83396-11-05 17:32 G 32181133.08 32181133.23 32181133.39 0.0490 0.0313

Uranus 83397-04-06 02:24 G 32181284.38 32181284.60 32181284.82 0.0143 0.0029

Jupiter 83397-06-29 12:58 G 32181368.84 32181369.04 32181369.24 0.0493 0.0052

Uranus 83397-11-18 14:53 G 32181510.92 32181511.12 32181511.31 0.0144 0.0067

Jupiter 83398-02-20 09:51 G 32181604.81 32181604.91 32181605.02 0.0497 0.0420

Uranus 83398-07-03 03:22 G 32181737.49 32181737.64 32181737.79 0.0144 0.0105

Uranus 83399-02-14 15:51 G 32181964.15 32181964.16 32181964.18 0.0144 0.0143

Jupiter 83402-09-08 15:22 G 32183265.00 32183265.14 32183265.29 0.0537 0.0372

Jupiter 83403-05-04 23:46 G 32183503.29 32183503.49 32183503.69 0.0534 0.0120

Moon 83403-05-24 00:15 G 32183522.40 32183522.51 32183522.62 0.2654 0.1854

Earth 83403-05-24 04:20 G 32183522.64 32183522.68 32183522.72 0.2650 0.2551

Saturn 83404-08-17 12:15 G 32183973.91 32183974.01 32183974.12 0.0268 0.0235

Saturn 83405-04-03 17:17 G 32184203.01 32184203.22 32184203.43 0.0266 0.0077

Saturn 83405-11-18 20:53 G 32184432.17 32184432.37 32184432.59 0.0265 0.0081

Saturn 83406-07-05 23:46 G 32184661.41 32184661.49 32184661.60 0.0264 0.0233

Jupiter 83408-07-12 21:51 G 32185399.31 32185399.41 32185399.53 0.0490 0.0409

Jupiter 83409-03-05 17:03 G 32185635.01 32185635.21 32185635.41 0.0492 0.0050

Jupiter 83409-10-27 12:58 G 32185870.89 32185871.04 32185871.20 0.0496 0.0320

Earth 83411-05-21 18:00 G 32186442.10 32186442.25 32186442.40 0.2651 0.0930

Moon 83411-05-21 18:00 G 32186442.11 32186442.25 32186442.40 0.2658 0.0710 *

Jupiter 83414-05-14 04:05 G 32187530.60 32187530.67 32187530.75 0.0537 0.0500

Jupiter 83415-01-07 12:44 G 32187768.82 32187769.03 32187769.23 0.0535 0.0016

Jupiter 83415-09-02 19:27 G 32188007.22 32188007.31 32188007.41 0.0530 0.0463

Saturn 83420-04-27 08:39 G 32189705.72 32189705.86 32189706.02 0.0293 0.0206

Jupiter 83420-11-08 21:51 G 32189901.22 32189901.41 32189901.61 0.0491 0.0152

Saturn 83420-12-13 05:17 G 32189935.51 32189935.72 32189935.93 0.0294 0.0002

Jupiter 83421-07-02 17:46 G 32190137.06 32190137.24 32190137.42 0.0494 0.0219

Saturn 83421-07-31 02:24 G 32190165.47 32190165.60 32190165.76 0.0296 0.0210

Neptune 83423-05-03 12:58 G 32190806.99 32190807.04 32190807.11 0.0089 0.0085

Neptune 83423-12-15 01:41 G 32191032.47 32191032.57 32191032.70 0.0089 0.0076

Neptune 83424-07-27 14:53 G 32191257.98 32191258.12 32191258.27 0.0089 0.0066

Neptune 83425-03-10 03:36 G 32191483.49 32191483.65 32191483.82 0.0089 0.0057

Neptune 83425-10-21 16:05 G 32191709.00 32191709.17 32191709.37 0.0089 0.0048

Neptune 83426-06-04 05:03 G 32191934.52 32191934.71 32191934.91 0.0089 0.0039

Jupiter 83426-09-12 00:29 G 32192034.32 32192034.52 32192034.71 0.0535 0.0152

Neptune 83427-01-15 17:46 G 32192160.04 32192160.24 32192160.46 0.0089 0.0029

Jupiter 83427-05-08 07:12 G 32192272.64 32192272.80 32192272.96 0.0531 0.0335

Neptune 83427-08-29 06:58 G 32192385.58 32192385.79 32192386.00 0.0089 0.0020

Mars 83427-10-14 06:44 G 32192431.72 32192431.78 32192431.83 0.1847 0.1725

Neptune 83428-04-10 19:41 G 32192611.10 32192611.32 32192611.54 0.0089 0.0010

Neptune 83428-11-22 08:24 G 32192836.63 32192836.85 32192837.07 0.0089 0.0001

Neptune 83429-07-05 21:08 G 32193062.16 32193062.38 32193062.60 0.0089 0.0009

Neptune 83430-02-16 09:51 G 32193287.70 32193287.91 32193288.13 0.0089 0.0018

Neptune 83430-09-29 22:34 G 32193513.24 32193513.44 32193513.66 0.0089 0.0028

Neptune 83431-05-13 11:17 G 32193738.78 32193738.97 32193739.18 0.0089 0.0037

Neptune 83431-12-25 00:15 G 32193964.33 32193964.51 32193964.70 0.0089 0.0047

Jupiter 83432-07-15 01:27 G 32194167.39 32194167.56 32194167.73 0.0491 0.0254

Neptune 83432-08-06 12:58 G 32194189.88 32194190.04 32194190.22 0.0089 0.0056

Jupiter 83433-03-07 21:22 G 32194403.19 32194403.39 32194403.59 0.0494 0.0115

Neptune 83433-03-20 01:56 G 32194415.44 32194415.58 32194415.73 0.0089 0.0066

Jupiter 83433-10-29 19:12 G 32194639.26 32194639.30 32194639.36 0.0499 0.0483

Neptune 83433-10-31 14:24 G 32194641.00 32194641.10 32194641.24 0.0089 0.0075

Saturn 83434-02-27 15:51 G 32194760.04 32194760.16 32194760.30 0.0269 0.0214

Neptune 83434-06-14 03:08 G 32194866.58 32194866.63 32194866.72 0.0089 0.0085

Saturn 83434-10-14 20:53 G 32194989.16 32194989.37 32194989.59 0.0267 0.0055

Uranus 83435-01-29 21:51 G 32195096.37 32195096.41 32195096.50 0.0135 0.0129

Saturn 83435-06-01 00:58 G 32195218.34 32195218.54 32195218.74 0.0266 0.0103

Uranus 83435-09-13 03:51 G 32195322.52 32195322.66 32195322.82 0.0135 0.0098

Saturn 83436-01-16 04:05 G 32195447.62 32195447.67 32195447.72 0.0265 0.0256

Uranus 83436-04-26 09:36 G 32195548.71 32195548.90 32195549.09 0.0135 0.0067

Uranus 83436-12-08 14:39 G 32195774.91 32195775.11 32195775.33 0.0135 0.0036

Uranus 83437-07-22 19:56 G 32196001.12 32196001.33 32196001.55 0.0135 0.0006

Uranus 83438-03-06 00:58 G 32196227.34 32196227.54 32196227.76 0.0135 0.0026

Jupiter 83438-05-17 11:17 G 32196299.80 32196299.97 32196300.15 0.0536 0.0289

Uranus 83438-10-18 06:15 G 32196453.57 32196453.76 32196453.96 0.0135 0.0056

Jupiter 83439-01-10 18:44 G 32196538.09 32196538.28 32196538.47 0.0532 0.0202

Uranus 83439-06-01 10:48 G 32196679.80 32196679.95 32196680.13 0.0135 0.0087

Uranus 83440-01-13 15:36 G 32196906.06 32196906.15 32196906.28 0.0134 0.0117

Jupiter 83444-03-20 06:00 G 32198433.61 32198433.75 32198433.89 0.0490 0.0354

Jupiter 83444-11-11 01:27 G 32198669.36 32198669.56 32198669.77 0.0492 0.0015

Jupiter 83445-07-04 22:20 G 32198905.31 32198905.43 32198905.57 0.0497 0.0381

Saturn 83449-11-07 18:58 G 32200492.13 32200492.29 32200492.47 0.0293 0.0169

Jupiter 83450-01-19 20:39 G 32200565.24 32200565.36 32200565.48 0.0537 0.0426

Saturn 83450-06-25 15:36 G 32200721.94 32200722.15 32200722.36 0.0295 0.0038

Jupiter 83450-09-15 04:34 G 32200803.48 32200803.69 32200803.89 0.0534 0.0064

Saturn 83451-02-10 12:58 G 32200951.94 32200952.04 32200952.16 0.0296 0.0249

Mars 83455-03-02 11:03 G 32202432.80 32202432.96 32202433.13 0.1688 0.0553

Jupiter 83455-11-24 10:34 G 32202699.87 32202699.94 32202700.02 0.0490 0.0449

Jupiter 83456-07-17 06:15 G 32202935.56 32202935.76 32202935.96 0.0491 0.0091

Jupiter 83457-03-10 02:24 G 32203171.43 32203171.60 32203171.77 0.0495 0.0280

Mars 83459-10-13 18:58 G 32204119.19 32204119.29 32204119.40 0.1834 0.1471

Jupiter 83462-05-20 15:51 G 32205068.96 32205069.16 32205069.36 0.0535 0.0075

Jupiter 83463-01-13 22:48 G 32205307.33 32205307.45 32205307.59 0.0531 0.0410

Saturn 83463-09-09 22:20 G 32205546.28 32205546.43 32205546.59 0.0268 0.0185

Saturn 83464-04-26 03:08 G 32205775.42 32205775.63 32205775.85 0.0266 0.0027

Saturn 83464-12-11 06:58 G 32206004.60 32206004.79 32206004.98 0.0265 0.0130

Jupiter 83468-03-22 10:20 G 32207201.75 32207201.93 32207202.12 0.0491 0.0193

Jupiter 83468-11-13 05:46 G 32207437.55 32207437.74 32207437.93 0.0494 0.0177

Jupiter 83474-01-23 04:20 G 32209334.49 32209334.68 32209334.87 0.0536 0.0210

Jupiter 83474-09-18 12:15 G 32209572.84 32209573.01 32209573.18 0.0532 0.0282

Uranus 83478-06-13 07:12 G 32210936.77 32210936.80 32210936.87 0.0143 0.0139

Uranus 83479-01-25 19:12 G 32211163.16 32211163.30 32211163.47 0.0143 0.0102

Saturn 83479-05-20 23:17 G 32211278.29 32211278.47 32211278.66 0.0293 0.0142

Uranus 83479-09-09 07:27 G 32211389.62 32211389.81 32211390.02 0.0143 0.0065

Jupiter 83479-11-26 14:53 G 32211467.96 32211468.12 32211468.29 0.0490 0.0293

Saturn 83480-01-05 19:56 G 32211508.13 32211508.33 32211508.53 0.0295 0.0065

Uranus 83480-04-22 19:56 G 32211616.11 32211616.33 32211616.55 0.0143 0.0027

Jupiter 83480-07-19 10:20 G 32211703.73 32211703.93 32211704.13 0.0493 0.0075

Saturn 83480-08-22 17:17 G 32211738.16 32211738.22 32211738.31 0.0296 0.0275

Uranus 83480-12-05 08:10 G 32211842.62 32211842.84 32211843.06 0.0143 0.0011

Jupiter 83481-03-12 07:41 G 32211939.73 32211939.82 32211939.91 0.0498 0.0443

Uranus 83481-07-19 20:24 G 32212069.15 32212069.35 32212069.56 0.0144 0.0050

Uranus 83482-03-03 08:53 G 32212295.70 32212295.87 32212296.05 0.0144 0.0088

Uranus 83482-10-15 21:22 G 32212522.30 32212522.39 32212522.51 0.0144 0.0126

Jupiter 83485-09-27 16:34 G 32213600.04 32213600.19 32213600.35 0.0537 0.0345

Jupiter 83486-05-24 00:15 G 32213838.31 32213838.51 32213838.70 0.0533 0.0148

Jupiter 83491-08-01 18:00 G 32215734.13 32215734.25 32215734.37 0.0490 0.0394

Jupiter 83492-03-24 13:41 G 32215969.87 32215970.07 32215970.27 0.0492 0.0031

Jupiter 83492-11-15 10:20 G 32216205.79 32216205.93 32216206.09 0.0496 0.0342

Saturn 83493-03-22 02:24 G 32216332.43 32216332.60 32216332.77 0.0268 0.0163

Saturn 83493-11-06 07:12 G 32216561.58 32216561.80 32216562.01 0.0267 0.0004

Saturn 83494-06-23 11:03 G 32216790.78 32216790.96 32216791.14 0.0266 0.0153

Jupiter 83497-06-02 03:51 G 32217865.57 32217865.66 32217865.75 0.0537 0.0476

Jupiter 83498-01-26 11:17 G 32218103.77 32218103.97 32218104.18 0.0534 0.0011

Jupiter 83498-09-21 16:48 G 32218342.13 32218342.20 32218342.29 0.0529 0.0486

Pluto 83502-11-17 04:20 G 32219858.51 32219858.68 32219858.89 0.0065 0.0034

Jupiter 83503-04-07 22:05 G 32220000.42 32220000.42 32220000.42 0.0490 0.0490

Pluto 83503-06-30 09:08 G 32220083.66 32220083.88 32220084.10 0.0066 0.0006

Jupiter 83503-11-29 18:00 G 32220236.05 32220236.25 32220236.45 0.0491 0.0134

Pluto 83504-02-10 13:12 G 32220308.91 32220309.05 32220309.22 0.0066 0.0046

Neptune 83504-03-25 10:20 G 32220352.93 32220352.93 32220352.97 0.0088 0.0088

Jupiter 83504-07-22 14:10 G 32220471.92 32220472.09 32220472.27 0.0495 0.0238

Neptune 83504-11-05 23:46 G 32220578.40 32220578.49 32220578.59 0.0088 0.0079

Neptune 83505-06-19 12:44 G 32220803.91 32220804.03 32220804.18 0.0088 0.0070

Neptune 83506-01-31 01:56 G 32221029.43 32221029.58 32221029.76 0.0088 0.0060

Neptune 83506-09-13 14:53 G 32221254.96 32221255.12 32221255.32 0.0088 0.0052

Neptune 83507-04-27 04:20 G 32221480.50 32221480.68 32221480.89 0.0088 0.0042

Neptune 83507-12-08 17:32 G 32221706.03 32221706.23 32221706.45 0.0088 0.0032

Neptune 83508-07-21 06:44 G 32221931.58 32221931.78 32221932.01 0.0088 0.0023

Moon 83508-11-25 02:53 G 32222058.48 32222058.62 32222058.77 0.2688 0.0539

Earth 83508-11-25 05:17 G 32222058.57 32222058.72 32222058.88 0.2681 0.0614 *

Saturn 83508-12-01 10:34 G 32222064.74 32222064.94 32222065.14 0.0294 0.0103

Neptune 83509-03-03 20:24 G 32222157.13 32222157.35 32222157.57 0.0088 0.0013

Saturn 83509-07-19 07:12 G 32222294.61 32222294.80 32222295.00 0.0295 0.0105

Jupiter 83509-10-01 20:10 G 32222369.14 32222369.34 32222369.54 0.0536 0.0132

Neptune 83509-10-15 09:36 G 32222382.68 32222382.90 32222383.12 0.0088 0.0004

Jupiter 83510-05-28 03:08 G 32222607.48 32222607.63 32222607.79 0.0531 0.0355

Neptune 83510-05-28 22:48 G 32222608.23 32222608.45 32222608.67 0.0088 0.0005

Neptune 83511-01-09 11:46 G 32222833.78 32222833.99 32222834.22 0.0088 0.0015

Neptune 83511-08-23 01:12 G 32223059.34 32223059.55 32223059.77 0.0088 0.0024

Neptune 83512-04-04 14:39 G 32223284.90 32223285.11 32223285.31 0.0088 0.0034

Neptune 83512-11-16 03:22 G 32223510.46 32223510.64 32223510.85 0.0088 0.0043

Neptune 83513-06-29 16:48 G 32223736.03 32223736.20 32223736.39 0.0088 0.0052

Neptune 83514-02-10 06:15 G 32223961.60 32223961.76 32223961.92 0.0088 0.0061

Neptune 83514-09-23 18:58 G 32224187.18 32224187.29 32224187.44 0.0088 0.0071

Neptune 83515-05-07 08:10 G 32224412.77 32224412.84 32224412.95 0.0088 0.0080

Jupiter 83515-08-04 23:03 G 32224502.28 32224502.46 32224502.64 0.0491 0.0235

Jupiter 83516-03-27 18:29 G 32224738.08 32224738.27 32224738.47 0.0493 0.0135

Earth 83516-11-22 21:51 G 32224978.37 32224978.41 32224978.45 0.2680 0.2588

Uranus 83519-05-14 15:08 G 32225881.02 32225881.13 32225881.27 0.0135 0.0110

Uranus 83519-12-26 20:39 G 32226107.20 32226107.36 32226107.55 0.0135 0.0080

Uranus 83520-08-09 02:10 G 32226333.40 32226333.59 32226333.80 0.0135 0.0049

Mars 83520-12-28 20:53 G 32226475.22 32226475.37 32226475.53 0.1685 0.0827

Uranus 83521-03-23 07:27 G 32226559.60 32226559.81 32226560.03 0.0135 0.0018

Jupiter 83521-06-06 06:58 G 32226634.62 32226634.79 32226634.97 0.0536 0.0270

Uranus 83521-11-04 12:44 G 32226785.82 32226786.03 32226786.25 0.0135 0.0013

Jupiter 83522-01-30 15:08 G 32226872.94 32226873.13 32226873.31 0.0533 0.0224

Uranus 83522-06-18 17:32 G 32227012.04 32227012.23 32227012.45 0.0135 0.0044

Saturn 83522-10-03 09:36 G 32227118.72 32227118.90 32227119.09 0.0267 0.0132

Uranus 83523-01-30 22:34 G 32227238.27 32227238.44 32227238.63 0.0135 0.0074

Saturn 83523-05-20 14:24 G 32227347.88 32227348.10 32227348.31 0.0266 0.0027

Uranus 83523-09-14 03:36 G 32227464.53 32227464.65 32227464.80 0.0135 0.0104

Saturn 83524-01-04 17:46 G 32227577.09 32227577.24 32227577.40 0.0265 0.0182

Uranus 83524-04-27 08:24 G 32227690.84 32227690.85 32227690.88 0.0135 0.0134

Mars 83525-08-11 01:12 G 32228161.40 32228161.55 32228161.69 0.1838 0.0985

Jupiter 83527-04-10 02:53 G 32228768.47 32228768.62 32228768.77 0.0490 0.0334

Jupiter 83527-12-01 22:05 G 32229004.22 32229004.42 32229004.62 0.0492 0.0031

Jupiter 83528-07-24 18:44 G 32229240.17 32229240.28 32229240.40 0.0497 0.0401

Jupiter 83533-02-08 19:12 G 32230900.17 32230900.30 32230900.43 0.0537 0.0403

Jupiter 83533-10-05 03:36 G 32231138.44 32231138.65 32231138.85 0.0534 0.0090

Saturn 83537-10-26 20:24 G 32232621.29 32232621.35 32232621.42 0.0292 0.0276

Saturn 83538-06-13 15:51 G 32232850.96 32232851.16 32232851.37 0.0294 0.0074

Jupiter 83538-12-14 07:12 G 32233034.71 32233034.80 32233034.90 0.0490 0.0431

Saturn 83539-01-29 12:29 G 32233080.84 32233081.02 32233081.21 0.0295 0.0134

Jupiter 83539-08-07 02:39 G 32233270.41 32233270.61 32233270.81 0.0491 0.0071

Jupiter 83540-03-29 22:48 G 32233506.29 32233506.45 32233506.61 0.0495 0.0301

Jupiter 83544-10-14 07:56 G 32235165.81 32235165.83 32235165.87 0.0537 0.0531

Jupiter 83545-06-09 15:51 G 32235403.95 32235404.16 32235404.36 0.0535 0.0049

Jupiter 83546-02-02 22:05 G 32235642.31 32235642.42 32235642.54 0.0530 0.0435

Jupiter 83551-04-12 05:32 G 32237536.54 32237536.73 32237536.92 0.0491 0.0177

Jupiter 83551-12-04 01:41 G 32237772.38 32237772.57 32237772.76 0.0494 0.0195

Saturn 83552-04-14 13:41 G 32237904.87 32237905.07 32237905.27 0.0268 0.0109

Saturn 83552-11-29 18:15 G 32238134.05 32238134.26 32238134.48 0.0267 0.0050

Mars 83552-12-27 22:34 G 32238162.37 32238162.44 32238162.52 0.1695 0.1513

Saturn 83553-07-16 21:51 G 32238363.28 32238363.41 32238363.55 0.0266 0.0206

Jupiter 83557-02-12 02:53 G 32239669.43 32239669.62 32239669.81 0.0536 0.0186

Jupiter 83557-10-08 09:51 G 32239907.74 32239907.91 32239908.08 0.0531 0.0305

Uranus 83562-09-26 03:36 G 32241721.55 32241721.65 32241721.80 0.0143 0.0117

Jupiter 83562-12-16 10:05 G 32241802.75 32241802.92 32241803.08 0.0490 0.0278

Uranus 83563-05-10 16:05 G 32241947.99 32241948.17 32241948.35 0.0143 0.0079

Jupiter 83563-08-09 05:46 G 32242038.55 32242038.74 32242038.94 0.0493 0.0092

Uranus 83563-12-23 04:05 G 32242174.46 32242174.67 32242174.89 0.0143 0.0042

Jupiter 83564-04-01 03:22 G 32242274.57 32242274.64 32242274.72 0.0498 0.0460

Uranus 83564-08-05 16:20 G 32242400.96 32242401.18 32242401.40 0.0143 0.0005

Uranus 83565-03-20 04:48 G 32242627.49 32242627.70 32242627.92 0.0143 0.0034

Uranus 83565-11-01 17:17 G 32242854.03 32242854.22 32242854.41 0.0144 0.0072

Uranus 83566-06-16 05:32 G 32243080.60 32243080.73 32243080.88 0.0144 0.0110

Saturn 83567-05-09 07:27 G 32243407.69 32243407.81 32243407.93 0.0292 0.0237

Saturn 83567-12-25 03:22 G 32243637.43 32243637.64 32243637.85 0.0294 0.0034

Saturn 83568-08-11 00:15 G 32243867.35 32243867.51 32243867.68 0.0295 0.0175

Jupiter 83568-10-17 11:03 G 32243934.81 32243934.96 32243935.13 0.0536 0.0327

Jupiter 83569-06-12 18:44 G 32244173.09 32244173.28 32244173.48 0.0533 0.0167

Jupiter 83574-08-21 14:53 G 32246069.00 32246069.12 32246069.25 0.0490 0.0376

Jupiter 83575-04-14 10:34 G 32246304.73 32246304.94 32246305.14 0.0492 0.0014

Jupiter 83575-12-06 06:58 G 32246540.65 32246540.79 32246540.93 0.0496 0.0360

Jupiter 83580-06-21 21:51 G 32248200.31 32248200.41 32248200.52 0.0537 0.0461

Jupiter 83581-02-15 06:00 G 32248438.54 32248438.75 32248438.95 0.0535 0.0030

Saturn 83581-03-10 16:34 G 32248462.09 32248462.19 32248462.29 0.0269 0.0237

Jupiter 83581-10-11 12:15 G 32248676.96 32248677.01 32248677.07 0.0530 0.0505

Saturn 83581-10-25 21:51 G 32248691.21 32248691.41 32248691.62 0.0267 0.0077

Saturn 83582-06-12 02:10 G 32248920.39 32248920.59 32248920.80 0.0266 0.0081

Saturn 83583-01-27 05:32 G 32249149.64 32249149.73 32249149.84 0.0265 0.0235

Jupiter 83586-04-26 18:44 G 32250335.23 32250335.28 32250335.34 0.0490 0.0471

Mars 83586-10-26 07:12 G 32250517.66 32250517.80 32250517.93 0.1682 0.1077

Jupiter 83586-12-18 14:10 G 32250570.90 32250571.09 32250571.29 0.0491 0.0115

Neptune 83587-08-05 21:51 G 32250801.41 32250801.41 32250801.43 0.0089 0.0089

Jupiter 83587-08-11 10:05 G 32250806.75 32250806.92 32250807.09 0.0494 0.0258

Neptune 83588-03-18 10:20 G 32251026.86 32251026.93 32251027.05 0.0089 0.0080

Neptune 83588-10-29 23:32 G 32251252.36 32251252.48 32251252.62 0.0089 0.0070

Neptune 83589-06-12 12:00 G 32251477.86 32251478.00 32251478.18 0.0089 0.0061

Neptune 83590-01-24 00:44 G 32251703.38 32251703.53 32251703.73 0.0089 0.0052

Pluto 83590-07-19 11:03 G 32251879.84 32251879.96 32251880.13 0.0078 0.0060

Neptune 83590-09-06 13:56 G 32251928.90 32251929.08 32251929.28 0.0089 0.0042

Pluto 83591-03-01 21:22 G 32252105.18 32252105.39 32252105.62 0.0078 0.0010

Neptune 83591-04-20 02:39 G 32252154.42 32252154.61 32252154.83 0.0089 0.0033

Mars 83591-06-08 07:41 G 32252203.66 32252203.82 32252203.99 0.1842 0.0505

Pluto 83591-10-13 06:44 G 32252330.78 32252330.78 32252330.82 0.0078 0.0078

Neptune 83591-12-01 15:36 G 32252379.95 32252380.15 32252380.37 0.0089 0.0023

Neptune 83592-07-14 04:20 G 32252605.47 32252605.68 32252605.91 0.0089 0.0014

Jupiter 83592-10-20 17:46 G 32252704.04 32252704.24 32252704.44 0.0536 0.0109

Neptune 83593-02-24 17:17 G 32252831.00 32252831.22 32252831.44 0.0089 0.0004

Jupiter 83593-06-16 01:12 G 32252942.41 32252942.55 32252942.70 0.0531 0.0381

Neptune 83593-10-08 06:00 G 32253056.54 32253056.75 32253056.97 0.0089 0.0006

Neptune 83594-05-21 18:44 G 32253282.07 32253282.28 32253282.50 0.0089 0.0015

Neptune 83595-01-02 07:27 G 32253507.61 32253507.81 32253508.03 0.0089 0.0025

Neptune 83595-08-15 20:10 G 32253733.16 32253733.34 32253733.56 0.0089 0.0034

Neptune 83596-03-28 09:08 G 32253958.70 32253958.88 32253959.08 0.0089 0.0043

Neptune 83596-11-08 21:36 G 32254184.25 32254184.40 32254184.60 0.0089 0.0053

Saturn 83596-11-18 14:10 G 32254193.95 32254194.09 32254194.24 0.0292 0.0208

Neptune 83597-06-22 10:34 G 32254409.80 32254409.94 32254410.11 0.0089 0.0062

Saturn 83597-07-06 10:05 G 32254423.71 32254423.92 32254424.13 0.0294 0.0004

Neptune 83598-02-02 23:32 G 32254635.36 32254635.48 32254635.61 0.0089 0.0072

Saturn 83598-02-21 06:58 G 32254653.64 32254653.79 32254653.94 0.0295 0.0206

Jupiter 83598-08-23 18:44 G 32254837.10 32254837.28 32254837.46 0.0490 0.0216

Neptune 83598-09-16 12:00 G 32254860.94 32254861.00 32254861.12 0.0089 0.0082

Jupiter 83599-04-16 14:10 G 32255072.90 32255073.09 32255073.28 0.0493 0.0155

Uranus 83603-01-12 02:39 G 32256439.54 32256439.61 32256439.72 0.0136 0.0123

Uranus 83603-08-26 08:24 G 32256665.70 32256665.85 32256666.02 0.0135 0.0092

Uranus 83604-04-08 13:56 G 32256891.90 32256892.08 32256892.28 0.0135 0.0061

Jupiter 83604-06-25 06:15 G 32256969.59 32256969.76 32256969.95 0.0536 0.0246

Uranus 83604-11-20 19:12 G 32257118.10 32257118.30 32257118.52 0.0135 0.0030

Jupiter 83605-02-18 14:10 G 32257207.91 32257208.09 32257208.27 0.0532 0.0249

Uranus 83605-07-05 00:29 G 32257344.31 32257344.52 32257344.74 0.0135 0.0001

Uranus 83606-02-16 05:32 G 32257570.53 32257570.73 32257570.94 0.0135 0.0031

Uranus 83606-09-30 10:34 G 32257796.76 32257796.94 32257797.14 0.0135 0.0062

Uranus 83607-05-14 15:36 G 32258023.00 32258023.15 32258023.31 0.0135 0.0092

Uranus 83607-12-26 20:24 G 32258249.27 32258249.35 32258249.45 0.0135 0.0122

Jupiter 83610-04-28 21:22 G 32259103.24 32259103.39 32259103.55 0.0490 0.0319

Saturn 83610-09-20 20:10 G 32259248.21 32259248.34 32259248.47 0.0269 0.0215

Jupiter 83610-12-20 17:03 G 32259339.01 32259339.21 32259339.41 0.0493 0.0048

Saturn 83611-05-08 01:41 G 32259477.36 32259477.57 32259477.78 0.0268 0.0055

Jupiter 83611-08-13 14:24 G 32259575.00 32259575.10 32259575.21 0.0497 0.0420

Saturn 83611-12-23 06:00 G 32259706.55 32259706.75 32259706.95 0.0266 0.0104

Saturn 83612-08-08 09:36 G 32259935.85 32259935.90 32259935.95 0.0265 0.0258

Jupiter 83616-02-28 17:46 G 32261235.10 32261235.24 32261235.39 0.0537 0.0380

Jupiter 83616-10-24 01:27 G 32261473.36 32261473.56 32261473.76 0.0534 0.0113

Mars 83618-10-25 08:10 G 32262204.72 32262204.84 32262204.96 0.1692 0.1227

Jupiter 83622-01-02 01:41 G 32263369.47 32263369.57 32263369.68 0.0490 0.0418

Jupiter 83622-08-25 21:36 G 32263605.20 32263605.40 32263605.60 0.0492 0.0056

Jupiter 83623-04-18 18:00 G 32263841.10 32263841.25 32263841.41 0.0496 0.0317

Saturn 83626-06-01 00:44 G 32264980.36 32264980.53 32264980.70 0.0293 0.0169

Saturn 83627-01-16 20:53 G 32265210.17 32265210.37 32265210.58 0.0294 0.0038

Saturn 83627-09-03 18:15 G 32265440.15 32265440.26 32265440.38 0.0296 0.0247

Jupiter 83627-11-03 01:56 G 32265500.54 32265500.58 32265500.64 0.0537 0.0515

Jupiter 83628-06-28 09:36 G 32265738.70 32265738.90 32265739.11 0.0535 0.0030

Jupiter 83629-02-21 16:20 G 32265977.08 32265977.18 32265977.29 0.0530 0.0453

Jupiter 83634-05-01 02:24 G 32267871.41 32267871.60 32267871.80 0.0491 0.0157

Jupiter 83634-12-22 22:20 G 32268107.25 32268107.43 32268107.61 0.0494 0.0215

Jupiter 83640-03-02 20:24 G 32270004.15 32270004.35 32270004.54 0.0536 0.0169

Saturn 83640-04-02 04:48 G 32270034.56 32270034.70 32270034.87 0.0268 0.0183

Jupiter 83640-10-27 03:51 G 32270242.50 32270242.66 32270242.82 0.0532 0.0323

Saturn 83640-11-17 10:05 G 32270263.71 32270263.92 32270264.14 0.0267 0.0023

Saturn 83641-07-04 14:24 G 32270492.91 32270493.10 32270493.28 0.0266 0.0135

Jupiter 83646-01-04 06:29 G 32272137.60 32272137.77 32272137.94 0.0490 0.0258

Earth 83646-05-25 04:20 G 32272278.66 32272278.68 32272278.70 0.2651 0.2622

Uranus 83646-05-26 11:32 G 32272279.90 32272279.98 32272280.06 0.0143 0.0132

Jupiter 83646-08-28 01:56 G 32272373.38 32272373.58 32272373.77 0.0493 0.0112

Uranus 83647-01-07 23:17 G 32272506.31 32272506.47 32272506.64 0.0143 0.0095

Jupiter 83647-04-20 23:03 G 32272609.41 32272609.46 32272609.51 0.0497 0.0479

Uranus 83647-08-22 11:17 G 32272732.78 32272732.97 32272733.18 0.0143 0.0058

Uranus 83648-04-04 23:46 G 32272959.28 32272959.49 32272959.71 0.0143 0.0021

Uranus 83648-11-17 12:15 G 32273185.79 32273186.01 32273186.23 0.0143 0.0018

Uranus 83649-07-02 00:15 G 32273412.32 32273412.51 32273412.72 0.0144 0.0056

Uranus 83650-02-13 12:44 G 32273638.88 32273639.03 32273639.21 0.0144 0.0094

Uranus 83650-09-28 01:12 G 32273865.48 32273865.55 32273865.66 0.0144 0.0132

Jupiter 83651-11-06 07:56 G 32274269.66 32274269.83 32274270.00 0.0537 0.0305

Jupiter 83652-07-01 16:05 G 32274507.98 32274508.17 32274508.36 0.0534 0.0191

Mars 83652-08-22 17:03 G 32274560.10 32274560.21 32274560.31 0.1678 0.1338

Earth 83654-05-22 17:46 G 32275198.09 32275198.24 32275198.40 0.2653 0.0856

Moon 83654-05-22 20:24 G 32275198.19 32275198.35 32275198.51 0.2647 0.0958 *

Saturn 83655-12-12 07:56 G 32275766.65 32275766.83 32275767.02 0.0293 0.0138

Saturn 83656-07-29 04:05 G 32275996.47 32275996.67 32275996.88 0.0294 0.0069

Saturn 83657-03-16 01:12 G 32276226.49 32276226.55 32276226.63 0.0296 0.0278

Mars 83657-04-04 13:27 G 32276245.89 32276246.06 32276246.24 0.1846 0.0044

Jupiter 83657-09-09 10:34 G 32276403.81 32276403.94 32276404.09 0.0490 0.0358

Jupiter 83658-05-03 06:00 G 32276639.54 32276639.75 32276639.95 0.0492 0.0010

Jupiter 83658-12-25 02:24 G 32276875.47 32276875.60 32276875.73 0.0496 0.0379

Jupiter 83663-07-11 20:53 G 32278535.26 32278535.37 32278535.49 0.0537 0.0438

Jupiter 83664-03-06 05:03 G 32278773.51 32278773.71 32278773.92 0.0535 0.0055

Jupiter 83664-10-30 11:03 G 32279011.96 32279011.96 32279011.97 0.0529 0.0529

Neptune 83669-02-07 08:10 G 32280572.78 32280572.84 32280572.94 0.0088 0.0083

Jupiter 83669-05-15 13:12 G 32280669.99 32280670.05 32280670.13 0.0490 0.0458

Neptune 83669-09-20 21:51 G 32280798.29 32280798.41 32280798.54 0.0088 0.0073

Saturn 83669-10-13 08:39 G 32280820.69 32280820.86 32280821.04 0.0268 0.0159

Jupiter 83670-01-06 08:53 G 32280905.67 32280905.87 32280906.07 0.0491 0.0098

Neptune 83670-05-04 10:48 G 32281023.81 32281023.95 32281024.11 0.0088 0.0064

Saturn 83670-05-30 13:41 G 32281049.86 32281050.07 32281050.29 0.0267 0.0005

Jupiter 83670-08-30 05:17 G 32281141.55 32281141.72 32281141.88 0.0495 0.0275

Neptune 83670-12-15 23:46 G 32281249.33 32281249.49 32281249.68 0.0088 0.0055

Saturn 83671-01-14 17:32 G 32281279.07 32281279.23 32281279.42 0.0266 0.0158

Neptune 83671-07-29 12:58 G 32281474.87 32281475.04 32281475.25 0.0088 0.0045

Neptune 83672-03-11 02:24 G 32281700.41 32281700.60 32281700.81 0.0088 0.0036

Neptune 83672-10-22 15:36 G 32281925.95 32281926.15 32281926.37 0.0088 0.0026

Neptune 83673-06-05 05:03 G 32282151.49 32282151.71 32282151.93 0.0088 0.0017

Neptune 83674-01-16 18:15 G 32282377.04 32282377.26 32282377.48 0.0088 0.0007

Neptune 83674-08-30 07:27 G 32282602.59 32282602.81 32282603.04 0.0088 0.0003

Neptune 83675-04-12 20:39 G 32282828.15 32282828.36 32282828.59 0.0088 0.0012

Jupiter 83675-11-09 16:20 G 32283038.98 32283039.18 32283039.38 0.0535 0.0084

Neptune 83675-11-24 09:51 G 32283053.70 32283053.91 32283054.13 0.0088 0.0021

Jupiter 83676-07-04 23:03 G 32283277.33 32283277.46 32283277.60 0.0531 0.0404

Neptune 83676-07-06 23:17 G 32283279.26 32283279.47 32283279.68 0.0088 0.0031

Neptune 83677-02-17 12:15 G 32283504.83 32283505.01 32283505.22 0.0088 0.0040

Neptune 83677-10-01 01:41 G 32283730.39 32283730.57 32283730.76 0.0088 0.0049

Neptune 83678-05-14 14:24 G 32283955.96 32283956.10 32283956.29 0.0088 0.0059

Neptune 83678-12-26 03:51 G 32284181.54 32284181.66 32284181.82 0.0088 0.0068

Neptune 83679-08-08 17:03 G 32284407.12 32284407.21 32284407.33 0.0088 0.0077

Neptune 83680-03-21 06:29 G 32284632.74 32284632.77 32284632.82 0.0088 0.0086

Jupiter 83681-09-11 13:41 G 32285171.88 32285172.07 32285172.25 0.0491 0.0201

Jupiter 83682-05-05 09:22 G 32285407.70 32285407.89 32285408.08 0.0494 0.0172

Mars 83684-08-21 18:15 G 32286247.11 32286247.26 32286247.40 0.1689 0.0955

Saturn 83685-06-23 17:32 G 32286553.04 32286553.23 32286553.43 0.0293 0.0100

Saturn 83686-02-08 14:10 G 32286782.90 32286783.09 32286783.29 0.0295 0.0108

Uranus 83686-09-11 14:53 G 32286998.12 32286998.12 32286998.17 0.0136 0.0135

Uranus 83687-04-25 20:39 G 32287224.24 32287224.36 32287224.51 0.0135 0.0104

Jupiter 83687-07-15 00:15 G 32287304.33 32287304.51 32287304.70 0.0536 0.0227

Uranus 83687-12-08 01:56 G 32287450.42 32287450.58 32287450.78 0.0135 0.0074

Jupiter 83688-03-09 07:56 G 32287542.66 32287542.83 32287543.01 0.0532 0.0268

Uranus 83688-07-21 07:27 G 32287676.61 32287676.81 32287677.02 0.0135 0.0042

Uranus 83689-03-04 12:44 G 32287902.82 32287903.03 32287903.25 0.0135 0.0012

Uranus 83689-10-16 18:00 G 32288129.04 32288129.25 32288129.47 0.0135 0.0019

Uranus 83690-05-30 23:03 G 32288355.26 32288355.46 32288355.66 0.0135 0.0050

Uranus 83691-01-12 03:51 G 32288581.50 32288581.66 32288581.84 0.0135 0.0080

Uranus 83691-08-26 08:53 G 32288807.76 32288807.87 32288808.00 0.0135 0.0110

Jupiter 83693-05-17 18:44 G 32289438.12 32289438.28 32289438.44 0.0490 0.0299

Jupiter 83694-01-08 14:10 G 32289673.89 32289674.09 32289674.29 0.0493 0.0070

Jupiter 83694-09-01 11:17 G 32289909.88 32289909.97 32289910.07 0.0497 0.0439

Jupiter 83699-03-19 11:03 G 32291569.81 32291569.96 32291570.11 0.0537 0.0363

Saturn 83699-04-25 17:17 G 32291607.04 32291607.22 32291607.42 0.0268 0.0127

Jupiter 83699-11-12 18:44 G 32291808.09 32291808.28 32291808.48 0.0534 0.0132

Saturn 83699-12-10 22:05 G 32291836.21 32291836.42 32291836.64 0.0266 0.0033

Saturn 83700-07-28 01:56 G 32292065.44 32292065.58 32292065.74 0.0265 0.0189

Jupiter 83705-01-21 22:48 G 32293704.34 32293704.45 32293704.57 0.0490 0.0398

Jupiter 83705-09-14 18:15 G 32293940.05 32293940.26 32293940.46 0.0491 0.0035

Jupiter 83706-05-08 14:10 G 32294175.94 32294176.09 32294176.24 0.0495 0.0337

Jupiter 83710-11-22 22:34 G 32295835.37 32295835.44 32295835.52 0.0537 0.0496

Jupiter 83711-07-19 06:44 G 32296073.57 32296073.78 32296073.98 0.0535 0.0007

Jupiter 83712-03-13 13:56 G 32296311.99 32296312.08 32296312.17 0.0530 0.0477

Saturn 83714-05-20 05:46 G 32297109.67 32297109.74 32297109.82 0.0292 0.0271

Saturn 83715-01-05 01:12 G 32297339.35 32297339.55 32297339.75 0.0293 0.0069

Saturn 83715-08-22 21:36 G 32297569.22 32297569.40 32297569.59 0.0295 0.0140

Jupiter 83717-05-20 22:20 G 32298206.24 32298206.43 32298206.63 0.0491 0.0138

Jupiter 83718-01-11 18:00 G 32298442.07 32298442.25 32298442.42 0.0494 0.0235

Mars 83718-06-21 03:36 G 32298602.59 32298602.65 32298602.70 0.1675 0.1577

Mars 83723-01-31 19:41 G 32300288.16 32300288.32 32300288.49 0.1850 0.0493

Jupiter 83723-03-23 19:41 G 32300339.12 32300339.32 32300339.52 0.0536 0.0143

Jupiter 83723-11-17 03:08 G 32300577.48 32300577.63 32300577.79 0.0532 0.0350

Saturn 83728-03-21 14:53 G 32302164.10 32302164.12 32302164.16 0.0269 0.0266

Saturn 83728-11-05 20:39 G 32302393.17 32302393.36 32302393.56 0.0268 0.0105

Jupiter 83729-01-24 01:27 G 32302472.39 32302472.56 32302472.74 0.0490 0.0242

Saturn 83729-06-23 01:12 G 32302622.34 32302622.55 32302622.77 0.0267 0.0055

Jupiter 83729-09-16 21:08 G 32302708.18 32302708.38 32302708.57 0.0493 0.0130

Saturn 83730-02-07 04:48 G 32302851.58 32302851.70 32302851.84 0.0266 0.0210

Jupiter 83730-05-10 18:44 G 32302944.27 32302944.28 32302944.28 0.0498 0.0497

Uranus 83730-09-08 07:12 G 32303064.67 32303064.80 32303064.95 0.0143 0.0111

Uranus 83731-04-22 19:12 G 32303291.13 32303291.30 32303291.50 0.0143 0.0074

Uranus 83731-12-05 07:27 G 32303517.61 32303517.81 32303518.03 0.0143 0.0037

Uranus 83732-07-18 19:56 G 32303744.11 32303744.33 32303744.55 0.0143 0.0002

Uranus 83733-03-02 08:24 G 32303970.64 32303970.85 32303971.06 0.0143 0.0040

Uranus 83733-10-14 20:39 G 32304197.19 32304197.36 32304197.56 0.0144 0.0078

Uranus 83734-05-29 09:22 G 32304423.77 32304423.89 32304424.03 0.0144 0.0116

Jupiter 83734-11-26 07:12 G 32304604.63 32304604.80 32304604.98 0.0537 0.0281

Jupiter 83735-07-22 15:08 G 32304842.94 32304843.13 32304843.32 0.0533 0.0216

Jupiter 83740-09-29 06:15 G 32306738.62 32306738.76 32306738.91 0.0490 0.0342

Jupiter 83741-05-23 01:41 G 32306974.37 32306974.57 32306974.78 0.0492 0.0027

Jupiter 83742-01-13 22:34 G 32307210.32 32307210.44 32307210.56 0.0496 0.0397

Saturn 83743-11-30 12:58 G 32307895.93 32307896.04 32307896.17 0.0292 0.0238

Saturn 83744-07-17 08:53 G 32308125.66 32308125.87 32308126.08 0.0294 0.0034

Saturn 83745-03-04 05:46 G 32308355.58 32308355.74 32308355.91 0.0295 0.0176

Jupiter 83746-07-31 15:36 G 32308870.03 32308870.15 32308870.28 0.0537 0.0419

Jupiter 83747-03-26 23:32 G 32309108.27 32309108.48 32309108.68 0.0534 0.0076

Mars 83750-06-20 04:05 G 32310289.51 32310289.67 32310289.83 0.1685 0.0680

Pluto 83751-06-03 07:56 G 32310637.66 32310637.83 32310638.04 0.0065 0.0032

Earth 83751-11-27 07:41 G 32310814.67 32310814.82 32310814.97 0.2680 0.0762

Moon 83751-11-27 12:00 G 32310814.86 32310815.00 32310815.14 0.2676 0.1282 *

Pluto 83752-01-14 12:29 G 32310862.82 32310863.02 32310863.25 0.0066 0.0009

Jupiter 83752-06-04 11:03 G 32311004.88 32311004.96 32311005.06 0.0490 0.0438

Neptune 83752-06-20 19:12 G 32311021.23 32311021.30 32311021.38 0.0089 0.0083

Pluto 83752-08-26 17:03 G 32311088.07 32311088.21 32311088.36 0.0066 0.0048

Jupiter 83753-01-26 06:58 G 32311240.59 32311240.79 32311240.99 0.0491 0.0076

Neptune 83753-02-01 07:56 G 32311246.72 32311246.83 32311246.96 0.0089 0.0074

Neptune 83753-09-14 20:39 G 32311472.23 32311472.36 32311472.53 0.0089 0.0065

Jupiter 83753-09-19 03:08 G 32311476.47 32311476.63 32311476.79 0.0495 0.0297

Neptune 83754-04-28 09:51 G 32311697.74 32311697.91 32311698.08 0.0089 0.0055

Neptune 83754-12-09 22:20 G 32311923.26 32311923.43 32311923.63 0.0089 0.0046

Neptune 83755-07-23 11:32 G 32312148.78 32312148.98 32312149.18 0.0089 0.0036

Neptune 83756-03-05 00:15 G 32312374.31 32312374.51 32312374.73 0.0089 0.0027

Neptune 83756-10-16 13:12 G 32312599.84 32312600.05 32312600.26 0.0089 0.0017

Neptune 83757-05-30 01:56 G 32312825.36 32312825.58 32312825.80 0.0089 0.0008

Saturn 83757-10-01 23:17 G 32312950.38 32312950.47 32312950.59 0.0269 0.0234

Neptune 83758-01-10 14:39 G 32313050.89 32313051.11 32313051.33 0.0089 0.0002

Saturn 83758-05-19 05:03 G 32313179.50 32313179.71 32313179.92 0.0267 0.0073

Neptune 83758-08-24 03:36 G 32313276.43 32313276.65 32313276.87 0.0089 0.0011

Jupiter 83758-11-29 10:05 G 32313373.71 32313373.92 32313374.12 0.0535 0.0065

Saturn 83759-01-03 09:22 G 32313408.69 32313408.89 32313409.10 0.0266 0.0086

Neptune 83759-04-06 16:05 G 32313501.97 32313502.17 32313502.39 0.0089 0.0021

Jupiter 83759-07-25 17:03 G 32313612.09 32313612.21 32313612.34 0.0531 0.0423

Saturn 83759-08-20 12:58 G 32313637.95 32313638.04 32313638.13 0.0265 0.0240

Neptune 83759-11-18 04:48 G 32313727.51 32313727.70 32313727.92 0.0089 0.0031

Moon 83759-11-25 00:44 G 32313734.43 32313734.53 32313734.63 0.2672 0.2097

Earth 83759-11-25 00:29 G 32313734.45 32313734.52 32313734.58 0.2679 0.2424 *

Neptune 83760-06-30 17:17 G 32313953.05 32313953.22 32313953.44 0.0089 0.0041

Neptune 83761-02-11 06:15 G 32314178.59 32314178.76 32314178.95 0.0089 0.0049

Neptune 83761-09-24 19:27 G 32314404.15 32314404.31 32314404.47 0.0089 0.0059

Neptune 83762-05-08 07:41 G 32314629.70 32314629.82 32314629.98 0.0089 0.0069

Neptune 83762-12-19 20:39 G 32314855.27 32314855.36 32314855.48 0.0089 0.0078

Neptune 83763-08-02 09:08 G 32315080.86 32315080.88 32315080.95 0.0089 0.0088

Jupiter 83764-10-01 11:17 G 32315506.78 32315506.97 32315507.16 0.0490 0.0178

Jupiter 83765-05-25 06:29 G 32315742.59 32315742.77 32315742.96 0.0493 0.0194

Jupiter 83770-08-03 21:36 G 32317639.21 32317639.40 32317639.59 0.0537 0.0204

Uranus 83770-12-25 08:53 G 32317782.77 32317782.87 32317782.99 0.0135 0.0116

Jupiter 83771-03-30 05:46 G 32317877.57 32317877.74 32317877.91 0.0533 0.0293

Uranus 83771-08-08 14:39 G 32318008.94 32318009.11 32318009.28 0.0135 0.0085

Uranus 83772-03-21 19:41 G 32318235.14 32318235.32 32318235.53 0.0135 0.0055

Uranus 83772-11-03 01:12 G 32318461.34 32318461.55 32318461.77 0.0135 0.0023

Saturn 83773-06-11 20:24 G 32318682.21 32318682.35 32318682.50 0.0292 0.0207

Uranus 83773-06-17 06:29 G 32318687.55 32318687.77 32318687.98 0.0135 0.0007

Saturn 83774-01-27 16:20 G 32318911.97 32318912.18 32318912.39 0.0294 0.0004

Uranus 83774-01-29 11:17 G 32318913.77 32318913.97 32318914.19 0.0135 0.0038

Uranus	83774-09-12 16:34 G	32319140.01	32319140.19	32319140.38	0.0135	0.0068
Saturn	83774-09-14 13:27 G	32319141.91	32319142.06	32319142.21	0.0295	0.0207
Uranus	83775-04-26 21:36 G	32319366.25	32319366.40	32319366.55	0.0134	0.0098
Uranus	83775-12-09 02:24 G	32319592.54	32319592.60	32319592.67	0.0134	0.0128
Jupiter	83776-06-06 15:36 G	32319772.98	32319773.15	32319773.32	0.0490	0.0280
Jupiter	83777-01-28 10:48 G	32320008.75	32320008.95	32320009.15	0.0492	0.0090
Jupiter	83777-09-21 07:27 G	32320244.74	32320244.81	32320244.89	0.0497	0.0460
Jupiter	83782-04-08 10:34 G	32321904.79	32321904.94	32321905.10	0.0537	0.0339
Jupiter	83782-12-02 18:58 G	32322143.09	32322143.29	32322143.48	0.0534	0.0159
Saturn	83787-04-14 02:24 G	32323736.48	32323736.60	32323736.74	0.0269	0.0212
Saturn	83787-11-29 07:41 G	32323965.61	32323965.82	32323966.03	0.0267	0.0051
Jupiter	83788-02-10 18:44 G	32324039.16	32324039.28	32324039.42	0.0490	0.0381
Saturn	83788-07-15 11:46 G	32324194.80	32324194.99	32324195.19	0.0266	0.0107
Jupiter	83788-10-03 14:10 G	32324274.89	32324275.09	32324275.30	0.0492	0.0016
Mars	83788-11-28 01:12 G	32324330.41	32324330.55	32324330.70	0.1855	0.1015
Saturn	83789-03-01 14:53 G	32324424.10	32324424.12	32324424.17	0.0265	0.0262
Jupiter	83789-05-27 10:20 G	32324510.80	32324510.93	32324511.07	0.0496	0.0358
Jupiter	83793-12-11 23:03 G	32326170.36	32326170.46	32326170.56	0.0537	0.0470
Jupiter	83794-08-07 06:58 G	32326408.59	32326408.79	32326409.00	0.0535	0.0022
Jupiter	83795-04-02 13:41 G	32326647.01	32326647.07	32326647.13	0.0530	0.0503
Jupiter	83799-10-16 23:17 G	32328305.44	32328305.47	32328305.52	0.0490	0.0478
Jupiter	83800-06-09 19:12 G	32328541.10	32328541.30	32328541.50	0.0491	0.0118
Jupiter	83801-01-31 15:08 G	32328776.96	32328777.13	32328777.30	0.0494	0.0255
Saturn	83802-12-24 02:10 G	32329468.43	32329468.59	32329468.76	0.0293	0.0177
Saturn	83803-08-10 22:34 G	32329698.23	32329698.44	32329698.64	0.0294	0.0030
Saturn	83804-03-27 19:41 G	32329928.21	32329928.32	32329928.45	0.0296	0.0240
Jupiter	83806-04-12 15:22 G	32330673.94	32330674.14	32330674.33	0.0536	0.0121
Jupiter	83806-12-06 22:34 G	32330912.29	32330912.44	32330912.58	0.0532	0.0371
Jupiter	83812-02-14 00:29 G	32332807.35	32332807.52	32332807.71	0.0491	0.0219
Jupiter	83812-10-06 20:10 G	32333043.15	32333043.34	32333043.54	0.0493	0.0155

Uranus 83814-05-09 12:58 G 32333622.95 32333623.04 32333623.14 0.0143 0.0128

Uranus 83814-12-22 00:44 G 32333849.37 32333849.53 32333849.71 0.0143 0.0091

Uranus 83815-08-05 12:58 G 32334075.84 32334076.04 32334076.25 0.0143 0.0054

Uranus 83816-03-19 01:27 G 32334302.34 32334302.56 32334302.78 0.0143 0.0016

Mars 83816-04-17 13:56 G 32334331.91 32334332.08 32334332.25 0.1682 0.0405

Saturn 83816-10-25 10:05 G 32334522.77 32334522.92 32334523.08 0.0268 0.0182

Uranus 83816-10-31 13:56 G 32334528.86 32334529.08 32334529.30 0.0143 0.0022

Saturn 83817-06-11 15:08 G 32334751.92 32334752.13 32334752.35 0.0267 0.0021

Uranus 83817-06-15 02:10 G 32334755.39 32334755.59 32334755.80 0.0144 0.0060

Jupiter 83817-12-16 01:56 G 32334939.41 32334939.58 32334939.76 0.0536 0.0260

Saturn 83818-01-26 18:58 G 32334981.11 32334981.29 32334981.48 0.0266 0.0137

Uranus 83818-01-27 14:39 G 32334981.96 32334982.11 32334982.28 0.0144 0.0098

Jupiter 83818-08-11 09:51 G 32335177.72 32335177.91 32335178.09 0.0533 0.0237

Uranus 83818-09-11 03:08 G 32335208.58 32335208.63 32335208.72 0.0144 0.0136

Jupiter 83823-10-20 04:48 G 32337073.56 32337073.70 32337073.86 0.0490 0.0319

Jupiter 83824-06-12 00:15 G 32337309.31 32337309.51 32337309.71 0.0492 0.0050

Jupiter 83825-02-02 20:39 G 32337545.25 32337545.36 32337545.46 0.0496 0.0420

Jupiter 83829-08-20 13:27 G 32339204.93 32339205.06 32339205.20 0.0537 0.0396

Jupiter 83830-04-15 21:51 G 32339443.21 32339443.41 32339443.61 0.0535 0.0102

Saturn 83832-07-05 08:53 G 32340254.69 32340254.87 32340255.05 0.0293 0.0147

Saturn 83833-02-20 05:03 G 32340484.51 32340484.71 32340484.91 0.0295 0.0060

Neptune 83833-05-13 16:34 G 32340567.15 32340567.19 32340567.26 0.0088 0.0086

Saturn 83833-10-08 02:24 G 32340714.52 32340714.60 32340714.69 0.0296 0.0270

Neptune 83833-12-25 05:46 G 32340792.64 32340792.74 32340792.86 0.0088 0.0077

Neptune 83834-08-07 18:44 G 32341018.16 32341018.28 32341018.45 0.0088 0.0068

Neptune 83835-03-21 08:24 G 32341243.69 32341243.85 32341244.02 0.0088 0.0058

Jupiter 83835-06-25 09:22 G 32341339.79 32341339.89 32341340.00 0.0490 0.0417

Neptune 83835-11-01 21:22 G 32341469.22 32341469.39 32341469.59 0.0088 0.0049

Jupiter 83836-02-16 04:48 G 32341575.50 32341575.70 32341575.90 0.0491 0.0053

Neptune 83836-06-14 10:34 G 32341694.75 32341694.94 32341695.15 0.0088 0.0039

Jupiter 83836-10-09 00:29 G 32341811.37 32341811.52 32341811.67 0.0495 0.0320

Neptune 83837-01-26 00:00 G 32341920.29 32341920.50 32341920.71 0.0088 0.0029

Neptune 83837-09-08 12:58 G 32342145.84 32342146.04 32342146.27 0.0088 0.0021

Neptune 83838-04-22 02:24 G 32342371.38 32342371.60 32342371.82 0.0088 0.0011

Neptune 83838-12-03 15:36 G 32342596.93 32342597.15 32342597.37 0.0088 0.0001

Pluto 83839-02-03 15:36 G 32342659.00 32342659.15 32342659.31 0.0078 0.0055

Neptune 83839-07-17 04:48 G 32342822.48 32342822.70 32342822.92 0.0088 0.0008

Pluto 83839-09-17 01:27 G 32342884.34 32342884.56 32342884.78 0.0078 0.0014

Neptune 83840-02-27 18:00 G 32343048.04 32343048.25 32343048.48 0.0088 0.0018

Neptune 83840-10-10 07:12 G 32343273.60 32343273.80 32343274.02 0.0088 0.0027

Jupiter 83841-04-25 02:39 G 32343470.58 32343470.61 32343470.66 0.0537 0.0526

Neptune 83841-05-23 20:10 G 32343499.16 32343499.34 32343499.56 0.0088 0.0037

Jupiter 83841-12-19 10:48 G 32343708.75 32343708.95 32343709.16 0.0536 0.0037

Neptune 83842-01-04 09:36 G 32343724.72 32343724.90 32343725.10 0.0088 0.0046

Jupiter 83842-08-14 18:15 G 32343947.16 32343947.26 32343947.37 0.0531 0.0452

Neptune 83842-08-17 23:03 G 32343950.29 32343950.46 32343950.63 0.0088 0.0055

Neptune 83843-03-31 12:00 G 32344175.87 32344176.00 32344176.17 0.0088 0.0065

Neptune 83843-11-12 01:27 G 32344401.45 32344401.56 32344401.69 0.0088 0.0074

Neptune 83844-06-24 14:39 G 32344627.05 32344627.11 32344627.19 0.0088 0.0083

Saturn 83846-05-07 12:29 G 32345308.85 32345309.02 32345309.20 0.0268 0.0160

Saturn 83846-12-22 17:17 G 32345538.01 32345538.22 32345538.44 0.0267 0.0002

Saturn 83847-08-08 20:53 G 32345767.21 32345767.37 32345767.55 0.0266 0.0157

Jupiter 83847-10-22 08:24 G 32345841.66 32345841.85 32345842.05 0.0490 0.0158

Jupiter 83848-06-14 03:51 G 32346077.48 32346077.66 32346077.84 0.0494 0.0216

Jupiter 83853-08-23 23:17 G 32347974.28 32347974.47 32347974.66 0.0536 0.0173

Jupiter 83854-04-19 06:58 G 32348212.63 32348212.79 32348212.96 0.0532 0.0324

Uranus 83854-08-25 21:36 G 32348341.33 32348341.40 32348341.47 0.0136 0.0127

Mars 83854-09-26 07:12 G 32348372.71 32348372.80 32348372.90 0.1859 0.1522

Uranus 83855-04-09 02:53 G 32348567.48 32348567.62 32348567.78 0.0135 0.0097

Uranus 83855-11-21 08:24 G 32348793.67 32348793.85 32348794.04 0.0135 0.0066

Uranus 83856-07-04 13:41 G 32349019.86 32349020.07 32349020.28 0.0135 0.0035

Uranus 83857-02-15 18:58 G 32349246.07 32349246.29 32349246.50 0.0135 0.0004

Uranus 83857-09-30 00:15 G 32349472.30 32349472.51 32349472.72 0.0135 0.0026

Uranus 83858-05-14 05:03 G 32349698.53 32349698.71 32349698.92 0.0135 0.0057

Uranus 83858-12-26 09:51 G 32349924.76 32349924.91 32349925.09 0.0135 0.0087

Jupiter 83859-06-27 13:41 G 32350107.90 32350108.07 32350108.24 0.0490 0.0259

Uranus 83859-08-09 14:39 G 32350151.03 32350151.11 32350151.24 0.0134 0.0117

Jupiter 83860-02-18 09:08 G 32350343.68 32350343.88 32350344.08 0.0493 0.0113

Jupiter 83860-10-11 06:00 G 32350579.72 32350579.75 32350579.81 0.0497 0.0483

Saturn 83862-01-15 12:29 G 32351040.83 32351041.02 32351041.21 0.0293 0.0120

Saturn 83862-09-02 09:08 G 32351270.69 32351270.88 32351271.08 0.0295 0.0089

Jupiter 83865-04-28 08:10 G 32352239.67 32352239.84 32352240.00 0.0537 0.0314

Jupiter 83865-12-22 15:36 G 32352477.96 32352478.15 32352478.35 0.0534 0.0185

Jupiter 83871-03-02 18:44 G 32354374.15 32354374.28 32354374.42 0.0490 0.0357

Jupiter 83871-10-24 14:24 G 32354609.90 32354610.10 32354610.31 0.0492 0.0017

Jupiter 83872-06-16 10:48 G 32354845.83 32354845.95 32354846.08 0.0496 0.0384

Saturn 83875-11-17 19:12 G 32356095.12 32356095.30 32356095.49 0.0268 0.0132

Saturn 83876-07-03 23:46 G 32356324.28 32356324.49 32356324.71 0.0266 0.0028

Jupiter 83876-12-31 19:27 G 32356505.20 32356505.31 32356505.42 0.0537 0.0448

Saturn 83877-02-18 03:22 G 32356553.49 32356553.64 32356553.80 0.0265 0.0184

Jupiter 83877-08-27 02:53 G 32356743.42 32356743.62 32356743.82 0.0535 0.0046

Jupiter 83878-04-22 09:22 G 32356981.87 32356981.89 32356981.92 0.0530 0.0525

Mars 83882-02-12 23:46 G 32358374.32 32358374.49 32358374.67 0.1679 0.0147

Jupiter 83882-11-05 23:03 G 32358640.39 32358640.46 32358640.54 0.0490 0.0455

Jupiter 83883-06-29 18:58 G 32358876.09 32358876.29 32358876.49 0.0491 0.0092

Jupiter 83884-02-20 14:39 G 32359111.94 32359112.11 32359112.28 0.0494 0.0281

Mars 83886-09-25 20:53 G 32360060.32 32360060.37 32360060.42 0.1846 0.1757

Jupiter 83889-05-01 14:24 G 32361008.90 32361009.10 32361009.30 0.0536 0.0094

Moon 83889-05-26 22:05 G 32361034.33 32361034.42 32361034.50 0.2652 0.2244

Jupiter 83889-12-25 22:05 G 32361247.29 32361247.42 32361247.56 0.0532 0.0399

Saturn 83891-07-28 18:58 G 32361827.09 32361827.29 32361827.49 0.0294 0.0090

Saturn 83892-03-14 15:36 G 32362056.96 32362057.15 32362057.34 0.0295 0.0119

Jupiter 83895-03-04 23:46 G 32363142.30 32363142.49 32363142.67 0.0490 0.0195

Jupiter 83895-10-26 18:58 G 32363378.10 32363378.29 32363378.48 0.0493 0.0179

Moon 83897-05-24 13:27 G 32363953.92 32363954.06 32363954.21 0.2659 0.0897

Earth 83897-05-24 17:46 G 32363954.09 32363954.24 32363954.40 0.2654 0.0792 *

Uranus 83898-08-21 06:58 G 32364407.66 32364407.79 32364407.95 0.0143 0.0108

Uranus 83899-04-04 19:12 G 32364634.12 32364634.30 32364634.50 0.0143 0.0071

Uranus 83899-11-17 07:41 G 32364860.60 32364860.82 32364861.03 0.0143 0.0033

Uranus 83900-07-01 19:56 G 32365087.11 32365087.33 32365087.55 0.0143 0.0004

Jupiter 83901-01-05 03:36 G 32365274.47 32365274.65 32365274.84 0.0537 0.0231

Uranus 83901-02-13 08:10 G 32365313.64 32365313.84 32365314.06 0.0143 0.0043

Jupiter 83901-08-31 11:46 G 32365512.82 32365512.99 32365513.18 0.0533 0.0270

Uranus 83901-09-27 20:39 G 32365540.19 32365540.36 32365540.56 0.0144 0.0081

Uranus 83902-05-12 09:22 G 32365766.78 32365766.89 32365767.03 0.0144 0.0119

Saturn 83905-05-30 20:53 G 32366881.17 32366881.37 32366881.57 0.0267 0.0112

Saturn 83906-01-15 01:12 G 32367110.34 32367110.55 32367110.76 0.0266 0.0048

Saturn 83906-09-01 04:34 G 32367339.56 32367339.69 32367339.84 0.0265 0.0203

Jupiter 83906-11-09 03:22 G 32367408.49 32367408.64 32367408.81 0.0490 0.0297

Jupiter 83907-07-02 22:48 G 32367644.25 32367644.45 32367644.65 0.0492 0.0074

Jupiter 83908-02-23 19:12 G 32367880.22 32367880.30 32367880.39 0.0496 0.0444

Jupiter 83912-09-09 16:34 G 32369540.04 32369540.19 32369540.34 0.0537 0.0365

Jupiter 83913-05-06 00:44 G 32369778.33 32369778.53 32369778.73 0.0535 0.0134

Neptune 83916-09-24 03:36 G 32371015.61 32371015.65 32371015.69 0.0089 0.0087

Neptune 83917-05-07 16:05 G 32371241.08 32371241.17 32371241.28 0.0089 0.0078

Neptune 83917-12-19 04:48 G 32371466.58 32371466.70 32371466.85 0.0089 0.0069

Jupiter 83918-07-15 08:39 G 32371674.75 32371674.86 32371674.98 0.0490 0.0395

Neptune 83918-08-01 18:00 G 32371692.09 32371692.25 32371692.42 0.0089 0.0059

Jupiter 83919-03-08 04:20 G 32371910.48 32371910.68 32371910.88 0.0491 0.0029

Neptune 83919-03-15 06:44 G 32371917.61 32371917.78 32371917.97 0.0089 0.0050

Neptune 83919-10-26 19:41 G 32372143.13 32372143.32 32372143.52 0.0089 0.0040

Jupiter 83919-10-30 00:15 G 32372146.37 32372146.51 32372146.66 0.0495 0.0345

Neptune 83920-06-08 08:24 G 32372368.65 32372368.85 32372369.06 0.0089 0.0031

Saturn 83920-06-23 00:58 G 32372383.47 32372383.54 32372383.62 0.0292 0.0270

Neptune 83921-01-19 21:22 G 32372594.18 32372594.39 32372594.60 0.0089 0.0021

Saturn 83921-02-07 20:39 G 32372613.15 32372613.36 32372613.56 0.0293 0.0067

Neptune 83921-09-02 10:20 G 32372819.72 32372819.93 32372820.15 0.0089 0.0012

Saturn 83921-09-25 17:32 G 32372843.05 32372843.23 32372843.41 0.0295 0.0143

Neptune 83922-04-15 23:17 G 32373045.25 32373045.47 32373045.69 0.0089 0.0002

Neptune 83922-11-27 12:00 G 32373270.78 32373271.00 32373271.22 0.0089 0.0007

Neptune 83923-07-11 00:29 G 32373496.32 32373496.52 32373496.75 0.0089 0.0018

Neptune 83924-02-21 13:27 G 32373721.86 32373722.06 32373722.27 0.0089 0.0027

Jupiter 83924-05-15 02:24 G 32373805.53 32373805.60 32373805.67 0.0537 0.0498

Neptune 83924-10-04 02:10 G 32373947.40 32373947.59 32373947.80 0.0089 0.0036

Jupiter 83925-01-08 09:36 G 32374043.70 32374043.90 32374044.11 0.0535 0.0009

Neptune 83925-05-17 15:08 G 32374172.94 32374173.13 32374173.32 0.0089 0.0046

Jupiter 83925-09-03 16:20 G 32374282.10 32374282.18 32374282.27 0.0531 0.0477

Neptune 83925-12-29 03:22 G 32374398.49 32374398.64 32374398.83 0.0089 0.0056

Neptune 83926-08-11 16:34 G 32374624.05 32374624.19 32374624.34 0.0089 0.0065

Neptune 83927-03-25 05:03 G 32374849.61 32374849.71 32374849.85 0.0089 0.0074

Neptune 83927-11-05 17:46 G 32375075.18 32375075.24 32375075.33 0.0089 0.0084

Jupiter 83930-11-11 09:36 G 32376176.71 32376176.90 32376177.10 0.0491 0.0130

Jupiter 83931-07-05 05:32 G 32376412.55 32376412.73 32376412.91 0.0494 0.0245

Saturn 83934-04-25 20:53 G 32377438.30 32377438.37 32377438.47 0.0269 0.0248

Saturn 83934-12-11 02:24 G 32377667.40 32377667.60 32377667.81 0.0267 0.0086

Saturn 83935-07-28 06:44 G 32377896.58 32377896.78 32377896.99 0.0266 0.0074

Saturn 83936-03-13 10:20 G 32378125.83 32378125.93 32378126.04 0.0265 0.0229

Jupiter 83936-09-12 20:53 G 32378309.17 32378309.37 32378309.57 0.0536 0.0147

Jupiter 83937-05-09 04:05 G 32378547.52 32378547.67 32378547.83 0.0532 0.0348

Uranus 83938-12-08 14:39 G 32379126.00 32379126.11 32379126.25 0.0136 0.0109

Uranus 83939-07-22 20:24 G 32379352.18 32379352.35 32379352.53 0.0135 0.0078

Uranus 83940-03-05 01:41 G 32379578.37 32379578.57 32379578.78 0.0135 0.0047

Uranus 83940-10-17 07:12 G 32379804.59 32379804.80 32379805.01 0.0135 0.0016

Uranus 83941-05-31 12:29 G 32380030.80 32380031.02 32380031.23 0.0135 0.0014

Uranus 83942-01-12 17:17 G 32380257.03 32380257.22 32380257.43 0.0135 0.0045

Jupiter 83942-07-17 14:24 G 32380442.92 32380443.10 32380443.28 0.0490 0.0232

Uranus 83942-08-26 22:20 G 32380483.27 32380483.43 32380483.62 0.0135 0.0075

Jupiter 83943-03-10 09:51 G 32380678.72 32380678.91 32380679.10 0.0493 0.0141

Uranus 83943-04-10 03:22 G 32380709.52 32380709.64 32380709.79 0.0135 0.0105

Uranus 83943-11-22 08:24 G 32380935.85 32380935.85 32380935.87 0.0134 0.0134

Mars 83947-12-12 10:05 G 32382416.74 32382416.92 32382417.09 0.1676 0.0128

Jupiter 83948-05-18 08:10 G 32382574.67 32382574.84 32382575.01 0.0537 0.0287

Jupiter 83949-01-11 16:20 G 32382812.99 32382813.18 32382813.37 0.0534 0.0214

Saturn 83950-01-03 06:29 G 32383169.66 32383169.77 32383169.89 0.0292 0.0243

Saturn 83950-08-21 02:24 G 32383399.39 32383399.60 32383399.80 0.0294 0.0038

Saturn 83951-04-07 23:03 G 32383629.30 32383629.46 32383629.64 0.0296 0.0173

Mars 83952-07-24 02:39 G 32384102.48 32384102.61 32384102.73 0.1850 0.1247

Jupiter 83954-03-22 18:58 G 32384709.15 32384709.29 32384709.44 0.0490 0.0333

Jupiter 83954-11-13 14:24 G 32384944.90 32384945.10 32384945.30 0.0492 0.0037

Jupiter 83955-07-07 10:34 G 32385180.83 32385180.94 32385181.05 0.0496 0.0409

Jupiter 83960-01-21 21:36 G 32386840.27 32386840.40 32386840.52 0.0537 0.0420

Jupiter 83960-09-16 05:46 G 32387078.54 32387078.74 32387078.94 0.0535 0.0078

Saturn 83963-11-05 22:20 G 32388224.33 32388224.43 32388224.56 0.0269 0.0227

Saturn 83964-06-22 03:36 G 32388453.45 32388453.65 32388453.86 0.0267 0.0066

Saturn 83965-02-06 07:41 G 32388682.62 32388682.82 32388683.03 0.0266 0.0093

Saturn 83965-09-23 11:03 G 32388911.89 32388911.96 32388912.03 0.0265 0.0247

Jupiter 83965-11-25 23:03 G 32388975.36 32388975.46 32388975.55 0.0490 0.0431

Jupiter 83966-07-19 18:44 G 32389211.08 32389211.28 32389211.48 0.0491 0.0067

Jupiter 83967-03-12 14:10 G 32389446.94 32389447.09 32389447.25 0.0494 0.0308

Jupiter 83972-05-21 18:44 G 32391344.07 32391344.28 32391344.48 0.0536 0.0060

Jupiter 83973-01-15 02:10 G 32391582.48 32391582.59 32391582.71 0.0532 0.0433

Jupiter 83978-03-25 00:15 G 32393477.32 32393477.51 32393477.70 0.0490 0.0169

Jupiter 83978-11-15 19:41 G 32393713.14 32393713.32 32393713.50 0.0493 0.0206

Saturn 83979-07-16 06:44 G 32393955.66 32393955.78 32393955.93 0.0292 0.0222

Saturn 83980-03-02 02:53 G 32394185.41 32394185.62 32394185.83 0.0294 0.0017

Saturn 83980-10-17 23:46 G 32394415.35 32394415.49 32394415.66 0.0295 0.0195

Uranus 83982-04-21 12:58 G 32394965.95 32394966.04 32394966.16 0.0143 0.0125

Uranus 83982-12-04 00:58 G 32395192.38 32395192.54 32395192.72 0.0143 0.0088

Uranus 83983-07-18 12:58 G 32395418.84 32395419.04 32395419.26 0.0143 0.0051

Jupiter 83984-01-25 04:20 G 32395609.50 32395609.68 32395609.87 0.0536 0.0200

Uranus 83984-03-01 01:27 G 32395645.34 32395645.56 32395645.78 0.0143 0.0013

Jupiter 83984-09-19 11:46 G 32395847.82 32395847.99 32395848.16 0.0533 0.0299

Uranus 83984-10-13 13:41 G 32395871.86 32395872.07 32395872.29 0.0143 0.0025

Uranus 83985-05-28 01:56 G 32396098.40 32396098.58 32396098.79 0.0143 0.0063

Uranus 83986-01-09 14:53 G 32396324.96 32396325.12 32396325.28 0.0144 0.0100

Uranus 83986-08-24 03:08 G 32396551.59 32396551.63 32396551.71 0.0144 0.0138

Jupiter 83989-11-28 05:03 G 32397743.54 32397743.71 32397743.88 0.0491 0.0270

Jupiter 83990-07-22 00:58 G 32397979.35 32397979.54 32397979.74 0.0493 0.0105

Jupiter 83991-03-14 22:05 G 32398215.37 32398215.42 32398215.48 0.0497 0.0474

Saturn 83993-05-18 03:08 G 32399010.50 32399010.63 32399010.78 0.0269 0.0203

Saturn 83994-01-02 08:24 G 32399239.64 32399239.85 32399240.06 0.0267 0.0041

Saturn 83994-08-19 12:15 G 32399468.83 32399469.01 32399469.21 0.0266 0.0118

Moon 83994-11-29 05:46 G 32399570.59 32399570.74 32399570.89 0.2681 0.0175

Earth 83994-11-29 10:34 G 32399570.80 32399570.94 32399571.09 0.2679 0.0962 *

Jupiter 83995-09-29 15:51 G 32399875.01 32399875.16 32399875.32 0.0536 0.0337

Jupiter 83996-05-24 23:17 G 32400113.27 32400113.47 32400113.66 0.0534 0.0162

Neptune 83998-03-29 13:41 G 32400787.00 32400787.07 32400787.19 0.0088 0.0081

Neptune 83998-11-10 03:08 G 32401012.51 32401012.63 32401012.78 0.0088 0.0071

Neptune 83999-06-23 16:20 G 32401238.04 32401238.18 32401238.35 0.0088 0.0062

Pluto 83999-12-19 10:34 G 32401416.77 32401416.94 32401417.15 0.0065 0.0033

Neptune 84000-02-04 06:00 G 32401463.57 32401463.75 32401463.93 0.0088 0.0052

Pluto 84000-07-31 15:22 G 32401641.93 32401642.14 32401642.36 0.0066 0.0008

Neptune 84000-09-16 18:58 G 32401689.10 32401689.29 32401689.49 0.0088 0.0043

85TH MILLENNIUM CE

This is a list of transits of Venus in the 85th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Pluto 84001-03-13 19:12 G 32401867.18 32401867.30 32401867.48 0.0066 0.0048

Neptune 84001-04-30 07:56 G 32401914.64 32401914.83 32401915.05 0.0088 0.0034

Jupiter 84001-08-03 09:51 G 32402009.78 32402009.91 32402010.05 0.0490 0.0370

Neptune 84001-12-11 21:22 G 32402140.18 32402140.39 32402140.61 0.0088 0.0024

Jupiter 84002-03-27 05:46 G 32402245.54 32402245.74 32402245.94 0.0492 0.0001

Neptune 84002-07-25 10:34 G 32402365.72 32402365.94 32402366.16 0.0088 0.0014

Jupiter 84002-11-18 01:41 G 32402481.45 32402481.57 32402481.71 0.0495 0.0374

Moon 84002-11-27 00:44 G 32402490.48 32402490.53 32402490.57 0.2683 0.2548

Earth 84002-11-27 03:08 G 32402490.55 32402490.63 32402490.71 0.2677 0.2239 *

Neptune 84003-03-08 00:00 G 32402591.28 32402591.50 32402591.72 0.0088 0.0005

Neptune 84003-10-19 12:58 G 32402816.82 32402817.04 32402817.27 0.0088 0.0006

Neptune 84004-06-01 02:10 G 32403042.37 32403042.59 32403042.81 0.0088 0.0015

Neptune 84005-01-12 15:08 G 32403267.93 32403268.13 32403268.36 0.0088 0.0024

Neptune 84005-08-26 04:34 G 32403493.49 32403493.69 32403493.90 0.0088 0.0033

Neptune 84006-04-08 17:32 G 32403719.05 32403719.23 32403719.44 0.0088 0.0043

Neptune 84006-11-20 06:58 G 32403944.62 32403944.79 32403944.98 0.0088 0.0052

Jupiter 84007-06-04 03:08 G 32404140.54 32404140.63 32404140.73 0.0537 0.0472

Neptune 84007-07-03 19:41 G 32404170.19 32404170.32 32404170.51 0.0088 0.0063

Jupiter 84008-01-28 11:03 G 32404378.75 32404378.96 32404379.16 0.0535 0.0025

Neptune 84008-02-14 09:22 G 32404395.77 32404395.89 32404396.03 0.0088 0.0071

Jupiter 84008-09-22 18:00 G 32404617.20 32404617.25 32404617.31 0.0531 0.0508

Neptune 84008-09-26 22:48 G 32404621.37 32404621.45 32404621.54 0.0088 0.0080

Saturn 84009-01-25 11:46 G 32404741.85 32404741.99 32404742.16 0.0293 0.0196

Saturn 84009-09-12 08:10 G 32404971.63 32404971.84 32404972.05 0.0294 0.0012

Saturn 84010-04-30 05:03 G 32405201.58 32405201.71 32405201.86 0.0296 0.0223

Jupiter 84013-04-08 14:24 G 32406276.05 32406276.10 32406276.16 0.0490 0.0467

Mars 84013-10-08 20:10 G 32406459.17 32406459.34 32406459.51 0.1673 0.0366

Jupiter 84013-11-30 10:34 G 32406511.74 32406511.94 32406512.14 0.0491 0.0104

Jupiter 84014-07-24 06:00 G 32406747.59 32406747.75 32406747.93 0.0494 0.0272

Mars 84018-05-21 08:39 G 32408144.70 32408144.86 32408145.02 0.1854 0.0744

Jupiter 84019-10-03 00:00 G 32408644.30 32408644.50 32408644.70 0.0536 0.0115

Jupiter 84020-05-28 07:56 G 32408882.69 32408882.83 32408882.97 0.0532 0.0382

Uranus 84022-08-08 02:24 G 32409684.51 32409684.60 32409684.70 0.0136 0.0121

Saturn 84022-11-28 04:20 G 32409796.52 32409796.68 32409796.84 0.0268 0.0182

Uranus 84023-03-22 07:41 G 32409910.68 32409910.82 32409911.00 0.0136 0.0091

Saturn 84023-07-15 09:08 G 32410025.67 32410025.88 32410026.10 0.0267 0.0023

Uranus 84023-11-03 13:27 G 32410136.88 32410137.06 32410137.26 0.0135 0.0060

Saturn 84024-02-29 12:58 G 32410254.86 32410255.04 32410255.23 0.0265 0.0136

Uranus 84024-06-16 18:58 G 32410363.08 32410363.29 32410363.50 0.0135 0.0029

Uranus 84025-01-29 00:29 G 32410589.30 32410589.52 32410589.73 0.0135 0.0003

Jupiter 84025-08-05 14:53 G 32410777.94 32410778.12 32410778.31 0.0490 0.0206

Uranus 84025-09-12 05:46 G 32410815.53 32410815.74 32410815.95 0.0135 0.0032

Jupiter 84026-03-29 10:20 G 32411013.74 32411013.93 32411014.12 0.0493 0.0168

Uranus 84026-04-26 10:48 G 32411041.77 32411041.95 32411042.15 0.0135 0.0063

Uranus 84026-12-08 15:51 G 32411268.01 32411268.16 32411268.32 0.0135 0.0093

Uranus 84027-07-22 20:39 G 32411494.29 32411494.36 32411494.46 0.0135 0.0123

Jupiter 84031-06-07 13:12 G 32412909.87 32412910.05 32412910.23 0.0537 0.0251

Jupiter 84032-01-31 21:22 G 32413148.21 32413148.39 32413148.57 0.0534 0.0251

Jupiter 84037-04-10 20:10 G 32415044.19 32415044.34 32415044.50 0.0490 0.0307

Jupiter 84037-12-02 15:51 G 32415279.96 32415280.16 32415280.36 0.0492 0.0065

Jupiter 84038-07-26 12:15 G 32415515.92 32415516.01 32415516.11 0.0496 0.0438

Saturn 84038-08-07 11:17 G 32415527.81 32415527.97 32415528.14 0.0292 0.0176

Saturn 84039-03-25 07:27 G 32415757.60 32415757.81 32415758.01 0.0294 0.0031

Saturn 84039-11-10 04:34 G 32415987.58 32415987.69 32415987.81 0.0296 0.0242

Jupiter 84043-02-10 00:00 G 32417175.37 32417175.50 32417175.65 0.0536 0.0388

Jupiter 84043-10-06 07:12 G 32417413.60 32417413.80 32417414.00 0.0534 0.0111

Jupiter 84048-12-15 00:29 G 32419310.41 32419310.52 32419310.64 0.0490 0.0406

Jupiter 84049-08-07 21:08 G 32419546.18 32419546.38 32419546.58 0.0492 0.0037

Jupiter 84050-03-31 17:17 G 32419782.08 32419782.22 32419782.37 0.0495 0.0339

Saturn 84052-06-09 07:56 G 32420582.67 32420582.83 32420583.01 0.0269 0.0161

Saturn 84053-01-24 12:58 G 32420811.83 32420812.04 32420812.26 0.0267 0.0006

Saturn 84053-09-10 16:48 G 32421041.04 32421041.20 32421041.38 0.0266 0.0160

Jupiter 84054-10-15 12:00 G 32421440.96 32421441.00 32421441.06 0.0536 0.0519

Jupiter 84055-06-10 18:44 G 32421679.07 32421679.28 32421679.48 0.0535 0.0029

Jupiter 84056-02-04 01:27 G 32421917.46 32421917.56 32421917.66 0.0531 0.0461

Jupiter 84061-04-13 01:41 G 32423812.38 32423812.57 32423812.77 0.0491 0.0142

Jupiter 84061-12-04 21:36 G 32424048.22 32424048.40 32424048.58 0.0494 0.0235

Uranus 84065-12-19 21:51 G 32425524.37 32425524.41 32425524.46 0.0142 0.0139

Uranus 84066-08-03 09:36 G 32425750.76 32425750.90 32425751.06 0.0143 0.0103

Jupiter 84067-02-13 06:00 G 32425944.56 32425944.75 32425944.95 0.0536 0.0170

Uranus 84067-03-17 21:36 G 32425977.22 32425977.40 32425977.61 0.0143 0.0066

Jupiter 84067-10-09 13:41 G 32426182.91 32426183.07 32426183.23 0.0533 0.0330

Uranus 84067-10-30 10:05 G 32426203.70 32426203.92 32426204.13 0.0143 0.0028

Saturn 84068-02-17 16:20 G 32426314.00 32426314.18 32426314.36 0.0293 0.0149

Uranus 84068-06-12 22:20 G 32426430.21 32426430.43 32426430.65 0.0143 0.0009

Saturn 84068-10-04 12:44 G 32426543.82 32426544.03 32426544.23 0.0295 0.0059

Uranus 84069-01-25 10:34 G 32426656.73 32426656.94 32426657.15 0.0143 0.0047

Saturn 84069-05-22 10:05 G 32426773.84 32426773.92 32426774.00 0.0296 0.0271

Uranus 84069-09-08 22:48 G 32426883.28 32426883.45 32426883.64 0.0143 0.0085

Uranus 84070-04-23 11:46 G 32427109.88 32427109.99 32427110.11 0.0144 0.0122

Jupiter 84072-12-17 06:44 G 32428078.60 32428078.78 32428078.95 0.0490 0.0243

Jupiter 84073-08-10 02:24 G 32428314.40 32428314.60 32428314.79 0.0492 0.0132

Jupiter 84078-10-18 18:58 G 32430210.13 32430210.29 32430210.46 0.0537 0.0307

Jupiter 84079-06-14 03:08 G 32430448.44 32430448.63 32430448.82 0.0534 0.0197

Mars 84079-08-06 06:15 G 32430501.60 32430501.76 32430501.93 0.1669 0.0620

Neptune 84081-08-09 00:29 G 32431235.45 32431235.52 32431235.61 0.0089 0.0082

Saturn 84081-12-20 09:22 G 32431368.71 32431368.89 32431369.07 0.0268 0.0139

Neptune 84082-03-22 12:58 G 32431460.94 32431461.04 32431461.19 0.0089 0.0073

Saturn 84082-08-06 14:10 G 32431597.87 32431598.09 32431598.30 0.0266 0.0022

Neptune 84082-11-03 02:10 G 32431686.44 32431686.59 32431686.75 0.0089 0.0063

Saturn 84083-03-23 17:46 G 32431827.09 32431827.24 32431827.40 0.0265 0.0178

Neptune 84083-06-16 14:39 G 32431911.95 32431912.11 32431912.30 0.0089 0.0054

Neptune 84084-01-28 03:36 G 32432137.47 32432137.65 32432137.85 0.0089 0.0044

Mars 84084-03-17 13:56 G 32432186.91 32432187.08 32432187.25 0.1858 0.0219

Jupiter 84084-08-22 11:03 G 32432344.82 32432344.96 32432345.11 0.0490 0.0344

Neptune 84084-09-09 16:20 G 32432363.00 32432363.18 32432363.40 0.0089 0.0035

Jupiter 84085-04-15 06:44 G 32432580.58 32432580.78 32432580.98 0.0492 0.0028

Neptune 84085-04-23 05:32 G 32432588.52 32432588.73 32432588.94 0.0089 0.0025

Neptune 84085-12-04 18:15 G 32432814.05 32432814.26 32432814.48 0.0089 0.0016

Jupiter 84085-12-07 02:39 G 32432816.50 32432816.61 32432816.73 0.0495 0.0401

Neptune 84086-07-18 07:12 G 32433039.58 32433039.80 32433040.02 0.0089 0.0006

Neptune 84087-02-28 19:56 G 32433265.11 32433265.33 32433265.55 0.0089 0.0004

Pluto 84087-08-20 17:17 G 32433438.09 32433438.22 32433438.38 0.0078 0.0059

Neptune 84087-10-12 08:39 G 32433490.65 32433490.86 32433491.08 0.0089 0.0013

Pluto 84088-04-02 03:22 G 32433663.42 32433663.64 32433663.86 0.0078 0.0010

Neptune 84088-05-24 21:22 G 32433716.19 32433716.39 32433716.61 0.0089 0.0023

Neptune 84089-01-05 10:05 G 32433941.73 32433941.92 32433942.14 0.0089 0.0033

Neptune 84089-08-18 22:48 G 32434167.28 32434167.45 32434167.66 0.0089 0.0043

Neptune 84090-04-01 11:46 G 32434392.83 32434392.99 32434393.18 0.0089 0.0052

Jupiter 84090-06-23 08:39 G 32434475.74 32434475.86 32434475.98 0.0537 0.0438

Neptune 84090-11-13 00:15 G 32434618.37 32434618.51 32434618.69 0.0089 0.0061

Jupiter 84091-02-16 16:34 G 32434713.98 32434714.19 32434714.39 0.0535 0.0061

Neptune 84091-06-26 13:12 G 32434843.93 32434844.05 32434844.19 0.0089 0.0070

Neptune 84092-02-07 02:10 G 32435069.50 32435069.59 32435069.69 0.0089 0.0080

Neptune 84092-09-19 14:53 G 32435295.12 32435295.12 32435295.14 0.0089 0.0089

Jupiter 84096-04-27 15:51 G 32436611.09 32436611.16 32436611.26 0.0490 0.0443

Jupiter 84096-12-19 12:15 G 32436846.81 32436847.01 32436847.21 0.0491 0.0076

Jupiter 84097-08-12 08:10 G 32437082.68 32437082.84 32437083.00 0.0494 0.0301

Saturn 84097-08-29 15:22 G 32437099.96 32437100.14 32437100.33 0.0293 0.0130

Saturn 84098-04-16 11:32 G 32437329.79 32437329.98 32437330.19 0.0294 0.0078

Saturn 84098-12-02 08:53 G 32437559.84 32437559.87 32437559.92 0.0296 0.0289

Jupiter 84102-10-23 02:53 G 32438979.42 32438979.62 32438979.83 0.0535 0.0082

Jupiter 84103-06-18 09:51 G 32439217.78 32439217.91 32439218.04 0.0531 0.0414

Uranus 84106-04-08 14:10 G 32440243.06 32440243.09 32440243.13 0.0136 0.0133

Uranus 84106-11-20 19:41 G 32440469.19 32440469.32 32440469.47 0.0136 0.0103

Uranus 84107-07-05 01:27 G 32440695.38 32440695.56 32440695.75 0.0136 0.0072

Uranus 84108-02-16 06:58 G 32440921.59 32440921.79 32440922.00 0.0135 0.0041

Jupiter 84108-08-25 16:48 G 32441113.02 32441113.20 32441113.40 0.0491 0.0179

Uranus 84108-09-29 12:44 G 32441147.81 32441148.03 32441148.24 0.0135 0.0010

Jupiter 84109-04-18 13:12 G 32441348.86 32441349.05 32441349.23 0.0493 0.0199

Uranus 84109-05-13 18:00 G 32441374.04 32441374.25 32441374.46 0.0135 0.0020

Uranus 84109-12-25 23:03 G 32441600.27 32441600.46 32441600.67 0.0135 0.0051

Uranus 84110-08-09 04:05 G 32441826.51 32441826.67 32441826.85 0.0135 0.0081

Uranus 84111-03-23 09:08 G 32442052.77 32442052.88 32442053.02 0.0135 0.0111

Saturn 84111-07-03 12:15 G 32442154.83 32442155.01 32442155.21 0.0268 0.0119

Mars 84111-08-06 06:29 G 32442188.73 32442188.77 32442188.82 0.1679 0.1622

Saturn 84112-02-17 17:17 G 32442384.01 32442384.22 32442384.43 0.0267 0.0043

Saturn 84112-10-03 20:53 G 32442613.24 32442613.37 32442613.52 0.0265 0.0200

Jupiter 84114-06-27 14:39 G 32443244.92 32443245.11 32443245.29 0.0536 0.0220

Jupiter 84115-02-20 21:36 G 32443483.23 32443483.40 32443483.58 0.0533 0.0281

Jupiter 84120-04-30 21:36 G 32445379.24 32445379.40 32445379.57 0.0491 0.0281

Jupiter 84120-12-22 17:32 G 32445615.04 32445615.23 32445615.43 0.0492 0.0095

Jupiter 84121-08-15 14:24 G 32445851.04 32445851.10 32445851.17 0.0496 0.0466

Jupiter 84126-03-02 01:41 G 32447510.43 32447510.57 32447510.73 0.0536 0.0360

Jupiter 84126-10-26 09:08 G 32447748.68 32447748.88 32447749.08 0.0534 0.0142

Saturn 84127-03-12 20:39 G 32447886.17 32447886.36 32447886.56 0.0293 0.0103

Saturn 84127-10-28 17:03 G 32448116.02 32448116.21 32448116.40 0.0295 0.0107

Jupiter 84132-01-05 02:24 G 32449645.48 32449645.60 32449645.73 0.0490 0.0381

Jupiter 84132-08-27 22:34 G 32449881.24 32449881.44 32449881.64 0.0491 0.0010

Jupiter 84133-04-20 18:29 G 32450117.14 32450117.27 32450117.41 0.0495 0.0366

Jupiter 84137-11-04 14:53 G 32451776.04 32451776.12 32451776.19 0.0537 0.0491

Jupiter 84138-06-30 22:05 G 32452014.21 32452014.42 32452014.62 0.0536 0.0006

Jupiter 84139-02-24 05:32 G 32452252.66 32452252.73 32452252.80 0.0531 0.0494

Earth 84140-05-26 17:32 G 32452710.07 32452710.23 32452710.39 0.2655 0.0734

Moon 84140-05-26 23:17 G 32452710.30 32452710.47 32452710.63 0.2652 0.0272 *

Saturn 84140-05-28 07:56 G 32452711.79 32452711.83 32452711.90 0.0269 0.0260

Saturn 84141-01-12 13:56 G 32452940.88 32452941.08 32452941.28 0.0268 0.0097

Saturn 84141-08-29 18:29 G 32453170.07 32453170.27 32453170.48 0.0266 0.0064

Saturn 84142-04-15 22:20 G 32453399.31 32453399.43 32453399.55 0.0265 0.0219

Jupiter 84143-09-10 06:44 G 32453911.74 32453911.78 32453911.82 0.0490 0.0478

Jupiter 84144-05-03 02:53 G 32454147.42 32454147.62 32454147.82 0.0491 0.0114

Jupiter 84144-12-24 22:34 G 32454383.27 32454383.44 32454383.61 0.0494 0.0263

Mars 84145-06-03 17:03 G 32454544.06 32454544.21 32454544.36 0.1667 0.0852

Mars 84150-01-13 19:41 G 32456229.15 32456229.32 32456229.49 0.1862 0.0309

Jupiter 84150-03-05 11:32 G 32456279.78 32456279.98 32456280.18 0.0536 0.0133

Uranus 84150-04-03 18:00 G 32456309.15 32456309.25 32456309.40 0.0142 0.0118

Jupiter 84150-10-29 18:58 G 32456518.15 32456518.29 32456518.45 0.0533 0.0368

Uranus 84150-11-16 06:15 G 32456535.59 32456535.76 32456535.95 0.0143 0.0081

Uranus 84151-06-30 18:15 G 32456762.06 32456762.26 32456762.48 0.0143 0.0044

Uranus 84152-02-12 06:29 G 32456988.55 32456988.77 32456989.00 0.0143 0.0007

Uranus 84152-09-25 18:58 G 32457215.07 32457215.29 32457215.50 0.0143 0.0031

Uranus 84153-05-10 07:12 G 32457441.62 32457441.80 32457442.00 0.0143 0.0069

Uranus 84153-12-22 19:41 G 32457668.18 32457668.32 32457668.47 0.0143 0.0107

Jupiter 84156-01-07 08:10 G 32458413.66 32458413.84 32458414.03 0.0490 0.0216

Saturn 84156-02-05 00:29 G 32458442.49 32458442.52 32458442.56 0.0291 0.0286

Jupiter 84156-08-30 04:05 G 32458649.48 32458649.67 32458649.86 0.0493 0.0161

Saturn 84156-09-21 19:56 G 32458672.13 32458672.33 32458672.53 0.0293 0.0084

Saturn 84157-05-09 16:05 G 32458901.99 32458902.17 32458902.36 0.0295 0.0125

Jupiter 84161-11-07 22:48 G 32460545.28 32460545.45 32460545.63 0.0536 0.0272

Neptune 84162-07-01 20:53 G 32460781.33 32460781.37 32460781.47 0.0088 0.0085

Jupiter 84162-07-04 05:46 G 32460783.56 32460783.74 32460783.93 0.0533 0.0231

Neptune 84163-02-12 10:48 G 32461006.84 32461006.95 32461007.07 0.0088 0.0075

Neptune 84163-09-25 23:46 G 32461232.36 32461232.49 32461232.66 0.0088 0.0066

Neptune 84164-05-08 13:27 G 32461457.89 32461458.06 32461458.23 0.0088 0.0056

Neptune 84164-12-20 02:24 G 32461683.42 32461683.60 32461683.80 0.0088 0.0046

Neptune 84165-08-02 15:51 G 32461908.96 32461909.16 32461909.36 0.0088 0.0037

Neptune 84166-03-16 05:03 G 32462134.51 32462134.71 32462134.93 0.0088 0.0027

Neptune 84166-10-27 18:29 G 32462360.05 32462360.27 32462360.49 0.0088 0.0018

Neptune 84167-06-10 07:27 G 32462585.60 32462585.81 32462586.04 0.0088 0.0009

Jupiter 84167-09-12 12:15 G 32462679.86 32462680.01 32462680.16 0.0491 0.0319

Neptune 84168-01-21 20:53 G 32462811.15 32462811.37 32462811.59 0.0088 0.0001

Jupiter 84168-05-05 08:39 G 32462915.66 32462915.86 32462916.06 0.0492 0.0056

Neptune 84168-09-03 09:51 G 32463036.70 32463036.91 32463037.14 0.0088 0.0012

Jupiter 84168-12-27 05:32 G 32463151.64 32463151.73 32463151.83 0.0496 0.0431

Neptune 84169-04-16 23:17 G 32463262.26 32463262.47 32463262.69 0.0088 0.0020

Neptune 84169-11-28 12:15 G 32463487.81 32463488.01 32463488.23 0.0088 0.0030

Saturn 84169-12-08 11:03 G 32463497.86 32463497.96 32463498.06 0.0270 0.0239

Neptune 84170-07-12 01:27 G 32463713.37 32463713.56 32463713.77 0.0088 0.0040

Saturn 84170-07-25 16:48 G 32463727.00 32463727.20 32463727.41 0.0268 0.0076

Neptune 84171-02-22 14:39 G 32463938.94 32463939.11 32463939.31 0.0088 0.0049

Saturn 84171-03-11 21:36 G 32463956.20 32463956.40 32463956.61 0.0267 0.0086

Neptune 84171-10-06 04:05 G 32464164.51 32464164.67 32464164.84 0.0088 0.0058

Saturn 84171-10-27 01:12 G 32464185.47 32464185.55 32464185.65 0.0265 0.0242

Neptune 84172-05-18 16:48 G 32464390.08 32464390.20 32464390.37 0.0088 0.0068

Neptune 84172-12-30 06:15 G 32464615.67 32464615.76 32464615.88 0.0088 0.0077

Jupiter 84173-07-13 11:03 G 32464810.83 32464810.96 32464811.09 0.0536 0.0408

Neptune 84173-08-12 19:41 G 32464841.29 32464841.32 32464841.37 0.0088 0.0086

Jupiter 84174-03-08 17:32 G 32465049.03 32465049.23 32465049.44 0.0534 0.0092

Mars 84177-06-02 16:34 G 32466231.09 32466231.19 32466231.30 0.1676 0.1356

Jupiter 84179-05-18 16:34 G 32466946.09 32466946.19 32466946.30 0.0491 0.0420

Jupiter 84180-01-09 13:12 G 32467181.85 32467182.05 32467182.26 0.0491 0.0050

Jupiter 84180-09-01 09:51 G 32467417.76 32467417.91 32467418.06 0.0495 0.0329

Saturn 84185-08-17 06:44 G 32469228.69 32469228.78 32469228.88 0.0291 0.0257

Jupiter 84185-11-11 04:20 G 32469314.48 32469314.68 32469314.89 0.0535 0.0052

Saturn 84186-04-04 01:56 G 32469458.38 32469458.58 32469458.79 0.0293 0.0054

Jupiter 84186-07-07 11:17 G 32469552.86 32469552.97 32469553.09 0.0532 0.0444

Saturn 84186-11-19 22:20 G 32469688.26 32469688.43 32469688.61 0.0295 0.0156

Uranus 84190-07-21 07:27 G 32471027.72 32471027.81 32471027.95 0.0136 0.0115

Uranus 84191-03-04 13:27 G 32471253.90 32471254.06 32471254.24 0.0136 0.0084

Jupiter 84191-09-14 18:15 G 32471448.07 32471448.26 32471448.46 0.0491 0.0153

Uranus 84191-10-16 19:27 G 32471480.11 32471480.31 32471480.51 0.0135 0.0053

Jupiter 84192-05-07 14:10 G 32471683.91 32471684.09 32471684.27 0.0493 0.0226

Uranus 84192-05-30 00:58 G 32471706.33 32471706.54 32471706.75 0.0135 0.0022

Uranus 84193-01-11 06:15 G 32471932.55 32471932.76 32471932.98 0.0135 0.0010

Uranus 84193-08-25 11:46 G 32472158.79 32472158.99 32472159.20 0.0135 0.0039

Uranus 84194-04-08 17:03 G 32472385.03 32472385.21 32472385.39 0.0135 0.0069

Uranus 84194-11-20 22:20 G 32472611.28 32472611.43 32472611.57 0.0135 0.0099

Uranus 84195-07-05 03:08 G 32472837.58 32472837.63 32472837.70 0.0135 0.0129

Jupiter 84197-07-16 17:03 G 32473580.02 32473580.21 32473580.40 0.0536 0.0191

Jupiter 84198-03-12 00:44 G 32473818.37 32473818.53 32473818.70 0.0533 0.0313

Saturn 84199-06-20 13:12 G 32474283.93 32474284.05 32474284.19 0.0269 0.0217

Saturn 84200-02-04 19:12 G 32474513.09 32474513.30 32474513.51 0.0268 0.0053

Saturn 84200-09-21 23:46 G 32474742.29 32474742.49 32474742.69 0.0266 0.0106

Saturn 84201-05-09 03:08 G 32474971.61 32474971.63 32474971.67 0.0265 0.0262

Jupiter 84203-05-21 22:34 G 32475714.27 32475714.44 32475714.61 0.0490 0.0255

Jupiter 84204-01-12 18:15 G 32475950.06 32475950.26 32475950.46 0.0492 0.0121

Jupiter 84204-09-04 15:08 G 32476186.11 32476186.13 32476186.15 0.0496 0.0493

Jupiter 84209-03-22 06:29 G 32477845.61 32477845.77 32477845.93 0.0537 0.0325

Jupiter 84209-11-15 14:10 G 32478083.89 32478084.09 32478084.28 0.0534 0.0180

Mars 84211-04-02 03:08 G 32478586.50 32478586.63 32478586.76 0.1663 0.1096

Jupiter 84215-01-25 03:36 G 32479980.51 32479980.65 32479980.79 0.0490 0.0356

Saturn 84215-02-28 06:15 G 32480014.65 32480014.76 32480014.88 0.0291 0.0238

Jupiter 84215-09-17 23:46 G 32480216.28 32480216.49 32480216.69 0.0492 0.0019

Saturn 84215-10-16 01:41 G 32480244.36 32480244.57 32480244.77 0.0293 0.0035

Mars 84215-11-12 00:44 G 32480271.38 32480271.53 32480271.69 0.1866 0.0857

Jupiter 84216-05-10 19:56 G 32480452.21 32480452.33 32480452.46 0.0495 0.0394

Saturn 84216-06-01 22:05 G 32480474.25 32480474.42 32480474.59 0.0295 0.0175

Jupiter 84220-11-24 18:58 G 32482111.19 32482111.29 32482111.40 0.0536 0.0459

Jupiter 84221-07-21 01:27 G 32482349.35 32482349.56 32482349.76 0.0535 0.0039

Jupiter 84222-03-16 07:41 G 32482587.79 32482587.82 32482587.84 0.0530 0.0525

Jupiter 84226-09-30 06:29 G 32484246.71 32484246.77 32484246.85 0.0491 0.0458

Jupiter 84227-05-24 03:36 G 32484482.45 32484482.65 32484482.85 0.0492 0.0088

Jupiter 84228-01-15 00:15 G 32484718.34 32484718.51 32484718.67 0.0494 0.0292

Saturn 84228-12-31 16:05 G 32485070.03 32485070.17 32485070.32 0.0270 0.0196

Saturn 84229-08-17 22:05 G 32485299.20 32485299.42 32485299.63 0.0268 0.0032

Saturn 84230-04-04 02:39 G 32485528.43 32485528.61 32485528.81 0.0267 0.0129

Jupiter 84233-03-25 12:58 G 32486614.85 32486615.04 32486615.25 0.0535 0.0103

Jupiter 84233-11-18 19:27 G 32486853.18 32486853.31 32486853.45 0.0532 0.0396

Uranus 84233-12-03 03:51 G 32486867.59 32486867.66 32486867.76 0.0142 0.0131

Uranus 84234-07-17 15:36 G 32487094.00 32487094.15 32487094.33 0.0143 0.0095

Uranus 84235-03-01 03:51 G 32487320.47 32487320.66 32487320.87 0.0143 0.0058

Uranus 84235-10-13 16:05 G 32487546.95 32487547.17 32487547.39 0.0143 0.0021

Uranus 84236-05-27 04:20 G 32487773.46 32487773.68 32487773.90 0.0143 0.0017

Uranus 84237-01-08 16:34 G 32487999.99 32488000.19 32488000.40 0.0143 0.0054

Uranus 84237-08-23 04:48 G 32488226.55 32488226.70 32488226.88 0.0143 0.0092

Earth 84237-12-01 13:12 G 32488326.91 32488327.05 32488327.19 0.2678 0.1106

Moon 84237-12-01 18:00 G 32488327.14 32488327.25 32488327.36 0.2680 0.1892 *

Uranus 84238-04-06 17:32 G 32488453.15 32488453.23 32488453.34 0.0144 0.0130

Jupiter 84239-01-27 08:10 G 32488748.66 32488748.84 32488749.03 0.0491 0.0194

Jupiter 84239-09-20 04:34 G 32488984.50 32488984.69 32488984.88 0.0493 0.0186

Mars 84243-04-01 02:39 G 32490273.48 32490273.61 32490273.74 0.1673 0.1090

Saturn 84244-09-09 13:12 G 32490800.92 32490801.05 32490801.21 0.0291 0.0208

Jupiter 84244-11-27 23:17 G 32490880.30 32490880.47 32490880.66 0.0536 0.0246

Saturn 84245-04-27 08:39 G 32491030.65 32491030.86 32491031.07 0.0294 0.0004

Jupiter 84245-07-24 06:29 G 32491118.59 32491118.77 32491118.95 0.0533 0.0259

Neptune 84245-11-12 08:53 G 32491229.83 32491229.87 32491229.93 0.0089 0.0086

Earth 84245-11-29 06:00 G 32491246.65 32491246.75 32491246.85 0.2676 0.2050

Moon 84245-11-29 10:34 G 32491246.82 32491246.94 32491247.05 0.2674 0.1847 *

Saturn 84245-12-13 05:17 G 32491260.57 32491260.72 32491260.87 0.0295 0.0208

Neptune 84246-06-25 21:22 G 32491455.31 32491455.39 32491455.52 0.0089 0.0077

Neptune 84247-02-06 10:34 G 32491680.80 32491680.94 32491681.09 0.0089 0.0067

Neptune 84247-09-19 23:03 G 32491906.32 32491906.46 32491906.65 0.0089 0.0058

Neptune 84248-05-02 12:15 G 32492131.83 32492132.01 32492132.20 0.0089 0.0048

Pluto 84248-07-05 14:53 G 32492195.94 32492196.12 32492196.33 0.0066 0.0029

Neptune 84248-12-14 00:44 G 32492357.35 32492357.53 32492357.74 0.0089 0.0039

Pluto 84249-02-15 19:27 G 32492421.10 32492421.31 32492421.53 0.0066 0.0012

Neptune 84249-07-27 13:41 G 32492582.87 32492583.07 32492583.29 0.0089 0.0029

Pluto 84249-09-28 23:32 G 32492646.37 32492646.48 32492646.63 0.0066 0.0052

Neptune 84250-03-10 02:24 G 32492808.40 32492808.60 32492808.83 0.0089 0.0020

Jupiter 84250-10-02 12:58 G 32493014.88 32493015.04 32493015.21 0.0491 0.0295

Neptune 84250-10-21 15:22 G 32493033.93 32493034.14 32493034.36 0.0089 0.0010

Jupiter 84251-05-26 09:08 G 32493250.68 32493250.88 32493251.08 0.0492 0.0082

Neptune 84251-06-04 04:20 G 32493259.46 32493259.68 32493259.90 0.0089 0.0001

Neptune 84252-01-15 17:03 G 32493485.00 32493485.21 32493485.43 0.0089 0.0009

Jupiter 84252-01-17 05:46 G 32493486.67 32493486.74 32493486.82 0.0496 0.0456

Neptune 84252-08-28 05:46 G 32493710.54 32493710.74 32493710.97 0.0089 0.0020

Neptune 84253-04-10 18:58 G 32493936.08 32493936.29 32493936.49 0.0089 0.0029

Neptune 84253-11-22 07:27 G 32494161.62 32494161.81 32494162.01 0.0089 0.0038

Neptune 84254-07-05 19:56 G 32494387.17 32494387.33 32494387.53 0.0089 0.0048

Neptune 84255-02-16 08:53 G 32494612.71 32494612.87 32494613.05 0.0089 0.0057

Neptune 84255-09-29 21:22 G 32494838.27 32494838.39 32494838.56 0.0089 0.0068

Neptune 84256-05-12 10:20 G 32495063.84 32495063.93 32495064.06 0.0089 0.0077

Jupiter 84256-08-02 11:46 G 32495145.86 32495145.99 32495146.14 0.0536 0.0383

Neptune 84256-12-23 23:17 G 32495289.42 32495289.47 32495289.54 0.0089 0.0086

Jupiter 84257-03-28 19:12 G 32495384.10 32495384.30 32495384.50 0.0535 0.0122

Saturn 84258-07-13 19:41 G 32495856.16 32495856.32 32495856.49 0.0269 0.0171

Saturn 84259-02-28 01:27 G 32496085.35 32496085.56 32496085.78 0.0267 0.0009

Saturn 84259-10-15 06:00 G 32496314.57 32496314.75 32496314.93 0.0266 0.0151

Jupiter 84262-06-07 17:17 G 32497281.10 32497281.22 32497281.34 0.0490 0.0396

Jupiter 84263-01-29 13:27 G 32497516.86 32497517.06 32497517.26 0.0491 0.0023

Jupiter 84263-09-22 09:36 G 32497752.76 32497752.90 32497753.04 0.0495 0.0355

Jupiter 84268-04-07 01:12 G 32499411.50 32499411.55 32499411.62 0.0537 0.0513

Jupiter 84268-12-01 08:10 G 32499649.64 32499649.84 32499650.05 0.0536 0.0017

Jupiter 84269-07-27 15:22 G 32499888.05 32499888.14 32499888.23 0.0531 0.0478

Uranus 84274-03-21 20:10 G 32501586.28 32501586.34 32501586.44 0.0136 0.0126

Saturn 84274-03-22 14:10 G 32501586.93 32501587.09 32501587.25 0.0291 0.0186

Jupiter 84274-10-04 18:29 G 32501783.07 32501783.27 32501783.47 0.0491 0.0127

Uranus 84274-11-03 02:10 G 32501812.45 32501812.59 32501812.75 0.0136 0.0095

Saturn 84274-11-07 09:36 G 32501816.69 32501816.90 32501817.11 0.0293 0.0019

Jupiter 84275-05-28 14:24 G 32502018.93 32502019.10 32502019.28 0.0494 0.0253

Uranus 84275-06-17 07:41 G 32502038.65 32502038.82 32502039.03 0.0136 0.0065

Saturn 84275-06-25 06:00 G 32502046.63 32502046.75 32502046.89 0.0295 0.0229

Uranus 84276-01-29 13:41 G 32502264.86 32502265.07 32502265.28 0.0135 0.0034

Uranus 84276-09-11 19:12 G 32502491.09 32502491.30 32502491.52 0.0135 0.0003

Mars 84277-01-27 14:10 G 32502628.98 32502629.09 32502629.19 0.1661 0.1323

Uranus 84277-04-26 00:29 G 32502717.32 32502717.52 32502717.74 0.0135 0.0028

Uranus 84277-12-08 05:46 G 32502943.55 32502943.74 32502943.94 0.0135 0.0058

Uranus 84278-07-22 10:48 G 32503169.80 32503169.95 32503170.12 0.0135 0.0088

Uranus 84279-03-05 15:51 G 32503396.07 32503396.16 32503396.27 0.0135 0.0118

Jupiter 84280-08-05 20:24 G 32503915.15 32503915.35 32503915.54 0.0536 0.0158

Jupiter 84281-04-01 02:53 G 32504153.47 32504153.62 32504153.78 0.0532 0.0345

Mars 84281-09-08 06:15 G 32504313.64 32504313.76 32504313.87 0.1870 0.1394

Jupiter 84286-06-09 21:36 G 32506049.23 32506049.40 32506049.59 0.0491 0.0234

Jupiter 84287-01-31 18:15 G 32506285.07 32506285.26 32506285.45 0.0493 0.0147

Saturn 84288-01-23 22:34 G 32506642.26 32506642.44 32506642.62 0.0270 0.0150

Saturn 84288-09-09 04:20 G 32506871.47 32506871.68 32506871.90 0.0268 0.0014

Saturn 84289-04-26 08:53 G 32507100.72 32507100.87 32507101.05 0.0267 0.0174

Jupiter 84292-04-10 08:10 G 32508180.67 32508180.84 32508181.01 0.0536 0.0297

Jupiter 84292-12-04 14:24 G 32508418.92 32508419.10 32508419.29 0.0533 0.0208

Jupiter 84298-02-13 02:10 G 32510315.44 32510315.59 32510315.74 0.0491 0.0337

Jupiter 84298-10-06 22:48 G 32510551.25 32510551.45 32510551.65 0.0492 0.0041

Jupiter 84299-05-30 19:27 G 32510787.21 32510787.31 32510787.42 0.0496 0.0418

Saturn 84303-10-03 22:34 G 32512373.27 32512373.44 32512373.62 0.0292 0.0152

Jupiter 84303-12-15 18:15 G 32512446.15 32512446.26 32512446.38 0.0536 0.0436

Saturn 84304-05-20 18:00 G 32512603.05 32512603.25 32512603.46 0.0294 0.0054

Jupiter 84304-08-10 00:44 G 32512684.33 32512684.53 32512684.74 0.0535 0.0065

Saturn 84305-01-05 14:39 G 32512833.02 32512833.11 32512833.21 0.0295 0.0264

Mars 84309-01-27 12:58 G 32514315.89 32514316.04 32514316.19 0.1670 0.0840

Jupiter 84309-10-20 06:29 G 32514581.69 32514581.77 32514581.87 0.0491 0.0437

Jupiter 84310-06-13 03:22 G 32514817.44 32514817.64 32514817.85 0.0491 0.0065

Jupiter 84311-02-03 23:32 G 32515053.33 32515053.48 32515053.64 0.0494 0.0315

Jupiter 84316-04-14 12:44 G 32516949.83 32516950.03 32516950.23 0.0536 0.0076

Jupiter 84316-12-08 19:41 G 32517188.20 32517188.32 32517188.45 0.0532 0.0424

Saturn 84317-08-06 03:22 G 32517428.46 32517428.64 32517428.84 0.0269 0.0123

Uranus 84318-03-17 23:32 G 32517652.35 32517652.48 32517652.63 0.0142 0.0110

Saturn 84318-03-23 09:08 G 32517657.67 32517657.88 32517658.10 0.0267 0.0040

Uranus 84318-10-30 11:17 G 32517878.80 32517878.97 32517879.17 0.0143 0.0074

Saturn 84318-11-07 13:41 G 32517886.93 32517887.07 32517887.21 0.0266 0.0198

Uranus 84319-06-13 23:32 G 32518105.27 32518105.48 32518105.70 0.0143 0.0036

Uranus 84320-01-26 11:46 G 32518331.77 32518331.99 32518332.21 0.0143 0.0002

Uranus 84320-09-08 23:46 G 32518558.28 32518558.49 32518558.71 0.0143 0.0038

Uranus 84321-04-23 12:15 G 32518784.83 32518785.01 32518785.21 0.0143 0.0076

Uranus 84321-12-06 00:58 G 32519011.40 32519011.54 32519011.67 0.0143 0.0113

Jupiter 84322-02-16 07:41 G 32519083.63 32519083.82 32519084.01 0.0491 0.0169

Jupiter 84322-10-10 03:36 G 32519319.46 32519319.65 32519319.83 0.0493 0.0211

Neptune 84326-10-05 04:48 G 32520775.70 32520775.70 32520775.74 0.0089 0.0088

Neptune 84327-05-18 18:00 G 32521001.17 32521001.25 32521001.37 0.0089 0.0079

Jupiter 84327-12-19 01:41 G 32521215.38 32521215.57 32521215.76 0.0536 0.0215

Neptune 84327-12-30 07:12 G 32521226.68 32521226.80 32521226.96 0.0088 0.0070

Neptune 84328-08-11 20:53 G 32521452.21 32521452.37 32521452.54 0.0088 0.0060

Jupiter 84328-08-13 09:08 G 32521453.71 32521453.88 32521454.05 0.0533 0.0292

Neptune 84329-03-25 09:51 G 32521677.75 32521677.91 32521678.11 0.0088 0.0051

Neptune 84329-11-05 23:17 G 32521903.29 32521903.47 32521903.68 0.0088 0.0041

Neptune 84330-06-19 12:29 G 32522128.83 32522129.02 32522129.24 0.0088 0.0031

Neptune 84331-01-31 01:56 G 32522354.37 32522354.58 32522354.80 0.0088 0.0022

Neptune 84331-09-13 15:08 G 32522579.92 32522580.13 32522580.36 0.0088 0.0012

Neptune 84332-04-26 04:34 G 32522805.47 32522805.69 32522805.91 0.0088 0.0002

Neptune 84332-12-07 17:46 G 32523031.02 32523031.24 32523031.46 0.0088 0.0007

Saturn 84333-04-15 00:29 G 32523159.34 32523159.52 32523159.71 0.0292 0.0130

Neptune 84333-07-21 06:44 G 32523256.57 32523256.78 32523257.01 0.0088 0.0017

Jupiter 84333-10-22 12:15 G 32523349.84 32523350.01 32523350.18 0.0490 0.0272

Saturn 84333-11-30 19:56 G 32523389.13 32523389.33 32523389.54 0.0294 0.0077

Neptune 84334-03-03 20:10 G 32523482.13 32523482.34 32523482.56 0.0088 0.0026

Jupiter 84334-06-15 08:10 G 32523585.65 32523585.84 32523586.04 0.0492 0.0107

Saturn 84334-07-18 16:34 G 32523619.15 32523619.19 32523619.25 0.0295 0.0287

Neptune 84334-10-15 09:08 G 32523707.69 32523707.88 32523708.10 0.0088 0.0036

Jupiter 84335-02-06 05:03 G 32523821.67 32523821.71 32523821.76 0.0496 0.0481

Neptune 84335-05-28 22:20 G 32523933.25 32523933.43 32523933.63 0.0088 0.0046

Neptune 84336-01-09 11:17 G 32524158.82 32524158.97 32524159.16 0.0088 0.0055

Pluto 84336-03-07 21:51 G 32524217.27 32524217.41 32524217.60 0.0078 0.0052

Neptune 84336-08-22 00:44 G 32524384.39 32524384.53 32524384.69 0.0088 0.0064

Pluto 84336-10-19 08:10 G 32524442.63 32524442.84 32524443.06 0.0078 0.0018

Neptune 84337-04-04 13:41 G 32524609.98 32524610.07 32524610.22 0.0088 0.0074

Neptune 84337-11-16 03:08 G 32524835.58 32524835.63 32524835.72 0.0088 0.0083

Jupiter 84339-08-23 14:39 G 32525480.96 32525481.11 32525481.27 0.0536 0.0352

Jupiter 84340-04-17 21:08 G 32525719.18 32525719.38 32525719.58 0.0534 0.0153

Mars 84342-11-26 00:44 G 32526671.47 32526671.53 32526671.59 0.1658 0.1554

Jupiter 84345-06-27 14:39 G 32527615.99 32527616.11 32527616.24 0.0491 0.0378

Jupiter 84346-02-18 11:32 G 32527851.78 32527851.98 32527852.19 0.0492 0.0010

Saturn 84346-07-02 00:00 G 32527985.46 32527985.50 32527985.53 0.0271 0.0267

Jupiter 84346-10-12 08:39 G 32528087.73 32528087.86 32528087.98 0.0495 0.0379

Saturn 84347-02-16 06:58 G 32528214.59 32528214.79 32528214.99 0.0270 0.0101

Saturn 84347-10-03 12:29 G 32528443.82 32528444.02 32528444.23 0.0268 0.0063

Saturn 84348-05-19 17:03 G 32528673.10 32528673.21 32528673.34 0.0266 0.0222

Jupiter 84351-04-28 02:39 G 32529746.54 32529746.61 32529746.70 0.0536 0.0487

Jupiter 84351-12-22 08:39 G 32529984.65 32529984.86 32529985.06 0.0535 0.0017

Jupiter 84352-08-16 14:24 G 32530223.04 32530223.10 32530223.16 0.0530 0.0502

Jupiter 84357-03-02 18:29 G 32531882.24 32531882.27 32531882.32 0.0491 0.0479

Jupiter 84357-10-24 16:05 G 32532117.97 32532118.17 32532118.37 0.0491 0.0108

Jupiter 84358-06-17 12:29 G 32532353.85 32532354.02 32532354.19 0.0494 0.0274

Uranus 84358-07-04 14:24 G 32532370.98 32532371.10 32532371.24 0.0136 0.0107

Uranus 84359-02-15 20:24 G 32532597.17 32532597.35 32532597.53 0.0136 0.0076

Uranus 84359-09-30 01:56 G 32532823.39 32532823.58 32532823.79 0.0135 0.0046

Uranus 84360-05-13 07:41 G 32533049.61 32533049.82 32533050.04 0.0135 0.0015

Uranus 84360-12-25 12:58 G 32533275.83 32533276.04 32533276.26 0.0135 0.0016

Uranus 84361-08-08 18:15 G 32533502.06 32533502.26 32533502.47 0.0135 0.0046

Uranus 84362-03-22 23:32 G 32533728.31 32533728.48 32533728.66 0.0135 0.0076

Saturn 84362-10-26 10:05 G 32533945.73 32533945.92 32533946.12 0.0292 0.0093

Uranus 84362-11-04 04:34 G 32533954.57 32533954.69 32533954.83 0.0135 0.0106

Saturn 84363-06-13 05:46 G 32534175.55 32534175.74 32534175.93 0.0294 0.0115

Jupiter 84363-08-26 18:15 G 32534250.06 32534250.26 32534250.46 0.0536 0.0134

Jupiter 84364-04-21 00:58 G 32534488.39 32534488.54 32534488.68 0.0532 0.0369

Jupiter 84369-06-29 20:39 G 32536384.18 32536384.36 32536384.55 0.0491 0.0212

Jupiter 84370-02-20 16:48 G 32536620.01 32536620.20 32536620.40 0.0493 0.0169

Mars 84374-11-24 23:17 G 32538358.30 32538358.47 32538358.63 0.1667 0.0583

Jupiter 84375-05-01 05:46 G 32538515.57 32538515.74 32538515.92 0.0536 0.0275

Jupiter 84375-12-25 12:44 G 32538753.85 32538754.03 32538754.22 0.0534 0.0232

Saturn 84376-01-12 06:15 G 32538771.66 32538771.76 32538771.87 0.0271 0.0237

Saturn 84376-08-28 12:58 G 32539000.84 32539001.04 32539001.25 0.0269 0.0072

Saturn 84377-04-14 18:29 G 32539230.07 32539230.27 32539230.48 0.0267 0.0091

Saturn 84377-11-29 22:48 G 32539459.38 32539459.45 32539459.53 0.0266 0.0248

Mars 84379-07-07 02:24 G 32540043.49 32540043.60 32540043.71 0.1862 0.1436

Jupiter 84381-03-05 00:44 G 32540650.37 32540650.53 32540650.69 0.0490 0.0315

Jupiter 84381-10-26 20:53 G 32540886.16 32540886.37 32540886.57 0.0492 0.0064

Jupiter 84382-06-19 17:03 G 32541122.13 32541122.21 32541122.31 0.0495 0.0440

Moon 84383-05-29 11:32 G 32541465.84 32541465.98 32541466.11 0.2658 0.1377

Earth 84383-05-29 17:32 G 32541466.07 32541466.23 32541466.39 0.2656 0.0663 *

Jupiter 84387-01-03 18:44 G 32542781.15 32542781.28 32542781.41 0.0536 0.0410

Jupiter 84387-08-30 01:41 G 32543019.37 32543019.57 32543019.77 0.0535 0.0095

Saturn 84391-09-20 19:56 G 32544502.26 32544502.33 32544502.41 0.0290 0.0267

Saturn 84392-05-07 14:10 G 32544731.89 32544732.09 32544732.29 0.0292 0.0067

Jupiter 84392-11-08 04:34 G 32544916.59 32544916.69 32544916.80 0.0490 0.0417

Saturn 84392-12-23 09:51 G 32544961.73 32544961.91 32544962.09 0.0294 0.0141

Jupiter 84393-07-02 01:27 G 32545152.35 32545152.56 32545152.76 0.0491 0.0043

Jupiter 84394-02-22 21:22 G 32545388.25 32545388.39 32545388.55 0.0494 0.0339

Jupiter 84399-05-04 14:10 G 32547284.88 32547285.09 32547285.29 0.0535 0.0047

Jupiter 84399-12-28 20:24 G 32547523.24 32547523.35 32547523.46 0.0531 0.0451

Uranus 84401-11-15 06:44 G 32548210.69 32548210.78 32548210.90 0.0142 0.0126

Uranus 84402-06-29 18:29 G 32548437.11 32548437.27 32548437.46 0.0142 0.0090

Uranus 84403-02-11 06:29 G 32548663.58 32548663.77 32548663.99 0.0143 0.0053

Uranus 84403-09-25 18:44 G 32548890.06 32548890.28 32548890.50 0.0143 0.0016

Uranus 84404-05-09 06:58 G 32549116.58 32549116.79 32549117.01 0.0143 0.0022

Uranus 84404-12-21 18:58 G 32549343.10 32549343.29 32549343.50 0.0143 0.0060

Jupiter 84405-03-07 04:05 G 32549418.48 32549418.67 32549418.87 0.0491 0.0151

Saturn 84405-07-24 09:36 G 32549557.78 32549557.90 32549558.04 0.0271 0.0215

Uranus 84405-08-05 07:27 G 32549569.66 32549569.81 32549569.98 0.0143 0.0096

Jupiter 84405-10-29 00:44 G 32549654.35 32549654.53 32549654.71 0.0494 0.0232

Saturn 84406-03-10 16:48 G 32549786.99 32549787.20 32549787.41 0.0269 0.0049

Uranus 84406-03-19 19:56 G 32549796.26 32549796.33 32549796.42 0.0144 0.0134

Saturn 84406-10-25 22:20 G 32550016.24 32550016.43 32550016.63 0.0268 0.0114

Neptune 84410-09-28 06:00 G 32551449.68 32551449.75 32551449.86 0.0089 0.0081

Jupiter 84411-01-07 01:41 G 32551550.38 32551550.57 32551550.76 0.0535 0.0189

Neptune 84411-05-11 19:12 G 32551675.17 32551675.30 32551675.43 0.0089 0.0071

Jupiter 84411-09-02 07:56 G 32551788.67 32551788.83 32551789.00 0.0532 0.0317

Neptune 84411-12-23 07:41 G 32551900.68 32551900.82 32551900.99 0.0089 0.0062

Neptune 84412-08-04 20:39 G 32552126.19 32552126.36 32552126.55 0.0089 0.0052

Neptune 84413-03-18 09:22 G 32552351.71 32552351.89 32552352.09 0.0089 0.0043

Neptune 84413-10-29 22:05 G 32552577.23 32552577.42 32552577.63 0.0089 0.0033

Neptune 84414-06-12 10:48 G 32552802.75 32552802.95 32552803.17 0.0089 0.0024

Neptune 84415-01-23 23:46 G 32553028.28 32553028.49 32553028.71 0.0089 0.0014

Neptune 84415-09-06 12:44 G 32553253.81 32553254.03 32553254.25 0.0089 0.0004

Neptune 84416-04-19 01:27 G 32553479.35 32553479.56 32553479.78 0.0089 0.0006

Jupiter 84416-11-10 08:10 G 32553684.67 32553684.84 32553685.02 0.0491 0.0257

Neptune 84416-11-30 14:10 G 32553704.88 32553705.09 32553705.31 0.0089 0.0015

Jupiter 84417-07-04 04:48 G 32553920.50 32553920.70 32553920.90 0.0493 0.0125

Neptune 84417-07-14 02:53 G 32553930.42 32553930.62 32553930.84 0.0089 0.0025

Neptune 84418-02-24 15:51 G 32554155.96 32554156.16 32554156.36 0.0089 0.0034

Neptune 84418-10-08 04:34 G 32554381.51 32554381.69 32554381.89 0.0089 0.0044

Neptune 84419-05-21 17:32 G 32554607.06 32554607.23 32554607.41 0.0089 0.0053

Neptune 84420-01-02 06:00 G 32554832.61 32554832.75 32554832.92 0.0089 0.0063

Neptune 84420-08-14 19:12 G 32555058.18 32555058.30 32555058.43 0.0089 0.0073

Neptune 84421-03-28 07:41 G 32555283.75 32555283.82 32555283.92 0.0089 0.0082

Saturn 84421-04-02 05:46 G 32555288.62 32555288.74 32555288.87 0.0290 0.0230

Saturn 84421-11-18 00:15 G 32555518.31 32555518.51 32555518.72 0.0292 0.0028

Saturn 84422-07-05 20:10 G 32555748.18 32555748.34 32555748.50 0.0294 0.0180

Jupiter 84422-09-11 11:03 G 32555815.80 32555815.96 32555816.12 0.0536 0.0332

Jupiter 84423-05-07 17:32 G 32556054.03 32556054.23 32556054.42 0.0534 0.0174

Jupiter 84428-07-16 12:44 G 32557950.90 32557951.03 32557951.17 0.0491 0.0358

Jupiter 84429-03-09 09:36 G 32558186.69 32558186.90 32558187.10 0.0492 0.0022

Jupiter 84429-10-31 06:00 G 32558422.63 32558422.75 32558422.87 0.0495 0.0399

Jupiter 84434-05-16 22:34 G 32560081.34 32560081.44 32560081.54 0.0536 0.0469

Jupiter 84435-01-10 04:48 G 32560319.50 32560319.70 32560319.90 0.0535 0.0033

Saturn 84435-02-03 17:32 G 32560344.08 32560344.23 32560344.39 0.0270 0.0183

Jupiter 84435-09-05 11:17 G 32560557.95 32560557.97 32560558.00 0.0531 0.0525

Saturn 84435-09-21 00:15 G 32560573.29 32560573.51 32560573.72 0.0269 0.0018

Saturn 84436-05-07 05:32 G 32560802.55 32560802.73 32560802.91 0.0267 0.0144

Jupiter 84440-03-21 16:20 G 32562217.12 32562217.18 32562217.26 0.0491 0.0459

Mars 84440-09-21 09:51 G 32562400.73 32562400.91 32562401.08 0.1664 0.0347

Jupiter 84440-11-12 13:12 G 32562452.85 32562453.05 32562453.25 0.0491 0.0087

Jupiter 84441-07-06 09:22 G 32562688.73 32562688.89 32562689.05 0.0494 0.0295

Uranus 84442-03-04 02:24 G 32562929.51 32562929.60 32562929.72 0.0136 0.0119

Uranus 84442-10-16 08:39 G 32563155.70 32563155.86 32563156.03 0.0136 0.0088

Uranus 84443-05-30 14:10 G 32563381.91 32563382.09 32563382.30 0.0136 0.0058

Uranus 84444-01-11 19:56 G 32563608.12 32563608.33 32563608.55 0.0135 0.0027

Uranus 84444-08-25 01:27 G 32563834.35 32563834.56 32563834.78 0.0135 0.0005

Uranus 84445-04-08 06:44 G 32564060.58 32564060.78 32564061.00 0.0135 0.0035

Mars 84445-05-03 07:41 G 32564085.68 32564085.82 32564085.97 0.1866 0.0907

Uranus 84445-11-20 11:46 G 32564286.82 32564286.99 32564287.19 0.0135 0.0065

Uranus 84446-07-04 17:17 G 32564513.07 32564513.22 32564513.37 0.0135 0.0094

Jupiter 84446-09-14 17:17 G 32564585.02 32564585.22 32564585.42 0.0536 0.0108

Uranus 84447-02-15 22:05 G 32564739.35 32564739.42 32564739.51 0.0135 0.0124

Jupiter 84447-05-11 00:15 G 32564823.38 32564823.51 32564823.65 0.0532 0.0396

Saturn 84450-10-13 11:17 G 32566074.83 32566074.97 32566075.13 0.0290 0.0202

Saturn 84451-05-31 06:00 G 32566304.54 32566304.75 32566304.95 0.0292 0.0006

Saturn 84452-01-16 01:41 G 32566534.43 32566534.57 32566534.72 0.0294 0.0209

Jupiter 84452-07-18 17:32 G 32566719.05 32566719.23 32566719.42 0.0491 0.0192

Jupiter 84453-03-11 13:41 G 32566954.88 32566955.07 32566955.26 0.0493 0.0190

Jupiter 84458-05-20 06:15 G 32568850.58 32568850.76 32568850.94 0.0536 0.0249

Jupiter 84459-01-13 12:58 G 32569088.86 32569089.04 32569089.22 0.0533 0.0260

Jupiter 84464-03-23 19:41 G 32570985.16 32570985.32 32570985.49 0.0491 0.0300

Saturn 84464-08-15 21:22 G 32571130.23 32571130.39 32571130.57 0.0271 0.0160

Jupiter 84464-11-14 16:20 G 32571220.98 32571221.18 32571221.38 0.0492 0.0081

Saturn 84465-04-02 04:20 G 32571359.46 32571359.68 32571359.89 0.0269 0.0007

Jupiter 84465-07-08 13:27 G 32571456.99 32571457.06 32571457.14 0.0496 0.0459

Saturn 84465-11-17 09:22 G 32571588.73 32571588.89 32571589.07 0.0267 0.0168

Jupiter 84470-01-22 18:15 G 32573116.12 32573116.26 32573116.40 0.0536 0.0386

Jupiter 84470-09-18 00:15 G 32573354.32 32573354.51 32573354.72 0.0534 0.0121

Jupiter 84475-11-27 23:32 G 32575251.36 32575251.48 32575251.59 0.0491 0.0403

Jupiter 84476-07-20 20:39 G 32575487.16 32575487.36 32575487.56 0.0492 0.0026

Jupiter 84477-03-13 17:17 G 32575723.09 32575723.22 32575723.36 0.0495 0.0356

Saturn 84480-04-24 22:05 G 32576861.25 32576861.42 32576861.60 0.0291 0.0163

Moon 84480-12-02 12:15 G 32577082.85 32577083.01 32577083.16 0.2672 0.0795

Earth 84480-12-02 16:20 G 32577083.04 32577083.18 32577083.31 0.2677 0.1326 *

Saturn 84480-12-10 17:03 G 32577091.00 32577091.21 32577091.41 0.0293 0.0042

Saturn 84481-07-28 12:58 G 32577320.94 32577321.04 32577321.16 0.0295 0.0251

Jupiter 84481-09-27 03:36 G 32577381.61 32577381.65 32577381.69 0.0536 0.0524

Jupiter 84482-05-23 09:08 G 32577619.68 32577619.88 32577620.08 0.0535 0.0028

Jupiter 84483-01-16 15:22 G 32577858.05 32577858.14 32577858.24 0.0531 0.0470

Uranus 84485-07-15 13:12 G 32578769.04 32578769.05 32578769.07 0.0142 0.0142

Uranus 84486-02-27 00:58 G 32578995.39 32578995.54 32578995.68 0.0142 0.0106

Uranus 84486-10-11 12:29 G 32579221.83 32579222.02 32579222.22 0.0142 0.0070

Uranus 84487-05-26 00:29 G 32579448.31 32579448.52 32579448.74 0.0143 0.0033

Uranus 84488-01-07 12:29 G 32579674.80 32579675.02 32579675.24 0.0143 0.0004

Jupiter 84488-03-26 01:27 G 32579753.36 32579753.56 32579753.75 0.0491 0.0131

Uranus 84488-08-21 00:29 G 32579901.31 32579901.52 32579901.74 0.0143 0.0041

Jupiter 84488-11-16 21:36 G 32579989.23 32579989.40 32579989.58 0.0493 0.0252

Moon 84488-11-30 03:22 G 32580002.54 32580002.64 32580002.74 0.2676 0.2010

Earth 84488-11-30 08:53 G 32580002.76 32580002.87 32580002.98 0.2675 0.1859

Uranus 84489-04-04 12:44 G 32580127.86 32580128.03 32580128.22 0.0143 0.0079

Uranus 84489-11-17 01:12 G 32580354.42 32580354.55 32580354.68 0.0143 0.0116

Neptune 84491-08-20 01:41 G 32580995.51 32580995.57 32580995.66 0.0089 0.0083

Neptune 84492-04-01 14:39 G 32581221.01 32581221.11 32581221.26 0.0089 0.0074

Neptune 84492-11-13 04:20 G 32581446.53 32581446.68 32581446.84 0.0089 0.0064

Neptune 84493-06-26 17:17 G 32581672.06 32581672.22 32581672.41 0.0088 0.0055

Jupiter 84494-01-25 20:10 G 32581885.15 32581885.34 32581885.54 0.0536 0.0171

Neptune 84494-02-07 06:58 G 32581897.61 32581897.79 32581897.99 0.0088 0.0045

Saturn 84494-02-26 06:15 G 32581916.57 32581916.76 32581916.95 0.0270 0.0126

Neptune 84494-09-20 20:10 G 32582123.15 32582123.34 32582123.55 0.0088 0.0035

Jupiter 84494-09-21 03:08 G 32582123.47 32582123.63 32582123.79 0.0533 0.0337 *

Saturn 84494-10-13 12:29 G 32582145.81 32582146.02 32582146.24 0.0268 0.0038

Neptune 84495-05-04 09:22 G 32582348.69 32582348.89 32582349.12 0.0088 0.0026

Saturn 84495-05-30 17:32 G 32582375.09 32582375.23 32582375.38 0.0267 0.0199

Neptune 84495-12-15 22:48 G 32582574.24 32582574.45 32582574.67 0.0088 0.0016

Neptune 84496-07-28 12:15 G 32582799.79 32582800.01 32582800.23 0.0088 0.0006

Pluto 84497-01-19 18:00 G 32582975.07 32582975.25 32582975.47 0.0066 0.0028

Neptune 84497-03-11 01:41 G 32583025.35 32583025.57 32583025.79 0.0088 0.0004

Pluto 84497-09-01 22:34 G 32583200.23 32583200.44 32583200.66 0.0066 0.0013

Neptune 84497-10-22 14:39 G 32583250.90 32583251.11 32583251.34 0.0088 0.0014

Pluto 84498-04-15 02:39 G 32583425.50 32583425.61 32583425.76 0.0066 0.0053

Neptune 84498-06-05 04:05 G 32583476.45 32583476.67 32583476.88 0.0088 0.0023

Neptune 84499-01-16 17:03 G 32583702.01 32583702.21 32583702.43 0.0088 0.0033

Neptune 84499-08-30 06:00 G 32583927.58 32583927.75 32583927.97 0.0088 0.0043

Jupiter 84499-11-30 05:03 G 32584019.53 32584019.71 32584019.89 0.0491 0.0236

Neptune 84500-04-12 19:41 G 32584153.15 32584153.32 32584153.51 0.0088 0.0052

Jupiter 84500-07-24 01:12 G 32584255.36 32584255.55 32584255.74 0.0492 0.0146

Neptune 84500-11-24 08:39 G 32584378.72 32584378.86 32584379.04 0.0088 0.0061

Neptune 84501-07-07 21:51 G 32584604.29 32584604.41 32584604.56 0.0088 0.0071

Neptune 84502-02-18 10:48 G 32584829.89 32584829.95 32584830.07 0.0088 0.0081

Jupiter 84505-10-01 08:24 G 32586150.68 32586150.85 32586151.02 0.0536 0.0310

Jupiter 84506-05-27 15:22 G 32586388.95 32586389.14 32586389.33 0.0534 0.0199

Mars 84506-07-20 19:56 G 32586443.16 32586443.33 32586443.51 0.1661 0.0105

Saturn 84509-11-06 04:48 G 32587647.51 32587647.70 32587647.88 0.0291 0.0133

Saturn 84510-06-23 23:32 G 32587877.28 32587877.48 32587877.68 0.0293 0.0072

Saturn 84511-02-08 19:27 G 32588107.26 32588107.31 32588107.38 0.0295 0.0281

Mars 84511-03-01 12:44 G 32588127.86 32588128.03 32588128.19 0.1870 0.0353

Jupiter 84511-08-06 08:53 G 32588285.73 32588285.87 32588286.02 0.0490 0.0340

Jupiter	84512-03-29 05:17 G	32588521.52	32588521.72	32588521.93	0.0492	0.0041
Jupiter	84512-11-20 01:41 G	32588757.47	32588757.57	32588757.68	0.0495	0.0419
Jupiter	84517-06-05 21:51 G	32590416.30	32590416.41	32590416.52	0.0536	0.0446
Jupiter	84518-01-30 04:20 G	32590654.48	32590654.68	32590654.88	0.0535	0.0059
Saturn	84523-01-23 02:24 G	32592473.59	32592473.60	32592473.64	0.0272	0.0270
Jupiter	84523-04-11 10:34 G	32592551.86	32592551.94	32592552.03	0.0491	0.0446
Saturn	84523-09-09 10:20 G	32592702.73	32592702.93	32592703.13	0.0270	0.0102
Jupiter	84523-12-03 07:56 G	32592787.63	32592787.83	32592788.03	0.0491	0.0071
Saturn	84524-04-25 16:34 G	32592931.99	32592932.19	32592932.41	0.0269	0.0063
Jupiter	84524-07-26 04:20 G	32593023.53	32593023.68	32593023.84	0.0494	0.0313
Saturn	84524-12-10 21:36 G	32593161.29	32593161.40	32593161.52	0.0267	0.0223
Uranus	84525-11-02 13:41 G	32593488.02	32593488.07	32593488.12	0.0136	0.0132
Uranus	84526-06-16 19:27 G	32593714.18	32593714.31	32593714.46	0.0136	0.0101
Uranus	84527-01-29 01:27 G	32593940.38	32593940.56	32593940.75	0.0136	0.0070
Uranus	84527-09-12 07:12 G	32594166.60	32594166.80	32594167.01	0.0136	0.0039
Uranus	84528-04-25 12:58 G	32594392.82	32594393.04	32594393.25	0.0135	0.0009
Uranus	84528-12-07 18:15 G	32594619.05	32594619.26	32594619.48	0.0135	0.0022
Uranus	84529-07-21 23:17 G	32594845.28	32594845.47	32594845.68	0.0135	0.0053
Jupiter	84529-10-04 15:51 G	32594919.96	32594920.16	32594920.36	0.0535	0.0084
Uranus	84530-03-05 04:34 G	32595071.53	32595071.69	32595071.87	0.0135	0.0082
Jupiter	84530-05-30 22:05 G	32595158.30	32595158.42	32595158.55	0.0532	0.0419
Uranus	84530-10-17 09:51 G	32595297.80	32595297.91	32595298.04	0.0135	0.0112
Jupiter	84535-08-08 12:00 G	32597053.82	32597054.00	32597054.19	0.0491	0.0177
Jupiter	84536-03-31 08:39 G	32597289.68	32597289.86	32597290.04	0.0493	0.0207
Saturn	84539-05-19 15:08 G	32598433.93	32598434.13	32598434.33	0.0291	0.0094
Saturn	84540-01-04 10:20 G	32598663.74	32598663.93	32598664.12	0.0293	0.0112
Jupiter	84541-06-09 00:29 G	32599185.33	32599185.52	32599185.70	0.0536	0.0230
Jupiter	84542-02-02 06:58 G	32599423.62	32599423.79	32599423.97	0.0533	0.0279
Jupiter	84547-04-13 16:34 G	32601320.03	32601320.19	32601320.36	0.0491	0.0280
Jupiter	84547-12-05 13:12 G	32601555.85	32601556.05	32601556.25	0.0492	0.0101

Jupiter 84548-07-28 09:51 G 32601791.87 32601791.91 32601791.97 0.0496 0.0479

Saturn 84552-08-04 12:00 G 32603259.90 32603260.00 32603260.11 0.0271 0.0236

Jupiter 84553-02-11 11:32 G 32603450.84 32603450.98 32603451.13 0.0536 0.0371

Saturn 84553-03-21 19:27 G 32603489.10 32603489.31 32603489.52 0.0269 0.0069

Jupiter 84553-10-07 18:00 G 32603689.05 32603689.25 32603689.45 0.0534 0.0138

Saturn 84553-11-06 01:27 G 32603718.36 32603718.56 32603718.76 0.0268 0.0095

Saturn 84554-06-23 06:00 G 32603947.70 32603947.75 32603947.82 0.0266 0.0254

Jupiter 84558-12-17 20:10 G 32605586.22 32605586.34 32605586.47 0.0490 0.0383

Jupiter 84559-08-10 17:03 G 32605822.01 32605822.21 32605822.41 0.0491 0.0006

Jupiter 84560-04-02 13:12 G 32606057.92 32606058.05 32606058.18 0.0494 0.0375

Jupiter 84564-10-16 23:46 G 32607716.43 32607716.49 32607716.56 0.0536 0.0505

Jupiter 84565-06-12 06:00 G 32607954.54 32607954.75 32607954.95 0.0535 0.0012

Jupiter 84566-02-05 12:44 G 32608192.96 32608193.03 32608193.11 0.0532 0.0495

Saturn 84568-04-13 05:03 G 32608990.63 32608990.71 32608990.80 0.0290 0.0262

Saturn 84568-11-28 22:48 G 32609220.25 32609220.45 32609220.66 0.0292 0.0062

Saturn 84569-07-16 18:00 G 32609450.07 32609450.25 32609450.43 0.0294 0.0145

Uranus 84569-10-28 07:56 G 32609553.73 32609553.83 32609553.96 0.0142 0.0122

Uranus 84570-06-11 19:41 G 32609780.15 32609780.32 32609780.50 0.0142 0.0085

Jupiter 84570-08-22 23:46 G 32609852.46 32609852.49 32609852.52 0.0491 0.0484

Uranus 84571-01-24 07:27 G 32610006.61 32610006.81 32610007.02 0.0143 0.0049

Jupiter 84571-04-15 20:53 G 32610088.17 32610088.37 32610088.57 0.0491 0.0112

Uranus 84571-09-07 19:12 G 32610233.09 32610233.30 32610233.53 0.0143 0.0013

Jupiter 84571-12-07 16:48 G 32610324.04 32610324.20 32610324.38 0.0493 0.0272

Uranus 84572-04-21 07:27 G 32610459.59 32610459.81 32610460.03 0.0143 0.0025

Mars 84572-05-17 06:58 G 32610485.62 32610485.79 32610485.97 0.1658 0.0130

Uranus 84572-12-03 19:12 G 32610686.12 32610686.30 32610686.51 0.0143 0.0062

Uranus 84573-07-18 07:27 G 32610912.66 32610912.81 32610912.98 0.0143 0.0099

Uranus 84574-03-01 19:41 G 32611139.27 32611139.32 32611139.40 0.0143 0.0136

Neptune 84574-12-31 15:36 G 32611444.09 32611444.15 32611444.22 0.0089 0.0084

Neptune 84575-08-14 04:20 G 32611669.58 32611669.68 32611669.81 0.0089 0.0075

Neptune 84576-03-26 16:48 G 32611895.08 32611895.20 32611895.37 0.0089 0.0066

Neptune 84576-11-07 05:46 G 32612120.58 32612120.74 32612120.92 0.0089 0.0056

Mars 84576-12-26 18:00 G 32612170.08 32612170.25 32612170.42 0.1874 0.0198

Jupiter 84577-02-14 19:12 G 32612220.10 32612220.30 32612220.49 0.0536 0.0146

Neptune 84577-06-20 18:44 G 32612346.09 32612346.28 32612346.47 0.0089 0.0046

Jupiter 84577-10-11 01:56 G 32612458.44 32612458.58 32612458.73 0.0533 0.0362

Neptune 84578-02-01 07:12 G 32612571.61 32612571.80 32612572.01 0.0089 0.0037

Neptune 84578-09-14 20:10 G 32612797.14 32612797.34 32612797.55 0.0089 0.0027

Neptune 84579-04-28 08:53 G 32613022.66 32613022.87 32613023.09 0.0089 0.0018

Neptune 84579-12-09 21:36 G 32613248.19 32613248.40 32613248.62 0.0089 0.0008

Neptune 84580-07-22 10:34 G 32613473.72 32613473.94 32613474.16 0.0089 0.0002

Neptune 84581-03-04 23:17 G 32613699.25 32613699.47 32613699.69 0.0089 0.0011

Neptune 84581-10-16 12:00 G 32613924.79 32613925.00 32613925.21 0.0089 0.0021

Saturn 84582-02-14 16:20 G 32614046.05 32614046.18 32614046.32 0.0271 0.0211

Neptune 84582-05-30 00:29 G 32614150.33 32614150.52 32614150.74 0.0089 0.0031

Saturn 84582-10-01 23:32 G 32614275.27 32614275.48 32614275.69 0.0270 0.0045

Jupiter 84582-12-19 23:17 G 32614354.29 32614354.47 32614354.65 0.0491 0.0221

Neptune 84583-01-10 13:27 G 32614375.87 32614376.06 32614376.26 0.0089 0.0040

Saturn 84583-05-19 05:17 G 32614504.53 32614504.72 32614504.92 0.0268 0.0119

Jupiter 84583-08-12 19:41 G 32614590.13 32614590.32 32614590.51 0.0493 0.0163

Neptune 84583-08-24 02:10 G 32614601.42 32614601.59 32614601.78 0.0089 0.0050

Neptune 84584-04-05 14:39 G 32614826.98 32614827.11 32614827.30 0.0089 0.0061

Pluto 84584-09-22 00:58 G 32614996.39 32614996.54 32614996.73 0.0078 0.0051

Neptune 84584-11-17 03:36 G 32615052.53 32615052.65 32615052.80 0.0089 0.0070

Pluto 84585-05-05 11:03 G 32615221.75 32615221.96 32615222.19 0.0078 0.0019

Neptune 84585-06-30 16:05 G 32615278.10 32615278.17 32615278.30 0.0089 0.0080

Neptune 84586-02-11 05:03 G 32615503.70 32615503.71 32615503.76 0.0089 0.0089

Jupiter 84588-10-20 07:12 G 32616485.62 32616485.80 32616485.97 0.0536 0.0286

Jupiter 84589-06-15 13:41 G 32616723.88 32616724.07 32616724.25 0.0534 0.0224

Jupiter 84594-08-25 03:22 G 32618620.49 32618620.64 32618620.79 0.0491 0.0325

Jupiter 84595-04-18 00:00 G 32618856.30 32618856.50 32618856.71 0.0492 0.0056

Jupiter 84595-12-09 20:53 G 32619092.28 32619092.37 32619092.47 0.0495 0.0435

Saturn 84597-10-24 14:10 G 32619776.97 32619777.09 32619777.22 0.0290 0.0226

Saturn 84598-06-11 08:24 G 32620006.64 32620006.85 32620007.06 0.0292 0.0024

Saturn 84599-01-27 03:51 G 32620236.51 32620236.66 32620236.83 0.0294 0.0184

Jupiter 84600-06-25 16:05 G 32620751.05 32620751.17 32620751.29 0.0536 0.0427

Jupiter 84601-02-18 22:05 G 32620989.22 32620989.42 32620989.62 0.0535 0.0078

Jupiter 84606-05-01 07:41 G 32622886.72 32622886.82 32622886.92 0.0491 0.0426

Jupiter 84606-12-23 04:48 G 32623122.50 32623122.70 32623122.90 0.0491 0.0050

Jupiter 84607-08-16 01:27 G 32623358.41 32623358.56 32623358.71 0.0494 0.0333

Uranus 84610-02-15 06:00 G 32624272.66 32624272.75 32624272.89 0.0136 0.0115

Uranus 84610-09-29 12:29 G 32624498.86 32624499.02 32624499.20 0.0136 0.0083

Uranus 84611-05-13 18:29 G 32624725.07 32624725.27 32624725.47 0.0136 0.0052

Saturn 84611-08-29 01:27 G 32624832.40 32624832.56 32624832.72 0.0271 0.0178

Uranus 84611-12-26 00:00 G 32624951.29 32624951.50 32624951.71 0.0136 0.0022

Saturn 84612-04-14 08:24 G 32625061.64 32625061.85 32625062.07 0.0269 0.0012

Uranus 84612-08-08 05:32 G 32625177.52 32625177.73 32625177.95 0.0136 0.0009

Jupiter 84612-10-24 08:53 G 32625254.67 32625254.87 32625255.07 0.0535 0.0066

Saturn 84612-11-29 14:10 G 32625290.91 32625291.09 32625291.26 0.0267 0.0151

Uranus 84613-03-22 10:48 G 32625403.75 32625403.95 32625404.16 0.0135 0.0040

Jupiter 84613-06-19 15:22 G 32625493.03 32625493.14 32625493.26 0.0532 0.0437

Uranus 84613-11-03 16:20 G 32625630.00 32625630.18 32625630.36 0.0135 0.0070

Uranus 84614-06-17 21:22 G 32625856.25 32625856.39 32625856.54 0.0135 0.0100

Uranus 84615-01-30 02:24 G 32626082.55 32626082.60 32626082.67 0.0135 0.0129

Jupiter 84618-08-28 08:53 G 32627388.67 32627388.87 32627389.06 0.0491 0.0156

Jupiter 84619-04-21 04:48 G 32627624.52 32627624.70 32627624.88 0.0493 0.0228

Jupiter 84624-06-28 20:39 G 32629520.17 32629520.36 32629520.55 0.0536 0.0209

Jupiter 84625-02-22 03:51 G 32629758.49 32629758.66 32629758.83 0.0534 0.0302

Earth 84626-05-31 17:03 G 32630222.06 32630222.21 32630222.37 0.2657 0.0630

Moon 84626-05-31 22:48 G 32630222.29 32630222.45 32630222.61 0.2659 0.0267 *

Saturn 84627-05-07 22:05 G 32630563.27 32630563.42 32630563.58 0.0290 0.0195

Saturn 84627-12-23 16:20 G 32630792.97 32630793.18 32630793.39 0.0292 0.0009

Saturn 84628-08-09 11:46 G 32631022.86 32631022.99 32631023.14 0.0294 0.0217

Jupiter 84630-05-03 12:29 G 32631654.85 32631655.02 32631655.20 0.0490 0.0262

Jupiter 84630-12-25 08:39 G 32631890.67 32631890.86 32631891.06 0.0492 0.0122

Jupiter 84636-03-03 10:05 G 32633785.77 32633785.92 32633786.08 0.0536 0.0347

Jupiter 84636-10-27 17:03 G 32634024.01 32634024.21 32634024.40 0.0535 0.0164

Mars 84638-03-15 17:17 G 32634528.05 32634528.22 32634528.39 0.1655 0.0365

Saturn 84641-03-10 05:32 G 32635618.56 32635618.73 32635618.92 0.0271 0.0154

Saturn 84641-10-25 12:15 G 32635847.80 32635848.01 32635848.23 0.0269 0.0013

Jupiter 84642-01-06 14:53 G 32635920.99 32635921.12 32635921.26 0.0490 0.0368

Saturn 84642-06-11 17:32 G 32636077.08 32636077.23 32636077.40 0.0267 0.0175

Jupiter 84642-08-30 11:46 G 32636156.78 32636156.99 32636157.19 0.0491 0.0014

Mars 84642-10-24 22:34 G 32636212.29 32636212.44 32636212.60 0.1878 0.0770

Jupiter 84643-04-23 08:10 G 32636392.72 32636392.84 32636392.96 0.0495 0.0393

Jupiter 84647-11-06 22:48 G 32638051.36 32638051.45 32638051.54 0.0536 0.0481

Jupiter 84648-07-02 04:48 G 32638289.50 32638289.70 32638289.91 0.0535 0.0022

Jupiter 84649-02-25 11:17 G 32638527.93 32638527.97 32638528.02 0.0531 0.0519

Uranus 84653-06-28 16:05 G 32640112.13 32640112.17 32640112.26 0.0142 0.0136

Jupiter 84653-09-11 18:29 G 32640187.22 32640187.27 32640187.34 0.0491 0.0470

Uranus 84654-02-10 03:51 G 32640338.52 32640338.66 32640338.83 0.0142 0.0100

Jupiter 84654-05-05 16:05 G 32640422.97 32640423.17 32640423.37 0.0491 0.0095

Uranus 84654-09-24 15:22 G 32640564.96 32640565.14 32640565.35 0.0142 0.0064

Jupiter 84654-12-27 12:29 G 32640658.85 32640659.02 32640659.18 0.0494 0.0289

Uranus 84655-05-09 03:22 G 32640791.43 32640791.64 32640791.86 0.0143 0.0028

Neptune 84655-11-23 09:22 G 32640989.87 32640989.89 32640989.95 0.0089 0.0087

Uranus 84655-12-21 15:08 G 32641017.91 32641018.13 32641018.36 0.0143 0.0010

Neptune 84656-07-05 22:20 G 32641215.35 32641215.43 32641215.56 0.0089 0.0078

Uranus 84656-08-04 03:08 G 32641244.42 32641244.63 32641244.84 0.0143 0.0046

Saturn 84656-11-17 05:46 G 32641349.57 32641349.74 32641349.92 0.0290 0.0161

Neptune 84657-02-16 12:00 G 32641440.87 32641441.00 32641441.15 0.0089 0.0068

Uranus 84657-03-18 15:08 G 32641470.96 32641471.13 32641471.32 0.0143 0.0083

Saturn 84657-07-05 00:29 G 32641579.31 32641579.52 32641579.72 0.0292 0.0044

Neptune 84657-09-30 00:58 G 32641666.40 32641666.54 32641666.73 0.0089 0.0059

Uranus 84657-10-31 03:08 G 32641697.53 32641697.63 32641697.77 0.0143 0.0121

Saturn 84658-02-19 20:24 G 32641809.25 32641809.35 32641809.46 0.0294 0.0253

Neptune 84658-05-13 14:24 G 32641891.93 32641892.10 32641892.30 0.0089 0.0049

Neptune 84658-12-25 03:51 G 32642117.46 32642117.66 32642117.86 0.0088 0.0039

Neptune 84659-08-07 17:03 G 32642343.01 32642343.21 32642343.43 0.0088 0.0029

Jupiter 84660-03-06 13:27 G 32642554.86 32642555.06 32642555.26 0.0536 0.0125

Neptune 84660-03-20 06:29 G 32642568.56 32642568.77 32642568.99 0.0088 0.0020

Jupiter 84660-10-30 19:56 G 32642793.19 32642793.33 32642793.48 0.0533 0.0382

Neptune 84660-10-31 19:41 G 32642794.11 32642794.32 32642794.55 0.0088 0.0010

Neptune 84661-06-14 09:08 G 32643019.66 32643019.88 32643020.10 0.0088 0.0000

Neptune 84662-01-25 22:20 G 32643245.21 32643245.43 32643245.66 0.0088 0.0010

Neptune 84662-09-08 11:32 G 32643470.77 32643470.98 32643471.21 0.0088 0.0019

Neptune 84663-04-22 00:58 G 32643696.33 32643696.54 32643696.75 0.0088 0.0029

Neptune 84663-12-03 14:10 G 32643921.90 32643922.09 32643922.30 0.0088 0.0038

Neptune 84664-07-16 03:08 G 32644147.46 32644147.63 32644147.83 0.0088 0.0048

Neptune 84665-02-26 16:48 G 32644373.04 32644373.20 32644373.37 0.0088 0.0058

Neptune 84665-10-10 05:46 G 32644598.61 32644598.74 32644598.90 0.0088 0.0067

Jupiter 84666-01-08 20:53 G 32644689.18 32644689.37 32644689.56 0.0491 0.0199

Neptune 84666-05-23 19:12 G 32644824.20 32644824.30 32644824.41 0.0088 0.0077

Jupiter 84666-09-01 17:17 G 32644925.04 32644925.22 32644925.41 0.0493 0.0186

Neptune 84667-01-04 07:56 G 32645049.81 32645049.83 32645049.90 0.0088 0.0086

Saturn 84670-09-20 14:24 G 32646404.91 32646405.10 32646405.29 0.0270 0.0122

Saturn 84671-05-07 20:53 G 32646634.16 32646634.37 32646634.58 0.0268 0.0044

Jupiter 84671-11-10 00:29 G 32646820.34 32646820.52 32646820.70 0.0536 0.0268

Saturn 84671-12-23 01:56 G 32646863.45 32646863.58 32646863.72 0.0267 0.0205

Jupiter 84672-07-05 06:58 G 32647058.61 32647058.79 32647058.97 0.0534 0.0243

Jupiter	84677-09-14 00:44 G	32648955.38	32648955.53	32648955.69	0.0491	0.0304
Jupiter	84678-05-07 21:08 G	32649191.18	32649191.38	32649191.58	0.0492	0.0079
Jupiter	84678-12-29 17:32 G	32649427.16	32649427.23	32649427.31	0.0495	0.0456
Jupiter	84683-07-15 12:15 G	32651085.88	32651086.01	32651086.14	0.0536	0.0408
Jupiter	84684-03-09 18:58 G	32651324.09	32651324.29	32651324.49	0.0535	0.0102
Saturn	84686-05-30 13:41 G	32652135.89	32652136.07	32652136.26	0.0291	0.0129
Saturn	84687-01-15 08:24 G	32652365.65	32652365.85	32652366.05	0.0293	0.0077
Saturn	84687-09-02 04:20 G	32652595.64	32652595.68	32652595.73	0.0295	0.0286
Jupiter	84689-05-20 04:20 G	32653221.57	32653221.68	32653221.80	0.0490	0.0407
Jupiter	84690-01-11 01:12 G	32653457.35	32653457.55	32653457.75	0.0491	0.0029
Jupiter	84690-09-03 21:22 G	32653693.26	32653693.39	32653693.54	0.0494	0.0354
Uranus	84693-10-15 16:34 G	32654831.13	32654831.19	32654831.28	0.0136	0.0127
Uranus	84694-05-29 22:48 G	32655057.31	32655057.45	32655057.61	0.0136	0.0096
Uranus	84695-01-11 04:48 G	32655283.51	32655283.70	32655283.89	0.0136	0.0065
Uranus	84695-08-25 10:34 G	32655509.74	32655509.94	32655510.15	0.0136	0.0035
Jupiter	84695-11-13 08:10 G	32655589.63	32655589.84	32655590.04	0.0536	0.0040
Uranus	84696-04-07 16:20 G	32655735.96	32655736.18	32655736.39	0.0136	0.0004
Jupiter	84696-07-08 15:08 G	32655828.03	32655828.13	32655828.23	0.0532	0.0464
Uranus	84696-11-19 21:36 G	32655962.20	32655962.40	32655962.62	0.0136	0.0027
Uranus	84697-07-04 03:08 G	32656188.44	32656188.63	32656188.83	0.0135	0.0057
Uranus	84698-02-15 08:10 G	32656414.69	32656414.84	32656415.01	0.0135	0.0087
Uranus	84698-09-29 13:12 G	32656640.97	32656641.05	32656641.18	0.0135	0.0117
Saturn	84699-08-16 10:05 G	32656961.89	32656961.92	32656961.97	0.0272	0.0266
Saturn	84700-04-02 17:46 G	32657191.05	32657191.24	32657191.45	0.0270	0.0098
Saturn	84700-11-18 00:00 G	32657420.29	32657420.50	32657420.71	0.0268	0.0067
Saturn	84701-07-05 05:03 G	32657649.60	32657649.71	32657649.82	0.0267	0.0227
Jupiter	84701-09-17 04:20 G	32657723.48	32657723.68	32657723.87	0.0491	0.0137
Jupiter	84702-05-11 00:15 G	32657959.34	32657959.51	32657959.69	0.0493	0.0247
Mars	84704-01-12 04:34 G	32658570.52	32658570.69	32658570.85	0.1653	0.0583
Jupiter	84707-07-19 20:24 G	32659855.16	32659855.35	32659855.55	0.0536	0.0182

Jupiter 84708-03-14 03:22 G 32660093.49 32660093.64 32660093.81 0.0533 0.0331

Mars 84708-08-22 03:36 G 32660254.53 32660254.65 32660254.77 0.1882 0.1332

Jupiter 84713-05-23 08:39 G 32661989.68 32661989.86 32661990.04 0.0491 0.0243

Jupiter 84714-01-14 05:03 G 32662225.52 32662225.71 32662225.90 0.0492 0.0141

Saturn 84715-12-11 19:27 G 32662922.12 32662922.31 32662922.51 0.0291 0.0098

Saturn 84716-07-28 14:24 G 32663151.91 32663152.10 32663152.30 0.0293 0.0109

Jupiter 84719-03-24 05:46 G 32664120.58 32664120.74 32664120.90 0.0536 0.0325

Jupiter 84719-11-17 12:00 G 32664358.81 32664359.00 32664359.19 0.0534 0.0186

Earth 84723-12-06 18:58 G 32665839.16 32665839.29 32665839.41 0.2676 0.1494

Moon 84723-12-06 21:22 G 32665839.27 32665839.39 32665839.50 0.2682 0.1595 *

Jupiter 84725-01-26 13:12 G 32666255.91 32666256.05 32666256.20 0.0491 0.0346

Jupiter 84725-09-19 10:20 G 32666491.73 32666491.93 32666492.13 0.0492 0.0037

Jupiter 84726-05-13 06:44 G 32666727.68 32666727.78 32666727.89 0.0495 0.0418

Saturn 84729-02-26 18:29 G 32667748.17 32667748.27 32667748.38 0.0272 0.0235

Saturn 84729-10-14 01:41 G 32667977.37 32667977.57 32667977.78 0.0270 0.0068

Saturn 84730-05-31 07:41 G 32668206.62 32668206.82 32668207.02 0.0268 0.0097

Jupiter 84730-11-26 17:32 G 32668386.13 32668386.23 32668386.33 0.0536 0.0462

Saturn 84731-01-15 12:15 G 32668435.97 32668436.01 32668436.07 0.0266 0.0257

Jupiter 84731-07-22 23:03 G 32668624.26 32668624.46 32668624.66 0.0535 0.0043

Earth 84731-12-04 11:32 G 32668758.86 32668758.98 32668759.11 0.2674 0.1663

Moon 84731-12-04 16:48 G 32668759.07 32668759.20 32668759.33 0.2677 0.1450 *

Mars 84736-01-11 02:39 G 32670257.55 32670257.61 32670257.68 0.1661 0.1538

Jupiter 84736-10-01 17:03 G 32670522.13 32670522.21 32670522.29 0.0491 0.0448

Jupiter 84737-05-25 14:24 G 32670757.89 32670758.10 32670758.30 0.0491 0.0071

Uranus 84737-10-11 12:58 G 32670896.92 32670897.04 32670897.18 0.0142 0.0114

Jupiter 84738-01-16 10:20 G 32670993.78 32670993.93 32670994.09 0.0493 0.0313

Uranus 84738-05-26 00:29 G 32671123.35 32671123.52 32671123.71 0.0142 0.0078

Uranus 84739-01-07 12:15 G 32671349.80 32671350.01 32671350.22 0.0142 0.0042

Neptune 84739-04-06 00:44 G 32671438.52 32671438.53 32671438.57 0.0089 0.0088

Uranus 84739-08-22 00:00 G 32671576.28 32671576.50 32671576.72 0.0143 0.0006

Neptune 84739-11-17 13:27 G 32671663.98 32671664.06 32671664.18 0.0089 0.0079

Uranus 84740-04-04 12:00 G 32671802.79 32671803.00 32671803.22 0.0143 0.0031

Neptune 84740-06-30 02:24 G 32671889.47 32671889.60 32671889.75 0.0089 0.0069

Uranus 84740-11-17 00:00 G 32672029.31 32672029.50 32672029.70 0.0143 0.0068

Neptune 84741-02-10 14:53 G 32672114.98 32672115.12 32672115.30 0.0089 0.0060

Uranus 84741-07-01 12:00 G 32672255.86 32672256.00 32672256.16 0.0143 0.0105

Neptune 84741-09-24 04:05 G 32672340.50 32672340.67 32672340.86 0.0089 0.0050

Uranus 84742-02-13 00:00 G 32672482.49 32672482.50 32672482.54 0.0143 0.0143

Neptune 84742-05-07 17:03 G 32672566.01 32672566.21 32672566.40 0.0089 0.0040

Neptune 84742-12-19 05:32 G 32672791.53 32672791.73 32672791.94 0.0089 0.0031

Jupiter 84743-03-27 10:48 G 32672889.75 32672889.95 32672890.15 0.0536 0.0101

Neptune 84743-08-01 18:29 G 32673017.06 32673017.27 32673017.48 0.0089 0.0021

Jupiter 84743-11-20 17:46 G 32673128.11 32673128.24 32673128.38 0.0533 0.0408

Neptune 84744-03-14 07:12 G 32673242.59 32673242.80 32673243.02 0.0089 0.0011

Neptune 84744-10-25 19:56 G 32673468.12 32673468.33 32673468.55 0.0089 0.0002

Saturn 84744-11-05 09:08 G 32673478.80 32673478.88 32673478.95 0.0289 0.0268

Pluto 84744-12-25 18:00 G 32673529.20 32673529.25 32673529.35 0.0065 0.0062

Neptune 84745-06-08 08:39 G 32673693.65 32673693.86 32673694.08 0.0089 0.0008

Saturn 84745-06-23 02:39 G 32673708.41 32673708.61 32673708.81 0.0292 0.0067

Pluto 84745-08-07 22:34 G 32673754.25 32673754.44 32673754.66 0.0066 0.0022

Neptune 84746-01-19 21:22 G 32673919.18 32673919.39 32673919.61 0.0089 0.0018

Saturn 84746-02-07 21:51 G 32673938.23 32673938.41 32673938.59 0.0294 0.0141

Pluto 84746-03-21 02:53 G 32673979.43 32673979.62 32673979.85 0.0066 0.0019

Neptune 84746-09-02 10:20 G 32674144.72 32674144.93 32674145.14 0.0089 0.0027

Pluto 84746-11-01 07:27 G 32674204.73 32674204.81 32674204.92 0.0066 0.0059

Neptune 84747-04-15 22:48 G 32674370.27 32674370.45 32674370.66 0.0089 0.0037

Neptune 84747-11-27 11:32 G 32674595.81 32674595.98 32674596.18 0.0089 0.0047

Neptune 84748-07-10 00:29 G 32674821.36 32674821.52 32674821.69 0.0089 0.0056

Jupiter 84749-01-28 18:29 G 32675024.08 32675024.27 32675024.46 0.0491 0.0177

Neptune 84749-02-20 12:58 G 32675046.91 32675047.04 32675047.20 0.0089 0.0066

Jupiter 84749-09-21 14:39 G 32675259.93 32675260.11 32675260.29 0.0492 0.0207

Neptune 84749-10-04 02:10 G 32675272.48 32675272.59 32675272.71 0.0089 0.0076

Neptune 84750-05-17 14:39 G 32675498.07 32675498.11 32675498.19 0.0089 0.0085

Jupiter 84754-11-30 00:00 G 32677155.32 32677155.50 32677155.69 0.0536 0.0242

Jupiter 84755-07-26 07:12 G 32677393.63 32677393.80 32677393.98 0.0534 0.0272

Saturn 84758-09-08 21:36 G 32678534.27 32678534.40 32678534.54 0.0271 0.0212

Saturn 84759-04-26 04:48 G 32678763.49 32678763.70 32678763.91 0.0269 0.0044

Saturn 84759-12-11 10:20 G 32678992.74 32678992.93 32678993.13 0.0268 0.0119

Jupiter 84760-10-03 21:36 G 32679290.23 32679290.40 32679290.57 0.0490 0.0284

Jupiter 84761-05-27 17:46 G 32679526.04 32679526.24 32679526.44 0.0492 0.0100

Jupiter 84762-01-18 14:24 G 32679762.05 32679762.10 32679762.15 0.0495 0.0478

Jupiter 84766-08-04 13:12 G 32681420.91 32681421.05 32681421.20 0.0536 0.0380

Jupiter 84767-03-30 19:56 G 32681659.13 32681659.33 32681659.53 0.0535 0.0133

Mars 84769-11-08 15:08 G 32682612.98 32682613.13 32682613.29 0.1650 0.0807

Jupiter 84772-06-09 01:41 G 32683556.46 32683556.57 32683556.70 0.0491 0.0388

Jupiter 84773-01-30 22:48 G 32683792.25 32683792.45 32683792.65 0.0491 0.0007

Jupiter 84773-09-23 19:12 G 32684028.17 32684028.30 32684028.43 0.0494 0.0376

Saturn 84774-05-18 12:44 G 32684264.92 32684265.03 32684265.15 0.0289 0.0241

Saturn 84775-01-03 06:44 G 32684494.58 32684494.78 32684494.99 0.0292 0.0039

Saturn 84775-08-21 01:56 G 32684724.42 32684724.58 32684724.76 0.0294 0.0170

Uranus 84778-01-28 09:36 G 32685615.80 32685615.90 32685616.05 0.0136 0.0110

Jupiter 84778-04-08 23:46 G 32685686.44 32685686.49 32685686.55 0.0536 0.0515

Uranus 84778-09-11 15:51 G 32685842.00 32685842.16 32685842.35 0.0136 0.0079

Jupiter 84778-12-03 04:48 G 32685924.50 32685924.70 32685924.91 0.0535 0.0018

Uranus 84779-04-25 21:51 G 32686068.22 32686068.41 32686068.62 0.0136 0.0047

Jupiter 84779-07-29 11:17 G 32686162.89 32686162.97 32686163.05 0.0532 0.0488

Uranus 84779-12-08 03:36 G 32686294.44 32686294.65 32686294.87 0.0136 0.0017

Uranus 84780-07-21 09:08 G 32686520.67 32686520.88 32686521.10 0.0136 0.0014

Uranus 84781-03-04 14:24 G 32686746.91 32686747.10 32686747.31 0.0135 0.0045

Uranus 84781-10-16 19:56 G 32686973.16 32686973.33 32686973.52 0.0135 0.0075

Uranus 84782-05-31 01:12 G 32687199.42 32687199.55 32687199.69 0.0135 0.0104

Uranus 84783-01-12 06:15 G 32687425.75 32687425.76 32687425.80 0.0135 0.0134

Jupiter 84784-02-13 06:00 G 32687822.73 32687822.75 32687822.77 0.0491 0.0487

Jupiter 84784-10-06 03:51 G 32688058.46 32688058.66 32688058.86 0.0491 0.0111

Jupiter 84785-05-30 00:15 G 32688294.34 32688294.51 32688294.68 0.0493 0.0274

Saturn 84788-03-21 04:48 G 32689320.54 32689320.70 32689320.86 0.0271 0.0183

Saturn 84788-11-05 11:32 G 32689549.77 32689549.98 32689550.20 0.0269 0.0016

Saturn 84789-06-22 16:48 G 32689779.03 32689779.20 32689779.39 0.0267 0.0147

Jupiter 84790-08-07 16:20 G 32690189.99 32690190.18 32690190.37 0.0536 0.0158

Jupiter 84791-04-02 22:48 G 32690428.30 32690428.45 32690428.61 0.0533 0.0353

Jupiter 84796-06-11 07:56 G 32692324.65 32692324.83 32692325.02 0.0491 0.0219

Jupiter 84797-02-02 04:20 G 32692560.49 32692560.68 32692560.87 0.0492 0.0167

Mars 84801-11-07 12:58 G 32694299.94 32694300.04 32694300.15 0.1659 0.1290

Jupiter 84802-04-12 04:05 G 32694455.50 32694455.67 32694455.84 0.0536 0.0301

Jupiter 84802-12-06 10:48 G 32694693.76 32694693.95 32694694.13 0.0534 0.0213

Saturn 84803-11-28 18:58 G 32695051.16 32695051.29 32695051.44 0.0290 0.0213

Saturn 84804-07-15 13:12 G 32695280.84 32695281.05 32695281.25 0.0292 0.0011

Saturn 84805-03-02 08:24 G 32695510.71 32695510.85 32695511.01 0.0294 0.0200

Mars 84806-06-19 00:44 G 32695984.44 32695984.53 32695984.62 0.1874 0.1567

Jupiter 84808-02-15 12:15 G 32696590.86 32696591.01 32696591.16 0.0491 0.0323

Jupiter 84808-10-08 08:53 G 32696826.66 32696826.87 32696827.07 0.0491 0.0061

Jupiter 84809-06-01 05:03 G 32697062.62 32697062.71 32697062.80 0.0495 0.0441

Jupiter 84813-12-15 17:32 G 32698721.13 32698721.23 32698721.36 0.0536 0.0438

Jupiter 84814-08-11 00:15 G 32698959.30 32698959.51 32698959.71 0.0535 0.0073

Saturn 84817-10-01 07:12 G 32700106.63 32700106.80 32700106.97 0.0270 0.0161

Saturn 84818-05-18 13:41 G 32700335.86 32700336.07 32700336.29 0.0269 0.0007

Saturn 84819-01-02 18:58 G 32700565.12 32700565.29 32700565.46 0.0267 0.0168

Jupiter 84819-10-21 15:22 G 32700857.04 32700857.14 32700857.24 0.0490 0.0426

Jupiter 84820-06-13 12:15 G 32701092.81 32701093.01 32701093.22 0.0491 0.0049

Neptune 84820-10-08 07:27 G 32701209.72 32701209.81 32701209.90 0.0089 0.0081

Jupiter 84821-02-04 08:24 G 32701328.70 32701328.85 32701329.00 0.0494 0.0336

Neptune 84821-05-21 20:10 G 32701435.23 32701435.34 32701435.49 0.0089 0.0072

Uranus 84821-06-10 21:36 G 32701455.32 32701455.40 32701455.50 0.0142 0.0128

Neptune 84822-01-02 09:36 G 32701660.75 32701660.90 32701661.06 0.0089 0.0062

Uranus 84822-01-23 09:08 G 32701681.71 32701681.88 32701682.05 0.0142 0.0092

Neptune 84822-08-15 22:34 G 32701886.28 32701886.44 32701886.64 0.0089 0.0053

Uranus 84822-09-06 20:39 G 32701908.16 32701908.36 32701908.56 0.0142 0.0057

Neptune 84823-03-29 12:00 G 32702111.82 32702112.00 32702112.21 0.0089 0.0043

Uranus 84823-04-21 08:24 G 32702134.64 32702134.85 32702135.07 0.0142 0.0020

Neptune 84823-11-10 01:27 G 32702337.36 32702337.56 32702337.77 0.0088 0.0033

Uranus 84823-12-03 20:10 G 32702361.13 32702361.34 32702361.57 0.0143 0.0017

Neptune 84824-06-22 14:24 G 32702562.90 32702563.10 32702563.33 0.0088 0.0024

Uranus 84824-07-17 08:10 G 32702587.64 32702587.84 32702588.05 0.0143 0.0053

Neptune 84825-02-03 04:05 G 32702788.45 32702788.67 32702788.89 0.0088 0.0014

Uranus 84825-02-28 20:10 G 32702814.18 32702814.34 32702814.52 0.0143 0.0090

Neptune 84825-09-16 17:17 G 32703014.00 32703014.22 32703014.45 0.0088 0.0004

Uranus 84825-10-13 08:10 G 32703040.76 32703040.84 32703040.96 0.0143 0.0127

Jupiter 84826-04-15 13:12 G 32703224.85 32703225.05 32703225.25 0.0536 0.0068

Neptune 84826-04-30 06:29 G 32703239.56 32703239.77 32703240.00 0.0088 0.0007

Jupiter 84826-12-09 20:10 G 32703463.23 32703463.34 32703463.46 0.0533 0.0440

Neptune 84826-12-11 19:56 G 32703465.11 32703465.33 32703465.55 0.0088 0.0016

Neptune 84827-07-25 08:53 G 32703690.67 32703690.87 32703691.10 0.0088 0.0026

Neptune 84828-03-06 22:20 G 32703916.24 32703916.43 32703916.65 0.0088 0.0035

Neptune 84828-10-18 11:46 G 32704141.80 32704141.99 32704142.19 0.0088 0.0045

Neptune 84829-06-01 00:44 G 32704367.37 32704367.53 32704367.72 0.0088 0.0055

Neptune 84830-01-12 13:41 G 32704592.95 32704593.07 32704593.25 0.0088 0.0065

Neptune 84830-08-26 03:22 G 32704818.53 32704818.64 32704818.77 0.0088 0.0073

Neptune 84831-04-08 16:20 G 32705044.13 32705044.18 32705044.28 0.0088 0.0084

Jupiter 84832-02-17 17:17 G 32705359.03 32705359.22 32705359.42 0.0491 0.0154

Jupiter 84832-10-10 13:27 G 32705594.89 32705595.06 32705595.25 0.0493 0.0233

Pluto 84833-04-09 06:44 G 32705775.60 32705775.78 32705775.99 0.0078 0.0039

Saturn 84833-06-09 20:53 G 32705837.21 32705837.37 32705837.53 0.0290 0.0189

Pluto 84833-11-20 16:48 G 32706001.00 32706001.20 32706001.41 0.0078 0.0030

Saturn 84834-01-25 15:08 G 32706066.92 32706067.13 32706067.34 0.0292 0.0015

Saturn 84834-09-12 11:03 G 32706296.83 32706296.96 32706297.09 0.0294 0.0224

Mars 84835-09-06 02:24 G 32706655.46 32706655.60 32706655.73 0.1648 0.1023

Jupiter 84837-12-18 23:03 G 32707490.28 32707490.46 32707490.65 0.0536 0.0214

Jupiter 84838-08-14 05:17 G 32707728.56 32707728.72 32707728.90 0.0533 0.0300

Jupiter 84843-10-23 21:51 G 32709625.24 32709625.41 32709625.59 0.0491 0.0258

Jupiter 84844-06-15 18:44 G 32709861.09 32709861.28 32709861.48 0.0492 0.0128

Saturn 84847-04-13 13:12 G 32710892.87 32710893.05 32710893.24 0.0271 0.0134

Saturn 84847-11-28 19:41 G 32711122.10 32711122.32 32711122.53 0.0269 0.0033

Saturn 84848-07-15 00:44 G 32711351.38 32711351.53 32711351.67 0.0267 0.0194

Jupiter 84849-08-23 11:03 G 32711755.81 32711755.96 32711756.12 0.0536 0.0354

Jupiter 84850-04-18 17:03 G 32711994.01 32711994.21 32711994.40 0.0534 0.0159

Jupiter 84855-06-29 02:10 G 32713891.45 32713891.59 32713891.73 0.0491 0.0363

Jupiter 84856-02-19 23:17 G 32714127.27 32714127.47 32714127.67 0.0491 0.0020

Jupiter 84856-10-12 19:27 G 32714363.20 32714363.31 32714363.43 0.0494 0.0404

Jupiter 84861-04-27 23:03 G 32716021.39 32716021.46 32716021.54 0.0536 0.0492

Uranus 84861-09-27 20:39 G 32716174.27 32716174.36 32716174.46 0.0136 0.0122

Jupiter 84861-12-22 04:34 G 32716259.49 32716259.69 32716259.90 0.0535 0.0015

Uranus 84862-05-12 02:24 G 32716400.46 32716400.60 32716400.78 0.0136 0.0092

Jupiter 84862-08-17 11:17 G 32716497.93 32716497.97 32716498.02 0.0532 0.0516

Saturn 84862-12-21 02:24 G 32716623.43 32716623.60 32716623.78 0.0291 0.0162

Uranus 84862-12-24 08:39 G 32716626.67 32716626.86 32716627.05 0.0136 0.0060

Uranus 84863-08-07 14:10 G 32716852.89 32716853.09 32716853.31 0.0136 0.0030

Saturn 84863-08-07 20:53 G 32716853.16 32716853.37 32716853.58 0.0293 0.0044 *

Uranus 84864-03-20 19:56 G 32717079.12 32717079.33 32717079.55 0.0136 0.0003

Saturn 84864-03-24 16:34 G 32717083.10 32717083.19 32717083.30 0.0295 0.0255

Uranus 84864-11-02 01:27 G 32717305.36 32717305.56 32717305.78 0.0136 0.0032

Uranus 84865-06-16 06:58 G 32717531.60 32717531.79 32717531.98 0.0135 0.0062

Uranus 84866-01-28 12:00 G 32717757.86 32717758.00 32717758.17 0.0135 0.0092

Uranus 84866-09-11 17:32 G 32717984.14 32717984.23 32717984.33 0.0135 0.0121

Jupiter 84867-03-04 06:00 G 32718157.70 32718157.75 32718157.82 0.0491 0.0465

Mars 84867-09-05 00:00 G 32718342.37 32718342.50 32718342.63 0.1656 0.1064

Jupiter 84867-10-26 03:36 G 32718393.46 32718393.65 32718393.86 0.0491 0.0087

Jupiter 84868-06-17 23:46 G 32718629.33 32718629.49 32718629.65 0.0493 0.0299

Moon 84869-06-01 12:15 G 32718977.87 32718978.01 32718978.15 0.2655 0.1374

Earth 84869-06-01 17:03 G 32718978.05 32718978.21 32718978.37 0.2659 0.0561 *

Mars 84872-04-15 05:46 G 32720026.59 32720026.74 32720026.88 0.1877 0.1012

Jupiter 84873-08-26 18:00 G 32720525.06 32720525.25 32720525.45 0.0536 0.0128

Jupiter 84874-04-22 01:12 G 32720763.41 32720763.55 32720763.70 0.0533 0.0386

Saturn 84876-10-23 14:53 G 32721678.93 32721679.12 32721679.32 0.0270 0.0113

Saturn 84877-06-09 21:08 G 32721908.17 32721908.38 32721908.59 0.0268 0.0053

Saturn 84878-01-25 01:41 G 32722137.46 32722137.57 32722137.71 0.0267 0.0215

Jupiter 84879-07-01 07:27 G 32722659.63 32722659.81 32722660.00 0.0491 0.0193

Jupiter 84880-02-22 03:36 G 32722895.47 32722895.65 32722895.84 0.0492 0.0193

Jupiter 84885-05-01 07:41 G 32724790.64 32724790.82 32724790.99 0.0536 0.0267

Jupiter 84885-12-25 14:24 G 32725028.92 32725029.10 32725029.28 0.0534 0.0249

Jupiter 84891-03-06 12:15 G 32726925.85 32726926.01 32726926.18 0.0491 0.0298

Jupiter 84891-10-28 08:53 G 32727161.67 32727161.87 32727162.07 0.0492 0.0088

Jupiter 84892-06-20 05:17 G 32727397.67 32727397.72 32727397.79 0.0495 0.0468

Saturn 84892-07-02 02:53 G 32727409.44 32727409.62 32727409.80 0.0290 0.0140

Saturn 84893-02-16 21:36 G 32727639.19 32727639.40 32727639.60 0.0292 0.0066

Saturn 84893-10-04 17:46 G 32727869.17 32727869.24 32727869.31 0.0294 0.0276

Jupiter 84897-01-03 18:58 G 32729056.16 32729056.29 32729056.42 0.0536 0.0406

Jupiter 84897-08-30 00:29 G 32729294.32 32729294.52 32729294.72 0.0535 0.0104

Mars 84901-07-04 13:12 G 32730697.94 32730698.05 32730698.17 0.1645 0.1238

Jupiter 84902-11-10 16:05 G 32731192.06 32731192.17 32731192.29 0.0491 0.0402

Jupiter 84903-07-04 13:56 G 32731427.88 32731428.08 32731428.28 0.0492 0.0019

Neptune 84904-02-19 23:17 G 32731658.40 32731658.47 32731658.57 0.0089 0.0082

Jupiter 84904-02-25 10:34 G 32731663.81 32731663.94 32731664.08 0.0494 0.0367

Neptune 84904-10-02 12:00 G 32731883.90 32731884.00 32731884.15 0.0089 0.0073

Neptune 84905-05-16 00:58 G 32732109.40 32732109.54 32732109.71 0.0089 0.0063

Saturn 84905-09-19 12:15 G 32732235.95 32732236.01 32732236.08 0.0272 0.0257

Uranus 84905-09-23 16:20 G 32732240.05 32732240.18 32732240.33 0.0142 0.0108

Neptune 84905-12-27 13:56 G 32732334.91 32732335.08 32732335.26 0.0089 0.0053

Saturn 84906-05-06 19:41 G 32732465.12 32732465.32 32732465.53 0.0270 0.0088

Uranus 84906-05-08 03:51 G 32732466.48 32732466.66 32732466.86 0.0142 0.0072

Neptune 84906-08-10 02:39 G 32732560.43 32732560.61 32732560.81 0.0089 0.0044

Uranus 84906-12-20 15:36 G 32732692.94 32732693.15 32732693.37 0.0142 0.0036

Saturn 84906-12-22 01:41 G 32732694.37 32732694.57 32732694.78 0.0268 0.0079

Neptune 84907-03-23 15:22 G 32732785.95 32732786.14 32732786.36 0.0089 0.0034

Uranus 84907-08-04 03:22 G 32732919.42 32732919.64 32732919.86 0.0142 0.0001

Saturn 84907-08-08 06:29 G 32732923.69 32732923.77 32732923.87 0.0267 0.0239

Neptune 84907-11-04 04:20 G 32733011.47 32733011.68 32733011.89 0.0089 0.0024

Uranus 84908-03-17 15:22 G 32733145.93 32733146.14 32733146.35 0.0143 0.0037

Neptune 84908-06-16 16:48 G 32733237.00 32733237.20 32733237.43 0.0089 0.0015

Uranus 84908-10-30 03:22 G 32733372.46 32733372.64 32733372.83 0.0143 0.0074

Neptune 84909-01-28 05:46 G 32733462.52 32733462.74 32733462.96 0.0089 0.0005

Jupiter 84909-05-05 12:00 G 32733559.80 32733560.00 32733560.21 0.0535 0.0042

Uranus 84909-06-13 15:22 G 32733599.01 32733599.14 32733599.29 0.0143 0.0111

Neptune 84909-09-10 18:44 G 32733688.06 32733688.28 32733688.50 0.0089 0.0005

Jupiter 84909-12-29 18:15 G 32733798.17 32733798.26 32733798.36 0.0532 0.0466

Neptune 84910-04-24 07:12 G 32733913.59 32733913.80 32733914.02 0.0089 0.0015

Neptune 84910-12-05 19:56 G 32734139.13 32734139.33 32734139.55 0.0089 0.0024

Neptune 84911-07-19 08:24 G 32734364.66 32734364.85 32734365.07 0.0089 0.0034

Neptune 84912-02-29 21:36 G 32734590.21 32734590.40 32734590.59 0.0089 0.0043

Neptune 84912-10-12 10:05 G 32734815.76 32734815.92 32734816.10 0.0089 0.0053

Neptune 84913-05-25 22:34 G 32735041.31 32735041.44 32735041.61 0.0089 0.0063

Neptune 84914-01-06 11:32 G 32735266.87 32735266.98 32735267.12 0.0089 0.0073

Neptune 84914-08-20 00:15 G 32735492.44 32735492.51 32735492.61 0.0089 0.0082

Jupiter 84915-03-09 18:29 G 32735694.08 32735694.27 32735694.47 0.0491 0.0126

Jupiter 84915-10-31 14:53 G 32735929.95 32735930.12 32735930.30 0.0493 0.0261

Jupiter 84921-01-07 23:46 G 32737825.30 32737825.49 32737825.68 0.0536 0.0185

Jupiter 84921-09-03 06:29 G 32738063.61 32738063.77 32738063.93 0.0534 0.0330

Saturn 84922-01-13 07:27 G 32738195.63 32738195.81 32738196.01 0.0291 0.0114

Saturn 84922-08-31 02:24 G 32738425.40 32738425.60 32738425.80 0.0293 0.0094

Jupiter 84926-11-12 22:48 G 32739960.28 32739960.45 32739960.64 0.0491 0.0233

Jupiter 84927-07-06 19:27 G 32740196.12 32740196.31 32740196.50 0.0492 0.0155

Jupiter 84932-09-12 13:27 G 32742090.90 32742091.06 32742091.22 0.0536 0.0324

Jupiter 84933-05-08 19:56 G 32742329.14 32742329.33 32742329.52 0.0535 0.0192

Mars 84933-07-03 10:34 G 32742384.79 32742384.94 32742385.09 0.1653 0.0828

Saturn 84935-04-01 14:10 G 32743021.99 32743022.09 32743022.20 0.0271 0.0235

Saturn 84935-11-16 21:22 G 32743251.19 32743251.39 32743251.60 0.0269 0.0067

Saturn 84936-07-03 03:08 G 32743480.44 32743480.63 32743480.84 0.0268 0.0099

Saturn 84937-02-17 07:41 G 32743709.78 32743709.82 32743709.88 0.0266 0.0258

Mars 84938-02-11 10:05 G 32744068.76 32744068.92 32744069.09 0.1881 0.0432

Jupiter 84938-07-19 02:53 G 32744226.47 32744226.62 32744226.77 0.0491 0.0337

Jupiter 84939-03-11 23:32 G 32744462.28 32744462.48 32744462.69 0.0491 0.0049

Jupiter 84939-11-02 19:41 G 32744698.23 32744698.32 32744698.42 0.0494 0.0431

Jupiter 84944-05-18 03:22 G 32746356.54 32746356.64 32746356.75 0.0536 0.0459

Jupiter 84945-01-11 09:22 G 32746594.69 32746594.89 32746595.10 0.0536 0.0052

Uranus 84945-05-29 07:27 G 32746732.79 32746732.81 32746732.86 0.0136 0.0135

Uranus 84946-01-10 13:41 G 32746958.94 32746959.07 32746959.22 0.0136 0.0104

Uranus 84946-08-24 19:27 G 32747185.15 32747185.31 32747185.51 0.0136 0.0074

Uranus 84947-04-08 01:41 G 32747411.37 32747411.57 32747411.77 0.0136 0.0042

Uranus 84947-11-20 07:12 G 32747637.59 32747637.80 32747638.02 0.0136 0.0012

Uranus 84948-07-03 12:44 G 32747863.83 32747864.03 32747864.25 0.0136 0.0020

Uranus 84949-02-14 18:15 G 32748090.07 32748090.26 32748090.47 0.0135 0.0049

Uranus 84949-09-28 23:46 G 32748316.32 32748316.49 32748316.67 0.0135 0.0079

Jupiter 84950-03-24 07:12 G 32748492.72 32748492.80 32748492.89 0.0491 0.0440

Uranus 84950-05-13 05:03 G 32748542.59 32748542.71 32748542.84 0.0135 0.0109

Jupiter 84950-11-15 04:48 G 32748728.50 32748728.70 32748728.90 0.0491 0.0059

Jupiter 84951-07-09 01:12 G 32748964.40 32748964.55 32748964.70 0.0493 0.0328

Saturn 84951-07-26 06:58 G 32748981.60 32748981.79 32748982.00 0.0291 0.0095

Saturn 84952-03-12 02:10 G 32749211.39 32749211.59 32749211.78 0.0293 0.0113

Jupiter 84956-09-15 20:24 G 32750860.15 32750860.35 32750860.55 0.0535 0.0094

Jupiter 84957-05-12 02:24 G 32751098.48 32751098.60 32751098.73 0.0533 0.0417

Jupiter 84962-07-21 09:22 G 32752994.69 32752994.89 32752995.08 0.0491 0.0166

Jupiter 84963-03-14 06:15 G 32753230.58 32753230.76 32753230.94 0.0493 0.0224

Saturn 84964-10-11 18:00 G 32753808.12 32753808.25 32753808.39 0.0272 0.0213

Saturn 84965-05-29 01:12 G 32754037.34 32754037.55 32754037.77 0.0270 0.0044

Saturn 84966-01-13 06:58 G 32754266.61 32754266.79 32754266.99 0.0268 0.0122

Moon 84966-12-07 21:08 G 32754595.26 32754595.38 32754595.49 0.2667 0.1920

Earth 84966-12-07 21:51 G 32754595.29 32754595.41 32754595.53 0.2675 0.1689 *

Mars 84967-05-02 00:15 G 32754740.44 32754740.51 32754740.59 0.1643 0.1456

Jupiter 84968-05-21 08:24 G 32755125.67 32755125.85 32755126.03 0.0535 0.0237

Jupiter 84969-01-14 14:10 G 32755363.92 32755364.09 32755364.27 0.0534 0.0279

Jupiter 84974-03-26 13:41 G 32757260.90 32757261.07 32757261.24 0.0491 0.0272

Jupiter 84974-11-17 10:48 G 32757496.75 32757496.95 32757497.15 0.0492 0.0116

Moon 84974-12-05 10:05 G 32757514.80 32757514.92 32757515.04 0.2669 0.1794

Earth 84974-12-05 14:39 G 32757514.98 32757515.11 32757515.24 0.2673 0.1464 *

Jupiter 84980-01-24 20:24 G 32759391.21 32759391.35 32759391.49 0.0536 0.0379

Saturn 84980-06-19 18:44 G 32759538.20 32759538.28 32759538.35 0.0289 0.0267

Jupiter 84980-09-19 01:56 G 32759629.39 32759629.58 32759629.78 0.0535 0.0136

Saturn 84981-02-04 12:00 G 32759767.80 32759768.00 32759768.20 0.0291 0.0067

Saturn 84981-09-22 07:12 G 32759997.62 32759997.80 32759997.98 0.0293 0.0142

Neptune 84985-01-10 15:36 G 32761204.10 32761204.15 32761204.23 0.0089 0.0085

Neptune 84985-08-24 04:34 G 32761429.60 32761429.69 32761429.83 0.0089 0.0076

Jupiter 84985-11-29 18:00 G 32761527.12 32761527.25 32761527.38 0.0491 0.0376

Neptune 84986-04-06 18:00 G 32761655.12 32761655.25 32761655.42 0.0089 0.0066

Jupiter 84986-07-23 15:36 G 32761762.94 32761763.15 32761763.35 0.0491 0.0015

Neptune 84986-11-18 07:27 G 32761880.65 32761880.81 32761880.99 0.0089 0.0056

Jupiter 84987-03-16 11:46 G 32761998.87 32761998.99 32761999.12 0.0494 0.0394

Neptune 84987-07-01 20:24 G 32762106.18 32762106.35 32762106.55 0.0089 0.0047

Neptune 84988-02-12 09:51 G 32762331.72 32762331.91 32762332.12 0.0089 0.0037

Neptune 84988-09-24 23:17 G 32762557.26 32762557.47 32762557.68 0.0088 0.0027

Neptune 84989-05-08 12:15 G 32762782.80 32762783.01 32762783.24 0.0088 0.0018

Uranus 84989-05-23 22:34 G 32762798.35 32762798.44 32762798.56 0.0142 0.0124

Neptune 84989-12-20 01:41 G 32763008.35 32763008.57 32763008.79 0.0088 0.0007

Uranus 84990-01-05 10:05 G 32763024.75 32763024.92 32763025.10 0.0142 0.0088

Neptune 84990-08-02 14:53 G 32763233.90 32763234.12 32763234.35 0.0088 0.0003

Uranus 84990-08-19 21:36 G 32763251.20 32763251.40 32763251.61 0.0142 0.0053

Neptune 84991-03-16 04:20 G 32763459.46 32763459.68 32763459.90 0.0088 0.0012

Uranus 84991-04-03 09:22 G 32763477.68 32763477.89 32763478.11 0.0142 0.0017

Jupiter 84991-09-29 10:05 G 32763656.87 32763656.92 32763656.98 0.0536 0.0513

Neptune 84991-10-27 17:17 G 32763685.02 32763685.22 32763685.45 0.0088 0.0023

Uranus 84991-11-15 21:08 G 32763704.17 32763704.38 32763704.61 0.0142 0.0021

Jupiter 84992-05-24 15:08 G 32763894.93 32763895.13 32763895.34 0.0536 0.0014

Neptune 84992-06-09 06:44 G 32763910.58 32763910.78 32763911.00 0.0088 0.0032

Uranus 84992-06-29 09:08 G 32763930.68 32763930.88 32763931.09 0.0143 0.0057

Jupiter 84993-01-17 22:05 G 32764133.36 32764133.42 32764133.49 0.0532 0.0500

Neptune 84993-01-20 19:56 G 32764136.15 32764136.33 32764136.54 0.0088 0.0042

Uranus 84993-02-10 20:53 G 32764157.22 32764157.37 32764157.56 0.0143 0.0094

Pluto 84993-07-11 21:36 G 32764308.33 32764308.40 32764308.51 0.0065 0.0060

Neptune 84993-09-03 09:08 G 32764361.72 32764361.88 32764362.08 0.0088 0.0051

Uranus 84993-09-25 09:22 G 32764383.81 32764383.89 32764383.99 0.0143 0.0130

Pluto 84994-02-22 02:10 G 32764533.39 32764533.59 32764533.81 0.0066 0.0020

Neptune 84994-04-16 22:48 G 32764587.30 32764587.45 32764587.62 0.0088 0.0061

Saturn 84994-04-23 19:41 G 32764594.17 32764594.32 32764594.48 0.0271 0.0190

Pluto 84994-10-05 06:29 G 32764758.57 32764758.77 32764758.99 0.0066 0.0021

Neptune 84994-11-28 11:46 G 32764812.88 32764812.99 32764813.14 0.0088 0.0071

Saturn 84994-12-09 02:53 G 32764823.40 32764823.62 32764823.83 0.0269 0.0022

Pluto 84995-05-18 10:48 G 32764983.89 32764983.95 32764984.05 0.0066 0.0061

Neptune 84995-07-12 01:27 G 32765038.47 32765038.56 32765038.66 0.0088 0.0080

Saturn 84995-07-26 08:10 G 32765052.67 32765052.84 32765053.03 0.0267 0.0143

Jupiter 84997-08-04 21:36 G 32765793.36 32765793.40 32765793.45 0.0491 0.0478

Jupiter 84998-03-28 19:41 G 32766029.12 32766029.32 32766029.52 0.0491 0.0098

Jupiter 84998-11-19 15:51 G 32766265.00 32766265.16 32766265.33 0.0493 0.0289

Mars 84999-04-30 21:36 G 32766427.24 32766427.40 32766427.57 0.1650 0.0609

86TH MILLENNIUM CE

This is a list of transits of Venus in the 86th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Mars 85003-12-10 15:08 G 32768110.96 32768111.13 32768111.31 0.1885 0.0142

Jupiter 85004-01-29 05:03 G 32768160.52 32768160.71 32768160.91 0.0536 0.0148

Jupiter 85004-09-23 11:46 G 32768398.85 32768398.99 32768399.15 0.0534 0.0369

Jupiter 85009-12-03 00:29 G 32770295.34 32770295.52 32770295.71 0.0491 0.0205

Saturn 85009-12-31 16:48 G 32770324.11 32770324.20 32770324.32 0.0289 0.0251

Jupiter 85010-07-26 21:08 G 32770531.20 32770531.38 32770531.57 0.0492 0.0185

Saturn 85010-08-18 10:48 G 32770553.74 32770553.95 32770554.15 0.0291 0.0049

Saturn 85011-04-05 05:46 G 32770783.57 32770783.74 32770783.92 0.0293 0.0159

Jupiter 85015-10-03 17:03 G 32772426.04 32772426.21 32772426.38 0.0535 0.0291

Jupiter 85016-05-28 22:34 G 32772664.26 32772664.44 32772664.63 0.0534 0.0226

Jupiter 85021-08-08 04:20 G 32774561.52 32774561.68 32774561.83 0.0491 0.0312

Jupiter 85022-04-01 01:56 G 32774797.38 32774797.58 32774797.78 0.0492 0.0077

Jupiter 85022-11-22 22:48 G 32775033.39 32775033.45 32775033.53 0.0495 0.0461

Saturn 85023-11-04 23:03 G 32775380.29 32775380.46 32775380.63 0.0272 0.0169

Saturn 85024-06-21 06:00 G 32775609.54 32775609.75 32775609.97 0.0270 0.0002

Saturn 85025-02-05 11:32 G 32775838.82 32775838.98 32775839.16 0.0268 0.0165

Jupiter 85027-06-08 06:00 G 32776691.63 32776691.75 32776691.87 0.0535 0.0428

Jupiter 85028-02-01 10:48 G 32776929.75 32776929.95 32776930.15 0.0534 0.0083

Uranus 85029-09-10 23:17 G 32777517.38 32777517.47 32777517.60 0.0136 0.0118

Uranus 85030-04-25 05:32 G 32777743.58 32777743.73 32777743.91 0.0136 0.0087

Uranus 85030-12-07 11:17 G 32777969.79 32777969.97 32777970.18 0.0136 0.0056

Uranus 85031-07-21 17:17 G 32778196.01 32778196.22 32778196.44 0.0136 0.0025

Uranus 85032-03-03 23:03 G 32778422.25 32778422.46 32778422.68 0.0136 0.0006

Uranus 85032-10-16 04:48 G 32778648.49 32778648.70 32778648.91 0.0136 0.0036

Jupiter 85033-04-13 08:10 G 32778827.74 32778827.84 32778827.95 0.0491 0.0417

Uranus 85033-05-30 10:05 G 32778874.74 32778874.92 32778875.12 0.0135 0.0066

Jupiter 85033-12-05 06:29 G 32779063.57 32779063.77 32779063.97 0.0492 0.0031

Uranus 85034-01-11 15:22 G 32779101.00 32779101.14 32779101.30 0.0135 0.0096

Jupiter 85034-07-29 03:08 G 32779299.50 32779299.63 32779299.78 0.0494 0.0357

Uranus 85034-08-25 20:24 G 32779327.30 32779327.35 32779327.45 0.0135 0.0126

Saturn 85039-07-13 21:51 G 32781110.29 32781110.41 32781110.55 0.0289 0.0223

Jupiter 85039-10-06 22:05 G 32781195.22 32781195.42 32781195.62 0.0535 0.0064

Saturn 85040-02-28 15:36 G 32781339.94 32781340.15 32781340.36 0.0292 0.0021

Jupiter 85040-06-01 04:20 G 32781433.58 32781433.68 32781433.79 0.0533 0.0448

Saturn 85040-10-15 10:48 G 32781569.80 32781569.95 32781570.12 0.0294 0.0189

Jupiter 85045-08-10 11:17 G 32783329.77 32783329.97 32783330.16 0.0491 0.0138

Jupiter 85046-04-03 07:56 G 32783565.65 32783565.83 32783566.00 0.0493 0.0252

Jupiter 85051-06-11 11:17 G 32785460.78 32785460.97 32785461.16 0.0536 0.0206

Jupiter 85052-02-04 17:46 G 32785699.08 32785699.24 32785699.41 0.0534 0.0313

Saturn 85053-05-17 00:44 G 32786166.36 32786166.53 32786166.72 0.0271 0.0146

Saturn 85054-01-01 07:41 G 32786395.61 32786395.82 32786396.04 0.0269 0.0023

Saturn 85054-08-18 13:12 G 32786624.90 32786625.05 32786625.21 0.0267 0.0185

Jupiter 85057-04-15 15:08 G 32787595.96 32787596.13 32787596.31 0.0491 0.0245

Jupiter 85057-12-07 12:00 G 32787831.81 32787832.00 32787832.19 0.0492 0.0144

Jupiter 85063-02-14 01:27 G 32789726.41 32789726.56 32789726.72 0.0536 0.0344

Jupiter 85063-10-10 07:27 G 32789964.62 32789964.81 32789965.01 0.0535 0.0174

Mars 85065-02-26 08:24 G 32790469.68 32790469.85 32790470.02 0.1647 0.0386

Neptune 85068-05-24 09:36 G 32791652.85 32791652.90 32791652.97 0.0089 0.0085

Jupiter 85068-12-19 19:41 G 32791862.18 32791862.32 32791862.47 0.0491 0.0350

Neptune 85069-01-04 22:05 G 32791878.33 32791878.42 32791878.55 0.0089 0.0076

Saturn 85069-01-22 20:53 G 32791896.23 32791896.37 32791896.52 0.0289 0.0205

Jupiter 85069-08-12 17:17 G 32792098.02 32792098.22 32792098.42 0.0492 0.0038

Neptune 85069-08-18 11:17 G 32792103.84 32792103.97 32792104.13 0.0089 0.0066

Saturn 85069-09-09 14:53 G 32792125.91 32792126.12 32792126.33 0.0291 0.0002

Mars 85069-10-06 19:27 G 32792153.15 32792153.31 32792153.47 0.1889 0.0727

Neptune 85070-04-01 00:00 G 32792329.35 32792329.50 32792329.68 0.0089 0.0057

Jupiter 85070-04-05 13:56 G 32792333.98 32792334.08 32792334.18 0.0494 0.0424

Saturn 85070-04-27 10:05 G 32792355.78 32792355.92 32792356.07 0.0293 0.0207

Neptune 85070-11-12 12:44 G 32792554.86 32792555.03 32792555.23 0.0089 0.0047

Neptune 85071-06-26 01:41 G 32792780.38 32792780.57 32792780.78 0.0089 0.0037

Neptune 85072-02-06 14:24 G 32793005.91 32793006.10 32793006.32 0.0089 0.0028

Neptune 85072-09-19 03:22 G 32793231.44 32793231.64 32793231.87 0.0089 0.0018

Uranus 85073-01-22 04:05 G 32793356.66 32793356.67 32793356.72 0.0142 0.0141

Neptune 85073-05-02 16:20 G 32793456.97 32793457.18 32793457.40 0.0089 0.0008

Uranus 85073-09-05 15:36 G 32793583.01 32793583.15 32793583.30 0.0142 0.0105

Neptune 85073-12-14 05:03 G 32793682.50 32793682.71 32793682.93 0.0089 0.0002

Uranus 85074-04-20 02:53 G 32793809.45 32793809.62 32793809.83 0.0142 0.0070

Neptune 85074-07-27 17:46 G 32793908.03 32793908.24 32793908.46 0.0089 0.0012

Jupiter 85074-10-19 14:39 G 32793992.03 32793992.11 32793992.21 0.0535 0.0480

Uranus 85074-12-02 14:39 G 32794035.90 32794036.11 32794036.33 0.0142 0.0034

Neptune 85075-03-10 06:29 G 32794133.56 32794133.77 32794133.99 0.0089 0.0021

Jupiter 85075-06-14 19:12 G 32794230.09 32794230.30 32794230.50 0.0535 0.0030

Uranus 85075-07-17 02:39 G 32794262.38 32794262.61 32794262.83 0.0142 0.0004

Neptune 85075-10-21 19:12 G 32794359.10 32794359.30 32794359.51 0.0089 0.0031

Uranus 85076-02-28 14:24 G 32794488.89 32794489.10 32794489.31 0.0143 0.0039

Neptune 85076-06-03 07:41 G 32794584.64 32794584.82 32794585.03 0.0089 0.0041

Uranus 85076-10-12 02:10 G 32794715.42 32794715.59 32794715.79 0.0143 0.0076

Neptune 85077-01-14 20:39 G 32794810.19 32794810.36 32794810.54 0.0089 0.0050

Uranus 85077-05-26 14:39 G 32794941.98 32794942.11 32794942.25 0.0143 0.0112

Neptune 85077-08-28 09:22 G 32795035.74 32795035.89 32795036.06 0.0089 0.0060

Neptune 85078-04-10 21:51 G 32795261.30 32795261.41 32795261.56 0.0089 0.0070

Neptune 85078-11-22 10:48 G 32795486.86 32795486.95 32795487.06 0.0089 0.0079

Neptune 85079-07-05 23:32 G 32795712.48 32795712.48 32795712.50 0.0089 0.0089

Jupiter 85080-08-24 22:20 G 32796128.36 32796128.43 32796128.51 0.0492 0.0456

Jupiter 85081-04-17 21:08 G 32796364.18 32796364.38 32796364.58 0.0492 0.0071

Pluto 85081-10-25 10:20 G 32796554.74 32796554.93 32796555.14 0.0078 0.0035

Jupiter 85081-12-09 18:15 G 32796600.11 32796600.26 32796600.42 0.0494 0.0319

Pluto 85082-06-07 20:24 G 32796780.16 32796780.35 32796780.56 0.0078 0.0034

Saturn 85082-11-27 03:22 G 32796952.46 32796952.64 32796952.84 0.0272 0.0126

Saturn 85083-07-14 10:34 G 32797181.73 32797181.94 32797182.15 0.0270 0.0044

Saturn 85084-02-28 15:51 G 32797411.04 32797411.16 32797411.31 0.0268 0.0208

Jupiter 85087-02-17 07:27 G 32798495.61 32798495.81 32798496.01 0.0535 0.0116

Jupiter 85087-10-13 12:58 G 32798733.91 32798734.04 32798734.18 0.0533 0.0398

Jupiter 85092-12-22 01:27 G 32800630.37 32800630.56 32800630.75 0.0491 0.0180

Jupiter 85093-08-14 22:48 G 32800866.27 32800866.45 32800866.64 0.0493 0.0212

Saturn 85098-08-05 02:24 G 32802682.44 32802682.60 32802682.77 0.0289 0.0177

Jupiter 85098-10-22 18:44 G 32802761.10 32802761.28 32802761.46 0.0535 0.0262

Saturn 85099-03-22 20:10 G 32802912.13 32802912.34 32802912.55 0.0292 0.0027

Jupiter 85099-06-18 00:15 G 32802999.34 32802999.51 32802999.70 0.0534 0.0257

Saturn 85099-11-07 15:22 G 32803142.03 32803142.14 32803142.27 0.0294 0.0237

Jupiter 85104-08-28 06:00 G 32804896.59 32804896.75 32804896.92 0.0491 0.0286

Jupiter 85105-04-21 03:36 G 32805132.45 32805132.65 32805132.84 0.0492 0.0105

Jupiter 85105-12-13 00:15 G 32805368.48 32805368.51 32805368.54 0.0495 0.0487

Jupiter 85110-06-28 07:56 G 32807026.70 32807026.83 32807026.97 0.0536 0.0400

Jupiter 85111-02-21 13:27 G 32807264.86 32807265.06 32807265.26 0.0535 0.0115

Saturn 85111-10-23 21:51 G 32807509.40 32807509.41 32807509.42 0.0273 0.0272

Earth 85112-06-04 16:34 G 32807734.03 32807734.19 32807734.35 0.2660 0.0540

Moon 85112-06-04 18:58 G 32807734.14 32807734.29 32807734.45 0.2665 0.0148 *

Saturn 85112-06-09 06:00 G 32807738.56 32807738.75 32807738.95 0.0271 0.0101

Saturn 85113-01-24 12:44 G 32807967.83 32807968.03 32807968.24 0.0269 0.0067

Uranus 85113-05-12 09:08 G 32808075.83 32808075.88 32808075.95 0.0137 0.0131

Saturn 85113-09-10 18:00 G 32808197.15 32808197.25 32808197.37 0.0267 0.0229

Uranus 85113-12-24 15:08 G 32808302.00 32808302.13 32808302.29 0.0136 0.0101

Uranus 85114-08-07 21:22 G 32808528.21 32808528.39 32808528.58 0.0136 0.0069

Uranus 85115-03-22 03:22 G 32808754.43 32808754.64 32808754.85 0.0136 0.0039

Uranus 85115-11-03 09:22 G 32808980.67 32808980.89 32808981.10 0.0136 0.0008

Jupiter 85116-05-03 09:51 G 32809162.79 32809162.91 32809163.04 0.0491 0.0390

Uranus 85116-06-16 14:53 G 32809206.91 32809207.12 32809207.33 0.0136 0.0023

Jupiter 85116-12-25 07:41 G 32809398.61 32809398.82 32809399.02 0.0491 0.0008

Uranus 85117-01-28 20:24 G 32809433.16 32809433.35 32809433.55 0.0136 0.0053

Jupiter 85117-08-18 04:05 G 32809634.55 32809634.67 32809634.80 0.0494 0.0385

Uranus 85117-09-12 01:41 G 32809659.42 32809659.57 32809659.76 0.0135 0.0084

Uranus 85118-04-26 07:27 G 32809885.70 32809885.81 32809885.93 0.0135 0.0113

Jupiter 85122-03-02 22:34 G 32811292.43 32811292.44 32811292.46 0.0535 0.0533

Jupiter 85122-10-27 03:08 G 32811530.42 32811530.63 32811530.83 0.0536 0.0028

Jupiter 85123-06-22 09:36 G 32811768.82 32811768.90 32811768.98 0.0533 0.0484

Saturn 85128-02-16 01:41 G 32813468.40 32813468.57 32813468.75 0.0289 0.0158

Jupiter 85128-08-30 12:29 G 32813664.83 32813665.02 32813665.23 0.0491 0.0112

Saturn 85128-10-02 19:41 G 32813698.12 32813698.32 32813698.53 0.0292 0.0047

Jupiter 85129-04-23 09:22 G 32813900.72 32813900.89 32813901.06 0.0493 0.0280

Saturn 85129-05-20 14:53 G 32813928.03 32813928.12 32813928.24 0.0294 0.0256

Mars 85130-12-25 19:56 G 32814512.15 32814512.33 32814512.50 0.1645 0.0177

Jupiter 85134-07-01 15:36 G 32815795.96 32815796.15 32815796.35 0.0535 0.0171

Jupiter 85135-02-24 21:22 G 32816034.23 32816034.39 32816034.54 0.0533 0.0346

Mars 85135-08-05 00:15 G 32816195.39 32816195.51 32816195.63 0.1892 0.1306

Jupiter 85140-05-05 15:36 G 32817930.97 32817931.15 32817931.33 0.0492 0.0221

Jupiter 85140-12-27 13:12 G 32818166.86 32818167.05 32818167.24 0.0493 0.0172

Saturn 85141-05-05 00:00 G 32818295.43 32818295.50 32818295.59 0.0274 0.0253

Saturn 85141-12-20 08:39 G 32818524.65 32818524.86 32818525.06 0.0271 0.0080

Saturn 85142-08-06 15:22 G 32818753.94 32818754.14 32818754.35 0.0269 0.0088

Saturn 85143-03-23 20:53 G 32818983.31 32818983.37 32818983.45 0.0268 0.0251

Jupiter 85146-03-06 04:34 G 32820061.52 32820061.69 32820061.85 0.0535 0.0313

Jupiter 85146-10-30 09:22 G 32820299.70 32820299.89 32820300.08 0.0534 0.0205

Neptune 85149-04-16 01:12 G 32821198.53 32821198.55 32821198.58 0.0089 0.0088

Neptune 85149-11-27 13:56 G 32821424.00 32821424.08 32821424.20 0.0089 0.0079

Neptune 85150-07-11 03:22 G 32821649.52 32821649.64 32821649.79 0.0089 0.0069

Neptune 85151-02-21 16:34 G 32821875.04 32821875.19 32821875.37 0.0089 0.0060

Neptune 85151-10-05 05:46 G 32822100.58 32822100.74 32822100.94 0.0089 0.0050

Jupiter 85152-01-09 19:27 G 32822197.17 32822197.31 32822197.47 0.0492 0.0329

Neptune 85152-05-17 19:12 G 32822326.11 32822326.30 32822326.50 0.0089 0.0040

Jupiter 85152-09-01 17:46 G 32822433.04 32822433.24 32822433.44 0.0492 0.0063

Neptune 85152-12-29 08:10 G 32822551.65 32822551.84 32822552.06 0.0089 0.0031

Jupiter 85153-04-25 14:53 G 32822669.04 32822669.12 32822669.21 0.0495 0.0449

Neptune 85153-08-11 21:36 G 32822777.19 32822777.40 32822777.62 0.0089 0.0020

Neptune 85154-03-25 11:03 G 32823002.74 32823002.96 32823003.18 0.0088 0.0011

Neptune 85154-11-06 00:15 G 32823228.29 32823228.51 32823228.73 0.0088 0.0001

Neptune 85155-06-19 13:12 G 32823453.84 32823454.05 32823454.28 0.0088 0.0010

Neptune 85156-01-31 02:39 G 32823679.39 32823679.61 32823679.83 0.0088 0.0019

Neptune 85156-09-12 15:51 G 32823904.95 32823905.16 32823905.37 0.0088 0.0029

Neptune 85157-04-26 05:03 G 32824130.52 32824130.71 32824130.92 0.0088 0.0038

Uranus 85157-05-06 22:34 G 32824141.34 32824141.44 32824141.57 0.0142 0.0121

Saturn 85157-08-28 08:24 G 32824254.67 32824254.85 32824255.04 0.0290 0.0127

Jupiter 85157-11-08 15:36 G 32824327.05 32824327.15 32824327.26 0.0535 0.0454

Neptune 85157-12-07 18:00 G 32824356.08 32824356.25 32824356.46 0.0088 0.0049

Uranus 85157-12-19 10:05 G 32824367.74 32824367.92 32824368.10 0.0142 0.0085

Saturn 85158-04-15 02:24 G 32824484.40 32824484.60 32824484.80 0.0292 0.0078

Jupiter 85158-07-04 20:10 G 32824565.14 32824565.34 32824565.54 0.0535 0.0058

Neptune 85158-07-21 07:41 G 32824581.66 32824581.82 32824581.99 0.0088 0.0058

Uranus 85158-08-02 21:22 G 32824594.19 32824594.39 32824594.60 0.0142 0.0050

Saturn 85158-11-30 21:36 G 32824714.37 32824714.40 32824714.45 0.0294 0.0288

Neptune 85159-03-03 20:53 G 32824807.24 32824807.37 32824807.52 0.0088 0.0067

Uranus 85159-03-17 09:08 G 32824820.66 32824820.88 32824821.10 0.0142 0.0014

Neptune 85159-10-15 09:51 G 32825032.83 32825032.91 32825033.04 0.0088 0.0078

Uranus 85159-10-29 20:53 G 32825047.15 32825047.37 32825047.59 0.0142 0.0022

Neptune 85160-05-27 23:17 G 32825258.45 32825258.47 32825258.53 0.0088 0.0087

Uranus 85160-06-12 08:39 G 32825273.67 32825273.86 32825274.07 0.0142 0.0059

Uranus 85161-01-24 20:39 G 32825500.20 32825500.36 32825500.53 0.0143 0.0095

Uranus 85161-09-08 08:24 G 32825726.79 32825726.85 32825726.95 0.0143 0.0132

Jupiter 85163-09-14 23:46 G 32826463.40 32826463.49 32826463.59 0.0492 0.0432

Jupiter 85164-05-07 22:20 G 32826699.23 32826699.43 32826699.63 0.0492 0.0045

Jupiter 85164-12-29 19:12 G 32826935.16 32826935.30 32826935.44 0.0494 0.0345

Jupiter 85170-03-09 08:53 G 32828830.67 32828830.87 32828831.07 0.0535 0.0087

Jupiter 85170-11-02 15:08 G 32829069.01 32829069.13 32829069.25 0.0533 0.0429

Saturn 85170-11-15 03:51 G 32829081.55 32829081.66 32829081.78 0.0273 0.0226

Saturn 85171-07-02 12:00 G 32829310.79 32829311.00 32829311.22 0.0271 0.0055

Saturn 85172-02-16 18:44 G 32829540.09 32829540.28 32829540.48 0.0269 0.0112

Jupiter 85176-01-12 02:24 G 32830965.40 32830965.60 32830965.79 0.0491 0.0153

Jupiter 85176-09-03 23:17 G 32831201.29 32831201.47 32831201.65 0.0493 0.0239

Jupiter 85181-11-11 22:34 G 32833096.26 32833096.44 32833096.62 0.0536 0.0228

Jupiter 85182-07-08 04:34 G 32833334.52 32833334.69 32833334.86 0.0534 0.0293

Saturn 85187-03-10 08:53 G 32835040.68 32835040.87 32835041.06 0.0290 0.0106

Jupiter 85187-09-17 06:44 G 32835231.61 32835231.78 32835231.96 0.0491 0.0260

Saturn 85187-10-26 02:53 G 32835270.43 32835270.62 32835270.82 0.0292 0.0099

Jupiter 85188-05-10 04:05 G 32835467.48 32835467.67 32835467.87 0.0492 0.0132

Jupiter 85193-07-17 12:15 G 32837361.87 32837362.01 32837362.16 0.0535 0.0368

Jupiter 85194-03-12 17:03 G 32837600.01 32837600.21 32837600.41 0.0534 0.0149

Mars 85196-10-22 06:44 G 32838554.61 32838554.78 32838554.96 0.1643 0.0058

Uranus 85197-08-23 23:46 G 32838860.38 32838860.49 32838860.61 0.0137 0.0115

Uranus 85198-04-07 06:00 G 32839086.59 32839086.75 32839086.92 0.0136 0.0084

Uranus 85198-11-19 12:00 G 32839312.81 32839313.00 32839313.21 0.0136 0.0053

Jupiter 85199-05-23 08:39 G 32839497.74 32839497.86 32839498.00 0.0492 0.0371

Uranus 85199-07-03 18:00 G 32839539.04 32839539.25 32839539.47 0.0136 0.0022

Jupiter 85200-01-14 07:12 G 32839733.60 32839733.80 32839734.01 0.0492 0.0022

Uranus 85200-02-14 23:46 G 32839765.28 32839765.49 32839765.71 0.0136 0.0009

Saturn 85200-05-27 05:46 G 32839867.62 32839867.74 32839867.90 0.0273 0.0207

Jupiter 85200-09-06 04:48 G 32839969.59 32839969.70 32839969.81 0.0495 0.0411

Uranus 85200-09-28 05:46 G 32839991.54 32839991.74 32839991.95 0.0136 0.0039

Saturn 85201-01-11 14:24 G 32840096.89 32840097.10 32840097.32 0.0271 0.0034

Uranus 85201-05-12 11:17 G 32840217.79 32840217.97 32840218.16 0.0136 0.0069

Saturn 85201-08-28 21:08 G 32840326.20 32840326.38 32840326.57 0.0269 0.0134

Uranus 85201-12-24 16:48 G 32840444.06 32840444.20 32840444.35 0.0135 0.0099

Uranus 85202-08-07 22:05 G 32840670.37 32840670.42 32840670.50 0.0135 0.0128

Jupiter 85205-03-22 01:41 G 32841627.51 32841627.57 32841627.63 0.0535 0.0504

Jupiter 85205-11-15 05:03 G 32841865.51 32841865.71 32841865.91 0.0534 0.0004

Jupiter 85206-07-11 10:20 G 32842103.88 32842103.93 32842103.98 0.0531 0.0512

Moon 85209-12-09 23:32 G 32843351.35 32843351.48 32843351.60 0.2680 0.1436

Earth 85209-12-10 00:44 G 32843351.42 32843351.53 32843351.64 0.2673 0.1883 *

Jupiter 85211-01-26 12:15 G 32843763.97 32843764.01 32843764.06 0.0492 0.0476

Jupiter 85211-09-19 11:32 G 32843999.78 32843999.98 32844000.19 0.0492 0.0090

Jupiter 85212-05-12 08:53 G 32844235.72 32844235.87 32844236.03 0.0494 0.0304

Saturn 85216-02-03 00:00 G 32845597.43 32845597.50 32845597.57 0.0287 0.0271

Saturn 85216-09-19 16:34 G 32845826.98 32845827.19 32845827.39 0.0290 0.0073

Saturn 85217-05-07 10:20 G 32846056.75 32846056.93 32846057.12 0.0292 0.0134

Jupiter 85217-07-20 15:36 G 32846130.95 32846131.15 32846131.35 0.0535 0.0145

Earth 85217-12-07 17:17 G 32846271.09 32846271.22 32846271.36 0.2672 0.1277

Moon 85217-12-07 20:10 G 32846271.20 32846271.34 32846271.48 0.2678 0.0839 *

Jupiter 85218-03-15 21:22 G 32846369.24 32846369.39 32846369.53 0.0533 0.0373

Jupiter 85223-05-25 16:05 G 32848265.98 32848266.17 32848266.35 0.0491 0.0196

Jupiter 85224-01-16 13:27 G 32848501.87 32848502.06 32848502.24 0.0493 0.0197

Jupiter 85229-03-25 04:20 G 32850396.51 32850396.68 32850396.85 0.0535 0.0288

Jupiter 85229-11-18 09:36 G 32850634.72 32850634.90 32850635.08 0.0534 0.0233

Saturn 85229-12-07 11:03 G 32850653.80 32850653.96 32850654.12 0.0273 0.0178

Saturn 85230-07-24 19:12 G 32850883.08 32850883.30 32850883.51 0.0270 0.0007

Saturn 85231-03-11 01:56 G 32851112.40 32851112.58 32851112.75 0.0268 0.0160

Neptune 85232-08-26 20:24 G 32851647.33 32851647.35 32851647.37 0.0089 0.0088

Neptune 85233-04-09 08:39 G 32851872.78 32851872.86 32851872.98 0.0089 0.0079

Mars 85233-05-31 22:20 G 32851925.35 32851925.43 32851925.51 0.1885 0.1662

Neptune 85233-11-20 21:51 G 32852098.28 32852098.41 32852098.55 0.0089 0.0069

Neptune 85234-07-04 10:20 G 32852323.78 32852323.93 32852324.11 0.0089 0.0060

Jupiter 85235-01-28 19:41 G 32852532.17 32852532.32 32852532.49 0.0491 0.0304

Neptune 85235-02-14 23:17 G 32852549.30 32852549.47 32852549.66 0.0089 0.0050

Jupiter 85235-09-21 17:32 G 32852768.03 32852768.23 32852768.43 0.0492 0.0089

Neptune 85235-09-28 12:15 G 32852774.82 32852775.01 32852775.21 0.0089 0.0040

Neptune 85236-05-11 00:58 G 32853000.35 32853000.54 32853000.76 0.0089 0.0031

Jupiter 85236-05-14 14:10 G 32853004.04 32853004.09 32853004.15 0.0495 0.0474

Neptune 85236-12-22 13:56 G 32853225.87 32853226.08 32853226.30 0.0089 0.0021

Neptune 85237-08-05 02:53 G 32853451.40 32853451.62 32853451.84 0.0089 0.0011

Neptune 85238-03-18 15:36 G 32853676.93 32853677.15 32853677.37 0.0089 0.0002

Neptune 85238-10-30 04:20 G 32853902.47 32853902.68 32853902.90 0.0089 0.0009

Neptune 85239-06-12 17:03 G 32854128.00 32854128.21 32854128.43 0.0089 0.0019

Neptune 85240-01-24 05:46 G 32854353.54 32854353.74 32854353.95 0.0089 0.0028

Neptune 85240-09-05 18:29 G 32854579.09 32854579.27 32854579.48 0.0089 0.0038

Jupiter 85240-11-27 18:00 G 32854662.13 32854662.25 32854662.37 0.0535 0.0426

Uranus 85241-01-04 06:44 G 32854699.72 32854699.78 32854699.84 0.0141 0.0135

Neptune 85241-04-19 07:12 G 32854804.63 32854804.80 32854805.00 0.0089 0.0048

Jupiter 85241-07-23 22:48 G 32854900.25 32854900.45 32854900.65 0.0535 0.0091

Uranus 85241-08-18 18:00 G 32854926.09 32854926.25 32854926.40 0.0142 0.0100

Neptune 85241-11-30 20:10 G 32855030.18 32855030.34 32855030.51 0.0089 0.0057

Pluto 85242-01-27 02:24 G 32855087.49 32855087.60 32855087.74 0.0065 0.0053

Uranus 85242-04-02 05:17 G 32855152.53 32855152.72 32855152.92 0.0142 0.0065

Neptune 85242-07-14 08:24 G 32855255.73 32855255.85 32855256.01 0.0089 0.0068

Pluto 85242-09-09 06:58 G 32855312.58 32855312.79 32855313.01 0.0066 0.0013

Uranus 85242-11-14 16:48 G 32855378.99 32855379.20 32855379.42 0.0142 0.0029

Neptune 85243-02-24 21:36 G 32855481.29 32855481.40 32855481.51 0.0089 0.0077

Pluto 85243-04-22 11:03 G 32855537.78 32855537.96 32855538.18 0.0066 0.0028

Uranus 85243-06-29 04:34 G 32855605.47 32855605.69 32855605.91 0.0142 0.0007

Neptune 85243-10-08 10:05 G 32855706.89 32855706.92 32855706.99 0.0089 0.0086

Uranus 85244-02-10 16:05 G 32855831.97 32855832.17 32855832.39 0.0142 0.0043

Uranus 85244-09-24 03:51 G 32856058.49 32856058.66 32856058.86 0.0143 0.0080

Uranus 85245-05-08 15:51 G 32856285.05 32856285.16 32856285.31 0.0143 0.0116

Saturn 85245-08-15 01:56 G 32856383.48 32856383.58 32856383.68 0.0287 0.0249

Saturn 85246-04-01 18:15 G 32856613.06 32856613.26 32856613.47 0.0290 0.0051

Jupiter 85246-10-03 23:32 G 32856798.37 32856798.48 32856798.60 0.0491 0.0409

Saturn 85246-11-17 12:29 G 32856842.85 32856843.02 32856843.20 0.0292 0.0156

Jupiter 85247-05-27 21:51 G 32857034.21 32857034.41 32857034.61 0.0491 0.0020

Jupiter 85248-01-18 18:44 G 32857270.15 32857270.28 32857270.41 0.0494 0.0371

Jupiter 85253-03-28 12:00 G 32859165.80 32859166.00 32859166.20 0.0535 0.0054

Jupiter 85253-11-21 17:17 G 32859404.13 32859404.22 32859404.33 0.0532 0.0459

Jupiter 85259-01-31 00:15 G 32861300.32 32861300.51 32861300.71 0.0492 0.0133

Saturn 85259-06-19 13:41 G 32861439.90 32861440.07 32861440.25 0.0273 0.0156

Jupiter 85259-09-23 21:51 G 32861536.24 32861536.41 32861536.59 0.0493 0.0263

Saturn 85260-02-03 21:51 G 32861669.20 32861669.41 32861669.63 0.0271 0.0017

Saturn 85260-09-20 04:48 G 32861898.54 32861898.70 32861898.85 0.0269 0.0182

Mars 85262-08-19 18:15 G 32862597.09 32862597.26 32862597.44 0.1640 0.0247

Jupiter 85264-12-01 00:15 G 32863431.32 32863431.51 32863431.70 0.0535 0.0199

Jupiter 85265-07-27 05:03 G 32863669.56 32863669.71 32863669.88 0.0533 0.0321

Jupiter 85270-10-06 04:20 G 32865566.50 32865566.68 32865566.85 0.0492 0.0242

Jupiter 85271-05-30 02:10 G 32865802.39 32865802.59 32865802.78 0.0493 0.0153

Saturn 85275-02-25 10:20 G 32867169.80 32867169.93 32867170.08 0.0288 0.0214

Saturn 85275-10-13 03:08 G 32867399.43 32867399.63 32867399.84 0.0290 0.0016

Saturn 85276-05-29 21:36 G 32867629.24 32867629.40 32867629.55 0.0293 0.0193

Jupiter 85276-08-05 10:48 G 32867696.80 32867696.95 32867697.11 0.0535 0.0345

Jupiter 85277-03-31 15:22 G 32867934.95 32867935.14 32867935.34 0.0534 0.0175

Uranus 85281-04-23 09:08 G 32869418.82 32869418.88 32869418.96 0.0137 0.0129

Uranus 85281-12-05 15:22 G 32869645.00 32869645.14 32869645.30 0.0137 0.0098

Jupiter 85282-06-11 08:10 G 32869832.71 32869832.84 32869832.99 0.0492 0.0349

Uranus 85282-07-19 21:22 G 32869871.22 32869871.39 32869871.59 0.0136 0.0068

Jupiter 85283-02-02 06:44 G 32870068.57 32870068.78 32870068.98 0.0492 0.0046

Uranus 85283-03-03 03:36 G 32870097.45 32870097.65 32870097.87 0.0136 0.0037

Jupiter 85283-09-26 03:51 G 32870304.57 32870304.66 32870304.76 0.0494 0.0434

Uranus 85283-10-15 09:51 G 32870323.70 32870323.91 32870324.13 0.0136 0.0006

Uranus 85284-05-28 15:36 G 32870549.94 32870550.15 32870550.37 0.0136 0.0025

Uranus 85285-01-09 21:08 G 32870776.20 32870776.38 32870776.59 0.0136 0.0056

Uranus 85285-08-24 02:39 G 32871002.46 32871002.61 32871002.79 0.0136 0.0086

Uranus 85286-04-07 08:10 G 32871228.74 32871228.84 32871228.97 0.0135 0.0115

Jupiter 85288-04-09 23:32 G 32871962.40 32871962.48 32871962.56 0.0535 0.0483

Jupiter 85288-12-04 03:22 G 32872200.43 32872200.64 32872200.84 0.0535 0.0029

Saturn 85288-12-29 19:41 G 32872226.13 32872226.32 32872226.51 0.0272 0.0126

Saturn 85289-08-16 03:36 G 32872455.44 32872455.65 32872455.87 0.0270 0.0045

Saturn 85290-04-02 10:05 G 32872684.80 32872684.92 32872685.06 0.0268 0.0210

Jupiter 85294-02-14 11:46 G 32874098.92 32874098.99 32874099.07 0.0492 0.0453

Jupiter 85294-10-08 10:34 G 32874334.73 32874334.94 32874335.14 0.0491 0.0065

Jupiter 85295-06-01 07:12 G 32874570.65 32874570.80 32874570.96 0.0493 0.0328

Mars 85299-03-29 02:53 G 32875967.48 32875967.62 32875967.76 0.1888 0.1088

Jupiter 85300-08-09 16:20 G 32876465.99 32876466.18 32876466.38 0.0535 0.0116

Jupiter 85301-04-04 22:34 G 32876704.31 32876704.44 32876704.57 0.0533 0.0404

Saturn 85304-09-07 14:10 G 32877955.93 32877956.09 32877956.24 0.0288 0.0189

Saturn 85305-04-25 06:44 G 32878185.57 32878185.78 32878185.99 0.0290 0.0012

Saturn 85305-12-11 00:58 G 32878415.41 32878415.54 32878415.68 0.0292 0.0219

Jupiter 85306-06-14 14:24 G 32878600.91 32878601.10 32878601.29 0.0491 0.0174

Jupiter 85307-02-05 11:46 G 32878836.80 32878836.99 32878837.17 0.0493 0.0221

Jupiter 85312-04-14 06:15 G 32880731.59 32880731.76 32880731.94 0.0535 0.0259

Jupiter 85312-12-08 11:17 G 32880969.79 32880969.97 32880970.15 0.0534 0.0263

Neptune 85314-03-01 23:32 G 32881418.42 32881418.48 32881418.59 0.0089 0.0082

Neptune 85314-10-13 13:12 G 32881643.93 32881644.05 32881644.18 0.0089 0.0072

Neptune 85315-05-27 01:56 G 32881869.45 32881869.58 32881869.76 0.0089 0.0063

Neptune 85316-01-07 15:22 G 32882094.98 32882095.14 32882095.33 0.0089 0.0053

Neptune 85316-08-20 04:48 G 32882320.51 32882320.70 32882320.90 0.0089 0.0043

Neptune 85317-04-02 18:00 G 32882546.06 32882546.25 32882546.47 0.0089 0.0033

Neptune 85317-11-14 07:12 G 32882771.60 32882771.80 32882772.03 0.0089 0.0024

Jupiter 85318-02-17 16:05 G 32882867.01 32882867.17 32882867.34 0.0492 0.0287

Neptune 85318-06-27 20:39 G 32882997.14 32882997.36 32882997.58 0.0088 0.0014

Saturn 85318-07-12 23:03 G 32883012.26 32883012.46 32883012.66 0.0273 0.0104

Jupiter 85318-10-11 14:10 G 32883102.90 32883103.09 32883103.29 0.0492 0.0110

Neptune 85319-02-08 09:51 G 32883222.69 32883222.91 32883223.14 0.0088 0.0004

Saturn 85319-02-27 06:58 G 32883241.59 32883241.79 32883242.00 0.0271 0.0068

Neptune 85319-09-21 23:03 G 32883448.24 32883448.46 32883448.69 0.0088 0.0006

Saturn 85319-10-14 13:41 G 32883470.97 32883471.07 32883471.18 0.0269 0.0233

Neptune 85320-05-04 12:15 G 32883673.80 32883674.01 32883674.24 0.0088 0.0016

Neptune 85320-12-16 01:27 G 32883899.35 32883899.56 32883899.78 0.0088 0.0026

Neptune 85321-07-29 14:39 G 32884124.91 32884125.11 32884125.32 0.0088 0.0035

Neptune 85322-03-12 03:51 G 32884350.48 32884350.66 32884350.86 0.0088 0.0045

Neptune 85322-10-23 16:48 G 32884576.05 32884576.20 32884576.40 0.0088 0.0056

Neptune 85323-06-06 06:29 G 32884801.63 32884801.77 32884801.93 0.0088 0.0065

Jupiter 85323-12-18 19:12 G 32884997.17 32884997.30 32884997.43 0.0535 0.0399

Neptune 85324-01-17 19:27 G 32885027.21 32885027.31 32885027.45 0.0088 0.0075

Jupiter 85324-08-12 23:03 G 32885235.27 32885235.46 32885235.66 0.0534 0.0119

Neptune 85324-08-30 08:39 G 32885252.82 32885252.86 32885252.95 0.0088 0.0084

Uranus 85325-04-19 02:10 G 32885484.48 32885484.59 32885484.74 0.0141 0.0115

Uranus 85325-12-01 13:27 G 32885710.89 32885711.06 32885711.26 0.0142 0.0080

Uranus 85326-07-16 00:58 G 32885937.34 32885937.54 32885937.76 0.0142 0.0044

Uranus 85327-02-27 12:44 G 32886163.81 32886164.03 32886164.25 0.0142 0.0008

Uranus 85327-10-12 00:29 G 32886390.31 32886390.52 32886390.74 0.0142 0.0028

Uranus 85328-05-25 12:15 G 32886616.82 32886617.01 32886617.21 0.0142 0.0064

Mars 85328-06-17 05:32 G 32886639.57 32886639.73 32886639.90 0.1638 0.0453

Uranus 85329-01-07 00:00 G 32886843.36 32886843.50 32886843.67 0.0143 0.0101

Uranus 85329-08-21 12:00 G 32887069.95 32887070.00 32887070.08 0.0143 0.0137

Jupiter 85329-10-23 19:27 G 32887133.19 32887133.31 32887133.43 0.0492 0.0394

Pluto 85330-05-12 16:34 G 32887333.98 32887334.19 32887334.40 0.0078 0.0022

Jupiter 85330-06-16 18:15 G 32887369.06 32887369.26 32887369.47 0.0492 0.0005

Pluto 85330-12-24 01:56 G 32887559.42 32887559.58 32887559.78 0.0078 0.0047

Jupiter 85331-02-07 15:36 G 32887605.03 32887605.15 32887605.28 0.0494 0.0390

Saturn 85334-03-20 23:17 G 32888742.29 32888742.47 32888742.65 0.0288 0.0152

Saturn 85334-11-05 16:20 G 32888971.98 32888972.18 32888972.39 0.0291 0.0050

Saturn 85335-06-23 10:48 G 32889201.86 32889201.95 32889202.05 0.0293 0.0257

Jupiter 85336-04-17 08:53 G 32889500.67 32889500.87 32889501.07 0.0535 0.0031

Jupiter 85336-12-11 14:10 G 32889739.01 32889739.09 32889739.18 0.0532 0.0482

Jupiter 85342-02-19 22:48 G 32891635.25 32891635.45 32891635.65 0.0492 0.0111

Jupiter 85342-10-13 20:10 G 32891871.17 32891871.34 32891871.50 0.0493 0.0284

Saturn 85347-06-07 20:53 G 32893569.29 32893569.37 32893569.48 0.0274 0.0246

Jupiter 85347-12-21 20:39 G 32893766.17 32893766.36 32893766.55 0.0535 0.0178

Saturn 85348-01-23 06:15 G 32893798.56 32893798.76 32893798.98 0.0272 0.0072

Jupiter 85348-08-16 01:56 G 32894004.43 32894004.58 32894004.74 0.0533 0.0344

Saturn 85348-09-08 14:10 G 32894027.89 32894028.09 32894028.29 0.0270 0.0098

Saturn 85349-04-25 20:39 G 32894257.32 32894257.36 32894257.40 0.0268 0.0262

Jupiter 85353-10-26 02:10 G 32895901.41 32895901.59 32895901.78 0.0491 0.0220

Jupiter 85354-06-18 23:32 G 32896137.30 32896137.48 32896137.67 0.0492 0.0176

Moon 85355-06-06 15:51 G 32896489.99 32896490.16 32896490.33 0.2655 0.0413

Earth 85355-06-06 16:05 G 32896490.01 32896490.17 32896490.33 0.2661 0.0505 *

Jupiter 85359-08-26 09:36 G 32898031.74 32898031.90 32898032.07 0.0535 0.0321

Jupiter 85360-04-20 14:53 G 32898269.93 32898270.12 32898270.31 0.0534 0.0202

Mars 85360-06-16 02:10 G 32898326.55 32898326.59 32898326.64 0.1645 0.1578

Saturn 85363-10-01 04:48 G 32899528.51 32899528.70 32899528.89 0.0288 0.0125

Saturn 85364-05-17 21:36 G 32899758.20 32899758.40 32899758.61 0.0291 0.0079

Saturn 85365-01-02 16:05 G 32899988.14 32899988.17 32899988.22 0.0293 0.0286

Mars 85365-01-24 06:58 G 32900009.63 32900009.79 32900009.96 0.1892 0.0485

Jupiter 85365-07-01 05:46 G 32900167.59 32900167.74 32900167.89 0.0491 0.0328

Uranus 85365-08-06 00:29 G 32900203.41 32900203.52 32900203.66 0.0137 0.0112

Jupiter 85366-02-22 03:51 G 32900403.45 32900403.66 32900403.86 0.0492 0.0067

Uranus 85366-03-20 06:44 G 32900429.62 32900429.78 32900429.97 0.0136 0.0081

Jupiter 85366-10-16 00:44 G 32900639.46 32900639.53 32900639.61 0.0494 0.0455

Uranus 85366-11-01 13:12 G 32900655.85 32900656.05 32900656.25 0.0136 0.0050

Uranus 85367-06-15 19:12 G 32900882.09 32900882.30 32900882.52 0.0136 0.0020

Uranus 85368-01-28 01:12 G 32901108.34 32901108.55 32901108.76 0.0136 0.0011

Uranus 85368-09-10 06:58 G 32901334.59 32901334.79 32901335.00 0.0136 0.0042

Uranus 85369-04-24 12:29 G 32901560.85 32901561.02 32901561.21 0.0136 0.0072

Uranus 85369-12-06 18:00 G 32901787.12 32901787.25 32901787.40 0.0135 0.0102

Uranus 85370-07-20 23:17 G 32902013.44 32902013.47 32902013.54 0.0135 0.0131

Jupiter 85371-05-01 00:00 G 32902297.40 32902297.50 32902297.61 0.0535 0.0459

Jupiter 85371-12-25 04:05 G 32902535.47 32902535.67 32902535.87 0.0535 0.0057

Saturn 85376-12-18 00:44 G 32904355.41 32904355.53 32904355.66 0.0274 0.0222

Jupiter 85377-03-06 06:44 G 32904433.70 32904433.78 32904433.88 0.0492 0.0439

Saturn 85377-08-04 10:05 G 32904584.71 32904584.92 32904585.13 0.0272 0.0048

Jupiter 85377-10-28 05:46 G 32904669.54 32904669.74 32904669.95 0.0492 0.0048

Saturn 85378-03-21 18:00 G 32904814.06 32904814.25 32904814.44 0.0270 0.0123

Jupiter 85378-06-21 03:08 G 32904905.49 32904905.63 32904905.78 0.0494 0.0347

Jupiter 85383-08-29 16:20 G 32906800.98 32906801.18 32906801.38 0.0535 0.0089

Jupiter 85384-04-23 21:22 G 32907039.28 32907039.39 32907039.51 0.0532 0.0429

Jupiter 85389-07-03 09:36 G 32908935.71 32908935.90 32908936.09 0.0492 0.0158

Jupiter 85390-02-24 07:12 G 32909171.63 32909171.80 32909171.98 0.0493 0.0238

Saturn 85392-08-25 22:48 G 32910085.43 32910085.45 32910085.49 0.0286 0.0282

Saturn 85393-04-12 14:39 G 32910314.91 32910315.11 32910315.31 0.0289 0.0086

Saturn 85393-11-28 07:56 G 32910544.64 32910544.83 32910545.02 0.0291 0.0118

Mars 85394-04-14 16:48 G 32910682.04 32910682.20 32910682.36 0.1636 0.0664

Jupiter 85395-05-04 01:56 G 32911066.40 32911066.58 32911066.76 0.0535 0.0238

Jupiter 85395-12-28 06:44 G 32911304.61 32911304.78 32911304.95 0.0533 0.0284

Neptune 85397-07-12 19:41 G 32911867.26 32911867.32 32911867.42 0.0089 0.0082

Neptune 85398-02-23 08:39 G 32912092.75 32912092.86 32912093.00 0.0089 0.0072

Neptune 85398-10-06 21:22 G 32912318.25 32912318.39 32912318.56 0.0089 0.0063

Neptune 85399-05-20 10:05 G 32912543.76 32912543.92 32912544.12 0.0089 0.0053

Neptune 85399-12-31 23:03 G 32912769.28 32912769.46 32912769.66 0.0089 0.0043

Neptune 85400-08-14 12:15 G 32912994.81 32912995.01 32912995.21 0.0089 0.0033

Jupiter 85401-03-09 13:56 G 32913201.91 32913202.08 32913202.25 0.0492 0.0266

Neptune 85401-03-28 00:44 G 32913220.33 32913220.53 32913220.75 0.0089 0.0024

Jupiter 85401-10-31 11:46 G 32913437.79 32913437.99 32913438.19 0.0492 0.0130

Neptune 85401-11-08 13:41 G 32913445.86 32913446.07 32913446.29 0.0089 0.0014

Neptune 85402-06-22 02:39 G 32913671.39 32913671.61 32913671.83 0.0089 0.0004

Neptune 85403-02-02 15:22 G 32913896.92 32913897.14 32913897.36 0.0089 0.0006

Neptune 85403-09-16 04:20 G 32914122.47 32914122.68 32914122.90 0.0089 0.0016

Neptune 85404-04-28 16:48 G 32914348.01 32914348.20 32914348.42 0.0089 0.0026

Neptune 85404-12-10 05:46 G 32914573.55 32914573.74 32914573.95 0.0089 0.0035

Neptune 85405-07-23 18:15 G 32914799.09 32914799.26 32914799.46 0.0089 0.0045

Neptune 85406-03-06 06:58 G 32915024.64 32915024.79 32915024.98 0.0089 0.0055

Saturn 85406-07-01 09:22 G 32915141.74 32915141.89 32915142.05 0.0274 0.0189

Neptune 85406-10-17 20:10 G 32915250.19 32915250.34 32915250.49 0.0089 0.0065

Jupiter 85407-01-07 13:56 G 32915331.94 32915332.08 32915332.22 0.0535 0.0381

Saturn 85407-02-15 18:29 G 32915371.06 32915371.27 32915371.49 0.0272 0.0015

Neptune 85407-05-31 08:39 G 32915475.75 32915475.86 32915475.99 0.0089 0.0074

Jupiter 85407-09-02 18:00 G 32915570.06 32915570.25 32915570.45 0.0534 0.0139

Saturn 85407-10-03 01:56 G 32915600.41 32915600.58 32915600.76 0.0270 0.0154

Neptune 85408-01-11 21:08 G 32915701.33 32915701.38 32915701.47 0.0089 0.0084

Uranus 85408-12-18 09:51 G 32916042.84 32916042.91 32916043.01 0.0141 0.0129

Uranus 85409-08-01 21:08 G 32916269.23 32916269.38 32916269.56 0.0142 0.0095

Uranus 85410-03-16 08:39 G 32916495.67 32916495.86 32916496.07 0.0142 0.0059

Uranus 85410-10-28 20:10 G 32916722.13 32916722.34 32916722.57 0.0142 0.0024

Uranus 85411-06-12 07:56 G 32916948.61 32916948.83 32916949.05 0.0142 0.0012

Uranus 85412-01-24 19:27 G 32917175.11 32917175.31 32917175.53 0.0142 0.0049

Uranus 85412-09-07 07:12 G 32917401.64 32917401.80 32917401.99 0.0142 0.0085

Jupiter 85412-11-12 17:03 G 32917468.08 32917468.21 32917468.34 0.0491 0.0374

Uranus 85413-04-21 19:12 G 32917628.20 32917628.30 32917628.43 0.0143 0.0121

Jupiter 85413-07-06 15:22 G 32917703.93 32917704.14 32917704.34 0.0492 0.0021

Jupiter 85414-02-27 12:00 G 32917939.90 32917940.00 32917940.12 0.0494 0.0411

Jupiter 85418-09-12 02:53 G 32919597.58 32919597.62 32919597.67 0.0535 0.0519

Jupiter 85419-05-08 06:29 G 32919835.57 32919835.77 32919835.98 0.0535 0.0008

Jupiter 85420-01-01 12:15 G 32920073.96 32920074.01 32920074.08 0.0532 0.0508

Saturn 85422-03-09 05:17 G 32920871.63 32920871.72 32920871.82 0.0287 0.0254

Saturn 85422-10-24 21:08 G 32921101.18 32921101.38 32921101.59 0.0289 0.0056

Saturn 85423-06-11 14:24 G 32921330.93 32921331.10 32921331.28 0.0291 0.0149

Jupiter 85424-07-18 19:56 G 32921734.29 32921734.33 32921734.37 0.0492 0.0480

Jupiter 85425-03-11 18:58 G 32921970.09 32921970.29 32921970.50 0.0491 0.0091

Jupiter 85425-11-02 16:05 G 32922206.01 32922206.17 32922206.33 0.0493 0.0305

Mars 85426-04-14 13:27 G 32922368.96 32922369.06 32922369.15 0.1643 0.1366

Mars 85430-11-22 12:00 G 32924051.82 32924052.00 32924052.17 0.1895 0.0108

Jupiter 85431-01-10 20:10 G 32924101.15 32924101.34 32924101.54 0.0535 0.0153

Jupiter 85431-09-06 01:27 G 32924339.42 32924339.56 32924339.72 0.0533 0.0370

Saturn 85436-01-11 13:56 G 32925927.91 32925928.08 32925928.26 0.0274 0.0163

Saturn 85436-08-27 22:48 G 32926157.24 32926157.45 32926157.67 0.0272 0.0011

Jupiter 85436-11-14 20:39 G 32926236.18 32926236.36 32926236.55 0.0491 0.0205

Saturn 85437-04-14 06:15 G 32926386.61 32926386.76 32926386.93 0.0270 0.0179

Jupiter 85437-07-08 18:15 G 32926472.08 32926472.26 32926472.45 0.0493 0.0193

Jupiter 85442-09-15 08:53 G 32928366.70 32928366.87 32928367.04 0.0535 0.0296

Jupiter 85443-05-11 13:27 G 32928604.88 32928605.06 32928605.25 0.0534 0.0228

Jupiter 85448-07-21 00:00 G 32930502.35 32930502.50 32930502.66 0.0492 0.0314

Jupiter 85449-03-13 22:20 G 32930738.23 32930738.43 32930738.63 0.0492 0.0083

Uranus 85449-04-06 10:48 G 32930761.87 32930761.95 32930762.04 0.0137 0.0125

Jupiter 85449-11-04 19:41 G 32930974.27 32930974.32 32930974.38 0.0495 0.0472

Uranus 85449-11-18 17:03 G 32930988.07 32930988.21 32930988.38 0.0136 0.0094

Uranus 85450-07-02 23:17 G 32931214.29 32931214.47 32931214.67 0.0136 0.0064

Uranus 85451-02-14 05:17 G 32931440.52 32931440.72 32931440.94 0.0136 0.0033

Saturn 85451-09-19 15:08 G 32931657.99 32931658.13 32931658.27 0.0287 0.0216

Uranus 85451-09-28 11:32 G 32931666.77 32931666.98 32931667.20 0.0136 0.0003

Saturn 85452-05-06 07:12 G 32931887.59 32931887.80 32931888.01 0.0289 0.0017

Uranus 85452-05-11 17:32 G 32931893.02 32931893.23 32931893.44 0.0136 0.0028

Earth 85452-12-12 03:22 G 32932107.55 32932107.64 32932107.74 0.2672 0.2070

Moon 85452-12-12 06:44 G 32932107.73 32932107.78 32932107.83 0.2667 0.2539 *

Saturn 85452-12-22 00:44 G 32932117.38 32932117.53 32932117.70 0.0292 0.0189

Uranus 85452-12-23 22:48 G 32932119.27 32932119.45 32932119.66 0.0136 0.0059

Uranus 85453-08-07 04:20 G 32932345.53 32932345.68 32932345.86 0.0136 0.0089

Uranus 85454-03-21 10:05 G 32932571.82 32932571.92 32932572.03 0.0135 0.0118

Jupiter 85454-05-20 18:44 G 32932632.17 32932632.28 32932632.40 0.0535 0.0440

Jupiter 85455-01-13 22:34 G 32932870.24 32932870.44 32932870.64 0.0534 0.0077

Mars 85460-02-11 04:20 G 32934724.53 32934724.68 32934724.83 0.1633 0.0855

Jupiter 85460-03-26 03:36 G 32934768.56 32934768.65 32934768.77 0.0492 0.0420

Jupiter 85460-11-17 02:53 G 32935004.42 32935004.62 32935004.82 0.0492 0.0027

Moon 85460-12-09 19:27 G 32935027.17 32935027.31 32935027.45 0.2664 0.1459

Earth 85460-12-09 20:24 G 32935027.21 32935027.35 32935027.49 0.2671 0.1064 *

Jupiter 85461-07-11 00:00 G 32935240.37 32935240.50 32935240.64 0.0494 0.0367

Saturn 85465-07-23 23:03 G 32936714.28 32936714.46 32936714.66 0.0273 0.0130

Saturn 85466-03-10 07:56 G 32936943.62 32936943.83 32936944.04 0.0271 0.0044

Jupiter 85466-09-18 09:51 G 32937135.71 32937135.91 32937136.11 0.0535 0.0071

Saturn 85466-10-25 14:53 G 32937172.99 32937173.12 32937173.26 0.0269 0.0212

Jupiter 85467-05-14 15:22 G 32937374.03 32937374.14 32937374.25 0.0533 0.0448

Jupiter 85472-07-23 06:15 G 32939270.57 32939270.76 32939270.96 0.0491 0.0138

Jupiter 85473-03-16 03:36 G 32939506.48 32939506.65 32939506.82 0.0493 0.0259

Jupiter 85478-05-23 22:05 G 32941401.24 32941401.42 32941401.61 0.0535 0.0218

Neptune 85478-06-04 09:36 G 32941412.85 32941412.90 32941412.98 0.0089 0.0085

Neptune 85479-01-15 23:03 G 32941638.35 32941638.46 32941638.58 0.0089 0.0075

Jupiter 85479-01-17 03:36 G 32941639.48 32941639.65 32941639.81 0.0534 0.0308

Neptune 85479-08-29 12:00 G 32941863.87 32941864.00 32941864.17 0.0089 0.0066

Neptune 85480-04-11 01:27 G 32942089.40 32942089.56 32942089.75 0.0089 0.0056

Neptune 85480-11-22 14:53 G 32942314.94 32942315.12 32942315.31 0.0089 0.0046

Saturn 85481-03-31 22:34 G 32942444.29 32942444.44 32942444.61 0.0287 0.0186

Neptune 85481-07-06 04:05 G 32942540.47 32942540.67 32942540.88 0.0089 0.0036

Saturn 85481-11-16 14:53 G 32942673.92 32942674.12 32942674.33 0.0290 0.0016

Neptune 85482-02-16 17:17 G 32942766.02 32942766.22 32942766.44 0.0089 0.0026

Saturn 85482-07-04 08:39 G 32942903.73 32942903.86 32942904.00 0.0292 0.0222

Neptune 85482-09-30 06:44 G 32942991.56 32942991.78 32942992.00 0.0089 0.0016

Neptune 85483-05-13 19:56 G 32943217.11 32943217.33 32943217.55 0.0088 0.0007

Neptune 85483-12-25 09:08 G 32943442.66 32943442.88 32943443.10 0.0088 0.0003

Jupiter 85484-03-28 09:36 G 32943536.73 32943536.90 32943537.08 0.0491 0.0248

Neptune 85484-08-06 22:05 G 32943668.21 32943668.42 32943668.65 0.0088 0.0014

Jupiter 85484-11-19 07:12 G 32943772.61 32943772.80 32943773.00 0.0492 0.0150

Neptune 85485-03-20 11:17 G 32943893.77 32943893.97 32943894.20 0.0088 0.0024

Neptune 85485-11-01 00:44 G 32944119.33 32944119.53 32944119.74 0.0088 0.0033

Neptune 85486-06-14 13:41 G 32944344.89 32944345.07 32944345.28 0.0088 0.0043

Neptune 85487-01-26 02:53 G 32944570.46 32944570.62 32944570.81 0.0088 0.0053

Neptune 85487-09-08 15:51 G 32944796.03 32944796.16 32944796.34 0.0088 0.0063

Neptune 85488-04-21 05:32 G 32945021.61 32945021.73 32945021.87 0.0088 0.0072

Neptune 85488-12-02 18:29 G 32945247.21 32945247.27 32945247.38 0.0088 0.0082

Jupiter 85490-01-26 12:15 G 32945666.86 32945667.01 32945667.16 0.0535 0.0359

Pluto 85490-08-14 06:15 G 32945866.63 32945866.76 32945866.91 0.0065 0.0050

Jupiter 85490-09-21 17:03 G 32945905.01 32945905.21 32945905.40 0.0534 0.0165

Pluto 85491-03-27 10:48 G 32946091.73 32946091.95 32946092.16 0.0066 0.0010

Pluto 85491-11-07 14:39 G 32946316.94 32946317.11 32946317.32 0.0066 0.0031

Mars 85492-02-10 00:29 G 32946411.40 32946411.52 32946411.65 0.1640 0.1156

Uranus 85493-04-01 04:05 G 32946827.54 32946827.67 32946827.81 0.0141 0.0110

Uranus 85493-11-13 15:22 G 32947053.96 32947054.14 32947054.33 0.0142 0.0075

Uranus 85494-06-28 02:39 G 32947280.41 32947280.61 32947280.83 0.0142 0.0040

Saturn 85495-02-03 03:51 G 32947500.47 32947500.66 32947500.86 0.0273 0.0103

Uranus 85495-02-09 14:24 G 32947506.88 32947507.10 32947507.32 0.0142 0.0004

Saturn 85495-09-20 12:15 G 32947729.81 32947730.01 32947730.22 0.0271 0.0070

Uranus 85495-09-24 01:56 G 32947733.37 32947733.58 32947733.80 0.0142 0.0032

Jupiter 85495-12-02 10:48 G 32947802.82 32947802.95 32947803.10 0.0491 0.0360

Saturn 85496-05-06 19:12 G 32947959.21 32947959.30 32947959.41 0.0269 0.0237

Uranus 85496-05-07 13:41 G 32947959.89 32947960.07 32947960.27 0.0142 0.0068

Jupiter 85496-07-25 09:22 G 32948038.69 32948038.89 32948039.10 0.0492 0.0037

Mars 85496-09-18 15:36 G 32948094.00 32948094.15 32948094.31 0.1899 0.0720

Uranus 85496-12-20 01:41 G 32948186.42 32948186.57 32948186.72 0.0143 0.0104

Jupiter 85497-03-18 06:29 G 32948274.68 32948274.77 32948274.88 0.0494 0.0428

Uranus 85497-08-03 13:27 G 32948413.03 32948413.06 32948413.11 0.0143 0.0140

Jupiter 85501-10-02 01:41 G 32949932.50 32949932.57 32949932.64 0.0535 0.0496

Jupiter 85502-05-28 05:03 G 32950170.51 32950170.71 32950170.92 0.0535 0.0020

Jupiter 85503-01-21 10:34 G 32950408.93 32950408.94 32950408.95 0.0532 0.0531

Jupiter 85507-08-08 13:56 G 32952069.02 32952069.08 32952069.15 0.0492 0.0466

Jupiter 85508-03-31 13:27 G 32952304.85 32952305.06 32952305.26 0.0492 0.0076

Jupiter 85508-11-22 10:34 G 32952540.79 32952540.94 32952541.10 0.0493 0.0321

Saturn 85510-10-13 07:12 G 32953230.63 32953230.80 32953230.99 0.0288 0.0150

Saturn 85511-05-31 00:00 G 32953460.30 32953460.50 32953460.71 0.0290 0.0052

Saturn 85512-01-15 18:15 G 32953690.17 32953690.26 32953690.36 0.0292 0.0260

Jupiter 85514-01-30 14:24 G 32954435.90 32954436.10 32954436.30 0.0535 0.0132

Jupiter 85514-09-25 19:27 G 32954674.18 32954674.31 32954674.45 0.0533 0.0389

Jupiter 85519-12-05 17:32 G 32956571.04 32956571.23 32956571.42 0.0492 0.0184

Jupiter 85520-07-28 15:22 G 32956806.96 32956807.14 32956807.32 0.0493 0.0214

Saturn 85523-12-31 04:05 G 32958057.57 32958057.67 32958057.76 0.0275 0.0244

Saturn 85524-08-16 13:27 G 32958286.86 32958287.06 32958287.27 0.0273 0.0069

Saturn 85525-04-02 21:36 G 32958516.21 32958516.40 32958516.60 0.0271 0.0104

Jupiter 85525-10-05 01:56 G 32958701.41 32958701.58 32958701.75 0.0535 0.0279

Mars 85525-12-09 15:36 G 32958767.02 32958767.15 32958767.28 0.1631 0.1057

Jupiter 85526-05-31 06:29 G 32958939.59 32958939.77 32958939.95 0.0534 0.0246

Jupiter 85531-08-10 20:53 G 32960837.21 32960837.37 32960837.54 0.0491 0.0293

Jupiter 85532-04-02 18:58 G 32961073.09 32961073.29 32961073.49 0.0492 0.0104

Jupiter 85532-11-24 15:51 G 32961309.14 32961309.16 32961309.18 0.0494 0.0492

Uranus 85533-07-20 02:39 G 32961546.48 32961546.61 32961546.74 0.0137 0.0108

Uranus 85534-03-03 08:39 G 32961772.69 32961772.86 32961773.05 0.0136 0.0078

Uranus 85534-10-15 14:53 G 32961998.93 32961999.12 32961999.33 0.0136 0.0047

Uranus 85535-05-29 21:08 G 32962225.17 32962225.38 32962225.60 0.0136 0.0016

Uranus 85536-01-11 02:53 G 32962451.41 32962451.62 32962451.84 0.0136 0.0014

Uranus 85536-08-24 08:24 G 32962677.66 32962677.85 32962678.07 0.0136 0.0045

Uranus 85537-04-07 13:56 G 32962903.92 32962904.08 32962904.28 0.0136 0.0075

Jupiter 85537-06-09 14:10 G 32962966.97 32962967.09 32962967.22 0.0535 0.0422

Uranus 85537-11-19 19:27 G 32963130.19 32963130.31 32963130.46 0.0135 0.0105

Jupiter 85538-02-02 18:29 G 32963205.07 32963205.27 32963205.48 0.0535 0.0100

Uranus 85538-07-04 00:58 G 32963356.52 32963356.54 32963356.58 0.0135 0.0134

Saturn 85540-04-24 15:36 G 32964016.96 32964017.15 32964017.34 0.0288 0.0117

Saturn 85540-12-10 08:10 G 32964246.65 32964246.84 32964247.05 0.0291 0.0087

Jupiter 85543-04-15 23:46 G 32965103.38 32965103.49 32965103.61 0.0492 0.0402

Jupiter 85543-12-07 22:34 G 32965339.23 32965339.44 32965339.64 0.0491 0.0010

Jupiter 85544-07-30 19:27 G 32965575.19 32965575.31 32965575.43 0.0493 0.0386

Jupiter 85549-10-08 08:10 G 32967470.64 32967470.84 32967471.04 0.0535 0.0046

Jupiter 85550-06-03 13:56 G 32967708.99 32967709.08 32967709.18 0.0533 0.0473

Saturn 85553-07-12 08:53 G 32968843.74 32968843.87 32968844.00 0.0274 0.0218

Saturn 85554-02-26 18:15 G 32969073.05 32969073.26 32969073.47 0.0272 0.0042

Saturn 85554-10-14 02:10 G 32969302.40 32969302.59 32969302.78 0.0270 0.0129

Jupiter 85555-08-13 00:44 G 32969605.33 32969605.53 32969605.73 0.0491 0.0120

Jupiter 85556-04-04 21:51 G 32969841.25 32969841.41 32969841.58 0.0493 0.0277

Mars 85557-12-08 12:15 G 32970453.86 32970454.01 32970454.15 0.1638 0.0952

Jupiter 85561-06-12 20:53 G 32971736.18 32971736.37 32971736.56 0.0535 0.0191

Neptune 85561-10-16 06:44 G 32971861.74 32971861.78 32971861.87 0.0089 0.0085

Jupiter 85562-02-06 02:10 G 32971974.43 32971974.59 32971974.75 0.0534 0.0334

Neptune 85562-05-29 19:41 G 32972087.22 32972087.32 32972087.45 0.0089 0.0075

Mars 85562-07-17 20:24 G 32972136.22 32972136.35 32972136.47 0.1902 0.1318

Neptune 85563-01-10 08:39 G 32972312.72 32972312.86 32972313.02 0.0089 0.0065

Neptune 85563-08-23 21:22 G 32972538.24 32972538.39 32972538.58 0.0089 0.0056

Neptune 85564-04-05 10:20 G 32972763.75 32972763.93 32972764.13 0.0089 0.0046

Neptune 85564-11-16 23:03 G 32972989.27 32972989.46 32972989.67 0.0089 0.0036

Neptune 85565-06-30 12:00 G 32973214.79 32973215.00 32973215.21 0.0089 0.0026

Neptune 85566-02-11 00:44 G 32973440.32 32973440.53 32973440.75 0.0089 0.0016

Neptune 85566-09-24 13:41 G 32973665.86 32973666.07 32973666.29 0.0089 0.0007

Jupiter 85567-04-18 04:05 G 32973871.50 32973871.67 32973871.86 0.0491 0.0232

Neptune 85567-05-08 02:39 G 32973891.39 32973891.61 32973891.83 0.0089 0.0003

Jupiter 85567-12-10 02:10 G 32974107.40 32974107.59 32974107.78 0.0492 0.0167

Neptune 85567-12-19 15:22 G 32974116.93 32974117.14 32974117.36 0.0089 0.0013

Neptune 85568-08-01 04:05 G 32974342.47 32974342.67 32974342.89 0.0089 0.0023

Neptune 85569-03-14 16:48 G 32974568.01 32974568.20 32974568.41 0.0089 0.0033

Saturn 85569-03-20 07:56 G 32974573.79 32974573.83 32974573.88 0.0286 0.0279

Neptune 85569-10-26 05:32 G 32974793.56 32974793.73 32974793.94 0.0089 0.0043

Saturn 85569-11-04 23:32 G 32974803.28 32974803.48 32974803.68 0.0288 0.0083

Neptune 85570-06-08 18:44 G 32975019.10 32975019.28 32975019.45 0.0089 0.0052

Saturn 85570-06-22 16:34 G 32975033.00 32975033.19 32975033.38 0.0291 0.0122

Neptune 85571-01-20 07:12 G 32975244.66 32975244.80 32975244.97 0.0089 0.0062

Neptune 85571-09-02 19:56 G 32975470.22 32975470.33 32975470.48 0.0089 0.0072

Neptune 85572-04-15 09:08 G 32975695.80 32975695.88 32975695.97 0.0089 0.0082

Jupiter 85573-02-15 06:58 G 32976001.63 32976001.79 32976001.94 0.0535 0.0338

Jupiter 85573-10-11 11:03 G 32976239.77 32976239.96 32976240.15 0.0534 0.0185

Uranus 85576-11-30 09:22 G 32977385.81 32977385.89 32977386.00 0.0141 0.0127

Uranus 85577-07-14 20:39 G 32977612.20 32977612.36 32977612.53 0.0142 0.0092

Uranus 85578-02-26 07:56 G 32977838.63 32977838.83 32977839.03 0.0142 0.0057

Uranus 85578-10-10 19:12 G 32978065.09 32978065.30 32978065.53 0.0142 0.0022

Pluto 85578-11-27 20:24 G 32978113.14 32978113.35 32978113.57 0.0078 0.0016

Jupiter 85578-12-22 07:56 G 32978137.69 32978137.83 32978137.98 0.0492 0.0338

Uranus 85579-05-25 06:58 G 32978291.57 32978291.79 32978292.01 0.0142 0.0014

Pluto 85579-07-11 06:15 G 32978338.61 32978338.76 32978338.93 0.0078 0.0053

Jupiter 85579-08-15 06:44 G 32978373.58 32978373.78 32978373.99 0.0492 0.0060

Uranus 85580-01-06 18:29 G 32978518.07 32978518.27 32978518.48 0.0142 0.0050

Jupiter 85580-04-07 04:05 G 32978609.59 32978609.67 32978609.75 0.0494 0.0450

Uranus 85580-08-20 06:00 G 32978744.59 32978744.75 32978744.94 0.0142 0.0087

Uranus 85581-04-03 18:29 G 32978971.16 32978971.27 32978971.38 0.0143 0.0122

Saturn 85583-01-22 18:15 G 32979630.11 32979630.26 32979630.42 0.0274 0.0184

Saturn 85583-09-09 03:22 G 32979859.43 32979859.64 32979859.86 0.0272 0.0009

Saturn 85584-04-25 11:03 G 32980088.79 32980088.96 32980089.13 0.0270 0.0161

Jupiter 85584-10-20 18:58 G 32980267.21 32980267.29 32980267.38 0.0535 0.0479

Jupiter 85585-06-15 22:20 G 32980505.22 32980505.43 32980505.63 0.0535 0.0039

Jupiter 85590-08-27 11:03 G 32982403.88 32982403.96 32982404.05 0.0492 0.0446

Jupiter 85591-04-20 10:34 G 32982639.73 32982639.94 32982640.14 0.0491 0.0053

Mars 85591-10-07 03:22 G 32982809.53 32982809.64 32982809.75 0.1629 0.1242

Jupiter 85591-12-12 07:27 G 32982875.67 32982875.81 32982875.96 0.0493 0.0343

Jupiter 85597-02-18 10:20 G 32984770.73 32984770.93 32984771.13 0.0535 0.0111

Jupiter 85597-10-14 15:51 G 32985009.04 32985009.16 32985009.29 0.0533 0.0413

Moon 85598-06-08 13:41 G 32985245.93 32985246.07 32985246.21 0.2669 0.1006

Earth 85598-06-08 15:36 G 32985245.99 32985246.15 32985246.31 0.2662 0.0478 *

Saturn 85598-09-30 15:36 G 32985360.06 32985360.15 32985360.26 0.0287 0.0249

Saturn 85599-05-18 07:27 G 32985589.60 32985589.81 32985590.01 0.0289 0.0050

Saturn 85600-01-03 00:29 G 32985819.35 32985819.52 32985819.70 0.0291 0.0155

Jupiter 85602-12-24 13:56 G 32986905.89 32986906.08 32986906.27 0.0491 0.0163

Jupiter 85603-08-17 11:17 G 32987141.79 32987141.97 32987142.15 0.0492 0.0235

Jupiter 85608-10-24 00:00 G 32989036.33 32989036.50 32989036.68 0.0536 0.0255

Jupiter 85609-06-19 05:17 G 32989274.55 32989274.72 32989274.90 0.0534 0.0272

Saturn 85612-08-03 22:48 G 32990416.28 32990416.45 32990416.63 0.0274 0.0158

Saturn 85613-03-21 07:56 G 32990645.61 32990645.83 32990646.04 0.0272 0.0017

Saturn 85613-11-05 15:08 G 32990874.98 32990875.13 32990875.29 0.0270 0.0186

Jupiter 85614-08-29 16:05 G 32991172.00 32991172.17 32991172.34 0.0491 0.0275

Jupiter 85615-04-22 13:56 G 32991407.88 32991408.08 32991408.28 0.0492 0.0123

Uranus 85617-03-19 12:00 G 32992104.91 32992105.00 32992105.10 0.0137 0.0122

Uranus 85617-10-31 18:15 G 32992331.11 32992331.26 32992331.43 0.0137 0.0092

Uranus 85618-06-15 00:44 G 32992557.34 32992557.53 32992557.72 0.0136 0.0061

Uranus 85619-01-27 06:44 G 32992783.57 32992783.78 32992783.99 0.0136 0.0030

Uranus 85619-09-10 12:44 G 32993009.81 32993010.03 32993010.24 0.0136 0.0001

Uranus 85620-04-23 18:15 G 32993236.06 32993236.26 32993236.48 0.0136 0.0031

Jupiter 85620-06-28 13:41 G 32993301.93 32993302.07 32993302.20 0.0535 0.0396

Uranus 85620-12-06 00:00 G 32993462.31 32993462.50 32993462.70 0.0136 0.0061

Jupiter 85621-02-21 18:00 G 32993540.05 32993540.25 32993540.45 0.0535 0.0128

Uranus 85621-07-20 05:17 G 32993688.58 32993688.72 32993688.89 0.0136 0.0091

Uranus 85622-03-03 11:03 G 32993914.86 32993914.96 32993915.06 0.0135 0.0120

Mars 85623-10-05 23:32 G 32994496.32 32994496.48 32994496.63 0.1636 0.0745

Jupiter 85626-05-04 19:12 G 32995438.18 32995438.30 32995438.43 0.0492 0.0384

Jupiter 85626-12-26 18:00 G 32995674.05 32995674.25 32995674.46 0.0492 0.0015

Jupiter 85627-08-19 15:22 G 32995910.03 32995910.14 32995910.25 0.0494 0.0406

Saturn 85628-04-11 21:36 G 32996146.27 32996146.40 32996146.54 0.0287 0.0218

Saturn 85628-11-27 13:27 G 32996375.85 32996376.06 32996376.27 0.0289 0.0019

Saturn 85629-07-15 06:58 G 32996605.64 32996605.79 32996605.95 0.0291 0.0188

Jupiter 85632-03-03 00:44 G 32997567.53 32997567.53 32997567.54 0.0534 0.0534

Jupiter 85632-10-27 03:22 G 32997805.44 32997805.64 32997805.84 0.0535 0.0023

Jupiter 85633-06-22 08:39 G 32998043.79 32998043.86 32998043.93 0.0532 0.0494

Jupiter 85638-01-07 22:20 G 32999704.42 32999704.43 32999704.46 0.0492 0.0490

Jupiter 85638-08-31 22:34 G 32999940.25 32999940.44 32999940.65 0.0492 0.0098

Jupiter 85639-04-24 20:10 G 33000176.18 33000176.34 33000176.50 0.0493 0.0301

Saturn 85642-02-14 07:41 G 33001202.63 33001202.82 33001203.01 0.0273 0.0126

Neptune 85642-09-06 19:56 G 33001407.32 33001407.33 33001407.38 0.0089 0.0088

Saturn 85642-10-01 16:05 G 33001431.96 33001432.17 33001432.39 0.0271 0.0049

Neptune 85643-04-20 09:22 G 33001632.80 33001632.89 33001633.01 0.0089 0.0078

Saturn 85643-05-18 23:17 G 33001661.35 33001661.47 33001661.60 0.0269 0.0216

Neptune 85643-12-01 22:48 G 33001858.31 33001858.45 33001858.59 0.0089 0.0068

Jupiter 85644-07-01 14:53 G 33002070.93 33002071.12 33002071.32 0.0535 0.0171

Neptune 85644-07-14 11:32 G 33002083.84 33002083.98 33002084.17 0.0089 0.0059

Jupiter 85645-02-24 19:56 G 33002309.18 33002309.33 33002309.49 0.0533 0.0355

Neptune 85645-02-25 01:12 G 33002309.38 33002309.55 33002309.75 0.0089 0.0049 *

Neptune 85645-10-08 14:24 G 33002534.92 33002535.10 33002535.31 0.0089 0.0039

Neptune 85646-05-22 03:51 G 33002760.46 33002760.66 33002760.88 0.0089 0.0029

Neptune 85647-01-02 17:17 G 33002986.00 33002986.22 33002986.43 0.0089 0.0019

Neptune 85647-08-16 06:15 G 33003211.55 33003211.76 33003211.99 0.0088 0.0010

Neptune 85648-03-28 19:56 G 33003437.10 33003437.33 33003437.55 0.0088 0.0002

Neptune 85648-11-09 08:53 G 33003662.66 33003662.87 33003663.10 0.0088 0.0011

Neptune 85649-06-22 22:05 G 33003888.21 33003888.42 33003888.64 0.0088 0.0021

Neptune 85650-02-03 11:17 G 33004113.77 33004113.97 33004114.19 0.0088 0.0030

Jupiter 85650-05-07 02:10 G 33004206.41 33004206.59 33004206.78 0.0491 0.0208

Neptune 85650-09-17 00:15 G 33004339.33 33004339.51 33004339.73 0.0088 0.0041

Jupiter 85650-12-29 00:00 G 33004442.31 33004442.50 33004442.69 0.0492 0.0191

Neptune 85651-04-30 13:27 G 33004564.90 33004565.06 33004565.26 0.0088 0.0051

Neptune 85651-12-12 02:53 G 33004790.47 33004790.62 33004790.79 0.0088 0.0060

Neptune 85652-07-24 15:51 G 33005016.04 33005016.16 33005016.32 0.0088 0.0070

Neptune 85653-03-07 05:03 G 33005241.64 33005241.71 33005241.83 0.0088 0.0080

Jupiter 85656-03-06 03:22 G 33006336.47 33006336.64 33006336.80 0.0535 0.0317

Jupiter 85656-10-30 07:56 G 33006574.64 33006574.83 33006575.02 0.0535 0.0209

Mars 85657-08-03 14:53 G 33006852.04 33006852.12 33006852.20 0.1627 0.1434

Saturn 85657-10-23 05:03 G 33006932.56 33006932.71 33006932.87 0.0287 0.0188

Saturn 85658-06-09 21:08 G 33007162.17 33007162.38 33007162.59 0.0290 0.0014

Saturn 85659-01-25 14:39 G 33007391.99 33007392.11 33007392.26 0.0292 0.0221

Mars 85660-05-13 18:58 G 33007866.22 33007866.29 33007866.36 0.1896 0.1715

Uranus 85661-03-14 01:56 G 33008170.45 33008170.58 33008170.73 0.0141 0.0109

Uranus 85661-10-26 13:12 G 33008396.86 33008397.05 33008397.24 0.0142 0.0074

Jupiter 85662-01-10 05:32 G 33008472.58 33008472.73 33008472.89 0.0491 0.0317

Uranus 85662-06-10 00:15 G 33008623.31 33008623.51 33008623.73 0.0142 0.0039

Jupiter 85662-09-03 03:51 G 33008708.46 33008708.66 33008708.86 0.0492 0.0081

Uranus 85663-01-22 11:46 G 33008849.77 33008849.99 33008850.21 0.0142 0.0004

Jupiter 85663-04-27 00:44 G 33008944.48 33008944.53 33008944.59 0.0494 0.0472

Uranus 85663-09-05 23:17 G 33009076.26 33009076.47 33009076.69 0.0142 0.0032

Uranus 85664-04-19 10:48 G 33009302.77 33009302.95 33009303.16 0.0142 0.0069

Uranus 85664-12-01 22:34 G 33009529.31 33009529.44 33009529.61 0.0143 0.0105

Uranus 85665-07-16 10:34 G 33009755.91 33009755.94 33009755.99 0.0143 0.0140

Jupiter 85667-11-09 17:32 G 33010602.13 33010602.23 33010602.33 0.0535 0.0456

Jupiter 85668-07-04 21:22 G 33010840.19 33010840.39 33010840.60 0.0535 0.0065

Saturn 85671-08-27 11:32 G 33011988.79 33011988.98 33011989.19 0.0273 0.0101

Saturn 85672-04-12 19:56 G 33012218.13 33012218.33 33012218.54 0.0271 0.0073

Saturn 85672-11-28 02:39 G 33012447.52 33012447.61 33012447.71 0.0269 0.0240

Jupiter 85673-09-15 07:41 G 33012738.72 33012738.82 33012738.92 0.0492 0.0426

Jupiter 85674-05-09 06:44 G 33012974.57 33012974.78 33012974.98 0.0491 0.0032

Jupiter 85674-12-31 03:36 G 33013210.52 33013210.65 33013210.79 0.0493 0.0364

Jupiter 85680-03-09 10:48 G 33015105.75 33015105.95 33015106.15 0.0535 0.0081

Jupiter 85680-11-02 16:20 G 33015344.08 33015344.18 33015344.30 0.0533 0.0443

Jupiter 85686-01-12 10:48 G 33017240.75 33017240.95 33017241.14 0.0491 0.0142

Jupiter 85686-09-05 08:24 G 33017476.68 33017476.85 33017477.02 0.0493 0.0257

Saturn 85687-05-05 09:08 G 33017718.71 33017718.88 33017719.05 0.0287 0.0160

Saturn 85687-12-21 01:27 G 33017948.35 33017948.56 33017948.76 0.0290 0.0041

Saturn 85688-08-06 19:12 G 33018178.20 33018178.30 33018178.41 0.0292 0.0249

Mars 85689-08-02 11:03 G 33018538.79 33018538.96 33018539.12 0.1634 0.0542

Jupiter 85691-11-12 20:53 G 33019371.19 33019371.37 33019371.56 0.0535 0.0230

Jupiter 85692-07-08 01:41 G 33019609.40 33019609.57 33019609.74 0.0534 0.0297

Moon 85695-12-14 01:56 G 33020863.47 33020863.58 33020863.68 0.2674 0.1916

Earth 85695-12-14 06:29 G 33020863.69 33020863.77 33020863.85 0.2671 0.2271

Jupiter 85697-09-17 14:53 G 33021506.94 33021507.12 33021507.29 0.0492 0.0251

Jupiter 85698-05-11 13:12 G 33021742.85 33021743.05 33021743.24 0.0492 0.0149

Saturn 85700-07-23 09:22 G 33022545.81 33022545.89 33022545.99 0.0275 0.0248

Saturn 85701-03-09 19:12 G 33022775.09 33022775.30 33022775.51 0.0273 0.0071

Uranus 85701-07-02 02:10 G 33022889.47 33022889.59 33022889.74 0.0137 0.0107

Saturn 85701-10-25 03:08 G 33023004.44 33023004.63 33023004.83 0.0271 0.0102

Uranus 85702-02-13 08:39 G 33023115.69 33023115.86 33023116.05 0.0137 0.0076

Saturn 85702-06-11 09:36 G 33023233.90 33023233.90 33023233.92 0.0269 0.0269

Uranus 85702-09-27 14:53 G 33023341.93 33023342.12 33023342.33 0.0136 0.0045

Uranus 85703-05-11 21:08 G 33023568.17 33023568.38 33023568.59 0.0136 0.0015

Jupiter 85703-07-19 09:22 G 33023636.75 33023636.89 33023637.04 0.0535 0.0374

Moon 85703-12-12 21:51 G 33023783.27 33023783.41 33023783.55 0.2676 0.0720

Earth 85703-12-12 23:17 G 33023783.32 33023783.47 33023783.62 0.2669 0.0870 *

Uranus 85703-12-24 02:53 G 33023794.41 33023794.62 33023794.84 0.0136 0.0016

Jupiter 85704-03-13 13:12 G 33023874.86 33023875.05 33023875.25 0.0534 0.0151

Uranus 85704-08-06 08:24 G 33024020.66 33024020.85 33024021.06 0.0136 0.0046

Uranus 85705-03-20 14:10 G 33024246.91 33024247.09 33024247.27 0.0136 0.0076

Uranus 85705-11-01 19:41 G 33024473.19 33024473.32 33024473.46 0.0136 0.0106

Uranus 85706-06-16 01:12 G 33024699.54 33024699.55 33024699.57 0.0135 0.0135

Jupiter 85709-05-24 18:15 G 33025773.12 33025773.26 33025773.40 0.0492 0.0361

Jupiter 85710-01-15 17:03 G 33026009.01 33026009.21 33026009.42 0.0492 0.0039

Jupiter 85710-09-08 14:10 G 33026245.00 33026245.09 33026245.20 0.0494 0.0432

Jupiter 85715-03-23 22:05 G 33027902.38 33027902.42 33027902.48 0.0534 0.0514

Jupiter 85715-11-17 01:12 G 33028140.34 33028140.55 33028140.75 0.0535 0.0010

Jupiter 85716-07-12 06:44 G 33028378.75 33028378.78 33028378.83 0.0533 0.0521

Saturn 85716-11-15 15:22 G 33028504.96 33028505.14 33028505.33 0.0288 0.0131

Saturn 85717-07-03 07:56 G 33028734.63 33028734.83 33028735.03 0.0290 0.0072

Saturn 85718-02-18 01:56 G 33028964.54 33028964.58 33028964.65 0.0293 0.0281

Jupiter 85721-01-27 21:22 G 33030039.33 33030039.39 33030039.45 0.0492 0.0468

Jupiter 85721-09-20 21:08 G 33030275.18 33030275.38 33030275.58 0.0491 0.0073

Jupiter 85722-05-14 18:15 G 33030511.11 33030511.26 33030511.41 0.0493 0.0325

Mars 85723-06-02 02:53 G 33030894.60 33030894.62 33030894.63 0.1625 0.1616

Neptune 85726-01-18 18:29 G 33031856.25 33031856.27 33031856.33 0.0089 0.0087

Mars 85726-03-11 23:17 G 33031908.33 33031908.47 33031908.61 0.1899 0.1112

Neptune 85726-09-01 07:12 G 33032081.72 33032081.80 33032081.93 0.0089 0.0078

Neptune 85727-04-14 20:10 G 33032307.22 33032307.34 33032307.50 0.0089 0.0068

Jupiter 85727-07-22 14:53 G 33032405.92 33032406.12 33032406.32 0.0536 0.0144

Neptune 85727-11-26 09:08 G 33032532.72 33032532.88 33032533.05 0.0089 0.0058

Jupiter 85728-03-16 20:39 G 33032644.22 33032644.36 33032644.50 0.0534 0.0384

Neptune 85728-07-08 22:05 G 33032758.23 33032758.42 33032758.60 0.0089 0.0048

Neptune 85729-02-19 10:20 G 33032983.75 33032983.93 33032984.15 0.0089 0.0039

Neptune 85729-10-02 23:32 G 33033209.28 33033209.48 33033209.69 0.0089 0.0029

Saturn 85730-02-02 12:58 G 33033331.92 33033332.04 33033332.17 0.0274 0.0222

Neptune 85730-05-16 12:15 G 33033434.80 33033435.01 33033435.23 0.0089 0.0019

Saturn 85730-09-19 22:20 G 33033561.22 33033561.43 33033561.64 0.0272 0.0046

Neptune 85730-12-28 01:12 G 33033660.33 33033660.55 33033660.77 0.0089 0.0009

Saturn 85731-05-07 06:15 G 33033790.57 33033790.76 33033790.95 0.0270 0.0125

Neptune 85731-08-10 13:56 G 33033885.87 33033886.08 33033886.30 0.0089 0.0002

Neptune 85732-03-23 02:39 G 33034111.40 33034111.61 33034111.83 0.0089 0.0011

Neptune 85732-11-03 15:22 G 33034336.94 33034337.14 33034337.36 0.0089 0.0021

Jupiter 85733-05-27 00:00 G 33034541.31 33034541.50 33034541.69 0.0491 0.0185

Neptune 85733-06-17 04:20 G 33034562.48 33034562.68 33034562.89 0.0089 0.0030

Jupiter 85734-01-17 21:22 G 33034777.21 33034777.39 33034777.58 0.0492 0.0215

Neptune 85734-01-28 17:03 G 33034788.02 33034788.21 33034788.41 0.0089 0.0040

Neptune 85734-09-11 05:46 G 33035013.58 33035013.74 33035013.94 0.0089 0.0050

Neptune 85735-04-24 18:29 G 33035239.13 33035239.27 33035239.45 0.0089 0.0060

Neptune 85735-12-06 07:12 G 33035464.69 33035464.80 33035464.96 0.0089 0.0070

Neptune 85736-07-18 20:10 G 33035690.26 33035690.34 33035690.45 0.0089 0.0079

Neptune 85737-03-01 09:08 G 33035915.88 33035915.88 33035915.89 0.0089 0.0089

Pluto 85739-03-01 11:03 G 33036645.81 33036645.96 33036646.15 0.0065 0.0042

Jupiter 85739-03-27 04:48 G 33036671.53 33036671.70 33036671.88 0.0535 0.0287

Pluto 85739-10-12 15:51 G 33036870.94 33036871.16 33036871.38 0.0066 0.0001

Jupiter 85739-11-20 09:51 G 33036909.73 33036909.91 33036910.09 0.0535 0.0243

Pluto 85740-05-24 19:41 G 33037096.17 33037096.32 33037096.52 0.0066 0.0040

Uranus 85744-11-12 08:24 G 33038728.75 33038728.85 33038728.95 0.0141 0.0125

Jupiter 85745-01-30 03:51 G 33038807.50 33038807.66 33038807.83 0.0491 0.0295

Uranus 85745-06-26 18:58 G 33038955.14 33038955.29 33038955.48 0.0141 0.0091

Jupiter 85745-09-23 02:24 G 33039043.40 33039043.60 33039043.79 0.0492 0.0106

Uranus 85746-02-08 06:15 G 33039181.57 33039181.76 33039181.97 0.0142 0.0056

Saturn	85746-05-28 17:46 G	33039291.05	33039291.24	33039291.44	0.0288	0.0107
Uranus	85746-09-22 17:46 G	33039408.02	33039408.24	33039408.46	0.0142	0.0020
Saturn	85747-01-13 10:34 G	33039520.75	33039520.94	33039521.14	0.0290	0.0097
Uranus	85747-05-07 05:17 G	33039634.50	33039634.72	33039634.94	0.0142	0.0015
Uranus	85747-12-19 16:34 G	33039860.99	33039861.19	33039861.40	0.0142	0.0051
Uranus	85748-08-02 04:20 G	33040087.51	33040087.68	33040087.86	0.0142	0.0087
Uranus	85749-03-16 15:51 G	33040314.07	33040314.16	33040314.29	0.0143	0.0123
Jupiter	85750-11-29 16:34 G	33040937.08	33040937.19	33040937.31	0.0534	0.0429
Jupiter	85751-07-25 19:41 G	33041175.12	33041175.32	33041175.53	0.0535	0.0094
Mars	85755-05-31 22:34 G	33042581.26	33042581.44	33042581.61	0.1631	0.0340
Jupiter	85756-10-05 06:58 G	33043073.68	33043073.79	33043073.91	0.0492	0.0403
Jupiter	85757-05-29 06:44 G	33043309.58	33043309.78	33043309.98	0.0492	0.0004
Jupiter	85758-01-20 04:20 G	33043545.56	33043545.68	33043545.80	0.0494	0.0393
Saturn	85759-08-15 19:12 G	33044118.16	33044118.30	33044118.46	0.0275	0.0196
Saturn	85760-04-01 04:48 G	33044347.48	33044347.70	33044347.91	0.0272	0.0020
Saturn	85760-11-16 12:15 G	33044576.84	33044577.01	33044577.19	0.0270	0.0152
Jupiter	85763-03-30 07:56 G	33045440.63	33045440.83	33045441.03	0.0535	0.0055
Jupiter	85763-11-23 12:44 G	33045678.95	33045679.03	33045679.14	0.0533	0.0468
Jupiter	85769-02-01 10:48 G	33047575.75	33047575.95	33047576.15	0.0492	0.0116
Jupiter	85769-09-25 08:39 G	33047811.69	33047811.86	33047812.02	0.0493	0.0284
Jupiter	85774-12-02 19:56 G	33049706.15	33049706.33	33049706.52	0.0535	0.0204
Saturn	85775-04-23 08:10 G	33049847.79	33049847.84	33049847.90	0.0286	0.0275
Jupiter	85775-07-29 00:58 G	33049944.38	33049944.54	33049944.70	0.0534	0.0325
Saturn	85775-12-08 23:17 G	33050077.28	33050077.47	33050077.68	0.0288	0.0079
Saturn	85776-07-25 16:20 G	33050306.99	33050307.18	33050307.37	0.0291	0.0127
Jupiter	85780-10-07 14:39 G	33051841.93	33051842.11	33051842.29	0.0491	0.0226
Jupiter	85781-05-31 12:44 G	33052077.84	33052078.03	33052078.22	0.0492	0.0175
Uranus	85785-03-01 10:34 G	33053447.85	33053447.94	33053448.05	0.0137	0.0121
Uranus	85785-10-13 17:03 G	33053674.06	33053674.21	33053674.38	0.0137	0.0091
Uranus	85786-05-27 23:32 G	33053900.29	33053900.48	33053900.68	0.0137	0.0060

Jupiter 85786-08-07 10:05 G 33053971.77 33053971.92 33053972.08 0.0535 0.0347

Uranus 85787-01-09 05:32 G 33054126.52 33054126.73 33054126.94 0.0136 0.0029

Jupiter 85787-04-02 14:39 G 33054209.92 33054210.11 33054210.30 0.0535 0.0182

Uranus 85787-08-23 11:32 G 33054352.77 33054352.98 33054353.20 0.0136 0.0001

Uranus 85788-04-05 17:17 G 33054579.01 33054579.22 33054579.43 0.0136 0.0032

Uranus 85788-11-17 22:48 G 33054805.27 33054805.45 33054805.66 0.0136 0.0062

Saturn 85789-02-24 21:51 G 33054904.25 33054904.41 33054904.58 0.0274 0.0171

Uranus 85789-07-02 04:20 G 33055031.54 33055031.68 33055031.86 0.0136 0.0092

Saturn 85789-10-12 06:58 G 33055133.57 33055133.79 33055134.00 0.0272 0.0005

Uranus 85790-02-13 10:05 G 33055257.83 33055257.92 33055258.02 0.0136 0.0121

Saturn 85790-05-29 14:10 G 33055362.93 33055363.09 33055363.26 0.0270 0.0174

Mars 85792-01-07 02:53 G 33055950.46 33055950.62 33055950.79 0.1902 0.0484

Jupiter 85792-06-12 17:32 G 33056108.09 33056108.23 33056108.38 0.0491 0.0336

Jupiter 85793-02-03 16:05 G 33056343.97 33056344.17 33056344.37 0.0492 0.0064

Jupiter 85793-09-27 13:12 G 33056579.98 33056580.05 33056580.13 0.0494 0.0456

Jupiter 85798-04-12 00:58 G 33058237.46 33058237.54 33058237.63 0.0535 0.0483

Jupiter 85798-12-06 04:20 G 33058475.47 33058475.68 33058475.88 0.0535 0.0038

Jupiter 85804-02-17 21:08 G 33060374.30 33060374.38 33060374.47 0.0492 0.0444

Jupiter 85804-10-10 20:53 G 33060610.17 33060610.37 33060610.57 0.0491 0.0047

Saturn 85804-11-03 08:39 G 33060633.77 33060633.86 33060633.96 0.0286 0.0255

Jupiter 85805-06-03 18:00 G 33060846.11 33060846.25 33060846.40 0.0493 0.0352

Saturn 85805-06-21 00:00 G 33060863.30 33060863.50 33060863.71 0.0288 0.0057

Saturn 85806-02-05 17:03 G 33061093.04 33061093.21 33061093.40 0.0291 0.0149

Neptune 85807-07-24 19:41 G 33061627.25 33061627.32 33061627.43 0.0089 0.0081

Neptune 85808-03-06 09:08 G 33061852.76 33061852.88 33061853.03 0.0089 0.0071

Neptune 85808-10-17 22:34 G 33062078.29 33062078.44 33062078.61 0.0089 0.0061

Neptune 85809-05-31 11:17 G 33062303.81 33062303.97 33062304.18 0.0089 0.0052

Neptune 85810-01-12 00:44 G 33062529.35 33062529.53 33062529.74 0.0089 0.0042

Jupiter 85810-08-11 15:36 G 33062740.95 33062741.15 33062741.35 0.0535 0.0112

Neptune 85810-08-25 14:10 G 33062754.89 33062755.09 33062755.31 0.0089 0.0032

Jupiter 85811-04-06 20:24 G 33062979.22 33062979.35 33062979.48 0.0533 0.0414

Neptune 85811-04-08 03:36 G 33062980.44 33062980.65 33062980.87 0.0089 0.0022

Neptune 85811-11-19 17:03 G 33063205.99 33063206.21 33063206.43 0.0088 0.0012

Neptune 85812-07-02 06:15 G 33063431.54 33063431.76 33063431.98 0.0088 0.0002

Neptune 85813-02-12 19:27 G 33063657.09 33063657.31 33063657.54 0.0088 0.0008

Neptune 85813-09-26 08:39 G 33063882.65 33063882.86 33063883.09 0.0088 0.0018

Neptune 85814-05-09 21:51 G 33064108.21 33064108.41 33064108.63 0.0088 0.0028

Neptune 85814-12-21 11:17 G 33064333.77 33064333.97 33064334.17 0.0088 0.0038

Neptune 85815-08-04 00:15 G 33064559.34 33064559.51 33064559.71 0.0088 0.0048

Neptune 85816-03-16 13:27 G 33064784.91 33064785.06 33064785.25 0.0088 0.0058

Jupiter 85816-06-16 00:44 G 33064876.34 33064876.53 33064876.72 0.0492 0.0158

Neptune 85816-10-28 02:39 G 33065010.49 33065010.61 33065010.77 0.0088 0.0068

Jupiter 85817-02-06 22:48 G 33065112.28 33065112.45 33065112.63 0.0493 0.0245

Neptune 85817-06-10 16:20 G 33065236.07 33065236.18 33065236.29 0.0088 0.0077

Neptune 85818-01-22 05:03 G 33065461.69 33065461.71 33065461.77 0.0088 0.0087

Saturn 85818-09-08 02:53 G 33065690.44 33065690.62 33065690.80 0.0274 0.0147

Saturn 85819-04-25 11:46 G 33065919.78 33065919.99 33065920.21 0.0272 0.0030

Saturn 85819-12-10 18:58 G 33066149.16 33066149.29 33066149.44 0.0270 0.0200

Mars 85821-03-29 09:36 G 33066623.73 33066623.90 33066624.08 0.1629 0.0140

Jupiter 85822-04-16 04:20 G 33067006.51 33067006.68 33067006.86 0.0535 0.0258

Jupiter 85822-12-10 08:10 G 33067244.67 33067244.84 33067245.02 0.0534 0.0271

Pluto 85826-11-01 16:20 G 33068667.11 33068667.18 33068667.29 0.0078 0.0072

Pluto 85827-06-15 02:53 G 33068892.40 33068892.62 33068892.85 0.0078 0.0002

Pluto 85828-01-26 12:15 G 33069117.93 33069118.01 33069118.14 0.0078 0.0068

Jupiter 85828-02-20 04:34 G 33069142.52 33069142.69 33069142.86 0.0492 0.0269

Uranus 85828-07-13 15:36 G 33069287.13 33069287.15 33069287.19 0.0141 0.0139

Jupiter 85828-10-13 03:22 G 33069378.44 33069378.64 33069378.83 0.0492 0.0134

Uranus 85829-02-25 02:24 G 33069513.47 33069513.60 33069513.76 0.0141 0.0106

Uranus 85829-10-09 13:41 G 33069739.88 33069740.07 33069740.27 0.0142 0.0071

Uranus 85830-05-24 00:58 G 33069966.33 33069966.54 33069966.76 0.0142 0.0035

Uranus 85831-01-05 12:15 G 33070192.79 33070193.01 33070193.23 0.0142 0.0002

Uranus 85831-08-19 23:46 G 33070419.28 33070419.49 33070419.70 0.0142 0.0035

Uranus 85832-04-02 11:17 G 33070645.79 33070645.97 33070646.17 0.0142 0.0071

Uranus 85832-11-14 23:03 G 33070872.32 33070872.46 33070872.61 0.0142 0.0107

Uranus 85833-06-29 10:48 G 33071098.95 33071098.95 33071098.97 0.0143 0.0143

Jupiter 85833-12-19 16:48 G 33071272.07 33071272.20 33071272.33 0.0535 0.0403

Saturn 85834-05-16 13:27 G 33071419.94 33071420.06 33071420.19 0.0286 0.0229

Jupiter 85834-08-14 20:10 G 33071510.14 33071510.34 33071510.54 0.0535 0.0123

Saturn 85835-01-01 04:48 G 33071649.50 33071649.70 33071649.91 0.0289 0.0030

Saturn 85835-08-18 22:05 G 33071879.26 33071879.42 33071879.59 0.0291 0.0177

Jupiter 85839-10-26 08:10 G 33073408.72 33073408.84 33073408.98 0.0492 0.0378

Jupiter 85840-06-18 07:27 G 33073644.61 33073644.81 33073645.02 0.0492 0.0024

Jupiter 85841-02-09 04:34 G 33073880.59 33073880.69 33073880.80 0.0493 0.0420

Earth 85841-06-10 15:08 G 33074001.97 33074002.13 33074002.29 0.2664 0.0472

Moon 85841-06-10 19:12 G 33074002.13 33074002.30 33074002.47 0.2658 0.0303 *

Jupiter 85846-04-19 10:05 G 33075775.71 33075775.92 33075776.12 0.0535 0.0025

Jupiter 85846-12-13 15:36 G 33076014.09 33076014.15 33076014.22 0.0533 0.0501

Saturn 85848-03-20 05:03 G 33076476.52 33076476.71 33076476.91 0.0273 0.0123

Saturn 85848-11-04 13:41 G 33076705.86 33076706.07 33076706.28 0.0271 0.0052

Saturn 85849-06-21 20:39 G 33076935.24 33076935.36 33076935.49 0.0269 0.0220

Jupiter 85851-07-01 11:17 G 33077674.94 33077674.97 33077675.00 0.0492 0.0485

Jupiter 85852-02-22 11:17 G 33077910.77 33077910.97 33077911.17 0.0491 0.0089

Jupiter 85852-10-15 08:39 G 33078146.70 33078146.86 33078147.01 0.0493 0.0312

Mars 85857-11-04 07:27 G 33079992.64 33079992.81 33079992.98 0.1905 0.0130

Jupiter 85857-12-23 00:15 G 33080041.31 33080041.51 33080041.70 0.0535 0.0168

Jupiter 85858-08-18 05:17 G 33080279.58 33080279.72 33080279.87 0.0534 0.0363

Jupiter 85863-10-28 15:36 G 33082176.96 33082177.15 33082177.34 0.0491 0.0199

Saturn 85863-11-26 12:29 G 33082205.89 33082206.02 33082206.18 0.0286 0.0211

Jupiter 85864-06-20 13:27 G 33082412.88 33082413.06 33082413.25 0.0492 0.0204

Saturn 85864-07-13 04:34 G 33082435.48 33082435.69 33082435.90 0.0289 0.0011

Saturn 85865-02-27 21:36 G 33082665.26 33082665.40 33082665.57 0.0291 0.0197

Uranus 85868-10-30 18:44 G 33084006.27 33084006.28 33084006.32 0.0137 0.0136

Uranus 85869-06-14 01:27 G 33084232.43 33084232.56 33084232.70 0.0137 0.0105

Jupiter 85869-08-27 12:58 G 33084306.88 33084307.04 33084307.20 0.0535 0.0313

Uranus 85870-01-26 07:41 G 33084458.65 33084458.82 33084459.01 0.0137 0.0075

Jupiter 85870-04-22 16:20 G 33084545.00 33084545.18 33084545.37 0.0534 0.0216

Uranus 85870-09-09 13:56 G 33084684.88 33084685.08 33084685.29 0.0136 0.0044

Uranus 85871-04-23 19:56 G 33084911.12 33084911.33 33084911.55 0.0136 0.0014

Uranus 85871-12-06 01:56 G 33085137.37 33085137.58 33085137.79 0.0136 0.0017

Uranus 85872-07-19 07:27 G 33085363.62 33085363.81 33085364.02 0.0136 0.0047

Uranus 85873-03-02 13:12 G 33085589.88 33085590.05 33085590.23 0.0136 0.0077

Uranus 85873-10-14 18:44 G 33085816.16 33085816.28 33085816.43 0.0136 0.0107

Jupiter 85875-07-03 18:29 G 33086443.12 33086443.27 33086443.43 0.0492 0.0311

Jupiter 85876-02-24 18:00 G 33086679.05 33086679.25 33086679.45 0.0492 0.0093

Jupiter 85876-10-17 15:36 G 33086915.13 33086915.15 33086915.19 0.0494 0.0488

Saturn 85877-09-30 08:39 G 33087262.66 33087262.86 33087263.06 0.0274 0.0100

Saturn 85878-05-17 17:17 G 33087492.02 33087492.22 33087492.43 0.0272 0.0075

Saturn 85879-01-02 00:15 G 33087721.43 33087721.51 33087721.61 0.0269 0.0244

Jupiter 85881-05-02 02:39 G 33088572.51 33088572.61 33088572.72 0.0534 0.0454

Jupiter 85881-12-26 04:48 G 33088810.50 33088810.70 33088810.90 0.0534 0.0068

Mars 85887-01-24 21:36 G 33090666.22 33090666.40 33090666.58 0.1627 0.0054

Jupiter 85887-03-08 22:05 G 33090709.32 33090709.42 33090709.53 0.0493 0.0421

Jupiter 85887-10-30 22:20 G 33090945.23 33090945.43 33090945.63 0.0492 0.0019

Jupiter 85888-06-22 19:56 G 33091181.21 33091181.33 33091181.46 0.0493 0.0381

Neptune 85890-12-04 18:58 G 33092076.21 33092076.29 33092076.40 0.0089 0.0080

Neptune 85891-07-18 08:10 G 33092301.71 33092301.84 33092301.97 0.0089 0.0070

Neptune 85892-02-28 20:39 G 33092527.22 33092527.36 33092527.53 0.0089 0.0061

Neptune 85892-10-11 09:36 G 33092752.73 33092752.90 33092753.09 0.0089 0.0051

Neptune 85893-05-24 22:20 G 33092978.25 33092978.43 33092978.64 0.0089 0.0041

Saturn 85893-06-07 17:03 G 33092992.05 33092992.21 33092992.37 0.0287 0.0184

Jupiter 85893-08-30 16:48 G 33093076.00 33093076.20 33093076.40 0.0535 0.0083

Neptune 85894-01-05 11:17 G 33093203.77 33093203.97 33093204.18 0.0089 0.0031

Saturn 85894-01-23 08:53 G 33093221.66 33093221.87 33093222.08 0.0289 0.0017

Jupiter 85894-04-25 21:51 G 33093314.30 33093314.41 33093314.52 0.0533 0.0445

Neptune 85894-08-19 00:15 G 33093429.30 33093429.51 33093429.72 0.0089 0.0021

Saturn 85894-09-10 02:10 G 33093451.47 33093451.59 33093451.73 0.0292 0.0225

Neptune 85895-04-01 12:58 G 33093654.83 33093655.04 33093655.26 0.0089 0.0011

Neptune 85895-11-13 01:41 G 33093880.36 33093880.57 33093880.79 0.0089 0.0002

Neptune 85896-06-25 14:24 G 33094105.89 33094106.10 33094106.32 0.0089 0.0009

Neptune 85897-02-06 03:22 G 33094331.42 33094331.64 33094331.85 0.0089 0.0018

Neptune 85897-09-19 16:05 G 33094556.97 33094557.17 33094557.38 0.0089 0.0028

Neptune 85898-05-03 04:48 G 33094782.51 33094782.70 33094782.91 0.0089 0.0038

Neptune 85898-12-14 17:32 G 33095008.06 33095008.23 33095008.43 0.0089 0.0048

Jupiter 85899-07-06 02:24 G 33095211.41 33095211.60 33095211.80 0.0492 0.0131

Neptune 85899-07-28 06:00 G 33095233.61 33095233.75 33095233.94 0.0089 0.0058

Jupiter 85900-02-27 00:15 G 33095447.35 33095447.51 33095447.69 0.0493 0.0273

Neptune 85900-03-10 19:12 G 33095459.17 33095459.30 33095459.45 0.0089 0.0067

Neptune 85900-10-22 07:56 G 33095684.74 33095684.83 33095684.95 0.0089 0.0077

Neptune 85901-06-04 20:39 G 33095910.34 33095910.36 33095910.42 0.0089 0.0087

Jupiter 85905-05-06 06:44 G 33097341.60 33097341.78 33097341.97 0.0535 0.0228

Jupiter 85905-12-30 11:17 G 33097579.81 33097579.97 33097580.14 0.0534 0.0305

Saturn 85906-08-27 00:15 G 33097819.44 33097819.51 33097819.60 0.0275 0.0256

Saturn 85907-04-13 10:34 G 33098048.74 33098048.94 33098049.15 0.0273 0.0077

Saturn 85907-11-28 18:58 G 33098278.09 33098278.29 33098278.49 0.0271 0.0097

Saturn 85908-07-15 01:27 G 33098507.53 33098507.56 33098507.61 0.0269 0.0264

Jupiter 85911-03-12 06:15 G 33099477.58 33099477.76 33099477.94 0.0492 0.0241

Jupiter 85911-11-03 04:20 G 33099713.49 33099713.68 33099713.87 0.0492 0.0163

Uranus 85912-10-26 09:51 G 33100071.82 33100071.91 33100072.05 0.0141 0.0121

Uranus 85913-06-09 21:08 G 33100298.21 33100298.38 33100298.56 0.0141 0.0086

Uranus 85914-01-22 08:10 G 33100524.64 33100524.84 33100525.05 0.0142 0.0051

Uranus 85914-09-05 19:27 G 33100751.10 33100751.31 33100751.54 0.0142 0.0016

Uranus 85915-04-20 07:12 G 33100977.58 33100977.80 33100978.02 0.0142 0.0020

Uranus 85915-12-02 18:44 G 33101204.08 33101204.28 33101204.48 0.0142 0.0055

Uranus 85916-07-16 06:00 G 33101430.60 33101430.75 33101430.94 0.0142 0.0092

Jupiter 85917-01-08 21:36 G 33101607.26 33101607.40 33101607.55 0.0535 0.0369

Uranus 85917-02-27 18:00 G 33101657.16 33101657.25 33101657.36 0.0142 0.0127

Jupiter 85917-09-04 01:27 G 33101845.37 33101845.56 33101845.76 0.0535 0.0161

Jupiter 85922-11-15 10:05 G 33103743.78 33103743.92 33103744.06 0.0492 0.0351

Saturn 85922-12-19 15:36 G 33103777.98 33103778.15 33103778.32 0.0287 0.0166

Jupiter 85923-07-09 09:08 G 33103979.68 33103979.88 33103980.09 0.0492 0.0054

Saturn 85923-08-06 07:27 G 33104007.61 33104007.81 33104008.02 0.0289 0.0035

Mars 85923-09-02 10:48 G 33104034.79 33104034.95 33104035.10 0.1909 0.0770

Jupiter 85924-03-01 06:29 G 33104215.69 33104215.77 33104215.86 0.0494 0.0449

Saturn 85924-03-23 00:58 G 33104237.44 33104237.54 33104237.66 0.0292 0.0243

Jupiter 85928-09-13 12:00 G 33105872.94 33105873.00 33105873.06 0.0534 0.0506

Jupiter 85929-05-09 13:41 G 33106110.86 33106111.07 33106111.27 0.0534 0.0017

Jupiter 85934-07-21 12:00 G 33108009.94 33108010.00 33108010.07 0.0493 0.0462

Jupiter 85935-03-14 12:58 G 33108245.84 33108246.04 33108246.24 0.0492 0.0061

Jupiter 85935-11-05 11:03 G 33108481.82 33108481.96 33108482.11 0.0493 0.0342

Saturn 85936-03-08 03:08 G 33108605.53 33108605.63 33108605.75 0.0276 0.0235

Saturn 85936-10-23 13:27 G 33108834.85 33108835.06 33108835.27 0.0274 0.0055

Saturn 85937-06-09 21:51 G 33109064.22 33109064.41 33109064.60 0.0271 0.0119

Earth 85938-12-17 09:22 G 33109619.83 33109619.89 33109619.95 0.2670 0.2470

Moon 85938-12-17 14:39 G 33109620.09 33109620.11 33109620.12 0.2671 0.2652

Jupiter 85941-01-12 02:39 G 33110376.41 33110376.61 33110376.80 0.0534 0.0136

Jupiter 85941-09-07 06:44 G 33110614.64 33110614.78 33110614.91 0.0533 0.0393

Jupiter 85946-11-17 17:03 G 33112512.02 33112512.21 33112512.40 0.0492 0.0173

Earth 85946-12-15 02:10 G 33112539.44 33112539.59 33112539.74 0.2668 0.0670

Moon 85946-12-15 06:00 G 33112539.59 33112539.75 33112539.91 0.2664 0.0363 *

Jupiter 85947-07-11 15:36 G 33112747.97 33112748.15 33112748.33 0.0493 0.0232

Saturn 85952-06-30 20:10 G 33114564.16 33114564.34 33114564.52 0.0287 0.0139

Jupiter 85952-09-16 14:39 G 33114641.95 33114642.11 33114642.29 0.0534 0.0285

Mars 85952-11-22 08:53 G 33114708.70 33114708.87 33114709.04 0.1625 0.0253

Uranus 85953-02-12 10:20 G 33114790.84 33114790.93 33114791.05 0.0137 0.0119

Saturn 85953-02-15 12:00 G 33114793.80 33114794.00 33114794.21 0.0290 0.0063

Jupiter 85953-05-12 18:29 G 33114880.09 33114880.27 33114880.45 0.0534 0.0247

Uranus 85953-09-26 16:48 G 33115017.05 33115017.20 33115017.38 0.0137 0.0089

Saturn 85953-10-03 05:46 G 33115023.67 33115023.74 33115023.82 0.0292 0.0271

Uranus 85954-05-10 23:17 G 33115243.28 33115243.47 33115243.67 0.0137 0.0058

Uranus 85954-12-23 05:17 G 33115469.51 33115469.72 33115469.93 0.0136 0.0027

Uranus 85955-08-06 11:17 G 33115695.75 33115695.97 33115696.18 0.0136 0.0003

Uranus 85956-03-19 17:03 G 33115922.00 33115922.21 33115922.42 0.0136 0.0033

Uranus 85956-10-31 22:48 G 33116148.27 33116148.45 33116148.65 0.0136 0.0063

Uranus 85957-06-15 04:20 G 33116374.54 33116374.68 33116374.85 0.0136 0.0093

Uranus 85958-01-27 09:36 G 33116600.83 33116600.90 33116601.01 0.0136 0.0123

Jupiter 85958-07-23 20:53 G 33116778.21 33116778.37 33116778.54 0.0492 0.0284

Jupiter 85959-03-16 20:10 G 33117014.14 33117014.34 33117014.53 0.0492 0.0122

Jupiter 85964-05-22 05:03 G 33118907.59 33118907.71 33118907.83 0.0534 0.0426

Jupiter 85965-01-15 07:56 G 33119145.63 33119145.83 33119146.03 0.0535 0.0101

Saturn 85965-09-18 05:17 G 33119391.59 33119391.72 33119391.86 0.0275 0.0211

Saturn 85966-05-05 15:22 G 33119620.92 33119621.14 33119621.35 0.0273 0.0032

Saturn 85966-12-20 23:17 G 33119850.29 33119850.47 33119850.66 0.0270 0.0141

Jupiter 85970-03-29 00:15 G 33121044.40 33121044.51 33121044.64 0.0492 0.0393

Jupiter 85970-11-20 00:00 G 33121280.30 33121280.50 33121280.70 0.0492 0.0010

Jupiter 85971-07-13 21:22 G 33121516.28 33121516.39 33121516.50 0.0493 0.0409

Neptune 85971-10-27 07:12 G 33121621.74 33121621.80 33121621.89 0.0089 0.0083

Neptune 85972-06-08 19:56 G 33121847.24 33121847.33 33121847.48 0.0089 0.0074

Neptune 85973-01-20 09:22 G 33122072.75 33122072.89 33122073.06 0.0089 0.0064

Neptune 85973-09-02 22:34 G 33122298.28 33122298.44 33122298.63 0.0089 0.0054

Neptune 85974-04-16 12:00 G 33122523.82 33122524.00 33122524.20 0.0089 0.0044

Neptune 85974-11-28 01:12 G 33122749.36 33122749.55 33122749.76 0.0089 0.0034

Neptune 85975-07-11 14:39 G 33122974.90 33122975.11 33122975.32 0.0089 0.0024

Neptune 85976-02-22 03:51 G 33123200.45 33123200.66 33123200.88 0.0089 0.0014

Jupiter 85976-09-19 22:20 G 33123411.22 33123411.43 33123411.63 0.0535 0.0045

Neptune 85976-10-04 17:17 G 33123426.00 33123426.22 33123426.44 0.0088 0.0004

Jupiter 85977-05-16 03:22 G 33123649.56 33123649.64 33123649.73 0.0533 0.0484

Neptune 85977-05-18 06:29 G 33123651.55 33123651.77 33123651.99 0.0088 0.0006

Neptune 85977-12-29 19:41 G 33123877.10 33123877.32 33123877.54 0.0088 0.0016

Neptune 85978-08-12 08:53 G 33124102.66 33124102.87 33124103.09 0.0088 0.0026

Neptune 85979-03-25 22:05 G 33124328.23 33124328.42 33124328.63 0.0088 0.0036

Neptune 85979-11-06 11:17 G 33124553.79 33124553.97 33124554.17 0.0088 0.0046

Neptune 85980-06-19 00:15 G 33124779.36 33124779.51 33124779.70 0.0088 0.0056

Neptune 85981-01-30 13:27 G 33125004.93 33125005.06 33125005.23 0.0088 0.0066

Neptune 85981-09-13 03:08 G 33125230.52 33125230.63 33125230.75 0.0088 0.0075

Saturn 85982-01-10 18:44 G 33125350.09 33125350.28 33125350.47 0.0287 0.0122

Neptune 85982-04-26 16:05 G 33125456.13 33125456.17 33125456.25 0.0088 0.0085

Jupiter 85982-07-26 04:34 G 33125546.49 33125546.69 33125546.89 0.0492 0.0101

Saturn 85982-08-28 10:48 G 33125579.75 33125579.95 33125580.15 0.0289 0.0081

Jupiter 85983-03-19 02:24 G 33125782.44 33125782.60 33125782.76 0.0493 0.0303

Saturn 85983-04-15 04:34 G 33125809.66 33125809.69 33125809.72 0.0292 0.0288

Pluto 85987-09-16 15:36 G 33127424.98 33127425.15 33127425.34 0.0065 0.0036

Pluto 85988-04-28 19:56 G 33127650.12 33127650.33 33127650.56 0.0066 0.0005

Jupiter 85988-05-25 11:32 G 33127676.79 33127676.98 33127677.17 0.0534 0.0192

Pluto 85988-12-10 00:29 G 33127875.37 33127875.52 33127875.69 0.0066 0.0045

Jupiter 85989-01-18 15:22 G 33127914.98 33127915.14 33127915.29 0.0533 0.0340

Mars 85989-06-29 14:53 G 33128077.01 33128077.12 33128077.24 0.1912 0.1395

Jupiter 85994-03-31 07:12 G 33129812.62 33129812.80 33129812.99 0.0492 0.0216

Jupiter 85994-11-22 06:15 G 33130048.58 33130048.76 33130048.95 0.0493 0.0192

Saturn 85995-03-31 07:27 G 33130177.66 33130177.81 33130177.96 0.0276 0.0190

Saturn 85995-11-15 17:32 G 33130407.01 33130407.23 33130407.44 0.0273 0.0011

Uranus	**85996-06-25 16:48**	**G**	**33130630.15**	**33130630.20**	**33130630.27**	**0.0141**	**0.0135**
Saturn	**85996-07-02 01:41**	**G**	**33130636.40**	**33130636.57**	**33130636.74**	**0.0271**	**0.0162**
Uranus	**85997-02-07 03:36**	**G**	**33130856.51**	**33130856.65**	**33130856.82**	**0.0141**	**0.0102**
Uranus	**85997-09-21 14:53**	**G**	**33131082.93**	**33131083.12**	**33131083.32**	**0.0142**	**0.0067**
Uranus	**85998-05-06 02:24**	**G**	**33131309.39**	**33131309.60**	**33131309.82**	**0.0142**	**0.0031**
Uranus	**85998-12-18 13:41**	**G**	**33131535.86**	**33131536.07**	**33131536.30**	**0.0142**	**0.0005**
Uranus	**85999-08-02 01:12**	**G**	**33131762.34**	**33131762.55**	**33131762.77**	**0.0142**	**0.0039**
Jupiter	**86000-01-29 01:12**	**G**	**33131942.40**	**33131942.55**	**33131942.71**	**0.0534**	**0.0336**
Uranus	**86000-03-15 12:44**	**G**	**33131988.86**	**33131989.03**	**33131989.23**	**0.0142**	**0.0076**
Jupiter	**86000-09-23 04:05**	**G**	**33132180.48**	**33132180.67**	**33132180.86**	**0.0534**	**0.0194**
Uranus	**86000-10-28 00:44**	**G**	**33132215.40**	**33132215.53**	**33132215.68**	**0.0142**	**0.0111**

87TH MILLENNIUM CE

This is a list of transits of Venus in the 87th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**86005-12-04 10:48**	**G**	**33134078.80**	**33134078.95**	**33134079.10**	**0.0493**	**0.0328**	
Jupiter	**86006-07-28 10:48**	**G**	**33134314.75**	**33134314.95**	**33134315.15**	**0.0492**	**0.0080**	
Jupiter	**86007-03-21 08:39**	**G**	**33134550.81**	**33134550.86**	**33134550.91**	**0.0494**	**0.0476**	
Saturn	**86011-07-23 23:03**	**G**	**33136136.27**	**33136136.46**	**33136136.66**	**0.0287**	**0.0094**	
Jupiter	**86011-10-03 13:56**	**G**	**33136207.99**	**33136208.08**	**33136208.17**	**0.0534**	**0.0479**	
Saturn	**86012-03-09 15:08**	**G**	**33136365.94**	**33136366.13**	**33136366.33**	**0.0290**	**0.0110**	
Jupiter	**86012-05-28 15:36**	**G**	**33136445.94**	**33136446.15**	**33136446.35**	**0.0534**	**0.0044**	
Jupiter	**86017-08-09 14:39**	**G**	**33138345.02**	**33138345.11**	**33138345.20**	**0.0493**	**0.0436**	

Jupiter	86018-04-02 15:08 G	33138580.93	33138581.13	33138581.34	0.0492	0.0033
Mars	86018-09-19 20:53 G	33138751.20	33138751.37	33138751.54	0.1623	0.0435
Jupiter	86018-11-24 12:58 G	33138816.91	33138817.04	33138817.18	0.0493	0.0370
Jupiter	86024-02-01 05:03 G	33140711.51	33140711.71	33140711.91	0.0535	0.0104
Jupiter	86024-09-26 09:51 G	33140949.79	33140949.91	33140950.03	0.0533	0.0427
Saturn	86024-10-10 10:05 G	33140963.76	33140963.92	33140964.10	0.0275	0.0165
Saturn	86025-05-27 19:56 G	33141193.12	33141193.33	33141193.55	0.0273	0.0014
Saturn	86026-01-12 03:51 G	33141422.51	33141422.66	33141422.82	0.0270	0.0185
Jupiter	86029-12-06 18:58 G	33142847.09	33142847.29	33142847.48	0.0492	0.0145
Jupiter	86030-07-30 17:03 G	33143083.04	33143083.21	33143083.38	0.0493	0.0261
Jupiter	86035-10-06 19:41 G	33144977.14	33144977.32	33144977.50	0.0535	0.0249
Jupiter	86036-05-31 23:46 G	33145215.32	33145215.49	33145215.66	0.0534	0.0286
Uranus	86036-10-12 19:27 G	33145349.28	33145349.31	33145349.37	0.0137	0.0133
Uranus	86037-05-27 01:41 G	33145575.45	33145575.57	33145575.73	0.0137	0.0103
Uranus	86038-01-08 08:24 G	33145801.67	33145801.85	33145802.03	0.0137	0.0072
Uranus	86038-08-22 14:24 G	33146027.90	33146028.10	33146028.31	0.0136	0.0041
Uranus	86039-04-05 20:24 G	33146254.14	33146254.35	33146254.56	0.0136	0.0011
Uranus	86039-11-18 02:24 G	33146480.39	33146480.60	33146480.81	0.0136	0.0019
Saturn	86040-06-17 07:41 G	33146692.77	33146692.82	33146692.89	0.0284	0.0272
Uranus	86040-07-01 08:10 G	33146706.64	33146706.84	33146707.04	0.0136	0.0049
Saturn	86041-02-01 22:20 G	33146922.23	33146922.43	33146922.63	0.0287	0.0076
Uranus	86041-02-12 13:41 G	33146932.90	33146933.07	33146933.25	0.0136	0.0079
Jupiter	86041-08-11 23:03 G	33147113.29	33147113.46	33147113.63	0.0492	0.0256
Saturn	86041-09-19 14:39 G	33147151.92	33147152.11	33147152.30	0.0290	0.0128
Uranus	86041-09-26 19:12 G	33147159.18	33147159.30	33147159.44	0.0136	0.0109
Jupiter	86042-04-04 21:51 G	33147349.22	33147349.41	33147349.61	0.0492	0.0151
Jupiter	86047-06-11 10:05 G	33149242.79	33149242.92	33149243.06	0.0534	0.0392
Jupiter	86048-02-04 12:29 G	33149480.83	33149481.02	33149481.22	0.0534	0.0138
Mars	86050-09-18 16:20 G	33150438.12	33150438.18	33150438.24	0.1629	0.1520
Jupiter	86053-04-17 00:29 G	33151379.39	33151379.52	33151379.66	0.0493	0.0371

Jupiter 86053-12-09 00:58 G 33151615.33 33151615.54 33151615.74 0.0492 0.0037

Saturn 86054-04-22 12:00 G 33151749.82 33151750.00 33151750.18 0.0276 0.0145

Jupiter 86054-08-01 23:03 G 33151851.37 33151851.46 33151851.56 0.0494 0.0438

Saturn 86054-12-07 21:51 G 33151979.20 33151979.41 33151979.63 0.0273 0.0034

Neptune 86055-03-09 06:29 G 33152070.71 33152070.77 33152070.87 0.0089 0.0083

Saturn 86055-07-25 06:00 G 33152208.62 33152208.75 33152208.89 0.0271 0.0207

Neptune 86055-10-20 19:27 G 33152296.20 33152296.31 33152296.45 0.0089 0.0073

Neptune 86056-06-02 08:24 G 33152521.71 33152521.85 33152522.01 0.0089 0.0063

Neptune 86057-01-13 21:22 G 33152747.22 33152747.39 33152747.57 0.0089 0.0053

Neptune 86057-08-27 10:05 G 33152972.74 33152972.92 33152973.12 0.0089 0.0044

Neptune 86058-04-09 22:48 G 33153198.27 33153198.45 33153198.67 0.0089 0.0034

Neptune 86058-11-21 11:46 G 33153423.79 33153423.99 33153424.21 0.0089 0.0024

Jupiter 86059-02-14 00:44 G 33153508.51 33153508.53 33153508.56 0.0533 0.0529

Neptune 86059-07-05 00:29 G 33153649.31 33153649.52 33153649.74 0.0089 0.0014

Jupiter 86059-10-10 01:27 G 33153746.36 33153746.56 33153746.77 0.0534 0.0015

Neptune 86060-02-15 13:27 G 33153874.84 33153875.06 33153875.28 0.0089 0.0004

Jupiter 86060-06-04 05:32 G 33153984.68 33153984.73 33153984.78 0.0532 0.0513

Neptune 86060-09-28 02:24 G 33154100.38 33154100.60 33154100.82 0.0089 0.0006

Neptune 86061-05-11 15:08 G 33154325.92 33154326.13 33154326.35 0.0089 0.0016

Neptune 86061-12-23 03:36 G 33154551.45 33154551.65 33154551.87 0.0089 0.0026

Neptune 86062-08-05 16:20 G 33154776.99 33154777.18 33154777.39 0.0089 0.0036

Neptune 86063-03-19 05:03 G 33155002.54 33155002.71 33155002.91 0.0089 0.0046

Neptune 86063-10-30 18:15 G 33155228.09 33155228.26 33155228.43 0.0089 0.0055

Neptune 86064-06-12 06:44 G 33155453.65 33155453.78 33155453.94 0.0089 0.0065

Jupiter 86064-12-21 03:22 G 33155645.60 33155645.64 33155645.69 0.0493 0.0481

Neptune 86065-01-23 19:27 G 33155679.21 33155679.31 33155679.44 0.0089 0.0075

Jupiter 86065-08-14 05:03 G 33155881.51 33155881.71 33155881.91 0.0492 0.0077

Neptune 86065-09-06 08:10 G 33155904.80 33155904.84 33155904.93 0.0089 0.0085

Jupiter 86066-04-07 03:22 G 33156117.50 33156117.64 33156117.80 0.0493 0.0330

Saturn 86069-12-28 13:27 G 33157478.96 33157479.06 33157479.17 0.0285 0.0242

Saturn 86070-08-15 04:05 G 33157708.46 33157708.67 33157708.87 0.0287 0.0046

Saturn 86071-04-01 20:10 G 33157938.17 33157938.34 33157938.52 0.0290 0.0159

Jupiter 86071-06-14 12:58 G 33158011.85 33158012.04 33158012.24 0.0534 0.0163

Jupiter 86072-02-07 16:48 G 33158250.06 33158250.20 33158250.35 0.0533 0.0370

Pluto 86075-05-18 21:36 G 33159446.28 33159446.40 33159446.57 0.0078 0.0060

Pluto 86075-12-30 08:10 G 33159671.62 33159671.84 33159672.06 0.0078 0.0010

Moon 86076-06-13 19:27 G 33159838.24 33159838.31 33159838.39 0.2662 0.2364

Jupiter 86077-04-19 09:08 G 33160147.69 33160147.88 33160148.07 0.0492 0.0189

Jupiter 86077-12-11 07:56 G 33160383.65 33160383.83 33160384.01 0.0493 0.0219

Uranus 86080-10-07 09:22 G 33161414.78 33161414.89 33161415.02 0.0141 0.0118

Uranus 86081-05-21 20:39 G 33161641.19 33161641.36 33161641.54 0.0141 0.0083

Uranus 86082-01-03 07:56 G 33161867.62 33161867.83 33161868.04 0.0142 0.0048

Uranus 86082-08-17 19:12 G 33162094.08 33162094.30 33162094.52 0.0142 0.0013

Jupiter 86083-02-17 02:39 G 33162277.45 33162277.61 33162277.78 0.0534 0.0308

Uranus 86083-04-01 06:44 G 33162320.57 33162320.78 33162321.00 0.0142 0.0023

Jupiter 86083-10-13 06:00 G 33162515.56 33162515.75 33162515.93 0.0534 0.0226

Saturn 86083-11-02 15:22 G 33162535.95 33162536.14 33162536.34 0.0275 0.0118

Uranus 86083-11-13 18:15 G 33162547.07 33162547.26 33162547.47 0.0142 0.0058

Moon 86084-06-11 09:36 G 33162757.76 33162757.90 33162758.04 0.2669 0.1209

Earth 86084-06-11 14:39 G 33162757.95 33162758.11 33162758.27 0.2665 0.0438 *

Saturn 86084-06-19 00:58 G 33162765.34 33162765.54 33162765.76 0.0272 0.0060

Uranus 86084-06-27 06:00 G 33162773.60 33162773.75 33162773.93 0.0142 0.0094

Mars 86084-07-17 08:24 G 33162793.68 33162793.85 33162794.01 0.1621 0.0624

Saturn 86085-02-03 08:53 G 33162994.77 33162994.87 33162994.99 0.0270 0.0231

Uranus 86085-02-08 18:00 G 33163000.17 33163000.25 33163000.35 0.0142 0.0129

Mars 86087-04-26 14:10 G 33163807.02 33163807.09 33163807.17 0.1906 0.1690

Jupiter 86088-12-23 12:29 G 33164413.86 33164414.02 33164414.18 0.0492 0.0300

Jupiter 86089-08-16 12:00 G 33164649.80 33164650.00 33164650.20 0.0492 0.0108

Jupiter 86094-10-22 17:32 G 33166543.13 33166543.23 33166543.34 0.0534 0.0448

Jupiter 86095-06-17 19:56 G 33166781.13 33166781.33 33166781.53 0.0535 0.0080

Saturn	86099-07-10 13:12 G	33168264.92	33168265.05	33168265.18	0.0285	0.0223
Saturn	86100-02-25 03:36 G	33168494.45	33168494.65	33168494.86	0.0287	0.0027
Jupiter	86100-08-29 15:51 G	33168680.06	33168680.16	33168680.28	0.0493	0.0411
Saturn	86100-10-12 20:10 G	33168724.18	33168724.34	33168724.51	0.0290	0.0178
Jupiter	86101-04-22 16:20 G	33168915.98	33168916.18	33168916.38	0.0492	0.0005
Jupiter	86101-12-14 14:10 G	33169151.97	33169152.09	33169152.21	0.0493	0.0398
Jupiter	86107-02-21 09:51 G	33171046.70	33171046.91	33171047.11	0.0534	0.0070
Jupiter	86107-10-17 13:41 G	33171284.97	33171285.07	33171285.17	0.0533	0.0460
Jupiter	86112-12-26 18:15 G	33173182.07	33173182.26	33173182.46	0.0492	0.0122
Saturn	86113-05-15 17:32 G	33173322.03	33173322.23	33173322.43	0.0275	0.0097
Jupiter	86113-08-19 17:17 G	33173418.06	33173418.22	33173418.39	0.0493	0.0287
Saturn	86113-12-31 03:22 G	33173551.43	33173551.64	33173551.84	0.0273	0.0081
Saturn	86114-08-17 11:17 G	33173780.91	33173780.97	33173781.05	0.0271	0.0253
Mars	86116-07-17 04:05 G	33174480.57	33174480.67	33174480.77	0.1627	0.1324
Jupiter	86118-10-26 23:03 G	33175312.28	33175312.46	33175312.65	0.0534	0.0217
Jupiter	86119-06-22 02:10 G	33175550.42	33175550.59	33175550.75	0.0533	0.0316
Uranus	86121-01-25 11:17 G	33176133.86	33176133.97	33176134.08	0.0137	0.0116
Uranus	86121-09-08 17:32 G	33176360.07	33176360.23	33176360.40	0.0137	0.0086
Uranus	86122-04-22 23:46 G	33176586.30	33176586.49	33176586.69	0.0136	0.0055
Uranus	86122-12-05 05:46 G	33176812.54	33176812.74	33176812.96	0.0136	0.0025
Uranus	86123-07-19 11:46 G	33177038.78	33177038.99	33177039.21	0.0136	0.0006
Uranus	86124-03-01 17:32 G	33177265.03	33177265.23	33177265.44	0.0136	0.0036
Jupiter	86124-08-31 21:51 G	33177448.24	33177448.41	33177448.60	0.0493	0.0236
Uranus	86124-10-13 23:32 G	33177491.29	33177491.48	33177491.67	0.0136	0.0065
Jupiter	86125-04-24 21:36 G	33177684.21	33177684.40	33177684.59	0.0493	0.0175
Uranus	86125-05-28 05:03 G	33177717.56	33177717.71	33177717.87	0.0136	0.0095
Uranus	86126-01-09 10:20 G	33177943.86	33177943.93	33177944.03	0.0135	0.0124
Saturn	86129-01-20 19:56 G	33179051.17	33179051.33	33179051.48	0.0285	0.0191
Saturn	86129-09-07 10:34 G	33179280.73	33179280.94	33179281.15	0.0288	0.0007
Saturn	86130-04-25 02:53 G	33179510.48	33179510.62	33179510.77	0.0290	0.0212

Jupiter 86130-07-01 10:48 G 33179577.81 33179577.95 33179578.10 0.0534 0.0364

Jupiter 86131-02-24 13:12 G 33179815.86 33179816.05 33179816.24 0.0534 0.0167

Neptune 86136-01-29 18:00 G 33181616.22 33181616.25 33181616.33 0.0089 0.0086

Jupiter 86136-05-07 01:41 G 33181714.42 33181714.57 33181714.71 0.0493 0.0346

Neptune 86136-09-11 07:27 G 33181841.71 33181841.81 33181841.94 0.0089 0.0076

Jupiter 86136-12-29 01:56 G 33181950.37 33181950.58 33181950.78 0.0492 0.0063

Neptune 86137-04-24 20:39 G 33182067.23 33182067.36 33182067.52 0.0089 0.0066

Jupiter 86137-08-22 00:00 G 33182186.43 33182186.50 33182186.57 0.0494 0.0464

Neptune 86137-12-06 10:05 G 33182292.75 33182292.92 33182293.09 0.0089 0.0056

Neptune 86138-07-19 22:48 G 33182518.28 33182518.45 33182518.66 0.0089 0.0047

Neptune 86139-03-02 12:15 G 33182743.82 33182744.01 33182744.22 0.0089 0.0037

Neptune 86139-10-14 01:27 G 33182969.36 33182969.56 33182969.78 0.0089 0.0027

Neptune 86140-05-26 14:39 G 33183194.90 33183195.11 33183195.34 0.0089 0.0017

Neptune 86141-01-07 04:05 G 33183420.45 33183420.67 33183420.89 0.0089 0.0006

Neptune 86141-08-20 17:17 G 33183646.00 33183646.22 33183646.44 0.0088 0.0003

Jupiter 86142-03-06 00:44 G 33183843.47 33183843.53 33183843.60 0.0533 0.0505

Neptune 86142-04-03 06:29 G 33183871.56 33183871.77 33183872.00 0.0088 0.0014

Saturn 86142-04-10 10:48 G 33183878.87 33183878.95 33183879.04 0.0277 0.0251

Jupiter 86142-10-30 01:56 G 33184081.38 33184081.58 33184081.78 0.0534 0.0017

Neptune 86142-11-14 19:41 G 33184097.12 33184097.32 33184097.55 0.0088 0.0024

Saturn 86142-11-25 22:05 G 33184108.22 33184108.42 33184108.63 0.0275 0.0069

Neptune 86143-06-28 08:53 G 33184322.68 33184322.87 33184323.09 0.0088 0.0034

Saturn 86143-07-13 07:41 G 33184337.63 33184337.82 33184338.02 0.0272 0.0108

Neptune 86144-02-08 22:05 G 33184548.24 33184548.42 33184548.63 0.0088 0.0044

Neptune 86144-09-21 11:17 G 33184773.81 33184773.97 33184774.17 0.0088 0.0054

Neptune 86145-05-05 00:29 G 33184999.39 33184999.52 33184999.70 0.0088 0.0064

Neptune 86145-12-16 14:10 G 33185224.97 33185225.09 33185225.22 0.0088 0.0073

Neptune 86146-07-30 03:08 G 33185450.57 33185450.63 33185450.73 0.0088 0.0083

Jupiter 86148-01-11 04:20 G 33185980.62 33185980.68 33185980.77 0.0493 0.0456

Jupiter 86148-09-03 05:46 G 33186216.53 33186216.74 33186216.94 0.0492 0.0051

Jupiter 86149-04-27 03:36 G 33186452.52 33186452.65 33186452.80 0.0493 0.0356

Mars 86150-05-15 20:24 G 33186836.20 33186836.35 33186836.50 0.1619 0.0805

Mars 86153-02-21 18:00 G 33187849.11 33187849.25 33187849.39 0.1909 0.1054

Jupiter 86154-07-04 15:51 G 33188346.96 33188347.16 33188347.36 0.0535 0.0130

Jupiter 86155-02-27 20:10 G 33188585.21 33188585.34 33188585.48 0.0533 0.0405

Saturn 86158-08-02 21:08 G 33189837.23 33189837.38 33189837.56 0.0285 0.0171

Saturn 86159-03-20 12:00 G 33190066.79 33190067.00 33190067.21 0.0288 0.0029

Saturn 86159-11-05 04:34 G 33190296.57 33190296.69 33190296.82 0.0290 0.0234

Jupiter 86160-05-09 09:22 G 33190482.70 33190482.89 33190483.08 0.0492 0.0163

Jupiter 86160-12-31 07:56 G 33190718.66 33190718.83 33190719.01 0.0493 0.0246

Uranus 86164-06-07 13:56 G 33191973.03 33191973.08 33191973.16 0.0141 0.0135

Uranus 86165-01-20 00:58 G 33192199.40 33192199.54 33192199.70 0.0141 0.0100

Uranus 86165-09-03 12:15 G 33192425.82 33192426.01 33192426.21 0.0142 0.0066

Jupiter 86166-03-09 06:44 G 33192612.61 33192612.78 33192612.95 0.0534 0.0276

Uranus 86166-04-17 23:46 G 33192652.27 33192652.49 33192652.70 0.0142 0.0031

Jupiter 86166-11-02 09:22 G 33192850.72 33192850.89 33192851.07 0.0533 0.0259

Uranus 86166-11-30 11:03 G 33192878.74 33192878.96 33192879.19 0.0142 0.0005

Uranus 86167-07-14 22:34 G 33193105.23 33193105.44 33193105.66 0.0142 0.0040

Uranus 86168-02-26 10:05 G 33193331.75 33193331.92 33193332.12 0.0142 0.0076

Uranus 86168-10-09 22:05 G 33193558.29 33193558.42 33193558.57 0.0142 0.0111

Saturn 86171-10-21 12:58 G 33194664.93 33194665.04 33194665.17 0.0278 0.0230

Jupiter 86172-01-13 10:34 G 33194748.77 33194748.94 33194749.11 0.0493 0.0281

Saturn 86172-06-07 00:29 G 33194894.31 33194894.52 33194894.73 0.0275 0.0047

Jupiter 86172-09-05 10:34 G 33194984.74 33194984.94 33194985.14 0.0493 0.0130

Saturn 86173-01-22 10:05 G 33195123.74 33195123.92 33195124.11 0.0273 0.0131

Jupiter 86177-11-11 20:39 G 33196878.24 33196878.36 33196878.49 0.0533 0.0418

Jupiter 86178-07-07 22:05 G 33197116.22 33197116.42 33197116.62 0.0534 0.0111

Moon 86181-12-18 07:27 G 33198375.77 33198375.81 33198375.86 0.2666 0.2551

Mars 86182-05-14 15:36 G 33198523.02 33198523.15 33198523.27 0.1625 0.1123

Jupiter 86183-09-18 13:27 G 33199014.94 33199015.06 33199015.18 0.0493 0.0393

Jupiter 86184-05-11 14:24 G 33199250.89 33199251.10 33199251.30 0.0492 0.0017

Jupiter 86185-01-02 12:58 G 33199486.93 33199487.04 33199487.14 0.0494 0.0420

Saturn 86188-02-13 04:48 G 33200623.52 33200623.70 33200623.88 0.0285 0.0136

Saturn 86188-09-29 19:41 G 33200853.12 33200853.32 33200853.53 0.0288 0.0064

Saturn 86189-05-17 12:29 G 33201082.94 33201083.02 33201083.10 0.0291 0.0269

Moon 86189-12-16 00:29 G 33201295.38 33201295.52 33201295.66 0.2669 0.1100

Earth 86189-12-16 05:32 G 33201295.57 33201295.73 33201295.88 0.2667 0.0443 *

Jupiter 86190-03-12 09:08 G 33201381.67 33201381.88 33201382.08 0.0534 0.0044

Jupiter 86190-11-05 12:44 G 33201619.96 33201620.03 33201620.12 0.0532 0.0487

Jupiter 86196-01-15 18:15 G 33203517.07 33203517.26 33203517.47 0.0492 0.0098

Jupiter 86196-09-07 17:17 G 33203753.06 33203753.22 33203753.38 0.0493 0.0312

Saturn 86201-05-03 19:12 G 33205451.16 33205451.30 33205451.45 0.0277 0.0199

Jupiter 86201-11-15 21:36 G 33205647.22 33205647.40 33205647.59 0.0534 0.0192

Saturn 86201-12-19 06:29 G 33205680.56 33205680.77 33205680.99 0.0274 0.0017

Jupiter 86202-07-12 01:12 G 33205885.39 33205885.55 33205885.70 0.0533 0.0344

Saturn 86202-08-05 15:51 G 33205909.99 33205910.16 33205910.34 0.0272 0.0160

Uranus 86204-09-25 19:27 G 33206692.26 33206692.31 33206692.38 0.0137 0.0131

Uranus 86205-05-10 01:41 G 33206918.45 33206918.57 33206918.74 0.0137 0.0101

Uranus 86205-12-22 08:24 G 33207144.67 33207144.85 33207145.03 0.0137 0.0070

Uranus 86206-08-05 14:24 G 33207370.90 33207371.10 33207371.31 0.0136 0.0039

Uranus 86207-03-19 20:24 G 33207597.14 33207597.35 33207597.57 0.0136 0.0010

Jupiter 86207-09-21 21:51 G 33207783.22 33207783.41 33207783.59 0.0492 0.0210

Uranus 86207-11-01 02:24 G 33207823.39 33207823.60 33207823.82 0.0136 0.0021

Jupiter 86208-05-14 20:53 G 33208019.18 33208019.37 33208019.55 0.0492 0.0200

Uranus 86208-06-14 08:10 G 33208049.65 33208049.84 33208050.05 0.0136 0.0051

Uranus 86209-01-26 13:41 G 33208275.91 33208276.07 33208276.26 0.0136 0.0081

Uranus 86209-09-09 19:27 G 33208502.20 33208502.31 33208502.44 0.0136 0.0110

Jupiter 86213-07-21 11:46 G 33209912.83 33209912.99 33209913.15 0.0534 0.0337

Jupiter 86214-03-16 14:39 G 33210150.92 33210151.11 33210151.30 0.0534 0.0198

Mars 86216-03-13 07:56 G 33210878.69 33210878.83 33210878.97 0.1617 0.0991

Saturn 86217-08-26 07:56 G 33211409.65 33211409.83 33211410.03 0.0286 0.0112

Saturn 86218-04-12 22:48 G 33211639.26 33211639.45 33211639.66 0.0288 0.0089

Mars 86218-12-20 21:22 G 33211891.22 33211891.39 33211891.56 0.1912 0.0404

Jupiter 86219-05-28 00:58 G 33212049.38 33212049.54 33212049.69 0.0492 0.0323

Neptune 86219-06-12 18:29 G 33212065.22 33212065.27 33212065.34 0.0089 0.0085

Jupiter 86220-01-19 00:44 G 33212285.33 33212285.53 33212285.73 0.0492 0.0088

Neptune 86220-01-24 06:58 G 33212290.70 33212290.79 33212290.93 0.0089 0.0076

Neptune 86220-09-05 20:10 G 33212516.21 33212516.34 33212516.50 0.0089 0.0066

Jupiter 86220-09-10 22:34 G 33212521.42 33212521.44 33212521.48 0.0494 0.0488

Neptune 86221-04-19 09:08 G 33212741.72 33212741.88 33212742.06 0.0089 0.0056

Neptune 86221-11-30 22:05 G 33212967.24 33212967.42 33212967.62 0.0089 0.0046

Neptune 86222-07-14 10:48 G 33213192.76 33213192.95 33213193.16 0.0089 0.0036

Neptune 86223-02-24 23:46 G 33213418.29 33213418.49 33213418.71 0.0089 0.0026

Neptune 86223-10-08 12:44 G 33213643.82 33213644.03 33213644.25 0.0089 0.0016

Neptune 86224-05-21 01:41 G 33213869.35 33213869.57 33213869.79 0.0089 0.0006

Neptune 86225-01-01 14:24 G 33214094.88 33214095.10 33214095.32 0.0089 0.0004

Jupiter 86225-03-26 03:22 G 33214178.55 33214178.64 33214178.73 0.0533 0.0477

Neptune 86225-08-15 03:08 G 33214320.42 33214320.63 33214320.85 0.0089 0.0014

Jupiter 86225-11-19 04:34 G 33214416.48 33214416.69 33214416.89 0.0534 0.0049

Neptune 86226-03-28 15:51 G 33214545.96 33214546.16 33214546.38 0.0089 0.0024

Neptune 86226-11-09 04:20 G 33214771.50 33214771.68 33214771.90 0.0089 0.0034

Neptune 86227-06-22 17:32 G 33214997.04 33214997.23 33214997.42 0.0089 0.0043

Neptune 86228-02-03 06:00 G 33215222.59 33215222.75 33215222.93 0.0089 0.0053

Neptune 86228-09-15 18:58 G 33215448.15 33215448.29 33215448.45 0.0089 0.0063

Neptune 86229-04-29 07:27 G 33215673.71 33215673.81 33215673.95 0.0089 0.0073

Neptune 86229-12-10 20:10 G 33215899.28 33215899.34 33215899.44 0.0089 0.0083

Saturn 86230-11-13 22:20 G 33216237.27 33216237.43 33216237.60 0.0277 0.0175

Jupiter 86231-01-31 01:12 G 33216315.46 33216315.55 33216315.64 0.0493 0.0439

Saturn 86231-07-01 09:36 G 33216466.68 33216466.90 33216467.11 0.0275 0.0007

Jupiter 86231-09-24 02:24 G 33216551.40 33216551.60 33216551.81 0.0492 0.0032

Saturn 86232-02-15 18:58 G 33216696.14 33216696.29 33216696.45 0.0272 0.0184

Jupiter 86232-05-17 00:58 G 33216787.42 33216787.54 33216787.68 0.0494 0.0377

Pluto 86235-08-21 17:03 G 33217979.19 33217979.21 33217979.30 0.0065 0.0064

Pluto 86236-04-02 22:05 G 33218204.22 33218204.42 33218204.63 0.0066 0.0023

Pluto 86236-11-14 02:10 G 33218429.39 33218429.59 33218429.81 0.0066 0.0018

Pluto 86237-06-27 06:15 G 33218654.69 33218654.76 33218654.89 0.0066 0.0059

Jupiter 86237-07-24 17:32 G 33218682.03 33218682.23 33218682.43 0.0534 0.0100

Jupiter 86238-03-19 20:53 G 33218920.26 33218920.37 33218920.49 0.0532 0.0432

Jupiter 86243-05-30 05:46 G 33220817.54 33220817.74 33220817.93 0.0492 0.0145

Jupiter 86244-01-21 05:03 G 33221053.54 33221053.71 33221053.88 0.0493 0.0265

Saturn 86246-07-22 03:22 G 33221966.58 33221966.64 33221966.71 0.0283 0.0268

Saturn 86247-03-08 16:48 G 33222196.00 33222196.20 33222196.40 0.0286 0.0075

Saturn 86247-10-24 07:56 G 33222425.65 33222425.83 33222426.03 0.0288 0.0127

Mars 86248-03-12 02:53 G 33222565.48 33222565.62 33222565.77 0.1623 0.0923

Uranus 86248-09-20 05:46 G 33222757.63 33222757.74 33222757.87 0.0141 0.0117

Jupiter 86249-03-29 04:34 G 33222947.51 33222947.69 33222947.87 0.0534 0.0252

Uranus 86249-05-04 16:48 G 33222984.04 33222984.20 33222984.39 0.0141 0.0083

Jupiter 86249-11-22 06:58 G 33223185.62 33223185.79 33223185.97 0.0533 0.0284

Uranus 86249-12-17 04:05 G 33223210.47 33223210.67 33223210.89 0.0142 0.0049

Uranus 86250-07-31 15:36 G 33223436.93 33223437.15 33223437.37 0.0142 0.0013

Uranus 86251-03-15 03:08 G 33223663.41 33223663.63 33223663.85 0.0142 0.0022

Uranus 86251-10-27 14:39 G 33223889.91 33223890.11 33223890.32 0.0142 0.0057

Uranus 86252-06-10 02:24 G 33224116.44 33224116.60 33224116.78 0.0142 0.0093

Uranus 86253-01-22 14:24 G 33224343.01 33224343.10 33224343.20 0.0142 0.0128

Jupiter 86255-02-02 09:22 G 33225083.72 33225083.89 33225084.07 0.0493 0.0258

Jupiter 86255-09-26 09:22 G 33225319.70 33225319.89 33225320.08 0.0493 0.0154

Saturn 86260-05-26 05:46 G 33227023.56 33227023.74 33227023.93 0.0277 0.0143

Jupiter 86260-12-01 17:17 G 33227213.09 33227213.22 33227213.36 0.0534 0.0398

Saturn 86261-01-10 16:48 G 33227252.99 33227253.20 33227253.41 0.0274 0.0039

Jupiter 86261-07-27 18:58 G 33227451.10 33227451.29 33227451.49 0.0534 0.0135

Saturn 86261-08-28 01:56 G 33227482.45 33227482.58 33227482.71 0.0272 0.0214

Jupiter 86266-10-08 12:15 G 33229349.88 33229350.01 33229350.15 0.0493 0.0370

Jupiter 86267-06-01 12:44 G 33229585.83 33229586.03 33229586.23 0.0492 0.0040

Jupiter 86268-01-23 10:48 G 33229821.86 33229821.95 33229822.04 0.0494 0.0443

Jupiter 86273-04-01 08:24 G 33231716.65 33231716.85 33231717.05 0.0534 0.0015

Jupiter 86273-11-25 12:44 G 33231954.99 33231955.03 33231955.08 0.0533 0.0515

Saturn 86276-02-01 08:10 G 33232752.74 33232752.84 33232752.96 0.0283 0.0242

Saturn 86276-09-17 21:51 G 33232982.20 33232982.41 33232982.62 0.0286 0.0047

Saturn 86277-05-05 12:58 G 33233211.87 33233212.04 33233212.22 0.0289 0.0154

Jupiter 86278-06-13 14:39 G 33233616.07 33233616.11 33233616.16 0.0493 0.0481

Jupiter 86279-02-04 16:05 G 33233851.97 33233852.17 33233852.38 0.0492 0.0075

Jupiter 86279-09-28 14:39 G 33234087.97 33234088.11 33234088.26 0.0493 0.0334

Mars 86282-01-08 20:10 G 33234921.22 33234921.34 33234921.46 0.1616 0.1168

Mars 86284-10-17 01:12 G 33235933.38 33235933.55 33235933.72 0.1914 0.0233

Jupiter 86284-12-04 22:48 G 33235982.26 33235982.45 33235982.65 0.0534 0.0164

Jupiter 86285-07-31 02:10 G 33236220.45 33236220.59 33236220.74 0.0533 0.0372

Uranus 86289-01-07 09:51 G 33237476.81 33237476.91 33237477.04 0.0137 0.0115

Uranus 86289-08-21 16:05 G 33237703.02 33237703.17 33237703.35 0.0137 0.0085

Saturn 86289-12-06 09:22 G 33237809.70 33237809.89 33237810.09 0.0277 0.0118

Uranus 86290-04-04 22:34 G 33237929.25 33237929.44 33237929.64 0.0137 0.0054

Saturn 86290-07-23 20:24 G 33238039.14 33238039.35 33238039.56 0.0274 0.0064

Jupiter 86290-10-10 17:03 G 33238118.03 33238118.21 33238118.40 0.0492 0.0194

Uranus 86290-11-17 04:48 G 33238155.50 33238155.70 33238155.92 0.0136 0.0024

Saturn 86291-03-10 05:32 G 33238268.64 33238268.73 33238268.84 0.0272 0.0239

Jupiter 86291-06-03 16:34 G 33238354.01 33238354.19 33238354.37 0.0493 0.0219

Uranus 86291-07-01 11:03 G 33238381.74 33238381.96 33238382.17 0.0136 0.0006

Uranus 86292-02-12 16:48 G 33238608.00 33238608.20 33238608.41 0.0136 0.0036

Uranus 86292-09-25 22:48 G 33238834.26 33238834.45 33238834.64 0.0136 0.0066

Uranus 86293-05-10 04:20 G 33239060.54 33239060.68 33239060.84 0.0136 0.0096

Uranus 86293-12-22 10:05 G 33239286.84 33239286.92 33239287.00 0.0136 0.0125

Jupiter 86296-08-09 12:29 G 33240247.86 33240248.02 33240248.19 0.0534 0.0310

Jupiter 86297-04-04 14:53 G 33240485.93 33240486.12 33240486.30 0.0533 0.0226

Neptune 86300-05-04 05:32 G 33241610.72 33241610.73 33241610.77 0.0089 0.0088

Neptune 86300-12-15 18:58 G 33241836.19 33241836.29 33241836.40 0.0089 0.0078

Neptune 86301-07-29 07:41 G 33242061.70 33242061.82 33242061.98 0.0089 0.0069

Neptune 86302-03-11 21:08 G 33242287.23 33242287.38 33242287.56 0.0089 0.0059

Jupiter 86302-06-16 19:56 G 33242384.17 33242384.33 33242384.49 0.0493 0.0308

Neptune 86302-10-23 10:20 G 33242512.76 33242512.93 33242513.13 0.0089 0.0049

Jupiter 86303-02-07 20:10 G 33242620.14 33242620.34 33242620.54 0.0493 0.0105

Neptune 86303-06-05 23:32 G 33242738.29 33242738.48 33242738.69 0.0089 0.0039

Neptune 86304-01-17 12:44 G 33242963.83 33242964.03 33242964.25 0.0089 0.0029

Neptune 86304-08-30 01:56 G 33243189.37 33243189.58 33243189.80 0.0089 0.0019

Neptune 86305-04-12 15:22 G 33243414.92 33243415.14 33243415.36 0.0089 0.0009

Saturn 86305-08-14 17:03 G 33243539.08 33243539.21 33243539.37 0.0284 0.0206

Neptune 86305-11-24 04:34 G 33243640.46 33243640.69 33243640.91 0.0089 0.0002

Saturn 86306-04-01 06:58 G 33243768.58 33243768.79 33243769.00 0.0286 0.0011

Neptune 86306-07-07 17:32 G 33243866.01 33243866.23 33243866.45 0.0088 0.0011

Saturn 86306-11-16 22:34 G 33243998.29 33243998.44 33243998.60 0.0289 0.0193

Neptune 86307-02-18 06:44 G 33244091.57 33244091.78 33244092.00 0.0088 0.0021

Neptune 86307-10-01 19:41 G 33244317.13 33244317.32 33244317.55 0.0088 0.0032

Jupiter 86308-04-14 23:46 G 33244513.39 33244513.49 33244513.60 0.0533 0.0456

Neptune 86308-05-14 08:53 G 33244542.70 33244542.87 33244543.09 0.0088 0.0042

Jupiter 86308-12-09 00:44 G 33244751.33 33244751.53 33244751.73 0.0534 0.0072

Neptune 86308-12-25 22:34 G 33244768.26 33244768.44 33244768.62 0.0088 0.0051

Neptune 86309-08-08 11:46 G 33244993.83 33244993.99 33244994.16 0.0088 0.0061

Neptune 86310-03-22 00:58 G 33245219.42 33245219.54 33245219.68 0.0088 0.0071

Neptune 86310-11-02 14:10 G 33245445.02 33245445.09 33245445.20 0.0088 0.0081

Mars 86314-01-08 14:53 G 33246607.96 33246608.12 33246608.28 0.1621 0.0737

Jupiter 86314-02-19 23:03 G 33246650.36 33246650.46 33246650.57 0.0493 0.0418

Jupiter 86314-10-14 00:15 G 33246886.31 33246886.51 33246886.72 0.0492 0.0012

Jupiter 86315-06-06 22:48 G 33247122.34 33247122.45 33247122.57 0.0494 0.0399

Saturn 86318-11-02 05:46 G 33248366.69 33248366.74 33248366.80 0.0279 0.0269

Saturn 86319-06-19 18:00 G 33248596.05 33248596.25 33248596.46 0.0276 0.0084

Saturn 86320-02-04 04:48 G 33248825.50 33248825.70 33248825.90 0.0274 0.0097

Jupiter 86320-08-13 12:44 G 33249016.83 33249017.03 33249017.23 0.0534 0.0080

Saturn 86320-09-20 13:27 G 33249055.05 33249055.06 33249055.09 0.0271 0.0270

Jupiter 86321-04-08 16:20 G 33249255.08 33249255.18 33249255.29 0.0533 0.0454

Pluto 86323-12-05 05:32 G 33250225.55 33250225.73 33250225.94 0.0078 0.0038

Pluto 86324-07-17 15:36 G 33250450.96 33250451.15 33250451.37 0.0078 0.0032

Jupiter 86326-06-19 03:22 G 33251152.44 33251152.64 33251152.84 0.0492 0.0123

Jupiter 86327-02-10 02:10 G 33251388.43 33251388.59 33251388.76 0.0493 0.0287

Earth 86327-06-15 14:10 G 33251513.93 33251514.09 33251514.25 0.2666 0.0436

Moon 86327-06-15 20:10 G 33251514.17 33251514.34 33251514.50 0.2664 0.0160 *

Jupiter 86332-04-18 01:56 G 33253282.40 33253282.58 33253282.76 0.0534 0.0229

Uranus 86332-05-21 11:46 G 33253315.94 33253315.99 33253316.08 0.0141 0.0133

Jupiter 86332-12-12 05:03 G 33253520.55 33253520.71 33253520.88 0.0534 0.0309

Uranus 86333-01-02 22:48 G 33253542.31 33253542.45 33253542.62 0.0141 0.0099

Uranus 86333-08-17 10:05 G 33253768.73 33253768.92 33253769.12 0.0141 0.0065

Uranus 86334-03-31 21:36 G 33253995.18 33253995.40 33253995.61 0.0142 0.0030

Uranus 86334-11-13 08:53 G 33254221.65 33254221.87 33254222.09 0.0142 0.0005

Saturn 86335-02-24 23:46 G 33254325.33 33254325.49 33254325.66 0.0284 0.0176

Uranus 86335-06-27 20:10 G 33254448.14 33254448.34 33254448.56 0.0142 0.0040

Saturn 86335-10-12 13:41 G 33254554.87 33254555.07 33254555.28 0.0287 0.0022

Uranus 86336-02-09 07:56 G 33254674.65 33254674.83 33254675.02 0.0142 0.0075

Saturn 86336-05-29 05:17 G 33254784.59 33254784.72 33254784.86 0.0289 0.0224

Uranus 86336-09-22 19:41 G 33254901.19 33254901.32 33254901.46 0.0142 0.0111

Jupiter 86338-02-22 06:15 G 33255418.59 33255418.76 33255418.94 0.0492 0.0238

Jupiter 86338-10-16 05:46 G 33255654.55 33255654.74 33255654.93 0.0492 0.0175

Jupiter 86343-12-22 17:03 G 33257548.06 33257548.21 33257548.35 0.0534 0.0373

Jupiter 86344-08-16 18:58 G 33257786.10 33257786.29 33257786.49 0.0534 0.0161

Mars 86347-11-07 07:56 G 33258963.73 33258963.83 33258963.92 0.1614 0.1349

Saturn 86348-05-14 10:34 G 33259152.84 33259152.94 33259153.04 0.0278 0.0242

Saturn 86348-12-29 22:34 G 33259382.24 33259382.44 33259382.66 0.0276 0.0057

Saturn 86349-08-16 09:08 G 33259611.69 33259611.88 33259612.07 0.0274 0.0123

Jupiter 86349-10-28 06:44 G 33259684.64 33259684.78 33259684.93 0.0493 0.0355

Jupiter 86350-06-21 07:12 G 33259920.60 33259920.80 33259921.00 0.0492 0.0057

Mars 86350-08-15 04:05 G 33259975.52 33259975.67 33259975.83 0.1917 0.0903

Jupiter 86351-02-12 05:32 G 33260156.66 33260156.73 33260156.80 0.0494 0.0461

Jupiter 86355-08-27 07:27 G 33261813.76 33261813.81 33261813.86 0.0533 0.0513

Jupiter 86356-04-21 07:56 G 33262051.62 33262051.83 33262052.03 0.0534 0.0013

Jupiter 86361-07-03 08:53 G 33263950.81 33263950.87 33263950.93 0.0493 0.0467

Jupiter 86362-02-24 10:34 G 33264186.74 33264186.94 33264187.14 0.0492 0.0059

Jupiter 86362-10-18 09:22 G 33264422.75 33264422.89 33264423.04 0.0493 0.0351

Saturn 86364-09-06 08:53 G 33265111.70 33265111.87 33265112.06 0.0284 0.0140

Saturn 86365-04-23 23:17 G 33265341.27 33265341.47 33265341.68 0.0287 0.0059

Saturn 86365-12-09 15:08 G 33265571.05 33265571.13 33265571.22 0.0290 0.0263

Jupiter 86367-12-25 18:00 G 33266317.05 33266317.25 33266317.44 0.0534 0.0143

Jupiter 86368-08-19 21:08 G 33266555.24 33266555.38 33266555.51 0.0533 0.0393

Uranus 86372-09-07 17:32 G 33268035.18 33268035.23 33268035.31 0.0137 0.0130

Uranus 86373-04-22 00:00 G 33268261.37 33268261.50 33268261.66 0.0137 0.0100

Jupiter 86373-10-30 14:24 G 33268452.90 33268453.10 33268453.29 0.0492 0.0172

Uranus 86373-12-04 06:44 G 33268487.60 33268487.78 33268487.97 0.0137 0.0069

Jupiter 86374-06-23 13:41 G 33268688.89 33268689.07 33268689.25 0.0493 0.0241

Uranus 86374-07-18 12:58 G 33268713.83 33268714.04 33268714.25 0.0136 0.0039

Uranus 86375-03-01 18:58 G 33268940.08 33268940.29 33268940.51 0.0136 0.0009

Uranus 86375-10-14 01:12 G 33269166.34 33269166.55 33269166.77 0.0136 0.0022

Uranus 86376-05-27 06:58 G 33269392.60 33269392.79 33269393.00 0.0136 0.0052

Uranus 86377-01-08 12:44 G 33269618.87 33269619.03 33269619.21 0.0136 0.0081

Uranus 86377-08-22 18:15 G 33269845.15 33269845.26 33269845.40 0.0136 0.0111

Saturn 86377-11-24 20:10 G 33269939.20 33269939.34 33269939.48 0.0278 0.0207

Saturn 86378-07-12 07:56 G 33270168.61 33270168.83 33270169.04 0.0276 0.0023

Saturn 86379-02-26 18:00 G 33270398.07 33270398.25 33270398.43 0.0273 0.0157

Jupiter 86379-08-30 06:29 G 33270582.60 33270582.77 33270582.94 0.0534 0.0292

Mars 86379-11-06 02:10 G 33270650.43 33270650.59 33270650.76 0.1619 0.0541

Jupiter 86380-04-24 08:39 G 33270820.68 33270820.86 33270821.04 0.0534 0.0245

Neptune 86383-09-15 05:46 G 33272059.73 33272059.74 33272059.80 0.0089 0.0088

Neptune 86384-04-27 18:58 G 33272285.20 33272285.29 33272285.40 0.0089 0.0078

Neptune 86384-12-09 07:56 G 33272510.70 33272510.83 33272510.97 0.0089 0.0068

Jupiter 86385-07-05 17:03 G 33272719.05 33272719.21 33272719.38 0.0492 0.0286

Neptune 86385-07-22 20:53 G 33272736.21 33272736.37 33272736.53 0.0089 0.0058

Jupiter 86386-02-26 17:03 G 33272955.01 33272955.21 33272955.40 0.0492 0.0127

Neptune 86386-03-05 09:22 G 33272961.72 33272961.89 33272962.09 0.0089 0.0049

Neptune 86386-10-16 22:20 G 33273187.25 33273187.43 33273187.64 0.0089 0.0039

Neptune 86387-05-30 11:17 G 33273412.78 33273412.97 33273413.19 0.0089 0.0029

Neptune 86388-01-11 00:15 G 33273638.30 33273638.51 33273638.73 0.0089 0.0019

Neptune 86388-08-23 13:12 G 33273863.84 33273864.05 33273864.28 0.0089 0.0009

Neptune 86389-04-06 02:10 G 33274089.37 33274089.59 33274089.81 0.0089 0.0002

Neptune 86389-11-17 14:53 G 33274314.91 33274315.12 33274315.34 0.0089 0.0012

Neptune 86390-07-01 03:51 G 33274540.45 33274540.66 33274540.87 0.0089 0.0021

Neptune 86391-02-11 16:34 G 33274765.99 33274766.19 33274766.40 0.0089 0.0031

Jupiter 86391-05-04 19:41 G 33274848.21 33274848.32 33274848.43 0.0534 0.0437

Neptune 86391-09-25 05:17 G 33274991.54 33274991.72 33274991.92 0.0089 0.0041

Jupiter 86391-12-28 21:08 G 33275086.18 33275086.38 33275086.58 0.0534 0.0095

Neptune 86392-05-07 18:00 G 33275217.09 33275217.25 33275217.44 0.0089 0.0051

Neptune 86392-12-19 06:44 G 33275442.64 33275442.78 33275442.95 0.0089 0.0061

Neptune 86393-08-01 19:12 G 33275668.19 33275668.30 33275668.45 0.0089 0.0071

Neptune 86394-03-15 07:56 G 33275893.77 33275893.83 33275893.95 0.0089 0.0081

Saturn 86394-03-19 16:34 G 33275898.00 33275898.19 33275898.39 0.0285 0.0108

Saturn 86394-11-04 06:58 G 33276127.60 33276127.79 33276127.99 0.0288 0.0092

Jupiter 86397-03-10 19:27 G 33276985.19 33276985.31 33276985.43 0.0493 0.0399

Jupiter 86397-11-01 20:10 G 33277221.14 33277221.34 33277221.55 0.0492 0.0013

Jupiter 86398-06-25 18:15 G 33277457.16 33277457.26 33277457.37 0.0493 0.0418

Jupiter 86403-09-02 11:17 G 33279351.77 33279351.97 33279352.18 0.0534 0.0055

Jupiter 86404-04-27 15:08 G 33279590.05 33279590.13 33279590.23 0.0533 0.0480

Saturn 86407-06-07 01:12 G 33280725.39 33280725.55 33280725.72 0.0278 0.0179

Saturn 86408-01-22 12:58 G 33280954.82 33280955.04 33280955.25 0.0275 0.0006

Saturn 86408-09-07 22:48 G 33281184.30 33281184.45 33281184.61 0.0273 0.0183

Jupiter 86409-07-07 21:22 G 33281487.19 33281487.39 33281487.59 0.0492 0.0107

Jupiter 86410-02-28 20:10 G 33281723.18 33281723.34 33281723.50 0.0493 0.0304

Mars 86413-09-03 19:56 G 33283006.28 33283006.33 33283006.38 0.1612 0.1526

Jupiter 86415-05-08 00:44 G 33283617.34 33283617.53 33283617.72 0.0534 0.0203

Jupiter 86416-01-01 03:36 G 33283855.50 33283855.65 33283855.81 0.0533 0.0335

Mars 86416-06-11 07:56 G 33284017.73 33284017.83 33284017.93 0.1920 0.1549

Uranus 86416-09-02 05:46 G 33284100.63 33284100.74 33284100.89 0.0141 0.0114

Uranus 86417-04-16 17:03 G 33284327.04 33284327.21 33284327.40 0.0141 0.0080

Uranus 86417-11-29 04:20 G 33284553.48 33284553.68 33284553.90 0.0142 0.0046

Uranus 86418-07-13 15:51 G 33284779.94 33284780.16 33284780.38 0.0142 0.0011

Uranus 86419-02-25 03:08 G 33285006.41 33285006.63 33285006.85 0.0142 0.0024

Uranus 86419-10-09 14:39 G 33285232.91 33285233.11 33285233.31 0.0142 0.0059

Uranus 86420-05-23 02:24 G 33285459.44 33285459.60 33285459.77 0.0142 0.0095

Uranus 86421-01-04 14:10 G 33285686.01 33285686.09 33285686.19 0.0142 0.0130

Jupiter 86421-03-13 00:15 G 33285753.33 33285753.51 33285753.70 0.0492 0.0222

Jupiter 86421-11-04 00:00 G 33285989.31 33285989.50 33285989.69 0.0493 0.0192

Saturn 86423-02-12 12:15 G 33286454.95 33286455.01 33286455.09 0.0282 0.0264

Saturn 86423-09-30 01:27 G 33286684.36 33286684.56 33286684.76 0.0285 0.0072

Saturn 86424-05-16 16:05 G 33286913.99 33286914.17 33286914.36 0.0288 0.0129

Jupiter 86427-01-10 11:32 G 33287882.83 33287882.98 33287883.13 0.0534 0.0353

Jupiter 86427-09-05 13:12 G 33288120.86 33288121.05 33288121.24 0.0534 0.0182

Jupiter 86432-11-16 03:22 G 33290019.50 33290019.64 33290019.79 0.0493 0.0335

Earth 86432-12-18 08:10 G 33290051.69 33290051.84 33290052.00 0.2666 0.0266

Moon 86432-12-18 13:41 G 33290051.92 33290052.07 33290052.22 0.2667 0.0621 *

Jupiter 86433-07-10 04:05 G 33290255.47 33290255.67 33290255.87 0.0492 0.0079

Jupiter 86434-03-03 02:24 G 33290491.56 33290491.60 33290491.64 0.0494 0.0482

Saturn 86436-12-17 11:03 G 33291511.79 33291511.96 33291512.16 0.0277 0.0145

Saturn 86437-08-03 22:34 G 33291741.23 33291741.44 33291741.65 0.0275 0.0040

Saturn 86438-03-21 07:56 G 33291970.72 33291970.83 33291970.97 0.0272 0.0218

Jupiter 86438-09-15 00:29 G 33292148.46 33292148.52 33292148.60 0.0533 0.0496

Jupiter 86439-05-11 00:58 G 33292386.33 33292386.54 33292386.74 0.0534 0.0032

Jupiter 86444-07-22 05:46 G 33294285.66 33294285.74 33294285.83 0.0493 0.0447

Jupiter 86445-03-15 07:27 G 33294521.60 33294521.81 33294522.01 0.0492 0.0038

Mars 86445-09-02 14:24 G 33294692.93 33294693.10 33294693.27 0.1617 0.0363

Jupiter 86445-11-06 05:46 G 33294757.61 33294757.74 33294757.87 0.0493 0.0372

Jupiter 86451-01-13 13:27 G 33296651.86 33296652.06 33296652.25 0.0534 0.0123

Jupiter 86451-09-08 17:03 G 33296890.08 33296890.21 33296890.34 0.0533 0.0416

Saturn 86452-08-24 20:24 G 33297241.24 33297241.35 33297241.48 0.0283 0.0233

Saturn 86453-04-11 09:51 G 33297470.70 33297470.91 33297471.11 0.0286 0.0039

Saturn 86453-11-27 00:29 G 33297700.36 33297700.52 33297700.70 0.0288 0.0164

Jupiter 86456-11-18 10:05 G 33298787.73 33298787.92 33298788.12 0.0492 0.0153

Uranus 86456-12-20 08:39 G 33298819.76 33298819.86 33298819.99 0.0137 0.0114

Jupiter 86457-07-12 09:08 G 33299023.71 33299023.88 33299024.05 0.0493 0.0260

Uranus 86457-08-03 15:08 G 33299045.97 33299046.13 33299046.31 0.0137 0.0083

Uranus 86458-03-17 21:36 G 33299272.21 33299272.40 33299272.60 0.0137 0.0053

Uranus 86458-10-30 04:05 G 33299498.46 33299498.67 33299498.88 0.0136 0.0023

Uranus 86459-06-13 10:05 G 33299724.71 33299724.92 33299725.14 0.0136 0.0008

Uranus 86460-01-25 16:05 G 33299950.97 33299951.17 33299951.38 0.0136 0.0037

Uranus 86460-09-07 21:51 G 33300177.23 33300177.41 33300177.60 0.0136 0.0067

Uranus 86461-04-22 03:22 G 33300403.51 33300403.64 33300403.81 0.0136 0.0097

Uranus 86461-12-04 09:08 G 33300629.81 33300629.88 33300629.97 0.0136 0.0126

Jupiter 86462-09-18 03:51 G 33300917.49 33300917.66 33300917.84 0.0534 0.0270

Jupiter 86463-05-14 06:44 G 33301155.61 33301155.78 33301155.96 0.0534 0.0271

Neptune 86465-03-19 06:00 G 33301830.68 33301830.75 33301830.85 0.0089 0.0081

Neptune 86465-10-30 19:12 G 33302056.18 33302056.30 33302056.45 0.0089 0.0071

Neptune 86466-06-13 08:24 G 33302281.70 33302281.85 33302282.02 0.0089 0.0061

Saturn 86466-06-29 16:20 G 33302298.00 33302298.18 33302298.39 0.0277 0.0116

Neptune 86467-01-24 21:51 G 33302507.23 33302507.41 33302507.59 0.0089 0.0051

Saturn 86467-02-14 03:36 G 33302527.44 33302527.65 33302527.86 0.0274 0.0067

Neptune 86467-09-07 11:03 G 33302732.77 33302732.96 33302733.16 0.0089 0.0041

Saturn 86467-10-01 12:44 G 33302756.95 33302757.03 33302757.14 0.0272 0.0244

Neptune 86468-04-20 00:15 G 33302958.31 33302958.51 33302958.72 0.0089 0.0031

Jupiter 86468-07-24 11:17 G 33303053.80 33303053.97 33303054.14 0.0492 0.0270

Neptune 86468-12-01 13:12 G 33303183.84 33303184.05 33303184.27 0.0089 0.0021

Jupiter 86469-03-17 11:03 G 33303289.76 33303289.96 33303290.15 0.0492 0.0144

Neptune 86469-07-15 02:24 G 33303409.39 33303409.60 33303409.83 0.0089 0.0011

Neptune 86470-02-25 15:51 G 33303634.94 33303635.16 33303635.38 0.0089 0.0001

Neptune 86470-10-09 05:03 G 33303860.49 33303860.71 33303860.93 0.0089 0.0009

Neptune 86471-05-22 18:15 G 33304086.04 33304086.26 33304086.47 0.0088 0.0019

Neptune 86472-01-03 07:12 G 33304311.60 33304311.80 33304312.01 0.0088 0.0029

Neptune 86472-08-15 20:24 G 33304537.16 33304537.35 33304537.55 0.0088 0.0039

Neptune 86473-03-29 09:36 G 33304762.73 33304762.90 33304763.10 0.0088 0.0049

Neptune 86473-11-09 22:48 G 33304988.30 33304988.45 33304988.63 0.0088 0.0059

Jupiter 86474-05-23 18:00 G 33305183.13 33305183.25 33305183.38 0.0534 0.0413

Neptune 86474-06-23 12:00 G 33305213.87 33305214.00 33305214.15 0.0088 0.0069

Jupiter 86475-01-16 19:41 G 33305421.12 33305421.32 33305421.52 0.0534 0.0122

Neptune 86475-02-04 01:12 G 33305439.46 33305439.55 33305439.66 0.0088 0.0078

Neptune 86475-09-17 14:39 G 33305665.11 33305665.11 33305665.13 0.0088 0.0088

Jupiter 86480-03-29 13:41 G 33307319.94 33307320.07 33307320.20 0.0493 0.0384

Jupiter 86480-11-20 14:24 G 33307555.90 33307556.10 33307556.31 0.0492 0.0030

Jupiter 86481-07-14 12:44 G 33307791.94 33307792.03 33307792.13 0.0494 0.0436

Saturn 86482-03-07 03:51 G 33308027.52 33308027.66 33308027.81 0.0283 0.0200

Saturn 86482-10-22 17:32 G 33308257.02 33308257.23 33308257.44 0.0286 0.0004

Saturn 86483-06-09 08:39 G 33308486.71 33308486.86 33308487.02 0.0288 0.0198

Pluto 86484-03-06 23:03 G 33308758.35 33308758.46 33308758.62 0.0065 0.0052

Pluto 86484-10-18 03:51 G 33308983.45 33308983.66 33308983.88 0.0066 0.0011

Pluto 86485-05-31 07:56 G 33309208.65 33309208.83 33309209.04 0.0066 0.0030

Jupiter 86486-09-21 05:46 G 33309686.53 33309686.74 33309686.94 0.0534 0.0034

Jupiter 86487-05-17 09:08 G 33309924.82 33309924.88 33309924.95 0.0533 0.0500

Jupiter 86492-07-26 18:15 G 33311822.06 33311822.26 33311822.47 0.0492 0.0085

Jupiter 86493-03-19 17:17 G 33312058.07 33312058.22 33312058.38 0.0493 0.0327

Saturn 86495-05-25 13:41 G 33312855.03 33312855.07 33312855.14 0.0279 0.0268

Saturn 86496-01-10 02:24 G 33313084.39 33313084.60 33313084.80 0.0276 0.0081

Saturn 86496-08-26 12:58 G 33313313.85 33313314.04 33313314.24 0.0274 0.0101

Jupiter 86498-05-26 17:46 G 33313952.05 33313952.24 33313952.43 0.0534 0.0185

Jupiter 86499-01-19 20:24 G 33314190.21 33314190.35 33314190.51 0.0533 0.0354

Uranus 86500-05-03 12:58 G 33314658.97 33314659.04 33314659.15 0.0141 0.0129

Uranus 86500-12-16 00:00 G 33314885.35 33314885.50 33314885.68 0.0141 0.0096

Uranus 86501-07-30 11:17 G 33315111.78 33315111.97 33315112.18 0.0141 0.0061

Uranus 86502-03-13 22:34 G 33315338.23 33315338.44 33315338.66 0.0142 0.0026

Uranus 86502-10-26 10:05 G 33315564.70 33315564.92 33315565.14 0.0142 0.0009

Uranus 86503-06-09 21:22 G 33315791.19 33315791.39 33315791.61 0.0142 0.0044

Uranus 86504-01-22 08:53 G 33316017.70 33316017.87 33316018.07 0.0142 0.0079

Jupiter 86504-04-01 21:22 G 33316088.20 33316088.39 33316088.58 0.0492 0.0200

Uranus 86504-09-04 20:39 G 33316244.24 33316244.36 33316244.50 0.0142 0.0114

Jupiter 86504-11-23 20:39 G 33316324.18 33316324.36 33316324.55 0.0492 0.0214

Jupiter 86510-01-30 06:44 G 33318217.62 33318217.78 33318217.93 0.0534 0.0334

Jupiter 86510-09-25 08:39 G 33318455.68 33318455.86 33318456.05 0.0534 0.0205

Mars 86511-07-02 02:10 G 33318735.41 33318735.59 33318735.76 0.1615 0.0178

Saturn 86511-09-18 11:46 G 33318813.83 33318813.99 33318814.17 0.0284 0.0169

Saturn 86512-05-05 01:41 G 33319043.36 33319043.57 33319043.78 0.0287 0.0029

Saturn 86512-12-20 17:03 G 33319273.09 33319273.21 33319273.33 0.0289 0.0233

Mars 86514-04-09 07:56 G 33319747.74 33319747.83 33319747.92 0.1915 0.1593

Jupiter 86515-12-06 23:46 G 33320354.33 33320354.49 33320354.65 0.0493 0.0315

Jupiter 86516-07-30 00:00 G 33320590.30 33320590.50 33320590.70 0.0492 0.0099

Jupiter 86521-10-04 21:36 G 33322483.32 33322483.40 33322483.49 0.0534 0.0476

Jupiter 86522-05-30 22:34 G 33322721.24 33322721.44 33322721.65 0.0535 0.0056

Saturn 86524-12-05 19:27 G 33323641.21 33323641.31 33323641.43 0.0278 0.0238

Saturn 86525-07-23 07:41 G 33323870.61 33323870.82 33323871.03 0.0276 0.0052

Saturn 86526-03-09 18:00 G 33324100.07 33324100.25 33324100.45 0.0274 0.0129

Jupiter 86527-08-12 00:44 G 33324620.44 33324620.53 33324620.63 0.0493 0.0430

Jupiter 86528-04-04 01:56 G 33324856.38 33324856.58 33324856.79 0.0492 0.0019

Jupiter 86528-11-26 00:15 G 33325092.39 33325092.51 33325092.64 0.0493 0.0391

Jupiter 86534-02-02 12:15 G 33326986.81 33326987.01 33326987.21 0.0535 0.0094

Jupiter 86534-09-28 15:51 G 33327225.06 33327225.16 33327225.28 0.0533 0.0444

Jupiter 86539-12-09 05:03 G 33329122.52 33329122.71 33329122.91 0.0492 0.0134

Jupiter 86540-08-01 04:20 G 33329358.51 33329358.68 33329358.85 0.0493 0.0280

Uranus 86540-08-20 18:00 G 33329378.17 33329378.25 33329378.33 0.0137 0.0127

Saturn 86541-03-30 18:00 G 33329600.07 33329600.25 33329600.43 0.0284 0.0138

Uranus 86541-04-04 00:29 G 33329604.37 33329604.52 33329604.67 0.0137 0.0097

Saturn 86541-11-15 08:10 G 33329829.63 33329829.84 33329830.04 0.0287 0.0061

Uranus 86541-11-16 06:58 G 33329830.60 33329830.79 33329830.98 0.0137 0.0067

Uranus 86542-06-30 13:12 G 33330056.84 33330057.05 33330057.26 0.0136 0.0037

Saturn 86542-07-02 23:46 G 33330059.41 33330059.49 33330059.58 0.0289 0.0265

Uranus 86543-02-11 19:27 G 33330283.09 33330283.31 33330283.52 0.0136 0.0007

Uranus 86543-09-26 01:27 G 33330509.35 33330509.56 33330509.77 0.0136 0.0024

Uranus 86544-05-09 07:12 G 33330735.61 33330735.80 33330736.00 0.0136 0.0053

Uranus 86544-12-21 12:44 G 33330961.87 33330962.03 33330962.21 0.0136 0.0083

Uranus 86545-08-04 18:29 G 33331188.16 33331188.27 33331188.39 0.0136 0.0112

Jupiter 86545-10-07 23:17 G 33331252.29 33331252.47 33331252.65 0.0534 0.0247

Jupiter 86546-06-03 01:27 G 33331490.39 33331490.56 33331490.73 0.0534 0.0293

Neptune 86548-07-31 06:29 G 33332279.70 33332279.77 33332279.88 0.0089 0.0081

Neptune 86549-03-13 19:27 G 33332505.20 33332505.31 33332505.46 0.0089 0.0071

Neptune 86549-10-25 08:24 G 33332730.71 33332730.85 33332731.02 0.0089 0.0061

Neptune 86550-06-07 21:22 G 33332956.22 33332956.39 33332956.58 0.0089 0.0051

Neptune 86551-01-19 10:20 G 33333181.74 33333181.93 33333182.13 0.0089 0.0041

Jupiter 86551-08-14 08:24 G 33333388.68 33333388.85 33333389.03 0.0493 0.0248

Neptune 86551-09-01 23:17 G 33333407.27 33333407.47 33333407.68 0.0089 0.0031

Jupiter 86552-04-06 08:39 G 33333624.67 33333624.86 33333625.05 0.0493 0.0168

Neptune 86552-04-14 12:15 G 33333632.80 33333633.01 33333633.22 0.0089 0.0021

Neptune 86552-11-26 00:58 G 33333858.33 33333858.54 33333858.76 0.0089 0.0011

Neptune 86553-07-09 13:56 G 33334083.86 33334084.08 33334084.30 0.0089 0.0001

Neptune 86554-02-20 02:39 G 33334309.40 33334309.61 33334309.83 0.0089 0.0009

Saturn 86554-06-18 04:48 G 33334427.56 33334427.70 33334427.85 0.0278 0.0206

Neptune 86554-10-03 15:36 G 33334534.94 33334535.15 33334535.37 0.0089 0.0019

Saturn 86555-02-02 16:34 G 33334656.98 33334657.19 33334657.41 0.0276 0.0020

Neptune 86555-05-17 04:20 G 33334760.48 33334760.68 33334760.90 0.0089 0.0029

Saturn 86555-09-20 02:39 G 33334886.44 33334886.61 33334886.79 0.0273 0.0161

Neptune 86555-12-28 17:03 G 33334986.03 33334986.21 33334986.42 0.0089 0.0039

Neptune 86556-08-10 05:46 G 33335211.57 33335211.74 33335211.94 0.0089 0.0049

Neptune 86557-03-23 18:29 G 33335437.12 33335437.27 33335437.45 0.0089 0.0059

Jupiter 86557-06-12 12:15 G 33335517.88 33335518.01 33335518.15 0.0533 0.0394

Neptune 86557-11-04 07:12 G 33335662.68 33335662.80 33335662.96 0.0089 0.0069

Jupiter 86558-02-05 13:12 G 33335755.86 33335756.05 33335756.25 0.0534 0.0143

Neptune 86558-06-17 20:24 G 33335888.25 33335888.35 33335888.45 0.0089 0.0078

Neptune 86559-01-29 08:53 G 33336113.86 33336113.87 33336113.91 0.0089 0.0088

Moon 86562-06-18 21:22 G 33337350.34 33337350.39 33337350.44 0.2660 0.2544

Jupiter 86563-04-19 11:03 G 33337654.82 33337654.96 33337655.10 0.0493 0.0363

Jupiter 86563-12-11 12:00 G 33337890.80 33337891.00 33337891.21 0.0492 0.0053

Jupiter 86564-08-03 10:20 G 33338126.86 33338126.93 33338127.00 0.0494 0.0459

Jupiter 86569-10-11 01:27 G 33340021.36 33340021.56 33340021.77 0.0534 0.0015

Jupiter 86570-06-06 05:32 G 33340259.70 33340259.73 33340259.77 0.0533 0.0523

Moon 86570-06-16 07:41 G 33340269.67 33340269.82 33340269.98 0.2667 0.0779

Earth 86570-06-16 13:41 G 33340269.91 33340270.07 33340270.23 0.2667 0.0415 *

Saturn 86570-10-11 01:27 G 33340386.37 33340386.56 33340386.76 0.0285 0.0107

Saturn 86571-05-28 15:51 G 33340615.96 33340616.16 33340616.36 0.0287 0.0094

Pluto 86572-06-20 13:56 G 33341004.86 33341005.08 33341005.30 0.0078 0.0015

Pluto 86573-01-31 23:17 G 33341230.34 33341230.47 33341230.65 0.0078 0.0055

Jupiter 86574-12-23 13:12 G 33341921.00 33341921.05 33341921.10 0.0493 0.0475

Jupiter 86575-08-16 15:22 G 33342156.94 33342157.14 33342157.34 0.0492 0.0063

Jupiter 86576-04-08 13:56 G 33342392.94 33342393.08 33342393.22 0.0493 0.0349

Mars 86577-04-28 14:10 G 33342777.91 33342778.09 33342778.26 0.1614 0.0018

Mars 86580-02-04 11:17 G 33343789.82 33343789.97 33343790.12 0.1917 0.0932

Jupiter 86581-06-15 15:36 G 33344286.96 33344287.15 33344287.35 0.0534 0.0161

Jupiter 86582-02-08 19:12 G 33344525.16 33344525.30 33344525.45 0.0534 0.0382

Saturn 86583-12-29 09:51 G 33345213.75 33345213.91 33345214.08 0.0277 0.0177

Saturn 86584-08-14 21:22 G 33345443.18 33345443.39 33345443.61 0.0275 0.0008

Uranus 86584-08-15 06:44 G 33345443.65 33345443.78 33345443.92 0.0141 0.0111

Uranus 86585-03-29 17:46 G 33345670.06 33345670.24 33345670.43 0.0141 0.0077

Saturn 86585-04-01 07:12 G 33345672.65 33345672.80 33345672.96 0.0273 0.0187

Uranus 86585-11-11 04:48 G 33345896.50 33345896.70 33345896.92 0.0142 0.0043

Uranus 86586-06-25 16:20 G 33346122.96 33346123.18 33346123.40 0.0142 0.0007

Uranus 86587-02-07 03:36 G 33346349.44 33346349.65 33346349.87 0.0142 0.0028

Jupiter 86587-04-21 17:17 G 33346423.03 33346423.22 33346423.41 0.0492 0.0180

Uranus 86587-09-21 15:22 G 33346575.94 33346576.14 33346576.34 0.0142 0.0063

Jupiter 86587-12-13 16:20 G 33346659.00 33346659.18 33346659.36 0.0492 0.0235

Uranus 86588-05-05 03:08 G 33346802.47 33346802.63 33346802.79 0.0142 0.0098

Uranus 86588-12-17 14:39 G 33347029.05 33347029.11 33347029.20 0.0143 0.0133

Jupiter 86593-02-18 06:15 G 33348552.60 33348552.76 33348552.93 0.0534 0.0307

Jupiter 86593-10-14 08:39 G 33348790.68 33348790.86 33348791.04 0.0534 0.0235

Jupiter 86598-12-25 19:56 G 33350689.17 33350689.33 33350689.50 0.0492 0.0295

Jupiter 86599-08-18 20:24 G 33350925.15 33350925.35 33350925.55 0.0492 0.0121

Saturn 86599-09-05 16:48 G 33350943.15 33350943.20 33350943.26 0.0282 0.0272

Saturn 86600-04-23 05:32 G 33351172.54 33351172.73 33351172.94 0.0285 0.0080

Saturn 86600-12-08 20:10 G 33351402.15 33351402.34 33351402.53 0.0287 0.0122

Jupiter 86604-10-24 18:29 G 33352818.17 33352818.27 33352818.38 0.0533 0.0453

Jupiter 86605-06-19 18:58 G 33353056.09 33353056.29 33353056.49 0.0534 0.0080

Jupiter 86610-08-31 22:34 G 33354955.33 33354955.44 33354955.55 0.0493 0.0409

Jupiter 86611-04-25 00:15 G 33355191.31 33355191.51 33355191.72 0.0492 0.0012

Jupiter 86611-12-16 23:03 G 33355427.36 33355427.46 33355427.57 0.0494 0.0417

Saturn 86613-07-11 18:15 G 33356000.08 33356000.26 33356000.44 0.0278 0.0146

Saturn 86614-02-26 05:32 G 33356229.52 33356229.73 33356229.94 0.0275 0.0039

Saturn 86614-10-13 14:53 G 33356459.00 33356459.12 33356459.26 0.0273 0.0218

Jupiter 86617-02-22 07:27 G 33357321.61 33357321.81 33357322.01 0.0534 0.0072

Jupiter 86617-10-18 10:34 G 33357559.85 33357559.94 33357560.04 0.0533 0.0466

Jupiter 86622-12-29 03:36 G 33359457.45 33359457.65 33359457.85 0.0492 0.0110

Jupiter 86623-08-22 02:53 G 33359693.46 33359693.62 33359693.78 0.0493 0.0305

Uranus 86624-12-03 09:51 G 33360162.80 33360162.91 33360163.05 0.0137 0.0111

Uranus 86625-07-17 16:20 G 33360389.02 33360389.18 33360389.37 0.0137 0.0081

Uranus 86626-02-28 22:34 G 33360615.26 33360615.44 33360615.66 0.0136 0.0051

Uranus 86626-10-13 05:03 G 33360841.51 33360841.71 33360841.93 0.0136 0.0021

Uranus 86627-05-27 11:17 G 33361067.75 33361067.97 33361068.18 0.0136 0.0010

Uranus 86628-01-08 17:03 G 33361294.01 33361294.21 33361294.42 0.0136 0.0040

Uranus 86628-08-21 22:48 G 33361520.27 33361520.45 33361520.63 0.0136 0.0069

Jupiter 86628-10-27 19:56 G 33361587.15 33361587.33 33361587.52 0.0534 0.0225

Saturn 86629-03-18 23:03 G 33361729.37 33361729.46 33361729.58 0.0283 0.0244

Uranus 86629-04-05 04:05 G 33361746.54 33361746.67 33361746.83 0.0136 0.0099

Neptune 86629-06-22 16:34 G 33361825.15 33361825.19 33361825.29 0.0089 0.0084

Jupiter 86629-06-22 22:34 G 33361825.28 33361825.44 33361825.61 0.0534 0.0318 *

Saturn 86629-11-03 12:29 G 33361958.81 33361959.02 33361959.23 0.0286 0.0049

Uranus 86629-11-17 09:36 G 33361972.85 33361972.90 33361972.99 0.0136 0.0128

Neptune 86630-02-03 06:00 G 33362050.65 33362050.75 33362050.89 0.0089 0.0074

Saturn 86630-06-21 03:08 G 33362188.46 33362188.63 33362188.81 0.0288 0.0154

Neptune 86630-09-16 19:12 G 33362276.17 33362276.30 33362276.47 0.0089 0.0064

Neptune 86631-04-30 08:39 G 33362501.70 33362501.86 33362502.05 0.0089 0.0054

Neptune 86631-12-11 21:51 G 33362727.23 33362727.41 33362727.61 0.0089 0.0044

Neptune 86632-07-24 11:03 G 33362952.76 33362952.96 33362953.17 0.0089 0.0034

Neptune 86633-03-07 00:15 G 33363178.31 33363178.51 33363178.74 0.0089 0.0024

Neptune 86633-10-18 13:41 G 33363403.85 33363404.07 33363404.29 0.0089 0.0014

Neptune 86634-06-01 02:53 G 33363629.40 33363629.62 33363629.84 0.0089 0.0004

Jupiter 86634-09-03 06:44 G 33363723.60 33363723.78 33363723.96 0.0492 0.0225

Neptune 86635-01-12 15:51 G 33363854.94 33363855.16 33363855.39 0.0089 0.0007

Jupiter 86635-04-27 06:29 G 33363959.59 33363959.77 33363959.96 0.0492 0.0192

Neptune 86635-08-26 05:03 G 33364080.50 33364080.71 33364080.93 0.0088 0.0016

Neptune 86636-04-07 18:15 G 33364306.06 33364306.26 33364306.48 0.0088 0.0027

Neptune 86636-11-19 07:12 G 33364531.61 33364531.80 33364532.02 0.0088 0.0037

Neptune 86637-07-02 20:24 G 33364757.17 33364757.35 33364757.55 0.0088 0.0047

Neptune 86638-02-13 09:36 G 33364982.74 33364982.90 33364983.08 0.0088 0.0056

Neptune 86638-09-26 22:34 G 33365208.32 33365208.44 33365208.61 0.0088 0.0067

Neptune 86639-05-10 11:46 G 33365433.91 33365433.99 33365434.13 0.0088 0.0077

Neptune 86639-12-22 00:58 G 33365659.52 33365659.54 33365659.62 0.0088 0.0087

Jupiter 86640-07-02 10:48 G 33365852.80 33365852.95 33365853.09 0.0534 0.0370

Jupiter 86641-02-25 12:44 G 33366090.83 33366091.03 33366091.22 0.0534 0.0171

Saturn 86643-01-21 22:34 G 33366786.25 33366786.44 33366786.63 0.0277 0.0118

Mars 86643-02-25 01:56 G 33366820.41 33366820.58 33366820.76 0.1612 0.0183

Saturn 86643-09-08 09:36 G 33367015.69 33367015.90 33367016.11 0.0274 0.0065

Saturn 86644-04-24 18:44 G 33367245.19 33367245.28 33367245.39 0.0272 0.0242

Mars 86645-12-02 14:24 G 33367831.93 33367832.10 33367832.27 0.1920 0.0258

Jupiter 86646-05-09 08:24 G 33367989.71 33367989.85 33367990.01 0.0493 0.0341

Jupiter 86646-12-31 09:08 G 33368225.68 33368225.88 33368226.08 0.0492 0.0076

Jupiter 86647-08-24 07:12 G 33368461.77 33368461.80 33368461.85 0.0493 0.0482

Jupiter 86652-03-07 02:10 G 33370118.54 33370118.59 33370118.65 0.0533 0.0509

Jupiter 86652-10-31 02:39 G 33370356.40 33370356.61 33370356.81 0.0535 0.0024

Jupiter 86658-01-12 11:03 G 33372255.89 33372255.96 33372256.04 0.0493 0.0453

Jupiter 86658-09-05 13:12 G 33372491.84 33372492.05 33372492.25 0.0492 0.0040

Saturn 86658-09-29 01:41 G 33372515.45 33372515.57 33372515.71 0.0283 0.0220

Jupiter 86659-04-29 11:46 G 33372727.86 33372727.99 33372728.12 0.0493 0.0373

Saturn 86659-05-16 15:08 G 33372744.93 33372745.13 33372745.34 0.0286 0.0025

Saturn 86660-01-01 06:00 G 33372974.60 33372974.75 33372974.92 0.0288 0.0179

Jupiter 86664-07-05 14:10 G 33374621.89 33374622.09 33374622.29 0.0534 0.0133

Jupiter 86665-02-28 17:03 G 33374860.08 33374860.21 33374860.34 0.0533 0.0408

Uranus 86668-04-15 11:46 G 33376001.91 33376001.99 33376002.10 0.0141 0.0127

Uranus 86668-11-27 22:48 G 33376228.30 33376228.45 33376228.63 0.0141 0.0094

Uranus 86669-07-12 09:51 G 33376454.72 33376454.91 33376455.12 0.0142 0.0060

Uranus 86670-02-23 21:08 G 33376681.17 33376681.38 33376681.60 0.0142 0.0025

Jupiter 86670-05-11 16:05 G 33376757.98 33376758.17 33376758.37 0.0493 0.0156

Uranus 86670-10-08 08:39 G 33376907.64 33376907.86 33376908.08 0.0142 0.0010

Jupiter 86671-01-02 16:05 G 33376994.00 33376994.17 33376994.34 0.0493 0.0262

Uranus 86671-05-22 20:10 G 33377134.14 33377134.34 33377134.56 0.0142 0.0045

Saturn 86671-12-17 16:48 G 33377343.18 33377343.20 33377343.22 0.0280 0.0278

Uranus 86672-01-04 07:41 G 33377360.65 33377360.82 33377361.01 0.0142 0.0080

Saturn 86672-08-03 05:17 G 33377572.52 33377572.72 33377572.93 0.0277 0.0090

Uranus 86672-08-17 19:12 G 33377587.19 33377587.30 33377587.45 0.0142 0.0116

Saturn 86673-03-20 16:20 G 33377801.98 33377802.18 33377802.38 0.0274 0.0094

Saturn 86673-11-05 01:12 G 33378031.54 33378031.55 33378031.58 0.0272 0.0270

Moon 86675-12-21 06:44 G 33378807.62 33378807.78 33378807.93 0.2662 0.0812

Earth 86675-12-21 11:46 G 33378807.83 33378807.99 33378808.14 0.2665 0.0063 *

Jupiter 86676-03-10 03:36 G 33378887.48 33378887.65 33378887.82 0.0533 0.0282

Jupiter 86676-11-03 05:03 G 33379125.54 33379125.71 33379125.89 0.0534 0.0260

Jupiter 86682-01-14 19:12 G 33381024.13 33381024.30 33381024.47 0.0493 0.0271

Jupiter 86682-09-07 20:10 G 33381260.14 33381260.34 33381260.53 0.0492 0.0148

Jupiter 86687-11-13 16:48 G 33383153.08 33383153.20 33383153.32 0.0533 0.0429

Saturn 86688-04-10 06:58 G 33383301.65 33383301.79 33383301.96 0.0283 0.0193

Jupiter 86688-07-08 17:17 G 33383391.02 33383391.22 33383391.42 0.0534 0.0107

Saturn 86688-11-25 20:39 G 33383531.15 33383531.36 33383531.57 0.0286 0.0006

Saturn 86689-07-13 11:32 G 33383760.85 33383760.98 33383761.13 0.0289 0.0209

Jupiter 86693-09-19 22:05 G 33385290.30 33385290.42 33385290.55 0.0493 0.0385

Jupiter 86694-05-13 23:32 G 33385526.28 33385526.48 33385526.69 0.0492 0.0034

Jupiter 86695-01-04 22:05 G 33385762.33 33385762.42 33385762.51 0.0493 0.0441

Jupiter 86700-03-14 07:27 G 33387656.61 33387656.81 33387657.02 0.0534 0.0046

Jupiter 86700-11-07 11:17 G 33387894.91 33387894.97 33387895.05 0.0533 0.0497

Saturn 86701-06-29 20:39 G 33388129.28 33388129.36 33388129.46 0.0279 0.0250

Saturn 86702-02-14 09:08 G 33388358.67 33388358.88 33388359.09 0.0276 0.0063

Saturn 86702-10-01 19:41 G 33388588.12 33388588.32 33388588.51 0.0274 0.0119

Jupiter 86706-01-18 02:24 G 33389792.40 33389792.60 33389792.80 0.0492 0.0084

Jupiter 86706-09-11 01:12 G 33390028.41 33390028.55 33390028.71 0.0493 0.0331

Uranus 86708-08-03 19:12 G 33390721.23 33390721.30 33390721.41 0.0137 0.0124

Mars 86708-12-23 14:10 G 33390862.92 33390863.09 33390863.27 0.1611 0.0356

Uranus 86709-03-18 01:56 G 33390947.43 33390947.58 33390947.74 0.0137 0.0094

Uranus 86709-10-30 08:24 G 33391173.67 33391173.85 33391174.05 0.0136 0.0064

Uranus 86710-06-13 14:39 G 33391399.91 33391400.11 33391400.32 0.0136 0.0034

Uranus 86711-01-25 20:39 G 33391626.15 33391626.36 33391626.58 0.0136 0.0005

Uranus 86711-09-09 02:39 G 33391852.40 33391852.61 33391852.82 0.0136 0.0026

Mars 86711-09-30 17:46 G 33391874.07 33391874.24 33391874.41 0.1923 0.0401

Jupiter 86711-11-17 22:05 G 33391922.24 33391922.42 33391922.61 0.0534 0.0192

Uranus 86712-04-22 08:10 G 33392078.65 33392078.84 33392079.04 0.0136 0.0056

Jupiter 86712-07-13 01:12 G 33392160.40 33392160.55 33392160.70 0.0534 0.0353

Neptune 86712-11-03 18:29 G 33392274.20 33392274.27 33392274.35 0.0089 0.0083

Uranus 86712-12-04 13:56 G 33392304.92 33392305.08 33392305.25 0.0136 0.0085

Neptune 86713-06-17 06:44 G 33392499.69 33392499.78 33392499.93 0.0089 0.0074

Uranus 86713-07-18 19:27 G 33392531.20 33392531.31 33392531.43 0.0136 0.0114

Neptune 86714-01-28 19:41 G 33392725.19 33392725.32 33392725.50 0.0089 0.0064

Neptune 86714-09-11 08:53 G 33392950.71 33392950.87 33392951.06 0.0089 0.0054

Neptune 86715-04-24 21:51 G 33393176.23 33393176.41 33393176.61 0.0089 0.0044

Neptune 86715-12-06 10:34 G 33393401.75 33393401.94 33393402.16 0.0089 0.0034

Neptune 86716-07-18 23:32 G 33393627.28 33393627.48 33393627.70 0.0089 0.0024

Neptune 86717-03-01 12:29 G 33393852.81 33393853.02 33393853.24 0.0089 0.0014

Jupiter 86717-09-23 06:00 G 33394058.56 33394058.75 33394058.94 0.0492 0.0200

Neptune 86717-10-13 01:27 G 33394078.35 33394078.56 33394078.78 0.0089 0.0004

Saturn 86717-10-22 08:10 G 33394087.68 33394087.84 33394088.01 0.0283 0.0171

Jupiter 86718-05-17 05:46 G 33394294.56 33394294.74 33394294.92 0.0492 0.0218

Neptune 86718-05-26 14:24 G 33394303.88 33394304.10 33394304.32 0.0089 0.0006

Saturn 86718-06-08 21:51 G 33394317.20 33394317.41 33394317.62 0.0286 0.0027

Neptune 86719-01-07 03:08 G 33394529.42 33394529.63 33394529.85 0.0089 0.0017

Saturn 86719-01-24 13:12 G 33394546.93 33394547.05 33394547.17 0.0289 0.0231

Neptune 86719-08-20 15:51 G 33394754.97 33394755.16 33394755.38 0.0089 0.0027

Neptune 86720-04-02 04:34 G 33394980.51 33394980.69 33394980.91 0.0089 0.0037

Neptune 86720-11-13 17:32 G 33395206.06 33395206.23 33395206.43 0.0089 0.0047

Neptune 86721-06-27 06:44 G 33395431.61 33395431.78 33395431.95 0.0089 0.0056

Neptune 86722-02-07 19:27 G 33395657.17 33395657.31 33395657.46 0.0089 0.0066

Neptune 86722-09-21 08:10 G 33395882.74 33395882.84 33395882.96 0.0089 0.0076

Neptune 86723-05-04 20:53 G 33396108.33 33396108.37 33396108.44 0.0089 0.0086

Jupiter 86723-07-23 11:17 G 33396187.82 33396187.97 33396188.13 0.0533 0.0341

Jupiter 86724-03-17 12:29 G 33396425.83 33396426.02 33396426.21 0.0534 0.0201

Jupiter 86729-05-29 08:10 G 33398324.69 33398324.84 33398325.00 0.0493 0.0316

Jupiter 86730-01-20 09:36 G 33398560.70 33398560.90 33398561.10 0.0493 0.0104

Saturn 86731-01-10 02:10 G 33398915.47 33398915.59 33398915.72 0.0279 0.0224

Saturn 86731-08-27 14:24 G 33399144.89 33399145.10 33399145.32 0.0276 0.0037

Saturn 86732-04-13 00:58 G 33399374.36 33399374.54 33399374.73 0.0274 0.0146

Pluto 86732-09-23 07:56 G 33399537.65 33399537.83 33399538.03 0.0066 0.0031

Pluto 86733-05-06 12:15 G 33399762.80 33399763.01 33399763.24 0.0066 0.0010

Pluto 86733-12-17 16:34 G 33399988.07 33399988.19 33399988.35 0.0066 0.0051

Jupiter 86735-03-28 01:56 G 33400453.50 33400453.58 33400453.67 0.0532 0.0483

Jupiter	86735-11-21 01:27 G	33400691.35	33400691.56	33400691.76	0.0534	0.0050
Mars	86740-12-22 08:39 G	33402549.81	33402549.86	33402549.91	0.1616	0.1529
Jupiter	86741-02-01 10:48 G	33402590.86	33402590.95	33402591.05	0.0494	0.0431
Jupiter	86741-09-25 13:27 G	33402826.86	33402827.06	33402827.27	0.0493	0.0013
Jupiter	86742-05-19 12:29 G	33403062.91	33403063.02	33403063.14	0.0493	0.0401
Saturn	86747-05-04 13:12 G	33404873.87	33404874.05	33404874.23	0.0284	0.0143
Jupiter	86747-07-26 13:41 G	33404956.88	33404957.07	33404957.27	0.0534	0.0106
Saturn	86747-12-20 02:39 G	33405103.41	33405103.61	33405103.82	0.0287	0.0056
Jupiter	86748-03-20 16:48 G	33405195.09	33405195.20	33405195.32	0.0533	0.0437
Saturn	86748-08-05 18:15 G	33405333.17	33405333.26	33405333.35	0.0289	0.0261
Uranus	86752-07-29 03:08 G	33406786.50	33406786.63	33406786.77	0.0141	0.0111
Uranus	86753-03-12 14:10 G	33407012.91	33407013.09	33407013.28	0.0142	0.0077
Jupiter	86753-05-31 16:48 G	33407093.01	33407093.20	33407093.40	0.0493	0.0129
Uranus	86753-10-25 01:12 G	33407239.35	33407239.55	33407239.77	0.0142	0.0043
Jupiter	86754-01-22 16:34 G	33407329.02	33407329.19	33407329.35	0.0493	0.0289
Uranus	86754-06-08 12:44 G	33407465.81	33407466.03	33407466.25	0.0142	0.0008
Uranus	86755-01-21 00:00 G	33407692.29	33407692.50	33407692.72	0.0142	0.0027
Uranus	86755-09-04 11:32 G	33407918.79	33407918.98	33407919.18	0.0142	0.0062
Uranus	86756-04-17 23:03 G	33408145.32	33408145.46	33408145.64	0.0142	0.0098
Uranus	86756-11-30 10:48 G	33408371.89	33408371.95	33408372.05	0.0143	0.0133
Jupiter	86759-03-31 04:20 G	33409222.51	33409222.68	33409222.87	0.0534	0.0254
Jupiter	86759-11-24 06:44 G	33409460.61	33409460.78	33409460.95	0.0534	0.0292
Saturn	86760-07-22 05:17 G	33409701.58	33409701.72	33409701.87	0.0278	0.0198
Saturn	86761-03-08 17:17 G	33409931.01	33409931.22	33409931.44	0.0276	0.0012
Saturn	86761-10-24 03:22 G	33410160.48	33410160.64	33410160.82	0.0273	0.0169
Jupiter	86765-02-03 19:41 G	33411359.14	33411359.32	33411359.50	0.0493	0.0244
Jupiter	86765-09-27 19:56 G	33411595.14	33411595.33	33411595.52	0.0492	0.0175
Jupiter	86770-12-03 19:56 G	33413488.20	33413488.33	33413488.46	0.0534	0.0397
Jupiter	86771-07-29 20:53 G	33413726.18	33413726.37	33413726.57	0.0534	0.0144
Mars	86774-10-21 02:10 G	33414905.43	33414905.59	33414905.76	0.1609	0.0530

Jupiter 86776-10-09 22:48 G 33415625.31 33415625.45 33415625.59 0.0493 0.0359

Saturn 86776-11-13 12:29 G 33415659.84 33415660.02 33415660.21 0.0284 0.0125

Jupiter 86777-06-03 00:15 G 33415861.30 33415861.51 33415861.71 0.0492 0.0061

Saturn 86777-07-01 02:24 G 33415889.40 33415889.60 33415889.80 0.0286 0.0075

Mars 86777-07-27 20:39 G 33415916.22 33415916.36 33415916.51 0.1925 0.1085

Jupiter 86778-01-24 22:34 G 33416097.39 33416097.44 33416097.50 0.0493 0.0470

Saturn 86778-02-15 17:46 G 33416119.21 33416119.24 33416119.30 0.0289 0.0280

Jupiter 86783-04-03 09:36 G 33417991.70 33417991.90 33417992.11 0.0534 0.0012

Jupiter 86783-11-27 12:29 G 33418230.00 33418230.02 33418230.05 0.0533 0.0528

Jupiter 86788-06-15 00:00 G 33419891.45 33419891.50 33419891.55 0.0494 0.0475

Jupiter 86789-02-06 03:08 G 33420127.43 33420127.63 33420127.84 0.0493 0.0058

Jupiter 86789-09-30 02:53 G 33420363.49 33420363.62 33420363.76 0.0493 0.0360

Saturn 86790-02-01 09:08 G 33420487.72 33420487.88 33420488.05 0.0279 0.0175

Saturn 86790-09-18 21:22 G 33420717.17 33420717.39 33420717.60 0.0276 0.0013

Saturn 86791-05-06 07:41 G 33420946.67 33420946.82 33420946.97 0.0274 0.0194

Uranus 86792-11-15 10:48 G 33421505.83 33421505.95 33421506.10 0.0137 0.0108

Uranus 86793-06-29 17:17 G 33421732.05 33421732.22 33421732.41 0.0137 0.0078

Neptune 86793-09-25 04:05 G 33421819.63 33421819.67 33421819.73 0.0089 0.0086

Uranus 86794-02-10 23:46 G 33421958.29 33421958.49 33421958.69 0.0136 0.0047

Neptune 86794-05-08 17:17 G 33422045.12 33422045.22 33422045.34 0.0089 0.0076

Uranus 86794-09-25 06:00 G 33422184.54 33422184.75 33422184.96 0.0136 0.0017

Jupiter 86794-12-06 23:17 G 33422257.28 33422257.47 33422257.67 0.0533 0.0161

Neptune 86794-12-20 06:29 G 33422270.63 33422270.77 33422270.92 0.0089 0.0066

Uranus 86795-05-09 12:00 G 33422410.78 33422411.00 33422411.21 0.0136 0.0012

Jupiter 86795-08-02 01:12 G 33422495.41 33422495.55 33422495.69 0.0533 0.0383

Neptune 86795-08-02 19:56 G 33422496.16 33422496.33 33422496.50 0.0089 0.0056

Uranus 86795-12-21 17:32 G 33422637.03 33422637.23 33422637.44 0.0136 0.0042

Neptune 86796-03-15 09:08 G 33422721.70 33422721.88 33422722.07 0.0089 0.0046

Uranus 86796-08-03 23:03 G 33422863.29 33422863.46 33422863.66 0.0136 0.0072

Neptune 86796-10-26 22:05 G 33422947.23 33422947.42 33422947.64 0.0089 0.0036

Uranus 86797-03-18 04:34 G 33423089.56 33423089.69 33423089.85 0.0136 0.0101

Neptune 86797-06-09 11:32 G 33423172.77 33423172.98 33423173.19 0.0089 0.0026

Uranus 86797-10-30 10:05 G 33423315.88 33423315.92 33423316.00 0.0136 0.0130

Neptune 86798-01-21 00:44 G 33423398.31 33423398.53 33423398.75 0.0089 0.0016

Neptune 86798-09-03 13:56 G 33423623.86 33423624.08 33423624.30 0.0089 0.0006

Neptune 86799-04-17 03:08 G 33423849.41 33423849.63 33423849.86 0.0089 0.0004

Neptune 86799-11-28 16:05 G 33424074.96 33424075.17 33424075.40 0.0089 0.0015

Neptune 86800-07-11 05:17 G 33424300.52 33424300.72 33424300.94 0.0088 0.0024

Jupiter 86800-10-12 06:44 G 33424393.59 33424393.78 33424393.97 0.0493 0.0174

Neptune 86801-02-21 18:15 G 33424526.07 33424526.26 33424526.48 0.0088 0.0035

Jupiter 86801-06-05 06:58 G 33424629.62 33424629.79 33424629.97 0.0493 0.0247

Neptune 86801-10-05 07:27 G 33424751.64 33424751.81 33424752.02 0.0088 0.0045

Neptune 86802-05-18 20:39 G 33424977.20 33424977.36 33424977.55 0.0088 0.0055

Neptune 86802-12-30 09:36 G 33425202.77 33425202.90 33425203.08 0.0088 0.0065

Neptune 86803-08-12 23:17 G 33425428.35 33425428.47 33425428.59 0.0088 0.0074

Neptune 86804-03-25 12:29 G 33425653.96 33425654.02 33425654.09 0.0088 0.0084

Saturn 86806-05-26 16:48 G 33426446.01 33426446.20 33426446.40 0.0284 0.0098

Jupiter 86806-08-11 12:15 G 33426522.85 33426523.01 33426523.18 0.0533 0.0313

Mars 86806-10-19 20:10 G 33426592.25 33426592.34 33426592.44 0.1614 0.1339

Saturn 86807-01-11 06:44 G 33426675.59 33426675.78 33426675.98 0.0287 0.0103

Jupiter 86807-04-06 13:27 G 33426760.88 33426761.06 33426761.25 0.0534 0.0232

Jupiter 86812-06-17 10:05 G 33428659.75 33428659.92 33428660.08 0.0493 0.0289

Jupiter 86813-02-08 11:03 G 33428895.77 33428895.96 33428896.16 0.0493 0.0132

Earth 86813-06-18 12:58 G 33429025.88 33429026.04 33429026.20 0.2669 0.0416

Moon 86813-06-18 17:46 G 33429026.08 33429026.24 33429026.39 0.2672 0.0318 *

Jupiter 86818-04-16 03:36 G 33430788.55 33430788.65 33430788.75 0.0533 0.0455

Jupiter 86818-12-10 03:22 G 33431026.44 33431026.64 33431026.85 0.0534 0.0083

Saturn 86819-08-14 12:00 G 33431273.82 33431274.00 33431274.18 0.0278 0.0149

Saturn 86820-03-30 23:46 G 33431503.28 33431503.49 33431503.71 0.0275 0.0038

Pluto 86820-05-25 14:10 G 33431558.94 33431559.09 33431559.27 0.0078 0.0052

Saturn 86820-11-15 09:36 G 33431732.78 33431732.90 33431733.04 0.0273 0.0217

Pluto 86821-01-06 00:29 G 33431784.30 33431784.52 33431784.74 0.0078 0.0019

Jupiter 86824-02-21 12:44 G 33432925.92 33432926.03 33432926.15 0.0493 0.0403

Jupiter 86824-10-14 14:39 G 33433161.91 33433162.11 33433162.31 0.0492 0.0017

Jupiter 86825-06-07 13:12 G 33433397.96 33433398.05 33433398.15 0.0493 0.0429

Jupiter 86830-08-14 18:15 G 33435292.06 33435292.26 33435292.47 0.0534 0.0069

Jupiter 86831-04-09 21:51 G 33435530.32 33435530.41 33435530.50 0.0533 0.0476

Saturn 86835-04-21 03:22 G 33437002.60 33437002.64 33437002.71 0.0281 0.0272

Saturn 86835-12-06 15:51 G 33437231.96 33437232.16 33437232.36 0.0284 0.0079

Uranus 86836-03-28 08:10 G 33437344.76 33437344.84 33437344.95 0.0141 0.0127

Jupiter 86836-06-19 18:29 G 33437428.07 33437428.27 33437428.47 0.0492 0.0099

Saturn 86836-07-23 05:46 G 33437461.55 33437461.74 33437461.93 0.0287 0.0121

Uranus 86836-11-09 18:58 G 33437571.14 33437571.29 33437571.47 0.0141 0.0094

Jupiter 86837-02-10 18:00 G 33437664.10 33437664.25 33437664.40 0.0493 0.0319

Uranus 86837-06-24 06:00 G 33437797.56 33437797.75 33437797.96 0.0142 0.0060

Uranus 86838-02-05 17:17 G 33438024.00 33438024.22 33438024.44 0.0142 0.0025

Uranus 86838-09-20 04:34 G 33438250.47 33438250.69 33438250.91 0.0142 0.0010

Uranus 86839-05-04 16:05 G 33438476.96 33438477.17 33438477.38 0.0142 0.0044

Uranus 86839-12-17 03:22 G 33438703.47 33438703.64 33438703.84 0.0142 0.0080

Uranus 86840-07-30 14:53 G 33438930.01 33438930.12 33438930.27 0.0142 0.0115

Mars 86840-08-17 14:24 G 33438947.94 33438948.10 33438948.26 0.1608 0.0704

Jupiter 86842-04-19 08:24 G 33439557.67 33439557.85 33439558.04 0.0533 0.0219

Jupiter 86842-12-13 09:51 G 33439795.75 33439795.91 33439796.07 0.0533 0.0326

Mars 86843-05-25 00:15 G 33439958.44 33439958.51 33439958.58 0.1928 0.1749

Jupiter 86848-02-23 20:39 G 33441694.18 33441694.36 33441694.54 0.0493 0.0219

Jupiter 86848-10-16 21:36 G 33441930.22 33441930.40 33441930.59 0.0493 0.0204

Saturn 86849-02-23 14:39 G 33442059.93 33442060.11 33442060.31 0.0278 0.0127

Saturn 86849-10-11 02:39 G 33442289.40 33442289.61 33442289.82 0.0276 0.0061

Saturn 86850-05-28 12:29 G 33442518.94 33442519.02 33442519.14 0.0273 0.0241

Jupiter 86853-12-22 23:03 G 33443823.32 33443823.46 33443823.61 0.0533 0.0366

Jupiter 86854-08-17 23:03 G 33444061.27 33444061.46 33444061.65 0.0533 0.0176

Jupiter 86859-10-29 23:32 G 33445960.34 33445960.48 33445960.63 0.0494 0.0335

Jupiter 86860-06-22 01:27 G 33446196.37 33446196.56 33446196.77 0.0493 0.0089

Saturn 86864-10-31 07:41 G 33447788.72 33447788.82 33447788.92 0.0282 0.0245

Saturn 86865-06-17 19:56 G 33448018.12 33448018.33 33448018.54 0.0284 0.0052

Jupiter 86865-08-27 12:44 G 33448088.98 33448089.03 33448089.09 0.0532 0.0510

Saturn 86866-02-02 09:51 G 33448247.74 33448247.91 33448248.09 0.0287 0.0149

Jupiter 86866-04-22 11:32 G 33448326.78 33448326.98 33448327.18 0.0534 0.0022

Jupiter 86871-07-05 02:24 G 33450226.53 33450226.60 33450226.69 0.0494 0.0449

Jupiter 86872-02-26 05:32 G 33450462.53 33450462.73 33450462.94 0.0493 0.0028

Mars 86872-08-16 08:24 G 33450634.73 33450634.85 33450634.98 0.1612 0.1166

Jupiter 86872-10-19 05:03 G 33450698.59 33450698.71 33450698.83 0.0493 0.0389

Uranus 86876-07-15 18:58 G 33452064.21 33452064.29 33452064.40 0.0137 0.0122

Neptune 86877-02-05 05:32 G 33452268.70 33452268.73 33452268.80 0.0089 0.0086

Uranus 86877-02-27 01:41 G 33452290.42 33452290.57 33452290.74 0.0137 0.0092

Neptune 86877-09-18 18:44 G 33452494.18 33452494.28 33452494.40 0.0089 0.0076

Uranus 86877-10-11 08:10 G 33452516.66 33452516.84 33452517.04 0.0137 0.0062

Jupiter 86877-12-26 01:41 G 33452592.37 33452592.57 33452592.77 0.0534 0.0129

Neptune 86878-05-02 07:41 G 33452719.68 33452719.82 33452719.97 0.0089 0.0066

Uranus 86878-05-25 14:24 G 33452742.90 33452743.10 33452743.31 0.0136 0.0032

Jupiter 86878-08-21 04:05 G 33452830.55 33452830.67 33452830.80 0.0533 0.0417

Saturn 86878-09-05 17:03 G 33452846.01 33452846.21 33452846.41 0.0278 0.0102

Neptune 86878-12-13 20:39 G 33452945.19 33452945.36 33452945.53 0.0089 0.0056

Uranus 86879-01-06 20:24 G 33452969.14 33452969.35 33452969.57 0.0136 0.0004

Saturn 86879-04-23 04:48 G 33453075.50 33453075.70 33453075.91 0.0275 0.0084

Neptune 86879-07-27 08:53 G 33453170.71 33453170.87 33453171.08 0.0089 0.0047

Uranus 86879-08-21 02:10 G 33453195.39 33453195.59 33453195.81 0.0136 0.0028

Saturn 86879-12-08 14:24 G 33453305.05 33453305.10 33453305.17 0.0272 0.0262

Neptune 86880-03-08 21:51 G 33453396.23 33453396.41 33453396.63 0.0089 0.0037

Uranus 86880-04-03 08:10 G 33453421.65 33453421.84 33453422.03 0.0136 0.0057

Neptune 86880-10-20 10:48 G 33453621.76 33453621.95 33453622.17 0.0089 0.0027

Uranus 86880-11-15 13:41 G 33453647.92 33453648.07 33453648.25 0.0136 0.0087

Neptune 86881-06-03 00:00 G 33453847.28 33453847.50 33453847.71 0.0089 0.0016

Uranus 86881-06-29 19:12 G 33453874.20 33453874.30 33453874.42 0.0136 0.0116

Neptune 86882-01-14 12:44 G 33454072.81 33454073.03 33454073.25 0.0089 0.0006

Neptune 86882-08-28 01:41 G 33454298.35 33454298.57 33454298.79 0.0089 0.0004

Neptune 86883-04-10 14:24 G 33454523.89 33454524.10 33454524.32 0.0089 0.0014

Jupiter 86883-11-01 08:53 G 33454728.68 33454728.87 33454729.07 0.0493 0.0144

Neptune 86883-11-22 03:08 G 33454749.43 33454749.63 33454749.85 0.0089 0.0024

Jupiter 86884-06-24 08:39 G 33454964.70 33454964.86 33454965.03 0.0493 0.0277

Neptune 86884-07-04 16:05 G 33454974.97 33454975.17 33454975.38 0.0089 0.0034

Neptune 86885-02-15 04:48 G 33455200.52 33455200.70 33455200.90 0.0089 0.0044

Neptune 86885-09-28 17:46 G 33455426.08 33455426.24 33455426.43 0.0089 0.0054

Neptune 86886-05-12 06:29 G 33455651.64 33455651.77 33455651.94 0.0089 0.0064

Neptune 86886-12-23 19:12 G 33455877.20 33455877.30 33455877.44 0.0089 0.0074

Neptune 86887-08-06 07:56 G 33456102.78 33456102.83 33456102.93 0.0089 0.0084

Jupiter 86889-08-30 17:17 G 33456858.04 33456858.22 33456858.39 0.0534 0.0277

Jupiter 86890-04-25 18:44 G 33457096.11 33457096.28 33457096.46 0.0534 0.0271

Saturn 86894-05-13 06:00 G 33458574.64 33458574.75 33458574.88 0.0282 0.0229

Saturn 86894-12-28 18:29 G 33458804.06 33458804.27 33458804.48 0.0284 0.0035

Jupiter 86895-07-07 12:15 G 33458994.84 33458995.01 33458995.19 0.0493 0.0261

Saturn 86895-08-15 08:24 G 33459033.69 33459033.85 33459034.03 0.0287 0.0166

Jupiter 86896-02-28 13:12 G 33459230.86 33459231.05 33459231.24 0.0493 0.0162

Jupiter 86901-05-06 08:39 G 33461123.74 33461123.86 33461123.98 0.0532 0.0422

Jupiter 86901-12-30 08:10 G 33461361.64 33461361.84 33461362.04 0.0533 0.0118

Mars 86906-06-16 02:53 G 33462990.47 33462990.62 33462990.76 0.1606 0.0871

Jupiter 86907-03-13 13:27 G 33463260.93 33463261.06 33463261.19 0.0494 0.0380

Saturn 86907-08-02 05:17 G 33463402.67 33463402.72 33463402.77 0.0281 0.0272

Jupiter 86907-11-04 15:51 G 33463496.96 33463497.16 33463497.37 0.0493 0.0045

Saturn 86908-03-18 18:58 G 33463632.09 33463632.29 33463632.50 0.0278 0.0081

Jupiter 86908-06-27 15:22 G 33463733.07 33463733.14 33463733.22 0.0494 0.0459

Saturn 86908-11-03 06:44 G 33463861.59 33463861.78 33463861.99 0.0276 0.0107

Jupiter 86913-09-03 22:05 G 33465627.21 33465627.42 33465627.62 0.0533 0.0035

Jupiter 86914-04-30 00:15 G 33465865.45 33465865.51 33465865.57 0.0532 0.0507

Earth 86918-12-23 14:24 G 33467563.95 33467564.10 33467564.26 0.2664 0.0199

Moon 86918-12-23 18:15 G 33467564.12 33467564.26 33467564.41 0.2669 0.0685 *

Jupiter 86919-07-10 19:27 G 33467763.11 33467763.31 33467763.52 0.0493 0.0075

Jupiter 86920-03-02 19:41 G 33467999.18 33467999.32 33467999.47 0.0493 0.0347

Uranus 86920-07-11 00:58 G 33468129.42 33468129.54 33468129.70 0.0141 0.0110

Uranus 86921-02-22 12:00 G 33468355.83 33468356.00 33468356.20 0.0141 0.0076

Uranus 86921-10-06 23:17 G 33468582.26 33468582.47 33468582.68 0.0142 0.0041

Uranus 86922-05-21 10:34 G 33468808.72 33468808.94 33468809.16 0.0142 0.0007

Uranus 86923-01-02 21:51 G 33469035.20 33469035.41 33469035.63 0.0142 0.0028

Uranus 86923-08-17 09:08 G 33469261.69 33469261.88 33469262.09 0.0142 0.0063

Saturn 86923-11-24 10:20 G 33469360.79 33469360.93 33469361.08 0.0282 0.0201

Uranus 86924-03-30 21:08 G 33469488.22 33469488.38 33469488.54 0.0142 0.0098

Saturn 86924-07-10 22:48 G 33469590.24 33469590.45 33469590.66 0.0285 0.0008

Uranus 86924-11-12 08:39 G 33469714.79 33469714.86 33469714.95 0.0142 0.0133

Saturn 86925-02-25 12:44 G 33469819.89 33469820.03 33469820.19 0.0287 0.0195

Jupiter 86925-05-09 10:34 G 33469892.75 33469892.94 33469893.13 0.0533 0.0188

Jupiter 86926-01-02 12:00 G 33470130.85 33470131.00 33470131.15 0.0533 0.0359

Jupiter 86931-03-15 23:17 G 33472029.28 33472029.47 33472029.66 0.0493 0.0190

Jupiter 86931-11-07 00:00 G 33472265.32 33472265.50 33472265.68 0.0493 0.0234

Jupiter 86937-01-12 01:12 G 33474158.40 33474158.55 33474158.71 0.0533 0.0336

Saturn 86937-02-11 07:56 G 33474188.74 33474188.83 33474188.94 0.0280 0.0246

Jupiter 86937-09-07 01:41 G 33474396.39 33474396.57 33474396.76 0.0534 0.0210

Saturn 86937-09-28 21:36 G 33474418.20 33474418.40 33474418.62 0.0277 0.0055

Saturn 86938-05-16 09:22 G 33474647.70 33474647.89 33474648.08 0.0275 0.0130

Mars 86938-06-14 20:24 G 33474677.21 33474677.35 33474677.49 0.1610 0.0985

Mars 86941-03-22 00:58 G 33475688.43 33475688.54 33475688.65 0.1923 0.1451

Jupiter 86942-11-19 02:10 G 33476295.44 33476295.59 33476295.76 0.0493 0.0307

Jupiter 86943-07-13 03:36 G 33476531.46 33476531.65 33476531.85 0.0493 0.0118

Jupiter 86948-09-16 17:17 G 33478424.13 33478424.22 33478424.31 0.0533 0.0478

Jupiter 86949-05-12 16:34 G 33478661.99 33478662.19 33478662.39 0.0534 0.0060

Saturn 86953-06-05 09:22 G 33480146.74 33480146.89 33480147.05 0.0282 0.0184

Saturn 86954-01-20 21:51 G 33480376.20 33480376.41 33480376.62 0.0285 0.0012

Jupiter 86954-07-25 05:03 G 33480561.61 33480561.71 33480561.82 0.0494 0.0421

Saturn 86954-09-07 11:46 G 33480605.86 33480605.99 33480606.14 0.0287 0.0213

Jupiter 86955-03-18 07:41 G 33480797.62 33480797.82 33480798.03 0.0493 0.0009

Jupiter 86955-11-09 06:58 G 33481033.69 33481033.79 33481033.90 0.0493 0.0419

Neptune 86957-12-28 14:53 G 33481814.12 33481814.12 33481814.13 0.0089 0.0089

Neptune 86958-08-11 03:51 G 33482039.57 33482039.66 33482039.77 0.0089 0.0079

Neptune 86959-03-24 17:03 G 33482265.09 33482265.21 33482265.36 0.0089 0.0069

Neptune 86959-11-05 06:15 G 33482490.61 33482490.76 33482490.94 0.0089 0.0059

Uranus 86960-03-16 03:36 G 33482622.64 33482622.65 33482622.69 0.0137 0.0136

Neptune 86960-06-17 19:27 G 33482716.14 33482716.31 33482716.50 0.0089 0.0049

Uranus 86960-10-28 10:20 G 33482848.81 33482848.93 33482849.08 0.0137 0.0106

Jupiter 86961-01-15 07:12 G 33482927.60 33482927.80 33482928.00 0.0533 0.0094

Neptune 86961-01-29 08:39 G 33482941.67 33482941.86 33482942.07 0.0089 0.0039

Uranus 86961-06-11 16:48 G 33483075.03 33483075.20 33483075.39 0.0137 0.0076

Jupiter 86961-09-10 08:53 G 33483165.77 33483165.87 33483165.98 0.0533 0.0451

Neptune 86961-09-11 22:05 G 33483167.21 33483167.42 33483167.63 0.0089 0.0029

Uranus 86962-01-23 23:17 G 33483301.27 33483301.47 33483301.67 0.0137 0.0046

Neptune 86962-04-25 11:17 G 33483392.76 33483392.97 33483393.19 0.0089 0.0019

Uranus 86962-09-07 05:17 G 33483527.51 33483527.72 33483527.94 0.0136 0.0016

Neptune 86962-12-07 00:29 G 33483618.30 33483618.52 33483618.74 0.0089 0.0009

Uranus 86963-04-21 11:17 G 33483753.76 33483753.97 33483754.19 0.0136 0.0014

Neptune 86963-07-20 13:41 G 33483843.85 33483844.07 33483844.30 0.0089 0.0002

Uranus 86963-12-03 17:03 G 33483980.02 33483980.21 33483980.43 0.0136 0.0044

Neptune 86964-03-02 02:53 G 33484069.41 33484069.62 33484069.85 0.0088 0.0012

Uranus 86964-07-16 22:48 G 33484206.28 33484206.45 33484206.64 0.0136 0.0073

Neptune 86964-10-13 16:05 G 33484294.96 33484295.17 33484295.39 0.0088 0.0022

Uranus 86965-02-28 04:34 G 33484432.56 33484432.69 33484432.84 0.0136 0.0102

Neptune 86965-05-27 05:17 G 33484520.52 33484520.72 33484520.93 0.0088 0.0032

Uranus 86965-10-12 10:05 G 33484658.88 33484658.92 33484658.99 0.0136 0.0131

Neptune 86966-01-07 18:29 G 33484746.08 33484746.27 33484746.47 0.0088 0.0042

Neptune 86966-08-21 07:27 G 33484971.64 33484971.81 33484972.00 0.0088 0.0052

Saturn 86966-08-24 09:08 G 33484974.76 33484974.88 33484975.02 0.0281 0.0226

Jupiter 86966-11-21 09:22 G 33485063.69 33485063.89 33485064.09 0.0493 0.0120

Neptune 86967-04-03 20:53 G 33485197.22 33485197.37 33485197.54 0.0088 0.0062

Saturn 86967-04-10 23:03 G 33485204.25 33485204.46 33485204.68 0.0278 0.0034

Jupiter 86967-07-15 10:05 G 33485299.76 33485299.92 33485300.08 0.0493 0.0304

Neptune 86967-11-15 09:51 G 33485422.80 33485422.91 33485423.05 0.0088 0.0072

Saturn 86967-11-26 10:48 G 33485433.77 33485433.95 33485434.13 0.0275 0.0152

Neptune 86968-06-27 22:48 G 33485648.39 33485648.45 33485648.56 0.0088 0.0082

Mars 86972-04-12 14:39 G 33487032.98 33487033.11 33487033.24 0.1605 0.1047

Jupiter 86972-09-19 21:36 G 33487193.23 33487193.40 33487193.59 0.0533 0.0243

Jupiter 86973-05-15 22:20 G 33487431.26 33487431.43 33487431.59 0.0533 0.0304

Jupiter 86978-07-27 12:29 G 33489329.84 33489330.02 33489330.20 0.0494 0.0238

Jupiter 86979-03-20 14:10 G 33489565.90 33489566.09 33489566.28 0.0493 0.0189

Pluto 86980-08-27 12:29 G 33490091.88 33490092.02 33490092.17 0.0065 0.0049

Pluto 86981-04-09 16:48 G 33490316.99 33490317.20 33490317.42 0.0066 0.0009

Pluto 86981-11-20 21:08 G 33490542.20 33490542.38 33490542.57 0.0066 0.0032

Saturn 86982-12-16 13:56 G 33490932.91 33490933.08 33490933.26 0.0282 0.0155

Saturn 86983-08-03 02:24 G 33491162.39 33491162.60 33491162.81 0.0285 0.0041

Saturn 86984-03-19 16:34 G 33491392.09 33491392.19 33491392.31 0.0288 0.0243

Jupiter 86984-05-25 10:48 G 33491458.81 33491458.95 33491459.08 0.0532 0.0392

Jupiter 86985-01-18 10:05 G 33491696.73 33491696.92 33491697.12 0.0533 0.0150

Jupiter 86990-04-01 15:51 G 33493596.02 33493596.16 33493596.30 0.0494 0.0353

Jupiter 86990-11-23 18:15 G 33493832.06 33493832.26 33493832.46 0.0493 0.0073

Jupiter 86991-07-17 17:17 G 33494068.20 33494068.22 33494068.26 0.0494 0.0487

Saturn 86996-03-05 12:44 G 33495760.89 33495761.03 33495761.19 0.0280 0.0199

Jupiter 86996-09-23 00:00 G 33495962.29 33495962.50 33495962.70 0.0534 0.0008

Saturn 86996-10-21 02:24 G 33495990.38 33495990.60 33495990.81 0.0277 0.0008

Saturn 86997-06-07 13:41 G 33496219.91 33496220.07 33496220.24 0.0275 0.0177

88TH MILLENNIUM CE

This is a list of transits of Venus in the 88th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 87001-12-06 18:15 G 33497862.20 33497862.26 33497862.32 0.0494 0.0467

Jupiter 87002-07-30 21:36 G 33498098.20 33498098.40 33498098.61 0.0493 0.0045

Jupiter 87003-03-23 21:22 G 33498334.26 33498334.39 33498334.52 0.0493 0.0375

Uranus 87004-03-11 08:39 G 33498687.77 33498687.86 33498687.98 0.0141 0.0123

Mars 87004-04-12 08:39 G 33498719.70 33498719.86 33498720.01 0.1609 0.0811

Uranus 87004-10-23 19:41 G 33498914.15 33498914.32 33498914.49 0.0141 0.0090

Uranus 87005-06-07 06:44 G 33499140.58 33499140.78 33499140.98 0.0142 0.0056

Uranus 87006-01-19 17:46 G 33499367.02 33499367.24 33499367.46 0.0142 0.0022

Uranus 87006-09-03 05:03 G 33499593.49 33499593.71 33499593.93 0.0142 0.0013

Mars 87007-01-18 04:05 G 33499730.51 33499730.67 33499730.83 0.1925 0.0772

Uranus 87007-04-17 16:20 G 33499819.98 33499820.18 33499820.40 0.0142 0.0048

Uranus 87007-11-30 04:05 G 33500046.50 33500046.67 33500046.86 0.0142 0.0083

Jupiter 87008-05-29 14:39 G 33500227.92 33500228.11 33500228.31 0.0534 0.0154

Uranus 87008-07-13 15:36 G 33500273.04 33500273.15 33500273.29 0.0142 0.0118

Jupiter 87009-01-22 16:48 G 33500466.07 33500466.20 33500466.34 0.0533 0.0396

Saturn 87012-06-28 13:41 G 33501718.89 33501719.07 33501719.25 0.0282 0.0136

Saturn 87013-02-13 02:10 G 33501948.38 33501948.59 33501948.79 0.0285 0.0060

Saturn 87013-09-30 16:34 G 33502178.11 33502178.19 33502178.28 0.0288 0.0262

Jupiter 87014-04-05 01:12 G 33502364.35 33502364.55 33502364.74 0.0493 0.0162

Jupiter 87014-11-27 01:27 G 33502600.40 33502600.56 33502600.74 0.0493 0.0263

Jupiter 87020-02-02 06:29 G 33504493.61 33504493.77 33504493.94 0.0533 0.0302

Jupiter 87020-09-27 06:44 G 33504731.60 33504731.78 33504731.96 0.0533 0.0245

Saturn 87025-09-16 14:10 G 33506546.93 33506547.09 33506547.26 0.0281 0.0178

Jupiter 87025-12-09 01:41 G 33506630.40 33506630.57 33506630.74 0.0494 0.0285

Saturn 87026-05-04 03:51 G 33506776.45 33506776.66 33506776.88 0.0278 0.0016

Jupiter 87026-08-02 03:51 G 33506866.46 33506866.66 33506866.85 0.0493 0.0143

Saturn 87026-12-19 15:22 G 33507006.00 33507006.14 33507006.30 0.0275 0.0199

Jupiter 87031-10-07 21:51 G 33508759.31 33508759.41 33508759.52 0.0532 0.0446

Jupiter 87032-06-01 20:24 G 33508997.15 33508997.35 33508997.55 0.0533 0.0093

Jupiter 87037-08-14 04:05 G 33510896.55 33510896.67 33510896.79 0.0494 0.0401

Mars 87038-02-09 03:08 G 33511075.52 33511075.63 33511075.75 0.1603 0.1203

Jupiter 87038-04-07 07:27 G 33511132.60 33511132.81 33511133.01 0.0493 0.0026

Jupiter 87038-11-29 07:12 G 33511368.72 33511368.80 33511368.90 0.0494 0.0444

Neptune 87041-12-23 05:46 G 33512488.66 33512488.74 33512488.85 0.0089 0.0079

Saturn 87042-01-08 19:27 G 33512505.11 33512505.31 33512505.50 0.0282 0.0105

Neptune 87042-08-05 18:44 G 33512714.16 33512714.28 33512714.43 0.0089 0.0069

Saturn 87042-08-26 07:56 G 33512734.63 33512734.83 33512735.03 0.0285 0.0091

Neptune 87043-03-19 07:41 G 33512939.67 33512939.82 33512939.99 0.0089 0.0059

Neptune 87043-10-30 20:39 G 33513165.18 33513165.36 33513165.55 0.0089 0.0049

Jupiter 87044-02-05 08:24 G 33513262.65 33513262.85 33513263.05 0.0533 0.0062

Neptune 87044-06-12 09:22 G 33513390.70 33513390.89 33513391.10 0.0089 0.0039

Uranus 87044-06-28 19:41 G 33513407.22 33513407.32 33513407.43 0.0137 0.0119

Jupiter 87044-09-30 10:05 G 33513500.84 33513500.92 33513501.01 0.0532 0.0482

Neptune 87045-01-23 22:20 G 33513616.23 33513616.43 33513616.64 0.0089 0.0029

Uranus 87045-02-10 02:10 G 33513633.44 33513633.59 33513633.76 0.0137 0.0089

Neptune 87045-09-06 11:17 G 33513841.76 33513841.97 33513842.19 0.0089 0.0019

Uranus 87045-09-24 08:24 G 33513859.67 33513859.85 33513860.06 0.0137 0.0060

Neptune 87046-04-20 00:15 G 33514067.29 33514067.51 33514067.73 0.0089 0.0009

Uranus 87046-05-08 14:53 G 33514085.91 33514086.12 33514086.33 0.0136 0.0029

Neptune 87046-12-01 12:58 G 33514292.82 33514293.04 33514293.26 0.0089 0.0001

Uranus 87046-12-20 20:53 G 33514312.16 33514312.37 33514312.59 0.0136 0.0003

Neptune 87047-07-15 01:41 G 33514518.36 33514518.57 33514518.79 0.0089 0.0011

Uranus 87047-08-04 02:53 G 33514538.41 33514538.62 33514538.83 0.0136 0.0030

Neptune 87048-02-25 14:39 G 33514743.89 33514744.11 33514744.32 0.0089 0.0021

Uranus 87048-03-17 08:24 G 33514764.67 33514764.85 33514765.05 0.0136 0.0060

Neptune 87048-10-08 03:36 G 33514969.44 33514969.65 33514969.85 0.0089 0.0031

Uranus 87048-10-29 14:24 G 33514990.95 33514991.10 33514991.27 0.0136 0.0089

Neptune 87049-05-21 16:20 G 33515194.99 33515195.18 33515195.38 0.0089 0.0041

Uranus 87049-06-12 19:56 G 33515217.24 33515217.33 33515217.45 0.0136 0.0118

Jupiter 87049-12-11 11:03 G 33515398.76 33515398.96 33515399.16 0.0493 0.0092

Neptune 87050-01-02 05:03 G 33515420.54 33515420.71 33515420.90 0.0089 0.0051

Jupiter 87050-08-04 11:32 G 33515634.83 33515634.98 33515635.13 0.0493 0.0332

Neptune 87050-08-15 18:00 G 33515646.10 33515646.25 33515646.41 0.0089 0.0061

Neptune 87051-03-29 06:44 G 33515871.66 33515871.78 33515871.92 0.0089 0.0071

Neptune 87051-11-09 19:27 G 33516097.24 33516097.31 33516097.41 0.0089 0.0081

Saturn 87055-03-29 18:44 G 33517333.10 33517333.28 33517333.46 0.0280 0.0149

Jupiter 87055-10-10 22:20 G 33517528.25 33517528.43 33517528.62 0.0533 0.0214

Saturn 87055-11-14 07:56 G 33517562.62 33517562.83 33517563.04 0.0277 0.0041

Jupiter 87056-06-04 23:17 G 33517766.31 33517766.47 33517766.63 0.0533 0.0335

Moon 87056-06-20 09:22 G 33517781.73 33517781.89 33517782.06 0.2664 0.0438

Earth 87056-06-20 12:29 G 33517781.86 33517782.02 33517782.18 0.2670 0.0420 *

Saturn 87056-06-30 19:12 G 33517792.18 33517792.30 33517792.43 0.0274 0.0225

Jupiter 87061-08-16 14:10 G 33519664.91 33519665.09 33519665.28 0.0493 0.0209

Jupiter 87062-04-09 15:08 G 33519900.95 33519901.13 33519901.32 0.0493 0.0217

Jupiter 87067-06-15 13:27 G 33521793.91 33521794.06 33521794.21 0.0533 0.0362

Jupiter 87068-02-08 13:27 G 33522031.87 33522032.06 33522032.25 0.0534 0.0185

Pluto 87068-12-11 02:53 G 33522338.40 33522338.62 33522338.85 0.0078 0.0010

Pluto 87069-07-24 12:44 G 33522563.90 33522564.03 33522564.18 0.0078 0.0060

Mars 87070-02-07 20:53 G 33522762.21 33522762.37 33522762.53 0.1607 0.0641

Saturn 87070-12-04 09:36 G 33523061.86 33523061.90 33523061.94 0.0280 0.0273

Saturn 87071-07-21 20:10 G 33523291.14 33523291.34 33523291.55 0.0282 0.0085

Saturn 87072-03-07 08:39 G 33523520.68 33523520.86 33523521.06 0.0285 0.0114

Mars 87072-11-14 06:58 G 33523772.62 33523772.79 33523772.96 0.1928 0.0088

Jupiter 87073-04-21 16:48 G 33523931.05 33523931.20 33523931.36 0.0494 0.0327

Jupiter 87073-12-13 18:58 G 33524167.09 33524167.29 33524167.49 0.0493 0.0100

Jupiter 87079-02-18 06:15 G 33526059.70 33526059.76 33526059.83 0.0532 0.0503

Jupiter 87079-10-14 04:20 G 33526297.48 33526297.68 33526297.88 0.0533 0.0032

Saturn 87084-10-08 20:10 G 33528119.16 33528119.34 33528119.54 0.0280 0.0128

Jupiter 87084-12-25 16:20 G 33528197.10 33528197.18 33528197.27 0.0495 0.0448

Saturn 87085-05-26 09:51 G 33528348.70 33528348.91 33528349.12 0.0278 0.0064

Jupiter 87085-08-18 20:10 G 33528433.14 33528433.34 33528433.55 0.0493 0.0024

Saturn 87086-01-10 21:08 G 33528578.30 33528578.38 33528578.48 0.0275 0.0248

Jupiter 87086-04-11 20:24 G 33528669.24 33528669.35 33528669.48 0.0494 0.0400

Uranus 87087-11-09 15:36 G 33529246.13 33529246.15 33529246.22 0.0141 0.0138

Uranus 87088-06-23 02:39 G 33529472.47 33529472.61 33529472.77 0.0141 0.0105

Uranus 87089-02-04 13:41 G 33529698.88 33529699.07 33529699.26 0.0141 0.0071

Uranus 87089-09-19 00:44 G 33529925.32 33529925.53 33529925.75 0.0142 0.0037

Uranus 87090-05-03 12:15 G 33530151.79 33530152.01 33530152.23 0.0142 0.0002

Uranus 87090-12-15 23:46 G 33530378.27 33530378.49 33530378.70 0.0142 0.0032

Jupiter 87091-06-18 18:29 G 33530563.07 33530563.27 33530563.47 0.0533 0.0120

Uranus 87091-07-30 11:03 G 33530604.78 33530604.96 33530605.16 0.0142 0.0067

Jupiter 87092-02-11 19:27 G 33530801.20 33530801.31 33530801.44 0.0532 0.0427

Uranus 87092-03-12 22:34 G 33530831.31 33530831.44 33530831.61 0.0142 0.0103

Uranus 87092-10-25 10:48 G 33531057.90 33531057.95 33531058.02 0.0143 0.0137

Jupiter 87097-04-23 23:17 G 33532699.27 33532699.47 33532699.66 0.0493 0.0142

Jupiter 87097-12-16 00:15 G 33532935.35 33532935.51 33532935.68 0.0494 0.0285

Saturn 87100-06-16 15:36 G 33533848.05 33533848.15 33533848.26 0.0280 0.0242

Saturn 87101-02-01 02:39 G 33534077.41 33534077.61 33534077.82 0.0283 0.0052

Saturn 87101-09-18 15:36 G 33534306.97 33534307.15 33534307.33 0.0285 0.0146

Jupiter 87103-02-22 06:44 G 33534828.61 33534828.78 33534828.96 0.0533 0.0274

Jupiter 87103-10-18 06:44 G 33535066.61 33535066.78 33535066.96 0.0533 0.0274

Mars 87103-12-08 15:22 G 33535118.05 33535118.14 33535118.23 0.1602 0.1372

Jupiter 87108-12-29 02:10 G 33536965.42 33536965.59 33536965.77 0.0494 0.0259

Jupiter 87109-08-22 04:20 G 33537201.49 33537201.68 33537201.88 0.0493 0.0171

Saturn 87114-04-22 02:10 G 33538905.39 33538905.59 33538905.80 0.0280 0.0097

Jupiter 87114-10-27 20:53 G 33539094.25 33539094.37 33539094.50 0.0532 0.0421

Saturn 87114-12-07 15:22 G 33539134.94 33539135.14 33539135.34 0.0277 0.0094

Jupiter 87115-06-22 19:41 G 33539332.12 33539332.32 33539332.52 0.0533 0.0121

Jupiter 87120-09-03 05:03 G 33541231.58 33541231.71 33541231.84 0.0494 0.0376

Jupiter 87121-04-27 07:41 G 33541467.62 33541467.82 33541468.03 0.0493 0.0052

Jupiter 87121-12-19 07:12 G 33541703.74 33541703.80 33541703.86 0.0494 0.0469

Neptune 87122-11-14 14:39 G 33542034.04 33542034.11 33542034.21 0.0089 0.0082

Neptune 87123-06-28 03:36 G 33542259.54 33542259.65 33542259.80 0.0089 0.0072

Neptune 87124-02-08 16:48 G 33542485.06 33542485.20 33542485.38 0.0089 0.0062

Neptune 87124-09-21 06:00 G 33542710.59 33542710.75 33542710.95 0.0089 0.0052

Neptune 87125-05-04 19:12 G 33542936.12 33542936.30 33542936.51 0.0089 0.0042

Neptune 87125-12-16 08:24 G 33543161.66 33543161.85 33543162.07 0.0089 0.0032

Neptune 87126-07-29 21:36 G 33543387.20 33543387.40 33543387.63 0.0089 0.0022

Jupiter 87127-02-25 10:05 G 33543597.71 33543597.92 33543598.12 0.0534 0.0032

Neptune 87127-03-12 11:03 G 33543612.74 33543612.96 33543613.18 0.0089 0.0011

Jupiter 87127-10-21 12:15 G 33543835.97 33543836.01 33543836.06 0.0533 0.0514

Neptune 87127-10-24 00:15 G 33543838.29 33543838.51 33543838.74 0.0089 0.0002

Uranus 87128-02-28 05:32 G 33543965.69 33543965.73 33543965.81 0.0137 0.0132

Neptune 87128-06-05 13:27 G 33544063.84 33544064.06 33544064.28 0.0088 0.0009

Uranus 87128-10-11 12:29 G 33544191.89 33544192.02 33544192.17 0.0137 0.0102

Neptune 87129-01-17 02:39 G 33544289.39 33544289.61 33544289.83 0.0088 0.0019

Uranus 87129-05-25 18:58 G 33544418.11 33544418.29 33544418.48 0.0137 0.0072

Neptune 87129-08-30 15:51 G 33544514.95 33544515.16 33544515.37 0.0088 0.0029

Saturn 87129-12-27 18:15 G 33544634.14 33544634.26 33544634.40 0.0280 0.0220

Uranus 87130-01-07 01:12 G 33544644.35 33544644.55 33544644.76 0.0136 0.0042

Neptune 87130-04-13 04:48 G 33544740.52 33544740.70 33544740.92 0.0088 0.0040

Saturn 87130-08-14 05:32 G 33544863.52 33544863.73 33544863.94 0.0283 0.0028

Uranus 87130-08-21 07:12 G 33544870.59 33544870.80 33544871.02 0.0136 0.0013

Neptune 87130-11-24 18:00 G 33544966.08 33544966.25 33544966.45 0.0088 0.0049

Saturn 87131-03-31 18:15 G 33545093.10 33545093.26 33545093.43 0.0286 0.0171

Uranus 87131-04-04 13:12 G 33545096.84 33545097.05 33545097.27 0.0136 0.0018

Neptune 87131-07-08 06:58 G 33545191.65 33545191.79 33545191.98 0.0088 0.0060

Uranus 87131-11-16 19:12 G 33545323.10 33545323.30 33545323.51 0.0136 0.0047

Neptune 87132-02-18 20:10 G 33545417.22 33545417.34 33545417.50 0.0088 0.0069

Jupiter 87132-05-09 06:29 G 33545497.76 33545497.77 33545497.80 0.0495 0.0492

Uranus 87132-06-30 00:58 G 33545549.37 33545549.54 33545549.72 0.0136 0.0076

Neptune 87132-10-01 09:51 G 33545642.81 33545642.91 33545643.01 0.0088 0.0079

Jupiter 87132-12-31 10:48 G 33545733.75 33545733.95 33545734.15 0.0493 0.0066

Uranus 87133-02-11 06:44 G 33545775.65 33545775.78 33545775.92 0.0136 0.0105

Jupiter 87133-08-24 11:03 G 33545969.82 33545969.96 33545970.10 0.0493 0.0358

Uranus 87133-09-25 12:00 G 33546001.98 33546002.00 33546002.04 0.0135 0.0134

Mars 87135-12-07 09:08 G 33546804.71 33546804.88 33546805.05 0.1606 0.0471

Mars 87138-09-12 10:20 G 33547814.76 33547814.93 33547815.09 0.1930 0.0590

Jupiter 87138-10-31 01:27 G 33547863.37 33547863.56 33547863.75 0.0533 0.0183

Jupiter 87139-06-26 02:24 G 33548101.45 33548101.60 33548101.75 0.0533 0.0367

Saturn 87143-03-17 13:41 G 33549462.01 33549462.07 33549462.14 0.0282 0.0268

Saturn 87143-11-02 04:48 G 33549691.49 33549691.70 33549691.90 0.0280 0.0072

Saturn 87144-06-18 17:46 G 33549921.05 33549921.24 33549921.44 0.0277 0.0118

Jupiter 87144-09-05 11:17 G 33549999.78 33549999.97 33550000.16 0.0493 0.0190

Jupiter 87145-04-29 12:44 G 33550235.85 33550236.03 33550236.21 0.0493 0.0238

Jupiter 87150-07-05 16:05 G 33552129.02 33552129.17 33552129.34 0.0532 0.0332

Jupiter 87151-02-28 15:51 G 33552366.97 33552367.16 33552367.34 0.0533 0.0216

Jupiter 87156-05-11 13:27 G 33554265.90 33554266.06 33554266.22 0.0494 0.0309

Jupiter 87157-01-02 16:05 G 33554501.97 33554502.17 33554502.36 0.0493 0.0121

Saturn 87159-07-10 01:41 G 33555420.42 33555420.57 33555420.73 0.0280 0.0185

Saturn 87160-02-24 12:58 G 33555649.83 33555650.04 33555650.25 0.0283 0.0008

Saturn 87160-10-11 02:24 G 33555879.45 33555879.60 33555879.74 0.0286 0.0206

Moon 87161-12-25 15:36 G 33556319.98 33556320.15 33556320.31 0.2656 0.0310

Earth 87161-12-25 17:46 G 33556320.09 33556320.24 33556320.39 0.2663 0.0422 *

Jupiter 87162-03-10 05:03 G 33556394.63 33556394.71 33556394.80 0.0532 0.0479

Jupiter 87162-11-03 02:53 G 33556632.42 33556632.62 33556632.82 0.0533 0.0059

Jupiter 87168-01-15 15:51 G 33558532.06 33558532.16 33558532.27 0.0495 0.0425

Jupiter 87168-09-07 19:41 G 33558768.12 33558768.32 33558768.53 0.0493 0.0012

Jupiter 87169-05-01 19:56 G 33559004.23 33559004.33 33559004.44 0.0494 0.0425

Mars 87169-10-05 03:51 G 33559160.61 33559160.66 33559160.71 0.1601 0.1528

Uranus 87172-02-22 09:22 G 33560030.79 33560030.89 33560031.02 0.0141 0.0120

Saturn 87172-09-26 20:39 G 33560248.26 33560248.36 33560248.49 0.0282 0.0236

Uranus 87172-10-05 20:39 G 33560257.18 33560257.36 33560257.53 0.0141 0.0086

Saturn 87173-05-14 11:46 G 33560477.78 33560477.99 33560478.20 0.0279 0.0040

Uranus 87173-05-20 07:41 G 33560483.62 33560483.82 33560484.03 0.0142 0.0052

Saturn 87173-12-30 00:29 G 33560707.34 33560707.52 33560707.70 0.0276 0.0149

Uranus 87174-01-01 18:58 G 33560710.07 33560710.29 33560710.51 0.0142 0.0018

Jupiter 87174-07-08 15:51 G 33560897.96 33560898.16 33560898.36 0.0533 0.0096

Uranus 87174-08-16 06:15 G 33560936.54 33560936.76 33560936.98 0.0142 0.0017

Jupiter 87175-03-03 17:17 G 33561136.12 33561136.22 33561136.33 0.0533 0.0453

Uranus 87175-03-30 18:00 G 33561163.04 33561163.25 33561163.45 0.0142 0.0051

Uranus 87175-11-12 05:32 G 33561389.56 33561389.73 33561389.91 0.0142 0.0086

Uranus 87176-06-25 17:03 G 33561616.12 33561616.21 33561616.35 0.0142 0.0122

Jupiter 87180-05-13 22:34 G 33563034.24 33563034.44 33563034.64 0.0493 0.0116

Jupiter 87181-01-04 23:03 G 33563270.31 33563270.46 33563270.62 0.0493 0.0310

Jupiter 87186-03-13 06:15 G 33565163.58 33565163.76 33565163.94 0.0533 0.0248

Jupiter 87186-11-06 06:58 G 33565401.62 33565401.79 33565401.95 0.0533 0.0304

Saturn 87189-01-19 06:00 G 33566206.58 33566206.75 33566206.92 0.0281 0.0160

Saturn 87189-09-05 17:17 G 33566436.01 33566436.22 33566436.43 0.0283 0.0034

Saturn 87190-04-23 06:29 G 33566665.65 33566665.77 33566665.89 0.0286 0.0233

Jupiter 87192-01-18 00:58 G 33567300.36 33567300.54 33567300.72 0.0493 0.0235

Jupiter 87192-09-10 02:39 G 33567536.43 33567536.61 33567536.80 0.0493 0.0194

Jupiter 87197-11-15 22:20 G 33569429.30 33569429.43 33569429.57 0.0532 0.0394

Jupiter 87198-07-11 21:22 G 33569667.20 33569667.39 33569667.59 0.0533 0.0152

Mars 87201-10-03 21:22 G 33570847.22 33570847.39 33570847.56 0.1605 0.0301

Saturn 87202-04-09 00:44 G 33571034.39 33571034.53 33571034.68 0.0282 0.0209

Saturn 87202-11-24 15:22 G 33571263.93 33571264.14 33571264.36 0.0279 0.0015

Saturn 87203-07-12 04:05 G 33571493.51 33571493.67 33571493.84 0.0277 0.0175

Jupiter 87203-09-23 00:44 G 33571566.39 33571566.53 33571566.67 0.0494 0.0358

Jupiter 87204-05-16 03:36 G 33571802.45 33571802.65 33571802.85 0.0493 0.0071

Mars 87204-07-09 12:58 G 33571856.91 33571857.04 33571857.17 0.1932 0.1288

Jupiter 87205-01-07 03:22 G 33572038.62 33572038.64 33572038.67 0.0494 0.0489

Neptune 87206-03-27 16:34 G 33572483.12 33572483.19 33572483.28 0.0089 0.0082

Neptune 87206-11-08 05:32 G 33572708.61 33572708.73 33572708.86 0.0089 0.0072

Neptune 87207-06-21 18:29 G 33572934.11 33572934.27 33572934.43 0.0089 0.0062

Neptune 87208-02-02 07:12 G 33573159.63 33573159.80 33573159.98 0.0089 0.0052

Neptune 87208-09-14 20:24 G 33573385.16 33573385.35 33573385.54 0.0089 0.0042

Neptune 87209-04-28 09:08 G 33573610.68 33573610.88 33573611.09 0.0089 0.0032

Neptune 87209-12-09 21:51 G 33573836.20 33573836.41 33573836.63 0.0089 0.0022

Jupiter 87210-03-16 11:17 G 33573932.77 33573932.97 33573933.17 0.0533 0.0002

Neptune 87210-07-23 10:48 G 33574061.73 33574061.95 33574062.17 0.0089 0.0012

Neptune 87211-03-05 23:32 G 33574287.26 33574287.48 33574287.70 0.0089 0.0002

Neptune 87211-10-17 12:29 G 33574512.81 33574513.02 33574513.24 0.0089 0.0008

Neptune 87212-05-30 01:27 G 33574738.34 33574738.56 33574738.77 0.0089 0.0018

Uranus 87212-06-10 23:03 G 33574750.35 33574750.46 33574750.58 0.0137 0.0114

Neptune 87213-01-10 14:10 G 33574963.88 33574964.09 33574964.30 0.0089 0.0028

Uranus 87213-01-23 05:03 G 33574976.56 33574976.71 33574976.90 0.0137 0.0085

Neptune 87213-08-24 03:08 G 33575189.43 33575189.63 33575189.82 0.0089 0.0038

Uranus 87213-09-06 11:32 G 33575202.79 33575202.98 33575203.19 0.0137 0.0055

Neptune 87214-04-06 15:51 G 33575414.98 33575415.16 33575415.34 0.0089 0.0048

Uranus 87214-04-20 18:00 G 33575429.04 33575429.25 33575429.46 0.0136 0.0025

Neptune 87214-11-18 04:20 G 33575640.53 33575640.68 33575640.86 0.0089 0.0059

Uranus 87214-12-03 00:00 G 33575655.29 33575655.50 33575655.72 0.0136 0.0005

Jupiter 87215-05-29 01:56 G 33575832.53 33575832.58 33575832.64 0.0495 0.0476

Neptune 87215-07-01 17:32 G 33575866.09 33575866.23 33575866.37 0.0089 0.0068

Uranus 87215-07-17 05:46 G 33575881.54 33575881.74 33575881.96 0.0136 0.0035

Jupiter 87216-01-20 06:15 G 33576068.56 33576068.76 33576068.96 0.0493 0.0049

Neptune 87216-02-12 06:15 G 33576091.67 33576091.76 33576091.87 0.0089 0.0078

Uranus 87216-02-28 11:32 G 33576107.80 33576107.98 33576108.18 0.0136 0.0064

Jupiter 87216-09-12 06:58 G 33576304.67 33576304.79 33576304.93 0.0494 0.0377

Neptune 87216-09-24 19:12 G 33576317.29 33576317.30 33576317.33 0.0089 0.0088

Uranus 87216-10-11 17:17 G 33576334.08 33576334.22 33576334.39 0.0136 0.0093

Uranus 87217-05-25 22:48 G 33576560.37 33576560.45 33576560.56 0.0135 0.0122

Saturn 87218-08-01 13:56 G 33576992.90 33576993.08 33576993.28 0.0281 0.0125

Saturn 87219-03-19 01:41 G 33577222.37 33577222.57 33577222.78 0.0284 0.0070

Saturn 87219-11-03 15:22 G 33577452.08 33577452.14 33577452.21 0.0286 0.0271

Jupiter 87221-11-18 22:34 G 33578198.25 33578198.44 33578198.64 0.0533 0.0158

Jupiter 87222-07-14 23:17 G 33578436.33 33578436.47 33578436.61 0.0533 0.0391

Jupiter 87227-09-25 09:36 G 33580334.71 33580334.90 33580335.09 0.0494 0.0166

Jupiter 87228-05-18 11:03 G 33580570.79 33580570.96 33580571.13 0.0493 0.0262

Pluto 87228-08-01 19:12 G 33580646.23 33580646.30 33580646.43 0.0065 0.0058

Pluto 87229-03-14 23:46 G 33580871.29 33580871.49 33580871.71 0.0066 0.0018

Pluto 87229-10-26 04:20 G 33581096.48 33581096.68 33581096.89 0.0066 0.0023

Pluto 87230-06-08 08:10 G 33581321.83 33581321.84 33581321.91 0.0066 0.0065

Saturn	87231-10-20 09:22 G	33581820.73	33581820.89	33581821.06	0.0281	0.0175
Saturn	87232-06-05 23:46 G	33582050.28	33582050.49	33582050.70	0.0279	0.0020
Saturn	87233-01-21 12:15 G	33582279.87	33582280.01	33582280.15	0.0276	0.0207
Jupiter	87233-07-24 12:00 G	33582463.84	33582464.00	33582464.17	0.0532	0.0310
Jupiter	87234-03-19 11:32 G	33582701.80	33582701.98	33582702.17	0.0533	0.0239
Jupiter	87239-05-31 11:46 G	33584600.83	33584600.99	33584601.16	0.0494	0.0286
Jupiter	87240-01-22 13:56 G	33584836.89	33584837.08	33584837.28	0.0493	0.0144
Jupiter	87245-03-29 02:39 G	33586729.51	33586729.61	33586729.71	0.0532	0.0457
Jupiter	87245-11-22 00:58 G	33586967.34	33586967.54	33586967.74	0.0533	0.0085
Saturn	87248-02-11 20:10 G	33587779.15	33587779.34	33587779.54	0.0281	0.0096
Saturn	87248-09-28 08:10 G	33588008.64	33588008.84	33588009.04	0.0284	0.0100
Jupiter	87251-02-03 13:27 G	33588866.95	33588867.06	33588867.18	0.0494	0.0404
Jupiter	87251-09-27 16:48 G	33589103.00	33589103.20	33589103.41	0.0493	0.0028
Jupiter	87252-05-20 16:48 G	33589339.12	33589339.20	33589339.28	0.0494	0.0446
Uranus	87255-10-22 14:53 G	33590589.07	33590589.12	33590589.19	0.0141	0.0135
Uranus	87256-06-05 01:27 G	33590815.43	33590815.56	33590815.73	0.0141	0.0103
Uranus	87257-01-17 12:44 G	33591041.84	33591042.03	33591042.23	0.0142	0.0068
Jupiter	87257-07-27 15:51 G	33591232.96	33591233.16	33591233.37	0.0533	0.0069
Uranus	87257-08-31 23:46 G	33591268.29	33591268.49	33591268.72	0.0142	0.0035
Jupiter	87258-03-22 17:32 G	33591471.15	33591471.23	33591471.32	0.0533	0.0481
Uranus	87258-04-15 11:32 G	33591494.76	33591494.98	33591495.20	0.0142	0.0000
Uranus	87258-11-27 23:03 G	33591721.25	33591721.46	33591721.68	0.0142	0.0035
Uranus	87259-07-12 10:34 G	33591947.75	33591947.94	33591948.14	0.0142	0.0069
Uranus	87260-02-23 22:05 G	33592174.29	33592174.42	33592174.59	0.0142	0.0105
Uranus	87260-10-07 10:20 G	33592400.89	33592400.93	33592400.99	0.0143	0.0139
Saturn	87261-05-01 14:10 G	33592606.91	33592607.09	33592607.27	0.0281	0.0146
Saturn	87261-12-17 04:20 G	33592836.47	33592836.68	33592836.89	0.0278	0.0048
Saturn	87262-08-03 16:34 G	33593066.08	33593066.19	33593066.30	0.0276	0.0234
Jupiter	87263-06-02 17:17 G	33593369.02	33593369.22	33593369.42	0.0493	0.0099
Jupiter	87264-01-24 17:46 G	33593605.10	33593605.24	33593605.40	0.0493	0.0329

Mars 87267-08-01 09:51 G 33594889.73 33594889.91 33594890.08 0.1604 0.0136

Jupiter 87269-04-01 06:15 G 33595498.58 33595498.76 33595498.95 0.0533 0.0220

Jupiter 87269-11-25 06:44 G 33595736.62 33595736.78 33595736.94 0.0533 0.0332

Jupiter 87275-02-05 19:12 G 33597635.12 33597635.30 33597635.49 0.0494 0.0220

Jupiter 87275-09-29 21:22 G 33597871.20 33597871.39 33597871.57 0.0493 0.0211

Saturn 87277-01-06 18:00 G 33598336.17 33598336.25 33598336.36 0.0279 0.0249

Saturn 87277-08-24 04:34 G 33598565.49 33598565.69 33598565.90 0.0282 0.0060

Saturn 87278-04-10 16:34 G 33598795.01 33598795.19 33598795.38 0.0284 0.0137

Jupiter 87280-12-04 18:15 G 33599764.12 33599764.26 33599764.41 0.0532 0.0372

Jupiter 87281-07-30 17:03 G 33600002.02 33600002.21 33600002.40 0.0533 0.0175

Jupiter 87286-10-11 21:51 G 33601901.26 33601901.41 33601901.56 0.0494 0.0337

Neptune 87287-02-16 00:58 G 33602028.50 33602028.54 33602028.62 0.0089 0.0085

Jupiter 87287-06-05 00:58 G 33602137.34 33602137.54 33602137.74 0.0493 0.0095

Neptune 87287-09-29 14:10 G 33602253.99 33602254.09 33602254.22 0.0089 0.0075

Neptune 87288-05-12 03:22 G 33602479.50 33602479.64 33602479.80 0.0089 0.0065

Neptune 87288-12-23 16:20 G 33602705.02 33602705.18 33602705.37 0.0089 0.0055

Neptune 87289-08-06 05:32 G 33602930.55 33602930.73 33602930.93 0.0089 0.0045

Neptune 87290-03-19 18:44 G 33603156.09 33603156.28 33603156.50 0.0089 0.0035

Neptune 87290-10-31 07:56 G 33603381.63 33603381.83 33603382.05 0.0089 0.0025

Saturn 87290-11-11 23:46 G 33603393.30 33603393.49 33603393.69 0.0281 0.0111

Neptune 87291-06-13 21:08 G 33603607.17 33603607.38 33603607.61 0.0089 0.0015

Moon 87291-06-24 18:44 G 33603618.22 33603618.28 33603618.34 0.2674 0.2464

Saturn 87291-06-29 13:41 G 33603622.86 33603623.07 33603623.27 0.0278 0.0083

Neptune 87292-01-25 10:20 G 33603832.71 33603832.93 33603833.16 0.0089 0.0005

Saturn 87292-02-14 01:12 G 33603852.52 33603852.55 33603852.61 0.0275 0.0269

Jupiter 87292-08-09 08:24 G 33604029.81 33604029.85 33604029.90 0.0531 0.0517

Neptune 87292-09-06 23:32 G 33604058.26 33604058.48 33604058.71 0.0088 0.0006

Jupiter 87293-04-04 05:32 G 33604267.53 33604267.73 33604267.93 0.0533 0.0019

Neptune 87293-04-20 12:44 G 33604283.82 33604284.03 33604284.26 0.0088 0.0017

Neptune 87293-12-02 01:56 G 33604509.38 33604509.58 33604509.80 0.0088 0.0026

Neptune 87294-07-15 14:53 G 33604734.94 33604735.12 33604735.34 0.0088 0.0037

Neptune 87295-02-26 04:20 G 33604960.50 33604960.68 33604960.88 0.0088 0.0046

Neptune 87295-10-09 17:32 G 33605186.07 33605186.23 33605186.41 0.0088 0.0056

Uranus 87296-02-09 09:08 G 33605308.82 33605308.88 33605308.98 0.0137 0.0127

Neptune 87296-05-22 06:44 G 33605411.65 33605411.78 33605411.94 0.0088 0.0067

Uranus 87296-09-22 15:51 G 33605535.02 33605535.16 33605535.32 0.0137 0.0097

Neptune 87297-01-02 19:41 G 33605637.23 33605637.32 33605637.45 0.0088 0.0077

Uranus 87297-05-06 22:20 G 33605761.25 33605761.43 33605761.62 0.0137 0.0067

Neptune 87297-08-16 08:53 G 33605862.85 33605862.87 33605862.94 0.0088 0.0087

Uranus 87297-12-19 04:34 G 33605987.49 33605987.69 33605987.90 0.0136 0.0037

Jupiter 87298-06-16 23:32 G 33606167.40 33606167.48 33606167.56 0.0495 0.0455

Uranus 87298-08-02 10:48 G 33606213.73 33606213.95 33606214.16 0.0136 0.0007

Jupiter 87299-02-08 03:36 G 33606403.45 33606403.65 33606403.85 0.0493 0.0026

Uranus 87299-03-16 16:48 G 33606439.99 33606440.20 33606440.41 0.0136 0.0022

Earth 87299-06-22 11:46 G 33606537.83 33606537.99 33606538.15 0.2671 0.0428

Moon 87299-06-22 12:15 G 33606537.86 33606538.01 33606538.16 0.2678 0.0409 *

Jupiter 87299-10-02 03:51 G 33606639.55 33606639.66 33606639.79 0.0493 0.0399

Uranus 87299-10-28 22:34 G 33606666.25 33606666.44 33606666.65 0.0136 0.0052

Uranus 87300-06-12 04:20 G 33606892.52 33606892.68 33606892.86 0.0136 0.0081

Uranus 87301-01-24 09:51 G 33607118.80 33607118.91 33607119.05 0.0136 0.0109

Jupiter 87304-12-08 18:44 G 33608533.09 33608533.28 33608533.48 0.0533 0.0137

Jupiter 87305-08-03 19:56 G 33608771.21 33608771.33 33608771.46 0.0533 0.0416

Saturn 87306-07-21 01:27 G 33609122.44 33609122.56 33609122.70 0.0280 0.0219

Saturn 87307-03-07 12:00 G 33609351.79 33609352.00 33609352.21 0.0282 0.0028

Saturn 87307-10-23 00:15 G 33609581.35 33609581.51 33609581.68 0.0285 0.0170

Jupiter 87310-10-15 06:00 G 33610669.55 33610669.75 33610669.94 0.0493 0.0146

Jupiter 87311-06-08 06:58 G 33610905.62 33610905.79 33610905.96 0.0493 0.0283

Jupiter 87316-08-13 10:20 G 33612798.76 33612798.93 33612799.10 0.0533 0.0287

Pluto 87316-11-15 07:56 G 33612892.64 33612892.83 33612893.06 0.0078 0.0028

Jupiter 87317-04-08 10:34 G 33613036.76 33613036.94 33613037.11 0.0533 0.0266

Pluto 87317-06-28 18:15 G 33613118.08 33613118.26 33613118.45 0.0078 0.0043

Saturn 87319-10-08 13:56 G 33613950.05 33613950.08 33613950.12 0.0283 0.0278

Saturn 87320-05-25 05:32 G 33614179.52 33614179.73 33614179.93 0.0280 0.0080

Saturn 87321-01-09 19:12 G 33614409.10 33614409.30 33614409.49 0.0278 0.0112

Jupiter 87322-06-20 05:46 G 33614935.58 33614935.74 33614935.92 0.0493 0.0270

Jupiter 87323-02-11 07:56 G 33615171.64 33615171.83 33615172.02 0.0493 0.0161

Jupiter 87328-04-18 01:27 G 33617064.45 33617064.56 33617064.68 0.0532 0.0432

Jupiter 87328-12-11 23:46 G 33617302.30 33617302.49 33617302.69 0.0533 0.0114

Mars 87333-05-29 22:05 G 33618932.25 33618932.42 33618932.60 0.1602 0.0046

Jupiter 87334-02-23 07:27 G 33619201.69 33619201.81 33619201.94 0.0494 0.0389

Jupiter 87334-10-17 10:48 G 33619437.75 33619437.95 33619438.16 0.0493 0.0042

Jupiter 87335-06-10 10:48 G 33619673.89 33619673.95 33619674.03 0.0494 0.0463

Saturn 87336-01-31 09:36 G 33619908.75 33619908.90 33619909.06 0.0280 0.0185

Saturn 87336-09-16 20:39 G 33620138.15 33620138.36 33620138.57 0.0282 0.0008

Saturn 87337-05-04 09:08 G 33620367.74 33620367.88 33620368.03 0.0285 0.0207

Uranus 87340-02-04 06:58 G 33621373.68 33621373.79 33621373.92 0.0141 0.0118

Jupiter 87340-08-16 10:48 G 33621567.75 33621567.95 33621568.15 0.0533 0.0046

Uranus 87340-09-17 18:00 G 33621600.08 33621600.25 33621600.43 0.0141 0.0085

Jupiter 87341-04-11 12:00 G 33621805.94 33621806.00 33621806.07 0.0532 0.0502

Uranus 87341-05-02 05:17 G 33621826.52 33621826.72 33621826.93 0.0142 0.0051

Uranus 87341-12-14 16:34 G 33622052.97 33622053.19 33622053.41 0.0142 0.0017

Uranus 87342-07-29 03:51 G 33622279.45 33622279.66 33622279.88 0.0142 0.0018

Uranus 87343-03-12 15:22 G 33622505.94 33622506.14 33622506.35 0.0142 0.0052

Uranus 87343-10-25 03:08 G 33622732.46 33622732.63 33622732.81 0.0142 0.0087

Uranus 87344-06-07 14:53 G 33622959.02 33622959.12 33622959.25 0.0143 0.0122

Jupiter 87346-06-22 13:56 G 33623703.88 33623704.08 33623704.28 0.0493 0.0076

Jupiter 87347-02-13 14:53 G 33623939.98 33623940.12 33623940.26 0.0493 0.0351

Saturn 87349-04-20 00:29 G 33624736.42 33624736.52 33624736.64 0.0283 0.0242

Saturn 87349-12-05 15:36 G 33624965.94 33624966.15 33624966.37 0.0280 0.0045

Saturn 87350-07-23 04:48 G 33625195.52 33625195.70 33625195.89 0.0277 0.0147

Jupiter 87352-04-20 23:46 G 33625833.30 33625833.49 33625833.68 0.0533 0.0201

Jupiter 87352-12-14 23:46 G 33626071.34 33626071.49 33626071.65 0.0533 0.0352

Jupiter 87358-02-25 16:20 G 33627969.99 33627970.18 33627970.37 0.0493 0.0197

Jupiter 87358-10-19 18:00 G 33628206.07 33628206.25 33628206.43 0.0493 0.0234

Jupiter 87363-12-25 13:12 G 33630098.91 33630099.05 33630099.21 0.0532 0.0354

Jupiter 87364-08-19 12:29 G 33630336.83 33630337.02 33630337.21 0.0533 0.0197

Saturn 87365-08-12 17:46 G 33630695.06 33630695.24 33630695.41 0.0280 0.0153

Saturn 87366-03-30 04:34 G 33630924.49 33630924.69 33630924.90 0.0283 0.0041

Saturn 87366-11-14 17:17 G 33631154.12 33631154.22 33631154.34 0.0286 0.0241

Mars 87368-03-03 17:32 G 33631629.11 33631629.23 33631629.36 0.1930 0.1279

Jupiter 87369-10-31 18:00 G 33632236.10 33632236.25 33632236.41 0.0494 0.0317

Jupiter 87370-06-24 20:39 G 33632472.16 33632472.36 33632472.56 0.0493 0.0115

Neptune 87370-06-30 02:10 G 33632477.57 33632477.59 33632477.68 0.0089 0.0086

Neptune 87371-02-10 15:22 G 33632703.05 33632703.14 33632703.28 0.0089 0.0076

Neptune 87371-09-24 04:34 G 33632928.56 33632928.69 33632928.85 0.0089 0.0066

Neptune 87372-05-06 17:32 G 33633154.07 33633154.23 33633154.42 0.0089 0.0056

Neptune 87372-12-18 06:15 G 33633379.59 33633379.76 33633379.97 0.0089 0.0046

Neptune 87373-07-31 19:12 G 33633605.12 33633605.30 33633605.52 0.0089 0.0036

Neptune 87374-03-14 08:24 G 33633830.64 33633830.85 33633831.06 0.0089 0.0025

Neptune 87374-10-25 21:22 G 33634056.18 33634056.39 33634056.61 0.0089 0.0015

Neptune 87375-06-08 10:20 G 33634281.71 33634281.93 33634282.15 0.0089 0.0005

Jupiter 87375-08-30 05:17 G 33634364.66 33634364.72 33634364.79 0.0532 0.0497

Neptune 87376-01-19 23:03 G 33634507.24 33634507.46 33634507.68 0.0089 0.0005

Jupiter 87376-04-24 03:08 G 33634602.43 33634602.63 33634602.84 0.0534 0.0045

Neptune 87376-09-01 12:00 G 33634732.78 33634733.00 33634733.21 0.0089 0.0015

Neptune 87377-04-15 00:44 G 33634958.32 33634958.53 33634958.74 0.0089 0.0025

Neptune 87377-11-26 13:27 G 33635183.86 33635184.06 33635184.26 0.0089 0.0035

Neptune 87378-07-10 01:56 G 33635409.41 33635409.58 33635409.78 0.0089 0.0046

Saturn 87378-10-31 06:44 G 33635522.64 33635522.78 33635522.93 0.0282 0.0210

Neptune 87379-02-20 14:39 G 33635634.96 33635635.11 33635635.30 0.0089 0.0056

Saturn 87379-06-17 21:36 G 33635752.19 33635752.40 33635752.62 0.0279 0.0014

Neptune 87379-10-04 03:36 G 33635860.52 33635860.65 33635860.82 0.0089 0.0066

Saturn 87380-02-02 10:20 G 33635981.78 33635981.93 33635982.11 0.0277 0.0177

Neptune 87380-05-16 16:48 G 33636086.09 33636086.20 33636086.32 0.0089 0.0075

Uranus 87380-05-24 01:27 G 33636093.45 33636093.56 33636093.70 0.0137 0.0110

Neptune 87380-12-28 05:32 G 33636311.68 33636311.73 33636311.79 0.0089 0.0085

Uranus 87381-01-05 08:10 G 33636319.67 33636319.84 33636320.02 0.0137 0.0080

Jupiter 87381-07-06 17:46 G 33636502.15 33636502.24 33636502.34 0.0494 0.0438

Uranus 87381-08-19 14:39 G 33636545.91 33636546.11 33636546.31 0.0137 0.0050

Jupiter 87382-02-27 21:36 G 33636738.19 33636738.40 33636738.60 0.0493 0.0010

Uranus 87382-04-02 20:39 G 33636772.15 33636772.36 33636772.58 0.0136 0.0021

Jupiter 87382-10-21 21:36 G 33636974.30 33636974.40 33636974.51 0.0493 0.0416

Uranus 87382-11-15 03:08 G 33636998.41 33636998.63 33636998.84 0.0136 0.0009

Uranus 87383-06-29 08:53 G 33637224.67 33637224.87 33637225.08 0.0136 0.0039

Uranus 87384-02-10 14:39 G 33637450.93 33637451.11 33637451.31 0.0136 0.0068

Uranus 87384-09-23 20:24 G 33637677.21 33637677.35 33637677.51 0.0136 0.0097

Uranus 87385-05-08 02:10 G 33637903.51 33637903.59 33637903.67 0.0136 0.0125

Jupiter 87387-12-28 17:17 G 33638868.02 33638868.22 33638868.42 0.0533 0.0110

Jupiter 87388-08-22 18:29 G 33639106.16 33639106.27 33639106.38 0.0533 0.0443

Jupiter 87393-11-03 00:00 G 33641004.30 33641004.50 33641004.70 0.0493 0.0129

Jupiter 87394-06-27 00:58 G 33641240.38 33641240.54 33641240.70 0.0493 0.0301

Saturn 87395-02-23 00:58 G 33641481.36 33641481.54 33641481.73 0.0280 0.0120

Saturn 87395-10-10 12:29 G 33641710.82 33641711.02 33641711.23 0.0283 0.0075

Saturn 87396-05-27 01:27 G 33641940.52 33641940.56 33641940.63 0.0286 0.0276

Mars 87399-03-27 10:05 G 33642974.75 33642974.92 33642975.10 0.1601 0.0209

Jupiter 87399-09-02 05:03 G 33643133.54 33643133.71 33643133.89 0.0532 0.0265

Jupiter 87400-04-28 04:34 G 33643371.53 33643371.69 33643371.87 0.0533 0.0288

Moon 87404-12-27 20:39 G 33645076.21 33645076.36 33645076.51 0.2668 0.0333

Earth 87404-12-27 20:39 G 33645076.21 33645076.36 33645076.52 0.2661 0.0634 *

Jupiter 87405-07-10 02:24 G 33645270.42 33645270.60 33645270.78 0.0494 0.0248

Jupiter 87406-03-03 04:48 G 33645506.51 33645506.70 33645506.89 0.0493 0.0185

Saturn 87408-05-13 17:32 G 33646309.06 33646309.23 33646309.40 0.0282 0.0174

Saturn 87408-12-29 07:56 G 33646538.62 33646538.83 33646539.04 0.0279 0.0022

Saturn 87409-08-15 20:24 G 33646768.22 33646768.35 33646768.49 0.0277 0.0211

Jupiter 87411-05-08 18:58 G 33647399.17 33647399.29 33647399.42 0.0532 0.0414

Jupiter 87412-01-01 16:48 G 33647637.01 33647637.20 33647637.40 0.0533 0.0132

Earth 87412-12-25 13:41 G 33647996.02 33647996.07 33647996.12 0.2660 0.2493

Moon 87412-12-25 17:17 G 33647996.14 33647996.22 33647996.31 0.2665 0.2229

Jupiter 87417-03-15 04:20 G 33649536.54 33649536.68 33649536.81 0.0494 0.0368

Jupiter 87417-11-06 07:41 G 33649772.62 33649772.82 33649773.02 0.0493 0.0065

Jupiter 87418-06-30 07:27 G 33650008.78 33650008.81 33650008.85 0.0494 0.0485

Jupiter 87423-09-06 05:46 G 33651902.53 33651902.74 33651902.94 0.0533 0.0028

Uranus 87423-10-05 12:29 G 33651931.97 33651932.02 33651932.11 0.0141 0.0134

Saturn 87424-01-19 23:32 G 33652038.45 33652038.48 33652038.51 0.0279 0.0275

Jupiter 87424-05-01 07:27 G 33652140.78 33652140.81 33652140.84 0.0533 0.0524

Uranus 87424-05-18 23:46 G 33652158.34 33652158.49 33652158.65 0.0141 0.0101

Saturn 87424-09-05 09:08 G 33652267.69 33652267.88 33652268.09 0.0281 0.0088

Uranus 87424-12-31 10:34 G 33652384.76 33652384.94 33652385.14 0.0141 0.0067

Saturn 87425-04-22 20:53 G 33652497.18 33652497.37 33652497.56 0.0284 0.0109

Uranus 87425-08-14 21:36 G 33652611.20 33652611.40 33652611.62 0.0142 0.0034

Uranus 87426-03-29 09:08 G 33652837.66 33652837.88 33652838.10 0.0142 0.0002

Uranus 87426-11-10 20:39 G 33653064.15 33653064.36 33653064.58 0.0142 0.0035

Uranus 87427-06-25 08:10 G 33653290.65 33653290.84 33653291.04 0.0142 0.0070

Uranus 87428-02-06 19:41 G 33653517.18 33653517.32 33653517.48 0.0142 0.0104

Uranus 87428-09-20 07:27 G 33653743.78 33653743.81 33653743.88 0.0143 0.0139

Jupiter 87428-11-18 05:32 G 33653802.69 33653802.73 33653802.76 0.0495 0.0486

Jupiter 87429-07-12 10:05 G 33654038.71 33654038.92 33654039.12 0.0493 0.0056

Jupiter 87430-03-05 10:20 G 33654274.81 33654274.93 33654275.07 0.0493 0.0371

Mars 87433-12-30 20:39 G 33655671.19 33655671.36 33655671.52 0.1932 0.0589

Jupiter 87435-05-11 20:39 G 33656168.17 33656168.36 33656168.55 0.0533 0.0178

Jupiter 87436-01-04 21:22 G 33656406.25 33656406.39 33656406.54 0.0533 0.0377

Saturn 87437-11-23 23:46 G 33657095.31 33657095.49 33657095.68 0.0281 0.0142

Saturn 87438-07-11 13:56 G 33657324.87 33657325.08 33657325.29 0.0278 0.0053

Saturn 87439-02-26 02:10 G 33657554.49 33657554.59 33657554.70 0.0276 0.0240

Jupiter 87441-03-17 10:48 G 33658304.76 33658304.95 33658305.15 0.0493 0.0179

Jupiter 87441-11-08 12:00 G 33658540.83 33658541.00 33658541.18 0.0493 0.0253

Jupiter 87447-01-14 11:32 G 33660433.83 33660433.98 33660434.14 0.0533 0.0328

Jupiter 87447-09-09 11:03 G 33660671.78 33660671.96 33660672.15 0.0533 0.0226

Neptune 87451-05-22 11:03 G 33662022.96 33662022.96 33662023.02 0.0089 0.0088

Neptune 87452-01-03 00:15 G 33662248.42 33662248.51 33662248.63 0.0089 0.0078

Neptune 87452-08-15 13:27 G 33662473.93 33662474.06 33662474.21 0.0089 0.0068

Jupiter 87452-11-20 12:44 G 33662570.87 33662571.03 33662571.20 0.0494 0.0299

Neptune 87453-03-29 02:39 G 33662699.46 33662699.61 33662699.79 0.0089 0.0058

Jupiter 87453-07-14 15:22 G 33662806.94 33662807.14 33662807.33 0.0493 0.0134

Saturn 87453-08-01 05:03 G 33662824.63 33662824.71 33662824.82 0.0279 0.0246

Neptune 87453-11-09 15:51 G 33662924.98 33662925.16 33662925.35 0.0089 0.0048

Saturn 87454-03-18 15:36 G 33663053.94 33663054.15 33663054.35 0.0281 0.0056

Neptune 87454-06-23 04:48 G 33663150.51 33663150.70 33663150.91 0.0089 0.0038

Saturn 87454-11-03 03:36 G 33663283.47 33663283.65 33663283.83 0.0284 0.0141

Neptune 87455-02-03 18:00 G 33663376.05 33663376.25 33663376.47 0.0089 0.0028

Neptune 87455-09-17 06:58 G 33663601.58 33663601.79 33663602.02 0.0089 0.0018

Neptune 87456-04-29 20:24 G 33663827.13 33663827.35 33663827.57 0.0089 0.0007

Neptune 87456-12-11 09:22 G 33664052.68 33664052.89 33664053.12 0.0089 0.0004

Neptune 87457-07-24 22:20 G 33664278.22 33664278.43 33664278.66 0.0088 0.0014

Neptune 87458-03-07 11:32 G 33664503.78 33664503.98 33664504.21 0.0088 0.0024

Jupiter 87458-09-19 00:58 G 33664699.45 33664699.54 33664699.63 0.0531 0.0476

Neptune 87458-10-19 00:44 G 33664729.34 33664729.53 33664729.75 0.0088 0.0034

Jupiter 87459-05-14 22:05 G 33664937.22 33664937.42 33664937.62 0.0533 0.0067

Neptune 87459-06-01 13:56 G 33664954.90 33664955.08 33664955.29 0.0088 0.0044

Neptune 87460-01-13 03:08 G 33665180.47 33665180.63 33665180.82 0.0088 0.0054

Neptune 87460-08-25 16:20 G 33665406.04 33665406.18 33665406.35 0.0088 0.0064

Neptune 87461-04-08 05:32 G 33665631.63 33665631.73 33665631.87 0.0088 0.0074

Neptune 87461-11-19 18:44 G 33665857.23 33665857.28 33665857.37 0.0088 0.0084

Uranus 87464-01-23 10:48 G 33666651.88 33666651.95 33666652.06 0.0137 0.0123

Jupiter 87464-07-26 14:10 G 33666836.99 33666837.09 33666837.21 0.0495 0.0419

Uranus 87464-09-05 17:32 G 33666878.09 33666878.23 33666878.40 0.0137 0.0093

Mars 87465-01-22 22:48 G 33667017.28 33667017.45 33667017.63 0.1600 0.0363

Jupiter 87465-03-19 18:29 G 33667073.07 33667073.27 33667073.48 0.0493 0.0018

Uranus 87465-04-20 00:15 G 33667104.33 33667104.51 33667104.71 0.0137 0.0063

Jupiter 87465-11-10 19:12 G 33667309.21 33667309.30 33667309.39 0.0494 0.0440

Uranus 87465-12-02 06:44 G 33667330.57 33667330.78 33667330.99 0.0137 0.0033

Uranus 87466-07-16 12:58 G 33667556.83 33667557.04 33667557.26 0.0136 0.0004

Uranus 87467-02-27 18:58 G 33667783.08 33667783.29 33667783.51 0.0136 0.0026

Saturn 87467-06-06 09:22 G 33667881.70 33667881.89 33667882.09 0.0281 0.0108

Uranus 87467-10-12 00:58 G 33668009.35 33668009.54 33668009.74 0.0136 0.0055

Saturn 87468-01-21 23:17 G 33668111.27 33668111.47 33668111.68 0.0278 0.0087

Uranus 87468-05-25 06:44 G 33668235.62 33668235.78 33668235.96 0.0136 0.0084

Saturn 87468-09-07 11:03 G 33668340.95 33668340.96 33668341.00 0.0276 0.0274

Uranus 87469-01-06 12:15 G 33668461.91 33668462.01 33668462.15 0.0136 0.0113

Jupiter 87471-01-17 11:03 G 33669202.76 33669202.96 33669203.16 0.0533 0.0090

Jupiter 87471-09-12 11:46 G 33669440.89 33669440.99 33669441.09 0.0533 0.0462

Pluto 87476-07-07 03:22 G 33671200.61 33671200.64 33671200.71 0.0065 0.0064

Jupiter 87476-11-22 21:08 G 33671339.18 33671339.38 33671339.58 0.0493 0.0106

Pluto 87477-02-17 08:10 G 33671425.64 33671425.84 33671426.04 0.0066 0.0023

Jupiter 87477-07-16 22:05 G 33671575.27 33671575.42 33671575.58 0.0493 0.0324

Pluto 87477-09-30 12:15 G 33671650.81 33671651.01 33671651.23 0.0066 0.0018

Pluto 87478-05-13 16:34 G 33671876.11 33671876.19 33671876.29 0.0066 0.0060

Jupiter 87482-09-22 00:15 G 33673468.33 33673468.51 33673468.69 0.0533 0.0245

Saturn 87483-02-11 12:29 G 33673610.90 33673611.02 33673611.17 0.0279 0.0216

Jupiter 87483-05-18 00:00 G 33673706.34 33673706.50 33673706.67 0.0533 0.0310

Saturn 87483-09-28 23:17 G 33673840.26 33673840.47 33673840.68 0.0282 0.0024

Saturn 87484-05-15 11:17 G 33674069.81 33674069.97 33674070.14 0.0285 0.0175

Jupiter 87488-07-28 23:17 G 33675605.29 33675605.47 33675605.65 0.0494 0.0227

Jupiter 87489-03-22 01:12 G 33675841.37 33675841.55 33675841.74 0.0493 0.0206

Jupiter 87494-05-27 15:36 G 33677734.02 33677734.15 33677734.29 0.0532 0.0394

Jupiter 87495-01-20 14:24 G 33677971.91 33677972.10 33677972.30 0.0534 0.0157

Saturn 87496-05-01 00:00 G 33678438.46 33678438.50 33678438.55 0.0283 0.0276

Saturn 87496-12-16 15:22 G 33678667.94 33678668.14 33678668.35 0.0280 0.0077

Mars 87497-01-21 16:05 G 33678704.11 33678704.17 33678704.24 0.1603 0.1466

Saturn 87497-08-03 04:48 G 33678897.52 33678897.70 33678897.90 0.0277 0.0117

Mars 87499-10-27 23:03 G 33679713.29 33679713.46 33679713.63 0.1934 0.0120

Jupiter 87500-04-04 00:00 G 33679871.36 33679871.50 33679871.65 0.0494 0.0348

Jupiter 87500-11-26 02:53 G 33680107.42 33680107.62 33680107.83 0.0493 0.0086

Jupiter 87506-09-26 04:48 G 33682237.50 33682237.70 33682237.90 0.0534 0.0005

Uranus 87508-01-18 07:41 G 33682716.69 33682716.82 33682716.95 0.0141 0.0114

Uranus 87508-08-31 18:15 G 33682943.09 33682943.26 33682943.45 0.0141 0.0082

Uranus 87509-04-15 05:32 G 33683169.53 33683169.73 33683169.94 0.0141 0.0048

Uranus 87509-11-27 16:48 G 33683395.98 33683396.20 33683396.42 0.0142 0.0014

Uranus 87510-07-12 04:05 G 33683622.45 33683622.67 33683622.89 0.0142 0.0020

Uranus 87511-02-23 15:22 G 33683848.94 33683849.14 33683849.35 0.0142 0.0055

Uranus 87511-10-08 02:39 G 33684075.46 33684075.61 33684075.80 0.0142 0.0090

Jupiter 87511-12-09 01:27 G 33684137.50 33684137.56 33684137.63 0.0495 0.0467

Uranus 87512-05-21 14:39 G 33684302.02 33684302.11 33684302.24 0.0142 0.0124

Jupiter 87512-08-01 05:46 G 33684373.54 33684373.74 33684373.95 0.0493 0.0036

Saturn 87512-08-24 17:17 G 33684397.07 33684397.22 33684397.37 0.0279 0.0188

Jupiter 87513-03-25 06:15 G 33684609.64 33684609.76 33684609.89 0.0493 0.0392

Saturn 87513-04-11 04:05 G 33684626.46 33684626.67 33684626.88 0.0282 0.0007

Saturn 87513-11-26 16:20 G 33684856.05 33684856.18 33684856.34 0.0285 0.0204

Jupiter 87518-05-31 17:03 G 33686503.02 33686503.21 33686503.40 0.0533 0.0154

Jupiter 87519-01-24 17:03 G 33686741.09 33686741.21 33686741.35 0.0533 0.0401

Jupiter 87524-04-06 08:24 G 33688639.65 33688639.85 33688640.04 0.0494 0.0156

Jupiter 87524-11-28 10:05 G 33688875.76 33688875.92 33688876.09 0.0493 0.0278

Saturn 87525-11-12 09:08 G 33689224.78 33689224.88 33689224.99 0.0283 0.0243

Saturn 87526-06-30 00:15 G 33689454.30 33689454.51 33689454.73 0.0280 0.0044

Saturn 87527-02-14 13:27 G 33689683.89 33689684.06 33689684.25 0.0278 0.0149

Jupiter 87530-02-03 06:58 G 33690768.63 33690768.79 33690768.96 0.0532 0.0306

Jupiter 87530-09-29 05:46 G 33691006.56 33691006.74 33691006.92 0.0533 0.0247

Mars 87530-11-21 11:03 G 33691059.79 33691059.96 33691060.12 0.1599 0.0529

Neptune 87535-05-17 01:12 G 33692697.47 33692697.55 33692697.66 0.0089 0.0079

Jupiter 87535-12-11 10:34 G 33692905.77 33692905.94 33692906.11 0.0494 0.0278

Neptune 87535-12-28 14:10 G 33692922.97 33692923.09 33692923.24 0.0089 0.0069

Jupiter 87536-08-03 13:27 G 33693141.86 33693142.06 33693142.25 0.0493 0.0158

Neptune 87536-08-10 03:08 G 33693148.48 33693148.63 33693148.80 0.0089 0.0059

Neptune 87537-03-23 16:05 G 33693374.00 33693374.17 33693374.36 0.0089 0.0049

Neptune 87537-11-04 05:03 G 33693599.52 33693599.71 33693599.92 0.0089 0.0039

Neptune 87538-06-17 18:00 G 33693825.05 33693825.25 33693825.46 0.0089 0.0029

Neptune 87539-01-29 06:58 G 33694050.58 33694050.79 33694051.01 0.0089 0.0019

Neptune 87539-09-11 19:56 G 33694276.12 33694276.33 33694276.55 0.0089 0.0009

Neptune 87540-04-24 08:53 G 33694501.65 33694501.87 33694502.09 0.0089 0.0002

Neptune 87540-12-05 21:36 G 33694727.19 33694727.40 33694727.62 0.0089 0.0012

Neptune 87541-07-19 10:20 G 33694952.73 33694952.93 33694953.15 0.0089 0.0022

Jupiter 87541-10-08 20:53 G 33695034.27 33695034.37 33695034.47 0.0531 0.0456

Neptune 87542-03-01 23:17 G 33695178.27 33695178.47 33695178.68 0.0089 0.0032

Saturn 87542-03-06 23:46 G 33695183.33 33695183.49 33695183.67 0.0280 0.0158

Jupiter 87542-06-03 18:15 G 33695272.06 33695272.26 33695272.46 0.0533 0.0090

Earth 87542-06-25 11:03 G 33695293.80 33695293.96 33695294.12 0.2672 0.0447

Moon 87542-06-25 12:58 G 33695293.87 33695294.04 33695294.20 0.2665 0.0506 *

Neptune 87542-10-13 12:15 G 33695403.82 33695404.01 33695404.21 0.0089 0.0042

Saturn 87542-10-22 11:03 G 33695412.75 33695412.96 33695413.17 0.0283 0.0036

Neptune 87543-05-27 00:58 G 33695629.37 33695629.54 33695629.73 0.0089 0.0052

Saturn 87543-06-08 23:32 G 33695642.37 33695642.48 33695642.60 0.0286 0.0237

Neptune 87544-01-07 13:41 G 33695854.93 33695855.07 33695855.24 0.0089 0.0062

Neptune 87544-08-20 02:39 G 33696080.49 33696080.61 33696080.74 0.0089 0.0072

Neptune 87545-04-02 15:22 G 33696306.07 33696306.14 33696306.23 0.0089 0.0082

Jupiter 87547-08-16 12:29 G 33697171.90 33697172.02 33697172.14 0.0495 0.0397

Uranus 87547-09-23 20:53 G 33697210.34 33697210.37 33697210.40 0.0137 0.0136

Jupiter 87548-04-08 16:20 G 33697407.98 33697408.18 33697408.38 0.0493 0.0038

Uranus 87548-05-07 03:22 G 33697436.52 33697436.64 33697436.79 0.0137 0.0106

Jupiter 87548-11-30 16:20 G 33697644.12 33697644.18 33697644.25 0.0493 0.0463

Uranus 87548-12-19 10:05 G 33697662.75 33697662.92 33697663.11 0.0137 0.0076

Uranus 87549-08-02 16:48 G 33697889.00 33697889.20 33697889.40 0.0137 0.0046

Uranus 87550-03-16 23:03 G 33698115.25 33698115.46 33698115.68 0.0136 0.0016

Uranus 87550-10-29 05:17 G 33698341.51 33698341.72 33698341.94 0.0136 0.0014

Uranus 87551-06-12 11:32 G 33698567.77 33698567.98 33698568.18 0.0136 0.0042

Uranus 87552-01-24 17:17 G 33698794.04 33698794.22 33698794.41 0.0136 0.0071

Uranus 87552-09-06 23:03 G 33699020.32 33699020.46 33699020.61 0.0136 0.0100

Uranus 87553-04-21 04:20 G 33699246.63 33699246.68 33699246.76 0.0136 0.0129

Jupiter 87554-02-06 09:08 G 33699537.68 33699537.88 33699538.08 0.0533 0.0065

Jupiter 87554-10-02 10:34 G 33699775.86 33699775.94 33699776.02 0.0533 0.0490

Saturn 87555-05-25 14:24 G 33700010.97 33700011.10 33700011.24 0.0282 0.0212

Saturn 87556-01-10 05:17 G 33700240.51 33700240.72 33700240.93 0.0279 0.0015

Saturn 87556-08-26 18:00 G 33700470.09 33700470.25 33700470.42 0.0277 0.0176

Jupiter 87559-12-13 18:00 G 33701674.05 33701674.25 33701674.46 0.0493 0.0084

Jupiter 87560-08-05 18:44 G 33701910.14 33701910.28 33701910.43 0.0493 0.0347

Mars 87562-11-20 04:34 G 33702746.59 33702746.69 33702746.79 0.1602 0.1298

Pluto 87564-10-20 15:51 G 33703446.98 33703447.16 33703447.39 0.0078 0.0034

Pluto 87565-06-03 01:56 G 33703672.40 33703672.58 33703672.79 0.0078 0.0038

Mars 87565-08-25 02:10 G 33703755.43 33703755.59 33703755.74 0.1936 0.0810

Jupiter 87565-10-12 00:15 G 33703803.33 33703803.51 33703803.70 0.0533 0.0216

Jupiter 87566-06-07 00:29 G 33704041.37 33704041.52 33704041.68 0.0533 0.0342

Jupiter	87571-08-18 20:39 G	33705940.18	33705940.36	33705940.55	0.0493	0.0204
Saturn	87571-09-17 02:53 G	33705969.43	33705969.62	33705969.80	0.0280	0.0133
Jupiter	87572-04-10 22:34 G	33706176.26	33706176.44	33706176.62	0.0493	0.0230
Saturn	87572-05-03 13:56 G	33706198.88	33706199.08	33706199.29	0.0283	0.0061
Saturn	87572-12-19 02:39 G	33706428.54	33706428.61	33706428.70	0.0286	0.0263
Jupiter	87577-06-16 13:56 G	33708068.94	33708069.08	33708069.23	0.0532	0.0368
Jupiter	87578-02-09 12:15 G	33708306.82	33708307.01	33708307.20	0.0533	0.0184
Jupiter	87583-04-23 22:05 G	33710206.27	33710206.42	33710206.57	0.0495	0.0327
Jupiter	87583-12-16 01:41 G	33710442.37	33710442.57	33710442.77	0.0493	0.0111
Saturn	87584-12-04 21:51 G	33710797.25	33710797.41	33710797.58	0.0282	0.0182
Saturn	87585-07-22 12:29 G	33711026.81	33711027.02	33711027.24	0.0280	0.0017
Saturn	87586-03-09 01:12 G	33711256.42	33711256.55	33711256.70	0.0277	0.0207
Jupiter	87589-02-19 05:17 G	33712334.68	33712334.72	33712334.78	0.0531	0.0513
Jupiter	87589-10-15 01:27 G	33712572.36	33712572.56	33712572.77	0.0533	0.0031
Uranus	87591-09-17 15:22 G	33713275.06	33713275.14	33713275.23	0.0141	0.0128
Uranus	87592-05-01 02:24 G	33713501.44	33713501.60	33713501.76	0.0141	0.0095
Uranus	87592-12-13 13:12 G	33713727.86	33713728.05	33713728.25	0.0141	0.0062
Uranus	87593-07-28 00:15 G	33713954.30	33713954.51	33713954.73	0.0142	0.0029
Uranus	87594-03-11 11:32 G	33714180.76	33714180.98	33714181.20	0.0142	0.0006
Uranus	87594-10-23 22:48 G	33714407.25	33714407.45	33714407.67	0.0142	0.0040
Jupiter	87594-12-27 23:46 G	33714472.40	33714472.49	33714472.57	0.0495	0.0446
Uranus	87595-06-07 10:20 G	33714633.76	33714633.93	33714634.13	0.0142	0.0075
Jupiter	87595-08-21 04:48 G	33714708.50	33714708.70	33714708.91	0.0493	0.0010
Uranus	87596-01-19 22:05 G	33714860.29	33714860.42	33714860.57	0.0142	0.0109
Jupiter	87596-04-13 05:32 G	33714944.63	33714944.73	33714944.84	0.0494	0.0419
Mars	87596-09-17 23:46 G	33715102.33	33715102.49	33715102.65	0.1598	0.0681
Saturn	87601-03-29 08:24 G	33716755.65	33716755.85	33716756.04	0.0281	0.0105
Jupiter	87601-06-19 14:24 G	33716837.91	33716838.10	33716838.30	0.0533	0.0131
Saturn	87601-11-13 19:41 G	33716985.12	33716985.32	33716985.52	0.0283	0.0091
Jupiter	87602-02-12 14:53 G	33717076.01	33717076.12	33717076.25	0.0533	0.0427

Jupiter 87607-04-26 07:27 G 33718974.61 33718974.81 33718975.01 0.0494 0.0131

Jupiter 87607-12-18 09:08 G 33719210.72 33719210.88 33719211.04 0.0493 0.0303

Jupiter 87613-02-22 05:46 G 33721103.58 33721103.74 33721103.92 0.0532 0.0282

Jupiter 87613-10-18 05:17 G 33721341.55 33721341.72 33721341.90 0.0533 0.0277

Saturn 87614-06-17 02:39 G 33721583.43 33721583.61 33721583.79 0.0281 0.0152

Saturn 87615-02-01 16:48 G 33721812.99 33721813.20 33721813.42 0.0279 0.0044

Saturn 87615-09-19 05:03 G 33722042.61 33722042.71 33722042.84 0.0276 0.0233

Neptune 87616-04-06 10:20 G 33722242.85 33722242.93 33722243.03 0.0089 0.0081

Neptune 87616-11-17 23:32 G 33722468.35 33722468.48 33722468.61 0.0089 0.0071

Neptune 87617-07-01 12:29 G 33722693.87 33722694.02 33722694.19 0.0089 0.0061

Neptune 87618-02-12 01:41 G 33722919.40 33722919.57 33722919.76 0.0089 0.0051

Neptune 87618-09-25 14:39 G 33723144.93 33723145.11 33723145.32 0.0089 0.0041

Jupiter 87618-12-30 09:08 G 33723240.71 33723240.88 33723241.06 0.0494 0.0253

Neptune 87619-05-09 03:51 G 33723370.46 33723370.66 33723370.88 0.0089 0.0031

Jupiter 87619-08-23 11:32 G 33723476.80 33723476.98 33723477.17 0.0493 0.0184

Neptune 87619-12-20 17:03 G 33723596.00 33723596.21 33723596.43 0.0089 0.0021

Neptune 87620-08-02 06:00 G 33723821.54 33723821.75 33723821.98 0.0089 0.0011

Neptune 87621-03-15 19:27 G 33724047.09 33724047.31 33724047.53 0.0089 0.0001

Neptune 87621-10-27 08:24 G 33724272.63 33724272.85 33724273.07 0.0089 0.0010

Neptune 87622-06-09 21:22 G 33724498.18 33724498.39 33724498.62 0.0088 0.0020

Neptune 87623-01-21 10:20 G 33724723.74 33724723.93 33724724.15 0.0088 0.0031

Neptune 87623-09-03 23:32 G 33724949.30 33724949.48 33724949.69 0.0088 0.0041

Neptune 87624-04-16 12:44 G 33725174.86 33725175.03 33725175.23 0.0088 0.0051

Jupiter 87624-10-27 21:51 G 33725369.29 33725369.41 33725369.53 0.0532 0.0428

Neptune 87624-11-28 01:56 G 33725400.43 33725400.58 33725400.76 0.0088 0.0061

Jupiter 87625-06-22 19:56 G 33725607.13 33725607.33 33725607.53 0.0534 0.0123

Neptune 87625-07-11 15:08 G 33725626.01 33725626.13 33725626.27 0.0088 0.0071

Neptune 87626-02-22 04:20 G 33725851.60 33725851.68 33725851.78 0.0088 0.0081

Mars 87628-09-16 16:48 G 33726789.08 33726789.20 33726789.33 0.1601 0.1133

Saturn 87630-02-21 23:46 G 33727312.45 33727312.49 33727312.54 0.0278 0.0271

Jupiter 87630-09-04 11:32 G 33727506.84 33727506.98 33727507.11 0.0494 0.0373

Saturn 87630-10-09 09:51 G 33727541.71 33727541.91 33727542.11 0.0281 0.0083

Jupiter 87631-04-28 15:08 G 33727742.93 33727743.13 33727743.33 0.0493 0.0064

Saturn 87631-05-26 21:22 G 33727771.20 33727771.39 33727771.58 0.0283 0.0114

Mars 87631-06-22 04:34 G 33727797.59 33727797.69 33727797.80 0.1937 0.1524

Jupiter 87631-12-20 15:08 G 33727979.11 33727979.13 33727979.16 0.0494 0.0488

Uranus 87632-01-05 14:10 G 33727995.00 33727995.09 33727995.22 0.0137 0.0118

Uranus 87632-08-18 21:08 G 33728221.22 33728221.38 33728221.55 0.0137 0.0088

Uranus 87633-04-02 03:51 G 33728447.46 33728447.66 33728447.85 0.0137 0.0058

Uranus 87633-11-14 10:20 G 33728673.72 33728673.93 33728674.14 0.0137 0.0028

Uranus 87634-06-28 16:34 G 33728899.98 33728900.19 33728900.41 0.0136 0.0002

Uranus 87635-02-09 22:34 G 33729126.24 33729126.44 33729126.65 0.0136 0.0030

Uranus 87635-09-24 04:34 G 33729352.50 33729352.69 33729352.89 0.0136 0.0059

Uranus 87636-05-07 10:20 G 33729578.77 33729578.93 33729579.10 0.0136 0.0088

Uranus 87636-12-19 15:51 G 33729805.07 33729805.16 33729805.28 0.0136 0.0117

Jupiter 87637-02-25 09:08 G 33729872.67 33729872.88 33729873.08 0.0533 0.0035

Jupiter 87637-10-21 09:51 G 33730110.87 33730110.91 33730110.95 0.0532 0.0519

Jupiter 87642-05-10 11:32 G 33731772.97 33731772.98 33731772.99 0.0496 0.0495

Jupiter 87643-01-01 17:17 G 33732009.02 33732009.22 33732009.43 0.0494 0.0059

Jupiter 87643-08-25 18:58 G 33732245.16 33732245.29 33732245.42 0.0494 0.0375

Saturn 87643-12-28 08:10 G 33732369.65 33732369.84 33732370.03 0.0282 0.0125

Saturn 87644-08-13 22:20 G 33732599.23 33732599.43 33732599.64 0.0279 0.0072

Saturn 87645-03-31 10:48 G 33732828.89 33732828.95 33732829.03 0.0276 0.0260

Earth 87647-12-29 23:46 G 33733832.34 33733832.49 33733832.64 0.2661 0.0848

Moon 87647-12-30 02:24 G 33733832.46 33733832.60 33733832.74 0.2655 0.1378 *

Jupiter 87648-10-30 23:17 G 33734138.29 33734138.47 33734138.66 0.0532 0.0190

Jupiter 87649-06-25 22:34 G 33734376.30 33734376.44 33734376.59 0.0533 0.0368

Jupiter 87654-09-06 20:10 G 33736275.15 33736275.34 33736275.53 0.0494 0.0180

Jupiter 87655-04-30 22:34 G 33736511.27 33736511.44 33736511.62 0.0493 0.0257

Moon 87655-12-27 15:08 G 33736752.10 33736752.13 33736752.17 0.2653 0.2573

Earth 87655-12-27 16:48 G 33736752.12 33736752.20 33736752.29 0.2659 0.2258 *

Saturn 87659-09-04 04:20 G 33738098.59 33738098.68 33738098.79 0.0278 0.0244

Saturn 87660-04-20 14:24 G 33738327.89 33738328.10 33738328.30 0.0281 0.0055

Jupiter 87660-07-05 12:58 G 33738403.89 33738404.04 33738404.20 0.0532 0.0343

Saturn 87660-12-06 01:56 G 33738557.40 33738557.58 33738557.76 0.0284 0.0143

Jupiter 87661-02-28 11:17 G 33738641.79 33738641.97 33738642.16 0.0533 0.0213

Mars 87662-07-16 12:15 G 33739144.86 33739145.01 33739145.16 0.1597 0.0840

Jupiter 87666-05-12 22:34 G 33740541.28 33740541.44 33740541.60 0.0494 0.0301

Jupiter 87667-01-04 01:56 G 33740777.39 33740777.58 33740777.78 0.0493 0.0138

Jupiter 87672-03-10 05:03 G 33742669.64 33742669.71 33742669.79 0.0531 0.0488

Jupiter 87672-11-03 01:56 G 33742907.38 33742907.58 33742907.78 0.0533 0.0058

Saturn 87673-07-09 11:46 G 33743155.80 33743155.99 33743156.20 0.0281 0.0098

Saturn 87674-02-24 01:41 G 33743385.38 33743385.57 33743385.78 0.0278 0.0099

Uranus 87675-12-30 10:48 G 33744059.83 33744059.95 33744060.10 0.0141 0.0109

Uranus 87676-08-12 21:51 G 33744286.23 33744286.41 33744286.60 0.0141 0.0076

Uranus 87677-03-27 08:53 G 33744512.66 33744512.87 33744513.09 0.0142 0.0042

Uranus 87677-11-08 20:10 G 33744739.12 33744739.34 33744739.56 0.0142 0.0008

Jupiter 87678-01-16 00:15 G 33744807.40 33744807.51 33744807.62 0.0495 0.0420

Uranus 87678-06-23 07:27 G 33744965.60 33744965.81 33744966.03 0.0142 0.0026

Jupiter 87678-09-09 04:48 G 33745043.49 33745043.70 33745043.90 0.0493 0.0018

Uranus 87679-02-04 18:44 G 33745192.09 33745192.28 33745192.49 0.0142 0.0060

Jupiter 87679-05-03 05:03 G 33745279.63 33745279.71 33745279.80 0.0493 0.0445

Uranus 87679-09-19 06:15 G 33745418.61 33745418.76 33745418.94 0.0142 0.0095

Uranus 87680-05-02 18:00 G 33745645.18 33745645.25 33745645.36 0.0143 0.0129

Jupiter 87684-07-08 17:17 G 33747173.02 33747173.22 33747173.42 0.0533 0.0095

Jupiter 87685-03-03 18:15 G 33747411.17 33747411.26 33747411.36 0.0533 0.0463

Saturn 87689-03-16 03:51 G 33748884.55 33748884.66 33748884.79 0.0278 0.0226

Saturn 87689-10-31 14:10 G 33749113.88 33749114.09 33749114.30 0.0281 0.0036

Jupiter 87690-05-15 07:41 G 33749309.62 33749309.82 33749310.02 0.0493 0.0104

Saturn 87690-06-18 01:56 G 33749343.41 33749343.58 33749343.76 0.0284 0.0162

Jupiter 87691-01-06 09:08 G 33749545.73 33749545.88 33749546.03 0.0493 0.0331

Mars 87694-07-15 05:32 G 33750831.59 33750831.73 33750831.87 0.1600 0.0968

Jupiter 87696-03-13 07:56 G 33751438.66 33751438.83 33751439.01 0.0532 0.0250

Jupiter 87696-11-06 06:44 G 33751676.62 33751676.78 33751676.95 0.0533 0.0309

Neptune 87699-08-18 10:20 G 33752691.88 33752691.93 33752692.03 0.0089 0.0083

Neptune 87700-03-31 23:17 G 33752917.37 33752917.47 33752917.61 0.0089 0.0073

Neptune 87700-11-12 12:15 G 33753142.87 33753143.01 33753143.18 0.0089 0.0063

Neptune 87701-06-26 01:12 G 33753368.39 33753368.55 33753368.74 0.0089 0.0053

Jupiter 87702-01-19 08:53 G 33753575.69 33753575.87 33753576.06 0.0494 0.0229

Neptune 87702-02-06 14:10 G 33753593.91 33753594.09 33753594.29 0.0089 0.0043

Saturn 87702-06-05 00:00 G 33753712.45 33753712.50 33753712.56 0.0284 0.0273

Jupiter 87702-09-12 12:15 G 33753811.83 33753812.01 33753812.20 0.0494 0.0212

Neptune 87702-09-20 03:08 G 33753819.44 33753819.63 33753819.85 0.0089 0.0033

Saturn 87703-01-20 16:05 G 33753941.97 33753942.17 33753942.38 0.0281 0.0072

Neptune 87703-05-03 16:05 G 33754044.97 33754045.17 33754045.40 0.0089 0.0023

Saturn 87703-09-07 06:00 G 33754171.57 33754171.75 33754171.95 0.0279 0.0125

Neptune 87703-12-15 05:17 G 33754270.50 33754270.72 33754270.94 0.0089 0.0012

Neptune 87704-07-27 18:00 G 33754496.04 33754496.25 33754496.47 0.0089 0.0003

Neptune 87705-03-10 06:58 G 33754721.57 33754721.79 33754722.01 0.0089 0.0008

Neptune 87705-10-21 19:41 G 33754947.12 33754947.32 33754947.55 0.0089 0.0019

Neptune 87706-06-04 08:39 G 33755172.66 33755172.86 33755173.08 0.0089 0.0029

Neptune 87707-01-15 21:22 G 33755398.21 33755398.39 33755398.60 0.0089 0.0039

Neptune 87707-08-29 10:05 G 33755623.76 33755623.92 33755624.12 0.0089 0.0049

Jupiter 87707-11-17 23:32 G 33755704.35 33755704.48 33755704.61 0.0531 0.0398

Neptune 87708-04-10 22:48 G 33755849.31 33755849.45 33755849.64 0.0089 0.0059

Jupiter 87708-07-12 20:24 G 33755942.16 33755942.35 33755942.55 0.0533 0.0154

Neptune 87708-11-22 11:46 G 33756074.87 33756074.99 33756075.14 0.0089 0.0069

Neptune 87709-07-06 00:29 G 33756300.44 33756300.52 33756300.64 0.0089 0.0079

Neptune 87710-02-16 13:27 G 33756526.06 33756526.06 33756526.09 0.0089 0.0089

Jupiter 87713-09-24 11:17 G 33757841.83 33757841.97 33757842.12 0.0495 0.0350

Jupiter 87714-05-18 15:36 G 33758077.95 33758078.15 33758078.36 0.0494 0.0092

Uranus 87715-09-06 01:41 G 33758553.51 33758553.57 33758553.65 0.0137 0.0129

Uranus 87716-04-19 08:24 G 33758779.72 33758779.85 33758780.01 0.0137 0.0100

Uranus 87716-12-01 15:08 G 33759005.96 33759006.13 33759006.33 0.0137 0.0070

Uranus 87717-07-15 21:51 G 33759232.20 33759232.41 33759232.62 0.0137 0.0040

Uranus 87718-02-27 04:05 G 33759458.46 33759458.67 33759458.89 0.0136 0.0011

Saturn 87718-09-27 08:10 G 33759670.70 33759670.84 33759670.99 0.0279 0.0199

Uranus 87718-10-11 10:20 G 33759684.72 33759684.93 33759685.15 0.0136 0.0019

Saturn 87719-05-14 18:15 G 33759900.05 33759900.26 33759900.47 0.0281 0.0009

Uranus 87719-05-25 16:05 G 33759910.98 33759911.17 33759911.38 0.0136 0.0048

Saturn 87719-12-30 06:00 G 33760129.60 33760129.75 33760129.91 0.0284 0.0191

Uranus 87720-01-06 21:51 G 33760137.25 33760137.41 33760137.60 0.0136 0.0077

Jupiter 87720-03-17 09:36 G 33760207.70 33760207.90 33760208.10 0.0533 0.0005

Uranus 87720-08-20 03:22 G 33760363.52 33760363.64 33760363.79 0.0136 0.0106

Uranus 87721-04-03 08:53 G 33760589.86 33760589.87 33760589.92 0.0136 0.0134

Pluto 87724-06-11 14:24 G 33761755.02 33761755.10 33761755.19 0.0065 0.0060

Pluto 87725-01-22 18:29 G 33761980.08 33761980.27 33761980.49 0.0066 0.0020

Jupiter 87725-05-30 13:12 G 33762107.99 33762108.05 33762108.12 0.0496 0.0468

Pluto 87725-09-04 22:48 G 33762205.26 33762205.45 33762205.67 0.0066 0.0022

Jupiter 87726-01-21 18:58 G 33762344.08 33762344.29 33762344.49 0.0494 0.0030

Pluto 87726-04-18 03:08 G 33762430.59 33762430.63 33762430.71 0.0066 0.0063

Jupiter 87726-09-14 20:10 G 33762580.23 33762580.34 33762580.46 0.0494 0.0403

Mars 87728-05-14 00:44 G 33763187.39 33763187.53 33763187.67 0.1596 0.0999

Mars 87729-04-19 07:12 G 33763527.74 33763527.80 33763527.86 0.1934 0.1793

Jupiter 87731-11-21 00:29 G 33764473.33 33764473.52 33764473.72 0.0533 0.0159

Saturn 87731-12-16 03:08 G 33764498.54 33764498.63 33764498.75 0.0283 0.0246

Jupiter 87732-07-16 00:29 G 33764711.39 33764711.52 33764711.65 0.0533 0.0401

Saturn 87732-08-01 19:12 G 33764728.09 33764728.30 33764728.51 0.0281 0.0045

Saturn 87733-03-19 08:53 G 33764957.69 33764957.87 33764958.05 0.0278 0.0149

Jupiter 87737-09-26 21:36 G 33766610.21 33766610.40 33766610.60 0.0494 0.0151

Jupiter 87738-05-20 23:32 G 33766846.31 33766846.48 33766846.64 0.0493 0.0286

Jupiter 87743-07-26 16:34 G 33768739.03 33768739.19 33768739.36 0.0532 0.0309

Jupiter 87744-03-20 15:36 G 33768976.97 33768977.15 33768977.33 0.0533 0.0250

Saturn 87748-04-08 06:58 G 33770456.64 33770456.79 33770456.96 0.0279 0.0182

Saturn 87748-11-23 17:17 G 33770686.01 33770686.22 33770686.43 0.0281 0.0010

Jupiter 87749-06-02 00:00 G 33770876.33 33770876.50 33770876.68 0.0494 0.0273

Saturn 87749-07-11 05:17 G 33770915.58 33770915.72 33770915.86 0.0284 0.0208

Jupiter 87750-01-24 03:08 G 33771112.44 33771112.63 33771112.83 0.0493 0.0169

Jupiter 87755-03-31 09:08 G 33773004.78 33773004.88 33773004.98 0.0531 0.0456

Jupiter 87755-11-24 05:17 G 33773242.52 33773242.72 33773242.92 0.0533 0.0094

Uranus 87759-08-30 18:00 G 33774618.15 33774618.25 33774618.36 0.0141 0.0123

Uranus 87760-04-13 04:48 G 33774844.54 33774844.70 33774844.87 0.0141 0.0091

Mars 87760-05-12 17:46 G 33774874.09 33774874.24 33774874.39 0.1599 0.0801

Uranus 87760-11-25 15:36 G 33775070.96 33775071.15 33775071.36 0.0141 0.0058

Jupiter 87761-02-05 00:15 G 33775142.39 33775142.51 33775142.63 0.0495 0.0398

Saturn 87761-06-27 06:00 G 33775284.62 33775284.75 33775284.88 0.0284 0.0223

Uranus 87761-07-10 02:39 G 33775297.40 33775297.61 33775297.83 0.0142 0.0024

Jupiter 87761-09-29 05:32 G 33775378.53 33775378.73 33775378.93 0.0494 0.0044

Saturn 87762-02-11 21:51 G 33775514.20 33775514.41 33775514.63 0.0281 0.0022

Uranus 87762-02-21 13:56 G 33775523.86 33775524.08 33775524.30 0.0142 0.0010

Jupiter 87762-05-23 06:44 G 33775614.73 33775614.78 33775614.84 0.0494 0.0474

Saturn 87762-09-29 11:46 G 33775743.83 33775743.99 33775744.16 0.0278 0.0173

Uranus 87762-10-06 01:12 G 33775750.35 33775750.55 33775750.77 0.0142 0.0044

Uranus 87763-05-20 12:58 G 33775976.86 33775977.04 33775977.23 0.0142 0.0079

Uranus 87764-01-02 00:44 G 33776203.40 33776203.53 33776203.66 0.0142 0.0113

Jupiter 87767-07-29 19:56 G 33777508.13 33777508.33 33777508.54 0.0532 0.0063

Jupiter 87768-03-23 19:56 G 33777746.26 33777746.33 33777746.40 0.0532 0.0494

Jupiter 87773-06-04 08:24 G 33779644.65 33779644.85 33779645.06 0.0494 0.0078

Jupiter 87774-01-26 10:34 G 33779880.80 33779880.94 33779881.08 0.0494 0.0359

Moon 87777-06-28 15:22 G 33781130.07 33781130.14 33781130.21 0.2673 0.2366

Saturn 87777-10-19 10:34 G 33781242.77 33781242.94 33781243.12 0.0279 0.0156

Saturn 87778-06-05 20:53 G 33781472.16 33781472.37 33781472.58 0.0282 0.0037

Saturn 87779-01-21 08:39 G 33781701.75 33781701.86 33781701.98 0.0285 0.0236

Jupiter 87779-04-03 09:36 G 33781773.72 33781773.90 33781774.09 0.0532 0.0219

Jupiter 87779-11-27 08:24 G 33782011.70 33782011.85 33782012.01 0.0533 0.0340

Neptune 87780-07-09 18:58 G 33782237.25 33782237.29 33782237.38 0.0089 0.0085

Neptune 87781-02-20 08:10 G 33782462.75 33782462.84 33782462.98 0.0089 0.0075

Neptune 87781-10-03 21:22 G 33782688.26 33782688.39 33782688.56 0.0089 0.0065

Neptune 87782-05-17 10:34 G 33782913.78 33782913.94 33782914.13 0.0089 0.0055

Neptune 87782-12-28 23:32 G 33783139.31 33783139.48 33783139.69 0.0089 0.0045

Neptune 87783-08-11 12:44 G 33783364.84 33783365.03 33783365.25 0.0089 0.0035

Neptune 87784-03-24 02:24 G 33783590.39 33783590.60 33783590.81 0.0089 0.0024

Neptune 87784-11-04 15:22 G 33783815.93 33783816.14 33783816.36 0.0089 0.0014

Jupiter 87785-02-07 11:17 G 33783910.79 33783910.97 33783911.16 0.0494 0.0200

Neptune 87785-06-18 04:34 G 33784041.47 33784041.69 33784041.91 0.0089 0.0004

Moon 87785-06-26 07:12 G 33784049.64 33784049.80 33784049.95 0.2680 0.0422

Earth 87785-06-26 10:34 G 33784049.78 33784049.94 33784050.10 0.2673 0.0458 *

Jupiter 87785-10-01 14:24 G 33784146.93 33784147.10 33784147.28 0.0493 0.0242

Neptune 87786-01-29 17:32 G 33784267.01 33784267.23 33784267.45 0.0089 0.0006

Neptune 87786-09-12 06:29 G 33784492.56 33784492.77 33784493.00 0.0089 0.0017

Neptune 87787-04-25 19:56 G 33784718.12 33784718.33 33784718.54 0.0088 0.0027

Neptune 87787-12-07 08:53 G 33784943.67 33784943.87 33784944.08 0.0088 0.0037

Neptune 87788-07-19 21:36 G 33785169.23 33785169.40 33785169.61 0.0088 0.0048

Neptune 87789-03-02 10:48 G 33785394.80 33785394.95 33785395.14 0.0088 0.0058

Neptune 87789-10-14 00:00 G 33785620.38 33785620.50 33785620.66 0.0088 0.0068

Neptune 87790-05-27 13:12 G 33785845.96 33785846.05 33785846.18 0.0088 0.0078

Jupiter 87790-12-07 01:12 G 33786039.41 33786039.55 33786039.70 0.0531 0.0369

Saturn 87791-01-07 08:53 G 33786070.73 33786070.87 33786071.03 0.0283 0.0196

Neptune 87791-01-08 02:10 G 33786071.59 33786071.59 33786071.65 0.0088 0.0088

Jupiter 87791-08-01 22:48 G 33786277.26 33786277.45 33786277.64 0.0533 0.0187

Saturn 87791-08-25 00:44 G 33786300.32 33786300.53 33786300.75 0.0280 0.0005

Saturn 87792-04-10 14:24 G 33786529.96 33786530.10 33786530.25 0.0277 0.0198

Mars 87794-03-11 12:58 G 33787229.93 33787230.04 33787230.16 0.1595 0.1160

Mars 87795-02-14 09:08 G 33787569.74 33787569.88 33787570.03 0.1936 0.1053

Jupiter 87796-10-13 13:56 G 33788176.92 33788177.08 33788177.23 0.0495 0.0320

Jupiter 87797-06-06 17:32 G 33788413.04 33788413.23 33788413.43 0.0493 0.0122

Uranus 87799-12-18 20:10 G 33789338.24 33789338.34 33789338.49 0.0137 0.0112

Uranus 87800-08-02 03:08 G 33789564.47 33789564.63 33789564.81 0.0137 0.0081

Uranus 87801-03-16 09:36 G 33789790.71 33789790.90 33789791.11 0.0137 0.0052

Uranus 87801-10-28 16:20 G 33790016.97 33790017.18 33790017.39 0.0136 0.0022

Uranus 87802-06-11 22:34 G 33790243.22 33790243.44 33790243.65 0.0136 0.0008

Jupiter 87802-08-12 18:00 G 33790305.21 33790305.25 33790305.30 0.0531 0.0513

Uranus 87803-01-24 04:20 G 33790469.48 33790469.68 33790469.89 0.0136 0.0037

Jupiter 87803-04-07 14:10 G 33790542.89 33790543.09 33790543.29 0.0533 0.0034

Uranus 87803-09-07 09:51 G 33790695.74 33790695.91 33790696.11 0.0136 0.0066

Uranus 87804-04-20 15:51 G 33790922.01 33790922.16 33790922.32 0.0136 0.0094

Uranus 87804-12-02 21:08 G 33791148.31 33791148.38 33791148.49 0.0136 0.0123

Saturn 87807-05-02 09:08 G 33792028.70 33792028.88 33792029.07 0.0279 0.0139

Saturn 87807-12-17 19:27 G 33792258.10 33792258.31 33792258.52 0.0282 0.0054

Jupiter 87808-06-19 15:51 G 33792443.07 33792443.16 33792443.25 0.0495 0.0440

Saturn 87808-08-03 07:27 G 33792487.72 33792487.81 33792487.91 0.0285 0.0254

Jupiter 87809-02-10 21:08 G 33792679.17 33792679.38 33792679.58 0.0493 0.0007

Jupiter 87809-10-04 22:05 G 33792915.33 33792915.42 33792915.52 0.0494 0.0434

Pluto 87812-09-25 03:08 G 33794001.42 33794001.63 33794001.84 0.0078 0.0028

Pluto 87813-05-08 12:44 G 33794226.85 33794227.03 33794227.22 0.0078 0.0043

Jupiter 87814-12-11 05:32 G 33794808.53 33794808.73 33794808.93 0.0532 0.0123

Jupiter 87815-08-06 04:48 G 33795046.59 33795046.70 33795046.82 0.0532 0.0436

Saturn 87820-07-20 10:48 G 33796856.79 33796856.95 33796857.12 0.0284 0.0174

Jupiter 87820-10-16 22:05 G 33796945.23 33796945.42 33796945.62 0.0494 0.0126

Saturn 87821-03-07 02:39 G 33797086.40 33797086.61 33797086.83 0.0281 0.0028

Jupiter 87821-06-10 00:44 G 33797181.38 33797181.53 33797181.69 0.0494 0.0315

Saturn 87821-10-22 16:20 G 33797316.06 33797316.18 33797316.32 0.0278 0.0221

Mars 87826-03-11 06:00 G 33798916.59 33798916.75 33798916.91 0.1598 0.0632

Jupiter 87826-08-15 21:08 G 33799074.21 33799074.38 33799074.55 0.0531 0.0275

Jupiter 87827-04-10 18:58 G 33799312.12 33799312.29 33799312.46 0.0532 0.0284

Jupiter 87832-06-22 00:29 G 33801211.35 33801211.52 33801211.70 0.0495 0.0249

Jupiter 87833-02-13 04:34 G 33801447.50 33801447.69 33801447.87 0.0494 0.0195

Saturn 87836-11-11 12:58 G 33802814.85 33802815.04 33802815.24 0.0279 0.0111

Saturn 87837-06-28 23:17 G 33803044.27 33803044.47 33803044.67 0.0282 0.0082

Saturn 87838-02-13 11:17 G 33803273.95 33803273.97 33803274.01 0.0285 0.0282

Jupiter 87838-04-20 11:32 G 33803339.86 33803339.98 33803340.10 0.0531 0.0425

Jupiter 87838-12-14 07:41 G 33803577.62 33803577.82 33803578.02 0.0533 0.0126

Uranus 87843-05-01 00:44 G 33805176.51 33805176.53 33805176.59 0.0141 0.0138

Uranus 87843-12-13 11:32 G 33805402.85 33805402.98 33805403.13 0.0141 0.0106

Jupiter 87844-02-26 03:08 G 33805477.50 33805477.63 33805477.77 0.0495 0.0369

Uranus 87844-07-26 22:20 G 33805629.25 33805629.43 33805629.62 0.0141 0.0073

Jupiter 87844-10-19 08:10 G 33805713.64 33805713.84 33805714.04 0.0494 0.0075

Uranus 87845-03-10 09:08 G 33805855.68 33805855.88 33805856.10 0.0142 0.0040

Uranus 87845-10-22 20:39 G 33806082.13 33806082.36 33806082.58 0.0142 0.0006

Uranus 87846-06-06 07:41 G 33806308.61 33806308.82 33806309.05 0.0142 0.0029

Uranus 87847-01-18 18:58 G 33806535.11 33806535.29 33806535.50 0.0142 0.0063

Uranus 87847-09-02 06:29 G 33806761.63 33806761.77 33806761.95 0.0142 0.0098

Uranus 87848-04-15 18:15 G 33806988.20 33806988.26 33806988.36 0.0143 0.0132

Saturn 87850-01-30 13:41 G 33807642.90 33807643.07 33807643.26 0.0283 0.0147

Jupiter 87850-08-18 22:20 G 33807843.23 33807843.43 33807843.63 0.0533 0.0030

Saturn 87850-09-17 05:17 G 33807872.51 33807872.72 33807872.94 0.0280 0.0054

Jupiter 87851-04-13 22:48 G 33808081.43 33808081.45 33808081.47 0.0532 0.0528

Saturn 87851-05-04 18:44 G 33808102.20 33808102.28 33808102.39 0.0277 0.0246

Jupiter 87855-11-01 05:03 G 33809743.68 33809743.71 33809743.75 0.0496 0.0488

Jupiter 87856-06-24 11:03 G 33809979.76 33809979.96 33809980.17 0.0494 0.0047

Jupiter 87857-02-15 12:29 G 33810215.91 33810216.02 33810216.15 0.0493 0.0390

Mars 87860-01-08 01:56 G 33811272.48 33811272.58 33811272.67 0.1594 0.1315

Mars 87860-12-12 12:00 G 33811611.83 33811612.00 33811612.17 0.1938 0.0346

Jupiter 87862-04-23 14:10 G 33812108.90 33812109.09 33812109.28 0.0532 0.0183

Jupiter 87862-12-17 13:27 G 33812346.92 33812347.06 33812347.21 0.0533 0.0380

Neptune 87863-11-21 19:12 G 33812686.28 33812686.30 33812686.36 0.0089 0.0087

Neptune 87864-07-04 08:10 G 33812911.75 33812911.84 33812911.97 0.0089 0.0077

Neptune 87865-02-14 21:08 G 33813137.25 33813137.38 33813137.54 0.0089 0.0067

Neptune 87865-09-28 10:05 G 33813362.77 33813362.92 33813363.11 0.0089 0.0057

Neptune 87866-05-11 23:03 G 33813588.29 33813588.46 33813588.66 0.0089 0.0047

Saturn 87866-05-24 11:46 G 33813600.79 33813600.99 33813601.19 0.0279 0.0094

Neptune 87866-12-23 12:00 G 33813813.81 33813814.00 33813814.21 0.0089 0.0037

Saturn 87867-01-08 21:51 G 33813830.22 33813830.41 33813830.61 0.0282 0.0100

Neptune 87867-08-06 00:58 G 33814039.34 33814039.54 33814039.76 0.0089 0.0026

Jupiter 87868-02-28 14:10 G 33814245.89 33814246.09 33814246.28 0.0494 0.0170

Neptune 87868-03-18 14:10 G 33814264.87 33814265.09 33814265.30 0.0089 0.0016

Jupiter 87868-10-21 16:48 G 33814482.03 33814482.20 33814482.37 0.0493 0.0272

Neptune 87868-10-30 03:08 G 33814490.41 33814490.63 33814490.85 0.0089 0.0006

Neptune 87869-06-12 15:51 G 33814715.95 33814716.16 33814716.39 0.0089 0.0005

Neptune 87870-01-24 04:48 G 33814941.49 33814941.70 33814941.92 0.0089 0.0015

Neptune 87870-09-06 17:32 G 33815167.03 33815167.23 33815167.45 0.0089 0.0025

Neptune 87871-04-20 06:29 G 33815392.58 33815392.77 33815392.98 0.0089 0.0035

Neptune 87871-12-01 19:27 G 33815618.13 33815618.31 33815618.51 0.0089 0.0045

Neptune 87872-07-14 08:10 G 33815843.68 33815843.84 33815844.02 0.0089 0.0055

Neptune 87873-02-24 21:08 G 33816069.24 33816069.38 33816069.53 0.0089 0.0065

Neptune 87873-10-08 10:05 G 33816294.81 33816294.92 33816295.04 0.0089 0.0075

Jupiter 87873-12-27 06:44 G 33816374.63 33816374.78 33816374.94 0.0531 0.0334

Neptune 87874-05-21 22:48 G 33816520.40 33816520.45 33816520.52 0.0089 0.0085

Jupiter 87874-08-22 04:05 G 33816612.49 33816612.67 33816612.85 0.0532 0.0224

Saturn 87879-08-12 14:53 G 33818428.94 33818429.12 33818429.32 0.0284 0.0126

Jupiter 87879-11-03 13:56 G 33818511.92 33818512.08 33818512.25 0.0495 0.0297

Saturn 87880-03-29 06:58 G 33818658.58 33818658.79 33818659.00 0.0281 0.0076

Jupiter 87880-06-26 18:29 G 33818748.07 33818748.27 33818748.46 0.0494 0.0149

Saturn 87880-11-13 20:39 G 33818888.31 33818888.36 33818888.42 0.0278 0.0268

Uranus 87883-08-19 07:41 G 33819896.74 33819896.82 33819896.92 0.0137 0.0123

Uranus 87884-04-01 14:24 G 33820122.95 33820123.10 33820123.27 0.0137 0.0093

Uranus 87884-11-13 21:22 G 33820349.20 33820349.39 33820349.58 0.0137 0.0063

Uranus 87885-06-28 03:36 G 33820575.45 33820575.65 33820575.87 0.0137 0.0034

Jupiter 87885-08-31 23:32 G 33820640.40 33820640.48 33820640.57 0.0530 0.0479

Uranus 87886-02-09 10:05 G 33820801.70 33820801.92 33820802.13 0.0136 0.0005

Jupiter 87886-04-26 18:44 G 33820878.08 33820878.28 33820878.48 0.0532 0.0070

Uranus 87886-09-23 15:51 G 33821027.96 33821028.16 33821028.38 0.0136 0.0026

Uranus 87887-05-07 21:51 G 33821254.22 33821254.41 33821254.61 0.0136 0.0054

Uranus 87887-12-20 03:36 G 33821480.49 33821480.65 33821480.83 0.0136 0.0083

Uranus 87888-08-02 09:22 G 33821706.77 33821706.89 33821707.01 0.0136 0.0111

Moon 87890-12-31 22:48 G 33822588.30 33822588.45 33822588.59 0.2663 0.0575

Earth 87891-01-01 03:08 G 33822588.48 33822588.63 33822588.77 0.2659 0.1085 *

Jupiter 87891-07-09 15:36 G 33822778.05 33822778.15 33822778.26 0.0496 0.0419

Mars 87892-01-06 18:44 G 33822959.11 33822959.28 33822959.45 0.1597 0.0477

Jupiter 87892-03-01 21:36 G 33823014.20 33823014.40 33823014.61 0.0494 0.0026

Jupiter 87892-10-23 23:32 G 33823250.41 33823250.48 33823250.55 0.0494 0.0460

Saturn 87895-04-19 06:58 G 33824157.72 33824157.79 33824157.89 0.0276 0.0252

Saturn 87895-12-04 15:36 G 33824386.95 33824387.15 33824387.36 0.0279 0.0066

Saturn 87896-07-21 02:10 G 33824616.40 33824616.59 33824616.77 0.0282 0.0129

Jupiter 87897-12-30 07:56 G 33825143.63 33825143.83 33825144.03 0.0532 0.0090

Jupiter 87898-08-25 06:58 G 33825381.71 33825381.79 33825381.89 0.0532 0.0469

Moon 87898-12-29 18:58 G 33825508.19 33825508.29 33825508.40 0.2664 0.1825

Earth 87898-12-29 19:56 G 33825508.23 33825508.33 33825508.43 0.2658 0.2041 *

Jupiter 87903-11-07 00:58 G 33827280.34 33827280.54 33827280.74 0.0494 0.0095

Jupiter 87904-06-30 03:22 G 33827516.50 33827516.64 33827516.79 0.0494 0.0345

Saturn 87909-02-22 18:29 G 33829215.08 33829215.27 33829215.48 0.0283 0.0098

Jupiter 87909-09-04 23:03 G 33829409.28 33829409.46 33829409.64 0.0532 0.0244

Saturn 87909-10-10 10:05 G 33829444.72 33829444.92 33829445.12 0.0280 0.0102

Jupiter 87910-04-30 21:08 G 33829647.22 33829647.38 33829647.55 0.0533 0.0318

Jupiter 87915-07-13 03:22 G 33831546.46 33831546.64 33831546.83 0.0494 0.0218

Jupiter 87916-03-05 06:44 G 33831782.60 33831782.78 33831782.96 0.0493 0.0226

Jupiter 87921-05-10 15:22 G 33833675.00 33833675.14 33833675.27 0.0531 0.0394

Jupiter 87922-01-03 12:00 G 33833912.81 33833913.00 33833913.20 0.0533 0.0164

Saturn 87924-10-30 06:44 G 33834943.68 33834943.78 33834943.90 0.0277 0.0234

Saturn 87925-06-16 15:22 G 33835172.94 33835173.14 33835173.35 0.0279 0.0048

Mars 87925-11-05 14:10 G 33835315.03 33835315.09 33835315.16 0.1593 0.1473

Saturn 87926-02-01 01:56 G 33835402.40 33835402.58 33835402.75 0.0282 0.0148

Mars 87926-10-10 14:10 G 33835653.92 33835654.09 33835654.26 0.1939 0.0384

Jupiter 87927-03-18 05:46 G 33835812.59 33835812.74 33835812.89 0.0495 0.0340

Uranus 87927-08-13 17:03 G 33835961.11 33835961.21 33835961.33 0.0141 0.0121

Jupiter 87927-11-09 10:20 G 33836048.73 33836048.93 33836049.13 0.0494 0.0106

Uranus 87928-03-27 03:51 G 33836187.49 33836187.66 33836187.83 0.0141 0.0089

Uranus 87928-11-08 14:24 G 33836413.91 33836414.10 33836414.31 0.0141 0.0056

Uranus 87929-06-23 01:27 G 33836640.35 33836640.56 33836640.78 0.0142 0.0022

Uranus 87930-02-04 12:44 G 33836866.81 33836867.03 33836867.25 0.0142 0.0012

Uranus 87930-09-18 23:46 G 33837093.29 33837093.49 33837093.71 0.0142 0.0046

Uranus 87931-05-03 11:32 G 33837319.80 33837319.98 33837320.16 0.0142 0.0080

Uranus 87931-12-15 23:03 G 33837546.34 33837546.46 33837546.60 0.0142 0.0114

Jupiter 87933-09-08 03:51 G 33838178.46 33838178.66 33838178.86 0.0532 0.0007

Saturn 87938-01-18 01:56 G 33839771.56 33839771.58 33839771.63 0.0286 0.0282

Saturn 87938-09-04 19:41 G 33840001.12 33840001.32 33840001.53 0.0283 0.0076

Jupiter 87938-11-21 04:34 G 33840078.62 33840078.69 33840078.76 0.0496 0.0467

Saturn 87939-04-22 11:32 G 33840230.79 33840230.98 33840231.18 0.0280 0.0125

Jupiter 87939-07-15 11:03 G 33840314.75 33840314.96 33840315.16 0.0494 0.0024

Jupiter 87940-03-07 13:12 G 33840550.94 33840551.05 33840551.16 0.0494 0.0415

Neptune 87944-10-13 04:05 G 33842231.67 33842231.67 33842231.70 0.0089 0.0089

Jupiter 87945-05-13 19:12 G 33842444.11 33842444.30 33842444.50 0.0532 0.0147

Neptune 87945-05-26 16:48 G 33842457.13 33842457.20 33842457.33 0.0089 0.0079

Jupiter 87946-01-06 17:32 G 33842682.11 33842682.23 33842682.36 0.0532 0.0414

Neptune 87946-01-07 06:44 G 33842682.64 33842682.78 33842682.92 0.0089 0.0068

Neptune 87946-08-20 19:41 G 33842908.16 33842908.32 33842908.49 0.0089 0.0058

Neptune 87947-04-03 08:53 G 33843133.69 33843133.87 33843134.06 0.0089 0.0048

Neptune 87947-11-14 22:05 G 33843359.22 33843359.42 33843359.62 0.0089 0.0038

Neptune 87948-06-27 11:03 G 33843584.76 33843584.96 33843585.18 0.0089 0.0028

Neptune 87949-02-08 00:15 G 33843810.30 33843810.51 33843810.73 0.0089 0.0018

Neptune 87949-09-21 13:27 G 33844035.84 33844036.06 33844036.28 0.0089 0.0007

Neptune 87950-05-05 02:39 G 33844261.39 33844261.61 33844261.83 0.0089 0.0003

Neptune 87950-12-16 15:36 G 33844486.94 33844487.15 33844487.37 0.0089 0.0013

Jupiter 87951-03-20 13:27 G 33844580.87 33844581.06 33844581.26 0.0495 0.0146

Neptune 87951-07-30 04:34 G 33844712.49 33844712.69 33844712.91 0.0089 0.0024

Jupiter 87951-11-11 16:48 G 33844817.04 33844817.20 33844817.36 0.0494 0.0298

Neptune 87952-03-11 17:46 G 33844938.04 33844938.24 33844938.45 0.0089 0.0034

Neptune 87952-10-23 06:58 G 33845163.60 33845163.79 33845163.99 0.0088 0.0044

Neptune 87953-06-05 19:56 G 33845389.17 33845389.33 33845389.52 0.0088 0.0054

Neptune 87954-01-17 09:08 G 33845614.73 33845614.88 33845615.04 0.0088 0.0064

Saturn 87954-05-12 11:17 G 33845729.84 33845729.97 33845730.12 0.0277 0.0205

Neptune 87954-08-30 22:20 G 33845840.31 33845840.43 33845840.55 0.0088 0.0074

Saturn 87954-12-27 20:10 G 33845959.13 33845959.34 33845959.55 0.0279 0.0017

Neptune 87955-04-13 11:32 G 33846065.92 33846065.98 33846066.05 0.0088 0.0084

Saturn 87955-08-14 06:29 G 33846188.61 33846188.77 33846188.94 0.0282 0.0178

Jupiter 87957-01-16 08:53 G 33846709.71 33846709.87 33846710.04 0.0531 0.0303

Jupiter 87957-09-11 06:00 G 33846947.57 33846947.75 33846947.92 0.0532 0.0257

Mars 87957-11-04 06:44 G 33847001.61 33847001.78 33847001.95 0.1596 0.0309

Jupiter 87962-11-23 16:05 G 33848847.00 33848847.17 33848847.35 0.0495 0.0268

Jupiter 87963-07-17 20:24 G 33849083.16 33849083.35 33849083.54 0.0494 0.0179

Uranus 87967-04-19 18:00 G 33850455.23 33850455.25 33850455.30 0.0137 0.0135

Saturn 87967-07-31 06:15 G 33850557.68 33850557.76 33850557.87 0.0286 0.0254

Uranus 87967-12-02 00:58 G 33850681.42 33850681.54 33850681.69 0.0137 0.0106

Saturn 87968-03-17 00:00 G 33850787.29 33850787.50 33850787.71 0.0283 0.0047

Uranus 87968-07-15 07:41 G 33850907.66 33850907.82 33850908.01 0.0137 0.0076

Jupiter 87968-09-21 00:29 G 33850975.42 33850975.52 33850975.63 0.0530 0.0451

Saturn 87968-11-01 15:22 G 33851016.96 33851017.14 33851017.32 0.0280 0.0152

Uranus 87969-02-26 14:24 G 33851133.90 33851134.10 33851134.31 0.0137 0.0046

Jupiter 87969-05-16 19:56 G 33851213.13 33851213.33 33851213.53 0.0532 0.0101

Uranus 87969-10-10 20:53 G 33851360.16 33851360.37 33851360.59 0.0137 0.0017

Uranus 87970-05-25 03:08 G 33851586.42 33851586.63 33851586.85 0.0136 0.0013

Uranus 87971-01-06 08:53 G 33851812.68 33851812.87 33851813.09 0.0136 0.0043

Uranus 87971-08-20 14:39 G 33852038.94 33852039.11 33852039.31 0.0136 0.0071

Uranus 87972-04-02 20:39 G 33852265.22 33852265.36 33852265.51 0.0136 0.0099

Pluto 87972-05-17 02:10 G 33852309.47 33852309.59 33852309.73 0.0065 0.0052

Uranus 87972-11-15 02:10 G 33852491.54 33852491.59 33852491.68 0.0136 0.0128

Pluto 87972-12-28 06:29 G 33852534.56 33852534.77 33852534.99 0.0066 0.0011

Pluto 87973-08-10 10:48 G 33852759.76 33852759.95 33852760.15 0.0066 0.0030

Jupiter 87974-07-29 18:15 G 33853113.14 33853113.26 33853113.39 0.0495 0.0390

Jupiter 87975-03-22 23:32 G 33853349.28 33853349.48 33853349.69 0.0494 0.0057

Jupiter 87975-11-14 00:44 G 33853585.51 33853585.53 33853585.56 0.0494 0.0489

Jupiter 87981-01-19 11:17 G 33855478.76 33855478.97 33855479.17 0.0532 0.0057

Jupiter 87981-09-14 11:03 G 33855716.90 33855716.96 33855717.02 0.0532 0.0505

Saturn 87983-11-22 12:15 G 33856515.86 33856516.01 33856516.17 0.0277 0.0185

Saturn 87984-07-08 20:53 G 33856745.16 33856745.37 33856745.58 0.0280 0.0005

Saturn 87985-02-23 07:27 G 33856974.66 33856974.81 33856974.96 0.0282 0.0199

Jupiter 87986-11-26 02:24 G 33857615.40 33857615.60 33857615.80 0.0494 0.0067

Jupiter 87987-07-20 04:20 G 33857851.56 33857851.68 33857851.82 0.0494 0.0374

Mars 87992-08-06 17:03 G 33859696.07 33859696.21 33859696.35 0.1940 0.1090

Jupiter 87992-09-24 03:51 G 33859744.48 33859744.66 33859744.85 0.0532 0.0209

Jupiter	**87993-05-20 01:56**	**G**	**33859982.43**	**33859982.58**	**33859982.73**	**0.0532**	**0.0353**	
Saturn	**87997-02-09 07:56**	**G**	**33861343.71**	**33861343.83**	**33861343.96**	**0.0286**	**0.0230**	
Saturn	**87997-09-27 01:41**	**G**	**33861573.36**	**33861573.57**	**33861573.78**	**0.0283**	**0.0023**	
Saturn	**87998-05-14 17:03**	**G**	**33861803.06**	**33861803.21**	**33861803.39**	**0.0280**	**0.0177**	
Jupiter	**87998-08-01 02:10**	**G**	**33861881.40**	**33861881.59**	**33861881.78**	**0.0495**	**0.0196**	
Jupiter	**87999-03-25 05:46**	**G**	**33862117.57**	**33862117.74**	**33862117.92**	**0.0494**	**0.0250**	

89TH MILLENNIUM CE

This is a list of transits of Venus in the 89th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**88004-05-29 19:56**	**G**	**33864010.19**	**33864010.33**	**33864010.48**	**0.0531**	**0.0360**	
Jupiter	**88005-01-22 16:20**	**G**	**33864247.99**	**33864248.18**	**33864248.37**	**0.0532**	**0.0198**	
Jupiter	**88010-04-06 03:51**	**G**	**33866147.51**	**33866147.66**	**33866147.82**	**0.0495**	**0.0320**	
Jupiter	**88010-11-28 08:53**	**G**	**33866383.67**	**33866383.87**	**33866384.07**	**0.0494**	**0.0128**	
Uranus	**88011-04-13 00:44**	**G**	**33866519.49**	**33866519.53**	**33866519.61**	**0.0141**	**0.0135**	
Uranus	**88011-11-25 11:32**	**G**	**33866745.83**	**33866745.98**	**33866746.13**	**0.0141**	**0.0102**	
Uranus	**88012-07-08 21:51**	**G**	**33866972.23**	**33866972.41**	**33866972.61**	**0.0141**	**0.0070**	
Uranus	**88013-02-20 08:53**	**G**	**33867198.66**	**33867198.87**	**33867199.08**	**0.0141**	**0.0037**	
Saturn	**88013-06-03 17:46**	**G**	**33867302.08**	**33867302.24**	**33867302.43**	**0.0277**	**0.0154**	
Uranus	**88013-10-04 19:56**	**G**	**33867425.11**	**33867425.33**	**33867425.55**	**0.0142**	**0.0003**	
Saturn	**88014-01-19 02:53**	**G**	**33867531.41**	**33867531.62**	**33867531.82**	**0.0280**	**0.0036**	
Uranus	**88014-05-19 06:58**	**G**	**33867651.58**	**33867651.79**	**33867652.01**	**0.0142**	**0.0031**	
Saturn	**88014-09-05 13:12**	**G**	**33867760.94**	**33867761.05**	**33867761.18**	**0.0283**	**0.0232**	

Uranus 88014-12-31 18:29 G 33867878.08 33867878.27 33867878.47 0.0142 0.0064

Uranus 88015-08-15 05:46 G 33868104.59 33868104.74 33868104.91 0.0142 0.0099

Jupiter 88016-02-02 10:20 G 33868275.88 33868275.93 33868275.99 0.0530 0.0508

Uranus 88016-03-28 17:32 G 33868331.16 33868331.23 33868331.32 0.0142 0.0133

Jupiter 88016-09-27 04:48 G 33868513.50 33868513.70 33868513.90 0.0532 0.0039

Jupiter 88021-12-10 05:46 G 33870413.65 33870413.74 33870413.83 0.0496 0.0441

Jupiter 88022-08-03 12:15 G 33870649.80 33870650.01 33870650.21 0.0494 0.0006

Jupiter 88023-03-27 14:24 G 33870886.01 33870886.10 33870886.19 0.0494 0.0443

Mars 88023-09-01 19:27 G 33871044.14 33871044.31 33871044.49 0.1595 0.0156

Saturn 88026-08-22 13:41 G 33872129.92 33872130.07 33872130.23 0.0285 0.0199

Saturn 88027-04-09 07:12 G 33872359.58 33872359.80 33872360.01 0.0282 0.0008

Saturn 88027-11-24 22:20 G 33872589.29 33872589.43 33872589.58 0.0280 0.0205

Jupiter 88028-06-01 18:58 G 33872779.09 33872779.29 33872779.49 0.0532 0.0119

Earth 88028-06-28 09:51 G 33872805.75 33872805.91 33872806.06 0.2675 0.0488

Moon 88028-06-28 14:53 G 33872805.95 33872806.12 33872806.28 0.2670 0.0343 *

Neptune 88028-10-06 16:48 G 33872906.13 33872906.20 33872906.31 0.0089 0.0081

Jupiter 88029-01-25 17:32 G 33873017.13 33873017.23 33873017.35 0.0532 0.0444

Neptune 88029-05-20 05:46 G 33873131.62 33873131.74 33873131.88 0.0089 0.0071

Neptune 88029-12-31 18:44 G 33873357.13 33873357.28 33873357.45 0.0089 0.0061

Neptune 88030-08-14 07:27 G 33873582.64 33873582.81 33873583.00 0.0089 0.0051

Neptune 88031-03-27 20:24 G 33873808.17 33873808.35 33873808.56 0.0089 0.0041

Neptune 88031-11-08 09:22 G 33874033.69 33874033.89 33874034.11 0.0089 0.0031

Neptune 88032-06-20 22:05 G 33874259.22 33874259.42 33874259.65 0.0089 0.0021

Neptune 88033-02-01 11:17 G 33874484.75 33874484.97 33874485.19 0.0089 0.0010

Neptune 88033-09-15 00:15 G 33874710.29 33874710.51 33874710.73 0.0089 0.0001

Jupiter 88034-04-08 14:53 G 33874915.92 33874916.12 33874916.32 0.0494 0.0117

Neptune 88034-04-28 12:58 G 33874935.83 33874936.04 33874936.27 0.0089 0.0011

Jupiter 88034-11-30 17:32 G 33875152.08 33875152.23 33875152.39 0.0494 0.0326

Neptune 88034-12-10 01:56 G 33875161.37 33875161.58 33875161.80 0.0089 0.0021

Neptune 88035-07-23 14:39 G 33875386.92 33875387.11 33875387.33 0.0089 0.0031

Neptune 88036-03-05 03:36 G 33875612.47 33875612.65 33875612.85 0.0089 0.0041

Neptune 88036-10-16 16:34 G 33875838.03 33875838.19 33875838.38 0.0089 0.0051

Neptune 88037-05-30 05:32 G 33876063.58 33876063.73 33876063.90 0.0089 0.0061

Neptune 88038-01-10 18:29 G 33876289.15 33876289.27 33876289.40 0.0089 0.0071

Neptune 88038-08-24 07:12 G 33876514.72 33876514.80 33876514.90 0.0089 0.0081

Jupiter 88040-02-05 10:20 G 33877044.76 33877044.93 33877045.11 0.0531 0.0274

Jupiter 88040-09-30 08:10 G 33877282.67 33877282.84 33877283.01 0.0533 0.0290

Saturn 88042-12-14 20:24 G 33878088.16 33878088.35 33878088.53 0.0277 0.0131

Saturn 88043-08-01 05:03 G 33878317.51 33878317.71 33878317.92 0.0280 0.0059

Saturn 88044-03-17 15:51 G 33878547.07 33878547.16 33878547.25 0.0283 0.0255

Jupiter 88045-12-12 16:48 G 33879182.02 33879182.20 33879182.38 0.0495 0.0242

Jupiter 88046-08-05 20:39 G 33879418.18 33879418.36 33879418.55 0.0494 0.0206

Uranus 88051-08-01 11:17 G 33881239.86 33881239.97 33881240.08 0.0137 0.0118

Jupiter 88051-10-11 03:51 G 33881310.54 33881310.66 33881310.78 0.0531 0.0421

Uranus 88052-03-14 17:46 G 33881466.09 33881466.24 33881466.42 0.0137 0.0088

Jupiter 88052-06-04 23:46 G 33881548.29 33881548.49 33881548.68 0.0532 0.0135

Uranus 88052-10-27 00:58 G 33881692.34 33881692.54 33881692.73 0.0137 0.0059

Uranus 88053-06-10 07:12 G 33881918.59 33881918.80 33881919.02 0.0137 0.0029

Uranus 88054-01-22 13:41 G 33882144.85 33882145.07 33882145.28 0.0137 0.0002

Uranus 88054-09-05 19:41 G 33882371.11 33882371.32 33882371.53 0.0136 0.0030

Uranus 88055-04-20 01:41 G 33882597.38 33882597.57 33882597.77 0.0136 0.0059

Uranus 88055-12-02 07:41 G 33882823.66 33882823.82 33882823.99 0.0136 0.0087

Saturn 88056-03-03 15:51 G 33882915.99 33882916.16 33882916.33 0.0285 0.0175

Uranus 88056-07-15 13:12 G 33883049.95 33883050.05 33883050.17 0.0136 0.0116

Saturn 88056-10-19 09:08 G 33883145.67 33883145.88 33883146.10 0.0283 0.0032

Saturn 88057-06-06 00:15 G 33883375.40 33883375.51 33883375.64 0.0280 0.0230

Jupiter 88057-08-17 15:51 G 33883448.02 33883448.16 33883448.29 0.0495 0.0370

Jupiter 88058-04-10 21:08 G 33883684.18 33883684.38 33883684.59 0.0494 0.0079

Mars 88058-06-03 18:58 G 33883738.23 33883738.29 33883738.35 0.1942 0.1824

Pluto 88060-08-29 16:34 G 33884555.98 33884556.19 33884556.43 0.0078 0.0010

Pluto 88061-04-12 02:24 G 33884781.48 33884781.60 33884781.75 0.0078 0.0062

Jupiter 88064-02-08 14:39 G 33885813.91 33885814.11 33885814.31 0.0532 0.0022

Jupiter 88069-04-22 16:20 G 33887714.17 33887714.18 33887714.21 0.0496 0.0493

Jupiter 88069-12-14 23:32 G 33887950.28 33887950.48 33887950.69 0.0494 0.0047

Jupiter 88070-08-08 02:10 G 33888186.47 33888186.59 33888186.72 0.0494 0.0395

Saturn 88072-06-26 02:39 G 33888874.42 33888874.61 33888874.81 0.0277 0.0099

Saturn 88073-02-10 11:46 G 33889103.80 33889103.99 33889104.19 0.0280 0.0093

Jupiter 88075-10-14 03:36 G 33890079.46 33890079.65 33890079.84 0.0531 0.0181

Jupiter 88076-06-08 01:12 G 33890317.41 33890317.55 33890317.69 0.0532 0.0382

Jupiter 88081-08-20 02:10 G 33892216.40 33892216.59 33892216.79 0.0495 0.0170

Jupiter 88082-04-13 06:00 G 33892452.58 33892452.75 33892452.92 0.0494 0.0277

Saturn 88085-09-13 22:48 G 33893702.27 33893702.45 33893702.64 0.0285 0.0142

Saturn 88086-05-01 16:05 G 33893931.96 33893932.17 33893932.37 0.0282 0.0063

Saturn 88086-12-17 06:44 G 33894161.72 33894161.78 33894161.87 0.0279 0.0260

Jupiter 88087-06-18 18:00 G 33894345.10 33894345.25 33894345.41 0.0531 0.0335

Jupiter 88088-02-11 14:24 G 33894582.92 33894583.10 33894583.29 0.0532 0.0226

Mars 88089-06-29 07:56 G 33895086.66 33895086.83 33895087.01 0.1594 0.0027

Jupiter 88093-04-25 04:05 G 33896482.51 33896482.67 33896482.84 0.0495 0.0294

Jupiter 88093-12-17 08:53 G 33896718.67 33896718.87 33896719.06 0.0494 0.0155

Uranus 88095-07-25 19:27 G 33897304.20 33897304.31 33897304.44 0.0141 0.0116

Uranus 88096-03-08 05:46 G 33897530.58 33897530.74 33897530.93 0.0141 0.0084

Uranus 88096-10-20 16:48 G 33897756.99 33897757.20 33897757.40 0.0141 0.0051

Uranus 88097-06-04 03:36 G 33897983.44 33897983.65 33897983.87 0.0141 0.0018

Uranus 88098-01-16 14:39 G 33898209.90 33898210.11 33898210.33 0.0142 0.0016

Uranus 88098-08-31 01:56 G 33898436.38 33898436.58 33898436.79 0.0142 0.0050

Jupiter 88099-02-21 09:36 G 33898610.83 33898610.90 33898610.99 0.0530 0.0485

Uranus 88099-04-14 13:12 G 33898662.88 33898663.05 33898663.24 0.0142 0.0084

Jupiter 88099-10-17 05:03 G 33898848.50 33898848.71 33898848.91 0.0532 0.0069

Uranus 88099-11-27 00:58 G 33898889.42 33898889.54 33898889.67 0.0142 0.0118

Saturn 88101-05-22 23:17 G 33899431.41 33899431.47 33899431.56 0.0275 0.0257

Saturn 88102-01-07 06:44 G 33899660.58 33899660.78 33899660.99 0.0278 0.0073

Saturn 88102-08-24 15:36 G 33899889.97 33899890.15 33899890.35 0.0281 0.0120

Jupiter 88104-12-30 05:17 G 33900748.61 33900748.72 33900748.83 0.0496 0.0417

Jupiter 88105-08-23 11:17 G 33900984.77 33900984.97 33900985.18 0.0494 0.0033

Jupiter 88106-04-16 12:58 G 33901220.99 33901221.04 33901221.11 0.0494 0.0468

Neptune 88109-08-29 00:58 G 33902451.49 33902451.54 33902451.65 0.0089 0.0083

Neptune 88110-04-11 14:10 G 33902676.99 33902677.09 33902677.25 0.0089 0.0073

Neptune 88110-11-23 04:05 G 33902902.51 33902902.67 33902902.82 0.0089 0.0062

Jupiter 88111-06-22 20:53 G 33903114.18 33903114.37 33903114.58 0.0532 0.0089

Neptune 88111-07-06 17:03 G 33903128.03 33903128.21 33903128.39 0.0089 0.0052

Jupiter 88112-02-15 19:56 G 33903352.25 33903352.33 33903352.43 0.0532 0.0475

Neptune 88112-02-17 06:00 G 33903353.57 33903353.75 33903353.96 0.0089 0.0042

Neptune 88112-09-29 19:12 G 33903579.10 33903579.30 33903579.52 0.0089 0.0032

Neptune 88113-05-13 08:24 G 33903804.65 33903804.85 33903805.08 0.0089 0.0022

Neptune 88113-12-24 21:36 G 33904030.19 33904030.40 33904030.63 0.0089 0.0012

Neptune 88114-08-07 10:48 G 33904255.73 33904255.95 33904256.18 0.0089 0.0002

Neptune 88115-03-21 00:00 G 33904481.29 33904481.50 33904481.73 0.0089 0.0010

Saturn 88115-03-28 02:24 G 33904488.41 33904488.60 33904488.80 0.0285 0.0115

Neptune 88115-11-01 13:12 G 33904706.84 33904707.05 33904707.27 0.0089 0.0020

Saturn 88115-11-12 19:27 G 33904718.11 33904718.31 33904718.51 0.0282 0.0090

Neptune 88116-06-14 02:24 G 33904932.39 33904932.60 33904932.81 0.0089 0.0030

Neptune 88117-01-25 15:22 G 33905157.95 33905158.14 33905158.34 0.0088 0.0040

Jupiter 88117-04-28 11:03 G 33905250.76 33905250.96 33905251.16 0.0494 0.0098

Neptune 88117-09-08 04:05 G 33905383.51 33905383.67 33905383.87 0.0088 0.0051

Jupiter 88117-12-20 13:56 G 33905486.94 33905487.08 33905487.23 0.0494 0.0346

Neptune 88118-04-21 17:17 G 33905609.08 33905609.22 33905609.41 0.0088 0.0061

Neptune 88118-12-03 06:29 G 33905834.66 33905834.77 33905834.92 0.0088 0.0071

Neptune 88119-07-16 19:27 G 33906060.25 33906060.31 33906060.43 0.0088 0.0081

Jupiter 88123-02-25 12:44 G 33907379.85 33907380.03 33907380.21 0.0531 0.0242

Jupiter 88123-10-21 09:51 G 33907617.76 33907617.91 33907618.08 0.0532 0.0322

Jupiter 88129-01-01 12:29 G 33909516.84 33909517.02 33909517.20 0.0495 0.0223

Jupiter 88129-08-25 16:48 G 33909753.02 33909753.20 33909753.38 0.0494 0.0225

Saturn 88130-12-03 06:29 G 33910217.65 33910217.77 33910217.89 0.0275 0.0223

Saturn 88131-07-20 14:10 G 33910446.88 33910447.09 33910447.30 0.0278 0.0038

Saturn 88132-03-05 23:17 G 33910676.31 33910676.47 33910676.66 0.0281 0.0155

Earth 88134-01-03 06:00 G 33911344.62 33911344.75 33911344.89 0.2658 0.1309

Moon 88134-01-03 11:32 G 33911344.86 33911344.98 33911345.11 0.2658 0.1639 *

Jupiter 88134-10-31 02:10 G 33911645.45 33911645.59 33911645.72 0.0530 0.0396

Uranus 88135-04-01 21:08 G 33911798.34 33911798.38 33911798.47 0.0138 0.0131

Jupiter 88135-06-25 21:36 G 33911883.20 33911883.40 33911883.59 0.0532 0.0161

Uranus 88135-11-14 04:34 G 33912024.55 33912024.69 33912024.85 0.0137 0.0101

Uranus 88136-06-27 11:32 G 33912250.80 33912250.98 33912251.17 0.0137 0.0071

Uranus 88137-02-08 18:00 G 33912477.05 33912477.25 33912477.46 0.0137 0.0041

Uranus 88137-09-23 00:29 G 33912703.31 33912703.52 33912703.74 0.0137 0.0012

Uranus 88138-05-07 06:58 G 33912929.57 33912929.79 33912930.00 0.0137 0.0018

Uranus 88138-12-19 12:44 G 33913155.84 33913156.03 33913156.25 0.0136 0.0048

Uranus 88139-08-02 18:44 G 33913382.12 33913382.28 33913382.47 0.0136 0.0076

Uranus 88140-03-16 00:44 G 33913608.40 33913608.53 33913608.67 0.0136 0.0104

Jupiter 88140-09-06 14:24 G 33913782.96 33913783.10 33913783.25 0.0496 0.0346

Uranus 88140-10-28 06:15 G 33913834.74 33913834.76 33913834.83 0.0136 0.0133

Jupiter 88141-04-30 20:10 G 33914019.14 33914019.34 33914019.54 0.0494 0.0104

Earth 88141-12-31 23:03 G 33914264.35 33914264.46 33914264.58 0.2657 0.1805

Moon 88142-01-01 02:39 G 33914264.48 33914264.61 33914264.73 0.2652 0.1713 *

Saturn 88144-10-07 10:34 G 33915274.73 33915274.94 33915275.14 0.0284 0.0081

Saturn 88145-05-25 03:08 G 33915504.44 33915504.63 33915504.82 0.0282 0.0124

Jupiter 88147-02-28 11:03 G 33916148.76 33916148.96 33916149.16 0.0532 0.0006

Jupiter 88152-05-12 15:22 G 33918049.08 33918049.14 33918049.21 0.0496 0.0470

Jupiter 88153-01-03 22:20 G 33918285.23 33918285.43 33918285.64 0.0494 0.0021

Jupiter 88153-08-28 00:44 G 33918521.43 33918521.53 33918521.64 0.0494 0.0419

Mars 88155-04-27 20:24 G 33919129.18 33919129.35 33919129.53 0.1593 0.0167

Mars	88156-03-31 22:05 G	33919468.32	33919468.42	33919468.53	0.1940	0.1522
Jupiter	88158-11-03 01:27 G	33920414.37	33920414.56	33920414.75	0.0532	0.0156
Jupiter	88159-06-28 23:46 G	33920652.37	33920652.49	33920652.62	0.0532	0.0409
Saturn	88160-06-14 11:46 G	33921003.86	33921003.99	33921004.15	0.0276	0.0197
Saturn	88161-01-29 19:41 G	33921233.11	33921233.32	33921233.53	0.0279	0.0011
Saturn	88161-09-16 05:03 G	33921462.56	33921462.71	33921462.88	0.0281	0.0184
Jupiter	88164-09-09 00:15 G	33922551.32	33922551.51	33922551.71	0.0494	0.0146
Jupiter	88165-05-03 03:36 G	33922787.49	33922787.65	33922787.81	0.0494	0.0300
Jupiter	88170-07-08 18:00 G	33924680.09	33924680.25	33924680.42	0.0531	0.0308
Jupiter	88171-03-03 15:08 G	33924917.95	33924918.13	33924918.31	0.0532	0.0255
Saturn	88173-09-01 20:39 G	33925831.28	33925831.36	33925831.45	0.0287	0.0261
Saturn	88174-04-19 15:08 G	33926060.92	33926061.13	33926061.34	0.0284	0.0051
Saturn	88174-12-05 07:27 G	33926290.64	33926290.81	33926291.00	0.0281	0.0153
Jupiter	88176-05-14 23:17 G	33926817.30	33926817.47	33926817.64	0.0495	0.0275
Jupiter	88177-01-06 03:51 G	33927053.47	33927053.66	33927053.85	0.0494	0.0174
Uranus	88179-03-26 05:32 G	33927862.65	33927862.73	33927862.83	0.0141	0.0128
Uranus	88179-11-07 15:51 G	33928089.01	33928089.16	33928089.33	0.0141	0.0096
Uranus	88180-06-21 02:24 G	33928315.42	33928315.60	33928315.81	0.0141	0.0063
Uranus	88181-02-02 13:12 G	33928541.85	33928542.05	33928542.28	0.0141	0.0031
Uranus	88181-09-17 00:29 G	33928768.30	33928768.52	33928768.74	0.0142	0.0004
Jupiter	88182-03-13 10:20 G	33928945.83	33928945.93	33928946.03	0.0530	0.0456
Uranus	88182-05-01 11:46 G	33928994.78	33928994.99	33928995.20	0.0142	0.0037
Jupiter	88182-11-06 05:32 G	33929183.53	33929183.73	33929183.93	0.0532	0.0098
Uranus	88182-12-13 22:48 G	33929221.27	33929221.45	33929221.65	0.0142	0.0071
Uranus	88183-07-28 10:34 G	33929447.80	33929447.94	33929448.09	0.0142	0.0105
Uranus	88184-03-10 22:05 G	33929674.38	33929674.42	33929674.48	0.0142	0.0139
Jupiter	88188-01-19 00:00 G	33931083.38	33931083.50	33931083.62	0.0496	0.0400
Jupiter	88188-09-11 06:00 G	33931319.55	33931319.75	33931319.96	0.0494	0.0051
Jupiter	88189-05-05 08:10 G	33931555.81	33931555.84	33931555.88	0.0494	0.0486
Saturn	88189-12-25 19:27 G	33931790.14	33931790.31	33931790.48	0.0276	0.0163

Saturn 88190-08-12 03:22 G 33932019.43 33932019.64 33932019.85 0.0279 0.0025

Saturn 88191-03-29 13:12 G 33932248.93 33932249.05 33932249.19 0.0281 0.0219

Neptune 88193-01-09 01:27 G 33932900.51 33932900.56 33932900.63 0.0088 0.0085

Neptune 88193-08-22 14:24 G 33933125.99 33933126.10 33933126.22 0.0089 0.0075

Neptune 88194-04-05 03:08 G 33933351.50 33933351.63 33933351.79 0.0089 0.0065

Jupiter 88194-07-11 17:32 G 33933449.03 33933449.23 33933449.43 0.0532 0.0063

Neptune 88194-11-16 16:05 G 33933577.01 33933577.17 33933577.35 0.0089 0.0055

Jupiter 88195-03-06 16:05 G 33933687.11 33933687.17 33933687.24 0.0532 0.0499

Neptune 88195-06-30 04:48 G 33933802.53 33933802.70 33933802.91 0.0089 0.0045

Neptune 88196-02-10 17:46 G 33934028.05 33934028.24 33934028.45 0.0089 0.0035

Neptune 88196-09-23 06:44 G 33934253.58 33934253.78 33934254.00 0.0089 0.0025

Neptune 88197-05-06 19:56 G 33934479.11 33934479.33 33934479.55 0.0089 0.0014

Neptune 88197-12-18 08:39 G 33934704.64 33934704.86 33934705.08 0.0089 0.0004

Neptune 88198-07-31 21:22 G 33934930.18 33934930.39 33934930.61 0.0089 0.0007

Neptune 88199-03-14 10:05 G 33935155.72 33935155.92 33935156.15 0.0089 0.0017

Neptune 88199-10-25 23:03 G 33935381.27 33935381.46 33935381.68 0.0089 0.0027

Jupiter 88200-05-18 08:39 G 33935585.66 33935585.86 33935586.06 0.0494 0.0074

Neptune 88200-06-08 12:00 G 33935606.81 33935607.00 33935607.21 0.0089 0.0037

Jupiter 88201-01-09 11:46 G 33935821.86 33935821.99 33935822.12 0.0494 0.0370

Neptune 88201-01-20 00:58 G 33935832.36 33935832.54 33935832.73 0.0089 0.0047

Neptune 88201-09-02 13:41 G 33936057.92 33936058.07 33936058.25 0.0089 0.0057

Neptune 88202-04-16 02:39 G 33936283.48 33936283.61 33936283.76 0.0089 0.0067

Neptune 88202-11-27 15:36 G 33936509.05 33936509.15 33936509.26 0.0089 0.0077

Saturn 88203-03-16 06:44 G 33936617.65 33936617.78 33936617.91 0.0287 0.0224

Neptune 88203-07-11 04:34 G 33936734.66 33936734.69 33936734.73 0.0089 0.0087

Saturn 88203-11-01 00:44 G 33936847.32 33936847.53 33936847.74 0.0284 0.0015

Saturn 88204-06-17 16:48 G 33937077.04 33937077.20 33937077.36 0.0281 0.0187

Jupiter 88206-03-17 07:27 G 33937714.63 33937714.81 33937715.00 0.0531 0.0221

Jupiter 88206-11-10 04:48 G 33937952.55 33937952.70 33937952.85 0.0532 0.0344

Jupiter 88212-01-22 10:20 G 33939851.74 33939851.93 33939852.12 0.0495 0.0200

Jupiter 88212-09-14 14:24 G 33940087.93 33940088.10 33940088.28 0.0494 0.0249

Jupiter 88217-11-19 22:05 G 33941980.28 33941980.42 33941980.56 0.0531 0.0376

Jupiter 88218-07-15 18:00 G 33942218.06 33942218.25 33942218.44 0.0532 0.0186

Saturn 88219-07-09 02:24 G 33942576.41 33942576.60 33942576.78 0.0277 0.0133

Uranus 88219-07-15 16:05 G 33942583.05 33942583.17 33942583.30 0.0138 0.0112

Saturn 88220-02-23 10:34 G 33942805.74 33942805.94 33942806.15 0.0279 0.0056

Uranus 88220-02-26 22:48 G 33942809.29 33942809.45 33942809.63 0.0137 0.0082

Pluto 88220-04-21 16:05 G 33942864.00 33942864.17 33942864.36 0.0066 0.0036

Saturn 88220-10-09 20:39 G 33943035.27 33943035.36 33943035.46 0.0282 0.0252

Uranus 88220-10-10 05:46 G 33943035.54 33943035.74 33943035.94 0.0137 0.0052

Pluto 88220-12-02 20:39 G 33943089.14 33943089.36 33943089.58 0.0066 0.0005

Mars 88221-02-23 09:08 G 33943171.70 33943171.88 33943172.05 0.1592 0.0322

Uranus 88221-05-24 12:15 G 33943261.80 33943262.01 33943262.23 0.0137 0.0023

Pluto 88221-07-16 00:15 G 33943314.39 33943314.51 33943314.69 0.0066 0.0047

Uranus 88222-01-05 18:44 G 33943488.06 33943488.28 33943488.49 0.0137 0.0007

Mars 88222-01-27 23:46 G 33943510.33 33943510.49 33943510.65 0.1941 0.0766

Uranus 88222-08-20 00:44 G 33943714.33 33943714.53 33943714.74 0.0136 0.0036

Uranus 88223-04-03 06:58 G 33943940.60 33943940.79 33943940.98 0.0136 0.0065

Jupiter 88223-09-27 11:32 G 33944117.83 33944117.98 33944118.14 0.0495 0.0325

Uranus 88223-11-15 12:58 G 33944166.89 33944167.04 33944167.20 0.0136 0.0093

Jupiter 88224-05-20 16:34 G 33944354.00 33944354.19 33944354.39 0.0494 0.0126

Uranus 88224-06-28 18:29 G 33944393.19 33944393.27 33944393.38 0.0136 0.0122

Jupiter 88229-07-25 15:08 G 33946246.10 33946246.13 33946246.17 0.0530 0.0521

Jupiter 88230-03-20 09:51 G 33946483.70 33946483.91 33946484.11 0.0532 0.0030

Saturn 88232-09-25 12:15 G 33947403.86 33947404.01 33947404.17 0.0286 0.0193

Saturn 88233-05-13 06:15 G 33947633.55 33947633.76 33947633.98 0.0283 0.0016

Saturn 88233-12-28 22:05 G 33947863.29 33947863.42 33947863.56 0.0280 0.0217

Jupiter 88235-06-02 10:05 G 33948383.84 33948383.92 33948384.00 0.0496 0.0452

Jupiter 88236-01-24 16:34 G 33948619.98 33948620.19 33948620.39 0.0494 0.0006

Jupiter 88236-09-16 18:44 G 33948856.19 33948856.28 33948856.38 0.0494 0.0437

Jupiter 88241-11-23 00:44 G 33950749.33 33950749.53 33950749.73 0.0532 0.0128

Jupiter 88242-07-18 23:03 G 33950987.35 33950987.46 33950987.58 0.0532 0.0438

Jupiter 88247-09-29 18:15 G 33952886.06 33952886.26 33952886.46 0.0494 0.0129

Jupiter 88248-05-22 21:36 G 33953122.24 33953122.40 33953122.56 0.0494 0.0318

Saturn 88249-01-18 09:51 G 33953362.72 33953362.91 33953363.11 0.0277 0.0100

Saturn 88249-09-04 18:29 G 33953592.07 33953592.27 33953592.47 0.0279 0.0091

Mars 88253-02-22 01:41 G 33954858.50 33954858.57 33954858.64 0.1595 0.1457

Jupiter 88253-07-28 13:27 G 33955014.90 33955015.06 33955015.24 0.0531 0.0286

Jupiter 88254-03-23 10:20 G 33955252.75 33955252.93 33955253.10 0.0532 0.0278

Jupiter 88259-06-04 19:56 G 33957152.15 33957152.33 33957152.50 0.0495 0.0253

Jupiter 88260-01-27 00:44 G 33957388.34 33957388.53 33957388.72 0.0494 0.0197

Saturn 88262-04-07 23:03 G 33958190.29 33958190.46 33958190.64 0.0286 0.0155

Saturn 88262-11-23 16:34 G 33958419.98 33958420.19 33958420.40 0.0283 0.0053

Uranus 88262-11-24 14:24 G 33958421.10 33958421.10 33958421.11 0.0141 0.0141

Uranus 88263-07-09 00:29 G 33958647.40 33958647.52 33958647.67 0.0141 0.0109

Saturn 88263-07-11 07:56 G 33958649.74 33958649.83 33958649.92 0.0280 0.0252

Uranus 88264-02-20 11:17 G 33958873.79 33958873.97 33958874.15 0.0141 0.0076

Uranus 88264-10-03 21:51 G 33959100.21 33959100.41 33959100.63 0.0141 0.0044

Jupiter 88265-04-02 04:20 G 33959280.57 33959280.68 33959280.79 0.0530 0.0438

Uranus 88265-05-18 09:08 G 33959326.66 33959326.88 33959327.10 0.0141 0.0011

Jupiter 88265-11-25 23:03 G 33959518.27 33959518.46 33959518.66 0.0532 0.0119

Uranus 88265-12-30 20:10 G 33959553.12 33959553.34 33959553.56 0.0142 0.0023

Uranus 88266-08-14 07:12 G 33959779.61 33959779.80 33959780.01 0.0142 0.0057

Uranus 88267-03-28 18:58 G 33960006.12 33960006.29 33960006.46 0.0142 0.0090

Uranus 88267-11-10 06:15 G 33960232.67 33960232.76 33960232.88 0.0142 0.0124

Jupiter 88271-02-07 20:53 G 33961418.24 33961418.37 33961418.50 0.0496 0.0379

Moon 88271-07-01 03:36 G 33961561.50 33961561.65 33961561.80 0.2679 0.0855

Earth 88271-07-01 09:22 G 33961561.73 33961561.89 33961562.05 0.2676 0.0486 *

Jupiter 88271-10-02 03:08 G 33961654.43 33961654.63 33961654.83 0.0494 0.0073

Neptune 88273-12-01 09:08 G 33962445.86 33962445.88 33962445.95 0.0089 0.0087

Neptune 88274-07-14 22:20 G 33962671.34 33962671.43 33962671.56 0.0089 0.0077

Neptune 88275-02-25 11:32 G 33962896.85 33962896.98 33962897.14 0.0089 0.0067

Neptune 88275-10-09 00:58 G 33963122.38 33963122.54 33963122.71 0.0089 0.0056

Neptune 88276-05-21 13:56 G 33963347.90 33963348.08 33963348.28 0.0089 0.0046

Neptune 88277-01-02 03:08 G 33963573.44 33963573.63 33963573.84 0.0089 0.0036

Jupiter 88277-07-31 12:44 G 33963783.82 33963784.03 33963784.23 0.0532 0.0044

Neptune 88277-08-15 16:05 G 33963798.97 33963799.17 33963799.40 0.0089 0.0026

Saturn 88277-12-14 10:20 G 33963919.85 33963919.93 33963920.01 0.0275 0.0252

Jupiter 88278-03-26 11:46 G 33964021.96 33964021.99 33964022.03 0.0532 0.0521

Neptune 88278-03-29 05:32 G 33964024.52 33964024.73 33964024.96 0.0089 0.0016

Saturn 88278-07-31 17:17 G 33964149.02 33964149.22 33964149.43 0.0277 0.0068

Neptune 88278-11-09 18:44 G 33964250.07 33964250.28 33964250.51 0.0089 0.0006

Saturn 88279-03-18 02:10 G 33964378.41 33964378.59 33964378.78 0.0280 0.0124

Neptune 88279-06-23 07:56 G 33964475.61 33964475.83 33964476.05 0.0089 0.0005

Neptune 88280-02-03 20:53 G 33964701.16 33964701.37 33964701.60 0.0089 0.0016

Neptune 88280-09-16 10:05 G 33964926.72 33964926.92 33964927.14 0.0089 0.0026

Neptune 88281-04-29 23:32 G 33965152.28 33965152.48 33965152.68 0.0089 0.0036

Neptune 88281-12-11 12:15 G 33965377.84 33965378.01 33965378.22 0.0089 0.0047

Neptune 88282-07-25 01:12 G 33965603.40 33965603.55 33965603.74 0.0088 0.0057

Neptune 88283-03-07 14:24 G 33965828.98 33965829.10 33965829.27 0.0088 0.0067

Jupiter 88283-06-07 04:48 G 33965920.49 33965920.70 33965920.90 0.0494 0.0054

Neptune 88283-10-19 03:36 G 33966054.56 33966054.65 33966054.78 0.0088 0.0077

Jupiter 88284-01-29 07:12 G 33966156.69 33966156.80 33966156.93 0.0494 0.0391

Neptune 88284-05-31 16:48 G 33966280.18 33966280.20 33966280.26 0.0088 0.0087

Mars 88286-12-21 21:36 G 33967214.23 33967214.40 33967214.57 0.1592 0.0481

Mars 88287-11-25 02:24 G 33967552.42 33967552.60 33967552.77 0.1942 0.0065

Jupiter 88289-04-05 04:34 G 33968049.50 33968049.69 33968049.88 0.0532 0.0198

Jupiter 88289-11-29 02:24 G 33968287.46 33968287.60 33968287.75 0.0533 0.0370

Saturn 88291-10-19 05:46 G 33968976.55 33968976.74 33968976.94 0.0285 0.0122

Saturn 88292-06-04 23:03 G 33969206.26 33969206.46 33969206.66 0.0282 0.0085

Jupiter 88295-02-10 04:20 G 33970186.49 33970186.68 33970186.87 0.0494 0.0182

Jupiter 88295-10-04 08:10 G 33970422.67 33970422.84 33970423.01 0.0494 0.0267

Jupiter 88300-12-09 20:10 G 33972315.20 33972315.34 33972315.50 0.0531 0.0350

Jupiter 88301-08-04 16:34 G 33972553.01 33972553.19 33972553.38 0.0533 0.0214

Uranus 88303-03-16 03:51 G 33973141.57 33973141.66 33973141.76 0.0138 0.0123

Uranus 88303-10-28 10:48 G 33973367.81 33973367.95 33973368.12 0.0137 0.0093

Uranus 88304-06-10 17:46 G 33973594.05 33973594.24 33973594.44 0.0137 0.0064

Uranus 88305-01-23 00:15 G 33973820.31 33973820.51 33973820.73 0.0137 0.0034

Uranus 88305-09-06 06:58 G 33974046.57 33974046.79 33974047.00 0.0137 0.0005

Uranus 88306-04-20 13:12 G 33974272.84 33974273.05 33974273.26 0.0137 0.0025

Jupiter 88306-10-17 05:17 G 33974452.57 33974452.72 33974452.89 0.0495 0.0308

Uranus 88306-12-02 19:12 G 33974499.12 33974499.30 33974499.51 0.0136 0.0055

Jupiter 88307-06-10 10:20 G 33974688.74 33974688.93 33974689.13 0.0494 0.0144

Saturn 88307-06-27 17:03 G 33974706.10 33974706.21 33974706.34 0.0275 0.0221

Uranus 88307-07-17 01:27 G 33974725.40 33974725.56 33974725.74 0.0136 0.0083

Pluto 88307-12-23 22:05 G 33974885.28 33974885.42 33974885.60 0.0078 0.0053

Saturn 88308-02-12 00:44 G 33974935.32 33974935.53 33974935.74 0.0278 0.0035

Uranus 88308-02-28 07:12 G 33974951.69 33974951.80 33974951.94 0.0136 0.0111

Pluto 88308-08-05 08:24 G 33975110.65 33975110.85 33975111.08 0.0078 0.0019

Saturn 88308-09-28 09:51 G 33975164.75 33975164.91 33975165.09 0.0280 0.0158

Jupiter 88312-08-14 10:20 G 33976580.87 33976580.93 33976581.00 0.0530 0.0501

Jupiter 88313-04-09 04:34 G 33976818.49 33976818.69 33976818.89 0.0532 0.0052

Jupiter 88318-06-22 06:00 G 33978718.66 33978718.75 33978718.85 0.0496 0.0433

Mars 88318-12-21 14:10 G 33978900.99 33978901.09 33978901.19 0.1594 0.1301

Jupiter 88319-02-13 12:58 G 33978954.83 33978955.04 33978955.24 0.0494 0.0020

Jupiter 88319-10-07 15:36 G 33979191.08 33979191.15 33979191.22 0.0494 0.0460

Saturn 88321-05-01 16:48 G 33979763.00 33979763.20 33979763.40 0.0285 0.0084

Saturn 88321-12-17 09:22 G 33979992.70 33979992.89 33979993.09 0.0282 0.0122

Jupiter 88324-12-12 18:00 G 33981084.05 33981084.25 33981084.45 0.0531 0.0109

Jupiter 88325-08-07 16:05 G 33981322.07 33981322.17 33981322.27 0.0532 0.0457

Jupiter 88330-10-19 14:53 G 33983220.92 33983221.12 33983221.32 0.0495 0.0107

Jupiter 88331-06-12 18:15 G 33983457.11 33983457.26 33983457.41 0.0494 0.0340

Jupiter 88336-08-17 07:56 G 33985349.66 33985349.83 33985350.01 0.0531 0.0268

Saturn 88337-01-07 00:58 G 33985492.39 33985492.54 33985492.70 0.0276 0.0190

Jupiter 88337-04-12 05:03 G 33985587.54 33985587.71 33985587.88 0.0532 0.0299

Saturn 88337-08-24 08:39 G 33985721.65 33985721.86 33985722.07 0.0278 0.0005

Saturn 88338-04-10 18:00 G 33985951.10 33985951.25 33985951.41 0.0281 0.0192

Jupiter 88342-06-24 16:05 G 33987486.99 33987487.17 33987487.35 0.0495 0.0233

Jupiter 88343-02-15 20:24 G 33987723.17 33987723.35 33987723.53 0.0494 0.0218

Uranus 88347-03-09 09:22 G 33989205.80 33989205.89 33989206.02 0.0141 0.0122

Uranus 88347-10-21 20:10 G 33989432.17 33989432.34 33989432.51 0.0141 0.0089

Jupiter 88348-04-22 00:15 G 33989615.39 33989615.51 33989615.64 0.0531 0.0418

Uranus 88348-06-04 06:44 G 33989658.59 33989658.78 33989658.99 0.0141 0.0057

Jupiter 88348-12-15 19:56 G 33989853.13 33989853.33 33989853.52 0.0533 0.0143

Uranus 88349-01-16 17:46 G 33989885.02 33989885.24 33989885.46 0.0141 0.0024

Uranus 88349-08-31 04:48 G 33990111.48 33990111.70 33990111.92 0.0141 0.0010

Saturn 88350-03-27 05:32 G 33990319.65 33990319.73 33990319.82 0.0287 0.0261

Uranus 88350-04-14 16:05 G 33990337.96 33990338.17 33990338.38 0.0142 0.0043

Saturn 88350-11-11 23:46 G 33990549.28 33990549.49 33990549.70 0.0284 0.0050

Uranus 88350-11-27 03:08 G 33990564.46 33990564.63 33990564.83 0.0142 0.0077

Saturn 88351-06-29 16:05 G 33990778.99 33990779.17 33990779.35 0.0281 0.0154

Uranus 88351-07-11 14:53 G 33990790.99 33990791.12 33990791.27 0.0142 0.0110

Mars 88352-10-19 10:20 G 33991256.76 33991256.93 33991257.09 0.1591 0.0636

Mars 88353-09-22 04:05 G 33991594.51 33991594.67 33991594.83 0.1943 0.0700

Jupiter 88354-02-27 15:36 G 33991753.01 33991753.15 33991753.29 0.0495 0.0361

Jupiter 88354-10-21 21:08 G 33991989.18 33991989.38 33991989.58 0.0494 0.0092

Neptune 88357-11-25 22:05 G 33993120.35 33993120.42 33993120.54 0.0088 0.0080

Neptune 88358-07-09 11:03 G 33993345.85 33993345.96 33993346.12 0.0088 0.0070

Neptune 88359-02-20 00:29 G 33993571.36 33993571.52 33993571.68 0.0089 0.0059

Neptune 88359-10-03 13:27 G 33993796.88 33993797.06 33993797.25 0.0089 0.0049

Neptune 88360-05-16 02:10 G 33994022.40 33994022.59 33994022.80 0.0089 0.0039

Jupiter 88360-08-20 10:48 G 33994118.74 33994118.95 33994119.15 0.0532 0.0016

Neptune 88360-12-27 14:53 G 33994247.93 33994248.12 33994248.34 0.0089 0.0029

Neptune 88361-08-10 03:51 G 33994473.45 33994473.66 33994473.88 0.0089 0.0019

Neptune 88362-03-23 16:48 G 33994698.98 33994699.20 33994699.42 0.0089 0.0008

Neptune 88362-11-04 05:46 G 33994924.52 33994924.74 33994924.96 0.0089 0.0002

Neptune 88363-06-17 18:29 G 33995150.06 33995150.27 33995150.49 0.0089 0.0012

Neptune 88364-01-29 07:12 G 33995375.60 33995375.80 33995376.02 0.0089 0.0023

Neptune 88364-09-10 20:10 G 33995601.14 33995601.34 33995601.55 0.0089 0.0033

Neptune 88365-04-24 08:53 G 33995826.69 33995826.87 33995827.08 0.0089 0.0043

Jupiter 88365-11-02 15:51 G 33996019.13 33996019.16 33996019.21 0.0496 0.0485

Neptune 88365-12-05 21:51 G 33996052.25 33996052.41 33996052.60 0.0089 0.0053

Jupiter 88366-06-26 23:03 G 33996255.25 33996255.46 33996255.66 0.0494 0.0035

Neptune 88366-07-19 10:48 G 33996277.80 33996277.95 33996278.11 0.0089 0.0063

Saturn 88366-07-20 06:44 G 33996278.61 33996278.78 33996278.95 0.0276 0.0160

Jupiter 88367-02-18 01:27 G 33996491.45 33996491.56 33996491.68 0.0494 0.0410

Neptune 88367-03-01 23:46 G 33996503.37 33996503.49 33996503.61 0.0089 0.0073

Saturn 88367-03-06 14:53 G 33996507.91 33996508.12 33996508.33 0.0278 0.0029

Neptune 88367-10-13 12:44 G 33996728.96 33996729.03 33996729.11 0.0089 0.0083

Saturn 88367-10-22 00:44 G 33996737.41 33996737.53 33996737.66 0.0281 0.0224

Jupiter 88372-04-24 23:46 G 33998384.30 33998384.49 33998384.68 0.0531 0.0175

Jupiter 88372-12-18 21:08 G 33998622.24 33998622.38 33998622.52 0.0532 0.0392

Moon 88377-01-05 03:51 G 34000100.52 34000100.66 34000100.80 0.2655 0.1351

Earth 88377-01-05 09:22 G 34000100.76 34000100.89 34000101.02 0.2657 0.1538 *

Jupiter 88378-03-02 00:44 G 34000521.34 34000521.53 34000521.72 0.0495 0.0161

Jupiter 88378-10-24 04:48 G 34000757.54 34000757.70 34000757.87 0.0494 0.0291

Saturn 88379-10-07 16:05 G 34001106.05 34001106.17 34001106.31 0.0287 0.0224

Saturn 88380-05-24 10:20 G 34001335.72 34001335.93 34001336.14 0.0284 0.0013

Saturn 88381-01-09 02:24 G 34001565.44 34001565.60 34001565.75 0.0281 0.0190

Jupiter 88383-12-29 14:10 G 34002649.94 34002650.09 34002650.25 0.0530 0.0332

Jupiter 88384-08-23 10:05 G 34002887.73 34002887.92 34002888.10 0.0532 0.0234

Mars 88384-10-18 02:24 G 34002943.48 34002943.60 34002943.73 0.1593 0.1136

Moon 88385-01-02 21:51 G 34003020.31 34003020.41 34003020.51 0.2659 0.1973

Earth 88385-01-03 02:24 G 34003020.47 34003020.60 34003020.73 0.2656 0.1566 *

Uranus 88386-11-13 15:51 G 34003700.13 34003700.16 34003700.22 0.0138 0.0134

Uranus 88387-06-27 23:17 G 34003926.33 34003926.47 34003926.61 0.0138 0.0104

Uranus 88388-02-09 05:46 G 34004152.57 34004152.74 34004152.93 0.0137 0.0075

Uranus 88388-09-22 12:29 G 34004378.83 34004379.02 34004379.24 0.0137 0.0045

Uranus 88389-05-06 19:12 G 34004605.09 34004605.30 34004605.52 0.0137 0.0016

Jupiter 88389-11-05 01:56 G 34004787.42 34004787.58 34004787.75 0.0495 0.0287

Uranus 88389-12-19 01:41 G 34004831.36 34004831.57 34004831.79 0.0137 0.0014

Jupiter 88390-06-29 07:12 G 34005023.61 34005023.80 34005024.00 0.0494 0.0167

Uranus 88390-08-02 07:56 G 34005057.63 34005057.83 34005058.04 0.0136 0.0043

Uranus 88391-03-16 13:56 G 34005283.91 34005284.08 34005284.27 0.0136 0.0072

Uranus 88391-10-28 20:10 G 34005510.20 34005510.34 34005510.49 0.0136 0.0100

Uranus 88392-06-11 01:56 G 34005736.52 34005736.58 34005736.66 0.0136 0.0128

Jupiter 88395-09-03 04:48 G 34006915.63 34006915.70 34006915.79 0.0530 0.0484

Saturn 88396-01-30 14:24 G 34007064.91 34007065.10 34007065.29 0.0277 0.0129

Jupiter 88396-04-27 23:03 G 34007153.26 34007153.46 34007153.67 0.0532 0.0073

Saturn 88396-09-15 22:34 G 34007294.24 34007294.44 34007294.65 0.0279 0.0062

Saturn 88397-05-03 08:39 G 34007523.78 34007523.86 34007523.95 0.0282 0.0258

Jupiter 88401-07-11 02:39 G 34009053.51 34009053.61 34009053.73 0.0496 0.0413

Jupiter 88402-03-04 09:22 G 34009289.68 34009289.89 34009290.09 0.0494 0.0041

Jupiter 88402-10-26 11:32 G 34009525.94 34009525.98 34009526.03 0.0494 0.0481

Jupiter 88408-01-01 14:24 G 34011418.90 34011419.10 34011419.30 0.0532 0.0086

Jupiter 88408-08-26 13:12 G 34011656.97 34011657.05 34011657.14 0.0533 0.0482

Saturn 88409-04-18 23:32 G 34011892.33 34011892.48 34011892.65 0.0286 0.0189

Saturn 88409-12-04 17:17 G 34012122.01 34012122.22 34012122.43 0.0283 0.0020

Saturn 88410-07-22 08:53 G 34012351.74 34012351.87 34012352.00 0.0280 0.0222

Jupiter 88413-11-07 10:05 G 34013555.72 34013555.92 34013556.12 0.0494 0.0086

Jupiter 88414-07-01 12:58 G 34013791.90 34013792.04 34013792.18 0.0494 0.0361

Mars 88418-08-16 22:48 G 34015299.30 34015299.45 34015299.60 0.1591 0.0795

Mars 88419-07-20 06:44 G 34015636.67 34015636.78 34015636.90 0.1944 0.1420

Jupiter 88419-09-06 06:15 G 34015684.58 34015684.76 34015684.94 0.0532 0.0241

Jupiter 88420-05-01 03:36 G 34015922.49 34015922.65 34015922.81 0.0533 0.0329

Jupiter 88425-07-13 11:17 G 34017821.79 34017821.97 34017822.16 0.0495 0.0214

Saturn 88425-08-11 19:12 G 34017851.10 34017851.30 34017851.49 0.0277 0.0101

Jupiter 88426-03-06 15:36 G 34018057.97 34018058.15 34018058.33 0.0494 0.0239

Saturn 88426-03-29 03:51 G 34018080.46 34018080.66 34018080.86 0.0279 0.0091

Uranus 88430-11-06 16:48 G 34019764.16 34019764.20 34019764.27 0.0140 0.0135

Jupiter 88431-05-11 20:39 G 34019950.23 34019950.36 34019950.50 0.0530 0.0396

Uranus 88431-06-21 03:08 G 34019990.49 34019990.63 34019990.79 0.0141 0.0104

Jupiter 88432-01-04 15:36 G 34020187.96 34020188.15 34020188.34 0.0532 0.0167

Uranus 88432-02-02 13:56 G 34020216.89 34020217.08 34020217.27 0.0141 0.0071

Uranus 88432-09-16 00:15 G 34020443.31 34020443.51 34020443.73 0.0141 0.0039

Uranus 88433-04-30 11:32 G 34020669.76 34020669.98 34020670.20 0.0141 0.0006

Uranus 88433-12-12 22:34 G 34020896.23 34020896.44 34020896.66 0.0142 0.0027

Uranus 88434-07-27 09:36 G 34021122.71 34021122.90 34021123.11 0.0142 0.0061

Uranus 88435-03-10 21:08 G 34021349.22 34021349.38 34021349.55 0.0142 0.0094

Uranus 88435-10-23 08:24 G 34021575.77 34021575.85 34021575.96 0.0142 0.0128

Jupiter 88437-03-18 12:00 G 34022087.86 34022088.00 34022088.15 0.0496 0.0341

Jupiter 88437-11-09 18:15 G 34022324.06 34022324.26 34022324.46 0.0494 0.0115

Neptune 88438-10-17 06:15 G 34022665.69 34022665.76 34022665.87 0.0089 0.0081

Saturn 88438-10-30 09:08 G 34022678.70 34022678.88 34022679.06 0.0286 0.0154

Neptune 88439-05-30 19:27 G 34022891.19 34022891.31 34022891.46 0.0089 0.0071

Saturn 88439-06-17 02:39 G 34022908.40 34022908.61 34022908.82 0.0283 0.0056

Neptune 88440-01-11 08:24 G 34023116.71 34023116.85 34023117.03 0.0089 0.0061

Saturn 88440-02-01 17:46 G 34023138.17 34023138.24 34023138.33 0.0280 0.0256

Neptune 88440-08-23 21:22 G 34023342.23 34023342.39 34023342.59 0.0089 0.0051

Neptune 88441-04-06 11:03 G 34023567.77 34023567.96 34023568.16 0.0089 0.0040

Neptune 88441-11-18 00:00 G 34023793.30 34023793.50 34023793.72 0.0089 0.0030

Neptune 88442-07-01 13:12 G 34024018.84 34024019.05 34024019.27 0.0089 0.0020

Neptune 88443-02-12 02:24 G 34024244.38 34024244.60 34024244.82 0.0089 0.0009

Jupiter 88443-09-09 05:32 G 34024453.53 34024453.73 34024453.93 0.0532 0.0006

Neptune 88443-09-25 15:36 G 34024469.93 34024470.15 34024470.37 0.0089 0.0002

Neptune 88444-05-08 04:48 G 34024695.49 34024695.70 34024695.93 0.0089 0.0012

Neptune 88444-12-19 18:00 G 34024921.04 34024921.25 34024921.47 0.0089 0.0022

Neptune 88445-08-02 07:12 G 34025146.60 34025146.80 34025147.01 0.0089 0.0032

Neptune 88446-03-15 20:10 G 34025372.16 34025372.34 34025372.55 0.0089 0.0043

Neptune 88446-10-27 09:22 G 34025597.73 34025597.89 34025598.08 0.0089 0.0053

Neptune 88447-06-09 22:34 G 34025823.30 34025823.44 34025823.61 0.0089 0.0063

Neptune 88448-01-21 11:46 G 34026048.88 34026048.99 34026049.12 0.0088 0.0073

Neptune 88448-09-03 00:58 G 34026274.47 34026274.54 34026274.62 0.0088 0.0083

Jupiter 88448-11-21 12:44 G 34026353.97 34026354.03 34026354.10 0.0497 0.0466

Jupiter 88449-07-15 20:24 G 34026590.14 34026590.35 34026590.55 0.0494 0.0012

Jupiter 88450-03-08 23:17 G 34026826.38 34026826.47 34026826.57 0.0494 0.0433

Mars 88450-08-15 15:22 G 34026986.00 34026986.14 34026986.28 0.1592 0.0983

Saturn 88454-07-07 18:29 G 34028408.21 34028408.27 34028408.36 0.0275 0.0255

Saturn 88455-02-22 01:41 G 34028637.37 34028637.57 34028637.78 0.0277 0.0070

Jupiter 88455-05-14 19:12 G 34028719.11 34028719.30 34028719.49 0.0531 0.0155

Saturn 88455-10-09 10:34 G 34028866.76 34028866.94 34028867.13 0.0280 0.0123

Jupiter 88456-01-07 16:48 G 34028957.07 34028957.20 34028957.33 0.0532 0.0415

Jupiter 88461-03-20 22:05 G 34030856.23 34030856.42 34030856.62 0.0495 0.0138

Jupiter 88461-11-12 01:56 G 34031092.43 34031092.58 34031092.74 0.0494 0.0313

Jupiter 88467-01-17 11:03 G 34032984.80 34032984.96 34032985.13 0.0531 0.0310

Pluto 88467-08-14 02:53 G 34033193.53 34033193.62 34033193.76 0.0065 0.0056

Jupiter 88467-09-12 07:27 G 34033222.64 34033222.81 34033222.99 0.0533 0.0259

Pluto 88468-03-26 07:27 G 34033418.61 34033418.81 34033419.04 0.0066 0.0015

Saturn 88468-05-11 15:51 G 34033464.97 34033465.16 34033465.35 0.0285 0.0120

Pluto 88468-11-06 11:46 G 34033643.80 34033643.99 34033644.20 0.0066 0.0027

Saturn 88468-12-27 08:53 G 34033694.67 34033694.87 34033695.07 0.0282 0.0087

Uranus 88471-02-25 09:51 G 34034484.81 34034484.91 34034485.04 0.0138 0.0116

Uranus 88471-10-09 17:17 G 34034711.05 34034711.22 34034711.39 0.0138 0.0086

Uranus 88472-05-23 00:00 G 34034937.31 34034937.50 34034937.70 0.0137 0.0057

Jupiter 88472-11-23 22:48 G 34035122.28 34035122.45 34035122.63 0.0495 0.0265

Uranus 88473-01-04 06:44 G 34035163.57 34035163.78 34035164.00 0.0137 0.0027

Jupiter 88473-07-18 03:22 G 34035358.46 34035358.64 34035358.84 0.0494 0.0190

Uranus 88473-08-18 13:27 G 34035389.84 34035390.06 34035390.27 0.0137 0.0003

Uranus 88474-04-01 19:41 G 34035616.12 34035616.32 34035616.53 0.0137 0.0032

Uranus 88474-11-14 02:10 G 34035842.40 34035842.59 34035842.79 0.0136 0.0061

Uranus 88475-06-28 07:56 G 34036068.69 34036068.83 34036069.01 0.0136 0.0090

Uranus 88476-02-09 14:10 G 34036294.99 34036295.09 34036295.20 0.0136 0.0117

Jupiter 88478-09-22 03:51 G 34037250.56 34037250.66 34037250.76 0.0530 0.0459

Jupiter 88479-05-17 22:34 G 34037488.24 34037488.44 34037488.64 0.0533 0.0102

Saturn 88484-01-17 21:36 G 34039194.30 34039194.40 34039194.52 0.0275 0.0231

Mars 88484-06-13 11:46 G 34039341.84 34039341.99 34039342.13 0.1590 0.0946

Jupiter 88484-07-29 23:46 G 34039388.37 34039388.49 34039388.62 0.0496 0.0391

Saturn 88484-09-03 05:03 G 34039423.51 34039423.71 34039423.92 0.0277 0.0045

Jupiter 88485-03-23 06:00 G 34039624.55 34039624.75 34039624.96 0.0494 0.0065

Saturn 88485-04-20 13:56 G 34039652.91 34039653.08 34039653.27 0.0280 0.0149

Jupiter 88491-01-20 12:00 G 34041753.80 34041754.00 34041754.20 0.0532 0.0060

Jupiter 88491-09-15 10:05 G 34041991.87 34041991.92 34041991.98 0.0532 0.0508

Jupiter 88496-11-26 07:41 G 34043890.62 34043890.82 34043891.02 0.0495 0.0063

Jupiter 88497-07-20 11:03 G 34044126.84 34044126.96 34044127.09 0.0494 0.0387

Saturn 88497-11-22 00:00 G 34044251.30 34044251.50 34044251.71 0.0285 0.0087

Saturn 88498-07-09 16:48 G 34044481.01 34044481.20 34044481.40 0.0282 0.0121

Jupiter 88502-09-26 03:08 G 34046019.45 34046019.63 34046019.82 0.0531 0.0218

Jupiter 88503-05-21 23:32 G 34046257.33 34046257.48 34046257.63 0.0532 0.0352

Jupiter 88508-08-02 09:22 G 34048156.70 34048156.89 34048157.08 0.0495 0.0191

Jupiter 88509-03-26 14:10 G 34048392.92 34048393.09 34048393.26 0.0494 0.0264

Saturn 88513-07-31 03:36 G 34049980.51 34049980.65 34049980.79 0.0275 0.0201

Saturn 88514-03-17 11:03 G 34050209.75 34050209.96 34050210.17 0.0278 0.0015

Jupiter 88514-05-31 17:32 G 34050285.09 34050285.23 34050285.37 0.0530 0.0374

Earth 88514-07-03 08:39 G 34050317.70 34050317.86 34050318.01 0.2677 0.0531

Moon 88514-07-03 14:10 G 34050317.93 34050318.09 34050318.25 0.2678 0.0159 *

Saturn 88514-11-01 20:24 G 34050439.19 34050439.35 34050439.51 0.0281 0.0180

Jupiter 88515-01-24 12:29 G 34050522.83 34050523.02 34050523.21 0.0532 0.0191

Uranus 88515-02-19 10:48 G 34050548.85 34050548.95 34050549.09 0.0140 0.0117

Uranus 88515-10-03 21:08 G 34050775.22 34050775.38 34050775.57 0.0141 0.0086

Uranus 88516-05-17 08:10 G 34051001.64 34051001.84 34051002.05 0.0141 0.0053

Mars 88516-06-13 03:51 G 34051028.51 34051028.66 34051028.81 0.1592 0.0822

Uranus 88516-12-29 18:58 G 34051228.07 34051228.29 34051228.51 0.0141 0.0020

Uranus 88517-08-13 05:46 G 34051454.52 34051454.74 34051454.96 0.0141 0.0013

Uranus 88518-03-27 16:48 G 34051680.99 34051681.20 34051681.41 0.0142 0.0046

Uranus 88518-11-09 04:05 G 34051907.49 34051907.67 34051907.86 0.0142 0.0079

Uranus 88519-06-23 15:22 G 34052134.02 34052134.14 34052134.29 0.0142 0.0113

Jupiter 88520-04-07 11:03 G 34052422.80 34052422.96 34052423.11 0.0496 0.0317

Jupiter 88520-11-29 16:48 G 34052659.00 34052659.20 34052659.39 0.0494 0.0140

Neptune 88522-02-28 06:29 G 34053114.72 34053114.77 34053114.87 0.0088 0.0084

Neptune 88522-10-11 19:41 G 34053340.22 34053340.32 34053340.46 0.0088 0.0074

Neptune 88523-05-25 08:39 G 34053565.73 34053565.86 34053566.03 0.0088 0.0064

Neptune 88524-01-05 21:22 G 34053791.24 34053791.39 34053791.59 0.0088 0.0054

Neptune 88524-08-18 10:48 G 34054016.76 34054016.95 34054017.14 0.0089 0.0043

Neptune 88525-03-31 23:32 G 34054242.28 34054242.48 34054242.69 0.0089 0.0033

Neptune 88525-11-12 12:29 G 34054467.81 34054468.02 34054468.24 0.0089 0.0023

Jupiter 88526-02-03 10:20 G 34054550.90 34054550.93 34054550.96 0.0529 0.0522

Neptune 88526-06-26 01:12 G 34054693.34 34054693.55 34054693.78 0.0089 0.0013

Jupiter 88526-09-29 03:51 G 34054788.46 34054788.66 34054788.86 0.0532 0.0034

Saturn 88526-10-18 10:48 G 34054807.89 34054807.95 34054808.04 0.0287 0.0269

Neptune 88527-02-06 14:10 G 34054918.87 34054919.09 34054919.31 0.0089 0.0002

Saturn 88527-06-05 05:46 G 34055037.53 34055037.74 34055037.95 0.0284 0.0055

Neptune 88527-09-20 03:08 G 34055144.41 34055144.63 34055144.85 0.0089 0.0008

Saturn 88528-01-20 22:05 G 34055267.25 34055267.42 34055267.61 0.0281 0.0151

Neptune 88528-05-02 15:36 G 34055369.95 34055370.15 34055370.38 0.0089 0.0019

Neptune 88528-12-14 04:34 G 34055595.49 34055595.69 34055595.90 0.0089 0.0029

Neptune 88529-07-27 17:17 G 34055821.03 34055821.22 34055821.43 0.0089 0.0039

Neptune 88530-03-10 06:00 G 34056046.58 34056046.75 34056046.95 0.0089 0.0049

Neptune 88530-10-21 18:58 G 34056272.14 34056272.29 34056272.47 0.0089 0.0059

Neptune 88531-06-04 07:56 G 34056497.70 34056497.83 34056497.98 0.0089 0.0069

Jupiter 88531-12-12 11:32 G 34056688.89 34056688.98 34056689.07 0.0496 0.0442

Neptune 88532-01-15 20:53 G 34056723.28 34056723.37 34056723.47 0.0089 0.0079

Jupiter 88532-08-04 18:29 G 34056925.06 34056925.27 34056925.47 0.0494 0.0014

Jupiter 88533-03-28 20:39 G 34057161.30 34057161.36 34057161.44 0.0494 0.0458

Jupiter 88538-06-03 19:27 G 34059054.12 34059054.31 34059054.51 0.0532 0.0125

Jupiter 88539-01-27 17:46 G 34059292.13 34059292.24 34059292.35 0.0533 0.0448

Saturn 88543-02-10 05:03 G 34060766.56 34060766.71 34060766.87 0.0275 0.0180

Saturn 88543-09-27 12:58 G 34060995.83 34060996.04 34060996.25 0.0278 0.0009

Jupiter 88544-04-09 20:39 G 34061191.16 34061191.36 34061191.56 0.0494 0.0113

Saturn 88544-05-13 22:20 G 34061225.29 34061225.43 34061225.57 0.0281 0.0203

Jupiter 88544-12-02 00:15 G 34061427.36 34061427.51 34061427.65 0.0494 0.0339

Jupiter 88550-02-06 10:48 G 34063319.78 34063319.95 34063320.12 0.0531 0.0282

Mars 88550-04-11 23:46 G 34063384.37 34063384.49 34063384.62 0.1590 0.1109

Jupiter 88550-10-02 06:44 G 34063557.61 34063557.78 34063557.95 0.0532 0.0288

Uranus 88554-10-26 20:10 G 34065043.28 34065043.34 34065043.43 0.0138 0.0128

Uranus 88555-06-10 03:22 G 34065269.51 34065269.64 34065269.81 0.0138 0.0099

Pluto 88555-11-27 17:17 G 34065440.01 34065440.22 34065440.45 0.0078 0.0012

Jupiter 88555-12-14 21:08 G 34065457.20 34065457.38 34065457.56 0.0496 0.0243

Uranus 88556-01-22 10:34 G 34065495.76 34065495.94 34065496.13 0.0138 0.0069

Saturn 88556-04-29 17:03 G 34065594.10 34065594.21 34065594.34 0.0288 0.0239

Pluto 88556-07-10 03:22 G 34065665.51 34065665.64 34065665.79 0.0078 0.0060

Jupiter 88556-08-07 02:24 G 34065693.42 34065693.60 34065693.79 0.0494 0.0216

Uranus 88556-09-04 17:17 G 34065722.03 34065722.22 34065722.44 0.0137 0.0040

Saturn 88556-12-15 11:46 G 34065823.78 34065823.99 34065824.21 0.0285 0.0026

Uranus 88557-04-19 00:15 G 34065948.30 34065948.51 34065948.73 0.0137 0.0010

Saturn 88557-08-02 04:20 G 34066053.52 34066053.68 34066053.85 0.0282 0.0180

Uranus 88557-12-01 06:58 G 34066174.58 34066174.79 34066175.00 0.0137 0.0020

Uranus 88558-07-15 13:12 G 34066400.86 34066401.05 34066401.26 0.0137 0.0049

Uranus 88559-02-26 19:27 G 34066627.14 34066627.31 34066627.49 0.0136 0.0078

Uranus 88559-10-11 01:12 G 34066853.44 34066853.55 34066853.71 0.0136 0.0107

Uranus 88560-05-24 07:12 G 34067079.78 34067079.80 34067079.86 0.0136 0.0134

Jupiter 88561-10-12 03:08 G 34067585.52 34067585.63 34067585.75 0.0529 0.0433

Jupiter 88562-06-06 20:53 G 34067823.18 34067823.37 34067823.57 0.0532 0.0129

Jupiter 88567-08-19 22:20 G 34069723.30 34069723.43 34069723.57 0.0496 0.0370

Jupiter 88568-04-12 05:17 G 34069959.52 34069959.72 34069959.92 0.0494 0.0090

Saturn 88572-08-22 09:51 G 34071552.74 34071552.91 34071553.09 0.0275 0.0152

Saturn 88573-04-08 17:46 G 34071782.03 34071782.24 34071782.45 0.0278 0.0037

Saturn 88573-11-24 03:08 G 34072011.52 34072011.63 34072011.75 0.0281 0.0233

Jupiter 88574-02-09 10:34 G 34072088.74 34072088.94 34072089.15 0.0531 0.0035

Jupiter 88579-04-24 23:17 G 34073989.46 34073989.47 34073989.49 0.0497 0.0495

Jupiter 88579-12-17 07:41 G 34074225.62 34074225.82 34074226.03 0.0495 0.0037

Jupiter 88580-08-09 10:48 G 34074461.85 34074461.95 34074462.07 0.0494 0.0413

Mars 88582-04-10 16:20 G 34075071.02 34075071.18 34075071.34 0.1591 0.0665

Mars 88583-03-14 12:15 G 34075408.87 34075409.01 34075409.14 0.1944 0.1209

Jupiter 88585-10-15 02:24 G 34076354.41 34076354.60 34076354.79 0.0531 0.0191

Saturn 88585-11-09 22:05 G 34076380.29 34076380.42 34076380.58 0.0287 0.0208

Jupiter 88586-06-09 23:17 G 34076592.34 34076592.47 34076592.62 0.0532 0.0383

Saturn 88586-06-27 16:34 G 34076609.98 34076610.19 34076610.40 0.0284 0.0005

Saturn 88587-02-12 08:39 G 34076839.72 34076839.86 34076840.01 0.0281 0.0209

Jupiter 88591-08-22 09:22 G 34078491.70 34078491.89 34078492.09 0.0495 0.0164

Jupiter 88592-04-14 13:41 G 34078727.90 34078728.07 34078728.23 0.0494 0.0291

Jupiter 88597-06-19 18:58 G 34080620.14 34080620.29 34080620.44 0.0531 0.0344

Jupiter 88598-02-12 14:39 G 34080857.93 34080858.11 34080858.30 0.0533 0.0227

Uranus 88598-10-19 19:27 G 34081107.25 34081107.31 34081107.41 0.0140 0.0130

Uranus 88599-06-03 05:46 G 34081333.60 34081333.74 34081333.91 0.0140 0.0099

Uranus 88600-01-15 16:05 G 34081559.99 34081560.17 34081560.38 0.0141 0.0067

Uranus 88600-08-30 02:53 G 34081786.41 34081786.62 34081786.83 0.0141 0.0034

Uranus 88601-04-13 13:41 G 34082012.85 34082013.07 34082013.29 0.0141 0.0002

Uranus 88601-11-26 00:29 G 34082239.31 34082239.52 34082239.74 0.0141 0.0031

Saturn 88602-03-05 10:05 G 34082338.74 34082338.92 34082339.11 0.0276 0.0132

Uranus 88602-07-10 11:32 G 34082465.79 34082465.98 34082466.18 0.0142 0.0065

Saturn 88602-10-20 18:15 G 34082568.05 34082568.26 34082568.47 0.0278 0.0058

Neptune 88603-01-20 14:10 G 34082660.04 34082660.09 34082660.15 0.0089 0.0085

Uranus 88603-02-21 22:34 G 34082692.29 34082692.44 34082692.61 0.0142 0.0098

Jupiter 88603-04-28 11:03 G 34082757.80 34082757.96 34082758.13 0.0495 0.0291

Saturn 88603-06-07 03:51 G 34082797.58 34082797.66 34082797.75 0.0281 0.0253

Neptune 88603-09-03 03:08 G 34082885.52 34082885.63 34082885.75 0.0089 0.0075

Uranus 88603-10-06 09:51 G 34082918.84 34082918.91 34082919.01 0.0142 0.0131

Jupiter 88603-12-20 16:34 G 34082994.00 34082994.19 34082994.38 0.0494 0.0168

Neptune 88604-04-15 16:20 G 34083111.04 34083111.18 34083111.34 0.0089 0.0065

Neptune 88604-11-27 05:17 G 34083336.56 34083336.72 34083336.90 0.0089 0.0055

Neptune 88605-07-10 18:15 G 34083562.09 34083562.26 34083562.47 0.0089 0.0045

Neptune 88606-02-21 07:27 G 34083787.62 34083787.81 34083788.02 0.0089 0.0035

Neptune 88606-10-04 20:39 G 34084013.16 34084013.36 34084013.58 0.0089 0.0024

Neptune 88607-05-18 09:51 G 34084238.70 34084238.91 34084239.13 0.0089 0.0014

Neptune 88607-12-29 23:03 G 34084464.24 34084464.46 34084464.68 0.0089 0.0003

Neptune 88608-08-11 12:15 G 34084689.79 34084690.01 34084690.23 0.0089 0.0007

Jupiter 88609-02-23 12:00 G 34084885.94 34084886.00 34084886.08 0.0529 0.0493

Neptune 88609-03-25 01:12 G 34084915.35 34084915.55 34084915.78 0.0089 0.0018

Jupiter 88609-10-19 05:17 G 34085123.52 34085123.72 34085123.92 0.0532 0.0065

Neptune 88609-11-05 14:24 G 34085140.90 34085141.10 34085141.32 0.0089 0.0028

Neptune 88610-06-19 03:51 G 34085366.46 34085366.66 34085366.86 0.0089 0.0038

Neptune 88611-01-30 16:34 G 34085592.02 34085592.19 34085592.39 0.0089 0.0049

Neptune 88611-09-13 05:46 G 34085817.59 34085817.74 34085817.92 0.0089 0.0059

Neptune 88612-04-25 19:12 G 34086043.18 34086043.30 34086043.45 0.0089 0.0069

Neptune 88612-12-07 08:24 G 34086268.77 34086268.85 34086268.96 0.0088 0.0079

Jupiter 88615-01-01 10:05 G 34087023.82 34087023.92 34087024.03 0.0497 0.0422

Saturn 88615-05-24 02:39 G 34087166.46 34087166.61 34087166.79 0.0287 0.0181

Jupiter 88615-08-25 18:00 G 34087260.05 34087260.25 34087260.46 0.0495 0.0041

Saturn 88616-01-08 21:08 G 34087396.17 34087396.38 34087396.60 0.0284 0.0033

Mars 88616-02-08 12:58 G 34087426.93 34087427.04 34087427.14 0.1590 0.1252

Jupiter 88616-04-17 21:22 G 34087496.36 34087496.39 34087496.42 0.0494 0.0486

Saturn 88616-08-25 13:12 G 34087625.95 34087626.05 34087626.17 0.0281 0.0237

Earth 88620-01-08 12:29 G 34088856.90 34088857.02 34088857.14 0.2656 0.1775

Moon 88620-01-08 17:03 G 34088857.11 34088857.21 34088857.32 0.2660 0.1870 *

Jupiter 88621-06-23 20:39 G 34089389.16 34089389.36 34089389.56 0.0531 0.0095

Jupiter 88622-02-16 17:32 G 34089627.15 34089627.23 34089627.33 0.0532 0.0477

Jupiter 88627-04-30 20:24 G 34091526.15 34091526.35 34091526.55 0.0495 0.0088

Jupiter 88627-12-23 00:44 G 34091762.39 34091762.53 34091762.66 0.0494 0.0366

Earth 88628-01-06 05:17 G 34091776.59 34091776.72 34091776.86 0.2654 0.1356

Moon 88628-01-06 10:48 G 34091776.80 34091776.95 34091777.11 0.2653 0.0615 *

Saturn 88631-09-15 14:10 G 34093124.90 34093125.09 34093125.29 0.0276 0.0105

Saturn 88632-05-01 22:20 G 34093354.23 34093354.43 34093354.63 0.0279 0.0085

Jupiter 88633-02-26 11:03 G 34093654.79 34093654.96 34093655.14 0.0530 0.0253

Jupiter 88633-10-22 06:58 G 34093892.62 34093892.79 34093892.95 0.0532 0.0318

Jupiter 88639-01-03 22:20 G 34095792.25 34095792.43 34095792.62 0.0496 0.0215

Uranus 88639-02-08 12:58 G 34095827.92 34095828.04 34095828.17 0.0138 0.0111

Jupiter 88639-08-28 03:51 G 34096028.48 34096028.66 34096028.84 0.0494 0.0244

Uranus 88639-09-22 19:56 G 34096054.17 34096054.33 34096054.52 0.0138 0.0082

Uranus 88640-05-06 03:22 G 34096280.44 34096280.64 34096280.84 0.0138 0.0052

Uranus 88640-12-18 10:20 G 34096506.72 34096506.93 34096507.14 0.0137 0.0022

Uranus 88641-08-01 17:03 G 34096733.00 34096733.21 34096733.43 0.0137 0.0007

Uranus 88642-03-15 23:32 G 34096959.28 34096959.48 34096959.69 0.0137 0.0037

Uranus 88642-10-28 05:46 G 34097185.57 34097185.74 34097185.94 0.0137 0.0066

Uranus 88643-06-11 12:15 G 34097411.86 34097412.01 34097412.17 0.0136 0.0094

Uranus 88644-01-23 18:00 G 34097638.17 34097638.25 34097638.36 0.0136 0.0122

Jupiter 88644-11-01 03:22 G 34097920.52 34097920.64 34097920.77 0.0530 0.0406

Saturn 88644-12-03 06:29 G 34097952.59 34097952.77 34097952.95 0.0286 0.0152

Jupiter 88645-06-26 21:51 G 34098158.21 34098158.41 34098158.60 0.0532 0.0160

Saturn 88645-07-21 00:29 G 34098182.31 34098182.52 34098182.73 0.0283 0.0060

Saturn 88646-03-07 16:34 G 34098412.12 34098412.19 34098412.26 0.0281 0.0262

Mars 88648-02-07 05:03 G 34099113.55 34099113.71 34099113.88 0.1591 0.0513

Mars 88649-01-09 13:41 G 34099450.90 34099451.07 34099451.24 0.1945 0.0445

Jupiter 88650-09-09 00:00 G 34100058.35 34100058.50 34100058.65 0.0496 0.0341

Jupiter 88651-05-03 06:29 G 34100294.57 34100294.77 34100294.96 0.0494 0.0119

Jupiter 88657-03-01 13:56 G 34102423.87 34102424.08 34102424.28 0.0532 0.0010

Saturn 88660-08-10 06:58 G 34103681.77 34103681.79 34103681.83 0.0273 0.0269

Saturn 88661-03-27 13:27 G 34103910.86 34103911.06 34103911.26 0.0276 0.0087

Saturn 88661-11-11 21:36 G 34104140.21 34104140.40 34104140.60 0.0279 0.0104

Jupiter 88662-05-15 00:58 G 34104324.48 34104324.54 34104324.61 0.0497 0.0467

Jupiter 88663-01-06 08:53 G 34104560.67 34104560.87 34104561.08 0.0494 0.0008

Jupiter 88663-08-30 12:00 G 34104796.92 34104797.00 34104797.09 0.0494 0.0442

Jupiter 88668-11-04 05:46 G 34106689.55 34106689.74 34106689.94 0.0531 0.0157

Jupiter 88669-06-30 02:10 G 34106927.48 34106927.59 34106927.73 0.0532 0.0416

Saturn 88674-06-15 09:22 G 34108738.71 34108738.89 34108739.09 0.0287 0.0126

Jupiter 88674-09-11 09:22 G 34108826.69 34108826.89 34108827.09 0.0495 0.0139

Saturn 88675-01-31 03:36 G 34108968.45 34108968.65 34108968.86 0.0284 0.0086

Jupiter 88675-05-05 14:24 G 34109062.94 34109063.10 34109063.25 0.0494 0.0319

Jupiter 88680-07-09 22:20 G 34110955.27 34110955.43 34110955.59 0.0530 0.0311

Jupiter 88681-03-04 17:03 G 34111193.04 34111193.21 34111193.39 0.0532 0.0259

Mars 88681-12-06 01:12 G 34111469.47 34111469.55 34111469.63 0.1589 0.1409

Uranus 88683-02-01 15:51 G 34111892.04 34111892.16 34111892.31 0.0140 0.0110

Uranus 88683-09-16 02:10 G 34112118.42 34112118.59 34112118.78 0.0140 0.0079

Uranus 88684-04-29 12:43 G 34112344.83 34112345.03 34112345.25 0.0141 0.0046

Uranus 88684-12-11 23:31 G 34112571.26 34112571.48 34112571.70 0.0141 0.0014

Uranus 88685-07-26 10:05 G 34112797.71 34112797.92 34112798.14 0.0141 0.0019

Uranus 88686-03-09 21:07 G 34113024.17 34113024.38 34113024.58 0.0141 0.0052

Jupiter 88686-05-17 11:03 G 34113092.79 34113092.96 34113093.13 0.0496 0.0267

Neptune 88686-06-02 15:07 G 34113109.12 34113109.13 34113109.18 0.0088 0.0088

Uranus 88686-10-22 07:55 G 34113250.67 34113250.83 34113251.02 0.0142 0.0085

Jupiter 88687-01-08 17:17 G 34113329.04 34113329.22 34113329.41 0.0495 0.0195

Neptune 88687-01-14 04:05 G 34113334.58 34113334.67 34113334.79 0.0088 0.0078

Uranus 88687-06-05 19:12 G 34113477.20 34113477.30 34113477.44 0.0142 0.0118

Neptune 88687-08-27 17:03 G 34113560.09 34113560.21 34113560.37 0.0088 0.0068

Neptune 88688-04-09 06:00 G 34113785.60 34113785.75 34113785.94 0.0088 0.0058

Neptune 88688-11-20 19:27 G 34114011.12 34114011.31 34114011.49 0.0088 0.0047

Neptune 88689-07-04 08:10 G 34114236.64 34114236.84 34114237.04 0.0088 0.0037

Neptune 88690-02-14 20:53 G 34114462.17 34114462.37 34114462.59 0.0089 0.0027

Saturn 88690-02-20 10:34 G 34114467.85 34114467.94 34114468.03 0.0273 0.0243

Neptune 88690-09-28 10:05 G 34114687.71 34114687.92 34114688.14 0.0089 0.0016

Saturn 88690-10-07 16:48 G 34114697.00 34114697.20 34114697.41 0.0276 0.0060

Neptune 88691-05-11 23:03 G 34114913.24 34114913.46 34114913.68 0.0089 0.0006

Saturn 88691-05-25 00:58 G 34114926.36 34114926.54 34114926.73 0.0279 0.0131

Neptune 88691-12-23 11:46 G 34115138.77 34115138.99 34115139.21 0.0089 0.0004

Jupiter 88692-03-14 13:41 G 34115220.98 34115221.07 34115221.17 0.0529 0.0464

Neptune 88692-08-05 00:29 G 34115364.31 34115364.52 34115364.74 0.0089 0.0014

Jupiter 88692-11-07 06:43 G 34115458.58 34115458.78 34115458.98 0.0531 0.0097

Neptune 88693-03-18 13:12 G 34115589.85 34115590.05 34115590.27 0.0089 0.0025

Neptune 88693-10-30 02:10 G 34115815.40 34115815.59 34115815.80 0.0089 0.0035

Neptune 88694-06-12 14:53 G 34116040.95 34116041.12 34116041.32 0.0089 0.0045

Neptune 88695-01-24 03:51 G 34116266.50 34116266.66 34116266.84 0.0089 0.0055

Neptune 88695-09-06 16:48 G 34116492.05 34116492.20 34116492.35 0.0089 0.0065

Neptune 88696-04-19 05:03 G 34116717.62 34116717.71 34116717.85 0.0089 0.0076

Neptune 88696-11-30 17:46 G 34116943.21 34116943.24 34116943.33 0.0089 0.0086

Jupiter 88698-01-20 12:29 G 34117358.90 34117359.02 34117359.15 0.0497 0.0393

Jupiter 88698-09-13 20:24 G 34117595.15 34117595.35 34117595.55 0.0495 0.0070

Saturn 88703-12-27 12:43 G 34119524.83 34119525.03 34119525.23 0.0286 0.0099

Jupiter 88704-07-13 22:05 G 34119724.22 34119724.42 34119724.62 0.0531 0.0063

Saturn 88704-08-13 06:29 G 34119754.58 34119754.77 34119754.97 0.0283 0.0112

Jupiter 88705-03-08 19:41 G 34119962.27 34119962.32 34119962.38 0.0532 0.0510

Jupiter 88710-05-20 22:48 G 34121861.24 34121861.45 34121861.65 0.0495 0.0058

Jupiter 88711-01-12 02:24 G 34122097.48 34122097.60 34122097.72 0.0494 0.0396

Mars 88713-12-05 17:46 G 34123156.07 34123156.24 34123156.41 0.1590 0.0355

Mars 88714-11-07 16:05 G 34123493.00 34123493.17 34123493.34 0.1945 0.0282

Pluto 88715-07-20 20:39 G 34123748.18 34123748.36 34123748.58 0.0066 0.0026

Pluto 88716-03-02 01:12 G 34123973.35 34123973.55 34123973.77 0.0066 0.0016

Jupiter 88716-03-18 14:53 G 34123989.94 34123990.12 34123990.30 0.0531 0.0219

Pluto 88716-10-13 05:31 G 34124198.64 34124198.73 34124198.85 0.0066 0.0058

Jupiter 88716-11-11 11:17 G 34124227.82 34124227.97 34124228.12 0.0532 0.0356

Saturn 88719-09-03 09:07 G 34125253.78 34125253.88 34125254.01 0.0273 0.0227

Saturn 88720-04-19 15:36 G 34125482.95 34125483.15 34125483.36 0.0276 0.0043

Saturn 88720-12-04 23:46 G 34125712.32 34125712.49 34125712.67 0.0279 0.0149

Jupiter 88722-01-24 00:43 G 34126127.34 34126127.53 34126127.72 0.0495 0.0185

Jupiter 88722-09-17 05:46 G 34126363.58 34126363.74 34126363.91 0.0494 0.0275

Uranus 88722-10-09 23:17 G 34126386.39 34126386.47 34126386.58 0.0138 0.0123

Uranus 88723-05-24 06:58 G 34126612.63 34126612.79 34126612.95 0.0138 0.0093

Uranus 88724-01-05 13:55 G 34126838.90 34126839.08 34126839.28 0.0138 0.0064

Uranus 88724-08-18 20:53 G 34127065.17 34127065.37 34127065.59 0.0137 0.0035

Uranus 88725-04-02 04:05 G 34127291.45 34127291.67 34127291.88 0.0137 0.0005

Uranus 88725-11-14 10:48 G 34127517.74 34127517.95 34127518.16 0.0137 0.0025

Uranus 88726-06-28 17:03 G 34127744.03 34127744.21 34127744.42 0.0137 0.0054

Uranus 88727-02-09 23:17 G 34127970.31 34127970.47 34127970.66 0.0137 0.0083

Uranus 88727-09-24 05:31 G 34128196.62 34128196.73 34128196.86 0.0136 0.0111

Jupiter 88727-11-22 08:24 G 34128255.70 34128255.85 34128255.99 0.0530 0.0372

Jupiter 88728-07-17 02:24 G 34128493.41 34128493.60 34128493.79 0.0532 0.0196

Saturn 88733-07-08 14:10 G 34130310.89 34130311.09 34130311.30 0.0287 0.0075

Jupiter 88733-09-29 00:00 G 34130393.35 34130393.50 34130393.66 0.0496 0.0318

Saturn 88734-02-23 08:10 G 34130540.66 34130540.84 34130541.03 0.0284 0.0136

Jupiter 88734-05-23 06:58 G 34130629.60 34130629.79 34130629.99 0.0495 0.0146

Jupiter 88739-07-28 01:55 G 34132521.55 34132521.58 34132521.62 0.0528 0.0519

Jupiter 88740-03-21 18:00 G 34132759.05 34132759.25 34132759.46 0.0531 0.0040

Jupiter 88745-06-04 00:43 G 34134659.45 34134659.53 34134659.63 0.0497 0.0445

Jupiter 88746-01-26 09:36 G 34134895.69 34134895.90 34134896.10 0.0495 0.0019

Jupiter 88746-09-19 13:41 G 34135132.01 34135132.07 34135132.13 0.0495 0.0470

Mars 88747-10-04 14:10 G 34135512.06 34135512.09 34135512.12 0.1589 0.1556

Saturn 88749-03-15 12:29 G 34136039.88 34136040.02 34136040.16 0.0273 0.0200

Saturn 88749-10-30 18:58 G 34136269.08 34136269.29 34136269.50 0.0276 0.0015

Saturn 88750-06-17 03:07 G 34136498.47 34136498.63 34136498.79 0.0279 0.0176

Jupiter 88751-11-25 08:10 G 34137024.65 34137024.84 34137025.04 0.0531 0.0124

Jupiter 88752-07-20 04:48 G 34137262.59 34137262.70 34137262.80 0.0532 0.0449

Moon 88757-07-05 03:07 G 34139073.49 34139073.63 34139073.78 0.2675 0.1322

Earth 88757-07-05 08:10 G 34139073.68 34139073.84 34139074.00 0.2678 0.0531 *

Jupiter 88757-10-01 12:15 G 34139161.81 34139162.01 34139162.21 0.0495 0.0108

Jupiter 88758-05-25 17:03 G 34139398.07 34139398.21 34139398.36 0.0494 0.0350

Saturn 88762-06-02 20:53 G 34140867.31 34140867.37 34140867.47 0.0289 0.0266

Saturn 88763-01-18 17:03 G 34141097.00 34141097.21 34141097.42 0.0286 0.0048

Jupiter 88763-07-31 00:15 G 34141290.34 34141290.51 34141290.68 0.0530 0.0280

Saturn 88763-09-05 10:48 G 34141326.78 34141326.95 34141327.13 0.0283 0.0162

Jupiter 88764-03-24 19:27 G 34141528.15 34141528.31 34141528.48 0.0532 0.0293

Uranus 88766-10-03 02:10 G 34142450.49 34142450.59 34142450.71 0.0140 0.0121

Uranus 88767-05-17 12:15 G 34142676.86 34142677.01 34142677.19 0.0140 0.0091

Neptune 88767-12-06 10:48 G 34142879.88 34142879.95 34142880.07 0.0089 0.0080

Uranus 88767-12-29 22:34 G 34142903.25 34142903.44 34142903.65 0.0141 0.0059

Neptune 88768-07-18 23:46 G 34143105.38 34143105.49 34143105.65 0.0089 0.0070

Uranus 88768-08-12 09:22 G 34143129.67 34143129.89 34143130.10 0.0141 0.0026

Neptune 88769-03-01 13:12 G 34143330.90 34143331.05 34143331.23 0.0089 0.0059

Uranus 88769-03-26 19:55 G 34143356.11 34143356.33 34143356.55 0.0141 0.0006

Jupiter 88769-06-06 14:10 G 34143427.91 34143428.09 34143428.27 0.0496 0.0235

Neptune 88769-10-13 02:24 G 34143556.42 34143556.60 34143556.79 0.0089 0.0049

Uranus 88769-11-08 06:29 G 34143582.57 34143582.77 34143582.99 0.0141 0.0039

Jupiter 88770-01-28 19:55 G 34143664.15 34143664.33 34143664.51 0.0494 0.0227

Neptune 88770-05-26 15:22 G 34143781.96 34143782.14 34143782.35 0.0089 0.0039

Uranus 88770-06-22 17:46 G 34143809.05 34143809.24 34143809.43 0.0141 0.0072

Neptune 88771-01-07 04:19 G 34144007.49 34144007.68 34144007.91 0.0089 0.0029

Uranus 88771-02-04 04:34 G 34144035.56 34144035.69 34144035.85 0.0142 0.0105

Neptune 88771-08-20 17:46 G 34144233.03 34144233.24 34144233.46 0.0089 0.0018

Uranus 88771-09-18 15:51 G 34144262.12 34144262.16 34144262.22 0.0142 0.0138

Neptune 88772-04-02 06:58 G 34144458.57 34144458.79 34144459.01 0.0089 0.0008

Neptune 88772-11-13 20:10 G 34144684.12 34144684.34 34144684.56 0.0089 0.0003

Neptune 88773-06-27 09:07 G 34144909.67 34144909.88 34144910.10 0.0089 0.0013

Neptune 88774-02-07 22:05 G 34145135.22 34145135.42 34145135.64 0.0089 0.0024

Neptune 88774-09-21 11:17 G 34145360.77 34145360.97 34145361.18 0.0089 0.0034

Jupiter 88775-04-04 17:31 G 34145556.12 34145556.23 34145556.35 0.0530 0.0432

Neptune 88775-05-05 00:43 G 34145586.34 34145586.53 34145586.72 0.0089 0.0044

Jupiter 88775-11-28 11:17 G 34145793.77 34145793.97 34145794.17 0.0532 0.0135

Neptune 88775-12-16 13:27 G 34145811.91 34145812.06 34145812.25 0.0089 0.0055

Neptune 88776-07-29 02:39 G 34146037.48 34146037.61 34146037.78 0.0089 0.0065

Neptune 88777-03-11 16:05 G 34146263.06 34146263.17 34146263.30 0.0089 0.0075

Neptune 88777-10-23 05:17 G 34146488.67 34146488.72 34146488.79 0.0089 0.0085

Saturn 88778-09-25 11:03 G 34146825.81 34146825.96 34146826.12 0.0274 0.0183

Saturn 88779-05-12 17:31 G 34147055.02 34147055.23 34147055.44 0.0276 0.0002

Mars 88779-10-03 06:29 G 34147198.60 34147198.77 34147198.95 0.1590 0.0203

Saturn 88779-12-28 01:27 G 34147284.42 34147284.56 34147284.72 0.0279 0.0194

Mars 88780-09-03 18:00 G 34147535.10 34147535.25 34147535.40 0.1946 0.1030

Jupiter 88781-02-09 15:36 G 34147694.01 34147694.15 34147694.29 0.0496 0.0363

Jupiter 88781-10-03 23:03 G 34147930.26 34147930.46 34147930.66 0.0494 0.0101

Jupiter 88787-08-03 03:51 G 34150059.45 34150059.66 34150059.86 0.0531 0.0027

Saturn 88791-12-13 22:05 G 34151653.31 34151653.42 34151653.54 0.0289 0.0243

Saturn 88792-07-30 18:15 G 34151883.05 34151883.26 34151883.47 0.0286 0.0025

Jupiter 88792-10-15 13:41 G 34151960.06 34151960.07 34151960.09 0.0498 0.0495

Saturn 88793-03-17 12:00 G 34152112.85 34152113.00 34152113.17 0.0283 0.0186

Jupiter 88793-06-08 23:03 G 34152196.26 34152196.46 34152196.67 0.0495 0.0031

Jupiter 88794-01-31 03:22 G 34152432.54 34152432.64 34152432.75 0.0495 0.0424

Jupiter 88799-04-07 20:24 G 34154325.16 34154325.35 34154325.54 0.0530 0.0182

Jupiter 88799-12-01 15:51 G 34154563.03 34154563.16 34154563.30 0.0531 0.0392

Pluto 88803-03-22 04:19 G 34155769.49 34155769.68 34155769.89 0.0078 0.0033

Pluto 88803-11-02 14:24 G 34155994.91 34155995.10 34155995.30 0.0078 0.0038

Jupiter 88805-02-12 00:58 G 34156462.34 34156462.54 34156462.73 0.0496 0.0160

Jupiter 88805-10-06 06:43 G 34156698.62 34156698.78 34156698.95 0.0495 0.0302

Uranus 88806-06-09 09:51 G 34156944.88 34156944.91 34156944.97 0.0138 0.0135

Uranus 88807-01-21 17:31 G 34157171.10 34157171.23 34157171.38 0.0138 0.0105

Uranus 88807-09-05 00:43 G 34157397.36 34157397.53 34157397.72 0.0138 0.0076

Saturn 88808-04-06 14:10 G 34157611.93 34157612.09 34157612.27 0.0274 0.0157

Uranus 88808-04-18 07:55 G 34157623.63 34157623.83 34157624.04 0.0138 0.0046

Saturn 88808-11-21 20:53 G 34157841.16 34157841.37 34157841.58 0.0276 0.0029

Uranus 88808-11-30 15:07 G 34157849.92 34157850.13 34157850.35 0.0137 0.0016

Saturn 88809-07-09 05:03 G 34158070.59 34158070.71 34158070.84 0.0279 0.0222

Uranus 88809-07-14 21:51 G 34158076.20 34158076.41 34158076.63 0.0137 0.0013

Uranus 88810-02-26 04:19 G 34158302.48 34158302.68 34158302.89 0.0137 0.0042

Uranus 88810-10-10 10:48 G 34158528.77 34158528.95 34158529.14 0.0137 0.0071

Jupiter 88810-12-11 11:17 G 34158590.82 34158590.97 34158591.12 0.0529 0.0339

Uranus 88811-05-24 16:48 G 34158755.07 34158755.20 34158755.36 0.0137 0.0100

Jupiter 88811-08-06 05:03 G 34158828.53 34158828.71 34158828.90 0.0531 0.0232

Uranus 88812-01-05 22:48 G 34158981.39 34158981.45 34158981.54 0.0136 0.0128

Jupiter 88816-10-18 03:07 G 34160728.46 34160728.63 34160728.80 0.0496 0.0287

Jupiter 88817-06-11 10:05 G 34160964.73 34160964.92 34160965.11 0.0495 0.0178

Saturn 88821-06-25 01:12 G 34162439.42 34162439.55 34162439.70 0.0289 0.0216

Saturn 88822-02-09 21:07 G 34162669.17 34162669.38 34162669.59 0.0286 0.0002

Jupiter 88822-08-16 03:51 G 34162856.59 34162856.66 34162856.74 0.0529 0.0490

Saturn 88822-09-27 14:39 G 34162898.98 34162899.11 34162899.26 0.0283 0.0211

Jupiter 88823-04-10 20:24 G 34163094.15 34163094.35 34163094.55 0.0531 0.0072

Jupiter 88828-06-23 04:19 G 34164994.58 34164994.68 34164994.80 0.0497 0.0414

Jupiter 88829-02-14 12:29 G 34165230.82 34165231.02 34165231.23 0.0495 0.0053

Jupiter 88834-12-14 12:29 G 34167359.82 34167360.02 34167360.22 0.0531 0.0088

Jupiter 88835-08-09 09:22 G 34167597.82 34167597.89 34167597.98 0.0532 0.0488

Saturn 88837-10-17 13:41 G 34168397.89 34168398.07 34168398.26 0.0274 0.0139

Saturn 88838-06-03 20:10 G 34168627.13 34168627.34 34168627.55 0.0277 0.0048

Saturn 88839-01-19 04:05 G 34168856.58 34168856.67 34168856.79 0.0279 0.0240

Jupiter 88840-10-20 14:53 G 34169496.92 34169497.12 34169497.33 0.0495 0.0077

Jupiter 88841-06-13 19:27 G 34169733.18 34169733.31 34169733.44 0.0494 0.0381

Mars 88845-07-30 19:12 G 34171241.13 34171241.30 34171241.48 0.1589 0.0055

Mars 88846-07-01 20:39 G 34171577.29 34171577.36 34171577.43 0.1946 0.1751

Jupiter 88846-08-19 06:00 G 34171625.57 34171625.75 34171625.93 0.0530 0.0244

Jupiter 88847-04-14 01:12 G 34171863.39 34171863.55 34171863.71 0.0531 0.0331

Uranus 88850-06-02 12:15 G 34173008.96 34173009.01 34173009.09 0.0140 0.0133

Saturn 88851-01-05 01:55 G 34173225.43 34173225.58 34173225.74 0.0289 0.0193

Uranus 88851-01-14 22:05 G 34173235.29 34173235.42 34173235.59 0.0140 0.0103

Neptune 88851-04-18 12:58 G 34173328.97 34173329.04 34173329.14 0.0088 0.0082

Saturn 88851-08-22 21:51 G 34173455.20 34173455.41 34173455.63 0.0286 0.0025

Uranus 88851-08-29 08:24 G 34173461.67 34173461.85 34173462.05 0.0140 0.0071

Neptune 88851-11-30 01:41 G 34173554.47 34173554.57 34173554.72 0.0088 0.0072

Saturn 88852-04-08 15:36 G 34173685.04 34173685.15 34173685.28 0.0283 0.0235

Uranus 88852-04-11 18:58 G 34173688.08 34173688.29 34173688.51 0.0141 0.0039

Jupiter 88852-06-25 13:55 G 34173762.90 34173763.08 34173763.27 0.0496 0.0211

Neptune 88852-07-12 14:39 G 34173779.97 34173780.11 34173780.29 0.0088 0.0062

Uranus 88852-11-24 05:31 G 34173914.51 34173914.73 34173914.95 0.0141 0.0007

Jupiter 88853-02-16 20:10 G 34173999.17 34173999.34 34173999.52 0.0495 0.0253

Neptune 88853-02-23 03:36 G 34174005.49 34174005.65 34174005.85 0.0088 0.0052

Uranus 88853-07-08 16:19 G 34174140.96 34174141.18 34174141.40 0.0141 0.0026

Neptune 88853-10-06 17:03 G 34174231.02 34174231.21 34174231.41 0.0088 0.0041

Uranus 88854-02-20 02:53 G 34174367.43 34174367.62 34174367.83 0.0141 0.0059

Neptune 88854-05-20 05:46 G 34174456.55 34174456.74 34174456.96 0.0088 0.0031

Uranus 88854-10-04 13:55 G 34174593.92 34174594.08 34174594.26 0.0142 0.0092

Neptune 88854-12-31 18:43 G 34174682.07 34174682.28 34174682.50 0.0089 0.0021

Uranus 88855-05-19 01:12 G 34174820.46 34174820.55 34174820.66 0.0142 0.0125

Neptune 88855-08-14 07:41 G 34174907.60 34174907.82 34174908.04 0.0089 0.0010

Neptune 88856-03-26 20:39 G 34175133.14 34175133.36 34175133.58 0.0089 0.0000

Neptune 88856-11-07 09:36 G 34175358.68 34175358.90 34175359.12 0.0089 0.0010

Neptune 88857-06-20 22:19 G 34175584.22 34175584.43 34175584.65 0.0089 0.0021

Neptune 88858-02-01 11:03 G 34175809.76 34175809.96 34175810.17 0.0089 0.0031

Jupiter 88858-04-23 23:31 G 34175891.35 34175891.48 34175891.62 0.0529 0.0395

Neptune 88858-09-15 00:00 G 34176035.31 34176035.50 34176035.70 0.0089 0.0041

Jupiter 88858-12-17 16:34 G 34176129.00 34176129.19 34176129.39 0.0531 0.0173

Neptune 88859-04-28 12:58 G 34176260.86 34176261.04 34176261.22 0.0089 0.0051

Neptune 88859-12-10 01:12 G 34176486.41 34176486.55 34176486.73 0.0089 0.0062

Neptune 88860-07-22 13:55 G 34176711.98 34176712.08 34176712.23 0.0089 0.0072

Neptune 88861-03-05 02:39 G 34176937.55 34176937.61 34176937.72 0.0089 0.0082

Moon 88863-01-09 12:15 G 34177612.89 34177613.01 34177613.12 0.2650 0.1872

Earth 88863-01-09 15:36 G 34177613.05 34177613.15 34177613.25 0.2655 0.1995 *

Jupiter 88864-02-29 15:07 G 34178028.98 34178029.13 34178029.28 0.0497 0.0340

Jupiter 88864-10-22 23:03 G 34178265.26 34178265.46 34178265.66 0.0495 0.0127

Saturn 88867-04-29 17:17 G 34179184.03 34179184.22 34179184.41 0.0274 0.0111

Saturn 88867-12-14 23:46 G 34179413.29 34179413.49 34179413.69 0.0276 0.0076

Saturn 88868-07-31 07:55 G 34179642.78 34179642.83 34179642.89 0.0279 0.0269

Jupiter 88870-08-22 06:15 G 34180394.56 34180394.76 34180394.97 0.0531 0.0015

Moon 88871-01-07 03:22 G 34180532.53 34180532.64 34180532.74 0.2653 0.1952

Earth 88871-01-07 08:39 G 34180532.72 34180532.86 34180533.01 0.2654 0.1096 *

Jupiter 88875-11-04 16:19 G 34182295.12 34182295.18 34182295.26 0.0498 0.0466

Jupiter 88876-06-28 01:41 G 34182531.37 34182531.57 34182531.78 0.0495 0.0001

Jupiter 88877-02-19 06:00 G 34182767.68 34182767.75 34182767.83 0.0495 0.0455

Saturn 88880-07-17 06:00 G 34184011.58 34184011.75 34184011.93 0.0289 0.0165

Saturn 88881-03-04 01:41 G 34184241.36 34184241.57 34184241.78 0.0286 0.0053

Saturn 88881-10-19 19:12 G 34184471.23 34184471.30 34184471.39 0.0283 0.0261

Jupiter 88882-04-26 21:51 G 34184660.22 34184660.41 34184660.61 0.0530 0.0150

Jupiter 88882-12-20 17:31 G 34184898.12 34184898.23 34184898.36 0.0532 0.0426

Jupiter 88888-03-03 03:51 G 34186797.46 34186797.66 34186797.86 0.0496 0.0129

Jupiter 88888-10-25 09:07 G 34187033.73 34187033.88 34187034.03 0.0494 0.0333

Uranus 88890-09-21 05:03 G 34187729.61 34187729.71 34187729.84 0.0138 0.0117

Uranus 88891-05-05 12:29 G 34187955.87 34187956.02 34187956.20 0.0138 0.0087

Uranus 88891-12-17 19:55 G 34188182.14 34188182.33 34188182.53 0.0138 0.0057

Uranus 88892-07-31 02:53 G 34188408.41 34188408.62 34188408.84 0.0137 0.0028

Uranus 88893-03-14 09:51 G 34188634.69 34188634.91 34188635.13 0.0137 0.0002

Uranus 88893-10-26 16:34 G 34188860.98 34188861.19 34188861.40 0.0137 0.0031

Jupiter 88893-12-30 14:24 G 34188925.94 34188926.10 34188926.26 0.0530 0.0306

Uranus 88894-06-09 22:48 G 34189087.27 34189087.45 34189087.65 0.0137 0.0060

Jupiter 88894-08-25 08:53 G 34189163.70 34189163.87 34189164.05 0.0532 0.0268

Uranus 88895-01-22 05:03 G 34189313.56 34189313.71 34189313.88 0.0137 0.0089

Uranus 88895-09-05 11:03 G 34189539.86 34189539.96 34189540.08 0.0136 0.0117

Saturn 88896-03-24 12:43 G 34189741.02 34189741.03 34189741.04 0.0271 0.0271

Saturn 88896-11-08 17:46 G 34189970.04 34189970.24 34189970.44 0.0274 0.0091

Saturn 88897-06-26 00:15 G 34190199.31 34190199.51 34190199.70 0.0277 0.0096

Jupiter 88899-11-07 05:31 G 34191063.55 34191063.73 34191063.91 0.0496 0.0257

Jupiter 88900-07-01 12:00 G 34191299.81 34191300.00 34191300.18 0.0495 0.0209

Jupiter 88905-09-05 08:53 G 34193191.78 34193191.87 34193191.98 0.0529 0.0456

Jupiter 88906-05-01 01:41 G 34193429.37 34193429.57 34193429.77 0.0531 0.0109

Saturn 88910-01-28 06:58 G 34194797.61 34194797.79 34194797.98 0.0289 0.0141

Saturn 88910-09-15 02:53 G 34195027.41 34195027.62 34195027.83 0.0286 0.0077

Mars 88911-05-29 07:55 G 34195283.66 34195283.83 34195284.01 0.1589 0.0110

Jupiter 88911-07-14 03:36 G 34195329.52 34195329.65 34195329.77 0.0497 0.0391

Jupiter 88912-03-06 11:46 G 34195565.79 34195565.99 34195566.20 0.0495 0.0076

Jupiter 88918-01-03 17:46 G 34197695.04 34197695.24 34197695.44 0.0531 0.0050

Jupiter 88918-08-29 14:10 G 34197933.06 34197933.09 34197933.12 0.0531 0.0523

Jupiter 88923-11-10 13:41 G 34199831.87 34199832.07 34199832.28 0.0496 0.0053

Jupiter 88924-07-03 18:43 G 34200068.17 34200068.28 34200068.40 0.0495 0.0406

Saturn 88925-10-05 17:17 G 34200527.13 34200527.22 34200527.31 0.0271 0.0242

Saturn 88926-05-22 22:05 G 34200756.22 34200756.42 34200756.63 0.0274 0.0062

Saturn 88927-01-07 04:48 G 34200985.52 34200985.70 34200985.89 0.0277 0.0126

Jupiter 88929-09-08 07:55 G 34201960.65 34201960.83 34201961.02 0.0530 0.0211

Jupiter 88930-05-04 02:53 G 34202198.47 34202198.62 34202198.77 0.0531 0.0364

Neptune 88932-03-09 18:43 G 34202874.23 34202874.28 34202874.37 0.0089 0.0084

Neptune 88932-10-21 07:41 G 34203099.72 34203099.82 34203099.96 0.0089 0.0074

Neptune 88933-06-03 20:53 G 34203325.24 34203325.37 34203325.54 0.0089 0.0064

Neptune 88934-01-15 10:19 G 34203550.76 34203550.93 34203551.11 0.0089 0.0053

Neptune 88934-08-28 23:17 G 34203776.29 34203776.47 34203776.67 0.0089 0.0043

Uranus 88934-09-15 07:12 G 34203793.68 34203793.80 34203793.93 0.0140 0.0115

Neptune 88935-04-11 12:29 G 34204001.82 34204002.02 34204002.23 0.0089 0.0033

Uranus 88935-04-29 17:03 G 34204020.05 34204020.21 34204020.40 0.0140 0.0084

Jupiter 88935-07-16 15:51 G 34204097.97 34204098.16 34204098.35 0.0496 0.0181

Neptune 88935-11-23 01:27 G 34204227.36 34204227.56 34204227.79 0.0089 0.0023

Uranus 88935-12-12 03:22 G 34204246.44 34204246.64 34204246.85 0.0141 0.0052

Jupiter 88936-03-08 22:05 G 34204334.25 34204334.42 34204334.59 0.0495 0.0284

Neptune 88936-07-05 14:53 G 34204452.90 34204453.12 34204453.34 0.0089 0.0012

Uranus 88936-07-25 13:41 G 34204472.86 34204473.07 34204473.30 0.0141 0.0020

Neptune 88937-02-16 03:51 G 34204678.44 34204678.66 34204678.88 0.0089 0.0002

Uranus 88937-03-09 00:15 G 34204699.30 34204699.51 34204699.73 0.0141 0.0013

Neptune 88937-09-29 17:03 G 34204903.99 34204904.21 34204904.43 0.0089 0.0009

Uranus 88937-10-21 11:03 G 34204925.75 34204925.96 34204926.17 0.0141 0.0045

Neptune 88938-05-13 06:15 G 34205129.54 34205129.76 34205129.98 0.0089 0.0019

Uranus 88938-06-04 22:05 G 34205152.24 34205152.42 34205152.61 0.0141 0.0078

Neptune 88938-12-24 18:58 G 34205355.10 34205355.29 34205355.51 0.0089 0.0030

Uranus 88939-01-17 08:53 G 34205378.75 34205378.87 34205379.02 0.0142 0.0111

Neptune 88939-08-07 08:10 G 34205580.66 34205580.84 34205581.05 0.0089 0.0040

Saturn 88939-08-10 12:00 G 34205583.81 34205584.00 34205584.20 0.0289 0.0111

Neptune 88940-03-19 21:36 G 34205806.22 34205806.40 34205806.59 0.0089 0.0050

Saturn 88940-03-27 07:41 G 34205813.62 34205813.82 34205814.02 0.0286 0.0106

Neptune 88940-10-31 10:19 G 34206031.79 34206031.93 34206032.11 0.0089 0.0061

Jupiter 88941-05-14 00:00 G 34206226.36 34206226.50 34206226.64 0.0529 0.0366

Neptune 88941-06-13 23:46 G 34206257.37 34206257.49 34206257.64 0.0089 0.0071

Jupiter 88942-01-06 17:17 G 34206464.03 34206464.22 34206464.40 0.0531 0.0205

Neptune 88942-01-25 12:58 G 34206482.97 34206483.04 34206483.14 0.0089 0.0081

Mars 88944-04-29 00:15 G 34207307.42 34207307.51 34207307.60 0.1946 0.1648

Jupiter 88947-03-21 17:31 G 34208364.07 34208364.23 34208364.39 0.0497 0.0310

Jupiter 88947-11-13 00:43 G 34208600.34 34208600.53 34208600.73 0.0495 0.0158

Jupiter 88953-01-16 16:48 G 34210492.17 34210492.20 34210492.24 0.0528 0.0517

Jupiter 88953-09-11 08:39 G 34210729.66 34210729.86 34210730.06 0.0531 0.0043

Saturn 88955-04-17 18:43 G 34211313.16 34211313.28 34211313.40 0.0272 0.0221

Saturn 88955-12-02 23:46 G 34211542.28 34211542.49 34211542.70 0.0274 0.0040

Saturn 88956-07-19 06:15 G 34211771.59 34211771.76 34211771.94 0.0277 0.0149

Jupiter 88958-11-24 18:00 G 34212630.16 34212630.25 34212630.35 0.0497 0.0439

Jupiter 88959-07-19 02:53 G 34212866.42 34212866.62 34212866.83 0.0495 0.0029

Jupiter 88960-03-11 06:43 G 34213102.74 34213102.78 34213102.83 0.0495 0.0483

Pluto 88962-11-11 12:00 G 34214077.82 34214078.00 34214078.21 0.0066 0.0030

Pluto 88963-06-24 16:34 G 34214302.98 34214303.19 34214303.41 0.0066 0.0012

Pluto 88964-02-04 20:39 G 34214528.26 34214528.36 34214528.51 0.0066 0.0054

Jupiter 88965-05-17 01:55 G 34214995.39 34214995.58 34214995.78 0.0531 0.0115

Jupiter 88966-01-09 22:05 G 34215233.32 34215233.42 34215233.52 0.0531 0.0461

Saturn 88969-02-19 13:55 G 34216369.88 34216370.08 34216370.29 0.0288 0.0085

Saturn 88969-10-07 09:36 G 34216599.71 34216599.90 34216600.09 0.0286 0.0132

Jupiter 88971-03-24 01:55 G 34217132.38 34217132.58 34217132.78 0.0496 0.0106

Jupiter 88971-11-15 07:12 G 34217368.67 34217368.80 34217368.95 0.0495 0.0357

Uranus 88974-05-22 15:36 G 34218288.09 34218288.15 34218288.25 0.0138 0.0128

Uranus 88975-01-03 23:17 G 34218514.33 34218514.47 34218514.63 0.0138 0.0098

Uranus 88975-08-18 06:29 G 34218740.59 34218740.77 34218740.97 0.0138 0.0069

Uranus 88976-03-31 13:41 G 34218966.87 34218967.07 34218967.28 0.0138 0.0039

Uranus 88976-11-12 20:53 G 34219193.15 34219193.37 34219193.58 0.0137 0.0010

Jupiter 88977-01-19 18:43 G 34219261.11 34219261.28 34219261.46 0.0530 0.0271

Mars 88977-03-25 20:24 G 34219326.18 34219326.35 34219326.53 0.1589 0.0261

Uranus 88977-06-27 03:36 G 34219419.44 34219419.65 34219419.86 0.0137 0.0019

Jupiter 88977-09-14 12:58 G 34219498.88 34219499.04 34219499.21 0.0531 0.0304

Uranus 88978-02-08 09:51 G 34219645.72 34219645.91 34219646.12 0.0137 0.0048

Uranus 88978-09-22 16:05 G 34219872.00 34219872.17 34219872.36 0.0137 0.0077

Uranus 88979-05-06 22:34 G 34220098.31 34220098.44 34220098.58 0.0137 0.0105

Uranus 88979-12-19 04:48 G 34220324.65 34220324.70 34220324.74 0.0136 0.0133

Jupiter 88982-11-27 02:53 G 34221398.44 34221398.62 34221398.81 0.0496 0.0236

Jupiter 88983-07-21 09:51 G 34221634.73 34221634.91 34221635.09 0.0495 0.0231

Saturn 88984-10-28 00:00 G 34222099.35 34222099.50 34222099.65 0.0272 0.0191

Saturn 88985-06-14 05:17 G 34222328.51 34222328.72 34222328.93 0.0274 0.0009

Saturn 88986-01-29 12:00 G 34222557.85 34222558.00 34222558.16 0.0277 0.0180

Jupiter 88988-09-24 09:51 G 34223526.79 34223526.91 34223527.03 0.0529 0.0426

Jupiter 88989-05-20 02:10 G 34223764.39 34223764.59 34223764.78 0.0531 0.0141

Jupiter 88994-08-02 04:19 G 34225664.54 34225664.68 34225664.82 0.0497 0.0364

Jupiter 88995-03-26 12:43 G 34225900.83 34225901.03 34225901.23 0.0495 0.0106

Saturn 88998-01-14 23:17 G 34226926.41 34226926.47 34226926.54 0.0291 0.0275

Saturn 88998-09-01 20:39 G 34227156.15 34227156.36 34227156.57 0.0288 0.0053

Saturn 88999-04-19 15:51 G 34227385.99 34227386.16 34227386.34 0.0285 0.0164

Earth 89000-07-07 07:12 G 34227829.65 34227829.80 34227829.96 0.2679 0.0590

Moon 89000-07-07 10:05 G 34227829.77 34227829.92 34227830.08 0.2685 0.0062 *

90TH MILLENNIUM CE

This is a list of transits of Venus in the 90th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 89001-01-23 16:48 G 34228029.99 34228030.20 34228030.40 0.0531 0.0023

Jupiter 89006-04-08 05:03 G 34229930.68 34229930.71 34229930.74 0.0498 0.0492

Jupiter 89006-11-30 14:39 G 34230166.91 34230167.11 34230167.32 0.0495 0.0024

Jupiter 89007-07-24 19:12 G 34230403.21 34230403.30 34230403.40 0.0495 0.0434

Mars 89009-03-25 12:43 G 34231012.98 34231013.03 34231013.09 0.1589 0.1507

Mars 89010-02-25 02:10 G 34231349.44 34231349.59 34231349.74 0.1946 0.0889

Jupiter 89012-09-28 08:24 G 34232295.66 34232295.85 34232296.04 0.0530 0.0182

Jupiter 89013-05-24 03:51 G 34232533.53 34232533.66 34232533.79 0.0532 0.0396

Saturn 89014-05-11 03:22 G 34232885.48 34232885.64 34232885.81 0.0272 0.0167

Saturn 89014-12-26 08:39 G 34233114.65 34233114.86 34233115.07 0.0275 0.0017

Neptune 89015-07-22 22:05 G 34233323.39 34233323.42 34233323.50 0.0088 0.0085

Saturn 89015-08-12 15:22 G 34233344.01 34233344.14 34233344.29 0.0278 0.0207

Neptune 89016-03-04 11:03 G 34233548.87 34233548.96 34233549.09 0.0088 0.0075

Neptune 89016-10-16 00:00 G 34233774.38 34233774.50 34233774.67 0.0088 0.0066

Neptune 89017-05-29 13:27 G 34233999.89 34234000.06 34234000.23 0.0088 0.0055

Neptune 89018-01-10 02:10 G 34234225.41 34234225.59 34234225.79 0.0088 0.0045

Uranus 89018-05-16 14:53 G 34234352.04 34234352.12 34234352.21 0.0140 0.0128

Jupiter 89018-08-05 16:05 G 34234432.98 34234433.17 34234433.37 0.0496 0.0154

Neptune 89018-08-23 14:53 G 34234450.93 34234451.12 34234451.34 0.0088 0.0035

Uranus 89018-12-29 00:43 G 34234578.38 34234578.53 34234578.69 0.0140 0.0097

Jupiter 89019-03-29 21:36 G 34234669.25 34234669.40 34234669.57 0.0495 0.0311

Neptune 89019-04-06 03:51 G 34234676.46 34234676.66 34234676.89 0.0088 0.0025

Uranus 89019-08-12 10:48 G 34234804.76 34234804.95 34234805.14 0.0140 0.0066

Neptune 89019-11-17 17:03 G 34234902.00 34234902.21 34234902.43 0.0089 0.0014

Uranus 89020-03-25 20:53 G 34235031.16 34235031.37 34235031.59 0.0141 0.0034

Neptune 89020-06-30 06:00 G 34235127.53 34235127.75 34235127.97 0.0089 0.0004

Uranus 89020-11-07 07:27 G 34235257.59 34235257.81 34235258.03 0.0141 0.0002

Neptune 89021-02-10 18:58 G 34235353.07 34235353.29 34235353.51 0.0089 0.0007

Uranus 89021-06-21 18:00 G 34235484.04 34235484.25 34235484.47 0.0141 0.0031

Neptune 89021-09-24 07:55 G 34235578.61 34235578.83 34235579.05 0.0089 0.0017

Uranus 89022-02-03 04:34 G 34235710.51 34235710.69 34235710.90 0.0141 0.0063

Neptune 89022-05-07 20:24 G 34235804.16 34235804.35 34235804.57 0.0089 0.0028

Uranus 89022-09-17 15:36 G 34235937.00 34235937.15 34235937.32 0.0142 0.0096

Neptune 89022-12-19 09:22 G 34236029.70 34236029.89 34236030.10 0.0089 0.0038

Uranus 89023-05-02 02:39 G 34236163.54 34236163.61 34236163.72 0.0142 0.0129

Neptune 89023-08-01 22:05 G 34236255.25 34236255.42 34236255.62 0.0089 0.0048

Neptune 89024-03-14 10:48 G 34236480.80 34236480.95 34236481.13 0.0089 0.0058

Jupiter 89024-06-03 02:10 G 34236561.44 34236561.59 34236561.75 0.0530 0.0336

Neptune 89024-10-26 00:00 G 34236706.37 34236706.50 34236706.65 0.0089 0.0068

Jupiter 89025-01-26 19:55 G 34236799.15 34236799.33 34236799.51 0.0531 0.0238

Neptune 89025-06-08 12:43 G 34236931.94 34236932.03 34236932.14 0.0089 0.0078

Neptune 89026-01-20 01:27 G 34237157.55 34237157.56 34237157.59 0.0089 0.0088

Saturn 89027-07-29 02:10 G 34237712.50 34237712.59 34237712.71 0.0291 0.0248

Saturn 89028-03-14 23:46 G 34237942.28 34237942.49 34237942.70 0.0288 0.0025

Saturn 89028-10-30 18:58 G 34238172.13 34238172.29 34238172.45 0.0285 0.0190

Jupiter 89030-04-10 14:24 G 34238698.93 34238699.10 34238699.27 0.0496 0.0289

Jupiter 89030-12-02 21:22 G 34238935.21 34238935.39 34238935.59 0.0495 0.0180

Jupiter 89036-02-06 19:41 G 34240827.25 34240827.32 34240827.40 0.0529 0.0486

Jupiter 89036-10-01 11:46 G 34241064.78 34241064.99 34241065.19 0.0531 0.0079

Jupiter 89041-12-14 14:24 G 34242964.99 34242965.10 34242965.21 0.0497 0.0419

Jupiter 89042-08-07 23:17 G 34243201.27 34243201.47 34243201.67 0.0495 0.0050

Mars 89043-01-22 09:36 G 34243368.73 34243368.90 34243369.07 0.1589 0.0404

Saturn 89043-11-21 09:36 G 34243671.71 34243671.90 34243672.08 0.0272 0.0136

Saturn 89044-07-07 14:53 G 34243900.92 34243901.12 34243901.33 0.0275 0.0049

Saturn 89045-02-21 22:05 G 34244130.32 34244130.42 34244130.53 0.0278 0.0239

Jupiter 89048-06-06 00:58 G 34245330.35 34245330.54 34245330.74 0.0530 0.0086

Jupiter 89049-01-29 20:39 G 34245568.29 34245568.36 34245568.44 0.0531 0.0490

Pluto 89050-07-14 19:12 G 34246099.12 34246099.30 34246099.51 0.0078 0.0038

Pluto 89051-02-25 05:17 G 34246324.54 34246324.72 34246324.94 0.0078 0.0035

Jupiter 89054-04-13 01:27 G 34247467.36 34247467.56 34247467.76 0.0496 0.0078

Jupiter 89054-12-05 06:43 G 34247703.66 34247703.78 34247703.91 0.0495 0.0384

Saturn 89057-02-07 10:34 G 34248498.80 34248498.94 34248499.09 0.0291 0.0213

Saturn 89057-09-25 07:41 G 34248728.60 34248728.82 34248729.03 0.0288 0.0011

Saturn 89058-05-13 02:24 G 34248958.48 34248958.60 34248958.74 0.0285 0.0224

Uranus 89058-09-04 09:36 G 34249072.78 34249072.90 34249073.03 0.0138 0.0111

Uranus 89059-04-18 16:48 G 34249299.04 34249299.20 34249299.39 0.0138 0.0081

Uranus 89059-12-01 00:15 G 34249525.32 34249525.51 34249525.72 0.0138 0.0052

Jupiter 89060-02-09 16:05 G 34249596.00 34249596.17 34249596.35 0.0530 0.0246

Uranus 89060-07-14 07:27 G 34249751.60 34249751.81 34249752.02 0.0138 0.0022

Jupiter 89060-10-04 10:19 G 34249833.78 34249833.93 34249834.09 0.0531 0.0331

Uranus 89061-02-25 14:10 G 34249977.88 34249978.09 34249978.31 0.0137 0.0007

Uranus 89061-10-09 20:53 G 34250204.16 34250204.37 34250204.58 0.0137 0.0036

Uranus 89062-05-24 03:07 G 34250430.45 34250430.63 34250430.83 0.0137 0.0065

Uranus 89063-01-05 09:22 G 34250656.75 34250656.89 34250657.06 0.0137 0.0094

Uranus 89063-08-19 15:36 G 34250883.06 34250883.15 34250883.26 0.0137 0.0122

Jupiter 89065-12-17 02:39 G 34251733.43 34251733.61 34251733.80 0.0496 0.0209

Jupiter 89066-08-10 09:07 G 34251969.71 34251969.88 34251970.06 0.0495 0.0258

Jupiter 89071-10-15 08:10 G 34253861.71 34253861.84 34253861.97 0.0529 0.0402

Jupiter 89072-06-09 00:43 G 34254099.34 34254099.53 34254099.73 0.0531 0.0170

Saturn 89073-06-02 14:24 G 34254457.91 34254458.10 34254458.30 0.0273 0.0109

Saturn 89074-01-17 19:55 G 34254687.13 34254687.33 34254687.54 0.0276 0.0077

Saturn 89074-09-04 03:07 G 34254916.59 34254916.63 34254916.69 0.0278 0.0268

Mars 89075-01-21 01:41 G 34255055.48 34255055.57 34255055.66 0.1589 0.1354

Mars 89075-12-23 04:05 G 34255391.49 34255391.67 34255391.84 0.1947 0.0136

Jupiter 89077-08-22 03:22 G 34255999.49 34255999.64 34255999.79 0.0497 0.0339

Jupiter 89078-04-15 11:03 G 34256235.77 34256235.96 34256236.16 0.0495 0.0131

Jupiter 89084-02-12 17:31 G 34258365.03 34258365.23 34258365.43 0.0531 0.0009

Saturn 89086-08-20 15:07 G 34259284.98 34259285.13 34259285.31 0.0290 0.0182

Saturn 89087-04-07 12:15 G 34259514.80 34259515.01 34259515.22 0.0287 0.0040

Saturn 89087-11-23 06:58 G 34259744.70 34259744.79 34259744.89 0.0284 0.0253

Jupiter 89089-04-27 00:58 G 34260265.48 34260265.54 34260265.61 0.0497 0.0472

Jupiter 89089-12-19 10:19 G 34260501.72 34260501.93 34260502.13 0.0495 0.0008

Jupiter 89090-08-12 14:39 G 34260738.04 34260738.11 34260738.19 0.0495 0.0453

Jupiter 89095-10-18 09:36 G 34262630.71 34262630.90 34262631.10 0.0530 0.0150

Jupiter 89096-06-12 05:03 G 34262868.60 34262868.71 34262868.83 0.0531 0.0428

Neptune 89096-06-12 03:07 G 34262868.62 34262868.63 34262868.67 0.0089 0.0088 *

Neptune 89097-01-23 16:05 G 34263094.09 34263094.17 34263094.29 0.0089 0.0078

Neptune 89097-09-06 05:03 G 34263319.59 34263319.71 34263319.88 0.0089 0.0068

Neptune 89098-04-19 18:58 G 34263545.12 34263545.29 34263545.45 0.0089 0.0057

Neptune 89098-12-01 07:41 G 34263770.65 34263770.82 34263771.02 0.0089 0.0047

Neptune 89099-07-14 20:39 G 34263996.18 34263996.36 34263996.58 0.0089 0.0037

Neptune 89100-02-25 09:51 G 34264221.71 34264221.91 34264222.13 0.0089 0.0027

Neptune 89100-10-08 23:17 G 34264447.25 34264447.47 34264447.69 0.0089 0.0016

Neptune 89101-05-22 12:15 G 34264672.80 34264673.01 34264673.24 0.0089 0.0006

Jupiter 89101-08-25 11:17 G 34264767.77 34264767.97 34264768.17 0.0496 0.0135

Neptune 89102-01-03 01:27 G 34264898.34 34264898.56 34264898.78 0.0089 0.0005

Jupiter 89102-04-18 17:03 G 34265004.06 34265004.21 34265004.36 0.0495 0.0330

Saturn 89102-04-29 16:48 G 34265015.15 34265015.20 34265015.28 0.0271 0.0256

Neptune 89102-08-16 14:39 G 34265123.89 34265124.11 34265124.32 0.0089 0.0015

Uranus 89102-08-29 08:10 G 34265136.72 34265136.84 34265136.99 0.0140 0.0111

Saturn 89102-12-14 21:22 G 34265244.19 34265244.39 34265244.60 0.0273 0.0076

Neptune 89103-03-30 03:22 G 34265349.44 34265349.64 34265349.87 0.0089 0.0026

Uranus 89103-04-12 18:15 G 34265363.09 34265363.26 34265363.45 0.0140 0.0079

Saturn 89103-08-01 03:22 G 34265473.45 34265473.64 34265473.83 0.0276 0.0111

Neptune 89103-11-10 16:34 G 34265575.00 34265575.19 34265575.40 0.0089 0.0036

Uranus 89103-11-25 04:05 G 34265589.48 34265589.67 34265589.89 0.0140 0.0049

Neptune 89104-06-23 05:31 G 34265800.56 34265800.73 34265800.94 0.0089 0.0047

Uranus 89104-07-08 14:24 G 34265815.89 34265816.10 34265816.33 0.0141 0.0017

Neptune 89105-02-03 18:29 G 34266026.12 34266026.27 34266026.46 0.0089 0.0057

Uranus 89105-02-20 00:58 G 34266042.32 34266042.54 34266042.76 0.0141 0.0016

Neptune 89105-09-17 07:41 G 34266251.70 34266251.82 34266251.98 0.0089 0.0067

Uranus 89105-10-04 11:31 G 34266268.77 34266268.98 34266269.19 0.0141 0.0048

Earth 89106-01-12 18:43 G 34266369.20 34266369.28 34266369.37 0.2654 0.2240

Moon 89106-01-12 19:55 G 34266369.27 34266369.33 34266369.39 0.2660 0.2419 *

Neptune 89106-04-30 21:07 G 34266477.29 34266477.38 34266477.50 0.0089 0.0077

Uranus 89106-05-18 22:19 G 34266495.25 34266495.43 34266495.62 0.0141 0.0081

Neptune 89106-12-12 09:51 G 34266702.91 34266702.91 34266702.98 0.0089 0.0088

Uranus 89106-12-31 09:07 G 34266721.76 34266721.88 34266722.02 0.0141 0.0113

Jupiter 89107-06-23 23:46 G 34266896.33 34266896.49 34266896.66 0.0529 0.0310

Jupiter 89108-02-16 17:17 G 34267134.05 34267134.22 34267134.40 0.0531 0.0265

Mars 89108-11-19 21:51 G 34267411.25 34267411.41 34267411.58 0.1589 0.0561

Jupiter 89113-04-30 12:29 G 34269033.85 34269034.02 34269034.19 0.0497 0.0265

Jupiter 89113-12-22 19:41 G 34269270.14 34269270.32 34269270.51 0.0495 0.0205

Earth 89114-01-10 11:31 G 34269288.84 34269288.98 34269289.13 0.2652 0.0897

Moon 89114-01-10 16:05 G 34269289.02 34269289.17 34269289.32 0.2656 0.0167 *

Saturn 89116-03-03 00:58 G 34270071.36 34270071.54 34270071.73 0.0290 0.0145

Saturn 89116-10-18 21:22 G 34270301.19 34270301.39 34270301.60 0.0287 0.0077

Jupiter 89119-02-26 15:36 G 34271162.06 34271162.15 34271162.25 0.0528 0.0464

Jupiter 89119-10-22 07:12 G 34271399.60 34271399.80 34271400.00 0.0531 0.0102

Jupiter 89125-01-03 12:43 G 34273299.91 34273300.03 34273300.16 0.0497 0.0396

Jupiter 89125-08-27 21:36 G 34273536.20 34273536.40 34273536.60 0.0495 0.0076

Jupiter 89131-06-26 21:51 G 34275665.21 34275665.41 34275665.61 0.0531 0.0063

Saturn 89131-11-09 23:17 G 34275801.36 34275801.47 34275801.59 0.0271 0.0227

Jupiter 89132-02-19 18:00 G 34275903.21 34275903.25 34275903.30 0.0532 0.0515

Saturn 89132-06-26 03:51 G 34276030.45 34276030.66 34276030.87 0.0274 0.0046

Saturn 89133-02-10 09:51 G 34276259.73 34276259.91 34276260.09 0.0276 0.0142

Jupiter 89137-05-02 22:48 G 34277802.25 34277802.45 34277802.66 0.0495 0.0056

Jupiter 89137-12-25 03:36 G 34278038.55 34278038.65 34278038.77 0.0495 0.0407

Mars 89140-11-18 14:24 G 34279097.98 34279098.10 34279098.21 0.1589 0.1199

Mars 89141-10-20 06:15 G 34279433.60 34279433.76 34279433.93 0.1947 0.0601

Uranus 89142-05-05 17:17 G 34279631.14 34279631.22 34279631.33 0.0139 0.0125

Uranus 89142-12-18 01:12 G 34279857.40 34279857.55 34279857.71 0.0138 0.0095

Jupiter 89143-03-01 14:53 G 34279930.93 34279931.12 34279931.30 0.0530 0.0220

Uranus 89143-08-01 08:24 G 34280083.67 34280083.85 34280084.05 0.0138 0.0065

Jupiter 89143-10-25 09:36 G 34280168.76 34280168.90 34280169.05 0.0532 0.0360

Uranus 89144-03-14 15:36 G 34280309.95 34280310.15 34280310.37 0.0138 0.0036

Uranus 89144-10-26 22:48 G 34280536.24 34280536.45 34280536.67 0.0138 0.0006

Uranus 89145-06-10 05:31 G 34280762.52 34280762.73 34280762.95 0.0137 0.0023

Saturn 89145-09-13 06:58 G 34280857.59 34280857.79 34280857.98 0.0289 0.0111

Uranus 89146-01-22 12:00 G 34280988.81 34280989.00 34280989.21 0.0137 0.0052

Saturn 89146-05-01 03:07 G 34281087.44 34281087.63 34281087.83 0.0286 0.0109

Uranus 89146-09-05 18:43 G 34281215.11 34281215.28 34281215.45 0.0137 0.0080

Uranus 89147-04-20 00:43 G 34281441.41 34281441.53 34281441.67 0.0137 0.0109

Uranus 89147-12-02 07:27 G 34281667.81 34281667.81 34281667.81 0.0137 0.0137

Jupiter 89149-01-05 21:36 G 34282068.21 34282068.40 34282068.59 0.0496 0.0190

Jupiter 89149-08-30 03:36 G 34282304.48 34282304.65 34282304.82 0.0495 0.0277

Jupiter 89154-11-04 07:41 G 34284196.68 34284196.82 34284196.96 0.0529 0.0375

Jupiter 89155-06-30 00:43 G 34284434.34 34284434.53 34284434.72 0.0531 0.0200

Jupiter 89160-09-10 21:36 G 34286334.25 34286334.40 34286334.56 0.0496 0.0322

Jupiter 89161-05-05 05:17 G 34286570.53 34286570.72 34286570.92 0.0495 0.0150

Saturn 89161-05-22 06:15 G 34286587.62 34286587.76 34286587.91 0.0271 0.0195

Saturn 89162-01-06 11:03 G 34286816.75 34286816.96 34286817.17 0.0274 0.0013

Saturn 89162-08-23 17:17 G 34287046.06 34287046.22 34287046.39 0.0276 0.0176

Jupiter 89166-07-09 22:34 G 34288462.44 34288462.44 34288462.46 0.0528 0.0527

Jupiter 89167-03-04 13:41 G 34288699.87 34288700.07 34288700.27 0.0531 0.0035

Jupiter 89172-05-16 21:36 G 34290600.32 34290600.40 34290600.49 0.0498 0.0452

Jupiter 89173-01-08 07:12 G 34290836.60 34290836.80 34290837.01 0.0495 0.0022

Jupiter 89173-09-01 12:00 G 34291072.95 34291073.00 34291073.05 0.0495 0.0478

Mars 89174-09-17 10:48 G 34291453.80 34291453.95 34291454.11 0.1589 0.0708

Saturn 89175-03-26 17:46 G 34291644.03 34291644.24 34291644.44 0.0289 0.0072

Saturn 89175-11-11 13:27 G 34291873.88 34291874.06 34291874.25 0.0286 0.0147

Jupiter 89178-11-07 04:05 G 34292965.47 34292965.67 34292965.87 0.0530 0.0129

Jupiter 89179-07-02 23:03 G 34293203.36 34293203.46 34293203.57 0.0531 0.0449

Neptune 89180-06-06 20:53 G 34293543.28 34293543.37 34293543.48 0.0088 0.0079

Neptune 89181-01-18 09:51 G 34293768.78 34293768.91 34293769.05 0.0088 0.0069

Neptune 89181-08-31 22:34 G 34293994.29 34293994.44 34293994.62 0.0088 0.0059

Neptune 89182-04-14 11:31 G 34294219.81 34294219.98 34294220.18 0.0088 0.0049

Neptune 89182-11-26 00:15 G 34294445.33 34294445.51 34294445.73 0.0088 0.0039

Neptune 89183-07-09 13:27 G 34294670.86 34294671.06 34294671.28 0.0088 0.0028

Neptune 89184-02-20 02:24 G 34294896.39 34294896.60 34294896.82 0.0088 0.0018

Jupiter 89184-09-13 08:39 G 34295102.66 34295102.86 34295103.06 0.0496 0.0112

Neptune 89184-10-02 15:22 G 34295121.93 34295122.14 34295122.37 0.0089 0.0008

Jupiter 89185-05-07 14:24 G 34295338.96 34295339.10 34295339.24 0.0495 0.0354

Neptune 89185-05-16 04:19 G 34295347.47 34295347.68 34295347.91 0.0089 0.0004

Neptune 89185-12-27 17:17 G 34295573.01 34295573.22 34295573.44 0.0089 0.0013

Uranus 89186-04-28 16:48 G 34295695.11 34295695.20 34295695.32 0.0140 0.0123

Neptune 89186-08-10 06:00 G 34295798.55 34295798.75 34295798.97 0.0089 0.0024

Uranus 89186-12-11 02:39 G 34295921.45 34295921.61 34295921.78 0.0140 0.0092

Neptune 89187-03-23 18:58 G 34296024.09 34296024.29 34296024.50 0.0089 0.0034

Uranus 89187-07-25 12:29 G 34296147.83 34296148.02 34296148.22 0.0140 0.0061

Neptune 89187-11-04 08:10 G 34296249.65 34296249.84 34296250.03 0.0089 0.0044

Uranus 89188-03-07 22:34 G 34296374.23 34296374.44 34296374.66 0.0140 0.0030

Neptune 89188-06-16 20:39 G 34296475.20 34296475.36 34296475.55 0.0089 0.0055

Uranus 89188-10-20 08:53 G 34296600.65 34296600.87 34296601.09 0.0141 0.0002

Neptune 89189-01-28 09:22 G 34296700.76 34296700.89 34296701.06 0.0089 0.0065

Uranus 89189-06-03 19:27 G 34296827.10 34296827.31 34296827.53 0.0141 0.0034

Neptune 89189-09-10 22:19 G 34296926.33 34296926.43 34296926.56 0.0089 0.0075

Uranus 89190-01-16 05:46 G 34297053.56 34297053.74 34297053.95 0.0141 0.0067

Neptune 89190-04-24 11:03 G 34297151.92 34297151.96 34297152.04 0.0089 0.0085

Jupiter 89190-07-12 18:58 G 34297231.12 34297231.29 34297231.46 0.0530 0.0291

Uranus 89190-08-30 16:34 G 34297280.05 34297280.19 34297280.36 0.0141 0.0099

Saturn 89190-12-02 13:27 G 34297373.89 34297374.06 34297374.23 0.0272 0.0165

Jupiter 89191-03-07 12:43 G 34297468.86 34297469.03 34297469.20 0.0531 0.0288

Uranus 89191-04-14 03:36 G 34297506.59 34297506.65 34297506.75 0.0141 0.0132

Saturn 89191-07-19 18:29 G 34297603.06 34297603.27 34297603.48 0.0274 0.0019

Saturn 89192-03-05 00:58 G 34297832.41 34297832.54 34297832.68 0.0277 0.0209

Jupiter 89196-05-19 09:07 G 34299368.70 34299368.88 34299369.06 0.0496 0.0243

Jupiter 89197-01-10 16:05 G 34299604.98 34299605.17 34299605.35 0.0495 0.0227

Jupiter 89202-03-17 12:15 G 34301496.91 34301497.01 34301497.12 0.0529 0.0444

Jupiter 89202-11-10 04:34 G 34301734.50 34301734.69 34301734.89 0.0531 0.0128

Saturn 89204-02-19 03:07 G 34302200.56 34302200.63 34302200.74 0.0291 0.0262

Saturn 89204-10-06 00:43 G 34302430.32 34302430.53 34302430.74 0.0288 0.0037

Saturn 89205-05-23 20:10 G 34302660.19 34302660.34 34302660.51 0.0285 0.0181

Mars 89206-09-16 03:07 G 34303140.50 34303140.63 34303140.76 0.1589 0.1049

Mars 89207-08-17 08:10 G 34303475.72 34303475.84 34303475.97 0.1947 0.1352

Jupiter 89208-01-23 07:12 G 34303634.68 34303634.80 34303634.94 0.0497 0.0377

Jupiter 89208-09-15 15:36 G 34303870.95 34303871.15 34303871.36 0.0495 0.0095

Pluto 89209-07-24 01:55 G 34304182.56 34304182.58 34304182.67 0.0065 0.0064

Pluto 89210-03-06 06:29 G 34304407.59 34304407.77 34304408.00 0.0066 0.0023

Pluto 89210-10-17 11:03 G 34304632.76 34304632.96 34304633.18 0.0066 0.0019

Pluto 89211-05-30 15:07 G 34304858.07 34304858.13 34304858.23 0.0066 0.0061

Jupiter 89214-07-15 20:10 G 34306000.14 34306000.34 34306000.54 0.0531 0.0034

Jupiter 89220-05-21 16:48 G 34308136.99 34308137.20 34308137.40 0.0495 0.0038

Saturn 89220-06-13 20:24 G 34308160.16 34308160.35 34308160.53 0.0272 0.0134

Jupiter 89221-01-12 21:36 G 34308373.30 34308373.40 34308373.50 0.0495 0.0425

Saturn 89221-01-29 01:41 G 34308389.36 34308389.57 34308389.78 0.0275 0.0052

Saturn 89221-09-15 08:24 G 34308618.76 34308618.85 34308618.96 0.0277 0.0243

Uranus 89226-01-03 01:41 G 34310189.57 34310189.57 34310189.61 0.0139 0.0138

Jupiter 89226-03-20 10:05 G 34310265.74 34310265.92 34310266.11 0.0530 0.0198

Uranus 89226-08-17 09:22 G 34310415.77 34310415.89 34310416.04 0.0138 0.0109

Jupiter 89226-11-13 04:34 G 34310503.55 34310503.69 34310503.83 0.0531 0.0382

Uranus 89227-03-31 17:03 G 34310642.04 34310642.21 34310642.40 0.0138 0.0079

Uranus 89227-11-13 00:29 G 34310868.33 34310868.52 34310868.73 0.0138 0.0049

Uranus 89228-06-26 07:41 G 34311094.61 34311094.82 34311095.04 0.0138 0.0020

Uranus 89229-02-07 14:39 G 34311320.90 34311321.11 34311321.33 0.0138 0.0010

Uranus 89229-09-21 21:22 G 34311547.19 34311547.39 34311547.60 0.0137 0.0039

Uranus 89230-05-06 03:51 G 34311773.48 34311773.66 34311773.86 0.0137 0.0068

Uranus 89230-12-18 10:34 G 34311999.79 34311999.94 34312000.10 0.0137 0.0096

Uranus 89231-08-01 17:03 G 34312226.12 34312226.21 34312226.30 0.0137 0.0124

Jupiter 89232-01-25 17:31 G 34312403.04 34312403.23 34312403.43 0.0496 0.0169

Jupiter 89232-09-18 00:15 G 34312639.35 34312639.51 34312639.67 0.0495 0.0301

Saturn 89233-08-31 14:24 G 34312986.97 34312987.10 34312987.24 0.0291 0.0223

Saturn 89234-04-18 11:46 G 34313216.77 34313216.99 34313217.20 0.0288 0.0006

Saturn 89234-12-04 06:43 G 34313446.65 34313446.78 34313446.92 0.0285 0.0218

Jupiter 89237-11-23 01:27 G 34314531.42 34314531.56 34314531.71 0.0529 0.0356

Jupiter 89238-07-18 18:00 G 34314769.07 34314769.25 34314769.44 0.0531 0.0219

Mars 89240-07-14 23:46 G 34315496.34 34315496.49 34315496.64 0.1588 0.0856

Moon 89243-07-09 05:46 G 34316585.58 34316585.74 34316585.90 0.2674 0.0874

Earth 89243-07-09 06:43 G 34316585.62 34316585.78 34316585.94 0.2681 0.0605 *

Jupiter 89243-09-30 18:15 G 34316669.10 34316669.26 34316669.42 0.0497 0.0301

Jupiter 89244-05-24 02:10 G 34316905.40 34316905.59 34316905.78 0.0495 0.0172

Jupiter 89249-07-28 17:03 G 34318797.16 34318797.21 34318797.26 0.0528 0.0510

Saturn 89249-12-25 03:51 G 34318946.47 34318946.66 34318946.86 0.0273 0.0102

Jupiter 89250-03-23 07:55 G 34319034.63 34319034.83 34319035.04 0.0531 0.0055

Saturn 89250-08-11 09:22 G 34319175.69 34319175.89 34319176.09 0.0275 0.0085

Saturn 89251-03-28 16:19 G 34319405.18 34319405.18 34319405.21 0.0278 0.0277

Jupiter 89255-06-05 18:00 G 34320935.15 34320935.25 34320935.35 0.0497 0.0431

Jupiter 89256-01-28 03:22 G 34321171.43 34321171.64 34321171.84 0.0495 0.0042

Neptune 89261-04-28 00:43 G 34323088.47 34323088.53 34323088.63 0.0089 0.0082

Jupiter 89261-11-26 00:00 G 34323300.31 34323300.50 34323300.70 0.0531 0.0108

Neptune 89261-12-09 13:55 G 34323313.97 34323314.08 34323314.23 0.0089 0.0072

Jupiter 89262-07-21 19:55 G 34323538.24 34323538.33 34323538.42 0.0532 0.0474

Neptune 89262-07-23 03:22 G 34323539.49 34323539.64 34323539.80 0.0089 0.0061

Neptune 89263-03-05 16:19 G 34323765.01 34323765.18 34323765.37 0.0089 0.0051

Saturn 89263-03-13 22:34 G 34323773.28 34323773.44 34323773.61 0.0290 0.0185

Neptune 89263-10-17 05:31 G 34323990.55 34323990.73 34323990.94 0.0089 0.0041

Saturn 89263-10-29 19:27 G 34324003.10 34324003.31 34324003.52 0.0287 0.0038

Neptune 89264-05-29 18:58 G 34324216.08 34324216.29 34324216.50 0.0089 0.0030

Saturn 89264-06-15 13:55 G 34324233.00 34324233.08 34324233.19 0.0284 0.0252

Neptune 89265-01-10 07:55 G 34324441.62 34324441.83 34324442.05 0.0089 0.0020

Neptune 89265-08-23 21:07 G 34324667.16 34324667.38 34324667.60 0.0089 0.0009

Neptune 89266-04-06 10:19 G 34324892.71 34324892.93 34324893.15 0.0089 0.0002

Neptune 89266-11-17 23:17 G 34325118.26 34325118.47 34325118.70 0.0089 0.0012

Neptune 89267-07-01 12:29 G 34325343.81 34325344.02 34325344.24 0.0089 0.0022

Jupiter 89267-10-03 02:53 G 34325437.42 34325437.62 34325437.82 0.0495 0.0092

Neptune 89268-02-12 01:41 G 34325569.36 34325569.57 34325569.77 0.0089 0.0032

Jupiter 89268-05-26 08:10 G 34325673.71 34325673.84 34325673.97 0.0494 0.0372

Neptune 89268-09-24 14:24 G 34325794.92 34325795.10 34325795.31 0.0089 0.0043

Neptune 89269-05-08 03:51 G 34326020.49 34326020.66 34326020.84 0.0089 0.0053

Neptune 89269-12-19 17:03 G 34326246.06 34326246.21 34326246.37 0.0089 0.0063

Uranus 89269-12-27 02:24 G 34326253.56 34326253.60 34326253.67 0.0140 0.0135

Neptune 89270-08-02 05:46 G 34326471.64 34326471.74 34326471.88 0.0089 0.0074

Uranus 89270-08-10 12:00 G 34326479.87 34326480.00 34326480.16 0.0140 0.0104

Neptune 89271-03-15 18:58 G 34326697.24 34326697.29 34326697.38 0.0089 0.0084

Uranus 89271-03-24 21:51 G 34326706.23 34326706.41 34326706.60 0.0140 0.0073

Uranus 89271-11-06 07:55 G 34326932.62 34326932.83 34326933.04 0.0140 0.0042

Uranus 89272-06-19 18:15 G 34327159.04 34327159.26 34327159.48 0.0140 0.0010

Mars 89272-07-13 16:05 G 34327183.02 34327183.17 34327183.31 0.1588 0.0896

Uranus 89273-02-01 04:34 G 34327385.47 34327385.69 34327385.91 0.0141 0.0022

Jupiter 89273-07-31 16:19 G 34327566.01 34327566.18 34327566.36 0.0530 0.0265

Uranus 89273-09-15 14:53 G 34327611.93 34327612.12 34327612.33 0.0141 0.0054

Jupiter 89274-03-26 10:48 G 34327803.79 34327803.95 34327804.12 0.0532 0.0317

Uranus 89274-04-30 01:41 G 34327838.41 34327838.57 34327838.76 0.0141 0.0086

Uranus 89274-12-12 12:43 G 34328064.92 34328065.03 34328065.16 0.0141 0.0118

Saturn 89278-11-20 05:17 G 34329503.66 34329503.72 34329503.80 0.0271 0.0253

Jupiter 89279-06-08 03:07 G 34329703.45 34329703.63 34329703.82 0.0496 0.0225

Saturn 89279-07-07 09:51 G 34329732.71 34329732.91 34329733.12 0.0273 0.0072

Jupiter 89280-01-30 09:51 G 34329939.74 34329939.91 34329940.09 0.0494 0.0246

Saturn 89280-02-21 15:51 G 34329961.97 34329962.16 34329962.35 0.0276 0.0116

Jupiter 89285-04-05 07:41 G 34331831.71 34331831.82 34331831.94 0.0529 0.0423

Jupiter 89285-11-28 23:31 G 34332069.29 34332069.48 34332069.68 0.0531 0.0150

Jupiter 89291-02-11 02:53 G 34333969.48 34333969.62 34333969.77 0.0497 0.0358

Jupiter 89291-10-05 12:00 G 34334205.80 34334206.00 34334206.20 0.0495 0.0117

Saturn 89292-09-23 09:36 G 34334559.72 34334559.90 34334560.09 0.0290 0.0146

Saturn 89293-05-11 06:15 G 34334789.56 34334789.76 34334789.97 0.0287 0.0077

Jupiter 89297-08-03 13:55 G 34336334.88 34336335.08 34336335.28 0.0530 0.0014

Pluto 89297-11-05 13:27 G 34336428.87 34336429.06 34336429.28 0.0078 0.0029

Pluto 89298-06-18 23:31 G 34336654.30 34336654.48 34336654.68 0.0078 0.0043

Jupiter 89302-10-18 02:39 G 34338235.58 34338235.61 34338235.65 0.0498 0.0489

Jupiter 89303-06-11 13:12 G 34338471.84 34338472.05 34338472.25 0.0495 0.0016

Jupiter 89304-02-02 18:15 G 34338708.18 34338708.26 34338708.35 0.0495 0.0447

Mars 89306-05-13 12:29 G 34339538.89 34339539.02 34339539.16 0.1589 0.1008

Saturn 89308-06-02 12:58 G 34340289.92 34340290.04 34340290.16 0.0271 0.0221

Saturn 89309-01-17 17:31 G 34340519.02 34340519.23 34340519.44 0.0274 0.0039

Jupiter 89309-04-09 04:19 G 34340600.49 34340600.68 34340600.87 0.0530 0.0179

Saturn 89309-09-03 23:31 G 34340748.31 34340748.48 34340748.66 0.0276 0.0150

Jupiter 89309-12-02 23:03 G 34340838.33 34340838.46 34340838.59 0.0531 0.0403

Uranus 89310-04-17 17:31 G 34340974.15 34340974.23 34340974.35 0.0139 0.0122

Uranus 89310-11-30 01:41 G 34341200.41 34341200.57 34341200.73 0.0138 0.0092

Uranus 89311-07-14 08:53 G 34341426.69 34341426.87 34341427.07 0.0138 0.0062

Uranus 89312-02-25 16:05 G 34341652.97 34341653.17 34341653.39 0.0138 0.0033

Uranus 89312-10-08 23:17 G 34341879.26 34341879.47 34341879.69 0.0138 0.0004

Uranus 89313-05-23 06:15 G 34342105.55 34342105.76 34342105.97 0.0138 0.0026

Uranus 89314-01-04 12:43 G 34342331.85 34342332.03 34342332.24 0.0137 0.0056

Uranus 89314-08-18 19:27 G 34342558.15 34342558.31 34342558.49 0.0137 0.0084

Jupiter 89315-02-14 13:55 G 34342737.88 34342738.08 34342738.28 0.0496 0.0147

Uranus 89315-04-02 01:41 G 34342784.47 34342784.57 34342784.71 0.0137 0.0112

Jupiter 89315-10-08 20:10 G 34342974.19 34342974.34 34342974.50 0.0495 0.0323

Jupiter 89320-12-12 20:53 G 34344866.22 34344866.37 34344866.53 0.0529 0.0336

Jupiter 89321-08-07 14:10 G 34345103.91 34345104.09 34345104.27 0.0532 0.0244

Saturn 89322-04-06 17:46 G 34345346.05 34345346.24 34345346.44 0.0289 0.0109

Saturn 89322-11-22 13:41 G 34345575.88 34345576.07 34345576.27 0.0286 0.0112

Jupiter 89326-10-20 13:27 G 34347003.89 34347004.06 34347004.23 0.0496 0.0280

Jupiter 89327-06-13 20:39 G 34347240.17 34347240.36 34347240.55 0.0494 0.0192

Jupiter 89332-08-17 13:55 G 34349132.02 34349132.08 34349132.16 0.0529 0.0489

Jupiter 89333-04-12 05:46 G 34349369.54 34349369.74 34349369.94 0.0531 0.0082

Saturn 89337-12-13 17:31 G 34351076.09 34351076.23 34351076.38 0.0271 0.0194

Mars 89338-05-12 04:48 G 34351225.54 34351225.70 34351225.85 0.1588 0.0747

Jupiter 89338-06-25 13:12 G 34351269.94 34351270.05 34351270.17 0.0497 0.0412

Saturn 89338-07-30 22:34 G 34351305.23 34351305.44 34351305.65 0.0274 0.0011

Jupiter 89339-02-16 22:05 G 34351506.22 34351506.42 34351506.63 0.0495 0.0062

Saturn 89339-03-17 05:03 G 34351534.55 34351534.71 34351534.87 0.0276 0.0179

Neptune 89344-09-09 06:43 G 34353537.73 34353537.78 34353537.89 0.0088 0.0083

Jupiter 89344-12-15 19:55 G 34353635.13 34353635.33 34353635.53 0.0530 0.0084

Neptune 89345-04-22 19:41 G 34353763.22 34353763.32 34353763.47 0.0088 0.0073

Jupiter 89345-08-10 15:07 G 34353873.07 34353873.13 34353873.20 0.0531 0.0497

Neptune 89345-12-04 08:53 G 34353988.72 34353988.87 34353989.04 0.0088 0.0062

Neptune 89346-07-17 21:51 G 34354214.24 34354214.41 34354214.59 0.0088 0.0052

Neptune 89347-02-28 10:34 G 34354439.76 34354439.94 34354440.15 0.0088 0.0042

Neptune 89347-10-11 23:31 G 34354665.29 34354665.48 34354665.70 0.0088 0.0032

Neptune 89348-05-24 12:43 G 34354890.82 34354891.03 34354891.25 0.0088 0.0021

Neptune 89349-01-05 01:27 G 34355116.35 34355116.56 34355116.79 0.0089 0.0011

Earth 89349-01-13 21:51 G 34355125.35 34355125.41 34355125.46 0.2653 0.2457

Moon 89349-01-13 23:17 G 34355125.39 34355125.47 34355125.55 0.2647 0.2307 *

Neptune 89349-08-18 14:24 G 34355341.88 34355342.10 34355342.32 0.0089 0.0001

Neptune 89350-04-01 03:22 G 34355567.42 34355567.64 34355567.86 0.0089 0.0010

Jupiter 89350-10-22 23:03 G 34355772.26 34355772.46 34355772.66 0.0496 0.0071

Neptune 89350-11-12 16:05 G 34355792.97 34355793.17 34355793.39 0.0089 0.0021

Jupiter 89351-06-16 04:48 G 34356008.58 34356008.70 34356008.83 0.0495 0.0396

Neptune 89351-06-26 05:03 G 34356018.51 34356018.71 34356018.92 0.0089 0.0031

Saturn 89351-10-18 03:51 G 34356132.45 34356132.66 34356132.86 0.0289 0.0071

Neptune 89352-02-06 18:00 G 34356244.06 34356244.25 34356244.45 0.0089 0.0041

Saturn 89352-06-03 23:31 G 34356362.31 34356362.48 34356362.67 0.0286 0.0149

Neptune 89352-09-19 06:58 G 34356469.61 34356469.79 34356469.97 0.0089 0.0051

Neptune 89353-05-02 19:27 G 34356695.17 34356695.31 34356695.49 0.0089 0.0062

Neptune 89353-12-14 08:24 G 34356920.74 34356920.85 34356920.99 0.0089 0.0072

Uranus 89354-04-10 21:22 G 34357038.28 34357038.39 34357038.53 0.0140 0.0116

Neptune 89354-07-27 21:07 G 34357146.32 34357146.38 34357146.48 0.0089 0.0082

Uranus 89354-11-23 07:27 G 34357264.64 34357264.81 34357264.98 0.0140 0.0085

Uranus 89355-07-07 17:03 G 34357491.02 34357491.21 34357491.42 0.0140 0.0055

Uranus 89356-02-19 03:22 G 34357717.42 34357717.64 34357717.86 0.0140 0.0023

Jupiter 89356-08-20 11:17 G 34357900.80 34357900.97 34357901.16 0.0529 0.0246

Uranus 89356-10-02 13:41 G 34357943.85 34357944.07 34357944.29 0.0140 0.0009

Moon 89357-01-11 12:00 G 34358044.85 34358045.00 34358045.15 0.2646 0.1022

Earth 89357-01-11 14:53 G 34358044.97 34358045.12 34358045.27 0.2651 0.0641 *

Jupiter 89357-04-15 05:03 G 34358138.55 34358138.71 34358138.87 0.0531 0.0336

Uranus 89357-05-17 00:15 G 34358170.30 34358170.51 34358170.72 0.0141 0.0041

Uranus 89357-12-29 10:48 G 34358396.77 34358396.95 34358397.14 0.0141 0.0073

Uranus 89358-08-12 21:36 G 34358623.26 34358623.40 34358623.55 0.0141 0.0105

Uranus 89359-03-27 08:24 G 34358849.82 34358849.85 34358849.92 0.0141 0.0138

Jupiter 89362-06-27 23:46 G 34360038.30 34360038.49 34360038.68 0.0496 0.0204

Jupiter 89363-02-19 06:58 G 34360274.62 34360274.79 34360274.96 0.0495 0.0269

Saturn 89367-06-26 00:15 G 34361862.35 34361862.51 34361862.68 0.0272 0.0164

Saturn 89368-02-10 05:17 G 34362091.51 34362091.72 34362091.93 0.0274 0.0021

Jupiter 89368-04-25 02:39 G 34362166.48 34362166.61 34362166.74 0.0529 0.0404

Saturn 89368-09-26 12:00 G 34362320.87 34362321.00 34362321.13 0.0277 0.0211

Jupiter 89368-12-18 18:29 G 34362404.08 34362404.27 34362404.46 0.0531 0.0171

Mars 89371-04-11 14:39 G 34363247.99 34363248.11 34363248.24 0.1948 0.1337

Mars 89372-03-10 01:12 G 34363581.43 34363581.55 34363581.67 0.1589 0.1159

Jupiter 89374-03-03 00:00 G 34364304.36 34364304.50 34364304.66 0.0497 0.0337

Jupiter 89374-10-25 08:39 G 34364540.67 34364540.86 34364541.06 0.0495 0.0140

Jupiter 89380-08-23 10:05 G 34366669.72 34366669.92 34366670.13 0.0531 0.0013

Saturn 89380-09-11 14:10 G 34366689.00 34366689.09 34366689.18 0.0291 0.0260

Saturn	89381-04-29 11:31 G	34366918.77	34366918.98	34366919.20	0.0288	0.0035
Saturn	89381-12-15 06:58 G	34367148.63	34367148.79	34367148.96	0.0285	0.0183
Jupiter	89385-11-05 23:31 G	34368570.42	34368570.48	34368570.55	0.0498	0.0467
Jupiter	89386-06-30 09:07 G	34368806.68	34368806.88	34368807.09	0.0495	0.0010
Jupiter	89387-02-21 13:41 G	34369043.01	34369043.07	34369043.14	0.0494	0.0469
Jupiter	89392-04-28 02:24 G	34370935.41	34370935.60	34370935.80	0.0530	0.0152
Jupiter	89392-12-21 21:51 G	34371173.29	34371173.41	34371173.52	0.0532	0.0433
Uranus	89393-12-16 03:22 G	34371532.60	34371532.64	34371532.71	0.0139	0.0134
Uranus	89394-07-30 11:03 G	34371758.84	34371758.96	34371759.12	0.0138	0.0105
Uranus	89395-03-13 18:43 G	34371985.11	34371985.28	34371985.47	0.0138	0.0075
Uranus	89395-10-26 02:10 G	34372211.40	34372211.59	34372211.80	0.0138	0.0045
Uranus	89396-06-08 09:36 G	34372437.68	34372437.90	34372438.11	0.0138	0.0015
Saturn	89397-01-05 03:36 G	34372648.47	34372648.65	34372648.84	0.0272	0.0139
Uranus	89397-01-20 16:34 G	34372663.97	34372664.19	34372664.40	0.0138	0.0014
Saturn	89397-08-22 08:53 G	34372877.67	34372877.87	34372878.08	0.0274	0.0047
Uranus	89397-09-03 23:17 G	34372890.27	34372890.47	34372890.68	0.0137	0.0043
Jupiter	89398-03-05 10:05 G	34373072.73	34373072.92	34373073.13	0.0496	0.0126
Saturn	89398-04-08 15:51 G	34373107.06	34373107.16	34373107.27	0.0277	0.0238
Uranus	89398-04-18 06:00 G	34373116.57	34373116.75	34373116.94	0.0137	0.0071
Jupiter	89398-10-27 16:19 G	34373309.03	34373309.18	34373309.32	0.0494	0.0345
Uranus	89398-11-30 12:29 G	34373342.89	34373343.02	34373343.18	0.0137	0.0100
Uranus	89399-07-14 18:43 G	34373569.23	34373569.28	34373569.38	0.0137	0.0128
Jupiter	89404-01-02 18:15 G	34375201.10	34375201.26	34375201.42	0.0529	0.0312
Mars	89404-03-09 17:17 G	34375268.06	34375268.22	34375268.39	0.1588	0.0593
Jupiter	89404-08-27 11:03 G	34375438.79	34375438.96	34375439.13	0.0531	0.0268
Jupiter	89409-11-09 09:51 G	34377338.74	34377338.91	34377339.09	0.0497	0.0261
Saturn	89410-03-25 22:48 G	34377475.32	34377475.45	34377475.59	0.0291	0.0225
Jupiter	89410-07-03 17:46 G	34377575.06	34377575.24	34377575.43	0.0495	0.0216
Saturn	89410-11-10 20:10 G	34377705.13	34377705.34	34377705.55	0.0288	0.0001
Saturn	89411-06-28 15:22 G	34377935.01	34377935.14	34377935.28	0.0286	0.0219

Jupiter 89415-09-07 11:03 G 34379466.88 34379466.96 34379467.06 0.0528 0.0467

Jupiter 89416-05-02 01:55 G 34379704.38 34379704.58 34379704.78 0.0531 0.0105

Jupiter 89421-07-15 09:51 G 34381604.79 34381604.91 34381605.04 0.0498 0.0394

Jupiter 89422-03-08 19:41 G 34381841.12 34381841.32 34381841.52 0.0495 0.0085

Neptune 89425-08-01 09:51 G 34383082.88 34383082.91 34383082.99 0.0089 0.0086

Neptune 89426-03-14 23:17 G 34383308.37 34383308.47 34383308.60 0.0089 0.0075

Saturn 89426-07-19 09:36 G 34383434.71 34383434.90 34383435.09 0.0272 0.0109

Neptune 89426-10-26 12:15 G 34383533.88 34383534.01 34383534.18 0.0089 0.0065

Saturn 89427-03-05 14:53 G 34383663.92 34383664.12 34383664.33 0.0275 0.0078

Neptune 89427-06-09 01:12 G 34383759.40 34383759.55 34383759.75 0.0089 0.0055

Saturn 89427-10-20 22:05 G 34383893.38 34383893.42 34383893.47 0.0278 0.0270

Jupiter 89428-01-05 16:05 G 34383969.97 34383970.17 34383970.37 0.0530 0.0062

Neptune 89428-01-20 14:39 G 34383984.93 34383985.11 34383985.31 0.0089 0.0044

Jupiter 89428-08-30 11:17 G 34384207.94 34384207.97 34384208.01 0.0531 0.0521

Neptune 89428-09-02 03:36 G 34384210.46 34384210.65 34384210.87 0.0089 0.0034

Neptune 89429-04-15 17:03 G 34384436.00 34384436.21 34384436.43 0.0089 0.0024

Neptune 89429-11-27 06:15 G 34384661.55 34384661.76 34384661.98 0.0089 0.0013

Neptune 89430-07-10 19:27 G 34384887.09 34384887.31 34384887.53 0.0089 0.0003

Neptune 89431-02-21 08:24 G 34385112.64 34385112.85 34385113.07 0.0089 0.0008

Neptune 89431-10-04 21:36 G 34385338.19 34385338.40 34385338.62 0.0089 0.0018

Neptune 89432-05-17 10:34 G 34385563.74 34385563.94 34385564.16 0.0089 0.0029

Neptune 89432-12-28 23:46 G 34385789.30 34385789.49 34385789.70 0.0089 0.0039

Neptune 89433-08-11 12:29 G 34386014.86 34386015.02 34386015.23 0.0089 0.0050

Jupiter 89433-11-11 21:07 G 34386107.17 34386107.38 34386107.58 0.0496 0.0047

Neptune 89434-03-25 01:55 G 34386240.43 34386240.58 34386240.76 0.0089 0.0060

Jupiter 89434-07-06 02:39 G 34386343.51 34386343.61 34386343.72 0.0495 0.0420

Neptune 89434-11-05 15:07 G 34386466.01 34386466.13 34386466.27 0.0089 0.0070

Neptune 89435-06-19 03:51 G 34386691.60 34386691.66 34386691.78 0.0089 0.0081

Mars 89437-02-06 16:19 G 34387290.02 34387290.18 34387290.35 0.1947 0.0571

Uranus 89437-12-10 06:43 G 34387596.70 34387596.78 34387596.87 0.0140 0.0128

Mars 89438-01-06 14:10 G 34387623.99 34387624.09 34387624.19 0.1589 0.1311

Uranus 89438-07-24 16:05 G 34387823.02 34387823.17 34387823.34 0.0140 0.0098

Uranus 89439-03-08 01:55 G 34388049.40 34388049.58 34388049.78 0.0140 0.0067

Jupiter 89439-09-10 08:24 G 34388235.67 34388235.85 34388236.03 0.0530 0.0222

Saturn 89439-10-06 05:46 G 34388261.58 34388261.74 34388261.90 0.0290 0.0190

Uranus 89439-10-20 12:15 G 34388275.79 34388276.01 34388276.22 0.0140 0.0036

Jupiter 89440-05-05 02:39 G 34388473.46 34388473.61 34388473.75 0.0532 0.0363

Saturn 89440-05-23 02:53 G 34388491.41 34388491.62 34388491.83 0.0288 0.0035

Uranus 89440-06-02 22:34 G 34388502.22 34388502.44 34388502.66 0.0140 0.0004

Saturn 89441-01-07 21:22 G 34388721.31 34388721.39 34388721.51 0.0285 0.0251

Uranus 89441-01-15 08:53 G 34388728.66 34388728.87 34388729.09 0.0141 0.0028

Uranus 89441-08-29 19:12 G 34388955.11 34388955.30 34388955.51 0.0141 0.0060

Uranus 89442-04-13 06:00 G 34389181.60 34389181.75 34389181.93 0.0141 0.0092

Uranus 89442-11-25 16:48 G 34389408.12 34389408.20 34389408.33 0.0141 0.0125

Jupiter 89445-07-17 21:36 G 34390373.21 34390373.40 34390373.59 0.0496 0.0180

Jupiter 89446-03-11 04:05 G 34390609.51 34390609.67 34390609.84 0.0494 0.0293

Jupiter 89451-05-16 01:27 G 34392501.43 34392501.56 34392501.71 0.0529 0.0379

Jupiter 89452-01-08 18:00 G 34392739.07 34392739.25 34392739.44 0.0532 0.0203

Saturn 89455-06-14 07:12 G 34393991.78 34393991.80 34393991.84 0.0270 0.0266

Saturn 89456-01-29 11:17 G 34394220.78 34394220.97 34394221.18 0.0272 0.0087

Saturn 89456-09-14 17:03 G 34394450.01 34394450.21 34394450.41 0.0275 0.0101

Pluto 89456-11-15 23:03 G 34394512.33 34394512.46 34394512.63 0.0066 0.0048

Jupiter 89457-03-22 22:05 G 34394639.27 34394639.42 34394639.59 0.0497 0.0313

Pluto 89457-06-29 03:36 G 34394737.44 34394737.65 34394737.87 0.0066 0.0007

Jupiter 89457-11-14 06:15 G 34394875.57 34394875.76 34394875.96 0.0495 0.0165

Pluto 89458-02-09 08:10 G 34394962.66 34394962.84 34394963.02 0.0066 0.0035

Jupiter 89463-09-13 09:07 G 34397004.67 34397004.88 34397005.08 0.0530 0.0037

Jupiter 89468-11-25 20:24 G 34398905.27 34398905.35 34398905.45 0.0498 0.0449

Saturn 89469-04-17 12:58 G 34399047.86 34399048.04 34399048.22 0.0291 0.0157

Jupiter 89469-07-20 06:58 G 34399141.58 34399141.79 34399141.99 0.0496 0.0030

Saturn 89469-12-03 09:51 G 34399277.71 34399277.91 34399278.12 0.0288 0.0068

Mars 89470-01-05 06:15 G 34399310.59 34399310.76 34399310.93 0.1588 0.0447

Jupiter 89470-03-13 12:15 G 34399378.01 34399378.01 34399378.02 0.0495 0.0494

Saturn 89470-07-21 04:48 G 34399507.68 34399507.70 34399507.72 0.0285 0.0283

Jupiter 89475-05-19 00:58 G 34401270.35 34401270.54 34401270.74 0.0530 0.0126

Jupiter 89476-01-11 19:12 G 34401508.20 34401508.30 34401508.40 0.0531 0.0458

Uranus 89478-03-30 20:24 G 34402317.25 34402317.35 34402317.48 0.0139 0.0117

Uranus 89478-11-12 04:05 G 34402543.52 34402543.67 34402543.85 0.0138 0.0088

Uranus 89479-06-26 11:31 G 34402769.80 34402769.98 34402770.19 0.0138 0.0058

Uranus 89480-02-07 19:12 G 34402996.08 34402996.30 34402996.51 0.0138 0.0028

Uranus 89480-09-21 02:10 G 34403222.37 34403222.59 34403222.81 0.0138 0.0001

Jupiter 89481-03-25 08:24 G 34403407.65 34403407.85 34403408.05 0.0496 0.0103

Uranus 89481-05-05 08:53 G 34403448.67 34403448.87 34403449.09 0.0137 0.0031

Jupiter 89481-11-16 14:53 G 34403643.99 34403644.12 34403644.26 0.0495 0.0370

Uranus 89481-12-17 15:51 G 34403674.97 34403675.16 34403675.36 0.0137 0.0059

Uranus 89482-07-31 22:34 G 34403901.28 34403901.44 34403901.61 0.0137 0.0087

Uranus 89483-03-15 05:03 G 34404127.60 34404127.71 34404127.83 0.0137 0.0115

Saturn 89484-12-24 12:15 G 34404777.91 34404778.01 34404778.11 0.0270 0.0238

Saturn 89485-08-10 16:19 G 34405006.97 34405007.18 34405007.39 0.0273 0.0057

Saturn 89486-03-27 22:05 G 34405236.23 34405236.42 34405236.60 0.0275 0.0131

Moon 89486-07-11 05:03 G 34405341.56 34405341.71 34405341.85 0.2689 0.0837

Earth 89486-07-11 06:00 G 34405341.60 34405341.75 34405341.91 0.2682 0.0652 *

Jupiter 89487-01-21 16:05 G 34405536.00 34405536.17 34405536.34 0.0529 0.0288

Jupiter 89487-09-16 08:53 G 34405773.70 34405773.87 34405774.04 0.0531 0.0294

Jupiter 89492-11-28 09:22 G 34407673.71 34407673.89 34407674.07 0.0497 0.0235

Jupiter 89493-07-22 17:03 G 34407910.04 34407910.21 34407910.39 0.0495 0.0243

Jupiter 89498-09-26 09:22 G 34409801.78 34409801.89 34409802.00 0.0528 0.0443

Saturn 89498-10-28 18:43 G 34409834.09 34409834.28 34409834.48 0.0290 0.0123

Jupiter 89499-05-22 00:29 G 34410039.32 34410039.52 34410039.71 0.0531 0.0133

Saturn 89499-06-15 15:22 G 34410063.95 34410064.14 34410064.34 0.0287 0.0100

Mars 89502-12-05 18:15 G 34411332.08 34411332.26 34411332.43 0.1947 0.0198

Mars 89503-11-05 02:53 G 34411666.55 34411666.62 34411666.69 0.1589 0.1460

Jupiter 89504-08-04 09:51 G 34411939.77 34411939.91 34411940.05 0.0497 0.0367

Jupiter 89505-03-28 18:43 G 34412176.08 34412176.28 34412176.48 0.0495 0.0112

Neptune 89508-12-13 17:03 G 34413532.18 34413532.21 34413532.29 0.0088 0.0086

Neptune 89509-07-27 06:00 G 34413757.65 34413757.75 34413757.88 0.0088 0.0076

Neptune 89510-03-09 18:58 G 34413983.16 34413983.29 34413983.45 0.0088 0.0065

Neptune 89510-10-21 08:24 G 34414208.68 34414208.85 34414209.02 0.0088 0.0055

Jupiter 89511-01-25 16:48 G 34414305.00 34414305.20 34414305.40 0.0531 0.0030

Neptune 89511-06-03 21:07 G 34414434.20 34414434.38 34414434.58 0.0088 0.0045

Neptune 89512-01-15 09:51 G 34414659.72 34414659.91 34414660.13 0.0088 0.0035

Neptune 89512-08-27 22:48 G 34414885.25 34414885.45 34414885.67 0.0088 0.0024

Neptune 89513-04-10 12:00 G 34415110.78 34415111.00 34415111.21 0.0089 0.0014

Neptune 89513-11-22 00:58 G 34415336.32 34415336.54 34415336.76 0.0089 0.0004

Neptune 89514-07-05 13:41 G 34415561.85 34415562.07 34415562.29 0.0089 0.0007

Saturn 89514-07-07 12:58 G 34415563.92 34415564.04 34415564.16 0.0270 0.0218

Neptune 89515-02-16 02:24 G 34415787.39 34415787.60 34415787.83 0.0089 0.0018

Saturn 89515-02-21 17:03 G 34415793.01 34415793.21 34415793.43 0.0273 0.0037

Neptune 89515-09-29 15:22 G 34416012.94 34416013.14 34416013.36 0.0089 0.0028

Saturn 89515-10-08 22:48 G 34416022.29 34416022.45 34416022.64 0.0276 0.0153

Neptune 89516-05-12 04:19 G 34416238.49 34416238.68 34416238.89 0.0089 0.0038

Jupiter 89516-12-01 20:24 G 34416442.15 34416442.35 34416442.56 0.0495 0.0022

Neptune 89516-12-23 17:17 G 34416464.04 34416464.22 34416464.41 0.0089 0.0048

Jupiter 89517-07-26 01:41 G 34416678.49 34416678.57 34416678.66 0.0495 0.0447

Neptune 89517-08-06 05:46 G 34416689.60 34416689.74 34416689.92 0.0089 0.0059

Neptune 89518-03-19 18:43 G 34416915.16 34416915.28 34416915.44 0.0089 0.0069

Neptune 89518-10-31 07:55 G 34417140.74 34417140.83 34417140.94 0.0089 0.0079

Uranus 89522-03-24 23:46 G 34418381.36 34418381.49 34418381.63 0.0140 0.0111

Jupiter 89522-09-30 09:22 G 34418570.71 34418570.89 34418571.08 0.0529 0.0193

Uranus 89522-11-06 09:22 G 34418607.72 34418607.89 34418608.08 0.0140 0.0081

Jupiter 89523-05-26 03:07 G 34418808.50 34418808.63 34418808.77 0.0531 0.0393

Uranus 89523-06-20 19:41 G 34418834.11 34418834.32 34418834.52 0.0140 0.0049

Uranus 89524-02-02 05:46 G 34419060.52 34419060.74 34419060.96 0.0140 0.0018

Uranus 89524-09-15 16:05 G 34419286.95 34419287.17 34419287.39 0.0140 0.0013

Uranus 89525-04-30 02:24 G 34419513.40 34419513.60 34419513.82 0.0141 0.0046

Uranus 89525-12-12 13:12 G 34419739.87 34419740.05 34419740.24 0.0141 0.0077

Uranus 89526-07-27 00:00 G 34419966.37 34419966.50 34419966.65 0.0141 0.0109

Uranus 89527-03-10 11:03 G 34420192.96 34420192.96 34420192.98 0.0141 0.0141

Saturn 89528-05-11 00:00 G 34420620.30 34420620.50 34420620.70 0.0290 0.0093

Jupiter 89528-08-06 19:55 G 34420708.14 34420708.33 34420708.53 0.0497 0.0158

Saturn 89528-12-26 20:24 G 34420850.17 34420850.35 34420850.55 0.0287 0.0131

Jupiter 89529-03-31 03:22 G 34420944.49 34420944.64 34420944.80 0.0495 0.0319

Jupiter 89534-06-05 02:39 G 34422836.46 34422836.61 34422836.76 0.0528 0.0349

Jupiter 89535-01-28 18:15 G 34423074.08 34423074.26 34423074.44 0.0531 0.0231

Mars 89535-11-03 18:43 G 34423353.11 34423353.28 34423353.46 0.1588 0.0291

Jupiter 89540-04-11 20:39 G 34424974.20 34424974.36 34424974.53 0.0497 0.0292

Jupiter 89540-12-04 05:31 G 34425210.55 34425210.73 34425210.93 0.0495 0.0191

Saturn 89544-01-17 16:34 G 34426350.05 34426350.19 34426350.35 0.0270 0.0191

Pluto 89544-07-19 03:07 G 34426533.55 34426533.63 34426533.74 0.0079 0.0071

Saturn 89544-09-02 20:53 G 34426579.16 34426579.37 34426579.59 0.0273 0.0010

Pluto 89545-03-01 13:41 G 34426758.84 34426759.07 34426759.29 0.0078 0.0003

Saturn 89545-04-20 02:53 G 34426808.46 34426808.62 34426808.78 0.0276 0.0180

Pluto 89545-10-12 23:03 G 34426984.41 34426984.46 34426984.55 0.0078 0.0074

Jupiter 89546-02-07 18:58 G 34427102.23 34427102.29 34427102.35 0.0527 0.0504

Jupiter 89546-10-03 08:39 G 34427339.66 34427339.86 34427340.06 0.0530 0.0065

Jupiter 89551-12-16 21:22 G 34429240.29 34429240.39 34429240.50 0.0498 0.0423

Jupiter 89552-08-09 07:41 G 34429476.62 34429476.82 34429477.03 0.0496 0.0060

Saturn 89557-04-05 06:00 G 34431176.75 34431176.75 34431176.78 0.0293 0.0292

Saturn 89557-11-21 04:34 G 34431406.49 34431406.69 34431406.90 0.0290 0.0063

Jupiter 89558-06-08 00:43 G 34431605.34 34431605.53 34431605.73 0.0530 0.0097

Saturn 89558-07-09 00:58 G 34431636.37 34431636.54 34431636.72 0.0287 0.0160

Jupiter 89559-01-31 19:27 G 34431843.24 34431843.31 34431843.39 0.0531 0.0489

Uranus 89561-11-29 06:15 G 34432875.69 34432875.76 34432875.85 0.0139 0.0129

Uranus 89562-07-13 13:55 G 34433101.94 34433102.08 34433102.24 0.0138 0.0100

Uranus 89563-02-24 21:22 G 34433328.22 34433328.39 34433328.59 0.0138 0.0071

Uranus 89563-10-09 04:48 G 34433554.51 34433554.70 34433554.92 0.0138 0.0041

Jupiter 89564-04-14 09:22 G 34433742.69 34433742.89 34433743.09 0.0496 0.0073

Uranus 89564-05-22 12:15 G 34433780.80 34433781.01 34433781.23 0.0138 0.0011

Jupiter 89564-12-06 15:07 G 34433979.02 34433979.13 34433979.26 0.0495 0.0399

Uranus 89565-01-03 19:27 G 34434007.09 34434007.31 34434007.52 0.0138 0.0018

Uranus 89565-08-18 02:10 G 34434233.39 34434233.59 34434233.80 0.0137 0.0047

Uranus 89566-04-01 08:53 G 34434459.70 34434459.87 34434460.05 0.0137 0.0075

Uranus 89566-11-13 15:36 G 34434686.01 34434686.15 34434686.29 0.0137 0.0103

Uranus 89567-06-27 21:51 G 34434912.36 34434912.41 34434912.48 0.0137 0.0131

Mars 89568-10-01 20:10 G 34435374.19 34435374.34 34435374.50 0.1947 0.0930

Jupiter 89570-02-10 18:00 G 34435871.07 34435871.25 34435871.43 0.0529 0.0257

Jupiter 89570-10-06 11:17 G 34436108.82 34436108.97 34436109.13 0.0531 0.0330

Saturn 89573-07-29 16:19 G 34437136.02 34437136.18 34437136.35 0.0271 0.0172

Saturn 89574-03-15 20:53 G 34437365.15 34437365.37 34437365.58 0.0273 0.0012

Saturn 89574-10-31 02:39 G 34437594.48 34437594.61 34437594.76 0.0276 0.0200

Jupiter 89575-12-19 10:34 G 34438008.75 34438008.94 34438009.12 0.0497 0.0207

Jupiter 89576-08-11 17:46 G 34438245.08 34438245.24 34438245.42 0.0495 0.0272

Jupiter 89581-10-16 12:15 G 34440136.89 34440137.01 34440137.13 0.0528 0.0412

Jupiter 89582-06-11 03:07 G 34440374.44 34440374.63 34440374.82 0.0531 0.0166

Saturn 89586-10-16 09:36 G 34441962.82 34441962.90 34441963.00 0.0293 0.0264

Saturn 89587-06-03 08:24 G 34442192.64 34442192.85 34442193.06 0.0290 0.0034

Jupiter 89587-08-24 08:53 G 34442274.72 34442274.87 34442275.02 0.0498 0.0345

Saturn 89588-01-19 04:48 G 34442422.54 34442422.70 34442422.86 0.0287 0.0188

Jupiter 89588-04-16 18:29 G 34442511.08 34442511.27 34442511.47 0.0496 0.0138

Neptune 89589-11-03 20:24 G 34443077.35 34443077.35 34443077.36 0.0089 0.0089

Neptune 89590-06-17 08:53 G 34443302.80 34443302.87 34443303.00 0.0089 0.0079

Neptune 89591-01-28 22:19 G 34443528.30 34443528.43 34443528.58 0.0089 0.0068

Neptune 89591-09-11 11:17 G 34443753.82 34443753.97 34443754.15 0.0089 0.0058

Neptune 89592-04-24 00:15 G 34443979.35 34443979.51 34443979.72 0.0089 0.0048

Neptune 89592-12-05 13:41 G 34444204.88 34444205.07 34444205.28 0.0089 0.0037

Neptune 89593-07-19 02:39 G 34444430.41 34444430.61 34444430.83 0.0089 0.0027

Jupiter 89594-02-13 19:27 G 34444640.11 34444640.31 34444640.51 0.0530 0.0008

Neptune 89594-03-01 15:51 G 34444655.95 34444656.16 34444656.38 0.0089 0.0017

Neptune 89594-10-13 05:17 G 34444881.50 34444881.72 34444881.94 0.0089 0.0006

Neptune 89595-05-26 18:15 G 34445107.05 34445107.26 34445107.49 0.0089 0.0005

Neptune 89596-01-07 07:27 G 34445332.60 34445332.81 34445333.03 0.0089 0.0015

Neptune 89596-08-19 20:24 G 34445558.15 34445558.35 34445558.57 0.0089 0.0026

Neptune 89597-04-02 09:36 G 34445783.71 34445783.90 34445784.11 0.0089 0.0036

Neptune 89597-11-13 23:03 G 34446009.27 34446009.46 34446009.65 0.0089 0.0046

Neptune 89598-06-27 11:46 G 34446234.84 34446234.99 34446235.17 0.0089 0.0057

Neptune 89599-02-08 00:58 G 34446460.41 34446460.54 34446460.69 0.0089 0.0067

Jupiter 89599-04-29 08:53 G 34446540.82 34446540.87 34446540.93 0.0499 0.0478

Neptune 89599-09-21 14:24 G 34446685.99 34446686.10 34446686.20 0.0089 0.0077

Jupiter 89599-12-21 20:10 G 34446777.14 34446777.34 34446777.55 0.0496 0.0012

Earth 89600-01-14 17:46 G 34446801.09 34446801.24 34446801.40 0.2650 0.0425

Moon 89600-01-14 18:15 G 34446801.11 34446801.26 34446801.40 0.2657 0.0565 *

Neptune 89600-05-04 02:53 G 34446911.61 34446911.62 34446911.68 0.0089 0.0088

Jupiter 89600-08-14 02:10 G 34447013.54 34447013.59 34447013.66 0.0495 0.0475

Mars 89601-08-31 07:41 G 34447395.65 34447395.82 34447396.00 0.1588 0.0145

Saturn 89603-02-08 19:41 G 34447922.15 34447922.32 34447922.51 0.0271 0.0146

Saturn 89603-09-26 00:15 G 34448151.30 34448151.51 34448151.72 0.0273 0.0038

Saturn 89604-05-12 06:15 G 34448380.65 34448380.76 34448380.88 0.0276 0.0227

Jupiter 89605-10-19 10:34 G 34448905.75 34448905.94 34448906.14 0.0529 0.0161

Uranus 89605-11-22 06:43 G 34448939.69 34448939.78 34448939.88 0.0139 0.0125

Jupiter 89606-06-14 04:05 G 34449143.55 34449143.67 34449143.79 0.0531 0.0425

Uranus 89606-07-06 16:05 G 34449166.03 34449166.17 34449166.35 0.0140 0.0095

Uranus 89607-02-18 01:55 G 34449392.40 34449392.58 34449392.79 0.0140 0.0064

Uranus 89607-10-02 12:00 G 34449618.80 34449619.00 34449619.22 0.0140 0.0033

Uranus 89608-05-15 22:34 G 34449845.22 34449845.44 34449845.66 0.0140 0.0002

Uranus 89608-12-28 08:39 G 34450071.65 34450071.86 34450072.08 0.0141 0.0031

Uranus 89609-08-11 19:12 G 34450298.11 34450298.30 34450298.50 0.0141 0.0062

Uranus 89610-03-26 05:46 G 34450524.59 34450524.74 34450524.92 0.0141 0.0094

Uranus 89610-11-07 16:48 G 34450751.11 34450751.20 34450751.30 0.0141 0.0126

Jupiter 89611-08-26 22:05 G 34451043.22 34451043.42 34451043.62 0.0497 0.0127

Jupiter 89612-04-19 05:17 G 34451279.58 34451279.72 34451279.87 0.0495 0.0349

Saturn 89616-04-27 13:41 G 34452748.95 34452749.07 34452749.20 0.0292 0.0235

Saturn 89616-12-13 12:00 G 34452978.79 34452979.00 34452979.22 0.0289 0.0007

Jupiter 89617-06-24 03:22 G 34453171.49 34453171.64 34453171.81 0.0529 0.0321

Saturn 89617-07-31 07:55 G 34453208.71 34453208.83 34453208.98 0.0286 0.0217

Jupiter 89618-02-16 19:27 G 34453409.14 34453409.31 34453409.49 0.0531 0.0264

Jupiter 89623-05-01 23:17 G 34455309.30 34455309.47 34455309.65 0.0497 0.0260

Jupiter 89623-12-24 07:27 G 34455545.63 34455545.81 34455546.00 0.0495 0.0221

Jupiter 89629-02-26 21:22 G 34457437.31 34457437.39 34457437.49 0.0528 0.0474

Jupiter 89629-10-22 12:00 G 34457674.80 34457675.00 34457675.20 0.0531 0.0102

Saturn 89632-08-20 18:43 G 34458708.10 34458708.28 34458708.47 0.0271 0.0128

Saturn 89633-04-06 23:17 G 34458937.26 34458937.47 34458937.67 0.0273 0.0056

Saturn 89633-11-22 05:03 G 34459166.63 34459166.71 34459166.82 0.0276 0.0246

Mars 89634-07-29 22:05 G 34459416.34 34459416.42 34459416.51 0.1946 0.1684

Jupiter 89635-01-04 23:46 G 34459575.37 34459575.49 34459575.62 0.0498 0.0393

Jupiter 89635-08-29 09:51 G 34459811.71 34459811.91 34459812.11 0.0495 0.0090

Jupiter 89641-06-27 05:03 G 34461940.51 34461940.71 34461940.91 0.0530 0.0062

Jupiter 89642-02-19 23:31 G 34462178.45 34462178.48 34462178.51 0.0531 0.0523

Saturn 89645-11-07 15:36 G 34463535.01 34463535.15 34463535.30 0.0293 0.0209

Uranus 89646-03-12 21:22 G 34463660.29 34463660.39 34463660.53 0.0139 0.0114

Saturn 89646-06-25 14:10 G 34463764.88 34463765.09 34463765.30 0.0290 0.0021

Uranus 89646-10-25 05:31 G 34463886.56 34463886.73 34463886.91 0.0138 0.0084

Saturn 89647-02-10 10:34 G 34463994.83 34463994.94 34463995.05 0.0287 0.0242

Jupiter 89647-05-04 09:22 G 34464077.68 34464077.89 34464078.09 0.0496 0.0049

Uranus 89647-06-08 12:58 G 34464112.85 34464113.04 34464113.25 0.0138 0.0055

Jupiter 89647-12-26 15:51 G 34464314.06 34464314.16 34464314.27 0.0495 0.0426

Uranus 89648-01-20 20:24 G 34464339.14 34464339.35 34464339.57 0.0138 0.0025

Uranus 89648-09-03 03:36 G 34464565.44 34464565.65 34464565.87 0.0138 0.0005

Uranus 89649-04-17 10:34 G 34464791.74 34464791.94 34464792.16 0.0138 0.0033

Uranus 89649-11-29 17:46 G 34465018.05 34465018.24 34465018.43 0.0137 0.0062

Uranus 89650-07-14 00:15 G 34465244.36 34465244.51 34465244.68 0.0137 0.0090

Uranus 89651-02-25 06:43 G 34465470.68 34465470.78 34465470.90 0.0137 0.0118

Jupiter 89653-03-01 22:48 G 34466206.26 34466206.45 34466206.63 0.0529 0.0221

Jupiter 89653-10-25 15:07 G 34466443.99 34466444.13 34466444.28 0.0531 0.0365

Jupiter 89659-01-07 10:19 G 34468343.74 34468343.93 34468344.12 0.0497 0.0182

Jupiter 89659-08-31 18:29 G 34468580.11 34468580.27 34468580.44 0.0496 0.0299

Saturn 89662-03-02 21:51 G 34469494.22 34469494.41 34469494.61 0.0271 0.0101

Saturn 89662-10-18 02:24 G 34469723.40 34469723.60 34469723.80 0.0273 0.0083

Saturn 89663-06-04 08:10 G 34469952.82 34469952.84 34469952.88 0.0276 0.0273

Jupiter 89664-11-04 14:39 G 34470471.98 34470472.11 34470472.25 0.0528 0.0380

Jupiter 89665-06-30 05:17 G 34470709.54 34470709.72 34470709.91 0.0530 0.0200

Mars 89667-06-28 20:39 G 34471438.18 34471438.36 34471438.53 0.1588 0.0044

Jupiter 89670-09-12 11:31 G 34472609.83 34472609.98 34472610.15 0.0498 0.0315

Jupiter 89671-05-06 21:22 G 34472846.19 34472846.39 34472846.58 0.0496 0.0170

Neptune 89673-10-28 16:48 G 34473752.12 34473752.20 34473752.32 0.0088 0.0079

Neptune 89674-06-11 05:31 G 34473977.62 34473977.73 34473977.90 0.0088 0.0069

Neptune 89675-01-22 18:29 G 34474203.13 34474203.27 34474203.46 0.0088 0.0059

Saturn 89675-05-20 19:12 G 34474321.14 34474321.30 34474321.47 0.0292 0.0181

Neptune 89675-09-05 07:41 G 34474428.65 34474428.82 34474429.02 0.0088 0.0048

Saturn 89676-01-05 17:17 G 34474551.02 34474551.22 34474551.44 0.0289 0.0050

Neptune 89676-04-17 20:39 G 34474654.17 34474654.36 34474654.57 0.0088 0.0038

Saturn 89676-08-22 13:41 G 34474781.00 34474781.07 34474781.14 0.0286 0.0269

Neptune 89676-11-29 09:36 G 34474879.70 34474879.90 34474880.12 0.0088 0.0027

Jupiter 89677-03-04 21:22 G 34474975.19 34474975.39 34474975.59 0.0530 0.0037

Neptune 89677-07-12 22:34 G 34475105.23 34475105.44 34475105.66 0.0089 0.0017

Neptune 89678-02-23 11:31 G 34475330.76 34475330.98 34475331.20 0.0089 0.0007

Neptune 89678-10-07 00:29 G 34475556.30 34475556.52 34475556.74 0.0089 0.0004

Neptune 89679-05-20 13:12 G 34475781.84 34475782.05 34475782.28 0.0089 0.0015

Neptune 89680-01-01 01:55 G 34476007.38 34476007.58 34476007.80 0.0089 0.0025

Neptune 89680-08-13 14:53 G 34476232.92 34476233.12 34476233.33 0.0089 0.0035

Neptune 89681-03-27 03:51 G 34476458.47 34476458.66 34476458.85 0.0089 0.0045

Neptune 89681-11-07 16:34 G 34476684.04 34476684.19 34476684.38 0.0089 0.0056

Jupiter 89682-05-18 12:15 G 34476875.93 34476876.01 34476876.11 0.0498 0.0447

Neptune 89682-06-21 05:31 G 34476909.60 34476909.73 34476909.89 0.0089 0.0066

Jupiter 89683-01-09 23:17 G 34477112.26 34477112.47 34477112.67 0.0496 0.0038

Neptune 89683-02-01 18:15 G 34477135.17 34477135.26 34477135.39 0.0089 0.0076

Neptune 89683-09-15 07:12 G 34477360.77 34477360.80 34477360.87 0.0089 0.0086

Jupiter 89688-11-07 14:24 G 34479240.90 34479241.10 34479241.29 0.0530 0.0126

Jupiter 89689-07-03 08:24 G 34479478.76 34479478.85 34479478.95 0.0531 0.0463

Uranus 89689-07-22 13:27 G 34479498.05 34479498.06 34479498.11 0.0139 0.0138

Uranus 89690-03-05 22:48 G 34479724.33 34479724.45 34479724.61 0.0139 0.0109

Uranus 89690-10-18 08:53 G 34479950.69 34479950.87 34479951.05 0.0140 0.0078

Saturn 89691-01-26 18:00 G 34480051.21 34480051.25 34480051.31 0.0269 0.0261

Uranus 89691-06-01 18:58 G 34480177.08 34480177.29 34480177.49 0.0140 0.0047

Saturn 89691-09-12 20:53 G 34480280.17 34480280.37 34480280.58 0.0271 0.0084

Uranus 89692-01-14 04:48 G 34480403.48 34480403.70 34480403.92 0.0140 0.0016

Saturn 89692-04-29 01:12 G 34480509.36 34480509.55 34480509.75 0.0273 0.0101

Uranus 89692-08-27 14:53 G 34480629.91 34480630.12 34480630.34 0.0140 0.0015

Uranus 89693-04-11 01:12 G 34480856.35 34480856.55 34480856.76 0.0141 0.0047

Uranus 89693-11-23 12:00 G 34481082.81 34481083.00 34481083.18 0.0141 0.0078

Uranus 89694-07-07 22:19 G 34481309.31 34481309.43 34481309.58 0.0141 0.0110

Jupiter 89694-09-15 00:58 G 34481378.34 34481378.54 34481378.74 0.0496 0.0095

Jupiter 89695-05-09 07:55 G 34481614.70 34481614.83 34481614.96 0.0495 0.0381

Jupiter 89700-07-14 08:39 G 34483506.70 34483506.86 34483507.04 0.0529 0.0285

Jupiter 89701-03-09 00:58 G 34483744.37 34483744.54 34483744.70 0.0531 0.0302

Pluto 89703-07-29 18:43 G 34484617.24 34484617.28 34484617.36 0.0065 0.0063

Pluto 89704-03-10 23:17 G 34484842.28 34484842.47 34484842.69 0.0066 0.0022

Pluto 89704-10-22 03:36 G 34485067.45 34485067.65 34485067.87 0.0066 0.0020

Saturn 89704-11-30 20:10 G 34485107.17 34485107.34 34485107.53 0.0292 0.0156

Pluto 89705-06-04 07:41 G 34485292.77 34485292.82 34485292.91 0.0066 0.0063

Saturn 89705-07-18 18:43 G 34485337.07 34485337.28 34485337.48 0.0290 0.0074

Jupiter 89706-05-21 23:17 G 34485644.29 34485644.47 34485644.65 0.0497 0.0235

Jupiter 89707-01-13 07:55 G 34485880.66 34485880.83 34485881.01 0.0496 0.0248

Jupiter 89712-03-19 03:22 G 34487772.54 34487772.64 34487772.76 0.0527 0.0438

Jupiter 89712-11-11 17:17 G 34488010.03 34488010.22 34488010.42 0.0530 0.0140

Jupiter 89718-01-24 23:31 G 34489910.34 34489910.48 34489910.62 0.0498 0.0370

Jupiter 89718-09-18 10:05 G 34490146.72 34490146.92 34490147.12 0.0496 0.0117

Saturn 89720-08-08 20:53 G 34490837.28 34490837.37 34490837.48 0.0268 0.0234

Saturn 89721-03-25 23:46 G 34491066.29 34491066.49 34491066.70 0.0271 0.0057

Saturn 89721-11-10 04:19 G 34491295.50 34491295.68 34491295.87 0.0273 0.0128

Jupiter 89724-07-17 08:10 G 34492275.64 34492275.84 34492276.04 0.0529 0.0026

Earth 89729-07-13 05:31 G 34494097.57 34494097.73 34494097.88 0.2683 0.0688

Moon 89729-07-13 08:24 G 34494097.68 34494097.85 34494098.02 0.2676 0.0089 *

Uranus 89729-11-11 05:17 G 34494218.63 34494218.72 34494218.80 0.0139 0.0127

Jupiter 89730-05-24 12:15 G 34494412.81 34494413.01 34494413.22 0.0496 0.0019

Uranus 89730-06-25 12:58 G 34494444.89 34494445.04 34494445.20 0.0139 0.0098

Jupiter 89731-01-15 18:43 G 34494649.22 34494649.28 34494649.37 0.0495 0.0459

Uranus 89731-02-06 20:24 G 34494671.18 34494671.35 34494671.55 0.0138 0.0069

Uranus 89731-09-21 04:05 G 34494897.47 34494897.67 34494897.88 0.0138 0.0039

Uranus 89732-05-04 11:31 G 34495123.77 34495123.98 34495124.20 0.0138 0.0010

Mars 89732-05-27 02:24 G 34495146.52 34495146.60 34495146.67 0.1948 0.1736

Uranus 89732-12-16 18:43 G 34495350.07 34495350.28 34495350.50 0.0138 0.0020

Mars 89733-04-26 09:07 G 34495480.70 34495480.88 34495481.05 0.1589 0.0165

Uranus 89733-07-31 01:41 G 34495576.38 34495576.57 34495576.78 0.0138 0.0049

Uranus 89734-03-14 08:39 G 34495802.69 34495802.86 34495803.04 0.0137 0.0077

Saturn 89734-06-12 23:17 G 34495893.28 34495893.47 34495893.67 0.0292 0.0129

Uranus 89734-10-26 15:07 G 34496029.01 34496029.13 34496029.28 0.0137 0.0105

Saturn 89735-01-28 21:22 G 34496123.20 34496123.39 34496123.60 0.0289 0.0101

Uranus 89735-06-09 21:51 G 34496255.36 34496255.41 34496255.47 0.0137 0.0132

Jupiter 89736-03-22 00:43 G 34496541.34 34496541.53 34496541.72 0.0529 0.0188

Jupiter 89736-11-14 17:31 G 34496779.10 34496779.23 34496779.36 0.0531 0.0400

Jupiter 89742-01-27 13:55 G 34498678.88 34498679.08 34498679.28 0.0497 0.0149

Jupiter 89742-09-20 21:36 G 34498915.25 34498915.40 34498915.56 0.0495 0.0332

Jupiter 89747-11-25 18:15 G 34500807.11 34500807.26 34500807.41 0.0528 0.0347

Jupiter 89748-07-20 09:36 G 34501044.72 34501044.90 34501045.08 0.0531 0.0238

Saturn 89750-02-18 20:24 G 34501623.23 34501623.35 34501623.48 0.0269 0.0217

Saturn 89750-10-05 23:17 G 34501852.26 34501852.47 34501852.68 0.0271 0.0039

Saturn 89751-05-23 03:36 G 34502081.48 34502081.65 34502081.83 0.0274 0.0147

Jupiter 89753-10-02 14:53 G 34502944.96 34502945.12 34502945.29 0.0497 0.0283

Jupiter 89754-05-27 00:00 G 34503181.32 34503181.50 34503181.69 0.0495 0.0202

Neptune 89754-09-19 19:12 G 34503297.24 34503297.30 34503297.40 0.0089 0.0082

Neptune 89755-05-03 08:10 G 34503522.74 34503522.84 34503522.99 0.0089 0.0072

Neptune 89755-12-14 21:36 G 34503748.25 34503748.40 34503748.56 0.0089 0.0061

Neptune 89756-07-27 10:34 G 34503973.77 34503973.94 34503974.13 0.0089 0.0051

Neptune 89757-03-09 23:31 G 34504199.30 34504199.48 34504199.69 0.0089 0.0041

Neptune 89757-10-21 12:43 G 34504424.83 34504425.03 34504425.25 0.0089 0.0030

Neptune 89758-06-04 01:55 G 34504650.37 34504650.58 34504650.80 0.0089 0.0020

Neptune 89759-01-15 15:07 G 34504875.91 34504876.13 34504876.35 0.0089 0.0009

Jupiter 89759-07-31 13:41 G 34505073.01 34505073.07 34505073.14 0.0527 0.0498

Neptune 89759-08-29 04:19 G 34505101.46 34505101.68 34505101.90 0.0089 0.0002

Jupiter 89760-03-25 03:07 G 34505310.43 34505310.63 34505310.83 0.0530 0.0076

Neptune 89760-04-10 17:17 G 34505327.01 34505327.22 34505327.45 0.0089 0.0012

Neptune 89760-11-22 06:15 G 34505552.56 34505552.76 34505552.99 0.0089 0.0023

Neptune 89761-07-05 19:27 G 34505778.12 34505778.31 34505778.53 0.0089 0.0033

Neptune 89762-02-16 08:53 G 34506003.68 34506003.87 34506004.06 0.0089 0.0043

Neptune 89762-09-29 21:36 G 34506229.24 34506229.40 34506229.59 0.0089 0.0054

Neptune 89763-05-13 11:03 G 34506454.82 34506454.96 34506455.12 0.0089 0.0064

Saturn 89763-12-24 00:00 G 34506679.31 34506679.50 34506679.70 0.0292 0.0105

Neptune 89763-12-25 00:29 G 34506680.40 34506680.52 34506680.64 0.0089 0.0074

Neptune 89764-08-06 12:58 G 34506906.00 34506906.04 34506906.13 0.0089 0.0085

Saturn 89764-08-09 22:19 G 34506909.24 34506909.43 34506909.63 0.0289 0.0125

Mars 89765-04-25 01:27 G 34507167.55 34507167.56 34507167.56 0.1588 0.1587

Jupiter 89765-06-07 12:00 G 34507210.90 34507211.00 34507211.12 0.0499 0.0423

Jupiter 89766-01-29 23:17 G 34507447.27 34507447.47 34507447.67 0.0496 0.0064

Jupiter 89771-11-28 20:24 G 34509576.15 34509576.35 34509576.55 0.0529 0.0086

Jupiter 89772-07-23 13:55 G 34509814.02 34509814.08 34509814.15 0.0530 0.0500

Uranus 89773-11-04 07:27 G 34510282.71 34510282.81 34510282.92 0.0139 0.0121

Uranus 89774-06-18 17:03 G 34510509.05 34510509.21 34510509.38 0.0139 0.0091

Uranus 89775-01-31 02:24 G 34510735.42 34510735.60 34510735.81 0.0140 0.0061

Uranus 89775-09-14 12:29 G 34510961.81 34510962.02 34510962.24 0.0140 0.0030

Uranus 89776-04-27 22:48 G 34511188.23 34511188.45 34511188.67 0.0140 0.0003

Uranus 89776-12-10 08:53 G 34511414.66 34511414.87 34511415.09 0.0140 0.0033

Uranus 89777-07-24 18:58 G 34511641.11 34511641.29 34511641.50 0.0141 0.0065

Jupiter 89777-10-05 00:43 G 34511713.33 34511713.53 34511713.73 0.0497 0.0070

Uranus 89778-03-08 05:31 G 34511867.58 34511867.73 34511867.90 0.0141 0.0096

Jupiter 89778-05-29 08:10 G 34511949.73 34511949.84 34511949.96 0.0496 0.0408

Uranus 89778-10-20 16:19 G 34512094.09 34512094.18 34512094.28 0.0141 0.0127

Saturn 89779-08-31 23:17 G 34512409.33 34512409.47 34512409.63 0.0268 0.0191

Saturn 89780-04-17 02:24 G 34512638.39 34512638.60 34512638.81 0.0271 0.0011

Saturn 89780-12-02 06:58 G 34512867.63 34512867.79 34512867.95 0.0274 0.0175

Jupiter 89783-08-03 12:00 G 34513841.82 34513842.00 34513842.18 0.0528 0.0248

Jupiter 89784-03-28 03:51 G 34514079.51 34514079.66 34514079.82 0.0530 0.0338

Jupiter 89789-06-10 02:10 G 34515979.40 34515979.59 34515979.78 0.0497 0.0203

Jupiter 89790-02-01 11:03 G 34516215.79 34516215.96 34516216.13 0.0496 0.0281

Pluto 89791-11-11 05:46 G 34516863.54 34516863.74 34516863.96 0.0078 0.0027

Pluto 89792-06-23 15:36 G 34517088.98 34517089.15 34517089.35 0.0078 0.0045

Saturn 89793-07-05 03:51 G 34517465.46 34517465.66 34517465.87 0.0292 0.0076

Saturn 89794-02-20 01:55 G 34517695.40 34517695.58 34517695.76 0.0289 0.0153

Jupiter 89795-04-08 05:17 G 34518107.59 34518107.72 34518107.85 0.0527 0.0406

Jupiter 89795-12-01 19:12 G 34518345.11 34518345.30 34518345.49 0.0530 0.0174

Mars 89798-03-24 04:34 G 34519188.54 34519188.69 34519188.83 0.1948 0.0991

Mars 89799-02-21 22:05 G 34519523.25 34519523.42 34519523.59 0.1589 0.0314

Jupiter 89801-02-14 03:07 G 34520245.48 34520245.63 34520245.78 0.0498 0.0337

Jupiter 89801-10-08 13:27 G 34520481.86 34520482.06 34520482.25 0.0496 0.0150

Jupiter 89807-08-07 11:31 G 34522610.78 34522610.98 34522611.19 0.0530 0.0014

Saturn 89809-03-13 23:46 G 34523195.33 34523195.49 34523195.66 0.0269 0.0171

Saturn 89809-10-29 02:53 G 34523424.41 34523424.62 34523424.83 0.0271 0.0009

Saturn 89810-06-15 07:12 G 34523653.66 34523653.80 34523653.95 0.0274 0.0195

Jupiter 89812-10-20 03:22 G 34524511.58 34524511.64 34524511.71 0.0499 0.0470

Jupiter 89813-06-13 14:53 G 34524747.92 34524748.12 34524748.33 0.0496 0.0020

Jupiter 89814-02-04 21:07 G 34524984.36 34524984.38 34524984.41 0.0495 0.0489

Uranus 89814-02-23 19:12 G 34525003.20 34525003.30 34525003.45 0.0139 0.0113

Uranus 89814-10-08 03:22 G 34525229.48 34525229.64 34525229.82 0.0138 0.0083

Uranus 89815-05-22 11:03 G 34525455.77 34525455.96 34525456.17 0.0138 0.0054

Uranus 89816-01-03 18:43 G 34525682.07 34525682.28 34525682.49 0.0138 0.0024

Uranus 89816-08-17 01:55 G 34525908.37 34525908.58 34525908.80 0.0138 0.0006

Uranus 89817-03-31 09:07 G 34526134.67 34526134.88 34526135.09 0.0138 0.0034

Uranus 89817-11-12 16:05 G 34526360.99 34526361.17 34526361.37 0.0137 0.0063

Uranus 89818-06-26 22:34 G 34526587.30 34526587.44 34526587.62 0.0137 0.0092

Uranus 89819-02-08 05:17 G 34526813.63 34526813.72 34526813.84 0.0137 0.0119

Jupiter 89819-04-12 06:00 G 34526876.56 34526876.75 34526876.95 0.0529 0.0151

Jupiter 89819-12-05 23:03 G 34527114.35 34527114.46 34527114.58 0.0531 0.0438

Saturn 89822-05-31 04:19 G 34528021.64 34528021.68 34528021.73 0.0295 0.0287

Saturn 89823-01-16 04:19 G 34528251.48 34528251.68 34528251.90 0.0292 0.0052

Saturn 89823-09-03 02:39 G 34528481.44 34528481.61 34528481.78 0.0289 0.0177

Jupiter 89825-02-16 13:12 G 34529013.85 34529014.05 34529014.25 0.0497 0.0123

Jupiter 89825-10-10 21:22 G 34529250.25 34529250.39 34529250.53 0.0496 0.0358

Jupiter 89830-12-16 00:00 G 34531142.34 34531142.50 34531142.67 0.0528 0.0308

Mars 89831-02-21 14:10 G 34531210.02 34531210.09 34531210.16 0.1588 0.1433

Jupiter 89831-08-10 15:07 G 34531379.96 34531380.13 34531380.31 0.0530 0.0278

Jupiter 89836-10-22 13:55 G 34533279.90 34533280.08 34533280.25 0.0498 0.0259

Jupiter 89837-06-15 23:17 G 34533516.29 34533516.47 34533516.65 0.0496 0.0228

Neptune 89838-02-01 03:22 G 34533746.58 34533746.64 34533746.74 0.0088 0.0082

Neptune 89838-09-14 16:19 G 34533972.08 34533972.18 34533972.33 0.0088 0.0072

Saturn 89838-09-24 03:22 G 34533981.47 34533981.64 34533981.83 0.0269 0.0143

Neptune 89839-04-28 05:46 G 34534197.59 34534197.74 34534197.91 0.0088 0.0061

Saturn 89839-05-11 06:29 G 34534210.56 34534210.77 34534210.98 0.0271 0.0037

Neptune 89839-12-09 18:43 G 34534423.11 34534423.28 34534423.47 0.0088 0.0051

Saturn 89839-12-26 10:48 G 34534439.84 34534439.95 34534440.08 0.0274 0.0224

Neptune 89840-07-22 07:27 G 34534648.63 34534648.81 34534649.02 0.0088 0.0041

Neptune 89841-03-04 20:53 G 34534874.16 34534874.37 34534874.57 0.0088 0.0030

Neptune 89841-10-16 09:51 G 34535099.70 34535099.91 34535100.13 0.0088 0.0020

Neptune 89842-05-29 22:48 G 34535325.23 34535325.45 34535325.67 0.0089 0.0009

Jupiter 89842-08-20 16:34 G 34535408.10 34535408.19 34535408.28 0.0527 0.0464

Neptune 89843-01-10 11:31 G 34535550.77 34535550.98 34535551.21 0.0089 0.0002

Earth 89843-01-16 20:53 G 34535557.22 34535557.37 34535557.53 0.2649 0.0197

Moon 89843-01-16 23:03 G 34535557.30 34535557.46 34535557.63 0.2644 0.0342 *

Jupiter 89843-04-15 05:46 G 34535645.54 34535645.74 34535645.93 0.0530 0.0112

Neptune 89843-08-24 00:29 G 34535776.30 34535776.52 34535776.74 0.0089 0.0011

Neptune 89844-04-05 13:12 G 34536001.84 34536002.05 34536002.27 0.0089 0.0022

Neptune 89844-11-17 02:24 G 34536227.39 34536227.60 34536227.80 0.0089 0.0032

Neptune 89845-06-30 14:53 G 34536452.94 34536453.12 34536453.33 0.0089 0.0043

Neptune 89846-02-11 03:51 G 34536678.49 34536678.66 34536678.85 0.0089 0.0053

Neptune 89846-09-24 16:48 G 34536904.05 34536904.20 34536904.36 0.0089 0.0063

Neptune 89847-05-08 05:17 G 34537129.62 34537129.72 34537129.87 0.0089 0.0074

Neptune 89847-12-19 18:15 G 34537355.21 34537355.26 34537355.35 0.0089 0.0084

Jupiter 89848-06-27 14:24 G 34537545.98 34537546.10 34537546.23 0.0499 0.0392

Jupiter 89849-02-19 01:41 G 34537782.36 34537782.57 34537782.77 0.0496 0.0097

Saturn 89851-12-11 09:07 G 34538807.79 34538807.88 34538807.99 0.0295 0.0258

Saturn 89852-07-28 09:07 G 34539037.67 34539037.88 34539038.09 0.0292 0.0022

Saturn 89853-03-15 06:58 G 34539267.64 34539267.79 34539267.94 0.0289 0.0206

Jupiter 89854-12-18 21:22 G 34539911.19 34539911.39 34539911.59 0.0529 0.0054

Uranus 89857-07-05 15:51 G 34540841.12 34540841.16 34540841.24 0.0139 0.0133

Uranus 89858-02-17 01:12 G 34541067.42 34541067.55 34541067.71 0.0139 0.0104

Uranus 89858-10-01 11:03 G 34541293.78 34541293.96 34541294.15 0.0140 0.0073

Uranus 89859-05-15 20:53 G 34541520.17 34541520.37 34541520.59 0.0140 0.0043

Uranus 89859-12-28 06:58 G 34541746.57 34541746.79 34541747.01 0.0140 0.0012

Uranus 89860-08-10 17:03 G 34541972.99 34541973.21 34541973.43 0.0140 0.0019

Jupiter 89860-10-25 03:22 G 34542048.44 34542048.64 34542048.85 0.0497 0.0037

Uranus 89861-03-25 03:07 G 34542199.43 34542199.63 34542199.84 0.0141 0.0051

Jupiter 89861-06-18 10:19 G 34542284.84 34542284.93 34542285.03 0.0495 0.0439

Uranus 89861-11-06 13:41 G 34542425.89 34542426.07 34542426.25 0.0141 0.0082

Uranus 89862-06-21 00:00 G 34542652.39 34542652.50 34542652.64 0.0141 0.0114

Mars 89864-01-20 06:00 G 34543230.58 34543230.75 34543230.92 0.1947 0.0219

Mars 89864-12-20 10:34 G 34543565.78 34543565.94 34543566.11 0.1589 0.0472

Jupiter 89866-08-23 14:10 G 34544176.91 34544177.09 34544177.27 0.0529 0.0216

Jupiter 89867-04-18 06:29 G 34544414.64 34544414.77 34544414.92 0.0531 0.0374

Saturn 89868-04-05 04:48 G 34544767.51 34544767.70 34544767.88 0.0269 0.0123

Saturn 89868-11-20 07:55 G 34544996.62 34544996.83 34544997.03 0.0272 0.0059

Saturn 89869-07-07 12:15 G 34545225.92 34545226.01 34545226.11 0.0274 0.0246

Jupiter 89872-06-30 04:19 G 34546314.48 34546314.68 34546314.87 0.0497 0.0172

Jupiter	89873-02-21 12:29 G	34546550.87	34546551.02	34546551.18	0.0495	0.0312
Jupiter	89878-04-28 09:22 G	34548442.75	34548442.89	34548443.03	0.0528	0.0372
Jupiter	89878-12-21 23:46 G	34548680.31	34548680.49	34548680.68	0.0530	0.0212
Saturn	89881-06-22 10:34 G	34549593.82	34549593.94	34549594.08	0.0294	0.0232
Saturn	89882-02-07 10:48 G	34549823.73	34549823.95	34549824.16	0.0292	0.0008
Saturn	89882-09-25 08:39 G	34550053.74	34550053.86	34550053.99	0.0289	0.0232
Jupiter	89884-03-05 01:41 G	34550580.41	34550580.57	34550580.73	0.0498	0.0313
Jupiter	89884-10-27 11:46 G	34550816.80	34550816.99	34550817.18	0.0496	0.0175
Jupiter	89890-01-01 04:05 G	34552708.65	34552708.67	34552708.70	0.0527	0.0523
Jupiter	89890-08-26 16:34 G	34552945.99	34552946.19	34552946.39	0.0530	0.0050
Jupiter	89895-11-09 01:12 G	34554846.47	34554846.55	34554846.64	0.0499	0.0448
Jupiter	89896-07-02 12:58 G	34555082.84	34555083.04	34555083.25	0.0496	0.0041
Mars	89896-12-19 02:53 G	34555252.52	34555252.62	34555252.72	0.1588	0.1284
Saturn	89897-10-16 09:22 G	34555553.69	34555553.89	34555554.09	0.0269	0.0093
Uranus	89897-10-24 03:22 G	34555561.57	34555561.64	34555561.75	0.0139	0.0126
Saturn	89898-06-02 12:29 G	34555782.82	34555783.02	34555783.22	0.0271	0.0088
Uranus	89898-06-07 11:46 G	34555787.84	34555787.99	34555788.15	0.0139	0.0096
Uranus	89899-01-19 19:27 G	34556014.13	34556014.31	34556014.50	0.0138	0.0067
Uranus	89899-09-03 02:53 G	34556240.42	34556240.62	34556240.84	0.0138	0.0038
Uranus	89900-04-17 10:19 G	34556466.72	34556466.93	34556467.15	0.0138	0.0009
Uranus	89900-11-29 17:46 G	34556693.03	34556693.24	34556693.46	0.0138	0.0021
Uranus	89901-07-14 00:43 G	34556919.34	34556919.53	34556919.74	0.0138	0.0050
Uranus	89902-02-25 07:41 G	34557145.64	34557145.82	34557146.00	0.0137	0.0078
Jupiter	89902-05-02 07:41 G	34557211.62	34557211.82	34557212.01	0.0529	0.0116
Uranus	89902-10-09 13:55 G	34557371.96	34557372.08	34557372.23	0.0137	0.0106
Jupiter	89902-12-26 00:15 G	34557449.43	34557449.51	34557449.61	0.0530	0.0472
Uranus	89903-05-23 20:39 G	34557598.32	34557598.36	34557598.41	0.0137	0.0133
Jupiter	89908-03-08 14:39 G	34559348.91	34559349.11	34559349.31	0.0497	0.0093
Jupiter	89908-10-30 22:34 G	34559585.32	34559585.44	34559585.57	0.0496	0.0389
Saturn	89911-01-03 16:48 G	34560380.05	34560380.20	34560380.36	0.0294	0.0200

Saturn 89911-08-21 16:19 G 34560609.97 34560610.18 34560610.39 0.0291 0.0036

Saturn 89912-04-07 13:55 G 34560840.00 34560840.08 34560840.17 0.0288 0.0263

Jupiter 89914-01-05 00:00 G 34561477.33 34561477.50 34561477.67 0.0528 0.0278

Jupiter 89914-08-30 14:53 G 34561714.96 34561715.12 34561715.29 0.0530 0.0309

Neptune 89918-12-24 06:00 G 34563291.71 34563291.75 34563291.84 0.0089 0.0085

Neptune 89919-08-06 18:58 G 34563517.20 34563517.29 34563517.43 0.0089 0.0075

Jupiter 89919-11-12 15:36 G 34563614.97 34563615.15 34563615.33 0.0498 0.0228

Neptune 89920-03-19 08:24 G 34563742.71 34563742.85 34563743.01 0.0089 0.0064

Jupiter 89920-07-06 00:43 G 34563851.36 34563851.53 34563851.70 0.0496 0.0259

Neptune 89920-10-30 21:22 G 34563968.23 34563968.39 34563968.58 0.0089 0.0054

Neptune 89921-06-13 10:48 G 34564193.76 34564193.95 34564194.14 0.0089 0.0043

Neptune 89922-01-24 23:31 G 34564419.28 34564419.48 34564419.69 0.0089 0.0033

Neptune 89922-09-07 12:29 G 34564644.82 34564645.02 34564645.24 0.0089 0.0023

Neptune 89923-04-21 01:55 G 34564870.36 34564870.58 34564870.80 0.0089 0.0012

Neptune 89923-12-02 14:53 G 34565095.90 34565096.12 34565096.34 0.0089 0.0002

Neptune 89924-07-15 03:51 G 34565321.45 34565321.66 34565321.88 0.0089 0.0009

Neptune 89925-02-25 16:48 G 34565546.99 34565547.20 34565547.42 0.0089 0.0020

Jupiter 89925-09-09 17:03 G 34565743.10 34565743.21 34565743.32 0.0527 0.0437

Neptune 89925-10-09 06:00 G 34565772.55 34565772.75 34565772.96 0.0089 0.0030

Jupiter 89926-05-05 06:43 G 34565980.58 34565980.78 34565980.97 0.0530 0.0144

Neptune 89926-05-22 18:58 G 34565998.11 34565998.29 34565998.50 0.0089 0.0041

Saturn 89926-09-12 09:51 G 34566110.84 34566110.91 34566111.00 0.0267 0.0246

Neptune 89927-01-03 08:10 G 34566223.68 34566223.84 34566224.04 0.0089 0.0051

Saturn 89927-04-29 12:00 G 34566339.79 34566340.00 34566340.20 0.0270 0.0070

Neptune 89927-08-16 21:36 G 34566449.24 34566449.40 34566449.56 0.0089 0.0061

Saturn 89927-12-14 15:07 G 34566568.94 34566569.13 34566569.33 0.0272 0.0113

Neptune 89928-03-29 10:19 G 34566674.82 34566674.93 34566675.08 0.0089 0.0072

Neptune 89928-11-09 23:31 G 34566900.42 34566900.48 34566900.58 0.0089 0.0082

Mars 89929-11-17 07:41 G 34567272.65 34567272.82 34567272.98 0.1947 0.0543

Mars 89930-10-18 23:31 G 34567608.31 34567608.48 34567608.64 0.1590 0.0622

Jupiter 89931-07-18 15:36 G 34567881.01 34567881.15 34567881.29 0.0498 0.0364

Jupiter 89932-03-11 02:10 G 34568117.39 34568117.59 34568117.79 0.0496 0.0126

Jupiter 89938-01-08 00:29 G 34570246.32 34570246.52 34570246.72 0.0530 0.0020

Saturn 89940-07-15 19:27 G 34571166.14 34571166.31 34571166.48 0.0294 0.0171

Saturn 89941-03-02 18:58 G 34571396.08 34571396.29 34571396.50 0.0291 0.0064

Uranus 89941-10-18 10:05 G 34571625.81 34571625.92 34571626.05 0.0139 0.0116

Uranus 89942-06-01 19:41 G 34571852.16 34571852.32 34571852.50 0.0140 0.0086

Uranus 89943-01-14 05:31 G 34572078.53 34572078.73 34572078.93 0.0140 0.0055

Uranus 89943-08-28 15:07 G 34572304.92 34572305.13 34572305.35 0.0140 0.0025

Jupiter 89943-11-15 00:43 G 34572383.32 34572383.53 34572383.73 0.0496 0.0014

Uranus 89944-04-11 01:12 G 34572531.34 34572531.55 34572531.77 0.0140 0.0007

Jupiter 89944-07-08 07:27 G 34572619.75 34572619.81 34572619.89 0.0495 0.0463

Uranus 89944-11-23 11:31 G 34572757.77 34572757.98 34572758.19 0.0140 0.0038

Uranus 89945-07-07 21:51 G 34572984.22 34572984.41 34572984.60 0.0141 0.0069

Uranus 89946-02-19 08:24 G 34573210.70 34573210.85 34573211.00 0.0141 0.0100

Uranus 89946-10-03 18:29 G 34573437.22 34573437.27 34573437.37 0.0141 0.0133

Jupiter 89949-09-12 17:46 G 34574512.06 34574512.24 34574512.43 0.0529 0.0180

Jupiter 89950-05-08 10:19 G 34574749.80 34574749.93 34574750.06 0.0530 0.0410

Pluto 89950-11-21 20:39 G 34574947.17 34574947.36 34574947.56 0.0066 0.0030

Pluto 89951-07-05 00:43 G 34575172.33 34575172.53 34575172.76 0.0066 0.0012

Pluto 89952-02-15 04:48 G 34575397.60 34575397.70 34575397.85 0.0066 0.0055

Jupiter 89955-07-21 00:58 G 34576649.35 34576649.54 34576649.74 0.0497 0.0150

Jupiter 89956-03-13 09:22 G 34576885.75 34576885.89 34576886.05 0.0496 0.0334

Saturn 89956-03-24 14:39 G 34576897.00 34576897.11 34576897.24 0.0267 0.0218

Saturn 89956-11-08 17:03 G 34577126.01 34577126.21 34577126.42 0.0270 0.0040

Saturn 89957-06-25 20:39 G 34577355.18 34577355.36 34577355.54 0.0272 0.0143

Jupiter 89961-05-18 09:36 G 34578777.75 34578777.90 34578778.05 0.0528 0.0341

Jupiter 89962-01-10 23:46 G 34579015.31 34579015.49 34579015.67 0.0530 0.0244

Mars 89962-10-17 15:22 G 34579295.02 34579295.14 34579295.26 0.1588 0.1128

Moon 89964-07-17 09:51 G 34579933.85 34579933.91 34579933.96 0.2682 0.2501

Jupiter 89967-03-26 01:41 G 34580915.41 34580915.57 34580915.74 0.0498 0.0285

Jupiter 89967-11-17 11:46 G 34581151.81 34581151.99 34581152.18 0.0496 0.0205

Saturn 89970-01-26 03:22 G 34581952.45 34581952.64 34581952.82 0.0294 0.0136

Saturn 89970-09-13 02:24 G 34582182.40 34582182.60 34582182.80 0.0291 0.0099

Moon 89972-07-15 00:43 G 34582853.41 34582853.53 34582853.66 0.2689 0.1539

Earth 89972-07-15 05:03 G 34582853.55 34582853.71 34582853.86 0.2684 0.0718 *

Jupiter 89973-01-21 02:39 G 34583043.54 34583043.61 34583043.67 0.0527 0.0497

Jupiter 89973-09-15 14:53 G 34583280.92 34583281.12 34583281.32 0.0530 0.0078

Jupiter 89978-11-29 01:41 G 34585181.47 34585181.57 34585181.69 0.0499 0.0421

Jupiter 89979-07-23 13:12 G 34585417.85 34585418.05 34585418.26 0.0496 0.0071

Uranus 89981-06-24 12:00 G 34586120.00 34586120.00 34586120.03 0.0139 0.0139

Uranus 89982-02-05 20:24 G 34586346.22 34586346.35 34586346.48 0.0139 0.0109

Uranus 89982-09-20 04:05 G 34586572.50 34586572.67 34586572.85 0.0138 0.0080

Uranus 89983-05-04 11:46 G 34586798.79 34586798.99 34586799.19 0.0138 0.0051

Uranus 89983-12-16 19:12 G 34587025.09 34587025.30 34587025.52 0.0138 0.0022

Uranus 89984-07-30 02:39 G 34587251.39 34587251.61 34587251.82 0.0138 0.0008

Uranus 89985-03-13 09:22 G 34587477.69 34587477.89 34587478.11 0.0138 0.0037

Jupiter 89985-05-21 06:29 G 34587546.58 34587546.77 34587546.97 0.0529 0.0090

Saturn 89985-10-04 19:12 G 34587683.16 34587683.30 34587683.45 0.0268 0.0192

Uranus 89985-10-25 16:34 G 34587704.00 34587704.19 34587704.38 0.0137 0.0065

Jupiter 89986-01-13 23:46 G 34587784.43 34587784.49 34587784.56 0.0531 0.0502

Saturn 89986-05-21 21:22 G 34587912.18 34587912.39 34587912.60 0.0270 0.0014

Uranus 89986-06-08 22:48 G 34587930.31 34587930.45 34587930.63 0.0137 0.0094

Saturn 89987-01-06 00:58 G 34588141.38 34588141.54 34588141.70 0.0273 0.0171

Uranus 89987-01-21 05:17 G 34588156.64 34588156.72 34588156.84 0.0137 0.0121

Jupiter 89991-03-28 14:10 G 34589683.89 34589684.09 34589684.29 0.0497 0.0066

Jupiter 89991-11-19 21:36 G 34589920.29 34589920.40 34589920.51 0.0495 0.0415

Mars 89995-09-14 09:51 G 34591314.78 34591314.91 34591315.04 0.1946 0.1279

Mars 89996-08-15 12:00 G 34591650.85 34591651.00 34591651.16 0.1590 0.0780

Jupiter 89997-01-24 00:43 G 34591812.35 34591812.53 34591812.71 0.0529 0.0249

Jupiter 89997-09-18 16:34 G 34592050.04 34592050.19 34592050.34 0.0531 0.0342

Saturn 89999-08-08 07:27 G 34592738.61 34592738.81 34592739.01 0.0293 0.0105

Saturn 90000-03-25 06:29 G 34592968.58 34592968.77 34592968.96 0.0290 0.0129

91ST MILLENNIUM CE

This is a list of transits of Venus in the 91st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 90002-05-06 14:10 G 34593741.05 34593741.09 34593741.18 0.0088 0.0085

Jupiter 90002-12-01 12:00 G 34593949.81 34593950.00 34593950.19 0.0497 0.0206

Neptune 90002-12-18 03:07 G 34593966.54 34593966.63 34593966.78 0.0088 0.0075

Jupiter 90003-07-25 20:39 G 34594186.19 34594186.36 34594186.53 0.0495 0.0280

Neptune 90003-07-31 16:34 G 34594192.05 34594192.19 34594192.35 0.0088 0.0064

Neptune 90004-03-13 05:31 G 34594417.56 34594417.73 34594417.91 0.0088 0.0054

Neptune 90004-10-24 18:29 G 34594643.10 34594643.27 34594643.48 0.0088 0.0044

Neptune 90005-06-07 07:55 G 34594868.62 34594868.83 34594869.03 0.0088 0.0033

Neptune 90006-01-18 20:39 G 34595094.15 34595094.36 34595094.58 0.0088 0.0023

Neptune 90006-09-01 09:36 G 34595319.69 34595319.90 34595320.12 0.0089 0.0012

Neptune 90007-04-14 22:34 G 34595545.23 34595545.44 34595545.67 0.0089 0.0003

Neptune 90007-11-26 11:46 G 34595770.77 34595770.99 34595771.21 0.0089 0.0009

Neptune 90008-07-09 00:15 G 34595996.31 34595996.51 34595996.74 0.0089 0.0020

Jupiter 90008-09-28 18:43 G 34596078.16 34596078.28 34596078.41 0.0528 0.0405

Neptune 90009-02-19 13:12 G 34596221.85 34596222.05 34596222.27 0.0089 0.0030

Jupiter 90009-05-24 08:53 G 34596315.68 34596315.87 34596316.06 0.0530 0.0180

Neptune 90009-10-03 02:10 G 34596447.41 34596447.59 34596447.80 0.0089 0.0040

Neptune 90010-05-16 15:07 G 34596672.96 34596673.13 34596673.32 0.0089 0.0050

Neptune 90010-12-28 03:36 G 34596898.51 34596898.65 34596898.83 0.0089 0.0061

Neptune 90011-08-10 16:34 G 34597124.08 34597124.19 34597124.34 0.0089 0.0071

Neptune 90012-03-23 05:31 G 34597349.66 34597349.73 34597349.83 0.0089 0.0081

Jupiter 90014-08-06 11:31 G 34598215.83 34598215.98 34598216.13 0.0498 0.0343

Jupiter 90015-03-30 21:51 G 34598452.22 34598452.41 34598452.61 0.0496 0.0147

Saturn 90015-04-17 00:43 G 34598469.37 34598469.53 34598469.71 0.0268 0.0162

Saturn 90015-12-02 03:22 G 34598698.43 34598698.64 34598698.86 0.0270 0.0018

Saturn 90016-07-18 07:12 G 34598927.67 34598927.80 34598927.94 0.0273 0.0203

Jupiter 90021-01-26 22:48 G 34600581.25 34600581.45 34600581.65 0.0529 0.0012

Uranus 90025-06-17 18:00 G 34602184.18 34602184.25 34602184.35 0.0139 0.0128

Uranus 90026-01-30 03:22 G 34602410.50 34602410.64 34602410.81 0.0140 0.0099

Jupiter 90026-04-11 10:48 G 34602481.90 34602481.95 34602482.02 0.0499 0.0478

Uranus 90026-09-13 12:58 G 34602636.86 34602637.04 34602637.24 0.0140 0.0069

Jupiter 90026-12-03 23:17 G 34602718.27 34602718.47 34602718.68 0.0497 0.0015

Uranus 90027-04-27 22:48 G 34602863.25 34602863.45 34602863.67 0.0140 0.0038

Jupiter 90027-07-28 06:15 G 34602954.74 34602954.76 34602954.80 0.0496 0.0490

Uranus 90027-12-10 08:53 G 34603089.65 34603089.87 34603090.09 0.0140 0.0007

Uranus 90028-07-23 18:58 G 34603316.07 34603316.29 34603316.51 0.0140 0.0024

Mars 90028-08-14 04:19 G 34603337.54 34603337.68 34603337.82 0.1589 0.0981

Saturn 90029-02-17 16:19 G 34603524.98 34603525.18 34603525.39 0.0293 0.0068

Uranus 90029-03-07 05:03 G 34603542.51 34603542.71 34603542.92 0.0141 0.0055

Saturn 90029-10-05 15:07 G 34603754.96 34603755.13 34603755.31 0.0290 0.0165

Uranus 90029-10-19 15:36 G 34603768.98 34603769.15 34603769.32 0.0141 0.0086

Uranus 90030-06-03 01:55 G 34603995.48 34603995.58 34603995.72 0.0141 0.0118

Jupiter 90032-10-01 14:24 G 34604846.91 34604847.10 34604847.30 0.0529 0.0155

Jupiter 90033-05-27 06:43 G 34605084.66 34605084.78 34605084.89 0.0530 0.0436

Pluto 90038-07-24 02:39 G 34606968.42 34606968.61 34606968.81 0.0078 0.0038

Jupiter 90038-08-09 00:00 G 34606984.30 34606984.50 34606984.70 0.0497 0.0124

Pluto 90039-03-06 12:29 G 34607193.84 34607194.02 34607194.23 0.0078 0.0035

Jupiter 90039-04-02 08:24 G 34607220.71 34607220.85 34607220.99 0.0495 0.0360

Jupiter 90044-06-06 06:29 G 34609112.61 34609112.77 34609112.93 0.0528 0.0319

Saturn 90044-10-27 06:15 G 34609255.59 34609255.76 34609255.95 0.0268 0.0135

Jupiter 90045-01-29 21:07 G 34609350.21 34609350.38 34609350.56 0.0530 0.0270

Saturn 90045-06-13 08:53 G 34609484.67 34609484.87 34609485.08 0.0271 0.0047

Saturn 90046-01-28 12:58 G 34609713.93 34609714.04 34609714.15 0.0273 0.0233

Jupiter 90050-04-14 00:00 G 34611250.33 34611250.50 34611250.68 0.0498 0.0261

Jupiter 90050-12-06 09:36 G 34611486.72 34611486.90 34611487.09 0.0496 0.0230

Jupiter 90056-02-10 00:58 G 34613378.46 34613378.54 34613378.63 0.0527 0.0473

Jupiter 90056-10-04 14:10 G 34613615.89 34613616.09 34613616.29 0.0530 0.0107

Saturn 90058-01-12 22:19 G 34614081.35 34614081.43 34614081.51 0.0295 0.0271

Saturn 90058-08-30 22:34 G 34614311.23 34614311.44 34614311.65 0.0292 0.0033

Saturn 90059-04-17 21:07 G 34614541.23 34614541.38 34614541.54 0.0289 0.0198

Jupiter 90061-12-17 21:36 G 34615516.28 34615516.40 34615516.52 0.0498 0.0400

Mars 90062-06-13 00:58 G 34615693.40 34615693.54 34615693.68 0.1591 0.0928

Jupiter 90062-08-11 08:24 G 34615752.65 34615752.85 34615753.05 0.0496 0.0091

Uranus 90065-10-06 05:17 G 34616904.63 34616904.72 34616904.84 0.0139 0.0122

Uranus 90066-05-20 13:12 G 34617130.90 34617131.05 34617131.22 0.0139 0.0093

Uranus 90067-01-01 20:53 G 34617357.19 34617357.37 34617357.58 0.0138 0.0064

Uranus 90067-08-16 04:34 G 34617583.49 34617583.69 34617583.91 0.0138 0.0034

Uranus 90068-03-29 12:00 G 34617809.78 34617810.00 34617810.22 0.0138 0.0005

Jupiter 90068-06-09 06:43 G 34617881.58 34617881.78 34617881.98 0.0530 0.0058

Uranus 90068-11-10 19:12 G 34618036.09 34618036.30 34618036.51 0.0138 0.0024

Uranus 90069-06-25 01:55 G 34618262.39 34618262.58 34618262.79 0.0138 0.0053

Uranus 90070-02-06 08:39 G 34618488.70 34618488.86 34618489.05 0.0137 0.0081

Uranus 90070-09-20 15:07 G 34618715.02 34618715.13 34618715.28 0.0137 0.0109

Uranus 90071-05-04 21:36 G 34618941.39 34618941.40 34618941.44 0.0137 0.0136

Jupiter 90074-04-16 08:53 G 34620018.66 34620018.87 34620019.07 0.0496 0.0046

Saturn 90074-05-09 12:29 G 34620041.83 34620042.02 34620042.22 0.0269 0.0104

Jupiter 90074-12-08 16:19 G 34620255.08 34620255.18 34620255.27 0.0495 0.0435

Saturn 90074-12-24 15:36 G 34620270.95 34620271.15 34620271.35 0.0271 0.0079

Saturn 90075-08-10 19:41 G 34620500.28 34620500.32 34620500.38 0.0273 0.0266

Moon 90078-01-20 01:41 G 34621393.53 34621393.57 34621393.61 0.2650 0.2559

Jupiter 90080-02-12 21:51 G 34622147.23 34622147.41 34622147.59 0.0528 0.0223

Jupiter 90080-10-07 13:12 G 34622384.91 34622385.05 34622385.20 0.0530 0.0368

Neptune 90083-03-27 16:48 G 34623286.20 34623286.20 34623286.27 0.0089 0.0088

Neptune 90083-11-08 06:29 G 34623511.67 34623511.77 34623511.88 0.0089 0.0077

Neptune 90084-06-20 19:12 G 34623737.17 34623737.30 34623737.46 0.0089 0.0067

Neptune 90085-02-01 08:10 G 34623962.69 34623962.84 34623963.03 0.0089 0.0057

Neptune 90085-09-14 21:22 G 34624188.21 34624188.39 34624188.59 0.0089 0.0046

Jupiter 90085-12-20 09:07 G 34624284.69 34624284.88 34624285.08 0.0497 0.0183

Moon 90086-01-17 20:24 G 34624313.20 34624313.35 34624313.49 0.2653 0.0613

Earth 90086-01-18 00:00 G 34624313.35 34624313.50 34624313.66 0.2648 0.0099 *

Neptune 90086-04-28 10:34 G 34624413.75 34624413.94 34624414.15 0.0089 0.0036

Jupiter 90086-08-13 18:15 G 34624521.10 34624521.26 34624521.42 0.0496 0.0306

Neptune 90086-12-09 23:46 G 34624639.28 34624639.49 34624639.70 0.0089 0.0025

Neptune 90087-07-23 12:43 G 34624864.81 34624865.03 34624865.25 0.0089 0.0015

Saturn 90087-07-26 08:53 G 34624867.75 34624867.87 34624868.00 0.0295 0.0232

Neptune 90088-03-05 01:41 G 34625090.35 34625090.57 34625090.79 0.0089 0.0005

Saturn 90088-03-12 08:53 G 34625097.66 34625097.87 34625098.08 0.0292 0.0007

Neptune 90088-10-16 14:53 G 34625315.90 34625316.12 34625316.34 0.0089 0.0006

Saturn 90088-10-28 07:12 G 34625327.68 34625327.80 34625327.92 0.0289 0.0237

Neptune 90089-05-30 03:51 G 34625541.45 34625541.66 34625541.88 0.0089 0.0017

Neptune 90090-01-10 17:03 G 34625767.00 34625767.21 34625767.42 0.0089 0.0027

Neptune 90090-08-24 05:46 G 34625992.56 34625992.74 34625992.95 0.0089 0.0038

Neptune 90091-04-06 19:12 G 34626218.12 34626218.30 34626218.49 0.0089 0.0048

Jupiter 90091-10-18 14:10 G 34626412.96 34626413.09 34626413.23 0.0527 0.0384

Neptune 90091-11-18 07:55 G 34626443.69 34626443.83 34626444.02 0.0089 0.0059

Jupiter 90092-06-12 03:36 G 34626650.47 34626650.65 34626650.84 0.0530 0.0202

Neptune 90092-06-30 21:22 G 34626669.26 34626669.39 34626669.54 0.0089 0.0069

Neptune 90093-02-11 10:48 G 34626894.85 34626894.95 34626895.04 0.0089 0.0079

Mars 90094-06-11 16:48 G 34627380.05 34627380.20 34627380.36 0.1589 0.0825

Jupiter 90097-08-25 09:07 G 34628550.72 34628550.88 34628551.04 0.0498 0.0320

Jupiter 90098-04-18 19:41 G 34628787.13 34628787.32 34628787.51 0.0496 0.0172

Saturn 90103-04-05 17:31 G 34630599.16 34630599.23 34630599.30 0.0267 0.0250

Saturn 90103-11-20 19:27 G 34630828.11 34630828.31 34630828.51 0.0269 0.0073

Jupiter 90104-02-16 18:29 G 34630916.07 34630916.27 34630916.47 0.0530 0.0033

Saturn 90104-07-06 22:19 G 34631057.25 34631057.43 34631057.63 0.0272 0.0111

Jupiter 90109-05-01 08:10 G 34632816.77 34632816.84 34632816.93 0.0499 0.0456

Uranus 90109-09-30 10:05 G 34632968.80 34632968.92 34632969.06 0.0139 0.0113

Jupiter 90109-12-23 20:10 G 34633053.14 34633053.34 34633053.55 0.0496 0.0038

Uranus 90110-05-14 19:41 G 34633195.15 34633195.32 34633195.50 0.0140 0.0083

Uranus 90110-12-27 05:17 G 34633421.53 34633421.72 34633421.93 0.0140 0.0053

Uranus 90111-08-10 15:07 G 34633647.92 34633648.13 34633648.35 0.0140 0.0022

Uranus 90112-03-24 01:12 G 34633874.33 34633874.55 34633874.77 0.0140 0.0009

Uranus 90112-11-05 11:17 G 34634100.76 34634100.97 34634101.18 0.0140 0.0040

Uranus 90113-06-19 21:22 G 34634327.22 34634327.39 34634327.60 0.0141 0.0072

Uranus 90114-02-01 07:55 G 34634553.70 34634553.83 34634553.99 0.0141 0.0103

Uranus 90114-09-15 18:29 G 34634780.22 34634780.27 34634780.36 0.0141 0.0134

Jupiter 90115-10-22 11:46 G 34635181.79 34635181.99 34635182.18 0.0529 0.0131

Jupiter 90116-06-16 04:34 G 34635419.59 34635419.69 34635419.79 0.0531 0.0463

Saturn 90117-02-05 16:34 G 34635654.04 34635654.19 34635654.35 0.0294 0.0194

Saturn 90117-09-23 16:19 G 34635883.97 34635884.18 34635884.39 0.0291 0.0043

Saturn 90118-05-11 13:55 G 34636114.02 34636114.08 34636114.16 0.0288 0.0272

Jupiter 90121-08-28 18:43 G 34637319.08 34637319.28 34637319.48 0.0496 0.0103

Jupiter 90122-04-22 02:24 G 34637555.48 34637555.60 34637555.73 0.0495 0.0380

Jupiter 90127-06-27 04:48 G 34639447.54 34639447.70 34639447.87 0.0529 0.0292

Jupiter 90128-02-19 20:10 G 34639685.17 34639685.34 34639685.50 0.0531 0.0301

Mars 90128-04-10 13:12 G 34639735.92 34639736.05 34639736.18 0.1591 0.1091

Saturn	90132-10-15 23:31 G	34641385.36	34641385.48	34641385.60	0.0267	0.0220
Jupiter	90133-05-03 18:29 G	34641585.09	34641585.27	34641585.45	0.0497	0.0241
Saturn	90133-06-02 01:41 G	34641614.36	34641614.57	34641614.78	0.0269	0.0042
Jupiter	90133-12-26 03:36 G	34641821.48	34641821.65	34641821.83	0.0495	0.0248
Saturn	90134-01-17 05:03 G	34641843.53	34641843.71	34641843.89	0.0272	0.0142
Jupiter	90139-03-01 20:53 G	34643713.28	34643713.37	34643713.48	0.0527	0.0452
Jupiter	90139-10-25 09:51 G	34643950.72	34643950.91	34643951.11	0.0530	0.0131
Jupiter	90145-01-06 17:31 G	34645851.10	34645851.23	34645851.36	0.0499	0.0380
Jupiter	90145-08-31 04:48 G	34646087.50	34646087.70	34646087.90	0.0496	0.0115
Saturn	90146-08-19 03:51 G	34646440.48	34646440.66	34646440.84	0.0294	0.0153
Saturn	90147-04-06 03:22 G	34646670.44	34646670.64	34646670.84	0.0291	0.0084
Uranus	90149-06-06 13:41 G	34647463.04	34647463.07	34647463.14	0.0139	0.0135
Uranus	90150-01-18 21:36 G	34647689.28	34647689.40	34647689.56	0.0139	0.0106
Uranus	90150-09-02 05:31 G	34647915.56	34647915.73	34647915.92	0.0138	0.0077
Uranus	90151-04-16 13:12 G	34648141.85	34648142.05	34648142.26	0.0138	0.0047
Jupiter	90151-06-30 00:58 G	34648216.34	34648216.54	34648216.74	0.0529	0.0037
Uranus	90151-11-28 20:53 G	34648368.15	34648368.37	34648368.58	0.0138	0.0018
Uranus	90152-07-12 03:51 G	34648594.45	34648594.66	34648594.88	0.0138	0.0011
Uranus	90153-02-23 11:03 G	34648820.75	34648820.96	34648821.16	0.0138	0.0039
Uranus	90153-10-07 17:31 G	34649047.05	34649047.23	34649047.43	0.0137	0.0068
Uranus	90154-05-22 00:15 G	34649273.37	34649273.51	34649273.67	0.0137	0.0095
Uranus	90155-01-03 06:43 G	34649499.70	34649499.78	34649499.89	0.0137	0.0123
Jupiter	90157-05-06 05:31 G	34650353.53	34650353.73	34650353.94	0.0497	0.0025
Jupiter	90157-12-28 12:58 G	34650589.97	34650590.04	34650590.12	0.0495	0.0458
Mars	90159-05-09 15:36 G	34651087.03	34651087.15	34651087.28	0.1947	0.1374
Mars	90160-04-09 05:31 G	34651422.57	34651422.73	34651422.89	0.1589	0.0669
Saturn	90162-04-28 06:29 G	34652171.63	34652171.77	34652171.93	0.0268	0.0190
Saturn	90162-12-13 09:07 G	34652400.67	34652400.88	34652401.09	0.0270	0.0011
Jupiter	90163-03-04 16:05 G	34652481.99	34652482.17	34652482.36	0.0529	0.0204
Saturn	90163-07-30 12:29 G	34652629.86	34652630.02	34652630.18	0.0272	0.0176

Jupiter 90163-10-28 07:55 G 34652719.69 34652719.83 34652719.97 0.0530 0.0389

Neptune 90166-08-09 01:12 G 34653735.55 34653735.55 34653735.62 0.0088 0.0088

Neptune 90167-03-22 14:53 G 34653961.02 34653961.12 34653961.23 0.0088 0.0077

Neptune 90167-11-03 03:51 G 34654186.53 34654186.66 34654186.82 0.0088 0.0067

Neptune 90168-06-15 16:48 G 34654412.05 34654412.20 34654412.38 0.0088 0.0056

Jupiter 90169-01-09 05:31 G 34654619.54 34654619.73 34654619.93 0.0497 0.0161

Neptune 90169-01-27 06:00 G 34654637.57 34654637.75 34654637.94 0.0088 0.0046

Jupiter 90169-09-02 14:24 G 34654855.94 34654856.10 34654856.25 0.0495 0.0328

Neptune 90169-09-09 18:58 G 34654863.10 34654863.29 34654863.50 0.0088 0.0036

Neptune 90170-04-23 07:55 G 34655088.63 34655088.83 34655089.05 0.0088 0.0025

Neptune 90170-12-04 21:07 G 34655314.17 34655314.38 34655314.60 0.0088 0.0015

Neptune 90171-07-18 10:05 G 34655539.70 34655539.92 34655540.14 0.0089 0.0004

Neptune 90172-02-28 23:03 G 34655765.24 34655765.46 34655765.68 0.0089 0.0006

Neptune 90172-10-11 12:00 G 34655990.79 34655991.00 34655991.22 0.0089 0.0017

Neptune 90173-05-25 00:58 G 34656216.34 34656216.54 34656216.76 0.0089 0.0027

Neptune 90174-01-05 13:41 G 34656441.88 34656442.07 34656442.28 0.0089 0.0038

Neptune 90174-08-19 02:24 G 34656667.43 34656667.60 34656667.80 0.0089 0.0048

Jupiter 90174-11-07 09:51 G 34656747.76 34656747.91 34656748.05 0.0528 0.0364

Neptune 90175-04-01 15:22 G 34656892.99 34656893.14 34656893.32 0.0089 0.0058

Jupiter 90175-07-03 00:00 G 34656985.32 34656985.50 34656985.68 0.0530 0.0226

Neptune 90175-11-13 04:48 G 34657118.56 34657118.70 34657118.84 0.0089 0.0068

Saturn 90176-02-29 12:43 G 34657226.84 34657227.03 34657227.23 0.0293 0.0113

Neptune 90176-06-25 17:03 G 34657344.13 34657344.21 34657344.33 0.0089 0.0079

Saturn 90176-10-16 11:46 G 34657456.80 34657456.99 34657457.18 0.0290 0.0122

Neptune 90177-02-06 06:15 G 34657569.76 34657569.76 34657569.77 0.0089 0.0089

Jupiter 90180-09-14 04:05 G 34658885.50 34658885.67 34658885.83 0.0498 0.0300

Jupiter 90181-05-08 13:41 G 34659121.89 34659122.07 34659122.27 0.0495 0.0192

Jupiter 90186-07-13 03:36 G 34661013.62 34661013.65 34661013.68 0.0527 0.0518

Jupiter 90187-03-07 16:05 G 34661250.97 34661251.17 34661251.37 0.0530 0.0062

Saturn 90191-11-08 12:43 G 34662957.86 34662958.03 34662958.20 0.0268 0.0160

Jupiter 90192-05-20 02:39 G 34663151.52 34663151.61 34663151.71 0.0498 0.0438

Saturn 90192-06-24 15:07 G 34663186.92 34663187.13 34663187.34 0.0270 0.0021

Jupiter 90193-01-11 14:24 G 34663387.89 34663388.10 34663388.30 0.0496 0.0056

Saturn 90193-02-08 18:58 G 34663416.16 34663416.29 34663416.43 0.0273 0.0207

Uranus 90193-05-30 16:19 G 34663527.10 34663527.18 34663527.28 0.0139 0.0127

Uranus 90194-01-12 01:27 G 34663753.42 34663753.56 34663753.73 0.0139 0.0098

Mars 90194-02-06 02:10 G 34663778.48 34663778.59 34663778.70 0.1592 0.1239

Uranus 90194-08-26 10:48 G 34663979.78 34663979.95 34663980.16 0.0140 0.0068

Uranus 90195-04-09 20:39 G 34664206.16 34664206.36 34664206.58 0.0140 0.0037

Uranus 90195-11-22 06:43 G 34664432.56 34664432.78 34664433.00 0.0140 0.0006

Uranus 90196-07-05 16:48 G 34664658.98 34664659.20 34664659.42 0.0140 0.0025

Uranus 90197-02-17 02:53 G 34664885.42 34664885.62 34664885.82 0.0141 0.0056

Pluto 90197-08-02 20:10 G 34665052.15 34665052.34 34665052.54 0.0066 0.0030

Uranus 90197-10-01 13:12 G 34665111.88 34665112.05 34665112.23 0.0141 0.0087

Pluto 90198-03-16 00:29 G 34665277.31 34665277.52 34665277.74 0.0066 0.0012

Uranus 90198-05-15 23:46 G 34665338.38 34665338.49 34665338.62 0.0141 0.0118

Pluto 90198-10-27 04:34 G 34665502.59 34665502.69 34665502.84 0.0066 0.0054

Jupiter 90198-11-10 06:58 G 34665516.60 34665516.79 34665516.99 0.0529 0.0109

Jupiter 90199-07-05 23:17 G 34665754.40 34665754.47 34665754.56 0.0530 0.0486

Jupiter 90204-09-17 14:39 G 34667653.90 34667654.11 34667654.31 0.0497 0.0083

Jupiter 90205-05-11 22:48 G 34667890.33 34667890.45 34667890.57 0.0496 0.0403

Saturn 90205-09-12 00:00 G 34668013.30 34668013.50 34668013.71 0.0293 0.0072

Saturn 90206-04-29 23:03 G 34668243.28 34668243.46 34668243.63 0.0290 0.0163

Jupiter 90210-07-16 23:03 G 34669782.29 34669782.46 34669782.64 0.0528 0.0273

Jupiter 90211-03-11 13:41 G 34670019.91 34670020.07 34670020.23 0.0530 0.0320

Earth 90215-07-18 04:34 G 34671609.53 34671609.69 34671609.84 0.2685 0.0762

Moon 90215-07-18 09:51 G 34671609.75 34671609.91 34671610.08 0.2683 0.0082 *

Jupiter 90216-05-23 14:24 G 34671919.92 34671920.10 34671920.29 0.0498 0.0222

Jupiter 90217-01-15 00:00 G 34672156.33 34672156.50 34672156.68 0.0496 0.0271

Saturn 90221-05-21 19:55 G 34673744.15 34673744.33 34673744.52 0.0268 0.0128

Saturn 90222-01-05 22:34 G 34673973.23 34673973.44 34673973.65 0.0271 0.0054

Jupiter 90222-03-21 15:07 G 34674048.02 34674048.13 34674048.24 0.0527 0.0434

Saturn 90222-08-23 02:39 G 34674202.51 34674202.61 34674202.71 0.0273 0.0240

Jupiter 90222-11-14 03:51 G 34674285.47 34674285.66 34674285.86 0.0530 0.0151

Mars 90225-03-06 17:46 G 34675129.07 34675129.24 34675129.40 0.1947 0.0622

Mars 90226-02-05 18:29 G 34675465.10 34675465.27 34675465.43 0.1590 0.0518

Jupiter 90228-01-27 13:41 G 34676185.93 34676186.07 34676186.22 0.0498 0.0359

Jupiter 90228-09-20 00:58 G 34676422.35 34676422.54 34676422.74 0.0496 0.0136

Uranus 90233-09-19 05:31 G 34678247.62 34678247.73 34678247.84 0.0139 0.0119

Uranus 90234-05-03 12:58 G 34678473.90 34678474.04 34678474.22 0.0139 0.0091

Jupiter 90234-07-19 20:24 G 34678551.14 34678551.35 34678551.55 0.0530 0.0019

Saturn 90234-08-07 08:53 G 34678569.79 34678569.87 34678569.95 0.0295 0.0271

Uranus 90234-12-15 20:53 G 34678700.19 34678700.37 34678700.58 0.0138 0.0062

Saturn 90235-03-25 09:07 G 34678799.67 34678799.88 34678800.09 0.0292 0.0032

Uranus 90235-07-30 04:34 G 34678926.49 34678926.69 34678926.91 0.0138 0.0032

Saturn 90235-11-10 07:12 G 34679029.66 34679029.80 34679029.96 0.0289 0.0201

Uranus 90236-03-12 12:00 G 34679152.78 34679153.00 34679153.21 0.0138 0.0003

Uranus 90236-10-24 18:58 G 34679379.09 34679379.29 34679379.51 0.0138 0.0026

Uranus 90237-06-08 02:10 G 34679605.39 34679605.59 34679605.79 0.0138 0.0054

Uranus 90238-01-20 08:39 G 34679831.70 34679831.86 34679832.04 0.0137 0.0083

Uranus 90238-09-03 15:07 G 34680058.02 34680058.13 34680058.28 0.0137 0.0111

Jupiter 90239-10-02 12:00 G 34680451.99 34680452.00 34680452.03 0.0499 0.0496

Jupiter 90240-05-26 00:29 G 34680688.31 34680688.52 34680688.72 0.0496 0.0003

Jupiter 90241-01-17 07:12 G 34680924.75 34680924.80 34680924.86 0.0495 0.0477

Jupiter 90246-03-24 13:12 G 34682816.86 34682817.05 34682817.24 0.0529 0.0179

Jupiter 90246-11-17 05:31 G 34683054.61 34683054.73 34683054.86 0.0531 0.0418

Neptune 90248-02-11 17:17 G 34683506.15 34683506.22 34683506.33 0.0089 0.0080

Neptune 90248-09-24 06:15 G 34683731.65 34683731.76 34683731.92 0.0089 0.0070

Neptune 90249-05-07 19:41 G 34683957.17 34683957.32 34683957.49 0.0089 0.0059

Neptune 90249-12-19 08:39 G 34684182.69 34684182.86 34684183.05 0.0089 0.0049

Neptune 90250-08-01 21:36 G 34684408.21 34684408.40 34684408.61 0.0089 0.0039

Saturn 90250-12-02 00:58 G 34684530.34 34684530.54 34684530.74 0.0269 0.0101

Neptune 90251-03-15 10:48 G 34684633.75 34684633.95 34684634.16 0.0089 0.0028

Saturn 90251-07-19 03:51 G 34684759.46 34684759.66 34684759.86 0.0271 0.0082

Neptune 90251-10-26 23:46 G 34684859.28 34684859.49 34684859.72 0.0089 0.0018

Jupiter 90252-01-30 00:15 G 34684954.32 34684954.51 34684954.71 0.0497 0.0141

Saturn 90252-03-04 07:55 G 34684988.82 34684988.83 34684988.88 0.0273 0.0271

Neptune 90252-06-08 12:58 G 34685084.82 34685085.04 34685085.26 0.0089 0.0007

Jupiter 90252-09-22 08:39 G 34685190.72 34685190.86 34685191.01 0.0495 0.0348

Neptune 90253-01-20 01:55 G 34685310.36 34685310.58 34685310.80 0.0089 0.0004

Neptune 90253-09-02 14:53 G 34685535.91 34685536.12 34685536.34 0.0089 0.0014

Neptune 90254-04-16 03:51 G 34685761.46 34685761.66 34685761.89 0.0089 0.0025

Neptune 90254-11-27 17:03 G 34685987.02 34685987.21 34685987.42 0.0089 0.0035

Neptune 90255-07-11 05:46 G 34686212.57 34686212.74 34686212.95 0.0089 0.0046

Neptune 90256-02-21 18:58 G 34686438.13 34686438.29 34686438.47 0.0089 0.0056

Neptune 90256-10-04 08:24 G 34686663.70 34686663.85 34686663.99 0.0089 0.0066

Neptune 90257-05-17 21:07 G 34686889.29 34686889.38 34686889.51 0.0089 0.0077

Jupiter 90257-11-27 05:31 G 34687082.58 34687082.73 34687082.88 0.0528 0.0343

Neptune 90257-12-29 10:19 G 34687114.91 34687114.93 34687114.99 0.0089 0.0087

Jupiter 90258-07-22 19:12 G 34687320.13 34687320.30 34687320.48 0.0530 0.0249

Mars 90259-12-05 14:24 G 34687821.02 34687821.10 34687821.19 0.1592 0.1402

Jupiter 90263-10-04 23:17 G 34689220.30 34689220.47 34689220.64 0.0498 0.0282

Saturn 90264-02-17 19:27 G 34689356.19 34689356.31 34689356.45 0.0295 0.0231

Jupiter 90264-05-28 09:51 G 34689456.73 34689456.91 34689457.10 0.0496 0.0214

Saturn 90264-10-04 19:41 G 34689586.11 34689586.32 34689586.53 0.0292 0.0009

Saturn 90265-05-22 18:00 G 34689816.14 34689816.25 34689816.37 0.0290 0.0241

Jupiter 90269-08-01 22:48 G 34691348.40 34691348.45 34691348.52 0.0526 0.0499

Jupiter 90270-03-27 10:48 G 34691585.75 34691585.95 34691586.15 0.0529 0.0082

Jupiter 90275-06-09 22:19 G 34693486.32 34693486.43 34693486.54 0.0499 0.0420

Jupiter 90276-02-01 10:34 G 34693722.74 34693722.94 34693723.15 0.0496 0.0077

Uranus 90277-09-12 07:41 G 34694311.71 34694311.82 34694311.97 0.0139 0.0112

Uranus 90278-04-26 17:17 G 34694538.05 34694538.22 34694538.41 0.0140 0.0082

Uranus 90278-12-09 02:53 G 34694764.42 34694764.62 34694764.83 0.0140 0.0052

Uranus 90279-07-23 12:43 G 34694990.81 34694991.03 34694991.25 0.0140 0.0021

Saturn 90279-10-28 06:00 G 34695087.68 34695087.75 34695087.83 0.0267 0.0246

Uranus 90280-03-05 22:34 G 34695217.22 34695217.44 34695217.66 0.0140 0.0010

Saturn 90280-06-13 07:55 G 34695316.63 34695316.83 34695317.04 0.0269 0.0069

Uranus 90280-10-18 08:39 G 34695443.65 34695443.86 34695444.07 0.0140 0.0041

Saturn 90281-01-28 10:48 G 34695545.77 34695545.95 34695546.15 0.0271 0.0116

Uranus 90281-06-01 18:58 G 34695670.10 34695670.29 34695670.48 0.0141 0.0072

Jupiter 90281-11-30 01:27 G 34695851.36 34695851.56 34695851.76 0.0529 0.0089

Uranus 90282-01-14 05:17 G 34695896.58 34695896.72 34695896.88 0.0141 0.0103

Jupiter 90282-07-25 18:00 G 34696089.19 34696089.25 34696089.31 0.0530 0.0506

Uranus 90282-08-28 15:51 G 34696123.11 34696123.16 34696123.24 0.0141 0.0134

Pluto 90285-04-05 00:58 G 34697073.37 34697073.54 34697073.75 0.0078 0.0041

Pluto 90285-11-16 11:17 G 34697298.78 34697298.97 34697299.18 0.0078 0.0033

Jupiter 90287-10-07 11:17 G 34697988.76 34697988.97 34697989.17 0.0497 0.0061

Jupiter 90288-05-30 19:12 G 34698225.20 34698225.30 34698225.40 0.0495 0.0425

Mars 90291-01-01 19:27 G 34699171.14 34699171.31 34699171.48 0.1945 0.0141

Mars 90291-12-04 06:58 G 34699507.62 34699507.79 34699507.96 0.1590 0.0359

Jupiter 90293-08-04 18:29 G 34700117.09 34700117.27 34700117.44 0.0528 0.0252

Saturn 90293-08-30 04:48 G 34700142.54 34700142.70 34700142.86 0.0294 0.0190

Jupiter 90294-03-30 09:36 G 34700354.75 34700354.90 34700355.06 0.0531 0.0344

Saturn 90294-04-17 04:34 G 34700372.48 34700372.69 34700372.90 0.0291 0.0048

Saturn 90294-12-03 02:10 G 34700602.55 34700602.59 34700602.66 0.0289 0.0278

Jupiter 90299-06-12 10:34 G 34702254.75 34702254.94 34702255.13 0.0497 0.0199

Jupiter 90300-02-03 19:27 G 34702491.15 34702491.31 34702491.48 0.0495 0.0293

Jupiter 90305-04-10 12:00 G 34704382.88 34704383.00 34704383.13 0.0528 0.0412

Jupiter 90305-12-04 01:41 G 34704620.38 34704620.57 34704620.76 0.0530 0.0178

Saturn 90309-05-10 09:36 G 34705873.79 34705873.90 34705874.03 0.0267 0.0222

Saturn 90309-12-25 11:46 G 34706102.78 34706102.99 34706103.20 0.0269 0.0043

Saturn 90310-08-11 14:53 G 34706331.95 34706332.12 34706332.31 0.0272 0.0143

Jupiter 90311-02-16 09:51 G 34706520.76 34706520.91 34706521.06 0.0498 0.0338

Jupiter 90311-10-10 20:39 G 34706757.17 34706757.36 34706757.56 0.0496 0.0158

Uranus 90317-05-20 11:31 G 34708805.94 34708805.98 34708806.05 0.0139 0.0134

Jupiter 90317-08-08 16:48 G 34708886.00 34708886.20 34708886.41 0.0529 0.0014

Uranus 90318-01-01 19:27 G 34709032.19 34709032.31 34709032.47 0.0139 0.0105

Uranus 90318-08-16 03:22 G 34709258.47 34709258.64 34709258.83 0.0139 0.0076

Uranus 90319-03-30 11:03 G 34709484.77 34709484.96 34709485.17 0.0138 0.0047

Uranus 90319-11-11 18:43 G 34709711.07 34709711.28 34709711.50 0.0138 0.0018

Uranus 90320-06-25 02:10 G 34709937.37 34709937.59 34709937.80 0.0138 0.0011

Uranus 90321-02-06 09:07 G 34710163.68 34710163.88 34710164.09 0.0138 0.0040

Uranus 90321-09-20 16:05 G 34710389.98 34710390.17 34710390.36 0.0138 0.0068

Uranus 90322-05-04 22:34 G 34710616.30 34710616.44 34710616.61 0.0137 0.0096

Jupiter 90322-10-22 07:27 G 34710786.76 34710786.81 34710786.87 0.0499 0.0480

Uranus 90322-12-17 05:31 G 34710842.65 34710842.73 34710842.83 0.0137 0.0124

Saturn 90323-03-13 13:55 G 34710928.90 34710929.08 34710929.26 0.0294 0.0152

Jupiter 90323-06-15 20:39 G 34711023.15 34711023.36 34711023.56 0.0497 0.0020

Saturn 90323-10-29 13:27 G 34711158.86 34711159.06 34711159.27 0.0292 0.0086

Mars 90325-10-03 03:22 G 34711863.60 34711863.64 34711863.67 0.1593 0.1557

Earth 90329-01-21 03:07 G 34713069.47 34713069.63 34713069.79 0.2648 0.0284

Moon 90329-01-21 08:24 G 34713069.70 34713069.85 34713070.00 0.2645 0.0868 *

Jupiter 90329-04-13 09:36 G 34713151.70 34713151.90 34713152.09 0.0528 0.0158

Jupiter 90329-12-07 00:43 G 34713389.43 34713389.53 34713389.65 0.0530 0.0439

Neptune 90331-06-26 01:55 G 34713955.50 34713955.58 34713955.69 0.0088 0.0080

Neptune 90332-02-06 14:53 G 34714181.00 34714181.12 34714181.27 0.0088 0.0070

Neptune 90332-09-19 04:19 G 34714406.52 34714406.68 34714406.85 0.0088 0.0059

Neptune 90333-05-02 17:03 G 34714632.04 34714632.21 34714632.41 0.0088 0.0049

Neptune 90333-12-14 06:00 G 34714857.57 34714857.75 34714857.96 0.0088 0.0039

Neptune 90334-07-27 19:12 G 34715083.10 34715083.30 34715083.52 0.0088 0.0028

Jupiter 90335-02-18 20:53 G 34715289.17 34715289.37 34715289.57 0.0497 0.0121

Neptune 90335-03-10 08:10 G 34715308.63 34715308.84 34715309.06 0.0088 0.0018

Jupiter 90335-10-13 06:00 G 34715525.62 34715525.75 34715525.89 0.0496 0.0371

Neptune 90335-10-21 21:22 G 34715534.18 34715534.39 34715534.62 0.0088 0.0007

Neptune 90336-06-03 10:34 G 34715759.72 34715759.94 34715760.16 0.0089 0.0004

Neptune 90337-01-14 23:31 G 34715985.26 34715985.48 34715985.70 0.0089 0.0014

Neptune 90337-08-28 12:15 G 34716210.81 34716211.01 34716211.23 0.0089 0.0024

Neptune 90338-04-11 01:12 G 34716436.36 34716436.55 34716436.76 0.0089 0.0035

Saturn 90338-11-20 15:51 G 34716660.01 34716660.16 34716660.31 0.0267 0.0191

Neptune 90338-11-22 14:24 G 34716661.91 34716662.10 34716662.29 0.0089 0.0045

Neptune 90339-07-06 02:53 G 34716887.47 34716887.62 34716887.81 0.0089 0.0056

Saturn 90339-07-07 18:00 G 34716889.04 34716889.25 34716889.46 0.0270 0.0011

Neptune 90340-02-16 15:51 G 34717113.03 34717113.16 34717113.33 0.0089 0.0066

Saturn 90340-02-21 21:22 G 34717118.23 34717118.39 34717118.55 0.0272 0.0174

Neptune 90340-09-29 05:03 G 34717338.61 34717338.71 34717338.83 0.0089 0.0076

Jupiter 90340-12-17 01:12 G 34717417.39 34717417.55 34717417.71 0.0527 0.0322

Neptune 90341-05-12 17:31 G 34717564.21 34717564.23 34717564.30 0.0089 0.0087

Jupiter 90341-08-11 14:53 G 34717654.95 34717655.12 34717655.29 0.0530 0.0271

Jupiter 90346-10-24 20:53 G 34719555.20 34719555.37 34719555.55 0.0498 0.0259

Jupiter 90347-06-18 07:12 G 34719791.63 34719791.80 34719791.98 0.0496 0.0238

Jupiter 90352-08-21 18:58 G 34721683.21 34721683.29 34721683.37 0.0527 0.0480

Saturn 90352-09-22 22:05 G 34721715.22 34721715.42 34721715.61 0.0294 0.0114

Jupiter 90353-04-16 06:58 G 34721920.60 34721920.79 34721920.99 0.0530 0.0105

Saturn 90353-05-10 21:22 G 34721945.20 34721945.39 34721945.59 0.0291 0.0123

Mars 90356-10-29 21:07 G 34723213.22 34723213.38 34723213.53 0.1944 0.0902

Mars 90357-10-01 19:41 G 34723550.15 34723550.32 34723550.50 0.1591 0.0212

Jupiter 90358-06-29 20:10 G 34723821.22 34723821.34 34723821.47 0.0499 0.0397

Jupiter 90359-02-21 07:41 G 34724057.62 34724057.82 34724058.02 0.0496 0.0102

Uranus 90361-05-13 15:51 G 34724870.06 34724870.16 34724870.25 0.0139 0.0124

Uranus 90361-12-26 00:43 G 34725096.38 34725096.53 34725096.70 0.0139 0.0095

Uranus	90362-08-09 10:05 G	34725322.73	34725322.92	34725323.12	0.0140	0.0065
Uranus	90363-03-23 19:41 G	34725549.11	34725549.32	34725549.54	0.0140	0.0035
Uranus	90363-11-05 05:31 G	34725775.51	34725775.73	34725775.95	0.0140	0.0005
Uranus	90364-06-18 15:36 G	34726001.94	34726002.15	34726002.37	0.0140	0.0027
Jupiter	90364-12-19 23:46 G	34726186.29	34726186.49	34726186.69	0.0529	0.0062
Uranus	90365-01-31 01:41 G	34726228.38	34726228.57	34726228.78	0.0140	0.0058
Uranus	90365-09-14 12:00 G	34726454.84	34726455.00	34726455.18	0.0141	0.0089
Uranus	90366-04-28 22:19 G	34726681.34	34726681.43	34726681.57	0.0141	0.0120
Saturn	90368-06-01 18:15 G	34727446.10	34727446.26	34727446.43	0.0268	0.0168
Saturn	90369-01-16 20:24 G	34727675.14	34727675.35	34727675.57	0.0270	0.0014
Saturn	90369-09-03 00:00 G	34727904.36	34727904.50	34727904.65	0.0272	0.0199
Jupiter	90370-10-27 08:24 G	34728323.65	34728323.85	34728324.06	0.0496	0.0037
Jupiter	90371-06-20 16:05 G	34728560.09	34728560.17	34728560.26	0.0495	0.0449
Jupiter	90376-08-24 16:48 G	34730452.02	34730452.20	34730452.38	0.0528	0.0228
Jupiter	90377-04-19 07:41 G	34730689.68	34730689.82	34730689.96	0.0530	0.0370
Saturn	90382-04-05 05:46 G	34732501.54	34732501.74	34732501.95	0.0294	0.0078
Jupiter	90382-07-02 06:58 G	34732589.60	34732589.79	34732589.99	0.0498	0.0180
Saturn	90382-11-21 05:03 G	34732731.54	34732731.71	34732731.89	0.0291	0.0159
Jupiter	90383-02-23 16:48 G	34732826.05	34732826.20	34732826.36	0.0496	0.0316
Jupiter	90388-04-29 10:48 G	34734717.81	34734717.95	34734718.08	0.0527	0.0387
Jupiter	90388-12-22 23:17 G	34734955.28	34734955.47	34734955.66	0.0530	0.0203
Jupiter	90394-03-07 06:43 G	34736855.63	34736855.78	34736855.94	0.0499	0.0319
Jupiter	90394-10-29 18:14 G	34737092.07	34737092.26	34737092.46	0.0496	0.0181
Saturn	90397-12-12 23:17 G	34738232.29	34738232.47	34738232.66	0.0268	0.0138
Saturn	90398-07-30 01:41 G	34738461.36	34738461.57	34738461.78	0.0270	0.0043
Saturn	90399-03-16 05:02 G	34738690.61	34738690.71	34738690.84	0.0272	0.0230
Jupiter	90400-08-27 14:10 G	34739220.89	34739221.09	34739221.29	0.0529	0.0034
Uranus	90401-09-01 02:10 G	34739590.49	34739590.59	34739590.72	0.0139	0.0119
Uranus	90402-04-15 10:05 G	34739816.77	34739816.92	34739817.10	0.0139	0.0090
Uranus	90402-11-27 18:14 G	34740043.07	34740043.26	34740043.46	0.0138	0.0061

Uranus 90403-07-12 01:55 G 34740269.37 34740269.58 34740269.79 0.0138 0.0031

Uranus 90404-02-23 09:22 G 34740495.67 34740495.89 34740496.10 0.0138 0.0003

Uranus 90404-10-06 16:34 G 34740721.98 34740722.19 34740722.40 0.0138 0.0026

Uranus 90405-05-20 23:17 G 34740948.29 34740948.47 34740948.68 0.0138 0.0055

Jupiter 90405-11-10 06:29 G 34741121.69 34741121.77 34741121.85 0.0500 0.0456

Uranus 90406-01-02 06:29 G 34741174.61 34741174.77 34741174.95 0.0137 0.0083

Jupiter 90406-07-04 19:26 G 34741358.10 34741358.31 34741358.51 0.0497 0.0045

Uranus 90406-08-16 13:12 G 34741400.93 34741401.05 34741401.19 0.0137 0.0110

Saturn 90411-02-28 11:17 G 34743057.93 34743057.97 34743058.04 0.0296 0.0285

Saturn 90411-10-16 12:14 G 34743287.80 34743288.01 34743288.22 0.0293 0.0042

Jupiter 90412-05-02 06:58 G 34743486.60 34743486.79 34743486.99 0.0529 0.0132

Neptune 90412-05-16 04:34 G 34743500.63 34743500.69 34743500.79 0.0089 0.0083

Saturn 90412-06-02 11:02 G 34743517.82 34743517.96 34743518.13 0.0290 0.0194

Jupiter 90412-12-25 22:48 G 34743724.36 34743724.45 34743724.55 0.0531 0.0466

Neptune 90412-12-27 18:00 G 34743726.13 34743726.25 34743726.38 0.0089 0.0072

Neptune 90413-08-10 06:43 G 34743951.64 34743951.78 34743951.95 0.0089 0.0062

Neptune 90414-03-23 19:41 G 34744177.17 34744177.32 34744177.52 0.0089 0.0052

Neptune 90414-11-04 09:07 G 34744402.69 34744402.88 34744403.08 0.0089 0.0041

Neptune 90415-06-17 22:05 G 34744628.23 34744628.42 34744628.64 0.0089 0.0031

Neptune 90416-01-29 11:17 G 34744853.76 34744853.97 34744854.19 0.0089 0.0020

Neptune 90416-09-11 00:14 G 34745079.30 34745079.51 34745079.74 0.0089 0.0010

Neptune 90417-04-24 13:26 G 34745304.85 34745305.06 34745305.29 0.0089 0.0002

Neptune 90417-12-06 02:24 G 34745530.39 34745530.60 34745530.83 0.0089 0.0012

Jupiter 90418-03-09 19:55 G 34745624.13 34745624.33 34745624.53 0.0497 0.0094

Neptune 90418-07-19 15:36 G 34745755.94 34745756.15 34745756.36 0.0089 0.0022

Jupiter 90418-11-01 04:19 G 34745860.56 34745860.68 34745860.81 0.0495 0.0397

Neptune 90419-03-02 04:19 G 34745981.49 34745981.68 34745981.90 0.0089 0.0033

Neptune 90419-10-13 17:31 G 34746207.04 34746207.23 34746207.43 0.0089 0.0043

Neptune 90420-05-26 06:14 G 34746432.61 34746432.76 34746432.96 0.0089 0.0054

Neptune 90421-01-06 19:26 G 34746658.17 34746658.31 34746658.48 0.0089 0.0064

Neptune 90421-08-20 08:53 G 34746883.75 34746883.87 34746883.99 0.0089 0.0074

Neptune 90422-04-02 21:22 G 34747109.35 34747109.39 34747109.48 0.0089 0.0085

Mars 90422-08-26 23:17 G 34747255.38 34747255.47 34747255.57 0.1943 0.1629

Mars 90423-07-30 08:24 G 34747592.68 34747592.85 34747593.03 0.1591 0.0055

Jupiter 90424-01-06 00:29 G 34747752.36 34747752.52 34747752.69 0.0528 0.0295

Jupiter 90424-08-30 14:53 G 34747989.96 34747990.12 34747990.29 0.0531 0.0303

Saturn 90427-06-25 00:43 G 34749018.34 34749018.53 34749018.72 0.0268 0.0117

Saturn 90428-02-09 02:53 G 34749247.42 34749247.62 34749247.83 0.0270 0.0065

Saturn 90428-09-25 06:29 G 34749476.70 34749476.77 34749476.86 0.0273 0.0252

Jupiter 90429-11-12 20:10 G 34749890.16 34749890.34 34749890.52 0.0498 0.0233

Jupiter 90430-07-07 06:00 G 34750126.58 34750126.75 34750126.92 0.0496 0.0264

Jupiter 90435-09-10 19:12 G 34752018.20 34752018.30 34752018.40 0.0527 0.0454

Jupiter 90436-05-05 07:12 G 34752255.61 34752255.80 34752256.00 0.0530 0.0134

Saturn 90440-09-09 17:02 G 34753844.11 34753844.21 34753844.33 0.0296 0.0252

Saturn 90441-04-27 18:14 G 34754074.05 34754074.26 34754074.47 0.0293 0.0009

Jupiter 90441-07-18 17:31 G 34754156.10 34754156.23 34754156.36 0.0499 0.0377

Saturn 90441-12-13 17:02 G 34754304.09 34754304.21 34754304.35 0.0291 0.0226

Jupiter 90442-03-12 05:46 G 34754392.54 34754392.74 34754392.94 0.0497 0.0125

Pluto 90444-04-14 21:07 G 34755157.19 34755157.38 34755157.59 0.0066 0.0025

Pluto 90444-11-26 01:26 G 34755382.36 34755382.56 34755382.78 0.0066 0.0017

Uranus 90445-01-10 23:17 G 34755428.45 34755428.47 34755428.53 0.0139 0.0136

Pluto 90445-07-09 05:31 G 34755607.65 34755607.73 34755607.84 0.0066 0.0059

Uranus 90445-08-25 08:24 G 34755654.73 34755654.85 34755655.01 0.0139 0.0107

Uranus 90446-04-08 18:00 G 34755881.08 34755881.25 34755881.44 0.0139 0.0077

Uranus 90446-11-21 03:36 G 34756107.45 34756107.65 34756107.86 0.0140 0.0048

Uranus 90447-07-05 13:26 G 34756333.85 34756334.06 34756334.28 0.0140 0.0017

Jupiter 90448-01-09 00:00 G 34756521.30 34756521.50 34756521.71 0.0529 0.0034

Uranus 90448-02-16 23:17 G 34756560.26 34756560.47 34756560.70 0.0140 0.0014

Uranus 90448-09-30 09:22 G 34756786.69 34756786.89 34756787.11 0.0140 0.0044

Uranus 90449-05-14 19:55 G 34757013.15 34757013.33 34757013.52 0.0140 0.0075

Uranus 90449-12-27 06:14 G 34757239.63 34757239.76 34757239.91 0.0141 0.0106

Moon 90450-07-21 11:17 G 34757445.88 34757445.97 34757446.07 0.2679 0.2210

Uranus 90450-08-10 16:48 G 34757466.17 34757466.20 34757466.27 0.0141 0.0137

Jupiter 90453-11-15 06:43 G 34758658.57 34758658.78 34758658.98 0.0497 0.0014

Jupiter 90454-07-09 15:07 G 34758895.08 34758895.13 34758895.19 0.0496 0.0474

Saturn 90456-05-20 03:07 G 34759575.62 34759575.63 34759575.66 0.0266 0.0265

Saturn 90457-01-04 04:19 G 34759804.49 34759804.68 34759804.89 0.0268 0.0089

Saturn 90457-08-21 06:43 G 34760033.59 34760033.78 34760033.98 0.0270 0.0093

Moon 90458-07-18 22:19 G 34760365.30 34760365.43 34760365.57 0.2686 0.1417

Earth 90458-07-19 04:05 G 34760365.51 34760365.67 34760365.82 0.2686 0.0792 *

Jupiter 90459-09-13 15:50 G 34760786.98 34760787.16 34760787.35 0.0528 0.0200

Jupiter 90460-05-08 06:29 G 34761024.64 34761024.77 34761024.91 0.0530 0.0398

Jupiter 90465-07-21 07:26 G 34762924.61 34762924.81 34762925.00 0.0498 0.0152

Jupiter 90466-03-14 17:02 G 34763161.07 34763161.21 34763161.36 0.0496 0.0344

Saturn 90470-03-22 22:48 G 34764630.32 34764630.45 34764630.60 0.0296 0.0219

Saturn 90470-11-07 23:31 G 34764860.27 34764860.48 34764860.70 0.0293 0.0025

Jupiter 90471-05-19 09:36 G 34765052.76 34765052.90 34765053.05 0.0527 0.0361

Saturn 90471-06-25 22:34 G 34765090.34 34765090.44 34765090.53 0.0290 0.0257

Jupiter 90472-01-11 22:34 G 34765290.26 34765290.44 34765290.62 0.0530 0.0233

Jupiter 90477-03-26 07:41 G 34767190.66 34767190.82 34767190.99 0.0498 0.0291

Jupiter 90477-11-17 18:43 G 34767427.09 34767427.28 34767427.46 0.0496 0.0210

Jupiter 90483-01-22 04:05 G 34769318.64 34769318.67 34769318.70 0.0526 0.0518

Jupiter 90483-09-16 15:22 G 34769555.94 34769556.14 34769556.34 0.0530 0.0066

Uranus 90485-05-01 09:50 G 34770148.86 34770148.91 34770148.99 0.0139 0.0132

Saturn 90485-11-30 03:22 G 34770361.57 34770361.64 34770361.73 0.0266 0.0246

Uranus 90485-12-13 18:00 G 34770375.12 34770375.25 34770375.41 0.0139 0.0103

Saturn 90486-07-17 04:48 G 34770590.49 34770590.70 34770590.90 0.0268 0.0069

Uranus 90486-07-28 01:55 G 34770601.41 34770601.58 34770601.77 0.0139 0.0074

Saturn 90487-03-03 07:12 G 34770819.61 34770819.80 34770819.99 0.0270 0.0113

Uranus 90487-03-11 09:36 G 34770827.70 34770827.90 34770828.11 0.0138 0.0045

Uranus 90487-10-23 17:17 G 34771054.00 34771054.22 34771054.43 0.0138 0.0016

Uranus 90488-06-06 00:29 G 34771280.31 34771280.52 34771280.74 0.0138 0.0013

Jupiter 90488-11-29 07:26 G 34771456.71 34771456.81 34771456.91 0.0499 0.0428

Uranus 90489-01-18 07:41 G 34771506.62 34771506.82 34771507.03 0.0138 0.0041

Mars 90489-05-26 21:07 G 34771635.21 34771635.38 34771635.56 0.1592 0.0099

Jupiter 90489-07-23 19:55 G 34771693.13 34771693.33 34771693.53 0.0496 0.0074

Uranus 90489-09-01 14:24 G 34771732.93 34771733.10 34771733.30 0.0137 0.0070

Uranus 90490-04-15 21:22 G 34771959.25 34771959.39 34771959.55 0.0137 0.0097

Uranus 90490-11-28 04:19 G 34772185.60 34772185.68 34772185.78 0.0137 0.0124

Jupiter 90495-05-22 09:07 G 34773821.68 34773821.88 34773822.08 0.0528 0.0100

Neptune 90495-09-27 13:26 G 34773950.01 34773950.06 34773950.17 0.0088 0.0083

Jupiter 90496-01-15 00:43 G 34774059.47 34774059.53 34774059.60 0.0530 0.0498

Neptune 90496-05-10 02:53 G 34774175.50 34774175.62 34774175.75 0.0088 0.0072

Neptune 90496-12-21 15:36 G 34774401.01 34774401.15 34774401.32 0.0088 0.0062

Neptune 90497-08-04 04:34 G 34774626.53 34774626.69 34774626.88 0.0088 0.0051

Neptune 90498-03-17 17:46 G 34774852.05 34774852.24 34774852.44 0.0088 0.0041

Neptune 90498-10-29 06:43 G 34775077.59 34775077.78 34775078.00 0.0088 0.0031

Neptune 90499-06-11 19:41 G 34775303.12 34775303.32 34775303.55 0.0088 0.0021

Saturn 90499-10-03 02:24 G 34775416.45 34775416.60 34775416.77 0.0296 0.0189

Neptune 90500-01-23 08:53 G 34775528.65 34775528.87 34775529.09 0.0089 0.0010

Saturn 90500-05-21 03:22 G 34775646.43 34775646.64 34775646.85 0.0293 0.0054

Neptune 90500-09-05 21:50 G 34775754.19 34775754.41 34775754.63 0.0089 0.0001

Saturn 90501-01-06 01:55 G 34775876.57 34775876.58 34775876.62 0.0290 0.0287

Jupiter 90501-03-29 18:29 G 34775959.07 34775959.27 34775959.48 0.0497 0.0071

Neptune 90501-04-19 10:48 G 34775979.73 34775979.95 34775980.17 0.0089 0.0011

Jupiter 90501-11-21 03:36 G 34776195.55 34776195.65 34776195.76 0.0496 0.0423

Neptune 90501-11-30 23:46 G 34776205.28 34776205.49 34776205.71 0.0089 0.0022

Neptune 90502-07-14 12:29 G 34776430.83 34776431.02 34776431.24 0.0089 0.0033

Neptune 90503-02-25 01:41 G 34776656.39 34776656.57 34776656.77 0.0089 0.0043

Neptune 90503-10-08 14:53 G 34776881.95 34776882.12 34776882.30 0.0089 0.0053

Neptune 90504-05-21 03:22 G 34777107.51 34777107.64 34777107.81 0.0089 0.0064

Neptune 90505-01-01 16:19 G 34777333.08 34777333.18 34777333.32 0.0089 0.0074

Neptune 90505-08-15 05:17 G 34777558.67 34777558.72 34777558.81 0.0089 0.0084

Jupiter 90507-01-26 03:22 G 34778087.47 34778087.64 34778087.81 0.0527 0.0263

Jupiter 90507-09-20 16:48 G 34778325.05 34778325.20 34778325.36 0.0530 0.0335

Jupiter 90512-12-02 18:43 G 34780225.10 34780225.28 34780225.47 0.0498 0.0210

Jupiter 90513-07-27 05:31 G 34780461.57 34780461.73 34780461.90 0.0496 0.0290

Saturn 90515-06-13 06:29 G 34781147.66 34781147.77 34781147.90 0.0266 0.0219

Saturn 90516-01-28 07:55 G 34781376.62 34781376.83 34781377.04 0.0268 0.0042

Saturn 90516-09-13 10:19 G 34781605.75 34781605.93 34781606.11 0.0270 0.0140

Jupiter 90518-09-30 20:24 G 34782353.23 34782353.35 34782353.47 0.0526 0.0424

Jupiter 90519-05-26 07:55 G 34782590.64 34782590.83 34782591.02 0.0529 0.0166

Mars 90520-06-24 03:36 G 34782985.58 34782985.65 34782985.72 0.1946 0.1771

Jupiter 90524-08-07 19:12 G 34784491.15 34784491.30 34784491.44 0.0499 0.0348

Jupiter 90525-04-01 07:26 G 34784727.61 34784727.81 34784728.00 0.0497 0.0156

Saturn 90529-04-15 06:58 G 34786202.62 34786202.79 34786202.97 0.0295 0.0158

Uranus 90529-04-25 16:34 G 34786213.09 34786213.19 34786213.31 0.0139 0.0120

Saturn 90529-12-01 07:26 G 34786432.61 34786432.81 34786433.02 0.0293 0.0084

Uranus 90529-12-08 01:41 G 34786439.42 34786439.57 34786439.76 0.0139 0.0091

Uranus 90530-07-22 11:17 G 34786665.79 34786665.97 34786666.18 0.0140 0.0061

Jupiter 90531-01-29 00:29 G 34786856.32 34786856.52 34786856.72 0.0529 0.0007

Uranus 90531-03-05 21:07 G 34786892.17 34786892.38 34786892.60 0.0140 0.0030

Uranus 90531-10-18 07:12 G 34787118.58 34787118.80 34787119.02 0.0140 0.0001

Pluto 90531-12-17 03:07 G 34787178.44 34787178.63 34787178.86 0.0078 0.0028

Uranus 90532-05-31 17:17 G 34787345.01 34787345.22 34787345.44 0.0140 0.0031

Pluto 90532-07-29 13:12 G 34787403.89 34787404.05 34787404.25 0.0078 0.0046

Uranus 90533-01-13 03:22 G 34787571.45 34787571.64 34787571.85 0.0140 0.0062

Uranus 90533-08-27 13:41 G 34787797.92 34787798.07 34787798.25 0.0141 0.0093

Uranus 90534-04-11 00:29 G 34788024.42 34788024.52 34788024.63 0.0141 0.0123

Jupiter 90536-04-12 19:12 G 34788757.25 34788757.30 34788757.35 0.0500 0.0485

Jupiter 90536-12-05 08:38 G 34788993.66 34788993.86 34788994.07 0.0497 0.0020

Jupiter 90542-10-03 18:14 G 34791122.07 34791122.26 34791122.45 0.0528 0.0167

Jupiter 90543-05-29 09:36 G 34791359.78 34791359.90 34791360.01 0.0530 0.0435

Saturn 90544-12-23 06:00 G 34791933.62 34791933.75 34791933.89 0.0266 0.0201

Saturn 90545-08-09 07:12 G 34792162.59 34792162.80 34792163.01 0.0268 0.0024

Saturn 90546-03-26 09:22 G 34792391.73 34792391.89 34792392.07 0.0271 0.0160

Jupiter 90548-08-10 09:22 G 34793259.69 34793259.89 34793260.09 0.0497 0.0121

Jupiter 90549-04-03 18:43 G 34793496.15 34793496.28 34793496.41 0.0496 0.0375

Jupiter 90554-06-08 13:12 G 34795387.90 34795388.05 34795388.21 0.0527 0.0329

Jupiter 90555-02-01 02:10 G 34795625.42 34795625.59 34795625.77 0.0530 0.0269

Mars 90555-03-25 09:36 G 34795677.72 34795677.90 34795678.07 0.1593 0.0259

Saturn 90558-10-26 09:22 G 34796988.70 34796988.89 34796989.08 0.0296 0.0130

Saturn 90559-06-13 09:50 G 34797218.72 34797218.91 34797219.11 0.0293 0.0113

Jupiter 90560-04-15 06:58 G 34797525.62 34797525.79 34797525.97 0.0499 0.0267

Jupiter 90560-12-07 18:29 G 34797762.09 34797762.27 34797762.45 0.0496 0.0237

Jupiter 90566-02-11 08:53 G 34799653.79 34799653.87 34799653.95 0.0526 0.0483

Jupiter 90566-10-06 19:41 G 34799891.12 34799891.32 34799891.52 0.0529 0.0103

Uranus 90569-08-14 02:24 G 34800933.50 34800933.60 34800933.74 0.0139 0.0116

Uranus 90570-03-28 10:34 G 34801159.78 34801159.94 34801160.12 0.0139 0.0087

Uranus 90570-11-09 18:29 G 34801386.08 34801386.27 34801386.48 0.0138 0.0058

Uranus 90571-06-24 02:10 G 34801612.38 34801612.59 34801612.81 0.0138 0.0029

Jupiter 90571-12-20 06:29 G 34801791.66 34801791.77 34801791.89 0.0500 0.0406

Moon 90572-01-23 00:43 G 34801825.37 34801825.53 34801825.68 0.2647 0.0132

Earth 90572-01-23 06:14 G 34801825.60 34801825.76 34801825.91 0.2646 0.0527 *

Uranus 90572-02-05 09:36 G 34801838.69 34801838.90 34801839.12 0.0138 0.0001

Jupiter 90572-08-12 19:41 G 34802028.12 34802028.32 34802028.52 0.0497 0.0100

Uranus 90572-09-18 16:48 G 34802064.99 34802065.20 34802065.41 0.0138 0.0029

Uranus 90573-05-02 23:46 G 34802291.30 34802291.49 34802291.69 0.0138 0.0057

Uranus 90573-12-15 06:58 G 34802517.63 34802517.79 34802517.96 0.0137 0.0085

Saturn 90574-07-05 08:38 G 34802719.70 34802719.86 34802720.02 0.0266 0.0175

Uranus 90574-07-29 13:26 G 34802743.96 34802744.06 34802744.20 0.0137 0.0113

Saturn 90575-02-19 09:50 G 34802948.70 34802948.91 34802949.12 0.0268 0.0004

Saturn 90575-10-06 12:14 G 34803177.86 34803178.01 34803178.17 0.0271 0.0186

Neptune 90576-08-18 16:05 G 34803495.12 34803495.17 34803495.24 0.0089 0.0085

Neptune 90577-04-01 05:02 G 34803720.61 34803720.71 34803720.84 0.0089 0.0075

Neptune 90577-11-12 18:00 G 34803946.12 34803946.25 34803946.42 0.0089 0.0065

Jupiter 90578-06-11 11:31 G 34804156.78 34804156.98 34804157.18 0.0528 0.0066

Neptune 90578-06-26 07:12 G 34804171.64 34804171.80 34804171.98 0.0089 0.0054

Neptune 90579-02-06 20:10 G 34804397.16 34804397.34 34804397.54 0.0089 0.0044

Neptune 90579-09-20 09:22 G 34804622.69 34804622.89 34804623.10 0.0089 0.0033

Earth 90580-01-20 23:02 G 34804745.44 34804745.46 34804745.48 0.2645 0.2611

Neptune 90580-05-02 22:19 G 34804848.23 34804848.43 34804848.66 0.0089 0.0023

Neptune 90580-12-14 11:46 G 34805073.77 34805073.99 34805074.21 0.0089 0.0012

Neptune 90581-07-28 00:43 G 34805299.31 34805299.53 34805299.75 0.0089 0.0002

Neptune 90582-03-10 13:41 G 34805524.85 34805525.07 34805525.29 0.0089 0.0009

Neptune 90582-10-22 02:38 G 34805750.40 34805750.61 34805750.83 0.0089 0.0020

Neptune 90583-06-04 15:50 G 34805975.96 34805976.16 34805976.37 0.0089 0.0030

Neptune 90584-01-16 04:34 G 34806201.51 34806201.69 34806201.90 0.0089 0.0041

Jupiter 90584-04-17 21:07 G 34806294.18 34806294.38 34806294.59 0.0498 0.0039

Neptune 90584-08-28 17:46 G 34806427.07 34806427.24 34806427.43 0.0089 0.0051

Jupiter 90584-12-10 06:14 G 34806530.68 34806530.76 34806530.84 0.0496 0.0455

Neptune 90585-04-11 06:29 G 34806652.64 34806652.77 34806652.96 0.0089 0.0062

Neptune 90585-11-22 19:41 G 34806878.21 34806878.32 34806878.47 0.0089 0.0072

Mars 90586-04-21 05:17 G 34807027.57 34807027.72 34807027.87 0.1945 0.1016

Neptune 90586-07-06 09:07 G 34807103.80 34807103.88 34807103.97 0.0089 0.0082

Mars 90587-03-24 01:55 G 34807364.53 34807364.58 34807364.64 0.1590 0.1504

Saturn 90588-05-07 12:43 G 34807774.84 34807775.03 34807775.24 0.0295 0.0102

Saturn 90588-12-23 13:12 G 34808004.87 34808005.05 34808005.24 0.0292 0.0141

Jupiter 90590-02-14 04:48 G 34808422.52 34808422.70 34808422.88 0.0527 0.0230

Jupiter 90590-10-09 18:43 G 34808660.13 34808660.28 34808660.42 0.0530 0.0369

Jupiter 90595-12-22 22:05 G 34810560.23 34810560.42 34810560.62 0.0498 0.0177

Jupiter 90596-08-15 08:10 G 34810796.69 34810796.84 34810797.00 0.0496 0.0323

Jupiter 90601-10-20 23:02 G 34812688.33 34812688.46 34812688.60 0.0527 0.0392

Jupiter 90602-06-15 11:31 G 34812925.79 34812925.98 34812926.17 0.0530 0.0203

Saturn 90604-01-16 07:41 G 34813505.66 34813505.82 34813506.00 0.0266 0.0158

Saturn 90604-09-01 08:53 G 34813734.66 34813734.87 34813735.08 0.0268 0.0021

Saturn 90605-04-18 11:17 G 34813963.83 34813963.97 34813964.11 0.0271 0.0204

Jupiter 90607-08-28 22:19 G 34814826.27 34814826.43 34814826.59 0.0499 0.0316

Jupiter 90608-04-21 10:05 G 34815062.73 34815062.92 34815063.11 0.0496 0.0188

Uranus 90612-12-24 23:46 G 34816771.44 34816771.49 34816771.57 0.0139 0.0133

Uranus 90613-08-08 08:53 G 34816997.74 34816997.87 34816998.03 0.0139 0.0104

Jupiter 90614-02-18 05:46 G 34817191.53 34817191.74 34817191.94 0.0529 0.0038

Uranus 90614-03-22 18:29 G 34817224.09 34817224.27 34817224.46 0.0140 0.0074

Uranus 90614-11-04 04:19 G 34817450.47 34817450.68 34817450.89 0.0140 0.0044

Uranus 90615-06-18 14:10 G 34817676.87 34817677.09 34817677.31 0.0140 0.0014

Uranus 90616-01-31 00:14 G 34817903.29 34817903.51 34817903.73 0.0140 0.0017

Uranus 90616-09-13 10:05 G 34818129.73 34818129.92 34818130.14 0.0140 0.0048

Uranus 90617-04-27 20:38 G 34818356.18 34818356.36 34818356.55 0.0141 0.0078

Saturn 90617-11-18 13:55 G 34818560.87 34818561.08 34818561.28 0.0295 0.0075

Uranus 90617-12-10 06:58 G 34818582.67 34818582.79 34818582.95 0.0141 0.0109

Saturn 90618-07-06 14:24 G 34818790.93 34818791.10 34818791.28 0.0293 0.0167

Uranus 90618-07-24 17:31 G 34818809.23 34818809.23 34818809.28 0.0141 0.0140

Jupiter 90619-05-03 18:58 G 34819092.21 34819092.29 34819092.37 0.0500 0.0461

Jupiter 90619-12-26 08:38 G 34819328.66 34819328.86 34819329.07 0.0497 0.0045

Mars 90621-01-20 22:19 G 34819720.26 34819720.43 34819720.61 0.1594 0.0411

Jupiter 90625-10-24 00:00 G 34821457.31 34821457.50 34821457.70 0.0528 0.0127

Jupiter 90626-06-18 14:38 G 34821695.02 34821695.11 34821695.20 0.0530 0.0473

Jupiter 90631-08-31 09:22 G 34823594.69 34823594.89 34823595.09 0.0498 0.0095

Jupiter 90632-04-23 19:12 G 34823831.19 34823831.30 34823831.42 0.0496 0.0403

Saturn 90633-07-28 09:50 G 34824291.73 34824291.91 34824292.10 0.0266 0.0132

Saturn 90634-03-14 11:02 G 34824520.75 34824520.96 34824521.17 0.0268 0.0046

Saturn 90634-10-29 13:41 G 34824749.96 34824750.07 34824750.18 0.0271 0.0230

Jupiter 90637-06-28 16:48 G 34825723.03 34825723.20 34825723.36 0.0527 0.0292

Jupiter 90638-02-21 05:17 G 34825960.56 34825960.72 34825960.89 0.0529 0.0306

Jupiter 90643-05-06 10:05 G 34827860.74 34827860.92 34827861.11 0.0499 0.0234

Jupiter 90643-12-28 21:36 G 34828097.23 34828097.40 34828097.57 0.0497 0.0271

Saturn 90646-10-13 14:53 G 34829117.10 34829117.12 34829117.15 0.0298 0.0295

Saturn 90647-05-31 17:17 G 34829347.01 34829347.22 34829347.43 0.0295 0.0047

Saturn 90648-01-16 17:31 G 34829577.08 34829577.23 34829577.39 0.0292 0.0194

Jupiter 90649-03-03 10:48 G 34829988.86 34829988.95 34829989.06 0.0526 0.0451

Jupiter 90649-10-26 21:50 G 34830226.22 34830226.41 34830226.60 0.0529 0.0139

Mars 90652-02-17 07:12 G 34831069.63 34831069.80 34831069.97 0.1944 0.0270

Mars 90653-01-19 14:53 G 34831407.03 34831407.12 34831407.21 0.1591 0.1352

Uranus 90653-04-14 11:31 G 34831491.91 34831491.98 34831492.07 0.0139 0.0128

Uranus 90653-11-26 19:55 G 34831718.18 34831718.33 34831718.48 0.0139 0.0099

Uranus 90654-07-11 03:22 G 34831944.47 34831944.64 34831944.84 0.0138 0.0071

Jupiter 90655-01-09 10:34 G 34832126.81 34832126.94 34832127.08 0.0499 0.0372

Uranus 90655-02-22 11:17 G 34832170.77 34832170.97 34832171.18 0.0138 0.0041

Jupiter 90655-09-02 23:17 G 34832363.28 34832363.47 34832363.67 0.0497 0.0135

Uranus 90655-10-06 18:43 G 34832397.07 34832397.28 34832397.50 0.0138 0.0013

Uranus 90656-05-20 02:10 G 34832623.38 34832623.59 34832623.81 0.0138 0.0016

Uranus 90657-01-01 09:07 G 34832849.69 34832849.88 34832850.10 0.0138 0.0045

Uranus 90657-08-15 16:05 G 34833076.00 34833076.17 34833076.37 0.0137 0.0073

Uranus 90658-03-29 23:17 G 34833302.32 34833302.47 34833302.62 0.0137 0.0100

Uranus 90658-11-11 05:31 G 34833528.67 34833528.73 34833528.83 0.0137 0.0127

Neptune 90660-01-01 01:12 G 34833944.50 34833944.55 34833944.62 0.0088 0.0085

Neptune 90660-08-13 14:10 G 34834169.99 34834170.09 34834170.22 0.0088 0.0075

Neptune 90661-03-27 02:53 G 34834395.49 34834395.62 34834395.80 0.0088 0.0065

Jupiter 90661-07-01 15:07 G 34834491.93 34834492.13 34834492.33 0.0529 0.0030

Neptune 90661-11-07 16:34 G 34834621.02 34834621.19 34834621.37 0.0088 0.0054

Neptune 90662-06-21 05:17 G 34834846.54 34834846.72 34834846.93 0.0088 0.0044

Neptune 90663-02-01 18:14 G 34835072.07 34835072.26 34835072.48 0.0088 0.0033

Saturn 90663-02-07 09:22 G 34835077.70 34835077.89 34835078.08 0.0266 0.0114

Neptune 90663-09-15 07:26 G 34835297.60 34835297.81 34835298.03 0.0088 0.0023

Saturn 90663-09-24 10:19 G 34835306.73 34835306.93 34835307.14 0.0268 0.0065

Neptune 90664-04-27 20:24 G 34835523.14 34835523.35 34835523.57 0.0088 0.0012

Saturn 90664-05-10 12:43 G 34835535.95 34835536.03 34835536.12 0.0271 0.0249

Neptune 90664-12-09 09:36 G 34835748.68 34835748.90 34835749.12 0.0089 0.0002

Neptune 90665-07-22 22:34 G 34835974.22 34835974.44 34835974.66 0.0089 0.0009

Neptune 90666-03-05 11:17 G 34836199.76 34836199.97 34836200.19 0.0089 0.0019

Neptune 90666-10-17 00:29 G 34836425.32 34836425.52 34836425.73 0.0089 0.0030

Jupiter 90667-05-09 00:29 G 34836629.32 34836629.52 34836629.73 0.0497 0.0009

Neptune 90667-05-30 13:12 G 34836650.87 34836651.05 34836651.26 0.0089 0.0041

Jupiter 90667-12-31 08:53 G 34836865.85 34836865.87 34836865.92 0.0496 0.0488

Neptune 90668-01-11 02:10 G 34836876.42 34836876.59 34836876.78 0.0089 0.0051

Neptune 90668-08-23 15:07 G 34837101.99 34837102.13 34837102.30 0.0089 0.0061

Neptune 90669-04-06 03:50 G 34837327.56 34837327.66 34837327.81 0.0089 0.0072

Neptune 90669-11-17 17:02 G 34837553.15 34837553.21 34837553.32 0.0089 0.0082

Jupiter 90673-03-06 10:19 G 34838757.75 34838757.93 34838758.12 0.0528 0.0193

Jupiter 90673-10-30 00:29 G 34838995.39 34838995.52 34838995.65 0.0530 0.0408

Saturn 90676-04-24 15:22 G 34839903.06 34839903.14 34839903.24 0.0298 0.0270

Saturn 90676-12-10 17:46 G 34840133.03 34840133.24 34840133.46 0.0295 0.0022

Saturn 90677-07-28 18:14 G 34840363.13 34840363.26 34840363.40 0.0292 0.0220

Jupiter 90679-01-11 22:05 G 34840895.22 34840895.42 34840895.62 0.0498 0.0150

Jupiter 90679-09-05 08:38 G 34841131.71 34841131.86 34841132.00 0.0496 0.0351

Jupiter 90684-11-09 05:31 G 34843023.59 34843023.73 34843023.89 0.0527 0.0352

Jupiter 90685-07-04 17:46 G 34843261.06 34843261.24 34843261.42 0.0529 0.0244

Mars 90686-11-18 10:48 G 34843762.79 34843762.95 34843763.12 0.1594 0.0570

Pluto 90690-05-15 20:10 G 34845037.23 34845037.34 34845037.48 0.0066 0.0053

Jupiter 90690-09-16 22:05 G 34845161.25 34845161.42 34845161.59 0.0499 0.0290

Pluto 90690-12-27 00:29 G 34845262.31 34845262.52 34845262.74 0.0066 0.0012

Jupiter 90691-05-11 10:05 G 34845397.74 34845397.92 34845398.11 0.0497 0.0216

Pluto 90691-08-09 04:19 G 34845487.51 34845487.68 34845487.90 0.0066 0.0031

Saturn 90692-01-03 11:46 G 34845634.97 34845634.99 34845635.02 0.0264 0.0261

Saturn 90692-08-19 11:46 G 34845863.79 34845863.99 34845864.19 0.0266 0.0088

Saturn 90693-04-05 12:58 G 34846092.84 34846093.04 34846093.24 0.0268 0.0091

Jupiter 90696-07-14 23:02 G 34847289.42 34847289.46 34847289.52 0.0525 0.0510

Jupiter 90697-03-09 09:07 G 34847526.69 34847526.88 34847527.08 0.0529 0.0076

Uranus 90697-04-07 15:07 G 34847556.03 34847556.13 34847556.26 0.0139 0.0117

Uranus 90697-11-20 00:29 G 34847782.36 34847782.52 34847782.70 0.0139 0.0088

Uranus 90698-07-04 10:05 G 34848008.73 34848008.92 34848009.13 0.0140 0.0059

Uranus 90699-02-15 19:55 G 34848235.12 34848235.33 34848235.55 0.0140 0.0029

Uranus 90699-09-30 06:00 G 34848461.53 34848461.75 34848461.97 0.0140 0.0003

Uranus 90700-05-14 16:05 G 34848687.96 34848688.17 34848688.39 0.0140 0.0032

Uranus 90700-12-27 02:24 G 34848914.40 34848914.60 34848914.80 0.0141 0.0063

Earth 90701-07-22 03:36 G 34849121.50 34849121.65 34849121.80 0.2687 0.0830

Moon 90701-07-22 08:24 G 34849121.70 34849121.85 34849122.00 0.2691 0.0609 *

Uranus 90701-08-10 12:29 G 34849140.87 34849141.02 34849141.20 0.0141 0.0094

Uranus 90702-03-24 23:02 G 34849367.37 34849367.46 34849367.58 0.0141 0.0124

Jupiter 90702-05-23 22:05 G 34849427.32 34849427.42 34849427.52 0.0500 0.0429

Jupiter 90703-01-15 12:00 G 34849663.79 34849664.00 34849664.20 0.0497 0.0080

Saturn 90705-11-05 18:58 G 34850689.18 34850689.29 34850689.42 0.0298 0.0242

Saturn 90706-06-23 21:07 G 34850919.17 34850919.38 34850919.60 0.0295 0.0010

Saturn 90707-02-08 21:22 G 34851149.29 34851149.39 34851149.51 0.0292 0.0247

Jupiter 90708-11-13 02:10 G 34851792.39 34851792.59 34851792.79 0.0528 0.0092

Jupiter 90709-07-08 16:48 G 34852030.15 34852030.20 34852030.26 0.0530 0.0508

Jupiter 90714-09-20 13:12 G 34853929.85 34853930.05 34853930.26 0.0498 0.0060

Jupiter 90715-05-14 22:48 G 34854166.35 34854166.45 34854166.54 0.0496 0.0436

Mars 90717-12-15 09:22 G 34855111.72 34855111.89 34855112.05 0.1942 0.0476

Mars 90718-11-18 03:22 G 34855449.53 34855449.64 34855449.76 0.1592 0.1196

Jupiter 90720-07-18 19:55 G 34856058.15 34856058.33 34856058.50 0.0527 0.0258

Jupiter 90721-03-13 09:07 G 34856295.74 34856295.88 34856296.04 0.0530 0.0344

Saturn 90721-07-16 11:31 G 34856420.91 34856420.98 34856421.08 0.0264 0.0244

Saturn 90722-03-02 11:31 G 34856649.78 34856649.98 34856650.19 0.0266 0.0070

Saturn 90722-10-17 12:43 G 34856878.84 34856879.03 34856879.23 0.0269 0.0111

Jupiter 90726-05-26 13:41 G 34858195.88 34858196.07 34858196.26 0.0498 0.0200

Jupiter 90727-01-18 00:29 G 34858432.36 34858432.52 34858432.68 0.0496 0.0304

Jupiter 90732-03-23 16:05 G 34860324.05 34860324.17 34860324.29 0.0526 0.0415

Jupiter 90732-11-16 03:36 G 34860561.46 34860561.65 34860561.84 0.0529 0.0178

Saturn 90735-05-18 19:26 G 34861475.17 34861475.31 34861475.46 0.0297 0.0217

Saturn 90736-01-03 21:50 G 34861705.20 34861705.41 34861705.62 0.0295 0.0032

Saturn 90736-08-20 22:05 G 34861935.36 34861935.42 34861935.50 0.0292 0.0273

Uranus 90737-07-28 04:05 G 34862276.56 34862276.67 34862276.81 0.0139 0.0112

Jupiter 90738-01-29 10:19 G 34862461.78 34862461.93 34862462.08 0.0499 0.0346

Uranus 90738-03-11 12:14 G 34862502.84 34862503.01 34862503.19 0.0139 0.0083

Jupiter 90738-09-22 23:02 G 34862698.27 34862698.46 34862698.66 0.0497 0.0162

Uranus 90738-10-23 19:55 G 34862729.14 34862729.33 34862729.54 0.0138 0.0054

Uranus 90739-06-07 03:50 G 34862955.45 34862955.66 34862955.87 0.0138 0.0025

Uranus 90740-01-19 11:17 G 34863181.75 34863181.97 34863182.19 0.0138 0.0003

Uranus 90740-09-01 18:14 G 34863408.06 34863408.26 34863408.48 0.0138 0.0032

Neptune 90740-11-22 03:36 G 34863489.64 34863489.65 34863489.70 0.0089 0.0088

Uranus 90741-04-16 01:26 G 34863634.37 34863634.56 34863634.76 0.0138 0.0060

Neptune 90741-07-05 16:19 G 34863715.10 34863715.18 34863715.31 0.0089 0.0078

Uranus 90741-11-28 08:24 G 34863860.70 34863860.85 34863861.03 0.0137 0.0087

Neptune 90742-02-16 05:31 G 34863940.60 34863940.73 34863940.89 0.0089 0.0067

Uranus 90742-07-12 15:22 G 34864087.03 34864087.14 34864087.26 0.0137 0.0114

Neptune 90742-09-29 18:29 G 34864166.12 34864166.27 34864166.45 0.0089 0.0057

Neptune 90743-05-13 07:55 G 34864391.65 34864391.83 34864392.02 0.0089 0.0046

Neptune 90743-12-24 20:38 G 34864617.17 34864617.36 34864617.58 0.0089 0.0036

Jupiter 90744-07-21 21:22 G 34864827.19 34864827.39 34864827.60 0.0528 0.0017

Neptune 90744-08-06 10:05 G 34864842.71 34864842.92 34864843.13 0.0089 0.0025

Neptune 90745-03-19 23:02 G 34865068.24 34865068.46 34865068.68 0.0089 0.0015

Neptune 90745-10-31 12:14 G 34865293.79 34865294.01 34865294.23 0.0089 0.0004

Neptune 90746-06-14 01:12 G 34865519.33 34865519.55 34865519.77 0.0089 0.0007

Neptune 90747-01-25 14:10 G 34865744.88 34865745.09 34865745.31 0.0089 0.0017

Neptune 90747-09-08 03:07 G 34865970.43 34865970.63 34865970.85 0.0089 0.0028

Neptune 90748-04-20 16:19 G 34866195.99 34866196.18 34866196.39 0.0089 0.0038

Neptune 90748-12-02 05:02 G 34866421.55 34866421.71 34866421.92 0.0089 0.0049

Neptune 90749-07-15 18:14 G 34866647.11 34866647.26 34866647.44 0.0089 0.0059

Jupiter 90749-10-04 09:22 G 34866727.85 34866727.89 34866727.94 0.0500 0.0486

Neptune 90750-02-26 06:58 G 34866872.68 34866872.79 34866872.95 0.0089 0.0070

Jupiter 90750-05-29 00:00 G 34866964.29 34866964.50 34866964.70 0.0497 0.0024

Neptune 90750-10-09 20:10 G 34867098.26 34867098.34 34867098.45 0.0089 0.0080

Saturn 90751-01-26 14:38 G 34867206.99 34867207.11 34867207.23 0.0264 0.0217

Saturn 90751-09-12 14:38 G 34867435.90 34867436.11 34867436.32 0.0266 0.0043

Saturn 90752-04-28 15:50 G 34867664.98 34867665.16 34867665.34 0.0268 0.0138

Mars 90752-09-15 23:31 G 34867805.33 34867805.48 34867805.64 0.1595 0.0726

Jupiter 90756-03-26 13:55 G 34869092.88 34869093.08 34869093.27 0.0527 0.0155

Jupiter 90756-11-19 03:36 G 34869330.54 34869330.65 34869330.76 0.0529 0.0446

Jupiter 90762-02-01 00:58 G 34871230.34 34871230.54 34871230.74 0.0498 0.0116

Jupiter 90762-09-25 11:31 G 34871466.85 34871466.98 34871467.11 0.0496 0.0385

Saturn 90764-11-28 00:00 G 34872261.34 34872261.50 34872261.67 0.0297 0.0187

Saturn 90765-07-16 02:10 G 34872491.38 34872491.59 34872491.80 0.0295 0.0062

Jupiter 90767-11-30 07:12 G 34873358.65 34873358.80 34873358.96 0.0527 0.0319

Jupiter 90768-07-24 19:12 G 34873596.13 34873596.30 34873596.48 0.0529 0.0280

Jupiter 90773-10-07 01:26 G 34875496.39 34875496.56 34875496.74 0.0499 0.0257

Jupiter 90774-05-31 13:26 G 34875732.88 34875733.06 34875733.23 0.0497 0.0250

Pluto 90778-08-29 07:55 G 34877283.61 34877283.83 34877284.06 0.0078 0.0006

Pluto 90779-04-11 17:17 G 34877509.14 34877509.22 34877509.37 0.0078 0.0067

Jupiter 90779-08-05 01:26 G 34877624.48 34877624.56 34877624.64 0.0526 0.0478

Jupiter 90780-03-29 12:00 G 34877861.80 34877862.00 34877862.20 0.0529 0.0111

Saturn 90780-08-07 15:36 G 34877993.01 34877993.15 34877993.29 0.0265 0.0197

Uranus 90780-12-06 21:07 G 34878114.32 34878114.38 34878114.46 0.0139 0.0131

Saturn 90781-03-24 15:36 G 34878221.94 34878222.15 34878222.36 0.0267 0.0022

Uranus 90781-07-21 06:14 G 34878340.63 34878340.76 34878340.92 0.0139 0.0103

Saturn 90781-11-08 16:48 G 34878451.04 34878451.20 34878451.38 0.0269 0.0160

Uranus 90782-03-04 15:36 G 34878566.97 34878567.15 34878567.35 0.0140 0.0073

Uranus 90782-10-17 01:12 G 34878793.35 34878793.55 34878793.77 0.0140 0.0044

Uranus 90783-05-31 11:17 G 34879019.75 34879019.97 34879020.19 0.0140 0.0013

Mars 90783-10-12 11:02 G 34879153.83 34879153.96 34879154.09 0.1941 0.1222

Uranus 90784-01-12 21:07 G 34879246.17 34879246.38 34879246.60 0.0140 0.0017

Uranus 90784-08-26 06:58 G 34879472.60 34879472.79 34879473.01 0.0140 0.0048

Mars 90784-09-14 16:19 G 34879492.05 34879492.18 34879492.31 0.1592 0.1046

Uranus 90785-04-09 17:17 G 34879699.05 34879699.22 34879699.41 0.0141 0.0078

Jupiter 90785-06-12 00:58 G 34879762.42 34879762.54 34879762.67 0.0500 0.0397

Uranus 90785-11-22 03:50 G 34879925.53 34879925.66 34879925.80 0.0141 0.0108

Jupiter 90786-02-03 14:24 G 34879998.90 34879999.10 34879999.30 0.0497 0.0113

Uranus 90786-07-06 14:10 G 34880152.08 34880152.09 34880152.15 0.0141 0.0139

Jupiter 90791-12-03 06:58 G 34882127.59 34882127.79 34882127.99 0.0528 0.0055

Saturn 90794-06-10 01:26 G 34883047.38 34883047.56 34883047.74 0.0297 0.0160

Saturn 90795-01-26 03:22 G 34883277.44 34883277.64 34883277.84 0.0295 0.0089

Jupiter 90797-10-09 12:14 G 34884264.81 34884265.01 34884265.22 0.0498 0.0033

Jupiter 90798-06-02 21:50 G 34884501.34 34884501.41 34884501.48 0.0496 0.0463

Jupiter 90803-08-08 01:26 G 34886393.38 34886393.56 34886393.75 0.0527 0.0217

Jupiter 90804-04-01 14:53 G 34886630.99 34886631.12 34886631.26 0.0529 0.0385

Jupiter 90809-06-14 12:00 G 34888530.81 34888531.00 34888531.20 0.0498 0.0175

Jupiter 90810-02-05 23:02 G 34888767.31 34888767.46 34888767.62 0.0497 0.0330

Saturn 90810-02-17 18:58 G 34888779.14 34888779.29 34888779.46 0.0264 0.0171

Saturn 90810-10-04 19:26 G 34889008.09 34889008.31 34889008.52 0.0266 0.0007

Saturn 90811-05-21 20:24 G 34889237.21 34889237.35 34889237.51 0.0269 0.0188

Earth 90815-01-25 09:07 G 34890581.73 34890581.88 34890582.03 0.2646 0.0758

Moon 90815-01-25 14:10 G 34890581.95 34890582.09 34890582.24 0.2648 0.0928 *

Jupiter 90815-04-12 18:29 G 34890659.14 34890659.27 34890659.42 0.0526 0.0380

Jupiter 90815-12-06 05:46 G 34890896.56 34890896.74 34890896.93 0.0529 0.0215

Mars 90818-07-14 12:14 G 34891847.87 34891848.01 34891848.16 0.1596 0.0884

Jupiter 90821-02-17 12:14 G 34892796.85 34892797.01 34892797.17 0.0499 0.0314

Uranus 90821-03-27 11:17 G 34892834.89 34892834.97 34892835.07 0.0139 0.0125

Jupiter 90821-10-12 01:12 G 34893033.36 34893033.55 34893033.74 0.0497 0.0195

Uranus 90821-11-08 19:26 G 34893061.17 34893061.31 34893061.48 0.0139 0.0097

Uranus 90822-06-23 03:36 G 34893287.47 34893287.65 34893287.84 0.0138 0.0068

Earth 90823-01-23 01:55 G 34893501.51 34893501.58 34893501.64 0.2644 0.2385

Moon 90823-01-23 06:43 G 34893501.68 34893501.78 34893501.89 0.2641 0.1958

Uranus 90823-02-04 11:17 G 34893513.77 34893513.97 34893514.18 0.0138 0.0039

Uranus 90823-09-18 18:58 G 34893740.07 34893740.29 34893740.50 0.0138 0.0010

Saturn 90823-12-21 06:43 G 34893833.59 34893833.78 34893833.97 0.0297 0.0129

Neptune 90824-04-04 12:29 G 34893939.01 34893939.02 34893939.07 0.0088 0.0088

Uranus 90824-05-02 02:24 G 34893966.38 34893966.60 34893966.81 0.0138 0.0018

Saturn 90824-08-07 08:24 G 34894063.66 34894063.85 34894064.05 0.0295 0.0120

Neptune 90824-11-16 01:26 G 34894164.48 34894164.56 34894164.69 0.0088 0.0078

Uranus 90824-12-14 09:36 G 34894192.70 34894192.90 34894193.11 0.0138 0.0046

Neptune 90825-06-29 14:53 G 34894389.99 34894390.12 34894390.27 0.0088 0.0067

Uranus 90825-07-28 16:48 G 34894419.02 34894419.20 34894419.38 0.0137 0.0074

Neptune 90826-02-10 03:36 G 34894615.50 34894615.65 34894615.84 0.0088 0.0057

Uranus 90826-03-11 23:17 G 34894645.34 34894645.47 34894645.63 0.0137 0.0102

Neptune 90826-09-23 16:34 G 34894841.02 34894841.19 34894841.40 0.0088 0.0047

Uranus 90826-10-24 06:00 G 34894871.69 34894871.75 34894871.83 0.0137 0.0128

Neptune 90827-05-07 06:00 G 34895066.55 34895066.75 34895066.96 0.0088 0.0036

Jupiter 90827-08-10 22:05 G 34895162.22 34895162.42 34895162.62 0.0528 0.0047

Neptune 90827-12-18 18:43 G 34895292.08 34895292.28 34895292.51 0.0088 0.0026

Neptune 90828-07-31 07:55 G 34895517.62 34895517.83 34895518.05 0.0088 0.0015

Neptune 90829-03-13 20:53 G 34895743.15 34895743.37 34895743.59 0.0089 0.0004

Neptune 90829-10-25 10:05 G 34895968.70 34895968.92 34895969.14 0.0089 0.0006

Neptune 90830-06-07 22:48 G 34896194.24 34896194.45 34896194.68 0.0089 0.0017

Neptune 90831-01-19 11:31 G 34896419.79 34896419.98 34896420.21 0.0089 0.0028

Neptune 90831-09-02 00:29 G 34896645.34 34896645.52 34896645.73 0.0089 0.0038

Neptune 90832-04-14 13:41 G 34896870.89 34896871.07 34896871.26 0.0089 0.0048

Jupiter 90832-10-23 12:00 G 34897062.92 34897063.00 34897063.08 0.0500 0.0454

Neptune 90832-11-26 02:24 G 34897096.46 34897096.60 34897096.79 0.0089 0.0059

Jupiter 90833-06-17 02:10 G 34897299.39 34897299.59 34897299.80 0.0497 0.0056

Neptune 90833-07-09 15:36 G 34897322.03 34897322.15 34897322.30 0.0089 0.0069

Neptune 90834-02-20 04:34 G 34897547.60 34897547.69 34897547.80 0.0089 0.0079

Jupiter 90839-04-15 14:53 G 34899427.93 34899428.12 34899428.32 0.0528 0.0123

Saturn 90839-08-30 21:22 G 34899565.22 34899565.39 34899565.57 0.0265 0.0147

Jupiter 90839-12-09 05:17 G 34899665.64 34899665.72 34899665.81 0.0530 0.0480

Saturn 90840-04-15 21:36 G 34899794.19 34899794.40 34899794.61 0.0267 0.0030

Saturn 90840-11-30 22:48 G 34900023.33 34900023.45 34900023.59 0.0269 0.0212

Jupiter 90845-02-20 02:38 G 34901565.40 34901565.61 34901565.81 0.0498 0.0085

Jupiter 90845-10-14 12:43 G 34901801.92 34901802.03 34901802.14 0.0496 0.0415

Mars 90849-08-08 13:41 G 34903196.07 34903196.07 34903196.08 0.1939 0.1934

Mars 90850-07-13 05:02 G 34903534.56 34903534.71 34903534.85 0.1593 0.0889

Jupiter 90850-12-19 10:19 G 34903693.76 34903693.93 34903694.10 0.0527 0.0285

Jupiter 90851-08-13 23:02 G 34903931.30 34903931.46 34903931.62 0.0529 0.0317

Saturn 90853-07-02 09:22 G 34904619.69 34904619.89 34904620.09 0.0297 0.0099

Saturn 90854-02-17 10:48 G 34904849.78 34904849.95 34904850.14 0.0294 0.0149

Jupiter 90856-10-25 23:46 G 34905831.31 34905831.49 34905831.67 0.0498 0.0231

Jupiter 90857-06-19 11:02 G 34906067.80 34906067.96 34906068.14 0.0497 0.0276

Jupiter 90862-08-24 05:31 G 34907959.63 34907959.73 34907959.84 0.0526 0.0442

Jupiter 90863-04-18 16:34 G 34908197.00 34908197.19 34908197.38 0.0529 0.0151

Uranus 90865-03-20 12:29 G 34908898.91 34908899.02 34908899.15 0.0139 0.0116

Uranus 90865-11-01 21:36 G 34909125.25 34909125.40 34909125.59 0.0139 0.0088

Uranus 90866-06-16 07:26 G 34909351.62 34909351.81 34909352.02 0.0140 0.0058

Uranus 90867-01-28 17:02 G 34909578.00 34909578.21 34909578.43 0.0140 0.0028

Uranus 90867-09-12 02:53 G 34909804.40 34909804.62 34909804.84 0.0140 0.0002

Uranus 90868-04-25 12:43 G 34910030.82 34910031.03 34910031.25 0.0140 0.0033

Jupiter 90868-06-30 22:34 G 34910097.31 34910097.44 34910097.58 0.0499 0.0373

Uranus 90868-12-07 22:48 G 34910257.26 34910257.45 34910257.66 0.0140 0.0063

Jupiter 90869-02-22 11:46 G 34910333.79 34910333.99 34910334.19 0.0497 0.0137

Saturn 90869-03-12 01:41 G 34910351.39 34910351.57 34910351.76 0.0265 0.0120

Uranus 90869-07-22 08:53 G 34910483.73 34910483.87 34910484.05 0.0141 0.0094

Saturn 90869-10-27 02:10 G 34910580.39 34910580.59 34910580.80 0.0267 0.0059

Uranus 90870-03-05 19:26 G 34910710.22 34910710.31 34910710.43 0.0141 0.0124

Saturn 90870-06-13 03:50 G 34910809.57 34910809.66 34910809.75 0.0269 0.0241

Jupiter 90874-12-22 07:55 G 34912462.63 34912462.83 34912463.03 0.0528 0.0020

Jupiter 90880-10-28 12:58 G 34914599.83 34914600.04 34914600.24 0.0498 0.0005

Jupiter 90881-06-21 22:34 G 34914836.42 34914836.44 34914836.46 0.0496 0.0494

Saturn 90883-01-12 16:19 G 34915405.97 34915406.18 34915406.39 0.0297 0.0065

Saturn 90883-08-30 17:31 G 34915636.08 34915636.23 34915636.41 0.0294 0.0183

Mars 90884-05-11 00:43 G 34915890.40 34915890.53 34915890.67 0.1597 0.1045

Jupiter 90886-08-27 00:43 G 34916728.34 34916728.53 34916728.72 0.0527 0.0187

Jupiter 90887-04-21 13:55 G 34916965.96 34916966.08 34916966.21 0.0529 0.0415

Jupiter 90892-07-03 13:12 G 34918865.85 34918866.05 34918866.25 0.0498 0.0143

Jupiter 90893-02-25 00:00 G 34919102.36 34919102.50 34919102.64 0.0496 0.0360

Jupiter 90898-05-01 18:00 G 34920994.10 34920994.25 34920994.40 0.0526 0.0353

Saturn 90898-09-22 05:31 G 34921137.53 34921137.73 34921137.93 0.0265 0.0094

Jupiter 90898-12-25 05:31 G 34921231.56 34921231.73 34921231.91 0.0529 0.0246

Saturn 90899-05-09 06:00 G 34921366.55 34921366.75 34921366.95 0.0267 0.0085

Saturn 90899-12-24 07:26 G 34921595.80 34921595.81 34921595.84 0.0270 0.0268

Jupiter 90904-03-09 12:43 G 34923131.86 34923132.03 34923132.20 0.0499 0.0286

Jupiter 90904-11-01 01:12 G 34923368.37 34923368.55 34923368.73 0.0497 0.0224

Uranus 90904-11-25 18:00 G 34923393.25 34923393.25 34923393.26 0.0139 0.0139

Uranus 90905-07-10 02:24 G 34923619.47 34923619.60 34923619.73 0.0139 0.0110

Neptune 90905-10-08 04:05 G 34923709.59 34923709.67 34923709.77 0.0089 0.0080

Uranus 90906-02-21 10:05 G 34923845.76 34923845.92 34923846.11 0.0139 0.0082

Neptune 90906-05-21 16:48 G 34923935.09 34923935.20 34923935.35 0.0089 0.0070

Uranus 90906-10-05 18:14 G 34924072.06 34924072.26 34924072.46 0.0138 0.0053

Neptune 90907-01-02 05:46 G 34924160.60 34924160.74 34924160.92 0.0089 0.0060

Uranus 90907-05-20 01:55 G 34924298.37 34924298.58 34924298.80 0.0138 0.0024

Neptune 90907-08-15 18:58 G 34924386.11 34924386.29 34924386.48 0.0089 0.0049

Uranus 90908-01-01 09:36 G 34924524.68 34924524.90 34924525.12 0.0138 0.0004

Neptune 90908-03-28 07:41 G 34924611.64 34924611.82 34924612.04 0.0089 0.0039

Uranus 90908-08-14 16:48 G 34924751.00 34924751.20 34924751.42 0.0138 0.0033

Neptune 90908-11-08 21:07 G 34924837.18 34924837.38 34924837.59 0.0089 0.0028

Uranus 90909-03-28 23:46 G 34924977.31 34924977.49 34924977.70 0.0138 0.0061

Neptune 90909-06-22 10:05 G 34925062.71 34925062.92 34925063.14 0.0089 0.0018

Uranus 90909-11-10 07:12 G 34925203.63 34925203.80 34925203.96 0.0137 0.0088

Jupiter 90910-01-05 13:26 G 34925260.02 34925260.06 34925260.12 0.0526 0.0509

Neptune 90910-02-02 23:17 G 34925288.25 34925288.47 34925288.69 0.0089 0.0007

Uranus 90910-06-24 13:41 G 34925429.97 34925430.07 34925430.20 0.0137 0.0115

Jupiter 90910-08-30 23:31 G 34925497.29 34925497.48 34925497.68 0.0529 0.0081

Neptune 90910-09-16 12:14 G 34925513.79 34925514.01 34925514.23 0.0089 0.0004

Neptune 90911-04-30 01:26 G 34925739.34 34925739.56 34925739.78 0.0089 0.0014

Saturn 90911-12-08 17:02 G 34925962.16 34925962.21 34925962.28 0.0298 0.0286

Neptune 90911-12-11 14:24 G 34925964.90 34925965.10 34925965.32 0.0089 0.0025

Neptune 90912-07-24 03:22 G 34926190.45 34926190.64 34926190.85 0.0089 0.0036

Saturn 90912-07-25 20:10 G 34926192.13 34926192.34 34926192.55 0.0296 0.0033

Neptune 90913-03-06 16:19 G 34926416.01 34926416.18 34926416.38 0.0089 0.0046

Saturn 90913-03-12 21:22 G 34926422.25 34926422.39 34926422.54 0.0293 0.0213

Neptune 90913-10-18 05:17 G 34926641.57 34926641.72 34926641.91 0.0089 0.0057

Neptune 90914-05-31 18:43 G 34926867.15 34926867.28 34926867.43 0.0089 0.0067

Neptune 90915-01-12 07:55 G 34927092.73 34927092.83 34927092.94 0.0089 0.0077

Neptune 90915-08-25 20:24 G 34927318.34 34927318.35 34927318.41 0.0089 0.0088

Jupiter 90915-11-13 09:22 G 34927397.79 34927397.89 34927397.99 0.0500 0.0430

Mars 90916-05-10 17:31 G 34927577.08 34927577.23 34927577.39 0.1594 0.0738

Jupiter 90916-07-06 23:02 G 34927634.26 34927634.46 34927634.66 0.0497 0.0080

Jupiter 90922-05-05 17:31 G 34929763.03 34929763.23 34929763.43 0.0528 0.0086

Jupiter 90922-12-29 08:10 G 34930000.80 34930000.84 34930000.88 0.0530 0.0517

Saturn 90927-08-19 10:34 G 34931694.87 34931694.94 34931695.04 0.0264 0.0240

Jupiter 90928-03-11 22:48 G 34931900.25 34931900.45 34931900.66 0.0498 0.0062

Saturn 90928-04-04 10:34 G 34931923.74 34931923.94 34931924.15 0.0265 0.0065

Jupiter 90928-11-03 08:53 G 34932136.78 34932136.87 34932136.97 0.0496 0.0438

Saturn 90928-11-19 11:17 G 34932152.78 34932152.97 34932153.17 0.0267 0.0115

Jupiter 90934-01-08 09:50 G 34934028.74 34934028.91 34934029.09 0.0527 0.0254

Jupiter 90934-09-02 22:19 G 34934266.28 34934266.43 34934266.58 0.0529 0.0349

Pluto 90937-01-26 00:58 G 34935142.36 34935142.54 34935142.73 0.0066 0.0035

Pluto 90937-09-08 05:02 G 34935367.50 34935367.71 34935367.94 0.0066 0.0007

Pluto 90938-04-21 09:07 G 34935592.75 34935592.88 34935593.04 0.0066 0.0049

Jupiter 90939-11-15 22:48 G 34936166.26 34936166.45 34936166.64 0.0499 0.0203

Jupiter 90940-07-09 10:19 G 34936402.78 34936402.93 34936403.10 0.0497 0.0305

Saturn 90941-06-20 01:55 G 34936748.47 34936748.58 34936748.70 0.0299 0.0248

Saturn 90942-02-05 04:34 G 34936978.48 34936978.69 34936978.91 0.0296 0.0008

Saturn 90942-09-23 05:46 G 34937208.63 34937208.74 34937208.85 0.0294 0.0250

Moon 90944-07-22 23:31 G 34937877.33 34937877.48 34937877.64 0.2683 0.0856

Earth 90944-07-23 03:07 G 34937877.48 34937877.63 34937877.78 0.2688 0.0883 *

Jupiter 90945-09-13 03:07 G 34938294.52 34938294.63 34938294.76 0.0526 0.0417

Jupiter 90946-05-08 13:55 G 34938531.89 34938532.08 34938532.27 0.0529 0.0179

Mars 90947-06-06 17:31 G 34938926.12 34938926.23 34938926.35 0.1943 0.1440

Uranus 90948-11-18 20:10 G 34939457.27 34939457.34 34939457.43 0.0139 0.0128

Uranus 90949-07-03 05:31 G 34939683.58 34939683.73 34939683.88 0.0139 0.0100

Uranus 90950-02-14 14:38 G 34939909.93 34939910.11 34939910.31 0.0139 0.0071

Mars 90950-03-09 13:41 G 34939932.95 34939933.07 34939933.18 0.1598 0.1200

Uranus 90950-09-29 00:14 G 34940136.30 34940136.51 34940136.72 0.0140 0.0041

Uranus 90951-05-13 09:50 G 34940362.70 34940362.91 34940363.14 0.0140 0.0012

Jupiter 90951-07-21 22:05 G 34940432.28 34940432.42 34940432.57 0.0500 0.0346

Uranus 90951-12-25 19:41 G 34940589.11 34940589.32 34940589.54 0.0140 0.0019

Jupiter 90952-03-14 11:17 G 34940668.78 34940668.97 34940669.17 0.0497 0.0166

Uranus 90952-08-08 05:46 G 34940815.54 34940815.74 34940815.95 0.0140 0.0049

Uranus 90953-03-22 15:36 G 34941041.98 34941042.15 34941042.34 0.0141 0.0079

Uranus 90953-11-04 01:55 G 34941268.46 34941268.58 34941268.73 0.0141 0.0110

Uranus 90954-06-18 12:29 G 34941495.01 34941495.02 34941495.06 0.0141 0.0140

Saturn 90957-02-28 15:50 G 34942481.04 34942481.16 34942481.29 0.0264 0.0212

Saturn 90957-10-15 15:36 G 34942709.94 34942710.15 34942710.37 0.0266 0.0037

Jupiter 90958-01-11 05:46 G 34942797.53 34942797.74 34942797.94 0.0528 0.0012

Saturn 90958-06-01 16:19 G 34942939.01 34942939.18 34942939.36 0.0268 0.0144

Jupiter 90963-03-26 20:53 G 34944698.33 34944698.37 34944698.42 0.0500 0.0487

Jupiter 90963-11-18 11:46 G 34944934.78 34944934.99 34944935.19 0.0497 0.0026

Jupiter 90969-09-16 00:00 G 34947063.31 34947063.50 34947063.69 0.0528 0.0159

Jupiter 90970-05-11 13:55 G 34947300.98 34947301.08 34947301.19 0.0530 0.0447

Saturn 90970-12-31 08:10 G 34947534.70 34947534.84 34947535.00 0.0298 0.0212

Saturn 90971-08-18 10:34 G 34947764.73 34947764.94 34947765.15 0.0295 0.0040

Saturn 90972-04-04 11:31 G 34947994.93 34947994.98 34947995.03 0.0293 0.0283

Jupiter 90975-07-24 09:07 G 34949200.68 34949200.88 34949201.08 0.0498 0.0121

Jupiter 90976-03-16 19:26 G 34949437.18 34949437.31 34949437.44 0.0496 0.0382

Jupiter 90981-05-21 18:14 G 34951329.11 34951329.26 34951329.42 0.0527 0.0322

Jupiter 90982-01-14 06:29 G 34951566.60 34951566.77 34951566.95 0.0529 0.0282

Mars 90982-03-08 06:14 G 34951619.59 34951619.76 34951619.92 0.1595 0.0581

Saturn 90986-09-10 21:22 G 34953267.24 34953267.39 34953267.54 0.0264 0.0184

Jupiter 90987-03-29 08:10 G 34953466.67 34953466.84 34953467.02 0.0499 0.0264

Saturn 90987-04-27 21:22 G 34953496.18 34953496.39 34953496.60 0.0266 0.0007

Jupiter 90987-11-20 20:10 G 34953703.16 34953703.34 34953703.52 0.0496 0.0246

Saturn 90987-12-12 22:34 G 34953725.28 34953725.44 34953725.60 0.0268 0.0174

Neptune 90989-02-18 13:12 G 34954158.96 34954159.05 34954159.15 0.0088 0.0080

Uranus 90989-03-09 08:53 G 34954177.79 34954177.87 34954177.99 0.0139 0.0124

Neptune 90989-10-02 02:10 G 34954384.47 34954384.59 34954384.74 0.0088 0.0069

Uranus 90989-10-21 17:31 G 34954404.08 34954404.23 34954404.39 0.0139 0.0095

Neptune 90990-05-15 15:07 G 34954609.98 34954610.13 34954610.31 0.0088 0.0059

Uranus 90990-06-05 01:26 G 34954630.38 34954630.56 34954630.76 0.0139 0.0066

Neptune 90990-12-27 04:19 G 34954835.51 34954835.68 34954835.87 0.0088 0.0049

Uranus 90991-01-17 09:22 G 34954856.68 34954856.89 34954857.10 0.0138 0.0038

Neptune 90991-08-09 17:17 G 34955061.03 34955061.22 34955061.43 0.0088 0.0038

Uranus 90991-08-31 17:02 G 34955082.99 34955083.21 34955083.43 0.0138 0.0009

Neptune 90992-03-22 06:29 G 34955286.56 34955286.77 34955286.98 0.0088 0.0028

Uranus 90992-04-14 00:29 G 34955309.31 34955309.52 34955309.73 0.0138 0.0019

Neptune 90992-11-02 19:41 G 34955512.11 34955512.32 34955512.54 0.0088 0.0017

Uranus 90992-11-26 07:41 G 34955535.62 34955535.82 34955536.03 0.0138 0.0047

Jupiter 90993-01-24 11:31 G 34955594.91 34955594.98 34955595.06 0.0526 0.0483

Neptune 90993-06-16 08:38 G 34955737.64 34955737.86 34955738.08 0.0088 0.0007

Uranus 90993-07-10 14:38 G 34955761.94 34955762.11 34955762.30 0.0138 0.0075

Jupiter 90993-09-18 21:22 G 34955832.20 34955832.39 34955832.59 0.0529 0.0109

Neptune 90994-01-27 21:36 G 34955963.18 34955963.40 34955963.62 0.0089 0.0004

Uranus 90994-02-21 21:22 G 34955988.26 34955988.39 34955988.55 0.0137 0.0102

Neptune 90994-09-10 10:34 G 34956188.72 34956188.94 34956189.16 0.0089 0.0014

Uranus 90994-10-06 03:50 G 34956214.61 34956214.66 34956214.75 0.0137 0.0130

Neptune 90995-04-23 23:17 G 34956414.27 34956414.47 34956414.69 0.0089 0.0025

Neptune 90995-12-05 12:29 G 34956639.82 34956640.02 34956640.23 0.0089 0.0035

Neptune 90996-07-18 01:12 G 34956865.37 34956865.55 34956865.75 0.0089 0.0046

Neptune 90997-02-28 14:10 G 34957090.93 34957091.09 34957091.27 0.0089 0.0056

Neptune 90997-10-12 02:53 G 34957316.50 34957316.62 34957316.79 0.0089 0.0067

Neptune 90998-05-25 15:50 G 34957542.07 34957542.16 34957542.29 0.0089 0.0077

Jupiter 90998-12-02 06:58 G 34957732.67 34957732.79 34957732.91 0.0500 0.0407

Neptune 90999-01-06 05:02 G 34957767.68 34957767.71 34957767.76 0.0089 0.0087

Jupiter 90999-07-26 20:53 G 34957969.17 34957969.37 34957969.57 0.0497 0.0106

Saturn 91000-07-13 17:46 G 34958321.08 34958321.24 34958321.42 0.0298 0.0173

92ND MILLENNIUM CE

This is a list of transits of Venus in the 92nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**91001-02-28 20:10 G**		**34958551.14**	**34958551.34**	**34958551.54**	**0.0295**	**0.0079**	
Jupiter	**91005-05-25 13:41 G**		**34960097.87**	**34960098.07**	**34960098.27**	**0.0528**	**0.0063**	
Jupiter	**91011-04-01 21:07 G**		**34962235.17**	**34962235.38**	**34962235.58**	**0.0498**	**0.0037**	
Jupiter	**91011-11-24 06:58 G**		**34962471.73**	**34962471.79**	**34962471.87**	**0.0496**	**0.0464**	
Mars	**91013-04-03 19:41 G**		**34962968.16**	**34962968.32**	**34962968.48**	**0.1941**	**0.0695**	
Mars	**91016-01-06 02:10 G**		**34963975.50**	**34963975.59**	**34963975.68**	**0.1600**	**0.1364**	
Saturn	**91016-03-24 03:22 G**		**34964053.47**	**34964053.64**	**34964053.82**	**0.0265**	**0.0154**	
Saturn	**91016-11-08 03:50 G**		**34964282.44**	**34964282.66**	**34964282.87**	**0.0267**	**0.0024**	
Jupiter	**91017-01-28 05:46 G**		**34964363.56**	**34964363.74**	**34964363.92**	**0.0527**	**0.0232**	
Saturn	**91017-06-25 04:48 G**		**34964511.57**	**34964511.70**	**34964511.84**	**0.0269**	**0.0206**	
Jupiter	**91017-09-22 18:29 G**		**34964601.13**	**34964601.27**	**34964601.41**	**0.0529**	**0.0373**	
Jupiter	**91022-12-05 20:24 G**		**34966501.16**	**34966501.35**	**34966501.55**	**0.0498**	**0.0179**	
Jupiter	**91023-07-30 07:41 G**		**34966737.67**	**34966737.82**	**34966737.97**	**0.0496**	**0.0329**	
Pluto	**91024-09-28 04:48 G**		**34967163.53**	**34967163.70**	**34967163.90**	**0.0079**	**0.0046**	
Pluto	**91025-05-11 15:07 G**		**34967388.93**	**34967389.13**	**34967389.35**	**0.0078**	**0.0029**	
Jupiter	**91028-10-03 00:29 G**		**34968629.39**	**34968629.52**	**34968629.65**	**0.0526**	**0.0394**	
Jupiter	**91029-05-28 11:46 G**		**34968866.80**	**34968866.99**	**34968867.17**	**0.0529**	**0.0206**	

Saturn 91030-01-24 01:55 G 34969107.39 34969107.58 34969107.77 0.0297 0.0133

Saturn 91030-09-11 03:36 G 34969337.46 34969337.65 34969337.85 0.0294 0.0117

Uranus 91033-03-03 12:58 G 34970241.92 34970242.04 34970242.18 0.0139 0.0112

Uranus 91033-10-15 22:05 G 34970468.26 34970468.42 34970468.61 0.0139 0.0084

Uranus 91034-05-30 07:55 G 34970694.63 34970694.83 34970695.03 0.0140 0.0054

Jupiter 91034-08-10 17:46 G 34970767.09 34970767.24 34970767.40 0.0499 0.0324

Uranus 91035-01-11 17:17 G 34970921.01 34970921.22 34970921.44 0.0140 0.0025

Jupiter 91035-04-04 06:14 G 34971003.57 34971003.76 34971003.95 0.0496 0.0187

Uranus 91035-08-26 03:07 G 34971147.41 34971147.63 34971147.85 0.0140 0.0005

Uranus 91036-04-08 12:58 G 34971373.83 34971374.04 34971374.26 0.0140 0.0035

Uranus 91036-11-20 23:02 G 34971600.27 34971600.46 34971600.66 0.0140 0.0066

Uranus 91037-07-05 09:22 G 34971826.74 34971826.89 34971827.06 0.0141 0.0096

Uranus 91038-02-16 19:55 G 34972053.24 34972053.33 34972053.43 0.0141 0.0126

Jupiter 91041-01-31 04:34 G 34973132.49 34973132.69 34973132.89 0.0529 0.0039

Saturn 91045-10-04 09:07 G 34974839.69 34974839.88 34974840.07 0.0265 0.0125

Jupiter 91046-04-15 16:05 G 34975033.10 34975033.17 34975033.24 0.0500 0.0467

Saturn 91046-05-21 09:36 G 34975068.69 34975068.90 34975069.11 0.0267 0.0054

Jupiter 91046-12-08 06:00 G 34975269.55 34975269.75 34975269.96 0.0497 0.0047

Saturn 91047-01-05 10:48 G 34975297.86 34975297.95 34975298.06 0.0269 0.0237

Mars 91048-01-04 18:58 G 34975662.12 34975662.29 34975662.46 0.1596 0.0430

Jupiter 91052-10-05 20:24 G 34977398.16 34977398.35 34977398.55 0.0528 0.0135

Jupiter 91053-05-31 10:05 G 34977635.84 34977635.92 34977636.02 0.0529 0.0472

Moon 91058-01-27 07:55 G 34979337.68 34979337.83 34979337.99 0.2641 0.0922

Earth 91058-01-27 12:00 G 34979337.85 34979338.00 34979338.15 0.2645 0.0980 *

Jupiter 91058-08-13 05:31 G 34979535.53 34979535.73 34979535.94 0.0498 0.0099

Jupiter 91059-04-06 16:19 G 34979772.07 34979772.18 34979772.30 0.0496 0.0407

Saturn 91059-08-06 12:58 G 34979893.84 34979894.04 34979894.24 0.0297 0.0091

Saturn 91060-03-23 14:38 G 34980123.93 34980124.11 34980124.29 0.0295 0.0159

Jupiter 91064-06-10 13:26 G 34981663.90 34981664.06 34981664.23 0.0527 0.0301

Jupiter 91065-02-03 00:58 G 34981901.38 34981901.54 34981901.71 0.0529 0.0303

Earth 91066-01-25 04:48 G 34982257.61 34982257.70 34982257.79 0.2643 0.2148

Neptune 91070-01-10 15:22 G 34983704.08 34983704.14 34983704.24 0.0089 0.0083

Jupiter 91070-04-18 05:02 G 34983801.53 34983801.71 34983801.89 0.0499 0.0242

Neptune 91070-08-24 04:05 G 34983929.57 34983929.67 34983929.82 0.0089 0.0073

Jupiter 91070-12-10 17:02 G 34984038.04 34984038.21 34984038.39 0.0497 0.0270

Neptune 91071-04-06 17:31 G 34984155.09 34984155.23 34984155.40 0.0089 0.0062

Neptune 91071-11-18 06:14 G 34984380.60 34984380.76 34984380.96 0.0089 0.0052

Neptune 91072-06-30 19:26 G 34984606.12 34984606.31 34984606.51 0.0089 0.0041

Uranus 91072-11-07 17:31 G 34984736.20 34984736.23 34984736.28 0.0139 0.0136

Neptune 91073-02-11 08:10 G 34984831.65 34984831.84 34984832.06 0.0089 0.0031

Uranus 91073-06-22 01:41 G 34984962.45 34984962.57 34984962.72 0.0139 0.0108

Neptune 91073-09-24 21:22 G 34985057.18 34985057.39 34985057.61 0.0089 0.0020

Uranus 91074-02-03 10:05 G 34985188.74 34985188.92 34985189.10 0.0139 0.0079

Neptune 91074-05-08 10:34 G 34985282.72 34985282.94 34985283.16 0.0089 0.0010

Uranus 91074-09-17 17:46 G 34985415.04 34985415.24 34985415.45 0.0138 0.0051

Neptune 91074-12-19 23:31 G 34985508.26 34985508.48 34985508.70 0.0089 0.0001

Saturn 91075-04-16 15:50 G 34985625.97 34985626.16 34985626.37 0.0265 0.0094

Uranus 91075-05-02 01:26 G 34985641.35 34985641.56 34985641.78 0.0138 0.0022

Neptune 91075-08-02 12:29 G 34985733.80 34985734.02 34985734.24 0.0089 0.0012

Saturn 91075-12-01 16:34 G 34985854.99 34985855.19 34985855.40 0.0267 0.0086

Uranus 91075-12-14 09:07 G 34985867.67 34985867.88 34985868.10 0.0138 0.0007

Jupiter 91076-02-14 06:14 G 34985929.67 34985929.76 34985929.85 0.0526 0.0465

Neptune 91076-03-15 01:26 G 34985959.35 34985959.56 34985959.78 0.0089 0.0022

Uranus 91076-07-27 16:34 G 34986093.98 34986094.19 34986094.40 0.0138 0.0034

Jupiter 91076-10-08 16:05 G 34986166.98 34986167.17 34986167.37 0.0529 0.0130

Neptune 91076-10-26 14:24 G 34986184.90 34986185.10 34986185.31 0.0089 0.0033

Uranus 91077-03-10 23:31 G 34986320.29 34986320.48 34986320.68 0.0138 0.0062

Neptune 91077-06-09 03:50 G 34986410.47 34986410.66 34986410.85 0.0089 0.0043

Uranus 91077-10-23 06:14 G 34986546.61 34986546.76 34986546.94 0.0137 0.0090

Neptune 91078-01-20 16:34 G 34986636.03 34986636.19 34986636.38 0.0089 0.0054

Uranus 91078-06-06 13:12 G 34986772.94 34986773.05 34986773.17 0.0137 0.0117

Neptune 91078-09-03 05:46 G 34986861.59 34986861.74 34986861.90 0.0089 0.0064

Mars 91079-01-29 21:50 G 34987010.24 34987010.41 34987010.58 0.1940 0.0036

Neptune 91079-04-16 18:29 G 34987087.18 34987087.27 34987087.41 0.0089 0.0075

Neptune 91079-11-28 07:55 G 34987312.78 34987312.83 34987312.90 0.0089 0.0085

Mars 91081-11-02 14:38 G 34988018.06 34988018.11 34988018.16 0.1601 0.1520

Jupiter 91081-12-22 03:36 G 34988067.52 34988067.65 34988067.78 0.0500 0.0386

Jupiter 91082-08-15 17:17 G 34988304.02 34988304.22 34988304.42 0.0497 0.0129

Jupiter 91088-06-13 09:22 G 34990432.69 34990432.89 34990433.10 0.0528 0.0041

Saturn 91089-02-15 22:05 G 34990680.21 34990680.42 34990680.63 0.0296 0.0049

Saturn 91089-10-03 23:02 G 34990910.31 34990910.46 34990910.63 0.0294 0.0199

Jupiter 91094-04-20 15:50 G 34992569.95 34992570.16 34992570.36 0.0497 0.0016

Jupiter 91094-12-13 00:58 G 34992806.50 34992806.54 34992806.59 0.0496 0.0483

Jupiter 91100-02-17 02:53 G 34994698.44 34994698.62 34994698.81 0.0528 0.0207

Jupiter 91100-10-12 16:34 G 34994936.06 34994936.19 34994936.32 0.0530 0.0402

Saturn 91104-03-12 21:22 G 34996183.32 34996183.39 34996183.49 0.0264 0.0241

Saturn 91104-10-27 21:36 G 34996412.20 34996412.40 34996412.61 0.0266 0.0065

Saturn 91105-06-13 22:19 G 34996641.25 34996641.43 34996641.63 0.0268 0.0117

Jupiter 91105-12-25 14:53 G 34996835.92 34996836.12 34996836.32 0.0498 0.0159

Jupiter 91106-08-19 01:41 G 34997072.42 34997072.57 34997072.71 0.0496 0.0348

Jupiter 91111-10-23 20:10 G 34998964.20 34998964.34 34998964.48 0.0526 0.0373

Jupiter 91112-06-17 06:58 G 34999201.62 34999201.79 34999201.98 0.0529 0.0230

Mars 91113-11-02 07:12 G 34999704.63 34999704.80 34999704.98 0.1597 0.0271

Uranus 91116-11-01 20:53 G 35000800.29 35000800.37 35000800.48 0.0139 0.0125

Uranus 91117-06-16 06:00 G 35001026.61 35001026.75 35001026.92 0.0139 0.0096

Jupiter 91117-08-30 13:12 G 35001101.89 35001102.05 35001102.21 0.0499 0.0306

Saturn 91118-01-12 06:43 G 35001236.68 35001236.78 35001236.88 0.0299 0.0260

Uranus 91118-01-28 15:36 G 35001252.96 35001253.15 35001253.34 0.0140 0.0067

Jupiter 91118-04-24 02:10 G 35001338.40 35001338.59 35001338.78 0.0497 0.0209

Saturn 91118-08-30 09:07 G 35001466.67 35001466.88 35001467.10 0.0296 0.0009

Uranus 91118-09-12 00:58 G 35001479.33 35001479.54 35001479.75 0.0140 0.0038

Saturn 91119-04-17 10:19 G 35001696.81 35001696.93 35001697.05 0.0294 0.0241

Uranus 91119-04-26 10:48 G 35001705.73 35001705.95 35001706.16 0.0140 0.0008

Uranus 91119-12-08 20:24 G 35001932.14 35001932.35 35001932.57 0.0140 0.0022

Uranus 91120-07-22 06:29 G 35002158.57 35002158.77 35002158.98 0.0140 0.0052

Uranus 91121-03-05 16:34 G 35002385.02 35002385.19 35002385.37 0.0141 0.0083

Uranus 91121-10-18 02:53 G 35002611.50 35002611.62 35002611.76 0.0141 0.0113

Jupiter 91124-02-20 22:48 G 35003467.25 35003467.45 35003467.66 0.0528 0.0059

Jupiter 91129-05-05 11:31 G 35005367.89 35005367.98 35005368.07 0.0500 0.0450

Jupiter 91129-12-28 02:10 G 35005604.39 35005604.59 35005604.80 0.0497 0.0068

Saturn 91133-09-23 04:34 G 35006969.57 35006969.69 35006969.82 0.0264 0.0209

Saturn 91134-05-10 04:34 G 35007198.48 35007198.69 35007198.90 0.0266 0.0033

Saturn 91134-12-25 05:31 G 35007427.56 35007427.73 35007427.91 0.0268 0.0149

Jupiter 91135-10-26 14:24 G 35007732.91 35007733.10 35007733.30 0.0528 0.0116

Jupiter 91136-06-20 04:05 G 35007970.60 35007970.67 35007970.75 0.0530 0.0493

Jupiter 91141-09-02 01:55 G 35009870.37 35009870.58 35009870.78 0.0498 0.0076

Jupiter 91142-04-26 12:14 G 35010106.91 35010107.01 35010107.11 0.0496 0.0429

Mars 91144-11-27 00:00 G 35011052.34 35011052.50 35011052.66 0.1938 0.0765

Jupiter 91147-07-01 08:10 G 35011998.67 35011998.84 35011999.01 0.0527 0.0282

Saturn 91147-07-25 16:48 G 35012023.06 35012023.20 35012023.35 0.0298 0.0216

Jupiter 91148-02-23 20:24 G 35012236.19 35012236.35 35012236.51 0.0530 0.0326

Saturn 91148-03-11 19:12 G 35012253.09 35012253.30 35012253.51 0.0295 0.0037

Saturn 91148-10-27 19:41 G 35012483.27 35012483.32 35012483.39 0.0293 0.0281

Jupiter 91153-05-08 00:14 G 35014136.33 35014136.51 35014136.70 0.0498 0.0221

Neptune 91153-05-25 00:00 G 35014153.43 35014153.50 35014153.59 0.0088 0.0083

Jupiter 91153-12-30 11:31 G 35014372.82 35014372.98 35014373.15 0.0496 0.0290

Neptune 91154-01-05 12:43 G 35014378.93 35014379.03 35014379.18 0.0088 0.0073

Neptune 91154-08-19 01:41 G 35014604.44 35014604.57 35014604.75 0.0088 0.0063

Neptune 91155-04-01 15:07 G 35014829.96 35014830.13 35014830.32 0.0088 0.0052

Neptune 91155-11-13 04:19 G 35015055.50 35015055.68 35015055.89 0.0088 0.0041

Neptune 91156-06-25 17:31 G 35015281.03 35015281.23 35015281.44 0.0088 0.0031

Neptune 91157-02-06 06:29 G 35015506.56 35015506.77 35015506.99 0.0088 0.0021

Uranus 91157-02-20 10:48 G 35015520.86 35015520.95 35015521.08 0.0139 0.0120

Neptune 91157-09-19 19:41 G 35015732.10 35015732.32 35015732.54 0.0088 0.0010

Uranus 91157-10-04 19:12 G 35015747.14 35015747.30 35015747.47 0.0139 0.0091

Neptune 91158-05-03 08:38 G 35015957.64 35015957.86 35015958.08 0.0088 0.0002

Uranus 91158-05-19 03:07 G 35015973.44 35015973.63 35015973.83 0.0138 0.0063

Neptune 91158-12-14 21:36 G 35016183.19 35016183.40 35016183.63 0.0089 0.0012

Uranus 91158-12-31 11:02 G 35016199.75 35016199.96 35016200.17 0.0138 0.0034

Jupiter 91159-03-06 02:10 G 35016264.49 35016264.59 35016264.70 0.0526 0.0445

Neptune 91159-07-28 10:34 G 35016408.73 35016408.94 35016409.16 0.0089 0.0022

Uranus 91159-08-14 18:29 G 35016426.06 35016426.27 35016426.49 0.0138 0.0007

Jupiter 91159-10-29 13:12 G 35016501.85 35016502.05 35016502.24 0.0529 0.0157

Neptune 91160-03-09 23:17 G 35016634.28 35016634.47 35016634.69 0.0089 0.0033

Uranus 91160-03-28 01:55 G 35016652.37 35016652.58 35016652.79 0.0138 0.0022

Neptune 91160-10-21 12:29 G 35016859.84 35016860.02 35016860.22 0.0089 0.0043

Uranus 91160-11-09 09:07 G 35016878.68 35016878.88 35016879.08 0.0138 0.0050

Neptune 91161-06-04 01:41 G 35017085.40 35017085.57 35017085.75 0.0089 0.0053

Uranus 91161-06-23 15:50 G 35017104.99 35017105.16 35017105.35 0.0137 0.0078

Neptune 91162-01-15 14:10 G 35017310.96 35017311.09 35017311.26 0.0089 0.0064

Uranus 91162-02-04 22:48 G 35017331.32 35017331.45 35017331.59 0.0137 0.0105

Neptune 91162-08-29 03:07 G 35017536.53 35017536.63 35017536.77 0.0089 0.0074

Uranus 91162-09-19 05:31 G 35017557.67 35017557.73 35017557.79 0.0137 0.0131

Saturn 91163-04-05 09:36 G 35017755.74 35017755.90 35017756.05 0.0265 0.0182

Neptune 91163-04-11 15:50 G 35017762.12 35017762.16 35017762.25 0.0089 0.0085

Saturn 91163-11-20 09:50 G 35017984.70 35017984.91 35017985.12 0.0266 0.0004

Saturn 91164-07-06 11:02 G 35018213.80 35018213.96 35018214.12 0.0268 0.0179

Jupiter 91165-01-10 22:34 G 35018402.30 35018402.44 35018402.58 0.0499 0.0366

Jupiter 91165-09-04 11:46 G 35018638.79 35018638.99 35018639.19 0.0497 0.0149

Jupiter 91171-07-04 05:02 G 35020767.50 35020767.71 35020767.91 0.0528 0.0021

Saturn 91177-02-04 03:50 G 35022809.49 35022809.66 35022809.84 0.0298 0.0173

Jupiter 91177-05-10 11:02 G 35022904.76 35022904.96 35022905.17 0.0498 0.0008

Saturn 91177-09-22 06:00 G 35023039.55 35023039.75 35023039.96 0.0296 0.0080

Moon 91179-07-28 10:05 G 35023713.84 35023713.92 35023714.00 0.2694 0.2309

Mars 91179-08-30 20:10 G 35023747.16 35023747.34 35023747.51 0.1598 0.0118

Pluto 91183-02-26 03:22 G 35025022.52 35025022.64 35025022.81 0.0066 0.0050

Jupiter 91183-03-08 21:50 G 35025033.23 35025033.41 35025033.60 0.0527 0.0187

Pluto 91183-10-09 08:10 G 35025247.63 35025247.84 35025248.06 0.0066 0.0008

Jupiter 91183-11-01 10:34 G 35025270.82 35025270.94 35025271.06 0.0529 0.0422

Pluto 91184-05-21 12:00 G 35025472.84 35025473.00 35025473.21 0.0066 0.0035

Earth 91187-07-26 02:38 G 35026633.46 35026633.61 35026633.76 0.2689 0.0915

Moon 91187-07-26 04:05 G 35026633.53 35026633.67 35026633.81 0.2696 0.1095 *

Jupiter 91189-01-13 10:19 G 35027170.74 35027170.93 35027171.13 0.0498 0.0141

Jupiter 91189-09-06 21:50 G 35027407.28 35027407.41 35027407.55 0.0497 0.0370

Saturn 91192-10-15 16:19 G 35028542.01 35028542.18 35028542.36 0.0265 0.0150

Saturn 91193-06-01 16:48 G 35028770.99 35028771.20 35028771.41 0.0267 0.0029

Saturn 91194-01-16 18:00 G 35029000.12 35029000.25 35029000.38 0.0269 0.0212

Jupiter 91194-11-11 14:10 G 35029298.95 35029299.09 35029299.24 0.0526 0.0355

Jupiter 91195-07-07 01:12 G 35029536.37 35029536.55 35029536.72 0.0529 0.0249

Uranus 91200-07-02 03:50 G 35031358.64 35031358.66 35031358.70 0.0139 0.0138

Jupiter 91200-09-18 09:36 G 35031436.73 35031436.90 35031437.07 0.0499 0.0284

Uranus 91201-02-13 12:43 G 35031584.91 35031585.03 35031585.18 0.0139 0.0110

Jupiter 91201-05-12 22:19 G 35031673.25 35031673.43 35031673.62 0.0497 0.0232

Uranus 91201-09-27 22:05 G 35031811.25 35031811.42 35031811.60 0.0140 0.0080

Uranus 91202-05-12 07:41 G 35032037.62 35032037.82 35032038.02 0.0140 0.0051

Uranus 91202-12-24 17:02 G 35032264.00 35032264.21 35032264.44 0.0140 0.0022

Uranus 91203-08-08 02:53 G 35032490.40 35032490.62 35032490.84 0.0140 0.0008

Uranus 91204-03-21 12:43 G 35032716.82 35032717.03 35032717.25 0.0140 0.0038

Uranus 91204-11-02 22:48 G 35032943.27 35032943.45 35032943.65 0.0141 0.0068

Uranus 91205-06-17 09:07 G 35033169.74 35033169.88 35033170.05 0.0141 0.0099

Uranus 91206-01-29 19:41 G 35033396.25 35033396.32 35033396.42 0.0141 0.0129

Jupiter 91206-07-17 08:24 G 35033564.82 35033564.85 35033564.89 0.0525 0.0515

Saturn 91206-08-17 13:41 G 35033595.89 35033596.07 35033596.27 0.0297 0.0130

Jupiter 91207-03-11 17:46 G 35033802.05 35033802.24 35033802.44 0.0529 0.0080

Saturn 91207-04-04 15:36 G 35033825.96 35033826.15 35033826.35 0.0295 0.0121

Mars 91210-09-24 02:10 G 35035094.48 35035094.59 35035094.69 0.1936 0.1497

Jupiter 91212-05-24 07:41 G 35035702.72 35035702.82 35035702.93 0.0500 0.0429

Jupiter 91213-01-15 21:50 G 35035939.20 35035939.41 35035939.61 0.0497 0.0089

Jupiter 91218-11-14 11:02 G 35038067.76 35038067.96 35038068.16 0.0528 0.0092

Jupiter 91219-07-10 01:26 G 35038305.53 35038305.56 35038305.60 0.0530 0.0520

Saturn 91222-04-27 20:10 G 35039328.16 35039328.34 35039328.53 0.0265 0.0124

Saturn 91222-12-12 20:53 G 35039557.16 35039557.37 35039557.58 0.0267 0.0056

Saturn 91223-07-29 22:19 G 35039786.34 35039786.43 35039786.53 0.0269 0.0239

Jupiter 91224-09-20 21:22 G 35040205.19 35040205.39 35040205.60 0.0498 0.0055

Jupiter 91225-05-15 07:12 G 35040441.72 35040441.80 35040441.89 0.0496 0.0450

Jupiter 91230-07-20 04:19 G 35042333.51 35042333.68 35042333.86 0.0527 0.0261

Jupiter 91231-03-14 16:34 G 35042571.04 35042571.19 35042571.34 0.0529 0.0348

Neptune 91234-04-15 02:38 G 35043698.58 35043698.61 35043698.69 0.0089 0.0086

Neptune 91234-11-26 15:50 G 35043924.06 35043924.16 35043924.28 0.0089 0.0076

Neptune 91235-07-10 04:34 G 35044149.56 35044149.69 35044149.86 0.0089 0.0065

Neptune 91236-02-20 17:17 G 35044375.07 35044375.22 35044375.42 0.0089 0.0055

Saturn 91236-02-28 00:00 G 35044382.30 35044382.50 35044382.70 0.0297 0.0088

Jupiter 91236-05-26 19:26 G 35044471.12 35044471.31 35044471.50 0.0499 0.0204

Neptune 91236-10-03 06:29 G 35044600.59 35044600.77 35044600.97 0.0089 0.0044

Saturn 91236-10-15 01:41 G 35044612.40 35044612.57 35044612.75 0.0295 0.0163

Jupiter 91237-01-18 07:26 G 35044707.65 35044707.81 35044707.97 0.0497 0.0311

Neptune 91237-05-16 19:26 G 35044826.13 35044826.31 35044826.53 0.0089 0.0034

Neptune 91237-12-28 08:38 G 35045051.65 35045051.86 35045052.08 0.0089 0.0023

Neptune 91238-08-10 21:36 G 35045277.19 35045277.40 35045277.62 0.0089 0.0013

Neptune 91239-03-24 10:34 G 35045502.73 35045502.94 35045503.17 0.0089 0.0003

Neptune 91239-11-04 23:31 G 35045728.27 35045728.48 35045728.71 0.0089 0.0009

Neptune 91240-06-17 12:29 G 35045953.82 35045954.02 35045954.25 0.0089 0.0020

Uranus 91240-10-20 20:38 G 35046079.30 35046079.36 35046079.44 0.0139 0.0131

Neptune 91241-01-29 01:41 G 35046179.36 35046179.57 35046179.78 0.0089 0.0030

Uranus 91241-06-04 04:48 G 35046305.57 35046305.70 35046305.85 0.0139 0.0103

Neptune 91241-09-11 14:24 G 35046404.92 35046405.10 35046405.31 0.0089 0.0041

Uranus 91242-01-16 12:43 G 35046531.86 35046532.03 35046532.22 0.0139 0.0075

Jupiter 91242-03-24 22:48 G 35046599.33 35046599.45 35046599.57 0.0526 0.0423

Neptune 91242-04-25 03:50 G 35046630.48 35046630.66 35046630.84 0.0089 0.0051

Uranus 91242-08-30 20:24 G 35046758.16 35046758.35 35046758.57 0.0138 0.0047

Jupiter 91242-11-17 08:38 G 35046836.67 35046836.86 35046837.05 0.0529 0.0177

Neptune 91242-12-06 16:34 G 35046856.05 35046856.19 35046856.36 0.0089 0.0062

Uranus 91243-04-14 04:19 G 35046984.47 35046984.68 35046984.90 0.0138 0.0018

Neptune 91243-07-20 05:46 G 35047081.62 35047081.74 35047081.88 0.0089 0.0072

Uranus 91243-11-26 11:46 G 35047210.78 35047210.99 35047211.21 0.0138 0.0011

Neptune 91244-03-01 18:29 G 35047307.22 35047307.27 35047307.37 0.0089 0.0083

Uranus 91244-07-09 18:58 G 35047437.09 35047437.29 35047437.50 0.0138 0.0038

Uranus 91245-02-21 01:55 G 35047663.40 35047663.58 35047663.78 0.0138 0.0066

Mars 91245-06-27 08:38 G 35047789.69 35047789.86 35047790.04 0.1599 0.0054

Uranus 91245-10-05 08:38 G 35047889.71 35047889.86 35047890.03 0.0137 0.0093

Uranus 91246-05-19 15:07 G 35048116.05 35048116.13 35048116.25 0.0137 0.0121

Jupiter 91248-01-30 18:00 G 35048737.10 35048737.25 35048737.39 0.0500 0.0349

Jupiter 91248-09-23 07:55 G 35048973.64 35048973.83 35048974.03 0.0497 0.0170

Saturn 91251-11-08 02:38 G 35050114.41 35050114.61 35050114.81 0.0265 0.0092

Saturn 91252-06-24 02:53 G 35050343.43 35050343.62 35050343.83 0.0267 0.0088

Jupiter 91254-07-23 00:00 G 35051102.29 35051102.50 35051102.70 0.0528 0.0013

Jupiter 91259-10-05 16:34 G 35053003.16 35053003.19 35053003.23 0.0501 0.0492

Jupiter 91260-05-29 08:10 G 35053239.63 35053239.84 35053240.04 0.0498 0.0028

Saturn 91265-09-09 09:07 G 35055168.67 35055168.88 35055169.09 0.0297 0.0046

Jupiter 91266-03-27 17:17 G 35055368.03 35055368.22 35055368.41 0.0527 0.0166

Saturn 91266-04-27 10:48 G 35055398.80 35055398.95 35055399.10 0.0294 0.0203

Jupiter 91266-11-20 06:14 G 35055605.66 35055605.76 35055605.88 0.0530 0.0446

Pluto 91270-10-28 04:19 G 35057043.62 35057043.68 35057043.76 0.0079 0.0074

Pluto 91271-06-10 14:53 G 35057268.89 35057269.12 35057269.34 0.0078 0.0001

Pluto 91272-01-22 00:29 G 35057494.46 35057494.52 35057494.61 0.0078 0.0074

Jupiter 91272-02-02 07:26 G 35057505.61 35057505.81 35057506.01 0.0498 0.0117

Jupiter 91272-09-25 18:14 G 35057742.14 35057742.26 35057742.39 0.0496 0.0393

Jupiter 91277-11-30 11:02 G 35059633.81 35059633.96 35059634.12 0.0527 0.0333

Jupiter 91278-07-25 22:48 G 35059871.28 35059871.45 35059871.62 0.0530 0.0276

Saturn 91280-10-03 05:46 G 35060671.67 35060671.74 35060671.83 0.0264 0.0244

Saturn 91281-05-20 05:46 G 35060900.53 35060900.74 35060900.94 0.0265 0.0068

Saturn 91282-01-04 06:14 G 35061129.57 35061129.76 35061129.95 0.0267 0.0113

Jupiter 91283-10-08 06:43 G 35061771.60 35061771.78 35061771.95 0.0499 0.0262

Jupiter 91284-05-31 18:58 G 35062008.11 35062008.29 35062008.47 0.0496 0.0254

Uranus 91284-10-13 19:26 G 35062143.21 35062143.31 35062143.41 0.0139 0.0123

Uranus 91285-05-28 04:19 G 35062369.53 35062369.68 35062369.85 0.0139 0.0094

Uranus 91286-01-09 13:26 G 35062595.88 35062596.06 35062596.27 0.0140 0.0066

Uranus 91286-08-23 23:02 G 35062822.25 35062822.46 35062822.68 0.0140 0.0036

Uranus 91287-04-07 08:38 G 35063048.65 35063048.86 35063049.08 0.0140 0.0007

Uranus 91287-11-19 18:29 G 35063275.06 35063275.27 35063275.49 0.0140 0.0024

Uranus 91288-07-03 04:34 G 35063501.49 35063501.69 35063501.90 0.0140 0.0054

Uranus 91289-02-14 14:38 G 35063727.95 35063728.11 35063728.30 0.0141 0.0084

Jupiter 91289-08-05 06:00 G 35063899.69 35063899.75 35063899.82 0.0525 0.0494

Uranus 91289-09-29 00:58 G 35063954.43 35063954.54 35063954.68 0.0141 0.0114

Jupiter 91290-03-30 15:22 G 35064136.95 35064137.14 35064137.34 0.0528 0.0104

Saturn 91294-08-04 14:38 G 35065725.02 35065725.11 35065725.22 0.0299 0.0262

Saturn 91295-03-22 17:46 G 35065955.03 35065955.24 35065955.45 0.0297 0.0007

Jupiter 91295-06-13 03:07 G 35066037.52 35066037.63 35066037.75 0.0500 0.0412

Saturn 91295-11-07 18:58 G 35066185.18 35066185.29 35066185.42 0.0294 0.0242

Jupiter 91296-02-04 17:46 G 35066274.04 35066274.24 35066274.45 0.0497 0.0110

Earth 91301-01-29 14:53 G 35068093.98 35068094.12 35068094.26 0.2644 0.1223

Moon 91301-01-29 16:34 G 35068094.06 35068094.19 35068094.32 0.2650 0.1260 *

Jupiter 91301-12-04 08:53 G 35068402.67 35068402.87 35068403.07 0.0527 0.0068

Jupiter 91307-10-11 17:46 G 35070540.04 35070540.24 35070540.45 0.0498 0.0037

Jupiter 91308-06-04 04:34 G 35070776.64 35070776.69 35070776.76 0.0497 0.0472

Mars 91308-07-22 05:31 G 35070824.68 35070824.73 35070824.78 0.1940 0.1838

Earth 91309-01-27 07:41 G 35071013.71 35071013.82 35071013.92 0.2642 0.1941

Moon 91309-01-27 12:14 G 35071013.87 35071014.01 35071014.15 0.2645 0.1174 *

Saturn 91310-04-16 10:48 G 35071457.84 35071457.95 35071458.08 0.0263 0.0214

Saturn 91310-12-01 10:48 G 35071686.74 35071686.95 35071687.16 0.0265 0.0037

Mars 91311-04-25 21:07 G 35071832.20 35071832.38 35071832.55 0.1600 0.0212

Saturn 91311-07-18 11:31 G 35071915.80 35071915.98 35071916.16 0.0267 0.0144

Jupiter 91313-08-09 00:58 G 35072668.36 35072668.54 35072668.72 0.0527 0.0238

Jupiter 91314-04-03 12:58 G 35072905.90 35072906.04 35072906.18 0.0529 0.0373

Neptune 91317-08-27 10:34 G 35074147.91 35074147.94 35074148.01 0.0088 0.0086

Neptune 91318-04-09 23:31 G 35074373.39 35074373.48 35074373.62 0.0088 0.0076

Neptune 91318-11-21 13:12 G 35074598.91 35074599.05 35074599.20 0.0088 0.0065

Jupiter 91319-06-16 17:31 G 35074806.04 35074806.23 35074806.42 0.0499 0.0179

Neptune 91319-07-05 02:10 G 35074824.43 35074824.59 35074824.77 0.0088 0.0054

Jupiter 91320-02-08 05:31 G 35075042.59 35075042.73 35075042.89 0.0497 0.0337

Neptune 91320-02-15 14:53 G 35075049.95 35075050.12 35075050.33 0.0088 0.0045

Neptune 91320-09-28 04:19 G 35075275.48 35075275.68 35075275.89 0.0088 0.0034

Neptune 91321-05-11 17:17 G 35075501.02 35075501.22 35075501.45 0.0088 0.0024

Neptune 91321-12-23 06:29 G 35075726.56 35075726.77 35075727.00 0.0088 0.0013

Neptune 91322-08-05 19:41 G 35075952.10 35075952.32 35075952.54 0.0088 0.0002

Neptune 91323-03-19 08:38 G 35076177.64 35076177.86 35076178.08 0.0088 0.0009

Neptune 91323-10-30 21:50 G 35076403.20 35076403.41 35076403.63 0.0089 0.0019

Saturn 91324-02-15 22:19 G 35076511.31 35076511.43 35076511.58 0.0299 0.0224

Neptune 91324-06-12 10:34 G 35076628.74 35076628.94 35076629.16 0.0089 0.0030

Saturn 91324-10-03 01:26 G 35076741.35 35076741.56 35076741.77 0.0296 0.0032

Neptune 91325-01-23 23:31 G 35076854.29 35076854.48 35076854.69 0.0089 0.0040

Uranus 91325-02-02 13:26 G 35076863.96 35076864.06 35076864.20 0.0139 0.0115

Jupiter 91325-04-13 19:12 G 35076934.18 35076934.30 35076934.43 0.0526 0.0402

Saturn 91325-05-21 02:24 G 35076971.55 35076971.60 35076971.68 0.0293 0.0280

Neptune 91325-09-06 12:14 G 35077079.85 35077080.01 35077080.21 0.0089 0.0051

Uranus 91325-09-16 21:36 G 35077090.24 35077090.40 35077090.58 0.0139 0.0087

Jupiter 91325-12-07 05:17 G 35077171.54 35077171.72 35077171.91 0.0529 0.0202

Neptune 91326-04-20 01:12 G 35077305.41 35077305.55 35077305.73 0.0089 0.0061

Uranus 91326-05-01 05:31 G 35077316.54 35077316.73 35077316.94 0.0139 0.0059

Neptune 91326-12-01 14:38 G 35077530.98 35077531.11 35077531.24 0.0089 0.0071

Uranus 91326-12-13 13:26 G 35077542.85 35077543.06 35077543.28 0.0138 0.0030

Neptune 91327-07-15 03:07 G 35077756.57 35077756.63 35077756.73 0.0089 0.0082

Uranus 91327-07-27 21:07 G 35077769.16 35077769.38 35077769.59 0.0138 0.0002

Uranus 91328-03-10 04:19 G 35077995.47 35077995.68 35077995.89 0.0138 0.0026

Uranus 91328-10-22 11:17 G 35078221.78 35078221.97 35078222.18 0.0138 0.0054

Uranus 91329-06-05 18:00 G 35078448.10 35078448.25 35078448.44 0.0137 0.0082

Uranus 91330-01-18 00:58 G 35078674.43 35078674.54 35078674.69 0.0137 0.0109

Uranus 91330-09-01 07:26 G 35078900.80 35078900.81 35078900.87 0.0137 0.0135

Jupiter 91331-02-19 16:48 G 35079072.04 35079072.20 35079072.36 0.0499 0.0324

Jupiter 91331-10-14 06:14 G 35079308.57 35079308.76 35079308.95 0.0497 0.0196

Jupiter 91337-08-11 22:34 G 35081437.24 35081437.44 35081437.64 0.0529 0.0033

Saturn 91339-10-27 13:12 G 35082243.91 35082244.05 35082244.20 0.0264 0.0191

Saturn 91340-06-12 12:58 G 35082472.82 35082473.04 35082473.25 0.0266 0.0015

Saturn 91341-01-27 13:26 G 35082701.90 35082702.06 35082702.23 0.0268 0.0167

Jupiter 91342-10-25 15:22 G 35083338.07 35083338.14 35083338.21 0.0500 0.0468

Mars 91343-04-24 13:55 G 35083519.06 35083519.08 35083519.11 0.1596 0.1580

Jupiter 91343-06-19 06:29 G 35083574.56 35083574.77 35083574.97 0.0497 0.0054

Jupiter 91349-04-16 16:34 G 35085703.00 35085703.19 35085703.39 0.0527 0.0140

Jupiter 91349-12-10 05:31 G 35085940.65 35085940.73 35085940.82 0.0529 0.0472

Saturn 91353-08-28 05:17 G 35087297.56 35087297.72 35087297.89 0.0299 0.0187

Saturn	91354-04-15 08:24 G	35087527.64	35087527.85	35087528.05	0.0296	0.0069
Jupiter	91355-02-22 04:05 G	35087840.47	35087840.67	35087840.88	0.0499	0.0097
Jupiter	91355-10-16 15:50 G	35088077.05	35088077.16	35088077.27	0.0497	0.0416
Jupiter	91360-12-20 11:17 G	35089968.81	35089968.97	35089969.14	0.0526	0.0305
Jupiter	91361-08-14 22:05 G	35090206.26	35090206.42	35090206.59	0.0529	0.0304
Jupiter	91366-10-28 03:22 G	35092106.47	35092106.64	35092106.83	0.0499	0.0243
Jupiter	91367-06-21 16:34 G	35092343.03	35092343.19	35092343.37	0.0497	0.0278
Uranus	91368-06-14 00:58 G	35092701.52	35092701.54	35092701.60	0.0139	0.0136
Uranus	91369-01-26 09:50 G	35092927.79	35092927.91	35092928.06	0.0139	0.0108
Saturn	91369-05-08 17:17 G	35093030.06	35093030.22	35093030.39	0.0264	0.0162
Uranus	91369-09-09 18:58 G	35093154.12	35093154.29	35093154.48	0.0139	0.0080
Saturn	91369-12-23 17:02 G	35093259.00	35093259.21	35093259.42	0.0265	0.0015
Uranus	91370-04-24 04:19 G	35093380.49	35093380.68	35093380.89	0.0140	0.0051
Saturn	91370-08-09 17:46 G	35093488.10	35093488.24	35093488.39	0.0268	0.0197
Uranus	91370-12-06 14:10 G	35093606.87	35093607.09	35093607.30	0.0140	0.0021
Uranus	91371-07-20 23:46 G	35093833.27	35093833.49	35093833.71	0.0140	0.0009
Uranus	91372-03-03 09:36 G	35094059.69	35094059.90	35094060.11	0.0140	0.0038
Jupiter	91372-08-25 04:48 G	35094234.62	35094234.70	35094234.79	0.0525	0.0468
Uranus	91372-10-15 19:26 G	35094286.13	35094286.31	35094286.51	0.0140	0.0069
Jupiter	91373-04-19 13:41 G	35094471.88	35094472.07	35094472.27	0.0528	0.0131
Uranus	91373-05-30 05:46 G	35094512.60	35094512.74	35094512.91	0.0141	0.0099
Uranus	91374-01-11 16:19 G	35094739.11	35094739.18	35094739.28	0.0141	0.0129
Mars	91374-05-19 08:24 G	35094866.71	35094866.85	35094866.99	0.1939	0.1140
Mars	91377-02-20 09:50 G	35095874.74	35095874.91	35095875.08	0.1601	0.0368
Jupiter	91378-07-03 02:38 G	35096372.48	35096372.61	35096372.74	0.0500	0.0386
Jupiter	91379-02-24 17:31 G	35096609.03	35096609.23	35096609.43	0.0498	0.0138
Saturn	91383-03-10 12:00 G	35098083.82	35098084.00	35098084.18	0.0298	0.0151
Saturn	91383-10-26 14:38 G	35098313.91	35098314.11	35098314.31	0.0296	0.0104
Jupiter	91384-12-23 06:58 G	35098737.59	35098737.79	35098737.99	0.0528	0.0040
Jupiter	91390-10-30 18:00 G	35100875.04	35100875.25	35100875.46	0.0498	0.0006

Jupiter 91396-08-28 00:43 G 35103003.35 35103003.53 35103003.72 0.0527 0.0210

Jupiter 91397-04-22 13:26 G 35103240.93 35103241.06 35103241.19 0.0530 0.0405

Neptune 91398-07-18 13:41 G 35103693.07 35103693.07 35103693.10 0.0089 0.0089

Saturn 91398-11-18 18:29 G 35103816.09 35103816.27 35103816.45 0.0264 0.0141

Neptune 91399-03-01 02:38 G 35103918.52 35103918.61 35103918.72 0.0089 0.0078

Saturn 91399-07-05 18:00 G 35104045.05 35104045.25 35104045.47 0.0266 0.0037

Neptune 91399-10-12 15:22 G 35104144.02 35104144.14 35104144.30 0.0089 0.0068

Saturn 91400-02-19 18:43 G 35104274.16 35104274.28 35104274.41 0.0268 0.0218

Neptune 91400-05-26 04:48 G 35104369.54 35104369.70 35104369.87 0.0089 0.0057

Neptune 91401-01-06 17:31 G 35104595.06 35104595.23 35104595.43 0.0089 0.0047

Neptune 91401-08-20 06:43 G 35104820.58 35104820.78 35104820.98 0.0089 0.0036

Neptune 91402-04-02 19:26 G 35105046.11 35105046.31 35105046.53 0.0089 0.0026

Jupiter 91402-07-06 17:46 G 35105141.04 35105141.24 35105141.43 0.0499 0.0151

Neptune 91402-11-14 08:38 G 35105271.65 35105271.86 35105272.08 0.0089 0.0015

Jupiter 91403-02-28 05:17 G 35105377.59 35105377.72 35105377.86 0.0496 0.0365

Neptune 91403-06-27 21:36 G 35105497.18 35105497.40 35105497.62 0.0089 0.0005

Neptune 91404-02-08 10:34 G 35105722.72 35105722.94 35105723.16 0.0089 0.0006

Neptune 91404-09-20 23:17 G 35105948.26 35105948.47 35105948.69 0.0089 0.0017

Neptune 91405-05-04 12:29 G 35106173.81 35106174.02 35106174.23 0.0089 0.0027

Neptune 91405-12-16 01:12 G 35106399.36 35106399.55 35106399.76 0.0089 0.0038

Neptune 91406-07-29 14:24 G 35106624.92 35106625.10 35106625.29 0.0089 0.0048

Neptune 91407-03-12 03:07 G 35106850.48 35106850.63 35106850.81 0.0089 0.0059

Neptune 91407-10-23 16:19 G 35107076.05 35107076.18 35107076.32 0.0089 0.0069

Jupiter 91408-05-03 20:24 G 35107269.21 35107269.35 35107269.49 0.0526 0.0373

Neptune 91408-06-05 05:02 G 35107301.64 35107301.71 35107301.83 0.0089 0.0080

Uranus 91408-10-03 21:07 G 35107422.31 35107422.38 35107422.47 0.0139 0.0128

Jupiter 91408-12-27 06:29 G 35107506.60 35107506.77 35107506.96 0.0529 0.0234

Mars 91409-02-20 02:38 G 35107561.53 35107561.61 35107561.69 0.1597 0.1420

Uranus 91409-05-18 05:17 G 35107648.59 35107648.72 35107648.88 0.0139 0.0100

Uranus 91409-12-30 13:41 G 35107874.89 35107875.07 35107875.26 0.0139 0.0071

Uranus 91410-08-13 21:36 G 35108101.19 35108101.40 35108101.61 0.0139 0.0043

Uranus 91411-03-28 05:17 G 35108327.50 35108327.72 35108327.93 0.0138 0.0015

Uranus 91411-11-09 12:43 G 35108553.82 35108554.03 35108554.25 0.0138 0.0013

Uranus 91412-06-22 19:55 G 35108780.13 35108780.33 35108780.54 0.0138 0.0041

Saturn 91412-09-20 16:19 G 35108869.99 35108870.18 35108870.37 0.0298 0.0118

Uranus 91413-02-04 02:53 G 35109006.45 35109006.62 35109006.82 0.0138 0.0069

Saturn 91413-05-08 19:12 G 35109100.11 35109100.30 35109100.49 0.0296 0.0137

Uranus 91413-09-18 10:05 G 35109232.77 35109232.92 35109233.08 0.0137 0.0096

Jupiter 91414-03-11 14:24 G 35109406.94 35109407.10 35109407.26 0.0500 0.0303

Uranus 91414-05-02 16:48 G 35109459.11 35109459.20 35109459.30 0.0137 0.0123

Jupiter 91414-11-03 04:19 G 35109643.50 35109643.68 35109643.87 0.0497 0.0220

Jupiter 91420-09-01 00:29 G 35111772.32 35111772.52 35111772.72 0.0528 0.0064

Jupiter 91425-11-14 12:58 G 35113672.95 35113673.04 35113673.13 0.0501 0.0448

Jupiter 91426-07-09 04:48 G 35113909.49 35113909.70 35113909.90 0.0498 0.0078

Saturn 91428-05-31 21:36 G 35114602.21 35114602.40 35114602.60 0.0264 0.0114

Saturn 91429-01-15 21:22 G 35114831.18 35114831.39 35114831.59 0.0266 0.0064

Pluto 91429-03-28 07:12 G 35114902.73 35114902.80 35114902.90 0.0065 0.0060

Saturn 91429-09-01 21:50 G 35115060.34 35115060.41 35115060.50 0.0268 0.0246

Pluto 91429-11-08 11:46 G 35115127.78 35115127.99 35115128.20 0.0066 0.0018

Pluto 91430-06-21 15:36 G 35115352.96 35115353.15 35115353.37 0.0066 0.0024

Earth 91430-07-28 02:24 G 35115389.45 35115389.60 35115389.74 0.2690 0.0973

Moon 91430-07-28 02:53 G 35115389.46 35115389.62 35115389.78 0.2683 0.0811 *

Jupiter 91432-05-06 17:02 G 35116038.02 35116038.21 35116038.41 0.0527 0.0108

Jupiter 91432-12-30 05:46 G 35116275.68 35116275.74 35116275.79 0.0529 0.0503

Jupiter 91438-03-14 05:17 G 35118175.51 35118175.72 35118175.92 0.0499 0.0066

Jupiter 91438-11-05 16:48 G 35118412.12 35118412.20 35118412.29 0.0497 0.0447

Mars 91440-03-16 10:19 G 35118908.76 35118908.93 35118909.10 0.1937 0.0398

Saturn 91442-04-02 21:36 G 35119656.20 35119656.40 35119656.60 0.0298 0.0085

Saturn 91442-11-19 00:14 G 35119886.34 35119886.51 35119886.68 0.0296 0.0170

Mars 91442-12-19 22:05 G 35119917.25 35119917.42 35119917.59 0.1603 0.0537

Jupiter 91444-01-10 11:02 G 35120303.79 35120303.96 35120304.13 0.0526 0.0275

Jupiter 91444-09-03 21:50 G 35120541.26 35120541.41 35120541.57 0.0529 0.0336

Jupiter 91449-11-17 05:17 G 35122441.54 35122441.72 35122441.91 0.0499 0.0211

Jupiter 91450-07-11 18:00 G 35122678.09 35122678.25 35122678.41 0.0497 0.0309

Uranus 91452-09-26 17:17 G 35123486.12 35123486.22 35123486.33 0.0139 0.0120

Uranus 91453-05-11 02:10 G 35123712.44 35123712.59 35123712.77 0.0139 0.0092

Uranus 91453-12-23 11:31 G 35123938.79 35123938.98 35123939.18 0.0139 0.0063

Uranus 91454-08-06 20:53 G 35124165.16 35124165.37 35124165.58 0.0140 0.0034

Uranus 91455-03-21 06:29 G 35124391.55 35124391.77 35124391.99 0.0140 0.0005

Jupiter 91455-09-15 05:46 G 35124569.64 35124569.74 35124569.85 0.0525 0.0440

Uranus 91455-11-02 16:05 G 35124617.96 35124618.17 35124618.39 0.0140 0.0025

Jupiter 91456-05-09 15:22 G 35124806.95 35124807.14 35124807.33 0.0529 0.0165

Uranus 91456-06-16 02:10 G 35124844.39 35124844.59 35124844.80 0.0140 0.0055

Uranus 91457-01-28 12:14 G 35125070.85 35125071.01 35125071.20 0.0140 0.0084

Uranus 91457-09-11 22:48 G 35125297.32 35125297.45 35125297.58 0.0141 0.0114

Saturn 91457-12-11 21:50 G 35125388.21 35125388.41 35125388.61 0.0264 0.0094

Saturn 91458-07-28 21:22 G 35125617.19 35125617.39 35125617.60 0.0266 0.0084

Saturn 91459-03-14 22:05 G 35125846.40 35125846.42 35125846.45 0.0268 0.0266

Jupiter 91461-07-23 04:34 G 35126707.55 35126707.69 35126707.84 0.0500 0.0356

Jupiter 91462-03-16 18:58 G 35126944.09 35126944.29 35126944.48 0.0497 0.0168

Jupiter 91468-01-13 10:05 G 35129072.72 35129072.92 35129073.12 0.0528 0.0008

Saturn 91471-10-14 00:29 G 35130442.31 35130442.52 35130442.73 0.0298 0.0054

Saturn 91472-05-31 03:07 G 35130672.49 35130672.63 35130672.80 0.0296 0.0201

Jupiter 91473-11-19 16:48 G 35131210.00 35131210.20 35131210.41 0.0498 0.0020

Mars 91474-12-18 15:07 G 35131604.02 35131604.13 35131604.24 0.1598 0.1264

Jupiter 91479-09-18 05:02 G 35133338.52 35133338.71 35133338.90 0.0527 0.0173

Jupiter 91480-05-12 17:02 G 35133576.10 35133576.21 35133576.32 0.0529 0.0440

Neptune 91482-07-13 10:05 G 35134367.84 35134367.92 35134368.04 0.0088 0.0079

Neptune 91483-02-23 23:02 G 35134593.34 35134593.46 35134593.62 0.0088 0.0068

Neptune 91483-10-07 12:29 G 35134818.86 35134819.02 35134819.20 0.0088 0.0058

Neptune 91484-05-20 01:26 G 35135044.39 35135044.56 35135044.76 0.0088 0.0047

Neptune 91484-12-31 14:38 G 35135269.92 35135270.11 35135270.32 0.0088 0.0037

Jupiter 91485-07-25 16:34 G 35135475.99 35135476.19 35135476.39 0.0499 0.0126

Neptune 91485-08-14 03:36 G 35135495.45 35135495.65 35135495.87 0.0088 0.0027

Jupiter 91486-03-19 04:48 G 35135712.58 35135712.70 35135712.83 0.0497 0.0392

Neptune 91486-03-27 16:48 G 35135720.99 35135721.20 35135721.42 0.0088 0.0016

Saturn 91486-11-07 01:41 G 35135945.50 35135945.57 35135945.66 0.0262 0.0241

Neptune 91486-11-08 06:14 G 35135946.54 35135946.76 35135946.98 0.0088 0.0005

Neptune 91487-06-21 19:12 G 35136172.08 35136172.30 35136172.52 0.0088 0.0005

Saturn 91487-06-24 00:29 G 35136174.32 35136174.52 35136174.73 0.0264 0.0068

Neptune 91488-02-02 08:24 G 35136397.63 35136397.85 35136398.06 0.0088 0.0016

Saturn 91488-02-08 00:00 G 35136403.31 35136403.50 35136403.70 0.0266 0.0111

Neptune 91488-09-14 21:07 G 35136623.18 35136623.38 35136623.60 0.0089 0.0027

Neptune 91489-04-28 10:19 G 35136848.73 35136848.93 35136849.13 0.0089 0.0037

Neptune 91489-12-09 23:02 G 35137074.29 35137074.46 35137074.66 0.0089 0.0048

Neptune 91490-07-23 12:14 G 35137299.85 35137300.01 35137300.18 0.0089 0.0058

Neptune 91491-03-06 00:43 G 35137525.42 35137525.53 35137525.70 0.0089 0.0069

Jupiter 91491-05-23 22:48 G 35137604.30 35137604.45 35137604.60 0.0526 0.0339

Neptune 91491-10-17 13:55 G 35137751.00 35137751.08 35137751.20 0.0089 0.0079

Jupiter 91492-01-16 08:24 G 35137841.68 35137841.85 35137842.03 0.0528 0.0269

Uranus 91493-01-15 12:29 G 35138206.91 35138207.02 35138207.16 0.0139 0.0113

Uranus 91493-08-29 20:53 G 35138433.20 35138433.37 35138433.54 0.0139 0.0084

Uranus 91494-04-13 04:48 G 35138659.51 35138659.70 35138659.90 0.0139 0.0056

Uranus 91494-11-25 12:58 G 35138885.83 35138886.04 35138886.25 0.0138 0.0028

Uranus 91495-07-09 20:24 G 35139112.14 35139112.35 35139112.57 0.0138 0.0003

Uranus 91496-02-21 03:50 G 35139338.45 35139338.66 35139338.88 0.0138 0.0028

Uranus 91496-10-04 11:02 G 35139564.77 35139564.96 35139565.16 0.0138 0.0056

Jupiter 91497-03-30 16:34 G 35139742.02 35139742.19 35139742.37 0.0500 0.0271

Uranus 91497-05-18 18:00 G 35139791.09 35139791.25 35139791.43 0.0138 0.0084

Jupiter 91497-11-22 06:29 G 35139978.60 35139978.77 35139978.95 0.0497 0.0254

Uranus 91497-12-31 00:58 G 35140017.43 35140017.54 35140017.69 0.0137 0.0111

Uranus 91498-08-14 08:10 G 35140243.83 35140243.84 35140243.86 0.0137 0.0137

Saturn 91500-09-08 00:14 G 35140998.44 35140998.51 35140998.57 0.0300 0.0285

Saturn 91501-04-26 04:05 G 35141228.46 35141228.67 35141228.89 0.0298 0.0025

Saturn 91501-12-12 06:43 G 35141458.65 35141458.78 35141458.91 0.0295 0.0229

Jupiter 91503-01-27 17:31 G 35141870.18 35141870.23 35141870.29 0.0524 0.0500

Jupiter 91503-09-22 01:41 G 35142107.37 35142107.57 35142107.76 0.0528 0.0098

Mars 91506-01-12 12:43 G 35142950.86 35142951.03 35142951.20 0.1935 0.0318

Mars 91508-10-17 10:48 G 35143959.79 35143959.95 35143960.11 0.1604 0.0696

Jupiter 91508-12-04 16:19 G 35144008.07 35144008.18 35144008.30 0.0501 0.0415

Jupiter 91509-07-29 07:41 G 35144244.62 35144244.82 35144245.02 0.0498 0.0112

Jupiter 91515-05-27 19:41 G 35146373.12 35146373.32 35146373.51 0.0527 0.0074

Saturn 91516-05-20 01:26 G 35146731.46 35146731.56 35146731.68 0.0262 0.0223

Saturn 91517-01-04 00:00 G 35146960.30 35146960.50 35146960.71 0.0264 0.0049

Pluto 91517-07-11 17:02 G 35147149.00 35147149.21 35147149.44 0.0079 0.0016

Saturn 91517-08-20 23:31 G 35147189.30 35147189.48 35147189.67 0.0266 0.0130

Pluto 91518-02-22 02:38 G 35147374.49 35147374.61 35147374.79 0.0078 0.0059

Jupiter 91521-04-03 07:55 G 35148510.63 35148510.83 35148511.04 0.0498 0.0035

Jupiter 91521-11-25 19:12 G 35148747.25 35148747.30 35148747.35 0.0497 0.0479

Jupiter 91527-01-30 15:22 G 35150638.97 35150639.14 35150639.32 0.0526 0.0240

Jupiter 91527-09-25 02:38 G 35150876.47 35150876.61 35150876.75 0.0529 0.0373

Saturn 91530-03-21 01:12 G 35151784.46 35151784.55 35151784.67 0.0300 0.0258

Saturn 91530-11-06 05:31 G 35152014.52 35152014.73 35152014.95 0.0298 0.0008

Saturn 91531-06-24 08:24 G 35152244.75 35152244.85 35152244.95 0.0296 0.0258

Jupiter 91532-12-07 04:48 G 35152776.51 35152776.70 35152776.90 0.0499 0.0185

Jupiter 91533-07-31 17:46 G 35153013.09 35153013.24 35153013.39 0.0497 0.0337

Uranus 91536-05-28 01:12 G 35154044.49 35154044.55 35154044.62 0.0139 0.0132

Uranus 91537-01-09 09:50 G 35154270.78 35154270.91 35154271.07 0.0139 0.0105

Uranus 91537-08-23 18:43 G 35154497.11 35154497.28 35154497.48 0.0139 0.0077

Uranus 91538-04-07 04:19 G 35154723.48 35154723.68 35154723.89 0.0140 0.0047

Jupiter 91538-10-05 11:46 G 35154904.86 35154904.99 35154905.12 0.0525 0.0400

Uranus 91538-11-19 13:55 G 35154949.86 35154950.08 35154950.29 0.0140 0.0018

Jupiter 91539-05-30 20:53 G 35155142.18 35155142.37 35155142.55 0.0528 0.0206

Uranus 91539-07-03 23:31 G 35155176.27 35155176.48 35155176.70 0.0140 0.0012

Uranus 91540-02-15 09:22 G 35155402.69 35155402.89 35155403.11 0.0140 0.0041

Uranus 91540-09-28 19:12 G 35155629.13 35155629.30 35155629.51 0.0140 0.0072

Mars 91540-10-16 03:36 G 35155646.52 35155646.65 35155646.78 0.1599 0.1102

Uranus 91541-05-13 05:46 G 35155855.60 35155855.74 35155855.90 0.0141 0.0101

Uranus 91541-12-25 16:05 G 35156082.11 35156082.17 35156082.27 0.0141 0.0131

Earth 91544-02-01 17:46 G 35156850.11 35156850.24 35156850.37 0.2643 0.1439

Moon 91544-02-01 18:43 G 35156850.14 35156850.28 35156850.42 0.2637 0.1364 *

Jupiter 91544-08-12 04:05 G 35157042.51 35157042.67 35157042.82 0.0500 0.0331

Jupiter 91545-04-05 18:43 G 35157279.09 35157279.28 35157279.47 0.0498 0.0196

Saturn 91545-11-30 03:22 G 35157517.51 35157517.64 35157517.79 0.0262 0.0198

Saturn 91546-07-17 02:10 G 35157746.38 35157746.59 35157746.80 0.0264 0.0024

Saturn 91547-03-03 01:41 G 35157975.40 35157975.57 35157975.74 0.0266 0.0155

Jupiter 91551-02-02 13:12 G 35159407.85 35159408.05 35159408.25 0.0527 0.0034

Moon 91552-01-30 07:26 G 35159769.72 35159769.81 35159769.89 0.2637 0.2258

Earth 91552-01-30 10:34 G 35159769.82 35159769.94 35159770.06 0.2642 0.1693 *

Jupiter 91556-04-17 03:22 G 35161308.58 35161308.64 35161308.71 0.0501 0.0474

Jupiter 91556-12-09 19:55 G 35161545.12 35161545.33 35161545.53 0.0498 0.0055

Saturn 91559-10-01 04:48 G 35162570.57 35162570.70 35162570.84 0.0300 0.0229

Saturn 91560-05-18 09:07 G 35162800.67 35162800.88 35162801.09 0.0298 0.0033

Saturn 91561-01-03 11:31 G 35163030.94 35163030.98 35163031.04 0.0295 0.0286

Jupiter 91562-10-08 07:12 G 35163673.60 35163673.80 35163673.99 0.0527 0.0137

Jupiter 91563-06-02 18:58 G 35163911.21 35163911.29 35163911.38 0.0529 0.0476

Neptune 91563-06-04 13:26 G 35163912.98 35163913.06 35163913.16 0.0089 0.0081

Neptune 91564-01-16 02:10 G 35164138.48 35164138.59 35164138.74 0.0089 0.0071

Neptune 91564-08-28 15:36 G 35164363.99 35164364.15 35164364.31 0.0089 0.0060

Neptune 91565-04-11 04:19 G 35164589.51 35164589.68 35164589.87 0.0089 0.0050

Neptune 91565-11-22 17:31 G 35164815.04 35164815.23 35164815.43 0.0089 0.0039

Neptune 91566-07-06 06:14 G 35165040.57 35165040.76 35165040.98 0.0089 0.0029

Neptune 91567-02-16 19:26 G 35165266.10 35165266.31 35165266.53 0.0089 0.0018

Neptune 91567-09-30 08:24 G 35165491.63 35165491.85 35165492.07 0.0089 0.0008

Neptune 91568-05-12 21:22 G 35165717.17 35165717.39 35165717.61 0.0089 0.0003

Jupiter 91568-08-14 20:24 G 35165811.15 35165811.35 35165811.56 0.0499 0.0091

Neptune 91568-12-24 10:19 G 35165942.72 35165942.93 35165943.15 0.0089 0.0014

Jupiter 91569-04-08 08:24 G 35166047.75 35166047.85 35166047.96 0.0497 0.0425

Neptune 91569-08-06 23:17 G 35166168.26 35166168.47 35166168.68 0.0089 0.0024

Neptune 91570-03-20 12:00 G 35166393.81 35166394.00 35166394.21 0.0089 0.0035

Neptune 91570-11-01 01:12 G 35166619.36 35166619.55 35166619.74 0.0089 0.0045

Neptune 91571-06-14 13:55 G 35166844.92 35166845.08 35166845.26 0.0089 0.0056

Mars 91571-11-09 14:53 G 35166992.98 35166993.12 35166993.27 0.1932 0.1036

Neptune 91572-01-26 03:07 G 35167070.49 35167070.63 35167070.78 0.0089 0.0066

Neptune 91572-09-07 15:36 G 35167296.06 35167296.15 35167296.28 0.0089 0.0077

Neptune 91573-04-21 05:02 G 35167521.68 35167521.71 35167521.76 0.0089 0.0087

Jupiter 91574-06-13 01:41 G 35167939.41 35167939.57 35167939.73 0.0526 0.0305

Mars 91574-08-14 23:02 G 35168002.31 35168002.46 35168002.61 0.1605 0.0864

Jupiter 91575-02-05 12:00 G 35168176.84 35168177.00 35168177.17 0.0529 0.0307

Saturn 91575-06-12 03:07 G 35168303.48 35168303.63 35168303.79 0.0262 0.0180

Saturn 91576-01-27 01:41 G 35168532.36 35168532.57 35168532.78 0.0264 0.0005

Saturn 91576-09-12 01:12 G 35168761.39 35168761.55 35168761.71 0.0266 0.0175

Uranus 91576-09-15 20:38 G 35168765.28 35168765.36 35168765.46 0.0139 0.0125

Uranus 91577-04-30 04:48 G 35168991.56 35168991.70 35168991.87 0.0139 0.0097

Uranus 91577-12-12 13:12 G 35169217.87 35169218.05 35169218.25 0.0139 0.0069

Uranus 91578-07-26 21:07 G 35169444.18 35169444.38 35169444.60 0.0139 0.0041

Uranus 91579-03-10 05:02 G 35169670.50 35169670.71 35169670.93 0.0138 0.0012

Uranus 91579-10-22 12:43 G 35169896.81 35169897.03 35169897.24 0.0138 0.0016

Jupiter 91580-04-19 20:24 G 35170077.17 35170077.35 35170077.53 0.0500 0.0236

Uranus 91580-06-04 19:55 G 35170123.13 35170123.33 35170123.54 0.0138 0.0044

Jupiter 91580-12-12 09:36 G 35170313.74 35170313.90 35170314.07 0.0497 0.0288

Uranus 91581-01-17 03:22 G 35170349.46 35170349.64 35170349.83 0.0138 0.0071

Uranus 91581-08-31 10:05 G 35170575.79 35170575.92 35170576.09 0.0137 0.0099

Uranus 91582-04-14 17:31 G 35170802.14 35170802.23 35170802.31 0.0137 0.0125

Jupiter 91586-02-15 22:19 G 35172205.35 35172205.43 35172205.53 0.0525 0.0465

Jupiter 91586-10-11 06:58 G 35172442.60 35172442.79 35172442.99 0.0528 0.0138

Saturn 91589-04-12 05:02 G 35173356.57 35173356.71 35173356.87 0.0300 0.0203

Saturn 91589-11-28 09:22 G 35173586.68 35173586.89 35173587.10 0.0298 0.0059

Jupiter 91591-12-24 16:19 G 35174343.05 35174343.18 35174343.31 0.0501 0.0388

Jupiter 91592-08-17 07:41 G 35174579.62 35174579.82 35174580.01 0.0498 0.0140

Jupiter 91598-06-16 02:10 G 35176708.39 35176708.59 35176708.79 0.0527 0.0030

Jupiter 91604-04-22 07:55 G 35178845.62 35178845.83 35178846.03 0.0499 0.0007

Saturn 91604-12-22 05:02 G 35179089.54 35179089.71 35179089.89 0.0262 0.0155

Saturn 91605-08-08 03:36 G 35179318.44 35179318.65 35179318.86 0.0264 0.0021

Saturn 91606-03-25 02:53 G 35179547.49 35179547.62 35179547.77 0.0266 0.0200

Mars 91606-08-13 16:19 G 35179689.04 35179689.18 35179689.32 0.1601 0.0946

Jupiter 91610-02-18 19:26 G 35180974.13 35180974.31 35180974.50 0.0526 0.0200

Jupiter 91610-10-14 06:29 G 35181211.64 35181211.77 35181211.89 0.0528 0.0413

Jupiter 91615-12-27 08:10 G 35183111.65 35183111.84 35183112.04 0.0499 0.0149

Jupiter 91616-08-19 21:07 G 35183348.25 35183348.38 35183348.52 0.0497 0.0372

Saturn 91618-10-23 08:10 G 35184142.68 35184142.84 35184143.02 0.0300 0.0176

Saturn 91619-06-10 12:29 G 35184372.82 35184373.02 35184373.22 0.0298 0.0087

Uranus 91620-09-08 18:29 G 35184829.17 35184829.27 35184829.41 0.0139 0.0116

Uranus 91621-04-23 03:50 G 35185055.50 35185055.66 35185055.84 0.0139 0.0087

Jupiter 91621-10-24 14:10 G 35185239.95 35185240.09 35185240.23 0.0525 0.0366

Uranus 91621-12-05 13:12 G 35185281.85 35185282.05 35185282.25 0.0139 0.0059

Jupiter 91622-06-18 23:02 G 35185477.29 35185477.46 35185477.65 0.0528 0.0244

Uranus 91622-07-19 22:34 G 35185508.23 35185508.44 35185508.66 0.0140 0.0030

Uranus 91623-03-03 08:24 G 35185734.63 35185734.85 35185735.07 0.0140 0.0002

Uranus 91623-10-15 18:00 G 35185961.04 35185961.25 35185961.47 0.0140 0.0029

Uranus 91624-05-29 04:19 G 35186187.48 35186187.68 35186187.88 0.0140 0.0059

Uranus 91625-01-10 14:10 G 35186413.93 35186414.09 35186414.27 0.0140 0.0089

Uranus 91625-08-25 00:43 G 35186640.42 35186640.53 35186640.65 0.0141 0.0118

Jupiter 91627-09-01 08:24 G 35187377.68 35187377.85 35187378.01 0.0500 0.0295

Jupiter 91628-04-24 22:48 G 35187614.27 35187614.45 35187614.63 0.0498 0.0232

Jupiter 91634-02-21 16:48 G 35189743.00 35189743.20 35189743.40 0.0528 0.0071

Saturn 91634-07-04 04:48 G 35189875.52 35189875.70 35189875.89 0.0262 0.0136

Saturn 91635-02-18 03:22 G 35190104.43 35190104.64 35190104.85 0.0264 0.0039

Saturn 91635-10-05 02:38 G 35190333.50 35190333.61 35190333.73 0.0266 0.0219

Mars 91637-09-05 17:17 G 35191035.15 35191035.22 35191035.29 0.1930 0.1751

Jupiter 91639-05-07 07:26 G 35191643.72 35191643.81 35191643.91 0.0501 0.0440

Jupiter 91639-12-29 23:17 G 35191880.27 35191880.47 35191880.68 0.0498 0.0090

Mars 91640-06-11 11:31 G 35192044.84 35192044.98 35192045.11 0.1607 0.1028

Jupiter 91645-10-27 12:29 G 35194008.83 35194009.02 35194009.22 0.0527 0.0098

Jupiter 91646-06-22 00:43 G 35194246.50 35194246.53 35194246.58 0.0529 0.0517

Neptune 91646-10-15 20:24 G 35194362.28 35194362.35 35194362.44 0.0088 0.0082

Neptune 91647-05-29 09:22 G 35194587.78 35194587.89 35194588.03 0.0088 0.0072

Neptune 91648-01-09 22:05 G 35194813.29 35194813.42 35194813.61 0.0088 0.0062

Saturn 91648-05-04 08:53 G 35194928.69 35194928.87 35194929.06 0.0300 0.0149

Neptune 91648-08-22 11:31 G 35195038.81 35195038.98 35195039.17 0.0088 0.0051

Saturn 91648-12-20 12:58 G 35195158.85 35195159.04 35195159.24 0.0298 0.0113

Neptune 91649-04-05 00:29 G 35195264.34 35195264.52 35195264.73 0.0088 0.0040

Neptune 91649-11-16 13:55 G 35195489.87 35195490.08 35195490.29 0.0088 0.0030

Neptune 91650-06-30 02:53 G 35195715.41 35195715.62 35195715.84 0.0088 0.0019

Neptune 91651-02-10 16:05 G 35195940.95 35195941.17 35195941.39 0.0088 0.0009

Jupiter 91651-09-03 20:24 G 35196146.15 35196146.35 35196146.56 0.0499 0.0063

Neptune 91651-09-24 05:02 G 35196166.49 35196166.71 35196166.93 0.0088 0.0002

Jupiter 91652-04-27 08:24 G 35196382.77 35196382.85 35196382.93 0.0497 0.0454

Neptune 91652-05-06 18:00 G 35196392.04 35196392.25 35196392.48 0.0088 0.0013

Neptune 91652-12-18 06:58 G 35196617.59 35196617.79 35196618.02 0.0088 0.0024

Neptune 91653-07-31 20:10 G 35196843.14 35196843.34 35196843.55 0.0089 0.0034

Neptune 91654-03-14 08:53 G 35197068.70 35197068.87 35197069.08 0.0089 0.0045

Neptune 91654-10-25 22:05 G 35197294.26 35197294.42 35197294.61 0.0089 0.0055

Neptune 91655-06-08 11:17 G 35197519.83 35197519.97 35197520.13 0.0089 0.0065

Neptune 91656-01-20 00:00 G 35197745.41 35197745.50 35197745.63 0.0089 0.0076

Neptune 91656-09-01 12:58 G 35197971.01 35197971.04 35197971.11 0.0089 0.0086

Jupiter 91657-07-02 08:24 G 35198274.68 35198274.85 35198275.02 0.0526 0.0262

Jupiter 91658-02-24 18:43 G 35198512.13 35198512.28 35198512.43 0.0528 0.0351

Uranus 91660-05-16 06:00 G 35199323.72 35199323.75 35199323.80 0.0139 0.0137

Uranus 91660-12-28 14:24 G 35199549.98 35199550.10 35199550.25 0.0139 0.0108

Uranus 91661-08-11 22:48 G 35199776.28 35199776.45 35199776.63 0.0139 0.0080

Uranus 91662-03-26 06:43 G 35200002.59 35200002.78 35200002.99 0.0139 0.0052

Uranus 91662-11-07 14:53 G 35200228.90 35200229.12 35200229.33 0.0138 0.0023

Jupiter 91663-05-09 19:55 G 35200412.14 35200412.33 35200412.52 0.0500 0.0208

Uranus 91663-06-21 22:34 G 35200455.22 35200455.44 35200455.65 0.0138 0.0005

Jupiter 91664-01-01 09:22 G 35200648.74 35200648.89 35200649.05 0.0497 0.0317

Saturn 91664-01-14 06:58 G 35200661.60 35200661.79 35200661.99 0.0262 0.0111

Uranus 91664-02-03 06:00 G 35200681.54 35200681.75 35200681.96 0.0138 0.0032

Saturn 91664-08-30 05:31 G 35200890.53 35200890.73 35200890.94 0.0264 0.0065

Uranus 91664-09-16 13:12 G 35200907.86 35200908.05 35200908.25 0.0138 0.0060

Saturn 91665-04-16 04:48 G 35201119.63 35201119.70 35201119.79 0.0266 0.0245

Uranus 91665-04-30 20:24 G 35201134.19 35201134.35 35201134.52 0.0138 0.0087

Moon 91665-07-31 07:12 G 35201225.68 35201225.80 35201225.91 0.2692 0.1743

Earth 91665-07-31 12:29 G 35201226.02 35201226.02 35201226.03 0.2690 0.2685

Uranus 91665-12-13 03:36 G 35201360.54 35201360.65 35201360.77 0.0137 0.0114

Jupiter 91669-03-07 02:38 G 35202540.50 35202540.61 35202540.73 0.0525 0.0426

Jupiter 91669-10-30 11:02 G 35202777.77 35202777.96 35202778.15 0.0528 0.0179

Mars 91672-06-10 04:34 G 35203731.54 35203731.69 35203731.85 0.1602 0.0780

Moon 91673-07-28 23:46 G 35204145.35 35204145.49 35204145.63 0.2698 0.1089

Earth 91673-07-29 02:10 G 35204145.44 35204145.59 35204145.74 0.2691 0.0997 *

Jupiter 91675-01-12 19:26 G 35204678.17 35204678.31 35204678.46 0.0501 0.0354

Pluto 91675-04-27 13:41 G 35204783.01 35204783.07 35204783.17 0.0065 0.0061

Jupiter 91675-09-06 10:48 G 35204914.76 35204914.95 35204915.14 0.0498 0.0176

Pluto 91675-12-08 18:14 G 35205008.05 35205008.26 35205008.47 0.0066 0.0019

Pluto 91676-07-20 22:19 G 35205233.23 35205233.43 35205233.64 0.0066 0.0023

Pluto 91677-03-03 02:24 G 35205458.60 35205458.60 35205458.64 0.0066 0.0066

Saturn 91677-11-14 12:29 G 35205714.83 35205715.02 35205715.22 0.0300 0.0120

Saturn 91678-07-02 16:19 G 35205945.00 35205945.18 35205945.37 0.0298 0.0142

Jupiter 91681-07-05 04:19 G 35207043.48 35207043.68 35207043.88 0.0527 0.0008

Jupiter 91686-09-17 18:43 G 35208944.26 35208944.28 35208944.30 0.0502 0.0498

Jupiter 91687-05-12 11:46 G 35209180.78 35209180.99 35209181.20 0.0498 0.0032

Jupiter 91693-03-09 22:05 G 35211309.24 35211309.42 35211309.62 0.0527 0.0165

Saturn 91693-07-26 07:26 G 35211447.62 35211447.81 35211448.02 0.0263 0.0091

Jupiter 91693-11-02 09:36 G 35211546.80 35211546.90 35211547.01 0.0529 0.0451

Saturn 91694-03-12 06:00 G 35211676.55 35211676.75 35211676.95 0.0264 0.0086

Saturn 91694-10-27 05:46 G 35211905.73 35211905.74 35211905.75 0.0266 0.0266

Jupiter 91699-01-15 11:46 G 35213446.79 35213446.99 35213447.19 0.0499 0.0114

Jupiter 91699-09-09 00:00 G 35213683.39 35213683.50 35213683.62 0.0497 0.0406

Uranus 91704-05-10 03:07 G 35215387.55 35215387.63 35215387.72 0.0139 0.0127

Jupiter 91704-11-13 18:43 G 35215575.12 35215575.28 35215575.43 0.0526 0.0329

Uranus 91704-12-22 12:00 G 35215613.86 35215614.00 35215614.16 0.0139 0.0100

Jupiter 91705-07-09 04:19 G 35215812.52 35215812.68 35215812.86 0.0528 0.0284

Uranus 91705-08-05 21:07 G 35215840.20 35215840.38 35215840.58 0.0139 0.0071

Uranus 91706-03-20 06:29 G 35216066.57 35216066.77 35216066.98 0.0140 0.0042

Mars 91706-04-09 23:31 G 35216087.37 35216087.48 35216087.60 0.1608 0.1205

Uranus 91706-11-01 16:05 G 35216292.96 35216293.17 35216293.39 0.0140 0.0013

Saturn 91707-05-28 13:12 G 35216500.85 35216501.05 35216501.25 0.0300 0.0093

Uranus 91707-06-16 02:10 G 35216519.37 35216519.59 35216519.80 0.0140 0.0016

Saturn 91708-01-13 17:02 G 35216731.04 35216731.21 35216731.39 0.0297 0.0168

Uranus 91708-01-28 12:00 G 35216745.79 35216746.00 35216746.21 0.0140 0.0046

Uranus 91708-09-10 21:50 G 35216972.24 35216972.41 35216972.61 0.0140 0.0076

Uranus 91709-04-25 08:24 G 35217198.71 35217198.85 35217198.99 0.0141 0.0105

Uranus 91709-12-07 18:29 G 35217425.23 35217425.27 35217425.35 0.0141 0.0135

Jupiter 91710-09-21 08:10 G 35217712.67 35217712.84 35217713.01 0.0500 0.0266

Jupiter 91711-05-15 22:19 G 35217949.25 35217949.43 35217949.60 0.0497 0.0261

Jupiter 91716-07-19 14:53 G 35219841.06 35219841.12 35219841.20 0.0525 0.0488

Jupiter 91717-03-13 23:02 G 35220078.26 35220078.46 35220078.66 0.0528 0.0115

Jupiter 91722-05-27 06:29 G 35221978.66 35221978.77 35221978.89 0.0501 0.0413

Saturn 91722-06-22 12:14 G 35222004.93 35222005.01 35222005.10 0.0261 0.0238

Jupiter 91723-01-18 22:19 G 35222215.23 35222215.43 35222215.64 0.0498 0.0118

Saturn 91723-02-06 10:05 G 35222233.71 35222233.92 35222234.13 0.0262 0.0066

Saturn 91723-09-23 08:38 G 35222462.67 35222462.86 35222463.05 0.0264 0.0111

Neptune 91727-09-06 23:02 G 35223907.42 35223907.46 35223907.55 0.0089 0.0085

Neptune 91728-04-19 12:29 G 35224132.91 35224133.02 35224133.15 0.0089 0.0074

Jupiter 91728-11-16 15:50 G 35224343.96 35224344.16 35224344.36 0.0527 0.0059

Neptune 91728-12-01 01:12 G 35224358.42 35224358.55 35224358.73 0.0089 0.0064

Neptune 91729-07-14 14:24 G 35224583.94 35224584.10 35224584.29 0.0089 0.0053

Neptune 91730-02-25 03:07 G 35224809.46 35224809.63 35224809.84 0.0089 0.0043

Neptune 91730-10-08 16:19 G 35225034.99 35225035.18 35225035.40 0.0089 0.0032

Neptune 91731-05-22 05:31 G 35225260.52 35225260.73 35225260.95 0.0089 0.0022

Neptune 91732-01-02 18:29 G 35225486.06 35225486.27 35225486.49 0.0089 0.0011

Neptune 91732-08-15 07:26 G 35225711.60 35225711.81 35225712.04 0.0089 0.0002

Neptune 91733-03-28 20:24 G 35225937.14 35225937.35 35225937.57 0.0089 0.0011

Neptune 91733-11-09 09:22 G 35226162.68 35226162.89 35226163.11 0.0089 0.0021

Neptune 91734-06-22 22:19 G 35226388.23 35226388.43 35226388.65 0.0089 0.0032

Jupiter 91734-09-23 23:02 G 35226481.25 35226481.46 35226481.67 0.0499 0.0027

Neptune 91735-02-03 11:17 G 35226613.79 35226613.97 35226614.17 0.0089 0.0042

Jupiter 91735-05-18 11:02 G 35226717.93 35226717.96 35226718.00 0.0497 0.0489

Mars 91735-07-04 19:55 G 35226765.23 35226765.33 35226765.44 0.1935 0.1533

Neptune 91735-09-17 00:00 G 35226839.34 35226839.50 35226839.69 0.0089 0.0053

Neptune 91736-04-29 13:26 G 35227064.91 35227065.06 35227065.22 0.0089 0.0063

Saturn 91736-12-07 18:00 G 35227287.05 35227287.25 35227287.46 0.0300 0.0062

Neptune 91736-12-11 01:55 G 35227290.48 35227290.58 35227290.72 0.0089 0.0074

Neptune 91737-07-24 15:07 G 35227516.08 35227516.13 35227516.21 0.0089 0.0084

Saturn 91737-07-25 21:36 G 35227517.25 35227517.40 35227517.57 0.0298 0.0200

Mars 91738-04-08 17:02 G 35227774.04 35227774.21 35227774.37 0.1603 0.0615

Jupiter 91740-07-22 09:36 G 35228609.73 35228609.90 35228610.09 0.0526 0.0229

Jupiter 91741-03-16 20:10 G 35228847.20 35228847.34 35228847.48 0.0528 0.0386

Uranus 91744-08-29 00:43 G 35230108.44 35230108.53 35230108.66 0.0139 0.0120

Uranus 91745-04-12 09:07 G 35230334.73 35230334.88 35230335.06 0.0139 0.0091

Uranus 91745-11-24 17:31 G 35230561.05 35230561.23 35230561.43 0.0139 0.0063

Jupiter 91746-05-29 23:02 G 35230747.27 35230747.46 35230747.66 0.0500 0.0174

Uranus 91746-07-09 01:41 G 35230787.36 35230787.57 35230787.78 0.0138 0.0034

Jupiter 91747-01-21 12:29 G 35230983.88 35230984.02 35230984.16 0.0497 0.0351

Uranus 91747-02-20 09:22 G 35231013.68 35231013.89 35231014.11 0.0138 0.0007

Uranus 91747-10-04 17:02 G 35231239.99 35231240.21 35231240.42 0.0138 0.0021

Uranus 91748-05-18 00:14 G 35231466.32 35231466.51 35231466.72 0.0138 0.0049

Uranus 91748-12-30 07:26 G 35231692.65 35231692.81 35231693.01 0.0138 0.0077

Uranus 91749-08-13 14:53 G 35231918.98 35231919.12 35231919.26 0.0137 0.0103

Uranus 91750-03-27 21:36 G 35232145.34 35232145.40 35232145.48 0.0137 0.0129

Saturn 91752-01-02 13:55 G 35232790.96 35232791.08 35232791.19 0.0261 0.0217

Jupiter 91752-03-27 04:05 G 35232875.54 35232875.67 35232875.80 0.0525 0.0395

Saturn 91752-08-18 11:31 G 35233019.77 35233019.98 35233020.19 0.0263 0.0044

Jupiter 91752-11-19 12:58 G 35233112.86 35233113.04 35233113.22 0.0528 0.0214

Saturn 91753-04-04 10:05 G 35233248.75 35233248.92 35233249.11 0.0265 0.0135

Jupiter 91758-02-01 22:05 G 35235013.27 35235013.42 35235013.58 0.0500 0.0321

Jupiter 91758-09-26 13:12 G 35235249.86 35235250.05 35235250.24 0.0498 0.0210

Pluto 91763-08-10 22:34 G 35237029.23 35237029.44 35237029.66 0.0079 0.0020

Pluto 91764-03-23 08:10 G 35237254.70 35237254.84 35237255.02 0.0078 0.0054

Jupiter 91764-07-25 07:55 G 35237378.63 35237378.83 35237379.04 0.0528 0.0046

Saturn 91765-11-01 15:07 G 35237843.11 35237843.13 35237843.16 0.0301 0.0298

Saturn 91766-06-19 20:10 G 35238073.13 35238073.34 35238073.55 0.0299 0.0033

Saturn 91767-02-04 23:46 G 35238303.36 35238303.49 35238303.63 0.0297 0.0227

Jupiter 91769-10-07 18:14 G 35239279.19 35239279.26 35239279.33 0.0501 0.0470

Jupiter 91770-06-01 10:34 G 35239515.73 35239515.94 35239516.14 0.0498 0.0060

Mars 91772-02-05 12:00 G 35240129.91 35240130.00 35240130.09 0.1610 0.1372

Jupiter 91776-03-30 03:07 G 35241644.44 35241644.63 35241644.83 0.0527 0.0124

Jupiter 91776-11-22 15:07 G 35241882.06 35241882.13 35241882.20 0.0529 0.0493

Saturn 91781-07-14 16:48 G 35243577.07 35243577.20 35243577.35 0.0261 0.0192

Jupiter 91782-02-04 09:50 G 35243781.71 35243781.91 35243782.11 0.0499 0.0087

Saturn 91782-02-28 15:07 G 35243805.91 35243806.13 35243806.34 0.0263 0.0017

Jupiter 91782-09-28 22:05 G 35244018.33 35244018.42 35244018.53 0.0497 0.0433

Saturn 91782-10-15 13:41 G 35244034.91 35244035.07 35244035.25 0.0265 0.0162

Moon 91787-02-02 17:46 G 35245606.13 35245606.24 35245606.35 0.2648 0.1746

Earth 91787-02-02 20:53 G 35245606.25 35245606.37 35245606.49 0.2642 0.1685 *

Jupiter 91787-12-03 20:53 G 35245910.20 35245910.37 35245910.53 0.0526 0.0293

Jupiter 91788-07-28 06:29 G 35246147.61 35246147.77 35246147.93 0.0528 0.0320

Uranus 91788-08-21 20:24 G 35246172.23 35246172.35 35246172.48 0.0139 0.0111

Uranus 91789-04-05 05:17 G 35246398.56 35246398.72 35246398.91 0.0139 0.0083

Uranus 91789-11-17 14:38 G 35246624.92 35246625.11 35246625.32 0.0139 0.0055

Uranus 91790-07-02 00:14 G 35246851.30 35246851.51 35246851.73 0.0140 0.0026

Uranus 91791-02-13 10:05 G 35247077.70 35247077.92 35247078.14 0.0140 0.0004

Uranus 91791-09-27 19:41 G 35247304.11 35247304.32 35247304.54 0.0140 0.0033

Uranus 91792-05-11 05:31 G 35247530.55 35247530.73 35247530.94 0.0140 0.0063

Uranus 91792-12-23 15:50 G 35247757.00 35247757.16 35247757.33 0.0141 0.0092

Uranus 91793-08-07 02:10 G 35247983.49 35247983.59 35247983.71 0.0141 0.0122

Jupiter 91793-10-10 09:22 G 35248047.71 35248047.89 35248048.08 0.0500 0.0234

Jupiter 91794-06-03 23:46 G 35248284.32 35248284.49 35248284.65 0.0498 0.0294

Earth 91795-01-31 13:26 G 35248525.92 35248526.06 35248526.19 0.2641 0.1481

Moon 91795-01-31 14:24 G 35248525.98 35248526.10 35248526.23 0.2647 0.1356 *

Saturn 91795-05-14 21:07 G 35248629.29 35248629.38 35248629.49 0.0301 0.0266

Saturn 91795-12-31 02:10 G 35248859.37 35248859.59 35248859.80 0.0299 0.0005

Saturn 91796-08-17 05:31 G 35249089.63 35249089.73 35249089.83 0.0297 0.0260

Jupiter 91799-08-08 15:22 G 35250176.04 35250176.14 35250176.23 0.0524 0.0457

Jupiter 91800-04-02 23:02 G 35250413.27 35250413.46 35250413.66 0.0528 0.0148

Mars 91801-05-01 23:02 G 35250807.31 35250807.46 35250807.62 0.1933 0.0843

Mars 91804-02-05 05:31 G 35251816.56 35251816.73 35251816.90 0.1605 0.0455

Jupiter 91805-06-16 08:24 G 35252313.72 35252313.85 35252313.99 0.0501 0.0381

Jupiter 91806-02-08 00:14 G 35252550.32 35252550.51 35252550.71 0.0498 0.0150

Neptune 91811-01-19 05:46 G 35254356.71 35254356.74 35254356.82 0.0088 0.0085

Saturn 91811-01-25 19:41 G 35254363.16 35254363.32 35254363.49 0.0262 0.0167

Neptune 91811-09-01 19:12 G 35254582.19 35254582.30 35254582.42 0.0088 0.0075

Saturn 91811-09-11 17:46 G 35254592.03 35254592.24 35254592.45 0.0263 0.0008

Jupiter 91811-12-07 16:05 G 35254678.97 35254679.17 35254679.37 0.0527 0.0027

Neptune 91812-04-14 07:55 G 35254807.70 35254807.83 35254808.00 0.0088 0.0065

Saturn 91812-04-27 16:34 G 35254821.04 35254821.19 35254821.34 0.0265 0.0186

Neptune 91812-11-25 21:07 G 35255033.22 35255033.38 35255033.57 0.0088 0.0054

Neptune 91813-07-09 10:19 G 35255258.75 35255258.93 35255259.13 0.0088 0.0044

Neptune 91814-02-19 23:17 G 35255484.28 35255484.47 35255484.69 0.0088 0.0033

Neptune 91814-10-03 12:29 G 35255709.81 35255710.02 35255710.24 0.0088 0.0023

Neptune 91815-05-17 01:26 G 35255935.35 35255935.56 35255935.79 0.0088 0.0013

Neptune 91815-12-28 14:38 G 35256160.90 35256161.11 35256161.34 0.0088 0.0003

Neptune 91816-08-10 03:36 G 35256386.44 35256386.65 35256386.88 0.0088 0.0010

Neptune 91817-03-23 16:48 G 35256611.99 35256612.20 35256612.42 0.0088 0.0020

Jupiter 91817-10-14 00:14 G 35256816.31 35256816.51 35256816.72 0.0499 0.0007

Neptune 91817-11-04 05:46 G 35256837.55 35256837.74 35256837.96 0.0088 0.0031

Neptune 91818-06-17 18:58 G 35257063.10 35257063.29 35257063.49 0.0089 0.0041

Neptune 91819-01-29 07:41 G 35257288.66 35257288.82 35257289.02 0.0089 0.0052

Neptune 91819-09-11 20:53 G 35257514.22 35257514.37 35257514.54 0.0089 0.0062

Neptune 91820-04-24 10:05 G 35257739.80 35257739.92 35257740.05 0.0089 0.0072

Neptune 91820-12-05 22:48 G 35257965.39 35257965.45 35257965.55 0.0089 0.0083

Jupiter 91823-08-12 11:31 G 35258944.79 35258944.98 35258945.17 0.0526 0.0194

Jupiter 91824-04-05 22:48 G 35259182.33 35259182.45 35259182.57 0.0529 0.0423

Saturn 91824-11-25 00:58 G 35259415.42 35259415.54 35259415.68 0.0301 0.0233

Saturn 91825-07-13 05:46 G 35259645.53 35259645.74 35259645.95 0.0299 0.0033

Saturn 91826-02-28 08:53 G 35259875.84 35259875.87 35259875.92 0.0296 0.0292

Uranus 91828-04-29 11:02 G 35260666.91 35260666.96 35260667.06 0.0139 0.0131

Uranus 91828-12-11 20:10 G 35260893.20 35260893.34 35260893.49 0.0139 0.0102

Jupiter 91829-06-18 21:07 G 35261082.18 35261082.38 35261082.57 0.0499 0.0147

Uranus 91829-07-26 04:05 G 35261119.50 35261119.67 35261119.87 0.0139 0.0074

Jupiter 91830-02-10 09:50 G 35261318.78 35261318.91 35261319.04 0.0497 0.0376

Uranus 91830-03-09 12:14 G 35261345.82 35261346.01 35261346.22 0.0139 0.0046

Uranus 91830-10-21 20:10 G 35261572.13 35261572.34 35261572.56 0.0138 0.0018

Uranus 91831-06-05 04:05 G 35261798.45 35261798.67 35261798.88 0.0138 0.0011

Uranus 91832-01-17 11:31 G 35262024.78 35262024.98 35262025.19 0.0138 0.0038

Uranus 91832-08-30 18:43 G 35262251.10 35262251.28 35262251.48 0.0138 0.0066

Uranus 91833-04-14 01:41 G 35262477.43 35262477.57 35262477.75 0.0137 0.0093

Uranus 91833-11-26 09:07 G 35262703.78 35262703.88 35262703.99 0.0137 0.0119

Jupiter 91835-04-17 07:12 G 35263210.65 35263210.80 35263210.94 0.0526 0.0359

Jupiter 91835-12-10 16:34 G 35263448.01 35263448.19 35263448.37 0.0528 0.0254

Mars 91837-12-04 00:00 G 35264172.45 35264172.50 35264172.54 0.1612 0.1554

Saturn 91840-08-06 23:31 G 35265149.31 35265149.48 35265149.67 0.0262 0.0141

Jupiter 91841-02-21 19:26 G 35265348.15 35265348.31 35265348.48 0.0500 0.0295

Saturn 91841-03-23 22:05 G 35265378.21 35265378.42 35265378.63 0.0263 0.0035

Jupiter 91841-10-16 10:05 G 35265584.74 35265584.92 35265585.10 0.0497 0.0235

Saturn 91841-11-07 21:07 G 35265607.26 35265607.38 35265607.51 0.0265 0.0215

Jupiter 91846-12-21 01:26 G 35267476.55 35267476.56 35267476.58 0.0524 0.0521

Jupiter 91847-08-15 08:38 G 35267713.66 35267713.86 35267714.06 0.0527 0.0079

Jupiter 91852-10-27 17:46 G 35269614.15 35269614.24 35269614.34 0.0501 0.0443

Jupiter 91853-06-21 10:19 G 35269850.73 35269850.93 35269851.14 0.0498 0.0091

Saturn	91854-06-07 08:53 G	35270201.72	35270201.87	35270202.04	0.0301	0.0196
Saturn	91855-01-23 13:26 G	35270431.86	35270432.06	35270432.27	0.0299	0.0070
Jupiter	91859-04-20 01:55 G	35271979.38	35271979.58	35271979.78	0.0527	0.0094
Jupiter	91859-12-13 13:12 G	35272217.03	35272217.05	35272217.09	0.0529	0.0522
Jupiter	91865-02-24 10:05 G	35274116.72	35274116.92	35274117.13	0.0499	0.0058
Jupiter	91865-10-18 22:34 G	35274353.38	35274353.44	35274353.52	0.0497	0.0463
Mars	91867-02-27 00:58 G	35274849.37	35274849.54	35274849.71	0.1930	0.0109
Mars	91869-12-02 17:31 G	35275859.06	35275859.23	35275859.41	0.1606	0.0282
Saturn	91870-02-17 04:05 G	35275935.48	35275935.67	35275935.86	0.0262	0.0114
Saturn	91870-10-04 02:24 G	35276164.39	35276164.60	35276164.81	0.0264	0.0063
Jupiter	91870-12-23 18:58 G	35276245.12	35276245.29	35276245.47	0.0526	0.0266
Saturn	91871-05-21 01:26 G	35276393.48	35276393.56	35276393.65	0.0266	0.0243
Jupiter	91871-08-18 05:02 G	35276482.56	35276482.71	35276482.86	0.0528	0.0350
Uranus	91872-04-22 03:07 G	35276730.55	35276730.63	35276730.74	0.0139	0.0124
Uranus	91872-12-04 12:14 G	35276956.86	35276957.01	35276957.17	0.0139	0.0096
Uranus	91873-07-18 21:07 G	35277183.20	35277183.38	35277183.58	0.0139	0.0069
Uranus	91874-03-02 06:29 G	35277409.57	35277409.77	35277409.99	0.0140	0.0040
Uranus	91874-10-14 16:05 G	35277635.95	35277636.17	35277636.39	0.0140	0.0011
Uranus	91875-05-29 01:55 G	35277862.36	35277862.58	35277862.80	0.0140	0.0019
Uranus	91876-01-10 11:31 G	35278088.79	35278088.98	35278089.20	0.0140	0.0048
Uranus	91876-08-23 21:36 G	35278315.23	35278315.40	35278315.59	0.0140	0.0077
Jupiter	91876-10-30 09:22 G	35278382.70	35278382.89	35278383.08	0.0500	0.0205
Uranus	91877-04-07 07:41 G	35278541.69	35278541.82	35278541.97	0.0141	0.0107
Jupiter	91877-06-23 23:02 G	35278619.31	35278619.46	35278619.62	0.0497	0.0323
Uranus	91877-11-19 18:14 G	35278768.21	35278768.26	35278768.32	0.0141	0.0136
Jupiter	91882-08-28 14:53 G	35280511.00	35280511.12	35280511.23	0.0525	0.0429
Jupiter	91883-04-22 23:17 G	35280748.29	35280748.47	35280748.66	0.0528	0.0181
Saturn	91883-12-18 14:53 G	35280987.95	35280988.12	35280988.30	0.0300	0.0159
Saturn	91884-08-04 19:12 G	35281218.10	35281218.30	35281218.49	0.0298	0.0106
Jupiter	91888-07-05 05:46 G	35282648.60	35282648.74	35282648.88	0.0500	0.0356

Jupiter 91889-02-26 20:38 G 35282885.17 35282885.36 35282885.56 0.0497 0.0175

Neptune 91891-12-10 09:36 G 35283901.89 35283901.90 35283901.94 0.0089 0.0088

Neptune 91892-07-22 22:19 G 35284127.35 35284127.43 35284127.56 0.0089 0.0078

Neptune 91893-03-05 11:17 G 35284352.85 35284352.97 35284353.13 0.0089 0.0067

Neptune 91893-10-17 00:14 G 35284578.36 35284578.51 35284578.69 0.0089 0.0057

Neptune 91894-05-30 13:26 G 35284803.88 35284804.06 35284804.26 0.0089 0.0046

Jupiter 91894-12-26 17:31 G 35285014.03 35285014.23 35285014.43 0.0528 0.0011

Neptune 91895-01-11 02:38 G 35285029.41 35285029.61 35285029.81 0.0089 0.0035

Neptune 91895-08-24 15:22 G 35285254.94 35285255.14 35285255.36 0.0089 0.0025

Neptune 91896-04-06 04:34 G 35285480.47 35285480.69 35285480.91 0.0089 0.0014

Neptune 91896-11-17 17:31 G 35285706.01 35285706.23 35285706.45 0.0089 0.0004

Neptune 91897-07-01 06:29 G 35285931.56 35285931.77 35285931.99 0.0089 0.0007

Neptune 91898-02-11 19:26 G 35286157.10 35286157.31 35286157.53 0.0089 0.0018

Neptune 91898-09-25 08:24 G 35286382.64 35286382.85 35286383.06 0.0089 0.0028

Saturn 91899-01-13 10:48 G 35286492.94 35286492.95 35286492.98 0.0261 0.0259

Neptune 91899-05-08 21:22 G 35286608.20 35286608.39 35286608.59 0.0089 0.0039

Saturn 91899-08-30 08:38 G 35286721.66 35286721.86 35286722.07 0.0262 0.0086

Neptune 91899-12-20 10:05 G 35286833.76 35286833.92 35286834.12 0.0089 0.0050

Saturn 91900-04-16 07:12 G 35286950.61 35286950.80 35286951.00 0.0264 0.0092

Neptune 91900-08-02 23:02 G 35287059.31 35287059.46 35287059.64 0.0089 0.0060

Jupiter 91900-11-02 20:10 G 35287151.14 35287151.34 35287151.55 0.0498 0.0029

Neptune 91901-03-16 11:46 G 35287284.88 35287284.99 35287285.15 0.0089 0.0071

Neptune 91901-10-28 00:58 G 35287510.47 35287510.54 35287510.64 0.0089 0.0081

Jupiter 91906-09-01 10:19 G 35289279.74 35289279.93 35289280.12 0.0526 0.0165

Jupiter 91907-04-26 21:22 G 35289517.29 35289517.39 35289517.50 0.0529 0.0454

Earth 91908-08-03 12:14 G 35289981.98 35289982.01 35289982.04 0.2690 0.2629

Jupiter 91912-07-08 19:12 G 35291417.10 35291417.30 35291417.51 0.0499 0.0121

Uranus 91912-08-12 05:31 G 35291451.63 35291451.73 35291451.88 0.0139 0.0114

Jupiter 91913-03-02 08:24 G 35291653.73 35291653.85 35291653.97 0.0497 0.0404

Uranus 91913-03-26 14:10 G 35291677.93 35291678.09 35291678.27 0.0139 0.0085

Saturn 91913-07-01 00:00 G 35291774.31 35291774.50 35291774.69 0.0301 0.0119

Uranus 91913-11-07 22:19 G 35291904.25 35291904.43 35291904.64 0.0139 0.0057

Saturn 91914-02-16 04:05 G 35292004.49 35292004.67 35292004.85 0.0298 0.0145

Uranus 91914-06-22 06:43 G 35292130.57 35292130.78 35292130.99 0.0139 0.0028

Uranus 91915-02-03 14:38 G 35292356.89 35292357.11 35292357.32 0.0138 0.0002

Uranus 91915-09-17 22:05 G 35292583.21 35292583.42 35292583.64 0.0138 0.0027

Uranus 91916-05-01 05:17 G 35292809.54 35292809.72 35292809.93 0.0138 0.0055

Earth 91916-08-01 01:41 G 35292901.43 35292901.57 35292901.72 0.2692 0.1047

Moon 91916-08-01 06:00 G 35292901.60 35292901.75 35292901.91 0.2687 0.0961 *

Uranus 91916-12-13 12:43 G 35293035.87 35293036.03 35293036.22 0.0138 0.0082

Uranus 91917-07-27 20:10 G 35293262.21 35293262.34 35293262.47 0.0137 0.0108

Uranus 91918-03-11 02:38 G 35293488.58 35293488.61 35293488.66 0.0137 0.0134

Jupiter 91918-05-07 04:19 G 35293545.53 35293545.68 35293545.83 0.0525 0.0334

Jupiter 91918-12-30 13:12 G 35293782.88 35293783.05 35293783.22 0.0528 0.0280

Pluto 91921-05-28 20:24 G 35294663.29 35294663.35 35294663.46 0.0065 0.0061

Pluto 91922-01-09 00:43 G 35294888.34 35294888.53 35294888.76 0.0066 0.0019

Pluto 91922-08-22 05:02 G 35295113.52 35295113.71 35295113.93 0.0066 0.0024

Jupiter 91924-03-13 18:00 G 35295683.08 35295683.25 35295683.43 0.0500 0.0270

Jupiter 91924-11-05 08:53 G 35295919.70 35295919.87 35295920.05 0.0498 0.0262

Saturn 91928-07-26 16:34 G 35297279.09 35297279.19 35297279.28 0.0261 0.0231

Saturn 91929-03-12 14:24 G 35297507.89 35297508.10 35297508.31 0.0263 0.0057

Saturn 91929-10-27 12:58 G 35297736.86 35297737.04 35297737.23 0.0264 0.0122

Jupiter 91930-01-09 22:05 G 35297811.36 35297811.42 35297811.47 0.0524 0.0500

Jupiter 91930-09-04 05:17 G 35298048.52 35298048.72 35298048.91 0.0528 0.0105

Mars 91932-12-25 03:50 G 35298891.50 35298891.66 35298891.83 0.1928 0.0581

Mars 91935-10-01 06:14 G 35299901.58 35299901.76 35299901.93 0.1608 0.0118

Jupiter 91935-11-17 16:34 G 35299949.07 35299949.19 35299949.30 0.0501 0.0417

Jupiter 91936-07-11 08:38 G 35300185.66 35300185.86 35300186.06 0.0498 0.0117

Jupiter 91942-05-09 23:46 G 35302314.29 35302314.49 35302314.69 0.0527 0.0067

Saturn 91943-01-11 08:10 G 35302560.64 35302560.84 35302561.04 0.0300 0.0078

Saturn 91943-08-29 11:46 G 35302790.83 35302790.99 35302791.16 0.0297 0.0185

Jupiter 91948-03-16 06:00 G 35304451.55 35304451.75 35304451.96 0.0498 0.0034

Jupiter 91948-11-07 17:46 G 35304688.20 35304688.24 35304688.29 0.0497 0.0484

Jupiter 91954-01-12 18:00 G 35306580.08 35306580.25 35306580.43 0.0527 0.0237

Jupiter 91954-09-07 04:48 G 35306817.57 35306817.70 35306817.84 0.0529 0.0384

Uranus 91955-12-22 11:17 G 35307288.94 35307288.97 35307289.03 0.0139 0.0136

Uranus 91956-08-04 20:10 G 35307515.21 35307515.34 35307515.48 0.0139 0.0108

Uranus 91957-03-19 05:02 G 35307741.54 35307741.71 35307741.89 0.0139 0.0080

Uranus 91957-10-31 13:55 G 35307967.89 35307968.08 35307968.30 0.0139 0.0053

Saturn 91958-02-05 21:22 G 35308065.26 35308065.39 35308065.53 0.0262 0.0203

Uranus 91958-06-14 23:31 G 35308194.27 35308194.48 35308194.70 0.0140 0.0024

Saturn 91958-09-22 19:41 G 35308294.11 35308294.32 35308294.53 0.0263 0.0028

Uranus 91959-01-27 09:07 G 35308420.66 35308420.88 35308421.10 0.0140 0.0005

Saturn 91959-05-09 18:29 G 35308523.10 35308523.27 35308523.45 0.0264 0.0152

Uranus 91959-09-10 18:43 G 35308647.07 35308647.28 35308647.49 0.0140 0.0034

Jupiter 91959-11-20 04:34 G 35308717.50 35308717.69 35308717.89 0.0499 0.0183

Uranus 91960-04-24 04:34 G 35308873.50 35308873.69 35308873.89 0.0140 0.0064

Jupiter 91960-07-13 17:46 G 35308954.10 35308954.24 35308954.39 0.0497 0.0344

Uranus 91960-12-06 14:38 G 35309099.95 35309100.11 35309100.27 0.0141 0.0093

Uranus 91961-07-21 00:29 G 35309326.43 35309326.52 35309326.65 0.0141 0.0123

Jupiter 91965-09-17 12:00 G 35310845.88 35310846.00 35310846.13 0.0525 0.0405

Jupiter 91966-05-12 20:24 G 35311083.17 35311083.35 35311083.54 0.0528 0.0208

Jupiter 91971-07-26 02:24 G 35312983.45 35312983.60 35312983.75 0.0500 0.0334

Jupiter 91972-03-18 17:46 G 35313220.05 35313220.24 35313220.43 0.0498 0.0200

Saturn 91972-07-23 18:29 G 35313347.07 35313347.27 35313347.49 0.0300 0.0036

Saturn 91973-03-10 22:05 G 35313577.29 35313577.42 35313577.56 0.0298 0.0228

Neptune 91975-12-05 04:05 G 35314576.59 35314576.67 35314576.79 0.0088 0.0079

Neptune 91976-07-17 17:02 G 35314802.09 35314802.21 35314802.37 0.0088 0.0069

Neptune 91977-02-28 06:29 G 35315027.61 35315027.77 35315027.94 0.0088 0.0058

Neptune 91977-10-11 19:26 G 35315253.13 35315253.31 35315253.51 0.0088 0.0047

Jupiter 91978-01-15 12:58 G 35315348.84 35315349.04 35315349.25 0.0527 0.0035

Neptune 91978-05-25 08:38 G 35315478.66 35315478.86 35315479.07 0.0088 0.0037

Neptune 91979-01-05 21:36 G 35315704.20 35315704.40 35315704.62 0.0088 0.0026

Neptune 91979-08-19 10:48 G 35315929.73 35315929.95 35315930.17 0.0088 0.0016

Neptune 91980-03-31 23:46 G 35316155.27 35316155.49 35316155.71 0.0088 0.0005

Neptune 91980-11-12 12:58 G 35316380.82 35316381.04 35316381.26 0.0088 0.0005

Neptune 91981-06-26 01:55 G 35316606.37 35316606.58 35316606.80 0.0088 0.0016

Neptune 91982-02-06 14:38 G 35316831.91 35316832.11 35316832.33 0.0088 0.0027

Neptune 91982-09-20 03:50 G 35317057.47 35317057.66 35317057.87 0.0088 0.0037

Jupiter 91983-03-31 00:14 G 35317249.46 35317249.51 35317249.56 0.0501 0.0484

Neptune 91983-05-03 16:34 G 35317283.02 35317283.19 35317283.40 0.0089 0.0048

Jupiter 91983-11-22 17:31 G 35317486.02 35317486.23 35317486.43 0.0498 0.0053

Neptune 91983-12-15 06:00 G 35317508.59 35317508.75 35317508.92 0.0089 0.0058

Neptune 91984-07-27 18:43 G 35317734.16 35317734.28 35317734.44 0.0089 0.0069

Neptune 91985-03-10 07:55 G 35317959.75 35317959.83 35317959.94 0.0089 0.0079

Saturn 91987-08-19 03:50 G 35318851.50 35318851.66 35318851.82 0.0262 0.0172

Saturn 91988-04-04 02:10 G 35319080.38 35319080.59 35319080.81 0.0263 0.0005

Saturn 91988-11-19 01:12 G 35319309.41 35319309.55 35319309.71 0.0265 0.0184

Jupiter 91989-09-20 05:17 G 35319614.53 35319614.72 35319614.92 0.0526 0.0145

Jupiter 91990-05-15 16:19 G 35319852.11 35319852.18 35319852.28 0.0529 0.0477

Jupiter 91995-07-28 16:19 G 35321751.98 35321752.18 35321752.39 0.0499 0.0096

Jupiter 91996-03-21 05:02 G 35321988.62 35321988.71 35321988.82 0.0497 0.0429

Uranus 91996-04-11 13:41 G 35322010.00 35322010.07 35322010.19 0.0139 0.0126

Uranus 91996-11-23 22:34 G 35322236.30 35322236.44 35322236.61 0.0139 0.0097

Uranus 91997-07-08 06:58 G 35322462.62 35322462.79 35322463.00 0.0139 0.0069

Uranus 91998-02-19 15:22 G 35322688.94 35322689.14 35322689.35 0.0139 0.0041

Uranus 91998-10-03 23:31 G 35322915.26 35322915.48 35322915.69 0.0139 0.0013

Mars 91998-10-22 06:14 G 35322933.63 35322933.76 35322933.88 0.1925 0.1286

Uranus 91999-05-18 07:12 G 35323141.59 35323141.80 35323142.02 0.0138 0.0015

Uranus 91999-12-30 14:53 G 35323367.92 35323368.12 35323368.33 0.0138 0.0043

Uranus 92000-08-12 22:19 G 35323594.25 35323594.43 35323594.62 0.0138 0.0070

93RD MILLENNIUM CE

This is a list of transits of Venus in the 93rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Uranus	**92001-03-27 05:17**	**G**	**35323820.58**	**35323820.72**	**35323820.89**	**0.0138**	**0.0097**	
Jupiter	**92001-05-26 00:00**	**G**	**35323880.35**	**35323880.50**	**35323880.67**	**0.0526**	**0.0313**	
Saturn	**92001-06-17 23:02**	**G**	**35323903.37**	**35323903.46**	**35323903.58**	**0.0301**	**0.0259**	
Mars	**92001-07-28 18:29**	**G**	**35323944.09**	**35323944.27**	**35323944.44**	**0.1609**	**0.0066**	
Uranus	**92001-11-08 12:29**	**G**	**35324046.93**	**35324047.02**	**35324047.12**	**0.0137**	**0.0123**	
Jupiter	**92002-01-18 09:36**	**G**	**35324117.74**	**35324117.90**	**35324118.07**	**0.0529**	**0.0306**	
Saturn	**92002-02-03 03:50**	**G**	**35324133.45**	**35324133.66**	**35324133.87**	**0.0299**	**0.0009**	
Saturn	**92002-09-21 06:58**	**G**	**35324363.71**	**35324363.79**	**35324363.88**	**0.0297**	**0.0268**	
Jupiter	**92007-04-02 13:55**	**G**	**35326017.90**	**35326018.08**	**35326018.26**	**0.0499**	**0.0248**	
Jupiter	**92007-11-25 03:36**	**G**	**35326254.49**	**35326254.65**	**35326254.82**	**0.0497**	**0.0283**	
Pluto	**92009-09-10 05:31**	**G**	**35326909.52**	**35326909.73**	**35326909.96**	**0.0079**	**0.0016**	
Pluto	**92010-04-23 15:50**	**G**	**35327135.01**	**35327135.16**	**35327135.31**	**0.0078**	**0.0058**	
Jupiter	**92013-01-28 18:58**	**G**	**35328146.21**	**35328146.29**	**35328146.37**	**0.0525**	**0.0477**	
Jupiter	**92013-09-23 02:53**	**G**	**35328383.43**	**35328383.62**	**35328383.82**	**0.0528**	**0.0134**	
Saturn	**92017-02-28 09:07**	**G**	**35329637.71**	**35329637.88**	**35329638.06**	**0.0262**	**0.0144**	
Saturn	**92017-10-15 07:41**	**G**	**35329866.61**	**35329866.82**	**35329867.04**	**0.0263**	**0.0034**	
Saturn	**92018-06-01 06:58**	**G**	**35330095.67**	**35330095.79**	**35330095.92**	**0.0265**	**0.0214**	
Jupiter	**92018-12-06 11:31**	**G**	**35330283.86**	**35330283.98**	**35330284.11**	**0.0500**	**0.0397**	

Jupiter 92019-07-31 02:53 G 35330520.43 35330520.62 35330520.82 0.0498 0.0138

Jupiter 92025-05-28 19:41 G 35332649.12 35332649.32 35332649.52 0.0527 0.0044

Earth 92030-02-04 23:31 G 35334362.37 35334362.48 35334362.58 0.2641 0.1905

Moon 92030-02-05 04:05 G 35334362.57 35334362.67 35334362.78 0.2637 0.2005 *

Saturn 92030-12-29 10:34 G 35334689.80 35334689.94 35334690.09 0.0301 0.0214

Jupiter 92031-04-05 01:41 G 35334786.37 35334786.57 35334786.78 0.0499 0.0017

Saturn 92031-08-16 15:07 G 35334919.92 35334920.13 35334920.34 0.0299 0.0053

Jupiter 92037-01-31 13:12 G 35336914.87 35336915.05 35336915.23 0.0526 0.0216

Jupiter 92037-09-25 23:02 G 35337152.34 35337152.46 35337152.60 0.0528 0.0405

Earth 92038-02-02 16:05 G 35337282.03 35337282.17 35337282.31 0.2640 0.1252

Moon 92038-02-02 16:48 G 35337282.05 35337282.20 35337282.36 0.2633 0.0957 *

Uranus 92040-04-04 04:05 G 35338073.57 35338073.67 35338073.79 0.0139 0.0120

Uranus 92040-11-16 12:43 G 35338299.88 35338300.03 35338300.20 0.0139 0.0093

Uranus 92041-06-30 22:05 G 35338526.22 35338526.42 35338526.61 0.0139 0.0065

Uranus 92042-02-12 06:58 G 35338752.59 35338752.79 35338753.01 0.0139 0.0036

Uranus 92042-09-26 16:19 G 35338978.96 35338979.18 35338979.40 0.0140 0.0008

Jupiter 92042-12-09 00:29 G 35339052.33 35339052.52 35339052.72 0.0500 0.0163

Uranus 92043-05-11 01:55 G 35339205.36 35339205.58 35339205.80 0.0140 0.0021

Jupiter 92043-08-02 14:10 G 35339288.96 35339289.09 35339289.23 0.0497 0.0367

Uranus 92043-12-23 11:31 G 35339431.78 35339431.98 35339432.19 0.0140 0.0050

Uranus 92044-08-05 21:22 G 35339658.22 35339658.39 35339658.58 0.0140 0.0080

Uranus 92045-03-20 07:12 G 35339884.68 35339884.80 35339884.95 0.0141 0.0109

Uranus 92045-11-01 17:31 G 35340111.20 35340111.23 35340111.28 0.0141 0.0138

Saturn 92046-09-10 16:05 G 35340423.98 35340424.17 35340424.36 0.0262 0.0112

Saturn 92047-04-27 14:38 G 35340652.91 35340653.11 35340653.32 0.0264 0.0066

Saturn 92047-12-12 13:55 G 35340882.02 35340882.08 35340882.17 0.0266 0.0248

Jupiter 92048-10-06 06:14 G 35341180.63 35341180.76 35341180.90 0.0525 0.0387

Jupiter 92049-05-31 14:38 G 35341417.93 35341418.11 35341418.29 0.0528 0.0228

Jupiter 92054-08-13 22:48 G 35343318.29 35343318.45 35343318.61 0.0500 0.0313

Jupiter 92055-04-07 13:55 G 35343554.90 35343555.08 35343555.27 0.0498 0.0223

Neptune 92056-10-25 07:55 G 35344121.76 35344121.83 35344121.93 0.0089 0.0082

Neptune 92057-06-07 20:38 G 35344347.25 35344347.36 35344347.51 0.0089 0.0071

Neptune 92058-01-19 09:50 G 35344572.76 35344572.91 35344573.08 0.0089 0.0060

Neptune 92058-09-01 22:34 G 35344798.28 35344798.44 35344798.64 0.0089 0.0050

Neptune 92059-04-15 11:46 G 35345023.80 35345023.99 35345024.20 0.0089 0.0039

Neptune 92059-11-27 00:43 G 35345249.33 35345249.53 35345249.75 0.0089 0.0029

Neptune 92060-07-09 13:41 G 35345474.86 35345475.07 35345475.29 0.0089 0.0018

Saturn 92060-07-10 21:22 G 35345476.22 35345476.39 35345476.57 0.0300 0.0168

Jupiter 92061-02-03 07:55 G 35345683.63 35345683.83 35345684.03 0.0528 0.0055

Neptune 92061-02-20 02:53 G 35345700.40 35345700.62 35345700.84 0.0089 0.0007

Saturn 92061-02-26 01:26 G 35345706.36 35345706.56 35345706.76 0.0298 0.0098

Neptune 92061-10-03 15:50 G 35345925.94 35345926.16 35345926.38 0.0089 0.0003

Neptune 92062-05-17 04:48 G 35346151.49 35346151.70 35346151.92 0.0089 0.0014

Neptune 92062-12-28 17:46 G 35346377.04 35346377.24 35346377.46 0.0089 0.0025

Neptune 92063-08-11 06:58 G 35346602.59 35346602.79 35346602.99 0.0089 0.0035

Neptune 92064-03-23 19:41 G 35346828.14 35346828.32 35346828.52 0.0089 0.0046

Neptune 92064-11-04 08:24 G 35347053.70 35347053.85 35347054.04 0.0089 0.0057

Neptune 92065-06-17 21:36 G 35347279.27 35347279.40 35347279.56 0.0089 0.0067

Neptune 92066-01-29 10:19 G 35347504.85 35347504.93 35347505.06 0.0089 0.0078

Jupiter 92066-04-18 20:10 G 35347584.26 35347584.34 35347584.42 0.0501 0.0462

Neptune 92066-09-11 23:31 G 35347730.47 35347730.48 35347730.52 0.0089 0.0088

Jupiter 92066-12-11 12:29 G 35347820.81 35347821.02 35347821.22 0.0498 0.0074

Mars 92067-05-26 06:29 G 35347986.60 35347986.77 35347986.95 0.1611 0.0228

Jupiter 92072-10-09 01:41 G 35349949.38 35349949.57 35349949.77 0.0527 0.0120

Jupiter 92073-06-03 13:41 G 35350187.01 35350187.07 35350187.13 0.0529 0.0504

Saturn 92075-08-06 22:48 G 35350981.44 35350981.45 35350981.50 0.0261 0.0259

Saturn 92076-03-22 21:07 G 35351210.19 35351210.38 35351210.59 0.0263 0.0084

Saturn 92076-11-06 20:10 G 35351439.14 35351439.34 35351439.54 0.0264 0.0096

Jupiter 92078-08-16 11:02 G 35352086.76 35352086.96 35352087.17 0.0498 0.0077

Jupiter 92079-04-09 23:17 G 35352323.39 35352323.47 35352323.56 0.0497 0.0448

Uranus	92079-12-10 22:05 G	35352568.41	35352568.42	35352568.48	0.0140	0.0138
Uranus	92080-07-24 06:58 G	35352794.67	35352794.79	35352794.94	0.0139	0.0109
Uranus	92081-03-07 15:36 G	35353020.99	35353021.15	35353021.34	0.0139	0.0081
Uranus	92081-10-20 00:00 G	35353247.31	35353247.50	35353247.71	0.0139	0.0053
Uranus	92082-06-03 08:24 G	35353473.64	35353473.85	35353474.06	0.0139	0.0025
Uranus	92083-01-15 16:19 G	35353699.97	35353700.18	35353700.40	0.0138	0.0005
Uranus	92083-08-30 00:00 G	35353926.30	35353926.50	35353926.72	0.0138	0.0031
Uranus	92084-04-12 07:26 G	35354152.63	35354152.81	35354153.02	0.0138	0.0058
Jupiter	92084-06-13 19:41 G	35354215.16	35354215.32	35354215.49	0.0526	0.0292
Uranus	92084-11-24 14:53 G	35354378.96	35354379.12	35354379.30	0.0138	0.0085
Jupiter	92085-02-06 05:02 G	35354452.56	35354452.71	35354452.87	0.0528	0.0328
Uranus	92085-07-08 21:50 G	35354605.30	35354605.41	35354605.55	0.0138	0.0112
Saturn	92090-01-21 08:24 G	35356262.66	35356262.85	35356263.04	0.0300	0.0123
Jupiter	92090-04-21 08:38 G	35356352.68	35356352.86	35356353.04	0.0500	0.0230
Saturn	92090-09-08 12:29 G	35356492.83	35356493.02	35356493.20	0.0298	0.0143
Jupiter	92090-12-13 23:02 G	35356589.30	35356589.46	35356589.62	0.0497	0.0304
Jupiter	92096-02-17 14:24 G	35358481.01	35358481.10	35358481.20	0.0524	0.0458
Jupiter	92096-10-11 21:36 G	35358718.21	35358718.40	35358718.60	0.0528	0.0153
Mars	92099-05-25 00:00 G	35359673.48	35359673.50	35359673.52	0.1605	0.1595
Jupiter	92101-12-26 06:14 G	35360618.64	35360618.76	35360618.90	0.0501	0.0381
Jupiter	92102-08-19 22:34 G	35360855.25	35360855.44	35360855.64	0.0498	0.0158
Saturn	92105-02-17 05:31 G	35361767.64	35361767.73	35361767.85	0.0261	0.0227
Saturn	92105-10-04 04:05 G	35361996.46	35361996.67	35361996.88	0.0263	0.0051
Saturn	92106-05-21 02:53 G	35362225.44	35362225.62	35362225.81	0.0264	0.0129
Jupiter	92108-06-17 13:41 G	35362983.87	35362984.07	35362984.27	0.0527	0.0025
Jupiter	92114-04-24 21:50 G	35365121.21	35365121.41	35365121.62	0.0499	0.0015
Saturn	92119-08-04 19:12 G	35367049.10	35367049.30	35367049.50	0.0300	0.0077
Jupiter	92120-02-21 07:26 G	35367249.63	35367249.81	35367250.00	0.0526	0.0198
Saturn	92120-03-21 22:48 G	35367279.29	35367279.45	35367279.62	0.0298	0.0187
Jupiter	92120-10-15 18:00 G	35367487.14	35367487.25	35367487.37	0.0529	0.0426

Uranus 92123-12-04 14:24 G 35368632.03 35368632.10 35368632.17 0.0139 0.0130

Uranus 92124-07-17 22:48 G 35368858.31 35368858.45 35368858.60 0.0139 0.0103

Uranus 92125-03-01 07:41 G 35369084.64 35369084.82 35369085.01 0.0139 0.0075

Uranus 92125-10-13 16:34 G 35369310.99 35369311.19 35369311.40 0.0139 0.0047

Jupiter 92125-12-28 20:10 G 35369387.15 35369387.34 35369387.54 0.0499 0.0142

Uranus 92126-05-28 01:55 G 35369537.37 35369537.58 35369537.80 0.0139 0.0019

Jupiter 92126-08-22 09:07 G 35369623.76 35369623.88 35369624.01 0.0497 0.0388

Uranus 92127-01-09 11:17 G 35369763.75 35369763.97 35369764.19 0.0140 0.0010

Uranus 92127-08-23 20:38 G 35369990.16 35369990.36 35369990.58 0.0140 0.0039

Uranus 92128-04-06 06:14 G 35370216.58 35370216.76 35370216.97 0.0140 0.0068

Uranus 92128-11-18 16:05 G 35370443.03 35370443.17 35370443.35 0.0140 0.0098

Uranus 92129-07-03 02:24 G 35370669.52 35370669.60 35370669.71 0.0141 0.0127

Jupiter 92131-10-27 01:55 G 35371515.44 35371515.58 35371515.72 0.0526 0.0367

Jupiter 92132-06-20 11:02 G 35371752.78 35371752.96 35371753.13 0.0529 0.0253

Mars 92133-03-23 18:43 G 35372029.11 35372029.28 35372029.45 0.1613 0.0403

Saturn 92134-08-30 10:05 G 35372553.79 35372553.92 35372554.07 0.0262 0.0200

Saturn 92135-04-16 08:38 G 35372782.64 35372782.86 35372783.07 0.0263 0.0023

Saturn 92135-12-01 07:26 G 35373011.65 35373011.81 35373011.99 0.0265 0.0158

Jupiter 92137-09-02 18:14 G 35373653.10 35373653.26 35373653.44 0.0500 0.0293

Jupiter 92138-04-27 09:07 G 35373889.70 35373889.88 35373890.06 0.0497 0.0243

Neptune 92140-03-08 12:43 G 35374570.97 35374571.03 35374571.13 0.0088 0.0083

Neptune 92140-10-20 01:55 G 35374796.47 35374796.58 35374796.73 0.0088 0.0072

Neptune 92141-06-02 15:22 G 35375021.99 35375022.14 35375022.30 0.0088 0.0062

Neptune 92142-01-14 04:05 G 35375247.51 35375247.67 35375247.87 0.0088 0.0052

Neptune 92142-08-27 17:31 G 35375473.04 35375473.23 35375473.43 0.0088 0.0041

Neptune 92143-04-10 06:29 G 35375698.57 35375698.77 35375698.99 0.0088 0.0030

Neptune 92143-11-21 19:41 G 35375924.11 35375924.32 35375924.54 0.0088 0.0020

Jupiter 92144-02-24 03:50 G 35376018.46 35376018.66 35376018.86 0.0527 0.0075

Neptune 92144-07-04 08:38 G 35376149.65 35376149.86 35376150.09 0.0088 0.0010

Neptune 92145-02-14 21:50 G 35376375.19 35376375.41 35376375.63 0.0088 0.0001

Neptune 92145-09-28 10:34 G 35376600.73 35376600.94 35376601.17 0.0088 0.0013

Neptune 92146-05-11 23:46 G 35376826.28 35376826.49 35376826.71 0.0088 0.0022

Neptune 92146-12-23 12:29 G 35377051.83 35377052.02 35377052.24 0.0088 0.0034

Neptune 92147-08-06 01:41 G 35377277.39 35377277.57 35377277.77 0.0089 0.0044

Neptune 92148-03-18 14:53 G 35377502.95 35377503.12 35377503.29 0.0089 0.0054

Saturn 92148-06-29 00:58 G 35377605.53 35377605.54 35377605.57 0.0302 0.0300

Neptune 92148-10-30 03:36 G 35377728.52 35377728.65 35377728.82 0.0089 0.0065

Saturn 92149-02-14 06:00 G 35377835.54 35377835.75 35377835.96 0.0300 0.0032

Jupiter 92149-05-08 14:24 G 35377919.02 35377919.10 35377919.20 0.0501 0.0448

Neptune 92149-06-12 16:48 G 35377954.09 35377954.20 35377954.32 0.0089 0.0075

Saturn 92149-10-02 09:36 G 35378065.77 35378065.90 35378066.03 0.0298 0.0232

Jupiter 92149-12-31 07:26 G 35378155.61 35378155.81 35378156.01 0.0498 0.0093

Neptune 92150-01-24 05:31 G 35378179.69 35378179.73 35378179.81 0.0089 0.0086

Moon 92151-08-05 06:58 G 35378737.69 35378737.79 35378737.89 0.2689 0.2080

Earth 92151-08-05 12:00 G 35378737.97 35378738.00 35378738.04 0.2691 0.2608

Jupiter 92155-10-29 21:36 G 35380284.21 35380284.40 35380284.60 0.0526 0.0099

Jupiter 92156-06-23 08:38 G 35380521.84 35380521.86 35380521.88 0.0529 0.0524

Moon 92159-08-02 20:38 G 35381657.22 35381657.36 35381657.50 0.2696 0.1238

Earth 92159-08-03 01:55 G 35381657.43 35381657.58 35381657.72 0.2693 0.1065 *

Jupiter 92161-09-05 06:29 G 35382421.56 35382421.77 35382421.97 0.0499 0.0059

Jupiter 92162-04-29 19:12 G 35382658.24 35382658.30 35382658.37 0.0497 0.0469

Mars 92162-06-16 10:48 G 35382705.82 35382705.95 35382706.08 0.1929 0.1242

Saturn 92164-03-11 16:19 G 35383340.02 35383340.18 35383340.35 0.0262 0.0168

Uranus 92164-03-24 16:19 G 35383353.08 35383353.18 35383353.30 0.0139 0.0121

Saturn 92164-10-26 14:53 G 35383568.91 35383569.12 35383569.34 0.0263 0.0010

Uranus 92164-11-06 00:58 G 35383579.39 35383579.54 35383579.72 0.0139 0.0093

Mars 92165-03-22 12:29 G 35383715.94 35383716.02 35383716.10 0.1607 0.1430

Saturn 92165-06-12 13:55 G 35383797.94 35383798.08 35383798.23 0.0265 0.0190

Uranus 92165-06-20 09:36 G 35383805.72 35383805.90 35383806.10 0.0139 0.0064

Uranus 92166-02-01 18:00 G 35384032.04 35384032.25 35384032.46 0.0139 0.0036

Uranus 92166-09-16 01:55 G 35384258.37 35384258.58 35384258.80 0.0139 0.0009

Uranus 92167-04-30 09:50 G 35384484.70 35384484.91 35384485.13 0.0138 0.0019

Pluto 92167-06-28 05:02 G 35384543.61 35384543.71 35384543.87 0.0066 0.0053

Jupiter 92167-07-04 14:24 G 35384549.93 35384550.10 35384550.27 0.0525 0.0273

Uranus 92167-12-12 17:31 G 35384711.03 35384711.23 35384711.44 0.0138 0.0047

Pluto 92168-02-08 09:36 G 35384768.70 35384768.90 35384769.13 0.0066 0.0011

Jupiter 92168-02-26 23:31 G 35384787.33 35384787.48 35384787.63 0.0528 0.0349

Uranus 92168-07-26 00:43 G 35384937.36 35384937.53 35384937.73 0.0138 0.0074

Pluto 92168-09-20 13:55 G 35384993.90 35384994.08 35384994.28 0.0066 0.0032

Uranus 92169-03-09 07:55 G 35385163.70 35385163.83 35385163.99 0.0138 0.0101

Uranus 92169-10-21 15:07 G 35385390.05 35385390.13 35385390.22 0.0138 0.0127

Jupiter 92173-05-11 05:17 G 35386687.53 35386687.72 35386687.91 0.0500 0.0208

Jupiter 92174-01-02 19:26 G 35386924.16 35386924.31 35386924.47 0.0497 0.0328

Saturn 92178-01-09 11:02 G 35388391.86 35388391.96 35388392.07 0.0301 0.0256

Saturn 92178-08-27 15:36 G 35388621.94 35388622.15 35388622.36 0.0299 0.0013

Jupiter 92179-03-09 09:07 G 35388815.77 35388815.88 35388815.99 0.0525 0.0440

Saturn 92179-04-14 18:58 G 35388852.22 35388852.29 35388852.38 0.0297 0.0274

Jupiter 92179-11-01 16:34 G 35389053.00 35389053.19 35389053.38 0.0528 0.0175

Jupiter 92185-01-14 03:22 G 35390953.50 35390953.64 35390953.79 0.0500 0.0359

Jupiter 92185-09-07 18:58 G 35391190.10 35391190.29 35391190.48 0.0498 0.0180

Jupiter 92191-07-07 10:05 G 35393318.72 35393318.92 35393319.12 0.0528 0.0001

Saturn 92193-09-21 19:55 G 35394126.16 35394126.33 35394126.52 0.0262 0.0142

Saturn 92194-05-08 18:29 G 35394355.06 35394355.27 35394355.48 0.0263 0.0036

Saturn 92194-12-23 17:31 G 35394584.12 35394584.23 35394584.36 0.0265 0.0217

Jupiter 92197-05-13 18:14 G 35395456.06 35395456.26 35395456.47 0.0498 0.0034

Mars 92199-01-19 06:58 G 35396071.62 35396071.79 35396071.95 0.1615 0.0574

Jupiter 92203-03-13 04:19 G 35397584.50 35397584.68 35397584.88 0.0526 0.0176

Jupiter 92203-11-05 14:53 G 35397822.02 35397822.12 35397822.22 0.0529 0.0449

Saturn 92207-07-23 20:10 G 35399178.20 35399178.34 35399178.50 0.0301 0.0213

Saturn 92208-03-10 00:58 G 35399408.33 35399408.54 35399408.75 0.0299 0.0055

Uranus 92208-03-18 08:10 G 35399416.72 35399416.84 35399416.97 0.0139 0.0114

Uranus 92208-10-30 17:02 G 35399643.04 35399643.21 35399643.38 0.0139 0.0086

Jupiter 92209-01-17 15:22 G 35399721.94 35399722.14 35399722.34 0.0499 0.0124

Uranus 92209-06-14 01:55 G 35399869.38 35399869.58 35399869.78 0.0139 0.0059

Jupiter 92209-09-11 05:02 G 35399958.60 35399958.71 35399958.83 0.0497 0.0408

Uranus 92210-01-26 11:02 G 35400095.75 35400095.96 35400096.17 0.0139 0.0030

Uranus 92210-09-09 20:10 G 35400322.12 35400322.34 35400322.56 0.0140 0.0002

Uranus 92211-04-24 05:31 G 35400548.52 35400548.73 35400548.95 0.0140 0.0027

Uranus 92211-12-06 15:07 G 35400774.93 35400775.13 35400775.34 0.0140 0.0056

Uranus 92212-07-20 00:43 G 35401001.38 35401001.53 35401001.72 0.0140 0.0086

Uranus 92213-03-03 11:17 G 35401227.84 35401227.97 35401228.09 0.0141 0.0114

Jupiter 92214-11-15 23:31 G 35401850.33 35401850.48 35401850.64 0.0525 0.0344

Jupiter 92215-07-11 07:55 G 35402087.66 35402087.83 35402088.00 0.0528 0.0276

Jupiter 92220-09-22 13:41 G 35403987.90 35403988.07 35403988.24 0.0500 0.0275

Neptune 92221-01-28 17:02 G 35404116.17 35404116.21 35404116.29 0.0089 0.0086

Jupiter 92221-05-17 05:17 G 35404224.54 35404224.72 35404224.89 0.0498 0.0264

Neptune 92221-09-11 05:46 G 35404341.65 35404341.74 35404341.88 0.0089 0.0075

Neptune 92222-04-24 18:58 G 35404567.15 35404567.29 35404567.45 0.0089 0.0064

Neptune 92222-12-06 07:41 G 35404792.67 35404792.82 35404793.01 0.0089 0.0054

Saturn 92223-04-05 01:12 G 35404912.36 35404912.55 35404912.75 0.0262 0.0111

Neptune 92223-07-19 20:38 G 35405018.19 35405018.36 35405018.57 0.0089 0.0044

Saturn 92223-11-19 23:46 G 35405141.29 35405141.49 35405141.70 0.0263 0.0067

Neptune 92224-03-01 09:50 G 35405243.71 35405243.91 35405244.11 0.0089 0.0032

Saturn 92224-07-05 23:02 G 35405370.39 35405370.46 35405370.54 0.0265 0.0247

Neptune 92224-10-12 22:34 G 35405469.24 35405469.44 35405469.66 0.0089 0.0022

Neptune 92225-05-26 11:46 G 35405694.77 35405694.99 35405695.21 0.0089 0.0011

Neptune 92226-01-07 00:43 G 35405920.31 35405920.53 35405920.75 0.0089 0.0001

Jupiter 92226-07-21 17:17 G 35406116.19 35406116.22 35406116.27 0.0524 0.0511

Neptune 92226-08-20 13:41 G 35406145.85 35406146.07 35406146.29 0.0089 0.0010

Jupiter 92227-03-15 23:46 G 35406353.29 35406353.49 35406353.69 0.0527 0.0098

Neptune 92227-04-03 02:24 G 35406371.40 35406371.60 35406371.82 0.0089 0.0021

Neptune 92227-11-14 15:22 G 35406596.95 35406597.14 35406597.36 0.0089 0.0032

Mars 92228-04-13 14:10 G 35406747.92 35406748.09 35406748.25 0.1926 0.0570

Neptune 92228-06-27 04:34 G 35406822.50 35406822.69 35406822.89 0.0089 0.0042

Neptune 92229-02-07 17:17 G 35407048.06 35407048.22 35407048.41 0.0089 0.0053

Neptune 92229-09-21 06:29 G 35407273.63 35407273.77 35407273.93 0.0089 0.0063

Neptune 92230-05-04 19:26 G 35407499.20 35407499.31 35407499.45 0.0089 0.0074

Neptune 92230-12-16 08:38 G 35407724.80 35407724.86 35407724.93 0.0089 0.0084

Mars 92231-01-19 00:43 G 35407758.43 35407758.53 35407758.64 0.1609 0.1264

Jupiter 92232-05-28 11:46 G 35408253.89 35408253.99 35408254.11 0.0501 0.0426

Jupiter 92233-01-20 05:02 G 35408490.51 35408490.71 35408490.91 0.0498 0.0117

Saturn 92237-02-02 05:17 G 35409964.55 35409964.72 35409964.90 0.0301 0.0171

Saturn 92237-09-20 09:36 G 35410194.71 35410194.90 35410195.11 0.0299 0.0097

Jupiter 92238-11-18 17:31 G 35410619.03 35410619.23 35410619.43 0.0527 0.0077

Jupiter 92244-09-25 04:34 G 35412756.48 35412756.69 35412756.89 0.0499 0.0034

Jupiter 92245-05-19 16:48 G 35412993.18 35412993.20 35412993.22 0.0497 0.0493

Uranus 92247-11-24 03:07 G 35413911.56 35413911.63 35413911.71 0.0140 0.0131

Uranus 92248-07-07 12:00 G 35414137.85 35414138.00 35414138.14 0.0139 0.0103

Uranus 92249-02-18 20:10 G 35414364.17 35414364.34 35414364.54 0.0139 0.0075

Uranus 92249-10-03 04:34 G 35414590.50 35414590.69 35414590.90 0.0139 0.0047

Uranus 92250-05-17 12:58 G 35414816.82 35414817.04 35414817.25 0.0139 0.0019

Jupiter 92250-07-24 11:31 G 35414884.81 35414884.98 35414885.16 0.0526 0.0250

Uranus 92250-12-29 20:53 G 35415043.16 35415043.37 35415043.59 0.0139 0.0009

Jupiter 92251-03-18 21:22 G 35415122.26 35415122.39 35415122.54 0.0529 0.0377

Uranus 92251-08-13 04:34 G 35415269.49 35415269.69 35415269.91 0.0138 0.0036

Uranus 92252-03-26 12:00 G 35415495.82 35415496.00 35415496.20 0.0138 0.0064

Saturn 92252-10-15 04:05 G 35415698.47 35415698.67 35415698.87 0.0262 0.0087

Uranus 92252-11-07 19:26 G 35415722.15 35415722.31 35415722.47 0.0138 0.0090

Saturn 92253-06-01 02:24 G 35415927.40 35415927.60 35415927.80 0.0264 0.0091

Uranus 92253-06-22 02:24 G 35415948.50 35415948.60 35415948.72 0.0138 0.0117

Pluto 92255-02-28 03:50 G 35416564.66 35416564.66 35416564.70 0.0079 0.0079

Pluto 92255-10-11 14:53 G 35416789.90 35416790.12 35416790.34 0.0079 0.0003

Pluto 92256-05-24 00:14 G 35417015.45 35417015.51 35417015.64 0.0078 0.0072

Jupiter 92256-05-31 03:07 G 35417022.44 35417022.63 35417022.83 0.0499 0.0184

Jupiter 92257-01-22 17:02 G 35417259.07 35417259.21 35417259.36 0.0497 0.0352

Jupiter 92262-03-29 07:26 G 35419150.69 35419150.81 35419150.93 0.0525 0.0417

Jupiter 92262-11-21 15:07 G 35419387.95 35419388.13 35419388.32 0.0528 0.0200

Mars 92264-11-16 18:43 G 35420114.13 35420114.28 35420114.44 0.1616 0.0758

Saturn 92266-08-15 12:43 G 35420750.84 35420751.03 35420751.22 0.0301 0.0131

Saturn 92267-04-02 17:02 G 35420981.03 35420981.21 35420981.41 0.0299 0.0137

Jupiter 92268-02-03 23:02 G 35421288.31 35421288.46 35421288.61 0.0501 0.0340

Jupiter 92268-09-27 15:22 G 35421524.95 35421525.14 35421525.33 0.0498 0.0202

Moon 92273-02-06 21:07 G 35423118.27 35423118.38 35423118.49 0.2643 0.1845

Earth 92273-02-07 02:24 G 35423118.51 35423118.60 35423118.69 0.2641 0.2146

Jupiter 92274-07-27 09:22 G 35423653.69 35423653.89 35423654.09 0.0527 0.0027

Jupiter 92279-10-09 20:38 G 35425554.33 35425554.36 35425554.41 0.0502 0.0491

Jupiter 92280-06-02 14:53 G 35425790.91 35425791.12 35425791.32 0.0499 0.0053

Moon 92281-02-04 16:34 G 35426038.07 35426038.19 35426038.31 0.2646 0.1610

Earth 92281-02-04 18:58 G 35426038.14 35426038.29 35426038.44 0.2639 0.1016 *

Saturn 92281-09-10 10:34 G 35426255.84 35426255.94 35426256.03 0.0260 0.0232

Saturn 92282-04-27 08:10 G 35426484.63 35426484.84 35426485.05 0.0262 0.0058

Saturn 92282-12-12 06:29 G 35426713.59 35426713.77 35426713.97 0.0263 0.0122

Jupiter 92286-04-01 02:24 G 35427919.41 35427919.60 35427919.79 0.0526 0.0149

Jupiter 92286-11-24 12:14 G 35428156.93 35428157.01 35428157.10 0.0528 0.0476

Uranus 92291-11-16 18:29 G 35429975.18 35429975.27 35429975.37 0.0139 0.0124

Jupiter 92292-02-06 14:10 G 35430056.89 35430057.09 35430057.30 0.0500 0.0097

Uranus 92292-06-30 02:53 G 35430201.48 35430201.62 35430201.79 0.0139 0.0097

Jupiter 92292-09-30 04:05 G 35430293.57 35430293.67 35430293.76 0.0497 0.0436

Uranus 92293-02-11 11:46 G 35430427.81 35430427.99 35430428.19 0.0139 0.0070

Uranus 92293-09-25 20:38 G 35430654.16 35430654.36 35430654.58 0.0139 0.0042

Mars 92294-02-08 16:19 G 35430790.01 35430790.18 35430790.35 0.1923 0.0143

Uranus 92294-05-10 06:00 G 35430880.53 35430880.75 35430880.97 0.0140 0.0013

Uranus 92294-12-22 15:22 G 35431106.92 35431107.14 35431107.36 0.0140 0.0016

Uranus 92295-08-06 00:43 G 35431333.33 35431333.53 35431333.75 0.0140 0.0045

Saturn 92296-02-25 19:55 G 35431537.13 35431537.33 35431537.53 0.0301 0.0093

Uranus 92296-03-19 10:34 G 35431559.76 35431559.94 35431560.13 0.0140 0.0074

Saturn 92296-10-13 00:00 G 35431767.34 35431767.50 35431767.68 0.0299 0.0175

Uranus 92296-10-31 20:24 G 35431786.21 35431786.35 35431786.51 0.0140 0.0103

Mars 92296-11-15 12:43 G 35431800.91 35431801.03 35431801.16 0.1610 0.1092

Uranus 92297-06-15 06:43 G 35432012.72 35432012.78 35432012.87 0.0141 0.0132

Jupiter 92297-12-04 20:38 G 35432185.21 35432185.36 35432185.53 0.0525 0.0320

Jupiter 92298-07-30 05:02 G 35432422.55 35432422.71 35432422.88 0.0528 0.0303

Jupiter 92303-10-13 13:41 G 35434322.89 35434323.07 35434323.25 0.0500 0.0247

Jupiter 92304-06-06 04:34 G 35434559.52 35434559.69 35434559.85 0.0498 0.0292

Neptune 92304-06-11 21:07 G 35434565.35 35434565.38 35434565.43 0.0088 0.0086

Neptune 92305-01-23 10:05 G 35434790.83 35434790.92 35434791.05 0.0088 0.0076

Neptune 92305-09-05 23:31 G 35435016.34 35435016.48 35435016.63 0.0088 0.0066

Neptune 92306-04-19 12:29 G 35435241.86 35435242.02 35435242.20 0.0088 0.0055

Neptune 92306-12-01 01:55 G 35435467.39 35435467.58 35435467.77 0.0088 0.0045

Neptune 92307-07-14 14:53 G 35435692.92 35435693.12 35435693.33 0.0088 0.0034

Neptune 92308-02-25 04:05 G 35435918.46 35435918.67 35435918.89 0.0088 0.0024

Neptune 92308-10-07 17:02 G 35436144.00 35436144.21 35436144.44 0.0088 0.0013

Neptune 92309-05-21 06:14 G 35436369.54 35436369.76 35436369.98 0.0088 0.0003

Jupiter 92309-08-10 15:36 G 35436451.09 35436451.15 35436451.23 0.0524 0.0487

Neptune 92310-01-01 19:12 G 35436595.08 35436595.30 35436595.52 0.0088 0.0008

Jupiter 92310-04-04 22:48 G 35436688.25 35436688.45 35436688.64 0.0528 0.0127

Neptune 92310-08-15 08:10 G 35436820.63 35436820.84 35436821.06 0.0088 0.0019

Saturn 92311-03-24 12:00 G 35437041.88 35437042.00 35437042.13 0.0261 0.0210

Neptune 92311-03-28 20:53 G 35437046.18 35437046.37 35437046.60 0.0088 0.0030

Saturn 92311-11-08 09:50 G 35437270.70 35437270.91 35437271.12 0.0262 0.0035

Neptune 92311-11-09 10:05 G 35437271.74 35437271.92 35437272.13 0.0088 0.0040

Neptune 92312-06-21 23:02 G 35437497.30 35437497.46 35437497.66 0.0088 0.0050

Saturn 92312-06-24 08:10 G 35437499.67 35437499.84 35437500.02 0.0264 0.0144

Neptune 92313-02-02 12:00 G 35437722.86 35437723.00 35437723.18 0.0089 0.0061

Neptune 92313-09-16 01:12 G 35437948.43 35437948.55 35437948.69 0.0089 0.0071

Neptune 92314-04-29 13:41 G 35438174.01 35438174.07 35438174.18 0.0089 0.0082

Jupiter 92315-06-18 11:46 G 35438588.87 35438588.99 35438589.12 0.0501 0.0398

Jupiter 92316-02-10 04:19 G 35438825.48 35438825.68 35438825.88 0.0498 0.0145

Jupiter 92321-12-08 17:46 G 35440954.04 35440954.24 35440954.44 0.0527 0.0047

Saturn 92325-09-08 01:26 G 35442323.35 35442323.56 35442323.77 0.0301 0.0056

Saturn 92326-04-26 06:00 G 35442553.60 35442553.75 35442553.90 0.0299 0.0211

Jupiter 92327-10-16 01:41 G 35443091.36 35443091.57 35443091.77 0.0499 0.0015

Mars 92330-09-15 06:58 G 35444156.65 35444156.79 35444156.93 0.1618 0.0936

Uranus 92332-03-07 22:48 G 35444696.34 35444696.45 35444696.59 0.0140 0.0114

Uranus 92332-10-20 07:26 G 35444922.66 35444922.81 35444923.00 0.0139 0.0086

Uranus 92333-06-03 16:05 G 35445148.98 35445149.17 35445149.38 0.0139 0.0057

Jupiter 92333-08-13 13:12 G 35445219.87 35445220.05 35445220.24 0.0526 0.0218

Uranus 92334-01-16 00:29 G 35445375.31 35445375.52 35445375.73 0.0139 0.0029

Jupiter 92334-04-07 22:34 G 35445457.32 35445457.44 35445457.57 0.0528 0.0408

Uranus 92334-08-30 08:24 G 35445601.64 35445601.85 35445602.07 0.0139 0.0003

Uranus 92335-04-13 16:05 G 35445827.97 35445828.17 35445828.39 0.0138 0.0027

Uranus 92335-11-25 23:46 G 35446054.30 35446054.49 35446054.70 0.0138 0.0054

Uranus 92336-07-09 07:12 G 35446280.63 35446280.80 35446280.98 0.0138 0.0080

Uranus 92337-02-20 14:10 G 35446506.97 35446507.09 35446507.24 0.0138 0.0107

Uranus 92337-10-04 21:22 G 35446733.35 35446733.39 35446733.45 0.0138 0.0133

Jupiter 92339-06-21 00:14 G 35447357.32 35447357.51 35447357.71 0.0500 0.0162

Jupiter 92340-02-12 14:53 G 35447593.99 35447594.12 35447594.26 0.0498 0.0376

Saturn 92340-10-03 15:22 G 35447827.99 35447828.14 35447828.30 0.0260 0.0182

Saturn 92341-05-20 13:12 G 35448056.83 35448057.05 35448057.26 0.0262 0.0009

Saturn 92342-01-04 11:31 G 35448285.82 35448285.98 35448286.14 0.0263 0.0172

Jupiter 92345-04-18 07:26 G 35449485.68 35449485.81 35449485.95 0.0524 0.0387

Jupiter 92345-12-11 14:38 G 35449722.93 35449723.11 35449723.30 0.0527 0.0232

Jupiter 92351-02-23 23:17 G 35451623.31 35451623.47 35451623.63 0.0501 0.0312

Jupiter 92351-10-18 15:36 G 35451859.97 35451860.15 35451860.34 0.0498 0.0233

Saturn 92354-08-03 01:41 G 35452879.54 35452879.57 35452879.63 0.0302 0.0294

Saturn 92355-03-21 07:12 G 35453109.59 35453109.80 35453110.01 0.0301 0.0022

Saturn 92355-11-06 11:31 G 35453339.86 35453339.98 35453340.10 0.0298 0.0245

Jupiter 92357-08-16 08:10 G 35453988.64 35453988.84 35453989.04 0.0527 0.0057

Mars 92359-12-07 19:26 G 35454832.16 35454832.31 35454832.47 0.1920 0.0810

Mars 92362-09-14 01:26 G 35455843.41 35455843.56 35455843.70 0.1612 0.0928

Jupiter 92362-10-29 22:19 G 35455889.35 35455889.43 35455889.51 0.0502 0.0461

Jupiter 92363-06-23 16:05 G 35456125.96 35456126.17 35456126.37 0.0499 0.0084

Jupiter 92369-04-21 02:38 G 35458254.41 35458254.61 35458254.81 0.0526 0.0119

Jupiter 92369-12-14 13:12 G 35458492.01 35458492.05 35458492.11 0.0529 0.0509

Saturn 92370-04-15 16:05 G 35458614.01 35458614.17 35458614.34 0.0261 0.0162

Saturn 92370-11-30 13:55 G 35458842.87 35458843.08 35458843.29 0.0262 0.0014

Saturn 92371-07-17 12:14 G 35459071.87 35459072.01 35459072.15 0.0264 0.0193

Jupiter 92375-02-26 15:22 G 35460391.94 35460392.14 35460392.35 0.0499 0.0066

Uranus 92375-07-18 03:07 G 35460533.60 35460533.63 35460533.69 0.0138 0.0135

Jupiter 92375-10-21 04:34 G 35460628.63 35460628.69 35460628.77 0.0497 0.0466

Uranus 92376-02-29 11:17 G 35460759.86 35460759.97 35460760.13 0.0139 0.0109

Uranus 92376-10-12 20:10 G 35460986.17 35460986.34 35460986.52 0.0139 0.0081

Uranus 92377-05-27 05:02 G 35461212.52 35461212.71 35461212.92 0.0139 0.0054

Uranus 92378-01-08 14:10 G 35461438.88 35461439.09 35461439.31 0.0139 0.0025

Uranus 92378-08-22 23:17 G 35461665.25 35461665.47 35461665.69 0.0140 0.0004

Uranus 92379-04-06 08:38 G 35461891.65 35461891.86 35461892.08 0.0140 0.0032

Uranus 92379-11-18 18:14 G 35462118.07 35462118.26 35462118.46 0.0140 0.0061

Uranus 92380-07-02 04:05 G 35462344.51 35462344.67 35462344.85 0.0140 0.0090

Jupiter 92380-12-24 22:48 G 35462520.29 35462520.45 35462520.62 0.0525 0.0288

Uranus 92381-02-13 14:10 G 35462570.98 35462571.09 35462571.22 0.0140 0.0118

Jupiter 92381-08-19 07:26 G 35462757.66 35462757.81 35462757.97 0.0528 0.0336

Saturn 92384-02-13 04:48 G 35463665.61 35463665.70 35463665.82 0.0302 0.0262

Saturn 92384-09-30 10:34 G 35463895.73 35463895.94 35463896.15 0.0301 0.0012

Saturn 92385-05-18 15:07 G 35464126.06 35464126.13 35464126.21 0.0298 0.0278

Neptune 92385-12-14 14:38 G 35464336.03 35464336.11 35464336.23 0.0089 0.0079

Neptune 92386-07-28 03:36 G 35464561.53 35464561.65 35464561.80 0.0089 0.0069

Jupiter 92386-11-01 11:31 G 35464657.80 35464657.98 35464658.17 0.0500 0.0224

Neptune 92387-03-10 16:19 G 35464787.04 35464787.18 35464787.37 0.0089 0.0058

Jupiter 92387-06-26 02:53 G 35464894.46 35464894.62 35464894.78 0.0498 0.0317

Neptune 92387-10-22 05:31 G 35465012.55 35465012.73 35465012.92 0.0089 0.0047

Neptune 92388-06-03 18:43 G 35465238.08 35465238.28 35465238.48 0.0089 0.0037

Neptune 92389-01-15 07:26 G 35465463.61 35465463.81 35465464.02 0.0089 0.0026

Neptune 92389-08-28 20:24 G 35465689.14 35465689.35 35465689.57 0.0089 0.0015

Neptune 92390-04-11 09:22 G 35465914.67 35465914.89 35465915.11 0.0089 0.0005

Neptune 92390-11-22 22:19 G 35466140.21 35466140.43 35466140.65 0.0089 0.0006

Neptune 92391-07-06 11:17 G 35466365.76 35466365.97 35466366.19 0.0089 0.0017

Neptune 92392-02-17 00:00 G 35466591.30 35466591.50 35466591.72 0.0089 0.0028

Jupiter 92392-08-29 19:41 G 35466786.22 35466786.32 35466786.42 0.0524 0.0451

Neptune 92392-09-29 12:58 G 35466816.85 35466817.04 35466817.25 0.0089 0.0038

Jupiter 92393-04-24 02:24 G 35467023.41 35467023.60 35467023.79 0.0527 0.0165

Neptune 92393-05-13 01:55 G 35467042.42 35467042.58 35467042.78 0.0089 0.0049

Neptune 92393-12-24 15:22 G 35467267.98 35467268.14 35467268.30 0.0089 0.0059

Neptune 92394-08-07 04:05 G 35467493.55 35467493.67 35467493.82 0.0089 0.0070

Earth 92394-08-07 12:00 G 35467493.95 35467494.00 35467494.04 0.2692 0.2571

Moon 92394-08-07 15:07 G 35467494.10 35467494.13 35467494.16 0.2698 0.2630

Neptune 92395-03-20 16:48 G 35467719.13 35467719.20 35467719.31 0.0089 0.0081

Mars 92396-07-12 19:12 G 35468199.17 35468199.30 35468199.42 0.1620 0.1117

Jupiter 92398-07-07 09:36 G 35468923.77 35468923.90 35468924.04 0.0501 0.0375

Jupiter 92399-03-01 02:53 G 35469160.43 35469160.62 35469160.81 0.0499 0.0171

Saturn 92399-10-26 18:43 G 35469400.10 35469400.28 35469400.46 0.0260 0.0135

Saturn 92400-06-11 16:19 G 35469628.97 35469629.18 35469629.39 0.0262 0.0040

Saturn 92401-01-26 14:24 G 35469857.99 35469858.10 35469858.22 0.0263 0.0219

Earth 92402-08-05 01:26 G 35470413.42 35470413.56 35470413.71 0.2694 0.1120

Moon 92402-08-05 06:58 G 35470413.64 35470413.79 35470413.95 0.2695 0.0698 *

Jupiter 92404-12-27 19:26 G 35471289.11 35471289.31 35471289.51 0.0526 0.0012

Jupiter 92410-11-04 03:07 G 35473426.43 35473426.63 35473426.84 0.0499 0.0024

Pluto 92413-07-28 13:55 G 35474423.93 35474424.08 35474424.25 0.0066 0.0045

Saturn 92413-08-25 09:36 G 35474451.77 35474451.90 35474452.04 0.0302 0.0230

Pluto 92414-03-10 18:29 G 35474649.05 35474649.27 35474649.48 0.0066 0.0003

Saturn 92414-04-12 15:07 G 35474681.92 35474682.13 35474682.34 0.0301 0.0044

Pluto 92414-10-21 22:34 G 35474874.27 35474874.44 35474874.62 0.0066 0.0039

Uranus 92415-11-06 09:50 G 35475254.83 35475254.91 35475255.02 0.0140 0.0124

Uranus 92416-06-19 18:43 G 35475481.13 35475481.28 35475481.45 0.0140 0.0096

Jupiter 92416-09-01 13:41 G 35475554.89 35475555.07 35475555.26 0.0525 0.0185

Uranus 92417-02-01 03:22 G 35475707.46 35475707.64 35475707.83 0.0139 0.0067

Jupiter 92417-04-26 23:02 G 35475792.36 35475792.46 35475792.58 0.0528 0.0441

Uranus 92417-09-15 11:46 G 35475933.78 35475933.99 35475934.20 0.0139 0.0040

Uranus 92418-04-29 19:55 G 35476160.11 35476160.33 35476160.54 0.0139 0.0012

Uranus 92418-12-12 03:50 G 35476386.45 35476386.66 35476386.88 0.0139 0.0016

Uranus 92419-07-26 11:31 G 35476612.78 35476612.98 35476613.19 0.0138 0.0043

Uranus 92420-03-08 18:58 G 35476839.11 35476839.29 35476839.48 0.0138 0.0070

Uranus 92420-10-21 02:10 G 35477065.45 35477065.59 35477065.75 0.0138 0.0097

Uranus 92421-06-04 09:22 G 35477291.80 35477291.89 35477291.99 0.0138 0.0123

Jupiter 92422-07-10 03:07 G 35477692.43 35477692.63 35477692.83 0.0500 0.0127

Jupiter 92423-03-03 17:17 G 35477929.11 35477929.22 35477929.34 0.0498 0.0409

Mars 92425-10-03 22:19 G 35478874.32 35478874.43 35478874.53 0.1917 0.1490

Jupiter 92428-05-07 08:53 G 35479820.72 35479820.87 35479821.02 0.0525 0.0356

Mars 92428-07-11 13:26 G 35479885.90 35479886.06 35479886.21 0.1614 0.0751

Jupiter 92428-12-30 16:34 G 35480058.02 35480058.19 35480058.37 0.0528 0.0267

Saturn 92429-05-07 18:43 G 35480186.10 35480186.28 35480186.48 0.0261 0.0116

Saturn 92429-12-22 16:19 G 35480414.98 35480415.18 35480415.39 0.0262 0.0061

Saturn 92430-08-08 14:24 G 35480644.02 35480644.10 35480644.20 0.0264 0.0240

Jupiter 92434-03-15 01:55 G 35481958.41 35481958.58 35481958.76 0.0501 0.0279

Jupiter 92434-11-06 18:00 G 35482195.08 35482195.25 35482195.42 0.0498 0.0265

Jupiter 92440-01-11 06:00 G 35484086.73 35484086.75 35484086.78 0.0524 0.0518

Jupiter 92440-09-04 12:00 G 35484323.81 35484324.00 35484324.20 0.0527 0.0094

Saturn 92443-03-07 11:31 G 35485237.83 35485237.98 35485238.14 0.0302 0.0199

Saturn 92443-10-23 17:02 G 35485468.01 35485468.21 35485468.42 0.0301 0.0075

Jupiter 92445-11-17 21:07 G 35486224.29 35486224.38 35486224.49 0.0502 0.0436

Jupiter 92446-07-12 15:07 G 35486460.93 35486461.13 35486461.33 0.0499 0.0111

Jupiter 92452-05-10 07:55 G 35488589.63 35488589.83 35488590.03 0.0526 0.0078

Jupiter 92458-03-17 14:24 G 35490726.90 35490727.10 35490727.31 0.0500 0.0040

Jupiter 92458-11-09 04:19 G 35490963.66 35490963.68 35490963.71 0.0498 0.0494

Saturn 92458-11-17 20:53 G 35490972.18 35490972.37 35490972.58 0.0260 0.0091

Saturn 92459-07-04 18:29 G 35491201.07 35491201.27 35491201.47 0.0262 0.0086

Uranus 92459-10-29 20:24 G 35491318.25 35491318.35 35491318.47 0.0138 0.0120

Uranus 92460-06-12 04:48 G 35491544.56 35491544.70 35491544.88 0.0139 0.0093

Uranus 92461-01-24 13:41 G 35491770.88 35491771.07 35491771.27 0.0139 0.0065

Uranus 92461-09-07 22:34 G 35491997.23 35491997.44 35491997.65 0.0139 0.0037

Uranus 92462-04-22 07:41 G 35492223.60 35492223.82 35492224.04 0.0139 0.0009

Mars 92462-05-10 06:58 G 35492241.69 35492241.79 35492241.89 0.1622 0.1304

Uranus 92462-12-04 16:48 G 35492449.99 35492450.20 35492450.42 0.0140 0.0019

Uranus 92463-07-19 02:24 G 35492676.40 35492676.60 35492676.81 0.0140 0.0048

Jupiter 92464-01-14 02:10 G 35492855.41 35492855.59 35492855.77 0.0525 0.0250

Uranus 92464-03-01 11:46 G 35492902.83 35492902.99 35492903.19 0.0140 0.0077

Jupiter 92464-09-07 10:19 G 35493092.79 35493092.93 35493093.07 0.0528 0.0375

Uranus 92464-10-13 21:50 G 35493129.28 35493129.41 35493129.57 0.0140 0.0106

Uranus 92465-05-28 07:55 G 35493355.79 35493355.83 35493355.91 0.0141 0.0135

Neptune 92469-04-26 18:14 G 35494785.19 35494785.26 35494785.37 0.0088 0.0080

Jupiter 92469-11-20 14:10 G 35494992.90 35494993.09 35494993.28 0.0500 0.0189

Neptune 92469-12-08 07:26 G 35495010.70 35495010.81 35495010.96 0.0088 0.0070

Jupiter 92470-07-15 05:31 G 35495229.59 35495229.73 35495229.88 0.0498 0.0353

Neptune 92470-07-21 20:38 G 35495236.21 35495236.36 35495236.54 0.0088 0.0060

Neptune 92471-03-04 09:36 G 35495461.74 35495461.90 35495462.11 0.0088 0.0050

Neptune 92471-10-15 23:02 G 35495687.27 35495687.46 35495687.67 0.0088 0.0039

Neptune 92472-05-28 12:00 G 35495912.81 35495913.00 35495913.23 0.0088 0.0029

Saturn 92472-09-16 15:07 G 35496023.96 35496024.13 35496024.31 0.0302 0.0170

Neptune 92473-01-09 01:12 G 35496138.34 35496138.55 35496138.78 0.0088 0.0018

Saturn 92473-05-04 20:38 G 35496254.17 35496254.36 35496254.57 0.0301 0.0105

Neptune 92473-08-22 14:24 G 35496363.88 35496364.10 35496364.32 0.0088 0.0007

Neptune 92474-04-05 03:22 G 35496589.43 35496589.64 35496589.87 0.0088 0.0005

Neptune 92474-11-16 16:34 G 35496814.98 35496815.19 35496815.42 0.0088 0.0015

Neptune 92475-06-30 05:46 G 35497040.53 35497040.74 35497040.95 0.0088 0.0025

Jupiter 92475-09-18 21:22 G 35497121.27 35497121.39 35497121.51 0.0524 0.0418

Neptune 92476-02-10 18:29 G 35497266.08 35497266.27 35497266.48 0.0088 0.0035

Jupiter 92476-05-13 04:05 G 35497358.48 35497358.67 35497358.85 0.0527 0.0201

Neptune 92476-09-23 07:26 G 35497491.63 35497491.81 35497492.01 0.0088 0.0046

Neptune 92477-05-06 20:10 G 35497717.19 35497717.34 35497717.53 0.0088 0.0057

Neptune 92477-12-18 09:22 G 35497942.76 35497942.89 35497943.05 0.0089 0.0067

Neptune 92478-07-31 22:05 G 35498168.34 35498168.42 35498168.55 0.0089 0.0078

Neptune 92479-03-14 11:02 G 35498393.95 35498393.96 35498394.01 0.0089 0.0088

Jupiter 92481-07-26 13:26 G 35499258.91 35499259.06 35499259.22 0.0501 0.0340

Jupiter 92482-03-20 06:14 G 35499495.58 35499495.76 35499495.95 0.0498 0.0207

Saturn 92487-10-14 00:00 G 35501529.44 35501529.50 35501529.58 0.0259 0.0244

Jupiter 92488-01-16 22:05 G 35501624.22 35501624.42 35501624.62 0.0527 0.0025

Saturn 92488-05-29 20:53 G 35501758.17 35501758.37 35501758.58 0.0261 0.0071

Saturn 92489-01-13 18:00 G 35501987.06 35501987.25 35501987.45 0.0262 0.0106

Jupiter 92493-03-31 12:00 G 35503524.96 35503525.00 35503525.05 0.0502 0.0490

Jupiter 92493-11-23 06:29 G 35503761.57 35503761.77 35503761.98 0.0499 0.0059

Mars 92494-05-09 01:26 G 35503928.40 35503928.56 35503928.73 0.1616 0.0582

Uranus 92499-07-06 19:26 G 35505813.27 35505813.31 35505813.38 0.0140 0.0135

Jupiter 92499-09-21 18:29 G 35505890.08 35505890.27 35505890.46 0.0526 0.0147

Uranus 92500-02-18 04:19 G 35506039.56 35506039.68 35506039.83 0.0140 0.0107

Jupiter 92500-05-17 04:05 G 35506127.60 35506127.67 35506127.76 0.0528 0.0482

Uranus 92500-10-02 13:12 G 35506265.88 35506266.05 35506266.23 0.0140 0.0079

Pluto 92501-03-30 12:58 G 35506444.93 35506445.04 35506445.19 0.0079 0.0065

Uranus 92501-05-16 21:50 G 35506492.21 35506492.41 35506492.61 0.0139 0.0051

Pluto 92501-11-10 23:46 G 35506670.27 35506670.49 35506670.71 0.0079 0.0011

Uranus 92501-12-29 06:14 G 35506718.55 35506718.76 35506718.97 0.0139 0.0023

Saturn 92502-03-30 15:50 G 35506809.97 35506810.16 35506810.34 0.0302 0.0142

Uranus 92502-08-12 14:10 G 35506944.88 35506945.09 35506945.31 0.0139 0.0006

Saturn 92502-11-15 21:22 G 35507040.21 35507040.39 35507040.58 0.0300 0.0132

Uranus 92503-03-26 22:05 G 35507171.21 35507171.42 35507171.63 0.0139 0.0032

Uranus 92503-11-08 05:46 G 35507397.55 35507397.74 35507397.94 0.0138 0.0059

Uranus 92504-06-21 13:12 G 35507623.89 35507624.05 35507624.22 0.0138 0.0086

Uranus 92505-02-02 20:24 G 35507850.24 35507850.35 35507850.49 0.0138 0.0113

Jupiter 92505-07-30 02:53 G 35508027.41 35508027.62 35508027.82 0.0500 0.0099

Jupiter 92506-03-23 17:02 G 35508264.12 35508264.21 35508264.31 0.0498 0.0438

Jupiter 92511-05-28 15:22 G 35510155.98 35510156.14 35510156.30 0.0525 0.0313

Jupiter 92512-01-20 23:02 G 35510393.30 35510393.46 35510393.62 0.0528 0.0311

Earth 92516-02-10 05:02 G 35511874.64 35511874.71 35511874.78 0.2640 0.2359

Jupiter 92517-04-04 01:41 G 35512293.39 35512293.57 35512293.75 0.0501 0.0251

Saturn 92517-04-26 01:41 G 35512315.47 35512315.57 35512315.69 0.0259 0.0219

Jupiter 92517-11-26 17:46 G 35512530.07 35512530.24 35512530.40 0.0498 0.0294

Saturn 92517-12-10 22:48 G 35512544.24 35512544.45 35512544.66 0.0260 0.0046

Saturn 92518-07-27 19:55 G 35512773.15 35512773.33 35512773.52 0.0262 0.0131

Jupiter 92523-01-31 10:19 G 35514421.86 35514421.93 35514422.01 0.0523 0.0479

Mars 92523-08-02 00:00 G 35514604.42 35514604.50 35514604.58 0.1924 0.1695

Jupiter 92523-09-25 16:05 G 35514658.98 35514659.17 35514659.37 0.0527 0.0135

Earth 92524-02-07 21:36 G 35514794.25 35514794.40 35514794.55 0.2639 0.0809

Moon 92524-02-08 01:41 G 35514794.41 35514794.57 35514794.74 0.2634 0.0105 *

Mars 92528-03-07 19:12 G 35516284.23 35516284.30 35516284.37 0.1624 0.1482

Jupiter 92528-12-08 00:29 G 35516559.40 35516559.52 35516559.64 0.0502 0.0401

Jupiter 92529-08-01 18:14 G 35516796.06 35516796.26 35516796.46 0.0499 0.0148

Saturn 92531-10-10 19:12 G 35517596.11 35517596.30 35517596.50 0.0302 0.0113

Saturn 92532-05-28 00:43 G 35517826.36 35517826.53 35517826.71 0.0301 0.0161

Jupiter 92535-05-31 10:19 G 35518924.73 35518924.93 35518925.13 0.0526 0.0040

Jupiter 92541-04-06 18:43 G 35521062.07 35521062.28 35521062.49 0.0499 0.0004

Uranus 92543-06-30 05:02 G 35521876.65 35521876.71 35521876.79 0.0138 0.0130

Uranus 92544-02-11 13:26 G 35522102.92 35522103.06 35522103.21 0.0138 0.0104

Uranus 92544-09-24 21:36 G 35522329.23 35522329.40 35522329.59 0.0139 0.0077

Uranus 92545-05-09 06:29 G 35522555.57 35522555.77 35522555.98 0.0139 0.0049

Uranus 92545-12-21 15:36 G 35522781.93 35522782.15 35522782.36 0.0139 0.0022

Uranus 92546-08-05 00:29 G 35523008.31 35523008.52 35523008.74 0.0139 0.0007

Saturn 92546-11-06 01:41 G 35523101.45 35523101.57 35523101.72 0.0259 0.0201

Jupiter 92547-02-03 05:02 G 35523190.52 35523190.71 35523190.89 0.0525 0.0214

Uranus 92547-03-19 09:50 G 35523234.70 35523234.91 35523235.12 0.0140 0.0035

Saturn 92547-06-22 22:48 G 35523330.24 35523330.45 35523330.66 0.0261 0.0027

Jupiter 92547-09-28 13:41 G 35523427.95 35523428.07 35523428.20 0.0528 0.0414

Uranus 92547-10-31 19:12 G 35523461.11 35523461.30 35523461.50 0.0140 0.0064

Saturn 92548-02-06 19:55 G 35523559.16 35523559.33 35523559.51 0.0262 0.0151

Uranus 92548-06-14 05:02 G 35523687.55 35523687.71 35523687.88 0.0140 0.0092

Uranus 92549-01-26 15:07 G 35523914.02 35523914.13 35523914.24 0.0140 0.0121

Neptune 92550-03-18 22:48 G 35524330.39 35524330.45 35524330.54 0.0089 0.0083

Neptune 92550-10-30 11:31 G 35524555.88 35524555.98 35524556.13 0.0089 0.0073

Neptune 92551-06-13 00:43 G 35524781.39 35524781.53 35524781.70 0.0089 0.0062

Neptune 92552-01-24 13:55 G 35525006.90 35525007.08 35525007.26 0.0089 0.0052

Neptune 92552-09-06 02:24 G 35525232.42 35525232.60 35525232.81 0.0089 0.0041

Jupiter 92552-12-10 18:14 G 35525328.06 35525328.26 35525328.45 0.0500 0.0152

Neptune 92553-04-19 15:36 G 35525457.95 35525458.15 35525458.36 0.0089 0.0030

Jupiter 92553-08-04 08:53 G 35525564.75 35525564.87 35525565.00 0.0498 0.0389

Neptune 92553-12-01 04:19 G 35525683.48 35525683.68 35525683.91 0.0089 0.0020

Neptune 92554-07-14 17:31 G 35525909.01 35525909.23 35525909.45 0.0089 0.0009

Neptune 92555-02-25 06:29 G 35526134.55 35526134.77 35526134.99 0.0089 0.0002

Neptune 92555-10-08 19:12 G 35526360.09 35526360.30 35526360.52 0.0089 0.0012

Neptune 92556-05-21 08:10 G 35526585.64 35526585.84 35526586.06 0.0089 0.0023

Neptune 92557-01-01 21:07 G 35526811.19 35526811.38 35526811.59 0.0089 0.0034

Neptune 92557-08-15 10:05 G 35527036.74 35527036.92 35527037.12 0.0089 0.0044

Neptune 92558-03-28 22:48 G 35527262.30 35527262.45 35527262.64 0.0089 0.0055

Jupiter 92558-10-09 02:10 G 35527456.46 35527456.59 35527456.73 0.0524 0.0380

Neptune 92558-11-09 11:46 G 35527487.86 35527487.99 35527488.16 0.0089 0.0066

Jupiter 92559-06-03 09:22 G 35527693.71 35527693.89 35527694.07 0.0527 0.0242

Neptune 92559-06-23 01:12 G 35527713.45 35527713.55 35527713.67 0.0089 0.0076

Neptune 92560-02-03 13:41 G 35527939.05 35527939.07 35527939.14 0.0089 0.0087

Mars 92560-03-06 13:41 G 35527970.90 35527971.07 35527971.24 0.1617 0.0404

Saturn 92561-04-21 19:41 G 35528382.12 35528382.32 35528382.53 0.0302 0.0086

Saturn 92561-12-08 01:12 G 35528612.40 35528612.55 35528612.73 0.0300 0.0189

Jupiter 92564-08-15 13:41 G 35529593.92 35529594.07 35529594.24 0.0501 0.0310

Jupiter 92565-04-09 06:14 G 35529830.58 35529830.76 35529830.95 0.0498 0.0237

Jupiter 92571-02-06 04:48 G 35531959.51 35531959.70 35531959.90 0.0527 0.0072

Jupiter 92576-04-20 12:00 G 35533859.92 35533860.00 35533860.08 0.0502 0.0461

Saturn 92576-05-18 03:36 G 35533887.50 35533887.65 35533887.81 0.0259 0.0176

Jupiter 92576-12-13 06:14 G 35534096.55 35534096.76 35534096.96 0.0499 0.0088

Saturn 92577-01-02 00:43 G 35534116.31 35534116.53 35534116.74 0.0260 0.0005

Saturn 92577-08-18 21:36 G 35534345.26 35534345.40 35534345.57 0.0262 0.0176

Jupiter 92582-10-11 22:48 G 35536225.26 35536225.45 35536225.65 0.0526 0.0105

Jupiter 92583-06-06 08:24 G 35536462.83 35536462.85 35536462.88 0.0528 0.0522

Uranus 92583-10-19 12:14 G 35536597.91 35536598.01 35536598.14 0.0140 0.0119

Uranus 92584-06-01 21:07 G 35536824.23 35536824.38 35536824.56 0.0140 0.0091

Uranus 92585-01-14 06:00 G 35537050.57 35537050.75 35537050.95 0.0140 0.0063

Uranus 92585-08-28 14:38 G 35537276.90 35537277.11 35537277.32 0.0139 0.0035

Uranus 92586-04-11 23:02 G 35537503.24 35537503.46 35537503.67 0.0139 0.0007

Uranus 92586-11-24 06:58 G 35537729.58 35537729.79 35537730.01 0.0139 0.0021

Uranus 92587-07-08 15:07 G 35537955.92 35537956.13 35537956.33 0.0139 0.0048

Uranus 92588-02-19 22:19 G 35538182.27 35538182.43 35538182.63 0.0138 0.0076

Jupiter 92588-08-18 06:00 G 35538362.55 35538362.75 35538362.96 0.0500 0.0063

Uranus 92588-10-03 06:14 G 35538408.62 35538408.76 35538408.91 0.0138 0.0102

Jupiter 92589-04-11 20:24 G 35538599.30 35538599.35 35538599.42 0.0498 0.0475

Uranus 92589-05-17 13:12 G 35538634.99 35538635.05 35538635.15 0.0138 0.0128

Mars 92589-05-29 02:38 G 35538646.46 35538646.61 35538646.76 0.1921 0.1010

Saturn 92590-11-01 22:48 G 35539168.24 35539168.45 35539168.65 0.0302 0.0058

Saturn 92591-06-20 04:19 G 35539398.54 35539398.68 35539398.83 0.0300 0.0217

Jupiter 92594-06-16 17:46 G 35540491.07 35540491.24 35540491.41 0.0525 0.0277

Jupiter 92595-02-09 01:26 G 35540728.41 35540728.56 35540728.71 0.0527 0.0349

Jupiter 92600-04-24 05:46 G 35542628.56 35542628.74 35542628.93 0.0501 0.0214

Jupiter 92600-12-16 21:36 G 35542865.25 35542865.40 35542865.56 0.0498 0.0332

Saturn 92605-11-29 04:19 G 35544673.52 35544673.68 35544673.86 0.0260 0.0156

Jupiter 92606-02-20 12:58 G 35544756.94 35544757.04 35544757.14 0.0524 0.0446

Saturn 92606-07-16 01:12 G 35544902.33 35544902.55 35544902.76 0.0261 0.0019

Jupiter 92606-10-15 19:12 G 35544994.11 35544994.30 35544994.49 0.0527 0.0173

Saturn 92607-03-01 22:05 G 35545131.29 35545131.42 35545131.57 0.0262 0.0197

Jupiter 92611-12-29 04:34 G 35546894.55 35546894.69 35546894.83 0.0501 0.0365

Jupiter 92612-08-21 21:50 G 35547131.22 35547131.41 35547131.60 0.0499 0.0185

Jupiter 92618-06-20 15:22 G 35549259.93 35549260.14 35549260.34 0.0526 0.0012

Saturn 92620-05-14 23:46 G 35549954.28 35549954.49 35549954.70 0.0302 0.0030

Saturn 92620-12-31 05:17 G 35550184.60 35550184.72 35550184.85 0.0300 0.0244

Jupiter 92624-04-26 18:43 G 35551397.07 35551397.28 35551397.48 0.0499 0.0030

Mars 92626-01-03 01:41 G 35552013.39 35552013.57 35552013.74 0.1620 0.0229

Uranus 92627-10-12 23:31 G 35552661.36 35552661.48 35552661.61 0.0138 0.0113

Uranus 92628-05-26 07:55 G 35552887.67 35552887.83 35552888.01 0.0138 0.0087

Uranus 92629-01-07 16:19 G 35553114.00 35553114.18 35553114.39 0.0139 0.0060

Uranus 92629-08-22 01:12 G 35553340.34 35553340.55 35553340.77 0.0139 0.0032

Jupiter 92630-02-23 11:17 G 35553525.79 35553525.97 35553526.17 0.0526 0.0170

Uranus 92630-04-05 10:05 G 35553566.71 35553566.92 35553567.15 0.0139 0.0006

Jupiter 92630-10-18 20:38 G 35553763.26 35553763.36 35553763.45 0.0528 0.0459

Uranus 92630-11-17 19:12 G 35553793.09 35553793.30 35553793.52 0.0139 0.0025

Uranus 92631-07-02 04:48 G 35554019.50 35554019.70 35554019.91 0.0140 0.0052

Uranus 92632-02-13 14:10 G 35554245.93 35554246.09 35554246.28 0.0140 0.0081

Uranus 92632-09-27 00:00 G 35554472.38 35554472.50 35554472.65 0.0140 0.0109

Uranus 92633-05-11 10:05 G 35554698.89 35554698.92 35554698.97 0.0140 0.0138

Neptune 92633-07-31 02:24 G 35554779.56 35554779.60 35554779.68 0.0088 0.0085

Neptune 92634-03-13 15:22 G 35555005.04 35555005.14 35555005.28 0.0088 0.0074

Neptune 92634-10-25 05:02 G 35555230.56 35555230.71 35555230.87 0.0088 0.0063

Neptune 92635-06-07 17:46 G 35555456.08 35555456.24 35555456.44 0.0088 0.0054

Saturn 92635-06-11 06:29 G 35555459.59 35555459.77 35555459.95 0.0259 0.0131

Jupiter 92635-12-31 17:31 G 35555663.03 35555663.23 35555663.43 0.0500 0.0123

Neptune 92636-01-19 07:12 G 35555681.61 35555681.80 35555682.00 0.0088 0.0043

Saturn 92636-01-26 03:22 G 35555688.43 35555688.64 35555688.85 0.0261 0.0044

Jupiter 92636-08-24 08:10 G 35555899.74 35555899.84 35555899.96 0.0498 0.0418

Neptune 92636-08-31 20:10 G 35555907.14 35555907.34 35555907.56 0.0088 0.0032

Saturn 92636-09-11 00:29 G 35555917.41 35555917.52 35555917.64 0.0262 0.0221

Neptune 92637-04-14 09:22 G 35556132.68 35556132.89 35556133.11 0.0088 0.0022

Earth 92637-08-09 11:46 G 35556249.94 35556249.99 35556250.04 0.2693 0.2527

Neptune 92637-11-25 22:34 G 35556358.23 35556358.44 35556358.67 0.0088 0.0012

Neptune 92638-07-09 11:46 G 35556583.77 35556583.99 35556584.22 0.0088 0.0002

Neptune 92639-02-20 00:43 G 35556809.32 35556809.53 35556809.76 0.0088 0.0011

Neptune 92639-10-03 13:55 G 35557034.87 35557035.08 35557035.30 0.0088 0.0021

Neptune 92640-05-16 02:38 G 35557260.42 35557260.61 35557260.83 0.0088 0.0032

Neptune 92640-12-27 16:05 G 35557485.98 35557486.17 35557486.36 0.0088 0.0042

Neptune 92641-08-10 04:48 G 35557711.53 35557711.70 35557711.89 0.0088 0.0052

Jupiter 92641-10-29 06:14 G 35557791.61 35557791.76 35557791.92 0.0524 0.0340

Neptune 92642-03-23 17:46 G 35557937.10 35557937.24 35557937.41 0.0088 0.0063

Jupiter 92642-06-23 13:12 G 35558028.89 35558029.05 35558029.22 0.0527 0.0285

Neptune 92642-11-04 06:29 G 35558162.67 35558162.77 35558162.92 0.0088 0.0074

Neptune 92643-06-17 19:41 G 35558388.27 35558388.32 35558388.41 0.0089 0.0084

Moon 92645-08-06 20:38 G 35559169.24 35559169.36 35559169.49 0.2691 0.1737

Earth 92645-08-07 01:41 G 35559169.42 35559169.57 35559169.71 0.2694 0.1129 *

Jupiter 92647-09-05 16:34 G 35559929.02 35559929.19 35559929.37 0.0501 0.0275

Jupiter 92648-04-29 09:22 G 35560165.72 35560165.89 35560166.06 0.0499 0.0273

Saturn 92649-04-08 21:22 G 35560510.32 35560510.39 35560510.48 0.0304 0.0278

Saturn 92649-11-25 03:50 G 35560740.45 35560740.66 35560740.87 0.0302 0.0003

Saturn 92650-07-13 09:22 G 35560970.81 35560970.89 35560970.97 0.0300 0.0275

Jupiter 92653-07-04 01:41 G 35562057.53 35562057.57 35562057.62 0.0523 0.0506

Jupiter 92654-02-26 06:58 G 35562294.59 35562294.79 35562294.98 0.0527 0.0108

Mars 92655-03-27 06:14 G 35562688.59 35562688.76 35562688.93 0.1918 0.0354

Jupiter 92659-05-11 15:36 G 35564195.04 35564195.15 35564195.26 0.0502 0.0426

Pluto 92659-08-29 00:29 G 35564304.34 35564304.52 35564304.73 0.0066 0.0030

Jupiter 92660-01-03 09:36 G 35564431.71 35564431.90 35564432.11 0.0499 0.0126

Pluto 92660-04-10 05:02 G 35564529.50 35564529.71 35564529.93 0.0066 0.0013

Pluto 92660-11-21 09:22 G 35564754.78 35564754.89 35564755.01 0.0066 0.0055

Saturn 92664-12-21 07:41 G 35566245.64 35566245.82 35566246.02 0.0260 0.0110

Saturn 92665-08-07 04:34 G 35566474.49 35566474.69 35566474.90 0.0261 0.0066

Jupiter 92665-11-01 00:58 G 35566560.34 35566560.54 35566560.74 0.0526 0.0069

Saturn 92666-03-24 01:55 G 35566703.51 35566703.58 35566703.66 0.0263 0.0244

Uranus 92667-06-19 20:53 G 35567156.29 35567156.37 35567156.45 0.0140 0.0131

Uranus 92668-02-01 05:31 G 35567382.60 35567382.73 35567382.89 0.0140 0.0103

Uranus 92668-09-14 14:24 G 35567608.93 35567609.10 35567609.30 0.0140 0.0075

Uranus 92669-04-28 23:17 G 35567835.27 35567835.47 35567835.68 0.0139 0.0046

Uranus 92669-12-11 07:55 G 35568061.62 35568061.83 35568062.05 0.0139 0.0019

Uranus 92670-07-25 16:05 G 35568287.96 35568288.17 35568288.39 0.0139 0.0010

Uranus 92671-03-09 00:00 G 35568514.30 35568514.50 35568514.72 0.0139 0.0037

Jupiter 92671-09-08 09:22 G 35568697.68 35568697.89 35568698.09 0.0500 0.0027

Uranus 92671-10-21 07:55 G 35568740.64 35568740.83 35568741.03 0.0138 0.0064

Uranus 92672-06-03 15:36 G 35568966.99 35568967.15 35568967.32 0.0138 0.0090

Uranus 92673-01-15 23:02 G 35569193.36 35569193.46 35569193.59 0.0138 0.0117

Jupiter 92677-07-06 21:22 G 35570826.21 35570826.39 35570826.57 0.0525 0.0239

Jupiter 92678-03-01 05:46 G 35571063.61 35571063.74 35571063.88 0.0528 0.0390

Saturn 92678-10-19 23:17 G 35571296.35 35571296.47 35571296.59 0.0303 0.0248

Saturn 92679-06-07 05:31 G 35571526.52 35571526.73 35571526.94 0.0302 0.0030

Jupiter 92683-05-14 05:31 G 35572963.54 35572963.73 35572963.92 0.0500 0.0183

Jupiter 92684-01-05 20:38 G 35573200.22 35573200.36 35573200.51 0.0498 0.0361

Jupiter 92689-03-11 18:00 G 35575092.13 35575092.25 35575092.38 0.0524 0.0405

Jupiter 92689-11-04 00:58 G 35575329.35 35575329.54 35575329.72 0.0527 0.0218

Mars 92691-10-31 13:26 G 35576055.89 35576056.06 35576056.24 0.1621 0.0062

Saturn 92693-11-16 13:41 G 35576803.07 35576803.07 35576803.10 0.0259 0.0258

Saturn 92694-07-03 10:34 G 35577031.74 35577031.94 35577032.14 0.0260 0.0085

Jupiter 92695-01-17 03:36 G 35577229.50 35577229.65 35577229.81 0.0501 0.0336

Saturn 92695-02-17 07:12 G 35577260.61 35577260.80 35577261.01 0.0261 0.0092

Jupiter 92695-09-10 20:24 G 35577466.17 35577466.35 35577466.54 0.0498 0.0214

Jupiter 92701-07-10 18:14 G 35579595.06 35579595.26 35579595.46 0.0526 0.0041

Jupiter 92706-09-23 01:41 G 35581495.52 35581495.57 35581495.61 0.0502 0.0488

Jupiter 92707-05-17 20:38 G 35581732.15 35581732.36 35581732.56 0.0499 0.0064

Saturn 92708-05-02 04:34 G 35582082.54 35582082.69 35582082.84 0.0303 0.0216

Saturn 92708-12-18 10:34 G 35582312.74 35582312.94 35582313.15 0.0302 0.0063

Uranus 92711-06-13 10:05 G 35583219.83 35583219.92 35583220.03 0.0138 0.0123

Uranus 92712-01-25 18:14 G 35583446.12 35583446.26 35583446.43 0.0138 0.0097

Uranus 92712-09-08 02:38 G 35583672.43 35583672.61 35583672.81 0.0138 0.0070

Jupiter 92713-03-15 12:29 G 35583860.83 35583861.02 35583861.21 0.0525 0.0135

Uranus 92713-04-22 11:17 G 35583898.77 35583898.97 35583899.19 0.0139 0.0043

Jupiter 92713-11-07 21:22 G 35584098.32 35584098.39 35584098.46 0.0528 0.0494

Uranus 92713-12-04 20:10 G 35584125.13 35584125.34 35584125.56 0.0139 0.0015

Neptune 92714-06-22 06:29 G 35584324.77 35584324.77 35584324.84 0.0089 0.0089

Uranus 92714-07-19 05:31 G 35584351.51 35584351.73 35584351.95 0.0139 0.0013

Neptune 92715-02-02 19:41 G 35584550.23 35584550.32 35584550.45 0.0089 0.0078

Uranus 92715-03-02 14:38 G 35584577.90 35584578.11 35584578.32 0.0139 0.0041

Neptune 92715-09-16 09:07 G 35584775.73 35584775.88 35584776.02 0.0089 0.0067

Uranus 92715-10-15 00:00 G 35584804.32 35584804.50 35584804.70 0.0140 0.0070

Neptune 92716-04-28 21:36 G 35585001.25 35585001.40 35585001.59 0.0089 0.0057

Uranus 92716-05-28 09:36 G 35585030.76 35585030.90 35585031.07 0.0140 0.0098

Neptune 92716-12-10 10:48 G 35585226.77 35585226.95 35585227.15 0.0089 0.0046

Uranus 92717-01-09 19:26 G 35585257.23 35585257.31 35585257.42 0.0140 0.0126

Neptune 92717-07-23 23:31 G 35585452.29 35585452.48 35585452.70 0.0089 0.0035

Neptune 92718-03-06 12:29 G 35585677.82 35585678.02 35585678.24 0.0089 0.0024

Neptune 92718-10-18 01:41 G 35585903.35 35585903.57 35585903.78 0.0089 0.0013

Jupiter 92719-01-20 20:10 G 35585998.13 35585998.34 35585998.54 0.0500 0.0089

Neptune 92719-05-31 14:38 G 35586128.89 35586129.11 35586129.33 0.0089 0.0003

Jupiter 92719-09-14 10:48 G 35586234.87 35586234.95 35586235.04 0.0498 0.0452

Neptune 92720-01-12 03:36 G 35586354.43 35586354.65 35586354.87 0.0089 0.0008

Neptune 92720-08-24 16:05 G 35586579.97 35586580.17 35586580.40 0.0089 0.0019

Mars 92721-01-22 08:53 G 35586730.70 35586730.87 35586731.04 0.1915 0.0331

Neptune 92721-04-07 05:17 G 35586805.52 35586805.72 35586805.93 0.0089 0.0029

Neptune 92721-11-18 18:00 G 35587031.07 35587031.25 35587031.46 0.0089 0.0040

Neptune 92722-07-02 06:58 G 35587256.62 35587256.79 35587256.98 0.0089 0.0051

Neptune 92723-02-12 19:55 G 35587482.18 35587482.33 35587482.50 0.0089 0.0061

Saturn 92723-05-30 16:19 G 35587589.09 35587589.18 35587589.27 0.0259 0.0234

Neptune 92723-09-26 08:38 G 35587707.75 35587707.86 35587708.01 0.0089 0.0072

Saturn 92724-01-14 12:43 G 35587817.82 35587818.03 35587818.24 0.0260 0.0061

Neptune 92724-05-08 22:19 G 35587933.35 35587933.43 35587933.51 0.0089 0.0082

Saturn 92724-08-30 09:36 G 35588046.71 35588046.90 35588047.09 0.0261 0.0116

Jupiter 92724-11-18 06:58 G 35588126.63 35588126.79 35588126.95 0.0525 0.0309

Jupiter 92725-07-13 14:10 G 35588363.93 35588364.09 35588364.25 0.0527 0.0319

Jupiter 92730-09-25 18:58 G 35590264.11 35590264.29 35590264.47 0.0501 0.0241

Jupiter 92731-05-20 11:02 G 35590500.80 35590500.96 35590501.12 0.0498 0.0307

Jupiter 92736-07-24 03:36 G 35592392.57 35592392.65 35592392.73 0.0524 0.0474

Jupiter 92737-03-18 09:22 G 35592629.70 35592629.89 35592630.09 0.0527 0.0146

Saturn 92737-11-12 08:10 G 35592868.68 35592868.84 35592869.01 0.0303 0.0183

Saturn 92738-06-30 14:10 G 35593098.89 35593099.09 35593099.29 0.0301 0.0095

Jupiter 92742-05-31 14:38 G 35594529.99 35594530.11 35594530.24 0.0501 0.0398

Jupiter 92743-01-23 08:10 G 35594766.64 35594766.84 35594767.04 0.0498 0.0153

Pluto 92747-05-01 00:58 G 35596325.36 35596325.54 35596325.75 0.0079 0.0041

Pluto 92747-12-12 11:17 G 35596550.78 35596550.97 35596551.18 0.0078 0.0035

Jupiter 92748-11-21 04:48 G 35596895.50 35596895.70 35596895.90 0.0527 0.0029

Uranus 92751-10-02 14:24 G 35597940.99 35597941.10 35597941.24 0.0140 0.0114

Uranus 92752-05-15 23:31 G 35598167.32 35598167.48 35598167.66 0.0140 0.0086

Saturn 92752-12-09 19:26 G 35598375.19 35598375.31 35598375.44 0.0259 0.0210

Uranus 92752-12-28 08:38 G 35598393.67 35598393.86 35598394.06 0.0140 0.0058

Saturn 92753-07-26 16:05 G 35598603.96 35598604.17 35598604.39 0.0260 0.0035

Uranus 92753-08-11 17:02 G 35598620.01 35598620.21 35598620.43 0.0139 0.0031

Saturn 92754-03-12 13:12 G 35598832.88 35598833.05 35598833.23 0.0261 0.0143

Uranus 92754-03-26 01:41 G 35598846.35 35598846.57 35598846.79 0.0139 0.0002

Jupiter 92754-09-28 07:12 G 35599032.59 35599032.80 35599033.01 0.0499 0.0003

Uranus 92754-11-07 09:50 G 35599072.70 35599072.91 35599073.13 0.0139 0.0025

Uranus 92755-06-21 17:46 G 35599299.05 35599299.24 35599299.45 0.0139 0.0053

Uranus 92756-02-03 01:41 G 35599525.40 35599525.57 35599525.76 0.0138 0.0080

Uranus 92756-09-16 09:07 G 35599751.76 35599751.88 35599752.04 0.0138 0.0107

Uranus 92757-04-30 16:48 G 35599978.15 35599978.20 35599978.27 0.0138 0.0132

Mars 92757-08-29 01:41 G 35600098.39 35600098.57 35600098.74 0.1624 0.0136

Moon 92759-02-12 03:07 G 35600630.52 35600630.63 35600630.74 0.2636 0.1883

Earth 92759-02-12 07:41 G 35600630.80 35600630.82 35600630.85 0.2639 0.2603

Jupiter 92760-07-26 22:48 G 35601161.27 35601161.45 35601161.64 0.0525 0.0204

Jupiter 92761-03-21 07:12 G 35601398.69 35601398.80 35601398.92 0.0528 0.0427

Jupiter 92766-06-03 06:00 G 35603298.56 35603298.75 35603298.95 0.0500 0.0152

Jupiter 92767-01-25 21:22 G 35603535.27 35603535.39 35603535.52 0.0498 0.0393

Moon 92767-02-09 19:12 G 35603550.16 35603550.30 35603550.44 0.2640 0.1180

Earth 92767-02-10 00:14 G 35603550.36 35603550.51 35603550.67 0.2638 0.0576 *

Saturn 92767-05-25 14:38 G 35603654.93 35603655.11 35603655.30 0.0303 0.0147

Saturn 92768-01-10 20:38 G 35603885.17 35603885.36 35603885.55 0.0301 0.0131

Jupiter 92772-03-31 17:46 G 35605427.11 35605427.24 35605427.38 0.0524 0.0375

Jupiter 92772-11-24 00:14 G 35605664.34 35605664.51 35605664.69 0.0527 0.0251

Jupiter 92778-02-06 04:19 G 35607564.52 35607564.68 35607564.85 0.0501 0.0307

Jupiter 92778-09-30 21:36 G 35607801.22 35607801.40 35607801.58 0.0499 0.0246

Saturn 92782-06-21 23:02 G 35609161.31 35609161.46 35609161.61 0.0259 0.0184

Saturn 92783-02-05 19:41 G 35609390.11 35609390.32 35609390.53 0.0260 0.0009

Saturn 92783-09-22 16:34 G 35609619.04 35609619.19 35609619.36 0.0262 0.0170

Jupiter 92784-07-29 17:17 G 35609930.02 35609930.22 35609930.42 0.0527 0.0071

Mars 92786-11-19 12:29 G 35610772.87 35610773.02 35610773.17 0.1911 0.0969

Jupiter 92789-10-12 02:24 G 35611830.53 35611830.60 35611830.69 0.0502 0.0458

Jupiter 92790-06-05 21:07 G 35612067.18 35612067.38 35612067.58 0.0499 0.0096

Uranus 92795-02-10 21:22 G 35613778.34 35613778.39 35613778.46 0.0138 0.0132

Uranus 92795-09-25 05:17 G 35614004.60 35614004.72 35614004.87 0.0138 0.0106

Jupiter 92796-04-03 12:43 G 35614195.84 35614196.03 35614196.23 0.0526 0.0103

Uranus 92796-05-08 13:41 G 35614230.91 35614231.07 35614231.26 0.0138 0.0080

Saturn 92796-12-04 20:10 G 35614441.15 35614441.34 35614441.54 0.0302 0.0111

Uranus 92796-12-20 22:34 G 35614457.24 35614457.44 35614457.65 0.0139 0.0052

Saturn 92797-07-23 01:55 G 35614671.41 35614671.58 35614671.76 0.0301 0.0167

Uranus 92797-08-04 07:12 G 35614683.59 35614683.80 35614684.02 0.0139 0.0025

Uranus 92798-03-18 16:19 G 35614909.96 35614910.18 35614910.40 0.0139 0.0003

Neptune 92798-06-15 23:46 G 35614999.41 35614999.49 35614999.61 0.0088 0.0079

Uranus 92798-10-31 01:26 G 35615136.35 35615136.56 35615136.78 0.0139 0.0031

Neptune 92799-01-27 12:43 G 35615224.91 35615225.03 35615225.19 0.0088 0.0068

Uranus 92799-06-14 10:48 G 35615362.76 35615362.95 35615363.16 0.0140 0.0059

Neptune 92799-09-10 01:55 G 35615450.43 35615450.58 35615450.76 0.0088 0.0058

Uranus 92800-01-26 20:10 G 35615589.19 35615589.34 35615589.53 0.0140 0.0088

Neptune 92800-04-22 14:53 G 35615675.95 35615676.12 35615676.33 0.0088 0.0048

Uranus 92800-09-09 05:46 G 35615815.64 35615815.74 35615815.89 0.0140 0.0116

Neptune 92800-12-04 04:19 G 35615901.49 35615901.68 35615901.89 0.0088 0.0037

Neptune 92801-07-17 17:17 G 35616127.02 35616127.22 35616127.45 0.0088 0.0027

Jupiter 92802-02-08 17:46 G 35616333.04 35616333.24 35616333.45 0.0499 0.0061

Neptune 92802-02-28 06:43 G 35616352.56 35616352.78 35616353.00 0.0088 0.0015

Jupiter 92802-10-03 07:41 G 35616569.77 35616569.82 35616569.88 0.0497 0.0478

Neptune 92802-10-11 19:41 G 35616578.10 35616578.32 35616578.55 0.0088 0.0005

Neptune 92803-05-25 08:53 G 35616803.65 35616803.87 35616804.09 0.0088 0.0006

Neptune 92804-01-05 21:50 G 35617029.20 35617029.41 35617029.64 0.0088 0.0017

Neptune 92804-08-18 10:48 G 35617254.75 35617254.95 35617255.17 0.0088 0.0027

Neptune 92805-04-01 00:00 G 35617480.31 35617480.50 35617480.71 0.0088 0.0038

Neptune 92805-11-12 12:58 G 35617705.87 35617706.04 35617706.24 0.0088 0.0048

Neptune 92806-06-26 01:55 G 35617931.43 35617931.58 35617931.76 0.0088 0.0059

Neptune 92807-02-06 14:38 G 35618157.00 35618157.11 35618157.27 0.0088 0.0070

Neptune 92807-09-20 03:50 G 35618382.58 35618382.66 35618382.77 0.0088 0.0080

Jupiter 92807-12-08 08:24 G 35618461.68 35618461.85 35618462.02 0.0525 0.0275

Jupiter 92808-08-01 16:34 G 35618699.04 35618699.19 35618699.34 0.0528 0.0357

Saturn 92812-01-02 02:38 G 35619947.45 35619947.61 35619947.78 0.0260 0.0158

Saturn 92812-08-17 23:31 G 35620176.27 35620176.48 35620176.70 0.0261 0.0020

Saturn 92813-04-03 20:53 G 35620405.24 35620405.37 35620405.52 0.0262 0.0197

Jupiter 92813-10-14 16:05 G 35620598.98 35620599.17 35620599.35 0.0500 0.0215

Jupiter 92814-06-08 07:41 G 35620835.66 35620835.82 35620835.97 0.0498 0.0332

Jupiter 92819-08-13 03:07 G 35622727.53 35622727.63 35622727.74 0.0524 0.0445

Jupiter 92820-04-06 09:22 G 35622964.70 35622964.89 35622965.08 0.0527 0.0179

Mars 92823-06-26 13:41 G 35624140.90 35624141.07 35624141.24 0.1625 0.0320

Jupiter 92825-06-19 13:26 G 35624864.93 35624865.06 35624865.20 0.0501 0.0371

Jupiter 92826-02-11 07:12 G 35625101.61 35625101.80 35625101.99 0.0499 0.0182

Saturn 92826-06-17 04:34 G 35625227.49 35625227.69 35625227.90 0.0303 0.0071

Saturn 92827-02-02 10:05 G 35625457.78 35625457.92 35625458.08 0.0301 0.0207

Jupiter 92831-12-11 02:53 G 35627230.42 35627230.62 35627230.82 0.0526 0.0006

Uranus 92835-06-02 01:12 G 35628499.46 35628499.55 35628499.66 0.0140 0.0124

Uranus 92836-01-14 10:19 G 35628725.79 35628725.93 35628726.10 0.0140 0.0096

Uranus 92836-08-27 19:26 G 35628952.13 35628952.31 35628952.50 0.0140 0.0068

Uranus 92837-04-11 04:05 G 35629178.47 35629178.67 35629178.89 0.0139 0.0040

Jupiter 92837-10-17 06:29 G 35629367.57 35629367.77 35629367.98 0.0499 0.0031

Uranus 92837-11-23 12:58 G 35629404.82 35629405.04 35629405.25 0.0139 0.0013

Uranus 92838-07-07 21:07 G 35629631.17 35629631.38 35629631.60 0.0139 0.0015

Uranus 92839-02-19 05:17 G 35629857.52 35629857.72 35629857.93 0.0139 0.0043

Uranus 92839-10-03 12:58 G 35630083.87 35630084.04 35630084.24 0.0139 0.0070

Uranus 92840-05-16 20:38 G 35630310.22 35630310.36 35630310.53 0.0138 0.0097

Uranus 92840-12-29 04:34 G 35630536.60 35630536.69 35630536.80 0.0138 0.0122

Saturn 92841-07-14 07:26 G 35630733.63 35630733.81 35630734.00 0.0260 0.0129

Saturn 92842-02-28 04:34 G 35630962.48 35630962.69 35630962.90 0.0261 0.0047

Saturn 92842-10-15 01:55 G 35631191.48 35631191.58 35631191.69 0.0262 0.0226

Jupiter 92843-08-15 20:10 G 35631496.15 35631496.34 35631496.52 0.0525 0.0178

Jupiter 92844-04-09 04:34 G 35631733.60 35631733.69 35631733.80 0.0528 0.0455

Jupiter 92849-06-22 05:02 G 35633633.51 35633633.71 35633633.91 0.0500 0.0124

Jupiter 92850-02-13 20:10 G 35633870.23 35633870.34 35633870.45 0.0498 0.0421

Mars 92852-09-15 15:50 G 35634815.07 35634815.16 35634815.24 0.1908 0.1622

Jupiter 92855-04-20 15:50 G 35635762.01 35635762.16 35635762.31 0.0525 0.0349

Mars 92855-06-25 08:24 G 35635827.81 35635827.85 35635827.89 0.1619 0.1566

Jupiter 92855-12-13 23:02 G 35635999.29 35635999.46 35635999.63 0.0528 0.0281

Saturn 92855-12-28 12:14 G 35636013.81 35636014.01 35636014.22 0.0302 0.0030

Saturn 92856-08-14 17:31 G 35636244.12 35636244.23 35636244.35 0.0300 0.0246

Jupiter 92861-02-25 01:41 G 35637899.40 35637899.57 35637899.74 0.0500 0.0280

Jupiter 92861-10-19 17:46 G 35638136.07 35638136.24 35638136.42 0.0498 0.0270

Jupiter 92866-12-24 11:17 G 35640027.95 35640027.97 35640028.01 0.0524 0.0516

Jupiter 92867-08-18 17:02 G 35640265.02 35640265.21 35640265.41 0.0527 0.0105

Saturn 92871-01-24 12:00 G 35641519.81 35641520.00 35641520.20 0.0260 0.0102

Saturn 92871-09-10 09:07 G 35641748.68 35641748.88 35641749.09 0.0261 0.0076

Saturn 92872-04-26 06:43 G 35641977.74 35641977.78 35641977.83 0.0262 0.0256

Jupiter 92872-10-30 22:48 G 35642165.36 35642165.45 35642165.56 0.0501 0.0436

Jupiter 92873-06-24 16:48 G 35642402.00 35642402.20 35642402.40 0.0498 0.0119

Jupiter 92879-04-23 10:48 G 35644530.75 35644530.95 35644531.15 0.0526 0.0075

Neptune 92879-05-07 03:07 G 35644544.57 35644544.63 35644544.74 0.0089 0.0083

Uranus 92879-05-25 16:19 G 35644563.07 35644563.18 35644563.30 0.0138 0.0115

Neptune 92879-12-18 16:19 G 35644770.07 35644770.18 35644770.33 0.0089 0.0072

Uranus 92880-01-07 00:14 G 35644789.36 35644789.51 35644789.69 0.0138 0.0090

Neptune 92880-07-31 05:02 G 35644995.58 35644995.71 35644995.89 0.0089 0.0062

Moon 92880-08-10 10:34 G 35645005.85 35645005.94 35645006.03 0.2701 0.2157

Earth 92880-08-10 11:46 G 35645005.93 35645005.99 35645006.04 0.2694 0.2496 *

Uranus 92880-08-20 08:53 G 35645015.68 35645015.87 35645016.07 0.0138 0.0062

Neptune 92881-03-13 18:14 G 35645221.09 35645221.26 35645221.45 0.0089 0.0050

Uranus 92881-04-03 17:46 G 35645242.03 35645242.24 35645242.45 0.0139 0.0035

Neptune 92881-10-25 07:26 G 35645446.62 35645446.81 35645447.01 0.0089 0.0039

Uranus 92881-11-16 02:24 G 35645468.39 35645468.60 35645468.82 0.0139 0.0008

Neptune 92882-06-07 20:10 G 35645672.15 35645672.34 35645672.56 0.0089 0.0029

Uranus 92882-06-30 11:31 G 35645694.77 35645694.98 35645695.20 0.0139 0.0021

Neptune 92883-01-19 09:22 G 35645897.68 35645897.89 35645898.11 0.0089 0.0018

Uranus 92883-02-11 20:38 G 35645921.17 35645921.36 35645921.58 0.0139 0.0049

Neptune 92883-09-01 22:19 G 35646123.21 35646123.43 35646123.65 0.0089 0.0007

Uranus 92883-09-26 06:14 G 35646147.58 35646147.76 35646147.95 0.0140 0.0076

Neptune 92884-04-14 11:17 G 35646348.75 35646348.97 35646349.19 0.0089 0.0004

Uranus 92884-05-09 15:50 G 35646374.02 35646374.16 35646374.31 0.0140 0.0104

Saturn 92884-11-21 15:50 G 35646570.07 35646570.16 35646570.27 0.0303 0.0266

Neptune 92884-11-26 00:14 G 35646574.30 35646574.51 35646574.73 0.0089 0.0014

Uranus 92884-12-22 01:26 G 35646600.50 35646600.56 35646600.64 0.0140 0.0133

Jupiter 92885-02-27 15:07 G 35646667.92 35646668.13 35646668.34 0.0500 0.0036

Neptune 92885-07-09 12:58 G 35646799.84 35646800.04 35646800.26 0.0089 0.0025

Saturn 92885-07-09 21:50 G 35646800.20 35646800.41 35646800.62 0.0302 0.0015 *

Neptune 92886-02-20 02:10 G 35647025.39 35647025.59 35647025.79 0.0089 0.0035

Saturn 92886-02-25 03:07 G 35647030.58 35647030.63 35647030.69 0.0300 0.0289

Neptune 92886-10-03 14:53 G 35647250.94 35647251.12 35647251.31 0.0089 0.0046

Neptune 92887-05-17 03:36 G 35647476.50 35647476.65 35647476.84 0.0089 0.0057

Neptune 92887-12-28 17:02 G 35647702.07 35647702.21 35647702.35 0.0089 0.0067

Earth 92888-08-08 01:26 G 35647925.42 35647925.56 35647925.70 0.2695 0.1195

Moon 92888-08-08 04:34 G 35647925.55 35647925.69 35647925.84 0.2701 0.0529 *

Neptune 92888-08-10 05:31 G 35647927.65 35647927.73 35647927.85 0.0089 0.0078

Neptune 92889-03-23 18:29 G 35648153.27 35648153.27 35648153.31 0.0089 0.0089

Mars 92889-04-23 01:26 G 35648183.39 35648183.56 35648183.73 0.1628 0.0510

Jupiter 92890-12-27 05:02 G 35648796.54 35648796.71 35648796.89 0.0525 0.0250

Jupiter 92891-08-21 12:43 G 35649033.89 35649034.03 35649034.17 0.0527 0.0382

Jupiter 92896-11-02 13:26 G 35650933.87 35650934.06 35650934.25 0.0500 0.0192

Jupiter 92897-06-27 05:17 G 35651170.59 35651170.72 35651170.87 0.0498 0.0358

Saturn 92899-12-20 20:38 G 35652077.30 35652077.36 35652077.43 0.0259 0.0246

Saturn 92900-08-06 17:46 G 35652306.03 35652306.24 35652306.44 0.0260 0.0071

Saturn 92901-03-23 14:53 G 35652534.93 35652535.12 35652535.32 0.0261 0.0107

Jupiter 92902-09-01 22:48 G 35653062.34 35653062.45 35653062.57 0.0524 0.0424

Jupiter 92903-04-27 04:48 G 35653299.52 35653299.70 35653299.89 0.0527 0.0202

Pluto 92905-02-15 07:12 G 35653959.70 35653959.80 35653959.92 0.0065 0.0056

Pluto 92905-09-28 11:31 G 35654184.77 35654184.98 35654185.20 0.0066 0.0014

Pluto 92906-05-11 15:50 G 35654409.97 35654410.16 35654410.36 0.0066 0.0028

Jupiter 92908-07-09 11:17 G 35655199.82 35655199.97 35655200.12 0.0501 0.0346

Jupiter 92909-03-03 04:34 G 35655436.51 35655436.69 35655436.88 0.0498 0.0209

Saturn 92914-06-05 01:41 G 35657356.43 35657356.57 35657356.72 0.0303 0.0220

Jupiter 92914-12-30 23:17 G 35657565.27 35657565.47 35657565.67 0.0527 0.0026

Saturn 92915-01-21 07:26 G 35657586.61 35657586.81 35657587.02 0.0301 0.0059

Uranus 92919-01-31 11:31 G 35659057.93 35659057.98 35659058.05 0.0140 0.0135

Uranus 92919-09-14 20:53 G 35659284.24 35659284.37 35659284.52 0.0140 0.0107

Jupiter 92920-03-14 07:41 G 35659465.82 35659465.82 35659465.83 0.0502 0.0501

Uranus 92920-04-28 05:46 G 35659510.58 35659510.74 35659510.93 0.0140 0.0079

Jupiter 92920-11-06 02:24 G 35659702.39 35659702.60 35659702.80 0.0499 0.0054

Uranus 92920-12-10 14:53 G 35659736.93 35659737.12 35659737.33 0.0140 0.0051

Mars 92921-04-22 20:24 G 35659870.27 35659870.35 35659870.44 0.1621 0.1396

Uranus 92921-07-24 23:46 G 35659963.28 35659963.49 35659963.71 0.0139 0.0023

Uranus 92922-03-08 08:10 G 35660189.63 35660189.84 35660190.06 0.0139 0.0005

Uranus 92922-10-20 16:19 G 35660415.97 35660416.18 35660416.40 0.0139 0.0032

Uranus 92923-06-04 00:29 G 35660642.33 35660642.52 35660642.72 0.0139 0.0059

Uranus 92924-01-16 08:24 G 35660868.69 35660868.85 35660869.03 0.0138 0.0086

Uranus 92924-08-29 15:50 G 35661095.05 35661095.16 35661095.30 0.0138 0.0113

Uranus 92925-04-12 23:31 G 35661321.48 35661321.48 35661321.49 0.0138 0.0138

Jupiter 92926-09-04 17:31 G 35661831.04 35661831.23 35661831.43 0.0526 0.0152

Jupiter 92927-04-30 03:07 G 35662068.56 35662068.63 35662068.71 0.0528 0.0485

Saturn 92929-07-03 01:41 G 35662863.46 35662863.57 35662863.69 0.0260 0.0219

Saturn 92930-02-16 22:48 G 35663092.24 35663092.45 35663092.66 0.0261 0.0043

Saturn 92930-10-03 19:55 G 35663321.16 35663321.33 35663321.52 0.0262 0.0137

Jupiter 92932-07-12 00:14 G 35663968.31 35663968.51 35663968.72 0.0499 0.0102

Jupiter 92933-03-05 14:38 G 35664205.02 35664205.11 35664205.21 0.0497 0.0442

Jupiter 92938-05-10 12:14 G 35666096.86 35666097.01 35666097.17 0.0525 0.0327

Jupiter 92939-01-02 19:26 G 35666334.15 35666334.31 35666334.47 0.0528 0.0305

Saturn 92943-12-16 12:43 G 35668142.86 35668143.03 35668143.20 0.0303 0.0174

Jupiter 92944-03-16 21:22 G 35668234.21 35668234.39 35668234.57 0.0501 0.0260

Saturn 92944-08-02 18:14 G 35668373.07 35668373.26 35668373.46 0.0301 0.0106

Jupiter 92944-11-08 13:55 G 35668470.92 35668471.08 35668471.25 0.0498 0.0294

Jupiter 92950-01-13 07:26 G 35670362.75 35670362.81 35670362.87 0.0523 0.0495

Mars 92950-07-14 16:48 G 35670545.09 35670545.20 35670545.30 0.1916 0.1502

Jupiter 92950-09-07 12:29 G 35670599.83 35670600.02 35670600.22 0.0527 0.0127

Mars 92955-02-19 13:41 G 35672225.91 35672226.07 35672226.23 0.1630 0.0690

Jupiter 92955-11-20 18:29 G 35672500.17 35672500.27 35672500.39 0.0502 0.0417

Jupiter 92956-07-14 12:58 G 35672736.85 35672737.04 35672737.24 0.0499 0.0141

Saturn 92959-01-13 07:55 G 35673649.69 35673649.83 35673649.98 0.0260 0.0187

Saturn 92959-08-30 05:02 G 35673878.50 35673878.71 35673878.93 0.0261 0.0011

Saturn 92960-04-15 02:24 G 35674107.45 35674107.60 35674107.77 0.0262 0.0169

Jupiter 92962-05-13 05:17 G 35674865.52 35674865.72 35674865.92 0.0526 0.0055

Neptune 92962-09-18 08:24 G 35674993.79 35674993.85 35674993.94 0.0088 0.0082

Uranus 92963-01-24 02:38 G 35675121.52 35675121.61 35675121.70 0.0138 0.0125

Neptune 92963-05-01 21:22 G 35675219.28 35675219.39 35675219.54 0.0088 0.0072

Uranus 92963-09-07 10:34 G 35675347.80 35675347.94 35675348.10 0.0138 0.0099

Neptune 92963-12-13 10:48 G 35675444.80 35675444.95 35675445.12 0.0088 0.0061

Uranus 92964-04-20 18:58 G 35675574.11 35675574.29 35675574.48 0.0138 0.0073

Neptune 92964-07-25 23:31 G 35675670.32 35675670.48 35675670.68 0.0088 0.0052

Uranus 92964-12-03 03:22 G 35675800.44 35675800.64 35675800.85 0.0139 0.0046

Neptune 92965-03-08 12:58 G 35675895.85 35675896.04 35675896.24 0.0088 0.0040

Uranus 92965-07-17 12:14 G 35676026.80 35676027.01 35676027.23 0.0139 0.0019

Neptune 92965-10-20 01:55 G 35676121.38 35676121.58 35676121.80 0.0088 0.0030

Uranus 92966-02-28 21:07 G 35676253.17 35676253.38 35676253.60 0.0139 0.0009

Neptune 92966-06-02 15:07 G 35676346.92 35676347.13 35676347.35 0.0088 0.0019

Uranus 92966-10-13 06:14 G 35676479.55 35676479.76 35676479.97 0.0139 0.0037

Neptune 92967-01-14 04:19 G 35676572.46 35676572.68 35676572.90 0.0088 0.0009

Uranus 92967-05-27 15:22 G 35676705.96 35676706.14 35676706.34 0.0140 0.0065

Neptune 92967-08-27 17:17 G 35676798.00 35676798.22 35676798.45 0.0088 0.0003

Uranus 92968-01-09 00:43 G 35676932.38 35676932.53 35676932.71 0.0140 0.0093

Jupiter 92968-03-19 11:46 G 35677002.78 35677002.99 35677003.19 0.0499 0.0017

Neptune 92968-04-09 06:29 G 35677023.55 35677023.77 35677023.99 0.0088 0.0012

Uranus 92968-08-22 10:19 G 35677158.84 35677158.93 35677159.06 0.0140 0.0121

Neptune 92968-11-20 19:26 G 35677249.11 35677249.31 35677249.53 0.0088 0.0023

Neptune	92969-07-04 08:38	G	35677474.66	35677474.86	35677475.07	0.0088	0.0034
Neptune	92970-02-14 21:22	G	35677700.22	35677700.39	35677700.60	0.0088	0.0044
Neptune	92970-09-28 10:34	G	35677925.78	35677925.94	35677926.12	0.0088	0.0055
Neptune	92971-05-11 23:17	G	35678151.34	35678151.47	35678151.64	0.0088	0.0066
Neptune	92971-12-23 12:29	G	35678376.93	35678377.02	35678377.15	0.0088	0.0076
Neptune	92972-08-05 01:41	G	35678602.53	35678602.57	35678602.63	0.0088	0.0086
Saturn	92973-06-27 23:31	G	35678929.29	35678929.48	35678929.67	0.0302	0.0127
Jupiter	92974-01-15 23:46	G	35679131.31	35679131.49	35679131.67	0.0525	0.0230
Saturn	92974-02-13 04:48	G	35679159.52	35679159.70	35679159.89	0.0301	0.0151
Jupiter	92974-09-10 07:55	G	35679368.71	35679368.83	35679368.96	0.0528	0.0406
Jupiter	92979-11-23 09:07	G	35681268.69	35681268.88	35681269.08	0.0500	0.0170
Jupiter	92980-07-17 00:14	G	35681505.38	35681505.51	35681505.65	0.0497	0.0379
Jupiter	92985-09-20 18:29	G	35683397.15	35683397.27	35683397.40	0.0525	0.0404
Jupiter	92986-05-16 01:26	G	35683634.38	35683634.56	35683634.74	0.0528	0.0228
Mars	92987-02-18 08:24	G	35683912.74	35683912.85	35683912.97	0.1623	0.1216
Saturn	92988-07-25 12:58	G	35684435.88	35684436.04	35684436.21	0.0260	0.0159
Saturn	92989-03-11 10:19	G	35684664.71	35684664.93	35684665.14	0.0261	0.0019
Saturn	92989-10-26 07:55	G	35684893.69	35684893.83	35684893.97	0.0262	0.0199
Jupiter	92991-07-29 06:29	G	35685534.62	35685534.77	35685534.93	0.0501	0.0326
Jupiter	92992-03-21 23:17	G	35685771.29	35685771.47	35685771.65	0.0498	0.0229
Pluto	92993-05-30 13:26	G	35686205.84	35686206.06	35686206.28	0.0079	0.0015
Pluto	92994-01-10 23:17	G	35686431.34	35686431.47	35686431.63	0.0078	0.0060
Jupiter	92998-01-18 18:43	G	35687900.08	35687900.28	35687900.48	0.0527	0.0048

94TH MILLENNIUM CE

This is a list of transits of Venus in the 94th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Saturn	**93003-01-09 10:48**	**G**	**35689715.75**	**35689715.95**	**35689716.15**	**0.0302**	**0.0079**	
Jupiter	**93003-04-04 02:10**	**G**	**35689800.54**	**35689800.59**	**35689800.64**	**0.0502**	**0.0486**	
Uranus	**93003-05-16 07:41**	**G**	**35689842.70**	**35689842.82**	**35689842.94**	**0.0140**	**0.0117**	
Saturn	**93003-08-27 16:05**	**G**	**35689946.02**	**35689946.17**	**35689946.33**	**0.0301**	**0.0199**	
Jupiter	**93003-11-26 21:22**	**G**	**35690037.18**	**35690037.39**	**35690037.59**	**0.0499**	**0.0073**	
Uranus	**93003-12-28 16:48**	**G**	**35690069.05**	**35690069.20**	**35690069.38**	**0.0140**	**0.0089**	
Uranus	**93004-08-11 01:55**	**G**	**35690295.39**	**35690295.58**	**35690295.78**	**0.0140**	**0.0061**	
Uranus	**93005-03-25 10:48**	**G**	**35690521.74**	**35690521.95**	**35690522.16**	**0.0140**	**0.0033**	
Uranus	**93005-11-06 19:26**	**G**	**35690748.09**	**35690748.31**	**35690748.53**	**0.0139**	**0.0005**	
Uranus	**93006-06-21 03:50**	**G**	**35690974.45**	**35690974.66**	**35690974.88**	**0.0139**	**0.0022**	
Uranus	**93007-02-02 12:00**	**G**	**35691200.80**	**35691201.00**	**35691201.21**	**0.0139**	**0.0049**	
Uranus	**93007-09-16 19:55**	**G**	**35691427.16**	**35691427.33**	**35691427.52**	**0.0139**	**0.0076**	
Uranus	**93008-04-30 03:36**	**G**	**35691653.52**	**35691653.65**	**35691653.81**	**0.0138**	**0.0103**	
Uranus	**93008-12-12 11:17**	**G**	**35691879.90**	**35691879.97**	**35691880.06**	**0.0138**	**0.0128**	
Jupiter	**93009-09-24 12:58**	**G**	**35692165.85**	**35692166.04**	**35692166.24**	**0.0525**	**0.0131**	
Earth	**93010-02-12 02:38**	**G**	**35692306.45**	**35692306.61**	**35692306.77**	**0.2637**	**0.0373**	
Moon	**93010-02-12 07:55**	**G**	**35692306.67**	**35692306.83**	**35692306.98**	**0.2639**	**0.0072**	*
Jupiter	**93010-05-19 21:36**	**G**	**35692403.35**	**35692403.40**	**35692403.46**	**0.0528**	**0.0505**	
Jupiter	**93015-08-01 19:26**	**G**	**35694303.10**	**35694303.31**	**35694303.51**	**0.0500**	**0.0083**	
Jupiter	**93016-03-25 10:19**	**G**	**35694539.87**	**35694539.93**	**35694540.01**	**0.0498**	**0.0464**	
Mars	**93016-05-11 19:55**	**G**	**35694587.17**	**35694587.33**	**35694587.48**	**0.1912**	**0.0843**	
Saturn	**93018-02-05 19:26**	**G**	**35695222.13**	**35695222.31**	**35695222.50**	**0.0260**	**0.0126**	
Saturn	**93018-09-22 16:48**	**G**	**35695450.99**	**35695451.20**	**35695451.41**	**0.0261**	**0.0052**	
Saturn	**93019-05-09 14:24**	**G**	**35695680.01**	**35695680.10**	**35695680.20**	**0.0262**	**0.0232**	
Mars	**93020-12-18 00:58**	**G**	**35696268.40**	**35696268.54**	**35696268.69**	**0.1632**	**0.0890**	
Jupiter	**93021-05-30 06:14**	**G**	**35696431.61**	**35696431.76**	**35696431.93**	**0.0524**	**0.0309**	

Jupiter 93022-01-22 13:12 G 35696668.90 35696669.05 35696669.21 0.0527 0.0325

Jupiter 93027-04-06 17:31 G 35698569.04 35698569.23 35698569.41 0.0501 0.0239

Jupiter 93027-11-29 09:50 G 35698805.76 35698805.91 35698806.08 0.0498 0.0317

Saturn 93032-07-21 22:19 G 35700502.22 35700502.43 35700502.64 0.0302 0.0030

Jupiter 93033-02-02 01:26 G 35700697.48 35700697.56 35700697.64 0.0524 0.0478

Saturn 93033-03-09 03:22 G 35700732.53 35700732.64 35700732.76 0.0300 0.0246

Jupiter 93033-09-27 06:43 G 35700934.59 35700934.78 35700934.98 0.0527 0.0147

Jupiter 93038-12-10 14:38 G 35702834.99 35702835.11 35702835.24 0.0501 0.0395

Jupiter 93039-08-04 08:24 G 35703071.66 35703071.85 35703072.05 0.0498 0.0163

Neptune 93043-08-10 11:31 G 35704538.94 35704538.98 35704539.04 0.0089 0.0087

Neptune 93044-03-23 00:00 G 35704764.41 35704764.50 35704764.64 0.0089 0.0077

Neptune 93044-11-03 13:12 G 35704989.92 35704990.05 35704990.21 0.0089 0.0066

Jupiter 93045-06-02 00:43 G 35705200.33 35705200.53 35705200.73 0.0527 0.0033

Neptune 93045-06-17 01:55 G 35705215.43 35705215.58 35705215.78 0.0089 0.0056

Neptune 93046-01-28 15:07 G 35705440.95 35705441.13 35705441.33 0.0089 0.0044

Neptune 93046-09-11 04:05 G 35705666.48 35705666.67 35705666.88 0.0089 0.0034

Uranus 93046-09-24 11:46 G 35705679.98 35705679.99 35705680.05 0.0138 0.0136

Neptune 93047-04-24 17:02 G 35705892.01 35705892.21 35705892.44 0.0089 0.0023

Uranus 93047-05-08 20:24 G 35705906.22 35705906.35 35705906.48 0.0138 0.0109

Saturn 93047-08-19 00:29 G 35706008.32 35706008.52 35706008.72 0.0260 0.0098

Neptune 93047-12-06 06:14 G 35706117.55 35706117.76 35706117.98 0.0089 0.0012

Uranus 93047-12-21 04:19 G 35706132.51 35706132.68 35706132.86 0.0138 0.0083

Saturn 93048-04-03 21:36 G 35706237.21 35706237.40 35706237.61 0.0261 0.0082

Neptune 93048-07-18 19:12 G 35706343.08 35706343.30 35706343.52 0.0089 0.0002

Uranus 93048-08-03 12:43 G 35706358.83 35706359.03 35706359.23 0.0138 0.0057

Saturn 93048-11-18 19:26 G 35706466.31 35706466.31 35706466.34 0.0263 0.0262

Neptune 93049-03-01 07:55 G 35706568.62 35706568.83 35706569.06 0.0089 0.0010

Uranus 93049-03-17 21:07 G 35706585.17 35706585.38 35706585.60 0.0139 0.0030

Neptune 93049-10-12 21:07 G 35706794.17 35706794.38 35706794.59 0.0089 0.0020

Uranus 93049-10-30 06:00 G 35706811.53 35706811.75 35706811.96 0.0139 0.0004

Neptune 93050-05-26 09:50 G 35707019.72 35707019.91 35707020.13 0.0089 0.0031

Uranus 93050-06-13 14:53 G 35707037.90 35707038.12 35707038.34 0.0139 0.0025

Neptune 93051-01-06 22:34 G 35707245.27 35707245.44 35707245.65 0.0089 0.0042

Uranus 93051-01-26 00:00 G 35707264.30 35707264.50 35707264.70 0.0139 0.0053

Jupiter 93051-04-09 06:58 G 35707337.58 35707337.79 35707337.99 0.0499 0.0013

Neptune 93051-08-20 11:46 G 35707470.82 35707470.99 35707471.17 0.0089 0.0052

Uranus 93051-09-09 08:53 G 35707490.70 35707490.87 35707491.06 0.0140 0.0081

Neptune 93052-04-02 00:29 G 35707696.38 35707696.52 35707696.69 0.0089 0.0063

Uranus 93052-04-22 18:29 G 35707717.14 35707717.27 35707717.41 0.0140 0.0108

Neptune 93052-11-13 13:12 G 35707921.95 35707922.05 35707922.20 0.0089 0.0074

Uranus 93052-12-05 03:50 G 35707943.63 35707943.66 35707943.73 0.0140 0.0136

Mars 93052-12-16 20:10 G 35707955.21 35707955.34 35707955.48 0.1625 0.1035

Neptune 93053-06-27 02:24 G 35708147.55 35708147.60 35708147.69 0.0089 0.0084

Jupiter 93057-02-04 19:12 G 35709466.12 35709466.30 35709466.49 0.0525 0.0211

Jupiter 93057-09-30 03:22 G 35709703.53 35709703.64 35709703.76 0.0528 0.0427

Saturn 93061-06-16 03:22 G 35711058.54 35711058.64 35711058.75 0.0303 0.0262

Saturn 93062-02-01 09:22 G 35711288.68 35711288.89 35711289.10 0.0302 0.0018

Saturn 93062-09-19 14:24 G 35711519.07 35711519.10 35711519.15 0.0300 0.0294

Jupiter 93062-12-13 03:22 G 35711603.45 35711603.64 35711603.84 0.0500 0.0153

Jupiter 93063-08-06 18:58 G 35711840.18 35711840.29 35711840.42 0.0498 0.0399

Jupiter 93068-10-10 14:38 G 35713731.98 35713732.11 35713732.25 0.0524 0.0383

Jupiter 93069-06-04 20:53 G 35713969.19 35713969.37 35713969.55 0.0527 0.0249

Jupiter 93074-08-18 00:43 G 35715869.37 35715869.53 35715869.70 0.0501 0.0311

Jupiter 93075-04-11 18:14 G 35716106.09 35716106.26 35716106.44 0.0499 0.0249

Saturn 93076-07-14 09:22 G 35716565.83 35716565.89 35716565.98 0.0259 0.0242

Saturn 93077-02-28 06:43 G 35716794.57 35716794.78 35716794.99 0.0260 0.0065

Saturn 93077-10-15 04:05 G 35717023.48 35717023.67 35717023.86 0.0261 0.0114

Jupiter 93081-02-07 13:12 G 35718234.85 35718235.05 35718235.25 0.0526 0.0068

Mars 93082-03-08 23:31 G 35718629.31 35718629.48 35718629.65 0.1909 0.0204

Jupiter 93086-04-22 22:19 G 35720135.36 35720135.43 35720135.51 0.0502 0.0465

Mars	93086-10-15 12:58 G	35720310.91	35720311.04	35720311.17	0.1635	0.1076
Jupiter	93086-12-15 17:31 G	35720372.02	35720372.23	35720372.43	0.0499	0.0096
Uranus	93087-01-13 15:22 G	35720401.07	35720401.14	35720401.24	0.0140	0.0129
Uranus	93087-08-28 00:58 G	35720627.40	35720627.54	35720627.70	0.0140	0.0101
Uranus	93088-04-10 10:05 G	35720853.75	35720853.92	35720854.12	0.0140	0.0073
Uranus	93088-11-22 19:26 G	35721080.11	35721080.31	35721080.52	0.0140	0.0045
Uranus	93089-07-07 04:19 G	35721306.46	35721306.68	35721306.89	0.0140	0.0017
Uranus	93090-02-18 12:58 G	35721532.82	35721533.04	35721533.25	0.0139	0.0011
Uranus	93090-10-02 21:07 G	35721759.18	35721759.38	35721759.59	0.0139	0.0038
Saturn	93090-12-27 13:55 G	35721844.95	35721845.08	35721845.24	0.0303	0.0216
Uranus	93091-05-17 05:02 G	35721985.53	35721985.71	35721985.92	0.0139	0.0065
Saturn	93091-08-14 19:55 G	35722075.13	35722075.33	35722075.54	0.0302	0.0065
Uranus	93091-12-29 13:12 G	35722211.90	35722212.05	35722212.22	0.0139	0.0092
Uranus	93092-08-11 20:53 G	35722438.27	35722438.37	35722438.50	0.0138	0.0118
Jupiter	93092-10-13 07:12 G	35722500.61	35722500.80	35722501.00	0.0526	0.0112
Jupiter	93093-06-07 16:19 G	35722738.17	35722738.18	35722738.19	0.0528	0.0526
Jupiter	93098-08-20 15:50 G	35724637.95	35724638.16	35724638.37	0.0499	0.0061
Jupiter	93099-04-14 06:14 G	35724874.72	35724874.76	35724874.80	0.0497	0.0485
Jupiter	93104-06-19 01:41 G	35726766.40	35726766.57	35726766.74	0.0525	0.0289
Jupiter	93105-02-11 09:22 G	35727003.74	35727003.89	35727004.04	0.0528	0.0349
Saturn	93106-01-25 14:10 G	35727351.97	35727352.09	35727352.21	0.0260	0.0214
Saturn	93106-09-11 11:02 G	35727580.75	35727580.96	35727581.17	0.0260	0.0037
Saturn	93107-04-28 08:24 G	35727809.67	35727809.85	35727810.03	0.0262	0.0142
Jupiter	93110-04-26 13:41 G	35728903.89	35728904.07	35728904.26	0.0500	0.0218
Jupiter	93110-12-19 05:31 G	35729140.59	35729140.73	35729140.89	0.0498	0.0338
Jupiter	93116-02-22 21:36 G	35731032.31	35731032.40	35731032.50	0.0524	0.0460
Jupiter	93116-10-17 03:07 G	35731269.44	35731269.63	35731269.82	0.0527	0.0168
Mars	93118-10-15 08:10 G	35731997.69	35731997.84	35731997.99	0.1627	0.0848
Saturn	93120-07-10 00:14 G	35732631.34	35732631.51	35732631.69	0.0303	0.0169
Saturn	93121-02-25 06:14 G	35732861.56	35732861.76	35732861.95	0.0302	0.0112

Jupiter 93121-12-30 09:07 G 35733169.75 35733169.88 35733170.01 0.0502 0.0380

Jupiter 93122-08-24 03:07 G 35733406.44 35733406.63 35733406.83 0.0499 0.0181

Earth 93123-08-14 11:31 G 35733761.92 35733761.98 35733762.05 0.2695 0.2454

Neptune 93126-12-22 17:02 G 35734988.18 35734988.21 35734988.27 0.0088 0.0086

Neptune 93127-08-05 06:00 G 35735213.66 35735213.75 35735213.88 0.0088 0.0076

Neptune 93128-03-17 19:12 G 35735439.17 35735439.30 35735439.46 0.0088 0.0066

Jupiter 93128-06-21 21:36 G 35735535.20 35735535.40 35735535.60 0.0526 0.0014

Neptune 93128-10-29 08:10 G 35735664.69 35735664.84 35735665.04 0.0088 0.0056

Neptune 93129-06-11 21:36 G 35735890.22 35735890.40 35735890.60 0.0088 0.0044

Neptune 93130-01-23 10:34 G 35736115.75 35736115.94 35736116.16 0.0088 0.0034

Neptune 93130-09-05 23:46 G 35736341.28 35736341.49 35736341.71 0.0088 0.0023

Uranus 93131-01-07 06:14 G 35736464.65 35736464.76 35736464.87 0.0138 0.0119

Neptune 93131-04-19 12:43 G 35736566.82 35736567.03 35736567.26 0.0088 0.0013

Moon 93131-08-12 00:00 G 35736681.37 35736681.50 35736681.63 0.2689 0.1735

Earth 93131-08-12 01:41 G 35736681.43 35736681.57 35736681.71 0.2696 0.1204 *

Uranus 93131-08-21 14:10 G 35736690.93 35736691.09 35736691.25 0.0138 0.0093

Neptune 93131-12-01 02:10 G 35736792.37 35736792.59 35736792.81 0.0088 0.0002

Uranus 93132-04-03 22:05 G 35736917.24 35736917.42 35736917.62 0.0138 0.0067

Neptune 93132-07-13 15:07 G 35737017.91 35737018.13 35737018.35 0.0088 0.0008

Uranus 93132-11-16 06:29 G 35737143.56 35737143.77 35737143.98 0.0138 0.0041

Neptune 93133-02-24 03:50 G 35737243.46 35737243.66 35737243.89 0.0088 0.0020

Uranus 93133-06-30 15:07 G 35737369.91 35737370.13 35737370.35 0.0139 0.0014

Neptune 93133-10-07 17:02 G 35737469.01 35737469.21 35737469.43 0.0088 0.0030

Uranus 93134-02-11 23:46 G 35737596.28 35737596.49 35737596.71 0.0139 0.0014

Jupiter 93134-04-29 01:55 G 35737672.37 35737672.58 35737672.78 0.0500 0.0027

Neptune 93134-05-21 06:00 G 35737694.56 35737694.75 35737694.96 0.0088 0.0040

Uranus 93134-09-26 08:24 G 35737822.65 35737822.85 35737823.07 0.0139 0.0041

Neptune 93135-01-01 19:12 G 35737920.13 35737920.30 35737920.49 0.0088 0.0051

Uranus 93135-05-10 17:31 G 35738049.05 35738049.23 35738049.43 0.0139 0.0069

Saturn 93135-08-07 19:26 G 35738138.17 35738138.31 35738138.47 0.0259 0.0182

Neptune 93135-08-15 07:55 G 35738145.70 35738145.83 35738146.01 0.0088 0.0062

Uranus 93135-12-23 02:38 G 35738275.47 35738275.61 35738275.78 0.0140 0.0097

Saturn 93136-03-23 16:34 G 35738366.98 35738367.19 35738367.41 0.0260 0.0007

Neptune 93136-03-27 21:07 G 35738371.27 35738371.38 35738371.53 0.0088 0.0072

Uranus 93136-08-05 12:14 G 35738501.92 35738502.01 35738502.12 0.0140 0.0124

Saturn 93136-11-07 14:10 G 35738595.93 35738596.09 35738596.25 0.0261 0.0174

Neptune 93136-11-08 10:05 G 35738596.86 35738596.92 35738597.02 0.0088 0.0082

Jupiter 93140-02-25 14:53 G 35739800.94 35739801.12 35739801.31 0.0525 0.0189

Jupiter 93140-10-19 22:34 G 35740038.34 35740038.44 35740038.55 0.0528 0.0449

Jupiter 93146-01-02 00:29 G 35741938.32 35741938.52 35741938.72 0.0500 0.0130

Jupiter 93146-08-26 16:05 G 35742175.07 35742175.17 35742175.28 0.0498 0.0423

Mars 93148-01-05 02:53 G 35742671.45 35742671.62 35742671.78 0.1905 0.0448

Saturn 93150-01-20 10:19 G 35743417.74 35743417.93 35743418.12 0.0303 0.0124

Saturn 93150-09-07 15:50 G 35743647.98 35743648.16 35743648.34 0.0301 0.0156

Pluto 93151-03-18 20:24 G 35743840.17 35743840.35 35743840.55 0.0066 0.0032

Pluto 93151-10-30 00:43 G 35744065.32 35744065.53 35744065.75 0.0066 0.0011

Jupiter 93151-10-31 09:50 G 35744066.77 35744066.91 35744067.06 0.0524 0.0363

Pluto 93152-06-11 04:48 G 35744290.59 35744290.70 35744290.84 0.0066 0.0053

Jupiter 93152-06-24 16:05 G 35744304.00 35744304.17 35744304.34 0.0527 0.0272

Mars 93152-08-13 00:43 G 35744353.42 35744353.53 35744353.63 0.1637 0.1276

Jupiter 93157-09-06 22:48 G 35746204.28 35746204.45 35746204.62 0.0501 0.0286

Jupiter 93158-05-01 15:36 G 35746440.98 35746441.15 35746441.33 0.0498 0.0273

Jupiter 93164-02-28 09:36 G 35748569.70 35748569.90 35748570.10 0.0527 0.0090

Saturn 93165-02-16 23:02 G 35748924.30 35748924.46 35748924.64 0.0260 0.0157

Saturn 93165-10-03 20:10 G 35749153.13 35749153.34 35749153.55 0.0261 0.0021

Saturn 93166-05-20 17:17 G 35749382.10 35749382.22 35749382.37 0.0262 0.0201

Jupiter 93169-05-12 20:10 G 35750470.25 35750470.34 35750470.44 0.0502 0.0442

Jupiter 93170-01-04 14:38 G 35750706.91 35750707.11 35750707.31 0.0499 0.0120

Uranus 93170-09-13 23:02 G 35750959.46 35750959.46 35750959.48 0.0141 0.0141

Uranus 93171-04-28 08:38 G 35751185.74 35751185.86 35751186.00 0.0140 0.0113

Uranus 93171-12-10 18:14 G 35751412.09 35751412.26 35751412.44 0.0140 0.0085

Uranus 93172-07-24 03:22 G 35751638.45 35751638.64 35751638.85 0.0140 0.0057

Uranus 93173-03-07 12:29 G 35751864.81 35751865.02 35751865.23 0.0140 0.0029

Uranus 93173-10-19 21:07 G 35752091.17 35752091.38 35752091.60 0.0140 0.0003

Uranus 93174-06-03 05:46 G 35752317.53 35752317.74 35752317.95 0.0139 0.0026

Uranus 93175-01-15 14:10 G 35752543.89 35752544.09 35752544.29 0.0139 0.0053

Uranus 93175-08-29 22:05 G 35752770.25 35752770.42 35752770.61 0.0139 0.0080

Jupiter 93175-11-03 04:48 G 35752835.51 35752835.70 35752835.90 0.0526 0.0089

Uranus 93176-04-12 06:14 G 35752996.62 35752996.76 35752996.90 0.0139 0.0106

Uranus 93176-11-24 13:26 G 35753223.02 35753223.06 35753223.14 0.0138 0.0132

Saturn 93179-08-02 18:14 G 35754204.06 35754204.26 35754204.46 0.0303 0.0081

Saturn 93180-03-19 23:46 G 35754434.34 35754434.49 35754434.66 0.0301 0.0199

Jupiter 93181-09-09 11:02 G 35754972.76 35754972.96 35754973.17 0.0500 0.0042

Mars 93184-08-11 20:10 G 35756040.18 35756040.34 35756040.50 0.1629 0.0666

Jupiter 93187-07-09 00:43 G 35757101.36 35757101.53 35757101.71 0.0525 0.0262

Jupiter 93188-03-02 07:41 G 35757338.68 35757338.82 35757338.96 0.0527 0.0376

Jupiter 93193-05-15 09:07 G 35759238.69 35759238.88 35759239.07 0.0501 0.0199

Jupiter 93194-01-07 01:55 G 35759475.43 35759475.58 35759475.72 0.0498 0.0359

Saturn 93194-08-30 03:36 G 35759710.47 35759710.65 35759710.85 0.0259 0.0126

Saturn 93195-04-16 00:43 G 35759939.32 35759939.53 35759939.74 0.0260 0.0051

Saturn 93195-11-30 22:05 G 35760168.33 35760168.42 35760168.53 0.0262 0.0231

Jupiter 93199-03-13 19:12 G 35761367.20 35761367.30 35761367.41 0.0523 0.0435

Jupiter 93199-11-06 00:14 G 35761604.32 35761604.51 35761604.70 0.0527 0.0195

Jupiter 93205-01-18 07:12 G 35763504.65 35763504.80 35763504.94 0.0502 0.0355

Jupiter 93205-09-12 01:26 G 35763741.37 35763741.56 35763741.75 0.0499 0.0208

Neptune 93208-06-25 08:24 G 35764758.78 35764758.85 35764758.96 0.0089 0.0081

Neptune 93209-02-05 21:07 G 35764984.27 35764984.38 35764984.54 0.0089 0.0070

Saturn 93209-02-12 02:24 G 35764990.40 35764990.60 35764990.81 0.0303 0.0040

Neptune 93209-09-19 10:19 G 35765209.78 35765209.93 35765210.10 0.0089 0.0059

Saturn 93209-09-30 07:55 G 35765220.72 35765220.83 35765220.97 0.0301 0.0240

Neptune 93210-05-02 23:31 G 35765435.30 35765435.48 35765435.67 0.0089 0.0048

Neptune 93210-12-14 12:14 G 35765660.83 35765661.01 35765661.22 0.0089 0.0038

Jupiter 93211-07-11 18:14 G 35765870.06 35765870.26 35765870.46 0.0526 0.0016

Neptune 93211-07-28 01:12 G 35765886.35 35765886.55 35765886.77 0.0089 0.0027

Neptune 93212-03-09 14:24 G 35766111.88 35766112.10 35766112.31 0.0089 0.0016

Neptune 93212-10-21 03:22 G 35766337.42 35766337.64 35766337.86 0.0089 0.0006

Neptune 93213-06-03 16:34 G 35766562.97 35766563.19 35766563.40 0.0089 0.0005

Mars 93213-11-01 06:29 G 35766713.63 35766713.77 35766713.92 0.1902 0.1067

Neptune 93214-01-15 05:17 G 35766788.51 35766788.72 35766788.94 0.0089 0.0016

Neptune 93214-08-28 18:00 G 35767014.06 35767014.25 35767014.47 0.0089 0.0027

Uranus 93214-09-06 16:34 G 35767023.13 35767023.19 35767023.28 0.0137 0.0129

Neptune 93215-04-11 07:12 G 35767239.61 35767239.80 35767240.00 0.0089 0.0037

Uranus 93215-04-21 00:29 G 35767249.39 35767249.52 35767249.67 0.0138 0.0103

Neptune 93215-11-22 19:55 G 35767465.16 35767465.33 35767465.53 0.0089 0.0048

Uranus 93215-12-03 08:24 G 35767475.68 35767475.85 35767476.04 0.0138 0.0077

Neptune 93216-07-05 08:53 G 35767690.72 35767690.87 35767691.05 0.0089 0.0059

Uranus 93216-07-16 16:48 G 35767702.00 35767702.20 35767702.41 0.0138 0.0050

Neptune 93217-02-15 22:05 G 35767916.29 35767916.42 35767916.56 0.0089 0.0069

Uranus 93217-02-28 01:12 G 35767928.34 35767928.55 35767928.77 0.0138 0.0024

Jupiter 93217-05-18 00:58 G 35768007.33 35768007.54 35768007.75 0.0499 0.0054

Neptune 93217-09-29 10:34 G 35768141.87 35768141.94 35768142.06 0.0089 0.0080

Uranus 93217-10-12 09:36 G 35768154.69 35768154.90 35768155.12 0.0139 0.0005

Uranus 93218-05-26 18:14 G 35768381.06 35768381.26 35768381.48 0.0139 0.0031

Mars 93218-06-10 12:14 G 35768395.93 35768396.01 35768396.08 0.1640 0.1472

Uranus 93219-01-08 03:07 G 35768607.44 35768607.63 35768607.84 0.0139 0.0058

Uranus 93219-08-22 12:14 G 35768833.85 35768834.01 35768834.19 0.0139 0.0086

Uranus 93220-04-04 21:36 G 35769060.28 35769060.40 35769060.53 0.0140 0.0113

Jupiter 93223-03-16 12:29 G 35770135.84 35770136.02 35770136.22 0.0525 0.0165

Jupiter 93223-11-08 20:53 G 35770373.29 35770373.37 35770373.46 0.0528 0.0477

Saturn 93224-03-11 06:29 G 35770496.57 35770496.77 35770496.96 0.0260 0.0102

Saturn 93224-10-26 03:07 G 35770725.43 35770725.63 35770725.84 0.0261 0.0076

Saturn 93225-06-12 00:14 G 35770954.48 35770954.51 35770954.57 0.0262 0.0256

Jupiter 93229-01-20 23:31 G 35772273.28 35772273.48 35772273.68 0.0500 0.0102

Jupiter 93229-09-14 14:38 G 35772510.03 35772510.11 35772510.20 0.0498 0.0449

Jupiter 93234-11-19 09:07 G 35774401.73 35774401.88 35774402.04 0.0524 0.0337

Jupiter 93235-07-14 15:36 G 35774638.98 35774639.15 35774639.31 0.0527 0.0300

Saturn 93238-01-07 02:24 G 35775546.53 35775546.60 35775546.68 0.0304 0.0283

Saturn 93238-08-25 08:53 G 35775776.66 35775776.87 35775777.08 0.0303 0.0001

Pluto 93238-11-17 18:00 G 35775861.09 35775861.25 35775861.44 0.0079 0.0050

Saturn 93239-04-12 14:24 G 35776007.04 35776007.10 35776007.19 0.0301 0.0280

Pluto 93239-07-01 04:34 G 35776086.48 35776086.69 35776086.90 0.0078 0.0026

Jupiter 93240-09-25 18:58 G 35776539.11 35776539.29 35776539.46 0.0501 0.0265

Jupiter 93241-05-20 12:14 G 35776775.85 35776776.01 35776776.18 0.0499 0.0295

Jupiter 93246-07-25 06:14 G 35778667.71 35778667.76 35778667.81 0.0523 0.0503

Jupiter 93247-03-19 10:34 G 35778904.75 35778904.94 35778905.14 0.0526 0.0123

Mars 93250-06-09 07:55 G 35780082.66 35780082.83 35780082.99 0.1631 0.0477

Jupiter 93252-05-31 16:05 G 35780805.07 35780805.17 35780805.29 0.0502 0.0423

Jupiter 93253-01-23 11:17 G 35781041.78 35781041.97 35781042.17 0.0499 0.0143

Saturn 93253-02-04 13:12 G 35781054.01 35781054.05 35781054.12 0.0258 0.0248

Moon 93253-02-13 00:43 G 35781062.37 35781062.53 35781062.70 0.2633 0.0256

Earth 93253-02-13 05:17 G 35781062.56 35781062.72 35781062.88 0.2636 0.0165 *

Saturn 93253-09-21 09:50 G 35781282.71 35781282.91 35781283.12 0.0259 0.0073

Saturn 93254-05-08 06:43 G 35781511.59 35781511.78 35781511.98 0.0260 0.0104

Uranus 93254-12-26 15:50 G 35781744.06 35781744.16 35781744.25 0.0141 0.0125

Uranus 93255-08-10 00:58 G 35781970.40 35781970.54 35781970.71 0.0140 0.0098

Uranus 93256-03-23 10:19 G 35782196.75 35782196.93 35782197.13 0.0140 0.0070

Uranus 93256-11-04 19:26 G 35782423.11 35782423.31 35782423.53 0.0140 0.0042

Uranus 93257-06-19 04:34 G 35782649.48 35782649.69 35782649.91 0.0140 0.0014

Uranus 93258-01-31 13:12 G 35782875.84 35782876.05 35782876.27 0.0139 0.0014

Uranus 93258-09-14 21:36 G 35783102.20 35783102.40 35783102.61 0.0139 0.0041

Jupiter 93258-11-22 04:19 G 35783170.48 35783170.68 35783170.88 0.0525 0.0057

Uranus 93259-04-29 05:46 G 35783328.56 35783328.74 35783328.94 0.0139 0.0068

Uranus 93259-12-11 14:10 G 35783554.93 35783555.09 35783555.25 0.0139 0.0094

Uranus 93260-07-24 21:36 G 35783781.31 35783781.40 35783781.52 0.0139 0.0121

Jupiter 93264-09-28 10:48 G 35785307.74 35785307.95 35785308.15 0.0500 0.0014

Saturn 93267-07-20 08:38 G 35786332.75 35786332.86 35786332.99 0.0304 0.0247

Saturn 93268-03-06 15:07 G 35786562.92 35786563.13 35786563.34 0.0303 0.0037

Jupiter 93270-07-27 23:02 G 35787436.28 35787436.46 35787436.64 0.0524 0.0234

Jupiter 93271-03-22 05:46 G 35787673.62 35787673.74 35787673.88 0.0527 0.0405

Jupiter 93276-06-03 09:50 G 35789573.72 35789573.91 35789574.11 0.0501 0.0169

Jupiter 93277-01-26 02:10 G 35789810.47 35789810.59 35789810.72 0.0498 0.0389

Mars 93279-08-29 10:19 G 35790755.85 35790755.93 35790756.00 0.1898 0.1697

Jupiter 93282-04-01 18:14 G 35791702.14 35791702.26 35791702.39 0.0524 0.0408

Saturn 93282-08-17 14:53 G 35791840.03 35791840.12 35791840.23 0.0259 0.0226

Jupiter 93282-11-24 23:46 G 35791939.31 35791939.49 35791939.67 0.0527 0.0226

Saturn 93283-04-03 11:31 G 35792068.77 35792068.98 35792069.19 0.0259 0.0050

Saturn 93283-11-18 08:10 G 35792297.66 35792297.84 35792298.03 0.0261 0.0128

Jupiter 93288-02-07 07:55 G 35793839.68 35793839.83 35793839.99 0.0502 0.0325

Jupiter 93288-10-01 01:55 G 35794076.40 35794076.58 35794076.76 0.0499 0.0238

Neptune 93291-11-06 15:22 G 35795208.06 35795208.14 35795208.25 0.0088 0.0079

Neptune 93292-06-19 04:19 G 35795433.56 35795433.68 35795433.84 0.0088 0.0069

Neptune 93293-01-30 17:46 G 35795659.08 35795659.24 35795659.41 0.0088 0.0058

Neptune 93293-09-13 06:29 G 35795884.60 35795884.77 35795884.97 0.0088 0.0048

Neptune 93294-04-26 19:55 G 35796110.13 35796110.33 35796110.53 0.0088 0.0038

Jupiter 93294-07-30 19:26 G 35796205.11 35796205.31 35796205.51 0.0526 0.0048

Neptune 93294-12-08 08:53 G 35796335.67 35796335.87 35796336.09 0.0088 0.0027

Neptune 93295-07-21 22:05 G 35796561.21 35796561.42 35796561.64 0.0088 0.0017

Neptune 93296-03-03 11:02 G 35796786.74 35796786.96 35796787.19 0.0088 0.0006

Neptune 93296-10-15 00:14 G 35797012.29 35797012.51 35797012.73 0.0088 0.0005

Saturn 93297-01-29 12:43 G 35797118.88 35797119.03 35797119.18 0.0304 0.0212

Neptune 93297-05-28 13:12 G 35797237.83 35797238.05 35797238.27 0.0088 0.0015

Saturn 93297-09-16 19:12 G 35797349.10 35797349.30 35797349.51 0.0303 0.0073

Neptune 93298-01-09 01:55 G 35797463.39 35797463.58 35797463.81 0.0088 0.0027

Uranus 93298-05-07 03:50 G 35797581.66 35797581.66 35797581.68 0.0137 0.0137

Neptune 93298-08-22 15:07 G 35797688.94 35797689.13 35797689.34 0.0088 0.0036

Uranus 93298-12-19 11:31 G 35797807.86 35797807.98 35797808.11 0.0138 0.0112

Neptune 93299-04-05 03:50 G 35797914.49 35797914.66 35797914.87 0.0088 0.0048

Uranus 93299-08-02 19:26 G 35798034.15 35798034.31 35798034.49 0.0138 0.0086

Jupiter 93299-10-13 02:38 G 35798105.57 35798105.61 35798105.66 0.0503 0.0487

Neptune 93299-11-16 17:17 G 35798140.06 35798140.22 35798140.40 0.0088 0.0057

Uranus 93300-03-17 03:22 G 35798260.45 35798260.64 35798260.85 0.0138 0.0060

Jupiter 93300-06-06 22:34 G 35798342.23 35798342.44 35798342.64 0.0500 0.0079

Neptune 93300-06-30 06:29 G 35798365.63 35798365.77 35798365.91 0.0088 0.0068

Uranus 93300-10-29 11:46 G 35798486.78 35798486.99 35798487.20 0.0138 0.0033

Neptune 93301-02-10 18:58 G 35798591.21 35798591.29 35798591.42 0.0088 0.0079

Uranus 93301-06-12 20:10 G 35798713.13 35798713.34 35798713.56 0.0138 0.0008

Uranus 93302-01-25 04:48 G 35798939.49 35798939.70 35798939.92 0.0139 0.0021

Uranus 93302-09-08 13:26 G 35799165.86 35799166.06 35799166.27 0.0139 0.0048

Uranus 93303-04-22 22:19 G 35799392.26 35799392.43 35799392.63 0.0139 0.0075

Uranus 93303-12-05 07:26 G 35799618.68 35799618.81 35799618.97 0.0139 0.0103

Uranus 93304-07-18 17:02 G 35799845.14 35799845.21 35799845.30 0.0140 0.0130

Jupiter 93306-04-05 15:50 G 35800470.97 35800471.16 35800471.36 0.0525 0.0127

Jupiter 93306-11-28 23:46 G 35800708.45 35800708.49 35800708.54 0.0527 0.0513

Jupiter 93312-02-10 21:07 G 35802608.17 35802608.38 35802608.58 0.0500 0.0079

Saturn 93312-02-28 17:31 G 35802626.10 35802626.23 35802626.37 0.0258 0.0200

Jupiter 93312-10-04 12:58 G 35802844.98 35802845.04 35802845.10 0.0498 0.0475

Saturn 93312-10-14 14:10 G 35802854.87 35802855.09 35802855.30 0.0259 0.0024

Saturn 93313-05-31 10:34 G 35803083.78 35803083.94 35803084.12 0.0260 0.0154

Mars 93316-04-06 19:26 G 35804125.14 35804125.31 35804125.49 0.1634 0.0288

Jupiter 93317-12-09 10:34 G 35804736.78 35804736.94 35804737.11 0.0524 0.0303

Jupiter 93318-08-03 16:34 G 35804974.04 35804974.19 35804974.34 0.0527 0.0334

Jupiter 93323-10-16 19:55 G 35806874.15 35806874.33 35806874.51 0.0501 0.0234

Jupiter 93324-06-09 13:26 G 35807110.91 35807111.06 35807111.22 0.0499 0.0328

Saturn 93326-08-12 17:46 G 35807905.07 35807905.24 35807905.41 0.0304 0.0178

Saturn 93327-03-31 00:14 G 35808135.31 35808135.51 35808135.71 0.0303 0.0107

Jupiter 93329-08-14 06:14 G 35809002.68 35809002.76 35809002.84 0.0523 0.0473

Jupiter 93330-04-08 10:34 G 35809239.75 35809239.94 35809240.13 0.0526 0.0156

Jupiter 93335-06-21 18:29 G 35811140.15 35811140.27 35811140.41 0.0502 0.0390

Jupiter 93336-02-13 13:26 G 35811376.87 35811377.06 35811377.26 0.0499 0.0177

Uranus 93338-08-27 00:29 G 35812302.47 35812302.52 35812302.58 0.0141 0.0136

Uranus 93339-04-10 09:50 G 35812528.79 35812528.91 35812529.06 0.0140 0.0109

Uranus 93339-11-22 19:41 G 35812755.15 35812755.32 35812755.50 0.0140 0.0080

Uranus 93340-07-06 04:48 G 35812981.51 35812981.70 35812981.91 0.0140 0.0053

Uranus 93341-02-17 13:55 G 35813207.87 35813208.08 35813208.29 0.0140 0.0025

Saturn 93341-09-09 18:14 G 35813412.11 35813412.26 35813412.42 0.0259 0.0179

Uranus 93341-10-01 22:34 G 35813434.23 35813434.44 35813434.66 0.0140 0.0003

Jupiter 93341-12-12 05:02 G 35813505.51 35813505.71 35813505.91 0.0526 0.0025

Saturn 93342-04-26 14:38 G 35813640.90 35813641.11 35813641.33 0.0259 0.0003

Uranus 93342-05-16 07:12 G 35813660.59 35813660.80 35813661.01 0.0139 0.0030

Saturn 93342-12-11 11:17 G 35813869.82 35813869.97 35813870.13 0.0261 0.0176

Uranus 93342-12-28 15:22 G 35813886.96 35813887.14 35813887.35 0.0139 0.0057

Uranus 93343-08-11 23:46 G 35814113.32 35814113.49 35814113.66 0.0139 0.0083

Uranus 93344-03-25 07:12 G 35814339.69 35814339.80 35814339.95 0.0139 0.0110

Uranus 93344-11-06 14:53 G 35814566.10 35814566.12 35814566.18 0.0139 0.0136

Jupiter 93347-10-19 12:58 G 35815642.83 35815643.04 35815643.25 0.0500 0.0022

Jupiter 93353-08-17 01:41 G 35817771.39 35817771.57 35817771.76 0.0525 0.0200

Jupiter 93354-04-11 09:22 G 35818008.78 35818008.89 35818008.99 0.0527 0.0442

Saturn 93356-02-22 19:55 G 35818691.15 35818691.33 35818691.51 0.0304 0.0147

Saturn 93356-10-10 02:24 G 35818921.42 35818921.60 35818921.79 0.0302 0.0138

Jupiter 93359-06-24 08:38 G 35819908.66 35819908.86 35819909.06 0.0501 0.0141

Jupiter 93360-02-16 00:58 G 35820145.43 35820145.54 35820145.66 0.0498 0.0416

Jupiter 93365-04-21 23:17 G 35822037.33 35822037.47 35822037.61 0.0524 0.0368

Jupiter 93365-12-15 04:34 G 35822274.53 35822274.69 35822274.87 0.0527 0.0268

Moon 93366-08-15 07:26 G 35822517.72 35822517.81 35822517.89 0.2701 0.2216

Earth 93366-08-15 11:46 G 35822517.92 35822517.99 35822518.06 0.2695 0.2421

Jupiter 93371-02-27 06:29 G 35824174.61 35824174.77 35824174.94 0.0502 0.0299

Saturn 93371-03-22 20:10 G 35824198.18 35824198.34 35824198.52 0.0258 0.0154

Jupiter 93371-10-22 00:43 G 35824411.36 35824411.53 35824411.71 0.0499 0.0267

Saturn 93371-11-06 16:34 G 35824426.98 35824427.19 35824427.41 0.0259 0.0023

Saturn 93372-06-22 13:12 G 35824655.92 35824656.05 35824656.18 0.0260 0.0200

Neptune 93372-09-27 17:17 G 35824753.16 35824753.22 35824753.30 0.0089 0.0085

Neptune 93373-05-11 06:00 G 35824978.65 35824978.75 35824978.89 0.0089 0.0074

Neptune 93373-12-22 18:58 G 35825204.15 35825204.29 35825204.46 0.0089 0.0064

Neptune 93374-08-05 07:41 G 35825429.66 35825429.82 35825430.01 0.0089 0.0053

Moon 93374-08-13 01:26 G 35825437.42 35825437.56 35825437.70 0.2704 0.1049

Earth 93374-08-13 01:41 G 35825437.43 35825437.57 35825437.71 0.2697 0.1253 *

Neptune 93375-03-18 20:38 G 35825655.18 35825655.36 35825655.56 0.0089 0.0042

Neptune 93375-10-30 09:36 G 35825880.71 35825880.90 35825881.11 0.0089 0.0032

Neptune 93376-06-11 22:34 G 35826106.24 35826106.44 35826106.66 0.0089 0.0021

Neptune 93377-01-23 11:46 G 35826331.77 35826331.99 35826332.21 0.0089 0.0010

Mars 93377-06-26 10:19 G 35826485.81 35826485.93 35826486.05 0.1906 0.1358

Jupiter 93377-08-19 22:19 G 35826540.24 35826540.43 35826540.63 0.0526 0.0088

Neptune 93377-09-06 00:43 G 35826557.31 35826557.53 35826557.75 0.0089 0.0001

Neptune 93378-04-19 13:26 G 35826782.85 35826783.06 35826783.29 0.0089 0.0012

Neptune 93378-12-01 02:38 G 35827008.40 35827008.61 35827008.82 0.0089 0.0022

Neptune 93379-07-14 15:22 G 35827233.95 35827234.14 35827234.36 0.0089 0.0033

Neptune 93380-02-25 04:19 G 35827459.50 35827459.68 35827459.88 0.0089 0.0044

Neptune 93380-10-07 17:31 G 35827685.06 35827685.23 35827685.40 0.0089 0.0054

Neptune 93381-05-21 06:14 G 35827910.63 35827910.76 35827910.92 0.0089 0.0065

Neptune 93382-01-01 19:12 G 35828136.20 35828136.30 35828136.43 0.0089 0.0076

Mars 93382-02-02 07:26 G 35828167.64 35828167.81 35828167.99 0.1636 0.0108

Neptune 93382-08-15 08:24 G 35828361.81 35828361.85 35828361.91 0.0089 0.0086

Uranus 93382-08-19 22:48 G 35828366.35 35828366.45 35828366.55 0.0138 0.0121

Jupiter 93382-11-02 04:34 G 35828440.61 35828440.69 35828440.79 0.0503 0.0455

Uranus 93383-04-03 06:14 G 35828592.62 35828592.76 35828592.93 0.0138 0.0096

Jupiter 93383-06-27 00:43 G 35828677.33 35828677.53 35828677.73 0.0500 0.0114

Uranus 93383-11-15 14:10 G 35828818.92 35828819.09 35828819.29 0.0138 0.0070

Uranus 93384-06-28 22:34 G 35829045.24 35829045.44 35829045.65 0.0138 0.0043

Uranus 93385-02-10 06:58 G 35829271.58 35829271.79 35829272.01 0.0138 0.0017

Saturn 93385-09-03 23:17 G 35829477.28 35829477.47 35829477.67 0.0304 0.0117

Uranus 93385-09-24 15:22 G 35829497.93 35829498.14 35829498.36 0.0139 0.0011

Saturn 93386-04-22 06:00 G 35829707.58 35829707.75 35829707.93 0.0303 0.0169

Uranus 93386-05-09 00:00 G 35829724.30 35829724.50 35829724.72 0.0139 0.0038

Uranus 93386-12-21 08:53 G 35829950.68 35829950.87 35829951.07 0.0139 0.0065

Uranus 93387-08-04 18:00 G 35830177.10 35830177.25 35830177.42 0.0139 0.0092

Uranus 93388-03-18 03:07 G 35830403.54 35830403.63 35830403.76 0.0139 0.0120

Jupiter 93389-04-24 17:17 G 35830806.03 35830806.22 35830806.42 0.0525 0.0091

Jupiter 93395-03-02 00:29 G 35832943.31 35832943.52 35832943.73 0.0500 0.0041

Pluto 93396-09-04 04:34 G 35833495.57 35833495.69 35833495.83 0.0065 0.0052

Pluto 93397-04-17 08:53 G 35833720.66 35833720.87 35833721.09 0.0066 0.0010

Pluto 93397-11-28 12:43 G 35833945.86 35833946.03 35833946.24 0.0066 0.0033

Saturn 93400-10-02 20:24 G 35834984.17 35834984.35 35834984.53 0.0258 0.0134

Jupiter 93400-12-29 12:29 G 35835071.85 35835072.02 35835072.19 0.0524 0.0269

Saturn 93401-05-19 16:34 G 35835212.98 35835213.19 35835213.40 0.0259 0.0043

Jupiter 93401-08-23 18:58 G 35835309.15 35835309.29 35835309.43 0.0527 0.0372

Saturn 93402-01-03 12:58 G 35835441.93 35835442.04 35835442.16 0.0261 0.0221

Jupiter 93406-11-05 23:17 G 35837209.29 35837209.47 35837209.67 0.0501 0.0198

Jupiter 93407-06-30 16:34 G 35837446.05 35837446.19 35837446.33 0.0498 0.0364

Jupiter 93412-09-03 09:50 G 35839337.81 35839337.91 35839338.03 0.0523 0.0437

Jupiter 93413-04-28 14:53 G 35839574.94 35839575.12 35839575.31 0.0527 0.0196

Saturn 93415-03-18 00:29 G 35840263.33 35840263.52 35840263.73 0.0304 0.0088

Saturn 93415-11-03 07:12 G 35840493.65 35840493.80 35840493.96 0.0302 0.0198

Jupiter 93418-07-11 18:29 G 35841475.12 35841475.27 35841475.41 0.0502 0.0360

Jupiter 93419-03-05 12:58 G 35841711.86 35841712.04 35841712.23 0.0499 0.0207

Uranus 93422-12-09 18:58 G 35843087.19 35843087.29 35843087.42 0.0141 0.0120

Uranus 93423-07-24 04:48 G 35843313.54 35843313.70 35843313.86 0.0140 0.0092

Uranus 93424-03-06 13:41 G 35843539.89 35843540.07 35843540.28 0.0140 0.0065

Uranus 93424-10-18 23:02 G 35843766.25 35843766.46 35843766.67 0.0140 0.0036

Jupiter 93425-01-01 11:17 G 35843840.77 35843840.97 35843841.17 0.0526 0.0021

Uranus 93425-06-02 07:55 G 35843992.61 35843992.83 35843993.04 0.0140 0.0009

Uranus 93426-01-14 16:34 G 35844218.98 35844219.19 35844219.41 0.0140 0.0019

Uranus 93426-08-29 00:58 G 35844445.34 35844445.54 35844445.75 0.0139 0.0046

Uranus 93427-04-12 09:07 G 35844671.70 35844671.88 35844672.07 0.0139 0.0072

Uranus 93427-11-24 16:48 G 35844898.07 35844898.20 35844898.37 0.0139 0.0099

Uranus 93428-07-08 00:43 G 35845124.45 35845124.53 35845124.64 0.0139 0.0125

Saturn 93430-04-14 21:36 G 35845770.21 35845770.40 35845770.60 0.0258 0.0110

Jupiter 93430-11-08 12:29 G 35845977.81 35845978.02 35845978.22 0.0500 0.0052

Saturn 93430-11-29 18:00 G 35845999.05 35845999.25 35845999.46 0.0259 0.0067

Saturn 93431-07-16 14:24 G 35846228.04 35846228.10 35846228.18 0.0260 0.0245

Jupiter 93436-09-06 06:00 G 35848106.56 35848106.75 35848106.94 0.0525 0.0157

Jupiter 93437-05-01 13:12 G 35848343.98 35848344.05 35848344.13 0.0527 0.0483

Jupiter 93442-07-14 11:31 G 35850243.78 35850243.98 35850244.19 0.0501 0.0105

Jupiter 93443-03-08 04:05 G 35850480.59 35850480.67 35850480.76 0.0499 0.0454

Mars 93443-04-24 13:41 G 35850527.91 35850528.07 35850528.23 0.1903 0.0717

Saturn 93444-09-27 03:36 G 35851049.44 35851049.65 35851049.85 0.0304 0.0058

Saturn 93445-05-15 10:05 G 35851279.79 35851279.92 35851280.07 0.0303 0.0228

Mars 93447-12-01 18:43 G 35852210.10 35852210.28 35852210.46 0.1639 0.0108

Jupiter 93448-05-12 01:41 G 35852372.42 35852372.57 35852372.73 0.0524 0.0332

Jupiter 93449-01-04 06:58 G 35852609.63 35852609.79 35852609.96 0.0527 0.0306

Jupiter 93454-03-19 10:48 G 35854509.77 35854509.95 35854510.13 0.0502 0.0261

Jupiter 93454-11-11 04:48 G 35854746.55 35854746.70 35854746.87 0.0499 0.0305

Neptune 93456-02-10 00:14 G 35855202.46 35855202.51 35855202.60 0.0088 0.0083

Neptune 93456-09-22 13:12 G 35855427.95 35855428.05 35855428.20 0.0088 0.0073

Neptune 93457-05-06 02:38 G 35855653.47 35855653.61 35855653.78 0.0088 0.0062

Neptune 93457-12-17 15:50 G 35855879.00 35855879.16 35855879.36 0.0088 0.0052

Neptune 93458-07-31 05:02 G 35856104.53 35856104.71 35856104.92 0.0088 0.0041

Neptune 93459-03-13 18:29 G 35856330.06 35856330.27 35856330.48 0.0088 0.0031

Neptune 93459-10-25 07:26 G 35856555.60 35856555.81 35856556.03 0.0088 0.0020

Saturn 93459-10-25 21:50 G 35856556.21 35856556.41 35856556.61 0.0258 0.0090

Jupiter 93460-01-15 21:22 G 35856638.34 35856638.39 35856638.45 0.0523 0.0502

Neptune 93460-06-06 20:38 G 35856781.14 35856781.36 35856781.58 0.0088 0.0009

Saturn 93460-06-10 17:46 G 35856785.04 35856785.24 35856785.45 0.0259 0.0087

Jupiter 93460-09-09 01:12 G 35856875.36 35856875.55 35856875.75 0.0526 0.0126

Neptune 93461-01-18 09:36 G 35857006.68 35857006.90 35857007.13 0.0088 0.0002

Neptune 93461-08-31 22:34 G 35857232.23 35857232.44 35857232.67 0.0088 0.0012

Neptune 93462-04-14 11:31 G 35857457.77 35857457.98 35857458.20 0.0088 0.0022

Neptune 93462-11-26 00:29 G 35857683.33 35857683.52 35857683.74 0.0088 0.0034

Neptune 93463-07-09 13:41 G 35857908.89 35857909.07 35857909.27 0.0088 0.0044

Neptune 93464-02-20 02:24 G 35858134.45 35858134.60 35858134.80 0.0088 0.0055

Neptune 93464-10-02 15:36 G 35858360.01 35858360.15 35858360.31 0.0088 0.0065

Neptune 93465-05-16 04:48 G 35858585.59 35858585.70 35858585.82 0.0088 0.0075

Jupiter 93465-11-22 09:07 G 35858775.77 35858775.88 35858776.00 0.0502 0.0417

Neptune 93465-12-27 17:31 G 35858811.20 35858811.23 35858811.31 0.0088 0.0086

Uranus 93466-04-20 08:53 G 35858924.82 35858924.87 35858924.95 0.0137 0.0131

Jupiter 93466-07-17 04:34 G 35859012.50 35859012.69 35859012.89 0.0499 0.0152

Uranus 93466-12-02 16:19 G 35859151.06 35859151.18 35859151.34 0.0138 0.0106

Uranus 93467-07-17 00:29 G 35859377.35 35859377.52 35859377.71 0.0138 0.0080

Uranus 93468-02-28 08:38 G 35859603.66 35859603.86 35859604.06 0.0138 0.0054

Uranus 93468-10-11 16:48 G 35859829.99 35859830.20 35859830.42 0.0138 0.0027

Uranus 93469-05-26 01:12 G 35860056.34 35860056.55 35860056.77 0.0139 0.0002

Uranus 93470-01-07 09:50 G 35860282.70 35860282.91 35860283.13 0.0139 0.0027

Uranus 93470-08-21 18:29 G 35860509.08 35860509.27 35860509.48 0.0139 0.0054

Uranus 93471-04-05 03:22 G 35860735.48 35860735.64 35860735.83 0.0139 0.0081

Uranus 93471-11-17 12:29 G 35860961.90 35860962.02 35860962.18 0.0139 0.0109

Jupiter 93472-05-14 22:05 G 35861141.22 35861141.42 35861141.62 0.0525 0.0050

Uranus 93472-06-30 22:05 G 35861188.39 35861188.42 35861188.49 0.0140 0.0136

Saturn 93474-04-09 03:50 G 35861835.45 35861835.66 35861835.87 0.0304 0.0031

Saturn 93474-11-25 10:34 G 35862065.83 35862065.94 35862066.05 0.0302 0.0254

Jupiter 93478-03-22 00:43 G 35863278.32 35863278.53 35863278.74 0.0500 0.0010

Jupiter 93484-01-18 19:12 G 35865407.12 35865407.30 35865407.48 0.0525 0.0222

Jupiter 93484-09-12 01:55 G 35865644.46 35865644.58 35865644.70 0.0527 0.0419

Pluto 93484-12-18 09:07 G 35865741.66 35865741.88 35865742.10 0.0079 0.0012

Pluto 93485-07-31 18:43 G 35865967.17 35865967.28 35865967.44 0.0078 0.0064

Saturn 93488-09-20 02:53 G 35867113.55 35867113.62 35867113.70 0.0258 0.0242

Saturn 93489-05-06 22:48 G 35867342.25 35867342.45 35867342.66 0.0258 0.0067

Jupiter 93489-11-24 23:17 G 35867544.28 35867544.47 35867544.67 0.0501 0.0167

Saturn 93489-12-21 19:12 G 35867571.10 35867571.30 35867571.49 0.0259 0.0110

Jupiter 93490-07-19 16:19 G 35867781.06 35867781.18 35867781.31 0.0499 0.0394

Jupiter 93495-09-23 14:53 G 35869672.99 35869673.12 35869673.25 0.0523 0.0395

Earth 93496-02-16 07:41 G 35869818.66 35869818.82 35869818.98 0.2636 0.0059

Moon 93496-02-16 10:05 G 35869818.77 35869818.92 35869819.07 0.2642 0.0043 *

Jupiter 93496-05-17 19:41 G 35869910.14 35869910.32 35869910.50 0.0526 0.0240

Jupiter 93501-07-31 21:36 G 35871810.25 35871810.40 35871810.56 0.0502 0.0324

Jupiter 93502-03-25 16:34 G 35872047.01 35872047.19 35872047.37 0.0499 0.0245

Saturn 93503-03-04 23:17 G 35872391.43 35872391.47 35872391.55 0.0305 0.0291

Saturn 93503-10-21 06:43 G 35872621.57 35872621.78 35872621.99 0.0304 0.0005

Moon 93504-02-15 05:02 G 35872738.65 35872738.71 35872738.77 0.2637 0.2398

Saturn 93504-06-07 13:26 G 35872851.99 35872852.06 35872852.13 0.0303 0.0284

Uranus 93506-08-10 05:17 G 35873645.65 35873645.72 35873645.81 0.0141 0.0130

Uranus 93507-03-24 14:38 G 35873871.98 35873872.11 35873872.27 0.0141 0.0103

Uranus 93507-11-06 00:14 G 35874098.33 35874098.51 35874098.70 0.0140 0.0075

Jupiter 93508-01-22 14:10 G 35874175.89 35874176.09 35874176.29 0.0526 0.0061

Uranus 93508-06-19 09:22 G 35874324.69 35874324.89 35874325.10 0.0140 0.0047

Uranus 93509-01-31 18:29 G 35874551.05 35874551.27 35874551.48 0.0140 0.0019

Mars 93509-02-19 17:46 G 35874570.06 35874570.24 35874570.41 0.1899 0.0102

Uranus 93509-09-15 03:07 G 35874777.41 35874777.63 35874777.85 0.0140 0.0008

Uranus 93510-04-29 11:31 G 35875003.78 35875003.98 35875004.20 0.0139 0.0035

Uranus 93510-12-11 19:41 G 35875230.14 35875230.32 35875230.53 0.0139 0.0063

Uranus 93511-07-26 04:05 G 35875456.51 35875456.67 35875456.84 0.0139 0.0088

Uranus 93512-03-08 11:46 G 35875682.88 35875682.99 35875683.12 0.0139 0.0115

Jupiter 93513-04-05 20:10 G 35876076.28 35876076.34 35876076.40 0.0503 0.0480

Mars 93513-09-29 06:29 G 35876252.60 35876252.77 35876252.95 0.1641 0.0301

Jupiter 93513-11-28 16:48 G 35876313.00 35876313.20 35876313.40 0.0500 0.0091

Saturn 93518-04-03 03:07 G 35877899.53 35877899.63 35877899.75 0.0258 0.0222

Saturn 93518-11-17 23:17 G 35878128.26 35878128.47 35878128.68 0.0258 0.0046

Saturn 93519-07-04 19:12 G 35878357.12 35878357.30 35878357.49 0.0259 0.0131

Jupiter 93519-09-27 08:53 G 35878441.67 35878441.87 35878442.06 0.0525 0.0120

Jupiter 93520-05-21 16:34 G 35878679.17 35878679.19 35878679.21 0.0527 0.0523

Jupiter 93525-08-03 15:50 G 35880578.95 35880579.16 35880579.36 0.0500 0.0065

Jupiter 93526-03-28 07:55 G 35880815.80 35880815.83 35880815.86 0.0498 0.0491

Jupiter 93531-06-02 06:14 G 35882707.59 35882707.76 35882707.92 0.0524 0.0292

Jupiter 93532-01-25 12:14 G 35882944.86 35882945.01 35882945.16 0.0527 0.0349

Saturn 93532-09-14 00:29 G 35883177.42 35883177.52 35883177.63 0.0304 0.0262

Saturn 93533-05-02 07:41 G 35883407.61 35883407.82 35883408.02 0.0304 0.0027

Neptune 93537-01-01 02:38 G 35884747.60 35884747.61 35884747.65 0.0089 0.0089

Jupiter 93537-04-08 11:31 G 35884844.79 35884844.98 35884845.16 0.0501 0.0228

Neptune 93537-08-14 15:07 G 35884973.05 35884973.13 35884973.26 0.0089 0.0079

Jupiter 93537-12-01 05:02 G 35885081.56 35885081.71 35885081.86 0.0499 0.0336

Neptune 93538-03-28 04:05 G 35885198.55 35885198.67 35885198.83 0.0089 0.0068

Neptune 93538-11-08 17:17 G 35885424.06 35885424.22 35885424.39 0.0089 0.0057

Neptune 93539-06-22 06:00 G 35885649.58 35885649.75 35885649.95 0.0089 0.0046

Neptune 93540-02-02 18:58 G 35885875.10 35885875.29 35885875.50 0.0089 0.0035

Neptune 93540-09-15 07:55 G 35886100.62 35886100.83 35886101.04 0.0089 0.0025

Neptune 93541-04-28 20:38 G 35886326.16 35886326.36 35886326.59 0.0089 0.0015

Neptune 93541-12-10 09:50 G 35886551.69 35886551.91 35886552.13 0.0089 0.0003

Neptune 93542-07-23 22:34 G 35886777.23 35886777.44 35886777.67 0.0089 0.0008

Jupiter 93543-02-05 03:36 G 35886973.56 35886973.65 35886973.75 0.0523 0.0460

Neptune 93543-03-06 11:17 G 35887002.77 35887002.97 35887003.20 0.0089 0.0019

Jupiter 93543-09-30 08:10 G 35887210.65 35887210.84 35887211.03 0.0526 0.0174

Neptune 93543-10-18 00:29 G 35887228.32 35887228.52 35887228.73 0.0089 0.0029

Neptune 93544-05-30 13:26 G 35887453.87 35887454.06 35887454.27 0.0089 0.0040

Neptune 93545-01-11 02:10 G 35887679.43 35887679.59 35887679.79 0.0089 0.0051

Neptune 93545-08-24 15:22 G 35887904.99 35887905.14 35887905.31 0.0089 0.0061

Neptune 93546-04-07 04:05 G 35888130.56 35888130.67 35888130.82 0.0089 0.0072

Neptune 93546-11-18 17:31 G 35888356.15 35888356.23 35888356.31 0.0089 0.0082

Saturn 93547-10-14 04:34 G 35888685.56 35888685.69 35888685.83 0.0258 0.0199

Saturn 93548-05-30 00:43 G 35888914.32 35888914.53 35888914.74 0.0258 0.0023

Jupiter 93548-12-12 09:07 G 35889110.76 35889110.88 35889111.02 0.0502 0.0386

Saturn 93549-01-13 20:38 G 35889143.20 35889143.36 35889143.54 0.0259 0.0155

Jupiter 93549-08-06 04:19 G 35889347.49 35889347.68 35889347.88 0.0499 0.0184

Uranus 93550-08-03 02:10 G 35889709.49 35889709.59 35889709.72 0.0138 0.0116

Uranus 93551-03-17 09:50 G 35889935.76 35889935.91 35889936.09 0.0138 0.0090

Uranus 93551-10-29 17:46 G 35890162.06 35890162.24 35890162.44 0.0138 0.0064

Uranus 93552-06-12 01:55 G 35890388.38 35890388.58 35890388.80 0.0138 0.0038

Uranus 93553-01-24 10:19 G 35890614.72 35890614.93 35890615.15 0.0138 0.0012

Uranus 93553-09-07 18:43 G 35890841.07 35890841.28 35890841.50 0.0139 0.0016

Uranus 93554-04-22 03:22 G 35891067.44 35891067.64 35891067.86 0.0139 0.0043

Uranus 93554-12-04 12:29 G 35891293.83 35891294.02 35891294.21 0.0139 0.0069

Jupiter 93555-06-05 02:53 G 35891476.42 35891476.62 35891476.82 0.0525 0.0013

Uranus 93555-07-18 21:36 G 35891520.25 35891520.40 35891520.56 0.0139 0.0097

Uranus 93556-03-01 06:43 G 35891746.69 35891746.78 35891746.89 0.0139 0.0124

Jupiter 93561-04-11 03:50 G 35893613.46 35893613.66 35893613.87 0.0500 0.0029

Saturn 93562-03-27 03:22 G 35893963.52 35893963.64 35893963.78 0.0305 0.0234

Saturn 93562-11-12 10:34 G 35894193.73 35894193.94 35894194.15 0.0304 0.0056

Jupiter 93567-02-07 21:50 G 35895742.22 35895742.41 35895742.60 0.0524 0.0184

Jupiter 93567-10-03 04:19 G 35895979.59 35895979.68 35895979.78 0.0527 0.0458

Jupiter 93572-12-15 03:22 G 35897879.44 35897879.64 35897879.84 0.0501 0.0129

Jupiter 93573-08-08 20:10 G 35898116.25 35898116.34 35898116.45 0.0499 0.0433

Mars 93574-12-17 21:07 G 35898612.22 35898612.38 35898612.55 0.1895 0.0530

Saturn 93577-04-25 05:17 G 35899471.58 35899471.72 35899471.89 0.0258 0.0178

Saturn 93577-12-10 01:41 G 35899700.35 35899700.57 35899700.78 0.0258 0.0004

Saturn 93578-07-26 21:22 G 35899929.25 35899929.39 35899929.56 0.0259 0.0177

Jupiter 93578-10-13 17:02 G 35900008.07 35900008.21 35900008.36 0.0524 0.0360

Jupiter 93579-06-07 22:05 G 35900245.26 35900245.42 35900245.59 0.0527 0.0279

Mars 93579-07-27 17:46 G 35900295.08 35900295.24 35900295.41 0.1644 0.0509

Jupiter 93584-08-20 01:41 G 35902145.40 35902145.57 35902145.74 0.0502 0.0286

Jupiter 93585-04-13 20:10 G 35902382.17 35902382.34 35902382.51 0.0499 0.0282

Uranus 93590-11-21 23:02 G 35904430.34 35904430.46 35904430.60 0.0141 0.0114

Jupiter 93591-02-10 18:14 G 35904511.07 35904511.26 35904511.46 0.0526 0.0103

Uranus 93591-07-06 08:24 G 35904656.70 35904656.85 35904657.04 0.0140 0.0087

Saturn 93591-10-07 05:02 G 35904749.56 35904749.71 35904749.87 0.0304 0.0204

Uranus 93592-02-17 18:00 G 35904883.05 35904883.25 35904883.45 0.0140 0.0058

Saturn 93592-05-24 12:00 G 35904979.81 35904980.00 35904980.21 0.0303 0.0086

Uranus 93592-10-01 02:53 G 35905109.41 35905109.62 35905109.84 0.0140 0.0031

Uranus 93593-05-15 11:46 G 35905335.78 35905335.99 35905336.21 0.0140 0.0005

Uranus 93593-12-27 20:38 G 35905562.15 35905562.36 35905562.58 0.0140 0.0024

Uranus 93594-08-11 05:02 G 35905788.51 35905788.71 35905788.92 0.0139 0.0051

Uranus 93595-03-25 13:12 G 35906014.88 35906015.05 35906015.24 0.0139 0.0077

Uranus 93595-11-06 21:22 G 35906241.25 35906241.39 35906241.53 0.0139 0.0103

Jupiter 93596-04-24 21:07 G 35906411.29 35906411.38 35906411.47 0.0502 0.0447

Uranus 93596-06-20 05:17 G 35906467.64 35906467.72 35906467.80 0.0139 0.0129

Jupiter 93596-12-17 16:48 G 35906648.00 35906648.20 35906648.40 0.0499 0.0123

Jupiter 93602-10-16 14:38 G 35908776.92 35908777.11 35908777.31 0.0525 0.0075

Saturn 93606-11-05 07:26 G 35910257.65 35910257.81 35910257.99 0.0258 0.0154

Saturn 93607-06-22 03:36 G 35910486.44 35910486.65 35910486.86 0.0259 0.0023

Saturn 93608-02-05 23:31 G 35910715.36 35910715.48 35910715.62 0.0259 0.0201

Jupiter 93608-08-22 15:22 G 35910913.93 35910914.14 35910914.35 0.0500 0.0034

Earth 93609-08-17 11:46 G 35911273.92 35911273.99 35911274.06 0.2696 0.2393

Moon 93609-08-17 17:17 G 35911274.18 35911274.22 35911274.27 0.2694 0.2566

Mars 93611-07-26 13:55 G 35911982.00 35911982.08 35911982.16 0.1635 0.1456

Jupiter 93614-06-21 10:05 G 35913042.75 35913042.92 35913043.10 0.0524 0.0251

Jupiter 93615-02-13 16:05 G 35913280.04 35913280.17 35913280.30 0.0527 0.0392

Earth 93617-08-15 01:55 G 35914193.44 35914193.58 35914193.72 0.2697 0.1274

Moon 93617-08-15 04:05 G 35914193.52 35914193.67 35914193.83 0.2691 0.1012 *

Jupiter 93620-04-27 13:55 G 35915179.89 35915180.08 35915180.27 0.0501 0.0193

Neptune 93620-05-14 09:50 G 35915196.88 35915196.91 35915196.96 0.0088 0.0087

Jupiter 93620-12-20 07:41 G 35915416.68 35915416.82 35915416.95 0.0499 0.0373

Neptune 93620-12-25 22:48 G 35915422.36 35915422.45 35915422.58 0.0088 0.0076

Saturn 93621-04-18 09:22 G 35915535.72 35915535.89 35915536.07 0.0305 0.0173

Neptune 93621-08-08 12:29 G 35915647.87 35915648.02 35915648.17 0.0088 0.0066

Saturn 93621-12-04 16:19 G 35915765.99 35915766.18 35915766.38 0.0304 0.0118

Neptune 93622-03-22 01:12 G 35915873.40 35915873.55 35915873.74 0.0088 0.0056

Neptune 93622-11-02 14:53 G 35916098.93 35916099.12 35916099.31 0.0088 0.0045

Neptune 93623-06-16 03:50 G 35916324.46 35916324.66 35916324.87 0.0088 0.0034

Neptune 93624-01-27 17:02 G 35916550.00 35916550.21 35916550.43 0.0088 0.0023

Neptune 93624-09-09 06:00 G 35916775.54 35916775.75 35916775.98 0.0088 0.0013

Neptune 93625-04-22 19:12 G 35917001.08 35917001.30 35917001.53 0.0088 0.0003

Neptune 93625-12-04 08:24 G 35917226.63 35917226.85 35917227.08 0.0088 0.0008

Jupiter 93626-02-24 05:46 G 35917308.63 35917308.74 35917308.86 0.0523 0.0425

Neptune 93626-07-17 21:22 G 35917452.18 35917452.39 35917452.61 0.0088 0.0019

Jupiter 93626-10-19 10:05 G 35917545.73 35917545.92 35917546.10 0.0526 0.0211

Neptune 93627-02-28 10:19 G 35917677.73 35917677.93 35917678.15 0.0088 0.0030

Neptune 93627-10-11 23:02 G 35917903.28 35917903.46 35917903.68 0.0088 0.0041

Neptune 93628-05-24 12:14 G 35918128.84 35918129.01 35918129.21 0.0088 0.0051

Neptune 93629-01-05 01:12 G 35918354.41 35918354.55 35918354.73 0.0088 0.0061

Neptune 93629-08-18 14:24 G 35918579.98 35918580.10 35918580.24 0.0088 0.0072

Neptune 93630-04-01 03:36 G 35918805.57 35918805.65 35918805.74 0.0088 0.0082

Jupiter 93632-01-01 12:14 G 35919445.87 35919446.01 35919446.16 0.0502 0.0351

Jupiter 93632-08-25 07:26 G 35919682.63 35919682.81 35919683.00 0.0499 0.0221

Uranus 93634-04-02 11:02 G 35920267.89 35920267.96 35920268.06 0.0137 0.0126

Uranus 93634-11-14 18:29 G 35920494.14 35920494.27 35920494.43 0.0138 0.0101

Uranus 93635-06-29 02:38 G 35920720.43 35920720.61 35920720.79 0.0138 0.0075

Uranus 93636-02-10 10:34 G 35920946.74 35920946.94 35920947.15 0.0138 0.0049

Saturn 93636-05-17 09:22 G 35921043.71 35921043.89 35921044.08 0.0258 0.0131

Uranus 93636-09-23 18:29 G 35921173.06 35921173.27 35921173.49 0.0138 0.0023

Saturn 93637-01-01 05:31 G 35921272.52 35921272.73 35921272.94 0.0259 0.0047

Uranus 93637-05-08 02:53 G 35921399.41 35921399.62 35921399.84 0.0138 0.0005

Saturn 93637-08-18 01:26 G 35921501.46 35921501.56 35921501.67 0.0260 0.0225

Uranus 93637-12-20 11:31 G 35921625.77 35921625.98 35921626.19 0.0139 0.0030

Jupiter 93638-06-24 04:05 G 35921811.47 35921811.67 35921811.87 0.0526 0.0030

Uranus 93638-08-03 20:10 G 35921852.15 35921852.34 35921852.55 0.0139 0.0058

Uranus 93639-03-18 05:17 G 35922078.55 35922078.72 35922078.90 0.0139 0.0084

Uranus 93639-10-30 14:10 G 35922304.97 35922305.09 35922305.23 0.0139 0.0112

Uranus 93640-06-12 23:31 G 35922531.48 35922531.48 35922531.52 0.0139 0.0139

Mars 93640-10-14 01:26 G 35922654.42 35922654.56 35922654.70 0.1891 0.1123

Pluto 93642-10-05 18:29 G 35923376.08 35923376.27 35923376.49 0.0066 0.0025

Pluto 93643-05-18 22:48 G 35923601.25 35923601.45 35923601.67 0.0066 0.0018

Pluto 93643-12-30 02:24 G 35923826.55 35923826.60 35923826.72 0.0066 0.0062

Jupiter 93644-04-30 06:43 G 35923948.58 35923948.78 35923948.99 0.0500 0.0065

Mars 93645-05-24 05:02 G 35924337.56 35924337.71 35924337.87 0.1647 0.0714

Jupiter 93650-02-27 00:29 G 35926077.33 35926077.52 35926077.71 0.0525 0.0147

Jupiter 93650-10-22 07:41 G 35926314.76 35926314.82 35926314.89 0.0527 0.0499

Saturn 93650-10-29 12:43 G 35926321.85 35926322.03 35926322.22 0.0304 0.0140

Saturn 93651-06-16 19:41 G 35926552.14 35926552.32 35926552.50 0.0303 0.0149

Jupiter 93656-01-04 02:53 G 35928214.42 35928214.62 35928214.83 0.0500 0.0097

Jupiter 93656-08-27 18:58 G 35928451.22 35928451.29 35928451.37 0.0498 0.0463

Jupiter 93661-11-01 21:07 G 35930343.23 35930343.38 35930343.54 0.0524 0.0320

Jupiter 93662-06-27 03:07 G 35930580.47 35930580.63 35930580.79 0.0527 0.0324

Saturn 93665-11-27 12:00 G 35931829.81 35931830.00 35931830.20 0.0258 0.0106

Saturn 93666-07-14 08:10 G 35932058.64 35932058.84 35932059.05 0.0259 0.0072

Saturn 93667-02-28 04:05 G 35932287.63 35932287.67 35932287.74 0.0260 0.0251

Jupiter 93667-09-09 00:58 G 35932480.36 35932480.54 35932480.71 0.0501 0.0257

Jupiter 93668-05-02 18:29 G 35932717.11 35932717.27 35932717.44 0.0499 0.0311

Jupiter 93673-07-07 17:02 G 35934609.15 35934609.21 35934609.28 0.0523 0.0492

Jupiter 93674-03-01 20:53 G 35934846.18 35934846.37 35934846.56 0.0526 0.0141

Uranus 93674-07-22 06:14 G 35934988.67 35934988.76 35934988.87 0.0141 0.0126

Uranus 93675-03-05 15:36 G 35935215.01 35935215.15 35935215.32 0.0141 0.0099

Uranus 93675-10-18 01:12 G 35935441.37 35935441.55 35935441.75 0.0140 0.0071

Uranus 93676-05-31 10:34 G 35935667.74 35935667.94 35935668.15 0.0140 0.0043

Uranus 93677-01-12 19:41 G 35935894.11 35935894.32 35935894.54 0.0140 0.0016

Mars 93677-05-23 01:26 G 35936024.44 35936024.56 35936024.67 0.1638 0.1260

Uranus 93677-08-27 04:34 G 35936120.48 35936120.69 35936120.91 0.0140 0.0012

Uranus 93678-04-10 13:12 G 35936346.84 35936347.05 35936347.26 0.0140 0.0039

Uranus 93678-11-22 21:36 G 35936573.21 35936573.40 35936573.60 0.0139 0.0066

Jupiter 93679-05-14 22:05 G 35936746.32 35936746.42 35936746.54 0.0502 0.0417

Uranus 93679-07-07 05:46 G 35936799.59 35936799.74 35936799.91 0.0139 0.0092

Jupiter 93680-01-06 18:00 G 35936983.05 35936983.25 35936983.45 0.0500 0.0157

Uranus 93680-02-18 13:55 G 35937025.98 35937026.08 35937026.20 0.0139 0.0118

Saturn 93680-05-10 18:00 G 35937108.06 35937108.25 35937108.45 0.0305 0.0105

Saturn 93680-12-27 00:43 G 35937338.37 35937338.53 35937338.70 0.0303 0.0185

Jupiter 93685-11-04 15:22 G 35939111.94 35939112.14 35939112.34 0.0525 0.0041

Jupiter 93691-09-11 17:02 G 35941249.00 35941249.21 35941249.42 0.0500 0.0004

Saturn 93694-10-23 18:58 G 35942387.28 35942387.29 35942387.31 0.0258 0.0256

Saturn 93695-06-09 15:07 G 35942615.93 35942616.13 35942616.33 0.0258 0.0080

Saturn 93696-01-24 11:02 G 35942844.77 35942844.96 35942845.17 0.0259 0.0098

Jupiter 93697-07-10 09:50 G 35943377.73 35943377.91 35943378.09 0.0524 0.0220

Jupiter 93698-03-04 15:50 G 35943615.05 35943615.16 35943615.28 0.0527 0.0425

Neptune 93701-11-17 01:12 G 35944967.47 35944967.55 35944967.64 0.0089 0.0082

Neptune 93702-06-30 13:41 G 35945192.96 35945193.07 35945193.22 0.0089 0.0071

Neptune 93703-02-11 02:38 G 35945418.46 35945418.61 35945418.78 0.0089 0.0061

Jupiter 93703-05-18 15:36 G 35945514.95 35945515.15 35945515.35 0.0501 0.0159

Neptune 93703-09-24 15:22 G 35945643.98 35945644.14 35945644.34 0.0089 0.0050

Jupiter 93704-01-10 08:38 G 35945751.75 35945751.86 35945751.98 0.0499 0.0407

Neptune 93704-05-07 04:19 G 35945869.50 35945869.68 35945869.89 0.0089 0.0040

Neptune 93704-12-18 17:31 G 35946095.03 35946095.23 35946095.44 0.0089 0.0028

Neptune 93705-08-01 06:29 G 35946320.55 35946320.77 35946320.98 0.0089 0.0018

Neptune 93706-03-14 19:12 G 35946546.08 35946546.30 35946546.52 0.0089 0.0007

Mars 93706-08-12 05:17 G 35946696.65 35946696.72 35946696.79 0.1887 0.1731

Neptune 93706-10-26 08:10 G 35946771.62 35946771.84 35946772.06 0.0089 0.0004

Neptune 93707-06-08 20:53 G 35946997.16 35946997.37 35946997.59 0.0089 0.0015

Neptune 93708-01-20 09:50 G 35947222.71 35947222.91 35947223.13 0.0089 0.0026

Neptune 93708-09-01 22:48 G 35947448.25 35947448.45 35947448.65 0.0089 0.0036

Jupiter 93709-03-16 06:29 G 35947643.64 35947643.77 35947643.90 0.0524 0.0393

Neptune 93709-04-15 11:31 G 35947673.81 35947673.98 35947674.18 0.0089 0.0047

Jupiter 93709-11-08 11:17 G 35947880.80 35947880.97 35947881.15 0.0527 0.0248

Saturn 93709-11-21 23:17 G 35947894.27 35947894.47 35947894.68 0.0304 0.0069

Neptune 93709-11-27 00:14 G 35947899.37 35947899.51 35947899.70 0.0089 0.0058

Saturn 93710-07-10 06:00 G 35948124.61 35948124.75 35948124.90 0.0303 0.0221

Neptune 93710-07-10 13:41 G 35948124.94 35948125.07 35948125.22 0.0089 0.0068

Neptune 93711-02-21 02:24 G 35948350.52 35948350.60 35948350.72 0.0089 0.0079

Mars 93711-03-22 16:19 G 35948380.04 35948380.18 35948380.33 0.1649 0.0928

Jupiter 93715-01-21 11:31 G 35949780.82 35949780.98 35949781.14 0.0501 0.0321

Jupiter 93715-09-15 05:46 G 35950017.56 35950017.74 35950017.92 0.0499 0.0249

Uranus 93717-12-01 20:24 G 35950826.33 35950826.35 35950826.40 0.0137 0.0135

Uranus 93718-07-16 03:50 G 35951052.55 35951052.66 35951052.80 0.0137 0.0111

Uranus 93719-02-27 11:46 G 35951278.82 35951278.99 35951279.16 0.0138 0.0085

Uranus 93719-10-11 19:12 G 35951505.12 35951505.30 35951505.51 0.0138 0.0060

Uranus 93720-05-25 03:36 G 35951731.44 35951731.65 35951731.86 0.0138 0.0033

Uranus 93721-01-06 11:46 G 35951957.77 35951957.99 35951958.21 0.0138 0.0007

Jupiter 93721-07-14 06:43 G 35952146.58 35952146.78 35952146.98 0.0526 0.0069

Uranus 93721-08-20 20:10 G 35952184.13 35952184.34 35952184.56 0.0138 0.0020

Uranus 93722-04-04 04:48 G 35952410.49 35952410.70 35952410.91 0.0139 0.0046

Uranus 93722-11-16 13:26 G 35952636.88 35952637.06 35952637.25 0.0139 0.0073

Uranus 93723-06-30 22:19 G 35952863.30 35952863.43 35952863.60 0.0139 0.0100

Uranus 93724-02-12 07:55 G 35953089.75 35953089.83 35953089.92 0.0139 0.0126

Saturn 93724-05-05 22:05 G 35953173.34 35953173.42 35953173.52 0.0258 0.0232

Saturn 93724-12-20 18:29 G 35953402.07 35953402.27 35953402.49 0.0259 0.0054

Saturn 93725-08-06 14:38 G 35953630.93 35953631.11 35953631.30 0.0259 0.0125

Jupiter 93726-09-26 08:38 G 35954046.80 35954046.86 35954046.92 0.0502 0.0480

Jupiter 93727-05-21 04:19 G 35954283.48 35954283.68 35954283.89 0.0499 0.0094

Pluto 93730-06-07 16:05 G 35955396.99 35955397.17 35955397.38 0.0079 0.0039

Pluto 93731-01-19 02:24 G 35955622.41 35955622.60 35955622.81 0.0078 0.0037

Jupiter 93733-03-19 01:12 G 35956412.36 35956412.55 35956412.75 0.0525 0.0114

Mars 93738-08-12 00:29 G 35958384.49 35958384.52 35958384.55 0.1900 0.1857

Jupiter 93739-01-24 02:38 G 35958549.41 35958549.61 35958549.82 0.0500 0.0067

Moon 93739-02-18 09:22 G 35958574.72 35958574.89 35958575.06 0.2628 0.0299

Earth 93739-02-18 10:05 G 35958574.76 35958574.92 35958575.08 0.2635 0.0261 *

Saturn 93739-06-04 06:43 G 35958680.57 35958680.78 35958680.99 0.0304 0.0029

Jupiter 93739-09-17 18:58 G 35958786.27 35958786.29 35958786.32 0.0498 0.0493

Saturn 93740-01-20 13:12 G 35958910.95 35958911.05 35958911.17 0.0303 0.0260

Mars	93743-03-21 12:58 G	35960066.91	35960067.04	35960067.17	0.1640	0.1063
Jupiter	93744-11-21 20:24 G	35960678.19	35960678.35	35960678.52	0.0524	0.0291
Jupiter	93745-07-17 01:55 G	35960915.43	35960915.58	35960915.73	0.0527	0.0354
Jupiter	93750-09-29 00:43 G	35962815.35	35962815.53	35962815.72	0.0501	0.0227
Jupiter	93751-05-23 18:43 G	35963052.13	35963052.28	35963052.43	0.0499	0.0342
Saturn	93753-11-16 02:24 G	35963959.48	35963959.60	35963959.74	0.0258	0.0203
Saturn	93754-07-02 22:48 G	35964188.24	35964188.45	35964188.66	0.0259	0.0026
Saturn	93755-02-16 18:58 G	35964417.12	35964417.29	35964417.47	0.0259	0.0153
Jupiter	93756-07-27 15:07 G	35964944.04	35964944.13	35964944.22	0.0523	0.0466
Jupiter	93757-03-21 18:58 G	35965181.10	35965181.29	35965181.48	0.0526	0.0170
Uranus	93758-03-22 11:17 G	35965546.95	35965546.97	35965547.01	0.0141	0.0139
Uranus	93758-11-03 20:53 G	35965773.25	35965773.37	35965773.52	0.0141	0.0112
Uranus	93759-06-18 06:43 G	35965999.61	35965999.78	35965999.96	0.0141	0.0084
Uranus	93760-01-30 16:05 G	35966225.98	35966226.17	35966226.38	0.0140	0.0056
Uranus	93760-09-13 01:12 G	35966452.35	35966452.55	35966452.77	0.0140	0.0029
Uranus	93761-04-27 10:19 G	35966678.72	35966678.93	35966679.15	0.0140	0.0003
Uranus	93761-12-09 19:12 G	35966905.09	35966905.30	35966905.52	0.0140	0.0026
Jupiter	93762-06-03 22:19 G	35967081.30	35967081.43	35967081.56	0.0502	0.0386
Uranus	93762-07-24 03:50 G	35967131.47	35967131.66	35967131.87	0.0139	0.0053
Jupiter	93763-01-26 17:46 G	35967318.05	35967318.24	35967318.43	0.0499	0.0188
Uranus	93763-03-07 12:14 G	35967357.84	35967358.01	35967358.19	0.0139	0.0079
Uranus	93763-10-19 20:38 G	35967584.22	35967584.36	35967584.50	0.0139	0.0105
Uranus	93764-06-02 04:34 G	35967810.63	35967810.69	35967810.76	0.0139	0.0131
Saturn	93768-04-28 06:58 G	35969236.72	35969236.79	35969236.88	0.0304	0.0278
Jupiter	93768-11-24 14:24 G	35969446.90	35969447.10	35969447.30	0.0526	0.0010
Saturn	93768-12-14 13:41 G	35969466.86	35969467.07	35969467.28	0.0303	0.0013
Saturn	93769-08-01 19:55 G	35969697.32	35969697.33	35969697.37	0.0302	0.0299
Jupiter	93774-10-01 14:38 G	35971583.91	35971584.11	35971584.32	0.0499	0.0028
Mars	93777-01-17 03:36 G	35972422.53	35972422.65	35972422.78	0.1652	0.1139
Jupiter	93780-07-30 09:36 G	35973712.72	35973712.90	35973713.09	0.0525	0.0189

Jupiter 93781-03-24 16:48 G 35973950.11 35973950.20 35973950.30 0.0528 0.0462

Saturn 93783-05-29 06:29 G 35974745.62 35974745.77 35974745.93 0.0258 0.0177

Saturn 93784-01-13 03:07 G 35974974.41 35974974.63 35974974.84 0.0259 0.0005

Saturn 93784-08-28 23:17 G 35975203.33 35975203.47 35975203.63 0.0260 0.0182

Neptune 93785-03-30 08:38 G 35975416.78 35975416.86 35975416.97 0.0088 0.0079

Neptune 93785-11-10 21:50 G 35975642.29 35975642.41 35975642.57 0.0088 0.0069

Jupiter 93786-06-06 12:29 G 35975849.82 35975850.02 35975850.22 0.0500 0.0134

Neptune 93786-06-24 11:17 G 35975867.81 35975867.97 35975868.15 0.0088 0.0058

Jupiter 93787-01-29 04:48 G 35976086.61 35976086.70 35976086.81 0.0498 0.0431

Neptune 93787-02-05 00:14 G 35976093.34 35976093.51 35976093.71 0.0088 0.0048

Neptune 93787-09-18 13:41 G 35976318.87 35976319.07 35976319.28 0.0088 0.0037

Neptune 93788-05-01 02:38 G 35976544.41 35976544.61 35976544.84 0.0088 0.0027

Neptune 93788-12-12 16:05 G 35976769.96 35976770.17 35976770.40 0.0088 0.0016

Neptune 93789-07-26 05:31 G 35976995.51 35976995.73 35976995.95 0.0088 0.0006

Neptune 93790-03-08 18:29 G 35977221.05 35977221.27 35977221.49 0.0088 0.0005

Neptune 93790-10-20 07:41 G 35977446.60 35977446.82 35977447.04 0.0088 0.0016

Neptune 93791-06-02 20:38 G 35977672.15 35977672.36 35977672.58 0.0088 0.0026

Neptune 93792-01-14 09:36 G 35977897.71 35977897.90 35977898.11 0.0088 0.0037

Jupiter 93792-04-04 05:17 G 35977978.58 35977978.72 35977978.86 0.0524 0.0366

Neptune 93792-08-26 22:34 G 35978123.27 35978123.44 35978123.64 0.0088 0.0048

Jupiter 93792-11-27 10:19 G 35978215.76 35978215.93 35978216.10 0.0527 0.0279

Neptune 93793-04-09 11:31 G 35978348.83 35978348.98 35978349.16 0.0088 0.0058

Neptune 93793-11-21 00:43 G 35978574.41 35978574.53 35978574.68 0.0088 0.0069

Neptune 93794-07-04 14:10 G 35978799.99 35978800.09 35978800.18 0.0088 0.0079

Saturn 93797-11-08 15:50 G 35980023.04 35980023.16 35980023.30 0.0305 0.0235

Jupiter 93798-02-09 09:22 G 35980115.72 35980115.89 35980116.06 0.0502 0.0297

Saturn 93798-06-26 22:34 G 35980253.24 35980253.44 35980253.65 0.0304 0.0056

Jupiter 93798-10-04 03:50 G 35980352.49 35980352.66 35980352.84 0.0499 0.0277

Uranus 93802-03-16 13:26 G 35981610.97 35981611.06 35981611.18 0.0137 0.0120

Uranus 93802-10-28 21:22 G 35981837.23 35981837.39 35981837.54 0.0137 0.0095

Uranus 93803-06-12 04:48 G 35982063.52 35982063.70 35982063.90 0.0138 0.0070

Uranus 93804-01-24 12:43 G 35982289.83 35982290.03 35982290.25 0.0138 0.0044

Mars 93804-06-09 04:34 G 35982426.56 35982426.69 35982426.82 0.1896 0.1247

Jupiter 93804-08-03 04:05 G 35982481.48 35982481.67 35982481.87 0.0526 0.0096

Uranus 93804-09-06 20:53 G 35982516.16 35982516.37 35982516.59 0.0138 0.0018

Uranus 93805-04-21 05:17 G 35982742.50 35982742.72 35982742.94 0.0138 0.0009

Uranus 93805-12-03 13:41 G 35982968.87 35982969.07 35982969.29 0.0138 0.0035

Uranus 93806-07-17 22:34 G 35983195.25 35983195.44 35983195.64 0.0139 0.0062

Uranus 93807-03-01 07:12 G 35983421.65 35983421.80 35983421.98 0.0139 0.0089

Uranus 93807-10-13 16:19 G 35983648.07 35983648.18 35983648.31 0.0139 0.0115

Mars 93809-01-17 00:29 G 35984109.37 35984109.52 35984109.67 0.1643 0.0869

Jupiter 93809-10-16 06:29 G 35984381.68 35984381.77 35984381.85 0.0503 0.0457

Jupiter 93810-06-10 02:38 G 35984618.41 35984618.61 35984618.82 0.0500 0.0120

Saturn 93812-12-09 11:46 G 35985531.82 35985531.99 35985532.17 0.0258 0.0146

Saturn 93813-07-26 08:10 G 35985760.63 35985760.84 35985761.06 0.0259 0.0033

Saturn 93814-03-12 04:34 G 35985989.57 35985989.69 35985989.82 0.0260 0.0212

Jupiter 93816-04-07 21:36 G 35986747.21 35986747.40 35986747.60 0.0525 0.0089

Jupiter 93822-02-13 00:57 G 35988884.33 35988884.54 35988884.75 0.0500 0.0040

Saturn 93827-05-23 01:26 G 35990809.40 35990809.56 35990809.73 0.0304 0.0189

Jupiter 93827-12-12 17:17 G 35991013.05 35991013.22 35991013.39 0.0524 0.0267

Saturn 93828-01-08 08:09 G 35991039.64 35991039.84 35991040.04 0.0303 0.0101

Jupiter 93828-08-05 23:02 G 35991250.33 35991250.46 35991250.60 0.0527 0.0382

Jupiter 93833-10-18 21:50 G 35993150.22 35993150.41 35993150.60 0.0501 0.0202

Jupiter 93834-06-12 14:53 G 35993386.98 35993387.12 35993387.26 0.0498 0.0366

Jupiter 93839-08-17 12:29 G 35995278.92 35995279.02 35995279.13 0.0524 0.0443

Jupiter 93840-04-10 17:17 G 35995516.04 35995516.22 35995516.41 0.0527 0.0201

Saturn 93842-06-21 16:33 G 35996318.00 35996318.19 35996318.38 0.0259 0.0118

Uranus 93842-07-05 03:21 G 35996331.55 35996331.64 35996331.75 0.0141 0.0124

Mars 93842-11-15 14:38 G 35996465.01 35996465.11 35996465.21 0.1655 0.1364

Saturn 93843-02-05 13:12 G 35996546.84 35996547.05 35996547.25 0.0259 0.0062

Uranus 93843-02-16 12:57 G 35996557.90 35996558.04 35996558.21 0.0141 0.0097

Saturn 93843-09-22 09:36 G 35996775.83 35996775.90 35996775.98 0.0260 0.0242

Uranus 93843-09-30 22:48 G 35996784.26 35996784.45 35996784.64 0.0140 0.0069

Uranus 93844-05-14 07:55 G 35997010.63 35997010.83 35997011.05 0.0140 0.0042

Uranus 93844-12-26 17:31 G 35997237.01 35997237.23 35997237.44 0.0140 0.0014

Jupiter 93845-06-23 18:43 G 35997416.14 35997416.28 35997416.43 0.0501 0.0364

Uranus 93845-08-10 02:24 G 35997463.39 35997463.60 35997463.82 0.0140 0.0013

Jupiter 93846-02-15 13:26 G 35997652.87 35997653.06 35997653.25 0.0499 0.0210

Uranus 93846-03-24 11:02 G 35997689.76 35997689.96 35997690.17 0.0140 0.0040

Uranus 93846-11-05 19:26 G 35997916.13 35997916.31 35997916.51 0.0139 0.0067

Uranus 93847-06-20 03:50 G 35998142.51 35998142.66 35998142.83 0.0139 0.0094

Uranus 93848-02-01 12:14 G 35998368.91 35998369.01 35998369.13 0.0139 0.0119

Jupiter 93851-12-15 11:31 G 35999781.78 35999781.98 35999782.18 0.0526 0.0019

Moon 93852-08-19 06:29 G 36000029.68 36000029.77 36000029.87 0.2697 0.2133

Earth 93852-08-19 12:14 G 36000029.93 36000030.01 36000030.08 0.2697 0.2369

Saturn 93856-12-02 11:31 G 36001595.81 36001595.98 36001596.17 0.0304 0.0143

Saturn 93857-07-20 18:00 G 36001826.07 36001826.25 36001826.44 0.0303 0.0148

Jupiter 93857-10-21 11:17 G 36001918.76 36001918.97 36001919.17 0.0500 0.0050

Moon 93860-08-16 22:19 G 36002949.33 36002949.43 36002949.54 0.2703 0.1944

Earth 93860-08-17 02:09 G 36002949.45 36002949.59 36002949.73 0.2698 0.1288 *

Jupiter 93863-08-20 06:14 G 36004047.57 36004047.76 36004047.95 0.0525 0.0165

Jupiter 93864-04-13 12:57 G 36004284.96 36004285.04 36004285.12 0.0527 0.0485

Neptune 93866-02-19 10:48 G 36004961.92 36004961.95 36004962.04 0.0089 0.0086

Neptune 93866-10-03 00:00 G 36005187.40 36005187.50 36005187.63 0.0089 0.0075

Neptune 93867-05-16 13:12 G 36005412.90 36005413.05 36005413.21 0.0089 0.0064

Neptune 93867-12-28 01:41 G 36005638.42 36005638.57 36005638.77 0.0089 0.0054

Neptune 93868-08-09 14:38 G 36005863.93 36005864.11 36005864.32 0.0089 0.0043

Neptune 93869-03-23 03:50 G 36006089.45 36006089.66 36006089.86 0.0089 0.0032

Jupiter 93869-06-26 08:53 G 36006184.67 36006184.87 36006185.07 0.0501 0.0112

Neptune 93869-11-03 16:19 G 36006314.98 36006315.18 36006315.40 0.0089 0.0021

Jupiter 93870-02-18 01:55 G 36006421.50 36006421.58 36006421.66 0.0498 0.0454

Mars 93870-04-06 08:09 G 36006468.68 36006468.84 36006469.00 0.1892 0.0624

Neptune 93870-06-17 05:31 G 36006540.51 36006540.73 36006540.95 0.0089 0.0010

Neptune 93871-01-28 18:14 G 36006766.05 36006766.26 36006766.48 0.0089 0.0002

Neptune 93871-09-11 07:12 G 36006991.58 36006991.80 36006992.02 0.0089 0.0011

Saturn 93872-01-01 22:19 G 36007104.23 36007104.43 36007104.64 0.0259 0.0086

Neptune 93872-04-23 19:55 G 36007217.12 36007217.33 36007217.55 0.0089 0.0022

Saturn 93872-08-17 18:57 G 36007333.09 36007333.29 36007333.49 0.0259 0.0094

Neptune 93872-12-05 08:38 G 36007442.67 36007442.86 36007443.08 0.0089 0.0033

Neptune 93873-07-18 21:50 G 36007668.22 36007668.41 36007668.60 0.0089 0.0043

Neptune 93874-03-01 10:33 G 36007893.77 36007893.94 36007894.12 0.0089 0.0054

Neptune 93874-10-12 23:17 G 36008119.34 36008119.47 36008119.63 0.0089 0.0065

Mars 93874-11-14 11:31 G 36008151.82 36008151.98 36008152.15 0.1646 0.0661

Jupiter 93875-04-25 00:14 G 36008313.37 36008313.51 36008313.66 0.0524 0.0345

Neptune 93875-05-26 12:43 G 36008344.92 36008345.03 36008345.14 0.0089 0.0075

Jupiter 93875-12-18 05:17 G 36008550.55 36008550.72 36008550.88 0.0527 0.0301

Neptune 93876-01-07 01:12 G 36008570.52 36008570.55 36008570.62 0.0089 0.0086

Jupiter 93881-03-01 06:14 G 36010450.59 36010450.76 36010450.94 0.0502 0.0273

Jupiter 93881-10-24 00:57 G 36010687.37 36010687.54 36010687.70 0.0499 0.0302

Uranus 93885-11-13 23:31 G 36012169.42 36012169.48 36012169.56 0.0137 0.0130

Saturn 93886-06-14 22:19 G 36012382.24 36012382.43 36012382.63 0.0304 0.0095

Uranus 93886-06-28 07:12 G 36012395.67 36012395.80 36012395.95 0.0137 0.0105

Jupiter 93886-12-28 19:55 G 36012579.31 36012579.33 36012579.36 0.0523 0.0518

Saturn 93887-01-31 04:33 G 36012612.54 36012612.69 36012612.86 0.0303 0.0195

Uranus 93887-02-09 14:38 G 36012621.95 36012622.11 36012622.30 0.0138 0.0080

Jupiter 93887-08-22 23:17 G 36012816.28 36012816.47 36012816.67 0.0526 0.0120

Uranus 93887-09-23 22:33 G 36012848.25 36012848.44 36012848.65 0.0138 0.0054

Pluto 93888-03-25 03:21 G 36013031.49 36013031.64 36013031.81 0.0065 0.0044

Uranus 93888-05-07 06:43 G 36013074.57 36013074.78 36013075.00 0.0138 0.0028

Pluto 93888-11-05 07:41 G 36013256.60 36013256.82 36013257.04 0.0066 0.0002

Uranus 93888-12-19 15:07 G 36013300.91 36013301.13 36013301.35 0.0138 0.0002

Pluto 93889-06-18 11:31 G 36013481.83 36013481.98 36013482.16 0.0066 0.0041

Uranus 93889-08-02 23:31 G 36013527.27 36013527.48 36013527.70 0.0138 0.0025

Uranus 93890-03-17 07:55 G 36013753.64 36013753.83 36013754.05 0.0139 0.0052

Uranus 93890-10-29 16:48 G 36013980.03 36013980.20 36013980.39 0.0139 0.0078

Uranus 93891-06-13 02:09 G 36014206.44 36014206.59 36014206.73 0.0139 0.0104

Uranus 93892-01-25 11:02 G 36014432.90 36014432.96 36014433.04 0.0139 0.0131

Jupiter 93892-11-04 03:07 G 36014716.53 36014716.63 36014716.73 0.0502 0.0434

Jupiter 93893-06-28 22:33 G 36014953.24 36014953.44 36014953.64 0.0499 0.0142

Jupiter 93899-04-27 18:00 G 36017082.05 36017082.25 36017082.44 0.0526 0.0066

Saturn 93900-11-28 06:57 G 36017661.71 36017661.79 36017661.88 0.0259 0.0236

Saturn 93901-07-15 03:36 G 36017890.44 36017890.65 36017890.86 0.0259 0.0057

Saturn 93902-03-01 00:00 G 36018119.32 36018119.50 36018119.70 0.0260 0.0124

Jupiter 93905-03-04 20:24 G 36019219.14 36019219.35 36019219.55 0.0500 0.0019

Mars 93908-09-13 01:41 G 36020507.53 36020507.57 36020507.62 0.1658 0.1585

Jupiter 93911-01-01 12:57 G 36021347.86 36021348.04 36021348.22 0.0525 0.0246

Jupiter 93911-08-26 19:12 G 36021585.17 36021585.30 36021585.42 0.0527 0.0405

Saturn 93915-12-27 09:50 G 36023168.71 36023168.91 36023169.12 0.0304 0.0045

Saturn 93916-08-13 15:50 G 36023399.05 36023399.16 36023399.30 0.0303 0.0245

Jupiter 93916-11-07 16:48 G 36023485.01 36023485.20 36023485.39 0.0501 0.0184

Jupiter 93917-07-02 10:19 G 36023721.80 36023721.93 36023722.06 0.0499 0.0387

Jupiter 93922-09-06 08:38 G 36025613.74 36025613.86 36025613.98 0.0523 0.0421

Jupiter 93923-05-01 12:57 G 36025850.86 36025851.04 36025851.22 0.0526 0.0222

Uranus 93926-03-05 10:19 G 36026889.88 36026889.93 36026889.99 0.0141 0.0136

Uranus 93926-10-17 19:55 G 36027116.21 36027116.33 36027116.48 0.0141 0.0109

Uranus 93927-06-01 05:31 G 36027342.57 36027342.73 36027342.92 0.0141 0.0082

Uranus 93928-01-13 15:21 G 36027568.94 36027569.14 36027569.35 0.0140 0.0054

Jupiter 93928-07-13 13:26 G 36027750.91 36027751.06 36027751.21 0.0502 0.0347

Uranus 93928-08-27 00:43 G 36027795.32 36027795.53 36027795.74 0.0140 0.0026

Jupiter 93929-03-07 08:53 G 36027987.68 36027987.87 36027988.05 0.0499 0.0231

Uranus 93929-04-10 09:50 G 36028021.69 36028021.91 36028022.12 0.0140 0.0002

Uranus 93929-11-22 18:29 G 36028248.06 36028248.27 36028248.49 0.0140 0.0029

Saturn 93930-06-10 12:43 G 36028447.92 36028448.03 36028448.18 0.0258 0.0204

Uranus 93930-07-07 03:21 G 36028474.44 36028474.64 36028474.84 0.0139 0.0055

Saturn 93931-01-25 09:50 G 36028676.69 36028676.91 36028677.12 0.0259 0.0024

Uranus 93931-02-18 11:45 G 36028700.82 36028700.99 36028701.17 0.0139 0.0081

Saturn 93931-09-11 06:14 G 36028905.60 36028905.76 36028905.94 0.0260 0.0157

Uranus 93931-10-02 20:09 G 36028927.21 36028927.34 36028927.48 0.0139 0.0107

Uranus 93932-05-16 04:05 G 36029153.62 36029153.67 36029153.74 0.0139 0.0133

Jupiter 93935-01-04 05:45 G 36030116.54 36030116.74 36030116.94 0.0526 0.0037

Mars 93936-02-02 12:29 G 36030510.85 36030511.02 36030511.20 0.1888 0.0044

Mars 93940-09-11 23:17 G 36032194.30 36032194.47 36032194.64 0.1648 0.0464

Jupiter 93940-11-10 07:12 G 36032253.60 36032253.80 36032254.01 0.0500 0.0073

Saturn 93944-11-20 14:53 G 36033725.05 36033725.12 36033725.19 0.0304 0.0284

Saturn 93945-07-08 21:07 G 36033955.17 36033955.38 36033955.59 0.0303 0.0007

Saturn 93946-02-24 03:07 G 36034185.59 36034185.63 36034185.69 0.0302 0.0293

Jupiter 93946-09-09 00:14 G 36034382.32 36034382.51 36034382.70 0.0525 0.0146

Jupiter 93947-05-04 07:12 G 36034619.75 36034619.80 36034619.86 0.0528 0.0507

Neptune 93949-07-03 18:57 G 36035411.22 36035411.29 36035411.37 0.0088 0.0082

Neptune 93950-02-14 07:41 G 36035636.72 36035636.82 36035636.97 0.0088 0.0073

Neptune 93950-09-27 21:21 G 36035862.23 36035862.39 36035862.55 0.0088 0.0062

Neptune 93951-05-11 10:05 G 36036087.76 36036087.92 36036088.12 0.0088 0.0052

Neptune 93951-12-22 23:45 G 36036313.30 36036313.49 36036313.69 0.0088 0.0040

Jupiter 93952-07-16 04:48 G 36036519.50 36036519.70 36036519.91 0.0500 0.0090

Neptune 93952-08-04 12:43 G 36036538.83 36036539.03 36036539.25 0.0088 0.0030

Jupiter 93953-03-09 21:07 G 36036756.32 36036756.38 36036756.44 0.0498 0.0475

Neptune 93953-03-18 02:09 G 36036764.37 36036764.59 36036764.81 0.0088 0.0019

Neptune 93953-10-29 15:21 G 36036989.92 36036990.14 36036990.36 0.0088 0.0009

Neptune 93954-06-12 04:33 G 36037215.47 36037215.69 36037215.91 0.0088 0.0002

Neptune 93955-01-23 17:45 G 36037441.02 36037441.24 36037441.46 0.0088 0.0013

Neptune 93955-09-06 06:43 G 36037666.57 36037666.78 36037667.00 0.0088 0.0023

Neptune 93956-04-18 19:41 G 36037892.13 36037892.32 36037892.54 0.0088 0.0034

Neptune 93956-11-30 08:53 G 36038117.69 36038117.87 36038118.08 0.0088 0.0045

Neptune 93957-07-13 21:50 G 36038343.26 36038343.41 36038343.60 0.0088 0.0055

Neptune 93958-02-24 11:02 G 36038568.83 36038568.96 36038569.12 0.0088 0.0066

Jupiter 93958-05-14 18:57 G 36038648.14 36038648.29 36038648.45 0.0524 0.0327

Neptune 93958-10-07 23:45 G 36038794.40 36038794.49 36038794.63 0.0088 0.0076

Jupiter 93959-01-07 00:43 G 36038885.37 36038885.53 36038885.69 0.0527 0.0324

Neptune 93959-05-21 12:57 G 36039020.01 36039020.04 36039020.10 0.0088 0.0087

Saturn 93959-12-21 18:14 G 36039234.11 36039234.26 36039234.42 0.0259 0.0174

Saturn 93960-08-06 14:53 G 36039462.91 36039463.12 36039463.34 0.0259 0.0008

Saturn 93961-03-23 11:17 G 36039691.84 36039691.97 36039692.13 0.0260 0.0187

Jupiter 93964-03-21 01:55 G 36040785.40 36040785.58 36040785.76 0.0501 0.0252

Jupiter 93964-11-12 19:41 G 36041022.17 36041022.32 36041022.49 0.0498 0.0322

Jupiter 93970-01-17 15:07 G 36042914.08 36042914.13 36042914.19 0.0523 0.0501

Uranus 93970-02-26 16:48 G 36042954.09 36042954.20 36042954.33 0.0137 0.0115

Jupiter 93970-09-11 18:43 G 36043151.09 36043151.28 36043151.48 0.0526 0.0139

Uranus 93970-10-11 00:14 G 36043180.36 36043180.51 36043180.69 0.0137 0.0090

Uranus 93971-05-25 08:24 G 36043406.66 36043406.85 36043407.04 0.0138 0.0064

Uranus 93972-01-06 16:33 G 36043632.98 36043633.19 36043633.39 0.0138 0.0038

Uranus 93972-08-20 00:43 G 36043859.31 36043859.53 36043859.74 0.0138 0.0012

Uranus 93973-04-03 08:53 G 36044085.65 36044085.87 36044086.09 0.0138 0.0014

Uranus 93973-11-15 17:17 G 36044312.02 36044312.22 36044312.44 0.0138 0.0041

Saturn 93974-06-03 01:55 G 36044511.46 36044511.58 36044511.72 0.0304 0.0235

Uranus 93974-06-30 02:09 G 36044538.40 36044538.59 36044538.79 0.0139 0.0067

Saturn 93975-01-19 08:24 G 36044741.65 36044741.85 36044742.06 0.0304 0.0055

Uranus 93975-02-11 11:02 G 36044764.81 36044764.96 36044765.13 0.0139 0.0093

Uranus 93975-09-25 19:55 G 36044991.23 36044991.33 36044991.45 0.0139 0.0120

Jupiter 93975-11-24 20:53 G 36045051.27 36045051.37 36045051.49 0.0502 0.0419

Pluto 93975-11-25 19:55 G 36045052.31 36045052.33 36045052.41 0.0079 0.0077

Pluto 93976-07-08 06:57 G 36045277.57 36045277.79 36045278.02 0.0079 0.0001

Jupiter 93976-07-18 17:02 G 36045288.01 36045288.21 36045288.40 0.0499 0.0160

Pluto 93977-02-18 16:33 G 36045503.16 36045503.19 36045503.28 0.0078 0.0076

Moon 93982-02-20 11:17 G 36047330.82 36047330.97 36047331.12 0.2641 0.0506

Earth 93982-02-20 12:29 G 36047330.86 36047331.02 36047331.18 0.2635 0.0478 *

Jupiter 93982-05-17 13:41 G 36047416.87 36047417.07 36047417.27 0.0525 0.0044

Jupiter 93988-03-23 14:38 G 36049553.90 36049554.11 36049554.32 0.0500 0.0005

Saturn 93989-07-03 00:00 G 36050020.33 36050020.50 36050020.69 0.0258 0.0142

Saturn 93990-02-16 20:53 G 36050249.16 36050249.37 36050249.58 0.0259 0.0039

Moon 93990-02-18 07:26 G 36050250.73 36050250.81 36050250.89 0.2640 0.2226

Saturn 93990-10-03 17:31 G 36050478.12 36050478.23 36050478.35 0.0260 0.0219

Jupiter 93994-01-20 07:12 G 36051682.63 36051682.80 36051682.99 0.0524 0.0227

Jupiter 93994-09-14 12:57 G 36051919.93 36051920.04 36051920.16 0.0527 0.0425

Jupiter 93999-11-27 12:29 G 36053819.83 36053820.02 36053820.22 0.0501 0.0162

Jupiter 94000-07-21 06:14 G 36054056.64 36054056.76 36054056.87 0.0499 0.0410

95TH MILLENNIUM CE

This is a list of transits of Venus in the 95th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Mars 94001-11-29 16:19 G 36054553.02 36054553.18 36054553.35 0.1884 0.0570

Saturn 94003-12-14 13:41 G 36055297.90 36055298.07 36055298.23 0.0304 0.0185

Saturn 94004-07-31 19:55 G 36055528.13 36055528.33 36055528.53 0.0303 0.0105

Jupiter 94005-09-25 02:24 G 36055948.48 36055948.60 36055948.73 0.0523 0.0404

Jupiter 94006-05-20 06:43 G 36056185.61 36056185.78 36056185.96 0.0527 0.0242

Mars 94006-07-10 10:19 G 36056236.76 36056236.93 36056237.10 0.1651 0.0247

Uranus 94010-06-17 04:33 G 36057674.59 36057674.69 36057674.82 0.0141 0.0120

Uranus 94011-01-29 14:09 G 36057900.95 36057901.09 36057901.27 0.0141 0.0093

Jupiter 94011-08-02 09:50 G 36058085.76 36058085.91 36058086.07 0.0502 0.0325

Uranus 94011-09-13 00:00 G 36058127.31 36058127.50 36058127.70 0.0140 0.0065

Jupiter 94012-03-26 04:33 G 36058322.52 36058322.69 36058322.87 0.0499 0.0253

Uranus 94012-04-26 09:21 G 36058353.69 36058353.89 36058354.11 0.0140 0.0038

Uranus 94012-12-08 18:43 G 36058580.07 36058580.28 36058580.50 0.0140 0.0010

Uranus 94013-07-23 03:50 G 36058806.44 36058806.66 36058806.87 0.0140 0.0017

Uranus 94014-03-06 12:29 G 36059032.82 36059033.02 36059033.23 0.0140 0.0044

Uranus 94014-10-18 20:53 G 36059259.19 36059259.37 36059259.56 0.0139 0.0070

Uranus 94015-06-02 05:17 G 36059485.57 36059485.72 36059485.88 0.0139 0.0096

Uranus 94016-01-14 13:26 G 36059711.98 36059712.06 36059712.18 0.0139 0.0122

Jupiter 94018-01-23 00:29 G 36060451.33 36060451.52 36060451.72 0.0526 0.0058

Saturn 94019-01-13 05:02 G 36060806.52 36060806.71 36060806.91 0.0259 0.0112

Saturn 94019-08-30 01:41 G 36061035.37 36061035.57 36061035.78 0.0259 0.0068

Saturn 94020-04-14 22:05 G 36061264.38 36061264.42 36061264.50 0.0260 0.0250

Jupiter 94023-04-07 06:43 G 36062351.73 36062351.78 36062351.83 0.0503 0.0486

Jupiter 94023-11-30 03:07 G 36062588.42 36062588.63 36062588.83 0.0499 0.0094

Jupiter 94029-09-27 19:55 G 36064717.14 36064717.33 36064717.52 0.0525 0.0126

Jupiter 94030-05-23 03:07 G 36064954.63 36064954.63 36064954.63 0.0528 0.0527

Neptune 94030-05-24 21:21 G 36064956.39 36064956.39 36064956.45 0.0089 0.0089

Neptune 94031-01-05 10:33 G 36065181.85 36065181.94 36065182.06 0.0089 0.0078

Neptune 94031-08-18 23:17 G 36065407.34 36065407.47 36065407.63 0.0089 0.0067

Neptune 94032-03-31 12:14 G 36065632.85 36065633.01 36065633.19 0.0089 0.0056

Neptune 94032-11-12 01:12 G 36065858.37 36065858.55 36065858.75 0.0089 0.0046

Neptune 94033-06-25 13:55 G 36066083.90 36066084.08 36066084.30 0.0089 0.0036

Saturn 94033-06-26 00:00 G 36066084.32 36066084.50 36066084.69 0.0304 0.0136

Neptune 94034-02-06 02:53 G 36066309.42 36066309.62 36066309.84 0.0089 0.0025

Saturn 94034-02-11 06:29 G 36066314.59 36066314.77 36066314.95 0.0303 0.0155

Neptune 94034-09-19 15:50 G 36066534.95 36066535.16 36066535.38 0.0089 0.0014

Neptune 94035-05-03 04:48 G 36066760.49 36066760.70 36066760.92 0.0089 0.0003

Jupiter 94035-08-04 22:48 G 36066854.25 36066854.45 36066854.66 0.0500 0.0073

Neptune 94035-12-14 17:45 G 36066986.02 36066986.24 36066986.46 0.0089 0.0008

Jupiter 94036-03-28 15:36 G 36067091.13 36067091.15 36067091.17 0.0498 0.0494

Neptune 94036-07-27 06:29 G 36067211.56 36067211.77 36067211.99 0.0089 0.0019

Neptune 94037-03-09 19:12 G 36067437.11 36067437.30 36067437.52 0.0089 0.0030

Neptune 94037-10-21 08:09 G 36067662.65 36067662.84 36067663.04 0.0089 0.0040

Neptune 94038-06-03 21:07 G 36067888.21 36067888.38 36067888.57 0.0089 0.0051

Neptune 94039-01-15 09:50 G 36068113.77 36068113.91 36068114.08 0.0089 0.0062

Neptune 94039-08-28 23:02 G 36068339.34 36068339.46 36068339.59 0.0089 0.0072

Neptune 94040-04-10 11:31 G 36068564.92 36068564.98 36068565.08 0.0089 0.0083

Jupiter 94041-06-02 16:05 G 36068983.01 36068983.17 36068983.33 0.0524 0.0304

Jupiter 94042-01-25 20:53 G 36069220.23 36069220.37 36069220.53 0.0527 0.0347

Jupiter 94047-04-09 19:55 G 36071120.15 36071120.33 36071120.51 0.0502 0.0236

Jupiter 94047-12-02 14:24 G 36071356.96 36071357.10 36071357.26 0.0499 0.0341

Saturn 94048-07-25 10:48 G 36071592.75 36071592.95 36071593.15 0.0259 0.0080

Saturn 94049-03-11 07:12 G 36071821.61 36071821.80 36071822.00 0.0259 0.0100

Jupiter 94053-02-05 10:33 G 36073248.87 36073248.94 36073249.02 0.0522 0.0480

Jupiter 94053-09-30 13:41 G 36073485.88 36073486.07 36073486.26 0.0526 0.0161

Uranus 94053-10-27 02:09 G 36073512.51 36073512.59 36073512.68 0.0137 0.0124

Uranus 94054-06-10 09:50 G 36073738.77 36073738.91 36073739.06 0.0137 0.0100

Uranus 94055-01-22 17:31 G 36073965.05 36073965.23 36073965.42 0.0138 0.0075

Uranus 94055-09-06 01:26 G 36074191.36 36074191.56 36074191.77 0.0138 0.0049

Uranus 94056-04-19 09:36 G 36074417.68 36074417.90 36074418.11 0.0138 0.0023

Uranus 94056-12-01 17:45 G 36074644.02 36074644.24 36074644.46 0.0138 0.0003

Uranus 94057-07-16 02:09 G 36074870.38 36074870.59 36074870.81 0.0138 0.0029

Uranus 94058-02-27 10:33 G 36075096.75 36075096.94 36075097.15 0.0139 0.0056

Uranus 94058-10-11 19:26 G 36075323.14 36075323.31 36075323.49 0.0139 0.0082

Jupiter 94058-12-13 17:02 G 36075386.09 36075386.21 36075386.34 0.0503 0.0398

Uranus 94059-05-26 04:19 G 36075549.56 36075549.68 36075549.83 0.0139 0.0109

Jupiter 94059-08-07 13:12 G 36075622.86 36075623.05 36075623.24 0.0499 0.0184

Uranus 94060-01-07 13:41 G 36075776.02 36075776.07 36075776.13 0.0139 0.0135

Saturn 94063-01-06 10:33 G 36076870.74 36076870.94 36076871.14 0.0304 0.0089

Saturn 94063-08-24 16:48 G 36077101.05 36077101.20 36077101.36 0.0303 0.0202

Jupiter 94065-06-05 08:09 G 36077751.64 36077751.84 36077752.04 0.0525 0.0023

Mars 94067-09-26 21:07 G 36078595.24 36078595.38 36078595.52 0.1880 0.1138

Jupiter 94071-04-12 11:45 G 36079888.78 36079888.99 36079889.20 0.0500 0.0023

Mars 94072-05-06 21:21 G 36080279.22 36080279.39 36080279.57 0.1654 0.0049

Jupiter 94077-02-08 02:24 G 36082017.42 36082017.60 36082017.79 0.0525 0.0207

Saturn 94077-06-20 18:29 G 36082150.17 36082150.27 36082150.36 0.0258 0.0231

Jupiter 94077-10-03 08:53 G 36082254.77 36082254.87 36082254.98 0.0528 0.0448

Saturn 94078-02-04 14:53 G 36082378.91 36082379.12 36082379.33 0.0259 0.0052

Saturn 94078-09-21 11:17 G 36082607.79 36082607.97 36082608.16 0.0260 0.0129

Jupiter 94082-12-16 09:36 G 36084154.70 36084154.90 36084155.10 0.0501 0.0138

Jupiter 94083-08-10 02:24 G 36084391.51 36084391.60 36084391.71 0.0498 0.0433

Jupiter 94088-10-13 23:02 G 36086283.33 36086283.46 36086283.60 0.0523 0.0384

Jupiter 94089-06-08 03:36 G 36086520.48 36086520.65 36086520.82 0.0527 0.0265

Saturn 94092-07-18 19:41 G 36087657.11 36087657.32 36087657.53 0.0304 0.0042

Saturn 94093-03-06 01:55 G 36087887.47 36087887.58 36087887.71 0.0303 0.0249

Uranus 94094-02-14 12:57 G 36088232.97 36088233.04 36088233.13 0.0141 0.0131

Jupiter 94094-08-21 04:19 G 36088420.52 36088420.68 36088420.84 0.0502 0.0307

Uranus 94094-09-28 22:33 G 36088459.31 36088459.44 36088459.60 0.0141 0.0104

Jupiter 94095-04-14 23:31 G 36088657.31 36088657.48 36088657.65 0.0499 0.0272

Uranus 94095-05-13 08:24 G 36088685.68 36088685.85 36088686.04 0.0140 0.0076

Earth 94095-08-21 12:14 G 36088785.94 36088786.01 36088786.09 0.2698 0.2344

Uranus 94095-12-25 18:00 G 36088912.05 36088912.25 36088912.46 0.0140 0.0049

Uranus 94096-08-08 03:21 G 36089138.43 36089138.64 36089138.86 0.0140 0.0022

Uranus 94097-03-22 12:29 G 36089364.80 36089365.02 36089365.24 0.0140 0.0005

Uranus 94097-11-03 21:07 G 36089591.18 36089591.38 36089591.60 0.0140 0.0032

Uranus 94098-06-18 05:45 G 36089817.55 36089817.74 36089817.95 0.0139 0.0059

Uranus 94099-01-30 14:09 G 36090043.94 36090044.09 36090044.28 0.0139 0.0085

Uranus 94099-09-13 22:48 G 36090270.32 36090270.45 36090270.58 0.0139 0.0110

Uranus 94100-04-28 06:29 G 36090496.74 36090496.77 36090496.83 0.0139 0.0136

Jupiter 94101-02-11 22:48 G 36090786.25 36090786.45 36090786.65 0.0526 0.0084

Earth 94103-08-20 02:24 G 36091705.47 36091705.60 36091705.74 0.2699 0.1321

Moon 94103-08-20 07:41 G 36091705.66 36091705.82 36091705.98 0.2697 0.0422 *

Jupiter 94106-04-27 00:57 G 36092686.47 36092686.54 36092686.61 0.0503 0.0470

Jupiter 94106-12-19 21:50 G 36092923.21 36092923.41 36092923.61 0.0500 0.0113

Saturn 94107-01-01 23:02 G 36092936.34 36092936.46 36092936.61 0.0258 0.0200

Saturn 94107-08-18 19:41 G 36093165.11 36093165.32 36093165.54 0.0258 0.0021

Saturn 94108-04-03 16:05 G 36093394.01 36093394.17 36093394.34 0.0259 0.0159

Jupiter 94112-10-17 16:48 G 36095052.00 36095052.20 36095052.39 0.0525 0.0102

Neptune 94113-10-06 05:17 G 36095405.68 36095405.72 36095405.79 0.0088 0.0085

Neptune 94114-05-19 18:14 G 36095631.17 36095631.26 36095631.40 0.0088 0.0075

Neptune 94114-12-31 07:41 G 36095856.68 36095856.82 36095856.98 0.0088 0.0065

Neptune 94115-08-13 20:38 G 36096082.21 36096082.36 36096082.56 0.0088 0.0055

Neptune 94116-03-26 10:05 G 36096307.74 36096307.92 36096308.12 0.0088 0.0043

Neptune 94116-11-06 23:17 G 36096533.28 36096533.47 36096533.69 0.0088 0.0033

Neptune 94117-06-20 12:29 G 36096758.82 36096759.02 36096759.25 0.0088 0.0022

Neptune 94118-02-01 01:55 G 36096984.36 36096984.58 36096984.80 0.0088 0.0012

Jupiter 94118-08-24 20:09 G 36097189.13 36097189.34 36097189.54 0.0501 0.0048

Neptune 94118-09-14 14:53 G 36097209.90 36097210.12 36097210.35 0.0088 0.0002

Neptune 94119-04-28 04:05 G 36097435.45 36097435.67 36097435.89 0.0088 0.0010

Neptune 94119-12-09 17:17 G 36097661.01 36097661.22 36097661.45 0.0088 0.0021

Neptune 94120-07-22 06:14 G 36097886.57 36097886.76 36097886.98 0.0088 0.0032

Neptune 94121-03-04 19:41 G 36098112.13 36098112.32 36098112.52 0.0088 0.0042

Saturn 94121-06-13 22:19 G 36098213.37 36098213.43 36098213.49 0.0305 0.0290

Neptune 94121-10-16 08:24 G 36098337.69 36098337.85 36098338.05 0.0088 0.0053

Saturn 94122-01-30 04:48 G 36098443.49 36098443.70 36098443.91 0.0304 0.0004

Neptune 94122-05-29 21:50 G 36098563.26 36098563.41 36098563.57 0.0088 0.0063

Saturn 94122-09-17 11:02 G 36098673.92 36098673.96 36098674.02 0.0303 0.0293

Neptune 94123-01-10 10:33 G 36098788.84 36098788.94 36098789.09 0.0088 0.0074

Neptune 94123-08-24 00:00 G 36099014.44 36099014.50 36099014.58 0.0088 0.0084

Jupiter 94124-06-22 11:45 G 36099317.82 36099317.99 36099318.16 0.0524 0.0281

Jupiter 94125-02-14 16:33 G 36099555.05 36099555.19 36099555.34 0.0527 0.0371

Jupiter 94130-04-29 18:29 G 36101455.08 36101455.27 36101455.46 0.0501 0.0210

Jupiter 94130-12-22 12:29 G 36101691.89 36101692.02 36101692.17 0.0499 0.0368

Mars 94133-07-25 01:12 G 36102637.48 36102637.55 36102637.61 0.1876 0.1724

Pluto 94133-09-12 12:29 G 36102686.95 36102687.02 36102687.14 0.0065 0.0059

Pluto 94134-04-25 17:02 G 36102912.01 36102912.21 36102912.43 0.0066 0.0017

Pluto 94134-12-06 21:07 G 36103137.19 36103137.38 36103137.59 0.0066 0.0026

Jupiter 94136-02-26 06:57 G 36103583.70 36103583.79 36103583.88 0.0523 0.0460

Saturn 94136-07-14 02:53 G 36103722.46 36103722.62 36103722.78 0.0258 0.0174

Jupiter 94136-10-20 10:33 G 36103820.75 36103820.94 36103821.13 0.0526 0.0185

Saturn 94137-02-27 23:02 G 36103951.25 36103951.46 36103951.68 0.0259 0.0006

Uranus 94137-06-27 10:33 G 36104070.92 36104070.94 36104070.99 0.0137 0.0135

Saturn 94137-10-14 19:12 G 36104180.16 36104180.30 36104180.45 0.0260 0.0186

Uranus 94138-02-08 18:00 G 36104297.14 36104297.25 36104297.39 0.0137 0.0111

Mars 94138-03-05 08:38 G 36104321.68 36104321.86 36104322.03 0.1657 0.0187

Uranus 94138-09-23 01:41 G 36104523.41 36104523.57 36104523.75 0.0137 0.0086

Uranus 94139-05-07 09:21 G 36104749.71 36104749.89 36104750.10 0.0138 0.0061

Uranus 94139-12-19 17:31 G 36104976.02 36104976.23 36104976.44 0.0138 0.0035

Uranus 94140-08-02 01:41 G 36105202.35 36105202.57 36105202.79 0.0138 0.0009

Uranus 94141-03-16 09:50 G 36105428.70 36105428.91 36105429.13 0.0138 0.0017

Uranus 94141-10-28 18:14 G 36105655.06 36105655.26 36105655.47 0.0139 0.0043

Jupiter 94142-01-02 15:50 G 36105721.02 36105721.16 36105721.30 0.0502 0.0372

Uranus 94142-06-12 02:53 G 36105881.44 36105881.62 36105881.82 0.0139 0.0070

Jupiter 94142-08-27 11:31 G 36105957.79 36105957.98 36105958.16 0.0499 0.0211

Uranus 94143-01-24 11:45 G 36106107.84 36106107.99 36106108.15 0.0139 0.0096

Uranus 94143-09-07 20:38 G 36106334.27 36106334.36 36106334.47 0.0139 0.0123

Jupiter 94148-06-25 06:29 G 36108086.57 36108086.77 36108086.97 0.0525 0.0005

Saturn 94150-12-25 05:17 G 36108999.61 36108999.72 36108999.84 0.0304 0.0248

Saturn 94151-08-12 12:00 G 36109229.79 36109230.00 36109230.21 0.0304 0.0045

Jupiter 94154-05-02 07:12 G 36110223.60 36110223.80 36110224.01 0.0500 0.0046

Jupiter 94160-02-29 02:53 G 36112352.43 36112352.62 36112352.81 0.0524 0.0176

Jupiter 94160-10-23 08:38 G 36112589.79 36112589.86 36112589.95 0.0527 0.0479

Mars 94165-07-24 19:12 G 36114325.24 36114325.30 36114325.35 0.1890 0.1767

Jupiter 94166-01-05 05:02 G 36114489.51 36114489.71 36114489.91 0.0501 0.0118

Saturn 94166-01-24 06:43 G 36114508.60 36114508.78 36114508.96 0.0258 0.0144

Jupiter 94166-08-29 22:48 G 36114726.37 36114726.45 36114726.53 0.0499 0.0455

Saturn 94166-09-10 02:53 G 36114737.41 36114737.62 36114737.83 0.0258 0.0035

Saturn 94167-04-26 23:02 G 36114966.35 36114966.46 36114966.58 0.0259 0.0215

Jupiter 94171-11-03 22:05 G 36116618.27 36116618.42 36116618.57 0.0523 0.0354

Jupiter 94172-06-28 01:55 G 36116855.42 36116855.58 36116855.75 0.0526 0.0295

Jupiter 94177-09-10 02:53 G 36118755.45 36118755.62 36118755.79 0.0502 0.0281

Jupiter 94178-05-04 22:19 G 36118992.26 36118992.43 36118992.59 0.0499 0.0301

Uranus 94178-05-30 06:29 G 36119017.65 36119017.77 36119017.90 0.0141 0.0115

Uranus 94179-01-11 16:19 G 36119244.02 36119244.18 36119244.36 0.0141 0.0088

Uranus 94179-08-26 01:55 G 36119470.39 36119470.58 36119470.79 0.0140 0.0061

Uranus 94180-04-08 11:31 G 36119696.77 36119696.98 36119697.19 0.0140 0.0033

Saturn 94180-07-06 12:14 G 36119785.87 36119786.01 36119786.17 0.0305 0.0209

Uranus 94180-11-20 20:38 G 36119923.15 36119923.36 36119923.58 0.0140 0.0007

Saturn 94181-02-21 19:12 G 36120016.10 36120016.30 36120016.50 0.0304 0.0085

Uranus 94181-07-05 05:45 G 36120149.52 36120149.74 36120149.95 0.0140 0.0021

Uranus 94182-02-16 14:24 G 36120375.90 36120376.10 36120376.31 0.0140 0.0047

Uranus 94182-09-30 23:02 G 36120602.28 36120602.46 36120602.65 0.0139 0.0073

Uranus 94183-05-15 07:12 G 36120828.66 36120828.80 36120828.96 0.0139 0.0100

Uranus 94183-12-27 15:21 G 36121055.06 36121055.14 36121055.25 0.0139 0.0125

Jupiter 94184-03-02 20:09 G 36121121.15 36121121.34 36121121.54 0.0526 0.0111

Jupiter 94189-05-16 00:57 G 36123021.45 36123021.54 36123021.64 0.0503 0.0442

Jupiter 94190-01-07 21:36 G 36123258.21 36123258.40 36123258.60 0.0500 0.0144

Neptune 94195-04-09 21:21 G 36125176.31 36125176.39 36125176.49 0.0089 0.0081

Saturn 94195-08-06 09:21 G 36125294.70 36125294.89 36125295.08 0.0258 0.0120

Jupiter 94195-11-06 14:53 G 36125386.92 36125387.12 36125387.31 0.0525 0.0075

Neptune 94195-11-21 10:05 G 36125401.80 36125401.92 36125402.07 0.0089 0.0070

Saturn 94196-03-22 05:17 G 36125523.51 36125523.72 36125523.93 0.0259 0.0060

Neptune 94196-07-03 23:02 G 36125627.31 36125627.46 36125627.64 0.0089 0.0060

Saturn 94196-11-06 01:12 G 36125752.48 36125752.55 36125752.64 0.0259 0.0241

Neptune 94197-02-14 12:00 G 36125852.83 36125853.00 36125853.19 0.0089 0.0049

Neptune 94197-09-28 00:43 G 36126078.35 36126078.53 36126078.74 0.0089 0.0038

Neptune 94198-05-11 13:55 G 36126303.88 36126304.08 36126304.29 0.0089 0.0027

Neptune 94198-12-23 02:53 G 36126529.41 36126529.62 36126529.84 0.0089 0.0016

Neptune 94199-08-05 15:36 G 36126754.94 36126755.15 36126755.37 0.0089 0.0006

Neptune 94200-03-19 04:33 G 36126980.47 36126980.69 36126980.91 0.0089 0.0005

Neptune 94200-10-30 17:17 G 36127206.01 36127206.22 36127206.44 0.0089 0.0016

Neptune 94201-06-13 06:00 G 36127431.56 36127431.75 36127431.97 0.0089 0.0027

Jupiter 94201-09-13 20:09 G 36127524.13 36127524.34 36127524.55 0.0500 0.0018

Neptune 94202-01-24 18:57 G 36127657.10 36127657.29 36127657.50 0.0089 0.0038

Neptune 94202-09-07 07:41 G 36127882.65 36127882.82 36127883.02 0.0089 0.0048

Neptune 94203-04-20 20:24 G 36128108.21 36128108.35 36128108.53 0.0089 0.0059

Neptune 94203-12-02 09:36 G 36128333.77 36128333.90 36128334.04 0.0089 0.0069

Mars 94204-01-01 19:26 G 36128364.14 36128364.31 36128364.48 0.1660 0.0407

Neptune 94204-07-14 22:19 G 36128559.35 36128559.43 36128559.54 0.0089 0.0080

Jupiter 94207-07-13 11:45 G 36129652.82 36129652.99 36129653.17 0.0524 0.0252

Jupiter 94208-03-06 17:02 G 36129890.08 36129890.21 36129890.34 0.0527 0.0402

Saturn 94210-01-17 17:31 G 36130572.07 36130572.23 36130572.41 0.0305 0.0171

Saturn 94210-09-05 00:29 G 36130802.33 36130802.52 36130802.72 0.0304 0.0124

Jupiter 94213-05-19 15:07 G 36131789.94 36131790.13 36131790.33 0.0501 0.0187

Jupiter 94214-01-11 09:21 G 36132026.77 36132026.89 36132027.02 0.0499 0.0392

Jupiter 94219-03-18 09:21 G 36133918.78 36133918.89 36133919.01 0.0523 0.0425

Jupiter 94219-11-10 12:43 G 36134155.86 36134156.03 36134156.22 0.0526 0.0223

Uranus 94221-10-10 01:55 G 36134855.50 36134855.58 36134855.70 0.0137 0.0122

Pluto 94221-12-26 13:12 G 36134932.86 36134933.05 36134933.28 0.0079 0.0029

Uranus 94222-05-24 09:36 G 36135081.76 36135081.90 36135082.07 0.0137 0.0097

Pluto 94222-08-08 23:31 G 36135158.32 36135158.48 36135158.67 0.0078 0.0048

Uranus 94223-01-05 17:17 G 36135308.04 36135308.22 36135308.42 0.0138 0.0072

Uranus 94223-08-20 01:12 G 36135534.35 36135534.55 36135534.76 0.0138 0.0046

Uranus 94224-04-02 09:07 G 36135760.67 36135760.88 36135761.10 0.0138 0.0021

Uranus 94224-11-14 17:17 G 36135987.00 36135987.22 36135987.44 0.0138 0.0005

Jupiter 94225-01-22 12:14 G 36136055.87 36136056.01 36136056.16 0.0502 0.0350

Saturn 94225-02-16 12:14 G 36136080.81 36136081.01 36136081.21 0.0258 0.0092

Earth 94225-02-22 14:38 G 36136086.96 36136087.11 36136087.26 0.2634 0.0673

Moon 94225-02-22 18:00 G 36136087.08 36136087.25 36136087.41 0.2628 0.0655 *

Uranus 94225-06-29 01:26 G 36136213.36 36136213.56 36136213.78 0.0138 0.0032

Jupiter 94225-09-16 08:24 G 36136292.67 36136292.85 36136293.03 0.0500 0.0235

Saturn 94225-10-03 08:09 G 36136309.64 36136309.84 36136310.05 0.0258 0.0088

Uranus 94226-02-10 09:50 G 36136439.72 36136439.91 36136440.12 0.0139 0.0058

Uranus 94226-09-24 18:29 G 36136666.11 36136666.27 36136666.45 0.0139 0.0084

Uranus 94227-05-09 03:07 G 36136892.51 36136892.63 36136892.78 0.0139 0.0110

Uranus 94227-12-21 12:00 G 36137118.98 36137119.00 36137119.07 0.0139 0.0137

Mars 94231-05-22 23:45 G 36138367.36 36138367.49 36138367.62 0.1885 0.1189

Jupiter 94231-07-16 07:12 G 36138421.60 36138421.80 36138422.00 0.0525 0.0039

Earth 94233-02-20 06:43 G 36139006.75 36139006.78 36139006.82 0.2633 0.2559

Mars 94235-12-31 17:02 G 36140051.18 36140051.21 36140051.23 0.1650 0.1632

Jupiter 94237-05-22 07:41 G 36140558.61 36140558.82 36140559.02 0.0500 0.0077

Saturn 94239-07-30 23:02 G 36141358.28 36141358.46 36141358.66 0.0305 0.0135

Saturn 94240-03-17 06:00 G 36141588.58 36141588.75 36141588.93 0.0304 0.0161

Jupiter 94243-03-21 02:09 G 36142687.40 36142687.59 36142687.79 0.0524 0.0145

Jupiter 94243-11-13 07:55 G 36142924.79 36142924.83 36142924.88 0.0527 0.0510

Jupiter 94249-01-25 06:43 G 36144824.57 36144824.78 36144824.98 0.0501 0.0085

Jupiter 94249-09-19 00:00 G 36145061.47 36145061.50 36145061.55 0.0499 0.0488

Saturn 94254-01-12 17:45 G 36146638.19 36146638.24 36146638.30 0.0258 0.0247

Saturn 94254-08-29 13:41 G 36146866.87 36146867.07 36146867.28 0.0258 0.0069

Jupiter 94254-11-23 21:36 G 36146953.25 36146953.40 36146953.56 0.0523 0.0325

Saturn 94255-04-15 09:36 G 36147095.71 36147095.90 36147096.10 0.0258 0.0111

Jupiter 94255-07-19 01:55 G 36147190.43 36147190.58 36147190.74 0.0527 0.0328

Jupiter 94260-09-30 04:48 G 36149090.52 36149090.70 36149090.88 0.0502 0.0247

Jupiter 94261-05-24 23:45 G 36149327.34 36149327.49 36149327.64 0.0499 0.0334

Uranus 94262-01-28 11:45 G 36149575.92 36149575.99 36149576.10 0.0141 0.0128

Uranus 94262-09-11 21:50 G 36149802.27 36149802.41 36149802.57 0.0141 0.0101

Uranus 94263-04-26 07:41 G 36150028.64 36150028.82 36150029.01 0.0140 0.0074

Uranus 94263-12-08 17:17 G 36150255.02 36150255.22 36150255.44 0.0140 0.0047

Uranus 94264-07-22 02:53 G 36150481.40 36150481.62 36150481.84 0.0140 0.0019

Uranus 94265-03-05 12:00 G 36150707.78 36150708.00 36150708.22 0.0140 0.0008

Uranus 94265-10-17 20:38 G 36150934.16 36150934.36 36150934.58 0.0140 0.0035

Uranus 94266-06-01 05:31 G 36151160.54 36151160.73 36151160.93 0.0140 0.0061

Jupiter 94266-07-29 19:12 G 36151219.25 36151219.30 36151219.37 0.0522 0.0497

Uranus 94267-01-13 13:55 G 36151386.92 36151387.08 36151387.26 0.0139 0.0087

Jupiter 94267-03-23 22:19 G 36151456.23 36151456.43 36151456.62 0.0526 0.0147

Uranus 94267-08-27 22:19 G 36151613.31 36151613.43 36151613.56 0.0139 0.0113

Uranus 94268-04-10 06:00 G 36151839.75 36151839.75 36151839.80 0.0139 0.0138

Saturn 94269-02-09 02:09 G 36152144.39 36152144.59 36152144.79 0.0305 0.0101

Saturn 94269-09-27 09:07 G 36152374.72 36152374.88 36152375.04 0.0304 0.0194

Mars 94269-10-29 06:14 G 36152406.60 36152406.76 36152406.93 0.1663 0.0636

Jupiter 94272-06-04 23:17 G 36153356.35 36153356.47 36153356.58 0.0503 0.0415

Jupiter 94273-01-27 19:41 G 36153593.13 36153593.32 36153593.52 0.0500 0.0171

Neptune 94278-08-22 04:48 G 36155625.62 36155625.70 36155625.83 0.0088 0.0078

Jupiter 94278-11-26 19:12 G 36155722.10 36155722.30 36155722.50 0.0525 0.0032

Neptune 94279-04-04 18:14 G 36155851.13 36155851.26 36155851.41 0.0088 0.0067

Neptune 94279-11-16 07:12 G 36156076.66 36156076.80 36156076.99 0.0088 0.0058

Neptune 94280-06-28 20:38 G 36156302.19 36156302.36 36156302.56 0.0088 0.0047

Neptune 94281-02-09 10:05 G 36156527.72 36156527.92 36156528.12 0.0088 0.0036

Neptune 94281-09-22 23:02 G 36156753.25 36156753.46 36156753.68 0.0088 0.0025

Neptune 94282-05-06 12:14 G 36156978.80 36156979.01 36156979.24 0.0088 0.0015

Neptune 94282-12-18 01:41 G 36157204.35 36157204.57 36157204.79 0.0088 0.0004

Saturn 94283-07-25 20:09 G 36157424.24 36157424.34 36157424.45 0.0257 0.0221

Neptune 94283-07-31 14:53 G 36157429.90 36157430.12 36157430.34 0.0088 0.0007

Saturn 94284-03-10 16:05 G 36157652.96 36157653.17 36157653.38 0.0258 0.0043

Neptune 94284-03-13 03:50 G 36157655.45 36157655.66 36157655.88 0.0088 0.0018

Jupiter 94284-10-02 18:14 G 36157859.05 36157859.26 36157859.47 0.0501 0.0011

Neptune 94284-10-24 17:02 G 36157881.01 36157881.21 36157881.43 0.0088 0.0028

Saturn 94284-10-25 11:45 G 36157881.82 36157881.99 36157882.18 0.0258 0.0137

Neptune 94285-06-07 06:29 G 36158106.57 36158106.77 36158106.96 0.0088 0.0039

Neptune 94286-01-18 19:12 G 36158332.13 36158332.30 36158332.50 0.0088 0.0050

Neptune 94286-09-01 08:09 G 36158557.70 36158557.84 36158558.03 0.0088 0.0061

Neptune 94287-04-14 21:36 G 36158783.28 36158783.40 36158783.54 0.0088 0.0071

Neptune 94287-11-26 10:33 G 36159008.88 36159008.94 36159009.05 0.0088 0.0081

Jupiter 94290-08-01 14:24 G 36159987.92 36159988.10 36159988.29 0.0524 0.0214

Jupiter 94291-03-26 19:26 G 36160225.20 36160225.31 36160225.42 0.0526 0.0441

Jupiter 94296-06-07 16:48 G 36162125.00 36162125.20 36162125.40 0.0502 0.0152

Jupiter 94297-01-30 11:17 G 36162361.87 36162361.97 36162362.08 0.0499 0.0427

Mars 94297-03-19 03:36 G 36162409.49 36162409.65 36162409.82 0.1881 0.0587

Saturn 94298-08-22 06:14 G 36162930.56 36162930.76 36162930.96 0.0305 0.0069

Saturn 94299-04-09 13:12 G 36163160.92 36163161.05 36163161.19 0.0304 0.0228

Mars 94301-10-29 04:05 G 36164093.58 36164093.67 36164093.75 0.1653 0.1420

Jupiter 94302-04-07 10:33 G 36164253.81 36164253.94 36164254.07 0.0523 0.0391

Jupiter 94302-11-30 13:41 G 36164490.90 36164491.07 36164491.25 0.0526 0.0259

Uranus 94305-06-10 10:33 G 36165413.90 36165413.94 36165414.02 0.0137 0.0131

Uranus 94306-01-22 17:45 G 36165640.13 36165640.24 36165640.40 0.0137 0.0108

Uranus 94306-09-06 01:26 G 36165866.40 36165866.56 36165866.74 0.0137 0.0082

Uranus 94307-04-20 08:53 G 36166092.69 36166092.87 36166093.08 0.0138 0.0058

Uranus 94307-12-02 17:02 G 36166319.00 36166319.21 36166319.42 0.0138 0.0032

Jupiter 94308-02-12 15:07 G 36166390.98 36166391.13 36166391.30 0.0502 0.0315

Uranus 94308-07-16 01:12 G 36166545.33 36166545.55 36166545.77 0.0138 0.0007

Jupiter 94308-10-06 11:17 G 36166627.80 36166627.97 36166628.15 0.0500 0.0271

Uranus 94309-02-27 09:21 G 36166771.67 36166771.89 36166772.10 0.0138 0.0020

Uranus 94309-10-11 17:17 G 36166998.02 36166998.22 36166998.44 0.0138 0.0046

Uranus 94310-05-26 01:41 G 36167224.40 36167224.57 36167224.77 0.0139 0.0072

Uranus 94311-01-07 10:19 G 36167450.79 36167450.93 36167451.10 0.0139 0.0098

Uranus 94311-08-21 19:12 G 36167677.22 36167677.30 36167677.42 0.0139 0.0124

Saturn 94313-02-04 20:53 G 36168210.25 36168210.37 36168210.51 0.0257 0.0200

Saturn 94313-09-21 16:48 G 36168438.99 36168439.20 36168439.42 0.0258 0.0021

Saturn 94314-05-08 12:29 G 36168667.86 36168668.02 36168668.19 0.0258 0.0159

Jupiter 94314-08-05 08:24 G 36168756.65 36168756.85 36168757.05 0.0525 0.0073

Jupiter 94319-10-18 13:12 G 36170656.98 36170657.05 36170657.11 0.0503 0.0475

Jupiter 94320-06-11 10:33 G 36170893.74 36170893.94 36170894.14 0.0500 0.0113

Jupiter 94326-04-10 05:31 G 36173022.54 36173022.73 36173022.93 0.0525 0.0106

Saturn 94328-03-04 08:09 G 36173716.63 36173716.84 36173717.05 0.0305 0.0037

Saturn 94328-10-20 15:07 G 36173947.03 36173947.13 36173947.25 0.0304 0.0259

Jupiter 94332-02-15 06:00 G 36175159.54 36175159.75 36175159.95 0.0501 0.0055

Mars 94335-08-27 17:17 G 36176449.07 36176449.22 36176449.37 0.1666 0.0860

Jupiter 94337-12-14 03:07 G 36177288.47 36177288.63 36177288.80 0.0524 0.0282

Jupiter 94338-08-08 07:55 G 36177525.69 36177525.83 36177525.97 0.0527 0.0373

Moon 94338-08-24 09:36 G 36177541.78 36177541.90 36177542.02 0.2693 0.1812

Earth 94338-08-24 12:43 G 36177541.96 36177542.03 36177542.11 0.2698 0.2330 *

Saturn 94342-08-17 22:48 G 36178996.29 36178996.45 36178996.61 0.0257 0.0175

Saturn 94343-04-03 18:29 G 36179225.06 36179225.27 36179225.49 0.0257 0.0005

Jupiter 94343-10-21 03:50 G 36179425.48 36179425.66 36179425.85 0.0502 0.0217

Saturn 94343-11-18 14:09 G 36179453.95 36179454.09 36179454.25 0.0258 0.0183

Jupiter 94344-06-13 22:48 G 36179662.31 36179662.45 36179662.59 0.0499 0.0364

Uranus 94345-09-28 16:48 G 36180134.20 36180134.20 36180134.22 0.0141 0.0141

Uranus 94346-05-13 02:53 G 36180360.50 36180360.62 36180360.76 0.0141 0.0114

Moon 94346-08-21 21:36 G 36180461.31 36180461.40 36180461.50 0.2699 0.2138

Earth 94346-08-22 03:07 G 36180461.49 36180461.63 36180461.77 0.2699 0.1320 *

Uranus 94346-12-25 12:57 G 36180586.88 36180587.04 36180587.22 0.0141 0.0087

Uranus 94347-08-08 22:33 G 36180813.26 36180813.44 36180813.65 0.0140 0.0060

Uranus 94348-03-22 08:09 G 36181039.63 36181039.84 36181040.06 0.0140 0.0032

Uranus 94348-11-03 17:31 G 36181266.01 36181266.23 36181266.45 0.0140 0.0005

Uranus 94349-06-18 02:24 G 36181492.39 36181492.60 36181492.82 0.0140 0.0022

Jupiter 94349-08-18 23:31 G 36181554.39 36181554.48 36181554.58 0.0522 0.0456

Uranus 94350-01-30 11:31 G 36181718.78 36181718.98 36181719.19 0.0140 0.0048

Jupiter 94350-04-13 02:09 G 36181791.41 36181791.59 36181791.78 0.0526 0.0190

Uranus 94350-09-13 19:55 G 36181945.16 36181945.33 36181945.52 0.0139 0.0074

Uranus 94351-04-28 04:05 G 36182171.54 36182171.67 36182171.84 0.0139 0.0101

Uranus 94351-12-10 12:43 G 36182397.94 36182398.03 36182398.13 0.0139 0.0125

Jupiter 94355-06-26 01:41 G 36183691.44 36183691.57 36183691.71 0.0503 0.0380

Jupiter 94356-02-17 22:33 G 36183928.25 36183928.44 36183928.63 0.0500 0.0208

Saturn 94357-01-27 03:36 G 36184272.64 36184272.65 36184272.67 0.0305 0.0305

Saturn 94357-09-14 10:48 G 36184502.74 36184502.95 36184503.16 0.0305 0.0009

Saturn 94358-05-02 18:00 G 36184733.19 36184733.25 36184733.31 0.0304 0.0288

Neptune 94359-07-14 08:38 G 36185170.80 36185170.86 36185170.95 0.0089 0.0083

Neptune 94360-02-24 21:36 G 36185396.28 36185396.40 36185396.53 0.0089 0.0073

Neptune 94360-10-07 10:05 G 36185621.78 36185621.92 36185622.09 0.0089 0.0062

Neptune 94361-05-20 23:17 G 36185847.30 36185847.47 36185847.66 0.0089 0.0051

Jupiter 94361-12-16 21:21 G 36186057.19 36186057.39 36186057.59 0.0525 0.0007

Neptune 94362-01-01 12:14 G 36186072.82 36186073.01 36186073.21 0.0089 0.0041

Neptune 94362-08-15 00:57 G 36186298.35 36186298.54 36186298.76 0.0089 0.0030

Mars 94363-01-15 08:38 G 36186451.68 36186451.86 36186452.03 0.1877 0.0053

Neptune 94363-03-28 13:55 G 36186523.87 36186524.08 36186524.30 0.0089 0.0019

Neptune 94363-11-09 02:53 G 36186749.40 36186749.62 36186749.84 0.0089 0.0008

Neptune 94364-06-21 15:50 G 36186974.94 36186975.16 36186975.38 0.0089 0.0003

Neptune 94365-02-02 04:33 G 36187200.48 36187200.69 36187200.91 0.0089 0.0014

Neptune 94365-09-15 17:17 G 36187426.02 36187426.22 36187426.44 0.0089 0.0024

Neptune 94366-04-29 06:14 G 36187651.57 36187651.76 36187651.97 0.0089 0.0035

Neptune 94366-12-10 19:12 G 36187877.12 36187877.30 36187877.49 0.0089 0.0045

Neptune 94367-07-24 07:55 G 36188102.68 36188102.83 36188103.01 0.0089 0.0056

Mars 94367-08-26 15:36 G 36188136.03 36188136.15 36188136.26 0.1656 0.1221

Jupiter 94367-10-23 22:05 G 36188194.22 36188194.42 36188194.63 0.0501 0.0049

Neptune 94368-03-05 20:38 G 36188328.24 36188328.36 36188328.52 0.0089 0.0067

Neptune 94368-10-17 09:50 G 36188553.81 36188553.91 36188554.02 0.0089 0.0077

Neptune 94369-05-30 22:19 G 36188779.42 36188779.43 36188779.48 0.0089 0.0088

Saturn 94372-02-27 23:17 G 36189782.30 36189782.47 36189782.64 0.0257 0.0154

Saturn 94372-10-13 18:57 G 36190011.07 36190011.29 36190011.50 0.0258 0.0025

Saturn 94373-05-30 14:09 G 36190239.98 36190240.09 36190240.23 0.0258 0.0205

Jupiter 94373-08-21 16:33 G 36190323.00 36190323.19 36190323.38 0.0524 0.0177

Jupiter 94374-04-15 21:50 G 36190560.34 36190560.41 36190560.50 0.0527 0.0480

Jupiter 94379-06-28 20:53 G 36192460.16 36192460.37 36192460.57 0.0501 0.0113

Pluto 94379-10-14 01:12 G 36192567.39 36192567.55 36192567.75 0.0065 0.0037

Jupiter 94380-02-20 14:53 G 36192697.05 36192697.12 36192697.19 0.0499 0.0464

Pluto 94380-05-26 05:45 G 36192792.52 36192792.74 36192792.95 0.0066 0.0006

Pluto 94381-01-06 09:07 G 36193017.76 36193017.88 36193018.05 0.0066 0.0049

Jupiter 94385-04-26 14:24 G 36194588.96 36194589.10 36194589.25 0.0523 0.0352

Jupiter 94385-12-19 18:14 G 36194826.10 36194826.26 36194826.43 0.0526 0.0302

Saturn 94386-08-09 04:48 G 36195058.61 36195058.70 36195058.79 0.0305 0.0275

Saturn 94387-03-27 11:45 G 36195288.78 36195288.99 36195289.20 0.0305 0.0021

Uranus 94389-09-22 02:38 G 36196198.52 36196198.61 36196198.74 0.0137 0.0117

Uranus 94390-05-06 10:19 G 36196424.78 36196424.93 36196425.10 0.0137 0.0092

Uranus 94390-12-18 17:45 G 36196651.06 36196651.24 36196651.44 0.0137 0.0068

Jupiter 94391-03-03 15:50 G 36196725.99 36196726.16 36196726.33 0.0502 0.0281

Uranus 94391-08-02 01:41 G 36196877.37 36196877.57 36196877.78 0.0138 0.0042

Jupiter 94391-10-26 11:17 G 36196962.81 36196962.97 36196963.14 0.0499 0.0304

Uranus 94392-03-15 09:36 G 36197103.68 36197103.90 36197104.12 0.0138 0.0017

Uranus 94392-10-27 17:31 G 36197330.01 36197330.23 36197330.45 0.0138 0.0009

Uranus 94393-06-11 01:41 G 36197556.37 36197556.57 36197556.79 0.0138 0.0035

Uranus 94394-01-23 10:05 G 36197782.73 36197782.92 36197783.12 0.0138 0.0060

Uranus 94394-09-06 18:29 G 36198009.11 36198009.27 36198009.45 0.0139 0.0087

Uranus 94395-04-21 03:07 G 36198235.52 36198235.63 36198235.77 0.0139 0.0113

Uranus 94395-12-03 12:14 G 36198462.00 36198462.01 36198462.04 0.0139 0.0139

Jupiter 94396-12-30 12:29 G 36198855.02 36198855.02 36198855.03 0.0522 0.0522

Jupiter 94397-08-24 15:07 G 36199091.93 36199092.13 36199092.32 0.0526 0.0122

Mars 94401-06-24 04:19 G 36200491.55 36200491.68 36200491.81 0.1669 0.1088

Saturn 94401-09-09 00:14 G 36200568.33 36200568.51 36200568.70 0.0257 0.0132

Saturn 94402-04-25 19:55 G 36200797.13 36200797.33 36200797.55 0.0257 0.0049

Jupiter 94402-11-06 12:57 G 36200991.96 36200992.04 36200992.15 0.0503 0.0444

Saturn 94402-12-10 15:50 G 36201026.06 36201026.16 36201026.26 0.0258 0.0227

Jupiter 94403-07-01 10:19 G 36201228.73 36201228.93 36201229.13 0.0500 0.0145

Jupiter 94409-04-29 10:33 G 36203357.74 36203357.94 36203358.14 0.0525 0.0062

Jupiter 94415-03-06 09:07 G 36205494.67 36205494.88 36205495.09 0.0501 0.0017

Saturn 94416-02-19 06:57 G 36205844.68 36205844.79 36205844.92 0.0306 0.0248

Saturn 94416-10-06 14:09 G 36206074.89 36206075.09 36206075.30 0.0305 0.0051

Jupiter 94421-01-02 06:14 G 36207623.58 36207623.76 36207623.94 0.0524 0.0242

Jupiter 94421-08-27 10:33 G 36207860.82 36207860.94 36207861.07 0.0526 0.0414

Jupiter 94426-11-09 08:09 G 36209760.65 36209760.84 36209761.04 0.0502 0.0178

Jupiter 94427-07-04 03:07 G 36209997.52 36209997.63 36209997.75 0.0499 0.0404

Mars 94428-11-11 12:43 G 36210493.87 36210494.03 36210494.20 0.1873 0.0548

Uranus 94430-01-10 08:53 G 36210918.78 36210918.87 36210918.96 0.0141 0.0126

Uranus 94430-08-24 18:29 G 36211145.13 36211145.27 36211145.44 0.0141 0.0100

Saturn 94431-03-22 00:43 G 36211354.34 36211354.53 36211354.73 0.0257 0.0110

Uranus 94431-04-08 04:19 G 36211371.50 36211371.68 36211371.88 0.0141 0.0073

Saturn 94431-11-05 20:24 G 36211583.15 36211583.35 36211583.56 0.0258 0.0069

Uranus 94431-11-20 13:55 G 36211597.88 36211598.08 36211598.30 0.0140 0.0045

Saturn 94432-06-21 15:50 G 36211812.11 36211812.16 36211812.22 0.0258 0.0249

Uranus 94432-07-03 23:31 G 36211824.26 36211824.48 36211824.69 0.0140 0.0018

Jupiter 94432-09-07 01:55 G 36211889.47 36211889.58 36211889.70 0.0523 0.0420

Uranus 94433-02-15 08:38 G 36212050.64 36212050.86 36212051.08 0.0140 0.0009

Jupiter 94433-05-02 05:02 G 36212126.53 36212126.71 36212126.89 0.0526 0.0230

Mars 94433-06-23 02:09 G 36212178.46 36212178.59 36212178.73 0.1659 0.1001

Uranus 94433-09-29 17:31 G 36212277.02 36212277.23 36212277.44 0.0140 0.0035

Uranus 94434-05-14 01:55 G 36212503.40 36212503.58 36212503.79 0.0140 0.0062

Uranus 94434-12-26 10:33 G 36212729.79 36212729.94 36212730.12 0.0139 0.0088

Uranus 94435-08-09 18:43 G 36212956.17 36212956.28 36212956.43 0.0139 0.0113

Uranus 94436-03-23 02:53 G 36213182.61 36213182.62 36213182.66 0.0139 0.0138

Jupiter 94438-07-15 06:14 G 36214026.61 36214026.76 36214026.91 0.0503 0.0340

Jupiter 94439-03-09 02:38 G 36214263.43 36214263.61 36214263.79 0.0500 0.0248

Neptune 94442-11-24 16:05 G 36215620.10 36215620.17 36215620.27 0.0088 0.0081

Neptune 94443-07-08 05:02 G 36215845.60 36215845.71 36215845.87 0.0088 0.0071

Neptune 94444-02-18 18:29 G 36216071.12 36216071.27 36216071.45 0.0088 0.0060

Neptune 94444-10-01 07:26 G 36216296.64 36216296.81 36216297.01 0.0088 0.0049

Jupiter 94445-01-05 01:55 G 36216392.38 36216392.58 36216392.78 0.0525 0.0049

Neptune 94445-05-14 20:53 G 36216522.18 36216522.37 36216522.58 0.0088 0.0038

Saturn 94445-08-31 07:55 G 36216630.69 36216630.83 36216630.98 0.0305 0.0219

Neptune 94445-12-26 10:05 G 36216747.72 36216747.92 36216748.14 0.0088 0.0028

Saturn 94446-04-18 14:53 G 36216860.92 36216861.12 36216861.33 0.0305 0.0079

Neptune 94446-08-08 23:17 G 36216973.26 36216973.47 36216973.70 0.0088 0.0017

Neptune 94447-03-22 12:29 G 36217198.80 36217199.02 36217199.25 0.0088 0.0007

Neptune 94447-11-03 01:41 G 36217424.35 36217424.57 36217424.80 0.0088 0.0004

Neptune 94448-06-15 14:38 G 36217649.90 36217650.11 36217650.34 0.0088 0.0015

Neptune 94449-01-27 03:50 G 36217875.46 36217875.66 36217875.88 0.0088 0.0026

Neptune 94449-09-09 16:48 G 36218101.01 36218101.20 36218101.42 0.0088 0.0037

Neptune 94450-04-23 06:14 G 36218326.58 36218326.76 36218326.95 0.0088 0.0047

Jupiter 94450-11-11 22:48 G 36218529.24 36218529.45 36218529.65 0.0500 0.0083

Neptune 94450-12-04 19:12 G 36218552.15 36218552.30 36218552.49 0.0088 0.0058

Neptune 94451-07-18 08:38 G 36218777.73 36218777.86 36218778.01 0.0088 0.0068

Neptune 94452-02-28 21:21 G 36219003.31 36219003.39 36219003.51 0.0088 0.0079

Jupiter 94456-09-09 23:02 G 36220658.27 36220658.46 36220658.66 0.0525 0.0129

Saturn 94460-10-01 01:55 G 36222140.38 36222140.58 36222140.78 0.0257 0.0088

Saturn 94461-05-17 21:21 G 36222369.20 36222369.39 36222369.60 0.0258 0.0093

Jupiter 94462-07-17 20:53 G 36222795.17 36222795.37 36222795.58 0.0501 0.0080

Jupiter 94463-03-11 14:38 G 36223032.10 36223032.11 36223032.13 0.0499 0.0496

Mars 94467-04-21 14:53 G 36224534.02 36224534.12 36224534.22 0.1672 0.1328

Pluto 94467-06-14 17:31 G 36224588.13 36224588.23 36224588.36 0.0079 0.0068

Pluto 94468-01-26 04:05 G 36224813.45 36224813.67 36224813.90 0.0079 0.0009

Moon 94468-02-24 12:29 G 36224842.88 36224843.02 36224843.17 0.2637 0.0803

Earth 94468-02-24 17:02 G 36224843.06 36224843.21 36224843.36 0.2633 0.0882 *

Jupiter 94468-05-15 19:26 G 36224924.15 36224924.31 36224924.47 0.0523 0.0309

Jupiter 94469-01-07 23:17 G 36225161.32 36225161.47 36225161.62 0.0526 0.0347

Uranus 94473-05-22 11:45 G 36226756.93 36226756.99 36226757.09 0.0137 0.0127

Uranus 94474-01-03 19:26 G 36226983.17 36226983.31 36226983.46 0.0137 0.0103

Jupiter 94474-03-22 18:57 G 36227061.11 36227061.29 36227061.47 0.0502 0.0244

Uranus 94474-08-18 02:53 G 36227209.44 36227209.62 36227209.80 0.0137 0.0078

Jupiter 94474-11-14 14:53 G 36227297.97 36227298.12 36227298.27 0.0499 0.0343

Saturn 94475-03-13 10:05 G 36227416.76 36227416.92 36227417.08 0.0306 0.0191

Uranus 94475-04-01 10:33 G 36227435.74 36227435.94 36227436.14 0.0138 0.0053

Saturn 94475-10-29 17:02 G 36227647.02 36227647.21 36227647.42 0.0305 0.0109

Uranus 94475-11-13 18:14 G 36227662.05 36227662.26 36227662.47 0.0138 0.0028

Earth 94476-02-22 08:53 G 36227762.80 36227762.87 36227762.94 0.2632 0.2367

Moon 94476-02-22 08:09 G 36227762.84 36227762.84 36227762.84 0.2639 0.2635 *

Uranus 94476-06-27 02:24 G 36227888.38 36227888.60 36227888.81 0.0138 0.0003

Uranus	94477-02-08 10:19 G	36228114.72	36228114.93	36228115.15	0.0138	0.0024
Uranus	94477-09-22 18:29 G	36228341.08	36228341.27	36228341.48	0.0138	0.0050
Uranus	94478-05-07 02:53 G	36228567.45	36228567.62	36228567.82	0.0139	0.0076
Uranus	94478-12-19 11:45 G	36228793.85	36228793.99	36228794.14	0.0139	0.0101
Uranus	94479-08-02 20:38 G	36229020.29	36229020.36	36229020.46	0.0139	0.0127
Jupiter	94480-01-19 15:36 G	36229190.09	36229190.15	36229190.23	0.0522	0.0485
Jupiter	94480-09-12 18:00 G	36229427.06	36229427.25	36229427.44	0.0525	0.0163
Jupiter	94485-11-25 17:17 G	36231327.10	36231327.22	36231327.34	0.0503	0.0406
Jupiter	94486-07-20 14:24 G	36231563.91	36231564.10	36231564.30	0.0500	0.0185
Saturn	94489-08-27 06:29 G	36232697.71	36232697.77	36232697.84	0.0257	0.0245
Saturn	94490-04-13 02:24 G	36232926.40	36232926.60	36232926.81	0.0257	0.0066
Saturn	94490-11-27 22:05 G	36233155.23	36233155.42	36233155.62	0.0258	0.0114
Jupiter	94492-05-18 12:57 G	36233692.84	36233693.04	36233693.24	0.0525	0.0023
Mars	94494-09-08 18:00 G	36234536.11	36234536.25	36234536.39	0.1869	0.1088
Jupiter	94498-03-25 13:26 G	36235829.85	36235830.06	36235830.26	0.0501	0.0027
Mars	94499-04-20 13:26 G	36236220.90	36236221.06	36236221.21	0.1662	0.0787
Jupiter	94504-01-23 10:05 G	36237958.74	36237958.92	36237959.11	0.0524	0.0202
Jupiter	94504-09-16 15:07 G	36238196.04	36238196.13	36238196.24	0.0527	0.0458
Saturn	94504-09-23 11:45 G	36238202.82	36238202.99	36238203.17	0.0305	0.0161
Saturn	94505-05-11 18:57 G	36238433.11	36238433.29	36238433.48	0.0304	0.0138
Jupiter	94509-11-29 09:07 G	36240095.68	36240095.88	36240096.08	0.0501	0.0144
Jupiter	94510-07-24 03:07 G	36240332.54	36240332.63	36240332.74	0.0499	0.0437
Uranus	94513-09-10 15:36 G	36241477.12	36241477.15	36241477.20	0.0141	0.0138
Uranus	94514-04-25 01:41 G	36241703.45	36241703.57	36241703.71	0.0141	0.0111
Uranus	94514-12-07 11:45 G	36241929.82	36241929.99	36241930.17	0.0141	0.0084
Uranus	94515-07-21 21:07 G	36242156.19	36242156.38	36242156.59	0.0140	0.0058
Jupiter	94515-09-28 07:26 G	36242224.68	36242224.81	36242224.95	0.0523	0.0377
Uranus	94516-03-04 06:43 G	36242382.57	36242382.78	36242383.00	0.0140	0.0030
Jupiter	94516-05-22 11:31 G	36242461.81	36242461.98	36242462.15	0.0526	0.0279
Uranus	94516-10-16 15:50 G	36242608.95	36242609.16	36242609.38	0.0140	0.0005

Uranus 94517-05-31 00:57 G 36242835.33 36242835.54 36242835.75 0.0140 0.0023

Uranus 94518-01-12 09:50 G 36243061.71 36243061.91 36243062.12 0.0140 0.0049

Uranus 94518-08-26 18:14 G 36243288.09 36243288.26 36243288.45 0.0139 0.0076

Saturn 94519-03-10 07:41 G 36243483.73 36243483.82 36243483.94 0.0257 0.0224

Uranus 94519-04-10 02:38 G 36243514.47 36243514.61 36243514.77 0.0139 0.0101

Saturn 94519-10-25 03:50 G 36243712.45 36243712.66 36243712.88 0.0257 0.0043

Uranus 94519-11-22 11:02 G 36243740.88 36243740.96 36243741.05 0.0139 0.0126

Saturn 94520-06-09 23:31 G 36243941.30 36243941.48 36243941.67 0.0258 0.0137

Jupiter 94521-08-04 06:43 G 36244361.62 36244361.78 36244361.94 0.0502 0.0307

Jupiter 94522-03-29 02:24 G 36244598.43 36244598.60 36244598.77 0.0499 0.0280

Neptune 94523-10-16 19:41 G 36245165.29 36245165.32 36245165.40 0.0089 0.0087

Neptune 94524-05-29 08:53 G 36245390.77 36245390.87 36245391.00 0.0089 0.0076

Neptune 94525-01-09 21:21 G 36245616.27 36245616.39 36245616.56 0.0089 0.0066

Neptune 94525-08-23 10:19 G 36245841.77 36245841.93 36245842.12 0.0089 0.0055

Neptune 94526-04-05 23:17 G 36246067.29 36246067.47 36246067.67 0.0089 0.0044

Neptune 94526-11-17 12:00 G 36246292.81 36246293.00 36246293.22 0.0089 0.0033

Neptune 94527-07-01 00:57 G 36246518.34 36246518.54 36246518.76 0.0089 0.0022

Jupiter 94528-01-26 06:29 G 36246727.57 36246727.77 36246727.96 0.0525 0.0094

Neptune 94528-02-11 13:55 G 36246743.87 36246744.08 36246744.30 0.0089 0.0012

Neptune 94528-09-24 02:53 G 36246969.40 36246969.62 36246969.84 0.0089 0.0001

Neptune 94529-05-07 15:50 G 36247194.95 36247195.16 36247195.38 0.0089 0.0010

Neptune 94529-12-19 04:33 G 36247420.49 36247420.69 36247420.91 0.0089 0.0022

Neptune 94530-08-01 17:31 G 36247646.03 36247646.23 36247646.44 0.0089 0.0032

Neptune 94531-03-15 06:14 G 36247871.58 36247871.76 36247871.96 0.0089 0.0043

Neptune 94531-10-26 19:12 G 36248097.13 36248097.30 36248097.48 0.0089 0.0053

Neptune 94532-06-08 08:09 G 36248322.70 36248322.84 36248323.00 0.0089 0.0064

Neptune 94533-01-19 20:38 G 36248548.27 36248548.36 36248548.51 0.0089 0.0075

Mars 94533-02-17 01:55 G 36248576.52 36248576.58 36248576.64 0.1675 0.1556

Jupiter 94533-04-09 03:50 G 36248627.59 36248627.66 36248627.73 0.0503 0.0472

Neptune 94533-09-02 09:50 G 36248773.86 36248773.91 36248773.98 0.0089 0.0085

Jupiter 94533-12-02 01:41 G 36248864.37 36248864.57 36248864.77 0.0500 0.0120

Saturn 94534-04-05 14:38 G 36248988.93 36248989.11 36248989.31 0.0305 0.0132

Saturn 94534-11-21 21:50 G 36249219.24 36249219.41 36249219.59 0.0305 0.0169

Jupiter 94539-10-01 01:41 G 36250993.38 36250993.57 36250993.77 0.0524 0.0091

Jupiter 94545-08-07 00:29 G 36253130.31 36253130.52 36253130.72 0.0501 0.0042

Saturn 94548-09-19 08:53 G 36254269.75 36254269.87 36254270.02 0.0257 0.0200

Saturn 94549-05-06 05:02 G 36254498.50 36254498.71 36254498.93 0.0257 0.0020

Saturn 94549-12-21 00:43 G 36254727.37 36254727.53 36254727.71 0.0258 0.0161

Jupiter 94551-06-05 20:53 G 36255259.21 36255259.37 36255259.55 0.0523 0.0274

Jupiter 94552-01-29 01:12 G 36255496.42 36255496.55 36255496.69 0.0526 0.0385

Uranus 94557-01-20 20:53 G 36257315.37 36257315.37 36257315.39 0.0137 0.0137

Jupiter 94557-04-11 22:33 G 36257396.26 36257396.44 36257396.63 0.0502 0.0205

Uranus 94557-09-04 03:50 G 36257541.56 36257541.66 36257541.80 0.0137 0.0114

Jupiter 94557-12-04 17:45 G 36257633.12 36257633.24 36257633.38 0.0499 0.0382

Uranus 94558-04-18 11:17 G 36257767.82 36257767.97 36257768.15 0.0137 0.0089

Uranus 94558-11-30 18:57 G 36257994.11 36257994.29 36257994.49 0.0138 0.0064

Uranus 94559-07-15 02:53 G 36258220.41 36258220.62 36258220.83 0.0138 0.0039

Uranus 94560-02-26 10:48 G 36258446.73 36258446.95 36258447.17 0.0138 0.0013

Mars 94560-07-06 22:33 G 36258578.36 36258578.44 36258578.52 0.1864 0.1643

Uranus 94560-10-09 18:43 G 36258673.07 36258673.28 36258673.50 0.0138 0.0013

Uranus 94561-05-24 02:53 G 36258899.42 36258899.62 36258899.84 0.0138 0.0038

Uranus 94562-01-05 11:31 G 36259125.79 36259125.98 36259126.17 0.0139 0.0064

Uranus 94562-08-19 20:09 G 36259352.18 36259352.34 36259352.51 0.0139 0.0090

Jupiter 94563-02-08 18:29 G 36259525.17 36259525.27 36259525.37 0.0523 0.0448

Uranus 94563-04-03 04:48 G 36259578.59 36259578.70 36259578.83 0.0139 0.0116

Jupiter 94563-10-03 21:21 G 36259762.21 36259762.39 36259762.57 0.0526 0.0204

Saturn 94563-10-16 17:31 G 36259775.04 36259775.23 36259775.43 0.0305 0.0099

Saturn 94564-06-03 00:43 G 36260005.38 36260005.53 36260005.69 0.0304 0.0200

Mars 94565-02-16 00:14 G 36260263.35 36260263.51 36260263.68 0.1665 0.0562

Jupiter 94568-12-15 18:14 G 36261662.12 36261662.26 36261662.40 0.0502 0.0372

Jupiter 94569-08-09 14:24 G 36261898.92 36261899.10 36261899.29 0.0499 0.0218

Jupiter 94575-06-08 17:45 G 36264028.04 36264028.24 36264028.44 0.0526 0.0022

Saturn 94578-04-01 11:02 G 36265055.81 36265055.96 36265056.12 0.0258 0.0177

Saturn 94578-11-16 07:12 G 36265284.58 36265284.80 36265285.01 0.0258 0.0005

Saturn 94579-07-03 02:38 G 36265513.47 36265513.61 36265513.77 0.0258 0.0185

Jupiter 94581-04-14 12:43 G 36266164.83 36266165.03 36266165.24 0.0500 0.0057

Earth 94581-08-25 13:12 G 36266297.97 36266298.05 36266298.13 0.2699 0.2294

Jupiter 94587-02-11 13:26 G 36268293.87 36268294.06 36268294.25 0.0524 0.0162

Jupiter 94587-10-06 18:43 G 36268531.22 36268531.28 36268531.34 0.0527 0.0499

Earth 94589-08-23 03:21 G 36269217.51 36269217.64 36269217.78 0.2700 0.1348

Moon 94589-08-23 08:09 G 36269217.70 36269217.84 36269217.99 0.2704 0.0870 *

Mars 94592-07-06 15:21 G 36270266.08 36270266.14 36270266.20 0.1878 0.1753

Jupiter 94592-12-18 11:02 G 36270430.75 36270430.96 36270431.16 0.0501 0.0109

Saturn 94593-04-27 22:05 G 36270561.21 36270561.42 36270561.62 0.0305 0.0065

Jupiter 94593-08-12 05:02 G 36270667.66 36270667.71 36270667.78 0.0499 0.0473

Saturn 94593-12-14 05:02 G 36270791.58 36270791.71 36270791.85 0.0305 0.0235

Uranus 94597-12-23 10:05 G 36272261.82 36272261.92 36272262.03 0.0141 0.0122

Uranus 94598-08-06 19:41 G 36272488.17 36272488.32 36272488.49 0.0141 0.0096

Jupiter 94598-10-17 09:21 G 36272559.74 36272559.89 36272560.04 0.0523 0.0342

Uranus 94599-03-21 05:31 G 36272714.54 36272714.73 36272714.92 0.0140 0.0069

Jupiter 94599-06-11 12:57 G 36272796.88 36272797.04 36272797.20 0.0526 0.0315

Uranus 94599-11-02 14:38 G 36272940.92 36272941.11 36272941.33 0.0140 0.0043

Uranus 94600-06-17 00:14 G 36273167.29 36273167.51 36273167.73 0.0140 0.0015

Uranus 94601-01-29 09:21 G 36273393.68 36273393.89 36273394.11 0.0140 0.0012

Uranus 94601-09-12 18:14 G 36273620.05 36273620.26 36273620.47 0.0140 0.0038

Uranus 94602-04-27 02:53 G 36273846.43 36273846.62 36273846.81 0.0139 0.0064

Uranus 94602-12-09 11:31 G 36274072.81 36274072.98 36274073.14 0.0139 0.0090

Uranus 94603-07-23 19:26 G 36274299.20 36274299.31 36274299.44 0.0139 0.0115

Jupiter 94604-08-24 08:53 G 36274696.69 36274696.87 36274697.04 0.0502 0.0273

Jupiter 94605-04-18 04:48 G 36274933.54 36274933.70 36274933.86 0.0499 0.0316

Neptune 94607-02-28 02:38 G 36275614.56 36275614.61 36275614.71 0.0088 0.0083

Neptune 94607-10-11 16:19 G 36275840.06 36275840.18 36275840.31 0.0088 0.0073

Saturn 94607-10-13 13:12 G 36275841.88 36275842.05 36275842.23 0.0257 0.0152

Neptune 94608-05-24 05:17 G 36276065.58 36276065.72 36276065.90 0.0088 0.0062

Saturn 94608-05-29 09:07 G 36276070.67 36276070.88 36276071.10 0.0258 0.0030

Neptune 94609-01-04 18:57 G 36276291.11 36276291.29 36276291.47 0.0088 0.0051

Saturn 94609-01-13 04:48 G 36276299.59 36276299.70 36276299.84 0.0258 0.0210

Neptune 94609-08-18 07:55 G 36276516.65 36276516.83 36276517.04 0.0088 0.0041

Neptune 94610-03-31 21:07 G 36276742.18 36276742.38 36276742.60 0.0088 0.0031

Jupiter 94610-06-23 05:02 G 36276825.69 36276825.71 36276825.73 0.0522 0.0518

Neptune 94610-11-12 10:19 G 36276967.73 36276967.93 36276968.16 0.0088 0.0020

Jupiter 94611-02-15 06:57 G 36277062.59 36277062.79 36277062.98 0.0525 0.0129

Neptune 94611-06-25 23:45 G 36277193.27 36277193.49 36277193.72 0.0088 0.0009

Neptune 94612-02-06 12:57 G 36277418.82 36277419.04 36277419.26 0.0088 0.0002

Neptune 94612-09-19 01:55 G 36277644.37 36277644.58 36277644.81 0.0088 0.0013

Neptune 94613-05-02 14:53 G 36277869.92 36277870.12 36277870.35 0.0088 0.0024

Neptune 94613-12-14 04:19 G 36278095.48 36278095.68 36278095.89 0.0088 0.0034

Neptune 94614-07-27 17:17 G 36278321.05 36278321.22 36278321.43 0.0088 0.0045

Neptune 94615-03-10 06:43 G 36278546.61 36278546.78 36278546.96 0.0088 0.0055

Neptune 94615-10-21 19:26 G 36278772.18 36278772.31 36278772.48 0.0088 0.0066

Jupiter 94616-04-29 06:14 G 36278962.67 36278962.76 36278962.87 0.0503 0.0437

Neptune 94616-06-03 08:53 G 36278997.77 36278997.87 36278997.99 0.0088 0.0076

Jupiter 94616-12-22 03:50 G 36279199.46 36279199.66 36279199.85 0.0500 0.0157

Neptune 94617-01-14 21:50 G 36279223.39 36279223.41 36279223.47 0.0088 0.0087

Jupiter 94622-10-21 03:07 G 36281328.44 36281328.63 36281328.83 0.0525 0.0055

Saturn 94622-11-09 02:38 G 36281347.41 36281347.61 36281347.82 0.0305 0.0029

Saturn 94623-06-27 09:36 G 36281577.82 36281577.90 36281578.01 0.0304 0.0270

Pluto 94625-04-02 10:48 G 36282222.85 36282222.95 36282223.11 0.0065 0.0052

Pluto 94625-11-13 15:21 G 36282447.93 36282448.14 36282448.36 0.0066 0.0010

Pluto 94626-06-26 19:12 G 36282673.13 36282673.30 36282673.51 0.0066 0.0034

Jupiter 94628-08-27 00:00 G 36283465.29 36283465.50 36283465.71 0.0500 0.0012

Mars 94630-12-15 10:48 G 36284305.78 36284305.95 36284306.13 0.1668 0.0335

Jupiter 94634-06-25 23:31 G 36285594.31 36285594.48 36285594.66 0.0524 0.0236

Jupiter 94635-02-18 04:48 G 36285831.59 36285831.70 36285831.82 0.0527 0.0428

Saturn 94637-04-24 15:50 G 36286627.98 36286628.16 36286628.35 0.0258 0.0127

Saturn 94637-12-09 12:14 G 36286856.80 36286857.01 36286857.22 0.0258 0.0055

Saturn 94638-07-26 07:41 G 36287085.75 36287085.82 36287085.92 0.0258 0.0237

Jupiter 94640-05-01 21:50 G 36287731.21 36287731.41 36287731.60 0.0501 0.0175

Jupiter 94640-12-24 16:05 G 36287968.06 36287968.17 36287968.29 0.0499 0.0410

Uranus 94641-05-05 12:14 G 36288099.93 36288100.01 36288100.12 0.0137 0.0124

Uranus 94641-12-17 19:26 G 36288326.18 36288326.31 36288326.48 0.0137 0.0100

Uranus 94642-08-01 03:07 G 36288552.46 36288552.63 36288552.82 0.0138 0.0075

Uranus 94643-03-15 10:48 G 36288778.75 36288778.95 36288779.16 0.0138 0.0050

Uranus 94643-10-27 18:29 G 36289005.06 36289005.27 36289005.49 0.0138 0.0025

Uranus 94644-06-10 02:38 G 36289231.39 36289231.61 36289231.83 0.0138 0.0002

Uranus 94645-01-22 10:48 G 36289457.74 36289457.95 36289458.17 0.0138 0.0027

Uranus 94645-09-05 18:57 G 36289684.10 36289684.29 36289684.51 0.0139 0.0053

Jupiter 94646-02-28 19:55 G 36289860.21 36289860.33 36289860.45 0.0523 0.0415

Uranus 94646-04-20 03:50 G 36289910.48 36289910.66 36289910.84 0.0139 0.0078

Jupiter 94646-10-23 23:02 G 36290097.29 36290097.46 36290097.64 0.0526 0.0242

Uranus 94646-12-02 12:14 G 36290136.88 36290137.01 36290137.17 0.0139 0.0104

Uranus 94647-07-16 21:21 G 36290363.33 36290363.39 36290363.48 0.0139 0.0130

Saturn 94651-10-04 01:41 G 36291903.52 36291903.57 36291903.65 0.0305 0.0289

Jupiter 94652-01-05 18:29 G 36291997.12 36291997.27 36291997.43 0.0502 0.0342

Saturn 94652-05-21 08:38 G 36292133.65 36292133.86 36292134.07 0.0305 0.0010

Jupiter 94652-08-29 14:53 G 36292233.94 36292234.12 36292234.30 0.0500 0.0250

Mars 94658-05-04 20:24 G 36294308.22 36294308.35 36294308.48 0.1874 0.1199

Jupiter 94658-06-28 18:00 G 36294363.05 36294363.25 36294363.45 0.0525 0.0056

Jupiter 94664-05-04 13:26 G 36296499.86 36296500.06 36296500.27 0.0500 0.0089

Saturn 94666-11-04 19:12 G 36297414.10 36297414.30 36297414.50 0.0258 0.0100

Saturn 94667-06-21 15:21 G 36297642.94 36297643.14 36297643.34 0.0258 0.0082

Jupiter 94670-03-03 12:14 G 36298628.82 36298629.01 36298629.20 0.0524 0.0131

Jupiter 94676-01-08 11:45 G 36300765.78 36300765.99 36300766.19 0.0501 0.0076

Saturn 94681-04-15 08:24 G 36302689.75 36302689.85 36302689.98 0.0305 0.0249

Uranus 94681-08-23 18:00 G 36302820.19 36302820.25 36302820.33 0.0141 0.0133

Jupiter 94681-11-06 08:38 G 36302894.70 36302894.86 36302895.02 0.0523 0.0312

Saturn 94681-12-01 15:21 G 36302919.93 36302920.14 36302920.35 0.0304 0.0050

Uranus 94682-04-07 03:50 G 36303046.53 36303046.66 36303046.82 0.0141 0.0107

Jupiter 94682-07-01 12:57 G 36303131.89 36303132.04 36303132.18 0.0527 0.0350

Uranus 94682-11-19 13:41 G 36303272.90 36303273.07 36303273.26 0.0141 0.0080

Uranus 94683-07-03 23:17 G 36303499.28 36303499.47 36303499.68 0.0140 0.0053

Uranus 94684-02-15 08:38 G 36303725.65 36303725.86 36303726.08 0.0140 0.0027

Uranus 94684-09-28 18:00 G 36303952.03 36303952.25 36303952.47 0.0140 0.0001

Uranus 94685-05-13 02:53 G 36304178.41 36304178.62 36304178.84 0.0140 0.0027

Uranus 94685-12-25 11:45 G 36304404.79 36304404.99 36304405.19 0.0140 0.0053

Uranus 94686-08-08 20:24 G 36304631.17 36304631.35 36304631.53 0.0139 0.0079

Uranus 94687-03-23 04:33 G 36304857.56 36304857.69 36304857.84 0.0139 0.0104

Jupiter 94687-09-13 07:55 G 36305031.65 36305031.83 36305032.01 0.0501 0.0244

Uranus 94687-11-04 12:43 G 36305083.96 36305084.03 36305084.12 0.0139 0.0129

Neptune 94688-01-19 08:09 G 36305159.82 36305159.84 36305159.87 0.0089 0.0089

Jupiter 94688-05-07 02:53 G 36305268.47 36305268.62 36305268.77 0.0499 0.0344

Neptune 94688-08-31 20:24 G 36305385.27 36305385.35 36305385.48 0.0089 0.0079

Neptune 94689-04-14 09:21 G 36305610.77 36305610.89 36305611.05 0.0089 0.0068

Neptune 94689-11-25 22:33 G 36305836.27 36305836.44 36305836.61 0.0089 0.0057

Neptune 94690-07-09 11:02 G 36306061.79 36306061.96 36306062.16 0.0089 0.0046

Neptune 94691-02-20 00:00 G 36306287.30 36306287.50 36306287.70 0.0089 0.0035

Neptune 94691-10-03 12:43 G 36306512.83 36306513.03 36306513.25 0.0089 0.0025

Neptune 94692-05-16 01:41 G 36306738.36 36306738.57 36306738.79 0.0089 0.0014

Neptune 94692-12-27 14:38 G 36306963.89 36306964.11 36306964.33 0.0089 0.0003

Jupiter 94693-07-12 04:48 G 36307160.64 36307160.70 36307160.77 0.0523 0.0490

Neptune 94693-08-10 03:21 G 36307189.43 36307189.64 36307189.86 0.0089 0.0008

Jupiter 94694-03-06 07:55 G 36307397.64 36307397.83 36307398.02 0.0526 0.0165

Neptune 94694-03-23 16:19 G 36307414.96 36307415.18 36307415.39 0.0089 0.0019

Neptune 94694-11-04 05:02 G 36307640.51 36307640.71 36307640.92 0.0089 0.0029

Neptune 94695-06-17 17:45 G 36307866.06 36307866.24 36307866.45 0.0089 0.0041

Saturn 94695-10-01 02:09 G 36307971.57 36307971.59 36307971.63 0.0258 0.0255

Neptune 94696-01-29 06:43 G 36308091.61 36308091.78 36308091.97 0.0089 0.0051

Saturn 94696-05-16 22:48 G 36308200.25 36308200.45 36308200.66 0.0258 0.0073

Neptune 94696-09-10 19:41 G 36308317.17 36308317.32 36308317.48 0.0089 0.0061

Mars 94696-10-11 21:36 G 36308348.23 36308348.40 36308348.58 0.1671 0.0109

Saturn 94696-12-31 19:12 G 36308429.10 36308429.30 36308429.49 0.0258 0.0110

Neptune 94697-04-24 08:24 G 36308542.74 36308542.85 36308542.99 0.0089 0.0072

Neptune 94697-12-05 21:07 G 36308768.32 36308768.38 36308768.48 0.0089 0.0083

Jupiter 94699-05-19 04:48 G 36309297.59 36309297.70 36309297.82 0.0502 0.0409

Jupiter 94700-01-11 01:12 G 36309534.36 36309534.55 36309534.74 0.0499 0.0184

Jupiter 94705-11-10 03:07 G 36311663.43 36311663.63 36311663.83 0.0525 0.0024

Saturn 94710-10-27 16:33 G 36313476.04 36313476.19 36313476.35 0.0305 0.0206

Earth 94711-02-27 18:57 G 36313599.14 36313599.29 36313599.43 0.2633 0.1062

Moon 94711-02-28 00:14 G 36313599.38 36313599.51 36313599.65 0.2632 0.1417 *

Saturn 94711-06-14 23:17 G 36313706.28 36313706.47 36313706.67 0.0305 0.0093

Jupiter 94711-09-16 22:48 G 36313800.24 36313800.45 36313800.66 0.0500 0.0018

Pluto 94713-07-16 10:33 G 36314468.73 36314468.94 36314469.16 0.0079 0.0020

Pluto 94714-02-26 20:24 G 36314694.22 36314694.35 36314694.53 0.0078 0.0057

Jupiter 94717-07-15 22:19 G 36315929.25 36315929.43 36315929.62 0.0524 0.0207

Jupiter 94718-03-10 03:07 G 36316166.54 36316166.63 36316166.73 0.0527 0.0457

Earth 94719-02-25 10:48 G 36316518.87 36316518.95 36316519.04 0.2632 0.2197

Moon 94719-02-25 13:55 G 36316518.94 36316519.08 36316519.21 0.2627 0.1577 *

Jupiter 94723-05-22 20:24 G 36318066.15 36318066.35 36318066.55 0.0501 0.0148

Jupiter 94724-01-14 15:07 G 36318303.04 36318303.13 36318303.23 0.0499 0.0439

Mars 94724-03-02 00:43 G 36318350.37 36318350.53 36318350.69 0.1870 0.0624

Uranus 94725-01-03 19:55 G 36318658.31 36318658.33 36318658.40 0.0137 0.0134

Saturn 94725-04-13 06:14 G 36318757.67 36318757.76 36318757.88 0.0258 0.0226

Uranus 94725-08-18 03:07 G 36318884.52 36318884.63 36318884.78 0.0137 0.0111

Saturn 94725-11-28 03:21 G 36318986.43 36318986.64 36318986.85 0.0258 0.0043

Uranus 94726-04-01 10:33 G 36319110.78 36319110.94 36319111.12 0.0137 0.0086

Saturn 94726-07-14 23:17 G 36319215.30 36319215.47 36319215.66 0.0258 0.0139

Uranus 94726-11-13 18:14 G 36319337.07 36319337.26 36319337.46 0.0138 0.0061

Uranus 94727-06-28 02:09 G 36319563.38 36319563.59 36319563.80 0.0138 0.0036

Uranus 94728-02-09 09:50 G 36319789.70 36319789.91 36319790.13 0.0138 0.0011

Uranus 94728-09-22 18:00 G 36320016.03 36320016.25 36320016.47 0.0138 0.0015

Jupiter 94729-03-20 17:17 G 36320195.09 36320195.22 36320195.35 0.0523 0.0389

Uranus 94729-05-07 01:55 G 36320242.38 36320242.58 36320242.80 0.0138 0.0041

Jupiter 94729-11-12 20:09 G 36320432.17 36320432.34 36320432.52 0.0526 0.0269

Uranus 94729-12-19 10:33 G 36320468.75 36320468.94 36320469.14 0.0139 0.0066

Uranus 94730-08-02 19:12 G 36320695.15 36320695.30 36320695.48 0.0139 0.0092

Uranus 94731-03-17 04:19 G 36320921.57 36320921.68 36320921.80 0.0139 0.0117

Jupiter 94735-01-25 17:45 G 36322332.08 36322332.24 36322332.40 0.0502 0.0313

Jupiter 94735-09-19 13:55 G 36322568.91 36322569.08 36322569.25 0.0499 0.0280

Saturn 94740-05-09 01:26 G 36324262.39 36324262.56 36324262.74 0.0304 0.0161

Saturn 94740-12-25 07:55 G 36324492.65 36324492.83 36324493.02 0.0304 0.0138

Jupiter 94741-07-18 15:36 G 36324697.95 36324698.15 36324698.35 0.0526 0.0084

Jupiter 94746-09-30 13:55 G 36326598.02 36326598.08 36326598.14 0.0503 0.0480

Jupiter 94747-05-25 11:02 G 36326834.76 36326834.96 36326835.16 0.0500 0.0114

Jupiter 94753-03-23 10:33 G 36328963.75 36328963.94 36328964.14 0.0525 0.0103

Saturn 94754-10-24 11:02 G 36329543.83 36329543.96 36329544.10 0.0258 0.0198

Saturn 94755-06-10 07:41 G 36329772.61 36329772.82 36329773.04 0.0258 0.0015

Saturn 94756-01-25 03:50 G 36330001.51 36330001.66 36330001.83 0.0259 0.0169

Jupiter 94759-01-28 08:38 G 36331100.65 36331100.86 36331101.06 0.0500 0.0051

Mars 94762-08-10 08:24 G 36332390.68 36332390.85 36332391.03 0.1674 0.0140

Jupiter 94764-11-26 06:29 G 36333229.60 36333229.77 36333229.94 0.0524 0.0287

Jupiter 94765-07-21 10:48 G 36333466.82 36333466.95 36333467.09 0.0527 0.0378

Uranus 94765-12-06 10:48 G 36333604.85 36333604.95 36333605.08 0.0141 0.0118

Uranus 94766-07-20 20:38 G 36333831.21 36333831.36 36333831.54 0.0141 0.0092

Uranus 94767-03-04 06:29 G 36334057.58 36334057.77 36334057.97 0.0141 0.0065

Uranus 94767-10-16 15:50 G 36334283.96 36334284.16 36334284.38 0.0140 0.0038

Uranus 94768-05-30 01:26 G 36334510.34 36334510.56 36334510.77 0.0140 0.0011

Uranus 94769-01-11 10:33 G 36334736.73 36334736.94 36334737.16 0.0140 0.0015

Uranus 94769-08-25 19:26 G 36334963.11 36334963.31 36334963.52 0.0140 0.0041

Saturn 94769-11-19 10:48 G 36335048.76 36335048.95 36335049.15 0.0305 0.0114

Uranus 94770-04-09 03:50 G 36335189.49 36335189.66 36335189.87 0.0139 0.0068

Saturn 94770-07-07 17:31 G 36335279.06 36335279.23 36335279.39 0.0304 0.0185

Jupiter 94770-10-03 04:48 G 36335366.52 36335366.70 36335366.89 0.0502 0.0221

Uranus 94770-11-21 12:14 G 36335415.87 36335416.01 36335416.19 0.0139 0.0094

Jupiter 94771-05-28 00:00 G 36335603.37 36335603.50 36335603.64 0.0499 0.0370

Neptune 94771-06-02 13:26 G 36335609.04 36335609.06 36335609.14 0.0088 0.0086

Uranus 94771-07-05 20:38 G 36335642.27 36335642.36 36335642.49 0.0139 0.0118

Neptune 94772-01-14 03:07 G 36335834.53 36335834.63 36335834.76 0.0088 0.0075

Neptune 94772-08-26 16:48 G 36336060.04 36336060.20 36336060.35 0.0088 0.0065

Neptune 94773-04-09 05:31 G 36336285.57 36336285.73 36336285.92 0.0088 0.0054

Neptune 94773-11-20 19:12 G 36336511.11 36336511.30 36336511.50 0.0088 0.0043

Neptune 94774-07-04 08:09 G 36336736.65 36336736.84 36336737.06 0.0088 0.0033

Neptune 94775-02-14 21:36 G 36336962.19 36336962.40 36336962.62 0.0088 0.0022

Neptune 94775-09-28 10:48 G 36337187.73 36337187.95 36337188.17 0.0088 0.0012

Neptune 94776-05-11 00:00 G 36337413.28 36337413.50 36337413.72 0.0088 0.0001

Jupiter 94776-08-01 02:38 G 36337495.52 36337495.61 36337495.70 0.0522 0.0465

Neptune 94776-12-22 13:26 G 36337638.84 36337639.06 36337639.28 0.0088 0.0010

Jupiter 94777-03-26 05:02 G 36337732.53 36337732.71 36337732.90 0.0526 0.0191

Neptune 94777-08-05 02:24 G 36337864.39 36337864.60 36337864.82 0.0088 0.0020

Neptune 94778-03-18 15:21 G 36338089.94 36338090.14 36338090.36 0.0088 0.0031

Neptune 94778-10-30 04:33 G 36338315.50 36338315.69 36338315.89 0.0088 0.0042

Neptune 94779-06-12 17:31 G 36338541.07 36338541.23 36338541.42 0.0088 0.0052

Neptune 94780-01-24 06:57 G 36338766.64 36338766.79 36338766.95 0.0088 0.0063

Neptune 94780-09-05 19:41 G 36338992.22 36338992.32 36338992.46 0.0088 0.0074

Neptune 94781-04-19 09:07 G 36339217.82 36339217.88 36339217.96 0.0088 0.0084

Jupiter 94782-06-08 01:26 G 36339632.43 36339632.56 36339632.69 0.0503 0.0388

Jupiter 94783-01-30 22:19 G 36339869.24 36339869.43 36339869.62 0.0500 0.0208

Saturn 94784-05-05 16:19 G 36340330.02 36340330.18 36340330.35 0.0258 0.0166

Saturn 94784-12-20 13:12 G 36340558.83 36340559.05 36340559.26 0.0258 0.0017

Saturn 94785-08-06 09:21 G 36340787.76 36340787.89 36340788.03 0.0258 0.0200

Jupiter 94788-11-28 22:48 G 36341998.25 36341998.45 36341998.65 0.0525 0.0008

Mars 94789-12-28 06:00 G 36342392.58 36342392.75 36342392.93 0.1865 0.0105

Jupiter 94794-10-05 20:24 G 36344135.14 36344135.35 36344135.56 0.0500 0.0045

Saturn 94799-06-01 21:21 G 36345835.19 36345835.39 36345835.60 0.0304 0.0066

Saturn 94800-01-18 04:05 G 36346065.54 36346065.67 36346065.80 0.0304 0.0233

Jupiter 94800-08-03 18:00 G 36346264.06 36346264.25 36346264.44 0.0524 0.0184

Jupiter 94801-03-28 23:02 G 36346501.39 36346501.46 36346501.54 0.0527 0.0482

Jupiter 94806-06-10 17:31 G 36348401.03 36348401.23 36348401.43 0.0501 0.0123

Jupiter 94807-02-02 11:17 G 36348637.90 36348637.97 36348638.05 0.0498 0.0461

Uranus 94809-04-17 10:48 G 36349442.86 36349442.95 36349443.06 0.0137 0.0121

Uranus 94809-11-29 18:00 G 36349669.10 36349669.25 36349669.41 0.0137 0.0097

Uranus 94810-07-14 01:26 G 36349895.39 36349895.56 36349895.75 0.0137 0.0072

Uranus 94811-02-25 09:07 G 36350121.68 36350121.88 36350122.09 0.0138 0.0048

Uranus 94811-10-09 16:48 G 36350347.99 36350348.20 36350348.42 0.0138 0.0023

Jupiter 94812-04-08 13:12 G 36350529.91 36350530.05 36350530.19 0.0524 0.0369

Uranus 94812-05-23 00:57 G 36350574.32 36350574.54 36350574.75 0.0138 0.0003

Jupiter 94812-12-01 17:17 G 36350767.05 36350767.22 36350767.38 0.0527 0.0296

Uranus 94813-01-04 08:53 G 36350800.66 36350800.87 36350801.09 0.0138 0.0029

Uranus 94813-08-18 17:31 G 36351027.03 36351027.23 36351027.43 0.0138 0.0054

Saturn 94813-11-15 21:50 G 36351116.23 36351116.41 36351116.59 0.0258 0.0136

Uranus 94814-04-02 01:41 G 36351253.41 36351253.57 36351253.76 0.0139 0.0080

Saturn 94814-07-02 18:14 G 36351345.05 36351345.26 36351345.48 0.0259 0.0048

Uranus 94814-11-14 10:33 G 36351479.81 36351479.94 36351480.09 0.0139 0.0105

Saturn 94815-02-16 14:24 G 36351574.02 36351574.10 36351574.21 0.0259 0.0231

Uranus 94815-06-28 19:12 G 36351706.25 36351706.30 36351706.40 0.0139 0.0131

Jupiter 94818-02-13 14:09 G 36352666.92 36352667.09 36352667.26 0.0502 0.0291

Jupiter 94818-10-08 09:36 G 36352903.73 36352903.90 36352904.06 0.0499 0.0302

Jupiter 94824-08-06 12:00 G 36355032.80 36355033.00 36355033.19 0.0526 0.0107

Moon 94824-08-27 14:24 G 36355053.98 36355054.10 36355054.21 0.2692 0.1982

Earth 94824-08-27 13:41 G 36355053.99 36355054.07 36355054.15 0.2700 0.2283 *

Mars 94828-06-06 19:12 G 36356433.13 36356433.30 36356433.47 0.1677 0.0370

Saturn 94828-12-12 08:24 G 36356621.64 36356621.85 36356622.06 0.0304 0.0015

Saturn 94829-07-30 14:53 G 36356852.05 36356852.12 36356852.20 0.0304 0.0284

Jupiter 94829-10-19 09:07 G 36356932.81 36356932.88 36356932.96 0.0503 0.0462

Jupiter 94830-06-13 06:43 G 36357169.58 36357169.78 36357169.98 0.0500 0.0136

Moon 94832-08-25 00:00 G 36357973.37 36357973.50 36357973.64 0.2695 0.1541

Earth 94832-08-25 04:05 G 36357973.53 36357973.67 36357973.80 0.2701 0.1363 *

Jupiter 94836-04-11 07:12 G 36359298.60 36359298.80 36359298.99 0.0525 0.0080

Jupiter 94842-02-16 03:50 G 36361435.46 36361435.66 36361435.87 0.0501 0.0032

Saturn 94843-05-29 03:21 G 36361902.45 36361902.64 36361902.85 0.0258 0.0103

Saturn 94844-01-13 00:14 G 36362131.31 36362131.51 36362131.72 0.0258 0.0081

Jupiter 94847-12-16 01:12 G 36363564.38 36363564.55 36363564.73 0.0523 0.0267

Jupiter 94848-08-09 05:17 G 36363801.59 36363801.72 36363801.85 0.0526 0.0399

Uranus 94849-08-05 15:50 G 36364163.10 36364163.16 36364163.26 0.0141 0.0131

Uranus 94850-03-20 02:09 G 36364389.45 36364389.59 36364389.74 0.0141 0.0104

Uranus 94850-11-01 11:45 G 36364615.82 36364615.99 36364616.19 0.0141 0.0078

Uranus 94851-06-15 21:36 G 36364842.20 36364842.40 36364842.61 0.0140 0.0051

Uranus 94852-01-28 07:26 G 36365068.59 36365068.81 36365069.02 0.0140 0.0024

Uranus 94852-09-10 16:33 G 36365294.98 36365295.19 36365295.41 0.0140 0.0004

Neptune 94852-12-04 08:38 G 36365379.77 36365379.86 36365379.96 0.0089 0.0081

Uranus 94853-04-25 01:41 G 36365521.36 36365521.57 36365521.78 0.0140 0.0029

Neptune 94853-07-17 21:07 G 36365605.26 36365605.38 36365605.53 0.0089 0.0070

Jupiter 94853-10-22 01:12 G 36365701.36 36365701.55 36365701.74 0.0502 0.0198

Uranus 94853-12-07 10:19 G 36365747.74 36365747.93 36365748.14 0.0140 0.0056

Neptune 94854-02-28 09:50 G 36365830.76 36365830.91 36365831.09 0.0089 0.0060

Jupiter 94854-06-15 20:24 G 36365938.23 36365938.35 36365938.48 0.0499 0.0394

Uranus 94854-07-21 19:26 G 36365974.13 36365974.31 36365974.48 0.0139 0.0081

Neptune 94854-10-11 23:02 G 36366056.28 36366056.46 36366056.64 0.0089 0.0049

Uranus 94855-03-05 03:36 G 36366200.53 36366200.65 36366200.80 0.0139 0.0107

Neptune 94855-05-25 11:31 G 36366281.80 36366281.98 36366282.19 0.0089 0.0038

Uranus 94855-10-17 12:00 G 36366426.94 36366427.00 36366427.08 0.0139 0.0131

Mars 94855-10-25 11:02 G 36366434.79 36366434.96 36366435.13 0.1861 0.0447

Neptune 94856-01-06 00:29 G 36366507.32 36366507.52 36366507.73 0.0089 0.0027

Neptune 94856-08-18 13:26 G 36366732.84 36366733.06 36366733.27 0.0089 0.0017

Neptune 94857-04-01 01:55 G 36366958.37 36366958.58 36366958.81 0.0089 0.0006

Saturn 94857-11-06 13:12 G 36367177.95 36367178.05 36367178.16 0.0304 0.0262

Neptune 94857-11-12 14:53 G 36367183.90 36367184.12 36367184.34 0.0089 0.0005

Saturn 94858-06-24 19:26 G 36367408.11 36367408.31 36367408.52 0.0304 0.0037

Neptune 94858-06-26 03:36 G 36367409.45 36367409.65 36367409.87 0.0089 0.0016

Neptune 94859-02-06 16:19 G 36367634.99 36367635.18 36367635.40 0.0089 0.0027

Jupiter 94859-08-20 20:38 G 36367830.27 36367830.36 36367830.47 0.0523 0.0448

Neptune 94859-09-20 05:31 G 36367860.53 36367860.73 36367860.93 0.0089 0.0037

Jupiter 94860-04-13 23:31 G 36368067.30 36368067.48 36368067.66 0.0526 0.0212

Neptune 94860-05-02 18:14 G 36368086.08 36368086.26 36368086.45 0.0089 0.0048

Neptune 94860-12-14 06:57 G 36368311.64 36368311.79 36368311.97 0.0089 0.0059

Neptune 94861-07-27 19:41 G 36368537.21 36368537.32 36368537.48 0.0089 0.0070

Neptune 94862-03-10 08:53 G 36368762.79 36368762.87 36368762.97 0.0089 0.0080

Jupiter 94865-06-26 22:05 G 36369967.28 36369967.42 36369967.57 0.0502 0.0366

Jupiter 94866-02-18 18:14 G 36370204.08 36370204.26 36370204.45 0.0499 0.0231

Pluto 94871-05-02 23:31 G 36372103.30 36372103.48 36372103.69 0.0065 0.0029

Pluto 94871-12-14 03:50 G 36372328.45 36372328.66 36372328.88 0.0066 0.0014

Jupiter 94871-12-18 17:45 G 36372333.04 36372333.24 36372333.44 0.0526 0.0022

Saturn 94872-04-23 12:00 G 36372459.98 36372460.00 36372460.04 0.0259 0.0256

Pluto 94872-07-26 07:26 G 36372553.73 36372553.81 36372553.95 0.0066 0.0057

Saturn 94872-12-08 09:21 G 36372688.68 36372688.89 36372689.10 0.0259 0.0072

Saturn 94873-07-25 05:45 G 36372917.55 36372917.74 36372917.94 0.0259 0.0112

Jupiter 94877-10-24 16:05 G 36374469.96 36374470.17 36374470.37 0.0500 0.0066

Jupiter 94883-08-23 13:12 G 36376598.87 36376599.05 36376599.24 0.0524 0.0166

Jupiter 94884-04-16 18:43 G 36376836.23 36376836.28 36376836.34 0.0527 0.0503

Saturn 94887-05-20 00:57 G 36377964.39 36377964.54 36377964.69 0.0304 0.0210

Saturn 94888-01-05 07:12 G 36378194.60 36378194.80 36378195.00 0.0304 0.0089

Jupiter 94889-06-29 11:45 G 36378735.79 36378735.99 36378736.19 0.0501 0.0106

Jupiter 94890-02-21 06:00 G 36378972.70 36378972.75 36378972.80 0.0499 0.0481

Uranus 94892-12-15 19:12 G 36380001.24 36380001.30 36380001.36 0.0137 0.0130

Uranus 94893-07-30 02:24 G 36380227.46 36380227.60 36380227.73 0.0137 0.0107

Uranus 94894-03-13 09:21 G 36380453.73 36380453.89 36380454.07 0.0137 0.0083

Mars 94894-04-04 05:45 G 36380475.58 36380475.74 36380475.90 0.1681 0.0615

Uranus 94894-10-25 16:48 G 36380680.01 36380680.20 36380680.41 0.0137 0.0058

Jupiter 94895-04-28 09:36 G 36380864.75 36380864.90 36380865.05 0.0523 0.0347

Uranus 94895-06-09 00:29 G 36380906.32 36380906.52 36380906.74 0.0138 0.0034

Jupiter 94895-12-21 12:57 G 36381101.89 36381102.04 36381102.20 0.0526 0.0318

Uranus 94896-01-21 08:38 G 36381132.64 36381132.86 36381133.08 0.0138 0.0008

Uranus 94896-09-03 16:33 G 36381358.98 36381359.19 36381359.41 0.0138 0.0017

Uranus 94897-04-18 00:43 G 36381585.33 36381585.53 36381585.74 0.0138 0.0042

Uranus 94897-11-30 09:07 G 36381811.69 36381811.88 36381812.07 0.0138 0.0068

Uranus 94898-07-14 17:31 G 36382038.09 36382038.23 36382038.41 0.0139 0.0094

Uranus 94899-02-26 02:24 G 36382264.50 36382264.60 36382264.73 0.0139 0.0119

Jupiter 94901-03-05 07:55 G 36383001.67 36383001.83 36383002.01 0.0502 0.0276

Jupiter 94901-10-28 04:19 G 36383238.52 36383238.68 36383238.84 0.0499 0.0322

Saturn 94901-11-04 18:29 G 36383246.16 36383246.27 36383246.37 0.0258 0.0222

Saturn 94902-06-21 15:21 G 36383474.92 36383475.14 36383475.35 0.0258 0.0038

Saturn 94903-02-05 11:45 G 36383703.81 36383703.99 36383704.17 0.0258 0.0145

Jupiter 94907-08-27 06:00 G 36385367.56 36385367.75 36385367.95 0.0525 0.0128

Jupiter 94912-11-08 04:48 G 36387267.60 36387267.70 36387267.80 0.0503 0.0442

Jupiter 94913-07-03 02:24 G 36387504.41 36387504.60 36387504.80 0.0500 0.0159

Saturn 94916-11-30 12:29 G 36388750.85 36388751.02 36388751.20 0.0304 0.0159

Saturn 94917-07-18 18:57 G 36388981.10 36388981.29 36388981.47 0.0304 0.0140

Jupiter 94919-05-02 00:57 G 36389633.34 36389633.54 36389633.73 0.0525 0.0062

Mars 94921-08-22 16:33 G 36390477.04 36390477.19 36390477.34 0.1857 0.0963

Jupiter 94925-03-08 00:14 G 36391770.30 36391770.51 36391770.71 0.0500 0.0011

Mars 94926-04-04 05:02 G 36392162.64 36392162.71 36392162.77 0.1670 0.1538

Jupiter 94931-01-04 19:12 G 36393899.13 36393899.30 36393899.48 0.0524 0.0250

Saturn 94931-05-17 23:45 G 36394032.36 36394032.49 36394032.64 0.0259 0.0192

Jupiter 94931-08-30 00:00 G 36394136.39 36394136.50 36394136.63 0.0527 0.0420

Saturn 94932-01-01 20:53 G 36394261.15 36394261.37 36394261.58 0.0259 0.0007

Saturn 94932-08-17 17:02 G 36394490.07 36394490.21 36394490.38 0.0259 0.0177

Uranus 94933-11-18 06:57 G 36394947.68 36394947.79 36394947.93 0.0141 0.0117

Uranus 94934-07-02 17:02 G 36395174.05 36395174.21 36395174.39 0.0141 0.0090

Uranus 94935-02-14 03:07 G 36395400.43 36395400.63 36395400.82 0.0141 0.0063

Uranus 94935-09-28 12:29 G 36395626.82 36395627.02 36395627.24 0.0140 0.0037

Neptune 94936-04-17 13:55 G 36395829.00 36395829.08 36395829.21 0.0088 0.0078

Uranus 94936-05-11 22:05 G 36395853.20 36395853.42 36395853.64 0.0140 0.0010

Jupiter 94936-11-10 21:21 G 36396036.20 36396036.39 36396036.59 0.0501 0.0176

Neptune 94936-11-29 03:36 G 36396054.52 36396054.65 36396054.81 0.0088 0.0067

Uranus 94936-12-24 07:26 G 36396079.59 36396079.81 36396080.03 0.0140 0.0017

Jupiter 94937-07-05 15:50 G 36396273.05 36396273.16 36396273.28 0.0498 0.0415

Neptune 94937-07-12 17:02 G 36396280.05 36396280.21 36396280.39 0.0088 0.0057

Uranus 94937-08-07 16:19 G 36396305.98 36396306.18 36396306.39 0.0140 0.0043

Neptune 94938-02-23 06:00 G 36396505.58 36396505.75 36396505.96 0.0088 0.0046

Uranus 94938-03-22 00:57 G 36396532.37 36396532.54 36396532.74 0.0139 0.0069

Neptune 94938-10-06 19:26 G 36396731.11 36396731.31 36396731.52 0.0088 0.0035

Uranus 94938-11-03 09:36 G 36396758.76 36396758.90 36396759.07 0.0139 0.0094

Neptune 94939-05-20 08:38 G 36396956.66 36396956.86 36396957.09 0.0088 0.0025

Uranus 94939-06-17 18:00 G 36396985.16 36396985.25 36396985.38 0.0139 0.0119

Neptune 94939-12-31 22:05 G 36397182.21 36397182.42 36397182.65 0.0088 0.0014

Neptune 94940-08-13 11:31 G 36397407.76 36397407.98 36397408.20 0.0088 0.0003

Neptune 94941-03-27 00:43 G 36397633.31 36397633.53 36397633.75 0.0088 0.0007

Neptune 94941-11-07 13:41 G 36397858.86 36397859.07 36397859.30 0.0088 0.0018

Neptune 94942-06-21 02:53 G 36398084.42 36398084.62 36398084.84 0.0088 0.0029

Jupiter 94942-09-09 15:50 G 36398165.05 36398165.16 36398165.27 0.0523 0.0430

Neptune 94943-02-01 15:50 G 36398309.98 36398310.16 36398310.38 0.0088 0.0040

Jupiter 94943-05-04 18:57 G 36398402.11 36398402.29 36398402.47 0.0526 0.0232

Neptune 94943-09-15 05:17 G 36398535.54 36398535.72 36398535.91 0.0088 0.0050

Neptune 94944-04-27 18:00 G 36398761.11 36398761.25 36398761.43 0.0088 0.0061

Neptune 94944-12-09 07:41 G 36398986.69 36398986.82 36398986.95 0.0088 0.0071

Neptune 94945-07-22 20:24 G 36399212.28 36399212.35 36399212.45 0.0088 0.0082

Saturn 94946-06-12 23:17 G 36399537.28 36399537.47 36399537.67 0.0304 0.0108

Saturn 94947-01-29 05:31 G 36399767.58 36399767.73 36399767.90 0.0304 0.0192

Jupiter 94948-07-16 15:50 G 36400302.01 36400302.16 36400302.31 0.0502 0.0350

Jupiter 94949-03-10 12:29 G 36400538.84 36400539.02 36400539.19 0.0499 0.0249

Moon 94954-02-28 15:50 G 36402355.01 36402355.16 36402355.32 0.2631 0.0686

Earth 94954-02-28 21:07 G 36402355.24 36402355.38 36402355.52 0.2632 0.1267 *

Jupiter 94955-01-07 14:24 G 36402667.90 36402668.10 36402668.30 0.0525 0.0046

Pluto 94959-01-02 14:09 G 36404123.96 36404124.09 36404124.24 0.0079 0.0060

Pluto 94959-08-16 00:43 G 36404349.31 36404349.53 36404349.75 0.0079 0.0017

Mars 94960-01-31 16:33 G 36404518.04 36404518.19 36404518.34 0.1684 0.0849

Jupiter 94960-11-13 10:05 G 36404804.71 36404804.92 36404805.12 0.0500 0.0084

Saturn 94960-11-27 06:00 G 36404818.58 36404818.75 36404818.92 0.0258 0.0158

Saturn 94961-07-14 02:38 G 36405047.40 36405047.61 36405047.82 0.0258 0.0026

Earth 94962-02-26 12:57 G 36405274.94 36405275.04 36405275.14 0.2632 0.1997

Saturn 94962-02-27 22:48 G 36405276.33 36405276.45 36405276.58 0.0258 0.0210

Jupiter 94966-09-12 08:24 G 36406933.66 36406933.85 36406934.04 0.0524 0.0144

Jupiter 94967-05-07 13:12 G 36407171.04 36407171.05 36407171.07 0.0527 0.0525

Jupiter 94972-07-19 07:26 G 36409070.61 36409070.81 36409071.02 0.0501 0.0084

Saturn 94975-12-24 10:19 G 36410323.73 36410323.93 36410324.14 0.0305 0.0059

Saturn 94976-08-10 16:48 G 36410554.07 36410554.20 36410554.32 0.0304 0.0242

Uranus 94977-03-30 10:33 G 36410785.83 36410785.94 36410786.05 0.0137 0.0117

Uranus 94977-11-11 17:45 G 36411012.08 36411012.24 36411012.40 0.0137 0.0093

Jupiter 94978-05-18 03:36 G 36411199.50 36411199.65 36411199.81 0.0523 0.0328

Uranus 94978-06-26 01:12 G 36411238.37 36411238.55 36411238.74 0.0137 0.0069

Jupiter 94979-01-10 06:57 G 36411436.64 36411436.79 36411436.95 0.0526 0.0338

Uranus 94979-02-07 08:53 G 36411464.67 36411464.87 36411465.08 0.0138 0.0044

Uranus 94979-09-21 16:48 G 36411690.98 36411691.20 36411691.41 0.0138 0.0019

Uranus 94980-05-05 00:29 G 36411917.31 36411917.52 36411917.74 0.0138 0.0007

Uranus 94980-12-17 08:38 G 36412143.65 36412143.86 36412144.08 0.0138 0.0031

Uranus 94981-07-31 17:02 G 36412370.02 36412370.21 36412370.42 0.0138 0.0057

Uranus 94982-03-15 01:41 G 36412596.40 36412596.57 36412596.75 0.0139 0.0082

Uranus 94982-10-27 10:05 G 36412822.80 36412822.92 36412823.07 0.0139 0.0108

Uranus 94983-06-10 18:57 G 36413049.24 36413049.29 36413049.36 0.0139 0.0133

Jupiter 94984-03-24 05:02 G 36413336.53 36413336.71 36413336.89 0.0502 0.0251

Jupiter 94984-11-16 00:43 G 36413573.39 36413573.53 36413573.69 0.0499 0.0345

Mars 94987-06-19 21:21 G 36414519.29 36414519.39 36414519.49 0.1852 0.1492

Jupiter 94990-01-20 22:33 G 36415465.41 36415465.44 36415465.48 0.0522 0.0510

Saturn 94990-06-09 10:48 G 36415604.77 36415604.95 36415605.14 0.0258 0.0128

Jupiter 94990-09-15 00:43 G 36415702.34 36415702.53 36415702.73 0.0526 0.0148

Saturn 94991-01-24 07:26 G 36415833.60 36415833.81 36415834.02 0.0258 0.0057

Saturn 94991-09-10 03:36 G 36416062.58 36416062.65 36416062.73 0.0259 0.0240

Mars 94992-01-30 15:36 G 36416205.04 36416205.15 36416205.26 0.1673 0.1307

Jupiter 94995-11-28 01:41 G 36417602.46 36417602.57 36417602.69 0.0503 0.0419

Jupiter 94996-07-21 22:48 G 36417839.26 36417839.45 36417839.65 0.0500 0.0182

96TH MILLENNIUM CE

This is a list of transits of Venus in the 96th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	95002-05-21 20:53	G	36419968.17	36419968.37	36419968.57	0.0525	0.0041	
Saturn	95005-07-06 20:09	G	36421110.14	36421110.34	36421110.55	0.0304	0.0011	
Saturn	95006-02-22 02:53	G	36421340.57	36421340.62	36421340.68	0.0304	0.0292	
Jupiter	95008-03-27 18:14	G	36422105.05	36422105.26	36422105.47	0.0501	0.0012	
Jupiter	95014-01-24 17:17	G	36424234.04	36424234.22	36424234.40	0.0524	0.0223	
Jupiter	95014-09-18 21:36	G	36424471.30	36424471.40	36424471.50	0.0527	0.0446	
Neptune	95017-03-09 20:09	G	36425374.28	36425374.34	36425374.43	0.0089	0.0083	
Uranus	95017-07-19 13:12	G	36425505.96	36425506.05	36425506.14	0.0141	0.0128	
Neptune	95017-10-21 09:07	G	36425599.76	36425599.88	36425600.01	0.0089	0.0073	
Uranus	95018-03-02 23:02	G	36425732.32	36425732.46	36425732.62	0.0141	0.0102	
Neptune	95018-06-03 21:36	G	36425825.27	36425825.40	36425825.58	0.0089	0.0063	
Uranus	95018-10-15 08:53	G	36425958.70	36425958.87	36425959.06	0.0141	0.0075	
Neptune	95019-01-15 10:33	G	36426050.78	36426050.94	36426051.13	0.0089	0.0052	
Uranus	95019-05-29 18:43	G	36426185.08	36426185.28	36426185.49	0.0140	0.0049	
Mars	95019-06-20 12:57	G	36426207.00	36426207.04	36426207.08	0.1867	0.1807	
Neptune	95019-08-28 23:31	G	36426276.29	36426276.48	36426276.68	0.0089	0.0041	
Jupiter	95019-12-01 15:07	G	36426370.94	36426371.13	36426371.33	0.0502	0.0159	
Saturn	95019-12-21 16:05	G	36426390.97	36426391.17	36426391.37	0.0258	0.0096	
Uranus	95020-01-11 04:33	G	36426411.47	36426411.69	36426411.91	0.0140	0.0022	
Neptune	95020-04-10 12:00	G	36426501.81	36426502.00	36426502.22	0.0089	0.0030	

Jupiter 95020-07-25 10:33 G 36426607.84 36426607.94 36426608.04 0.0499 0.0434

Saturn 95020-08-06 12:29 G 36426619.82 36426620.02 36426620.23 0.0258 0.0088

Uranus 95020-08-24 13:55 G 36426637.86 36426638.08 36426638.30 0.0140 0.0004

Neptune 95020-11-22 00:57 G 36426727.33 36426727.54 36426727.76 0.0089 0.0019

Uranus 95021-04-07 22:48 G 36426864.25 36426864.45 36426864.67 0.0140 0.0031

Neptune 95021-07-05 13:55 G 36426952.87 36426953.08 36426953.30 0.0089 0.0008

Uranus 95021-11-20 07:41 G 36427090.63 36427090.82 36427091.03 0.0140 0.0057

Neptune 95022-02-16 02:38 G 36427178.39 36427178.61 36427178.83 0.0089 0.0003

Uranus 95022-07-04 16:48 G 36427317.03 36427317.20 36427317.38 0.0139 0.0082

Neptune 95022-09-29 15:21 G 36427403.93 36427404.14 36427404.36 0.0089 0.0013

Uranus 95023-02-16 01:12 G 36427543.43 36427543.55 36427543.70 0.0139 0.0107

Neptune 95023-05-13 04:05 G 36427629.47 36427629.67 36427629.89 0.0089 0.0024

Uranus 95023-09-30 09:36 G 36427769.85 36427769.90 36427769.98 0.0139 0.0132

Neptune 95023-12-24 16:48 G 36427855.01 36427855.20 36427855.41 0.0089 0.0035

Neptune 95024-08-06 06:00 G 36428080.56 36428080.75 36428080.93 0.0089 0.0046

Neptune 95025-03-19 18:29 G 36428306.11 36428306.27 36428306.45 0.0089 0.0056

Jupiter 95025-09-29 12:29 G 36428499.90 36428500.02 36428500.15 0.0522 0.0406

Neptune 95025-10-31 07:12 G 36428531.67 36428531.80 36428531.96 0.0089 0.0067

Mars 95025-11-29 02:24 G 36428560.47 36428560.60 36428560.73 0.1688 0.1112

Jupiter 95026-05-24 14:53 G 36428736.95 36428737.12 36428737.30 0.0526 0.0257

Neptune 95026-06-13 19:55 G 36428757.25 36428757.33 36428757.46 0.0089 0.0078

Neptune 95027-01-25 09:07 G 36428982.87 36428982.88 36428982.92 0.0089 0.0088

Jupiter 95031-08-06 12:00 G 36430636.85 36430637.00 36430637.16 0.0503 0.0327

Jupiter 95032-03-30 09:07 G 36430873.71 36430873.88 36430874.05 0.0500 0.0274

Saturn 95034-05-31 23:45 G 36431666.38 36431666.49 36431666.59 0.0305 0.0262

Saturn 95035-01-17 05:45 G 36431896.53 36431896.74 36431896.95 0.0305 0.0038

Jupiter 95038-01-27 09:21 G 36433002.69 36433002.89 36433003.09 0.0525 0.0068

Jupiter 95043-04-11 09:21 G 36434902.86 36434902.89 36434902.93 0.0504 0.0494

Jupiter 95043-12-04 07:41 G 36435139.62 36435139.82 36435140.03 0.0500 0.0110

Saturn 95048-11-15 23:31 G 36436948.43 36436948.48 36436948.53 0.0258 0.0251

Saturn 95049-07-02 20:09 G 36437177.14 36437177.34 36437177.55 0.0258 0.0067

Jupiter 95049-10-02 03:50 G 36437268.46 36437268.66 36437268.85 0.0524 0.0122

Saturn 95050-02-16 16:33 G 36437406.00 36437406.19 36437406.38 0.0258 0.0117

Jupiter 95055-08-09 05:17 G 36439405.52 36439405.72 36439405.93 0.0501 0.0058

Mars 95057-11-28 01:55 G 36440247.45 36440247.58 36440247.72 0.1677 0.1070

Uranus 95060-11-28 19:26 G 36441344.23 36441344.31 36441344.39 0.0137 0.0126

Jupiter 95061-06-07 00:43 G 36441534.37 36441534.53 36441534.70 0.0523 0.0305

Uranus 95061-07-13 02:24 G 36441570.47 36441570.60 36441570.76 0.0137 0.0103

Jupiter 95062-01-30 04:33 G 36441771.55 36441771.69 36441771.83 0.0526 0.0363

Uranus 95062-02-24 10:05 G 36441796.74 36441796.92 36441797.10 0.0137 0.0079

Uranus 95062-10-08 17:17 G 36442023.03 36442023.22 36442023.43 0.0138 0.0055

Uranus 95063-05-23 01:12 G 36442249.34 36442249.55 36442249.77 0.0138 0.0030

Saturn 95063-12-12 07:26 G 36442452.66 36442452.81 36442452.95 0.0304 0.0217

Uranus 95064-01-04 09:07 G 36442475.67 36442475.88 36442476.10 0.0138 0.0005

Saturn 95064-07-29 13:41 G 36442682.87 36442683.07 36442683.27 0.0305 0.0084

Uranus 95064-08-17 17:17 G 36442702.01 36442702.22 36442702.44 0.0138 0.0020

Uranus 95065-04-01 01:26 G 36442928.36 36442928.56 36442928.77 0.0138 0.0046

Uranus 95065-11-13 09:50 G 36443154.73 36443154.91 36443155.10 0.0139 0.0071

Uranus 95066-06-27 18:14 G 36443381.12 36443381.26 36443381.43 0.0139 0.0097

Uranus 95067-02-09 03:07 G 36443607.54 36443607.63 36443607.75 0.0139 0.0122

Jupiter 95067-04-13 23:45 G 36443671.31 36443671.49 36443671.68 0.0502 0.0232

Moon 95067-08-30 12:00 G 36443809.92 36443810.00 36443810.08 0.2707 0.2264

Earth 95067-08-30 14:09 G 36443810.01 36443810.09 36443810.18 0.2700 0.2262 *

Jupiter 95067-12-06 19:55 G 36443908.19 36443908.33 36443908.47 0.0499 0.0365

Jupiter 95073-02-09 22:33 G 36445800.36 36445800.44 36445800.51 0.0522 0.0480

Jupiter 95073-10-05 00:14 G 36446037.33 36446037.51 36446037.70 0.0526 0.0180

Earth 95075-08-28 04:33 G 36446729.56 36446729.69 36446729.83 0.2701 0.1367

Moon 95075-08-28 06:57 G 36446729.67 36446729.79 36446729.92 0.2708 0.1508 *

Saturn 95078-05-29 03:21 G 36447734.55 36447734.64 36447734.76 0.0258 0.0221

Jupiter 95078-12-17 20:24 G 36447937.22 36447937.35 36447937.47 0.0503 0.0400

Saturn 95079-01-13 00:29 G 36447963.31 36447963.52 36447963.73 0.0258 0.0037

Jupiter 95079-08-11 17:45 G 36448174.05 36448174.24 36448174.43 0.0500 0.0203

Saturn 95079-08-29 20:38 G 36448192.19 36448192.36 36448192.54 0.0258 0.0147

Mars 95085-04-16 18:29 G 36450249.14 36450249.27 36450249.39 0.1862 0.1276

Jupiter 95085-06-09 18:57 G 36450303.09 36450303.29 36450303.49 0.0524 0.0012

Jupiter 95091-04-16 16:05 G 36452439.96 36452440.17 36452440.38 0.0501 0.0037

Mars 95091-09-26 12:57 G 36452602.94 36452603.04 36452603.14 0.1691 0.1361

Saturn 95093-06-23 15:07 G 36453238.97 36453239.13 36453239.31 0.0305 0.0176

Saturn 95094-02-08 21:36 G 36453469.22 36453469.40 36453469.60 0.0305 0.0127

Jupiter 95097-02-12 13:55 G 36454568.90 36454569.08 36454569.27 0.0524 0.0198

Jupiter 95097-10-07 18:00 G 36454806.17 36454806.25 36454806.34 0.0526 0.0473

Neptune 95100-07-22 01:12 G 36455823.47 36455823.55 36455823.65 0.0088 0.0080

Neptune 95101-03-04 14:09 G 36456048.98 36456049.09 36456049.25 0.0088 0.0070

Uranus 95101-03-19 19:55 G 36456064.33 36456064.33 36456064.38 0.0141 0.0140

Neptune 95101-10-16 03:36 G 36456274.50 36456274.65 36456274.83 0.0088 0.0059

Uranus 95101-11-01 06:29 G 36456290.65 36456290.77 36456290.90 0.0141 0.0113

Neptune 95102-05-29 16:48 G 36456500.03 36456500.20 36456500.40 0.0088 0.0049

Uranus 95102-06-15 16:19 G 36456517.02 36456517.18 36456517.36 0.0141 0.0087

Jupiter 95102-12-21 14:24 G 36456705.90 36456706.10 36456706.31 0.0502 0.0130

Neptune 95103-01-10 06:14 G 36456725.57 36456725.76 36456725.98 0.0088 0.0038

Uranus 95103-01-28 02:09 G 36456743.41 36456743.59 36456743.80 0.0140 0.0061

Jupiter 95103-08-15 09:36 G 36456942.83 36456942.90 36456942.98 0.0499 0.0463

Neptune 95103-08-23 19:41 G 36456951.12 36456951.32 36456951.54 0.0088 0.0027

Uranus 95103-09-11 12:14 G 36456969.80 36456970.01 36456970.22 0.0140 0.0034

Neptune 95104-04-05 08:53 G 36457176.66 36457176.87 36457177.10 0.0088 0.0017

Uranus 95104-04-24 21:36 G 36457196.18 36457196.40 36457196.62 0.0140 0.0007

Neptune 95104-11-16 22:19 G 36457402.21 36457402.43 36457402.66 0.0088 0.0006

Uranus 95104-12-07 06:57 G 36457422.57 36457422.79 36457423.00 0.0140 0.0019

Neptune 95105-06-30 11:31 G 36457627.77 36457627.98 36457628.21 0.0088 0.0006

Uranus 95105-07-21 15:50 G 36457648.96 36457649.16 36457649.37 0.0140 0.0045

Neptune 95106-02-11 00:57 G 36457853.32 36457853.54 36457853.76 0.0088 0.0015

Uranus 95106-03-05 00:43 G 36457875.35 36457875.53 36457875.72 0.0139 0.0071

Neptune 95106-09-24 13:55 G 36458078.88 36458079.08 36458079.30 0.0088 0.0026

Uranus 95106-10-17 09:07 G 36458101.74 36458101.88 36458102.05 0.0139 0.0096

Neptune 95107-05-08 03:21 G 36458304.44 36458304.64 36458304.84 0.0088 0.0037

Uranus 95107-05-31 18:00 G 36458328.14 36458328.25 36458328.36 0.0139 0.0120

Saturn 95107-12-10 06:57 G 36458520.66 36458520.79 36458520.94 0.0258 0.0194

Neptune 95107-12-19 16:19 G 36458530.01 36458530.18 36458530.38 0.0088 0.0048

Saturn 95108-07-26 03:36 G 36458749.44 36458749.65 36458749.87 0.0258 0.0011

Neptune 95108-08-01 05:45 G 36458755.58 36458755.74 36458755.91 0.0088 0.0058

Jupiter 95108-10-19 09:21 G 36458834.75 36458834.89 36458835.02 0.0523 0.0383

Saturn 95109-03-11 23:45 G 36458978.33 36458978.49 36458978.65 0.0258 0.0173

Neptune 95109-03-14 18:29 G 36458981.15 36458981.27 36458981.43 0.0088 0.0069

Jupiter 95109-06-13 12:14 G 36459071.84 36459072.01 36459072.18 0.0526 0.0283

Neptune 95109-10-26 08:09 G 36459206.74 36459206.84 36459206.93 0.0088 0.0079

Jupiter 95114-08-26 11:45 G 36460971.82 36460971.99 36460972.16 0.0502 0.0297

Jupiter 95115-04-20 08:09 G 36461208.68 36461208.84 36461209.01 0.0499 0.0303

Pluto 95116-10-21 08:24 G 36461758.71 36461758.85 36461759.02 0.0065 0.0046

Pluto 95117-06-03 12:57 G 36461983.82 36461984.04 36461984.26 0.0066 0.0003

Pluto 95118-01-14 16:33 G 36462209.04 36462209.19 36462209.38 0.0066 0.0040

Jupiter 95121-02-16 08:24 G 36463337.66 36463337.85 36463338.05 0.0525 0.0098

Saturn 95123-01-04 21:07 G 36464025.20 36464025.38 36464025.57 0.0305 0.0135

Saturn 95123-08-23 03:50 G 36464255.48 36464255.66 36464255.83 0.0305 0.0168

Mars 95123-09-26 12:43 G 36464289.87 36464290.03 36464290.18 0.1680 0.0832

Jupiter 95126-05-01 05:31 G 36465237.67 36465237.73 36465237.81 0.0503 0.0471

Jupiter 95126-12-24 03:50 G 36465474.46 36465474.66 36465474.86 0.0500 0.0133

Jupiter 95132-10-22 05:31 G 36467603.53 36467603.73 36467603.93 0.0524 0.0086

Saturn 95137-06-21 10:19 G 36469306.77 36469306.93 36469307.10 0.0258 0.0166

Saturn 95138-02-05 06:43 G 36469535.57 36469535.78 36469536.00 0.0258 0.0019

Jupiter 95138-08-29 01:26 G 36469740.35 36469740.56 36469740.76 0.0501 0.0035

Saturn 95138-09-22 02:38 G 36469764.49 36469764.61 36469764.75 0.0258 0.0202

Jupiter 95144-06-27 01:12 G 36471869.38 36471869.55 36471869.72 0.0523 0.0271

Uranus 95144-07-30 03:50 G 36471902.65 36471902.66 36471902.68 0.0137 0.0136

Jupiter 95145-02-19 04:19 G 36472106.55 36472106.68 36472106.81 0.0526 0.0398

Uranus 95145-03-13 10:33 G 36472128.84 36472128.94 36472129.08 0.0137 0.0114

Uranus 95145-10-25 18:00 G 36472355.10 36472355.25 36472355.43 0.0137 0.0090

Uranus 95146-06-09 01:55 G 36472581.39 36472581.58 36472581.77 0.0138 0.0065

Uranus 95147-01-21 09:21 G 36472807.69 36472807.89 36472808.11 0.0138 0.0041

Uranus 95147-09-04 17:17 G 36473034.01 36473034.22 36473034.44 0.0138 0.0016

Uranus 95148-04-18 01:12 G 36473260.34 36473260.55 36473260.77 0.0138 0.0010

Uranus 95148-11-30 09:21 G 36473486.68 36473486.89 36473487.11 0.0138 0.0034

Uranus 95149-07-14 17:45 G 36473713.05 36473713.24 36473713.44 0.0139 0.0060

Uranus 95150-02-26 02:09 G 36473939.43 36473939.59 36473939.77 0.0139 0.0085

Jupiter 95150-05-03 23:02 G 36474006.27 36474006.46 36474006.65 0.0502 0.0202

Uranus 95150-10-10 11:02 G 36474165.83 36474165.96 36474166.09 0.0139 0.0110

Jupiter 95150-12-26 19:12 G 36474243.18 36474243.30 36474243.43 0.0499 0.0397

Mars 95151-02-12 23:17 G 36474291.31 36474291.47 36474291.62 0.1858 0.0726

Uranus 95151-05-24 19:55 G 36474392.28 36474392.33 36474392.38 0.0139 0.0135

Saturn 95152-07-17 02:53 G 36474811.43 36474811.62 36474811.82 0.0305 0.0098

Saturn 95153-03-04 09:36 G 36475041.75 36475041.90 36475042.06 0.0305 0.0206

Jupiter 95156-03-01 21:07 G 36476135.29 36476135.38 36476135.49 0.0522 0.0452

Jupiter 95156-10-24 22:48 G 36476372.27 36476372.45 36476372.64 0.0525 0.0210

Mars 95157-07-24 23:02 G 36476645.41 36476645.46 36476645.50 0.1695 0.1629

Jupiter 95162-01-06 21:07 G 36478272.24 36478272.38 36478272.52 0.0503 0.0369

Jupiter 95162-08-31 18:29 G 36478509.09 36478509.27 36478509.46 0.0500 0.0236

Saturn 95167-01-01 12:43 G 36480092.85 36480093.03 36480093.21 0.0258 0.0141

Saturn 95167-08-18 08:53 G 36480321.66 36480321.87 36480322.08 0.0258 0.0043

Saturn 95168-04-03 04:33 G 36480550.60 36480550.69 36480550.80 0.0258 0.0226

Jupiter 95168-06-29 17:45 G 36480638.04 36480638.24 36480638.44 0.0525 0.0023

Jupiter 95174-05-06 17:02 G 36482775.01 36482775.21 36482775.42 0.0501 0.0070

Jupiter 95180-03-04 14:53 G 36484903.93 36484904.12 36484904.31 0.0524 0.0164

Jupiter 95180-10-27 19:26 G 36485141.26 36485141.31 36485141.36 0.0527 0.0507

Neptune 95181-06-12 08:24 G 36485368.79 36485368.85 36485368.90 0.0089 0.0086

Neptune 95182-01-23 20:38 G 36485594.26 36485594.36 36485594.49 0.0089 0.0076

Saturn 95182-01-27 06:57 G 36485597.59 36485597.79 36485598.00 0.0305 0.0061

Neptune 95182-09-06 09:36 G 36485819.76 36485819.90 36485820.06 0.0089 0.0065

Saturn 95182-09-14 13:55 G 36485827.96 36485828.08 36485828.21 0.0305 0.0243

Neptune 95183-04-19 22:05 G 36486045.27 36486045.42 36486045.62 0.0089 0.0055

Neptune 95183-12-01 11:02 G 36486270.79 36486270.96 36486271.17 0.0089 0.0044

Neptune 95184-07-14 00:00 G 36486496.31 36486496.50 36486496.71 0.0089 0.0033

Neptune 95185-02-24 12:57 G 36486721.83 36486722.04 36486722.25 0.0089 0.0022

Uranus 95185-07-01 14:38 G 36486849.03 36486849.11 36486849.23 0.0141 0.0124

Neptune 95185-10-08 01:41 G 36486947.36 36486947.57 36486947.79 0.0089 0.0011

Jupiter 95186-01-09 12:00 G 36487040.80 36487041.00 36487041.20 0.0501 0.0103

Uranus 95186-02-13 01:12 G 36487075.39 36487075.55 36487075.71 0.0141 0.0097

Neptune 95186-05-21 14:38 G 36487172.89 36487173.11 36487173.33 0.0089 0.0001

Jupiter 95186-09-03 06:43 G 36487277.76 36487277.78 36487277.83 0.0499 0.0491

Uranus 95186-09-27 10:48 G 36487301.77 36487301.95 36487302.15 0.0140 0.0071

Neptune 95187-01-02 03:07 G 36487398.42 36487398.63 36487398.86 0.0089 0.0012

Uranus 95187-05-11 20:38 G 36487528.16 36487528.36 36487528.57 0.0140 0.0044

Neptune 95187-08-15 16:05 G 36487623.96 36487624.17 36487624.38 0.0089 0.0022

Uranus 95187-12-24 06:14 G 36487754.55 36487754.76 36487754.98 0.0140 0.0019

Neptune 95188-03-28 04:33 G 36487849.50 36487849.69 36487849.91 0.0089 0.0033

Uranus 95188-08-06 15:36 G 36487980.94 36487981.15 36487981.37 0.0140 0.0009

Neptune 95188-11-08 17:17 G 36488075.04 36488075.22 36488075.43 0.0089 0.0043

Uranus 95189-03-21 00:57 G 36488207.32 36488207.54 36488207.75 0.0140 0.0034

Neptune 95189-06-22 06:00 G 36488300.60 36488300.75 36488300.95 0.0089 0.0054

Mars 95189-07-23 23:02 G 36488332.30 36488332.46 36488332.63 0.1683 0.0589

Uranus 95189-11-02 09:36 G 36488433.71 36488433.90 36488434.10 0.0139 0.0060

Neptune 95190-02-02 19:12 G 36488526.16 36488526.30 36488526.46 0.0089 0.0064

Uranus 95190-06-16 18:14 G 36488660.10 36488660.26 36488660.44 0.0139 0.0085

Neptune 95190-09-16 07:41 G 36488751.72 36488751.82 36488751.96 0.0089 0.0075

Uranus 95191-01-29 02:53 G 36488886.50 36488886.62 36488886.76 0.0139 0.0110

Neptune 95191-04-29 20:24 G 36488977.32 36488977.35 36488977.43 0.0089 0.0086

Uranus 95191-09-12 11:17 G 36489112.93 36489112.97 36489113.03 0.0139 0.0134

Jupiter 95191-11-08 12:43 G 36489169.89 36489170.03 36489170.19 0.0523 0.0343

Jupiter 95192-07-02 15:50 G 36489407.00 36489407.16 36489407.32 0.0526 0.0325

Saturn 95196-07-13 15:07 G 36490878.94 36490879.13 36490879.33 0.0257 0.0114

Saturn 95197-02-27 11:17 G 36491107.76 36491107.97 36491108.18 0.0257 0.0069

Earth 95197-03-02 22:48 G 36491111.32 36491111.45 36491111.59 0.2632 0.1432

Moon 95197-03-03 03:07 G 36491111.54 36491111.63 36491111.71 0.2636 0.2150 *

Jupiter 95197-09-14 09:07 G 36491306.71 36491306.88 36491307.05 0.0502 0.0271

Saturn 95197-10-14 06:43 G 36491336.75 36491336.78 36491336.83 0.0258 0.0252

Jupiter 95198-05-09 05:45 G 36491543.59 36491543.74 36491543.89 0.0500 0.0330

Jupiter 95203-07-14 09:36 G 36493435.89 36493435.90 36493435.91 0.0522 0.0520

Jupiter 95204-03-07 10:33 G 36493672.75 36493672.94 36493673.13 0.0525 0.0137

Pluto 95205-02-02 06:57 G 36494004.57 36494004.79 36494005.01 0.0079 0.0013

Earth 95205-02-28 14:38 G 36494031.00 36494031.11 36494031.23 0.2631 0.1842

Moon 95205-02-28 20:09 G 36494031.20 36494031.34 36494031.49 0.2631 0.1248 *

Pluto 95205-09-15 17:02 G 36494230.08 36494230.21 36494230.35 0.0079 0.0063

Jupiter 95209-05-20 06:14 G 36495572.67 36495572.76 36495572.86 0.0504 0.0439

Jupiter 95210-01-12 04:48 G 36495809.50 36495809.70 36495809.89 0.0500 0.0168

Saturn 95211-08-09 11:17 G 36496383.76 36496383.97 36496384.18 0.0305 0.0027

Saturn 95212-03-26 18:00 G 36496614.18 36496614.25 36496614.34 0.0305 0.0278

Jupiter 95215-11-11 06:00 G 36497938.55 36497938.75 36497938.95 0.0524 0.0051

Mars 95216-12-10 04:48 G 36498333.53 36498333.70 36498333.87 0.1853 0.0218

Jupiter 95221-09-17 03:36 G 36500075.45 36500075.65 36500075.86 0.0501 0.0009

Saturn 95226-01-23 16:19 G 36501664.99 36501665.18 36501665.39 0.0257 0.0091

Saturn 95226-09-09 12:29 G 36501893.82 36501894.02 36501894.22 0.0257 0.0093

Jupiter 95227-07-17 01:26 G 36502204.38 36502204.56 36502204.74 0.0523 0.0238

Jupiter 95228-03-10 05:02 G 36502441.60 36502441.71 36502441.82 0.0526 0.0433

Uranus 95228-11-10 18:57 G 36502687.21 36502687.29 36502687.40 0.0137 0.0123

Uranus 95229-06-25 02:24 G 36502913.46 36502913.60 36502913.76 0.0137 0.0100

Uranus 95230-02-06 09:50 G 36503139.74 36503139.91 36503140.10 0.0137 0.0076

Uranus 95230-09-20 17:17 G 36503366.03 36503366.22 36503366.43 0.0138 0.0052

Uranus 95231-05-05 01:12 G 36503592.34 36503592.55 36503592.76 0.0138 0.0027

Uranus 95231-12-17 09:07 G 36503818.66 36503818.88 36503819.09 0.0138 0.0003

Uranus 95232-07-30 17:02 G 36504045.00 36504045.21 36504045.43 0.0138 0.0023

Uranus 95233-03-14 01:26 G 36504271.35 36504271.56 36504271.76 0.0138 0.0048

Jupiter 95233-05-23 01:55 G 36504341.38 36504341.58 36504341.77 0.0502 0.0165

Uranus 95233-10-26 09:36 G 36504497.72 36504497.90 36504498.09 0.0139 0.0073

Jupiter 95234-01-14 21:21 G 36504578.30 36504578.39 36504578.50 0.0499 0.0433

Uranus 95234-06-09 17:45 G 36504724.11 36504724.24 36504724.41 0.0139 0.0099

Uranus 95235-01-22 02:38 G 36504950.53 36504950.61 36504950.72 0.0139 0.0124

Jupiter 95239-03-21 23:17 G 36506470.36 36506470.47 36506470.59 0.0522 0.0417

Jupiter 95239-11-14 01:41 G 36506707.39 36506707.57 36506707.74 0.0526 0.0249

Saturn 95240-07-03 07:26 G 36506939.77 36506939.81 36506939.86 0.0305 0.0296

Saturn 95241-02-18 13:41 G 36507169.86 36507170.07 36507170.28 0.0305 0.0006

Jupiter 95245-01-25 20:09 G 36508607.19 36508607.34 36508607.50 0.0503 0.0339

Jupiter 95245-09-19 17:17 G 36508844.05 36508844.22 36508844.40 0.0500 0.0266

Jupiter 95251-07-19 22:48 G 36510973.26 36510973.45 36510973.65 0.0525 0.0066

Saturn 95254-12-19 21:36 G 36512222.36 36512222.40 36512222.45 0.0258 0.0251

Mars 95255-05-21 09:21 G 36512374.72 36512374.89 36512375.07 0.1686 0.0344

Saturn 95255-08-05 18:14 G 36512451.05 36512451.26 36512451.47 0.0257 0.0067

Saturn 95256-03-21 13:55 G 36512679.89 36512680.08 36512680.28 0.0257 0.0117

Jupiter 95257-05-25 15:50 G 36513109.95 36513110.16 36513110.36 0.0501 0.0101

Jupiter 95263-03-24 18:43 G 36515239.08 36515239.28 36515239.47 0.0524 0.0122

Neptune 95264-10-23 12:00 G 36515817.95 36515818.00 36515818.10 0.0088 0.0083

Neptune 95265-06-06 01:26 G 36516043.45 36516043.56 36516043.70 0.0088 0.0073

Neptune 95266-01-17 14:38 G 36516268.97 36516269.11 36516269.29 0.0088 0.0062

Neptune 95266-08-31 04:05 G 36516494.50 36516494.67 36516494.86 0.0088 0.0051

Neptune 95267-04-13 17:31 G 36516720.03 36516720.23 36516720.43 0.0088 0.0041

Neptune 95267-11-25 06:43 G 36516945.58 36516945.78 36516946.00 0.0088 0.0030

Neptune 95268-07-07 20:09 G 36517171.12 36517171.34 36517171.56 0.0088 0.0019

Jupiter 95269-01-28 14:09 G 36517375.88 36517376.09 36517376.29 0.0502 0.0067

Neptune 95269-02-18 09:21 G 36517396.67 36517396.89 36517397.11 0.0088 0.0009

Uranus 95269-02-28 23:02 G 36517407.41 36517407.46 36517407.54 0.0141 0.0134

Neptune 95269-10-01 22:33 G 36517622.22 36517622.44 36517622.66 0.0088 0.0002

Uranus 95269-10-13 09:07 G 36517633.76 36517633.88 36517634.04 0.0141 0.0108

Saturn 95270-01-13 09:50 G 36517725.82 36517725.91 36517726.01 0.0305 0.0268

Neptune 95270-05-15 11:45 G 36517847.77 36517847.99 36517848.21 0.0088 0.0013

Uranus 95270-05-27 19:12 G 36517860.14 36517860.30 36517860.49 0.0141 0.0082

Saturn 95270-08-31 16:19 G 36517955.98 36517956.18 36517956.39 0.0306 0.0037

Neptune 95270-12-27 01:12 G 36518073.34 36518073.55 36518073.77 0.0088 0.0023

Uranus 95271-01-09 05:31 G 36518086.53 36518086.73 36518086.93 0.0140 0.0055

Neptune 95271-08-09 14:09 G 36518298.90 36518299.09 36518299.31 0.0088 0.0034

Uranus 95271-08-23 15:07 G 36518312.92 36518313.13 36518313.35 0.0140 0.0029

Neptune 95272-03-22 03:36 G 36518524.46 36518524.65 36518524.84 0.0088 0.0045

Uranus 95272-04-06 00:29 G 36518539.31 36518539.52 36518539.74 0.0140 0.0003

Neptune 95272-11-02 16:33 G 36518750.03 36518750.19 36518750.37 0.0088 0.0055

Uranus 95272-11-18 09:36 G 36518765.69 36518765.90 36518766.12 0.0140 0.0024

Neptune 95273-06-16 06:00 G 36518975.61 36518975.75 36518975.90 0.0088 0.0066

Uranus 95273-07-02 18:43 G 36518992.08 36518992.28 36518992.49 0.0140 0.0049

Neptune 95274-01-27 18:57 G 36519201.20 36519201.29 36519201.41 0.0088 0.0077

Uranus 95274-02-14 03:36 G 36519218.47 36519218.65 36519218.84 0.0139 0.0074

Neptune 95274-09-10 08:24 G 36519426.81 36519426.85 36519426.89 0.0088 0.0087

Uranus 95274-09-28 12:00 G 36519444.86 36519445.00 36519445.16 0.0139 0.0100

Jupiter 95274-11-27 14:53 G 36519504.96 36519505.12 36519505.29 0.0523 0.0306

Uranus 95275-05-12 20:24 G 36519671.27 36519671.35 36519671.46 0.0139 0.0124

Jupiter 95275-07-22 17:31 G 36519742.09 36519742.23 36519742.38 0.0526 0.0364

Jupiter 95280-10-03 12:29 G 36521641.84 36521642.02 36521642.21 0.0502 0.0234

Jupiter 95281-05-28 09:21 G 36521878.75 36521878.89 36521879.03 0.0500 0.0369

Mars 95282-10-07 10:19 G 36522375.76 36522375.93 36522376.10 0.1849 0.0301

Saturn 95284-06-30 22:19 G 36523008.35 36523008.43 36523008.54 0.0257 0.0229

Saturn 95285-02-14 18:57 G 36523237.08 36523237.29 36523237.50 0.0257 0.0044

Saturn 95285-10-01 14:38 G 36523465.93 36523466.11 36523466.29 0.0257 0.0139

Jupiter 95286-08-02 11:02 G 36523770.89 36523770.96 36523771.03 0.0522 0.0487

Jupiter 95287-03-27 12:14 G 36524007.82 36524008.01 36524008.20 0.0525 0.0175

Jupiter 95292-06-08 10:19 G 36525907.80 36525907.93 36525908.05 0.0503 0.0400

Jupiter 95293-01-31 08:09 G 36526144.66 36526144.84 36526145.03 0.0500 0.0207

Jupiter 95298-11-30 09:36 G 36528273.70 36528273.90 36528274.10 0.0525 0.0010

Saturn 95299-07-26 11:31 G 36528511.86 36528511.98 36528512.12 0.0305 0.0237

Saturn 95300-03-13 18:00 G 36528742.05 36528742.25 36528742.46 0.0305 0.0068

Jupiter 95304-10-07 03:50 G 36530410.45 36530410.66 36530410.86 0.0501 0.0037

Jupiter 95310-08-06 07:26 G 36532539.62 36532539.81 36532539.99 0.0524 0.0192

Earth 95310-09-01 14:38 G 36532566.03 36532566.11 36532566.20 0.2701 0.2243

Moon 95310-09-01 18:29 G 36532566.25 36532566.27 36532566.29 0.2695 0.2670

Jupiter 95311-03-31 11:31 G 36532776.90 36532776.98 36532777.06 0.0527 0.0482

Uranus 95312-07-12 02:53 G 36533245.58 36533245.62 36533245.67 0.0137 0.0133

Uranus 95313-02-23 09:50 G 36533471.79 36533471.91 36533472.05 0.0137 0.0110

Uranus 95313-10-07 17:02 G 36533698.05 36533698.21 36533698.39 0.0137 0.0087

Saturn 95314-01-11 23:45 G 36533794.37 36533794.49 36533794.63 0.0258 0.0205

Uranus 95314-05-22 00:29 G 36533924.33 36533924.52 36533924.72 0.0138 0.0063

Saturn 95314-08-28 20:09 G 36534023.13 36534023.34 36534023.56 0.0257 0.0021

Uranus 95315-01-03 07:55 G 36534150.63 36534150.83 36534151.05 0.0138 0.0039

Saturn 95315-04-14 15:36 G 36534252.00 36534252.15 36534252.33 0.0257 0.0163

Uranus 95315-08-17 15:50 G 36534376.95 36534377.16 36534377.38 0.0138 0.0014

Uranus 95316-03-30 23:45 G 36534603.28 36534603.49 36534603.71 0.0138 0.0011

Jupiter 95316-06-12 01:41 G 36534676.37 36534676.57 36534676.77 0.0502 0.0132

Uranus 95316-11-12 07:41 G 36534829.62 36534829.82 36534830.04 0.0138 0.0036

Jupiter 95317-02-03 20:53 G 36534913.31 36534913.37 36534913.45 0.0499 0.0465

Uranus 95317-06-26 15:50 G 36535055.98 36535056.16 36535056.37 0.0139 0.0062

Uranus 95318-02-08 00:29 G 36535282.36 36535282.52 36535282.70 0.0139 0.0086

Moon 95318-08-30 04:33 G 36535485.54 36535485.69 36535485.84 0.2694 0.1106

Earth 95318-08-30 05:17 G 36535485.59 36535485.72 36535485.86 0.2702 0.1387 *

Uranus 95318-09-22 09:07 G 36535508.75 36535508.88 36535509.01 0.0139 0.0111

Uranus 95319-05-06 17:45 G 36535735.21 36535735.24 36535735.29 0.0139 0.0136

Mars 95321-03-18 19:55 G 36536417.15 36536417.33 36536417.50 0.1690 0.0100

Jupiter 95322-04-11 04:05 G 36536805.54 36536805.67 36536805.82 0.0523 0.0374

Jupiter 95322-12-04 06:29 G 36537042.61 36537042.77 36537042.94 0.0526 0.0295

Jupiter 95328-02-15 23:02 G 36538942.30 36538942.46 36538942.63 0.0503 0.0302

Jupiter 95328-10-09 20:24 G 36539179.19 36539179.35 36539179.52 0.0500 0.0305

Saturn 95329-02-05 13:26 G 36539297.91 36539298.06 36539298.21 0.0305 0.0209

Saturn 95329-09-23 20:09 G 36539528.14 36539528.34 36539528.54 0.0306 0.0097

Jupiter 95334-08-09 01:41 G 36541308.38 36541308.57 36541308.77 0.0525 0.0107

Jupiter 95339-10-21 21:07 G 36543208.31 36543208.38 36543208.45 0.0504 0.0468

Jupiter 95340-06-14 19:55 G 36543445.13 36543445.33 36543445.53 0.0501 0.0141

Saturn 95343-07-25 00:14 G 36544580.37 36544580.51 36544580.67 0.0257 0.0184

Saturn 95344-03-09 20:38 G 36544809.14 36544809.36 36544809.57 0.0257 0.0002

Saturn 95344-10-24 16:05 G 36545038.03 36545038.17 36545038.33 0.0257 0.0185

Neptune 95345-09-14 19:26 G 36545363.30 36545363.31 36545363.35 0.0089 0.0089

Jupiter 95346-04-13 21:07 G 36545574.18 36545574.38 36545574.57 0.0524 0.0083

Neptune 95346-04-28 07:55 G 36545588.75 36545588.83 36545588.96 0.0089 0.0079

Neptune 95346-12-09 20:53 G 36545814.25 36545814.37 36545814.53 0.0089 0.0068

Neptune 95347-07-23 09:50 G 36546039.76 36546039.91 36546040.09 0.0089 0.0057

Neptune 95348-03-04 22:33 G 36546265.27 36546265.44 36546265.64 0.0089 0.0046

Mars 95348-08-04 16:05 G 36546418.01 36546418.17 36546418.32 0.1844 0.0795

Neptune 95348-10-16 11:17 G 36546490.79 36546490.97 36546491.19 0.0089 0.0036

Neptune 95349-05-30 00:29 G 36546716.31 36546716.52 36546716.73 0.0089 0.0024

Neptune 95350-01-10 13:26 G 36546941.84 36546942.06 36546942.27 0.0089 0.0014

Neptune 95350-08-24 02:09 G 36547167.37 36547167.59 36547167.80 0.0089 0.0003

Neptune 95351-04-06 14:38 G 36547392.90 36547393.11 36547393.33 0.0089 0.0008

Neptune 95351-11-18 03:21 G 36547618.44 36547618.64 36547618.86 0.0089 0.0019

Jupiter 95352-02-18 18:29 G 36547711.06 36547711.27 36547711.48 0.0501 0.0025

Neptune 95352-06-30 16:19 G 36547843.98 36547844.18 36547844.39 0.0089 0.0030

Neptune 95353-02-11 05:02 G 36548069.52 36548069.71 36548069.91 0.0089 0.0040

Uranus 95353-06-13 16:05 G 36548192.07 36548192.17 36548192.30 0.0141 0.0119

Neptune 95353-09-24 17:31 G 36548295.07 36548295.23 36548295.43 0.0089 0.0051

Uranus 95354-01-26 02:24 G 36548418.45 36548418.60 36548418.78 0.0141 0.0093

Neptune 95354-05-08 06:14 G 36548520.62 36548520.76 36548520.94 0.0089 0.0062

Uranus 95354-09-09 12:29 G 36548644.84 36548645.02 36548645.23 0.0141 0.0067

Neptune 95354-12-19 19:12 G 36548746.19 36548746.30 36548746.44 0.0089 0.0073

Uranus 95355-04-23 22:19 G 36548871.23 36548871.43 36548871.65 0.0140 0.0040

Neptune 95355-08-02 07:55 G 36548971.77 36548971.83 36548971.93 0.0089 0.0083

Uranus 95355-12-06 08:09 G 36549097.62 36549097.84 36549098.06 0.0140 0.0014

Uranus 95356-07-19 17:31 G 36549324.01 36549324.23 36549324.45 0.0140 0.0012

Uranus 95357-03-03 02:38 G 36549550.40 36549550.61 36549550.82 0.0140 0.0038

Uranus 95357-10-15 11:17 G 36549776.79 36549776.97 36549777.18 0.0140 0.0064

Jupiter 95357-12-17 18:43 G 36549840.11 36549840.28 36549840.46 0.0523 0.0265

Uranus 95358-05-29 20:09 G 36550003.18 36550003.34 36550003.51 0.0139 0.0089

Jupiter 95358-08-11 22:05 G 36550077.30 36550077.42 36550077.55 0.0526 0.0409

Saturn 95358-08-18 14:24 G 36550083.94 36550084.10 36550084.28 0.0305 0.0180

Uranus 95359-01-11 04:33 G 36550229.58 36550229.69 36550229.83 0.0139 0.0114

Saturn 95359-04-05 21:07 G 36550314.19 36550314.38 36550314.57 0.0305 0.0126

Uranus 95359-08-25 13:12 G 36550456.02 36550456.05 36550456.08 0.0139 0.0137

Pluto 95362-11-20 20:24 G 36551639.17 36551639.35 36551639.57 0.0065 0.0026

Pluto 95363-07-04 00:57 G 36551864.33 36551864.54 36551864.75 0.0066 0.0017

Jupiter 95363-10-24 13:41 G 36551976.88 36551977.07 36551977.26 0.0502 0.0198

Pluto 95364-02-14 04:33 G 36552089.62 36552089.69 36552089.79 0.0066 0.0060

Jupiter 95364-06-17 09:36 G 36552213.78 36552213.90 36552214.02 0.0499 0.0403

Jupiter 95369-08-22 16:48 G 36554106.10 36554106.20 36554106.31 0.0523 0.0442

Jupiter 95370-04-16 18:57 G 36554343.12 36554343.29 36554343.48 0.0526 0.0226

Saturn 95373-02-03 01:26 G 36555366.40 36555366.56 36555366.74 0.0257 0.0161

Saturn 95373-09-19 21:50 G 36555595.19 36555595.41 36555595.62 0.0257 0.0025

Saturn 95374-05-06 17:02 G 36555824.10 36555824.21 36555824.35 0.0257 0.0209

Jupiter 95375-06-29 11:02 G 36556242.82 36556242.96 36556243.10 0.0503 0.0367

Jupiter 95376-02-21 08:24 G 36556479.67 36556479.85 36556480.03 0.0500 0.0241

Jupiter 95381-12-20 14:53 G 36558608.92 36558609.12 36558609.32 0.0525 0.0037

Mars 95387-01-14 06:14 G 36560459.58 36560459.76 36560459.93 0.1694 0.0164

Jupiter 95387-10-27 07:12 G 36560745.59 36560745.80 36560746.00 0.0501 0.0075

Saturn 95388-02-28 16:19 G 36560870.00 36560870.18 36560870.36 0.0305 0.0152

Saturn 95388-10-15 23:02 G 36561100.29 36561100.46 36561100.64 0.0306 0.0155

Jupiter 95393-08-25 10:48 G 36562874.76 36562874.95 36562875.14 0.0524 0.0151

Jupiter 95394-04-19 14:38 G 36563112.10 36563112.11 36563112.13 0.0526 0.0523

Uranus 95396-10-23 17:45 G 36564030.15 36564030.24 36564030.35 0.0137 0.0120

Uranus 95397-06-07 00:43 G 36564256.39 36564256.53 36564256.70 0.0137 0.0097

Uranus 95398-01-19 07:55 G 36564482.66 36564482.83 36564483.03 0.0137 0.0074

Uranus 95398-09-02 15:21 G 36564708.95 36564709.14 36564709.36 0.0138 0.0050

Uranus 95399-04-16 23:02 G 36564935.25 36564935.46 36564935.68 0.0138 0.0025

Jupiter 95399-07-02 05:45 G 36565011.54 36565011.74 36565011.95 0.0502 0.0093

Uranus 95399-11-29 06:57 G 36565161.57 36565161.79 36565162.00 0.0138 0.0002

Uranus 95400-07-13 14:53 G 36565387.91 36565388.12 36565388.34 0.0138 0.0024

Uranus 95401-02-24 22:48 G 36565614.25 36565614.45 36565614.66 0.0138 0.0049

Uranus 95401-10-09 06:57 G 36565840.62 36565840.79 36565840.98 0.0139 0.0074

Uranus 95402-05-23 15:36 G 36566067.00 36566067.15 36566067.30 0.0139 0.0099

Saturn 95402-08-17 02:09 G 36566152.41 36566152.59 36566152.77 0.0257 0.0138

Uranus 95403-01-05 00:00 G 36566293.41 36566293.50 36566293.60 0.0139 0.0124

Saturn 95403-04-02 22:19 G 36566381.22 36566381.43 36566381.64 0.0257 0.0046

Saturn 95403-11-17 18:00 G 36566610.16 36566610.25 36566610.34 0.0257 0.0230

Jupiter 95405-05-01 06:43 G 36567140.63 36567140.78 36567140.93 0.0523 0.0336

Jupiter 95405-12-24 09:07 G 36567377.73 36567377.88 36567378.04 0.0526 0.0335

Jupiter 95411-03-08 03:36 G 36569277.48 36569277.65 36569277.83 0.0503 0.0261

Jupiter 95411-10-31 00:43 G 36569514.38 36569514.53 36569514.68 0.0500 0.0346

Mars 95414-06-02 21:21 G 36570460.27 36570460.39 36570460.52 0.1839 0.1296

Jupiter 95417-01-04 04:33 G 36571406.67 36571406.69 36571406.73 0.0522 0.0513

Jupiter 95417-08-29 06:00 G 36571643.56 36571643.75 36571643.94 0.0525 0.0150

Saturn 95417-09-10 18:14 G 36571656.07 36571656.26 36571656.45 0.0305 0.0121

Saturn 95418-04-29 00:57 G 36571886.38 36571886.54 36571886.71 0.0305 0.0185

Jupiter 95422-11-10 23:02 G 36573543.36 36573543.46 36573543.56 0.0503 0.0432

Jupiter 95423-07-05 20:53 G 36573780.18 36573780.37 36573780.56 0.0500 0.0177

Neptune 95429-01-26 23:17 G 36575812.42 36575812.47 36575812.52 0.0088 0.0085

Jupiter 95429-05-04 03:07 G 36575909.43 36575909.63 36575909.83 0.0525 0.0035

Neptune 95429-09-09 12:00 G 36576037.91 36576038.00 36576038.14 0.0088 0.0075

Neptune 95430-04-23 01:41 G 36576263.42 36576263.57 36576263.73 0.0088 0.0064

Neptune 95430-12-04 14:53 G 36576488.96 36576489.12 36576489.31 0.0088 0.0054

Neptune 95431-07-18 04:19 G 36576714.49 36576714.68 36576714.88 0.0088 0.0043

Saturn 95432-02-27 03:21 G 36576938.46 36576938.64 36576938.84 0.0258 0.0116

Neptune 95432-02-28 17:17 G 36576940.03 36576940.22 36576940.44 0.0088 0.0033

Neptune 95432-10-11 06:43 G 36577165.57 36577165.78 36577166.00 0.0088 0.0022

Saturn 95432-10-12 23:31 G 36577167.28 36577167.48 36577167.69 0.0257 0.0070

Neptune 95433-05-24 20:09 G 36577391.12 36577391.34 36577391.56 0.0088 0.0011

Saturn 95433-05-29 18:57 G 36577396.27 36577396.29 36577396.34 0.0257 0.0254

Neptune 95434-01-05 09:21 G 36577616.67 36577616.89 36577617.12 0.0088 0.0002

Neptune 95434-08-18 22:33 G 36577842.23 36577842.44 36577842.67 0.0088 0.0010

Jupiter 95435-03-10 18:57 G 36578046.08 36578046.29 36578046.50 0.0501 0.0010

Neptune 95435-04-01 12:00 G 36578067.78 36578068.00 36578068.21 0.0088 0.0021

Neptune 95435-11-13 00:57 G 36578293.34 36578293.54 36578293.76 0.0088 0.0032

Neptune 95436-06-25 14:09 G 36578518.91 36578519.09 36578519.30 0.0088 0.0042

Neptune 95437-02-06 03:36 G 36578744.48 36578744.65 36578744.84 0.0088 0.0053

Uranus 95437-02-11 21:21 G 36578750.33 36578750.39 36578750.49 0.0141 0.0131

Neptune 95437-09-19 16:33 G 36578970.05 36578970.19 36578970.36 0.0088 0.0064

Uranus 95437-09-26 07:55 G 36578976.70 36578976.83 36578976.99 0.0141 0.0105

Neptune 95438-05-03 06:14 G 36579195.64 36579195.76 36579195.88 0.0088 0.0074

Uranus 95438-05-10 18:00 G 36579203.08 36579203.25 36579203.45 0.0141 0.0079

Neptune 95438-12-14 18:57 G 36579421.25 36579421.29 36579421.38 0.0088 0.0085

Uranus 95438-12-23 04:19 G 36579429.48 36579429.68 36579429.89 0.0141 0.0052

Uranus 95439-08-06 14:09 G 36579655.87 36579656.09 36579656.30 0.0140 0.0026

Moon 95440-03-04 21:50 G 36579867.26 36579867.41 36579867.57 0.2626 0.0982

Earth 95440-03-05 00:57 G 36579867.42 36579867.54 36579867.67 0.2632 0.1638 *

Uranus 95440-03-19 23:31 G 36579882.27 36579882.48 36579882.70 0.0140 0.0002

Uranus 95440-11-01 08:53 G 36580108.65 36580108.87 36580109.08 0.0140 0.0026

Jupiter 95441-01-06 23:31 G 36580175.30 36580175.48 36580175.67 0.0524 0.0221

Uranus 95441-06-15 17:45 G 36580335.05 36580335.24 36580335.45 0.0140 0.0052

Jupiter 95441-09-01 03:07 G 36580412.53 36580412.63 36580412.73 0.0526 0.0454

Uranus 95442-01-28 02:53 G 36580561.44 36580561.62 36580561.80 0.0140 0.0077

Uranus 95442-09-11 11:31 G 36580787.84 36580787.98 36580788.13 0.0139 0.0102

Uranus 95443-04-25 19:41 G 36581014.25 36581014.32 36581014.42 0.0139 0.0126

Jupiter 95446-11-13 16:48 G 36582312.01 36582312.20 36582312.40 0.0502 0.0160

Saturn 95447-03-23 19:55 G 36582442.13 36582442.33 36582442.53 0.0305 0.0092

Jupiter 95447-07-08 12:43 G 36582548.95 36582549.03 36582549.13 0.0499 0.0443

Saturn 95447-11-09 02:53 G 36582672.47 36582672.62 36582672.76 0.0306 0.0215

Moon 95448-03-02 11:02 G 36582786.86 36582786.96 36582787.06 0.2629 0.2053

Earth 95448-03-02 16:48 G 36582787.07 36582787.20 36582787.32 0.2631 0.1653

Pluto 95450-07-23 09:21 G 36583659.75 36583659.89 36583660.06 0.0079 0.0058

Pluto 95451-03-05 19:41 G 36583885.12 36583885.32 36583885.56 0.0079 0.0020

Jupiter 95452-09-11 20:09 G 36584441.22 36584441.34 36584441.47 0.0522 0.0403

Mars 95452-11-11 15:50 G 36584501.99 36584502.16 36584502.33 0.1697 0.0434

Jupiter 95453-05-06 22:05 G 36584678.25 36584678.42 36584678.60 0.0525 0.0267

Jupiter 95458-07-19 14:38 G 36586577.95 36586578.11 36586578.27 0.0503 0.0329

Jupiter 95459-03-13 12:14 G 36586814.84 36586815.01 36586815.18 0.0500 0.0281

Saturn 95461-09-08 04:19 G 36587724.49 36587724.68 36587724.89 0.0257 0.0092

Saturn 95462-04-25 00:29 G 36587953.33 36587953.52 36587953.73 0.0257 0.0093

Jupiter 95465-01-09 16:48 G 36588944.01 36588944.20 36588944.40 0.0525 0.0077

Jupiter 95470-03-24 11:45 G 36590843.96 36590843.99 36590844.03 0.0504 0.0496

Jupiter 95470-11-16 11:02 G 36591080.76 36591080.96 36591081.16 0.0501 0.0116

Jupiter 95476-09-14 13:55 G 36593209.88 36593210.08 36593210.28 0.0524 0.0110

Saturn 95476-10-02 22:48 G 36593228.25 36593228.45 36593228.66 0.0305 0.0060

Saturn 95477-05-21 05:45 G 36593458.62 36593458.74 36593458.86 0.0305 0.0247

Mars 95480-03-30 03:07 G 36594502.59 36594502.63 36594502.66 0.1835 0.1789

Uranus 95480-06-24 01:41 G 36594588.52 36594588.57 36594588.65 0.0137 0.0130

Uranus 95481-02-05 08:38 G 36594814.74 36594814.86 36594815.01 0.0137 0.0107

Uranus 95481-09-19 15:50 G 36595041.00 36595041.16 36595041.34 0.0137 0.0084

Uranus 95482-05-03 23:17 G 36595267.28 36595267.47 36595267.67 0.0137 0.0060

Jupiter 95482-07-22 06:57 G 36595346.58 36595346.79 36595347.00 0.0501 0.0057

Uranus 95482-12-16 06:29 G 36595493.57 36595493.77 36595493.99 0.0138 0.0036

Uranus 95483-07-30 14:24 G 36595719.88 36595720.10 36595720.32 0.0138 0.0011

Uranus 95484-03-12 22:05 G 36595946.21 36595946.42 36595946.64 0.0138 0.0014

Uranus 95484-10-25 06:00 G 36596172.54 36596172.75 36596172.96 0.0138 0.0038

Uranus 95485-06-08 13:55 G 36596398.90 36596399.08 36596399.29 0.0138 0.0063

Uranus 95486-01-20 22:19 G 36596625.27 36596625.43 36596625.61 0.0139 0.0088

Uranus 95486-09-04 06:43 G 36596851.67 36596851.78 36596851.92 0.0139 0.0113

Uranus 95487-04-18 15:21 G 36597078.13 36597078.14 36597078.18 0.0139 0.0138

Jupiter 95488-05-20 11:17 G 36597475.80 36597475.97 36597476.13 0.0524 0.0294

Jupiter 95489-01-12 14:38 G 36597712.98 36597713.11 36597713.25 0.0527 0.0384

Saturn 95490-08-04 09:21 G 36598281.87 36598281.89 36598281.93 0.0258 0.0255

Saturn 95491-03-21 06:14 G 36598510.56 36598510.76 36598510.97 0.0258 0.0068

Saturn 95491-11-05 02:24 G 36598739.41 36598739.60 36598739.79 0.0257 0.0117

Jupiter 95494-03-27 04:19 G 36599612.50 36599612.68 36599612.87 0.0502 0.0226

Jupiter 95494-11-19 00:43 G 36599849.39 36599849.53 36599849.66 0.0499 0.0379

Jupiter 95500-01-24 08:24 G 36601741.77 36601741.85 36601741.93 0.0522 0.0474

Jupiter 95500-09-18 10:05 G 36601978.73 36601978.92 36601979.10 0.0526 0.0194

Jupiter 95505-12-01 01:12 G 36603878.43 36603878.55 36603878.68 0.0503 0.0398

Saturn 95506-04-16 02:24 G 36604014.39 36604014.60 36604014.80 0.0305 0.0027

Jupiter 95506-07-25 23:17 G 36604115.28 36604115.47 36604115.66 0.0500 0.0214

Saturn 95506-12-02 09:07 G 36604244.80 36604244.88 36604244.96 0.0305 0.0281

Neptune 95510-08-01 19:55 G 36605583.25 36605583.33 36605583.43 0.0089 0.0081

Neptune 95511-03-15 08:09 G 36605808.73 36605808.84 36605809.00 0.0089 0.0071

Neptune 95511-10-26 21:07 G 36606034.24 36606034.38 36606034.56 0.0089 0.0060

Mars 95512-03-30 17:17 G 36606190.11 36606190.22 36606190.33 0.1850 0.1392

Jupiter 95512-05-24 05:31 G 36606244.53 36606244.73 36606244.93 0.0525 0.0010

Neptune 95512-06-08 10:19 G 36606259.76 36606259.93 36606260.12 0.0089 0.0049

Neptune 95513-01-19 23:17 G 36606485.27 36606485.47 36606485.67 0.0089 0.0038

Neptune 95513-09-02 11:45 G 36606710.79 36606710.99 36606711.21 0.0089 0.0027

Neptune 95514-04-16 00:43 G 36606936.32 36606936.53 36606936.75 0.0089 0.0016

Neptune 95514-11-27 13:41 G 36607161.85 36607162.07 36607162.28 0.0089 0.0006

Neptune 95515-07-11 02:24 G 36607387.39 36607387.60 36607387.82 0.0089 0.0005

Neptune 95516-02-21 15:07 G 36607612.92 36607613.13 36607613.35 0.0089 0.0016

Neptune 95516-10-04 03:36 G 36607838.46 36607838.65 36607838.87 0.0089 0.0028

Neptune 95517-05-17 16:19 G 36608064.00 36608064.18 36608064.40 0.0089 0.0038

Neptune 95517-12-29 05:31 G 36608289.55 36608289.73 36608289.92 0.0089 0.0048

Jupiter 95518-03-30 21:36 G 36608381.20 36608381.40 36608381.61 0.0501 0.0048

Neptune 95518-08-11 18:00 G 36608515.10 36608515.25 36608515.43 0.0089 0.0059

Mars 95518-09-10 02:09 G 36608544.43 36608544.59 36608544.75 0.1701 0.0690

Neptune 95519-03-25 06:29 G 36608740.66 36608740.77 36608740.93 0.0089 0.0070

Neptune 95519-11-05 19:41 G 36608966.24 36608966.32 36608966.42 0.0089 0.0080

Saturn 95520-02-15 11:02 G 36609067.87 36609067.96 36609068.06 0.0258 0.0230

Saturn 95520-10-01 07:55 G 36609296.62 36609296.83 36609297.04 0.0257 0.0043

Saturn 95521-05-18 03:50 G 36609525.49 36609525.66 36609525.85 0.0257 0.0143

Uranus 95521-05-27 13:41 G 36609534.95 36609535.07 36609535.19 0.0141 0.0116

Uranus 95522-01-08 23:45 G 36609761.34 36609761.49 36609761.67 0.0141 0.0091

Uranus 95522-08-23 10:05 G 36609987.73 36609987.92 36609988.12 0.0141 0.0064

Uranus 95523-04-06 19:41 G 36610214.12 36610214.32 36610214.54 0.0140 0.0038

Uranus 95523-11-19 05:31 G 36610440.51 36610440.73 36610440.95 0.0140 0.0012

Jupiter 95524-01-28 00:43 G 36610510.34 36610510.53 36610510.71 0.0524 0.0186

Uranus 95524-07-02 14:53 G 36610666.90 36610667.12 36610667.34 0.0140 0.0014

Jupiter 95524-09-21 04:05 G 36610747.61 36610747.67 36610747.75 0.0526 0.0492

Uranus 95525-02-14 00:00 G 36610893.30 36610893.50 36610893.72 0.0140 0.0040

Uranus 95525-09-28 09:07 G 36611119.69 36611119.88 36611120.07 0.0140 0.0065

Uranus 95526-05-12 17:45 G 36611346.08 36611346.24 36611346.41 0.0139 0.0090

Uranus 95526-12-25 02:24 G 36611572.49 36611572.60 36611572.73 0.0139 0.0115

Uranus 95527-08-08 10:48 G 36611798.95 36611798.95 36611798.97 0.0139 0.0139

Jupiter 95529-12-03 19:55 G 36612647.13 36612647.33 36612647.53 0.0502 0.0122

Jupiter 95530-07-28 15:21 G 36612884.10 36612884.14 36612884.21 0.0499 0.0481

Saturn 95535-03-11 00:28 G 36614570.47 36614570.52 36614570.57 0.0304 0.0294

Jupiter 95535-10-02 21:50 G 36614776.27 36614776.41 36614776.55 0.0523 0.0368

Saturn 95535-10-27 06:14 G 36614800.55 36614800.76 36614800.97 0.0305 0.0010

Jupiter 95536-05-27 00:14 G 36615013.36 36615013.51 36615013.68 0.0526 0.0307

Jupiter 95541-08-08 15:36 G 36616912.99 36616913.15 36616913.32 0.0502 0.0294

Jupiter 95542-04-02 12:14 G 36617149.85 36617150.01 36617150.17 0.0499 0.0313

Jupiter 95548-01-30 20:24 G 36619279.16 36619279.35 36619279.55 0.0526 0.0118

Saturn 95549-08-27 13:26 G 36619853.94 36619854.06 36619854.20 0.0258 0.0206

Saturn 95550-04-13 10:33 G 36620082.72 36620082.94 36620083.15 0.0258 0.0018

Mars 95550-09-09 02:38 G 36620231.54 36620231.61 36620231.68 0.1689 0.1544

Saturn 95550-11-28 06:43 G 36620311.62 36620311.78 36620311.95 0.0258 0.0168

Jupiter 95553-04-13 12:14 G 36621178.94 36621179.01 36621179.10 0.0503 0.0464

Moon 95553-09-03 11:16 G 36621321.84 36621321.97 36621322.09 0.2705 0.1554

Earth 95553-09-03 15:36 G 36621322.07 36621322.15 36621322.24 0.2701 0.2252 *

Jupiter 95553-12-06 10:33 G 36621415.74 36621415.94 36621416.14 0.0500 0.0147

Jupiter 95559-10-05 16:19 G 36623544.98 36623545.18 36623545.38 0.0525 0.0072

Moon 95561-09-01 05:16 G 36624241.61 36624241.72 36624241.84 0.2709 0.1672

Earth 95561-09-01 06:14 G 36624241.62 36624241.76 36624241.89 0.2702 0.1374 *

Saturn 95564-09-20 05:16 G 36625356.62 36625356.72 36625356.83 0.0304 0.0259

Uranus 95564-10-06 17:45 G 36625373.14 36625373.24 36625373.36 0.0137 0.0116

Saturn 95565-05-08 11:16 G 36625586.76 36625586.97 36625587.18 0.0305 0.0046

Uranus 95565-05-21 00:43 G 36625599.38 36625599.53 36625599.70 0.0137 0.0093

Jupiter 95565-08-11 07:55 G 36625681.63 36625681.83 36625682.04 0.0501 0.0024

Uranus 95566-01-02 07:55 G 36625825.65 36625825.83 36625826.02 0.0137 0.0070

Uranus 95566-08-16 15:21 G 36626051.94 36626052.14 36626052.35 0.0138 0.0046

Uranus 95567-03-30 22:48 G 36626278.24 36626278.45 36626278.67 0.0138 0.0022

Uranus 95567-11-12 06:28 G 36626504.56 36626504.77 36626504.99 0.0138 0.0003

Uranus 95568-06-25 14:24 G 36626730.89 36626731.10 36626731.32 0.0138 0.0028

Uranus 95569-02-06 22:19 G 36626957.24 36626957.43 36626957.64 0.0138 0.0053

Uranus 95569-09-21 06:28 G 36627183.60 36627183.77 36627183.96 0.0138 0.0077

Uranus 95570-05-05 14:52 G 36627409.98 36627410.12 36627410.28 0.0139 0.0102

Uranus 95570-12-17 23:16 G 36627636.40 36627636.47 36627636.58 0.0139 0.0127

Jupiter 95571-06-10 12:28 G 36627810.85 36627811.02 36627811.20 0.0523 0.0259

Jupiter 95572-02-02 15:36 G 36628048.04 36628048.15 36628048.27 0.0526 0.0419

Jupiter 95577-04-16 05:31 G 36629947.54 36629947.73 36629947.92 0.0502 0.0194

Jupiter 95577-12-09 01:55 G 36630184.47 36630184.58 36630184.70 0.0499 0.0413

Mars 95578-01-25 22:19 G 36630232.28 36630232.43 36630232.59 0.1845 0.0868

Saturn 95579-03-09 15:50 G 36630640.02 36630640.16 36630640.33 0.0258 0.0179

Saturn 95579-10-24 12:57 G 36630868.83 36630869.04 36630869.26 0.0258 0.0010

Saturn 95580-06-09 09:07 G 36631097.75 36631097.88 36631098.03 0.0258 0.0194

Jupiter 95583-02-13 07:55 G 36632076.73 36632076.83 36632076.94 0.0522 0.0443

Jupiter 95583-10-08 09:36 G 36632313.72 36632313.90 36632314.08 0.0525 0.0227

Mars 95584-07-07 11:45 G 36632586.84 36632586.99 36632587.13 0.1705 0.0974

Jupiter 95588-12-20 02:52 G 36634213.48 36634213.62 36634213.76 0.0503 0.0363

Jupiter 95589-08-14 00:28 G 36634450.35 36634450.52 36634450.71 0.0500 0.0250

Neptune 95593-12-12 22:48 G 36636032.37 36636032.45 36636032.57 0.0088 0.0078

Saturn 95594-04-02 11:31 G 36636142.84 36636142.98 36636143.13 0.0304 0.0219

Neptune 95594-07-26 12:14 G 36636257.88 36636258.01 36636258.16 0.0088 0.0067

Saturn 95594-11-18 17:31 G 36636373.03 36636373.23 36636373.43 0.0305 0.0086

Neptune 95595-03-09 01:12 G 36636483.40 36636483.55 36636483.74 0.0088 0.0057

Jupiter 95595-06-13 05:45 G 36636579.54 36636579.74 36636579.94 0.0525 0.0039

Neptune 95595-10-20 14:38 G 36636708.93 36636709.11 36636709.31 0.0088 0.0046

Neptune 95596-06-02 04:04 G 36636934.47 36636934.67 36636934.88 0.0088 0.0036

Neptune 95597-01-13 17:16 G 36637160.01 36637160.22 36637160.44 0.0088 0.0025

Neptune 95597-08-27 06:28 G 36637385.56 36637385.77 36637386.00 0.0088 0.0015

Neptune 95598-04-09 19:55 G 36637611.11 36637611.33 36637611.55 0.0088 0.0004

Neptune 95598-11-21 09:07 G 36637836.66 36637836.88 36637837.10 0.0088 0.0007

Neptune 95599-07-04 22:04 G 36638062.22 36638062.42 36638062.65 0.0088 0.0019

Neptune 95600-02-15 11:31 G 36638287.77 36638287.98 36638288.20 0.0088 0.0029

Neptune 95600-09-28 00:28 G 36638513.34 36638513.52 36638513.73 0.0088 0.0040

Jupiter 95601-04-18 21:07 G 36638716.18 36638716.38 36638716.59 0.0500 0.0079

Neptune 95601-05-11 14:09 G 36638738.90 36638739.09 36638739.27 0.0088 0.0050

Neptune 95601-12-23 03:07 G 36638964.48 36638964.63 36638964.81 0.0088 0.0061

Neptune 95602-08-05 16:04 G 36639190.07 36639190.17 36639190.33 0.0088 0.0072

Neptune 95603-03-19 05:31 G 36639415.66 36639415.73 36639415.83 0.0088 0.0082

Uranus 95605-01-24 19:55 G 36640093.26 36640093.33 36640093.44 0.0141 0.0128

Uranus 95605-09-08 06:14 G 36640319.63 36640319.76 36640319.93 0.0141 0.0102

Uranus 95606-04-22 16:33 G 36640546.01 36640546.19 36640546.38 0.0141 0.0076

Uranus 95606-12-05 02:24 G 36640772.41 36640772.60 36640772.82 0.0141 0.0050

Jupiter 95607-02-16 01:26 G 36640845.37 36640845.56 36640845.76 0.0525 0.0151

Uranus 95607-07-19 12:14 G 36640998.80 36640999.01 36640999.23 0.0140 0.0024

Uranus 95608-03-01 21:50 G 36641225.19 36641225.41 36641225.63 0.0140 0.0003

Pluto 95608-05-10 04:04 G 36641294.54 36641294.67 36641294.83 0.0065 0.0048

Saturn 95608-09-18 19:26 G 36641426.14 36641426.31 36641426.49 0.0259 0.0152

Uranus 95608-10-14 07:12 G 36641451.59 36641451.80 36641452.01 0.0140 0.0028

Pluto 95608-12-21 08:24 G 36641519.64 36641519.85 36641520.07 0.0066 0.0006

Saturn 95609-05-05 16:19 G 36641654.97 36641655.18 36641655.40 0.0258 0.0037

Uranus 95609-05-28 16:04 G 36641677.98 36641678.17 36641678.38 0.0140 0.0054

Pluto 95609-08-03 12:28 G 36641744.84 36641745.02 36641745.20 0.0066 0.0037

Saturn 95609-12-20 12:43 G 36641883.93 36641884.03 36641884.14 0.0258 0.0222

Uranus 95610-01-10 00:57 G 36641904.37 36641904.54 36641904.73 0.0140 0.0079

Uranus 95610-08-24 09:36 G 36642130.77 36642130.90 36642131.06 0.0139 0.0104

Uranus 95611-04-07 18:00 G 36642357.19 36642357.25 36642357.35 0.0139 0.0128

Jupiter 95612-12-22 18:43 G 36642982.08 36642982.28 36642982.49 0.0501 0.0092

Mars 95616-07-06 12:28 G 36644273.91 36644274.02 36644274.14 0.1693 0.1289

Jupiter 95618-10-21 22:04 G 36645111.27 36645111.42 36645111.58 0.0523 0.0338

Jupiter 95619-06-16 00:57 G 36645348.40 36645348.54 36645348.70 0.0526 0.0342

Saturn 95623-10-13 18:14 G 36646929.09 36646929.26 36646929.43 0.0304 0.0177

Saturn 95624-05-31 00:14 G 36647159.32 36647159.51 36647159.70 0.0305 0.0128

Jupiter 95624-08-27 14:52 G 36647247.95 36647248.12 36647248.30 0.0502 0.0266

Jupiter 95625-04-21 11:45 G 36647484.84 36647484.99 36647485.14 0.0499 0.0344

Jupiter 95630-06-26 18:57 G 36649377.27 36649377.29 36649377.32 0.0522 0.0518

Jupiter 95631-02-18 19:55 G 36649614.14 36649614.33 36649614.53 0.0525 0.0151

Jupiter 95636-05-02 11:31 G 36651513.88 36651513.98 36651514.08 0.0503 0.0438

Jupiter 95636-12-25 10:04 G 36651750.72 36651750.92 36651751.11 0.0500 0.0178

Saturn 95638-03-31 22:48 G 36652212.27 36652212.45 36652212.65 0.0258 0.0124

Saturn 95638-11-15 20:09 G 36652441.13 36652441.34 36652441.54 0.0258 0.0065

Saturn 95639-07-02 16:04 G 36652670.14 36652670.17 36652670.23 0.0258 0.0251

Jupiter 95642-10-24 14:24 G 36653879.90 36653880.10 36653880.30 0.0524 0.0043

Mars 95643-11-23 04:19 G 36654274.52 36654274.68 36654274.85 0.1841 0.0387

Uranus 95648-06-06 02:24 G 36655931.53 36655931.60 36655931.69 0.0137 0.0126

Jupiter 95648-08-30 07:40 G 36656016.62 36656016.82 36656017.03 0.0501 0.0014

Uranus 95649-01-18 09:07 G 36656157.76 36656157.88 36656158.04 0.0137 0.0104

Uranus 95649-09-01 16:33 G 36656384.02 36656384.19 36656384.37 0.0137 0.0080

Uranus 95650-04-15 23:45 G 36656610.29 36656610.49 36656610.69 0.0137 0.0056

Mars 95650-05-04 21:21 G 36656629.27 36656629.39 36656629.51 0.1709 0.1254

Uranus 95650-11-28 07:12 G 36656836.59 36656836.80 36656837.01 0.0138 0.0032

Uranus 95651-07-12 14:52 G 36657062.90 36657063.12 36657063.34 0.0138 0.0008

Uranus 95652-02-23 22:33 G 36657289.23 36657289.44 36657289.66 0.0138 0.0017

Uranus 95652-10-07 06:28 G 36657515.57 36657515.77 36657515.98 0.0138 0.0041

Saturn 95653-04-25 02:09 G 36657715.41 36657715.59 36657715.78 0.0304 0.0134

Uranus 95653-05-21 14:24 G 36657741.92 36657742.10 36657742.30 0.0138 0.0067

Saturn 95653-12-11 08:09 G 36657945.67 36657945.84 36657946.02 0.0305 0.0172

Uranus 95654-01-02 23:02 G 36657968.30 36657968.46 36657968.62 0.0139 0.0091

Jupiter 95654-06-29 10:33 G 36658145.76 36658145.94 36658146.12 0.0524 0.0230

Uranus 95654-08-17 07:26 G 36658194.71 36658194.81 36658194.94 0.0139 0.0116

Jupiter 95655-02-21 13:55 G 36658382.99 36658383.08 36658383.19 0.0527 0.0451

Jupiter 95660-05-05 04:19 G 36660282.49 36660282.68 36660282.88 0.0501 0.0165

Jupiter 95660-12-27 23:45 G 36660519.40 36660519.49 36660519.59 0.0499 0.0440

Jupiter 95666-03-04 06:14 G 36662411.64 36662411.76 36662411.88 0.0523 0.0418

Jupiter 95666-10-27 08:52 G 36662648.70 36662648.87 36662649.04 0.0526 0.0260

Saturn 95667-10-12 03:21 G 36662998.44 36662998.64 36662998.84 0.0259 0.0094

Saturn 95668-05-28 00:00 G 36663227.31 36663227.50 36663227.71 0.0258 0.0095

Jupiter 95672-01-09 00:57 G 36664548.40 36664548.54 36664548.70 0.0502 0.0337

Jupiter 95672-09-01 21:50 G 36664785.24 36664785.41 36664785.58 0.0499 0.0275

Neptune 95674-11-03 06:57 G 36665577.73 36665577.79 36665577.88 0.0089 0.0084

Neptune 95675-06-16 19:26 G 36665803.21 36665803.31 36665803.46 0.0089 0.0074

Neptune 95676-01-28 08:24 G 36666028.71 36666028.85 36666029.02 0.0089 0.0063

Neptune 95676-09-09 21:21 G 36666254.22 36666254.39 36666254.57 0.0089 0.0052

Neptune 95677-04-23 10:19 G 36666479.73 36666479.93 36666480.12 0.0089 0.0041

Neptune 95677-12-04 22:48 G 36666705.25 36666705.45 36666705.66 0.0089 0.0030

Jupiter 95678-07-02 04:19 G 36666914.48 36666914.68 36666914.88 0.0525 0.0067

Neptune 95678-07-18 11:45 G 36666930.78 36666930.99 36666931.21 0.0089 0.0019

Neptune 95679-03-01 00:28 G 36667156.31 36667156.52 36667156.74 0.0089 0.0009

Neptune 95679-10-12 13:26 G 36667381.84 36667382.06 36667382.28 0.0089 0.0003

Neptune 95680-05-25 02:09 G 36667607.38 36667607.59 36667607.81 0.0089 0.0013

Neptune 95681-01-05 14:52 G 36667832.92 36667833.12 36667833.34 0.0089 0.0024

Neptune 95681-08-19 03:36 G 36668058.46 36668058.65 36668058.86 0.0089 0.0035

Neptune 95682-04-01 16:33 G 36668284.01 36668284.19 36668284.38 0.0089 0.0046

Mars 95682-05-03 22:48 G 36668316.31 36668316.45 36668316.59 0.1696 0.1034

Saturn 95682-11-05 11:02 G 36668501.76 36668501.96 36668502.16 0.0304 0.0087

Neptune 95682-11-13 05:16 G 36668509.56 36668509.72 36668509.90 0.0089 0.0056

Earth 95683-03-07 02:38 G 36668623.50 36668623.61 36668623.73 0.2631 0.1796

Moon 95683-03-07 04:19 G 36668623.60 36668623.68 36668623.76 0.2638 0.2246 *

Saturn 95683-06-23 17:02 G 36668732.07 36668732.21 36668732.36 0.0305 0.0219

Neptune 95683-06-26 18:00 G 36668735.12 36668735.25 36668735.41 0.0089 0.0067

Neptune 95684-02-07 07:12 G 36668960.69 36668960.80 36668960.90 0.0089 0.0077

Jupiter 95684-05-07 18:57 G 36669051.08 36669051.29 36669051.49 0.0500 0.0104

Neptune 95684-09-19 19:26 G 36669186.30 36669186.31 36669186.36 0.0089 0.0088

Uranus 95688-09-24 04:04 G 36670651.64 36670651.67 36670651.72 0.0141 0.0139

Uranus 95689-05-08 14:38 G 36670877.99 36670878.11 36670878.25 0.0141 0.0112

Uranus 95689-12-21 00:57 G 36671104.37 36671104.54 36671104.72 0.0141 0.0086

Jupiter 95690-03-07 00:00 G 36671180.30 36671180.50 36671180.69 0.0524 0.0123

Uranus 95690-08-04 10:48 G 36671330.76 36671330.95 36671331.16 0.0141 0.0061

Earth 95691-03-04 18:28 G 36671543.13 36671543.27 36671543.40 0.2630 0.1491

Moon 95691-03-04 23:31 G 36671543.35 36671543.48 36671543.62 0.2634 0.1323 *

Uranus 95691-03-18 20:38 G 36671557.15 36671557.36 36671557.58 0.0140 0.0034

Uranus 95691-10-31 06:14 G 36671783.54 36671783.76 36671783.98 0.0140 0.0008

Uranus 95692-06-13 15:36 G 36672009.94 36672010.15 36672010.37 0.0140 0.0017

Uranus 95693-01-26 00:57 G 36672236.33 36672236.54 36672236.75 0.0140 0.0043

Uranus 95693-09-09 09:50 G 36672462.73 36672462.91 36672463.11 0.0140 0.0068

Uranus 95694-04-23 18:43 G 36672689.12 36672689.28 36672689.44 0.0139 0.0093

Uranus 95694-12-06 03:07 G 36672915.52 36672915.63 36672915.75 0.0139 0.0117

Jupiter 95696-01-11 16:04 G 36673316.97 36673317.17 36673317.38 0.0501 0.0067

Pluto 95696-08-21 23:16 G 36673540.27 36673540.47 36673540.70 0.0079 0.0022

Saturn 95696-09-06 10:04 G 36673555.88 36673555.92 36673555.97 0.0259 0.0252

Pluto 95697-04-04 09:36 G 36673765.76 36673765.90 36673766.08 0.0079 0.0056

Saturn 95697-04-23 07:40 G 36673784.62 36673784.82 36673785.04 0.0258 0.0063

Saturn 95697-12-08 04:48 G 36674013.52 36674013.70 36674013.89 0.0258 0.0125

Jupiter 95701-11-10 18:43 G 36675446.12 36675446.28 36675446.44 0.0523 0.0313

Jupiter 95702-07-05 21:21 G 36675683.25 36675683.39 36675683.53 0.0526 0.0367

Jupiter 95707-09-17 12:57 G 36677582.87 36677583.04 36677583.23 0.0502 0.0240

Jupiter 95708-05-11 09:50 G 36677819.77 36677819.91 36677820.05 0.0499 0.0372

Mars 95709-09-20 10:19 G 36678316.75 36678316.93 36678317.10 0.1836 0.0119

Saturn 95712-05-18 20:52 G 36679288.17 36679288.37 36679288.58 0.0304 0.0039

Saturn 95713-01-04 02:52 G 36679518.53 36679518.62 36679518.72 0.0304 0.0267

Jupiter 95713-07-16 15:07 G 36679712.07 36679712.13 36679712.19 0.0522 0.0495

Jupiter 95714-03-10 16:19 G 36679948.99 36679949.18 36679949.37 0.0526 0.0176

Mars 95716-03-02 06:57 G 36680671.72 36680671.79 36680671.86 0.1712 0.1544

Jupiter 95719-05-23 09:36 G 36681848.79 36681848.90 36681849.02 0.0503 0.0412

Jupiter 95720-01-15 07:12 G 36682085.61 36682085.80 36682085.99 0.0499 0.0203

Jupiter 95725-11-13 11:02 G 36684214.76 36684214.96 36684215.16 0.0525 0.0018

Saturn 95726-03-20 15:07 G 36684342.03 36684342.13 36684342.25 0.0259 0.0222

Saturn 95726-11-04 12:57 G 36684570.82 36684571.04 36684571.25 0.0259 0.0032

Saturn 95727-06-21 09:36 G 36684799.74 36684799.90 36684800.08 0.0258 0.0156

Jupiter 95731-09-20 04:33 G 36686351.48 36686351.69 36686351.90 0.0500 0.0033

Uranus 95732-02-05 11:45 G 36686489.97 36686489.99 36686490.02 0.0137 0.0135

Uranus 95732-09-18 18:14 G 36686716.15 36686716.26 36686716.40 0.0137 0.0113

Uranus 95733-05-03 01:26 G 36686942.40 36686942.56 36686942.73 0.0137 0.0089

Uranus 95733-12-15 08:24 G 36687168.67 36687168.85 36687169.05 0.0137 0.0066

Uranus 95734-07-29 16:04 G 36687394.96 36687395.17 36687395.38 0.0138 0.0042

Uranus 95735-03-12 23:31 G 36687621.27 36687621.48 36687621.70 0.0138 0.0018

Uranus 95735-10-25 07:12 G 36687847.58 36687847.80 36687848.02 0.0138 0.0006

Uranus 95736-06-07 14:52 G 36688073.92 36688074.12 36688074.34 0.0138 0.0032

Uranus 95737-01-19 23:02 G 36688300.27 36688300.46 36688300.67 0.0138 0.0056

Jupiter 95737-07-19 07:12 G 36688480.62 36688480.80 36688480.98 0.0524 0.0208

Uranus 95737-09-03 07:12 G 36688526.64 36688526.80 36688526.99 0.0139 0.0081

Jupiter 95738-03-13 11:02 G 36688717.88 36688717.96 36688718.05 0.0527 0.0476

Uranus 95738-04-17 15:50 G 36688753.03 36688753.16 36688753.31 0.0139 0.0105

Uranus 95738-11-30 00:14 G 36688979.46 36688979.51 36688979.61 0.0139 0.0130

Saturn 95741-04-13 01:55 G 36689844.53 36689844.58 36689844.64 0.0303 0.0290

Saturn 95741-11-29 06:57 G 36690074.58 36690074.79 36690075.00 0.0304 0.0012

Jupiter 95743-05-26 00:14 G 36690617.32 36690617.51 36690617.71 0.0501 0.0144

Jupiter 95744-01-17 19:55 G 36690854.26 36690854.33 36690854.41 0.0499 0.0463

Mars 95748-03-01 08:38 G 36692358.71 36692358.86 36692359.02 0.1700 0.0771

Jupiter 95749-03-24 03:36 G 36692746.52 36692746.65 36692746.78 0.0523 0.0394

Jupiter 95749-11-16 05:45 G 36692983.57 36692983.74 36692983.91 0.0526 0.0285

Jupiter 95755-01-28 20:24 G 36694883.19 36694883.35 36694883.52 0.0503 0.0317

Jupiter 95755-09-22 17:45 G 36695120.08 36695120.24 36695120.41 0.0500 0.0298

Saturn 95755-09-30 20:24 G 36695128.21 36695128.35 36695128.50 0.0259 0.0189

Saturn 95756-05-16 18:14 G 36695357.04 36695357.26 36695357.47 0.0258 0.0005

Saturn 95756-12-31 15:07 G 36695585.99 36695586.13 36695586.28 0.0258 0.0188

Neptune 95758-03-17 08:38 G 36696026.80 36696026.86 36696026.98 0.0088 0.0081

Neptune 95758-10-28 22:19 G 36696252.31 36696252.43 36696252.58 0.0088 0.0070

Neptune 95759-06-11 11:31 G 36696477.84 36696477.98 36696478.16 0.0088 0.0060

Neptune 95760-01-23 00:57 G 36696703.37 36696703.54 36696703.74 0.0088 0.0049

Neptune 95760-09-04 14:24 G 36696928.91 36696929.10 36696929.31 0.0088 0.0038

Neptune 95761-04-18 03:21 G 36697154.45 36697154.64 36697154.87 0.0088 0.0029

Jupiter 95761-07-21 23:31 G 36697249.28 36697249.48 36697249.67 0.0525 0.0090

Neptune 95761-11-29 17:02 G 36697379.99 36697380.21 36697380.43 0.0088 0.0017

Neptune 95762-07-13 06:14 G 36697605.54 36697605.76 36697605.99 0.0088 0.0007

Neptune 95763-02-23 19:26 G 36697831.09 36697831.31 36697831.54 0.0088 0.0004

Neptune 95763-10-07 08:24 G 36698056.64 36698056.85 36698057.08 0.0088 0.0016

Neptune 95764-05-19 21:50 G 36698282.20 36698282.41 36698282.63 0.0088 0.0026

Neptune 95764-12-31 11:02 G 36698507.77 36698507.96 36698508.17 0.0088 0.0036

Neptune 95765-08-14 00:00 G 36698733.33 36698733.50 36698733.71 0.0088 0.0048

Neptune 95766-03-27 13:26 G 36698958.90 36698959.06 36698959.24 0.0088 0.0058

Jupiter 95766-10-03 16:33 G 36699149.15 36699149.19 36699149.25 0.0504 0.0489

Neptune 95766-11-08 02:24 G 36699184.48 36699184.60 36699184.76 0.0088 0.0069

Jupiter 95767-05-28 15:36 G 36699385.95 36699386.15 36699386.35 0.0500 0.0130

Neptune 95767-06-21 15:50 G 36699410.07 36699410.16 36699410.27 0.0088 0.0079

Saturn 95770-10-24 12:43 G 36700630.91 36700631.03 36700631.16 0.0304 0.0240

Saturn 95771-06-11 18:14 G 36700861.05 36700861.26 36700861.46 0.0304 0.0063

Uranus 95773-01-06 23:31 G 36701436.39 36701436.48 36701436.60 0.0141 0.0123

Jupiter 95773-03-26 18:28 G 36701515.08 36701515.27 36701515.47 0.0524 0.0102

Uranus 95773-08-21 10:04 G 36701662.76 36701662.92 36701663.08 0.0141 0.0096

Uranus 95774-04-04 19:40 G 36701889.15 36701889.32 36701889.52 0.0141 0.0071

Uranus 95774-11-17 05:45 G 36702115.54 36702115.74 36702115.95 0.0141 0.0045

Uranus 95775-07-01 15:36 G 36702341.93 36702342.15 36702342.36 0.0140 0.0019

Mars 95775-07-18 16:19 G 36702359.01 36702359.18 36702359.34 0.1832 0.0589

Uranus 95776-02-13 01:12 G 36702568.33 36702568.55 36702568.76 0.0140 0.0008

Uranus 95776-09-26 10:19 G 36702794.72 36702794.93 36702795.14 0.0140 0.0033

Uranus 95777-05-10 19:26 G 36703021.11 36703021.31 36703021.51 0.0140 0.0058

Uranus 95777-12-23 04:19 G 36703247.51 36703247.68 36703247.86 0.0140 0.0083

Uranus 95778-08-06 12:57 G 36703473.91 36703474.04 36703474.18 0.0139 0.0107

Jupiter 95779-01-31 12:57 G 36703651.83 36703652.04 36703652.25 0.0501 0.0043

Uranus 95779-03-20 21:36 G 36703700.33 36703700.40 36703700.47 0.0139 0.0132

Jupiter 95784-11-29 13:26 G 36705780.90 36705781.06 36705781.22 0.0524 0.0295

Saturn 95785-04-12 02:09 G 36705914.43 36705914.59 36705914.77 0.0259 0.0158

Jupiter 95785-07-24 16:48 G 36706018.07 36706018.20 36706018.34 0.0527 0.0390

Saturn 95785-11-27 00:00 G 36706143.28 36706143.50 36706143.71 0.0259 0.0033

Saturn 95786-07-13 20:38 G 36706372.25 36706372.36 36706372.47 0.0259 0.0221

Jupiter 95790-10-06 09:36 G 36707917.72 36707917.90 36707918.09 0.0502 0.0216

Jupiter 95791-05-31 05:31 G 36708154.61 36708154.73 36708154.86 0.0499 0.0394

Jupiter 95796-08-04 10:19 G 36710046.85 36710046.93 36710047.00 0.0522 0.0479

Earth 95796-09-04 16:19 G 36710078.09 36710078.18 36710078.27 0.2701 0.2219

Jupiter 95797-03-29 12:00 G 36710283.81 36710284.00 36710284.18 0.0526 0.0197

Saturn 95800-05-07 00:00 G 36711417.34 36711417.50 36711417.67 0.0304 0.0187

Saturn 95800-12-23 05:16 G 36711647.53 36711647.72 36711647.92 0.0304 0.0118

Jupiter 95802-06-12 04:04 G 36712183.55 36712183.67 36712183.80 0.0503 0.0394

Jupiter 95803-02-04 01:55 G 36712420.39 36712420.58 36712420.77 0.0500 0.0223

Earth 95804-09-03 07:12 G 36712997.66 36712997.80 36712997.93 0.2702 0.1381

Moon 95804-09-03 09:50 G 36712997.76 36712997.91 36712998.06 0.2697 0.1148 *

Jupiter 95808-12-03 07:40 G 36714549.62 36714549.82 36714550.02 0.0525 0.0009

Mars 95813-12-28 18:43 G 36716401.11 36716401.28 36716401.45 0.1703 0.0507

Jupiter 95814-10-09 23:02 G 36716686.25 36716686.46 36716686.66 0.0501 0.0052

Saturn 95814-10-24 07:55 G 36716700.65 36716700.83 36716701.03 0.0259 0.0124

Saturn 95815-06-10 05:31 G 36716929.52 36716929.73 36716929.94 0.0258 0.0066

Saturn 95816-01-25 02:24 G 36717158.56 36717158.60 36717158.64 0.0258 0.0254

Uranus 95816-05-20 02:38 G 36717274.52 36717274.61 36717274.71 0.0137 0.0122

Uranus 95817-01-01 09:36 G 36717500.75 36717500.90 36717501.05 0.0137 0.0100

Uranus 95817-08-15 16:33 G 36717727.02 36717727.19 36717727.38 0.0137 0.0076

Uranus 95818-03-29 23:45 G 36717953.29 36717953.49 36717953.69 0.0138 0.0053

Uranus 95818-11-11 07:12 G 36718179.59 36718179.80 36718180.01 0.0138 0.0029

Uranus 95819-06-25 14:52 G 36718405.90 36718406.12 36718406.34 0.0138 0.0005

Uranus 95820-02-06 22:33 G 36718632.23 36718632.44 36718632.66 0.0138 0.0020

Jupiter 95820-08-08 01:55 G 36718815.40 36718815.58 36718815.77 0.0524 0.0187

Uranus 95820-09-20 06:28 G 36718858.57 36718858.77 36718858.98 0.0138 0.0045

Jupiter 95821-04-02 05:16 G 36719052.66 36719052.72 36719052.79 0.0526 0.0496

Uranus 95821-05-04 14:38 G 36719084.93 36719085.11 36719085.31 0.0138 0.0069

Uranus 95821-12-16 22:48 G 36719311.31 36719311.45 36719311.63 0.0139 0.0094

Uranus 95822-07-31 07:40 G 36719537.72 36719537.82 36719537.95 0.0139 0.0118

Jupiter 95826-06-14 20:09 G 36720952.14 36720952.34 36720952.54 0.0502 0.0121

Jupiter 95827-02-06 15:50 G 36721189.12 36721189.16 36721189.20 0.0499 0.0487

Saturn 95829-11-17 11:31 G 36722203.79 36722203.98 36722204.16 0.0304 0.0136

Saturn 95830-07-05 16:48 G 36722434.04 36722434.20 36722434.38 0.0304 0.0170

Jupiter 95832-04-12 21:21 G 36723081.26 36723081.39 36723081.54 0.0523 0.0376

Jupiter 95832-12-05 23:31 G 36723318.32 36723318.48 36723318.65 0.0526 0.0305

Jupiter 95838-02-17 17:02 G 36725218.05 36725218.21 36725218.38 0.0502 0.0295

Jupiter 95838-10-12 13:55 G 36725454.92 36725455.08 36725455.24 0.0499 0.0320

Neptune 95839-02-06 18:14 G 36725572.22 36725572.26 36725572.33 0.0089 0.0087

Neptune 95839-09-20 07:12 G 36725797.69 36725797.80 36725797.92 0.0089 0.0076

Neptune 95840-05-02 19:26 G 36726023.19 36726023.31 36726023.48 0.0089 0.0066

Neptune 95840-12-14 08:24 G 36726248.69 36726248.85 36726249.03 0.0089 0.0055

Mars 95841-05-15 22:19 G 36726401.29 36726401.43 36726401.57 0.1827 0.1065

Neptune 95841-07-27 21:21 G 36726474.20 36726474.39 36726474.58 0.0089 0.0044

Neptune 95842-03-10 09:50 G 36726699.72 36726699.91 36726700.12 0.0089 0.0033

Neptune 95842-10-21 22:33 G 36726925.24 36726925.44 36726925.66 0.0089 0.0022

Neptune 95843-06-04 11:31 G 36727150.77 36727150.98 36727151.20 0.0089 0.0011

Neptune 95844-01-16 00:28 G 36727376.30 36727376.52 36727376.74 0.0089 0.0001

Saturn 95844-05-05 13:55 G 36727486.88 36727487.08 36727487.29 0.0259 0.0091

Jupiter 95844-08-10 17:31 G 36727584.04 36727584.23 36727584.43 0.0526 0.0109

Neptune 95844-08-28 13:12 G 36727601.83 36727602.05 36727602.26 0.0089 0.0010

Saturn 95844-12-20 11:16 G 36727715.78 36727715.97 36727716.18 0.0259 0.0100

Neptune 95845-04-11 01:40 G 36727827.37 36727827.57 36727827.79 0.0089 0.0021

Neptune 95845-11-22 14:24 G 36728052.91 36728053.10 36728053.32 0.0089 0.0032

Neptune 95846-07-06 03:36 G 36728278.46 36728278.65 36728278.84 0.0089 0.0043

Neptune 95847-02-16 16:04 G 36728504.01 36728504.17 36728504.36 0.0089 0.0054

Neptune 95847-09-30 04:48 G 36728729.57 36728729.70 36728729.87 0.0089 0.0064

Neptune 95848-05-12 17:16 G 36728955.13 36728955.22 36728955.37 0.0089 0.0075

Neptune 95848-12-24 06:28 G 36729180.72 36729180.77 36729180.84 0.0089 0.0085

Jupiter 95849-10-23 13:26 G 36729483.98 36729484.06 36729484.13 0.0503 0.0466

Jupiter 95850-06-17 11:31 G 36729720.78 36729720.98 36729721.18 0.0500 0.0152

Pluto 95854-06-10 13:55 G 36731174.91 36731175.08 36731175.28 0.0065 0.0034

Pluto 95855-01-21 18:14 G 36731400.05 36731400.26 36731400.48 0.0066 0.0009

Pluto 95855-09-03 21:50 G 36731625.30 36731625.41 36731625.57 0.0066 0.0052

Jupiter 95856-04-15 13:40 G 36731849.87 36731850.07 36731850.26 0.0525 0.0084

Uranus 95856-09-07 08:09 G 36731994.78 36731994.84 36731994.93 0.0141 0.0132

Uranus 95857-04-21 18:43 G 36732221.14 36732221.28 36732221.43 0.0141 0.0106

Uranus 95857-12-04 05:02 G 36732447.53 36732447.71 36732447.89 0.0141 0.0080

Uranus 95858-07-18 14:52 G 36732673.92 36732674.12 36732674.33 0.0141 0.0055

Uranus 95859-03-02 00:43 G 36732900.32 36732900.53 36732900.75 0.0141 0.0029

Saturn 95859-05-30 22:33 G 36732990.24 36732990.44 36732990.64 0.0304 0.0083

Uranus 95859-10-14 10:19 G 36733126.72 36733126.93 36733127.15 0.0140 0.0004

Saturn 95860-01-16 04:04 G 36733220.54 36733220.67 36733220.82 0.0304 0.0224

Uranus 95860-05-27 19:40 G 36733353.11 36733353.32 36733353.54 0.0140 0.0023

Uranus 95861-01-09 05:02 G 36733579.51 36733579.71 36733579.92 0.0140 0.0048

Uranus 95861-08-23 14:09 G 36733805.91 36733806.09 36733806.28 0.0140 0.0073

Jupiter 95862-02-20 06:43 G 36733986.57 36733986.78 36733986.99 0.0501 0.0026

Uranus 95862-04-06 22:48 G 36734032.30 36734032.45 36734032.61 0.0139 0.0098

Uranus 95862-11-19 07:12 G 36734258.71 36734258.80 36734258.92 0.0139 0.0122

Jupiter 95867-12-20 10:19 G 36736115.76 36736115.93 36736116.10 0.0523 0.0270

Jupiter 95868-08-13 13:12 G 36736352.93 36736353.05 36736353.17 0.0526 0.0414

Saturn 95873-03-31 21:50 G 36738044.36 36738044.41 36738044.48 0.0259 0.0248

Jupiter 95873-10-26 03:07 G 36738252.44 36738252.63 36738252.82 0.0502 0.0200

Saturn 95873-11-15 19:55 G 36738273.12 36738273.33 36738273.55 0.0259 0.0057

Jupiter 95874-06-19 23:31 G 36738489.37 36738489.48 36738489.60 0.0499 0.0413

Saturn 95874-07-02 17:02 G 36738502.03 36738502.21 36738502.40 0.0258 0.0133

Jupiter 95879-08-25 05:31 G 36740381.64 36740381.73 36740381.82 0.0522 0.0457

Mars 95879-10-26 04:19 G 36740443.50 36740443.68 36740443.85 0.1707 0.0227

Jupiter 95880-04-18 06:43 G 36740618.60 36740618.78 36740618.96 0.0525 0.0219

Jupiter 95885-06-30 23:31 G 36742518.34 36742518.48 36742518.62 0.0503 0.0374

Jupiter 95886-02-22 21:21 G 36742755.22 36742755.39 36742755.58 0.0500 0.0246

Saturn 95888-12-10 09:50 G 36743776.71 36743776.91 36743777.12 0.0304 0.0032

Saturn 95889-07-28 15:36 G 36744007.07 36744007.15 36744007.24 0.0305 0.0276

Jupiter 95891-12-23 01:26 G 36744884.36 36744884.56 36744884.76 0.0525 0.0026

Jupiter 95897-10-28 19:40 G 36747021.11 36747021.32 36747021.52 0.0500 0.0076

Uranus 95900-01-18 11:16 G 36747832.93 36747832.97 36747833.04 0.0137 0.0132

Uranus 95900-09-01 18:00 G 36748059.13 36748059.25 36748059.39 0.0137 0.0109

Uranus 95901-04-16 00:43 G 36748285.38 36748285.53 36748285.71 0.0137 0.0087

Uranus 95901-11-28 08:09 G 36748511.65 36748511.84 36748512.03 0.0137 0.0063

Uranus 95902-07-12 15:36 G 36748737.94 36748738.15 36748738.36 0.0138 0.0039

Saturn 95902-10-13 03:36 G 36748830.55 36748830.65 36748830.78 0.0259 0.0216

Uranus 95903-02-23 23:02 G 36748964.24 36748964.46 36748964.68 0.0138 0.0015

Saturn 95903-05-30 01:40 G 36749059.36 36749059.57 36749059.79 0.0259 0.0024

Jupiter 95903-08-28 19:40 G 36749150.13 36749150.32 36749150.51 0.0524 0.0171

Uranus 95903-10-08 06:43 G 36749190.56 36749190.78 36749190.99 0.0138 0.0009

Saturn 95904-01-13 22:48 G 36749288.29 36749288.45 36749288.62 0.0258 0.0165

Jupiter 95904-04-21 23:45 G 36749387.46 36749387.49 36749387.53 0.0527 0.0517

Uranus 95904-05-21 14:24 G 36749416.89 36749417.10 36749417.31 0.0138 0.0033

Uranus 95905-01-02 22:33 G 36749643.24 36749643.44 36749643.64 0.0138 0.0058

Uranus 95905-08-17 06:43 G 36749869.62 36749869.78 36749869.96 0.0138 0.0082

Uranus 95906-03-31 15:07 G 36750096.00 36750096.13 36750096.28 0.0139 0.0107

Uranus 95906-11-12 23:45 G 36750322.43 36750322.49 36750322.57 0.0139 0.0131

Mars 95907-03-14 04:04 G 36750443.58 36750443.67 36750443.76 0.1822 0.1540

Jupiter 95909-07-04 16:33 G 36751286.99 36751287.19 36751287.40 0.0501 0.0098

Jupiter 95915-05-03 16:33 G 36753416.05 36753416.19 36753416.34 0.0523 0.0357

Jupiter 95915-12-26 19:12 G 36753653.14 36753653.30 36753653.45 0.0526 0.0326

Saturn 95917-11-05 15:07 G 36754333.06 36754333.13 36754333.21 0.0303 0.0283

Saturn 95918-06-23 20:24 G 36754563.14 36754563.35 36754563.55 0.0304 0.0021

Jupiter 95921-03-09 10:33 G 36755552.77 36755552.94 36755553.12 0.0502 0.0277

Jupiter 95921-11-01 07:40 G 36755789.68 36755789.82 36755789.98 0.0499 0.0339

Neptune 95922-06-20 18:14 G 36756021.22 36756021.26 36756021.35 0.0088 0.0084

Neptune 95923-02-01 07:55 G 36756246.72 36756246.83 36756246.96 0.0088 0.0073

Neptune 95923-09-14 20:52 G 36756472.24 36756472.37 36756472.55 0.0088 0.0063

Neptune 95924-04-27 10:33 G 36756697.77 36756697.94 36756698.13 0.0088 0.0052

Neptune 95924-12-09 00:14 G 36756923.32 36756923.51 36756923.71 0.0088 0.0042

Neptune 95925-07-22 13:12 G 36757148.86 36757149.05 36757149.27 0.0088 0.0031

Neptune 95926-03-05 02:38 G 36757374.40 36757374.61 36757374.83 0.0088 0.0020

Moon 95926-03-10 04:33 G 36757379.57 36757379.69 36757379.80 0.2624 0.1892

Earth 95926-03-10 04:33 G 36757379.59 36757379.69 36757379.80 0.2631 0.1991 *

Neptune 95926-10-16 15:50 G 36757599.94 36757600.16 36757600.39 0.0088 0.0010

Neptune 95927-05-30 05:16 G 36757825.49 36757825.72 36757825.94 0.0088 0.0001

Jupiter 95927-08-31 14:52 G 36757918.93 36757919.12 36757919.32 0.0525 0.0136

Neptune 95928-01-10 18:28 G 36758051.05 36758051.27 36758051.50 0.0088 0.0012

Neptune 95928-08-23 07:40 G 36758276.61 36758276.82 36758277.04 0.0088 0.0022

Neptune 95929-04-05 20:38 G 36758502.17 36758502.36 36758502.58 0.0088 0.0033

Neptune 95929-11-17 10:04 G 36758727.73 36758727.92 36758728.12 0.0088 0.0044

Neptune 95930-06-30 23:02 G 36758953.30 36758953.46 36758953.65 0.0088 0.0055

Neptune 95931-02-11 12:14 G 36759178.88 36759179.01 36759179.18 0.0088 0.0065

Neptune 95931-09-25 01:26 G 36759404.47 36759404.56 36759404.69 0.0088 0.0076

Saturn 95932-04-24 09:21 G 36759616.75 36759616.89 36759617.05 0.0259 0.0182

Neptune 95932-05-07 14:24 G 36759630.08 36759630.10 36759630.18 0.0088 0.0087

Jupiter 95932-11-12 06:28 G 36759818.68 36759818.77 36759818.86 0.0503 0.0451

Saturn 95932-12-09 07:12 G 36759845.59 36759845.80 36759846.02 0.0258 0.0010

Jupiter 95933-07-07 05:16 G 36760055.52 36760055.72 36760055.91 0.0500 0.0170

Saturn 95933-07-26 04:04 G 36760074.54 36760074.67 36760074.81 0.0258 0.0197

Moon 95934-03-07 15:36 G 36760299.01 36760299.15 36760299.29 0.2625 0.1376

Earth 95934-03-07 20:09 G 36760299.20 36760299.34 36760299.48 0.2630 0.1320 *

Mars 95939-03-13 17:02 G 36762131.11 36762131.21 36762131.30 0.1837 0.1547

Jupiter 95939-05-06 09:36 G 36762184.70 36762184.90 36762185.10 0.0524 0.0058

Uranus 95940-12-21 01:26 G 36762779.46 36762779.56 36762779.70 0.0141 0.0118

Uranus 95941-08-04 12:00 G 36763005.84 36763006.00 36763006.18 0.0141 0.0091

Uranus 95942-03-18 22:19 G 36763232.24 36763232.43 36763232.63 0.0141 0.0065

Pluto 95942-09-23 09:21 G 36763420.67 36763420.89 36763421.12 0.0079 0.0003

Uranus 95942-10-31 08:09 G 36763458.64 36763458.84 36763459.06 0.0141 0.0039

Pluto 95943-05-06 19:12 G 36763646.26 36763646.30 36763646.40 0.0079 0.0075

Uranus 95943-06-14 18:00 G 36763685.04 36763685.25 36763685.47 0.0140 0.0014

Uranus 95944-01-27 03:50 G 36763911.44 36763911.66 36763911.88 0.0140 0.0012

Uranus 95944-09-09 13:12 G 36764137.84 36764138.05 36764138.26 0.0140 0.0038

Jupiter 95945-03-12 02:38 G 36764321.40 36764321.61 36764321.82 0.0501 0.0003

Uranus 95945-04-23 22:19 G 36764364.24 36764364.43 36764364.63 0.0140 0.0063

Mars 95945-08-23 14:09 G 36764485.92 36764486.09 36764486.27 0.1711 0.0046

Uranus 95945-12-06 07:12 G 36764590.64 36764590.80 36764590.98 0.0140 0.0088

Uranus 95946-07-20 16:19 G 36764817.05 36764817.18 36764817.31 0.0139 0.0112

Uranus 95947-03-04 00:43 G 36765043.50 36765043.53 36765043.59 0.0139 0.0136

Saturn 95947-05-19 00:57 G 36765119.42 36765119.54 36765119.67 0.0304 0.0237

Saturn 95948-01-04 06:14 G 36765349.56 36765349.76 36765349.96 0.0305 0.0069

Jupiter 95951-01-09 04:48 G 36766450.53 36766450.70 36766450.88 0.0523 0.0250

Jupiter 95951-09-03 07:40 G 36766687.71 36766687.82 36766687.93 0.0526 0.0435

Jupiter 95956-11-15 00:28 G 36768587.33 36768587.52 36768587.72 0.0502 0.0175

Jupiter 95957-07-09 20:52 G 36768824.27 36768824.37 36768824.47 0.0499 0.0437

Saturn 95961-11-04 14:52 G 36770402.95 36770403.12 36770403.30 0.0259 0.0150

Saturn 95962-06-21 12:28 G 36770631.80 36770632.02 36770632.23 0.0258 0.0041

Jupiter 95962-09-13 23:45 G 36770716.39 36770716.49 36770716.60 0.0522 0.0440

Saturn 95963-02-05 09:07 G 36770860.78 36770860.88 36770860.98 0.0258 0.0229

Jupiter 95963-05-09 01:26 G 36770953.39 36770953.56 36770953.74 0.0526 0.0240

Jupiter 95968-07-20 21:07 G 36772853.23 36772853.38 36772853.53 0.0503 0.0348

Jupiter 95969-03-14 18:43 G 36773090.11 36773090.28 36773090.45 0.0500 0.0271

Jupiter 95975-01-11 21:50 G 36775219.21 36775219.41 36775219.61 0.0525 0.0049

Saturn 95976-11-28 09:36 G 36775905.75 36775905.90 36775906.07 0.0304 0.0189

Saturn 95977-07-16 15:07 G 36776135.95 36776136.13 36776136.33 0.0304 0.0119

Jupiter 95980-11-17 13:55 G 36777355.87 36777356.08 36777356.28 0.0501 0.0095

Uranus 95984-05-02 02:09 G 36778617.50 36778617.59 36778617.71 0.0137 0.0119

Uranus 95984-12-14 08:52 G 36778843.73 36778843.87 36778844.04 0.0137 0.0096

Uranus 95985-07-28 16:19 G 36779070.00 36779070.18 36779070.36 0.0137 0.0073

Uranus 95986-03-11 23:16 G 36779296.27 36779296.47 36779296.68 0.0137 0.0049

Jupiter 95986-09-16 18:43 G 36779485.09 36779485.28 36779485.47 0.0524 0.0140

Uranus 95986-10-24 06:43 G 36779522.57 36779522.78 36779522.99 0.0137 0.0026

Uranus 95987-06-07 14:09 G 36779748.88 36779749.09 36779749.31 0.0138 0.0003

Uranus 95988-01-19 21:50 G 36779975.20 36779975.41 36779975.63 0.0138 0.0023

Uranus 95988-09-02 05:45 G 36780201.54 36780201.74 36780201.95 0.0138 0.0047

Uranus 95989-04-16 13:40 G 36780427.90 36780428.07 36780428.27 0.0138 0.0072

Uranus 95989-11-28 22:04 G 36780654.27 36780654.42 36780654.59 0.0138 0.0095

Uranus 95990-07-13 06:28 G 36780880.68 36780880.77 36780880.90 0.0139 0.0120

Saturn 95991-05-17 19:40 G 36781189.13 36781189.32 36781189.52 0.0258 0.0118

Saturn 95992-01-01 17:02 G 36781418.01 36781418.21 36781418.42 0.0258 0.0072

Jupiter 95992-07-23 10:33 G 36781621.74 36781621.94 36781622.15 0.0501 0.0079

Jupiter 95998-05-22 14:24 G 36783750.95 36783751.10 36783751.26 0.0523 0.0329

Jupiter 95999-01-14 16:19 G 36783988.04 36783988.18 36783988.33 0.0526 0.0355

97TH MILLENNIUM CE

This is a list of transits of Venus in the 97th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 96003-12-23 18:00 G 36785792.15 36785792.25 36785792.35 0.0089 0.0079

Jupiter 96004-03-28 07:26 G 36785887.63 36785887.81 36785887.99 0.0503 0.0252

Neptune 96004-08-05 06:14 G 36786017.64 36786017.76 36786017.92 0.0089 0.0069

Jupiter 96004-11-20 05:02 G 36786124.57 36786124.71 36786124.85 0.0500 0.0366

Mars 96005-01-07 22:33 G 36786173.30 36786173.44 36786173.58 0.1833 0.1051

Neptune 96005-03-18 19:12 G 36786243.14 36786243.30 36786243.47 0.0089 0.0058

Neptune 96005-10-30 07:26 G 36786468.65 36786468.81 36786469.02 0.0089 0.0048

Saturn 96006-06-10 18:28 G 36786692.08 36786692.27 36786692.45 0.0304 0.0145

Neptune 96006-06-12 20:38 G 36786694.17 36786694.36 36786694.57 0.0089 0.0036

Neptune 96007-01-24 09:21 G 36786919.69 36786919.89 36786920.11 0.0089 0.0026

Saturn 96007-01-26 23:45 G 36786922.32 36786922.49 36786922.67 0.0305 0.0164

Neptune 96007-09-06 22:19 G 36787145.21 36787145.43 36787145.64 0.0089 0.0015

Neptune 96008-04-19 10:48 G 36787370.74 36787370.95 36787371.17 0.0089 0.0004

Neptune 96008-11-30 23:31 G 36787596.27 36787596.48 36787596.70 0.0089 0.0008

Neptune 96009-07-14 12:14 G 36787821.81 36787822.01 36787822.24 0.0089 0.0019

Jupiter 96010-01-25 10:19 G 36788016.91 36788016.93 36788016.97 0.0521 0.0514

Neptune 96010-02-25 00:57 G 36788047.35 36788047.54 36788047.76 0.0089 0.0029

Jupiter 96010-09-19 11:02 G 36788253.77 36788253.96 36788254.15 0.0525 0.0161

Neptune 96010-10-08 13:55 G 36788272.89 36788273.08 36788273.28 0.0089 0.0039

Neptune 96011-05-22 02:38 G 36788498.44 36788498.61 36788498.80 0.0089 0.0050

Mars 96011-06-20 23:16 G 36788528.30 36788528.47 36788528.64 0.1715 0.0341

Neptune 96012-01-02 15:21 G 36788724.00 36788724.14 36788724.32 0.0089 0.0061

Neptune 96012-08-15 04:04 G 36788949.56 36788949.67 36788949.82 0.0089 0.0072

Neptune 96013-03-28 17:02 G 36789175.14 36789175.21 36789175.31 0.0089 0.0082

Jupiter 96015-12-02 05:02 G 36790153.60 36790153.71 36790153.82 0.0504 0.0425

Jupiter 96016-07-26 03:50 G 36790390.47 36790390.66 36790390.85 0.0500 0.0198

Saturn 96020-11-27 00:14 G 36791975.31 36791975.51 36791975.72 0.0258 0.0089

Saturn 96021-07-13 21:21 G 36792204.19 36792204.39 36792204.59 0.0258 0.0101

Jupiter 96022-05-25 05:31 G 36792519.53 36792519.73 36792519.93 0.0524 0.0035

Uranus 96024-08-20 07:40 G 36793337.74 36793337.82 36793337.92 0.0141 0.0129

Uranus 96025-04-03 18:14 G 36793564.12 36793564.26 36793564.42 0.0141 0.0103

Uranus 96025-11-16 04:48 G 36793790.51 36793790.70 36793790.88 0.0141 0.0077

Uranus 96026-06-30 14:38 G 36794016.92 36794017.11 36794017.33 0.0141 0.0051

Uranus 96027-02-12 00:57 G 36794243.33 36794243.54 36794243.76 0.0141 0.0025

Uranus 96027-09-26 10:48 G 36794469.73 36794469.95 36794470.17 0.0140 0.0001

Jupiter 96028-03-31 01:26 G 36794656.35 36794656.56 36794656.77 0.0501 0.0027

Uranus 96028-05-09 20:24 G 36794696.13 36794696.35 36794696.56 0.0140 0.0027

Uranus 96028-12-22 05:45 G 36794922.54 36794922.74 36794922.94 0.0140 0.0052

Uranus 96029-08-05 14:52 G 36795148.95 36795149.12 36795149.31 0.0140 0.0077

Uranus 96030-03-19 23:45 G 36795375.35 36795375.49 36795375.65 0.0140 0.0102

Uranus 96030-11-01 08:38 G 36795601.78 36795601.86 36795601.96 0.0139 0.0125

Jupiter 96034-01-28 02:38 G 36796785.43 36796785.61 36796785.79 0.0523 0.0223

Jupiter 96034-09-22 05:45 G 36797022.65 36797022.74 36797022.84 0.0526 0.0464

Saturn 96035-12-22 00:57 G 36797478.34 36797478.54 36797478.73 0.0304 0.0101

Saturn 96036-08-08 06:28 G 36797708.63 36797708.77 36797708.93 0.0305 0.0208

Moon 96039-09-07 12:14 G 36798833.88 36798834.01 36798834.15 0.2700 0.1432

Earth 96039-09-07 17:31 G 36798834.14 36798834.23 36798834.31 0.2702 0.2254 *

Jupiter 96039-12-04 19:55 G 36798922.13 36798922.33 36798922.53 0.0502 0.0152

Jupiter 96040-07-28 16:04 G 36799159.10 36799159.17 36799159.25 0.0499 0.0460

Jupiter 96045-10-03 00:43 G 36801051.41 36801051.53 36801051.65 0.0522 0.0405

Jupiter 96046-05-28 02:24 G 36801288.43 36801288.60 36801288.77 0.0526 0.0276

Moon 96047-09-05 03:36 G 36801753.53 36801753.65 36801753.78 0.2706 0.1540

Earth 96047-09-05 08:09 G 36801753.71 36801753.84 36801753.98 0.2703 0.1365 *

Saturn 96049-10-23 06:14 G 36802532.72 36802532.76 36802532.83 0.0259 0.0250

Saturn 96050-06-09 04:04 G 36802761.47 36802761.67 36802761.89 0.0258 0.0059

Saturn 96051-01-24 00:57 G 36802990.36 36802990.54 36802990.73 0.0258 0.0131

Jupiter 96051-08-09 16:04 G 36803188.02 36803188.17 36803188.33 0.0503 0.0327

Jupiter 96052-04-02 14:09 G 36803424.92 36803425.09 36803425.26 0.0500 0.0294

Jupiter 96058-01-30 21:21 G 36805554.19 36805554.39 36805554.58 0.0525 0.0083

Jupiter 96063-04-14 12:28 G 36807454.00 36807454.02 36807454.05 0.0504 0.0500

Jupiter 96063-12-07 12:28 G 36807690.81 36807691.02 36807691.22 0.0501 0.0125

Saturn 96065-07-03 07:26 G 36808264.61 36808264.81 36808265.01 0.0305 0.0062

Saturn 96066-02-18 13:12 G 36808494.94 36808495.05 36808495.18 0.0305 0.0248

Uranus 96067-12-31 12:00 G 36809175.94 36809176.00 36809176.09 0.0137 0.0127

Uranus 96068-08-13 18:57 G 36809402.16 36809402.29 36809402.43 0.0137 0.0104

Uranus 96069-03-28 01:55 G 36809628.41 36809628.58 36809628.75 0.0137 0.0081

Jupiter 96069-10-05 16:33 G 36809820.00 36809820.19 36809820.39 0.0524 0.0111

Uranus 96069-11-09 08:38 G 36809854.67 36809854.86 36809855.07 0.0137 0.0059

Uranus 96070-06-23 16:04 G 36810080.97 36810081.17 36810081.39 0.0137 0.0035

Mars 96070-11-05 05:02 G 36810215.55 36810215.71 36810215.88 0.1828 0.0593

Uranus 96071-02-04 23:31 G 36810307.27 36810307.48 36810307.70 0.0137 0.0012

Uranus 96071-09-19 07:12 G 36810533.59 36810533.80 36810534.02 0.0138 0.0013

Uranus 96072-05-02 14:52 G 36810759.92 36810760.12 36810760.33 0.0138 0.0037

Uranus 96072-12-14 22:48 G 36810986.26 36810986.45 36810986.65 0.0138 0.0061

Uranus 96073-07-29 06:57 G 36811212.63 36811212.79 36811212.97 0.0138 0.0086

Uranus 96074-03-12 15:21 G 36811439.02 36811439.14 36811439.28 0.0139 0.0110

Uranus 96074-10-24 23:45 G 36811665.45 36811665.49 36811665.56 0.0139 0.0134

Jupiter 96075-08-12 10:48 G 36811956.74 36811956.95 36811957.15 0.0502 0.0048

Mars 96077-04-17 08:52 G 36812570.71 36812570.87 36812571.03 0.1719 0.0629

Saturn 96079-05-05 09:50 G 36813318.80 36813318.91 36813319.02 0.0259 0.0222

Saturn 96079-12-20 07:26 G 36813547.60 36813547.81 36813548.03 0.0258 0.0031

Saturn 96080-08-05 04:04 G 36813776.50 36813776.67 36813776.84 0.0258 0.0158

Jupiter 96081-06-10 12:00 G 36814085.84 36814086.00 36814086.17 0.0523 0.0302

Jupiter 96082-02-02 14:09 G 36814322.96 36814323.09 36814323.23 0.0526 0.0384

Neptune 96086-09-22 03:36 G 36816015.64 36816015.65 36816015.70 0.0088 0.0087

Jupiter 96087-04-17 07:55 G 36816222.65 36816222.83 36816223.02 0.0502 0.0220

Neptune 96087-05-05 16:48 G 36816241.12 36816241.20 36816241.34 0.0088 0.0077

Jupiter 96087-12-10 05:02 G 36816459.60 36816459.71 36816459.84 0.0499 0.0399

Neptune 96087-12-17 06:28 G 36816466.64 36816466.77 36816466.94 0.0088 0.0066

Neptune 96088-07-29 20:09 G 36816692.17 36816692.34 36816692.52 0.0088 0.0055

Neptune 96089-03-12 09:07 G 36816917.71 36816917.88 36816918.09 0.0088 0.0045

Neptune 96089-10-23 22:48 G 36817143.25 36817143.45 36817143.66 0.0088 0.0034

Neptune 96090-06-06 12:00 G 36817368.79 36817369.00 36817369.22 0.0088 0.0024

Neptune 96091-01-18 01:26 G 36817594.35 36817594.56 36817594.79 0.0088 0.0013

Neptune 96091-08-31 14:52 G 36817819.90 36817820.12 36817820.34 0.0088 0.0002

Neptune 96092-04-13 04:04 G 36818045.45 36818045.67 36818045.89 0.0088 0.0008

Neptune 96092-11-24 17:16 G 36818271.01 36818271.22 36818271.44 0.0088 0.0019

Jupiter 96093-02-13 09:50 G 36818351.84 36818351.91 36818351.99 0.0522 0.0484

Neptune 96093-07-08 06:14 G 36818496.56 36818496.76 36818496.98 0.0088 0.0030

Jupiter 96093-10-08 10:48 G 36818588.77 36818588.95 36818589.14 0.0525 0.0194

Neptune 96094-02-18 19:40 G 36818722.13 36818722.32 36818722.52 0.0088 0.0040

Neptune 96094-10-02 08:24 G 36818947.69 36818947.85 36818948.05 0.0088 0.0052

Saturn 96095-01-13 12:43 G 36819050.82 36819051.03 36819051.23 0.0304 0.0023

Neptune 96095-05-15 21:50 G 36819173.26 36819173.41 36819173.58 0.0088 0.0062

Saturn 96095-08-31 18:28 G 36819281.21 36819281.27 36819281.35 0.0305 0.0288

Neptune 96095-12-27 11:02 G 36819398.85 36819398.96 36819399.10 0.0088 0.0072

Neptune 96096-08-09 00:28 G 36819624.45 36819624.52 36819624.60 0.0088 0.0083

Jupiter 96098-12-21 01:55 G 36820488.46 36820488.58 36820488.71 0.0503 0.0398

Jupiter 96099-08-15 00:28 G 36820725.34 36820725.52 36820725.71 0.0500 0.0225

Pluto 96099-11-27 20:24 G 36820830.28 36820830.35 36820830.44 0.0065 0.0061

Pluto 96100-07-11 00:28 G 36821055.32 36821055.52 36821055.73 0.0065 0.0019

Pluto 96101-02-21 04:19 G 36821280.49 36821280.68 36821280.89 0.0066 0.0024

Jupiter 96105-06-14 08:24 G 36822854.65 36822854.85 36822855.05 0.0525 0.0008

Uranus 96108-04-20 13:40 G 36823896.05 36823896.07 36823896.11 0.0142 0.0140

Saturn 96108-11-15 12:57 G 36824104.91 36824105.04 36824105.19 0.0259 0.0195

Uranus 96108-12-03 00:28 G 36824122.40 36824122.52 36824122.66 0.0141 0.0114

Saturn 96109-07-02 10:19 G 36824333.72 36824333.93 36824334.15 0.0258 0.0006

Uranus 96109-07-17 10:48 G 36824348.79 36824348.95 36824349.14 0.0141 0.0088

Saturn 96110-02-16 06:43 G 36824562.64 36824562.78 36824562.94 0.0257 0.0186

Uranus 96110-02-28 21:21 G 36824575.20 36824575.39 36824575.59 0.0141 0.0062

Uranus 96110-10-13 07:26 G 36824801.61 36824801.81 36824802.03 0.0141 0.0036

Jupiter 96111-04-20 22:04 G 36824991.21 36824991.42 36824991.63 0.0501 0.0053

Uranus 96111-05-27 17:31 G 36825028.01 36825028.23 36825028.45 0.0141 0.0010

Uranus 96112-01-09 03:21 G 36825254.43 36825254.64 36825254.86 0.0140 0.0016

Uranus 96112-08-22 12:43 G 36825480.83 36825481.03 36825481.25 0.0140 0.0042

Uranus 96113-04-05 22:04 G 36825707.24 36825707.42 36825707.62 0.0140 0.0066

Uranus 96113-11-18 07:12 G 36825933.65 36825933.80 36825933.98 0.0140 0.0091

Uranus 96114-07-02 16:19 G 36826160.06 36826160.18 36826160.31 0.0139 0.0115

Uranus 96115-02-14 01:12 G 36826386.54 36826386.55 36826386.58 0.0139 0.0138

Jupiter 96117-02-17 04:19 G 36827120.49 36827120.68 36827120.87 0.0523 0.0185

Jupiter 96117-10-12 06:57 G 36827357.74 36827357.79 36827357.86 0.0526 0.0503

Jupiter 96122-12-24 19:40 G 36829257.12 36829257.32 36829257.53 0.0502 0.0120

Jupiter 96123-08-18 16:19 G 36829494.16 36829494.18 36829494.21 0.0499 0.0494

Saturn 96123-12-09 11:31 G 36829606.94 36829606.98 36829607.04 0.0304 0.0294

Saturn 96124-07-26 16:48 G 36829836.99 36829837.20 36829837.41 0.0305 0.0013

Jupiter 96128-10-23 00:28 G 36831386.39 36831386.52 36831386.67 0.0522 0.0374

Jupiter 96129-06-17 02:09 G 36831623.43 36831623.59 36831623.75 0.0525 0.0311

Jupiter 96134-08-29 17:45 G 36833523.07 36833523.24 36833523.41 0.0503 0.0292

Jupiter 96135-04-23 15:36 G 36833760.00 36833760.15 36833760.31 0.0500 0.0330

Mars 96136-09-02 11:16 G 36834257.79 36834257.97 36834258.14 0.1823 0.0125

Saturn 96138-05-28 14:52 G 36834890.97 36834891.12 36834891.29 0.0258 0.0170

Saturn 96139-01-12 12:28 G 36835119.81 36835120.02 36835120.24 0.0258 0.0022

Saturn 96139-08-29 08:38 G 36835348.75 36835348.86 36835348.99 0.0257 0.0210

Jupiter 96141-02-19 20:38 G 36835889.17 36835889.36 36835889.56 0.0525 0.0116

Mars 96143-02-13 18:14 G 36836613.11 36836613.26 36836613.40 0.1723 0.0932

Jupiter 96146-05-04 14:52 G 36837789.04 36837789.12 36837789.20 0.0504 0.0464

Jupiter 96146-12-27 14:09 G 36838025.90 36838026.09 36838026.29 0.0501 0.0162

Uranus 96151-08-31 21:36 G 36839734.39 36839734.40 36839734.44 0.0136 0.0136

Uranus 96152-04-14 04:33 G 36839960.57 36839960.69 36839960.81 0.0137 0.0113

Jupiter 96152-10-25 18:00 G 36840155.06 36840155.25 36840155.45 0.0524 0.0074

Uranus 96152-11-26 11:02 G 36840186.81 36840186.96 36840187.13 0.0137 0.0091

Saturn 96153-06-20 14:52 G 36840393.02 36840393.12 36840393.24 0.0304 0.0259

Uranus 96153-07-10 18:00 G 36840413.08 36840413.25 36840413.45 0.0137 0.0068

Saturn 96154-02-05 20:09 G 36840623.14 36840623.34 36840623.55 0.0305 0.0048

Uranus 96154-02-22 01:26 G 36840639.36 36840639.56 36840639.77 0.0137 0.0044

Uranus 96154-10-06 08:38 G 36840865.65 36840865.86 36840866.08 0.0137 0.0021

Uranus 96155-05-20 16:19 G 36841091.96 36841092.18 36841092.40 0.0138 0.0003

Uranus 96156-01-01 23:45 G 36841318.29 36841318.49 36841318.71 0.0138 0.0027

Uranus 96156-08-15 07:40 G 36841544.63 36841544.82 36841545.03 0.0138 0.0051

Uranus 96157-03-29 15:36 G 36841770.98 36841771.15 36841771.35 0.0138 0.0075

Uranus 96157-11-10 23:45 G 36841997.35 36841997.49 36841997.66 0.0138 0.0099

Uranus 96158-06-25 08:09 G 36842223.76 36842223.84 36842223.95 0.0139 0.0124

Jupiter 96158-09-01 09:07 G 36842291.67 36842291.88 36842292.09 0.0501 0.0017

Jupiter 96164-06-30 16:19 G 36844421.01 36844421.18 36844421.35 0.0523 0.0258

Jupiter 96165-02-22 18:43 G 36844658.18 36844658.28 36844658.40 0.0526 0.0430

Saturn 96167-12-08 17:16 G 36845677.05 36845677.22 36845677.41 0.0258 0.0144

Neptune 96168-03-27 03:36 G 36845786.60 36845786.65 36845786.76 0.0089 0.0083

Saturn 96168-07-24 14:24 G 36845905.89 36845906.10 36845906.32 0.0258 0.0048

Neptune 96168-11-07 16:33 G 36846012.08 36846012.19 36846012.33 0.0089 0.0072

Saturn 96169-03-10 10:33 G 36846134.86 36846134.94 36846135.03 0.0257 0.0235

Moon 96169-03-11 04:04 G 36846135.56 36846135.67 36846135.78 0.2636 0.1773

Earth 96169-03-11 06:14 G 36846135.67 36846135.76 36846135.85 0.2630 0.2154 *

Neptune 96169-06-21 05:45 G 36846237.58 36846237.74 36846237.90 0.0089 0.0061

Neptune 96170-02-01 18:00 G 36846463.09 36846463.25 36846463.45 0.0089 0.0051

Jupiter 96170-05-07 06:14 G 36846557.57 36846557.76 36846557.96 0.0502 0.0190

Neptune 96170-09-15 06:57 G 36846688.60 36846688.79 36846688.99 0.0089 0.0040

Jupiter 96170-12-30 03:21 G 36846794.54 36846794.64 36846794.75 0.0500 0.0428

Neptune 96171-04-28 19:40 G 36846914.12 36846914.32 36846914.53 0.0089 0.0029

Neptune 96171-12-10 08:09 G 36847139.64 36847139.84 36847140.06 0.0089 0.0019

Neptune 96172-07-22 21:07 G 36847365.17 36847365.38 36847365.60 0.0089 0.0007

Neptune 96173-03-05 09:50 G 36847590.69 36847590.91 36847591.13 0.0089 0.0004

Neptune 96173-10-16 22:33 G 36847816.23 36847816.44 36847816.65 0.0089 0.0014

Neptune 96174-05-30 11:16 G 36848041.77 36848041.97 36848042.18 0.0089 0.0025

Neptune 96175-01-10 23:45 G 36848267.31 36848267.49 36848267.70 0.0089 0.0037

Mars 96175-02-12 20:52 G 36848300.28 36848300.37 36848300.46 0.1710 0.1435

Neptune 96175-08-24 12:28 G 36848492.85 36848493.02 36848493.22 0.0089 0.0047

Jupiter 96176-03-05 13:12 G 36848686.96 36848687.05 36848687.16 0.0522 0.0444

Neptune 96176-04-06 01:26 G 36848718.40 36848718.56 36848718.73 0.0089 0.0058

Jupiter 96176-10-28 14:09 G 36848923.91 36848924.09 36848924.27 0.0525 0.0237

Neptune 96176-11-17 13:55 G 36848943.96 36848944.08 36848944.24 0.0089 0.0069

Earth 96177-03-08 21:50 G 36849055.26 36849055.41 36849055.55 0.2630 0.1155

Moon 96177-03-09 00:00 G 36849055.36 36849055.50 36849055.64 0.2636 0.1184 *

Neptune 96177-07-01 02:52 G 36849169.54 36849169.62 36849169.74 0.0089 0.0079

Jupiter 96182-01-10 03:21 G 36850823.50 36850823.64 36850823.79 0.0503 0.0364

Jupiter 96182-09-04 01:55 G 36851060.41 36851060.58 36851060.76 0.0500 0.0262

Saturn 96182-12-31 17:31 G 36851179.11 36851179.23 36851179.38 0.0304 0.0230

Saturn 96183-08-18 23:02 G 36851409.26 36851409.46 36851409.66 0.0305 0.0080

Pluto 96188-03-11 09:50 G 36853075.77 36853075.91 36853076.08 0.0079 0.0056

Jupiter 96188-07-03 09:50 G 36853189.71 36853189.91 36853190.11 0.0524 0.0045

Pluto 96188-10-22 20:24 G 36853301.14 36853301.35 36853301.58 0.0079 0.0022

Uranus 96192-08-02 07:55 G 36854680.75 36854680.83 36854680.96 0.0141 0.0125

Uranus 96193-03-16 18:43 G 36854907.14 36854907.28 36854907.45 0.0141 0.0099

Uranus 96193-10-29 05:16 G 36855133.54 36855133.72 36855133.92 0.0141 0.0072

Jupiter 96194-05-10 00:57 G 36855326.34 36855326.54 36855326.75 0.0501 0.0092

Uranus 96194-06-12 15:36 G 36855359.95 36855360.15 36855360.36 0.0141 0.0047

Uranus 96195-01-25 01:55 G 36855586.37 36855586.58 36855586.80 0.0141 0.0021

Uranus 96195-09-08 12:00 G 36855812.78 36855813.00 36855813.21 0.0140 0.0006

Uranus 96196-04-21 21:36 G 36856039.19 36856039.40 36856039.61 0.0140 0.0030

Uranus 96196-12-04 06:57 G 36856265.59 36856265.79 36856265.99 0.0140 0.0055

Saturn 96197-06-19 18:28 G 36856463.08 36856463.27 36856463.46 0.0258 0.0120

Uranus 96197-07-18 16:19 G 36856492.00 36856492.18 36856492.36 0.0140 0.0080

Saturn 96198-02-03 15:36 G 36856691.94 36856692.15 36856692.36 0.0258 0.0071

Uranus 96198-03-02 01:12 G 36856718.42 36856718.55 36856718.71 0.0140 0.0105

Uranus 96198-10-14 10:04 G 36856944.85 36856944.92 36856945.01 0.0139 0.0129

Jupiter 96200-03-09 05:16 G 36857455.53 36857455.72 36857455.91 0.0523 0.0149

Mars 96202-07-01 17:45 G 36858300.07 36858300.24 36858300.41 0.1819 0.0329

Jupiter 96206-01-13 23:02 G 36859592.26 36859592.46 36859592.67 0.0502 0.0080

Mars 96208-12-12 03:07 G 36860655.51 36860655.63 36860655.75 0.1727 0.1243

Jupiter 96211-11-13 03:07 G 36861721.48 36861721.63 36861721.79 0.0523 0.0335

Jupiter 96212-07-07 05:02 G 36861958.57 36861958.71 36861958.86 0.0526 0.0353

Saturn 96212-07-13 19:55 G 36861965.17 36861965.33 36861965.49 0.0304 0.0197

Saturn 96213-03-01 01:12 G 36862195.36 36862195.55 36862195.74 0.0305 0.0112

Jupiter 96217-09-18 17:45 G 36863858.06 36863858.24 36863858.42 0.0502 0.0258

Jupiter 96218-05-13 15:07 G 36864094.99 36864095.13 36864095.28 0.0500 0.0363

Jupiter 96223-07-19 01:55 G 36865987.55 36865987.58 36865987.61 0.0522 0.0514

Jupiter 96224-03-12 02:24 G 36866224.42 36866224.60 36866224.79 0.0525 0.0165

Saturn 96226-12-31 20:09 G 36867249.14 36867249.34 36867249.54 0.0258 0.0096

Saturn 96227-08-17 16:48 G 36867478.01 36867478.20 36867478.41 0.0258 0.0095

Jupiter 96229-05-24 14:38 G 36868124.01 36868124.11 36868124.22 0.0503 0.0432

Jupiter 96230-01-16 13:40 G 36868360.88 36868361.07 36868361.26 0.0500 0.0195

Jupiter 96235-11-15 22:48 G 36870490.25 36870490.45 36870490.65 0.0524 0.0028

Uranus 96235-12-14 14:52 G 36870519.04 36870519.12 36870519.23 0.0137 0.0122

Uranus 96236-07-27 21:50 G 36870745.27 36870745.41 36870745.57 0.0137 0.0099

Uranus 96237-03-11 04:48 G 36870971.53 36870971.70 36870971.89 0.0137 0.0076

Uranus 96237-10-23 11:45 G 36871197.80 36871197.99 36871198.20 0.0137 0.0054

Uranus 96238-06-06 19:12 G 36871424.09 36871424.30 36871424.51 0.0137 0.0030

Uranus 96239-01-19 02:38 G 36871650.39 36871650.61 36871650.83 0.0138 0.0006

Uranus 96239-09-02 10:19 G 36871876.71 36871876.93 36871877.14 0.0138 0.0018

Uranus 96240-04-15 18:00 G 36872103.04 36872103.25 36872103.46 0.0138 0.0041

Uranus 96240-11-28 01:55 G 36872329.39 36872329.58 36872329.77 0.0138 0.0065

Mars 96240-12-11 06:28 G 36872342.65 36872342.77 36872342.90 0.1714 0.1163

Uranus 96241-07-12 09:50 G 36872555.76 36872555.91 36872556.09 0.0138 0.0090

Jupiter 96241-09-21 11:45 G 36872626.78 36872626.99 36872627.20 0.0501 0.0023

Saturn 96242-01-23 21:07 G 36872751.21 36872751.38 36872751.56 0.0304 0.0170

Uranus 96242-02-23 18:14 G 36872782.15 36872782.26 36872782.39 0.0139 0.0114

Saturn 96242-09-11 02:38 G 36872981.43 36872981.61 36872981.80 0.0305 0.0141

Uranus 96242-10-08 02:24 G 36873008.60 36873008.60 36873008.65 0.0139 0.0138

Jupiter 96247-07-21 19:12 G 36874756.12 36874756.30 36874756.48 0.0523 0.0218

Jupiter 96248-03-14 21:36 G 36874993.31 36874993.40 36874993.49 0.0526 0.0471

Neptune 96251-08-09 01:55 G 36876235.51 36876235.58 36876235.69 0.0088 0.0080

Neptune 96252-03-21 15:07 G 36876461.01 36876461.13 36876461.28 0.0088 0.0070

Neptune 96252-11-02 04:33 G 36876686.54 36876686.69 36876686.87 0.0088 0.0059

Jupiter 96253-05-27 10:04 G 36876892.72 36876892.92 36876893.12 0.0502 0.0150

Neptune 96253-06-15 18:14 G 36876912.07 36876912.26 36876912.45 0.0088 0.0048

Jupiter 96254-01-19 07:12 G 36877129.73 36877129.80 36877129.87 0.0500 0.0469

Neptune 96254-01-27 07:12 G 36877137.62 36877137.80 36877138.02 0.0088 0.0038

Neptune 96254-09-09 20:52 G 36877363.16 36877363.37 36877363.59 0.0088 0.0027

Neptune 96255-04-23 10:19 G 36877588.71 36877588.93 36877589.15 0.0088 0.0017

Neptune 96255-12-04 23:31 G 36877814.26 36877814.48 36877814.71 0.0088 0.0006

Saturn 96256-07-12 20:24 G 36878035.15 36878035.35 36878035.56 0.0258 0.0073

Neptune 96256-07-17 12:57 G 36878039.82 36878040.04 36878040.26 0.0088 0.0005

Saturn 96257-02-26 17:16 G 36878264.03 36878264.22 36878264.41 0.0257 0.0117

Neptune 96257-02-28 02:09 G 36878265.37 36878265.59 36878265.81 0.0088 0.0016

Neptune 96257-10-11 15:21 G 36878490.93 36878491.14 36878491.36 0.0088 0.0026

Neptune 96258-05-25 04:19 G 36878716.50 36878716.68 36878716.90 0.0088 0.0037

Neptune 96259-01-05 18:00 G 36878942.07 36878942.25 36878942.44 0.0088 0.0047

Jupiter 96259-03-26 15:21 G 36879022.02 36879022.14 36879022.26 0.0522 0.0407

Neptune 96259-08-19 06:57 G 36879167.64 36879167.79 36879167.97 0.0088 0.0058

Jupiter 96259-11-18 16:19 G 36879259.01 36879259.18 36879259.35 0.0525 0.0277

Neptune 96260-03-31 20:09 G 36879393.22 36879393.34 36879393.49 0.0088 0.0069

Neptune 96260-11-12 09:07 G 36879618.81 36879618.88 36879619.00 0.0088 0.0080

Jupiter 96265-01-30 07:40 G 36881158.67 36881158.82 36881158.98 0.0503 0.0323

Jupiter 96265-09-24 06:00 G 36881395.59 36881395.75 36881395.92 0.0500 0.0303

Mars 96268-04-28 00:14 G 36882342.35 36882342.51 36882342.66 0.1814 0.0785

Jupiter 96271-07-24 13:40 G 36883524.87 36883525.07 36883525.26 0.0525 0.0089

Saturn 96271-08-05 22:48 G 36883537.27 36883537.45 36883537.64 0.0304 0.0139

Saturn 96272-03-23 04:19 G 36883767.51 36883767.68 36883767.86 0.0305 0.0172

Mars 96274-10-09 12:28 G 36884697.94 36884698.02 36884698.09 0.1731 0.1555

Uranus 96276-04-02 17:16 G 36885239.16 36885239.22 36885239.30 0.0142 0.0134

Jupiter 96276-10-05 02:24 G 36885424.58 36885424.60 36885424.63 0.0504 0.0499

Uranus 96276-11-15 04:19 G 36885465.54 36885465.68 36885465.82 0.0141 0.0108

Jupiter 96277-05-30 01:40 G 36885661.37 36885661.57 36885661.78 0.0500 0.0128

Uranus 96277-06-29 14:38 G 36885691.94 36885692.11 36885692.30 0.0141 0.0082

Uranus 96278-02-11 01:12 G 36885918.36 36885918.55 36885918.76 0.0141 0.0056

Uranus 96278-09-25 11:16 G 36886144.77 36886144.97 36886145.20 0.0141 0.0031

Uranus 96279-05-09 21:36 G 36886371.18 36886371.40 36886371.62 0.0141 0.0005

Uranus 96279-12-22 07:26 G 36886597.59 36886597.81 36886598.02 0.0140 0.0021

Uranus 96280-08-04 16:48 G 36886824.00 36886824.20 36886824.41 0.0140 0.0046

Uranus 96281-03-19 02:09 G 36887050.41 36887050.59 36887050.78 0.0140 0.0071

Uranus 96281-10-31 11:31 G 36887276.82 36887276.98 36887277.14 0.0140 0.0095

Uranus 96282-06-14 19:55 G 36887503.24 36887503.33 36887503.46 0.0139 0.0120

Earth 96282-09-09 18:14 G 36887590.17 36887590.26 36887590.35 0.2702 0.2229

Moon 96282-09-09 22:04 G 36887590.39 36887590.42 36887590.45 0.2707 0.2643

Jupiter 96283-03-29 11:16 G 36887790.78 36887790.97 36887791.17 0.0524 0.0101

Saturn 96285-06-08 00:00 G 36888592.43 36888592.50 36888592.57 0.0259 0.0242

Saturn 96286-01-22 21:36 G 36888821.19 36888821.40 36888821.62 0.0258 0.0050

Saturn 96286-09-08 18:14 G 36889050.09 36889050.26 36889050.45 0.0257 0.0141

Jupiter 96289-02-01 23:45 G 36889927.28 36889927.49 36889927.69 0.0501 0.0045

Earth 96290-09-07 09:07 G 36890509.75 36890509.88 36890510.02 0.2703 0.1359

Moon 96290-09-07 14:38 G 36890509.97 36890510.11 36890510.26 0.2703 0.1148 *

Jupiter 96294-12-02 08:24 G 36892056.69 36892056.85 36892057.02 0.0523 0.0290

Jupiter 96295-07-27 10:33 G 36892293.81 36892293.94 36892294.07 0.0526 0.0400

Jupiter 96300-10-08 21:07 G 36894193.19 36894193.38 36894193.57 0.0502 0.0220

Saturn 96301-02-15 23:45 G 36894323.30 36894323.49 36894323.69 0.0304 0.0112

Jupiter 96301-06-02 18:28 G 36894430.16 36894430.27 36894430.40 0.0500 0.0403

Saturn 96301-10-04 05:31 G 36894553.58 36894553.73 36894553.89 0.0305 0.0200

Jupiter 96306-08-08 05:31 G 36896322.66 36896322.73 36896322.82 0.0522 0.0474

Mars 96306-10-09 15:50 G 36896385.01 36896385.16 36896385.31 0.1718 0.0873

Jupiter 96307-04-02 06:00 G 36896559.57 36896559.75 36896559.94 0.0525 0.0208

Jupiter 96312-06-13 18:43 G 36898459.15 36898459.28 36898459.41 0.0504 0.0393

Jupiter 96313-02-05 17:45 G 36898696.06 36898696.24 36898696.42 0.0500 0.0236

Saturn 96314-12-20 00:00 G 36899378.40 36899378.50 36899378.62 0.0259 0.0220

Saturn 96315-08-05 21:50 G 36899607.20 36899607.41 36899607.63 0.0258 0.0027

Saturn 96316-03-21 18:28 G 36899836.11 36899836.27 36899836.44 0.0257 0.0163

Jupiter 96318-12-06 01:26 G 36900825.36 36900825.56 36900825.76 0.0524 0.0015

Uranus 96319-08-15 01:26 G 36901077.50 36901077.56 36901077.62 0.0137 0.0130

Uranus 96320-03-28 07:40 G 36901303.70 36901303.82 36901303.96 0.0137 0.0108

Uranus 96320-11-09 14:24 G 36901529.95 36901530.10 36901530.28 0.0137 0.0086

Uranus 96321-06-23 21:50 G 36901756.21 36901756.41 36901756.60 0.0137 0.0063

Uranus 96322-02-05 04:48 G 36901982.50 36901982.70 36901982.91 0.0137 0.0039

Uranus 96322-09-19 12:00 G 36902208.79 36902209.00 36902209.22 0.0137 0.0016

Uranus 96323-05-03 19:26 G 36902435.10 36902435.31 36902435.53 0.0138 0.0008

Uranus 96323-12-16 03:07 G 36902661.42 36902661.63 36902661.84 0.0138 0.0031

Uranus 96324-07-29 10:48 G 36902887.76 36902887.95 36902888.16 0.0138 0.0055

Jupiter 96324-10-11 16:19 G 36902961.97 36902962.18 36902962.38 0.0501 0.0066

Uranus 96325-03-12 18:43 G 36903114.11 36903114.28 36903114.47 0.0138 0.0079

Uranus 96325-10-25 03:07 G 36903340.49 36903340.63 36903340.77 0.0139 0.0103

Uranus 96326-06-08 11:16 G 36903566.89 36903566.97 36903567.06 0.0139 0.0127

Jupiter 96330-08-10 22:48 G 36905091.27 36905091.45 36905091.64 0.0523 0.0177

Saturn 96330-08-29 01:26 G 36905109.36 36905109.56 36905109.76 0.0304 0.0081

Jupiter 96331-04-05 01:40 G 36905328.55 36905328.57 36905328.62 0.0526 0.0517

Saturn 96331-04-16 06:57 G 36905339.66 36905339.79 36905339.93 0.0305 0.0231

Neptune 96332-06-30 13:55 G 36905781.03 36905781.08 36905781.15 0.0089 0.0086

Neptune 96333-02-11 02:24 G 36906006.50 36906006.60 36906006.73 0.0089 0.0075

Neptune 96333-09-24 15:07 G 36906232.00 36906232.13 36906232.30 0.0089 0.0065

Mars 96334-02-24 06:43 G 36906384.65 36906384.78 36906384.90 0.1810 0.1236

Neptune 96334-05-08 04:04 G 36906457.51 36906457.67 36906457.85 0.0089 0.0054

Neptune 96334-12-19 16:33 G 36906683.02 36906683.19 36906683.40 0.0089 0.0044

Neptune 96335-08-02 05:31 G 36906908.54 36906908.73 36906908.94 0.0089 0.0032

Neptune 96336-03-14 18:14 G 36907134.06 36907134.26 36907134.48 0.0089 0.0022

Jupiter 96336-06-16 12:00 G 36907227.80 36907228.00 36907228.20 0.0501 0.0112

Neptune 96336-10-26 07:12 G 36907359.58 36907359.80 36907360.01 0.0089 0.0011

Neptune 96337-06-08 19:55 G 36907585.11 36907585.33 36907585.55 0.0089 0.0000

Neptune 96338-01-20 08:24 G 36907810.64 36907810.85 36907811.08 0.0089 0.0012

Neptune 96338-09-02 21:07 G 36908036.18 36908036.38 36908036.60 0.0089 0.0022

Neptune 96339-04-16 09:50 G 36908261.71 36908261.91 36908262.12 0.0089 0.0033

Neptune 96339-11-27 22:19 G 36908487.26 36908487.43 36908487.64 0.0089 0.0044

Neptune 96340-07-10 11:02 G 36908712.81 36908712.96 36908713.15 0.0089 0.0055

Neptune 96341-02-20 23:45 G 36908938.36 36908938.49 36908938.66 0.0089 0.0065

Neptune 96341-10-04 12:43 G 36909163.93 36909164.03 36909164.16 0.0089 0.0075

Jupiter 96342-04-15 20:52 G 36909357.23 36909357.37 36909357.51 0.0523 0.0362

Neptune 96342-05-18 01:12 G 36909389.52 36909389.55 36909389.63 0.0089 0.0087

Jupiter 96342-12-08 22:48 G 36909594.30 36909594.45 36909594.61 0.0526 0.0328

Saturn 96344-07-01 01:12 G 36910164.42 36910164.55 36910164.70 0.0259 0.0197

Saturn 96345-02-14 22:48 G 36910393.24 36910393.45 36910393.67 0.0258 0.0006

Saturn 96345-10-01 19:12 G 36910622.17 36910622.30 36910622.46 0.0258 0.0187

Pluto 96345-12-29 05:45 G 36910710.61 36910710.74 36910710.89 0.0065 0.0050

Pluto 96346-08-11 09:50 G 36910935.70 36910935.91 36910936.13 0.0065 0.0008

Pluto 96347-03-24 13:26 G 36911160.89 36911161.06 36911161.26 0.0066 0.0035

Jupiter 96348-02-20 09:07 G 36911493.71 36911493.88 36911494.06 0.0502 0.0287

Jupiter 96348-10-14 06:43 G 36911730.63 36911730.78 36911730.93 0.0500 0.0338

Jupiter 96354-08-13 18:57 G 36913860.10 36913860.29 36913860.48 0.0525 0.0135

Jupiter 96359-10-26 05:45 G 36915759.67 36915759.74 36915759.83 0.0504 0.0462

Saturn 96360-03-10 02:38 G 36915895.41 36915895.61 36915895.82 0.0305 0.0053

Jupiter 96360-06-19 05:16 G 36915996.52 36915996.72 36915996.91 0.0501 0.0168

Uranus 96360-07-16 14:24 G 36916023.98 36916024.10 36916024.23 0.0142 0.0117

Saturn 96360-10-26 08:09 G 36916125.75 36916125.84 36916125.96 0.0305 0.0261

Uranus 96361-02-28 00:57 G 36916250.38 36916250.54 36916250.72 0.0141 0.0091

Uranus 96361-10-12 11:31 G 36916476.79 36916476.98 36916477.18 0.0141 0.0065

Uranus 96362-05-26 21:50 G 36916703.21 36916703.41 36916703.63 0.0141 0.0040

Uranus 96363-01-08 08:09 G 36916929.63 36916929.84 36916930.06 0.0141 0.0014

Uranus 96363-08-22 18:14 G 36917156.04 36917156.26 36917156.47 0.0140 0.0012

Uranus 96364-04-05 03:50 G 36917382.45 36917382.66 36917382.87 0.0140 0.0037

Uranus 96364-11-17 13:12 G 36917608.85 36917609.05 36917609.25 0.0140 0.0062

Uranus 96365-07-01 22:19 G 36917835.26 36917835.43 36917835.61 0.0140 0.0086

Uranus 96366-02-13 07:12 G 36918061.69 36918061.80 36918061.95 0.0140 0.0111

Mars 96366-02-23 18:00 G 36918072.21 36918072.25 36918072.30 0.1825 0.1762

Jupiter 96366-04-18 15:07 G 36918125.93 36918126.13 36918126.33 0.0524 0.0058

Uranus 96366-09-27 16:19 G 36918288.13 36918288.18 36918288.24 0.0139 0.0134

Jupiter 96372-02-23 03:36 G 36920262.44 36920262.65 36920262.86 0.0501 0.0004

Mars 96372-08-06 01:40 G 36920427.40 36920427.57 36920427.73 0.1722 0.0595

Saturn 96374-01-11 01:40 G 36920950.41 36920950.57 36920950.73 0.0259 0.0174

Saturn 96374-08-27 23:16 G 36921179.26 36921179.47 36921179.69 0.0258 0.0019

Saturn 96375-04-13 19:55 G 36921408.21 36921408.33 36921408.46 0.0257 0.0208

Jupiter 96377-12-22 10:48 G 36922391.78 36922391.95 36922392.13 0.0523 0.0251

Jupiter 96378-08-16 12:57 G 36922628.94 36922629.04 36922629.15 0.0526 0.0441

Jupiter 96383-10-29 01:26 G 36924528.37 36924528.56 36924528.76 0.0502 0.0178

Jupiter 96384-06-21 22:48 G 36924765.36 36924765.45 36924765.54 0.0500 0.0445

Jupiter 96389-08-27 08:38 G 36926657.75 36926657.86 36926657.97 0.0522 0.0435

Saturn 96389-09-20 05:16 G 36926681.51 36926681.72 36926681.93 0.0304 0.0020

Jupiter 96390-04-21 09:36 G 36926894.73 36926894.90 36926895.08 0.0526 0.0252

Saturn 96390-05-08 11:02 G 36926911.91 36926911.96 36926912.02 0.0305 0.0292

Jupiter 96395-07-03 21:07 G 36928794.24 36928794.38 36928794.53 0.0503 0.0355

Jupiter 96396-02-25 19:12 G 36929031.12 36929031.30 36929031.47 0.0500 0.0272

Mars 96399-12-22 13:12 G 36930426.99 36930427.05 36930427.12 0.1805 0.1660

Jupiter 96401-12-25 06:43 G 36931160.58 36931160.78 36931160.98 0.0525 0.0060

Saturn 96403-07-24 03:07 G 36931736.46 36931736.63 36931736.81 0.0259 0.0151

Uranus 96403-11-26 18:28 G 36931862.16 36931862.27 36931862.38 0.0137 0.0116

Saturn 96404-03-09 00:43 G 36931965.32 36931965.53 36931965.74 0.0258 0.0043

Uranus 96404-07-10 00:57 G 36932088.40 36932088.54 36932088.71 0.0137 0.0094

Saturn 96404-10-23 21:07 G 36932194.30 36932194.38 36932194.48 0.0258 0.0233

Uranus 96405-02-21 07:55 G 36932314.65 36932314.83 36932315.02 0.0137 0.0071

Uranus 96405-10-05 14:52 G 36932540.92 36932541.12 36932541.33 0.0137 0.0048

Uranus 96406-05-19 22:04 G 36932767.21 36932767.42 36932767.63 0.0137 0.0025

Uranus 96407-01-01 05:16 G 36932993.51 36932993.72 36932993.94 0.0138 0.0003

Uranus 96407-08-15 12:57 G 36933219.82 36933220.04 36933220.25 0.0138 0.0022

Jupiter 96407-10-31 17:16 G 36933297.02 36933297.22 36933297.42 0.0500 0.0101

Uranus 96408-03-28 20:38 G 36933446.15 36933446.36 36933446.56 0.0138 0.0045

Uranus 96408-11-10 04:04 G 36933672.49 36933672.67 36933672.87 0.0138 0.0069

Uranus 96409-06-24 12:00 G 36933898.86 36933899.00 36933899.18 0.0138 0.0094

Uranus 96410-02-05 20:24 G 36934125.24 36934125.35 36934125.47 0.0139 0.0117

Earth 96412-03-13 07:55 G 36934891.76 36934891.83 36934891.90 0.2630 0.2319

Jupiter 96413-08-30 03:21 G 36935426.45 36935426.64 36935426.83 0.0524 0.0133

Neptune 96415-11-11 10:19 G 36936229.89 36936229.93 36936230.02 0.0088 0.0084

Neptune 96416-06-24 00:00 G 36936455.39 36936455.50 36936455.63 0.0088 0.0073

Neptune 96417-02-04 12:57 G 36936680.91 36936681.04 36936681.22 0.0088 0.0063

Neptune 96417-09-18 02:24 G 36936906.44 36936906.60 36936906.80 0.0088 0.0052

Neptune 96418-05-01 16:04 G 36937131.97 36937132.17 36937132.37 0.0088 0.0041

Saturn 96418-08-15 02:52 G 36937237.59 36937237.62 36937237.67 0.0303 0.0296

Neptune 96418-12-13 05:16 G 36937357.52 36937357.72 36937357.94 0.0088 0.0031

Saturn 96419-04-02 07:26 G 36937467.60 36937467.81 36937468.01 0.0304 0.0013

Jupiter 96419-07-06 14:52 G 36937562.91 36937563.12 36937563.32 0.0502 0.0075

Neptune 96419-07-26 18:43 G 36937583.07 36937583.28 36937583.50 0.0088 0.0020

Neptune 96420-03-08 07:55 G 36937808.61 36937808.83 36937809.06 0.0088 0.0010

Earth 96420-03-10 23:16 G 36937811.32 36937811.47 36937811.62 0.2629 0.1007

Moon 96420-03-10 23:31 G 36937811.32 36937811.48 36937811.64 0.2623 0.1001 *

Neptune 96420-10-19 21:21 G 36938034.17 36938034.39 36938034.61 0.0088 0.0001

Neptune 96421-06-02 10:33 G 36938259.72 36938259.94 36938260.17 0.0088 0.0012

Neptune 96422-01-14 00:00 G 36938485.29 36938485.50 36938485.72 0.0088 0.0022

Neptune 96422-08-27 13:12 G 36938710.85 36938711.05 36938711.26 0.0088 0.0033

Neptune 96423-04-10 02:38 G 36938936.41 36938936.61 36938936.80 0.0088 0.0044

Neptune 96423-11-21 15:36 G 36939161.99 36939162.15 36939162.33 0.0088 0.0054

Neptune 96424-07-04 04:33 G 36939387.56 36939387.69 36939387.86 0.0088 0.0065

Neptune 96425-02-14 18:00 G 36939613.15 36939613.25 36939613.38 0.0088 0.0076

Jupiter 96425-05-05 00:14 G 36939692.35 36939692.51 36939692.67 0.0523 0.0322

Neptune 96425-09-28 06:43 G 36939838.76 36939838.78 36939838.86 0.0088 0.0087

Jupiter 96425-12-28 01:55 G 36939929.44 36939929.58 36939929.72 0.0526 0.0370

Jupiter 96431-03-11 12:14 G 36941828.83 36941829.01 36941829.19 0.0503 0.0249

Jupiter 96431-11-03 10:04 G 36942065.79 36942065.92 36942066.06 0.0500 0.0377

Mars 96431-12-22 00:14 G 36942114.39 36942114.51 36942114.63 0.1820 0.1294

Saturn 96433-02-02 04:04 G 36942522.48 36942522.67 36942522.86 0.0259 0.0126

Saturn 96433-09-19 01:40 G 36942751.36 36942751.57 36942751.78 0.0258 0.0067

Pluto 96434-04-11 18:28 G 36942956.10 36942956.27 36942956.47 0.0079 0.0044

Saturn 96434-05-05 22:04 G 36942980.42 36942980.42 36942980.45 0.0257 0.0257

Pluto 96434-11-23 05:02 G 36943181.52 36943181.71 36943181.93 0.0079 0.0034

Jupiter 96437-01-07 20:24 G 36943958.31 36943958.35 36943958.39 0.0521 0.0509

Jupiter 96437-09-01 20:38 G 36944195.17 36944195.36 36944195.55 0.0525 0.0174

Mars 96438-06-03 10:33 G 36944469.76 36944469.94 36944470.11 0.1726 0.0290

Jupiter 96442-11-14 09:36 G 36946094.79 36946094.90 36946095.01 0.0504 0.0423

Jupiter 96443-07-09 08:38 G 36946331.68 36946331.86 36946332.05 0.0500 0.0209

Uranus 96444-03-15 23:31 G 36946582.39 36946582.48 36946582.59 0.0142 0.0126

Uranus 96444-10-28 10:19 G 36946808.79 36946808.93 36946809.10 0.0141 0.0100

Uranus 96445-06-11 21:07 G 36947035.20 36947035.38 36947035.57 0.0141 0.0075

Uranus 96446-01-24 07:40 G 36947261.63 36947261.82 36947262.04 0.0141 0.0049

Uranus 96446-09-07 18:14 G 36947488.04 36947488.26 36947488.47 0.0141 0.0023

Uranus 96447-04-22 04:04 G 36947714.46 36947714.67 36947714.89 0.0141 0.0003

Uranus 96447-12-04 13:55 G 36947940.87 36947941.08 36947941.30 0.0140 0.0028

Saturn 96448-02-25 06:14 G 36948023.66 36948023.76 36948023.87 0.0303 0.0262

Uranus 96448-07-17 23:31 G 36948167.28 36948167.48 36948167.68 0.0140 0.0052

Saturn 96448-10-12 10:48 G 36948253.75 36948253.95 36948254.16 0.0304 0.0046

Uranus 96449-03-01 08:52 G 36948393.69 36948393.87 36948394.06 0.0140 0.0077

Jupiter 96449-05-07 17:31 G 36948461.03 36948461.23 36948461.43 0.0524 0.0019

Uranus 96449-10-13 18:14 G 36948620.11 36948620.26 36948620.40 0.0140 0.0101

Uranus 96450-05-28 03:07 G 36948846.53 36948846.63 36948846.72 0.0140 0.0125

Jupiter 96455-03-14 05:02 G 36950597.50 36950597.71 36950597.92 0.0501 0.0032

Jupiter 96461-01-10 14:09 G 36952726.91 36952727.09 36952727.27 0.0524 0.0210

Jupiter 96461-09-04 17:31 G 36952964.16 36952964.23 36952964.30 0.0527 0.0487

Saturn 96462-08-15 06:14 G 36953308.57 36953308.76 36953308.97 0.0259 0.0102

Saturn 96463-04-01 03:50 G 36953537.46 36953537.66 36953537.87 0.0258 0.0093

Jupiter 96466-11-17 02:38 G 36954863.41 36954863.61 36954863.81 0.0501 0.0143

Jupiter 96467-07-11 22:48 G 36955100.39 36955100.45 36955100.51 0.0499 0.0477

Jupiter 96472-09-15 11:31 G 36956992.85 36956992.98 36956993.10 0.0523 0.0399

Jupiter 96473-05-10 12:57 G 36957229.88 36957230.04 36957230.21 0.0526 0.0294

Saturn 96477-09-06 10:04 G 36958809.80 36958809.92 36958810.07 0.0303 0.0228

Saturn 96478-04-24 14:52 G 36959039.92 36959040.12 36959040.32 0.0304 0.0082

Jupiter 96478-07-22 22:48 G 36959129.30 36959129.45 36959129.61 0.0503 0.0321

Jupiter 96479-03-16 20:52 G 36959366.21 36959366.37 36959366.53 0.0500 0.0308

Jupiter 96485-01-13 08:52 G 36961495.67 36961495.87 36961496.06 0.0525 0.0099

Uranus 96487-07-27 04:04 G 36962420.60 36962420.67 36962420.77 0.0136 0.0125

Uranus 96488-03-09 10:33 G 36962646.81 36962646.94 36962647.09 0.0136 0.0103

Uranus 96488-10-21 17:02 G 36962873.05 36962873.21 36962873.40 0.0137 0.0081

Uranus 96489-06-05 00:00 G 36963099.31 36963099.50 36963099.70 0.0137 0.0058

Uranus 96490-01-17 06:57 G 36963325.59 36963325.79 36963326.01 0.0137 0.0035

Jupiter 96490-03-27 19:12 G 36963395.28 36963395.30 36963395.34 0.0504 0.0496

Uranus 96490-08-31 14:09 G 36963551.88 36963552.09 36963552.31 0.0137 0.0012

Jupiter 96490-11-19 19:12 G 36963632.10 36963632.30 36963632.50 0.0501 0.0137

Uranus 96491-04-14 21:36 G 36963778.18 36963778.40 36963778.61 0.0138 0.0012

Uranus 96491-11-27 04:48 G 36964004.50 36964004.70 36964004.92 0.0138 0.0035

Saturn 96492-02-25 08:09 G 36964094.63 36964094.84 36964095.05 0.0259 0.0075

Uranus 96492-07-10 12:28 G 36964230.83 36964231.02 36964231.22 0.0138 0.0059

Saturn 96492-10-11 05:45 G 36964323.55 36964323.74 36964323.93 0.0258 0.0118

Uranus 96493-02-21 20:24 G 36964457.18 36964457.35 36964457.53 0.0138 0.0082

Uranus 96493-10-06 04:04 G 36964683.55 36964683.67 36964683.83 0.0138 0.0107

Uranus 96494-05-20 12:28 G 36964909.95 36964910.02 36964910.10 0.0139 0.0130

Jupiter 96496-09-18 03:50 G 36965761.46 36965761.66 36965761.85 0.0524 0.0098

Neptune 96497-05-15 11:16 G 36966000.90 36966000.97 36966001.10 0.0089 0.0080

Mars 96497-10-18 07:12 G 36966156.65 36966156.80 36966156.96 0.1815 0.0862

Neptune 96497-12-27 00:14 G 36966226.39 36966226.51 36966226.67 0.0089 0.0069

Neptune 96498-08-09 13:12 G 36966451.89 36966452.05 36966452.22 0.0089 0.0058

Neptune 96499-03-23 01:40 G 36966677.40 36966677.57 36966677.77 0.0089 0.0047

Neptune 96499-11-03 14:24 G 36966902.92 36966903.10 36966903.32 0.0089 0.0037

Neptune 96500-06-17 03:36 G 36967128.45 36967128.65 36967128.86 0.0089 0.0025

Neptune 96501-01-28 16:19 G 36967353.97 36967354.18 36967354.40 0.0089 0.0015

Neptune 96501-09-11 05:02 G 36967579.50 36967579.71 36967579.93 0.0089 0.0004

Neptune 96502-04-24 17:45 G 36967805.02 36967805.24 36967805.46 0.0089 0.0007

Jupiter 96502-07-26 17:02 G 36967898.00 36967898.21 36967898.42 0.0501 0.0037

Neptune 96502-12-06 06:14 G 36968030.56 36968030.76 36968030.98 0.0089 0.0018

Neptune 96503-07-19 19:12 G 36968256.10 36968256.30 36968256.51 0.0089 0.0029

Neptune 96504-03-01 07:40 G 36968481.64 36968481.82 36968482.03 0.0089 0.0040

Mars 96504-03-31 19:40 G 36968512.15 36968512.32 36968512.50 0.1730 0.0042

Neptune 96504-10-12 20:24 G 36968707.18 36968707.35 36968707.54 0.0089 0.0050

Neptune 96505-05-26 08:52 G 36968932.74 36968932.87 36968933.05 0.0089 0.0062

Neptune 96506-01-06 22:04 G 36969158.30 36969158.42 36969158.55 0.0089 0.0071

Neptune 96506-08-20 10:33 G 36969383.88 36969383.94 36969384.04 0.0089 0.0082

Saturn 96507-03-20 15:36 G 36969595.99 36969596.15 36969596.31 0.0303 0.0189

Saturn 96507-11-05 20:09 G 36969826.15 36969826.34 36969826.53 0.0304 0.0121

Jupiter 96508-05-25 00:43 G 36970027.37 36970027.53 36970027.70 0.0523 0.0288

Jupiter 96509-01-17 02:52 G 36970264.50 36970264.62 36970264.75 0.0526 0.0408

Jupiter 96514-03-31 13:12 G 36972163.87 36972164.05 36972164.24 0.0502 0.0215

Jupiter 96514-11-23 10:04 G 36972400.81 36972400.92 36972401.04 0.0499 0.0409

Jupiter 96520-01-28 21:07 G 36974293.30 36974293.38 36974293.46 0.0522 0.0478

Jupiter 96520-09-21 22:33 G 36974530.26 36974530.44 36974530.62 0.0526 0.0213

Saturn 96521-01-21 12:28 G 36974651.96 36974652.02 36974652.10 0.0260 0.0244

Saturn 96521-09-07 11:16 G 36974880.76 36974880.97 36974881.18 0.0259 0.0047

Saturn 96522-04-24 08:38 G 36975109.69 36975109.86 36975110.04 0.0258 0.0146

Moon 96525-09-11 17:02 G 36976346.12 36976346.21 36976346.30 0.2696 0.2223

Earth 96525-09-11 19:26 G 36976346.22 36976346.31 36976346.39 0.2703 0.2248 *

Jupiter 96525-12-04 10:04 G 36976429.80 36976429.92 36976430.06 0.0503 0.0391

Jupiter 96526-07-29 08:09 G 36976666.66 36976666.84 36976667.02 0.0500 0.0240

Uranus 96527-11-15 06:57 G 36977140.74 36977140.79 36977140.85 0.0142 0.0136

Uranus 96528-06-28 17:45 G 36977367.12 36977367.24 36977367.39 0.0142 0.0111

Uranus 96529-02-10 05:02 G 36977593.54 36977593.71 36977593.89 0.0141 0.0085

Uranus 96529-09-24 15:36 G 36977819.96 36977820.15 36977820.36 0.0141 0.0059

Uranus 96530-05-09 02:09 G 36978046.38 36978046.59 36978046.81 0.0141 0.0033

Uranus 96530-12-21 12:28 G 36978272.80 36978273.02 36978273.24 0.0141 0.0008

Uranus 96531-08-04 22:19 G 36978499.22 36978499.43 36978499.65 0.0141 0.0018

Uranus 96532-03-18 08:09 G 36978725.64 36978725.84 36978726.05 0.0140 0.0043

Jupiter 96532-05-27 18:57 G 36978796.09 36978796.29 36978796.49 0.0525 0.0020

Uranus 96532-10-30 17:31 G 36978952.05 36978952.23 36978952.43 0.0140 0.0068

Uranus 96533-06-14 02:38 G 36979178.47 36979178.61 36979178.79 0.0140 0.0092

Moon 96533-09-09 04:48 G 36979265.58 36979265.70 36979265.83 0.2701 0.1672

Earth 96533-09-09 10:19 G 36979265.80 36979265.93 36979266.07 0.2703 0.1343 *

Uranus 96534-01-26 12:00 G 36979404.89 36979405.00 36979405.13 0.0140 0.0116

Uranus 96534-09-09 20:52 G 36979631.37 36979631.37 36979631.40 0.0140 0.0139

Saturn 96536-09-29 20:52 G 36980382.19 36980382.37 36980382.56 0.0303 0.0150

Saturn 96537-05-18 01:26 G 36980612.39 36980612.56 36980612.74 0.0304 0.0161

Jupiter	96538-04-03 05:16 G	36980932.51	36980932.72	36980932.92	0.0501	0.0064
Jupiter	96544-01-31 15:07 G	36983061.94	36983062.13	36983062.32	0.0524	0.0176
Jupiter	96544-09-24 18:00 G	36983299.23	36983299.25	36983299.28	0.0526	0.0521
Jupiter	96549-12-07 02:24 G	36985198.40	36985198.60	36985198.81	0.0502	0.0113
Saturn	96550-08-03 15:36 G	36985438.03	36985438.15	36985438.27	0.0260	0.0215
Saturn	96551-03-20 14:09 G	36985666.88	36985667.09	36985667.31	0.0259	0.0019
Saturn	96551-11-04 11:31 G	36985895.83	36985895.98	36985896.15	0.0258	0.0174
Jupiter	96555-10-06 10:19 G	36987327.80	36987327.93	36987328.08	0.0522	0.0369
Jupiter	96556-05-30 12:00 G	36987564.85	36987565.00	36987565.16	0.0526	0.0326
Jupiter	96561-08-11 23:31 G	36989464.31	36989464.48	36989464.65	0.0503	0.0288
Jupiter	96562-04-05 21:21 G	36989701.25	36989701.39	36989701.55	0.0500	0.0343
Mars	96563-08-16 13:40 G	36990198.90	36990199.07	36990199.24	0.1811	0.0412
Saturn	96566-04-12 04:19 G	36991168.48	36991168.68	36991168.87	0.0303	0.0106
Saturn	96566-11-28 08:52 G	36991398.73	36991398.87	36991399.03	0.0304	0.0204
Jupiter	96568-02-03 07:40 G	36991830.63	36991830.82	36991831.02	0.0525	0.0131
Mars	96570-01-27 04:33 G	36992554.52	36992554.69	36992554.87	0.1734	0.0331
Uranus	96571-03-27 14:38 G	36992979.08	36992979.11	36992979.19	0.0136	0.0133
Uranus	96571-11-08 21:07 G	36993205.27	36993205.38	36993205.52	0.0136	0.0111
Uranus	96572-06-22 03:36 G	36993431.51	36993431.65	36993431.83	0.0136	0.0089
Uranus	96573-02-03 10:33 G	36993657.76	36993657.94	36993658.14	0.0137	0.0066
Jupiter	96573-04-16 19:40 G	36993730.25	36993730.32	36993730.40	0.0503	0.0465
Uranus	96573-09-17 17:31 G	36993884.02	36993884.23	36993884.43	0.0137	0.0043
Jupiter	96573-12-09 18:28 G	36993967.08	36993967.27	36993967.47	0.0500	0.0168
Uranus	96574-05-02 00:14 G	36994110.30	36994110.51	36994110.73	0.0137	0.0020
Uranus	96574-12-14 07:26 G	36994336.59	36994336.81	36994337.03	0.0137	0.0003
Uranus	96575-07-28 14:52 G	36994562.91	36994563.12	36994563.33	0.0138	0.0026
Uranus	96576-03-10 22:04 G	36994789.23	36994789.42	36994789.63	0.0138	0.0050
Uranus	96576-10-23 05:45 G	36995015.56	36995015.74	36995015.93	0.0138	0.0073
Uranus	96577-06-06 13:40 G	36995241.92	36995242.07	36995242.23	0.0138	0.0097
Uranus	96578-01-18 21:21 G	36995468.31	36995468.39	36995468.52	0.0138	0.0121

Jupiter 96579-10-09 03:07 G 36996096.43 36996096.63 36996096.83 0.0525 0.0067

Saturn 96580-02-13 19:26 G 36996224.17 36996224.31 36996224.47 0.0260 0.0186

Neptune 96580-02-13 19:12 G 36996224.28 36996224.30 36996224.33 0.0088 0.0087 *

Neptune 96580-09-26 08:09 G 36996449.75 36996449.84 36996449.96 0.0088 0.0077

Saturn 96580-09-29 18:14 G 36996453.04 36996453.26 36996453.48 0.0259 0.0011

Neptune 96581-05-09 21:50 G 36996675.27 36996675.41 36996675.56 0.0088 0.0066

Saturn 96581-05-16 15:50 G 36996682.03 36996682.16 36996682.29 0.0259 0.0204

Neptune 96581-12-21 10:48 G 36996900.80 36996900.95 36996901.14 0.0088 0.0056

Neptune 96582-08-04 00:28 G 36997126.33 36997126.52 36997126.71 0.0088 0.0045

Neptune 96583-03-17 13:26 G 36997351.87 36997352.06 36997352.28 0.0088 0.0035

Neptune 96583-10-29 02:52 G 36997577.41 36997577.62 36997577.84 0.0088 0.0024

Neptune 96584-06-10 16:19 G 36997802.96 36997803.18 36997803.40 0.0088 0.0013

Neptune 96585-01-22 05:45 G 36998028.52 36998028.74 36998028.96 0.0088 0.0003

Jupiter 96585-08-14 15:50 G 36998232.95 36998233.16 36998233.37 0.0501 0.0009

Neptune 96585-09-04 18:57 G 36998254.07 36998254.29 36998254.52 0.0088 0.0008

Neptune 96586-04-18 07:55 G 36998479.63 36998479.83 36998480.06 0.0088 0.0020

Neptune 96586-11-29 21:36 G 36998705.19 36998705.40 36998705.61 0.0088 0.0029

Neptune 96587-07-13 10:33 G 36998930.76 36998930.94 36998931.15 0.0088 0.0040

Neptune 96588-02-24 00:14 G 36999156.33 36999156.51 36999156.69 0.0088 0.0050

Neptune 96588-10-06 12:57 G 36999381.90 36999382.04 36999382.22 0.0088 0.0062

Neptune 96589-05-20 02:38 G 36999607.49 36999607.61 36999607.74 0.0088 0.0072

Neptune 96589-12-31 15:36 G 36999833.09 36999833.15 36999833.25 0.0088 0.0082

Jupiter 96591-06-13 23:45 G 37000362.32 37000362.49 37000362.67 0.0524 0.0260

Pluto 96592-01-28 14:38 G 37000590.94 37000591.11 37000591.28 0.0065 0.0041

Jupiter 96592-02-06 02:38 G 37000599.50 37000599.61 37000599.72 0.0527 0.0439

Pluto 96592-09-09 18:43 G 37000816.06 37000816.28 37000816.49 0.0065 0.0002

Pluto 96593-04-22 22:33 G 37001041.29 37001041.44 37001041.61 0.0066 0.0044

Saturn 96595-10-23 12:00 G 37001954.80 37001955.00 37001955.21 0.0303 0.0061

Saturn 96596-06-09 16:48 G 37002185.09 37002185.20 37002185.32 0.0304 0.0250

Jupiter 96597-04-19 11:45 G 37002498.80 37002498.99 37002499.18 0.0502 0.0188

Jupiter 96597-12-12 08:38 G 37002735.77 37002735.86 37002735.96 0.0499 0.0438

Jupiter 96603-02-17 20:52 G 37004628.27 37004628.37 37004628.47 0.0522 0.0448

Jupiter 96603-10-12 21:50 G 37004865.23 37004865.41 37004865.58 0.0526 0.0244

Jupiter 96608-12-24 07:55 G 37006764.69 37006764.83 37006764.98 0.0503 0.0366

Jupiter 96609-08-18 06:28 G 37007001.60 37007001.77 37007001.95 0.0500 0.0268

Saturn 96609-08-26 23:31 G 37007010.32 37007010.48 37007010.66 0.0260 0.0155

Saturn 96610-04-12 22:04 G 37007239.21 37007239.42 37007239.64 0.0259 0.0042

Saturn 96610-11-27 19:40 G 37007468.24 37007468.32 37007468.42 0.0258 0.0234

Uranus 96612-02-28 00:43 G 37007925.43 37007925.53 37007925.65 0.0142 0.0121

Uranus 96612-10-11 11:31 G 37008151.83 37008151.98 37008152.16 0.0142 0.0096

Uranus 96613-05-25 22:33 G 37008378.25 37008378.44 37008378.63 0.0141 0.0070

Uranus 96614-01-07 09:07 G 37008604.68 37008604.88 37008605.10 0.0141 0.0044

Uranus 96614-08-21 19:40 G 37008831.10 37008831.32 37008831.54 0.0141 0.0019

Uranus 96615-04-05 05:45 G 37009057.52 37009057.74 37009057.96 0.0141 0.0007

Jupiter 96615-06-17 16:04 G 37009130.98 37009131.17 37009131.37 0.0525 0.0047

Uranus 96615-11-17 15:36 G 37009283.94 37009284.15 37009284.37 0.0141 0.0032

Uranus 96616-07-01 01:26 G 37009510.36 37009510.56 37009510.76 0.0140 0.0057

Uranus 96617-02-12 10:48 G 37009736.78 37009736.95 37009737.14 0.0140 0.0082

Uranus 96617-09-26 19:55 G 37009963.20 37009963.33 37009963.49 0.0140 0.0106

Uranus 96618-05-11 05:16 G 37010189.64 37010189.72 37010189.80 0.0140 0.0129

Jupiter 96621-04-23 04:04 G 37011267.47 37011267.67 37011267.88 0.0501 0.0094

Saturn 96625-05-05 20:52 G 37012741.16 37012741.37 37012741.57 0.0303 0.0015

Saturn 96625-12-22 01:40 G 37012971.53 37012971.57 37012971.62 0.0304 0.0297

Jupiter 96627-02-20 12:00 G 37013396.81 37013397.00 37013397.19 0.0524 0.0149

Mars 96629-06-13 20:52 G 37014241.20 37014241.37 37014241.54 0.1806 0.0013

Jupiter 96632-12-27 01:12 G 37015533.34 37015533.55 37015533.75 0.0501 0.0084

Mars 96635-11-25 13:26 G 37016596.90 37016597.06 37016597.22 0.1739 0.0652

Jupiter 96638-10-26 06:57 G 37017662.65 37017662.79 37017662.95 0.0523 0.0347

Saturn 96639-03-09 04:48 G 37017796.51 37017796.70 37017796.89 0.0260 0.0123

Jupiter 96639-06-20 09:36 G 37017899.76 37017899.90 37017900.05 0.0527 0.0354

Saturn 96639-10-24 03:21 G 37018025.43 37018025.64 37018025.84 0.0259 0.0073

Jupiter 96644-08-31 21:36 G 37019799.23 37019799.40 37019799.58 0.0502 0.0261

Jupiter 96645-04-25 18:28 G 37020036.14 37020036.27 37020036.42 0.0499 0.0368

Jupiter 96651-02-23 05:16 G 37022165.53 37022165.72 37022165.91 0.0526 0.0157

Saturn 96654-03-31 02:52 G 37023297.53 37023297.62 37023297.71 0.0302 0.0268

Saturn 96654-11-16 06:14 G 37023527.56 37023527.76 37023527.97 0.0303 0.0037

Moon 96655-03-16 04:04 G 37023647.55 37023647.67 37023647.79 0.2631 0.1700

Earth 96655-03-16 09:21 G 37023647.84 37023647.89 37023647.94 0.2630 0.2481

Uranus 96655-07-10 07:55 G 37023763.74 37023763.83 37023763.96 0.0136 0.0119

Uranus 96656-02-21 14:24 G 37023989.96 37023990.10 37023990.27 0.0136 0.0097

Jupiter 96656-05-06 16:19 G 37024065.09 37024065.18 37024065.28 0.0503 0.0443

Uranus 96656-10-04 20:52 G 37024216.20 37024216.37 37024216.56 0.0137 0.0074

Jupiter 96656-12-29 15:21 G 37024301.95 37024302.14 37024302.33 0.0500 0.0192

Uranus 96657-05-19 03:36 G 37024442.45 37024442.65 37024442.86 0.0137 0.0052

Uranus 96657-12-31 10:33 G 37024668.73 37024668.94 37024669.15 0.0137 0.0029

Uranus 96658-08-14 17:31 G 37024895.02 37024895.23 37024895.45 0.0137 0.0006

Uranus 96659-03-29 00:28 G 37025121.31 37025121.52 37025121.74 0.0137 0.0018

Uranus 96659-11-10 07:40 G 37025347.62 37025347.82 37025348.04 0.0138 0.0041

Uranus 96660-06-23 15:21 G 37025573.95 37025574.14 37025574.34 0.0138 0.0064

Uranus 96661-02-04 23:02 G 37025800.30 37025800.46 37025800.64 0.0138 0.0087

Neptune 96661-08-18 20:09 G 37025995.29 37025995.34 37025995.44 0.0089 0.0084

Uranus 96661-09-19 07:12 G 37026026.67 37026026.80 37026026.93 0.0138 0.0111

Neptune 96662-04-01 09:07 G 37026220.77 37026220.88 37026221.02 0.0089 0.0073

Uranus 96662-05-03 14:52 G 37026253.09 37026253.12 37026253.19 0.0138 0.0134

Jupiter 96662-10-29 01:12 G 37026431.35 37026431.55 37026431.75 0.0524 0.0040

Neptune 96662-11-12 22:04 G 37026446.27 37026446.42 37026446.58 0.0089 0.0062

Moon 96663-03-13 22:04 G 37026567.28 37026567.42 37026567.57 0.2634 0.0856

Earth 96663-03-14 00:43 G 37026567.38 37026567.53 37026567.69 0.2629 0.0855 *

Neptune 96663-06-26 10:33 G 37026671.78 37026671.94 37026672.14 0.0089 0.0052

Neptune 96664-02-06 23:31 G 37026897.30 37026897.48 37026897.69 0.0089 0.0040

Neptune 96664-09-19 12:14 G 37027122.82 37027123.01 37027123.23 0.0089 0.0030

Neptune 96665-05-03 01:12 G 37027348.34 37027348.55 37027348.76 0.0089 0.0019

Neptune 96665-12-14 13:55 G 37027573.87 37027574.08 37027574.30 0.0089 0.0008

Neptune 96666-07-28 02:52 G 37027799.40 37027799.62 37027799.83 0.0089 0.0003

Neptune 96667-03-10 15:21 G 37028024.93 37028025.14 37028025.36 0.0089 0.0014

Neptune 96667-10-22 04:04 G 37028250.47 37028250.67 37028250.88 0.0089 0.0025

Neptune 96668-06-03 16:48 G 37028476.01 37028476.20 37028476.41 0.0089 0.0036

Jupiter 96668-09-03 12:00 G 37028567.79 37028568.00 37028568.21 0.0501 0.0017

Saturn 96668-09-18 09:36 G 37028582.70 37028582.90 37028583.11 0.0260 0.0091

Neptune 96669-01-15 05:16 G 37028701.55 37028701.72 37028701.92 0.0089 0.0047

Saturn 96669-05-05 07:55 G 37028811.64 37028811.83 37028812.03 0.0259 0.0106

Neptune 96669-08-28 18:00 G 37028927.10 37028927.25 37028927.44 0.0089 0.0057

Neptune 96670-04-11 06:57 G 37029152.66 37029152.79 37029152.94 0.0089 0.0068

Neptune 96670-11-22 19:26 G 37029378.22 37029378.31 37029378.43 0.0089 0.0078

Neptune 96671-07-06 08:24 G 37029603.85 37029603.85 37029603.88 0.0089 0.0089

Jupiter 96674-07-03 20:09 G 37030697.16 37030697.34 37030697.51 0.0523 0.0235

Jupiter 96675-02-25 22:19 G 37030934.34 37030934.43 37030934.52 0.0526 0.0464

Jupiter 96680-05-09 08:52 G 37032833.68 37032833.87 37032834.07 0.0502 0.0162

Pluto 96680-05-12 03:36 G 37032836.46 37032836.65 37032836.88 0.0079 0.0028

Pluto 96680-12-23 14:09 G 37033061.93 37033062.09 37033062.28 0.0079 0.0050

Jupiter 96681-01-01 06:00 G 37033070.68 37033070.75 37033070.82 0.0499 0.0465

Saturn 96683-10-11 13:12 G 37034083.91 37034084.05 37034084.20 0.0302 0.0220

Saturn 96684-05-28 17:02 G 37034314.01 37034314.21 37034314.41 0.0304 0.0088

Jupiter 96686-03-08 16:04 G 37034963.05 37034963.17 37034963.28 0.0522 0.0427

Jupiter 96686-10-31 17:02 G 37035200.04 37035200.21 37035200.38 0.0526 0.0268

Jupiter 96692-01-13 05:45 G 37037099.59 37037099.74 37037099.89 0.0503 0.0340

Jupiter 96692-09-06 03:36 G 37037336.48 37037336.65 37037336.82 0.0499 0.0293

Mars 96695-04-11 03:36 G 37038283.48 37038283.65 37038283.82 0.1801 0.0443

Uranus 96695-10-28 06:57 G 37038483.73 37038483.79 37038483.89 0.0142 0.0132

Uranus 96696-06-10 18:28 G 37038710.13 37038710.27 37038710.42 0.0142 0.0106

Uranus 96697-01-23 05:31 G 37038936.56 37038936.73 37038936.92 0.0142 0.0081

Saturn 96697-08-14 16:04 G 37039140.14 37039140.17 37039140.22 0.0261 0.0256

Uranus 96697-09-06 16:04 G 37039162.98 37039163.17 37039163.39 0.0141 0.0056

Saturn 96698-03-31 15:36 G 37039368.94 37039369.15 37039369.36 0.0260 0.0057

Uranus 96698-04-21 02:52 G 37039389.41 37039389.62 37039389.83 0.0141 0.0029

Jupiter 96698-07-06 11:16 G 37039465.78 37039465.97 37039466.17 0.0525 0.0069

Saturn 96698-11-15 13:40 G 37039597.90 37039598.07 37039598.26 0.0259 0.0140

Uranus 96698-12-03 13:12 G 37039615.83 37039616.05 37039616.27 0.0141 0.0004

Uranus 96699-07-17 23:02 G 37039842.25 37039842.46 37039842.68 0.0141 0.0022

Uranus 96700-03-01 08:52 G 37040068.68 37040068.87 37040069.09 0.0141 0.0047

Uranus 96700-10-13 18:28 G 37040295.10 37040295.27 37040295.47 0.0140 0.0071

Uranus 96701-05-28 04:04 G 37040521.52 37040521.67 37040521.83 0.0140 0.0095

Mars 96701-09-22 22:19 G 37040639.29 37040639.43 37040639.58 0.1743 0.0973

Uranus 96702-01-09 13:26 G 37040747.95 37040748.06 37040748.17 0.0140 0.0119

Jupiter 96704-05-13 00:43 G 37041602.33 37041602.53 37041602.74 0.0500 0.0119

Jupiter 96710-03-12 07:40 G 37043731.63 37043731.82 37043732.01 0.0524 0.0129

Saturn 96713-04-23 23:31 G 37044870.32 37044870.48 37044870.66 0.0302 0.0167

Saturn 96713-12-10 03:21 G 37045100.46 37045100.64 37045100.83 0.0304 0.0141

Jupiter 96716-01-16 20:09 G 37045868.13 37045868.34 37045868.55 0.0501 0.0063

Jupiter 96721-11-15 04:19 G 37047997.53 37047997.68 37047997.84 0.0523 0.0321

Jupiter 96722-07-10 06:28 G 37048234.63 37048234.77 37048234.91 0.0526 0.0379

Saturn 96727-02-25 21:36 G 37049926.30 37049926.40 37049926.52 0.0261 0.0222

Jupiter 96727-09-21 16:04 G 37050133.99 37050134.17 37050134.35 0.0502 0.0243

Saturn 96727-10-12 21:07 G 37050155.16 37050155.38 37050155.59 0.0260 0.0023

Jupiter 96728-05-15 13:40 G 37050370.94 37050371.07 37050371.20 0.0499 0.0389

Saturn 96728-05-28 18:57 G 37050384.14 37050384.29 37050384.46 0.0259 0.0173

Jupiter 96733-07-21 00:00 G 37052263.47 37052263.50 37052263.54 0.0521 0.0510

Mars 96733-09-22 03:07 G 37052326.54 37052326.63 37052326.71 0.1729 0.1516

Jupiter 96734-03-15 00:14 G 37052500.32 37052500.51 37052500.70 0.0525 0.0180

Uranus 96739-03-10 19:55 G 37054322.25 37054322.33 37054322.42 0.0136 0.0125

Jupiter 96739-05-27 12:14 G 37054399.90 37054400.01 37054400.12 0.0503 0.0421

Uranus 96739-10-23 01:55 G 37054548.46 37054548.58 37054548.73 0.0136 0.0104

Jupiter 96740-01-19 11:16 G 37054636.79 37054636.97 37054637.16 0.0500 0.0217

Uranus 96740-06-05 08:38 G 37054774.69 37054774.86 37054775.03 0.0136 0.0082

Uranus 96741-01-17 15:07 G 37055000.94 37055001.13 37055001.33 0.0137 0.0060

Uranus 96741-08-31 21:50 G 37055227.21 37055227.41 37055227.62 0.0137 0.0037

Uranus 96742-04-15 04:48 G 37055453.48 37055453.70 37055453.91 0.0137 0.0014

Saturn 96742-11-04 10:33 G 37055656.75 37055656.94 37055657.14 0.0303 0.0116

Uranus 96742-11-27 11:45 G 37055679.77 37055679.99 37055680.21 0.0137 0.0009

Saturn 96743-06-22 14:52 G 37055886.96 37055887.12 37055887.28 0.0304 0.0194

Uranus 96743-07-11 19:12 G 37055906.09 37055906.30 37055906.51 0.0137 0.0032

Uranus 96744-02-23 02:38 G 37056132.41 37056132.61 37056132.81 0.0138 0.0055

Uranus 96744-10-06 09:50 G 37056358.75 37056358.91 37056359.10 0.0138 0.0079

Neptune 96744-12-30 16:19 G 37056444.12 37056444.18 37056444.29 0.0088 0.0081

Uranus 96745-05-20 17:45 G 37056585.10 37056585.24 37056585.40 0.0138 0.0102

Neptune 96745-08-13 06:00 G 37056669.62 37056669.75 37056669.89 0.0088 0.0070

Jupiter 96745-11-17 19:12 G 37056766.10 37056766.30 37056766.50 0.0524 0.0019

Uranus 96746-01-02 01:40 G 37056811.50 37056811.57 37056811.68 0.0138 0.0126

Neptune 96746-03-26 18:57 G 37056895.14 37056895.29 37056895.47 0.0088 0.0060

Neptune 96746-11-07 08:24 G 37057120.67 37057120.85 37057121.04 0.0088 0.0049

Neptune 96747-06-20 21:36 G 37057346.21 37057346.40 37057346.61 0.0088 0.0039

Neptune 96748-02-01 11:02 G 37057571.75 37057571.96 37057572.18 0.0088 0.0028

Neptune 96748-09-14 00:28 G 37057797.30 37057797.52 37057797.74 0.0088 0.0017

Neptune 96749-04-27 13:26 G 37058022.85 37058023.06 37058023.29 0.0088 0.0007

Neptune 96749-12-09 02:52 G 37058248.40 37058248.62 37058248.85 0.0088 0.0004

Neptune 96750-07-22 16:04 G 37058473.96 37058474.17 37058474.40 0.0088 0.0015

Neptune 96751-03-05 05:16 G 37058699.52 37058699.72 37058699.94 0.0088 0.0025

Jupiter 96751-09-24 08:52 G 37058902.66 37058902.87 37058903.07 0.0501 0.0040

Neptune 96751-10-16 18:28 G 37058925.08 37058925.27 37058925.48 0.0088 0.0036

Neptune 96752-05-29 07:55 G 37059150.65 37059150.83 37059151.02 0.0088 0.0046

Neptune 96753-01-09 21:07 G 37059376.23 37059376.38 37059376.56 0.0088 0.0057

Neptune 96753-08-23 10:33 G 37059601.81 37059601.94 37059602.09 0.0088 0.0068

Neptune 96754-04-05 23:31 G 37059827.40 37059827.48 37059827.60 0.0088 0.0078

Saturn 96756-09-07 04:04 G 37060712.53 37060712.67 37060712.83 0.0261 0.0188

Saturn 96757-04-24 03:21 G 37060941.42 37060941.64 37060941.86 0.0260 0.0011

Jupiter 96757-07-23 13:40 G 37061031.89 37061032.07 37061032.25 0.0524 0.0219

Saturn 96757-12-09 01:12 G 37061170.43 37061170.55 37061170.69 0.0259 0.0207

Jupiter 96758-03-17 16:48 G 37061269.12 37061269.20 37061269.28 0.0527 0.0485

Mars 96761-02-06 10:33 G 37062325.79 37062325.94 37062326.09 0.1797 0.0869

Jupiter 96763-05-30 05:31 G 37063168.53 37063168.73 37063168.93 0.0501 0.0139

Jupiter 96764-01-22 01:55 G 37063405.54 37063405.58 37063405.62 0.0499 0.0487

Mars 96767-07-21 07:12 G 37064681.68 37064681.80 37064681.91 0.1747 0.1305

Earth 96768-09-13 20:24 G 37065102.27 37065102.35 37065102.44 0.2703 0.2247

Moon 96768-09-13 20:52 G 37065102.27 37065102.37 37065102.47 0.2710 0.1938 *

Jupiter 96769-03-28 10:33 G 37065297.82 37065297.94 37065298.07 0.0523 0.0410

Jupiter 96769-11-20 12:14 G 37065534.84 37065535.01 37065535.17 0.0526 0.0288

Saturn 96772-05-16 21:50 G 37066443.21 37066443.41 37066443.62 0.0303 0.0061

Saturn 96773-01-02 02:09 G 37066673.47 37066673.59 37066673.71 0.0304 0.0249

Jupiter 96775-02-01 23:31 G 37067434.33 37067434.48 37067434.65 0.0503 0.0323

Jupiter 96775-09-26 21:36 G 37067671.24 37067671.40 37067671.56 0.0500 0.0312

Earth 96776-09-11 11:31 G 37068021.84 37068021.98 37068022.11 0.2704 0.1340

Moon 96776-09-11 15:50 G 37068022.01 37068022.16 37068022.30 0.2709 0.0853 *

Uranus 96779-06-28 15:50 G 37069042.15 37069042.16 37069042.18 0.0142 0.0141

Uranus 96780-02-10 02:52 G 37069268.51 37069268.62 37069268.76 0.0142 0.0116

Uranus 96780-09-23 13:55 G 37069494.93 37069495.08 37069495.26 0.0142 0.0091

Uranus 96781-05-08 00:57 G 37069721.35 37069721.54 37069721.74 0.0142 0.0065

Jupiter 96781-07-26 08:09 G 37069800.65 37069800.84 37069801.04 0.0525 0.0093

Uranus 96781-12-20 11:31 G 37069947.78 37069947.98 37069948.20 0.0141 0.0039

Uranus 96782-08-03 22:04 G 37070174.20 37070174.42 37070174.64 0.0141 0.0014

Uranus 96783-03-18 08:09 G 37070400.63 37070400.84 37070401.06 0.0141 0.0012

Uranus	96783-10-30 18:00 G	37070627.05	37070627.25	37070627.47	0.0141	0.0037
Uranus	96784-06-13 03:36 G	37070853.47	37070853.65	37070853.86	0.0141	0.0062
Uranus	96785-01-25 13:12 G	37071079.90	37071080.05	37071080.24	0.0140	0.0087
Uranus	96785-09-08 22:33 G	37071306.32	37071306.44	37071306.59	0.0140	0.0110
Saturn	96786-03-20 10:04 G	37071498.75	37071498.92	37071499.10	0.0260	0.0153
Uranus	96786-04-23 07:40 G	37071532.78	37071532.82	37071532.90	0.0140	0.0134
Jupiter	96786-10-07 18:43 G	37071700.28	37071700.28	37071700.31	0.0504	0.0502
Saturn	96786-11-04 09:07 G	37071727.67	37071727.88	37071728.09	0.0259	0.0046
Jupiter	96787-06-01 18:28 G	37071937.07	37071937.27	37071937.47	0.0500	0.0137
Saturn	96787-06-21 06:57 G	37071956.72	37071956.79	37071956.87	0.0259	0.0240
Jupiter	96793-03-31 02:52 G	37074066.42	37074066.62	37074066.81	0.0524	0.0107
Jupiter	96799-02-04 15:36 G	37076202.94	37076203.15	37076203.35	0.0501	0.0042
Mars	96799-07-20 12:14 G	37076368.89	37076369.01	37076369.14	0.1733	0.1225
Saturn	96801-11-27 08:52 G	37077229.67	37077229.87	37077230.08	0.0303	0.0011
Saturn	96802-07-15 13:12 G	37077460.04	37077460.05	37077460.09	0.0304	0.0303
Jupiter	96804-12-03 22:19 G	37078332.27	37078332.43	37078332.59	0.0523	0.0302
Jupiter	96805-07-29 00:00 G	37078569.38	37078569.50	37078569.63	0.0526	0.0400
Jupiter	96810-10-10 12:43 G	37080468.85	37080469.03	37080469.22	0.0502	0.0219
Jupiter	96811-06-04 10:04 G	37080705.80	37080705.92	37080706.03	0.0499	0.0412
Saturn	96815-09-30 16:19 G	37082284.99	37082285.18	37082285.38	0.0260	0.0118
Saturn	96816-05-16 15:07 G	37082513.93	37082514.13	37082514.34	0.0259	0.0080
Jupiter	96816-08-08 17:16 G	37082598.16	37082598.22	37082598.27	0.0522	0.0496
Jupiter	96817-04-02 17:45 G	37082835.06	37082835.24	37082835.43	0.0526	0.0198
Jupiter	96822-06-15 09:07 G	37084734.75	37084734.88	37084735.00	0.0503	0.0397
Uranus	96822-11-08 06:57 G	37084880.77	37084880.79	37084880.86	0.0136	0.0134
Jupiter	96823-02-07 07:26 G	37084971.63	37084971.81	37084972.00	0.0500	0.0240
Uranus	96823-06-22 13:26 G	37085106.95	37085107.06	37085107.19	0.0136	0.0112
Uranus	96824-02-03 19:55 G	37085333.17	37085333.33	37085333.49	0.0136	0.0090
Uranus	96824-09-17 02:09 G	37085559.41	37085559.59	37085559.79	0.0137	0.0068
Uranus	96825-05-01 08:38 G	37085785.67	37085785.86	37085786.08	0.0137	0.0046

Neptune 96825-11-21 04:33 G 37085989.67 37085989.69 37085989.75 0.0089 0.0088

Uranus 96825-12-13 15:36 G 37086011.94 37086012.15 37086012.37 0.0137 0.0023

Neptune 96826-07-04 17:45 G 37086215.13 37086215.24 37086215.35 0.0089 0.0077

Uranus 96826-07-27 22:48 G 37086238.23 37086238.45 37086238.67 0.0137 0.0001

Mars 96826-12-04 17:45 G 37086368.12 37086368.24 37086368.36 0.1792 0.1273

Neptune 96827-02-15 06:00 G 37086440.63 37086440.75 37086440.91 0.0089 0.0067

Uranus 96827-03-11 05:45 G 37086464.53 37086464.74 37086464.96 0.0137 0.0023

Neptune 96827-09-28 18:57 G 37086666.13 37086666.29 37086666.47 0.0089 0.0056

Uranus 96827-10-23 12:57 G 37086690.85 37086691.04 37086691.25 0.0138 0.0046

Neptune 96828-05-11 07:40 G 37086891.64 37086891.82 37086892.02 0.0089 0.0045

Uranus 96828-06-05 20:24 G 37086917.18 37086917.35 37086917.55 0.0138 0.0070

Jupiter 96828-12-06 14:09 G 37087100.89 37087101.09 37087101.29 0.0525 0.0007

Neptune 96828-12-22 20:24 G 37087117.16 37087117.35 37087117.56 0.0089 0.0034

Uranus 96829-01-18 04:04 G 37087143.53 37087143.67 37087143.85 0.0138 0.0093

Neptune 96829-08-05 09:21 G 37087342.69 37087342.89 37087343.11 0.0089 0.0023

Uranus 96829-09-01 12:14 G 37087369.91 37087370.01 37087370.14 0.0138 0.0116

Neptune 96830-03-18 22:04 G 37087568.21 37087568.42 37087568.64 0.0089 0.0013

Saturn 96830-10-22 16:04 G 37087786.08 37087786.17 37087786.28 0.0302 0.0262

Neptune 96830-10-30 11:02 G 37087793.74 37087793.96 37087794.18 0.0089 0.0001

Saturn 96831-06-09 19:26 G 37088016.11 37088016.31 37088016.52 0.0303 0.0045

Neptune 96831-06-13 00:00 G 37088019.28 37088019.50 37088019.71 0.0089 0.0010

Neptune 96832-01-24 12:28 G 37088244.82 37088245.02 37088245.24 0.0089 0.0021

Neptune 96832-09-06 01:12 G 37088470.36 37088470.55 37088470.76 0.0089 0.0031

Neptune 96833-04-19 13:40 G 37088695.90 37088696.07 37088696.28 0.0089 0.0042

Mars 96833-05-17 15:50 G 37088724.10 37088724.16 37088724.22 0.1751 0.1635

Neptune 96833-12-01 02:38 G 37088921.45 37088921.61 37088921.79 0.0089 0.0053

Neptune 96834-07-14 15:21 G 37089147.00 37089147.14 37089147.31 0.0089 0.0064

Jupiter 96834-10-13 02:24 G 37089237.39 37089237.60 37089237.80 0.0501 0.0058

Neptune 96835-02-25 04:04 G 37089372.57 37089372.67 37089372.81 0.0089 0.0074

Neptune 96835-10-08 17:02 G 37089598.15 37089598.21 37089598.28 0.0089 0.0085

Pluto 96838-02-27 21:50 G 37090471.24 37090471.41 37090471.60 0.0065 0.0037

Pluto 96838-10-11 01:55 G 37090696.36 37090696.58 37090696.80 0.0065 0.0006

Pluto 96839-05-24 06:00 G 37090921.61 37090921.75 37090921.90 0.0066 0.0048

Jupiter 96840-08-11 11:02 G 37091366.78 37091366.96 37091367.15 0.0524 0.0192

Jupiter 96841-04-05 13:40 G 37091604.03 37091604.07 37091604.12 0.0526 0.0511

Saturn 96845-04-11 22:04 G 37093071.22 37093071.42 37093071.63 0.0260 0.0084

Saturn 96845-11-26 20:38 G 37093300.17 37093300.36 37093300.56 0.0259 0.0114

Jupiter 96846-06-17 22:33 G 37093503.24 37093503.44 37093503.65 0.0502 0.0122

Jupiter 96852-04-16 06:43 G 37095632.65 37095632.78 37095632.92 0.0522 0.0385

Jupiter 96852-12-09 07:40 G 37095869.66 37095869.82 37095869.98 0.0526 0.0313

Jupiter 96858-02-20 18:57 G 37097769.12 37097769.29 37097769.46 0.0503 0.0301

Jupiter 96858-10-15 17:16 G 37098006.07 37098006.22 37098006.37 0.0500 0.0336

Mars 96858-12-04 03:21 G 37098055.56 37098055.64 37098055.72 0.1807 0.1597

Saturn 96860-05-04 02:24 G 37098572.46 37098572.60 37098572.75 0.0302 0.0214

Saturn 96860-12-20 06:00 G 37098802.55 37098802.75 37098802.95 0.0304 0.0095

Uranus 96863-10-10 12:14 G 37099826.92 37099827.01 37099827.12 0.0142 0.0125

Uranus 96864-05-23 23:16 G 37100053.32 37100053.47 37100053.63 0.0142 0.0100

Jupiter 96864-08-14 02:24 G 37100135.40 37100135.60 37100135.79 0.0525 0.0114

Uranus 96865-01-05 10:33 G 37100279.75 37100279.94 37100280.12 0.0142 0.0074

Mars 96865-05-16 20:52 G 37100411.23 37100411.37 37100411.52 0.1737 0.0907

Uranus 96865-08-19 21:07 G 37100506.18 37100506.38 37100506.59 0.0142 0.0049

Uranus 96866-04-03 07:40 G 37100732.60 37100732.82 37100733.03 0.0141 0.0023

Uranus 96866-11-15 17:45 G 37100959.03 37100959.24 37100959.46 0.0141 0.0004

Uranus 96867-06-30 03:50 G 37101185.45 37101185.66 37101185.88 0.0141 0.0027

Uranus 96868-02-11 13:55 G 37101411.88 37101412.08 37101412.29 0.0141 0.0052

Uranus 96868-09-24 23:31 G 37101638.31 37101638.48 37101638.67 0.0140 0.0077

Uranus 96869-05-09 09:07 G 37101864.73 37101864.88 37101865.03 0.0140 0.0101

Jupiter 96869-10-26 15:50 G 37102035.10 37102035.16 37102035.23 0.0504 0.0478

Uranus 96869-12-21 18:28 G 37102091.17 37102091.27 37102091.37 0.0140 0.0124

Jupiter 96870-06-20 15:36 G 37102271.95 37102272.15 37102272.34 0.0500 0.0162

Saturn 96874-03-08 04:33 G 37103628.64 37103628.69 37103628.76 0.0261 0.0250

Saturn 96874-10-23 04:04 G 37103857.46 37103857.67 37103857.88 0.0260 0.0050

Saturn 96875-06-09 02:24 G 37104086.43 37104086.60 37104086.78 0.0259 0.0147

Jupiter 96876-04-18 20:38 G 37104401.16 37104401.36 37104401.56 0.0524 0.0088

Jupiter 96882-02-23 12:28 G 37106537.82 37106538.02 37106538.23 0.0501 0.0019

Jupiter 96887-12-23 17:45 G 37108667.07 37108667.24 37108667.41 0.0523 0.0281

Jupiter 96888-08-16 19:55 G 37108904.21 37108904.33 37108904.45 0.0526 0.0422

Saturn 96889-11-14 11:45 G 37109358.82 37109358.99 37109359.17 0.0302 0.0163

Saturn 96890-07-02 15:36 G 37109588.97 37109589.15 37109589.33 0.0303 0.0146

Mars 96892-10-01 00:57 G 37110410.49 37110410.54 37110410.60 0.1787 0.1678

Jupiter 96893-10-29 06:28 G 37110803.59 37110803.77 37110803.97 0.0502 0.0200

Jupiter 96894-06-23 03:50 G 37111040.56 37111040.66 37111040.77 0.0499 0.0432

Earth 96898-03-17 10:48 G 37112403.94 37112403.95 37112403.95 0.2629 0.2626

Jupiter 96899-08-28 15:36 G 37112933.07 37112933.15 37112933.24 0.0522 0.0467

Jupiter 96900-04-22 16:19 G 37113170.00 37113170.18 37113170.36 0.0525 0.0229

Saturn 96903-09-19 09:50 G 37114414.80 37114414.91 37114415.04 0.0261 0.0217

Saturn 96904-05-05 09:21 G 37114643.67 37114643.89 37114644.10 0.0260 0.0018

Saturn 96904-12-20 07:12 G 37114872.66 37114872.80 37114872.97 0.0259 0.0180

Jupiter 96905-07-05 02:24 G 37115069.47 37115069.60 37115069.74 0.0503 0.0380

Jupiter 96906-02-27 01:12 G 37115306.37 37115306.55 37115306.73 0.0500 0.0259

Earth 96906-03-16 01:55 G 37115323.43 37115323.58 37115323.74 0.2629 0.0723

Moon 96906-03-16 06:43 G 37115323.62 37115323.78 37115323.95 0.2626 0.0596 *

Uranus 96907-02-21 00:57 G 37115665.46 37115665.54 37115665.66 0.0136 0.0119

Uranus 96907-10-05 07:26 G 37115891.67 37115891.81 37115891.97 0.0136 0.0097

Uranus 96908-05-18 13:40 G 37116117.90 37116118.07 37116118.26 0.0136 0.0076

Uranus 96908-12-30 20:09 G 37116344.15 37116344.34 37116344.55 0.0137 0.0054

Neptune 96909-04-04 00:28 G 37116438.48 37116438.52 37116438.60 0.0088 0.0085

Uranus 96909-08-14 03:07 G 37116570.42 37116570.63 37116570.84 0.0137 0.0031

Neptune 96909-11-15 13:55 G 37116663.98 37116664.08 37116664.22 0.0088 0.0074

Uranus 96910-03-28 09:50 G 37116796.70 37116796.91 37116797.13 0.0137 0.0009

Neptune 96910-06-29 03:07 G 37116889.50 37116889.63 37116889.81 0.0088 0.0064

Uranus 96910-11-09 17:02 G 37117022.99 37117023.21 37117023.42 0.0137 0.0015

Neptune 96911-02-09 16:33 G 37117115.03 37117115.19 37117115.38 0.0088 0.0053

Uranus 96911-06-24 00:14 G 37117249.30 37117249.51 37117249.72 0.0137 0.0038

Neptune 96911-09-23 06:14 G 37117340.56 37117340.76 37117340.95 0.0088 0.0042

Jupiter 96911-12-27 11:16 G 37117435.77 37117435.97 37117436.17 0.0524 0.0029

Uranus 96912-02-05 07:40 G 37117475.63 37117475.82 37117476.02 0.0138 0.0061

Neptune 96912-05-05 19:12 G 37117566.10 37117566.30 37117566.52 0.0088 0.0032

Uranus 96912-09-18 15:07 G 37117701.97 37117702.13 37117702.31 0.0138 0.0084

Neptune 96912-12-17 08:38 G 37117791.65 37117791.86 37117792.08 0.0088 0.0021

Uranus 96913-05-02 23:02 G 37117928.33 37117928.46 37117928.61 0.0138 0.0107

Neptune 96913-07-30 21:50 G 37118017.20 37118017.41 37118017.64 0.0088 0.0011

Uranus 96913-12-15 06:57 G 37118154.74 37118154.79 37118154.88 0.0138 0.0131

Neptune 96914-03-13 11:16 G 37118242.74 37118242.97 37118243.19 0.0088 0.0001

Neptune 96914-10-25 00:14 G 37118468.29 37118468.51 37118468.74 0.0088 0.0011

Neptune 96915-06-07 13:26 G 37118693.85 37118694.06 37118694.29 0.0088 0.0021

Neptune 96916-01-19 02:38 G 37118919.42 37118919.61 37118919.83 0.0088 0.0033

Neptune 96916-08-31 16:19 G 37119144.98 37119145.18 37119145.37 0.0088 0.0042

Neptune 96917-04-14 05:02 G 37119370.55 37119370.71 37119370.91 0.0088 0.0053

Jupiter 96917-11-01 22:33 G 37119572.24 37119572.44 37119572.65 0.0501 0.0084

Neptune 96917-11-25 18:14 G 37119596.13 37119596.26 37119596.43 0.0088 0.0064

Neptune 96918-07-09 07:40 G 37119821.72 37119821.82 37119821.95 0.0088 0.0074

Neptune 96919-02-19 20:38 G 37120047.33 37120047.36 37120047.45 0.0088 0.0085

Saturn 96919-05-28 20:24 G 37120145.16 37120145.35 37120145.54 0.0303 0.0119

Saturn 96920-01-14 00:14 G 37120375.36 37120375.51 37120375.68 0.0304 0.0193

Jupiter 96923-09-01 06:28 G 37121701.59 37121701.77 37121701.96 0.0523 0.0169

Mars 96924-10-01 10:48 G 37122097.82 37122097.95 37122098.08 0.1803 0.1183

Pluto 96926-06-12 09:36 G 37122716.69 37122716.90 37122717.12 0.0079 0.0027

Pluto 96927-01-23 19:40 G 37122942.17 37122942.32 37122942.51 0.0079 0.0051

Jupiter 96929-07-07 20:38 G 37123838.15 37123838.36 37123838.56 0.0502 0.0094

Mars 96931-03-15 06:00 G 37124453.59 37124453.75 37124453.92 0.1741 0.0597

Saturn 96933-03-31 15:07 G 37125200.99 37125201.13 37125201.29 0.0260 0.0185

Saturn 96933-11-15 14:24 G 37125429.88 37125430.10 37125430.32 0.0259 0.0015

Saturn 96934-07-02 12:14 G 37125658.89 37125659.01 37125659.14 0.0259 0.0211

Jupiter 96935-05-07 01:40 G 37125967.43 37125967.57 37125967.71 0.0522 0.0365

Jupiter 96935-12-30 02:52 G 37126204.47 37126204.62 37126204.77 0.0526 0.0336

Jupiter 96941-03-12 17:16 G 37128104.04 37128104.22 37128104.39 0.0503 0.0273

Jupiter 96941-11-04 15:21 G 37128341.00 37128341.14 37128341.28 0.0500 0.0364

Uranus 96947-06-10 22:33 G 37130385.37 37130385.44 37130385.51 0.0142 0.0134

Jupiter 96947-09-03 23:16 G 37130470.28 37130470.47 37130470.66 0.0525 0.0140

Uranus 96948-01-23 09:50 G 37130611.77 37130611.91 37130612.05 0.0142 0.0108

Uranus 96948-09-05 20:38 G 37130838.19 37130838.36 37130838.55 0.0142 0.0083

Saturn 96948-12-08 04:04 G 37130931.47 37130931.67 37130931.87 0.0303 0.0072

Uranus 96949-04-20 07:26 G 37131064.62 37131064.81 37131065.02 0.0142 0.0058

Saturn 96949-07-26 08:09 G 37131161.72 37131161.84 37131161.98 0.0304 0.0240

Uranus 96949-12-02 18:14 G 37131291.05 37131291.26 37131291.47 0.0141 0.0032

Uranus 96950-07-17 04:33 G 37131517.48 37131517.69 37131517.91 0.0141 0.0007

Uranus 96951-02-28 14:52 G 37131743.91 37131744.12 37131744.34 0.0141 0.0019

Uranus 96951-10-13 00:43 G 37131970.33 37131970.53 37131970.75 0.0141 0.0044

Uranus 96952-05-26 10:48 G 37132196.76 37132196.95 37132197.14 0.0141 0.0068

Jupiter 96952-11-15 10:48 G 37132369.87 37132369.95 37132370.04 0.0504 0.0456

Uranus 96953-01-07 20:09 G 37132423.19 37132423.34 37132423.51 0.0140 0.0093

Jupiter 96953-07-10 10:19 G 37132606.73 37132606.93 37132607.12 0.0500 0.0184

Uranus 96953-08-22 05:31 G 37132649.62 37132649.73 37132649.86 0.0140 0.0116

Uranus 96954-04-05 14:52 G 37132876.12 37132876.12 37132876.14 0.0140 0.0140

Jupiter 96959-05-09 20:38 G 37134736.17 37134736.36 37134736.56 0.0524 0.0055

Saturn 96962-10-11 19:55 G 37135987.16 37135987.33 37135987.51 0.0260 0.0153

Saturn 96963-05-28 18:43 G 37136216.07 37136216.28 37136216.50 0.0259 0.0046

Saturn 96964-01-12 16:19 G 37136445.12 37136445.18 37136445.27 0.0258 0.0242

Jupiter 96965-03-15 07:12 G 37136872.59 37136872.80 37136873.00 0.0501 0.0010

Jupiter 96971-01-12 16:48 G 37139002.03 37139002.20 37139002.38 0.0523 0.0249

Jupiter 96971-09-06 18:28 G 37139239.17 37139239.27 37139239.37 0.0526 0.0454

Jupiter 96976-11-18 04:04 G 37141138.48 37141138.67 37141138.87 0.0502 0.0173

Jupiter 96977-07-13 01:40 G 37141375.50 37141375.57 37141375.65 0.0500 0.0461

Saturn 96978-06-20 11:02 G 37141717.75 37141717.96 37141718.17 0.0303 0.0031

Saturn 96979-02-05 15:36 G 37141948.08 37141948.15 37141948.22 0.0304 0.0283

Jupiter 96982-09-17 12:57 G 37143267.94 37143268.04 37143268.15 0.0522 0.0440

Jupiter 96983-05-12 13:12 G 37143504.88 37143505.05 37143505.23 0.0525 0.0258

Jupiter 96988-07-24 01:26 G 37145404.41 37145404.56 37145404.71 0.0503 0.0351

Jupiter 96989-03-18 00:28 G 37145641.35 37145641.52 37145641.69 0.0500 0.0290

Mars 96990-07-29 17:31 G 37146140.08 37146140.23 37146140.39 0.1798 0.0753

Neptune 96990-10-07 01:40 G 37146209.50 37146209.57 37146209.67 0.0090 0.0082

Uranus 96990-10-21 12:14 G 37146223.95 37146224.01 37146224.10 0.0136 0.0126

Neptune 96991-05-20 14:38 G 37146434.99 37146435.11 37146435.25 0.0089 0.0071

Uranus 96991-06-04 18:14 G 37146450.14 37146450.26 37146450.41 0.0136 0.0105

Neptune 96992-01-01 03:36 G 37146660.49 37146660.65 37146660.81 0.0089 0.0060

Uranus 96992-01-17 00:43 G 37146676.37 37146676.53 37146676.71 0.0136 0.0083

Saturn 96992-04-23 00:00 G 37146773.32 37146773.50 37146773.70 0.0260 0.0123

Neptune 96992-08-13 15:50 G 37146885.99 37146886.16 37146886.36 0.0089 0.0050

Uranus 96992-08-30 06:57 G 37146902.61 37146902.79 37146902.99 0.0136 0.0062

Saturn 96992-12-07 22:48 G 37147002.25 37147002.45 37147002.66 0.0259 0.0076

Neptune 96993-03-27 04:33 G 37147111.51 37147111.69 37147111.90 0.0089 0.0039

Uranus 96993-04-13 13:26 G 37147128.87 37147129.06 37147129.28 0.0137 0.0040

Neptune 96993-11-07 17:31 G 37147337.03 37147337.23 37147337.44 0.0089 0.0028

Uranus 96993-11-25 20:24 G 37147355.14 37147355.35 37147355.57 0.0137 0.0017

Neptune 96994-06-21 06:28 G 37147562.56 37147562.77 37147562.98 0.0089 0.0017

Uranus 96994-07-10 03:21 G 37147581.43 37147581.64 37147581.86 0.0137 0.0007

Jupiter 96995-01-15 07:55 G 37147770.63 37147770.83 37147771.03 0.0524 0.0056

Neptune 96995-02-01 19:12 G 37147788.08 37147788.30 37147788.52 0.0089 0.0006

Uranus 96995-02-21 10:19 G 37147807.73 37147807.93 37147808.15 0.0137 0.0030

Neptune 96995-09-15 07:55 G 37148013.61 37148013.83 37148014.05 0.0089 0.0005

Uranus 96995-10-05 17:45 G 37148034.04 37148034.24 37148034.45 0.0137 0.0052

Neptune 96996-04-27 20:38 G 37148239.15 37148239.36 37148239.57 0.0089 0.0016

Uranus 96996-05-19 01:12 G 37148260.38 37148260.55 37148260.74 0.0138 0.0075

Neptune 96996-12-09 09:21 G 37148464.69 37148464.89 37148465.10 0.0089 0.0026

Uranus 96996-12-31 08:38 G 37148486.73 37148486.86 37148487.03 0.0138 0.0098

Mars 96997-01-09 14:24 G 37148495.93 37148496.10 37148496.28 0.1746 0.0265

Neptune 96997-07-22 22:04 G 37148690.23 37148690.42 37148690.63 0.0089 0.0037

Uranus 96997-08-14 16:33 G 37148713.11 37148713.19 37148713.32 0.0138 0.0121

Neptune 96998-03-05 10:33 G 37148915.78 37148915.94 37148916.14 0.0089 0.0049

Neptune 96998-10-16 23:45 G 37149141.33 37149141.49 37149141.65 0.0089 0.0059

Neptune 96999-05-30 12:14 G 37149366.89 37149367.01 37149367.16 0.0089 0.0070

Neptune 97000-01-11 00:57 G 37149592.46 37149592.54 37149592.65 0.0089 0.0080

Jupiter 97000-11-21 22:19 G 37149907.23 37149907.43 37149907.63 0.0501 0.0116

98TH MILLENNIUM CE

This is a list of transits of Venus in the 98th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 97006-09-21 05:02 G 37152036.52 37152036.71 37152036.90 0.0524 0.0138

Saturn 97007-05-16 13:55 G 37152274.05 37152274.08 37152274.13 0.0301 0.0295

Saturn 97008-01-01 17:02 G 37152504.00 37152504.21 37152504.42 0.0303 0.0011

Earth 97011-09-16 21:36 G 37153858.32 37153858.40 37153858.49 0.2703 0.2249

Moon 97011-09-16 22:48 G 37153858.44 37153858.45 37153858.47 0.2696 0.2687 *

Jupiter 97012-07-27 16:48 G 37154172.99 37154173.20 37154173.40 0.0502 0.0069

Jupiter 97018-05-27 03:21 G 37156302.49 37156302.64 37156302.80 0.0523 0.0327

Jupiter 97019-01-19 04:48 G 37156539.57 37156539.70 37156539.84 0.0526 0.0376

Moon 97019-09-14 09:36 G 37156777.78 37156777.90 37156778.02 0.2698 0.1865

Earth 97019-09-14 12:43 G 37156777.90 37156778.03 37156778.17 0.2704 0.1311 *

Saturn 97021-11-04 03:50 G 37157559.46 37157559.66 37157559.87 0.0260 0.0093

Saturn 97022-06-21 02:09 G 37157788.40 37157788.59 37157788.79 0.0259 0.0105

Jupiter 97024-04-01 13:12 G 37158438.87 37158439.05 37158439.23 0.0503 0.0248

Jupiter 97024-11-24 11:16 G 37158675.85 37158675.97 37158676.10 0.0500 0.0390

Jupiter 97030-01-30 00:28 G 37160568.49 37160568.52 37160568.55 0.0521 0.0516

Jupiter 97030-09-24 00:14 G 37160805.32 37160805.51 37160805.70 0.0525 0.0178

Uranus 97031-09-23 17:31 G 37161170.12 37161170.23 37161170.37 0.0142 0.0118

Uranus 97032-05-07 05:02 G 37161396.54 37161396.71 37161396.88 0.0142 0.0092

Uranus 97032-12-19 15:50 G 37161622.98 37161623.16 37161623.36 0.0142 0.0067

Uranus 97033-08-03 02:38 G 37161849.41 37161849.61 37161849.83 0.0142 0.0042

Uranus 97034-03-17 13:26 G 37162075.84 37162076.06 37162076.28 0.0141 0.0016

Uranus 97034-10-30 00:00 G 37162302.28 37162302.50 37162302.71 0.0141 0.0010

Uranus 97035-06-13 10:04 G 37162528.71 37162528.92 37162529.13 0.0141 0.0034

Jupiter 97035-12-06 09:36 G 37162704.80 37162704.90 37162705.02 0.0504 0.0428

Uranus 97036-01-25 20:09 G 37162755.15 37162755.34 37162755.54 0.0141 0.0059

Jupiter 97036-07-30 09:21 G 37162941.71 37162941.89 37162942.08 0.0501 0.0216

Uranus 97036-09-08 05:45 G 37162981.58 37162981.74 37162981.93 0.0141 0.0084

Saturn 97036-11-25 18:14 G 37163060.16 37163060.26 37163060.36 0.0302 0.0262

Uranus 97037-04-22 15:21 G 37163208.01 37163208.14 37163208.29 0.0140 0.0107

Saturn 97037-07-13 21:36 G 37163290.20 37163290.40 37163290.61 0.0304 0.0048

Uranus 97037-12-05 00:28 G 37163434.47 37163434.52 37163434.62 0.0140 0.0132

Jupiter 97042-05-29 19:55 G 37165071.13 37165071.33 37165071.53 0.0524 0.0020

Jupiter 97048-04-04 07:40 G 37167207.62 37167207.82 37167208.03 0.0501 0.0041

Saturn 97051-05-17 06:43 G 37168345.58 37168345.78 37168346.00 0.0259 0.0066

Saturn 97052-01-01 05:02 G 37168574.54 37168574.71 37168574.90 0.0259 0.0133

Jupiter 97054-02-01 15:07 G 37169336.95 37169337.13 37169337.31 0.0523 0.0219

Jupiter 97054-09-26 17:02 G 37169574.14 37169574.21 37169574.29 0.0526 0.0486

Mars 97056-05-27 01:12 G 37170182.38 37170182.55 37170182.72 0.1794 0.0355

Jupiter 97059-12-09 05:16 G 37171473.52 37171473.72 37171473.92 0.0502 0.0137

Jupiter 97060-08-02 02:38 G 37171710.60 37171710.61 37171710.64 0.0499 0.0496

Mars 97062-11-07 23:02 G 37172538.28 37172538.46 37172538.63 0.1750 0.0087

Jupiter 97065-10-07 12:57 G 37173602.92 37173603.04 37173603.17 0.0522 0.0407

Jupiter 97066-06-01 13:55 G 37173839.91 37173840.08 37173840.24 0.0526 0.0294

Saturn 97066-06-07 22:48 G 37173846.32 37173846.45 37173846.59 0.0302 0.0224

Saturn 97067-01-24 02:24 G 37174076.40 37174076.60 37174076.80 0.0303 0.0086

Jupiter 97071-08-13 23:31 G 37175739.32 37175739.48 37175739.64 0.0503 0.0321

Jupiter 97072-04-06 22:04 G 37175976.26 37175976.42 37175976.58 0.0500 0.0319

Neptune 97074-02-17 21:50 G 37176658.33 37176658.41 37176658.53 0.0088 0.0078

Uranus 97074-06-21 23:45 G 37176782.46 37176782.49 37176782.54 0.0136 0.0133

Neptune 97074-10-01 11:02 G 37176883.84 37176883.96 37176884.12 0.0088 0.0068

Uranus 97075-02-03 05:31 G 37177008.62 37177008.73 37177008.86 0.0136 0.0112

Neptune 97075-05-15 00:28 G 37177109.37 37177109.52 37177109.71 0.0088 0.0057

Uranus 97075-09-17 11:31 G 37177234.84 37177234.98 37177235.16 0.0136 0.0091

Neptune 97075-12-26 14:24 G 37177334.91 37177335.10 37177335.29 0.0088 0.0046

Uranus 97076-04-30 17:45 G 37177461.07 37177461.24 37177461.44 0.0136 0.0069

Neptune 97076-08-08 03:21 G 37177560.45 37177560.64 37177560.85 0.0088 0.0036

Uranus 97076-12-13 00:14 G 37177687.32 37177687.51 37177687.72 0.0136 0.0047

Neptune 97077-03-21 16:48 G 37177785.99 37177786.20 37177786.41 0.0088 0.0025

Uranus 97077-07-27 07:12 G 37177913.59 37177913.80 37177914.01 0.0137 0.0025

Neptune 97077-11-02 05:45 G 37178011.53 37178011.74 37178011.97 0.0088 0.0015

Jupiter 97078-02-04 11:31 G 37178105.78 37178105.98 37178106.17 0.0525 0.0101

Uranus 97078-03-10 13:55 G 37178139.87 37178140.08 37178140.30 0.0137 0.0003

Neptune 97078-06-15 19:12 G 37178237.08 37178237.30 37178237.53 0.0088 0.0004

Uranus 97078-10-22 20:52 G 37178366.16 37178366.37 37178366.59 0.0137 0.0020

Neptune 97079-01-27 08:38 G 37178462.64 37178462.86 37178463.08 0.0088 0.0007

Uranus 97079-06-06 03:50 G 37178592.46 37178592.66 37178592.88 0.0137 0.0043

Neptune 97079-09-09 21:50 G 37178688.19 37178688.41 37178688.63 0.0088 0.0017

Uranus 97080-01-18 11:16 G 37178818.79 37178818.97 37178819.17 0.0137 0.0066

Saturn 97080-04-11 10:33 G 37178902.86 37178902.94 37178903.03 0.0261 0.0239

Neptune 97080-04-22 10:48 G 37178913.75 37178913.95 37178914.17 0.0088 0.0028

Uranus 97080-08-31 18:57 G 37179045.13 37179045.29 37179045.46 0.0138 0.0089

Saturn 97080-11-26 09:50 G 37179131.70 37179131.91 37179132.13 0.0259 0.0038

Neptune 97080-12-04 00:00 G 37179139.31 37179139.50 37179139.71 0.0088 0.0039

Uranus 97081-04-15 02:24 G 37179271.49 37179271.60 37179271.75 0.0138 0.0112

Saturn 97081-07-13 07:40 G 37179360.66 37179360.82 37179361.00 0.0258 0.0160

Neptune 97081-07-17 13:12 G 37179364.88 37179365.05 37179365.25 0.0088 0.0049

Uranus 97081-11-27 10:33 G 37179497.90 37179497.94 37179498.00 0.0138 0.0134

Neptune 97082-02-28 02:24 G 37179590.45 37179590.60 37179590.78 0.0088 0.0060

Neptune 97082-10-11 15:36 G 37179816.03 37179816.15 37179816.30 0.0088 0.0071

Jupiter 97083-04-18 19:40 G 37180005.30 37180005.32 37180005.35 0.0504 0.0499

Neptune 97083-05-25 04:33 G 37180041.63 37180041.69 37180041.81 0.0088 0.0081

Jupiter 97083-12-11 19:55 G 37180242.13 37180242.33 37180242.53 0.0501 0.0145

Pluto 97084-03-30 03:50 G 37180351.49 37180351.66 37180351.83 0.0065 0.0039

Pluto 97084-11-10 07:40 G 37180576.60 37180576.82 37180577.04 0.0065 0.0003

Pluto 97085-06-23 11:31 G 37180801.84 37180801.98 37180802.14 0.0066 0.0046

Jupiter 97089-10-10 07:55 G 37182371.63 37182371.83 37182372.02 0.0524 0.0097

Jupiter 97095-08-16 17:16 G 37184508.01 37184508.22 37184508.43 0.0502 0.0034

Saturn 97095-12-19 01:26 G 37184632.41 37184632.56 37184632.72 0.0303 0.0193

Saturn 97096-08-05 05:16 G 37184862.53 37184862.72 37184862.91 0.0304 0.0120

Jupiter 97101-06-16 04:19 G 37186637.52 37186637.68 37186637.85 0.0522 0.0291

Jupiter 97102-02-08 05:31 G 37186874.61 37186874.73 37186874.86 0.0526 0.0414

Jupiter 97107-04-22 15:07 G 37188773.94 37188774.13 37188774.32 0.0503 0.0211

Jupiter 97107-12-15 13:40 G 37189010.96 37189011.07 37189011.17 0.0500 0.0427

Saturn 97109-10-23 12:28 G 37189688.90 37189689.02 37189689.15 0.0260 0.0212

Saturn 97110-06-09 11:31 G 37189917.77 37189917.98 37189918.20 0.0259 0.0014

Saturn 97111-01-24 09:21 G 37190146.76 37190146.89 37190147.05 0.0258 0.0186

Jupiter 97113-02-19 00:28 G 37190903.45 37190903.52 37190903.59 0.0521 0.0482

Jupiter 97113-10-14 00:14 G 37191140.33 37191140.51 37191140.69 0.0525 0.0214

Uranus 97115-05-25 00:43 G 37191728.44 37191728.53 37191728.63 0.0142 0.0128

Uranus 97116-01-06 12:14 G 37191954.86 37191955.01 37191955.16 0.0142 0.0102

Uranus 97116-08-19 23:16 G 37192181.29 37192181.47 37192181.66 0.0142 0.0077

Uranus 97117-04-03 10:04 G 37192407.73 37192407.92 37192408.14 0.0142 0.0052

Uranus 97117-11-15 21:07 G 37192634.17 37192634.38 37192634.60 0.0142 0.0026

Uranus 97118-06-30 07:40 G 37192860.61 37192860.82 37192861.04 0.0141 0.0003

Jupiter 97118-12-26 12:28 G 37193039.89 37193040.02 37193040.15 0.0504 0.0389

Uranus 97119-02-11 18:14 G 37193087.05 37193087.26 37193087.48 0.0141 0.0025

Jupiter 97119-08-20 12:00 G 37193276.82 37193277.00 37193277.18 0.0500 0.0256

Uranus 97119-09-26 04:33 G 37193313.49 37193313.69 37193313.90 0.0141 0.0049

Uranus 97120-05-09 14:24 G 37193539.92 37193540.10 37193540.29 0.0141 0.0074

Uranus 97120-12-22 00:14 G 37193766.36 37193766.51 37193766.67 0.0141 0.0098

Uranus 97121-08-05 09:50 G 37193992.81 37193992.91 37193993.02 0.0140 0.0122

Mars 97122-03-25 08:24 G 37194224.67 37194224.85 37194225.02 0.1789 0.0072

Jupiter 97125-06-18 21:36 G 37195406.21 37195406.40 37195406.60 0.0524 0.0023

Saturn 97125-07-01 04:19 G 37195418.51 37195418.68 37195418.86 0.0302 0.0159

Saturn 97126-02-16 08:09 G 37195648.66 37195648.84 37195649.02 0.0304 0.0153

Mars 97128-09-05 07:40 G 37196580.65 37196580.82 37196580.99 0.1754 0.0413

Jupiter 97131-04-25 06:57 G 37197542.59 37197542.79 37197543.00 0.0501 0.0075

Jupiter 97137-02-21 19:40 G 37199672.13 37199672.32 37199672.51 0.0524 0.0173

Saturn 97139-05-05 14:52 G 37200474.97 37200475.12 37200475.27 0.0260 0.0186

Saturn 97139-12-20 13:55 G 37200703.87 37200704.08 37200704.30 0.0259 0.0015

Saturn 97140-08-05 11:45 G 37200932.87 37200932.99 37200933.11 0.0258 0.0211

Moon 97141-03-20 07:12 G 37201159.74 37201159.80 37201159.85 0.2625 0.2467

Jupiter 97142-12-29 04:33 G 37201808.49 37201808.69 37201808.89 0.0502 0.0104

Jupiter 97148-10-27 17:02 G 37203938.07 37203938.21 37203938.36 0.0522 0.0365

Moon 97149-03-17 21:50 G 37204079.26 37204079.41 37204079.56 0.2630 0.0868

Earth 97149-03-18 03:21 G 37204079.49 37204079.64 37204079.80 0.2629 0.0575 *

Jupiter 97149-06-21 18:00 G 37204175.11 37204175.25 37204175.41 0.0526 0.0340

Jupiter 97154-09-03 01:26 G 37206074.39 37206074.56 37206074.73 0.0503 0.0284

Neptune 97155-01-10 10:19 G 37206203.88 37206203.93 37206203.99 0.0090 0.0086

Saturn 97155-01-11 06:00 G 37206204.56 37206204.75 37206204.94 0.0303 0.0130

Jupiter 97155-04-28 00:00 G 37206311.36 37206311.50 37206311.65 0.0500 0.0358

Neptune 97155-08-23 22:33 G 37206429.35 37206429.44 37206429.58 0.0090 0.0076

Saturn 97155-08-29 09:50 G 37206434.75 37206434.91 37206435.08 0.0304 0.0184

Neptune 97156-04-05 11:16 G 37206654.84 37206654.97 37206655.14 0.0089 0.0065

Neptune 97156-11-17 00:14 G 37206880.34 37206880.51 37206880.69 0.0089 0.0054

Neptune 97157-06-30 12:43 G 37207105.86 37207106.03 37207106.24 0.0089 0.0044

Neptune 97158-02-11 01:40 G 37207331.38 37207331.57 37207331.78 0.0089 0.0032

Neptune 97158-09-24 14:24 G 37207556.90 37207557.10 37207557.32 0.0089 0.0022

Uranus 97158-10-04 17:02 G 37207567.12 37207567.21 37207567.32 0.0136 0.0119

Neptune 97159-05-08 03:07 G 37207782.42 37207782.63 37207782.85 0.0089 0.0011

Uranus 97159-05-18 22:48 G 37207793.32 37207793.45 37207793.62 0.0136 0.0098

Neptune 97159-12-19 16:04 G 37208007.95 37208008.17 37208008.38 0.0089 0.0001

Uranus 97159-12-31 05:16 G 37208019.54 37208019.72 37208019.90 0.0136 0.0076

Neptune 97160-08-01 04:48 G 37208233.49 37208233.70 37208233.92 0.0089 0.0011

Uranus 97160-08-13 11:45 G 37208245.79 37208245.99 37208246.19 0.0136 0.0054

Jupiter 97161-02-24 13:55 G 37208440.88 37208441.08 37208441.27 0.0525 0.0142

Neptune 97161-03-14 17:16 G 37208459.02 37208459.22 37208459.44 0.0089 0.0023

Uranus 97161-03-27 18:14 G 37208472.05 37208472.26 37208472.47 0.0136 0.0033

Neptune 97161-10-26 06:00 G 37208684.56 37208684.75 37208684.97 0.0089 0.0033

Uranus 97161-11-09 00:43 G 37208698.32 37208698.53 37208698.75 0.0137 0.0011

Neptune 97162-06-08 19:12 G 37208910.11 37208910.30 37208910.49 0.0089 0.0044

Uranus 97162-06-23 07:40 G 37208924.60 37208924.82 37208925.04 0.0137 0.0012

Neptune 97163-01-20 07:40 G 37209135.66 37209135.82 37209136.01 0.0089 0.0055

Uranus 97163-02-04 14:38 G 37209150.90 37209151.11 37209151.32 0.0137 0.0035

Neptune 97163-09-02 20:24 G 37209361.22 37209361.35 37209361.51 0.0089 0.0065

Uranus 97163-09-18 21:50 G 37209377.22 37209377.41 37209377.61 0.0137 0.0057

Neptune 97164-04-15 08:52 G 37209586.78 37209586.87 37209587.01 0.0089 0.0077

Uranus 97164-05-02 05:02 G 37209603.54 37209603.71 37209603.90 0.0137 0.0080

Neptune 97164-11-26 21:50 G 37209812.38 37209812.41 37209812.48 0.0089 0.0087

Uranus 97164-12-14 12:28 G 37209829.89 37209830.02 37209830.18 0.0138 0.0103

Uranus 97165-07-28 20:38 G 37210056.27 37210056.36 37210056.45 0.0138 0.0125

Jupiter 97166-05-08 22:33 G 37210340.37 37210340.44 37210340.53 0.0504 0.0463

Jupiter 97166-12-31 23:02 G 37210577.27 37210577.46 37210577.65 0.0501 0.0185

Saturn 97168-11-14 15:50 G 37211261.00 37211261.16 37211261.33 0.0260 0.0162

Saturn 97169-07-01 14:52 G 37211489.91 37211490.12 37211490.33 0.0259 0.0038

Saturn 97170-02-15 12:28 G 37211718.94 37211719.02 37211719.11 0.0258 0.0234

Pluto 97172-07-12 14:24 G 37212596.90 37212597.10 37212597.32 0.0079 0.0031

Jupiter 97172-10-30 09:21 G 37212706.69 37212706.89 37212707.08 0.0524 0.0059

Pluto 97173-02-23 00:43 G 37212822.36 37212822.53 37212822.72 0.0079 0.0047

Jupiter 97178-09-05 21:07 G 37214843.17 37214843.38 37214843.58 0.0502 0.0012

Jupiter 97184-07-05 07:12 G 37216972.62 37216972.80 37216972.97 0.0523 0.0250

Saturn 97184-07-23 08:24 G 37216990.65 37216990.85 37216991.05 0.0303 0.0097

Jupiter 97185-02-27 08:52 G 37217209.77 37217209.87 37217209.97 0.0526 0.0457

Saturn 97185-03-10 12:14 G 37217220.87 37217221.01 37217221.16 0.0304 0.0217

Mars 97188-01-20 15:36 G 37218266.98 37218267.15 37218267.32 0.1784 0.0465

Jupiter 97190-05-11 16:04 G 37219108.98 37219109.17 37219109.37 0.0502 0.0175

Jupiter 97191-01-03 13:40 G 37219346.00 37219346.07 37219346.15 0.0499 0.0462

Mars 97194-07-03 15:50 G 37220623.00 37220623.16 37220623.31 0.1759 0.0764

Jupiter 97196-03-10 05:16 G 37221238.62 37221238.72 37221238.83 0.0522 0.0439

Jupiter 97196-11-02 06:00 G 37221475.58 37221475.75 37221475.93 0.0526 0.0265

Saturn 97198-05-27 17:31 G 37222047.06 37222047.23 37222047.42 0.0260 0.0137

Saturn 97199-01-11 16:33 G 37222275.98 37222276.19 37222276.40 0.0259 0.0063

Uranus 97199-01-22 05:45 G 37222286.70 37222286.74 37222286.79 0.0143 0.0139

Uranus 97199-09-05 17:16 G 37222513.10 37222513.22 37222513.36 0.0142 0.0114

Uranus 97200-04-19 04:33 G 37222739.53 37222739.69 37222739.87 0.0142 0.0088

Uranus 97200-12-01 15:36 G 37222965.96 37222966.15 37222966.36 0.0142 0.0063

Uranus 97201-07-16 02:52 G 37223192.41 37223192.62 37223192.83 0.0142 0.0037

Jupiter 97202-01-14 13:12 G 37223374.91 37223375.05 37223375.20 0.0503 0.0353

Uranus 97202-02-27 13:40 G 37223418.85 37223419.07 37223419.29 0.0142 0.0012

Jupiter 97202-09-08 12:00 G 37223611.83 37223612.00 37223612.17 0.0500 0.0290

Uranus 97202-10-12 00:14 G 37223645.30 37223645.51 37223645.73 0.0141 0.0014

Uranus 97203-05-26 10:33 G 37223871.74 37223871.94 37223872.16 0.0141 0.0039

Uranus 97204-01-07 20:52 G 37224098.18 37224098.37 37224098.57 0.0141 0.0063

Uranus 97204-08-21 06:43 G 37224324.62 37224324.78 37224324.96 0.0141 0.0088

Uranus 97205-04-04 16:19 G 37224551.07 37224551.18 37224551.33 0.0140 0.0112

Uranus 97205-11-17 02:09 G 37224777.54 37224777.59 37224777.66 0.0140 0.0135

Jupiter 97208-07-08 02:52 G 37225741.42 37225741.62 37225741.82 0.0525 0.0067

Saturn 97214-02-02 08:52 G 37227776.67 37227776.87 37227777.07 0.0303 0.0070

Jupiter 97214-05-14 10:04 G 37227877.71 37227877.92 37227878.12 0.0501 0.0114

Saturn 97214-09-20 12:57 G 37228006.92 37228007.04 37228007.16 0.0304 0.0245

Jupiter 97220-03-12 23:16 G 37230007.28 37230007.47 37230007.66 0.0523 0.0130

Jupiter 97226-01-17 08:09 G 37232143.64 37232143.84 37232144.05 0.0502 0.0064

Saturn 97227-12-07 18:14 G 37232833.07 37232833.26 37232833.46 0.0260 0.0113

Saturn 97228-07-23 17:02 G 37233062.00 37233062.21 37233062.41 0.0259 0.0087

Jupiter 97231-11-16 19:26 G 37234273.15 37234273.31 37234273.46 0.0522 0.0326

Jupiter 97232-07-10 20:24 G 37234510.21 37234510.35 37234510.49 0.0526 0.0381

Jupiter 97237-09-22 05:45 G 37236409.56 37236409.74 37236409.93 0.0503 0.0242

Jupiter 97238-05-17 04:19 G 37236646.56 37236646.68 37236646.80 0.0500 0.0401

Neptune 97238-05-23 06:00 G 37236652.69 37236652.75 37236652.85 0.0088 0.0082

Neptune 97239-01-03 19:40 G 37236878.20 37236878.32 37236878.46 0.0088 0.0071

Neptune 97239-08-17 08:52 G 37237103.73 37237103.87 37237104.05 0.0088 0.0061

Neptune 97240-03-29 22:19 G 37237329.26 37237329.43 37237329.62 0.0088 0.0050

Neptune 97240-11-10 11:31 G 37237554.79 37237554.98 37237555.19 0.0088 0.0040

Neptune 97241-06-24 00:57 G 37237780.34 37237780.54 37237780.76 0.0088 0.0029

Neptune 97242-02-04 14:09 G 37238005.89 37238006.09 37238006.32 0.0088 0.0019

Uranus 97242-06-04 04:48 G 37238125.64 37238125.70 37238125.79 0.0136 0.0126

Neptune 97242-09-18 03:35 G 37238231.43 37238231.65 37238231.88 0.0088 0.0008

Uranus 97243-01-16 10:48 G 37238351.83 37238351.95 37238352.10 0.0136 0.0105

Neptune 97243-05-01 17:02 G 37238456.98 37238457.21 37238457.43 0.0088 0.0003

Jupiter 97243-07-22 17:31 G 37238539.20 37238539.23 37238539.27 0.0521 0.0513

Saturn 97243-08-15 11:02 G 37238562.75 37238562.96 37238563.16 0.0303 0.0038

Uranus 97243-08-30 17:02 G 37238578.04 37238578.21 37238578.38 0.0136 0.0083

Neptune 97243-12-13 06:00 G 37238682.54 37238682.75 37238682.98 0.0088 0.0014

Jupiter 97244-03-15 17:16 G 37238776.04 37238776.22 37238776.41 0.0525 0.0187

Saturn 97244-04-01 14:52 G 37238793.05 37238793.12 37238793.22 0.0304 0.0277

Uranus 97244-04-12 23:02 G 37238804.28 37238804.46 37238804.66 0.0136 0.0062

Neptune 97244-07-25 19:26 G 37238908.10 37238908.31 37238908.53 0.0088 0.0024

Uranus 97244-11-25 05:31 G 37239030.53 37239030.73 37239030.94 0.0136 0.0040

Neptune 97245-03-08 08:24 G 37239133.66 37239133.85 37239134.07 0.0088 0.0035

Uranus 97245-07-09 12:14 G 37239256.80 37239257.01 37239257.23 0.0136 0.0018

Neptune 97245-10-19 21:35 G 37239359.22 37239359.40 37239359.60 0.0088 0.0045

Uranus 97246-02-20 19:11 G 37239483.08 37239483.30 37239483.51 0.0137 0.0004

Neptune 97246-06-02 10:33 G 37239584.79 37239584.94 37239585.13 0.0088 0.0056

Uranus 97246-10-05 01:55 G 37239709.37 37239709.58 37239709.80 0.0137 0.0027

Neptune 97247-01-14 00:14 G 37239810.37 37239810.51 37239810.66 0.0088 0.0066

Uranus 97247-05-19 08:52 G 37239935.67 37239935.87 37239936.08 0.0137 0.0049

Neptune 97247-08-27 12:57 G 37240035.96 37240036.04 37240036.18 0.0088 0.0078

Uranus 97247-12-31 16:19 G 37240161.99 37240162.18 37240162.36 0.0137 0.0072

Neptune 97248-04-09 02:24 G 37240261.59 37240261.60 37240261.64 0.0088 0.0087

Uranus 97248-08-13 23:31 G 37240388.34 37240388.48 37240388.65 0.0137 0.0095

Uranus 97249-03-28 07:11 G 37240614.70 37240614.80 37240614.92 0.0138 0.0117

Jupiter 97249-05-28 01:11 G 37240675.44 37240675.55 37240675.66 0.0503 0.0424

Jupiter 97250-01-20 00:14 G 37240912.33 37240912.51 37240912.70 0.0500 0.0223

Mars 97253-11-16 23:16 G 37242309.31 37242309.47 37242309.62 0.1780 0.0851

Moon 97254-09-17 20:09 G 37242614.23 37242614.34 37242614.45 0.2710 0.1849

Earth 97254-09-17 22:48 G 37242614.37 37242614.45 37242614.54 0.2703 0.2273 *

Jupiter 97255-11-19 14:52 G 37243041.92 37243042.12 37243042.32 0.0525 0.0010

Saturn 97257-06-18 19:40 G 37243619.12 37243619.32 37243619.53 0.0260 0.0089

Saturn 97258-02-02 18:28 G 37243848.07 37243848.27 37243848.46 0.0259 0.0111

Mars 97260-04-30 00:14 G 37244665.38 37244665.51 37244665.65 0.1763 0.1110

Jupiter 97261-09-24 22:04 G 37245178.22 37245178.42 37245178.63 0.0501 0.0047

Earth 97262-09-15 14:09 G 37245533.95 37245534.09 37245534.23 0.2704 0.1303

Moon 97262-09-15 15:35 G 37245534.01 37245534.15 37245534.29 0.2711 0.0813 *

Jupiter 97267-07-25 12:14 G 37247307.83 37247308.01 37247308.19 0.0523 0.0205

Jupiter 97268-03-18 14:24 G 37247545.05 37247545.10 37247545.15 0.0526 0.0506

Saturn 97273-02-24 11:45 G 37249348.79 37249348.99 37249349.20 0.0303 0.0012

Jupiter 97273-05-30 19:26 G 37249444.11 37249444.31 37249444.52 0.0502 0.0136

Jupiter 97279-03-30 09:21 G 37251573.77 37251573.89 37251574.02 0.0522 0.0398

Jupiter 97279-11-22 10:04 G 37251810.76 37251810.92 37251811.08 0.0525 0.0308

Uranus 97283-05-06 00:00 G 37253071.40 37253071.50 37253071.62 0.0142 0.0124

Uranus 97283-12-18 11:31 G 37253297.83 37253297.98 37253298.15 0.0142 0.0098

Uranus 97284-07-31 22:48 G 37253524.27 37253524.45 37253524.65 0.0142 0.0073

Jupiter 97285-02-02 16:48 G 37253710.05 37253710.20 37253710.37 0.0503 0.0315

Uranus 97285-03-15 09:50 G 37253750.72 37253750.91 37253751.13 0.0142 0.0048

Jupiter 97285-09-27 15:50 G 37253947.01 37253947.16 37253947.32 0.0500 0.0332

Uranus 97285-10-27 21:07 G 37253977.16 37253977.38 37253977.59 0.0142 0.0022

Uranus 97286-06-11 07:40 G 37254203.61 37254203.82 37254204.04 0.0141 0.0004

Saturn 97286-12-29 19:55 G 37254405.13 37254405.33 37254405.55 0.0260 0.0066

Uranus 97287-01-23 18:28 G 37254430.06 37254430.27 37254430.49 0.0141 0.0028

Saturn 97287-08-15 18:28 G 37254634.10 37254634.27 37254634.46 0.0259 0.0135

Uranus 97287-09-07 04:33 G 37254656.50 37254656.69 37254656.90 0.0141 0.0053

Uranus 97288-04-20 14:52 G 37254882.94 37254883.12 37254883.31 0.0141 0.0077

Uranus 97288-12-03 00:28 G 37255109.38 37255109.52 37255109.69 0.0141 0.0102

Uranus 97289-07-17 10:19 G 37255335.84 37255335.93 37255336.04 0.0140 0.0125

Jupiter 97291-07-28 05:16 G 37256076.52 37256076.72 37256076.91 0.0525 0.0109

Mars 97292-04-29 06:28 G 37256352.69 37256352.77 37256352.86 0.1749 0.1500

Jupiter 97296-10-08 13:55 G 37257976.05 37257976.08 37257976.13 0.0504 0.0492

Jupiter 97297-06-02 14:24 G 37258212.90 37258213.10 37258213.30 0.0501 0.0157

Saturn 97302-01-20 11:31 G 37259904.93 37259904.98 37259905.05 0.0301 0.0285

Saturn 97302-09-07 14:09 G 37260134.88 37260135.09 37260135.30 0.0303 0.0023

Jupiter 97303-04-03 02:24 G 37260342.41 37260342.60 37260342.80 0.0524 0.0088

Jupiter 97309-02-06 10:33 G 37262478.73 37262478.94 37262479.14 0.0501 0.0027

Jupiter 97314-12-07 00:00 G 37264608.33 37264608.50 37264608.66 0.0523 0.0283

Jupiter 97315-08-01 01:55 G 37264845.47 37264845.58 37264845.70 0.0527 0.0431

Saturn 97315-11-25 21:21 G 37264962.33 37264962.39 37264962.48 0.0262 0.0245

Saturn 97316-07-11 21:35 G 37265191.19 37265191.40 37265191.61 0.0260 0.0040

Saturn 97317-02-25 19:55 G 37265420.17 37265420.33 37265420.51 0.0259 0.0160

Mars 97319-09-15 06:43 G 37266351.66 37266351.78 37266351.90 0.1775 0.1240

Neptune 97319-11-26 06:57 G 37266423.71 37266423.79 37266423.90 0.0090 0.0080

Neptune 97320-07-08 20:09 G 37266649.20 37266649.34 37266649.48 0.0090 0.0069

Jupiter 97320-10-12 07:55 G 37266744.64 37266744.83 37266745.02 0.0502 0.0204

Neptune 97321-02-19 08:24 G 37266874.70 37266874.85 37266875.03 0.0089 0.0059

Jupiter 97321-06-06 05:02 G 37266981.62 37266981.71 37266981.82 0.0499 0.0436

Neptune 97321-10-02 21:07 G 37267100.21 37267100.38 37267100.58 0.0089 0.0048

Neptune 97322-05-16 10:04 G 37267325.72 37267325.92 37267326.12 0.0089 0.0037

Neptune 97322-12-27 22:48 G 37267551.24 37267551.45 37267551.66 0.0089 0.0026

Neptune 97323-08-10 11:16 G 37267776.77 37267776.97 37267777.19 0.0089 0.0016

Neptune 97324-03-23 00:14 G 37268002.29 37268002.51 37268002.72 0.0089 0.0004

Neptune 97324-11-03 12:43 G 37268227.82 37268228.03 37268228.25 0.0089 0.0007

Neptune 97325-06-17 01:26 G 37268453.36 37268453.56 37268453.78 0.0089 0.0018

Neptune 97326-01-28 14:09 G 37268678.90 37268679.09 37268679.31 0.0089 0.0029

Uranus 97326-02-02 16:48 G 37268684.18 37268684.20 37268684.26 0.0136 0.0133

Mars 97326-02-26 08:24 G 37268707.75 37268707.85 37268707.94 0.1768 0.1474

Jupiter 97326-08-11 21:50 G 37268874.33 37268874.41 37268874.49 0.0522 0.0473

Neptune 97326-09-11 02:52 G 37268904.44 37268904.62 37268904.83 0.0089 0.0039

Uranus 97326-09-16 22:48 G 37268910.34 37268910.45 37268910.58 0.0136 0.0112

Jupiter 97327-04-05 22:19 G 37269111.25 37269111.43 37269111.61 0.0525 0.0232

Neptune 97327-04-24 15:50 G 37269129.98 37269130.16 37269130.34 0.0089 0.0050

Uranus 97327-05-01 04:48 G 37269136.55 37269136.70 37269136.87 0.0136 0.0091

Neptune 97327-12-06 04:19 G 37269355.54 37269355.68 37269355.85 0.0089 0.0061

Uranus 97327-12-13 11:02 G 37269362.78 37269362.96 37269363.15 0.0136 0.0069

Neptune 97328-07-18 17:16 G 37269581.10 37269581.22 37269581.36 0.0089 0.0071

Uranus 97328-07-26 17:45 G 37269589.04 37269589.24 37269589.44 0.0136 0.0048

Neptune 97329-03-01 05:45 G 37269806.68 37269806.74 37269806.85 0.0089 0.0083

Uranus 97329-03-10 00:14 G 37269815.30 37269815.51 37269815.72 0.0136 0.0026

Uranus 97329-10-22 06:43 G 37270041.57 37270041.78 37270042.00 0.0137 0.0004

Pluto 97330-04-30 07:55 G 37270231.70 37270231.83 37270232.00 0.0065 0.0046

Uranus 97330-06-05 13:26 G 37270267.85 37270268.06 37270268.28 0.0137 0.0019

Pluto 97330-12-11 12:14 G 37270456.79 37270457.01 37270457.23 0.0065 0.0004

Uranus 97331-01-17 20:24 G 37270494.15 37270494.35 37270494.56 0.0137 0.0041

Pluto 97331-07-24 15:35 G 37270682.00 37270682.15 37270682.35 0.0065 0.0039

Saturn 97331-08-02 13:11 G 37270690.94 37270691.05 37270691.15 0.0301 0.0256

Uranus 97331-09-01 03:50 G 37270720.47 37270720.66 37270720.85 0.0137 0.0064

Saturn 97332-03-19 15:21 G 37270920.94 37270921.14 37270921.35 0.0303 0.0053

Uranus 97332-04-14 10:48 G 37270946.79 37270946.95 37270947.13 0.0137 0.0086

Jupiter 97332-06-17 04:19 G 37271010.55 37271010.68 37271010.81 0.0503 0.0386

Uranus 97332-11-26 18:14 G 37271173.14 37271173.26 37271173.40 0.0138 0.0109

Jupiter 97333-02-09 03:21 G 37271247.47 37271247.64 37271247.82 0.0500 0.0262

Uranus 97333-07-11 01:55 G 37271399.53 37271399.58 37271399.66 0.0138 0.0131

Jupiter 97338-12-09 18:43 G 37273377.08 37273377.28 37273377.48 0.0524 0.0034

Jupiter 97344-10-15 01:26 G 37275513.36 37275513.56 37275513.77 0.0501 0.0086

Saturn 97345-06-06 21:50 G 37275748.30 37275748.41 37275748.53 0.0261 0.0220

Saturn 97346-01-21 22:04 G 37275977.20 37275977.42 37275977.63 0.0260 0.0016

Saturn 97346-09-07 20:38 G 37276206.21 37276206.36 37276206.51 0.0259 0.0183

Jupiter 97350-08-14 14:09 G 37277642.91 37277643.09 37277643.29 0.0523 0.0166

Mars 97351-09-14 15:07 G 37278039.05 37278039.13 37278039.22 0.1790 0.1540

Jupiter 97356-06-19 23:31 G 37279779.27 37279779.48 37279779.68 0.0502 0.0093

Mars 97358-02-25 15:07 G 37280395.00 37280395.13 37280395.26 0.1753 0.1173

Saturn 97361-02-11 16:19 G 37281477.04 37281477.18 37281477.32 0.0301 0.0222

Saturn 97361-09-29 18:57 G 37281707.09 37281707.29 37281707.49 0.0303 0.0088

Jupiter 97362-04-19 11:45 G 37281908.85 37281908.99 37281909.14 0.0522 0.0359

Jupiter 97362-12-12 12:43 G 37282145.89 37282146.03 37282146.18 0.0526 0.0352

Uranus 97367-01-04 07:11 G 37283629.74 37283629.80 37283629.88 0.0143 0.0134

Uranus 97367-08-18 18:43 G 37283856.15 37283856.28 37283856.43 0.0142 0.0109

Jupiter 97368-02-23 19:26 G 37284045.14 37284045.31 37284045.49 0.0502 0.0276

Uranus 97368-04-01 06:00 G 37284082.59 37284082.75 37284082.94 0.0142 0.0084

Jupiter 97368-10-17 17:16 G 37284282.09 37284282.22 37284282.36 0.0499 0.0368

Uranus 97368-11-13 17:16 G 37284309.03 37284309.22 37284309.43 0.0142 0.0058

Uranus 97369-06-28 04:19 G 37284535.48 37284535.68 37284535.90 0.0142 0.0033

Uranus 97370-02-09 15:35 G 37284761.93 37284762.15 37284762.37 0.0142 0.0007

Uranus 97370-09-24 02:09 G 37284988.38 37284988.59 37284988.81 0.0141 0.0018

Uranus 97371-05-08 12:43 G 37285214.82 37285215.03 37285215.24 0.0141 0.0043

Uranus 97371-12-20 22:48 G 37285441.26 37285441.45 37285441.65 0.0141 0.0067

Uranus 97372-08-03 08:52 G 37285667.71 37285667.87 37285668.04 0.0141 0.0091

Uranus 97373-03-17 18:43 G 37285894.16 37285894.28 37285894.41 0.0141 0.0115

Uranus 97373-10-30 04:04 G 37286120.65 37286120.67 37286120.72 0.0140 0.0139

Jupiter 97374-08-17 09:07 G 37286411.69 37286411.88 37286412.08 0.0526 0.0153

Saturn 97374-12-18 00:00 G 37286534.37 37286534.50 37286534.65 0.0262 0.0195

Saturn 97375-08-04 00:00 G 37286763.29 37286763.50 37286763.72 0.0260 0.0011

Saturn 97376-03-19 22:33 G 37286992.32 37286992.44 37286992.57 0.0259 0.0209

Jupiter 97379-10-29 16:19 G 37288311.10 37288311.18 37288311.27 0.0503 0.0455

Jupiter 97380-06-22 15:35 G 37288547.96 37288548.15 37288548.34 0.0500 0.0193

Mars 97385-07-12 14:38 G 37290394.04 37290394.11 37290394.18 0.1770 0.1603

Jupiter 97386-04-22 06:14 G 37290677.56 37290677.76 37290677.95 0.0524 0.0048

Saturn 97390-08-24 18:57 G 37292263.14 37292263.29 37292263.46 0.0301 0.0189

Saturn 97391-04-11 21:35 G 37292493.21 37292493.40 37292493.59 0.0303 0.0122

Jupiter 97392-02-26 12:43 G 37292813.82 37292814.03 37292814.24 0.0501 0.0013

Earth 97392-03-19 04:19 G 37292835.53 37292835.68 37292835.84 0.2628 0.0463

Moon 97392-03-19 10:19 G 37292835.77 37292835.93 37292836.09 0.2629 0.0105 *

Jupiter 97397-12-26 03:07 G 37294943.45 37294943.63 37294943.80 0.0523 0.0242

Jupiter 97398-08-20 04:48 G 37295180.62 37295180.70 37295180.79 0.0526 0.0471

Neptune 97402-08-26 14:09 G 37296647.07 37296647.09 37296647.16 0.0088 0.0086

Neptune 97403-04-09 03:35 G 37296872.55 37296872.65 37296872.78 0.0088 0.0075

Jupiter 97403-11-02 09:50 G 37297079.72 37297079.91 37297080.11 0.0502 0.0169

Neptune 97403-11-20 16:48 G 37297098.07 37297098.20 37297098.38 0.0088 0.0065

Jupiter 97404-06-26 07:40 G 37297316.76 37297316.82 37297316.89 0.0499 0.0474

Saturn 97404-06-30 00:57 G 37297320.38 37297320.54 37297320.71 0.0261 0.0169

Neptune 97404-07-03 06:28 G 37297323.61 37297323.77 37297323.96 0.0088 0.0054

Neptune 97405-02-13 20:09 G 37297549.15 37297549.34 37297549.53 0.0088 0.0043

Saturn 97405-02-14 00:57 G 37297549.33 37297549.54 37297549.76 0.0260 0.0036 *

Neptune 97405-09-27 09:07 G 37297774.69 37297774.88 37297775.10 0.0088 0.0033

Saturn 97405-09-30 23:31 G 37297778.40 37297778.48 37297778.57 0.0259 0.0234

Neptune 97406-05-10 22:48 G 37298000.23 37298000.45 37298000.67 0.0088 0.0022

Neptune 97406-12-22 12:00 G 37298225.79 37298226.00 37298226.23 0.0088 0.0012

Neptune 97407-08-05 01:26 G 37298451.34 37298451.56 37298451.79 0.0088 0.0002

Neptune 97408-03-17 14:38 G 37298676.89 37298677.11 37298677.34 0.0088 0.0010

Neptune 97408-10-29 04:04 G 37298902.45 37298902.67 37298902.88 0.0088 0.0020

Neptune 97409-06-11 17:02 G 37299128.01 37299128.21 37299128.43 0.0088 0.0031

Jupiter 97409-08-31 23:02 G 37299209.36 37299209.46 37299209.57 0.0522 0.0437

Neptune 97410-01-23 06:14 G 37299353.58 37299353.76 37299353.97 0.0088 0.0042

Jupiter 97410-04-25 23:16 G 37299446.30 37299446.47 37299446.65 0.0525 0.0271

Uranus 97410-05-18 10:48 G 37299468.86 37299468.95 37299469.06 0.0136 0.0119

Neptune 97410-09-05 19:40 G 37299579.15 37299579.32 37299579.51 0.0088 0.0052

Uranus 97410-12-30 16:48 G 37299695.06 37299695.20 37299695.36 0.0136 0.0098

Neptune 97411-04-19 08:24 G 37299804.72 37299804.85 37299805.03 0.0088 0.0063

Uranus 97411-08-13 22:48 G 37299921.29 37299921.45 37299921.64 0.0136 0.0077

Neptune 97411-11-30 21:50 G 37300030.31 37300030.41 37300030.55 0.0088 0.0073

Uranus 97412-03-27 05:16 G 37300147.53 37300147.72 37300147.92 0.0136 0.0055

Neptune 97412-07-13 11:31 G 37300255.91 37300255.98 37300256.05 0.0088 0.0084

Uranus 97412-11-08 11:45 G 37300373.78 37300373.99 37300374.20 0.0136 0.0033

Uranus 97413-06-22 18:28 G 37300600.05 37300600.27 37300600.48 0.0137 0.0012

Uranus 97414-02-04 01:11 G 37300826.33 37300826.55 37300826.76 0.0137 0.0011

Uranus 97414-09-18 07:55 G 37301052.62 37301052.83 37301053.05 0.0137 0.0033

Uranus 97415-05-02 14:52 G 37301278.93 37301279.12 37301279.32 0.0137 0.0055

Jupiter 97415-07-08 06:57 G 37301345.65 37301345.79 37301345.95 0.0503 0.0348

Uranus 97415-12-14 22:04 G 37301505.25 37301505.42 37301505.60 0.0137 0.0078

Jupiter 97416-03-01 06:00 G 37301582.59 37301582.75 37301582.92 0.0500 0.0302

Uranus 97416-07-28 05:45 G 37301731.59 37301731.74 37301731.88 0.0138 0.0100

Uranus 97417-03-11 12:43 G 37301957.95 37301958.03 37301958.15 0.0138 0.0123

Mars 97417-07-12 22:19 G 37302081.30 37302081.43 37302081.57 0.1785 0.1131

Pluto 97418-08-12 14:52 G 37302476.97 37302477.12 37302477.30 0.0079 0.0054

Pluto 97419-03-26 01:26 G 37302702.36 37302702.56 37302702.79 0.0079 0.0025

Saturn 97420-03-06 23:31 G 37303049.30 37303049.48 37303049.66 0.0301 0.0152

Saturn 97420-10-23 02:09 G 37303279.42 37303279.59 37303279.77 0.0303 0.0159

Jupiter 97421-12-29 19:55 G 37303712.13 37303712.33 37303712.53 0.0525 0.0072

Mars 97423-12-24 23:02 G 37304437.31 37304437.46 37304437.61 0.1757 0.0819

Jupiter 97427-11-05 02:52 G 37305848.42 37305848.62 37305848.82 0.0500 0.0121

Jupiter 97433-09-03 16:04 G 37307977.97 37307978.17 37307978.36 0.0524 0.0130

Saturn 97434-01-10 03:50 G 37308106.49 37308106.66 37308106.85 0.0262 0.0142

Saturn 97434-08-27 03:50 G 37308335.45 37308335.66 37308335.87 0.0260 0.0063

Jupiter 97439-07-11 00:28 G 37310114.31 37310114.52 37310114.73 0.0501 0.0059

Jupiter 97445-05-09 13:26 G 37312243.90 37312244.06 37312244.22 0.0523 0.0325

Jupiter 97446-01-01 15:07 G 37312481.00 37312481.13 37312481.27 0.0526 0.0390

Saturn 97449-09-17 04:04 G 37313835.48 37313835.67 37313835.87 0.0301 0.0113

Saturn 97450-05-05 06:43 G 37314065.63 37314065.78 37314065.94 0.0303 0.0199

Uranus 97450-09-04 16:48 G 37314188.20 37314188.20 37314188.22 0.0143 0.0142

Jupiter 97451-03-15 20:24 G 37314380.17 37314380.35 37314380.53 0.0502 0.0243

Uranus 97451-04-19 04:04 G 37314414.57 37314414.67 37314414.81 0.0142 0.0118

Jupiter 97451-11-07 18:14 G 37314617.15 37314617.26 37314617.39 0.0499 0.0402

Uranus 97451-12-01 15:35 G 37314641.00 37314641.15 37314641.34 0.0142 0.0093

Uranus 97452-07-15 03:07 G 37314867.45 37314867.63 37314867.83 0.0142 0.0067

Uranus 97453-02-26 14:38 G 37315093.90 37315094.11 37315094.32 0.0142 0.0041

Uranus 97453-10-11 01:26 G 37315320.35 37315320.56 37315320.78 0.0142 0.0016

Uranus 97454-05-25 12:14 G 37315546.79 37315547.01 37315547.23 0.0141 0.0009

Uranus 97455-01-06 22:48 G 37315773.24 37315773.45 37315773.67 0.0141 0.0034

Uranus 97455-08-21 09:07 G 37315999.68 37315999.88 37316000.08 0.0141 0.0058

Uranus 97456-04-03 19:11 G 37316226.13 37316226.30 37316226.48 0.0141 0.0082

Uranus 97456-11-16 05:02 G 37316452.57 37316452.71 37316452.86 0.0141 0.0106

Jupiter 97457-01-12 10:48 G 37316509.93 37316509.95 37316509.98 0.0522 0.0515

Uranus 97457-06-30 14:24 G 37316679.04 37316679.10 37316679.20 0.0140 0.0130

Jupiter 97457-09-06 10:48 G 37316746.77 37316746.95 37316747.14 0.0525 0.0191

Jupiter 97462-11-18 16:48 G 37318646.09 37318646.20 37318646.31 0.0503 0.0424

Jupiter 97463-07-13 16:19 G 37318883.00 37318883.18 37318883.37 0.0500 0.0227

Saturn 97463-07-23 06:00 G 37318892.56 37318892.75 37318892.95 0.0261 0.0114

Saturn 97464-03-08 05:45 G 37319121.54 37319121.74 37319121.95 0.0260 0.0090

Jupiter 97469-05-12 06:00 G 37321012.55 37321012.75 37321012.95 0.0524 0.0012

Jupiter 97475-03-18 13:55 G 37323148.88 37323149.08 37323149.29 0.0501 0.0049

Saturn 97479-03-30 10:33 G 37324621.74 37324621.94 37324622.14 0.0301 0.0072

Saturn 97479-11-15 13:11 G 37324851.93 37324852.05 37324852.18 0.0303 0.0241

Jupiter 97481-01-15 02:24 G 37325278.42 37325278.60 37325278.79 0.0523 0.0210

Jupiter 97481-09-09 04:33 G 37325515.64 37325515.69 37325515.74 0.0527 0.0507

Mars 97483-05-10 06:14 G 37326123.61 37326123.76 37326123.92 0.1781 0.0747

Neptune 97484-02-28 15:50 G 37326418.10 37326418.16 37326418.25 0.0090 0.0084

Neptune 97484-10-11 04:19 G 37326643.58 37326643.68 37326643.83 0.0090 0.0074

Neptune 97485-05-24 17:16 G 37326869.08 37326869.22 37326869.39 0.0089 0.0063

Neptune 97486-01-05 06:00 G 37327094.59 37327094.75 37327094.94 0.0089 0.0052

Neptune 97486-08-18 18:57 G 37327320.10 37327320.29 37327320.48 0.0089 0.0041

Jupiter 97486-11-21 10:48 G 37327414.75 37327414.95 37327415.15 0.0501 0.0134

Neptune 97487-04-01 07:11 G 37327545.61 37327545.80 37327546.02 0.0089 0.0031

Neptune 97487-11-12 20:09 G 37327771.13 37327771.34 37327771.55 0.0089 0.0019

Neptune 97488-06-25 08:52 G 37327996.66 37327996.87 37327997.09 0.0089 0.0009

Neptune 97489-02-05 21:35 G 37328222.19 37328222.40 37328222.62 0.0089 0.0003

Neptune 97489-09-19 10:19 G 37328447.72 37328447.93 37328448.15 0.0089 0.0013

Mars 97489-10-21 07:11 G 37328479.63 37328479.80 37328479.97 0.1762 0.0468

Neptune 97490-05-02 22:48 G 37328673.25 37328673.45 37328673.67 0.0089 0.0024

Neptune 97490-12-14 11:31 G 37328898.79 37328898.98 37328899.19 0.0089 0.0035

Neptune 97491-07-28 00:14 G 37329124.34 37329124.51 37329124.71 0.0089 0.0046

Neptune 97492-03-09 12:57 G 37329349.88 37329350.04 37329350.22 0.0089 0.0056

Jupiter 97492-09-19 22:04 G 37329544.30 37329544.42 37329544.55 0.0523 0.0409

Neptune 97492-10-21 01:26 G 37329575.44 37329575.56 37329575.72 0.0089 0.0067

Saturn 97493-02-01 09:50 G 37329678.70 37329678.91 37329679.11 0.0262 0.0084

Jupiter 97493-05-14 23:45 G 37329781.33 37329781.49 37329781.65 0.0526 0.0306

Neptune 97493-06-03 14:38 G 37329801.01 37329801.11 37329801.22 0.0089 0.0078

Saturn 97493-09-18 09:21 G 37329907.71 37329907.89 37329908.09 0.0260 0.0121

Neptune 97494-01-15 03:07 G 37330026.62 37330026.63 37330026.68 0.0089 0.0089

Uranus 97494-01-15 22:33 G 37330027.38 37330027.44 37330027.54 0.0136 0.0126

Uranus 97494-08-30 04:33 G 37330253.57 37330253.69 37330253.84 0.0136 0.0105

Uranus 97495-04-13 10:33 G 37330479.79 37330479.94 37330480.13 0.0136 0.0084

Uranus 97495-11-25 17:02 G 37330706.02 37330706.21 37330706.40 0.0136 0.0063

Uranus 97496-07-08 23:16 G 37330932.27 37330932.47 37330932.69 0.0136 0.0041

Uranus 97497-02-20 05:45 G 37331158.53 37331158.74 37331158.96 0.0136 0.0020

Earth 97497-09-20 00:14 G 37331370.43 37331370.51 37331370.59 0.2704 0.2287

Moon 97497-09-20 04:33 G 37331370.65 37331370.69 37331370.73 0.2700 0.2601

Uranus 97497-10-04 12:28 G 37331384.80 37331385.02 37331385.24 0.0137 0.0003

Uranus 97498-05-18 19:11 G 37331611.09 37331611.30 37331611.51 0.0137 0.0025

Jupiter 97498-07-27 07:40 G 37331680.66 37331680.82 37331680.98 0.0502 0.0316

Uranus 97498-12-31 01:55 G 37331837.38 37331837.58 37331837.79 0.0137 0.0047

Jupiter 97499-03-21 05:31 G 37331917.57 37331917.73 37331917.88 0.0499 0.0331

Uranus 97499-08-14 09:07 G 37332063.70 37332063.88 37332064.07 0.0137 0.0069

Uranus 97500-03-28 16:19 G 37332290.03 37332290.18 37332290.35 0.0137 0.0092

Uranus 97500-11-09 23:31 G 37332516.38 37332516.48 37332516.62 0.0138 0.0114

Uranus 97501-06-24 07:11 G 37332742.78 37332742.80 37332742.84 0.0138 0.0136

Jupiter 97505-01-18 19:55 G 37334047.14 37334047.33 37334047.53 0.0525 0.0105

Earth 97505-09-18 15:35 G 37334290.01 37334290.15 37334290.29 0.2704 0.1261

Moon 97505-09-18 16:04 G 37334290.03 37334290.17 37334290.30 0.2698 0.1515 *

Saturn 97508-10-10 17:02 G 37335408.00 37335408.21 37335408.41 0.0301 0.0028

Saturn 97509-05-28 19:40 G 37335638.26 37335638.32 37335638.40 0.0303 0.0285

Jupiter 97510-04-02 02:24 G 37335946.59 37335946.60 37335946.62 0.0504 0.0501

Jupiter 97510-11-25 02:09 G 37336183.40 37336183.59 37336183.79 0.0500 0.0152

Jupiter 97516-09-23 16:19 G 37338312.99 37338313.18 37338313.38 0.0524 0.0095

Saturn 97521-12-29 11:31 G 37340235.98 37340235.98 37340236.00 0.0263 0.0262

Jupiter 97522-07-30 23:16 G 37340449.26 37340449.47 37340449.67 0.0501 0.0032

Saturn 97522-08-15 12:57 G 37340464.83 37340465.04 37340465.25 0.0261 0.0054

Saturn 97523-04-01 12:28 G 37340693.85 37340694.02 37340694.20 0.0260 0.0150

Jupiter 97528-05-29 11:45 G 37342578.83 37342578.99 37342579.16 0.0523 0.0295

Jupiter 97529-01-21 13:11 G 37342815.94 37342816.05 37342816.17 0.0526 0.0421

Jupiter 97534-04-04 19:55 G 37344715.14 37344715.33 37344715.52 0.0502 0.0212

Jupiter 97534-11-27 17:45 G 37344952.15 37344952.24 37344952.35 0.0499 0.0436

Uranus 97534-12-18 12:28 G 37344972.94 37344973.02 37344973.14 0.0142 0.0127

Uranus 97535-08-02 00:14 G 37345199.37 37345199.51 37345199.68 0.0142 0.0101

Uranus 97536-03-15 11:45 G 37345425.81 37345425.99 37345426.19 0.0142 0.0076

Uranus 97536-10-27 23:02 G 37345652.26 37345652.46 37345652.67 0.0142 0.0051

Uranus 97537-06-11 10:04 G 37345878.71 37345878.92 37345879.15 0.0142 0.0026

Saturn 97537-09-04 23:45 G 37345964.44 37345964.49 37345964.55 0.0300 0.0287

Uranus 97538-01-23 21:21 G 37346105.17 37346105.39 37346105.61 0.0142 0.0002

Saturn 97538-04-23 00:57 G 37346194.33 37346194.54 37346194.75 0.0302 0.0018

Uranus 97538-09-07 07:55 G 37346331.62 37346331.83 37346332.05 0.0141 0.0024

Uranus 97539-04-21 18:00 G 37346558.06 37346558.25 37346558.47 0.0141 0.0050

Uranus 97539-12-04 04:19 G 37346784.50 37346784.68 37346784.87 0.0141 0.0073

Jupiter 97540-02-02 08:09 G 37346844.78 37346844.84 37346844.92 0.0522 0.0489

Uranus 97540-07-17 14:09 G 37347010.95 37347011.09 37347011.26 0.0141 0.0097

Jupiter 97540-09-26 08:38 G 37347081.68 37347081.86 37347082.04 0.0525 0.0221

Uranus 97541-03-01 00:00 G 37347237.41 37347237.50 37347237.63 0.0141 0.0121

Jupiter 97545-12-08 16:48 G 37348981.07 37348981.20 37348981.33 0.0503 0.0394

Jupiter 97546-08-02 15:21 G 37349217.97 37349218.14 37349218.32 0.0500 0.0256

Mars 97549-03-07 13:40 G 37350165.90 37350166.07 37350166.24 0.1776 0.0343

Saturn 97551-07-11 16:33 G 37351022.10 37351022.19 37351022.30 0.0263 0.0230

Saturn 97552-02-25 17:45 G 37351251.03 37351251.24 37351251.46 0.0262 0.0021

Jupiter 97552-06-01 03:35 G 37351347.45 37351347.65 37351347.85 0.0525 0.0017

Saturn 97552-10-11 17:16 G 37351480.07 37351480.22 37351480.38 0.0260 0.0183

Mars 97555-08-19 15:21 G 37352521.97 37352522.14 37352522.32 0.1766 0.0115

Jupiter 97558-04-07 12:43 G 37353483.82 37353484.03 37353484.23 0.0500 0.0077

Jupiter 97564-02-05 00:14 G 37355613.32 37355613.51 37355613.70 0.0524 0.0185

Saturn 97567-03-18 08:09 G 37356750.72 37356750.84 37356750.97 0.0300 0.0239

Neptune 97567-07-12 12:00 G 37356866.93 37356867.00 37356867.12 0.0088 0.0079

Saturn 97567-11-03 09:35 G 37356980.70 37356980.90 37356981.10 0.0302 0.0067

Neptune 97568-02-23 01:40 G 37357092.44 37357092.57 37357092.72 0.0088 0.0068

Neptune 97568-10-05 14:38 G 37357317.97 37357318.11 37357318.30 0.0088 0.0058

Neptune 97569-05-19 04:19 G 37357543.50 37357543.68 37357543.88 0.0088 0.0047

Jupiter 97569-12-11 08:09 G 37357749.64 37357749.84 37357750.05 0.0501 0.0109

Neptune 97569-12-30 18:00 G 37357769.05 37357769.25 37357769.45 0.0088 0.0036

Neptune 97570-08-13 07:11 G 37357994.59 37357994.80 37357995.02 0.0088 0.0026

Neptune 97571-03-26 20:38 G 37358220.14 37358220.36 37358220.58 0.0088 0.0015

Neptune 97571-11-07 09:50 G 37358445.69 37358445.91 37358446.14 0.0088 0.0005

Neptune 97572-06-19 23:16 G 37358671.25 37358671.47 37358671.69 0.0088 0.0006

Neptune 97573-01-31 12:28 G 37358896.81 37358897.02 37358897.25 0.0088 0.0017

Neptune 97573-09-14 01:55 G 37359122.37 37359122.58 37359122.80 0.0088 0.0027

Neptune 97574-04-27 14:52 G 37359347.93 37359348.12 37359348.34 0.0088 0.0038

Neptune 97574-12-09 04:33 G 37359573.50 37359573.69 37359573.87 0.0088 0.0048

Neptune 97575-07-22 17:31 G 37359799.08 37359799.23 37359799.41 0.0088 0.0059

Jupiter 97575-10-10 21:07 G 37359879.25 37359879.38 37359879.52 0.0523 0.0380

Neptune 97576-03-04 06:28 G 37360024.66 37360024.77 37360024.93 0.0088 0.0070

Pluto 97576-05-30 09:50 G 37360111.87 37360111.91 37360112.01 0.0065 0.0062

Jupiter 97576-06-03 22:33 G 37360116.29 37360116.44 37360116.59 0.0526 0.0336

Neptune 97576-10-15 19:40 G 37360250.25 37360250.32 37360250.43 0.0088 0.0080

Pluto 97577-01-10 14:09 G 37360336.89 37360337.09 37360337.31 0.0065 0.0020

Pluto 97577-08-23 18:00 G 37360562.06 37360562.25 37360562.47 0.0065 0.0022

Uranus 97577-09-16 10:04 G 37360585.89 37360585.92 37360585.98 0.0135 0.0133

Pluto 97578-04-05 21:50 G 37360787.40 37360787.41 37360787.46 0.0066 0.0065

Uranus 97578-04-30 16:04 G 37360812.06 37360812.17 37360812.30 0.0136 0.0112

Uranus 97578-12-12 22:04 G 37361038.26 37361038.42 37361038.58 0.0136 0.0091

Uranus 97579-07-27 04:04 G 37361264.49 37361264.67 37361264.86 0.0136 0.0070

Uranus 97580-03-09 10:19 G 37361490.73 37361490.93 37361491.14 0.0136 0.0049

Uranus 97580-10-21 16:33 G 37361716.98 37361717.19 37361717.41 0.0136 0.0028

Saturn 97581-01-20 20:52 G 37361808.24 37361808.37 37361808.52 0.0263 0.0197

Uranus 97581-06-04 23:02 G 37361943.25 37361943.46 37361943.68 0.0136 0.0006

Jupiter 97581-08-16 04:04 G 37362015.51 37362015.67 37362015.84 0.0503 0.0292

Saturn 97581-09-06 22:04 G 37362037.20 37362037.42 37362037.63 0.0261 0.0011

Uranus 97582-01-17 05:31 G 37362169.52 37362169.73 37362169.95 0.0137 0.0017

Jupiter 97582-04-10 02:24 G 37362252.46 37362252.60 37362252.75 0.0500 0.0358

Saturn 97582-04-23 21:21 G 37362266.28 37362266.39 37362266.52 0.0260 0.0214

Uranus 97582-08-31 12:14 G 37362395.82 37362396.01 37362396.23 0.0137 0.0039

Uranus 97583-04-14 19:26 G 37362622.12 37362622.31 37362622.51 0.0137 0.0060

Uranus 97583-11-27 02:24 G 37362848.43 37362848.60 37362848.78 0.0137 0.0083

Uranus 97584-07-10 09:50 G 37363074.77 37363074.91 37363075.05 0.0137 0.0105

Uranus 97585-02-21 17:16 G 37363301.14 37363301.22 37363301.30 0.0138 0.0127

Jupiter 97588-02-07 16:48 G 37364382.01 37364382.20 37364382.39 0.0525 0.0132

Jupiter 97593-04-21 00:00 G 37366281.44 37366281.50 37366281.57 0.0504 0.0475

Jupiter 97593-12-14 00:00 G 37366518.31 37366518.50 37366518.70 0.0500 0.0181

Saturn 97596-09-27 17:31 G 37367537.08 37367537.23 37367537.39 0.0300 0.0192

Saturn 97597-05-15 19:11 G 37367767.11 37367767.30 37367767.49 0.0302 0.0116

Jupiter 97599-10-13 12:14 G 37368647.81 37368648.01 37368648.21 0.0524 0.0070

Jupiter 97605-08-18 21:21 G 37370784.18 37370784.39 37370784.60 0.0501 0.0003

Saturn 97610-08-03 02:52 G 37372594.46 37372594.62 37372594.80 0.0263 0.0163

Saturn 97611-03-20 03:50 G 37372823.45 37372823.66 37372823.87 0.0261 0.0046

Jupiter 97611-06-18 06:57 G 37372913.62 37372913.79 37372913.96 0.0523 0.0275

Saturn 97611-11-04 03:07 G 37373052.58 37373052.63 37373052.70 0.0260 0.0248

Jupiter 97612-02-10 09:07 G 37373150.78 37373150.88 37373150.99 0.0527 0.0446

Mars 97615-01-02 21:21 G 37374208.22 37374208.39 37374208.57 0.1772 0.0042

Jupiter 97617-04-23 18:00 G 37375050.06 37375050.25 37375050.44 0.0502 0.0185

Jupiter 97617-12-16 15:07 G 37375287.06 37375287.13 37375287.21 0.0499 0.0459

Uranus 97618-08-17 20:24 G 37375531.30 37375531.35 37375531.43 0.0143 0.0136

Uranus 97619-04-01 08:09 G 37375757.72 37375757.84 37375757.99 0.0142 0.0111

Uranus 97619-11-13 19:40 G 37375984.16 37375984.32 37375984.51 0.0142 0.0086

Uranus 97620-06-27 07:11 G 37376210.61 37376210.80 37376211.01 0.0142 0.0060

Uranus 97621-02-08 18:43 G 37376437.07 37376437.28 37376437.50 0.0142 0.0035

Mars 97621-06-15 23:02 G 37376564.29 37376564.46 37376564.64 0.1771 0.0264

Uranus 97621-09-23 05:45 G 37376663.53 37376663.74 37376663.96 0.0142 0.0010

Uranus 97622-05-07 16:33 G 37376889.97 37376890.19 37376890.41 0.0142 0.0015

Uranus 97622-12-20 03:07 G 37377116.42 37377116.63 37377116.84 0.0141 0.0040

Jupiter 97623-02-21 04:04 G 37377179.59 37377179.67 37377179.76 0.0522 0.0469

Uranus 97623-08-03 13:11 G 37377342.87 37377343.05 37377343.26 0.0141 0.0064

Jupiter 97623-10-16 05:02 G 37377416.53 37377416.71 37377416.88 0.0526 0.0244

Uranus 97624-03-16 23:31 G 37377569.32 37377569.48 37377569.66 0.0141 0.0088

Uranus 97624-10-29 09:21 G 37377795.77 37377795.89 37377796.03 0.0141 0.0112

Uranus 97625-06-12 18:57 G 37378022.25 37378022.29 37378022.37 0.0141 0.0135

Saturn 97626-04-10 03:07 G 37378323.45 37378323.63 37378323.82 0.0300 0.0140

Saturn 97626-11-26 05:02 G 37378553.54 37378553.71 37378553.88 0.0302 0.0169

Jupiter 97628-12-27 12:14 G 37379315.88 37379316.01 37379316.16 0.0503 0.0373

Jupiter 97629-08-21 11:02 G 37379552.79 37379552.96 37379553.14 0.0500 0.0280

Moon 97635-03-22 00:00 G 37381591.35 37381591.50 37381591.65 0.2627 0.1026

Earth 97635-03-22 05:45 G 37381591.58 37381591.74 37381591.90 0.2628 0.0308 *

Jupiter 97635-06-21 01:11 G 37381682.35 37381682.55 37381682.75 0.0525 0.0044

Saturn 97640-02-13 08:24 G 37383380.66 37383380.85 37383381.04 0.0262 0.0128

Saturn 97640-09-29 08:52 G 37383609.67 37383609.87 37383610.08 0.0261 0.0080

Jupiter 97641-04-26 07:40 G 37383818.62 37383818.82 37383819.03 0.0501 0.0099

Jupiter 97647-02-23 20:09 G 37385948.15 37385948.34 37385948.53 0.0523 0.0160

Neptune 97648-06-02 00:43 G 37386412.50 37386412.53 37386412.58 0.0090 0.0088

Neptune 97649-01-13 13:11 G 37386637.97 37386638.05 37386638.18 0.0090 0.0078

Neptune 97649-08-27 01:55 G 37386863.46 37386863.58 37386863.74 0.0089 0.0067

Neptune 97650-04-09 14:52 G 37387088.96 37387089.12 37387089.30 0.0089 0.0056

Neptune 97650-11-21 03:21 G 37387314.47 37387314.64 37387314.84 0.0089 0.0045

Neptune 97651-07-04 16:19 G 37387539.99 37387540.18 37387540.39 0.0089 0.0034

Neptune 97652-02-15 05:02 G 37387765.51 37387765.71 37387765.93 0.0089 0.0024

Neptune 97652-09-27 17:45 G 37387991.03 37387991.24 37387991.46 0.0089 0.0013

Jupiter 97652-12-30 04:33 G 37388084.49 37388084.69 37388084.90 0.0502 0.0084

Neptune 97653-05-11 06:28 G 37388216.56 37388216.77 37388216.99 0.0089 0.0002

Neptune 97653-12-22 19:11 G 37388442.09 37388442.30 37388442.52 0.0089 0.0009

Neptune 97654-08-05 07:55 G 37388667.62 37388667.83 37388668.04 0.0089 0.0020

Neptune 97655-03-18 20:24 G 37388893.16 37388893.35 37388893.56 0.0089 0.0031

Saturn 97655-10-21 13:40 G 37389109.88 37389110.07 37389110.27 0.0301 0.0090

Neptune 97655-10-30 09:07 G 37389118.70 37389118.88 37389119.08 0.0089 0.0041

Saturn 97656-06-07 15:50 G 37389340.03 37389340.16 37389340.31 0.0302 0.0222

Neptune 97656-06-11 21:35 G 37389344.24 37389344.40 37389344.60 0.0089 0.0053

Neptune 97657-01-23 10:19 G 37389569.80 37389569.93 37389570.10 0.0089 0.0063

Neptune 97657-09-05 23:16 G 37389795.36 37389795.47 37389795.60 0.0089 0.0074

Neptune 97658-04-19 11:45 G 37390020.94 37390020.99 37390021.08 0.0089 0.0085

Jupiter 97658-10-29 15:50 G 37390214.02 37390214.16 37390214.31 0.0522 0.0359

Jupiter 97659-06-23 17:02 G 37390451.06 37390451.21 37390451.35 0.0526 0.0358

Uranus 97661-12-29 03:21 G 37391370.55 37391370.64 37391370.75 0.0135 0.0119

Uranus 97662-08-12 09:21 G 37391596.75 37391596.89 37391597.04 0.0136 0.0098

Uranus 97663-03-26 15:21 G 37391822.96 37391823.14 37391823.31 0.0136 0.0077

Uranus 97663-11-07 21:07 G 37392049.19 37392049.38 37392049.58 0.0136 0.0056

Uranus 97664-06-21 03:21 G 37392275.44 37392275.64 37392275.85 0.0136 0.0035

Jupiter 97664-09-04 01:26 G 37392350.39 37392350.56 37392350.74 0.0502 0.0267

Uranus 97665-02-02 09:50 G 37392501.69 37392501.91 37392502.12 0.0136 0.0013

Pluto 97665-04-24 00:00 G 37392582.28 37392582.50 37392582.73 0.0079 0.0006

Jupiter 97665-04-28 23:31 G 37392587.35 37392587.48 37392587.61 0.0499 0.0382

Uranus 97665-09-16 16:19 G 37392727.96 37392728.18 37392728.40 0.0136 0.0008

Pluto 97665-12-05 10:33 G 37392807.86 37392807.94 37392808.04 0.0079 0.0072

Uranus 97666-04-30 22:33 G 37392954.24 37392954.44 37392954.66 0.0137 0.0031

Uranus 97666-12-13 05:31 G 37393180.53 37393180.73 37393180.93 0.0137 0.0052

Uranus 97667-07-27 12:28 G 37393406.85 37393407.02 37393407.21 0.0137 0.0074

Uranus 97668-03-09 19:26 G 37393633.17 37393633.31 37393633.48 0.0137 0.0097

Uranus 97668-10-22 02:38 G 37393859.52 37393859.61 37393859.74 0.0137 0.0119

Saturn 97669-08-25 15:07 G 37394166.93 37394167.13 37394167.34 0.0262 0.0092

Saturn 97670-04-11 15:35 G 37394395.96 37394396.15 37394396.34 0.0261 0.0115

Jupiter 97671-02-26 10:48 G 37394716.76 37394716.95 37394717.14 0.0526 0.0151

Jupiter 97676-05-09 21:35 G 37396616.31 37396616.40 37396616.49 0.0503 0.0450

Jupiter 97677-01-01 20:52 G 37396853.18 37396853.37 37396853.56 0.0500 0.0204

Mars 97680-10-30 05:31 G 37398250.56 37398250.73 37398250.90 0.1767 0.0407

Jupiter 97682-11-01 07:11 G 37398982.60 37398982.80 37398983.00 0.0525 0.0051

Saturn 97685-05-03 00:28 G 37399896.32 37399896.52 37399896.73 0.0301 0.0035

Saturn 97685-12-19 02:52 G 37400126.54 37400126.62 37400126.70 0.0302 0.0277

Mars 97687-04-13 07:26 G 37400606.65 37400606.81 37400606.97 0.1775 0.0624

Jupiter 97688-09-06 15:35 G 37401118.94 37401119.15 37401119.36 0.0501 0.0019

Jupiter 97694-07-07 04:19 G 37403248.50 37403248.68 37403248.85 0.0523 0.0248

Jupiter 97695-03-01 06:00 G 37403485.67 37403485.75 37403485.84 0.0526 0.0473

Saturn 97699-03-07 20:52 G 37404953.16 37404953.37 37404953.59 0.0262 0.0056

Saturn 97699-10-22 21:07 G 37405182.21 37405182.38 37405182.56 0.0261 0.0150

Jupiter 97700-05-13 11:31 G 37405384.79 37405384.98 37405385.18 0.0502 0.0167

Jupiter 97701-01-05 09:21 G 37405621.83 37405621.89 37405621.94 0.0499 0.0480

Uranus 97702-11-30 12:57 G 37406315.95 37406316.04 37406316.18 0.0143 0.0122

Uranus 97703-07-15 00:57 G 37406542.39 37406542.54 37406542.71 0.0142 0.0096

Uranus 97704-02-26 12:43 G 37406768.85 37406769.03 37406769.23 0.0142 0.0071

Uranus 97704-10-10 00:00 G 37406995.30 37406995.50 37406995.72 0.0142 0.0046

Uranus 97705-05-24 11:16 G 37407221.75 37407221.97 37407222.19 0.0142 0.0021

Uranus 97706-01-05 22:19 G 37407448.21 37407448.43 37407448.65 0.0142 0.0004

Jupiter 97706-03-13 00:00 G 37407514.40 37407514.50 37407514.60 0.0522 0.0445

Uranus 97706-08-20 08:52 G 37407674.66 37407674.87 37407675.09 0.0142 0.0029

Jupiter 97706-11-05 00:00 G 37407751.34 37407751.50 37407751.68 0.0525 0.0269

Uranus 97707-04-03 19:11 G 37407901.11 37407901.30 37407901.52 0.0141 0.0054

Uranus 97707-11-16 05:31 G 37408127.56 37408127.73 37408127.92 0.0141 0.0078

Uranus 97708-06-29 15:35 G 37408354.01 37408354.15 37408354.31 0.0141 0.0101

Uranus 97709-02-11 01:26 G 37408580.48 37408580.56 37408580.68 0.0141 0.0125

Jupiter 97712-01-17 07:26 G 37409650.67 37409650.81 37409650.97 0.0503 0.0351

Jupiter 97712-09-10 06:28 G 37409887.61 37409887.77 37409887.94 0.0500 0.0304

Saturn 97714-03-29 10:33 G 37410452.88 37410452.94 37410452.99 0.0299 0.0288

Saturn 97714-11-14 11:02 G 37410682.76 37410682.96 37410683.17 0.0301 0.0017

Jupiter 97718-07-10 19:11 G 37412017.10 37412017.30 37412017.50 0.0525 0.0064

Jupiter 97724-05-16 04:19 G 37414153.48 37414153.68 37414153.89 0.0500 0.0123

Saturn 97728-02-02 02:24 G 37415510.51 37415510.60 37415510.72 0.0263 0.0229

Saturn 97728-09-18 04:04 G 37415739.46 37415739.67 37415739.89 0.0262 0.0019

Saturn 97729-05-05 04:04 G 37415968.52 37415968.67 37415968.82 0.0261 0.0187

Jupiter 97730-03-15 13:11 G 37416282.86 37416283.05 37416283.24 0.0524 0.0143

Neptune 97731-10-14 21:07 G 37416861.32 37416861.38 37416861.47 0.0088 0.0082

Neptune 97732-05-27 10:04 G 37417086.82 37417086.92 37417087.08 0.0088 0.0072

Neptune 97733-01-08 00:00 G 37417312.35 37417312.50 37417312.67 0.0088 0.0061

Neptune 97733-08-21 12:57 G 37417537.88 37417538.04 37417538.25 0.0088 0.0051

Neptune 97734-04-04 02:38 G 37417763.42 37417763.61 37417763.82 0.0088 0.0040

Neptune 97734-11-15 16:04 G 37417988.96 37417989.17 37417989.39 0.0088 0.0029

Neptune 97735-06-29 05:16 G 37418214.51 37418214.72 37418214.95 0.0088 0.0019

Jupiter 97736-01-20 01:11 G 37418419.35 37418419.55 37418419.76 0.0501 0.0059

Neptune 97736-02-09 18:57 G 37418440.07 37418440.29 37418440.51 0.0088 0.0008

Neptune 97736-09-22 08:24 G 37418665.62 37418665.85 37418666.07 0.0088 0.0003

Neptune 97737-05-05 21:35 G 37418891.18 37418891.40 37418891.62 0.0088 0.0013

Neptune 97737-12-17 10:48 G 37419116.74 37419116.95 37419117.17 0.0088 0.0024

Neptune 97738-07-31 00:00 G 37419342.31 37419342.50 37419342.72 0.0088 0.0035

Neptune 97739-03-13 13:26 G 37419567.88 37419568.06 37419568.26 0.0088 0.0045

Neptune 97739-10-25 02:24 G 37419793.45 37419793.60 37419793.79 0.0088 0.0056

Neptune 97740-06-06 15:50 G 37420019.03 37420019.16 37420019.32 0.0088 0.0066

Moon 97740-09-21 20:52 G 37420126.27 37420126.37 37420126.46 0.2706 0.2096

Earth 97740-09-22 01:55 G 37420126.50 37420126.58 37420126.65 0.2704 0.2313

Neptune 97741-01-18 05:02 G 37420244.63 37420244.71 37420244.84 0.0088 0.0077

Neptune 97741-08-31 18:28 G 37420470.26 37420470.27 37420470.31 0.0088 0.0087

Jupiter 97741-11-18 10:04 G 37420548.78 37420548.92 37420549.08 0.0523 0.0341

Jupiter 97742-07-13 11:45 G 37420785.85 37420785.99 37420786.13 0.0526 0.0379

Saturn 97743-10-09 21:07 G 37421239.25 37421239.38 37421239.50 0.0299 0.0235

Saturn 97744-05-26 22:04 G 37421469.22 37421469.42 37421469.62 0.0301 0.0072

Uranus 97745-08-29 14:38 G 37421929.04 37421929.11 37421929.20 0.0135 0.0126

Uranus 97746-04-12 20:09 G 37422155.22 37422155.34 37422155.49 0.0135 0.0105

Mars 97746-08-28 13:11 G 37422292.89 37422293.05 37422293.20 0.1763 0.0783

Uranus 97746-11-25 01:55 G 37422381.43 37422381.58 37422381.76 0.0136 0.0085

Uranus 97747-07-09 08:09 G 37422607.66 37422607.84 37422608.04 0.0136 0.0064

Jupiter 97747-09-24 18:57 G 37422685.12 37422685.29 37422685.48 0.0502 0.0249

Uranus 97748-02-20 14:09 G 37422833.89 37422834.09 37422834.30 0.0136 0.0043

Jupiter 97748-05-18 17:02 G 37422922.09 37422922.21 37422922.34 0.0499 0.0402

Moon 97748-09-19 15:07 G 37423046.00 37423046.13 37423046.26 0.2711 0.1339

Earth 97748-09-19 17:16 G 37423046.08 37423046.22 37423046.36 0.2704 0.1231 *

Uranus 97748-10-03 20:24 G 37423060.14 37423060.35 37423060.57 0.0136 0.0021

Uranus 97749-05-18 02:38 G 37423286.40 37423286.61 37423286.83 0.0136 0.0003

Uranus 97749-12-30 09:07 G 37423512.67 37423512.88 37423513.10 0.0136 0.0022

Uranus 97750-08-13 15:50 G 37423738.96 37423739.16 37423739.37 0.0137 0.0044

Uranus 97751-03-27 22:33 G 37423965.26 37423965.44 37423965.64 0.0137 0.0066

Uranus 97751-11-09 05:16 G 37424191.57 37424191.72 37424191.91 0.0137 0.0089

Uranus 97752-06-22 12:57 G 37424417.91 37424418.04 37424418.17 0.0137 0.0110

Uranus 97753-02-03 19:55 G 37424644.29 37424644.33 37424644.41 0.0137 0.0132

Mars 97753-02-08 14:52 G 37424648.98 37424649.12 37424649.26 0.1780 0.1011

Jupiter 97754-03-18 07:55 G 37425051.65 37425051.83 37425052.02 0.0525 0.0180

Saturn 97757-08-14 08:52 G 37426296.73 37426296.87 37426297.02 0.0263 0.0193

Saturn 97758-03-31 10:04 G 37426525.70 37426525.92 37426526.14 0.0261 0.0016

Saturn 97758-11-15 09:35 G 37426754.80 37426754.90 37426755.02 0.0260 0.0221

Jupiter 97759-05-30 14:24 G 37426951.00 37426951.10 37426951.21 0.0504 0.0434

Jupiter 97760-01-22 14:09 G 37427187.90 37427188.09 37427188.27 0.0500 0.0223

Jupiter 97765-11-21 03:07 G 37429317.43 37429317.63 37429317.82 0.0524 0.0028

Jupiter 97771-09-27 10:48 G 37431453.74 37431453.95 37431454.16 0.0501 0.0041

Saturn 97773-04-21 06:57 G 37432025.64 37432025.79 37432025.96 0.0300 0.0186

Saturn 97773-12-07 08:24 G 37432255.66 37432255.85 37432256.04 0.0302 0.0123

Jupiter 97777-07-26 22:19 G 37433583.26 37433583.43 37433583.62 0.0523 0.0228

Jupiter 97778-03-21 00:00 G 37433820.44 37433820.50 37433820.57 0.0526 0.0493

Jupiter 97783-06-02 08:24 G 37435719.65 37435719.85 37435720.05 0.0502 0.0142

Mars 97785-02-07 22:48 G 37436336.41 37436336.45 37436336.49 0.1765 0.1713

Uranus 97786-07-30 18:43 G 37436874.21 37436874.28 37436874.37 0.0143 0.0132

Saturn 97787-02-24 15:50 G 37437082.99 37437083.16 37437083.34 0.0263 0.0156

Uranus 97787-03-14 06:43 G 37437100.64 37437100.78 37437100.93 0.0143 0.0107

Saturn 97787-10-11 16:48 G 37437311.99 37437312.20 37437312.41 0.0261 0.0053

Uranus 97787-10-26 18:14 G 37437327.09 37437327.26 37437327.45 0.0142 0.0082

Saturn 97788-05-27 16:04 G 37437541.15 37437541.17 37437541.21 0.0260 0.0257

Uranus 97788-06-09 05:31 G 37437553.54 37437553.73 37437553.94 0.0142 0.0057

Uranus 97789-01-21 17:02 G 37437780.00 37437780.21 37437780.43 0.0142 0.0032

Jupiter 97789-03-31 17:02 G 37437849.10 37437849.21 37437849.33 0.0522 0.0430

Uranus 97789-09-05 04:19 G 37438006.46 37438006.68 37438006.90 0.0142 0.0007

Jupiter 97789-11-23 17:31 G 37438086.07 37438086.23 37438086.40 0.0526 0.0287

Uranus 97790-04-19 14:52 G 37438232.91 37438233.12 37438233.34 0.0142 0.0018

Uranus 97790-12-02 01:26 G 37438459.36 37438459.56 37438459.77 0.0142 0.0042

Uranus 97791-07-16 12:00 G 37438685.81 37438686.00 37438686.19 0.0141 0.0067

Uranus 97792-02-27 22:19 G 37438912.27 37438912.43 37438912.60 0.0141 0.0090

Uranus 97792-10-11 08:09 G 37439138.72 37439138.84 37439138.98 0.0141 0.0114

Uranus 97793-05-25 18:00 G 37439365.21 37439365.25 37439365.30 0.0141 0.0137

Jupiter 97795-02-05 04:33 G 37439985.54 37439985.69 37439985.85 0.0503 0.0326

Jupiter 97795-09-30 03:21 G 37440222.48 37440222.64 37440222.79 0.0500 0.0329

Jupiter 97801-07-30 13:55 G 37442351.89 37442352.08 37442352.28 0.0525 0.0086

Saturn 97802-11-02 16:33 G 37442812.01 37442812.19 37442812.38 0.0300 0.0135

Saturn 97803-06-20 18:14 G 37443042.10 37443042.26 37443042.44 0.0302 0.0176

Jupiter 97807-06-05 22:04 G 37444488.22 37444488.42 37444488.62 0.0500 0.0143

Mars 97812-06-25 21:35 G 37446335.26 37446335.40 37446335.53 0.1758 0.1127

Jupiter 97813-04-04 11:16 G 37446617.78 37446617.97 37446618.17 0.0524 0.0113

Neptune 97813-04-18 23:02 G 37446632.37 37446632.46 37446632.55 0.0090 0.0081

Neptune 97813-11-30 11:16 G 37446857.86 37446857.97 37446858.13 0.0090 0.0071

Neptune 97814-07-14 00:14 G 37447083.37 37447083.51 37447083.69 0.0089 0.0060

Neptune 97815-02-24 13:11 G 37447308.88 37447309.05 37447309.24 0.0089 0.0049

Neptune 97815-10-08 01:40 G 37447534.39 37447534.57 37447534.78 0.0089 0.0038

Neptune 97816-05-20 14:24 G 37447759.91 37447760.10 37447760.32 0.0089 0.0028

Saturn 97816-09-06 21:35 G 37447869.22 37447869.40 37447869.60 0.0262 0.0122

Neptune 97817-01-01 03:21 G 37447985.43 37447985.64 37447985.85 0.0089 0.0016

Saturn 97817-04-23 22:33 G 37448098.23 37448098.44 37448098.64 0.0261 0.0087

Neptune 97817-08-14 16:04 G 37448210.96 37448211.17 37448211.39 0.0089 0.0006

Neptune 97818-03-28 04:48 G 37448436.48 37448436.70 37448436.91 0.0089 0.0005

Neptune 97818-11-08 17:16 G 37448662.01 37448662.22 37448662.44 0.0089 0.0016

Mars 97818-12-07 22:33 G 37448691.34 37448691.44 37448691.55 0.1785 0.1396

Jupiter 97819-02-08 18:28 G 37448754.06 37448754.27 37448754.47 0.0501 0.0041

Neptune 97819-06-22 06:14 G 37448887.55 37448887.76 37448887.96 0.0089 0.0027

Neptune 97820-02-02 18:43 G 37449113.09 37449113.28 37449113.48 0.0089 0.0038

Neptune 97820-09-15 07:11 G 37449338.63 37449338.80 37449338.99 0.0089 0.0049

Neptune 97821-04-28 19:40 G 37449564.18 37449564.32 37449564.50 0.0089 0.0059

Neptune 97821-12-10 08:38 G 37449789.73 37449789.86 37449790.00 0.0089 0.0070

Neptune 97822-07-23 21:07 G 37450015.31 37450015.38 37450015.49 0.0089 0.0081

Pluto 97823-02-10 14:24 G 37450216.96 37450217.10 37450217.29 0.0065 0.0041

Pluto 97823-09-23 18:43 G 37450442.07 37450442.28 37450442.50 0.0065 0.0002

Pluto 97824-05-05 22:19 G 37450667.29 37450667.43 37450667.61 0.0065 0.0044

Jupiter 97824-12-08 07:26 G 37450883.65 37450883.81 37450883.97 0.0522 0.0313

Jupiter 97825-08-02 08:09 G 37451120.72 37451120.84 37451120.97 0.0526 0.0407

Uranus 97829-04-30 01:55 G 37452487.55 37452487.58 37452487.64 0.0135 0.0133

Uranus 97829-12-12 07:26 G 37452713.71 37452713.81 37452713.95 0.0135 0.0113

Uranus 97830-07-26 13:26 G 37452939.91 37452940.06 37452940.23 0.0136 0.0092

Jupiter 97830-10-14 14:38 G 37453019.92 37453020.11 37453020.30 0.0503 0.0226

Uranus 97831-03-09 19:26 G 37453166.13 37453166.31 37453166.50 0.0136 0.0071

Jupiter 97831-06-08 12:57 G 37453256.94 37453257.04 37453257.15 0.0500 0.0427

Uranus 97831-10-22 01:26 G 37453392.36 37453392.56 37453392.76 0.0136 0.0050

Saturn 97832-05-15 01:26 G 37453598.37 37453598.56 37453598.76 0.0301 0.0088

Uranus 97832-06-04 07:26 G 37453618.60 37453618.81 37453619.02 0.0136 0.0029

Saturn 97832-12-31 03:21 G 37453828.51 37453828.64 37453828.78 0.0303 0.0224

Uranus 97833-01-16 13:40 G 37453844.86 37453845.07 37453845.29 0.0136 0.0008

Uranus 97833-08-30 20:09 G 37454071.13 37454071.34 37454071.56 0.0136 0.0014

Uranus 97834-04-14 02:38 G 37454297.41 37454297.61 37454297.82 0.0137 0.0036

Uranus 97834-11-26 09:21 G 37454523.70 37454523.89 37454524.09 0.0137 0.0058

Uranus 97835-07-10 16:04 G 37454750.01 37454750.17 37454750.36 0.0137 0.0080

Uranus 97836-02-21 23:31 G 37454976.34 37454976.48 37454976.63 0.0137 0.0101

Jupiter 97836-08-13 03:35 G 37455149.61 37455149.65 37455149.69 0.0521 0.0508

Uranus 97836-10-05 06:28 G 37455202.69 37455202.77 37455202.88 0.0137 0.0124

Jupiter 97837-04-07 02:52 G 37455386.44 37455386.62 37455386.81 0.0525 0.0203

Jupiter 97842-06-19 11:31 G 37457285.87 37457285.98 37457286.11 0.0504 0.0409

Jupiter 97843-02-11 11:16 G 37457522.80 37457522.97 37457523.15 0.0500 0.0250

Mars 97844-06-25 04:04 G 37458022.59 37458022.67 37458022.76 0.1773 0.1532

Saturn 97846-03-20 03:50 G 37458655.46 37458655.66 37458655.87 0.0262 0.0086

Saturn 97846-11-04 04:19 G 37458884.49 37458884.68 37458884.87 0.0261 0.0122

Jupiter 97848-12-10 21:21 G 37459652.19 37459652.39 37459652.59 0.0524 0.0011

Mars 97850-12-07 06:28 G 37460378.66 37460378.77 37460378.88 0.1770 0.1340

Jupiter 97854-10-17 08:38 G 37461788.65 37461788.86 37461789.06 0.0501 0.0070

Jupiter 97860-08-15 18:14 G 37463918.08 37463918.26 37463918.45 0.0523 0.0204

Jupiter 97861-04-09 20:24 G 37464155.32 37464155.35 37464155.38 0.0527 0.0519

Saturn 97861-11-25 10:04 G 37464384.72 37464384.92 37464385.13 0.0301 0.0040

Saturn 97862-07-13 12:14 G 37464614.94 37464615.01 37464615.11 0.0302 0.0274

Jupiter 97866-06-22 02:38 G 37466054.41 37466054.61 37466054.82 0.0502 0.0120

Uranus 97870-03-31 00:00 G 37467432.50 37467432.50 37467432.52 0.0143 0.0142

Uranus 97870-11-12 11:45 G 37467658.88 37467658.99 37467659.12 0.0143 0.0118

Uranus 97871-06-26 23:45 G 37467885.32 37467885.49 37467885.65 0.0142 0.0093

Uranus 97872-02-08 11:02 G 37468111.78 37468111.96 37468112.16 0.0142 0.0068

Jupiter 97872-04-20 16:19 G 37468184.06 37468184.18 37468184.31 0.0522 0.0397

Uranus 97872-09-21 22:19 G 37468338.23 37468338.43 37468338.65 0.0142 0.0044

Jupiter 97872-12-13 17:02 G 37468421.06 37468421.21 37468421.37 0.0526 0.0322

Uranus 97873-05-06 09:35 G 37468564.68 37468564.90 37468565.12 0.0142 0.0018

Uranus 97873-12-18 20:38 G 37468791.14 37468791.36 37468791.57 0.0142 0.0007

Uranus 97874-08-02 07:11 G 37469017.59 37469017.80 37469018.02 0.0142 0.0031

Uranus 97875-03-16 17:45 G 37469244.04 37469244.24 37469244.45 0.0141 0.0056

Saturn 97875-09-30 09:07 G 37469441.67 37469441.88 37469442.10 0.0262 0.0053

Uranus 97875-10-29 04:04 G 37469470.49 37469470.67 37469470.85 0.0141 0.0080

Saturn 97876-05-16 09:07 G 37469670.72 37469670.88 37469671.06 0.0260 0.0155

Uranus 97876-06-11 14:09 G 37469696.95 37469697.09 37469697.24 0.0141 0.0103

Uranus 97877-01-24 00:00 G 37469923.42 37469923.50 37469923.61 0.0141 0.0127

Jupiter 97878-02-24 22:48 G 37470320.28 37470320.45 37470320.61 0.0503 0.0305

Earth 97878-03-24 06:43 G 37470347.61 37470347.78 37470347.94 0.2628 0.0217

Moon 97878-03-24 11:31 G 37470347.83 37470347.98 37470348.13 0.2632 0.0602 *

Mars 97878-04-23 05:31 G 37470377.64 37470377.73 37470377.82 0.1753 0.1479

Jupiter 97878-10-19 21:21 G 37470557.25 37470557.39 37470557.54 0.0500 0.0351

Jupiter 97884-08-18 12:28 G 37472686.83 37472687.02 37472687.22 0.0525 0.0118

Jupiter 97889-10-30 18:14 G 37474586.23 37474586.26 37474586.32 0.0504 0.0491

Jupiter 97890-06-24 18:57 G 37474823.09 37474823.29 37474823.48 0.0501 0.0171

Saturn 97891-06-07 17:02 G 37475171.01 37475171.21 37475171.42 0.0301 0.0006

Neptune 97896-01-17 06:28 G 37476855.73 37476855.77 37476855.83 0.0088 0.0085

Jupiter 97896-04-23 07:55 G 37476952.64 37476952.83 37476953.03 0.0524 0.0087

Neptune 97896-08-29 19:26 G 37477081.22 37477081.31 37477081.45 0.0088 0.0075

Neptune 97897-04-12 09:07 G 37477306.73 37477306.88 37477307.04 0.0088 0.0064

Neptune 97897-11-23 22:04 G 37477532.26 37477532.42 37477532.62 0.0088 0.0054

Neptune 97898-07-07 11:45 G 37477757.80 37477757.99 37477758.19 0.0088 0.0043

Neptune 97899-02-18 00:57 G 37477983.34 37477983.54 37477983.76 0.0088 0.0033

Neptune 97899-10-01 14:24 G 37478208.89 37478209.10 37478209.32 0.0088 0.0022

Neptune 97900-05-15 03:50 G 37478434.44 37478434.66 37478434.88 0.0088 0.0011

Neptune 97900-12-26 17:16 G 37478660.00 37478660.22 37478660.45 0.0088 0.0001

Neptune 97901-08-09 06:28 G 37478885.56 37478885.77 37478886.00 0.0088 0.0010

Jupiter 97902-02-28 16:48 G 37479088.99 37479089.20 37479089.41 0.0502 0.0011

Neptune 97902-03-22 19:40 G 37479111.11 37479111.32 37479111.55 0.0088 0.0021

Neptune 97902-11-03 09:07 G 37479336.68 37479336.88 37479337.09 0.0088 0.0031

Neptune 97903-06-16 22:19 G 37479562.25 37479562.43 37479562.64 0.0088 0.0042

Neptune 97904-01-28 12:00 G 37479787.83 37479788.00 37479788.18 0.0088 0.0052

Saturn 97904-08-26 12:28 G 37479998.93 37479999.02 37479999.13 0.0263 0.0231

Neptune 97904-09-10 00:57 G 37480013.41 37480013.54 37480013.71 0.0088 0.0063

Saturn 97905-04-12 14:09 G 37480227.87 37480228.09 37480228.30 0.0261 0.0020

Neptune 97905-04-23 14:38 G 37480238.99 37480239.11 37480239.23 0.0088 0.0073

Saturn 97905-11-27 13:55 G 37480456.94 37480457.08 37480457.24 0.0260 0.0187

Neptune 97905-12-05 03:35 G 37480464.60 37480464.65 37480464.73 0.0088 0.0084

Jupiter 97907-12-29 03:07 G 37481218.46 37481218.63 37481218.80 0.0523 0.0289

Jupiter 97908-08-22 04:04 G 37481455.56 37481455.67 37481455.78 0.0526 0.0432

Mars 97910-04-23 12:14 G 37482064.88 37482065.01 37482065.14 0.1769 0.1163

Pluto 97911-05-25 18:43 G 37482462.13 37482462.28 37482462.46 0.0079 0.0053

Pluto 97912-01-06 05:45 G 37482687.52 37482687.74 37482687.95 0.0079 0.0025

Uranus 97913-08-12 18:57 G 37483272.20 37483272.29 37483272.39 0.0136 0.0120

Jupiter 97913-11-03 13:40 G 37483354.88 37483355.07 37483355.27 0.0503 0.0194

Uranus 97914-03-27 00:28 G 37483498.38 37483498.52 37483498.67 0.0136 0.0100

Jupiter 97914-06-28 11:45 G 37483591.92 37483591.99 37483592.08 0.0499 0.0459

Uranus 97914-11-08 06:14 G 37483724.59 37483724.76 37483724.94 0.0136 0.0079

Uranus 97915-06-22 12:14 G 37483950.82 37483951.01 37483951.21 0.0136 0.0058

Uranus 97916-02-03 18:14 G 37484177.06 37484177.26 37484177.48 0.0136 0.0037

Uranus 97916-09-17 00:43 G 37484403.31 37484403.53 37484403.74 0.0136 0.0016

Mars 97916-10-04 14:09 G 37484420.95 37484421.09 37484421.24 0.1774 0.0974

Uranus 97917-05-01 06:57 G 37484629.57 37484629.79 37484630.01 0.0136 0.0006

Uranus 97917-12-13 13:26 G 37484855.85 37484856.06 37484856.27 0.0137 0.0028

Uranus 97918-07-27 19:55 G 37485082.14 37485082.33 37485082.54 0.0137 0.0050

Uranus 97919-03-11 02:52 G 37485308.44 37485308.62 37485308.81 0.0137 0.0071

Jupiter 97919-09-03 00:43 G 37485484.46 37485484.53 37485484.60 0.0521 0.0482

Uranus 97919-10-23 09:50 G 37485534.76 37485534.91 37485535.08 0.0137 0.0093

Jupiter 97920-04-27 00:43 G 37485721.35 37485721.53 37485721.71 0.0525 0.0232

Saturn 97920-05-02 23:16 G 37485727.37 37485727.47 37485727.57 0.0299 0.0260

Uranus 97920-06-05 17:16 G 37485761.10 37485761.22 37485761.34 0.0137 0.0115

Saturn 97920-12-18 23:45 G 37485957.29 37485957.49 37485957.70 0.0301 0.0048

Uranus	97921-01-18 00:28 G	37485987.51	37485987.52	37485987.55	0.0137	0.0137
Jupiter	97925-07-09 07:26 G	37487620.68	37487620.81	37487620.95	0.0503	0.0384
Jupiter	97926-03-03 06:57 G	37487857.61	37487857.79	37487857.96	0.0500	0.0275
Jupiter	97931-12-31 22:19 G	37489987.23	37489987.43	37489987.63	0.0525	0.0034
Saturn	97934-03-08 17:16 G	37490785.09	37490785.22	37490785.36	0.0263	0.0199
Saturn	97934-10-23 18:28 G	37491014.05	37491014.27	37491014.48	0.0261	0.0012
Saturn	97935-06-09 17:45 G	37491243.14	37491243.24	37491243.37	0.0260	0.0217
Jupiter	97937-11-06 04:04 G	37492123.46	37492123.67	37492123.87	0.0501	0.0094
Jupiter	97943-09-05 18:43 G	37494253.09	37494253.28	37494253.47	0.0523	0.0168
Jupiter	97949-07-12 00:57 G	37496389.34	37496389.54	37496389.74	0.0502	0.0090
Saturn	97949-11-13 03:35 G	37496513.52	37496513.65	37496513.80	0.0300	0.0224
Saturn	97950-07-01 05:02 G	37496743.51	37496743.71	37496743.91	0.0302	0.0086
Uranus	97954-07-13 19:11 G	37498217.22	37498217.30	37498217.41	0.0143	0.0128
Uranus	97955-02-25 07:11 G	37498443.65	37498443.80	37498443.96	0.0142	0.0103
Jupiter	97955-05-11 15:07 G	37498518.99	37498519.13	37498519.28	0.0522	0.0366
Uranus	97955-10-09 18:43 G	37498670.10	37498670.28	37498670.47	0.0142	0.0078
Jupiter	97956-01-03 15:35 G	37498756.00	37498756.15	37498756.29	0.0526	0.0354
Uranus	97956-05-23 06:00 G	37498896.55	37498896.75	37498896.96	0.0142	0.0053
Uranus	97957-01-04 17:16 G	37499123.01	37499123.22	37499123.44	0.0142	0.0028
Uranus	97957-08-19 04:19 G	37499349.46	37499349.68	37499349.90	0.0142	0.0003
Uranus	97958-04-02 14:52 G	37499575.91	37499576.12	37499576.35	0.0142	0.0022
Uranus	97958-11-15 01:40 G	37499802.36	37499802.57	37499802.78	0.0141	0.0046
Uranus	97959-06-29 12:00 G	37500028.82	37500029.00	37500029.20	0.0141	0.0070
Uranus	97960-02-10 22:19 G	37500255.28	37500255.43	37500255.60	0.0141	0.0094
Uranus	97960-09-24 08:09 G	37500481.74	37500481.84	37500481.98	0.0141	0.0117
Jupiter	97961-03-16 22:04 G	37500655.26	37500655.42	37500655.60	0.0503	0.0275
Uranus	97961-05-08 18:00 G	37500708.25	37500708.25	37500708.29	0.0141	0.0140
Jupiter	97961-11-08 21:21 G	37500892.26	37500892.39	37500892.52	0.0500	0.0384
Saturn	97963-09-18 20:52 G	37501571.21	37501571.37	37501571.54	0.0262	0.0168
Saturn	97964-05-04 22:04 G	37501800.20	37501800.42	37501800.63	0.0261	0.0042

Saturn 97964-12-19 21:35 G 37502029.34 37502029.40 37502029.47 0.0260 0.0246

Jupiter 97967-09-08 10:04 G 37503021.73 37503021.92 37503022.11 0.0525 0.0148

Jupiter 97972-11-19 18:57 G 37504921.21 37504921.29 37504921.38 0.0504 0.0456

Jupiter 97973-07-14 19:26 G 37505158.12 37505158.31 37505158.50 0.0501 0.0206

Mars 97976-02-18 20:09 G 37506107.18 37506107.34 37506107.49 0.1764 0.0782

Neptune 97977-07-22 08:38 G 37506626.81 37506626.86 37506626.95 0.0090 0.0085

Neptune 97978-03-04 21:21 G 37506852.28 37506852.39 37506852.52 0.0089 0.0074

Neptune 97978-10-16 09:50 G 37507077.78 37507077.91 37507078.08 0.0089 0.0064

Jupiter 97979-05-14 07:11 G 37507287.60 37507287.80 37507288.00 0.0524 0.0053

Saturn 97979-05-26 09:07 G 37507299.72 37507299.88 37507300.04 0.0300 0.0184

Neptune 97979-05-29 22:48 G 37507303.29 37507303.45 37507303.64 0.0089 0.0052

Neptune 97980-01-10 11:31 G 37507528.80 37507528.98 37507529.18 0.0089 0.0042

Saturn 97980-01-11 10:19 G 37507529.74 37507529.93 37507530.12 0.0302 0.0127

Neptune 97980-08-23 00:28 G 37507754.32 37507754.52 37507754.73 0.0089 0.0031

Neptune 97981-04-05 13:11 G 37507979.84 37507980.05 37507980.26 0.0089 0.0020

Neptune 97981-11-17 01:55 G 37508205.37 37508205.58 37508205.80 0.0089 0.0009

Neptune 97982-06-30 14:52 G 37508430.90 37508431.12 37508431.33 0.0089 0.0002

Mars 97982-08-01 22:04 G 37508463.25 37508463.42 37508463.58 0.1779 0.0598

Neptune 97983-02-11 03:21 G 37508656.43 37508656.64 37508656.86 0.0089 0.0013

Neptune 97983-09-24 15:50 G 37508881.96 37508882.16 37508882.38 0.0089 0.0024

Earth 97983-09-25 03:21 G 37508882.56 37508882.64 37508882.71 0.2704 0.2346

Moon 97983-09-25 08:38 G 37508882.81 37508882.86 37508882.91 0.2706 0.2542

Neptune 97984-05-07 04:33 G 37509107.50 37509107.69 37509107.90 0.0089 0.0034

Neptune 97984-12-18 17:31 G 37509333.04 37509333.23 37509333.41 0.0089 0.0045

Jupiter 97985-03-19 13:55 G 37509423.88 37509424.08 37509424.29 0.0501 0.0022

Neptune 97985-08-01 06:00 G 37509558.59 37509558.75 37509558.93 0.0089 0.0056

Neptune 97986-03-14 18:28 G 37509784.14 37509784.27 37509784.43 0.0089 0.0067

Neptune 97986-10-26 06:57 G 37510009.71 37510009.79 37510009.92 0.0089 0.0078

Neptune 97987-06-08 19:55 G 37510235.31 37510235.33 37510235.38 0.0089 0.0088

Jupiter 97991-01-17 05:31 G 37511553.55 37511553.73 37511553.90 0.0523 0.0249

Jupiter 97991-09-11 06:57 G 37511790.71 37511790.79 37511790.88 0.0526 0.0477

Earth 97991-09-22 18:43 G 37511802.14 37511802.28 37511802.42 0.2705 0.1205

Moon 97991-09-22 23:02 G 37511802.30 37511802.46 37511802.62 0.2701 0.0574 *

Saturn 97993-03-31 00:28 G 37512357.34 37512357.52 37512357.71 0.0262 0.0139

Saturn 97993-11-15 01:11 G 37512586.35 37512586.55 37512586.76 0.0261 0.0071

Jupiter 97996-11-22 11:02 G 37513689.76 37513689.96 37513690.16 0.0502 0.0165

Uranus 97997-04-12 06:00 G 37513830.68 37513830.75 37513830.83 0.0136 0.0127

Jupiter 97997-07-17 08:52 G 37513926.83 37513926.87 37513926.91 0.0499 0.0486

Uranus 97997-11-24 11:31 G 37514056.86 37514056.98 37514057.12 0.0136 0.0107

Uranus 97998-07-08 17:16 G 37514283.07 37514283.22 37514283.40 0.0136 0.0087

Uranus 97999-02-19 23:02 G 37514509.29 37514509.46 37514509.66 0.0136 0.0066

Uranus 97999-10-04 05:02 G 37514735.52 37514735.71 37514735.93 0.0136 0.0045

Uranus 98000-05-17 11:31 G 37514961.76 37514961.98 37514962.19 0.0136 0.0024

Uranus 98000-12-29 17:45 G 37515188.02 37515188.24 37515188.45 0.0136 0.0003

99TH MILLENNIUM CE

This is a list of transits of Venus in the 99th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 98001-08-13 00:14 G 37515414.30 37515414.51 37515414.73 0.0137 0.0019

Uranus 98002-03-27 06:57 G 37515640.58 37515640.79 37515640.99 0.0137 0.0041

Jupiter 98002-09-22 02:52 G 37515819.52 37515819.62 37515819.72 0.0522 0.0444

Uranus 98002-11-08 13:26 G 37515866.88 37515867.06 37515867.26 0.0137 0.0063

Jupiter 98003-05-17 02:52 G 37516056.45 37516056.62 37516056.79 0.0525 0.0274

Uranus 98003-06-22 20:38 G 37516093.19 37516093.36 37516093.53 0.0137 0.0084

Uranus 98004-02-04 03:35 G 37516319.53 37516319.65 37516319.80 0.0137 0.0106

Uranus 98004-09-17 10:48 G 37516545.90 37516545.95 37516546.05 0.0137 0.0129

Jupiter 98008-07-28 07:11 G 37517955.66 37517955.80 37517955.96 0.0503 0.0352

Saturn 98008-12-05 11:31 G 37518085.81 37518085.98 37518086.16 0.0300 0.0153

Jupiter 98009-03-22 06:57 G 37518192.62 37518192.79 37518192.95 0.0500 0.0310

Saturn 98009-07-23 13:11 G 37518315.88 37518316.05 37518316.23 0.0302 0.0160

Jupiter 98015-01-19 22:48 G 37520322.25 37520322.45 37520322.65 0.0524 0.0071

Jupiter 98020-11-25 05:16 G 37522458.52 37522458.72 37522458.92 0.0501 0.0131

Saturn 98022-10-11 02:52 G 37523143.43 37523143.62 37523143.82 0.0262 0.0111

Saturn 98023-05-28 03:21 G 37523372.45 37523372.64 37523372.85 0.0261 0.0098

Jupiter 98026-09-24 18:00 G 37524588.06 37524588.25 37524588.44 0.0523 0.0134

Jupiter 98032-07-31 02:52 G 37526724.42 37526724.62 37526724.83 0.0502 0.0052

Uranus 98038-03-13 02:52 G 37528775.58 37528775.62 37528775.70 0.0143 0.0137

Jupiter 98038-05-30 15:50 G 37528854.01 37528854.16 37528854.32 0.0522 0.0330

Saturn 98038-06-17 15:35 G 37528871.96 37528872.15 37528872.34 0.0300 0.0116

Uranus 98038-10-25 15:07 G 37529001.99 37529002.13 37529002.26 0.0143 0.0112

Jupiter 98039-01-22 16:48 G 37529091.07 37529091.20 37529091.33 0.0526 0.0393

Saturn 98039-02-02 17:16 G 37529102.06 37529102.22 37529102.38 0.0302 0.0197

Uranus 98039-06-09 02:24 G 37529228.44 37529228.60 37529228.78 0.0142 0.0088

Uranus 98040-01-21 14:09 G 37529454.89 37529455.09 37529455.29 0.0142 0.0063

Uranus 98040-09-04 01:11 G 37529681.34 37529681.55 37529681.77 0.0142 0.0038

Uranus 98041-04-18 12:14 G 37529907.79 37529908.01 37529908.23 0.0142 0.0013

Uranus 98041-11-30 23:02 G 37530134.25 37530134.46 37530134.68 0.0142 0.0012

Mars 98041-12-16 04:04 G 37530149.51 37530149.67 37530149.84 0.1760 0.0422

Uranus 98042-07-15 09:50 G 37530360.70 37530360.91 37530361.12 0.0142 0.0036

Uranus 98043-02-26 20:09 G 37530587.16 37530587.34 37530587.55 0.0141 0.0061

Uranus 98043-10-11 06:28 G 37530813.61 37530813.77 37530813.96 0.0141 0.0084

Jupiter 98044-04-04 21:35 G 37530990.22 37530990.40 37530990.58 0.0502 0.0240

Uranus 98044-05-24 16:48 G 37531040.07 37531040.20 37531040.35 0.0141 0.0107

Jupiter 98044-11-27 19:55 G 37531227.22 37531227.33 37531227.45 0.0499 0.0416

Uranus 98045-01-06 02:52 G 37531266.54 37531266.62 37531266.70 0.0141 0.0130

Mars 98048-05-29 05:31 G 37532505.55 37532505.73 37532505.90 0.1783 0.0212

Jupiter 98050-09-27 14:09 G 37533356.91 37533357.09 37533357.28 0.0525 0.0195

Saturn 98052-04-22 05:45 G 37533929.54 37533929.74 37533929.95 0.0262 0.0083

Saturn 98052-12-07 06:00 G 37534158.57 37534158.75 37534158.95 0.0261 0.0126

Jupiter 98055-12-09 18:14 G 37535256.16 37535256.26 37535256.38 0.0504 0.0424

Jupiter 98056-08-02 18:00 G 37535493.07 37535493.25 37535493.43 0.0500 0.0238

Neptune 98060-12-02 05:02 G 37537075.63 37537075.71 37537075.83 0.0088 0.0078

Neptune 98061-07-15 18:43 G 37537301.14 37537301.28 37537301.43 0.0088 0.0067

Neptune 98062-02-26 07:40 G 37537526.67 37537526.82 37537527.01 0.0088 0.0057

Jupiter 98062-06-02 11:02 G 37537622.76 37537622.96 37537623.16 0.0524 0.0009

Neptune 98062-10-09 21:21 G 37537752.21 37537752.39 37537752.59 0.0088 0.0046

Neptune 98063-05-23 10:33 G 37537977.75 37537977.94 37537978.16 0.0088 0.0036

Neptune 98064-01-04 00:00 G 37538203.30 37538203.50 37538203.73 0.0088 0.0025

Neptune 98064-08-16 13:26 G 37538428.84 37538429.06 37538429.29 0.0088 0.0015

Neptune 98065-03-30 02:52 G 37538654.39 37538654.62 37538654.84 0.0088 0.0004

Neptune 98065-11-10 16:04 G 37538879.95 37538880.17 37538880.39 0.0088 0.0007

Neptune 98066-06-24 05:16 G 37539105.51 37539105.72 37539105.95 0.0088 0.0018

Neptune 98067-02-04 18:43 G 37539331.08 37539331.28 37539331.50 0.0088 0.0028

Neptune 98067-09-18 07:55 G 37539556.64 37539556.83 37539557.04 0.0088 0.0039

Saturn 98067-12-28 16:48 G 37539658.01 37539658.20 37539658.40 0.0301 0.0087

Jupiter 98068-04-07 15:21 G 37539758.94 37539759.14 37539759.35 0.0501 0.0056

Neptune 98068-04-30 21:21 G 37539782.21 37539782.39 37539782.58 0.0088 0.0049

Saturn 98068-08-14 18:43 G 37539888.15 37539888.28 37539888.42 0.0303 0.0228

Neptune 98068-12-12 10:33 G 37540007.79 37540007.94 37540008.12 0.0088 0.0060

Neptune 98069-07-26 00:00 G 37540233.38 37540233.50 37540233.64 0.0088 0.0070

Pluto 98069-10-22 17:16 G 37540322.03 37540322.22 37540322.42 0.0065 0.0028

Neptune 98070-03-08 12:57 G 37540458.98 37540459.04 37540459.15 0.0088 0.0082

Pluto 98070-06-04 21:21 G 37540547.18 37540547.39 37540547.60 0.0065 0.0014

Pluto 98071-01-16 00:43 G 37540772.45 37540772.53 37540772.67 0.0065 0.0057

Jupiter 98074-02-05 07:40 G 37541888.64 37541888.82 37541889.00 0.0523 0.0209

Jupiter 98074-09-30 09:07 G 37542125.84 37542125.88 37542125.91 0.0526 0.0517

Jupiter 98079-12-12 13:26 G 37544024.86 37544025.06 37544025.26 0.0502 0.0127

Uranus 98080-12-10 16:19 G 37544389.17 37544389.18 37544389.22 0.0135 0.0135

Uranus 98081-07-24 22:04 G 37544615.32 37544615.42 37544615.55 0.0136 0.0115

Saturn 98081-11-02 06:43 G 37544715.57 37544715.78 37544716.00 0.0262 0.0058

Uranus 98082-03-08 04:04 G 37544841.52 37544841.67 37544841.82 0.0136 0.0094

Saturn 98082-06-19 06:57 G 37544944.62 37544944.79 37544944.97 0.0260 0.0151

Uranus 98082-10-20 09:35 G 37545067.73 37545067.90 37545068.09 0.0136 0.0074

Uranus 98083-06-03 15:21 G 37545293.95 37545294.14 37545294.35 0.0136 0.0053

Uranus 98084-01-15 21:35 G 37545520.20 37545520.40 37545520.62 0.0136 0.0032

Uranus 98084-08-29 04:04 G 37545746.45 37545746.67 37545746.88 0.0136 0.0011

Uranus 98085-04-12 10:19 G 37545972.72 37545972.93 37545973.15 0.0136 0.0011

Jupiter 98085-10-11 03:35 G 37546154.53 37546154.65 37546154.78 0.0522 0.0408

Uranus 98085-11-24 16:48 G 37546199.00 37546199.20 37546199.42 0.0137 0.0033

Jupiter 98086-06-05 03:50 G 37546391.50 37546391.66 37546391.82 0.0525 0.0313

Uranus 98086-07-08 23:45 G 37546425.29 37546425.49 37546425.69 0.0137 0.0054

Uranus 98087-02-20 06:28 G 37546651.60 37546651.77 37546651.96 0.0137 0.0076

Uranus 98087-10-04 13:40 G 37546877.92 37546878.07 37546878.23 0.0137 0.0097

Uranus 98088-05-17 20:38 G 37547104.27 37547104.36 37547104.48 0.0137 0.0119

Jupiter 98091-08-17 10:33 G 37548290.78 37548290.94 37548291.11 0.0503 0.0310

Jupiter 98092-04-10 10:04 G 37548527.77 37548527.92 37548528.06 0.0500 0.0351

Saturn 98097-07-09 19:40 G 37550444.11 37550444.32 37550444.52 0.0300 0.0053

Jupiter 98098-02-08 00:57 G 37550657.35 37550657.54 37550657.74 0.0525 0.0113

Saturn 98098-02-24 21:35 G 37550674.30 37550674.40 37550674.50 0.0302 0.0261

Jupiter 98103-04-23 05:16 G 37552556.70 37552556.72 37552556.76 0.0504 0.0497

Jupiter 98103-12-16 05:45 G 37552793.54 37552793.74 37552793.93 0.0500 0.0167

Mars 98107-10-14 12:43 G 37554191.85 37554192.03 37554192.20 0.1755 0.0076

Jupiter 98109-10-14 22:33 G 37554923.25 37554923.44 37554923.64 0.0524 0.0088

Saturn 98110-09-29 07:11 G 37555272.73 37555272.80 37555272.88 0.0264 0.0245

Saturn 98111-05-16 08:52 G 37555501.66 37555501.87 37555502.09 0.0262 0.0032

Saturn 98111-12-31 09:21 G 37555730.73 37555730.89 37555731.04 0.0260 0.0177

Mars 98114-03-27 13:26 G 37556547.88 37556548.06 37556548.23 0.1788 0.0172

Jupiter 98115-08-21 03:21 G 37557059.43 37557059.64 37557059.84 0.0501 0.0018

Moon 98121-03-26 04:19 G 37559103.52 37559103.68 37559103.85 0.2623 0.0736

Earth 98121-03-26 07:40 G 37559103.66 37559103.82 37559103.98 0.2628 0.0082 *

Jupiter 98121-06-19 20:24 G 37559189.19 37559189.35 37559189.52 0.0523 0.0286

Jupiter 98122-02-11 21:35 G 37559426.30 37559426.40 37559426.51 0.0526 0.0441

Uranus 98122-06-25 22:48 G 37559560.34 37559560.45 37559560.57 0.0143 0.0121

Uranus 98123-02-07 10:33 G 37559786.79 37559786.94 37559787.11 0.0142 0.0097

Uranus 98123-09-21 22:19 G 37560013.24 37560013.43 37560013.62 0.0142 0.0072

Uranus 98124-05-05 09:21 G 37560239.69 37560239.89 37560240.11 0.0142 0.0047

Uranus 98124-12-17 20:38 G 37560466.15 37560466.36 37560466.58 0.0142 0.0023

Uranus 98125-08-01 07:40 G 37560692.60 37560692.82 37560693.04 0.0142 0.0003

Uranus 98126-03-15 18:43 G 37560919.06 37560919.28 37560919.49 0.0142 0.0027

Uranus 98126-10-28 05:16 G 37561145.52 37561145.72 37561145.93 0.0141 0.0051

Saturn 98127-01-20 19:55 G 37561230.13 37561230.33 37561230.54 0.0301 0.0026

Jupiter 98127-04-26 00:14 G 37561325.31 37561325.51 37561325.70 0.0502 0.0202

Uranus 98127-06-11 15:50 G 37561371.97 37561372.16 37561372.34 0.0141 0.0075

Saturn 98127-09-07 22:04 G 37561460.36 37561460.42 37561460.47 0.0303 0.0290

Jupiter 98127-12-18 22:33 G 37561562.36 37561562.44 37561562.53 0.0500 0.0456

Uranus 98128-01-24 01:55 G 37561598.43 37561598.58 37561598.74 0.0141 0.0098

Uranus 98128-09-06 12:14 G 37561824.90 37561825.01 37561825.12 0.0141 0.0121

Jupiter 98133-02-22 17:45 G 37563455.17 37563455.24 37563455.32 0.0521 0.0481

Jupiter 98133-10-17 17:31 G 37563692.05 37563692.23 37563692.41 0.0525 0.0238

Jupiter 98138-12-29 21:21 G 37565591.26 37565591.39 37565591.53 0.0504 0.0385

Jupiter 98139-08-23 21:21 G 37565828.22 37565828.39 37565828.56 0.0500 0.0279

Saturn 98140-04-10 07:26 G 37566058.71 37566058.81 37566058.94 0.0263 0.0221

Saturn 98140-11-25 09:35 G 37566287.68 37566287.90 37566288.11 0.0261 0.0008

Saturn 98141-07-12 09:35 G 37566516.76 37566516.90 37566517.04 0.0260 0.0200

Neptune 98141-10-24 18:57 G 37566621.27 37566621.29 37566621.35 0.0090 0.0088

Neptune 98142-06-07 08:09 G 37566846.73 37566846.84 37566846.95 0.0090 0.0077

Neptune 98143-01-18 20:24 G 37567072.22 37567072.35 37567072.51 0.0090 0.0067

Neptune 98143-09-01 09:07 G 37567297.72 37567297.88 37567298.06 0.0089 0.0056

Neptune 98144-04-13 21:50 G 37567523.23 37567523.41 37567523.60 0.0089 0.0045

Neptune 98144-11-25 10:19 G 37567748.75 37567748.93 37567749.14 0.0089 0.0035

Jupiter 98145-06-22 12:57 G 37567957.84 37567958.04 37567958.24 0.0524 0.0034

Neptune 98145-07-08 23:16 G 37567974.27 37567974.47 37567974.69 0.0089 0.0024

Neptune 98146-02-19 12:14 G 37568199.79 37568200.01 37568200.22 0.0089 0.0012

Neptune 98146-10-03 00:57 G 37568425.32 37568425.54 37568425.75 0.0089 0.0002

Neptune 98147-05-16 13:26 G 37568650.85 37568651.06 37568651.28 0.0089 0.0009

Neptune 98147-12-28 01:55 G 37568876.38 37568876.58 37568876.81 0.0089 0.0021

Neptune 98148-08-09 14:52 G 37569101.92 37569102.12 37569102.33 0.0089 0.0031

Neptune 98149-03-23 03:35 G 37569327.46 37569327.65 37569327.85 0.0089 0.0041

Neptune 98149-11-03 16:04 G 37569553.01 37569553.17 37569553.36 0.0089 0.0052

Neptune 98150-06-17 04:33 G 37569778.56 37569778.69 37569778.87 0.0089 0.0064

Neptune 98151-01-28 17:31 G 37570004.12 37570004.23 37570004.36 0.0089 0.0074

Jupiter 98151-04-28 19:26 G 37570094.11 37570094.31 37570094.51 0.0501 0.0100

Neptune 98151-09-11 06:00 G 37570229.70 37570229.75 37570229.84 0.0089 0.0085

Saturn 98156-08-01 22:19 G 37572016.22 37572016.43 37572016.64 0.0301 0.0007

Jupiter 98157-02-25 10:33 G 37572223.75 37572223.94 37572224.13 0.0523 0.0166

Pluto 98158-02-03 21:50 G 37572567.22 37572567.41 37572567.63 0.0079 0.0032

Pluto 98158-09-17 08:09 G 37572792.68 37572792.84 37572793.04 0.0079 0.0047

Jupiter 98163-01-01 15:21 G 37574359.93 37574360.14 37574360.34 0.0502 0.0089

Uranus 98165-03-25 08:24 G 37575173.77 37575173.85 37575173.96 0.0135 0.0122

Uranus 98165-11-06 13:55 G 37575399.95 37575400.08 37575400.23 0.0136 0.0102

Uranus 98166-06-20 19:55 G 37575626.16 37575626.33 37575626.50 0.0136 0.0081

Uranus 98167-02-02 01:26 G 37575852.38 37575852.56 37575852.77 0.0136 0.0061

Uranus 98167-09-16 07:40 G 37576078.62 37576078.82 37576079.03 0.0136 0.0040

Uranus 98168-04-29 13:55 G 37576304.87 37576305.08 37576305.29 0.0136 0.0019

Jupiter 98168-10-31 08:09 G 37576489.70 37576489.84 37576489.98 0.0523 0.0364

Uranus 98168-12-11 20:09 G 37576531.13 37576531.34 37576531.56 0.0136 0.0003

Jupiter 98169-06-25 09:21 G 37576726.75 37576726.89 37576727.04 0.0526 0.0364

Uranus 98169-07-26 02:38 G 37576757.40 37576757.61 37576757.83 0.0136 0.0024

Saturn 98169-10-21 09:21 G 37576844.76 37576844.89 37576845.05 0.0264 0.0195

Uranus 98170-03-09 09:21 G 37576983.69 37576983.89 37576984.10 0.0137 0.0046

Saturn 98170-06-07 11:02 G 37577073.75 37577073.96 37577074.18 0.0262 0.0020

Uranus 98170-10-21 16:04 G 37577209.99 37577210.17 37577210.37 0.0137 0.0067

Saturn 98171-01-22 11:02 G 37577302.87 37577302.96 37577303.08 0.0260 0.0227

Uranus 98171-06-04 23:16 G 37577436.30 37577436.47 37577436.63 0.0137 0.0088

Uranus 98172-01-17 06:00 G 37577662.64 37577662.75 37577662.89 0.0137 0.0110

Uranus 98172-08-30 13:26 G 37577889.02 37577889.06 37577889.14 0.0137 0.0132

Mars 98173-08-10 20:38 G 37578234.19 37578234.36 37578234.53 0.1751 0.0291

Jupiter 98174-09-06 12:28 G 37578625.85 37578626.02 37578626.19 0.0502 0.0272

Jupiter 98175-05-01 10:48 G 37578862.82 37578862.95 37578863.08 0.0499 0.0388

Mars 98180-01-22 20:24 G 37580590.19 37580590.35 37580590.52 0.1793 0.0576

Jupiter 98181-02-28 06:14 G 37580992.57 37580992.76 37580992.95 0.0525 0.0161

Saturn 98185-06-26 22:33 G 37582572.36 37582572.44 37582572.53 0.0299 0.0272

Saturn 98186-02-11 22:48 G 37582802.24 37582802.45 37582802.65 0.0301 0.0035

Jupiter 98186-05-12 08:38 G 37582891.78 37582891.86 37582891.95 0.0504 0.0459

Jupiter 98187-01-04 08:52 G 37583128.68 37583128.87 37583129.06 0.0500 0.0207

Jupiter 98192-11-03 02:52 G 37585258.42 37585258.62 37585258.82 0.0524 0.0042

Jupiter 98198-09-09 06:43 G 37587394.58 37587394.78 37587394.99 0.0501 0.0028

Saturn 98199-05-03 09:35 G 37587630.74 37587630.90 37587631.07 0.0263 0.0170

Saturn 98199-12-18 11:16 G 37587859.76 37587859.97 37587860.19 0.0261 0.0043

Saturn 98200-08-04 11:16 G 37588088.92 37588088.97 37588089.03 0.0260 0.0249

Jupiter 98204-07-09 22:48 G 37589524.28 37589524.45 37589524.63 0.0523 0.0245

Jupiter 98205-03-04 00:00 G 37589761.43 37589761.50 37589761.58 0.0526 0.0483

Uranus 98206-02-24 04:33 G 37590118.62 37590118.69 37590118.79 0.0143 0.0131

Uranus 98206-10-08 16:19 G 37590345.05 37590345.18 37590345.34 0.0143 0.0107

Uranus 98207-05-23 03:50 G 37590571.50 37590571.66 37590571.85 0.0142 0.0082

Uranus 98208-01-04 15:35 G 37590797.95 37590798.15 37590798.36 0.0142 0.0057

Uranus 98208-08-18 02:52 G 37591024.41 37591024.62 37591024.84 0.0142 0.0033

Uranus 98209-04-01 14:09 G 37591250.87 37591251.09 37591251.31 0.0142 0.0008

Uranus 98209-11-14 00:57 G 37591477.33 37591477.54 37591477.76 0.0142 0.0017

Jupiter 98210-05-16 04:33 G 37591660.49 37591660.69 37591660.89 0.0502 0.0158

Uranus 98210-06-28 11:45 G 37591703.79 37591703.99 37591704.21 0.0141 0.0041

Uranus 98211-02-09 22:33 G 37591930.25 37591930.44 37591930.64 0.0141 0.0065

Uranus 98211-09-24 08:52 G 37592156.71 37592156.87 37592157.05 0.0141 0.0088

Uranus 98212-05-07 19:11 G 37592383.17 37592383.30 37592383.44 0.0141 0.0111

Uranus 98212-12-20 05:16 G 37592609.66 37592609.72 37592609.79 0.0141 0.0134

Saturn 98215-01-08 00:28 G 37593358.40 37593358.52 37593358.64 0.0299 0.0241

Saturn 98215-08-26 00:43 G 37593588.33 37593588.53 37593588.73 0.0301 0.0067

Jupiter 98216-03-14 20:38 G 37593790.26 37593790.36 37593790.47 0.0522 0.0440

Jupiter 98216-11-06 20:38 G 37594027.20 37594027.36 37594027.53 0.0526 0.0284

Jupiter 98222-01-19 00:28 G 37595926.37 37595926.52 37595926.67 0.0503 0.0345

Jupiter 98222-09-12 23:16 G 37596163.31 37596163.47 37596163.63 0.0500 0.0318

Neptune 98225-03-07 14:24 G 37597070.04 37597070.10 37597070.21 0.0088 0.0081

Neptune 98225-10-19 04:04 G 37597295.55 37597295.67 37597295.81 0.0088 0.0070

Neptune 98226-06-01 17:16 G 37597521.08 37597521.22 37597521.40 0.0088 0.0060

Moon 98226-09-27 00:14 G 37597638.41 37597638.51 37597638.61 0.2700 0.2090

Earth 98226-09-27 05:02 G 37597638.63 37597638.71 37597638.78 0.2704 0.2367

Neptune 98227-01-13 06:57 G 37597746.62 37597746.79 37597746.99 0.0088 0.0049

Neptune 98227-08-26 20:09 G 37597972.16 37597972.34 37597972.56 0.0088 0.0039

Neptune 98228-04-08 09:50 G 37598197.70 37598197.91 37598198.13 0.0088 0.0028

Jupiter 98228-07-12 17:45 G 37598293.05 37598293.24 37598293.44 0.0525 0.0081

Saturn 98228-11-13 11:45 G 37598416.81 37598416.99 37598417.17 0.0263 0.0144

Neptune 98228-11-19 23:16 G 37598423.25 37598423.47 37598423.69 0.0088 0.0017

Saturn 98229-06-30 13:11 G 37598645.84 37598646.05 37598646.26 0.0262 0.0069

Neptune 98229-07-03 12:28 G 37598648.80 37598649.02 37598649.25 0.0088 0.0007

Neptune 98230-02-14 01:55 G 37598874.36 37598874.58 37598874.81 0.0088 0.0004

Neptune 98230-09-27 15:07 G 37599099.92 37599100.13 37599100.36 0.0088 0.0015

Neptune 98231-05-11 04:33 G 37599325.48 37599325.69 37599325.91 0.0088 0.0025

Neptune 98231-12-22 17:45 G 37599551.05 37599551.24 37599551.45 0.0088 0.0036

Neptune 98232-08-04 07:11 G 37599776.62 37599776.80 37599777.00 0.0088 0.0046

Neptune 98233-03-17 20:24 G 37600002.19 37600002.35 37600002.53 0.0088 0.0057

Neptune 98233-10-29 09:21 G 37600227.77 37600227.89 37600228.06 0.0088 0.0068

Jupiter 98234-05-18 21:21 G 37600429.19 37600429.39 37600429.59 0.0500 0.0137

Neptune 98234-06-11 22:48 G 37600453.37 37600453.45 37600453.57 0.0088 0.0078

Moon 98234-09-24 15:21 G 37600558.04 37600558.14 37600558.24 0.2706 0.2052

Earth 98234-09-24 20:38 G 37600558.22 37600558.36 37600558.50 0.2705 0.1145 *

Mars 98239-06-09 05:31 G 37602276.57 37602276.73 37602276.89 0.1746 0.0617

Jupiter 98240-03-17 15:07 G 37602558.94 37602559.13 37602559.33 0.0524 0.0122

Saturn 98244-07-20 01:26 G 37604144.42 37604144.56 37604144.71 0.0299 0.0212

Saturn 98245-03-07 01:40 G 37604374.38 37604374.57 37604374.77 0.0301 0.0097

Mars 98245-11-20 03:50 G 37604632.52 37604632.66 37604632.81 0.1797 0.0980

Jupiter 98246-01-21 18:28 G 37604695.06 37604695.27 37604695.48 0.0501 0.0048

Uranus 98248-11-23 18:28 G 37605732.22 37605732.27 37605732.34 0.0135 0.0129

Uranus 98249-07-08 00:14 G 37605958.39 37605958.51 37605958.64 0.0135 0.0109

Uranus 98250-02-19 05:45 G 37606184.58 37606184.74 37606184.91 0.0136 0.0089

Uranus 98250-10-03 11:16 G 37606410.80 37606410.97 37606411.17 0.0136 0.0069

Uranus 98251-05-17 17:16 G 37606637.03 37606637.22 37606637.43 0.0136 0.0048

Jupiter 98251-11-21 12:28 G 37606824.87 37606825.02 37606825.18 0.0523 0.0321

Uranus 98251-12-29 23:16 G 37606863.27 37606863.47 37606863.69 0.0136 0.0027

Jupiter 98252-07-15 13:26 G 37607061.94 37607062.06 37607062.19 0.0526 0.0408

Uranus 98252-08-12 05:45 G 37607089.53 37607089.74 37607089.96 0.0136 0.0006

Uranus 98253-03-26 12:14 G 37607315.80 37607316.01 37607316.23 0.0136 0.0016

Uranus 98253-11-07 18:43 G 37607542.07 37607542.28 37607542.49 0.0136 0.0037

Uranus 98254-06-22 01:11 G 37607768.36 37607768.55 37607768.76 0.0137 0.0058

Uranus	98255-02-03 07:55 G	37607994.67	37607994.83	37607995.02	0.0137	0.0080
Uranus	98255-09-17 15:07 G	37608221.00	37608221.13	37608221.29	0.0137	0.0101
Uranus	98256-04-30 22:19 G	37608447.34	37608447.43	37608447.54	0.0137	0.0122
Jupiter	98257-09-26 15:35 G	37608960.97	37608961.15	37608961.34	0.0503	0.0233
Jupiter	98258-05-21 14:24 G	37609198.00	37609198.10	37609198.21	0.0500	0.0429
Saturn	98258-05-26 11:45 G	37609202.80	37609202.99	37609203.18	0.0263	0.0119
Saturn	98259-01-10 13:11 G	37609431.86	37609432.05	37609432.26	0.0261	0.0094
Jupiter	98263-07-27 09:07 G	37611090.86	37611090.88	37611090.91	0.0521	0.0517
Jupiter	98264-03-20 08:24 G	37611327.67	37611327.85	37611328.04	0.0525	0.0203
Jupiter	98269-06-01 12:57 G	37613226.92	37613227.04	37613227.15	0.0504	0.0417
Jupiter	98270-01-24 12:43 G	37613463.86	37613464.03	37613464.22	0.0500	0.0252
Saturn	98274-01-30 04:33 G	37614930.52	37614930.69	37614930.85	0.0299	0.0178
Saturn	98274-09-17 04:33 G	37615160.51	37615160.69	37615160.89	0.0301	0.0132
Jupiter	98275-11-24 05:31 G	37615593.53	37615593.73	37615593.93	0.0524	0.0001
Jupiter	98281-09-29 09:21 G	37617729.68	37617729.89	37617730.10	0.0501	0.0065
Jupiter	98287-07-30 02:09 G	37619859.41	37619859.59	37619859.78	0.0524	0.0204
Saturn	98287-12-06 13:55 G	37619988.88	37619989.08	37619989.29	0.0263	0.0093
Saturn	98288-07-22 15:21 G	37620217.95	37620218.14	37620218.34	0.0262	0.0121
Uranus	98289-10-24 08:38 G	37620676.86	37620676.86	37620676.91	0.0143	0.0142
Uranus	98290-06-07 20:38 G	37620903.25	37620903.36	37620903.50	0.0143	0.0118
Uranus	98291-01-20 08:38 G	37621129.71	37621129.86	37621130.04	0.0142	0.0093
Uranus	98291-09-03 20:09 G	37621356.16	37621356.34	37621356.55	0.0142	0.0069
Uranus	98292-04-17 07:55 G	37621582.62	37621582.83	37621583.04	0.0142	0.0043
Uranus	98292-11-29 19:11 G	37621809.08	37621809.30	37621809.52	0.0142	0.0019
Jupiter	98293-06-04 06:57 G	37621995.59	37621995.79	37621995.99	0.0501	0.0120
Uranus	98293-07-14 06:14 G	37622035.54	37622035.76	37622035.98	0.0142	0.0006
Uranus	98294-02-25 17:31 G	37622262.01	37622262.23	37622262.44	0.0142	0.0030
Uranus	98294-10-10 03:50 G	37622488.47	37622488.66	37622488.88	0.0141	0.0055
Uranus	98295-05-24 14:38 G	37622714.93	37622715.11	37622715.30	0.0141	0.0078
Uranus	98296-01-06 00:57 G	37622941.40	37622941.54	37622941.70	0.0141	0.0101

Uranus 98296-08-19 11:16 G 37623167.88 37623167.97 37623168.08 0.0141 0.0124

Jupiter 98299-04-04 00:14 G 37624125.38 37624125.51 37624125.63 0.0523 0.0402

Jupiter 98299-11-27 00:57 G 37624362.39 37624362.54 37624362.70 0.0526 0.0328

Saturn 98303-08-13 06:14 G 37625716.58 37625716.76 37625716.94 0.0299 0.0146

Saturn 98304-03-30 06:28 G 37625946.60 37625946.77 37625946.94 0.0301 0.0164

Jupiter 98305-02-08 03:07 G 37626261.47 37626261.63 37626261.80 0.0503 0.0308

Mars 98305-04-06 13:55 G 37626318.94 37626319.08 37626319.23 0.1742 0.0952

Jupiter 98305-10-03 01:55 G 37626498.44 37626498.58 37626498.73 0.0500 0.0357

Neptune 98306-09-10 18:57 G 37626841.20 37626841.29 37626841.39 0.0090 0.0080

Neptune 98307-04-24 07:11 G 37627066.69 37627066.80 37627066.96 0.0090 0.0070

Neptune 98307-12-05 19:55 G 37627292.18 37627292.33 37627292.51 0.0090 0.0059

Neptune 98308-07-18 08:52 G 37627517.70 37627517.87 37627518.06 0.0089 0.0048

Neptune 98309-02-28 21:21 G 37627743.21 37627743.39 37627743.60 0.0089 0.0037

Neptune 98309-10-12 10:04 G 37627968.72 37627968.92 37627969.14 0.0089 0.0027

Neptune 98310-05-25 22:48 G 37628194.24 37628194.45 37628194.67 0.0089 0.0016

Neptune 98311-01-06 11:31 G 37628419.77 37628419.98 37628420.20 0.0089 0.0005

Jupiter 98311-08-02 21:21 G 37628628.20 37628628.39 37628628.59 0.0525 0.0125

Neptune 98311-08-20 00:14 G 37628645.30 37628645.51 37628645.73 0.0089 0.0007

Mars 98311-09-18 10:48 G 37628674.84 37628674.95 37628675.05 0.1802 0.1406

Neptune 98312-04-01 12:57 G 37628870.83 37628871.04 37628871.26 0.0089 0.0017

Neptune 98312-11-13 01:40 G 37629096.37 37629096.57 37629096.78 0.0089 0.0028

Neptune 98313-06-26 14:24 G 37629321.91 37629322.10 37629322.30 0.0089 0.0039

Neptune 98314-02-07 02:52 G 37629547.46 37629547.62 37629547.82 0.0089 0.0050

Neptune 98314-09-20 15:21 G 37629773.01 37629773.14 37629773.33 0.0089 0.0061

Neptune 98315-05-04 04:19 G 37629998.56 37629998.68 37629998.82 0.0089 0.0071

Pluto 98315-11-23 14:09 G 37630202.06 37630202.09 37630202.19 0.0065 0.0062

Neptune 98315-12-15 16:48 G 37630224.13 37630224.20 37630224.31 0.0089 0.0082

Pluto 98316-07-05 18:43 G 37630427.08 37630427.28 37630427.49 0.0065 0.0020

Jupiter 98316-10-13 23:31 G 37630527.44 37630527.48 37630527.52 0.0504 0.0493

Pluto 98317-02-15 22:19 G 37630652.24 37630652.43 37630652.65 0.0065 0.0022

Jupiter 98317-06-07 23:45 G 37630764.30 37630764.49 37630764.69 0.0501 0.0177

Saturn 98317-06-18 14:38 G 37630774.90 37630775.11 37630775.32 0.0263 0.0067

Pluto 98317-09-29 01:55 G 37630877.57 37630877.58 37630877.64 0.0065 0.0065

Saturn 98318-02-02 16:04 G 37631004.00 37631004.17 37631004.36 0.0261 0.0146

Jupiter 98323-04-07 17:02 G 37632894.01 37632894.21 37632894.40 0.0524 0.0082

Jupiter 98329-02-10 21:35 G 37635030.20 37635030.40 37635030.61 0.0501 0.0014

Saturn 98333-02-22 10:04 G 37636502.73 37636502.92 37636503.12 0.0299 0.0110

Uranus 98333-03-08 10:04 G 37636516.83 37636516.92 37636517.05 0.0135 0.0117

Saturn 98333-10-10 10:33 G 37636732.79 37636732.94 37636733.10 0.0301 0.0201

Uranus 98333-10-20 15:35 G 37636743.02 37636743.15 37636743.32 0.0135 0.0097

Uranus 98334-06-03 21:35 G 37636969.23 37636969.40 37636969.58 0.0136 0.0076

Jupiter 98334-12-11 14:09 G 37637159.92 37637160.09 37637160.26 0.0523 0.0283

Uranus 98335-01-16 03:21 G 37637195.45 37637195.64 37637195.84 0.0136 0.0056

Jupiter 98335-08-05 15:07 G 37637397.04 37637397.13 37637397.24 0.0526 0.0451

Uranus 98335-08-30 09:21 G 37637421.69 37637421.89 37637422.11 0.0136 0.0035

Uranus 98336-04-12 15:35 G 37637647.94 37637648.15 37637648.37 0.0136 0.0014

Uranus 98336-11-24 22:04 G 37637874.20 37637874.42 37637874.63 0.0136 0.0008

Mars 98337-04-05 19:40 G 37638006.25 37638006.32 37638006.38 0.1756 0.1623

Uranus 98337-07-09 04:33 G 37638100.48 37638100.69 37638100.90 0.0136 0.0029

Uranus 98338-02-20 11:02 G 37638326.76 37638326.96 37638327.16 0.0136 0.0050

Uranus 98338-10-04 17:45 G 37638553.06 37638553.24 37638553.43 0.0137 0.0071

Uranus 98339-05-19 00:43 G 37638779.37 37638779.53 37638779.69 0.0137 0.0092

Uranus 98339-12-31 07:11 G 37639005.70 37639005.80 37639005.94 0.0137 0.0114

Uranus 98340-08-13 15:07 G 37639232.09 37639232.13 37639232.17 0.0137 0.0135

Jupiter 98340-10-16 18:14 G 37639296.07 37639296.26 37639296.46 0.0502 0.0195

Jupiter 98341-06-10 15:50 G 37639533.09 37639533.16 37639533.24 0.0499 0.0464

Mars 98343-09-17 20:24 G 37640362.26 37640362.35 37640362.45 0.1787 0.1458

Saturn 98346-05-14 14:09 G 37641332.05 37641332.09 37641332.15 0.0265 0.0257

Jupiter 98346-08-16 10:19 G 37641425.87 37641425.93 37641426.01 0.0522 0.0485

Saturn 98346-12-29 17:31 G 37641561.02 37641561.23 37641561.45 0.0263 0.0038

Jupiter 98347-04-10 11:02 G 37641662.79 37641662.96 37641663.14 0.0526 0.0244

Saturn 98347-08-15 18:43 G 37641790.13 37641790.28 37641790.45 0.0262 0.0175

Jupiter 98352-06-21 15:21 G 37643562.01 37643562.14 37643562.28 0.0503 0.0380

Jupiter 98353-02-13 14:09 G 37643798.92 37643799.09 37643799.26 0.0499 0.0286

Jupiter 98358-12-14 08:09 G 37645928.64 37645928.84 37645929.04 0.0525 0.0040

Saturn 98362-09-04 14:09 G 37647288.89 37647289.09 37647289.29 0.0299 0.0072

Saturn 98363-04-22 14:24 G 37647518.98 37647519.10 37647519.23 0.0301 0.0239

Earth 98364-03-28 08:24 G 37647859.69 37647859.85 37647860.02 0.2628 0.0057

Moon 98364-03-28 09:07 G 37647859.73 37647859.88 37647860.03 0.2634 0.0230 *

Jupiter 98364-10-19 11:02 G 37648064.75 37648064.96 37648065.16 0.0501 0.0101

Jupiter 98370-08-19 05:02 G 37650194.52 37650194.71 37650194.90 0.0524 0.0163

Mars 98371-02-01 23:02 G 37650361.34 37650361.46 37650361.57 0.1737 0.1267

Uranus 98374-02-06 00:28 G 37651461.45 37651461.52 37651461.64 0.0143 0.0129

Uranus 98374-09-20 12:43 G 37651687.89 37651688.03 37651688.19 0.0142 0.0104

Uranus 98375-05-05 00:14 G 37651914.34 37651914.51 37651914.70 0.0142 0.0080

Saturn 98375-11-24 15:35 G 37652118.06 37652118.15 37652118.27 0.0265 0.0229

Uranus 98375-12-17 11:45 G 37652140.80 37652140.99 37652141.21 0.0142 0.0055

Jupiter 98376-06-24 08:09 G 37652330.63 37652330.84 37652331.04 0.0502 0.0085

Saturn 98376-07-10 18:57 G 37652347.08 37652347.29 37652347.51 0.0263 0.0011

Uranus 98376-07-30 23:31 G 37652367.26 37652367.48 37652367.69 0.0142 0.0030

Saturn 98377-02-24 20:09 G 37652576.22 37652576.34 37652576.49 0.0261 0.0202

Uranus 98377-03-14 10:48 G 37652593.73 37652593.95 37652594.17 0.0142 0.0006

Uranus 98377-10-26 21:50 G 37652820.19 37652820.41 37652820.63 0.0142 0.0019

Uranus 98378-06-10 08:38 G 37653046.66 37653046.86 37653047.07 0.0141 0.0043

Uranus 98379-01-22 19:26 G 37653273.12 37653273.31 37653273.51 0.0141 0.0066

Uranus 98379-09-06 05:45 G 37653499.58 37653499.74 37653499.92 0.0141 0.0090

Uranus 98380-04-19 16:04 G 37653726.05 37653726.17 37653726.31 0.0141 0.0113

Uranus 98380-12-02 01:55 G 37653952.55 37653952.58 37653952.66 0.0141 0.0136

Jupiter 98382-04-24 00:57 G 37654460.40 37654460.54 37654460.69 0.0522 0.0366

Jupiter 98382-12-17 01:26 G 37654697.42 37654697.56 37654697.71 0.0526 0.0365

Jupiter 98388-02-28 05:02 G 37656596.54 37656596.71 37656596.89 0.0503 0.0271

Jupiter 98388-10-22 03:50 G 37656833.54 37656833.66 37656833.79 0.0500 0.0395

Neptune 98389-06-10 00:43 G 37657064.47 37657064.53 37657064.60 0.0088 0.0083

Neptune 98390-01-21 13:55 G 37657289.98 37657290.08 37657290.22 0.0088 0.0073

Neptune 98390-09-04 03:50 G 37657515.50 37657515.66 37657515.82 0.0088 0.0062

Neptune 98391-04-17 16:48 G 37657741.04 37657741.20 37657741.40 0.0088 0.0052

Neptune 98391-11-29 06:28 G 37657966.58 37657966.77 37657966.97 0.0088 0.0041

Saturn 98392-03-16 19:11 G 37658075.09 37658075.30 37658075.51 0.0299 0.0033

Neptune 98392-07-11 19:40 G 37658192.12 37658192.32 37658192.54 0.0088 0.0031

Saturn 98392-11-01 19:40 G 37658305.25 37658305.32 37658305.41 0.0301 0.0279

Neptune 98393-02-22 09:21 G 37658417.67 37658417.89 37658418.11 0.0088 0.0020

Neptune 98393-10-05 22:33 G 37658643.22 37658643.44 37658643.67 0.0088 0.0010

Neptune 98394-05-19 12:00 G 37658868.78 37658869.00 37658869.23 0.0088 0.0001

Jupiter 98394-08-21 21:35 G 37658963.21 37658963.40 37658963.59 0.0525 0.0161

Neptune 98394-12-31 01:26 G 37659094.34 37659094.56 37659094.78 0.0088 0.0012

Neptune 98395-08-13 14:38 G 37659319.90 37659320.11 37659320.33 0.0088 0.0022

Neptune 98396-03-26 03:50 G 37659545.46 37659545.66 37659545.88 0.0088 0.0033

Neptune 98396-11-06 16:48 G 37659771.03 37659771.20 37659771.41 0.0088 0.0044

Neptune 98397-06-20 06:14 G 37659996.60 37659996.76 37659996.95 0.0088 0.0054

Neptune 98398-01-31 19:26 G 37660222.19 37660222.31 37660222.49 0.0088 0.0066

Neptune 98398-09-14 09:07 G 37660447.78 37660447.88 37660448.01 0.0088 0.0075

Neptune 98399-04-27 22:04 G 37660673.40 37660673.42 37660673.49 0.0088 0.0086

Jupiter 98399-11-03 01:40 G 37660862.49 37660862.57 37660862.66 0.0503 0.0457

Jupiter 98400-06-27 01:11 G 37661099.36 37661099.55 37661099.74 0.0500 0.0211

Mars 98403-02-01 03:35 G 37662048.54 37662048.65 37662048.77 0.1752 0.1262

Pluto 98404-10-16 21:50 G 37662672.21 37662672.41 37662672.64 0.0079 0.0025

Pluto 98405-05-30 08:09 G 37662897.70 37662897.84 37662898.03 0.0079 0.0054

Saturn 98405-06-05 19:26 G 37662904.18 37662904.31 37662904.46 0.0265 0.0198

Saturn 98406-01-20 22:48 G 37663133.24 37663133.45 37663133.67 0.0263 0.0021

Jupiter 98406-04-26 17:02 G 37663229.01 37663229.21 37663229.41 0.0525 0.0049

Saturn 98406-09-06 23:45 G 37663362.41 37663362.49 37663362.60 0.0262 0.0233

Mars 98409-07-15 03:50 G 37664404.52 37664404.66 37664404.80 0.1791 0.1062

Jupiter 98412-03-01 22:33 G 37665365.24 37665365.44 37665365.65 0.0501 0.0029

Uranus 98416-11-05 20:24 G 37667075.27 37667075.35 37667075.43 0.0135 0.0124

Uranus 98417-06-20 01:55 G 37667301.45 37667301.58 37667301.72 0.0136 0.0104

Jupiter 98417-12-30 14:24 G 37667494.93 37667495.10 37667495.28 0.0524 0.0251

Uranus 98418-02-01 07:26 G 37667527.65 37667527.81 37667527.99 0.0136 0.0084

Jupiter 98418-08-24 16:19 G 37667732.11 37667732.18 37667732.26 0.0527 0.0486

Uranus 98418-09-15 13:11 G 37667753.87 37667754.05 37667754.25 0.0136 0.0064

Uranus 98419-04-29 19:11 G 37667980.11 37667980.30 37667980.51 0.0136 0.0043

Uranus 98419-12-12 01:26 G 37668206.35 37668206.56 37668206.78 0.0136 0.0022

Uranus 98420-07-25 07:55 G 37668432.61 37668432.83 37668433.04 0.0136 0.0002

Saturn 98421-02-09 02:24 G 37668631.57 37668631.60 37668631.64 0.0297 0.0292

Uranus 98421-03-08 14:09 G 37668658.88 37668659.09 37668659.31 0.0136 0.0020

Saturn 98421-09-27 00:57 G 37668861.33 37668861.54 37668861.74 0.0299 0.0012

Uranus 98421-10-20 20:38 G 37668885.16 37668885.36 37668885.57 0.0136 0.0041

Uranus 98422-06-04 03:07 G 37669111.45 37669111.63 37669111.83 0.0137 0.0063

Uranus 98423-01-16 09:50 G 37669337.75 37669337.91 37669338.09 0.0137 0.0084

Uranus 98423-08-30 16:48 G 37669564.08 37669564.20 37669564.36 0.0137 0.0105

Jupiter 98423-11-05 18:28 G 37669631.07 37669631.27 37669631.47 0.0502 0.0162

Uranus 98424-04-13 00:00 G 37669790.43 37669790.50 37669790.60 0.0137 0.0126

Jupiter 98424-06-29 16:04 G 37669868.16 37669868.17 37669868.19 0.0499 0.0497

Jupiter 98429-09-04 11:45 G 37671760.90 37671760.99 37671761.10 0.0522 0.0449

Jupiter 98430-04-29 12:14 G 37671997.85 37671998.01 37671998.18 0.0526 0.0281

Saturn 98434-12-16 22:19 G 37673690.26 37673690.43 37673690.60 0.0265 0.0168

Jupiter 98435-07-11 14:38 G 37673896.96 37673897.11 37673897.26 0.0503 0.0350

Saturn 98435-08-03 01:11 G 37673919.34 37673919.55 37673919.77 0.0263 0.0050

Jupiter 98436-03-04 13:40 G 37674133.91 37674134.07 37674134.23 0.0500 0.0318

Saturn 98436-03-19 02:24 G 37674148.59 37674148.60 37674148.61 0.0261 0.0261

Mars 98436-11-29 07:40 G 37674403.76 37674403.82 37674403.89 0.1733 0.1579

Jupiter 98442-01-02 07:26 G 37676263.61 37676263.81 37676264.00 0.0525 0.0074

Jupiter 98447-11-08 11:16 G 37678399.77 37678399.97 37678400.17 0.0501 0.0135

Saturn 98450-08-22 09:21 G 37679417.78 37679417.89 37679418.00 0.0297 0.0250

Saturn 98451-04-09 07:55 G 37679647.63 37679647.83 37679648.04 0.0300 0.0054

Jupiter 98453-09-07 03:21 G 37680529.45 37680529.64 37680529.83 0.0524 0.0133

Uranus 98457-10-06 05:45 G 37682019.70 37682019.74 37682019.80 0.0143 0.0139

Uranus 98458-05-20 17:31 G 37682246.12 37682246.23 37682246.38 0.0143 0.0115

Uranus 98459-01-02 05:31 G 37682472.57 37682472.73 37682472.91 0.0142 0.0090

Jupiter 98459-07-14 08:38 G 37682665.65 37682665.86 37682666.06 0.0501 0.0052

Uranus 98459-08-16 17:16 G 37682699.03 37682699.22 37682699.42 0.0142 0.0066

Uranus 98460-03-30 04:48 G 37682925.49 37682925.70 37682925.91 0.0142 0.0041

Uranus 98460-11-11 16:04 G 37683151.96 37683152.17 37683152.39 0.0142 0.0017

Uranus 98461-06-26 03:21 G 37683378.42 37683378.64 37683378.86 0.0142 0.0008

Uranus 98462-02-07 14:24 G 37683604.89 37683605.10 37683605.32 0.0142 0.0032

Uranus 98462-09-22 01:11 G 37683831.35 37683831.55 37683831.76 0.0141 0.0056

Uranus 98463-05-06 11:31 G 37684057.82 37684057.98 37684058.18 0.0141 0.0080

Uranus 98463-12-18 22:04 G 37684284.28 37684284.42 37684284.58 0.0141 0.0102

Saturn 98464-06-28 02:52 G 37684476.44 37684476.62 37684476.82 0.0265 0.0135

Uranus 98464-08-01 08:09 G 37684510.76 37684510.84 37684510.95 0.0141 0.0125

Saturn 98465-02-12 06:00 G 37684705.55 37684705.75 37684705.96 0.0263 0.0084

Jupiter 98465-05-12 22:19 G 37684795.29 37684795.43 37684795.59 0.0523 0.0342

Jupiter 98466-01-05 00:14 G 37685032.38 37685032.51 37685032.64 0.0527 0.0396

Mars 98468-11-28 12:28 G 37686090.87 37686091.02 37686091.16 0.1748 0.0920

Earth 98469-09-28 06:43 G 37686394.71 37686394.78 37686394.85 0.2704 0.2407

Neptune 98470-12-13 06:00 G 37686835.68 37686835.75 37686835.84 0.0090 0.0083

Jupiter 98471-03-19 05:16 G 37686931.54 37686931.72 37686931.91 0.0502 0.0239

Neptune 98471-07-26 18:28 G 37687061.17 37687061.27 37687061.42 0.0090 0.0073

Jupiter 98471-11-11 02:52 G 37687168.52 37687168.62 37687168.74 0.0499 0.0425

Neptune 98472-03-08 07:11 G 37687286.66 37687286.80 37687286.97 0.0090 0.0062

Neptune 98472-10-19 19:55 G 37687512.16 37687512.33 37687512.52 0.0090 0.0051

Neptune 98473-06-02 08:24 G 37687737.67 37687737.85 37687738.06 0.0089 0.0040

Neptune 98474-01-13 21:07 G 37687963.19 37687963.38 37687963.60 0.0089 0.0030

Neptune 98474-08-27 09:50 G 37688188.71 37688188.91 37688189.13 0.0089 0.0019

Neptune 98475-04-09 22:33 G 37688414.23 37688414.44 37688414.66 0.0089 0.0008

Mars 98475-05-12 11:02 G 37688446.80 37688446.96 37688447.12 0.1796 0.0658

Neptune 98475-11-21 11:16 G 37688639.75 37688639.97 37688640.18 0.0089 0.0003

Neptune 98476-07-03 23:45 G 37688865.29 37688865.49 37688865.72 0.0089 0.0015

Neptune 98477-02-14 12:43 G 37689090.82 37689091.03 37689091.24 0.0089 0.0025

Jupiter 98477-09-09 20:24 G 37689298.17 37689298.35 37689298.54 0.0526 0.0190

Earth 98477-09-25 22:19 G 37689314.28 37689314.43 37689314.57 0.2705 0.1136

Moon 98477-09-26 03:50 G 37689314.50 37689314.66 37689314.81 0.2706 0.0228 *

Neptune 98477-09-28 01:11 G 37689316.36 37689316.55 37689316.76 0.0089 0.0036

Neptune 98478-05-11 13:40 G 37689541.90 37689542.07 37689542.27 0.0089 0.0047

Neptune 98478-12-23 02:24 G 37689767.45 37689767.60 37689767.78 0.0089 0.0057

Neptune 98479-08-05 15:35 G 37689993.01 37689993.15 37689993.29 0.0089 0.0068

Saturn 98480-03-03 16:33 G 37690204.05 37690204.19 37690204.35 0.0297 0.0204

Neptune 98480-03-18 03:50 G 37690218.58 37690218.66 37690218.78 0.0089 0.0079

Saturn 98480-10-19 15:21 G 37690433.95 37690434.14 37690434.34 0.0299 0.0102

Neptune 98480-10-29 16:33 G 37690444.19 37690444.19 37690444.23 0.0089 0.0089

Jupiter 98482-11-22 00:00 G 37691197.40 37691197.50 37691197.61 0.0503 0.0430

Jupiter 98483-07-16 23:31 G 37691434.30 37691434.48 37691434.66 0.0500 0.0240

Jupiter 98489-05-15 17:02 G 37693564.01 37693564.21 37693564.41 0.0525 0.0015

Saturn 98494-01-08 06:43 G 37695262.58 37695262.78 37695262.98 0.0265 0.0103

Saturn 98494-08-25 09:21 G 37695491.70 37695491.89 37695492.09 0.0263 0.0115

Jupiter 98495-03-21 20:09 G 37695700.13 37695700.34 37695700.55 0.0501 0.0054

Uranus 98500-07-07 06:14 G 37697633.72 37697633.76 37697633.82 0.0135 0.0132

Jupiter 98501-01-19 12:28 G 37697829.84 37697830.02 37697830.20 0.0523 0.0222

Uranus 98501-02-18 11:45 G 37697859.88 37697859.99 37697860.12 0.0136 0.0112

Jupiter 98501-09-13 13:55 G 37698067.04 37698067.08 37698067.12 0.0527 0.0515

Uranus 98501-10-02 17:31 G 37698086.08 37698086.23 37698086.40 0.0136 0.0092

Uranus 98502-05-16 23:16 G 37698312.30 37698312.47 37698312.66 0.0136 0.0072

Uranus 98502-12-29 05:16 G 37698538.52 37698538.72 37698538.92 0.0136 0.0051

Uranus 98503-08-12 11:31 G 37698764.77 37698764.98 37698765.19 0.0136 0.0030

Uranus 98504-03-25 17:45 G 37698991.02 37698991.24 37698991.45 0.0136 0.0010

Uranus 98504-11-07 00:00 G 37699217.28 37699217.50 37699217.72 0.0136 0.0011

Uranus 98505-06-21 06:14 G 37699443.56 37699443.76 37699443.98 0.0136 0.0033

Uranus 98506-02-02 12:43 G 37699669.84 37699670.03 37699670.24 0.0137 0.0054

Uranus 98506-09-16 19:40 G 37699896.14 37699896.32 37699896.51 0.0137 0.0075

Jupiter 98506-11-25 16:48 G 37699966.01 37699966.20 37699966.41 0.0502 0.0133

Uranus 98507-05-01 02:24 G 37700122.46 37700122.60 37700122.76 0.0137 0.0096

Uranus 98507-12-13 09:21 G 37700348.79 37700348.89 37700349.01 0.0137 0.0117

Saturn 98509-09-15 00:57 G 37700990.37 37700990.54 37700990.72 0.0298 0.0158

Saturn 98510-05-03 00:00 G 37701220.33 37701220.50 37701220.68 0.0300 0.0149

Jupiter 98512-09-24 08:38 G 37702095.74 37702095.86 37702095.97 0.0522 0.0424

Jupiter 98513-05-19 09:07 G 37702332.72 37702332.88 37702333.04 0.0526 0.0309

Jupiter 98518-07-31 13:55 G 37704231.92 37704232.08 37704232.24 0.0503 0.0321

Jupiter 98519-03-25 12:28 G 37704468.87 37704469.02 37704469.17 0.0499 0.0346

Saturn 98523-07-22 12:43 G 37706048.82 37706049.03 37706049.24 0.0265 0.0066

Saturn 98524-03-07 15:07 G 37706277.96 37706278.13 37706278.31 0.0263 0.0151

Jupiter 98525-01-22 03:21 G 37706598.44 37706598.64 37706598.83 0.0525 0.0097

Jupiter 98530-11-28 09:50 G 37708734.71 37708734.91 37708735.11 0.0500 0.0164

Mars 98534-09-26 21:07 G 37710133.22 37710133.38 37710133.55 0.1743 0.0586

Jupiter 98536-09-26 23:45 G 37710864.30 37710864.49 37710864.69 0.0524 0.0110

Saturn 98539-03-28 10:04 G 37711776.73 37711776.92 37711777.12 0.0298 0.0107

Saturn 98539-11-13 09:21 G 37712006.74 37712006.89 37712007.05 0.0300 0.0201

Mars 98541-03-09 18:28 G 37712489.10 37712489.27 37712489.45 0.1800 0.0266

Uranus 98542-01-19 00:14 G 37712804.42 37712804.51 37712804.63 0.0142 0.0125

Jupiter 98542-08-03 05:02 G 37713000.50 37713000.71 37713000.92 0.0501 0.0027

Uranus 98542-09-02 12:00 G 37713030.86 37713031.00 37713031.17 0.0142 0.0101

Uranus 98543-04-17 00:00 G 37713257.32 37713257.50 37713257.69 0.0142 0.0076

Uranus 98543-11-29 11:31 G 37713483.78 37713483.98 37713484.19 0.0142 0.0051

Uranus 98544-07-12 22:48 G 37713710.24 37713710.45 37713710.67 0.0142 0.0027

Uranus 98545-02-24 10:19 G 37713936.71 37713936.93 37713937.15 0.0142 0.0003

Uranus 98545-10-08 21:07 G 37714163.17 37714163.38 37714163.61 0.0142 0.0022

Uranus 98546-05-23 07:55 G 37714389.63 37714389.83 37714390.05 0.0141 0.0045

Uranus 98547-01-04 18:43 G 37714616.09 37714616.28 37714616.47 0.0141 0.0069

Uranus 98547-08-19 05:02 G 37714842.55 37714842.71 37714842.88 0.0141 0.0092

Uranus 98548-04-01 15:07 G 37715069.02 37715069.13 37715069.27 0.0141 0.0115

Jupiter 98548-06-01 21:07 G 37715130.23 37715130.38 37715130.55 0.0523 0.0311

Uranus 98548-11-14 01:26 G 37715295.52 37715295.56 37715295.61 0.0141 0.0137

Jupiter 98549-01-24 22:33 G 37715367.33 37715367.44 37715367.56 0.0526 0.0427

Saturn 98552-06-16 12:57 G 37716605.99 37716606.04 37716606.11 0.0266 0.0255

Saturn 98553-01-31 17:16 G 37716835.01 37716835.22 37716835.44 0.0264 0.0033

Neptune 98553-09-12 10:33 G 37717058.91 37717058.94 37717059.00 0.0088 0.0086

Saturn 98553-09-17 19:40 G 37717064.17 37717064.32 37717064.48 0.0263 0.0183

Jupiter 98554-04-08 00:43 G 37717266.35 37717266.53 37717266.72 0.0502 0.0216

Neptune 98554-04-25 23:45 G 37717284.40 37717284.49 37717284.63 0.0088 0.0076

Jupiter 98554-11-30 22:48 G 37717503.37 37717503.45 37717503.55 0.0499 0.0450

Neptune 98554-12-07 13:26 G 37717509.93 37717510.06 37717510.23 0.0088 0.0065

Neptune 98555-07-21 02:52 G 37717735.46 37717735.62 37717735.81 0.0088 0.0055

Neptune 98556-03-02 16:33 G 37717961.01 37717961.19 37717961.39 0.0088 0.0044

Neptune 98556-10-14 06:00 G 37718186.55 37718186.75 37718186.97 0.0088 0.0033

Neptune 98557-05-27 19:26 G 37718412.10 37718412.31 37718412.53 0.0088 0.0023

Neptune 98558-01-08 09:07 G 37718637.66 37718637.88 37718638.10 0.0088 0.0012

Neptune 98558-08-21 22:33 G 37718863.22 37718863.44 37718863.66 0.0088 0.0001

Neptune 98559-04-04 11:45 G 37719088.77 37719088.99 37719089.22 0.0088 0.0009

Neptune 98559-11-16 00:57 G 37719314.33 37719314.54 37719314.77 0.0088 0.0020

Jupiter 98560-02-05 17:16 G 37719396.18 37719396.22 37719396.26 0.0521 0.0511

Neptune 98560-06-28 14:38 G 37719539.90 37719540.11 37719540.32 0.0088 0.0030

Jupiter 98560-09-29 16:48 G 37719633.02 37719633.20 37719633.38 0.0525 0.0217

Neptune 98561-02-09 03:50 G 37719765.47 37719765.66 37719765.86 0.0088 0.0041

Neptune 98561-09-22 16:48 G 37719991.04 37719991.20 37719991.40 0.0088 0.0052

Neptune 98562-05-06 06:14 G 37720216.62 37720216.76 37720216.93 0.0088 0.0062

Pluto 98562-08-04 13:26 G 37720307.02 37720307.06 37720307.11 0.0065 0.0063

Neptune 98562-12-17 19:26 G 37720442.21 37720442.31 37720442.45 0.0088 0.0073

Pluto 98563-03-17 17:02 G 37720532.02 37720532.21 37720532.43 0.0065 0.0022

Neptune 98563-07-31 08:52 G 37720667.81 37720667.87 37720667.96 0.0088 0.0083

Pluto 98563-10-28 20:52 G 37720757.18 37720757.37 37720757.59 0.0065 0.0020

Pluto 98564-06-10 00:43 G 37720982.49 37720982.53 37720982.61 0.0065 0.0063

Jupiter 98565-12-11 20:38 G 37721532.24 37721532.36 37721532.49 0.0504 0.0405

Jupiter 98566-08-05 20:24 G 37721769.18 37721769.35 37721769.53 0.0500 0.0267

Saturn 98568-10-07 19:40 G 37722563.12 37722563.32 37722563.53 0.0298 0.0058

Saturn 98569-05-25 19:11 G 37722793.20 37722793.30 37722793.42 0.0300 0.0253

Jupiter 98572-06-04 12:14 G 37723898.81 37723899.01 37723899.21 0.0524 0.0011

Jupiter 98578-04-10 18:00 G 37726035.04 37726035.25 37726035.45 0.0501 0.0082

Saturn 98581-12-27 19:55 G 37727392.22 37727392.33 37727392.47 0.0266 0.0217

Saturn 98582-08-14 00:14 G 37727621.29 37727621.51 37727621.72 0.0264 0.0006

Saturn 98583-03-31 02:09 G 37727850.48 37727850.59 37727850.71 0.0263 0.0221

Jupiter 98584-02-08 06:14 G 37728164.58 37728164.76 37728164.95 0.0524 0.0204

Uranus 98584-10-18 21:21 G 37728418.31 37728418.39 37728418.51 0.0136 0.0120

Uranus 98585-06-02 03:07 G 37728644.50 37728644.63 37728644.79 0.0136 0.0100

Uranus 98586-01-14 08:52 G 37728870.71 37728870.87 37728871.05 0.0136 0.0080

Uranus 98586-08-28 14:52 G 37729096.94 37729097.12 37729097.32 0.0136 0.0060

Uranus 98587-04-11 20:52 G 37729323.17 37729323.37 37729323.58 0.0136 0.0039

Uranus 98587-11-24 03:07 G 37729549.42 37729549.63 37729549.85 0.0136 0.0018

Uranus 98588-07-07 09:21 G 37729775.68 37729775.89 37729776.11 0.0136 0.0004

Uranus 98589-02-18 15:50 G 37730001.95 37730002.16 37730002.37 0.0136 0.0024

Uranus 98589-10-02 22:19 G 37730228.23 37730228.43 37730228.64 0.0137 0.0045

Jupiter 98589-12-14 14:38 G 37730300.91 37730301.11 37730301.32 0.0501 0.0106

Uranus 98590-05-17 04:48 G 37730454.52 37730454.70 37730454.90 0.0137 0.0066

Uranus 98590-12-29 11:31 G 37730680.82 37730680.98 37730681.15 0.0137 0.0087

Uranus 98591-08-12 18:28 G 37730907.15 37730907.27 37730907.42 0.0137 0.0108

Uranus 98592-03-26 01:55 G 37731133.51 37731133.58 37731133.65 0.0137 0.0129

Jupiter 98595-10-14 03:21 G 37732430.52 37732430.64 37732430.77 0.0523 0.0405

Jupiter 98596-06-07 04:19 G 37732667.53 37732667.68 37732667.84 0.0526 0.0332

Saturn 98598-04-20 05:45 G 37733349.53 37733349.74 37733349.95 0.0298 0.0004

Mars 98600-07-25 05:31 G 37734175.56 37734175.73 37734175.91 0.1739 0.0245

Jupiter 98601-08-20 08:38 G 37734566.70 37734566.86 37734567.03 0.0503 0.0300

Jupiter 98602-04-14 07:11 G 37734803.67 37734803.80 37734803.94 0.0499 0.0369

Mars 98607-01-06 01:11 G 37736531.38 37736531.55 37736531.72 0.1805 0.0166

Earth 98607-03-31 09:21 G 37736615.72 37736615.89 37736616.05 0.2628 0.0138

Moon 98607-03-31 10:48 G 37736615.78 37736615.95 37736616.12 0.2622 0.0371 *

Jupiter 98608-02-12 00:57 G 37736933.34 37736933.54 37736933.73 0.0525 0.0126

Saturn 98611-07-11 01:55 G 37738178.42 37738178.58 37738178.74 0.0266 0.0181

Saturn 98612-02-25 05:31 G 37738407.52 37738407.73 37738407.95 0.0264 0.0041

Saturn 98612-10-11 07:11 G 37738636.77 37738636.80 37738636.86 0.0262 0.0255

Jupiter 98613-04-25 03:50 G 37738832.61 37738832.66 37738832.71 0.0504 0.0489

Jupiter 98613-12-18 03:50 G 37739069.47 37739069.66 37739069.86 0.0500 0.0186

Jupiter 98619-10-17 19:55 G 37741199.13 37741199.33 37741199.53 0.0524 0.0084

Jupiter 98625-08-23 00:28 G 37743335.32 37743335.52 37743335.73 0.0501 0.0009

Uranus 98625-09-19 07:26 G 37743362.76 37743362.81 37743362.91 0.0143 0.0134

Uranus 98626-05-03 19:26 G 37743589.19 37743589.31 37743589.47 0.0142 0.0110

Uranus 98626-12-16 07:11 G 37743815.64 37743815.80 37743816.00 0.0142 0.0086

Saturn 98627-03-16 17:45 G 37743906.15 37743906.24 37743906.35 0.0297 0.0257

Uranus 98627-07-30 18:57 G 37744042.11 37744042.29 37744042.50 0.0142 0.0061

Saturn 98627-11-01 16:04 G 37744135.96 37744136.17 37744136.37 0.0299 0.0047

Uranus 98628-03-13 06:43 G 37744268.57 37744268.78 37744269.00 0.0142 0.0036

Uranus 98628-10-25 18:00 G 37744495.03 37744495.25 37744495.47 0.0142 0.0012

Uranus 98629-06-09 05:16 G 37744721.50 37744721.72 37744721.93 0.0142 0.0012

Uranus 98630-01-21 16:04 G 37744947.96 37744948.17 37744948.39 0.0142 0.0036

Uranus 98630-09-05 02:38 G 37745174.42 37745174.61 37745174.82 0.0141 0.0059

Uranus 98631-04-19 13:11 G 37745400.88 37745401.05 37745401.23 0.0141 0.0082

Jupiter 98631-06-22 15:35 G 37745464.98 37745465.15 37745465.32 0.0523 0.0290

Uranus 98631-12-01 23:31 G 37745627.34 37745627.48 37745627.63 0.0141 0.0105

Jupiter 98632-02-14 16:33 G 37745702.09 37745702.19 37745702.30 0.0526 0.0448

Uranus 98632-07-15 09:21 G 37745853.82 37745853.89 37745853.99 0.0141 0.0128

Neptune 98635-03-18 17:31 G 37746830.19 37746830.23 37746830.32 0.0090 0.0086

Neptune 98635-10-30 06:14 G 37747055.66 37747055.76 37747055.89 0.0090 0.0075

Neptune 98636-06-11 19:11 G 37747281.16 37747281.30 37747281.45 0.0090 0.0064

Neptune 98637-01-23 07:26 G 37747506.66 37747506.81 37747507.00 0.0090 0.0054

Jupiter 98637-04-27 21:35 G 37747601.21 37747601.40 37747601.60 0.0502 0.0191

Neptune 98637-09-05 20:09 G 37747732.16 37747732.34 37747732.54 0.0090 0.0043

Jupiter 98637-12-20 19:40 G 37747838.27 37747838.32 37747838.39 0.0499 0.0474

Neptune 98638-04-19 08:52 G 37747957.67 37747957.87 37747958.08 0.0089 0.0032

Neptune 98638-11-30 21:21 G 37748183.19 37748183.39 37748183.61 0.0089 0.0021

Neptune 98639-07-14 10:19 G 37748408.72 37748408.93 37748409.15 0.0089 0.0010

Neptune 98640-02-24 23:02 G 37748634.24 37748634.46 37748634.67 0.0089 0.0002

Neptune 98640-10-07 11:31 G 37748859.77 37748859.98 37748860.19 0.0089 0.0011

Saturn 98641-01-20 09:21 G 37748964.72 37748964.89 37748965.08 0.0265 0.0142

Neptune 98641-05-20 23:45 G 37749085.29 37749085.49 37749085.71 0.0089 0.0023

Saturn 98641-09-06 12:57 G 37749193.83 37749194.04 37749194.25 0.0264 0.0079

Neptune 98642-01-01 12:43 G 37749310.83 37749311.03 37749311.23 0.0089 0.0033

Neptune 98642-08-15 01:11 G 37749536.37 37749536.55 37749536.75 0.0089 0.0044

Jupiter 98643-02-25 10:04 G 37749730.86 37749730.92 37749730.98 0.0522 0.0496

Neptune 98643-03-28 13:40 G 37749761.92 37749762.07 37749762.26 0.0089 0.0055

Jupiter 98643-10-20 10:04 G 37749967.74 37749967.92 37749968.10 0.0526 0.0235

Neptune 98643-11-09 02:09 G 37749987.47 37749987.59 37749987.76 0.0089 0.0066

Neptune 98644-06-21 15:21 G 37750213.04 37750213.14 37750213.26 0.0089 0.0076

Neptune 98645-02-02 03:50 G 37750438.63 37750438.66 37750438.73 0.0089 0.0087

Jupiter 98648-12-31 18:00 G 37751867.12 37751867.25 37751867.39 0.0503 0.0379

Jupiter 98649-08-25 17:02 G 37752104.05 37752104.21 37752104.38 0.0500 0.0293

Pluto 98651-06-29 19:11 G 37752777.10 37752777.30 37752777.52 0.0079 0.0030

Pluto 98652-02-10 05:31 G 37753002.57 37753002.73 37753002.92 0.0079 0.0049

Jupiter 98655-06-25 06:28 G 37754233.57 37754233.77 37754233.97 0.0525 0.0029

Saturn 98656-09-26 04:19 G 37754692.54 37754692.68 37754692.84 0.0296 0.0203

Saturn 98657-05-14 02:38 G 37754922.42 37754922.61 37754922.81 0.0299 0.0102

Jupiter 98661-04-30 11:45 G 37756369.79 37756369.99 37756370.19 0.0501 0.0102

Mars 98666-05-22 14:52 G 37758217.94 37758218.12 37758218.29 0.1735 0.0071

Jupiter 98667-02-28 03:35 G 37758499.47 37758499.65 37758499.84 0.0524 0.0175

Uranus 98668-06-19 07:26 G 37758976.74 37758976.81 37758976.89 0.0135 0.0127

Uranus 98669-01-31 12:43 G 37759202.92 37759203.03 37759203.18 0.0136 0.0108

Uranus 98669-09-14 18:28 G 37759429.12 37759429.27 37759429.45 0.0136 0.0088

Uranus 98670-04-29 00:14 G 37759655.34 37759655.51 37759655.71 0.0136 0.0068

Saturn 98670-08-02 15:35 G 37759750.96 37759751.15 37759751.36 0.0265 0.0105

Uranus 98670-12-11 06:14 G 37759881.57 37759881.76 37759881.97 0.0136 0.0047

Saturn 98671-03-19 18:43 G 37759980.09 37759980.28 37759980.48 0.0263 0.0115

Uranus 98671-07-25 12:28 G 37760107.81 37760108.02 37760108.24 0.0136 0.0027

Uranus 98672-03-07 18:43 G 37760334.07 37760334.28 37760334.50 0.0136 0.0006

Uranus 98672-10-20 00:57 G 37760560.33 37760560.54 37760560.76 0.0136 0.0015

Mars 98672-11-02 08:24 G 37760573.69 37760573.85 37760574.01 0.1810 0.0586

Jupiter 98673-01-03 07:55 G 37760635.62 37760635.83 37760636.03 0.0502 0.0088

Uranus 98673-06-03 07:11 G 37760786.60 37760786.80 37760787.01 0.0137 0.0036

Uranus 98674-01-15 13:40 G 37761012.88 37761013.07 37761013.27 0.0137 0.0057

Uranus 98674-08-29 20:24 G 37761239.18 37761239.35 37761239.54 0.0137 0.0078

Uranus 98675-04-13 03:07 G 37761465.50 37761465.63 37761465.79 0.0137 0.0099

Uranus 98675-11-25 10:19 G 37761691.83 37761691.93 37761692.04 0.0137 0.0120

Jupiter 98678-11-02 23:31 G 37762765.35 37762765.48 37762765.62 0.0522 0.0380

Jupiter 98679-06-28 00:00 G 37763002.36 37763002.50 37763002.65 0.0526 0.0357

Jupiter 98684-09-08 03:35 G 37764901.48 37764901.65 37764901.82 0.0503 0.0278

Jupiter 98685-05-03 02:24 G 37765138.48 37765138.60 37765138.73 0.0500 0.0393

Saturn 98686-04-08 13:55 G 37765478.91 37765479.08 37765479.26 0.0297 0.0155

Saturn 98686-11-24 12:43 G 37765708.85 37765709.03 37765709.21 0.0300 0.0153

Jupiter 98691-03-02 18:57 G 37767268.09 37767268.29 37767268.48 0.0525 0.0147

Jupiter 98696-05-14 00:00 G 37769167.44 37769167.50 37769167.59 0.0504 0.0467

Jupiter 98697-01-06 00:28 G 37769404.34 37769404.52 37769404.71 0.0500 0.0210

Saturn 98700-02-12 23:16 G 37770537.26 37770537.47 37770537.68 0.0265 0.0065

Saturn 98700-09-30 01:55 G 37770766.41 37770766.58 37770766.76 0.0263 0.0154

Jupiter 98702-11-06 12:43 G 37771533.83 37771534.03 37771534.23 0.0524 0.0067

Jupiter 98708-09-11 21:21 G 37773670.18 37773670.39 37773670.60 0.0501 0.0024

Uranus 98709-05-20 14:38 G 37773921.10 37773921.11 37773921.13 0.0143 0.0142

Uranus 98710-01-02 02:24 G 37774147.50 37774147.60 37774147.74 0.0142 0.0119

Uranus 98710-08-16 14:24 G 37774373.95 37774374.10 37774374.28 0.0142 0.0094

Uranus 98711-03-31 02:09 G 37774600.41 37774600.59 37774600.79 0.0142 0.0070

Uranus 98711-11-12 13:40 G 37774826.87 37774827.07 37774827.29 0.0142 0.0046

Uranus 98712-06-26 01:11 G 37775053.34 37775053.55 37775053.77 0.0142 0.0022

Moon 98712-10-01 06:14 G 37775150.65 37775150.76 37775150.87 0.2698 0.1961

Earth 98712-10-01 08:24 G 37775150.78 37775150.85 37775150.91 0.2705 0.2436 *

Uranus 98713-02-07 12:43 G 37775279.81 37775280.03 37775280.25 0.0142 0.0003

Uranus 98713-09-21 23:31 G 37775506.27 37775506.48 37775506.70 0.0142 0.0026

Uranus 98714-05-06 10:19 G 37775732.73 37775732.93 37775733.14 0.0141 0.0050

Jupiter 98714-07-12 09:35 G 37775799.74 37775799.90 37775800.08 0.0523 0.0271

Uranus 98714-12-18 20:38 G 37775959.18 37775959.36 37775959.56 0.0141 0.0073

Jupiter 98715-03-06 11:16 G 37776036.88 37776036.97 37776037.06 0.0527 0.0470

Uranus 98715-08-02 06:57 G 37776185.65 37776185.79 37776185.96 0.0141 0.0096

Saturn 98715-10-20 23:45 G 37776265.30 37776265.49 37776265.69 0.0297 0.0103

Uranus 98716-03-15 17:16 G 37776412.12 37776412.22 37776412.35 0.0141 0.0119

Saturn 98716-06-06 22:48 G 37776495.31 37776495.45 37776495.61 0.0300 0.0207

Uranus 98716-10-28 03:21 G 37776638.64 37776638.64 37776638.66 0.0141 0.0141

Neptune 98718-07-30 10:19 G 37777278.85 37777278.93 37777279.05 0.0088 0.0078

Neptune 98719-03-12 23:31 G 37777504.36 37777504.48 37777504.65 0.0088 0.0068

Neptune 98719-10-24 13:11 G 37777729.89 37777730.05 37777730.23 0.0088 0.0057

Jupiter 98720-05-17 15:21 G 37777935.94 37777936.14 37777936.33 0.0502 0.0171

Neptune 98720-06-06 02:24 G 37777955.43 37777955.60 37777955.81 0.0088 0.0047

Moon 98720-09-28 18:57 G 37778070.17 37778070.29 37778070.40 0.2703 0.1844

Earth 98720-09-29 00:14 G 37778070.37 37778070.51 37778070.65 0.2705 0.1065 *

Jupiter 98721-01-09 13:26 G 37778173.03 37778173.06 37778173.08 0.0499 0.0494

Neptune 98721-01-17 16:19 G 37778180.98 37778181.18 37778181.39 0.0088 0.0036

Neptune 98721-08-31 06:00 G 37778406.53 37778406.75 37778406.96 0.0088 0.0025

Neptune 98722-04-13 19:11 G 37778632.08 37778632.30 37778632.53 0.0088 0.0015

Neptune 98722-11-25 08:38 G 37778857.64 37778857.86 37778858.09 0.0088 0.0004

Neptune 98723-07-08 22:04 G 37779083.20 37779083.42 37779083.65 0.0088 0.0007

Neptune 98724-02-19 11:31 G 37779308.77 37779308.98 37779309.21 0.0088 0.0017

Neptune 98724-10-02 00:43 G 37779534.33 37779534.53 37779534.76 0.0088 0.0028

Neptune 98725-05-15 14:24 G 37779759.90 37779760.10 37779760.30 0.0088 0.0038

Neptune 98725-12-27 03:35 G 37779985.47 37779985.65 37779985.84 0.0088 0.0049

Jupiter 98726-03-17 07:40 G 37780065.74 37780065.82 37780065.91 0.0522 0.0467

Neptune 98726-08-09 16:33 G 37780211.05 37780211.19 37780211.38 0.0088 0.0060

Jupiter 98726-11-09 07:40 G 37780302.65 37780302.82 37780303.00 0.0526 0.0267

Neptune 98727-03-23 06:00 G 37780436.64 37780436.75 37780436.90 0.0088 0.0071

Neptune 98727-11-03 19:11 G 37780662.24 37780662.30 37780662.41 0.0088 0.0081

Saturn 98729-01-09 01:26 G 37781094.50 37781094.56 37781094.63 0.0266 0.0253

Saturn 98729-08-26 05:45 G 37781323.52 37781323.74 37781323.96 0.0264 0.0028

Saturn 98730-04-12 07:55 G 37781552.69 37781552.83 37781552.99 0.0263 0.0189

Jupiter 98732-01-21 10:48 G 37782201.81 37782201.95 37782202.10 0.0503 0.0361

Mars 98732-03-19 23:31 G 37782260.31 37782260.48 37782260.65 0.1730 0.0394

Jupiter 98732-09-14 10:04 G 37782438.76 37782438.92 37782439.09 0.0500 0.0313

Jupiter 98738-07-15 03:07 G 37784568.43 37784568.63 37784568.83 0.0524 0.0057

Mars 98738-08-31 14:52 G 37784615.98 37784616.12 37784616.26 0.1815 0.1032

Jupiter 98744-05-20 06:57 G 37786704.59 37786704.79 37786704.99 0.0501 0.0126

Saturn 98745-05-02 08:38 G 37787051.66 37787051.86 37787052.06 0.0298 0.0055

Saturn	98745-12-18 07:55 G	37787281.73	37787281.83	37787281.94	0.0300	0.0257
Jupiter	98750-03-19 22:33 G	37788834.25	37788834.44	37788834.63	0.0523	0.0152
Uranus	98752-02-18 16:33 G	37789535.18	37789535.19	37789535.23	0.0135	0.0134
Uranus	98752-10-01 22:19 G	37789761.32	37789761.43	37789761.54	0.0135	0.0115
Uranus	98753-05-16 03:35 G	37789987.51	37789987.65	37789987.81	0.0136	0.0096
Uranus	98753-12-28 09:21 G	37790213.72	37790213.89	37790214.08	0.0136	0.0076
Uranus	98754-08-11 15:07 G	37790439.95	37790440.13	37790440.34	0.0136	0.0056
Uranus	98755-03-25 21:21 G	37790666.18	37790666.39	37790666.60	0.0136	0.0035
Uranus	98755-11-07 03:21 G	37790892.43	37790892.64	37790892.86	0.0136	0.0015
Jupiter	98756-01-24 04:33 G	37790970.48	37790970.69	37790970.90	0.0502	0.0061
Uranus	98756-06-20 09:35 G	37791118.68	37791118.90	37791119.11	0.0136	0.0006
Uranus	98757-02-01 15:50 G	37791344.95	37791345.16	37791345.37	0.0136	0.0027
Uranus	98757-09-15 22:19 G	37791571.23	37791571.43	37791571.63	0.0137	0.0048
Uranus	98758-04-30 04:33 G	37791797.52	37791797.69	37791797.89	0.0137	0.0069
Saturn	98758-07-22 08:38 G	37791880.74	37791880.86	37791880.99	0.0266	0.0213
Uranus	98758-12-12 11:31 G	37792023.82	37792023.98	37792024.15	0.0137	0.0089
Saturn	98759-03-08 12:28 G	37792109.81	37792110.02	37792110.24	0.0264	0.0011
Uranus	98759-07-26 18:28 G	37792250.15	37792250.27	37792250.40	0.0137	0.0110
Saturn	98759-10-23 14:24 G	37792339.01	37792339.10	37792339.22	0.0262	0.0226
Uranus	98760-03-09 01:11 G	37792476.51	37792476.55	37792476.63	0.0137	0.0132
Jupiter	98761-11-22 17:02 G	37793100.07	37793100.21	37793100.36	0.0522	0.0361
Jupiter	98762-07-17 17:45 G	37793337.10	37793337.24	37793337.38	0.0526	0.0377
Jupiter	98767-09-29 00:57 G	37795236.36	37795236.54	37795236.72	0.0503	0.0250
Jupiter	98768-05-22 23:45 G	37795473.38	37795473.49	37795473.60	0.0499	0.0421
Jupiter	98774-03-22 13:55 G	37797602.90	37797603.08	37797603.27	0.0525	0.0171
Saturn	98774-11-12 17:45 G	37797838.04	37797838.24	37797838.45	0.0298	0.0006
Jupiter	98779-06-03 18:28 G	37799502.18	37799502.27	37799502.37	0.0504	0.0444
Jupiter	98780-01-26 18:28 G	37799739.09	37799739.27	37799739.45	0.0500	0.0232
Jupiter	98785-11-25 11:31 G	37801868.78	37801868.98	37801869.18	0.0524	0.0033
Saturn	98788-02-01 14:52 G	37802666.97	37802667.12	37802667.29	0.0266	0.0178

Saturn 98788-09-17 18:28 G 37802896.06 37802896.27 37802896.49 0.0264 0.0045

Saturn 98789-05-04 20:09 G 37803125.32 37803125.34 37803125.37 0.0262 0.0260

Jupiter 98791-10-01 14:52 G 37804004.91 37804005.12 37804005.33 0.0501 0.0045

Uranus 98793-09-01 07:55 G 37804705.74 37804705.83 37804705.93 0.0142 0.0128

Uranus 98794-04-15 19:40 G 37804932.18 37804932.32 37804932.48 0.0142 0.0104

Uranus 98794-11-28 07:26 G 37805158.64 37805158.81 37805159.01 0.0142 0.0081

Uranus 98795-07-12 19:11 G 37805385.11 37805385.30 37805385.51 0.0142 0.0056

Uranus 98796-02-24 06:57 G 37805611.58 37805611.79 37805612.01 0.0142 0.0032

Uranus 98796-10-07 18:28 G 37805838.05 37805838.27 37805838.49 0.0142 0.0008

Uranus 98797-05-22 05:31 G 37806064.51 37806064.73 37806064.95 0.0142 0.0016

Jupiter 98797-07-31 07:55 G 37806134.65 37806134.83 37806135.00 0.0523 0.0239

Uranus 98798-01-03 16:19 G 37806290.97 37806291.18 37806291.39 0.0142 0.0040

Mars 98798-01-15 08:52 G 37806302.71 37806302.87 37806303.03 0.1726 0.0691

Jupiter 98798-03-25 08:52 G 37806371.81 37806371.87 37806371.93 0.0526 0.0501

Uranus 98798-08-18 02:52 G 37806517.43 37806517.62 37806517.83 0.0141 0.0063

Uranus 98799-04-01 13:26 G 37806743.90 37806744.06 37806744.24 0.0141 0.0086

Neptune 98799-06-21 05:16 G 37806824.70 37806824.72 37806824.77 0.0090 0.0088

Uranus 98799-11-13 23:31 G 37806970.36 37806970.48 37806970.64 0.0141 0.0109

Neptune 98800-02-01 17:45 G 37807050.16 37807050.24 37807050.37 0.0090 0.0078

Uranus 98800-06-27 09:50 G 37807196.84 37807196.91 37807197.00 0.0141 0.0131

Neptune 98800-09-14 06:28 G 37807275.65 37807275.77 37807275.93 0.0090 0.0067

Neptune 98801-04-27 19:26 G 37807501.14 37807501.31 37807501.48 0.0090 0.0056

Neptune 98801-12-09 07:40 G 37807726.65 37807726.82 37807727.02 0.0089 0.0046

Neptune 98802-07-22 20:38 G 37807952.17 37807952.36 37807952.57 0.0089 0.0035

Neptune 98803-03-05 09:21 G 37808177.68 37808177.89 37808178.10 0.0089 0.0024

Jupiter 98803-06-06 11:16 G 37808270.77 37808270.97 37808271.17 0.0502 0.0146

Saturn 98803-10-08 02:38 G 37808394.53 37808394.61 37808394.71 0.0297 0.0267

Neptune 98803-10-16 21:50 G 37808403.20 37808403.41 37808403.63 0.0089 0.0013

Saturn 98804-05-25 00:43 G 37808624.32 37808624.53 37808624.73 0.0299 0.0038

Neptune 98804-05-29 10:33 G 37808628.73 37808628.94 37808629.16 0.0089 0.0002

Mars 98804-06-27 21:21 G 37808658.29 37808658.39 37808658.49 0.1820 0.1479

Neptune 98805-01-09 23:16 G 37808854.25 37808854.47 37808854.68 0.0089 0.0009

Neptune 98805-08-23 11:45 G 37809079.78 37809079.99 37809080.21 0.0089 0.0020

Neptune 98806-04-06 00:14 G 37809305.32 37809305.51 37809305.72 0.0089 0.0030

Neptune 98806-11-17 12:43 G 37809530.85 37809531.03 37809531.24 0.0089 0.0041

Neptune 98807-07-01 01:40 G 37809756.40 37809756.57 37809756.75 0.0089 0.0052

Neptune 98808-02-11 14:09 G 37809981.95 37809982.09 37809982.26 0.0089 0.0063

Neptune 98808-09-24 02:38 G 37810207.51 37810207.61 37810207.75 0.0089 0.0073

Jupiter 98809-04-05 03:50 G 37810400.57 37810400.66 37810400.77 0.0522 0.0443

Neptune 98809-05-07 15:35 G 37810433.08 37810433.15 37810433.23 0.0089 0.0084

Pluto 98809-11-27 14:09 G 37810636.91 37810637.09 37810637.30 0.0065 0.0029

Jupiter 98809-11-28 03:35 G 37810637.49 37810637.65 37810637.82 0.0525 0.0293

Pluto 98810-07-10 18:14 G 37810862.06 37810862.26 37810862.48 0.0065 0.0013

Pluto 98811-02-20 21:50 G 37811087.32 37811087.41 37811087.55 0.0065 0.0056

Jupiter 98815-02-09 08:09 G 37812536.69 37812536.84 37812537.00 0.0503 0.0334

Jupiter 98815-10-04 07:55 G 37812773.68 37812773.83 37812773.98 0.0500 0.0341

Saturn 98817-08-13 21:07 G 37813453.20 37813453.38 37813453.57 0.0265 0.0140

Saturn 98818-03-31 00:14 G 37813682.31 37813682.51 37813682.73 0.0263 0.0082

Jupiter 98821-08-02 22:04 G 37814903.22 37814903.42 37814903.61 0.0525 0.0081

Jupiter 98827-06-09 05:16 G 37817039.52 37817039.72 37817039.92 0.0501 0.0157

Jupiter 98833-04-07 18:57 G 37819169.09 37819169.29 37819169.48 0.0524 0.0125

Saturn 98833-04-19 10:19 G 37819180.80 37819180.93 37819181.08 0.0296 0.0221

Saturn 98833-12-05 08:38 G 37819410.66 37819410.86 37819411.06 0.0299 0.0086

Uranus 98836-06-01 07:26 G 37820319.74 37820319.81 37820319.92 0.0135 0.0123

Mars 98836-06-27 08:52 G 37820345.77 37820345.87 37820345.96 0.1804 0.1501

Uranus 98837-01-13 13:11 G 37820545.92 37820546.05 37820546.19 0.0135 0.0103

Uranus 98837-08-27 18:28 G 37820772.12 37820772.27 37820772.46 0.0136 0.0084

Uranus 98838-04-11 00:14 G 37820998.34 37820998.51 37820998.72 0.0136 0.0064

Uranus 98838-11-23 06:14 G 37821224.56 37821224.76 37821224.97 0.0136 0.0043

Jupiter 98839-02-11 23:45 G 37821305.28 37821305.49 37821305.69 0.0501 0.0038

Uranus 98839-07-07 12:14 G 37821450.80 37821451.01 37821451.23 0.0136 0.0023

Uranus 98840-02-18 18:28 G 37821677.05 37821677.27 37821677.48 0.0136 0.0004

Uranus 98840-10-02 00:28 G 37821903.31 37821903.52 37821903.74 0.0136 0.0018

Uranus 98841-05-16 06:28 G 37822129.58 37822129.77 37822129.99 0.0136 0.0040

Uranus 98841-12-28 13:11 G 37822355.86 37822356.05 37822356.25 0.0137 0.0060

Uranus 98842-08-11 19:40 G 37822582.16 37822582.32 37822582.51 0.0137 0.0081

Uranus 98843-03-26 02:38 G 37822808.47 37822808.61 37822808.76 0.0137 0.0101

Uranus 98843-11-07 09:21 G 37823034.81 37823034.89 37823035.00 0.0137 0.0122

Jupiter 98844-12-11 17:02 G 37823435.06 37823435.21 37823435.37 0.0523 0.0326

Jupiter 98845-08-05 18:00 G 37823672.13 37823672.25 37823672.37 0.0526 0.0416

Saturn 98847-02-24 02:38 G 37824239.42 37824239.61 37824239.82 0.0265 0.0106

Saturn 98847-10-11 05:45 G 37824468.54 37824468.74 37824468.93 0.0263 0.0115

Moon 98850-04-01 06:57 G 37825371.63 37825371.79 37825371.94 0.2633 0.0374

Earth 98850-04-01 09:50 G 37825371.75 37825371.91 37825372.07 0.2627 0.0222 *

Jupiter 98850-10-17 19:55 G 37825571.14 37825571.33 37825571.52 0.0502 0.0226

Jupiter 98851-06-11 18:28 G 37825808.18 37825808.27 37825808.36 0.0499 0.0445

Jupiter 98857-04-10 13:40 G 37827937.89 37827938.07 37827938.25 0.0525 0.0207

Jupiter 98862-06-22 15:35 G 37829837.04 37829837.15 37829837.27 0.0504 0.0418

Saturn 98862-10-30 15:21 G 37829966.98 37829967.14 37829967.31 0.0297 0.0183

Jupiter 98863-02-14 15:50 G 37830073.99 37830074.16 37830074.34 0.0500 0.0261

Saturn 98863-06-17 13:55 G 37830196.90 37830197.08 37830197.27 0.0300 0.0126

Mars 98863-11-12 18:14 G 37830345.12 37830345.26 37830345.40 0.1722 0.0987

Jupiter 98868-12-14 09:21 G 37832203.69 37832203.89 37832204.09 0.0524 0.0007

Jupiter 98874-10-20 13:40 G 37834339.87 37834340.07 37834340.28 0.0501 0.0076

Saturn 98876-09-05 07:26 G 37835025.60 37835025.81 37835026.02 0.0264 0.0072

Saturn 98877-04-22 10:04 G 37835254.75 37835254.92 37835255.10 0.0263 0.0147

Uranus 98877-05-01 11:31 G 37835263.95 37835263.98 37835264.05 0.0143 0.0139

Uranus 98877-12-13 23:45 G 37835490.37 37835490.49 37835490.63 0.0142 0.0115

Uranus 98878-07-28 12:00 G 37835716.83 37835717.00 37835717.17 0.0142 0.0091

Uranus 98879-03-11 23:31 G 37835943.30 37835943.48 37835943.69 0.0142 0.0067

Uranus 98879-10-24 11:02 G 37836169.76 37836169.96 37836170.18 0.0142 0.0043

Uranus 98880-06-06 22:33 G 37836396.23 37836396.44 37836396.66 0.0142 0.0019

Jupiter 98880-08-19 04:33 G 37836469.50 37836469.69 37836469.87 0.0523 0.0212

Uranus 98881-01-19 09:50 G 37836622.69 37836622.91 37836623.13 0.0142 0.0006

Uranus 98881-09-02 20:52 G 37836849.16 37836849.37 37836849.59 0.0142 0.0029

Uranus 98882-04-17 07:26 G 37837075.62 37837075.81 37837076.03 0.0141 0.0053

Neptune 98882-10-31 20:38 G 37837273.30 37837273.36 37837273.48 0.0088 0.0081

Uranus 98882-11-29 18:00 G 37837302.08 37837302.25 37837302.45 0.0141 0.0076

Neptune 98883-06-14 10:19 G 37837498.82 37837498.93 37837499.08 0.0088 0.0070

Uranus 98883-07-14 04:33 G 37837528.54 37837528.69 37837528.86 0.0141 0.0098

Neptune 98884-01-25 23:45 G 37837724.35 37837724.49 37837724.68 0.0088 0.0060

Uranus 98884-02-25 14:52 G 37837755.02 37837755.12 37837755.25 0.0141 0.0121

Neptune 98884-09-07 13:26 G 37837949.89 37837950.06 37837950.26 0.0088 0.0049

Neptune 98885-04-21 03:07 G 37838175.43 37838175.63 37838175.83 0.0088 0.0038

Neptune 98885-12-02 16:19 G 37838400.98 37838401.18 37838401.40 0.0088 0.0028

Jupiter 98886-06-25 11:02 G 37838605.76 37838605.96 37838606.16 0.0502 0.0112

Neptune 98886-07-16 06:00 G 37838626.53 37838626.75 37838626.97 0.0088 0.0017

Neptune 98887-02-26 19:26 G 37838852.09 37838852.31 37838852.54 0.0088 0.0006

Neptune 98887-10-10 08:52 G 37839077.65 37839077.87 37839078.09 0.0088 0.0004

Neptune 98888-05-22 22:04 G 37839303.21 37839303.42 37839303.65 0.0088 0.0015

Neptune 98889-01-03 11:31 G 37839528.78 37839528.98 37839529.21 0.0088 0.0026

Neptune 98889-08-17 00:57 G 37839754.35 37839754.54 37839754.76 0.0088 0.0036

Neptune 98890-03-30 14:09 G 37839979.92 37839980.09 37839980.30 0.0088 0.0047

Neptune 98890-11-11 03:35 G 37840205.49 37840205.65 37840205.83 0.0088 0.0057

Neptune 98891-06-24 16:48 G 37840431.08 37840431.20 37840431.36 0.0088 0.0068

Neptune 98892-02-05 06:28 G 37840656.68 37840656.77 37840656.88 0.0088 0.0078

Jupiter 98892-04-24 01:55 G 37840735.46 37840735.58 37840735.71 0.0522 0.0413

Saturn 98892-05-11 21:07 G 37840753.21 37840753.38 37840753.57 0.0297 0.0142

Jupiter 98892-12-17 01:55 G 37840972.43 37840972.58 37840972.74 0.0526 0.0326

Saturn 98892-12-27 19:55 G 37840983.16 37840983.33 37840983.51 0.0299 0.0168

Mars 98895-11-11 21:50 G 37842032.32 37842032.41 37842032.50 0.1736 0.1454

Jupiter 98898-02-28 05:16 G 37842871.56 37842871.72 37842871.88 0.0503 0.0306

Pluto 98898-03-10 12:14 G 37842881.86 37842882.01 37842882.20 0.0079 0.0051

Pluto 98898-10-21 23:02 G 37843107.26 37843107.46 37843107.68 0.0079 0.0028

Jupiter 98898-10-23 04:19 G 37843108.54 37843108.68 37843108.82 0.0500 0.0369

Mars 98902-04-25 15:50 G 37844388.02 37844388.16 37844388.29 0.1809 0.1080

Jupiter 98904-08-22 23:45 G 37845238.29 37845238.49 37845238.68 0.0525 0.0122

Saturn 98905-08-02 07:55 G 37845582.82 37845582.83 37845582.85 0.0267 0.0265

Saturn 98906-03-19 12:14 G 37845811.79 37845812.01 37845812.22 0.0265 0.0040

Saturn 98906-11-03 14:38 G 37846040.95 37846041.11 37846041.26 0.0263 0.0179

Jupiter 98909-11-04 01:26 G 37847137.52 37847137.56 37847137.60 0.0504 0.0494

Jupiter 98910-06-29 01:40 G 37847374.38 37847374.57 37847374.76 0.0500 0.0185

Jupiter 98916-04-27 20:24 G 37849504.16 37849504.35 37849504.55 0.0524 0.0086

Uranus 98920-01-31 17:02 G 37850878.16 37850878.21 37850878.27 0.0135 0.0130

Uranus 98920-09-13 22:19 G 37851104.32 37851104.43 37851104.56 0.0135 0.0111

Uranus 98921-04-28 04:04 G 37851330.51 37851330.67 37851330.83 0.0136 0.0091

Saturn 98921-11-23 00:14 G 37851539.32 37851539.51 37851539.71 0.0298 0.0108

Uranus 98921-12-10 09:21 G 37851556.72 37851556.89 37851557.08 0.0136 0.0072

Jupiter 98922-03-03 22:33 G 37851640.23 37851640.44 37851640.65 0.0502 0.0008

Saturn 98922-07-10 23:31 G 37851769.33 37851769.48 37851769.63 0.0300 0.0204

Uranus 98922-07-24 15:07 G 37851782.95 37851783.13 37851783.34 0.0136 0.0052

Uranus 98923-03-07 21:21 G 37852009.18 37852009.39 37852009.60 0.0136 0.0031

Uranus 98923-10-20 03:07 G 37852235.42 37852235.63 37852235.85 0.0136 0.0011

Uranus 98924-06-02 09:07 G 37852461.67 37852461.88 37852462.10 0.0136 0.0010

Uranus 98925-01-14 15:21 G 37852687.93 37852688.14 37852688.35 0.0136 0.0030

Uranus 98925-08-28 21:35 G 37852914.21 37852914.40 37852914.61 0.0137 0.0052

Uranus 98926-04-12 04:19 G 37853140.50 37853140.68 37853140.87 0.0137 0.0072

Uranus 98926-11-24 10:48 G 37853366.81 37853366.95 37853367.12 0.0137 0.0093

Uranus 98927-07-08 17:45 G 37853593.13 37853593.24 37853593.37 0.0137 0.0113

Jupiter 98928-01-01 17:02 G 37853770.05 37853770.21 37853770.38 0.0522 0.0291

Uranus 98928-02-20 00:43 G 37853819.50 37853819.53 37853819.59 0.0137 0.0134

Jupiter 98928-08-25 17:31 G 37854007.14 37854007.23 37854007.34 0.0526 0.0451

Mars 98929-09-10 03:50 G 37854387.55 37854387.66 37854387.78 0.1718 0.1274

Jupiter 98933-11-06 19:55 G 37855906.14 37855906.33 37855906.53 0.0503 0.0193

Jupiter 98934-07-01 18:43 G 37856143.24 37856143.28 37856143.35 0.0500 0.0481

Saturn 98935-02-12 11:16 G 37856368.87 37856368.97 37856369.07 0.0266 0.0233

Saturn 98935-09-29 15:21 G 37856597.92 37856598.14 37856598.36 0.0264 0.0009

Saturn 98936-05-15 17:31 G 37856827.11 37856827.23 37856827.36 0.0262 0.0209

Jupiter 98939-09-06 12:57 G 37858035.98 37858036.04 37858036.10 0.0521 0.0494

Jupiter 98940-04-30 12:14 G 37858272.83 37858273.01 37858273.18 0.0525 0.0240

Jupiter 98945-07-12 16:48 G 37860172.07 37860172.20 37860172.34 0.0504 0.0381

Jupiter 98946-03-06 17:02 G 37860409.04 37860409.21 37860409.38 0.0500 0.0300

Saturn 98951-06-05 05:16 G 37862325.52 37862325.72 37862325.92 0.0298 0.0069

Jupiter 98952-01-04 09:21 G 37862538.69 37862538.89 37862539.09 0.0524 0.0035

Saturn 98952-01-21 04:19 G 37862555.57 37862555.68 37862555.81 0.0300 0.0243

Earth 98955-10-03 10:19 G 37863906.87 37863906.93 37863906.99 0.2705 0.2476

Jupiter 98957-11-09 12:14 G 37864674.80 37864675.01 37864675.21 0.0501 0.0108

Uranus 98961-08-14 03:35 G 37866048.56 37866048.65 37866048.77 0.0143 0.0126

Mars 98961-09-09 06:43 G 37866074.65 37866074.78 37866074.91 0.1732 0.1128

Uranus 98962-03-28 15:35 G 37866275.01 37866275.15 37866275.32 0.0142 0.0102

Uranus 98962-11-10 03:35 G 37866501.47 37866501.65 37866501.84 0.0142 0.0078

Uranus 98963-06-24 15:07 G 37866727.93 37866728.13 37866728.34 0.0142 0.0054

Jupiter 98963-09-09 07:11 G 37866804.61 37866804.80 37866804.99 0.0524 0.0170

Earth 98963-10-01 01:55 G 37866826.44 37866826.58 37866826.73 0.2705 0.1042

Moon 98963-10-01 06:28 G 37866826.62 37866826.77 37866826.92 0.2709 0.0582 *

Uranus 98964-02-06 02:52 G 37866954.40 37866954.62 37866954.84 0.0142 0.0030

Neptune 98964-05-06 05:45 G 37867044.66 37867044.74 37867044.85 0.0090 0.0080

Saturn 98964-08-24 15:07 G 37867155.00 37867155.13 37867155.27 0.0266 0.0203

Uranus 98964-09-19 14:09 G 37867180.87 37867181.09 37867181.31 0.0142 0.0006

Neptune 98964-12-17 18:43 G 37867270.14 37867270.28 37867270.41 0.0090 0.0069

Saturn 98965-04-10 18:57 G 37867384.08 37867384.29 37867384.51 0.0264 0.0022

Uranus 98965-05-04 01:11 G 37867407.33 37867407.55 37867407.77 0.0142 0.0017

Neptune 98965-07-31 06:57 G 37867495.65 37867495.79 37867495.97 0.0090 0.0059

Saturn 98965-11-25 20:52 G 37867613.29 37867613.37 37867613.47 0.0262 0.0238

Uranus 98965-12-16 11:45 G 37867633.79 37867633.99 37867634.21 0.0142 0.0042

Neptune 98966-03-13 19:55 G 37867721.15 37867721.33 37867721.52 0.0090 0.0048

Uranus 98966-07-30 22:33 G 37867860.26 37867860.44 37867860.65 0.0141 0.0065

Neptune 98966-10-25 08:38 G 37867946.66 37867946.86 37867947.06 0.0089 0.0037

Uranus 98967-03-14 09:21 G 37868086.73 37868086.89 37868087.07 0.0141 0.0088

Neptune 98967-06-07 20:52 G 37868172.18 37868172.37 37868172.59 0.0089 0.0027

Uranus 98967-10-26 19:40 G 37868313.20 37868313.32 37868313.47 0.0141 0.0110

Neptune 98968-01-19 09:50 G 37868397.70 37868397.91 37868398.13 0.0089 0.0015

Mars 98968-02-20 22:47 G 37868430.29 37868430.45 37868430.61 0.1813 0.0659

Uranus 98968-06-09 05:59 G 37868539.69 37868539.75 37868539.83 0.0141 0.0132

Neptune 98968-08-31 22:33 G 37868623.22 37868623.44 37868623.65 0.0089 0.0005

Neptune 98969-04-14 11:02 G 37868848.74 37868848.96 37868849.18 0.0089 0.0006

Jupiter 98969-07-15 09:21 G 37868940.69 37868940.89 37868941.10 0.0502 0.0080

Neptune 98969-11-25 23:16 G 37869074.27 37869074.47 37869074.70 0.0089 0.0018

Neptune 98970-07-09 12:14 G 37869299.81 37869300.01 37869300.22 0.0089 0.0028

Neptune 98971-02-20 00:43 G 37869525.35 37869525.53 37869525.74 0.0089 0.0039

Neptune 98971-10-03 13:11 G 37869750.88 37869751.05 37869751.24 0.0089 0.0049

Neptune 98972-05-16 01:55 G 37869976.43 37869976.58 37869976.75 0.0089 0.0060

Neptune 98972-12-27 14:23 G 37870201.98 37870202.10 37870202.24 0.0089 0.0071

Neptune 98973-08-10 02:52 G 37870427.55 37870427.62 37870427.73 0.0089 0.0082

Jupiter 98975-05-15 04:47 G 37871070.57 37871070.70 37871070.85 0.0522 0.0372

Jupiter 98976-01-07 05:16 G 37871307.58 37871307.72 37871307.86 0.0526 0.0370

Saturn 98980-12-15 06:28 G 37873111.57 37873111.77 37873111.98 0.0298 0.0039

Jupiter 98981-03-20 05:45 G 37873206.57 37873206.74 37873206.92 0.0503 0.0272

Saturn 98981-08-02 05:45 G 37873341.67 37873341.74 37873341.83 0.0300 0.0275

Jupiter 98981-11-12 05:02 G 37873443.59 37873443.71 37873443.83 0.0500 0.0405

Jupiter 98987-09-12 01:11 G 37875573.36 37875573.55 37875573.74 0.0525 0.0162

Jupiter 98992-11-23 02:38 G 37877472.53 37877472.61 37877472.70 0.0504 0.0460

Jupiter 98993-07-18 03:21 G 37877709.46 37877709.64 37877709.83 0.0501 0.0223

Saturn 98994-03-06 16:47 G 37877941.04 37877941.20 37877941.37 0.0266 0.0175

Saturn 98994-10-21 20:38 G 37878170.15 37878170.36 37878170.58 0.0264 0.0049

Mars 98995-07-08 13:11 G 37878429.98 37878430.05 37878430.12 0.1714 0.1564

Jupiter 98999-05-17 20:38 G 37879839.16 37879839.36 37879839.56 0.0524 0.0049

100TH MILLENNIUM CE

This is a list of transits of Venus in the 100th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 99004-05-15 07:40 G 37881662.73 37881662.82 37881662.93 0.0135 0.0119

Uranus 99004-12-27 13:26 G 37881888.91 37881889.06 37881889.20 0.0136 0.0099

Jupiter 99005-03-24 01:11 G 37881975.34 37881975.55 37881975.76 0.0502 0.0037

Uranus 99005-08-10 18:43 G 37882115.12 37882115.28 37882115.47 0.0136 0.0080

Uranus 99006-03-25 00:28 G 37882341.34 37882341.52 37882341.72 0.0136 0.0060

Uranus 99006-11-06 06:14 G 37882567.56 37882567.76 37882567.98 0.0136 0.0040

Uranus 99007-06-20 12:14 G 37882793.80 37882794.01 37882794.23 0.0136 0.0019

Uranus 99008-02-01 18:28 G 37883020.05 37883020.27 37883020.48 0.0136 0.0003

Uranus 99008-09-15 00:28 G 37883246.31 37883246.52 37883246.74 0.0136 0.0022

Uranus 99009-04-29 06:43 G 37883472.58 37883472.78 37883472.99 0.0136 0.0043

Uranus 99009-12-11 13:26 G 37883698.87 37883699.06 37883699.25 0.0137 0.0063

Saturn 99010-06-28 10:04 G 37883897.71 37883897.92 37883898.12 0.0298 0.0005

Uranus 99010-07-25 19:55 G 37883925.17 37883925.33 37883925.51 0.0137 0.0084

Jupiter 99011-01-21 18:14 G 37884105.09 37884105.26 37884105.44 0.0523 0.0252

Uranus 99011-03-09 02:23 G 37884151.48 37884151.60 37884151.76 0.0137 0.0105

Jupiter 99011-09-15 19:11 G 37884342.23 37884342.30 37884342.37 0.0526 0.0493

Uranus 99011-10-21 09:35 G 37884377.83 37884377.90 37884378.00 0.0137 0.0125

Jupiter 99016-11-26 20:38 G 37886241.16 37886241.36 37886241.56 0.0502 0.0157

Jupiter 99022-09-26 16:04 G 37888371.08 37888371.17 37888371.27 0.0522 0.0454

Jupiter 99023-05-21 16:33 G 37888608.02 37888608.19 37888608.35 0.0526 0.0288

Saturn 99023-09-17 19:55 G 37888727.15 37888727.33 37888727.51 0.0266 0.0146

Saturn 99024-05-03 23:31 G 37888956.28 37888956.48 37888956.69 0.0264 0.0078

Mars 99027-07-08 15:35 G 37890117.00 37890117.15 37890117.30 0.1728 0.0804

Jupiter 99028-08-01 17:31 G 37890507.08 37890507.23 37890507.38 0.0503 0.0345

Jupiter 99029-03-26 16:33 G 37890744.04 37890744.19 37890744.35 0.0500 0.0333

Mars 99033-12-19 05:02 G 37892472.53 37892472.71 37892472.88 0.1818 0.0208

Jupiter 99035-01-24 13:40 G 37892873.87 37892874.07 37892874.27 0.0525 0.0081

Saturn 99039-05-23 13:11 G 37894453.99 37894454.05 37894454.13 0.0296 0.0278

Saturn 99040-01-08 10:33 G 37894683.74 37894683.94 37894684.15 0.0298 0.0026

Jupiter 99040-11-29 14:09 G 37895009.89 37895010.09 37895010.29 0.0501 0.0147

Uranus 99045-04-14 08:52 G 37896606.82 37896606.87 37896606.95 0.0143 0.0136

Uranus 99045-11-26 20:38 G 37896833.24 37896833.36 37896833.51 0.0142 0.0112

Uranus 99046-07-11 08:38 G 37897059.70 37897059.86 37897060.04 0.0142 0.0088

Jupiter 99046-09-29 10:19 G 37897139.74 37897139.93 37897140.12 0.0524 0.0127

Neptune 99047-02-04 07:40 G 37897267.77 37897267.82 37897267.91 0.0088 0.0083

Uranus 99047-02-22 20:38 G 37897286.16 37897286.36 37897286.56 0.0142 0.0064

Neptune 99047-09-17 20:52 G 37897493.27 37897493.37 37897493.52 0.0088 0.0073

Uranus 99047-10-07 07:55 G 37897512.63 37897512.83 37897513.05 0.0142 0.0041

Neptune 99048-04-30 10:33 G 37897718.80 37897718.94 37897719.11 0.0088 0.0062

Uranus 99048-05-20 19:26 G 37897739.09 37897739.31 37897739.53 0.0142 0.0017

Neptune 99048-12-12 00:14 G 37897944.33 37897944.51 37897944.70 0.0088 0.0051

Uranus 99049-01-02 06:28 G 37897965.55 37897965.77 37897965.99 0.0142 0.0007

Neptune 99049-07-25 13:26 G 37898169.87 37898170.06 37898170.27 0.0088 0.0041

Uranus 99049-08-16 17:31 G 37898192.02 37898192.23 37898192.45 0.0142 0.0030

Neptune 99050-03-08 03:07 G 37898395.42 37898395.63 37898395.84 0.0088 0.0030

Uranus 99050-03-31 04:33 G 37898418.48 37898418.69 37898418.89 0.0141 0.0054

Neptune 99050-10-19 16:19 G 37898620.97 37898621.18 37898621.41 0.0088 0.0020

Uranus 99050-11-12 14:52 G 37898644.95 37898645.12 37898645.31 0.0141 0.0077

Neptune 99051-06-02 05:59 G 37898846.53 37898846.75 37898846.97 0.0088 0.0009

Uranus 99051-06-27 01:40 G 37898871.41 37898871.57 37898871.72 0.0141 0.0100

Neptune 99052-01-13 19:26 G 37899072.09 37899072.31 37899072.54 0.0088 0.0002

Uranus 99052-02-08 11:45 G 37899097.89 37899097.99 37899098.11 0.0141 0.0122

Jupiter 99052-08-04 11:59 G 37899275.79 37899276.00 37899276.21 0.0502 0.0041

Neptune 99052-08-26 08:52 G 37899297.65 37899297.87 37899298.10 0.0088 0.0012

Saturn 99053-03-29 20:38 G 37899513.17 37899513.36 37899513.56 0.0265 0.0120

Neptune 99053-04-08 22:04 G 37899523.22 37899523.42 37899523.65 0.0088 0.0023

Saturn 99053-11-13 23:59 G 37899742.31 37899742.50 37899742.71 0.0263 0.0104

Neptune 99053-11-20 11:31 G 37899748.78 37899748.98 37899749.20 0.0088 0.0034

Neptune 99054-07-04 00:57 G 37899974.36 37899974.54 37899974.74 0.0088 0.0044

Neptune 99055-02-14 14:23 G 37900199.94 37900200.10 37900200.29 0.0088 0.0055

Neptune 99055-09-28 04:04 G 37900425.53 37900425.67 37900425.82 0.0088 0.0065

Neptune 99056-05-10 17:02 G 37900651.12 37900651.21 37900651.34 0.0088 0.0076

Pluto 99056-08-09 07:55 G 37900741.71 37900741.83 37900742.00 0.0065 0.0048

Neptune 99056-12-22 06:43 G 37900876.75 37900876.78 37900876.83 0.0088 0.0086

Pluto 99057-03-22 11:59 G 37900966.79 37900967.00 37900967.22 0.0065 0.0007

Pluto 99057-11-02 15:50 G 37901191.98 37901192.16 37901192.35 0.0065 0.0036

Jupiter 99058-06-04 06:28 G 37901405.62 37901405.77 37901405.93 0.0522 0.0333

Jupiter 99059-01-27 06:43 G 37901642.66 37901642.78 37901642.91 0.0526 0.0411

Jupiter 99064-04-09 09:21 G 37903541.71 37903541.89 37903542.08 0.0503 0.0229

Jupiter 99064-12-02 08:23 G 37903778.77 37903778.85 37903778.95 0.0500 0.0449

Saturn 99068-12-02 15:21 G 37905240.04 37905240.14 37905240.27 0.0296 0.0246

Saturn 99069-07-20 13:11 G 37905469.85 37905470.05 37905470.25 0.0298 0.0059

Jupiter 99070-10-02 03:35 G 37905908.47 37905908.65 37905908.84 0.0525 0.0205

Jupiter 99075-12-14 05:02 G 37907807.60 37907807.71 37907807.82 0.0504 0.0421

Jupiter 99076-08-07 04:47 G 37908044.52 37908044.70 37908044.87 0.0500 0.0260

Jupiter 99082-06-07 01:11 G 37910174.35 37910174.55 37910174.74 0.0525 0.0012

Saturn 99082-10-09 22:47 G 37910299.25 37910299.45 37910299.66 0.0266 0.0092

Saturn 99083-05-27 02:09 G 37910528.41 37910528.59 37910528.78 0.0264 0.0132

Uranus 99088-01-13 16:47 G 37912221.14 37912221.20 37912221.29 0.0136 0.0127

Jupiter 99088-04-12 02:23 G 37912310.40 37912310.60 37912310.81 0.0501 0.0075

Uranus 99088-08-26 22:33 G 37912447.31 37912447.44 37912447.57 0.0136 0.0107

Uranus 99089-04-10 03:50 G 37912673.51 37912673.66 37912673.83 0.0136 0.0088

Uranus 99089-11-22 09:35 G 37912899.72 37912899.90 37912900.09 0.0136 0.0068

Uranus 99090-07-06 15:21 G 37913125.94 37913126.14 37913126.34 0.0136 0.0048

Uranus 99091-02-17 21:07 G 37913352.18 37913352.38 37913352.60 0.0136 0.0028

Uranus 99091-10-02 03:21 G 37913578.42 37913578.64 37913578.85 0.0136 0.0008

Uranus 99092-05-15 09:21 G 37913804.68 37913804.89 37913805.11 0.0136 0.0013

Uranus 99092-12-27 15:35 G 37914030.94 37914031.15 37914031.36 0.0137 0.0034

Earth 99093-04-03 10:33 G 37914127.78 37914127.94 37914128.10 0.2627 0.0302

Moon 99093-04-03 15:07 G 37914127.98 37914128.13 37914128.28 0.2623 0.1114 *

Mars 99093-05-05 00:57 G 37914159.38 37914159.54 37914159.71 0.1723 0.0507

Uranus 99093-08-10 22:04 G 37914257.23 37914257.42 37914257.63 0.0137 0.0054

Jupiter 99094-02-09 22:47 G 37914440.27 37914440.45 37914440.64 0.0523 0.0208

Uranus 99094-03-25 04:47 G 37914483.52 37914483.70 37914483.88 0.0137 0.0075

Uranus 99094-11-06 11:45 G 37914709.83 37914709.99 37914710.14 0.0137 0.0095

Uranus 99095-06-20 18:14 G 37914936.16 37914936.26 37914936.39 0.0137 0.0116

Uranus 99096-02-02 01:26 G 37915162.55 37915162.56 37915162.59 0.0137 0.0137

Saturn 99098-06-14 15:50 G 37916026.02 37916026.16 37916026.30 0.0296 0.0218

Saturn 99099-01-30 13:11 G 37916255.85 37916256.05 37916256.25 0.0298 0.0087

Mars 99099-10-16 11:45 G 37916514.82 37916514.99 37916515.16 0.1823 0.0232

Jupiter 99099-12-16 23:31 G 37916576.28 37916576.48 37916576.68 0.0502 0.0116

Jupiter 99105-10-16 20:09 G 37918706.23 37918706.34 37918706.47 0.0522 0.0410

Jupiter 99106-06-10 20:23 G 37918943.20 37918943.35 37918943.51 0.0526 0.0335

Jupiter 99111-08-22 20:23 G 37920842.19 37920842.35 37920842.52 0.0503 0.0306

Jupiter 99112-04-15 19:55 G 37921079.20 37921079.33 37921079.47 0.0500 0.0375

Saturn 99112-04-21 22:47 G 37921085.25 37921085.45 37921085.66 0.0265 0.0067

Saturn 99112-12-07 02:09 G 37921314.42 37921314.59 37921314.77 0.0263 0.0156

Jupiter 99118-02-13 15:50 G 37923208.97 37923209.16 37923209.36 0.0525 0.0123

Jupiter 99123-04-27 17:16 G 37925108.19 37925108.22 37925108.27 0.0504 0.0494

Jupiter 99123-12-20 18:14 G 37925345.07 37925345.26 37925345.46 0.0501 0.0192

Saturn 99127-12-26 17:45 G 37926812.09 37926812.24 37926812.41 0.0296 0.0187

Neptune 99128-08-09 17:16 G 37927039.16 37927039.22 37927039.33 0.0090 0.0083

Saturn 99128-08-12 15:35 G 37927041.96 37927042.15 37927042.34 0.0298 0.0120

Neptune 99129-03-23 06:14 G 37927264.65 37927264.76 37927264.90 0.0090 0.0072

Uranus 99129-07-28 03:21 G 37927391.54 37927391.64 37927391.77 0.0142 0.0122

Jupiter 99129-10-19 12:57 G 37927474.85 37927475.04 37927475.24 0.0524 0.0084

Neptune 99129-11-03 18:57 G 37927490.14 37927490.29 37927490.46 0.0090 0.0061

Uranus 99130-03-11 15:35 G 37927617.99 37927618.15 37927618.31 0.0142 0.0098

Neptune 99130-06-17 07:26 G 37927715.65 37927715.81 37927716.01 0.0089 0.0051

Uranus 99130-10-24 03:07 G 37927844.45 37927844.63 37927844.83 0.0142 0.0074

Neptune 99131-01-28 20:09 G 37927941.16 37927941.34 37927941.55 0.0089 0.0040

Uranus 99131-06-07 14:52 G 37928070.91 37928071.12 37928071.32 0.0142 0.0050

Neptune 99131-09-11 09:07 G 37928166.68 37928166.88 37928167.09 0.0089 0.0029

Uranus 99132-01-20 02:09 G 37928297.38 37928297.59 37928297.81 0.0142 0.0027

Neptune 99132-04-23 21:50 G 37928392.20 37928392.41 37928392.62 0.0089 0.0018

Uranus 99132-09-02 13:26 G 37928523.84 37928524.06 37928524.28 0.0142 0.0004

Neptune 99132-12-05 10:19 G 37928617.72 37928617.93 37928618.15 0.0089 0.0007

Uranus 99133-04-17 00:28 G 37928750.30 37928750.52 37928750.74 0.0142 0.0021

Neptune 99133-07-18 23:02 G 37928843.25 37928843.46 37928843.68 0.0089 0.0005

Uranus 99133-11-29 11:16 G 37928976.77 37928976.97 37928977.18 0.0141 0.0044

Neptune 99134-03-01 11:45 G 37929068.78 37929068.99 37929069.21 0.0089 0.0015

Uranus 99134-07-13 21:50 G 37929203.23 37929203.41 37929203.62 0.0141 0.0068

Neptune 99134-10-13 00:14 G 37929294.31 37929294.51 37929294.72 0.0089 0.0025

Uranus 99135-02-25 08:38 G 37929429.70 37929429.86 37929430.04 0.0141 0.0090

Neptune 99135-05-26 12:43 G 37929519.84 37929520.03 37929520.24 0.0089 0.0036

Jupiter 99135-08-25 14:38 G 37929610.90 37929611.11 37929611.32 0.0501 0.0003

Uranus 99135-10-09 19:11 G 37929656.17 37929656.30 37929656.44 0.0141 0.0112

Neptune 99136-01-07 01:26 G 37929745.38 37929745.56 37929745.75 0.0089 0.0047

Uranus 99136-05-23 05:16 G 37929882.67 37929882.72 37929882.79 0.0141 0.0134

Neptune 99136-08-19 13:55 G 37929970.93 37929971.08 37929971.26 0.0089 0.0058

Neptune 99137-04-02 02:23 G 37930196.48 37930196.60 37930196.76 0.0089 0.0068

Neptune 99137-11-13 15:07 G 37930422.04 37930422.13 37930422.24 0.0089 0.0079

Neptune 99138-06-27 03:50 G 37930647.66 37930647.66 37930647.68 0.0089 0.0089

Jupiter 99141-06-24 10:19 G 37931740.76 37931740.93 37931741.09 0.0523 0.0291

Saturn 99141-11-02 00:57 G 37931871.32 37931871.54 37931871.75 0.0266 0.0039

Jupiter 99142-02-16 11:45 G 37931977.90 37931977.99 37931978.09 0.0527 0.0460

Saturn 99142-06-19 04:19 G 37932100.52 37932100.68 37932100.83 0.0264 0.0183

Pluto 99145-07-04 12:57 G 37933211.82 37933212.04 37933212.27 0.0079 0.0010

Pluto 99146-02-14 23:16 G 37933437.38 37933437.47 37933437.59 0.0079 0.0069

Jupiter 99147-04-30 11:59 G 37933876.81 37933877.00 37933877.20 0.0502 0.0189

Jupiter 99147-12-23 10:04 G 37934113.88 37934113.92 37934113.97 0.0499 0.0486

Jupiter 99153-02-27 08:38 G 37936006.79 37936006.86 37936006.92 0.0522 0.0490

Jupiter 99153-10-22 08:38 G 37936243.69 37936243.86 37936244.04 0.0526 0.0253

Saturn 99157-07-07 18:28 G 37937598.10 37937598.27 37937598.45 0.0296 0.0157

Saturn 99158-02-22 16:04 G 37937827.99 37937828.17 37937828.35 0.0299 0.0150

Jupiter 99159-01-03 08:23 G 37938142.72 37938142.85 37938142.98 0.0503 0.0381

Mars 99159-03-03 10:04 G 37938201.74 37938201.92 37938202.09 0.1719 0.0189

Jupiter 99159-08-28 07:55 G 37938379.67 37938379.83 37938380.00 0.0500 0.0301

Jupiter 99165-06-27 05:31 G 37940509.53 37940509.73 37940509.93 0.0525 0.0044

Mars 99165-08-13 17:45 G 37940557.08 37940557.24 37940557.40 0.1828 0.0705

Saturn 99170-09-27 19:11 G 37942428.22 37942428.30 37942428.39 0.0268 0.0245

Jupiter 99171-05-03 05:45 G 37942645.54 37942645.74 37942645.94 0.0501 0.0116

Saturn 99171-05-15 00:28 G 37942657.31 37942657.52 37942657.74 0.0265 0.0016

Uranus 99171-09-14 02:23 G 37942779.58 37942779.60 37942779.64 0.0136 0.0134

Saturn 99171-12-30 03:50 G 37942886.54 37942886.66 37942886.80 0.0263 0.0207

Uranus 99172-04-27 07:40 G 37943005.72 37943005.82 37943005.94 0.0136 0.0115

Uranus 99172-12-09 12:57 G 37943231.90 37943232.04 37943232.21 0.0136 0.0096

Uranus 99173-07-23 18:43 G 37943458.11 37943458.28 37943458.47 0.0136 0.0076

Uranus 99174-03-07 00:43 G 37943684.33 37943684.53 37943684.72 0.0136 0.0056

Uranus 99174-10-19 06:28 G 37943910.56 37943910.77 37943910.98 0.0136 0.0036

Uranus 99175-06-02 12:14 G 37944136.80 37944137.01 37944137.23 0.0136 0.0016

Uranus 99176-01-14 18:28 G 37944363.05 37944363.27 37944363.48 0.0136 0.0004

Uranus 99176-08-28 00:43 G 37944589.32 37944589.53 37944589.75 0.0136 0.0025

Jupiter 99177-03-02 01:26 G 37944775.37 37944775.56 37944775.75 0.0523 0.0166

Uranus 99177-04-11 06:57 G 37944815.60 37944815.79 37944816.00 0.0137 0.0046

Uranus 99177-11-23 13:40 G 37945041.88 37945042.07 37945042.26 0.0137 0.0066

Uranus 99178-07-07 20:09 G 37945268.19 37945268.34 37945268.52 0.0137 0.0087

Uranus 99179-02-19 03:07 G 37945494.51 37945494.63 37945494.78 0.0137 0.0107

Uranus 99179-10-03 10:19 G 37945720.86 37945720.93 37945721.02 0.0137 0.0128

Jupiter 99183-01-06 03:35 G 37946911.44 37946911.65 37946911.86 0.0502 0.0072

Saturn 99187-01-17 20:38 G 37948384.18 37948384.36 37948384.55 0.0296 0.0125

Saturn 99187-09-04 18:28 G 37948614.11 37948614.27 37948614.44 0.0299 0.0183

Jupiter 99188-11-04 22:47 G 37949041.31 37949041.45 37949041.59 0.0522 0.0369

Jupiter 99189-06-29 23:16 G 37949278.34 37949278.47 37949278.61 0.0526 0.0379

Jupiter 99194-09-10 23:59 G 37951177.32 37951177.50 37951177.68 0.0502 0.0265

Jupiter 99195-05-05 22:33 G 37951414.32 37951414.44 37951414.55 0.0499 0.0414

Earth 99198-10-05 11:59 G 37952662.95 37952663.00 37952663.06 0.2705 0.2517

Moon 99198-10-05 12:57 G 37952662.96 37952663.04 37952663.13 0.2698 0.2278 *

Saturn 99200-04-08 21:21 G 37953214.27 37953214.39 37953214.52 0.0268 0.0217

Saturn 99200-11-24 02:38 G 37953443.40 37953443.61 37953443.83 0.0266 0.0015

Jupiter 99201-03-04 19:40 G 37953544.13 37953544.32 37953544.51 0.0526 0.0168

Saturn 99201-07-11 05:45 G 37953672.66 37953672.74 37953672.85 0.0264 0.0235

Jupiter 99206-05-16 21:07 G 37955443.29 37955443.38 37955443.47 0.0503 0.0454

Moon 99206-10-03 00:28 G 37955582.37 37955582.52 37955582.67 0.2700 0.1159

Earth 99206-10-03 04:04 G 37955582.53 37955582.67 37955582.82 0.2705 0.0980 *

Jupiter 99207-01-08 20:38 G 37955680.18 37955680.36 37955680.55 0.0500 0.0230

Neptune 99211-05-09 18:43 G 37957262.24 37957262.28 37957262.35 0.0088 0.0085

Neptune 99211-12-21 07:55 G 37957487.74 37957487.83 37957487.97 0.0088 0.0075

Neptune 99212-08-02 21:35 G 37957713.26 37957713.40 37957713.57 0.0088 0.0064

Jupiter 99212-11-07 17:02 G 37957810.01 37957810.21 37957810.41 0.0525 0.0040

Neptune 99213-03-16 10:47 G 37957938.80 37957938.95 37957939.15 0.0088 0.0054

Uranus 99213-03-27 11:02 G 37957949.88 37957949.96 37957950.05 0.0143 0.0130

Neptune 99213-10-28 00:28 G 37958164.33 37958164.52 37958164.72 0.0088 0.0043

Uranus 99213-11-08 22:47 G 37958176.31 37958176.45 37958176.61 0.0142 0.0107

Neptune 99214-06-10 13:40 G 37958389.88 37958390.07 37958390.29 0.0088 0.0033

Uranus 99214-06-23 10:19 G 37958402.77 37958402.93 37958403.13 0.0142 0.0084

Neptune 99215-01-22 03:21 G 37958615.43 37958615.64 37958615.87 0.0088 0.0022

Uranus 99215-02-04 22:19 G 37958629.24 37958629.43 37958629.64 0.0142 0.0060

Neptune 99215-09-04 17:02 G 37958840.98 37958841.21 37958841.43 0.0088 0.0011

Uranus 99215-09-19 09:50 G 37958855.70 37958855.91 37958856.13 0.0142 0.0036

Neptune 99216-04-17 06:14 G 37959066.54 37959066.76 37959066.99 0.0088 0.0001

Uranus 99216-05-02 21:21 G 37959082.17 37959082.39 37959082.61 0.0142 0.0012

Saturn 99216-07-29 22:04 G 37959170.23 37959170.42 37959170.62 0.0296 0.0093

Neptune 99216-11-28 19:40 G 37959292.10 37959292.32 37959292.54 0.0088 0.0010

Uranus 99216-12-15 08:23 G 37959308.63 37959308.85 37959309.07 0.0142 0.0012

Saturn 99217-03-16 19:55 G 37959400.18 37959400.33 37959400.47 0.0299 0.0215

Neptune 99217-07-12 08:52 G 37959517.66 37959517.87 37959518.10 0.0088 0.0021

Uranus 99217-07-29 19:26 G 37959535.09 37959535.31 37959535.52 0.0142 0.0035

Neptune 99218-02-22 22:33 G 37959743.23 37959743.44 37959743.65 0.0088 0.0031

Uranus 99218-03-13 05:59 G 37959761.57 37959761.75 37959761.97 0.0141 0.0059

Jupiter 99218-09-13 17:31 G 37959946.03 37959946.23 37959946.44 0.0501 0.0041

Neptune 99218-10-06 11:45 G 37959968.80 37959968.99 37959969.20 0.0088 0.0042

Uranus 99218-10-25 16:47 G 37959988.03 37959988.20 37959988.39 0.0141 0.0081

Neptune 99219-05-20 01:11 G 37960194.38 37960194.55 37960194.74 0.0088 0.0052

Uranus 99219-06-09 03:21 G 37960214.50 37960214.64 37960214.79 0.0141 0.0103

Neptune 99219-12-31 14:23 G 37960419.97 37960420.10 37960420.28 0.0088 0.0063

Uranus 99220-01-21 13:40 G 37960440.98 37960441.07 37960441.17 0.0141 0.0125

Neptune 99220-08-13 04:19 G 37960645.56 37960645.68 37960645.80 0.0088 0.0073

Neptune 99221-03-26 17:16 G 37960871.17 37960871.22 37960871.30 0.0088 0.0084

Jupiter 99224-07-13 14:23 G 37962075.93 37962076.10 37962076.28 0.0523 0.0247

Mars 99224-12-28 19:40 G 37962244.15 37962244.32 37962244.49 0.1715 0.0097

Jupiter 99225-03-07 15:50 G 37962313.11 37962313.16 37962313.22 0.0527 0.0505

Saturn 99229-10-19 21:21 G 37964000.25 37964000.39 37964000.55 0.0267 0.0191

Jupiter 99230-05-19 14:38 G 37964211.91 37964212.11 37964212.31 0.0502 0.0150

Saturn 99230-06-06 02:52 G 37964229.40 37964229.62 37964229.83 0.0265 0.0038

Saturn 99231-01-21 05:59 G 37964458.72 37964458.75 37964458.80 0.0263 0.0259

Mars 99231-06-10 23:59 G 37964599.36 37964599.50 37964599.63 0.1833 0.1177

Jupiter 99236-03-18 10:47 G 37966341.86 37966341.95 37966342.06 0.0522 0.0451

Jupiter 99236-11-10 10:47 G 37966578.79 37966578.95 37966579.12 0.0526 0.0295

Jupiter 99242-01-22 11:45 G 37968477.84 37968477.99 37968478.15 0.0503 0.0340

Jupiter 99242-09-16 11:16 G 37968714.83 37968714.97 37968715.13 0.0500 0.0345

Saturn 99246-02-09 01:26 G 37969956.36 37969956.56 37969956.76 0.0296 0.0059

Saturn 99246-09-26 23:16 G 37970186.36 37970186.47 37970186.58 0.0299 0.0251

Jupiter 99248-07-16 07:26 G 37970844.62 37970844.81 37970845.01 0.0525 0.0086

Jupiter 99254-05-22 08:23 G 37972980.66 37972980.85 37972981.05 0.0500 0.0155

Uranus 99255-12-26 16:19 G 37973564.11 37973564.18 37973564.29 0.0136 0.0123

Uranus 99256-08-08 21:50 G 37973790.29 37973790.41 37973790.57 0.0136 0.0104

Uranus 99257-03-23 03:35 G 37974016.49 37974016.65 37974016.83 0.0136 0.0084

Uranus 99257-11-04 09:21 G 37974242.70 37974242.89 37974243.08 0.0136 0.0064

Uranus 99258-06-18 15:07 G 37974468.93 37974469.13 37974469.33 0.0136 0.0044

Uranus 99259-01-30 20:52 G 37974695.16 37974695.37 37974695.59 0.0136 0.0025

Saturn 99259-05-01 23:59 G 37974786.34 37974786.50 37974786.68 0.0268 0.0162

Uranus 99259-09-14 03:07 G 37974921.41 37974921.63 37974921.84 0.0136 0.0004

Saturn 99259-12-17 05:31 G 37975015.52 37975015.73 37975015.94 0.0265 0.0068

Jupiter 99260-03-21 03:21 G 37975110.45 37975110.64 37975110.83 0.0524 0.0127

Uranus 99260-04-27 09:07 G 37975147.67 37975147.88 37975148.10 0.0136 0.0017

Uranus 99260-12-09 15:35 G 37975373.94 37975374.15 37975374.36 0.0137 0.0037

Uranus 99261-07-23 22:04 G 37975600.23 37975600.42 37975600.62 0.0137 0.0057

Uranus 99262-03-07 04:33 G 37975826.53 37975826.69 37975826.88 0.0137 0.0078

Uranus 99262-10-19 11:31 G 37976052.84 37976052.98 37976053.14 0.0137 0.0098

Uranus 99263-06-02 18:28 G 37976279.17 37976279.27 37976279.38 0.0137 0.0118

Jupiter 99266-01-25 06:14 G 37977246.55 37977246.76 37977246.97 0.0501 0.0033

Jupiter 99271-11-25 01:11 G 37979376.40 37979376.55 37979376.71 0.0523 0.0333

Jupiter 99272-07-19 02:38 G 37979613.50 37979613.61 37979613.73 0.0527 0.0421

Saturn 99275-08-22 04:04 G 37980742.47 37980742.67 37980742.88 0.0296 0.0023

Saturn 99276-04-08 01:55 G 37980972.53 37980972.58 37980972.64 0.0299 0.0287

Jupiter 99277-09-30 02:09 G 37981512.41 37981512.59 37981512.78 0.0502 0.0227

Jupiter 99278-05-25 00:28 G 37981749.44 37981749.52 37981749.61 0.0499 0.0452

Jupiter 99284-03-23 23:02 G 37983879.28 37983879.46 37983879.64 0.0526 0.0212

Saturn 99288-11-11 00:43 G 37985572.35 37985572.53 37985572.73 0.0267 0.0136

Jupiter 99289-06-04 22:33 G 37985778.33 37985778.44 37985778.55 0.0504 0.0419

Saturn 99289-06-28 05:59 G 37985801.55 37985801.75 37985801.96 0.0265 0.0094

Jupiter 99290-01-27 22:19 G 37986015.26 37986015.43 37986015.61 0.0500 0.0268

Mars 99290-10-26 05:16 G 37986286.55 37986286.72 37986286.89 0.1711 0.0385

Neptune 99292-11-11 05:16 G 37987033.67 37987033.72 37987033.81 0.0090 0.0085

Neptune 99293-06-24 18:28 G 37987259.15 37987259.27 37987259.39 0.0090 0.0074

Neptune 99294-02-05 06:43 G 37987484.65 37987484.78 37987484.95 0.0090 0.0064

Neptune 99294-09-18 19:26 G 37987710.15 37987710.31 37987710.49 0.0090 0.0053

Neptune 99295-05-02 08:09 G 37987935.65 37987935.84 37987936.03 0.0090 0.0042

Jupiter 99295-11-27 18:28 G 37988145.07 37988145.27 37988145.47 0.0524 0.0003

Neptune 99295-12-13 20:38 G 37988161.17 37988161.36 37988161.57 0.0089 0.0031

Neptune 99296-07-26 09:21 G 37988386.69 37988386.89 37988387.11 0.0089 0.0021

Uranus 99296-11-24 17:16 G 37988508.18 37988508.22 37988508.28 0.0143 0.0139

Neptune 99297-03-08 22:19 G 37988612.21 37988612.43 37988612.64 0.0089 0.0010

Mars 99297-04-07 05:45 G 37988641.67 37988641.74 37988641.81 0.1838 0.1674

Uranus 99297-07-09 05:16 G 37988734.60 37988734.72 37988734.86 0.0142 0.0115

Neptune 99297-10-20 10:47 G 37988837.74 37988837.95 37988838.17 0.0089 0.0002

Uranus 99298-02-20 17:31 G 37988961.06 37988961.23 37988961.40 0.0142 0.0092

Neptune 99298-06-02 23:16 G 37989063.27 37989063.47 37989063.69 0.0089 0.0013

Uranus 99298-10-05 05:02 G 37989187.53 37989187.71 37989187.91 0.0142 0.0069

Neptune 99299-01-14 11:59 G 37989288.80 37989289.00 37989289.22 0.0089 0.0023

Uranus 99299-05-19 16:33 G 37989413.99 37989414.19 37989414.41 0.0142 0.0045

Neptune 99299-08-28 00:43 G 37989514.33 37989514.53 37989514.74 0.0089 0.0034

Uranus 99300-01-01 04:19 G 37989640.46 37989640.68 37989640.90 0.0142 0.0021

Neptune 99300-04-10 12:57 G 37989739.87 37989740.04 37989740.25 0.0089 0.0045

Uranus 99300-08-15 15:35 G 37989866.93 37989867.15 37989867.37 0.0142 0.0003

Neptune 99300-11-22 01:55 G 37989965.41 37989965.58 37989965.75 0.0089 0.0055

Uranus 99301-03-30 02:52 G 37990093.40 37990093.62 37990093.83 0.0142 0.0026

Neptune 99301-07-05 14:23 G 37990190.97 37990191.10 37990191.26 0.0089 0.0066

Jupiter 99301-10-03 19:55 G 37990281.13 37990281.33 37990281.54 0.0501 0.0081

Uranus 99301-11-11 13:26 G 37990319.87 37990320.06 37990320.28 0.0141 0.0050

Neptune 99302-02-16 02:52 G 37990416.53 37990416.62 37990416.75 0.0089 0.0077

Uranus 99302-06-26 00:14 G 37990546.34 37990546.51 37990546.71 0.0141 0.0072

Neptune 99302-09-29 15:50 G 37990642.12 37990642.16 37990642.21 0.0089 0.0087

Uranus 99303-02-07 11:16 G 37990772.81 37990772.97 37990773.13 0.0141 0.0094

Uranus 99303-09-21 21:21 G 37990999.29 37990999.39 37990999.53 0.0141 0.0117

Pluto 99303-12-03 04:04 G 37991071.50 37991071.67 37991071.88 0.0065 0.0032

Uranus 99304-05-05 07:55 G 37991225.80 37991225.83 37991225.87 0.0141 0.0138

Pluto 99304-07-15 08:23 G 37991296.63 37991296.85 37991297.06 0.0065 0.0010

Saturn 99304-07-17 12:43 G 37991298.99 37991299.03 37991299.09 0.0294 0.0285

Pluto 99305-02-25 11:45 G 37991521.88 37991521.99 37991522.14 0.0065 0.0052

Saturn 99305-03-04 08:23 G 37991528.65 37991528.85 37991529.06 0.0297 0.0016

Jupiter 99307-08-03 15:07 G 37992410.95 37992411.13 37992411.32 0.0523 0.0209

Jupiter 99313-06-08 17:16 G 37994547.01 37994547.22 37994547.42 0.0501 0.0112

Saturn 99318-05-25 04:33 G 37996358.50 37996358.69 37996358.90 0.0267 0.0103

Saturn 99319-01-09 09:35 G 37996587.72 37996587.90 37996588.10 0.0265 0.0127

Jupiter 99319-04-08 10:47 G 37996676.83 37996676.95 37996677.07 0.0523 0.0420

Jupiter 99319-12-01 11:45 G 37996913.84 37996913.99 37996914.14 0.0527 0.0332

Jupiter 99325-02-11 14:09 G 37998812.93 37998813.09 37998813.26 0.0502 0.0303

Jupiter 99325-10-06 12:28 G 37999049.90 37999050.02 37999050.16 0.0499 0.0380

Mars 99329-04-07 18:57 G 38000329.19 38000329.29 38000329.39 0.1822 0.1447

Jupiter 99331-08-06 08:38 G 38001179.67 38001179.86 38001180.06 0.0526 0.0123

Saturn 99334-01-27 17:31 G 38002085.12 38002085.23 38002085.35 0.0294 0.0244

Saturn 99334-09-14 13:11 G 38002314.85 38002315.05 38002315.25 0.0296 0.0056

Moon 99336-04-05 05:45 G 38002883.58 38002883.74 38002883.89 0.2630 0.0458

Earth 99336-04-05 11:02 G 38002883.80 38002883.96 38002884.12 0.2627 0.0391 *

Jupiter 99336-10-17 09:21 G 38003078.86 38003078.89 38003078.92 0.0504 0.0497

Jupiter 99337-06-11 09:21 G 38003315.70 38003315.89 38003316.08 0.0500 0.0190

Uranus 99339-08-27 01:40 G 38004122.53 38004122.57 38004122.65 0.0135 0.0130

Uranus 99340-04-09 07:11 G 38004348.69 38004348.80 38004348.93 0.0136 0.0111

Uranus 99340-11-21 12:28 G 38004574.88 38004575.02 38004575.19 0.0136 0.0092

Uranus 99341-07-05 18:14 G 38004801.09 38004801.26 38004801.45 0.0136 0.0072

Uranus 99342-02-16 23:59 G 38005027.31 38005027.50 38005027.70 0.0136 0.0052

Uranus 99342-10-01 05:45 G 38005253.54 38005253.74 38005253.95 0.0136 0.0032

Jupiter 99343-04-11 05:45 G 38005445.54 38005445.74 38005445.93 0.0524 0.0087

Uranus 99343-05-15 11:45 G 38005479.78 38005479.99 38005480.21 0.0136 0.0012

Uranus 99343-12-27 17:45 G 38005706.03 38005706.24 38005706.46 0.0136 0.0009

Uranus 99344-08-10 00:14 G 38005932.30 38005932.51 38005932.72 0.0136 0.0028

Uranus 99345-03-24 06:28 G 38006158.58 38006158.77 38006158.98 0.0137 0.0049

Uranus 99345-11-05 12:57 G 38006384.86 38006385.04 38006385.24 0.0137 0.0069

Uranus 99346-06-19 19:40 G 38006611.16 38006611.32 38006611.49 0.0137 0.0089

Uranus 99347-02-01 02:38 G 38006837.48 38006837.61 38006837.74 0.0137 0.0109

Uranus 99347-09-15 09:50 G 38007063.84 38007063.91 38007063.98 0.0137 0.0130

Saturn 99347-12-05 06:28 G 38007144.56 38007144.77 38007144.98 0.0267 0.0074

Saturn 99348-07-21 11:16 G 38007373.80 38007373.97 38007374.15 0.0265 0.0154

Jupiter 99349-02-14 06:14 G 38007581.55 38007581.76 38007581.97 0.0501 0.0003

Jupiter 99354-12-15 01:40 G 38009711.41 38009711.57 38009711.74 0.0523 0.0296

Jupiter 99355-08-09 02:38 G 38009948.51 38009948.61 38009948.71 0.0526 0.0457

Mars 99356-08-23 15:07 G 38010328.97 38010329.13 38010329.29 0.1707 0.0663

Jupiter 99360-10-20 03:07 G 38011847.44 38011847.63 38011847.82 0.0502 0.0192

Jupiter 99361-06-14 01:26 G 38012084.53 38012084.56 38012084.60 0.0499 0.0488

Saturn 99363-08-09 23:16 G 38012871.33 38012871.47 38012871.62 0.0294 0.0205

Saturn 99364-03-26 19:11 G 38013101.11 38013101.30 38013101.50 0.0297 0.0097

Jupiter 99366-08-19 22:33 G 38013977.39 38013977.44 38013977.49 0.0522 0.0500

Jupiter 99367-04-13 22:04 G 38014214.25 38014214.42 38014214.60 0.0526 0.0247

Jupiter 99372-06-24 23:59 G 38016113.38 38016113.50 38016113.64 0.0503 0.0384

Jupiter 99373-02-16 23:16 G 38016350.31 38016350.47 38016350.64 0.0499 0.0302

Neptune 99375-08-12 05:31 G 38017256.72 38017256.73 38017256.77 0.0088 0.0087

Neptune 99376-03-24 18:43 G 38017482.19 38017482.28 38017482.41 0.0088 0.0077

Neptune 99376-11-05 08:38 G 38017707.71 38017707.86 38017708.01 0.0088 0.0066

Saturn 99377-06-16 11:16 G 38017930.75 38017930.97 38017931.18 0.0267 0.0040

Neptune 99377-06-18 21:35 G 38017933.25 38017933.40 38017933.59 0.0088 0.0056

Neptune 99378-01-30 11:31 G 38018158.79 38018158.98 38018159.18 0.0088 0.0045

Saturn 99378-01-31 16:04 G 38018160.02 38018160.17 38018160.32 0.0265 0.0188

Neptune 99378-09-13 00:43 G 38018384.34 38018384.53 38018384.75 0.0088 0.0035

Jupiter 99378-12-17 17:02 G 38018480.01 38018480.21 38018480.41 0.0525 0.0030

Neptune 99379-04-26 14:23 G 38018609.88 38018610.10 38018610.32 0.0088 0.0024

Neptune 99379-12-08 03:35 G 38018835.44 38018835.65 38018835.88 0.0088 0.0014

Neptune 99380-07-20 17:16 G 38019060.99 38019061.22 38019061.44 0.0088 0.0003

Neptune 99381-03-03 06:28 G 38019286.55 38019286.77 38019287.00 0.0088 0.0008

Uranus 99381-03-09 10:19 G 38019292.84 38019292.93 38019293.05 0.0143 0.0125

Neptune 99381-10-14 19:55 G 38019512.11 38019512.33 38019512.55 0.0088 0.0018

Uranus 99381-10-21 22:19 G 38019519.29 38019519.43 38019519.60 0.0142 0.0102

Neptune 99382-05-28 09:07 G 38019737.68 38019737.88 38019738.10 0.0088 0.0029

Uranus 99382-06-05 10:04 G 38019745.75 38019745.92 38019746.12 0.0142 0.0079

Neptune 99383-01-08 22:33 G 38019963.25 38019963.44 38019963.65 0.0088 0.0040

Uranus 99383-01-17 22:04 G 38019972.22 38019972.42 38019972.63 0.0142 0.0054

Neptune 99383-08-22 11:59 G 38020188.83 38020189.00 38020189.20 0.0088 0.0050

Uranus 99383-09-01 09:35 G 38020198.70 38020198.90 38020199.13 0.0142 0.0031

Neptune 99384-04-04 01:11 G 38020414.41 38020414.55 38020414.73 0.0088 0.0061

Uranus 99384-04-14 21:21 G 38020425.17 38020425.39 38020425.61 0.0142 0.0007

Jupiter 99384-10-22 20:52 G 38020616.16 38020616.37 38020616.57 0.0500 0.0115

Neptune 99384-11-15 14:38 G 38020640.00 38020640.11 38020640.26 0.0088 0.0071

Uranus 99384-11-27 08:23 G 38020651.64 38020651.85 38020652.08 0.0142 0.0017

Neptune 99385-06-29 03:50 G 38020865.61 38020865.66 38020865.77 0.0088 0.0082

Uranus 99385-07-11 19:26 G 38020878.11 38020878.31 38020878.53 0.0142 0.0040

Uranus 99386-02-23 06:43 G 38021104.59 38021104.78 38021104.98 0.0141 0.0062

Uranus 99386-10-07 17:16 G 38021331.06 38021331.22 38021331.41 0.0141 0.0085

Uranus 99387-05-22 03:50 G 38021557.53 38021557.66 38021557.82 0.0141 0.0107

Uranus 99388-01-03 14:23 G 38021784.02 38021784.10 38021784.19 0.0141 0.0129

Mars 99388-08-22 16:47 G 38022016.17 38022016.20 38022016.24 0.1720 0.1687

Jupiter 99390-08-22 14:09 G 38022745.90 38022746.09 38022746.28 0.0524 0.0180

Pluto 99392-03-14 21:50 G 38023316.31 38023316.41 38023316.56 0.0079 0.0067

Pluto 99392-10-26 08:52 G 38023541.65 38023541.87 38023542.10 0.0079 0.0014

Saturn 99393-02-19 05:31 G 38023657.56 38023657.73 38023657.90 0.0294 0.0160

Saturn 99393-10-07 01:26 G 38023887.38 38023887.56 38023887.74 0.0297 0.0142

Mars 99395-02-03 01:26 G 38024371.42 38024371.56 38024371.71 0.1826 0.1002

Jupiter 99396-06-27 16:19 G 38024881.98 38024882.18 38024882.39 0.0501 0.0081

Jupiter 99402-04-28 11:45 G 38027011.86 38027011.99 38027012.13 0.0523 0.0384

Jupiter 99402-12-21 12:28 G 38027248.88 38027249.02 38027249.16 0.0526 0.0369

Saturn 99406-05-13 07:26 G 38028487.73 38028487.81 38028487.91 0.0269 0.0243

Saturn 99406-12-28 14:23 G 38028716.88 38028717.10 38028717.32 0.0267 0.0008

Saturn	99407-08-14 18:57 G	38028946.18	38028946.29	38028946.42	0.0265	0.0219
Jupiter	99408-03-03 12:28 G	38029147.85	38029148.02	38029148.19	0.0503	0.0274
Jupiter	99408-10-26 11:02 G	38029384.85	38029384.96	38029385.08	0.0499	0.0410
Jupiter	99414-08-26 07:26 G	38031514.62	38031514.81	38031515.00	0.0525	0.0155
Jupiter	99419-11-07 08:23 G	38033413.78	38033413.85	38033413.93	0.0504	0.0467
Jupiter	99420-07-01 08:38 G	38033650.67	38033650.86	38033651.04	0.0500	0.0223
Mars	99422-06-22 00:57 G	38034371.39	38034371.54	38034371.68	0.1703	0.0941
Saturn	99422-09-02 12:43 G	38034443.85	38034444.03	38034444.23	0.0295	0.0117
Saturn	99423-04-20 09:07 G	38034673.72	38034673.88	38034674.04	0.0297	0.0189
Uranus	99423-12-09 16:04 G	38034907.08	38034907.17	38034907.29	0.0135	0.0118
Uranus	99424-07-22 21:35 G	38035133.26	38035133.40	38035133.56	0.0135	0.0099
Uranus	99425-03-06 03:07 G	38035359.47	38035359.63	38035359.81	0.0136	0.0080
Uranus	99425-10-18 08:52 G	38035585.68	38035585.87	38035586.06	0.0136	0.0060
Jupiter	99426-05-01 03:07 G	38035780.44	38035780.63	38035780.83	0.0524	0.0058
Uranus	99426-06-01 14:38 G	38035811.90	38035812.11	38035812.31	0.0136	0.0040
Uranus	99427-01-13 20:23 G	38036038.14	38036038.35	38036038.56	0.0136	0.0020
Uranus	99427-08-28 02:38 G	38036264.39	38036264.61	38036264.82	0.0136	0.0002
Uranus	99428-04-10 08:38 G	38036490.65	38036490.86	38036491.08	0.0136	0.0020
Uranus	99428-11-22 14:38 G	38036716.92	38036717.11	38036717.33	0.0136	0.0041
Uranus	99429-07-06 21:07 G	38036943.20	38036943.38	38036943.58	0.0137	0.0061
Uranus	99430-02-18 03:35 G	38037169.49	38037169.65	38037169.84	0.0137	0.0081
Uranus	99430-10-02 10:19 G	38037395.80	38037395.93	38037396.09	0.0137	0.0101
Uranus	99431-05-16 17:16 G	38037622.13	38037622.22	38037622.33	0.0137	0.0121
Jupiter	99432-03-06 06:14 G	38037916.55	38037916.76	38037916.96	0.0501	0.0034
Saturn	99435-11-23 13:26 G	38039273.93	38039274.06	38039274.21	0.0269	0.0206
Saturn	99436-07-09 20:09 G	38039503.13	38039503.34	38039503.56	0.0267	0.0030
Saturn	99437-02-24 00:28 G	38039732.48	38039732.52	38039732.59	0.0265	0.0256
Jupiter	99438-01-03 21:50 G	38040046.24	38040046.41	38040046.58	0.0523	0.0274
Jupiter	99438-08-28 23:31 G	38040283.41	38040283.48	38040283.56	0.0527	0.0485
Moon	99441-10-07 11:31 G	38041418.91	38041418.98	38041419.04	0.2710	0.2438

Earth 99441-10-07 14:09 G 38041419.05 38041419.09 38041419.14 0.2705 0.2568

Jupiter 99443-11-10 03:07 G 38042182.43 38042182.63 38042182.83 0.0502 0.0159

Jupiter 99449-09-08 19:11 G 38044312.22 38044312.30 38044312.38 0.0522 0.0477

Earth 99449-10-05 05:59 G 38044338.61 38044338.75 38044338.90 0.2705 0.0928

Moon 99449-10-05 07:26 G 38044338.68 38044338.81 38044338.95 0.2711 0.1113 *

Jupiter 99450-05-03 19:40 G 38044549.15 38044549.32 38044549.49 0.0526 0.0274

Saturn 99452-03-14 21:07 G 38045230.18 38045230.38 38045230.58 0.0295 0.0067

Saturn 99452-10-30 17:31 G 38045460.12 38045460.23 38045460.36 0.0297 0.0239

Mars 99454-06-21 02:09 G 38046058.49 38046058.59 38046058.69 0.1716 0.1375

Jupiter 99455-07-15 21:35 G 38046448.26 38046448.40 38046448.55 0.0503 0.0356

Jupiter 99456-03-08 20:38 G 38046685.20 38046685.36 38046685.51 0.0499 0.0330

Neptune 99457-02-14 17:45 G 38047028.21 38047028.24 38047028.30 0.0090 0.0087

Neptune 99457-09-28 05:59 G 38047253.67 38047253.75 38047253.89 0.0090 0.0077

Neptune 99458-05-11 18:43 G 38047479.15 38047479.28 38047479.44 0.0090 0.0066

Neptune 99458-12-23 07:40 G 38047704.65 38047704.82 38047704.99 0.0090 0.0055

Neptune 99459-08-05 19:55 G 38047930.16 38047930.33 38047930.54 0.0090 0.0045

Neptune 99460-03-18 08:38 G 38048155.67 38048155.86 38048156.07 0.0090 0.0034

Neptune 99460-10-29 21:35 G 38048381.19 38048381.40 38048381.61 0.0089 0.0023

Mars 99460-12-01 07:11 G 38048413.64 38048413.80 38048413.97 0.1831 0.0520

Neptune 99461-06-12 10:04 G 38048606.71 38048606.92 38048607.14 0.0089 0.0012

Jupiter 99462-01-06 16:33 G 38048814.99 38048815.19 38048815.38 0.0525 0.0064

Neptune 99462-01-23 22:47 G 38048832.23 38048832.45 38048832.67 0.0089 0.0001

Neptune 99462-09-06 11:31 G 38049057.76 38049057.98 38049058.19 0.0089 0.0010

Neptune 99463-04-19 23:59 G 38049283.29 38049283.50 38049283.71 0.0089 0.0020

Neptune 99463-12-01 12:28 G 38049508.83 38049509.02 38049509.23 0.0089 0.0031

Neptune 99464-07-14 01:26 G 38049734.37 38049734.56 38049734.75 0.0089 0.0042

Uranus 99464-11-07 14:23 G 38049851.04 38049851.10 38049851.18 0.0143 0.0135

Neptune 99465-02-24 13:55 G 38049959.91 38049960.08 38049960.26 0.0089 0.0053

Saturn 99465-06-04 17:59 G 38050060.09 38050060.25 38050060.42 0.0269 0.0171

Uranus 99465-06-22 02:23 G 38050077.47 38050077.60 38050077.75 0.0143 0.0112

Neptune 99465-10-08 02:09 G 38050185.46 38050185.59 38050185.76 0.0089 0.0064

Saturn 99466-01-20 00:28 G 38050289.31 38050289.52 38050289.73 0.0267 0.0063

Uranus 99466-02-03 14:23 G 38050303.94 38050304.10 38050304.29 0.0142 0.0089

Neptune 99466-05-21 15:07 G 38050411.02 38050411.13 38050411.26 0.0089 0.0074

Uranus 99466-09-18 02:38 G 38050530.41 38050530.61 38050530.81 0.0142 0.0065

Neptune 99467-01-02 03:21 G 38050636.59 38050636.64 38050636.73 0.0089 0.0085

Uranus 99467-05-02 14:09 G 38050756.88 38050757.09 38050757.31 0.0142 0.0041

Jupiter 99467-11-12 17:16 G 38050951.02 38050951.22 38050951.42 0.0500 0.0140

Uranus 99467-12-15 01:40 G 38050983.36 38050983.57 38050983.80 0.0142 0.0018

Uranus 99468-07-28 13:11 G 38051209.83 38051210.05 38051210.27 0.0142 0.0006

Uranus 99469-03-12 00:43 G 38051436.31 38051436.53 38051436.74 0.0142 0.0029

Uranus 99469-10-24 11:31 G 38051662.79 38051662.98 38051663.19 0.0141 0.0052

Uranus 99470-06-07 22:33 G 38051889.26 38051889.44 38051889.63 0.0141 0.0075

Uranus 99471-01-20 09:07 G 38052115.73 38052115.88 38052116.05 0.0141 0.0097

Uranus 99471-09-03 19:40 G 38052342.22 38052342.32 38052342.45 0.0141 0.0119

Uranus 99472-04-17 06:14 G 38052568.76 38052568.76 38052568.77 0.0141 0.0141

Jupiter 99473-09-11 11:59 G 38053080.81 38053081.00 38053081.19 0.0524 0.0150

Jupiter 99479-07-18 13:55 G 38055216.87 38055217.08 38055217.29 0.0502 0.0052

Saturn 99481-09-25 05:31 G 38056016.52 38056016.73 38056016.94 0.0295 0.0020

Saturn 99482-05-13 02:09 G 38056246.55 38056246.59 38056246.65 0.0298 0.0288

Jupiter 99485-05-17 07:40 G 38057346.69 38057346.82 38057346.97 0.0522 0.0360

Jupiter 99486-01-09 08:23 G 38057583.72 38057583.85 38057583.98 0.0526 0.0395

Mars 99488-04-18 10:47 G 38058413.83 38058413.95 38058414.07 0.1700 0.1213

Jupiter 99491-03-23 11:02 G 38059482.78 38059482.96 38059483.14 0.0502 0.0245

Jupiter 99491-11-15 09:21 G 38059719.80 38059719.89 38059719.99 0.0499 0.0438

Saturn 99494-12-16 01:11 G 38060846.37 38060846.55 38060846.75 0.0269 0.0131

Saturn 99495-08-02 07:26 G 38061075.61 38061075.81 38061076.01 0.0266 0.0103

Jupiter 99497-09-14 02:09 G 38061849.40 38061849.59 38061849.78 0.0526 0.0177

Jupiter 99502-11-27 07:26 G 38063748.71 38063748.81 38063748.91 0.0504 0.0437

Jupiter 99503-07-22 06:43 G 38063985.61 38063985.78 38063985.97 0.0500 0.0253

Uranus 99507-08-10 01:26 G 38065465.51 38065465.56 38065465.67 0.0135 0.0126

Uranus 99508-03-23 06:57 G 38065691.68 38065691.79 38065691.94 0.0135 0.0107

Uranus 99508-11-04 12:43 G 38065917.87 38065918.03 38065918.20 0.0136 0.0087

Jupiter 99509-05-20 22:47 G 38066115.25 38066115.45 38066115.65 0.0525 0.0036

Uranus 99509-06-18 17:59 G 38066144.08 38066144.25 38066144.45 0.0136 0.0068

Uranus 99510-01-30 23:59 G 38066370.30 38066370.50 38066370.70 0.0136 0.0048

Saturn 99510-08-21 20:09 G 38066573.26 38066573.34 38066573.43 0.0292 0.0265

Uranus 99510-09-14 05:45 G 38066596.53 38066596.74 38066596.95 0.0136 0.0028

Saturn 99511-04-08 15:07 G 38066802.92 38066803.13 38066803.33 0.0295 0.0033

Uranus 99511-04-28 11:45 G 38066822.78 38066822.99 38066823.21 0.0136 0.0008

Uranus 99511-12-10 17:45 G 38067049.03 38067049.24 38067049.46 0.0136 0.0012

Uranus 99512-07-23 23:45 G 38067275.29 38067275.49 38067275.71 0.0136 0.0033

Uranus 99513-03-07 06:28 G 38067501.57 38067501.77 38067501.97 0.0136 0.0052

Uranus 99513-10-19 12:43 G 38067727.85 38067728.03 38067728.22 0.0137 0.0072

Uranus 99514-06-02 19:26 G 38067954.15 38067954.31 38067954.47 0.0137 0.0092

Uranus 99515-01-15 01:55 G 38068180.47 38068180.58 38068180.71 0.0137 0.0112

Jupiter 99515-03-27 01:55 G 38068251.37 38068251.58 38068251.78 0.0501 0.0058

Uranus 99515-08-29 08:52 G 38068406.83 38068406.87 38068406.93 0.0137 0.0132

Mars 99520-04-18 11:45 G 38070100.86 38070100.99 38070101.13 0.1712 0.1085

Jupiter 99521-01-23 20:09 G 38070381.16 38070381.34 38070381.52 0.0523 0.0242

Jupiter 99521-09-17 21:35 G 38070618.37 38070618.40 38070618.44 0.0527 0.0516

Saturn 99524-06-28 06:57 G 38071632.59 38071632.79 38071632.99 0.0268 0.0094

Saturn 99525-02-12 12:43 G 38071861.85 38071862.03 38071862.22 0.0266 0.0138

Mars 99526-09-29 13:40 G 38072455.90 38072456.07 38072456.24 0.1836 0.0058

Jupiter 99526-11-29 21:35 G 38072517.21 38072517.40 38072517.61 0.0502 0.0138

Jupiter 99532-09-28 16:19 G 38074647.08 38074647.18 38074647.28 0.0522 0.0450

Jupiter 99533-05-23 16:04 G 38074884.01 38074884.17 38074884.34 0.0526 0.0302

Jupiter 99538-08-04 17:16 G 38076783.07 38076783.22 38076783.38 0.0503 0.0333

Jupiter 99539-03-29 16:47 G 38077020.05 38077020.20 38077020.34 0.0500 0.0356

Saturn 99540-03-03 05:31 G 38077359.59 38077359.73 38077359.87 0.0293 0.0218

Neptune 99540-06-28 05:31 G 38077476.65 38077476.73 38077476.84 0.0088 0.0079

Saturn 99540-10-19 00:28 G 38077589.33 38077589.52 38077589.73 0.0296 0.0083

Neptune 99541-02-08 18:57 G 38077702.17 38077702.29 38077702.45 0.0088 0.0069

Neptune 99541-09-22 08:38 G 38077927.70 38077927.86 38077928.03 0.0088 0.0058

Neptune 99542-05-05 21:50 G 38078153.24 38078153.41 38078153.61 0.0088 0.0048

Neptune 99542-12-17 11:31 G 38078378.78 38078378.98 38078379.19 0.0088 0.0037

Neptune 99543-07-31 00:43 G 38078604.33 38078604.53 38078604.76 0.0088 0.0027

Neptune 99544-03-12 14:23 G 38078829.88 38078830.10 38078830.33 0.0088 0.0016

Neptune 99544-10-24 03:50 G 38079055.44 38079055.66 38079055.89 0.0088 0.0005

Jupiter 99545-01-26 11:16 G 38079149.77 38079149.97 38079150.17 0.0525 0.0087

Neptune 99545-06-06 17:16 G 38079281.00 38079281.22 38079281.44 0.0088 0.0005

Neptune 99546-01-18 06:43 G 38079506.56 38079506.78 38079507.00 0.0088 0.0016

Neptune 99546-08-31 20:09 G 38079732.13 38079732.34 38079732.55 0.0088 0.0026

Neptune 99547-04-14 09:07 G 38079957.69 38079957.88 38079958.10 0.0088 0.0037

Neptune 99547-11-25 22:19 G 38080183.26 38080183.43 38080183.64 0.0088 0.0048

Neptune 99548-07-08 11:59 G 38080408.84 38080409.00 38080409.18 0.0088 0.0058

Neptune 99549-02-19 01:11 G 38080634.44 38080634.55 38080634.71 0.0088 0.0069

Uranus 99549-02-20 06:43 G 38080635.68 38080635.78 38080635.90 0.0143 0.0122

Neptune 99549-10-02 14:52 G 38080860.04 38080860.12 38080860.23 0.0088 0.0079

Uranus 99549-10-04 18:43 G 38080862.14 38080862.28 38080862.45 0.0142 0.0099

Uranus 99550-05-19 06:43 G 38081088.60 38081088.78 38081088.98 0.0142 0.0075

Jupiter 99550-12-02 14:38 G 38081285.91 38081286.11 38081286.30 0.0500 0.0168

Uranus 99550-12-31 18:43 G 38081315.08 38081315.28 38081315.49 0.0142 0.0052

Pluto 99551-03-27 21:21 G 38081401.20 38081401.39 38081401.60 0.0065 0.0027

Uranus 99551-08-15 06:28 G 38081541.56 38081541.77 38081541.99 0.0142 0.0028

Pluto 99551-11-08 00:57 G 38081626.34 38081626.54 38081626.76 0.0065 0.0015

Uranus 99552-03-28 18:14 G 38081768.04 38081768.26 38081768.48 0.0142 0.0005

Pluto 99552-06-20 04:33 G 38081851.61 38081851.69 38081851.82 0.0065 0.0057

Uranus 99552-11-10 05:31 G 38081994.51 38081994.73 38081994.95 0.0142 0.0019

Uranus 99553-06-24 16:33 G 38082220.99 38082221.19 38082221.41 0.0142 0.0042

Saturn 99554-01-08 14:52 G 38082418.91 38082419.12 38082419.33 0.0268 0.0052

Uranus 99554-02-06 03:35 G 38082447.46 38082447.65 38082447.85 0.0141 0.0065

Mars 99554-02-14 20:38 G 38082456.28 38082456.36 38082456.44 0.1696 0.1488

Saturn 99554-08-25 20:09 G 38082648.19 38082648.34 38082648.51 0.0266 0.0179

Uranus 99554-09-20 14:23 G 38082673.94 38082674.10 38082674.28 0.0141 0.0087

Uranus 99555-05-05 00:57 G 38082900.42 38082900.54 38082900.69 0.0141 0.0109

Uranus 99555-12-17 11:16 G 38083126.91 38083126.97 38083127.07 0.0141 0.0131

Jupiter 99556-10-01 05:02 G 38083415.52 38083415.71 38083415.90 0.0524 0.0133

Jupiter 99562-08-07 11:31 G 38085551.77 38085551.98 38085552.19 0.0501 0.0025

Jupiter 99568-06-06 02:09 G 38087681.44 38087681.59 38087681.74 0.0523 0.0340

Jupiter 99569-01-29 03:07 G 38087918.51 38087918.63 38087918.75 0.0527 0.0418

Saturn 99569-09-13 15:07 G 38088145.97 38088146.13 38088146.31 0.0293 0.0165

Saturn 99570-05-01 10:33 G 38088375.76 38088375.94 38088376.13 0.0296 0.0137

Jupiter 99574-04-12 05:31 G 38089817.54 38089817.73 38089817.91 0.0502 0.0223

Jupiter 99574-12-05 03:35 G 38090054.58 38090054.65 38090054.74 0.0499 0.0461

Earth 99579-04-08 11:31 G 38091639.82 38091639.98 38091640.14 0.2627 0.0462

Moon 99579-04-08 17:31 G 38091640.08 38091640.23 38091640.38 0.2627 0.1162 *

Jupiter 99580-10-03 23:45 G 38092184.31 38092184.49 38092184.67 0.0526 0.0207

Saturn 99582-12-04 13:40 G 38092976.01 38092976.07 38092976.15 0.0270 0.0253

Saturn 99583-07-21 21:07 G 38093205.16 38093205.38 38093205.59 0.0268 0.0015

Saturn 99584-03-07 02:09 G 38093434.47 38093434.59 38093434.72 0.0265 0.0215

Jupiter 99585-12-16 00:43 G 38094083.42 38094083.53 38094083.65 0.0504 0.0418

Mars 99586-02-13 21:07 G 38094143.22 38094143.38 38094143.53 0.1708 0.0780

Jupiter 99586-08-10 00:28 G 38094320.35 38094320.52 38094320.69 0.0500 0.0273

Uranus 99591-04-09 10:47 G 38096023.92 38096023.95 38096024.00 0.0135 0.0133

Uranus 99591-11-21 16:19 G 38096250.07 38096250.18 38096250.30 0.0135 0.0114

Jupiter 99592-06-08 19:11 G 38096450.10 38096450.30 38096450.50 0.0524 0.0008

Uranus 99592-07-04 21:35 G 38096476.26 38096476.40 38096476.56 0.0136 0.0095

Mars 99592-07-26 19:11 G 38096498.13 38096498.30 38096498.46 0.1841 0.0444

Uranus 99593-02-16 03:07 G 38096702.46 38096702.63 38096702.82 0.0136 0.0076

Uranus 99593-09-30 09:07 G 38096928.68 38096928.88 38096929.07 0.0136 0.0056

Uranus 99594-05-14 14:38 G 38097154.91 38097155.11 38097155.32 0.0136 0.0037

Uranus 99594-12-26 20:38 G 38097381.15 38097381.36 38097381.57 0.0136 0.0017

Uranus 99595-08-10 02:38 G 38097607.40 38097607.61 38097607.83 0.0136 0.0005

Uranus 99596-03-23 08:52 G 38097833.66 38097833.87 38097834.08 0.0136 0.0023

Uranus 99596-11-04 14:52 G 38098059.92 38098060.12 38098060.33 0.0136 0.0043

Uranus 99597-06-18 21:07 G 38098286.20 38098286.38 38098286.58 0.0137 0.0064

Uranus 99598-01-31 03:35 G 38098512.49 38098512.65 38098512.83 0.0137 0.0084

Jupiter 99598-04-14 20:52 G 38098586.17 38098586.37 38098586.58 0.0501 0.0080

Uranus 99598-09-14 10:47 G 38098738.81 38098738.95 38098739.09 0.0137 0.0103

Saturn 99599-03-27 00:14 G 38098932.32 38098932.51 38098932.70 0.0294 0.0117

Uranus 99599-04-28 17:16 G 38098965.14 38098965.22 38098965.32 0.0137 0.0123

Saturn 99599-11-11 20:09 G 38099162.18 38099162.34 38099162.50 0.0297 0.0188

Jupiter 99604-02-12 14:38 G 38100715.93 38100716.11 38100716.29 0.0523 0.0221

Jupiter 99609-12-18 18:14 G 38102852.06 38102852.26 38102852.47 0.0502 0.0112

Saturn 99612-06-15 21:50 G 38103762.29 38103762.41 38103762.56 0.0269 0.0210

Saturn 99613-01-31 05:02 G 38103991.50 38103991.71 38103991.93 0.0267 0.0027

Saturn 99613-09-17 09:35 G 38104220.86 38104220.90 38104220.97 0.0265 0.0255

Jupiter 99615-10-18 08:52 G 38104981.76 38104981.87 38104981.98 0.0522 0.0434

Jupiter 99616-06-11 09:07 G 38105218.72 38105218.88 38105219.04 0.0526 0.0320

Neptune 99621-05-20 05:31 G 38107022.73 38107022.73 38107022.76 0.0090 0.0090

Jupiter 99621-08-23 14:38 G 38107117.94 38107118.11 38107118.27 0.0503 0.0305

Neptune 99621-12-31 18:14 G 38107248.17 38107248.26 38107248.37 0.0090 0.0079

Jupiter 99622-04-17 13:26 G 38107354.94 38107355.06 38107355.20 0.0499 0.0383

Neptune 99622-08-14 06:28 G 38107473.66 38107473.77 38107473.93 0.0090 0.0069

Neptune 99623-03-27 19:11 G 38107699.15 38107699.30 38107699.48 0.0090 0.0058

Neptune 99623-11-08 07:55 G 38107924.65 38107924.83 38107925.02 0.0090 0.0047

Neptune 99624-06-20 20:23 G 38108150.17 38108150.35 38108150.56 0.0090 0.0037

Neptune 99625-02-01 09:07 G 38108375.68 38108375.88 38108376.10 0.0089 0.0026

Neptune 99625-09-14 21:50 G 38108601.20 38108601.41 38108601.62 0.0089 0.0015

Neptune 99626-04-28 10:19 G 38108826.72 38108826.93 38108827.15 0.0089 0.0004

Neptune 99626-12-09 23:02 G 38109052.24 38109052.46 38109052.67 0.0089 0.0007

Neptune 99627-07-23 11:45 G 38109277.78 38109277.99 38109278.20 0.0089 0.0018

Jupiter 99628-02-15 05:16 G 38109484.53 38109484.72 38109484.92 0.0525 0.0108

Neptune 99628-03-05 00:14 G 38109503.31 38109503.51 38109503.72 0.0089 0.0029

Saturn 99628-10-06 10:33 G 38109718.74 38109718.94 38109719.14 0.0294 0.0064

Neptune 99628-10-16 12:43 G 38109728.85 38109729.03 38109729.24 0.0089 0.0040

Saturn 99629-05-24 06:43 G 38109948.66 38109948.78 38109948.90 0.0297 0.0242

Neptune 99629-05-30 01:40 G 38109954.39 38109954.57 38109954.75 0.0089 0.0050

Neptune 99630-01-10 14:09 G 38110179.94 38110180.09 38110180.26 0.0089 0.0061

Neptune 99630-08-24 02:38 G 38110405.50 38110405.61 38110405.76 0.0089 0.0072

Neptune 99631-04-06 15:35 G 38110631.07 38110631.15 38110631.24 0.0089 0.0082

Uranus 99632-10-20 12:43 G 38111193.95 38111194.03 38111194.11 0.0143 0.0131

Jupiter 99633-04-28 07:55 G 38111383.83 38111383.83 38111383.84 0.0504 0.0504

Uranus 99633-06-04 00:28 G 38111420.39 38111420.52 38111420.68 0.0142 0.0108

Jupiter 99633-12-21 08:23 G 38111620.66 38111620.85 38111621.04 0.0500 0.0189

Uranus 99634-01-16 12:57 G 38111646.86 38111647.04 38111647.22 0.0142 0.0085

Uranus 99634-08-31 00:43 G 38111873.34 38111873.53 38111873.73 0.0142 0.0061

Uranus 99635-04-14 12:28 G 38112099.81 38112100.02 38112100.24 0.0142 0.0038

Uranus 99635-11-26 23:59 G 38112326.29 38112326.50 38112326.73 0.0142 0.0015

Uranus 99636-07-10 11:31 G 38112552.76 38112552.98 38112553.20 0.0142 0.0009

Uranus 99637-02-21 22:47 G 38112779.24 38112779.45 38112779.67 0.0142 0.0032

Uranus 99637-10-06 09:50 G 38113005.72 38113005.91 38113006.12 0.0141 0.0055

Uranus 99638-05-20 20:38 G 38113232.19 38113232.36 38113232.56 0.0141 0.0077

Uranus 99639-01-02 07:26 G 38113458.66 38113458.81 38113458.97 0.0141 0.0099

Pluto 99639-07-08 13:55 G 38113645.96 38113646.08 38113646.25 0.0079 0.0062

Uranus 99639-08-16 17:45 G 38113685.15 38113685.24 38113685.37 0.0141 0.0121

Jupiter 99639-10-21 02:38 G 38113750.41 38113750.61 38113750.81 0.0524 0.0101

Pluto 99640-02-19 00:57 G 38113871.33 38113871.54 38113871.77 0.0079 0.0019

Saturn 99641-12-27 05:16 G 38114548.55 38114548.72 38114548.89 0.0269 0.0171

Saturn 99642-08-13 11:31 G 38114777.78 38114777.98 38114778.20 0.0267 0.0065

Jupiter 99645-08-26 04:33 G 38115886.48 38115886.69 38115886.89 0.0501 0.0011

Jupiter 99651-06-25 23:02 G 38118016.30 38118016.46 38118016.62 0.0522 0.0312

Mars 99651-12-12 06:57 G 38118185.63 38118185.79 38118185.96 0.1704 0.0509

Jupiter 99652-02-17 23:31 G 38118253.38 38118253.48 38118253.59 0.0526 0.0446

Jupiter 99657-05-01 00:14 G 38120152.32 38120152.51 38120152.70 0.0503 0.0201

Jupiter 99657-12-23 23:02 G 38120389.42 38120389.46 38120389.51 0.0499 0.0485

Saturn 99658-04-18 18:57 G 38120505.08 38120505.29 38120505.49 0.0295 0.0018

Mars 99658-05-24 00:57 G 38120540.39 38120540.54 38120540.69 0.1846 0.0938

Saturn 99658-12-04 15:21 G 38120735.11 38120735.14 38120735.18 0.0298 0.0292

Jupiter 99663-02-28 18:57 G 38122282.28 38122282.29 38122282.31 0.0521 0.0518

Jupiter 99663-10-23 18:14 G 38122519.08 38122519.26 38122519.44 0.0525 0.0231

Jupiter 99669-01-03 21:07 G 38124418.25 38124418.38 38124418.51 0.0504 0.0394

Jupiter 99669-08-28 21:07 G 38124655.21 38124655.38 38124655.54 0.0500 0.0299

Saturn 99671-07-09 12:43 G 38125334.85 38125335.03 38125335.22 0.0268 0.0130

Saturn 99672-02-23 18:57 G 38125564.09 38125564.29 38125564.49 0.0266 0.0105

Jupiter 99675-06-28 12:14 G 38126784.81 38126785.01 38126785.21 0.0524 0.0012

Uranus 99675-07-22 02:09 G 38126808.50 38126808.59 38126808.69 0.0135 0.0121

Uranus 99676-03-04 07:11 G 38127034.68 38127034.80 38127034.96 0.0136 0.0103

Uranus 99676-10-16 12:43 G 38127260.88 38127261.03 38127261.21 0.0136 0.0084

Uranus 99677-05-30 18:28 G 38127487.09 38127487.27 38127487.46 0.0136 0.0064

Uranus 99678-01-11 23:59 G 38127713.31 38127713.50 38127713.71 0.0136 0.0045

Uranus 99678-08-26 06:14 G 38127939.55 38127939.76 38127939.97 0.0136 0.0025

Uranus 99679-04-09 11:59 G 38128165.79 38128166.00 38128166.22 0.0136 0.0006

Uranus 99679-11-21 17:59 G 38128392.04 38128392.25 38128392.47 0.0136 0.0015

Uranus 99680-07-05 00:14 G 38128618.30 38128618.51 38128618.72 0.0136 0.0035

Uranus 99681-02-16 06:28 G 38128844.58 38128844.77 38128844.97 0.0137 0.0055

Jupiter 99681-05-03 17:59 G 38128921.05 38128921.25 38128921.45 0.0501 0.0109

Uranus 99681-09-30 12:57 G 38129070.87 38129071.04 38129071.22 0.0137 0.0075

Uranus 99682-05-14 19:11 G 38129297.16 38129297.30 38129297.47 0.0137 0.0095

Uranus 99682-12-27 01:55 G 38129523.48 38129523.58 38129523.71 0.0137 0.0115

Uranus 99683-08-10 09:07 G 38129749.85 38129749.88 38129749.92 0.0137 0.0135

Earth 99684-10-08 16:04 G 38130175.14 38130175.17 38130175.21 0.2705 0.2613

Jupiter 99687-03-03 08:52 G 38131050.69 38131050.87 38131051.06 0.0523 0.0199

Saturn 99687-03-14 09:35 G 38131061.83 38131061.90 38131062.00 0.0292 0.0265

Saturn 99687-10-30 04:19 G 38131291.48 38131291.68 38131291.89 0.0295 0.0034

Earth 99692-10-06 08:23 G 38133094.70 38133094.85 38133094.99 0.2705 0.0872

Moon 99692-10-06 08:52 G 38133094.71 38133094.87 38133095.03 0.2699 0.0526 *

Jupiter 99693-01-06 12:14 G 38133186.81 38133187.01 38133187.22 0.0502 0.0090

Jupiter 99698-11-06 06:43 G 38135316.66 38135316.78 38135316.91 0.0522 0.0404

Jupiter 99699-07-01 07:26 G 38135553.67 38135553.81 38135553.96 0.0526 0.0354

Saturn 99701-01-19 19:40 G 38136121.12 38136121.32 38136121.53 0.0268 0.0092

Saturn 99701-09-06 01:26 G 38136350.38 38136350.56 38136350.75 0.0266 0.0142

Jupiter 99704-09-12 07:55 G 38137452.66 38137452.83 38137453.00 0.0503 0.0285

Neptune 99704-09-30 15:35 G 38137471.09 38137471.15 38137471.26 0.0088 0.0082

Jupiter 99705-05-07 06:43 G 38137689.67 38137689.78 38137689.91 0.0499 0.0405

Neptune 99705-05-14 05:16 G 38137696.61 38137696.72 38137696.87 0.0088 0.0071

Neptune 99705-12-25 18:43 G 38137922.14 38137922.28 38137922.46 0.0088 0.0061

Neptune 99706-08-08 08:23 G 38138147.68 38138147.85 38138148.05 0.0088 0.0050

Neptune 99707-03-21 21:50 G 38138373.23 38138373.41 38138373.63 0.0088 0.0040

Neptune 99707-11-02 11:31 G 38138598.77 38138598.98 38138599.20 0.0088 0.0029

Neptune 99708-06-15 01:11 G 38138824.33 38138824.55 38138824.77 0.0088 0.0018

Neptune 99709-01-26 14:38 G 38139049.89 38139050.11 38139050.34 0.0088 0.0008

Neptune 99709-09-09 04:04 G 38139275.45 38139275.67 38139275.90 0.0088 0.0003

Neptune 99710-04-22 17:16 G 38139501.01 38139501.22 38139501.45 0.0088 0.0014

Neptune 99710-12-04 06:43 G 38139726.57 38139726.78 38139727.00 0.0088 0.0024

Jupiter 99711-03-07 02:52 G 38139819.43 38139819.62 38139819.82 0.0525 0.0139

Neptune 99711-07-17 19:55 G 38139952.14 38139952.33 38139952.55 0.0088 0.0035

Neptune 99712-02-28 09:35 G 38140177.71 38140177.90 38140178.10 0.0088 0.0045

Neptune 99712-10-10 22:33 G 38140403.29 38140403.44 38140403.63 0.0088 0.0056

Neptune 99713-05-24 12:14 G 38140628.87 38140629.01 38140629.16 0.0088 0.0066

Neptune 99714-01-05 01:11 G 38140854.47 38140854.55 38140854.69 0.0088 0.0077

Neptune 99714-08-18 14:52 G 38141080.11 38141080.12 38141080.16 0.0088 0.0087

Jupiter 99716-05-18 03:07 G 38141718.58 38141718.63 38141718.69 0.0504 0.0482

Uranus 99716-06-20 19:26 G 38141752.28 38141752.31 38141752.37 0.0143 0.0140

Saturn 99716-09-24 16:19 G 38141848.05 38141848.18 38141848.32 0.0293 0.0223

Jupiter 99717-01-10 03:50 G 38141955.47 38141955.66 38141955.85 0.0500 0.0214

Uranus 99717-02-02 07:55 G 38141978.71 38141978.83 38141978.96 0.0142 0.0117

Saturn 99717-05-12 11:16 G 38142077.77 38142077.97 38142078.17 0.0296 0.0079

Uranus 99717-09-16 19:55 G 38142205.18 38142205.33 38142205.51 0.0142 0.0094

Mars 99717-10-09 16:47 G 38142228.03 38142228.20 38142228.38 0.1700 0.0229

Uranus 99718-05-01 07:55 G 38142431.65 38142431.83 38142432.03 0.0142 0.0070

Uranus 99718-12-13 19:40 G 38142658.12 38142658.32 38142658.54 0.0142 0.0047

Uranus 99719-07-28 07:26 G 38142884.60 38142884.81 38142885.03 0.0142 0.0024

Uranus 99720-03-10 19:11 G 38143111.08 38143111.30 38143111.52 0.0142 0.0001

Uranus 99720-10-23 06:28 G 38143337.55 38143337.77 38143337.99 0.0142 0.0023

Uranus 99721-06-06 17:31 G 38143564.03 38143564.23 38143564.44 0.0142 0.0045

Uranus 99722-01-19 04:33 G 38143790.50 38143790.69 38143790.89 0.0141 0.0068

Uranus 99722-09-02 15:07 G 38144016.97 38144017.13 38144017.31 0.0141 0.0090

Jupiter 99722-11-09 22:19 G 38144085.24 38144085.43 38144085.63 0.0524 0.0076

Uranus 99723-04-17 01:40 G 38144243.45 38144243.57 38144243.72 0.0141 0.0112

Uranus 99723-11-29 12:14 G 38144469.95 38144470.01 38144470.08 0.0141 0.0133

Mars 99724-03-21 06:14 G 38144582.66 38144582.76 38144582.86 0.1851 0.1462

Jupiter 99728-09-15 01:26 G 38146221.35 38146221.56 38146221.77 0.0501 0.0024

Saturn 99730-08-02 02:38 G 38146907.39 38146907.61 38146907.82 0.0268 0.0052

Saturn 99731-03-19 07:40 G 38147136.68 38147136.82 38147136.99 0.0266 0.0181

Jupiter 99734-07-15 17:16 G 38148351.05 38148351.22 38148351.38 0.0522 0.0291

Jupiter 99735-03-09 17:31 G 38148588.15 38148588.23 38148588.33 0.0526 0.0469

Jupiter 99740-05-20 22:04 G 38150487.22 38150487.42 38150487.61 0.0503 0.0170

Jupiter 99746-03-20 14:23 G 38152617.04 38152617.10 38152617.16 0.0521 0.0495

Saturn 99746-04-07 00:28 G 38152634.36 38152634.52 38152634.69 0.0293 0.0176

Jupiter 99746-11-12 13:55 G 38152853.91 38152854.08 38152854.25 0.0526 0.0257

Saturn 99746-11-22 19:55 G 38152864.14 38152864.33 38152864.52 0.0296 0.0128

Jupiter 99752-01-24 16:04 G 38154753.03 38154753.17 38154753.31 0.0503 0.0370

Jupiter 99752-09-17 15:21 G 38154989.99 38154990.14 38154990.31 0.0500 0.0324

Mars 99756-03-20 20:38 G 38156270.32 38156270.36 38156270.41 0.1835 0.1760

Jupiter 99758-07-18 11:31 G 38157119.78 38157119.98 38157120.18 0.0525 0.0048

Uranus 99759-03-22 11:02 G 38157366.91 38157366.96 38157367.04 0.0135 0.0129

Saturn 99759-06-28 01:40 G 38157464.50 38157464.57 38157464.64 0.0270 0.0254

Uranus 99759-11-03 16:33 G 38157593.08 38157593.19 38157593.32 0.0135 0.0110

Saturn 99760-02-12 08:38 G 38157693.65 38157693.86 38157694.08 0.0268 0.0017

Uranus 99760-06-16 22:04 G 38157819.27 38157819.42 38157819.58 0.0136 0.0091

Saturn 99760-09-28 13:40 G 38157922.95 38157923.07 38157923.20 0.0265 0.0215

Uranus 99761-01-29 03:35 G 38158045.47 38158045.65 38158045.84 0.0136 0.0072

Uranus 99761-09-12 09:07 G 38158271.69 38158271.88 38158272.09 0.0136 0.0053

Uranus 99762-04-26 15:07 G 38158497.92 38158498.13 38158498.34 0.0136 0.0033

Uranus 99762-12-08 20:52 G 38158724.16 38158724.37 38158724.58 0.0136 0.0014

Uranus 99763-07-23 02:52 G 38158950.41 38158950.62 38158950.84 0.0136 0.0006

Uranus 99764-03-05 08:52 G 38159176.66 38159176.87 38159177.09 0.0136 0.0026

Jupiter 99764-05-23 12:14 G 38159255.81 38159256.01 38159256.21 0.0501 0.0133

Uranus 99764-10-17 14:52 G 38159402.93 38159403.12 38159403.34 0.0137 0.0047

Uranus 99765-05-31 21:21 G 38159629.21 38159629.39 38159629.58 0.0137 0.0066

Uranus 99766-01-13 03:35 G 38159855.50 38159855.65 38159855.83 0.0137 0.0086

Uranus 99766-08-27 10:19 G 38160081.81 38160081.93 38160082.08 0.0137 0.0106

Uranus 99767-04-10 17:31 G 38160308.15 38160308.23 38160308.31 0.0137 0.0126

Jupiter 99770-03-23 08:09 G 38161385.65 38161385.84 38161386.03 0.0523 0.0165

Saturn 99775-10-18 05:16 G 38163420.55 38163420.72 38163420.91 0.0294 0.0138

Jupiter 99776-01-27 08:52 G 38163521.66 38163521.87 38163522.07 0.0502 0.0063

Saturn 99776-06-04 01:11 G 38163650.38 38163650.55 38163650.72 0.0297 0.0168

Jupiter 99781-11-26 04:19 G 38165651.55 38165651.68 38165651.82 0.0522 0.0375

Jupiter 99782-07-21 04:33 G 38165888.56 38165888.69 38165888.83 0.0526 0.0383

Mars 99783-08-07 02:52 G 38166270.45 38166270.62 38166270.80 0.1697 0.0047

Neptune 99786-04-05 05:45 G 38167242.68 38167242.74 38167242.85 0.0090 0.0082

Neptune 99786-11-16 18:28 G 38167468.16 38167468.27 38167468.42 0.0090 0.0071

Neptune 99787-06-30 07:26 G 38167693.66 38167693.81 38167693.97 0.0090 0.0060

Jupiter 99787-10-02 05:45 G 38167787.56 38167787.74 38167787.92 0.0503 0.0256

Neptune 99788-02-10 19:40 G 38167919.16 38167919.32 38167919.52 0.0090 0.0050

Jupiter 99788-05-26 05:02 G 38168024.61 38168024.71 38168024.81 0.0500 0.0435

Neptune 99788-09-23 08:23 G 38168144.67 38168144.85 38168145.05 0.0090 0.0039

Saturn 99789-01-07 06:57 G 38168250.68 38168250.79 38168250.93 0.0269 0.0217

Neptune 99789-05-06 21:07 G 38168370.18 38168370.38 38168370.59 0.0090 0.0028

Saturn 99789-08-24 14:09 G 38168479.87 38168480.09 38168480.30 0.0267 0.0021

Neptune 99789-12-18 09:21 G 38168595.69 38168595.89 38168596.11 0.0090 0.0018

Saturn 99790-04-10 18:43 G 38168709.22 38168709.28 38168709.36 0.0265 0.0250

Neptune 99790-07-31 22:19 G 38168821.22 38168821.43 38168821.65 0.0089 0.0006

Neptune 99791-03-14 10:47 G 38169046.74 38169046.95 38169047.17 0.0089 0.0005

Neptune 99791-10-25 23:16 G 38169272.26 38169272.47 38169272.69 0.0089 0.0015

Neptune 99792-06-07 11:59 G 38169497.79 38169498.00 38169498.21 0.0089 0.0026

Neptune 99793-01-19 00:28 G 38169723.33 38169723.52 38169723.72 0.0089 0.0037

Neptune 99793-09-01 12:57 G 38169948.87 38169949.04 38169949.24 0.0089 0.0047

Jupiter 99794-03-25 22:47 G 38170154.26 38170154.45 38170154.63 0.0525 0.0166

Neptune 99794-04-15 01:26 G 38170174.41 38170174.56 38170174.74 0.0089 0.0058

Neptune 99794-11-26 14:09 G 38170399.97 38170400.09 38170400.24 0.0089 0.0069

Neptune 99795-07-10 02:38 G 38170625.54 38170625.61 38170625.73 0.0089 0.0080

Pluto 99798-07-19 12:57 G 38171730.87 38171731.04 38171731.26 0.0065 0.0027

Pluto 99799-03-01 17:02 G 38171956.01 38171956.21 38171956.43 0.0065 0.0015

Jupiter 99799-06-07 01:55 G 38172053.50 38172053.58 38172053.68 0.0504 0.0450

Pluto 99799-10-12 20:23 G 38172181.27 38172181.35 38172181.47 0.0065 0.0057

Jupiter 99800-01-30 02:38 G 38172290.44 38172290.61 38172290.80 0.0500 0.0249

Uranus 99800-10-03 15:21 G 38172537.05 38172537.14 38172537.26 0.0143 0.0125

Uranus 99801-05-18 03:50 G 38172763.51 38172763.66 38172763.82 0.0142 0.0102

Uranus 99801-12-30 15:50 G 38172989.98 38172990.16 38172990.35 0.0142 0.0079

Uranus 99802-08-14 03:50 G 38173216.46 38173216.66 38173216.87 0.0142 0.0055

Uranus 99803-03-28 15:35 G 38173442.94 38173443.15 38173443.37 0.0142 0.0032

Uranus 99803-11-10 03:21 G 38173669.42 38173669.64 38173669.86 0.0142 0.0009

Uranus 99804-06-23 14:38 G 38173895.89 38173896.11 38173896.33 0.0142 0.0014

Uranus 99805-02-05 01:55 G 38174122.37 38174122.58 38174122.80 0.0142 0.0037

Saturn 99805-04-30 11:59 G 38174206.81 38174207.00 38174207.20 0.0294 0.0094

Uranus 99805-09-19 12:57 G 38174348.85 38174349.04 38174349.24 0.0141 0.0059

Jupiter 99805-11-29 19:26 G 38174420.11 38174420.31 38174420.51 0.0524 0.0046

Saturn 99805-12-16 08:09 G 38174436.70 38174436.84 38174436.98 0.0297 0.0213

Uranus 99806-05-03 23:45 G 38174575.32 38174575.49 38174575.67 0.0141 0.0082

Uranus 99806-12-16 10:19 G 38174801.79 38174801.93 38174802.08 0.0141 0.0104

Uranus 99807-07-30 20:38 G 38175028.27 38175028.36 38175028.47 0.0141 0.0125

Jupiter 99811-10-05 21:21 G 38176556.19 38176556.39 38176556.60 0.0501 0.0052

Jupiter 99817-08-04 17:16 G 38178686.05 38178686.22 38178686.40 0.0523 0.0255

Jupiter 99818-03-29 18:43 G 38178923.23 38178923.28 38178923.33 0.0527 0.0509

Saturn 99818-07-21 12:57 G 38179036.89 38179037.04 38179037.21 0.0269 0.0181

Saturn 99819-03-07 19:26 G 38179266.11 38179266.31 38179266.53 0.0267 0.0057

Mars 99822-01-17 02:52 G 38180312.49 38180312.62 38180312.74 0.1839 0.1287

Moon 99822-04-10 05:45 G 38180395.58 38180395.74 38180395.91 0.2627 0.0078

Earth 99822-04-10 11:59 G 38180395.84 38180396.00 38180396.16 0.2627 0.0540 *

Jupiter 99823-06-10 17:59 G 38180822.06 38180822.25 38180822.46 0.0502 0.0144

Jupiter 99829-04-09 14:52 G 38182952.04 38182952.12 38182952.22 0.0522 0.0460

Jupiter 99829-12-02 14:38 G 38183188.95 38183189.11 38183189.28 0.0526 0.0297

Saturn 99834-11-10 15:35 G 38184992.94 38184993.15 38184993.35 0.0295 0.0059

Jupiter 99835-02-13 13:55 G 38185087.93 38185088.08 38185088.24 0.0503 0.0341

Saturn 99835-06-28 11:31 G 38185222.88 38185222.98 38185223.10 0.0297 0.0251

Jupiter 99835-10-08 13:40 G 38185324.93 38185325.07 38185325.22 0.0500 0.0355

Jupiter 99841-08-07 10:33 G 38187454.75 38187454.94 38187455.14 0.0525 0.0083

Uranus 99842-11-20 21:07 G 38187925.37 38187925.38 38187925.40 0.0135 0.0135

Uranus 99843-07-05 02:09 G 38188151.50 38188151.59 38188151.72 0.0135 0.0117

Uranus 99844-02-16 07:40 G 38188377.68 38188377.82 38188377.98 0.0135 0.0098

Uranus 99844-09-29 13:11 G 38188603.88 38188604.05 38188604.23 0.0136 0.0079

Uranus 99845-05-13 18:43 G 38188830.09 38188830.28 38188830.48 0.0136 0.0060

Uranus 99845-12-26 00:14 G 38189056.31 38189056.51 38189056.72 0.0136 0.0041

Uranus 99846-08-09 06:14 G 38189282.55 38189282.76 38189282.97 0.0136 0.0021

Uranus 99847-03-23 11:59 G 38189508.79 38189509.00 38189509.22 0.0136 0.0004

Jupiter 99847-06-13 11:45 G 38189590.79 38189590.99 38189591.18 0.0501 0.0166

Uranus 99847-11-04 17:59 G 38189735.04 38189735.25 38189735.47 0.0136 0.0018

Saturn 99848-01-31 16:47 G 38189823.03 38189823.20 38189823.39 0.0269 0.0148

Uranus 99848-06-17 23:59 G 38189961.30 38189961.50 38189961.71 0.0136 0.0038

Saturn 99848-09-16 23:16 G 38190052.27 38190052.47 38190052.68 0.0266 0.0089

Uranus 99849-01-30 05:59 G 38190187.57 38190187.75 38190187.96 0.0137 0.0058

Mars 99849-06-04 12:57 G 38190312.87 38190313.04 38190313.21 0.1693 0.0311

Uranus 99849-09-13 12:28 G 38190413.86 38190414.02 38190414.21 0.0137 0.0078

Uranus 99850-04-27 19:11 G 38190640.15 38190640.30 38190640.45 0.0137 0.0097

Uranus 99850-12-10 01:40 G 38190866.47 38190866.57 38190866.69 0.0137 0.0117

Uranus 99851-07-24 08:23 G 38191092.85 38191092.85 38191092.88 0.0137 0.0137

Jupiter 99853-04-12 05:45 G 38191720.55 38191720.74 38191720.93 0.0523 0.0134

Jupiter 99859-02-16 09:07 G 38193856.67 38193856.88 38193857.09 0.0502 0.0026

Saturn 99864-05-22 20:52 G 38195779.16 38195779.37 38195779.57 0.0295 0.0019

Jupiter 99864-12-16 03:07 G 38195986.48 38195986.63 38195986.78 0.0522 0.0342

Saturn 99865-01-07 17:02 G 38196009.18 38196009.21 38196009.26 0.0297 0.0291

Jupiter 99865-08-10 03:21 G 38196223.53 38196223.64 38196223.77 0.0526 0.0420

Neptune 99869-01-03 01:55 G 38197465.53 38197465.58 38197465.66 0.0088 0.0084

Neptune 99869-08-16 15:07 G 38197691.04 38197691.13 38197691.28 0.0088 0.0074

Neptune 99870-03-30 05:02 G 38197916.56 38197916.71 38197916.87 0.0088 0.0063

Jupiter 99870-10-22 03:50 G 38198122.48 38198122.66 38198122.85 0.0503 0.0225

Neptune 99870-11-10 18:14 G 38198142.10 38198142.26 38198142.45 0.0088 0.0053

Jupiter 99871-06-16 02:23 G 38198359.54 38198359.60 38198359.68 0.0499 0.0465

Neptune 99871-06-24 07:55 G 38198367.64 38198367.83 38198368.03 0.0088 0.0042

Neptune 99872-02-04 21:21 G 38198593.20 38198593.39 38198593.62 0.0088 0.0032

Neptune 99872-09-17 11:02 G 38198818.75 38198818.96 38198819.19 0.0088 0.0021

Neptune 99873-05-01 00:28 G 38199044.30 38199044.52 38199044.75 0.0088 0.0011

Neptune 99873-12-12 14:09 G 38199269.86 38199270.09 38199270.31 0.0088 0.0001

Neptune 99874-07-26 03:35 G 38199495.43 38199495.65 38199495.87 0.0088 0.0011

Neptune 99875-03-08 16:47 G 38199720.99 38199721.20 38199721.43 0.0088 0.0022

Neptune 99875-10-20 06:14 G 38199946.56 38199946.76 38199946.98 0.0088 0.0032

Neptune 99876-06-01 19:26 G 38200172.13 38200172.31 38200172.53 0.0088 0.0043

Neptune 99877-01-13 09:07 G 38200397.71 38200397.88 38200398.07 0.0088 0.0053

Jupiter 99877-04-15 00:43 G 38200489.35 38200489.53 38200489.72 0.0526 0.0209

Saturn 99877-08-12 21:50 G 38200609.22 38200609.41 38200609.61 0.0269 0.0113

Neptune 99877-08-26 22:19 G 38200623.30 38200623.43 38200623.60 0.0088 0.0064

Saturn 99878-03-30 03:50 G 38200838.47 38200838.66 38200838.85 0.0266 0.0122

Neptune 99878-04-09 11:45 G 38200848.89 38200848.99 38200849.12 0.0088 0.0074

Neptune 99878-11-21 00:43 G 38201074.50 38201074.53 38201074.62 0.0088 0.0085

Jupiter 99882-06-27 00:28 G 38202388.41 38202388.52 38202388.64 0.0504 0.0419

Jupiter 99883-02-19 00:14 G 38202625.34 38202625.51 38202625.69 0.0500 0.0278

Uranus 99884-06-02 21:50 G 38203095.35 38203095.41 38203095.50 0.0143 0.0133

Uranus 99885-01-15 10:33 G 38203321.80 38203321.94 38203322.08 0.0143 0.0110

Uranus 99885-08-29 22:19 G 38203548.27 38203548.43 38203548.62 0.0142 0.0088

Uranus 99886-04-13 10:33 G 38203774.75 38203774.94 38203775.15 0.0142 0.0064

Pluto 99886-10-31 02:52 G 38203975.54 38203975.62 38203975.73 0.0079 0.0072

Uranus 99886-11-25 22:19 G 38204001.23 38204001.43 38204001.65 0.0142 0.0041

Pluto 99887-06-13 13:55 G 38204200.86 38204201.08 38204201.30 0.0079 0.0009

Uranus 99887-07-10 10:19 G 38204227.71 38204227.93 38204228.15 0.0142 0.0018

Mars 99887-11-14 08:09 G 38204354.68 38204354.84 38204355.00 0.1844 0.0778

Uranus 99888-02-21 22:04 G 38204454.20 38204454.42 38204454.64 0.0142 0.0006

Uranus 99888-10-05 09:21 G 38204680.67 38204680.89 38204681.11 0.0142 0.0028

Jupiter 99888-12-18 21:50 G 38204755.21 38204755.41 38204755.61 0.0524 0.0005

Uranus 99889-05-19 20:23 G 38204907.15 38204907.35 38204907.56 0.0142 0.0051

Uranus 99890-01-01 06:57 G 38205133.62 38205133.79 38205134.00 0.0141 0.0074

Uranus 99890-08-15 17:45 G 38205360.10 38205360.24 38205360.42 0.0141 0.0096

Uranus 99891-03-30 04:33 G 38205586.58 38205586.69 38205586.83 0.0141 0.0117

Uranus 99891-11-11 14:52 G 38205813.10 38205813.12 38205813.18 0.0141 0.0138

Saturn 99893-04-17 04:04 G 38206335.64 38206335.67 38206335.72 0.0292 0.0285

Saturn 99893-12-02 22:19 G 38206565.22 38206565.43 38206565.64 0.0295 0.0013

Jupiter 99894-10-24 21:21 G 38206891.18 38206891.39 38206891.59 0.0501 0.0085

Jupiter 99900-08-24 18:28 G 38209021.09 38209021.27 38209021.46 0.0523 0.0216

Jupiter 99906-06-30 18:43 G 38211157.08 38211157.28 38211157.49 0.0502 0.0108

Saturn 99907-02-24 00:28 G 38211395.31 38211395.52 38211395.73 0.0268 0.0082

Saturn 99907-10-11 06:14 G 38211624.59 38211624.76 38211624.94 0.0266 0.0152

Jupiter 99912-04-29 14:38 G 38213287.00 38213287.11 38213287.22 0.0521 0.0425

Jupiter 99912-12-22 14:09 G 38213523.94 38213524.09 38213524.24 0.0526 0.0333

Mars 99915-04-02 23:16 G 38214355.31 38214355.47 38214355.64 0.1689 0.0572

Jupiter 99918-03-05 15:50 G 38215422.99 38215423.16 38215423.32 0.0504 0.0302

Jupiter 99918-10-28 15:21 G 38215660.02 38215660.14 38215660.27 0.0500 0.0395

Saturn 99922-10-29 08:09 G 38217121.73 38217121.84 38217121.94 0.0292 0.0250

Saturn 99923-06-16 02:38 G 38217351.40 38217351.61 38217351.81 0.0295 0.0051

Jupiter 99924-08-27 11:02 G 38217789.77 38217789.96 38217790.16 0.0525 0.0121

Uranus 99927-03-05 11:31 G 38218709.91 38218709.98 38218710.08 0.0135 0.0124

Moon 99927-10-12 13:26 G 38218930.95 38218931.06 38218931.17 0.2707 0.1860

Earth 99927-10-12 18:28 G 38218931.26 38218931.27 38218931.28 0.2705 0.2689

Uranus 99927-10-17 16:47 G 38218936.08 38218936.20 38218936.35 0.0135 0.0105

Uranus 99928-05-30 22:04 G 38219162.27 38219162.42 38219162.60 0.0135 0.0087

Uranus 99929-01-12 03:35 G 38219388.47 38219388.65 38219388.84 0.0136 0.0068

Uranus 99929-08-26 09:07 G 38219614.69 38219614.88 38219615.09 0.0136 0.0049

Jupiter 99929-11-08 10:47 G 38219688.93 38219688.95 38219688.98 0.0504 0.0499

Uranus 99930-04-09 14:52 G 38219840.91 38219841.12 38219841.33 0.0136 0.0029

Jupiter 99930-07-03 11:16 G 38219925.78 38219925.97 38219926.16 0.0500 0.0200

Uranus 99930-11-21 20:38 G 38220067.15 38220067.36 38220067.57 0.0136 0.0010

Uranus 99931-07-06 02:23 G 38220293.39 38220293.60 38220293.82 0.0136 0.0010

Uranus 99932-02-17 08:23 G 38220519.64 38220519.85 38220520.06 0.0136 0.0029

Uranus 99932-09-30 14:23 G 38220745.91 38220746.10 38220746.31 0.0136 0.0049

Uranus 99933-05-14 20:38 G 38220972.18 38220972.36 38220972.55 0.0137 0.0069

Uranus 99933-12-27 02:52 G 38221198.47 38221198.62 38221198.79 0.0137 0.0089

Uranus 99934-08-10 09:21 G 38221424.78 38221424.89 38221425.04 0.0137 0.0109

Uranus 99935-03-24 16:19 G 38221651.12 38221651.18 38221651.26 0.0137 0.0128

Moon 99935-10-10 08:09 G 38221850.71 38221850.84 38221850.97 0.2711 0.1151

Earth 99935-10-10 10:33 G 38221850.79 38221850.94 38221851.09 0.2705 0.0798 *

Jupiter 99936-05-02 08:23 G 38222055.66 38222055.85 38222056.05 0.0524 0.0092

Saturn 99936-09-05 04:19 G 38222181.47 38222181.68 38222181.89 0.0268 0.0051

Saturn 99937-04-22 09:50 G 38222410.76 38222410.91 38222411.07 0.0266 0.0183

Jupiter 99942-03-08 08:52 G 38224191.66 38224191.87 38224192.07 0.0501 0.0013

Mars 99947-04-01 23:31 G 38226042.45 38226042.48 38226042.50 0.1702 0.1679

Jupiter 99948-01-06 06:28 G 38226321.61 38226321.77 38226321.93 0.0523 0.0300

Jupiter 99948-08-30 07:11 G 38226558.72 38226558.80 38226558.90 0.0527 0.0466

Neptune 99950-07-09 17:31 G 38227237.17 38227237.23 38227237.32 0.0090 0.0084

Neptune 99951-02-20 05:59 G 38227462.65 38227462.75 38227462.89 0.0090 0.0074

Neptune 99951-10-03 18:43 G 38227688.14 38227688.28 38227688.45 0.0090 0.0063

Saturn 99952-05-10 08:38 G 38227907.74 38227907.86 38227908.00 0.0292 0.0221

Neptune 99952-05-16 07:26 G 38227913.64 38227913.81 38227913.99 0.0090 0.0052

Saturn 99952-12-26 03:21 G 38228137.44 38228137.64 38228137.84 0.0295 0.0081

Neptune 99952-12-27 19:40 G 38228139.15 38228139.32 38228139.53 0.0090 0.0042

Neptune 99953-08-10 08:38 G 38228364.66 38228364.86 38228365.07 0.0090 0.0031

Mars 99953-09-11 14:09 G 38228396.92 38228397.09 38228397.27 0.1849 0.0300

Jupiter 99953-11-11 05:16 G 38228457.53 38228457.72 38228457.91 0.0502 0.0188

Neptune 99954-03-23 21:21 G 38228590.18 38228590.39 38228590.60 0.0090 0.0020

Neptune 99954-11-04 09:50 G 38228815.70 38228815.91 38228816.13 0.0089 0.0009

Neptune 99955-06-17 22:33 G 38229041.22 38229041.44 38229041.65 0.0089 0.0002

Neptune 99956-01-29 11:02 G 38229266.75 38229266.96 38229267.17 0.0089 0.0012

Neptune 99956-09-10 23:31 G 38229492.28 38229492.48 38229492.69 0.0089 0.0023

Neptune 99957-04-24 11:45 G 38229717.81 38229717.99 38229718.21 0.0089 0.0035

Neptune 99957-12-06 00:28 G 38229943.34 38229943.52 38229943.72 0.0089 0.0045

Neptune 99958-07-19 12:57 G 38230168.89 38230169.04 38230169.23 0.0089 0.0056

Neptune 99959-03-02 01:26 G 38230394.44 38230394.56 38230394.73 0.0089 0.0067

Jupiter 99959-09-11 04:04 G 38230587.62 38230587.67 38230587.72 0.0521 0.0505

Neptune 99959-10-13 14:23 G 38230620.00 38230620.10 38230620.22 0.0089 0.0077

Jupiter 99960-05-05 03:21 G 38230824.47 38230824.64 38230824.82 0.0525 0.0252

Neptune 99960-05-26 02:38 G 38230845.59 38230845.61 38230845.68 0.0089 0.0088

Jupiter 99965-07-17 02:09 G 38232723.46 38232723.59 38232723.73 0.0504 0.0382

Saturn 99965-07-31 21:21 G 38232738.36 38232738.39 38232738.44 0.0270 0.0265

Jupiter 99966-03-11 02:09 G 38232960.44 38232960.59 38232960.76 0.0500 0.0318

Saturn 99966-03-18 05:31 G 38232967.51 38232967.73 38232967.94 0.0268 0.0023

Saturn 99966-11-02 10:47 G 38233196.83 38233196.95 38233197.09 0.0266 0.0211

Uranus 99968-02-02 03:07 G 38233653.62 38233653.63 38233653.66 0.0143 0.0142

Uranus 99968-09-15 15:21 G 38233880.04 38233880.14 38233880.28 0.0143 0.0120

Uranus 99969-04-30 03:50 G 38234106.51 38234106.66 38234106.83 0.0143 0.0097

Uranus 99969-12-12 16:04 G 38234332.99 38234333.17 38234333.36 0.0142 0.0073

Uranus 99970-07-27 04:04 G 38234559.47 38234559.67 38234559.88 0.0142 0.0050

Uranus 99971-03-10 16:04 G 38234785.96 38234786.17 38234786.39 0.0142 0.0027

Uranus 99971-10-23 03:50 G 38235012.44 38235012.66 38235012.88 0.0142 0.0004

Jupiter 99972-01-08 22:47 G 38235090.25 38235090.45 38235090.65 0.0524 0.0036

Uranus 99972-06-05 15:07 G 38235238.92 38235239.13 38235239.35 0.0142 0.0019

Uranus 99973-01-18 02:23 G 38235465.39 38235465.60 38235465.82 0.0142 0.0042

Uranus 99973-09-01 13:26 G 38235691.87 38235692.06 38235692.26 0.0142 0.0064

Uranus 99974-04-16 00:14 G 38235918.35 38235918.51 38235918.70 0.0141 0.0087

Uranus 99974-11-28 10:47 G 38236144.83 38236144.95 38236145.11 0.0141 0.0109

Uranus 99975-07-12 21:35 G 38236371.33 38236371.40 38236371.50 0.0141 0.0129

Jupiter 99977-11-14 00:14 G 38237226.31 38237226.51 38237226.71 0.0501 0.0128

Mars 99981-01-28 09:21 G 38238397.74 38238397.89 38238398.04 0.1685 0.0835

Saturn 99981-11-20 11:16 G 38238693.81 38238693.97 38238694.13 0.0293 0.0188

Saturn 99982-07-08 06:14 G 38238923.57 38238923.76 38238923.95 0.0295 0.0115

Jupiter 99983-09-13 20:09 G 38239356.15 38239356.34 38239356.53 0.0523 0.0175

Jupiter 99989-07-19 20:09 G 38241492.14 38241492.34 38241492.55 0.0502 0.0071

Saturn 99995-02-11 00:43 G 38243524.43 38243524.53 38243524.65 0.0271 0.0234

Jupiter 99995-05-19 17:31 G 38243622.10 38243622.23 38243622.36 0.0523 0.0385

Saturn 99995-09-28 08:38 G 38243753.64 38243753.86 38243754.08 0.0268 0.0009

Jupiter 99996-01-11 18:14 G 38243859.13 38243859.26 38243859.40 0.0527 0.0381

Saturn 99996-05-14 13:55 G 38243983.00 38243983.08 38243983.18 0.0266 0.0241

101ST MILLENNIUM CE

This is a list of transits of Venus in the 101st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 100001-03-24 17:31 G 38245758.05 38245758.23 38245758.41 0.0503 0.0264

Jupiter 100001-11-16 16:04 G 38245995.07 38245995.17 38245995.28 0.0499 0.0430

Jupiter 100007-09-16 15:21 G 38248124.96 38248125.14 38248125.34 0.0525 0.0169

Uranus 100010-11-02 22:04 G 38249268.37 38249268.42 38249268.48 0.0135 0.0130

Saturn 100011-06-02 11:45 G 38249479.82 38249479.99 38249480.16 0.0293 0.0159

Uranus 100011-06-17 03:07 G 38249494.52 38249494.63 38249494.76 0.0135 0.0111

Saturn 100012-01-18 06:28 G 38249709.59 38249709.77 38249709.95 0.0296 0.0144

Uranus 100012-01-29 08:09 G 38249720.70 38249720.84 38249721.01 0.0135 0.0093

Uranus 100012-09-11 13:26 G 38249946.90 38249947.06 38249947.25 0.0135 0.0075

Jupiter 100012-11-27 13:26 G 38250023.98 38250024.06 38250024.15 0.0504 0.0460

Mars 100013-01-27 08:52 G 38250084.77 38250084.87 38250084.97 0.1698 0.1387

Uranus 100013-04-25 18:57 G 38250173.10 38250173.29 38250173.49 0.0136 0.0056

Jupiter 100013-07-22 13:40 G 38250260.89 38250261.07 38250261.25 0.0500 0.0241

Uranus 100013-12-08 00:28 G 38250399.32 38250399.52 38250399.73 0.0136 0.0037

Uranus 100014-07-22 06:14 G 38250625.55 38250625.76 38250625.97 0.0136 0.0017

Uranus 100015-03-05 11:59 G 38250851.78 38250852.00 38250852.21 0.0136 0.0002

Uranus 100015-10-17 17:45 G 38251078.03 38251078.24 38251078.45 0.0136 0.0022

Uranus 100016-05-30 23:45 G 38251304.28 38251304.49 38251304.69 0.0136 0.0041

Uranus 100017-01-12 05:31 G 38251530.55 38251530.73 38251530.94 0.0136 0.0062

Uranus 100017-08-26 11:59 G 38251756.84 38251757.00 38251757.18 0.0137 0.0081

Uranus 100018-04-09 18:14 G 38251983.13 38251983.26 38251983.42 0.0137 0.0101

Uranus 100018-11-22 00:57 G 38252209.45 38252209.54 38252209.66 0.0137 0.0120

Jupiter 100019-05-22 12:28 G 38252390.82 38252391.02 38252391.22 0.0524 0.0046

Mars 100019-07-09 19:11 G 38252439.13 38252439.30 38252439.47 0.1854 0.0233

Saturn 100024-08-23 00:57 G 38254310.42 38254310.54 38254310.69 0.0270 0.0208

Jupiter 100025-03-27 11:16 G 38254526.77 38254526.97 38254527.18 0.0501 0.0050

Saturn 100025-04-09 08:52 G 38254539.66 38254539.87 38254540.09 0.0268 0.0034

Jupiter 100031-01-25 08:38 G 38256656.69 38256656.86 38256657.03 0.0523 0.0258

Jupiter 100031-09-19 09:07 G 38256893.84 38256893.88 38256893.94 0.0526 0.0508

Neptune 100033-04-07 11:45 G 38257459.98 38257459.99 38257460.05 0.0088 0.0087

Neptune 100033-11-19 01:26 G 38257685.46 38257685.56 38257685.68 0.0088 0.0076

Neptune 100034-07-02 14:38 G 38257910.98 38257911.11 38257911.28 0.0088 0.0066

Neptune 100035-02-13 04:33 G 38258136.52 38258136.69 38258136.87 0.0088 0.0055

Neptune 100035-09-26 17:45 G 38258362.06 38258362.24 38258362.45 0.0088 0.0045

Neptune 100036-05-09 07:26 G 38258587.61 38258587.81 38258588.02 0.0088 0.0034

Jupiter 100036-11-30 08:52 G 38258792.67 38258792.87 38258793.07 0.0502 0.0145

Neptune 100036-12-20 20:52 G 38258813.16 38258813.37 38258813.60 0.0088 0.0024

Neptune 100037-08-03 10:33 G 38259038.72 38259038.94 38259039.16 0.0088 0.0013

Neptune 100038-03-16 23:59 G 38259264.28 38259264.50 38259264.73 0.0088 0.0003

Neptune 100038-10-28 13:26 G 38259489.84 38259490.06 38259490.29 0.0088 0.0008

Neptune 100039-06-11 02:52 G 38259715.40 38259715.62 38259715.84 0.0088 0.0019

Neptune 100040-01-22 16:33 G 38259940.98 38259941.19 38259941.40 0.0088 0.0029

Neptune 100040-09-04 05:45 G 38260166.55 38260166.74 38260166.95 0.0088 0.0040

Saturn 100040-12-12 14:09 G 38260265.90 38260266.09 38260266.27 0.0293 0.0126

Neptune 100041-04-17 18:57 G 38260392.12 38260392.29 38260392.49 0.0088 0.0051

Saturn 100041-07-30 09:07 G 38260495.72 38260495.88 38260496.05 0.0296 0.0178

Neptune 100041-11-29 08:23 G 38260617.70 38260617.85 38260618.02 0.0088 0.0061

Neptune 100042-07-12 22:04 G 38260843.29 38260843.42 38260843.55 0.0088 0.0071

Jupiter 100042-09-30 06:14 G 38260922.67 38260922.76 38260922.85 0.0521 0.0465

Neptune 100043-02-23 11:16 G 38261068.91 38261068.97 38261069.07 0.0088 0.0082

Jupiter 100043-05-25 05:45 G 38261159.58 38261159.74 38261159.91 0.0526 0.0297

Pluto 100045-11-11 02:38 G 38262060.45 38262060.61 38262060.82 0.0065 0.0035

Pluto 100046-06-24 06:57 G 38262285.58 38262285.79 38262286.01 0.0065 0.0007

Mars 100046-11-25 19:40 G 38262440.19 38262440.32 38262440.45 0.1682 0.1092

Pluto 100047-02-04 10:04 G 38262510.81 38262510.92 38262511.09 0.0065 0.0049

Jupiter 100048-08-05 05:16 G 38263058.57 38263058.72 38263058.87 0.0503 0.0342

Jupiter 100049-03-30 04:19 G 38263295.54 38263295.68 38263295.83 0.0499 0.0356

Uranus 100052-05-15 19:40 G 38264438.24 38264438.32 38264438.42 0.0143 0.0129

Uranus 100052-12-28 08:23 G 38264664.70 38264664.85 38264664.99 0.0143 0.0106

Uranus 100053-08-11 20:23 G 38264891.18 38264891.35 38264891.54 0.0143 0.0083

Saturn 100054-03-05 03:50 G 38265096.50 38265096.66 38265096.83 0.0270 0.0177

Uranus 100054-03-26 08:23 G 38265117.66 38265117.85 38265118.06 0.0142 0.0061

Saturn 100054-10-20 11:31 G 38265325.77 38265325.98 38265326.19 0.0268 0.0065

Uranus 100054-11-07 20:23 G 38265344.15 38265344.35 38265344.57 0.0142 0.0038

Jupiter 100055-01-28 02:38 G 38265425.41 38265425.61 38265425.81 0.0525 0.0081

Uranus 100055-06-22 08:23 G 38265570.63 38265570.85 38265571.07 0.0142 0.0014

Uranus 100056-02-03 19:55 G 38265797.11 38265797.33 38265797.56 0.0142 0.0009

Uranus 100056-09-17 07:11 G 38266023.60 38266023.80 38266024.03 0.0142 0.0032

Uranus 100057-05-01 18:28 G 38266250.07 38266250.27 38266250.48 0.0142 0.0054

Uranus 100057-12-14 05:16 G 38266476.55 38266476.72 38266476.92 0.0142 0.0077

Uranus 100058-07-28 16:19 G 38266703.03 38266703.18 38266703.35 0.0141 0.0098

Uranus 100059-03-12 03:07 G 38266929.53 38266929.63 38266929.76 0.0141 0.0120

Uranus 100059-10-24 13:55 G 38267156.08 38267156.08 38267156.09 0.0141 0.0141

Jupiter 100060-12-03 02:23 G 38267561.41 38267561.60 38267561.80 0.0500 0.0167

Earth 100065-04-11 12:14 G 38269151.85 38269152.01 38269152.17 0.2627 0.0605

Moon 100065-04-11 17:31 G 38269152.08 38269152.23 38269152.38 0.2630 0.0863 *

Jupiter 100066-10-03 00:28 G 38269691.32 38269691.52 38269691.71 0.0524 0.0131

Saturn 100070-06-24 14:23 G 38271051.90 38271052.10 38271052.30 0.0293 0.0097

Saturn 100071-02-09 09:07 G 38271281.74 38271281.88 38271282.03 0.0296 0.0207

Jupiter 100072-08-07 23:16 G 38271827.27 38271827.47 38271827.68 0.0501 0.0030

Moon 100073-04-09 07:40 G 38272071.78 38272071.82 38272071.86 0.2624 0.2541

Jupiter 100078-06-07 22:04 G 38273957.27 38273957.42 38273957.57 0.0523 0.0339

Mars 100078-11-24 19:26 G 38274127.18 38274127.31 38274127.44 0.1694 0.1128

Jupiter 100079-01-30 22:33 G 38274194.33 38274194.44 38274194.56 0.0526 0.0428

Saturn 100083-09-15 03:50 G 38275882.48 38275882.66 38275882.84 0.0270 0.0152

Jupiter 100084-04-12 20:23 G 38276093.16 38276093.35 38276093.53 0.0503 0.0224

Saturn 100084-05-01 11:16 G 38276111.77 38276111.97 38276112.18 0.0268 0.0089

Jupiter 100084-12-05 19:11 G 38276330.24 38276330.30 38276330.37 0.0499 0.0472

Mars 100085-05-06 00:43 G 38276481.37 38276481.53 38276481.69 0.1859 0.0751

Jupiter 100090-10-05 17:59 G 38278460.07 38278460.25 38278460.43 0.0525 0.0211

Uranus 100095-02-14 12:57 G 38280052.94 38280053.04 38280053.14 0.0135 0.0119

Uranus 100095-09-28 17:45 G 38280279.11 38280279.24 38280279.40 0.0135 0.0101

Jupiter 100095-12-17 17:16 G 38280359.11 38280359.22 38280359.34 0.0504 0.0418

Uranus 100096-05-11 23:16 G 38280505.30 38280505.47 38280505.64 0.0135 0.0082

Jupiter 100096-08-10 17:31 G 38280596.06 38280596.23 38280596.41 0.0500 0.0285

Uranus 100096-12-24 04:19 G 38280731.50 38280731.68 38280731.88 0.0136 0.0063

Uranus 100097-08-07 10:04 G 38280957.72 38280957.92 38280958.12 0.0136 0.0044

Uranus 100098-03-21 15:35 G 38281183.94 38281184.15 38281184.36 0.0136 0.0025

Uranus 100098-11-02 21:07 G 38281410.17 38281410.38 38281410.60 0.0136 0.0006

Uranus 100099-06-17 02:52 G 38281636.40 38281636.62 38281636.83 0.0136 0.0014

Saturn 100100-01-04 16:33 G 38281837.99 38281838.19 38281838.40 0.0293 0.0065

Uranus 100100-01-29 08:38 G 38281862.65 38281862.86 38281863.07 0.0136 0.0033

Saturn 100100-08-22 11:31 G 38282067.87 38282067.98 38282068.11 0.0296 0.0241

Uranus 100100-09-12 14:38 G 38282088.92 38282089.11 38282089.32 0.0136 0.0053

Uranus 100101-04-26 20:52 G 38282315.20 38282315.37 38282315.56 0.0136 0.0073

Uranus 100101-12-09 03:21 G 38282541.48 38282541.64 38282541.80 0.0137 0.0092

Jupiter 100102-06-11 14:52 G 38282725.92 38282726.12 38282726.32 0.0524 0.0008

Uranus 100102-07-23 09:35 G 38282767.79 38282767.90 38282768.04 0.0137 0.0112

Uranus 100103-03-06 16:19 G 38282994.14 38282994.18 38282994.25 0.0137 0.0131

Jupiter 100108-04-16 14:23 G 38284861.90 38284862.10 38284862.31 0.0501 0.0090

Mars 100112-09-23 06:14 G 38286482.65 38286482.76 38286482.86 0.1678 0.1335

Saturn 100113-03-28 06:28 G 38286668.58 38286668.77 38286668.96 0.0270 0.0121

Saturn 100113-11-12 13:55 G 38286897.88 38286898.08 38286898.27 0.0268 0.0120

Jupiter 100114-02-14 11:16 G 38286991.79 38286991.97 38286992.15 0.0524 0.0219

Neptune 100114-10-12 04:33 G 38287231.65 38287231.69 38287231.76 0.0090 0.0087

Neptune 100115-05-25 17:16 G 38287457.12 38287457.22 38287457.34 0.0090 0.0076

Neptune 100116-01-06 05:45 G 38287682.61 38287682.74 38287682.90 0.0090 0.0066

Neptune 100116-08-18 18:28 G 38287908.11 38287908.27 38287908.45 0.0090 0.0055

Neptune 100117-04-01 07:26 G 38288133.62 38288133.81 38288134.00 0.0090 0.0044

Neptune 100117-11-12 19:40 G 38288359.13 38288359.32 38288359.53 0.0090 0.0034

Neptune 100118-06-26 08:23 G 38288584.65 38288584.85 38288585.07 0.0090 0.0023

Neptune 100119-02-06 21:07 G 38288810.17 38288810.38 38288810.59 0.0090 0.0012

Neptune 100119-09-20 09:35 G 38289035.69 38289035.90 38289036.12 0.0090 0.0002

Jupiter 100119-12-21 12:14 G 38289127.81 38289128.01 38289128.22 0.0501 0.0104

Neptune 100120-05-02 22:04 G 38289261.21 38289261.42 38289261.64 0.0089 0.0010

Neptune 100120-12-14 10:33 G 38289486.74 38289486.94 38289487.16 0.0089 0.0021

Neptune 100121-07-27 23:02 G 38289712.27 38289712.46 38289712.68 0.0089 0.0032

Neptune 100122-03-10 11:45 G 38289937.81 38289937.99 38289938.19 0.0089 0.0042

Neptune 100122-10-22 00:14 G 38290163.35 38290163.51 38290163.69 0.0089 0.0053

Neptune 100123-06-04 12:28 G 38290388.89 38290389.02 38290389.19 0.0089 0.0064

Neptune 100124-01-16 01:11 G 38290614.44 38290614.55 38290614.69 0.0089 0.0074

Neptune 100124-08-28 13:40 G 38290840.02 38290840.07 38290840.16 0.0089 0.0085

Jupiter 100125-10-20 09:21 G 38291257.78 38291257.89 38291258.01 0.0522 0.0426

Jupiter 100126-06-14 10:19 G 38291494.78 38291494.93 38291495.08 0.0527 0.0343

Saturn 100129-07-17 17:59 G 38292624.04 38292624.25 38292624.46 0.0293 0.0032

Saturn 100130-03-04 12:43 G 38292853.96 38292854.03 38292854.12 0.0296 0.0273

Jupiter 100131-08-26 08:23 G 38293393.69 38293393.85 38293394.02 0.0503 0.0301

Jupiter 100132-04-19 07:11 G 38293630.68 38293630.80 38293630.93 0.0499 0.0397

Pluto 100134-10-06 00:14 G 38294530.29 38294530.51 38294530.73 0.0079 0.0012

Pluto 100135-05-19 10:04 G 38294755.84 38294755.92 38294756.07 0.0079 0.0068

Uranus 100136-01-15 00:28 G 38294996.49 38294996.52 38294996.59 0.0143 0.0139

Uranus 100136-08-28 13:11 G 38295222.93 38295223.05 38295223.18 0.0143 0.0116

Uranus 100137-04-12 01:40 G 38295449.40 38295449.57 38295449.73 0.0143 0.0093

Uranus 100137-11-24 13:26 G 38295675.88 38295676.06 38295676.26 0.0143 0.0071

Jupiter 100138-02-17 06:57 G 38295760.60 38295760.79 38295760.99 0.0525 0.0130

Uranus 100138-07-09 01:26 G 38295902.36 38295902.56 38295902.78 0.0142 0.0048

Uranus 100139-02-20 13:40 G 38296128.85 38296129.07 38296129.29 0.0142 0.0024

Uranus 100139-10-05 01:26 G 38296355.34 38296355.56 38296355.78 0.0142 0.0002

Uranus 100140-05-18 12:43 G 38296581.82 38296582.03 38296582.25 0.0142 0.0022

Uranus 100140-12-30 23:59 G 38296808.30 38296808.50 38296808.72 0.0142 0.0044

Uranus 100141-08-14 11:02 G 38297034.78 38297034.96 38297035.17 0.0142 0.0067

Uranus 100142-03-28 22:19 G 38297261.27 38297261.43 38297261.61 0.0141 0.0089

Saturn 100142-10-08 05:59 G 38297454.56 38297454.75 38297454.96 0.0270 0.0096

Uranus 100142-11-10 09:07 G 38297487.76 38297487.88 38297488.03 0.0141 0.0111

Jupiter 100143-05-01 04:33 G 38297659.66 38297659.69 38297659.73 0.0504 0.0497

Saturn 100143-05-25 13:40 G 38297683.89 38297684.07 38297684.25 0.0268 0.0145

Uranus 100143-06-24 19:55 G 38297714.26 38297714.33 38297714.41 0.0141 0.0132

Jupiter 100143-12-24 05:16 G 38297896.53 38297896.72 38297896.91 0.0500 0.0208

Mars 100144-09-22 05:16 G 38298169.57 38298169.72 38298169.87 0.1690 0.0858

Jupiter 100149-10-23 02:52 G 38300026.43 38300026.62 38300026.82 0.0524 0.0088

Mars 100151-03-04 05:31 G 38300523.61 38300523.73 38300523.86 0.1864 0.1300

Jupiter 100155-08-29 02:52 G 38302162.41 38302162.62 38302162.83 0.0501 0.0015

Saturn 100159-01-27 20:38 G 38303410.16 38303410.36 38303410.57 0.0293 0.0004

Jupiter 100161-06-27 23:59 G 38304292.34 38304292.50 38304292.67 0.0523 0.0300

Jupiter 100162-02-20 00:57 G 38304529.45 38304529.54 38304529.63 0.0527 0.0471

Jupiter 100167-05-03 23:45 G 38306428.30 38306428.49 38306428.69 0.0502 0.0183

Saturn 100172-04-19 09:07 G 38308240.67 38308240.88 38308241.09 0.0270 0.0064

Saturn 100172-12-04 16:33 G 38308470.02 38308470.19 38308470.35 0.0268 0.0176

Jupiter 100173-03-02 20:09 G 38308558.30 38308558.34 38308558.37 0.0522 0.0512

Jupiter 100173-10-25 20:23 G 38308795.18 38308795.35 38308795.53 0.0526 0.0253

Mars 100178-07-21 16:19 G 38310525.13 38310525.18 38310525.23 0.1675 0.1586

Earth 100178-10-11 12:43 G 38310606.88 38310607.03 38310607.18 0.2705 0.0741

Moon 100178-10-11 16:47 G 38310607.05 38310607.20 38310607.36 0.2700 0.0474 *

Uranus 100178-10-15 23:02 G 38310611.40 38310611.46 38310611.55 0.0135 0.0126

Jupiter 100179-01-06 21:21 G 38310694.25 38310694.39 38310694.52 0.0503 0.0376

Uranus 100179-05-30 04:04 G 38310837.55 38310837.67 38310837.81 0.0135 0.0108

Jupiter 100179-08-31 20:09 G 38310931.19 38310931.34 38310931.50 0.0499 0.0324

Uranus 100180-01-11 09:07 G 38311063.74 38311063.88 38311064.06 0.0135 0.0090

Uranus 100180-08-24 14:38 G 38311289.94 38311290.11 38311290.30 0.0136 0.0071

Uranus 100181-04-07 19:55 G 38311516.14 38311516.33 38311516.54 0.0136 0.0052

Uranus 100181-11-20 01:26 G 38311742.36 38311742.56 38311742.78 0.0136 0.0033

Uranus 100182-07-04 07:11 G 38311968.59 38311968.80 38311969.01 0.0136 0.0013

Uranus 100183-02-15 12:57 G 38312194.82 38312195.04 38312195.25 0.0136 0.0006

Uranus 100183-09-29 18:43 G 38312421.07 38312421.28 38312421.49 0.0136 0.0026

Uranus 100184-05-13 00:28 G 38312647.33 38312647.52 38312647.73 0.0136 0.0046

Uranus 100184-12-25 06:43 G 38312873.60 38312873.78 38312873.98 0.0136 0.0065

Jupiter 100185-06-30 17:59 G 38313061.05 38313061.25 38313061.45 0.0525 0.0040

Uranus 100185-08-08 12:57 G 38313099.88 38313100.04 38313100.22 0.0137 0.0085

Uranus 100186-03-22 19:26 G 38313326.18 38313326.31 38313326.46 0.0137 0.0104

Uranus 100186-11-04 02:09 G 38313552.51 38313552.59 38313552.69 0.0137 0.0123

Saturn 100187-12-23 05:59 G 38313966.67 38313966.75 38313966.86 0.0290 0.0258

Saturn 100188-08-08 22:47 G 38314196.25 38314196.45 38314196.66 0.0293 0.0037

Jupiter 100191-05-06 17:02 G 38315197.01 38315197.21 38315197.41 0.0500 0.0130

Jupiter 100197-03-05 15:21 G 38317326.95 38317327.14 38317327.33 0.0524 0.0173

Neptune 100198-02-21 10:47 G 38317679.87 38317679.95 38317680.07 0.0088 0.0079

Neptune 100198-10-05 00:14 G 38317905.39 38317905.51 38317905.67 0.0088 0.0069

Neptune 100199-05-18 13:55 G 38318130.92 38318131.08 38318131.25 0.0088 0.0058

Neptune 100199-12-30 03:07 G 38318356.46 38318356.63 38318356.84 0.0088 0.0048

Neptune 100200-08-12 16:47 G 38318582.01 38318582.20 38318582.41 0.0088 0.0037

Neptune 100201-03-26 06:14 G 38318807.56 38318807.76 38318807.98 0.0088 0.0027

Saturn 100201-10-31 09:21 G 38319026.67 38319026.89 38319027.10 0.0270 0.0038

Neptune 100201-11-06 19:40 G 38319033.11 38319033.32 38319033.55 0.0088 0.0016

Saturn 100202-06-17 16:33 G 38319256.05 38319256.19 38319256.33 0.0267 0.0202

Neptune 100202-06-20 09:21 G 38319258.67 38319258.89 38319259.11 0.0088 0.0005

Jupiter 100203-01-10 14:09 G 38319462.88 38319463.09 38319463.30 0.0502 0.0065

Neptune 100203-01-31 22:47 G 38319484.23 38319484.45 38319484.68 0.0088 0.0006

Neptune 100203-09-14 12:14 G 38319709.80 38319710.01 38319710.24 0.0088 0.0016

Neptune 100204-04-27 01:40 G 38319935.37 38319935.57 38319935.79 0.0088 0.0027

Neptune 100204-12-08 15:07 G 38320160.94 38320161.13 38320161.34 0.0088 0.0037

Neptune 100205-07-22 04:19 G 38320386.51 38320386.68 38320386.89 0.0088 0.0048

Neptune 100206-03-04 18:14 G 38320612.10 38320612.26 38320612.44 0.0088 0.0058

Neptune 100206-10-16 07:11 G 38320837.69 38320837.80 38320837.97 0.0088 0.0069

Neptune 100207-05-29 20:52 G 38321063.29 38321063.37 38321063.48 0.0088 0.0079

Jupiter 100208-11-09 11:31 G 38321592.86 38321592.98 38321593.12 0.0522 0.0385

Jupiter 100209-07-04 11:59 G 38321829.87 38321830.00 38321830.14 0.0526 0.0384

Mars 100210-07-21 15:50 G 38322212.00 38322212.16 38322212.32 0.1687 0.0603

Jupiter 100214-09-15 11:02 G 38323728.78 38323728.96 38323729.14 0.0503 0.0261

Jupiter 100215-05-10 10:04 G 38323965.82 38323965.92 38323966.02 0.0499 0.0439

Mars 100216-12-30 10:19 G 38324565.92 38324565.93 38324565.95 0.1869 0.1858

Saturn 100217-07-05 09:50 G 38324752.79 38324752.91 38324753.05 0.0291 0.0223

Saturn 100218-02-20 02:38 G 38324982.42 38324982.61 38324982.82 0.0294 0.0074

Uranus 100220-04-28 19:26 G 38325781.22 38325781.31 38325781.43 0.0143 0.0125

Uranus 100220-12-11 07:55 G 38326007.68 38326007.83 38326007.99 0.0143 0.0102

Jupiter 100221-03-09 08:09 G 38326095.65 38326095.84 38326096.03 0.0525 0.0169

Uranus 100221-07-25 19:55 G 38326234.16 38326234.33 38326234.52 0.0143 0.0080

Uranus 100222-03-09 08:09 G 38326460.64 38326460.84 38326461.05 0.0143 0.0057

Uranus 100222-10-21 20:09 G 38326687.13 38326687.34 38326687.56 0.0142 0.0034

Uranus 100223-06-05 07:55 G 38326913.61 38326913.83 38326914.05 0.0142 0.0011

Uranus 100224-01-17 19:26 G 38327140.09 38327140.31 38327140.53 0.0142 0.0012

Uranus 100224-08-31 06:57 G 38327366.58 38327366.79 38327367.01 0.0142 0.0035

Uranus 100225-04-14 17:59 G 38327593.06 38327593.25 38327593.46 0.0142 0.0058

Uranus 100225-11-27 05:02 G 38327819.54 38327819.71 38327819.91 0.0142 0.0080

Jupiter 100226-05-21 07:55 G 38327994.75 38327994.83 38327994.92 0.0504 0.0457

Uranus 100226-07-11 16:04 G 38328046.03 38328046.17 38328046.34 0.0141 0.0102

Jupiter 100227-01-13 07:40 G 38328231.65 38328231.82 38328232.01 0.0500 0.0247

Uranus 100227-02-23 03:07 G 38328272.53 38328272.63 38328272.74 0.0141 0.0123

Saturn 100230-09-26 03:21 G 38329583.57 38329583.64 38329583.72 0.0273 0.0253

Saturn 100231-05-13 12:57 G 38329812.82 38329813.04 38329813.26 0.0270 0.0004

Saturn 100231-12-28 20:09 G 38330042.24 38330042.34 38330042.45 0.0268 0.0235

Jupiter 100232-11-12 03:21 G 38330361.44 38330361.64 38330361.84 0.0525 0.0053

Jupiter 100238-09-18 05:31 G 38332497.52 38332497.73 38332497.94 0.0500 0.0054

Jupiter 100244-07-18 01:11 G 38334627.38 38334627.55 38334627.72 0.0524 0.0264

Jupiter 100245-03-12 02:52 G 38334864.58 38334864.62 38334864.67 0.0527 0.0511

Saturn 100247-01-15 13:40 G 38335538.92 38335539.07 38335539.24 0.0290 0.0185

Saturn 100247-09-02 06:28 G 38335768.58 38335768.77 38335768.97 0.0293 0.0113

Mars 100248-12-30 03:07 G 38336253.53 38336253.63 38336253.73 0.1852 0.1526

Jupiter 100250-05-24 01:26 G 38336763.36 38336763.56 38336763.76 0.0502 0.0144

Jupiter 100256-03-22 23:02 G 38338893.38 38338893.46 38338893.55 0.0522 0.0470

Jupiter 100256-11-14 23:16 G 38339130.31 38339130.47 38339130.64 0.0526 0.0297

Saturn 100260-04-07 04:19 G 38340369.57 38340369.68 38340369.80 0.0272 0.0226

Saturn 100260-11-22 13:55 G 38340598.86 38340599.08 38340599.29 0.0270 0.0023

Saturn 100261-07-09 20:52 G 38340828.34 38340828.37 38340828.42 0.0267 0.0262

Jupiter 100262-01-26 21:35 G 38341029.25 38341029.40 38341029.56 0.0503 0.0342

Uranus 100262-06-16 08:52 G 38341169.85 38341169.87 38341169.93 0.0135 0.0133

Jupiter 100262-09-20 20:52 G 38341266.23 38341266.37 38341266.52 0.0499 0.0360

Uranus 100263-01-28 14:09 G 38341395.99 38341396.09 38341396.21 0.0135 0.0114

Uranus 100263-09-11 19:11 G 38341622.16 38341622.30 38341622.46 0.0135 0.0096

Uranus 100264-04-25 00:28 G 38341848.35 38341848.52 38341848.70 0.0135 0.0078

Uranus 100264-12-07 05:45 G 38342074.55 38342074.74 38342074.94 0.0136 0.0059

Uranus 100265-07-21 11:16 G 38342300.77 38342300.97 38342301.18 0.0136 0.0040

Uranus 100266-03-04 16:47 G 38342526.99 38342527.20 38342527.41 0.0136 0.0021

Uranus 100266-10-16 22:33 G 38342753.22 38342753.44 38342753.65 0.0136 0.0003

Uranus 100267-05-31 04:04 G 38342979.46 38342979.67 38342979.89 0.0136 0.0018

Uranus 100268-01-12 09:50 G 38343205.71 38343205.91 38343206.13 0.0136 0.0038

Jupiter 100268-07-20 18:57 G 38343396.09 38343396.29 38343396.48 0.0525 0.0079

Uranus 100268-08-25 16:04 G 38343431.98 38343432.17 38343432.38 0.0136 0.0057

Uranus 100269-04-08 22:33 G 38343658.26 38343658.44 38343658.62 0.0137 0.0076

Uranus 100269-11-21 04:33 G 38343884.55 38343884.69 38343884.86 0.0137 0.0096

Uranus 100270-07-05 11:02 G 38344110.86 38344110.96 38344111.09 0.0137 0.0115

Uranus 100271-02-16 17:59 G 38344337.22 38344337.25 38344337.30 0.0137 0.0134

Jupiter 100274-05-26 18:28 G 38345532.07 38345532.27 38345532.46 0.0500 0.0169

Mars 100276-05-18 02:09 G 38346254.42 38346254.59 38346254.76 0.1683 0.0346

Saturn 100276-07-27 18:28 G 38346325.10 38346325.27 38346325.45 0.0291 0.0147

Saturn 100277-03-14 11:31 G 38346554.81 38346554.98 38346555.16 0.0294 0.0152

Neptune 100279-01-14 15:21 G 38347226.14 38347226.14 38347226.17 0.0090 0.0090

Neptune 100279-08-28 04:04 G 38347451.58 38347451.67 38347451.78 0.0090 0.0079

Jupiter 100280-03-25 15:07 G 38347661.94 38347662.13 38347662.32 0.0524 0.0137

Neptune 100280-04-09 16:19 G 38347677.07 38347677.18 38347677.34 0.0090 0.0069

Neptune 100280-11-21 05:16 G 38347902.57 38347902.72 38347902.90 0.0090 0.0058

Neptune 100281-07-04 17:59 G 38348128.08 38348128.25 38348128.45 0.0090 0.0047

Neptune 100282-02-15 06:28 G 38348353.59 38348353.77 38348353.99 0.0090 0.0037

Neptune 100282-09-28 19:11 G 38348579.11 38348579.30 38348579.52 0.0090 0.0026

Neptune 100283-05-12 07:55 G 38348804.62 38348804.83 38348805.05 0.0090 0.0015

Neptune 100283-12-23 20:38 G 38349030.14 38349030.36 38349030.58 0.0090 0.0004

Neptune 100284-08-05 09:21 G 38349255.67 38349255.89 38349256.10 0.0089 0.0007

Neptune 100285-03-18 21:50 G 38349481.20 38349481.41 38349481.62 0.0089 0.0018

Neptune 100285-10-30 10:04 G 38349706.73 38349706.92 38349707.14 0.0089 0.0029

Jupiter 100286-01-29 16:04 G 38349797.96 38349798.17 38349798.38 0.0501 0.0028

Neptune 100286-06-12 22:47 G 38349932.26 38349932.45 38349932.65 0.0089 0.0039

Neptune 100287-01-24 11:16 G 38350157.80 38350157.97 38350158.16 0.0089 0.0050

Neptune 100287-09-06 23:45 G 38350383.35 38350383.49 38350383.66 0.0089 0.0060

Neptune 100288-04-19 12:28 G 38350608.90 38350609.02 38350609.16 0.0089 0.0071

Neptune 100288-12-01 00:43 G 38350834.46 38350834.53 38350834.64 0.0089 0.0082

Saturn 100289-10-18 08:52 G 38351155.73 38351155.87 38351156.04 0.0272 0.0190

Saturn 100290-06-04 18:28 G 38351385.06 38351385.27 38351385.48 0.0270 0.0059

Jupiter 100291-11-29 09:50 G 38351927.77 38351927.91 38351928.06 0.0523 0.0357

Jupiter 100292-07-23 11:16 G 38352164.85 38352164.97 38352165.09 0.0527 0.0418

Pluto 100293-03-05 15:35 G 38352390.01 38352390.15 38352390.32 0.0064 0.0046

Pluto 100293-10-16 19:26 G 38352615.10 38352615.31 38352615.53 0.0065 0.0005

Pluto 100294-05-29 23:02 G 38352840.30 38352840.46 38352840.65 0.0065 0.0037

Jupiter 100297-10-04 13:11 G 38354063.86 38354064.05 38354064.24 0.0502 0.0223

Jupiter 100298-05-29 11:02 G 38354300.91 38354300.96 38354301.03 0.0498 0.0474

Uranus 100303-12-29 03:07 G 38356339.57 38356339.63 38356339.73 0.0143 0.0133

Jupiter 100304-03-29 07:55 G 38356430.65 38356430.83 38356431.02 0.0526 0.0203

Uranus 100304-08-11 15:50 G 38356566.02 38356566.16 38356566.30 0.0143 0.0110

Uranus 100305-03-26 03:50 G 38356792.50 38356792.66 38356792.85 0.0143 0.0088

Uranus 100305-11-07 16:04 G 38357018.98 38357019.17 38357019.38 0.0143 0.0065

Saturn 100306-02-07 23:59 G 38357111.31 38357111.50 38357111.70 0.0291 0.0104

Uranus 100306-06-22 04:19 G 38357245.47 38357245.68 38357245.89 0.0142 0.0042

Saturn 100306-09-25 17:02 G 38357341.07 38357341.21 38357341.37 0.0294 0.0196

Uranus 100307-02-03 16:04 G 38357471.96 38357472.17 38357472.40 0.0142 0.0019

Uranus 100307-09-18 03:50 G 38357698.44 38357698.66 38357698.88 0.0142 0.0005

Moon 100308-04-14 07:40 G 38357907.65 38357907.82 38357907.98 0.2624 0.0529

Earth 100308-04-14 12:28 G 38357907.86 38357908.02 38357908.17 0.2628 0.0654 *

Uranus 100308-05-01 15:21 G 38357924.93 38357925.14 38357925.36 0.0142 0.0027

Uranus 100308-12-14 02:38 G 38358151.41 38358151.61 38358151.82 0.0142 0.0049

Jupiter 100309-06-10 08:09 G 38358329.73 38358329.84 38358329.95 0.0503 0.0423

Uranus 100309-07-28 13:55 G 38358377.90 38358378.08 38358378.28 0.0142 0.0071

Jupiter 100310-02-02 07:40 G 38358566.65 38358566.82 38358566.99 0.0500 0.0281

Uranus 100310-03-12 01:11 G 38358604.39 38358604.55 38358604.72 0.0141 0.0093

Uranus 100310-10-24 11:59 G 38358830.88 38358831.00 38358831.14 0.0141 0.0114

Uranus 100311-06-07 22:47 G 38359057.40 38359057.45 38359057.51 0.0141 0.0135

Mars 100314-10-28 08:09 G 38360295.70 38360295.84 38360295.99 0.1857 0.1003

Jupiter 100315-12-03 05:02 G 38360696.51 38360696.71 38360696.91 0.0525 0.0012

Saturn 100319-05-01 11:45 G 38361941.81 38361941.99 38361942.16 0.0272 0.0158

Saturn 100319-12-16 20:38 G 38362171.16 38362171.36 38362171.57 0.0269 0.0090

Jupiter 100321-10-08 04:19 G 38362832.48 38362832.68 38362832.89 0.0501 0.0087

Jupiter 100327-08-08 00:57 G 38364962.37 38364962.54 38364962.72 0.0523 0.0229

Jupiter 100333-06-13 00:57 G 38367098.34 38367098.54 38367098.75 0.0502 0.0112

Saturn 100335-08-21 06:28 G 38367897.57 38367897.77 38367897.97 0.0292 0.0062

Saturn 100336-04-06 23:59 G 38368127.38 38368127.50 38368127.62 0.0294 0.0240

Jupiter 100339-04-12 21:21 G 38369228.29 38369228.39 38369228.50 0.0522 0.0440

Jupiter 100339-12-05 21:35 G 38369465.24 38369465.40 38369465.55 0.0526 0.0330

Mars 100342-03-16 12:43 G 38370296.86 38370297.03 38370297.21 0.1680 0.0093

Jupiter 100345-02-15 22:19 G 38371364.27 38371364.43 38371364.60 0.0503 0.0308

Jupiter 100345-10-10 21:07 G 38371601.26 38371601.38 38371601.51 0.0499 0.0394

Uranus 100346-09-29 00:57 G 38371954.45 38371954.54 38371954.64 0.0135 0.0120

Uranus 100347-05-13 05:45 G 38372180.62 38372180.74 38372180.89 0.0135 0.0103

Uranus 100347-12-25 10:47 G 38372406.80 38372406.95 38372407.13 0.0135 0.0085

Uranus 100348-08-07 16:19 G 38372633.00 38372633.18 38372633.38 0.0136 0.0066

Saturn 100348-11-10 17:16 G 38372728.03 38372728.22 38372728.42 0.0272 0.0120

Uranus 100349-03-21 21:50 G 38372859.21 38372859.41 38372859.61 0.0136 0.0047

Saturn 100349-06-28 02:09 G 38372957.41 38372957.59 38372957.79 0.0269 0.0128

Uranus 100349-11-03 03:21 G 38373085.43 38373085.64 38373085.85 0.0136 0.0028

Uranus 100350-06-17 08:52 G 38373311.65 38373311.87 38373312.08 0.0136 0.0009

Uranus 100351-01-29 14:23 G 38373537.89 38373538.10 38373538.32 0.0136 0.0011

Jupiter 100351-08-10 15:35 G 38373730.96 38373731.15 38373731.35 0.0526 0.0106

Uranus 100351-09-12 20:23 G 38373764.14 38373764.35 38373764.56 0.0136 0.0030

Uranus 100352-04-26 02:23 G 38373990.40 38373990.60 38373990.81 0.0136 0.0049

Uranus 100352-12-08 08:23 G 38374216.68 38374216.85 38374217.05 0.0136 0.0069

Uranus 100353-07-22 14:52 G 38374442.96 38374443.12 38374443.29 0.0137 0.0088

Uranus 100354-03-05 21:21 G 38374669.26 38374669.39 38374669.53 0.0137 0.0107

Uranus 100354-10-18 04:04 G 38374895.59 38374895.67 38374895.76 0.0137 0.0126

Jupiter 100356-10-21 18:57 G 38375630.28 38375630.29 38375630.30 0.0504 0.0503

Jupiter 100357-06-15 18:43 G 38375867.09 38375867.28 38375867.47 0.0500 0.0203

Neptune 100362-05-27 20:09 G 38377674.28 38377674.34 38377674.44 0.0088 0.0082

Neptune 100363-01-08 10:04 G 38377899.79 38377899.92 38377900.05 0.0088 0.0071

Jupiter 100363-04-15 12:28 G 38377996.83 38377997.02 38377997.22 0.0524 0.0110

Neptune 100363-08-21 23:16 G 38378125.32 38378125.47 38378125.64 0.0088 0.0061

Neptune 100364-04-03 12:28 G 38378350.85 38378351.02 38378351.22 0.0088 0.0051

Neptune 100364-11-15 01:55 G 38378576.39 38378576.58 38378576.79 0.0088 0.0040

Saturn 100365-03-02 13:40 G 38378683.86 38378684.07 38378684.27 0.0291 0.0015

Neptune 100365-06-28 15:21 G 38378801.94 38378802.14 38378802.36 0.0088 0.0030

Saturn 100365-10-18 07:11 G 38378913.76 38378913.80 38378913.84 0.0294 0.0287

Neptune 100366-02-09 05:02 G 38379027.50 38379027.71 38379027.94 0.0088 0.0019

Neptune 100366-09-22 18:28 G 38379253.05 38379253.27 38379253.50 0.0088 0.0009

Neptune 100367-05-06 07:55 G 38379478.61 38379478.83 38379479.06 0.0088 0.0003

Neptune 100367-12-17 21:21 G 38379704.17 38379704.39 38379704.62 0.0088 0.0013

Neptune 100368-07-30 10:33 G 38379929.74 38379929.94 38379930.17 0.0088 0.0024

Jupiter 100369-02-18 14:23 G 38380132.89 38380133.10 38380133.30 0.0501 0.0012

Neptune 100369-03-13 00:14 G 38380155.31 38380155.51 38380155.73 0.0088 0.0034

Neptune 100369-10-24 13:26 G 38380380.88 38380381.06 38380381.27 0.0088 0.0045

Neptune 100370-06-07 02:52 G 38380606.46 38380606.62 38380606.81 0.0088 0.0055

Neptune 100371-01-18 16:19 G 38380832.05 38380832.18 38380832.35 0.0088 0.0066

Neptune 100371-09-01 05:59 G 38381057.65 38381057.75 38381057.88 0.0088 0.0076

Neptune 100372-04-13 19:40 G 38381283.28 38381283.32 38381283.36 0.0088 0.0086

Jupiter 100374-12-19 10:04 G 38382262.77 38382262.92 38382263.08 0.0523 0.0321

Jupiter 100375-08-13 11:31 G 38382499.88 38382499.98 38382500.08 0.0527 0.0455

Saturn 100378-05-23 21:07 G 38383514.18 38383514.38 38383514.59 0.0272 0.0087

Saturn 100379-01-08 05:59 G 38383743.58 38383743.75 38383743.93 0.0269 0.0160

Mars 100380-08-24 13:55 G 38384337.92 38384338.08 38384338.25 0.1862 0.0496

Jupiter 100380-10-24 10:04 G 38384398.73 38384398.92 38384399.11 0.0502 0.0195

Pluto 100382-01-28 08:09 G 38384859.66 38384859.84 38384860.03 0.0079 0.0044

Pluto 100382-09-10 18:28 G 38385085.09 38385085.27 38385085.49 0.0079 0.0036

Jupiter 100387-04-18 06:14 G 38386765.59 38386765.76 38386765.94 0.0526 0.0235

Uranus 100387-08-28 11:02 G 38386897.93 38386897.96 38386898.01 0.0143 0.0140

Uranus 100388-04-10 23:16 G 38387124.36 38387124.47 38387124.61 0.0143 0.0118

Uranus 100388-11-23 11:59 G 38387350.84 38387351.00 38387351.17 0.0143 0.0095

Uranus 100389-07-07 23:59 G 38387577.32 38387577.50 38387577.70 0.0143 0.0073

Uranus 100390-02-19 12:28 G 38387803.82 38387804.02 38387804.23 0.0143 0.0050

Uranus 100390-10-04 00:28 G 38388030.31 38388030.52 38388030.74 0.0142 0.0027

Uranus 100391-05-18 12:14 G 38388256.79 38388257.01 38388257.23 0.0142 0.0005

Uranus 100391-12-30 23:45 G 38388483.28 38388483.49 38388483.72 0.0142 0.0020

Jupiter 100392-06-29 05:59 G 38388664.62 38388664.75 38388664.88 0.0504 0.0395

Uranus 100392-08-13 11:31 G 38388709.77 38388709.98 38388710.19 0.0142 0.0041

Jupiter 100393-02-21 05:45 G 38388901.58 38388901.74 38388901.90 0.0500 0.0312

Uranus 100393-03-27 22:47 G 38388936.26 38388936.45 38388936.66 0.0142 0.0064

Uranus 100393-11-09 09:50 G 38389162.75 38389162.91 38389163.10 0.0142 0.0086

Saturn 100394-01-26 05:16 G 38389240.64 38389240.72 38389240.81 0.0289 0.0262

Uranus 100394-06-23 21:07 G 38389389.24 38389389.38 38389389.53 0.0141 0.0107

Saturn 100394-09-12 20:52 G 38389470.17 38389470.37 38389470.58 0.0292 0.0031

Uranus 100395-02-05 07:40 G 38389615.75 38389615.82 38389615.93 0.0141 0.0129

Jupiter 100398-12-22 01:40 G 38391031.37 38391031.57 38391031.77 0.0525 0.0017

Jupiter 100404-10-27 03:21 G 38393167.44 38393167.64 38393167.85 0.0500 0.0119

Saturn 100407-12-04 04:33 G 38394300.47 38394300.69 38394300.90 0.0271 0.0044

Mars 100408-01-11 23:02 G 38394339.29 38394339.46 38394339.63 0.1676 0.0160

Saturn 100408-07-20 12:57 G 38394529.90 38394530.04 38394530.18 0.0269 0.0200

Jupiter 100410-08-26 19:40 G 38395297.14 38395297.32 38395297.51 0.0524 0.0207

Moon 100413-10-15 17:31 G 38396443.12 38396443.23 38396443.34 0.2703 0.1912

Jupiter 100416-07-02 00:28 G 38397433.32 38397433.52 38397433.73 0.0501 0.0078

Moon 100421-10-13 10:33 G 38399362.80 38399362.94 38399363.08 0.2709 0.0866

Earth 100421-10-13 15:07 G 38399362.98 38399363.13 38399363.28 0.2705 0.0678 *

Jupiter 100422-05-01 16:47 G 38399563.09 38399563.20 38399563.33 0.0522 0.0419

Jupiter 100422-12-24 17:45 G 38399800.09 38399800.24 38399800.39 0.0527 0.0355

Saturn 100423-08-08 13:55 G 38400026.95 38400027.08 38400027.23 0.0289 0.0213

Saturn 100424-03-25 05:45 G 38400256.55 38400256.74 38400256.94 0.0292 0.0081

Jupiter 100428-03-06 18:57 G 38401699.12 38401699.29 38401699.46 0.0503 0.0280

Jupiter 100428-10-29 17:31 G 38401936.12 38401936.23 38401936.34 0.0499 0.0421

Uranus 100430-05-29 11:16 G 38402512.90 38402512.97 38402513.05 0.0135 0.0127

Uranus 100431-01-10 15:50 G 38402739.06 38402739.16 38402739.31 0.0135 0.0109

Uranus 100431-08-24 21:21 G 38402965.24 38402965.39 38402965.55 0.0135 0.0091

Uranus 100432-04-07 02:23 G 38403191.43 38403191.60 38403191.79 0.0135 0.0073

Uranus 100432-11-19 07:40 G 38403417.63 38403417.82 38403418.02 0.0135 0.0054

Uranus 100433-07-03 13:11 G 38403643.84 38403644.05 38403644.26 0.0136 0.0035

Uranus 100434-02-14 18:28 G 38403870.06 38403870.27 38403870.49 0.0136 0.0017

Jupiter 100434-08-29 14:38 G 38404065.92 38404066.11 38404066.30 0.0526 0.0141

Uranus 100434-09-29 00:14 G 38404096.30 38404096.51 38404096.73 0.0136 0.0004

Uranus 100435-05-13 05:59 G 38404322.54 38404322.75 38404322.97 0.0136 0.0022

Uranus 100435-12-25 11:45 G 38404548.79 38404548.99 38404549.20 0.0136 0.0042

Uranus 100436-08-07 17:59 G 38404775.06 38404775.25 38404775.45 0.0136 0.0061

Saturn 100436-10-28 23:02 G 38404857.41 38404857.46 38404857.53 0.0273 0.0262

Uranus 100437-03-22 00:14 G 38405001.34 38405001.51 38405001.69 0.0136 0.0080

Saturn 100437-06-15 09:35 G 38405086.68 38405086.90 38405087.11 0.0271 0.0009

Uranus 100437-11-03 06:28 G 38405227.63 38405227.77 38405227.92 0.0137 0.0099

Saturn 100438-01-30 17:45 G 38405316.14 38405316.24 38405316.34 0.0269 0.0235

Uranus 100438-06-17 12:57 G 38405453.94 38405454.04 38405454.15 0.0137 0.0118

Jupiter 100439-11-10 14:09 G 38405965.03 38405965.09 38405965.15 0.0504 0.0480

Jupiter 100440-07-04 14:09 G 38406201.91 38406202.09 38406202.28 0.0500 0.0228

Neptune 100443-11-30 14:23 G 38407446.02 38407446.10 38407446.19 0.0090 0.0082

Neptune 100444-07-13 02:52 G 38407671.51 38407671.62 38407671.76 0.0090 0.0072

Neptune 100445-02-23 15:35 G 38407897.00 38407897.15 38407897.32 0.0090 0.0061

Neptune 100445-10-07 03:50 G 38408122.51 38408122.66 38408122.86 0.0090 0.0051

Jupiter 100446-05-04 10:04 G 38408331.72 38408331.92 38408332.12 0.0524 0.0080

Neptune 100446-05-20 16:33 G 38408348.01 38408348.19 38408348.40 0.0090 0.0040

Mars 100446-06-21 18:43 G 38408380.10 38408380.28 38408380.45 0.1867 0.0070

Neptune 100447-01-01 05:31 G 38408573.53 38408573.73 38408573.94 0.0090 0.0029

Neptune 100447-08-14 18:14 G 38408799.05 38408799.26 38408799.47 0.0090 0.0018

Neptune 100448-03-27 06:57 G 38409024.57 38409024.79 38409025.00 0.0090 0.0007

Neptune 100448-11-07 19:26 G 38409250.10 38409250.31 38409250.53 0.0089 0.0004

Neptune 100449-06-21 07:55 G 38409475.63 38409475.83 38409476.05 0.0089 0.0015

Neptune 100450-02-01 20:23 G 38409701.16 38409701.35 38409701.57 0.0089 0.0026

Neptune 100450-09-15 09:07 G 38409926.69 38409926.88 38409927.09 0.0089 0.0036

Neptune 100451-04-28 21:35 G 38410152.23 38410152.40 38410152.60 0.0089 0.0047

Neptune 100451-12-10 09:50 G 38410377.77 38410377.91 38410378.10 0.0089 0.0058

Jupiter 100452-03-09 10:33 G 38410467.74 38410467.94 38410468.15 0.0501 0.0032

Neptune 100452-07-22 22:47 G 38410603.32 38410603.45 38410603.60 0.0089 0.0068

Saturn 100453-02-17 22:04 G 38410813.25 38410813.42 38410813.59 0.0290 0.0168

Neptune 100453-03-05 11:16 G 38410828.89 38410828.97 38410829.09 0.0089 0.0078

Saturn 100453-10-05 14:09 G 38411042.91 38411043.09 38411043.28 0.0293 0.0130

Neptune 100453-10-16 23:59 G 38411054.49 38411054.50 38411054.53 0.0089 0.0089

Jupiter 100458-01-07 05:59 G 38412597.58 38412597.75 38412597.91 0.0523 0.0296

Jupiter 100458-09-01 06:43 G 38412834.70 38412834.78 38412834.86 0.0527 0.0480

Jupiter 100463-11-13 07:55 G 38414733.63 38414733.83 38414734.03 0.0502 0.0167

Saturn 100466-05-11 07:11 G 38415643.68 38415643.80 38415643.94 0.0273 0.0217

Saturn 100466-12-26 17:31 G 38415873.02 38415873.23 38415873.45 0.0270 0.0035

Jupiter 100469-09-11 23:59 G 38416863.47 38416863.50 38416863.54 0.0521 0.0513

Jupiter 100470-05-06 23:59 G 38417100.32 38417100.50 38417100.67 0.0526 0.0255

Uranus 100471-12-10 05:59 G 38417682.66 38417682.75 38417682.87 0.0143 0.0126

Uranus 100472-07-23 18:28 G 38417909.13 38417909.27 38417909.44 0.0143 0.0104

Uranus 100473-03-07 07:11 G 38418135.63 38418135.80 38418135.99 0.0143 0.0081

Uranus 100473-10-19 19:40 G 38418362.12 38418362.32 38418362.52 0.0143 0.0058

Mars 100473-11-08 09:50 G 38418381.74 38418381.91 38418382.08 0.1673 0.0405

Uranus 100474-06-03 07:40 G 38418588.61 38418588.82 38418589.04 0.0143 0.0035

Uranus 100475-01-15 19:40 G 38418815.11 38418815.32 38418815.55 0.0142 0.0013

Jupiter 100475-07-19 04:19 G 38418999.54 38418999.68 38418999.83 0.0503 0.0364

Uranus 100475-08-30 07:40 G 38419041.60 38419041.82 38419042.04 0.0142 0.0011

Jupiter 100476-03-12 03:35 G 38419236.50 38419236.65 38419236.80 0.0499 0.0342

Uranus 100476-04-12 19:26 G 38419268.10 38419268.31 38419268.53 0.0142 0.0033

Uranus 100476-11-25 06:57 G 38419494.59 38419494.79 38419495.00 0.0142 0.0055

Uranus 100477-07-09 17:59 G 38419721.08 38419721.25 38419721.45 0.0142 0.0078

Uranus 100478-02-21 05:45 G 38419947.58 38419947.74 38419947.90 0.0142 0.0099

Uranus 100478-10-05 16:33 G 38420174.09 38420174.19 38420174.31 0.0141 0.0120

Uranus 100479-05-20 03:21 G 38420400.64 38420400.64 38420400.66 0.0141 0.0141

Jupiter 100482-01-09 20:23 G 38421366.15 38421366.35 38421366.55 0.0525 0.0038

Saturn 100482-08-31 07:26 G 38421599.62 38421599.81 38421600.00 0.0290 0.0116

Saturn 100483-04-17 23:45 G 38421829.33 38421829.49 38421829.66 0.0293 0.0182

Jupiter 100487-11-15 22:33 G 38423502.24 38423502.44 38423502.64 0.0500 0.0142

Jupiter 100493-09-14 17:45 G 38425632.06 38425632.24 38425632.43 0.0524 0.0175

Saturn 100495-11-21 14:09 G 38426429.93 38426430.09 38426430.26 0.0273 0.0178

Saturn 100496-07-07 23:45 G 38426659.29 38426659.49 38426659.70 0.0270 0.0074

Jupiter 100499-07-21 18:28 G 38427768.07 38427768.27 38427768.48 0.0501 0.0056

Jupiter 100505-05-21 14:09 G 38429897.96 38429898.09 38429898.22 0.0522 0.0390

Jupiter 100506-01-13 14:23 G 38430134.97 38430135.10 38430135.24 0.0526 0.0384

Jupiter 100511-03-27 13:55 G 38432033.91 38432034.08 38432034.27 0.0503 0.0258

Jupiter 100511-11-19 12:57 G 38432270.95 38432271.04 38432271.14 0.0499 0.0446

Saturn 100512-03-13 15:50 G 38432385.96 38432386.16 38432386.36 0.0291 0.0069

Mars 100512-04-18 23:59 G 38432422.33 38432422.50 38432422.66 0.1872 0.0598

Saturn 100512-10-29 08:52 G 38432615.74 38432615.87 38432615.99 0.0294 0.0232

Uranus 100514-01-27 22:19 G 38433071.41 38433071.43 38433071.49 0.0135 0.0132

Uranus 100514-09-11 03:21 G 38433297.54 38433297.64 38433297.76 0.0135 0.0114

Uranus 100515-04-25 08:23 G 38433523.71 38433523.85 38433524.00 0.0135 0.0096

Uranus 100515-12-07 13:26 G 38433749.89 38433750.06 38433750.24 0.0135 0.0078

Uranus 100516-07-20 18:28 G 38433976.09 38433976.27 38433976.47 0.0135 0.0060

Uranus 100517-03-03 23:59 G 38434202.30 38434202.50 38434202.71 0.0135 0.0041

Jupiter 100517-09-18 09:07 G 38434400.70 38434400.88 38434401.08 0.0525 0.0165

Uranus 100517-10-16 05:16 G 38434428.52 38434428.72 38434428.94 0.0135 0.0023

Uranus 100518-05-30 11:02 G 38434654.74 38434654.96 38434655.17 0.0136 0.0004

Uranus 100519-01-11 16:33 G 38434880.98 38434881.19 38434881.41 0.0136 0.0015

Uranus 100519-08-25 22:19 G 38435107.23 38435107.43 38435107.65 0.0136 0.0035

Uranus 100520-04-08 04:33 G 38435333.49 38435333.69 38435333.88 0.0136 0.0053

Uranus 100520-11-20 10:19 G 38435559.76 38435559.93 38435560.12 0.0136 0.0073

Uranus 100521-07-04 16:33 G 38435786.04 38435786.19 38435786.35 0.0136 0.0092

Uranus 100522-02-15 22:47 G 38436012.33 38436012.45 38436012.58 0.0137 0.0111

Uranus 100522-09-30 05:16 G 38436238.67 38436238.72 38436238.80 0.0137 0.0130

Jupiter 100522-11-30 10:47 G 38436299.86 38436299.95 38436300.04 0.0504 0.0455

Jupiter 100523-07-25 11:02 G 38436536.78 38436536.96 38436537.14 0.0500 0.0255

Saturn 100525-06-03 22:47 G 38437216.26 38437216.45 38437216.64 0.0272 0.0132

Saturn 100526-01-19 08:23 G 38437445.65 38437445.85 38437446.04 0.0270 0.0117

Neptune 100526-08-30 05:02 G 38437668.68 38437668.71 38437668.79 0.0088 0.0085

Neptune 100527-04-12 18:14 G 38437894.17 38437894.26 38437894.41 0.0088 0.0075

Neptune 100527-11-24 08:09 G 38438119.70 38438119.84 38438120.00 0.0088 0.0064

Neptune 100528-07-06 21:21 G 38438345.23 38438345.39 38438345.59 0.0088 0.0054

Neptune 100529-02-17 11:16 G 38438570.78 38438570.97 38438571.17 0.0088 0.0043

Jupiter 100529-05-24 02:52 G 38438666.42 38438666.62 38438666.82 0.0524 0.0062

Neptune 100529-10-01 00:28 G 38438796.32 38438796.52 38438796.74 0.0088 0.0033

Neptune 100530-05-14 13:55 G 38439021.87 38439022.08 38439022.31 0.0088 0.0022

Neptune 100530-12-26 03:21 G 38439247.42 38439247.64 38439247.87 0.0088 0.0012

Neptune 100531-08-08 17:02 G 38439472.98 38439473.21 38439473.43 0.0088 0.0001

Neptune 100532-03-21 06:14 G 38439698.54 38439698.76 38439698.99 0.0088 0.0010

Neptune 100532-11-01 19:40 G 38439924.11 38439924.32 38439924.54 0.0088 0.0020

Neptune 100533-06-15 08:52 G 38440149.67 38440149.87 38440150.10 0.0088 0.0031

Neptune 100534-01-26 22:47 G 38440375.25 38440375.45 38440375.65 0.0088 0.0041

Neptune 100534-09-09 11:59 G 38440600.83 38440601.00 38440601.19 0.0088 0.0052

Jupiter 100535-03-30 07:55 G 38440802.62 38440802.83 38440803.04 0.0501 0.0060

Neptune 100535-04-23 01:26 G 38440826.41 38440826.56 38440826.73 0.0088 0.0062

Neptune 100535-12-04 14:38 G 38441052.00 38441052.11 38441052.25 0.0088 0.0073

Neptune 100536-07-17 04:19 G 38441277.62 38441277.68 38441277.76 0.0088 0.0083

Mars 100539-09-06 20:23 G 38442424.19 38442424.35 38442424.51 0.1669 0.0642

Jupiter 100541-01-26 23:45 G 38442932.32 38442932.49 38442932.66 0.0523 0.0276

Pluto 100541-02-08 06:14 G 38442944.56 38442944.76 38442944.97 0.0064 0.0024

Jupiter 100541-09-21 00:57 G 38443169.48 38443169.54 38443169.60 0.0527 0.0502

Pluto 100541-09-21 09:50 G 38443169.71 38443169.91 38443170.13 0.0065 0.0018

Saturn 100541-09-24 01:55 G 38443172.37 38443172.58 38443172.79 0.0291 0.0016

Pluto 100542-05-04 13:26 G 38443394.99 38443395.06 38443395.16 0.0065 0.0059

Saturn 100542-05-11 18:57 G 38443402.26 38443402.29 38443402.34 0.0294 0.0287

Jupiter 100546-12-03 02:09 G 38445068.39 38445068.59 38445068.79 0.0502 0.0144

Earth 100551-04-16 12:28 G 38446663.86 38446664.02 38446664.18 0.2627 0.0705

Moon 100551-04-16 16:04 G 38446664.02 38446664.17 38446664.32 0.2632 0.0764 *

Jupiter 100552-10-01 21:35 G 38447198.33 38447198.40 38447198.47 0.0522 0.0484

Jupiter 100553-05-26 21:35 G 38447435.24 38447435.40 38447435.57 0.0526 0.0288

Saturn 100554-12-15 06:14 G 38448002.56 38448002.76 38448002.97 0.0272 0.0092

Saturn 100555-08-01 14:52 G 38448231.96 38448232.12 38448232.31 0.0269 0.0157

Uranus 100555-08-10 11:45 G 38448240.92 38448240.99 38448241.07 0.0143 0.0135

Uranus 100556-03-24 00:14 G 38448467.38 38448467.51 38448467.66 0.0143 0.0112

Uranus 100556-11-05 12:57 G 38448693.87 38448694.04 38448694.21 0.0143 0.0089

Uranus 100557-06-20 01:11 G 38448920.36 38448920.55 38448920.75 0.0143 0.0067

Uranus 100558-02-01 13:40 G 38449146.86 38449147.07 38449147.29 0.0143 0.0044

Jupiter 100558-08-07 21:35 G 38449334.25 38449334.40 38449334.56 0.0503 0.0345

Uranus 100558-09-16 01:55 G 38449373.36 38449373.58 38449373.80 0.0143 0.0021

Jupiter 100559-04-01 20:52 G 38449571.23 38449571.37 38449571.51 0.0499 0.0362

Moon 100559-04-14 08:09 G 38449583.74 38449583.84 38449583.94 0.2628 0.2054

Uranus 100559-04-30 13:55 G 38449599.86 38449600.08 38449600.30 0.0142 0.0002

Uranus 100559-12-13 01:40 G 38449826.36 38449826.57 38449826.79 0.0142 0.0024

Uranus 100560-07-26 13:11 G 38450052.86 38450053.05 38450053.27 0.0142 0.0047

Uranus 100561-03-10 00:57 G 38450279.36 38450279.54 38450279.74 0.0142 0.0069

Uranus 100561-10-22 12:14 G 38450505.86 38450506.01 38450506.19 0.0142 0.0091

Uranus 100562-06-05 23:31 G 38450732.36 38450732.48 38450732.62 0.0142 0.0112

Uranus 100563-01-18 10:47 G 38450958.87 38450958.95 38450959.02 0.0141 0.0133

Jupiter 100565-01-29 17:16 G 38451701.02 38451701.22 38451701.42 0.0525 0.0068

Saturn 100570-08-19 18:14 G 38453729.18 38453729.26 38453729.34 0.0289 0.0263

Jupiter 100570-12-05 17:16 G 38453837.03 38453837.22 38453837.42 0.0501 0.0167

Saturn 100571-04-06 09:35 G 38453958.69 38453958.90 38453959.10 0.0292 0.0030

Mars 100571-09-05 18:43 G 38454111.21 38454111.28 38454111.36 0.1680 0.1513

Jupiter 100576-10-04 12:43 G 38455966.84 38455967.03 38455967.22 0.0523 0.0152

Mars 100578-02-14 04:19 G 38456464.55 38456464.68 38456464.81 0.1876 0.1176

Jupiter 100582-08-10 14:52 G 38458102.91 38458103.12 38458103.32 0.0502 0.0031

Saturn 100584-06-26 14:38 G 38458788.90 38458789.11 38458789.33 0.0271 0.0047

Saturn 100585-02-10 23:16 G 38459018.33 38459018.47 38459018.62 0.0269 0.0199

Jupiter 100588-06-09 06:57 G 38460232.66 38460232.79 38460232.93 0.0522 0.0372

Jupiter 100589-02-01 07:11 G 38460469.68 38460469.80 38460469.93 0.0526 0.0404

Jupiter 100594-04-15 11:02 G 38462368.78 38462368.96 38462369.15 0.0503 0.0229

Jupiter 100594-12-08 10:04 G 38462605.86 38462605.92 38462605.98 0.0499 0.0475

Uranus 100598-05-11 14:23 G 38463856.02 38463856.10 38463856.20 0.0135 0.0120

Uranus 100598-12-23 18:57 G 38464082.17 38464082.29 38464082.45 0.0135 0.0103

Uranus 100599-08-07 00:28 G 38464308.36 38464308.52 38464308.69 0.0135 0.0084

Saturn 100600-03-02 03:35 G 38464515.52 38464515.65 38464515.80 0.0289 0.0213

Uranus 100600-03-21 05:31 G 38464534.55 38464534.73 38464534.92 0.0135 0.0066

Jupiter 100600-10-08 03:21 G 38464735.45 38464735.64 38464735.83 0.0525 0.0186

Saturn 100600-10-17 19:26 G 38464745.11 38464745.31 38464745.51 0.0292 0.0082

Uranus 100600-11-02 10:33 G 38464760.75 38464760.94 38464761.15 0.0135 0.0048

Uranus 100601-06-16 15:50 G 38464986.96 38464987.16 38464987.38 0.0135 0.0030

Uranus 100602-01-28 21:21 G 38465213.18 38465213.39 38465213.61 0.0135 0.0011

Uranus 100602-09-12 03:07 G 38465439.42 38465439.63 38465439.85 0.0136 0.0008

Uranus 100603-04-26 08:38 G 38465665.66 38465665.86 38465666.08 0.0136 0.0027

Uranus 100603-12-08 14:23 G 38465891.90 38465892.10 38465892.31 0.0136 0.0046

Uranus 100604-07-21 20:23 G 38466118.16 38466118.35 38466118.54 0.0136 0.0065

Uranus 100605-03-05 02:09 G 38466344.44 38466344.59 38466344.77 0.0136 0.0085

Mars 100605-07-05 06:57 G 38466466.65 38466466.79 38466466.94 0.1666 0.0884

Uranus 100605-10-17 08:23 G 38466570.73 38466570.85 38466571.00 0.0136 0.0103

Jupiter 100605-12-20 05:02 G 38466634.61 38466634.71 38466634.82 0.0504 0.0433

Uranus 100606-05-31 14:52 G 38466797.03 38466797.12 38466797.22 0.0137 0.0122

Jupiter 100606-08-14 04:47 G 38466871.53 38466871.70 38466871.88 0.0500 0.0278

Neptune 100608-03-05 00:14 G 38467440.47 38467440.51 38467440.59 0.0090 0.0086

Neptune 100608-10-16 12:57 G 38467665.94 38467666.04 38467666.17 0.0090 0.0075

Neptune 100609-05-30 01:11 G 38467891.43 38467891.55 38467891.72 0.0090 0.0065

Neptune 100610-01-10 13:55 G 38468116.93 38468117.08 38468117.27 0.0090 0.0054

Neptune 100610-08-24 02:52 G 38468342.44 38468342.62 38468342.81 0.0090 0.0043

Neptune 100611-04-06 15:21 G 38468567.95 38468568.14 38468568.35 0.0090 0.0032

Neptune 100611-11-18 04:04 G 38468793.46 38468793.67 38468793.88 0.0090 0.0021

Jupiter 100612-06-13 00:43 G 38469001.33 38469001.53 38469001.73 0.0524 0.0031

Neptune 100612-06-30 16:47 G 38469018.99 38469019.20 38469019.42 0.0090 0.0011

Neptune 100613-02-11 05:31 G 38469244.51 38469244.73 38469244.94 0.0090 0.0001

Saturn 100613-05-23 11:45 G 38469345.94 38469345.99 38469346.07 0.0274 0.0261

Neptune 100613-09-24 17:59 G 38469470.04 38469470.25 38469470.47 0.0090 0.0011

Saturn 100614-01-07 22:19 G 38469575.22 38469575.43 38469575.65 0.0271 0.0008

Neptune 100614-05-08 06:28 G 38469695.57 38469695.77 38469695.99 0.0090 0.0022

Saturn 100614-08-25 06:14 G 38469804.67 38469804.76 38469804.87 0.0269 0.0239

Neptune 100614-12-19 18:57 G 38469921.10 38469921.29 38469921.50 0.0089 0.0033

Neptune 100615-08-02 07:55 G 38470146.64 38470146.83 38470147.02 0.0089 0.0043

Neptune 100616-03-14 20:23 G 38470372.19 38470372.35 38470372.53 0.0089 0.0054

Neptune 100616-10-26 08:38 G 38470597.73 38470597.86 38470598.03 0.0089 0.0065

Neptune 100617-06-08 21:21 G 38470823.28 38470823.39 38470823.52 0.0089 0.0075

Neptune 100618-01-20 09:35 G 38471048.86 38471048.90 38471048.99 0.0089 0.0086

Jupiter 100618-04-19 01:11 G 38471137.35 38471137.55 38471137.76 0.0501 0.0080

Jupiter 100624-02-16 21:21 G 38473267.21 38473267.39 38473267.56 0.0523 0.0246

Saturn 100629-09-12 10:04 G 38475301.76 38475301.92 38475302.10 0.0290 0.0171

Jupiter 100629-12-22 21:07 G 38475403.18 38475403.38 38475403.58 0.0502 0.0121

Pluto 100630-01-03 00:43 G 38475414.31 38475414.53 38475414.76 0.0079 0.0004

Saturn 100630-04-30 02:23 G 38475531.41 38475531.60 38475531.78 0.0293 0.0127

Pluto 100630-08-16 10:47 G 38475639.92 38475639.95 38475640.04 0.0079 0.0076

Jupiter 100635-10-22 17:16 G 38477533.13 38477533.22 38477533.32 0.0521 0.0459

Jupiter 100636-06-15 17:02 G 38477770.05 38477770.21 38477770.37 0.0526 0.0314

Mars 100637-07-04 05:45 G 38478153.63 38478153.74 38478153.85 0.1677 0.1270

Uranus 100639-11-23 05:02 G 38479025.60 38479025.71 38479025.83 0.0143 0.0121

Uranus 100640-07-06 17:31 G 38479252.08 38479252.23 38479252.40 0.0143 0.0099

Uranus 100641-02-18 06:28 G 38479478.59 38479478.77 38479478.96 0.0143 0.0076

Jupiter 100641-08-27 17:45 G 38479669.08 38479669.24 38479669.40 0.0504 0.0320

Uranus 100641-10-02 18:43 G 38479705.09 38479705.28 38479705.50 0.0143 0.0054

Jupiter 100642-04-21 17:31 G 38479906.10 38479906.23 38479906.36 0.0500 0.0390

Uranus 100642-05-17 07:11 G 38479931.59 38479931.80 38479932.02 0.0143 0.0031

Saturn 100642-12-03 19:40 G 38480132.20 38480132.32 38480132.46 0.0273 0.0217

Uranus 100642-12-29 19:26 G 38480158.09 38480158.31 38480158.53 0.0143 0.0008

Saturn 100643-07-21 05:45 G 38480361.53 38480361.74 38480361.96 0.0270 0.0037

Uranus 100643-08-13 07:26 G 38480384.59 38480384.81 38480385.03 0.0142 0.0015

Mars 100643-12-13 08:38 G 38480506.80 38480506.86 38480506.92 0.1881 0.1765

Uranus 100644-03-26 19:26 G 38480611.10 38480611.31 38480611.53 0.0142 0.0037

Uranus 100644-11-08 07:11 G 38480837.60 38480837.80 38480838.00 0.0142 0.0059

Uranus 100645-06-22 18:43 G 38481064.10 38481064.28 38481064.46 0.0142 0.0081

Uranus 100646-02-04 05:59 G 38481290.60 38481290.75 38481290.90 0.0142 0.0103

Uranus 100646-09-18 17:16 G 38481517.12 38481517.22 38481517.32 0.0142 0.0124

Jupiter 100648-02-19 11:02 G 38482035.76 38482035.96 38482036.15 0.0525 0.0090

Jupiter 100653-12-25 14:52 G 38484171.93 38484172.12 38484172.31 0.0501 0.0197

Saturn 100659-03-25 18:42 G 38486088.10 38486088.28 38486088.47 0.0290 0.0123

Jupiter 100659-10-25 07:26 G 38486301.62 38486301.81 38486302.00 0.0523 0.0128

Saturn 100659-11-10 11:02 G 38486317.80 38486317.96 38486318.13 0.0293 0.0177

Earth 100664-10-15 17:30 G 38488119.08 38488119.23 38488119.38 0.2705 0.0608

Moon 100664-10-15 22:33 G 38488119.29 38488119.44 38488119.60 0.2702 0.0457 *

Jupiter 100665-08-30 09:21 G 38488437.68 38488437.89 38488438.10 0.0501 0.0007

Mars 100671-05-02 18:14 G 38490509.13 38490509.26 38490509.39 0.1663 0.1101

Jupiter 100671-06-30 05:16 G 38490567.58 38490567.72 38490567.88 0.0522 0.0340

Jupiter 100672-02-22 05:59 G 38490804.65 38490804.75 38490804.87 0.0527 0.0440

Saturn 100672-06-15 03:21 G 38490918.48 38490918.64 38490918.81 0.0273 0.0176

Saturn 100673-01-30 12:57 G 38491147.84 38491148.04 38491148.26 0.0270 0.0077

Mars 100675-12-13 02:52 G 38492194.55 38492194.62 38492194.68 0.1865 0.1730

Jupiter 100677-05-05 05:16 G 38492703.54 38492703.72 38492703.92 0.0503 0.0207

Jupiter 100677-12-28 03:50 G 38492940.66 38492940.66 38492940.68 0.0499 0.0498

Uranus 100682-01-10 02:09 G 38494414.53 38494414.59 38494414.67 0.0135 0.0126

Uranus 100682-08-24 07:11 G 38494640.68 38494640.80 38494640.93 0.0135 0.0108

Uranus 100683-04-07 12:14 G 38494866.85 38494867.01 38494867.17 0.0135 0.0090

Jupiter 100683-10-28 01:54 G 38495070.40 38495070.58 38495070.77 0.0525 0.0220

Uranus 100683-11-19 17:16 G 38495093.04 38495093.22 38495093.40 0.0135 0.0072

Uranus 100684-07-02 22:18 G 38495319.24 38495319.43 38495319.63 0.0135 0.0054

Uranus 100685-02-14 03:35 G 38495545.45 38495545.65 38495545.86 0.0135 0.0036

Uranus 100685-09-28 08:52 G 38495771.67 38495771.87 38495772.09 0.0135 0.0018

Uranus 100686-05-12 14:23 G 38495997.89 38495998.10 38495998.32 0.0136 0.0003

Uranus 100686-12-24 19:54 G 38496224.12 38496224.33 38496224.55 0.0136 0.0021

Uranus 100687-08-08 01:40 G 38496450.37 38496450.57 38496450.78 0.0136 0.0040

Uranus 100688-03-21 07:40 G 38496676.63 38496676.82 38496677.01 0.0136 0.0058

Saturn 100688-10-04 23:45 G 38496874.30 38496874.49 38496874.69 0.0291 0.0083

Uranus 100688-11-02 13:26 G 38496902.89 38496903.06 38496903.24 0.0136 0.0077

Jupiter 100689-01-08 00:42 G 38496969.42 38496969.53 38496969.66 0.0504 0.0409

Saturn 100689-05-22 16:18 G 38497104.05 38497104.18 38497104.33 0.0294 0.0219

Uranus 100689-06-16 19:11 G 38497129.17 38497129.30 38497129.47 0.0136 0.0097

Jupiter 100689-09-02 00:57 G 38497206.38 38497206.54 38497206.71 0.0500 0.0304

Uranus 100690-01-29 01:40 G 38497355.46 38497355.57 38497355.69 0.0136 0.0115

Uranus 100690-09-12 07:54 G 38497581.80 38497581.83 38497581.89 0.0137 0.0134

Neptune 100691-07-16 02:52 G 38497888.54 38497888.62 38497888.74 0.0088 0.0078

Neptune 100692-02-26 16:47 G 38498114.06 38498114.20 38498114.35 0.0088 0.0067

Neptune 100692-10-09 05:59 G 38498339.59 38498339.75 38498339.94 0.0088 0.0057

Neptune 100693-05-22 19:11 G 38498565.13 38498565.30 38498565.51 0.0088 0.0047

Neptune 100694-01-03 09:06 G 38498790.68 38498790.88 38498791.09 0.0088 0.0036

Neptune 100694-08-16 22:18 G 38499016.23 38499016.43 38499016.66 0.0088 0.0026

Neptune 100695-03-30 11:59 G 38499241.78 38499242.00 38499242.22 0.0088 0.0015

Jupiter 100695-07-02 21:50 G 38499336.21 38499336.41 38499336.61 0.0524 0.0008

Neptune 100695-11-11 01:26 G 38499467.33 38499467.56 38499467.78 0.0088 0.0004

Neptune 100696-06-23 14:38 G 38499692.89 38499693.11 38499693.34 0.0088 0.0007

Neptune 100697-02-04 04:04 G 38499918.46 38499918.67 38499918.90 0.0088 0.0017

Neptune 100697-09-17 17:45 G 38500144.03 38500144.24 38500144.45 0.0088 0.0027

Neptune 100698-05-01 06:42 G 38500369.59 38500369.78 38500370.00 0.0088 0.0038

Neptune 100698-12-12 20:23 G 38500595.17 38500595.35 38500595.54 0.0088 0.0048

Neptune 100699-07-26 09:35 G 38500820.75 38500820.90 38500821.08 0.0088 0.0059

Neptune 100700-03-08 23:16 G 38501046.34 38501046.47 38501046.61 0.0088 0.0069

Neptune 100700-10-20 12:14 G 38501271.95 38501272.01 38501272.13 0.0088 0.0080

Jupiter 100701-05-08 22:18 G 38501472.23 38501472.43 38501472.64 0.0501 0.0110

Saturn 100701-12-27 09:50 G 38501704.73 38501704.91 38501705.10 0.0272 0.0135

Saturn 100702-08-13 19:11 G 38501934.11 38501934.30 38501934.50 0.0270 0.0115

Mars 100703-05-02 16:18 G 38502196.04 38502196.18 38502196.32 0.1674 0.1022

Jupiter 100707-03-08 16:18 G 38503602.00 38503602.18 38503602.37 0.0523 0.0221

Jupiter 100713-01-11 19:26 G 38505738.11 38505738.31 38505738.52 0.0502 0.0088

Saturn 100718-04-18 07:11 G 38507660.60 38507660.80 38507661.01 0.0291 0.0038

Jupiter 100718-11-11 13:26 G 38507867.95 38507868.06 38507868.17 0.0521 0.0432

Saturn 100718-12-04 00:14 G 38507890.43 38507890.51 38507890.60 0.0294 0.0266

Jupiter 100719-07-06 13:26 G 38508104.91 38508105.06 38508105.21 0.0526 0.0343

Uranus 100723-07-24 10:47 G 38509583.87 38509583.95 38509584.05 0.0143 0.0130

Uranus 100724-03-06 23:59 G 38509810.36 38509810.50 38509810.65 0.0143 0.0108

Jupiter 100724-09-16 13:54 G 38510003.91 38510004.08 38510004.25 0.0503 0.0293

Uranus 100724-10-19 12:28 G 38510036.85 38510037.02 38510037.20 0.0143 0.0085

Jupiter 100725-05-11 12:57 G 38510240.93 38510241.04 38510241.16 0.0499 0.0416

Uranus 100725-06-03 01:11 G 38510263.35 38510263.55 38510263.75 0.0143 0.0062

Uranus 100726-01-15 13:26 G 38510489.85 38510490.06 38510490.28 0.0143 0.0040

Uranus 100726-08-30 01:54 G 38510716.36 38510716.58 38510716.80 0.0143 0.0017

Uranus 100727-04-13 13:54 G 38510942.86 38510943.08 38510943.31 0.0142 0.0006

Uranus 100727-11-26 01:54 G 38511169.37 38511169.58 38511169.80 0.0142 0.0028

Uranus 100728-07-09 13:40 G 38511395.87 38511396.07 38511396.28 0.0142 0.0051

Uranus 100729-02-21 01:26 G 38511622.37 38511622.56 38511622.75 0.0142 0.0072

Uranus 100729-10-05 12:42 G 38511848.87 38511849.03 38511849.20 0.0142 0.0094

Uranus 100730-05-19 23:45 G 38512075.38 38512075.49 38512075.63 0.0142 0.0116

Uranus 100731-01-01 10:33 G 38512301.91 38512301.94 38512302.02 0.0142 0.0137

Jupiter 100731-03-11 10:33 G 38512370.75 38512370.94 38512371.14 0.0525 0.0127

Saturn 100731-07-09 16:33 G 38512490.99 38512491.19 38512491.40 0.0272 0.0096

Saturn 100732-02-24 01:40 G 38512720.40 38512720.57 38512720.75 0.0270 0.0154

Jupiter 100736-05-22 09:50 G 38514269.87 38514269.91 38514269.95 0.0504 0.0492

Jupiter 100737-01-14 10:18 G 38514506.74 38514506.93 38514507.12 0.0500 0.0222

Mars 100737-02-28 04:47 G 38514551.60 38514551.70 38514551.81 0.1659 0.1336

Mars 100741-10-10 07:26 G 38516236.68 38516236.81 38516236.95 0.1870 0.1180

Jupiter 100742-11-14 07:26 G 38516636.62 38516636.81 38516637.01 0.0524 0.0092

Saturn 100747-10-29 10:47 G 38518446.74 38518446.95 38518447.16 0.0291 0.0003

Jupiter 100748-09-19 06:42 G 38518772.57 38518772.78 38518772.99 0.0501 0.0023

Jupiter 100754-07-20 04:04 G 38520902.51 38520902.67 38520902.84 0.0522 0.0307

Jupiter 100755-03-14 04:33 G 38521139.61 38521139.69 38521139.78 0.0526 0.0473

Jupiter 100760-05-25 03:35 G 38523038.46 38523038.65 38523038.85 0.0503 0.0176

Saturn 100761-01-18 21:21 G 38523277.18 38523277.39 38523277.60 0.0271 0.0059

Saturn 100761-09-05 05:59 G 38523506.61 38523506.75 38523506.91 0.0269 0.0189

Uranus 100765-09-10 13:40 G 38524973.04 38524973.07 38524973.13 0.0135 0.0132

Jupiter 100766-03-24 23:45 G 38525168.49 38525168.49 38525168.50 0.0521 0.0520

Uranus 100766-04-24 18:42 G 38525199.17 38525199.28 38525199.39 0.0135 0.0114

Jupiter 100766-11-16 22:47 G 38525405.28 38525405.45 38525405.62 0.0525 0.0250

Uranus 100766-12-06 23:16 G 38525425.34 38525425.47 38525425.63 0.0135 0.0097

Uranus 100767-07-21 04:18 G 38525651.52 38525651.68 38525651.87 0.0135 0.0079

Uranus 100768-03-03 09:50 G 38525877.72 38525877.91 38525878.10 0.0135 0.0061

Uranus 100768-10-15 14:52 G 38526103.92 38526104.12 38526104.33 0.0135 0.0042

Mars 100769-02-27 03:06 G 38526238.47 38526238.63 38526238.78 0.1670 0.0775

Uranus 100769-05-29 20:09 G 38526330.13 38526330.34 38526330.55 0.0135 0.0024

Uranus 100770-01-11 01:40 G 38526556.35 38526556.57 38526556.78 0.0135 0.0006

Uranus 100770-08-25 07:11 G 38526782.59 38526782.80 38526783.01 0.0136 0.0013

Uranus 100771-04-08 12:42 G 38527008.83 38527009.03 38527009.24 0.0136 0.0032

Uranus 100771-11-20 18:14 G 38527235.07 38527235.26 38527235.47 0.0136 0.0051

Jupiter 100772-01-29 00:14 G 38527304.37 38527304.51 38527304.65 0.0504 0.0375

Neptune 100772-06-07 09:50 G 38527434.90 38527434.91 38527434.94 0.0090 0.0089

Uranus 100772-07-03 23:59 G 38527461.33 38527461.50 38527461.69 0.0136 0.0070

Jupiter 100772-09-22 00:28 G 38527541.37 38527541.52 38527541.67 0.0500 0.0340

Neptune 100773-01-18 22:04 G 38527660.34 38527660.42 38527660.54 0.0090 0.0079

Uranus 100773-02-15 05:59 G 38527687.60 38527687.75 38527687.92 0.0136 0.0089

Neptune 100773-09-01 11:02 G 38527885.83 38527885.96 38527886.11 0.0090 0.0068

Uranus 100773-09-29 11:59 G 38527913.89 38527914.00 38527914.15 0.0136 0.0108

Neptune 100774-04-14 23:16 G 38528111.33 38528111.47 38528111.66 0.0090 0.0058

Uranus 100774-05-13 18:28 G 38528140.20 38528140.27 38528140.36 0.0137 0.0126

Neptune 100774-11-26 11:59 G 38528336.83 38528337.00 38528337.20 0.0090 0.0047

Neptune 100775-07-10 00:57 G 38528562.34 38528562.54 38528562.74 0.0090 0.0036

Neptune 100776-02-20 13:11 G 38528787.86 38528788.05 38528788.27 0.0090 0.0026

Saturn 100776-09-23 01:26 G 38529003.46 38529003.56 38529003.66 0.0289 0.0253

Neptune 100776-10-03 01:54 G 38529013.38 38529013.58 38529013.80 0.0090 0.0015

Saturn 100777-05-10 16:33 G 38529232.98 38529233.19 38529233.39 0.0292 0.0041

Neptune 100777-05-16 14:38 G 38529238.90 38529239.11 38529239.33 0.0090 0.0004

Neptune 100777-12-28 03:06 G 38529464.42 38529464.63 38529464.85 0.0090 0.0008

Jupiter 100778-07-22 19:40 G 38529671.12 38529671.32 38529671.52 0.0524 0.0034

Neptune 100778-08-10 16:04 G 38529689.96 38529690.17 38529690.38 0.0090 0.0018

Neptune 100779-03-24 04:33 G 38529915.49 38529915.69 38529915.90 0.0089 0.0029

Neptune 100779-11-04 17:02 G 38530141.03 38530141.21 38530141.41 0.0089 0.0039

Neptune 100780-06-17 05:45 G 38530366.57 38530366.74 38530366.92 0.0089 0.0050

Neptune 100781-01-28 18:14 G 38530592.11 38530592.26 38530592.43 0.0089 0.0061

Neptune 100781-09-11 06:42 G 38530817.67 38530817.78 38530817.93 0.0089 0.0072

Neptune 100782-04-24 19:26 G 38531043.24 38531043.31 38531043.41 0.0089 0.0082

Jupiter 100784-05-27 19:40 G 38531807.13 38531807.32 38531807.53 0.0501 0.0140

Pluto 100788-06-02 15:21 G 38533274.01 38533274.14 38533274.30 0.0064 0.0048

Pluto 100789-01-13 19:26 G 38533499.09 38533499.31 38533499.52 0.0065 0.0007

Pluto 100789-08-26 22:47 G 38533724.28 38533724.45 38533724.65 0.0065 0.0035

Jupiter 100790-03-27 17:02 G 38533937.02 38533937.21 38533937.40 0.0524 0.0183

Saturn 100790-08-01 03:06 G 38534063.41 38534063.63 38534063.85 0.0272 0.0022

Saturn 100791-03-18 11:30 G 38534292.87 38534292.98 38534293.10 0.0269 0.0225

Moon 100794-04-18 09:21 G 38535419.72 38535419.89 38535420.06 0.2622 0.0624

Earth 100794-04-18 12:28 G 38535419.86 38535420.02 38535420.18 0.2628 0.0736 *

Jupiter 100796-01-31 17:02 G 38536073.00 38536073.21 38536073.41 0.0502 0.0059

Jupiter 100801-11-30 14:38 G 38538202.99 38538203.11 38538203.25 0.0522 0.0396

Jupiter 100802-07-25 15:06 G 38538440.00 38538440.13 38538440.27 0.0526 0.0385

Mars 100802-12-26 16:04 G 38538594.11 38538594.17 38538594.23 0.1656 0.1549

Saturn 100806-04-05 03:21 G 38539789.51 38539789.64 38539789.78 0.0289 0.0221

Saturn 100806-11-20 18:42 G 38540019.08 38540019.28 38540019.48 0.0292 0.0074

Uranus 100807-03-23 17:59 G 38540142.21 38540142.25 38540142.32 0.0143 0.0138

Mars 100807-08-07 12:42 G 38540278.87 38540279.03 38540279.20 0.1875 0.0647

Jupiter 100807-10-06 12:42 G 38540338.86 38540339.03 38540339.21 0.0503 0.0261

Uranus 100807-11-05 06:42 G 38540368.67 38540368.78 38540368.93 0.0143 0.0116

Jupiter 100808-05-30 11:59 G 38540575.92 38540576.00 38540576.09 0.0499 0.0450

Uranus 100808-06-18 19:40 G 38540595.16 38540595.32 38540595.50 0.0143 0.0093

Uranus 100809-01-31 08:23 G 38540821.67 38540821.85 38540822.05 0.0143 0.0071

Uranus 100809-09-14 21:06 G 38541048.17 38541048.38 38541048.59 0.0143 0.0048

Uranus 100810-04-29 09:21 G 38541274.68 38541274.89 38541275.11 0.0143 0.0026

Uranus 100810-12-11 21:35 G 38541501.18 38541501.40 38541501.62 0.0143 0.0003

Uranus 100811-07-26 09:35 G 38541727.68 38541727.90 38541728.12 0.0142 0.0020

Uranus 100812-03-08 21:35 G 38541954.19 38541954.40 38541954.62 0.0142 0.0042

Uranus 100812-10-21 09:06 G 38542180.70 38542180.88 38542181.09 0.0142 0.0064

Uranus 100813-06-04 20:52 G 38542407.20 38542407.37 38542407.55 0.0142 0.0085

Uranus 100814-01-17 07:54 G 38542633.70 38542633.83 38542633.98 0.0142 0.0107

Jupiter 100814-03-30 11:02 G 38542705.78 38542705.96 38542706.15 0.0525 0.0165

Uranus 100814-08-31 18:57 G 38542860.21 38542860.29 38542860.40 0.0142 0.0128

Jupiter 100819-06-11 09:06 G 38544604.81 38544604.88 38544604.97 0.0505 0.0461

Saturn 100819-06-26 19:11 G 38544620.22 38544620.30 38544620.40 0.0274 0.0246

Jupiter 100820-02-03 10:04 G 38544841.75 38544841.92 38544842.10 0.0500 0.0258

Saturn 100820-02-11 06:14 G 38544849.54 38544849.76 38544849.98 0.0271 0.0011

Saturn 100820-09-27 14:09 G 38545079.05 38545079.09 38545079.17 0.0268 0.0257

Jupiter 100825-12-03 06:14 G 38546971.56 38546971.76 38546971.96 0.0524 0.0057

Jupiter 100831-10-09 07:40 G 38549107.61 38549107.82 38549108.02 0.0502 0.0063

Mars 100834-12-25 13:40 G 38550280.91 38550281.07 38550281.24 0.1667 0.0537

Saturn 100835-10-16 07:40 G 38550575.66 38550575.82 38550575.98 0.0289 0.0184

Saturn 100836-06-01 23:16 G 38550805.28 38550805.47 38550805.66 0.0292 0.0113

Jupiter 100837-08-08 03:35 G 38551237.48 38551237.65 38551237.82 0.0522 0.0271

Jupiter 100838-04-02 04:18 G 38551474.63 38551474.68 38551474.72 0.0527 0.0511

Jupiter 100843-06-14 03:06 G 38553373.43 38553373.63 38553373.83 0.0502 0.0142

Saturn 100849-01-06 00:14 G 38555406.37 38555406.51 38555406.65 0.0274 0.0210

Jupiter 100849-04-13 00:57 G 38555503.47 38555503.54 38555503.61 0.0522 0.0484

Saturn 100849-08-23 10:33 G 38555635.73 38555635.94 38555636.16 0.0271 0.0046

Jupiter 100849-12-06 01:11 G 38555740.38 38555740.55 38555740.71 0.0526 0.0295

Uranus 100849-12-23 06:28 G 38555757.69 38555757.77 38555757.88 0.0135 0.0120

Uranus 100850-08-06 11:45 G 38555983.86 38555983.99 38555984.13 0.0135 0.0102

Uranus 100851-03-20 16:47 G 38556210.04 38556210.20 38556210.37 0.0135 0.0084

Uranus 100851-11-01 21:50 G 38556436.23 38556436.41 38556436.60 0.0135 0.0066

Uranus 100852-06-15 02:52 G 38556662.42 38556662.62 38556662.82 0.0135 0.0048

Uranus 100853-01-27 07:54 G 38556888.63 38556888.83 38556889.05 0.0135 0.0031

Uranus 100853-09-10 13:40 G 38557114.85 38557115.07 38557115.28 0.0135 0.0012

Uranus 100854-04-24 18:57 G 38557341.08 38557341.29 38557341.50 0.0136 0.0007

Uranus 100854-12-07 00:14 G 38557567.31 38557567.51 38557567.73 0.0136 0.0026

Jupiter 100855-02-16 23:59 G 38557639.36 38557639.50 38557639.66 0.0503 0.0341

Uranus 100855-07-21 05:59 G 38557793.55 38557793.75 38557793.96 0.0136 0.0044

Jupiter 100855-10-11 23:16 G 38557876.34 38557876.47 38557876.61 0.0499 0.0373

Neptune 100855-10-18 11:16 G 38557882.90 38557882.97 38557883.08 0.0088 0.0081

Uranus 100856-03-03 11:30 G 38558019.80 38558019.98 38558020.18 0.0136 0.0064

Neptune 100856-05-31 00:42 G 38558108.42 38558108.53 38558108.68 0.0088 0.0071

Uranus 100856-10-15 17:16 G 38558246.07 38558246.22 38558246.41 0.0136 0.0083

Neptune 100857-01-11 14:23 G 38558333.95 38558334.10 38558334.28 0.0088 0.0060

Uranus 100857-05-29 23:30 G 38558472.34 38558472.48 38558472.63 0.0136 0.0101

Neptune 100857-08-25 03:50 G 38558559.49 38558559.66 38558559.86 0.0088 0.0050

Uranus 100858-01-11 05:16 G 38558698.64 38558698.72 38558698.85 0.0137 0.0120

Neptune 100858-04-07 17:30 G 38558785.03 38558785.23 38558785.44 0.0088 0.0039

Neptune 100858-11-19 06:42 G 38559010.58 38559010.78 38559011.01 0.0088 0.0029

Neptune 100859-07-02 20:23 G 38559236.13 38559236.35 38559236.57 0.0088 0.0018

Neptune 100860-02-13 10:04 G 38559461.70 38559461.92 38559462.14 0.0088 0.0008

Neptune 100860-09-25 23:30 G 38559687.25 38559687.48 38559687.70 0.0088 0.0003

Neptune 100861-05-09 12:42 G 38559912.81 38559913.03 38559913.26 0.0088 0.0013

Jupiter 100861-08-10 22:33 G 38560006.24 38560006.44 38560006.63 0.0525 0.0077

Neptune 100861-12-21 01:54 G 38560138.37 38560138.58 38560138.81 0.0088 0.0024

Neptune 100862-08-03 15:06 G 38560363.94 38560364.13 38560364.36 0.0088 0.0035

Neptune 100863-03-17 04:47 G 38560589.52 38560589.70 38560589.90 0.0088 0.0045

Neptune 100863-10-28 17:45 G 38560815.09 38560815.24 38560815.44 0.0088 0.0056

Neptune 100864-06-10 07:11 G 38561040.68 38561040.80 38561040.97 0.0088 0.0066

Neptune 100865-01-21 21:06 G 38561266.27 38561266.38 38561266.49 0.0088 0.0076

Saturn 100865-04-27 08:09 G 38561361.68 38561361.84 38561362.03 0.0289 0.0155

Neptune 100865-09-04 10:04 G 38561491.91 38561491.92 38561491.98 0.0088 0.0087

Saturn 100865-12-12 23:59 G 38561591.32 38561591.50 38561591.68 0.0292 0.0144

Jupiter 100867-06-16 20:23 G 38562142.16 38562142.35 38562142.55 0.0501 0.0176

Jupiter 100873-04-15 19:11 G 38564272.11 38564272.30 38564272.50 0.0523 0.0141

Mars 100873-06-03 17:02 G 38564321.04 38564321.21 38564321.39 0.1879 0.0077

Pluto 100877-04-26 02:52 G 38565743.49 38565743.62 38565743.79 0.0079 0.0060

Pluto 100877-12-07 13:40 G 38565968.87 38565969.07 38565969.30 0.0079 0.0022

Saturn 100878-07-19 01:40 G 38566192.41 38566192.57 38566192.74 0.0273 0.0180

Jupiter 100879-02-19 17:59 G 38566408.04 38566408.25 38566408.46 0.0502 0.0021

Saturn 100879-03-05 12:14 G 38566421.80 38566422.01 38566422.22 0.0271 0.0075

Jupiter 100884-12-19 15:21 G 38568538.00 38568538.14 38568538.29 0.0522 0.0358

Jupiter 100885-08-13 15:35 G 38568775.03 38568775.15 38568775.26 0.0526 0.0424

Jupiter 100890-10-25 14:52 G 38570673.94 38570674.12 38570674.31 0.0503 0.0221

Jupiter 100891-06-19 14:09 G 38570911.06 38570911.09 38570911.13 0.0499 0.0491

Uranus 100891-07-05 15:50 G 38570927.06 38570927.16 38570927.28 0.0143 0.0123

Uranus 100892-02-17 04:47 G 38571153.55 38571153.70 38571153.87 0.0143 0.0100

Uranus 100892-09-30 17:30 G 38571380.05 38571380.23 38571380.42 0.0143 0.0078

Uranus 100893-05-15 06:14 G 38571606.56 38571606.76 38571606.96 0.0143 0.0055

Uranus 100893-12-27 18:28 G 38571833.06 38571833.27 38571833.49 0.0143 0.0033

Uranus 100894-08-11 06:57 G 38572059.57 38572059.79 38572060.01 0.0143 0.0010

Saturn 100894-11-07 11:30 G 38572147.79 38572147.98 38572148.17 0.0289 0.0120

Uranus 100895-03-25 19:11 G 38572286.08 38572286.30 38572286.52 0.0143 0.0012

Saturn 100895-06-25 03:21 G 38572377.48 38572377.64 38572377.80 0.0292 0.0179

Uranus 100895-11-07 06:57 G 38572512.58 38572512.79 38572513.01 0.0142 0.0035

Uranus 100896-06-20 18:42 G 38572739.08 38572739.28 38572739.49 0.0142 0.0056

Uranus 100897-02-02 06:14 G 38572965.59 38572965.76 38572965.95 0.0142 0.0078

Jupiter 100897-04-18 11:59 G 38573040.82 38573041.00 38573041.18 0.0525 0.0206

Uranus 100897-09-16 17:30 G 38573192.09 38573192.23 38573192.40 0.0142 0.0100

Uranus 100898-05-01 04:47 G 38573418.60 38573418.70 38573418.82 0.0142 0.0121

Uranus 100898-12-13 15:35 G 38573645.15 38573645.15 38573645.18 0.0142 0.0142

Moon 100899-10-19 22:33 G 38573955.36 38573955.44 38573955.51 0.2702 0.2327

Mars 100900-10-23 00:42 G 38574323.36 38574323.53 38574323.70 0.1664 0.0296

Jupiter 100902-07-01 11:02 G 38574939.85 38574939.96 38574940.07 0.0504 0.0423

Jupiter 100903-02-23 10:47 G 38575176.78 38575176.95 38575177.12 0.0500 0.0294

Moon 100907-10-18 14:52 G 38576874.97 38576875.12 38576875.26 0.2708 0.0701

Earth 100907-10-18 19:54 G 38576875.18 38576875.33 38576875.48 0.2705 0.0547 *

Saturn 100908-01-30 05:30 G 38576978.56 38576978.73 38576978.93 0.0273 0.0147

Saturn 100908-09-15 15:50 G 38577207.97 38577208.16 38577208.37 0.0271 0.0109

Jupiter 100908-12-23 08:52 G 38577306.67 38577306.87 38577307.07 0.0525 0.0016

Jupiter 100914-10-29 08:38 G 38579442.65 38579442.86 38579443.06 0.0501 0.0099

Jupiter 100920-08-28 06:57 G 38581572.61 38581572.79 38581572.97 0.0523 0.0229

Saturn 100924-05-20 11:45 G 38582933.80 38582933.99 38582934.19 0.0289 0.0090

Saturn 100925-01-05 03:21 G 38583163.51 38583163.64 38583163.80 0.0292 0.0210

Jupiter 100926-07-04 05:16 G 38583708.51 38583708.72 38583708.92 0.0502 0.0102

Jupiter 100932-05-03 04:33 G 38585838.59 38585838.69 38585838.80 0.0522 0.0441

Jupiter 100932-12-26 04:33 G 38586075.54 38586075.69 38586075.85 0.0526 0.0341

Uranus 100933-08-23 18:42 G 38586316.22 38586316.28 38586316.38 0.0135 0.0125

Uranus 100934-04-06 23:30 G 38586542.37 38586542.48 38586542.62 0.0135 0.0108

Uranus 100934-11-19 04:33 G 38586768.54 38586768.69 38586768.86 0.0135 0.0090

Uranus 100935-07-03 09:35 G 38586994.73 38586994.90 38586995.09 0.0135 0.0072

Uranus 100936-02-14 14:38 G 38587220.92 38587221.11 38587221.31 0.0135 0.0054

Uranus 100936-09-27 19:40 G 38587447.12 38587447.32 38587447.54 0.0135 0.0037

Neptune 100937-04-23 07:11 G 38587654.74 38587654.80 38587654.91 0.0090 0.0083

Uranus 100937-05-12 00:57 G 38587673.33 38587673.54 38587673.76 0.0135 0.0018

Saturn 100937-08-11 05:59 G 38587764.56 38587764.75 38587764.94 0.0273 0.0119

Neptune 100937-12-04 19:54 G 38587880.22 38587880.33 38587880.47 0.0090 0.0072

Uranus 100937-12-24 06:14 G 38587899.55 38587899.76 38587899.98 0.0135 0.0003

Jupiter 100938-03-09 01:54 G 38587974.42 38587974.58 38587974.75 0.0503 0.0302

Saturn 100938-03-28 16:04 G 38587993.98 38587994.17 38587994.36 0.0270 0.0135

Neptune 100938-07-18 08:52 G 38588105.72 38588105.87 38588106.03 0.0090 0.0061

Uranus 100938-08-07 11:45 G 38588125.78 38588125.99 38588126.21 0.0136 0.0019

Jupiter 100938-11-01 01:26 G 38588211.45 38588211.56 38588211.68 0.0500 0.0414

Neptune 100939-02-28 21:06 G 38588331.22 38588331.38 38588331.58 0.0090 0.0051

Uranus 100939-03-21 17:16 G 38588352.02 38588352.22 38588352.43 0.0136 0.0038

Mars 100939-04-01 21:50 G 38588363.25 38588363.41 38588363.58 0.1884 0.0503

Neptune 100939-10-12 09:50 G 38588556.73 38588556.91 38588557.11 0.0090 0.0040

Uranus 100939-11-02 22:47 G 38588578.26 38588578.45 38588578.65 0.0136 0.0056

Neptune 100940-05-24 22:18 G 38588782.24 38588782.43 38588782.64 0.0090 0.0029

Uranus 100940-06-16 04:18 G 38588804.51 38588804.68 38588804.87 0.0136 0.0075

Neptune 100941-01-05 10:47 G 38589007.75 38589007.95 38589008.17 0.0090 0.0019

Uranus 100941-01-28 10:18 G 38589030.78 38589030.93 38589031.09 0.0136 0.0094

Neptune 100941-08-18 23:45 G 38589233.28 38589233.49 38589233.70 0.0090 0.0008

Uranus 100941-09-11 16:18 G 38589257.07 38589257.18 38589257.32 0.0136 0.0112

Neptune 100942-04-01 12:14 G 38589458.80 38589459.01 38589459.23 0.0090 0.0003

Uranus 100942-04-25 22:33 G 38589483.39 38589483.44 38589483.52 0.0137 0.0131

Neptune 100942-11-13 00:42 G 38589684.32 38589684.53 38589684.75 0.0090 0.0014

Neptune 100943-06-26 13:11 G 38589909.85 38589910.05 38589910.27 0.0090 0.0025

Neptune 100944-02-07 01:40 G 38590135.39 38590135.57 38590135.78 0.0090 0.0036

Jupiter 100944-08-30 23:59 G 38590341.31 38590341.50 38590341.70 0.0525 0.0120

Neptune 100944-09-19 14:38 G 38590360.93 38590361.11 38590361.30 0.0090 0.0046

Neptune 100945-05-03 02:52 G 38590586.47 38590586.62 38590586.80 0.0089 0.0057

Neptune 100945-12-14 15:21 G 38590812.02 38590812.14 38590812.31 0.0089 0.0068

Neptune 100946-07-28 04:18 G 38591037.59 38591037.68 38591037.80 0.0089 0.0078

Neptune 100947-03-10 16:47 G 38591263.19 38591263.20 38591263.25 0.0089 0.0089

Jupiter 100949-11-11 22:33 G 38592240.43 38592240.44 38592240.47 0.0505 0.0502

Jupiter 100950-07-06 23:30 G 38592477.30 38592477.48 38592477.67 0.0501 0.0220

Saturn 100953-11-30 14:09 G 38593719.89 38593720.09 38593720.29 0.0290 0.0058

Saturn 100954-07-18 05:59 G 38593949.65 38593949.75 38593949.88 0.0293 0.0244

Jupiter 100956-05-05 21:06 G 38594607.18 38594607.38 38594607.58 0.0524 0.0099

Jupiter 100962-03-11 20:23 G 38596743.14 38596743.35 38596743.56 0.0501 0.0019

Mars 100966-08-20 11:30 G 38598365.80 38598365.98 38598366.15 0.1660 0.0065

Saturn 100967-02-21 09:06 G 38598550.68 38598550.88 38598551.09 0.0273 0.0086

Saturn 100967-10-08 18:57 G 38598780.13 38598780.29 38598780.47 0.0271 0.0168

Jupiter 100968-01-09 17:45 G 38598873.09 38598873.24 38598873.40 0.0523 0.0319

Jupiter 100968-09-02 19:11 G 38599110.21 38599110.30 38599110.39 0.0527 0.0470

Jupiter 100973-11-14 17:59 G 38601009.05 38601009.25 38601009.44 0.0502 0.0179

Uranus 100975-03-05 23:59 G 38601485.41 38601485.50 38601485.59 0.0143 0.0130

Uranus 100975-10-18 12:42 G 38601711.89 38601712.03 38601712.18 0.0143 0.0108

Uranus 100976-06-01 01:26 G 38601938.39 38601938.56 38601938.75 0.0143 0.0086

Uranus 100977-01-13 14:09 G 38602164.90 38602165.09 38602165.30 0.0143 0.0063

Uranus 100977-08-28 03:06 G 38602391.41 38602391.63 38602391.84 0.0143 0.0040

Uranus 100978-04-11 15:21 G 38602617.93 38602618.14 38602618.37 0.0143 0.0018

Uranus 100978-11-24 03:35 G 38602844.43 38602844.65 38602844.88 0.0143 0.0006

Uranus 100979-07-08 15:50 G 38603070.94 38603071.16 38603071.38 0.0143 0.0027

Uranus 100980-02-20 03:35 G 38603297.45 38603297.65 38603297.87 0.0142 0.0049

Jupiter 100980-05-08 16:18 G 38603376.01 38603376.18 38603376.36 0.0526 0.0253

Uranus 100980-10-03 15:35 G 38603523.96 38603524.15 38603524.34 0.0142 0.0071

Uranus 100981-05-18 02:52 G 38603750.46 38603750.62 38603750.79 0.0142 0.0092

Uranus 100981-12-30 14:09 G 38603976.97 38603977.09 38603977.23 0.0142 0.0113

Uranus 100982-08-14 01:11 G 38604203.49 38604203.55 38604203.63 0.0142 0.0134

Saturn 100983-06-12 14:09 G 38604505.89 38604506.09 38604506.30 0.0290 0.0029

Saturn 100984-01-28 05:59 G 38604735.69 38604735.75 38604735.83 0.0293 0.0273

Jupiter 100985-07-20 13:54 G 38605274.95 38605275.08 38605275.22 0.0504 0.0382

Jupiter 100986-03-14 13:40 G 38605511.91 38605512.07 38605512.22 0.0500 0.0336

Jupiter 100992-01-12 13:26 G 38607641.86 38607642.06 38607642.26 0.0525 0.0034

Saturn 100996-09-02 08:52 G 38609336.66 38609336.87 38609337.09 0.0273 0.0061

Saturn 100997-04-19 18:42 G 38609566.14 38609566.28 38609566.44 0.0270 0.0193

Jupiter 100997-11-17 11:16 G 38609777.77 38609777.97 38609778.17 0.0501 0.0140

102ND MILLENNIUM CE

This is a list of transits of Venus in the 102nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 101003-09-18 09:35 G 38611907.72 38611907.90 38611908.09 0.0523 0.0186

Mars 101005-01-28 01:54 G 38612405.44 38612405.58 38612405.72 0.1889 0.1110

Jupiter 101009-07-24 08:52 G 38614043.66 38614043.87 38614044.08 0.0502 0.0058

Saturn 101012-05-08 02:52 G 38615062.60 38615062.62 38615062.64 0.0287 0.0284

Saturn 101012-12-23 16:33 G 38615291.98 38615292.19 38615292.39 0.0290 0.0007

Jupiter 101015-05-24 06:57 G 38616173.66 38616173.79 38616173.92 0.0522 0.0399

Jupiter 101016-01-16 06:57 G 38616410.66 38616410.79 38616410.93 0.0526 0.0385

Uranus 101017-04-24 07:11 G 38616874.76 38616874.80 38616874.87 0.0135 0.0130

Uranus 101017-12-06 11:45 G 38617100.90 38617100.99 38617101.13 0.0135 0.0113

Uranus 101018-07-20 17:02 G 38617327.07 38617327.21 38617327.37 0.0135 0.0095

Uranus 101019-03-03 22:04 G 38617553.24 38617553.42 38617553.59 0.0135 0.0077

Uranus 101019-10-16 02:38 G 38617779.43 38617779.61 38617779.81 0.0135 0.0060

Neptune 101020-01-21 19:40 G 38617877.26 38617877.32 38617877.38 0.0088 0.0084

Uranus 101020-05-29 07:54 G 38618005.62 38618005.83 38618006.03 0.0135 0.0042

Neptune 101020-09-03 08:52 G 38618102.76 38618102.87 38618103.00 0.0088 0.0074

Uranus 101021-01-10 12:57 G 38618231.83 38618232.04 38618232.25 0.0135 0.0023

Jupiter 101021-03-29 05:30 G 38618309.56 38618309.73 38618309.92 0.0503 0.0261

Neptune 101021-04-16 22:04 G 38618328.29 38618328.42 38618328.60 0.0088 0.0064

Uranus 101021-08-24 18:14 G 38618458.05 38618458.26 38618458.48 0.0135 0.0005

Jupiter 101021-11-21 04:04 G 38618546.60 38618546.67 38618546.77 0.0499 0.0453

Neptune 101021-11-28 11:59 G 38618553.82 38618554.00 38618554.18 0.0088 0.0053

Uranus 101022-04-07 23:30 G 38618684.27 38618684.48 38618684.70 0.0135 0.0013

Neptune 101022-07-12 01:11 G 38618779.37 38618779.55 38618779.76 0.0088 0.0043

Uranus 101022-11-20 04:47 G 38618910.50 38618910.70 38618910.91 0.0136 0.0032

Neptune 101023-02-22 15:06 G 38619004.92 38619005.13 38619005.34 0.0088 0.0032

Uranus 101023-07-04 10:18 G 38619136.73 38619136.93 38619137.13 0.0136 0.0050

Neptune 101023-10-06 04:18 G 38619230.47 38619230.68 38619230.91 0.0088 0.0022

Uranus 101024-02-15 15:35 G 38619362.98 38619363.15 38619363.35 0.0136 0.0069

Neptune 101024-05-18 17:59 G 38619456.03 38619456.25 38619456.47 0.0088 0.0011

Uranus 101024-09-28 21:35 G 38619589.25 38619589.40 38619589.58 0.0136 0.0087

Neptune 101024-12-30 07:26 G 38619681.58 38619681.81 38619682.03 0.0088 0.0001

Uranus 101025-05-13 03:35 G 38619815.53 38619815.65 38619815.79 0.0136 0.0106

Neptune 101025-08-12 20:52 G 38619907.15 38619907.37 38619907.59 0.0088 0.0010

Uranus 101025-12-25 09:50 G 38620041.83 38620041.91 38620042.00 0.0136 0.0124

Saturn 101026-03-16 11:45 G 38620122.78 38620122.99 38620123.21 0.0273 0.0028

Neptune 101026-03-26 10:04 G 38620132.71 38620132.92 38620133.15 0.0088 0.0021

Saturn 101026-10-31 21:35 G 38620352.29 38620352.40 38620352.52 0.0270 0.0225

Neptune 101026-11-06 23:30 G 38620358.28 38620358.48 38620358.70 0.0088 0.0031

Neptune 101027-06-20 12:42 G 38620583.85 38620584.03 38620584.24 0.0088 0.0042

Jupiter 101027-09-21 03:06 G 38620676.44 38620676.63 38620676.82 0.0526 0.0162

Neptune 101028-02-01 02:23 G 38620809.43 38620809.60 38620809.79 0.0088 0.0052

Neptune 101028-09-13 15:50 G 38621035.01 38621035.16 38621035.32 0.0088 0.0062

Neptune 101029-04-27 04:47 G 38621260.60 38621260.70 38621260.85 0.0088 0.0073

Neptune 101029-12-08 18:14 G 38621486.21 38621486.26 38621486.35 0.0088 0.0083

Mars 101032-06-17 22:18 G 38622408.26 38622408.43 38622408.61 0.1657 0.0172

Jupiter 101032-12-02 03:06 G 38622575.55 38622575.63 38622575.71 0.0504 0.0458

Jupiter 101033-07-27 02:38 G 38622812.44 38622812.61 38622812.79 0.0500 0.0261

Pluto 101036-05-08 02:23 G 38623828.44 38623828.60 38623828.78 0.0064 0.0039

Pluto 101036-12-19 06:14 G 38624053.55 38624053.76 38624053.98 0.0065 0.0002

Earth 101037-04-20 12:28 G 38624175.86 38624176.02 38624176.17 0.2628 0.0777

Moon 101037-04-20 14:23 G 38624175.96 38624176.10 38624176.24 0.2634 0.0969 *

Pluto 101037-08-01 09:35 G 38624278.76 38624278.90 38624279.08 0.0065 0.0044

Jupiter 101039-05-27 00:57 G 38624942.34 38624942.54 38624942.73 0.0525 0.0056

Saturn 101041-11-18 03:21 G 38625848.56 38625848.64 38625848.75 0.0287 0.0254

Saturn 101042-07-05 17:16 G 38626078.01 38626078.22 38626078.43 0.0290 0.0036

Jupiter 101045-03-31 23:30 G 38627078.27 38627078.48 38627078.69 0.0501 0.0062

Moon 101045-04-18 07:26 G 38627095.71 38627095.81 38627095.92 0.2631 0.1943

Jupiter 101051-01-29 22:33 G 38629208.27 38629208.44 38629208.61 0.0523 0.0271

Jupiter 101051-09-23 23:45 G 38629445.46 38629445.49 38629445.52 0.0527 0.0519

Saturn 101055-02-08 23:02 G 38630679.41 38630679.46 38630679.51 0.0276 0.0266

Saturn 101055-09-26 11:16 G 38630908.76 38630908.97 38630909.19 0.0273 0.0004

Saturn 101056-05-12 21:06 G 38631138.30 38631138.38 38631138.47 0.0270 0.0249

Jupiter 101056-12-04 20:38 G 38631344.16 38631344.36 38631344.56 0.0502 0.0138

Uranus 101058-11-04 07:11 G 38632043.74 38632043.80 38632043.87 0.0143 0.0137

Uranus 101059-06-18 19:54 G 38632270.22 38632270.33 38632270.48 0.0143 0.0115

Uranus 101060-01-31 09:06 G 38632496.72 38632496.88 38632497.06 0.0143 0.0093

Uranus 101060-09-13 21:50 G 38632723.23 38632723.41 38632723.61 0.0143 0.0071

Uranus 101061-04-28 10:33 G 38632949.74 38632949.94 38632950.16 0.0143 0.0048

Uranus 101061-12-10 23:16 G 38633176.25 38633176.47 38633176.69 0.0143 0.0025

Uranus 101062-07-25 11:30 G 38633402.76 38633402.98 38633403.20 0.0143 0.0004

Jupiter 101062-10-04 19:26 G 38633474.24 38633474.31 38633474.38 0.0521 0.0484

Uranus 101063-03-08 23:45 G 38633629.28 38633629.49 38633629.72 0.0143 0.0020

Jupiter 101063-05-29 18:57 G 38633711.13 38633711.29 38633711.46 0.0526 0.0298

Uranus 101063-10-21 11:45 G 38633855.79 38633855.99 38633856.21 0.0143 0.0042

Uranus 101064-06-03 23:30 G 38634082.29 38634082.48 38634082.69 0.0142 0.0064

Uranus 101065-01-16 11:02 G 38634308.80 38634308.96 38634309.15 0.0142 0.0085

Uranus 101065-08-30 22:33 G 38634535.31 38634535.44 38634535.60 0.0142 0.0106

Uranus 101066-04-14 10:04 G 38634761.84 38634761.92 38634762.03 0.0142 0.0127

Jupiter 101068-08-09 17:30 G 38635610.08 38635610.23 38635610.38 0.0504 0.0339

Jupiter 101069-04-03 17:02 G 38635847.08 38635847.21 38635847.35 0.0500 0.0380

Mars 101070-11-25 05:45 G 38636447.67 38636447.74 38636447.80 0.1893 0.1733

Saturn 101071-05-31 05:16 G 38636634.60 38636634.72 38636634.86 0.0287 0.0223

Saturn 101072-01-15 19:26 G 38636864.11 38636864.31 38636864.51 0.0290 0.0068

Jupiter 101075-02-01 15:35 G 38637976.96 38637977.15 38637977.35 0.0525 0.0079

Jupiter 101080-12-07 14:38 G 38640112.92 38640113.11 38640113.31 0.0500 0.0182

Saturn 101084-08-21 02:23 G 38641465.49 38641465.60 38641465.72 0.0276 0.0232

Saturn 101085-04-07 14:38 G 38641694.89 38641695.11 38641695.32 0.0273 0.0031

Jupiter 101086-10-07 11:16 G 38642242.78 38642242.97 38642243.16 0.0524 0.0147

Jupiter 101092-08-12 12:42 G 38644378.82 38644379.03 38644379.24 0.0501 0.0015

Mars 101098-04-15 09:50 G 38646450.74 38646450.91 38646451.08 0.1654 0.0387

Jupiter 101098-06-12 09:21 G 38646508.75 38646508.89 38646509.04 0.0523 0.0361

Jupiter 101099-02-04 10:33 G 38646745.83 38646745.94 38646746.06 0.0527 0.0430

Saturn 101100-12-11 07:11 G 38647420.65 38647420.80 38647420.96 0.0287 0.0189

Uranus 101100-12-23 19:54 G 38647433.33 38647433.33 38647433.35 0.0134 0.0134

Neptune 101101-07-27 15:50 G 38647649.13 38647649.16 38647649.24 0.0090 0.0087

Saturn 101101-07-28 21:06 G 38647650.19 38647650.38 38647650.58 0.0290 0.0103

Uranus 101101-08-07 00:57 G 38647659.44 38647659.54 38647659.64 0.0135 0.0117

Neptune 101102-03-10 04:47 G 38647874.60 38647874.70 38647874.83 0.0090 0.0076

Uranus 101102-03-21 05:30 G 38647885.59 38647885.73 38647885.88 0.0135 0.0100

Neptune 101102-10-21 17:02 G 38648100.09 38648100.21 38648100.38 0.0090 0.0066

Uranus 101102-11-02 10:04 G 38648111.76 38648111.92 38648112.10 0.0135 0.0083

Mars 101102-11-26 00:57 G 38648135.53 38648135.54 38648135.56 0.1878 0.1871

Neptune 101103-06-04 05:45 G 38648325.59 38648325.74 38648325.93 0.0090 0.0055

Uranus 101103-06-16 14:52 G 38648337.94 38648338.12 38648338.32 0.0135 0.0065

Neptune 101104-01-15 18:42 G 38648551.10 38648551.28 38648551.47 0.0090 0.0044

Uranus 101104-01-28 19:54 G 38648564.13 38648564.33 38648564.53 0.0135 0.0047

Jupiter 101104-04-18 08:38 G 38648644.68 38648644.86 38648645.05 0.0502 0.0218

Neptune 101104-08-28 07:11 G 38648776.61 38648776.80 38648777.01 0.0090 0.0033

Uranus 101104-09-11 00:57 G 38648790.33 38648790.54 38648790.75 0.0135 0.0029

Jupiter 101104-12-11 07:11 G 38648881.78 38648881.80 38648881.82 0.0499 0.0494

Neptune 101105-04-10 19:54 G 38649002.12 38649002.33 38649002.54 0.0090 0.0023

Uranus 101105-04-25 05:59 G 38649016.54 38649016.75 38649016.97 0.0135 0.0011

Neptune 101105-11-22 08:23 G 38649227.64 38649227.85 38649228.07 0.0090 0.0012

Uranus 101105-12-07 11:16 G 38649242.75 38649242.97 38649243.18 0.0135 0.0008

Neptune 101106-07-05 21:06 G 38649453.17 38649453.38 38649453.60 0.0090 0.0001

Uranus 101106-07-21 16:18 G 38649468.97 38649469.18 38649469.40 0.0135 0.0026

Neptune 101107-02-16 09:35 G 38649678.69 38649678.90 38649679.12 0.0090 0.0010

Uranus 101107-03-04 21:50 G 38649695.21 38649695.41 38649695.61 0.0136 0.0044

Neptune 101107-09-29 22:04 G 38649904.22 38649904.42 38649904.64 0.0090 0.0021

Uranus 101107-10-17 03:06 G 38649921.45 38649921.63 38649921.83 0.0136 0.0063

Neptune 101108-05-12 10:47 G 38650129.75 38650129.95 38650130.15 0.0090 0.0031

Uranus 101108-05-30 08:38 G 38650147.70 38650147.86 38650148.05 0.0136 0.0081

Neptune 101108-12-23 23:16 G 38650355.28 38650355.47 38650355.66 0.0090 0.0042

Uranus 101109-01-11 14:23 G 38650373.97 38650374.10 38650374.26 0.0136 0.0099

Neptune 101109-08-06 11:45 G 38650580.83 38650580.99 38650581.18 0.0090 0.0053

Uranus 101109-08-25 20:38 G 38650600.26 38650600.36 38650600.47 0.0136 0.0117

Neptune 101110-03-20 00:42 G 38650806.38 38650806.53 38650806.68 0.0089 0.0063

Uranus 101110-04-09 02:38 G 38650826.60 38650826.61 38650826.64 0.0136 0.0136

Jupiter 101110-10-11 07:26 G 38651011.63 38651011.81 38651012.00 0.0526 0.0211

Neptune 101110-10-31 12:57 G 38651031.93 38651032.04 38651032.18 0.0089 0.0074

Neptune 101111-06-14 01:11 G 38651257.51 38651257.55 38651257.65 0.0089 0.0085

Saturn 101114-03-04 01:54 G 38652251.45 38652251.58 38652251.73 0.0275 0.0207

Saturn 101114-10-19 14:09 G 38652480.88 38652481.09 38652481.31 0.0273 0.0057

Jupiter 101115-12-23 05:02 G 38652910.60 38652910.71 38652910.83 0.0504 0.0419

Jupiter 101116-08-16 04:47 G 38653147.54 38653147.70 38653147.87 0.0500 0.0302

Jupiter 101122-06-16 03:35 G 38655277.45 38655277.65 38655277.84 0.0524 0.0017

Pluto 101125-04-01 14:23 G 38656297.92 38656298.10 38656298.30 0.0079 0.0044

Pluto 101125-11-13 00:42 G 38656523.35 38656523.53 38656523.75 0.0079 0.0038

Jupiter 101128-04-21 02:23 G 38657413.40 38657413.60 38657413.81 0.0501 0.0104

Saturn 101130-06-23 10:18 G 38658206.76 38658206.93 38658207.11 0.0287 0.0156

Saturn 101131-02-08 00:28 G 38658436.34 38658436.52 38658436.70 0.0290 0.0138

Jupiter 101134-02-19 00:14 G 38659543.33 38659543.51 38659543.69 0.0523 0.0230

Jupiter 101139-12-25 23:59 G 38661679.30 38661679.50 38661679.71 0.0502 0.0097

Uranus 101143-02-17 00:57 G 38662828.45 38662828.54 38662828.67 0.0144 0.0124

Saturn 101143-09-14 05:59 G 38663037.58 38663037.75 38663037.92 0.0275 0.0171

Uranus 101143-10-01 14:09 G 38663054.94 38663055.09 38663055.25 0.0143 0.0102

Saturn 101144-04-30 17:59 G 38663267.05 38663267.25 38663267.46 0.0273 0.0091

Uranus 101144-05-15 02:52 G 38663281.45 38663281.62 38663281.82 0.0143 0.0080

Uranus 101144-12-27 15:35 G 38663507.96 38663508.15 38663508.37 0.0143 0.0058

Uranus 101145-08-11 04:33 G 38663734.48 38663734.69 38663734.91 0.0143 0.0034

Jupiter 101145-10-24 19:26 G 38663809.21 38663809.31 38663809.41 0.0522 0.0452

Uranus 101146-03-25 17:16 G 38663961.00 38663961.22 38663961.44 0.0143 0.0012

Jupiter 101146-06-18 20:09 G 38664046.19 38664046.34 38664046.50 0.0527 0.0337

Uranus 101146-11-07 05:30 G 38664187.51 38664187.73 38664187.95 0.0143 0.0010

Uranus 101147-06-21 17:30 G 38664414.02 38664414.23 38664414.45 0.0143 0.0033

Uranus 101148-02-03 05:30 G 38664640.53 38664640.73 38664640.94 0.0143 0.0055

Uranus 101148-09-16 17:16 G 38664867.04 38664867.22 38664867.42 0.0142 0.0076

Uranus 101149-05-01 05:16 G 38665093.56 38665093.72 38665093.88 0.0142 0.0098

Uranus 101149-12-13 16:18 G 38665320.08 38665320.18 38665320.31 0.0142 0.0119

Uranus 101150-07-28 03:50 G 38665546.63 38665546.66 38665546.70 0.0142 0.0139

Earth 101150-10-20 22:18 G 38665631.28 38665631.43 38665631.59 0.2704 0.0470

Moon 101150-10-21 03:50 G 38665631.50 38665631.66 38665631.82 0.2703 0.0184 *

Jupiter 101151-08-30 21:35 G 38665945.23 38665945.40 38665945.57 0.0503 0.0296

Jupiter 101152-04-23 19:54 G 38666182.23 38666182.33 38666182.45 0.0499 0.0420

Jupiter 101158-02-21 17:30 G 38668312.04 38668312.23 38668312.43 0.0526 0.0117

Saturn 101160-01-03 13:11 G 38668992.87 38668993.05 38668993.24 0.0287 0.0119

Saturn 101160-08-20 03:06 G 38669222.48 38669222.63 38669222.81 0.0290 0.0175

Jupiter 101163-05-05 16:47 G 38670211.18 38670211.20 38670211.23 0.0504 0.0499

Jupiter 101163-12-28 16:47 G 38670448.02 38670448.20 38670448.39 0.0500 0.0223

Mars 101164-02-11 20:23 G 38670493.19 38670493.35 38670493.51 0.1651 0.0615

Mars 101168-09-22 05:30 G 38672177.60 38672177.73 38672177.85 0.1882 0.1291

Jupiter 101169-10-27 14:52 G 38672577.93 38672578.12 38672578.32 0.0524 0.0101

Saturn 101173-03-26 06:28 G 38673823.59 38673823.77 38673823.96 0.0275 0.0144

Saturn 101173-11-10 18:28 G 38674053.08 38674053.27 38674053.47 0.0273 0.0118

Jupiter 101175-09-02 13:40 G 38674713.87 38674714.07 38674714.28 0.0501 0.0024

Jupiter 101181-07-02 11:30 G 38676843.82 38676843.98 38676844.14 0.0522 0.0320

Jupiter 101182-02-24 12:14 G 38677080.93 38677081.01 38677081.10 0.0527 0.0471

Neptune 101184-04-25 03:35 G 38677871.65 38677871.65 38677871.67 0.0088 0.0088

Neptune 101184-12-06 16:33 G 38678097.12 38678097.19 38678097.33 0.0088 0.0078

Uranus 101185-04-06 13:11 G 38678217.98 38678218.05 38678218.16 0.0135 0.0123

Neptune 101185-07-20 06:28 G 38678322.64 38678322.77 38678322.92 0.0088 0.0067

Uranus 101185-11-18 18:14 G 38678444.13 38678444.26 38678444.39 0.0135 0.0105

Neptune 101186-03-02 19:40 G 38678548.17 38678548.32 38678548.52 0.0088 0.0057

Uranus 101186-07-02 22:33 G 38678670.29 38678670.44 38678670.62 0.0135 0.0088

Neptune 101186-10-14 09:35 G 38678773.71 38678773.90 38678774.09 0.0088 0.0046

Uranus 101187-02-14 03:35 G 38678896.47 38678896.65 38678896.83 0.0135 0.0070

Jupiter 101187-05-08 10:18 G 38678979.74 38678979.93 38678980.13 0.0503 0.0180

Neptune 101187-05-27 22:47 G 38678999.26 38678999.45 38678999.67 0.0088 0.0036

Uranus 101187-09-28 08:09 G 38679122.66 38679122.84 38679123.05 0.0135 0.0053

Neptune 101188-01-08 12:28 G 38679224.81 38679225.02 38679225.24 0.0088 0.0025

Uranus 101188-05-11 13:11 G 38679348.85 38679349.05 38679349.26 0.0135 0.0035

Neptune 101188-08-21 01:54 G 38679450.36 38679450.58 38679450.81 0.0088 0.0015

Uranus 101188-12-23 18:14 G 38679575.05 38679575.26 38679575.47 0.0135 0.0017

Neptune 101189-04-03 15:21 G 38679675.92 38679676.14 38679676.37 0.0088 0.0005

Saturn 101189-07-15 17:30 G 38679779.03 38679779.23 38679779.43 0.0288 0.0082

Uranus 101189-08-06 23:16 G 38679801.26 38679801.47 38679801.69 0.0135 0.0003

Neptune 101189-11-15 04:47 G 38679901.48 38679901.70 38679901.93 0.0088 0.0007

Saturn 101190-03-02 07:26 G 38680008.68 38680008.81 38680008.96 0.0291 0.0214

Uranus 101190-03-21 04:33 G 38680027.48 38680027.69 38680027.90 0.0135 0.0020

Neptune 101190-06-28 18:14 G 38680127.04 38680127.26 38680127.48 0.0088 0.0017

Uranus 101190-11-02 09:50 G 38680253.70 38680253.91 38680254.12 0.0135 0.0038

Neptune 101191-02-09 07:40 G 38680352.62 38680352.82 38680353.04 0.0088 0.0028

Uranus 101191-06-16 14:52 G 38680479.94 38680480.12 38680480.33 0.0136 0.0057

Neptune 101191-09-22 21:06 G 38680578.18 38680578.38 38680578.59 0.0088 0.0038

Uranus 101192-01-28 20:23 G 38680706.19 38680706.35 38680706.54 0.0136 0.0075

Neptune 101192-05-05 10:33 G 38680803.76 38680803.94 38680804.13 0.0088 0.0048

Uranus 101192-09-11 02:23 G 38680932.45 38680932.60 38680932.76 0.0136 0.0093

Neptune 101192-12-16 23:30 G 38681029.33 38681029.48 38681029.67 0.0088 0.0059

Uranus 101193-04-25 08:09 G 38681158.73 38681158.84 38681158.98 0.0136 0.0111

Neptune 101193-07-30 13:11 G 38681254.92 38681255.05 38681255.19 0.0088 0.0069

Jupiter 101193-10-30 07:54 G 38681346.66 38681346.83 38681347.01 0.0526 0.0250

Uranus 101193-12-07 14:09 G 38681385.04 38681385.09 38681385.17 0.0136 0.0129

Neptune 101194-03-13 02:09 G 38681480.53 38681480.59 38681480.71 0.0088 0.0080

Mars 101196-02-10 17:45 G 38682180.17 38682180.24 38682180.33 0.1661 0.1464

Jupiter 101199-01-11 07:54 G 38683245.70 38683245.83 38683245.97 0.0504 0.0380

Jupiter 101199-09-05 07:11 G 38683482.65 38683482.80 38683482.95 0.0499 0.0340

Saturn 101202-10-06 11:30 G 38684609.78 38684609.98 38684610.18 0.0275 0.0105

Saturn 101203-05-23 23:02 G 38684839.29 38684839.46 38684839.65 0.0272 0.0156

Jupiter 101205-07-05 02:23 G 38685612.41 38685612.60 38685612.80 0.0525 0.0024

Jupiter 101211-05-11 05:02 G 38687748.51 38687748.71 38687748.91 0.0500 0.0144

Jupiter 101217-03-09 23:59 G 38689878.31 38689878.50 38689878.68 0.0524 0.0197

Saturn 101219-01-25 22:18 G 38690565.22 38690565.43 38690565.63 0.0287 0.0041

Saturn 101219-09-12 12:14 G 38690794.93 38690795.01 38690795.12 0.0290 0.0256

Jupiter 101223-01-14 00:57 G 38692014.33 38692014.54 38692014.75 0.0501 0.0059

Uranus 101226-10-17 06:57 G 38693386.70 38693386.79 38693386.87 0.0144 0.0132

Uranus 101227-05-31 19:26 G 38693613.19 38693613.31 38693613.47 0.0144 0.0111

Uranus 101228-01-13 08:52 G 38693839.70 38693839.87 38693840.05 0.0143 0.0088

Uranus 101228-08-26 21:35 G 38694066.21 38694066.40 38694066.60 0.0143 0.0066

Jupiter 101228-11-12 21:50 G 38694144.29 38694144.41 38694144.53 0.0522 0.0410

Uranus 101229-04-10 10:18 G 38694292.72 38694292.93 38694293.15 0.0143 0.0043

Jupiter 101229-07-07 22:47 G 38694381.31 38694381.45 38694381.58 0.0527 0.0381

Uranus 101229-11-22 22:47 G 38694519.24 38694519.45 38694519.68 0.0143 0.0021

Mars 101229-12-09 07:54 G 38694535.68 38694535.83 38694535.98 0.1648 0.0823

Uranus 101230-07-07 11:16 G 38694745.75 38694745.97 38694746.20 0.0143 0.0003

Uranus 101231-02-18 23:45 G 38694972.27 38694972.49 38694972.71 0.0143 0.0024

Uranus 101231-10-03 11:45 G 38695198.79 38695198.99 38695199.20 0.0143 0.0046

Saturn 101232-04-17 13:11 G 38695395.85 38695396.05 38695396.26 0.0275 0.0076

Uranus 101232-05-16 23:30 G 38695425.30 38695425.48 38695425.69 0.0143 0.0068

Saturn 101232-12-03 00:57 G 38695625.38 38695625.54 38695625.70 0.0272 0.0185

Uranus 101232-12-29 11:16 G 38695651.81 38695651.97 38695652.15 0.0142 0.0089

Uranus 101233-08-12 23:02 G 38695878.33 38695878.46 38695878.61 0.0142 0.0110

Uranus 101234-03-27 10:33 G 38696104.87 38696104.94 38696105.04 0.0142 0.0131

Mars 101234-07-20 10:04 G 38696219.76 38696219.92 38696220.08 0.1887 0.0723

Jupiter 101234-09-18 20:52 G 38696280.20 38696280.37 38696280.55 0.0503 0.0262

Jupiter 101235-05-13 19:40 G 38696517.24 38696517.32 38696517.40 0.0499 0.0455

Jupiter 101241-03-12 18:14 G 38698647.07 38698647.26 38698647.45 0.0525 0.0157

Jupiter 101246-05-24 16:47 G 38700546.13 38700546.20 38700546.28 0.0504 0.0466

Jupiter 101247-01-16 17:16 G 38700783.04 38700783.22 38700783.40 0.0500 0.0259

Saturn 101248-08-07 03:21 G 38701351.44 38701351.64 38701351.85 0.0288 0.0004

Jupiter 101252-11-15 13:54 G 38702912.88 38702913.08 38702913.28 0.0524 0.0066

Jupiter 101258-09-21 15:06 G 38705048.92 38705049.13 38705049.33 0.0501 0.0060

Saturn 101261-10-28 18:57 G 38706182.08 38706182.29 38706182.51 0.0275 0.0035

Mars 101261-12-08 04:47 G 38706222.59 38706222.70 38706222.82 0.1658 0.1231

Saturn 101262-06-15 06:14 G 38706411.65 38706411.76 38706411.89 0.0272 0.0224

Jupiter 101264-07-21 08:23 G 38707178.68 38707178.85 38707179.01 0.0523 0.0293

Jupiter 101265-03-15 09:50 G 38707415.86 38707415.91 38707415.97 0.0528 0.0502

Neptune 101266-06-11 13:11 G 38707868.96 38707869.05 38707869.15 0.0090 0.0080

Neptune 101267-01-23 01:40 G 38708094.45 38708094.57 38708094.72 0.0090 0.0070

Neptune 101267-09-05 14:23 G 38708319.95 38708320.10 38708320.27 0.0090 0.0059

Neptune 101268-04-18 02:52 G 38708545.45 38708545.62 38708545.82 0.0090 0.0049

Neptune 101268-11-29 15:35 G 38708770.96 38708771.15 38708771.35 0.0090 0.0038

Uranus 101268-12-05 01:40 G 38708776.52 38708776.57 38708776.66 0.0135 0.0128

Neptune 101269-07-13 04:18 G 38708996.48 38708996.68 38708996.89 0.0090 0.0027

Uranus 101269-07-19 06:28 G 38709002.66 38709002.77 38709002.90 0.0135 0.0111

Neptune 101270-02-23 17:02 G 38709222.00 38709222.21 38709222.42 0.0090 0.0016

Uranus 101270-03-02 11:30 G 38709228.82 38709228.98 38709229.13 0.0135 0.0093

Jupiter 101270-05-27 12:14 G 38709314.81 38709315.01 38709315.21 0.0502 0.0140

Neptune 101270-10-07 05:30 G 38709447.52 38709447.73 38709447.95 0.0090 0.0005

Uranus 101270-10-14 15:50 G 38709454.99 38709455.16 38709455.35 0.0135 0.0076

Neptune 101271-05-20 17:59 G 38709673.04 38709673.25 38709673.47 0.0090 0.0005

Uranus 101271-05-28 20:38 G 38709681.17 38709681.36 38709681.56 0.0135 0.0058

Neptune 101272-01-01 06:28 G 38709898.56 38709898.77 38709898.99 0.0090 0.0016

Uranus 101272-01-10 01:26 G 38709907.36 38709907.56 38709907.77 0.0135 0.0041

Neptune 101272-08-13 19:11 G 38710124.10 38710124.30 38710124.51 0.0090 0.0027

Uranus 101272-08-23 06:28 G 38710133.56 38710133.77 38710133.99 0.0135 0.0023

Neptune 101273-03-27 07:26 G 38710349.63 38710349.81 38710350.02 0.0090 0.0038

Uranus 101273-04-06 11:30 G 38710359.77 38710359.98 38710360.20 0.0135 0.0005

Neptune 101273-11-07 20:23 G 38710575.17 38710575.35 38710575.53 0.0090 0.0048

Uranus 101273-11-18 16:33 G 38710585.98 38710586.19 38710586.41 0.0135 0.0014

Neptune 101274-06-21 08:38 G 38710800.71 38710800.86 38710801.03 0.0090 0.0059

Uranus 101274-07-02 21:50 G 38710812.20 38710812.41 38710812.62 0.0135 0.0032

Neptune 101275-02-01 21:06 G 38711026.26 38711026.38 38711026.53 0.0090 0.0070

Uranus 101275-02-14 03:06 G 38711038.43 38711038.63 38711038.83 0.0135 0.0050

Neptune 101275-09-15 10:04 G 38711251.83 38711251.92 38711252.02 0.0089 0.0080

Uranus 101275-09-28 08:23 G 38711264.68 38711264.85 38711265.05 0.0136 0.0069

Jupiter 101276-03-26 05:45 G 38711444.70 38711444.74 38711444.79 0.0522 0.0506

Uranus 101276-05-11 14:09 G 38711490.94 38711491.09 38711491.27 0.0136 0.0087

Jupiter 101276-11-18 06:14 G 38711681.60 38711681.76 38711681.93 0.0527 0.0282

Uranus 101276-12-23 19:40 G 38711717.21 38711717.32 38711717.48 0.0136 0.0105

Saturn 101277-07-02 21:35 G 38711908.29 38711908.40 38711908.51 0.0285 0.0241

Uranus 101277-08-07 01:40 G 38711943.50 38711943.57 38711943.68 0.0136 0.0123

Saturn 101278-02-17 09:50 G 38712137.71 38712137.91 38712138.12 0.0288 0.0044

Moon 101280-04-21 11:59 G 38712931.83 38712932.00 38712932.17 0.2621 0.0563

Earth 101280-04-21 12:14 G 38712931.86 38712932.01 38712932.17 0.2628 0.0802 *

Jupiter 101282-01-30 07:11 G 38713580.65 38713580.80 38713580.95 0.0503 0.0346

Jupiter 101282-09-24 06:14 G 38713817.62 38713817.76 38713817.90 0.0499 0.0374

Pluto 101284-04-11 11:59 G 38714382.83 38714383.00 38714383.19 0.0064 0.0036

Pluto 101284-11-22 15:50 G 38714607.95 38714608.16 38714608.38 0.0065 0.0005

Pluto 101285-07-05 19:11 G 38714833.17 38714833.30 38714833.47 0.0065 0.0047

Jupiter 101288-07-24 03:35 G 38715947.45 38715947.65 38715947.85 0.0525 0.0062

Saturn 101290-09-23 08:38 G 38716738.83 38716738.86 38716738.91 0.0277 0.0272

Saturn 101291-05-10 22:18 G 38716968.22 38716968.43 38716968.65 0.0274 0.0005

Saturn 101291-12-26 09:21 G 38717197.83 38717197.89 38717197.97 0.0272 0.0256

Jupiter 101294-05-30 02:52 G 38718083.43 38718083.62 38718083.82 0.0500 0.0176

Mars 101295-10-06 19:11 G 38718578.17 38718578.30 38718578.44 0.1645 0.1037

Jupiter 101300-03-29 23:30 G 38720213.29 38720213.48 38720213.67 0.0523 0.0161

Mars 101300-05-17 14:09 G 38720261.91 38720262.09 38720262.26 0.1891 0.0116

Jupiter 101306-02-02 23:30 G 38722349.27 38722349.48 38722349.69 0.0502 0.0027

Saturn 101307-01-14 03:35 G 38722694.51 38722694.65 38722694.80 0.0286 0.0201

Saturn 101307-08-31 16:18 G 38722923.99 38722924.18 38722924.38 0.0289 0.0088

Uranus 101310-06-17 11:59 G 38723944.97 38723945.00 38723945.05 0.0144 0.0141

Uranus 101311-01-30 01:11 G 38724171.44 38724171.55 38724171.68 0.0144 0.0119

Uranus 101311-09-13 14:09 G 38724397.94 38724398.09 38724398.26 0.0144 0.0097

Jupiter 101311-12-03 19:26 G 38724479.18 38724479.31 38724479.45 0.0522 0.0380

Uranus 101312-04-27 03:06 G 38724624.44 38724624.63 38724624.82 0.0143 0.0075

Jupiter 101312-07-27 20:09 G 38724716.22 38724716.34 38724716.46 0.0527 0.0411

Uranus 101312-12-09 15:50 G 38724850.95 38724851.16 38724851.37 0.0143 0.0052

Uranus 101313-07-24 04:18 G 38725077.47 38725077.68 38725077.90 0.0143 0.0030

Uranus 101314-03-07 17:02 G 38725303.99 38725304.21 38725304.43 0.0143 0.0008

Uranus 101314-10-20 05:16 G 38725530.51 38725530.72 38725530.95 0.0143 0.0015

Uranus 101315-06-03 17:30 G 38725757.02 38725757.23 38725757.45 0.0143 0.0037

Uranus 101316-01-16 05:30 G 38725983.54 38725983.73 38725983.94 0.0143 0.0059

Uranus 101316-08-29 17:16 G 38726210.05 38726210.22 38726210.42 0.0143 0.0081

Uranus 101317-04-13 05:16 G 38726436.58 38726436.72 38726436.88 0.0142 0.0102

Jupiter 101317-10-08 20:38 G 38726615.18 38726615.36 38726615.55 0.0503 0.0229

Uranus 101317-11-25 17:02 G 38726663.11 38726663.21 38726663.33 0.0142 0.0122

Jupiter 101318-06-02 19:26 G 38726852.27 38726852.31 38726852.35 0.0499 0.0488

Saturn 101320-04-05 15:50 G 38727525.05 38727525.16 38727525.29 0.0277 0.0228

Saturn 101320-11-21 05:16 G 38727754.51 38727754.72 38727754.94 0.0274 0.0040

Jupiter 101324-04-01 13:26 G 38728981.88 38728982.06 38728982.25 0.0526 0.0181

Mars 101327-10-06 15:50 G 38730265.02 38730265.16 38730265.30 0.1655 0.0995

Jupiter 101329-06-13 17:16 G 38730881.12 38730881.22 38730881.33 0.0504 0.0430

Jupiter 101330-02-05 17:16 G 38731118.05 38731118.22 38731118.38 0.0499 0.0294

Jupiter 101335-12-06 10:18 G 38733247.73 38733247.93 38733248.12 0.0525 0.0041

Saturn 101336-07-26 11:30 G 38733480.81 38733480.98 38733481.16 0.0286 0.0153

Saturn 101337-03-13 00:28 G 38733710.34 38733710.52 38733710.70 0.0289 0.0137

Jupiter 101341-10-11 12:14 G 38735383.81 38735384.01 38735384.22 0.0501 0.0092

Jupiter 101347-08-11 07:54 G 38737513.66 38737513.83 38737514.01 0.0523 0.0257

Neptune 101349-03-11 00:57 G 38738091.47 38738091.54 38738091.64 0.0088 0.0081

Saturn 101349-10-16 20:52 G 38738311.22 38738311.37 38738311.53 0.0277 0.0191

Neptune 101349-10-22 14:09 G 38738316.98 38738317.09 38738317.25 0.0088 0.0071

Saturn 101350-06-03 09:50 G 38738540.71 38738540.91 38738541.12 0.0274 0.0076

Neptune 101350-06-05 03:50 G 38738542.51 38738542.66 38738542.84 0.0088 0.0060

Neptune 101351-01-16 17:16 G 38738768.05 38738768.22 38738768.42 0.0088 0.0050

Neptune 101351-08-30 06:57 G 38738993.59 38738993.79 38738994.00 0.0088 0.0039

Neptune 101352-04-11 20:09 G 38739219.14 38739219.34 38739219.57 0.0088 0.0029

Uranus 101352-08-05 14:23 G 38739335.08 38739335.10 38739335.15 0.0135 0.0133

Neptune 101352-11-23 09:35 G 38739444.69 38739444.90 38739445.13 0.0088 0.0019

Uranus 101353-03-19 18:57 G 38739561.20 38739561.29 38739561.41 0.0135 0.0116

Jupiter 101353-06-16 08:23 G 38739649.64 38739649.85 38739650.05 0.0502 0.0113

Neptune 101353-07-06 23:16 G 38739670.25 38739670.47 38739670.70 0.0088 0.0008

Uranus 101353-10-31 23:30 G 38739787.35 38739787.48 38739787.64 0.0135 0.0099

Neptune 101354-02-17 12:57 G 38739895.81 38739896.04 38739896.26 0.0088 0.0003

Uranus 101354-06-15 04:04 G 38740013.52 38740013.67 38740013.85 0.0135 0.0082

Neptune 101354-10-01 02:09 G 38740121.38 38740121.59 38740121.82 0.0088 0.0014

Uranus 101355-01-27 08:52 G 38740239.69 38740239.87 38740240.07 0.0135 0.0064

Neptune 101355-05-14 15:35 G 38740346.94 38740347.15 38740347.38 0.0088 0.0024

Uranus 101355-09-10 13:54 G 38740465.88 38740466.08 38740466.29 0.0135 0.0046

Neptune 101355-12-26 04:47 G 38740572.51 38740572.70 38740572.93 0.0088 0.0035

Uranus 101356-04-23 18:42 G 38740692.08 38740692.28 38740692.50 0.0135 0.0029

Neptune 101356-08-07 18:28 G 38740798.09 38740798.27 38740798.47 0.0088 0.0045

Uranus 101356-12-05 23:45 G 38740918.28 38740918.49 38740918.71 0.0135 0.0011

Neptune 101357-03-21 08:09 G 38741023.67 38741023.84 38741024.02 0.0088 0.0055

Uranus 101357-07-20 04:47 G 38741144.49 38741144.70 38741144.92 0.0135 0.0008

Neptune 101357-11-01 21:06 G 38741249.25 38741249.38 38741249.55 0.0088 0.0066

Uranus 101358-03-03 10:04 G 38741370.71 38741370.92 38741371.13 0.0135 0.0026

Neptune 101358-06-15 10:47 G 38741474.85 38741474.95 38741475.07 0.0088 0.0076

Uranus 101358-10-15 15:21 G 38741596.94 38741597.14 38741597.35 0.0135 0.0044

Neptune 101359-01-27 00:28 G 38741700.48 38741700.52 38741700.56 0.0088 0.0086

Jupiter 101359-04-16 04:33 G 38741779.61 38741779.69 38741779.77 0.0521 0.0473

Uranus 101359-05-29 20:52 G 38741823.18 38741823.37 38741823.56 0.0136 0.0062

Jupiter 101359-12-09 04:18 G 38742016.53 38742016.68 38742016.84 0.0526 0.0315

Uranus 101360-01-11 02:23 G 38742049.43 38742049.60 38742049.77 0.0136 0.0080

Uranus 101360-08-24 08:23 G 38742275.70 38742275.85 38742275.99 0.0136 0.0098

Uranus 101361-04-07 14:09 G 38742501.98 38742502.09 38742502.20 0.0136 0.0116

Mars 101361-08-04 06:42 G 38742620.66 38742620.78 38742620.89 0.1642 0.1246

Uranus 101361-11-19 19:54 G 38742728.31 38742728.33 38742728.38 0.0136 0.0134

Jupiter 101365-02-19 03:50 G 38743915.51 38743915.66 38743915.83 0.0503 0.0319

Jupiter 101365-10-14 03:06 G 38744152.52 38744152.63 38744152.76 0.0499 0.0404

Saturn 101366-02-05 18:28 G 38744267.08 38744267.27 38744267.46 0.0287 0.0110

Mars 101366-03-14 18:14 G 38744304.10 38744304.26 38744304.43 0.1896 0.0489

Saturn 101366-09-23 07:26 G 38744496.66 38744496.81 38744496.98 0.0290 0.0184

Jupiter 101371-08-13 23:45 G 38746282.29 38746282.49 38746282.68 0.0525 0.0090

Pluto 101373-03-05 21:50 G 38746852.23 38746852.41 38746852.59 0.0079 0.0046

Pluto 101373-10-17 08:23 G 38747077.65 38747077.85 38747078.06 0.0079 0.0034

Jupiter 101377-06-19 01:11 G 38748418.36 38748418.55 38748418.74 0.0500 0.0206

Saturn 101379-04-29 05:02 G 38749097.53 38749097.71 38749097.90 0.0276 0.0145

Saturn 101379-12-14 17:59 G 38749327.05 38749327.25 38749327.44 0.0273 0.0121

Jupiter 101383-04-18 17:16 G 38750548.03 38750548.22 38750548.41 0.0524 0.0140

Jupiter 101389-02-21 22:18 G 38752684.22 38752684.43 38752684.64 0.0501 0.0007

Mars 101393-08-03 02:52 G 38754307.47 38754307.62 38754307.78 0.1652 0.0771

Moon 101393-10-21 19:54 G 38754387.18 38754387.33 38754387.48 0.2703 0.0880

Earth 101393-10-22 00:57 G 38754387.39 38754387.54 38754387.70 0.2704 0.0393 *

Uranus 101394-09-29 09:21 G 38754729.80 38754729.89 38754730.00 0.0144 0.0126

Jupiter 101394-12-22 14:09 G 38754813.95 38754814.09 38754814.24 0.0522 0.0358

Uranus 101395-05-13 22:04 G 38754956.29 38754956.42 38754956.59 0.0144 0.0105

Jupiter 101395-08-16 15:21 G 38755051.03 38755051.14 38755051.25 0.0527 0.0436

Saturn 101395-08-19 03:21 G 38755053.44 38755053.64 38755053.85 0.0287 0.0060

Uranus 101395-12-26 11:02 G 38755182.79 38755182.96 38755183.15 0.0143 0.0083

Saturn 101396-04-04 17:02 G 38755283.09 38755283.21 38755283.33 0.0290 0.0235

Uranus 101396-08-08 23:45 G 38755409.30 38755409.49 38755409.71 0.0143 0.0061

Uranus 101397-03-23 12:57 G 38755635.82 38755636.04 38755636.25 0.0143 0.0038

Uranus 101397-11-05 01:26 G 38755862.34 38755862.56 38755862.78 0.0143 0.0016

Uranus 101398-06-19 13:40 G 38756088.85 38756089.07 38756089.30 0.0143 0.0007

Uranus 101399-02-01 01:54 G 38756315.37 38756315.58 38756315.80 0.0143 0.0029

Uranus 101399-09-15 14:09 G 38756541.89 38756542.09 38756542.30 0.0143 0.0051

Uranus 101400-04-30 02:09 G 38756768.41 38756768.59 38756768.79 0.0143 0.0073

Jupiter 101400-10-28 16:47 G 38756950.01 38756950.20 38756950.39 0.0502 0.0201

Uranus 101400-12-12 14:09 G 38756994.92 38756995.09 38756995.25 0.0142 0.0094

Uranus 101401-07-27 01:54 G 38757221.45 38757221.58 38757221.71 0.0142 0.0115

Uranus 101402-03-10 13:11 G 38757448.00 38757448.05 38757448.13 0.0142 0.0136

Jupiter 101407-04-22 11:59 G 38759316.82 38759317.00 38759317.18 0.0526 0.0217

Saturn 101408-11-09 11:45 G 38759883.79 38759883.99 38759884.19 0.0276 0.0105

Saturn 101409-06-26 23:45 G 38760113.32 38760113.49 38760113.67 0.0273 0.0159

Jupiter 101412-07-03 11:59 G 38761215.89 38761216.00 38761216.13 0.0504 0.0407

Jupiter 101413-02-25 11:45 G 38761452.83 38761452.99 38761453.15 0.0500 0.0318

Jupiter 101418-12-26 07:40 G 38763582.63 38763582.82 38763583.02 0.0524 0.0015

Jupiter 101424-10-31 07:54 G 38765718.63 38765718.83 38765719.04 0.0501 0.0116

Saturn 101425-03-01 11:02 G 38765839.75 38765839.96 38765840.17 0.0288 0.0014

Saturn 101425-10-17 00:42 G 38766069.50 38766069.53 38766069.59 0.0291 0.0284

Mars 101427-06-02 17:59 G 38766663.17 38766663.25 38766663.33 0.1639 0.1454

Jupiter 101430-08-31 03:21 G 38767848.46 38767848.64 38767848.82 0.0523 0.0232

Neptune 101430-09-14 21:50 G 38767863.34 38767863.41 38767863.48 0.0090 0.0084

Neptune 101431-04-28 10:04 G 38768088.82 38768088.92 38768089.06 0.0090 0.0074

Neptune 101431-12-09 22:47 G 38768314.31 38768314.45 38768314.62 0.0090 0.0063

Mars 101432-01-10 21:50 G 38768346.27 38768346.41 38768346.55 0.1900 0.1130

Neptune 101432-07-22 11:30 G 38768539.82 38768539.98 38768540.17 0.0090 0.0053

Neptune 101433-03-05 00:14 G 38768765.33 38768765.51 38768765.71 0.0090 0.0042

Neptune 101433-10-16 12:57 G 38768990.84 38768991.04 38768991.25 0.0090 0.0031

Neptune 101434-05-30 01:26 G 38769216.36 38769216.56 38769216.78 0.0090 0.0020

Neptune 101435-01-10 14:09 G 38769441.87 38769442.09 38769442.30 0.0090 0.0010

Neptune 101435-08-24 02:52 G 38769667.40 38769667.62 38769667.83 0.0090 0.0001

Neptune 101436-04-05 15:21 G 38769892.93 38769893.14 38769893.35 0.0090 0.0012

Jupiter 101436-07-06 05:16 G 38769984.52 38769984.72 38769984.93 0.0502 0.0086

Neptune 101436-11-17 03:35 G 38770118.45 38770118.65 38770118.87 0.0090 0.0023

Uranus 101436-11-18 07:26 G 38770119.73 38770119.81 38770119.92 0.0135 0.0121

Neptune 101437-06-30 16:04 G 38770343.98 38770344.17 38770344.38 0.0090 0.0034

Uranus 101437-07-02 11:59 G 38770345.88 38770346.00 38770346.15 0.0135 0.0104

Neptune 101438-02-11 04:47 G 38770569.52 38770569.70 38770569.90 0.0090 0.0044

Uranus 101438-02-13 16:33 G 38770572.04 38770572.19 38770572.37 0.0135 0.0087

Saturn 101438-05-22 20:09 G 38770670.13 38770670.34 38770670.55 0.0275 0.0059

Neptune 101438-09-24 17:16 G 38770795.06 38770795.22 38770795.40 0.0090 0.0055

Uranus 101438-09-27 21:35 G 38770798.22 38770798.40 38770798.59 0.0135 0.0069

Saturn 101439-01-07 08:09 G 38770899.70 38770899.84 38770899.99 0.0272 0.0204

Neptune 101439-05-08 05:59 G 38771020.61 38771020.75 38771020.90 0.0090 0.0065

Uranus 101439-05-12 02:09 G 38771024.40 38771024.59 38771024.80 0.0135 0.0052

Neptune 101439-12-19 18:14 G 38771246.16 38771246.26 38771246.39 0.0090 0.0076

Uranus 101439-12-24 07:11 G 38771250.59 38771250.80 38771251.01 0.0135 0.0034

Neptune 101440-08-01 06:42 G 38771471.75 38771471.78 38771471.86 0.0090 0.0087

Uranus 101440-08-06 12:14 G 38771476.80 38771477.01 38771477.22 0.0135 0.0016

Uranus 101441-03-20 17:16 G 38771703.01 38771703.22 38771703.43 0.0135 0.0002

Uranus 101441-11-01 22:18 G 38771929.22 38771929.43 38771929.65 0.0135 0.0020

Jupiter 101442-05-05 21:21 G 38772114.30 38772114.39 38772114.49 0.0521 0.0456

Uranus 101442-06-16 03:21 G 38772155.45 38772155.64 38772155.86 0.0135 0.0039

Jupiter 101442-12-28 21:21 G 38772351.24 38772351.39 38772351.55 0.0526 0.0334

Uranus 101443-01-28 08:38 G 38772381.68 38772381.86 38772382.07 0.0136 0.0057

Uranus 101443-09-11 14:38 G 38772607.93 38772608.11 38772608.29 0.0136 0.0074

Uranus 101444-04-24 20:23 G 38772834.19 38772834.35 38772834.51 0.0136 0.0092

Uranus 101444-12-07 01:54 G 38773060.47 38773060.58 38773060.72 0.0136 0.0110

Uranus 101445-07-21 07:40 G 38773286.77 38773286.82 38773286.91 0.0136 0.0128

Jupiter 101448-03-11 01:40 G 38774250.40 38774250.57 38774250.74 0.0503 0.0288

Jupiter 101448-11-03 00:42 G 38774487.44 38774487.53 38774487.64 0.0499 0.0434

Saturn 101454-01-25 08:38 G 38776396.76 38776396.86 38776396.96 0.0285 0.0248

Jupiter 101454-09-02 17:45 G 38776617.04 38776617.24 38776617.43 0.0525 0.0112

Saturn 101454-09-11 20:38 G 38776626.15 38776626.36 38776626.56 0.0288 0.0039

Mars 101459-06-01 13:54 G 38778349.92 38778350.08 38778350.25 0.1649 0.0539

Jupiter 101459-11-14 19:26 G 38778516.29 38778516.31 38778516.35 0.0505 0.0497

Jupiter 101460-07-08 19:54 G 38778753.14 38778753.33 38778753.51 0.0500 0.0231

Jupiter 101466-05-08 15:06 G 38780882.93 38780883.13 38780883.32 0.0524 0.0108

Saturn 101467-12-03 03:35 G 38781456.44 38781456.65 38781456.87 0.0275 0.0017

Saturn 101468-07-19 14:52 G 38781686.04 38781686.12 38781686.23 0.0272 0.0245

Jupiter 101472-03-13 16:04 G 38783018.96 38783019.17 38783019.37 0.0501 0.0030

Jupiter 101478-01-11 11:30 G 38785148.83 38785148.98 38785149.14 0.0522 0.0329

Uranus 101478-05-30 17:02 G 38785288.13 38785288.21 38785288.29 0.0144 0.0133

Jupiter 101478-09-05 12:14 G 38785385.92 38785386.01 38785386.10 0.0527 0.0467

Uranus 101479-01-12 05:30 G 38785514.61 38785514.73 38785514.89 0.0144 0.0112

Uranus 101479-08-26 18:42 G 38785741.12 38785741.28 38785741.46 0.0143 0.0090

Uranus 101480-04-09 07:40 G 38785967.63 38785967.82 38785968.02 0.0143 0.0067

Uranus 101480-11-21 20:23 G 38786194.14 38786194.35 38786194.56 0.0143 0.0045

Uranus 101481-07-06 09:06 G 38786420.66 38786420.88 38786421.10 0.0143 0.0023

Uranus 101482-02-17 21:50 G 38786647.18 38786647.41 38786647.63 0.0143 0.0003

Uranus 101482-10-02 10:04 G 38786873.70 38786873.92 38786874.14 0.0143 0.0021

Uranus 101483-05-16 22:18 G 38787100.22 38787100.43 38787100.64 0.0143 0.0043

Saturn 101483-08-07 15:21 G 38787183.00 38787183.14 38787183.29 0.0286 0.0206

Jupiter 101483-11-17 11:30 G 38787284.78 38787284.98 38787285.17 0.0503 0.0179

Uranus 101483-12-29 10:18 G 38787326.74 38787326.93 38787327.13 0.0143 0.0065

Saturn 101484-03-24 03:50 G 38787412.46 38787412.66 38787412.86 0.0289 0.0084

Uranus 101484-08-11 22:04 G 38787553.26 38787553.42 38787553.61 0.0143 0.0087

Uranus 101485-03-26 10:04 G 38787779.79 38787779.92 38787780.08 0.0142 0.0108

Uranus 101485-11-07 21:50 G 38788006.33 38788006.41 38788006.52 0.0142 0.0128

Jupiter 101490-05-11 06:57 G 38789651.61 38789651.79 38789651.97 0.0526 0.0241

Jupiter 101495-07-23 07:54 G 38791550.70 38791550.83 38791550.97 0.0504 0.0383

Jupiter 101496-03-16 08:09 G 38791787.69 38791787.84 38791787.99 0.0500 0.0346

Saturn 101496-10-27 22:47 G 38792013.35 38792013.45 38792013.57 0.0277 0.0240

Saturn 101497-06-14 12:28 G 38792242.81 38792243.02 38792243.24 0.0274 0.0030

Mars 101497-11-07 01:11 G 38792388.49 38792388.55 38792388.61 0.1905 0.1782

Jupiter 101502-01-15 00:28 G 38793917.32 38793917.52 38793917.72 0.0524 0.0013

Jupiter 101507-11-21 05:02 G 38796053.51 38796053.71 38796053.91 0.0501 0.0147

Saturn 101513-02-18 00:42 G 38797969.37 38797969.53 38797969.71 0.0286 0.0155

Neptune 101513-06-14 09:06 G 38798085.83 38798085.88 38798085.96 0.0088 0.0084

Jupiter 101513-09-19 21:06 G 38798183.20 38798183.38 38798183.56 0.0523 0.0211

Saturn 101513-10-05 13:40 G 38798198.89 38798199.07 38798199.25 0.0289 0.0137

Neptune 101514-01-25 22:33 G 38798311.34 38798311.44 38798311.58 0.0088 0.0074

Neptune 101514-09-08 11:45 G 38798536.86 38798536.99 38798537.17 0.0088 0.0064

Neptune 101515-04-22 01:26 G 38798762.39 38798762.56 38798762.75 0.0088 0.0053

Neptune 101515-12-03 14:38 G 38798987.93 38798988.11 38798988.32 0.0088 0.0043

Neptune 101516-07-16 04:04 G 38799213.48 38799213.67 38799213.89 0.0088 0.0033

Neptune 101517-02-26 17:45 G 38799439.03 38799439.24 38799439.47 0.0088 0.0022

Neptune 101517-10-10 07:11 G 38799664.58 38799664.80 38799665.03 0.0088 0.0012

Neptune 101518-05-23 20:38 G 38799890.14 38799890.36 38799890.59 0.0088 0.0002

Neptune 101519-01-04 10:04 G 38800115.70 38800115.92 38800116.15 0.0088 0.0010

Jupiter 101519-07-26 23:30 G 38800319.28 38800319.48 38800319.69 0.0502 0.0063

Neptune 101519-08-17 23:30 G 38800341.27 38800341.48 38800341.71 0.0088 0.0020

Neptune 101520-03-30 12:57 G 38800566.84 38800567.04 38800567.26 0.0088 0.0031

Uranus 101520-07-19 20:23 G 38800678.27 38800678.35 38800678.43 0.0135 0.0125

Neptune 101520-11-11 02:38 G 38800792.41 38800792.61 38800792.81 0.0088 0.0041

Uranus 101521-03-03 00:28 G 38800904.41 38800904.52 38800904.66 0.0135 0.0109

Neptune 101521-06-24 15:35 G 38801017.99 38801018.15 38801018.35 0.0088 0.0052

Uranus 101521-10-15 05:02 G 38801130.57 38801130.71 38801130.88 0.0135 0.0092

Neptune 101522-02-05 05:16 G 38801243.58 38801243.72 38801243.89 0.0088 0.0062

Uranus 101522-05-29 10:04 G 38801356.74 38801356.92 38801357.10 0.0135 0.0074

Neptune 101522-09-18 18:28 G 38801469.17 38801469.27 38801469.42 0.0088 0.0073

Uranus 101523-01-10 14:38 G 38801582.92 38801583.11 38801583.31 0.0135 0.0057

Moon 101523-04-25 09:35 G 38801687.76 38801687.90 38801688.04 0.2634 0.0957

Earth 101523-04-25 12:14 G 38801687.86 38801688.01 38801688.17 0.2628 0.0837 *

Neptune 101523-05-02 07:54 G 38801694.78 38801694.83 38801694.92 0.0088 0.0083

Uranus 101523-08-24 19:40 G 38801809.11 38801809.32 38801809.52 0.0135 0.0039

Uranus 101524-04-07 00:28 G 38802035.31 38802035.52 38802035.73 0.0135 0.0022

Uranus 101524-11-19 05:30 G 38802261.51 38802261.73 38802261.94 0.0135 0.0004

Mars 101525-03-30 01:26 G 38802392.39 38802392.56 38802392.73 0.1646 0.0325

Jupiter 101525-05-25 18:57 G 38802449.18 38802449.29 38802449.40 0.0522 0.0426

Uranus 101525-07-03 10:33 G 38802487.73 38802487.94 38802488.15 0.0135 0.0014

Jupiter 101526-01-17 19:11 G 38802686.16 38802686.30 38802686.45 0.0527 0.0368

Uranus 101526-02-14 15:35 G 38802713.95 38802714.15 38802714.37 0.0135 0.0032

Saturn 101526-05-11 07:26 G 38802799.65 38802799.81 38802799.96 0.0277 0.0196

Uranus 101526-09-28 21:06 G 38802940.19 38802940.38 38802940.58 0.0135 0.0050

Saturn 101526-12-26 20:09 G 38803029.14 38803029.34 38803029.56 0.0274 0.0073

Uranus 101527-05-13 02:23 G 38803166.43 38803166.60 38803166.80 0.0136 0.0069

Uranus 101527-12-25 08:09 G 38803392.68 38803392.84 38803393.01 0.0136 0.0086

Uranus 101528-08-07 13:54 G 38803618.95 38803619.08 38803619.22 0.0136 0.0104

Uranus 101529-03-21 19:26 G 38803845.24 38803845.31 38803845.42 0.0136 0.0122

Jupiter 101531-03-31 19:26 G 38804585.13 38804585.31 38804585.48 0.0503 0.0267

Jupiter 101531-11-23 17:59 G 38804822.18 38804822.25 38804822.34 0.0499 0.0455

Pluto 101532-03-17 19:40 G 38804937.16 38804937.32 38804937.50 0.0064 0.0040

Pluto 101532-10-28 23:30 G 38805162.26 38805162.48 38805162.69 0.0064 0.0002

Pluto 101533-06-11 02:23 G 38805387.46 38805387.60 38805387.79 0.0065 0.0043

Jupiter 101537-09-22 15:06 G 38806951.94 38806952.13 38806952.32 0.0525 0.0143

Saturn 101542-08-31 06:57 G 38808755.60 38808755.79 38808755.98 0.0287 0.0113

Jupiter 101542-12-04 14:09 G 38808851.03 38808851.09 38808851.16 0.0505 0.0475

Saturn 101543-04-17 20:09 G 38808985.18 38808985.34 38808985.50 0.0290 0.0181

Jupiter 101543-07-29 14:38 G 38809087.94 38809088.11 38809088.29 0.0500 0.0255

Jupiter 101549-05-28 10:33 G 38811217.75 38811217.94 38811218.14 0.0524 0.0083

Jupiter 101555-04-03 11:59 G 38813353.79 38813354.00 38813354.21 0.0502 0.0055

Saturn 101555-11-21 15:50 G 38813585.98 38813586.16 38813586.34 0.0276 0.0149

Saturn 101556-07-08 04:18 G 38813815.49 38813815.68 38813815.88 0.0273 0.0118

Jupiter 101561-01-31 05:02 G 38815483.55 38815483.71 38815483.87 0.0522 0.0308

Jupiter 101561-09-25 05:16 G 38815720.65 38815720.72 38815720.80 0.0527 0.0488

Uranus 101562-01-29 00:42 G 38815846.49 38815846.53 38815846.59 0.0144 0.0140

Uranus 101562-09-12 14:09 G 38816072.96 38816073.09 38816073.21 0.0144 0.0118

Uranus 101563-04-27 02:38 G 38816299.47 38816299.61 38816299.79 0.0144 0.0097

Uranus 101563-12-09 15:35 G 38816525.98 38816526.15 38816526.36 0.0143 0.0075

Uranus 101564-07-23 04:33 G 38816752.50 38816752.69 38816752.91 0.0143 0.0053

Uranus 101565-03-06 17:30 G 38816979.02 38816979.23 38816979.46 0.0143 0.0031

Uranus 101565-10-19 06:28 G 38817205.54 38817205.77 38817205.99 0.0143 0.0008

Uranus 101566-06-02 18:57 G 38817432.07 38817432.29 38817432.51 0.0143 0.0014

Jupiter 101566-12-07 08:38 G 38817619.66 38817619.86 38817620.06 0.0503 0.0149

Uranus 101567-01-15 07:11 G 38817658.59 38817658.80 38817659.02 0.0143 0.0036

Uranus 101567-08-29 19:26 G 38817885.11 38817885.31 38817885.52 0.0143 0.0058

Uranus 101568-04-12 07:26 G 38818111.64 38818111.81 38818112.01 0.0143 0.0080

Uranus 101568-11-24 19:26 G 38818338.17 38818338.31 38818338.48 0.0142 0.0101

Uranus 101569-07-09 07:11 G 38818564.70 38818564.80 38818564.93 0.0142 0.0121

Uranus 101570-02-20 19:11 G 38818791.28 38818791.30 38818791.32 0.0142 0.0141

Saturn 101572-03-12 15:35 G 38819541.95 38819542.15 38819542.36 0.0287 0.0065

Saturn 101572-10-28 05:02 G 38819771.60 38819771.71 38819771.84 0.0290 0.0232

Jupiter 101573-05-31 01:11 G 38819986.38 38819986.55 38819986.73 0.0526 0.0266

Jupiter 101578-08-12 02:52 G 38821885.48 38821885.62 38821885.77 0.0504 0.0358

Jupiter 101579-04-06 02:09 G 38822122.46 38822122.59 38822122.74 0.0499 0.0370

Jupiter 101585-02-02 22:33 G 38824252.25 38824252.44 38824252.64 0.0525 0.0045

Saturn 101585-06-03 00:14 G 38824372.31 38824372.51 38824372.71 0.0276 0.0105

Saturn 101586-01-18 12:28 G 38824601.85 38824602.02 38824602.20 0.0273 0.0160

Jupiter 101590-12-09 23:02 G 38826388.26 38826388.46 38826388.66 0.0500 0.0169

Mars 101591-01-25 12:14 G 38826434.84 38826435.01 38826435.19 0.1643 0.0106

Neptune 101594-12-18 05:30 G 38827857.72 38827857.73 38827857.79 0.0090 0.0089

Neptune 101595-07-31 18:28 G 38828083.18 38828083.27 38828083.39 0.0090 0.0078

Mars 101595-09-05 01:40 G 38828118.45 38828118.57 38828118.70 0.1895 0.1322

Neptune 101596-03-13 06:57 G 38828308.67 38828308.79 38828308.96 0.0090 0.0068

Jupiter 101596-10-08 19:26 G 38828518.12 38828518.31 38828518.50 0.0523 0.0179

Neptune 101596-10-24 19:40 G 38828534.17 38828534.32 38828534.51 0.0090 0.0057

Neptune 101597-06-07 08:38 G 38828759.68 38828759.86 38828760.05 0.0090 0.0046

Neptune 101598-01-18 20:52 G 38828985.19 38828985.37 38828985.59 0.0090 0.0036

Neptune 101598-09-01 09:50 G 38829210.71 38829210.91 38829211.13 0.0090 0.0025

Neptune 101599-04-14 22:33 G 38829436.23 38829436.44 38829436.66 0.0090 0.0014

Neptune 101599-11-26 11:16 G 38829661.75 38829661.97 38829662.18 0.0090 0.0003

Neptune 101600-07-08 23:45 G 38829887.28 38829887.49 38829887.71 0.0090 0.0008

Neptune 101601-02-19 12:14 G 38830112.81 38830113.01 38830113.23 0.0090 0.0019

Saturn 101601-09-22 20:52 G 38830328.16 38830328.37 38830328.58 0.0287 0.0024

Neptune 101601-10-03 00:57 G 38830338.34 38830338.54 38830338.75 0.0090 0.0029

Saturn 101602-05-10 10:18 G 38830557.88 38830557.93 38830558.01 0.0290 0.0275

Neptune 101602-05-16 13:26 G 38830563.87 38830564.06 38830564.26 0.0090 0.0040

Jupiter 101602-08-14 18:57 G 38830654.08 38830654.29 38830654.50 0.0502 0.0038

Neptune 101602-12-28 01:40 G 38830789.41 38830789.57 38830789.77 0.0090 0.0051

Neptune 101603-08-10 14:38 G 38831014.96 38831015.11 38831015.27 0.0090 0.0061

Uranus 101604-03-19 08:38 G 38831236.82 38831236.86 38831236.93 0.0134 0.0130

Neptune 101604-03-23 02:52 G 38831240.51 38831240.62 38831240.77 0.0090 0.0072

Uranus 101604-10-31 13:26 G 38831462.95 38831463.06 38831463.18 0.0135 0.0113

Neptune 101604-11-03 15:50 G 38831466.08 38831466.16 38831466.25 0.0090 0.0082

Uranus 101605-06-14 17:59 G 38831689.10 38831689.25 38831689.40 0.0135 0.0096

Uranus 101606-01-26 22:18 G 38831915.27 38831915.43 38831915.61 0.0135 0.0079

Uranus 101606-09-10 03:06 G 38832141.45 38832141.63 38832141.83 0.0135 0.0062

Uranus 101607-04-24 07:40 G 38832367.63 38832367.82 38832368.04 0.0135 0.0045

Uranus 101607-12-06 12:42 G 38832593.82 38832594.03 38832594.24 0.0135 0.0027

Jupiter 101608-06-13 15:50 G 38832784.03 38832784.16 38832784.28 0.0521 0.0398

Uranus 101608-07-19 17:45 G 38832820.03 38832820.24 38832820.45 0.0135 0.0009

Jupiter 101609-02-05 15:35 G 38833021.03 38833021.15 38833021.28 0.0526 0.0397

Uranus 101609-03-02 22:47 G 38833046.24 38833046.45 38833046.66 0.0135 0.0009

Uranus 101609-10-15 03:50 G 38833272.46 38833272.66 38833272.88 0.0135 0.0027

Uranus 101610-05-29 09:06 G 38833498.68 38833498.88 38833499.09 0.0135 0.0045

Uranus 101611-01-10 14:23 G 38833724.92 38833725.10 38833725.30 0.0135 0.0063

Uranus 101611-08-24 19:54 G 38833951.17 38833951.33 38833951.51 0.0136 0.0081

Uranus 101612-04-07 01:40 G 38834177.43 38834177.57 38834177.72 0.0136 0.0098

Uranus 101612-11-19 07:11 G 38834403.70 38834403.80 38834403.92 0.0136 0.0116

Uranus 101613-07-03 13:11 G 38834630.02 38834630.05 38834630.09 0.0136 0.0133

Jupiter 101614-04-19 15:35 G 38834919.97 38834920.15 38834920.33 0.0503 0.0241

Jupiter 101614-12-12 14:52 G 38835157.08 38835157.12 38835157.18 0.0499 0.0484

Saturn 101614-12-14 07:11 G 38835158.60 38835158.80 38835159.02 0.0275 0.0063

Saturn 101615-07-31 19:11 G 38835388.16 38835388.30 38835388.45 0.0272 0.0202

Jupiter 101620-10-11 09:35 G 38837286.71 38837286.90 38837287.09 0.0525 0.0167

Pluto 101621-02-08 03:21 G 38837406.49 38837406.64 38837406.81 0.0080 0.0056

Pluto 101621-09-21 14:09 G 38837631.88 38837632.09 38837632.31 0.0079 0.0025

Jupiter 101625-12-23 11:45 G 38839185.90 38839185.99 38839186.09 0.0505 0.0446

Jupiter 101626-08-17 12:28 G 38839422.85 38839423.02 38839423.19 0.0500 0.0288

Saturn 101630-08-18 16:47 G 38840885.13 38840885.20 38840885.28 0.0285 0.0264

Saturn 101631-04-05 04:47 G 38841114.49 38841114.70 38841114.90 0.0288 0.0024

Jupiter 101632-06-16 05:59 G 38841552.55 38841552.75 38841552.95 0.0524 0.0056

Earth 101636-10-24 03:35 G 38843143.50 38843143.65 38843143.81 0.2704 0.0316

Moon 101636-10-24 06:14 G 38843143.61 38843143.76 38843143.91 0.2710 0.0245 *

Jupiter 101638-04-22 07:26 G 38843688.60 38843688.81 38843689.01 0.0501 0.0080

Jupiter 101644-02-20 03:35 G 38845818.48 38845818.65 38845818.82 0.0523 0.0276

Saturn 101644-06-25 15:06 G 38845944.91 38845945.13 38845945.35 0.0275 0.0019

Jupiter 101644-10-14 04:33 G 38846055.68 38846055.69 38846055.71 0.0527 0.0525

Saturn 101645-02-10 02:38 G 38846174.52 38846174.61 38846174.71 0.0272 0.0244

Uranus 101646-05-12 19:26 G 38846631.20 38846631.31 38846631.41 0.0144 0.0126

Uranus 101646-12-25 08:09 G 38846857.70 38846857.84 38846858.00 0.0144 0.0105

Uranus 101647-08-08 21:21 G 38847084.21 38847084.39 38847084.58 0.0144 0.0083

Uranus 101648-03-22 10:18 G 38847310.74 38847310.93 38847311.14 0.0143 0.0061

Uranus 101648-11-03 23:16 G 38847537.26 38847537.47 38847537.69 0.0143 0.0038

Uranus 101649-06-18 11:59 G 38847763.78 38847764.00 38847764.23 0.0143 0.0016

Jupiter 101649-12-26 04:04 G 38847954.47 38847954.67 38847954.87 0.0502 0.0123

Uranus 101650-01-31 00:42 G 38847990.31 38847990.53 38847990.76 0.0143 0.0007

Uranus 101650-09-14 13:11 G 38848216.84 38848217.05 38848217.27 0.0143 0.0028

Uranus 101651-04-29 01:40 G 38848443.37 38848443.57 38848443.78 0.0143 0.0050

Uranus 101651-12-11 13:40 G 38848669.89 38848670.07 38848670.28 0.0143 0.0072

Uranus 101652-07-25 01:54 G 38848896.42 38848896.58 38848896.76 0.0143 0.0093

Uranus 101653-03-08 13:54 G 38849122.96 38849123.08 38849123.23 0.0142 0.0114

Uranus 101653-10-21 01:26 G 38849349.51 38849349.56 38849349.66 0.0142 0.0135

Jupiter 101655-10-26 01:11 G 38850084.48 38850084.55 38850084.61 0.0521 0.0491

Jupiter 101656-06-19 00:57 G 38850321.38 38850321.54 38850321.70 0.0526 0.0302

Mars 101656-11-22 00:14 G 38850477.33 38850477.51 38850477.68 0.1640 0.0103

Saturn 101660-02-28 20:09 G 38851671.22 38851671.34 38851671.47 0.0285 0.0229

Saturn 101660-10-15 08:09 G 38851900.64 38851900.84 38851901.04 0.0288 0.0060

Mars 101661-07-02 05:59 G 38852160.59 38852160.75 38852160.91 0.1899 0.0723

Jupiter 101661-08-30 23:16 G 38852220.32 38852220.47 38852220.63 0.0504 0.0332

Jupiter 101662-04-24 23:02 G 38852457.34 38852457.46 38852457.59 0.0500 0.0397

Jupiter 101668-02-22 20:52 G 38854587.17 38854587.37 38854587.56 0.0524 0.0077

Saturn 101673-05-21 06:57 G 38856501.71 38856501.79 38856501.89 0.0277 0.0251

Jupiter 101673-12-28 20:38 G 38856723.17 38856723.36 38856723.55 0.0501 0.0200

Saturn 101674-01-05 20:52 G 38856731.16 38856731.37 38856731.59 0.0274 0.0022

Neptune 101677-09-15 17:45 G 38858080.22 38858080.24 38858080.27 0.0088 0.0087

Neptune 101678-04-29 06:57 G 38858305.70 38858305.79 38858305.91 0.0088 0.0077

Neptune 101678-12-10 20:09 G 38858531.22 38858531.34 38858531.51 0.0088 0.0067

Neptune 101679-07-24 09:35 G 38858756.75 38858756.90 38858757.09 0.0088 0.0057

Jupiter 101679-10-28 15:35 G 38858852.96 38858853.15 38858853.34 0.0523 0.0151

Neptune 101680-03-05 23:16 G 38858982.29 38858982.47 38858982.67 0.0088 0.0046

Neptune 101680-10-17 12:28 G 38859207.83 38859208.02 38859208.24 0.0088 0.0036

Neptune 101681-05-31 02:09 G 38859433.38 38859433.59 38859433.81 0.0088 0.0025

Neptune 101682-01-11 15:35 G 38859658.93 38859659.15 38859659.38 0.0088 0.0015

Neptune 101682-08-25 05:02 G 38859884.49 38859884.71 38859884.94 0.0088 0.0005

Neptune 101683-04-07 18:28 G 38860110.05 38860110.27 38860110.50 0.0088 0.0007

Neptune 101683-11-19 07:54 G 38860335.61 38860335.83 38860336.05 0.0088 0.0017

Neptune 101684-07-01 21:06 G 38860561.18 38860561.38 38860561.61 0.0088 0.0028

Neptune 101685-02-12 10:47 G 38860786.76 38860786.95 38860787.16 0.0088 0.0038

Jupiter 101685-09-02 17:45 G 38860989.03 38860989.24 38860989.45 0.0502 0.0004

Neptune 101685-09-26 00:28 G 38861012.33 38861012.52 38861012.71 0.0088 0.0048

Neptune 101686-05-09 13:26 G 38861237.91 38861238.06 38861238.24 0.0088 0.0059

Neptune 101686-12-21 02:52 G 38861463.50 38861463.62 38861463.77 0.0088 0.0069

Neptune 101687-08-03 16:04 G 38861689.10 38861689.17 38861689.29 0.0088 0.0080

Uranus 101687-11-17 21:21 G 38861795.39 38861795.39 38861795.41 0.0134 0.0134

Uranus 101688-07-01 01:40 G 38862021.48 38862021.57 38862021.68 0.0134 0.0118

Uranus 101689-02-12 06:14 G 38862247.63 38862247.76 38862247.91 0.0134 0.0101

Saturn 101689-09-10 02:23 G 38862457.44 38862457.60 38862457.76 0.0285 0.0186

Uranus 101689-09-26 10:47 G 38862473.79 38862473.95 38862474.12 0.0135 0.0084

Saturn 101690-04-27 14:38 G 38862686.92 38862687.11 38862687.31 0.0288 0.0105

Uranus 101690-05-10 15:21 G 38862699.96 38862700.14 38862700.33 0.0135 0.0067

Uranus 101690-12-22 20:09 G 38862926.15 38862926.34 38862926.54 0.0135 0.0049

Jupiter 101691-07-03 12:42 G 38863118.89 38863119.03 38863119.17 0.0522 0.0369

Uranus 101691-08-06 00:57 G 38863152.34 38863152.54 38863152.76 0.0135 0.0032

Jupiter 101692-02-25 12:42 G 38863355.92 38863356.03 38863356.14 0.0526 0.0428

Uranus 101692-03-19 05:59 G 38863378.54 38863378.75 38863378.96 0.0135 0.0014

Uranus 101692-10-31 11:02 G 38863604.74 38863604.96 38863605.17 0.0135 0.0004

Uranus 101693-06-14 16:04 G 38863830.95 38863831.17 38863831.38 0.0135 0.0021

Uranus 101694-01-26 20:52 G 38864057.18 38864057.37 38864057.59 0.0135 0.0040

Uranus 101694-09-10 02:38 G 38864283.41 38864283.61 38864283.80 0.0135 0.0057

Uranus 101695-04-24 07:40 G 38864509.65 38864509.82 38864510.01 0.0135 0.0075

Uranus 101695-12-06 12:57 G 38864735.90 38864736.04 38864736.22 0.0135 0.0093

Uranus 101696-07-19 18:42 G 38864962.17 38864962.28 38864962.42 0.0136 0.0110

Uranus 101697-03-03 00:28 G 38865188.46 38865188.52 38865188.60 0.0136 0.0127

Jupiter 101697-05-08 12:42 G 38865254.84 38865255.03 38865255.22 0.0503 0.0212

Saturn 101702-12-02 14:09 G 38867287.96 38867288.09 38867288.24 0.0277 0.0208

Saturn 101703-07-20 03:50 G 38867517.45 38867517.66 38867517.87 0.0274 0.0063

Jupiter 101703-11-01 09:35 G 38867621.72 38867621.90 38867622.08 0.0526 0.0205

Jupiter 101709-01-12 09:21 G 38869520.78 38869520.89 38869521.01 0.0504 0.0417

Jupiter 101709-09-06 09:06 G 38869757.72 38869757.88 38869758.04 0.0500 0.0315

Jupiter 101715-07-07 06:42 G 38871887.59 38871887.78 38871887.98 0.0524 0.0021

Saturn 101719-03-24 04:47 G 38873243.53 38873243.70 38873243.88 0.0286 0.0153

Saturn 101719-11-08 17:16 G 38873473.04 38873473.22 38873473.40 0.0289 0.0139

Jupiter 101721-05-12 05:30 G 38874023.53 38874023.73 38874023.94 0.0501 0.0112

Mars 101722-09-20 11:30 G 38874519.80 38874519.98 38874520.15 0.1637 0.0313

Jupiter 101727-03-12 03:21 G 38876153.47 38876153.64 38876153.82 0.0523 0.0240

Mars 101727-04-30 09:35 G 38876202.73 38876202.90 38876203.07 0.1903 0.0086

Uranus 101730-01-11 00:28 G 38877189.45 38877189.52 38877189.60 0.0144 0.0134

Uranus 101730-08-25 13:26 G 38877415.94 38877416.06 38877416.21 0.0144 0.0113

Uranus 101731-04-09 02:38 G 38877642.45 38877642.61 38877642.79 0.0144 0.0091

Uranus 101731-11-21 15:50 G 38877868.97 38877869.16 38877869.36 0.0143 0.0069

Saturn 101732-06-13 18:14 G 38878074.09 38878074.26 38878074.43 0.0277 0.0172

Uranus 101732-07-05 04:47 G 38878095.49 38878095.70 38878095.91 0.0143 0.0047

Jupiter 101733-01-15 02:38 G 38878289.41 38878289.61 38878289.82 0.0503 0.0091

Saturn 101733-01-29 07:40 G 38878303.62 38878303.82 38878304.03 0.0274 0.0098

Uranus 101733-02-16 17:45 G 38878322.03 38878322.24 38878322.46 0.0143 0.0025

Uranus 101733-10-01 06:42 G 38878548.56 38878548.78 38878549.00 0.0143 0.0003

Uranus 101734-05-15 19:11 G 38878775.08 38878775.30 38878775.52 0.0143 0.0020

Uranus 101734-12-28 07:40 G 38879001.61 38879001.82 38879002.04 0.0143 0.0041

Uranus 101735-08-11 19:54 G 38879228.14 38879228.33 38879228.54 0.0143 0.0063

Uranus 101736-03-25 08:09 G 38879454.68 38879454.84 38879455.03 0.0143 0.0085

Uranus 101736-11-06 20:09 G 38879681.21 38879681.34 38879681.51 0.0143 0.0106

Uranus 101737-06-21 08:09 G 38879907.75 38879907.84 38879907.95 0.0142 0.0126

Jupiter 101738-11-14 23:16 G 38880419.38 38880419.47 38880419.57 0.0521 0.0459

Jupiter 101739-07-09 22:47 G 38880656.30 38880656.45 38880656.60 0.0526 0.0335

Jupiter 101744-09-19 23:16 G 38882555.30 38882555.47 38882555.64 0.0504 0.0296

Jupiter 101745-05-14 23:02 G 38882792.37 38882792.46 38882792.57 0.0500 0.0435

Saturn 101748-10-03 09:21 G 38884029.70 38884029.89 38884030.08 0.0286 0.0114

Saturn 101749-05-20 22:04 G 38884259.26 38884259.42 38884259.59 0.0289 0.0179

Jupiter 101751-03-14 19:11 G 38884922.11 38884922.30 38884922.50 0.0525 0.0112

Jupiter 101756-05-25 18:28 G 38886821.27 38886821.27 38886821.29 0.0505 0.0504

Jupiter 101757-01-17 19:11 G 38887058.12 38887058.30 38887058.49 0.0500 0.0231

Neptune 101759-11-03 03:21 G 38888077.58 38888077.64 38888077.75 0.0090 0.0082

Neptune 101760-06-15 16:18 G 38888303.06 38888303.18 38888303.31 0.0090 0.0071

Neptune 101761-01-27 04:33 G 38888528.55 38888528.69 38888528.87 0.0090 0.0061

Neptune 101761-09-09 17:30 G 38888754.06 38888754.23 38888754.41 0.0090 0.0050

Saturn 101761-12-25 00:14 G 38888860.33 38888860.51 38888860.71 0.0277 0.0132

Neptune 101762-04-23 05:45 G 38888979.57 38888979.74 38888979.95 0.0090 0.0040

Saturn 101762-08-11 13:11 G 38889089.87 38889090.05 38889090.25 0.0274 0.0138

Jupiter 101762-11-17 16:04 G 38889187.98 38889188.17 38889188.37 0.0524 0.0113

Neptune 101762-12-04 18:28 G 38889205.08 38889205.27 38889205.49 0.0090 0.0029

Neptune 101763-07-18 07:26 G 38889430.60 38889430.81 38889431.02 0.0090 0.0018

Neptune 101764-02-28 19:54 G 38889656.12 38889656.33 38889656.55 0.0090 0.0008

Neptune 101764-10-11 08:38 G 38889881.65 38889881.86 38889882.08 0.0090 0.0004

Neptune 101765-05-24 21:06 G 38890107.17 38890107.38 38890107.60 0.0090 0.0014

Neptune 101766-01-05 09:50 G 38890332.70 38890332.91 38890333.12 0.0090 0.0025

Earth 101766-04-26 11:59 G 38890443.84 38890444.00 38890444.15 0.2628 0.0846

Moon 101766-04-26 17:02 G 38890444.06 38890444.21 38890444.36 0.2624 0.1082 *

Neptune 101766-08-18 22:18 G 38890558.24 38890558.43 38890558.64 0.0090 0.0036

Neptune 101767-04-01 10:47 G 38890783.78 38890783.95 38890784.15 0.0090 0.0046

Neptune 101767-11-12 23:30 G 38891009.32 38891009.48 38891009.65 0.0090 0.0057

Neptune 101768-06-25 11:45 G 38891234.86 38891234.99 38891235.15 0.0090 0.0068

Jupiter 101768-09-22 16:33 G 38891323.98 38891324.19 38891324.40 0.0501 0.0030

Neptune 101769-02-06 00:28 G 38891460.42 38891460.52 38891460.63 0.0090 0.0078

Neptune 101769-09-19 12:42 G 38891686.02 38891686.03 38891686.09 0.0090 0.0089

Uranus 101772-03-01 14:09 G 38892580.02 38892580.09 38892580.19 0.0134 0.0123

Uranus 101772-10-13 18:42 G 38892806.16 38892806.28 38892806.42 0.0134 0.0106

Uranus 101773-05-27 23:16 G 38893032.32 38893032.47 38893032.63 0.0135 0.0089

Uranus 101774-01-09 03:50 G 38893258.49 38893258.66 38893258.85 0.0135 0.0072

Moon 101774-04-24 02:38 G 38893363.54 38893363.61 38893363.69 0.2622 0.2325

Jupiter 101774-07-23 14:09 G 38893453.94 38893454.09 38893454.25 0.0522 0.0331

Uranus 101774-08-23 08:38 G 38893484.67 38893484.86 38893485.06 0.0135 0.0055

Jupiter 101775-03-17 15:06 G 38893691.04 38893691.13 38893691.22 0.0527 0.0471

Uranus 101775-04-06 13:26 G 38893710.86 38893711.06 38893711.27 0.0135 0.0037

Uranus 101775-11-18 18:14 G 38893937.05 38893937.26 38893937.48 0.0135 0.0020

Uranus 101776-07-01 23:16 G 38894163.25 38894163.47 38894163.68 0.0135 0.0002

Uranus 101777-02-13 04:04 G 38894389.46 38894389.67 38894389.89 0.0135 0.0016

Uranus 101777-09-27 09:21 G 38894615.69 38894615.89 38894616.10 0.0135 0.0033

Saturn 101778-04-15 10:47 G 38894815.75 38894815.95 38894816.15 0.0286 0.0082

Uranus 101778-05-11 14:23 G 38894841.91 38894842.10 38894842.31 0.0135 0.0051

Saturn 101778-11-30 23:16 G 38895045.34 38895045.47 38895045.62 0.0289 0.0212

Uranus 101778-12-23 19:40 G 38895068.15 38895068.32 38895068.51 0.0135 0.0069

Uranus 101779-08-07 00:57 G 38895294.39 38895294.54 38895294.72 0.0135 0.0087

Pluto 101780-02-20 01:26 G 38895491.45 38895491.56 38895491.72 0.0064 0.0050

Uranus 101780-03-20 06:42 G 38895520.65 38895520.78 38895520.92 0.0136 0.0104

Jupiter 101780-05-28 12:42 G 38895589.83 38895590.03 38895590.22 0.0503 0.0177

Pluto 101780-10-02 05:30 G 38895716.52 38895716.73 38895716.95 0.0064 0.0009

Uranus 101780-11-01 11:59 G 38895746.93 38895747.00 38895747.11 0.0136 0.0122

Pluto 101781-05-15 08:38 G 38895941.69 38895941.86 38895942.07 0.0065 0.0033

Jupiter 101786-11-20 11:02 G 38897956.79 38897956.96 38897957.14 0.0526 0.0248

Mars 101788-07-17 23:02 G 38898562.30 38898562.46 38898562.63 0.1635 0.0515

Saturn 101791-07-07 02:38 G 38899646.41 38899646.61 38899646.81 0.0276 0.0099

Jupiter 101792-02-01 09:06 G 38899855.75 38899855.88 38899856.02 0.0504 0.0383

Saturn 101792-02-21 15:50 G 38899875.99 38899876.16 38899876.33 0.0273 0.0169

Jupiter 101792-09-25 09:21 G 38900092.74 38900092.89 38900093.04 0.0500 0.0352

Mars 101793-02-24 13:26 G 38900244.90 38900245.06 38900245.23 0.1908 0.0544

Jupiter 101798-07-26 06:42 G 38902222.58 38902222.78 38902222.98 0.0524 0.0022

Jupiter 101804-06-01 06:57 G 38904358.59 38904358.79 38904358.99 0.0501 0.0152

Saturn 101807-10-27 14:23 G 38905601.90 38905602.10 38905602.31 0.0286 0.0047

Saturn 101808-06-13 03:35 G 38905831.55 38905831.65 38905831.75 0.0289 0.0250

Jupiter 101810-04-01 03:21 G 38906488.46 38906488.64 38906488.83 0.0523 0.0202

Uranus 101813-09-11 04:18 G 38907747.67 38907747.68 38907747.72 0.0144 0.0143

Uranus 101814-04-25 17:30 G 38907974.13 38907974.23 38907974.36 0.0144 0.0122

Uranus 101814-12-08 06:42 G 38908200.63 38908200.78 38908200.95 0.0144 0.0100

Uranus 101815-07-22 19:54 G 38908427.15 38908427.33 38908427.52 0.0143 0.0078

Jupiter 101816-02-05 03:21 G 38908624.43 38908624.64 38908624.85 0.0502 0.0055

Uranus 101816-03-05 08:52 G 38908653.68 38908653.87 38908654.08 0.0143 0.0056

Uranus 101816-10-17 21:50 G 38908880.20 38908880.41 38908880.63 0.0143 0.0034

Uranus 101817-06-01 10:47 G 38909106.73 38909106.95 38909107.17 0.0143 0.0012

Uranus 101818-01-13 23:30 G 38909333.26 38909333.48 38909333.70 0.0143 0.0010

Uranus 101818-08-28 11:59 G 38909559.79 38909560.00 38909560.22 0.0143 0.0032

Uranus 101819-04-12 00:28 G 38909786.32 38909786.52 38909786.73 0.0143 0.0054

Uranus 101819-11-24 12:42 G 38910012.85 38910013.03 38910013.23 0.0143 0.0075

Uranus 101820-07-08 00:57 G 38910239.38 38910239.54 38910239.71 0.0143 0.0096

Mars 101820-07-17 18:57 G 38910249.21 38910249.29 38910249.36 0.1644 0.1477

Saturn 101821-01-17 07:40 G 38910432.61 38910432.82 38910433.03 0.0276 0.0061

Uranus 101821-02-19 12:57 G 38910465.92 38910466.04 38910466.17 0.0143 0.0117

Saturn 101821-09-03 20:09 G 38910662.21 38910662.34 38910662.50 0.0274 0.0207

Uranus 101821-10-04 00:28 G 38910692.48 38910692.52 38910692.60 0.0142 0.0137

Jupiter 101821-12-05 00:14 G 38910754.40 38910754.51 38910754.63 0.0522 0.0424

Jupiter 101822-07-30 00:57 G 38910991.41 38910991.54 38910991.68 0.0527 0.0379

Jupiter 101827-10-11 00:28 G 38912890.35 38912890.52 38912890.70 0.0503 0.0258

Jupiter 101828-06-03 23:02 G 38913127.40 38913127.46 38913127.54 0.0499 0.0470

Jupiter 101834-04-03 22:18 G 38915257.24 38915257.43 38915257.62 0.0525 0.0156

Saturn 101837-05-08 15:06 G 38916387.92 38916388.13 38916388.33 0.0286 0.0016

Saturn 101837-12-24 03:50 G 38916617.62 38916617.66 38916617.72 0.0289 0.0280

Jupiter 101839-06-15 20:09 G 38917156.27 38917156.34 38917156.42 0.0505 0.0466

Jupiter 101840-02-07 20:38 G 38917393.18 38917393.36 38917393.53 0.0500 0.0270

Neptune 101842-08-02 15:21 G 38918300.05 38918300.14 38918300.23 0.0088 0.0080

Neptune 101843-03-16 04:33 G 38918525.57 38918525.69 38918525.84 0.0088 0.0070

Neptune 101843-10-27 17:45 G 38918751.10 38918751.24 38918751.43 0.0088 0.0060

Neptune 101844-06-09 07:40 G 38918976.64 38918976.82 38918977.01 0.0088 0.0049

Neptune 101845-01-20 20:52 G 38919202.18 38919202.37 38919202.59 0.0088 0.0039

Neptune 101845-09-03 10:18 G 38919427.73 38919427.93 38919428.16 0.0088 0.0029

Jupiter 101845-12-07 19:11 G 38919523.11 38919523.30 38919523.50 0.0524 0.0068

Neptune 101846-04-16 23:59 G 38919653.28 38919653.50 38919653.72 0.0088 0.0018

Neptune 101846-11-28 13:26 G 38919878.83 38919879.06 38919879.28 0.0088 0.0007

Neptune 101847-07-12 02:52 G 38920104.39 38920104.62 38920104.84 0.0088 0.0003

Neptune 101848-02-22 16:18 G 38920329.96 38920330.18 38920330.41 0.0088 0.0014

Neptune 101848-10-05 05:45 G 38920555.53 38920555.74 38920555.96 0.0088 0.0024

Neptune 101849-05-18 18:42 G 38920781.09 38920781.28 38920781.51 0.0088 0.0035

Neptune 101849-12-30 08:23 G 38921006.67 38921006.85 38921007.05 0.0088 0.0045

Saturn 101850-07-30 08:23 G 38921218.63 38921218.85 38921219.06 0.0276 0.0033

Neptune 101850-08-12 22:04 G 38921232.25 38921232.42 38921232.59 0.0088 0.0055

Saturn 101851-03-16 20:52 G 38921448.27 38921448.37 38921448.49 0.0273 0.0235

Neptune 101851-03-26 11:16 G 38921457.84 38921457.97 38921458.13 0.0088 0.0066

Jupiter 101851-10-13 17:45 G 38921659.04 38921659.24 38921659.45 0.0501 0.0070

Neptune 101851-11-07 00:42 G 38921683.44 38921683.53 38921683.66 0.0088 0.0076

Neptune 101852-06-19 13:54 G 38921909.07 38921909.08 38921909.14 0.0088 0.0087

Mars 101854-05-16 10:47 G 38922604.79 38922604.95 38922605.11 0.1632 0.0714

Uranus 101855-11-01 02:09 G 38923138.54 38923138.59 38923138.66 0.0135 0.0128

Uranus 101856-06-14 06:28 G 38923364.67 38923364.77 38923364.90 0.0135 0.0112

Uranus 101857-01-26 11:02 G 38923590.82 38923590.96 38923591.12 0.0135 0.0095

Jupiter 101857-08-12 15:35 G 38923788.99 38923789.15 38923789.32 0.0522 0.0291

Uranus 101857-09-09 15:50 G 38923817.00 38923817.16 38923817.35 0.0135 0.0078

Jupiter 101858-04-06 16:04 G 38924026.13 38924026.17 38924026.21 0.0527 0.0512

Uranus 101858-04-23 20:38 G 38924043.18 38924043.36 38924043.56 0.0135 0.0061

Uranus 101858-12-06 01:26 G 38924269.36 38924269.56 38924269.77 0.0135 0.0043

Mars 101858-12-23 16:33 G 38924287.06 38924287.19 38924287.32 0.1912 0.1224

Uranus 101859-07-20 06:14 G 38924495.56 38924495.76 38924495.98 0.0135 0.0026

Uranus 101860-03-02 11:16 G 38924721.76 38924721.97 38924722.18 0.0135 0.0008

Uranus 101860-10-14 16:18 G 38924947.96 38924948.18 38924948.39 0.0135 0.0009

Uranus 101861-05-28 21:06 G 38925174.18 38925174.38 38925174.60 0.0135 0.0027

Uranus 101862-01-10 02:23 G 38925400.40 38925400.60 38925400.80 0.0135 0.0045

Uranus 101862-08-24 07:26 G 38925626.63 38925626.81 38925627.01 0.0135 0.0063

Uranus 101863-04-07 12:42 G 38925852.87 38925853.03 38925853.22 0.0135 0.0080

Jupiter 101863-06-18 14:52 G 38925924.93 38925925.12 38925925.33 0.0503 0.0136

Uranus 101863-11-19 18:14 G 38926079.12 38926079.26 38926079.42 0.0136 0.0098

Uranus 101864-07-02 23:45 G 38926305.39 38926305.49 38926305.61 0.0136 0.0115

Uranus 101865-02-14 05:30 G 38926531.69 38926531.73 38926531.78 0.0136 0.0132

Saturn 101866-04-03 06:42 G 38926944.72 38926944.78 38926944.86 0.0284 0.0266

Saturn 101866-11-18 17:45 G 38927174.03 38927174.24 38927174.45 0.0287 0.0019

Jupiter 101869-04-17 12:57 G 38928055.00 38928055.04 38928055.08 0.0521 0.0506

Pluto 101869-08-26 15:35 G 38928185.93 38928186.15 38928186.38 0.0079 0.0004

Jupiter 101869-12-10 12:14 G 38928291.85 38928292.01 38928292.18 0.0526 0.0290

Pluto 101870-04-09 01:54 G 38928411.54 38928411.58 38928411.65 0.0079 0.0076

Jupiter 101875-02-21 11:30 G 38930190.84 38930190.98 38930191.14 0.0504 0.0343

Jupiter 101875-10-16 10:47 G 38930427.83 38930427.95 38930428.09 0.0499 0.0390

Saturn 101879-06-24 21:21 G 38931775.35 38931775.39 38931775.43 0.0279 0.0273

Earth 101879-10-27 06:14 G 38931899.61 38931899.76 38931899.92 0.2704 0.0238

Moon 101879-10-27 06:42 G 38931899.61 38931899.78 38931899.94 0.2697 0.0507 *

Saturn 101880-02-09 12:42 G 38932004.81 38932005.03 38932005.24 0.0276 0.0006

Saturn 101880-09-26 00:57 G 38932234.52 38932234.54 38932234.58 0.0273 0.0270

Jupiter 101881-08-15 08:38 G 38932557.66 38932557.86 38932558.06 0.0525 0.0062

Mars 101886-05-15 05:59 G 38934291.64 38934291.75 38934291.87 0.1641 0.1256

Jupiter 101887-06-21 09:06 G 38934693.69 38934693.88 38934694.07 0.0500 0.0192

Jupiter 101893-04-20 06:28 G 38936823.59 38936823.77 38936823.96 0.0524 0.0160

Saturn 101895-10-14 07:11 G 38937730.70 38937730.80 38937730.93 0.0283 0.0235

Saturn 101896-05-30 18:14 G 38937960.05 38937960.26 38937960.46 0.0286 0.0049

Uranus 101897-12-23 23:30 G 38938532.41 38938532.48 38938532.60 0.0144 0.0130

Uranus 101898-08-07 12:57 G 38938758.91 38938759.04 38938759.20 0.0144 0.0108

Jupiter 101899-02-24 05:45 G 38938959.53 38938959.74 38938959.95 0.0502 0.0014

Uranus 101899-03-22 02:09 G 38938985.42 38938985.59 38938985.78 0.0143 0.0086

Uranus 101899-11-03 15:06 G 38939211.95 38939212.13 38939212.34 0.0143 0.0065

Uranus 101900-06-18 04:18 G 38939438.47 38939438.68 38939438.89 0.0143 0.0042

Uranus 101901-01-30 17:16 G 38939665.00 38939665.22 38939665.44 0.0143 0.0020

Uranus 101901-09-14 05:59 G 38939891.53 38939891.75 38939891.97 0.0143 0.0001

Uranus 101902-04-28 18:42 G 38940118.06 38940118.28 38940118.49 0.0143 0.0023

Uranus 101902-12-11 06:57 G 38940344.58 38940344.79 38940345.01 0.0143 0.0045

Uranus 101903-07-25 19:26 G 38940571.11 38940571.31 38940571.50 0.0143 0.0066

Uranus 101904-03-08 07:26 G 38940797.65 38940797.81 38940798.00 0.0143 0.0088

Uranus 101904-10-20 19:26 G 38941024.18 38941024.31 38941024.47 0.0143 0.0108

Jupiter 101904-12-25 04:18 G 38941089.55 38941089.68 38941089.82 0.0522 0.0377

Uranus 101905-06-04 07:11 G 38941250.72 38941250.80 38941250.91 0.0142 0.0129

Jupiter 101905-08-19 05:02 G 38941326.60 38941326.71 38941326.83 0.0527 0.0427

Saturn 101909-01-04 21:21 G 38942561.29 38942561.39 38942561.48 0.0279 0.0247

Saturn 101909-08-22 12:14 G 38942790.80 38942791.01 38942791.23 0.0276 0.0031

Jupiter 101910-10-31 02:38 G 38943225.42 38943225.61 38943225.79 0.0503 0.0218

Jupiter 101917-04-24 00:28 G 38945592.34 38945592.52 38945592.71 0.0525 0.0200

Mars 101920-03-13 22:33 G 38946647.29 38946647.44 38946647.58 0.1630 0.0921

Jupiter 101922-07-05 23:02 G 38947491.36 38947491.46 38947491.58 0.0505 0.0425

Jupiter 101923-02-27 23:45 G 38947728.33 38947728.49 38947728.65 0.0500 0.0315

Neptune 101924-02-06 12:28 G 38948071.99 38948072.02 38948072.11 0.0090 0.0086

Neptune 101924-09-19 01:26 G 38948297.46 38948297.56 38948297.69 0.0090 0.0075

Mars 101924-10-20 19:40 G 38948329.30 38948329.32 38948329.34 0.1916 0.1896

Saturn 101925-04-26 09:21 G 38948516.75 38948516.89 38948517.04 0.0284 0.0204

Neptune 101925-05-02 14:09 G 38948522.95 38948523.09 38948523.24 0.0090 0.0064

Saturn 101925-12-11 20:23 G 38948746.15 38948746.35 38948746.55 0.0287 0.0083

Neptune 101925-12-14 02:23 G 38948748.45 38948748.60 38948748.79 0.0090 0.0054

Neptune 101926-07-27 15:21 G 38948973.96 38948974.14 38948974.34 0.0090 0.0043

Neptune 101927-03-10 03:50 G 38949199.47 38949199.66 38949199.87 0.0090 0.0033

Neptune 101927-10-21 16:33 G 38949424.99 38949425.19 38949425.40 0.0090 0.0022

Neptune 101928-06-03 05:16 G 38949650.50 38949650.72 38949650.93 0.0090 0.0011

Jupiter 101928-12-27 21:21 G 38949858.19 38949858.39 38949858.58 0.0524 0.0027

Neptune 101929-01-14 17:45 G 38949876.03 38949876.24 38949876.46 0.0090 0.0001

Neptune 101929-08-28 06:28 G 38950101.56 38950101.77 38950101.99 0.0090 0.0011

Neptune 101930-04-10 18:57 G 38950327.09 38950327.29 38950327.51 0.0090 0.0021

Neptune 101930-11-22 07:40 G 38950552.62 38950552.82 38950553.02 0.0090 0.0032

Neptune 101931-07-05 20:09 G 38950778.16 38950778.34 38950778.54 0.0090 0.0043

Neptune 101932-02-16 08:23 G 38951003.70 38951003.85 38951004.05 0.0090 0.0054

Neptune 101932-09-28 21:21 G 38951229.25 38951229.39 38951229.55 0.0090 0.0064

Neptune 101933-05-12 09:35 G 38951454.80 38951454.90 38951455.04 0.0090 0.0075

Neptune 101933-12-23 22:18 G 38951680.38 38951680.43 38951680.51 0.0090 0.0085

Jupiter 101934-11-02 20:52 G 38951994.17 38951994.37 38951994.57 0.0501 0.0110

Saturn 101938-07-18 00:28 G 38953347.39 38953347.52 38953347.67 0.0279 0.0212

Saturn 101939-03-04 15:35 G 38953576.95 38953577.15 38953577.37 0.0276 0.0066

Uranus 101939-07-02 14:09 G 38953697.06 38953697.09 38953697.12 0.0135 0.0133

Uranus 101940-02-13 18:28 G 38953923.18 38953923.27 38953923.39 0.0135 0.0117

Jupiter 101940-09-01 17:16 G 38954124.04 38954124.22 38954124.39 0.0523 0.0252

Uranus 101940-09-26 23:16 G 38954149.33 38954149.47 38954149.62 0.0135 0.0100

Uranus 101941-05-11 03:50 G 38954375.50 38954375.66 38954375.84 0.0135 0.0083

Uranus 101941-12-23 08:38 G 38954601.68 38954601.86 38954602.05 0.0135 0.0066

Uranus 101942-08-06 13:26 G 38954827.87 38954828.06 38954828.26 0.0135 0.0049

Uranus 101943-03-20 18:14 G 38955054.06 38955054.26 38955054.47 0.0135 0.0032

Uranus 101943-11-01 23:16 G 38955280.26 38955280.47 38955280.68 0.0135 0.0014

Uranus 101944-06-15 04:04 G 38955506.46 38955506.67 38955506.89 0.0135 0.0004

Uranus 101945-01-27 09:06 G 38955732.67 38955732.88 38955733.09 0.0135 0.0021

Uranus 101945-09-10 14:23 G 38955958.89 38955959.10 38955959.30 0.0135 0.0039

Uranus 101946-04-24 19:11 G 38956185.12 38956185.30 38956185.51 0.0135 0.0057

Jupiter 101946-07-08 18:42 G 38956260.08 38956260.28 38956260.49 0.0502 0.0093

Uranus 101946-12-07 00:42 G 38956411.35 38956411.53 38956411.71 0.0135 0.0074

Uranus 101947-07-21 05:45 G 38956637.60 38956637.74 38956637.91 0.0136 0.0092

Uranus 101948-03-03 11:16 G 38956863.85 38956863.97 38956864.11 0.0136 0.0109

Uranus 101948-10-15 17:02 G 38957090.14 38957090.21 38957090.30 0.0136 0.0126

Mars 101952-03-12 17:45 G 38958334.10 38958334.24 38958334.37 0.1638 0.1045

Jupiter 101952-05-07 15:35 G 38958390.07 38958390.15 38958390.24 0.0522 0.0468

Jupiter 101952-12-30 16:04 G 38958627.02 38958627.17 38958627.33 0.0527 0.0336

Saturn 101954-11-06 10:04 G 38959302.76 38959302.92 38959303.09 0.0283 0.0173

Saturn 101955-06-23 20:52 G 38959532.18 38959532.37 38959532.56 0.0286 0.0113

Jupiter 101958-03-13 14:52 G 38960525.96 38960526.12 38960526.29 0.0503 0.0299

Jupiter 101958-11-05 13:40 G 38960762.98 38960763.07 38960763.18 0.0499 0.0433

Jupiter 101964-09-04 13:26 G 38962892.86 38962893.06 38962893.25 0.0525 0.0113

Saturn 101968-01-27 23:59 G 38964133.35 38964133.50 38964133.67 0.0279 0.0187

Saturn 101968-09-13 14:52 G 38964362.92 38964363.12 38964363.33 0.0276 0.0091

Jupiter 101970-07-11 11:30 G 38965028.80 38965028.98 38965029.16 0.0500 0.0234

Jupiter 101976-05-10 09:35 G 38967158.70 38967158.90 38967159.09 0.0523 0.0114

Uranus 101981-08-24 06:28 G 38969090.72 38969090.77 38969090.86 0.0143 0.0137

Jupiter 101982-03-16 09:06 G 38969294.67 38969294.88 38969295.09 0.0502 0.0032

Uranus 101982-04-07 19:40 G 38969317.21 38969317.32 38969317.47 0.0143 0.0116

Uranus 101982-11-20 09:06 G 38969543.72 38969543.88 38969544.05 0.0143 0.0094

Uranus 101983-07-04 21:50 G 38969770.23 38969770.41 38969770.62 0.0143 0.0073

Uranus 101984-02-16 11:02 G 38969996.76 38969996.96 38969997.18 0.0143 0.0051

Saturn 101984-05-18 11:59 G 38970088.83 38970089.00 38970089.18 0.0284 0.0141

Uranus 101984-09-29 23:59 G 38970223.29 38970223.50 38970223.72 0.0143 0.0029

Saturn 101985-01-02 23:02 G 38970318.29 38970318.46 38970318.64 0.0287 0.0147

Uranus 101985-05-14 12:42 G 38970449.81 38970450.03 38970450.26 0.0143 0.0007

Uranus 101985-12-27 01:26 G 38970676.34 38970676.56 38970676.78 0.0143 0.0015

Mars 101986-01-09 10:04 G 38970689.79 38970689.92 38970690.04 0.1627 0.1116

Uranus 101986-08-10 13:40 G 38970902.87 38970903.07 38970903.29 0.0143 0.0037

Uranus 101987-03-25 02:09 G 38971129.40 38971129.59 38971129.80 0.0143 0.0058

Uranus 101987-11-06 14:23 G 38971355.92 38971356.10 38971356.29 0.0143 0.0079

Jupiter 101988-01-14 06:42 G 38971424.63 38971424.78 38971424.93 0.0522 0.0335

Uranus 101988-06-20 02:23 G 38971582.45 38971582.60 38971582.76 0.0143 0.0100

Jupiter 101988-09-07 07:11 G 38971661.72 38971661.80 38971661.89 0.0527 0.0472

Uranus 101989-02-01 13:54 G 38971808.99 38971809.08 38971809.22 0.0142 0.0121

Uranus 101989-09-16 01:40 G 38972035.56 38972035.57 38972035.62 0.0142 0.0141

Jupiter 101993-11-19 06:28 G 38973560.57 38973560.77 38973560.96 0.0503 0.0175

Saturn 101997-08-09 03:35 G 38974919.47 38974919.65 38974919.84 0.0279 0.0150

Saturn 101998-03-26 18:28 G 38975149.08 38975149.27 38975149.46 0.0276 0.0126

Jupiter 102000-05-13 02:23 G 38975927.42 38975927.60 38975927.78 0.0526 0.0242

103RD MILLENNIUM CE

This is a list of transits of Venus in the 103rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**102005-07-25 03:50**	**G**	**38977826.53**	**38977826.66**	**38977826.81**	**0.0504**	**0.0379**	
Jupiter	**102006-03-19 03:06**	**G**	**38978063.49**	**38978063.63**	**38978063.78**	**0.0499**	**0.0357**	
Neptune	**102006-11-04 23:45**	**G**	**38978294.43**	**38978294.49**	**38978294.57**	**0.0088**	**0.0083**	
Neptune	**102007-06-18 12:57**	**G**	**38978519.94**	**38978520.04**	**38978520.18**	**0.0088**	**0.0073**	
Neptune	**102008-01-30 02:38**	**G**	**38978745.47**	**38978745.61**	**38978745.78**	**0.0088**	**0.0063**	
Neptune	**102008-09-11 16:18**	**G**	**38978971.01**	**38978971.18**	**38978971.37**	**0.0088**	**0.0052**	
Neptune	**102009-04-25 05:30**	**G**	**38979196.55**	**38979196.73**	**38979196.94**	**0.0088**	**0.0042**	
Moon	**102009-04-28 06:14**	**G**	**38979199.60**	**38979199.76**	**38979199.92**	**0.2631**	**0.0391**	
Earth	**102009-04-28 11:45**	**G**	**38979199.84**	**38979199.99**	**38979200.15**	**0.2628**	**0.0882**	*****
Neptune	**102009-12-06 18:57**	**G**	**38979422.10**	**38979422.29**	**38979422.52**	**0.0088**	**0.0032**	
Neptune	**102010-07-20 08:38**	**G**	**38979647.65**	**38979647.86**	**38979648.08**	**0.0088**	**0.0021**	
Neptune	**102011-03-02 22:18**	**G**	**38979873.21**	**38979873.43**	**38979873.66**	**0.0088**	**0.0010**	
Neptune	**102011-10-14 11:45**	**G**	**38980098.76**	**38980098.99**	**38980099.22**	**0.0088**	**0.0000**	
Jupiter	**102012-01-16 23:59**	**G**	**38980193.31**	**38980193.50**	**38980193.70**	**0.0525**	**0.0021**	
Neptune	**102012-05-27 00:57**	**G**	**38980324.32**	**38980324.54**	**38980324.77**	**0.0088**	**0.0011**	
Neptune	**102013-01-07 14:23**	**G**	**38980549.89**	**38980550.10**	**38980550.32**	**0.0088**	**0.0021**	
Neptune	**102013-08-21 03:35**	**G**	**38980775.46**	**38980775.65**	**38980775.88**	**0.0088**	**0.0032**	
Saturn	**102013-11-28 13:26**	**G**	**38980874.88**	**38980875.06**	**38980875.26**	**0.0284**	**0.0109**	
Neptune	**102014-04-03 17:02**	**G**	**38981001.03**	**38981001.21**	**38981001.42**	**0.0088**	**0.0042**	
Saturn	**102014-07-16 00:42**	**G**	**38981104.37**	**38981104.53**	**38981104.69**	**0.0287**	**0.0180**	

Neptune 102014-11-15 06:42 G 38981226.60 38981226.78 38981226.96 0.0088 0.0052

Neptune 102015-06-28 19:40 G 38981452.19 38981452.32 38981452.50 0.0088 0.0063

Neptune 102016-02-09 09:21 G 38981677.78 38981677.89 38981678.03 0.0088 0.0073

Neptune 102016-09-21 23:02 G 38981903.40 38981903.46 38981903.54 0.0088 0.0083

Jupiter 102017-11-21 23:59 G 38982329.30 38982329.50 38982329.70 0.0500 0.0154

Mars 102018-01-08 04:47 G 38982376.55 38982376.70 38982376.86 0.1635 0.0832

Mars 102022-08-17 20:52 G 38984059.25 38984059.37 38984059.50 0.1906 0.1291

Jupiter 102023-09-21 21:50 G 38984459.23 38984459.41 38984459.60 0.0523 0.0203

Uranus 102023-10-14 06:14 G 38984481.68 38984481.76 38984481.86 0.0135 0.0122

Uranus 102024-05-27 11:02 G 38984707.83 38984707.96 38984708.09 0.0135 0.0105

Uranus 102025-01-08 15:21 G 38984934.00 38984934.14 38984934.32 0.0135 0.0089

Uranus 102025-08-22 20:09 G 38985160.18 38985160.34 38985160.54 0.0135 0.0072

Uranus 102026-04-06 00:57 G 38985386.36 38985386.54 38985386.75 0.0135 0.0055

Uranus 102026-11-18 05:59 G 38985612.55 38985612.75 38985612.96 0.0135 0.0037

Saturn 102027-02-19 02:52 G 38985705.43 38985705.62 38985705.82 0.0279 0.0126

Uranus 102027-07-02 10:47 G 38985838.74 38985838.95 38985839.16 0.0135 0.0020

Saturn 102027-10-06 17:30 G 38985935.06 38985935.23 38985935.42 0.0276 0.0151

Pluto 102028-01-25 06:14 G 38986045.76 38986045.76 38986045.80 0.0064 0.0064

Uranus 102028-02-13 15:50 G 38986064.94 38986065.16 38986065.37 0.0135 0.0003

Pluto 102028-09-06 10:04 G 38986270.73 38986270.92 38986271.13 0.0064 0.0024

Uranus 102028-09-26 20:52 G 38986291.15 38986291.37 38986291.58 0.0135 0.0015

Pluto 102029-04-19 13:26 G 38986495.87 38986496.06 38986496.28 0.0064 0.0018

Uranus 102029-05-11 01:54 G 38986517.37 38986517.58 38986517.79 0.0135 0.0033

Jupiter 102029-07-27 21:06 G 38986595.17 38986595.38 38986595.58 0.0502 0.0051

Pluto 102029-11-30 16:47 G 38986721.14 38986721.20 38986721.32 0.0065 0.0059

Uranus 102029-12-23 06:42 G 38986743.59 38986743.78 38986743.99 0.0135 0.0050

Uranus 102030-08-06 11:59 G 38986969.82 38986970.00 38986970.19 0.0135 0.0068

Uranus 102031-03-20 17:30 G 38987196.06 38987196.23 38987196.40 0.0136 0.0085

Uranus 102031-11-01 22:33 G 38987422.32 38987422.44 38987422.60 0.0136 0.0103

Uranus 102032-06-15 04:04 G 38987648.59 38987648.67 38987648.78 0.0136 0.0120

Jupiter 102035-05-27 18:42 G 38988725.17 38988725.28 38988725.40 0.0521 0.0424

Jupiter 102036-01-19 18:57 G 38988962.15 38988962.29 38988962.43 0.0526 0.0381

Jupiter 102041-04-01 17:45 G 38990861.06 38990861.24 38990861.42 0.0503 0.0257

Jupiter 102041-11-24 16:47 G 38991098.15 38991098.20 38991098.26 0.0499 0.0476

Saturn 102043-06-10 15:50 G 38991660.96 38991661.16 38991661.36 0.0284 0.0076

Saturn 102044-01-26 02:52 G 38991890.50 38991890.62 38991890.77 0.0287 0.0215

Jupiter 102047-09-24 15:06 G 38993227.94 38993228.13 38993228.32 0.0525 0.0155

Mars 102051-11-06 21:50 G 38994732.31 38994732.41 38994732.51 0.1625 0.1317

Jupiter 102052-12-05 15:06 G 38995127.05 38995127.13 38995127.21 0.0505 0.0463

Jupiter 102053-07-30 15:06 G 38995363.95 38995364.13 38995364.30 0.0500 0.0276

Saturn 102056-08-31 06:42 G 38996491.58 38996491.78 38996491.99 0.0278 0.0089

Saturn 102057-04-17 21:21 G 38996721.24 38996721.39 38996721.55 0.0276 0.0187

Jupiter 102059-05-30 10:04 G 38997493.72 38997493.92 38997494.12 0.0524 0.0078

Jupiter 102065-04-04 12:57 G 38999629.84 38999630.04 38999630.25 0.0501 0.0077

Uranus 102065-04-23 14:38 G 38999649.10 38999649.11 38999649.14 0.0143 0.0143

Uranus 102065-12-06 03:50 G 38999875.55 38999875.66 38999875.78 0.0143 0.0122

Uranus 102066-07-20 16:47 G 39000102.06 39000102.20 39000102.37 0.0143 0.0101

Uranus 102067-03-04 06:28 G 39000328.58 39000328.77 39000328.95 0.0143 0.0079

Uranus 102067-10-16 19:11 G 39000555.11 39000555.30 39000555.51 0.0143 0.0057

Uranus 102068-05-30 08:09 G 39000781.63 39000781.84 39000782.06 0.0143 0.0036

Uranus 102069-01-11 20:52 G 39001008.16 39001008.37 39001008.60 0.0143 0.0014

Uranus 102069-08-26 09:50 G 39001234.68 39001234.91 39001235.13 0.0143 0.0008

Uranus 102070-04-09 22:18 G 39001461.22 39001461.43 39001461.65 0.0143 0.0029

Uranus 102070-11-22 10:33 G 39001687.74 39001687.94 39001688.16 0.0143 0.0051

Jupiter 102071-02-02 07:54 G 39001759.67 39001759.83 39001760.00 0.0523 0.0298

Uranus 102071-07-06 22:47 G 39001914.27 39001914.45 39001914.65 0.0143 0.0072

Jupiter 102071-09-27 09:35 G 39001996.86 39001996.90 39001996.94 0.0528 0.0515

Uranus 102072-02-18 10:47 G 39002140.80 39002140.95 39002141.13 0.0143 0.0093

Uranus 102072-10-01 22:47 G 39002367.33 39002367.45 39002367.60 0.0143 0.0113

Saturn 102072-12-20 18:14 G 39002447.06 39002447.26 39002447.47 0.0284 0.0041

Uranus 102073-05-16 10:33 G 39002593.88 39002593.94 39002594.03 0.0142 0.0134

Saturn 102073-08-07 05:30 G 39002676.64 39002676.73 39002676.84 0.0287 0.0250

Jupiter 102076-12-08 09:06 G 39003895.68 39003895.88 39003896.08 0.0502 0.0132

Jupiter 102082-10-08 06:14 G 39006025.73 39006025.76 39006025.80 0.0521 0.0512

Jupiter 102083-06-02 06:28 G 39006262.61 39006262.77 39006262.94 0.0526 0.0291

Mars 102083-11-05 17:02 G 39006419.04 39006419.21 39006419.37 0.1633 0.0635

Saturn 102086-03-13 06:57 G 39007277.58 39007277.79 39007278.00 0.0278 0.0062

Saturn 102086-10-28 21:21 G 39007507.26 39007507.39 39007507.53 0.0275 0.0213

Neptune 102088-05-09 22:33 G 39008066.43 39008066.44 39008066.49 0.0090 0.0089

Mars 102088-06-14 01:11 G 39008101.38 39008101.55 39008101.71 0.1910 0.0670

Jupiter 102088-08-13 05:30 G 39008161.58 39008161.73 39008161.88 0.0504 0.0339

Neptune 102088-12-21 11:16 G 39008291.88 39008291.97 39008292.08 0.0090 0.0078

Jupiter 102089-04-07 04:33 G 39008398.57 39008398.69 39008398.82 0.0499 0.0397

Neptune 102089-08-03 23:45 G 39008517.37 39008517.49 39008517.65 0.0090 0.0068

Neptune 102090-03-17 12:28 G 39008742.87 39008743.02 39008743.20 0.0090 0.0057

Neptune 102090-10-29 00:57 G 39008968.37 39008968.54 39008968.73 0.0090 0.0047

Neptune 102091-06-11 13:26 G 39009193.87 39009194.06 39009194.27 0.0090 0.0036

Neptune 102092-01-23 01:54 G 39009419.39 39009419.58 39009419.80 0.0090 0.0026

Neptune 102092-09-04 14:38 G 39009644.91 39009645.11 39009645.33 0.0090 0.0015

Neptune 102093-04-18 03:21 G 39009870.43 39009870.64 39009870.86 0.0090 0.0004

Neptune 102093-11-29 15:50 G 39010095.95 39010096.16 39010096.38 0.0090 0.0007

Neptune 102094-07-13 04:18 G 39010321.48 39010321.68 39010321.90 0.0090 0.0018

Jupiter 102095-02-05 02:38 G 39010528.41 39010528.61 39010528.80 0.0525 0.0063

Neptune 102095-02-23 16:47 G 39010547.01 39010547.20 39010547.42 0.0090 0.0029

Neptune 102095-10-07 05:45 G 39010772.55 39010772.74 39010772.93 0.0090 0.0039

Neptune 102096-05-19 17:59 G 39010998.09 39010998.25 39010998.44 0.0090 0.0050

Neptune 102096-12-31 06:57 G 39011223.63 39011223.79 39011223.95 0.0090 0.0060

Neptune 102097-08-13 19:11 G 39011449.19 39011449.30 39011449.45 0.0090 0.0071

Neptune 102098-03-27 07:40 G 39011674.76 39011674.82 39011674.93 0.0090 0.0082

Jupiter 102100-12-12 02:09 G 39012664.40 39012664.59 39012664.78 0.0501 0.0195

Saturn 102102-07-03 21:50 G 39013233.20 39013233.41 39013233.61 0.0285 0.0008

Saturn 102103-02-18 09:06 G 39013462.87 39013462.88 39013462.90 0.0288 0.0287

Jupiter 102106-10-11 22:47 G 39014794.26 39014794.45 39014794.64 0.0523 0.0163

Uranus 102107-06-14 17:59 G 39015040.19 39015040.25 39015040.34 0.0135 0.0126

Uranus 102108-01-26 22:47 G 39015266.34 39015266.45 39015266.58 0.0135 0.0110

Uranus 102108-09-09 03:21 G 39015492.50 39015492.64 39015492.81 0.0135 0.0094

Uranus 102109-04-23 08:09 G 39015718.67 39015718.84 39015719.02 0.0135 0.0077

Uranus 102109-12-05 12:42 G 39015944.85 39015945.03 39015945.24 0.0135 0.0060

Uranus 102110-07-19 17:30 G 39016171.04 39016171.23 39016171.44 0.0135 0.0043

Uranus 102111-03-02 22:33 G 39016397.23 39016397.44 39016397.65 0.0135 0.0025

Uranus 102111-10-15 03:21 G 39016623.43 39016623.64 39016623.86 0.0135 0.0008

Uranus 102112-05-28 08:09 G 39016849.63 39016849.84 39016850.06 0.0135 0.0010

Jupiter 102112-08-16 23:59 G 39016930.30 39016930.50 39016930.71 0.0501 0.0012

Uranus 102113-01-09 13:11 G 39017075.84 39017076.05 39017076.26 0.0135 0.0027

Uranus 102113-08-23 18:14 G 39017302.07 39017302.26 39017302.47 0.0135 0.0045

Uranus 102114-04-06 23:30 G 39017528.29 39017528.48 39017528.67 0.0135 0.0062

Uranus 102114-11-19 04:47 G 39017754.53 39017754.70 39017754.87 0.0135 0.0079

Uranus 102115-07-03 09:50 G 39017980.77 39017980.91 39017981.07 0.0136 0.0097

Saturn 102115-09-24 11:30 G 39018063.76 39018063.98 39018064.20 0.0278 0.0023

Uranus 102116-02-14 15:06 G 39018207.03 39018207.13 39018207.27 0.0136 0.0114

Saturn 102116-05-11 01:40 G 39018293.49 39018293.57 39018293.66 0.0275 0.0251

Uranus 102116-09-27 20:52 G 39018433.33 39018433.37 39018433.44 0.0136 0.0131

Pluto 102117-07-31 16:04 G 39018739.98 39018740.17 39018740.38 0.0079 0.0036

Mars 102117-09-04 09:35 G 39018774.84 39018774.90 39018774.97 0.1622 0.1503

Pluto 102118-03-14 02:52 G 39018965.45 39018965.62 39018965.82 0.0079 0.0045

Jupiter 102118-06-16 17:30 G 39019060.11 39019060.23 39019060.37 0.0522 0.0392

Jupiter 102119-02-08 18:42 G 39019297.16 39019297.28 39019297.40 0.0527 0.0417

Moon 102122-10-29 06:57 G 39020655.64 39020655.79 39020655.94 0.2710 0.0222

Earth 102122-10-29 09:06 G 39020655.73 39020655.88 39020656.04 0.2704 0.0140 *

Jupiter 102124-04-21 21:35 G 39021196.21 39021196.40 39021196.59 0.0503 0.0213

Jupiter 102130-10-14 15:35 G 39023562.97 39023563.15 39023563.34 0.0526 0.0193

Saturn 102131-05-29 16:18 G 39023790.09 39023790.18 39023790.29 0.0281 0.0245

Saturn 102132-01-14 01:40 G 39024019.36 39024019.57 39024019.77 0.0284 0.0034

Jupiter 102135-12-26 16:47 G 39025462.09 39025462.20 39025462.32 0.0504 0.0422

Jupiter 102136-08-19 16:18 G 39025699.02 39025699.18 39025699.35 0.0499 0.0317

Jupiter 102142-06-19 13:11 G 39027828.85 39027829.05 39027829.25 0.0524 0.0030

Saturn 102144-08-18 19:54 G 39028620.32 39028620.33 39028620.35 0.0281 0.0280

Saturn 102145-04-05 12:42 G 39028849.81 39028850.03 39028850.25 0.0278 0.0006

Jupiter 102148-04-24 13:11 G 39029964.85 39029965.05 39029965.25 0.0501 0.0113

Uranus 102149-08-06 10:18 G 39030433.85 39030433.93 39030434.04 0.0143 0.0129

Mars 102149-09-03 04:18 G 39030461.51 39030461.68 39030461.85 0.1630 0.0429

Uranus 102150-03-20 23:30 G 39030660.35 39030660.48 39030660.64 0.0143 0.0108

Uranus 102150-11-02 12:42 G 39030886.86 39030887.03 39030887.22 0.0143 0.0086

Uranus 102151-06-17 01:54 G 39031113.38 39031113.58 39031113.78 0.0143 0.0065

Uranus 102152-01-29 14:38 G 39031339.91 39031340.11 39031340.33 0.0143 0.0044

Uranus 102152-09-12 03:50 G 39031566.44 39031566.66 39031566.88 0.0143 0.0022

Uranus 102153-04-26 16:33 G 39031792.97 39031793.19 39031793.41 0.0143 0.0002

Uranus 102153-12-09 05:02 G 39032019.49 39032019.71 39032019.93 0.0143 0.0022

Jupiter 102154-02-22 09:50 G 39032094.73 39032094.91 39032095.08 0.0523 0.0256

Mars 102154-04-12 04:18 G 39032143.51 39032143.68 39032143.85 0.1914 0.0019

Uranus 102154-07-23 17:16 G 39032246.02 39032246.22 39032246.44 0.0143 0.0043

Uranus 102155-03-07 05:59 G 39032472.55 39032472.75 39032472.95 0.0143 0.0064

Uranus 102155-10-19 17:59 G 39032699.08 39032699.25 39032699.43 0.0143 0.0085

Uranus 102156-06-02 05:45 G 39032925.61 39032925.74 39032925.90 0.0143 0.0106

Uranus 102157-01-14 17:45 G 39033152.15 39033152.24 39033152.35 0.0142 0.0126

Jupiter 102159-12-29 09:50 G 39034230.71 39034230.91 39034231.12 0.0502 0.0094

Saturn 102160-12-08 20:09 G 39034576.21 39034576.34 39034576.48 0.0282 0.0210

Saturn 102161-07-26 05:45 G 39034805.54 39034805.74 39034805.94 0.0285 0.0072

Jupiter 102165-10-28 06:14 G 39036360.68 39036360.76 39036360.84 0.0521 0.0476

Jupiter 102166-06-22 06:14 G 39036597.61 39036597.76 39036597.92 0.0526 0.0328

Neptune 102171-02-07 08:23 G 39038288.82 39038288.85 39038288.90 0.0088 0.0086

Jupiter 102171-09-03 07:26 G 39038496.64 39038496.81 39038496.98 0.0504 0.0301

Neptune 102171-09-20 21:35 G 39038514.31 39038514.40 39038514.53 0.0088 0.0076

Jupiter 102172-04-27 06:14 G 39038733.67 39038733.76 39038733.87 0.0499 0.0435

Neptune 102172-05-03 11:02 G 39038739.83 39038739.96 39038740.13 0.0088 0.0066

Neptune 102172-12-15 00:57 G 39038965.37 39038965.54 39038965.71 0.0088 0.0055

Neptune 102173-07-28 14:09 G 39039190.91 39039191.09 39039191.30 0.0088 0.0045

Saturn 102174-03-01 01:40 G 39039406.47 39039406.57 39039406.70 0.0280 0.0238

Neptune 102174-03-11 03:50 G 39039416.46 39039416.66 39039416.88 0.0088 0.0035

Saturn 102174-10-16 18:28 G 39039636.06 39039636.27 39039636.48 0.0278 0.0047

Neptune 102174-10-22 17:30 G 39039642.02 39039642.23 39039642.45 0.0088 0.0024

Neptune 102175-06-05 06:57 G 39039867.57 39039867.79 39039868.02 0.0088 0.0013

Neptune 102176-01-16 20:38 G 39040093.13 39040093.36 39040093.58 0.0088 0.0003

Neptune 102176-08-29 10:04 G 39040318.69 39040318.92 39040319.14 0.0088 0.0007

Neptune 102177-04-11 23:30 G 39040544.26 39040544.48 39040544.70 0.0088 0.0018

Neptune 102177-11-23 12:28 G 39040769.83 39040770.02 39040770.25 0.0088 0.0029

Jupiter 102178-02-25 00:14 G 39040863.31 39040863.51 39040863.70 0.0525 0.0094

Neptune 102178-07-07 02:09 G 39040995.40 39040995.59 39040995.80 0.0088 0.0039

Neptune 102179-02-17 15:50 G 39041220.98 39041221.16 39041221.35 0.0088 0.0049

Neptune 102179-10-01 04:47 G 39041446.56 39041446.70 39041446.89 0.0088 0.0060

Neptune 102180-05-13 18:14 G 39041672.15 39041672.26 39041672.41 0.0088 0.0070

Neptune 102180-12-25 07:54 G 39041897.75 39041897.83 39041897.93 0.0088 0.0080

Jupiter 102184-01-01 04:18 G 39042999.50 39042999.68 39042999.87 0.0500 0.0237

Jupiter 102189-10-30 21:21 G 39045129.19 39045129.39 39045129.58 0.0524 0.0131

Saturn 102190-06-21 01:40 G 39045362.41 39045362.57 39045362.75 0.0282 0.0168

Saturn 102191-02-05 11:30 G 39045591.79 39045591.98 39045592.17 0.0285 0.0115

Uranus 102191-02-12 05:59 G 39045598.71 39045598.75 39045598.80 0.0135 0.0131

Uranus 102191-09-26 10:33 G 39045824.84 39045824.94 39045825.06 0.0135 0.0115

Uranus 102192-05-09 14:52 G 39046050.99 39046051.12 39046051.28 0.0135 0.0099

Uranus 102192-12-21 19:40 G 39046277.16 39046277.32 39046277.50 0.0135 0.0082

Uranus 102193-08-05 00:28 G 39046503.34 39046503.52 39046503.71 0.0135 0.0065

Uranus 102194-03-19 05:02 G 39046729.52 39046729.71 39046729.92 0.0135 0.0048

Uranus 102194-10-31 09:50 G 39046955.71 39046955.91 39046956.12 0.0135 0.0031

Uranus 102195-06-14 14:38 G 39047181.90 39047182.11 39047182.32 0.0135 0.0014

Jupiter 102195-09-05 23:59 G 39047265.30 39047265.50 39047265.71 0.0501 0.0031

Uranus 102196-01-26 19:26 G 39047408.10 39047408.31 39047408.53 0.0135 0.0004

Uranus 102196-09-09 00:28 G 39047634.31 39047634.52 39047634.73 0.0135 0.0021

Uranus 102197-04-23 05:30 G 39047860.53 39047860.73 39047860.94 0.0135 0.0038

Uranus 102197-12-05 10:33 G 39048086.75 39048086.94 39048087.14 0.0135 0.0056

Uranus 102198-07-19 15:21 G 39048312.97 39048313.14 39048313.33 0.0135 0.0073

Uranus 102199-03-02 20:38 G 39048539.22 39048539.36 39048539.53 0.0135 0.0091

Uranus 102199-10-15 02:09 G 39048765.47 39048765.59 39048765.73 0.0136 0.0108

Uranus 102200-05-29 07:40 G 39048991.75 39048991.82 39048991.92 0.0136 0.0125

Jupiter 102201-07-06 19:11 G 39049395.16 39049395.30 39049395.46 0.0522 0.0351

Jupiter 102202-02-28 20:23 G 39049632.26 39049632.35 39049632.45 0.0527 0.0462

Saturn 102203-09-12 05:02 G 39050192.56 39050192.71 39050192.86 0.0280 0.0205

Saturn 102204-04-28 21:06 G 39050422.17 39050422.38 39050422.59 0.0277 0.0079

Jupiter 102207-05-12 20:09 G 39051531.14 39051531.34 39051531.53 0.0503 0.0179

Jupiter 102213-11-03 15:50 G 39053897.98 39053898.16 39053898.34 0.0526 0.0232

Mars 102215-07-02 16:18 G 39054504.01 39054504.18 39054504.36 0.1628 0.0236

Jupiter 102219-01-15 15:50 G 39055797.03 39055797.16 39055797.29 0.0504 0.0390

Jupiter 102219-09-09 15:35 G 39056034.01 39056034.15 39056034.30 0.0500 0.0351

Saturn 102220-01-02 06:42 G 39056148.60 39056148.78 39056148.97 0.0283 0.0129

Mars 102220-02-08 07:54 G 39056185.67 39056185.83 39056185.99 0.1919 0.0649

Saturn 102220-08-18 16:47 G 39056378.03 39056378.20 39056378.38 0.0286 0.0157

Jupiter 102225-07-09 11:30 G 39058163.78 39058163.98 39058164.18 0.0524 0.0008

Jupiter 102231-05-15 13:40 G 39060299.87 39060300.07 39060300.27 0.0501 0.0149

Saturn 102233-03-24 11:45 G 39060978.82 39060978.99 39060979.18 0.0280 0.0160

Uranus 102233-04-06 16:04 G 39060992.11 39060992.17 39060992.25 0.0143 0.0136

Saturn 102233-11-09 03:50 G 39061208.47 39061208.66 39061208.86 0.0277 0.0123

Uranus 102233-11-19 05:02 G 39061218.60 39061218.71 39061218.86 0.0143 0.0115

Uranus 102234-07-03 18:28 G 39061445.11 39061445.27 39061445.44 0.0143 0.0094

Uranus 102235-02-15 07:26 G 39061671.63 39061671.81 39061672.01 0.0143 0.0073

Uranus 102235-09-29 20:23 G 39061898.16 39061898.35 39061898.57 0.0143 0.0052

Uranus 102236-05-13 09:35 G 39062124.68 39062124.90 39062125.11 0.0143 0.0030

Uranus 102236-12-25 22:18 G 39062351.21 39062351.43 39062351.65 0.0143 0.0008

Jupiter 102237-03-14 05:16 G 39062429.55 39062429.72 39062429.90 0.0523 0.0231

Uranus 102237-08-09 10:47 G 39062577.73 39062577.95 39062578.18 0.0143 0.0014

Uranus 102238-03-23 23:30 G 39062804.27 39062804.48 39062804.70 0.0143 0.0035

Uranus 102238-11-05 11:59 G 39063030.80 39063031.00 39063031.20 0.0143 0.0056

Uranus 102239-06-19 23:59 G 39063257.32 39063257.50 39063257.70 0.0143 0.0077

Uranus 102240-02-01 12:14 G 39063483.86 39063484.01 39063484.18 0.0143 0.0098

Uranus 102240-09-14 23:59 G 39063710.39 39063710.50 39063710.64 0.0143 0.0119

Uranus 102241-04-29 11:59 G 39063936.96 39063937.00 39063937.06 0.0142 0.0138

Jupiter 102243-01-18 11:02 G 39064565.75 39064565.96 39064566.17 0.0502 0.0055

Jupiter 102248-11-17 02:38 G 39066695.51 39066695.61 39066695.71 0.0521 0.0450

Jupiter 102249-07-12 03:21 G 39066932.50 39066932.64 39066932.79 0.0527 0.0359

Saturn 102249-07-14 13:54 G 39066934.88 39066935.08 39066935.28 0.0283 0.0084

Saturn 102250-02-28 23:59 G 39067164.35 39067164.50 39067164.64 0.0285 0.0203

Earth 102252-04-30 11:16 G 39067955.81 39067955.97 39067956.12 0.2629 0.0851

Moon 102252-04-30 16:47 G 39067956.07 39067956.20 39067956.32 0.2630 0.1639 *

Neptune 102253-03-26 21:50 G 39068286.33 39068286.41 39068286.51 0.0090 0.0081

Neptune 102253-11-07 10:04 G 39068511.81 39068511.92 39068512.07 0.0090 0.0071

Neptune 102254-06-20 22:47 G 39068737.30 39068737.45 39068737.62 0.0090 0.0060

Jupiter 102254-09-23 05:45 G 39068831.57 39068831.74 39068831.92 0.0503 0.0267

Neptune 102255-02-01 11:16 G 39068962.80 39068962.97 39068963.16 0.0090 0.0050

Jupiter 102255-05-18 04:33 G 39069068.62 39069068.69 39069068.76 0.0499 0.0468

Neptune 102255-09-14 23:59 G 39069188.31 39069188.50 39069188.70 0.0090 0.0039

Neptune 102256-04-27 12:28 G 39069413.82 39069414.02 39069414.23 0.0090 0.0028

Neptune 102256-12-09 00:57 G 39069639.34 39069639.54 39069639.76 0.0090 0.0018

Neptune 102257-07-22 13:40 G 39069864.86 39069865.07 39069865.29 0.0090 0.0007

Neptune 102258-03-05 02:23 G 39070090.38 39070090.60 39070090.81 0.0090 0.0004

Neptune 102258-10-16 14:38 G 39070315.91 39070316.11 39070316.33 0.0090 0.0015

Neptune 102259-05-30 03:21 G 39070541.43 39070541.64 39070541.85 0.0090 0.0025

Neptune 102260-01-10 15:35 G 39070766.96 39070767.15 39070767.36 0.0090 0.0036

Moon 102260-04-28 05:45 G 39070875.64 39070875.74 39070875.84 0.2625 0.2082

Neptune 102260-08-23 04:04 G 39070992.51 39070992.67 39070992.88 0.0090 0.0047

Jupiter 102261-03-17 00:28 G 39071198.33 39071198.52 39071198.72 0.0525 0.0134

Neptune 102261-04-05 17:02 G 39071218.05 39071218.21 39071218.38 0.0090 0.0057

Neptune 102261-11-17 05:16 G 39071443.60 39071443.72 39071443.88 0.0090 0.0068

Neptune 102262-06-30 17:59 G 39071669.16 39071669.25 39071669.37 0.0090 0.0078

Saturn 102262-10-04 16:47 G 39071765.01 39071765.20 39071765.39 0.0280 0.0123

Neptune 102263-02-11 06:14 G 39071894.75 39071894.76 39071894.82 0.0090 0.0089

Saturn 102263-05-22 08:09 G 39071994.67 39071994.84 39071995.02 0.0277 0.0159

Jupiter 102266-05-29 01:11 G 39073097.48 39073097.55 39073097.62 0.0505 0.0476

Jupiter 102267-01-21 01:11 G 39073334.38 39073334.55 39073334.73 0.0500 0.0267

Jupiter 102272-11-19 20:23 G 39075464.16 39075464.35 39075464.55 0.0524 0.0096

Uranus 102275-05-27 22:04 G 39076383.34 39076383.42 39076383.53 0.0135 0.0120

Uranus 102276-01-09 02:38 G 39076609.49 39076609.61 39076609.76 0.0135 0.0104

Pluto 102276-08-11 13:11 G 39076824.91 39076825.05 39076825.23 0.0064 0.0044

Uranus 102276-08-22 07:26 G 39076835.66 39076835.81 39076835.98 0.0135 0.0087

Pluto 102277-03-24 17:02 G 39077050.00 39077050.21 39077050.43 0.0064 0.0003

Uranus 102277-04-05 12:14 G 39077061.83 39077062.01 39077062.19 0.0135 0.0070

Pluto 102277-11-04 20:09 G 39077275.19 39077275.34 39077275.54 0.0065 0.0039

Uranus 102277-11-17 16:33 G 39077288.01 39077288.19 39077288.40 0.0135 0.0054

Uranus 102278-07-01 21:21 G 39077514.19 39077514.39 39077514.60 0.0135 0.0036

Jupiter 102278-09-25 21:35 G 39077600.19 39077600.40 39077600.61 0.0501 0.0059

Saturn 102279-01-24 19:40 G 39077721.12 39077721.32 39077721.53 0.0284 0.0042

Uranus 102279-02-13 02:09 G 39077740.38 39077740.59 39077740.80 0.0135 0.0019

Saturn 102279-09-11 06:14 G 39077950.66 39077950.76 39077950.87 0.0286 0.0247

Uranus 102279-09-27 06:57 G 39077966.58 39077966.79 39077967.01 0.0135 0.0003

Uranus 102280-05-10 11:45 G 39078192.78 39078192.99 39078193.21 0.0135 0.0015

Uranus 102280-12-22 16:47 G 39078418.99 39078419.20 39078419.41 0.0135 0.0032

Mars 102281-04-29 04:18 G 39078546.50 39078546.68 39078546.86 0.1625 0.0038

Uranus 102281-08-05 21:35 G 39078645.21 39078645.40 39078645.61 0.0135 0.0050

Uranus 102282-03-20 02:38 G 39078871.43 39078871.61 39078871.80 0.0135 0.0067

Uranus 102282-11-01 07:54 G 39079097.67 39079097.83 39079098.00 0.0135 0.0084

Uranus 102283-06-15 13:11 G 39079323.92 39079324.05 39079324.20 0.0135 0.0102

Uranus 102284-01-27 18:28 G 39079550.18 39079550.27 39079550.39 0.0136 0.0119

Jupiter 102284-07-25 16:33 G 39079730.04 39079730.19 39079730.35 0.0522 0.0321

Uranus 102284-09-10 00:28 G 39079776.52 39079776.52 39079776.53 0.0136 0.0135

Jupiter 102285-03-19 17:16 G 39079967.15 39079967.22 39079967.29 0.0527 0.0491

Mars 102285-12-05 10:33 G 39080227.82 39080227.94 39080228.07 0.1923 0.1357

Jupiter 102290-05-31 18:57 G 39081866.09 39081866.29 39081866.49 0.0503 0.0147

Saturn 102292-04-16 00:57 G 39082551.33 39082551.54 39082551.75 0.0279 0.0075

Saturn 102292-12-01 16:04 G 39082781.03 39082781.17 39082781.32 0.0276 0.0204

Jupiter 102296-11-22 10:04 G 39084232.75 39084232.92 39084233.10 0.0526 0.0256

Jupiter 102302-02-04 15:35 G 39086132.00 39086132.15 39086132.30 0.0504 0.0354

Jupiter 102302-09-29 14:52 G 39086369.00 39086369.12 39086369.26 0.0499 0.0387

Saturn 102307-12-21 19:26 G 39088278.27 39088278.31 39088278.37 0.0281 0.0271

Jupiter 102308-07-29 06:57 G 39088498.59 39088498.79 39088498.98 0.0525 0.0031

Saturn 102308-08-07 04:18 G 39088507.48 39088507.68 39088507.89 0.0283 0.0009

Jupiter 102314-06-04 10:18 G 39090634.73 39090634.93 39090635.12 0.0500 0.0179

Uranus 102317-07-20 09:06 G 39091776.78 39091776.88 39091777.01 0.0143 0.0124

Uranus 102318-03-03 22:33 G 39092003.29 39092003.44 39092003.60 0.0143 0.0103

Uranus 102318-10-16 11:30 G 39092229.81 39092229.98 39092230.17 0.0143 0.0082

Uranus 102319-05-31 00:28 G 39092456.33 39092456.52 39092456.73 0.0143 0.0060

Uranus 102320-01-12 13:26 G 39092682.85 39092683.06 39092683.28 0.0143 0.0039

Jupiter 102320-04-03 04:18 G 39092764.50 39092764.68 39092764.87 0.0523 0.0195

Uranus 102320-08-26 02:23 G 39092909.38 39092909.60 39092909.82 0.0143 0.0017

Uranus 102321-04-09 15:06 G 39093135.91 39093136.13 39093136.35 0.0143 0.0005

Saturn 102321-10-28 07:11 G 39093337.58 39093337.80 39093338.01 0.0279 0.0035

Uranus 102321-11-22 03:35 G 39093362.44 39093362.65 39093362.87 0.0143 0.0026

Saturn 102322-06-14 21:50 G 39093567.32 39093567.41 39093567.52 0.0276 0.0243

Uranus 102322-07-06 16:04 G 39093588.96 39093589.17 39093589.38 0.0143 0.0047

Uranus 102323-02-18 04:18 G 39093815.50 39093815.68 39093815.88 0.0143 0.0068

Uranus 102323-10-02 16:33 G 39094042.03 39094042.19 39094042.37 0.0143 0.0089

Uranus 102324-05-16 04:33 G 39094268.56 39094268.69 39094268.84 0.0143 0.0110

Uranus 102324-12-28 16:33 G 39094495.11 39094495.19 39094495.29 0.0142 0.0130

Jupiter 102326-02-07 06:28 G 39094900.56 39094900.77 39094900.98 0.0502 0.0029

Jupiter 102331-12-08 00:57 G 39097030.43 39097030.54 39097030.66 0.0521 0.0418

Jupiter 102332-08-01 01:26 G 39097267.43 39097267.56 39097267.69 0.0526 0.0392

Neptune 102335-12-25 06:28 G 39098508.70 39098508.77 39098508.89 0.0088 0.0079

Neptune 102336-08-06 19:54 G 39098734.22 39098734.33 39098734.49 0.0088 0.0069

Neptune 102337-03-20 09:50 G 39098959.75 39098959.91 39098960.09 0.0088 0.0058

Saturn 102337-07-03 01:26 G 39099064.46 39099064.56 39099064.69 0.0281 0.0231

Jupiter 102337-10-13 01:40 G 39099166.39 39099166.57 39099166.76 0.0503 0.0241

Neptune 102337-10-31 23:02 G 39099185.29 39099185.46 39099185.67 0.0088 0.0048

Saturn 102338-02-17 10:33 G 39099293.74 39099293.94 39099294.15 0.0284 0.0051

Jupiter 102338-06-07 00:42 G 39099403.51 39099403.53 39099403.55 0.0499 0.0496

Neptune 102338-06-14 12:57 G 39099410.84 39099411.04 39099411.25 0.0088 0.0037

Neptune 102339-01-26 02:23 G 39099636.39 39099636.60 39099636.82 0.0088 0.0027

Neptune 102339-09-08 15:50 G 39099861.95 39099862.16 39099862.39 0.0088 0.0017

Neptune 102340-04-21 05:30 G 39100087.51 39100087.73 39100087.96 0.0088 0.0006

Neptune 102340-12-02 18:57 G 39100313.07 39100313.29 39100313.52 0.0088 0.0005

Neptune 102341-07-16 08:23 G 39100538.63 39100538.85 39100539.08 0.0088 0.0015

Neptune 102342-02-26 21:50 G 39100764.21 39100764.41 39100764.64 0.0088 0.0026

Neptune 102342-10-10 11:16 G 39100989.78 39100989.97 39100990.19 0.0088 0.0036

Neptune 102343-05-24 00:57 G 39101215.35 39101215.54 39101215.73 0.0088 0.0046

Neptune 102344-01-04 13:54 G 39101440.93 39101441.08 39101441.27 0.0088 0.0057

Jupiter 102344-04-05 20:23 G 39101533.16 39101533.35 39101533.54 0.0525 0.0161

Neptune 102344-08-17 03:35 G 39101666.52 39101666.65 39101666.81 0.0088 0.0067

Neptune 102345-03-30 16:47 G 39101892.12 39101892.20 39101892.33 0.0088 0.0078

Neptune 102345-11-11 06:28 G 39102117.77 39102117.77 39102117.80 0.0088 0.0088

Mars 102347-02-25 16:04 G 39102588.99 39102589.17 39102589.34 0.1623 0.0168

Jupiter 102349-06-17 22:04 G 39103432.34 39103432.42 39103432.52 0.0505 0.0450

Jupiter 102350-02-09 22:47 G 39103669.28 39103669.45 39103669.62 0.0500 0.0297

Saturn 102350-09-22 22:47 G 39103894.42 39103894.45 39103894.51 0.0281 0.0274

Saturn 102351-05-10 16:04 G 39104123.95 39104124.17 39104124.38 0.0278 0.0014

Jupiter 102355-12-10 13:40 G 39105798.88 39105799.07 39105799.27 0.0524 0.0075

Uranus 102359-01-26 09:06 G 39106941.82 39106941.88 39106941.97 0.0135 0.0126

Uranus 102359-09-09 14:09 G 39107167.97 39107168.09 39107168.22 0.0135 0.0109

Uranus 102360-04-22 18:28 G 39107394.13 39107394.27 39107394.44 0.0135 0.0093

Uranus 102360-12-04 23:16 G 39107620.30 39107620.47 39107620.65 0.0135 0.0076

Uranus 102361-07-19 03:50 G 39107846.47 39107846.66 39107846.85 0.0135 0.0059

Jupiter 102361-10-15 19:40 G 39107935.12 39107935.32 39107935.53 0.0501 0.0094

Uranus 102362-03-02 08:23 G 39108072.65 39108072.85 39108073.06 0.0135 0.0043

Uranus 102362-10-14 13:11 G 39108298.84 39108299.05 39108299.26 0.0135 0.0025

Uranus 102363-05-28 17:59 G 39108525.03 39108525.25 39108525.46 0.0135 0.0008

Uranus 102364-01-09 22:47 G 39108751.23 39108751.45 39108751.66 0.0135 0.0009

Uranus 102364-08-23 03:35 G 39108977.45 39108977.65 39108977.87 0.0135 0.0026

Uranus 102365-04-06 08:38 G 39109203.66 39109203.86 39109204.07 0.0135 0.0044

Earth 102365-10-31 11:45 G 39109411.84 39109411.99 39109412.15 0.2704 0.0071

Moon 102365-10-31 15:50 G 39109412.00 39109412.16 39109412.31 0.2698 0.0463 *

Uranus 102365-11-18 13:26 G 39109429.88 39109430.06 39109430.26 0.0135 0.0061

Pluto 102366-02-16 00:14 G 39109519.28 39109519.51 39109519.74 0.0079 0.0003

Uranus 102366-07-02 18:28 G 39109656.11 39109656.27 39109656.46 0.0135 0.0079

Pluto 102366-09-29 10:18 G 39109744.90 39109744.93 39109745.00 0.0079 0.0077

Saturn 102367-01-13 10:33 G 39109850.79 39109850.94 39109851.10 0.0282 0.0181

Uranus 102367-02-13 23:45 G 39109882.36 39109882.49 39109882.66 0.0135 0.0096

Jupiter 102367-08-15 10:33 G 39110064.78 39110064.94 39110065.10 0.0522 0.0299

Saturn 102367-08-30 19:54 G 39110080.14 39110080.33 39110080.53 0.0284 0.0103

Uranus 102367-09-28 05:16 G 39110108.62 39110108.72 39110108.86 0.0135 0.0113

Jupiter 102368-04-08 11:30 G 39110301.95 39110301.98 39110302.03 0.0527 0.0516

Uranus 102368-05-11 11:16 G 39110334.91 39110334.97 39110335.03 0.0136 0.0129

Jupiter 102373-06-20 14:23 G 39112200.90 39112201.10 39112201.30 0.0502 0.0120

Jupiter 102379-04-20 08:23 G 39114330.83 39114330.85 39114330.88 0.0521 0.0516

Jupiter 102379-12-13 08:23 G 39114567.69 39114567.85 39114568.02 0.0526 0.0291

Saturn 102380-04-04 06:57 G 39114680.68 39114680.79 39114680.92 0.0281 0.0229

Saturn 102380-11-19 23:30 G 39114910.27 39114910.48 39114910.70 0.0278 0.0058

Mars 102383-10-03 12:42 G 39115958.00 39115958.03 39115958.05 0.1913 0.1884

Jupiter 102385-02-23 09:49 G 39116466.76 39116466.91 39116467.07 0.0504 0.0331

Jupiter 102385-10-18 09:06 G 39116703.77 39116703.88 39116704.00 0.0499 0.0410

Jupiter 102391-08-18 04:33 G 39118833.49 39118833.69 39118833.89 0.0525 0.0061

Saturn 102396-07-25 17:01 G 39120637.03 39120637.21 39120637.39 0.0282 0.0138

Saturn 102397-03-12 02:37 G 39120866.44 39120866.61 39120866.79 0.0285 0.0148

Jupiter 102397-06-23 05:16 G 39120969.53 39120969.72 39120969.91 0.0501 0.0204

Uranus 102401-03-19 13:54 G 39122335.00 39122335.08 39122335.17 0.0143 0.0132

Uranus 102401-11-01 02:37 G 39122561.49 39122561.61 39122561.77 0.0143 0.0112

Uranus 102402-06-15 15:49 G 39122788.00 39122788.16 39122788.34 0.0143 0.0090

Uranus 102403-01-28 04:47 G 39123014.52 39123014.70 39123014.91 0.0143 0.0069

Jupiter 102403-04-22 23:59 G 39123099.31 39123099.50 39123099.69 0.0523 0.0168

Uranus 102403-09-11 17:59 G 39123241.04 39123241.25 39123241.46 0.0143 0.0048

Uranus 102404-04-25 06:42 G 39123467.57 39123467.78 39123468.00 0.0143 0.0026

Uranus 102404-12-07 19:25 G 39123694.09 39123694.31 39123694.53 0.0143 0.0005

Uranus 102405-07-22 07:54 G 39123920.62 39123920.83 39123921.06 0.0143 0.0017

Uranus 102406-03-05 20:37 G 39124147.15 39124147.36 39124147.58 0.0143 0.0038

Uranus 102406-10-18 09:06 G 39124373.68 39124373.88 39124374.08 0.0143 0.0059

Uranus 102407-06-01 21:06 G 39124600.21 39124600.38 39124600.58 0.0143 0.0080

Uranus 102408-01-14 09:21 G 39124826.74 39124826.89 39124827.06 0.0143 0.0101

Uranus 102408-08-27 21:21 G 39125053.29 39125053.39 39125053.52 0.0143 0.0121

Jupiter 102409-02-26 02:37 G 39125235.40 39125235.61 39125235.82 0.0502 0.0005

Uranus 102409-04-11 09:35 G 39125279.88 39125279.90 39125279.94 0.0142 0.0141

Saturn 102409-10-15 16:18 G 39125467.02 39125467.18 39125467.35 0.0280 0.0179

Saturn 102410-06-02 08:37 G 39125696.66 39125696.86 39125697.06 0.0277 0.0106

Mars 102412-12-23 04:04 G 39126631.50 39126631.67 39126631.84 0.1620 0.0352

Jupiter 102414-12-26 17:59 G 39127365.13 39127365.25 39127365.38 0.0521 0.0398

Jupiter 102415-08-20 18:13 G 39127602.14 39127602.26 39127602.38 0.0526 0.0412

Neptune 102417-06-29 08:09 G 39128280.78 39128280.84 39128280.93 0.0090 0.0084

Neptune 102418-02-09 20:37 G 39128506.26 39128506.36 39128506.50 0.0090 0.0074

Neptune 102418-09-23 09:21 G 39128731.75 39128731.89 39128732.05 0.0090 0.0063

Neptune 102419-05-06 21:49 G 39128957.25 39128957.41 39128957.60 0.0090 0.0053

Neptune 102419-12-18 10:33 G 39129182.76 39129182.94 39129183.14 0.0090 0.0042

Neptune 102420-07-30 23:01 G 39129408.27 39129408.46 39129408.67 0.0090 0.0032

Jupiter 102420-10-31 23:01 G 39129501.27 39129501.46 39129501.65 0.0504 0.0210

Neptune 102421-03-13 11:45 G 39129633.79 39129633.99 39129634.20 0.0090 0.0021

Neptune 102421-10-25 00:13 G 39129859.30 39129859.51 39129859.73 0.0090 0.0010

Neptune 102422-06-07 12:42 G 39130084.82 39130085.03 39130085.25 0.0090 0.0002

Neptune 102423-01-19 01:11 G 39130310.34 39130310.55 39130310.77 0.0090 0.0011

Neptune 102423-09-01 13:54 G 39130535.87 39130536.08 39130536.29 0.0090 0.0022

Neptune 102424-04-14 02:09 G 39130761.40 39130761.59 39130761.80 0.0090 0.0033

Neptune 102424-11-25 14:37 G 39130986.94 39130987.11 39130987.31 0.0090 0.0044

Neptune 102425-07-09 03:21 G 39131212.48 39131212.64 39131212.82 0.0090 0.0054

Saturn 102426-02-05 02:09 G 39131423.40 39131423.59 39131423.79 0.0283 0.0088

Neptune 102426-02-19 15:35 G 39131438.02 39131438.15 39131438.32 0.0090 0.0065

Saturn 102426-09-22 12:13 G 39131652.87 39131653.01 39131653.16 0.0285 0.0200

Neptune 102426-10-03 04:33 G 39131663.58 39131663.69 39131663.81 0.0090 0.0075

Jupiter 102427-04-25 14:09 G 39131867.90 39131868.09 39131868.27 0.0525 0.0184

Neptune 102427-05-16 16:47 G 39131889.16 39131889.20 39131889.28 0.0090 0.0086

Jupiter 102432-07-06 17:01 G 39133767.11 39133767.21 39133767.33 0.0505 0.0425

Jupiter 102433-02-28 17:16 G 39134004.06 39134004.22 39134004.38 0.0500 0.0321

Jupiter 102438-12-29 11:16 G 39136133.78 39136133.97 39136134.17 0.0524 0.0043

Saturn 102439-04-28 00:57 G 39136253.36 39136253.54 39136253.74 0.0280 0.0133

Saturn 102439-12-13 16:33 G 39136483.02 39136483.19 39136483.38 0.0277 0.0151

Uranus 102442-09-25 20:09 G 39137500.31 39137500.34 39137500.41 0.0135 0.0131

Uranus 102443-05-10 00:42 G 39137726.44 39137726.53 39137726.66 0.0135 0.0115

Uranus 102443-12-22 05:16 G 39137952.59 39137952.72 39137952.88 0.0135 0.0099

Uranus 102444-08-04 10:04 G 39138178.76 39138178.92 39138179.10 0.0135 0.0082

Jupiter 102444-11-03 13:25 G 39138269.86 39138270.06 39138270.27 0.0501 0.0115

Mars 102444-12-21 22:18 G 39138318.39 39138318.43 39138318.48 0.1628 0.1577

Uranus 102445-03-18 14:52 G 39138404.93 39138405.12 39138405.31 0.0135 0.0065

Uranus 102445-10-30 19:11 G 39138631.11 39138631.30 39138631.51 0.0135 0.0049

Uranus 102446-06-13 23:59 G 39138857.30 39138857.50 39138857.71 0.0135 0.0032

Uranus 102447-01-26 04:47 G 39139083.49 39139083.70 39139083.91 0.0135 0.0014

Uranus 102447-09-09 09:49 G 39139309.69 39139309.91 39139310.12 0.0135 0.0004

Uranus 102448-04-22 14:37 G 39139535.90 39139536.11 39139536.32 0.0135 0.0020

Uranus 102448-12-04 19:25 G 39139762.11 39139762.31 39139762.52 0.0135 0.0037

Uranus 102449-07-19 00:28 G 39139988.33 39139988.52 39139988.72 0.0135 0.0054

Mars 102449-07-30 15:35 G 39140000.02 39140000.15 39140000.29 0.1917 0.1216

Uranus 102450-03-02 05:30 G 39140214.56 39140214.73 39140214.92 0.0135 0.0072

Jupiter 102450-09-03 08:09 G 39140399.67 39140399.84 39140400.01 0.0522 0.0268

Uranus 102450-10-14 11:01 G 39140440.80 39140440.96 39140441.12 0.0135 0.0089

Uranus 102451-05-28 16:18 G 39140667.06 39140667.18 39140667.32 0.0136 0.0106

Uranus 102452-01-09 21:35 G 39140893.33 39140893.40 39140893.51 0.0136 0.0123

Saturn 102455-08-18 08:09 G 39142209.63 39142209.84 39142210.04 0.0283 0.0046

Saturn 102456-04-03 18:28 G 39142439.16 39142439.27 39142439.38 0.0286 0.0244

Jupiter 102456-07-09 09:06 G 39142535.67 39142535.88 39142536.08 0.0503 0.0097

Jupiter 102462-05-09 04:18 G 39144665.62 39144665.68 39144665.75 0.0520 0.0490

Jupiter 102463-01-01 03:49 G 39144902.51 39144902.66 39144902.82 0.0526 0.0317

Jupiter 102468-03-14 05:30 G 39146801.57 39146801.73 39146801.89 0.0504 0.0306

Jupiter 102468-11-06 05:16 G 39147038.62 39147038.72 39147038.82 0.0500 0.0438

Saturn 102468-11-07 10:04 G 39147039.72 39147039.92 39147040.13 0.0279 0.0083

Saturn 102469-06-25 01:11 G 39147269.41 39147269.55 39147269.71 0.0276 0.0199

Jupiter 102474-09-05 21:35 G 39149168.20 39149168.40 39149168.60 0.0524 0.0082

Mars 102478-10-20 15:49 G 39150674.00 39150674.16 39150674.33 0.1618 0.0548

Jupiter 102480-07-12 02:23 G 39151304.42 39151304.60 39151304.78 0.0501 0.0235

Saturn 102484-07-13 08:09 G 39152766.82 39152766.84 39152766.89 0.0281 0.0276

Uranus 102484-11-16 19:25 G 39152893.27 39152893.31 39152893.37 0.0143 0.0139

Saturn 102485-02-27 17:01 G 39152996.01 39152996.21 39152996.42 0.0284 0.0005

Uranus 102485-07-01 08:09 G 39153119.74 39153119.84 39153119.98 0.0143 0.0120

Uranus 102486-02-12 21:21 G 39153346.24 39153346.39 39153346.57 0.0143 0.0099

Jupiter 102486-05-11 17:45 G 39153434.05 39153434.24 39153434.44 0.0523 0.0146

Uranus 102486-09-27 10:18 G 39153572.76 39153572.93 39153573.13 0.0143 0.0078

Uranus 102487-05-11 23:16 G 39153799.27 39153799.47 39153799.68 0.0143 0.0056

Uranus 102487-12-24 11:59 G 39154025.79 39154026.00 39154026.22 0.0143 0.0035

Uranus 102488-08-07 00:42 G 39154252.31 39154252.53 39154252.75 0.0143 0.0014

Uranus 102489-03-21 13:25 G 39154478.84 39154479.06 39154479.29 0.0143 0.0008

Uranus 102489-11-03 01:54 G 39154705.37 39154705.58 39154705.80 0.0143 0.0029

Uranus 102490-06-17 14:23 G 39154931.89 39154932.10 39154932.31 0.0143 0.0050

Uranus 102491-01-30 02:37 G 39155158.42 39155158.61 39155158.81 0.0143 0.0071

Uranus 102491-09-13 14:37 G 39155384.96 39155385.11 39155385.29 0.0143 0.0092

Jupiter 102492-03-16 21:21 G 39155570.18 39155570.39 39155570.59 0.0502 0.0024

Uranus 102492-04-27 03:06 G 39155611.50 39155611.63 39155611.77 0.0142 0.0112

Uranus 102492-12-09 15:06 G 39155838.05 39155838.13 39155838.21 0.0142 0.0132

Moon 102495-05-02 06:13 G 39156711.59 39156711.76 39156711.93 0.2626 0.0066

Earth 102495-05-02 11:01 G 39156711.81 39156711.96 39156712.11 0.2629 0.0879 *

Jupiter 102498-01-14 15:21 G 39157700.00 39157700.14 39157700.28 0.0522 0.0369

Saturn 102498-05-20 18:57 G 39157826.08 39157826.29 39157826.51 0.0279 0.0036

Jupiter 102498-09-08 16:04 G 39157937.07 39157937.17 39157937.28 0.0527 0.0447

Saturn 102499-01-05 09:49 G 39158055.82 39158055.91 39158056.02 0.0276 0.0244

Neptune 102500-03-28 16:18 G 39158503.10 39158503.18 39158503.27 0.0088 0.0081

Neptune 102500-11-09 05:30 G 39158728.61 39158728.73 39158728.88 0.0088 0.0071

Neptune 102501-06-22 18:57 G 39158954.14 39158954.29 39158954.47 0.0088 0.0061

Neptune 102502-02-03 08:52 G 39159179.69 39159179.87 39159180.06 0.0088 0.0050

Neptune 102502-09-16 22:04 G 39159405.23 39159405.42 39159405.63 0.0088 0.0040

Neptune 102503-04-30 11:30 G 39159630.78 39159630.98 39159631.21 0.0088 0.0030

Jupiter 102503-11-21 17:16 G 39159836.03 39159836.22 39159836.41 0.0503 0.0187

Neptune 102503-12-12 01:11 G 39159856.34 39159856.55 39159856.78 0.0088 0.0019

Neptune 102504-07-24 14:52 G 39160081.90 39160082.12 39160082.34 0.0088 0.0008

Neptune 102505-03-07 04:33 G 39160307.46 39160307.69 39160307.92 0.0088 0.0002

Neptune 102505-10-18 17:59 G 39160533.03 39160533.25 39160533.48 0.0088 0.0012

Neptune 102506-06-01 07:25 G 39160758.60 39160758.81 39160759.03 0.0088 0.0023

Neptune 102507-01-12 20:37 G 39160984.17 39160984.36 39160984.59 0.0088 0.0034

Neptune 102507-08-26 10:18 G 39161209.75 39161209.93 39161210.14 0.0088 0.0044

Neptune 102508-04-07 23:59 G 39161435.33 39161435.50 39161435.68 0.0088 0.0054

Neptune 102508-11-19 12:57 G 39161660.92 39161661.04 39161661.22 0.0088 0.0065

Neptune 102509-07-03 02:37 G 39161886.51 39161886.61 39161886.74 0.0088 0.0075

Neptune 102510-02-13 16:18 G 39162112.14 39162112.18 39162112.24 0.0088 0.0085

Jupiter 102510-05-15 12:13 G 39162202.83 39162203.01 39162203.19 0.0525 0.0217

Mars 102510-10-20 10:33 G 39162360.85 39162360.94 39162361.03 0.1626 0.1383

Saturn 102514-01-24 12:57 G 39163552.94 39163553.04 39163553.16 0.0281 0.0237

Saturn 102514-09-10 22:04 G 39163782.22 39163782.42 39163782.62 0.0284 0.0045

Mars 102515-05-28 19:40 G 39164042.16 39164042.32 39164042.49 0.1921 0.0569

Jupiter 102515-07-27 12:13 G 39164101.89 39164102.01 39164102.14 0.0505 0.0401

Jupiter 102516-03-20 12:13 G 39164338.87 39164339.01 39164339.17 0.0500 0.0347

Jupiter 102522-01-18 07:54 G 39166468.63 39166468.83 39166469.03 0.0524 0.0015

Pluto 102525-02-26 19:40 G 39167604.13 39167604.32 39167604.53 0.0064 0.0025

Pluto 102525-10-09 23:30 G 39167829.27 39167829.48 39167829.69 0.0064 0.0016

Pluto 102526-05-23 02:52 G 39168054.53 39168054.62 39168054.73 0.0065 0.0057

Uranus 102527-01-08 10:47 G 39168284.88 39168284.95 39168285.07 0.0135 0.0121

Saturn 102527-04-16 09:21 G 39168382.88 39168382.89 39168382.92 0.0281 0.0280

Uranus 102527-08-22 16:04 G 39168511.04 39168511.17 39168511.30 0.0135 0.0104

Jupiter 102527-11-24 09:35 G 39168604.70 39168604.90 39168605.10 0.0501 0.0142

Saturn 102527-12-02 02:37 G 39168612.40 39168612.61 39168612.83 0.0278 0.0011

Uranus 102528-04-04 20:23 G 39168737.20 39168737.35 39168737.52 0.0135 0.0088

Uranus 102528-11-17 01:11 G 39168963.37 39168963.55 39168963.73 0.0135 0.0071

Uranus 102529-07-01 05:30 G 39169189.55 39169189.73 39169189.94 0.0135 0.0055

Uranus 102530-02-12 10:18 G 39169415.73 39169415.93 39169416.14 0.0135 0.0038

Uranus 102530-09-26 15:06 G 39169641.93 39169642.13 39169642.35 0.0135 0.0022

Uranus 102531-05-10 20:09 G 39169868.13 39169868.34 39169868.55 0.0135 0.0004

Uranus 102531-12-23 00:57 G 39170094.33 39170094.54 39170094.75 0.0135 0.0013

Uranus 102532-08-05 05:59 G 39170320.54 39170320.75 39170320.96 0.0135 0.0031

Uranus 102533-03-19 10:47 G 39170546.76 39170546.95 39170547.16 0.0135 0.0048

Jupiter 102533-09-23 02:23 G 39170734.43 39170734.60 39170734.78 0.0522 0.0245

Uranus 102533-10-31 16:04 G 39170772.99 39170773.17 39170773.37 0.0135 0.0065

Uranus 102534-06-14 21:06 G 39170999.23 39170999.38 39170999.57 0.0135 0.0083

Uranus 102535-01-27 02:23 G 39171225.48 39171225.60 39171225.77 0.0136 0.0100

Uranus 102535-09-10 08:23 G 39171451.75 39171451.85 39171451.96 0.0136 0.0116

Uranus 102536-04-23 13:54 G 39171678.05 39171678.08 39171678.13 0.0136 0.0133

Jupiter 102539-07-30 06:13 G 39172870.56 39172870.76 39172870.97 0.0503 0.0066

Saturn 102543-08-06 20:37 G 39174339.22 39174339.36 39174339.52 0.0282 0.0192

Saturn 102544-03-23 05:59 G 39174568.56 39174568.75 39174568.95 0.0284 0.0093

Mars 102544-08-18 04:04 G 39174716.51 39174716.67 39174716.82 0.1616 0.0731

Jupiter 102545-05-28 23:16 G 39175000.39 39175000.47 39175000.56 0.0520 0.0466

Jupiter 102546-01-20 22:47 G 39175237.30 39175237.45 39175237.60 0.0526 0.0343

Jupiter 102551-04-04 00:57 G 39177136.37 39177136.54 39177136.72 0.0504 0.0281

Jupiter 102551-11-27 00:13 G 39177373.43 39177373.51 39177373.59 0.0499 0.0462

Saturn 102556-10-26 18:13 G 39179169.15 39179169.26 39179169.40 0.0281 0.0232

Saturn 102557-06-13 11:16 G 39179398.76 39179398.97 39179399.18 0.0278 0.0057

Jupiter 102557-09-25 19:40 G 39179503.13 39179503.32 39179503.52 0.0525 0.0116

Jupiter 102562-12-07 20:52 G 39181402.33 39181402.37 39181402.42 0.0505 0.0491

Jupiter 102563-08-01 21:21 G 39181639.21 39181639.39 39181639.57 0.0500 0.0259

Uranus 102569-03-01 15:06 G 39183678.04 39183678.13 39183678.25 0.0143 0.0126

Jupiter 102569-05-31 16:47 G 39183769.00 39183769.20 39183769.39 0.0523 0.0112

Uranus 102569-10-14 04:04 G 39183904.53 39183904.67 39183904.83 0.0143 0.0106

Uranus 102570-05-28 17:16 G 39184131.04 39184131.22 39184131.40 0.0143 0.0085

Uranus 102571-01-10 05:59 G 39184357.55 39184357.75 39184357.95 0.0143 0.0064

Uranus 102571-08-24 18:42 G 39184584.07 39184584.28 39184584.50 0.0143 0.0043

Uranus 102572-04-07 07:40 G 39184810.60 39184810.82 39184811.04 0.0143 0.0021

Uranus 102572-11-19 20:23 G 39185037.12 39185037.35 39185037.57 0.0143 0.0002

Saturn 102573-02-16 00:28 G 39185125.35 39185125.52 39185125.70 0.0282 0.0155

Uranus 102573-07-04 08:52 G 39185263.65 39185263.87 39185264.09 0.0143 0.0021

Saturn 102573-10-03 09:49 G 39185354.73 39185354.91 39185355.10 0.0285 0.0131

Uranus 102574-02-15 21:06 G 39185490.18 39185490.38 39185490.60 0.0143 0.0043

Uranus 102574-09-30 09:49 G 39185716.71 39185716.91 39185717.11 0.0143 0.0063

Jupiter 102575-04-06 17:16 G 39185905.01 39185905.22 39185905.43 0.0502 0.0050

Uranus 102575-05-14 21:49 G 39185943.24 39185943.41 39185943.60 0.0143 0.0084

Uranus 102575-12-27 09:49 G 39186169.78 39186169.91 39186170.08 0.0142 0.0105

Uranus 102576-08-09 21:49 G 39186396.32 39186396.41 39186396.54 0.0142 0.0125

Mars 102576-08-16 22:04 G 39186403.31 39186403.42 39186403.54 0.1623 0.1183

Jupiter 102581-02-03 13:11 G 39188034.91 39188035.05 39188035.21 0.0522 0.0338

Mars 102581-03-24 22:33 G 39188084.27 39188084.44 39188084.61 0.1925 0.0126

Jupiter 102581-09-28 13:40 G 39188271.99 39188272.07 39188272.15 0.0527 0.0479

Neptune 102581-10-01 18:57 G 39188275.26 39188275.29 39188275.37 0.0090 0.0087

Neptune 102582-05-15 07:54 G 39188500.73 39188500.83 39188500.95 0.0090 0.0076

Neptune 102582-12-26 20:09 G 39188726.22 39188726.34 39188726.51 0.0090 0.0066

Neptune 102583-08-09 09:21 G 39188951.72 39188951.89 39188952.06 0.0090 0.0055

Neptune 102584-03-21 21:35 G 39189177.23 39189177.40 39189177.60 0.0090 0.0045

Neptune 102584-11-02 10:18 G 39189402.74 39189402.93 39189403.14 0.0090 0.0034

Neptune 102585-06-15 22:47 G 39189628.25 39189628.45 39189628.66 0.0090 0.0023

Neptune 102586-01-27 11:16 G 39189853.77 39189853.97 39189854.19 0.0090 0.0013

Saturn 102586-05-09 00:57 G 39189955.39 39189955.54 39189955.70 0.0280 0.0188

Neptune 102586-09-09 23:59 G 39190079.29 39190079.50 39190079.72 0.0090 0.0003

Jupiter 102586-12-10 13:54 G 39190170.88 39190171.08 39190171.28 0.0503 0.0160

Saturn 102586-12-24 17:30 G 39190185.03 39190185.23 39190185.44 0.0277 0.0099

Neptune 102587-04-23 12:28 G 39190304.81 39190305.02 39190305.24 0.0090 0.0009

Neptune 102587-12-05 00:42 G 39190530.33 39190530.53 39190530.75 0.0090 0.0020

Neptune 102588-07-17 13:25 G 39190755.86 39190756.06 39190756.27 0.0090 0.0030

Neptune 102589-02-28 01:40 G 39190981.40 39190981.57 39190981.78 0.0090 0.0041

Neptune 102589-10-11 14:23 G 39191206.93 39191207.10 39191207.29 0.0090 0.0051

Neptune 102590-05-25 02:37 G 39191432.47 39191432.61 39191432.78 0.0090 0.0062

Neptune 102591-01-05 15:21 G 39191658.02 39191658.14 39191658.28 0.0090 0.0072

Neptune 102591-08-19 03:49 G 39191883.59 39191883.66 39191883.76 0.0090 0.0083

Jupiter 102593-06-03 07:40 G 39192537.65 39192537.82 39192538.00 0.0525 0.0244

Jupiter 102598-08-15 10:04 G 39194436.78 39194436.92 39194437.06 0.0505 0.0371

Jupiter 102599-04-09 10:33 G 39194673.80 39194673.94 39194674.07 0.0500 0.0380

Saturn 102602-08-30 07:11 G 39195911.61 39195911.80 39195911.99 0.0282 0.0111

Saturn 102603-04-16 16:47 G 39196141.04 39196141.20 39196141.37 0.0285 0.0176

Jupiter 102605-02-07 04:04 G 39196803.47 39196803.67 39196803.87 0.0524 0.0016

Moon 102608-11-02 10:18 G 39198167.78 39198167.93 39198168.07 0.2708 0.0704

Earth 102608-11-02 14:37 G 39198167.96 39198168.11 39198168.27 0.2703 0.0064 *

Mars 102610-06-16 15:49 G 39198759.02 39198759.16 39198759.31 0.1614 0.0921

Uranus 102610-09-08 21:35 G 39198843.35 39198843.40 39198843.49 0.0135 0.0126

Jupiter 102610-12-14 05:59 G 39198939.56 39198939.75 39198939.95 0.0501 0.0170

Uranus 102611-04-23 02:09 G 39199069.49 39199069.59 39199069.73 0.0135 0.0110

Uranus 102611-12-05 06:42 G 39199295.65 39199295.78 39199295.95 0.0135 0.0094

Uranus 102612-07-18 11:30 G 39199521.82 39199521.98 39199522.17 0.0135 0.0077

Uranus 102613-03-01 16:18 G 39199747.99 39199748.18 39199748.38 0.0135 0.0060

Uranus 102613-10-13 21:06 G 39199974.18 39199974.38 39199974.58 0.0135 0.0043

Pluto 102614-01-20 21:06 G 39200073.22 39200073.38 39200073.57 0.0080 0.0050

Uranus 102614-05-28 01:40 G 39200200.37 39200200.57 39200200.79 0.0135 0.0027

Pluto 102614-09-03 07:54 G 39200298.64 39200298.83 39200299.05 0.0079 0.0032

Uranus 102615-01-09 06:28 G 39200426.56 39200426.77 39200426.99 0.0135 0.0011

Uranus 102615-08-23 11:30 G 39200652.77 39200652.98 39200653.20 0.0135 0.0008

Saturn 102615-11-20 08:52 G 39200741.69 39200741.87 39200742.06 0.0280 0.0142

Uranus 102616-04-05 16:33 G 39200878.98 39200879.19 39200879.40 0.0135 0.0025

Saturn 102616-07-07 00:57 G 39200971.36 39200971.54 39200971.73 0.0277 0.0143

Jupiter 102616-10-13 00:57 G 39201069.36 39201069.54 39201069.73 0.0523 0.0213

Uranus 102616-11-17 21:35 G 39201105.20 39201105.40 39201105.61 0.0135 0.0042

Uranus 102617-07-02 02:23 G 39201331.42 39201331.60 39201331.81 0.0135 0.0059

Uranus 102618-02-13 07:54 G 39201557.66 39201557.83 39201558.01 0.0135 0.0076

Uranus 102618-09-27 13:25 G 39201783.91 39201784.06 39201784.22 0.0136 0.0093

Uranus 102619-05-11 18:42 G 39202010.17 39202010.28 39202010.42 0.0136 0.0110

Uranus 102619-12-23 23:59 G 39202236.45 39202236.50 39202236.60 0.0136 0.0127

Jupiter 102622-08-19 03:06 G 39203205.42 39203205.63 39203205.84 0.0502 0.0038

Jupiter 102628-06-17 23:01 G 39205335.35 39205335.46 39205335.57 0.0521 0.0433

Jupiter 102629-02-09 23:01 G 39205572.33 39205572.46 39205572.60 0.0526 0.0382

Saturn 102632-03-11 09:35 G 39206697.71 39206697.90 39206698.11 0.0282 0.0077

Saturn 102632-10-26 19:25 G 39206927.18 39206927.31 39206927.45 0.0285 0.0212

Jupiter 102634-04-23 22:33 G 39207471.26 39207471.44 39207471.62 0.0504 0.0251

Jupiter 102634-12-16 21:35 G 39207708.38 39207708.40 39207708.44 0.0499 0.0493

Jupiter 102640-10-15 19:11 G 39209838.11 39209838.30 39209838.49 0.0525 0.0152

Mars 102642-06-15 10:18 G 39210445.79 39210445.93 39210446.07 0.1621 0.0992

Saturn 102645-06-01 13:25 G 39211527.86 39211528.06 39211528.27 0.0280 0.0104

Jupiter 102645-12-27 18:42 G 39211737.20 39211737.28 39211737.36 0.0505 0.0462

Saturn 102646-01-17 05:30 G 39211757.57 39211757.73 39211757.90 0.0277 0.0181

Jupiter 102646-08-21 19:25 G 39211974.14 39211974.31 39211974.48 0.0501 0.0292

Mars 102647-01-21 01:54 G 39212126.42 39212126.58 39212126.73 0.1929 0.0803

Jupiter 102652-06-20 14:09 G 39214103.90 39214104.09 39214104.29 0.0523 0.0081

Uranus 102652-10-30 22:04 G 39214236.35 39214236.42 39214236.51 0.0143 0.0133

Uranus 102653-06-14 10:47 G 39214462.83 39214462.95 39214463.10 0.0143 0.0113

Uranus 102654-01-26 23:59 G 39214689.33 39214689.50 39214689.67 0.0143 0.0091

Uranus 102654-09-10 12:57 G 39214915.85 39214916.04 39214916.23 0.0143 0.0071

Uranus 102655-04-25 01:54 G 39215142.37 39215142.58 39215142.78 0.0143 0.0050

Uranus 102655-12-07 14:37 G 39215368.89 39215369.11 39215369.32 0.0143 0.0028

Uranus 102656-07-21 03:06 G 39215595.41 39215595.63 39215595.86 0.0143 0.0008

Uranus 102657-03-04 16:04 G 39215821.95 39215822.17 39215822.39 0.0143 0.0014

Uranus 102657-10-17 04:33 G 39216048.48 39216048.69 39216048.91 0.0143 0.0035

Jupiter 102658-04-26 16:33 G 39216239.98 39216240.19 39216240.39 0.0502 0.0085

Uranus 102658-05-31 16:47 G 39216275.00 39216275.20 39216275.41 0.0143 0.0056

Uranus 102659-01-13 05:01 G 39216501.53 39216501.71 39216501.91 0.0143 0.0077

Uranus 102659-08-27 17:16 G 39216728.07 39216728.22 39216728.39 0.0142 0.0097

Uranus 102660-04-10 05:30 G 39216954.62 39216954.73 39216954.87 0.0142 0.0117

Uranus 102660-11-22 17:30 G 39217181.18 39217181.23 39217181.30 0.0142 0.0136

Saturn 102661-09-21 14:37 G 39217483.91 39217484.11 39217484.32 0.0283 0.0037

Saturn 102662-05-09 00:42 G 39217713.45 39217713.53 39217713.63 0.0286 0.0254

Jupiter 102664-02-24 11:01 G 39218369.80 39218369.96 39218370.13 0.0522 0.0306

Neptune 102664-07-01 01:25 G 39218497.52 39218497.56 39218497.65 0.0088 0.0084

Jupiter 102664-10-18 11:16 G 39218606.94 39218606.97 39218607.02 0.0527 0.0513

Neptune 102665-02-11 15:06 G 39218723.03 39218723.13 39218723.27 0.0088 0.0074

Neptune 102665-09-25 05:01 G 39218948.56 39218948.71 39218948.87 0.0088 0.0063

Neptune 102666-05-08 18:13 G 39219174.09 39219174.26 39219174.45 0.0088 0.0053

Neptune 102666-12-20 07:25 G 39219399.63 39219399.81 39219400.03 0.0088 0.0043

Neptune 102667-08-02 21:21 G 39219625.18 39219625.39 39219625.60 0.0088 0.0032

Neptune 102668-03-15 10:47 G 39219850.74 39219850.95 39219851.18 0.0088 0.0022

Neptune 102668-10-27 00:28 G 39220076.29 39220076.52 39220076.74 0.0088 0.0011

Neptune 102669-06-09 13:54 G 39220301.85 39220302.08 39220302.31 0.0088 0.0001

Jupiter 102669-12-30 12:13 G 39220505.82 39220506.01 39220506.22 0.0503 0.0129

Neptune 102670-01-21 03:21 G 39220527.42 39220527.64 39220527.87 0.0088 0.0010

Neptune 102670-09-03 17:01 G 39220752.99 39220753.21 39220753.43 0.0088 0.0020

Neptune 102671-04-17 06:13 G 39220978.56 39220978.76 39220978.99 0.0088 0.0031

Neptune 102671-11-28 19:54 G 39221204.14 39221204.33 39221204.53 0.0088 0.0041

Neptune 102672-07-11 09:06 G 39221429.72 39221429.88 39221430.08 0.0088 0.0052

Neptune 102673-02-21 22:47 G 39221655.31 39221655.45 39221655.63 0.0088 0.0062

Neptune 102673-10-05 12:42 G 39221880.91 39221881.03 39221881.16 0.0088 0.0072

Neptune 102674-05-19 01:40 G 39222106.52 39222106.57 39222106.67 0.0088 0.0083

Saturn 102674-12-12 20:37 G 39222314.15 39222314.36 39222314.57 0.0280 0.0059

Saturn 102675-07-30 12:13 G 39222543.89 39222544.01 39222544.14 0.0277 0.0224

Mars 102676-04-13 04:18 G 39222801.55 39222801.68 39222801.81 0.1612 0.1096

Jupiter 102676-06-23 07:54 G 39222872.66 39222872.83 39222873.00 0.0526 0.0283

Jupiter 102681-09-04 09:06 G 39224771.73 39224771.88 39224772.04 0.0504 0.0338

Jupiter 102682-04-29 08:23 G 39225008.74 39225008.85 39225008.97 0.0499 0.0411

Jupiter 102688-02-27 05:16 G 39227138.52 39227138.72 39227138.92 0.0525 0.0055

Saturn 102691-04-03 16:33 G 39228269.98 39228270.19 39228270.39 0.0283 0.0007

Jupiter 102694-01-02 05:16 G 39229274.53 39229274.72 39229274.91 0.0501 0.0204

Uranus 102694-05-09 07:54 G 39229401.80 39229401.83 39229401.89 0.0135 0.0131

Uranus 102694-12-21 12:28 G 39229627.92 39229628.02 39229628.14 0.0135 0.0115

Uranus 102695-08-04 17:01 G 39229854.08 39229854.21 39229854.37 0.0135 0.0099

Uranus 102696-03-17 21:35 G 39230080.25 39230080.40 39230080.59 0.0135 0.0083

Uranus 102696-10-30 02:23 G 39230306.42 39230306.60 39230306.80 0.0135 0.0066

Uranus 102697-06-13 07:11 G 39230532.60 39230532.80 39230533.00 0.0135 0.0049

Uranus 102698-01-25 11:59 G 39230758.79 39230759.00 39230759.21 0.0135 0.0032

Uranus 102698-09-08 16:47 G 39230984.99 39230985.20 39230985.42 0.0135 0.0016

Uranus 102699-04-22 21:49 G 39231211.20 39231211.41 39231211.62 0.0135 0.0001

Jupiter 102699-11-02 02:09 G 39231404.40 39231404.59 39231404.78 0.0523 0.0172

Uranus 102699-12-05 02:37 G 39231437.40 39231437.61 39231437.83 0.0135 0.0019

Uranus 102700-07-19 07:40 G 39231663.62 39231663.82 39231664.03 0.0135 0.0036

Uranus 102701-03-02 12:57 G 39231889.84 39231890.04 39231890.23 0.0135 0.0053

Uranus 102701-10-14 18:13 G 39232116.08 39232116.26 39232116.44 0.0135 0.0070

Uranus 102702-05-28 23:16 G 39232342.32 39232342.47 39232342.65 0.0135 0.0087

Uranus 102703-01-10 04:33 G 39232568.57 39232568.69 39232568.84 0.0136 0.0104

Uranus 102703-08-24 10:18 G 39232794.84 39232794.93 39232795.04 0.0136 0.0120

Saturn 102704-06-24 23:16 G 39233100.26 39233100.47 39233100.69 0.0279 0.0025

Saturn 102705-02-09 14:52 G 39233330.05 39233330.12 39233330.21 0.0276 0.0257

Jupiter 102705-09-08 02:23 G 39233540.39 39233540.60 39233540.81 0.0502 0.0007

Mars 102708-04-12 22:18 G 39234488.28 39234488.43 39234488.59 0.1619 0.0798

Jupiter 102711-07-08 22:18 G 39235670.31 39235670.43 39235670.56 0.0521 0.0398

Jupiter 102712-03-01 22:04 G 39235907.31 39235907.42 39235907.54 0.0526 0.0418

Mars 102712-11-18 04:04 G 39236168.57 39236168.67 39236168.78 0.1932 0.1539

Jupiter 102717-05-13 22:47 G 39237806.27 39237806.45 39237806.64 0.0504 0.0215

Saturn 102720-02-28 12:13 G 39238826.92 39238827.01 39238827.11 0.0280 0.0245

Saturn 102720-10-14 20:23 G 39239056.14 39239056.35 39239056.56 0.0283 0.0034

Jupiter 102723-11-05 18:28 G 39240173.08 39240173.27 39240173.45 0.0525 0.0189

Jupiter 102729-01-16 19:11 G 39242072.19 39242072.30 39242072.41 0.0505 0.0427

Jupiter 102729-09-10 18:57 G 39242309.14 39242309.29 39242309.46 0.0500 0.0326

Saturn 102733-05-20 11:01 G 39243656.93 39243656.96 39243657.01 0.0282 0.0277

Saturn 102734-01-05 05:16 G 39243886.50 39243886.72 39243886.94 0.0279 0.0017

Jupiter 102735-07-11 14:52 G 39244438.92 39244439.12 39244439.32 0.0524 0.0043

Uranus 102736-07-01 03:35 G 39244794.62 39244794.65 39244794.71 0.0143 0.0140

Uranus 102737-02-12 16:33 G 39245021.09 39245021.19 39245021.33 0.0143 0.0120

Uranus 102737-09-27 05:59 G 39245247.59 39245247.75 39245247.91 0.0143 0.0099

Earth 102738-05-05 10:18 G 39245467.78 39245467.93 39245468.09 0.2629 0.0840

Moon 102738-05-05 13:54 G 39245467.95 39245468.08 39245468.20 0.2634 0.1525 *

Uranus 102738-05-11 18:28 G 39245474.10 39245474.27 39245474.47 0.0143 0.0078

Uranus 102738-12-24 07:25 G 39245700.62 39245700.81 39245701.02 0.0143 0.0057

Uranus 102739-08-07 20:23 G 39245927.14 39245927.35 39245927.57 0.0143 0.0036

Uranus 102740-03-21 09:21 G 39246153.67 39246153.89 39246154.12 0.0143 0.0015

Uranus 102740-11-02 22:18 G 39246380.20 39246380.43 39246380.65 0.0143 0.0007

Jupiter 102741-05-16 16:47 G 39246575.00 39246575.20 39246575.41 0.0501 0.0121

Uranus 102741-06-17 10:33 G 39246606.73 39246606.94 39246607.17 0.0143 0.0028

Uranus 102742-01-29 23:01 G 39246833.27 39246833.46 39246833.68 0.0143 0.0049

Mars 102742-02-09 16:04 G 39246844.07 39246844.17 39246844.28 0.1609 0.1283

Uranus 102742-09-13 11:45 G 39247059.80 39247059.99 39247060.19 0.0143 0.0069

Uranus 102743-04-27 23:59 G 39247286.34 39247286.50 39247286.68 0.0143 0.0090

Uranus 102743-12-10 12:13 G 39247512.88 39247513.01 39247513.16 0.0142 0.0110

Uranus 102744-07-24 00:13 G 39247739.43 39247739.51 39247739.61 0.0142 0.0129

Neptune 102746-01-05 06:28 G 39248269.76 39248269.77 39248269.80 0.0090 0.0089

Moon 102746-05-03 05:45 G 39248387.69 39248387.74 39248387.80 0.2630 0.2470

Neptune 102746-08-18 18:57 G 39248495.21 39248495.29 39248495.41 0.0090 0.0079

Jupiter 102747-03-16 12:42 G 39248704.86 39248705.03 39248705.21 0.0523 0.0267

Neptune 102747-04-01 07:54 G 39248720.69 39248720.83 39248720.97 0.0090 0.0068

Neptune 102747-11-12 20:09 G 39248946.19 39248946.34 39248946.52 0.0090 0.0058

Neptune 102748-06-25 08:52 G 39249171.69 39249171.87 39249172.06 0.0090 0.0047

Neptune 102749-02-05 21:21 G 39249397.21 39249397.39 39249397.60 0.0090 0.0037

Saturn 102749-09-09 12:42 G 39249612.91 39249613.03 39249613.17 0.0280 0.0215

Neptune 102749-09-19 10:04 G 39249622.72 39249622.92 39249623.14 0.0090 0.0026

Saturn 102750-04-26 20:52 G 39249842.17 39249842.37 39249842.58 0.0283 0.0065

Neptune 102750-05-02 22:33 G 39249848.24 39249848.44 39249848.66 0.0090 0.0016

Neptune 102750-12-14 11:16 G 39250073.76 39250073.97 39250074.19 0.0090 0.0005

Neptune 102751-07-27 23:59 G 39250299.29 39250299.50 39250299.71 0.0090 0.0006

Neptune 102752-03-09 12:28 G 39250524.81 39250525.02 39250525.23 0.0090 0.0017

Neptune 102752-10-21 00:42 G 39250750.34 39250750.53 39250750.75 0.0090 0.0028

Jupiter 102753-01-19 13:11 G 39250840.85 39250841.05 39250841.26 0.0503 0.0090

Neptune 102753-06-03 13:25 G 39250975.87 39250976.06 39250976.26 0.0090 0.0038

Neptune 102754-01-15 01:40 G 39251201.40 39251201.57 39251201.76 0.0090 0.0049

Neptune 102754-08-28 14:23 G 39251426.95 39251427.10 39251427.27 0.0090 0.0059

Neptune 102755-04-11 02:37 G 39251652.50 39251652.61 39251652.77 0.0090 0.0070

Neptune 102755-11-22 15:21 G 39251878.06 39251878.14 39251878.25 0.0090 0.0080

Jupiter 102758-11-19 10:33 G 39252970.88 39252970.94 39252971.01 0.0521 0.0487

Jupiter 102759-07-14 10:33 G 39253207.79 39253207.94 39253208.10 0.0526 0.0329

Saturn 102762-11-30 12:28 G 39254442.92 39254443.02 39254443.13 0.0282 0.0246

Saturn 102763-07-18 06:28 G 39254672.56 39254672.77 39254672.98 0.0279 0.0047

Jupiter 102764-09-24 09:35 G 39255106.74 39255106.90 39255107.07 0.0504 0.0301

Jupiter 102765-05-19 09:21 G 39255343.80 39255343.89 39255343.98 0.0500 0.0449

Jupiter 102771-03-19 05:59 G 39257473.56 39257473.75 39257473.95 0.0524 0.0097

Pluto 102773-01-31 21:06 G 39258158.27 39258158.38 39258158.52 0.0064 0.0051

Pluto 102773-09-14 00:42 G 39258383.33 39258383.53 39258383.76 0.0064 0.0012

Mars 102774-02-08 10:04 G 39258530.76 39258530.92 39258531.09 0.1617 0.0603

Pluto 102774-04-27 04:18 G 39258608.50 39258608.68 39258608.88 0.0064 0.0030

Jupiter 102777-01-22 06:57 G 39259609.61 39259609.79 39259609.97 0.0501 0.0246

Uranus 102778-08-21 23:16 G 39260186.39 39260186.47 39260186.58 0.0135 0.0120

Saturn 102779-03-22 15:35 G 39260399.00 39260399.15 39260399.32 0.0281 0.0182

Uranus 102779-04-05 03:49 G 39260412.54 39260412.66 39260412.81 0.0135 0.0104

Saturn 102779-11-06 23:59 G 39260628.31 39260628.50 39260628.70 0.0284 0.0101

Uranus 102779-11-17 08:23 G 39260638.70 39260638.85 39260639.02 0.0135 0.0088

Uranus 102780-06-30 13:11 G 39260864.87 39260865.05 39260865.23 0.0135 0.0071

Uranus 102781-02-11 17:45 G 39261091.05 39261091.24 39261091.44 0.0135 0.0055

Uranus 102781-09-25 22:33 G 39261317.24 39261317.44 39261317.65 0.0135 0.0038

Uranus 102782-05-10 03:21 G 39261543.43 39261543.64 39261543.85 0.0135 0.0021

Jupiter 102782-11-22 02:37 G 39261739.42 39261739.61 39261739.81 0.0523 0.0133

Uranus 102782-12-22 08:09 G 39261769.63 39261769.84 39261770.06 0.0135 0.0005

Uranus 102783-08-05 13:11 G 39261995.84 39261996.05 39261996.26 0.0135 0.0013

Uranus 102784-03-18 17:59 G 39262222.05 39262222.25 39262222.47 0.0135 0.0030

Uranus 102784-10-30 23:01 G 39262448.27 39262448.46 39262448.67 0.0135 0.0047

Uranus 102785-06-14 04:18 G 39262674.50 39262674.68 39262674.87 0.0135 0.0064

Uranus 102786-01-26 09:21 G 39262900.73 39262900.89 39262901.07 0.0135 0.0081

Uranus 102786-09-09 14:37 G 39263126.98 39263127.11 39263127.28 0.0135 0.0098

Uranus 102787-04-23 20:23 G 39263353.24 39263353.35 39263353.47 0.0136 0.0114

Uranus 102787-12-06 01:25 G 39263579.53 39263579.56 39263579.64 0.0136 0.0131

Jupiter 102788-09-27 03:49 G 39263875.46 39263875.66 39263875.87 0.0502 0.0036

Saturn 102792-06-11 17:45 G 39265229.09 39265229.24 39265229.39 0.0282 0.0205

Saturn 102793-01-27 11:30 G 39265458.78 39265458.98 39265459.19 0.0279 0.0087

Jupiter 102794-07-27 23:01 G 39266005.32 39266005.46 39266005.60 0.0522 0.0362

Jupiter 102795-03-21 23:59 G 39266242.41 39266242.50 39266242.60 0.0527 0.0461

Jupiter 102800-06-02 01:25 G 39268141.37 39268141.56 39268141.76 0.0503 0.0173

Jupiter 102806-11-24 21:21 G 39270508.21 39270508.39 39270508.57 0.0526 0.0234

Mars 102807-12-08 04:47 G 39270886.63 39270886.70 39270886.77 0.1608 0.1453

Saturn 102808-10-01 16:18 G 39271185.01 39271185.18 39271185.36 0.0280 0.0150

Saturn 102809-05-19 00:28 G 39271414.34 39271414.52 39271414.71 0.0283 0.0132

Mars 102810-09-15 06:57 G 39271898.73 39271898.79 39271898.85 0.1924 0.1781

Jupiter 102812-02-05 21:21 G 39272407.26 39272407.39 39272407.53 0.0504 0.0385

Jupiter 102812-09-29 21:06 G 39272644.24 39272644.38 39272644.52 0.0500 0.0367

Jupiter 102818-07-30 18:42 G 39274774.08 39274774.28 39274774.48 0.0524 0.0006

Uranus 102820-10-12 21:06 G 39275579.30 39275579.38 39275579.50 0.0143 0.0127

Uranus 102821-05-27 10:18 G 39275805.79 39275805.93 39275806.09 0.0143 0.0107

Saturn 102821-12-22 17:30 G 39276015.07 39276015.23 39276015.40 0.0282 0.0179

Uranus 102822-01-08 23:01 G 39276032.30 39276032.46 39276032.66 0.0143 0.0086

Saturn 102822-08-09 11:16 G 39276244.78 39276244.97 39276245.17 0.0279 0.0114

Uranus 102822-08-23 12:13 G 39276258.82 39276259.01 39276259.22 0.0143 0.0065

Uranus 102823-04-07 01:11 G 39276485.35 39276485.55 39276485.77 0.0143 0.0044

Uranus 102823-11-19 14:09 G 39276711.88 39276712.09 39276712.31 0.0143 0.0023

Jupiter 102824-06-04 18:28 G 39276910.07 39276910.27 39276910.47 0.0501 0.0162

Uranus 102824-07-03 03:06 G 39276938.40 39276938.63 39276938.85 0.0143 0.0003

Uranus 102825-02-14 15:49 G 39277164.94 39277165.16 39277165.38 0.0143 0.0019

Uranus 102825-09-29 04:18 G 39277391.47 39277391.68 39277391.90 0.0143 0.0040

Uranus 102826-05-13 16:47 G 39277618.01 39277618.20 39277618.41 0.0143 0.0061

Uranus 102826-12-26 05:01 G 39277844.54 39277844.71 39277844.90 0.0143 0.0082

Uranus 102827-08-09 17:16 G 39278071.08 39278071.22 39278071.39 0.0142 0.0102

Uranus 102828-03-23 05:30 G 39278297.63 39278297.73 39278297.86 0.0142 0.0121

Neptune 102828-10-03 11:45 G 39278491.97 39278491.99 39278492.06 0.0088 0.0086

Uranus 102828-11-04 17:30 G 39278524.21 39278524.23 39278524.28 0.0142 0.0141

Neptune 102829-05-17 01:11 G 39278717.46 39278717.55 39278717.68 0.0088 0.0076

Neptune 102829-12-28 14:37 G 39278942.98 39278943.11 39278943.28 0.0088 0.0066

Jupiter 102830-04-04 15:06 G 39279039.95 39279040.13 39279040.31 0.0522 0.0224

Neptune 102830-08-11 04:18 G 39279168.52 39279168.68 39279168.87 0.0088 0.0055

Neptune 102831-03-24 17:45 G 39279394.06 39279394.24 39279394.45 0.0088 0.0045

Neptune 102831-11-05 07:11 G 39279619.61 39279619.80 39279620.02 0.0088 0.0035

Neptune 102832-06-17 20:52 G 39279845.16 39279845.37 39279845.59 0.0088 0.0024

Neptune 102833-01-29 10:18 G 39280070.72 39280070.93 39280071.16 0.0088 0.0014

Neptune 102833-09-11 23:59 G 39280296.28 39280296.50 39280296.73 0.0088 0.0003

Neptune 102834-04-25 13:25 G 39280521.84 39280522.06 39280522.29 0.0088 0.0008

Neptune 102834-12-07 02:52 G 39280747.40 39280747.62 39280747.85 0.0088 0.0018

Neptune 102835-07-20 16:04 G 39280972.97 39280973.17 39280973.40 0.0088 0.0029

Jupiter 102836-02-08 15:35 G 39281175.95 39281176.15 39281176.36 0.0503 0.0049

Neptune 102836-03-02 05:45 G 39281198.56 39281198.74 39281198.96 0.0088 0.0039

Neptune 102836-10-13 19:25 G 39281424.13 39281424.31 39281424.51 0.0088 0.0049

Neptune 102837-05-27 08:37 G 39281649.72 39281649.86 39281650.05 0.0088 0.0060

Neptune 102838-01-07 22:18 G 39281875.31 39281875.43 39281875.58 0.0088 0.0070

Saturn 102838-04-13 18:13 G 39281971.08 39281971.26 39281971.45 0.0281 0.0119

Neptune 102838-08-21 11:59 G 39282100.92 39282101.00 39282101.10 0.0088 0.0080

Saturn 102838-11-29 02:37 G 39282200.45 39282200.61 39282200.78 0.0284 0.0165

Mars 102839-12-06 22:33 G 39282573.27 39282573.44 39282573.61 0.1614 0.0418

Jupiter 102841-12-08 11:59 G 39283305.91 39283306.00 39283306.11 0.0521 0.0447

Jupiter 102842-08-02 11:59 G 39283542.87 39283543.00 39283543.15 0.0526 0.0372

Jupiter 102847-10-14 12:42 G 39285441.85 39285442.03 39285442.21 0.0504 0.0259

Jupiter 102848-06-07 11:30 G 39285678.95 39285678.98 39285679.03 0.0499 0.0489

Saturn 102851-07-04 22:04 G 39286801.24 39286801.42 39286801.61 0.0282 0.0139

Earth 102851-11-04 17:16 G 39286924.07 39286924.22 39286924.38 0.2703 0.0092

Moon 102851-11-04 22:18 G 39286924.29 39286924.43 39286924.58 0.2701 0.0979 *

Saturn 102852-02-19 15:49 G 39287030.98 39287031.16 39287031.34 0.0279 0.0153

Jupiter 102854-04-07 07:25 G 39287808.62 39287808.81 39287809.01 0.0525 0.0138

Jupiter 102859-06-19 10:04 G 39289707.85 39289707.92 39289708.00 0.0505 0.0467

Jupiter 102860-02-11 10:18 G 39289944.76 39289944.93 39289945.10 0.0500 0.0288

Uranus 102862-04-21 09:21 G 39290744.83 39290744.89 39290744.98 0.0135 0.0126

Pluto 102862-08-07 01:54 G 39290852.39 39290852.58 39290852.81 0.0080 0.0031

Uranus 102862-12-03 13:54 G 39290970.97 39290971.08 39290971.22 0.0135 0.0110

Pluto 102863-03-20 12:57 G 39291077.88 39291078.04 39291078.22 0.0079 0.0051

Uranus 102863-07-17 18:28 G 39291197.13 39291197.27 39291197.44 0.0135 0.0094

Uranus 102864-02-28 23:16 G 39291423.30 39291423.47 39291423.65 0.0135 0.0077

Uranus 102864-10-12 03:49 G 39291649.48 39291649.66 39291649.86 0.0135 0.0061

Uranus 102865-05-26 08:37 G 39291875.67 39291875.86 39291876.07 0.0135 0.0044

Jupiter 102865-12-11 05:30 G 39292074.53 39292074.73 39292074.92 0.0524 0.0090

Uranus 102866-01-07 13:25 G 39292101.86 39292102.06 39292102.27 0.0135 0.0027

Uranus 102866-08-21 18:28 G 39292328.06 39292328.27 39292328.48 0.0135 0.0010

Uranus 102867-04-04 23:16 G 39292554.26 39292554.47 39292554.69 0.0135 0.0007

Saturn 102867-10-24 19:11 G 39292757.10 39292757.30 39292757.49 0.0280 0.0087

Uranus 102867-11-17 04:18 G 39292780.47 39292780.68 39292780.89 0.0135 0.0023

Saturn 102868-06-10 03:21 G 39292986.50 39292986.64 39292986.79 0.0283 0.0196

Uranus 102868-06-30 09:21 G 39293006.68 39293006.89 39293007.09 0.0135 0.0040

Uranus 102869-02-11 14:09 G 39293232.91 39293233.09 39293233.29 0.0135 0.0058

Uranus 102869-09-25 19:25 G 39293459.14 39293459.31 39293459.50 0.0135 0.0074

Uranus 102870-05-10 00:57 G 39293685.38 39293685.54 39293685.70 0.0135 0.0091

Uranus 102870-12-22 05:59 G 39293911.63 39293911.75 39293911.89 0.0136 0.0108

Uranus 102871-08-05 11:30 G 39294137.90 39294137.98 39294138.07 0.0136 0.0124

Jupiter 102871-10-17 06:42 G 39294210.58 39294210.78 39294210.99 0.0501 0.0080

Mars 102876-07-12 09:35 G 39295940.75 39295940.90 39295941.04 0.1927 0.1078

Jupiter 102877-08-16 03:35 G 39296340.49 39296340.65 39296340.81 0.0522 0.0313

Jupiter 102878-04-10 04:33 G 39296577.65 39296577.69 39296577.74 0.0527 0.0512

Saturn 102881-01-13 21:35 G 39297587.21 39297587.40 39297587.60 0.0282 0.0113

Saturn 102881-08-31 15:06 G 39297816.97 39297817.13 39297817.30 0.0279 0.0179

Jupiter 102883-06-22 03:35 G 39298476.45 39298476.65 39298476.85 0.0503 0.0131

Jupiter 102889-12-13 23:59 G 39300843.34 39300843.50 39300843.67 0.0526 0.0280

Jupiter 102895-02-25 00:13 G 39302742.36 39302742.51 39302742.66 0.0505 0.0343

Jupiter 102895-10-19 23:59 G 39302979.39 39302979.50 39302979.62 0.0500 0.0411

Saturn 102897-05-05 21:06 G 39303543.18 39303543.38 39303543.58 0.0281 0.0055

Saturn 102897-12-21 05:30 G 39303772.62 39303772.73 39303772.86 0.0284 0.0230

Jupiter 102901-08-19 20:37 G 39305109.16 39305109.36 39305109.56 0.0524 0.0050

Uranus 102904-06-13 00:28 G 39306137.47 39306137.52 39306137.61 0.0143 0.0136

Uranus 102905-01-25 13:40 G 39306363.95 39306364.07 39306364.22 0.0143 0.0115

Uranus 102905-09-09 02:52 G 39306590.46 39306590.62 39306590.79 0.0143 0.0094

Mars 102905-10-04 10:18 G 39306615.76 39306615.93 39306616.10 0.1612 0.0221

Uranus 102906-04-23 16:04 G 39306816.98 39306817.17 39306817.36 0.0143 0.0073

Uranus 102906-12-06 04:47 G 39307043.50 39307043.70 39307043.91 0.0143 0.0053

Jupiter 102907-06-25 21:49 G 39307245.22 39307245.41 39307245.60 0.0501 0.0205

Uranus 102907-07-20 17:45 G 39307270.03 39307270.24 39307270.46 0.0143 0.0032

Uranus 102908-03-03 06:42 G 39307496.56 39307496.78 39307497.01 0.0143 0.0011

Uranus 102908-10-15 19:40 G 39307723.10 39307723.32 39307723.54 0.0143 0.0010

Uranus 102909-05-30 08:09 G 39307949.63 39307949.84 39307950.06 0.0143 0.0031

Uranus 102910-01-11 20:37 G 39308176.16 39308176.36 39308176.57 0.0143 0.0052

Saturn 102910-07-28 01:40 G 39308373.36 39308373.57 39308373.78 0.0281 0.0074

Uranus 102910-08-26 09:06 G 39308402.70 39308402.88 39308403.08 0.0143 0.0072

Neptune 102910-11-21 06:42 G 39308489.70 39308489.78 39308489.88 0.0090 0.0081

Saturn 102911-03-14 18:57 G 39308603.17 39308603.29 39308603.44 0.0279 0.0217

Uranus 102911-04-09 21:35 G 39308629.24 39308629.40 39308629.58 0.0143 0.0093

Neptune 102911-07-04 18:57 G 39308715.18 39308715.29 39308715.44 0.0090 0.0071

Uranus 102911-11-22 09:49 G 39308855.79 39308855.91 39308856.05 0.0142 0.0113

Neptune 102912-02-15 07:54 G 39308940.68 39308940.83 39308940.99 0.0090 0.0060

Uranus 102912-07-05 22:04 G 39309082.34 39309082.42 39309082.50 0.0142 0.0132

Neptune 102912-09-27 20:09 G 39309166.18 39309166.34 39309166.54 0.0090 0.0050

Jupiter 102913-04-24 15:49 G 39309374.97 39309375.16 39309375.34 0.0523 0.0186

Neptune 102913-05-11 08:52 G 39309391.69 39309391.87 39309392.07 0.0090 0.0039

Neptune 102913-12-22 21:21 G 39309617.20 39309617.39 39309617.61 0.0090 0.0029

Neptune 102914-08-05 10:18 G 39309842.72 39309842.93 39309843.14 0.0090 0.0018

Neptune 102915-03-18 22:47 G 39310068.24 39310068.45 39310068.67 0.0090 0.0008

Neptune 102915-10-30 11:30 G 39310293.76 39310293.98 39310294.19 0.0090 0.0004

Neptune 102916-06-11 23:45 G 39310519.29 39310519.49 39310519.71 0.0090 0.0015

Neptune 102917-01-23 12:28 G 39310744.81 39310745.02 39310745.23 0.0090 0.0025

Neptune 102917-09-06 00:57 G 39310970.35 39310970.54 39310970.75 0.0090 0.0035

Neptune 102918-04-19 13:25 G 39311195.89 39311196.06 39311196.25 0.0090 0.0046

Neptune 102918-12-01 01:40 G 39311421.42 39311421.57 39311421.76 0.0090 0.0057

Jupiter 102919-02-28 20:09 G 39311511.13 39311511.34 39311511.55 0.0502 0.0004

Neptune 102919-07-14 14:23 G 39311646.97 39311647.10 39311647.25 0.0090 0.0067

Neptune 102920-02-25 02:37 G 39311872.52 39311872.61 39311872.74 0.0090 0.0078

Neptune 102920-10-07 15:21 G 39312098.11 39312098.14 39312098.19 0.0090 0.0088

Jupiter 102924-12-28 13:54 G 39313640.96 39313641.08 39313641.21 0.0522 0.0408

Jupiter 102925-08-22 15:06 G 39313878.01 39313878.13 39313878.25 0.0527 0.0417

Saturn 102926-11-16 22:18 G 39314329.22 39314329.43 39314329.64 0.0280 0.0023

Saturn 102927-07-04 06:42 G 39314558.71 39314558.78 39314558.86 0.0284 0.0261

Jupiter 102930-11-03 16:04 G 39315776.98 39315777.17 39315777.36 0.0503 0.0213

Jupiter 102937-04-27 12:13 G 39318143.83 39318144.01 39318144.20 0.0526 0.0190

Saturn 102940-02-07 00:57 G 39319159.33 39319159.54 39319159.76 0.0281 0.0049

Saturn 102940-09-23 18:13 G 39319389.16 39319389.26 39319389.37 0.0279 0.0242

Mars 102942-05-10 13:11 G 39319982.88 39319983.05 39319983.22 0.1931 0.0403

Jupiter 102942-07-09 12:13 G 39320042.91 39320043.01 39320043.12 0.0505 0.0426

Jupiter 102943-03-03 12:13 G 39320279.86 39320280.01 39320280.17 0.0500 0.0331

Uranus 102945-12-20 19:40 G 39321303.28 39321303.32 39321303.38 0.0135 0.0131

Uranus 102946-08-04 00:28 G 39321529.42 39321529.52 39321529.63 0.0135 0.0115

Uranus 102947-03-18 05:01 G 39321755.57 39321755.71 39321755.86 0.0135 0.0099

Uranus 102947-10-30 09:35 G 39321981.74 39321981.90 39321982.08 0.0135 0.0083

Uranus 102948-06-12 14:09 G 39322207.92 39322208.09 39322208.29 0.0135 0.0067

Jupiter 102948-12-31 08:37 G 39322409.66 39322409.86 39322410.06 0.0524 0.0043

Uranus 102949-01-24 18:57 G 39322434.10 39322434.29 39322434.49 0.0135 0.0050

Uranus 102949-09-07 23:59 G 39322660.29 39322660.50 39322660.71 0.0135 0.0033

Uranus 102950-04-22 04:47 G 39322886.49 39322886.70 39322886.91 0.0135 0.0017

Uranus 102950-12-04 09:35 G 39323112.69 39323112.90 39323113.12 0.0135 0.0002

Uranus 102951-07-18 14:23 G 39323338.89 39323339.10 39323339.32 0.0135 0.0017

Uranus 102952-02-29 19:25 G 39323565.11 39323565.31 39323565.52 0.0135 0.0034

Uranus 102952-10-13 00:28 G 39323791.33 39323791.52 39323791.73 0.0135 0.0051

Uranus 102953-05-27 05:30 G 39324017.55 39324017.73 39324017.92 0.0135 0.0068

Uranus 102954-01-08 10:33 G 39324243.79 39324243.94 39324244.12 0.0135 0.0085

Uranus 102954-08-22 16:04 G 39324470.03 39324470.17 39324470.32 0.0135 0.0101

Jupiter 102954-11-06 09:35 G 39324545.70 39324545.90 39324546.10 0.0501 0.0123

Uranus 102955-04-05 21:06 G 39324696.29 39324696.38 39324696.50 0.0136 0.0118

Saturn 102955-10-12 17:45 G 39324886.19 39324886.24 39324886.31 0.0278 0.0265

Uranus 102955-11-18 02:37 G 39324922.59 39324922.61 39324922.66 0.0136 0.0134

Saturn 102956-05-29 00:13 G 39325115.31 39325115.51 39325115.72 0.0281 0.0012

Jupiter 102960-09-05 05:30 G 39326675.56 39326675.73 39326675.90 0.0522 0.0270

Jupiter 102966-07-12 07:25 G 39328811.60 39328811.81 39328812.01 0.0502 0.0087

Saturn 102969-08-19 05:16 G 39329945.51 39329945.72 39329945.94 0.0281 0.0009

Mars 102971-08-01 22:33 G 39330658.27 39330658.44 39330658.62 0.1610 0.0047

Jupiter 102972-05-11 00:28 G 39330941.47 39330941.52 39330941.57 0.0521 0.0501

Jupiter 102973-01-03 00:42 G 39331178.38 39331178.53 39331178.69 0.0527 0.0320

Jupiter 102978-03-17 05:01 G 39333077.55 39333077.71 39333077.88 0.0504 0.0295

Jupiter 102978-11-09 03:49 G 39333314.58 39333314.66 39333314.75 0.0499 0.0456

Moon 102981-05-06 06:57 G 39334223.61 39334223.79 39334223.96 0.2624 0.0320

Earth 102981-05-06 10:04 G 39334223.76 39334223.92 39334224.07 0.2629 0.0856 *

Jupiter 102984-09-07 22:18 G 39335444.24 39335444.43 39335444.63 0.0525 0.0092

Saturn 102985-04-23 20:23 G 39335672.23 39335672.35 39335672.46 0.0278 0.0229

Saturn 102985-12-09 02:37 G 39335901.41 39335901.61 39335901.82 0.0281 0.0045

Uranus 102988-02-11 05:01 G 39336695.71 39336695.71 39336695.73 0.0143 0.0143

Uranus 102988-09-24 17:45 G 39336922.15 39336922.24 39336922.37 0.0143 0.0124

Uranus 102989-05-09 07:11 G 39337148.65 39337148.80 39337148.95 0.0143 0.0103

Uranus 102989-12-21 19:54 G 39337375.16 39337375.33 39337375.52 0.0143 0.0082

Jupiter 102990-07-15 00:42 G 39337580.35 39337580.53 39337580.71 0.0500 0.0250

Uranus 102990-08-05 09:06 G 39337601.68 39337601.88 39337602.08 0.0143 0.0061

Uranus 102991-03-19 21:49 G 39337828.21 39337828.41 39337828.63 0.0143 0.0041

Uranus 102991-11-01 10:47 G 39338054.74 39338054.95 39338055.18 0.0143 0.0020

Uranus 102992-06-14 23:45 G 39338281.26 39338281.49 39338281.71 0.0143 0.0002

Uranus 102993-01-27 12:13 G 39338507.80 39338508.01 39338508.24 0.0143 0.0022

Neptune 102993-08-19 11:30 G 39338711.89 39338711.98 39338712.10 0.0088 0.0078

Uranus 102993-09-11 00:57 G 39338734.33 39338734.54 39338734.75 0.0143 0.0043

Neptune 102994-04-02 00:42 G 39338937.41 39338937.53 39338937.70 0.0088 0.0068

Uranus 102994-04-25 13:11 G 39338960.87 39338961.05 39338961.26 0.0143 0.0064

Neptune 102994-11-13 14:37 G 39339162.95 39339163.11 39339163.29 0.0088 0.0057

Uranus 102994-12-08 01:40 G 39339187.40 39339187.57 39339187.76 0.0143 0.0084

Neptune 102995-06-27 04:04 G 39339388.49 39339388.67 39339388.87 0.0088 0.0047

Uranus 102995-07-22 13:54 G 39339413.94 39339414.08 39339414.24 0.0143 0.0104

Neptune 102996-02-07 17:30 G 39339614.04 39339614.23 39339614.45 0.0088 0.0037

Uranus 102996-03-05 01:54 G 39339640.49 39339640.58 39339640.70 0.0142 0.0123

Jupiter 102996-05-13 20:09 G 39339710.15 39339710.34 39339710.53 0.0523 0.0135

Neptune 102996-09-20 07:11 G 39339839.59 39339839.80 39339840.02 0.0088 0.0026

Uranus 102996-10-17 14:09 G 39339867.09 39339867.09 39339867.10 0.0142 0.0142

Neptune 102997-05-03 20:37 G 39340065.14 39340065.36 39340065.58 0.0088 0.0016

Neptune 102997-12-15 10:04 G 39340290.70 39340290.92 39340291.15 0.0088 0.0005

Neptune 102998-07-28 23:30 G 39340516.26 39340516.48 39340516.71 0.0088 0.0005

Saturn 102999-03-01 05:01 G 39340731.50 39340731.71 39340731.93 0.0281 0.0017

Neptune 102999-03-11 12:57 G 39340741.83 39340742.04 39340742.27 0.0088 0.0016

Neptune 102999-10-23 02:37 G 39340967.40 39340967.61 39340967.83 0.0088 0.0026

Neptune 103000-06-05 15:49 G 39341192.97 39341193.16 39341193.38 0.0088 0.0037

104TH MILLENNIUM CE

This is a list of transits of Venus in the 104th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Neptune	**103001-01-17 05:16**	**G**	**39341418.55**	**39341418.72**	**39341418.93**	**0.0088**	**0.0047**	
Neptune	**103001-08-30 19:11**	**G**	**39341644.13**	**39341644.30**	**39341644.47**	**0.0088**	**0.0057**	
Jupiter	**103002-03-20 21:35**	**G**	**39341846.20**	**39341846.40**	**39341846.61**	**0.0502**	**0.0043**	
Neptune	**103002-04-13 08:23**	**G**	**39341869.73**	**39341869.85**	**39341870.01**	**0.0088**	**0.0068**	
Neptune	**103002-11-24 21:49**	**G**	**39342095.33**	**39342095.41**	**39342095.53**	**0.0088**	**0.0078**	
Jupiter	**103008-01-18 17:01**	**G**	**39343976.08**	**39343976.21**	**39343976.36**	**0.0521**	**0.0363**	
Mars	**103008-03-07 15:35**	**G**	**39344024.98**	**39344025.15**	**39344025.32**	**0.1934**	**0.0325**	
Jupiter	**103008-09-11 17:45**	**G**	**39344213.15**	**39344213.24**	**39344213.34**	**0.0527**	**0.0463**	
Jupiter	**103013-11-23 18:13**	**G**	**39346112.06**	**39346112.26**	**39346112.45**	**0.0503**	**0.0172**	
Saturn	**103014-11-04 22:33**	**G**	**39346458.30**	**39346458.44**	**39346458.59**	**0.0279**	**0.0198**	
Saturn	**103015-06-22 05:16**	**G**	**39346687.52**	**39346687.72**	**39346687.92**	**0.0282**	**0.0079**	
Jupiter	**103020-05-17 13:25**	**G**	**39348478.89**	**39348479.06**	**39348479.24**	**0.0525**	**0.0232**	
Pluto	**103021-08-19 02:23**	**G**	**39348937.44**	**39348937.60**	**39348937.79**	**0.0064**	**0.0037**	
Pluto	**103022-04-01 06:13**	**G**	**39349162.55**	**39349162.76**	**39349162.98**	**0.0064**	**0.0003**	
Pluto	**103022-11-12 09:35**	**G**	**39349387.75**	**39349387.90**	**39349388.07**	**0.0064**	**0.0044**	
Jupiter	**103025-07-29 15:35**	**G**	**39350378.02**	**39350378.15**	**39350378.29**	**0.0505**	**0.0383**	
Jupiter	**103026-03-23 15:21**	**G**	**39350615.01**	**39350615.14**	**39350615.28**	**0.0500**	**0.0373**	
Saturn	**103028-01-25 13:54**	**G**	**39351287.98**	**39351288.08**	**39351288.20**	**0.0284**	**0.0244**	
Saturn	**103028-09-11 09:35**	**G**	**39351517.69**	**39351517.90**	**39351518.12**	**0.0281**	**0.0057**	
Uranus	**103030-04-04 09:49**	**G**	**39352087.83**	**39352087.91**	**39352088.01**	**0.0135**	**0.0121**	

Uranus 103030-11-16 14:37 G 39352313.98 39352314.11 39352314.24 0.0135 0.0105

Uranus 103031-06-30 19:11 G 39352540.14 39352540.30 39352540.46 0.0135 0.0089

Jupiter 103032-01-21 07:54 G 39352744.63 39352744.83 39352745.03 0.0524 0.0012

Uranus 103032-02-11 23:45 G 39352766.32 39352766.49 39352766.68 0.0135 0.0073

Uranus 103032-09-25 04:47 G 39352992.51 39352992.70 39352992.89 0.0135 0.0056

Uranus 103033-05-09 09:21 G 39353218.70 39353218.89 39353219.10 0.0135 0.0040

Uranus 103033-12-21 14:23 G 39353444.89 39353445.10 39353445.31 0.0135 0.0023

Uranus 103034-08-04 19:11 G 39353671.09 39353671.30 39353671.52 0.0135 0.0007

Uranus 103035-03-19 00:13 G 39353897.30 39353897.51 39353897.72 0.0135 0.0010

Uranus 103035-10-31 05:01 G 39354123.51 39354123.71 39354123.93 0.0135 0.0027

Uranus 103036-06-13 09:49 G 39354349.72 39354349.91 39354350.13 0.0135 0.0045

Uranus 103037-01-25 15:06 G 39354575.94 39354576.13 39354576.32 0.0135 0.0061

Mars 103037-05-30 10:33 G 39354700.77 39354700.94 39354701.12 0.1608 0.0147

Uranus 103037-09-08 20:09 G 39354802.18 39354802.34 39354802.53 0.0135 0.0078

Jupiter 103037-11-26 13:25 G 39354880.87 39354881.06 39354881.26 0.0501 0.0170

Uranus 103038-04-23 01:40 G 39355028.42 39355028.57 39355028.72 0.0136 0.0094

Uranus 103038-12-05 06:42 G 39355254.67 39355254.78 39355254.91 0.0136 0.0111

Uranus 103039-07-19 11:59 G 39355480.94 39355481.00 39355481.09 0.0136 0.0127

Jupiter 103043-09-26 05:30 G 39357010.55 39357010.73 39357010.91 0.0523 0.0234

Saturn 103044-05-17 01:54 G 39357244.42 39357244.58 39357244.76 0.0278 0.0161

Saturn 103045-01-01 08:37 G 39357473.68 39357473.86 39357474.06 0.0281 0.0117

Jupiter 103049-08-01 09:35 G 39359146.70 39359146.90 39359147.11 0.0502 0.0043

Jupiter 103055-06-01 04:04 G 39361276.57 39361276.67 39361276.76 0.0521 0.0455

Jupiter 103056-01-24 04:18 G 39361513.55 39361513.68 39361513.83 0.0527 0.0370

Saturn 103057-08-06 15:06 G 39362073.99 39362074.13 39362074.27 0.0284 0.0215

Saturn 103058-03-24 10:33 G 39362303.73 39362303.94 39362304.14 0.0281 0.0086

Jupiter 103061-04-06 05:45 G 39363412.56 39363412.74 39363412.92 0.0504 0.0256

Jupiter 103061-11-29 04:33 G 39363649.67 39363649.69 39363649.71 0.0499 0.0495

Jupiter 103067-09-29 00:28 G 39365779.33 39365779.52 39365779.71 0.0525 0.0136

Uranus 103072-05-25 23:16 G 39367480.39 39367480.47 39367480.57 0.0143 0.0130

Jupiter 103072-12-10 01:25 G 39367678.49 39367678.56 39367678.64 0.0505 0.0471

Uranus 103073-01-07 12:13 G 39367706.88 39367707.01 39367707.16 0.0143 0.0110

Jupiter 103073-08-04 01:54 G 39367915.41 39367915.58 39367915.75 0.0500 0.0289

Uranus 103073-08-22 01:11 G 39367933.39 39367933.55 39367933.74 0.0143 0.0090

Saturn 103073-11-27 05:16 G 39368030.54 39368030.72 39368030.91 0.0279 0.0126

Mars 103074-01-02 18:28 G 39368067.12 39368067.27 39368067.41 0.1938 0.1040

Uranus 103074-04-05 14:23 G 39368159.91 39368160.10 39368160.30 0.0143 0.0069

Saturn 103074-07-14 12:13 G 39368259.84 39368260.01 39368260.19 0.0282 0.0154

Uranus 103074-11-18 03:06 G 39368386.43 39368386.63 39368386.85 0.0143 0.0049

Neptune 103075-02-23 18:13 G 39368484.21 39368484.26 39368484.36 0.0090 0.0084

Uranus 103075-07-02 16:04 G 39368612.96 39368613.17 39368613.39 0.0143 0.0028

Neptune 103075-10-07 06:57 G 39368709.68 39368709.79 39368709.93 0.0090 0.0073

Uranus 103076-02-14 05:01 G 39368839.49 39368839.71 39368839.93 0.0143 0.0007

Neptune 103076-05-19 19:11 G 39368935.17 39368935.30 39368935.48 0.0090 0.0063

Uranus 103076-09-27 17:45 G 39369066.02 39369066.24 39369066.46 0.0143 0.0014

Neptune 103076-12-31 08:09 G 39369160.67 39369160.84 39369161.02 0.0090 0.0052

Uranus 103077-05-12 06:13 G 39369292.55 39369292.76 39369292.98 0.0143 0.0034

Neptune 103077-08-13 20:37 G 39369386.19 39369386.36 39369386.57 0.0090 0.0042

Uranus 103077-12-24 18:42 G 39369519.08 39369519.28 39369519.49 0.0143 0.0055

Neptune 103078-03-27 09:21 G 39369611.70 39369611.89 39369612.10 0.0090 0.0031

Uranus 103078-08-08 06:57 G 39369745.61 39369745.79 39369745.99 0.0143 0.0075

Neptune 103078-11-07 22:04 G 39369837.21 39369837.42 39369837.63 0.0090 0.0020

Uranus 103079-03-22 19:25 G 39369972.15 39369972.31 39369972.48 0.0143 0.0095

Jupiter 103079-06-03 20:37 G 39370045.16 39370045.36 39370045.55 0.0523 0.0096

Neptune 103079-06-21 10:33 G 39370062.73 39370062.94 39370063.16 0.0090 0.0009

Uranus 103079-11-04 07:25 G 39370198.69 39370198.81 39370198.95 0.0142 0.0115

Neptune 103080-02-01 23:16 G 39370288.25 39370288.47 39370288.68 0.0090 0.0002

Uranus 103080-06-17 19:25 G 39370425.24 39370425.31 39370425.39 0.0142 0.0134

Neptune 103080-09-14 11:59 G 39370513.78 39370514.00 39370514.21 0.0090 0.0012

Neptune 103081-04-28 00:13 G 39370739.31 39370739.51 39370739.73 0.0090 0.0023

Neptune 103081-12-09 12:57 G 39370964.84 39370965.04 39370965.24 0.0090 0.0033

Neptune 103082-07-23 01:11 G 39371190.38 39371190.55 39371190.75 0.0090 0.0044

Neptune 103083-03-05 13:40 G 39371415.92 39371416.07 39371416.26 0.0090 0.0055

Neptune 103083-10-17 02:23 G 39371641.46 39371641.60 39371641.76 0.0090 0.0065

Neptune 103084-05-29 15:06 G 39371867.02 39371867.13 39371867.25 0.0090 0.0075

Neptune 103085-01-10 03:06 G 39372092.59 39372092.63 39372092.71 0.0090 0.0086

Jupiter 103085-04-08 23:59 G 39372181.30 39372181.50 39372181.71 0.0501 0.0082

Saturn 103087-02-16 20:52 G 39372860.20 39372860.37 39372860.55 0.0283 0.0172

Saturn 103087-10-04 16:04 G 39373089.98 39373090.17 39373090.36 0.0280 0.0128

Jupiter 103091-02-06 14:52 G 39374310.97 39374311.12 39374311.27 0.0522 0.0332

Jupiter 103091-10-01 15:49 G 39374548.10 39374548.16 39374548.23 0.0528 0.0498

Moon 103094-11-06 17:59 G 39375680.10 39375680.25 39375680.39 0.2709 0.0364

Earth 103094-11-06 20:23 G 39375680.20 39375680.35 39375680.50 0.2703 0.0209 *

Jupiter 103096-12-12 21:35 G 39376447.20 39376447.40 39376447.60 0.0503 0.0127

Mars 103103-03-28 23:01 G 39378743.29 39378743.46 39378743.63 0.1606 0.0322

Jupiter 103103-06-07 12:42 G 39378813.86 39378814.03 39378814.20 0.0526 0.0268

Saturn 103103-06-10 10:18 G 39378816.74 39378816.93 39378817.13 0.0279 0.0085

Saturn 103104-01-25 17:16 G 39379046.08 39379046.22 39379046.38 0.0282 0.0195

Jupiter 103108-08-18 16:47 G 39380713.05 39380713.20 39380713.36 0.0504 0.0342

Jupiter 103109-04-12 15:49 G 39380950.05 39380950.16 39380950.28 0.0499 0.0414

Pluto 103111-02-23 08:23 G 39381631.63 39381631.85 39381632.08 0.0079 0.0005

Pluto 103111-10-06 18:42 G 39381857.24 39381857.28 39381857.36 0.0079 0.0076

Uranus 103113-12-03 19:11 G 39382646.25 39382646.30 39382646.39 0.0135 0.0127

Uranus 103114-07-17 23:59 G 39382872.39 39382872.50 39382872.63 0.0135 0.0111

Jupiter 103115-02-10 10:18 G 39383079.73 39383079.93 39383080.13 0.0525 0.0039

Uranus 103115-03-01 04:47 G 39383098.56 39383098.70 39383098.86 0.0135 0.0095

Uranus 103115-10-13 09:21 G 39383324.74 39383324.89 39383325.08 0.0135 0.0079

Uranus 103116-05-26 14:23 G 39383550.92 39383551.10 39383551.30 0.0135 0.0062

Saturn 103116-08-29 23:16 G 39383646.28 39383646.47 39383646.66 0.0283 0.0140

Uranus 103117-01-07 19:11 G 39383777.10 39383777.30 39383777.51 0.0135 0.0046

Saturn 103117-04-16 17:45 G 39383876.07 39383876.24 39383876.43 0.0280 0.0160

Uranus 103117-08-22 00:13 G 39384003.30 39384003.51 39384003.72 0.0135 0.0029

Uranus 103118-04-05 05:01 G 39384229.50 39384229.71 39384229.93 0.0135 0.0013

Uranus 103118-11-17 09:49 G 39384455.70 39384455.91 39384456.13 0.0135 0.0005

Uranus 103119-07-01 14:37 G 39384681.91 39384682.11 39384682.33 0.0135 0.0021

Uranus 103120-02-12 19:40 G 39384908.12 39384908.32 39384908.53 0.0135 0.0038

Uranus 103120-09-26 00:42 G 39385134.34 39385134.53 39385134.74 0.0135 0.0055

Jupiter 103120-12-16 12:42 G 39385215.84 39385216.03 39385216.22 0.0501 0.0206

Uranus 103121-05-10 05:59 G 39385360.57 39385360.75 39385360.93 0.0136 0.0071

Uranus 103121-12-22 10:47 G 39385586.80 39385586.95 39385587.13 0.0136 0.0088

Uranus 103122-08-05 16:18 G 39385813.05 39385813.18 39385813.32 0.0136 0.0104

Uranus 103123-03-19 21:49 G 39386039.31 39386039.41 39386039.51 0.0136 0.0120

Jupiter 103126-10-16 06:42 G 39387345.60 39387345.78 39387345.97 0.0523 0.0193

Jupiter 103132-08-21 09:21 G 39389481.68 39389481.89 39389482.09 0.0502 0.0012

Saturn 103132-12-20 14:23 G 39389602.89 39389603.10 39389603.30 0.0280 0.0048

Saturn 103133-08-06 21:49 G 39389832.30 39389832.41 39389832.53 0.0283 0.0235

Mars 103135-03-27 16:33 G 39390430.15 39390430.19 39390430.24 0.1613 0.1554

Jupiter 103138-06-21 03:21 G 39391611.52 39391611.64 39391611.76 0.0521 0.0419

Jupiter 103139-02-13 03:35 G 39391848.52 39391848.65 39391848.77 0.0526 0.0406

Mars 103139-10-31 20:23 G 39392109.29 39392109.35 39392109.42 0.1941 0.1799

Jupiter 103144-04-26 06:42 G 39393747.59 39393747.78 39393747.97 0.0504 0.0218

Saturn 103146-03-12 05:59 G 39394432.55 39394432.75 39394432.96 0.0283 0.0094

Saturn 103146-10-28 00:42 G 39394662.38 39394662.53 39394662.68 0.0280 0.0203

Jupiter 103150-10-18 20:52 G 39396114.18 39396114.37 39396114.56 0.0525 0.0165

Jupiter 103155-12-31 03:35 G 39398013.54 39398013.65 39398013.76 0.0505 0.0429

Uranus 103156-01-25 05:59 G 39398038.69 39398038.75 39398038.82 0.0143 0.0136

Jupiter 103156-08-24 03:35 G 39398250.49 39398250.65 39398250.80 0.0500 0.0331

Uranus 103156-09-07 18:42 G 39398265.17 39398265.28 39398265.42 0.0143 0.0117

Uranus 103157-04-22 07:40 G 39398491.67 39398491.82 39398492.00 0.0143 0.0097

Neptune 103157-11-22 21:49 G 39398706.34 39398706.41 39398706.52 0.0088 0.0080

Uranus 103157-12-04 20:52 G 39398718.19 39398718.37 39398718.56 0.0143 0.0076

Neptune 103158-07-06 11:16 G 39398931.86 39398931.97 39398932.13 0.0088 0.0070

Uranus 103158-07-19 09:35 G 39398944.71 39398944.90 39398945.11 0.0143 0.0056

Neptune 103159-02-17 01:25 G 39399157.39 39399157.56 39399157.72 0.0088 0.0059

Uranus 103159-03-02 22:47 G 39399171.23 39399171.45 39399171.67 0.0143 0.0035

Neptune 103159-09-30 14:37 G 39399382.93 39399383.11 39399383.31 0.0088 0.0049

Uranus 103159-10-15 11:30 G 39399397.76 39399397.98 39399398.20 0.0143 0.0015

Neptune 103160-05-13 04:04 G 39399608.48 39399608.67 39399608.88 0.0088 0.0039

Uranus 103160-05-29 00:13 G 39399624.29 39399624.51 39399624.73 0.0143 0.0006

Neptune 103160-12-24 17:45 G 39399834.03 39399834.24 39399834.45 0.0088 0.0028

Uranus 103161-01-10 12:42 G 39399850.81 39399851.03 39399851.25 0.0143 0.0027

Neptune 103161-08-07 07:11 G 39400059.58 39400059.80 39400060.02 0.0088 0.0018

Uranus 103161-08-25 01:11 G 39400077.34 39400077.55 39400077.76 0.0143 0.0047

Saturn 103161-11-15 15:06 G 39400160.12 39400160.13 39400160.16 0.0277 0.0275

Neptune 103162-03-20 20:37 G 39400285.14 39400285.36 39400285.59 0.0088 0.0008

Uranus 103162-04-08 13:25 G 39400303.88 39400304.06 39400304.27 0.0143 0.0068

Jupiter 103162-06-23 17:45 G 39400380.04 39400380.24 39400380.44 0.0524 0.0065

Saturn 103162-07-02 20:52 G 39400389.16 39400389.37 39400389.58 0.0279 0.0004

Neptune 103162-11-01 10:18 G 39400510.70 39400510.93 39400511.15 0.0088 0.0003

Uranus 103162-11-21 01:40 G 39400530.41 39400530.57 39400530.76 0.0143 0.0088

Saturn 103163-02-17 04:18 G 39400618.66 39400618.68 39400618.71 0.0282 0.0279

Neptune 103163-06-14 23:30 G 39400736.26 39400736.48 39400736.71 0.0088 0.0014

Uranus 103163-07-05 14:09 G 39400756.94 39400757.09 39400757.23 0.0142 0.0107

Neptune 103164-01-26 12:57 G 39400961.83 39400962.04 39400962.27 0.0088 0.0024

Uranus 103164-02-17 01:40 G 39400983.49 39400983.57 39400983.69 0.0142 0.0127

Neptune 103164-09-08 02:37 G 39401187.40 39401187.61 39401187.82 0.0088 0.0034

Neptune 103165-04-21 15:49 G 39401412.98 39401413.16 39401413.37 0.0088 0.0045

Neptune 103165-12-03 05:16 G 39401638.56 39401638.72 39401638.91 0.0088 0.0055

Neptune 103166-07-16 18:57 G 39401864.15 39401864.29 39401864.44 0.0088 0.0065

Neptune 103167-02-27 08:09 G 39402089.75 39402089.84 39402089.98 0.0088 0.0076

Neptune 103167-10-10 21:49 G 39402315.38 39402315.41 39402315.47 0.0088 0.0086

Jupiter 103168-04-28 23:16 G 39402516.26 39402516.47 39402516.67 0.0501 0.0119

Mars 103169-01-23 11:01 G 39402785.79 39402785.96 39402786.12 0.1604 0.0508

Jupiter 103174-02-26 15:49 G 39404645.99 39404646.16 39404646.32 0.0522 0.0290

Saturn 103175-09-22 10:18 G 39405218.72 39405218.93 39405219.15 0.0283 0.0057

Saturn 103176-05-09 04:18 G 39405448.58 39405448.68 39405448.80 0.0280 0.0239

Jupiter 103180-01-02 19:11 G 39406782.10 39406782.30 39406782.51 0.0503 0.0095

Jupiter 103185-11-01 12:42 G 39408912.01 39408912.03 39408912.06 0.0520 0.0515

Jupiter 103186-06-26 12:28 G 39409148.87 39409149.02 39409149.19 0.0526 0.0307

Saturn 103191-05-28 19:40 G 39410946.22 39410946.32 39410946.43 0.0278 0.0238

Jupiter 103191-09-07 14:37 G 39411047.95 39411048.11 39411048.28 0.0504 0.0311

Saturn 103192-01-13 01:40 G 39411175.37 39411175.57 39411175.78 0.0280 0.0037

Jupiter 103192-05-01 14:09 G 39411285.00 39411285.09 39411285.18 0.0499 0.0446

Uranus 103197-08-03 04:47 G 39413204.67 39413204.70 39413204.75 0.0135 0.0132

Jupiter 103198-03-01 08:09 G 39413414.64 39413414.84 39413415.04 0.0524 0.0072

Uranus 103198-03-17 09:35 G 39413430.80 39413430.90 39413431.01 0.0135 0.0116

Uranus 103198-10-29 14:23 G 39413656.96 39413657.10 39413657.24 0.0135 0.0100

Uranus 103199-06-12 19:11 G 39413883.13 39413883.30 39413883.46 0.0135 0.0084

Uranus 103200-01-24 23:45 G 39414109.31 39414109.49 39414109.68 0.0135 0.0068

Uranus 103200-09-07 04:33 G 39414335.51 39414335.69 39414335.90 0.0135 0.0052

Mars 103201-01-22 04:33 G 39414472.60 39414472.69 39414472.78 0.1611 0.1361

Uranus 103201-04-21 09:35 G 39414561.70 39414561.90 39414562.11 0.0135 0.0035

Uranus 103201-12-03 14:23 G 39414787.89 39414788.10 39414788.31 0.0135 0.0019

Uranus 103202-07-17 19:11 G 39415014.09 39415014.30 39415014.52 0.0135 0.0003

Uranus 103203-03-01 00:13 G 39415240.29 39415240.51 39415240.72 0.0135 0.0015

Uranus 103203-10-13 05:01 G 39415466.51 39415466.71 39415466.92 0.0135 0.0031

Jupiter 103204-01-05 12:13 G 39415550.83 39415551.01 39415551.19 0.0501 0.0241

Uranus 103204-05-26 10:04 G 39415692.72 39415692.92 39415693.12 0.0135 0.0048

Uranus 103205-01-07 14:52 G 39415918.95 39415919.12 39415919.32 0.0136 0.0065

Saturn 103205-04-03 17:59 G 39416005.04 39416005.25 39416005.47 0.0282 0.0011

Uranus 103205-08-21 20:09 G 39416145.18 39416145.34 39416145.52 0.0136 0.0081

Uranus 103206-04-05 01:11 G 39416371.42 39416371.55 39416371.72 0.0136 0.0098

Uranus 103206-11-17 06:42 G 39416597.67 39416597.78 39416597.90 0.0136 0.0114

Uranus 103207-07-01 11:59 G 39416823.96 39416824.00 39416824.07 0.0136 0.0130

Jupiter 103209-11-04 01:40 G 39417680.38 39417680.57 39417680.76 0.0523 0.0168

Jupiter 103215-09-10 09:35 G 39419816.69 39419816.90 39419817.11 0.0502 0.0032

Saturn 103220-12-08 03:21 G 39421732.49 39421732.64 39421732.79 0.0278 0.0192

Jupiter 103221-07-09 22:47 G 39421946.32 39421946.45 39421946.58 0.0521 0.0393

Saturn 103221-07-25 09:35 G 39421961.70 39421961.90 39421962.10 0.0280 0.0084

Jupiter 103222-03-03 23:16 G 39422183.37 39422183.47 39422183.59 0.0527 0.0435

Moon 103224-05-08 03:35 G 39422979.48 39422979.65 39422979.81 0.2629 0.0122

Earth 103224-05-08 09:21 G 39422979.74 39422979.89 39422980.05 0.2630 0.0833 *

Jupiter 103227-05-16 04:18 G 39424082.49 39424082.68 39424082.88 0.0503 0.0185

Jupiter 103233-11-06 20:23 G 39426449.17 39426449.35 39426449.54 0.0526 0.0205

Saturn 103234-02-27 03:49 G 39426561.62 39426561.66 39426561.73 0.0285 0.0274

Saturn 103234-10-14 23:59 G 39426791.29 39426791.50 39426791.72 0.0282 0.0031

Mars 103234-11-20 23:30 G 39426828.32 39426828.48 39426828.64 0.1602 0.0681

Mars 103237-08-27 23:30 G 39427839.39 39427839.48 39427839.58 0.1933 0.1587

Jupiter 103239-01-18 23:59 G 39428348.37 39428348.50 39428348.62 0.0505 0.0400

Neptune 103239-05-29 06:13 G 39428478.72 39428478.76 39428478.84 0.0090 0.0086

Jupiter 103239-09-12 23:30 G 39428585.34 39428585.48 39428585.63 0.0500 0.0360

Uranus 103239-09-24 12:13 G 39428597.01 39428597.01 39428597.02 0.0143 0.0143

Neptune 103240-01-09 18:57 G 39428704.18 39428704.29 39428704.42 0.0090 0.0075

Uranus 103240-05-08 00:57 G 39428823.44 39428823.54 39428823.66 0.0143 0.0123

Neptune 103240-08-22 07:25 G 39428929.68 39428929.81 39428929.98 0.0090 0.0065

Uranus 103240-12-20 13:54 G 39429049.94 39429050.08 39429050.25 0.0143 0.0103

Neptune 103241-04-04 20:23 G 39429155.18 39429155.35 39429155.52 0.0090 0.0054

Uranus 103241-08-04 02:52 G 39429276.45 39429276.62 39429276.81 0.0143 0.0083

Neptune 103241-11-16 08:37 G 39429380.68 39429380.86 39429381.06 0.0090 0.0044

Uranus 103242-03-18 16:04 G 39429502.98 39429503.17 39429503.38 0.0143 0.0063

Neptune 103242-06-29 21:21 G 39429606.19 39429606.39 39429606.59 0.0090 0.0033

Uranus 103242-10-31 05:01 G 39429729.50 39429729.71 39429729.93 0.0143 0.0042

Neptune 103243-02-10 09:35 G 39429831.70 39429831.90 39429832.12 0.0090 0.0023

Uranus 103243-06-14 17:45 G 39429956.03 39429956.24 39429956.47 0.0143 0.0022

Neptune 103243-09-23 22:18 G 39430057.22 39430057.43 39430057.65 0.0090 0.0012

Uranus 103244-01-27 06:42 G 39430182.55 39430182.78 39430183.00 0.0143 0.0003

Neptune 103244-05-06 11:01 G 39430282.74 39430282.96 39430283.17 0.0090 0.0002

Uranus 103244-09-09 19:11 G 39430409.08 39430409.30 39430409.52 0.0143 0.0020

Neptune 103244-12-17 23:30 G 39430508.27 39430508.48 39430508.69 0.0090 0.0009

Uranus 103245-04-24 07:54 G 39430635.62 39430635.83 39430636.04 0.0143 0.0040

Jupiter 103245-07-12 16:47 G 39430715.00 39430715.20 39430715.40 0.0524 0.0029

Neptune 103245-07-31 11:45 G 39430733.80 39430733.99 39430734.22 0.0090 0.0021

Uranus 103245-12-06 19:54 G 39430862.15 39430862.33 39430862.55 0.0143 0.0061

Neptune 103246-03-14 00:28 G 39430959.33 39430959.52 39430959.73 0.0090 0.0031

Uranus 103246-07-21 08:09 G 39431088.68 39431088.84 39431089.04 0.0143 0.0081

Neptune 103246-10-25 12:57 G 39431184.86 39431185.04 39431185.24 0.0090 0.0042

Uranus 103247-03-04 20:52 G 39431315.21 39431315.37 39431315.53 0.0142 0.0100

Neptune 103247-06-08 01:25 G 39431410.40 39431410.56 39431410.75 0.0090 0.0052

Uranus 103247-10-17 08:37 G 39431541.75 39431541.86 39431541.99 0.0142 0.0119

Neptune 103248-01-19 13:54 G 39431635.94 39431636.08 39431636.25 0.0090 0.0063

Uranus 103248-05-30 20:23 G 39431768.32 39431768.35 39431768.42 0.0142 0.0139

Neptune 103248-09-01 02:37 G 39431861.50 39431861.61 39431861.75 0.0090 0.0073

Neptune 103249-04-14 15:35 G 39432087.07 39432087.15 39432087.23 0.0090 0.0083

Saturn 103250-06-20 08:23 G 39432518.68 39432518.85 39432519.03 0.0279 0.0153

Saturn 103251-02-04 14:52 G 39432747.94 39432748.12 39432748.31 0.0281 0.0126

Jupiter 103251-05-18 19:40 G 39432851.12 39432851.32 39432851.52 0.0501 0.0148

Jupiter 103257-03-17 12:42 G 39434980.85 39434981.03 39434981.20 0.0522 0.0261

Jupiter 103263-01-21 17:01 G 39437117.00 39437117.21 39437117.42 0.0503 0.0063

Saturn 103263-09-09 13:11 G 39437347.93 39437348.05 39437348.19 0.0284 0.0222

Saturn 103264-04-26 08:52 G 39437577.67 39437577.87 39437578.08 0.0281 0.0081

Mars 103266-11-19 16:47 G 39438515.09 39438515.20 39438515.32 0.1609 0.1177

Jupiter 103268-11-20 06:42 G 39439246.72 39439246.78 39439246.84 0.0520 0.0493

Jupiter 103269-07-15 06:13 G 39439483.61 39439483.76 39439483.92 0.0526 0.0330

Pluto 103270-03-05 05:59 G 39439716.58 39439716.75 39439716.97 0.0064 0.0028

Pluto 103270-10-16 10:04 G 39439941.71 39439941.92 39439942.13 0.0064 0.0013

Pluto 103271-05-29 13:11 G 39440166.95 39440167.05 39440167.18 0.0064 0.0054

Jupiter 103274-09-26 13:25 G 39441382.89 39441383.06 39441383.24 0.0504 0.0276

Jupiter 103275-05-21 12:57 G 39441619.99 39441620.04 39441620.09 0.0499 0.0480

Saturn 103279-12-31 17:01 G 39443305.02 39443305.21 39443305.40 0.0279 0.0104

Saturn 103280-08-16 23:45 G 39443534.34 39443534.49 39443534.66 0.0281 0.0177

Jupiter 103281-03-20 02:37 G 39443749.41 39443749.61 39443749.80 0.0525 0.0097

Uranus 103281-11-14 19:11 G 39443989.23 39443989.30 39443989.41 0.0135 0.0122

Uranus 103282-06-28 23:59 G 39444215.39 39444215.50 39444215.65 0.0135 0.0106

Uranus 103283-02-10 04:47 G 39444441.56 39444441.70 39444441.87 0.0135 0.0090

Uranus 103283-09-24 09:35 G 39444667.74 39444667.90 39444668.09 0.0135 0.0074

Uranus 103284-05-07 14:37 G 39444893.92 39444894.11 39444894.31 0.0135 0.0057

Uranus 103284-12-19 19:11 G 39445120.11 39445120.30 39445120.51 0.0135 0.0041

Uranus 103285-08-02 23:59 G 39445346.30 39445346.50 39445346.72 0.0135 0.0025

Uranus 103286-03-17 05:01 G 39445572.50 39445572.71 39445572.92 0.0135 0.0008

Jupiter 103286-06-01 07:25 G 39445648.78 39445648.81 39445648.86 0.0506 0.0495

Uranus 103286-10-29 09:49 G 39445798.70 39445798.91 39445799.12 0.0135 0.0009

Jupiter 103287-01-24 08:09 G 39445885.67 39445885.84 39445886.02 0.0500 0.0270

Uranus 103287-06-12 14:37 G 39446024.90 39446025.11 39446025.32 0.0135 0.0025

Uranus 103288-01-24 19:40 G 39446251.11 39446251.32 39446251.52 0.0135 0.0042

Uranus 103288-09-07 00:28 G 39446477.34 39446477.52 39446477.72 0.0135 0.0059

Uranus 103289-04-21 05:45 G 39446703.57 39446703.74 39446703.92 0.0135 0.0075

Uranus 103289-12-03 10:33 G 39446929.80 39446929.94 39446930.11 0.0136 0.0092

Uranus 103290-07-17 15:49 G 39447156.05 39447156.16 39447156.30 0.0136 0.0108

Uranus 103291-02-28 21:06 G 39447382.31 39447382.38 39447382.48 0.0136 0.0124

Jupiter 103292-11-22 23:59 G 39448015.31 39448015.50 39448015.69 0.0523 0.0133

Saturn 103293-03-21 21:06 G 39448134.21 39448134.38 39448134.55 0.0284 0.0176

Saturn 103293-11-06 16:18 G 39448363.98 39448364.18 39448364.37 0.0281 0.0125

Jupiter 103298-09-29 04:18 G 39450151.48 39450151.68 39450151.89 0.0502 0.0058

Mars 103300-09-18 11:45 G 39450870.84 39450870.99 39450871.14 0.1600 0.0859

Mars 103303-06-26 01:54 G 39451881.43 39451881.58 39451881.74 0.1937 0.0853

Jupiter 103304-07-29 20:52 G 39452281.23 39452281.37 39452281.52 0.0521 0.0362

Jupiter 103305-03-23 21:21 G 39452518.31 39452518.39 39452518.48 0.0527 0.0468

Saturn 103309-07-13 22:33 G 39454091.24 39454091.44 39454091.65 0.0279 0.0063

Saturn 103310-02-28 05:45 G 39454320.61 39454320.74 39454320.87 0.0282 0.0220

Jupiter 103310-06-04 23:30 G 39454417.29 39454417.48 39454417.68 0.0503 0.0160

Jupiter 103316-11-26 16:18 G 39456784.00 39456784.18 39456784.36 0.0525 0.0232

Jupiter 103322-02-07 19:54 G 39458683.20 39458683.33 39458683.47 0.0505 0.0375

Neptune 103322-02-25 08:23 G 39458700.79 39458700.85 39458700.94 0.0088 0.0082

Jupiter 103322-10-02 20:09 G 39458920.22 39458920.34 39458920.48 0.0500 0.0389

Saturn 103322-10-03 06:42 G 39458920.59 39458920.78 39458920.97 0.0283 0.0124

Neptune 103322-10-08 21:49 G 39458926.30 39458926.41 39458926.56 0.0088 0.0072

Saturn 103323-05-21 01:25 G 39459150.39 39459150.56 39459150.73 0.0280 0.0175

Neptune 103323-05-22 11:01 G 39459151.83 39459151.96 39459152.15 0.0088 0.0062

Neptune 103324-01-03 00:57 G 39459377.37 39459377.54 39459377.73 0.0088 0.0051

Uranus 103324-01-07 06:13 G 39459381.69 39459381.76 39459381.87 0.0143 0.0130

Neptune 103324-08-15 14:23 G 39459602.92 39459603.10 39459603.32 0.0088 0.0041

Uranus 103324-08-20 19:25 G 39459608.18 39459608.31 39459608.46 0.0143 0.0110

Neptune 103325-03-29 04:18 G 39459828.47 39459828.68 39459828.89 0.0088 0.0030

Uranus 103325-04-04 08:37 G 39459834.69 39459834.86 39459835.04 0.0143 0.0090

Neptune 103325-11-09 17:45 G 39460054.03 39460054.24 39460054.46 0.0088 0.0020

Uranus 103325-11-16 21:21 G 39460061.21 39460061.39 39460061.60 0.0143 0.0070

Neptune 103326-06-23 07:11 G 39460279.58 39460279.80 39460280.03 0.0088 0.0010

Uranus 103326-07-01 10:33 G 39460287.73 39460287.94 39460288.15 0.0143 0.0049

Neptune 103327-02-03 20:52 G 39460505.15 39460505.37 39460505.60 0.0088 0.0002

Uranus 103327-02-12 23:30 G 39460514.26 39460514.48 39460514.70 0.0143 0.0029

Neptune 103327-09-17 10:18 G 39460730.71 39460730.93 39460731.16 0.0088 0.0012

Uranus 103327-09-27 12:13 G 39460740.79 39460741.01 39460741.23 0.0143 0.0008

Neptune 103328-04-29 23:45 G 39460956.28 39460956.49 39460956.71 0.0088 0.0022

Uranus 103328-05-11 00:57 G 39460967.32 39460967.54 39460967.76 0.0143 0.0012

Jupiter 103328-08-01 09:49 G 39461049.71 39461049.91 39461050.11 0.0523 0.0009

Neptune 103328-12-11 13:11 G 39461181.85 39461182.05 39461182.27 0.0088 0.0032

Uranus 103328-12-23 13:25 G 39461193.85 39461194.06 39461194.28 0.0143 0.0032

Neptune 103329-07-25 02:23 G 39461407.42 39461407.60 39461407.81 0.0088 0.0043

Uranus 103329-08-07 01:54 G 39461420.38 39461420.58 39461420.79 0.0143 0.0053

Neptune 103330-03-07 16:04 G 39461633.01 39461633.17 39461633.36 0.0088 0.0053

Uranus 103330-03-21 14:23 G 39461646.91 39461647.10 39461647.29 0.0143 0.0073

Neptune 103330-10-19 05:45 G 39461858.59 39461858.74 39461858.90 0.0088 0.0063

Uranus 103330-11-03 02:23 G 39461873.45 39461873.60 39461873.78 0.0143 0.0093

Neptune 103331-06-01 18:42 G 39462084.18 39462084.28 39462084.43 0.0088 0.0074

Uranus 103331-06-17 14:23 G 39462099.98 39462100.10 39462100.25 0.0142 0.0113

Neptune 103332-01-13 08:23 G 39462309.80 39462309.85 39462309.93 0.0088 0.0084

Uranus 103332-01-30 02:23 G 39462326.54 39462326.60 39462326.70 0.0142 0.0132

Mars 103332-09-17 04:47 G 39462557.56 39462557.70 39462557.84 0.1607 0.0983

Jupiter 103334-06-07 17:16 G 39463186.03 39463186.22 39463186.41 0.0501 0.0181

Earth 103337-11-08 23:16 G 39464436.31 39464436.47 39464436.62 0.2703 0.0284

Moon 103337-11-09 03:49 G 39464436.51 39464436.66 39464436.80 0.2700 0.1064 *

Saturn 103339-01-24 07:11 G 39464877.60 39464877.80 39464878.01 0.0280 0.0015

Saturn 103339-09-10 14:52 G 39465107.07 39465107.12 39465107.18 0.0282 0.0271

Jupiter 103340-04-06 06:13 G 39465315.58 39465315.76 39465315.94 0.0522 0.0239

Jupiter 103346-02-10 12:13 G 39467451.80 39467452.01 39467452.22 0.0503 0.0037

Jupiter 103351-12-11 03:49 G 39469581.58 39469581.66 39469581.75 0.0521 0.0464

Saturn 103352-04-14 15:49 G 39469706.95 39469707.16 39469707.37 0.0283 0.0075

Jupiter 103352-08-04 04:04 G 39469818.53 39469818.67 39469818.82 0.0526 0.0364

Saturn 103352-11-30 09:49 G 39469936.79 39469936.91 39469937.05 0.0280 0.0223

Jupiter 103357-10-16 07:40 G 39471717.65 39471717.82 39471718.01 0.0504 0.0253

Pluto 103359-01-27 00:13 G 39472185.45 39472185.51 39472185.62 0.0080 0.0074

Pluto 103359-09-09 11:30 G 39472410.77 39472410.98 39472411.22 0.0079 0.0009

Jupiter 103364-04-09 00:13 G 39474084.32 39474084.51 39474084.70 0.0525 0.0129

Uranus 103365-07-16 05:01 G 39474547.66 39474547.71 39474547.80 0.0135 0.0127

Uranus 103366-02-27 10:04 G 39474773.81 39474773.92 39474774.05 0.0135 0.0111

Mars 103366-07-17 00:13 G 39474913.38 39474913.51 39474913.65 0.1599 0.1034

Uranus 103366-10-11 14:52 G 39474999.98 39475000.12 39475000.27 0.0135 0.0095

Uranus 103367-05-25 19:25 G 39475226.15 39475226.31 39475226.49 0.0135 0.0079

Saturn 103367-12-20 06:42 G 39475434.70 39475434.78 39475434.88 0.0277 0.0247

Uranus 103368-01-07 00:13 G 39475452.32 39475452.51 39475452.70 0.0135 0.0063

Saturn 103368-08-05 12:57 G 39475663.83 39475664.04 39475664.24 0.0280 0.0029

Uranus 103368-08-20 04:47 G 39475678.51 39475678.70 39475678.91 0.0135 0.0047

Uranus 103369-04-03 09:49 G 39475904.70 39475904.91 39475905.12 0.0135 0.0031

Mars 103369-04-22 05:16 G 39475923.54 39475923.72 39475923.89 0.1940 0.0153

Jupiter 103369-06-21 02:23 G 39475983.53 39475983.60 39475983.67 0.0506 0.0472

Uranus 103369-11-15 14:23 G 39476130.89 39476131.10 39476131.32 0.0135 0.0014

Jupiter 103370-02-13 03:06 G 39476220.46 39476220.63 39476220.80 0.0501 0.0295

Uranus 103370-06-29 19:11 G 39476357.09 39476357.30 39476357.51 0.0135 0.0002

Uranus 103371-02-10 23:59 G 39476583.29 39476583.50 39476583.71 0.0135 0.0019

Uranus 103371-09-25 05:01 G 39476809.50 39476809.71 39476809.92 0.0135 0.0035

Uranus 103372-05-08 09:35 G 39477035.72 39477035.90 39477036.11 0.0135 0.0053

Uranus 103372-12-20 14:37 G 39477261.94 39477262.11 39477262.31 0.0135 0.0069

Uranus 103373-08-03 19:54 G 39477488.17 39477488.33 39477488.50 0.0135 0.0085

Uranus 103374-03-18 00:42 G 39477714.41 39477714.53 39477714.69 0.0136 0.0102

Uranus 103374-10-30 06:13 G 39477940.67 39477940.76 39477940.88 0.0136 0.0118

Uranus 103375-06-13 11:30 G 39478166.97 39478166.98 39478167.04 0.0136 0.0134

Jupiter 103375-12-13 19:54 G 39478350.13 39478350.33 39478350.52 0.0523 0.0105

Jupiter 103381-10-18 23:59 G 39480486.30 39480486.50 39480486.71 0.0502 0.0085

Saturn 103381-10-26 01:11 G 39480493.33 39480493.55 39480493.76 0.0282 0.0024

Saturn 103382-06-12 19:11 G 39480723.25 39480723.30 39480723.35 0.0279 0.0272

Jupiter 103387-08-18 14:09 G 39482615.95 39482616.09 39482616.25 0.0521 0.0341

Jupiter 103388-04-11 14:09 G 39482853.03 39482853.09 39482853.17 0.0527 0.0490

Jupiter 103393-06-23 20:23 G 39484752.15 39484752.35 39484752.55 0.0504 0.0130

Saturn 103397-07-01 15:21 G 39486221.01 39486221.14 39486221.29 0.0278 0.0199

Saturn 103398-02-15 21:49 G 39486450.21 39486450.41 39486450.61 0.0281 0.0079

Mars 103398-07-15 17:16 G 39486600.07 39486600.22 39486600.37 0.1605 0.0805

Jupiter 103399-12-16 09:49 G 39487118.74 39487118.91 39487119.09 0.0525 0.0257

Neptune 103403-09-01 18:28 G 39488473.25 39488473.27 39488473.34 0.0090 0.0088

Neptune 103404-04-14 07:25 G 39488698.71 39488698.81 39488698.92 0.0090 0.0077

Neptune 103404-11-25 19:40 G 39488924.19 39488924.32 39488924.48 0.0090 0.0067

Jupiter 103405-02-27 14:52 G 39489017.98 39489018.12 39489018.28 0.0505 0.0350

Neptune 103405-07-09 08:23 G 39489149.69 39489149.85 39489150.02 0.0090 0.0056

Jupiter 103405-10-22 14:37 G 39489255.00 39489255.11 39489255.23 0.0500 0.0414

Neptune 103406-02-19 20:52 G 39489375.19 39489375.37 39489375.56 0.0090 0.0046

Neptune 103406-10-03 09:35 G 39489600.70 39489600.90 39489601.10 0.0090 0.0035

Neptune 103407-05-16 21:49 G 39489826.21 39489826.41 39489826.63 0.0090 0.0025

Uranus 103407-09-07 10:47 G 39489939.90 39489939.95 39489940.01 0.0143 0.0137

Neptune 103407-12-28 10:33 G 39490051.73 39490051.94 39490052.15 0.0090 0.0014

Uranus 103408-04-20 23:30 G 39490166.37 39490166.48 39490166.62 0.0143 0.0118

Neptune 103408-08-09 23:16 G 39490277.25 39490277.47 39490277.68 0.0090 0.0004

Uranus 103408-12-03 12:28 G 39490392.88 39490393.02 39490393.20 0.0143 0.0098

Neptune 103409-03-23 11:30 G 39490502.77 39490502.98 39490503.20 0.0090 0.0008

Uranus 103409-07-18 01:25 G 39490619.39 39490619.56 39490619.76 0.0143 0.0078

Neptune 103409-11-03 23:59 G 39490728.30 39490728.50 39490728.72 0.0090 0.0018

Uranus 103410-03-01 14:52 G 39490845.92 39490846.12 39490846.33 0.0143 0.0057

Neptune 103410-06-17 12:28 G 39490953.82 39490954.02 39490954.23 0.0090 0.0029

Saturn 103410-09-21 14:23 G 39491050.07 39491050.10 39491050.14 0.0285 0.0280

Uranus 103410-10-14 03:35 G 39491072.44 39491072.65 39491072.87 0.0143 0.0037

Neptune 103411-01-29 00:57 G 39491179.36 39491179.54 39491179.74 0.0090 0.0039

Saturn 103411-05-09 10:33 G 39491279.72 39491279.94 39491280.15 0.0282 0.0026

Uranus 103411-05-28 16:33 G 39491298.97 39491299.19 39491299.41 0.0143 0.0017

Jupiter 103411-08-22 07:11 G 39491384.60 39491384.80 39491385.00 0.0524 0.0024

Neptune 103411-09-11 13:25 G 39491404.90 39491405.06 39491405.26 0.0090 0.0050

Uranus 103412-01-10 05:16 G 39491525.49 39491525.72 39491525.94 0.0143 0.0004

Neptune 103412-04-24 02:09 G 39491630.44 39491630.59 39491630.76 0.0090 0.0060

Uranus 103412-08-23 17:45 G 39491752.02 39491752.24 39491752.46 0.0143 0.0024

Neptune 103412-12-05 14:23 G 39491855.99 39491856.10 39491856.25 0.0090 0.0071

Uranus 103413-04-07 06:13 G 39491978.56 39491978.76 39491978.98 0.0143 0.0045

Neptune 103413-07-19 03:06 G 39492081.55 39492081.63 39492081.73 0.0090 0.0081

Uranus 103413-11-19 18:42 G 39492205.09 39492205.28 39492205.49 0.0143 0.0065

Uranus 103414-07-04 06:57 G 39492431.63 39492431.79 39492431.98 0.0143 0.0085

Uranus 103415-02-15 19:11 G 39492658.16 39492658.30 39492658.46 0.0142 0.0104

Uranus 103415-09-30 07:25 G 39492884.71 39492884.81 39492884.93 0.0142 0.0124

Jupiter 103417-06-27 11:16 G 39493520.78 39493520.97 39493521.16 0.0501 0.0204

Jupiter 103423-04-27 04:04 G 39495650.49 39495650.67 39495650.85 0.0522 0.0208

Saturn 103427-01-12 19:40 G 39497007.16 39497007.32 39497007.50 0.0278 0.0161

Saturn 103427-08-30 02:23 G 39497236.42 39497236.60 39497236.79 0.0281 0.0119

Jupiter 103429-03-02 06:57 G 39497786.58 39497786.79 39497787.00 0.0503 0.0014

Mars 103432-05-14 12:42 G 39498955.92 39498956.03 39498956.15 0.1597 0.1205

Jupiter 103434-12-31 00:28 G 39499916.42 39499916.52 39499916.63 0.0520 0.0436

Mars 103435-02-18 07:11 G 39499965.64 39499965.80 39499965.97 0.1943 0.0606

Jupiter 103435-08-25 00:13 G 39500153.39 39500153.51 39500153.65 0.0526 0.0393

Saturn 103440-04-02 23:01 G 39501836.35 39501836.46 39501836.60 0.0284 0.0229

Jupiter 103440-11-05 03:06 G 39502052.45 39502052.63 39502052.82 0.0504 0.0228

Saturn 103440-11-18 18:57 G 39502066.09 39502066.29 39502066.50 0.0281 0.0076

Jupiter 103447-04-29 17:59 G 39504419.06 39504419.25 39504419.44 0.0524 0.0152

Uranus 103449-03-16 15:35 G 39505106.12 39505106.15 39505106.20 0.0135 0.0132

Uranus 103449-10-28 20:23 G 39505332.25 39505332.35 39505332.46 0.0135 0.0116

Uranus 103450-06-12 00:42 G 39505558.41 39505558.53 39505558.69 0.0135 0.0101

Uranus 103451-01-24 05:30 G 39505784.57 39505784.73 39505784.90 0.0135 0.0085

Uranus 103451-09-07 10:18 G 39506010.75 39506010.93 39506011.12 0.0135 0.0069

Uranus 103452-04-20 14:52 G 39506236.94 39506237.12 39506237.33 0.0135 0.0053

Jupiter 103452-07-10 23:01 G 39506318.36 39506318.46 39506318.55 0.0506 0.0444

Uranus 103452-12-02 19:25 G 39506463.12 39506463.31 39506463.53 0.0135 0.0037

Jupiter 103453-03-04 23:59 G 39506555.35 39506555.50 39506555.66 0.0501 0.0326

Uranus 103453-07-17 00:28 G 39506689.31 39506689.52 39506689.73 0.0135 0.0020

Uranus 103454-02-28 05:01 G 39506915.50 39506915.71 39506915.93 0.0135 0.0004

Uranus 103454-10-12 09:49 G 39507141.70 39507141.91 39507142.13 0.0135 0.0013

Uranus 103455-05-26 14:37 G 39507367.91 39507368.11 39507368.32 0.0135 0.0029

Uranus 103456-01-07 19:40 G 39507594.12 39507594.32 39507594.52 0.0135 0.0046

Saturn 103456-07-25 04:04 G 39507793.48 39507793.67 39507793.86 0.0279 0.0113

Uranus 103456-08-21 00:28 G 39507820.34 39507820.52 39507820.72 0.0135 0.0062

Saturn 103457-03-11 10:47 G 39508022.79 39508022.95 39508023.12 0.0281 0.0168

Uranus 103457-04-04 05:30 G 39508046.57 39508046.73 39508046.91 0.0135 0.0079

Uranus 103457-11-16 10:33 G 39508272.80 39508272.94 39508273.11 0.0135 0.0095

Uranus 103458-06-30 15:35 G 39508499.05 39508499.15 39508499.29 0.0136 0.0112

Jupiter 103459-01-02 14:09 G 39508684.89 39508685.09 39508685.29 0.0523 0.0081

Uranus 103459-02-11 20:52 G 39508725.32 39508725.37 39508725.47 0.0136 0.0128

Mars 103464-05-13 05:16 G 39510642.56 39510642.72 39510642.89 0.1603 0.0620

Jupiter 103464-11-07 19:11 G 39510821.10 39510821.30 39510821.50 0.0502 0.0109

Earth 103467-05-11 08:37 G 39511735.71 39511735.86 39511736.02 0.2630 0.0808

Moon 103467-05-11 12:57 G 39511735.91 39511736.04 39511736.18 0.2634 0.1326 *

Saturn 103469-10-14 09:06 G 39512622.72 39512622.88 39512623.05 0.0284 0.0177

Saturn 103470-06-01 04:18 G 39512852.50 39512852.68 39512852.88 0.0281 0.0127

Jupiter 103470-09-07 11:30 G 39512950.82 39512950.98 39512951.14 0.0522 0.0312

Jupiter 103471-05-02 12:13 G 39513188.00 39513188.01 39513188.03 0.0527 0.0524

Jupiter 103476-07-13 15:35 G 39515086.95 39515087.15 39515087.35 0.0503 0.0105

Jupiter 103483-01-05 08:23 G 39517453.69 39517453.85 39517454.02 0.0526 0.0291

Saturn 103486-02-04 07:54 G 39518579.63 39518579.83 39518580.03 0.0279 0.0075

Neptune 103486-05-30 18:42 G 39518695.24 39518695.28 39518695.36 0.0088 0.0084

Saturn 103486-09-21 14:37 G 39518808.98 39518809.11 39518809.26 0.0282 0.0208

Neptune 103487-01-11 08:09 G 39518920.74 39518920.84 39518920.98 0.0088 0.0074

Neptune 103487-08-24 21:35 G 39519146.27 39519146.40 39519146.58 0.0088 0.0064

Jupiter 103488-03-18 10:47 G 39519352.79 39519352.95 39519353.10 0.0505 0.0324

Neptune 103488-04-06 11:30 G 39519371.81 39519371.98 39519372.17 0.0088 0.0053

Jupiter 103488-11-10 10:33 G 39519589.84 39519589.94 39519590.03 0.0500 0.0440

Neptune 103488-11-18 00:57 G 39519597.36 39519597.54 39519597.75 0.0088 0.0043

Neptune 103489-07-01 14:23 G 39519822.91 39519823.10 39519823.32 0.0088 0.0033

Neptune 103490-02-12 04:18 G 39520048.46 39520048.68 39520048.90 0.0088 0.0022

Neptune 103490-09-25 17:45 G 39520274.02 39520274.24 39520274.47 0.0088 0.0012

Neptune 103491-05-09 07:25 G 39520499.58 39520499.81 39520500.03 0.0088 0.0001

Uranus 103491-12-20 03:06 G 39520724.54 39520724.63 39520724.75 0.0143 0.0126

Neptune 103491-12-20 20:37 G 39520725.14 39520725.36 39520725.59 0.0088 0.0010

Neptune 103492-08-02 10:04 G 39520950.71 39520950.92 39520951.15 0.0088 0.0020

Uranus 103492-08-02 16:04 G 39520951.04 39520951.17 39520951.33 0.0143 0.0107 *

Neptune 103493-03-15 23:59 G 39521176.29 39521176.50 39521176.71 0.0088 0.0030

Uranus 103493-03-17 05:16 G 39521177.56 39521177.72 39521177.91 0.0143 0.0086

Neptune 103493-10-27 12:57 G 39521401.86 39521402.04 39521402.26 0.0088 0.0041

Uranus 103493-10-29 18:13 G 39521404.07 39521404.26 39521404.47 0.0143 0.0066

Neptune 103494-06-10 02:37 G 39521627.44 39521627.61 39521627.81 0.0088 0.0051

Uranus 103494-06-13 06:57 G 39521630.59 39521630.79 39521631.01 0.0143 0.0046

Jupiter 103494-09-10 04:33 G 39521719.49 39521719.69 39521719.89 0.0524 0.0055

Neptune 103495-01-21 16:04 G 39521853.02 39521853.17 39521853.34 0.0088 0.0061

Uranus 103495-01-25 20:09 G 39521857.12 39521857.34 39521857.56 0.0143 0.0025

Neptune 103495-09-04 05:45 G 39522078.62 39522078.74 39522078.88 0.0088 0.0071

Uranus 103495-09-09 08:52 G 39522083.65 39522083.87 39522084.09 0.0143 0.0005

Neptune 103496-04-16 18:57 G 39522304.23 39522304.29 39522304.39 0.0088 0.0082

Uranus 103496-04-22 21:35 G 39522310.18 39522310.40 39522310.62 0.0143 0.0016

Uranus 103496-12-05 10:04 G 39522536.71 39522536.92 39522537.14 0.0143 0.0036

Uranus 103497-07-19 22:33 G 39522763.24 39522763.44 39522763.65 0.0143 0.0056

Uranus 103498-03-03 11:01 G 39522989.78 39522989.96 39522990.15 0.0143 0.0076

Mars 103498-03-12 00:57 G 39522998.46 39522998.54 39522998.63 0.1596 0.1386

Uranus 103498-10-15 23:16 G 39523216.32 39523216.47 39523216.64 0.0143 0.0096

Saturn 103499-04-26 16:18 G 39523408.99 39523409.18 39523409.37 0.0283 0.0131

Uranus 103499-05-30 11:16 G 39523442.86 39523442.97 39523443.12 0.0142 0.0116

Saturn 103499-12-12 11:30 G 39523638.81 39523638.98 39523639.15 0.0281 0.0171

Uranus 103500-01-11 23:30 G 39523669.43 39523669.48 39523669.57 0.0142 0.0134

Jupiter 103500-07-17 07:25 G 39523855.63 39523855.81 39523856.00 0.0501 0.0232

Mars 103500-12-16 09:35 G 39524007.78 39524007.90 39524008.03 0.1946 0.1356

Jupiter 103506-05-16 23:16 G 39525985.29 39525985.47 39525985.66 0.0522 0.0182

Jupiter 103512-03-22 04:18 G 39528121.47 39528121.68 39528121.89 0.0503 0.0019

Saturn 103515-08-18 14:52 G 39529365.91 39529366.12 39529366.32 0.0279 0.0030

Saturn 103516-04-03 21:49 G 39529595.34 39529595.41 39529595.51 0.0282 0.0254

Jupiter 103518-01-19 20:09 G 39530251.22 39530251.34 39530251.46 0.0520 0.0410

Pluto 103518-02-08 06:42 G 39530270.71 39530270.78 39530270.91 0.0064 0.0057

Jupiter 103518-09-13 19:40 G 39530488.21 39530488.32 39530488.44 0.0526 0.0421

Pluto 103518-09-21 11:01 G 39530495.75 39530495.96 39530496.17 0.0064 0.0017

Pluto 103519-05-04 14:09 G 39530720.90 39530721.09 39530721.30 0.0064 0.0024

Jupiter 103523-11-25 23:30 G 39532387.29 39532387.48 39532387.67 0.0504 0.0201

Saturn 103528-11-07 01:25 G 39534195.35 39534195.56 39534195.77 0.0283 0.0080

Saturn 103529-06-24 20:09 G 39534425.21 39534425.34 39534425.48 0.0280 0.0220

Mars 103530-03-11 17:45 G 39534685.07 39534685.24 39534685.41 0.1601 0.0443

Jupiter 103530-05-19 16:18 G 39534753.99 39534754.18 39534754.36 0.0525 0.0186

Uranus 103533-06-29 05:45 G 39535890.66 39535890.74 39535890.83 0.0135 0.0122

Uranus 103534-02-10 10:04 G 39536116.81 39536116.92 39536117.07 0.0135 0.0107

Uranus 103534-09-24 14:52 G 39536342.98 39536343.12 39536343.29 0.0135 0.0091

Uranus 103535-05-08 19:40 G 39536569.15 39536569.32 39536569.50 0.0135 0.0075

Jupiter 103535-07-31 19:54 G 39536653.22 39536653.33 39536653.45 0.0505 0.0416

Uranus 103535-12-21 00:13 G 39536795.33 39536795.51 39536795.71 0.0135 0.0059

Jupiter 103536-03-24 20:09 G 39536890.19 39536890.34 39536890.48 0.0500 0.0352

Uranus 103536-08-03 05:01 G 39537021.51 39537021.71 39537021.92 0.0135 0.0043

Uranus 103537-03-17 09:49 G 39537247.70 39537247.91 39537248.12 0.0135 0.0027

Uranus 103537-10-29 14:37 G 39537473.89 39537474.11 39537474.32 0.0135 0.0011

Uranus 103538-06-12 19:11 G 39537700.09 39537700.30 39537700.52 0.0135 0.0006

Uranus 103539-01-24 23:59 G 39537926.29 39537926.50 39537926.71 0.0135 0.0023

Uranus 103539-09-08 04:47 G 39538152.51 39538152.70 39538152.91 0.0135 0.0040

Uranus 103540-04-21 09:49 G 39538378.72 39538378.91 39538379.11 0.0135 0.0056

Uranus 103540-12-03 14:37 G 39538604.94 39538605.11 39538605.31 0.0135 0.0073

Uranus 103541-07-17 19:40 G 39538831.18 39538831.32 39538831.50 0.0135 0.0089

Jupiter 103542-01-22 13:25 G 39539019.86 39539020.06 39539020.26 0.0523 0.0047

Uranus 103542-03-01 00:57 G 39539057.42 39539057.54 39539057.69 0.0136 0.0105

Uranus 103542-10-13 06:28 G 39539283.69 39539283.77 39539283.88 0.0136 0.0121

Saturn 103544-07-13 12:13 G 39539922.96 39539923.01 39539923.07 0.0277 0.0267

Saturn 103545-02-27 17:45 G 39540152.03 39540152.24 39540152.44 0.0279 0.0008

Jupiter 103547-11-28 16:04 G 39541155.97 39541156.17 39541156.37 0.0502 0.0139

Jupiter 103553-09-27 10:18 G 39543285.76 39543285.93 39543286.10 0.0522 0.0277

Saturn 103558-05-20 06:42 G 39544981.57 39544981.78 39544982.00 0.0283 0.0039

Saturn 103559-01-05 01:11 G 39545211.49 39545211.55 39545211.64 0.0280 0.0261

Jupiter 103559-08-03 12:42 G 39545421.83 39545422.03 39545422.24 0.0503 0.0075

Mars 103564-01-08 13:25 G 39547041.03 39547041.06 39547041.10 0.1594 0.1553

Jupiter 103565-06-02 06:28 G 39547551.73 39547551.77 39547551.81 0.0519 0.0506

Jupiter 103566-01-25 05:16 G 39547788.57 39547788.72 39547788.88 0.0525 0.0320

Neptune 103567-12-05 06:42 G 39548467.78 39548467.78 39548467.79 0.0090 0.0090

Neptune 103568-07-17 19:25 G 39548693.21 39548693.31 39548693.41 0.0090 0.0079

Neptune 103569-02-28 07:40 G 39548918.70 39548918.82 39548918.97 0.0090 0.0069

Neptune 103569-10-11 19:54 G 39549144.19 39549144.33 39549144.52 0.0090 0.0059

Neptune 103570-05-25 08:52 G 39549369.70 39549369.87 39549370.06 0.0090 0.0048

Neptune 103571-01-05 21:06 G 39549595.20 39549595.38 39549595.59 0.0090 0.0038

Jupiter 103571-04-08 08:52 G 39549687.70 39549687.87 39549688.04 0.0505 0.0292

Neptune 103571-08-19 10:04 G 39549820.72 39549820.92 39549821.13 0.0090 0.0027

Jupiter 103571-12-01 08:52 G 39549924.81 39549924.87 39549924.94 0.0500 0.0475

Neptune 103572-03-31 22:33 G 39550046.24 39550046.44 39550046.66 0.0090 0.0016

Neptune 103572-11-12 11:01 G 39550271.75 39550271.96 39550272.18 0.0090 0.0006

Neptune 103573-06-25 23:30 G 39550497.27 39550497.48 39550497.70 0.0090 0.0005

Saturn 103574-01-23 17:45 G 39550709.12 39550709.24 39550709.36 0.0277 0.0227

Neptune 103574-02-06 11:59 G 39550722.79 39550723.00 39550723.22 0.0090 0.0016

Saturn 103574-09-09 23:30 G 39550938.28 39550938.48 39550938.68 0.0280 0.0049

Neptune 103574-09-20 00:42 G 39550948.33 39550948.53 39550948.74 0.0090 0.0026

Neptune 103575-05-03 12:57 G 39551173.86 39551174.04 39551174.25 0.0090 0.0037

Uranus 103575-08-20 07:40 G 39551282.75 39551282.82 39551282.91 0.0143 0.0133

Neptune 103575-12-15 01:11 G 39551399.39 39551399.55 39551399.76 0.0090 0.0048

Uranus 103576-04-02 20:37 G 39551509.24 39551509.36 39551509.51 0.0143 0.0114

Neptune 103576-07-27 13:54 G 39551624.93 39551625.08 39551625.26 0.0090 0.0058

Uranus 103576-11-15 09:35 G 39551735.74 39551735.90 39551736.08 0.0143 0.0094

Neptune 103577-03-10 02:23 G 39551850.48 39551850.60 39551850.76 0.0090 0.0069

Uranus 103577-06-29 22:33 G 39551962.25 39551962.44 39551962.63 0.0143 0.0074

Jupiter 103577-09-30 01:25 G 39552054.37 39552054.56 39552054.76 0.0524 0.0087

Neptune 103577-10-21 15:06 G 39552076.04 39552076.13 39552076.24 0.0090 0.0079

Uranus 103578-02-11 11:16 G 39552188.78 39552188.97 39552189.19 0.0143 0.0054

Neptune 103578-06-04 03:49 G 39552301.64 39552301.66 39552301.69 0.0090 0.0089

Uranus 103578-09-26 00:13 G 39552415.30 39552415.51 39552415.73 0.0143 0.0034

Uranus 103579-05-10 12:57 G 39552641.82 39552642.04 39552642.27 0.0143 0.0014

Uranus 103579-12-23 01:40 G 39552868.35 39552868.57 39552868.79 0.0143 0.0007

Uranus 103580-08-05 14:23 G 39553094.88 39553095.10 39553095.31 0.0143 0.0027

Moon 103580-11-10 21:21 G 39553192.23 39553192.39 39553192.55 0.2701 0.0175

Earth 103580-11-11 02:23 G 39553192.45 39553192.60 39553192.75 0.2702 0.0399 *

Uranus 103581-03-20 02:52 G 39553321.42 39553321.62 39553321.83 0.0143 0.0047

Uranus 103581-11-01 15:06 G 39553547.95 39553548.13 39553548.34 0.0143 0.0068

Uranus 103582-06-16 03:21 G 39553774.49 39553774.64 39553774.83 0.0143 0.0088

Uranus 103583-01-28 15:49 G 39554001.03 39554001.16 39554001.32 0.0142 0.0107

Jupiter 103583-08-06 05:16 G 39554190.54 39554190.72 39554190.90 0.0501 0.0261

Uranus 103583-09-12 04:04 G 39554227.58 39554227.67 39554227.78 0.0142 0.0126

Saturn 103587-11-30 14:52 G 39555767.91 39555768.12 39555768.34 0.0283 0.0011

Jupiter 103589-06-04 21:49 G 39556320.22 39556320.41 39556320.61 0.0523 0.0150

Jupiter 103595-04-11 02:37 G 39558456.40 39558456.61 39558456.81 0.0502 0.0051

Mars 103596-01-07 05:59 G 39558727.57 39558727.75 39558727.92 0.1599 0.0264

Jupiter 103601-02-07 19:54 G 39560586.20 39560586.33 39560586.47 0.0521 0.0376

Jupiter 103601-10-02 20:23 G 39560823.26 39560823.35 39560823.45 0.0527 0.0461

Saturn 103603-08-05 19:40 G 39561495.18 39561495.32 39561495.48 0.0277 0.0193

Saturn 103604-03-22 01:25 G 39561724.36 39561724.56 39561724.76 0.0280 0.0083

Jupiter 103606-12-14 22:18 G 39562722.23 39562722.43 39562722.62 0.0504 0.0167

Pluto 103607-08-14 05:16 G 39562964.57 39562964.72 39562964.91 0.0080 0.0053

Pluto 103608-03-26 16:47 G 39563189.99 39563190.20 39563190.41 0.0079 0.0029

Jupiter 103613-06-07 16:47 G 39565089.02 39565089.20 39565089.38 0.0525 0.0226

Saturn 103616-10-24 21:06 G 39566324.31 39566324.38 39566324.47 0.0285 0.0263

Uranus 103617-02-26 15:06 G 39566449.08 39566449.13 39566449.21 0.0135 0.0128

Saturn 103617-06-11 17:59 G 39566554.04 39566554.25 39566554.47 0.0282 0.0047

Uranus 103617-10-10 19:54 G 39566675.22 39566675.33 39566675.46 0.0135 0.0113

Uranus 103618-05-25 00:28 G 39566901.39 39566901.52 39566901.68 0.0135 0.0097

Jupiter 103618-08-19 18:13 G 39566988.13 39566988.26 39566988.40 0.0506 0.0384

Uranus 103619-01-06 05:01 G 39567127.56 39567127.71 39567127.89 0.0135 0.0081

Jupiter 103619-04-13 18:42 G 39567225.15 39567225.28 39567225.41 0.0500 0.0387

Uranus 103619-08-20 09:49 G 39567353.74 39567353.91 39567354.11 0.0135 0.0065

Uranus 103620-04-02 14:37 G 39567579.92 39567580.11 39567580.31 0.0135 0.0049

Uranus 103620-11-14 19:11 G 39567806.10 39567806.30 39567806.52 0.0135 0.0033

Uranus 103621-06-28 23:59 G 39568032.29 39568032.50 39568032.71 0.0135 0.0017

Uranus 103622-02-10 04:47 G 39568258.49 39568258.70 39568258.91 0.0135 0.0000

Uranus 103622-09-24 09:49 G 39568484.70 39568484.91 39568485.12 0.0135 0.0016

Uranus 103623-05-08 14:37 G 39568710.90 39568711.11 39568711.32 0.0135 0.0033

Uranus 103623-12-20 19:25 G 39568937.12 39568937.31 39568937.51 0.0135 0.0049

Uranus 103624-08-03 00:28 G 39569163.34 39569163.52 39569163.71 0.0135 0.0066

Jupiter 103625-02-10 12:13 G 39569354.81 39569355.01 39569355.21 0.0523 0.0012

Uranus 103625-03-17 05:30 G 39569389.57 39569389.73 39569389.91 0.0135 0.0082

Uranus 103625-10-29 11:01 G 39569615.81 39569615.96 39569616.10 0.0136 0.0098

Uranus 103626-06-12 16:18 G 39569842.07 39569842.18 39569842.29 0.0136 0.0114

Uranus 103627-01-24 21:35 G 39570068.35 39570068.40 39570068.46 0.0136 0.0130

Jupiter 103630-12-17 15:49 G 39571490.96 39571491.16 39571491.35 0.0502 0.0176

Saturn 103633-02-14 23:45 G 39572281.33 39572281.49 39572281.67 0.0278 0.0156

Saturn 103633-10-02 05:45 G 39572510.56 39572510.74 39572510.93 0.0280 0.0122

Jupiter 103636-10-16 08:52 G 39573620.70 39573620.87 39573621.05 0.0521 0.0243

Jupiter 103642-08-22 12:13 G 39575756.81 39575757.01 39575757.22 0.0503 0.0042

Saturn 103646-05-07 04:47 G 39577110.56 39577110.70 39577110.84 0.0285 0.0216

Saturn 103646-12-23 00:57 G 39577340.35 39577340.54 39577340.75 0.0282 0.0094

Jupiter 103648-06-21 05:16 G 39577886.64 39577886.72 39577886.80 0.0520 0.0475

Jupiter 103649-02-13 05:30 G 39578123.58 39578123.73 39578123.87 0.0526 0.0359

Neptune 103650-09-02 05:16 G 39578689.70 39578689.72 39578689.79 0.0088 0.0086

Neptune 103651-04-15 18:42 G 39578915.20 39578915.28 39578915.42 0.0088 0.0076

Neptune 103651-11-27 08:37 G 39579140.72 39579140.86 39579141.02 0.0088 0.0065

Neptune 103652-07-09 22:04 G 39579366.25 39579366.42 39579366.60 0.0088 0.0055

Neptune 103653-02-20 11:30 G 39579591.80 39579591.98 39579592.19 0.0088 0.0045

Neptune 103653-10-04 01:25 G 39579817.35 39579817.56 39579817.77 0.0088 0.0034

Jupiter 103654-04-27 09:21 G 39580022.72 39580022.89 39580023.07 0.0504 0.0256

Neptune 103654-05-17 14:52 G 39580042.90 39580043.12 39580043.34 0.0088 0.0024

Neptune 103654-12-29 04:18 G 39580268.46 39580268.68 39580268.91 0.0088 0.0014

Neptune 103655-08-11 17:59 G 39580494.02 39580494.25 39580494.47 0.0088 0.0003

Neptune 103656-03-24 07:25 G 39580719.59 39580719.81 39580720.04 0.0088 0.0008

Neptune 103656-11-04 21:06 G 39580945.16 39580945.38 39580945.60 0.0088 0.0018

Neptune 103657-06-18 10:33 G 39581170.73 39581170.94 39581171.16 0.0088 0.0028

Neptune 103658-01-29 23:45 G 39581396.31 39581396.49 39581396.71 0.0088 0.0039

Neptune 103658-09-12 13:25 G 39581621.89 39581622.06 39581622.26 0.0088 0.0049

Uranus 103659-04-19 13:11 G 39581841.02 39581841.05 39581841.11 0.0143 0.0140

Neptune 103659-04-26 03:06 G 39581847.47 39581847.63 39581847.80 0.0088 0.0059

Uranus 103659-12-02 01:54 G 39582067.48 39582067.58 39582067.72 0.0143 0.0121

Neptune 103659-12-07 16:04 G 39582073.06 39582073.17 39582073.33 0.0088 0.0070

Uranus 103660-07-15 15:06 G 39582293.98 39582294.13 39582294.29 0.0143 0.0101

Neptune 103660-07-20 05:45 G 39582298.67 39582298.74 39582298.85 0.0088 0.0080

Jupiter 103660-10-19 02:52 G 39582389.43 39582389.62 39582389.81 0.0525 0.0127

Uranus 103661-02-27 04:18 G 39582520.50 39582520.68 39582520.86 0.0143 0.0081

Uranus 103661-10-11 17:01 G 39582747.01 39582747.21 39582747.41 0.0143 0.0061

Mars 103661-11-03 18:42 G 39582770.10 39582770.28 39582770.45 0.1598 0.0101

Uranus 103662-05-26 05:45 G 39582973.53 39582973.74 39582973.95 0.0143 0.0041

Saturn 103662-08-28 01:11 G 39583067.37 39583067.55 39583067.74 0.0277 0.0123

Uranus 103663-01-07 18:28 G 39583200.05 39583200.27 39583200.49 0.0143 0.0021

Saturn 103663-04-14 06:57 G 39583296.62 39583296.79 39583296.96 0.0280 0.0154

Uranus 103663-08-22 07:11 G 39583426.58 39583426.80 39583427.02 0.0143 0.0001

Uranus 103664-04-04 19:54 G 39583653.11 39583653.33 39583653.55 0.0143 0.0020

Mars 103664-08-09 15:21 G 39583780.01 39583780.14 39583780.26 0.1942 0.1314

Uranus 103664-11-17 08:23 G 39583879.64 39583879.85 39583880.07 0.0143 0.0040

Uranus 103665-07-01 20:52 G 39584106.18 39584106.37 39584106.58 0.0143 0.0060

Jupiter 103665-12-31 05:01 G 39584288.64 39584288.71 39584288.78 0.0506 0.0473

Uranus 103666-02-13 09:06 G 39584332.71 39584332.88 39584333.08 0.0143 0.0080

Jupiter 103666-08-25 05:16 G 39584525.56 39584525.72 39584525.89 0.0501 0.0300

Uranus 103666-09-27 21:49 G 39584559.25 39584559.41 39584559.57 0.0142 0.0099

Uranus 103667-05-12 09:49 G 39584785.80 39584785.91 39584786.05 0.0142 0.0118

Uranus 103667-12-24 22:18 G 39585012.37 39585012.43 39585012.49 0.0142 0.0137

Jupiter 103672-06-23 23:59 G 39586655.31 39586655.50 39586655.70 0.0523 0.0106

Saturn 103675-11-17 05:59 G 39587896.60 39587896.75 39587896.93 0.0285 0.0184

Saturn 103676-07-04 02:37 G 39588126.42 39588126.61 39588126.81 0.0282 0.0125

Jupiter 103678-04-30 02:23 G 39588791.40 39588791.60 39588791.81 0.0502 0.0087

Jupiter 103684-02-27 20:37 G 39590921.21 39590921.36 39590921.51 0.0521 0.0337

Jupiter 103684-10-21 20:37 G 39591158.30 39591158.36 39591158.42 0.0526 0.0500

Jupiter 103690-01-02 23:01 G 39593057.26 39593057.46 39593057.66 0.0504 0.0129

Saturn 103692-03-09 04:18 G 39593853.49 39593853.68 39593853.88 0.0278 0.0088

Saturn 103692-10-24 10:04 G 39594082.78 39594082.92 39594083.08 0.0281 0.0192

Jupiter 103696-06-26 16:47 G 39595424.03 39595424.20 39595424.37 0.0525 0.0265

Uranus 103700-10-28 00:13 G 39597007.49 39597007.51 39597007.56 0.0135 0.0133

Uranus 103701-06-11 04:47 G 39597233.62 39597233.70 39597233.82 0.0135 0.0118

Jupiter 103701-09-08 19:40 G 39597323.17 39597323.32 39597323.47 0.0505 0.0347

Uranus 103702-01-23 09:49 G 39597459.77 39597459.91 39597460.05 0.0135 0.0102

Jupiter 103702-05-03 19:25 G 39597560.20 39597560.31 39597560.42 0.0500 0.0423

Uranus 103702-09-06 14:09 G 39597685.95 39597686.09 39597686.27 0.0135 0.0088

Uranus 103703-04-20 18:57 G 39597912.12 39597912.29 39597912.48 0.0135 0.0071

Uranus 103703-12-02 23:45 G 39598138.30 39598138.49 39598138.69 0.0135 0.0055

Uranus 103704-07-16 04:18 G 39598364.48 39598364.68 39598364.89 0.0135 0.0039

Uranus 103705-02-27 09:06 G 39598590.67 39598590.88 39598591.09 0.0135 0.0023

Saturn 103705-05-30 11:59 G 39598682.82 39598683.00 39598683.19 0.0285 0.0140

Uranus 103705-10-11 13:54 G 39598816.87 39598817.08 39598817.30 0.0135 0.0007

Saturn 103706-01-15 08:23 G 39598912.68 39598912.85 39598913.03 0.0282 0.0168

Uranus 103706-05-25 18:42 G 39599043.07 39599043.28 39599043.50 0.0135 0.0010

Uranus 103707-01-06 23:30 G 39599269.28 39599269.48 39599269.70 0.0135 0.0027

Uranus 103707-08-21 04:47 G 39599495.49 39599495.70 39599495.90 0.0135 0.0043

Jupiter 103708-03-02 12:28 G 39599689.82 39599690.02 39599690.22 0.0524 0.0029

Uranus 103708-04-03 09:21 G 39599721.71 39599721.89 39599722.10 0.0135 0.0060

Uranus 103708-11-15 14:37 G 39599947.94 39599948.11 39599948.30 0.0135 0.0076

Uranus 103709-06-29 19:40 G 39600174.18 39600174.32 39600174.49 0.0136 0.0092

Uranus 103710-02-11 00:57 G 39600400.43 39600400.54 39600400.68 0.0136 0.0108

Moon 103710-05-13 07:11 G 39600491.64 39600491.80 39600491.96 0.2624 0.0930

Earth 103710-05-13 08:09 G 39600491.68 39600491.84 39600492.00 0.2630 0.0778 *

Uranus 103710-09-25 06:28 G 39600626.70 39600626.77 39600626.87 0.0136 0.0124

Jupiter 103714-01-06 17:30 G 39601826.05 39601826.23 39601826.42 0.0501 0.0216

Jupiter 103719-11-06 10:33 G 39603955.76 39603955.94 39603956.12 0.0523 0.0203

Saturn 103721-09-20 05:01 G 39604639.51 39604639.71 39604639.92 0.0277 0.0057

Saturn 103722-05-07 10:47 G 39604868.83 39604868.95 39604869.08 0.0280 0.0222

Jupiter 103725-09-11 14:09 G 39606091.88 39606092.09 39606092.29 0.0502 0.0009

Mars 103727-09-02 06:57 G 39606812.61 39606812.79 39606812.96 0.1596 0.0090

Mars 103730-06-07 17:30 G 39607822.06 39607822.23 39607822.40 0.1945 0.0557

Jupiter 103731-07-12 08:52 G 39608221.76 39608221.87 39608221.98 0.0521 0.0428

Jupiter 103732-03-05 08:52 G 39608458.75 39608458.87 39608459.00 0.0526 0.0409

Neptune 103732-10-20 07:25 G 39608687.72 39608687.81 39608687.90 0.0090 0.0081

Neptune 103733-06-02 19:40 G 39608913.20 39608913.32 39608913.46 0.0090 0.0071

Neptune 103734-01-14 08:09 G 39609138.70 39609138.84 39609139.01 0.0090 0.0061

Neptune 103734-08-27 21:06 G 39609364.21 39609364.38 39609364.56 0.0090 0.0050

Saturn 103734-12-10 12:13 G 39609468.81 39609469.01 39609469.21 0.0285 0.0111

Neptune 103735-04-10 09:21 G 39609589.72 39609589.89 39609590.10 0.0090 0.0040

Saturn 103735-07-28 08:23 G 39609698.70 39609698.85 39609699.01 0.0282 0.0196

Neptune 103735-11-21 22:04 G 39609815.23 39609815.42 39609815.63 0.0090 0.0029

Neptune 103736-07-04 10:33 G 39610040.74 39610040.94 39610041.16 0.0090 0.0019

Neptune 103737-02-14 23:16 G 39610266.26 39610266.47 39610266.68 0.0090 0.0008

Jupiter 103737-05-17 10:18 G 39610357.75 39610357.93 39610358.12 0.0504 0.0216

Neptune 103737-09-28 11:45 G 39610491.78 39610491.99 39610492.21 0.0090 0.0003

Neptune 103738-05-12 00:13 G 39610717.30 39610717.51 39610717.73 0.0090 0.0013

Neptune 103738-12-23 12:42 G 39610942.83 39610943.03 39610943.24 0.0090 0.0024

Neptune 103739-08-06 00:57 G 39611168.36 39611168.54 39611168.75 0.0090 0.0035

Neptune 103740-03-18 13:40 G 39611393.89 39611394.07 39611394.26 0.0090 0.0045

Neptune 103740-10-30 01:54 G 39611619.43 39611619.58 39611619.76 0.0090 0.0056

Neptune 103741-06-12 14:23 G 39611844.97 39611845.10 39611845.26 0.0090 0.0066

Neptune 103742-01-24 02:37 G 39612070.52 39612070.61 39612070.74 0.0090 0.0077

Neptune 103742-09-06 15:21 G 39612296.11 39612296.14 39612296.21 0.0090 0.0087

Uranus 103743-08-02 08:37 G 39612625.77 39612625.86 39612625.97 0.0143 0.0127

Jupiter 103743-11-09 04:33 G 39612724.51 39612724.69 39612724.88 0.0524 0.0171

Uranus 103744-03-15 21:21 G 39612852.26 39612852.39 39612852.55 0.0143 0.0108

Uranus 103744-10-28 10:33 G 39613078.77 39613078.94 39613079.12 0.0143 0.0088

Uranus 103745-06-11 23:16 G 39613305.28 39613305.47 39613305.67 0.0143 0.0068

Uranus 103746-01-24 12:13 G 39613531.80 39613532.01 39613532.22 0.0143 0.0048

Uranus 103746-09-08 00:57 G 39613758.33 39613758.54 39613758.76 0.0143 0.0028

Uranus 103747-04-22 13:54 G 39613984.86 39613985.08 39613985.30 0.0143 0.0008

Uranus 103747-12-05 02:37 G 39614211.39 39614211.61 39614211.83 0.0143 0.0012

Uranus 103748-07-18 15:06 G 39614437.92 39614438.13 39614438.35 0.0143 0.0033

Jupiter 103749-01-20 06:28 G 39614623.67 39614623.77 39614623.88 0.0506 0.0434

Uranus 103749-03-02 03:49 G 39614664.46 39614664.66 39614664.87 0.0143 0.0053

Jupiter 103749-09-14 07:11 G 39614860.66 39614860.80 39614860.96 0.0501 0.0342

Uranus 103749-10-14 16:04 G 39614890.99 39614891.17 39614891.38 0.0143 0.0073

Uranus 103750-05-29 04:47 G 39615117.53 39615117.70 39615117.87 0.0142 0.0092

Uranus 103751-01-10 16:47 G 39615344.08 39615344.20 39615344.35 0.0142 0.0111

Saturn 103751-04-02 07:11 G 39615425.60 39615425.80 39615426.01 0.0278 0.0025

Uranus 103751-08-25 04:47 G 39615570.63 39615570.70 39615570.81 0.0142 0.0131

Saturn 103751-11-17 13:11 G 39615654.98 39615655.05 39615655.14 0.0281 0.0257

Jupiter 103755-07-15 01:11 G 39616990.36 39616990.55 39616990.75 0.0523 0.0064

Jupiter 103761-05-20 04:47 G 39619126.50 39619126.70 39619126.90 0.0502 0.0128

Saturn 103764-06-21 17:30 G 39620255.02 39620255.23 39620255.44 0.0285 0.0068

Saturn 103765-02-06 13:40 G 39620484.96 39620485.07 39620485.19 0.0282 0.0238

Pluto 103766-08-25 10:18 G 39621049.81 39621049.93 39621050.07 0.0064 0.0050

Jupiter 103767-03-19 20:52 G 39621256.21 39621256.37 39621256.53 0.0522 0.0301

Pluto 103767-04-07 13:54 G 39621274.87 39621275.08 39621275.30 0.0064 0.0010

Pluto 103767-11-18 17:01 G 39621500.04 39621500.21 39621500.42 0.0064 0.0031

Jupiter 103773-01-23 02:52 G 39623392.41 39623392.62 39623392.82 0.0503 0.0083

Jupiter 103779-07-17 19:25 G 39625759.15 39625759.31 39625759.47 0.0526 0.0311

Saturn 103780-02-26 03:49 G 39625982.61 39625982.66 39625982.73 0.0275 0.0262

Saturn 103780-10-12 08:09 G 39626211.63 39626211.84 39626212.05 0.0278 0.0008

Jupiter 103784-09-27 22:33 G 39627658.28 39627658.44 39627658.61 0.0505 0.0302

Uranus 103785-02-08 14:37 G 39627792.04 39627792.11 39627792.21 0.0135 0.0123

Jupiter 103785-05-22 21:49 G 39627895.35 39627895.41 39627895.49 0.0499 0.0467

Uranus 103785-09-22 19:11 G 39628018.19 39628018.30 39628018.45 0.0135 0.0108

Uranus 103786-05-06 23:59 G 39628244.36 39628244.50 39628244.67 0.0135 0.0092

Uranus 103786-12-19 04:47 G 39628470.53 39628470.70 39628470.88 0.0135 0.0076

Uranus 103787-08-02 09:35 G 39628696.71 39628696.90 39628697.09 0.0135 0.0060

Uranus 103788-03-15 14:09 G 39628922.89 39628923.09 39628923.29 0.0135 0.0044

Uranus 103788-10-27 18:57 G 39629149.08 39629149.29 39629149.50 0.0135 0.0028

Uranus 103789-06-10 23:45 G 39629375.27 39629375.49 39629375.70 0.0135 0.0012

Uranus 103790-01-23 04:33 G 39629601.47 39629601.69 39629601.90 0.0135 0.0005

Uranus 103790-09-06 09:21 G 39629827.68 39629827.89 39629828.11 0.0135 0.0021

Jupiter 103791-03-22 17:01 G 39630025.01 39630025.21 39630025.40 0.0524 0.0079

Uranus 103791-04-20 14:09 G 39630053.90 39630054.09 39630054.31 0.0135 0.0038

Uranus 103791-12-02 19:11 G 39630280.11 39630280.30 39630280.51 0.0135 0.0053

Uranus 103792-07-16 00:13 G 39630506.34 39630506.51 39630506.70 0.0135 0.0070

Uranus 103793-02-27 05:16 G 39630732.57 39630732.72 39630732.90 0.0136 0.0086

Mars 103793-06-29 19:25 G 39630855.14 39630855.31 39630855.49 0.1594 0.0260

Uranus 103793-10-11 10:47 G 39630958.82 39630958.95 39630959.10 0.0136 0.0102

Saturn 103794-01-01 16:33 G 39631040.98 39631041.19 39631041.41 0.0285 0.0044

Uranus 103794-05-25 15:49 G 39631185.08 39631185.16 39631185.29 0.0136 0.0118

Saturn 103794-08-19 12:28 G 39631270.96 39631271.02 39631271.11 0.0282 0.0263

Uranus 103795-01-06 21:35 G 39631411.37 39631411.40 39631411.44 0.0136 0.0133

Mars 103796-04-03 20:23 G 39631864.18 39631864.35 39631864.52 0.1948 0.0172

Jupiter 103797-01-25 19:25 G 39632161.13 39632161.31 39632161.49 0.0501 0.0259

Jupiter 103802-11-26 13:25 G 39634290.87 39634291.06 39634291.25 0.0522 0.0157

Jupiter 103808-10-01 16:33 G 39636426.98 39636427.19 39636427.40 0.0503 0.0044

Saturn 103809-09-08 05:30 G 39636768.63 39636768.73 39636768.85 0.0276 0.0232

Saturn 103810-04-25 09:49 G 39636997.71 39636997.91 39636998.12 0.0278 0.0040

Jupiter 103814-08-01 10:33 G 39638556.81 39638556.94 39638557.08 0.0521 0.0386

Neptune 103814-12-06 16:04 G 39638684.17 39638684.17 39638684.20 0.0088 0.0088

Jupiter 103815-03-26 10:47 G 39638793.85 39638793.95 39638794.05 0.0526 0.0453

Neptune 103815-07-20 05:16 G 39638909.64 39638909.72 39638909.85 0.0088 0.0078

Neptune 103816-03-01 19:11 G 39639135.16 39639135.30 39639135.45 0.0088 0.0067

Neptune 103816-10-13 08:37 G 39639360.70 39639360.86 39639361.04 0.0088 0.0057

Neptune 103817-05-26 21:49 G 39639586.23 39639586.41 39639586.62 0.0088 0.0047

Neptune 103818-01-07 11:16 G 39639811.78 39639811.97 39639812.19 0.0088 0.0037

Neptune 103818-08-21 01:11 G 39640037.33 39640037.55 39640037.76 0.0088 0.0026

Neptune 103819-04-03 14:37 G 39640262.89 39640263.11 39640263.34 0.0088 0.0016

Neptune 103819-11-15 04:04 G 39640488.45 39640488.67 39640488.90 0.0088 0.0006

Jupiter 103820-06-06 13:54 G 39640692.89 39640693.08 39640693.28 0.0504 0.0172

Neptune 103820-06-27 17:45 G 39640714.02 39640714.24 39640714.47 0.0088 0.0005

Neptune 103821-02-08 07:11 G 39640939.59 39640939.80 39640940.03 0.0088 0.0016

Neptune 103821-09-21 20:52 G 39641165.16 39641165.37 39641165.59 0.0088 0.0026

Neptune 103822-05-05 10:04 G 39641390.73 39641390.92 39641391.14 0.0088 0.0037

Neptune 103822-12-16 23:45 G 39641616.31 39641616.49 39641616.69 0.0088 0.0047

Saturn 103823-07-15 21:06 G 39641827.17 39641827.38 39641827.60 0.0284 0.0007

Neptune 103823-07-30 13:11 G 39641841.89 39641842.05 39641842.24 0.0088 0.0057

Earth 103823-11-14 05:16 G 39641948.56 39641948.72 39641948.87 0.2702 0.0478

Moon 103823-11-14 08:23 G 39641948.70 39641948.85 39641948.99 0.2708 0.0516 *

Neptune 103824-03-12 03:06 G 39642067.49 39642067.63 39642067.78 0.0088 0.0067

Neptune 103824-10-23 16:04 G 39642293.10 39642293.17 39642293.30 0.0088 0.0078

Neptune 103825-06-06 05:59 G 39642518.75 39642518.75 39642518.77 0.0088 0.0088

Mars 103825-06-29 12:13 G 39642541.98 39642542.01 39642542.04 0.1600 0.1570

Jupiter 103826-11-29 05:30 G 39643059.55 39643059.73 39643059.91 0.0525 0.0211

Uranus 103827-04-02 14:37 G 39643184.04 39643184.11 39643184.20 0.0143 0.0133

Uranus 103827-11-15 03:35 G 39643410.53 39643410.65 39643410.79 0.0143 0.0114

Uranus 103828-06-28 16:18 G 39643637.03 39643637.18 39643637.36 0.0143 0.0095

Uranus 103829-02-10 05:16 G 39643863.55 39643863.72 39643863.92 0.0143 0.0075

Uranus 103829-09-24 18:13 G 39644090.07 39644090.26 39644090.48 0.0143 0.0055

Uranus 103830-05-09 07:11 G 39644316.59 39644316.80 39644317.03 0.0143 0.0035

Uranus 103830-12-21 20:09 G 39644543.12 39644543.34 39644543.56 0.0143 0.0015

Uranus 103831-08-05 09:06 G 39644769.65 39644769.88 39644770.10 0.0143 0.0006

Moon 103831-11-12 03:21 G 39644868.59 39644868.64 39644868.69 0.2701 0.2548

Jupiter 103832-02-10 11:45 G 39644958.86 39644958.99 39644959.12 0.0505 0.0385

Uranus 103832-03-18 21:49 G 39644996.19 39644996.41 39644996.63 0.0143 0.0026

Jupiter 103832-10-04 11:16 G 39645195.84 39645195.97 39645196.10 0.0500 0.0387

Uranus 103832-10-31 10:33 G 39645222.73 39645222.94 39645223.15 0.0143 0.0046

Uranus 103833-06-14 23:01 G 39645449.27 39645449.46 39645449.66 0.0143 0.0066

Uranus 103834-01-27 11:16 G 39645675.81 39645675.97 39645676.16 0.0143 0.0086

Uranus 103834-09-10 23:45 G 39645902.36 39645902.49 39645902.65 0.0142 0.0105

Uranus 103835-04-25 12:13 G 39646128.92 39646129.01 39646129.13 0.0142 0.0124

Uranus 103835-12-08 00:28 G 39646355.52 39646355.52 39646355.54 0.0142 0.0142

Jupiter 103838-08-04 03:21 G 39647325.44 39647325.64 39647325.84 0.0524 0.0020

Saturn 103839-03-21 06:42 G 39647554.64 39647554.78 39647554.93 0.0275 0.0200

Saturn 103839-11-05 10:47 G 39647783.75 39647783.95 39647784.15 0.0278 0.0071

Jupiter 103844-06-09 07:54 G 39649461.64 39649461.83 39649462.03 0.0501 0.0176

Jupiter 103850-04-09 01:25 G 39651591.39 39651591.56 39651591.74 0.0522 0.0249

Saturn 103853-01-24 20:37 G 39652613.14 39652613.36 39652613.57 0.0284 0.0024

Jupiter 103856-02-13 05:01 G 39653727.50 39653727.71 39653727.91 0.0503 0.0041

Pluto 103856-02-29 07:25 G 39653743.64 39653743.81 39653744.01 0.0080 0.0046

Pluto 103856-10-11 18:42 G 39653969.08 39653969.28 39653969.48 0.0079 0.0036

Mars 103859-04-28 08:09 G 39654897.67 39654897.84 39654898.01 0.1593 0.0428

Jupiter 103861-12-12 22:47 G 39655857.38 39655857.45 39655857.53 0.0520 0.0477

Mars 103862-01-30 22:18 G 39655906.28 39655906.43 39655906.58 0.1951 0.0947

Jupiter 103862-08-06 22:47 G 39656094.30 39656094.45 39656094.59 0.0526 0.0359

Jupiter 103867-10-19 01:11 G 39657993.37 39657993.55 39657993.73 0.0505 0.0258

Saturn 103868-09-30 08:09 G 39658340.68 39658340.84 39658341.01 0.0276 0.0170

Uranus 103868-10-10 00:28 G 39658350.47 39658350.52 39658350.60 0.0135 0.0128

Saturn 103869-05-17 12:42 G 39658569.83 39658570.03 39658570.22 0.0279 0.0104

Uranus 103869-05-24 04:47 G 39658576.61 39658576.70 39658576.84 0.0135 0.0113

Uranus 103870-01-05 09:49 G 39658802.77 39658802.91 39658803.06 0.0135 0.0097

Uranus 103870-08-19 14:09 G 39659028.94 39659029.09 39659029.28 0.0135 0.0082

Uranus 103871-04-02 18:57 G 39659255.11 39659255.29 39659255.49 0.0135 0.0066

Uranus 103871-11-14 23:30 G 39659481.29 39659481.48 39659481.69 0.0135 0.0050

Uranus 103872-06-28 04:18 G 39659707.48 39659707.68 39659707.89 0.0135 0.0034

Uranus 103873-02-09 09:06 G 39659933.67 39659933.88 39659934.09 0.0135 0.0018

Uranus 103873-09-23 14:09 G 39660159.87 39660160.09 39660160.30 0.0135 0.0003

Jupiter 103874-04-11 18:42 G 39660360.09 39660360.28 39660360.48 0.0524 0.0123

Uranus 103874-05-07 18:42 G 39660386.07 39660386.28 39660386.50 0.0135 0.0015

Uranus 103874-12-19 23:30 G 39660612.28 39660612.48 39660612.70 0.0135 0.0032

Uranus 103875-08-03 04:33 G 39660838.50 39660838.69 39660838.90 0.0135 0.0047

Uranus 103876-03-16 09:35 G 39661064.72 39661064.90 39661065.09 0.0135 0.0063

Uranus 103876-10-28 14:37 G 39661290.95 39661291.11 39661291.29 0.0135 0.0080

Uranus 103877-06-11 19:54 G 39661517.19 39661517.33 39661517.49 0.0135 0.0096

Uranus 103878-01-24 00:57 G 39661743.44 39661743.54 39661743.68 0.0136 0.0112

Uranus 103878-09-07 06:28 G 39661969.71 39661969.77 39661969.85 0.0136 0.0127

Jupiter 103879-06-23 22:18 G 39662259.37 39662259.43 39662259.51 0.0506 0.0474

Jupiter 103880-02-15 23:01 G 39662496.30 39662496.46 39662496.63 0.0500 0.0303

Saturn 103881-12-20 02:37 G 39663169.51 39663169.61 39663169.71 0.0287 0.0252

Saturn 103882-08-07 00:42 G 39663399.32 39663399.53 39663399.74 0.0284 0.0065

Jupiter 103885-12-15 13:25 G 39664625.86 39664626.06 39664626.25 0.0523 0.0119

Mars 103891-04-27 00:28 G 39666584.44 39666584.52 39666584.61 0.1598 0.1387

Jupiter 103891-10-21 21:21 G 39666762.18 39666762.39 39666762.59 0.0502 0.0094

Neptune 103897-01-22 18:28 G 39668682.22 39668682.27 39668682.37 0.0090 0.0084

Jupiter 103897-08-20 11:30 G 39668891.84 39668891.98 39668892.14 0.0521 0.0348

Neptune 103897-09-05 07:40 G 39668907.70 39668907.82 39668907.95 0.0090 0.0073

Saturn 103898-04-12 10:18 G 39669126.75 39669126.93 39669127.12 0.0275 0.0136

Jupiter 103898-04-14 12:42 G 39669128.97 39669129.03 39669129.10 0.0527 0.0498

Neptune 103898-04-18 19:54 G 39669133.20 39669133.33 39669133.50 0.0090 0.0063

Saturn 103898-11-27 14:37 G 39669355.93 39669356.11 39669356.29 0.0278 0.0137

Neptune 103898-11-30 08:52 G 39669358.70 39669358.87 39669359.05 0.0090 0.0052

Neptune 103899-07-13 21:21 G 39669584.21 39669584.39 39669584.59 0.0090 0.0042

Neptune 103900-02-24 10:04 G 39669809.72 39669809.92 39669810.13 0.0090 0.0031

Neptune 103900-10-07 22:33 G 39670035.24 39670035.44 39670035.66 0.0090 0.0021

Neptune 103901-05-21 11:16 G 39670260.76 39670260.97 39670261.19 0.0090 0.0010

Neptune 103902-01-01 23:45 G 39670486.28 39670486.49 39670486.71 0.0090 0.0001

Neptune 103902-08-15 12:13 G 39670711.81 39670712.01 39670712.23 0.0090 0.0012

Neptune 103903-03-29 00:57 G 39670937.33 39670937.54 39670937.75 0.0090 0.0022

Jupiter 103903-06-27 17:16 G 39671028.02 39671028.22 39671028.43 0.0503 0.0124

Neptune 103903-11-09 13:11 G 39671162.86 39671163.05 39671163.26 0.0090 0.0033

Neptune 103904-06-22 01:40 G 39671388.39 39671388.57 39671388.77 0.0090 0.0043

Neptune 103905-02-02 13:54 G 39671613.93 39671614.08 39671614.27 0.0090 0.0054

Neptune 103905-09-16 02:37 G 39671839.47 39671839.61 39671839.77 0.0090 0.0064

Neptune 103906-04-29 15:21 G 39672065.02 39672065.14 39672065.26 0.0090 0.0074

Neptune 103906-12-11 03:21 G 39672290.59 39672290.64 39672290.73 0.0090 0.0085

Jupiter 103909-12-19 10:04 G 39673394.75 39673394.92 39673395.09 0.0526 0.0265

Uranus 103910-12-01 19:40 G 39673742.30 39673742.32 39673742.38 0.0143 0.0140

Saturn 103911-07-03 02:09 G 39673955.46 39673955.59 39673955.72 0.0287 0.0226

Uranus 103911-07-16 08:37 G 39673968.76 39673968.86 39673969.00 0.0143 0.0121

Saturn 103912-02-18 00:13 G 39674185.31 39674185.51 39674185.72 0.0284 0.0090

Uranus 103912-02-27 22:04 G 39674195.27 39674195.42 39674195.58 0.0143 0.0101

Uranus 103912-10-11 10:47 G 39674421.78 39674421.95 39674422.14 0.0143 0.0082

Uranus 103913-05-25 23:45 G 39674648.30 39674648.49 39674648.70 0.0143 0.0062

Uranus 103914-01-07 12:42 G 39674874.83 39674875.03 39674875.25 0.0143 0.0042

Uranus 103914-08-22 01:40 G 39675101.36 39675101.57 39675101.80 0.0143 0.0022

Jupiter 103915-03-02 13:25 G 39675293.92 39675294.06 39675294.22 0.0505 0.0342

Uranus 103915-04-05 14:52 G 39675327.90 39675328.12 39675328.34 0.0143 0.0001

Jupiter 103915-10-25 13:11 G 39675530.95 39675531.05 39675531.15 0.0500 0.0430

Uranus 103915-11-18 03:35 G 39675554.43 39675554.65 39675554.88 0.0143 0.0019

Uranus 103916-07-01 16:18 G 39675780.97 39675781.18 39675781.40 0.0143 0.0039

Uranus 103917-02-13 05:01 G 39676007.51 39676007.71 39676007.92 0.0143 0.0059

Uranus 103917-09-27 17:30 G 39676234.06 39676234.23 39676234.43 0.0143 0.0078

Uranus 103918-05-12 06:13 G 39676460.60 39676460.76 39676460.93 0.0142 0.0098

Uranus 103918-12-24 18:28 G 39676687.16 39676687.27 39676687.41 0.0142 0.0117

Uranus 103919-08-08 06:28 G 39676913.73 39676913.77 39676913.86 0.0142 0.0136

Jupiter 103921-08-24 06:42 G 39677660.58 39677660.78 39677660.98 0.0524 0.0028

Mars 103925-02-23 20:23 G 39678940.19 39678940.35 39678940.51 0.1591 0.0608

Jupiter 103927-06-30 10:18 G 39679796.74 39679796.93 39679797.11 0.0501 0.0219

Saturn 103927-10-24 11:45 G 39679912.81 39679912.99 39679913.19 0.0276 0.0105

Mars 103927-11-29 00:28 G 39679948.44 39679948.52 39679948.60 0.1954 0.1715

Saturn 103928-06-09 16:18 G 39680142.02 39680142.18 39680142.35 0.0279 0.0170

Jupiter 103933-04-29 03:06 G 39681926.45 39681926.63 39681926.82 0.0522 0.0206

Jupiter 103939-03-05 08:23 G 39684062.64 39684062.85 39684063.06 0.0503 0.0006

Saturn 103941-01-12 07:11 G 39684741.64 39684741.80 39684741.97 0.0286 0.0183

Saturn 103941-08-30 05:16 G 39684971.52 39684971.72 39684971.91 0.0284 0.0132

Jupiter 103945-01-01 21:35 G 39686192.31 39686192.40 39686192.51 0.0520 0.0444

Jupiter 103945-08-26 22:04 G 39686429.30 39686429.42 39686429.56 0.0527 0.0398

Jupiter 103950-11-08 05:59 G 39688328.56 39688328.75 39688328.94 0.0504 0.0208

Uranus 103952-06-10 10:47 G 39688908.93 39688908.95 39688909.00 0.0135 0.0133

Uranus 103953-01-22 15:21 G 39689135.05 39689135.14 39689135.26 0.0135 0.0118

Moon 103953-05-15 05:01 G 39689247.56 39689247.71 39689247.87 0.2636 0.0185

Earth 103953-05-15 07:40 G 39689247.66 39689247.82 39689247.97 0.2630 0.0771 *

Uranus 103953-09-05 20:23 G 39689361.22 39689361.35 39689361.49 0.0135 0.0102

Uranus 103954-04-20 00:42 G 39689587.38 39689587.53 39689587.71 0.0135 0.0087

Uranus 103954-12-02 05:30 G 39689813.55 39689813.73 39689813.91 0.0135 0.0071

Uranus 103955-07-16 10:04 G 39690039.73 39690039.92 39690040.12 0.0135 0.0055

Uranus 103956-02-27 14:37 G 39690265.91 39690266.11 39690266.32 0.0135 0.0039

Uranus 103956-10-10 19:25 G 39690492.11 39690492.31 39690492.53 0.0135 0.0023

Mars 103957-02-22 12:57 G 39690626.92 39690627.04 39690627.15 0.1596 0.1213

Jupiter 103957-05-01 19:25 G 39690695.12 39690695.31 39690695.50 0.0525 0.0164

Saturn 103957-05-05 15:06 G 39690698.93 39690699.13 39690699.33 0.0276 0.0068

Uranus 103957-05-25 00:13 G 39690718.30 39690718.51 39690718.73 0.0135 0.0007

Saturn 103957-12-20 19:40 G 39690928.18 39690928.32 39690928.46 0.0278 0.0207

Uranus 103958-01-06 05:01 G 39690944.50 39690944.71 39690944.93 0.0135 0.0009

Uranus 103958-08-20 10:04 G 39691170.71 39691170.92 39691171.13 0.0135 0.0026

Uranus 103959-04-03 14:52 G 39691396.92 39691397.12 39691397.32 0.0135 0.0042

Uranus 103959-11-15 19:40 G 39691623.14 39691623.32 39691623.52 0.0135 0.0058

Uranus 103960-06-29 00:42 G 39691849.36 39691849.53 39691849.71 0.0135 0.0074

Uranus 103961-02-10 05:45 G 39692075.59 39692075.74 39692075.91 0.0135 0.0090

Moon 103961-05-12 23:59 G 39692167.46 39692167.50 39692167.54 0.2636 0.2533

Uranus 103961-09-24 10:47 G 39692301.83 39692301.95 39692302.10 0.0135 0.0106

Uranus 103962-05-08 15:49 G 39692528.09 39692528.16 39692528.28 0.0136 0.0122

Jupiter 103962-07-14 01:25 G 39692594.46 39692594.56 39692594.67 0.0506 0.0428

Jupiter 103963-03-08 01:25 G 39692831.42 39692831.56 39692831.71 0.0500 0.0348

Jupiter 103969-01-04 17:16 G 39694961.03 39694961.22 39694961.42 0.0523 0.0069

Saturn 103970-07-25 07:40 G 39695527.64 39695527.82 39695528.00 0.0287 0.0155

Saturn 103971-03-12 05:30 G 39695757.55 39695757.73 39695757.91 0.0284 0.0160

Jupiter 103974-11-10 22:18 G 39697097.23 39697097.43 39697097.63 0.0502 0.0135

Neptune 103979-10-22 16:18 G 39698904.09 39698904.18 39698904.28 0.0088 0.0079

Neptune 103980-06-04 05:45 G 39699129.61 39699129.74 39699129.88 0.0088 0.0069

Jupiter 103980-09-09 14:37 G 39699226.95 39699227.11 39699227.27 0.0521 0.0300

Neptune 103981-01-15 18:57 G 39699355.14 39699355.29 39699355.47 0.0088 0.0059

Neptune 103981-08-29 08:23 G 39699580.68 39699580.85 39699581.05 0.0088 0.0049

Neptune 103982-04-11 22:18 G 39699806.23 39699806.43 39699806.63 0.0088 0.0038

Neptune 103982-11-23 11:30 G 39700031.77 39700031.98 39700032.20 0.0088 0.0028

Neptune 103983-07-07 00:57 G 39700257.33 39700257.54 39700257.77 0.0088 0.0018

Neptune 103984-02-17 14:37 G 39700482.89 39700483.11 39700483.34 0.0088 0.0007

Neptune 103984-09-30 04:04 G 39700708.45 39700708.67 39700708.90 0.0088 0.0004

Neptune 103985-05-13 17:30 G 39700934.01 39700934.23 39700934.46 0.0088 0.0014

Neptune 103985-12-25 06:57 G 39701159.58 39701159.79 39701160.02 0.0088 0.0024

Jupiter 103986-07-16 18:42 G 39701363.07 39701363.28 39701363.48 0.0503 0.0084

Neptune 103986-08-07 20:37 G 39701385.16 39701385.36 39701385.57 0.0088 0.0034

Saturn 103986-11-15 17:30 G 39701485.03 39701485.23 39701485.44 0.0276 0.0035

Neptune 103987-03-21 10:04 G 39701610.74 39701610.92 39701611.13 0.0088 0.0045

Saturn 103987-07-02 22:04 G 39701714.33 39701714.42 39701714.53 0.0279 0.0242

Neptune 103987-11-01 23:30 G 39701836.32 39701836.48 39701836.67 0.0088 0.0055

Neptune 103988-06-14 13:11 G 39702061.91 39702062.05 39702062.21 0.0088 0.0065

Neptune 103989-01-26 02:52 G 39702287.51 39702287.62 39702287.74 0.0088 0.0075

Neptune 103989-09-08 15:49 G 39702513.14 39702513.16 39702513.24 0.0088 0.0086

Mars 103990-12-22 09:21 G 39702982.73 39702982.89 39702983.04 0.1590 0.0768

Jupiter 103993-01-07 10:47 G 39703729.79 39703729.95 39703730.12 0.0526 0.0307

Uranus 103995-03-15 12:57 G 39704526.95 39704527.04 39704527.15 0.0143 0.0128

Uranus 103995-10-28 01:54 G 39704753.45 39704753.58 39704753.73 0.0143 0.0109

Uranus 103996-06-10 14:52 G 39704979.96 39704980.12 39704980.30 0.0143 0.0090

Uranus 103997-01-23 04:04 G 39705206.48 39705206.67 39705206.87 0.0143 0.0069

Uranus 103997-09-06 17:16 G 39705433.01 39705433.22 39705433.43 0.0143 0.0049

Jupiter 103998-03-21 16:04 G 39705629.01 39705629.17 39705629.34 0.0505 0.0299

Uranus 103998-04-21 06:13 G 39705659.54 39705659.76 39705659.98 0.0143 0.0029

Jupiter 103998-11-13 15:49 G 39705866.09 39705866.16 39705866.22 0.0499 0.0473

Uranus 103998-12-03 19:11 G 39705886.08 39705886.30 39705886.52 0.0143 0.0009

Uranus 103999-07-18 08:09 G 39706112.62 39706112.84 39706113.06 0.0143 0.0011

Saturn 104000-02-04 13:25 G 39706313.86 39706314.06 39706314.26 0.0286 0.0111

Uranus 104000-02-29 21:06 G 39706339.16 39706339.38 39706339.60 0.0143 0.0031

Saturn 104000-09-21 11:01 G 39706543.81 39706543.96 39706544.11 0.0283 0.0203

Uranus 104000-10-13 09:49 G 39706565.70 39706565.91 39706566.12 0.0143 0.0051

105TH MILLENNIUM CE

This is a list of transits of Venus in the 105th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Uranus	104001-05-27 22:18	G	39706792.25	39706792.43	39706792.63	0.0143	0.0071	
Uranus	104002-01-09 11:01	G	39707018.79	39707018.96	39707019.13	0.0143	0.0090	
Uranus	104002-08-23 23:01	G	39707245.34	39707245.46	39707245.62	0.0143	0.0110	
Uranus	104003-04-07 11:59	G	39707471.91	39707472.00	39707472.10	0.0142	0.0128	
Jupiter	104004-09-12 04:47	G	39707995.50	39707995.70	39707995.90	0.0524	0.0063	
Jupiter	104010-07-19 13:54	G	39710131.90	39710132.08	39710132.26	0.0501	0.0266	
Pluto	104015-03-12 13:40	G	39711828.92	39711829.07	39711829.25	0.0064	0.0042	
Saturn	104015-10-11 18:28	G	39712042.23	39712042.27	39712042.34	0.0274	0.0263	
Pluto	104015-10-23 17:30	G	39712054.01	39712054.23	39712054.45	0.0064	0.0002	
Jupiter	104016-05-18 02:09	G	39712261.40	39712261.59	39712261.78	0.0523	0.0170	
Saturn	104016-05-27 21:49	G	39712271.20	39712271.41	39712271.62	0.0276	0.0005	
Pluto	104016-06-04 20:23	G	39712279.20	39712279.35	39712279.55	0.0064	0.0040	
Jupiter	104022-03-24 10:04	G	39714397.71	39714397.92	39714398.12	0.0502	0.0050	
Mars	104022-12-21 01:25	G	39714669.43	39714669.56	39714669.69	0.1595	0.1040	
Mars	104025-09-25 04:18	G	39715678.60	39715678.68	39715678.75	0.1948	0.1755	
Jupiter	104028-01-22 00:28	G	39716527.40	39716527.52	39716527.65	0.0521	0.0397	
Jupiter	104028-09-15 01:25	G	39716764.45	39716764.56	39716764.66	0.0527	0.0447	
Saturn	104029-08-16 15:21	G	39717099.94	39717100.14	39717100.35	0.0286	0.0079	
Saturn	104030-04-03 12:42	G	39717329.91	39717330.03	39717330.15	0.0283	0.0234	
Jupiter	104033-11-27 05:59	G	39718663.56	39718663.75	39718663.95	0.0504	0.0169	
Uranus	104036-09-22 01:40	G	39719693.50	39719693.57	39719693.67	0.0135	0.0123	
Uranus	104037-05-06 05:59	G	39719919.64	39719919.75	39719919.90	0.0135	0.0108	

Uranus 104037-12-18 10:47 G 39720145.81 39720145.95 39720146.11 0.0135 0.0092

Uranus 104038-08-01 15:21 G 39720371.98 39720372.14 39720372.33 0.0135 0.0077

Uranus 104039-03-15 19:54 G 39720598.15 39720598.33 39720598.53 0.0135 0.0061

Uranus 104039-10-28 00:42 G 39720824.34 39720824.53 39720824.74 0.0135 0.0045

Jupiter 104040-05-20 21:21 G 39721030.21 39721030.39 39721030.57 0.0525 0.0209

Uranus 104040-06-10 05:30 G 39721050.52 39721050.73 39721050.94 0.0135 0.0029

Uranus 104041-01-22 10:04 G 39721276.71 39721276.92 39721277.14 0.0135 0.0013

Uranus 104041-09-05 15:06 G 39721502.92 39721503.13 39721503.34 0.0135 0.0003

Uranus 104042-04-19 19:54 G 39721729.12 39721729.33 39721729.54 0.0135 0.0019

Uranus 104042-12-02 00:42 G 39721955.32 39721955.53 39721955.74 0.0135 0.0035

Uranus 104043-07-16 05:30 G 39722181.53 39722181.73 39722181.93 0.0135 0.0052

Uranus 104044-02-27 10:18 G 39722407.75 39722407.93 39722408.12 0.0135 0.0068

Uranus 104044-10-10 15:21 G 39722633.98 39722634.14 39722634.32 0.0135 0.0084

Saturn 104045-04-22 21:35 G 39722828.29 39722828.40 39722828.52 0.0274 0.0229

Uranus 104045-05-24 20:23 G 39722860.22 39722860.35 39722860.50 0.0135 0.0099

Jupiter 104045-08-02 01:25 G 39722929.43 39722929.56 39722929.69 0.0506 0.0391

Saturn 104045-12-08 00:57 G 39723057.33 39723057.54 39723057.75 0.0277 0.0040

Uranus 104046-01-06 01:40 G 39723086.46 39723086.57 39723086.68 0.0136 0.0115

Jupiter 104046-03-27 01:40 G 39723166.44 39723166.57 39723166.70 0.0500 0.0387

Uranus 104046-08-20 06:28 G 39723312.73 39723312.77 39723312.84 0.0136 0.0131

Jupiter 104052-01-24 17:16 G 39725296.02 39725296.22 39725296.42 0.0523 0.0029

Mars 104056-10-18 21:35 G 39727025.26 39727025.40 39727025.54 0.1589 0.0944

Jupiter 104057-11-29 23:45 G 39727432.29 39727432.49 39727432.68 0.0502 0.0176

Saturn 104059-02-26 22:04 G 39727886.21 39727886.42 39727886.64 0.0285 0.0033

Saturn 104059-10-14 19:11 G 39728116.27 39728116.30 39728116.33 0.0283 0.0279

Neptune 104061-04-27 06:28 G 39728676.73 39728676.77 39728676.85 0.0090 0.0086

Neptune 104061-12-08 18:42 G 39728902.19 39728902.28 39728902.42 0.0090 0.0076

Neptune 104062-07-22 07:40 G 39729127.69 39729127.82 39729127.98 0.0090 0.0065

Neptune 104063-03-04 20:09 G 39729353.19 39729353.34 39729353.53 0.0090 0.0055

Jupiter 104063-09-29 11:16 G 39729561.80 39729561.97 39729562.14 0.0521 0.0271

Neptune 104063-10-16 08:52 G 39729578.69 39729578.87 39729579.07 0.0090 0.0044

Neptune 104064-05-28 21:21 G 39729804.21 39729804.39 39729804.60 0.0090 0.0034

Neptune 104065-01-09 10:04 G 39730029.72 39730029.92 39730030.14 0.0090 0.0023

Neptune 104065-08-22 22:47 G 39730255.25 39730255.45 39730255.67 0.0090 0.0013

Neptune 104066-04-05 11:30 G 39730480.77 39730480.98 39730481.20 0.0090 0.0002

Moon 104066-11-15 07:40 G 39730704.67 39730704.82 39730704.98 0.2695 0.0838

Earth 104066-11-15 08:09 G 39730704.69 39730704.84 39730705.00 0.2702 0.0573 *

Neptune 104066-11-16 23:59 G 39730706.29 39730706.50 39730706.72 0.0090 0.0009

Neptune 104067-06-30 12:13 G 39730931.81 39730932.01 39730932.23 0.0090 0.0020

Neptune 104068-02-11 00:57 G 39731157.34 39731157.54 39731157.75 0.0090 0.0030

Neptune 104068-09-23 13:25 G 39731382.88 39731383.06 39731383.26 0.0090 0.0041

Neptune 104069-05-07 01:54 G 39731608.41 39731608.58 39731608.77 0.0090 0.0051

Jupiter 104069-08-04 21:21 G 39731698.18 39731698.39 39731698.60 0.0503 0.0038

Neptune 104069-12-18 14:09 G 39731833.95 39731834.09 39731834.27 0.0090 0.0062

Neptune 104070-08-01 02:52 G 39732059.50 39732059.62 39732059.76 0.0090 0.0072

Neptune 104071-03-14 15:21 G 39732285.07 39732285.14 39732285.23 0.0090 0.0082

Saturn 104074-11-03 03:21 G 39733614.50 39733614.64 39733614.80 0.0274 0.0187

Jupiter 104075-06-04 08:37 G 39733827.81 39733827.86 39733827.92 0.0520 0.0498

Saturn 104075-06-20 06:57 G 39733843.59 39733843.79 39733843.99 0.0277 0.0083

Jupiter 104076-01-27 08:52 G 39734064.72 39734064.87 39734065.02 0.0526 0.0341

Uranus 104078-11-12 17:16 G 39735085.15 39735085.22 39735085.29 0.0143 0.0136

Uranus 104079-06-27 05:59 G 39735311.63 39735311.75 39735311.89 0.0143 0.0117

Uranus 104080-02-08 18:57 G 39735538.14 39735538.29 39735538.47 0.0143 0.0097

Uranus 104080-09-22 08:09 G 39735764.66 39735764.84 39735765.03 0.0143 0.0077

Jupiter 104081-04-09 16:33 G 39735964.01 39735964.19 39735964.37 0.0505 0.0259

Uranus 104081-05-06 21:21 G 39735991.19 39735991.39 39735991.60 0.0143 0.0057

Uranus 104081-12-19 10:18 G 39736217.72 39736217.93 39736218.15 0.0143 0.0037

Uranus 104082-08-02 23:16 G 39736444.25 39736444.47 39736444.70 0.0143 0.0018

Uranus 104083-03-17 12:28 G 39736670.80 39736671.02 39736671.24 0.0143 0.0003

Uranus 104083-10-30 01:11 G 39736897.34 39736897.55 39736897.78 0.0143 0.0023

Uranus 104084-06-12 13:54 G 39737123.88 39737124.08 39737124.30 0.0143 0.0043

Uranus 104085-01-25 02:52 G 39737350.42 39737350.62 39737350.82 0.0143 0.0062

Uranus 104085-09-08 15:21 G 39737576.97 39737577.14 39737577.33 0.0143 0.0082

Uranus 104086-04-23 04:04 G 39737803.52 39737803.67 39737803.83 0.0143 0.0101

Uranus 104086-12-05 16:33 G 39738030.07 39738030.19 39738030.31 0.0143 0.0120

Uranus 104087-07-20 04:33 G 39738256.65 39738256.69 39738256.75 0.0142 0.0139

Jupiter 104087-10-02 06:28 G 39738330.57 39738330.77 39738330.96 0.0525 0.0109

Saturn 104088-09-08 01:54 G 39738672.36 39738672.58 39738672.79 0.0285 0.0005

Mars 104088-10-17 14:09 G 39738711.94 39738712.09 39738712.23 0.1593 0.0871

Mars 104091-07-23 06:42 G 39739720.63 39739720.78 39739720.92 0.1950 0.1005

Jupiter 104092-12-13 11:59 G 39740229.94 39740230.00 39740230.06 0.0506 0.0479

Jupiter 104093-08-07 12:13 G 39740466.85 39740467.01 39740467.18 0.0501 0.0301

Jupiter 104099-06-07 03:06 G 39742596.43 39742596.63 39742596.82 0.0523 0.0129

Saturn 104104-05-16 06:57 G 39744400.62 39744400.79 39744400.97 0.0275 0.0151

Pluto 104104-09-15 11:30 G 39744522.78 39744522.98 39744523.20 0.0080 0.0030

Saturn 104104-12-31 10:47 G 39744629.76 39744629.95 39744630.14 0.0278 0.0121

Jupiter 104105-04-13 08:37 G 39744732.65 39744732.86 39744733.06 0.0502 0.0084

Pluto 104105-04-28 22:04 G 39744748.27 39744748.42 39744748.61 0.0079 0.0052

Jupiter 104111-02-10 23:30 G 39746862.34 39746862.48 39746862.62 0.0521 0.0362

Jupiter 104111-10-05 23:45 G 39747099.41 39747099.49 39747099.57 0.0527 0.0483

Jupiter 104116-12-17 05:45 G 39748998.54 39748998.74 39748998.94 0.0504 0.0132

Saturn 104117-08-04 10:33 G 39749228.87 39749228.94 39749229.02 0.0287 0.0268

Saturn 104118-03-22 09:35 G 39749458.68 39749458.90 39749459.11 0.0285 0.0053

Uranus 104120-05-23 11:45 G 39750251.94 39750251.99 39750252.07 0.0135 0.0128

Uranus 104121-01-04 16:18 G 39750478.08 39750478.18 39750478.31 0.0135 0.0113

Uranus 104121-08-18 21:21 G 39750704.25 39750704.39 39750704.54 0.0135 0.0097

Uranus 104122-04-02 01:40 G 39750930.42 39750930.57 39750930.75 0.0135 0.0082

Mars 104122-08-17 10:33 G 39751067.81 39751067.94 39751068.06 0.1587 0.1104

Uranus 104122-11-14 06:28 G 39751156.59 39751156.77 39751156.96 0.0135 0.0066

Jupiter 104123-06-10 16:47 G 39751365.02 39751365.20 39751365.37 0.0525 0.0237

Uranus 104123-06-28 11:01 G 39751382.77 39751382.96 39751383.17 0.0135 0.0051

Uranus 104124-02-09 15:35 G 39751608.96 39751609.15 39751609.37 0.0135 0.0035

Uranus 104124-09-22 20:37 G 39751835.15 39751835.36 39751835.58 0.0135 0.0019

Uranus 104125-05-07 01:25 G 39752061.35 39752061.56 39752061.78 0.0135 0.0003

Uranus 104125-12-19 06:13 G 39752287.55 39752287.76 39752287.97 0.0135 0.0013

Uranus 104126-08-02 11:01 G 39752513.75 39752513.96 39752514.17 0.0135 0.0030

Uranus 104127-03-16 15:49 G 39752739.96 39752740.16 39752740.36 0.0135 0.0045

Uranus 104127-10-28 20:37 G 39752966.18 39752966.36 39752966.55 0.0135 0.0062

Uranus 104128-06-11 01:25 G 39753192.40 39753192.56 39753192.74 0.0135 0.0078

Jupiter 104128-08-22 02:37 G 39753264.46 39753264.61 39753264.76 0.0506 0.0350

Uranus 104129-01-23 06:13 G 39753418.62 39753418.76 39753418.93 0.0135 0.0094

Jupiter 104129-04-16 02:23 G 39753501.50 39753501.60 39753501.71 0.0500 0.0428

Uranus 104129-09-06 11:30 G 39753644.86 39753644.98 39753645.12 0.0136 0.0109

Uranus 104130-04-20 16:33 G 39753871.12 39753871.19 39753871.29 0.0136 0.0125

Saturn 104133-11-26 14:09 G 39755186.90 39755187.09 39755187.28 0.0275 0.0106

Saturn 104134-07-13 17:59 G 39755416.09 39755416.25 39755416.42 0.0278 0.0167

Jupiter 104135-02-13 13:25 G 39755630.86 39755631.06 39755631.26 0.0524 0.0003

Jupiter 104140-12-19 22:04 G 39757767.24 39757767.42 39757767.61 0.0501 0.0212

Neptune 104144-01-25 02:23 G 39758898.52 39758898.60 39758898.69 0.0088 0.0081

Neptune 104144-09-06 15:49 G 39759124.04 39759124.16 39759124.30 0.0088 0.0071

Neptune 104145-04-20 05:01 G 39759349.57 39759349.71 39759349.89 0.0088 0.0061

Neptune 104145-12-01 18:28 G 39759575.10 39759575.27 39759575.47 0.0088 0.0051

Neptune 104146-07-15 07:54 G 39759800.65 39759800.83 39759801.05 0.0088 0.0041

Jupiter 104146-10-19 11:16 G 39759896.79 39759896.97 39759897.15 0.0522 0.0231

Saturn 104147-02-14 16:47 G 39760015.07 39760015.20 39760015.33 0.0288 0.0226

Neptune 104147-02-25 21:49 G 39760026.20 39760026.41 39760026.62 0.0088 0.0030

Saturn 104147-10-02 15:06 G 39760244.93 39760245.13 39760245.34 0.0285 0.0094

Neptune 104147-10-09 11:16 G 39760251.75 39760251.97 39760252.19 0.0088 0.0020

Neptune 104148-05-22 00:42 G 39760477.31 39760477.53 39760477.76 0.0088 0.0010

Neptune 104149-01-02 14:09 G 39760702.87 39760703.09 39760703.32 0.0088 0.0001

Neptune 104149-08-16 03:35 G 39760928.43 39760928.65 39760928.88 0.0088 0.0011

Neptune 104150-03-29 17:01 G 39761154.00 39761154.21 39761154.44 0.0088 0.0022

Neptune 104150-11-10 06:42 G 39761379.57 39761379.78 39761379.99 0.0088 0.0032

Neptune 104151-06-23 20:09 G 39761605.15 39761605.34 39761605.54 0.0088 0.0042

Neptune 104152-02-04 09:21 G 39761830.73 39761830.89 39761831.09 0.0088 0.0053

Jupiter 104152-08-24 18:28 G 39762033.06 39762033.27 39762033.47 0.0503 0.0012

Neptune 104152-09-16 23:01 G 39762056.32 39762056.46 39762056.63 0.0088 0.0063

Neptune 104153-04-30 12:42 G 39762281.92 39762282.03 39762282.17 0.0088 0.0073

Neptune 104153-12-12 02:37 G 39762507.54 39762507.61 39762507.67 0.0088 0.0083

Mars 104154-08-16 02:37 G 39762754.45 39762754.61 39762754.77 0.1592 0.0698

Mars 104157-05-20 08:52 G 39763762.69 39763762.87 39763763.04 0.1953 0.0231

Jupiter 104158-06-24 08:37 G 39764162.77 39764162.86 39764162.95 0.0520 0.0461

Jupiter 104159-02-16 08:23 G 39764399.72 39764399.85 39764399.99 0.0526 0.0380

Uranus 104162-07-13 21:49 G 39765643.40 39765643.41 39765643.44 0.0143 0.0142

Uranus 104163-02-25 11:01 G 39765869.85 39765869.96 39765870.07 0.0143 0.0123

Saturn 104163-06-08 18:28 G 39765973.07 39765973.27 39765973.47 0.0276 0.0068

Uranus 104163-10-09 23:59 G 39766096.36 39766096.50 39766096.66 0.0143 0.0104

Saturn 104164-01-23 22:33 G 39766202.31 39766202.44 39766202.58 0.0278 0.0208

Jupiter 104164-04-29 13:25 G 39766298.88 39766299.06 39766299.25 0.0505 0.0229

Uranus 104164-05-23 12:57 G 39766322.87 39766323.04 39766323.23 0.0143 0.0085

Uranus 104165-01-05 01:54 G 39766549.39 39766549.58 39766549.79 0.0143 0.0065

Uranus 104165-08-19 15:06 G 39766775.92 39766776.13 39766776.35 0.0143 0.0045

Uranus 104166-04-03 04:18 G 39767002.46 39767002.68 39767002.90 0.0143 0.0025

Uranus 104166-11-15 17:16 G 39767229.00 39767229.22 39767229.44 0.0143 0.0005

Uranus 104167-06-30 05:59 G 39767455.54 39767455.75 39767455.98 0.0143 0.0015

Uranus 104168-02-11 18:42 G 39767682.08 39767682.28 39767682.51 0.0143 0.0035

Uranus 104168-09-25 07:40 G 39767908.62 39767908.82 39767909.03 0.0143 0.0054

Uranus 104169-05-09 20:23 G 39768135.17 39768135.35 39768135.54 0.0143 0.0074

Uranus 104169-12-22 08:52 G 39768361.71 39768361.87 39768362.04 0.0143 0.0093

Uranus 104170-08-05 21:21 G 39768588.26 39768588.39 39768588.53 0.0143 0.0112

Jupiter 104170-10-22 03:49 G 39768665.47 39768665.66 39768665.85 0.0524 0.0141

Uranus 104171-03-20 09:35 G 39768814.82 39768814.90 39768815.00 0.0143 0.0131

Jupiter 104176-01-03 09:49 G 39770564.82 39770564.91 39770565.01 0.0507 0.0448

Saturn 104176-08-27 01:40 G 39770801.40 39770801.57 39770801.75 0.0287 0.0173

Jupiter 104176-08-27 10:47 G 39770801.80 39770801.95 39770802.10 0.0501 0.0335

Saturn 104177-04-13 23:45 G 39771031.31 39771031.49 39771031.68 0.0284 0.0145

Jupiter 104182-06-26 21:21 G 39772931.19 39772931.39 39772931.58 0.0522 0.0105

Jupiter 104188-05-02 07:54 G 39775067.63 39775067.83 39775068.03 0.0502 0.0122

Mars 104188-06-13 23:01 G 39775110.36 39775110.46 39775110.56 0.1586 0.1272

Saturn 104192-12-19 02:23 G 39776759.40 39776759.60 39776759.81 0.0276 0.0021

Saturn 104193-08-05 07:11 G 39776988.72 39776988.80 39776988.88 0.0278 0.0257

Jupiter 104194-03-01 18:13 G 39777197.11 39777197.26 39777197.41 0.0521 0.0337

Jupiter 104194-10-24 18:42 G 39777434.23 39777434.28 39777434.33 0.0527 0.0510

Earth 104196-05-16 06:42 G 39778003.62 39778003.78 39778003.93 0.2631 0.0705

Moon 104196-05-16 11:59 G 39778003.85 39778004.00 39778004.14 0.2627 0.1353 *

Jupiter 104200-01-06 02:52 G 39779333.42 39779333.62 39779333.83 0.0504 0.0101

Uranus 104204-01-22 21:35 G 39780810.38 39780810.40 39780810.44 0.0135 0.0133

Uranus 104204-09-05 02:23 G 39781036.51 39781036.60 39781036.71 0.0135 0.0118

Uranus 104205-04-19 06:57 G 39781262.66 39781262.79 39781262.94 0.0135 0.0103

Uranus 104205-12-01 11:16 G 39781488.83 39781488.97 39781489.15 0.0135 0.0088

Saturn 104206-03-10 09:06 G 39781587.69 39781587.88 39781588.08 0.0287 0.0127

Jupiter 104206-06-30 15:35 G 39781699.99 39781700.15 39781700.32 0.0525 0.0275

Uranus 104206-07-15 16:04 G 39781715.00 39781715.17 39781715.36 0.0135 0.0072

Saturn 104206-10-26 06:42 G 39781817.63 39781817.78 39781817.95 0.0284 0.0190

Uranus 104207-02-26 20:52 G 39781941.18 39781941.37 39781941.57 0.0135 0.0056

Uranus 104207-10-11 01:40 G 39782167.37 39782167.57 39782167.78 0.0135 0.0041

Uranus 104208-05-24 06:13 G 39782393.56 39782393.76 39782393.98 0.0135 0.0025

Uranus 104209-01-05 11:01 G 39782619.75 39782619.96 39782620.18 0.0135 0.0009

Uranus 104209-08-19 15:49 G 39782845.95 39782846.16 39782846.38 0.0135 0.0008

Uranus 104210-04-02 20:37 G 39783072.15 39783072.36 39783072.57 0.0135 0.0023

Uranus 104210-11-15 01:25 G 39783298.36 39783298.56 39783298.77 0.0135 0.0039

Uranus 104211-06-29 05:59 G 39783524.57 39783524.75 39783524.96 0.0135 0.0056

Jupiter 104211-09-11 22:18 G 39783599.28 39783599.43 39783599.60 0.0505 0.0322

Uranus 104212-02-10 10:47 G 39783750.78 39783750.95 39783751.14 0.0135 0.0071

Jupiter 104212-05-05 22:04 G 39783836.34 39783836.42 39783836.50 0.0500 0.0455

Uranus 104212-09-23 16:04 G 39783977.01 39783977.17 39783977.34 0.0135 0.0087

Uranus 104213-05-07 20:52 G 39784203.25 39784203.37 39784203.52 0.0136 0.0103

Uranus 104213-12-20 02:09 G 39784429.49 39784429.59 39784429.70 0.0136 0.0118

Uranus 104214-08-03 06:57 G 39784655.77 39784655.79 39784655.84 0.0136 0.0134

Jupiter 104218-03-05 12:13 G 39785965.81 39785966.01 39785966.21 0.0524 0.0037

Mars 104220-06-13 15:21 G 39786796.98 39786797.14 39786797.31 0.1591 0.0531

Saturn 104221-11-15 04:18 G 39787316.59 39787316.68 39787316.76 0.0274 0.0249

Saturn 104222-07-02 07:11 G 39787545.60 39787545.80 39787546.01 0.0277 0.0020

Mars 104223-03-18 11:30 G 39787804.81 39787804.98 39787805.15 0.1955 0.0517

Jupiter 104224-01-09 17:59 G 39788102.07 39788102.25 39788102.43 0.0501 0.0239

Neptune 104225-07-31 18:13 G 39788671.23 39788671.26 39788671.31 0.0090 0.0088

Neptune 104226-03-14 06:28 G 39788896.69 39788896.77 39788896.90 0.0090 0.0078

Neptune 104226-10-25 19:25 G 39789122.18 39789122.31 39789122.46 0.0090 0.0067

Neptune 104227-06-08 07:40 G 39789347.67 39789347.82 39789348.00 0.0090 0.0057

Neptune 104228-01-19 20:37 G 39789573.18 39789573.36 39789573.55 0.0090 0.0046

Neptune 104228-09-01 09:06 G 39789798.69 39789798.88 39789799.09 0.0090 0.0036

Neptune 104229-04-14 21:49 G 39790024.21 39790024.41 39790024.62 0.0090 0.0025

Jupiter 104229-11-08 07:54 G 39790231.65 39790231.83 39790232.02 0.0522 0.0202

Neptune 104229-11-26 10:18 G 39790249.72 39790249.93 39790250.15 0.0090 0.0015

Neptune 104230-07-09 23:01 G 39790475.24 39790475.46 39790475.67 0.0090 0.0004

Neptune 104231-02-20 11:30 G 39790700.77 39790700.98 39790701.20 0.0090 0.0007

Neptune 104231-10-04 00:13 G 39790926.30 39790926.51 39790926.72 0.0090 0.0017

Neptune 104232-05-16 12:42 G 39791151.83 39791152.03 39791152.24 0.0090 0.0028

Neptune 104232-12-28 01:25 G 39791377.36 39791377.56 39791377.75 0.0090 0.0038

Neptune 104233-08-10 13:40 G 39791602.90 39791603.07 39791603.26 0.0090 0.0049

Neptune 104234-03-24 02:23 G 39791828.44 39791828.60 39791828.76 0.0090 0.0059

Neptune 104234-11-04 14:23 G 39792053.99 39792054.10 39792054.26 0.0090 0.0070

Neptune 104235-06-18 03:06 G 39792279.54 39792279.63 39792279.74 0.0090 0.0080

Jupiter 104235-09-14 15:06 G 39792367.92 39792368.13 39792368.34 0.0503 0.0024

Saturn 104235-09-20 18:42 G 39792374.08 39792374.28 39792374.50 0.0286 0.0074

Saturn 104236-05-07 16:04 G 39792604.06 39792604.17 39792604.29 0.0283 0.0241

Jupiter 104241-07-14 02:23 G 39794497.50 39794497.60 39794497.71 0.0519 0.0439

Jupiter 104242-03-08 01:40 G 39794734.45 39794734.57 39794734.70 0.0526 0.0403

Uranus 104246-10-26 16:47 G 39796428.13 39796428.20 39796428.31 0.0143 0.0131

Jupiter 104247-05-20 11:16 G 39796633.78 39796633.97 39796634.16 0.0505 0.0196

Uranus 104247-06-10 05:59 G 39796654.62 39796654.75 39796654.90 0.0143 0.0111

Uranus 104248-01-22 19:11 G 39796881.14 39796881.30 39796881.48 0.0143 0.0092

Uranus 104248-09-05 08:09 G 39797107.66 39797107.84 39797108.05 0.0143 0.0072

Uranus 104249-04-19 21:21 G 39797334.19 39797334.39 39797334.61 0.0143 0.0052

Uranus 104249-12-02 10:33 G 39797560.72 39797560.94 39797561.16 0.0143 0.0032

Uranus 104250-07-16 23:30 G 39797787.26 39797787.48 39797787.70 0.0143 0.0012

Uranus 104251-02-28 12:28 G 39798013.80 39798014.02 39798014.25 0.0143 0.0008

Saturn 104251-05-28 12:13 G 39798102.88 39798103.01 39798103.16 0.0274 0.0202

Uranus 104251-10-13 01:25 G 39798240.34 39798240.56 39798240.78 0.0143 0.0027

Saturn 104252-01-12 15:49 G 39798331.96 39798332.16 39798332.36 0.0277 0.0069

Uranus 104252-05-26 14:09 G 39798466.88 39798467.09 39798467.30 0.0143 0.0047

Uranus 104253-01-08 02:37 G 39798693.42 39798693.61 39798693.81 0.0143 0.0067

Uranus 104253-08-22 15:06 G 39798919.97 39798920.13 39798920.32 0.0143 0.0086

Jupiter 104253-11-10 21:49 G 39799000.22 39799000.41 39799000.60 0.0524 0.0165

Uranus 104254-04-06 03:49 G 39799146.52 39799146.66 39799146.82 0.0143 0.0105

Mars 104254-04-12 11:59 G 39799152.93 39799153.00 39799153.08 0.1585 0.1430

Uranus 104254-11-18 15:49 G 39799373.07 39799373.16 39799373.29 0.0143 0.0124

Uranus 104255-07-03 04:18 G 39799599.67 39799599.68 39799599.71 0.0142 0.0142

Jupiter 104259-01-23 05:59 G 39800899.64 39800899.75 39800899.86 0.0506 0.0420

Jupiter 104259-09-17 06:28 G 39801136.63 39801136.77 39801136.91 0.0500 0.0363

Pluto 104263-09-27 15:49 G 39802608.01 39802608.16 39802608.35 0.0064 0.0039

Pluto 104264-05-09 19:40 G 39802833.10 39802833.32 39802833.54 0.0064 0.0001

Pluto 104264-12-20 22:33 G 39803058.30 39803058.44 39803058.63 0.0064 0.0042

Saturn 104265-04-02 03:49 G 39803160.44 39803160.66 39803160.88 0.0286 0.0023

Jupiter 104265-07-16 19:11 G 39803266.10 39803266.30 39803266.50 0.0523 0.0071

Jupiter 104271-05-23 02:37 G 39805402.41 39805402.61 39805402.81 0.0502 0.0147

Jupiter 104277-03-21 16:18 G 39807532.02 39807532.18 39807532.34 0.0521 0.0305

Saturn 104280-12-07 17:01 G 39808889.05 39808889.21 39808889.38 0.0275 0.0163

Saturn 104281-07-24 20:52 G 39809118.18 39809118.37 39809118.56 0.0277 0.0110

Jupiter 104283-01-25 21:49 G 39809668.21 39809668.41 39809668.62 0.0504 0.0076

Mars 104286-04-11 04:04 G 39810839.50 39810839.67 39810839.84 0.1589 0.0362

Uranus 104288-05-05 12:28 G 39811594.95 39811595.02 39811595.12 0.0135 0.0123

Uranus 104288-12-17 17:01 G 39811821.10 39811821.21 39811821.35 0.0135 0.0108

Mars 104289-01-12 13:11 G 39811846.93 39811847.05 39811847.18 0.1957 0.1317

Jupiter 104289-07-19 11:45 G 39812034.83 39812034.99 39812035.16 0.0525 0.0304

Uranus 104289-07-31 22:04 G 39812047.27 39812047.42 39812047.58 0.0135 0.0092

Uranus 104290-03-15 02:37 G 39812273.44 39812273.61 39812273.79 0.0135 0.0077

Uranus 104290-10-27 07:25 G 39812499.62 39812499.81 39812500.00 0.0135 0.0061

Uranus 104291-06-10 11:59 G 39812725.81 39812726.00 39812726.21 0.0135 0.0046

Uranus 104292-01-22 16:33 G 39812951.99 39812952.19 39812952.41 0.0135 0.0030

Uranus 104292-09-04 21:35 G 39813178.19 39813178.40 39813178.61 0.0135 0.0014

Uranus 104293-04-19 02:23 G 39813404.38 39813404.60 39813404.81 0.0135 0.0003

Uranus 104293-12-01 06:57 G 39813630.58 39813630.79 39813631.00 0.0135 0.0018

Uranus 104294-07-15 11:30 G 39813856.78 39813856.98 39813857.19 0.0135 0.0034

Jupiter 104294-09-30 17:59 G 39813934.08 39813934.25 39813934.42 0.0506 0.0297

Saturn 104294-10-13 13:11 G 39813946.83 39813947.05 39813947.26 0.0285 0.0030

Uranus 104295-02-26 16:18 G 39814082.99 39814083.18 39814083.38 0.0135 0.0050

Jupiter 104295-05-25 17:59 G 39814171.21 39814171.25 39814171.30 0.0500 0.0483

Uranus 104295-10-10 21:06 G 39814309.21 39814309.38 39814309.58 0.0135 0.0066

Uranus 104296-05-24 01:54 G 39814535.43 39814535.58 39814535.77 0.0135 0.0082

Uranus 104297-01-05 06:57 G 39814761.65 39814761.79 39814761.95 0.0135 0.0097

Uranus 104297-08-19 11:45 G 39814987.89 39814987.99 39814988.13 0.0136 0.0113

Uranus 104298-04-02 17:01 G 39815214.15 39815214.21 39815214.29 0.0136 0.0128

Jupiter 104301-03-25 05:30 G 39816300.53 39816300.73 39816300.93 0.0523 0.0058

Jupiter 104307-01-29 15:06 G 39818436.96 39818437.13 39818437.31 0.0502 0.0272

Neptune 104308-04-29 11:45 G 39818892.95 39818892.99 39818893.08 0.0088 0.0084

Neptune 104308-12-11 01:40 G 39819118.45 39819118.57 39819118.70 0.0088 0.0073

Neptune 104309-07-24 15:06 G 39819343.98 39819344.13 39819344.29 0.0088 0.0063

Moon 104309-11-18 09:06 G 39819460.73 39819460.88 39819461.03 0.2708 0.0322

Earth 104309-11-18 11:16 G 39819460.82 39819460.97 39819461.12 0.2701 0.0663 *

Neptune 104310-03-07 04:33 G 39819569.53 39819569.69 39819569.88 0.0088 0.0053

Saturn 104310-06-21 01:25 G 39819675.37 39819675.56 39819675.75 0.0275 0.0115

Neptune 104310-10-18 17:59 G 39819795.07 39819795.25 39819795.46 0.0088 0.0043

Saturn 104311-02-05 05:30 G 39819904.56 39819904.73 39819904.90 0.0278 0.0160

Neptune 104311-06-01 07:25 G 39820020.61 39820020.81 39820021.03 0.0088 0.0033

Neptune 104312-01-12 21:06 G 39820246.17 39820246.38 39820246.60 0.0088 0.0022

Neptune 104312-08-25 10:33 G 39820471.72 39820471.94 39820472.17 0.0088 0.0012

Jupiter 104312-11-28 01:40 G 39820566.39 39820566.57 39820566.76 0.0521 0.0179

Neptune 104313-04-08 00:13 G 39820697.28 39820697.51 39820697.73 0.0088 0.0001

Neptune 104313-11-19 13:40 G 39820922.84 39820923.07 39820923.29 0.0088 0.0009

Neptune 104314-07-03 03:06 G 39821148.41 39821148.63 39821148.85 0.0088 0.0019

Neptune 104315-02-13 16:18 G 39821373.98 39821374.18 39821374.40 0.0088 0.0030

Neptune 104315-09-27 05:45 G 39821599.55 39821599.74 39821599.95 0.0088 0.0040

Neptune 104316-05-09 19:25 G 39821825.13 39821825.31 39821825.50 0.0088 0.0050

Neptune 104316-12-21 08:23 G 39822050.71 39822050.85 39822051.04 0.0088 0.0061

Neptune 104317-08-03 22:04 G 39822276.31 39822276.42 39822276.57 0.0088 0.0071

Moon 104317-11-16 06:57 G 39822380.70 39822380.79 39822380.88 0.2707 0.2129

Neptune 104318-03-17 11:45 G 39822501.92 39822501.99 39822502.09 0.0088 0.0081

Jupiter 104318-10-04 10:18 G 39822702.72 39822702.93 39822703.13 0.0503 0.0049

Saturn 104323-09-09 00:28 G 39824503.40 39824503.52 39824503.64 0.0288 0.0239

Saturn 104324-04-25 22:47 G 39824733.25 39824733.45 39824733.66 0.0285 0.0083

Jupiter 104324-08-02 23:01 G 39824832.35 39824832.46 39824832.59 0.0520 0.0412

Jupiter 104325-03-27 23:16 G 39825069.37 39825069.47 39825069.58 0.0526 0.0437

Jupiter 104330-06-09 06:13 G 39826968.56 39826968.76 39826968.95 0.0504 0.0172

Uranus 104330-06-26 23:45 G 39826986.43 39826986.49 39826986.56 0.0143 0.0136

Uranus 104331-02-08 12:57 G 39827212.91 39827213.04 39827213.17 0.0143 0.0117

Uranus 104331-09-23 01:54 G 39827439.43 39827439.58 39827439.75 0.0143 0.0098

Uranus 104332-05-06 14:52 G 39827665.95 39827666.12 39827666.32 0.0143 0.0078

Uranus 104332-12-19 04:04 G 39827892.47 39827892.67 39827892.88 0.0143 0.0059

Uranus 104333-08-02 17:01 G 39828119.01 39828119.21 39828119.44 0.0143 0.0039

Uranus 104334-03-17 06:28 G 39828345.55 39828345.77 39828345.99 0.0143 0.0019

Uranus 104334-10-29 19:25 G 39828572.09 39828572.31 39828572.53 0.0143 0.0001

Uranus 104335-06-13 08:09 G 39828798.62 39828798.84 39828799.06 0.0143 0.0021

Uranus 104336-01-25 21:06 G 39829025.16 39829025.38 39829025.59 0.0143 0.0040

Uranus 104336-09-08 09:35 G 39829251.71 39829251.90 39829252.11 0.0143 0.0060

Jupiter 104336-11-30 19:40 G 39829335.14 39829335.32 39829335.50 0.0525 0.0197

Uranus 104337-04-22 22:33 G 39829478.25 39829478.44 39829478.62 0.0143 0.0079

Uranus 104337-12-05 11:01 G 39829704.80 39829704.96 39829705.12 0.0143 0.0098

Uranus 104338-07-19 23:16 G 39829931.35 39829931.47 39829931.60 0.0143 0.0117

Uranus 104339-03-03 11:16 G 39830157.92 39830157.97 39830158.06 0.0143 0.0136

Saturn 104340-01-01 05:45 G 39830461.54 39830461.74 39830461.94 0.0276 0.0076

Saturn 104340-08-17 10:04 G 39830690.78 39830690.92 39830691.07 0.0278 0.0200

Jupiter 104342-02-12 00:42 G 39831234.41 39831234.53 39831234.66 0.0506 0.0397

Jupiter 104342-10-07 01:11 G 39831471.42 39831471.55 39831471.68 0.0501 0.0388

Jupiter 104348-08-05 15:35 G 39833600.95 39833601.15 39833601.35 0.0523 0.0042

Mars 104352-02-07 16:33 G 39834882.01 39834882.19 39834882.36 0.1588 0.0185

Saturn 104353-03-21 09:35 G 39835289.74 39835289.90 39835290.06 0.0287 0.0186

Pluto 104353-04-02 11:59 G 39835301.80 39835302.00 39835302.22 0.0080 0.0029

Saturn 104353-11-06 07:40 G 39835519.64 39835519.82 39835520.02 0.0284 0.0134

Pluto 104353-11-13 22:47 G 39835527.30 39835527.45 39835527.63 0.0079 0.0053

Jupiter 104354-06-11 22:04 G 39835737.22 39835737.42 39835737.61 0.0502 0.0173

Jupiter 104360-04-10 10:18 G 39837866.76 39837866.93 39837867.10 0.0520 0.0282

Jupiter 104366-02-14 18:28 G 39840003.06 39840003.27 39840003.48 0.0504 0.0046

Saturn 104369-07-13 13:54 G 39841247.87 39841248.08 39841248.28 0.0276 0.0028

Saturn 104370-02-27 18:28 G 39841477.18 39841477.27 39841477.36 0.0279 0.0250

Jupiter 104371-12-15 06:57 G 39842132.76 39842132.79 39842132.82 0.0519 0.0512

Uranus 104372-01-04 22:47 G 39842153.39 39842153.45 39842153.53 0.0135 0.0127

Jupiter 104372-08-08 05:45 G 39842369.59 39842369.74 39842369.90 0.0525 0.0328

Uranus 104372-08-18 03:35 G 39842379.54 39842379.65 39842379.77 0.0135 0.0112

Uranus 104373-04-01 08:09 G 39842605.71 39842605.84 39842606.00 0.0135 0.0097

Uranus 104373-11-13 12:42 G 39842831.88 39842832.03 39842832.21 0.0135 0.0082

Uranus 104374-06-27 17:30 G 39843058.05 39843058.23 39843058.42 0.0135 0.0066

Uranus 104375-02-08 22:04 G 39843284.23 39843284.42 39843284.62 0.0135 0.0051

Uranus 104375-09-23 02:52 G 39843510.42 39843510.62 39843510.83 0.0135 0.0035

Uranus 104376-05-06 07:40 G 39843736.61 39843736.82 39843737.03 0.0135 0.0019

Uranus 104376-12-18 12:13 G 39843962.80 39843963.01 39843963.22 0.0135 0.0004

Uranus 104377-08-01 16:47 G 39844188.99 39844189.20 39844189.41 0.0135 0.0012

Jupiter 104377-10-20 13:11 G 39844268.88 39844269.05 39844269.23 0.0505 0.0272

Uranus 104378-03-15 21:21 G 39844415.19 39844415.39 39844415.61 0.0135 0.0028

Uranus 104378-10-28 02:09 G 39844641.39 39844641.59 39844641.80 0.0135 0.0044

Uranus 104379-06-11 06:57 G 39844867.60 39844867.79 39844867.99 0.0135 0.0060

Uranus 104380-01-23 11:30 G 39845093.82 39845093.98 39845094.17 0.0135 0.0076

Uranus 104380-09-05 16:47 G 39845320.04 39845320.20 39845320.36 0.0135 0.0091

Uranus 104381-04-19 21:35 G 39845546.28 39845546.40 39845546.54 0.0135 0.0106

Uranus 104381-12-02 02:37 G 39845772.53 39845772.61 39845772.71 0.0136 0.0122

Saturn 104382-10-01 19:40 G 39846076.14 39846076.32 39846076.52 0.0287 0.0132

Saturn 104383-05-19 17:30 G 39846306.07 39846306.23 39846306.40 0.0284 0.0187

Jupiter 104384-04-13 02:37 G 39846635.41 39846635.61 39846635.81 0.0524 0.0089

Jupiter 104389-06-25 08:52 G 39848534.83 39848534.87 39848534.92 0.0507 0.0493

Jupiter 104390-02-17 09:49 G 39848771.75 39848771.91 39848772.09 0.0501 0.0296

Neptune 104390-06-16 17:45 G 39848891.16 39848891.24 39848891.35 0.0090 0.0080

Neptune 104391-01-28 06:13 G 39849116.64 39849116.76 39849116.91 0.0090 0.0070

Neptune 104391-09-10 19:11 G 39849342.15 39849342.30 39849342.47 0.0090 0.0059

Neptune 104392-04-23 07:40 G 39849567.65 39849567.82 39849568.01 0.0090 0.0049

Neptune 104392-12-04 19:54 G 39849793.16 39849793.33 39849793.54 0.0090 0.0039

Neptune 104393-07-18 08:37 G 39850018.67 39850018.86 39850019.08 0.0090 0.0028

Neptune 104394-02-28 21:06 G 39850244.18 39850244.38 39850244.61 0.0090 0.0018

Neptune 104394-10-12 10:04 G 39850469.71 39850469.92 39850470.13 0.0090 0.0007

Neptune 104395-05-25 22:33 G 39850695.23 39850695.44 39850695.66 0.0090 0.0004

Jupiter 104395-12-17 23:45 G 39850901.30 39850901.49 39850901.68 0.0522 0.0147

Neptune 104396-01-06 11:01 G 39850920.75 39850920.96 39850921.18 0.0090 0.0015

Neptune 104396-08-18 23:45 G 39851146.29 39851146.49 39851146.70 0.0090 0.0025

Neptune 104397-04-01 12:13 G 39851371.82 39851372.01 39851372.22 0.0090 0.0036

Neptune 104397-11-13 00:57 G 39851597.36 39851597.54 39851597.72 0.0090 0.0046

Saturn 104398-06-08 14:23 G 39851805.04 39851805.10 39851805.17 0.0274 0.0259

Neptune 104398-06-26 13:11 G 39851822.90 39851823.05 39851823.23 0.0090 0.0057

Saturn 104399-01-23 17:30 G 39852034.03 39852034.23 39852034.44 0.0276 0.0011

Neptune 104399-02-07 01:40 G 39852048.44 39852048.57 39852048.73 0.0090 0.0067

Neptune 104399-09-20 14:09 G 39852274.01 39852274.09 39852274.22 0.0090 0.0078

Neptune 104400-05-03 02:37 G 39852499.59 39852499.61 39852499.68 0.0090 0.0088

Jupiter 104401-10-23 05:30 G 39853037.53 39853037.73 39853037.94 0.0503 0.0075

Jupiter 104407-08-22 20:37 G 39855167.22 39855167.36 39855167.49 0.0520 0.0380

Jupiter 104408-04-15 20:23 G 39855404.26 39855404.35 39855404.44 0.0526 0.0468

Saturn 104412-04-13 03:21 G 39856862.44 39856862.64 39856862.85 0.0286 0.0083

Saturn 104412-11-29 01:11 G 39857092.43 39857092.55 39857092.67 0.0284 0.0234

Jupiter 104413-06-28 01:40 G 39857303.37 39857303.57 39857303.77 0.0505 0.0146

Uranus 104414-02-24 05:59 G 39857544.73 39857544.75 39857544.79 0.0143 0.0142

Uranus 104414-10-08 18:57 G 39857771.19 39857771.29 39857771.42 0.0143 0.0123

Uranus 104415-05-23 08:23 G 39857997.70 39857997.85 39857998.00 0.0143 0.0104

Uranus 104416-01-04 21:21 G 39858224.22 39858224.39 39858224.58 0.0143 0.0084

Uranus 104416-08-18 10:18 G 39858450.75 39858450.93 39858451.14 0.0143 0.0066

Uranus 104417-04-01 23:45 G 39858677.29 39858677.49 39858677.71 0.0143 0.0045

Uranus 104417-11-14 12:57 G 39858903.82 39858904.04 39858904.26 0.0143 0.0025

Mars 104417-12-05 05:30 G 39858924.56 39858924.73 39858924.91 0.1586 0.0033

Uranus 104418-06-29 01:54 G 39859130.36 39859130.58 39859130.81 0.0143 0.0006

Uranus 104419-02-10 14:52 G 39859356.90 39859357.12 39859357.35 0.0143 0.0014

Uranus 104419-09-25 03:49 G 39859583.45 39859583.66 39859583.88 0.0143 0.0034

Jupiter 104419-12-20 14:23 G 39859669.92 39859670.10 39859670.28 0.0524 0.0223

Uranus 104420-05-08 16:47 G 39859809.99 39859810.20 39859810.40 0.0143 0.0053

Uranus 104420-12-21 05:16 G 39860036.54 39860036.72 39860036.92 0.0143 0.0073

Uranus 104421-08-04 17:45 G 39860263.08 39860263.24 39860263.42 0.0143 0.0092

Uranus 104422-03-19 06:13 G 39860489.64 39860489.76 39860489.92 0.0143 0.0111

Uranus 104422-10-31 18:42 G 39860716.20 39860716.28 39860716.39 0.0143 0.0129

Jupiter 104425-03-02 21:06 G 39861569.25 39861569.38 39861569.53 0.0507 0.0370

Jupiter 104425-10-25 22:18 G 39861806.32 39861806.43 39861806.54 0.0501 0.0419

Saturn 104427-12-19 21:06 G 39862591.26 39862591.38 39862591.52 0.0274 0.0215

Saturn 104428-08-05 00:42 G 39862820.33 39862820.53 39862820.73 0.0277 0.0056

Jupiter 104431-08-25 10:33 G 39863935.74 39863935.94 39863936.14 0.0522 0.0018

Jupiter 104437-06-30 17:45 G 39866072.06 39866072.24 39866072.44 0.0502 0.0200

Moon 104439-05-18 23:45 G 39866759.33 39866759.49 39866759.66 0.2632 0.0208

Earth 104439-05-19 05:59 G 39866759.59 39866759.75 39866759.91 0.2631 0.0684 *

Saturn 104441-10-24 13:40 G 39867648.86 39867649.07 39867649.29 0.0286 0.0028

Jupiter 104443-04-30 07:11 G 39868201.63 39868201.80 39868201.98 0.0521 0.0254

Jupiter 104449-03-05 14:52 G 39870337.91 39870338.12 39870338.32 0.0503 0.0021

Mars 104452-09-06 19:25 G 39871619.20 39871619.31 39871619.43 0.1955 0.1432

Jupiter 104455-01-03 05:01 G 39872467.64 39872467.71 39872467.79 0.0519 0.0483

Jupiter 104455-08-28 04:47 G 39872704.56 39872704.70 39872704.85 0.0526 0.0364

Uranus 104455-09-04 10:18 G 39872711.89 39872711.93 39872711.98 0.0135 0.0131

Uranus 104456-04-17 14:37 G 39872938.02 39872938.11 39872938.23 0.0135 0.0117

Uranus 104456-11-29 19:11 G 39873164.18 39873164.30 39873164.46 0.0135 0.0102

Saturn 104457-07-01 00:13 G 39873377.36 39873377.51 39873377.67 0.0274 0.0179

Uranus 104457-07-14 00:13 G 39873390.34 39873390.51 39873390.67 0.0135 0.0086

Saturn 104458-02-15 03:35 G 39873606.46 39873606.65 39873606.85 0.0277 0.0093

Uranus 104458-02-25 04:33 G 39873616.52 39873616.69 39873616.88 0.0135 0.0071

Uranus 104458-10-09 09:06 G 39873842.70 39873842.88 39873843.09 0.0135 0.0056

Uranus 104459-05-23 13:54 G 39874068.88 39874069.08 39874069.28 0.0135 0.0040

Uranus 104460-01-04 18:28 G 39874295.06 39874295.27 39874295.48 0.0135 0.0024

Uranus 104460-08-17 23:01 G 39874521.25 39874521.46 39874521.67 0.0135 0.0009

Jupiter 104460-11-08 09:49 G 39874603.73 39874603.91 39874604.09 0.0505 0.0243

Uranus 104461-04-01 03:35 G 39874747.44 39874747.65 39874747.87 0.0135 0.0007

Uranus 104461-11-13 08:09 G 39874973.63 39874973.84 39874974.05 0.0135 0.0023

Uranus 104462-06-27 12:42 G 39875199.83 39875200.03 39875200.24 0.0135 0.0039

Uranus 104463-02-08 17:30 G 39875426.04 39875426.23 39875426.43 0.0135 0.0054

Uranus 104463-09-22 22:18 G 39875652.25 39875652.43 39875652.62 0.0135 0.0070

Uranus 104464-05-06 03:06 G 39875878.47 39875878.63 39875878.80 0.0135 0.0086

Uranus 104464-12-18 07:54 G 39876104.70 39876104.83 39876104.98 0.0135 0.0101

Uranus 104465-08-01 12:42 G 39876330.94 39876331.03 39876331.15 0.0135 0.0117

Uranus 104466-03-15 17:59 G 39876557.21 39876557.25 39876557.31 0.0136 0.0132

Jupiter 104467-05-03 00:57 G 39876970.35 39876970.54 39876970.74 0.0524 0.0124

Saturn 104471-05-06 19:25 G 39878435.10 39878435.31 39878435.53 0.0286 0.0016

Jupiter 104472-07-14 05:16 G 39878869.64 39878869.72 39878869.80 0.0507 0.0466

Neptune 104472-07-31 21:21 G 39878887.36 39878887.39 39878887.45 0.0088 0.0086

Jupiter 104473-03-08 06:28 G 39879106.62 39879106.77 39879106.93 0.0501 0.0326

Neptune 104473-03-14 10:47 G 39879112.86 39879112.95 39879113.09 0.0088 0.0076

Neptune 104473-10-26 00:13 G 39879338.39 39879338.51 39879338.69 0.0088 0.0066

Neptune 104474-06-08 14:09 G 39879563.92 39879564.09 39879564.27 0.0088 0.0055

Neptune 104475-01-20 03:35 G 39879789.47 39879789.65 39879789.85 0.0088 0.0045

Neptune 104475-09-02 17:01 G 39880015.02 39880015.21 39880015.43 0.0088 0.0035

Neptune 104476-04-15 06:42 G 39880240.57 39880240.78 39880241.00 0.0088 0.0024

Neptune 104476-11-26 20:23 G 39880466.13 39880466.35 39880466.57 0.0088 0.0014

Neptune 104477-07-10 09:49 G 39880691.68 39880691.91 39880692.13 0.0088 0.0004

Neptune 104478-02-20 23:16 G 39880917.25 39880917.47 39880917.70 0.0088 0.0007

Neptune 104478-10-04 12:42 G 39881142.81 39881143.03 39881143.26 0.0088 0.0017

Jupiter 104479-01-05 20:09 G 39881236.15 39881236.34 39881236.54 0.0522 0.0118

Neptune 104479-05-18 01:54 G 39881368.38 39881368.58 39881368.81 0.0088 0.0028

Neptune 104479-12-29 15:21 G 39881593.95 39881594.14 39881594.36 0.0088 0.0038

Neptune 104480-08-11 04:47 G 39881819.53 39881819.70 39881819.90 0.0088 0.0048

Neptune 104481-03-24 18:28 G 39882045.11 39882045.27 39882045.45 0.0088 0.0058

Neptune 104481-11-05 08:09 G 39882270.70 39882270.84 39882270.98 0.0088 0.0068

Neptune 104482-06-18 21:06 G 39882496.30 39882496.38 39882496.50 0.0088 0.0079

Mars 104483-10-02 17:59 G 39882967.07 39882967.25 39882967.42 0.1585 0.0151

Jupiter 104484-11-11 03:06 G 39883372.43 39883372.63 39883372.83 0.0503 0.0107

Saturn 104487-01-11 06:13 G 39884163.58 39884163.76 39884163.94 0.0275 0.0137

Saturn 104487-08-28 09:49 G 39884392.74 39884392.91 39884393.10 0.0277 0.0137

Jupiter 104490-09-10 17:01 G 39885502.06 39885502.21 39885502.35 0.0520 0.0352

Jupiter 104491-05-05 16:33 G 39885739.13 39885739.19 39885739.26 0.0526 0.0498

Jupiter 104496-07-16 23:01 G 39887638.26 39887638.46 39887638.66 0.0504 0.0117

Uranus 104498-06-08 00:28 G 39888329.44 39888329.52 39888329.62 0.0143 0.0129

Uranus 104499-01-20 13:40 G 39888555.94 39888556.07 39888556.22 0.0143 0.0110

Uranus 104499-09-04 02:37 G 39888782.46 39888782.61 39888782.80 0.0143 0.0092

Saturn 104500-04-01 05:30 G 39888991.64 39888991.73 39888991.83 0.0288 0.0255

Uranus 104500-04-18 16:04 G 39889008.99 39889009.17 39889009.37 0.0143 0.0072

Saturn 104500-11-17 04:33 G 39889221.49 39889221.69 39889221.90 0.0285 0.0070

Uranus 104500-12-01 05:16 G 39889235.52 39889235.72 39889235.93 0.0143 0.0052

Uranus 104501-07-15 18:28 G 39889462.05 39889462.27 39889462.49 0.0143 0.0032

Uranus 104502-02-27 07:40 G 39889688.60 39889688.82 39889689.04 0.0143 0.0013

Uranus 104502-10-11 20:37 G 39889915.14 39889915.36 39889915.58 0.0143 0.0007

Jupiter 104503-01-09 12:28 G 39890004.85 39890005.02 39890005.20 0.0525 0.0257

Uranus 104503-05-26 09:21 G 39890141.68 39890141.89 39890142.12 0.0143 0.0027

Uranus 104504-01-07 22:18 G 39890368.22 39890368.43 39890368.64 0.0143 0.0047

Uranus 104504-08-21 11:01 G 39890594.77 39890594.96 39890595.16 0.0143 0.0066

Uranus 104505-04-04 23:45 G 39890821.32 39890821.49 39890821.68 0.0143 0.0085

Uranus 104505-11-17 12:28 G 39891047.88 39891048.02 39891048.18 0.0143 0.0104

Uranus 104506-07-02 00:42 G 39891274.44 39891274.53 39891274.66 0.0143 0.0123

Uranus 104507-02-13 13:25 G 39891501.04 39891501.06 39891501.10 0.0143 0.0141

Jupiter 104508-03-22 19:40 G 39891904.17 39891904.32 39891904.48 0.0506 0.0337

Jupiter 104508-11-14 19:25 G 39892141.23 39892141.31 39892141.41 0.0500 0.0449

Pluto 104512-04-13 18:42 G 39893387.11 39893387.28 39893387.48 0.0064 0.0033

Pluto 104512-11-24 22:33 G 39893612.22 39893612.44 39893612.65 0.0064 0.0007

Pluto 104513-07-08 01:54 G 39893837.44 39893837.58 39893837.73 0.0064 0.0048

Jupiter 104514-09-14 10:04 G 39894270.72 39894270.92 39894271.12 0.0523 0.0020

Saturn 104516-07-24 08:23 G 39894949.66 39894949.85 39894950.04 0.0274 0.0103

Saturn 104517-03-10 11:45 G 39895178.84 39895178.99 39895179.16 0.0277 0.0171

Mars 104518-07-05 21:49 G 39895661.25 39895661.41 39895661.58 0.1957 0.0662

Jupiter 104520-07-20 15:49 G 39896406.98 39896407.16 39896407.34 0.0502 0.0232

Jupiter 104526-05-20 07:11 G 39898536.62 39898536.80 39898536.98 0.0521 0.0215

Saturn 104529-10-12 09:35 G 39899777.76 39899777.90 39899778.05 0.0288 0.0216

Saturn 104530-05-30 08:37 G 39900007.67 39900007.86 39900008.07 0.0285 0.0108

Jupiter 104532-03-25 12:28 G 39900672.81 39900673.02 39900673.23 0.0503 0.0014

Jupiter 104538-01-23 03:35 G 39902802.56 39902802.65 39902802.75 0.0519 0.0449

Jupiter 104538-09-17 02:37 G 39903039.49 39903039.61 39903039.75 0.0525 0.0398

Uranus 104539-12-18 01:54 G 39903496.50 39903496.58 39903496.68 0.0135 0.0121

Uranus 104540-07-31 06:28 G 39903722.65 39903722.77 39903722.91 0.0135 0.0106

Uranus 104541-03-14 11:01 G 39903948.82 39903948.96 39903949.13 0.0135 0.0091

Uranus 104541-10-26 15:35 G 39904174.98 39904175.15 39904175.34 0.0135 0.0076

Uranus 104542-06-09 19:54 G 39904401.16 39904401.33 39904401.54 0.0135 0.0061

Uranus 104543-01-22 00:42 G 39904627.33 39904627.53 39904627.73 0.0135 0.0045

Uranus 104543-09-05 05:16 G 39904853.52 39904853.72 39904853.93 0.0135 0.0029

Jupiter 104543-11-29 08:23 G 39904938.66 39904938.85 39904939.04 0.0505 0.0210

Uranus 104544-04-18 09:49 G 39905079.70 39905079.91 39905080.12 0.0135 0.0014

Uranus 104544-11-30 14:23 G 39905305.88 39905306.10 39905306.31 0.0135 0.0003

Uranus 104545-07-14 18:42 G 39905532.07 39905532.28 39905532.49 0.0135 0.0018

Saturn 104546-02-03 12:57 G 39905735.84 39905736.04 39905736.24 0.0275 0.0063

Uranus 104546-02-25 23:16 G 39905758.27 39905758.47 39905758.68 0.0135 0.0033

Saturn 104546-09-20 16:47 G 39905965.07 39905965.20 39905965.34 0.0278 0.0212

Uranus 104546-10-10 03:49 G 39905984.47 39905984.66 39905984.87 0.0135 0.0049

Uranus 104547-05-24 08:52 G 39906210.68 39906210.87 39906211.05 0.0135 0.0064

Uranus 104548-01-05 13:11 G 39906436.89 39906437.05 39906437.23 0.0135 0.0080

Uranus 104548-08-18 18:13 G 39906663.11 39906663.26 39906663.41 0.0135 0.0095

Uranus 104549-04-01 23:16 G 39906889.35 39906889.47 39906889.59 0.0135 0.0111

Mars 104549-07-31 06:57 G 39907009.62 39907009.79 39907009.96 0.1584 0.0307

Uranus 104549-11-14 03:49 G 39907115.61 39907115.66 39907115.76 0.0135 0.0127

Jupiter 104550-05-22 22:47 G 39907305.26 39907305.45 39907305.64 0.0524 0.0158

Earth 104552-11-19 14:09 G 39908216.94 39908217.09 39908217.24 0.2701 0.0750

Moon 104552-11-19 18:42 G 39908217.13 39908217.28 39908217.42 0.2697 0.1004 *

Neptune 104554-09-19 04:33 G 39908885.64 39908885.69 39908885.80 0.0090 0.0083

Neptune 104555-05-02 17:30 G 39909111.12 39909111.23 39909111.37 0.0090 0.0072

Jupiter 104555-08-04 04:33 G 39909204.58 39909204.69 39909204.79 0.0507 0.0434

Neptune 104555-12-14 05:59 G 39909336.61 39909336.75 39909336.92 0.0090 0.0062

Jupiter 104556-03-28 05:16 G 39909441.58 39909441.72 39909441.86 0.0501 0.0357

Neptune 104556-07-26 18:57 G 39909562.11 39909562.29 39909562.46 0.0090 0.0051

Neptune 104557-03-09 07:11 G 39909787.62 39909787.80 39909788.00 0.0090 0.0041

Neptune 104557-10-20 19:40 G 39910013.13 39910013.32 39910013.53 0.0090 0.0031

Neptune 104558-06-03 08:23 G 39910238.64 39910238.85 39910239.06 0.0090 0.0020

Neptune 104559-01-14 20:52 G 39910464.16 39910464.37 39910464.59 0.0090 0.0009

Saturn 104559-04-24 17:59 G 39910564.08 39910564.25 39910564.43 0.0288 0.0164

Neptune 104559-08-28 09:35 G 39910689.69 39910689.90 39910690.12 0.0090 0.0001

Saturn 104559-12-10 16:47 G 39910794.02 39910794.20 39910794.38 0.0285 0.0159

Neptune 104560-04-09 22:04 G 39910915.21 39910915.42 39910915.64 0.0090 0.0012

Earth 104560-11-17 07:11 G 39911136.78 39911136.80 39911136.83 0.2701 0.2650

Neptune 104560-11-21 10:18 G 39911140.73 39911140.93 39911141.15 0.0090 0.0023

Neptune 104561-07-04 23:01 G 39911366.26 39911366.46 39911366.66 0.0090 0.0033

Jupiter 104562-01-25 18:42 G 39911571.08 39911571.28 39911571.48 0.0523 0.0085

Neptune 104562-02-15 11:16 G 39911591.80 39911591.97 39911592.17 0.0090 0.0044

Neptune 104562-09-28 23:59 G 39911817.34 39911817.50 39911817.69 0.0090 0.0054

Neptune 104563-05-12 12:42 G 39912042.89 39912043.03 39912043.19 0.0090 0.0064

Neptune 104563-12-24 00:57 G 39912268.44 39912268.54 39912268.68 0.0090 0.0075

Neptune 104564-08-05 13:40 G 39912494.02 39912494.07 39912494.15 0.0090 0.0085

Jupiter 104567-12-02 02:52 G 39913707.42 39913707.62 39913707.82 0.0502 0.0143

Jupiter 104573-09-30 16:47 G 39915837.04 39915837.20 39915837.36 0.0521 0.0317

Saturn 104575-08-16 14:37 G 39916521.91 39916522.11 39916522.32 0.0275 0.0030

Saturn 104576-04-01 18:28 G 39916751.18 39916751.27 39916751.37 0.0277 0.0245

Jupiter 104579-08-06 22:47 G 39917973.24 39917973.45 39917973.65 0.0504 0.0079

Mars 104581-07-29 22:47 G 39918696.39 39918696.45 39918696.51 0.1588 0.1488

Uranus 104582-02-06 04:47 G 39918887.65 39918887.70 39918887.78 0.0143 0.0136

Uranus 104582-09-20 17:59 G 39919114.14 39919114.25 39919114.39 0.0143 0.0118

Uranus 104583-05-05 07:11 G 39919340.65 39919340.80 39919340.97 0.0143 0.0099

Uranus 104583-12-17 20:23 G 39919567.17 39919567.35 39919567.54 0.0143 0.0079

Mars 104584-05-01 23:45 G 39919703.32 39919703.49 39919703.66 0.1959 0.0138

Uranus 104584-07-31 09:35 G 39919793.70 39919793.90 39919794.11 0.0143 0.0060

Uranus 104585-03-14 22:47 G 39920020.25 39920020.45 39920020.67 0.0143 0.0040

Uranus 104585-10-27 11:59 G 39920246.79 39920247.00 39920247.23 0.0143 0.0021

Jupiter 104586-01-28 14:09 G 39920339.93 39920340.09 39920340.25 0.0525 0.0301

Uranus 104586-06-11 01:11 G 39920473.33 39920473.55 39920473.77 0.0143 0.0001

Uranus 104587-01-23 14:09 G 39920699.87 39920700.09 39920700.31 0.0143 0.0019

Uranus 104587-09-07 02:52 G 39920926.42 39920926.62 39920926.84 0.0143 0.0039

Uranus 104588-04-20 16:04 G 39921152.97 39921153.17 39921153.38 0.0143 0.0058

Saturn 104588-11-03 19:54 G 39921350.15 39921350.33 39921350.53 0.0288 0.0131

Uranus 104588-12-03 04:33 G 39921379.52 39921379.69 39921379.89 0.0143 0.0078

Saturn 104589-06-21 18:57 G 39921580.13 39921580.29 39921580.45 0.0285 0.0192

Uranus 104589-07-17 17:16 G 39921606.08 39921606.22 39921606.40 0.0143 0.0097

Uranus 104590-03-01 05:59 G 39921832.64 39921832.75 39921832.90 0.0143 0.0116

Uranus 104590-10-13 18:42 G 39922059.22 39922059.28 39922059.37 0.0143 0.0134

Jupiter 104591-04-11 18:42 G 39922239.12 39922239.28 39922239.45 0.0506 0.0302

Jupiter 104591-12-04 18:42 G 39922476.24 39922476.28 39922476.33 0.0500 0.0485

Jupiter 104597-10-03 09:49 G 39924605.72 39924605.91 39924606.11 0.0523 0.0060

Pluto 104601-10-18 14:23 G 39926080.89 39926081.10 39926081.33 0.0080 0.0020

Pluto 104602-06-01 01:11 G 39926306.42 39926306.55 39926306.71 0.0079 0.0062

Jupiter 104603-08-10 15:49 G 39926741.99 39926742.16 39926742.34 0.0502 0.0270

Saturn 104604-07-12 15:35 G 39927079.10 39927079.15 39927079.22 0.0273 0.0260

Saturn 104605-02-26 17:59 G 39927308.04 39927308.25 39927308.46 0.0275 0.0007

Jupiter 104609-06-09 06:28 G 39928871.59 39928871.77 39928871.96 0.0521 0.0179

Jupiter 104615-04-15 12:57 G 39931007.83 39931008.04 39931008.25 0.0503 0.0050

Mars 104615-05-29 19:25 G 39931052.15 39931052.31 39931052.48 0.1583 0.0475

Saturn 104618-05-18 03:21 G 39932136.43 39932136.64 39932136.85 0.0287 0.0081

Saturn 104619-01-03 01:40 G 39932366.47 39932366.57 39932366.70 0.0285 0.0241

Jupiter 104621-02-12 02:23 G 39933137.48 39933137.60 39933137.72 0.0520 0.0418

Jupiter 104621-10-07 02:37 G 39933374.50 39933374.61 39933374.72 0.0526 0.0436

Uranus 104623-08-18 13:40 G 39934055.00 39934055.07 39934055.15 0.0135 0.0125

Uranus 104624-03-31 17:59 G 39934281.15 39934281.25 39934281.39 0.0135 0.0111

Uranus 104624-11-12 22:33 G 39934507.30 39934507.44 39934507.60 0.0135 0.0096

Uranus 104625-06-27 02:52 G 39934733.47 39934733.62 39934733.81 0.0135 0.0081

Uranus 104626-02-08 07:40 G 39934959.64 39934959.82 39934960.01 0.0135 0.0065

Uranus 104626-09-22 12:13 G 39935185.82 39935186.01 39935186.21 0.0135 0.0050

Jupiter 104626-12-19 10:18 G 39935273.74 39935273.93 39935274.13 0.0504 0.0168

Uranus 104627-05-06 16:33 G 39935411.99 39935412.19 39935412.40 0.0135 0.0035

Uranus 104627-12-18 21:06 G 39935638.17 39935638.38 39935638.59 0.0135 0.0019

Uranus 104628-08-01 01:40 G 39935864.35 39935864.57 39935864.78 0.0135 0.0004

Uranus 104629-03-15 05:59 G 39936090.54 39936090.75 39936090.97 0.0135 0.0013

Uranus 104629-10-27 10:33 G 39936316.74 39936316.94 39936317.16 0.0135 0.0028

Uranus 104630-06-10 15:06 G 39936542.94 39936543.13 39936543.34 0.0135 0.0044

Uranus 104631-01-22 19:40 G 39936769.14 39936769.32 39936769.52 0.0135 0.0059

Uranus 104631-09-06 00:28 G 39936995.35 39936995.52 39936995.71 0.0135 0.0075

Uranus 104632-04-19 05:16 G 39937221.57 39937221.72 39937221.89 0.0135 0.0090

Uranus 104632-12-01 10:18 G 39937447.80 39937447.93 39937448.06 0.0135 0.0106

Jupiter 104633-06-11 23:59 G 39937640.32 39937640.50 39937640.69 0.0525 0.0199

Uranus 104633-07-15 15:06 G 39937674.04 39937674.13 39937674.23 0.0135 0.0121

Saturn 104634-01-22 17:01 G 39937865.10 39937865.21 39937865.32 0.0272 0.0228

Saturn 104634-09-08 19:11 G 39938094.10 39938094.30 39938094.51 0.0275 0.0039

Neptune 104637-06-17 20:09 G 39939107.25 39939107.34 39939107.45 0.0088 0.0078

Neptune 104638-01-29 09:35 G 39939332.77 39939332.90 39939333.06 0.0088 0.0068

Jupiter 104638-08-24 05:59 G 39939539.62 39939539.75 39939539.88 0.0506 0.0392

Neptune 104638-09-11 23:01 G 39939558.31 39939558.46 39939558.65 0.0088 0.0058

Jupiter 104639-04-18 06:13 G 39939776.64 39939776.76 39939776.89 0.0500 0.0398

Neptune 104639-04-25 12:28 G 39939783.85 39939784.02 39939784.23 0.0088 0.0048

Neptune 104639-12-07 02:23 G 39940009.39 39940009.60 39940009.80 0.0088 0.0037

Neptune 104640-07-19 15:49 G 39940234.95 39940235.16 39940235.37 0.0088 0.0027

Neptune 104641-03-02 05:16 G 39940460.51 39940460.72 39940460.95 0.0088 0.0017

Neptune 104641-10-13 18:57 G 39940686.06 39940686.29 39940686.51 0.0088 0.0006

Neptune 104642-05-27 08:23 G 39940911.62 39940911.85 39940912.07 0.0088 0.0004

Neptune 104643-01-07 21:35 G 39941137.19 39941137.40 39941137.63 0.0088 0.0015

Neptune 104643-08-21 11:01 G 39941362.76 39941362.96 39941363.19 0.0088 0.0025

Neptune 104644-04-03 00:42 G 39941588.33 39941588.53 39941588.75 0.0088 0.0035

Neptune 104644-11-14 14:09 G 39941813.91 39941814.09 39941814.29 0.0088 0.0045

Jupiter 104645-02-14 21:35 G 39941906.20 39941906.40 39941906.60 0.0523 0.0037

Neptune 104645-06-28 03:49 G 39942039.48 39942039.66 39942039.83 0.0088 0.0055

Neptune 104646-02-08 16:47 G 39942265.07 39942265.20 39942265.37 0.0088 0.0066

Neptune 104646-09-22 06:13 G 39942490.67 39942490.76 39942490.90 0.0088 0.0076

Neptune 104647-05-05 19:54 G 39942716.30 39942716.33 39942716.39 0.0088 0.0086

Mars 104647-05-28 11:45 G 39942738.89 39942738.99 39942739.08 0.1587 0.1323

Saturn 104647-11-28 04:04 G 39942922.46 39942922.67 39942922.88 0.0287 0.0051

Saturn 104648-07-15 02:23 G 39943152.54 39943152.60 39943152.67 0.0285 0.0271

Mars 104650-02-28 02:23 G 39943745.44 39943745.60 39943745.75 0.1961 0.0900

Jupiter 104650-12-22 03:06 G 39944042.44 39944042.63 39944042.83 0.0502 0.0183

Jupiter 104656-10-20 18:28 G 39946172.10 39946172.27 39946172.44 0.0521 0.0274

Jupiter 104662-08-26 23:45 G 39948308.29 39948308.49 39948308.70 0.0504 0.0039

Saturn 104663-08-04 19:25 G 39948651.17 39948651.31 39948651.46 0.0273 0.0195

Saturn 104664-03-20 21:49 G 39948880.21 39948880.41 39948880.61 0.0276 0.0074

Uranus 104665-10-07 09:35 G 39949445.90 39949445.90 39949445.93 0.0143 0.0143

Uranus 104666-05-21 22:47 G 39949672.35 39949672.45 39949672.57 0.0143 0.0124

Uranus 104667-01-03 11:45 G 39949898.85 39949898.99 39949899.15 0.0143 0.0106

Uranus 104667-08-18 00:57 G 39950125.37 39950125.54 39950125.73 0.0143 0.0087

Uranus 104668-03-31 14:09 G 39950351.91 39950352.09 39950352.30 0.0143 0.0068

Jupiter 104668-06-25 15:35 G 39950438.11 39950438.15 39950438.20 0.0519 0.0505

Uranus 104668-11-13 03:35 G 39950578.44 39950578.65 39950578.86 0.0143 0.0048

Jupiter 104669-02-17 14:37 G 39950674.96 39950675.11 39950675.26 0.0525 0.0342

Uranus 104669-06-27 16:33 G 39950804.97 39950805.19 39950805.41 0.0143 0.0028

Uranus 104670-02-09 05:30 G 39951031.51 39951031.73 39951031.96 0.0143 0.0009

Uranus 104670-09-23 18:42 G 39951258.06 39951258.28 39951258.50 0.0143 0.0011

Uranus 104671-05-08 07:40 G 39951484.61 39951484.82 39951485.04 0.0143 0.0031

Uranus 104671-12-20 20:37 G 39951711.15 39951711.36 39951711.57 0.0143 0.0051

Uranus 104672-08-03 09:21 G 39951937.70 39951937.89 39951938.09 0.0143 0.0070

Uranus 104673-03-17 22:18 G 39952164.26 39952164.43 39952164.61 0.0143 0.0089

Uranus 104673-10-30 11:01 G 39952390.82 39952390.96 39952391.11 0.0143 0.0108

Jupiter 104674-05-01 20:37 G 39952574.19 39952574.36 39952574.55 0.0505 0.0262

Uranus 104674-06-13 23:30 G 39952617.40 39952617.48 39952617.60 0.0143 0.0127

Saturn 104677-06-09 10:04 G 39953708.70 39953708.92 39953709.14 0.0287 0.0005

Jupiter 104680-10-23 09:49 G 39954940.71 39954940.91 39954941.11 0.0524 0.0097

Mars 104681-03-26 08:23 G 39955094.69 39955094.85 39955095.01 0.1582 0.0634

Earth 104682-05-21 05:01 G 39955515.55 39955515.71 39955515.87 0.2631 0.0618

Moon 104682-05-21 11:01 G 39955515.81 39955515.96 39955516.11 0.2634 0.0850 *

Jupiter 104686-01-04 18:13 G 39956840.20 39956840.26 39956840.32 0.0507 0.0479

Jupiter 104686-08-29 18:57 G 39957077.13 39957077.29 39957077.45 0.0501 0.0314

Jupiter 104692-06-28 07:54 G 39959206.63 39959206.83 39959207.02 0.0522 0.0138

Saturn 104693-02-13 20:37 G 39959437.20 39959437.36 39959437.53 0.0272 0.0163

Saturn 104693-09-30 22:47 G 39959666.26 39959666.45 39959666.65 0.0275 0.0106

Jupiter 104698-05-04 15:21 G 39961342.94 39961343.14 39961343.34 0.0502 0.0096

Jupiter 104704-03-04 06:13 G 39963472.62 39963472.76 39963472.90 0.0520 0.0368

Jupiter 104704-10-27 06:28 G 39963709.71 39963709.77 39963709.85 0.0527 0.0489

Saturn 104706-12-21 09:35 G 39964494.68 39964494.90 39964495.11 0.0287 0.0023

Uranus 104707-04-19 00:28 G 39964613.48 39964613.52 39964613.59 0.0135 0.0130

Uranus 104707-12-01 04:47 G 39964839.61 39964839.70 39964839.83 0.0135 0.0116

Uranus 104708-07-14 09:21 G 39965065.77 39965065.89 39965066.05 0.0135 0.0101

Uranus 104709-02-25 13:54 G 39965291.93 39965292.08 39965292.26 0.0135 0.0086

Uranus 104709-10-09 18:28 G 39965518.10 39965518.27 39965518.46 0.0135 0.0071

Jupiter 104710-01-08 11:45 G 39965608.79 39965608.99 39965609.19 0.0504 0.0126

Uranus 104710-05-23 23:16 G 39965744.27 39965744.47 39965744.66 0.0135 0.0055

Uranus 104711-01-05 03:35 G 39965970.45 39965970.65 39965970.85 0.0135 0.0040

Uranus 104711-08-19 07:54 G 39966196.63 39966196.83 39966197.05 0.0135 0.0025

Uranus 104712-04-01 12:28 G 39966422.81 39966423.02 39966423.23 0.0135 0.0009

Uranus 104712-11-13 17:01 G 39966649.00 39966649.21 39966649.42 0.0135 0.0007

Mars 104713-03-26 00:13 G 39966781.39 39966781.51 39966781.63 0.1586 0.1153

Uranus 104713-06-27 21:21 G 39966875.18 39966875.39 39966875.60 0.0135 0.0023

Uranus 104714-02-09 01:54 G 39967101.38 39967101.58 39967101.79 0.0135 0.0038

Uranus 104714-09-23 06:28 G 39967327.59 39967327.77 39967327.98 0.0135 0.0054

Uranus 104715-05-07 11:16 G 39967553.79 39967553.97 39967554.16 0.0135 0.0069

Uranus 104715-12-19 16:04 G 39967780.01 39967780.17 39967780.34 0.0135 0.0084

Mars 104715-12-27 03:35 G 39967787.58 39967787.65 39967787.74 0.1962 0.1729

Jupiter 104716-07-02 02:37 G 39967975.43 39967975.61 39967975.79 0.0524 0.0246

Uranus 104716-08-01 20:37 G 39968006.23 39968006.36 39968006.52 0.0135 0.0100

Uranus 104717-03-16 01:25 G 39968232.47 39968232.56 39968232.69 0.0135 0.0115

Uranus 104717-10-28 06:28 G 39968458.74 39968458.77 39968458.85 0.0135 0.0131

Neptune 104718-12-23 14:52 G 39968880.08 39968880.12 39968880.20 0.0090 0.0086

Neptune 104719-08-06 03:49 G 39969105.55 39969105.66 39969105.79 0.0090 0.0075

Neptune 104720-03-18 16:18 G 39969331.05 39969331.18 39969331.34 0.0090 0.0065

Neptune 104720-10-30 05:01 G 39969556.55 39969556.71 39969556.89 0.0090 0.0054

Neptune 104721-06-12 17:30 G 39969782.05 39969782.23 39969782.43 0.0090 0.0044

Jupiter 104721-09-13 07:40 G 39969874.68 39969874.82 39969874.97 0.0506 0.0351

Neptune 104722-01-24 06:13 G 39970007.56 39970007.76 39970007.96 0.0090 0.0033

Jupiter 104722-05-08 08:09 G 39970111.75 39970111.84 39970111.94 0.0501 0.0441

Saturn 104722-08-27 22:33 G 39970223.26 39970223.44 39970223.62 0.0273 0.0131

Neptune 104722-09-06 18:42 G 39970233.08 39970233.28 39970233.50 0.0090 0.0023

Saturn 104723-04-14 00:42 G 39970452.36 39970452.53 39970452.72 0.0276 0.0139

Neptune 104723-04-20 07:25 G 39970458.60 39970458.81 39970459.03 0.0090 0.0012

Neptune 104723-12-01 19:54 G 39970684.12 39970684.33 39970684.55 0.0090 0.0002

Neptune 104724-07-14 08:23 G 39970909.64 39970909.85 39970910.07 0.0090 0.0009

Neptune 104725-02-24 20:52 G 39971135.17 39971135.37 39971135.59 0.0090 0.0019

Neptune 104725-10-08 09:35 G 39971360.70 39971360.90 39971361.10 0.0090 0.0030

Neptune 104726-05-21 21:49 G 39971586.23 39971586.41 39971586.62 0.0090 0.0041

Neptune 104727-01-02 10:18 G 39971811.77 39971811.93 39971812.12 0.0090 0.0051

Neptune 104727-08-15 22:47 G 39972037.31 39972037.45 39972037.63 0.0090 0.0062

Jupiter 104728-03-06 23:01 G 39972241.26 39972241.46 39972241.66 0.0523 0.0013

Neptune 104728-03-28 11:30 G 39972262.87 39972262.98 39972263.12 0.0090 0.0072

Neptune 104728-11-09 00:13 G 39972488.43 39972488.51 39972488.60 0.0090 0.0082

Jupiter 104734-01-11 06:13 G 39974377.57 39974377.76 39974377.94 0.0502 0.0226

Saturn 104735-11-15 14:09 G 39975051.02 39975051.09 39975051.18 0.0290 0.0265

Saturn 104736-07-02 14:52 G 39975280.91 39975281.12 39975281.33 0.0287 0.0067

Jupiter 104739-11-10 17:59 G 39976507.08 39976507.25 39976507.43 0.0521 0.0238

Jupiter 104745-09-16 04:18 G 39978643.47 39978643.68 39978643.89 0.0503 0.0011

Mars 104747-01-22 21:06 G 39979137.23 39979137.38 39979137.53 0.1581 0.0800

Uranus 104750-01-20 03:49 G 39980230.59 39980230.66 39980230.77 0.0143 0.0132

Uranus 104750-09-03 17:16 G 39980457.09 39980457.22 39980457.36 0.0143 0.0113

Uranus 104751-04-18 06:28 G 39980683.61 39980683.77 39980683.94 0.0143 0.0094

Jupiter 104751-07-16 16:33 G 39980773.11 39980773.19 39980773.28 0.0520 0.0466

Uranus 104751-11-30 19:25 G 39980910.13 39980910.31 39980910.51 0.0143 0.0075

Saturn 104752-03-08 23:59 G 39981009.31 39981009.50 39981009.69 0.0273 0.0099

Jupiter 104752-03-09 16:47 G 39981010.07 39981010.20 39981010.33 0.0526 0.0388

Uranus 104752-07-14 08:37 G 39981136.66 39981136.86 39981137.07 0.0143 0.0055

Saturn 104752-10-24 01:54 G 39981238.43 39981238.58 39981238.75 0.0275 0.0172

Uranus 104753-02-25 21:49 G 39981363.20 39981363.41 39981363.63 0.0143 0.0036

Uranus 104753-10-10 11:01 G 39981589.74 39981589.96 39981590.18 0.0143 0.0016

Uranus 104754-05-24 23:59 G 39981816.28 39981816.50 39981816.73 0.0143 0.0005

Uranus 104755-01-06 12:57 G 39982042.83 39982043.04 39982043.27 0.0143 0.0024

Uranus 104755-08-21 01:54 G 39982269.38 39982269.58 39982269.80 0.0143 0.0043

Uranus 104756-04-03 15:06 G 39982495.93 39982496.13 39982496.33 0.0143 0.0062

Uranus 104756-11-16 04:04 G 39982722.49 39982722.67 39982722.85 0.0143 0.0081

Jupiter 104757-05-22 00:13 G 39982909.32 39982909.51 39982909.70 0.0505 0.0213

Uranus 104757-06-30 16:47 G 39982949.05 39982949.20 39982949.36 0.0143 0.0100

Uranus 104758-02-12 05:30 G 39983175.61 39983175.73 39983175.86 0.0143 0.0119

Uranus 104758-09-26 18:13 G 39983402.21 39983402.26 39983402.32 0.0143 0.0137

Pluto 104760-10-29 20:52 G 39984166.18 39984166.37 39984166.56 0.0064 0.0031

Pluto 104761-06-11 23:59 G 39984391.29 39984391.50 39984391.72 0.0064 0.0009

Pluto 104762-01-23 03:06 G 39984616.51 39984616.63 39984616.79 0.0064 0.0049

Jupiter 104763-11-13 14:23 G 39985275.91 39985276.10 39985276.29 0.0524 0.0151

Saturn 104765-05-27 13:25 G 39985836.95 39985837.06 39985837.19 0.0290 0.0240

Saturn 104766-01-12 13:54 G 39986066.88 39986067.08 39986067.29 0.0287 0.0093

Jupiter 104769-01-24 20:09 G 39987175.24 39987175.34 39987175.45 0.0507 0.0436

Jupiter 104769-09-18 20:37 G 39987412.22 39987412.36 39987412.51 0.0501 0.0359

Jupiter 104775-07-19 11:16 G 39989541.77 39989541.97 39989542.17 0.0522 0.0089

Mars 104779-01-21 12:57 G 39990823.90 39990824.04 39990824.18 0.1585 0.0982

Jupiter 104781-05-24 17:30 G 39991678.03 39991678.23 39991678.43 0.0503 0.0139

Saturn 104781-09-19 01:25 G 39991795.36 39991795.56 39991795.76 0.0273 0.0068

Saturn 104782-05-06 03:35 G 39992024.52 39992024.65 39992024.80 0.0276 0.0204

Jupiter 104787-03-24 08:09 G 39993807.69 39993807.84 39993808.00 0.0520 0.0325

Uranus 104790-12-17 11:45 G 39995171.98 39995171.99 39995172.01 0.0135 0.0134

Uranus 104791-07-31 16:04 G 39995398.09 39995398.17 39995398.28 0.0135 0.0120

Uranus 104792-03-13 20:52 G 39995624.24 39995624.37 39995624.51 0.0135 0.0105

Uranus 104792-10-26 01:25 G 39995850.41 39995850.56 39995850.72 0.0135 0.0090

Jupiter 104793-01-27 15:21 G 39995943.94 39995944.14 39995944.35 0.0504 0.0080

Uranus 104793-06-09 05:45 G 39996076.57 39996076.74 39996076.92 0.0135 0.0075

Uranus 104794-01-21 10:18 G 39996302.74 39996302.93 39996303.12 0.0135 0.0060

Uranus 104794-09-04 14:37 G 39996528.92 39996529.11 39996529.32 0.0135 0.0045

Saturn 104794-12-07 18:13 G 39996623.11 39996623.26 39996623.42 0.0289 0.0196

Uranus 104795-04-18 19:25 G 39996755.10 39996755.31 39996755.52 0.0135 0.0029

Saturn 104795-07-25 18:42 G 39996853.09 39996853.28 39996853.47 0.0287 0.0135

Moon 104795-11-22 11:59 G 39996972.86 39996973.00 39996973.15 0.2702 0.0666

Earth 104795-11-22 17:16 G 39996973.08 39996973.22 39996973.37 0.2701 0.0846 *

Uranus 104795-11-30 23:45 G 39996981.28 39996981.49 39996981.70 0.0135 0.0014

Uranus 104796-07-14 04:18 G 39997207.46 39997207.68 39997207.89 0.0135 0.0003

Uranus 104797-02-25 08:37 G 39997433.65 39997433.86 39997434.08 0.0135 0.0017

Uranus 104797-10-09 13:25 G 39997659.85 39997660.06 39997660.27 0.0135 0.0033

Uranus 104798-05-23 17:59 G 39997886.05 39997886.25 39997886.45 0.0135 0.0048

Uranus 104799-01-04 22:33 G 39998112.26 39998112.44 39998112.63 0.0135 0.0064

Jupiter 104799-07-22 02:37 G 39998310.44 39998310.61 39998310.78 0.0525 0.0286

Uranus 104799-08-19 03:21 G 39998338.47 39998338.64 39998338.82 0.0135 0.0079

Uranus 104800-04-01 08:09 G 39998564.69 39998564.84 39998565.00 0.0135 0.0095

Uranus 104800-11-13 13:11 G 39998790.93 39998791.05 39998791.18 0.0135 0.0110

Uranus 104801-06-27 18:13 G 39999017.18 39999017.26 39999017.34 0.0135 0.0125

Neptune 104801-09-20 05:01 G 39999101.65 39999101.71 39999101.82 0.0088 0.0081

Neptune 104802-05-03 18:28 G 39999327.16 39999327.27 39999327.43 0.0088 0.0071

Neptune 104802-12-15 08:23 G 39999552.69 39999552.85 39999553.01 0.0088 0.0060

Neptune 104803-07-28 21:35 G 39999778.23 39999778.40 39999778.60 0.0088 0.0050

Earth 104803-11-20 10:18 G 39999892.88 39999892.93 39999892.98 0.2700 0.2555

Neptune 104804-03-10 11:16 G 40000003.78 40000003.97 40000004.18 0.0088 0.0040

Jupiter 104804-10-02 12:57 G 40000209.88 40000210.04 40000210.21 0.0506 0.0299

Neptune 104804-10-22 00:42 G 40000229.33 40000229.53 40000229.75 0.0088 0.0030

Jupiter 104805-05-27 12:28 G 40000446.99 40000447.02 40000447.07 0.0500 0.0490

Neptune 104805-06-04 14:09 G 40000454.88 40000455.09 40000455.32 0.0088 0.0019

Neptune 104806-01-16 03:49 G 40000680.44 40000680.66 40000680.88 0.0088 0.0009

Neptune 104806-08-29 17:16 G 40000906.00 40000906.22 40000906.45 0.0088 0.0002

Neptune 104807-04-12 06:42 G 40001131.57 40001131.78 40001132.01 0.0088 0.0012

Neptune 104807-11-23 20:23 G 40001357.13 40001357.35 40001357.57 0.0088 0.0022

Neptune 104808-07-06 09:49 G 40001582.70 40001582.91 40001583.12 0.0088 0.0032

Neptune 104809-02-16 23:01 G 40001808.28 40001808.46 40001808.67 0.0088 0.0043

Neptune 104809-09-30 12:28 G 40002033.86 40002034.02 40002034.22 0.0088 0.0053

Neptune 104810-05-14 01:54 G 40002259.44 40002259.58 40002259.75 0.0088 0.0063

Neptune 104810-12-25 15:21 G 40002485.03 40002485.14 40002485.28 0.0088 0.0073

Jupiter 104811-03-27 00:28 G 40002576.32 40002576.52 40002576.71 0.0524 0.0050

Saturn 104811-04-01 03:21 G 40002581.44 40002581.64 40002581.85 0.0273 0.0035

Neptune 104811-08-08 05:01 G 40002710.65 40002710.71 40002710.79 0.0088 0.0083

Saturn 104811-11-16 05:45 G 40002810.64 40002810.74 40002810.85 0.0275 0.0236

Mars 104812-11-19 10:04 G 40003179.78 40003179.92 40003180.06 0.1580 0.0960

Mars 104813-10-23 08:37 G 40003517.81 40003517.86 40003517.91 0.1958 0.1855

Jupiter 104817-01-30 09:35 G 40004712.72 40004712.90 40004713.07 0.0501 0.0275

Jupiter 104822-11-29 22:33 G 40006842.26 40006842.44 40006842.63 0.0522 0.0185

Saturn 104824-06-18 17:45 G 40007409.07 40007409.24 40007409.42 0.0290 0.0170

Saturn 104825-02-03 17:59 G 40007639.08 40007639.25 40007639.43 0.0287 0.0162

Jupiter 104828-10-05 06:13 G 40008978.55 40008978.76 40008978.97 0.0503 0.0055

Uranus 104833-09-19 11:16 G 40010788.91 40010788.97 40010789.04 0.0143 0.0137

Uranus 104834-05-03 23:59 G 40011015.40 40011015.50 40011015.64 0.0143 0.0119

Jupiter 104834-08-04 20:23 G 40011108.23 40011108.35 40011108.47 0.0520 0.0418

Uranus 104834-12-16 13:11 G 40011241.90 40011242.05 40011242.22 0.0143 0.0100

Jupiter 104835-03-29 20:09 G 40011345.23 40011345.34 40011345.45 0.0526 0.0437

Uranus 104835-07-31 02:23 G 40011468.42 40011468.60 40011468.79 0.0143 0.0080

Uranus 104836-03-13 15:35 G 40011694.96 40011695.15 40011695.36 0.0143 0.0061

Uranus 104836-10-26 04:47 G 40011921.49 40011921.70 40011921.92 0.0143 0.0042

Uranus 104837-06-09 17:45 G 40012148.03 40012148.24 40012148.47 0.0143 0.0023

Uranus 104838-01-22 06:57 G 40012374.57 40012374.79 40012375.02 0.0143 0.0003

Uranus 104838-09-05 19:54 G 40012601.12 40012601.33 40012601.56 0.0143 0.0018

Uranus 104839-04-20 09:21 G 40012827.67 40012827.89 40012828.10 0.0143 0.0037

Uranus 104839-12-02 22:04 G 40013054.22 40013054.42 40013054.63 0.0143 0.0056

Saturn 104840-02-25 03:21 G 40013138.62 40013138.64 40013138.69 0.0271 0.0267

Jupiter 104840-06-10 02:09 G 40013244.40 40013244.59 40013244.79 0.0505 0.0170

Uranus 104840-07-16 11:01 G 40013280.78 40013280.96 40013281.16 0.0143 0.0075

Saturn 104840-10-11 04:47 G 40013367.49 40013367.70 40013367.90 0.0274 0.0007

Uranus 104841-02-27 23:59 G 40013507.34 40013507.50 40013507.67 0.0143 0.0094

Saturn 104841-05-28 07:11 G 40013596.76 40013596.80 40013596.85 0.0276 0.0270

Uranus 104841-10-12 12:42 G 40013733.91 40013734.03 40013734.18 0.0143 0.0113

Uranus 104842-05-27 01:25 G 40013960.49 40013960.56 40013960.66 0.0143 0.0131

Mars 104844-11-18 01:54 G 40014866.43 40014866.58 40014866.73 0.1583 0.0819

Jupiter 104846-12-02 16:04 G 40015610.99 40015611.17 40015611.36 0.0524 0.0196

Pluto 104850-05-04 13:54 G 40016859.87 40016860.08 40016860.31 0.0080 0.0023

Pluto 104850-12-16 00:57 G 40017085.39 40017085.54 40017085.69 0.0079 0.0059

Jupiter 104852-02-13 23:30 G 40017510.36 40017510.48 40017510.62 0.0507 0.0391

Jupiter 104852-10-07 23:59 G 40017747.39 40017747.50 40017747.63 0.0501 0.0404

Saturn 104853-12-29 22:47 G 40018195.26 40018195.45 40018195.65 0.0289 0.0126

Saturn 104854-08-16 22:47 G 40018425.31 40018425.45 40018425.61 0.0286 0.0205

Jupiter 104858-08-07 10:18 G 40019876.73 40019876.93 40019877.13 0.0523 0.0052

Jupiter 104864-06-12 22:18 G 40022013.24 40022013.43 40022013.62 0.0502 0.0191

Saturn 104869-09-06 06:42 G 40023924.68 40023924.78 40023924.89 0.0271 0.0231

Jupiter 104870-04-12 08:09 G 40024142.68 40024142.84 40024143.01 0.0521 0.0286

Saturn 104870-04-23 07:40 G 40024153.62 40024153.82 40024154.03 0.0273 0.0033

Uranus 104875-03-31 03:21 G 40025956.57 40025956.64 40025956.74 0.0135 0.0124

Uranus 104875-11-12 08:09 G 40026182.72 40026182.84 40026182.96 0.0135 0.0109

Jupiter 104876-02-16 18:28 G 40026279.07 40026279.27 40026279.48 0.0504 0.0033

Uranus 104876-06-25 12:13 G 40026408.87 40026409.01 40026409.18 0.0135 0.0095

Uranus 104877-02-06 16:47 G 40026635.04 40026635.20 40026635.38 0.0135 0.0080

Uranus 104877-09-20 21:21 G 40026861.22 40026861.39 40026861.59 0.0135 0.0065

Uranus 104878-05-05 02:09 G 40027087.39 40027087.59 40027087.79 0.0135 0.0049

Mars 104878-09-16 22:47 G 40027222.33 40027222.45 40027222.57 0.1579 0.1127

Uranus 104878-12-17 06:28 G 40027313.56 40027313.77 40027313.98 0.0135 0.0034

Uranus 104879-07-31 10:47 G 40027539.74 40027539.95 40027540.17 0.0135 0.0019

Mars 104879-08-20 10:04 G 40027559.78 40027559.92 40027560.07 0.1960 0.1045

Uranus 104880-03-13 15:21 G 40027765.93 40027766.14 40027766.35 0.0135 0.0003

Uranus 104880-10-25 19:54 G 40027992.12 40027992.33 40027992.54 0.0135 0.0013

Uranus 104881-06-09 00:28 G 40028218.31 40028218.52 40028218.73 0.0135 0.0028

Jupiter 104881-12-16 07:11 G 40028408.77 40028408.80 40028408.83 0.0519 0.0512

Uranus 104882-01-21 04:47 G 40028444.51 40028444.70 40028444.91 0.0135 0.0044

Jupiter 104882-08-10 06:57 G 40028645.64 40028645.79 40028645.94 0.0526 0.0340

Uranus 104882-09-04 09:35 G 40028670.72 40028670.90 40028671.10 0.0135 0.0059

Neptune 104883-03-27 00:42 G 40028874.52 40028874.53 40028874.59 0.0090 0.0089

Uranus 104883-04-18 14:23 G 40028896.93 40028897.10 40028897.28 0.0135 0.0074

Saturn 104883-07-11 22:47 G 40028981.25 40028981.45 40028981.66 0.0289 0.0098

Neptune 104883-11-07 13:40 G 40029099.97 40029100.07 40029100.18 0.0090 0.0078

Uranus 104883-11-30 19:11 G 40029123.15 40029123.30 40029123.46 0.0135 0.0089

Saturn 104884-02-26 22:47 G 40029211.33 40029211.45 40029211.58 0.0286 0.0232

Neptune 104884-06-20 01:54 G 40029325.46 40029325.58 40029325.74 0.0090 0.0068

Uranus 104884-07-13 23:59 G 40029349.37 40029349.50 40029349.64 0.0135 0.0105

Neptune 104885-01-31 15:06 G 40029550.96 40029551.13 40029551.29 0.0090 0.0057

Uranus 104885-02-25 04:47 G 40029575.61 40029575.70 40029575.81 0.0135 0.0120

Neptune 104885-09-14 03:35 G 40029776.47 40029776.65 40029776.84 0.0090 0.0047

Uranus 104885-10-09 09:49 G 40029801.90 40029801.91 40029801.95 0.0135 0.0134

Neptune 104886-04-27 16:04 G 40030001.99 40030002.17 40030002.38 0.0090 0.0037

Neptune 104886-12-09 04:47 G 40030227.50 40030227.70 40030227.91 0.0090 0.0026

Neptune 104887-07-22 17:16 G 40030453.01 40030453.22 40030453.44 0.0090 0.0015

Jupiter 104887-10-22 14:23 G 40030544.93 40030545.10 40030545.29 0.0505 0.0256

Neptune 104888-03-04 05:59 G 40030678.53 40030678.75 40030678.96 0.0090 0.0005

Neptune 104888-10-15 18:28 G 40030904.06 40030904.27 40030904.49 0.0090 0.0006

Neptune 104889-05-29 06:57 G 40031129.58 40031129.79 40031130.00 0.0090 0.0016

Neptune 104890-01-09 19:11 G 40031355.11 40031355.30 40031355.52 0.0090 0.0027

Neptune 104890-08-23 07:54 G 40031580.64 40031580.83 40031581.03 0.0090 0.0037

Neptune 104891-04-05 20:09 G 40031806.18 40031806.34 40031806.54 0.0090 0.0048

Neptune 104891-11-17 08:52 G 40032031.72 40032031.87 40032032.04 0.0090 0.0058

Neptune 104892-06-29 21:06 G 40032257.26 40032257.38 40032257.54 0.0090 0.0069

Neptune 104893-02-10 09:35 G 40032482.82 40032482.90 40032483.02 0.0090 0.0079

Neptune 104893-09-23 22:33 G 40032708.42 40032708.44 40032708.47 0.0090 0.0089

Jupiter 104894-04-15 03:35 G 40032911.45 40032911.65 40032911.85 0.0524 0.0098

Saturn 104899-03-19 08:09 G 40034710.70 40034710.84 40034710.98 0.0272 0.0201

Jupiter 104899-06-27 09:35 G 40034810.85 40034810.90 40034810.97 0.0507 0.0482

Saturn 104899-11-03 09:21 G 40034939.69 40034939.89 40034940.09 0.0274 0.0065

Jupiter 104900-02-19 10:47 G 40035047.80 40035047.95 40035048.12 0.0501 0.0318

Jupiter 104905-12-19 23:59 G 40037177.31 40037177.50 40037177.69 0.0522 0.0141

Mars 104910-09-16 14:09 G 40038908.93 40038909.09 40038909.25 0.1582 0.0643

Jupiter 104911-10-26 08:52 G 40039313.67 40039313.87 40039314.08 0.0503 0.0101

Saturn 104913-01-22 04:33 G 40039767.48 40039767.69 40039767.91 0.0289 0.0053

Saturn 104913-09-09 04:18 G 40039997.63 40039997.68 40039997.74 0.0286 0.0275

Uranus 104917-05-20 17:30 G 40041347.23 40041347.23 40041347.28 0.0143 0.0143

Jupiter 104917-08-24 18:13 G 40041443.13 40041443.26 40041443.40 0.0520 0.0385

Uranus 104918-01-02 06:57 G 40041573.68 40041573.79 40041573.90 0.0143 0.0124

Jupiter 104918-04-18 18:42 G 40041680.19 40041680.28 40041680.36 0.0526 0.0474

Uranus 104918-08-16 19:54 G 40041800.19 40041800.33 40041800.49 0.0143 0.0105

Uranus 104919-03-31 09:06 G 40042026.72 40042026.88 40042027.07 0.0143 0.0087

Uranus 104919-11-12 22:18 G 40042253.24 40042253.43 40042253.64 0.0143 0.0067

Uranus 104920-06-26 11:45 G 40042479.78 40042479.99 40042480.20 0.0143 0.0048

Uranus 104921-02-08 00:42 G 40042706.32 40042706.53 40042706.76 0.0143 0.0029

Uranus 104921-09-22 14:09 G 40042932.86 40042933.09 40042933.31 0.0143 0.0009

Uranus 104922-05-07 03:21 G 40043159.42 40043159.64 40043159.86 0.0143 0.0011

Uranus 104922-12-19 16:18 G 40043385.97 40043386.18 40043386.40 0.0143 0.0031

Jupiter 104923-07-01 06:28 G 40043579.57 40043579.77 40043579.98 0.0504 0.0119

Uranus 104923-08-03 05:16 G 40043612.52 40043612.72 40043612.94 0.0143 0.0050

Uranus 104924-03-16 18:28 G 40043839.09 40043839.27 40043839.48 0.0143 0.0069

Uranus 104924-10-29 07:25 G 40044065.65 40044065.81 40044066.00 0.0143 0.0089

Moon 104925-05-22 23:59 G 40044271.33 40044271.50 40044271.67 0.2627 0.0466

Earth 104925-05-23 04:33 G 40044271.53 40044271.69 40044271.85 0.2632 0.0587 *

Uranus 104925-06-12 20:23 G 40044292.22 40044292.35 40044292.51 0.0143 0.0107

Uranus 104926-01-25 09:21 G 40044518.79 40044518.89 40044519.00 0.0143 0.0125

Saturn 104928-09-29 11:59 G 40045496.84 40045497.00 40045497.17 0.0271 0.0163

Saturn 104929-05-16 13:25 G 40045725.87 40045726.06 40045726.25 0.0274 0.0103

Jupiter 104929-12-22 15:35 G 40045945.97 40045946.15 40045946.33 0.0525 0.0235

Jupiter 104935-03-06 02:09 G 40047845.44 40047845.59 40047845.74 0.0506 0.0344

Jupiter 104935-10-29 02:09 G 40048082.50 40048082.59 40048082.68 0.0500 0.0449

Jupiter 104941-08-27 13:40 G 40050211.87 40050212.07 40050212.27 0.0523 0.0001

Saturn 104942-08-04 06:13 G 40050553.54 40050553.76 40050553.98 0.0289 0.0021

Mars 104944-07-15 11:30 G 40051264.89 40051264.98 40051265.08 0.1579 0.1293

Mars 104945-06-17 12:28 G 40051601.85 40051602.02 40051602.19 0.1962 0.0256

Jupiter 104947-07-03 22:47 G 40052348.27 40052348.45 40052348.63 0.0502 0.0232

Jupiter 104953-05-02 10:47 G 40054477.78 40054477.95 40054478.13 0.0521 0.0239

Saturn 104958-04-11 14:09 G 40056282.91 40056283.09 40056283.28 0.0272 0.0132

Saturn 104958-11-26 15:49 G 40056511.98 40056512.16 40056512.34 0.0275 0.0137

Uranus 104958-11-29 15:06 G 40056515.08 40056515.13 40056515.21 0.0135 0.0128

Jupiter 104959-03-08 18:57 G 40056614.08 40056614.29 40056614.50 0.0504 0.0010

Uranus 104959-07-13 19:54 G 40056741.22 40056741.33 40056741.45 0.0135 0.0113

Uranus 104960-02-24 23:59 G 40056967.38 40056967.50 40056967.67 0.0135 0.0099

Uranus 104960-10-08 04:47 G 40057193.54 40057193.70 40057193.88 0.0135 0.0084

Uranus 104961-05-22 09:06 G 40057419.71 40057419.88 40057420.08 0.0135 0.0069

Uranus 104962-01-03 13:40 G 40057645.88 40057646.07 40057646.27 0.0135 0.0053

Uranus 104962-08-17 18:13 G 40057872.06 40057872.26 40057872.47 0.0135 0.0038

Uranus 104963-03-31 22:47 G 40058098.24 40058098.45 40058098.66 0.0135 0.0023

Uranus 104963-11-13 03:06 G 40058324.42 40058324.63 40058324.85 0.0135 0.0008

Uranus 104964-06-26 07:40 G 40058550.61 40058550.82 40058551.03 0.0135 0.0008

Jupiter 104965-01-05 07:40 G 40058743.74 40058743.82 40058743.90 0.0519 0.0472

Uranus 104965-02-07 12:13 G 40058776.80 40058777.01 40058777.22 0.0135 0.0024

Jupiter 104965-08-30 07:11 G 40058980.67 40058980.80 40058980.94 0.0525 0.0381

Uranus 104965-09-21 17:01 G 40059003.00 40059003.21 40059003.41 0.0135 0.0039

Neptune 104965-12-23 14:09 G 40059096.03 40059096.09 40059096.16 0.0088 0.0083

Uranus 104966-05-05 21:21 G 40059229.21 40059229.39 40059229.60 0.0135 0.0055

Neptune 104966-08-06 03:21 G 40059321.53 40059321.64 40059321.77 0.0088 0.0073

Uranus 104966-12-18 01:54 G 40059455.41 40059455.58 40059455.78 0.0135 0.0070

Neptune 104967-03-19 16:47 G 40059547.06 40059547.20 40059547.37 0.0088 0.0063

Uranus 104967-08-01 06:42 G 40059681.63 40059681.78 40059681.95 0.0135 0.0085

Neptune 104967-10-31 06:13 G 40059772.59 40059772.76 40059772.95 0.0088 0.0053

Uranus 104968-03-14 11:30 G 40059907.85 40059907.98 40059908.13 0.0135 0.0100

Neptune 104968-06-12 19:40 G 40059998.13 40059998.32 40059998.53 0.0088 0.0043

Uranus 104968-10-26 16:18 G 40060134.09 40060134.18 40060134.31 0.0135 0.0115

Neptune 104969-01-24 09:06 G 40060223.68 40060223.88 40060224.10 0.0088 0.0032

Uranus 104969-06-09 21:35 G 40060360.35 40060360.40 40060360.46 0.0135 0.0130

Neptune 104969-09-06 22:33 G 40060449.23 40060449.44 40060449.67 0.0088 0.0022

Neptune 104970-04-20 12:13 G 40060674.79 40060675.01 40060675.24 0.0088 0.0012

Jupiter 104970-11-11 16:04 G 40060879.98 40060880.17 40060880.36 0.0505 0.0213

Neptune 104970-12-02 01:40 G 40060900.35 40060900.57 40060900.80 0.0088 0.0002

Neptune 104971-07-15 15:06 G 40061125.91 40061126.13 40061126.36 0.0088 0.0009

Saturn 104972-02-14 12:42 G 40061339.81 40061340.03 40061340.24 0.0288 0.0026

Neptune 104972-02-26 04:47 G 40061351.48 40061351.70 40061351.92 0.0088 0.0019

Neptune 104972-10-08 17:59 G 40061577.05 40061577.25 40061577.48 0.0088 0.0030

Neptune 104973-05-22 07:25 G 40061802.63 40061802.81 40061803.03 0.0088 0.0040

Neptune 104974-01-02 21:06 G 40062028.20 40062028.38 40062028.57 0.0088 0.0050

Neptune 104974-08-16 10:33 G 40062253.79 40062253.94 40062254.12 0.0088 0.0060

Neptune 104975-03-30 00:13 G 40062479.39 40062479.51 40062479.65 0.0088 0.0070

Neptune 104975-11-10 13:54 G 40062704.99 40062705.08 40062705.17 0.0088 0.0080

Mars 104976-07-14 03:21 G 40062951.47 40062951.64 40062951.80 0.1581 0.0485

Jupiter 104977-05-05 00:28 G 40063246.33 40063246.52 40063246.72 0.0524 0.0132

Jupiter 104982-07-17 12:42 G 40065145.94 40065146.03 40065146.15 0.0507 0.0436

Jupiter 104983-03-11 13:54 G 40065382.94 40065383.08 40065383.22 0.0501 0.0364

Saturn 104987-10-22 19:25 G 40067069.12 40067069.31 40067069.51 0.0272 0.0090

Saturn 104988-06-07 21:06 G 40067298.22 40067298.38 40067298.54 0.0274 0.0178

Jupiter 104989-01-07 21:49 G 40067512.21 40067512.41 40067512.60 0.0522 0.0107

Jupiter 104994-11-14 09:49 G 40069648.71 40069648.91 40069649.11 0.0502 0.0143

Jupiter 105000-09-13 20:09 G 40071778.19 40071778.34 40071778.49 0.0520 0.0339

106TH MILLENNIUM CE

This is a list of transits of Venus in the 106th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Saturn 105001-01-09 14:23 G 40071896.05 40071896.10 40071896.18 0.0291 0.0276

Jupiter 105001-05-08 20:37 G 40072015.35 40072015.36 40072015.39 0.0527 0.0523

Saturn 105001-08-27 15:49 G 40072125.95 40072126.16 40072126.37 0.0288 0.0062

Uranus 105001-09-02 13:40 G 40072131.99 40072132.07 40072132.18 0.0143 0.0130

Uranus 105002-04-17 03:06 G 40072358.50 40072358.63 40072358.78 0.0143 0.0111

Uranus 105002-11-29 16:18 G 40072585.01 40072585.18 40072585.35 0.0143 0.0092

Uranus 105003-07-14 05:30 G 40072811.54 40072811.73 40072811.92 0.0143 0.0073

Uranus 105004-02-25 18:42 G 40073038.08 40073038.28 40073038.49 0.0143 0.0054

Uranus 105004-10-09 07:54 G 40073264.62 40073264.83 40073265.06 0.0143 0.0034

Uranus 105005-05-23 21:21 G 40073491.17 40073491.39 40073491.61 0.0143 0.0014

Uranus 105006-01-05 10:33 G 40073717.72 40073717.94 40073718.16 0.0143 0.0005

Jupiter 105006-07-21 05:45 G 40073914.54 40073914.74 40073914.95 0.0504 0.0081

Uranus 105006-08-19 23:45 G 40073944.27 40073944.49 40073944.71 0.0143 0.0025

Uranus 105007-04-03 12:57 G 40074170.84 40074171.04 40074171.26 0.0143 0.0044

Uranus 105007-11-16 02:09 G 40074397.40 40074397.59 40074397.80 0.0143 0.0063

Uranus 105008-06-29 15:06 G 40074623.96 40074624.13 40074624.32 0.0143 0.0083

Uranus 105009-02-11 04:04 G 40074850.52 40074850.67 40074850.84 0.0143 0.0101

Pluto 105009-05-16 23:30 G 40074945.29 40074945.48 40074945.69 0.0064 0.0025

Uranus 105009-09-25 16:47 G 40075077.10 40075077.20 40075077.34 0.0143 0.0120

Pluto 105009-12-28 02:52 G 40075170.42 40075170.62 40075170.84 0.0064 0.0015

Uranus 105010-05-10 05:45 G 40075303.70 40075303.74 40075303.82 0.0143 0.0138

Mars 105010-05-14 00:42 G 40075307.46 40075307.53 40075307.59 0.1578 0.1450

Pluto 105010-08-10 06:13 G 40075395.67 40075395.76 40075395.88 0.0064 0.0056

Mars 105011-04-15 13:54 G 40075643.91 40075644.08 40075644.24 0.1964 0.0569

Jupiter 105013-01-11 17:01 G 40076281.04 40076281.21 40076281.38 0.0525 0.0280

Saturn 105017-05-04 22:04 G 40077855.22 40077855.42 40077855.62 0.0273 0.0057

Saturn 105017-12-19 23:59 G 40078084.37 40078084.50 40078084.63 0.0275 0.0214

Jupiter 105018-03-26 00:57 G 40078180.38 40078180.54 40078180.71 0.0506 0.0309

Jupiter 105018-11-18 01:11 G 40078417.50 40078417.55 40078417.60 0.0500 0.0485

Jupiter 105024-09-16 12:57 G 40080546.84 40080547.04 40080547.24 0.0523 0.0037

Saturn 105030-07-22 22:33 G 40082682.31 40082682.44 40082682.58 0.0290 0.0224

Jupiter 105030-07-23 23:01 G 40082683.29 40082683.46 40082683.63 0.0502 0.0271

Saturn 105031-03-09 23:30 G 40082912.28 40082912.48 40082912.68 0.0287 0.0112

Jupiter 105036-05-22 06:42 G 40084812.60 40084812.78 40084812.96 0.0521 0.0210

Earth 105038-11-24 20:23 G 40085729.20 40085729.35 40085729.49 0.2700 0.0941

Moon 105038-11-25 00:57 G 40085729.41 40085729.54 40085729.68 0.2703 0.1171 *

Jupiter 105042-03-28 20:23 G 40086949.15 40086949.35 40086949.56 0.0504 0.0053

Mars 105042-05-12 15:49 G 40086993.99 40086994.16 40086994.34 0.1580 0.0315

Uranus 105042-07-31 03:35 G 40087073.62 40087073.65 40087073.71 0.0135 0.0131

Uranus 105043-03-14 07:54 G 40087299.74 40087299.83 40087299.95 0.0135 0.0117

Uranus 105043-10-26 12:42 G 40087525.90 40087526.03 40087526.17 0.0135 0.0102

Uranus 105044-06-08 16:47 G 40087752.06 40087752.20 40087752.38 0.0135 0.0088

Uranus 105045-01-20 21:21 G 40087978.22 40087978.39 40087978.58 0.0135 0.0073

Uranus 105045-09-04 01:54 G 40088204.40 40088204.58 40088204.78 0.0135 0.0057

Uranus 105046-04-18 06:28 G 40088430.57 40088430.77 40088430.97 0.0135 0.0042

Saturn 105046-11-15 04:33 G 40088641.49 40088641.69 40088641.90 0.0273 0.0013

Earth 105046-11-22 13:11 G 40088649.00 40088649.05 40088649.11 0.2700 0.2476

Moon 105046-11-22 17:30 G 40088649.11 40088649.23 40088649.35 0.2696 0.1753 *

Uranus 105046-11-30 10:47 G 40088656.74 40088656.95 40088657.16 0.0135 0.0027

Saturn 105047-07-02 06:42 G 40088870.72 40088870.78 40088870.85 0.0275 0.0259

Uranus 105047-07-14 15:06 G 40088882.92 40088883.13 40088883.35 0.0135 0.0012

Jupiter 105048-01-26 04:04 G 40089078.57 40089078.67 40089078.78 0.0519 0.0443

Neptune 105048-02-10 22:33 G 40089094.37 40089094.44 40089094.55 0.0090 0.0082

Uranus 105048-02-25 19:40 G 40089109.11 40089109.32 40089109.53 0.0135 0.0004

Jupiter 105048-09-19 03:49 G 40089315.54 40089315.66 40089315.79 0.0526 0.0414

Neptune 105048-09-23 11:30 G 40089319.86 40089319.98 40089320.12 0.0090 0.0071

Uranus 105048-10-09 00:13 G 40089335.30 40089335.51 40089335.73 0.0135 0.0019

Neptune 105049-05-06 23:59 G 40089545.36 40089545.50 40089545.68 0.0090 0.0061

Uranus 105049-05-23 04:47 G 40089561.50 40089561.70 40089561.91 0.0135 0.0035

Neptune 105049-12-18 12:57 G 40089770.87 40089771.04 40089771.22 0.0090 0.0050

Uranus 105050-01-04 09:21 G 40089787.69 40089787.89 40089788.09 0.0135 0.0050

Neptune 105050-08-01 01:25 G 40089996.38 40089996.56 40089996.77 0.0090 0.0040

Uranus 105050-08-18 13:54 G 40090013.90 40090014.08 40090014.27 0.0135 0.0065

Neptune 105051-03-14 14:23 G 40090221.90 40090222.10 40090222.30 0.0090 0.0029

Uranus 105051-04-01 18:28 G 40090240.11 40090240.27 40090240.45 0.0135 0.0080

Neptune 105051-10-26 02:52 G 40090447.41 40090447.62 40090447.84 0.0090 0.0019

Uranus 105051-11-13 23:16 G 40090466.33 40090466.47 40090466.63 0.0135 0.0095

Neptune 105052-06-07 15:35 G 40090672.93 40090673.15 40090673.36 0.0090 0.0008

Uranus 105052-06-27 03:49 G 40090692.55 40090692.66 40090692.79 0.0135 0.0110

Neptune 105053-01-19 04:04 G 40090898.46 40090898.67 40090898.89 0.0090 0.0002

Uranus 105053-02-08 08:23 G 40090918.79 40090918.85 40090918.95 0.0135 0.0126

Neptune 105053-09-01 16:47 G 40091123.99 40091124.20 40091124.41 0.0090 0.0013

Jupiter 105053-12-01 15:35 G 40091214.96 40091215.15 40091215.35 0.0505 0.0174

Neptune 105054-04-15 05:01 G 40091349.51 40091349.71 40091349.93 0.0090 0.0024

Neptune 105054-11-26 17:30 G 40091575.04 40091575.23 40091575.44 0.0090 0.0034

Neptune 105055-07-10 06:13 G 40091800.57 40091800.76 40091800.95 0.0090 0.0044

Neptune 105056-02-20 18:13 G 40092026.11 40092026.26 40092026.45 0.0090 0.0055

Neptune 105056-10-03 07:11 G 40092251.66 40092251.80 40092251.95 0.0090 0.0065

Neptune 105057-05-16 19:11 G 40092477.21 40092477.30 40092477.44 0.0090 0.0076

Neptune 105057-12-28 07:54 G 40092702.79 40092702.83 40092702.91 0.0090 0.0086

Saturn 105060-02-02 04:04 G 40093468.50 40093468.67 40093468.84 0.0290 0.0182

Jupiter 105060-05-25 01:11 G 40093581.37 40093581.55 40093581.74 0.0524 0.0176

Saturn 105060-09-19 04:33 G 40093698.51 40093698.69 40093698.87 0.0287 0.0152

Jupiter 105065-08-06 11:01 G 40095480.84 40095480.96 40095481.09 0.0507 0.0401

Jupiter 105066-03-31 11:30 G 40095717.86 40095717.98 40095718.11 0.0501 0.0398

Jupiter 105072-01-28 22:04 G 40097847.23 40097847.42 40097847.62 0.0522 0.0067

Saturn 105075-10-11 07:11 G 40099198.71 40099198.80 40099198.90 0.0271 0.0240

Saturn 105076-05-27 08:09 G 40099427.63 40099427.84 40099428.05 0.0273 0.0024

Mars 105077-02-09 16:18 G 40099686.06 40099686.18 40099686.30 0.1965 0.1351

Jupiter 105077-12-04 07:11 G 40099983.61 40099983.80 40099984.00 0.0503 0.0177

Jupiter 105083-10-03 18:28 G 40102113.11 40102113.27 40102113.44 0.0520 0.0305

Uranus 105085-05-02 18:57 G 40102690.23 40102690.29 40102690.37 0.0143 0.0136

Uranus 105085-12-15 07:54 G 40102916.72 40102916.83 40102916.97 0.0143 0.0118

Uranus 105086-07-29 21:06 G 40103143.24 40103143.38 40103143.56 0.0143 0.0099

Uranus 105087-03-13 10:33 G 40103369.77 40103369.94 40103370.14 0.0144 0.0080

Uranus 105087-10-25 23:59 G 40103596.31 40103596.50 40103596.71 0.0144 0.0060

Uranus 105088-06-08 13:25 G 40103822.85 40103823.06 40103823.27 0.0144 0.0041

Uranus 105089-01-21 02:37 G 40104049.40 40104049.61 40104049.84 0.0143 0.0022

Jupiter 105089-08-09 04:18 G 40104249.48 40104249.68 40104249.89 0.0504 0.0046

Saturn 105089-08-14 12:42 G 40104254.84 40104255.03 40104255.23 0.0289 0.0129

Uranus 105089-09-04 16:04 G 40104275.95 40104276.17 40104276.40 0.0143 0.0002

Saturn 105090-04-01 12:57 G 40104484.90 40104485.04 40104485.20 0.0287 0.0204

Uranus 105090-04-19 05:30 G 40104502.51 40104502.73 40104502.95 0.0143 0.0018

Uranus 105090-12-01 18:42 G 40104729.07 40104729.28 40104729.50 0.0143 0.0038

Uranus 105091-07-16 07:54 G 40104955.63 40104955.83 40104956.04 0.0143 0.0057

Uranus 105092-02-27 21:21 G 40105182.20 40105182.39 40105182.58 0.0143 0.0076

Uranus 105092-10-11 10:18 G 40105408.77 40105408.93 40105409.10 0.0143 0.0095

Uranus 105093-05-25 23:16 G 40105635.35 40105635.47 40105635.62 0.0143 0.0113

Uranus 105094-01-07 12:13 G 40105861.93 40105862.01 40105862.10 0.0143 0.0132

Jupiter 105096-01-31 11:30 G 40106615.82 40106615.98 40106616.15 0.0525 0.0307

Pluto 105098-11-19 16:18 G 40107638.96 40107639.18 40107639.41 0.0080 0.0015

Pluto 105099-07-03 02:52 G 40107864.52 40107864.62 40107864.76 0.0079 0.0067

Jupiter 105101-04-15 00:42 G 40108515.36 40108515.53 40108515.71 0.0506 0.0270

Saturn 105105-04-23 14:09 G 40109984.96 40109985.09 40109985.24 0.0271 0.0196

Saturn 105105-12-08 15:35 G 40110213.95 40110214.15 40110214.35 0.0274 0.0071

Jupiter 105107-10-07 08:09 G 40110881.64 40110881.84 40110882.04 0.0523 0.0065

Mars 105108-03-10 04:33 G 40111036.52 40111036.69 40111036.87 0.1580 0.0156

Jupiter 105112-12-18 19:25 G 40112781.28 40112781.31 40112781.34 0.0508 0.0499

Jupiter 105113-08-12 20:37 G 40113018.20 40113018.36 40113018.53 0.0502 0.0305

Saturn 105119-02-25 20:09 G 40115041.14 40115041.34 40115041.55 0.0289 0.0081

Jupiter 105119-06-12 05:45 G 40115147.55 40115147.74 40115147.93 0.0521 0.0173

Saturn 105119-10-13 20:09 G 40115271.24 40115271.34 40115271.45 0.0287 0.0250

Jupiter 105125-04-17 16:47 G 40117284.00 40117284.20 40117284.41 0.0503 0.0084

Uranus 105126-03-31 16:33 G 40117632.19 40117632.19 40117632.19 0.0135 0.0135

Uranus 105126-11-12 20:37 G 40117858.28 40117858.36 40117858.47 0.0135 0.0121

Uranus 105127-06-27 01:11 G 40118084.43 40118084.55 40118084.69 0.0135 0.0106

Uranus 105128-02-08 05:45 G 40118310.59 40118310.74 40118310.90 0.0135 0.0091

Uranus 105128-09-21 10:04 G 40118536.76 40118536.92 40118537.11 0.0135 0.0077

Uranus 105129-05-05 14:23 G 40118762.93 40118763.10 40118763.31 0.0135 0.0062

Uranus 105129-12-17 18:57 G 40118989.10 40118989.29 40118989.50 0.0135 0.0046

Neptune 105130-03-28 22:33 G 40119090.42 40119090.44 40119090.51 0.0088 0.0086

Uranus 105130-07-31 23:30 G 40119215.27 40119215.48 40119215.69 0.0135 0.0031

Neptune 105130-11-09 11:59 G 40119315.91 40119316.00 40119316.13 0.0088 0.0076

Jupiter 105131-02-15 03:21 G 40119413.52 40119413.64 40119413.76 0.0519 0.0408

Uranus 105131-03-15 03:49 G 40119441.45 40119441.66 40119441.88 0.0135 0.0016

Neptune 105131-06-23 01:25 G 40119541.43 40119541.56 40119541.72 0.0088 0.0066

Jupiter 105131-10-10 03:06 G 40119650.53 40119650.63 40119650.73 0.0526 0.0452

Uranus 105131-10-27 08:23 G 40119667.64 40119667.85 40119668.07 0.0135 0.0002

Neptune 105132-02-03 14:52 G 40119766.96 40119767.12 40119767.31 0.0088 0.0056

Uranus 105132-06-09 12:42 G 40119893.83 40119894.03 40119894.25 0.0135 0.0016

Neptune 105132-09-16 04:04 G 40119992.50 40119992.67 40119992.88 0.0088 0.0046

Uranus 105133-01-21 17:16 G 40120120.02 40120120.22 40120120.43 0.0135 0.0030

Neptune 105133-04-29 17:30 G 40120218.04 40120218.23 40120218.46 0.0088 0.0036

Uranus 105133-09-04 21:49 G 40120346.22 40120346.41 40120346.62 0.0135 0.0046

Neptune 105133-12-11 07:11 G 40120443.59 40120443.80 40120444.02 0.0088 0.0025

Uranus 105134-04-19 02:23 G 40120572.42 40120572.60 40120572.80 0.0135 0.0061

Neptune 105134-07-24 20:37 G 40120669.14 40120669.36 40120669.59 0.0088 0.0015

Saturn 105134-11-03 17:59 G 40120771.09 40120771.25 40120771.43 0.0272 0.0159

Uranus 105134-12-01 06:57 G 40120798.62 40120798.79 40120798.97 0.0135 0.0076

Neptune 105135-03-07 10:18 G 40120894.70 40120894.93 40120895.15 0.0088 0.0005

Saturn 105135-06-20 19:25 G 40121000.13 40121000.31 40121000.51 0.0274 0.0110

Uranus 105135-07-15 11:30 G 40121024.83 40121024.98 40121025.14 0.0135 0.0091

Neptune 105135-10-18 23:45 G 40121120.26 40121120.49 40121120.71 0.0088 0.0006

Uranus 105136-02-26 15:49 G 40121251.05 40121251.16 40121251.31 0.0135 0.0106

Neptune 105136-05-31 13:11 G 40121345.83 40121346.05 40121346.27 0.0088 0.0016

Uranus 105136-10-09 21:06 G 40121477.29 40121477.38 40121477.48 0.0135 0.0120

Jupiter 105136-12-21 11:45 G 40121549.79 40121549.99 40121550.19 0.0505 0.0146

Neptune 105137-01-12 02:09 G 40121571.39 40121571.59 40121571.82 0.0088 0.0027

Uranus 105137-05-24 01:40 G 40121703.57 40121703.57 40121703.59 0.0135 0.0135

Neptune 105137-08-25 15:35 G 40121796.96 40121797.15 40121797.37 0.0088 0.0037

Neptune 105138-04-08 05:16 G 40122022.55 40122022.72 40122022.93 0.0088 0.0047

Neptune 105138-11-19 18:57 G 40122248.13 40122248.29 40122248.47 0.0088 0.0057

Neptune 105139-07-03 08:23 G 40122473.72 40122473.85 40122474.00 0.0088 0.0067

Neptune 105140-02-13 22:04 G 40122699.32 40122699.42 40122699.53 0.0088 0.0077

Neptune 105140-09-26 11:30 G 40122924.96 40122924.98 40122925.01 0.0088 0.0087

Jupiter 105143-06-14 22:18 G 40123916.25 40123916.43 40123916.62 0.0524 0.0208

Jupiter 105148-08-26 07:40 G 40125815.69 40125815.82 40125815.97 0.0507 0.0372

Saturn 105148-09-07 05:45 G 40125827.53 40125827.74 40125827.96 0.0288 0.0026

Jupiter 105149-04-20 08:52 G 40126052.76 40126052.87 40126052.97 0.0501 0.0430

Jupiter 105155-02-17 16:04 G 40128181.98 40128182.17 40128182.37 0.0522 0.0044

Jupiter 105160-12-24 05:45 G 40130318.55 40130318.74 40130318.93 0.0503 0.0212

Saturn 105164-05-16 02:09 G 40131557.40 40131557.59 40131557.78 0.0272 0.0111

Saturn 105164-12-31 03:49 G 40131786.50 40131786.66 40131786.83 0.0274 0.0159

Jupiter 105166-10-23 12:57 G 40132447.87 40132448.04 40132448.21 0.0520 0.0280

Earth 105168-05-25 03:35 G 40133027.49 40133027.65 40133027.81 0.2632 0.0531

Moon 105168-05-25 04:47 G 40133027.55 40133027.70 40133027.85 0.2638 0.0608 *

Uranus 105169-01-01 00:28 G 40133248.50 40133248.52 40133248.56 0.0143 0.0142

Uranus 105169-08-15 13:40 G 40133474.97 40133475.07 40133475.19 0.0143 0.0124

Uranus 105170-03-30 03:06 G 40133701.48 40133701.63 40133701.78 0.0143 0.0105

Uranus 105170-11-11 16:04 G 40133928.01 40133928.17 40133928.36 0.0144 0.0086

Uranus 105171-06-26 05:45 G 40134154.54 40134154.74 40134154.93 0.0144 0.0067

Uranus 105172-02-07 18:57 G 40134381.08 40134381.29 40134381.50 0.0144 0.0048

Jupiter 105172-08-29 00:57 G 40134584.33 40134584.54 40134584.75 0.0504 0.0016

Uranus 105172-09-21 08:09 G 40134607.63 40134607.84 40134608.07 0.0144 0.0029

Uranus 105173-05-05 21:49 G 40134834.19 40134834.41 40134834.63 0.0144 0.0009

Uranus 105173-12-18 11:01 G 40135060.74 40135060.96 40135061.19 0.0143 0.0011

Mars 105174-01-05 17:30 G 40135079.05 40135079.23 40135079.41 0.1579 0.0021

Uranus 105174-08-02 00:28 G 40135287.30 40135287.52 40135287.74 0.0143 0.0030

Uranus 105175-03-16 13:54 G 40135513.87 40135514.08 40135514.29 0.0143 0.0050

Uranus 105175-10-29 02:52 G 40135740.44 40135740.62 40135740.83 0.0143 0.0069

Moon 105176-05-22 22:18 G 40135947.35 40135947.43 40135947.51 0.2634 0.2276

Uranus 105176-06-11 15:49 G 40135967.00 40135967.16 40135967.35 0.0143 0.0089

Uranus 105177-01-24 05:16 G 40136193.57 40136193.72 40136193.87 0.0143 0.0106

Uranus 105177-09-07 17:59 G 40136420.16 40136420.25 40136420.37 0.0143 0.0125

Saturn 105178-03-20 14:52 G 40136613.90 40136614.12 40136614.33 0.0288 0.0027

Uranus 105178-04-22 07:11 G 40136646.80 40136646.80 40136646.82 0.0143 0.0143

Jupiter 105178-06-28 10:33 G 40136713.92 40136713.94 40136713.97 0.0518 0.0513

Jupiter 105179-02-20 09:49 G 40136950.76 40136950.91 40136951.06 0.0525 0.0343

Jupiter 105184-05-03 20:23 G 40138850.17 40138850.35 40138850.54 0.0506 0.0243

Jupiter 105190-10-26 06:28 G 40141216.58 40141216.77 40141216.97 0.0523 0.0101

Saturn 105193-11-26 06:13 G 40142343.56 40142343.76 40142343.96 0.0272 0.0073

Saturn 105194-07-13 08:09 G 40142572.70 40142572.84 40142572.99 0.0275 0.0199

Jupiter 105196-01-07 14:37 G 40143116.04 40143116.11 40143116.18 0.0508 0.0474

Jupiter 105196-08-31 16:04 G 40143353.02 40143353.17 40143353.33 0.0502 0.0332

Jupiter 105202-07-01 02:37 G 40145482.42 40145482.61 40145482.80 0.0521 0.0142

Saturn 105207-02-12 23:01 G 40147170.37 40147170.46 40147170.57 0.0290 0.0257

Saturn 105207-10-01 00:13 G 40147400.31 40147400.51 40147400.72 0.0288 0.0081

Jupiter 105208-05-06 12:42 G 40147618.83 40147619.03 40147619.24 0.0503 0.0112

Uranus 105210-07-13 08:52 G 40148416.81 40148416.87 40148416.97 0.0135 0.0125

Uranus 105211-02-24 13:40 G 40148642.96 40148643.07 40148643.20 0.0135 0.0110

Uranus 105211-10-08 18:28 G 40148869.12 40148869.27 40148869.42 0.0135 0.0095

Neptune 105212-05-15 07:40 G 40149088.77 40149088.82 40149088.90 0.0090 0.0085

Uranus 105212-05-21 22:33 G 40149095.28 40149095.44 40149095.62 0.0135 0.0081

Neptune 105212-12-26 20:09 G 40149314.24 40149314.34 40149314.47 0.0090 0.0075

Uranus 105213-01-03 03:06 G 40149321.45 40149321.63 40149321.82 0.0135 0.0066

Neptune 105213-08-09 09:21 G 40149539.74 40149539.89 40149540.03 0.0090 0.0064

Uranus 105213-08-17 07:25 G 40149547.62 40149547.81 40149548.02 0.0135 0.0051

Jupiter 105214-03-05 21:21 G 40149748.26 40149748.39 40149748.53 0.0519 0.0385

Neptune 105214-03-22 21:35 G 40149765.24 40149765.40 40149765.58 0.0090 0.0054

Uranus 105214-03-31 11:59 G 40149773.80 40149774.00 40149774.21 0.0135 0.0035

Jupiter 105214-10-28 20:23 G 40149985.27 40149985.35 40149985.44 0.0525 0.0475

Neptune 105214-11-03 10:04 G 40149990.75 40149990.92 40149991.13 0.0090 0.0044

Uranus 105214-11-12 16:33 G 40149999.98 40150000.19 40150000.40 0.0135 0.0020

Neptune 105215-06-16 23:01 G 40150216.26 40150216.46 40150216.66 0.0090 0.0033

Uranus 105215-06-26 20:52 G 40150226.16 40150226.37 40150226.59 0.0135 0.0005

Neptune 105216-01-28 11:30 G 40150441.78 40150441.98 40150442.20 0.0090 0.0023

Uranus 105216-02-08 01:25 G 40150452.34 40150452.56 40150452.77 0.0135 0.0011

Neptune 105216-09-10 00:28 G 40150667.31 40150667.52 40150667.73 0.0090 0.0012

Uranus 105216-09-21 05:59 G 40150678.54 40150678.75 40150678.96 0.0135 0.0026

Neptune 105217-04-23 13:11 G 40150892.83 40150893.05 40150893.26 0.0090 0.0002

Uranus 105217-05-05 10:18 G 40150904.73 40150904.93 40150905.14 0.0135 0.0041

Neptune 105217-12-05 01:40 G 40151118.35 40151118.57 40151118.78 0.0090 0.0009

Uranus 105217-12-17 14:52 G 40151130.93 40151131.12 40151131.31 0.0135 0.0056

Neptune 105218-07-18 13:54 G 40151343.88 40151344.08 40151344.30 0.0090 0.0020

Uranus 105218-07-31 19:11 G 40151357.12 40151357.30 40151357.49 0.0135 0.0071

Neptune 105219-03-01 02:37 G 40151569.41 40151569.61 40151569.82 0.0090 0.0030

Uranus 105219-03-14 23:45 G 40151583.33 40151583.49 40151583.66 0.0135 0.0086

Neptune 105219-10-12 14:52 G 40151794.95 40151795.12 40151795.33 0.0090 0.0041

Uranus 105219-10-27 04:18 G 40151809.55 40151809.68 40151809.83 0.0135 0.0101

Jupiter 105220-01-10 08:52 G 40151884.67 40151884.87 40151885.07 0.0505 0.0115

Neptune 105220-05-25 03:35 G 40152020.48 40152020.65 40152020.84 0.0090 0.0051

Uranus 105220-06-09 08:37 G 40152035.77 40152035.86 40152035.99 0.0135 0.0116

Neptune 105221-01-05 16:18 G 40152246.03 40152246.18 40152246.34 0.0090 0.0061

Uranus 105221-01-21 13:25 G 40152262.02 40152262.06 40152262.13 0.0135 0.0130

Neptune 105221-08-19 04:33 G 40152471.58 40152471.69 40152471.83 0.0090 0.0072

Neptune 105222-04-01 17:01 G 40152697.14 40152697.21 40152697.31 0.0090 0.0082

Saturn 105223-06-08 14:23 G 40153129.90 40153130.10 40153130.31 0.0273 0.0025

Saturn 105224-01-23 16:33 G 40153359.11 40153359.19 40153359.29 0.0275 0.0249

Jupiter 105226-07-03 16:18 G 40154251.00 40154251.18 40154251.36 0.0524 0.0231

Jupiter 105231-09-15 03:35 G 40156150.50 40156150.65 40156150.80 0.0507 0.0346

Jupiter 105232-05-09 04:04 G 40156387.59 40156387.67 40156387.76 0.0501 0.0457

Saturn 105236-08-25 09:35 G 40157956.76 40157956.90 40157957.07 0.0290 0.0200

Saturn 105237-04-12 10:18 G 40158186.75 40158186.93 40158187.13 0.0287 0.0137

Jupiter 105238-03-08 13:25 G 40158516.86 40158517.06 40158517.26 0.0522 0.0012

Mars 105239-11-03 06:13 G 40159121.59 40159121.76 40159121.94 0.1578 0.0180

Mars 105240-10-04 22:33 G 40159458.32 40159458.44 40159458.55 0.1963 0.1423

Jupiter 105244-01-13 00:42 G 40160653.35 40160653.53 40160653.71 0.0502 0.0237

Jupiter 105249-11-11 10:33 G 40162782.77 40162782.94 40162783.12 0.0520 0.0250

Saturn 105252-05-03 17:30 G 40163687.16 40163687.23 40163687.32 0.0271 0.0250

Saturn 105252-12-18 18:42 G 40163916.07 40163916.28 40163916.49 0.0273 0.0015

Uranus 105253-04-14 18:13 G 40164033.19 40164033.26 40164033.38 0.0143 0.0131

Uranus 105253-11-27 07:40 G 40164259.69 40164259.82 40164259.97 0.0143 0.0112

Uranus 105254-07-11 21:06 G 40164486.21 40164486.38 40164486.55 0.0143 0.0093

Uranus 105255-02-23 10:33 G 40164712.75 40164712.94 40164713.13 0.0144 0.0074

Jupiter 105255-09-17 19:54 G 40164919.12 40164919.33 40164919.54 0.0504 0.0011

Uranus 105255-10-07 23:45 G 40164939.29 40164939.49 40164939.70 0.0144 0.0055

Uranus 105256-05-21 12:57 G 40165165.83 40165166.04 40165166.27 0.0144 0.0036

Uranus 105257-01-03 02:23 G 40165392.38 40165392.60 40165392.83 0.0144 0.0016

Pluto 105257-04-19 22:33 G 40165499.39 40165499.44 40165499.54 0.0064 0.0060

Uranus 105257-08-17 15:49 G 40165618.94 40165619.16 40165619.38 0.0144 0.0004

Pluto 105257-12-01 02:23 G 40165724.39 40165724.60 40165724.80 0.0064 0.0020

Uranus 105258-04-01 05:16 G 40165845.50 40165845.72 40165845.94 0.0144 0.0023

Pluto 105258-07-14 05:16 G 40165949.53 40165949.72 40165949.94 0.0064 0.0020

Uranus 105258-11-13 18:28 G 40166072.07 40166072.27 40166072.49 0.0143 0.0042

Pluto 105259-02-24 08:37 G 40166174.81 40166174.86 40166174.96 0.0064 0.0060

Uranus 105259-06-28 07:40 G 40166298.63 40166298.82 40166299.03 0.0143 0.0062

Uranus 105260-02-09 20:52 G 40166525.20 40166525.37 40166525.56 0.0143 0.0080

Uranus 105260-09-23 09:49 G 40166751.77 40166751.91 40166752.09 0.0143 0.0100

Uranus 105261-05-07 23:16 G 40166978.35 40166978.47 40166978.60 0.0143 0.0118

Jupiter 105261-07-17 07:40 G 40167048.75 40167048.82 40167048.89 0.0518 0.0483

Uranus 105261-12-20 12:13 G 40167204.95 40167205.01 40167205.08 0.0143 0.0136

Jupiter 105262-03-11 06:28 G 40167285.63 40167285.77 40167285.91 0.0525 0.0373

Saturn 105266-03-07 18:57 G 40168743.11 40168743.29 40168743.48 0.0290 0.0146

Saturn 105266-10-23 19:25 G 40168973.15 40168973.31 40168973.48 0.0287 0.0189

Jupiter 105267-05-23 15:35 G 40169184.96 40169185.15 40169185.34 0.0506 0.0218

Jupiter 105273-11-14 00:28 G 40171551.33 40171551.52 40171551.71 0.0523 0.0123

Jupiter 105279-01-26 10:47 G 40173450.86 40173450.95 40173451.05 0.0508 0.0447

Jupiter 105279-09-20 12:42 G 40173687.89 40173688.03 40173688.17 0.0502 0.0363

Saturn 105281-11-14 01:25 G 40174473.43 40174473.56 40174473.70 0.0272 0.0203

Moon 105281-11-25 20:52 G 40174485.21 40174485.37 40174485.52 0.2695 0.0719

Earth 105281-11-25 23:30 G 40174485.34 40174485.48 40174485.62 0.2700 0.1037 *

Saturn 105282-07-01 02:37 G 40174702.41 40174702.61 40174702.82 0.0274 0.0064

Jupiter 105285-07-19 20:37 G 40175817.17 40175817.36 40175817.56 0.0521 0.0119

Earth 105289-11-23 16:33 G 40177405.12 40177405.19 40177405.26 0.2699 0.2352

Jupiter 105291-05-26 08:09 G 40177953.64 40177953.84 40177954.04 0.0503 0.0136

Uranus 105294-03-12 21:35 G 40178975.34 40178975.40 40178975.46 0.0135 0.0128

Uranus 105294-10-25 01:54 G 40179201.48 40179201.58 40179201.70 0.0135 0.0114

Neptune 105295-02-10 20:09 G 40179310.27 40179310.34 40179310.47 0.0088 0.0079

Uranus 105295-06-08 06:42 G 40179427.64 40179427.78 40179427.92 0.0135 0.0099

Saturn 105295-09-18 05:45 G 40179529.54 40179529.74 40179529.95 0.0289 0.0088

Neptune 105295-09-24 09:35 G 40179535.79 40179535.90 40179536.07 0.0088 0.0069

Uranus 105296-01-20 10:47 G 40179653.80 40179653.95 40179654.13 0.0135 0.0085

Saturn 105296-05-05 05:45 G 40179759.64 40179759.74 40179759.86 0.0287 0.0246

Neptune 105296-05-06 23:01 G 40179761.32 40179761.46 40179761.65 0.0088 0.0059

Uranus 105296-09-02 15:35 G 40179879.98 40179880.15 40179880.34 0.0135 0.0070

Neptune 105296-12-18 12:28 G 40179986.85 40179987.02 40179987.23 0.0088 0.0049

Jupiter 105297-03-24 17:45 G 40180083.10 40180083.24 40180083.39 0.0519 0.0358

Uranus 105297-04-16 19:54 G 40180106.15 40180106.33 40180106.54 0.0135 0.0055

Neptune 105297-08-01 02:09 G 40180212.39 40180212.59 40180212.80 0.0088 0.0038

Jupiter 105297-11-16 17:30 G 40180320.19 40180320.23 40180320.29 0.0526 0.0507

Uranus 105297-11-29 00:28 G 40180332.32 40180332.52 40180332.73 0.0135 0.0040

Neptune 105298-03-14 15:49 G 40180437.95 40180438.16 40180438.37 0.0088 0.0028

Uranus 105298-07-13 04:47 G 40180558.50 40180558.70 40180558.92 0.0135 0.0025

Neptune 105298-10-26 05:01 G 40180663.50 40180663.71 40180663.94 0.0088 0.0018

Uranus 105299-02-24 09:21 G 40180784.68 40180784.89 40180785.11 0.0135 0.0010

Neptune 105299-06-08 18:28 G 40180889.05 40180889.27 40180889.50 0.0088 0.0008

Uranus 105299-10-08 13:54 G 40181010.87 40181011.08 40181011.30 0.0135 0.0007

Neptune 105300-01-20 07:54 G 40181114.60 40181114.83 40181115.06 0.0088 0.0003

Uranus 105300-05-22 18:28 G 40181237.06 40181237.27 40181237.48 0.0135 0.0021

Neptune 105300-09-02 21:21 G 40181340.17 40181340.39 40181340.61 0.0088 0.0013

Uranus 105301-01-03 22:47 G 40181463.25 40181463.45 40181463.66 0.0135 0.0036

Neptune 105301-04-16 10:33 G 40181565.74 40181565.94 40181566.17 0.0088 0.0024

Uranus 105301-08-18 03:06 G 40181689.44 40181689.63 40181689.84 0.0135 0.0052

Neptune 105301-11-27 23:59 G 40181791.31 40181791.50 40181791.72 0.0088 0.0034

Uranus 105302-04-01 07:25 G 40181915.64 40181915.81 40181916.01 0.0135 0.0067

Neptune 105302-07-11 13:25 G 40182016.88 40182017.06 40182017.27 0.0088 0.0044

Uranus 105302-11-13 11:59 G 40182141.85 40182142.00 40182142.18 0.0135 0.0082

Jupiter 105303-01-30 04:18 G 40182219.48 40182219.68 40182219.89 0.0505 0.0089

Neptune 105303-02-22 03:06 G 40182242.46 40182242.63 40182242.82 0.0088 0.0054

Uranus 105303-06-27 16:47 G 40182368.06 40182368.20 40182368.35 0.0135 0.0096

Neptune 105303-10-05 16:33 G 40182468.05 40182468.19 40182468.36 0.0088 0.0064

Uranus 105304-02-08 21:06 G 40182594.27 40182594.38 40182594.51 0.0135 0.0111

Neptune 105304-05-18 06:13 G 40182693.65 40182693.76 40182693.88 0.0088 0.0074

Uranus 105304-09-22 01:54 G 40182820.51 40182820.58 40182820.67 0.0135 0.0125

Neptune 105304-12-29 19:40 G 40182919.27 40182919.32 40182919.39 0.0088 0.0084

Mars 105305-08-31 18:57 G 40183164.12 40183164.29 40183164.47 0.1577 0.0345

Mars 105306-08-02 23:45 G 40183500.33 40183500.49 40183500.66 0.1965 0.0591

Jupiter 105309-07-23 14:09 G 40184585.93 40184586.09 40184586.27 0.0524 0.0265

Saturn 105311-05-28 05:01 G 40185259.55 40185259.71 40185259.88 0.0271 0.0166

Saturn 105312-01-12 06:13 G 40185488.58 40185488.76 40185488.96 0.0274 0.0103

Jupiter 105314-10-04 22:47 G 40186485.30 40186485.45 40186485.61 0.0507 0.0320

Jupiter 105315-05-29 23:16 G 40186722.42 40186722.47 40186722.53 0.0501 0.0483

Jupiter 105321-03-28 10:33 G 40188851.74 40188851.94 40188852.14 0.0522 0.0021

Saturn 105325-03-31 13:54 G 40190315.87 40190316.08 40190316.30 0.0289 0.0037

Jupiter 105327-02-01 20:09 G 40190988.16 40190988.34 40190988.52 0.0502 0.0264

Jupiter 105332-12-01 05:30 G 40193117.56 40193117.73 40193117.92 0.0520 0.0225

Uranus 105336-12-14 01:40 G 40194591.51 40194591.57 40194591.65 0.0143 0.0135

Uranus 105337-07-28 14:37 G 40194818.00 40194818.11 40194818.26 0.0143 0.0118

Mars 105337-08-30 10:18 G 40194850.86 40194850.93 40194851.01 0.1580 0.1425

Uranus 105338-03-12 04:18 G 40195044.52 40195044.68 40195044.85 0.0143 0.0099

Jupiter 105338-10-07 16:18 G 40195253.97 40195254.18 40195254.38 0.0504 0.0039

Uranus 105338-10-24 17:30 G 40195271.05 40195271.23 40195271.42 0.0143 0.0080

Uranus 105339-06-08 06:57 G 40195497.59 40195497.79 40195497.99 0.0143 0.0061

Uranus 105340-01-20 20:09 G 40195724.13 40195724.34 40195724.56 0.0143 0.0042

Uranus 105340-09-03 09:35 G 40195950.68 40195950.90 40195951.12 0.0143 0.0022

Saturn 105340-12-07 12:13 G 40196045.83 40196046.01 40196046.20 0.0272 0.0120

Uranus 105341-04-17 23:01 G 40196177.24 40196177.46 40196177.68 0.0143 0.0003

Saturn 105341-07-24 13:40 G 40196274.91 40196275.07 40196275.26 0.0274 0.0151

Uranus 105341-11-30 12:13 G 40196403.79 40196404.01 40196404.24 0.0143 0.0017

Uranus 105342-07-15 01:25 G 40196630.35 40196630.56 40196630.78 0.0143 0.0036

Uranus 105343-02-26 14:52 G 40196856.91 40196857.12 40196857.33 0.0143 0.0055

Uranus 105343-10-11 04:04 G 40197083.48 40197083.67 40197083.86 0.0143 0.0074

Uranus 105344-05-24 17:01 G 40197310.05 40197310.21 40197310.39 0.0143 0.0093

Jupiter 105344-08-06 02:23 G 40197383.52 40197383.60 40197383.70 0.0518 0.0460

Uranus 105345-01-06 05:45 G 40197536.62 40197536.74 40197536.90 0.0143 0.0112

Jupiter 105345-03-31 00:57 G 40197620.42 40197620.54 40197620.68 0.0525 0.0399

Uranus 105345-08-20 18:42 G 40197763.21 40197763.28 40197763.39 0.0143 0.0130

Pluto 105347-06-06 17:01 G 40198418.00 40198418.21 40198418.45 0.0080 0.0012

Pluto 105348-01-18 04:04 G 40198643.57 40198643.67 40198643.78 0.0079 0.0070

Jupiter 105350-06-12 11:30 G 40199519.79 40199519.98 40199520.17 0.0506 0.0192

Saturn 105354-10-12 00:57 G 40201102.33 40201102.54 40201102.76 0.0289 0.0023

Jupiter 105356-12-03 21:21 G 40201886.20 40201886.39 40201886.58 0.0523 0.0153

Jupiter 105362-02-15 07:40 G 40203785.71 40203785.82 40203785.94 0.0508 0.0419

Jupiter 105362-10-10 08:37 G 40204022.73 40204022.86 40204022.99 0.0501 0.0389

Jupiter 105368-08-08 18:42 G 40206152.09 40206152.28 40206152.48 0.0522 0.0087

Saturn 105370-06-19 15:21 G 40206831.95 40206832.14 40206832.34 0.0272 0.0083

Saturn 105371-02-03 17:01 G 40207061.06 40207061.21 40207061.36 0.0274 0.0187

Mars 105371-06-29 07:54 G 40207206.66 40207206.83 40207207.00 0.1577 0.0509

Mars 105372-05-30 01:54 G 40207542.41 40207542.58 40207542.75 0.1966 0.0220

Jupiter 105374-06-15 04:04 G 40208288.48 40208288.67 40208288.87 0.0503 0.0165

Neptune 105376-08-17 16:18 G 40209083.17 40209083.18 40209083.23 0.0090 0.0089

Neptune 105377-03-31 05:30 G 40209308.62 40209308.73 40209308.83 0.0090 0.0078

Uranus 105377-11-11 09:21 G 40209533.86 40209533.89 40209533.94 0.0135 0.0132

Neptune 105377-11-11 17:45 G 40209534.11 40209534.24 40209534.39 0.0090 0.0068

Neptune 105378-06-25 06:13 G 40209759.61 40209759.76 40209759.94 0.0090 0.0058

Uranus 105378-06-25 13:40 G 40209759.99 40209760.07 40209760.20 0.0135 0.0118

Neptune 105379-02-05 18:57 G 40209985.12 40209985.29 40209985.48 0.0090 0.0047

Uranus 105379-02-06 18:28 G 40209986.15 40209986.27 40209986.42 0.0135 0.0103

Neptune 105379-09-19 07:40 G 40210210.64 40210210.82 40210211.03 0.0090 0.0037

Uranus 105379-09-20 23:30 G 40210212.32 40210212.48 40210212.64 0.0135 0.0088

Jupiter 105380-04-13 15:49 G 40210418.01 40210418.16 40210418.32 0.0519 0.0325

Neptune 105380-05-01 20:37 G 40210436.15 40210436.36 40210436.56 0.0090 0.0026

Uranus 105380-05-04 03:49 G 40210438.49 40210438.66 40210438.85 0.0135 0.0074

Neptune 105380-12-13 09:06 G 40210661.67 40210661.88 40210662.09 0.0090 0.0016

Uranus 105380-12-16 08:23 G 40210664.66 40210664.85 40210665.05 0.0135 0.0059

Neptune 105381-07-26 21:35 G 40210887.19 40210887.40 40210887.62 0.0090 0.0006

Uranus 105381-07-30 12:42 G 40210890.84 40210891.03 40210891.24 0.0135 0.0044

Neptune 105382-03-09 10:18 G 40211112.72 40211112.93 40211113.15 0.0090 0.0005

Uranus 105382-03-13 17:16 G 40211117.02 40211117.22 40211117.44 0.0135 0.0029

Neptune 105382-10-20 23:01 G 40211338.25 40211338.46 40211338.67 0.0090 0.0016

Uranus 105382-10-25 21:49 G 40211343.20 40211343.41 40211343.63 0.0135 0.0014

Neptune 105383-06-03 11:16 G 40211563.78 40211563.97 40211564.19 0.0090 0.0027

Uranus 105383-06-09 02:23 G 40211569.39 40211569.60 40211569.81 0.0135 0.0002

Saturn 105383-09-06 05:01 G 40211658.65 40211658.71 40211658.80 0.0291 0.0273

Neptune 105384-01-14 23:59 G 40211789.31 40211789.50 40211789.70 0.0090 0.0037

Uranus 105384-01-21 06:42 G 40211795.57 40211795.78 40211796.00 0.0135 0.0017

Saturn 105384-04-23 06:57 G 40211888.58 40211888.79 40211889.00 0.0288 0.0068

Neptune 105384-08-27 12:42 G 40212014.85 40212015.03 40212015.22 0.0090 0.0047

Uranus 105384-09-03 11:16 G 40212021.76 40212021.97 40212022.18 0.0135 0.0032

Neptune 105385-04-10 00:57 G 40212240.39 40212240.54 40212240.72 0.0090 0.0058

Uranus 105385-04-17 15:35 G 40212247.96 40212248.15 40212248.35 0.0135 0.0047

Neptune 105385-11-21 13:25 G 40212465.94 40212466.06 40212466.21 0.0090 0.0068

Uranus 105385-11-29 20:09 G 40212474.15 40212474.34 40212474.53 0.0135 0.0062

Jupiter 105386-02-18 00:13 G 40212554.31 40212554.51 40212554.72 0.0505 0.0061

Neptune 105386-07-05 02:09 G 40212691.49 40212691.59 40212691.70 0.0090 0.0078

Uranus 105386-07-14 00:28 G 40212700.35 40212700.52 40212700.70 0.0135 0.0077

Neptune 105387-02-15 14:09 G 40212917.08 40212917.09 40212917.15 0.0090 0.0089

Uranus 105387-02-25 04:47 G 40212926.56 40212926.70 40212926.87 0.0135 0.0092

Uranus 105387-10-09 09:35 G 40213152.78 40213152.90 40213153.04 0.0135 0.0106

Uranus 105388-05-22 13:54 G 40213379.01 40213379.08 40213379.19 0.0135 0.0121

Uranus 105389-01-03 18:57 G 40213605.29 40213605.29 40213605.29 0.0135 0.0135

Jupiter 105392-08-11 10:18 G 40214920.77 40214920.93 40214921.10 0.0524 0.0293

Jupiter 105397-10-23 19:25 G 40216820.15 40216820.31 40216820.49 0.0507 0.0292

Saturn 105399-12-30 21:35 G 40217618.19 40217618.40 40217618.61 0.0273 0.0040

Saturn 105400-08-16 23:30 G 40217847.38 40217847.48 40217847.59 0.0275 0.0232

Mars 105403-06-28 23:30 G 40218893.37 40218893.48 40218893.58 0.1579 0.1265

Jupiter 105404-04-17 06:28 G 40219186.57 40219186.77 40219186.97 0.0522 0.0050

Jupiter 105410-02-21 16:47 G 40221323.04 40221323.20 40221323.38 0.0502 0.0292

Earth 105411-05-28 02:52 G 40221783.46 40221783.62 40221783.78 0.2632 0.0488

Moon 105411-05-28 05:16 G 40221783.54 40221783.72 40221783.89 0.2627 0.0459 *

Saturn 105413-03-19 15:49 G 40222445.02 40222445.16 40222445.31 0.0291 0.0214

Saturn 105413-11-04 17:16 G 40222675.02 40222675.22 40222675.41 0.0288 0.0125

Jupiter 105415-12-22 02:23 G 40223452.42 40223452.60 40223452.79 0.0521 0.0196

Uranus 105420-08-14 08:37 G 40225149.83 40225149.86 40225149.91 0.0143 0.0140

Uranus 105421-03-28 21:49 G 40225376.31 40225376.41 40225376.53 0.0143 0.0122

Jupiter 105421-10-27 13:54 G 40225588.88 40225589.08 40225589.29 0.0504 0.0070

Uranus 105421-11-10 10:47 G 40225602.82 40225602.95 40225603.12 0.0143 0.0105

Uranus 105422-06-25 00:13 G 40225829.34 40225829.51 40225829.70 0.0143 0.0086

Uranus 105423-02-06 13:40 G 40226055.87 40226056.07 40226056.27 0.0143 0.0067

Uranus 105423-09-21 02:52 G 40226282.42 40226282.62 40226282.84 0.0143 0.0048

Uranus 105424-05-04 16:18 G 40226508.97 40226509.18 40226509.40 0.0143 0.0029

Uranus 105424-12-17 05:45 G 40226735.52 40226735.74 40226735.96 0.0144 0.0009

Uranus 105425-07-31 18:57 G 40226962.07 40226962.29 40226962.52 0.0144 0.0011

Uranus 105426-03-15 08:23 G 40227188.64 40227188.85 40227189.07 0.0144 0.0030

Uranus 105426-10-27 21:35 G 40227415.20 40227415.40 40227415.62 0.0143 0.0049

Uranus 105427-06-11 10:47 G 40227641.76 40227641.95 40227642.15 0.0143 0.0068

Jupiter 105427-08-27 00:42 G 40227718.42 40227718.53 40227718.64 0.0519 0.0429

Uranus 105428-01-23 23:45 G 40227868.32 40227868.49 40227868.68 0.0143 0.0087

Jupiter 105428-04-20 00:13 G 40227955.41 40227955.51 40227955.63 0.0526 0.0436

Uranus 105428-09-06 12:57 G 40228094.90 40228095.04 40228095.20 0.0143 0.0105

Saturn 105428-11-25 23:16 G 40228175.46 40228175.47 40228175.51 0.0270 0.0268

Uranus 105429-04-21 01:40 G 40228321.48 40228321.57 40228321.71 0.0143 0.0124

Saturn 105429-07-12 23:59 G 40228404.29 40228404.50 40228404.71 0.0272 0.0005

Uranus 105429-12-03 15:06 G 40228548.09 40228548.13 40228548.17 0.0143 0.0141

Saturn 105430-02-27 01:54 G 40228633.54 40228633.58 40228633.63 0.0275 0.0267

Jupiter 105433-07-02 09:06 G 40229854.69 40229854.88 40229855.08 0.0506 0.0159

Mars 105437-04-26 20:52 G 40231249.21 40231249.37 40231249.53 0.1576 0.0671

Mars 105438-03-28 03:21 G 40231584.49 40231584.64 40231584.78 0.1967 0.1058

Jupiter 105439-12-24 20:52 G 40232221.18 40232221.37 40232221.55 0.0524 0.0193

Saturn 105442-09-29 20:23 G 40233231.18 40233231.35 40233231.53 0.0290 0.0173

Saturn 105443-05-17 21:35 G 40233461.23 40233461.40 40233461.58 0.0288 0.0166

Jupiter 105445-03-07 04:33 G 40234120.56 40234120.69 40234120.83 0.0508 0.0389

Jupiter 105445-10-30 05:45 G 40234357.63 40234357.74 40234357.85 0.0501 0.0421

Jupiter 105451-08-29 16:33 G 40236487.00 40236487.19 40236487.39 0.0521 0.0056

Jupiter 105457-07-05 02:09 G 40238623.40 40238623.59 40238623.78 0.0503 0.0198

Saturn 105458-06-08 04:04 G 40238961.57 40238961.67 40238961.79 0.0271 0.0229

Saturn 105459-01-23 05:01 G 40239190.50 40239190.71 40239190.92 0.0273 0.0037

Neptune 105459-05-17 04:18 G 40239304.63 40239304.68 40239304.79 0.0088 0.0082

Neptune 105459-12-28 17:45 G 40239530.14 40239530.24 40239530.39 0.0088 0.0072

Neptune 105460-08-10 07:11 G 40239755.66 40239755.80 40239755.98 0.0088 0.0062

Neptune 105461-03-23 20:37 G 40239981.20 40239981.36 40239981.57 0.0088 0.0052

Neptune 105461-11-04 10:33 G 40240206.74 40240206.94 40240207.14 0.0088 0.0041

Uranus 105462-02-24 02:23 G 40240318.52 40240318.60 40240318.70 0.0135 0.0121

Neptune 105462-06-17 23:45 G 40240432.29 40240432.49 40240432.71 0.0088 0.0031

Uranus 105462-10-08 06:57 G 40240544.68 40240544.79 40240544.93 0.0135 0.0107

Neptune 105463-01-29 13:11 G 40240657.84 40240658.05 40240658.27 0.0088 0.0021

Jupiter 105463-05-04 13:11 G 40240752.89 40240753.05 40240753.22 0.0519 0.0294

Uranus 105463-05-22 11:45 G 40240770.84 40240770.99 40240771.15 0.0135 0.0092

Neptune 105463-09-12 02:37 G 40240883.39 40240883.61 40240883.84 0.0088 0.0011

Uranus 105464-01-03 16:18 G 40240997.01 40240997.18 40240997.36 0.0135 0.0077

Neptune 105464-04-24 16:04 G 40241108.95 40241109.17 40241109.40 0.0088 0.0001

Uranus 105464-08-16 21:06 G 40241223.19 40241223.38 40241223.57 0.0135 0.0062

Neptune 105464-12-06 05:30 G 40241334.50 40241334.73 40241334.95 0.0088 0.0010

Uranus 105465-03-31 01:25 G 40241449.37 40241449.56 40241449.77 0.0135 0.0047

Neptune 105465-07-19 18:57 G 40241560.07 40241560.29 40241560.51 0.0088 0.0020

Uranus 105465-11-12 05:45 G 40241675.55 40241675.74 40241675.96 0.0135 0.0033

Neptune 105466-03-02 07:54 G 40241785.64 40241785.83 40241786.06 0.0088 0.0031

Uranus 105466-06-26 10:18 G 40241901.73 40241901.93 40241902.15 0.0135 0.0018

Neptune 105466-10-13 21:21 G 40242011.21 40242011.39 40242011.61 0.0088 0.0041

Uranus 105467-02-07 14:52 G 40242127.91 40242128.12 40242128.33 0.0135 0.0002

Neptune 105467-05-27 10:47 G 40242236.78 40242236.95 40242237.15 0.0088 0.0051

Uranus 105467-09-21 19:25 G 40242354.10 40242354.31 40242354.52 0.0135 0.0013

Neptune 105468-01-08 00:13 G 40242462.37 40242462.51 40242462.69 0.0088 0.0061

Uranus 105468-05-04 23:45 G 40242580.29 40242580.49 40242580.70 0.0135 0.0028

Neptune 105468-08-20 13:40 G 40242687.96 40242688.07 40242688.22 0.0088 0.0071

Uranus 105468-12-17 04:04 G 40242806.47 40242806.67 40242806.88 0.0135 0.0043

Jupiter 105469-03-09 22:33 G 40242889.24 40242889.44 40242889.65 0.0505 0.0032

Neptune 105469-04-03 03:21 G 40242913.57 40242913.64 40242913.74 0.0088 0.0081

Mars 105469-04-25 11:59 G 40242935.88 40242936.00 40242936.13 0.1578 0.1095

Uranus 105469-07-31 08:23 G 40243032.66 40243032.85 40243033.05 0.0135 0.0058

Uranus 105470-03-14 12:42 G 40243258.86 40243259.03 40243259.22 0.0135 0.0073

Uranus 105470-10-26 17:16 G 40243485.07 40243485.22 40243485.39 0.0135 0.0088

Uranus 105471-06-09 21:49 G 40243711.28 40243711.41 40243711.56 0.0135 0.0102

Uranus 105472-01-22 02:09 G 40243937.51 40243937.59 40243937.72 0.0135 0.0117

Saturn 105472-04-11 05:30 G 40244017.54 40244017.73 40244017.93 0.0290 0.0117

Uranus 105472-09-04 06:57 G 40244163.75 40244163.79 40244163.85 0.0135 0.0131

Saturn 105472-11-27 06:13 G 40244247.63 40244247.76 40244247.91 0.0288 0.0221

Jupiter 105475-09-01 08:23 G 40245255.70 40245255.85 40245256.01 0.0525 0.0327

Jupiter 105480-11-12 19:25 G 40247155.14 40247155.31 40247155.49 0.0506 0.0254

Jupiter 105487-05-07 05:59 G 40249521.55 40249521.75 40249521.95 0.0523 0.0086

Saturn 105487-12-19 06:28 G 40249747.62 40249747.77 40249747.91 0.0270 0.0195

Saturn 105488-08-04 06:57 G 40249976.59 40249976.79 40249976.99 0.0272 0.0070

Jupiter 105492-07-18 14:23 G 40251421.05 40251421.10 40251421.16 0.0508 0.0485

Jupiter 105493-03-12 15:49 G 40251658.01 40251658.16 40251658.32 0.0502 0.0329

Jupiter 105499-01-10 03:35 G 40253787.45 40253787.65 40253787.84 0.0521 0.0153

Saturn 105501-10-23 08:09 G 40254803.64 40254803.84 40254804.05 0.0290 0.0081

Saturn 105502-06-10 08:52 G 40255033.78 40255033.87 40255033.97 0.0287 0.0255

Mars 105503-02-23 09:21 G 40255291.74 40255291.89 40255292.04 0.1576 0.0844

Mars 105504-01-24 05:30 G 40255626.68 40255626.73 40255626.79 0.1968 0.1854

Jupiter 105504-11-16 12:28 G 40255923.81 40255924.02 40255924.22 0.0504 0.0106

Uranus 105504-11-27 05:59 G 40255934.66 40255934.75 40255934.87 0.0143 0.0127

Uranus 105505-07-11 19:25 G 40256161.17 40256161.31 40256161.46 0.0143 0.0109

Pluto 105505-11-06 03:35 G 40256278.51 40256278.65 40256278.80 0.0064 0.0047

Uranus 105506-02-23 08:23 G 40256387.69 40256387.85 40256388.04 0.0143 0.0091

Pluto 105506-06-19 06:42 G 40256503.58 40256503.78 40256504.01 0.0064 0.0008

Uranus 105506-10-07 21:49 G 40256614.23 40256614.41 40256614.61 0.0143 0.0072

Pluto 105507-01-30 10:04 G 40256728.75 40256728.92 40256729.12 0.0064 0.0033

Uranus 105507-05-22 11:16 G 40256840.77 40256840.97 40256841.18 0.0143 0.0053

Uranus 105508-01-04 00:28 G 40257067.31 40257067.52 40257067.75 0.0143 0.0034

Uranus 105508-08-17 13:54 G 40257293.86 40257294.08 40257294.31 0.0144 0.0015

Uranus 105509-04-01 03:35 G 40257520.42 40257520.65 40257520.87 0.0144 0.0005

Uranus 105509-11-13 16:47 G 40257746.98 40257747.20 40257747.42 0.0144 0.0024

Uranus 105510-06-28 05:45 G 40257973.54 40257973.74 40257973.96 0.0144 0.0044

Jupiter 105510-09-16 00:28 G 40258053.39 40258053.52 40258053.65 0.0518 0.0392

Uranus 105511-02-09 18:57 G 40258200.10 40258200.29 40258200.50 0.0144 0.0063

Jupiter 105511-05-10 23:30 G 40258290.40 40258290.48 40258290.57 0.0525 0.0473

Uranus 105511-09-24 08:23 G 40258426.67 40258426.85 40258427.04 0.0143 0.0081

Uranus 105512-05-07 21:21 G 40258653.24 40258653.39 40258653.56 0.0143 0.0100

Uranus 105512-12-20 10:33 G 40258879.82 40258879.94 40258880.07 0.0143 0.0118

Uranus 105513-08-03 23:30 G 40259106.42 40259106.48 40259106.55 0.0143 0.0136

Jupiter 105516-07-22 08:09 G 40260189.64 40260189.84 40260190.04 0.0506 0.0124

Saturn 105517-07-01 09:35 G 40260533.74 40260533.90 40260534.08 0.0271 0.0159

Saturn 105518-02-15 10:18 G 40260762.75 40260762.93 40260763.13 0.0273 0.0109

Jupiter 105523-01-13 19:25 G 40262556.13 40262556.31 40262556.49 0.0523 0.0229

Moon 105524-11-29 02:09 G 40263241.46 40263241.59 40263241.71 0.2707 0.1406

Earth 105524-11-29 02:37 G 40263241.47 40263241.61 40263241.75 0.2700 0.1138 *

Jupiter 105528-03-27 04:33 G 40264455.55 40264455.69 40264455.84 0.0507 0.0353

Jupiter 105528-11-19 05:30 G 40264692.65 40264692.73 40264692.81 0.0501 0.0456

Saturn 105531-05-05 16:18 G 40265589.97 40265590.18 40265590.40 0.0290 0.0028

Earth 105532-11-26 19:25 G 40266161.23 40266161.31 40266161.39 0.2699 0.2285

Moon 105532-11-26 23:30 G 40266161.37 40266161.48 40266161.59 0.2703 0.1783 *

Jupiter 105534-09-18 15:06 G 40266821.93 40266822.13 40266822.33 0.0522 0.0022

Mars 105535-02-22 00:42 G 40266978.39 40266978.53 40266978.68 0.1578 0.0932

Jupiter 105540-07-25 03:21 G 40268958.46 40268958.64 40268958.83 0.0502 0.0239

Neptune 105541-07-04 13:40 G 40269302.99 40269303.07 40269303.16 0.0090 0.0082

Neptune 105542-02-15 01:54 G 40269528.47 40269528.58 40269528.73 0.0090 0.0072

Neptune 105542-09-28 14:37 G 40269753.97 40269754.11 40269754.29 0.0090 0.0062

Neptune 105543-05-12 03:35 G 40269979.48 40269979.65 40269979.83 0.0090 0.0051

Neptune 105543-12-23 16:04 G 40270204.99 40270205.17 40270205.37 0.0090 0.0041

Neptune 105544-08-05 04:47 G 40270430.50 40270430.70 40270430.91 0.0090 0.0030

Neptune 105545-03-18 17:16 G 40270656.02 40270656.22 40270656.44 0.0090 0.0020

Uranus 105545-10-25 15:06 G 40270877.06 40270877.13 40270877.22 0.0135 0.0124

Neptune 105545-10-30 06:13 G 40270881.54 40270881.76 40270881.97 0.0090 0.0009

Jupiter 105546-05-24 13:11 G 40271087.87 40271088.05 40271088.22 0.0520 0.0257

Uranus 105546-06-08 19:40 G 40271103.21 40271103.32 40271103.46 0.0135 0.0110

Neptune 105546-06-12 18:42 G 40271107.07 40271107.28 40271107.50 0.0090 0.0002

Saturn 105547-01-11 11:16 G 40271319.79 40271319.97 40271320.16 0.0270 0.0126

Uranus 105547-01-21 00:28 G 40271329.38 40271329.52 40271329.68 0.0135 0.0095

Neptune 105547-01-24 07:25 G 40271332.59 40271332.81 40271333.02 0.0090 0.0012

Saturn 105547-08-28 11:59 G 40271548.83 40271549.00 40271549.19 0.0273 0.0141

Uranus 105547-09-04 05:01 G 40271555.56 40271555.71 40271555.90 0.0135 0.0081

Neptune 105547-09-06 19:54 G 40271558.13 40271558.33 40271558.55 0.0090 0.0023

Uranus 105548-04-17 09:49 G 40271781.73 40271781.91 40271782.10 0.0135 0.0066

Neptune 105548-04-19 08:37 G 40271783.66 40271783.86 40271784.06 0.0090 0.0033

Uranus 105548-11-29 14:09 G 40272007.90 40272008.09 40272008.30 0.0135 0.0051

Neptune 105548-11-30 20:52 G 40272009.20 40272009.37 40272009.58 0.0090 0.0044

Uranus 105549-07-13 18:42 G 40272234.08 40272234.28 40272234.49 0.0135 0.0036

Neptune 105549-07-14 09:21 G 40272234.74 40272234.89 40272235.08 0.0090 0.0054

Uranus 105550-02-24 23:16 G 40272460.26 40272460.47 40272460.68 0.0135 0.0021

Neptune 105550-02-24 22:04 G 40272460.28 40272460.42 40272460.58 0.0090 0.0064 *

Neptune 105550-10-08 10:33 G 40272685.84 40272685.94 40272686.08 0.0090 0.0075

Uranus 105550-10-09 03:35 G 40272686.44 40272686.65 40272686.87 0.0135 0.0007

Neptune 105551-05-21 23:01 G 40272911.42 40272911.46 40272911.55 0.0090 0.0085

Uranus 105551-05-23 08:09 G 40272912.63 40272912.84 40272913.05 0.0135 0.0009

Uranus 105552-01-04 12:13 G 40273138.81 40273139.01 40273139.23 0.0135 0.0025

Jupiter 105552-03-29 23:30 G 40273224.27 40273224.48 40273224.69 0.0504 0.0013

Uranus 105552-08-17 16:33 G 40273365.00 40273365.19 40273365.40 0.0135 0.0040

Uranus 105553-03-31 21:06 G 40273591.19 40273591.38 40273591.58 0.0135 0.0054

Uranus 105553-11-13 01:25 G 40273817.39 40273817.56 40273817.75 0.0135 0.0069

Uranus 105554-06-27 05:45 G 40274043.59 40274043.74 40274043.92 0.0135 0.0084

Uranus 105555-02-08 10:18 G 40274269.79 40274269.93 40274270.08 0.0135 0.0098

Uranus 105555-09-22 14:37 G 40274496.01 40274496.11 40274496.24 0.0135 0.0113

Uranus 105556-05-05 19:25 G 40274722.25 40274722.31 40274722.39 0.0135 0.0127

Jupiter 105558-01-27 11:30 G 40275353.92 40275353.98 40275354.05 0.0518 0.0488

Jupiter 105558-09-21 10:47 G 40275590.82 40275590.95 40275591.09 0.0525 0.0376

Saturn 105560-11-14 17:01 G 40276376.00 40276376.21 40276376.43 0.0290 0.0005

Jupiter 105563-12-03 19:25 G 40277490.12 40277490.31 40277490.50 0.0506 0.0215

Mars 105568-12-20 22:33 G 40279334.31 40279334.44 40279334.58 0.1575 0.0998

Jupiter 105570-05-27 06:57 G 40279856.60 40279856.79 40279856.99 0.0523 0.0130

Jupiter 105575-08-08 14:37 G 40281756.02 40281756.11 40281756.21 0.0508 0.0448

Jupiter 105576-04-01 16:18 G 40281993.05 40281993.18 40281993.33 0.0502 0.0368

Saturn 105576-07-23 13:54 G 40282105.89 40282106.08 40282106.28 0.0271 0.0092

Saturn 105577-03-09 14:37 G 40282334.96 40282335.11 40282335.28 0.0273 0.0177

Jupiter 105582-01-30 03:35 G 40284122.46 40284122.65 40284122.85 0.0521 0.0114

Jupiter 105587-12-06 13:40 G 40286258.87 40286259.07 40286259.27 0.0503 0.0146

Uranus 105588-07-27 12:28 G 40286492.95 40286493.02 40286493.11 0.0143 0.0132

Uranus 105589-03-11 01:40 G 40286719.45 40286719.57 40286719.72 0.0143 0.0114

Uranus 105589-10-23 14:52 G 40286945.97 40286946.12 40286946.30 0.0143 0.0096

Saturn 105590-05-27 23:45 G 40287162.28 40287162.49 40287162.71 0.0289 0.0053

Uranus 105590-06-07 04:04 G 40287172.50 40287172.67 40287172.87 0.0143 0.0078

Uranus 105591-01-19 17:30 G 40287399.03 40287399.23 40287399.44 0.0143 0.0059

Uranus 105591-09-03 06:57 G 40287625.58 40287625.79 40287626.01 0.0144 0.0039

Uranus 105592-04-16 20:23 G 40287852.13 40287852.35 40287852.57 0.0144 0.0020

Uranus 105592-11-29 09:49 G 40288078.68 40288078.91 40288079.13 0.0144 0.0002

Uranus 105593-07-13 23:01 G 40288305.24 40288305.46 40288305.68 0.0144 0.0018

Jupiter 105593-10-04 23:01 G 40288388.32 40288388.46 40288388.60 0.0519 0.0358

Uranus 105594-02-25 12:13 G 40288531.80 40288532.01 40288532.23 0.0144 0.0037

Jupiter 105594-05-29 23:01 G 40288625.42 40288625.46 40288625.51 0.0526 0.0512

Uranus 105594-10-10 01:25 G 40288758.36 40288758.56 40288758.77 0.0144 0.0056

Pluto 105595-05-11 10:47 G 40288971.89 40288971.95 40288972.05 0.0080 0.0074

Uranus 105595-05-24 14:52 G 40288984.93 40288985.12 40288985.31 0.0144 0.0075

Pluto 105595-12-22 22:04 G 40289197.20 40289197.42 40289197.65 0.0080 0.0009

Uranus 105596-01-06 03:49 G 40289211.50 40289211.66 40289211.84 0.0143 0.0094

Uranus 105596-08-19 16:47 G 40289438.08 40289438.20 40289438.35 0.0143 0.0112

Uranus 105597-04-03 05:59 G 40289664.68 40289664.75 40289664.86 0.0143 0.0130

Jupiter 105599-08-11 11:30 G 40290524.78 40290524.98 40290525.19 0.0505 0.0077

Mars 105600-12-19 13:40 G 40291020.92 40291021.07 40291021.23 0.1577 0.0768

Mars 105601-11-20 10:18 G 40291356.86 40291356.93 40291357.00 0.1966 0.1774

Jupiter 105606-02-01 20:37 G 40292891.19 40292891.36 40292891.53 0.0525 0.0272

Saturn 105606-02-02 15:06 G 40292891.93 40292892.13 40292892.34 0.0270 0.0060

Saturn 105606-09-19 15:49 G 40293121.03 40293121.16 40293121.30 0.0273 0.0208

Jupiter 105611-04-16 07:11 G 40294790.64 40294790.80 40294790.97 0.0507 0.0306

Jupiter 105617-10-07 18:28 G 40297157.07 40297157.27 40297157.47 0.0522 0.0032

Saturn 105619-04-21 21:21 G 40297718.31 40297718.39 40297718.48 0.0292 0.0265

Saturn 105619-12-07 23:45 G 40297948.29 40297948.49 40297948.70 0.0290 0.0081

Jupiter 105623-08-14 04:18 G 40299293.51 40299293.68 40299293.85 0.0502 0.0281

Neptune 105623-08-19 12:57 G 40299298.98 40299299.04 40299299.10 0.0088 0.0084

Neptune 105624-04-01 02:23 G 40299524.49 40299524.60 40299524.72 0.0088 0.0074

Neptune 105624-11-12 15:49 G 40299750.01 40299750.16 40299750.32 0.0088 0.0064

Neptune 105625-06-26 05:16 G 40299975.54 40299975.72 40299975.90 0.0088 0.0054

Neptune 105626-02-06 18:28 G 40300201.09 40300201.27 40300201.48 0.0088 0.0044

Neptune 105626-09-20 07:54 G 40300426.63 40300426.83 40300427.05 0.0088 0.0034

Neptune 105627-05-03 21:21 G 40300652.18 40300652.39 40300652.62 0.0088 0.0024

Neptune 105627-12-15 10:47 G 40300877.74 40300877.95 40300878.18 0.0088 0.0014

Neptune 105628-07-28 00:13 G 40301103.29 40301103.51 40301103.74 0.0088 0.0004

Neptune 105629-03-10 13:54 G 40301328.85 40301329.08 40301329.30 0.0088 0.0007

Jupiter 105629-06-12 15:35 G 40301422.97 40301423.15 40301423.34 0.0520 0.0210

Uranus 105629-06-25 04:18 G 40301435.62 40301435.68 40301435.75 0.0135 0.0127

Neptune 105629-10-22 03:06 G 40301554.42 40301554.63 40301554.86 0.0088 0.0017

Uranus 105630-02-06 08:52 G 40301661.77 40301661.87 40301662.00 0.0135 0.0113

Neptune 105630-06-04 16:18 G 40301779.98 40301780.18 40301780.41 0.0088 0.0028

Uranus 105630-09-20 13:40 G 40301887.94 40301888.07 40301888.23 0.0135 0.0099

Neptune 105631-01-16 05:45 G 40302005.55 40302005.74 40302005.95 0.0088 0.0038

Uranus 105631-05-04 18:28 G 40302114.11 40302114.27 40302114.44 0.0135 0.0084

Neptune 105631-08-29 18:57 G 40302231.12 40302231.29 40302231.50 0.0088 0.0048

Uranus 105631-12-16 23:01 G 40302340.28 40302340.46 40302340.64 0.0135 0.0069

Neptune 105632-04-11 08:37 G 40302456.71 40302456.86 40302457.04 0.0088 0.0058

Uranus 105632-07-30 03:21 G 40302566.45 40302566.64 40302566.84 0.0135 0.0054

Neptune 105632-11-22 22:04 G 40302682.29 40302682.42 40302682.57 0.0088 0.0068

Uranus 105633-03-13 07:40 G 40302792.63 40302792.82 40302793.03 0.0135 0.0040

Neptune 105633-07-06 11:30 G 40302907.89 40302907.98 40302908.09 0.0088 0.0078

Uranus 105633-10-25 12:13 G 40303018.81 40303019.01 40303019.23 0.0135 0.0025

Uranus 105634-06-08 16:47 G 40303244.98 40303245.20 40303245.41 0.0135 0.0010

Mars 105634-10-18 11:01 G 40303376.85 40303376.96 40303377.08 0.1575 0.1169

Uranus 105635-01-20 21:06 G 40303471.16 40303471.38 40303471.59 0.0135 0.0006

Jupiter 105635-04-19 00:42 G 40303559.33 40303559.53 40303559.74 0.0504 0.0055

Saturn 105635-08-15 17:01 G 40303678.01 40303678.21 40303678.42 0.0271 0.0028

Uranus 105635-09-04 01:25 G 40303697.35 40303697.56 40303697.77 0.0135 0.0020

Saturn 105636-03-31 17:59 G 40303907.16 40303907.25 40303907.34 0.0274 0.0242

Uranus 105636-04-17 05:30 G 40303923.53 40303923.73 40303923.94 0.0135 0.0036

Uranus 105636-11-29 09:49 G 40304149.72 40304149.91 40304150.12 0.0135 0.0050

Uranus 105637-07-13 14:23 G 40304375.91 40304376.10 40304376.28 0.0135 0.0065

Uranus 105638-02-24 18:28 G 40304602.11 40304602.27 40304602.45 0.0135 0.0080

Uranus 105638-10-08 22:47 G 40304828.32 40304828.45 40304828.62 0.0135 0.0095

Uranus 105639-05-23 03:21 G 40305054.53 40305054.64 40305054.78 0.0135 0.0109

Uranus 105640-01-04 07:54 G 40305280.76 40305280.83 40305280.93 0.0135 0.0123

Jupiter 105641-02-15 12:57 G 40305688.94 40305689.04 40305689.14 0.0518 0.0446

Jupiter 105641-10-10 11:59 G 40305925.88 40305926.00 40305926.12 0.0525 0.0419

Jupiter 105646-12-22 21:49 G 40307825.22 40307825.41 40307825.61 0.0506 0.0172

Saturn 105648-11-01 03:21 G 40308504.50 40308504.64 40308504.79 0.0292 0.0218

Saturn 105649-06-19 05:45 G 40308734.55 40308734.74 40308734.93 0.0289 0.0127

Jupiter 105653-06-15 06:28 G 40310191.58 40310191.77 40310191.96 0.0524 0.0168

Moon 105654-05-28 23:59 G 40310539.35 40310539.50 40310539.65 0.2639 0.0545

Earth 105654-05-29 02:09 G 40310539.43 40310539.59 40310539.75 0.2633 0.0435 *

Jupiter 105658-08-27 19:25 G 40312091.19 40312091.31 40312091.44 0.0508 0.0396

Jupiter 105659-04-21 20:23 G 40312328.24 40312328.35 40312328.46 0.0501 0.0417

Saturn 105664-07-10 19:11 G 40314235.24 40314235.30 40314235.37 0.0269 0.0255

Jupiter 105665-02-18 04:33 G 40314457.49 40314457.69 40314457.89 0.0522 0.0072

Saturn 105665-02-24 18:42 G 40314464.07 40314464.28 40314464.49 0.0271 0.0006

Mars 105666-10-17 02:37 G 40315063.45 40315063.61 40315063.77 0.1576 0.0604

Mars 105667-09-17 11:59 G 40315398.85 40315399.00 40315399.15 0.1967 0.0945

Jupiter 105670-12-25 16:47 G 40316594.01 40316594.20 40316594.39 0.0503 0.0194

Uranus 105672-03-26 19:25 G 40317051.26 40317051.31 40317051.37 0.0143 0.0138

Uranus 105672-11-08 08:37 G 40317277.74 40317277.86 40317277.98 0.0143 0.0120

Uranus 105673-06-22 21:35 G 40317504.25 40317504.40 40317504.56 0.0143 0.0102

Uranus 105674-02-04 10:33 G 40317730.78 40317730.94 40317731.14 0.0143 0.0084

Uranus 105674-09-18 23:59 G 40317957.31 40317957.50 40317957.71 0.0144 0.0065

Uranus 105675-05-03 13:25 G 40318183.86 40318184.06 40318184.28 0.0144 0.0046

Uranus 105675-12-16 02:52 G 40318410.40 40318410.62 40318410.84 0.0144 0.0026

Uranus 105676-07-29 16:04 G 40318636.95 40318637.17 40318637.40 0.0144 0.0008

Jupiter 105676-10-24 03:06 G 40318723.47 40318723.63 40318723.79 0.0520 0.0307

Uranus 105677-03-13 05:30 G 40318863.51 40318863.73 40318863.96 0.0144 0.0012

Uranus 105677-10-25 18:57 G 40319090.07 40319090.29 40319090.51 0.0144 0.0031

Saturn 105678-05-14 02:23 G 40319290.45 40319290.60 40319290.77 0.0292 0.0192

Uranus 105678-06-09 08:09 G 40319316.63 40319316.84 40319317.05 0.0144 0.0050

Saturn 105678-12-30 04:47 G 40319520.52 40319520.70 40319520.89 0.0289 0.0154

Uranus 105679-01-21 21:21 G 40319543.20 40319543.39 40319543.59 0.0144 0.0069

Uranus 105679-09-05 10:33 G 40319769.77 40319769.94 40319770.12 0.0144 0.0088

Uranus 105680-04-18 23:59 G 40319996.35 40319996.50 40319996.65 0.0143 0.0106

Uranus 105680-12-01 12:42 G 40320222.94 40320223.03 40320223.16 0.0143 0.0125

Uranus 105681-07-16 01:40 G 40320449.57 40320449.57 40320449.62 0.0143 0.0143

Jupiter 105682-08-30 13:25 G 40320859.85 40320860.06 40320860.26 0.0505 0.0034

Jupiter 105689-02-20 23:45 G 40323226.34 40323226.49 40323226.65 0.0524 0.0321

Saturn 105694-01-20 19:54 G 40325021.23 40325021.33 40325021.45 0.0269 0.0226

Jupiter 105694-05-05 08:52 G 40325125.70 40325125.87 40325126.05 0.0507 0.0264

Saturn 105694-09-06 19:54 G 40325250.12 40325250.33 40325250.53 0.0271 0.0036

Mars 105700-08-16 00:13 G 40327419.41 40327419.51 40327419.60 0.1574 0.1326

Jupiter 105700-10-27 20:09 G 40327492.15 40327492.34 40327492.54 0.0522 0.0078

Neptune 105705-10-06 22:04 G 40329297.38 40329297.42 40329297.51 0.0090 0.0086

Jupiter 105706-01-09 05:45 G 40329391.69 40329391.74 40329391.80 0.0509 0.0491

Neptune 105706-05-20 10:33 G 40329522.85 40329522.94 40329523.08 0.0090 0.0076

Jupiter 105706-09-03 07:25 G 40329628.66 40329628.81 40329628.97 0.0502 0.0327

Neptune 105706-12-31 23:30 G 40329748.34 40329748.48 40329748.64 0.0090 0.0065

Neptune 105707-08-14 11:59 G 40329973.85 40329974.00 40329974.19 0.0090 0.0055

Saturn 105707-11-25 07:54 G 40330076.65 40330076.83 40330077.03 0.0291 0.0146

Neptune 105708-03-27 00:57 G 40330199.36 40330199.54 40330199.73 0.0090 0.0044

Saturn 105708-07-12 10:04 G 40330306.77 40330306.92 40330307.08 0.0289 0.0199

Neptune 105708-11-07 13:25 G 40330424.87 40330425.06 40330425.27 0.0090 0.0034

Neptune 105709-06-21 01:54 G 40330650.38 40330650.58 40330650.80 0.0090 0.0024

Neptune 105710-02-01 14:37 G 40330875.90 40330876.11 40330876.32 0.0090 0.0013

Neptune 105710-09-15 03:21 G 40331101.43 40331101.64 40331101.86 0.0090 0.0003

Neptune 105711-04-28 16:04 G 40331326.95 40331327.17 40331327.38 0.0090 0.0008

Neptune 105711-12-10 04:18 G 40331552.48 40331552.68 40331552.90 0.0090 0.0019

Jupiter 105712-07-02 14:52 G 40331757.93 40331758.12 40331758.31 0.0521 0.0173

Neptune 105712-07-22 16:47 G 40331778.01 40331778.20 40331778.41 0.0090 0.0029

Uranus 105713-02-23 17:01 G 40331994.18 40331994.21 40331994.28 0.0135 0.0131

Neptune 105713-03-05 05:16 G 40332003.54 40332003.72 40332003.93 0.0090 0.0040

Uranus 105713-10-07 22:18 G 40332220.33 40332220.43 40332220.54 0.0135 0.0116

Neptune 105713-10-16 17:59 G 40332229.09 40332229.25 40332229.44 0.0090 0.0050

Uranus 105714-05-22 02:52 G 40332446.49 40332446.62 40332446.76 0.0135 0.0102

Neptune 105714-05-30 06:42 G 40332454.63 40332454.78 40332454.95 0.0090 0.0060

Uranus 105715-01-03 07:11 G 40332672.66 40332672.80 40332672.98 0.0135 0.0088

Neptune 105715-01-10 18:57 G 40332680.18 40332680.29 40332680.44 0.0090 0.0071

Uranus 105715-08-17 11:59 G 40332898.83 40332899.00 40332899.19 0.0135 0.0073

Neptune 105715-08-24 07:40 G 40332905.75 40332905.82 40332905.93 0.0090 0.0081

Uranus 105716-03-30 16:33 G 40333125.00 40333125.19 40333125.39 0.0135 0.0058

Uranus 105716-11-11 20:52 G 40333351.18 40333351.37 40333351.58 0.0135 0.0043

Uranus 105717-06-26 01:11 G 40333577.35 40333577.55 40333577.77 0.0135 0.0029

Uranus 105718-02-07 05:45 G 40333803.53 40333803.74 40333803.95 0.0135 0.0013

Jupiter 105718-05-09 05:45 G 40333894.54 40333894.74 40333894.94 0.0504 0.0108

Uranus 105718-09-21 10:04 G 40334029.71 40334029.92 40334030.14 0.0135 0.0003

Uranus 105719-05-05 14:23 G 40334255.89 40334256.10 40334256.31 0.0135 0.0016

Uranus 105719-12-17 18:28 G 40334482.07 40334482.27 40334482.49 0.0135 0.0032

Uranus 105720-07-30 22:47 G 40334708.26 40334708.45 40334708.66 0.0135 0.0046

Uranus 105721-03-14 03:06 G 40334934.45 40334934.63 40334934.83 0.0135 0.0061

Uranus 105721-10-26 07:25 G 40335160.65 40335160.81 40335161.00 0.0135 0.0076

Uranus 105722-06-09 11:45 G 40335386.85 40335386.99 40335387.16 0.0135 0.0091

Uranus 105723-01-21 16:18 G 40335613.06 40335613.18 40335613.32 0.0135 0.0105

Saturn 105723-08-03 22:18 G 40335807.29 40335807.43 40335807.58 0.0269 0.0192

Uranus 105723-09-04 20:52 G 40335839.28 40335839.37 40335839.48 0.0135 0.0119

Jupiter 105724-03-07 13:11 G 40336023.94 40336024.05 40336024.18 0.0519 0.0407

Saturn 105724-03-19 21:49 G 40336036.21 40336036.41 40336036.61 0.0271 0.0070

Uranus 105724-04-18 01:25 G 40336065.54 40336065.56 40336065.60 0.0135 0.0133

Jupiter 105724-10-30 13:11 G 40336260.96 40336261.05 40336261.15 0.0526 0.0465

Jupiter 105730-01-12 01:40 G 40338160.37 40338160.57 40338160.78 0.0505 0.0121

Mars 105732-08-14 15:35 G 40339105.98 40339106.15 40339106.32 0.1576 0.0441

Mars 105733-07-15 13:25 G 40339440.89 40339441.06 40339441.23 0.1968 0.0104

Jupiter 105736-07-05 11:01 G 40340526.78 40340526.96 40340527.14 0.0524 0.0224

Saturn 105737-06-06 07:25 G 40340862.62 40340862.81 40340863.01 0.0292 0.0119

Saturn 105738-01-22 09:21 G 40341092.77 40341092.89 40341093.03 0.0289 0.0226

Jupiter 105741-09-16 21:35 G 40342426.26 40342426.40 40342426.55 0.0507 0.0350

Jupiter 105742-05-11 22:04 G 40342663.35 40342663.42 40342663.50 0.0501 0.0462

Jupiter 105748-03-10 08:23 G 40344792.65 40344792.85 40344793.05 0.0522 0.0022

Saturn 105753-02-12 23:01 G 40346593.30 40346593.46 40346593.63 0.0270 0.0164

Saturn 105753-09-29 23:01 G 40346822.27 40346822.46 40346822.65 0.0272 0.0101

Jupiter 105754-01-14 18:42 G 40346929.10 40346929.28 40346929.47 0.0503 0.0239

Pluto 105754-05-23 07:54 G 40347057.67 40347057.83 40347058.04 0.0064 0.0035

Pluto 105755-01-03 11:45 G 40347282.78 40347282.99 40347283.21 0.0064 0.0005

Pluto 105755-08-16 14:52 G 40347507.98 40347508.12 40347508.29 0.0064 0.0045

Uranus 105756-07-09 13:11 G 40347835.96 40347836.05 40347836.16 0.0143 0.0126

Uranus 105757-02-21 02:09 G 40348062.46 40348062.59 40348062.75 0.0143 0.0109

Uranus 105757-10-05 15:21 G 40348288.98 40348289.14 40348289.33 0.0143 0.0090

Uranus 105758-05-20 04:33 G 40348515.51 40348515.69 40348515.89 0.0143 0.0072

Uranus 105759-01-01 17:59 G 40348742.04 40348742.25 40348742.46 0.0144 0.0053

Uranus 105759-08-16 07:11 G 40348968.59 40348968.80 40348969.02 0.0144 0.0034

Jupiter 105759-11-14 05:01 G 40349058.54 40349058.71 40349058.89 0.0520 0.0262

Uranus 105760-03-29 20:37 G 40349195.14 40349195.36 40349195.58 0.0144 0.0015

Uranus 105760-11-11 09:49 G 40349421.69 40349421.91 40349422.14 0.0144 0.0005

Uranus 105761-06-25 23:01 G 40349648.25 40349648.46 40349648.69 0.0144 0.0024

Uranus 105762-02-07 12:13 G 40349874.81 40349875.01 40349875.23 0.0144 0.0043

Uranus 105762-09-22 01:25 G 40350101.37 40350101.56 40350101.77 0.0144 0.0062

Uranus 105763-05-06 14:52 G 40350327.95 40350328.12 40350328.32 0.0144 0.0081

Uranus 105763-12-19 04:18 G 40350554.52 40350554.68 40350554.84 0.0144 0.0099

Uranus 105764-08-01 17:01 G 40350781.11 40350781.21 40350781.36 0.0143 0.0118

Uranus 105765-03-16 06:13 G 40351007.71 40351007.76 40351007.86 0.0143 0.0136

Jupiter 105765-09-19 16:33 G 40351194.99 40351195.19 40351195.40 0.0505 0.0018

Mars 105766-06-13 12:57 G 40351461.99 40351462.04 40351462.09 0.1574 0.1491

Saturn 105766-12-17 12:42 G 40351648.83 40351649.03 40351649.24 0.0291 0.0073

Saturn 105767-08-04 14:37 G 40351879.04 40351879.11 40351879.19 0.0289 0.0270

Earth 105767-12-01 05:30 G 40351997.60 40351997.73 40351997.87 0.2699 0.1222

Moon 105767-12-01 08:23 G 40351997.74 40351997.85 40351997.96 0.2706 0.1791 *

Jupiter 105771-07-19 23:59 G 40353324.46 40353324.50 40353324.55 0.0518 0.0504

Jupiter 105772-03-12 23:01 G 40353561.32 40353561.46 40353561.61 0.0525 0.0361

Earth 105775-11-28 22:47 G 40354917.36 40354917.45 40354917.54 0.2699 0.2182

Moon 105775-11-29 04:04 G 40354917.54 40354917.67 40354917.80 0.2697 0.1360 *

Jupiter 105777-05-25 14:09 G 40355460.90 40355461.09 40355461.28 0.0506 0.0209

Saturn 105782-08-26 01:54 G 40357379.41 40357379.58 40357379.78 0.0269 0.0129

Saturn 105783-04-12 01:40 G 40357608.40 40357608.57 40357608.76 0.0271 0.0136

Jupiter 105783-11-16 20:37 G 40357827.17 40357827.36 40357827.55 0.0523 0.0119

Neptune 105787-11-21 20:52 G 40359293.35 40359293.37 40359293.39 0.0088 0.0087

Neptune 105788-07-04 10:18 G 40359518.82 40359518.93 40359519.03 0.0088 0.0077

Jupiter 105789-01-28 09:49 G 40359726.81 40359726.91 40359727.01 0.0508 0.0440

Neptune 105789-02-14 23:44 G 40359744.35 40359744.49 40359744.63 0.0088 0.0067

Jupiter 105789-09-22 10:47 G 40359963.82 40359963.95 40359964.09 0.0501 0.0377

Neptune 105789-09-28 13:11 G 40359969.88 40359970.05 40359970.22 0.0088 0.0057

Neptune 105790-05-12 02:23 G 40360195.42 40360195.60 40360195.80 0.0088 0.0047

Neptune 105790-12-23 15:49 G 40360420.96 40360421.16 40360421.37 0.0088 0.0037

Neptune 105791-08-06 05:16 G 40360646.51 40360646.72 40360646.94 0.0088 0.0027

Neptune 105792-03-18 18:56 G 40360872.07 40360872.29 40360872.51 0.0088 0.0017

Neptune 105792-10-30 08:23 G 40361097.63 40361097.85 40361098.08 0.0088 0.0006

Neptune 105793-06-12 21:49 G 40361323.18 40361323.41 40361323.63 0.0088 0.0004

Neptune 105794-01-24 11:16 G 40361548.74 40361548.97 40361549.19 0.0088 0.0014

Neptune 105794-09-07 00:13 G 40361774.31 40361774.51 40361774.74 0.0088 0.0025

Neptune 105795-04-20 13:54 G 40361999.88 40362000.08 40362000.30 0.0088 0.0035

Jupiter 105795-07-22 19:11 G 40362093.10 40362093.30 40362093.49 0.0521 0.0119

Neptune 105795-12-02 03:06 G 40362225.46 40362225.63 40362225.84 0.0088 0.0045

Saturn 105796-06-28 12:42 G 40362434.82 40362435.03 40362435.24 0.0291 0.0045

Neptune 105796-07-14 16:32 G 40362451.03 40362451.19 40362451.38 0.0088 0.0055

Uranus 105796-10-24 05:59 G 40362552.73 40362552.75 40362552.77 0.0135 0.0134

Neptune 105797-02-25 05:59 G 40362676.62 40362676.75 40362676.92 0.0088 0.0065

Uranus 105797-06-07 10:32 G 40362778.86 40362778.94 40362779.04 0.0135 0.0120

Neptune 105797-10-08 19:25 G 40362902.21 40362902.31 40362902.45 0.0088 0.0075

Uranus 105798-01-19 15:06 G 40363005.02 40363005.13 40363005.28 0.0135 0.0106

Neptune 105798-05-22 08:52 G 40363127.84 40363127.87 40363127.94 0.0088 0.0085

Mars 105798-06-12 04:32 G 40363148.51 40363148.69 40363148.86 0.1575 0.0278

Uranus 105798-09-02 19:54 G 40363231.19 40363231.33 40363231.50 0.0135 0.0092

Uranus 105799-04-17 00:42 G 40363457.36 40363457.53 40363457.71 0.0135 0.0077

Mars 105799-05-12 15:20 G 40363482.98 40363483.14 40363483.30 0.1969 0.0714

Uranus 105799-11-29 05:16 G 40363683.53 40363683.72 40363683.91 0.0135 0.0062

Uranus 105800-07-13 09:20 G 40363909.70 40363909.89 40363910.10 0.0135 0.0048

Uranus 105801-02-24 13:54 G 40364135.88 40364136.08 40364136.29 0.0135 0.0033

Jupiter 105801-05-29 07:25 G 40364229.61 40364229.81 40364230.01 0.0503 0.0153

Uranus 105801-10-08 18:28 G 40364362.06 40364362.27 40364362.48 0.0135 0.0018

Uranus 105802-05-22 22:47 G 40364588.24 40364588.45 40364588.66 0.0135 0.0003

Uranus 105803-01-04 03:06 G 40364814.42 40364814.63 40364814.84 0.0135 0.0012

Uranus 105803-08-18 07:25 G 40365040.60 40365040.81 40365041.02 0.0135 0.0027

Uranus 105804-03-31 11:30 G 40365266.79 40365266.98 40365267.19 0.0135 0.0042

Uranus 105804-11-12 15:49 G 40365492.98 40365493.16 40365493.36 0.0135 0.0057

Uranus 105805-06-26 20:08 G 40365719.17 40365719.34 40365719.53 0.0135 0.0072

Uranus 105806-02-08 00:42 G 40365945.37 40365945.53 40365945.70 0.0135 0.0086

Uranus 105806-09-22 05:01 G 40366171.58 40366171.71 40366171.86 0.0135 0.0101

Jupiter 105807-03-28 17:01 G 40366359.07 40366359.21 40366359.36 0.0519 0.0357

Uranus 105807-05-06 09:35 G 40366397.80 40366397.90 40366398.02 0.0135 0.0115

Jupiter 105807-11-20 16:47 G 40366596.16 40366596.20 40366596.24 0.0526 0.0515

Uranus 105807-12-18 14:08 G 40366624.04 40366624.09 40366624.16 0.0135 0.0129

Saturn 105812-03-08 03:06 G 40368165.44 40368165.63 40368165.83 0.0270 0.0098

Saturn 105812-10-23 02:52 G 40368394.46 40368394.62 40368394.79 0.0272 0.0168

Jupiter 105813-02-01 03:20 G 40368495.43 40368495.64 40368495.84 0.0505 0.0077

Jupiter 105819-07-26 12:42 G 40370861.86 40370862.03 40370862.20 0.0524 0.0269

Jupiter 105824-10-07 00:28 G 40372761.35 40372761.52 40372761.68 0.0507 0.0305

Saturn 105826-01-09 18:28 G 40373221.06 40373221.27 40373221.49 0.0291 0.0004

Jupiter 105831-03-31 06:42 G 40375127.58 40375127.78 40375127.98 0.0522 0.0017

Jupiter 105837-02-03 23:16 G 40377264.30 40377264.47 40377264.64 0.0502 0.0291

Uranus 105840-03-09 20:08 G 40378394.25 40378394.34 40378394.42 0.0143 0.0132

Uranus 105840-10-22 08:37 G 40378620.75 40378620.86 40378621.01 0.0143 0.0115

Uranus 105841-06-05 21:35 G 40378847.25 40378847.40 40378847.58 0.0143 0.0097

Saturn 105841-09-18 06:56 G 40378951.59 40378951.79 40378952.00 0.0270 0.0061

Uranus 105842-01-18 10:47 G 40379073.77 40379073.95 40379074.15 0.0143 0.0078

Saturn 105842-05-05 06:42 G 40379180.66 40379180.78 40379180.93 0.0272 0.0206

Uranus 105842-09-01 23:59 G 40379300.31 40379300.50 40379300.71 0.0143 0.0059

Jupiter 105842-12-04 04:18 G 40379393.50 40379393.68 40379393.86 0.0520 0.0223

Uranus 105843-04-16 13:11 G 40379526.85 40379527.05 40379527.27 0.0144 0.0041

Pluto 105843-11-26 16:04 G 40379751.02 40379751.17 40379751.37 0.0080 0.0052

Uranus 105843-11-29 02:37 G 40379753.39 40379753.61 40379753.83 0.0144 0.0021

Pluto 105844-07-09 03:20 G 40379976.44 40379976.64 40379976.86 0.0080 0.0031

Uranus 105844-07-12 15:49 G 40379979.94 40379980.16 40379980.38 0.0144 0.0002

Uranus 105845-02-24 05:01 G 40380206.49 40380206.71 40380206.93 0.0144 0.0017

Uranus 105845-10-08 18:13 G 40380433.05 40380433.26 40380433.48 0.0144 0.0036

Uranus 105846-05-23 07:40 G 40380659.62 40380659.82 40380660.03 0.0144 0.0055

Uranus 105847-01-04 20:37 G 40380886.18 40380886.36 40380886.56 0.0144 0.0074

Uranus 105847-08-19 10:18 G 40381112.76 40381112.93 40381113.10 0.0144 0.0092

Uranus 105848-04-01 23:16 G 40381339.34 40381339.47 40381339.62 0.0143 0.0111

Jupiter 105848-10-09 19:25 G 40381530.11 40381530.31 40381530.52 0.0504 0.0064

Uranus 105848-11-14 12:28 G 40381565.94 40381566.02 40381566.13 0.0143 0.0129

Jupiter 105854-08-09 03:20 G 40383659.55 40383659.64 40383659.74 0.0518 0.0455

Jupiter 105855-04-03 02:52 G 40383896.50 40383896.62 40383896.74 0.0525 0.0415

Saturn 105855-07-22 19:40 G 40384007.10 40384007.32 40384007.53 0.0291 0.0033

Jupiter 105860-06-14 15:20 G 40385795.94 40385796.14 40385796.33 0.0506 0.0165

Mars 105864-04-09 17:30 G 40387191.05 40387191.23 40387191.41 0.1575 0.0117

Mars 105865-03-09 16:47 G 40387525.10 40387525.20 40387525.31 0.1969 0.1553

Jupiter 105866-12-06 23:44 G 40388162.30 40388162.49 40388162.68 0.0523 0.0169

Neptune 105870-01-09 07:11 G 40389291.78 40389291.80 40389291.82 0.0090 0.0089

Neptune 105870-08-22 19:40 G 40389517.23 40389517.32 40389517.43 0.0090 0.0079

Saturn 105871-03-31 08:37 G 40389737.65 40389737.86 40389738.07 0.0270 0.0029

Neptune 105871-04-05 08:08 G 40389742.72 40389742.84 40389743.00 0.0090 0.0069

Saturn 105871-11-15 08:23 G 40389966.76 40389966.85 40389966.96 0.0272 0.0239

Neptune 105871-11-16 21:06 G 40389968.22 40389968.38 40389968.55 0.0090 0.0058

Jupiter 105872-02-18 10:04 G 40390061.80 40390061.92 40390062.06 0.0508 0.0401

Neptune 105872-06-29 09:35 G 40390193.72 40390193.90 40390194.09 0.0090 0.0048

Jupiter 105872-10-12 11:30 G 40390298.87 40390298.98 40390299.09 0.0502 0.0418

Neptune 105873-02-09 22:04 G 40390419.24 40390419.42 40390419.63 0.0090 0.0038

Neptune 105873-09-23 11:01 G 40390644.76 40390644.96 40390645.17 0.0090 0.0027

Neptune 105874-05-06 23:30 G 40390870.27 40390870.48 40390870.70 0.0090 0.0017

Neptune 105874-12-18 11:59 G 40391095.79 40391096.00 40391096.22 0.0090 0.0007

Neptune 105875-08-01 00:42 G 40391321.31 40391321.53 40391321.74 0.0090 0.0004

Neptune 105876-03-13 13:11 G 40391546.84 40391547.05 40391547.27 0.0090 0.0015

Neptune 105876-10-25 01:54 G 40391772.37 40391772.58 40391772.79 0.0090 0.0025

Neptune 105877-06-07 14:08 G 40391997.91 40391998.09 40391998.30 0.0090 0.0036

Neptune 105878-01-19 02:52 G 40392223.44 40392223.62 40392223.81 0.0090 0.0046

Jupiter 105878-08-11 20:08 G 40392428.14 40392428.34 40392428.54 0.0521 0.0075

Neptune 105878-09-01 15:20 G 40392448.99 40392449.14 40392449.32 0.0090 0.0057

Neptune 105879-04-15 03:49 G 40392674.54 40392674.66 40392674.82 0.0090 0.0067

Neptune 105879-11-26 16:32 G 40392900.09 40392900.19 40392900.31 0.0090 0.0077

Neptune 105880-07-09 04:47 G 40393125.68 40393125.70 40393125.77 0.0090 0.0088

Uranus 105881-02-05 22:18 G 40393337.36 40393337.43 40393337.53 0.0135 0.0124

Uranus 105881-09-20 03:06 G 40393563.53 40393563.63 40393563.77 0.0135 0.0110

Uranus 105882-05-04 07:54 G 40393789.70 40393789.83 40393789.99 0.0135 0.0096

Uranus 105882-12-16 12:42 G 40394015.87 40394016.03 40394016.20 0.0135 0.0081

Uranus 105883-07-30 17:16 G 40394242.04 40394242.22 40394242.41 0.0135 0.0066

Uranus 105884-03-12 21:35 G 40394468.21 40394468.40 40394468.61 0.0135 0.0052

Saturn 105884-06-15 22:32 G 40394563.37 40394563.44 40394563.53 0.0293 0.0271

Jupiter 105884-06-17 09:20 G 40394564.70 40394564.89 40394565.08 0.0503 0.0198

Uranus 105884-10-25 02:08 G 40394694.39 40394694.59 40394694.80 0.0135 0.0037

Saturn 105885-02-01 01:54 G 40394793.37 40394793.58 40394793.79 0.0290 0.0080

Uranus 105885-06-08 06:42 G 40394920.57 40394920.78 40394920.99 0.0135 0.0022

Uranus 105886-01-20 11:01 G 40395146.75 40395146.96 40395147.17 0.0135 0.0007

Uranus 105886-09-03 15:20 G 40395372.93 40395373.14 40395373.36 0.0135 0.0008

Uranus 105887-04-17 19:40 G 40395599.12 40395599.32 40395599.54 0.0135 0.0023

Uranus 105887-11-29 23:59 G 40395825.30 40395825.50 40395825.71 0.0135 0.0038

Uranus 105888-07-13 04:18 G 40396051.49 40396051.68 40396051.88 0.0135 0.0052

Uranus 105889-02-24 08:52 G 40396277.68 40396277.87 40396278.05 0.0135 0.0067

Uranus 105889-10-08 13:11 G 40396503.89 40396504.05 40396504.23 0.0135 0.0082

Jupiter 105890-04-16 14:23 G 40396693.95 40396694.10 40396694.26 0.0519 0.0324

Uranus 105890-05-22 17:44 G 40396730.10 40396730.24 40396730.39 0.0135 0.0096

Uranus 105891-01-03 21:49 G 40396956.31 40396956.41 40396956.55 0.0135 0.0111

Uranus 105891-08-18 02:23 G 40397182.54 40397182.60 40397182.70 0.0135 0.0125

Jupiter 105896-02-21 06:56 G 40398830.58 40398830.79 40398830.99 0.0505 0.0027

Earth 105897-05-31 01:11 G 40399295.39 40399295.55 40399295.71 0.2633 0.0369

Moon 105897-05-31 06:56 G 40399295.64 40399295.79 40399295.93 0.2636 0.0975 *

Saturn 105900-02-24 14:08 G 40400295.03 40400295.09 40400295.18 0.0268 0.0250

Saturn 105900-10-11 13:25 G 40400523.85 40400524.06 40400524.27 0.0270 0.0011

Jupiter 105902-08-15 11:01 G 40401196.80 40401196.96 40401197.12 0.0524 0.0307

Moon 105905-05-29 19:11 G 40402215.25 40402215.30 40402215.35 0.2630 0.2490

Jupiter 105907-10-28 02:08 G 40403096.42 40403096.59 40403096.77 0.0507 0.0259

Saturn 105913-12-28 01:40 G 40405349.45 40405349.57 40405349.71 0.0293 0.0234

Jupiter 105914-04-20 09:06 G 40405462.68 40405462.88 40405463.08 0.0522 0.0066

Saturn 105914-08-15 04:47 G 40405579.50 40405579.70 40405579.90 0.0290 0.0117

Jupiter 105919-07-02 21:20 G 40407362.34 40407362.39 40407362.45 0.0509 0.0491

Jupiter 105920-02-24 23:16 G 40407599.31 40407599.47 40407599.62 0.0502 0.0331

Uranus 105923-11-09 02:23 G 40408952.55 40408952.60 40408952.67 0.0143 0.0137

Uranus 105924-06-22 14:52 G 40409179.02 40409179.12 40409179.26 0.0143 0.0120

Uranus 105925-02-04 03:49 G 40409405.52 40409405.66 40409405.83 0.0143 0.0102

Uranus 105925-09-18 17:16 G 40409632.04 40409632.22 40409632.40 0.0143 0.0084

Jupiter 105925-12-24 06:28 G 40409728.58 40409728.77 40409728.96 0.0520 0.0177

Uranus 105926-05-03 05:59 G 40409858.57 40409858.75 40409858.96 0.0143 0.0066

Uranus 105926-12-15 19:11 G 40410085.10 40410085.30 40410085.52 0.0143 0.0047

Uranus 105927-07-30 08:23 G 40410311.64 40410311.85 40410312.07 0.0143 0.0028

Uranus 105928-03-12 21:35 G 40410538.18 40410538.40 40410538.63 0.0143 0.0010

Uranus 105928-10-25 10:47 G 40410764.73 40410764.95 40410765.18 0.0143 0.0011

Uranus 105929-06-08 23:59 G 40410991.29 40410991.50 40410991.73 0.0143 0.0029

Saturn 105929-09-06 16:18 G 40411081.06 40411081.18 40411081.30 0.0269 0.0218

Uranus 105930-01-21 13:25 G 40411217.85 40411218.06 40411218.27 0.0143 0.0048

Mars 105930-02-06 05:59 G 40411233.58 40411233.75 40411233.93 0.1574 0.0061

Saturn 105930-04-23 15:35 G 40411309.94 40411310.15 40411310.36 0.0271 0.0044

Uranus 105930-09-05 02:23 G 40411444.41 40411444.60 40411444.81 0.0143 0.0067

Uranus 105931-04-19 15:49 G 40411670.99 40411671.16 40411671.35 0.0143 0.0085

Jupiter 105931-10-30 18:42 G 40411865.08 40411865.28 40411865.49 0.0504 0.0103

Uranus 105931-12-02 05:01 G 40411897.57 40411897.71 40411897.87 0.0143 0.0104

Uranus 105932-07-15 18:13 G 40412124.15 40412124.26 40412124.39 0.0143 0.0122

Uranus 105933-02-27 07:11 G 40412350.77 40412350.80 40412350.87 0.0143 0.0140

Jupiter 105937-08-29 03:35 G 40413994.53 40413994.65 40413994.77 0.0518 0.0416

Jupiter 105938-04-23 02:37 G 40414231.52 40414231.61 40414231.71 0.0525 0.0455

Jupiter 105943-07-05 15:35 G 40416130.95 40416131.15 40416131.36 0.0506 0.0125

Saturn 105943-07-10 09:20 G 40416135.73 40416135.89 40416136.07 0.0292 0.0182

Saturn 105944-02-25 11:59 G 40416365.83 40416366.00 40416366.19 0.0290 0.0167

Jupiter 105949-12-26 19:54 G 40418497.15 40418497.33 40418497.51 0.0523 0.0200

Neptune 105952-10-07 18:13 G 40419513.19 40419513.26 40419513.37 0.0088 0.0080

Neptune 105953-05-21 07:40 G 40419738.70 40419738.82 40419738.97 0.0088 0.0070

Neptune 105954-01-01 21:06 G 40419964.22 40419964.38 40419964.55 0.0088 0.0060

Neptune 105954-08-15 10:32 G 40420189.76 40420189.94 40420190.13 0.0088 0.0050

Jupiter 105955-03-10 12:13 G 40420396.87 40420397.01 40420397.16 0.0508 0.0355

Neptune 105955-03-28 23:59 G 40420415.31 40420415.50 40420415.71 0.0088 0.0040

Jupiter 105955-11-02 13:25 G 40420633.99 40420634.06 40420634.14 0.0501 0.0464

Neptune 105955-11-09 13:25 G 40420640.86 40420641.06 40420641.28 0.0088 0.0030

Neptune 105956-06-22 02:52 G 40420866.41 40420866.62 40420866.85 0.0088 0.0020

Neptune 105957-02-02 16:18 G 40421091.97 40421092.18 40421092.41 0.0088 0.0010

Neptune 105957-09-16 05:59 G 40421317.53 40421317.75 40421317.98 0.0088 0.0001

Neptune 105958-04-29 19:25 G 40421543.09 40421543.31 40421543.54 0.0088 0.0011

Neptune 105958-12-11 08:37 G 40421768.65 40421768.86 40421769.09 0.0088 0.0022

Saturn 105959-03-19 22:18 G 40421867.27 40421867.43 40421867.59 0.0269 0.0175

Neptune 105959-07-24 22:04 G 40421994.22 40421994.42 40421994.64 0.0088 0.0032

Saturn 105959-11-03 21:35 G 40422096.21 40422096.40 40422096.60 0.0271 0.0088

Neptune 105960-03-06 11:30 G 40422219.80 40422219.98 40422220.19 0.0088 0.0042

Neptune 105960-10-18 00:56 G 40422445.37 40422445.54 40422445.74 0.0088 0.0052

Neptune 105961-05-31 14:23 G 40422670.96 40422671.10 40422671.27 0.0088 0.0062

Jupiter 105961-08-31 17:01 G 40422763.01 40422763.21 40422763.41 0.0521 0.0043

Neptune 105962-01-12 03:35 G 40422896.54 40422896.65 40422896.80 0.0088 0.0072

Neptune 105962-08-25 17:01 G 40423122.15 40423122.21 40423122.31 0.0088 0.0082

Uranus 105964-10-07 09:49 G 40423895.86 40423895.91 40423895.99 0.0135 0.0128

Uranus 105965-05-21 14:37 G 40424122.01 40424122.11 40424122.24 0.0135 0.0114

Uranus 105966-01-02 19:40 G 40424348.18 40424348.32 40424348.47 0.0135 0.0099

Uranus 105966-08-17 00:13 G 40424574.35 40424574.51 40424574.68 0.0135 0.0085

Uranus 105967-03-31 05:01 G 40424800.53 40424800.71 40424800.89 0.0135 0.0070

Jupiter 105967-07-08 09:20 G 40424899.71 40424899.89 40424900.07 0.0503 0.0239

Uranus 105967-11-12 09:20 G 40425026.71 40425026.89 40425027.09 0.0135 0.0056

Uranus 105968-06-25 13:54 G 40425252.88 40425253.08 40425253.29 0.0135 0.0041

Uranus 105969-02-06 18:28 G 40425479.06 40425479.27 40425479.48 0.0135 0.0026

Uranus 105969-09-20 23:01 G 40425705.25 40425705.46 40425705.67 0.0135 0.0011

Uranus 105970-05-05 03:20 G 40425931.43 40425931.64 40425931.86 0.0135 0.0004

Uranus 105970-12-17 07:40 G 40426157.61 40426157.82 40426158.04 0.0135 0.0019

Uranus 105971-07-31 11:59 G 40426383.80 40426384.00 40426384.21 0.0135 0.0034

Uranus 105972-03-13 16:32 G 40426609.99 40426610.19 40426610.39 0.0135 0.0048

Uranus 105972-10-25 20:52 G 40426836.19 40426836.37 40426836.57 0.0135 0.0063

Saturn 105973-01-19 14:08 G 40426921.91 40426922.09 40426922.28 0.0292 0.0141

Jupiter 105973-05-06 15:06 G 40427028.97 40427029.13 40427029.30 0.0519 0.0282

Uranus 105973-06-09 01:11 G 40427062.39 40427062.55 40427062.74 0.0135 0.0078

Saturn 105973-09-06 16:32 G 40427152.04 40427152.19 40427152.34 0.0290 0.0207

Uranus 105974-01-21 05:44 G 40427288.60 40427288.74 40427288.91 0.0135 0.0092

Uranus 105974-09-04 10:32 G 40427514.81 40427514.94 40427515.07 0.0135 0.0106

Uranus 105975-04-18 15:06 G 40427741.04 40427741.13 40427741.23 0.0135 0.0120

Uranus 105975-11-30 19:54 G 40427967.31 40427967.33 40427967.34 0.0135 0.0134

Jupiter 105979-03-13 05:30 G 40429165.52 40429165.73 40429165.94 0.0505 0.0010

Jupiter 105985-01-09 13:11 G 40431295.04 40431295.05 40431295.06 0.0517 0.0516

Jupiter 105985-09-03 11:59 G 40431531.86 40431532.00 40431532.15 0.0524 0.0351

Saturn 105988-09-29 00:42 G 40432653.36 40432653.53 40432653.71 0.0269 0.0142

Saturn 105989-05-16 00:13 G 40432882.33 40432882.51 40432882.70 0.0271 0.0123

Jupiter 105990-11-16 00:13 G 40433431.32 40433431.51 40433431.69 0.0507 0.0225

Mars 105995-12-04 19:25 G 40435276.13 40435276.31 40435276.48 0.1574 0.0210

Jupiter 105997-05-09 07:54 G 40435797.64 40435797.83 40435798.03 0.0522 0.0104

107TH MILLENNIUM CE

This is a list of transits of Venus in the 107th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Pluto 106002-04-27 11:44 G 40437611.89 40437611.99 40437612.14 0.0064 0.0053

Jupiter 106002-07-21 19:54 G 40437697.25 40437697.33 40437697.43 0.0509 0.0456

Saturn 106002-08-01 22:32 G 40437708.24 40437708.44 40437708.65 0.0291 0.0088

Pluto 106002-12-08 15:35 G 40437836.94 40437837.15 40437837.36 0.0064 0.0013

Jupiter 106003-03-15 22:18 G 40437934.29 40437934.43 40437934.57 0.0502 0.0369

Saturn 106003-03-20 00:42 G 40437938.45 40437938.53 40437938.64 0.0289 0.0259

Pluto 106003-07-21 18:28 G 40438062.09 40438062.27 40438062.49 0.0064 0.0027

Uranus 106007-07-09 10:04 G 40439510.91 40439510.92 40439510.97 0.0143 0.0142

Uranus 106008-02-20 23:01 G 40439737.37 40439737.46 40439737.58 0.0143 0.0124

Uranus 106008-10-04 12:13 G 40439963.86 40439964.01 40439964.16 0.0143 0.0106

Jupiter 106009-01-12 01:54 G 40440063.38 40440063.58 40440063.77 0.0520 0.0149

Uranus 106009-05-19 00:56 G 40440190.37 40440190.54 40440190.72 0.0143 0.0089

Uranus 106009-12-31 13:54 G 40440416.89 40440417.08 40440417.28 0.0143 0.0070

Uranus 106010-08-15 03:06 G 40440643.42 40440643.63 40440643.84 0.0143 0.0052

Moon 106010-12-03 04:04 G 40440753.53 40440753.67 40440753.81 0.2703 0.0918

Earth 106010-12-03 08:52 G 40440753.74 40440753.87 40440754.00 0.2699 0.1332 *

Uranus 106011-03-29 16:04 G 40440869.96 40440870.17 40440870.40 0.0143 0.0034

Uranus 106011-11-11 05:30 G 40441096.51 40441096.73 40441096.95 0.0143 0.0014

Uranus 106012-06-24 18:42 G 40441323.05 40441323.28 40441323.50 0.0143 0.0005

Uranus 106013-02-06 07:54 G 40441549.61 40441549.83 40441550.05 0.0143 0.0024

Uranus 106013-09-20 20:52 G 40441776.17 40441776.37 40441776.59 0.0143 0.0043

Uranus 106014-05-05 10:18 G 40442002.74 40442002.93 40442003.14 0.0143 0.0062

Jupiter 106014-11-18 19:11 G 40442200.10 40442200.30 40442200.50 0.0504 0.0145

Uranus 106014-12-17 23:44 G 40442229.31 40442229.49 40442229.68 0.0143 0.0080

Uranus 106015-08-01 12:42 G 40442455.88 40442456.03 40442456.21 0.0143 0.0099

Uranus 106016-03-15 01:54 G 40442682.47 40442682.58 40442682.73 0.0143 0.0117

Uranus 106016-10-27 15:06 G 40442909.07 40442909.13 40442909.23 0.0143 0.0134

Saturn 106018-04-11 07:40 G 40443439.62 40443439.82 40443440.01 0.0270 0.0097

Saturn 106018-11-26 07:11 G 40443668.65 40443668.80 40443668.97 0.0272 0.0169

Earth 106018-12-01 01:40 G 40443673.48 40443673.57 40443673.67 0.2698 0.2091

Moon 106018-12-01 01:11 G 40443673.50 40443673.55 40443673.61 0.2706 0.2516 *

Jupiter 106020-09-16 23:01 G 40444329.34 40444329.46 40444329.60 0.0518 0.0388

Jupiter 106021-05-11 22:18 G 40444566.36 40444566.43 40444566.51 0.0525 0.0485

Jupiter 106026-07-24 14:23 G 40446465.90 40446466.10 40446466.30 0.0506 0.0089

Mars 106027-12-03 10:32 G 40446962.92 40446962.94 40446962.96 0.1575 0.1559

Mars 106028-11-02 00:13 G 40447297.39 40447297.51 40447297.64 0.1969 0.1306

Saturn 106032-02-12 05:44 G 40448494.53 40448494.74 40448494.96 0.0291 0.0039

Jupiter 106033-01-14 19:40 G 40448832.14 40448832.32 40448832.49 0.0524 0.0242

Neptune 106034-11-25 05:01 G 40449511.62 40449511.71 40449511.79 0.0090 0.0082

Neptune 106035-07-08 17:16 G 40449737.10 40449737.22 40449737.36 0.0090 0.0072

Neptune 106036-02-19 05:44 G 40449962.60 40449962.74 40449962.91 0.0090 0.0062

Neptune 106036-10-01 18:28 G 40450188.11 40450188.27 40450188.46 0.0090 0.0052

Neptune 106037-05-15 07:11 G 40450413.62 40450413.80 40450414.00 0.0090 0.0041

Neptune 106037-12-26 19:40 G 40450639.13 40450639.32 40450639.54 0.0090 0.0031

Jupiter 106038-03-29 09:49 G 40450731.75 40450731.91 40450732.07 0.0508 0.0321

Neptune 106038-08-09 08:37 G 40450864.65 40450864.86 40450865.07 0.0090 0.0020

Jupiter 106038-11-21 10:32 G 40450968.92 40450968.94 40450968.97 0.0501 0.0496

Neptune 106039-03-22 21:06 G 40451090.17 40451090.38 40451090.60 0.0090 0.0010

Neptune 106039-11-03 09:49 G 40451315.69 40451315.91 40451316.12 0.0090 0.0002

Neptune 106040-06-15 22:18 G 40451541.21 40451541.43 40451541.64 0.0090 0.0011

Neptune 106041-01-27 10:32 G 40451766.74 40451766.94 40451767.16 0.0090 0.0022

Neptune 106041-09-09 23:16 G 40451992.28 40451992.47 40451992.68 0.0090 0.0032

Neptune 106042-04-23 11:30 G 40452217.81 40452217.98 40452218.19 0.0090 0.0043

Neptune 106042-12-05 00:13 G 40452443.35 40452443.51 40452443.69 0.0090 0.0053

Neptune 106043-07-18 12:42 G 40452668.89 40452669.03 40452669.19 0.0090 0.0063

Neptune 106044-02-29 00:56 G 40452894.44 40452894.54 40452894.69 0.0090 0.0074

Jupiter 106044-09-19 16:47 G 40453098.00 40453098.20 40453098.40 0.0521 0.0004

Neptune 106044-10-11 13:40 G 40453120.02 40453120.07 40453120.17 0.0090 0.0084

Saturn 106047-10-22 10:47 G 40454225.75 40454225.95 40454226.15 0.0270 0.0061

Uranus 106048-06-06 21:35 G 40454454.36 40454454.40 40454454.46 0.0135 0.0132

Saturn 106048-06-07 10:47 G 40454454.82 40454454.95 40454455.08 0.0272 0.0206

Uranus 106049-01-19 02:23 G 40454680.51 40454680.60 40454680.72 0.0135 0.0118

Uranus 106049-09-02 07:11 G 40454906.68 40454906.80 40454906.95 0.0135 0.0104

Uranus 106050-04-16 11:59 G 40455132.85 40455133.00 40455133.17 0.0135 0.0089

Jupiter 106050-07-27 05:59 G 40455234.58 40455234.75 40455234.93 0.0503 0.0270

Uranus 106050-11-28 16:47 G 40455359.03 40455359.20 40455359.38 0.0135 0.0074

Uranus 106051-07-12 21:06 G 40455585.20 40455585.38 40455585.58 0.0135 0.0060

Uranus 106052-02-24 01:40 G 40455811.38 40455811.57 40455811.78 0.0135 0.0045

Uranus 106052-10-07 06:28 G 40456037.57 40456037.77 40456037.98 0.0135 0.0030

Uranus 106053-05-21 11:01 G 40456263.75 40456263.96 40456264.17 0.0135 0.0015

Uranus 106054-01-02 15:20 G 40456489.93 40456490.14 40456490.36 0.0135 0.0003

Uranus 106054-08-16 19:54 G 40456716.12 40456716.33 40456716.54 0.0135 0.0015

Uranus 106055-03-31 00:13 G 40456942.31 40456942.51 40456942.72 0.0135 0.0030

Uranus 106055-11-12 04:32 G 40457168.50 40457168.69 40457168.90 0.0135 0.0045

Jupiter 106056-05-25 13:11 G 40457363.88 40457364.05 40457364.23 0.0519 0.0247

Uranus 106056-06-25 09:06 G 40457394.70 40457394.88 40457395.08 0.0135 0.0059

Uranus 106057-02-06 13:25 G 40457620.90 40457621.06 40457621.25 0.0135 0.0074

Uranus 106057-09-20 18:13 G 40457847.10 40457847.26 40457847.43 0.0135 0.0088

Uranus 106058-05-04 22:32 G 40458073.32 40458073.44 40458073.59 0.0135 0.0103

Uranus 106058-12-17 03:06 G 40458299.54 40458299.63 40458299.75 0.0135 0.0117

Uranus 106059-07-31 07:25 G 40458525.78 40458525.81 40458525.89 0.0135 0.0131

Saturn 106061-08-24 14:52 G 40459280.90 40459281.12 40459281.33 0.0291 0.0016

Mars 106061-10-01 07:54 G 40459318.65 40459318.83 40459319.00 0.1574 0.0381

Jupiter 106062-04-01 02:52 G 40459500.41 40459500.62 40459500.82 0.0505 0.0044

Jupiter 106068-01-29 08:08 G 40461629.78 40461629.84 40461629.90 0.0517 0.0491

Jupiter 106068-09-22 06:13 G 40461866.63 40461866.76 40461866.90 0.0524 0.0376

Jupiter 106073-12-04 22:32 G 40463766.26 40463766.44 40463766.64 0.0507 0.0190

Saturn 106077-05-03 18:28 G 40465012.06 40465012.27 40465012.48 0.0270 0.0014

Saturn 106077-12-18 18:42 G 40465241.21 40465241.28 40465241.35 0.0272 0.0255

Jupiter 106080-05-28 02:23 G 40466132.41 40466132.60 40466132.80 0.0522 0.0131

Jupiter 106085-08-09 17:16 G 40468032.12 40468032.22 40468032.34 0.0509 0.0426

Jupiter 106086-04-03 19:11 G 40468269.18 40468269.30 40468269.42 0.0502 0.0400

Saturn 106090-07-19 20:23 G 40469837.31 40469837.35 40469837.41 0.0293 0.0283

Saturn 106091-03-06 23:30 G 40470067.28 40470067.48 40470067.70 0.0291 0.0069

Uranus 106091-10-21 06:13 G 40470295.68 40470295.76 40470295.86 0.0143 0.0129

Jupiter 106092-01-31 23:59 G 40470398.30 40470398.50 40470398.70 0.0521 0.0114

Uranus 106092-06-03 18:42 G 40470522.16 40470522.28 40470522.44 0.0143 0.0112

Pluto 106092-06-12 01:40 G 40470530.35 40470530.57 40470530.80 0.0080 0.0012

Uranus 106093-01-16 07:40 G 40470748.67 40470748.82 40470749.00 0.0143 0.0094

Pluto 106093-01-23 12:13 G 40470755.92 40470756.01 40470756.14 0.0080 0.0070

Uranus 106093-08-30 20:37 G 40470975.18 40470975.36 40470975.56 0.0143 0.0076

Mars 106093-09-29 23:16 G 40471005.39 40471005.47 40471005.55 0.1575 0.1397

Uranus 106094-04-14 09:49 G 40471201.71 40471201.91 40471202.12 0.0143 0.0057

Mars 106094-08-30 01:54 G 40471339.41 40471339.58 40471339.74 0.1969 0.0467

Uranus 106094-11-26 23:01 G 40471428.25 40471428.46 40471428.67 0.0143 0.0039

Uranus 106095-07-11 11:59 G 40471654.79 40471655.00 40471655.23 0.0143 0.0020

Uranus 106096-02-23 01:25 G 40471881.33 40471881.56 40471881.78 0.0143 0.0002

Uranus 106096-10-06 14:37 G 40472107.89 40472108.11 40472108.33 0.0143 0.0018

Uranus 106097-05-21 04:04 G 40472334.45 40472334.67 40472334.88 0.0143 0.0037

Jupiter 106097-12-07 15:20 G 40472534.94 40472535.14 40472535.33 0.0504 0.0174

Uranus 106098-01-02 17:01 G 40472561.01 40472561.21 40472561.42 0.0143 0.0056

Uranus 106098-08-17 06:13 G 40472787.58 40472787.76 40472787.96 0.0143 0.0074

Uranus 106099-03-31 19:40 G 40473014.16 40473014.32 40473014.50 0.0143 0.0093

Uranus 106099-11-13 09:06 G 40473240.74 40473240.88 40473241.02 0.0143 0.0111

Uranus 106100-06-27 22:04 G 40473467.34 40473467.42 40473467.53 0.0143 0.0129

Jupiter 106103-10-07 21:35 G 40474664.26 40474664.40 40474664.55 0.0518 0.0354

Jupiter 106104-05-31 21:06 G 40474901.37 40474901.38 40474901.40 0.0525 0.0523

Saturn 106106-03-30 22:32 G 40475569.35 40475569.44 40475569.53 0.0269 0.0239

Saturn 106106-11-14 21:49 G 40475798.20 40475798.41 40475798.62 0.0271 0.0023

Jupiter 106109-08-13 10:04 G 40476800.71 40476800.92 40476801.13 0.0506 0.0061

Jupiter 106116-02-04 16:47 G 40479167.03 40479167.20 40479167.37 0.0523 0.0275

Neptune 106117-01-10 02:08 G 40479507.54 40479507.59 40479507.68 0.0088 0.0083

Neptune 106117-08-23 15:35 G 40479733.04 40479733.15 40479733.29 0.0088 0.0073

Neptune 106118-04-06 05:16 G 40479958.57 40479958.72 40479958.89 0.0088 0.0063

Neptune 106118-11-17 18:28 G 40480184.11 40480184.27 40480184.47 0.0088 0.0053

Neptune 106119-07-01 07:54 G 40480409.65 40480409.83 40480410.04 0.0088 0.0043

Saturn 106120-01-31 06:13 G 40480623.63 40480623.76 40480623.90 0.0292 0.0226

Neptune 106120-02-11 21:20 G 40480635.20 40480635.39 40480635.61 0.0088 0.0033

Saturn 106120-09-17 09:06 G 40480853.69 40480853.88 40480854.08 0.0290 0.0124

Neptune 106120-09-24 11:01 G 40480860.75 40480860.96 40480861.18 0.0088 0.0022

Jupiter 106121-04-18 05:30 G 40481066.57 40481066.73 40481066.90 0.0508 0.0294

Neptune 106121-05-08 00:28 G 40481086.30 40481086.52 40481086.75 0.0088 0.0012

Neptune 106121-12-19 14:08 G 40481311.86 40481312.09 40481312.31 0.0088 0.0002

Neptune 106122-08-02 03:20 G 40481537.42 40481537.64 40481537.87 0.0088 0.0009

Neptune 106123-03-15 17:01 G 40481762.99 40481763.21 40481763.44 0.0088 0.0018

Neptune 106123-10-27 06:28 G 40481988.56 40481988.77 40481988.99 0.0088 0.0029

Neptune 106124-06-08 19:54 G 40482214.14 40482214.33 40482214.54 0.0088 0.0039

Neptune 106125-01-20 09:20 G 40482439.71 40482439.89 40482440.08 0.0088 0.0049

Neptune 106125-09-02 22:47 G 40482665.29 40482665.45 40482665.63 0.0088 0.0059

Neptune 106126-04-16 12:28 G 40482890.89 40482891.02 40482891.16 0.0088 0.0069

Neptune 106126-11-28 01:54 G 40483116.49 40483116.58 40483116.68 0.0088 0.0079

Mars 106127-07-30 21:06 G 40483361.21 40483361.38 40483361.54 0.1574 0.0536

Jupiter 106127-10-10 10:47 G 40483432.75 40483432.95 40483433.15 0.0521 0.0022

Uranus 106132-02-06 09:20 G 40485012.89 40485012.89 40485012.90 0.0135 0.0135

Uranus 106132-09-19 14:08 G 40485239.02 40485239.09 40485239.20 0.0135 0.0122

Uranus 106133-05-03 18:56 G 40485465.18 40485465.29 40485465.44 0.0135 0.0107

Jupiter 106133-08-16 03:20 G 40485569.48 40485569.64 40485569.81 0.0503 0.0304

Uranus 106133-12-15 23:59 G 40485691.35 40485691.50 40485691.66 0.0135 0.0093

Uranus 106134-07-30 04:32 G 40485917.52 40485917.69 40485917.87 0.0135 0.0078

Uranus 106135-03-13 09:20 G 40486143.70 40486143.89 40486144.08 0.0135 0.0063

Saturn 106135-10-11 06:13 G 40486355.62 40486355.76 40486355.91 0.0269 0.0192

Uranus 106135-10-25 13:40 G 40486369.88 40486370.07 40486370.28 0.0135 0.0049

Saturn 106136-05-27 05:44 G 40486584.54 40486584.74 40486584.95 0.0271 0.0073

Uranus 106136-06-07 18:28 G 40486596.07 40486596.27 40486596.48 0.0135 0.0034

Uranus 106137-01-19 23:01 G 40486822.25 40486822.46 40486822.67 0.0135 0.0019

Uranus 106137-09-03 03:35 G 40487048.43 40487048.65 40487048.86 0.0135 0.0005

Uranus 106138-04-17 07:54 G 40487274.62 40487274.83 40487275.05 0.0135 0.0011

Uranus 106138-11-29 12:13 G 40487500.81 40487501.01 40487501.23 0.0135 0.0026

Jupiter 106139-06-15 07:25 G 40487698.63 40487698.81 40487698.99 0.0519 0.0223

Uranus 106139-07-13 16:32 G 40487727.00 40487727.19 40487727.41 0.0135 0.0041

Uranus 106140-02-24 21:20 G 40487953.19 40487953.39 40487953.58 0.0135 0.0055

Moon 106140-06-01 18:13 G 40488051.10 40488051.26 40488051.42 0.2635 0.0226

Earth 106140-06-02 00:28 G 40488051.36 40488051.52 40488051.68 0.2634 0.0320 *

Uranus 106140-10-08 01:40 G 40488179.40 40488179.57 40488179.76 0.0135 0.0070

Uranus 106141-05-22 06:28 G 40488405.60 40488405.77 40488405.94 0.0135 0.0084

Uranus 106142-01-03 10:32 G 40488631.81 40488631.94 40488632.10 0.0135 0.0099

Uranus 106142-08-17 15:06 G 40488858.03 40488858.13 40488858.26 0.0135 0.0113

Uranus 106143-03-31 19:40 G 40489084.26 40489084.32 40489084.41 0.0135 0.0127

Jupiter 106145-04-20 22:47 G 40489835.25 40489835.45 40489835.66 0.0505 0.0072

Saturn 106149-08-12 16:47 G 40491410.03 40491410.20 40491410.38 0.0292 0.0167

Saturn 106150-03-30 19:11 G 40491640.14 40491640.30 40491640.47 0.0290 0.0182

Jupiter 106151-02-18 05:01 G 40491964.62 40491964.71 40491964.79 0.0517 0.0463

Jupiter 106151-10-13 03:35 G 40492201.54 40492201.65 40492201.78 0.0525 0.0411

Jupiter 106156-12-24 18:28 G 40494101.08 40494101.27 40494101.47 0.0507 0.0162

Mars 106159-07-29 12:13 G 40495047.91 40495048.01 40495048.12 0.1575 0.1235

Mars 106160-06-27 03:35 G 40495381.48 40495381.65 40495381.82 0.1970 0.0379

Jupiter 106163-06-18 00:28 G 40496467.33 40496467.52 40496467.71 0.0523 0.0164

Saturn 106165-04-22 09:49 G 40497141.75 40497141.91 40497142.09 0.0269 0.0155

Saturn 106165-12-07 09:35 G 40497370.71 40497370.90 40497371.09 0.0271 0.0111

Jupiter 106168-08-29 12:28 G 40498366.90 40498367.02 40498367.15 0.0509 0.0400

Jupiter 106169-04-23 14:08 G 40498603.99 40498604.09 40498604.20 0.0502 0.0427

Jupiter 106175-02-20 20:52 G 40500733.18 40500733.37 40500733.57 0.0520 0.0083

Uranus 106175-06-21 13:11 G 40500853.98 40500854.05 40500854.13 0.0143 0.0134

Uranus 106176-02-03 01:40 G 40501080.46 40501080.57 40501080.71 0.0143 0.0117

Uranus 106176-09-16 14:37 G 40501306.96 40501307.11 40501307.28 0.0143 0.0099

Uranus 106177-05-01 03:35 G 40501533.48 40501533.65 40501533.84 0.0143 0.0081

Uranus 106177-12-13 16:47 G 40501760.00 40501760.20 40501760.40 0.0143 0.0063

Uranus 106178-07-28 05:44 G 40501986.53 40501986.74 40501986.95 0.0143 0.0044

Saturn 106179-02-23 01:54 G 40502196.39 40502196.58 40502196.78 0.0292 0.0113

Uranus 106179-03-11 18:56 G 40502213.07 40502213.29 40502213.51 0.0143 0.0026

Saturn 106179-10-11 04:04 G 40502426.56 40502426.67 40502426.81 0.0289 0.0236

Uranus 106179-10-24 08:08 G 40502439.62 40502439.84 40502440.07 0.0143 0.0007

Uranus 106180-06-06 21:35 G 40502666.17 40502666.40 40502666.62 0.0143 0.0012

Jupiter 106180-12-27 10:32 G 40502869.75 40502869.94 40502870.13 0.0504 0.0201

Uranus 106181-01-19 10:32 G 40502892.73 40502892.94 40502893.17 0.0143 0.0032

Uranus 106181-09-02 23:59 G 40503119.30 40503119.50 40503119.71 0.0143 0.0050

Uranus 106182-04-17 13:25 G 40503345.87 40503346.06 40503346.26 0.0143 0.0068

Uranus 106182-11-30 02:52 G 40503572.44 40503572.62 40503572.80 0.0143 0.0087

Uranus 106183-07-14 15:49 G 40503799.02 40503799.16 40503799.32 0.0143 0.0105

Uranus 106184-02-26 04:47 G 40504025.61 40504025.70 40504025.84 0.0143 0.0124

Uranus 106184-10-09 18:13 G 40504252.23 40504252.26 40504252.32 0.0143 0.0141

Jupiter 106186-10-26 16:04 G 40504999.02 40504999.17 40504999.33 0.0518 0.0330

Jupiter 106192-09-01 06:28 G 40507135.56 40507135.77 40507135.97 0.0506 0.0033

Mars 106193-05-27 09:49 G 40507403.76 40507403.91 40507404.07 0.1574 0.0700

Saturn 106194-11-02 17:30 G 40507928.04 40507928.23 40507928.42 0.0270 0.0107

Saturn 106195-06-19 17:16 G 40508157.06 40508157.22 40508157.39 0.0272 0.0160

Jupiter 106199-02-23 10:32 G 40509501.78 40509501.94 40509502.11 0.0523 0.0298

Neptune 106199-02-27 13:40 G 40509506.03 40509506.07 40509506.16 0.0090 0.0086

Neptune 106199-10-11 02:52 G 40509731.51 40509731.62 40509731.74 0.0090 0.0075

Neptune 106200-05-24 15:20 G 40509957.01 40509957.14 40509957.30 0.0090 0.0065

Neptune 106201-01-05 03:49 G 40510182.51 40510182.66 40510182.85 0.0090 0.0055

Neptune 106201-08-18 16:47 G 40510408.02 40510408.20 40510408.40 0.0090 0.0044

Neptune 106202-04-01 05:16 G 40510633.54 40510633.72 40510633.94 0.0090 0.0034

Neptune 106202-11-12 18:13 G 40510859.05 40510859.26 40510859.47 0.0090 0.0023

Neptune 106203-06-26 06:42 G 40511084.57 40511084.78 40511085.00 0.0090 0.0013

Neptune 106204-02-06 19:25 G 40511310.09 40511310.31 40511310.52 0.0090 0.0003

Jupiter 106204-05-08 01:11 G 40511401.38 40511401.55 40511401.73 0.0508 0.0269

Neptune 106204-09-19 07:54 G 40511535.62 40511535.83 40511536.05 0.0090 0.0008

Neptune 106205-05-02 20:23 G 40511761.15 40511761.35 40511761.57 0.0090 0.0019

Neptune 106205-12-14 08:52 G 40511986.67 40511986.87 40511987.08 0.0090 0.0029

Neptune 106206-07-27 21:20 G 40512212.20 40512212.39 40512212.59 0.0090 0.0039

Neptune 106207-03-10 09:35 G 40512437.74 40512437.90 40512438.10 0.0090 0.0050

Neptune 106207-10-21 22:18 G 40512663.29 40512663.43 40512663.60 0.0090 0.0060

Neptune 106208-06-03 10:47 G 40512888.83 40512888.95 40512889.10 0.0090 0.0070

Saturn 106208-09-05 13:40 G 40512982.86 40512983.07 40512983.28 0.0291 0.0050

Neptune 106209-01-14 23:30 G 40513114.39 40513114.48 40513114.58 0.0090 0.0080

Jupiter 106210-10-30 07:25 G 40513767.61 40513767.81 40513768.01 0.0522 0.0051

Jupiter 106216-01-11 20:37 G 40515667.34 40515667.36 40515667.40 0.0510 0.0502

Uranus 106216-05-21 02:37 G 40515797.53 40515797.61 40515797.69 0.0135 0.0125

Jupiter 106216-09-04 22:47 G 40515904.30 40515904.45 40515904.61 0.0503 0.0330

Uranus 106217-01-02 07:25 G 40516023.69 40516023.81 40516023.93 0.0135 0.0111

Uranus 106217-08-16 11:59 G 40516249.87 40516250.00 40516250.16 0.0135 0.0097

Uranus 106218-03-30 16:47 G 40516476.04 40516476.20 40516476.38 0.0135 0.0082

Uranus 106218-11-11 21:35 G 40516702.22 40516702.40 40516702.59 0.0135 0.0067

Uranus 106219-06-26 01:54 G 40516928.40 40516928.58 40516928.79 0.0135 0.0053

Uranus 106220-02-07 06:42 G 40517154.58 40517154.78 40517154.99 0.0135 0.0038

Uranus 106220-09-20 11:16 G 40517380.77 40517380.97 40517381.19 0.0135 0.0023

Uranus 106221-05-04 15:49 G 40517606.95 40517607.16 40517607.38 0.0135 0.0008

Uranus 106221-12-16 20:23 G 40517833.14 40517833.35 40517833.56 0.0135 0.0007

Jupiter 106222-07-05 04:47 G 40518033.52 40518033.70 40518033.89 0.0520 0.0193

Uranus 106222-07-31 00:42 G 40518059.32 40518059.53 40518059.74 0.0135 0.0022

Uranus 106223-03-14 05:01 G 40518285.51 40518285.71 40518285.92 0.0135 0.0037

Uranus 106223-10-26 09:49 G 40518511.72 40518511.91 40518512.11 0.0135 0.0051

Saturn 106224-05-15 21:06 G 40518714.18 40518714.38 40518714.58 0.0270 0.0070

Uranus 106224-06-08 14:08 G 40518737.91 40518738.09 40518738.28 0.0135 0.0066

Saturn 106224-12-30 20:52 G 40518943.24 40518943.37 40518943.52 0.0272 0.0198

Uranus 106225-01-20 18:42 G 40518964.11 40518964.28 40518964.45 0.0135 0.0080

Mars 106225-05-27 01:25 G 40519090.43 40519090.56 40519090.69 0.1574 0.1073

Uranus 106225-09-03 23:01 G 40519190.32 40519190.46 40519190.62 0.0135 0.0095

Uranus 106226-04-18 03:20 G 40519416.53 40519416.64 40519416.78 0.0135 0.0109

Mars 106226-04-25 05:30 G 40519423.59 40519423.73 40519423.87 0.1970 0.1196

Uranus 106226-11-30 07:54 G 40519642.76 40519642.83 40519642.93 0.0135 0.0123

Jupiter 106228-05-10 17:59 G 40520170.05 40520170.25 40520170.46 0.0505 0.0098

Jupiter 106234-03-10 02:08 G 40522299.49 40522299.59 40522299.70 0.0517 0.0432

Jupiter 106234-11-02 00:42 G 40522536.43 40522536.53 40522536.64 0.0524 0.0443

Saturn 106238-03-18 21:49 G 40523769.20 40523769.41 40523769.63 0.0291 0.0002

Jupiter 106240-01-14 13:25 G 40524435.87 40524436.06 40524436.26 0.0507 0.0136

Jupiter 106246-07-07 19:11 G 40526802.12 40526802.30 40526802.49 0.0522 0.0189

Pluto 106250-11-12 19:11 G 40528391.12 40528391.30 40528391.50 0.0064 0.0031

Pluto 106251-06-25 22:32 G 40528616.23 40528616.44 40528616.66 0.0064 0.0009

Jupiter 106251-09-19 08:08 G 40528701.71 40528701.84 40528701.99 0.0509 0.0375

Pluto 106252-02-06 01:54 G 40528841.45 40528841.58 40528841.73 0.0064 0.0049

Jupiter 106252-05-13 10:32 G 40528938.86 40528938.94 40528939.02 0.0502 0.0457

Saturn 106253-11-26 04:32 G 40529500.48 40529500.69 40529500.89 0.0270 0.0023

Earth 106253-12-05 11:44 G 40529509.86 40529509.99 40529510.12 0.2699 0.1403

Moon 106253-12-05 15:35 G 40529510.03 40529510.15 40529510.27 0.2694 0.1738 *

Saturn 106254-07-13 04:32 G 40529729.61 40529729.69 40529729.78 0.0272 0.0247

Jupiter 106258-03-12 15:35 G 40531067.95 40531068.15 40531068.35 0.0520 0.0058

Uranus 106259-02-19 18:42 G 40531412.25 40531412.28 40531412.34 0.0143 0.0140

Mars 106259-03-25 22:47 G 40531446.31 40531446.45 40531446.60 0.1574 0.0860

Uranus 106259-10-04 07:11 G 40531638.71 40531638.80 40531638.93 0.0143 0.0123

Uranus 106260-05-17 20:08 G 40531865.20 40531865.34 40531865.50 0.0143 0.0105

Uranus 106260-12-30 08:52 G 40532091.70 40532091.87 40532092.05 0.0143 0.0087

Uranus 106261-08-13 21:49 G 40532318.22 40532318.41 40532318.61 0.0143 0.0069

Moon 106261-12-03 03:20 G 40532429.52 40532429.64 40532429.76 0.2691 0.1782

Earth 106261-12-03 04:47 G 40532429.60 40532429.70 40532429.81 0.2698 0.2002 *

Uranus 106262-03-28 10:47 G 40532544.76 40532544.95 40532545.17 0.0143 0.0051

Uranus 106262-11-09 23:59 G 40532771.29 40532771.50 40532771.73 0.0143 0.0033

Uranus 106263-06-24 13:25 G 40532997.83 40532998.06 40532998.28 0.0143 0.0014

Jupiter 106264-01-17 06:13 G 40533204.58 40533204.76 40533204.95 0.0504 0.0227

Uranus 106264-02-06 02:23 G 40533224.38 40533224.60 40533224.83 0.0143 0.0007

Uranus 106264-09-19 15:49 G 40533450.94 40533451.16 40533451.38 0.0143 0.0024

Uranus 106265-05-04 05:01 G 40533677.51 40533677.71 40533677.93 0.0143 0.0043

Uranus 106265-12-16 18:28 G 40533904.07 40533904.27 40533904.47 0.0143 0.0062

Uranus 106266-07-31 07:25 G 40534130.64 40534130.81 40534131.01 0.0143 0.0081

Saturn 106267-02-11 06:28 G 40534325.73 40534325.77 40534325.80 0.0293 0.0288

Uranus 106267-03-14 20:52 G 40534357.22 40534357.37 40534357.54 0.0143 0.0099

Saturn 106267-09-29 09:20 G 40534555.68 40534555.89 40534556.11 0.0291 0.0065

Uranus 106267-10-27 10:04 G 40534583.81 40534583.92 40534584.06 0.0143 0.0117

Uranus 106268-06-09 23:16 G 40534810.41 40534810.47 40534810.56 0.0143 0.0134

Jupiter 106269-11-15 11:59 G 40535333.84 40535334.00 40535334.17 0.0519 0.0305

Jupiter 106275-09-22 02:52 G 40537470.41 40537470.62 40537470.83 0.0505 0.0003

Neptune 106281-04-14 10:47 G 40539501.93 40539501.95 40539502.03 0.0088 0.0086

Neptune 106281-11-25 23:59 G 40539727.42 40539727.50 40539727.64 0.0088 0.0076

Jupiter 106282-03-15 08:37 G 40539836.71 40539836.86 40539837.02 0.0524 0.0332

Neptune 106282-07-09 13:25 G 40539952.94 40539953.06 40539953.23 0.0088 0.0066

Saturn 106282-10-22 08:23 G 40540057.78 40540057.85 40540057.93 0.0268 0.0247

Neptune 106283-02-20 02:52 G 40540178.47 40540178.62 40540178.82 0.0088 0.0056

Saturn 106283-06-08 07:25 G 40540286.61 40540286.81 40540287.02 0.0270 0.0015

Neptune 106283-10-03 16:18 G 40540404.01 40540404.18 40540404.39 0.0088 0.0046

Neptune 106284-05-16 05:44 G 40540629.55 40540629.74 40540629.96 0.0088 0.0036

Neptune 106284-12-27 19:11 G 40540855.10 40540855.30 40540855.53 0.0088 0.0026

Neptune 106285-08-10 08:52 G 40541080.65 40541080.87 40541081.09 0.0088 0.0015

Neptune 106286-03-23 22:32 G 40541306.21 40541306.44 40541306.66 0.0088 0.0005

Neptune 106286-11-04 11:44 G 40541531.77 40541531.99 40541532.22 0.0088 0.0006

Jupiter 106287-05-27 21:20 G 40541736.21 40541736.39 40541736.57 0.0507 0.0240

Neptune 106287-06-18 01:11 G 40541757.34 40541757.55 40541757.78 0.0088 0.0016

Neptune 106288-01-29 14:37 G 40541982.90 40541983.11 40541983.33 0.0088 0.0026

Neptune 106288-09-11 04:04 G 40542208.47 40542208.67 40542208.89 0.0088 0.0036

Neptune 106289-04-24 17:44 G 40542434.06 40542434.24 40542434.44 0.0088 0.0046

Neptune 106289-12-06 07:11 G 40542659.64 40542659.80 40542659.98 0.0088 0.0056

Neptune 106290-07-19 20:37 G 40542885.22 40542885.36 40542885.52 0.0088 0.0066

Neptune 106291-03-02 10:18 G 40543110.82 40543110.93 40543111.04 0.0088 0.0076

Mars 106291-03-24 14:08 G 40543132.95 40543133.09 40543133.24 0.1574 0.0912

Neptune 106291-10-13 23:44 G 40543336.46 40543336.49 40543336.54 0.0088 0.0086

Jupiter 106293-11-18 05:16 G 40544102.52 40544102.72 40544102.92 0.0522 0.0085

Saturn 106296-08-23 12:42 G 40545111.92 40545112.03 40545112.16 0.0293 0.0241

Saturn 106297-04-10 16:04 G 40545341.97 40545342.17 40545342.37 0.0291 0.0113

Jupiter 106299-01-30 16:18 G 40546002.11 40546002.18 40546002.25 0.0510 0.0476

Jupiter 106299-09-24 18:28 G 40546239.13 40546239.27 40546239.42 0.0503 0.0358

Uranus 106300-01-19 13:25 G 40546356.02 40546356.06 40546356.14 0.0135 0.0130

Uranus 106300-09-02 18:56 G 40546582.18 40546582.29 40546582.40 0.0135 0.0115

Uranus 106301-04-16 23:44 G 40546808.35 40546808.49 40546808.64 0.0135 0.0101

Uranus 106301-11-29 04:18 G 40547034.53 40547034.68 40547034.86 0.0135 0.0086

Uranus 106302-07-13 09:20 G 40547260.71 40547260.89 40547261.07 0.0135 0.0072

Uranus 106303-02-24 13:40 G 40547486.89 40547487.07 40547487.27 0.0135 0.0057

Uranus 106303-10-08 18:42 G 40547713.08 40547713.28 40547713.48 0.0135 0.0042

Uranus 106304-05-21 23:16 G 40547939.26 40547939.47 40547939.68 0.0135 0.0027

Uranus 106305-01-03 03:49 G 40548165.45 40548165.66 40548165.87 0.0135 0.0013

Jupiter 106305-07-25 00:56 G 40548368.35 40548368.54 40548368.73 0.0519 0.0165

Uranus 106305-08-17 08:23 G 40548391.63 40548391.85 40548392.06 0.0135 0.0003

Uranus 106306-03-31 12:42 G 40548617.82 40548618.03 40548618.25 0.0135 0.0017

Uranus 106306-11-12 17:16 G 40548844.02 40548844.22 40548844.43 0.0135 0.0032

Uranus 106307-06-26 21:49 G 40549070.21 40549070.41 40549070.61 0.0135 0.0047

Uranus 106308-02-08 01:54 G 40549296.41 40549296.58 40549296.79 0.0135 0.0062

Uranus 106308-09-21 06:42 G 40549522.61 40549522.78 40549522.96 0.0135 0.0076

Uranus 106309-05-05 11:16 G 40549748.82 40549748.97 40549749.13 0.0135 0.0090

Uranus 106309-12-17 15:49 G 40549975.03 40549975.16 40549975.29 0.0135 0.0104

Uranus 106310-07-31 20:08 G 40550201.24 40550201.34 40550201.44 0.0135 0.0118

Uranus 106311-03-15 00:28 G 40550427.49 40550427.52 40550427.57 0.0135 0.0132

Jupiter 106311-05-31 14:23 G 40550504.90 40550505.10 40550505.30 0.0505 0.0126

Saturn 106312-05-04 14:23 G 40550843.98 40550844.10 40550844.25 0.0269 0.0205

Saturn 106312-12-19 13:54 G 40551072.88 40551073.08 40551073.29 0.0271 0.0060

Jupiter 106317-03-29 21:49 G 40552634.29 40552634.41 40552634.54 0.0517 0.0406

Jupiter 106317-11-21 20:08 G 40552871.26 40552871.34 40552871.43 0.0524 0.0469

Jupiter 106323-02-03 10:18 G 40554770.72 40554770.93 40554771.13 0.0507 0.0109

Mars 106325-01-21 11:44 G 40555488.86 40555488.99 40555489.12 0.1573 0.1024

Saturn 106326-03-07 00:28 G 40555898.36 40555898.52 40555898.70 0.0292 0.0177

Saturn 106326-10-23 03:20 G 40556128.47 40556128.64 40556128.82 0.0290 0.0174

Jupiter 106329-07-27 15:49 G 40557136.98 40557137.16 40557137.35 0.0523 0.0219

Jupiter 106334-10-09 06:28 G 40559036.62 40559036.77 40559036.92 0.0508 0.0341

Jupiter 106335-06-03 07:40 G 40559273.77 40559273.82 40559273.87 0.0502 0.0486

Pluto 106340-05-18 00:42 G 40561084.37 40561084.53 40561084.71 0.0080 0.0051

Pluto 106340-12-29 11:44 G 40561309.79 40561309.99 40561310.20 0.0080 0.0031

Jupiter 106341-04-01 13:40 G 40561402.87 40561403.07 40561403.27 0.0521 0.0025

Saturn 106341-11-14 17:16 G 40561630.07 40561630.22 40561630.40 0.0268 0.0169

Saturn 106342-07-01 16:47 G 40561859.01 40561859.20 40561859.40 0.0270 0.0096

Uranus 106343-06-04 12:42 G 40562196.95 40562197.03 40562197.14 0.0143 0.0129

Uranus 106344-01-17 01:40 G 40562423.43 40562423.57 40562423.71 0.0143 0.0111

Uranus 106344-08-30 14:08 G 40562649.94 40562650.09 40562650.27 0.0143 0.0094

Uranus 106345-04-14 03:20 G 40562876.45 40562876.64 40562876.83 0.0143 0.0075

Uranus 106345-11-26 16:18 G 40563102.98 40563103.18 40563103.39 0.0143 0.0057

Uranus 106346-07-11 05:16 G 40563329.51 40563329.72 40563329.94 0.0143 0.0039

Jupiter 106347-02-06 03:20 G 40563539.47 40563539.64 40563539.82 0.0503 0.0259

Uranus 106347-02-22 18:28 G 40563556.05 40563556.27 40563556.49 0.0143 0.0020

Uranus 106347-10-07 07:40 G 40563782.60 40563782.82 40563783.05 0.0143 0.0002

Uranus 106348-05-20 20:52 G 40564009.15 40564009.37 40564009.60 0.0143 0.0018

Uranus 106349-01-02 10:04 G 40564235.71 40564235.92 40564236.14 0.0143 0.0036

Uranus 106349-08-16 23:30 G 40564462.27 40564462.48 40564462.68 0.0143 0.0055

Uranus 106350-03-31 12:42 G 40564688.85 40564689.03 40564689.23 0.0143 0.0073

Uranus 106350-11-13 01:54 G 40564915.42 40564915.58 40564915.76 0.0143 0.0092

Uranus 106351-06-27 15:06 G 40565142.00 40565142.13 40565142.28 0.0143 0.0110

Uranus 106352-02-09 04:04 G 40565368.59 40565368.67 40565368.79 0.0143 0.0128

Jupiter 106352-12-05 11:16 G 40565668.80 40565668.97 40565669.14 0.0519 0.0267

Saturn 106355-09-17 05:30 G 40566684.54 40566684.73 40566684.92 0.0292 0.0135

Saturn 106356-05-04 07:54 G 40566914.70 40566914.83 40566914.98 0.0290 0.0217

Mars 106357-01-20 03:06 G 40567175.48 40567175.63 40567175.79 0.1574 0.0746

Jupiter 106358-10-11 23:16 G 40567805.27 40567805.47 40567805.68 0.0506 0.0029

Neptune 106363-06-02 23:16 G 40569500.46 40569500.47 40569500.53 0.0090 0.0089

Neptune 106364-01-14 12:28 G 40569725.92 40569726.02 40569726.13 0.0090 0.0078

Jupiter 106364-08-10 08:23 G 40569934.81 40569934.85 40569934.88 0.0516 0.0507

Neptune 106364-08-27 00:56 G 40569951.42 40569951.54 40569951.70 0.0090 0.0068

Jupiter 106365-04-04 05:59 G 40570171.61 40570171.75 40570171.89 0.0523 0.0364

Neptune 106365-04-09 13:25 G 40570176.92 40570177.06 40570177.25 0.0090 0.0058

Neptune 106365-11-21 02:23 G 40570402.43 40570402.60 40570402.79 0.0090 0.0047

Neptune 106366-07-04 14:52 G 40570627.94 40570628.12 40570628.33 0.0090 0.0037

Neptune 106367-02-15 03:35 G 40570853.46 40570853.65 40570853.87 0.0090 0.0027

Neptune 106367-09-28 16:32 G 40571078.98 40571079.19 40571079.41 0.0090 0.0016

Neptune 106368-05-11 05:16 G 40571304.50 40571304.72 40571304.93 0.0090 0.0006

Neptune 106368-12-22 17:44 G 40571530.03 40571530.24 40571530.46 0.0090 0.0005

Neptune 106369-08-05 05:59 G 40571755.55 40571755.75 40571755.97 0.0090 0.0016

Neptune 106370-03-18 18:42 G 40571981.08 40571981.28 40571981.49 0.0090 0.0026

Jupiter 106370-06-16 18:13 G 40572071.08 40572071.26 40572071.45 0.0508 0.0211

Neptune 106370-10-30 07:25 G 40572206.61 40572206.81 40572207.01 0.0090 0.0036

Saturn 106371-05-27 22:32 G 40572416.27 40572416.44 40572416.63 0.0269 0.0127

Neptune 106371-06-12 19:25 G 40572432.15 40572432.31 40572432.52 0.0090 0.0047

Saturn 106372-01-11 22:04 G 40572645.25 40572645.42 40572645.60 0.0271 0.0139

Neptune 106372-01-24 08:08 G 40572657.69 40572657.84 40572658.02 0.0090 0.0057

Neptune 106372-09-05 20:52 G 40572883.24 40572883.37 40572883.52 0.0090 0.0067

Neptune 106373-04-19 09:20 G 40573108.79 40573108.89 40573109.01 0.0090 0.0077

Neptune 106373-11-30 21:20 G 40573334.37 40573334.39 40573334.47 0.0090 0.0088

Jupiter 106376-12-08 01:54 G 40574437.39 40574437.58 40574437.78 0.0521 0.0116

Jupiter 106382-02-19 13:54 G 40576336.99 40576337.08 40576337.19 0.0510 0.0447

Jupiter 106382-10-14 16:18 G 40576574.05 40576574.18 40576574.31 0.0503 0.0388

Earth 106383-06-04 23:30 G 40576807.31 40576807.48 40576807.64 0.2634 0.0248

Moon 106383-06-05 05:16 G 40576807.56 40576807.72 40576807.88 0.2632 0.0852 *

Uranus 106383-09-20 00:42 G 40576914.51 40576914.53 40576914.59 0.0136 0.0134

Uranus 106384-05-03 05:44 G 40577140.66 40577140.74 40577140.86 0.0135 0.0120

Uranus 106384-12-15 11:01 G 40577366.83 40577366.96 40577367.10 0.0135 0.0105

Saturn 106385-03-29 15:35 G 40577470.95 40577471.15 40577471.36 0.0292 0.0075

Uranus 106385-07-29 15:49 G 40577593.01 40577593.16 40577593.32 0.0135 0.0090

Saturn 106385-11-14 17:59 G 40577701.20 40577701.25 40577701.33 0.0290 0.0276

Uranus 106386-03-12 20:23 G 40577819.19 40577819.35 40577819.54 0.0135 0.0076

Uranus 106386-10-25 01:25 G 40578045.38 40578045.56 40578045.75 0.0135 0.0061

Uranus 106387-06-08 06:13 G 40578271.56 40578271.76 40578271.96 0.0135 0.0046

Uranus 106388-01-20 10:47 G 40578497.75 40578497.95 40578498.16 0.0135 0.0032

Jupiter 106388-08-12 21:49 G 40578703.22 40578703.41 40578703.60 0.0520 0.0135

Uranus 106388-09-02 15:35 G 40578723.94 40578724.15 40578724.36 0.0135 0.0017

Uranus 106389-04-16 20:08 G 40578950.13 40578950.34 40578950.55 0.0135 0.0002

Uranus 106389-11-29 00:42 G 40579176.32 40579176.53 40579176.74 0.0135 0.0013

Mars 106389-12-18 12:42 G 40579195.95 40579196.03 40579196.12 0.1970 0.1671

Uranus 106390-07-13 05:01 G 40579402.51 40579402.71 40579402.92 0.0135 0.0028

Mars 106390-11-19 00:42 G 40579531.42 40579531.53 40579531.65 0.1574 0.1187

Uranus 106391-02-24 09:35 G 40579628.70 40579628.90 40579629.11 0.0135 0.0042

Uranus 106391-10-08 14:08 G 40579854.90 40579855.09 40579855.29 0.0135 0.0057

Uranus 106392-05-21 18:42 G 40580081.10 40580081.28 40580081.46 0.0135 0.0071

Uranus 106393-01-02 22:47 G 40580307.30 40580307.45 40580307.63 0.0135 0.0086

Uranus 106393-08-17 03:20 G 40580533.51 40580533.64 40580533.79 0.0135 0.0100

Uranus 106394-03-31 07:40 G 40580759.72 40580759.82 40580759.95 0.0135 0.0114

Jupiter 106394-06-19 13:40 G 40580839.87 40580840.07 40580840.26 0.0504 0.0163

Uranus 106394-11-12 12:13 G 40580985.96 40580986.01 40580986.09 0.0135 0.0128

Jupiter 106400-04-17 19:54 G 40582969.20 40582969.33 40582969.48 0.0518 0.0374

Saturn 106400-12-07 01:11 G 40583202.35 40583202.55 40583202.75 0.0269 0.0092

Jupiter 106400-12-10 19:25 G 40583206.27 40583206.31 40583206.36 0.0525 0.0508

Saturn 106401-07-24 00:28 G 40583431.36 40583431.52 40583431.68 0.0271 0.0173

Jupiter 106406-02-22 09:06 G 40585105.67 40585105.88 40585106.08 0.0506 0.0071

Jupiter 106412-08-15 16:32 G 40587472.02 40587472.19 40587472.36 0.0523 0.0262

Saturn 106414-10-09 18:56 G 40588257.08 40588257.29 40588257.50 0.0292 0.0036

Jupiter 106417-10-28 04:18 G 40589371.52 40589371.68 40589371.85 0.0508 0.0307

Mars 106422-11-17 16:18 G 40591218.02 40591218.18 40591218.34 0.1574 0.0589

Jupiter 106424-04-20 12:42 G 40591737.83 40591738.03 40591738.23 0.0521 0.0016

Uranus 106427-02-01 19:11 G 40592755.23 40592755.30 40592755.37 0.0143 0.0134

Uranus 106427-09-16 07:25 G 40592981.70 40592981.81 40592981.95 0.0143 0.0117

Uranus 106428-04-29 19:54 G 40593208.19 40593208.33 40593208.51 0.0143 0.0100

Uranus 106428-12-12 08:52 G 40593434.70 40593434.87 40593435.06 0.0143 0.0082

Uranus 106429-07-26 21:35 G 40593661.21 40593661.40 40593661.61 0.0143 0.0064

Jupiter 106430-02-25 01:54 G 40593874.41 40593874.58 40593874.75 0.0504 0.0294

Uranus 106430-03-10 10:47 G 40593887.75 40593887.95 40593888.17 0.0143 0.0045

Saturn 106430-06-19 05:16 G 40593988.51 40593988.72 40593988.92 0.0269 0.0054

Uranus 106430-10-22 23:44 G 40594114.28 40594114.49 40594114.72 0.0143 0.0027

Saturn 106431-02-03 04:32 G 40594217.57 40594217.69 40594217.82 0.0271 0.0213

Uranus 106431-06-06 12:56 G 40594340.82 40594341.04 40594341.27 0.0143 0.0008

Uranus 106432-01-19 02:08 G 40594567.37 40594567.59 40594567.81 0.0143 0.0010

Uranus 106432-09-01 15:06 G 40594793.92 40594794.13 40594794.35 0.0143 0.0029

Uranus 106433-04-16 04:32 G 40595020.48 40595020.69 40595020.90 0.0143 0.0047

Uranus 106433-11-28 17:30 G 40595247.04 40595247.23 40595247.44 0.0143 0.0066

Uranus 106434-07-13 06:28 G 40595473.61 40595473.77 40595473.97 0.0143 0.0085

Uranus 106435-02-24 19:40 G 40595700.18 40595700.32 40595700.49 0.0143 0.0103

Uranus 106435-10-09 08:37 G 40595926.76 40595926.86 40595927.00 0.0143 0.0121

Jupiter 106435-12-25 09:20 G 40596003.72 40596003.89 40596004.07 0.0519 0.0233

Uranus 106436-05-22 22:04 G 40596153.37 40596153.42 40596153.49 0.0143 0.0137

Jupiter 106441-10-30 22:32 G 40598140.24 40598140.44 40598140.65 0.0505 0.0063

Saturn 106444-04-21 03:49 G 40599043.45 40599043.66 40599043.88 0.0292 0.0022

Neptune 106445-07-17 19:54 G 40599496.33 40599496.33 40599496.34 0.0088 0.0088

Neptune 106446-02-28 09:06 G 40599721.80 40599721.88 40599722.00 0.0088 0.0078

Neptune 106446-10-11 22:32 G 40599947.31 40599947.44 40599947.60 0.0088 0.0068

Neptune 106447-05-25 11:59 G 40600172.84 40600173.00 40600173.18 0.0088 0.0058

Jupiter 106447-08-30 05:16 G 40600269.65 40600269.72 40600269.80 0.0517 0.0478

Neptune 106448-01-06 01:11 G 40600398.38 40600398.55 40600398.75 0.0088 0.0048

Jupiter 106448-04-23 04:04 G 40600506.54 40600506.67 40600506.79 0.0524 0.0399

Neptune 106448-08-18 14:37 G 40600623.92 40600624.11 40600624.33 0.0088 0.0038

Neptune 106449-04-01 04:18 G 40600849.47 40600849.68 40600849.90 0.0088 0.0028

Neptune 106449-11-12 17:44 G 40601075.02 40601075.24 40601075.46 0.0088 0.0018

Neptune 106450-06-26 07:11 G 40601300.58 40601300.80 40601301.03 0.0088 0.0007

Neptune 106451-02-06 20:37 G 40601526.13 40601526.36 40601526.59 0.0088 0.0003

Neptune 106451-09-20 10:04 G 40601751.70 40601751.92 40601752.14 0.0088 0.0013

Neptune 106452-05-02 23:44 G 40601977.27 40601977.49 40601977.70 0.0088 0.0023

Neptune 106452-12-14 12:42 G 40602202.84 40602203.03 40602203.25 0.0088 0.0034

Jupiter 106453-07-05 19:40 G 40602406.13 40602406.32 40602406.52 0.0507 0.0167

Neptune 106453-07-28 02:08 G 40602428.41 40602428.59 40602428.80 0.0088 0.0044

Neptune 106454-03-10 15:49 G 40602654.00 40602654.16 40602654.35 0.0088 0.0054

Neptune 106454-10-22 05:16 G 40602879.58 40602879.72 40602879.89 0.0088 0.0064

Neptune 106455-06-04 18:42 G 40603105.18 40603105.28 40603105.42 0.0088 0.0074

Mars 106455-10-15 14:37 G 40603237.95 40603238.11 40603238.26 0.1970 0.0831

Neptune 106456-01-16 08:08 G 40603330.80 40603330.84 40603330.93 0.0088 0.0084

Mars 106456-09-15 13:40 G 40603573.98 40603574.07 40603574.16 0.1573 0.1353

Jupiter 106459-12-28 01:25 G 40604772.37 40604772.56 40604772.76 0.0522 0.0155

Saturn 106459-12-30 07:11 G 40604774.60 40604774.80 40604775.01 0.0269 0.0020

Saturn 106460-08-15 06:28 G 40605003.70 40605003.77 40605003.86 0.0271 0.0247

Jupiter 106465-03-10 14:52 G 40606672.00 40606672.12 40606672.25 0.0509 0.0404

Jupiter 106465-11-02 16:32 G 40606909.08 40606909.19 40606909.29 0.0502 0.0428

Uranus 106468-01-01 15:49 G 40607699.09 40607699.16 40607699.25 0.0136 0.0124

Uranus 106468-08-14 20:52 G 40607925.26 40607925.37 40607925.51 0.0136 0.0110

Uranus 106469-03-29 01:40 G 40608151.44 40608151.57 40608151.74 0.0135 0.0096

Uranus 106469-11-10 06:56 G 40608377.63 40608377.79 40608377.97 0.0135 0.0080

Uranus 106470-06-24 11:30 G 40608603.81 40608603.98 40608604.18 0.0135 0.0067

Uranus 106471-02-05 16:32 G 40608830.00 40608830.19 40608830.39 0.0135 0.0051

Jupiter 106471-09-01 23:44 G 40609038.29 40609038.49 40609038.68 0.0520 0.0090

Uranus 106471-09-19 21:35 G 40609056.20 40609056.40 40609056.61 0.0135 0.0036

Uranus 106472-05-03 02:08 G 40609282.39 40609282.59 40609282.81 0.0135 0.0022

Uranus 106472-12-15 06:56 G 40609508.58 40609508.79 40609509.00 0.0135 0.0007

Uranus 106473-07-29 11:30 G 40609734.77 40609734.98 40609735.19 0.0135 0.0008

Saturn 106473-11-01 05:01 G 40609829.50 40609829.71 40609829.93 0.0292 0.0053

Uranus 106474-03-12 16:04 G 40609960.96 40609961.17 40609961.38 0.0135 0.0023

Uranus 106474-10-24 20:37 G 40610187.16 40610187.36 40610187.57 0.0135 0.0038

Uranus 106475-06-08 01:11 G 40610413.36 40610413.55 40610413.75 0.0135 0.0052

Uranus 106476-01-20 05:30 G 40610639.56 40610639.73 40610639.93 0.0135 0.0067

Uranus 106476-09-02 10:04 G 40610865.76 40610865.92 40610866.10 0.0135 0.0081

Uranus 106477-04-16 14:37 G 40611091.97 40611092.11 40611092.27 0.0135 0.0095

Jupiter 106477-07-08 12:56 G 40611174.85 40611175.04 40611175.23 0.0504 0.0202

Uranus 106477-11-28 18:56 G 40611318.18 40611318.29 40611318.43 0.0135 0.0109

Uranus 106478-07-12 23:30 G 40611544.41 40611544.48 40611544.58 0.0135 0.0123

Jupiter 106483-05-07 21:06 G 40613304.22 40613304.38 40613304.53 0.0518 0.0332

Mars 106488-09-14 04:47 G 40615260.53 40615260.70 40615260.87 0.1573 0.0418

Saturn 106488-11-24 11:30 G 40615331.91 40615331.98 40615332.07 0.0268 0.0245

Jupiter 106489-03-13 08:37 G 40615440.65 40615440.86 40615441.06 0.0506 0.0035

Saturn 106489-07-11 10:04 G 40615560.71 40615560.92 40615561.13 0.0270 0.0016

Jupiter 106495-09-04 16:04 G 40617807.01 40617807.17 40617807.33 0.0523 0.0301

Moon 106496-12-06 11:16 G 40618265.83 40618265.97 40618266.10 0.2704 0.1059

Earth 106496-12-06 14:52 G 40618265.99 40618266.12 40618266.25 0.2698 0.1500 *

Pluto 106498-10-17 01:25 G 40618945.40 40618945.56 40618945.72 0.0064 0.0041

Pluto 106499-05-30 04:47 G 40619170.48 40619170.70 40619170.91 0.0064 0.0002

Pluto 106500-01-10 07:40 G 40619395.67 40619395.82 40619396.01 0.0064 0.0038

Jupiter 106500-11-17 05:01 G 40619706.54 40619706.71 40619706.89 0.0508 0.0268

Saturn 106502-09-27 08:52 G 40620385.77 40620385.87 40620385.99 0.0294 0.0252

Saturn 106503-05-15 12:56 G 40620615.84 40620616.04 40620616.24 0.0291 0.0106

Earth 106504-12-05 07:40 G 40621185.72 40621185.82 40621185.93 0.2697 0.1926

Moon 106504-12-05 08:52 G 40621185.79 40621185.87 40621185.96 0.2705 0.2168 *

Jupiter 106507-05-11 11:01 G 40622072.76 40622072.96 40622073.16 0.0521 0.0048

Uranus 106510-10-03 02:08 G 40623313.55 40623313.59 40623313.64 0.0142 0.0139

Uranus 106511-05-17 14:23 G 40623540.00 40623540.10 40623540.22 0.0143 0.0122

Uranus 106511-12-30 02:52 G 40623766.48 40623766.62 40623766.78 0.0143 0.0105

Jupiter 106512-07-23 01:54 G 40623972.55 40623972.58 40623972.62 0.0510 0.0499

Uranus 106512-08-12 15:35 G 40623992.98 40623993.15 40623993.34 0.0143 0.0087

Jupiter 106513-03-17 04:18 G 40624209.53 40624209.68 40624209.84 0.0503 0.0339

Uranus 106513-03-27 04:32 G 40624219.50 40624219.69 40624219.89 0.0143 0.0069

Uranus 106513-11-08 17:30 G 40624446.03 40624446.23 40624446.44 0.0143 0.0051

Uranus 106514-06-23 06:13 G 40624672.55 40624672.76 40624672.99 0.0143 0.0033

Uranus 106515-02-04 19:25 G 40624899.09 40624899.31 40624899.53 0.0143 0.0014

Uranus 106515-09-19 08:37 G 40625125.63 40625125.86 40625126.08 0.0143 0.0005

Uranus 106516-05-02 21:35 G 40625352.19 40625352.40 40625352.63 0.0143 0.0024

Uranus 106516-12-15 10:47 G 40625578.74 40625578.95 40625579.17 0.0143 0.0041

Uranus 106517-07-29 23:44 G 40625805.30 40625805.49 40625805.70 0.0143 0.0060

Uranus 106518-03-13 12:56 G 40626031.86 40626032.04 40626032.23 0.0143 0.0078

Saturn 106518-06-07 13:25 G 40626117.94 40626118.06 40626118.19 0.0267 0.0211

Uranus 106518-10-26 01:54 G 40626258.43 40626258.58 40626258.76 0.0143 0.0096

Jupiter 106519-01-14 09:06 G 40626338.70 40626338.88 40626339.07 0.0520 0.0194

Saturn 106519-01-22 11:44 G 40626346.79 40626346.99 40626347.20 0.0269 0.0050

Uranus 106519-06-09 14:52 G 40626485.01 40626485.12 40626485.27 0.0143 0.0115

Uranus 106520-01-22 04:04 G 40626711.60 40626711.67 40626711.77 0.0143 0.0131

Mars 106521-08-12 16:04 G 40627280.00 40627280.17 40627280.34 0.1970 0.0021

Mars 106522-07-15 02:23 G 40627616.56 40627616.60 40627616.65 0.1574 0.1523

Jupiter 106524-11-20 00:28 G 40628475.32 40628475.52 40628475.72 0.0505 0.0109

Neptune 106528-04-17 22:32 G 40629720.37 40629720.44 40629720.55 0.0090 0.0081

Neptune 106528-11-29 11:01 G 40629945.85 40629945.96 40629946.12 0.0090 0.0071

Neptune 106529-07-12 23:59 G 40630171.35 40630171.50 40630171.67 0.0090 0.0060

Neptune 106530-02-23 12:28 G 40630396.86 40630397.02 40630397.21 0.0090 0.0050

Jupiter 106530-09-19 07:54 G 40630604.73 40630604.83 40630604.95 0.0517 0.0431

Neptune 106530-10-07 01:11 G 40630622.37 40630622.55 40630622.76 0.0090 0.0040

Jupiter 106531-05-14 06:56 G 40630841.70 40630841.79 40630841.90 0.0525 0.0451

Neptune 106531-05-20 14:08 G 40630847.89 40630848.09 40630848.30 0.0090 0.0029

Neptune 106532-01-01 02:37 G 40631073.41 40631073.61 40631073.83 0.0090 0.0019

Saturn 106532-04-08 09:20 G 40631171.75 40631171.89 40631172.03 0.0294 0.0222

Neptune 106532-08-13 15:20 G 40631298.93 40631299.14 40631299.36 0.0090 0.0009

Saturn 106532-11-24 12:56 G 40631401.85 40631402.04 40631402.24 0.0292 0.0136

Neptune 106533-03-27 04:04 G 40631524.46 40631524.67 40631524.89 0.0090 0.0002

Neptune 106533-11-07 16:32 G 40631749.98 40631750.19 40631750.41 0.0090 0.0013

Neptune 106534-06-21 05:01 G 40631975.51 40631975.71 40631975.93 0.0090 0.0023

Neptune 106535-02-01 17:44 G 40632201.04 40632201.24 40632201.44 0.0090 0.0033

Neptune 106535-09-15 05:59 G 40632426.58 40632426.75 40632426.96 0.0090 0.0044

Neptune 106536-04-27 18:42 G 40632652.12 40632652.28 40632652.46 0.0090 0.0054

Jupiter 106536-07-25 20:23 G 40632741.15 40632741.35 40632741.55 0.0507 0.0125

Neptune 106536-12-09 07:11 G 40632877.66 40632877.80 40632877.96 0.0090 0.0064

Neptune 106537-07-22 19:54 G 40633103.21 40633103.33 40633103.45 0.0090 0.0074

Neptune 106538-03-05 07:40 G 40633328.78 40633328.82 40633328.92 0.0090 0.0085

Jupiter 106543-01-17 03:35 G 40635107.47 40635107.65 40635107.83 0.0522 0.0201

Saturn 106547-12-18 15:06 G 40636903.99 40636904.13 40636904.29 0.0268 0.0180

Jupiter 106548-03-30 15:20 G 40637007.00 40637007.14 40637007.28 0.0509 0.0364

Saturn 106548-08-03 13:54 G 40637132.88 40637133.08 40637133.28 0.0270 0.0083

Jupiter 106548-11-22 17:01 G 40637244.15 40637244.21 40637244.29 0.0502 0.0470

Uranus 106551-09-02 02:08 G 40638257.53 40638257.59 40638257.67 0.0136 0.0128

Uranus 106552-04-15 07:11 G 40638483.70 40638483.80 40638483.93 0.0136 0.0114

Uranus 106552-11-27 12:13 G 40638709.88 40638710.01 40638710.17 0.0135 0.0100

Uranus 106553-07-11 17:30 G 40638936.07 40638936.23 40638936.40 0.0135 0.0085

Uranus 106554-02-22 22:18 G 40639162.26 40639162.43 40639162.62 0.0135 0.0070

Mars 106554-07-13 17:59 G 40639303.08 40639303.25 40639303.43 0.1573 0.0260

Jupiter 106554-09-22 00:28 G 40639373.32 40639373.52 40639373.72 0.0520 0.0047

Uranus 106554-10-07 03:20 G 40639388.45 40639388.64 40639388.84 0.0135 0.0056

Uranus 106555-05-21 08:23 G 40639614.65 40639614.85 40639615.05 0.0135 0.0041

Uranus 106556-01-02 12:56 G 40639840.84 40639841.04 40639841.26 0.0135 0.0026

Uranus 106556-08-15 17:44 G 40640067.03 40640067.24 40640067.46 0.0135 0.0011

Uranus 106557-03-29 22:32 G 40640293.23 40640293.44 40640293.65 0.0135 0.0004

Uranus 106557-11-11 03:06 G 40640519.42 40640519.63 40640519.85 0.0135 0.0019

Uranus 106558-06-25 07:40 G 40640745.62 40640745.82 40640746.03 0.0135 0.0033

Uranus 106559-02-06 11:59 G 40640971.81 40640972.00 40640972.21 0.0135 0.0048

Uranus 106559-09-20 16:47 G 40641198.02 40641198.20 40641198.39 0.0135 0.0062

Uranus 106560-05-03 21:06 G 40641424.22 40641424.38 40641424.57 0.0135 0.0077

Jupiter 106560-07-28 14:37 G 40641509.93 40641510.11 40641510.30 0.0504 0.0245

Uranus 106560-12-16 01:25 G 40641650.42 40641650.56 40641650.73 0.0135 0.0091

Uranus 106561-07-30 05:59 G 40641876.63 40641876.75 40641876.90 0.0135 0.0105

Saturn 106561-10-19 15:49 G 40641957.98 40641958.16 40641958.33 0.0293 0.0173

Uranus 106562-03-13 10:18 G 40642102.85 40642102.93 40642103.05 0.0135 0.0119

Saturn 106562-06-06 19:25 G 40642188.14 40642188.31 40642188.48 0.0291 0.0185

Uranus 106562-10-25 15:06 G 40642329.11 40642329.13 40642329.19 0.0135 0.0132

Jupiter 106566-05-27 19:11 G 40643639.14 40643639.30 40643639.47 0.0518 0.0297

Jupiter 106572-04-02 12:42 G 40645775.82 40645776.03 40645776.24 0.0506 0.0018

Saturn 106577-06-29 17:01 G 40647690.05 40647690.21 40647690.40 0.0267 0.0147

Saturn 106578-02-13 15:35 G 40647918.96 40647919.15 40647919.34 0.0269 0.0116

Jupiter 106578-09-24 16:47 G 40648142.05 40648142.20 40648142.35 0.0524 0.0345

Jupiter 106583-12-07 08:08 G 40650041.66 40650041.84 40650042.04 0.0507 0.0218

Mars 106587-06-09 17:44 G 40651322.09 40651322.24 40651322.40 0.1970 0.0865

Pluto 106588-04-21 02:23 G 40651638.56 40651638.60 40651638.67 0.0080 0.0078

Pluto 106588-12-02 13:40 G 40651863.85 40651864.07 40651864.30 0.0080 0.0006

Jupiter 106590-05-30 14:52 G 40652407.92 40652408.12 40652408.31 0.0522 0.0101

Saturn 106591-05-01 15:06 G 40652743.95 40652744.13 40652744.32 0.0294 0.0145

Saturn 106591-12-17 18:42 G 40652974.14 40652974.28 40652974.43 0.0291 0.0212

Uranus 106595-01-14 21:35 G 40654098.32 40654098.40 40654098.52 0.0142 0.0127

Jupiter 106595-08-12 03:35 G 40654307.57 40654307.65 40654307.75 0.0510 0.0454

Uranus 106595-08-29 10:04 G 40654324.80 40654324.92 40654325.08 0.0142 0.0110

Jupiter 106596-04-05 05:44 G 40654544.61 40654544.74 40654544.87 0.0503 0.0384

Uranus 106596-04-11 23:01 G 40654551.30 40654551.46 40654551.64 0.0143 0.0092

Uranus 106596-11-24 11:44 G 40654777.81 40654777.99 40654778.19 0.0143 0.0074

Uranus 106597-07-09 00:42 G 40655004.32 40655004.53 40655004.73 0.0143 0.0056

Uranus 106598-02-20 13:25 G 40655230.85 40655231.06 40655231.28 0.0143 0.0038

Uranus 106598-10-05 02:23 G 40655457.38 40655457.60 40655457.83 0.0143 0.0020

Uranus 106599-05-19 15:35 G 40655683.92 40655684.15 40655684.37 0.0143 0.0002

Uranus 106600-01-01 04:32 G 40655910.47 40655910.69 40655910.91 0.0143 0.0017

Uranus 106600-08-15 17:16 G 40656137.02 40656137.22 40656137.45 0.0143 0.0036

Uranus 106601-03-30 06:28 G 40656363.57 40656363.77 40656363.99 0.0143 0.0054

Uranus 106601-11-11 19:40 G 40656590.13 40656590.32 40656590.52 0.0143 0.0072

Jupiter 106602-02-03 12:13 G 40656673.82 40656674.01 40656674.21 0.0519 0.0145

Uranus 106602-06-26 08:37 G 40656816.70 40656816.86 40656817.04 0.0143 0.0090

Uranus 106603-02-07 21:20 G 40657043.26 40657043.39 40657043.55 0.0143 0.0109

Uranus 106603-09-22 10:32 G 40657269.85 40657269.94 40657270.06 0.0143 0.0126

Uranus 106604-05-05 23:44 G 40657496.48 40657496.49 40657496.51 0.0143 0.0143

Saturn 106607-01-10 18:13 G 40658476.07 40658476.26 40658476.45 0.0268 0.0116

Saturn 106607-08-27 16:47 G 40658705.03 40658705.20 40658705.38 0.0270 0.0147

Jupiter 106607-12-11 01:40 G 40658810.38 40658810.57 40658810.77 0.0505 0.0153

Neptune 106610-06-03 18:13 G 40659716.18 40659716.26 40659716.36 0.0088 0.0080

Neptune 106611-01-15 07:40 G 40659941.69 40659941.82 40659941.96 0.0088 0.0070

Neptune 106611-08-28 20:37 G 40660167.22 40660167.36 40660167.54 0.0088 0.0061

Neptune 106612-04-10 10:04 G 40660392.76 40660392.92 40660393.13 0.0088 0.0051

Neptune 106612-11-21 23:59 G 40660618.30 40660618.50 40660618.70 0.0088 0.0040

Neptune 106613-07-05 13:25 G 40660843.85 40660844.06 40660844.27 0.0088 0.0030

Jupiter 106613-10-09 09:35 G 40660939.78 40660939.90 40660940.04 0.0517 0.0386

Neptune 106614-02-16 02:37 G 40661069.40 40661069.61 40661069.84 0.0088 0.0020

Jupiter 106614-06-03 08:23 G 40661176.79 40661176.85 40661176.92 0.0525 0.0496

Neptune 106614-09-29 16:04 G 40661294.95 40661295.17 40661295.40 0.0088 0.0010

Neptune 106615-05-13 05:30 G 40661520.51 40661520.73 40661520.96 0.0088 0.0002

Neptune 106615-12-24 18:56 G 40661746.07 40661746.29 40661746.52 0.0088 0.0010

Neptune 106616-08-06 08:08 G 40661971.63 40661971.84 40661972.07 0.0088 0.0021

Neptune 106617-03-19 21:35 G 40662197.20 40662197.40 40662197.63 0.0088 0.0031

Neptune 106617-10-31 11:16 G 40662422.78 40662422.97 40662423.18 0.0088 0.0041

Neptune 106618-06-14 00:42 G 40662648.35 40662648.53 40662648.72 0.0088 0.0051

Neptune 106619-01-25 14:08 G 40662873.94 40662874.09 40662874.26 0.0088 0.0061

Jupiter 106619-08-15 23:01 G 40663076.26 40663076.46 40663076.67 0.0507 0.0079

Neptune 106619-09-08 03:35 G 40663099.53 40663099.65 40663099.79 0.0088 0.0071

Neptune 106620-04-20 17:16 G 40663325.15 40663325.22 40663325.32 0.0088 0.0081

Mars 106620-05-11 06:42 G 40663345.61 40663345.78 40663345.96 0.1573 0.0098

Saturn 106620-11-11 21:06 G 40663530.18 40663530.38 40663530.59 0.0293 0.0097

Saturn 106621-06-30 00:42 G 40663760.44 40663760.53 40663760.63 0.0291 0.0259

Jupiter 106626-02-06 02:37 G 40665442.43 40665442.61 40665442.79 0.0523 0.0240

Moon 106626-06-06 17:01 G 40665563.05 40665563.21 40665563.36 0.2637 0.0542

Earth 106626-06-06 22:47 G 40665563.28 40665563.45 40665563.61 0.2634 0.0195 *

Jupiter 106631-04-20 20:23 G 40667342.19 40667342.35 40667342.52 0.0509 0.0309

Uranus 106635-05-03 11:59 G 40668815.97 40668816.00 40668816.06 0.0136 0.0132

Uranus 106635-12-15 17:16 G 40669042.13 40669042.22 40669042.34 0.0136 0.0118

Saturn 106636-07-22 20:23 G 40669262.16 40669262.35 40669262.56 0.0267 0.0083

Uranus 106636-07-28 22:18 G 40669268.31 40669268.43 40669268.58 0.0136 0.0104

Saturn 106637-03-08 18:56 G 40669491.14 40669491.29 40669491.45 0.0269 0.0180

Uranus 106637-03-12 03:49 G 40669494.50 40669494.66 40669494.82 0.0135 0.0089

Jupiter 106637-10-12 00:42 G 40669708.33 40669708.53 40669708.73 0.0521 0.0004

Uranus 106637-10-24 08:37 G 40669720.69 40669720.86 40669721.05 0.0135 0.0075

Uranus 106638-06-07 13:54 G 40669946.89 40669947.08 40669947.27 0.0135 0.0060

Uranus 106639-01-19 18:28 G 40670173.08 40670173.27 40670173.48 0.0135 0.0046

Uranus 106639-09-02 23:30 G 40670399.28 40670399.48 40670399.69 0.0135 0.0030

Uranus 106640-04-16 04:18 G 40670625.47 40670625.68 40670625.90 0.0135 0.0016

Uranus 106640-11-28 09:06 G 40670851.67 40670851.88 40670852.09 0.0135 0.0001

Uranus 106641-07-12 13:40 G 40671077.86 40671078.07 40671078.28 0.0135 0.0014

Uranus 106642-02-23 18:13 G 40671304.05 40671304.26 40671304.47 0.0135 0.0029

Uranus 106642-10-07 23:01 G 40671530.26 40671530.46 40671530.66 0.0135 0.0043

Uranus 106643-05-22 03:20 G 40671756.46 40671756.64 40671756.84 0.0135 0.0058

Jupiter 106643-08-18 18:13 G 40671845.09 40671845.26 40671845.43 0.0503 0.0296

Uranus 106644-01-03 07:40 G 40671982.65 40671982.82 40671983.01 0.0135 0.0072

Uranus 106644-08-16 12:13 G 40672208.86 40672209.01 40672209.18 0.0135 0.0086

Uranus 106645-03-30 16:47 G 40672435.07 40672435.20 40672435.35 0.0135 0.0100

Uranus 106645-11-11 21:20 G 40672661.29 40672661.39 40672661.51 0.0135 0.0114

Uranus 106646-06-26 01:40 G 40672887.53 40672887.57 40672887.66 0.0135 0.0128

Jupiter 106649-06-16 23:30 G 40673974.30 40673974.48 40673974.66 0.0519 0.0244

Saturn 106650-05-24 20:08 G 40674316.14 40674316.34 40674316.55 0.0293 0.0071

Saturn 106651-01-09 23:30 G 40674546.45 40674546.48 40674546.52 0.0291 0.0286

Mars 106653-04-06 19:40 G 40675364.23 40675364.32 40675364.40 0.1969 0.1691

Jupiter 106655-04-23 14:37 G 40676110.91 40676111.11 40676111.32 0.0505 0.0065

Jupiter 106661-02-19 21:49 G 40678240.35 40678240.41 40678240.49 0.0517 0.0482

Jupiter 106661-10-14 20:23 G 40678477.22 40678477.35 40678477.48 0.0524 0.0397

Saturn 106666-02-01 21:06 G 40680048.18 40680048.38 40680048.58 0.0268 0.0053

Saturn 106666-09-18 19:40 G 40680277.20 40680277.32 40680277.46 0.0270 0.0211

Jupiter 106666-12-27 09:49 G 40680376.72 40680376.91 40680377.11 0.0508 0.0173

Jupiter 106673-06-19 16:32 G 40682743.00 40682743.19 40682743.39 0.0522 0.0149

Jupiter 106678-09-01 06:42 G 40684642.66 40684642.78 40684642.90 0.0510 0.0407

Uranus 106678-09-15 04:47 G 40684656.63 40684656.70 40684656.80 0.0142 0.0131

Jupiter 106679-04-26 08:37 G 40684879.76 40684879.86 40684879.97 0.0503 0.0432

Uranus 106679-04-29 17:44 G 40684883.10 40684883.24 40684883.37 0.0142 0.0114

Saturn 106679-12-05 01:40 G 40685102.36 40685102.57 40685102.79 0.0293 0.0025

Uranus 106679-12-12 05:59 G 40685109.60 40685109.75 40685109.92 0.0143 0.0097

Uranus 106680-07-25 18:42 G 40685336.10 40685336.28 40685336.47 0.0143 0.0079

Uranus 106681-03-09 07:40 G 40685562.62 40685562.82 40685563.02 0.0143 0.0061

Uranus 106681-10-21 20:23 G 40685789.14 40685789.35 40685789.57 0.0143 0.0043

Uranus 106682-06-05 09:20 G 40686015.67 40686015.89 40686016.11 0.0143 0.0025

Uranus 106683-01-17 22:18 G 40686242.20 40686242.43 40686242.65 0.0143 0.0007

Uranus 106683-09-01 11:16 G 40686468.75 40686468.97 40686469.19 0.0143 0.0012

Uranus 106684-04-15 00:13 G 40686695.30 40686695.51 40686695.73 0.0143 0.0030

Uranus 106684-11-27 13:25 G 40686921.85 40686922.06 40686922.27 0.0143 0.0048

Jupiter 106685-02-22 11:01 G 40687008.77 40687008.96 40687009.16 0.0520 0.0107

Uranus 106685-07-12 02:23 G 40687148.40 40687148.60 40687148.80 0.0143 0.0067

Uranus 106686-02-23 15:06 G 40687374.96 40687375.13 40687375.32 0.0143 0.0085

Mars 106686-03-08 19:40 G 40687388.14 40687388.32 40687388.50 0.1574 0.0075

Uranus 106686-10-08 04:18 G 40687601.53 40687601.68 40687601.84 0.0143 0.0103

Uranus 106687-05-22 17:16 G 40687828.12 40687828.22 40687828.35 0.0143 0.0120

Uranus 106688-01-04 06:28 G 40688054.72 40688054.77 40688054.84 0.0143 0.0137

Jupiter 106690-12-30 06:56 G 40689145.60 40689145.79 40689145.98 0.0504 0.0208

Neptune 106692-07-21 09:20 G 40689714.82 40689714.89 40689714.98 0.0090 0.0083

Neptune 106693-03-03 21:49 G 40689940.30 40689940.41 40689940.55 0.0090 0.0073

Neptune 106693-10-15 10:32 G 40690165.80 40690165.94 40690166.11 0.0090 0.0063

Neptune 106694-05-28 23:01 G 40690391.31 40690391.46 40690391.65 0.0090 0.0053

Neptune 106695-01-09 11:59 G 40690616.81 40690617.00 40690617.19 0.0090 0.0042

Saturn 106695-08-14 23:59 G 40690834.29 40690834.50 40690834.71 0.0268 0.0018

Neptune 106695-08-23 00:28 G 40690842.33 40690842.52 40690842.73 0.0090 0.0032

Saturn 106696-03-30 22:18 G 40691063.36 40691063.43 40691063.52 0.0270 0.0246

Neptune 106696-04-04 13:25 G 40691067.85 40691068.06 40691068.27 0.0090 0.0021

Jupiter 106696-10-28 09:20 G 40691274.75 40691274.89 40691275.05 0.0518 0.0346

Neptune 106696-11-16 01:54 G 40691293.37 40691293.58 40691293.80 0.0090 0.0011

Neptune 106697-06-29 14:37 G 40691518.89 40691519.11 40691519.32 0.0090 0.0000

Neptune 106698-02-10 03:20 G 40691744.42 40691744.64 40691744.85 0.0090 0.0010

Neptune 106698-09-23 15:49 G 40691969.96 40691970.16 40691970.38 0.0090 0.0021

Neptune 106699-05-07 04:18 G 40692195.49 40692195.68 40692195.89 0.0090 0.0031

Neptune 106699-12-18 17:01 G 40692421.02 40692421.21 40692421.41 0.0090 0.0041

Neptune 106700-08-01 05:16 G 40692646.56 40692646.72 40692646.91 0.0090 0.0052

Neptune 106701-03-14 17:44 G 40692872.10 40692872.24 40692872.41 0.0090 0.0062

Neptune 106701-10-26 06:28 G 40693097.66 40693097.77 40693097.91 0.0090 0.0072

Neptune 106702-06-08 18:56 G 40693323.22 40693323.29 40693323.39 0.0090 0.0082

Jupiter 106702-09-05 02:52 G 40693411.42 40693411.62 40693411.83 0.0506 0.0028

Jupiter 106709-02-26 06:56 G 40695777.63 40695777.79 40695777.96 0.0523 0.0296

Saturn 106709-06-17 01:40 G 40695888.35 40695888.57 40695888.79 0.0293 0.0005

Jupiter 106714-05-10 22:32 G 40697677.27 40697677.44 40697677.62 0.0508 0.0262

Uranus 106719-01-01 23:01 G 40699374.46 40699374.46 40699374.48 0.0136 0.0136

Uranus 106719-08-16 04:04 G 40699600.60 40699600.67 40699600.78 0.0136 0.0122

Uranus 106720-03-29 09:20 G 40699826.78 40699826.89 40699827.04 0.0136 0.0108

Jupiter 106720-11-01 04:32 G 40700043.49 40700043.69 40700043.89 0.0521 0.0049

Uranus 106720-11-10 14:37 G 40700052.97 40700053.11 40700053.28 0.0135 0.0093

Uranus 106721-06-24 19:40 G 40700279.16 40700279.32 40700279.51 0.0135 0.0079

Uranus 106722-02-06 00:56 G 40700505.35 40700505.54 40700505.73 0.0135 0.0064

Uranus 106722-09-20 05:44 G 40700731.55 40700731.74 40700731.95 0.0135 0.0049

Uranus 106723-05-04 10:47 G 40700957.75 40700957.95 40700958.16 0.0135 0.0034

Uranus 106723-12-16 15:35 G 40701183.94 40701184.15 40701184.36 0.0135 0.0020

Saturn 106724-07-11 02:37 G 40701391.54 40701391.61 40701391.69 0.0267 0.0248

Uranus 106724-07-29 20:08 G 40701410.13 40701410.34 40701410.55 0.0135 0.0005

Saturn 106725-02-25 00:28 G 40701620.31 40701620.52 40701620.73 0.0268 0.0011

Uranus 106725-03-13 00:42 G 40701636.32 40701636.53 40701636.75 0.0135 0.0010

Uranus 106725-10-25 05:30 G 40701862.52 40701862.73 40701862.94 0.0135 0.0024

Jupiter 106726-01-13 17:01 G 40701943.18 40701943.21 40701943.25 0.0510 0.0503

Uranus 106726-06-08 10:04 G 40702088.72 40702088.92 40702089.12 0.0135 0.0039

Jupiter 106726-09-07 19:40 G 40702180.17 40702180.32 40702180.48 0.0503 0.0340

Uranus 106727-01-20 14:37 G 40702314.91 40702315.11 40702315.30 0.0135 0.0053

Uranus 106727-09-03 18:42 G 40702541.11 40702541.28 40702541.48 0.0135 0.0068

Uranus 106728-04-16 23:16 G 40702767.31 40702767.47 40702767.65 0.0135 0.0082

Uranus 106728-11-29 03:49 G 40702993.52 40702993.66 40702993.82 0.0135 0.0096

Uranus 106729-07-13 08:23 G 40703219.74 40703219.85 40703219.98 0.0135 0.0110

Uranus 106730-02-24 12:42 G 40703445.96 40703446.03 40703446.13 0.0135 0.0124

Jupiter 106732-07-07 01:25 G 40704309.38 40704309.56 40704309.75 0.0519 0.0197

Jupiter 106738-05-13 17:16 G 40706446.02 40706446.22 40706446.43 0.0505 0.0113

Saturn 106738-12-28 07:11 G 40706674.59 40706674.80 40706675.02 0.0292 0.0053

Earth 106739-12-10 17:44 G 40707022.12 40707022.24 40707022.37 0.2698 0.1576

Moon 106739-12-10 21:35 G 40707022.31 40707022.40 40707022.49 0.2693 0.2168 *

Jupiter 106744-03-11 20:08 G 40708575.25 40708575.34 40708575.45 0.0517 0.0446

Jupiter 106744-11-03 18:42 G 40708812.18 40708812.28 40708812.39 0.0524 0.0436

Pluto 106746-09-22 06:28 G 40709499.67 40709499.77 40709499.93 0.0063 0.0052

Pluto 106747-05-05 10:18 G 40709724.73 40709724.93 40709725.15 0.0064 0.0012

Moon 106747-12-08 09:35 G 40709941.77 40709941.90 40709942.03 0.2690 0.1672

Earth 106747-12-08 10:47 G 40709941.84 40709941.95 40709942.07 0.2697 0.1837 *

Pluto 106747-12-16 13:25 G 40709949.88 40709950.06 40709950.27 0.0064 0.0028

Jupiter 106750-01-16 14:52 G 40710711.92 40710712.12 40710712.32 0.0507 0.0118

Mars 106752-01-05 08:37 G 40711430.69 40711430.86 40711431.04 0.1573 0.0237

Saturn 106754-01-21 05:59 G 40712177.64 40712177.75 40712177.89 0.0267 0.0212

Saturn 106754-09-07 04:18 G 40712406.47 40712406.68 40712406.88 0.0268 0.0049

Jupiter 106756-07-09 16:04 G 40713077.99 40713078.17 40713078.36 0.0522 0.0190

Jupiter 106761-09-21 10:18 G 40714977.78 40714977.93 40714978.08 0.0509 0.0356

Jupiter 106762-05-16 11:30 G 40715214.93 40715214.98 40715215.05 0.0502 0.0481

Uranus 106762-05-16 11:16 G 40715214.93 40715214.97 40715215.05 0.0142 0.0136 *

Uranus 106762-12-28 23:30 G 40715441.38 40715441.48 40715441.62 0.0142 0.0120

Uranus 106763-08-12 11:59 G 40715667.87 40715668.00 40715668.17 0.0142 0.0103

Uranus 106764-03-26 00:56 G 40715894.37 40715894.54 40715894.73 0.0143 0.0085

Uranus 106764-11-07 13:40 G 40716120.88 40716121.07 40716121.27 0.0143 0.0067

Uranus 106765-06-22 02:23 G 40716347.40 40716347.60 40716347.82 0.0143 0.0049

Uranus 106766-02-03 15:20 G 40716573.92 40716574.14 40716574.36 0.0143 0.0031

Uranus 106766-09-18 04:04 G 40716800.45 40716800.67 40716800.90 0.0143 0.0013

Uranus 106767-05-02 17:16 G 40717027.00 40717027.22 40717027.44 0.0143 0.0006

Saturn 106767-11-22 03:35 G 40717230.59 40717230.65 40717230.72 0.0295 0.0280

Uranus 106767-12-15 06:13 G 40717253.54 40717253.76 40717253.98 0.0143 0.0024

Jupiter 106768-03-14 14:52 G 40717343.92 40717344.12 40717344.32 0.0520 0.0055

Saturn 106768-07-09 07:54 G 40717460.63 40717460.83 40717461.04 0.0293 0.0084

Uranus 106768-07-28 19:11 G 40717480.09 40717480.30 40717480.51 0.0143 0.0042

Uranus 106769-03-12 08:08 G 40717706.64 40717706.84 40717707.04 0.0143 0.0061

Uranus 106769-10-24 21:20 G 40717933.20 40717933.39 40717933.57 0.0143 0.0079

Uranus 106770-06-08 10:18 G 40718159.77 40718159.93 40718160.09 0.0143 0.0096

Uranus 106771-01-20 23:01 G 40718386.34 40718386.46 40718386.60 0.0143 0.0114

Uranus 106771-09-04 12:13 G 40718612.93 40718613.01 40718613.10 0.0143 0.0131

Jupiter 106774-01-19 08:08 G 40719480.67 40719480.84 40719481.02 0.0504 0.0253

Neptune 106774-09-06 03:49 G 40719710.58 40719710.66 40719710.73 0.0088 0.0082

Neptune 106775-04-19 16:32 G 40719936.09 40719936.19 40719936.35 0.0088 0.0073

Neptune 106775-12-01 05:59 G 40720161.62 40720161.75 40720161.93 0.0088 0.0063

Neptune 106776-07-13 19:25 G 40720387.16 40720387.31 40720387.51 0.0088 0.0053

Neptune 106777-02-24 09:06 G 40720612.70 40720612.88 40720613.09 0.0088 0.0043

Neptune 106777-10-07 22:32 G 40720838.25 40720838.44 40720838.67 0.0088 0.0033

Neptune 106778-05-21 12:28 G 40721063.80 40721064.02 40721064.23 0.0088 0.0022

Neptune 106779-01-02 01:40 G 40721289.35 40721289.57 40721289.79 0.0088 0.0012

Neptune 106779-08-15 15:06 G 40721514.90 40721515.13 40721515.36 0.0088 0.0002

Jupiter 106779-11-18 12:56 G 40721609.88 40721610.04 40721610.20 0.0518 0.0296

Neptune 106780-03-28 04:32 G 40721740.47 40721740.69 40721740.92 0.0088 0.0008

Neptune 106780-11-08 17:44 G 40721966.03 40721966.24 40721966.47 0.0088 0.0019

Neptune 106781-06-22 07:11 G 40722191.60 40722191.80 40722192.02 0.0088 0.0029

Neptune 106782-02-02 20:23 G 40722417.17 40722417.35 40722417.57 0.0088 0.0039

Neptune 106782-09-16 09:49 G 40722642.74 40722642.91 40722643.12 0.0088 0.0049

Neptune 106783-04-29 23:30 G 40722868.33 40722868.48 40722868.66 0.0088 0.0059

Saturn 106783-08-03 06:42 G 40722963.64 40722963.78 40722963.94 0.0267 0.0183

Neptune 106783-12-11 12:42 G 40723093.92 40723094.03 40723094.19 0.0088 0.0069

Mars 106784-01-03 23:59 G 40723117.47 40723117.50 40723117.54 0.1573 0.1537

Saturn 106784-03-19 04:47 G 40723192.51 40723192.70 40723192.90 0.0269 0.0079

Neptune 106784-07-24 02:08 G 40723319.52 40723319.59 40723319.71 0.0088 0.0079

Jupiter 106785-09-24 03:49 G 40723746.45 40723746.66 40723746.87 0.0506 0.0018

Jupiter 106792-03-17 08:08 G 40726112.70 40726112.84 40726113.00 0.0523 0.0343

Jupiter 106797-05-30 00:28 G 40728012.33 40728012.52 40728012.71 0.0508 0.0217

Saturn 106797-06-03 10:04 G 40728016.80 40728016.92 40728017.06 0.0294 0.0230

Saturn 106798-01-19 14:23 G 40728246.91 40728247.10 40728247.30 0.0292 0.0132

Uranus 106803-04-15 14:37 G 40730159.05 40730159.11 40730159.21 0.0136 0.0126

Jupiter 106803-11-21 02:08 G 40730378.39 40730378.59 40730378.79 0.0521 0.0084

Uranus 106803-11-27 19:54 G 40730385.23 40730385.33 40730385.47 0.0136 0.0112

Uranus 106804-07-11 00:56 G 40730611.41 40730611.54 40730611.71 0.0136 0.0098

Uranus 106805-02-22 06:28 G 40730837.61 40730837.77 40730837.94 0.0135 0.0083

Uranus 106805-10-06 11:30 G 40731063.81 40731063.98 40731064.17 0.0135 0.0068

Uranus 106806-05-20 16:32 G 40731290.00 40731290.19 40731290.39 0.0135 0.0054

Uranus 106807-01-01 21:20 G 40731516.19 40731516.39 40731516.60 0.0135 0.0039

Uranus 106807-08-16 02:08 G 40731742.39 40731742.59 40731742.80 0.0135 0.0024

Uranus 106808-03-29 06:56 G 40731968.58 40731968.79 40731969.00 0.0135 0.0010

Uranus 106808-11-10 11:44 G 40732194.77 40732194.99 40732195.20 0.0135 0.0005

Jupiter 106809-02-01 20:52 G 40732278.28 40732278.37 40732278.47 0.0510 0.0452

Uranus 106809-06-24 16:04 G 40732420.97 40732421.17 40732421.39 0.0135 0.0020

Jupiter 106809-09-26 23:44 G 40732515.36 40732515.49 40732515.62 0.0503 0.0392

Uranus 106810-02-05 20:52 G 40732647.16 40732647.37 40732647.57 0.0135 0.0034

Uranus 106810-09-20 01:11 G 40732873.36 40732873.55 40732873.76 0.0135 0.0049

Uranus 106811-05-04 05:44 G 40733099.56 40733099.74 40733099.93 0.0135 0.0063

Uranus 106811-12-16 10:04 G 40733325.76 40733325.92 40733326.11 0.0135 0.0078

Uranus 106812-07-29 14:23 G 40733551.96 40733552.10 40733552.27 0.0135 0.0092

Saturn 106813-02-12 11:16 G 40733749.80 40733749.97 40733750.15 0.0267 0.0144

Uranus 106813-03-12 18:56 G 40733778.18 40733778.29 40733778.44 0.0135 0.0106

Saturn 106813-09-29 09:20 G 40733978.71 40733978.89 40733979.09 0.0269 0.0119

Uranus 106813-10-24 23:59 G 40734004.41 40734004.50 40734004.60 0.0135 0.0119

Uranus 106814-06-08 04:18 G 40734230.66 40734230.68 40734230.72 0.0135 0.0133

Jupiter 106815-07-26 23:44 G 40734644.30 40734644.49 40734644.69 0.0519 0.0160

Mars 106816-11-30 02:37 G 40735136.48 40735136.61 40735136.75 0.1970 0.1164

Mars 106817-11-01 21:20 G 40735473.22 40735473.39 40735473.56 0.1574 0.0407

Jupiter 106821-06-01 19:40 G 40736781.12 40736781.32 40736781.52 0.0505 0.0160

Saturn 106826-12-14 12:42 G 40738802.87 40738803.03 40738803.20 0.0294 0.0194

Jupiter 106827-03-31 22:47 G 40738910.32 40738910.45 40738910.58 0.0517 0.0398

Saturn 106827-08-01 16:47 G 40739033.03 40739033.20 40739033.38 0.0292 0.0168

Jupiter 106827-11-23 21:49 G 40739147.34 40739147.41 40739147.48 0.0525 0.0488

Jupiter 106833-02-04 15:35 G 40741046.94 40741047.15 40741047.35 0.0507 0.0075

Pluto 106836-11-06 16:47 G 40742417.98 40742418.20 40742418.42 0.0080 0.0016

Pluto 106837-06-20 03:35 G 40742643.54 40742643.65 40742643.79 0.0080 0.0066

Jupiter 106839-07-29 18:42 G 40743413.11 40743413.28 40743413.46 0.0522 0.0239

Saturn 106842-08-25 12:42 G 40744535.84 40744536.03 40744536.22 0.0267 0.0113

Saturn 106843-04-11 11:01 G 40744764.79 40744764.96 40744765.13 0.0269 0.0150

Jupiter 106844-10-10 10:04 G 40745312.76 40745312.92 40745313.08 0.0509 0.0316

Uranus 106846-01-13 17:01 G 40745773.20 40745773.21 40745773.24 0.0142 0.0141

Uranus 106846-08-28 05:01 G 40745999.62 40745999.71 40745999.83 0.0142 0.0125

Uranus 106847-04-11 17:59 G 40746226.10 40746226.25 40746226.39 0.0142 0.0108

Uranus 106847-11-24 06:13 G 40746452.60 40746452.76 40746452.94 0.0143 0.0091

Uranus 106848-07-07 18:56 G 40746679.10 40746679.29 40746679.48 0.0143 0.0073

Uranus 106849-02-19 07:40 G 40746905.61 40746905.82 40746906.02 0.0143 0.0055

Uranus 106849-10-03 20:23 G 40747132.13 40747132.35 40747132.56 0.0143 0.0037

Mars 106849-10-31 12:56 G 40747159.95 40747160.04 40747160.12 0.1573 0.1375

Uranus 106850-05-18 09:06 G 40747358.66 40747358.88 40747359.10 0.0143 0.0019

Uranus 106850-12-30 22:04 G 40747585.19 40747585.42 40747585.64 0.0143 0.0002

Jupiter 106851-04-03 15:20 G 40747678.94 40747679.14 40747679.34 0.0520 0.0013

Uranus 106851-08-14 10:47 G 40747811.73 40747811.95 40747812.18 0.0143 0.0018

Uranus 106852-03-27 23:44 G 40748038.28 40748038.49 40748038.71 0.0143 0.0036

Uranus 106852-11-09 12:42 G 40748264.83 40748265.03 40748265.25 0.0143 0.0054

Uranus 106853-06-24 01:40 G 40748491.39 40748491.57 40748491.77 0.0143 0.0072

Uranus 106854-02-05 14:37 G 40748717.95 40748718.11 40748718.29 0.0143 0.0090

Uranus 106854-09-20 04:04 G 40748944.52 40748944.67 40748944.81 0.0143 0.0108

Uranus 106855-05-04 16:47 G 40749171.11 40749171.20 40749171.32 0.0143 0.0126

Uranus 106855-12-17 05:59 G 40749397.74 40749397.75 40749397.78 0.0143 0.0142

Saturn 106856-06-25 19:54 G 40749589.15 40749589.33 40749589.52 0.0294 0.0143

Neptune 106856-10-23 20:08 G 40749709.30 40749709.34 40749709.43 0.0090 0.0086

Jupiter 106857-02-07 09:06 G 40749815.71 40749815.88 40749816.05 0.0504 0.0296

Saturn 106857-02-10 23:44 G 40749819.36 40749819.49 40749819.64 0.0292 0.0218

Neptune 106857-06-06 09:06 G 40749934.77 40749934.88 40749935.01 0.0090 0.0075

Neptune 106858-01-17 21:35 G 40750160.27 40750160.40 40750160.56 0.0090 0.0065

Neptune 106858-08-31 10:18 G 40750385.77 40750385.93 40750386.11 0.0090 0.0055

Neptune 106859-04-13 22:47 G 40750611.28 40750611.45 40750611.65 0.0090 0.0045

Neptune 106859-11-25 11:44 G 40750836.79 40750836.99 40750837.19 0.0090 0.0034

Neptune 106860-07-07 23:59 G 40751062.30 40751062.50 40751062.72 0.0090 0.0024

Neptune 106861-02-18 12:42 G 40751287.82 40751288.03 40751288.25 0.0090 0.0014

Neptune 106861-10-02 01:40 G 40751513.35 40751513.57 40751513.78 0.0090 0.0003

Neptune 106862-05-15 14:08 G 40751738.88 40751739.09 40751739.31 0.0090 0.0007

Jupiter 106862-12-07 09:49 G 40751944.74 40751944.91 40751945.08 0.0518 0.0264

Neptune 106862-12-27 02:37 G 40751964.40 40751964.61 40751964.83 0.0090 0.0018

Neptune 106863-08-09 15:20 G 40752189.93 40752190.14 40752190.34 0.0090 0.0028

Neptune 106864-03-22 03:35 G 40752415.47 40752415.65 40752415.86 0.0090 0.0039

Neptune 106864-11-02 16:18 G 40752641.01 40752641.18 40752641.37 0.0090 0.0049

Neptune 106865-06-16 05:01 G 40752866.56 40752866.71 40752866.88 0.0090 0.0059

Neptune 106866-01-27 17:44 G 40753092.10 40753092.24 40753092.37 0.0090 0.0069

Neptune 106866-09-10 05:44 G 40753317.67 40753317.74 40753317.86 0.0090 0.0080

Neptune 106867-04-23 18:42 G 40753543.28 40753543.28 40753543.30 0.0090 0.0090

Jupiter 106868-10-13 06:13 G 40754081.56 40754081.76 40754081.97 0.0506 0.0066

Earth 106869-06-07 21:49 G 40754319.24 40754319.41 40754319.57 0.2635 0.0110

Moon 106869-06-08 03:35 G 40754319.49 40754319.65 40754319.80 0.2632 0.0966 *

Saturn 106872-03-06 17:59 G 40755322.06 40755322.25 40755322.46 0.0268 0.0071

Saturn 106872-10-21 16:18 G 40755551.05 40755551.18 40755551.34 0.0269 0.0193

Jupiter 106874-08-12 07:54 G 40756210.79 40756210.83 40756210.87 0.0516 0.0501

Jupiter 106875-04-06 05:44 G 40756447.60 40756447.74 40756447.88 0.0524 0.0378

Jupiter 106880-06-18 01:25 G 40758347.37 40758347.56 40758347.76 0.0508 0.0174

Mars 106882-09-27 04:18 G 40759178.51 40759178.68 40759178.85 0.1970 0.0320

Mars 106883-08-30 10:18 G 40759515.76 40759515.93 40759516.09 0.1574 0.0575

Saturn 106886-01-06 00:13 G 40760375.32 40760375.51 40760375.72 0.0294 0.0101

Saturn 106886-08-24 04:04 G 40760605.57 40760605.67 40760605.77 0.0292 0.0259

Jupiter 106886-12-10 03:35 G 40760713.46 40760713.65 40760713.85 0.0522 0.0131

Uranus 106886-12-14 01:25 G 40760717.51 40760717.56 40760717.63 0.0136 0.0130

Uranus 106887-07-28 06:42 G 40760943.68 40760943.78 40760943.90 0.0136 0.0116

Uranus 106888-03-10 11:59 G 40761169.87 40761170.00 40761170.15 0.0136 0.0102

Uranus 106888-10-22 17:30 G 40761396.07 40761396.23 40761396.39 0.0136 0.0087

Uranus 106889-06-05 22:18 G 40761622.26 40761622.43 40761622.62 0.0135 0.0073

Uranus 106890-01-18 03:20 G 40761848.46 40761848.64 40761848.84 0.0135 0.0058

Uranus 106890-09-01 08:23 G 40762074.65 40762074.85 40762075.06 0.0135 0.0043

Uranus 106891-04-15 13:11 G 40762300.85 40762301.05 40762301.26 0.0135 0.0029

Uranus 106891-11-27 17:59 G 40762527.04 40762527.25 40762527.46 0.0135 0.0014

Jupiter 106892-02-21 20:37 G 40762613.25 40762613.36 40762613.49 0.0510 0.0412

Uranus 106892-07-10 22:32 G 40762753.23 40762753.44 40762753.66 0.0135 0.0001

Jupiter 106892-10-15 22:47 G 40762850.35 40762850.45 40762850.56 0.0503 0.0431

Uranus 106893-02-22 03:06 G 40762979.42 40762979.63 40762979.85 0.0135 0.0015

Uranus 106893-10-06 07:40 G 40763205.62 40763205.82 40763206.04 0.0135 0.0030

Uranus 106894-05-20 12:28 G 40763431.82 40763432.02 40763432.22 0.0135 0.0044

Uranus 106895-01-01 16:32 G 40763658.01 40763658.19 40763658.40 0.0135 0.0059

Uranus 106895-08-15 21:06 G 40763884.21 40763884.38 40763884.57 0.0135 0.0073

Uranus 106896-03-29 01:40 G 40764110.42 40764110.57 40764110.74 0.0135 0.0087

Uranus 106896-11-10 06:13 G 40764336.63 40764336.76 40764336.91 0.0135 0.0101

Uranus 106897-06-24 10:47 G 40764562.85 40764562.95 40764563.07 0.0135 0.0115

Uranus 106898-02-05 15:06 G 40764789.09 40764789.13 40764789.21 0.0135 0.0129

Jupiter 106898-08-15 01:25 G 40764979.36 40764979.56 40764979.75 0.0519 0.0115

Saturn 106901-09-17 20:08 G 40766108.13 40766108.34 40766108.55 0.0268 0.0038

Saturn 106902-05-04 18:28 G 40766337.17 40766337.27 40766337.39 0.0270 0.0227

Jupiter 106904-06-21 17:59 G 40767116.07 40767116.25 40767116.45 0.0505 0.0198

Jupiter 106910-04-20 22:18 G 40769245.30 40769245.43 40769245.58 0.0517 0.0359

Saturn 106915-07-20 08:37 G 40771161.65 40771161.86 40771162.08 0.0293 0.0047

Mars 106915-08-30 01:25 G 40771202.45 40771202.56 40771202.68 0.1573 0.1203

Jupiter 106916-02-25 14:37 G 40771381.91 40771382.11 40771382.32 0.0507 0.0037

Jupiter 106922-08-18 14:37 G 40773747.94 40773748.11 40773748.28 0.0522 0.0269

Jupiter 106927-10-31 10:32 G 40775647.77 40775647.94 40775648.12 0.0509 0.0274

Uranus 106930-04-28 11:01 G 40776557.88 40776557.96 40776558.05 0.0142 0.0130

Saturn 106930-08-14 04:32 G 40776665.64 40776665.69 40776665.76 0.0267 0.0254

Uranus 106930-12-10 23:16 G 40776784.34 40776784.47 40776784.61 0.0142 0.0114

Saturn 106931-03-31 02:37 G 40776894.40 40776894.61 40776894.82 0.0268 0.0007

Uranus 106931-07-25 11:30 G 40777010.83 40777010.98 40777011.15 0.0142 0.0097

Uranus 106932-03-07 23:59 G 40777237.33 40777237.50 40777237.69 0.0143 0.0079

Uranus 106932-10-20 12:28 G 40777463.83 40777464.02 40777464.23 0.0143 0.0062

Uranus 106933-06-04 01:11 G 40777690.34 40777690.55 40777690.77 0.0143 0.0044

Uranus 106934-01-16 13:54 G 40777916.86 40777917.08 40777917.30 0.0143 0.0026

Jupiter 106934-04-23 11:30 G 40778013.78 40778013.98 40778014.18 0.0520 0.0022

Uranus 106934-08-31 02:37 G 40778143.39 40778143.61 40778143.84 0.0143 0.0008

Uranus 106935-04-14 15:35 G 40778369.93 40778370.15 40778370.38 0.0143 0.0011

Uranus 106935-11-27 04:18 G 40778596.47 40778596.68 40778596.91 0.0143 0.0029

Uranus 106936-07-10 17:16 G 40778823.01 40778823.22 40778823.44 0.0143 0.0047

Uranus 106937-02-22 05:59 G 40779049.57 40779049.75 40779049.96 0.0143 0.0065

Uranus 106937-10-06 18:56 G 40779276.13 40779276.29 40779276.49 0.0143 0.0083

Uranus 106938-05-21 08:08 G 40779502.70 40779502.84 40779503.01 0.0143 0.0101

Neptune 106938-12-09 12:28 G 40779704.99 40779705.02 40779705.11 0.0088 0.0085

Uranus 106939-01-02 21:20 G 40779729.27 40779729.39 40779729.52 0.0143 0.0118

Neptune 106939-07-23 01:54 G 40779930.49 40779930.58 40779930.72 0.0088 0.0075

Uranus 106939-08-17 10:18 G 40779955.87 40779955.93 40779956.01 0.0143 0.0135

Jupiter 106940-02-28 08:23 G 40780150.70 40780150.85 40780151.01 0.0504 0.0335

Neptune 106940-03-04 15:35 G 40780156.02 40780156.15 40780156.32 0.0088 0.0065

Neptune 106940-10-16 05:01 G 40780381.56 40780381.71 40780381.91 0.0088 0.0055

Neptune 106941-05-29 18:28 G 40780607.10 40780607.27 40780607.48 0.0088 0.0045

Neptune 106942-01-10 07:54 G 40780832.64 40780832.83 40780833.05 0.0088 0.0035

Neptune 106942-08-23 21:35 G 40781058.19 40781058.40 40781058.62 0.0088 0.0024

Neptune 106943-04-06 11:01 G 40781283.75 40781283.96 40781284.20 0.0088 0.0015

Neptune 106943-11-18 00:42 G 40781509.31 40781509.53 40781509.76 0.0088 0.0004

Neptune 106944-06-30 14:08 G 40781734.87 40781735.09 40781735.32 0.0088 0.0006

Saturn 106945-01-29 15:20 G 40781947.92 40781948.14 40781948.35 0.0293 0.0005

Neptune 106945-02-11 03:35 G 40781960.43 40781960.65 40781960.87 0.0088 0.0016

Neptune 106945-09-24 17:01 G 40782186.00 40782186.21 40782186.43 0.0088 0.0026

Jupiter 106945-12-27 09:35 G 40782279.72 40782279.90 40782280.08 0.0518 0.0224

Neptune 106946-05-08 06:13 G 40782411.57 40782411.76 40782411.98 0.0088 0.0037

Neptune 106946-12-19 19:25 G 40782637.14 40782637.31 40782637.52 0.0088 0.0047

Neptune 106947-08-02 08:52 G 40782862.72 40782862.87 40782863.06 0.0088 0.0057

Neptune 106948-03-14 22:18 G 40783088.31 40783088.43 40783088.60 0.0088 0.0067

Mars 106948-07-25 05:59 G 40783220.58 40783220.75 40783220.91 0.1969 0.0532

Neptune 106948-10-26 11:44 G 40783313.91 40783313.99 40783314.13 0.0088 0.0077

Neptune 106949-06-09 01:11 G 40783539.54 40783539.55 40783539.62 0.0088 0.0087

Mars 106949-06-27 23:01 G 40783558.31 40783558.46 40783558.62 0.1574 0.0745

Jupiter 106951-11-03 04:18 G 40784416.48 40784416.68 40784416.89 0.0506 0.0102

Jupiter 106957-09-01 07:54 G 40786545.75 40786545.83 40786545.92 0.0516 0.0463

Jupiter 106958-04-26 05:59 G 40786782.64 40786782.75 40786782.87 0.0524 0.0421

Saturn 106960-02-24 06:56 G 40787451.68 40787451.79 40787451.91 0.0267 0.0220

Saturn 106960-10-10 05:16 G 40787680.51 40787680.72 40787680.92 0.0268 0.0042

Jupiter 106963-07-08 22:47 G 40788682.25 40788682.45 40788682.65 0.0508 0.0140

Jupiter 106969-12-30 02:08 G 40791048.40 40791048.59 40791048.78 0.0521 0.0169

Uranus 106970-08-14 11:01 G 40791275.93 40791275.96 40791275.99 0.0136 0.0134

Uranus 106971-03-28 16:04 G 40791502.09 40791502.17 40791502.28 0.0136 0.0121

Uranus 106971-11-09 21:49 G 40791728.28 40791728.41 40791728.54 0.0136 0.0106

Uranus 106972-06-23 02:52 G 40791954.47 40791954.62 40791954.78 0.0136 0.0092

Uranus 106973-02-04 07:54 G 40792180.67 40792180.83 40792181.02 0.0136 0.0078

Uranus 106973-09-18 13:25 G 40792406.87 40792407.06 40792407.25 0.0136 0.0063

Uranus 106974-05-02 18:13 G 40792633.06 40792633.26 40792633.46 0.0135 0.0048

Saturn 106974-08-11 23:44 G 40792734.28 40792734.49 40792734.71 0.0293 0.0057

Uranus 106974-12-14 23:01 G 40792859.26 40792859.46 40792859.67 0.0135 0.0034

Jupiter 106975-03-13 18:13 G 40792948.12 40792948.26 40792948.40 0.0510 0.0380

Uranus 106975-07-29 03:49 G 40793085.45 40793085.66 40793085.87 0.0135 0.0019

Jupiter 106975-11-05 20:37 G 40793185.29 40793185.36 40793185.44 0.0503 0.0466

Uranus 106976-03-11 08:37 G 40793311.64 40793311.86 40793312.07 0.0135 0.0005

Uranus 106976-10-23 13:25 G 40793537.84 40793538.06 40793538.27 0.0135 0.0010

Uranus 106977-06-06 17:59 G 40793764.04 40793764.25 40793764.46 0.0135 0.0025

Uranus 106978-01-18 22:18 G 40793990.24 40793990.43 40793990.64 0.0135 0.0039

Uranus 106978-09-02 03:06 G 40794216.43 40794216.63 40794216.82 0.0135 0.0054

Uranus 106979-04-16 07:25 G 40794442.64 40794442.81 40794443.00 0.0135 0.0068

Uranus 106979-11-28 11:59 G 40794668.84 40794669.00 40794669.18 0.0135 0.0082

Uranus 106980-07-11 16:32 G 40794895.05 40794895.19 40794895.35 0.0135 0.0096

Uranus 106981-02-22 21:06 G 40795121.27 40795121.38 40795121.51 0.0135 0.0110

Mars 106981-06-26 14:37 G 40795244.98 40795245.11 40795245.24 0.1574 0.1044

Jupiter 106981-09-03 20:37 G 40795314.16 40795314.36 40795314.56 0.0519 0.0088

Uranus 106981-10-07 01:40 G 40795347.51 40795347.57 40795347.67 0.0135 0.0124

Moon 106982-12-11 17:30 G 40795778.10 40795778.23 40795778.37 0.2703 0.1055

Earth 106982-12-11 20:52 G 40795778.25 40795778.37 40795778.49 0.2698 0.1684 *

Jupiter 106987-07-11 17:16 G 40797451.04 40797451.22 40797451.40 0.0505 0.0236

Saturn 106989-09-05 14:08 G 40798237.94 40798238.09 40798238.25 0.0267 0.0174

Saturn 106990-04-22 12:28 G 40798466.83 40798467.02 40798467.22 0.0269 0.0089

Earth 106990-12-09 13:54 G 40798697.96 40798698.08 40798698.20 0.2697 0.1752

Moon 106990-12-09 15:20 G 40798698.03 40798698.14 40798698.25 0.2704 0.1814 *

Jupiter 106993-05-09 17:44 G 40799580.09 40799580.24 40799580.39 0.0517 0.0332

Pluto 106994-08-26 14:37 G 40800054.01 40800054.11 40800054.24 0.0063 0.0054

Pluto 106995-04-08 18:13 G 40800279.05 40800279.26 40800279.47 0.0064 0.0015

Pluto 106995-11-19 21:20 G 40800504.21 40800504.39 40800504.61 0.0064 0.0025

Jupiter 106999-03-16 12:42 G 40801716.82 40801717.03 40801717.23 0.0507 0.0009

108TH MILLENNIUM CE

This is a list of transits of Venus in the 108th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Saturn 107003-07-08 04:32 G 40803290.58 40803290.69 40803290.80 0.0294 0.0251

Saturn 107004-02-23 08:37 G 40803520.67 40803520.86 40803521.06 0.0292 0.0112

Jupiter 107005-09-07 13:25 G 40804082.90 40804083.06 40804083.22 0.0523 0.0307

Jupiter 107010-11-20 07:54 G 40805982.65 40805982.83 40805983.01 0.0509 0.0242

Uranus 107013-12-27 17:01 G 40807116.15 40807116.21 40807116.27 0.0142 0.0136

Mars 107014-05-23 07:25 G 40807262.69 40807262.81 40807262.93 0.1969 0.1388

Uranus 107014-08-11 04:47 G 40807342.60 40807342.70 40807342.83 0.0142 0.0119

Uranus 107015-03-25 17:16 G 40807569.08 40807569.22 40807569.38 0.0142 0.0102

Mars 107015-04-26 11:59 G 40807600.86 40807601.00 40807601.15 0.1575 0.0912

Uranus 107015-11-07 05:30 G 40807795.56 40807795.73 40807795.92 0.0142 0.0085

Uranus 107016-06-20 17:59 G 40808022.06 40808022.25 40808022.45 0.0143 0.0068

Uranus 107017-02-02 06:42 G 40808248.57 40808248.78 40808248.98 0.0143 0.0050

Jupiter 107017-05-13 10:32 G 40808348.75 40808348.94 40808349.14 0.0521 0.0060

Uranus 107017-09-16 19:11 G 40808475.08 40808475.30 40808475.52 0.0143 0.0032

Uranus 107018-05-01 07:54 G 40808701.61 40808701.83 40808702.05 0.0143 0.0014

Uranus 107018-12-13 20:37 G 40808928.14 40808928.36 40808928.59 0.0143 0.0004

Saturn 107019-03-19 17:01 G 40809024.04 40809024.21 40809024.39 0.0267 0.0138

Uranus 107019-07-28 09:20 G 40809154.67 40809154.89 40809155.11 0.0143 0.0022

Saturn 107019-11-03 15:35 G 40809252.96 40809253.15 40809253.33 0.0269 0.0125

Uranus 107020-03-10 22:18 G 40809381.22 40809381.43 40809381.65 0.0143 0.0040

Uranus 107020-10-23 11:16 G 40809607.77 40809607.97 40809608.17 0.0143 0.0058

Neptune 107021-01-27 07:25 G 40809703.79 40809703.81 40809703.88 0.0090 0.0088

Uranus 107021-06-07 00:13 G 40809834.32 40809834.51 40809834.70 0.0143 0.0076

Neptune 107021-09-09 20:37 G 40809929.26 40809929.36 40809929.48 0.0090 0.0077

Uranus 107022-01-19 12:56 G 40810060.89 40810061.04 40810061.22 0.0143 0.0094

Neptune 107022-04-23 09:06 G 40810154.75 40810154.88 40810155.04 0.0090 0.0067

Jupiter 107022-07-26 01:25 G 40810248.50 40810248.56 40810248.62 0.0511 0.0486

Uranus 107022-09-03 01:54 G 40810287.46 40810287.58 40810287.73 0.0143 0.0112

Neptune 107022-12-04 21:35 G 40810380.25 40810380.40 40810380.58 0.0090 0.0057

Jupiter 107023-03-20 04:32 G 40810485.55 40810485.69 40810485.83 0.0504 0.0365

Uranus 107023-04-17 15:06 G 40810514.05 40810514.13 40810514.24 0.0143 0.0129

Neptune 107023-07-18 10:04 G 40810605.76 40810605.92 40810606.12 0.0090 0.0047

Neptune 107024-02-28 23:01 G 40810831.27 40810831.46 40810831.66 0.0090 0.0036

Neptune 107024-10-11 11:44 G 40811056.79 40811056.99 40811057.20 0.0090 0.0026

Neptune 107025-05-25 00:13 G 40811282.31 40811282.51 40811282.73 0.0090 0.0016

Neptune 107026-01-05 12:56 G 40811507.83 40811508.04 40811508.26 0.0090 0.0005

Neptune 107026-08-19 01:25 G 40811733.35 40811733.56 40811733.78 0.0090 0.0006

Neptune 107027-04-01 13:54 G 40811958.88 40811959.08 40811959.30 0.0090 0.0016

Neptune 107027-11-13 02:37 G 40812184.41 40812184.61 40812184.82 0.0090 0.0026

Neptune 107028-06-25 14:52 G 40812409.94 40812410.12 40812410.34 0.0090 0.0037

Jupiter 107029-01-16 07:25 G 40812614.62 40812614.81 40812615.00 0.0518 0.0189

Neptune 107029-02-06 03:35 G 40812635.48 40812635.65 40812635.85 0.0090 0.0047

Neptune 107029-09-19 16:18 G 40812861.03 40812861.18 40812861.36 0.0090 0.0057

Neptune 107030-05-03 05:01 G 40813086.57 40813086.71 40813086.86 0.0090 0.0067

Neptune 107030-12-14 17:44 G 40813312.13 40813312.24 40813312.35 0.0090 0.0077

Neptune 107031-07-28 05:30 G 40813537.71 40813537.73 40813537.81 0.0090 0.0088

Saturn 107033-01-17 13:25 G 40814076.91 40814077.06 40814077.23 0.0294 0.0196

Saturn 107033-09-04 17:44 G 40814307.06 40814307.24 40814307.42 0.0292 0.0166

Jupiter 107034-11-23 00:42 G 40814751.33 40814751.53 40814751.73 0.0506 0.0132

Jupiter 107040-09-21 02:52 G 40816880.52 40816880.62 40816880.73 0.0515 0.0438

Jupiter 107041-05-16 00:13 G 40817117.42 40817117.51 40817117.62 0.0523 0.0445

Jupiter 107046-07-28 20:08 G 40819017.14 40819017.34 40819017.54 0.0508 0.0108

Mars 107047-04-25 03:06 G 40819287.49 40819287.63 40819287.78 0.1574 0.0873

Saturn 107048-09-29 00:42 G 40819810.34 40819810.53 40819810.73 0.0268 0.0091

Saturn 107049-05-15 23:16 G 40820039.32 40820039.47 40820039.63 0.0270 0.0175

Jupiter 107053-01-18 20:23 G 40821383.17 40821383.35 40821383.54 0.0521 0.0194

Uranus 107054-11-27 01:25 G 40822060.49 40822060.56 40822060.66 0.0136 0.0125

Uranus 107055-07-11 06:42 G 40822286.68 40822286.78 40822286.92 0.0136 0.0111

Uranus 107056-02-22 12:13 G 40822512.87 40822513.01 40822513.17 0.0136 0.0097

Uranus 107056-10-05 17:44 G 40822739.07 40822739.24 40822739.41 0.0136 0.0082

Uranus 107057-05-19 22:47 G 40822965.27 40822965.45 40822965.64 0.0136 0.0068

Uranus 107058-01-01 03:35 G 40823191.47 40823191.65 40823191.86 0.0136 0.0054

Jupiter 107058-04-02 14:52 G 40823282.97 40823283.12 40823283.27 0.0510 0.0351

Uranus 107058-08-15 08:37 G 40823417.66 40823417.86 40823418.07 0.0135 0.0039

Jupiter 107058-11-25 17:01 G 40823520.19 40823520.21 40823520.25 0.0503 0.0496

Uranus 107059-03-29 13:40 G 40823643.86 40823644.07 40823644.28 0.0135 0.0024

Uranus 107059-11-10 18:28 G 40823870.06 40823870.27 40823870.48 0.0135 0.0009

Uranus 107060-06-23 23:16 G 40824096.26 40824096.47 40824096.68 0.0135 0.0005

Uranus 107061-02-05 03:49 G 40824322.45 40824322.66 40824322.87 0.0135 0.0020

Uranus 107061-09-19 08:37 G 40824548.65 40824548.86 40824549.07 0.0135 0.0034

Uranus 107062-05-03 12:56 G 40824774.86 40824775.04 40824775.25 0.0135 0.0050

Saturn 107062-07-30 23:59 G 40824863.32 40824863.50 40824863.70 0.0294 0.0135

Uranus 107062-12-15 17:44 G 40825001.06 40825001.24 40825001.43 0.0135 0.0063

Saturn 107063-03-18 03:35 G 40825093.53 40825093.65 40825093.80 0.0292 0.0226

Uranus 107063-07-29 22:18 G 40825227.26 40825227.43 40825227.61 0.0135 0.0078

Uranus 107064-03-12 03:06 G 40825453.47 40825453.63 40825453.78 0.0135 0.0092

Jupiter 107064-09-23 17:44 G 40825649.04 40825649.24 40825649.44 0.0519 0.0056

Uranus 107064-10-24 07:40 G 40825679.70 40825679.82 40825679.96 0.0135 0.0106

Uranus 107065-06-07 12:13 G 40825905.92 40825906.01 40825906.12 0.0135 0.0119

Uranus 107066-01-19 16:32 G 40826132.18 40826132.19 40826132.25 0.0135 0.0133

Jupiter 107070-07-31 13:11 G 40827785.88 40827786.05 40827786.23 0.0504 0.0266

Jupiter 107076-05-29 15:35 G 40829914.99 40829915.15 40829915.32 0.0517 0.0299

Saturn 107078-04-11 04:04 G 40830596.47 40830596.67 40830596.87 0.0268 0.0054

Saturn 107078-11-26 02:37 G 40830825.49 40830825.61 40830825.74 0.0269 0.0212

Mars 107081-02-21 00:28 G 40831643.39 40831643.52 40831643.64 0.1575 0.1092

Jupiter 107082-04-05 08:08 G 40832051.63 40832051.84 40832052.04 0.0507 0.0027

Pluto 107084-10-11 21:35 G 40832972.20 40832972.40 40832972.62 0.0080 0.0027

Pluto 107085-05-25 08:52 G 40833197.71 40833197.87 40833198.04 0.0080 0.0055

Jupiter 107088-09-26 10:32 G 40834417.80 40834417.94 40834418.10 0.0523 0.0341

Saturn 107092-02-10 09:06 G 40835649.67 40835649.88 40835650.09 0.0293 0.0080

Saturn 107092-09-27 12:42 G 40835879.98 40835880.03 40835880.09 0.0291 0.0280

Jupiter 107093-12-09 03:06 G 40836317.44 40836317.63 40836317.82 0.0509 0.0215

Uranus 107097-08-26 23:44 G 40837674.46 40837674.49 40837674.53 0.0142 0.0140

Uranus 107098-04-10 11:30 G 40837900.89 40837900.98 40837901.10 0.0142 0.0124

Uranus 107098-11-22 23:44 G 40838127.36 40838127.49 40838127.65 0.0142 0.0108

Uranus 107099-07-07 11:59 G 40838353.84 40838354.00 40838354.18 0.0142 0.0091

Uranus 107100-02-19 00:13 G 40838580.33 40838580.51 40838580.71 0.0142 0.0073

Jupiter 107100-06-02 05:01 G 40838683.52 40838683.71 40838683.91 0.0520 0.0084

Uranus 107100-10-03 12:42 G 40838806.84 40838807.03 40838807.25 0.0143 0.0056

Uranus 107101-05-18 01:25 G 40839033.35 40839033.56 40839033.78 0.0143 0.0038

Uranus 107101-12-30 14:08 G 40839259.87 40839260.09 40839260.31 0.0143 0.0020

Uranus 107102-08-14 02:37 G 40839486.39 40839486.61 40839486.84 0.0143 0.0003

Neptune 107103-03-14 23:16 G 40839699.44 40839699.47 40839699.51 0.0088 0.0086

Uranus 107103-03-28 15:35 G 40839712.93 40839713.15 40839713.37 0.0143 0.0016

Neptune 107103-10-26 11:59 G 40839924.92 40839925.00 40839925.14 0.0088 0.0077

Uranus 107103-11-10 04:18 G 40839939.47 40839939.68 40839939.90 0.0143 0.0034

Neptune 107104-06-08 01:25 G 40840150.44 40840150.56 40840150.73 0.0088 0.0067

Uranus 107104-06-23 17:16 G 40840166.01 40840166.22 40840166.43 0.0143 0.0052

Neptune 107105-01-19 14:52 G 40840375.97 40840376.12 40840376.31 0.0088 0.0057

Uranus 107105-02-05 06:13 G 40840392.56 40840392.76 40840392.95 0.0143 0.0070

Jupiter 107105-08-14 21:20 G 40840583.31 40840583.39 40840583.48 0.0512 0.0460

Neptune 107105-09-02 04:18 G 40840601.51 40840601.68 40840601.89 0.0088 0.0047

Uranus 107105-09-19 18:56 G 40840619.12 40840619.29 40840619.47 0.0143 0.0088

Jupiter 107106-04-09 00:56 G 40840820.42 40840820.54 40840820.68 0.0504 0.0396

Neptune 107106-04-15 17:59 G 40840827.06 40840827.25 40840827.47 0.0088 0.0037

Uranus 107106-05-04 07:54 G 40840845.70 40840845.83 40840845.99 0.0143 0.0106

Neptune 107106-11-27 07:25 G 40841052.61 40841052.81 40841053.04 0.0088 0.0027

Uranus 107106-12-16 20:52 G 40841072.28 40841072.37 40841072.50 0.0143 0.0123

Saturn 107107-03-08 13:25 G 40841154.06 40841154.06 40841154.07 0.0267 0.0267

Neptune 107107-07-10 20:52 G 40841278.16 40841278.37 40841278.61 0.0088 0.0017

Uranus 107107-07-31 09:49 G 40841298.89 40841298.91 40841298.97 0.0143 0.0140

Saturn 107107-10-23 11:44 G 40841382.78 40841382.99 40841383.20 0.0268 0.0006

Neptune 107108-02-21 10:32 G 40841503.72 40841503.94 40841504.17 0.0088 0.0006

Saturn 107108-06-08 10:32 G 40841611.89 40841611.94 40841611.99 0.0270 0.0261

Neptune 107108-10-04 00:13 G 40841729.28 40841729.51 40841729.73 0.0088 0.0004

Neptune 107109-05-17 13:40 G 40841954.85 40841955.07 40841955.29 0.0088 0.0014

Neptune 107109-12-29 03:06 G 40842180.41 40842180.63 40842180.84 0.0088 0.0024

Neptune 107110-08-11 16:04 G 40842405.98 40842406.17 40842406.39 0.0088 0.0035

Neptune 107111-03-25 05:30 G 40842631.56 40842631.73 40842631.95 0.0088 0.0045

Neptune 107111-11-05 18:56 G 40842857.14 40842857.29 40842857.49 0.0088 0.0055

Jupiter 107112-02-06 01:40 G 40842949.38 40842949.57 40842949.76 0.0518 0.0166

Moon 107112-06-10 16:04 G 40843075.01 40843075.17 40843075.32 0.2639 0.0791

Earth 107112-06-10 21:06 G 40843075.22 40843075.38 40843075.55 0.2635 0.0094 *

Neptune 107112-06-18 08:23 G 40843082.72 40843082.85 40843083.02 0.0088 0.0065

Neptune 107113-01-29 22:18 G 40843308.31 40843308.43 40843308.55 0.0088 0.0074

Mars 107113-02-20 16:04 G 40843330.01 40843330.17 40843330.33 0.1574 0.0705

Neptune 107113-09-12 11:30 G 40843533.93 40843533.98 40843534.05 0.0088 0.0084

Jupiter 107117-12-12 20:37 G 40845086.16 40845086.36 40845086.55 0.0506 0.0159

Saturn 107121-08-23 20:52 G 40846436.16 40846436.37 40846436.59 0.0293 0.0016

Jupiter 107123-10-11 22:47 G 40847215.34 40847215.45 40847215.58 0.0516 0.0412

Jupiter 107124-06-04 21:06 G 40847452.30 40847452.38 40847452.46 0.0524 0.0477

Jupiter 107129-08-17 16:18 G 40849351.98 40849352.18 40849352.39 0.0508 0.0079

Jupiter 107136-02-08 18:13 G 40851718.08 40851718.26 40851718.44 0.0522 0.0228

Saturn 107136-09-17 16:47 G 40851940.11 40851940.20 40851940.31 0.0267 0.0230

Saturn 107137-05-04 15:06 G 40852168.92 40852169.13 40852169.34 0.0268 0.0032

Uranus 107138-07-28 10:18 G 40852618.87 40852618.93 40852619.00 0.0136 0.0129

Uranus 107139-03-11 15:49 G 40852845.05 40852845.16 40852845.28 0.0136 0.0115

Uranus 107139-10-23 21:06 G 40853071.25 40853071.38 40853071.53 0.0136 0.0101

Uranus 107140-06-06 02:23 G 40853297.45 40853297.60 40853297.77 0.0136 0.0087

Uranus 107141-01-18 07:25 G 40853523.64 40853523.81 40853524.00 0.0136 0.0073

Jupiter 107141-04-22 10:18 G 40853617.78 40853617.93 40853618.09 0.0510 0.0323

Uranus 107141-09-01 12:42 G 40853749.85 40853750.03 40853750.23 0.0136 0.0058

Uranus 107142-04-15 17:44 G 40853976.04 40853976.24 40853976.45 0.0136 0.0043

Uranus 107142-11-27 22:47 G 40854202.24 40854202.45 40854202.66 0.0135 0.0029

Uranus 107143-07-12 03:35 G 40854428.44 40854428.65 40854428.86 0.0135 0.0014

Uranus 107144-02-23 08:23 G 40854654.64 40854654.85 40854655.06 0.0135 0.0001

Uranus 107144-10-06 13:11 G 40854880.84 40854881.05 40854881.27 0.0135 0.0016

Uranus 107145-05-20 17:59 G 40855107.04 40855107.25 40855107.46 0.0135 0.0030

Uranus 107146-01-01 22:32 G 40855333.25 40855333.44 40855333.65 0.0135 0.0044

Uranus 107146-08-16 03:20 G 40855559.45 40855559.64 40855559.83 0.0135 0.0059

Mars 107146-12-20 13:25 G 40855685.96 40855686.06 40855686.17 0.1575 0.1256

Uranus 107147-03-30 07:40 G 40855785.66 40855785.82 40855786.01 0.0135 0.0073

Jupiter 107147-10-14 15:06 G 40855983.93 40855984.13 40855984.33 0.0519 0.0022

Uranus 107147-11-11 12:28 G 40856011.87 40856012.02 40856012.20 0.0135 0.0087

Uranus 107148-06-24 17:16 G 40856238.09 40856238.22 40856238.37 0.0135 0.0101

Uranus 107149-02-05 21:49 G 40856464.32 40856464.41 40856464.54 0.0135 0.0115

Uranus 107149-09-20 02:37 G 40856690.56 40856690.61 40856690.69 0.0135 0.0128

Saturn 107151-03-06 04:47 G 40857222.49 40857222.70 40857222.92 0.0293 0.0037

Jupiter 107153-08-20 08:23 G 40858120.69 40858120.85 40858121.02 0.0505 0.0292

Jupiter 107159-06-19 10:47 G 40860249.79 40860249.95 40860250.12 0.0517 0.0274

Jupiter 107165-04-25 03:49 G 40862386.45 40862386.66 40862386.87 0.0507 0.0053

Saturn 107166-03-30 23:59 G 40862726.36 40862726.50 40862726.66 0.0267 0.0184

Saturn 107166-11-14 22:18 G 40862955.24 40862955.43 40862955.63 0.0269 0.0080

Jupiter 107171-10-17 04:47 G 40864752.57 40864752.70 40864752.85 0.0522 0.0366

Jupiter 107176-12-28 22:47 G 40866652.26 40866652.45 40866652.65 0.0509 0.0190

Mars 107178-01-15 14:52 G 40867035.00 40867035.12 40867035.23 0.1970 0.1483

Mars 107178-12-19 05:01 G 40867372.54 40867372.71 40867372.87 0.1574 0.0536

Saturn 107180-01-29 12:42 G 40867778.94 40867779.03 40867779.13 0.0294 0.0261

Saturn 107180-09-15 17:01 G 40868009.01 40868009.21 40868009.41 0.0292 0.0103

Uranus 107181-12-09 18:13 G 40868459.18 40868459.26 40868459.37 0.0142 0.0129

Uranus 107182-07-24 06:13 G 40868685.64 40868685.76 40868685.91 0.0142 0.0112

Uranus 107183-03-07 18:28 G 40868912.12 40868912.27 40868912.45 0.0142 0.0096

Jupiter 107183-06-22 01:11 G 40869018.35 40869018.55 40869018.74 0.0521 0.0112

Uranus 107183-10-20 06:42 G 40869138.61 40869138.78 40869138.98 0.0142 0.0079

Uranus 107184-06-02 19:11 G 40869365.11 40869365.30 40869365.51 0.0142 0.0061

Uranus 107185-01-15 07:40 G 40869591.61 40869591.82 40869592.04 0.0143 0.0043

Neptune 107185-05-01 19:11 G 40869698.30 40869698.30 40869698.33 0.0090 0.0089

Uranus 107185-08-29 20:08 G 40869818.13 40869818.34 40869818.57 0.0143 0.0026

Neptune 107185-12-13 08:08 G 40869923.74 40869923.84 40869923.94 0.0090 0.0079

Uranus 107186-04-13 09:06 G 40870044.66 40870044.88 40870045.10 0.0143 0.0007

Neptune 107186-07-26 20:37 G 40870149.23 40870149.36 40870149.50 0.0090 0.0069

Uranus 107186-11-25 21:49 G 40870271.19 40870271.41 40870271.63 0.0143 0.0011

Neptune 107187-03-09 09:06 G 40870374.73 40870374.88 40870375.06 0.0090 0.0059

Uranus 107187-07-10 10:32 G 40870497.72 40870497.94 40870498.16 0.0143 0.0029

Neptune 107187-10-20 21:49 G 40870600.24 40870600.41 40870600.61 0.0090 0.0049

Uranus 107188-02-21 23:16 G 40870724.27 40870724.47 40870724.69 0.0143 0.0047

Neptune 107188-06-02 10:47 G 40870825.75 40870825.95 40870826.14 0.0090 0.0038

Jupiter 107188-09-02 18:28 G 40870918.17 40870918.27 40870918.39 0.0511 0.0430

Uranus 107188-10-05 12:13 G 40870950.82 40870951.01 40870951.22 0.0143 0.0065

Neptune 107189-01-13 23:16 G 40871051.27 40871051.47 40871051.68 0.0090 0.0028

Jupiter 107189-04-27 21:20 G 40871155.28 40871155.39 40871155.50 0.0503 0.0424

Uranus 107189-05-20 01:11 G 40871177.38 40871177.55 40871177.75 0.0143 0.0083

Neptune 107189-08-27 11:44 G 40871276.79 40871276.99 40871277.21 0.0090 0.0018

Uranus 107190-01-01 14:23 G 40871403.95 40871404.10 40871404.26 0.0143 0.0100

Neptune 107190-04-10 00:28 G 40871502.31 40871502.52 40871502.74 0.0090 0.0007

Uranus 107190-08-16 03:06 G 40871630.52 40871630.63 40871630.77 0.0143 0.0118

Neptune 107190-11-21 12:56 G 40871727.83 40871728.04 40871728.26 0.0090 0.0004

Uranus 107191-03-30 16:04 G 40871857.12 40871857.17 40871857.26 0.0143 0.0135

Neptune 107191-07-05 01:25 G 40871953.35 40871953.56 40871953.78 0.0090 0.0014

Neptune 107192-02-15 13:54 G 40872178.88 40872179.08 40872179.30 0.0090 0.0024

Neptune 107192-09-28 02:52 G 40872404.42 40872404.62 40872404.82 0.0090 0.0034

Neptune 107193-05-11 14:52 G 40872629.96 40872630.12 40872630.33 0.0090 0.0045

Neptune 107193-12-23 03:35 G 40872855.49 40872855.65 40872855.83 0.0090 0.0055

Neptune 107194-08-05 16:04 G 40873081.04 40873081.17 40873081.33 0.0090 0.0065

Jupiter 107195-02-24 22:47 G 40873284.26 40873284.45 40873284.65 0.0519 0.0136

Neptune 107195-03-19 04:47 G 40873306.59 40873306.70 40873306.83 0.0090 0.0075

Saturn 107195-10-11 03:20 G 40873512.46 40873512.64 40873512.81 0.0267 0.0146

Neptune 107195-10-30 17:30 G 40873532.17 40873532.23 40873532.30 0.0090 0.0085

Saturn 107196-05-27 01:25 G 40873741.38 40873741.56 40873741.75 0.0269 0.0117

Jupiter 107200-12-31 16:18 G 40875420.99 40875421.18 40875421.37 0.0505 0.0188

Jupiter 107206-10-30 20:52 G 40877550.23 40877550.37 40877550.50 0.0516 0.0378

Jupiter 107207-06-24 18:42 G 40877787.25 40877787.28 40877787.33 0.0524 0.0513

Saturn 107209-08-10 19:40 G 40878565.17 40878565.32 40878565.47 0.0294 0.0212

Saturn 107210-03-28 23:59 G 40878795.31 40878795.50 40878795.68 0.0292 0.0152

Jupiter 107212-09-05 11:44 G 40879686.78 40879686.99 40879687.19 0.0508 0.0052

Mars 107212-10-17 01:40 G 40879728.51 40879728.57 40879728.65 0.1576 0.1438

Jupiter 107219-02-27 13:54 G 40882052.91 40882053.08 40882053.26 0.0521 0.0255

Uranus 107222-03-27 19:54 G 40883177.30 40883177.33 40883177.38 0.0136 0.0133

Uranus 107222-11-09 01:25 G 40883403.47 40883403.56 40883403.67 0.0136 0.0119

Uranus 107223-06-23 06:56 G 40883629.66 40883629.79 40883629.92 0.0136 0.0105

Uranus 107224-02-04 11:59 G 40883855.85 40883856.00 40883856.17 0.0136 0.0091

Jupiter 107224-05-11 05:59 G 40883952.59 40883952.75 40883952.92 0.0510 0.0297

Uranus 107224-09-17 17:16 G 40884082.06 40884082.22 40884082.41 0.0136 0.0077

Saturn 107225-04-22 09:49 G 40884298.72 40884298.91 40884299.10 0.0268 0.0102

Uranus 107225-05-01 22:18 G 40884308.26 40884308.43 40884308.63 0.0136 0.0063

Saturn 107225-12-07 08:08 G 40884527.68 40884527.84 40884528.01 0.0269 0.0164

Earth 107225-12-13 23:59 G 40884534.38 40884534.50 40884534.62 0.2697 0.1758

Uranus 107225-12-14 03:35 G 40884534.45 40884534.65 40884534.85 0.0136 0.0048 *

Moon 107225-12-14 03:06 G 40884534.56 40884534.63 40884534.70 0.2692 0.2414 *

Uranus 107226-07-28 08:23 G 40884760.65 40884760.85 40884761.06 0.0135 0.0033

Uranus 107227-03-11 13:25 G 40884986.85 40884987.06 40884987.27 0.0135 0.0019

Uranus 107227-10-23 18:28 G 40885213.05 40885213.27 40885213.48 0.0135 0.0004

Uranus 107228-06-05 23:01 G 40885439.26 40885439.46 40885439.68 0.0135 0.0012

Uranus 107229-01-18 03:49 G 40885665.46 40885665.66 40885665.87 0.0135 0.0025

Uranus 107229-09-01 08:23 G 40885891.66 40885891.85 40885892.07 0.0135 0.0040

Uranus 107230-04-15 13:11 G 40886117.86 40886118.05 40886118.25 0.0135 0.0054

Jupiter 107230-11-02 10:18 G 40886318.73 40886318.93 40886319.13 0.0519 0.0008

Uranus 107230-11-27 18:13 G 40886344.07 40886344.26 40886344.44 0.0135 0.0069

Uranus 107231-07-11 22:32 G 40886570.29 40886570.44 40886570.62 0.0135 0.0083

Uranus 107232-02-23 03:06 G 40886796.50 40886796.63 40886796.80 0.0135 0.0097

Uranus 107232-10-06 08:23 G 40887022.73 40887022.85 40887022.97 0.0135 0.0110

Uranus 107233-05-20 12:42 G 40887248.96 40887249.03 40887249.13 0.0135 0.0124

Moon 107233-12-11 14:52 G 40887454.00 40887454.12 40887454.25 0.2690 0.1739

Earth 107233-12-11 17:01 G 40887454.09 40887454.21 40887454.33 0.2696 0.1658 *

Jupiter 107236-09-08 04:32 G 40888455.54 40888455.69 40888455.86 0.0505 0.0320

Saturn 107239-02-21 07:40 G 40889351.64 40889351.82 40889352.01 0.0294 0.0146

Saturn 107239-10-09 11:30 G 40889581.84 40889581.98 40889582.13 0.0292 0.0216

Jupiter 107242-07-08 06:28 G 40890584.60 40890584.77 40890584.95 0.0517 0.0248

Pluto 107242-07-31 22:32 G 40890608.35 40890608.44 40890608.56 0.0063 0.0056

Pluto 107243-03-14 01:54 G 40890833.38 40890833.58 40890833.80 0.0064 0.0017

Pluto 107243-10-25 05:30 G 40891058.54 40891058.73 40891058.94 0.0064 0.0023

Mars 107243-11-12 16:18 G 40891077.02 40891077.18 40891077.34 0.1969 0.0623

Pluto 107244-06-06 08:37 G 40891283.85 40891283.86 40891283.92 0.0064 0.0063

Mars 107244-10-15 17:30 G 40891415.06 40891415.23 40891415.40 0.1575 0.0363

Jupiter 107248-05-14 01:25 G 40892721.36 40892721.56 40892721.77 0.0506 0.0086

Jupiter 107254-03-13 05:01 G 40894850.65 40894850.71 40894850.78 0.0515 0.0487

Saturn 107254-11-02 12:42 G 40895084.83 40895085.03 40895085.24 0.0267 0.0065

Jupiter 107254-11-05 02:52 G 40895087.49 40895087.62 40895087.75 0.0523 0.0400

Saturn 107255-06-19 10:47 G 40895313.83 40895313.95 40895314.10 0.0269 0.0200

Jupiter 107260-01-17 20:08 G 40896987.14 40896987.34 40896987.53 0.0508 0.0157

Uranus 107265-08-09 00:56 G 40899017.47 40899017.54 40899017.62 0.0142 0.0133

Uranus 107266-03-23 12:56 G 40899243.93 40899244.04 40899244.17 0.0142 0.0117

Jupiter 107266-07-10 23:59 G 40899353.31 40899353.50 40899353.69 0.0521 0.0150

Uranus 107266-11-05 00:56 G 40899470.40 40899470.54 40899470.71 0.0142 0.0101

Uranus 107267-06-19 13:11 G 40899696.88 40899697.05 40899697.24 0.0142 0.0083

Neptune 107268-01-27 22:32 G 40899919.35 40899919.44 40899919.55 0.0088 0.0078

Uranus 107268-02-01 01:25 G 40899923.37 40899923.56 40899923.77 0.0142 0.0066

Saturn 107268-09-02 12:42 G 40900137.83 40900138.03 40900138.23 0.0294 0.0103

Neptune 107268-09-09 12:13 G 40900144.87 40900145.01 40900145.15 0.0088 0.0068

Uranus 107268-09-14 13:54 G 40900149.88 40900150.08 40900150.30 0.0142 0.0049

Saturn 107269-04-20 16:32 G 40900368.10 40900368.19 40900368.29 0.0292 0.0260

Neptune 107269-04-23 01:40 G 40900370.40 40900370.57 40900370.74 0.0088 0.0058

Uranus 107269-04-29 02:37 G 40900376.40 40900376.61 40900376.83 0.0143 0.0031

Neptune 107269-12-04 14:37 G 40900595.94 40900596.11 40900596.31 0.0088 0.0049

Uranus 107269-12-11 15:20 G 40900602.92 40900603.14 40900603.36 0.0143 0.0013

Neptune 107270-07-18 04:04 G 40900821.48 40900821.67 40900821.89 0.0088 0.0039

Uranus 107270-07-26 04:04 G 40900829.45 40900829.67 40900829.89 0.0143 0.0005

Neptune 107271-02-28 17:59 G 40901047.03 40901047.25 40901047.46 0.0088 0.0028

Uranus 107271-03-09 16:47 G 40901055.98 40901056.20 40901056.42 0.0143 0.0023

Jupiter 107271-09-22 14:52 G 40901252.99 40901253.12 40901253.24 0.0511 0.0400

Neptune 107271-10-12 07:25 G 40901272.59 40901272.81 40901273.03 0.0088 0.0018

Uranus 107271-10-22 05:30 G 40901282.53 40901282.73 40901282.95 0.0143 0.0042

Jupiter 107272-05-16 17:30 G 40901490.14 40901490.23 40901490.32 0.0503 0.0455

Neptune 107272-05-24 20:52 G 40901498.14 40901498.37 40901498.59 0.0088 0.0008

Uranus 107272-06-04 18:28 G 40901509.08 40901509.27 40901509.48 0.0143 0.0060

Neptune 107273-01-05 10:18 G 40901723.70 40901723.93 40901724.15 0.0088 0.0002

Uranus 107273-01-17 07:40 G 40901735.63 40901735.82 40901736.01 0.0143 0.0077

Neptune 107273-08-18 23:30 G 40901949.27 40901949.48 40901949.71 0.0088 0.0013

Uranus 107273-08-31 20:23 G 40901962.20 40901962.35 40901962.53 0.0143 0.0095

Neptune 107274-04-01 12:56 G 40902174.84 40902175.04 40902175.27 0.0088 0.0023

Uranus 107274-04-15 09:35 G 40902188.77 40902188.90 40902189.05 0.0143 0.0112

Neptune 107274-11-13 02:23 G 40902400.41 40902400.60 40902400.83 0.0088 0.0033

Uranus 107274-11-27 22:47 G 40902415.36 40902415.45 40902415.55 0.0143 0.0129

Neptune 107275-06-26 15:49 G 40902625.98 40902626.16 40902626.37 0.0088 0.0043

Neptune 107276-02-07 05:16 G 40902851.56 40902851.72 40902851.92 0.0088 0.0053

Neptune 107276-09-19 18:42 G 40903077.14 40903077.28 40903077.46 0.0088 0.0063

Neptune 107277-05-03 08:08 G 40903302.74 40903302.84 40903302.99 0.0088 0.0073

Neptune 107277-12-14 21:35 G 40903528.35 40903528.40 40903528.50 0.0088 0.0083

Jupiter 107278-03-15 20:23 G 40903619.15 40903619.35 40903619.55 0.0518 0.0103

Jupiter 107284-01-20 12:56 G 40905755.86 40905756.04 40905756.23 0.0506 0.0218

Saturn 107284-05-14 17:59 G 40905871.05 40905871.25 40905871.46 0.0268 0.0023

Saturn 107284-12-29 16:18 G 40906100.11 40906100.18 40906100.28 0.0270 0.0244

Jupiter 107289-11-18 17:16 G 40907885.08 40907885.22 40907885.37 0.0516 0.0349

Jupiter 107295-09-25 09:06 G 40910021.67 40910021.88 40910022.09 0.0508 0.0022

Saturn 107298-03-16 00:13 G 40910924.29 40910924.51 40910924.72 0.0293 0.0038

Jupiter 107302-03-19 10:32 G 40912387.77 40912387.94 40912388.11 0.0522 0.0286

Uranus 107306-07-10 10:32 G 40913961.87 40913961.94 40913962.04 0.0136 0.0124

Uranus 107307-02-21 16:04 G 40914188.06 40914188.17 40914188.31 0.0136 0.0110

Jupiter 107307-06-01 05:30 G 40914287.55 40914287.73 40914287.91 0.0509 0.0259

Uranus 107307-10-05 21:35 G 40914414.26 40914414.40 40914414.56 0.0136 0.0096

Uranus 107308-05-19 03:06 G 40914640.46 40914640.63 40914640.80 0.0136 0.0081

Uranus 107308-12-31 08:08 G 40914866.66 40914866.84 40914867.03 0.0136 0.0067

Uranus 107309-08-14 12:56 G 40915092.86 40915093.04 40915093.25 0.0136 0.0053

Mars 107309-09-09 17:59 G 40915119.08 40915119.25 40915119.42 0.1968 0.0228

Uranus 107310-03-28 18:13 G 40915319.06 40915319.26 40915319.47 0.0135 0.0038

Mars 107310-08-14 06:28 G 40915457.59 40915457.77 40915457.95 0.1575 0.0194

Uranus 107310-11-09 23:01 G 40915545.26 40915545.46 40915545.68 0.0135 0.0024

Uranus 107311-06-24 04:04 G 40915771.46 40915771.67 40915771.88 0.0135 0.0008

Uranus 107312-02-05 08:52 G 40915997.66 40915997.87 40915998.08 0.0135 0.0006

Uranus 107312-09-18 13:40 G 40916223.86 40916224.07 40916224.29 0.0135 0.0021

Saturn 107313-04-10 23:01 G 40916428.39 40916428.46 40916428.55 0.0266 0.0247

Uranus 107313-05-02 18:28 G 40916450.07 40916450.27 40916450.48 0.0135 0.0035

Jupiter 107313-11-22 08:23 G 40916653.65 40916653.85 40916654.05 0.0520 0.0038

Saturn 107313-11-25 20:52 G 40916657.16 40916657.37 40916657.58 0.0267 0.0014

Uranus 107313-12-14 23:01 G 40916676.27 40916676.46 40916676.67 0.0135 0.0050

Uranus 107314-07-29 03:49 G 40916902.48 40916902.66 40916902.85 0.0135 0.0064

Uranus 107315-03-12 08:23 G 40917128.69 40917128.85 40917129.04 0.0135 0.0079

Uranus 107315-10-24 13:25 G 40917354.91 40917355.06 40917355.22 0.0135 0.0092

Uranus 107316-06-06 17:59 G 40917581.13 40917581.25 40917581.39 0.0135 0.0106

Uranus 107317-01-18 22:47 G 40917807.36 40917807.45 40917807.55 0.0135 0.0120

Uranus 107317-09-02 03:06 G 40918033.61 40918033.63 40918033.68 0.0135 0.0133

Jupiter 107319-02-03 23:44 G 40918553.46 40918553.49 40918553.53 0.0512 0.0503

Jupiter 107319-09-29 02:52 G 40918790.48 40918790.62 40918790.78 0.0504 0.0356

Jupiter 107325-07-28 06:28 G 40920919.59 40920919.77 40920919.95 0.0518 0.0207

Saturn 107327-09-27 03:35 G 40921710.43 40921710.65 40921710.86 0.0294 0.0006

Jupiter 107331-06-03 22:47 G 40923056.25 40923056.45 40923056.65 0.0506 0.0120

Pluto 107332-09-16 04:04 G 40923526.48 40923526.67 40923526.90 0.0080 0.0032

Pluto 107333-04-29 15:20 G 40923751.99 40923752.14 40923752.33 0.0080 0.0052

Jupiter 107337-04-02 04:18 G 40925185.58 40925185.68 40925185.77 0.0515 0.0451

Jupiter 107337-11-25 01:25 G 40925422.45 40925422.56 40925422.67 0.0523 0.0436

Saturn 107342-10-22 03:06 G 40927214.51 40927214.63 40927214.77 0.0267 0.0209

Jupiter 107343-02-06 17:30 G 40927322.03 40927322.23 40927322.43 0.0509 0.0125

Saturn 107343-06-08 00:56 G 40927443.34 40927443.54 40927443.75 0.0268 0.0053

Uranus 107349-04-09 06:28 G 40929575.74 40929575.77 40929575.83 0.0142 0.0139

Jupiter 107349-07-30 21:35 G 40929688.22 40929688.40 40929688.59 0.0521 0.0184

Uranus 107349-11-21 18:42 G 40929802.17 40929802.28 40929802.39 0.0142 0.0122

Neptune 107350-03-17 19:40 G 40929918.24 40929918.32 40929918.42 0.0090 0.0081

Uranus 107350-07-06 06:13 G 40930028.63 40930028.76 40930028.92 0.0142 0.0106

Neptune 107350-10-29 08:08 G 40930143.73 40930143.84 40930143.99 0.0090 0.0071

Uranus 107351-02-17 18:28 G 40930255.11 40930255.27 40930255.45 0.0142 0.0089

Neptune 107351-06-11 20:52 G 40930369.23 40930369.37 40930369.55 0.0090 0.0061

Uranus 107351-10-02 06:56 G 40930481.60 40930481.79 40930481.99 0.0142 0.0072

Neptune 107352-01-23 09:35 G 40930594.74 40930594.90 40930595.09 0.0090 0.0051

Uranus 107352-05-15 19:11 G 40930708.11 40930708.30 40930708.52 0.0142 0.0055

Neptune 107352-09-04 22:32 G 40930820.25 40930820.44 40930820.64 0.0090 0.0040

Uranus 107352-12-28 07:54 G 40930934.62 40930934.83 40930935.05 0.0143 0.0037

Neptune 107353-04-18 11:01 G 40931045.77 40931045.96 40931046.17 0.0090 0.0030

Uranus 107353-08-11 20:37 G 40931161.14 40931161.36 40931161.58 0.0143 0.0019

Neptune 107353-11-29 23:44 G 40931271.28 40931271.49 40931271.71 0.0090 0.0019

Uranus 107354-03-26 09:20 G 40931387.67 40931387.89 40931388.11 0.0143 0.0001

Neptune 107354-07-13 12:28 G 40931496.80 40931497.02 40931497.23 0.0090 0.0009

Jupiter 107354-10-12 13:25 G 40931587.92 40931588.06 40931588.20 0.0511 0.0367

Uranus 107354-11-07 22:04 G 40931614.20 40931614.42 40931614.65 0.0143 0.0018

Neptune 107355-02-24 00:56 G 40931722.32 40931722.54 40931722.76 0.0090 0.0001

Jupiter 107355-06-06 15:49 G 40931825.12 40931825.16 40931825.22 0.0503 0.0489

Earth 107355-06-12 20:23 G 40931831.19 40931831.35 40931831.51 0.2636 0.0022

Moon 107355-06-13 01:25 G 40931831.40 40931831.56 40931831.71 0.2632 0.0865 *

Uranus 107355-06-22 10:47 G 40931840.74 40931840.95 40931841.18 0.0143 0.0036

Neptune 107355-10-07 13:25 G 40931947.86 40931948.06 40931948.28 0.0090 0.0012

Uranus 107356-02-03 23:44 G 40932067.29 40932067.49 40932067.70 0.0143 0.0053

Neptune 107356-05-20 02:08 G 40932173.38 40932173.59 40932173.80 0.0090 0.0022

Uranus 107356-09-17 12:42 G 40932293.85 40932294.03 40932294.23 0.0143 0.0071

Neptune 107356-12-31 14:37 G 40932398.91 40932399.11 40932399.31 0.0090 0.0032

Saturn 107357-04-08 13:11 G 40932496.84 40932497.05 40932497.27 0.0293 0.0061

Uranus 107357-05-02 01:40 G 40932520.41 40932520.57 40932520.76 0.0143 0.0089

Neptune 107357-08-14 02:52 G 40932624.44 40932624.62 40932624.82 0.0090 0.0043

Uranus 107357-12-14 14:52 G 40932746.98 40932747.12 40932747.28 0.0143 0.0106

Neptune 107358-03-27 15:20 G 40932849.98 40932850.14 40932850.33 0.0090 0.0053

Uranus 107358-07-29 04:04 G 40932973.56 40932973.67 40932973.78 0.0143 0.0123

Neptune 107358-11-08 04:04 G 40933075.53 40933075.67 40933075.83 0.0090 0.0063

Uranus 107359-03-12 16:47 G 40933200.17 40933200.20 40933200.25 0.0143 0.0140

Neptune 107359-06-21 16:32 G 40933301.08 40933301.19 40933301.33 0.0090 0.0073

Neptune 107360-02-02 05:01 G 40933526.65 40933526.71 40933526.80 0.0090 0.0083

Jupiter 107361-04-04 17:01 G 40933954.01 40933954.21 40933954.41 0.0519 0.0073

Jupiter 107367-02-09 13:40 G 40936090.89 40936091.07 40936091.25 0.0505 0.0260

Saturn 107372-05-03 05:44 G 40938000.59 40938000.74 40938000.90 0.0266 0.0173

Jupiter 107372-12-08 15:35 G 40938219.99 40938220.15 40938220.31 0.0517 0.0315

Saturn 107372-12-18 03:20 G 40938229.44 40938229.64 40938229.84 0.0267 0.0087

Mars 107375-07-07 19:40 G 40939161.18 40939161.32 40939161.47 0.1967 0.1069

Mars 107376-06-10 19:11 G 40939500.13 40939500.30 40939500.48 0.1575 0.0038

Jupiter 107378-10-15 09:06 G 40940356.68 40940356.88 40940357.09 0.0507 0.0023

Jupiter 107385-04-07 11:44 G 40942722.85 40942722.99 40942723.15 0.0522 0.0334

Saturn 107386-03-03 10:18 G 40943052.86 40943052.93 40943053.02 0.0295 0.0272

Saturn 107386-10-19 15:06 G 40943282.93 40943283.13 40943283.34 0.0293 0.0097

Uranus 107390-03-09 20:37 G 40944520.31 40944520.36 40944520.45 0.0136 0.0128

Jupiter 107390-06-20 04:18 G 40944622.49 40944622.68 40944622.87 0.0509 0.0221

Uranus 107390-10-22 02:23 G 40944746.49 40944746.60 40944746.72 0.0136 0.0114

Uranus 107391-06-05 07:40 G 40944972.69 40944972.82 40944972.97 0.0136 0.0100

Uranus 107392-01-17 12:56 G 40945198.89 40945199.04 40945199.22 0.0136 0.0086

Uranus 107392-08-30 18:28 G 40945425.09 40945425.27 40945425.45 0.0136 0.0071

Uranus 107393-04-13 23:30 G 40945651.29 40945651.48 40945651.68 0.0136 0.0057

Uranus 107393-11-26 04:18 G 40945877.49 40945877.68 40945877.89 0.0136 0.0043

Uranus 107394-07-10 09:20 G 40946103.69 40946103.89 40946104.11 0.0135 0.0028

Uranus 107395-02-21 14:23 G 40946329.89 40946330.10 40946330.31 0.0135 0.0013

Uranus 107395-10-05 19:25 G 40946556.10 40946556.31 40946556.52 0.0135 0.0002

Uranus 107396-05-19 00:13 G 40946782.30 40946782.51 40946782.72 0.0135 0.0016

Jupiter 107396-12-11 08:52 G 40946988.67 40946988.87 40946989.06 0.0520 0.0080

Uranus 107396-12-31 04:47 G 40947008.50 40947008.70 40947008.92 0.0135 0.0031

Uranus 107397-08-14 09:35 G 40947234.71 40947234.90 40947235.11 0.0135 0.0045

Uranus 107398-03-28 14:23 G 40947460.91 40947461.10 40947461.29 0.0135 0.0059

Uranus 107398-11-09 18:56 G 40947687.13 40947687.29 40947687.48 0.0135 0.0074

Uranus 107399-06-23 23:44 G 40947913.34 40947913.49 40947913.66 0.0135 0.0088

Uranus 107400-02-05 04:32 G 40948139.56 40948139.69 40948139.83 0.0135 0.0101

Uranus 107400-09-19 09:06 G 40948365.78 40948365.88 40948366.00 0.0135 0.0115

Uranus 107401-05-03 13:25 G 40948592.02 40948592.06 40948592.14 0.0135 0.0129

Saturn 107401-11-14 08:37 G 40948786.68 40948786.86 40948787.04 0.0267 0.0138

Jupiter 107402-02-23 22:32 G 40948888.36 40948888.44 40948888.52 0.0512 0.0469

Saturn 107402-07-01 06:28 G 40949015.58 40949015.77 40949015.95 0.0268 0.0124

Jupiter 107402-10-19 01:54 G 40949125.46 40949125.58 40949125.71 0.0504 0.0393

Jupiter 107408-08-17 05:44 G 40951254.55 40951254.74 40951254.93 0.0518 0.0169

Jupiter 107414-06-23 22:47 G 40953391.26 40953391.45 40953391.65 0.0506 0.0158

Saturn 107415-09-14 18:56 G 40953839.15 40953839.29 40953839.44 0.0295 0.0215

Saturn 107416-05-01 23:44 G 40954069.31 40954069.49 40954069.68 0.0293 0.0153

Jupiter 107420-04-22 01:11 G 40955520.44 40955520.55 40955520.67 0.0516 0.0420

Jupiter 107420-12-14 23:16 G 40955757.39 40955757.47 40955757.56 0.0524 0.0472

Jupiter 107426-02-26 20:08 G 40957657.14 40957657.34 40957657.55 0.0508 0.0077

Saturn 107431-05-27 11:01 G 40959572.77 40959572.96 40959573.16 0.0266 0.0104

Saturn 107432-01-11 08:37 G 40959801.70 40959801.86 40959802.03 0.0268 0.0159

Neptune 107432-05-02 09:06 G 40959913.81 40959913.88 40959913.99 0.0088 0.0080

Jupiter 107432-08-19 21:06 G 40960023.20 40960023.38 40960023.56 0.0522 0.0224

Neptune 107432-12-13 22:32 G 40960139.32 40960139.44 40960139.59 0.0088 0.0070

Uranus 107433-07-22 23:30 G 40960360.39 40960360.48 40960360.58 0.0142 0.0128

Neptune 107433-07-27 11:44 G 40960364.84 40960364.99 40960365.17 0.0088 0.0060

Uranus 107434-03-06 11:16 G 40960586.85 40960586.97 40960587.12 0.0142 0.0112

Neptune 107434-03-10 01:25 G 40960590.38 40960590.56 40960590.75 0.0088 0.0050

Uranus 107434-10-18 23:16 G 40960813.32 40960813.47 40960813.65 0.0142 0.0096

Neptune 107434-10-21 14:37 G 40960815.92 40960816.11 40960816.32 0.0088 0.0040

Uranus 107435-06-02 11:30 G 40961039.81 40961039.98 40961040.18 0.0142 0.0078

Neptune 107435-06-04 04:04 G 40961041.47 40961041.67 40961041.89 0.0088 0.0030

Uranus 107436-01-14 23:59 G 40961266.31 40961266.50 40961266.71 0.0142 0.0061

Neptune 107436-01-15 17:30 G 40961267.01 40961267.23 40961267.45 0.0088 0.0020

Neptune 107436-08-28 06:56 G 40961492.57 40961492.79 40961493.01 0.0088 0.0010

Uranus 107436-08-28 12:28 G 40961492.81 40961493.02 40961493.24 0.0142 0.0043 *

Neptune 107437-04-10 20:37 G 40961718.13 40961718.36 40961718.58 0.0088 0.0001

Uranus 107437-04-12 01:11 G 40961719.34 40961719.55 40961719.78 0.0143 0.0025

Jupiter 107437-11-01 15:20 G 40961922.98 40961923.14 40961923.30 0.0510 0.0319

Neptune 107437-11-22 09:49 G 40961943.69 40961943.91 40961944.14 0.0088 0.0011

Uranus 107437-11-24 13:54 G 40961945.86 40961946.08 40961946.31 0.0143 0.0008

Neptune 107438-07-05 23:16 G 40962169.26 40962169.47 40962169.69 0.0088 0.0020

Uranus 107438-07-09 02:37 G 40962172.39 40962172.61 40962172.84 0.0143 0.0011

Neptune 107439-02-16 12:28 G 40962394.83 40962395.02 40962395.25 0.0088 0.0031

Uranus 107439-02-20 15:20 G 40962398.93 40962399.14 40962399.37 0.0143 0.0029

Neptune 107439-09-30 01:54 G 40962620.40 40962620.58 40962620.80 0.0088 0.0041

Uranus 107439-10-05 04:18 G 40962625.48 40962625.68 40962625.90 0.0143 0.0047

Neptune 107440-05-12 15:35 G 40962845.98 40962846.15 40962846.35 0.0088 0.0051

Uranus 107440-05-18 17:16 G 40962852.03 40962852.22 40962852.43 0.0143 0.0065

Neptune 107440-12-24 05:01 G 40963071.56 40963071.71 40963071.89 0.0088 0.0061

Uranus 107440-12-31 06:28 G 40963078.59 40963078.77 40963078.95 0.0143 0.0082

Mars 107441-05-04 21:20 G 40963203.36 40963203.39 40963203.43 0.1966 0.1916

Neptune 107441-08-06 18:28 G 40963297.16 40963297.27 40963297.42 0.0088 0.0071

Uranus 107441-08-14 19:11 G 40963305.15 40963305.30 40963305.47 0.0143 0.0100

Neptune 107442-03-20 07:54 G 40963522.77 40963522.83 40963522.94 0.0088 0.0081

Uranus 107442-03-29 08:08 G 40963531.73 40963531.84 40963531.98 0.0143 0.0117

Mars 107442-04-09 08:08 G 40963542.66 40963542.84 40963543.01 0.1576 0.0149

Uranus 107442-11-10 21:06 G 40963758.32 40963758.38 40963758.47 0.0143 0.0134

Jupiter 107444-04-24 19:40 G 40964289.11 40964289.32 40964289.52 0.0519 0.0025

Saturn 107445-03-26 19:25 G 40964625.15 40964625.31 40964625.48 0.0295 0.0185

Saturn 107445-11-12 00:13 G 40964855.35 40964855.51 40964855.68 0.0293 0.0184

Jupiter 107450-03-01 13:40 G 40966425.91 40966426.07 40966426.24 0.0505 0.0302

Jupiter 107455-12-29 17:16 G 40968555.06 40968555.22 40968555.40 0.0517 0.0270

Saturn 107460-12-06 12:56 G 40970358.84 40970359.04 40970359.24 0.0267 0.0071

Saturn 107461-07-23 10:32 G 40970587.80 40970587.94 40970588.09 0.0268 0.0193

Jupiter 107461-11-04 09:06 G 40970691.67 40970691.88 40970692.08 0.0507 0.0061

Jupiter 107467-09-03 15:06 G 40972821.11 40972821.13 40972821.16 0.0515 0.0510

Jupiter 107468-04-27 12:13 G 40973057.87 40973058.01 40973058.15 0.0522 0.0375

Moon 107468-12-15 23:59 G 40973290.37 40973290.50 40973290.63 0.2702 0.1200

Earth 107468-12-16 03:06 G 40973290.52 40973290.63 40973290.74 0.2697 0.1864 *

Jupiter 107473-07-10 05:30 G 40974957.54 40974957.73 40974957.93 0.0509 0.0179

Uranus 107473-11-08 06:13 G 40975078.71 40975078.76 40975078.80 0.0136 0.0133

Uranus 107474-06-22 11:16 G 40975304.89 40975304.97 40975305.09 0.0136 0.0119

Saturn 107474-10-07 02:52 G 40975411.43 40975411.62 40975411.82 0.0295 0.0131

Uranus 107475-02-03 16:47 G 40975531.08 40975531.20 40975531.35 0.0136 0.0105

Saturn 107475-05-25 07:40 G 40975641.69 40975641.82 40975641.94 0.0293 0.0236

Uranus 107475-09-17 22:18 G 40975757.29 40975757.43 40975757.60 0.0136 0.0091

Uranus 107476-05-01 03:49 G 40975983.49 40975983.66 40975983.84 0.0136 0.0076

Uranus 107476-12-13 08:52 G 40976209.69 40976209.87 40976210.07 0.0136 0.0062

Earth 107476-12-13 19:54 G 40976210.21 40976210.33 40976210.46 0.2696 0.1587

Moon 107476-12-13 21:49 G 40976210.28 40976210.41 40976210.53 0.2702 0.1389 *

Uranus 107477-07-27 13:54 G 40976435.89 40976436.08 40976436.29 0.0136 0.0047

Uranus 107478-03-10 18:56 G 40976662.09 40976662.29 40976662.50 0.0135 0.0033

Uranus 107478-10-23 00:13 G 40976888.30 40976888.51 40976888.72 0.0135 0.0018

Uranus 107479-06-06 05:01 G 40977114.50 40977114.71 40977114.93 0.0135 0.0005

Jupiter 107480-01-01 06:42 G 40977323.59 40977323.78 40977323.98 0.0521 0.0117

Uranus 107480-01-18 10:04 G 40977340.70 40977340.92 40977341.13 0.0135 0.0011

Uranus 107480-08-31 14:37 G 40977566.91 40977567.11 40977567.33 0.0135 0.0026

Uranus 107481-04-14 19:25 G 40977793.12 40977793.31 40977793.52 0.0135 0.0041

Uranus 107481-11-27 00:28 G 40978019.32 40978019.52 40978019.71 0.0135 0.0055

Uranus 107482-07-11 04:47 G 40978245.53 40978245.70 40978245.90 0.0135 0.0069

Uranus 107483-02-22 09:35 G 40978471.74 40978471.90 40978472.08 0.0135 0.0083

Uranus 107483-10-06 14:08 G 40978697.96 40978698.09 40978698.26 0.0135 0.0097

Uranus 107484-05-19 18:56 G 40978924.18 40978924.29 40978924.42 0.0135 0.0111

Uranus 107484-12-31 23:16 G 40979150.41 40979150.47 40979150.57 0.0135 0.0125

Jupiter 107485-03-15 02:37 G 40979223.49 40979223.61 40979223.73 0.0511 0.0416

Jupiter 107485-11-07 05:30 G 40979460.63 40979460.73 40979460.83 0.0504 0.0443

Saturn 107490-06-18 15:20 G 40981144.93 40981145.14 40981145.35 0.0266 0.0036

Pluto 107490-07-06 08:52 G 40981162.75 40981162.87 40981163.01 0.0063 0.0050

Saturn 107491-02-02 12:56 G 40981373.93 40981374.04 40981374.15 0.0268 0.0226

Pluto 107491-02-16 12:13 G 40981387.80 40981388.01 40981388.23 0.0064 0.0011

Jupiter 107491-09-06 05:16 G 40981589.53 40981589.72 40981589.91 0.0518 0.0129

Pluto 107491-09-29 15:35 G 40981612.97 40981613.15 40981613.35 0.0064 0.0029

Jupiter 107497-07-13 01:25 G 40983726.38 40983726.56 40983726.75 0.0505 0.0209

Jupiter 107503-05-13 04:18 G 40985855.55 40985855.68 40985855.82 0.0516 0.0370

Saturn 107504-04-19 02:37 G 40986197.41 40986197.61 40986197.82 0.0295 0.0103

Saturn 107504-12-05 07:11 G 40986427.72 40986427.80 40986427.89 0.0293 0.0265

Mars 107508-02-05 20:37 G 40987585.18 40987585.36 40987585.53 0.1576 0.0327

Jupiter 107509-03-18 21:35 G 40987992.19 40987992.40 40987992.60 0.0508 0.0032

Neptune 107514-06-21 06:56 G 40989912.73 40989912.79 40989912.89 0.0090 0.0083

Neptune 107515-02-01 19:39 G 40990138.21 40990138.32 40990138.46 0.0090 0.0073

Jupiter 107515-09-09 23:59 G 40990358.33 40990358.50 40990358.67 0.0522 0.0274

Neptune 107515-09-15 08:23 G 40990363.72 40990363.85 40990364.02 0.0090 0.0063

Neptune 107516-04-27 21:06 G 40990589.23 40990589.38 40990589.57 0.0090 0.0053

Neptune 107516-12-09 10:03 G 40990814.74 40990814.92 40990815.12 0.0090 0.0042

Uranus 107517-03-23 04:32 G 40990918.63 40990918.69 40990918.78 0.0142 0.0134

Neptune 107517-07-22 22:32 G 40991040.25 40991040.44 40991040.65 0.0090 0.0032

Uranus 107517-11-04 16:47 G 40991145.07 40991145.20 40991145.32 0.0142 0.0117

Neptune 107518-03-05 11:15 G 40991265.77 40991265.97 40991266.19 0.0090 0.0022

Uranus 107518-06-19 04:18 G 40991371.54 40991371.68 40991371.85 0.0142 0.0101

Neptune 107518-10-17 00:13 G 40991491.30 40991491.51 40991491.73 0.0090 0.0011

Uranus 107519-01-31 16:18 G 40991598.02 40991598.18 40991598.38 0.0142 0.0085

Saturn 107519-05-15 19:11 G 40991702.29 40991702.30 40991702.32 0.0265 0.0264

Neptune 107519-05-30 12:56 G 40991716.82 40991717.04 40991717.25 0.0090 0.0001

Uranus 107519-09-15 05:01 G 40991824.51 40991824.71 40991824.90 0.0142 0.0067

Saturn 107519-12-30 16:18 G 40991930.98 40991931.18 40991931.39 0.0267 0.0008

Neptune 107520-01-11 01:25 G 40991942.35 40991942.56 40991942.78 0.0090 0.0010

Uranus 107520-04-28 17:15 G 40992051.02 40992051.22 40992051.44 0.0142 0.0049

Saturn 107520-08-15 14:08 G 40992160.04 40992160.09 40992160.15 0.0268 0.0259

Neptune 107520-08-23 13:54 G 40992167.87 40992168.08 40992168.29 0.0090 0.0020

Jupiter 107520-11-21 16:03 G 40992257.99 40992258.17 40992258.34 0.0510 0.0277

Uranus 107520-12-11 05:59 G 40992277.53 40992277.75 40992277.96 0.0142 0.0032

Neptune 107521-04-06 02:37 G 40992393.41 40992393.61 40992393.81 0.0090 0.0030

Uranus 107521-07-25 18:27 G 40992504.05 40992504.27 40992504.49 0.0143 0.0014

Neptune 107521-11-17 14:51 G 40992618.94 40992619.12 40992619.33 0.0090 0.0041

Uranus 107522-03-09 07:11 G 40992730.58 40992730.80 40992731.02 0.0143 0.0004

Neptune 107522-07-01 03:20 G 40992844.48 40992844.64 40992844.83 0.0090 0.0051

Uranus 107522-10-21 19:54 G 40992957.11 40992957.33 40992957.56 0.0143 0.0022

Neptune 107523-02-11 15:49 G 40993070.02 40993070.16 40993070.33 0.0090 0.0061

Uranus 107523-06-05 08:51 G 40993183.66 40993183.87 40993184.08 0.0143 0.0040

Neptune 107523-09-25 04:32 G 40993295.57 40993295.69 40993295.83 0.0090 0.0071

Uranus 107524-01-17 21:35 G 40993410.20 40993410.40 40993410.61 0.0143 0.0058

Neptune 107524-05-07 17:15 G 40993521.14 40993521.22 40993521.31 0.0090 0.0081

Uranus 107524-08-31 10:18 G 40993636.75 40993636.93 40993637.13 0.0143 0.0076

Uranus 107525-04-14 23:30 G 40993863.32 40993863.48 40993863.65 0.0143 0.0093

Uranus 107525-11-27 12:27 G 40994089.88 40994090.02 40994090.16 0.0143 0.0110

Uranus 107526-07-12 01:11 G 40994316.46 40994316.55 40994316.66 0.0143 0.0127

Jupiter 107527-05-15 20:51 G 40994624.17 40994624.37 40994624.57 0.0519 0.0023

Jupiter 107533-03-21 15:49 G 40996761.02 40996761.16 40996761.32 0.0505 0.0348

Saturn 107533-10-30 09:06 G 40996983.67 40996983.88 40996984.10 0.0294 0.0053

Jupiter 107539-01-18 15:35 G 40998889.97 40998890.15 40998890.33 0.0517 0.0233

Mars 107539-03-03 02:23 G 40998933.53 40998933.60 40998933.67 0.1968 0.1777

Mars 107540-02-04 12:13 G 40999271.96 40999272.01 40999272.07 0.1575 0.1481

Jupiter 107544-11-24 13:39 G 41001026.87 41001027.07 41001027.27 0.0507 0.0116

Saturn 107548-11-24 21:49 G 41002488.32 41002488.41 41002488.52 0.0265 0.0229

Saturn 107549-07-11 18:56 G 41002717.08 41002717.29 41002717.50 0.0266 0.0030

Jupiter 107550-09-23 14:37 G 41003156.03 41003156.11 41003156.19 0.0515 0.0471

Jupiter 107551-05-18 12:27 G 41003392.90 41003393.02 41003393.14 0.0523 0.0419

Jupiter 107556-07-30 09:20 G 41005292.69 41005292.89 41005293.09 0.0508 0.0125

Uranus 107558-02-20 20:23 G 41005863.27 41005863.35 41005863.45 0.0136 0.0124

Uranus 107558-10-05 02:08 G 41006089.47 41006089.59 41006089.72 0.0136 0.0110

Uranus 107559-05-19 07:39 G 41006315.67 41006315.82 41006315.98 0.0136 0.0095

Uranus 107559-12-31 12:56 G 41006541.88 41006542.04 41006542.22 0.0136 0.0081

Uranus 107560-08-13 17:59 G 41006768.08 41006768.25 41006768.45 0.0136 0.0067

Uranus 107561-03-27 23:30 G 41006994.29 41006994.48 41006994.68 0.0136 0.0052

Uranus 107561-11-09 04:32 G 41007220.49 41007220.69 41007220.90 0.0136 0.0038

Uranus 107562-06-23 09:49 G 41007446.70 41007446.91 41007447.12 0.0135 0.0023

Jupiter 107563-01-21 10:47 G 41007658.76 41007658.95 41007659.14 0.0521 0.0172

Uranus 107563-02-04 14:51 G 41007672.91 41007673.12 41007673.33 0.0135 0.0008

Saturn 107563-05-12 08:23 G 41007769.64 41007769.85 41007770.07 0.0295 0.0024

Uranus 107563-09-18 19:54 G 41007899.11 41007899.33 41007899.54 0.0135 0.0007

Uranus 107564-05-02 00:42 G 41008125.32 41008125.53 41008125.74 0.0135 0.0021

Uranus 107564-12-14 05:30 G 41008351.53 41008351.73 41008351.94 0.0135 0.0035

Uranus 107565-07-28 10:18 G 41008577.73 41008577.93 41008578.13 0.0135 0.0050

Uranus 107566-03-11 14:51 G 41008803.94 41008804.12 41008804.32 0.0135 0.0064

Uranus 107566-10-23 19:39 G 41009030.16 41009030.32 41009030.50 0.0135 0.0078

Uranus 107567-06-07 00:13 G 41009256.37 41009256.51 41009256.68 0.0135 0.0092

Uranus 107568-01-19 05:01 G 41009482.58 41009482.71 41009482.85 0.0135 0.0106

Jupiter 107568-04-04 04:47 G 41009558.56 41009558.70 41009558.84 0.0511 0.0368

Uranus 107568-09-01 09:20 G 41009708.81 41009708.89 41009709.00 0.0135 0.0119

Jupiter 107568-11-27 06:56 G 41009795.75 41009795.79 41009795.84 0.0503 0.0490

Uranus 107569-04-15 14:08 G 41009935.06 41009935.09 41009935.14 0.0135 0.0132

Mars 107573-12-03 09:35 G 41011627.73 41011627.90 41011628.07 0.1577 0.0492

Jupiter 107574-09-26 08:51 G 41011924.67 41011924.87 41011925.07 0.0519 0.0077

Saturn 107578-06-06 22:18 G 41013274.30 41013274.43 41013274.57 0.0266 0.0201

Saturn 107579-01-21 19:25 G 41013503.11 41013503.31 41013503.52 0.0267 0.0059

Jupiter 107580-08-02 02:51 G 41014061.44 41014061.62 41014061.80 0.0506 0.0253

Pluto 107580-08-21 13:25 G 41014080.85 41014081.06 41014081.28 0.0080 0.0024

Pluto 107581-04-04 00:27 G 41014306.38 41014306.52 41014306.69 0.0080 0.0058

Jupiter 107586-06-01 06:13 G 41016190.61 41016190.76 41016190.92 0.0516 0.0323

Jupiter 107592-04-06 23:59 G 41018327.30 41018327.50 41018327.71 0.0508 0.0019

Saturn 107592-11-21 14:37 G 41018555.89 41018556.11 41018556.32 0.0294 0.0025

Neptune 107596-08-04 19:54 G 41019908.26 41019908.33 41019908.43 0.0088 0.0081

Neptune 107597-03-18 09:35 G 41020133.78 41020133.90 41020134.03 0.0088 0.0071

Neptune 107597-10-29 22:32 G 41020359.30 41020359.44 41020359.62 0.0088 0.0062

Neptune 107598-06-12 11:44 G 41020584.83 41020584.99 41020585.19 0.0088 0.0052

Moon 107598-06-14 15:06 G 41020586.98 41020587.13 41020587.27 0.2640 0.0935

Earth 107598-06-14 19:54 G 41020587.16 41020587.33 41020587.49 0.2636 0.0065 *

Jupiter 107598-09-28 22:32 G 41020693.29 41020693.44 41020693.60 0.0522 0.0314

Neptune 107599-01-24 01:11 G 41020810.37 41020810.55 41020810.76 0.0088 0.0042

Neptune 107599-09-06 14:37 G 41021035.91 41021036.11 41021036.33 0.0088 0.0032

Neptune 107600-04-19 04:03 G 41021261.47 41021261.67 41021261.90 0.0088 0.0022

Uranus 107600-11-20 10:18 G 41021476.90 41021476.93 41021476.99 0.0142 0.0139

Neptune 107600-11-30 17:30 G 41021487.02 41021487.23 41021487.46 0.0088 0.0012

Uranus 107601-07-04 22:03 G 41021703.32 41021703.42 41021703.54 0.0142 0.0123

Neptune 107601-07-14 07:11 G 41021712.57 41021712.80 41021713.02 0.0088 0.0002

Uranus 107602-02-16 10:03 G 41021929.78 41021929.92 41021930.07 0.0142 0.0106

Neptune 107602-02-24 20:23 G 41021938.13 41021938.35 41021938.58 0.0088 0.0009

Uranus 107602-09-30 22:18 G 41022156.26 41022156.43 41022156.60 0.0142 0.0089

Neptune 107602-10-08 09:49 G 41022163.70 41022163.91 41022164.14 0.0088 0.0019

Uranus 107603-05-15 10:18 G 41022382.75 41022382.93 41022383.13 0.0142 0.0073

Neptune 107603-05-21 23:15 G 41022389.27 41022389.47 41022389.69 0.0088 0.0029

Jupiter 107603-12-11 21:06 G 41022593.20 41022593.38 41022593.57 0.0510 0.0220

Uranus 107603-12-27 22:32 G 41022609.25 41022609.44 41022609.66 0.0142 0.0055

Neptune 107604-01-02 12:42 G 41022614.84 41022615.03 41022615.24 0.0088 0.0039

Uranus 107604-08-10 11:15 G 41022835.75 41022835.97 41022836.18 0.0142 0.0038

Neptune 107604-08-15 02:08 G 41022840.41 41022840.59 41022840.79 0.0088 0.0049

Mars 107604-12-28 04:32 G 41022975.54 41022975.69 41022975.84 0.1968 0.0944

Uranus 107605-03-24 23:44 G 41023062.27 41023062.49 41023062.72 0.0142 0.0020

Neptune 107605-03-28 15:49 G 41023066.00 41023066.16 41023066.33 0.0088 0.0059

Uranus 107605-11-06 12:27 G 41023288.80 41023289.02 41023289.24 0.0143 0.0002

Neptune 107605-11-09 05:15 G 41023291.59 41023291.72 41023291.87 0.0088 0.0069

Mars 107605-12-02 01:11 G 41023314.45 41023314.55 41023314.65 0.1575 0.1310

Uranus 107606-06-21 01:11 G 41023515.33 41023515.55 41023515.77 0.0143 0.0016

Neptune 107606-06-22 18:27 G 41023517.20 41023517.27 41023517.39 0.0088 0.0079

Uranus 107607-02-02 13:39 G 41023741.86 41023742.07 41023742.29 0.0143 0.0034

Uranus 107607-09-17 02:23 G 41023968.40 41023968.60 41023968.82 0.0143 0.0052

Saturn 107607-12-18 01:25 G 41024060.40 41024060.56 41024060.73 0.0265 0.0165

Uranus 107608-04-30 15:35 G 41024194.96 41024195.15 41024195.35 0.0143 0.0069

Saturn 107608-08-02 22:32 G 41024289.25 41024289.44 41024289.64 0.0267 0.0095

Uranus 107608-12-13 04:03 G 41024421.51 41024421.67 41024421.86 0.0143 0.0087

Uranus 107609-07-27 17:01 G 41024648.07 41024648.21 41024648.37 0.0143 0.0104

Uranus 107610-03-11 05:44 G 41024874.64 41024874.74 41024874.87 0.0143 0.0121

Jupiter 107610-06-03 20:37 G 41024959.16 41024959.36 41024959.56 0.0520 0.0066

Uranus 107610-10-23 18:27 G 41025101.24 41025101.27 41025101.35 0.0143 0.0138

Jupiter 107615-08-16 16:18 G 41026859.10 41026859.18 41026859.27 0.0512 0.0464

Jupiter 107616-04-09 19:25 G 41027096.19 41027096.31 41027096.44 0.0504 0.0400

Jupiter 107622-02-06 19:25 G 41029225.13 41029225.31 41029225.50 0.0518 0.0179

Saturn 107622-06-03 14:08 G 41029341.88 41029342.09 41029342.31 0.0294 0.0054

Jupiter 107627-12-14 15:49 G 41031361.96 41031362.16 41031362.35 0.0506 0.0165

Jupiter 107633-10-12 18:13 G 41033491.15 41033491.26 41033491.38 0.0515 0.0421

Jupiter 107634-06-06 16:03 G 41033728.10 41033728.17 41033728.26 0.0523 0.0473

Saturn 107637-06-29 01:39 G 41034846.39 41034846.57 41034846.75 0.0266 0.0137

Saturn 107638-02-12 22:47 G 41035075.27 41035075.45 41035075.64 0.0267 0.0125

Jupiter 107639-08-19 10:32 G 41035627.74 41035627.94 41035628.15 0.0508 0.0081

Mars 107639-09-30 21:49 G 41035670.25 41035670.41 41035670.57 0.1578 0.0675

Uranus 107641-10-21 04:32 G 41036421.63 41036421.69 41036421.77 0.0136 0.0128

Uranus 107642-06-04 10:03 G 41036647.82 41036647.92 41036648.05 0.0136 0.0115

Uranus 107643-01-16 15:49 G 41036874.02 41036874.16 41036874.31 0.0136 0.0100

Uranus 107643-08-30 21:06 G 41037100.23 41037100.38 41037100.56 0.0136 0.0086

Uranus 107644-04-13 02:51 G 41037326.44 41037326.62 41037326.80 0.0136 0.0071

Uranus 107644-11-25 07:54 G 41037552.65 41037552.83 41037553.03 0.0136 0.0057

Uranus 107645-07-09 13:11 G 41037778.85 41037779.05 41037779.26 0.0136 0.0042

Jupiter 107646-02-09 12:42 G 41037993.85 41037994.03 41037994.21 0.0521 0.0220

Uranus 107646-02-20 18:27 G 41038005.06 41038005.27 41038005.48 0.0136 0.0028

Uranus 107646-10-04 23:44 G 41038231.28 41038231.49 41038231.70 0.0135 0.0013

Uranus 107647-05-19 04:47 G 41038457.49 41038457.70 41038457.91 0.0135 0.0002

Uranus 107647-12-31 09:35 G 41038683.69 41038683.90 41038684.12 0.0135 0.0016

Uranus 107648-08-13 14:23 G 41038909.90 41038910.10 41038910.31 0.0135 0.0031

Uranus 107649-03-27 19:11 G 41039136.11 41039136.30 41039136.51 0.0135 0.0045

Uranus 107649-11-08 23:59 G 41039362.32 41039362.50 41039362.70 0.0135 0.0059

Uranus 107650-06-23 04:47 G 41039588.53 41039588.70 41039588.88 0.0135 0.0073

Uranus 107651-02-04 09:20 G 41039814.74 41039814.89 41039815.06 0.0135 0.0087

Jupiter 107651-04-24 06:56 G 41039893.64 41039893.79 41039893.96 0.0511 0.0321

Saturn 107651-04-28 14:51 G 41039898.04 41039898.12 41039898.20 0.0295 0.0271

Uranus 107651-09-18 13:54 G 41040040.95 41040041.08 41040041.23 0.0135 0.0101

Saturn 107651-12-14 19:54 G 41040128.13 41040128.33 41040128.53 0.0294 0.0101

Uranus 107652-05-01 18:42 G 41040267.18 41040267.28 41040267.40 0.0135 0.0114

Uranus 107652-12-13 23:30 G 41040493.41 41040493.48 41040493.55 0.0135 0.0128

Jupiter 107657-10-15 07:11 G 41042259.60 41042259.80 41042260.00 0.0519 0.0039

Jupiter 107663-08-22 07:39 G 41044396.66 41044396.82 41044396.98 0.0505 0.0309

Saturn 107667-01-09 05:30 G 41045632.53 41045632.73 41045632.92 0.0266 0.0100

Saturn 107667-08-26 02:23 G 41045861.45 41045861.60 41045861.78 0.0267 0.0162

Jupiter 107669-06-20 05:15 G 41046525.56 41046525.72 41046525.90 0.0517 0.0284

Mars 107670-10-25 06:27 G 41047017.60 41047017.77 41047017.94 0.1966 0.0110

Mars 107671-09-29 13:54 G 41047356.96 41047357.08 41047357.20 0.1576 0.1139

Jupiter 107675-04-27 03:35 G 41048662.45 41048662.65 41048662.86 0.0507 0.0071

Neptune 107678-09-22 18:56 G 41049907.24 41049907.29 41049907.37 0.0090 0.0085

Neptune 107679-05-06 07:25 G 41050132.72 41050132.81 41050132.95 0.0090 0.0075

Neptune 107679-12-17 20:08 G 41050358.21 41050358.34 41050358.51 0.0090 0.0065

Neptune 107680-07-30 09:06 G 41050583.72 41050583.88 41050584.06 0.0090 0.0054

Saturn 107680-11-07 15:20 G 41050684.03 41050684.14 41050684.27 0.0296 0.0240

Neptune 107681-03-12 21:49 G 41050809.23 41050809.41 41050809.60 0.0090 0.0044

Saturn 107681-06-25 20:37 G 41050914.17 41050914.36 41050914.55 0.0294 0.0133

Jupiter 107681-10-18 02:23 G 41051028.46 41051028.60 41051028.74 0.0523 0.0369

Neptune 107681-10-24 10:32 G 41051034.75 41051034.94 41051035.15 0.0090 0.0034

Neptune 107682-06-06 23:15 G 41051260.27 41051260.47 41051260.69 0.0090 0.0023

Neptune 107683-01-18 11:59 G 41051485.79 41051486.00 41051486.22 0.0090 0.0013

Neptune 107683-09-01 00:42 G 41051711.32 41051711.53 41051711.75 0.0090 0.0003

Neptune 107684-04-13 13:25 G 41051936.84 41051937.06 41051937.27 0.0090 0.0008

Neptune 107684-11-25 01:54 G 41052162.37 41052162.58 41052162.80 0.0090 0.0018

Uranus 107685-03-04 04:18 G 41052261.60 41052261.68 41052261.79 0.0142 0.0128

Neptune 107685-07-08 14:08 G 41052387.90 41052388.09 41052388.31 0.0090 0.0029

Uranus 107685-10-16 16:18 G 41052488.06 41052488.18 41052488.33 0.0142 0.0111

Neptune 107686-02-19 02:51 G 41052613.44 41052613.62 41052613.82 0.0090 0.0039

Uranus 107686-05-31 04:32 G 41052714.53 41052714.69 41052714.86 0.0142 0.0094

Neptune 107686-10-02 15:35 G 41052838.98 41052839.15 41052839.34 0.0090 0.0049

Jupiter 107686-12-30 23:01 G 41052928.27 41052928.46 41052928.66 0.0509 0.0173

Uranus 107687-01-12 16:32 G 41052941.01 41052941.19 41052941.38 0.0142 0.0078

Neptune 107687-05-16 04:03 G 41053064.52 41053064.67 41053064.84 0.0090 0.0059

Uranus 107687-08-27 04:47 G 41053167.50 41053167.70 41053167.91 0.0142 0.0060

Neptune 107687-12-27 16:32 G 41053290.06 41053290.19 41053290.34 0.0090 0.0069

Uranus 107688-04-09 17:15 G 41053394.01 41053394.22 41053394.44 0.0142 0.0043

Neptune 107688-08-09 05:01 G 41053515.62 41053515.71 41053515.82 0.0090 0.0079

Uranus 107688-11-22 05:44 G 41053620.53 41053620.74 41053620.96 0.0142 0.0026

Neptune 107689-03-22 17:30 G 41053741.22 41053741.23 41053741.26 0.0090 0.0089

Uranus 107689-07-06 18:13 G 41053847.04 41053847.26 41053847.49 0.0142 0.0009

Uranus 107690-02-18 06:56 G 41054073.57 41054073.79 41054074.01 0.0143 0.0010

Uranus 107690-10-02 19:39 G 41054300.10 41054300.32 41054300.54 0.0143 0.0028

Uranus 107691-05-17 08:23 G 41054526.64 41054526.85 41054527.07 0.0143 0.0046

Uranus 107691-12-29 20:51 G 41054753.19 41054753.37 41054753.59 0.0143 0.0064

Uranus 107692-08-12 09:49 G 41054979.74 41054979.91 41054980.10 0.0143 0.0081

Uranus 107693-03-26 22:47 G 41055206.30 41055206.45 41055206.62 0.0143 0.0098

Jupiter 107693-06-22 23:59 G 41055294.31 41055294.50 41055294.70 0.0520 0.0119

Uranus 107693-11-08 11:30 G 41055432.86 41055432.98 41055433.12 0.0143 0.0115

Uranus 107694-06-23 00:13 G 41055659.44 41055659.51 41055659.61 0.0143 0.0132

Saturn 107696-07-21 05:30 G 41056418.54 41056418.73 41056418.94 0.0266 0.0072

Saturn 107697-03-07 02:51 G 41056647.48 41056647.62 41056647.77 0.0267 0.0191

Jupiter 107698-09-04 17:15 G 41057194.11 41057194.22 41057194.34 0.0512 0.0421

Jupiter 107699-04-29 20:23 G 41057431.26 41057431.35 41057431.45 0.0504 0.0444

Jupiter 107705-02-26 21:20 G 41059560.19 41059560.39 41059560.58 0.0518 0.0132

Mars 107705-07-29 10:47 G 41059712.80 41059712.95 41059713.10 0.1579 0.0846

Saturn 107710-05-21 21:49 G 41061470.25 41061470.41 41061470.58 0.0295 0.0189

Jupiter 107711-01-03 17:44 G 41061697.05 41061697.24 41061697.42 0.0506 0.0212

Saturn 107711-01-07 02:37 G 41061700.46 41061700.61 41061700.79 0.0293 0.0183

Earth 107711-12-19 05:59 G 41062046.64 41062046.75 41062046.86 0.2697 0.1923

Moon 107711-12-19 09:49 G 41062046.86 41062046.91 41062046.95 0.2692 0.2585 *

Jupiter 107716-11-01 16:18 G 41063826.05 41063826.18 41063826.31 0.0515 0.0385

Jupiter 107717-06-26 13:54 G 41064063.05 41064063.08 41064063.13 0.0523 0.0511

Moon 107719-12-16 21:49 G 41064966.28 41064966.41 41064966.53 0.2689 0.1784

Earth 107719-12-16 23:01 G 41064966.33 41064966.46 41064966.59 0.2695 0.1495 *

Jupiter 107722-09-08 14:37 G 41065962.91 41065963.11 41065963.32 0.0508 0.0028

Uranus 107725-06-21 13:11 G 41066980.01 41066980.05 41066980.11 0.0136 0.0133

Saturn 107726-02-01 10:03 G 41067204.72 41067204.92 41067205.13 0.0266 0.0032

Uranus 107726-02-02 18:56 G 41067206.20 41067206.29 41067206.40 0.0136 0.0119

Uranus 107726-09-17 00:42 G 41067432.40 41067432.53 41067432.67 0.0136 0.0104

Saturn 107726-09-18 07:39 G 41067433.72 41067433.82 41067433.93 0.0267 0.0231

Uranus 107727-05-01 06:13 G 41067658.61 41067658.76 41067658.93 0.0136 0.0090

Uranus 107727-12-13 11:30 G 41067884.82 41067884.98 41067885.17 0.0136 0.0076

Uranus 107728-07-26 16:47 G 41068111.03 41068111.20 41068111.41 0.0136 0.0062

Jupiter 107729-03-01 11:15 G 41068328.80 41068328.97 41068329.14 0.0521 0.0260

Uranus 107729-03-09 22:18 G 41068337.24 41068337.43 41068337.64 0.0136 0.0047

Uranus 107729-10-22 03:35 G 41068563.45 41068563.65 41068563.87 0.0136 0.0033

Uranus 107730-06-05 08:51 G 41068789.66 41068789.87 41068790.09 0.0136 0.0018

Uranus 107731-01-17 13:54 G 41069015.87 41069016.08 41069016.30 0.0135 0.0004

Uranus 107731-08-31 18:56 G 41069242.08 41069242.29 41069242.50 0.0135 0.0011

Uranus 107732-04-13 23:44 G 41069468.29 41069468.49 41069468.70 0.0135 0.0026

Uranus 107732-11-26 04:32 G 41069694.50 41069694.69 41069694.90 0.0135 0.0041

Uranus 107733-07-10 09:20 G 41069920.70 41069920.89 41069921.09 0.0135 0.0055

Uranus 107734-02-21 14:08 G 41070146.91 41070147.09 41070147.28 0.0135 0.0069

Jupiter 107734-05-14 10:03 G 41070228.75 41070228.92 41070229.10 0.0510 0.0271

Uranus 107734-10-05 18:56 G 41070373.13 41070373.29 41070373.46 0.0135 0.0083

Uranus 107735-05-19 23:30 G 41070599.34 41070599.48 41070599.64 0.0135 0.0096

Uranus 107736-01-01 03:49 G 41070825.56 41070825.66 41070825.80 0.0135 0.0111

Uranus 107736-08-14 08:37 G 41071051.79 41071051.86 41071051.96 0.0135 0.0124

Mars 107736-08-22 08:08 G 41071059.69 41071059.84 41071060.00 0.1965 0.0737

Mars 107737-07-28 02:51 G 41071399.48 41071399.62 41071399.75 0.1576 0.0969

Pluto 107738-06-10 19:54 G 41071717.18 41071717.33 41071717.51 0.0063 0.0041

Pluto 107739-01-21 23:30 G 41071942.26 41071942.48 41071942.69 0.0064 0.0002

Pluto 107739-09-04 02:23 G 41072167.44 41072167.60 41072167.79 0.0064 0.0038

Saturn 107739-12-01 23:59 G 41072256.32 41072256.50 41072256.68 0.0295 0.0154

Saturn 107740-07-19 04:32 G 41072486.55 41072486.69 41072486.84 0.0294 0.0217

Jupiter 107740-11-04 09:49 G 41072594.71 41072594.91 41072595.11 0.0519 0.0015

Jupiter 107746-09-11 08:37 G 41074731.71 41074731.86 41074732.01 0.0505 0.0354

Jupiter 107752-07-10 08:08 G 41076860.67 41076860.84 41076861.02 0.0517 0.0235

Saturn 107754-12-28 13:25 G 41077762.05 41077762.06 41077762.11 0.0265 0.0262

Saturn 107755-08-14 10:47 G 41077990.75 41077990.95 41077991.16 0.0266 0.0006

Saturn 107756-03-30 08:08 G 41078219.81 41078219.84 41078219.90 0.0268 0.0262

Jupiter 107758-05-17 03:35 G 41078997.45 41078997.65 41078997.86 0.0507 0.0113

Neptune 107760-11-07 06:27 G 41079902.72 41079902.77 41079902.86 0.0088 0.0083

Neptune 107761-06-20 19:54 G 41080128.22 41080128.33 41080128.47 0.0088 0.0073

Neptune 107762-02-01 09:06 G 41080353.74 41080353.88 41080354.05 0.0088 0.0063

Neptune 107762-09-14 22:47 G 41080579.28 41080579.45 41080579.63 0.0088 0.0053

Neptune 107763-04-28 12:13 G 41080804.82 41080805.01 41080805.21 0.0088 0.0043

Neptune 107763-12-10 01:39 G 41081030.36 41081030.57 41081030.78 0.0088 0.0033

Jupiter 107764-03-15 06:13 G 41081126.69 41081126.76 41081126.83 0.0514 0.0477

Neptune 107764-07-22 14:51 G 41081255.91 41081256.12 41081256.34 0.0088 0.0023

Jupiter 107764-11-07 03:20 G 41081363.52 41081363.64 41081363.76 0.0522 0.0415

Neptune 107765-03-05 04:18 G 41081481.46 41081481.68 41081481.90 0.0088 0.0013

Neptune 107765-10-16 17:44 G 41081707.01 41081707.24 41081707.46 0.0088 0.0003

Neptune 107766-05-30 07:11 G 41081932.57 41081932.80 41081933.02 0.0088 0.0007

Neptune 107767-01-10 20:23 G 41082158.13 41082158.35 41082158.57 0.0088 0.0017

Neptune 107767-08-24 09:49 G 41082383.70 41082383.91 41082384.12 0.0088 0.0027

Neptune 107768-04-05 23:15 G 41082609.27 41082609.47 41082609.68 0.0088 0.0037

Uranus 107768-11-02 11:01 G 41082819.89 41082819.96 41082820.05 0.0142 0.0132

Neptune 107768-11-17 12:42 G 41082834.85 41082835.03 41082835.23 0.0088 0.0047

Saturn 107769-06-13 06:42 G 41083042.59 41083042.78 41083042.99 0.0295 0.0103

Uranus 107769-06-16 22:47 G 41083046.33 41083046.45 41083046.58 0.0142 0.0116

Neptune 107769-07-01 02:08 G 41083060.43 41083060.59 41083060.77 0.0088 0.0057

Jupiter 107770-01-19 23:44 G 41083263.30 41083263.49 41083263.69 0.0509 0.0129

Uranus 107770-01-29 10:47 G 41083272.80 41083272.95 41083273.11 0.0142 0.0099

Saturn 107770-01-29 11:30 G 41083272.90 41083272.98 41083273.07 0.0293 0.0267 *

Neptune 107770-02-11 15:35 G 41083286.01 41083286.15 41083286.30 0.0088 0.0067

Uranus 107770-09-12 23:01 G 41083499.28 41083499.46 41083499.64 0.0142 0.0082

Neptune 107770-09-25 05:01 G 41083511.62 41083511.71 41083511.83 0.0088 0.0077

Uranus 107771-04-27 11:15 G 41083725.77 41083725.97 41083726.17 0.0142 0.0065

Neptune 107771-05-08 18:27 G 41083737.26 41083737.27 41083737.32 0.0088 0.0087

Mars 107771-05-26 23:30 G 41083755.35 41083755.48 41083755.61 0.1579 0.1025

Uranus 107771-12-09 23:30 G 41083952.27 41083952.48 41083952.69 0.0142 0.0048

Uranus 107772-07-23 11:59 G 41084178.78 41084179.00 41084179.22 0.0142 0.0031

Uranus 107773-03-07 00:27 G 41084405.30 41084405.52 41084405.74 0.0142 0.0013

Uranus 107773-10-19 13:11 G 41084631.83 41084632.05 41084632.27 0.0142 0.0005

Uranus 107774-06-03 01:39 G 41084858.36 41084858.57 41084858.80 0.0143 0.0023

Uranus 107775-01-15 14:08 G 41085084.89 41085085.09 41085085.32 0.0143 0.0041

Uranus 107775-08-30 03:06 G 41085311.43 41085311.63 41085311.84 0.0143 0.0058

Uranus 107776-04-12 15:49 G 41085537.98 41085538.16 41085538.36 0.0143 0.0076

Jupiter 107776-07-12 21:06 G 41085629.19 41085629.38 41085629.58 0.0520 0.0153

Uranus 107776-11-25 04:32 G 41085764.54 41085764.69 41085764.87 0.0143 0.0093

Uranus 107777-07-09 17:15 G 41085991.10 41085991.22 41085991.38 0.0143 0.0110

Uranus 107778-02-21 05:59 G 41086217.67 41086217.75 41086217.87 0.0143 0.0127

Jupiter 107781-09-24 19:54 G 41087529.19 41087529.33 41087529.47 0.0512 0.0372

Jupiter 107782-05-19 23:15 G 41087766.44 41087766.47 41087766.51 0.0504 0.0494

Saturn 107784-07-09 18:56 G 41088548.18 41088548.29 41088548.40 0.0265 0.0221

Saturn 107785-02-23 16:03 G 41088776.96 41088777.17 41088777.38 0.0267 0.0040

Jupiter 107788-03-17 18:56 G 41089895.09 41089895.29 41089895.48 0.0518 0.0097

Jupiter 107794-01-22 19:11 G 41092032.12 41092032.30 41092032.48 0.0506 0.0257

Saturn 107798-12-24 11:01 G 41093828.75 41093828.96 41093829.17 0.0295 0.0060

Jupiter 107799-11-21 17:30 G 41094161.09 41094161.23 41094161.39 0.0516 0.0341

Mars 107802-06-20 10:32 G 41095101.83 41095101.94 41095102.04 0.1964 0.1565

Mars 107803-05-26 15:35 G 41095442.00 41095442.15 41095442.30 0.1577 0.0796

Jupiter 107805-09-28 14:51 G 41096297.92 41096298.12 41096298.33 0.0508 0.0018

Uranus 107809-10-04 03:49 G 41097764.58 41097764.66 41097764.76 0.0136 0.0123

Uranus 107810-05-18 09:20 G 41097990.78 41097990.89 41097991.04 0.0136 0.0110

Uranus 107810-12-30 15:06 G 41098216.99 41098217.13 41098217.30 0.0136 0.0095

Uranus 107811-08-13 20:51 G 41098443.20 41098443.37 41098443.54 0.0136 0.0080

Jupiter 107812-03-21 13:11 G 41098663.89 41098664.05 41098664.22 0.0522 0.0308

Uranus 107812-03-27 02:08 G 41098669.41 41098669.59 41098669.78 0.0136 0.0066

Uranus 107812-11-08 07:25 G 41098895.62 41098895.81 41098896.02 0.0136 0.0052

Uranus 107813-06-22 12:56 G 41099121.83 41099122.04 41099122.24 0.0136 0.0037

Saturn 107814-01-20 19:54 G 41099334.19 41099334.33 41099334.48 0.0266 0.0190

Uranus 107814-02-03 17:59 G 41099348.04 41099348.25 41099348.46 0.0136 0.0022

Saturn 107814-09-06 17:30 G 41099563.03 41099563.23 41099563.43 0.0267 0.0071

Uranus 107814-09-17 23:15 G 41099574.25 41099574.47 41099574.68 0.0135 0.0008

Uranus 107815-05-02 04:03 G 41099800.46 41099800.67 41099800.89 0.0135 0.0007

Uranus 107815-12-14 08:51 G 41100026.67 41100026.87 41100027.09 0.0135 0.0022

Uranus 107816-07-27 13:54 G 41100252.87 41100253.08 41100253.28 0.0135 0.0036

Uranus 107817-03-10 18:13 G 41100479.08 41100479.26 41100479.47 0.0135 0.0051

Jupiter 107817-06-03 08:51 G 41100563.69 41100563.87 41100564.06 0.0510 0.0233

Uranus 107817-10-22 23:15 G 41100705.29 41100705.47 41100705.67 0.0135 0.0064

Uranus 107818-06-06 03:49 G 41100931.50 41100931.66 41100931.85 0.0135 0.0078

Uranus 107819-01-18 08:51 G 41101157.71 41101157.87 41101158.02 0.0135 0.0092

Uranus 107819-09-01 13:11 G 41101383.93 41101384.05 41101384.19 0.0135 0.0105

Uranus 107820-04-14 17:30 G 41101610.15 41101610.23 41101610.35 0.0135 0.0120

Uranus 107820-11-26 22:18 G 41101836.41 41101836.43 41101836.49 0.0135 0.0133

Jupiter 107823-11-25 10:03 G 41102929.72 41102929.92 41102930.12 0.0519 0.0055

Saturn 107828-07-06 18:42 G 41104615.06 41104615.28 41104615.49 0.0294 0.0009

Pluto 107828-07-27 01:25 G 41104635.33 41104635.56 41104635.78 0.0080 0.0005

Jupiter 107829-02-06 04:03 G 41104829.60 41104829.67 41104829.75 0.0513 0.0478

Pluto 107829-03-09 11:59 G 41104860.96 41104861.00 41104861.08 0.0080 0.0077

Jupiter 107829-10-01 08:08 G 41105066.72 41105066.84 41105066.97 0.0505 0.0395

Jupiter 107835-07-31 04:47 G 41107195.52 41107195.70 41107195.89 0.0516 0.0203

Mars 107837-03-24 11:59 G 41107797.89 41107798.00 41107798.12 0.1580 0.1203

Jupiter 107841-06-06 04:47 G 41109332.50 41109332.70 41109332.90 0.0507 0.0158

Earth 107841-06-16 18:56 G 41109343.13 41109343.29 41109343.45 0.2637 0.0145

Moon 107841-06-17 00:13 G 41109343.35 41109343.51 41109343.67 0.2634 0.0710 *

Neptune 107842-12-27 06:27 G 41109901.74 41109901.77 41109901.85 0.0090 0.0087

Saturn 107843-08-03 01:54 G 41110120.42 41110120.58 41110120.77 0.0266 0.0147

Neptune 107843-08-09 19:11 G 41110127.21 41110127.30 41110127.43 0.0090 0.0077

Saturn 107844-03-18 23:30 G 41110349.30 41110349.48 41110349.67 0.0267 0.0116

Neptune 107844-03-22 08:23 G 41110352.71 41110352.85 41110353.00 0.0090 0.0066

Neptune 107844-11-02 20:51 G 41110578.22 41110578.37 41110578.55 0.0090 0.0056

Neptune 107845-06-16 09:35 G 41110803.73 41110803.90 41110804.10 0.0090 0.0046

Neptune 107846-01-27 22:03 G 41111029.24 41111029.42 41111029.64 0.0090 0.0036

Neptune 107846-09-10 11:15 G 41111254.76 41111254.97 41111255.18 0.0090 0.0025

Jupiter 107847-04-05 02:51 G 41111461.52 41111461.62 41111461.72 0.0514 0.0446

Neptune 107847-04-23 23:44 G 41111480.29 41111480.49 41111480.71 0.0090 0.0015

Jupiter 107847-11-27 23:44 G 41111698.39 41111698.49 41111698.59 0.0522 0.0448

Neptune 107847-12-05 12:27 G 41111705.81 41111706.02 41111706.24 0.0090 0.0005

Neptune 107848-07-18 01:11 G 41111931.34 41111931.55 41111931.77 0.0090 0.0006

Neptune 107849-02-28 13:54 G 41112156.87 41112157.08 41112157.29 0.0090 0.0016

Neptune 107849-10-12 02:23 G 41112382.41 41112382.60 41112382.82 0.0090 0.0027

Neptune 107850-05-25 15:06 G 41112607.94 41112608.13 41112608.33 0.0090 0.0037

Neptune 107851-01-06 03:35 G 41112833.48 41112833.65 41112833.84 0.0090 0.0047

Neptune 107851-08-19 16:18 G 41113059.02 41113059.18 41113059.35 0.0090 0.0057

Neptune 107852-04-01 05:01 G 41113284.57 41113284.71 41113284.85 0.0090 0.0067

Uranus 107852-07-03 17:01 G 41113378.17 41113378.21 41113378.28 0.0142 0.0137

Neptune 107852-11-12 17:01 G 41113510.13 41113510.21 41113510.34 0.0090 0.0078

Jupiter 107853-02-08 23:59 G 41113598.30 41113598.50 41113598.71 0.0509 0.0088

Uranus 107853-02-15 04:47 G 41113604.60 41113604.70 41113604.83 0.0142 0.0121

Neptune 107853-06-26 05:30 G 41113735.71 41113735.73 41113735.80 0.0090 0.0088

Uranus 107853-09-29 16:32 G 41113831.06 41113831.19 41113831.36 0.0142 0.0105

Uranus 107854-05-14 04:47 G 41114057.54 41114057.70 41114057.89 0.0142 0.0088

Uranus 107854-12-26 17:01 G 41114284.03 41114284.21 41114284.41 0.0142 0.0071

Uranus 107855-08-10 05:30 G 41114510.52 41114510.73 41114510.94 0.0142 0.0053

Uranus 107856-03-23 17:44 G 41114737.04 41114737.24 41114737.47 0.0142 0.0037

Uranus 107856-11-05 06:27 G 41114963.55 41114963.77 41114963.99 0.0142 0.0018

Uranus 107857-06-19 18:56 G 41115190.07 41115190.29 41115190.51 0.0143 0.0001

Saturn 107858-01-17 00:42 G 41115401.32 41115401.53 41115401.75 0.0294 0.0042

Uranus 107858-02-01 07:25 G 41115416.59 41115416.81 41115417.03 0.0143 0.0017

Uranus 107858-09-15 20:08 G 41115643.12 41115643.34 41115643.56 0.0143 0.0035

Uranus 107859-04-30 08:37 G 41115869.67 41115869.86 41115870.08 0.0143 0.0053

Jupiter 107859-08-02 21:35 G 41115964.21 41115964.40 41115964.58 0.0521 0.0196

Uranus 107859-12-12 21:35 G 41116096.21 41116096.40 41116096.60 0.0143 0.0070

Uranus 107860-07-26 10:18 G 41116322.76 41116322.93 41116323.11 0.0143 0.0087

Uranus 107861-03-09 23:15 G 41116549.32 41116549.47 41116549.62 0.0143 0.0104

Uranus 107861-10-22 11:59 G 41116775.89 41116776.00 41116776.12 0.0143 0.0121

Uranus 107862-06-06 00:56 G 41117002.49 41117002.54 41117002.60 0.0143 0.0138

Jupiter 107864-10-14 19:11 G 41117864.14 41117864.30 41117864.45 0.0511 0.0334

Mars 107869-03-23 04:18 G 41119484.52 41119484.68 41119484.84 0.1577 0.0626

Jupiter 107871-04-07 19:39 G 41120230.12 41120230.32 41120230.52 0.0518 0.0054

Saturn 107873-02-12 03:49 G 41120906.47 41120906.66 41120906.85 0.0266 0.0114

Saturn 107873-09-29 01:11 G 41121135.39 41121135.55 41121135.73 0.0267 0.0150

Jupiter 107877-02-11 16:47 G 41122367.04 41122367.20 41122367.37 0.0506 0.0293

Jupiter 107882-12-11 16:47 G 41124496.05 41124496.20 41124496.37 0.0516 0.0302

Saturn 107886-12-12 04:03 G 41125957.60 41125957.67 41125957.75 0.0295 0.0277

Saturn 107887-07-30 09:06 G 41126187.68 41126187.88 41126188.09 0.0294 0.0096

Jupiter 107888-10-17 12:56 G 41126632.83 41126633.04 41126633.24 0.0508 0.0053

Uranus 107893-06-03 13:25 G 41128323.00 41128323.06 41128323.15 0.0136 0.0127

Uranus 107894-01-15 19:11 G 41128549.20 41128549.30 41128549.44 0.0136 0.0113

Uranus 107894-08-30 00:56 G 41128775.41 41128775.54 41128775.70 0.0136 0.0099

Jupiter 107895-04-10 08:37 G 41128998.72 41128998.86 41128999.02 0.0521 0.0337

Uranus 107895-04-13 06:27 G 41129001.62 41129001.77 41129001.95 0.0136 0.0085

Uranus 107895-11-25 12:13 G 41129227.83 41129228.01 41129228.20 0.0136 0.0070

Uranus 107896-07-08 17:30 G 41129454.04 41129454.23 41129454.43 0.0136 0.0056

Uranus 107897-02-19 22:32 G 41129680.25 41129680.44 41129680.66 0.0136 0.0042

Uranus 107897-10-04 04:03 G 41129906.47 41129906.67 41129906.88 0.0136 0.0027

Uranus 107898-05-18 09:06 G 41130132.67 41130132.88 41130133.10 0.0135 0.0013

Uranus 107898-12-30 14:08 G 41130358.88 41130359.09 41130359.30 0.0135 0.0002

Uranus 107899-08-13 18:56 G 41130585.08 41130585.29 41130585.50 0.0135 0.0017

Uranus 107900-03-27 23:44 G 41130811.29 41130811.49 41130811.70 0.0135 0.0031

Jupiter 107900-06-23 08:08 G 41130898.65 41130898.84 41130899.03 0.0511 0.0195

Uranus 107900-11-09 04:32 G 41131037.50 41131037.69 41131037.90 0.0135 0.0046

Uranus 107901-06-23 09:20 G 41131263.70 41131263.89 41131264.08 0.0135 0.0059

Uranus 107902-02-04 13:54 G 41131489.91 41131490.08 41131490.27 0.0135 0.0074

Saturn 107902-08-26 10:47 G 41131692.75 41131692.95 41131693.15 0.0267 0.0068

Uranus 107902-09-18 18:27 G 41131716.12 41131716.27 41131716.44 0.0135 0.0088

Mars 107903-01-21 00:56 G 41131840.45 41131840.54 41131840.62 0.1581 0.1380

Saturn 107903-04-12 08:23 G 41131921.72 41131921.85 41131922.00 0.0268 0.0196

Uranus 107903-05-02 23:01 G 41131942.34 41131942.46 41131942.62 0.0135 0.0101

Uranus 107903-12-15 04:03 G 41132168.56 41132168.67 41132168.78 0.0135 0.0115

Uranus 107904-07-28 08:08 G 41132394.80 41132394.84 41132394.93 0.0135 0.0129

Jupiter 107906-12-15 05:30 G 41133264.54 41133264.73 41133264.93 0.0519 0.0084

Jupiter 107912-02-27 02:37 G 41135164.52 41135164.61 41135164.72 0.0513 0.0444

Jupiter 107912-10-21 06:27 G 41135401.67 41135401.77 41135401.89 0.0505 0.0431

Saturn 107916-06-24 12:56 G 41136743.90 41136744.04 41136744.19 0.0295 0.0220

Saturn 107917-02-09 17:30 G 41136974.05 41136974.23 41136974.42 0.0294 0.0152

Jupiter 107918-08-20 03:35 G 41137530.46 41137530.65 41137530.84 0.0517 0.0166

Jupiter 107924-06-26 02:23 G 41139667.41 41139667.60 41139667.80 0.0507 0.0192

Neptune 107925-02-10 17:15 G 41139897.17 41139897.22 41139897.30 0.0088 0.0084

Neptune 107925-09-24 06:42 G 41140122.67 41140122.78 41140122.91 0.0088 0.0074

Neptune 107926-05-07 20:23 G 41140348.20 41140348.35 41140348.50 0.0088 0.0064

Neptune 107926-12-19 09:06 G 41140573.73 41140573.88 41140574.08 0.0088 0.0055

Neptune 107927-08-01 22:32 G 41140799.27 41140799.44 41140799.65 0.0088 0.0045

Neptune 107928-03-14 12:13 G 41141024.81 41141025.01 41141025.23 0.0088 0.0035

Neptune 107928-10-26 01:39 G 41141250.36 41141250.57 41141250.79 0.0088 0.0025

Neptune 107929-06-08 15:06 G 41141475.91 41141476.13 41141476.35 0.0088 0.0015

Neptune 107930-01-20 04:32 G 41141701.46 41141701.69 41141701.91 0.0088 0.0005

Jupiter 107930-04-25 01:54 G 41141796.47 41141796.58 41141796.71 0.0515 0.0410

Neptune 107930-09-02 17:44 G 41141927.02 41141927.24 41141927.47 0.0088 0.0006

Jupiter 107930-12-17 23:30 G 41142033.41 41142033.48 41142033.55 0.0523 0.0488

Neptune 107931-04-16 07:11 G 41142152.58 41142152.80 41142153.03 0.0088 0.0016

Neptune 107931-11-27 20:23 G 41142378.15 41142378.35 41142378.58 0.0088 0.0026

Saturn 107932-03-07 13:11 G 41142478.84 41142479.05 41142479.25 0.0266 0.0034

Neptune 107932-07-10 09:35 G 41142603.71 41142603.90 41142604.12 0.0088 0.0036

Saturn 107932-10-22 10:47 G 41142707.86 41142707.95 41142708.06 0.0268 0.0232

Neptune 107933-02-20 23:01 G 41142829.28 41142829.46 41142829.67 0.0088 0.0046

Neptune 107933-10-04 12:13 G 41143054.86 41143055.01 41143055.21 0.0088 0.0056

Neptune 107934-05-18 01:54 G 41143280.45 41143280.58 41143280.75 0.0088 0.0066

Neptune 107934-12-29 15:49 G 41143506.05 41143506.16 41143506.27 0.0088 0.0075

Mars 107935-01-19 17:01 G 41143527.04 41143527.21 41143527.38 0.1578 0.0450

Neptune 107935-08-12 05:01 G 41143731.67 41143731.71 41143731.77 0.0088 0.0085

Jupiter 107936-02-29 20:37 G 41143933.16 41143933.36 41143933.57 0.0509 0.0056

Uranus 107936-10-16 10:32 G 41144162.84 41144162.94 41144163.04 0.0142 0.0126

Uranus 107937-05-30 22:03 G 41144389.30 41144389.42 41144389.57 0.0142 0.0110

Uranus 107938-01-12 10:18 G 41144615.76 41144615.93 41144616.10 0.0142 0.0093

Uranus 107938-08-26 22:18 G 41144842.25 41144842.43 41144842.62 0.0142 0.0077

Uranus 107939-04-10 10:32 G 41145068.75 41145068.94 41145069.15 0.0142 0.0060

Uranus 107939-11-22 22:47 G 41145295.25 41145295.45 41145295.67 0.0142 0.0043

Uranus 107940-07-06 11:15 G 41145521.75 41145521.97 41145522.19 0.0142 0.0025

Uranus 107941-02-17 23:44 G 41145748.27 41145748.49 41145748.72 0.0143 0.0007

Uranus 107941-10-02 12:27 G 41145974.79 41145975.02 41145975.24 0.0143 0.0011

Uranus 107942-05-17 00:56 G 41146201.33 41146201.54 41146201.77 0.0143 0.0029

Jupiter 107942-08-22 19:54 G 41146299.15 41146299.33 41146299.51 0.0520 0.0234

Uranus 107942-12-29 13:39 G 41146427.86 41146428.07 41146428.29 0.0143 0.0046

Uranus 107943-08-13 02:08 G 41146654.41 41146654.59 41146654.80 0.0143 0.0064

Uranus 107944-03-26 15:06 G 41146880.96 41146881.13 41146881.32 0.0143 0.0081

Uranus 107944-11-08 03:49 G 41147107.52 41147107.66 41147107.84 0.0143 0.0099

Uranus 107945-06-22 16:32 G 41147334.08 41147334.19 41147334.34 0.0143 0.0116

Saturn 107946-01-04 21:20 G 41147530.22 41147530.39 41147530.57 0.0295 0.0165

Uranus 107946-02-04 05:59 G 41147560.67 41147560.75 41147560.83 0.0143 0.0132

Saturn 107946-08-23 01:54 G 41147760.44 41147760.58 41147760.74 0.0293 0.0206

Jupiter 107947-11-04 15:35 G 41148198.98 41148199.15 41148199.31 0.0511 0.0303

Jupiter 107954-04-27 14:51 G 41150564.92 41150565.12 41150565.32 0.0518 0.0027

Moon 107954-12-21 05:15 G 41150802.59 41150802.72 41150802.84 0.2700 0.1445

Earth 107954-12-21 09:06 G 41150802.78 41150802.88 41150802.98 0.2696 0.2023 *

Jupiter 107960-03-03 14:37 G 41152701.96 41152702.11 41152702.27 0.0506 0.0328

Saturn 107961-01-31 22:47 G 41153036.38 41153036.45 41153036.53 0.0266 0.0247

Saturn 107961-09-17 20:37 G 41153265.15 41153265.36 41153265.57 0.0267 0.0015

Earth 107962-12-19 01:54 G 41153722.45 41153722.58 41153722.71 0.2695 0.1443

Moon 107962-12-19 02:51 G 41153722.48 41153722.62 41153722.75 0.2701 0.1084 *

Jupiter 107965-12-31 11:44 G 41154830.83 41154830.99 41154831.17 0.0515 0.0277

Mars 107966-02-12 17:15 G 41154874.09 41154874.22 41154874.34 0.1965 0.1275

Mars 107968-11-17 13:25 G 41155883.04 41155883.06 41155883.09 0.1582 0.1562

Jupiter 107971-11-07 10:03 G 41156967.71 41156967.92 41156968.12 0.0508 0.0083

Saturn 107975-07-18 08:08 G 41158316.64 41158316.84 41158317.04 0.0295 0.0102

Saturn 107976-03-04 12:27 G 41158546.94 41158547.02 41158547.11 0.0293 0.0267

Uranus 107977-02-01 23:01 G 41158881.42 41158881.46 41158881.53 0.0136 0.0132

Uranus 107977-09-16 05:01 G 41159107.62 41159107.71 41159107.83 0.0136 0.0118

Jupiter 107978-04-30 06:27 G 41159333.63 41159333.77 41159333.91 0.0522 0.0372

Uranus 107978-04-30 10:47 G 41159333.82 41159333.95 41159334.10 0.0136 0.0103 *

Uranus 107978-12-12 16:18 G 41159560.03 41159560.18 41159560.35 0.0136 0.0089

Uranus 107979-07-26 21:49 G 41159786.24 41159786.41 41159786.60 0.0136 0.0075

Uranus 107980-03-09 03:06 G 41160012.45 41160012.63 41160012.83 0.0136 0.0061

Uranus 107980-10-21 08:37 G 41160238.67 41160238.86 41160239.07 0.0136 0.0046

Uranus 107981-06-04 13:54 G 41160464.87 41160465.08 41160465.29 0.0136 0.0031

Uranus 107982-01-16 18:56 G 41160691.08 41160691.29 41160691.50 0.0136 0.0017

Uranus 107982-08-30 23:59 G 41160917.28 41160917.50 41160917.71 0.0135 0.0003

Uranus 107983-04-14 04:47 G 41161143.49 41161143.70 41161143.91 0.0135 0.0012

Jupiter 107983-07-13 05:15 G 41161233.52 41161233.72 41161233.92 0.0510 0.0162

Uranus 107983-11-26 09:35 G 41161369.69 41161369.90 41161370.11 0.0135 0.0026

Uranus 107984-07-09 14:23 G 41161595.90 41161596.10 41161596.30 0.0135 0.0040

Uranus 107985-02-20 19:11 G 41161822.10 41161822.30 41161822.49 0.0135 0.0055

Pluto 107985-10-03 05:30 G 41162046.72 41162046.73 41162046.80 0.0063 0.0063

Uranus 107985-10-04 23:30 G 41162048.31 41162048.48 41162048.68 0.0135 0.0069

Pluto 107986-05-16 09:06 G 41162271.69 41162271.88 41162272.09 0.0064 0.0024

Uranus 107986-05-19 04:32 G 41162274.52 41162274.69 41162274.86 0.0135 0.0083

Pluto 107986-12-27 12:27 G 41162496.82 41162497.02 41162497.24 0.0064 0.0016

Uranus 107986-12-31 08:51 G 41162500.73 41162500.87 41162501.03 0.0135 0.0097

Pluto 107987-08-09 15:49 G 41162722.06 41162722.16 41162722.27 0.0064 0.0055

Uranus 107987-08-14 13:25 G 41162726.95 41162727.06 41162727.19 0.0135 0.0110

Uranus 107988-03-27 17:59 G 41162953.18 41162953.25 41162953.35 0.0135 0.0124

Jupiter 107990-01-03 04:03 G 41163599.47 41163599.67 41163599.86 0.0519 0.0120

Saturn 107990-08-14 01:54 G 41163822.45 41163822.58 41163822.70 0.0266 0.0211

Saturn 107991-03-30 23:15 G 41164051.27 41164051.47 41164051.68 0.0267 0.0051

Jupiter 107995-03-17 22:47 G 41165499.33 41165499.45 41165499.57 0.0512 0.0414

Jupiter 107995-11-10 02:23 G 41165736.52 41165736.60 41165736.69 0.0505 0.0460

Mars 108000-11-16 05:59 G 41167569.57 41167569.75 41167569.92 0.1579 0.0284

109TH MILLENNIUM CE

This is a list of transits of Venus in the 109th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 108001-09-08 01:11 G 41167865.36 41167865.55 41167865.75 0.0517 0.0132

Saturn 108005-01-27 16:47 G 41169102.98 41169103.20 41169103.41 0.0294 0.0048

Neptune 108007-03-31 18:42 G 41169896.25 41169896.28 41169896.33 0.0090 0.0088

Jupiter 108007-07-15 22:03 G 41170002.23 41170002.42 41170002.61 0.0507 0.0221

Neptune 108007-11-12 07:25 G 41170121.71 41170121.81 41170121.92 0.0090 0.0078

Neptune 108008-06-24 19:54 G 41170347.21 41170347.33 41170347.49 0.0090 0.0068

Neptune 108009-02-05 08:37 G 41170572.71 41170572.86 41170573.04 0.0090 0.0058

Neptune 108009-09-18 21:20 G 41170798.22 41170798.39 41170798.59 0.0090 0.0048

Neptune 108010-05-02 10:18 G 41171023.74 41171023.93 41171024.13 0.0090 0.0037

Neptune 108010-12-13 22:47 G 41171249.25 41171249.45 41171249.66 0.0090 0.0027

Neptune 108011-07-27 11:30 G 41171474.77 41171474.98 41171475.19 0.0090 0.0017

Neptune 108012-03-09 00:13 G 41171700.29 41171700.51 41171700.72 0.0090 0.0006

Neptune 108012-10-20 12:56 G 41171925.83 41171926.04 41171926.26 0.0090 0.0004

Jupiter 108013-05-13 21:20 G 41172131.26 41172131.39 41172131.53 0.0514 0.0384

Neptune 108013-06-03 01:39 G 41172151.36 41172151.57 41172151.78 0.0090 0.0014

Jupiter 108014-01-05 17:59 G 41172368.22 41172368.25 41172368.29 0.0522 0.0513

Neptune 108014-01-14 13:54 G 41172376.89 41172377.08 41172377.30 0.0090 0.0025

Neptune 108014-08-28 02:37 G 41172602.42 41172602.61 41172602.82 0.0090 0.0035

Neptune 108015-04-10 15:20 G 41172827.96 41172828.14 41172828.33 0.0090 0.0045

Neptune 108015-11-22 04:03 G 41173053.51 41173053.67 41173053.84 0.0090 0.0055

Neptune 108016-07-04 16:18 G 41173279.05 41173279.18 41173279.35 0.0090 0.0066

Neptune 108017-02-15 04:47 G 41173504.61 41173504.70 41173504.84 0.0090 0.0076

Neptune 108017-09-28 17:30 G 41173730.19 41173730.23 41173730.31 0.0090 0.0086

Jupiter 108019-03-20 17:01 G 41174268.00 41174268.21 41174268.42 0.0509 0.0026

Saturn 108020-02-24 09:06 G 41174608.72 41174608.88 41174609.05 0.0266 0.0164

Uranus 108020-06-15 15:20 G 41174721.08 41174721.14 41174721.24 0.0142 0.0132

Saturn 108020-10-10 06:56 G 41174837.60 41174837.79 41174837.99 0.0268 0.0101

Uranus 108021-01-28 03:06 G 41174947.52 41174947.63 41174947.77 0.0142 0.0116

Uranus 108021-09-11 15:20 G 41175173.98 41175174.14 41175174.30 0.0142 0.0099

Uranus 108022-04-26 03:20 G 41175400.46 41175400.64 41175400.82 0.0142 0.0083

Uranus 108022-12-08 15:35 G 41175626.95 41175627.15 41175627.34 0.0142 0.0066

Uranus 108023-07-23 03:35 G 41175853.44 41175853.65 41175853.86 0.0142 0.0049

Uranus 108024-03-05 15:49 G 41176079.95 41176080.16 41176080.39 0.0142 0.0031

Uranus 108024-10-18 04:32 G 41176306.46 41176306.69 41176306.91 0.0143 0.0014

Uranus 108025-06-01 17:01 G 41176532.98 41176533.21 41176533.43 0.0143 0.0005

Jupiter 108025-09-10 14:08 G 41176633.92 41176634.09 41176634.27 0.0520 0.0258

Uranus 108026-01-14 05:30 G 41176759.51 41176759.73 41176759.95 0.0143 0.0022

Uranus 108026-08-28 17:59 G 41176986.04 41176986.25 41176986.47 0.0143 0.0039

Uranus 108027-04-12 06:42 G 41177212.59 41177212.78 41177212.99 0.0143 0.0057

Uranus 108027-11-24 19:25 G 41177439.13 41177439.31 41177439.51 0.0143 0.0075

Uranus 108028-07-08 08:08 G 41177665.68 41177665.84 41177666.02 0.0143 0.0092

Uranus 108029-02-19 21:06 G 41177892.25 41177892.38 41177892.53 0.0143 0.0109

Uranus 108029-10-04 10:03 G 41178118.83 41178118.92 41178119.03 0.0143 0.0126

Uranus 108030-05-18 23:01 G 41178345.46 41178345.46 41178345.49 0.0143 0.0143

Jupiter 108030-11-23 11:44 G 41178533.82 41178533.99 41178534.16 0.0511 0.0276

Mars 108031-12-10 19:25 G 41178916.15 41178916.31 41178916.48 0.1964 0.0455

Saturn 108034-08-10 04:32 G 41179889.48 41179889.69 41179889.91 0.0294 0.0020

Jupiter 108037-05-16 11:01 G 41180899.76 41180899.96 41180900.17 0.0518 0.0012

Jupiter 108043-03-23 11:01 G 41183036.82 41183036.96 41183037.11 0.0505 0.0358

Jupiter 108049-01-19 09:06 G 41185165.71 41185165.88 41185166.06 0.0516 0.0245

Saturn 108049-09-05 12:27 G 41185394.84 41185395.02 41185395.21 0.0266 0.0126

Saturn 108050-04-22 10:03 G 41185623.75 41185623.92 41185624.10 0.0267 0.0137

Jupiter 108054-11-26 05:30 G 41187302.53 41187302.73 41187302.93 0.0508 0.0112

Jupiter 108060-09-24 07:25 G 41189431.75 41189431.81 41189431.87 0.0514 0.0487

Uranus 108060-10-02 08:51 G 41189439.86 41189439.87 41189439.90 0.0136 0.0136

Uranus 108061-05-16 15:06 G 41189666.03 41189666.13 41189666.22 0.0136 0.0122

Jupiter 108061-05-19 04:03 G 41189668.55 41189668.67 41189668.79 0.0522 0.0407

Uranus 108061-12-28 20:23 G 41189892.24 41189892.35 41189892.49 0.0136 0.0108

Uranus 108062-08-12 02:23 G 41190118.45 41190118.60 41190118.76 0.0136 0.0093

Uranus 108063-03-26 07:54 G 41190344.66 41190344.83 41190345.00 0.0136 0.0079

Uranus 108063-11-07 13:11 G 41190570.87 41190571.05 41190571.25 0.0136 0.0065

Saturn 108064-02-20 12:27 G 41190675.81 41190676.02 41190676.23 0.0294 0.0072

Uranus 108064-06-20 18:27 G 41190797.08 41190797.27 41190797.48 0.0136 0.0051

Uranus 108065-02-01 23:44 G 41191023.29 41191023.49 41191023.70 0.0136 0.0036

Uranus 108065-09-16 05:01 G 41191249.50 41191249.71 41191249.92 0.0136 0.0022

Uranus 108066-04-30 10:03 G 41191475.70 41191475.92 41191476.13 0.0136 0.0007

Jupiter 108066-08-01 00:13 G 41191568.31 41191568.51 41191568.71 0.0510 0.0135

Mars 108066-09-13 18:13 G 41191612.08 41191612.26 41191612.44 0.1580 0.0100

Uranus 108066-12-12 14:51 G 41191701.91 41191702.12 41191702.33 0.0135 0.0007

Uranus 108067-07-26 19:39 G 41191928.11 41191928.32 41191928.53 0.0135 0.0022

Uranus 108068-03-09 00:27 G 41192154.32 41192154.52 41192154.73 0.0135 0.0036

Uranus 108068-10-21 05:01 G 41192380.53 41192380.71 41192380.92 0.0135 0.0051

Uranus 108069-06-04 09:49 G 41192606.73 41192606.91 41192607.11 0.0135 0.0064

Uranus 108070-01-16 14:23 G 41192832.94 41192833.10 41192833.29 0.0135 0.0078

Uranus 108070-08-30 18:56 G 41193059.15 41193059.29 41193059.46 0.0135 0.0092

Uranus 108071-04-13 23:44 G 41193285.37 41193285.49 41193285.63 0.0135 0.0105

Uranus 108071-11-26 04:18 G 41193511.60 41193511.68 41193511.80 0.0135 0.0119

Uranus 108072-07-09 08:51 G 41193737.85 41193737.87 41193737.93 0.0135 0.0133

Jupiter 108073-01-21 23:15 G 41193934.27 41193934.47 41193934.66 0.0519 0.0146

Pluto 108075-11-18 04:32 G 41194964.55 41194964.69 41194964.86 0.0080 0.0058

Pluto 108076-06-30 15:49 G 41195189.95 41195190.16 41195190.38 0.0080 0.0025

Jupiter 108078-04-05 17:59 G 41195834.12 41195834.25 41195834.39 0.0513 0.0390

Jupiter 108078-11-28 22:18 G 41196071.38 41196071.43 41196071.48 0.0505 0.0489

Saturn 108079-03-18 19:39 G 41196181.12 41196181.32 41196181.52 0.0267 0.0079

Saturn 108079-11-02 17:15 G 41196410.09 41196410.22 41196410.38 0.0268 0.0187

Moon 108084-06-17 14:08 G 41198098.94 41198099.09 41198099.23 0.2642 0.0923

Earth 108084-06-17 18:27 G 41198099.10 41198099.27 41198099.43 0.2637 0.0186 *

Jupiter 108084-09-26 19:54 G 41198200.14 41198200.33 41198200.53 0.0517 0.0108

Neptune 108089-05-15 03:20 G 41199891.62 41199891.64 41199891.71 0.0088 0.0086

Neptune 108089-12-26 16:47 G 41200117.11 41200117.20 41200117.33 0.0088 0.0076

Jupiter 108090-08-03 17:44 G 41200337.06 41200337.24 41200337.43 0.0507 0.0248

Neptune 108090-08-09 06:13 G 41200342.63 41200342.76 41200342.92 0.0088 0.0066

Neptune 108091-03-22 19:54 G 41200568.17 41200568.33 41200568.51 0.0088 0.0056

Neptune 108091-11-03 09:20 G 41200793.71 41200793.89 41200794.09 0.0088 0.0046

Neptune 108092-06-15 22:47 G 41201019.25 41201019.45 41201019.66 0.0088 0.0036

Saturn 108093-01-14 20:23 G 41201232.23 41201232.35 41201232.49 0.0295 0.0232

Neptune 108093-01-27 12:13 G 41201244.79 41201245.01 41201245.22 0.0088 0.0026

Saturn 108093-09-02 01:11 G 41201462.36 41201462.55 41201462.74 0.0294 0.0141

Neptune 108093-09-10 01:25 G 41201470.35 41201470.56 41201470.79 0.0088 0.0016

Neptune 108094-04-23 15:06 G 41201695.91 41201696.13 41201696.35 0.0088 0.0006

Neptune 108094-12-05 04:32 G 41201921.46 41201921.69 41201921.91 0.0088 0.0004

Neptune 108095-07-18 17:44 G 41202147.02 41202147.24 41202147.47 0.0088 0.0014

Neptune 108096-02-29 07:11 G 41202372.59 41202372.80 41202373.02 0.0088 0.0024

Jupiter 108096-06-01 16:32 G 41202466.05 41202466.19 41202466.34 0.0515 0.0359

Neptune 108096-10-11 20:23 G 41202598.15 41202598.35 41202598.57 0.0088 0.0034

Neptune 108097-05-25 09:49 G 41202823.73 41202823.91 41202824.12 0.0088 0.0044

Mars 108097-10-06 21:35 G 41202958.23 41202958.40 41202958.57 0.1963 0.0374

Neptune 108098-01-05 23:01 G 41203049.30 41203049.46 41203049.65 0.0088 0.0054

Neptune 108098-08-19 12:27 G 41203274.88 41203275.02 41203275.19 0.0088 0.0064

Neptune 108099-04-02 01:54 G 41203500.48 41203500.58 41203500.72 0.0088 0.0074

Neptune 108099-11-13 15:06 G 41203726.09 41203726.13 41203726.23 0.0088 0.0084

Jupiter 108102-04-09 13:54 G 41204602.88 41204603.08 41204603.29 0.0509 0.0008

Uranus 108104-02-14 21:06 G 41205279.33 41205279.38 41205279.44 0.0142 0.0137

Uranus 108104-09-28 08:37 G 41205505.76 41205505.86 41205505.98 0.0142 0.0121

Uranus 108105-05-12 20:23 G 41205732.21 41205732.35 41205732.51 0.0142 0.0105

Uranus 108105-12-25 08:23 G 41205958.68 41205958.85 41205959.02 0.0142 0.0088

Uranus 108106-08-08 20:23 G 41206185.16 41206185.35 41206185.54 0.0142 0.0072

Uranus 108107-03-23 08:37 G 41206411.65 41206411.86 41206412.06 0.0142 0.0055

Uranus 108107-11-04 20:37 G 41206638.15 41206638.36 41206638.58 0.0142 0.0038

Uranus 108108-06-18 09:06 G 41206864.66 41206864.88 41206865.10 0.0142 0.0020

Saturn 108108-09-28 23:15 G 41206967.26 41206967.47 41206967.67 0.0266 0.0041

Jupiter 108108-09-30 11:30 G 41206968.82 41206968.98 41206969.15 0.0521 0.0292

Uranus 108109-01-30 21:20 G 41207091.17 41207091.39 41207091.62 0.0143 0.0003

Saturn 108109-05-15 20:37 G 41207196.26 41207196.36 41207196.49 0.0267 0.0224

Uranus 108109-09-14 09:49 G 41207317.69 41207317.91 41207318.13 0.0143 0.0015

Uranus 108110-04-28 22:32 G 41207544.23 41207544.44 41207544.66 0.0143 0.0033

Uranus 108110-12-11 11:01 G 41207770.76 41207770.96 41207771.18 0.0143 0.0051

Uranus 108111-07-25 23:44 G 41207997.30 41207997.49 41207997.69 0.0143 0.0068

Uranus 108112-03-08 12:42 G 41208223.85 41208224.03 41208224.21 0.0143 0.0085

Uranus 108112-10-21 01:11 G 41208450.42 41208450.55 41208450.72 0.0143 0.0103

Uranus 108113-06-04 14:08 G 41208676.99 41208677.09 41208677.23 0.0143 0.0120

Jupiter 108113-12-13 07:39 G 41208868.65 41208868.82 41208869.01 0.0511 0.0246

Uranus 108114-01-17 03:35 G 41208903.59 41208903.65 41208903.71 0.0143 0.0136

Jupiter 108120-06-05 08:51 G 41211234.67 41211234.87 41211235.07 0.0518 0.0039

Saturn 108122-07-29 03:06 G 41212018.47 41212018.63 41212018.80 0.0295 0.0183

Saturn 108123-03-16 07:54 G 41212248.67 41212248.83 41212249.00 0.0294 0.0191

Jupiter 108125-08-18 01:39 G 41213134.53 41213134.57 41213134.62 0.0513 0.0497

Jupiter 108126-04-12 06:13 G 41213371.63 41213371.76 41213371.90 0.0506 0.0386

Jupiter 108132-02-09 05:15 G 41215500.55 41215500.72 41215500.91 0.0516 0.0217

Mars 108132-07-12 07:11 G 41215654.62 41215654.80 41215654.98 0.1581 0.0070

Saturn 108137-08-25 08:08 G 41217524.80 41217524.84 41217524.90 0.0266 0.0257

Jupiter 108137-12-16 00:56 G 41217637.35 41217637.54 41217637.74 0.0508 0.0140

Saturn 108138-04-11 05:44 G 41217753.53 41217753.74 41217753.95 0.0267 0.0007

Jupiter 108143-10-15 02:37 G 41219766.53 41219766.61 41219766.71 0.0513 0.0462

Jupiter 108144-06-07 22:47 G 41220003.35 41220003.45 41220003.57 0.0521 0.0432

Uranus 108145-01-14 23:30 G 41220224.41 41220224.48 41220224.57 0.0136 0.0126

Uranus 108145-08-29 05:15 G 41220450.62 41220450.72 41220450.85 0.0136 0.0113

Uranus 108146-04-12 11:01 G 41220676.83 41220676.96 41220677.12 0.0136 0.0099

Uranus 108146-11-24 16:47 G 41220903.04 41220903.20 41220903.37 0.0136 0.0084

Uranus 108147-07-08 22:03 G 41221129.25 41221129.42 41221129.62 0.0136 0.0070

Uranus 108148-02-20 03:20 G 41221355.46 41221355.64 41221355.85 0.0136 0.0056

Uranus 108148-10-03 09:06 G 41221581.68 41221581.88 41221582.08 0.0136 0.0041

Uranus 108149-05-17 14:08 G 41221807.88 41221808.09 41221808.30 0.0136 0.0027

Jupiter 108149-08-20 20:23 G 41221903.15 41221903.35 41221903.55 0.0510 0.0109

Uranus 108149-12-29 19:11 G 41222034.09 41222034.30 41222034.51 0.0136 0.0012

Uranus 108150-08-13 00:13 G 41222260.29 41222260.51 41222260.72 0.0135 0.0003

Uranus 108151-03-27 05:01 G 41222486.50 41222486.71 41222486.92 0.0135 0.0017

Uranus 108151-11-08 09:49 G 41222712.71 41222712.91 41222713.12 0.0135 0.0031

Saturn 108152-02-08 15:35 G 41222804.96 41222805.15 41222805.36 0.0295 0.0114

Uranus 108152-06-21 14:37 G 41222938.91 41222939.11 41222939.32 0.0135 0.0045

Saturn 108152-09-25 20:08 G 41223035.25 41223035.34 41223035.45 0.0293 0.0258

Uranus 108153-02-02 19:11 G 41223165.12 41223165.30 41223165.50 0.0135 0.0060

Uranus 108153-09-16 23:59 G 41223391.33 41223391.50 41223391.69 0.0135 0.0073

Uranus 108154-05-01 04:32 G 41223617.54 41223617.69 41223617.87 0.0135 0.0087

Uranus 108154-12-13 09:35 G 41223843.76 41223843.90 41223844.04 0.0135 0.0101

Uranus 108155-07-27 13:54 G 41224069.98 41224070.08 41224070.21 0.0135 0.0114

Jupiter 108156-02-11 18:42 G 41224269.09 41224269.28 41224269.47 0.0520 0.0174

Uranus 108156-03-09 18:42 G 41224296.22 41224296.28 41224296.36 0.0135 0.0127

Jupiter 108161-04-25 16:03 G 41226169.03 41226169.17 41226169.32 0.0512 0.0354

Mars 108163-08-04 23:44 G 41227000.36 41227000.49 41227000.63 0.1961 0.1195

Saturn 108167-03-07 11:30 G 41228310.87 41228310.98 41228311.11 0.0265 0.0219

Jupiter 108167-10-17 17:01 G 41228535.01 41228535.21 41228535.40 0.0517 0.0077

Saturn 108167-10-22 09:06 G 41228539.67 41228539.88 41228540.09 0.0266 0.0043

Neptune 108171-07-04 06:27 G 41229890.77 41229890.77 41229890.78 0.0090 0.0090

Neptune 108172-02-14 18:56 G 41230116.21 41230116.29 41230116.41 0.0090 0.0080

Neptune 108172-09-27 07:39 G 41230341.71 41230341.82 41230341.98 0.0090 0.0070

Neptune 108173-05-10 20:23 G 41230567.21 41230567.35 41230567.53 0.0090 0.0060

Jupiter 108173-08-23 14:37 G 41230671.94 41230672.11 41230672.28 0.0506 0.0280

Neptune 108173-12-22 09:35 G 41230792.72 41230792.90 41230793.08 0.0090 0.0049

Neptune 108174-08-04 22:03 G 41231018.23 41231018.42 41231018.62 0.0090 0.0039

Neptune 108175-03-18 10:32 G 41231243.75 41231243.94 41231244.16 0.0090 0.0029

Neptune 108175-10-29 23:15 G 41231469.27 41231469.47 41231469.69 0.0090 0.0019

Neptune 108176-06-11 12:13 G 41231694.79 41231695.01 41231695.22 0.0090 0.0008

Neptune 108177-01-23 00:42 G 41231920.32 41231920.53 41231920.75 0.0090 0.0003

Neptune 108177-09-05 13:11 G 41232145.85 41232146.05 41232146.27 0.0090 0.0013

Neptune 108178-04-19 01:54 G 41232371.38 41232371.58 41232371.80 0.0090 0.0023

Neptune 108178-11-30 14:37 G 41232596.91 41232597.11 41232597.31 0.0090 0.0033

Jupiter 108179-06-22 15:06 G 41232800.98 41232801.13 41232801.29 0.0515 0.0322

Neptune 108179-07-14 03:20 G 41232822.45 41232822.64 41232822.83 0.0090 0.0043

Neptune 108180-02-24 15:20 G 41233047.99 41233048.14 41233048.34 0.0090 0.0054

Neptune 108180-10-07 04:18 G 41233273.55 41233273.68 41233273.85 0.0090 0.0064

Neptune 108181-05-20 16:47 G 41233499.10 41233499.20 41233499.34 0.0090 0.0074

Saturn 108181-08-20 21:06 G 41233591.17 41233591.38 41233591.59 0.0295 0.0068

Neptune 108182-01-01 05:15 G 41233724.67 41233724.72 41233724.82 0.0090 0.0084

Jupiter 108185-04-28 09:49 G 41234937.70 41234937.91 41234938.11 0.0509 0.0036

Uranus 108188-05-28 14:51 G 41236064.02 41236064.12 41236064.22 0.0142 0.0126

Uranus 108189-01-10 02:23 G 41236290.46 41236290.60 41236290.74 0.0142 0.0110

Uranus 108189-08-24 13:54 G 41236516.93 41236517.08 41236517.26 0.0142 0.0094

Uranus 108190-04-08 01:54 G 41236743.41 41236743.58 41236743.78 0.0142 0.0078

Uranus 108190-11-20 14:08 G 41236969.89 41236970.09 41236970.29 0.0142 0.0060

Uranus 108191-07-05 02:08 G 41237196.38 41237196.59 41237196.81 0.0142 0.0043

Jupiter 108191-10-20 08:37 G 41237303.70 41237303.86 41237304.02 0.0520 0.0323

Uranus 108192-02-16 14:23 G 41237422.89 41237423.10 41237423.32 0.0142 0.0026

Uranus 108192-09-30 02:51 G 41237649.40 41237649.62 41237649.84 0.0142 0.0008

Uranus 108193-05-14 15:20 G 41237875.92 41237876.14 41237876.36 0.0143 0.0009

Uranus 108193-12-27 03:49 G 41238102.45 41238102.66 41238102.88 0.0143 0.0027

Uranus 108194-08-10 16:18 G 41238328.98 41238329.18 41238329.40 0.0143 0.0045

Uranus 108195-03-25 05:15 G 41238555.52 41238555.72 41238555.92 0.0143 0.0062

Uranus 108195-11-06 17:44 G 41238782.07 41238782.24 41238782.44 0.0143 0.0080

Uranus 108196-06-20 06:42 G 41239008.63 41239008.78 41239008.95 0.0143 0.0097

Saturn 108196-09-16 17:15 G 41239097.07 41239097.22 41239097.38 0.0266 0.0177

Jupiter 108197-01-01 03:35 G 41239203.46 41239203.65 41239203.84 0.0511 0.0219

Uranus 108197-02-01 19:25 G 41239235.20 41239235.31 41239235.46 0.0143 0.0114

Saturn 108197-05-03 14:37 G 41239325.92 41239326.11 41239326.31 0.0267 0.0087

Uranus 108197-09-16 08:23 G 41239461.78 41239461.85 41239461.96 0.0143 0.0131

Earth 108197-12-22 11:44 G 41239558.89 41239558.99 41239559.09 0.2696 0.2078

Moon 108197-12-22 16:47 G 41239559.13 41239559.20 41239559.27 0.2698 0.2353

Mars 108198-05-09 19:39 G 41239697.15 41239697.32 41239697.50 0.1582 0.0255

Jupiter 108203-06-26 05:01 G 41241569.51 41241569.71 41241569.91 0.0518 0.0068

Earth 108205-12-21 04:47 G 41242478.56 41242478.70 41242478.83 0.2695 0.1362

Moon 108205-12-21 08:51 G 41242478.73 41242478.87 41242479.02 0.2691 0.1118 *

Jupiter 108208-09-06 22:32 G 41243469.36 41243469.44 41243469.53 0.0513 0.0469

Jupiter 108209-05-02 03:06 G 41243706.52 41243706.63 41243706.75 0.0505 0.0415

Saturn 108211-03-04 09:06 G 41244377.67 41244377.88 41244378.10 0.0294 0.0005

Jupiter 108215-03-01 00:56 G 41245835.35 41245835.54 41245835.72 0.0516 0.0190

Jupiter 108221-01-04 23:59 G 41247972.31 41247972.50 41247972.69 0.0507 0.0177

Saturn 108226-03-30 20:23 G 41249883.18 41249883.35 41249883.54 0.0265 0.0140

Jupiter 108226-11-03 23:30 G 41250101.38 41250101.48 41250101.59 0.0514 0.0432

Saturn 108226-11-14 17:44 G 41250112.06 41250112.24 41250112.43 0.0266 0.0124

Jupiter 108227-06-28 20:51 G 41250338.28 41250338.37 41250338.45 0.0522 0.0469

Uranus 108228-09-15 08:23 G 41250782.80 41250782.85 41250782.92 0.0136 0.0131

Uranus 108229-04-29 14:23 G 41251009.00 41251009.10 41251009.22 0.0136 0.0117

Uranus 108229-12-11 20:23 G 41251235.21 41251235.35 41251235.49 0.0136 0.0103

Uranus 108230-07-26 01:54 G 41251461.42 41251461.58 41251461.74 0.0136 0.0088

Uranus 108231-03-09 07:25 G 41251687.63 41251687.81 41251687.99 0.0136 0.0074

Uranus 108231-10-21 12:42 G 41251913.85 41251914.03 41251914.23 0.0136 0.0060

Uranus 108232-06-03 17:59 G 41252140.06 41252140.25 41252140.46 0.0136 0.0046

Jupiter 108232-09-09 18:42 G 41252238.08 41252238.28 41252238.49 0.0510 0.0071

Uranus 108233-01-15 23:30 G 41252366.27 41252366.48 41252366.68 0.0136 0.0031

Uranus 108233-08-30 04:32 G 41252592.48 41252592.69 41252592.90 0.0136 0.0017

Pluto 108233-09-07 20:23 G 41252601.20 41252601.35 41252601.54 0.0063 0.0040

Uranus 108234-04-13 09:35 G 41252818.69 41252818.90 41252819.11 0.0136 0.0002

Pluto 108234-04-21 00:13 G 41252826.29 41252826.51 41252826.73 0.0064 0.0001

Uranus 108234-11-25 14:37 G 41253044.90 41253045.11 41253045.32 0.0135 0.0012

Pluto 108234-12-02 03:20 G 41253051.48 41253051.64 41253051.82 0.0064 0.0039

Uranus 108235-07-09 19:25 G 41253271.10 41253271.31 41253271.52 0.0135 0.0026

Uranus 108236-02-21 00:13 G 41253497.31 41253497.51 41253497.72 0.0135 0.0041

Uranus 108236-10-04 04:47 G 41253723.52 41253723.70 41253723.91 0.0135 0.0056

Uranus 108237-05-18 09:35 G 41253949.73 41253949.90 41253950.10 0.0135 0.0069

Uranus 108237-12-30 14:37 G 41254175.94 41254176.11 41254176.28 0.0135 0.0083

Uranus 108238-08-13 19:11 G 41254402.16 41254402.30 41254402.46 0.0135 0.0096

Jupiter 108239-03-03 18:13 G 41254604.08 41254604.26 41254604.45 0.0520 0.0216

Uranus 108239-03-27 23:44 G 41254628.38 41254628.49 41254628.63 0.0135 0.0110

Uranus 108239-11-09 04:32 G 41254854.62 41254854.69 41254854.79 0.0135 0.0124

Saturn 108240-09-13 12:27 G 41255163.81 41255164.02 41255164.24 0.0295 0.0039

Jupiter 108244-05-15 13:11 G 41256503.89 41256504.05 41256504.21 0.0512 0.0321

Jupiter 108250-11-06 15:35 G 41258869.95 41258870.15 41258870.35 0.0517 0.0040

Neptune 108253-08-18 14:08 G 41259886.08 41259886.09 41259886.13 0.0088 0.0087

Neptune 108254-04-01 03:49 G 41260111.56 41260111.66 41260111.77 0.0088 0.0077

Neptune 108254-11-12 16:47 G 41260337.08 41260337.20 41260337.36 0.0088 0.0068

Neptune 108255-06-26 05:59 G 41260562.60 41260562.75 41260562.94 0.0088 0.0058

Saturn 108255-10-11 00:56 G 41260669.35 41260669.54 41260669.74 0.0266 0.0100

Neptune 108256-02-06 19:25 G 41260788.14 41260788.31 41260788.51 0.0088 0.0048

Saturn 108256-05-26 22:18 G 41260898.27 41260898.43 41260898.60 0.0267 0.0164

Jupiter 108256-09-12 11:44 G 41261006.82 41261006.99 41261007.15 0.0507 0.0312

Neptune 108256-09-19 08:51 G 41261013.68 41261013.87 41261014.08 0.0088 0.0038

Neptune 108257-05-02 22:32 G 41261239.23 41261239.44 41261239.66 0.0088 0.0028

Neptune 108257-12-14 11:59 G 41261464.78 41261465.00 41261465.22 0.0088 0.0018

Neptune 108258-07-28 01:25 G 41261690.33 41261690.56 41261690.78 0.0088 0.0008

Neptune 108259-03-10 14:51 G 41261915.89 41261916.12 41261916.34 0.0088 0.0002

Neptune 108259-10-22 04:03 G 41262141.45 41262141.67 41262141.90 0.0088 0.0012

Neptune 108260-06-03 17:30 G 41262367.02 41262367.23 41262367.45 0.0088 0.0022

Neptune 108261-01-15 06:56 G 41262592.58 41262592.79 41262593.00 0.0088 0.0032

Neptune 108261-08-28 20:08 G 41262818.15 41262818.34 41262818.54 0.0088 0.0042

Neptune 108262-04-11 09:35 G 41263043.73 41263043.90 41263044.09 0.0088 0.0052

Jupiter 108262-07-12 12:27 G 41263135.86 41263136.02 41263136.19 0.0515 0.0290

Neptune 108262-11-22 23:01 G 41263269.31 41263269.46 41263269.63 0.0088 0.0062

Neptune 108263-07-06 12:13 G 41263494.90 41263495.01 41263495.15 0.0088 0.0072

Neptune 108264-02-17 01:25 G 41263720.50 41263720.56 41263720.66 0.0088 0.0082

Mars 108264-03-07 08:08 G 41263739.67 41263739.84 41263740.01 0.1583 0.0436

Jupiter 108268-05-18 07:54 G 41265272.62 41265272.83 41265273.03 0.0509 0.0069

Saturn 108269-08-08 17:59 G 41265720.18 41265720.25 41265720.34 0.0296 0.0273

Saturn 108270-03-26 23:30 G 41265950.28 41265950.48 41265950.68 0.0294 0.0103

Uranus 108272-01-27 21:06 G 41266622.30 41266622.38 41266622.47 0.0142 0.0131

Uranus 108272-09-10 08:37 G 41266848.74 41266848.86 41266849.00 0.0142 0.0115

Uranus 108273-04-24 20:08 G 41267075.20 41267075.34 41267075.52 0.0142 0.0099

Uranus 108273-12-07 08:08 G 41267301.67 41267301.84 41267302.03 0.0142 0.0082

Uranus 108274-07-21 20:08 G 41267528.15 41267528.34 41267528.54 0.0142 0.0066

Jupiter 108274-11-09 04:47 G 41267638.56 41267638.70 41267638.85 0.0521 0.0355

Uranus 108275-03-05 08:08 G 41267754.64 41267754.84 41267755.06 0.0142 0.0049

Uranus 108275-10-17 20:23 G 41267981.14 41267981.35 41267981.57 0.0142 0.0031

Uranus 108276-05-31 08:51 G 41268207.65 41268207.87 41268208.09 0.0142 0.0014

Uranus 108277-01-12 21:20 G 41268434.16 41268434.39 41268434.61 0.0143 0.0005

Uranus 108277-08-27 09:35 G 41268660.69 41268660.90 41268661.13 0.0143 0.0022

Uranus 108278-04-10 22:32 G 41268887.22 41268887.44 41268887.65 0.0143 0.0039

Uranus 108278-11-23 11:01 G 41269113.76 41269113.96 41269114.17 0.0143 0.0057

Uranus 108279-07-07 23:44 G 41269340.31 41269340.49 41269340.69 0.0143 0.0074

Jupiter 108280-01-22 04:18 G 41269538.49 41269538.68 41269538.88 0.0511 0.0175

Uranus 108280-02-19 12:42 G 41269566.86 41269567.03 41269567.20 0.0143 0.0091

Uranus 108280-10-03 01:11 G 41269793.43 41269793.55 41269793.72 0.0143 0.0109

Uranus 108281-05-17 14:37 G 41270020.01 41270020.11 41270020.22 0.0143 0.0125

Uranus 108281-12-30 03:20 G 41270246.63 41270246.64 41270246.68 0.0143 0.0142

Saturn 108285-04-22 03:49 G 41271455.46 41271455.66 41271455.87 0.0265 0.0064

Saturn 108285-12-07 00:56 G 41271684.41 41271684.54 41271684.68 0.0267 0.0200

Jupiter 108286-07-15 02:51 G 41271904.43 41271904.62 41271904.82 0.0519 0.0104

Jupiter 108291-09-26 22:47 G 41273804.34 41273804.45 41273804.57 0.0513 0.0426

Jupiter 108292-05-21 02:37 G 41274041.53 41274041.61 41274041.70 0.0505 0.0456

Mars 108296-03-06 00:42 G 41275426.46 41275426.53 41275426.61 0.1579 0.1410

Jupiter 108298-03-20 01:39 G 41276170.38 41276170.57 41276170.76 0.0517 0.0145

Saturn 108299-02-18 20:23 G 41276506.23 41276506.35 41276506.48 0.0296 0.0237

Saturn 108299-10-07 01:25 G 41276736.38 41276736.56 41276736.76 0.0295 0.0140

Jupiter 108304-01-25 22:18 G 41278307.24 41278307.43 41278307.62 0.0507 0.0215

Jupiter 108309-11-23 23:44 G 41280436.37 41280436.49 41280436.63 0.0514 0.0392

Jupiter 108310-07-18 20:37 G 41280673.32 41280673.36 41280673.40 0.0522 0.0509

Uranus 108312-05-16 17:30 G 41281341.21 41281341.23 41281341.26 0.0136 0.0135

Uranus 108312-12-28 23:01 G 41281567.38 41281567.46 41281567.58 0.0136 0.0122

Uranus 108313-08-12 05:01 G 41281793.59 41281793.71 41281793.85 0.0136 0.0107

Uranus 108314-03-26 10:47 G 41282019.80 41282019.95 41282020.11 0.0136 0.0093

Saturn 108314-11-03 07:11 G 41282241.59 41282241.80 41282242.01 0.0266 0.0027

Uranus 108314-11-07 16:18 G 41282246.02 41282246.18 41282246.37 0.0136 0.0079

Saturn 108315-06-20 04:32 G 41282470.59 41282470.69 41282470.78 0.0267 0.0238

Uranus 108315-06-21 22:03 G 41282472.23 41282472.42 41282472.61 0.0136 0.0064

Jupiter 108315-09-30 16:47 G 41282572.99 41282573.20 41282573.41 0.0510 0.0036

Uranus 108316-02-03 03:20 G 41282698.44 41282698.64 41282698.84 0.0136 0.0050

Uranus 108316-09-16 08:37 G 41282924.65 41282924.86 41282925.07 0.0136 0.0036

Uranus 108317-04-30 13:39 G 41283150.86 41283151.07 41283151.29 0.0136 0.0021

Uranus 108317-12-12 18:42 G 41283377.07 41283377.28 41283377.50 0.0136 0.0007

Uranus 108318-07-26 23:44 G 41283603.28 41283603.49 41283603.70 0.0135 0.0008

Uranus 108319-03-10 04:32 G 41283829.49 41283829.69 41283829.91 0.0135 0.0022

Uranus 108319-10-22 09:35 G 41284055.70 41284055.90 41284056.11 0.0135 0.0036

Uranus 108320-06-04 14:23 G 41284281.91 41284282.10 41284282.30 0.0135 0.0050

Uranus 108321-01-16 19:11 G 41284508.12 41284508.30 41284508.49 0.0135 0.0064

Uranus 108321-08-30 23:44 G 41284734.33 41284734.49 41284734.68 0.0135 0.0079

Jupiter 108322-03-23 17:01 G 41284939.04 41284939.21 41284939.39 0.0520 0.0253

Uranus 108322-04-14 04:32 G 41284960.55 41284960.69 41284960.86 0.0135 0.0092

Uranus 108322-11-26 09:35 G 41285186.77 41285186.90 41285187.04 0.0135 0.0106

Uranus 108323-07-10 14:08 G 41285413.00 41285413.09 41285413.20 0.0135 0.0119

Pluto 108323-10-24 23:15 G 41285519.25 41285519.47 41285519.70 0.0080 0.0008

Uranus 108324-02-21 18:42 G 41285639.26 41285639.28 41285639.34 0.0135 0.0132

Pluto 108324-06-06 10:18 G 41285744.86 41285744.93 41285745.02 0.0080 0.0074

Mars 108327-03-31 06:27 G 41286772.68 41286772.77 41286772.86 0.1963 0.1636

Jupiter 108327-06-05 12:27 G 41286838.85 41286839.02 41286839.19 0.0512 0.0284

Moon 108327-06-21 16:03 G 41286855.02 41286855.17 41286855.32 0.2644 0.0759

Earth 108327-06-21 17:30 G 41286855.07 41286855.23 41286855.40 0.2638 0.0275 *

Saturn 108328-09-01 05:30 G 41287292.56 41287292.73 41287292.90 0.0295 0.0179

Saturn 108329-04-19 10:32 G 41287522.79 41287522.94 41287523.10 0.0294 0.0197

Mars 108330-01-03 21:06 G 41287782.21 41287782.38 41287782.54 0.1583 0.0613

Jupiter 108333-11-26 12:13 G 41289204.81 41289205.01 41289205.21 0.0518 0.0007

Neptune 108336-05-20 06:27 G 41290110.70 41290110.77 41290110.88 0.0090 0.0082

Neptune 108336-12-31 19:11 G 41290336.19 41290336.30 41290336.45 0.0090 0.0072

Neptune 108337-08-14 08:23 G 41290561.69 41290561.85 41290562.00 0.0090 0.0061

Neptune 108338-03-27 20:51 G 41290787.20 41290787.37 41290787.55 0.0090 0.0051

Neptune 108338-11-08 09:35 G 41291012.72 41291012.90 41291013.10 0.0090 0.0041

Neptune 108339-06-21 22:03 G 41291238.23 41291238.42 41291238.64 0.0090 0.0031

Jupiter 108339-10-03 13:39 G 41291341.92 41291342.07 41291342.21 0.0506 0.0359

Neptune 108340-02-02 10:47 G 41291463.75 41291463.95 41291464.17 0.0090 0.0021

Neptune 108340-09-14 23:44 G 41291689.28 41291689.49 41291689.70 0.0090 0.0010

Neptune 108341-04-28 12:27 G 41291914.80 41291915.02 41291915.23 0.0090 0.0002

Neptune 108341-12-10 00:56 G 41292140.33 41292140.54 41292140.76 0.0090 0.0010

Neptune 108342-07-23 13:25 G 41292365.86 41292366.06 41292366.27 0.0090 0.0021

Neptune 108343-03-06 01:54 G 41292591.39 41292591.58 41292591.79 0.0090 0.0031

Saturn 108343-09-29 13:11 G 41292798.99 41292799.05 41292799.12 0.0264 0.0251

Neptune 108343-10-17 14:51 G 41292816.93 41292817.12 41292817.31 0.0090 0.0041

Saturn 108344-05-15 10:03 G 41293027.71 41293027.92 41293028.13 0.0265 0.0010

Neptune 108344-05-30 03:06 G 41293042.47 41293042.63 41293042.82 0.0090 0.0052

Neptune 108345-01-10 15:35 G 41293268.02 41293268.15 41293268.33 0.0090 0.0062

Jupiter 108345-08-01 10:47 G 41293470.78 41293470.95 41293471.13 0.0516 0.0254

Neptune 108345-08-24 04:03 G 41293493.57 41293493.67 41293493.82 0.0090 0.0072

Neptune 108346-04-06 16:47 G 41293719.13 41293719.20 41293719.31 0.0090 0.0082

Jupiter 108351-06-08 09:06 G 41295607.68 41295607.88 41295608.08 0.0508 0.0116

Uranus 108355-09-28 03:20 G 41297180.60 41297180.64 41297180.72 0.0142 0.0136

Uranus 108356-05-11 15:06 G 41297407.02 41297407.13 41297407.26 0.0142 0.0120

Uranus 108356-12-24 02:37 G 41297633.47 41297633.61 41297633.77 0.0142 0.0104

Jupiter 108357-04-06 10:18 G 41297736.88 41297736.93 41297736.99 0.0513 0.0494

Uranus 108357-08-07 14:37 G 41297859.94 41297860.11 41297860.28 0.0142 0.0087

Jupiter 108357-11-29 06:56 G 41297973.67 41297973.79 41297973.92 0.0522 0.0405

Saturn 108358-03-14 06:13 G 41298078.58 41298078.76 41298078.95 0.0296 0.0147

Uranus 108358-03-22 02:37 G 41298086.42 41298086.61 41298086.80 0.0142 0.0071

Saturn 108358-10-30 11:15 G 41298308.85 41298308.97 41298309.11 0.0294 0.0230

Uranus 108358-11-03 14:37 G 41298312.91 41298313.11 41298313.32 0.0142 0.0054

Uranus 108359-06-18 02:37 G 41298539.40 41298539.61 41298539.83 0.0142 0.0037

Uranus 108360-01-30 14:51 G 41298765.91 41298766.12 41298766.35 0.0142 0.0020

Uranus 108360-09-13 03:20 G 41298992.42 41298992.64 41298992.87 0.0142 0.0003

Uranus 108361-04-27 16:03 G 41299218.95 41299219.17 41299219.39 0.0143 0.0016

Uranus 108361-12-10 04:32 G 41299445.48 41299445.69 41299445.92 0.0143 0.0034

Mars 108362-01-02 13:25 G 41299468.95 41299469.06 41299469.17 0.1580 0.1233

Uranus 108362-07-24 17:15 G 41299672.02 41299672.22 41299672.44 0.0143 0.0051

Jupiter 108363-02-11 04:18 G 41299873.48 41299873.68 41299873.88 0.0510 0.0132

Uranus 108363-03-08 05:59 G 41299898.57 41299898.75 41299898.96 0.0143 0.0069

Uranus 108363-10-20 18:56 G 41300125.12 41300125.29 41300125.48 0.0143 0.0086

Uranus 108364-06-03 07:39 G 41300351.69 41300351.82 41300351.99 0.0143 0.0104

Uranus 108365-01-15 21:06 G 41300578.26 41300578.38 41300578.50 0.0143 0.0120

Uranus 108365-08-30 09:49 G 41300804.86 41300804.91 41300804.98 0.0143 0.0137

Jupiter 108369-08-04 04:18 G 41302239.49 41302239.68 41302239.88 0.0519 0.0150

Saturn 108373-04-10 14:37 G 41303585.01 41303585.11 41303585.24 0.0265 0.0219

Saturn 108373-11-25 11:44 G 41303813.79 41303813.99 41303814.20 0.0266 0.0043

Jupiter 108374-10-16 22:03 G 41304139.29 41304139.42 41304139.55 0.0513 0.0388

Jupiter 108375-06-11 01:54 G 41304376.55 41304376.58 41304376.63 0.0505 0.0495

Jupiter 108381-04-09 01:39 G 41306505.38 41306505.57 41306505.77 0.0516 0.0103

Jupiter 108387-02-13 23:01 G 41308642.28 41308642.46 41308642.64 0.0507 0.0257

Saturn 108387-09-24 14:23 G 41308864.90 41308865.10 41308865.31 0.0295 0.0091

Saturn 108388-05-11 19:25 G 41309095.27 41309095.31 41309095.37 0.0294 0.0285

Jupiter 108392-12-12 21:06 G 41310771.24 41310771.38 41310771.52 0.0514 0.0359

Mars 108393-01-25 08:23 G 41310814.69 41310814.85 41310815.01 0.1961 0.0793

Mars 108395-11-01 09:20 G 41311824.74 41311824.89 41311825.05 0.1585 0.0803

Uranus 108396-08-28 09:20 G 41312125.81 41312125.89 41312125.98 0.0136 0.0125

Uranus 108397-04-11 14:51 G 41312352.01 41312352.12 41312352.26 0.0136 0.0111

Uranus 108397-11-23 20:37 G 41312578.22 41312578.36 41312578.52 0.0136 0.0097

Uranus 108398-07-08 02:08 G 41312804.43 41312804.59 41312804.77 0.0136 0.0083

Jupiter 108398-10-19 20:23 G 41312908.14 41312908.35 41312908.56 0.0509 0.0017

Uranus 108399-02-19 07:39 G 41313030.65 41313030.82 41313031.02 0.0136 0.0069

Uranus 108399-10-03 13:25 G 41313256.86 41313257.06 41313257.26 0.0136 0.0054

Uranus 108400-05-16 18:42 G 41313483.08 41313483.28 41313483.48 0.0136 0.0040

Uranus 108400-12-28 23:44 G 41313709.28 41313709.49 41313709.70 0.0136 0.0025

Uranus 108401-08-12 04:47 G 41313935.49 41313935.70 41313935.92 0.0136 0.0011

Uranus 108402-03-26 09:49 G 41314161.70 41314161.91 41314162.13 0.0135 0.0004

Saturn 108402-10-21 17:59 G 41314371.10 41314371.25 41314371.40 0.0265 0.0183

Uranus 108402-11-07 14:51 G 41314387.91 41314388.12 41314388.34 0.0135 0.0018

Saturn 108403-06-07 14:37 G 41314599.91 41314600.11 41314600.31 0.0266 0.0078

Uranus 108403-06-21 19:39 G 41314614.12 41314614.32 41314614.54 0.0135 0.0033

Uranus 108404-02-03 00:27 G 41314840.33 41314840.52 41314840.73 0.0135 0.0047

Uranus 108404-09-16 05:30 G 41315066.54 41315066.73 41315066.92 0.0135 0.0060

Jupiter 108405-04-11 16:18 G 41315274.02 41315274.18 41315274.35 0.0521 0.0295

Uranus 108405-04-30 10:18 G 41315292.76 41315292.93 41315293.11 0.0135 0.0074

Uranus 108405-12-12 14:51 G 41315518.97 41315519.12 41315519.29 0.0135 0.0088

Uranus 108406-07-26 19:25 G 41315745.19 41315745.31 41315745.47 0.0135 0.0102

Uranus 108407-03-10 00:13 G 41315971.42 41315971.51 41315971.64 0.0135 0.0115

Uranus 108407-10-22 05:15 G 41316197.66 41316197.72 41316197.79 0.0135 0.0128

Jupiter 108410-06-24 15:20 G 41317173.96 41317174.14 41317174.33 0.0511 0.0233

Jupiter 108416-12-15 15:06 G 41319539.93 41319540.13 41319540.33 0.0518 0.0045

Saturn 108417-04-05 14:08 G 41319650.89 41319651.09 41319651.31 0.0296 0.0062

Neptune 108418-07-04 13:54 G 41320106.00 41320106.08 41320106.19 0.0088 0.0079

Neptune 108419-02-15 03:06 G 41320331.51 41320331.63 41320331.78 0.0088 0.0069

Neptune 108419-09-28 16:47 G 41320557.03 41320557.20 41320557.36 0.0088 0.0059

Neptune 108420-05-11 05:44 G 41320782.57 41320782.74 41320782.94 0.0088 0.0050

Neptune 108420-12-22 18:56 G 41321008.11 41321008.29 41321008.51 0.0088 0.0040

Neptune 108421-08-05 08:23 G 41321233.65 41321233.85 41321234.08 0.0088 0.0030

Jupiter 108422-02-27 10:03 G 41321439.86 41321439.92 41321439.99 0.0514 0.0483

Neptune 108422-03-18 22:03 G 41321459.21 41321459.42 41321459.64 0.0088 0.0020

Jupiter 108422-10-22 14:23 G 41321676.98 41321677.10 41321677.23 0.0506 0.0404

Neptune 108422-10-30 11:30 G 41321684.76 41321684.98 41321685.21 0.0088 0.0010

Neptune 108423-06-13 00:56 G 41321910.32 41321910.54 41321910.77 0.0088 0.0001

Neptune 108424-01-24 14:08 G 41322135.88 41322136.09 41322136.32 0.0088 0.0011

Neptune 108424-09-06 03:35 G 41322361.44 41322361.65 41322361.88 0.0088 0.0021

Neptune 108425-04-19 17:01 G 41322587.01 41322587.21 41322587.43 0.0088 0.0031

Neptune 108425-12-01 06:13 G 41322812.58 41322812.76 41322812.98 0.0088 0.0041

Neptune 108426-07-14 19:39 G 41323038.15 41323038.32 41323038.52 0.0088 0.0051

Neptune 108427-02-25 09:20 G 41323263.73 41323263.89 41323264.06 0.0088 0.0060

Neptune 108427-10-08 22:47 G 41323489.32 41323489.45 41323489.59 0.0088 0.0070

Mars 108427-10-31 02:08 G 41323511.46 41323511.59 41323511.72 0.1581 0.1058

Neptune 108428-05-21 11:59 G 41323714.93 41323715.00 41323715.11 0.0088 0.0080

Jupiter 108428-08-20 13:39 G 41323805.88 41323806.07 41323806.25 0.0516 0.0204

Saturn 108432-05-02 18:42 G 41325157.12 41325157.28 41325157.46 0.0265 0.0153

Saturn 108432-12-17 15:35 G 41325385.96 41325386.15 41325386.34 0.0266 0.0109

Jupiter 108434-06-27 09:20 G 41325942.70 41325942.89 41325943.09 0.0508 0.0158

Uranus 108439-05-28 09:35 G 41327738.89 41327738.90 41327738.94 0.0142 0.0141

Uranus 108440-01-09 21:06 G 41327965.29 41327965.38 41327965.49 0.0142 0.0125

Jupiter 108440-04-25 11:30 G 41328071.89 41328071.98 41328072.08 0.0513 0.0450

Uranus 108440-08-23 08:37 G 41328191.73 41328191.86 41328192.01 0.0142 0.0109

Jupiter 108440-12-18 07:54 G 41328308.74 41328308.83 41328308.93 0.0521 0.0450

Earth 108440-12-24 14:37 G 41328315.02 41328315.11 41328315.20 0.2695 0.2155

Moon 108440-12-24 19:39 G 41328315.26 41328315.32 41328315.37 0.2692 0.2521

Uranus 108441-04-06 20:23 G 41328418.20 41328418.35 41328418.53 0.0142 0.0093

Uranus 108441-11-19 08:23 G 41328644.67 41328644.85 41328645.04 0.0142 0.0076

Uranus 108442-07-03 20:23 G 41328871.15 41328871.35 41328871.56 0.0142 0.0059

Uranus 108443-02-15 08:23 G 41329097.65 41329097.85 41329098.07 0.0142 0.0042

Uranus 108443-09-29 20:51 G 41329324.15 41329324.37 41329324.59 0.0142 0.0025

Uranus 108444-05-13 09:20 G 41329550.67 41329550.89 41329551.11 0.0143 0.0007

Uranus 108444-12-25 21:49 G 41329777.19 41329777.41 41329777.64 0.0143 0.0011

Uranus 108445-08-09 10:18 G 41330003.72 41330003.93 41330004.16 0.0143 0.0029

Jupiter 108446-03-02 05:59 G 41330208.54 41330208.75 41330208.95 0.0510 0.0087

Uranus 108446-03-23 23:15 G 41330230.26 41330230.47 41330230.68 0.0143 0.0046

Saturn 108446-10-16 21:20 G 41330437.17 41330437.39 41330437.60 0.0295 0.0010

Uranus 108446-11-05 11:59 G 41330456.81 41330457.00 41330457.21 0.0143 0.0064

Uranus 108447-06-20 00:56 G 41330683.36 41330683.54 41330683.73 0.0143 0.0081

Uranus 108448-02-01 13:54 G 41330909.92 41330910.08 41330910.24 0.0143 0.0098

Uranus 108448-09-15 02:37 G 41331136.49 41331136.61 41331136.75 0.0143 0.0115

Earth 108448-12-22 07:25 G 41331234.68 41331234.81 41331234.95 0.2694 0.1303

Moon 108448-12-22 08:23 G 41331234.71 41331234.85 41331234.98 0.2687 0.1533 *

Uranus 108449-04-29 15:35 G 41331363.09 41331363.15 41331363.25 0.0143 0.0132

Jupiter 108452-08-23 02:23 G 41332574.42 41332574.60 41332574.79 0.0519 0.0188

Jupiter 108457-11-05 02:37 G 41334474.45 41334474.61 41334474.77 0.0513 0.0332

Mars 108458-11-22 11:01 G 41334856.79 41334856.96 41334857.13 0.1960 0.0041

Mars 108461-08-28 22:03 G 41335867.28 41335867.42 41335867.56 0.1586 0.0986

Saturn 108461-11-12 21:35 G 41335943.22 41335943.40 41335943.59 0.0265 0.0117

Saturn 108462-06-29 18:13 G 41336172.09 41336172.26 41336172.44 0.0266 0.0145

Jupiter 108464-04-28 00:56 G 41336840.34 41336840.54 41336840.74 0.0517 0.0063

Jupiter 108470-03-05 02:23 G 41338977.44 41338977.60 41338977.77 0.0506 0.0311

Jupiter 108476-01-02 00:27 G 41341106.36 41341106.52 41341106.68 0.0515 0.0307

Saturn 108476-04-27 20:51 G 41341223.15 41341223.37 41341223.58 0.0295 0.0021

Uranus 108480-04-27 19:11 G 41342684.25 41342684.30 41342684.38 0.0136 0.0129

Uranus 108480-12-10 00:56 G 41342910.45 41342910.54 41342910.67 0.0136 0.0116

Pluto 108480-12-30 10:18 G 41342930.81 41342930.93 41342931.10 0.0063 0.0047

Uranus 108481-07-24 06:42 G 41343136.65 41343136.78 41343136.94 0.0136 0.0102

Pluto 108481-08-12 13:54 G 41343155.87 41343156.08 41343156.30 0.0064 0.0008

Jupiter 108481-11-07 22:03 G 41343243.22 41343243.42 41343243.63 0.0509 0.0067

Uranus 108482-03-07 12:27 G 41343362.87 41343363.02 41343363.19 0.0136 0.0087

Pluto 108482-03-25 17:01 G 41343381.04 41343381.21 41343381.41 0.0064 0.0032

Uranus 108482-10-19 17:59 G 41343589.08 41343589.25 41343589.44 0.0136 0.0073

Uranus 108483-06-02 23:30 G 41343815.29 41343815.48 41343815.68 0.0136 0.0059

Uranus 108484-01-15 04:47 G 41344041.50 41344041.70 41344041.91 0.0136 0.0044

Uranus 108484-08-28 10:03 G 41344267.71 41344267.92 41344268.13 0.0136 0.0030

Uranus 108485-04-11 15:06 G 41344493.92 41344494.13 41344494.35 0.0135 0.0016

Uranus 108485-11-23 20:23 G 41344720.13 41344720.35 41344720.56 0.0135 0.0002

Uranus 108486-07-08 01:11 G 41344946.34 41344946.55 41344946.77 0.0135 0.0014

Uranus 108487-02-19 06:13 G 41345172.55 41345172.76 41345172.97 0.0135 0.0028

Uranus 108487-10-03 11:01 G 41345398.76 41345398.96 41345399.17 0.0135 0.0042

Jupiter 108488-04-30 19:54 G 41345609.18 41345609.33 41345609.48 0.0521 0.0348

Uranus 108488-05-16 15:49 G 41345624.97 41345625.16 41345625.36 0.0135 0.0056

Uranus 108488-12-28 20:37 G 41345851.18 41345851.36 41345851.55 0.0135 0.0070

Uranus 108489-08-12 01:11 G 41346077.40 41346077.55 41346077.73 0.0135 0.0084

Uranus 108490-03-26 05:59 G 41346303.61 41346303.75 41346303.91 0.0135 0.0098

Uranus 108490-11-07 10:32 G 41346529.84 41346529.94 41346530.08 0.0135 0.0112

Saturn 108491-05-25 22:03 G 41346729.22 41346729.42 41346729.62 0.0265 0.0089

Uranus 108491-06-21 15:20 G 41346756.07 41346756.14 41346756.24 0.0135 0.0124

Saturn 108492-01-09 18:42 G 41346958.13 41346958.28 41346958.44 0.0266 0.0174

Jupiter 108493-07-13 16:18 G 41347508.99 41347509.18 41347509.37 0.0511 0.0188

Mars 108493-08-27 14:23 G 41347553.96 41347554.10 41347554.25 0.1582 0.0873

Jupiter 108500-01-04 16:47 G 41349875.01 41349875.20 41349875.40 0.0518 0.0094

Neptune 108500-08-22 17:30 G 41350105.18 41350105.23 41350105.33 0.0090 0.0084

Neptune 108501-04-05 06:56 G 41350330.66 41350330.79 41350330.91 0.0090 0.0073

Neptune 108501-11-16 19:25 G 41350556.17 41350556.31 41350556.47 0.0090 0.0063

Neptune 108502-06-30 08:08 G 41350781.68 41350781.84 41350782.03 0.0090 0.0053

Neptune 108503-02-10 20:51 G 41351007.19 41351007.37 41351007.57 0.0090 0.0043

Neptune 108503-09-24 09:35 G 41351232.71 41351232.90 41351233.12 0.0090 0.0033

Neptune 108504-05-06 22:32 G 41351458.23 41351458.44 41351458.65 0.0090 0.0022

Neptune 108504-12-18 11:15 G 41351683.75 41351683.97 41351684.18 0.0090 0.0012

Jupiter 108505-03-19 12:13 G 41351774.90 41351775.01 41351775.11 0.0514 0.0436

Neptune 108505-07-31 23:44 G 41351909.28 41351909.49 41351909.71 0.0090 0.0002

Saturn 108505-11-09 03:06 G 41352009.42 41352009.63 41352009.84 0.0295 0.0071

Jupiter 108505-11-11 16:32 G 41352012.11 41352012.19 41352012.29 0.0506 0.0453

Neptune 108506-03-14 12:13 G 41352134.80 41352135.01 41352135.23 0.0090 0.0009

Neptune 108506-10-26 00:56 G 41352360.34 41352360.54 41352360.76 0.0090 0.0019

Neptune 108507-06-08 13:39 G 41352585.87 41352586.07 41352586.28 0.0090 0.0029

Neptune 108508-01-20 02:08 G 41352811.40 41352811.59 41352811.79 0.0090 0.0039

Neptune 108508-09-01 14:51 G 41353036.94 41353037.12 41353037.30 0.0090 0.0049

Neptune 108509-04-15 02:51 G 41353262.48 41353262.62 41353262.81 0.0090 0.0060

Neptune 108509-11-26 15:35 G 41353488.04 41353488.15 41353488.31 0.0090 0.0070

Neptune 108510-07-10 04:03 G 41353713.60 41353713.67 41353713.79 0.0090 0.0080

Neptune 108511-02-20 16:47 G 41353939.20 41353939.20 41353939.23 0.0090 0.0090

Jupiter 108511-09-10 11:44 G 41354140.81 41354140.99 41354141.19 0.0516 0.0167

Jupiter 108517-07-17 14:08 G 41356277.91 41356278.09 41356278.28 0.0508 0.0216

Saturn 108520-12-06 01:11 G 41357515.35 41357515.55 41357515.76 0.0265 0.0052

Saturn 108521-07-22 22:03 G 41357744.29 41357744.42 41357744.54 0.0266 0.0210

Jupiter 108523-05-16 10:47 G 41358406.83 41358406.95 41358407.07 0.0514 0.0410

Uranus 108523-09-10 02:23 G 41358523.53 41358523.60 41358523.70 0.0142 0.0131

Jupiter 108524-01-08 07:39 G 41358643.76 41358643.82 41358643.89 0.0522 0.0494

Uranus 108524-04-23 13:54 G 41358749.97 41358750.08 41358750.23 0.0142 0.0115

Mars 108524-09-19 13:11 G 41358898.90 41358899.05 41358899.21 0.1958 0.0830

Uranus 108524-12-06 01:54 G 41358976.43 41358976.58 41358976.74 0.0142 0.0098

Uranus 108525-07-20 13:25 G 41359202.89 41359203.06 41359203.25 0.0142 0.0082

Uranus 108526-03-04 01:25 G 41359429.38 41359429.56 41359429.77 0.0142 0.0066

Uranus 108526-10-16 13:39 G 41359655.87 41359656.07 41359656.29 0.0142 0.0048

Uranus 108527-05-31 02:08 G 41359882.37 41359882.59 41359882.81 0.0142 0.0031

Mars 108527-06-27 10:32 G 41359909.82 41359909.94 41359910.05 0.1587 0.1176

Uranus 108528-01-12 14:23 G 41360108.88 41360109.10 41360109.33 0.0143 0.0014

Uranus 108528-08-26 03:06 G 41360335.41 41360335.63 41360335.85 0.0143 0.0005

Jupiter 108529-03-22 10:03 G 41360543.71 41360543.92 41360544.12 0.0510 0.0031

Uranus 108529-04-09 15:49 G 41360561.94 41360562.16 41360562.38 0.0143 0.0022

Uranus 108529-11-22 04:32 G 41360788.48 41360788.69 41360788.90 0.0143 0.0040

Uranus 108530-07-06 17:01 G 41361015.02 41361015.21 41361015.43 0.0143 0.0058

Uranus 108531-02-18 05:59 G 41361241.57 41361241.75 41361241.95 0.0143 0.0075

Uranus 108531-10-02 18:56 G 41361468.13 41361468.29 41361468.47 0.0143 0.0092

Uranus 108532-05-16 08:08 G 41361694.70 41361694.84 41361694.99 0.0143 0.0109

Uranus 108532-12-28 21:06 G 41361921.29 41361921.38 41361921.49 0.0143 0.0126

Uranus 108533-08-12 10:18 G 41362147.92 41362147.93 41362147.95 0.0143 0.0142

Saturn 108534-10-03 21:06 G 41362565.32 41362565.38 41362565.46 0.0296 0.0280

Saturn 108535-05-22 02:37 G 41362795.41 41362795.61 41362795.81 0.0295 0.0100

Jupiter 108535-09-13 06:27 G 41362909.59 41362909.77 41362909.94 0.0520 0.0244

Jupiter 108540-11-25 05:01 G 41364809.54 41364809.71 41364809.88 0.0512 0.0282

Jupiter 108547-05-19 04:47 G 41367175.50 41367175.70 41367175.90 0.0517 0.0009

Saturn 108550-06-18 01:11 G 41368301.34 41368301.55 41368301.76 0.0265 0.0024

Saturn 108551-02-01 21:49 G 41368530.33 41368530.41 41368530.51 0.0266 0.0239

Jupiter 108553-03-25 03:35 G 41369312.51 41369312.65 41369312.80 0.0506 0.0356

Jupiter 108559-01-22 02:37 G 41371441.43 41371441.61 41371441.78 0.0515 0.0258

Mars 108559-06-26 03:20 G 41371596.48 41371596.64 41371596.80 0.1583 0.0700

Uranus 108563-12-28 05:59 G 41373242.71 41373242.75 41373242.80 0.0136 0.0133

Saturn 108564-04-15 03:20 G 41373351.51 41373351.64 41373351.78 0.0296 0.0230

Uranus 108564-08-10 11:30 G 41373468.90 41373468.98 41373469.10 0.0136 0.0120

Jupiter 108564-11-28 00:27 G 41373578.31 41373578.52 41373578.72 0.0509 0.0115

Saturn 108564-12-01 08:37 G 41373581.68 41373581.86 41373582.05 0.0295 0.0150

Uranus 108565-03-24 17:30 G 41373695.10 41373695.23 41373695.37 0.0136 0.0105

Uranus 108565-11-05 23:15 G 41373921.32 41373921.47 41373921.63 0.0136 0.0091

Uranus 108566-06-20 04:47 G 41374147.53 41374147.70 41374147.88 0.0136 0.0077

Uranus 108567-02-01 10:03 G 41374373.74 41374373.92 41374374.12 0.0136 0.0063

Uranus 108567-09-15 15:35 G 41374599.96 41374600.15 41374600.36 0.0136 0.0049

Uranus 108568-04-28 21:06 G 41374826.17 41374826.38 41374826.58 0.0136 0.0034

Uranus 108568-12-11 02:08 G 41375052.38 41375052.59 41375052.80 0.0136 0.0019

Uranus 108569-07-25 07:11 G 41375278.59 41375278.80 41375279.01 0.0135 0.0005

Uranus 108570-03-08 12:13 G 41375504.80 41375505.01 41375505.22 0.0135 0.0009

Earth 108570-06-22 17:01 G 41375611.05 41375611.21 41375611.37 0.2638 0.0326

Moon 108570-06-22 20:51 G 41375611.21 41375611.37 41375611.52 0.2643 0.0323 *

Jupiter 108570-09-26 22:03 G 41375707.41 41375707.42 41375707.44 0.0512 0.0510

Uranus 108570-10-20 17:15 G 41375731.01 41375731.22 41375731.43 0.0135 0.0024

Pluto 108571-02-15 09:35 G 41375848.70 41375848.90 41375849.12 0.0080 0.0029

Jupiter 108571-05-21 17:59 G 41375944.13 41375944.25 41375944.39 0.0521 0.0388

Uranus 108571-06-03 22:03 G 41375957.22 41375957.42 41375957.63 0.0135 0.0038

Pluto 108571-09-28 20:23 G 41376074.21 41376074.35 41376074.54 0.0080 0.0055

Uranus 108572-01-16 02:51 G 41376183.43 41376183.62 41376183.82 0.0135 0.0052

Uranus 108572-08-29 07:25 G 41376409.64 41376409.81 41376410.01 0.0135 0.0067

Uranus 108573-04-12 12:13 G 41376635.85 41376636.01 41376636.20 0.0135 0.0080

Uranus 108573-11-24 17:15 G 41376862.07 41376862.22 41376862.38 0.0135 0.0093

Uranus 108574-07-08 21:35 G 41377088.29 41377088.40 41377088.55 0.0135 0.0107

Uranus 108575-02-20 02:23 G 41377314.51 41377314.60 41377314.71 0.0135 0.0120

Uranus 108575-10-04 06:56 G 41377540.77 41377540.79 41377540.83 0.0135 0.0133

Jupiter 108576-08-02 21:06 G 41377844.18 41377844.38 41377844.58 0.0511 0.0130

Saturn 108579-05-14 08:08 G 41378858.78 41378858.84 41378858.92 0.0264 0.0247

Saturn 108579-12-29 04:47 G 41379087.50 41379087.70 41379087.91 0.0265 0.0015

Neptune 108582-10-06 23:44 G 41380100.43 41380100.49 41380100.61 0.0088 0.0081

Jupiter 108583-01-24 16:03 G 41380209.98 41380210.17 41380210.36 0.0519 0.0135

Neptune 108583-05-20 13:11 G 41380325.94 41380326.05 41380326.20 0.0088 0.0071

Neptune 108584-01-01 02:37 G 41380551.46 41380551.61 41380551.78 0.0088 0.0061

Neptune 108584-08-13 16:03 G 41380776.99 41380777.17 41380777.35 0.0088 0.0051

Neptune 108585-03-27 05:01 G 41381002.53 41381002.71 41381002.92 0.0088 0.0042

Neptune 108585-11-07 18:27 G 41381228.07 41381228.27 41381228.49 0.0088 0.0032

Neptune 108586-06-21 07:39 G 41381453.62 41381453.82 41381454.05 0.0088 0.0022

Neptune 108587-02-01 21:06 G 41381679.16 41381679.38 41381679.61 0.0088 0.0012

Neptune 108587-09-15 10:32 G 41381904.72 41381904.94 41381905.17 0.0088 0.0002

Jupiter 108588-04-07 16:18 G 41382110.05 41382110.18 41382110.32 0.0513 0.0382

Neptune 108588-04-27 23:59 G 41382130.28 41382130.50 41382130.73 0.0088 0.0009

Jupiter 108588-11-30 20:23 G 41382347.35 41382347.35 41382347.35 0.0505 0.0505

Neptune 108588-12-09 13:25 G 41382355.85 41382356.06 41382356.29 0.0088 0.0018

Neptune 108589-07-23 02:37 G 41382581.41 41382581.61 41382581.84 0.0088 0.0029

Neptune 108590-03-05 16:03 G 41382806.98 41382807.17 41382807.38 0.0088 0.0038

Mars 108590-07-17 15:49 G 41382941.07 41382941.16 41382941.25 0.1956 0.1637

Neptune 108590-10-17 05:15 G 41383032.56 41383032.72 41383032.93 0.0088 0.0049

Neptune 108591-05-30 19:11 G 41383258.14 41383258.30 41383258.47 0.0088 0.0058

Neptune 108592-01-11 08:37 G 41383483.72 41383483.86 41383484.00 0.0088 0.0068

Neptune 108592-08-23 21:49 G 41383709.32 41383709.41 41383709.52 0.0088 0.0078

Neptune 108593-04-06 11:30 G 41383934.98 41383934.98 41383934.99 0.0088 0.0088

Mars 108593-04-23 23:01 G 41383952.37 41383952.46 41383952.55 0.1588 0.1361

Saturn 108593-10-26 04:03 G 41384137.51 41384137.67 41384137.83 0.0296 0.0197

Saturn 108594-06-13 09:06 G 41384367.72 41384367.88 41384368.06 0.0295 0.0182

Jupiter 108594-09-29 15:20 G 41384475.94 41384476.14 41384476.34 0.0516 0.0113

Jupiter 108600-08-06 16:18 G 41386613.00 41386613.18 41386613.35 0.0507 0.0265

Jupiter 108606-06-05 14:08 G 41388741.96 41388742.09 41388742.24 0.0514 0.0359

Uranus 108607-05-11 08:08 G 41389081.79 41389081.84 41389081.92 0.0142 0.0136

Uranus 108607-12-23 19:39 G 41389308.21 41389308.32 41389308.44 0.0142 0.0120

Uranus 108608-08-06 07:11 G 41389534.66 41389534.80 41389534.96 0.0142 0.0104

Saturn 108608-11-24 07:39 G 41389644.72 41389644.82 41389644.95 0.0265 0.0220

Uranus 108609-03-20 19:11 G 41389761.13 41389761.30 41389761.47 0.0142 0.0087

Saturn 108609-07-11 04:47 G 41389873.49 41389873.70 41389873.91 0.0265 0.0042

Uranus 108609-11-02 06:42 G 41389987.60 41389987.78 41389987.99 0.0142 0.0072

Uranus 108610-06-16 18:42 G 41390214.09 41390214.28 41390214.50 0.0142 0.0055

Uranus 108611-01-29 07:11 G 41390440.59 41390440.80 41390441.02 0.0142 0.0037

Uranus 108611-09-12 19:25 G 41390667.10 41390667.31 41390667.54 0.0142 0.0020

Jupiter 108612-04-11 11:01 G 41390878.75 41390878.96 41390879.16 0.0510 0.0018

Uranus 108612-04-26 08:08 G 41390893.62 41390893.84 41390894.06 0.0143 0.0002

Uranus 108612-12-08 20:37 G 41391120.14 41391120.36 41391120.59 0.0143 0.0016

Uranus 108613-07-23 09:06 G 41391346.67 41391346.88 41391347.11 0.0143 0.0034

Uranus 108614-03-06 22:03 G 41391573.22 41391573.42 41391573.63 0.0143 0.0051

Uranus 108614-10-19 10:47 G 41391799.76 41391799.95 41391800.15 0.0143 0.0069

Uranus 108615-06-02 23:44 G 41392026.32 41392026.49 41392026.68 0.0143 0.0086

Uranus 108616-01-15 12:42 G 41392252.89 41392253.03 41392253.19 0.0143 0.0103

Uranus 108616-08-29 01:25 G 41392479.46 41392479.56 41392479.70 0.0143 0.0120

Uranus 108617-04-12 14:51 G 41392706.06 41392706.12 41392706.19 0.0143 0.0136

Jupiter 108618-10-03 08:23 G 41393244.68 41393244.85 41393245.01 0.0520 0.0293

Saturn 108623-05-09 10:03 G 41394923.74 41394923.92 41394924.11 0.0296 0.0148

Jupiter 108623-12-16 06:42 G 41395144.60 41395144.78 41395144.96 0.0512 0.0234

Saturn 108623-12-25 15:20 G 41395154.01 41395154.14 41395154.28 0.0294 0.0231

Mars 108625-04-23 15:35 G 41395638.98 41395639.15 41395639.32 0.1584 0.0511

Jupiter 108630-06-08 02:51 G 41397510.42 41397510.62 41397510.82 0.0517 0.0030

Jupiter 108635-08-21 02:23 G 41399410.54 41399410.60 41399410.67 0.0515 0.0485

Jupiter 108636-04-14 07:39 G 41399647.71 41399647.82 41399647.94 0.0506 0.0412

Saturn 108638-06-06 12:13 G 41400430.87 41400431.01 41400431.18 0.0265 0.0180

Saturn 108639-01-21 09:06 G 41400659.69 41400659.88 41400660.08 0.0266 0.0082

Jupiter 108642-02-11 01:11 G 41401776.37 41401776.55 41401776.73 0.0515 0.0219

Jupiter 108647-12-19 03:35 G 41403913.45 41403913.65 41403913.84 0.0508 0.0167

Uranus 108648-04-10 21:35 G 41404027.32 41404027.40 41404027.50 0.0136 0.0124

Uranus 108648-11-23 03:35 G 41404253.53 41404253.65 41404253.78 0.0136 0.0110

Uranus 108649-07-07 09:20 G 41404479.74 41404479.89 41404480.05 0.0136 0.0095

Uranus 108650-02-18 15:06 G 41404705.96 41404706.13 41404706.30 0.0136 0.0081

Uranus 108650-10-02 20:37 G 41404932.18 41404932.36 41404932.55 0.0136 0.0067

Uranus 108651-05-17 01:54 G 41405158.39 41405158.58 41405158.79 0.0136 0.0053

Uranus 108651-12-29 07:11 G 41405384.60 41405384.80 41405385.01 0.0136 0.0039

Uranus 108652-08-11 12:27 G 41405610.82 41405611.02 41405611.24 0.0136 0.0024

Saturn 108652-11-18 11:59 G 41405709.80 41405710.00 41405710.20 0.0296 0.0111

Uranus 108653-03-25 17:44 G 41405837.03 41405837.24 41405837.45 0.0135 0.0010

Saturn 108653-07-06 17:01 G 41405940.12 41405940.21 41405940.30 0.0294 0.0267

Jupiter 108653-10-17 00:42 G 41406042.45 41406042.53 41406042.62 0.0513 0.0462

Uranus 108653-11-06 23:01 G 41406063.24 41406063.46 41406063.67 0.0135 0.0005

Jupiter 108654-06-10 21:06 G 41406279.28 41406279.38 41406279.49 0.0521 0.0441

Uranus 108654-06-21 03:49 G 41406289.45 41406289.66 41406289.88 0.0135 0.0019

Uranus 108655-02-02 08:51 G 41406515.66 41406515.87 41406516.08 0.0135 0.0033

Uranus 108655-09-16 13:39 G 41406741.87 41406742.07 41406742.27 0.0135 0.0047

Uranus 108656-04-29 18:27 G 41406968.09 41406968.27 41406968.46 0.0135 0.0061

Uranus 108656-12-11 23:15 G 41407194.30 41407194.47 41407194.65 0.0135 0.0075

Uranus 108657-07-26 03:35 G 41407420.51 41407420.65 41407420.83 0.0135 0.0090

Uranus 108658-03-09 08:23 G 41407646.72 41407646.85 41407647.00 0.0135 0.0102

Uranus 108658-10-21 12:56 G 41407872.95 41407873.04 41407873.16 0.0135 0.0116

Mars 108659-02-20 11:01 G 41407994.93 41407994.96 41407994.99 0.1590 0.1562

Uranus 108659-06-04 17:15 G 41408099.18 41408099.22 41408099.31 0.0135 0.0129

Jupiter 108659-08-23 22:47 G 41408179.25 41408179.45 41408179.66 0.0511 0.0083

Neptune 108664-11-25 04:03 G 41410099.63 41410099.67 41410099.76 0.0090 0.0086

Neptune 108665-07-08 17:01 G 41410325.11 41410325.21 41410325.34 0.0090 0.0076

Jupiter 108666-02-13 19:11 G 41410545.11 41410545.30 41410545.49 0.0519 0.0188

Neptune 108666-02-19 05:44 G 41410550.62 41410550.74 41410550.91 0.0090 0.0066

Neptune 108666-10-02 19:11 G 41410776.13 41410776.30 41410776.47 0.0090 0.0055

Neptune 108667-05-16 07:54 G 41411001.65 41411001.83 41411002.02 0.0090 0.0045

Saturn 108667-12-17 12:27 G 41411216.85 41411217.02 41411217.19 0.0265 0.0152

Neptune 108667-12-27 20:23 G 41411227.17 41411227.35 41411227.56 0.0090 0.0035

Saturn 108668-08-02 09:20 G 41411445.70 41411445.89 41411446.08 0.0266 0.0111

Neptune 108668-08-09 09:06 G 41411452.69 41411452.88 41411453.10 0.0090 0.0025

Neptune 108669-03-22 22:03 G 41411678.21 41411678.42 41411678.64 0.0090 0.0014

Neptune 108669-11-03 11:01 G 41411903.74 41411903.96 41411904.17 0.0090 0.0004

Neptune 108670-06-16 23:30 G 41412129.27 41412129.48 41412129.70 0.0090 0.0007

Neptune 108671-01-28 11:59 G 41412354.80 41412355.00 41412355.22 0.0090 0.0017

Jupiter 108671-04-28 16:32 G 41412445.04 41412445.19 41412445.35 0.0513 0.0338

Neptune 108671-09-11 00:42 G 41412580.33 41412580.53 41412580.74 0.0090 0.0027

Neptune 108672-04-23 13:25 G 41412805.87 41412806.06 41412806.26 0.0090 0.0037

Neptune 108672-12-05 01:54 G 41413031.41 41413031.58 41413031.77 0.0090 0.0047

Neptune 108673-07-18 14:37 G 41413256.95 41413257.11 41413257.28 0.0090 0.0057

Neptune 108674-03-01 02:37 G 41413482.50 41413482.61 41413482.78 0.0090 0.0068

Neptune 108674-10-12 15:20 G 41413708.06 41413708.14 41413708.27 0.0090 0.0078

Neptune 108675-05-26 03:49 G 41413933.64 41413933.66 41413933.74 0.0090 0.0088

Jupiter 108677-10-19 16:47 G 41414811.00 41414811.20 41414811.40 0.0516 0.0066

Saturn 108682-05-31 18:42 G 41416496.07 41416496.28 41416496.49 0.0295 0.0060

Jupiter 108683-08-26 17:15 G 41416948.06 41416948.22 41416948.38 0.0507 0.0310

Earth 108683-12-27 17:30 G 41417071.14 41417071.23 41417071.32 0.2695 0.2224

Moon 108683-12-27 22:32 G 41417071.38 41417071.44 41417071.50 0.2693 0.2458

Mars 108688-05-14 18:42 G 41418671.26 41418671.28 41418671.31 0.1960 0.1935

Jupiter 108689-06-24 11:59 G 41419076.85 41419077.00 41419077.16 0.0514 0.0323

Uranus 108691-01-08 13:54 G 41419640.07 41419640.08 41419640.11 0.0142 0.0141

Mars 108691-02-19 04:03 G 41419681.49 41419681.67 41419681.84 0.1586 0.0327

Uranus 108691-08-23 00:56 G 41419866.46 41419866.54 41419866.66 0.0142 0.0126

Earth 108691-12-25 10:18 G 41419990.80 41419990.93 41419991.07 0.2694 0.1231

Moon 108691-12-25 12:13 G 41419990.86 41419991.01 41419991.15 0.2687 0.1199 *

Uranus 108692-04-05 12:42 G 41420092.91 41420093.03 41420093.18 0.0142 0.0110

Uranus 108692-11-18 00:27 G 41420319.36 41420319.52 41420319.70 0.0142 0.0093

Uranus 108693-07-02 12:27 G 41420545.83 41420546.02 41420546.21 0.0142 0.0077

Uranus 108694-02-14 00:27 G 41420772.32 41420772.52 41420772.72 0.0142 0.0060

Uranus 108694-09-28 12:27 G 41420998.81 41420999.02 41420999.24 0.0142 0.0043

Jupiter 108695-05-01 13:39 G 41421213.87 41421214.07 41421214.28 0.0510 0.0067

Uranus 108695-05-13 00:56 G 41421225.32 41421225.54 41421225.76 0.0142 0.0025

Uranus 108695-12-25 13:25 G 41421451.84 41421452.06 41421452.28 0.0143 0.0008

Uranus 108696-08-08 01:54 G 41421678.36 41421678.58 41421678.80 0.0143 0.0010

Uranus 108697-03-22 14:23 G 41421904.89 41421905.10 41421905.33 0.0143 0.0028

Saturn 108697-06-28 17:44 G 41422003.05 41422003.24 41422003.43 0.0265 0.0109

Uranus 108697-11-04 03:06 G 41422131.43 41422131.63 41422131.85 0.0143 0.0045

Saturn 108698-02-12 14:23 G 41422231.94 41422232.10 41422232.28 0.0266 0.0154

Uranus 108698-06-18 16:03 G 41422357.97 41422358.17 41422358.37 0.0143 0.0062

Uranus 108699-01-31 04:32 G 41422584.52 41422584.69 41422584.89 0.0143 0.0080

Uranus 108699-09-14 17:30 G 41422811.08 41422811.23 41422811.40 0.0143 0.0097

Uranus 108700-04-29 06:27 G 41423037.65 41423037.77 41423037.92 0.0143 0.0114

Uranus 108700-12-11 19:39 G 41423264.24 41423264.32 41423264.42 0.0143 0.0130

Jupiter 108701-10-23 06:13 G 41423579.60 41423579.76 41423579.91 0.0520 0.0330

Jupiter 108707-01-05 08:51 G 41425479.68 41425479.87 41425480.06 0.0512 0.0186

Saturn 108711-12-12 22:32 G 41427282.23 41427282.44 41427282.65 0.0295 0.0018

Jupiter 108713-06-28 04:32 G 41427845.49 41427845.69 41427845.89 0.0518 0.0078

Jupiter 108718-09-10 03:35 G 41429745.55 41429745.65 41429745.76 0.0514 0.0440

Jupiter 108719-05-05 08:08 G 41429982.76 41429982.84 41429982.93 0.0506 0.0455

Jupiter 108725-03-03 03:06 G 41432111.45 41432111.63 41432111.83 0.0515 0.0173

Saturn 108727-01-09 18:13 G 41432789.06 41432789.26 41432789.46 0.0265 0.0080

Saturn 108727-08-26 15:06 G 41433017.99 41433018.13 41433018.29 0.0266 0.0185

Pluto 108728-04-25 01:54 G 41433260.46 41433260.58 41433260.76 0.0063 0.0047

Pluto 108728-12-06 05:44 G 41433485.53 41433485.74 41433485.96 0.0064 0.0008

Pluto 108729-07-19 09:06 G 41433710.70 41433710.88 41433711.07 0.0064 0.0032

Jupiter 108731-01-08 02:37 G 41434248.43 41434248.61 41434248.81 0.0508 0.0209

Uranus 108731-12-11 07:11 G 41434585.74 41434585.80 41434585.89 0.0136 0.0128

Uranus 108732-07-24 13:25 G 41434811.94 41434812.06 41434812.18 0.0136 0.0114

Uranus 108733-03-07 18:56 G 41435038.16 41435038.29 41435038.45 0.0136 0.0100

Uranus 108733-10-20 01:11 G 41435264.38 41435264.55 41435264.71 0.0136 0.0085

Uranus 108734-06-03 06:42 G 41435490.60 41435490.78 41435490.96 0.0136 0.0071

Uranus 108735-01-15 12:13 G 41435716.82 41435717.01 41435717.21 0.0136 0.0057

Uranus 108735-08-29 17:30 G 41435943.03 41435943.23 41435943.44 0.0136 0.0043

Uranus 108736-04-11 23:01 G 41436169.25 41436169.46 41436169.67 0.0136 0.0028

Jupiter 108736-11-06 01:25 G 41436377.45 41436377.56 41436377.68 0.0513 0.0418

Uranus 108736-11-24 04:18 G 41436395.47 41436395.68 41436395.89 0.0136 0.0014

Jupiter 108737-06-30 21:49 G 41436614.34 41436614.41 41436614.48 0.0521 0.0487

Uranus 108737-07-08 09:20 G 41436621.68 41436621.89 41436622.11 0.0135 0.0003

Uranus 108738-02-19 14:23 G 41436847.89 41436848.10 41436848.32 0.0135 0.0015

Uranus 108738-10-03 19:25 G 41437074.11 41437074.31 41437074.53 0.0135 0.0030

Uranus 108739-05-18 00:27 G 41437300.32 41437300.52 41437300.73 0.0135 0.0043

Uranus 108739-12-30 05:15 G 41437526.53 41437526.72 41437526.92 0.0135 0.0057

Uranus 108740-08-12 09:49 G 41437752.74 41437752.91 41437753.10 0.0135 0.0072

Uranus 108741-03-26 14:23 G 41437978.95 41437979.10 41437979.28 0.0135 0.0085

Saturn 108741-06-24 05:15 G 41438068.51 41438068.72 41438068.94 0.0295 0.0034

Uranus 108741-11-07 19:25 G 41438205.17 41438205.31 41438205.46 0.0135 0.0098

Uranus 108742-06-21 23:44 G 41438431.39 41438431.49 41438431.63 0.0135 0.0112

Jupiter 108742-09-12 22:32 G 41438514.23 41438514.44 41438514.64 0.0511 0.0041

Uranus 108743-02-03 04:18 G 41438657.62 41438657.68 41438657.77 0.0135 0.0125

Neptune 108747-01-10 10:03 G 41440094.86 41440094.92 41440095.01 0.0088 0.0082

Neptune 108747-08-23 23:01 G 41440320.36 41440320.46 41440320.61 0.0088 0.0073

Neptune 108748-04-05 12:27 G 41440545.89 41440546.02 41440546.20 0.0088 0.0063

Neptune 108748-11-17 01:54 G 41440771.42 41440771.58 41440771.77 0.0088 0.0053

Jupiter 108749-03-05 16:03 G 41440879.99 41440880.17 41440880.35 0.0519 0.0221

Neptune 108749-06-30 15:20 G 41440996.95 41440997.14 41440997.34 0.0088 0.0043

Neptune 108750-02-11 04:32 G 41441222.49 41441222.69 41441222.90 0.0088 0.0033

Neptune 108750-09-24 17:30 G 41441448.03 41441448.23 41441448.46 0.0088 0.0024

Neptune 108751-05-08 07:11 G 41441673.58 41441673.80 41441674.03 0.0088 0.0013

Neptune 108751-12-19 20:37 G 41441899.13 41441899.36 41441899.58 0.0088 0.0003

Neptune 108752-08-01 09:49 G 41442124.69 41442124.91 41442125.14 0.0088 0.0007

Neptune 108753-03-14 23:01 G 41442350.25 41442350.46 41442350.69 0.0088 0.0017

Neptune 108753-10-26 12:27 G 41442575.81 41442576.02 41442576.24 0.0088 0.0027

Mars 108754-03-12 21:49 G 41442713.27 41442713.41 41442713.55 0.1958 0.1148

Jupiter 108754-05-18 17:44 G 41442780.07 41442780.24 41442780.41 0.0513 0.0294

Neptune 108754-06-09 01:39 G 41442801.38 41442801.57 41442801.79 0.0088 0.0037

Neptune 108755-01-20 15:06 G 41443026.95 41443027.13 41443027.33 0.0088 0.0047

Neptune 108755-09-03 04:47 G 41443252.53 41443252.70 41443252.87 0.0088 0.0056

Neptune 108756-04-15 18:13 G 41443478.12 41443478.26 41443478.41 0.0088 0.0066

Saturn 108756-07-22 00:13 G 41443575.30 41443575.51 41443575.72 0.0266 0.0036

Neptune 108756-11-27 07:25 G 41443703.72 41443703.81 41443703.94 0.0088 0.0076

Mars 108756-12-17 16:32 G 41443724.01 41443724.19 41443724.37 0.1587 0.0142

Saturn 108757-03-07 21:20 G 41443804.29 41443804.39 41443804.50 0.0266 0.0229

Neptune 108757-07-10 20:37 G 41443929.34 41443929.36 41443929.43 0.0088 0.0086

Jupiter 108760-11-08 13:39 G 41445145.87 41445146.07 41445146.27 0.0516 0.0033

Jupiter 108766-09-15 17:44 G 41447283.10 41447283.24 41447283.39 0.0507 0.0353

Saturn 108770-05-19 06:42 G 41448624.77 41448624.78 41448624.79 0.0296 0.0295

Saturn 108771-01-04 11:30 G 41448854.77 41448854.98 41448855.19 0.0295 0.0083

Jupiter 108772-07-14 12:13 G 41449411.85 41449412.01 41449412.18 0.0514 0.0282

Uranus 108775-04-23 08:08 G 41450424.76 41450424.84 41450424.93 0.0142 0.0130

Uranus 108775-12-05 19:39 G 41450651.19 41450651.32 41450651.45 0.0142 0.0114

Uranus 108776-07-19 06:56 G 41450877.64 41450877.79 41450877.96 0.0142 0.0098

Uranus 108777-03-02 18:56 G 41451104.11 41451104.29 41451104.48 0.0142 0.0081

Uranus 108777-10-15 06:42 G 41451330.60 41451330.78 41451330.99 0.0142 0.0065

Jupiter 108778-05-21 13:25 G 41451548.86 41451549.06 41451549.26 0.0509 0.0107

Uranus 108778-05-29 18:56 G 41451557.09 41451557.29 41451557.50 0.0142 0.0048

Uranus 108779-01-11 07:11 G 41451783.58 41451783.80 41451784.02 0.0142 0.0030

Uranus 108779-08-25 19:25 G 41452010.09 41452010.31 41452010.54 0.0142 0.0013

Uranus 108780-04-08 08:08 G 41452236.62 41452236.84 41452237.06 0.0143 0.0004

Uranus 108780-11-20 20:37 G 41452463.14 41452463.36 41452463.58 0.0143 0.0022

Uranus 108781-07-05 09:06 G 41452689.67 41452689.88 41452690.10 0.0143 0.0040

Uranus 108782-02-16 21:49 G 41452916.21 41452916.41 41452916.62 0.0143 0.0057

Uranus 108782-10-01 10:32 G 41453142.76 41453142.94 41453143.14 0.0143 0.0074

Uranus 108783-05-15 23:30 G 41453369.32 41453369.48 41453369.66 0.0143 0.0091

Uranus 108783-12-28 12:27 G 41453595.88 41453596.02 41453596.17 0.0143 0.0108

Uranus 108784-08-11 01:11 G 41453822.46 41453822.55 41453822.67 0.0143 0.0125

Jupiter 108784-11-11 07:25 G 41453914.67 41453914.81 41453914.94 0.0520 0.0377

Uranus 108785-03-25 14:08 G 41454049.07 41454049.09 41454049.13 0.0143 0.0142

Saturn 108786-02-01 01:25 G 41454361.35 41454361.56 41454361.77 0.0265 0.0004

Saturn 108786-09-17 22:32 G 41454590.41 41454590.44 41454590.49 0.0267 0.0261

Jupiter 108790-01-24 07:11 G 41455814.60 41455814.80 41455815.00 0.0512 0.0149

Jupiter 108796-07-17 04:18 G 41458180.48 41458180.68 41458180.88 0.0518 0.0120

Saturn 108799-11-29 13:54 G 41459410.97 41459411.08 41459411.21 0.0296 0.0243

Saturn 108800-07-16 18:56 G 41459641.11 41459641.29 41459641.49 0.0295 0.0137

Jupiter 108801-09-29 01:39 G 41460080.45 41460080.57 41460080.70 0.0514 0.0404

Jupiter 108802-05-24 06:42 G 41460317.74 41460317.78 41460317.82 0.0506 0.0493

Jupiter 108808-03-21 23:44 G 41462446.30 41462446.49 41462446.68 0.0515 0.0141

Earth 108813-06-24 16:32 G 41464367.02 41464367.19 41464367.35 0.2639 0.0396

Moon 108813-06-24 20:37 G 41464367.20 41464367.36 41464367.51 0.2644 0.0357 *

Jupiter 108814-01-27 02:37 G 41464583.43 41464583.61 41464583.79 0.0509 0.0249

Saturn 108814-12-28 11:01 G 41464918.85 41464918.96 41464919.08 0.0265 0.0221

Uranus 108815-08-10 16:47 G 41465144.15 41465144.20 41465144.26 0.0136 0.0132

Saturn 108815-08-14 08:08 G 41465147.64 41465147.84 41465148.05 0.0266 0.0043

Uranus 108816-03-23 23:01 G 41465370.36 41465370.46 41465370.57 0.0136 0.0118

Uranus 108816-11-05 05:01 G 41465596.57 41465596.71 41465596.85 0.0136 0.0104

Uranus 108817-06-19 10:32 G 41465822.79 41465822.94 41465823.11 0.0136 0.0090

Uranus 108818-01-31 16:32 G 41466049.01 41466049.19 41466049.37 0.0136 0.0075

Pluto 108818-06-10 00:56 G 41466178.33 41466178.54 41466178.76 0.0080 0.0026

Uranus 108818-09-14 22:03 G 41466275.24 41466275.42 41466275.62 0.0136 0.0061

Pluto 108819-01-21 11:44 G 41466403.85 41466403.99 41466404.17 0.0080 0.0057

Uranus 108819-04-29 03:35 G 41466501.46 41466501.65 41466501.86 0.0136 0.0047

Jupiter 108819-11-25 21:49 G 41466712.28 41466712.41 41466712.54 0.0513 0.0389

Uranus 108819-12-11 08:51 G 41466727.67 41466727.87 41466728.09 0.0136 0.0033

Mars 108820-01-07 23:44 G 41466755.32 41466755.49 41466755.66 0.1956 0.0311

Jupiter 108820-07-19 17:30 G 41466949.21 41466949.23 41466949.26 0.0521 0.0517

Uranus 108820-07-24 14:23 G 41466953.89 41466954.10 41466954.31 0.0136 0.0018

Uranus 108821-03-07 19:39 G 41467180.10 41467180.32 41467180.53 0.0135 0.0004

Uranus 108821-10-20 00:56 G 41467406.32 41467406.54 41467406.75 0.0135 0.0011

Uranus 108822-06-03 05:44 G 41467632.54 41467632.74 41467632.96 0.0135 0.0026

Mars 108822-10-15 04:47 G 41467766.52 41467766.70 41467766.87 0.1588 0.0064

Uranus 108823-01-15 10:47 G 41467858.75 41467858.95 41467859.16 0.0135 0.0039

Uranus 108823-08-29 15:35 G 41468084.96 41468085.15 41468085.35 0.0135 0.0053

Uranus 108824-04-11 20:08 G 41468311.17 41468311.34 41468311.54 0.0135 0.0067

Uranus 108824-11-24 00:56 G 41468537.38 41468537.54 41468537.72 0.0135 0.0081

Uranus 108825-07-08 05:44 G 41468763.59 41468763.74 41468763.90 0.0135 0.0094

Jupiter 108825-10-01 21:35 G 41468849.20 41468849.40 41468849.61 0.0511 0.0010

Uranus 108826-02-19 10:03 G 41468989.81 41468989.92 41468990.06 0.0135 0.0108

Uranus 108826-10-03 14:37 G 41469216.04 41469216.11 41469216.22 0.0135 0.0121

Uranus 108827-05-17 19:11 G 41469442.29 41469442.30 41469442.34 0.0135 0.0134

Neptune 108829-02-27 14:37 G 41470094.09 41470094.11 41470094.17 0.0090 0.0088

Saturn 108829-06-10 22:18 G 41470197.27 41470197.43 41470197.60 0.0295 0.0186

Neptune 108829-10-11 03:35 G 41470319.56 41470319.65 41470319.78 0.0090 0.0078

Saturn 108830-01-27 03:06 G 41470427.47 41470427.63 41470427.79 0.0294 0.0192

Neptune 108830-05-24 16:18 G 41470545.06 41470545.18 41470545.34 0.0090 0.0068

Neptune 108831-01-05 05:01 G 41470770.57 41470770.71 41470770.90 0.0090 0.0058

Neptune 108831-08-18 17:44 G 41470996.08 41470996.24 41470996.45 0.0090 0.0048

Jupiter 108832-03-24 15:06 G 41471214.96 41471215.13 41471215.31 0.0519 0.0261

Neptune 108832-03-31 06:56 G 41471221.60 41471221.79 41471221.99 0.0090 0.0037

Neptune 108832-11-11 19:39 G 41471447.13 41471447.32 41471447.54 0.0090 0.0027

Neptune 108833-06-25 08:37 G 41471672.65 41471672.86 41471673.07 0.0090 0.0017

Neptune 108834-02-05 21:20 G 41471898.18 41471898.39 41471898.61 0.0090 0.0006

Neptune 108834-09-19 10:03 G 41472123.71 41472123.92 41472124.14 0.0090 0.0004

Neptune 108835-05-02 22:47 G 41472349.24 41472349.45 41472349.67 0.0090 0.0014

Neptune 108835-12-14 11:15 G 41472574.77 41472574.97 41472575.19 0.0090 0.0025

Neptune 108836-07-26 23:44 G 41472800.31 41472800.49 41472800.70 0.0090 0.0035

Neptune 108837-03-09 12:27 G 41473025.84 41473026.02 41473026.22 0.0090 0.0045

Jupiter 108837-06-06 16:32 G 41473115.02 41473115.19 41473115.37 0.0513 0.0256

Neptune 108837-10-21 01:11 G 41473251.39 41473251.55 41473251.73 0.0090 0.0055

Neptune 108838-06-03 13:39 G 41473476.94 41473477.07 41473477.23 0.0090 0.0065

Neptune 108839-01-15 02:08 G 41473702.49 41473702.59 41473702.72 0.0090 0.0075

Neptune 108839-08-28 14:37 G 41473928.06 41473928.11 41473928.20 0.0090 0.0085

Jupiter 108843-11-28 13:25 G 41475480.86 41475481.06 41475481.26 0.0517 0.0009

Saturn 108844-07-09 12:42 G 41475704.89 41475705.03 41475705.18 0.0265 0.0187

Saturn 108845-02-23 10:03 G 41475933.72 41475933.92 41475934.12 0.0266 0.0076

Jupiter 108849-10-04 14:51 G 41477618.00 41477618.12 41477618.26 0.0507 0.0388

Jupiter 108855-08-03 11:15 G 41479746.79 41479746.97 41479747.15 0.0514 0.0243

Uranus 108858-12-21 14:37 G 41480983.06 41480983.11 41480983.19 0.0142 0.0135

Saturn 108858-12-22 06:13 G 41480983.57 41480983.76 41480983.95 0.0295 0.0133

Uranus 108859-08-05 01:54 G 41481209.48 41481209.58 41481209.71 0.0142 0.0119

Saturn 108859-08-09 11:01 G 41481213.85 41481213.96 41481214.08 0.0294 0.0245

Uranus 108860-03-18 13:39 G 41481435.93 41481436.07 41481436.23 0.0142 0.0103

Uranus 108860-10-31 01:39 G 41481662.40 41481662.57 41481662.75 0.0142 0.0086

Jupiter 108861-06-09 10:18 G 41481883.74 41481883.93 41481884.13 0.0509 0.0141

Uranus 108861-06-14 13:11 G 41481888.87 41481889.05 41481889.26 0.0142 0.0070

Uranus 108862-01-27 01:11 G 41482115.36 41482115.55 41482115.77 0.0142 0.0053

Uranus 108862-09-10 13:39 G 41482341.85 41482342.07 41482342.28 0.0142 0.0036

Uranus 108863-04-25 01:54 G 41482568.37 41482568.58 41482568.81 0.0142 0.0019

Uranus 108863-12-07 14:23 G 41482794.88 41482795.10 41482795.32 0.0143 0.0002

Uranus 108864-07-21 02:51 G 41483021.40 41483021.62 41483021.84 0.0143 0.0017

Uranus 108865-03-04 15:35 G 41483247.93 41483248.15 41483248.36 0.0143 0.0034

Uranus 108865-10-17 04:03 G 41483474.47 41483474.67 41483474.88 0.0143 0.0052

Uranus 108866-05-31 16:47 G 41483701.02 41483701.20 41483701.41 0.0143 0.0069

Uranus 108867-01-13 05:44 G 41483927.57 41483927.74 41483927.92 0.0143 0.0086

Jupiter 108867-04-08 07:54 G 41484012.78 41484012.83 41484012.88 0.0511 0.0495

Uranus 108867-08-27 18:27 G 41484154.13 41484154.27 41484154.43 0.0143 0.0103

Jupiter 108867-12-01 02:37 G 41484249.49 41484249.61 41484249.74 0.0520 0.0405

Uranus 108868-04-10 07:25 G 41484380.70 41484380.81 41484380.94 0.0143 0.0120

Uranus 108868-11-22 20:37 G 41484607.30 41484607.36 41484607.43 0.0143 0.0136

Jupiter 108873-02-12 05:01 G 41486149.51 41486149.71 41486149.91 0.0512 0.0115

Saturn 108874-01-19 19:39 G 41486491.15 41486491.32 41486491.51 0.0266 0.0141

Saturn 108874-09-05 17:15 G 41486720.04 41486720.22 41486720.40 0.0267 0.0125

Jupiter 108879-08-05 23:30 G 41488515.29 41488515.48 41488515.68 0.0517 0.0147

Jupiter 108884-10-17 23:15 G 41490415.34 41490415.47 41490415.62 0.0514 0.0372

Mars 108885-11-04 02:51 G 41490797.45 41490797.62 41490797.78 0.1954 0.0477

Saturn 108888-07-03 16:47 G 41491770.00 41491770.20 41491770.42 0.0295 0.0069

Mars 108888-08-11 17:15 G 41491809.04 41491809.22 41491809.40 0.1589 0.0244

Jupiter 108891-04-10 21:20 G 41492781.19 41492781.39 41492781.59 0.0515 0.0108

Jupiter 108897-02-14 23:59 G 41494918.33 41494918.50 41494918.68 0.0508 0.0283

Uranus 108899-04-10 02:37 G 41495702.61 41495702.61 41495702.66 0.0137 0.0136

Uranus 108899-11-22 09:06 G 41495928.79 41495928.88 41495928.99 0.0136 0.0121

Uranus 108900-07-06 15:06 G 41496155.01 41496155.13 41496155.27 0.0136 0.0108

Uranus 108901-02-17 21:06 G 41496381.23 41496381.38 41496381.54 0.0136 0.0093

Uranus 108901-10-02 02:51 G 41496607.46 41496607.62 41496607.81 0.0136 0.0079

Uranus 108902-05-16 08:37 G 41496833.68 41496833.86 41496834.06 0.0136 0.0065

Jupiter 108902-12-15 19:54 G 41497047.19 41497047.33 41497047.48 0.0513 0.0355

Uranus 108902-12-28 14:08 G 41497059.90 41497060.09 41497060.30 0.0136 0.0051

Saturn 108903-08-02 22:03 G 41497277.24 41497277.42 41497277.62 0.0265 0.0106

Uranus 108903-08-11 19:39 G 41497286.12 41497286.32 41497286.53 0.0136 0.0036

Saturn 108904-03-18 19:39 G 41497506.15 41497506.32 41497506.49 0.0266 0.0159

Uranus 108904-03-25 01:11 G 41497512.34 41497512.55 41497512.76 0.0136 0.0022

Uranus 108904-11-06 06:27 G 41497738.56 41497738.77 41497738.99 0.0135 0.0007

Uranus 108905-06-20 11:44 G 41497964.77 41497964.99 41497965.20 0.0135 0.0007

Uranus 108906-02-01 16:32 G 41498190.99 41498191.19 41498191.41 0.0135 0.0022

Uranus 108906-09-15 21:35 G 41498417.20 41498417.40 41498417.61 0.0135 0.0036

Uranus 108907-04-30 02:23 G 41498643.41 41498643.60 41498643.80 0.0135 0.0050

Uranus 108907-12-12 07:11 G 41498869.62 41498869.80 41498869.99 0.0135 0.0064

Uranus 108908-07-25 11:44 G 41499095.83 41499095.99 41499096.18 0.0135 0.0078

Jupiter 108908-10-21 18:13 G 41499184.05 41499184.26 41499184.46 0.0510 0.0031

Uranus 108909-03-08 16:18 G 41499322.04 41499322.18 41499322.35 0.0135 0.0091

Uranus 108909-10-20 21:06 G 41499548.26 41499548.38 41499548.53 0.0135 0.0104

Uranus 108910-06-04 01:39 G 41499774.48 41499774.57 41499774.69 0.0135 0.0117

Uranus 108911-01-16 06:13 G 41500000.72 41500000.76 41500000.82 0.0135 0.0130

Neptune 108911-04-14 19:39 G 41500089.28 41500089.32 41500089.40 0.0088 0.0084

Neptune 108911-11-26 08:37 G 41500314.77 41500314.86 41500315.01 0.0088 0.0075

Neptune 108912-07-08 22:03 G 41500540.29 41500540.42 41500540.59 0.0088 0.0065

Neptune 108913-02-19 11:15 G 41500765.81 41500765.97 41500766.16 0.0088 0.0055

Neptune 108913-10-03 00:42 G 41500991.35 41500991.53 41500991.73 0.0088 0.0045

Neptune 108914-05-16 14:08 G 41501216.89 41501217.09 41501217.30 0.0088 0.0035

Neptune 108914-12-28 03:06 G 41501442.43 41501442.63 41501442.86 0.0088 0.0026

Jupiter 108915-04-14 13:25 G 41501549.90 41501550.06 41501550.22 0.0519 0.0299

Neptune 108915-08-10 16:32 G 41501667.98 41501668.19 41501668.42 0.0088 0.0016

Neptune 108916-03-23 05:59 G 41501893.53 41501893.75 41501893.98 0.0088 0.0006

Neptune 108916-11-03 19:25 G 41502119.08 41502119.31 41502119.53 0.0088 0.0005

Neptune 108917-06-17 08:23 G 41502344.64 41502344.85 41502345.08 0.0088 0.0015

Saturn 108918-01-15 00:27 G 41502556.31 41502556.52 41502556.74 0.0295 0.0016

Neptune 108918-01-28 21:35 G 41502570.20 41502570.40 41502570.63 0.0088 0.0025

Neptune 108918-09-11 10:47 G 41502795.76 41502795.95 41502796.18 0.0088 0.0035

Neptune 108919-04-25 00:42 G 41503021.34 41503021.53 41503021.73 0.0088 0.0044

Neptune 108919-12-06 13:54 G 41503246.91 41503247.08 41503247.27 0.0088 0.0054

Jupiter 108920-06-26 12:13 G 41503449.83 41503450.01 41503450.20 0.0513 0.0227

Neptune 108920-07-19 03:06 G 41503472.50 41503472.63 41503472.80 0.0088 0.0064

Neptune 108921-03-01 16:32 G 41503698.09 41503698.19 41503698.33 0.0088 0.0074

Neptune 108921-10-13 05:44 G 41503923.70 41503923.74 41503923.84 0.0088 0.0084

Jupiter 108926-12-18 09:06 G 41505815.68 41505815.88 41505816.08 0.0516 0.0037

Moon 108926-12-29 19:25 G 41505827.22 41505827.31 41505827.40 0.2687 0.2246

Earth 108926-12-29 20:23 G 41505827.27 41505827.35 41505827.43 0.2694 0.2298 *

Jupiter 108932-03-01 05:30 G 41507715.67 41507715.73 41507715.80 0.0516 0.0489

Jupiter 108932-10-24 11:44 G 41507952.88 41507952.99 41507953.11 0.0507 0.0420

Saturn 108933-02-12 05:30 G 41508063.53 41508063.73 41508063.94 0.0266 0.0057

Saturn 108933-09-29 03:06 G 41508292.51 41508292.63 41508292.77 0.0267 0.0210

Moon 108934-12-27 08:08 G 41508746.74 41508746.84 41508746.94 0.2690 0.2053

Earth 108934-12-27 13:11 G 41508746.91 41508747.05 41508747.19 0.2693 0.1160 *

Jupiter 108938-08-23 06:13 G 41510081.58 41510081.76 41510081.95 0.0514 0.0218

Uranus 108942-08-21 22:03 G 41511541.39 41511541.42 41511541.48 0.0142 0.0139

Uranus 108943-04-05 09:35 G 41511767.80 41511767.90 41511768.02 0.0142 0.0123

Uranus 108943-11-17 21:06 G 41511994.25 41511994.38 41511994.53 0.0142 0.0107

Jupiter 108944-06-29 06:56 G 41512218.59 41512218.79 41512218.98 0.0509 0.0169

Uranus 108944-07-01 08:37 G 41512220.70 41512220.86 41512221.04 0.0142 0.0091

Uranus 108945-02-12 20:37 G 41512447.17 41512447.36 41512447.55 0.0142 0.0074

Uranus 108945-09-27 08:37 G 41512673.66 41512673.86 41512674.06 0.0142 0.0057

Uranus 108946-05-11 20:37 G 41512900.16 41512900.36 41512900.58 0.0142 0.0041

Uranus 108946-12-24 08:51 G 41513126.66 41513126.87 41513127.10 0.0142 0.0024

Saturn 108947-07-28 12:27 G 41513342.81 41513343.02 41513343.24 0.0295 0.0053

Uranus 108947-08-07 21:20 G 41513353.17 41513353.39 41513353.61 0.0143 0.0006

Uranus 108948-03-21 09:49 G 41513579.69 41513579.91 41513580.13 0.0143 0.0012

Uranus 108948-11-02 22:18 G 41513806.22 41513806.43 41513806.65 0.0143 0.0029

Uranus 108949-06-17 10:47 G 41514032.75 41514032.95 41514033.17 0.0143 0.0047

Uranus 108950-01-29 23:30 G 41514259.29 41514259.48 41514259.69 0.0143 0.0064

Jupiter 108950-04-28 03:49 G 41514347.59 41514347.66 41514347.75 0.0512 0.0468

Uranus 108950-09-13 12:13 G 41514485.84 41514486.01 41514486.20 0.0143 0.0081

Jupiter 108950-12-20 23:30 G 41514584.37 41514584.48 41514584.59 0.0520 0.0437

Uranus 108951-04-28 01:11 G 41514712.40 41514712.55 41514712.72 0.0143 0.0098

Mars 108951-09-02 05:01 G 41514839.59 41514839.71 41514839.84 0.1951 0.1284

Uranus 108951-12-10 14:08 G 41514938.97 41514939.09 41514939.23 0.0143 0.0115

Uranus 108952-07-24 02:51 G 41515165.55 41515165.62 41515165.72 0.0143 0.0132

Mars 108954-06-10 05:30 G 41515851.56 41515851.73 41515851.90 0.1591 0.0442

Jupiter 108956-03-04 02:23 G 41516484.40 41516484.60 41516484.80 0.0511 0.0081

Saturn 108962-08-25 08:37 G 41518849.65 41518849.86 41518850.07 0.0266 0.0021

Jupiter 108962-08-25 21:20 G 41518850.20 41518850.39 41518850.58 0.0518 0.0182

Saturn 108963-04-11 05:59 G 41519078.67 41519078.75 41519078.83 0.0267 0.0245

Jupiter 108967-11-07 19:39 G 41520750.17 41520750.32 41520750.47 0.0514 0.0341

Jupiter 108974-04-30 19:11 G 41523116.10 41523116.30 41523116.50 0.0516 0.0072

Pluto 108975-08-17 20:23 G 41523590.19 41523590.35 41523590.54 0.0063 0.0038

Pluto 108976-03-29 23:59 G 41523815.29 41523815.50 41523815.72 0.0064 0.0002

Saturn 108976-06-21 15:06 G 41523899.07 41523899.13 41523899.22 0.0296 0.0275

Pluto 108976-11-10 03:06 G 41524040.48 41524040.63 41524040.82 0.0064 0.0041

Saturn 108977-02-06 20:08 G 41524129.14 41524129.34 41524129.54 0.0295 0.0105

Jupiter 108980-03-06 19:25 G 41525253.15 41525253.31 41525253.47 0.0508 0.0312

Uranus 108983-07-23 19:39 G 41526487.25 41526487.32 41526487.42 0.0136 0.0125

Uranus 108984-03-06 01:54 G 41526713.47 41526713.58 41526713.71 0.0136 0.0111

Uranus 108984-10-18 07:54 G 41526939.70 41526939.83 41526940.00 0.0136 0.0097

Uranus 108985-06-01 13:54 G 41527165.92 41527166.08 41527166.26 0.0136 0.0083

Jupiter 108986-01-03 15:49 G 41527382.01 41527382.16 41527382.32 0.0513 0.0328

Uranus 108986-01-13 19:25 G 41527392.14 41527392.31 41527392.51 0.0136 0.0069

Mars 108986-06-08 22:32 G 41527538.37 41527538.44 41527538.51 0.1586 0.1452

Uranus 108986-08-28 01:25 G 41527618.36 41527618.56 41527618.76 0.0136 0.0054

Uranus 108987-04-11 06:42 G 41527844.59 41527844.78 41527844.99 0.0136 0.0040

Uranus 108987-11-23 12:13 G 41528070.81 41528071.01 41528071.23 0.0136 0.0025

Uranus 108988-07-06 17:30 G 41528297.02 41528297.23 41528297.45 0.0135 0.0011

Uranus 108989-02-17 22:47 G 41528523.23 41528523.45 41528523.66 0.0135 0.0003

Uranus 108989-10-02 03:49 G 41528749.45 41528749.66 41528749.87 0.0135 0.0018

Uranus 108990-05-16 08:37 G 41528975.66 41528975.86 41528976.08 0.0135 0.0032

Uranus 108990-12-28 13:25 G 41529201.87 41529202.06 41529202.27 0.0135 0.0046

Saturn 108991-07-21 18:13 G 41529407.17 41529407.26 41529407.36 0.0266 0.0237

Uranus 108991-08-11 17:59 G 41529428.08 41529428.25 41529428.46 0.0135 0.0060

Jupiter 108991-11-10 13:39 G 41529518.86 41529519.07 41529519.27 0.0511 0.0057

Saturn 108992-03-06 15:49 G 41529635.95 41529636.16 41529636.36 0.0266 0.0029

Uranus 108992-03-24 23:01 G 41529654.28 41529654.46 41529654.64 0.0135 0.0073

Uranus 108992-11-06 03:35 G 41529880.50 41529880.65 41529880.82 0.0135 0.0087

Uranus 108993-06-20 08:23 G 41530106.71 41530106.85 41530106.99 0.0135 0.0100

Neptune 108994-01-13 13:54 G 41530313.99 41530314.08 41530314.18 0.0090 0.0080

Uranus 108994-02-01 12:56 G 41530332.93 41530333.04 41530333.15 0.0135 0.0113

Neptune 108994-08-27 02:37 G 41530539.48 41530539.61 41530539.75 0.0090 0.0070

Uranus 108994-09-15 17:01 G 41530559.16 41530559.21 41530559.30 0.0135 0.0127

Neptune 108995-04-09 15:20 G 41530764.99 41530765.14 41530765.31 0.0090 0.0060

Neptune 108995-11-21 04:03 G 41530990.51 41530990.67 41530990.86 0.0090 0.0050

Neptune 108996-07-03 16:47 G 41531216.02 41531216.20 41531216.41 0.0090 0.0040

Neptune 108997-02-14 05:30 G 41531441.54 41531441.73 41531441.95 0.0090 0.0030

Neptune 108997-09-27 18:42 G 41531667.07 41531667.28 41531667.50 0.0090 0.0019

Jupiter 108998-05-03 07:54 G 41531884.68 41531884.83 41531884.99 0.0519 0.0324

Neptune 108998-05-11 07:25 G 41531892.60 41531892.81 41531893.03 0.0090 0.0009

Neptune 108998-12-22 20:08 G 41532118.13 41532118.34 41532118.56 0.0090 0.0003

Neptune 108999-08-05 08:51 G 41532343.66 41532343.87 41532344.09 0.0090 0.0012

Neptune 109000-03-18 21:35 G 41532569.20 41532569.40 41532569.61 0.0090 0.0022

Neptune 109000-10-30 10:32 G 41532794.74 41532794.94 41532795.14 0.0090 0.0032

110TH MILLENNIUM CE

This is a list of transits of Venus in the 110th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 109001-06-12 23:15 G 41533020.28 41533020.47 41533020.66 0.0090 0.0042

Neptune 109002-01-24 11:15 G 41533245.82 41533245.97 41533246.17 0.0090 0.0053

Neptune 109002-09-06 23:59 G 41533471.36 41533471.50 41533471.67 0.0090 0.0063

Neptune 109003-04-20 12:27 G 41533696.92 41533697.02 41533697.17 0.0090 0.0073

Jupiter 109003-07-17 08:08 G 41533784.65 41533784.84 41533785.03 0.0513 0.0200

Neptune 109003-12-02 01:11 G 41533922.49 41533922.55 41533922.65 0.0090 0.0083

Saturn 109006-01-03 04:03 G 41534685.53 41534685.67 41534685.83 0.0295 0.0204

Saturn 109006-08-21 08:37 G 41534915.70 41534915.86 41534916.04 0.0294 0.0175

Jupiter 109010-01-07 04:32 G 41536150.49 41536150.69 41536150.89 0.0517 0.0064

Jupiter 109015-03-22 03:20 G 41538050.55 41538050.64 41538050.73 0.0515 0.0454

Jupiter 109015-11-14 08:37 G 41538287.77 41538287.86 41538287.96 0.0507 0.0451

Mars 109020-04-07 17:44 G 41539894.08 41539894.24 41539894.40 0.1592 0.0634

Saturn 109021-01-31 21:49 G 41540193.27 41540193.41 41540193.54 0.0265 0.0198

Jupiter 109021-09-12 03:06 G 41540416.44 41540416.63 41540416.82 0.0515 0.0187

Saturn 109021-09-17 19:11 G 41540422.10 41540422.30 41540422.50 0.0266 0.0066

Uranus 109026-12-04 15:49 G 41542326.08 41542326.16 41542326.26 0.0142 0.0128

Uranus 109027-07-19 03:20 G 41542552.51 41542552.64 41542552.78 0.0142 0.0112

Jupiter 109027-07-20 03:06 G 41542553.44 41542553.63 41542553.82 0.0509 0.0201

Uranus 109028-03-01 14:51 G 41542778.97 41542779.12 41542779.29 0.0142 0.0096

Uranus 109028-10-14 02:23 G 41543005.44 41543005.60 41543005.80 0.0142 0.0080

Uranus 109029-05-28 14:23 G 41543231.92 41543232.10 41543232.31 0.0142 0.0063

Uranus 109030-01-10 02:23 G 41543458.40 41543458.60 41543458.82 0.0142 0.0047

Uranus 109030-08-24 14:51 G 41543684.90 41543685.12 41543685.34 0.0142 0.0029

Uranus 109031-04-08 03:20 G 41543911.42 41543911.64 41543911.86 0.0143 0.0012

Uranus 109031-11-20 15:35 G 41544137.93 41544138.15 41544138.38 0.0143 0.0007

Uranus 109032-07-04 04:03 G 41544364.45 41544364.67 41544364.89 0.0143 0.0024

Uranus 109033-02-15 16:32 G 41544590.98 41544591.19 41544591.41 0.0143 0.0041

Jupiter 109033-05-18 01:39 G 41544682.47 41544682.57 41544682.68 0.0512 0.0434

Uranus 109033-09-30 05:15 G 41544817.52 41544817.72 41544817.93 0.0143 0.0058

Jupiter 109034-01-09 21:20 G 41544919.31 41544919.39 41544919.47 0.0520 0.0474

Uranus 109034-05-14 17:59 G 41545044.08 41545044.25 41545044.45 0.0143 0.0076

Uranus 109034-12-27 06:42 G 41545270.63 41545270.78 41545270.97 0.0143 0.0094

Saturn 109035-07-16 10:32 G 41545471.77 41545471.94 41545472.13 0.0296 0.0155

Uranus 109035-08-10 19:39 G 41545497.20 41545497.32 41545497.48 0.0143 0.0110

Saturn 109036-03-02 15:20 G 41545702.01 41545702.14 41545702.28 0.0294 0.0225

Uranus 109036-03-24 08:51 G 41545723.78 41545723.87 41545723.98 0.0143 0.0127

Uranus 109036-11-05 22:03 G 41545950.42 41545950.42 41545950.43 0.0143 0.0143

Jupiter 109039-03-24 21:35 G 41546819.19 41546819.40 41546819.60 0.0511 0.0054

Jupiter 109045-09-14 17:30 G 41549185.05 41549185.23 41549185.41 0.0518 0.0211

Saturn 109050-08-14 04:03 G 41550979.51 41550979.67 41550979.85 0.0266 0.0153

Jupiter 109050-11-27 14:37 G 41551084.94 41551085.11 41551085.27 0.0514 0.0317

Saturn 109051-03-31 01:39 G 41551208.38 41551208.57 41551208.76 0.0267 0.0113

Mars 109052-04-06 10:32 G 41551580.84 41551580.94 41551581.05 0.1587 0.1258

Earth 109056-06-26 16:03 G 41553123.01 41553123.17 41553123.33 0.2639 0.0443

Moon 109056-06-26 21:35 G 41553123.23 41553123.40 41553123.56 0.2636 0.0170 *

Jupiter 109057-05-20 14:23 G 41553450.90 41553451.10 41553451.30 0.0515 0.0046

Jupiter 109063-03-27 15:20 G 41555587.99 41555588.14 41555588.30 0.0508 0.0339

Saturn 109065-01-25 23:44 G 41556258.29 41556258.49 41556258.70 0.0295 0.0083

Pluto 109065-10-02 18:27 G 41556508.06 41556508.27 41556508.50 0.0080 0.0013

Pluto 109066-05-16 05:44 G 41556733.64 41556733.74 41556733.86 0.0080 0.0070

Uranus 109067-03-24 07:11 G 41557045.75 41557045.80 41557045.89 0.0136 0.0129

Uranus 109067-11-05 13:39 G 41557271.96 41557272.07 41557272.19 0.0136 0.0115

Uranus 109068-06-18 19:39 G 41557498.18 41557498.32 41557498.47 0.0136 0.0100

Jupiter 109069-01-23 10:47 G 41557716.79 41557716.95 41557717.12 0.0513 0.0302

Uranus 109069-01-31 01:39 G 41557724.41 41557724.57 41557724.74 0.0136 0.0086

Uranus 109069-09-14 07:25 G 41557950.63 41557950.81 41557951.00 0.0136 0.0072

Uranus 109070-04-28 12:56 G 41558176.86 41558177.04 41558177.25 0.0136 0.0058

Uranus 109070-12-10 18:27 G 41558403.08 41558403.27 41558403.48 0.0136 0.0044

Uranus 109071-07-24 23:59 G 41558629.30 41558629.50 41558629.71 0.0136 0.0029

Uranus 109072-03-07 05:15 G 41558855.51 41558855.72 41558855.94 0.0135 0.0015

Uranus 109072-10-19 10:32 G 41559081.73 41559081.94 41559082.16 0.0135 0.0003

Uranus 109073-06-02 15:35 G 41559307.94 41559308.15 41559308.37 0.0135 0.0014

Uranus 109074-01-14 20:23 G 41559534.15 41559534.35 41559534.57 0.0135 0.0029

Uranus 109074-08-29 01:11 G 41559760.36 41559760.55 41559760.76 0.0135 0.0042

Jupiter 109074-11-30 11:30 G 41559853.77 41559853.98 41559854.18 0.0510 0.0092

Uranus 109075-04-12 05:59 G 41559986.56 41559986.75 41559986.95 0.0135 0.0056

Neptune 109075-07-18 05:01 G 41560083.69 41560083.71 41560083.77 0.0088 0.0086

Uranus 109075-11-24 10:47 G 41560212.78 41560212.95 41560213.14 0.0135 0.0070

Neptune 109076-02-28 18:27 G 41560309.17 41560309.27 41560309.39 0.0088 0.0076

Uranus 109076-07-07 15:35 G 41560438.99 41560439.15 41560439.32 0.0135 0.0083

Neptune 109076-10-11 07:25 G 41560534.69 41560534.81 41560534.98 0.0088 0.0067

Uranus 109077-02-18 19:54 G 41560665.20 41560665.33 41560665.49 0.0135 0.0097

Neptune 109077-05-24 20:51 G 41560760.22 41560760.37 41560760.56 0.0088 0.0057

Uranus 109077-10-03 00:27 G 41560891.41 41560891.52 41560891.65 0.0135 0.0110

Neptune 109078-01-05 10:18 G 41560985.75 41560985.93 41560986.12 0.0088 0.0047

Uranus 109078-05-17 05:01 G 41561117.64 41561117.71 41561117.81 0.0135 0.0123

Neptune 109078-08-18 23:30 G 41561211.28 41561211.48 41561211.69 0.0088 0.0037

Neptune 109079-04-01 12:42 G 41561436.83 41561437.03 41561437.26 0.0088 0.0028

Neptune 109079-11-13 02:08 G 41561662.37 41561662.59 41561662.82 0.0088 0.0017

Saturn 109080-02-24 07:54 G 41561765.64 41561765.83 41561766.02 0.0265 0.0114

Neptune 109080-06-25 15:20 G 41561887.92 41561888.14 41561888.37 0.0088 0.0008

Saturn 109080-10-10 05:15 G 41561994.55 41561994.72 41561994.89 0.0266 0.0150

Neptune 109081-02-06 04:32 G 41562113.47 41562113.69 41562113.92 0.0088 0.0003

Jupiter 109081-05-23 05:15 G 41562219.57 41562219.72 41562219.86 0.0520 0.0357

Neptune 109081-09-19 17:44 G 41562339.02 41562339.24 41562339.47 0.0088 0.0012

Neptune 109082-05-03 07:25 G 41562564.59 41562564.81 41562565.02 0.0088 0.0022

Neptune 109082-12-14 20:23 G 41562790.15 41562790.35 41562790.57 0.0088 0.0032

Neptune 109083-07-28 09:35 G 41563015.71 41563015.90 41563016.11 0.0088 0.0042

Neptune 109084-03-09 22:47 G 41563241.29 41563241.45 41563241.65 0.0088 0.0052

Neptune 109084-10-21 11:59 G 41563466.86 41563467.00 41563467.18 0.0088 0.0062

Neptune 109085-06-04 01:25 G 41563692.45 41563692.56 41563692.71 0.0088 0.0072

Neptune 109086-01-15 15:06 G 41563918.06 41563918.13 41563918.22 0.0088 0.0081

Mars 109086-02-03 05:44 G 41563936.59 41563936.74 41563936.89 0.1594 0.0837

Jupiter 109086-08-05 05:15 G 41564119.53 41564119.72 41564119.92 0.0512 0.0166

Jupiter 109093-01-26 02:51 G 41566485.43 41566485.62 41566485.82 0.0517 0.0102

Saturn 109094-08-08 05:15 G 41567044.51 41567044.72 41567044.93 0.0295 0.0036

Jupiter 109098-04-09 23:01 G 41568385.35 41568385.46 41568385.58 0.0515 0.0425

Jupiter 109098-12-03 04:18 G 41568622.62 41568622.68 41568622.74 0.0507 0.0481

Jupiter 109104-10-02 00:27 G 41570751.33 41570751.52 41570751.71 0.0514 0.0155

Saturn 109109-09-06 13:39 G 41572551.87 41572552.07 41572552.27 0.0266 0.0070

Saturn 109110-04-23 11:01 G 41572780.82 41572780.96 41572781.10 0.0267 0.0196

Uranus 109110-08-04 22:32 G 41572884.38 41572884.44 41572884.53 0.0142 0.0133

Jupiter 109110-08-08 22:32 G 41572888.26 41572888.44 41572888.63 0.0509 0.0229

Uranus 109111-03-19 10:03 G 41573110.81 41573110.92 41573111.05 0.0142 0.0117

Uranus 109111-10-31 21:35 G 41573337.25 41573337.40 41573337.56 0.0142 0.0101

Uranus 109112-06-14 09:06 G 41573563.71 41573563.88 41573564.07 0.0142 0.0085

Uranus 109113-01-26 20:51 G 41573790.18 41573790.37 41573790.57 0.0142 0.0068

Uranus 109113-09-10 08:51 G 41574016.67 41574016.87 41574017.08 0.0142 0.0051

Uranus 109114-04-24 21:06 G 41574243.17 41574243.38 41574243.60 0.0142 0.0034

Uranus 109114-12-07 09:20 G 41574469.67 41574469.89 41574470.11 0.0143 0.0017

Mars 109115-04-28 10:03 G 41574611.81 41574611.92 41574612.03 0.1954 0.1439

Uranus 109115-07-21 21:35 G 41574696.18 41574696.40 41574696.62 0.0143 0.0001

Uranus 109116-03-04 10:03 G 41574922.70 41574922.92 41574923.14 0.0143 0.0018

Jupiter 109116-06-06 21:49 G 41575017.29 41575017.41 41575017.54 0.0512 0.0405

Uranus 109116-10-16 22:32 G 41575149.23 41575149.44 41575149.66 0.0143 0.0035

Jupiter 109117-01-29 17:01 G 41575254.17 41575254.21 41575254.27 0.0520 0.0502

Uranus 109117-05-31 11:01 G 41575375.76 41575375.96 41575376.18 0.0143 0.0053

Uranus 109118-01-12 23:44 G 41575602.31 41575602.49 41575602.69 0.0143 0.0070

Mars 109118-02-02 23:01 G 41575623.33 41575623.46 41575623.59 0.1589 0.1072

Uranus 109118-08-27 12:27 G 41575828.86 41575829.02 41575829.21 0.0143 0.0087

Uranus 109119-04-11 01:25 G 41576055.42 41576055.56 41576055.73 0.0143 0.0105

Uranus 109119-11-23 14:23 G 41576282.00 41576282.10 41576282.23 0.0143 0.0122

Uranus 109120-07-07 03:49 G 41576508.60 41576508.66 41576508.72 0.0143 0.0138

Jupiter 109122-04-13 17:59 G 41577154.04 41577154.25 41577154.46 0.0511 0.0024

Saturn 109124-02-19 17:44 G 41577831.03 41577831.24 41577831.45 0.0295 0.0033

Jupiter 109128-10-04 12:42 G 41579519.86 41579520.03 41579520.21 0.0518 0.0240

Jupiter 109133-12-17 13:39 G 41581419.90 41581420.07 41581420.24 0.0514 0.0276

Saturn 109139-03-19 17:01 G 41583338.01 41583338.21 41583338.42 0.0265 0.0033

Saturn 109139-11-03 14:08 G 41583567.00 41583567.09 41583567.20 0.0266 0.0233

Jupiter 109140-06-09 11:01 G 41583785.76 41583785.96 41583786.16 0.0516 0.0017

Jupiter 109146-04-16 13:11 G 41585922.92 41585923.05 41585923.19 0.0508 0.0376

Uranus 109150-11-22 18:13 G 41587604.23 41587604.26 41587604.34 0.0137 0.0133

Uranus 109151-07-07 00:42 G 41587830.44 41587830.53 41587830.65 0.0136 0.0119

Mars 109151-12-02 18:13 G 41587979.12 41587979.26 41587979.39 0.1595 0.1032

Jupiter 109152-02-13 09:49 G 41588051.74 41588051.91 41588052.09 0.0514 0.0263

Uranus 109152-02-18 06:56 G 41588056.66 41588056.79 41588056.94 0.0136 0.0104

Uranus 109152-10-01 12:56 G 41588282.90 41588283.04 41588283.22 0.0136 0.0091

Uranus 109153-05-15 18:56 G 41588509.12 41588509.29 41588509.48 0.0136 0.0076

Saturn 109153-08-31 21:35 G 41588617.19 41588617.40 41588617.61 0.0295 0.0075

Uranus 109153-12-28 00:27 G 41588735.35 41588735.52 41588735.73 0.0136 0.0062

Uranus 109154-08-11 06:27 G 41588961.57 41588961.77 41588961.97 0.0136 0.0047

Uranus 109155-03-25 11:44 G 41589187.79 41589187.99 41589188.20 0.0136 0.0033

Uranus 109155-11-06 17:15 G 41589414.01 41589414.22 41589414.43 0.0136 0.0018

Uranus 109156-06-19 22:18 G 41589640.22 41589640.43 41589640.65 0.0135 0.0005

Uranus 109157-02-01 03:20 G 41589866.43 41589866.64 41589866.86 0.0135 0.0010

Uranus 109157-09-15 08:23 G 41590092.64 41590092.85 41590093.06 0.0135 0.0024

Jupiter 109157-12-20 07:54 G 41590188.64 41590188.83 41590189.04 0.0510 0.0126

Neptune 109158-04-18 23:15 G 41590308.40 41590308.47 41590308.56 0.0090 0.0083

Uranus 109158-04-29 13:11 G 41590318.85 41590319.05 41590319.26 0.0135 0.0038

Neptune 109158-11-30 11:59 G 41590533.89 41590534.00 41590534.14 0.0090 0.0073

Uranus 109158-12-11 17:59 G 41590545.06 41590545.25 41590545.45 0.0135 0.0052

Neptune 109159-07-14 00:42 G 41590759.39 41590759.53 41590759.70 0.0090 0.0063

Uranus 109159-07-25 22:32 G 41590771.26 41590771.44 41590771.64 0.0135 0.0066

Neptune 109160-02-24 13:25 G 41590984.90 41590985.06 41590985.25 0.0090 0.0053

Uranus 109160-03-08 03:20 G 41590997.47 41590997.64 41590997.81 0.0135 0.0080

Neptune 109160-10-07 02:23 G 41591210.43 41591210.60 41591210.81 0.0090 0.0043

Uranus 109160-10-20 07:54 G 41591223.69 41591223.83 41591223.99 0.0135 0.0093

Neptune 109161-05-20 15:06 G 41591435.95 41591436.13 41591436.35 0.0090 0.0033

Uranus 109161-06-03 12:27 G 41591449.90 41591450.02 41591450.16 0.0135 0.0106

Neptune 109162-01-01 04:03 G 41591661.47 41591661.67 41591661.88 0.0090 0.0022

Uranus 109162-01-15 16:47 G 41591676.12 41591676.20 41591676.31 0.0135 0.0120

Neptune 109162-08-14 16:47 G 41591886.99 41591887.20 41591887.42 0.0090 0.0012

Uranus 109162-08-29 21:35 G 41591902.36 41591902.40 41591902.44 0.0135 0.0132

Neptune 109163-03-28 05:30 G 41592112.52 41592112.73 41592112.95 0.0090 0.0003

Jupiter 109163-10-19 08:37 G 41592317.85 41592317.86 41592317.87 0.0511 0.0509

Neptune 109163-11-08 18:27 G 41592338.06 41592338.27 41592338.49 0.0090 0.0009

Jupiter 109164-06-12 03:20 G 41592554.51 41592554.64 41592554.77 0.0519 0.0393

Neptune 109164-06-21 07:11 G 41592563.59 41592563.80 41592564.01 0.0090 0.0019

Neptune 109165-02-01 19:54 G 41592789.13 41592789.33 41592789.54 0.0090 0.0029

Neptune 109165-09-15 08:08 G 41593014.67 41593014.84 41593015.06 0.0090 0.0040

Neptune 109166-04-28 20:51 G 41593240.21 41593240.37 41593240.57 0.0090 0.0050

Neptune 109166-12-10 09:35 G 41593465.76 41593465.90 41593466.08 0.0090 0.0060

Neptune 109167-07-23 22:18 G 41593691.31 41593691.43 41593691.58 0.0090 0.0070

Saturn 109168-02-13 00:27 G 41593895.47 41593895.52 41593895.58 0.0265 0.0255

Neptune 109168-03-05 10:47 G 41593916.88 41593916.95 41593917.07 0.0090 0.0080

Saturn 109168-09-28 21:49 G 41594124.20 41594124.41 41594124.62 0.0266 0.0009

Neptune 109168-10-16 23:44 G 41594142.49 41594142.49 41594142.51 0.0090 0.0090

Jupiter 109169-08-25 01:25 G 41594454.36 41594454.56 41594454.76 0.0513 0.0136

Earth 109169-12-31 23:15 G 41594583.40 41594583.47 41594583.54 0.2694 0.2374

Moon 109169-12-31 23:44 G 41594583.40 41594583.49 41594583.57 0.2687 0.2261 *

Jupiter 109176-02-15 23:59 G 41596820.31 41596820.50 41596820.69 0.0517 0.0134

Moon 109177-12-29 12:13 G 41597502.89 41597503.01 41597503.13 0.2688 0.1775

Earth 109177-12-29 16:03 G 41597503.03 41597503.17 41597503.31 0.2693 0.1091 *

Mars 109181-02-22 13:25 G 41598653.90 41598654.06 41598654.22 0.1952 0.0664

Jupiter 109181-04-29 20:23 G 41598720.22 41598720.35 41598720.48 0.0515 0.0393

Saturn 109182-07-27 04:03 G 41599173.55 41599173.67 41599173.80 0.0296 0.0240

Saturn 109183-03-14 09:06 G 41599403.70 41599403.88 41599404.07 0.0295 0.0141

Mars 109183-12-01 11:30 G 41599665.83 41599665.98 41599666.12 0.1590 0.0879

Jupiter 109187-10-21 19:54 G 41601086.13 41601086.33 41601086.52 0.0515 0.0127

Jupiter 109193-08-27 22:47 G 41603223.27 41603223.45 41603223.62 0.0509 0.0272

Uranus 109194-04-04 04:47 G 41603442.66 41603442.70 41603442.76 0.0141 0.0138

Uranus 109194-11-16 15:49 G 41603669.06 41603669.16 41603669.28 0.0142 0.0123

Uranus 109195-07-01 03:06 G 41603895.50 41603895.63 41603895.79 0.0142 0.0107

Uranus 109196-02-12 14:51 G 41604121.95 41604122.12 41604122.29 0.0142 0.0090

Uranus 109196-09-26 02:23 G 41604348.42 41604348.60 41604348.80 0.0142 0.0074

Uranus 109197-05-10 14:08 G 41604574.90 41604575.09 41604575.30 0.0142 0.0058

Saturn 109197-08-25 04:18 G 41604681.56 41604681.68 41604681.80 0.0264 0.0217

Uranus 109197-12-23 02:08 G 41604801.39 41604801.59 41604801.81 0.0142 0.0041

Saturn 109198-04-11 01:11 G 41604910.35 41604910.55 41604910.76 0.0265 0.0047

Uranus 109198-08-06 14:23 G 41605027.88 41605028.10 41605028.32 0.0143 0.0023

Uranus 109199-03-21 02:37 G 41605254.39 41605254.61 41605254.83 0.0143 0.0006

Jupiter 109199-06-26 18:42 G 41605352.14 41605352.28 41605352.42 0.0513 0.0373

Uranus 109199-11-02 15:06 G 41605480.91 41605481.13 41605481.35 0.0143 0.0011

Uranus 109200-06-16 03:20 G 41605707.43 41605707.64 41605707.86 0.0143 0.0029

Uranus 109201-01-28 16:03 G 41605933.96 41605934.17 41605934.38 0.0143 0.0046

Uranus 109201-09-12 04:18 G 41606160.50 41606160.68 41606160.90 0.0143 0.0064

Uranus 109202-04-26 17:15 G 41606387.05 41606387.22 41606387.42 0.0143 0.0081

Uranus 109202-12-09 06:13 G 41606613.61 41606613.76 41606613.93 0.0143 0.0098

Uranus 109203-07-23 19:11 G 41606840.18 41606840.30 41606840.44 0.0143 0.0115

Uranus 109204-03-06 08:23 G 41607066.77 41607066.85 41607066.94 0.0143 0.0132

Jupiter 109205-05-02 17:30 G 41607489.03 41607489.23 41607489.44 0.0511 0.0021

Jupiter 109211-10-24 13:10 G 41609854.88 41609855.05 41609855.22 0.0519 0.0285

Saturn 109212-02-06 06:27 G 41609959.62 41609959.77 41609959.93 0.0296 0.0203

Saturn 109212-09-23 11:30 G 41610189.81 41610189.98 41610190.15 0.0295 0.0179

Jupiter 109217-01-05 11:44 G 41611754.81 41611754.99 41611755.17 0.0513 0.0239

Mars 109217-09-29 05:58 G 41612021.64 41612021.75 41612021.86 0.1597 0.1244

Pluto 109222-04-29 12:13 G 41613694.99 41613695.01 41613695.10 0.0063 0.0062

Pluto 109222-12-10 16:03 G 41613919.98 41613920.17 41613920.38 0.0063 0.0023

Jupiter 109223-06-29 10:46 G 41614120.75 41614120.95 41614121.15 0.0516 0.0028

Pluto 109223-07-23 19:25 G 41614145.11 41614145.31 41614145.53 0.0064 0.0017

Pluto 109224-03-04 22:32 G 41614370.36 41614370.44 41614370.56 0.0064 0.0056

Saturn 109227-03-07 07:25 G 41615467.67 41615467.81 41615467.97 0.0265 0.0180

Saturn 109227-10-22 04:46 G 41615696.50 41615696.70 41615696.90 0.0266 0.0085

Jupiter 109228-09-10 04:18 G 41616020.65 41616020.68 41616020.73 0.0516 0.0504

Jupiter 109229-05-05 10:32 G 41616257.83 41616257.94 41616258.07 0.0508 0.0411

Uranus 109234-07-23 05:30 G 41618162.72 41618162.73 41618162.76 0.0137 0.0136

Jupiter 109235-03-04 08:22 G 41618386.67 41618386.85 41618387.03 0.0513 0.0226

Uranus 109235-03-06 11:58 G 41618388.91 41618389.00 41618389.10 0.0137 0.0122

Uranus 109235-10-18 17:58 G 41618615.14 41618615.25 41618615.40 0.0136 0.0109

Uranus 109236-06-01 00:13 G 41618841.37 41618841.51 41618841.68 0.0136 0.0094

Uranus 109237-01-13 06:27 G 41619067.60 41619067.77 41619067.94 0.0136 0.0080

Uranus 109237-08-27 12:13 G 41619293.82 41619294.01 41619294.20 0.0136 0.0065

Uranus 109238-04-10 17:44 G 41619520.05 41619520.24 41619520.45 0.0136 0.0051

Uranus 109238-11-22 23:15 G 41619746.27 41619746.47 41619746.68 0.0136 0.0037

Uranus 109239-07-07 04:32 G 41619972.49 41619972.69 41619972.91 0.0136 0.0023

Uranus 109240-02-18 10:03 G 41620198.70 41620198.92 41620199.13 0.0136 0.0008

Neptune 109240-06-02 03:06 G 41620303.56 41620303.63 41620303.75 0.0088 0.0079

Uranus 109240-10-01 15:20 G 41620424.92 41620425.14 41620425.35 0.0135 0.0007

Jupiter 109241-01-08 06:42 G 41620523.59 41620523.78 41620523.98 0.0510 0.0163

Neptune 109241-01-13 16:18 G 41620529.07 41620529.18 41620529.34 0.0088 0.0069

Uranus 109241-05-15 20:08 G 41620651.13 41620651.34 41620651.56 0.0135 0.0021

Saturn 109241-08-18 16:18 G 41620746.00 41620746.18 41620746.37 0.0296 0.0141

Neptune 109241-08-27 05:44 G 41620754.59 41620754.74 41620754.92 0.0088 0.0059

Uranus 109241-12-28 00:56 G 41620877.34 41620877.54 41620877.75 0.0135 0.0035

Saturn 109242-04-05 21:20 G 41620976.28 41620976.39 41620976.52 0.0295 0.0241

Neptune 109242-04-09 19:25 G 41620980.13 41620980.31 41620980.50 0.0088 0.0049

Uranus 109242-08-11 05:44 G 41621103.55 41621103.74 41621103.95 0.0135 0.0049

Neptune 109242-11-21 08:22 G 41621205.66 41621205.85 41621206.06 0.0088 0.0040

Uranus 109243-03-25 10:32 G 41621329.76 41621329.94 41621330.13 0.0135 0.0062

Neptune 109243-07-04 21:34 G 41621431.20 41621431.40 41621431.63 0.0088 0.0030

Uranus 109243-11-06 15:20 G 41621555.97 41621556.14 41621556.32 0.0135 0.0076

Neptune 109244-02-15 11:01 G 41621656.75 41621656.96 41621657.19 0.0088 0.0020

Uranus 109244-06-19 20:08 G 41621782.18 41621782.34 41621782.50 0.0135 0.0089

Neptune 109244-09-28 00:27 G 41621882.30 41621882.52 41621882.74 0.0088 0.0010

Uranus 109245-02-01 00:27 G 41622008.39 41622008.52 41622008.67 0.0135 0.0103

Neptune 109245-05-11 13:54 G 41622107.85 41622108.08 41622108.30 0.0088 0.0001

Uranus 109245-09-15 05:01 G 41622234.61 41622234.71 41622234.83 0.0135 0.0116

Neptune 109245-12-23 03:06 G 41622333.41 41622333.63 41622333.85 0.0088 0.0010

Uranus 109246-04-29 09:20 G 41622460.85 41622460.89 41622460.97 0.0135 0.0129

Neptune 109246-08-05 16:18 G 41622558.96 41622559.18 41622559.40 0.0088 0.0020

Jupiter 109246-11-07 04:18 G 41622652.62 41622652.68 41622652.75 0.0511 0.0480

Mars 109246-12-20 15:34 G 41622695.98 41622696.15 41622696.32 0.1949 0.0157

Neptune 109247-03-19 05:30 G 41622784.53 41622784.73 41622784.95 0.0088 0.0030

Jupiter 109247-07-01 23:44 G 41622889.37 41622889.49 41622889.60 0.0520 0.0426

Neptune 109247-10-30 18:42 G 41623010.09 41623010.28 41623010.49 0.0088 0.0040

Neptune 109248-06-12 07:54 G 41623235.66 41623235.83 41623236.03 0.0088 0.0050

Neptune 109249-01-23 21:06 G 41623461.23 41623461.38 41623461.56 0.0088 0.0060

Neptune 109249-09-06 10:32 G 41623686.82 41623686.94 41623687.09 0.0088 0.0069

Mars 109249-09-27 23:30 G 41623708.32 41623708.48 41623708.64 0.1592 0.0682

Neptune 109250-04-19 23:58 G 41623912.42 41623912.50 41623912.61 0.0088 0.0079

Jupiter 109252-09-13 03:20 G 41624789.44 41624789.64 41624789.84 0.0512 0.0087

Saturn 109256-09-16 11:15 G 41626253.80 41626253.97 41626254.15 0.0264 0.0142

Saturn 109257-05-03 08:08 G 41626482.66 41626482.84 41626483.03 0.0265 0.0122

Jupiter 109259-03-06 21:49 G 41627155.22 41627155.41 41627155.60 0.0518 0.0172

Jupiter 109264-05-18 21:49 G 41629055.26 41629055.41 41629055.56 0.0514 0.0345

Jupiter 109270-11-09 21:06 G 41631421.18 41631421.38 41631421.58 0.0515 0.0080

Saturn 109271-02-28 17:44 G 41631532.04 41631532.24 41631532.44 0.0296 0.0107

Saturn 109271-10-16 22:46 G 41631762.38 41631762.45 41631762.53 0.0295 0.0275

Jupiter 109276-09-15 22:03 G 41633558.26 41633558.42 41633558.58 0.0508 0.0313

Uranus 109278-07-16 23:30 G 41634227.39 41634227.48 41634227.58 0.0141 0.0127

Uranus 109279-02-28 10:46 G 41634453.82 41634453.95 41634454.09 0.0142 0.0111

Uranus 109279-10-12 22:03 G 41634680.26 41634680.42 41634680.59 0.0142 0.0095

Uranus 109280-05-26 09:20 G 41634906.72 41634906.89 41634907.09 0.0142 0.0079

Uranus 109281-01-07 21:06 G 41635133.19 41635133.38 41635133.59 0.0142 0.0063

Uranus 109281-08-22 09:06 G 41635359.67 41635359.88 41635360.09 0.0142 0.0045

Uranus 109282-04-05 21:06 G 41635586.17 41635586.38 41635586.60 0.0142 0.0029

Jupiter 109282-07-15 19:54 G 41635687.17 41635687.33 41635687.48 0.0513 0.0329

Uranus 109282-11-18 09:20 G 41635812.67 41635812.89 41635813.11 0.0143 0.0011

Uranus 109283-07-02 21:34 G 41636039.17 41636039.40 41636039.62 0.0143 0.0006

Mars 109283-07-27 18:13 G 41636064.18 41636064.26 41636064.33 0.1599 0.1447

Uranus 109284-02-14 09:34 G 41636265.69 41636265.90 41636266.13 0.0143 0.0024

Uranus 109284-09-27 22:03 G 41636492.22 41636492.42 41636492.64 0.0143 0.0041

Uranus 109285-05-12 11:01 G 41636718.76 41636718.96 41636719.16 0.0143 0.0058

Uranus 109285-12-24 23:44 G 41636945.30 41636945.49 41636945.68 0.0143 0.0075

Saturn 109286-03-29 13:25 G 41637039.87 41637040.06 41637040.25 0.0265 0.0108

Uranus 109286-08-08 12:27 G 41637171.86 41637172.02 41637172.19 0.0143 0.0093

Saturn 109286-11-13 10:18 G 41637268.77 41637268.93 41637269.10 0.0266 0.0157

Uranus 109287-03-23 01:25 G 41637398.42 41637398.56 41637398.71 0.0143 0.0110

Uranus 109287-11-04 14:22 G 41637625.01 41637625.10 41637625.21 0.0143 0.0126

Jupiter 109288-05-21 16:03 G 41637823.97 41637824.17 41637824.38 0.0511 0.0057

Uranus 109288-06-18 03:34 G 41637851.65 41637851.65 41637851.67 0.0143 0.0143

Jupiter 109294-11-12 12:27 G 41640189.87 41640190.02 41640190.18 0.0519 0.0327

Earth 109299-06-28 15:34 G 41641878.99 41641879.15 41641879.31 0.2640 0.0500

Moon 109299-06-28 19:10 G 41641879.13 41641879.30 41641879.47 0.2635 0.0371 *

Jupiter 109300-01-25 11:30 G 41642089.80 41642089.98 41642090.18 0.0513 0.0198

Saturn 109300-09-11 02:22 G 41642318.39 41642318.60 41642318.82 0.0295 0.0049

Jupiter 109306-07-19 07:39 G 41644455.62 41644455.82 41644456.02 0.0516 0.0062

Jupiter 109311-10-01 07:39 G 41646355.73 41646355.82 41646355.92 0.0516 0.0451

Jupiter 109312-05-25 13:25 G 41646592.99 41646593.06 41646593.15 0.0507 0.0463

Pluto 109312-06-14 05:58 G 41646612.61 41646612.75 41646612.90 0.0081 0.0061

Mars 109312-10-17 18:42 G 41646738.13 41646738.28 41646738.43 0.1947 0.0922

Pluto 109313-01-25 17:01 G 41646838.01 41646838.21 41646838.44 0.0080 0.0023

Mars 109315-07-27 11:58 G 41647750.83 41647751.00 41647751.17 0.1593 0.0491

Saturn 109315-10-10 17:01 G 41647826.01 41647826.21 41647826.41 0.0264 0.0070

Saturn 109316-05-26 13:39 G 41648054.93 41648055.07 41648055.22 0.0265 0.0194

Jupiter 109318-03-24 06:27 G 41648721.59 41648721.77 41648721.96 0.0514 0.0189

Uranus 109318-11-04 22:18 G 41648947.36 41648947.43 41648947.52 0.0137 0.0126

Uranus 109319-06-19 04:46 G 41649173.58 41649173.70 41649173.83 0.0136 0.0112

Uranus 109320-01-31 11:01 G 41649399.81 41649399.96 41649400.11 0.0136 0.0098

Uranus 109320-09-13 17:01 G 41649626.05 41649626.21 41649626.39 0.0136 0.0083

Uranus 109321-04-27 22:46 G 41649852.28 41649852.45 41649852.65 0.0136 0.0070

Uranus 109321-12-10 04:32 G 41650078.50 41650078.69 41650078.90 0.0136 0.0055

Neptune 109322-07-22 08:22 G 41650302.81 41650302.85 41650302.93 0.0090 0.0086

Uranus 109322-07-24 10:03 G 41650304.73 41650304.92 41650305.14 0.0136 0.0041

Neptune 109323-03-04 21:06 G 41650528.29 41650528.38 41650528.52 0.0090 0.0076

Uranus 109323-03-07 15:49 G 41650530.95 41650531.16 41650531.37 0.0136 0.0026

Neptune 109323-10-16 10:03 G 41650753.80 41650753.92 41650754.09 0.0090 0.0066

Uranus 109323-10-19 21:20 G 41650757.17 41650757.39 41650757.60 0.0136 0.0012

Jupiter 109324-01-29 09:06 G 41650858.69 41650858.88 41650859.07 0.0509 0.0213

Neptune 109324-05-28 23:01 G 41650979.31 41650979.46 41650979.64 0.0090 0.0056

Uranus 109324-06-02 02:22 G 41650983.39 41650983.60 41650983.82 0.0136 0.0003

Neptune 109325-01-09 11:44 G 41651204.82 41651204.99 41651205.19 0.0090 0.0046

Uranus 109325-01-14 07:25 G 41651209.60 41651209.81 41651210.02 0.0135 0.0017

Neptune 109325-08-23 00:42 G 41651430.33 41651430.53 41651430.73 0.0090 0.0035

Uranus 109325-08-28 12:27 G 41651435.81 41651436.02 41651436.23 0.0135 0.0031

Neptune 109326-04-05 13:25 G 41651655.86 41651656.06 41651656.27 0.0090 0.0025

Uranus 109326-04-11 17:01 G 41651662.02 41651662.21 41651662.43 0.0135 0.0046

Neptune 109326-11-17 02:08 G 41651881.38 41651881.59 41651881.81 0.0090 0.0015

Uranus 109326-11-23 22:18 G 41651888.24 41651888.43 41651888.62 0.0135 0.0059

Neptune 109327-06-30 15:06 G 41652106.91 41652107.13 41652107.34 0.0090 0.0005

Uranus 109327-07-08 02:51 G 41652114.45 41652114.62 41652114.81 0.0135 0.0073

Neptune 109328-02-11 03:34 G 41652332.44 41652332.65 41652332.87 0.0090 0.0006

Uranus 109328-02-19 07:25 G 41652340.66 41652340.81 41652340.99 0.0135 0.0086

Neptune 109328-09-23 16:18 G 41652557.98 41652558.18 41652558.40 0.0090 0.0016

Uranus 109328-10-02 12:27 G 41652566.88 41652567.02 41652567.16 0.0135 0.0099

Neptune 109329-05-07 05:01 G 41652783.51 41652783.71 41652783.92 0.0090 0.0026

Uranus 109329-05-16 16:32 G 41652793.10 41652793.19 41652793.33 0.0135 0.0113

Jupiter 109329-11-27 06:13 G 41652987.66 41652987.76 41652987.87 0.0512 0.0433

Neptune 109329-12-18 17:58 G 41653009.05 41653009.25 41653009.44 0.0090 0.0036

Uranus 109329-12-28 21:06 G 41653019.33 41653019.38 41653019.48 0.0135 0.0126

Saturn 109330-03-24 02:22 G 41653104.39 41653104.60 41653104.82 0.0296 0.0019

Jupiter 109330-07-22 01:54 G 41653224.52 41653224.58 41653224.67 0.0520 0.0480

Neptune 109330-08-01 06:13 G 41653234.59 41653234.76 41653234.96 0.0090 0.0047

Neptune 109331-03-14 18:56 G 41653460.14 41653460.29 41653460.47 0.0090 0.0057

Neptune 109331-10-26 07:39 G 41653685.70 41653685.82 41653685.98 0.0090 0.0067

Neptune 109332-06-07 20:22 G 41653911.26 41653911.35 41653911.48 0.0090 0.0077

Neptune 109333-01-19 08:51 G 41654136.84 41654136.87 41654136.95 0.0090 0.0087

Jupiter 109335-10-04 04:03 G 41655124.47 41655124.67 41655124.88 0.0512 0.0041

Jupiter 109342-03-27 00:13 G 41657490.33 41657490.51 41657490.69 0.0518 0.0222

Saturn 109345-04-21 17:58 G 41658612.05 41658612.25 41658612.46 0.0265 0.0040

Saturn 109345-12-06 14:51 G 41658841.02 41658841.12 41658841.23 0.0266 0.0226

Jupiter 109347-06-08 21:20 G 41659390.23 41659390.39 41659390.56 0.0514 0.0304

Jupiter 109353-11-29 21:49 G 41661756.21 41661756.41 41661756.61 0.0515 0.0035

Saturn 109359-10-04 10:03 G 41663890.71 41663890.92 41663891.14 0.0295 0.0037

Jupiter 109359-10-06 23:01 G 41663893.32 41663893.46 41663893.61 0.0508 0.0359

Uranus 109362-03-17 06:13 G 41664785.70 41664785.76 41664785.86 0.0141 0.0132

Uranus 109362-10-29 17:30 G 41665012.12 41665012.23 41665012.37 0.0142 0.0116

Uranus 109363-06-13 04:46 G 41665238.55 41665238.70 41665238.86 0.0142 0.0100

Uranus 109364-01-25 16:03 G 41665465.00 41665465.17 41665465.36 0.0142 0.0084

Uranus 109364-09-08 03:49 G 41665691.47 41665691.66 41665691.85 0.0142 0.0067

Uranus 109365-04-22 15:34 G 41665917.95 41665918.15 41665918.36 0.0142 0.0051

Jupiter 109365-08-04 17:15 G 41666022.06 41666022.22 41666022.39 0.0513 0.0294

Uranus 109365-12-05 03:34 G 41666144.43 41666144.65 41666144.86 0.0142 0.0034

Uranus 109366-07-19 15:20 G 41666370.92 41666371.14 41666371.36 0.0142 0.0017

Uranus 109367-03-03 03:34 G 41666597.43 41666597.65 41666597.87 0.0143 0.0001

Uranus 109367-10-15 15:49 G 41666823.94 41666824.16 41666824.38 0.0143 0.0018

Uranus 109368-05-29 04:18 G 41667050.47 41667050.68 41667050.90 0.0143 0.0036

Uranus 109369-01-10 16:46 G 41667277.00 41667277.20 41667277.42 0.0143 0.0053

Uranus 109369-08-25 05:30 G 41667503.54 41667503.73 41667503.93 0.0143 0.0070

Uranus 109370-04-08 18:27 G 41667730.10 41667730.27 41667730.45 0.0143 0.0087

Uranus 109370-11-21 07:25 G 41667956.66 41667956.81 41667956.97 0.0143 0.0104

Jupiter 109371-06-11 20:08 G 41668159.14 41668159.34 41668159.54 0.0511 0.0113

Uranus 109371-07-05 20:22 G 41668183.24 41668183.35 41668183.47 0.0143 0.0121

Uranus 109372-02-17 09:06 G 41668409.85 41668409.88 41668409.96 0.0143 0.0138

Saturn 109374-11-01 21:34 G 41669398.19 41669398.40 41669398.61 0.0265 0.0004

Saturn 109375-06-18 17:58 G 41669627.23 41669627.25 41669627.29 0.0265 0.0262

Jupiter 109377-12-02 11:30 G 41670524.85 41670524.98 41670525.13 0.0519 0.0369

Mars 109378-08-14 21:34 G 41670780.32 41670780.40 41670780.48 0.1944 0.1702

Mars 109381-05-24 00:13 G 41671793.33 41671793.51 41671793.68 0.1595 0.0290

Jupiter 109383-02-14 15:20 G 41672424.94 41672425.14 41672425.34 0.0513 0.0143

Saturn 109389-04-15 09:49 G 41674676.70 41674676.91 41674677.12 0.0296 0.0067

Jupiter 109389-08-07 10:32 G 41674790.75 41674790.94 41674791.14 0.0517 0.0116

Jupiter 109394-10-20 09:49 G 41676690.78 41676690.91 41676691.04 0.0515 0.0401

Jupiter 109401-04-13 09:34 G 41679056.71 41679056.90 41679057.10 0.0514 0.0138

Uranus 109402-07-06 08:37 G 41679505.82 41679505.86 41679505.95 0.0137 0.0130

Uranus 109403-02-17 15:06 G 41679732.04 41679732.13 41679732.27 0.0137 0.0116

Saturn 109403-09-29 00:42 G 41679955.45 41679955.53 41679955.64 0.0264 0.0237

Uranus 109403-10-01 21:34 G 41679958.28 41679958.40 41679958.56 0.0136 0.0102

Saturn 109404-05-14 21:49 G 41680184.20 41680184.41 41680184.62 0.0265 0.0027

Uranus 109404-05-15 03:49 G 41680184.51 41680184.66 41680184.84 0.0136 0.0087 *

Neptune 109404-09-05 11:58 G 41680297.93 41680298.00 41680298.11 0.0088 0.0081

Uranus 109404-12-27 10:03 G 41680410.74 41680410.92 41680411.10 0.0136 0.0073

Neptune 109405-04-19 01:25 G 41680523.44 41680523.56 41680523.70 0.0088 0.0071

Uranus 109405-08-10 15:49 G 41680636.97 41680637.16 41680637.35 0.0136 0.0058

Neptune 109405-11-30 14:22 G 41680748.96 41680749.10 41680749.28 0.0088 0.0062

Uranus 109406-03-24 21:20 G 41680863.19 41680863.39 41680863.60 0.0136 0.0044

Neptune 109406-07-14 03:34 G 41680974.49 41680974.65 41680974.85 0.0088 0.0052

Uranus 109406-11-06 02:51 G 41681089.42 41681089.62 41681089.84 0.0136 0.0030

Jupiter 109407-02-18 09:34 G 41681193.72 41681193.90 41681194.08 0.0509 0.0258

Neptune 109407-02-24 17:01 G 41681200.03 41681200.21 41681200.42 0.0088 0.0042

Uranus 109407-06-20 08:22 G 41681315.64 41681315.85 41681316.07 0.0136 0.0015

Neptune 109407-10-08 06:27 G 41681425.57 41681425.77 41681425.98 0.0088 0.0032

Uranus 109408-02-01 13:39 G 41681541.86 41681542.07 41681542.28 0.0136 0.0001

Neptune 109408-05-20 19:54 G 41681651.11 41681651.33 41681651.55 0.0088 0.0022

Uranus 109408-09-14 18:42 G 41681768.07 41681768.28 41681768.50 0.0135 0.0014

Neptune 109409-01-01 09:06 G 41681876.66 41681876.88 41681877.11 0.0088 0.0012

Uranus 109409-04-28 23:44 G 41681994.29 41681994.49 41681994.71 0.0135 0.0028

Neptune 109409-08-14 22:18 G 41682102.21 41682102.43 41682102.66 0.0088 0.0003

Uranus 109409-12-11 04:46 G 41682220.50 41682220.70 41682220.91 0.0135 0.0042

Neptune 109410-03-28 11:44 G 41682327.77 41682327.99 41682328.22 0.0088 0.0008

Uranus 109410-07-25 09:34 G 41682446.72 41682446.90 41682447.10 0.0135 0.0056

Neptune 109410-11-09 00:56 G 41682553.32 41682553.54 41682553.77 0.0088 0.0017

Uranus 109411-03-08 14:22 G 41682672.93 41682673.10 41682673.29 0.0135 0.0069

Neptune 109411-06-22 13:54 G 41682778.88 41682779.08 41682779.31 0.0088 0.0028

Uranus 109411-10-20 19:10 G 41682899.15 41682899.30 41682899.48 0.0135 0.0083

Neptune 109412-02-03 03:34 G 41683004.45 41683004.65 41683004.85 0.0088 0.0037

Uranus 109412-06-03 00:13 G 41683125.36 41683125.51 41683125.66 0.0135 0.0096

Neptune 109412-09-15 16:32 G 41683230.01 41683230.19 41683230.39 0.0088 0.0047

Jupiter 109412-12-17 07:54 G 41683322.71 41683322.83 41683322.97 0.0512 0.0386

Moon 109413-01-02 22:32 G 41683339.38 41683339.44 41683339.50 0.2699 0.2439

Earth 109413-01-03 02:08 G 41683339.52 41683339.59 41683339.65 0.2693 0.2434

Uranus 109413-01-15 04:32 G 41683351.58 41683351.69 41683351.83 0.0135 0.0110

Neptune 109413-04-29 05:58 G 41683455.59 41683455.75 41683455.93 0.0088 0.0057

Uranus 109413-08-29 09:06 G 41683577.81 41683577.88 41683577.98 0.0135 0.0123

Neptune 109413-12-10 18:56 G 41683681.17 41683681.29 41683681.46 0.0088 0.0067

Neptune 109414-07-24 08:37 G 41683906.76   41683906.86   41683906.98 0.0088 0.0076

Neptune 109415-03-06 21:49 G 41684132.38   41684132.41   41684132.47 0.0088 0.0086

Saturn   109418-03-11 11:15 G 41685232.88   41685232.97   41685233.06 0.0296 0.0266

Jupiter 109418-10-24 05:44 G 41685459.53   41685459.74   41685459.94 0.0512 0.0008

Saturn   109418-10-27 16:18 G 41685462.99   41685463.18   41685463.38 0.0295 0.0118

Earth   109420-12-31 18:42 G 41686259.14   41686259.28   41686259.42 0.2692 0.1049

Moon   109420-12-31 20:08 G 41686259.20   41686259.34   41686259.48 0.2699 0.0865 *

Jupiter 109425-04-15 22:03 G 41687825.25   41687825.42   41687825.60 0.0518 0.0261

Jupiter 109430-06-29 01:54 G 41689725.40   41689725.58   41689725.76 0.0514 0.0246

Saturn   109433-04-10 04:32 G 41690741.56   41690741.69   41690741.84 0.0264 0.0198

Saturn   109433-11-25 01:25 G 41690970.36   41690970.56   41690970.76 0.0265 0.0065

Jupiter 109436-12-19 20:51 G 41692091.17   41692091.37   41692091.57 0.0516 0.0011

Jupiter 109442-03-03 20:51 G 41693991.33   41693991.37   41693991.41 0.0516 0.0505

Jupiter 109442-10-27 02:51 G 41694228.50   41694228.62   41694228.74 0.0508 0.0414

Uranus   109445-11-15 14:51 G 41695344.08   41695344.12   41695344.20 0.0141 0.0135

Uranus   109446-06-30 01:54 G 41695570.48   41695570.58   41695570.71 0.0141 0.0120

Uranus   109447-02-11 13:10 G 41695796.91   41695797.05   41695797.20 0.0142 0.0104

Mars   109447-03-22 12:27 G 41695835.84   41695836.02   41695836.19 0.1596 0.0104

Saturn   109447-09-21 10:46 G 41696018.83   41696018.95   41696019.09 0.0296 0.0236

Uranus   109447-09-26 00:27 G 41696023.35   41696023.52   41696023.70 0.0142 0.0088

Saturn   109448-05-08 16:03 G 41696248.99   41696249.17   41696249.36 0.0295 0.0149

Uranus   109448-05-09 11:44 G 41696249.82   41696249.99   41696250.20 0.0142 0.0072

Jupiter 109448-08-24 20:22 G 41696357.18   41696357.35   41696357.53 0.0513 0.0242

Uranus   109448-12-21 23:30 G 41696476.28   41696476.48   41696476.69 0.0142 0.0055

Uranus   109449-08-05 11:15 G 41696702.76   41696702.97   41696703.19 0.0142 0.0038

Uranus   109450-03-19 23:15 G 41696929.26   41696929.47   41696929.70 0.0142 0.0022

Uranus   109450-11-01 11:30 G 41697155.76   41697155.98   41697156.20 0.0142 0.0004

Uranus   109451-06-15 23:44 G 41697382.27   41697382.49   41697382.71 0.0143 0.0014

Uranus   109452-01-28 11:58 G 41697608.79   41697609.00   41697609.22 0.0143 0.0031

Uranus   109452-09-11 00:27 G 41697835.32   41697835.52   41697835.74 0.0143 0.0049

Uranus 109453-04-25 13:10 G 41698061.87 41698062.05 41698062.26 0.0143 0.0066

Uranus 109453-12-08 02:08 G 41698288.42 41698288.59 41698288.78 0.0143 0.0083

Jupiter 109454-07-01 22:18 G 41698494.24 41698494.43 41698494.63 0.0510 0.0164

Uranus 109454-07-22 14:51 G 41698514.98 41698515.12 41698515.29 0.0143 0.0100

Uranus 109455-03-06 03:49 G 41698741.55 41698741.66 41698741.80 0.0143 0.0117

Uranus 109455-10-18 17:01 G 41698968.14 41698968.21 41698968.30 0.0143 0.0134

Jupiter 109460-04-29 20:08 G 41700623.29 41700623.34 41700623.41 0.0511 0.0486

Jupiter 109460-12-22 15:06 G 41700860.02 41700860.13 41700860.25 0.0519 0.0424

Saturn 109462-10-21 04:03 G 41701527.52 41701527.67 41701527.84 0.0264 0.0172

Saturn 109463-06-07 01:10 G 41701756.35 41701756.55 41701756.75 0.0265 0.0093

Jupiter 109466-03-06 16:18 G 41702759.97 41702760.18 41702760.38 0.0513 0.0097

Pluto 109469-08-22 10:32 G 41704024.79 41704024.94 41704025.13 0.0063 0.0039

Pluto 109470-04-04 14:08 G 41704249.88 41704250.09 41704250.31 0.0064 0.0002

Pluto 109470-11-15 17:15 G 41704475.07 41704475.22 41704475.41 0.0064 0.0040

Jupiter 109472-08-27 12:42 G 41705125.84 41705126.03 41705126.22 0.0517 0.0165

Mars 109476-06-11 23:44 G 41706510.43 41706510.49 41706510.56 0.1950 0.1796

Saturn 109477-04-02 17:15 G 41706805.06 41706805.22 41706805.39 0.0296 0.0186

Jupiter 109477-11-09 11:30 G 41707025.83 41707025.98 41707026.13 0.0515 0.0354

Saturn 109477-11-18 22:32 G 41707035.28 41707035.44 41707035.60 0.0295 0.0198

Jupiter 109484-05-02 07:54 G 41709391.64 41709391.83 41709392.03 0.0514 0.0099

Uranus 109486-03-05 19:39 G 41710064.29 41710064.32 41710064.39 0.0137 0.0133

Uranus 109486-10-18 02:37 G 41710290.51 41710290.61 41710290.72 0.0137 0.0119

Neptune 109486-10-24 17:15 G 41710297.21 41710297.22 41710297.26 0.0090 0.0089

Uranus 109487-06-01 08:51 G 41710516.75 41710516.87 41710517.02 0.0137 0.0105

Neptune 109487-06-07 05:58 G 41710522.67 41710522.75 41710522.87 0.0090 0.0079

Uranus 109488-01-13 15:06 G 41710742.98 41710743.13 41710743.30 0.0136 0.0091

Neptune 109488-01-18 18:56 G 41710748.16 41710748.29 41710748.44 0.0090 0.0069

Uranus 109488-08-26 21:06 G 41710969.21 41710969.38 41710969.57 0.0136 0.0076

Neptune 109488-08-31 07:39 G 41710973.67 41710973.82 41710974.00 0.0090 0.0059

Uranus 109489-04-10 02:51 G 41711195.44 41711195.62 41711195.82 0.0136 0.0062

Neptune 109489-04-13 20:22 G 41711199.19 41711199.35 41711199.55 0.0090 0.0049

Uranus 109489-11-22 08:51 G 41711421.67 41711421.87 41711422.07 0.0136 0.0047

Neptune 109489-11-25 09:06 G 41711424.71 41711424.88 41711425.10 0.0090 0.0039

Jupiter 109490-03-09 14:08 G 41711528.93 41711529.09 41711529.25 0.0509 0.0316

Uranus 109490-07-06 14:22 G 41711647.89 41711648.10 41711648.31 0.0136 0.0033

Neptune 109490-07-08 22:18 G 41711650.23 41711650.43 41711650.64 0.0090 0.0028

Uranus 109491-02-17 19:54 G 41711874.12 41711874.33 41711874.54 0.0136 0.0019

Neptune 109491-02-19 11:01 G 41711875.75 41711875.96 41711876.17 0.0090 0.0018

Uranus 109491-10-02 01:10 G 41712100.34 41712100.55 41712100.77 0.0136 0.0006

Neptune 109491-10-02 23:44 G 41712101.28 41712101.49 41712101.71 0.0090 0.0008

Saturn 109492-05-02 08:22 G 41712313.67 41712313.85 41712314.03 0.0264 0.0132

Uranus 109492-05-15 06:27 G 41712326.56 41712326.77 41712326.99 0.0136 0.0010

Neptune 109492-05-15 12:42 G 41712326.81 41712327.03 41712327.24 0.0090 0.0003 *

Saturn 109492-12-17 05:01 G 41712542.53 41712542.71 41712542.90 0.0265 0.0132

Neptune 109492-12-27 01:10 G 41712552.34 41712552.55 41712552.77 0.0090 0.0013

Uranus 109492-12-27 11:30 G 41712552.77 41712552.98 41712553.20 0.0135 0.0024 *

Neptune 109493-08-09 13:54 G 41712777.87 41712778.08 41712778.29 0.0090 0.0023

Uranus 109493-08-10 16:32 G 41712778.99 41712779.19 41712779.40 0.0135 0.0038

Neptune 109494-03-23 02:22 G 41713003.41 41713003.60 41713003.81 0.0090 0.0033

Uranus 109494-03-24 21:20 G 41713005.20 41713005.39 41713005.60 0.0135 0.0052

Neptune 109494-11-03 15:20 G 41713228.96 41713229.14 41713229.34 0.0090 0.0043

Uranus 109494-11-06 02:22 G 41713231.42 41713231.60 41713231.80 0.0135 0.0066

Neptune 109495-06-17 04:03 G 41713454.50 41713454.67 41713454.85 0.0090 0.0053

Uranus 109495-06-20 07:10 G 41713457.64 41713457.80 41713457.98 0.0135 0.0080

Jupiter 109496-01-06 06:56 G 41713657.65 41713657.79 41713657.94 0.0512 0.0347

Neptune 109496-01-28 16:46 G 41713680.05 41713680.20 41713680.36 0.0090 0.0063

Uranus 109496-02-01 11:58 G 41713683.86 41713684.00 41713684.16 0.0135 0.0093

Neptune 109496-09-10 05:01 G 41713905.61 41713905.71 41713905.85 0.0090 0.0074

Uranus 109496-09-14 16:46 G 41713910.07 41713910.20 41713910.33 0.0135 0.0106

Neptune 109497-04-23 18:13 G 41714131.18 41714131.26 41714131.34 0.0090 0.0083

Uranus 109497-04-28 21:06 G 41714136.30 41714136.38 41714136.50 0.0135 0.0120

Uranus 109497-12-11 01:39 G 41714362.56 41714362.57 41714362.63 0.0135 0.0133

Jupiter 109501-11-13 09:49 G 41715794.70 41715794.91 41715795.11 0.0511 0.0063

Saturn 109506-10-14 17:30 G 41717591.06 41717591.23 41717591.42 0.0296 0.0153

Saturn 109507-06-01 22:18 G 41717821.31 41717821.43 41717821.58 0.0295 0.0232

Jupiter 109508-05-06 01:39 G 41718160.41 41718160.57 41718160.73 0.0518 0.0316

Mars 109513-01-18 00:27 G 41719878.34 41719878.52 41719878.70 0.1598 0.0113

Jupiter 109513-07-19 04:32 G 41720060.50 41720060.69 41720060.88 0.0514 0.0195

Jupiter 109520-01-10 00:27 G 41722426.32 41722426.52 41722426.72 0.0516 0.0062

Saturn 109521-11-13 07:39 G 41723099.64 41723099.82 41723100.02 0.0265 0.0106

Saturn 109522-06-30 04:46 G 41723328.53 41723328.70 41723328.87 0.0265 0.0160

Jupiter 109525-03-23 21:34 G 41724326.32 41724326.40 41724326.50 0.0516 0.0459

Jupiter 109525-11-16 03:34 G 41724563.57 41724563.65 41724563.74 0.0508 0.0460

Uranus 109529-07-16 22:18 G 41725902.41 41725902.43 41725902.48 0.0141 0.0140

Uranus 109530-02-28 09:06 G 41726128.80 41726128.88 41726129.00 0.0141 0.0125

Uranus 109530-10-12 20:22 G 41726355.22 41726355.35 41726355.50 0.0142 0.0109

Uranus 109531-05-27 07:25 G 41726581.66 41726581.81 41726581.99 0.0142 0.0093

Jupiter 109531-09-14 22:32 G 41726692.26 41726692.44 41726692.63 0.0513 0.0192

Uranus 109532-01-08 18:56 G 41726808.11 41726808.29 41726808.48 0.0142 0.0076

Uranus 109532-08-22 06:13 G 41727034.57 41727034.76 41727034.97 0.0142 0.0060

Uranus 109533-04-05 18:13 G 41727261.05 41727261.26 41727261.48 0.0142 0.0043

Uranus 109533-11-18 06:13 G 41727487.54 41727487.76 41727487.98 0.0142 0.0026

Uranus 109534-07-02 18:13 G 41727714.04 41727714.26 41727714.48 0.0142 0.0009

Moon 109534-07-03 19:39 G 41727715.26 41727715.32 41727715.39 0.2638 0.2381

Uranus 109535-02-14 06:27 G 41727940.54 41727940.77 41727940.99 0.0143 0.0009

Uranus 109535-09-28 18:42 G 41728167.06 41728167.28 41728167.50 0.0143 0.0026

Saturn 109536-04-25 23:44 G 41728377.29 41728377.49 41728377.69 0.0296 0.0104

Uranus 109536-05-12 07:25 G 41728393.60 41728393.81 41728394.02 0.0143 0.0043

Saturn 109536-12-12 04:32 G 41728607.64 41728607.69 41728607.76 0.0295 0.0280

Uranus 109536-12-24 19:54 G 41728620.13 41728620.33 41728620.54 0.0143 0.0061

Jupiter 109537-07-21 23:44 G 41728829.31 41728829.49 41728829.68 0.0510 0.0213

Uranus 109537-08-08 08:37 G 41728846.68 41728846.86 41728847.05 0.0143 0.0078

Uranus 109538-03-22 21:34 G 41729073.24 41729073.40 41729073.57 0.0143 0.0095

Uranus 109538-11-04 10:18 G 41729299.81 41729299.93 41729300.08 0.0143 0.0113

Uranus 109539-06-18 23:30 G 41729526.40 41729526.48 41729526.59 0.0143 0.0129

Mars 109542-04-10 02:22 G 41730552.46 41730552.60 41730552.75 0.1947 0.0996

Moon 109542-07-01 11:58 G 41730634.85 41730635.00 41730635.15 0.2645 0.0590

Earth 109542-07-01 15:20 G 41730634.98 41730635.14 41730635.30 0.2640 0.0547 *

Jupiter 109543-05-20 18:27 G 41730958.18 41730958.27 41730958.37 0.0511 0.0449

Jupiter 109544-01-12 13:10 G 41731194.97 41731195.05 41731195.15 0.0519 0.0462

Jupiter 109549-03-26 20:08 G 41733095.14 41733095.34 41733095.55 0.0513 0.0041

Saturn 109551-05-26 12:27 G 41733885.81 41733886.02 41733886.22 0.0265 0.0065

Saturn 109552-01-10 08:51 G 41734114.75 41734114.87 41734115.02 0.0265 0.0201

Jupiter 109555-09-17 11:30 G 41735460.79 41735460.98 41735461.16 0.0517 0.0206

Pluto 109559-10-08 05:58 G 41736942.54 41736942.75 41736942.98 0.0081 0.0018

Pluto 109560-05-20 17:01 G 41737168.10 41737168.21 41737168.36 0.0080 0.0065

Jupiter 109560-11-29 15:06 G 41737360.96 41737361.13 41737361.30 0.0515 0.0301

Saturn 109565-11-06 01:39 G 41739163.37 41739163.57 41739163.78 0.0296 0.0066

Jupiter 109567-05-23 10:32 G 41739726.74 41739726.94 41739727.15 0.0515 0.0049

Neptune 109568-12-08 20:51 G 41740292.32 41740292.37 41740292.46 0.0088 0.0083

Neptune 109569-07-22 10:18 G 41740517.81 41740517.93 41740518.06 0.0088 0.0073

Uranus 109569-11-04 07:39 G 41740622.81 41740622.82 41740622.85 0.0137 0.0136

Neptune 109570-03-04 23:01 G 41740743.33 41740743.46 41740743.64 0.0088 0.0064

Uranus 109570-06-18 14:22 G 41740849.01 41740849.10 41740849.20 0.0137 0.0122

Neptune 109570-10-16 12:27 G 41740968.86 41740969.02 41740969.21 0.0088 0.0054

Uranus 109571-01-30 20:51 G 41741075.24 41741075.37 41741075.50 0.0137 0.0108

Neptune 109571-05-30 01:54 G 41741194.39 41741194.58 41741194.78 0.0088 0.0044

Uranus 109571-09-14 03:06 G 41741301.48 41741301.63 41741301.79 0.0137 0.0094

Neptune 109572-01-10 14:51 G 41741419.93 41741420.12 41741420.34 0.0088 0.0035

Uranus 109572-04-27 09:06 G 41741527.71 41741527.88 41741528.06 0.0136 0.0080

Neptune 109572-08-23 04:18 G 41741645.47 41741645.68 41741645.90 0.0088 0.0024

Uranus 109572-12-09 14:51 G 41741753.94 41741754.12 41741754.32 0.0136 0.0066

Jupiter 109573-03-29 16:03 G 41741864.03 41741864.17 41741864.31 0.0509 0.0365

Neptune 109573-04-05 17:44 G 41741871.02 41741871.24 41741871.46 0.0088 0.0015

Uranus 109573-07-23 20:37 G 41741980.17 41741980.36 41741980.57 0.0136 0.0051

Neptune 109573-11-17 07:10 G 41742096.57 41742096.80 41742097.02 0.0088 0.0005

Uranus 109574-03-07 02:22 G 41742206.40 41742206.60 41742206.81 0.0136 0.0037

Neptune 109574-06-30 20:22 G 41742322.13 41742322.35 41742322.57 0.0088 0.0005

Uranus 109574-10-19 08:08 G 41742432.63 41742432.84 41742433.05 0.0136 0.0022

Neptune 109575-02-11 09:34 G 41742547.68 41742547.90 41742548.12 0.0088 0.0015

Uranus 109575-06-02 13:25 G 41742658.85 41742659.06 41742659.28 0.0136 0.0008

Neptune 109575-09-24 22:46 G 41742773.24 41742773.45 41742773.67 0.0088 0.0025

Uranus 109576-01-14 18:42 G 41742885.07 41742885.28 41742885.50 0.0136 0.0007

Neptune 109576-05-07 11:58 G 41742998.81 41742999.00 41742999.22 0.0088 0.0035

Uranus 109576-08-27 23:58 G 41743111.28 41743111.50 41743111.71 0.0135 0.0021

Neptune 109576-12-19 01:10 G 41743224.38 41743224.55 41743224.76 0.0088 0.0045

Uranus 109577-04-11 04:46 G 41743337.50 41743337.70 41743337.92 0.0135 0.0035

Neptune 109577-08-01 14:22 G 41743449.95 41743450.10 41743450.30 0.0088 0.0055

Uranus 109577-11-23 09:49 G 41743563.72 41743563.91 41743564.12 0.0135 0.0050

Neptune 109578-03-15 04:03 G 41743675.52 41743675.67 41743675.83 0.0088 0.0064

Uranus 109578-07-07 14:51 G 41743789.94 41743790.12 41743790.32 0.0135 0.0063

Neptune 109578-10-26 17:01 G 41743901.11 41743901.21 41743901.35 0.0088 0.0074

Mars 109578-11-15 12:27 G 41743920.85 41743921.02 41743921.20 0.1600 0.0311

Jupiter 109579-01-26 09:49 G 41743992.75 41743992.91 41743993.08 0.0512 0.0296

Uranus 109579-02-18 19:54 G 41744016.15 41744016.33 41744016.50 0.0135 0.0077

Neptune 109579-06-09 06:13 G 41744126.72 41744126.76 41744126.85 0.0088 0.0084

Uranus 109579-10-03 00:27 G 41744242.37 41744242.52 41744242.69 0.0135 0.0090

Uranus 109580-05-16 05:01 G 41744468.59 41744468.71 41744468.86 0.0135 0.0104

Saturn 109580-12-05 11:58 G 41744671.79 41744672.00 41744672.20 0.0265 0.0038

Uranus 109580-12-28 09:49 G 41744694.82 41744694.91 41744695.03 0.0135 0.0117

Saturn 109581-07-22 08:51 G 41744900.77 41744900.87 41744900.98 0.0265 0.0228

Uranus 109581-08-11 14:22 G 41744921.06 41744921.10 41744921.17 0.0135 0.0130

Jupiter 109584-12-02 10:03 G 41746129.72 41746129.92 41746130.13 0.0511 0.0108

Jupiter 109591-05-26 03:20 G 41748495.50 41748495.64 41748495.78 0.0518 0.0365

Saturn 109595-05-19 07:54 G 41749949.61 41749949.83 41749950.04 0.0295 0.0017

Jupiter 109596-08-07 05:15 G 41750395.52 41750395.72 41750395.92 0.0514 0.0149

Jupiter 109603-01-28 22:18 G 41752761.23 41752761.43 41752761.62 0.0516 0.0098

Mars 109608-02-05 05:58 G 41754594.58 41754594.75 41754594.92 0.1945 0.0237

Jupiter 109608-04-12 00:13 G 41754661.39 41754661.51 41754661.64 0.0516 0.0410

Saturn 109609-10-31 19:39 G 41755229.30 41755229.32 41755229.37 0.0265 0.0260

Saturn 109610-06-17 17:01 G 41755458.01 41755458.21 41755458.42 0.0265 0.0008

Uranus 109613-10-28 17:30 G 41756687.15 41756687.23 41756687.33 0.0141 0.0129

Uranus 109614-06-12 04:32 G 41756913.56 41756913.69 41756913.83 0.0142 0.0113

Jupiter 109614-10-03 20:51 G 41757027.17 41757027.37 41757027.56 0.0513 0.0155

Uranus 109615-01-24 15:34 G 41757139.99 41757140.15 41757140.31 0.0142 0.0097

Uranus 109615-09-08 02:37 G 41757366.44 41757366.61 41757366.80 0.0142 0.0081

Uranus 109616-04-21 14:08 G 41757592.90 41757593.09 41757593.30 0.0142 0.0065

Uranus 109616-12-04 01:54 G 41757819.38 41757819.58 41757819.79 0.0142 0.0048

Uranus 109617-07-18 13:39 G 41758045.86 41758046.07 41758046.29 0.0142 0.0031

Uranus 109618-03-02 01:39 G 41758272.35 41758272.57 41758272.79 0.0142 0.0014

Uranus 109618-10-14 13:54 G 41758498.86 41758499.08 41758499.30 0.0143 0.0004

Uranus 109619-05-29 02:22 G 41758725.38 41758725.60 41758725.82 0.0143 0.0021

Uranus 109620-01-10 14:37 G 41758951.90 41758952.11 41758952.33 0.0143 0.0039

Jupiter 109620-08-10 02:22 G 41759164.42 41759164.60 41759164.78 0.0510 0.0262

Uranus 109620-08-24 03:06 G 41759178.44 41759178.63 41759178.84 0.0143 0.0056

Uranus 109621-04-07 16:03 G 41759404.98 41759405.17 41759405.37 0.0143 0.0073

Uranus 109621-11-20 05:01 G 41759631.54 41759631.71 41759631.88 0.0143 0.0090

Uranus 109622-07-04 17:58 G 41759858.11 41759858.25 41759858.40 0.0143 0.0107

Uranus 109623-02-16 06:42 G 41760084.68 41760084.78 41760084.90 0.0143 0.0124

Uranus 109623-09-30 19:39 G 41760311.30 41760311.32 41760311.38 0.0143 0.0141

Saturn 109624-11-28 11:30 G 41760735.77 41760735.98 41760736.19 0.0295 0.0027

Jupiter 109626-06-08 19:54 G 41761293.22 41761293.33 41761293.46 0.0511 0.0404

Jupiter 109627-01-31 15:20 G 41761530.11 41761530.14 41761530.18 0.0520 0.0512

Jupiter 109632-04-14 21:34 G 41763430.20 41763430.40 41763430.61 0.0512 0.0009

Jupiter 109638-10-06 13:54 G 41765795.91 41765796.08 41765796.26 0.0517 0.0257

Saturn 109639-05-13 19:39 G 41766015.23 41766015.32 41766015.43 0.0265 0.0232

Saturn 109639-12-28 17:01 G 41766244.00 41766244.21 41766244.42 0.0265 0.0034

Jupiter 109643-12-19 14:51 G 41767695.94 41767696.12 41767696.30 0.0515 0.0258

Mars 109644-09-12 00:13 G 41767963.35 41767963.51 41767963.68 0.1601 0.0525

Jupiter 109650-06-11 11:44 G 41770061.79 41770061.99 41770062.19 0.0515 0.0006

Neptune 109651-09-09 14:37 G 41770517.04 41770517.11 41770517.21 0.0090 0.0082

Neptune 109652-04-22 03:20 G 41770742.53 41770742.64 41770742.79 0.0090 0.0072

Neptune 109652-12-03 16:18 G 41770968.04 41770968.18 41770968.35 0.0090 0.0062

Neptune 109653-07-17 05:01 G 41771193.55 41771193.71 41771193.90 0.0090 0.0052

Uranus 109654-02-16 01:54 G 41771407.51 41771407.58 41771407.68 0.0137 0.0126

Neptune 109654-02-27 17:58 G 41771419.07 41771419.25 41771419.45 0.0090 0.0042

Saturn 109654-06-10 17:58 G 41771522.04 41771522.25 41771522.46 0.0295 0.0078

Uranus 109654-09-30 08:37 G 41771633.75 41771633.86 41771634.00 0.0137 0.0112

Neptune 109654-10-11 06:42 G 41771644.60 41771644.78 41771645.00 0.0090 0.0032

Uranus 109655-05-14 14:51 G 41771859.99 41771860.12 41771860.28 0.0137 0.0098

Neptune 109655-05-24 19:54 G 41771870.12 41771870.33 41771870.54 0.0090 0.0021

Uranus 109655-12-26 20:51 G 41772086.22 41772086.37 41772086.56 0.0136 0.0084

Earth 109656-01-05 04:46 G 41772095.64 41772095.70 41772095.75 0.2693 0.2496

Neptune 109656-01-05 08:37 G 41772095.64 41772095.86 41772096.07 0.0090 0.0011 *

Moon 109656-01-05 07:39 G 41772095.75 41772095.82 41772095.89 0.2687 0.2430 *

Jupiter 109656-04-17 15:49 G 41772199.05 41772199.16 41772199.29 0.0509 0.0409

Uranus 109656-08-09 02:51 G 41772312.45 41772312.62 41772312.82 0.0136 0.0069

Neptune 109656-08-17 21:06 G 41772321.17 41772321.38 41772321.60 0.0090 0.0002

Uranus 109657-03-23 09:06 G 41772538.68 41772538.88 41772539.08 0.0136 0.0055

Neptune 109657-03-31 09:49 G 41772546.70 41772546.91 41772547.13 0.0090 0.0009

Uranus 109657-11-04 14:51 G 41772764.92 41772765.12 41772765.33 0.0136 0.0040

Neptune 109657-11-11 22:32 G 41772772.24 41772772.44 41772772.66 0.0090 0.0020

Uranus 109658-06-18 20:22 G 41772991.14 41772991.35 41772991.56 0.0136 0.0026

Neptune 109658-06-25 11:01 G 41772997.77 41772997.96 41772998.18 0.0090 0.0030

Uranus 109659-01-31 01:54 G 41773217.37 41773217.58 41773217.79 0.0136 0.0011

Neptune 109659-02-05 23:44 G 41773223.31 41773223.49 41773223.70 0.0090 0.0040

Uranus 109659-09-14 07:10 G 41773443.59 41773443.80 41773444.02 0.0136 0.0004

Neptune 109659-09-19 12:27 G 41773448.85 41773449.02 41773449.21 0.0090 0.0050

Uranus 109660-04-27 12:27 G 41773669.81 41773670.02 41773670.23 0.0135 0.0017

Neptune 109660-05-02 01:10 G 41773674.40 41773674.55 41773674.72 0.0090 0.0060

Uranus 109660-12-09 17:44 G 41773896.03 41773896.24 41773896.45 0.0135 0.0032

Neptune 109660-12-13 13:39 G 41773899.95 41773900.07 41773900.22 0.0090 0.0070

Uranus 109661-07-23 22:46 G 41774122.25 41774122.45 41774122.65 0.0135 0.0046

Neptune 109661-07-27 02:22 G 41774125.52 41774125.60 41774125.71 0.0090 0.0080

Jupiter 109662-02-14 07:39 G 41774327.65 41774327.82 41774327.99 0.0512 0.0261

Uranus 109662-03-07 03:49 G 41774348.46 41774348.66 41774348.85 0.0135 0.0060

Neptune 109662-03-09 15:20 G 41774351.14 41774351.14 41774351.14 0.0090 0.0090

Uranus 109662-10-19 08:37 G 41774574.69 41774574.86 41774575.04 0.0135 0.0073

Uranus 109663-06-02 13:25 G 41774800.91 41774801.06 41774801.23 0.0135 0.0087

Moon 109664-01-02 18:42 G 41775015.14 41775015.28 41775015.43 0.2685 0.1230

Earth 109664-01-02 21:20 G 41775015.25 41775015.39 41775015.54 0.2692 0.0990 *

Uranus 109664-01-14 18:13 G 41775027.12 41775027.26 41775027.40 0.0135 0.0100

Uranus 109664-08-27 22:32 G 41775253.35 41775253.44 41775253.57 0.0135 0.0114

Uranus 109665-04-11 03:06 G 41775479.58 41775479.63 41775479.72 0.0135 0.0127

Jupiter 109667-12-22 11:30 G 41776464.79 41776464.98 41776465.18 0.0511 0.0156

Saturn 109668-11-23 01:39 G 41776801.43 41776801.57 41776801.72 0.0265 0.0187

Saturn 109669-07-09 22:46 G 41777030.26 41777030.45 41777030.66 0.0265 0.0079

Jupiter 109673-10-20 06:42 G 41778593.76 41778593.78 41778593.79 0.0510 0.0507

Mars 109673-12-02 08:51 G 41778636.70 41778636.87 41778637.03 0.1941 0.0553

Jupiter 109674-06-14 00:27 G 41778830.40 41778830.52 41778830.65 0.0518 0.0400

Mars 109676-09-10 18:27 G 41779650.19 41779650.27 41779650.35 0.1596 0.1426

Jupiter 109679-08-27 06:27 G 41780730.57 41780730.77 41780730.97 0.0514 0.0104

Saturn 109683-05-05 19:10 G 41782078.21 41782078.30 41782078.42 0.0296 0.0255

Saturn 109683-12-21 23:44 G 41782308.30 41782308.49 41782308.69 0.0295 0.0128

Jupiter 109686-02-16 22:46 G 41783096.26 41783096.45 41783096.65 0.0516 0.0143

Jupiter 109691-05-02 00:56 G 41784996.40 41784996.54 41784996.69 0.0516 0.0365

Uranus 109697-06-28 00:13 G 41787245.46 41787245.51 41787245.60 0.0141 0.0134

Jupiter 109697-10-22 21:49 G 41787362.22 41787362.41 41787362.61 0.0514 0.0110

Uranus 109698-02-09 10:46 G 41787471.85 41787471.95 41787472.09 0.0141 0.0119

Saturn 109698-06-05 02:08 G 41787587.43 41787587.59 41787587.77 0.0265 0.0157

Uranus 109698-09-23 21:49 G 41787698.28 41787698.41 41787698.58 0.0142 0.0103

Saturn 109699-01-19 23:30 G 41787816.29 41787816.48 41787816.68 0.0265 0.0109

Uranus 109699-05-08 09:06 G 41787924.72 41787924.88 41787925.07 0.0142 0.0087

Uranus 109699-12-20 20:37 G 41788151.17 41788151.36 41788151.55 0.0142 0.0070

Uranus 109700-08-04 08:08 G 41788377.63 41788377.84 41788378.04 0.0142 0.0053

Uranus 109701-03-18 19:54 G 41788604.12 41788604.33 41788604.54 0.0142 0.0037

Uranus 109701-10-31 07:39 G 41788830.61 41788830.82 41788831.04 0.0142 0.0020

Uranus 109702-06-14 19:54 G 41789057.11 41789057.33 41789057.55 0.0142 0.0003

Uranus 109703-01-27 07:54 G 41789283.61 41789283.83 41789284.06 0.0143 0.0015

Jupiter 109703-08-31 00:56 G 41789499.38 41789499.54 41789499.71 0.0510 0.0302

Uranus 109703-09-10 20:08 G 41789510.13 41789510.34 41789510.57 0.0143 0.0033

Uranus 109704-04-24 08:51 G 41789736.67 41789736.87 41789737.09 0.0143 0.0050

Uranus 109704-12-06 21:34 G 41789963.21 41789963.40 41789963.60 0.0143 0.0067

Uranus 109705-07-21 10:03 G 41790189.76 41790189.92 41790190.11 0.0143 0.0085

Uranus 109706-03-04 23:15 G 41790416.32 41790416.47 41790416.63 0.0143 0.0102

Uranus 109706-10-17 11:58 G 41790642.89 41790643.00 41790643.13 0.0143 0.0119

Uranus 109707-06-01 00:56 G 41790869.49 41790869.54 41790869.63 0.0143 0.0136

Jupiter 109709-06-28 20:08 G 41791628.21 41791628.34 41791628.49 0.0511 0.0361

Mars 109710-07-11 12:27 G 41792005.86 41792006.02 41792006.18 0.1603 0.0727

Saturn 109712-11-16 02:08 G 41792864.44 41792864.59 41792864.74 0.0296 0.0204

Saturn 109713-07-04 06:42 G 41793094.61 41793094.78 41793094.95 0.0295 0.0179

Jupiter 109715-05-05 20:08 G 41793765.13 41793765.34 41793765.54 0.0512 0.0046

Pluto 109716-05-04 06:27 G 41794129.66 41794129.77 41794129.93 0.0063 0.0050

Pluto 109716-12-15 10:18 G 41794354.72 41794354.93 41794355.14 0.0064 0.0011

Pluto 109717-07-28 13:39 G 41794579.87 41794580.07 41794580.26 0.0064 0.0028

Jupiter 109721-10-26 10:32 G 41796130.78 41796130.94 41796131.11 0.0517 0.0289

Jupiter 109727-01-08 14:08 G 41798030.91 41798031.09 41798031.28 0.0515 0.0218

Saturn 109727-12-17 08:37 G 41798373.68 41798373.86 41798374.06 0.0265 0.0111

Saturn 109728-08-02 05:58 G 41798602.59 41798602.75 41798602.92 0.0266 0.0157

Neptune 109733-03-13 05:44 G 41800286.69 41800286.74 41800286.79 0.0088 0.0085

Jupiter 109733-07-01 08:08 G 41800396.64 41800396.84 41800397.04 0.0515 0.0032

Neptune 109733-10-24 18:27 G 41800512.18 41800512.27 41800512.40 0.0088 0.0076

Neptune 109734-06-07 07:39 G 41800737.69 41800737.82 41800737.98 0.0088 0.0066

Neptune 109735-01-18 20:37 G 41800963.21 41800963.36 41800963.55 0.0088 0.0057

Neptune 109735-09-01 09:49 G 41801188.74 41801188.91 41801189.12 0.0088 0.0047

Neptune 109736-04-13 23:15 G 41801414.28 41801414.47 41801414.68 0.0088 0.0037

Neptune 109736-11-25 12:42 G 41801639.82 41801640.03 41801640.24 0.0088 0.0027

Neptune 109737-07-09 01:39 G 41801865.36 41801865.57 41801865.80 0.0088 0.0018

Uranus 109737-10-17 13:39 G 41801966.01 41801966.07 41801966.15 0.0137 0.0129

Neptune 109738-02-19 15:06 G 41802090.91 41802091.13 41802091.35 0.0088 0.0007

Uranus 109738-05-31 20:22 G 41802192.24 41802192.35 41802192.47 0.0137 0.0115

Jupiter 109738-09-13 08:22 G 41802296.78 41802296.85 41802296.93 0.0517 0.0482

Neptune 109738-10-03 04:18 G 41802316.46 41802316.68 41802316.91 0.0088 0.0003

Uranus 109739-01-13 02:51 G 41802418.48 41802418.62 41802418.76 0.0137 0.0101

Jupiter 109739-05-08 15:34 G 41802534.06 41802534.15 41802534.25 0.0509 0.0448

Neptune 109739-05-16 17:44 G 41802542.02 41802542.24 41802542.47 0.0088 0.0012

Uranus 109739-08-27 09:06 G 41802644.71 41802644.88 41802645.04 0.0137 0.0087

Mars 109739-09-30 12:27 G 41802678.89 41802679.02 41802679.15 0.1939 0.1287

Neptune 109739-12-28 06:42 G 41802767.58 41802767.78 41802768.01 0.0088 0.0023

Uranus 109740-04-09 15:06 G 41802870.95 41802871.13 41802871.32 0.0136 0.0073

Neptune 109740-08-09 20:22 G 41802993.14 41802993.35 41802993.56 0.0088 0.0032

Uranus 109740-11-21 20:51 G 41803097.19 41803097.37 41803097.58 0.0136 0.0059

Neptune 109741-03-23 09:34 G 41803218.71 41803218.90 41803219.10 0.0088 0.0042

Uranus 109741-07-06 02:51 G 41803323.42 41803323.62 41803323.83 0.0136 0.0044

Neptune 109741-11-03 22:46 G 41803444.28 41803444.45 41803444.64 0.0088 0.0052

Uranus 109742-02-17 08:37 G 41803549.65 41803549.86 41803550.07 0.0136 0.0029

Saturn 109742-05-29 10:18 G 41803650.75 41803650.93 41803651.12 0.0295 0.0146

Neptune 109742-06-17 11:58 G 41803669.86 41803670.00 41803670.18 0.0088 0.0062

Mars 109742-07-10 06:56 G 41803692.68 41803692.79 41803692.90 0.1597 0.1237

Uranus 109742-10-01 14:22 G 41803775.88 41803776.10 41803776.31 0.0136 0.0015

Saturn 109743-01-14 14:37 G 41803880.98 41803881.11 41803881.24 0.0295 0.0236

Neptune 109743-01-29 01:39 G 41803895.44 41803895.57 41803895.70 0.0088 0.0071

Uranus 109743-05-15 19:39 G 41804002.11 41804002.32 41804002.54 0.0136 0.0003

Neptune 109743-09-11 14:37 G 41804121.04 41804121.11 41804121.21 0.0088 0.0081

Uranus 109743-12-28 00:56 G 41804228.33 41804228.54 41804228.76 0.0136 0.0014

Uranus 109744-08-10 06:13 G 41804454.55 41804454.76 41804454.97 0.0135 0.0028

Jupiter 109745-03-06 06:42 G 41804662.60 41804662.78 41804662.96 0.0512 0.0223

Uranus 109745-03-24 11:15 G 41804680.77 41804680.97 41804681.18 0.0135 0.0042

Uranus 109745-11-05 16:32 G 41804907.00 41804907.19 41804907.39 0.0135 0.0056

Uranus 109746-06-19 21:20 G 41805133.22 41805133.39 41805133.58 0.0135 0.0070

Uranus 109747-02-01 02:08 G 41805359.44 41805359.59 41805359.77 0.0135 0.0084

Uranus 109747-09-15 06:56 G 41805585.65 41805585.79 41805585.95 0.0135 0.0097

Uranus 109748-04-28 11:44 G 41805811.88 41805811.99 41805812.12 0.0135 0.0110

Uranus 109748-12-10 16:32 G 41806038.11 41806038.19 41806038.28 0.0135 0.0123

Jupiter 109751-01-11 10:46 G 41806799.76 41806799.95 41806800.15 0.0511 0.0196

Jupiter 109756-11-09 06:13 G 41808928.68 41808928.76 41808928.83 0.0510 0.0468

Saturn 109757-06-28 10:03 G 41809159.72 41809159.92 41809160.12 0.0265 0.0078

Jupiter 109757-07-04 00:42 G 41809165.43 41809165.53 41809165.63 0.0519 0.0444

Saturn 109758-02-12 07:25 G 41809388.67 41809388.81 41809388.96 0.0266 0.0189

Jupiter 109762-09-16 04:18 G 41811065.48 41811065.68 41811065.88 0.0513 0.0067

Jupiter 109769-03-08 22:03 G 41813431.24 41813431.42 41813431.61 0.0516 0.0185

Saturn 109771-12-09 17:30 G 41814437.03 41814437.23 41814437.44 0.0295 0.0094

Saturn 109772-07-26 21:49 G 41814667.38 41814667.41 41814667.46 0.0295 0.0289

Jupiter 109774-05-21 22:18 G 41815331.27 41815331.43 41815331.59 0.0516 0.0330

Mars 109776-05-08 00:27 G 41816048.38 41816048.52 41816048.66 0.1605 0.0941

Jupiter 109780-11-11 18:27 G 41817697.07 41817697.27 41817697.47 0.0513 0.0079

Uranus 109781-02-26 08:37 G 41817803.82 41817803.86 41817803.92 0.0141 0.0137

Uranus 109781-10-10 19:10 G 41818030.20 41818030.30 41818030.42 0.0141 0.0122

Uranus 109782-05-25 06:13 G 41818256.62 41818256.76 41818256.90 0.0141 0.0107

Uranus 109783-01-06 17:01 G 41818483.05 41818483.21 41818483.38 0.0142 0.0091

Uranus 109783-08-21 04:03 G 41818709.49 41818709.67 41818709.87 0.0142 0.0075

Uranus 109784-04-03 15:49 G 41818935.96 41818936.16 41818936.36 0.0142 0.0058

Uranus 109784-11-16 03:20 G 41819162.43 41819162.64 41819162.85 0.0142 0.0042

Uranus 109785-06-30 15:06 G 41819388.91 41819389.13 41819389.35 0.0142 0.0025

Earth 109785-07-02 14:51 G 41819390.96 41819391.12 41819391.28 0.2641 0.0610

Moon 109785-07-02 17:30 G 41819391.06 41819391.23 41819391.40 0.2635 0.0675 *

Uranus 109786-02-12 03:06 G 41819615.41 41819615.63 41819615.85 0.0142 0.0008

Jupiter 109786-09-18 23:15 G 41819834.32 41819834.47 41819834.62 0.0510 0.0338

Uranus 109786-09-26 15:06 G 41819841.91 41819842.13 41819842.35 0.0142 0.0010

Saturn 109787-01-08 17:01 G 41819946.01 41819946.21 41819946.42 0.0266 0.0030

Uranus 109787-05-11 03:20 G 41820068.43 41820068.64 41820068.87 0.0143 0.0028

Saturn 109787-08-25 14:22 G 41820175.02 41820175.10 41820175.20 0.0266 0.0238

Uranus 109787-12-23 15:49 G 41820294.96 41820295.16 41820295.38 0.0143 0.0045

Uranus 109788-08-06 04:18 G 41820521.49 41820521.68 41820521.89 0.0143 0.0062

Uranus 109789-03-20 17:01 G 41820748.03 41820748.21 41820748.40 0.0143 0.0079

Uranus 109789-11-02 05:44 G 41820974.59 41820974.74 41820974.91 0.0143 0.0096

Uranus 109790-06-16 18:42 G 41821201.15 41821201.28 41821201.42 0.0143 0.0113

Uranus 109791-01-29 07:25 G 41821427.74 41821427.81 41821427.92 0.0143 0.0130

Jupiter 109792-07-17 16:18 G 41821963.03 41821963.18 41821963.34 0.0511 0.0332

Jupiter 109798-05-24 18:13 G 41824100.06 41824100.26 41824100.46 0.0512 0.0081

Saturn 109801-06-22 04:03 G 41825223.45 41825223.67 41825223.88 0.0295 0.0030

Jupiter 109804-11-15 08:37 G 41826465.70 41826465.86 41826466.01 0.0518 0.0326

Pluto 109806-06-19 23:01 G 41827047.28 41827047.46 41827047.67 0.0081 0.0040

Pluto 109807-01-31 10:18 G 41827272.76 41827272.93 41827273.13 0.0080 0.0044

Mars 109808-05-07 18:56 G 41827735.15 41827735.29 41827735.42 0.1599 0.1033

Jupiter 109810-01-28 12:56 G 41828365.85 41828366.04 41828366.23 0.0514 0.0180

Saturn 109815-12-05 21:20 G 41830503.37 41830503.39 41830503.43 0.0265 0.0262

Neptune 109815-12-13 22:46 G 41830511.40 41830511.45 41830511.53 0.0090 0.0085

Jupiter 109816-07-21 06:56 G 41830731.59 41830731.79 41830731.99 0.0515 0.0070

Saturn 109816-07-21 19:10 G 41830732.09 41830732.30 41830732.51 0.0265 0.0005

Neptune 109816-07-26 11:44 G 41830736.88 41830736.99 41830737.12 0.0090 0.0075

Neptune 109817-03-09 00:42 G 41830962.39 41830962.53 41830962.68 0.0090 0.0065

Neptune 109817-10-20 13:39 G 41831187.91 41831188.07 41831188.25 0.0090 0.0055

Neptune 109818-06-03 02:22 G 41831413.43 41831413.60 41831413.80 0.0090 0.0045

Neptune 109819-01-14 15:20 G 41831638.95 41831639.14 41831639.35 0.0090 0.0035

Neptune 109819-08-28 04:03 G 41831864.47 41831864.67 41831864.89 0.0090 0.0025

Neptune 109820-04-09 16:46 G 41832090.00 41832090.20 41832090.43 0.0090 0.0015

Neptune 109820-11-21 05:58 G 41832315.53 41832315.75 41832315.96 0.0090 0.0004

Uranus 109821-06-18 00:13 G 41832524.47 41832524.51 41832524.57 0.0137 0.0133

Neptune 109821-07-04 18:42 G 41832541.06 41832541.28 41832541.49 0.0090 0.0006

Jupiter 109821-10-03 05:44 G 41832631.64 41832631.74 41832631.84 0.0517 0.0447

Uranus 109822-01-30 06:56 G 41832750.70 41832750.79 41832750.91 0.0137 0.0119

Neptune 109822-02-15 07:10 G 41832766.59 41832766.80 41832767.02 0.0090 0.0016

Jupiter 109822-05-28 12:13 G 41832868.95 41832869.01 41832869.08 0.0508 0.0482

Uranus 109822-09-13 13:39 G 41832976.94 41832977.07 41832977.22 0.0137 0.0105

Neptune 109822-09-28 19:54 G 41832992.13 41832992.33 41832992.54 0.0090 0.0027

Uranus 109823-04-27 19:54 G 41833203.19 41833203.33 41833203.51 0.0137 0.0091

Neptune 109823-05-12 08:22 G 41833217.67 41833217.85 41833218.06 0.0090 0.0037

Uranus 109823-12-10 02:08 G 41833429.43 41833429.59 41833429.78 0.0137 0.0077

Neptune 109823-12-23 21:06 G 41833443.21 41833443.38 41833443.58 0.0090 0.0047

Uranus 109824-07-23 08:37 G 41833655.67 41833655.86 41833656.05 0.0136 0.0062

Neptune 109824-08-05 09:34 G 41833668.75 41833668.90 41833669.09 0.0090 0.0057

Uranus 109825-03-06 14:22 G 41833881.90 41833882.10 41833882.31 0.0136 0.0047

Neptune 109825-03-18 22:18 G 41833894.30 41833894.43 41833894.59 0.0090 0.0067

Uranus 109825-10-18 20:22 G 41834108.14 41834108.35 41834108.56 0.0136 0.0033

Neptune 109825-10-30 11:01 G 41834119.87 41834119.96 41834120.09 0.0090 0.0077

Uranus 109826-06-02 02:08 G 41834334.38 41834334.59 41834334.80 0.0136 0.0018

Neptune 109826-06-12 23:30 G 41834345.45 41834345.48 41834345.56 0.0090 0.0087

Uranus 109827-01-14 07:39 G 41834560.61 41834560.82 41834561.03 0.0136 0.0004

Uranus 109827-08-28 12:56 G 41834786.83 41834787.04 41834787.26 0.0136 0.0011

Jupiter 109828-03-26 05:15 G 41834997.53 41834997.72 41834997.91 0.0513 0.0185

Uranus 109828-04-10 18:27 G 41835013.06 41835013.27 41835013.48 0.0136 0.0025

Uranus 109828-11-22 23:30 G 41835239.29 41835239.48 41835239.70 0.0135 0.0040

Uranus 109829-07-07 04:46 G 41835465.51 41835465.70 41835465.90 0.0135 0.0053

Uranus 109830-02-18 09:34 G 41835691.73 41835691.90 41835692.10 0.0135 0.0068

Uranus 109830-10-02 14:51 G 41835917.95 41835918.12 41835918.29 0.0135 0.0081

Saturn 109831-01-02 10:46 G 41836009.74 41836009.95 41836010.17 0.0295 0.0022

Uranus 109831-05-16 19:25 G 41836144.17 41836144.31 41836144.48 0.0135 0.0094

Uranus 109831-12-29 00:27 G 41836370.40 41836370.52 41836370.65 0.0135 0.0107

Uranus 109832-08-11 05:01 G 41836596.62 41836596.71 41836596.81 0.0135 0.0120

Uranus 109833-03-25 09:34 G 41836822.88 41836822.90 41836822.94 0.0135 0.0133

Jupiter 109834-01-31 07:10 G 41837134.61 41837134.80 41837134.98 0.0511 0.0228

Jupiter 109839-11-30 02:37 G 41839263.52 41839263.61 41839263.72 0.0510 0.0439

Jupiter 109840-07-23 20:22 G 41839500.27 41839500.35 41839500.43 0.0518 0.0472

Mars 109842-03-06 12:13 G 41840090.89 41840091.01 41840091.13 0.1607 0.1157

Saturn 109845-06-17 04:32 G 41841289.58 41841289.69 41841289.82 0.0266 0.0215

Jupiter 109845-10-06 00:42 G 41841400.33 41841400.53 41841400.74 0.0514 0.0039

Saturn 109846-02-01 02:22 G 41841518.40 41841518.60 41841518.81 0.0266 0.0054

Jupiter 109852-03-28 17:15 G 41843766.04 41843766.22 41843766.41 0.0516 0.0212

Jupiter 109857-06-10 18:56 G 41845666.13 41845666.29 41845666.46 0.0516 0.0301

Saturn 109859-11-27 18:56 G 41846566.26 41846566.29 41846566.33 0.0295 0.0290

Saturn 109860-07-14 23:01 G 41846796.26 41846796.46 41846796.66 0.0295 0.0091

Jupiter 109863-12-02 14:51 G 41848031.92 41848032.12 41848032.32 0.0514 0.0048

Uranus 109865-06-11 02:37 G 41848588.53 41848588.61 41848588.72 0.0141 0.0127

Uranus 109866-01-23 13:25 G 41848814.93 41848815.06 41848815.20 0.0141 0.0111

Uranus 109866-09-07 00:13 G 41849041.36 41849041.51 41849041.68 0.0141 0.0096

Uranus 109867-04-21 11:30 G 41849267.80 41849267.98 41849268.17 0.0141 0.0080

Uranus 109867-12-03 22:32 G 41849494.26 41849494.44 41849494.65 0.0142 0.0064

Uranus 109868-07-17 10:03 G 41849720.72 41849720.92 41849721.14 0.0142 0.0047

Uranus 109869-02-28 21:49 G 41849947.20 41849947.41 41849947.63 0.0142 0.0030

Jupiter 109869-10-08 20:51 G 41850169.23 41850169.37 41850169.51 0.0509 0.0373

Uranus 109869-10-13 09:34 G 41850173.69 41850173.90 41850174.13 0.0142 0.0013

Uranus 109870-05-27 21:49 G 41850400.19 41850400.41 41850400.63 0.0142 0.0005

Uranus 109871-01-09 09:49 G 41850626.69 41850626.91 41850627.13 0.0142 0.0022

Uranus 109871-08-23 22:03 G 41850853.21 41850853.42 41850853.64 0.0143 0.0039

Uranus 109872-04-06 10:32 G 41851079.74 41851079.94 41851080.15 0.0143 0.0057

Uranus 109872-11-18 23:01 G 41851306.28 41851306.46 41851306.66 0.0143 0.0074

Uranus 109873-07-03 11:30 G 41851532.82 41851532.98 41851533.17 0.0143 0.0091

Uranus 109874-02-15 00:13 G 41851759.38 41851759.51 41851759.67 0.0143 0.0108

Mars 109874-03-05 07:10 G 41851777.65 41851777.80 41851777.95 0.1601 0.0837

Uranus 109874-09-29 13:10 G 41851985.95 41851986.05 41851986.17 0.0143 0.0124

Saturn 109874-12-28 07:25 G 41852075.66 41852075.81 41852075.97 0.0265 0.0178

Uranus 109875-05-14 01:54 G 41852212.57 41852212.58 41852212.64 0.0143 0.0142

Jupiter 109875-08-07 13:39 G 41852297.91 41852298.07 41852298.24 0.0511 0.0299

Saturn 109875-08-14 05:15 G 41852304.52 41852304.72 41852304.92 0.0265 0.0090

Jupiter 109881-06-13 14:37 G 41854434.91 41854435.11 41854435.31 0.0512 0.0114

Jupiter 109887-12-05 06:42 G 41856800.64 41856800.78 41856800.92 0.0518 0.0364

Saturn 109889-06-09 01:54 G 41857352.45 41857352.58 41857352.70 0.0296 0.0240

Saturn 109890-01-25 05:44 G 41857582.56 41857582.74 41857582.93 0.0295 0.0143

Jupiter 109893-02-16 08:22 G 41858700.66 41858700.85 41858701.05 0.0514 0.0150

Neptune 109897-06-15 13:54 G 41860281.08 41860281.08 41860281.12 0.0088 0.0088

Neptune 109898-01-27 03:06 G 41860506.54 41860506.63 41860506.74 0.0088 0.0078

Neptune 109898-09-09 16:32 G 41860732.05 41860732.19 41860732.33 0.0088 0.0068

Earth 109899-01-07 07:25 G 41860851.76 41860851.81 41860851.85 0.2692 0.2538

Neptune 109899-04-23 05:15 G 41860957.58 41860957.72 41860957.91 0.0088 0.0059

Jupiter 109899-08-10 03:06 G 41861066.43 41861066.63 41861066.83 0.0515 0.0099

Neptune 109899-12-04 18:42 G 41861183.10 41861183.28 41861183.47 0.0088 0.0049

Neptune 109900-07-18 07:39 G 41861408.63 41861408.82 41861409.03 0.0088 0.0040

Neptune 109901-02-28 20:51 G 41861634.17 41861634.37 41861634.59 0.0088 0.0030

Neptune 109901-10-12 10:18 G 41861859.71 41861859.93 41861860.15 0.0088 0.0020

Neptune 109902-05-25 23:30 G 41862085.26 41862085.48 41862085.71 0.0088 0.0010

Neptune 109903-01-06 12:42 G 41862310.81 41862311.03 41862311.26 0.0088 0.0001

Mars 109903-05-26 17:15 G 41862451.10 41862451.22 41862451.34 0.1943 0.1401

Neptune 109903-08-20 01:54 G 41862536.36 41862536.58 41862536.81 0.0088 0.0010

Neptune 109904-04-01 15:06 G 41862761.92 41862762.13 41862762.36 0.0088 0.0020

Saturn 109904-07-10 14:37 G 41862861.93 41862862.11 41862862.30 0.0266 0.0130

Jupiter 109904-10-23 00:42 G 41862966.42 41862966.53 41862966.66 0.0517 0.0423

Neptune 109904-11-13 04:18 G 41862987.48 41862987.68 41862987.91 0.0088 0.0030

Uranus 109905-02-16 10:18 G 41863082.93 41863082.93 41863082.94 0.0137 0.0137

Saturn 109905-02-24 12:27 G 41863090.84 41863091.02 41863091.20 0.0266 0.0139

Neptune 109905-06-26 17:30 G 41863213.05 41863213.23 41863213.45 0.0088 0.0040

Uranus 109905-09-30 17:15 G 41863309.14 41863309.22 41863309.32 0.0137 0.0123

Neptune 109906-02-07 07:10 G 41863438.62 41863438.80 41863438.99 0.0088 0.0049

Uranus 109906-05-14 23:58 G 41863535.38 41863535.50 41863535.64 0.0137 0.0109

Neptune 109906-09-20 20:08 G 41863664.19 41863664.34 41863664.52 0.0088 0.0059

Uranus 109906-12-27 06:27 G 41863761.63 41863761.77 41863761.94 0.0137 0.0095

Earth 109907-01-05 23:44 G 41863771.35 41863771.49 41863771.64 0.2691 0.0961

Moon 109907-01-06 03:20 G 41863771.50 41863771.64 41863771.79 0.2697 0.0682 *

Neptune 109907-05-04 09:34 G 41863889.78 41863889.90 41863890.06 0.0088 0.0069

Uranus 109907-08-10 12:42 G 41863987.87 41863988.03 41863988.22 0.0137 0.0081

Neptune 109907-12-15 23:15 G 41864115.38 41864115.47 41864115.57 0.0088 0.0078

Mars 109908-01-03 00:27 G 41864133.43 41864133.52 41864133.61 0.1609 0.1368

Uranus 109908-03-23 19:10 G 41864214.12 41864214.30 41864214.49 0.0137 0.0066

Uranus 109908-11-05 01:25 G 41864440.37 41864440.56 41864440.76 0.0136 0.0051

Uranus 109909-06-19 07:25 G 41864666.61 41864666.81 41864667.02 0.0136 0.0037

Uranus 109910-01-31 13:10 G 41864892.84 41864893.05 41864893.27 0.0136 0.0022

Uranus 109910-09-14 18:56 G 41865119.08 41865119.29 41865119.51 0.0136 0.0008

Jupiter 109911-04-16 00:42 G 41865332.34 41865332.53 41865332.72 0.0512 0.0158

Uranus 109911-04-29 00:42 G 41865345.31 41865345.53 41865345.74 0.0136 0.0007

Uranus 109911-12-11 05:58 G 41865571.55 41865571.75 41865571.97 0.0136 0.0022

Uranus 109912-07-24 11:15 G 41865797.77 41865797.97 41865798.19 0.0136 0.0036

Uranus 109913-03-07 16:32 G 41866024.00 41866024.19 41866024.40 0.0135 0.0050

Uranus 109913-10-19 21:49 G 41866250.23 41866250.41 41866250.60 0.0135 0.0064

Uranus 109914-06-03 02:51 G 41866476.45 41866476.62 41866476.80 0.0135 0.0077

Uranus 109915-01-15 07:25 G 41866702.67 41866702.81 41866702.98 0.0135 0.0092

Uranus 109915-08-29 12:27 G 41866928.89 41866929.02 41866929.16 0.0135 0.0104

Uranus 109916-04-11 17:01 G 41867155.12 41867155.21 41867155.33 0.0135 0.0117

Uranus 109916-11-23 21:49 G 41867381.37 41867381.41 41867381.48 0.0135 0.0130

Jupiter 109917-02-20 03:06 G 41867469.46 41867469.63 41867469.81 0.0511 0.0256

Saturn 109918-12-21 14:22 G 41868138.93 41868139.10 41868139.28 0.0295 0.0169

Saturn 109919-08-08 18:27 G 41868369.13 41868369.27 41868369.42 0.0294 0.0213

Jupiter 109922-12-19 21:49 G 41869598.30 41869598.41 41869598.53 0.0510 0.0413

Jupiter 109923-08-13 16:18 G 41869835.14 41869835.18 41869835.23 0.0519 0.0502

Jupiter 109928-10-25 22:32 G 41871735.24 41871735.44 41871735.65 0.0513 0.0011

Saturn 109934-01-20 18:13 G 41873648.06 41873648.26 41873648.46 0.0265 0.0091

Saturn 109934-09-06 15:34 G 41873877.00 41873877.15 41873877.32 0.0266 0.0177

Jupiter 109935-04-18 14:22 G 41874100.93 41874101.10 41874101.28 0.0517 0.0246

Mars 109940-01-01 19:10 G 41875820.13 41875820.30 41875820.46 0.1602 0.0631

Jupiter 109940-06-30 15:49 G 41876000.98 41876001.16 41876001.33 0.0515 0.0267

Jupiter 109946-12-22 12:42 G 41878366.83 41878367.03 41878367.24 0.0514 0.0017

Saturn 109948-07-02 20:51 G 41878925.18 41878925.37 41878925.57 0.0295 0.0120

Uranus 109949-02-09 11:58 G 41879146.92 41879147.00 41879147.08 0.0141 0.0130

Saturn 109949-02-18 00:42 G 41879155.45 41879155.53 41879155.64 0.0295 0.0264

Uranus 109949-09-23 22:18 G 41879373.32 41879373.43 41879373.57 0.0141 0.0115

Uranus 109950-05-08 09:20 G 41879599.74 41879599.89 41879600.05 0.0141 0.0099

Uranus 109950-12-20 20:08 G 41879826.17 41879826.34 41879826.52 0.0141 0.0084

Uranus 109951-08-04 07:10 G 41880052.62 41880052.80 41880053.00 0.0142 0.0068

Uranus 109952-03-17 18:42 G 41880279.08 41880279.28 41880279.49 0.0142 0.0051

Jupiter 109952-10-28 16:18 G 41880504.05 41880504.18 41880504.30 0.0509 0.0403

Uranus 109952-10-30 06:27 G 41880505.56 41880505.77 41880505.98 0.0142 0.0034

Uranus 109953-06-13 17:58 G 41880732.04 41880732.25 41880732.48 0.0142 0.0017

Uranus 109954-01-26 05:58 G 41880958.53 41880958.75 41880958.97 0.0142 0.0000

Uranus 109954-09-09 17:58 G 41881185.03 41881185.25 41881185.47 0.0142 0.0018

Uranus 109955-04-24 06:13 G 41881411.55 41881411.76 41881411.98 0.0142 0.0035

Uranus 109955-12-06 18:42 G 41881638.07 41881638.28 41881638.48 0.0143 0.0052

Uranus 109956-07-20 06:42 G 41881864.60 41881864.78 41881864.99 0.0143 0.0070

Uranus 109957-03-03 19:10 G 41882091.14 41882091.30 41882091.49 0.0143 0.0087

Uranus 109957-10-16 08:08 G 41882317.69 41882317.84 41882318.00 0.0143 0.0103

Uranus 109958-05-30 20:51 G 41882544.26 41882544.37 41882544.50 0.0143 0.0120

Jupiter 109958-08-27 10:32 G 41882632.77 41882632.94 41882633.11 0.0511 0.0268

Uranus 109959-01-12 09:49 G 41882770.85 41882770.91 41882770.98 0.0143 0.0136

Pluto 109963-01-15 04:46 G 41884234.60 41884234.70 41884234.85 0.0063 0.0052

Saturn 109963-08-03 00:42 G 41884434.32 41884434.53 41884434.74 0.0266 0.0045

Pluto 109963-08-28 08:37 G 41884459.65 41884459.86 41884460.07 0.0063 0.0013

Saturn 109964-03-18 22:18 G 41884663.32 41884663.43 41884663.55 0.0266 0.0224

Pluto 109964-04-09 11:58 G 41884684.80 41884685.00 41884685.19 0.0064 0.0026

Jupiter 109964-07-03 09:34 G 41884769.71 41884769.90 41884770.10 0.0512 0.0141

Mars 109969-03-22 20:37 G 41886493.19 41886493.36 41886493.52 0.1940 0.0632

Jupiter 109970-12-25 01:39 G 41887135.45 41887135.57 41887135.71 0.0517 0.0390

Mars 109973-10-30 11:58 G 41888175.98 41888176.00 41888176.02 0.1611 0.1596

Jupiter 109976-03-08 04:18 G 41889035.48 41889035.68 41889035.88 0.0515 0.0123

Saturn 109978-01-13 10:03 G 41889711.71 41889711.92 41889712.14 0.0295 0.0047

Neptune 109980-03-17 06:42 G 41890505.77 41890505.78 41890505.84 0.0090 0.0089

Neptune 109980-10-28 19:39 G 41890731.25 41890731.32 41890731.45 0.0090 0.0079

Neptune 109981-06-11 08:37 G 41890956.75 41890956.86 41890957.02 0.0090 0.0069

Neptune 109982-01-22 22:03 G 41891182.26 41891182.42 41891182.58 0.0090 0.0058

Jupiter 109982-08-29 22:03 G 41891401.23 41891401.42 41891401.62 0.0515 0.0126

Neptune 109982-09-05 10:46 G 41891407.77 41891407.95 41891408.14 0.0090 0.0048

Neptune 109983-04-18 23:30 G 41891633.30 41891633.48 41891633.69 0.0090 0.0038

Neptune 109983-11-30 12:27 G 41891858.82 41891859.02 41891859.23 0.0090 0.0028

Neptune 109984-07-13 01:10 G 41892084.35 41892084.55 41892084.77 0.0090 0.0018

Neptune 109985-02-23 14:08 G 41892309.88 41892310.09 41892310.31 0.0090 0.0008

Neptune 109985-10-07 03:06 G 41892535.41 41892535.63 41892535.85 0.0090 0.0003

Neptune 109986-05-20 15:49 G 41892760.95 41892761.16 41892761.38 0.0090 0.0013

Neptune 109987-01-01 04:32 G 41892986.48 41892986.69 41892986.90 0.0090 0.0023

Neptune 109987-08-14 17:01 G 41893212.02 41893212.21 41893212.42 0.0090 0.0033

Jupiter 109987-11-11 23:15 G 41893301.34 41893301.47 41893301.61 0.0517 0.0384

Neptune 109988-03-27 05:44 G 41893437.56 41893437.74 41893437.93 0.0090 0.0043

Neptune 109988-11-07 18:42 G 41893663.11 41893663.28 41893663.45 0.0090 0.0053

Uranus 109989-05-31 03:34 G 41893867.59 41893867.65 41893867.75 0.0137 0.0127

Neptune 109989-06-21 07:10 G 41893888.66 41893888.80 41893888.96 0.0090 0.0063

Uranus 109990-01-12 10:18 G 41894093.83 41894093.93 41894094.07 0.0137 0.0113

Neptune 109990-02-01 19:39 G 41894114.21 41894114.32 41894114.46 0.0090 0.0073

Uranus 109990-08-26 17:15 G 41894320.08 41894320.22 41894320.38 0.0137 0.0098

Neptune 109990-09-15 08:22 G 41894339.78 41894339.85 41894339.94 0.0090 0.0083

Uranus 109991-04-09 23:44 G 41894546.33 41894546.49 41894546.67 0.0137 0.0084

Uranus 109991-11-22 05:58 G 41894772.58 41894772.75 41894772.95 0.0137 0.0070

Uranus 109992-07-05 12:27 G 41894998.83 41894999.02 41894999.22 0.0136 0.0055

Saturn 109993-02-12 04:32 G 41895220.48 41895220.69 41895220.90 0.0265 0.0006

Uranus 109993-02-16 18:27 G 41895225.07 41895225.27 41895225.48 0.0136 0.0040

Saturn 109993-09-29 02:08 G 41895449.56 41895449.59 41895449.62 0.0266 0.0262

Uranus 109993-10-01 00:42 G 41895451.32 41895451.53 41895451.74 0.0136 0.0025

Jupiter 109994-05-04 20:51 G 41895667.18 41895667.37 41895667.57 0.0513 0.0128

Uranus 109994-05-15 06:27 G 41895677.56 41895677.77 41895677.99 0.0136 0.0011

Uranus 109994-12-27 12:13 G 41895903.79 41895904.01 41895904.22 0.0136 0.0004

Uranus 109995-08-10 17:44 G 41896130.03 41896130.24 41896130.45 0.0136 0.0018

Uranus 109996-03-23 23:01 G 41896356.26 41896356.46 41896356.67 0.0136 0.0032

Uranus 109996-11-05 04:18 G 41896582.49 41896582.68 41896582.89 0.0136 0.0047

Uranus 109997-06-19 09:34 G 41896808.72 41896808.90 41896809.10 0.0135 0.0061

Uranus 109998-01-31 14:37 G 41897034.94 41897035.11 41897035.29 0.0135 0.0074

Uranus 109998-09-14 19:25 G 41897261.16 41897261.31 41897261.48 0.0135 0.0088

Uranus 109999-04-29 00:13 G 41897487.38 41897487.51 41897487.66 0.0135 0.0102

Uranus 109999-12-11 05:15 G 41897713.62 41897713.72 41897713.84 0.0135 0.0114

Jupiter 110000-03-11 00:13 G 41897804.34 41897804.51 41897804.68 0.0510 0.0291

Uranus 110000-07-24 09:49 G 41897939.85 41897939.91 41897939.99 0.0135 0.0127

111TH MILLENNIUM CE

This is a list of transits of Venus in the 111th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Mars 110005-10-29 06:56 G 41899862.62 41899862.79 41899862.96 0.1604 0.0425

Jupiter 110006-01-07 19:54 G 41899933.20 41899933.33 41899933.47 0.0510 0.0378

Saturn 110007-07-26 15:06 G 41900497.92 41900498.13 41900498.35 0.0295 0.0004

Jupiter 110011-11-14 18:13 G 41902070.06 41902070.26 41902070.47 0.0513 0.0031

Jupiter 110018-05-07 11:44 G 41904435.82 41904435.99 41904436.16 0.0516 0.0278

Moon 110020-07-06 19:39 G 41905227.26 41905227.32 41905227.39 0.2644 0.2391

Saturn 110022-01-08 12:27 G 41905777.93 41905778.02 41905778.13 0.0265 0.0230

Saturn 110022-08-25 10:18 G 41906006.73 41906006.93 41906007.14 0.0266 0.0040

Jupiter 110023-07-20 10:32 G 41906335.76 41906335.94 41906336.13 0.0516 0.0242

Earth 110028-07-04 14:37 G 41908146.96 41908147.11 41908147.27 0.2641 0.0664

Moon 110028-07-04 14:51 G 41908146.97 41908147.12 41908147.27 0.2648 0.0331 *

Jupiter 110030-01-10 08:51 G 41908701.67 41908701.87 41908702.07 0.0514 0.0018

Uranus 110032-10-09 20:51 G 41909705.31 41909705.37 41909705.43 0.0141 0.0134

Uranus 110033-05-24 06:56 G 41909931.69 41909931.79 41909931.92 0.0141 0.0119

Uranus 110034-01-05 17:15 G 41910158.09 41910158.22 41910158.39 0.0141 0.0104

Uranus 110034-08-20 04:18 G 41910384.52 41910384.68 41910384.86 0.0141 0.0088

Mars 110035-01-18 00:13 G 41910535.34 41910535.51 41910535.68 0.1936 0.0116

Jupiter 110035-03-25 04:46 G 41910601.66 41910601.70 41910601.74 0.0518 0.0507

Uranus 110035-04-03 15:34 G 41910610.97 41910611.15 41910611.35 0.0141 0.0072

Uranus 110035-11-16 02:37 G 41910837.42 41910837.61 41910837.83 0.0142 0.0056

Jupiter 110035-11-17 12:27 G 41910838.92 41910839.02 41910839.13 0.0510 0.0432

Uranus 110036-06-29 14:08 G 41911063.89 41911064.09 41911064.31 0.0142 0.0039

Saturn 110037-02-05 04:03 G 41911284.46 41911284.67 41911284.88 0.0295 0.0070

Uranus 110037-02-11 01:39 G 41911290.36 41911290.57 41911290.80 0.0142 0.0022

Uranus 110037-09-25 13:39 G 41911516.85 41911517.07 41911517.29 0.0142 0.0005

Uranus 110038-05-10 01:39 G 41911743.35 41911743.57 41911743.79 0.0142 0.0013

Uranus 110038-12-22 13:25 G 41911969.85 41911970.06 41911970.29 0.0142 0.0031

Uranus 110039-08-06 01:39 G 41912196.37 41912196.57 41912196.79 0.0142 0.0047

Uranus 110040-03-19 13:54 G 41912422.89 41912423.08 41912423.29 0.0143 0.0065

Uranus 110040-11-01 02:22 G 41912649.43 41912649.60 41912649.79 0.0143 0.0082

Uranus 110041-06-15 14:51 G 41912875.97 41912876.12 41912876.29 0.0143 0.0099

Jupiter 110041-09-15 05:15 G 41912967.54 41912967.72 41912967.90 0.0512 0.0242

Uranus 110042-01-28 03:34 G 41913102.53 41913102.65 41913102.79 0.0143 0.0115

Uranus 110042-09-11 16:03 G 41913329.11 41913329.17 41913329.27 0.0143 0.0132

Jupiter 110047-07-23 08:37 G 41915104.66 41915104.86 41915105.05 0.0512 0.0180

Saturn 110051-07-21 16:32 G 41916564.05 41916564.19 41916564.34 0.0265 0.0190

Saturn 110052-03-06 14:08 G 41916792.89 41916793.09 41916793.29 0.0265 0.0078

Pluto 110053-02-28 18:42 G 41917152.11 41917152.28 41917152.45 0.0081 0.0052

Jupiter 110053-05-21 04:46 G 41917233.64 41917233.70 41917233.75 0.0509 0.0489

Pluto 110053-10-12 05:30 G 41917377.54 41917377.73 41917377.96 0.0080 0.0032

Jupiter 110054-01-12 22:32 G 41917470.33 41917470.44 41917470.56 0.0518 0.0424

Jupiter 110059-03-28 02:37 G 41919370.41 41919370.61 41919370.81 0.0514 0.0083

Neptune 110062-05-01 11:01 G 41920500.90 41920500.96 41920501.07 0.0088 0.0081

Neptune 110062-12-13 00:27 G 41920726.40 41920726.52 41920726.66 0.0088 0.0071

Neptune 110063-07-26 13:39 G 41920951.92 41920952.07 41920952.24 0.0088 0.0061

Neptune 110064-03-08 02:37 G 41921177.45 41921177.61 41921177.81 0.0088 0.0052

Neptune 110064-10-19 16:03 G 41921402.98 41921403.17 41921403.37 0.0088 0.0042

Neptune 110065-06-02 05:15 G 41921628.52 41921628.72 41921628.94 0.0088 0.0032

Jupiter 110065-09-17 21:06 G 41921736.19 41921736.38 41921736.57 0.0516 0.0167

Saturn 110065-12-31 03:49 G 41921840.59 41921840.66 41921840.75 0.0296 0.0271

Neptune 110066-01-13 18:13 G 41921854.06 41921854.26 41921854.49 0.0088 0.0023

Saturn 110066-08-18 08:08 G 41922070.64 41922070.84 41922071.04 0.0295 0.0113

Neptune 110066-08-27 07:39 G 41922079.60 41922079.82 41922080.05 0.0088 0.0013

Neptune 110067-04-09 21:06 G 41922305.15 41922305.38 41922305.60 0.0088 0.0003

Neptune 110067-11-21 10:03 G 41922530.71 41922530.92 41922531.15 0.0088 0.0008

Neptune 110068-07-03 23:30 G 41922756.26 41922756.48 41922756.70 0.0088 0.0017

Neptune 110069-02-14 12:27 G 41922981.82 41922982.02 41922982.24 0.0088 0.0027

Neptune 110069-09-28 01:39 G 41923207.38 41923207.57 41923207.79 0.0088 0.0037

Neptune 110070-05-11 15:06 G 41923432.95 41923433.13 41923433.33 0.0088 0.0047

Jupiter 110070-11-30 19:54 G 41923636.18 41923636.33 41923636.48 0.0517 0.0351

Neptune 110070-12-23 04:46 G 41923658.53 41923658.70 41923658.87 0.0088 0.0056

Neptune 110071-08-05 17:44 G 41923884.11 41923884.24 41923884.40 0.0088 0.0066

Mars 110071-08-26 18:42 G 41923905.11 41923905.28 41923905.46 0.1606 0.0209

Neptune 110072-03-18 06:56 G 41924109.70 41924109.79 41924109.92 0.0088 0.0076

Neptune 110072-10-29 20:51 G 41924335.32 41924335.37 41924335.42 0.0088 0.0085

Uranus 110073-01-28 14:08 G 41924426.04 41924426.09 41924426.17 0.0137 0.0131

Uranus 110073-09-11 21:20 G 41924652.28 41924652.39 41924652.51 0.0137 0.0117

Uranus 110074-04-26 04:03 G 41924878.54 41924878.67 41924878.82 0.0137 0.0102

Uranus 110074-12-08 10:32 G 41925104.79 41925104.94 41925105.12 0.0137 0.0088

Uranus 110075-07-22 17:15 G 41925331.04 41925331.22 41925331.40 0.0137 0.0073

Uranus 110076-03-04 23:30 G 41925557.29 41925557.48 41925557.68 0.0137 0.0059

Uranus 110076-10-17 05:58 G 41925783.55 41925783.75 41925783.96 0.0136 0.0044

Jupiter 110077-05-23 19:10 G 41926002.11 41926002.30 41926002.50 0.0513 0.0092

Uranus 110077-05-31 11:58 G 41926009.79 41926010.00 41926010.21 0.0136 0.0029

Uranus 110078-01-12 17:58 G 41926236.04 41926236.25 41926236.46 0.0136 0.0015

Uranus 110078-08-26 23:44 G 41926462.27 41926462.49 41926462.70 0.0136 0.0001

Uranus 110079-04-10 05:15 G 41926688.51 41926688.72 41926688.94 0.0136 0.0015

Uranus 110079-11-22 11:01 G 41926914.75 41926914.96 41926915.17 0.0136 0.0029

Uranus 110080-07-05 16:18 G 41927140.98 41927141.18 41927141.38 0.0136 0.0043

Saturn 110081-01-30 21:20 G 41927350.22 41927350.39 41927350.57 0.0265 0.0149

Uranus 110081-02-16 21:20 G 41927367.20 41927367.39 41927367.59 0.0136 0.0057

Saturn 110081-09-16 18:56 G 41927579.11 41927579.29 41927579.48 0.0266 0.0120

Uranus 110081-10-01 02:22 G 41927593.43 41927593.60 41927593.79 0.0135 0.0071

Uranus 110082-05-15 07:39 G 41927819.66 41927819.82 41927819.99 0.0135 0.0085

Uranus 110082-12-27 12:13 G 41928045.88 41928046.01 41928046.17 0.0135 0.0099

Jupiter 110083-03-30 19:54 G 41928139.18 41928139.33 41928139.50 0.0511 0.0322

Uranus 110083-08-10 17:15 G 41928272.11 41928272.22 41928272.34 0.0135 0.0111

Uranus 110084-03-23 21:49 G 41928498.34 41928498.41 41928498.50 0.0135 0.0124

Jupiter 110089-01-26 17:15 G 41930268.07 41930268.22 41930268.37 0.0510 0.0344

Jupiter 110094-12-03 15:20 G 41932404.93 41932405.14 41932405.34 0.0513 0.0063

Saturn 110095-07-13 15:49 G 41932627.00 41932627.16 41932627.31 0.0295 0.0204

Saturn 110096-02-28 19:39 G 41932857.16 41932857.32 41932857.50 0.0295 0.0181

Mars 110100-11-15 03:34 G 41934577.50 41934577.65 41934577.80 0.1933 0.0870

Jupiter 110101-05-27 06:56 G 41934770.63 41934770.79 41934770.95 0.0517 0.0308

Jupiter 110106-08-09 10:46 G 41936670.77 41936670.95 41936671.14 0.0515 0.0197

Saturn 110110-08-14 01:25 G 41938136.37 41938136.56 41938136.76 0.0265 0.0109

Saturn 110111-03-30 22:46 G 41938365.29 41938365.45 41938365.62 0.0265 0.0159

Jupiter 110113-01-30 05:30 G 41939036.53 41939036.73 41939036.93 0.0514 0.0052

Uranus 110116-06-10 05:44 G 41940263.71 41940263.74 41940263.79 0.0141 0.0138

Uranus 110117-01-22 15:49 G 41940490.07 41940490.16 41940490.28 0.0141 0.0123

Uranus 110117-09-06 02:22 G 41940716.47 41940716.60 41940716.75 0.0141 0.0108

Jupiter 110118-04-14 04:32 G 41940936.61 41940936.69 41940936.79 0.0518 0.0464

Uranus 110118-04-20 13:10 G 41940942.90 41940943.05 41940943.23 0.0141 0.0092

Uranus 110118-12-03 00:27 G 41941169.34 41941169.52 41941169.71 0.0141 0.0076

Jupiter 110118-12-07 11:30 G 41941173.92 41941173.98 41941174.06 0.0509 0.0474

Uranus 110119-07-17 11:15 G 41941395.78 41941395.97 41941396.18 0.0141 0.0060

Uranus 110120-02-28 22:46 G 41941622.24 41941622.45 41941622.66 0.0142 0.0043

Uranus 110120-10-12 10:18 G 41941848.72 41941848.93 41941849.15 0.0142 0.0026

Uranus 110121-05-26 22:03 G 41942075.20 41942075.42 41942075.64 0.0142 0.0009

Uranus 110122-01-08 09:49 G 41942301.69 41942301.91 41942302.13 0.0142 0.0008

Uranus 110122-08-22 21:49 G 41942528.19 41942528.41 41942528.63 0.0142 0.0025

Uranus 110123-04-06 09:49 G 41942754.70 41942754.91 41942755.13 0.0142 0.0043

Uranus 110123-11-18 22:03 G 41942981.22 41942981.42 41942981.63 0.0143 0.0060

Uranus 110124-07-02 10:32 G 41943207.75 41943207.94 41943208.13 0.0143 0.0077

Jupiter 110124-10-05 05:01 G 41943302.52 41943302.71 41943302.89 0.0512 0.0200

Saturn 110125-01-23 17:58 G 41943413.08 41943413.25 41943413.43 0.0296 0.0166

Uranus 110125-02-13 22:46 G 41943434.29 41943434.45 41943434.62 0.0143 0.0094

Saturn 110125-09-10 22:18 G 41943643.29 41943643.43 41943643.58 0.0295 0.0220

Uranus 110125-09-28 11:15 G 41943660.84 41943660.97 41943661.12 0.0143 0.0111

Uranus 110126-05-13 00:27 G 41943887.42 41943887.52 41943887.62 0.0143 0.0127

Jupiter 110130-08-12 06:13 G 41945439.57 41945439.76 41945439.95 0.0511 0.0217

Jupiter 110136-06-10 04:03 G 41947568.58 41947568.67 41947568.77 0.0509 0.0449

Jupiter 110137-02-01 21:49 G 41947805.33 41947805.41 41947805.50 0.0518 0.0465

Mars 110137-06-24 06:56 G 41947947.61 41947947.79 41947947.96 0.1608 0.0033

Saturn 110140-02-24 04:46 G 41948922.50 41948922.70 41948922.91 0.0265 0.0071

Saturn 110140-10-10 02:22 G 41949151.47 41949151.60 41949151.74 0.0266 0.0198

Moon 110142-01-09 07:39 G 41949607.71 41949607.82 41949607.93 0.2685 0.1993

Earth 110142-01-09 09:49 G 41949607.87 41949607.91 41949607.95 0.2692 0.2591 *

Jupiter 110142-04-16 23:15 G 41949705.27 41949705.47 41949705.68 0.0514 0.0051

Neptune 110145-01-31 05:01 G 41950725.62 41950725.71 41950725.80 0.0090 0.0081

Neptune 110145-09-13 17:44 G 41950951.12 41950951.24 41950951.38 0.0090 0.0071

Neptune 110146-04-27 06:42 G 41951176.62 41951176.78 41951176.94 0.0090 0.0061

Neptune 110146-12-08 19:25 G 41951402.14 41951402.31 41951402.50 0.0090 0.0051

Neptune 110147-07-22 08:08 G 41951627.66 41951627.84 41951628.04 0.0090 0.0041

Neptune 110148-03-03 21:06 G 41951853.18 41951853.38 41951853.59 0.0090 0.0031

Jupiter 110148-10-07 19:10 G 41952071.12 41952071.30 41952071.49 0.0515 0.0204

Neptune 110148-10-15 10:03 G 41952078.72 41952078.92 41952079.14 0.0090 0.0021

Neptune 110149-05-28 23:01 G 41952304.25 41952304.46 41952304.68 0.0090 0.0010

Moon 110150-01-06 21:06 G 41952527.25 41952527.38 41952527.51 0.2690 0.1512

Earth 110150-01-07 02:22 G 41952527.46 41952527.60 41952527.75 0.2691 0.0906 *

Neptune 110150-01-09 11:44 G 41952529.78 41952529.99 41952530.21 0.0090 0.0001

Neptune 110150-08-23 00:27 G 41952755.31 41952755.52 41952755.74 0.0090 0.0010

Neptune 110151-04-05 13:10 G 41952980.85 41952981.05 41952981.27 0.0090 0.0020

Neptune 110151-11-17 02:08 G 41953206.39 41953206.59 41953206.80 0.0090 0.0030

Neptune 110152-06-29 14:51 G 41953431.93 41953432.12 41953432.32 0.0090 0.0040

Neptune 110153-02-10 03:20 G 41953657.47 41953657.64 41953657.83 0.0090 0.0050

Neptune 110153-09-23 16:03 G 41953883.02 41953883.17 41953883.34 0.0090 0.0060

Jupiter 110153-12-20 17:44 G 41953971.08 41953971.24 41953971.41 0.0517 0.0315

Neptune 110154-05-07 04:46 G 41954108.57 41954108.70 41954108.84 0.0090 0.0070

Saturn 110154-08-06 04:46 G 41954199.50 41954199.70 41954199.90 0.0295 0.0101

Neptune 110154-12-18 17:15 G 41954334.14 41954334.22 41954334.33 0.0090 0.0080

Saturn 110155-03-24 09:06 G 41954429.83 41954429.88 41954429.94 0.0295 0.0283

Uranus 110156-09-29 01:25 G 41954984.54 41954984.56 41954984.62 0.0138 0.0135

Uranus 110157-05-13 08:22 G 41955210.77 41955210.85 41955210.98 0.0137 0.0121

Uranus 110157-12-25 15:49 G 41955437.02 41955437.16 41955437.29 0.0137 0.0106

Uranus 110158-08-08 22:18 G 41955663.28 41955663.43 41955663.60 0.0137 0.0091

Uranus 110159-03-23 04:46 G 41955889.53 41955889.70 41955889.89 0.0137 0.0077

Uranus 110159-11-04 11:30 G 41956115.79 41956115.98 41956116.18 0.0137 0.0062

Jupiter 110160-06-12 14:51 G 41956336.92 41956337.12 41956337.32 0.0513 0.0061

Uranus 110160-06-17 17:44 G 41956342.04 41956342.24 41956342.45 0.0137 0.0047

Uranus 110161-01-29 23:58 G 41956568.29 41956568.50 41956568.71 0.0136 0.0033

Uranus 110161-09-13 05:58 G 41956794.54 41956794.75 41956794.96 0.0136 0.0018

Uranus 110162-04-27 11:44 G 41957020.78 41957020.99 41957021.21 0.0136 0.0004

Uranus 110162-12-09 17:30 G 41957247.02 41957247.23 41957247.45 0.0136 0.0011

Uranus 110163-07-23 23:01 G 41957473.25 41957473.46 41957473.67 0.0136 0.0026

Uranus 110164-03-06 04:18 G 41957699.48 41957699.68 41957699.89 0.0136 0.0040

Uranus 110164-10-18 09:49 G 41957925.71 41957925.91 41957926.11 0.0136 0.0054

Uranus 110165-06-01 14:51 G 41958151.94 41958152.12 41958152.31 0.0135 0.0068

Uranus 110166-01-13 19:39 G 41958378.16 41958378.32 41958378.50 0.0135 0.0082

Jupiter 110166-04-19 21:20 G 41958474.25 41958474.39 41958474.53 0.0510 0.0369

Uranus 110166-08-28 00:27 G 41958604.39 41958604.52 41958604.69 0.0135 0.0096

Mars 110166-09-12 07:25 G 41958619.72 41958619.81 41958619.91 0.1930 0.1585

Uranus 110167-04-11 05:30 G 41958830.61 41958830.73 41958830.86 0.0135 0.0108

Uranus 110167-11-23 10:18 G 41959056.85 41959056.93 41959057.03 0.0135 0.0122

Uranus 110168-07-06 14:51 G 41959283.12 41959283.12 41959283.16 0.0135 0.0135

Saturn 110169-09-05 09:06 G 41959708.67 41959708.88 41959709.09 0.0265 0.0031

Saturn 110170-04-22 06:13 G 41959937.67 41959937.76 41959937.86 0.0265 0.0236

Jupiter 110172-02-16 14:08 G 41960602.93 41960603.09 41960603.25 0.0511 0.0311

Jupiter 110177-12-23 16:03 G 41962739.97 41962740.17 41962740.37 0.0512 0.0110

Saturn 110184-02-16 06:13 G 41964985.55 41964985.76 41964985.97 0.0296 0.0066

Jupiter 110184-06-15 07:39 G 41965105.68 41965105.82 41965105.97 0.0517 0.0356

Jupiter 110189-08-28 10:03 G 41967005.73 41967005.92 41967006.12 0.0515 0.0155

Jupiter 110196-02-19 06:13 G 41969371.56 41969371.76 41969371.96 0.0514 0.0097

Saturn 110198-08-01 13:39 G 41970266.07 41970266.07 41970266.08 0.0265 0.0264

Saturn 110199-03-18 11:15 G 41970494.76 41970494.97 41970495.18 0.0265 0.0004

Uranus 110200-09-22 23:58 G 41971048.43 41971048.50 41971048.61 0.0141 0.0128

Jupiter 110201-05-04 02:22 G 41971271.49 41971271.60 41971271.72 0.0518 0.0427

Uranus 110201-05-07 10:46 G 41971274.82 41971274.95 41971275.09 0.0141 0.0112

Uranus 110201-12-19 21:06 G 41971501.24 41971501.38 41971501.55 0.0141 0.0097

Uranus 110202-08-03 08:08 G 41971727.66 41971727.84 41971728.02 0.0141 0.0081

Uranus 110203-03-17 18:56 G 41971954.11 41971954.29 41971954.50 0.0141 0.0065

Mars 110203-04-22 18:27 G 41971990.09 41971990.27 41971990.45 0.1610 0.0223

Uranus 110203-10-30 06:27 G 41972180.56 41972180.77 41972180.98 0.0142 0.0048

Uranus 110204-06-12 17:44 G 41972407.02 41972407.24 41972407.45 0.0142 0.0031

Uranus 110205-01-25 05:01 G 41972633.49 41972633.71 41972633.93 0.0142 0.0014

Uranus 110205-09-08 16:46 G 41972859.98 41972860.20 41972860.42 0.0142 0.0003

Uranus 110206-04-23 04:32 G 41973086.48 41973086.69 41973086.92 0.0142 0.0020

Uranus 110206-12-05 16:32 G 41973312.98 41973313.19 41973313.41 0.0142 0.0037

Uranus 110207-07-20 04:32 G 41973539.49 41973539.69 41973539.90 0.0142 0.0054

Jupiter 110207-10-26 04:18 G 41973637.49 41973637.68 41973637.87 0.0512 0.0159

Uranus 110208-03-02 16:32 G 41973766.01 41973766.19 41973766.40 0.0143 0.0072

Uranus 110208-10-15 05:01 G 41973992.55 41973992.71 41973992.89 0.0143 0.0089

Uranus 110209-05-29 17:30 G 41974219.10 41974219.23 41974219.39 0.0143 0.0106

Pluto 110209-09-27 05:01 G 41974339.59 41974339.71 41974339.88 0.0063 0.0047

Uranus 110210-01-11 06:13 G 41974445.66 41974445.76 41974445.88 0.0143 0.0122

Pluto 110210-05-10 08:51 G 41974564.66 41974564.87 41974565.09 0.0063 0.0008

Uranus 110210-08-25 18:42 G 41974672.25 41974672.28 41974672.35 0.0143 0.0139

Pluto 110210-12-21 12:13 G 41974789.82 41974790.01 41974790.20 0.0064 0.0031

Saturn 110213-08-29 15:20 G 41975771.93 41975772.14 41975772.36 0.0295 0.0007

Jupiter 110213-09-01 05:30 G 41975774.55 41975774.73 41975774.91 0.0511 0.0259

Jupiter 110219-07-01 00:27 G 41977903.40 41977903.52 41977903.63 0.0509 0.0418

Jupiter 110220-02-22 18:27 G 41978140.22 41978140.27 41978140.32 0.0518 0.0500

Jupiter 110225-05-07 01:54 G 41980040.38 41980040.58 41980040.79 0.0514 0.0007

Neptune 110226-08-04 19:25 G 41980495.26 41980495.31 41980495.40 0.0088 0.0083

Neptune 110227-03-18 08:51 G 41980720.76 41980720.87 41980721.00 0.0088 0.0073

Neptune 110227-10-29 21:49 G 41980946.28 41980946.41 41980946.58 0.0088 0.0064

Saturn 110228-02-12 17:44 G 41981052.14 41981052.24 41981052.36 0.0264 0.0225

Neptune 110228-06-11 11:01 G 41981171.80 41981171.96 41981172.15 0.0088 0.0054

Saturn 110228-09-28 15:20 G 41981280.93 41981281.14 41981281.35 0.0265 0.0043

Neptune 110229-01-23 00:27 G 41981397.33 41981397.52 41981397.72 0.0088 0.0044

Neptune 110229-09-05 13:25 G 41981622.87 41981623.06 41981623.28 0.0088 0.0035

Neptune 110230-04-19 02:51 G 41981848.41 41981848.62 41981848.84 0.0088 0.0025

Neptune 110230-11-30 16:03 G 41982073.96 41982074.17 41982074.40 0.0088 0.0015

Neptune 110231-07-14 05:15 G 41982299.50 41982299.72 41982299.95 0.0088 0.0005

Jupiter 110231-10-28 17:01 G 41982406.04 41982406.21 41982406.39 0.0516 0.0243

Neptune 110232-02-24 18:27 G 41982525.05 41982525.27 41982525.49 0.0088 0.0005

Neptune 110232-10-07 07:25 G 41982750.60 41982750.81 41982751.04 0.0088 0.0015

Neptune 110233-05-20 21:06 G 41982976.16 41982976.38 41982976.59 0.0088 0.0024

Neptune 110234-01-01 10:03 G 41983201.72 41983201.92 41983202.13 0.0088 0.0034

Neptune 110234-08-14 23:01 G 41983427.28 41983427.46 41983427.67 0.0088 0.0044

Neptune 110235-03-28 12:13 G 41983652.85 41983653.01 41983653.21 0.0088 0.0054

Neptune 110235-11-09 01:54 G 41983878.43 41983878.58 41983878.74 0.0088 0.0063

Neptune 110236-06-21 15:06 G 41984104.02 41984104.13 41984104.27 0.0088 0.0073

Jupiter 110237-01-09 20:22 G 41984306.17 41984306.35 41984306.53 0.0516 0.0262

Neptune 110237-02-02 04:18 G 41984329.63 41984329.68 41984329.77 0.0088 0.0083

Uranus 110241-01-11 19:10 G 41985769.23 41985769.30 41985769.41 0.0138 0.0125

Uranus 110241-08-26 02:37 G 41985995.49 41985995.61 41985995.74 0.0137 0.0110

Uranus 110242-04-09 09:20 G 41986221.75 41986221.89 41986222.05 0.0137 0.0095

Uranus 110242-11-21 16:03 G 41986448.01 41986448.17 41986448.36 0.0137 0.0081

Saturn 110243-03-11 15:49 G 41986557.95 41986558.16 41986558.37 0.0296 0.0027

Jupiter 110243-07-03 16:32 G 41986671.99 41986672.19 41986672.39 0.0514 0.0013

Uranus 110243-07-05 22:46 G 41986674.27 41986674.45 41986674.64 0.0137 0.0066

Uranus 110244-02-17 05:01 G 41986900.52 41986900.71 41986900.92 0.0137 0.0052

Uranus 110244-09-30 11:30 G 41987126.78 41987126.98 41987127.19 0.0136 0.0037

Uranus 110245-05-14 17:44 G 41987353.03 41987353.24 41987353.45 0.0136 0.0022

Uranus 110245-12-26 23:30 G 41987579.27 41987579.48 41987579.70 0.0136 0.0007

Uranus 110246-08-10 05:15 G 41987805.51 41987805.72 41987805.94 0.0136 0.0007

Uranus 110247-03-24 10:46 G 41988031.74 41988031.95 41988032.17 0.0136 0.0022

Uranus 110247-11-05 16:32 G 41988257.98 41988258.19 41988258.40 0.0136 0.0036

Uranus 110248-06-18 21:49 G 41988484.21 41988484.41 41988484.61 0.0136 0.0050

Uranus 110249-01-31 02:37 G 41988710.44 41988710.61 41988710.81 0.0136 0.0065

Jupiter 110249-05-09 21:34 G 41988809.28 41988809.40 41988809.52 0.0510 0.0414

Uranus 110249-09-14 07:54 G 41988936.66 41988936.83 41988937.01 0.0136 0.0078

Uranus 110250-04-28 12:42 G 41989162.89 41989163.03 41989163.20 0.0135 0.0092

Uranus 110250-12-10 17:30 G 41989389.12 41989389.23 41989389.39 0.0135 0.0106

Uranus 110251-07-24 22:32 G 41989615.35 41989615.44 41989615.55 0.0135 0.0118

Uranus 110252-03-07 03:06 G 41989841.60 41989841.63 41989841.70 0.0135 0.0131

Jupiter 110255-03-08 15:49 G 41990937.99 41990938.16 41990938.34 0.0511 0.0263

Saturn 110257-08-24 18:56 G 41991838.15 41991838.29 41991838.43 0.0265 0.0194

Saturn 110258-04-10 16:18 G 41992066.98 41992067.18 41992067.39 0.0265 0.0075

Jupiter 110261-01-12 15:06 G 41993074.94 41993075.13 41993075.33 0.0512 0.0152

Mars 110264-07-10 08:22 G 41994349.79 41994349.85 41994349.91 0.1938 0.1810

Jupiter 110267-07-06 08:08 G 41995440.72 41995440.84 41995440.97 0.0517 0.0401

Mars 110269-02-17 06:13 G 41996032.59 41996032.76 41996032.93 0.1612 0.0443

Moon 110271-07-07 09:20 G 41996902.74 41996902.89 41996903.03 0.2640 0.1366

Earth 110271-07-07 14:22 G 41996902.95 41996903.10 41996903.26 0.2642 0.0714 *

Jupiter 110272-09-17 10:18 G 41997340.73 41997340.93 41997341.13 0.0515 0.0110

Saturn 110272-09-20 23:44 G 41997344.29 41997344.49 41997344.70 0.0295 0.0083

Jupiter 110279-03-11 03:20 G 41999706.44 41999706.64 41999706.83 0.0515 0.0133

Jupiter 110284-05-23 05:58 G 42001606.62 42001606.75 42001606.90 0.0518 0.0372

Uranus 110284-05-23 08:37 G 42001606.80 42001606.86 42001606.95 0.0140 0.0132 *

Uranus 110285-01-04 18:42 G 42001833.18 42001833.28 42001833.42 0.0141 0.0117

Uranus 110285-08-19 05:15 G 42002059.58 42002059.72 42002059.88 0.0141 0.0101

Uranus 110286-04-02 16:03 G 42002286.00 42002286.17 42002286.35 0.0141 0.0085

Uranus 110286-11-15 02:51 G 42002512.44 42002512.62 42002512.82 0.0141 0.0069

Saturn 110287-03-06 23:15 G 42002624.30 42002624.47 42002624.64 0.0265 0.0154

Uranus 110287-06-29 13:54 G 42002738.88 42002739.08 42002739.29 0.0141 0.0053

Saturn 110287-10-21 20:22 G 42002853.17 42002853.35 42002853.55 0.0265 0.0114

Uranus 110288-02-11 00:56 G 42002965.33 42002965.54 42002965.76 0.0142 0.0037

Uranus 110288-09-24 12:27 G 42003191.80 42003192.02 42003192.24 0.0142 0.0019

Uranus 110289-05-08 23:58 G 42003418.28 42003418.50 42003418.73 0.0142 0.0004

Uranus 110289-12-21 11:44 G 42003644.77 42003644.99 42003645.21 0.0142 0.0015

Uranus 110290-08-04 23:30 G 42003871.26 42003871.48 42003871.70 0.0142 0.0032

Jupiter 110290-11-14 02:37 G 42003972.41 42003972.61 42003972.80 0.0512 0.0121

Uranus 110291-03-19 11:15 G 42004097.77 42004097.97 42004098.19 0.0142 0.0049

Uranus 110291-10-31 23:15 G 42004324.29 42004324.47 42004324.68 0.0143 0.0067

Uranus 110292-06-14 11:58 G 42004550.82 42004551.00 42004551.18 0.0143 0.0083

Uranus 110293-01-27 00:13 G 42004777.36 42004777.51 42004777.67 0.0143 0.0100

Uranus 110293-09-10 12:27 G 42005003.91 42005004.02 42005004.16 0.0143 0.0117

Uranus 110294-04-25 01:39 G 42005230.49 42005230.57 42005230.65 0.0143 0.0133

Jupiter 110296-09-20 08:37 G 42006109.70 42006109.86 42006110.02 0.0511 0.0313

Pluto 110299-11-11 18:27 G 42007257.09 42007257.27 42007257.47 0.0081 0.0043

Pluto 110300-06-25 05:44 G 42007482.56 42007482.74 42007482.95 0.0080 0.0041

Mars 110301-02-17 01:39 G 42007719.54 42007719.57 42007719.60 0.1605 0.1579

Saturn 110301-08-16 19:25 G 42007900.24 42007900.31 42007900.40 0.0296 0.0272

Saturn 110302-04-03 23:44 G 42008130.30 42008130.49 42008130.69 0.0295 0.0114

Jupiter 110302-07-21 02:37 G 42008238.47 42008238.61 42008238.75 0.0510 0.0369

Jupiter 110308-05-27 03:34 G 42010375.44 42010375.65 42010375.85 0.0513 0.0053

Neptune 110309-05-06 13:39 G 42010720.01 42010720.07 42010720.16 0.0090 0.0084

Neptune 110309-12-18 02:37 G 42010945.50 42010945.61 42010945.74 0.0090 0.0074

Neptune 110310-07-31 15:20 G 42011171.00 42011171.14 42011171.30 0.0090 0.0064

Neptune 110311-03-14 04:18 G 42011396.51 42011396.68 42011396.86 0.0090 0.0054

Neptune 110311-10-25 17:15 G 42011622.04 42011622.22 42011622.41 0.0090 0.0044

Neptune 110312-06-07 05:58 G 42011847.56 42011847.75 42011847.96 0.0090 0.0034

Neptune 110313-01-18 18:42 G 42012073.08 42012073.28 42012073.50 0.0090 0.0024

Neptune 110313-09-01 07:39 G 42012298.61 42012298.82 42012299.04 0.0090 0.0014

Neptune 110314-04-14 20:22 G 42012524.14 42012524.35 42012524.57 0.0090 0.0004

Jupiter 110314-11-17 19:54 G 42012741.17 42012741.33 42012741.49 0.0516 0.0296

Neptune 110314-11-26 09:20 G 42012749.68 42012749.89 42012750.11 0.0090 0.0007

Neptune 110315-07-09 22:03 G 42012975.21 42012975.42 42012975.64 0.0090 0.0017

Neptune 110316-02-20 10:46 G 42013200.75 42013200.95 42013201.17 0.0090 0.0027

Saturn 110316-09-16 23:15 G 42013410.29 42013410.47 42013410.66 0.0265 0.0125

Neptune 110316-10-02 23:44 G 42013426.30 42013426.49 42013426.69 0.0090 0.0037

Saturn 110317-05-03 20:37 G 42013639.19 42013639.36 42013639.54 0.0265 0.0143

Neptune 110317-05-16 12:27 G 42013651.84 42013652.02 42013652.21 0.0090 0.0047

Neptune 110317-12-28 01:10 G 42013877.39 42013877.55 42013877.72 0.0090 0.0057

Neptune 110318-08-10 13:54 G 42014102.94 42014103.08 42014103.22 0.0090 0.0067

Neptune 110319-03-24 02:22 G 42014328.50 42014328.60 42014328.72 0.0090 0.0077

Neptune 110319-11-04 15:06 G 42014554.09 42014554.13 42014554.19 0.0090 0.0087

Jupiter 110320-01-30 20:22 G 42014641.16 42014641.35 42014641.53 0.0516 0.0218

Uranus 110324-09-12 06:27 G 42016327.69 42016327.77 42016327.84 0.0138 0.0128

Uranus 110325-04-26 13:25 G 42016553.95 42016554.06 42016554.19 0.0137 0.0114

Uranus 110325-12-08 20:08 G 42016780.21 42016780.34 42016780.51 0.0137 0.0100

Uranus 110326-07-23 03:20 G 42017006.47 42017006.64 42017006.81 0.0137 0.0084

Jupiter 110326-07-23 17:44 G 42017007.04 42017007.24 42017007.44 0.0514 0.0037

Uranus 110327-03-06 09:49 G 42017232.74 42017232.91 42017233.11 0.0137 0.0070

Uranus 110327-10-18 16:46 G 42017459.00 42017459.20 42017459.40 0.0137 0.0055

Uranus 110328-05-31 23:01 G 42017685.26 42017685.46 42017685.67 0.0137 0.0040

Uranus 110329-01-13 05:15 G 42017911.51 42017911.72 42017911.93 0.0136 0.0026

Uranus 110329-08-27 11:01 G 42018137.75 42018137.96 42018138.18 0.0136 0.0012

Uranus 110330-04-10 17:01 G 42018364.00 42018364.21 42018364.42 0.0136 0.0004

Mars 110330-05-08 11:44 G 42018391.85 42018391.99 42018392.13 0.1934 0.1058

Uranus 110330-11-22 22:46 G 42018590.24 42018590.45 42018590.66 0.0136 0.0018

Saturn 110331-02-27 02:22 G 42018686.46 42018686.60 42018686.74 0.0296 0.0220

Uranus 110331-07-07 04:18 G 42018816.47 42018816.68 42018816.89 0.0136 0.0032

Jupiter 110331-10-05 14:37 G 42018907.05 42018907.11 42018907.19 0.0519 0.0485

Saturn 110331-10-15 06:42 G 42018916.61 42018916.78 42018916.96 0.0295 0.0167

Uranus 110332-02-18 09:34 G 42019042.70 42019042.90 42019043.11 0.0136 0.0047

Jupiter 110332-05-29 22:46 G 42019144.36 42019144.45 42019144.53 0.0510 0.0462

Uranus 110332-10-01 14:51 G 42019268.94 42019269.12 42019269.32 0.0136 0.0061

Uranus 110333-05-15 19:54 G 42019495.16 42019495.33 42019495.52 0.0136 0.0075

Uranus 110333-12-28 00:56 G 42019721.39 42019721.54 42019721.71 0.0135 0.0088

Uranus 110334-08-11 05:58 G 42019947.62 42019947.75 42019947.90 0.0135 0.0102

Mars 110334-12-16 18:13 G 42020075.10 42020075.26 42020075.42 0.1614 0.0661

Uranus 110335-03-25 11:01 G 42020173.85 42020173.96 42020174.07 0.0135 0.0115

Uranus 110335-11-06 15:34 G 42020400.10 42020400.15 42020400.23 0.0135 0.0128

Jupiter 110338-03-28 13:39 G 42021272.89 42021273.07 42021273.25 0.0511 0.0227

Jupiter 110344-02-02 19:25 G 42023410.12 42023410.31 42023410.49 0.0512 0.0210

Saturn 110346-03-30 03:34 G 42024196.45 42024196.65 42024196.85 0.0265 0.0085

Saturn 110346-11-14 00:42 G 42024425.39 42024425.53 42024425.69 0.0265 0.0183

Jupiter 110349-12-01 13:10 G 42025538.99 42025539.05 42025539.13 0.0509 0.0473

Jupiter 110350-07-26 06:42 G 42025775.69 42025775.78 42025775.89 0.0518 0.0444

Jupiter 110355-10-08 14:22 G 42027675.90 42027676.10 42027676.31 0.0515 0.0054

Saturn 110360-09-08 02:22 G 42029472.44 42029472.60 42029472.77 0.0296 0.0188

Saturn 110361-04-26 06:42 G 42029702.63 42029702.78 42029702.94 0.0295 0.0199

Jupiter 110362-03-31 06:13 G 42030041.58 42030041.76 42030041.95 0.0515 0.0187

Mars 110366-12-15 13:10 G 42031761.96 42031762.05 42031762.14 0.1608 0.1365

Jupiter 110367-06-13 08:37 G 42031941.70 42031941.86 42031942.02 0.0517 0.0320

Uranus 110368-01-22 16:46 G 42032165.17 42032165.20 42032165.27 0.0140 0.0136

Uranus 110368-09-05 03:20 G 42032391.53 42032391.64 42032391.75 0.0140 0.0121

Uranus 110369-04-19 13:25 G 42032617.93 42032618.06 42032618.21 0.0141 0.0106

Uranus 110369-12-01 23:58 G 42032844.34 42032844.50 42032844.67 0.0141 0.0090

Uranus 110370-07-16 10:32 G 42033070.76 42033070.94 42033071.13 0.0141 0.0074

Uranus 110371-02-27 21:06 G 42033297.19 42033297.38 42033297.59 0.0141 0.0058

Uranus 110371-10-12 08:22 G 42033523.64 42033523.85 42033524.06 0.0141 0.0041

Uranus 110372-05-25 19:39 G 42033750.10 42033750.32 42033750.54 0.0142 0.0025

Uranus 110373-01-07 06:56 G 42033976.57 42033976.79 42033977.01 0.0142 0.0008

Uranus 110373-08-21 18:13 G 42034203.04 42034203.26 42034203.49 0.0142 0.0010

Jupiter 110373-12-04 05:44 G 42034307.54 42034307.74 42034307.94 0.0513 0.0067

Uranus 110374-04-05 05:58 G 42034429.54 42034429.75 42034429.97 0.0142 0.0026

Uranus 110374-11-17 17:44 G 42034656.04 42034656.24 42034656.46 0.0142 0.0043

Uranus 110375-07-02 05:44 G 42034882.54 42034882.74 42034882.94 0.0142 0.0060

Saturn 110375-10-10 03:06 G 42034982.43 42034982.63 42034982.84 0.0265 0.0058

Uranus 110376-02-13 17:44 G 42035109.06 42035109.24 42035109.43 0.0142 0.0077

Saturn 110376-05-26 00:27 G 42035211.40 42035211.52 42035211.65 0.0265 0.0211

Uranus 110376-09-27 05:44 G 42035335.59 42035335.74 42035335.92 0.0143 0.0095

Uranus 110377-05-11 18:42 G 42035562.14 42035562.28 42035562.42 0.0143 0.0111

Uranus 110377-12-24 06:56 G 42035788.71 42035788.79 42035788.90 0.0143 0.0128

Jupiter 110379-10-11 09:20 G 42036444.74 42036444.89 42036445.03 0.0511 0.0359

Earth 110385-01-11 12:13 G 42038363.98 42038364.01 42038364.04 0.2691 0.2619

Jupiter 110385-08-09 04:18 G 42038573.53 42038573.68 42038573.85 0.0510 0.0320

Saturn 110390-03-21 08:37 G 42040258.68 42040258.86 42040259.06 0.0295 0.0138

Saturn 110390-11-06 13:10 G 42040488.94 42040489.05 42040489.16 0.0295 0.0249

Neptune 110390-11-07 03:49 G 42040489.63 42040489.66 42040489.73 0.0088 0.0085

Jupiter 110391-06-16 04:46 G 42040710.50 42040710.70 42040710.90 0.0513 0.0102

Neptune 110391-06-20 16:46 G 42040715.11 42040715.20 42040715.34 0.0088 0.0076

Neptune 110392-02-01 06:13 G 42040940.63 42040940.76 42040940.92 0.0088 0.0066

Neptune 110392-09-13 19:39 G 42041166.15 42041166.32 42041166.49 0.0088 0.0056

Earth 110393-01-09 04:46 G 42041283.55 42041283.70 42041283.85 0.2690 0.0891

Moon 110393-01-09 07:10 G 42041283.64 42041283.80 42041283.96 0.2685 0.0380 *

Neptune 110393-04-27 08:37 G 42041391.69 42041391.86 42041392.07 0.0088 0.0047

Neptune 110393-12-08 22:03 G 42041617.23 42041617.42 42041617.63 0.0088 0.0037

Neptune 110394-07-22 11:15 G 42041842.76 42041842.97 42041843.19 0.0088 0.0027

Neptune 110395-03-05 00:27 G 42042068.31 42042068.52 42042068.75 0.0088 0.0017

Neptune 110395-10-16 13:39 G 42042293.85 42042294.07 42042294.30 0.0088 0.0008

Mars 110396-03-04 15:20 G 42042433.97 42042434.14 42042434.30 0.1931 0.0303

Neptune 110396-05-29 03:06 G 42042519.41 42042519.63 42042519.86 0.0088 0.0002

Neptune 110397-01-09 16:18 G 42042744.96 42042745.18 42042745.40 0.0088 0.0012

Neptune 110397-08-23 05:15 G 42042970.51 42042970.72 42042970.95 0.0088 0.0022

Jupiter 110397-12-06 17:44 G 42043076.09 42043076.24 42043076.40 0.0516 0.0335

Neptune 110398-04-05 18:27 G 42043196.08 42043196.27 42043196.49 0.0088 0.0032

Neptune 110398-11-17 07:39 G 42043421.64 42043421.82 42043422.03 0.0088 0.0042

Neptune 110399-06-30 21:06 G 42043647.21 42043647.38 42043647.57 0.0088 0.0051

Neptune 110400-02-11 10:18 G 42043872.78 42043872.93 42043873.10 0.0088 0.0061

Neptune 110400-09-23 23:15 G 42044098.36 42044098.47 42044098.63 0.0088 0.0071

Mars 110400-10-13 05:30 G 42044117.58 42044117.73 42044117.87 0.1617 0.0898

Neptune 110401-05-07 13:10 G 42044323.97 42044324.05 42044324.14 0.0088 0.0080

Jupiter 110403-02-19 00:27 G 42044976.33 42044976.52 42044976.72 0.0516 0.0161

Saturn 110405-04-21 07:39 G 42045768.61 42045768.82 42045769.03 0.0265 0.0017

Saturn 110405-12-06 04:46 G 42045997.64 42045997.70 42045997.77 0.0265 0.0251

Uranus 110408-05-12 15:06 G 42046886.09 42046886.13 42046886.20 0.0138 0.0133

Uranus 110408-12-24 22:18 G 42047112.34 42047112.43 42047112.56 0.0138 0.0119

Uranus 110409-08-08 05:44 G 42047338.61 42047338.74 42047338.89 0.0137 0.0104

Jupiter 110409-08-11 16:32 G 42047341.99 42047342.19 42047342.39 0.0514 0.0078

Uranus 110410-03-22 12:42 G 42047564.88 42047565.03 42047565.20 0.0137 0.0089

Uranus 110410-11-03 19:39 G 42047791.15 42047791.32 42047791.51 0.0137 0.0075

Uranus 110411-06-18 02:22 G 42048017.41 42048017.60 42048017.80 0.0137 0.0060

Uranus 110412-01-30 08:51 G 42048243.67 42048243.87 42048244.08 0.0137 0.0045

Uranus 110412-09-12 15:20 G 42048469.93 42048470.14 42048470.35 0.0137 0.0030

Uranus 110413-04-26 21:20 G 42048696.18 42048696.39 42048696.61 0.0137 0.0016

Uranus 110413-12-09 03:20 G 42048922.43 42048922.64 42048922.86 0.0136 0.0003

Uranus 110414-07-23 09:06 G 42049148.67 42049148.88 42049149.10 0.0136 0.0014

Jupiter 110414-10-24 19:10 G 42049242.19 42049242.30 42049242.41 0.0518 0.0428

Uranus 110415-03-06 14:51 G 42049374.91 42049375.12 42049375.33 0.0136 0.0028

Uranus 110415-10-18 20:22 G 42049601.15 42049601.35 42049601.56 0.0136 0.0043

Uranus 110416-06-01 01:39 G 42049827.39 42049827.57 42049827.78 0.0136 0.0057

Uranus 110417-01-13 06:56 G 42050053.62 42050053.79 42050053.98 0.0136 0.0071

Uranus 110417-08-27 11:58 G 42050279.85 42050280.00 42050280.18 0.0136 0.0085

Uranus 110418-04-10 17:15 G 42050506.08 42050506.22 42050506.37 0.0136 0.0098

Uranus 110418-11-22 22:18 G 42050732.32 42050732.43 42050732.56 0.0135 0.0111

Uranus 110419-07-07 03:06 G 42050958.56 42050958.63 42050958.73 0.0135 0.0125

Saturn 110419-10-01 09:06 G 42051044.69 42051044.88 42051045.09 0.0295 0.0104

Saturn 110420-05-18 13:10 G 42051275.00 42051275.05 42051275.12 0.0295 0.0283

Jupiter 110421-04-16 16:32 G 42051608.00 42051608.19 42051608.38 0.0512 0.0175

Jupiter 110427-02-21 21:49 G 42053745.23 42053745.41 42053745.59 0.0512 0.0261

Mars 110432-10-12 00:56 G 42055804.42 42055804.54 42055804.67 0.1610 0.1153

Jupiter 110432-12-20 16:32 G 42055874.08 42055874.19 42055874.30 0.0509 0.0422

Jupiter 110433-08-14 10:32 G 42056110.89 42056110.94 42056110.99 0.0518 0.0498

Saturn 110434-03-17 08:51 G 42056325.84 42056325.87 42056325.93 0.0265 0.0259

Saturn 110434-11-01 06:56 G 42056554.58 42056554.79 42056555.00 0.0265 0.0011

Jupiter 110438-10-27 15:20 G 42058010.93 42058011.14 42058011.34 0.0514 0.0007

Jupiter 110445-04-19 08:22 G 42060376.67 42060376.85 42060377.03 0.0515 0.0238

Saturn 110449-04-12 15:06 G 42061830.93 42061831.13 42061831.35 0.0295 0.0055

Jupiter 110450-07-02 09:49 G 42062276.74 42062276.91 42062277.09 0.0517 0.0272

Uranus 110451-09-22 01:39 G 42062723.57 42062723.57 42062723.60 0.0140 0.0140

Uranus 110452-05-05 11:30 G 42062949.90 42062949.98 42062950.10 0.0140 0.0126

Uranus 110452-12-17 21:49 G 42063176.29 42063176.41 42063176.56 0.0140 0.0110

Uranus 110453-08-01 07:54 G 42063402.69 42063402.83 42063403.01 0.0141 0.0095

Uranus 110454-03-15 18:27 G 42063629.10 42063629.27 42063629.47 0.0141 0.0079

Uranus 110454-10-28 05:30 G 42063855.53 42063855.73 42063855.93 0.0141 0.0062

Uranus 110455-06-11 16:03 G 42064081.97 42064082.17 42064082.39 0.0141 0.0046

Uranus 110456-01-24 03:06 G 42064308.42 42064308.63 42064308.85 0.0141 0.0030

Pluto 110456-06-08 08:08 G 42064444.67 42064444.84 42064445.05 0.0063 0.0032

Uranus 110456-09-06 14:22 G 42064534.88 42064535.10 42064535.32 0.0142 0.0013

Jupiter 110456-12-23 04:03 G 42064642.47 42064642.67 42064642.87 0.0512 0.0029

Pluto 110457-01-19 11:44 G 42064669.78 42064669.99 42064670.21 0.0064 0.0008

Uranus 110457-04-21 01:54 G 42064761.36 42064761.58 42064761.80 0.0142 0.0004

Pluto 110457-09-01 14:37 G 42064894.99 42064895.11 42064895.28 0.0064 0.0047

Uranus 110457-12-03 13:25 G 42064987.84 42064988.06 42064988.28 0.0142 0.0021

Uranus 110458-07-18 00:56 G 42065214.33 42065214.54 42065214.76 0.0142 0.0038

Uranus 110459-03-01 12:42 G 42065440.83 42065441.03 42065441.24 0.0142 0.0055

Uranus 110459-10-14 00:42 G 42065667.35 42065667.53 42065667.73 0.0142 0.0073

Uranus 110460-05-27 12:56 G 42065893.88 42065894.04 42065894.22 0.0142 0.0090

Uranus 110461-01-09 01:10 G 42066120.42 42066120.55 42066120.71 0.0143 0.0107

Uranus 110461-08-23 13:39 G 42066346.97 42066347.07 42066347.20 0.0143 0.0123

Mars 110461-12-30 19:10 G 42066476.13 42066476.30 42066476.47 0.1927 0.0426

Uranus 110462-04-07 02:08 G 42066573.57 42066573.59 42066573.66 0.0143 0.0140

Jupiter 110462-10-30 13:10 G 42066779.93 42066780.05 42066780.17 0.0511 0.0416

Saturn 110463-09-27 13:54 G 42067111.98 42067112.08 42067112.21 0.0265 0.0217

Saturn 110464-05-13 11:44 G 42067340.79 42067340.99 42067341.20 0.0265 0.0052

Mars 110466-08-10 17:15 G 42068160.09 42068160.22 42068160.35 0.1619 0.1123

Jupiter 110468-08-28 03:20 G 42068908.47 42068908.64 42068908.81 0.0510 0.0281

Neptune 110473-08-07 22:46 G 42070714.42 42070714.45 42070714.53 0.0090 0.0087

Neptune 110474-03-21 11:44 G 42070939.90 42070939.99 42070940.12 0.0090 0.0077

Jupiter 110474-07-05 08:22 G 42071045.66 42071045.85 42071046.05 0.0513 0.0156

Neptune 110474-11-02 00:42 G 42071165.41 42071165.53 42071165.70 0.0090 0.0067

Neptune 110475-06-15 13:39 G 42071390.92 42071391.07 42071391.25 0.0090 0.0057

Neptune 110476-01-27 02:22 G 42071616.43 42071616.60 42071616.80 0.0090 0.0047

Neptune 110476-09-08 15:20 G 42071841.95 42071842.14 42071842.35 0.0090 0.0037

Neptune 110477-04-22 04:03 G 42072067.48 42072067.67 42072067.89 0.0090 0.0027

Neptune 110477-12-03 17:01 G 42072293.01 42072293.21 42072293.43 0.0090 0.0017

Neptune 110478-07-17 05:58 G 42072518.53 42072518.75 42072518.97 0.0090 0.0006

Saturn 110478-10-23 17:15 G 42072617.00 42072617.22 42072617.43 0.0295 0.0015

Neptune 110479-02-27 18:42 G 42072744.07 42072744.28 42072744.50 0.0090 0.0004

Neptune 110479-10-11 07:39 G 42072969.60 42072969.82 42072970.03 0.0090 0.0014

Neptune 110480-05-23 20:08 G 42073195.14 42073195.34 42073195.56 0.0090 0.0025

Jupiter 110480-12-25 20:37 G 42073411.23 42073411.36 42073411.49 0.0517 0.0388

Neptune 110481-01-04 08:51 G 42073420.68 42073420.87 42073421.08 0.0090 0.0035

Neptune 110481-08-17 21:20 G 42073646.22 42073646.39 42073646.60 0.0090 0.0045

Neptune 110482-03-31 10:03 G 42073871.77 42073871.92 42073872.11 0.0090 0.0055

Neptune 110482-11-11 23:01 G 42074097.33 42074097.46 42074097.63 0.0090 0.0065

Neptune 110483-06-25 12:13 G 42074322.89 42074323.01 42074323.13 0.0090 0.0074

Neptune 110484-02-06 00:27 G 42074548.46 42074548.52 42074548.61 0.0090 0.0084

Jupiter 110486-03-10 03:06 G 42075311.43 42075311.63 42075311.84 0.0515 0.0109

Uranus 110492-01-11 00:13 G 42077444.51 42077444.51 42077444.55 0.0138 0.0137

Uranus 110492-08-24 07:39 G 42077670.75 42077670.82 42077670.94 0.0138 0.0123

Jupiter 110492-08-30 19:39 G 42077677.13 42077677.32 42077677.52 0.0514 0.0132

Uranus 110493-04-07 15:20 G 42077897.02 42077897.14 42077897.28 0.0138 0.0108

Saturn 110493-04-08 13:10 G 42077897.91 42077898.05 42077898.20 0.0265 0.0190

Uranus 110493-11-19 22:18 G 42078123.29 42078123.43 42078123.60 0.0137 0.0094

Saturn 110493-11-23 11:01 G 42078126.76 42078126.96 42078127.16 0.0265 0.0079

Uranus 110494-07-04 05:30 G 42078349.56 42078349.73 42078349.91 0.0137 0.0078

Uranus 110495-02-15 11:58 G 42078575.83 42078576.00 42078576.21 0.0137 0.0064

Uranus 110495-09-29 18:56 G 42078802.09 42078802.29 42078802.50 0.0137 0.0049

Uranus 110496-05-13 01:25 G 42079028.35 42079028.56 42079028.77 0.0137 0.0034

Uranus 110496-12-25 07:25 G 42079254.61 42079254.81 42079255.03 0.0137 0.0020

Uranus 110497-08-08 13:39 G 42079480.85 42079481.07 42079481.28 0.0136 0.0005

Jupiter 110497-11-12 19:54 G 42079577.19 42079577.33 42079577.47 0.0518 0.0382

Uranus 110498-03-22 19:25 G 42079707.10 42079707.31 42079707.53 0.0136 0.0011

Mars 110498-08-09 12:27 G 42079846.88 42079847.02 42079847.17 0.1612 0.0930

Uranus 110498-11-04 01:25 G 42079933.35 42079933.56 42079933.77 0.0136 0.0025

Uranus 110499-06-18 06:56 G 42080159.59 42080159.79 42080160.00 0.0136 0.0039

Uranus 110500-01-30 12:27 G 42080385.83 42080386.02 42080386.22 0.0136 0.0053

Uranus 110500-09-13 17:44 G 42080612.06 42080612.24 42080612.43 0.0136 0.0067

Uranus 110501-04-27 23:01 G 42080838.30 42080838.46 42080838.64 0.0136 0.0081

Uranus 110501-12-10 04:18 G 42081064.54 42081064.68 42081064.84 0.0136 0.0095

Uranus 110502-07-24 09:06 G 42081290.77 42081290.88 42081291.03 0.0135 0.0109

Uranus 110503-03-07 14:08 G 42081517.02 42081517.09 42081517.20 0.0135 0.0122

Uranus 110503-10-19 19:10 G 42081743.30 42081743.30 42081743.34 0.0135 0.0135

Jupiter 110504-05-06 18:27 G 42081943.07 42081943.27 42081943.46 0.0512 0.0125

Saturn 110508-05-05 22:32 G 42083403.23 42083403.44 42083403.66 0.0295 0.0034

Jupiter 110510-03-13 22:46 G 42084080.28 42084080.45 42084080.61 0.0512 0.0309

Earth 110514-07-09 14:22 G 42085658.94 42085659.10 42085659.25 0.2643 0.0757

Moon 110514-07-09 19:10 G 42085659.13 42085659.30 42085659.46 0.2639 0.0345 *

Jupiter 110516-01-10 15:06 G 42086209.00 42086209.13 42086209.26 0.0509 0.0385

Jupiter 110521-11-16 17:58 G 42088346.05 42088346.25 42088346.46 0.0515 0.0049

Saturn 110522-10-20 18:42 G 42088684.11 42088684.28 42088684.46 0.0265 0.0147

Saturn 110523-06-06 16:18 G 42088913.00 42088913.18 42088913.38 0.0265 0.0124

Mars 110527-10-28 22:46 G 42090518.31 42090518.45 42090518.58 0.1923 0.1159

Jupiter 110528-05-09 06:27 G 42090711.61 42090711.77 42090711.95 0.0515 0.0278

Mars 110532-06-08 04:32 G 42092202.60 42092202.69 42092202.79 0.1621 0.1364

Jupiter 110533-07-22 12:42 G 42092611.84 42092612.03 42092612.21 0.0517 0.0221

Uranus 110536-01-04 20:22 G 42093508.29 42093508.35 42093508.46 0.0140 0.0130

Uranus 110536-08-18 06:42 G 42093734.66 42093734.78 42093734.91 0.0140 0.0114

Uranus 110537-04-01 16:46 G 42093961.06 42093961.20 42093961.37 0.0140 0.0099

Uranus 110537-11-14 03:06 G 42094187.47 42094187.63 42094187.82 0.0141 0.0083

Saturn 110537-11-16 02:22 G 42094189.40 42094189.60 42094189.81 0.0295 0.0077

Uranus 110538-06-28 13:39 G 42094413.88 42094414.07 42094414.27 0.0141 0.0067

Uranus 110539-02-10 00:27 G 42094640.31 42094640.52 42094640.73 0.0141 0.0050

Uranus 110539-09-24 11:15 G 42094866.76 42094866.97 42094867.19 0.0141 0.0034

Jupiter 110540-01-13 05:44 G 42094977.54 42094977.74 42094977.94 0.0513 0.0021

Uranus 110540-05-07 22:18 G 42095093.22 42095093.43 42095093.65 0.0141 0.0018

Uranus 110540-12-20 09:34 G 42095319.68 42095319.90 42095320.12 0.0142 0.0001

Uranus 110541-08-03 20:51 G 42095546.15 42095546.37 42095546.59 0.0142 0.0016

Uranus 110542-03-18 08:22 G 42095772.64 42095772.85 42095773.07 0.0142 0.0034

Uranus 110542-10-30 19:54 G 42095999.14 42095999.33 42095999.55 0.0142 0.0051

Uranus 110543-06-14 07:54 G 42096225.65 42096225.83 42096226.04 0.0142 0.0068

Uranus 110544-01-26 20:08 G 42096452.17 42096452.34 42096452.52 0.0142 0.0085

Uranus 110544-09-09 08:22 G 42096678.70 42096678.85 42096679.01 0.0142 0.0101

Jupiter 110545-03-27 06:42 G 42096877.72 42096877.78 42096877.85 0.0519 0.0490

Uranus 110545-04-23 20:37 G 42096905.25 42096905.36 42096905.50 0.0142 0.0119

Jupiter 110545-11-19 14:37 G 42097115.04 42097115.11 42097115.20 0.0510 0.0464

Uranus 110545-12-06 09:20 G 42097131.83 42097131.89 42097131.97 0.0143 0.0135

Pluto 110546-07-24 22:32 G 42097362.22 42097362.44 42097362.66 0.0081 0.0017

Pluto 110547-03-07 09:49 G 42097587.78 42097587.91 42097588.04 0.0080 0.0066

Jupiter 110551-09-18 05:30 G 42099243.55 42099243.73 42099243.91 0.0511 0.0232

Saturn 110552-05-01 18:13 G 42099470.07 42099470.26 42099470.45 0.0265 0.0119

Saturn 110552-12-16 15:49 G 42099698.99 42099699.16 42099699.34 0.0265 0.0151

Neptune 110555-02-09 12:42 G 42100484.01 42100484.03 42100484.05 0.0088 0.0087

Neptune 110555-09-23 01:25 G 42100709.47 42100709.56 42100709.68 0.0088 0.0078

Neptune 110556-05-05 14:51 G 42100934.99 42100935.12 42100935.27 0.0088 0.0068

Neptune 110556-12-17 03:49 G 42101160.51 42101160.66 42101160.84 0.0088 0.0059

Jupiter 110557-07-25 08:22 G 42101380.66 42101380.85 42101381.04 0.0513 0.0201

Neptune 110557-07-30 17:01 G 42101386.04 42101386.21 42101386.41 0.0088 0.0049

Neptune 110558-03-13 06:27 G 42101611.58 42101611.77 42101611.98 0.0088 0.0039

Neptune 110558-10-24 19:25 G 42101837.12 42101837.31 42101837.54 0.0088 0.0030

Neptune 110559-06-07 08:51 G 42102062.66 42102062.87 42102063.10 0.0088 0.0020

Neptune 110560-01-18 22:18 G 42102288.21 42102288.43 42102288.65 0.0088 0.0010

Neptune 110560-08-31 11:30 G 42102513.76 42102513.98 42102514.20 0.0088 0.0000

Neptune 110561-04-14 00:42 G 42102739.31 42102739.53 42102739.76 0.0088 0.0010

Neptune 110561-11-25 13:54 G 42102964.87 42102965.08 42102965.31 0.0088 0.0020

Neptune 110562-07-09 03:20 G 42103190.43 42103190.64 42103190.85 0.0088 0.0029

Neptune 110563-02-19 16:18 G 42103415.99 42103416.18 42103416.39 0.0088 0.0039

Jupiter 110563-05-24 04:46 G 42103509.64 42103509.70 42103509.77 0.0508 0.0480

Neptune 110563-10-03 05:15 G 42103641.55 42103641.72 42103641.93 0.0088 0.0049

Jupiter 110564-01-15 21:49 G 42103746.31 42103746.41 42103746.52 0.0517 0.0437

Neptune 110564-05-15 18:42 G 42103867.13 42103867.28 42103867.46 0.0088 0.0059

Mars 110564-06-07 00:27 G 42103889.36 42103889.52 42103889.67 0.1614 0.0711

Neptune 110564-12-27 08:08 G 42104092.71 42104092.84 42104092.99 0.0088 0.0068

Neptune 110565-08-09 21:06 G 42104318.30 42104318.38 42104318.51 0.0088 0.0078

Neptune 110566-03-23 10:32 G 42104543.94 42104543.94 42104543.98 0.0088 0.0087

Saturn 110566-10-11 04:32 G 42104745.59 42104745.69 42104745.79 0.0295 0.0259

Saturn 110567-05-29 08:22 G 42104975.66 42104975.85 42104976.04 0.0295 0.0126

Jupiter 110569-03-30 03:06 G 42105646.43 42105646.63 42105646.83 0.0515 0.0064

Jupiter 110575-09-20 17:30 G 42108012.05 42108012.23 42108012.43 0.0514 0.0168

Uranus 110576-04-24 16:32 G 42108229.12 42108229.19 42108229.29 0.0138 0.0127

Uranus 110576-12-06 23:58 G 42108455.39 42108455.50 42108455.64 0.0138 0.0113

Uranus 110577-07-21 07:25 G 42108681.66 42108681.81 42108681.97 0.0138 0.0098

Uranus 110578-03-04 14:08 G 42108907.94 42108908.09 42108908.28 0.0137 0.0084

Uranus 110578-10-16 21:20 G 42109134.22 42109134.39 42109134.59 0.0137 0.0069

Uranus 110579-05-31 04:18 G 42109360.48 42109360.68 42109360.88 0.0137 0.0053

Uranus 110580-01-12 10:32 G 42109586.74 42109586.94 42109587.16 0.0137 0.0039

Uranus 110580-08-25 17:01 G 42109813.00 42109813.21 42109813.42 0.0137 0.0024

Jupiter 110580-12-02 20:51 G 42109912.22 42109912.37 42109912.53 0.0518 0.0337

Uranus 110581-04-08 23:15 G 42110039.25 42110039.47 42110039.68 0.0137 0.0009

Saturn 110581-11-12 00:13 G 42110256.31 42110256.51 42110256.71 0.0266 0.0074

Uranus 110581-11-21 05:15 G 42110265.51 42110265.72 42110265.94 0.0136 0.0006

Saturn 110582-06-28 21:49 G 42110485.28 42110485.41 42110485.55 0.0266 0.0197

Uranus 110582-07-05 11:15 G 42110491.76 42110491.97 42110492.18 0.0136 0.0020

Uranus 110583-02-16 17:01 G 42110718.00 42110718.21 42110718.41 0.0136 0.0035

Uranus 110583-09-30 22:32 G 42110944.24 42110944.44 42110944.64 0.0136 0.0049

Uranus 110584-05-14 04:03 G 42111170.48 42111170.67 42111170.86 0.0136 0.0063

Uranus 110584-12-26 09:34 G 42111396.72 42111396.90 42111397.07 0.0136 0.0077

Uranus 110585-08-09 14:37 G 42111622.96 42111623.11 42111623.28 0.0136 0.0091

Uranus 110586-03-23 19:39 G 42111849.20 42111849.32 42111849.47 0.0136 0.0105

Uranus 110586-11-05 01:10 G 42112075.45 42112075.55 42112075.66 0.0135 0.0118

Jupiter 110587-05-26 16:18 G 42112277.98 42112278.18 42112278.38 0.0511 0.0090

Uranus 110587-06-19 06:27 G 42112301.72 42112301.77 42112301.82 0.0135 0.0131

Jupiter 110593-04-02 00:13 G 42114415.36 42114415.51 42114415.66 0.0512 0.0356

Mars 110593-08-25 03:06 G 42114560.59 42114560.63 42114560.67 0.1920 0.1852

Saturn 110596-04-22 10:18 G 42115531.79 42115531.93 42115532.09 0.0295 0.0208

Saturn 110596-12-08 13:54 G 42115761.91 42115762.08 42115762.25 0.0295 0.0176

Mars 110598-04-05 16:03 G 42116245.14 42116245.17 42116245.19 0.1624 0.1600

Jupiter 110599-01-29 15:20 G 42116544.00 42116544.14 42116544.30 0.0509 0.0342

Jupiter 110604-12-06 19:10 G 42118681.10 42118681.30 42118681.50 0.0514 0.0094

Saturn 110611-05-26 00:13 G 42121042.31 42121042.51 42121042.72 0.0265 0.0045

Jupiter 110611-05-30 08:08 G 42121046.69 42121046.84 42121047.00 0.0516 0.0326

Saturn 110612-01-09 21:49 G 42121271.31 42121271.41 42121271.53 0.0265 0.0226

Jupiter 110616-08-11 11:58 G 42122946.81 42122947.00 42122947.19 0.0516 0.0178

Uranus 110619-09-05 05:58 G 42124066.68 42124066.75 42124066.81 0.0140 0.0133

Uranus 110620-04-18 15:49 G 42124293.04 42124293.16 42124293.28 0.0140 0.0118

Uranus 110620-12-01 01:25 G 42124519.43 42124519.56 42124519.72 0.0140 0.0103

Uranus 110621-07-15 11:44 G 42124745.82 42124745.99 42124746.17 0.0141 0.0087

Uranus 110622-02-26 22:03 G 42124972.24 42124972.42 42124972.62 0.0141 0.0071

Uranus 110622-10-11 08:37 G 42125198.66 42125198.86 42125199.07 0.0141 0.0055

Jupiter 110623-02-02 06:27 G 42125312.57 42125312.77 42125312.97 0.0513 0.0066

Uranus 110623-05-25 19:25 G 42125425.10 42125425.31 42125425.53 0.0141 0.0039

Uranus 110624-01-07 06:13 G 42125651.55 42125651.76 42125651.99 0.0141 0.0023

Uranus 110624-08-20 17:30 G 42125878.01 42125878.23 42125878.45 0.0141 0.0005

Uranus 110625-04-04 04:46 G 42126104.48 42126104.70 42126104.93 0.0142 0.0012

Saturn 110625-11-03 16:18 G 42126318.00 42126318.18 42126318.36 0.0295 0.0159

Uranus 110625-11-16 16:18 G 42126330.97 42126331.18 42126331.40 0.0142 0.0029

Saturn 110626-06-21 19:54 G 42126548.20 42126548.33 42126548.47 0.0295 0.0226

Uranus 110626-07-01 03:49 G 42126557.46 42126557.66 42126557.88 0.0142 0.0046

Uranus 110627-02-12 15:34 G 42126783.96 42126784.15 42126784.36 0.0142 0.0063

Uranus 110627-09-27 03:34 G 42127010.48 42127010.65 42127010.84 0.0142 0.0080

Moon 110628-01-14 09:49 G 42127119.80 42127119.91 42127120.02 0.2692 0.1881

Earth 110628-01-14 14:51 G 42127120.11 42127120.12 42127120.13 0.2691 0.2682

Jupiter 110628-04-16 05:30 G 42127212.63 42127212.73 42127212.83 0.0519 0.0450

Uranus 110628-05-10 15:49 G 42127237.01 42127237.16 42127237.34 0.0142 0.0097

Jupiter 110628-12-09 13:39 G 42127450.05 42127450.07 42127450.10 0.0510 0.0505

Uranus 110628-12-23 04:18 G 42127463.56 42127463.68 42127463.82 0.0142 0.0114

Uranus 110629-08-06 16:32 G 42127690.12 42127690.19 42127690.29 0.0142 0.0131

Mars 110630-04-05 11:44 G 42127931.82 42127931.99 42127932.16 0.1616 0.0479

Jupiter 110634-10-08 03:20 G 42129578.45 42129578.64 42129578.83 0.0510 0.0197

Moon 110636-01-12 05:30 G 42130039.60 42130039.73 42130039.86 0.2696 0.1241

Earth 110636-01-12 07:25 G 42130039.66 42130039.81 42130039.95 0.2689 0.0837 *

Neptune 110637-11-11 08:51 G 42130708.86 42130708.87 42130708.91 0.0090 0.0089

Neptune 110638-06-24 21:49 G 42130934.32 42130934.41 42130934.52 0.0090 0.0079

Neptune 110639-02-05 10:32 G 42131159.82 42131159.94 42131160.09 0.0090 0.0069

Neptune 110639-09-18 23:30 G 42131385.33 42131385.48 42131385.65 0.0090 0.0059

Neptune 110640-05-01 12:27 G 42131610.84 42131611.02 42131611.21 0.0090 0.0049

Jupiter 110640-08-14 08:22 G 42131715.67 42131715.85 42131716.03 0.0513 0.0243

Saturn 110640-12-05 06:42 G 42131828.57 42131828.78 42131828.99 0.0266 0.0006

Neptune 110640-12-13 01:10 G 42131836.37 42131836.55 42131836.76 0.0090 0.0039

Neptune 110641-07-26 13:54 G 42132061.89 42132062.08 42132062.30 0.0090 0.0029

Neptune 110642-03-09 02:51 G 42132287.41 42132287.62 42132287.84 0.0090 0.0019

Neptune 110642-10-20 15:49 G 42132512.95 42132513.16 42132513.38 0.0090 0.0009

Neptune 110643-06-03 04:32 G 42132738.48 42132738.69 42132738.91 0.0090 0.0002

Neptune 110644-01-14 17:15 G 42132964.01 42132964.22 42132964.44 0.0090 0.0012

Neptune 110644-08-27 05:58 G 42133189.54 42133189.75 42133189.96 0.0090 0.0022

Neptune 110645-04-09 18:42 G 42133415.08 42133415.28 42133415.49 0.0090 0.0032

Neptune 110645-11-21 07:25 G 42133640.63 42133640.81 42133641.01 0.0090 0.0042

Jupiter 110646-06-13 02:08 G 42133844.50 42133844.59 42133844.69 0.0508 0.0448

Neptune 110646-07-04 20:08 G 42133866.18 42133866.34 42133866.53 0.0090 0.0052

Jupiter 110647-02-04 18:42 G 42134081.20 42134081.28 42134081.36 0.0517 0.0469

Neptune 110647-02-15 08:51 G 42134091.73 42134091.87 42134092.04 0.0090 0.0062

Neptune 110647-09-28 21:34 G 42134317.29 42134317.40 42134317.54 0.0090 0.0072

Neptune 110648-05-11 10:03 G 42134542.86 42134542.92 42134543.03 0.0090 0.0082

Jupiter 110652-04-19 03:06 G 42135981.43 42135981.63 42135981.84 0.0515 0.0023

Saturn 110655-05-17 00:27 G 42137104.33 42137104.52 42137104.73 0.0295 0.0101

Saturn 110656-01-02 04:03 G 42137334.61 42137334.67 42137334.72 0.0294 0.0283

Jupiter 110658-10-10 17:01 G 42138347.03 42138347.21 42138347.40 0.0514 0.0210

Uranus 110659-12-25 02:22 G 42138787.55 42138787.60 42138787.68 0.0138 0.0131

Uranus 110660-08-07 09:49 G 42139013.81 42139013.91 42139014.04 0.0138 0.0117

Uranus 110661-03-21 17:15 G 42139240.09 42139240.22 42139240.37 0.0138 0.0102

Uranus 110661-11-03 00:27 G 42139466.37 42139466.52 42139466.70 0.0138 0.0087

Uranus 110662-06-17 07:25 G 42139692.64 42139692.81 42139693.00 0.0137 0.0073

Uranus 110663-01-29 14:22 G 42139918.90 42139919.10 42139919.30 0.0137 0.0057

Uranus 110663-09-12 20:37 G 42140145.17 42140145.36 42140145.58 0.0137 0.0044

Jupiter 110663-12-23 21:20 G 42140247.22 42140247.39 42140247.56 0.0518 0.0292

Uranus 110664-04-26 03:20 G 42140371.43 42140371.64 42140371.85 0.0137 0.0028

Uranus 110664-12-08 09:34 G 42140597.69 42140597.90 42140598.12 0.0137 0.0013

Uranus 110665-07-22 15:49 G 42140823.94 42140824.16 42140824.37 0.0137 0.0002

Uranus 110666-03-05 21:34 G 42141050.19 42141050.40 42141050.62 0.0136 0.0017

Uranus 110666-10-18 03:34 G 42141276.45 42141276.65 42141276.86 0.0136 0.0031

Uranus 110667-06-01 09:20 G 42141502.69 42141502.89 42141503.09 0.0136 0.0045

Uranus 110668-01-13 14:37 G 42141728.93 42141729.11 42141729.32 0.0136 0.0060

Uranus 110668-08-26 20:08 G 42141955.17 42141955.34 42141955.53 0.0136 0.0074

Uranus 110669-04-10 01:25 G 42142181.41 42142181.56 42142181.74 0.0136 0.0088

Saturn 110669-10-31 09:06 G 42142385.80 42142385.88 42142385.98 0.0265 0.0237

Uranus 110669-11-22 06:56 G 42142407.66 42142407.79 42142407.94 0.0136 0.0101

Jupiter 110670-06-15 16:18 G 42142612.98 42142613.18 42142613.38 0.0512 0.0047

Saturn 110670-06-17 07:25 G 42142614.61 42142614.81 42142615.02 0.0265 0.0034

Uranus 110670-07-06 12:13 G 42142633.91 42142634.01 42142634.13 0.0136 0.0115

Uranus 110671-02-17 17:15 G 42142860.16 42142860.22 42142860.30 0.0135 0.0128

Jupiter 110676-04-21 22:18 G 42144750.31 42144750.43 42144750.57 0.0511 0.0395

Jupiter 110682-02-18 15:20 G 42146878.97 42146879.14 42146879.30 0.0509 0.0300

Saturn 110684-11-26 06:42 G 42147890.57 42147890.78 42147890.99 0.0295 0.0051

Jupiter 110687-12-26 16:46 G 42149016.00 42149016.20 42149016.40 0.0514 0.0131

Mars 110691-06-23 02:51 G 42150290.51 42150290.62 42150290.73 0.1929 0.1461

Jupiter 110694-06-18 05:01 G 42151381.57 42151381.71 42151381.85 0.0515 0.0357

Mars 110696-01-31 23:15 G 42151974.30 42151974.47 42151974.65 0.1618 0.0254

Saturn 110699-05-13 15:49 G 42153172.02 42153172.16 42153172.32 0.0266 0.0190

Jupiter 110699-08-31 09:49 G 42153281.72 42153281.91 42153282.11 0.0517 0.0143

Saturn 110699-12-28 14:22 G 42153400.90 42153401.10 42153401.30 0.0266 0.0083

Pluto 110702-07-10 09:20 G 42154324.78 42154324.89 42154325.06 0.0063 0.0050

Pluto 110703-02-20 13:10 G 42154549.84 42154550.05 42154550.27 0.0063 0.0011

Uranus 110703-05-06 14:22 G 42154625.07 42154625.10 42154625.16 0.0140 0.0137

Pluto 110703-10-03 16:18 G 42154774.99 42154775.18 42154775.38 0.0064 0.0028

Uranus 110703-12-18 23:58 G 42154851.41 42154851.50 42154851.62 0.0140 0.0122

Uranus 110704-08-01 09:49 G 42155077.78 42155077.91 42155078.06 0.0140 0.0107

Uranus 110705-03-15 19:54 G 42155304.18 42155304.33 42155304.51 0.0141 0.0092

Uranus 110705-10-28 06:13 G 42155530.59 42155530.76 42155530.96 0.0141 0.0076

Jupiter 110706-02-22 02:37 G 42155647.42 42155647.61 42155647.81 0.0513 0.0097

Uranus 110706-06-11 16:32 G 42155757.01 42155757.19 42155757.40 0.0141 0.0060

Uranus 110707-01-24 03:20 G 42155983.43 42155983.64 42155983.85 0.0141 0.0043

Uranus 110707-09-07 14:08 G 42156209.88 42156210.09 42156210.31 0.0141 0.0027

Uranus 110708-04-21 01:25 G 42156436.34 42156436.56 42156436.78 0.0141 0.0010

Uranus 110708-12-03 12:27 G 42156662.80 42156663.02 42156663.24 0.0142 0.0007

Uranus 110709-07-17 23:44 G 42156889.28 42156889.49 42156889.71 0.0142 0.0024

Uranus 110710-03-01 11:15 G 42157115.76 42157115.97 42157116.19 0.0142 0.0041

Uranus 110710-10-13 23:01 G 42157342.26 42157342.46 42157342.67 0.0142 0.0058

Jupiter 110711-05-07 03:49 G 42157547.54 42157547.66 42157547.78 0.0519 0.0415

Uranus 110711-05-28 11:01 G 42157568.78 42157568.96 42157569.16 0.0142 0.0075

Uranus 110712-01-09 23:01 G 42157795.30 42157795.46 42157795.64 0.0142 0.0092

Uranus 110712-08-23 11:30 G 42158021.84 42158021.98 42158022.12 0.0142 0.0109

Uranus 110713-04-06 23:44 G 42158248.39 42158248.49 42158248.60 0.0142 0.0126

Uranus 110713-11-19 12:13 G 42158475.00 42158475.01 42158475.04 0.0142 0.0142

Saturn 110714-06-09 16:46 G 42158676.99 42158677.20 42158677.42 0.0294 0.0013

Jupiter 110717-10-28 01:10 G 42159913.36 42159913.55 42159913.74 0.0511 0.0162

Neptune 110719-12-27 10:32 G 42160703.86 42160703.94 42160704.05 0.0088 0.0080

Neptune 110720-08-08 23:44 G 42160929.37 42160929.49 42160929.63 0.0088 0.0070

Neptune 110721-03-22 12:42 G 42161154.89 42161155.03 42161155.21 0.0088 0.0061

Neptune 110721-11-03 02:08 G 42161380.42 42161380.59 42161380.78 0.0088 0.0051

Neptune 110722-06-16 15:34 G 42161605.95 42161606.15 42161606.34 0.0088 0.0041

Neptune 110723-01-28 04:18 G 42161831.49 42161831.68 42161831.90 0.0088 0.0032

Jupiter 110723-09-04 07:25 G 42162050.64 42162050.81 42162050.98 0.0513 0.0284

Neptune 110723-09-10 17:44 G 42162057.03 42162057.24 42162057.46 0.0088 0.0022

Neptune 110724-04-23 07:10 G 42162282.58 42162282.80 42162283.03 0.0088 0.0012

Neptune 110724-12-04 20:22 G 42162508.13 42162508.35 42162508.58 0.0088 0.0003

Neptune 110725-07-18 09:34 G 42162733.68 42162733.90 42162734.13 0.0088 0.0008

Neptune 110726-02-28 22:46 G 42162959.24 42162959.45 42162959.68 0.0088 0.0017

Neptune 110726-10-12 12:13 G 42163184.80 42163185.01 42163185.22 0.0088 0.0027

Neptune 110727-05-26 01:25 G 42163410.36 42163410.56 42163410.77 0.0088 0.0037

Neptune 110728-01-06 14:22 G 42163635.93 42163636.10 42163636.31 0.0088 0.0047

Neptune 110728-08-19 04:03 G 42163861.50 42163861.67 42163861.84 0.0088 0.0056

Saturn 110728-11-23 17:44 G 42163958.07 42163958.24 42163958.41 0.0265 0.0156

Neptune 110729-04-01 17:01 G 42164087.08 42164087.21 42164087.37 0.0088 0.0066

Jupiter 110729-07-03 00:42 G 42164179.41 42164179.53 42164179.65 0.0508 0.0411

Saturn 110729-07-10 16:03 G 42164186.98 42164187.17 42164187.36 0.0266 0.0116

Neptune 110729-11-13 05:58 G 42164312.67 42164312.75 42164312.89 0.0088 0.0076

Jupiter 110730-02-24 17:58 G 42164416.23 42164416.25 42164416.28 0.0517 0.0511

Neptune 110730-06-26 19:39 G 42164538.28 42164538.32 42164538.38 0.0088 0.0085

Jupiter 110735-05-10 00:42 G 42166316.32 42166316.53 42166316.73 0.0515 0.0014

Jupiter 110741-10-30 16:03 G 42168682.00 42168682.17 42168682.35 0.0515 0.0251

Uranus 110743-08-25 11:58 G 42169345.96 42169346.00 42169346.03 0.0138 0.0136

Saturn 110743-12-20 23:15 G 42169463.26 42169463.47 42169463.68 0.0295 0.0064

Uranus 110744-04-07 19:10 G 42169572.21 42169572.30 42169572.42 0.0138 0.0121

Uranus 110744-11-20 02:37 G 42169798.49 42169798.61 42169798.76 0.0138 0.0107

Uranus 110745-07-04 09:49 G 42170024.76 42170024.91 42170025.08 0.0138 0.0092

Uranus 110746-02-15 17:15 G 42170251.04 42170251.22 42170251.39 0.0138 0.0077

Uranus 110746-09-29 23:44 G 42170477.31 42170477.49 42170477.70 0.0137 0.0063

Jupiter 110747-01-12 17:44 G 42170582.07 42170582.24 42170582.42 0.0518 0.0259

Uranus 110747-05-14 06:42 G 42170703.58 42170703.78 42170703.99 0.0137 0.0047

Uranus 110747-12-26 13:10 G 42170929.84 42170930.05 42170930.26 0.0137 0.0032

Uranus 110748-08-08 19:25 G 42171156.10 42171156.31 42171156.53 0.0137 0.0018

Uranus 110749-03-23 01:39 G 42171382.36 42171382.57 42171382.79 0.0137 0.0004

Uranus 110749-11-04 07:54 G 42171608.62 42171608.83 42171609.05 0.0137 0.0012

Uranus 110750-06-18 13:54 G 42171834.87 42171835.08 42171835.29 0.0136 0.0027

Uranus 110751-01-30 19:39 G 42172061.12 42172061.32 42172061.53 0.0136 0.0041

Uranus 110751-09-14 01:25 G 42172287.36 42172287.56 42172287.75 0.0136 0.0056

Uranus 110752-04-27 06:42 G 42172513.61 42172513.78 42172513.97 0.0136 0.0070

Uranus 110752-12-09 12:13 G 42172739.86 42172740.01 42172740.19 0.0136 0.0084

Jupiter 110753-07-05 13:10 G 42172947.84 42172948.05 42172948.25 0.0511 0.0019

Uranus 110753-07-23 17:30 G 42172966.10 42172966.23 42172966.39 0.0136 0.0098

Uranus 110754-03-06 23:01 G 42173192.35 42173192.46 42173192.59 0.0136 0.0111

Uranus 110754-10-19 04:03 G 42173418.60 42173418.67 42173418.77 0.0136 0.0125

Mars 110757-04-20 06:42 G 42174332.62 42174332.78 42174332.93 0.1925 0.0730

Moon 110757-07-11 08:37 G 42174414.74 42174414.86 42174414.99 0.2642 0.1648

Earth 110757-07-11 14:22 G 42174414.94 42174415.10 42174415.25 0.2643 0.0794 *

Saturn 110758-06-06 00:42 G 42174744.34 42174744.53 42174744.73 0.0266 0.0108

Saturn 110759-01-20 23:01 G 42174973.30 42174973.46 42174973.63 0.0266 0.0166

Jupiter 110759-05-12 19:10 G 42175085.20 42175085.30 42175085.42 0.0512 0.0428

Mars 110761-11-29 10:46 G 42176016.77 42176016.95 42176017.13 0.1621 0.0022

Jupiter 110765-03-10 11:15 G 42177213.80 42177213.97 42177214.14 0.0509 0.0271

Jupiter 110771-01-15 13:54 G 42179350.88 42179351.08 42179351.27 0.0514 0.0163

Saturn 110772-11-14 08:08 G 42180019.74 42180019.84 42180019.96 0.0294 0.0250

Saturn 110773-07-02 11:01 G 42180249.78 42180249.96 42180250.16 0.0294 0.0133

Jupiter 110777-07-08 01:54 G 42181716.45 42181716.58 42181716.71 0.0516 0.0391

Jupiter 110782-09-20 08:37 G 42183616.66 42183616.86 42183617.06 0.0516 0.0104

Uranus 110787-08-18 08:22 G 42185409.76 42185409.85 42185409.94 0.0140 0.0126

Saturn 110787-12-17 03:34 G 42185530.44 42185530.65 42185530.85 0.0266 0.0071

Uranus 110788-03-31 17:58 G 42185636.13 42185636.25 42185636.39 0.0140 0.0112

Saturn 110788-08-02 01:39 G 42185759.44 42185759.57 42185759.71 0.0266 0.0201

Uranus 110788-11-13 03:49 G 42185862.51 42185862.66 42185862.83 0.0140 0.0096

Jupiter 110789-03-13 00:27 G 42185982.33 42185982.52 42185982.72 0.0513 0.0133

Uranus 110789-06-27 13:54 G 42186088.91 42186089.08 42186089.27 0.0141 0.0081

Uranus 110790-02-08 23:58 G 42186315.32 42186315.50 42186315.71 0.0141 0.0065

Uranus 110790-09-23 10:32 G 42186541.74 42186541.94 42186542.16 0.0141 0.0049

Uranus 110791-05-07 21:20 G 42186768.19 42186768.39 42186768.62 0.0141 0.0033

Uranus 110791-12-20 08:22 G 42186994.63 42186994.85 42186995.07 0.0141 0.0015

Uranus 110792-08-02 19:25 G 42187221.09 42187221.31 42187221.54 0.0141 0.0003

Pluto 110792-08-23 18:56 G 42187242.14 42187242.29 42187242.47 0.0081 0.0055

Uranus 110793-03-17 06:42 G 42187447.57 42187447.78 42187448.00 0.0142 0.0019

Pluto 110793-04-06 06:13 G 42187467.56 42187467.76 42187467.99 0.0081 0.0029

Uranus 110793-10-29 18:13 G 42187674.05 42187674.26 42187674.48 0.0142 0.0036

Jupiter 110794-05-26 01:10 G 42187882.41 42187882.55 42187882.69 0.0519 0.0379

Uranus 110794-06-13 05:58 G 42187900.55 42187900.75 42187900.96 0.0142 0.0053

Uranus 110795-01-25 17:30 G 42188127.05 42188127.23 42188127.44 0.0142 0.0070

Uranus 110795-09-09 05:30 G 42188353.57 42188353.73 42188353.92 0.0142 0.0087

Uranus 110796-04-22 17:58 G 42188580.10 42188580.25 42188580.40 0.0142 0.0104

Uranus 110796-12-05 05:58 G 42188806.65 42188806.75 42188806.88 0.0142 0.0121

Uranus 110797-07-19 18:42 G 42189033.22 42189033.28 42189033.34 0.0142 0.0137

Jupiter 110800-11-15 23:30 G 42190248.28 42190248.48 42190248.68 0.0511 0.0124

Saturn 110802-05-27 14:08 G 42190805.94 42190806.09 42190806.25 0.0295 0.0201

Neptune 110802-09-27 07:54 G 42190928.75 42190928.83 42190928.93 0.0090 0.0081

Saturn 110803-01-12 17:15 G 42191036.06 42191036.22 42191036.39 0.0295 0.0183

Neptune 110803-05-10 20:51 G 42191154.25 42191154.37 42191154.51 0.0090 0.0071

Neptune 110803-12-22 09:49 G 42191379.76 42191379.91 42191380.07 0.0090 0.0061

Neptune 110804-08-03 22:32 G 42191605.27 42191605.44 42191605.63 0.0090 0.0051

Neptune 110805-03-17 11:30 G 42191830.79 42191830.98 42191831.18 0.0090 0.0041

Neptune 110805-10-29 00:27 G 42192056.32 42192056.52 42192056.73 0.0090 0.0031

Neptune 110806-06-11 13:10 G 42192281.84 42192282.05 42192282.27 0.0090 0.0021

Jupiter 110806-09-23 03:06 G 42192385.47 42192385.63 42192385.80 0.0512 0.0315

Neptune 110807-01-23 01:54 G 42192507.37 42192507.58 42192507.80 0.0090 0.0011

Neptune 110807-09-05 14:51 G 42192732.90 42192733.12 42192733.33 0.0090 0.0002

Neptune 110808-04-18 03:20 G 42192958.43 42192958.64 42192958.86 0.0090 0.0010

Neptune 110808-11-29 16:03 G 42193183.97 42193184.17 42193184.39 0.0090 0.0020

Neptune 110809-07-13 04:46 G 42193409.51 42193409.70 42193409.92 0.0090 0.0030

Neptune 110810-02-23 17:15 G 42193635.05 42193635.22 42193635.43 0.0090 0.0040

Neptune 110810-10-07 05:58 G 42193860.59 42193860.75 42193860.95 0.0090 0.0050

Neptune 110811-05-20 18:42 G 42194086.14 42194086.28 42194086.46 0.0090 0.0060

Neptune 110812-01-01 07:25 G 42194311.70 42194311.81 42194311.97 0.0090 0.0070

Jupiter 110812-07-21 21:34 G 42194514.27 42194514.40 42194514.54 0.0508 0.0380

Neptune 110812-08-13 20:37 G 42194537.26 42194537.36 42194537.46 0.0090 0.0079

Neptune 110813-03-27 09:06 G 42194762.87 42194762.88 42194762.91 0.0090 0.0089

Saturn 110817-06-28 10:32 G 42196316.73 42196316.94 42196317.15 0.0266 0.0023

Saturn 110818-02-12 08:37 G 42196545.80 42196545.86 42196545.93 0.0266 0.0251

Jupiter 110818-05-28 20:08 G 42196651.13 42196651.34 42196651.54 0.0516 0.0042

Mars 110823-02-15 10:18 G 42198374.76 42198374.93 42198375.10 0.1921 0.0030

Jupiter 110824-11-18 11:30 G 42199016.81 42199016.98 42199017.15 0.0514 0.0278

Mars 110827-09-26 22:03 G 42200059.24 42200059.42 42200059.59 0.1623 0.0227

Uranus 110827-12-07 05:15 G 42200130.64 42200130.72 42200130.81 0.0138 0.0125

Uranus 110828-07-20 12:27 G 42200356.91 42200357.02 42200357.16 0.0138 0.0111

Uranus 110829-03-03 20:08 G 42200583.19 42200583.34 42200583.49 0.0138 0.0096

Uranus 110829-10-16 03:06 G 42200809.47 42200809.63 42200809.82 0.0138 0.0082

Jupiter 110830-01-31 13:54 G 42200916.90 42200917.08 42200917.26 0.0518 0.0230

Uranus 110830-05-30 10:03 G 42201035.74 42201035.92 42201036.12 0.0137 0.0067

Uranus 110831-01-11 17:01 G 42201262.01 42201262.21 42201262.41 0.0137 0.0052

Uranus 110831-08-25 23:30 G 42201488.28 42201488.48 42201488.69 0.0137 0.0037

Saturn 110831-12-08 03:20 G 42201592.45 42201592.64 42201592.83 0.0294 0.0128

Uranus 110832-04-08 05:58 G 42201714.54 42201714.75 42201714.97 0.0137 0.0022

Saturn 110832-07-25 06:13 G 42201822.66 42201822.76 42201822.87 0.0294 0.0254

Uranus 110832-11-20 12:27 G 42201940.81 42201941.02 42201941.24 0.0137 0.0007

Uranus 110833-07-04 18:42 G 42202167.07 42202167.28 42202167.49 0.0137 0.0008

Uranus 110834-02-16 00:42 G 42202393.32 42202393.53 42202393.74 0.0136 0.0023

Uranus 110834-09-30 06:27 G 42202619.57 42202619.77 42202619.98 0.0136 0.0038

Uranus 110835-05-14 12:27 G 42202845.82 42202846.02 42202846.22 0.0136 0.0052

Uranus 110835-12-26 17:58 G 42203072.07 42203072.25 42203072.44 0.0136 0.0066

Jupiter 110836-07-24 08:37 G 42203282.66 42203282.86 42203283.06 0.0512 0.0014

Uranus 110836-08-08 23:30 G 42203298.31 42203298.48 42203298.66 0.0136 0.0080

Uranus 110837-03-23 04:46 G 42203524.56 42203524.70 42203524.87 0.0136 0.0094

Uranus 110837-11-04 10:18 G 42203750.81 42203750.93 42203751.07 0.0136 0.0108

Uranus 110838-06-18 15:34 G 42203977.07 42203977.15 42203977.26 0.0136 0.0121

Uranus 110839-01-30 20:37 G 42204203.34 42204203.36 42204203.40 0.0136 0.0134

Jupiter 110841-10-06 08:08 G 42205182.79 42205182.84 42205182.90 0.0520 0.0501

Jupiter 110842-05-31 17:15 G 42205420.14 42205420.22 42205420.30 0.0511 0.0464

Saturn 110846-05-24 15:06 G 42206874.09 42206874.13 42206874.19 0.0266 0.0257

Saturn 110847-01-08 13:54 G 42207102.87 42207103.08 42207103.29 0.0266 0.0016

Jupiter 110848-03-29 07:54 G 42207548.65 42207548.83 42207549.01 0.0510 0.0240

Jupiter 110854-02-03 10:46 G 42209685.76 42209685.95 42209686.14 0.0514 0.0198

Jupiter 110859-12-03 07:25 G 42211814.77 42211814.81 42211814.87 0.0507 0.0488

Jupiter 110860-07-26 23:58 G 42212051.39 42212051.50 42212051.61 0.0516 0.0430

Saturn 110861-06-19 09:06 G 42212378.68 42212378.88 42212379.09 0.0295 0.0080

Jupiter 110865-10-09 04:03 G 42213951.47 42213951.67 42213951.87 0.0516 0.0073

Uranus 110871-04-17 16:18 G 42215968.12 42215968.18 42215968.26 0.0140 0.0131

Uranus 110871-11-30 01:54 G 42216194.47 42216194.58 42216194.71 0.0140 0.0116

Jupiter 110872-03-31 21:20 G 42216317.20 42216317.39 42216317.58 0.0513 0.0164

Uranus 110872-07-13 11:30 G 42216420.84 42216420.98 42216421.14 0.0140 0.0101

Uranus 110873-02-24 21:34 G 42216647.23 42216647.40 42216647.58 0.0140 0.0086

Uranus 110873-10-09 07:39 G 42216873.64 42216873.82 42216874.02 0.0141 0.0070

Uranus 110874-05-23 17:58 G 42217100.06 42217100.25 42217100.46 0.0141 0.0054

Uranus 110875-01-05 04:46 G 42217326.49 42217326.70 42217326.91 0.0141 0.0037

Uranus 110875-08-19 15:20 G 42217552.93 42217553.14 42217553.37 0.0141 0.0021

Saturn 110875-12-04 21:34 G 42217660.28 42217660.40 42217660.54 0.0266 0.0210

Uranus 110876-04-02 02:37 G 42217779.39 42217779.61 42217779.83 0.0141 0.0004

Saturn 110876-07-20 20:22 G 42217889.15 42217889.35 42217889.56 0.0266 0.0064

Uranus 110876-11-14 13:39 G 42218005.85 42218006.07 42218006.30 0.0141 0.0014

Jupiter 110877-06-13 19:39 G 42218217.17 42218217.32 42218217.47 0.0519 0.0355

Uranus 110877-06-29 00:56 G 42218232.33 42218232.54 42218232.76 0.0142 0.0031

Uranus 110878-02-10 12:27 G 42218458.82 42218459.02 42218459.23 0.0142 0.0047

Uranus 110878-09-25 00:13 G 42218685.32 42218685.51 42218685.71 0.0142 0.0064

Earth 110879-01-13 09:34 G 42218795.75 42218795.90 42218796.05 0.2689 0.0817

Moon 110879-01-13 14:37 G 42218795.95 42218796.11 42218796.27 0.2686 0.0465 *

Uranus 110879-05-09 12:13 G 42218911.83 42218912.01 42218912.19 0.0142 0.0081

Uranus 110879-12-21 23:58 G 42219138.35 42219138.50 42219138.67 0.0142 0.0098

Uranus 110880-08-04 12:27 G 42219364.89 42219365.02 42219365.15 0.0142 0.0115

Uranus 110881-03-19 00:13 G 42219591.44 42219591.51 42219591.61 0.0142 0.0132

Jupiter 110883-12-05 19:10 G 42220583.10 42220583.30 42220583.50 0.0510 0.0095

Neptune 110884-03-29 19:39 G 42220698.26 42220698.32 42220698.42 0.0088 0.0082

Neptune 110884-11-10 09:06 G 42220923.76 42220923.88 42220924.01 0.0088 0.0072

Neptune 110885-06-23 21:49 G 42221149.28 42221149.41 42221149.59 0.0088 0.0063

Neptune 110886-02-04 11:01 G 42221374.80 42221374.96 42221375.15 0.0088 0.0053

Neptune 110886-09-17 23:58 G 42221600.33 42221600.50 42221600.71 0.0088 0.0044

Neptune 110887-05-01 13:25 G 42221825.87 42221826.06 42221826.28 0.0088 0.0034

Neptune 110887-12-13 02:51 G 42222051.41 42222051.62 42222051.84 0.0088 0.0024

Neptune 110888-07-25 15:49 G 42222276.95 42222277.16 42222277.39 0.0088 0.0015

Mars 110888-12-12 14:37 G 42222416.95 42222417.11 42222417.26 0.1917 0.0718

Neptune 110889-03-08 05:15 G 42222502.50 42222502.72 42222502.95 0.0088 0.0005

Jupiter 110889-10-11 23:01 G 42222720.31 42222720.46 42222720.61 0.0513 0.0344

Neptune 110889-10-19 18:27 G 42222728.05 42222728.27 42222728.50 0.0088 0.0006

Neptune 110890-06-02 07:54 G 42222953.61 42222953.83 42222954.05 0.0088 0.0015

Saturn 110890-12-30 22:18 G 42223165.22 42223165.43 42223165.65 0.0294 0.0010

Neptune 110891-01-13 21:06 G 42223179.17 42223179.38 42223179.60 0.0088 0.0025

Neptune 110891-08-27 10:18 G 42223404.73 42223404.93 42223405.14 0.0088 0.0035

Neptune 110892-04-08 23:30 G 42223630.30 42223630.48 42223630.69 0.0088 0.0045

Neptune 110892-11-20 13:10 G 42223855.87 42223856.05 42223856.23 0.0088 0.0054

Neptune 110893-07-04 02:08 G 42224081.45 42224081.59 42224081.76 0.0088 0.0064

Mars 110893-07-24 09:34 G 42224101.73 42224101.90 42224102.07 0.1625 0.0456

Neptune 110894-02-14 15:06 G 42224307.04 42224307.13 42224307.28 0.0088 0.0074

Neptune 110894-09-28 04:46 G 42224532.64 42224532.70 42224532.78 0.0088 0.0083

Jupiter 110895-08-10 16:18 G 42224849.04 42224849.18 42224849.33 0.0508 0.0355

Jupiter 110901-06-17 18:27 G 42226986.06 42226986.27 42226986.47 0.0515 0.0081

Saturn 110905-06-17 01:54 G 42228446.43 42228446.58 42228446.75 0.0265 0.0170

Saturn 110906-02-01 00:13 G 42228675.33 42228675.51 42228675.71 0.0266 0.0104

Jupiter 110907-12-09 07:54 G 42229351.67 42229351.83 42229351.99 0.0515 0.0311

Uranus 110911-08-07 13:25 G 42230688.99 42230689.06 42230689.13 0.0138 0.0131

Uranus 110912-03-20 20:51 G 42230915.27 42230915.37 42230915.50 0.0138 0.0116

Uranus 110912-11-02 04:32 G 42231141.55 42231141.69 42231141.84 0.0138 0.0101

Jupiter 110913-02-20 11:30 G 42231251.79 42231251.98 42231252.17 0.0517 0.0193

Uranus 110913-06-16 11:30 G 42231367.83 42231367.98 42231368.17 0.0138 0.0087

Uranus 110914-01-28 18:42 G 42231594.11 42231594.28 42231594.48 0.0138 0.0072

Uranus 110914-09-12 01:54 G 42231820.39 42231820.58 42231820.78 0.0137 0.0057

Uranus 110915-04-26 08:37 G 42232046.66 42232046.86 42232047.07 0.0137 0.0042

Uranus 110915-12-08 15:20 G 42232272.93 42232273.14 42232273.35 0.0137 0.0026

Uranus 110916-07-21 21:49 G 42232499.20 42232499.41 42232499.63 0.0137 0.0012

Uranus 110917-03-05 04:03 G 42232725.46 42232725.67 42232725.89 0.0137 0.0004

Uranus 110917-10-17 10:18 G 42232951.72 42232951.93 42232952.15 0.0137 0.0019

Uranus 110918-05-31 16:32 G 42233177.98 42233178.19 42233178.40 0.0136 0.0033

Uranus 110919-01-12 22:18 G 42233404.23 42233404.43 42233404.63 0.0136 0.0047

Jupiter 110919-08-14 06:42 G 42233617.58 42233617.78 42233617.98 0.0512 0.0053

Uranus 110919-08-27 04:03 G 42233630.48 42233630.67 42233630.86 0.0136 0.0062

Uranus 110920-04-09 09:34 G 42233856.73 42233856.90 42233857.09 0.0136 0.0076

Saturn 110920-07-13 03:20 G 42233951.43 42233951.64 42233951.85 0.0295 0.0039

Uranus 110920-11-21 15:06 G 42234082.99 42234083.13 42234083.31 0.0136 0.0090

Uranus 110921-07-05 20:37 G 42234309.24 42234309.36 42234309.51 0.0136 0.0104

Uranus 110922-02-17 01:54 G 42234535.49 42234535.58 42234535.70 0.0136 0.0117

Uranus 110922-10-01 07:10 G 42234761.75 42234761.80 42234761.87 0.0136 0.0130

Jupiter 110924-10-26 04:03 G 42235517.59 42235517.67 42235517.76 0.0520 0.0469

Jupiter 110925-06-20 12:42 G 42235754.99 42235755.03 42235755.08 0.0511 0.0496

Jupiter 110931-04-19 05:15 G 42237883.54 42237883.72 42237883.91 0.0509 0.0207

Saturn 110934-12-28 07:54 G 42239232.65 42239232.83 42239233.02 0.0266 0.0124

Saturn 110935-08-14 06:13 G 42239461.59 42239461.76 42239461.94 0.0266 0.0150

Jupiter 110937-02-23 05:30 G 42240020.55 42240020.73 42240020.92 0.0514 0.0226

Jupiter 110942-12-23 03:49 G 42242149.58 42242149.66 42242149.75 0.0507 0.0458

Jupiter 110943-08-16 19:39 G 42242386.24 42242386.32 42242386.42 0.0516 0.0460

Pluto 110948-08-08 13:10 G 42244205.00 42244205.05 42244205.17 0.0063 0.0059

Jupiter 110948-10-28 23:58 G 42244286.30 42244286.50 42244286.70 0.0516 0.0044

Pluto 110949-03-21 16:46 G 42244430.01 42244430.20 42244430.42 0.0063 0.0020

Saturn 110949-06-07 13:39 G 42244508.00 42244508.07 42244508.16 0.0294 0.0271

Pluto 110949-11-01 20:08 G 42244655.15 42244655.34 42244655.56 0.0064 0.0019

Saturn 110950-01-23 16:18 G 42244737.99 42244738.18 42244738.39 0.0294 0.0113

Pluto 110950-06-14 23:01 G 42244880.40 42244880.46 42244880.58 0.0064 0.0058

Mars 110954-10-10 18:27 G 42246459.15 42246459.27 42246459.38 0.1913 0.1428

Uranus 110954-12-16 23:58 G 42246526.47 42246526.50 42246526.57 0.0140 0.0136

Jupiter 110955-04-21 16:03 G 42246651.98 42246652.17 42246652.36 0.0513 0.0192

Uranus 110955-07-31 09:34 G 42246752.80 42246752.90 42246753.02 0.0140 0.0121

Uranus 110956-03-13 19:10 G 42246979.17 42246979.30 42246979.45 0.0140 0.0106

Uranus 110956-10-26 05:01 G 42247205.55 42247205.71 42247205.89 0.0140 0.0091

Uranus 110957-06-09 15:06 G 42247431.95 42247432.13 42247432.32 0.0140 0.0075

Uranus 110958-01-22 01:10 G 42247658.36 42247658.55 42247658.76 0.0141 0.0059

Uranus 110958-09-05 11:44 G 42247884.79 42247884.99 42247885.21 0.0141 0.0042

Uranus 110959-04-19 22:32 G 42248111.23 42248111.44 42248111.66 0.0141 0.0026

Mars 110959-05-22 20:37 G 42248144.20 42248144.36 42248144.52 0.1628 0.0706

Uranus 110959-12-02 09:34 G 42248337.68 42248337.90 42248338.12 0.0141 0.0009

Jupiter 110960-07-03 18:42 G 42248552.12 42248552.28 42248552.45 0.0519 0.0313

Uranus 110960-07-15 20:37 G 42248564.14 42248564.36 42248564.58 0.0141 0.0008

Uranus 110961-02-27 07:39 G 42248790.61 42248790.82 42248791.04 0.0141 0.0025

Uranus 110961-10-11 19:10 G 42249017.09 42249017.30 42249017.51 0.0142 0.0042

Uranus 110962-05-26 06:42 G 42249243.58 42249243.78 42249243.99 0.0142 0.0059

Uranus 110963-01-07 18:13 G 42249470.09 42249470.26 42249470.46 0.0142 0.0076

Uranus 110963-08-22 05:58 G 42249696.60 42249696.75 42249696.93 0.0142 0.0093

Uranus 110964-04-04 18:13 G 42249923.13 42249923.26 42249923.41 0.0142 0.0109

Saturn 110964-07-09 12:27 G 42250018.82 42250019.02 42250019.22 0.0265 0.0083

Uranus 110964-11-17 05:58 G 42250149.67 42250149.75 42250149.87 0.0142 0.0127

Saturn 110965-02-23 10:32 G 42250247.80 42250247.94 42250248.09 0.0266 0.0189

Uranus 110965-07-01 18:42 G 42250376.28 42250376.28 42250376.29 0.0142 0.0142

Jupiter 110966-12-25 15:06 G 42250917.93 42250918.13 42250918.33 0.0511 0.0064

Neptune 110966-12-30 18:13 G 42250923.19 42250923.26 42250923.35 0.0090 0.0083

Neptune 110967-08-13 07:10 G 42251148.68 42251148.80 42251148.93 0.0090 0.0073

Neptune 110968-03-25 20:08 G 42251374.19 42251374.34 42251374.50 0.0090 0.0063

Neptune 110968-11-06 09:20 G 42251599.72 42251599.89 42251600.07 0.0090 0.0053

Neptune 110969-06-19 22:03 G 42251825.24 42251825.42 42251825.62 0.0090 0.0043

Neptune 110970-01-31 11:01 G 42252050.76 42252050.96 42252051.16 0.0090 0.0033

Neptune 110970-09-13 23:44 G 42252276.29 42252276.49 42252276.71 0.0090 0.0023

Neptune 110971-04-27 12:42 G 42252501.82 42252502.03 42252502.25 0.0090 0.0013

Neptune 110971-12-09 01:39 G 42252727.35 42252727.57 42252727.78 0.0090 0.0003

Neptune 110972-07-21 14:08 G 42252952.88 42252953.09 42252953.31 0.0090 0.0008

Jupiter 110972-10-31 21:06 G 42253055.25 42253055.38 42253055.52 0.0512 0.0383

Neptune 110973-03-04 02:51 G 42253178.42 42253178.62 42253178.84 0.0090 0.0018

Neptune 110973-10-15 15:34 G 42253403.96 42253404.15 42253404.37 0.0090 0.0028

Neptune 110974-05-29 04:18 G 42253629.50 42253629.68 42253629.89 0.0090 0.0038

Neptune 110975-01-09 16:46 G 42253855.04 42253855.20 42253855.40 0.0090 0.0048

Neptune 110975-08-23 05:30 G 42254080.58 42254080.73 42254080.91 0.0090 0.0058

Neptune 110976-04-04 18:42 G 42254306.14 42254306.28 42254306.42 0.0090 0.0067

Neptune 110976-11-16 07:10 G 42254531.70 42254531.80 42254531.92 0.0090 0.0077

Neptune 110977-06-29 19:54 G 42254757.29 42254757.33 42254757.39 0.0090 0.0087

Jupiter 110978-08-30 14:51 G 42255183.96 42255184.12 42255184.28 0.0509 0.0316

Saturn 110978-12-18 17:30 G 42255294.10 42255294.23 42255294.37 0.0295 0.0230

Saturn 110979-08-05 20:22 G 42255524.17 42255524.35 42255524.54 0.0295 0.0155

Jupiter 110984-07-06 14:51 G 42257320.92 42257321.12 42257321.32 0.0515 0.0115

Jupiter 110990-12-28 05:58 G 42259686.61 42259686.75 42259686.90 0.0515 0.0348

Mars 110991-05-21 17:01 G 42259831.12 42259831.21 42259831.29 0.1620 0.1403

Saturn 110994-01-19 17:30 G 42260805.02 42260805.23 42260805.44 0.0266 0.0041

Saturn 110994-09-05 15:34 G 42261034.06 42261034.15 42261034.25 0.0266 0.0233

Uranus 110995-04-06 21:20 G 42261247.36 42261247.39 42261247.44 0.0138 0.0136

Uranus 110995-11-19 05:01 G 42261473.62 42261473.71 42261473.83 0.0138 0.0121

Jupiter 110996-03-11 06:42 G 42261586.59 42261586.78 42261586.98 0.0518 0.0164

Uranus 110996-07-02 12:42 G 42261699.91 42261700.03 42261700.18 0.0138 0.0106

Uranus 110997-02-13 20:22 G 42261926.19 42261926.35 42261926.51 0.0138 0.0091

Uranus 110997-09-28 03:49 G 42262152.48 42262152.66 42262152.84 0.0138 0.0076

Uranus 110998-05-12 10:32 G 42262378.76 42262378.94 42262379.15 0.0138 0.0062

Uranus 110998-12-24 17:30 G 42262605.04 42262605.23 42262605.44 0.0137 0.0046

Uranus 110999-08-08 00:13 G 42262831.31 42262831.51 42262831.73 0.0137 0.0031

Uranus 111000-03-22 06:56 G 42263057.58 42263057.79 42263058.01 0.0137 0.0016

Earth 111000-07-13 14:22 G 42263170.95 42263171.10 42263171.25 0.2644 0.0833

Moon 111000-07-13 18:27 G 42263171.11 42263171.27 42263171.42 0.2649 0.0090 *

Uranus 111000-11-03 13:39 G 42263283.85 42263284.07 42263284.29 0.0137 0.0001

112TH MILLENNIUM CE

This is a list of transits of Venus in the 112th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 111001-06-17 19:54 G 42263510.12 42263510.33 42263510.55 0.0137 0.0014

Uranus 111002-01-30 01:54 G 42263736.38 42263736.58 42263736.80 0.0137 0.0029

Jupiter 111002-09-03 03:34 G 42263952.45 42263952.65 42263952.85 0.0512 0.0086

Uranus 111002-09-13 07:54 G 42263962.64 42263962.83 42263963.04 0.0136 0.0044

Uranus 111003-04-27 13:54 G 42264188.89 42264189.08 42264189.28 0.0136 0.0058

Uranus 111003-12-09 19:39 G 42264415.15 42264415.32 42264415.51 0.0136 0.0072

Uranus 111004-07-23 01:25 G 42264641.40 42264641.56 42264641.73 0.0136 0.0086

Uranus 111005-03-06 06:42 G 42264867.65 42264867.78 42264867.94 0.0136 0.0100

Uranus 111005-10-18 12:27 G 42265093.91 42265094.02 42265094.14 0.0136 0.0113

Uranus 111006-06-01 17:30 G 42265320.17 42265320.23 42265320.32 0.0136 0.0127

Jupiter 111007-11-16 00:27 G 42265852.41 42265852.52 42265852.63 0.0520 0.0439

Saturn 111008-07-01 05:30 G 42266080.56 42266080.73 42266080.91 0.0294 0.0161

Saturn 111009-02-16 08:37 G 42266310.72 42266310.86 42266311.00 0.0294 0.0224

Jupiter 111014-05-08 23:58 G 42268218.32 42268218.50 42268218.70 0.0510 0.0179

Jupiter 111020-03-15 05:15 G 42270355.55 42270355.72 42270355.90 0.0513 0.0271

Saturn 111023-08-02 22:03 G 42271591.21 42271591.42 42271591.63 0.0265 0.0003

Mars 111025-03-20 07:54 G 42272186.68 42272186.83 42272186.97 0.1631 0.0949

Jupiter 111026-01-11 23:44 G 42272484.39 42272484.49 42272484.60 0.0507 0.0428

Jupiter 111026-09-05 16:18 G 42272721.13 42272721.18 42272721.24 0.0516 0.0495

Jupiter 111031-11-18 23:30 G 42274621.27 42274621.48 42274621.68 0.0516 0.0002

Saturn 111038-01-11 08:22 G 42276866.66 42276866.85 42276867.04 0.0295 0.0121

Jupiter 111038-05-11 15:34 G 42276986.97 42276987.15 42276987.33 0.0514 0.0236

Uranus 111038-08-17 08:51 G 42277084.87 42277084.87 42277084.87 0.0140 0.0139

Saturn 111038-08-29 11:15 G 42277096.89 42277096.97 42277097.07 0.0295 0.0265

Pluto 111038-09-23 18:56 G 42277122.27 42277122.29 42277122.32 0.0081 0.0080

Uranus 111039-03-31 17:58 G 42277311.17 42277311.25 42277311.36 0.0140 0.0125

Pluto 111039-05-07 06:27 G 42277347.55 42277347.77 42277348.00 0.0081 0.0004

Uranus 111039-11-13 03:34 G 42277537.52 42277537.65 42277537.79 0.0140 0.0110

Uranus 111040-06-26 12:56 G 42277763.90 42277764.04 42277764.22 0.0140 0.0095

Uranus 111041-02-07 23:01 G 42277990.29 42277990.46 42277990.65 0.0140 0.0079

Uranus 111041-09-22 09:06 G 42278216.70 42278216.88 42278217.09 0.0140 0.0064

Uranus 111042-05-06 19:39 G 42278443.12 42278443.32 42278443.53 0.0141 0.0047

Uranus 111042-12-19 06:13 G 42278669.55 42278669.76 42278669.98 0.0141 0.0031

Jupiter 111043-07-24 16:32 G 42278887.02 42278887.19 42278887.36 0.0518 0.0275

Uranus 111043-08-02 17:01 G 42278895.99 42278896.21 42278896.43 0.0141 0.0014

Uranus 111044-03-16 04:03 G 42279122.45 42279122.67 42279122.89 0.0141 0.0004

Uranus 111044-10-28 15:06 G 42279348.91 42279349.13 42279349.35 0.0141 0.0020

Uranus 111045-06-12 02:08 G 42279575.39 42279575.59 42279575.81 0.0141 0.0038

Uranus 111046-01-24 13:39 G 42279801.87 42279802.07 42279802.28 0.0142 0.0054

Uranus 111046-09-08 01:10 G 42280028.37 42280028.55 42280028.75 0.0142 0.0071

Uranus 111047-04-22 12:56 G 42280254.88 42280255.04 42280255.22 0.0142 0.0088

Uranus 111047-12-05 00:56 G 42280481.40 42280481.54 42280481.69 0.0142 0.0104

Neptune 111048-07-03 05:58 G 42280692.68 42280692.75 42280692.82 0.0088 0.0083

Uranus 111048-07-18 12:42 G 42280707.93 42280708.03 42280708.16 0.0142 0.0121

Neptune 111049-02-13 18:42 G 42280918.18 42280918.28 42280918.41 0.0088 0.0074

Uranus 111049-03-02 00:42 G 42280934.49 42280934.53 42280934.60 0.0142 0.0138

Neptune 111049-09-27 08:08 G 42281143.69 42281143.84 42281143.99 0.0088 0.0064

Jupiter 111050-01-14 14:22 G 42281252.90 42281253.10 42281253.30 0.0511 0.0024

Neptune 111050-05-10 20:51 G 42281369.21 42281369.37 42281369.56 0.0088 0.0055

Neptune 111050-12-22 10:18 G 42281594.74 42281594.93 42281595.12 0.0088 0.0045

Neptune 111051-08-04 23:01 G 42281820.27 42281820.46 42281820.68 0.0088 0.0036

Neptune 111052-03-17 12:27 G 42282045.81 42282046.02 42282046.24 0.0088 0.0026

Saturn 111052-06-28 03:06 G 42282148.54 42282148.63 42282148.73 0.0266 0.0234

Mars 111052-08-07 18:13 G 42282189.24 42282189.26 42282189.29 0.1922 0.1888

Neptune 111052-10-29 01:39 G 42282271.35 42282271.57 42282271.79 0.0088 0.0016

Saturn 111053-02-12 01:39 G 42282377.37 42282377.57 42282377.78 0.0266 0.0040

Neptune 111053-06-11 14:51 G 42282496.90 42282497.12 42282497.35 0.0088 0.0006

Neptune 111054-01-23 04:03 G 42282722.45 42282722.67 42282722.90 0.0088 0.0003

Neptune 111054-09-05 17:15 G 42282948.00 42282948.22 42282948.44 0.0088 0.0013

Neptune 111055-04-19 06:27 G 42283173.56 42283173.77 42283173.99 0.0088 0.0023

Jupiter 111055-11-21 17:15 G 42283390.11 42283390.22 42283390.35 0.0512 0.0416

Neptune 111055-11-30 19:39 G 42283399.12 42283399.32 42283399.54 0.0088 0.0033

Neptune 111056-07-13 08:51 G 42283624.69 42283624.87 42283625.08 0.0088 0.0043

Neptune 111057-02-23 22:18 G 42283850.26 42283850.43 42283850.62 0.0088 0.0052

Mars 111057-03-19 04:03 G 42283873.55 42283873.67 42283873.80 0.1622 0.1165

Neptune 111057-10-07 11:15 G 42284075.83 42284075.97 42284076.15 0.0088 0.0062

Neptune 111058-05-21 00:42 G 42284301.42 42284301.53 42284301.68 0.0088 0.0072

Neptune 111059-01-01 14:08 G 42284527.02 42284527.09 42284527.19 0.0088 0.0081

Jupiter 111061-09-19 12:56 G 42285518.87 42285519.04 42285519.21 0.0508 0.0280

Saturn 111067-07-24 19:25 G 42287653.10 42287653.31 42287653.52 0.0294 0.0056

Jupiter 111067-07-27 12:13 G 42287655.81 42287656.01 42287656.21 0.0515 0.0151

Jupiter 111074-01-17 01:10 G 42290021.42 42290021.55 42290021.69 0.0515 0.0379

Jupiter 111079-04-01 07:54 G 42291921.63 42291921.83 42291922.03 0.0517 0.0115

Uranus 111079-07-20 11:58 G 42292031.94 42292032.00 42292032.11 0.0138 0.0127

Uranus 111080-03-02 19:54 G 42292258.22 42292258.33 42292258.47 0.0138 0.0112

Uranus 111080-10-15 03:49 G 42292484.51 42292484.66 42292484.82 0.0138 0.0096

Uranus 111081-05-29 11:30 G 42292710.80 42292710.98 42292711.15 0.0138 0.0081

Saturn 111082-01-08 08:08 G 42292934.70 42292934.84 42292934.99 0.0265 0.0192

Uranus 111082-01-10 18:13 G 42292937.09 42292937.26 42292937.46 0.0138 0.0067

Uranus 111082-08-25 01:25 G 42293163.37 42293163.56 42293163.77 0.0137 0.0051

Saturn 111082-08-25 06:27 G 42293163.57 42293163.77 42293163.97 0.0265 0.0081 *

Uranus 111083-04-08 08:22 G 42293389.65 42293389.85 42293390.06 0.0137 0.0036

Uranus 111083-11-20 15:20 G 42293615.93 42293616.14 42293616.35 0.0137 0.0021

Uranus 111084-07-03 21:49 G 42293842.20 42293842.41 42293842.63 0.0137 0.0006

Uranus 111085-02-15 04:18 G 42294068.47 42294068.68 42294068.90 0.0137 0.0009

Jupiter 111085-09-22 00:13 G 42294287.32 42294287.51 42294287.71 0.0513 0.0122

Uranus 111085-09-29 10:46 G 42294294.73 42294294.95 42294295.16 0.0137 0.0024

Uranus 111086-05-13 16:46 G 42294521.00 42294521.20 42294521.41 0.0137 0.0039

Uranus 111086-12-25 22:46 G 42294747.26 42294747.45 42294747.65 0.0136 0.0053

Uranus 111087-08-09 04:46 G 42294973.52 42294973.70 42294973.89 0.0136 0.0068

Uranus 111088-03-22 10:18 G 42295199.77 42295199.93 42295200.11 0.0136 0.0082

Uranus 111088-11-03 15:49 G 42295426.03 42295426.16 42295426.33 0.0136 0.0096

Uranus 111089-06-17 21:34 G 42295652.28 42295652.40 42295652.53 0.0136 0.0109

Uranus 111090-01-30 02:37 G 42295878.54 42295878.61 42295878.72 0.0136 0.0123

Uranus 111090-09-13 08:08 G 42296104.84 42296104.84 42296104.85 0.0136 0.0136

Jupiter 111090-12-05 01:25 G 42296187.43 42296187.56 42296187.70 0.0520 0.0390

Mars 111091-01-15 18:56 G 42296229.17 42296229.29 42296229.40 0.1633 0.1207

Saturn 111097-02-02 20:51 G 42298439.15 42298439.37 42298439.58 0.0295 0.0020

Jupiter 111097-05-28 00:13 G 42298553.32 42298553.51 42298553.71 0.0510 0.0134

Jupiter 111103-04-05 04:18 G 42300690.52 42300690.68 42300690.84 0.0513 0.0312

Jupiter 111109-01-31 23:58 G 42302819.38 42302819.50 42302819.64 0.0508 0.0386

Saturn 111111-07-22 10:32 G 42303720.77 42303720.94 42303721.11 0.0265 0.0156

Saturn 111112-03-07 08:51 G 42303949.69 42303949.87 42303950.06 0.0266 0.0117

Moon 111114-01-18 17:01 G 42304632.13 42304632.21 42304632.29 0.2683 0.2323

Jupiter 111114-12-08 20:51 G 42304956.16 42304956.37 42304956.57 0.0516 0.0037

Mars 111118-06-05 21:49 G 42306231.28 42306231.41 42306231.55 0.1919 0.1144

Jupiter 111121-05-31 14:22 G 42307321.94 42307322.10 42307322.27 0.0514 0.0277

Moon 111122-01-16 06:27 G 42307551.62 42307551.77 42307551.91 0.2688 0.0999

Earth 111122-01-16 11:58 G 42307551.86 42307552.00 42307552.15 0.2688 0.0777 *

Uranus 111122-11-30 02:37 G 42307869.53 42307869.61 42307869.69 0.0140 0.0129

Mars 111123-01-15 15:34 G 42307916.01 42307916.15 42307916.30 0.1625 0.0931

Uranus 111123-07-14 11:58 G 42308095.88 42308096.00 42308096.12 0.0140 0.0114

Uranus 111124-02-25 21:20 G 42308322.25 42308322.39 42308322.55 0.0140 0.0099

Uranus 111124-10-09 07:10 G 42308548.63 42308548.80 42308548.98 0.0140 0.0084

Uranus 111125-05-23 17:15 G 42308775.04 42308775.22 42308775.42 0.0140 0.0068

Uranus 111126-01-05 03:34 G 42309001.45 42309001.65 42309001.86 0.0140 0.0051

Jupiter 111126-08-13 14:51 G 42309221.94 42309222.12 42309222.30 0.0518 0.0235

Saturn 111126-08-17 06:42 G 42309225.56 42309225.78 42309225.99 0.0295 0.0042

Uranus 111126-08-19 14:08 G 42309227.87 42309228.09 42309228.30 0.0141 0.0035

Uranus 111127-04-03 00:42 G 42309454.31 42309454.53 42309454.75 0.0141 0.0018

Uranus 111127-11-15 11:30 G 42309680.76 42309680.98 42309681.20 0.0141 0.0003

Uranus 111128-06-28 22:32 G 42309907.22 42309907.44 42309907.66 0.0141 0.0015

Uranus 111129-02-10 09:34 G 42310133.69 42310133.90 42310134.12 0.0141 0.0032

Uranus 111129-09-24 20:37 G 42310360.16 42310360.36 42310360.58 0.0141 0.0050

Uranus 111130-05-09 08:08 G 42310586.66 42310586.84 42310587.05 0.0142 0.0067

Uranus 111130-12-21 19:54 G 42310813.16 42310813.33 42310813.52 0.0142 0.0083

Neptune 111131-04-05 04:46 G 42310917.64 42310917.70 42310917.77 0.0090 0.0085

Uranus 111131-08-05 07:25 G 42311039.67 42311039.81 42311039.98 0.0142 0.0100

Neptune 111131-11-16 17:44 G 42311143.13 42311143.24 42311143.37 0.0090 0.0075

Uranus 111132-03-18 19:25 G 42311266.19 42311266.31 42311266.44 0.0142 0.0116

Neptune 111132-06-29 06:42 G 42311368.64 42311368.78 42311368.94 0.0090 0.0065

Uranus 111132-10-31 07:39 G 42311492.74 42311492.82 42311492.90 0.0142 0.0133

Jupiter 111133-02-03 10:18 G 42311587.73 42311587.93 42311588.13 0.0511 0.0009

Neptune 111133-02-09 19:39 G 42311594.16 42311594.32 42311594.50 0.0090 0.0055

Neptune 111133-09-23 08:37 G 42311819.68 42311819.86 42311820.05 0.0090 0.0045

Neptune 111134-05-06 21:34 G 42312045.20 42312045.40 42312045.60 0.0090 0.0035

Neptune 111134-12-18 10:32 G 42312270.73 42312270.94 42312271.15 0.0090 0.0025

Neptune 111135-07-31 23:15 G 42312496.26 42312496.47 42312496.69 0.0090 0.0015

Neptune 111136-03-13 12:13 G 42312721.80 42312722.01 42312722.23 0.0090 0.0005

Neptune 111136-10-25 01:10 G 42312947.33 42312947.55 42312947.77 0.0090 0.0005

Neptune 111137-06-07 13:54 G 42313172.87 42313173.08 42313173.30 0.0090 0.0015

Neptune 111138-01-19 02:22 G 42313398.40 42313398.60 42313398.82 0.0090 0.0026

Jupiter 111138-04-18 09:49 G 42313487.87 42313487.91 42313487.96 0.0521 0.0507

Neptune 111138-09-01 15:06 G 42313623.94 42313624.13 42313624.34 0.0090 0.0036

Jupiter 111138-12-11 19:25 G 42313725.23 42313725.31 42313725.40 0.0512 0.0468

Neptune 111139-04-15 03:34 G 42313849.48 42313849.65 42313849.86 0.0090 0.0046

Neptune 111139-11-26 16:32 G 42314075.04 42314075.19 42314075.38 0.0090 0.0056

Neptune 111140-07-09 05:30 G 42314300.59 42314300.73 42314300.88 0.0090 0.0065

Saturn 111141-01-31 15:34 G 42314506.96 42314507.15 42314507.34 0.0265 0.0115

Neptune 111141-02-19 17:58 G 42314526.15 42314526.25 42314526.38 0.0090 0.0075

Saturn 111141-09-17 13:39 G 42314735.90 42314736.07 42314736.24 0.0265 0.0158

Neptune 111141-10-03 06:42 G 42314751.72 42314751.78 42314751.86 0.0090 0.0085

Jupiter 111144-10-09 09:49 G 42315853.74 42315853.91 42315854.09 0.0509 0.0245

Jupiter 111150-08-16 14:08 G 42317990.90 42317991.09 42317991.28 0.0514 0.0203

Saturn 111156-02-27 07:10 G 42320011.60 42320011.80 42320012.01 0.0295 0.0076

Jupiter 111156-06-14 10:32 G 42320119.89 42320119.94 42320119.98 0.0507 0.0492

Mars 111156-11-13 05:44 G 42320271.66 42320271.74 42320271.82 0.1636 0.1463

Jupiter 111157-02-06 02:37 G 42320356.50 42320356.61 42320356.72 0.0516 0.0429

Jupiter 111162-04-21 08:08 G 42322256.64 42322256.84 42322257.05 0.0517 0.0069

Uranus 111163-03-20 20:22 G 42322590.29 42322590.35 42322590.43 0.0138 0.0131

Uranus 111163-11-02 04:03 G 42322816.58 42322816.67 42322816.81 0.0138 0.0117

Uranus 111164-06-15 11:58 G 42323042.87 42323043.00 42323043.16 0.0138 0.0101

Uranus 111165-01-27 19:25 G 42323269.16 42323269.31 42323269.49 0.0138 0.0086

Uranus 111165-09-11 02:51 G 42323495.45 42323495.62 42323495.82 0.0138 0.0071

Uranus 111166-04-25 10:03 G 42323721.73 42323721.92 42323722.13 0.0138 0.0056

Uranus 111166-12-07 17:15 G 42323948.02 42323948.22 42323948.43 0.0137 0.0040

Uranus 111167-07-22 00:13 G 42324174.30 42324174.51 42324174.72 0.0137 0.0025

Uranus 111168-03-04 06:56 G 42324400.57 42324400.79 42324401.00 0.0137 0.0010

Jupiter 111168-10-12 01:54 G 42324622.39 42324622.58 42324622.77 0.0513 0.0170

Uranus 111168-10-16 13:39 G 42324626.85 42324627.07 42324627.28 0.0137 0.0005

Uranus 111169-05-30 19:54 G 42324853.12 42324853.33 42324853.55 0.0137 0.0020

Uranus 111170-01-12 02:08 G 42325079.39 42325079.59 42325079.80 0.0137 0.0035

Saturn 111170-08-13 16:32 G 42325292.99 42325293.19 42325293.39 0.0265 0.0083

Uranus 111170-08-26 08:08 G 42325305.65 42325305.84 42325306.05 0.0136 0.0049

Saturn 111171-03-30 14:37 G 42325521.97 42325522.11 42325522.26 0.0266 0.0191

Uranus 111171-04-09 14:08 G 42325531.91 42325532.09 42325532.28 0.0136 0.0064

Uranus 111171-11-21 19:54 G 42325758.17 42325758.33 42325758.52 0.0136 0.0078

Uranus 111172-07-05 01:25 G 42325984.42 42325984.56 42325984.74 0.0136 0.0093

Uranus 111173-02-16 07:25 G 42326210.68 42326210.81 42326210.94 0.0136 0.0106

Uranus 111173-09-30 12:27 G 42326436.93 42326437.02 42326437.13 0.0136 0.0119

Jupiter 111173-12-24 23:58 G 42326522.35 42326522.50 42326522.65 0.0519 0.0350

Uranus 111174-05-14 17:58 G 42326663.21 42326663.25 42326663.30 0.0136 0.0132

Jupiter 111180-06-17 00:27 G 42328888.32 42328888.52 42328888.72 0.0510 0.0090

Mars 111184-04-02 02:22 G 42330273.43 42330273.60 42330273.76 0.1915 0.0443

Saturn 111185-01-21 12:27 G 42330567.92 42330568.02 42330568.14 0.0295 0.0253

Saturn 111185-09-08 15:34 G 42330797.96 42330798.15 42330798.34 0.0295 0.0133

Jupiter 111186-04-24 03:49 G 42331025.52 42331025.66 42331025.81 0.0513 0.0356

Mars 111188-11-12 02:51 G 42331958.46 42331958.62 42331958.78 0.1627 0.0690

Jupiter 111192-02-20 20:51 G 42333154.22 42333154.37 42333154.51 0.0508 0.0352

Pluto 111195-04-21 20:51 G 42334310.19 42334310.37 42334310.58 0.0063 0.0028

Pluto 111195-12-03 00:27 G 42334535.32 42334535.52 42334535.74 0.0064 0.0011

Pluto 111196-07-15 03:34 G 42334760.53 42334760.65 42334760.80 0.0064 0.0050

Jupiter 111197-12-27 23:44 G 42335291.29 42335291.49 42335291.70 0.0516 0.0094

Saturn 111200-02-23 21:34 G 42336079.19 42336079.40 42336079.61 0.0265 0.0041

Saturn 111200-10-09 19:25 G 42336308.22 42336308.31 42336308.42 0.0265 0.0232

Jupiter 111204-06-19 12:27 G 42337656.86 42337657.02 42337657.18 0.0514 0.0316

Uranus 111206-07-30 10:32 G 42338427.90 42338427.94 42338428.02 0.0140 0.0134

Uranus 111207-03-13 19:54 G 42338654.24 42338654.33 42338654.46 0.0140 0.0119

Uranus 111207-10-26 05:58 G 42338880.60 42338880.75 42338880.89 0.0140 0.0103

Uranus 111208-06-08 15:20 G 42339106.98 42339107.14 42339107.32 0.0140 0.0088

Uranus 111209-01-21 01:10 G 42339333.38 42339333.55 42339333.75 0.0140 0.0073

Jupiter 111209-09-01 18:13 G 42339557.07 42339557.26 42339557.45 0.0518 0.0180

Uranus 111209-09-04 11:30 G 42339559.79 42339559.98 42339560.19 0.0140 0.0056

Uranus 111210-04-18 22:03 G 42339786.21 42339786.42 42339786.63 0.0141 0.0040

Uranus 111210-12-01 08:37 G 42340012.64 42340012.86 42340013.08 0.0141 0.0023

Uranus 111211-07-15 19:10 G 42340239.09 42340239.30 42340239.53 0.0141 0.0007

Uranus 111212-02-27 05:58 G 42340465.54 42340465.75 42340465.98 0.0141 0.0011

Neptune 111212-10-05 15:34 G 42340687.11 42340687.15 42340687.22 0.0088 0.0085

Uranus 111212-10-10 17:01 G 42340692.00 42340692.21 42340692.43 0.0141 0.0028

Neptune 111213-05-19 04:32 G 42340912.60 42340912.69 42340912.82 0.0088 0.0076

Uranus 111213-05-25 04:18 G 42340918.48 42340918.68 42340918.90 0.0141 0.0045

Neptune 111213-12-30 17:44 G 42341138.11 42341138.24 42341138.40 0.0088 0.0066

Uranus 111214-01-06 15:34 G 42341144.96 42341145.15 42341145.36 0.0142 0.0061

Saturn 111214-08-03 12:42 G 42341353.90 42341354.03 42341354.18 0.0295 0.0221

Neptune 111214-08-13 06:42 G 42341363.63 42341363.78 42341363.97 0.0088 0.0057

Uranus 111214-08-21 03:20 G 42341371.45 42341371.64 42341371.82 0.0142 0.0078

Saturn 111215-03-21 15:34 G 42341583.98 42341584.15 42341584.33 0.0295 0.0166

Neptune 111215-03-26 19:54 G 42341589.16 42341589.33 42341589.54 0.0088 0.0047

Uranus 111215-04-04 14:37 G 42341597.96 42341598.11 42341598.29 0.0142 0.0095

Neptune 111215-11-07 09:20 G 42341814.69 42341814.89 42341815.10 0.0088 0.0037

Uranus 111215-11-17 02:22 G 42341824.48 42341824.60 42341824.75 0.0142 0.0112

Jupiter 111216-02-23 12:13 G 42341922.81 42341923.01 42341923.21 0.0512 0.0060

Neptune 111216-06-19 22:18 G 42342040.23 42342040.43 42342040.65 0.0088 0.0028

Uranus 111216-06-30 14:22 G 42342051.02 42342051.10 42342051.20 0.0142 0.0128

Neptune 111217-01-31 11:30 G 42342265.77 42342265.98 42342266.21 0.0088 0.0018

Neptune 111217-09-14 00:42 G 42342491.31 42342491.53 42342491.76 0.0088 0.0008

Neptune 111218-04-27 14:08 G 42342716.86 42342717.09 42342717.31 0.0088 0.0002

Neptune 111218-12-09 03:06 G 42342942.42 42342942.63 42342942.86 0.0088 0.0012

Neptune 111219-07-22 16:32 G 42343167.97 42343168.19 42343168.40 0.0088 0.0021

Neptune 111220-03-04 05:30 G 42343393.53 42343393.73 42343393.95 0.0088 0.0031

Neptune 111220-10-15 18:42 G 42343619.09 42343619.28 42343619.49 0.0088 0.0041

Jupiter 111221-05-07 11:44 G 42343822.90 42343822.99 42343823.09 0.0520 0.0455

Neptune 111221-05-29 07:54 G 42343844.67 42343844.83 42343845.03 0.0088 0.0051

Neptune 111222-01-09 21:20 G 42344070.24 42344070.39 42344070.57 0.0088 0.0060

Neptune 111222-08-23 10:32 G 42344295.82 42344295.94 42344296.09 0.0088 0.0070

Neptune 111223-04-05 23:30 G 42344521.42 42344521.48 42344521.61 0.0088 0.0080

Jupiter 111227-10-29 12:13 G 42346188.83 42346189.01 42346189.20 0.0509 0.0195

Saturn 111229-09-04 21:34 G 42346865.19 42346865.40 42346865.61 0.0265 0.0012

Saturn 111230-04-21 19:25 G 42347094.28 42347094.31 42347094.36 0.0266 0.0261

Jupiter 111233-09-04 13:39 G 42348325.89 42348326.07 42348326.25 0.0514 0.0247

Jupiter 111239-07-04 11:15 G 42350454.89 42350454.97 42350455.08 0.0507 0.0446

Jupiter 111240-02-26 03:34 G 42350691.58 42350691.65 42350691.73 0.0516 0.0477

Moon 111243-07-15 12:56 G 42351926.89 42351927.04 42351927.19 0.2638 0.1172

Earth 111243-07-15 14:22 G 42351926.95 42351927.10 42351927.26 0.2644 0.0865 *

Saturn 111244-02-13 19:54 G 42352140.16 42352140.33 42352140.51 0.0295 0.0167

Saturn 111244-09-30 23:01 G 42352370.32 42352370.46 42352370.61 0.0295 0.0219

Jupiter 111245-05-10 08:37 G 42352591.65 42352591.86 42352592.06 0.0517 0.0023

Uranus 111246-11-18 04:18 G 42353148.65 42353148.68 42353148.74 0.0139 0.0136

Uranus 111247-07-02 12:27 G 42353374.92 42353375.02 42353375.13 0.0138 0.0121

Uranus 111248-02-13 19:54 G 42353601.21 42353601.33 42353601.49 0.0138 0.0106

Uranus 111248-09-27 03:49 G 42353827.51 42353827.66 42353827.83 0.0138 0.0091

Uranus 111249-05-11 11:15 G 42354053.80 42354053.97 42354054.16 0.0138 0.0076

Uranus 111249-12-23 18:27 G 42354280.09 42354280.27 42354280.48 0.0138 0.0061

Mars 111250-01-28 06:13 G 42354315.59 42354315.76 42354315.93 0.1911 0.0278

Uranus 111250-08-07 01:39 G 42354506.37 42354506.57 42354506.78 0.0137 0.0045

Uranus 111251-03-21 08:37 G 42354732.66 42354732.86 42354733.08 0.0137 0.0030

Jupiter 111251-10-31 23:15 G 42354957.29 42354957.47 42354957.66 0.0513 0.0206

Uranus 111251-11-02 15:34 G 42354958.94 42354959.15 42354959.37 0.0137 0.0016

Uranus 111252-06-15 22:18 G 42355185.22 42355185.43 42355185.65 0.0137 0.0002

Uranus 111253-01-28 04:46 G 42355411.49 42355411.70 42355411.92 0.0137 0.0015

Uranus 111253-09-11 11:01 G 42355637.76 42355637.96 42355638.17 0.0137 0.0030

Uranus 111254-04-25 17:15 G 42355864.02 42355864.22 42355864.43 0.0137 0.0045

Mars 111254-09-09 13:54 G 42356000.91 42356001.08 42356001.25 0.1630 0.0443

Uranus 111254-12-07 23:15 G 42356090.28 42356090.47 42356090.67 0.0136 0.0059

Uranus 111255-07-22 05:15 G 42356316.54 42356316.72 42356316.90 0.0136 0.0074

Uranus 111256-03-04 11:01 G 42356542.80 42356542.96 42356543.12 0.0136 0.0088

Uranus 111256-10-16 16:32 G 42356769.05 42356769.19 42356769.34 0.0136 0.0102

Jupiter 111257-01-13 03:34 G 42356857.48 42356857.65 42356857.82 0.0520 0.0293

Uranus 111257-05-30 21:49 G 42356995.31 42356995.41 42356995.53 0.0136 0.0115

Uranus 111258-01-12 03:34 G 42357221.58 42357221.65 42357221.71 0.0136 0.0128

Saturn 111258-08-01 03:49 G 42357422.58 42357422.66 42357422.75 0.0265 0.0243

Saturn 111259-03-18 02:22 G 42357651.39 42357651.60 42357651.81 0.0265 0.0031

Jupiter 111263-07-06 22:32 G 42359223.24 42359223.44 42359223.64 0.0510 0.0051

Jupiter 111269-05-13 07:39 G 42361360.70 42361360.82 42361360.94 0.0513 0.0412

Saturn 111273-08-25 20:08 G 42362926.15 42362926.34 42362926.53 0.0295 0.0134

Saturn 111274-04-12 23:01 G 42363156.36 42363156.46 42363156.58 0.0295 0.0253

Jupiter 111275-03-11 22:46 G 42363489.30 42363489.45 42363489.62 0.0508 0.0302

Jupiter 111281-01-16 02:08 G 42365626.39 42365626.59 42365626.78 0.0515 0.0145

Pluto 111285-06-05 08:37 G 42367227.65 42367227.86 42367228.09 0.0081 0.0012

Pluto 111286-01-16 19:39 G 42367453.24 42367453.32 42367453.44 0.0080 0.0072

Jupiter 111287-07-09 15:20 G 42367992.01 42367992.14 42367992.28 0.0515 0.0371

Saturn 111288-02-11 03:06 G 42368208.51 42368208.63 42368208.75 0.0265 0.0216

Saturn 111288-09-27 01:39 G 42368437.37 42368437.57 42368437.78 0.0265 0.0059

Uranus 111290-03-29 18:56 G 42368986.27 42368986.29 42368986.33 0.0140 0.0138

Uranus 111290-11-11 04:18 G 42369212.58 42369212.68 42369212.79 0.0140 0.0123

Uranus 111291-06-25 13:39 G 42369438.94 42369439.07 42369439.21 0.0140 0.0108

Uranus 111292-02-06 23:01 G 42369665.31 42369665.46 42369665.64 0.0140 0.0093

Uranus 111292-09-20 08:51 G 42369891.70 42369891.87 42369892.07 0.0140 0.0077

Jupiter 111292-09-20 18:27 G 42369892.08 42369892.27 42369892.47 0.0518 0.0133

Uranus 111293-05-04 19:10 G 42370118.11 42370118.30 42370118.50 0.0140 0.0061

Uranus 111293-12-17 05:30 G 42370344.52 42370344.73 42370344.94 0.0141 0.0045

Uranus 111294-07-31 15:49 G 42370570.95 42370571.16 42370571.38 0.0141 0.0028

Uranus 111295-03-15 02:22 G 42370797.39 42370797.60 42370797.82 0.0141 0.0012

Neptune 111295-07-07 15:34 G 42370912.12 42370912.15 42370912.23 0.0090 0.0087

Uranus 111295-10-27 13:10 G 42371023.83 42371024.05 42371024.27 0.0141 0.0006

Neptune 111296-02-18 04:32 G 42371137.60 42371137.69 42371137.82 0.0090 0.0077

Uranus 111296-06-10 00:13 G 42371250.29 42371250.51 42371250.73 0.0141 0.0022

Neptune 111296-09-30 17:30 G 42371363.11 42371363.23 42371363.39 0.0090 0.0067

Uranus 111297-01-22 11:01 G 42371476.76 42371476.96 42371477.18 0.0141 0.0040

Neptune 111297-05-14 06:42 G 42371588.62 42371588.78 42371588.96 0.0090 0.0057

Uranus 111297-09-05 22:03 G 42371703.23 42371703.42 42371703.64 0.0141 0.0057

Neptune 111297-12-25 19:25 G 42371814.14 42371814.31 42371814.51 0.0090 0.0047

Uranus 111298-04-20 09:49 G 42371929.73 42371929.91 42371930.10 0.0142 0.0073

Neptune 111298-08-08 08:22 G 42372039.66 42372039.85 42372040.06 0.0090 0.0037

Uranus 111298-12-02 21:20 G 42372156.22 42372156.39 42372156.57 0.0142 0.0090

Jupiter 111299-03-14 13:39 G 42372257.88 42372258.07 42372258.27 0.0512 0.0111

Neptune 111299-03-21 21:20 G 42372265.19 42372265.39 42372265.61 0.0090 0.0027

Uranus 111299-07-17 08:37 G 42372382.74 42372382.86 42372383.03 0.0142 0.0107

Neptune 111299-11-02 10:32 G 42372490.73 42372490.94 42372491.16 0.0090 0.0017

Uranus 111300-02-28 20:37 G 42372609.26 42372609.36 42372609.48 0.0142 0.0123

Neptune 111300-06-15 23:30 G 42372716.26 42372716.48 42372716.70 0.0090 0.0006

Uranus 111300-10-13 08:37 G 42372835.83 42372835.86 42372835.91 0.0142 0.0139

Neptune 111301-01-27 12:13 G 42372941.80 42372942.01 42372942.23 0.0090 0.0004

Neptune 111301-09-10 00:56 G 42373167.33 42373167.54 42373167.76 0.0090 0.0014

Neptune 111302-04-23 13:39 G 42373392.87 42373393.07 42373393.29 0.0090 0.0024

Neptune 111302-12-05 02:37 G 42373618.42 42373618.61 42373618.82 0.0090 0.0034

Saturn 111303-03-09 02:22 G 42373712.39 42373712.60 42373712.80 0.0295 0.0084

Neptune 111303-07-18 15:06 G 42373843.96 42373844.13 42373844.34 0.0090 0.0044

Neptune 111304-02-29 03:49 G 42374069.50 42374069.66 42374069.85 0.0090 0.0054

Jupiter 111304-05-27 12:13 G 42374157.90 42374158.01 42374158.15 0.0520 0.0409

Neptune 111304-10-11 16:32 G 42374295.05 42374295.19 42374295.36 0.0090 0.0064

Neptune 111305-05-25 05:01 G 42374520.61 42374520.71 42374520.86 0.0090 0.0074

Neptune 111306-01-05 17:58 G 42374746.18 42374746.25 42374746.34 0.0090 0.0083

Jupiter 111310-11-18 10:18 G 42376523.74 42376523.93 42376524.12 0.0509 0.0157

Mars 111315-11-26 11:01 G 42378357.81 42378357.96 42378358.11 0.1906 0.0944

Jupiter 111316-09-24 17:30 G 42378661.07 42378661.23 42378661.40 0.0514 0.0305

Saturn 111317-08-24 08:08 G 42378994.68 42378994.84 42378995.00 0.0266 0.0173

Saturn 111318-04-10 06:27 G 42379223.58 42379223.77 42379223.97 0.0266 0.0101

Mars 111320-07-08 01:25 G 42380043.38 42380043.56 42380043.74 0.1632 0.0205

Jupiter 111322-07-24 10:03 G 42380789.81 42380789.92 42380790.04 0.0507 0.0407

Jupiter 111328-05-30 12:42 G 42382926.82 42382927.03 42382927.23 0.0516 0.0037

Uranus 111331-03-02 21:06 G 42383933.31 42383933.38 42383933.49 0.0138 0.0126

Uranus 111331-10-15 05:30 G 42384159.60 42384159.73 42384159.86 0.0138 0.0110

Uranus 111332-05-28 13:10 G 42384385.90 42384386.05 42384386.21 0.0138 0.0095

Saturn 111332-09-18 03:20 G 42384498.43 42384498.64 42384498.85 0.0295 0.0048

Uranus 111333-01-09 20:51 G 42384612.19 42384612.37 42384612.54 0.0138 0.0080

Uranus 111333-08-24 04:03 G 42384838.48 42384838.67 42384838.86 0.0138 0.0065

Uranus 111334-04-07 11:15 G 42385064.77 42385064.97 42385065.17 0.0138 0.0050

Uranus 111334-11-19 18:27 G 42385291.06 42385291.27 42385291.48 0.0137 0.0035

Jupiter 111334-11-21 01:54 G 42385292.41 42385292.58 42385292.75 0.0513 0.0260

Uranus 111335-07-04 01:25 G 42385517.34 42385517.56 42385517.77 0.0137 0.0019

Uranus 111336-02-15 08:08 G 42385743.62 42385743.84 42385744.05 0.0137 0.0005

Uranus 111336-09-28 14:37 G 42385969.90 42385970.11 42385970.33 0.0137 0.0011

Uranus 111337-05-12 20:51 G 42386196.17 42386196.37 42386196.59 0.0137 0.0026

Uranus 111337-12-25 03:06 G 42386422.43 42386422.63 42386422.84 0.0137 0.0041

Uranus 111338-08-08 09:20 G 42386648.69 42386648.89 42386649.08 0.0137 0.0055

Uranus 111339-03-22 15:06 G 42386874.95 42386875.13 42386875.32 0.0136 0.0069

Uranus 111339-11-03 20:51 G 42387101.21 42387101.37 42387101.55 0.0136 0.0084

Jupiter 111340-02-03 06:27 G 42387192.59 42387192.77 42387192.95 0.0519 0.0239

Uranus 111340-06-17 02:37 G 42387327.47 42387327.61 42387327.76 0.0136 0.0098

Uranus 111341-01-29 07:54 G 42387553.72 42387553.83 42387553.96 0.0136 0.0111

Uranus 111341-09-12 13:10 G 42387779.98 42387780.05 42387780.15 0.0136 0.0125

Jupiter 111346-07-27 01:39 G 42389558.37 42389558.57 42389558.77 0.0511 0.0007

Saturn 111347-03-06 06:56 G 42389780.62 42389780.79 42389780.97 0.0265 0.0147

Saturn 111347-10-21 05:44 G 42390009.55 42390009.74 42390009.92 0.0265 0.0127

Jupiter 111351-10-08 22:32 G 42391458.43 42391458.44 42391458.44 0.0521 0.0521

Jupiter 111352-06-02 08:08 G 42391695.75 42391695.84 42391695.93 0.0512 0.0459

Moon 111357-01-19 21:20 G 42393388.35 42393388.39 42393388.44 0.2696 0.2532

Jupiter 111358-04-01 00:56 G 42393824.37 42393824.54 42393824.72 0.0508 0.0252

Saturn 111362-03-31 08:51 G 42395284.66 42395284.87 42395285.08 0.0295 0.0002

Jupiter 111364-02-06 03:06 G 42395961.44 42395961.63 42395961.82 0.0515 0.0195

Earth 111365-01-17 14:08 G 42396307.94 42396308.09 42396308.24 0.2688 0.0764

Moon 111365-01-17 18:27 G 42396308.12 42396308.27 42396308.42 0.2693 0.0597 *

Jupiter 111370-07-29 13:25 G 42398326.95 42398327.06 42398327.19 0.0514 0.0410

Uranus 111374-07-12 11:58 G 42399770.92 42399771.00 42399771.09 0.0140 0.0128

Uranus 111375-02-23 21:20 G 42399997.27 42399997.39 42399997.52 0.0140 0.0113

Uranus 111375-10-08 06:42 G 42400223.64 42400223.78 42400223.95 0.0140 0.0098

Jupiter 111375-10-11 22:03 G 42400227.21 42400227.42 42400227.62 0.0518 0.0078

Uranus 111376-05-21 16:32 G 42400450.02 42400450.19 42400450.38 0.0140 0.0082

Saturn 111376-09-15 12:13 G 42400566.82 42400567.01 42400567.21 0.0266 0.0103

Uranus 111377-01-03 02:22 G 42400676.42 42400676.60 42400676.80 0.0140 0.0066

Neptune 111377-01-08 02:08 G 42400681.56 42400681.59 42400681.63 0.0088 0.0086

Saturn 111377-05-02 10:32 G 42400795.79 42400795.94 42400796.11 0.0266 0.0171

Uranus 111377-08-17 12:42 G 42400902.82 42400903.03 42400903.23 0.0140 0.0050

Neptune 111377-08-21 14:51 G 42400907.03 42400907.12 42400907.25 0.0088 0.0077

Uranus 111378-03-31 22:46 G 42401129.25 42401129.45 42401129.67 0.0141 0.0034

Neptune 111378-04-04 04:32 G 42401132.55 42401132.69 42401132.83 0.0088 0.0067

Uranus 111378-11-13 09:34 G 42401355.68 42401355.90 42401356.11 0.0141 0.0017

Neptune 111378-11-15 17:15 G 42401358.07 42401358.22 42401358.40 0.0088 0.0058

Uranus 111379-06-27 20:08 G 42401582.12 42401582.34 42401582.56 0.0141 0.0002

Neptune 111379-06-29 06:27 G 42401583.59 42401583.77 42401583.96 0.0088 0.0048

Uranus 111380-02-09 06:42 G 42401808.57 42401808.78 42401809.00 0.0141 0.0017

Neptune 111380-02-09 19:25 G 42401809.12 42401809.31 42401809.52 0.0088 0.0039

Neptune 111380-09-22 08:37 G 42402034.66 42402034.86 42402035.08 0.0088 0.0029

Uranus 111380-09-22 17:44 G 42402035.03 42402035.24 42402035.45 0.0141 0.0034 *

Neptune 111381-05-05 21:49 G 42402260.20 42402260.41 42402260.64 0.0088 0.0020

Uranus 111381-05-07 04:46 G 42402261.50 42402261.70 42402261.91 0.0141 0.0051

Mars 111381-09-22 15:34 G 42402400.06 42402400.15 42402400.23 0.1902 0.1622

Neptune 111381-12-17 11:01 G 42402485.74 42402485.96 42402486.19 0.0088 0.0010

Uranus 111381-12-19 16:03 G 42402487.98 42402488.17 42402488.37 0.0142 0.0068

Jupiter 111382-04-03 12:27 G 42402592.83 42402593.02 42402593.21 0.0512 0.0150

Neptune 111382-07-31 00:13 G 42402711.29 42402711.51 42402711.73 0.0088 0.0000

Uranus 111382-08-03 03:34 G 42402714.47 42402714.65 42402714.83 0.0142 0.0084

Neptune 111383-03-13 13:10 G 42402936.83 42402937.05 42402937.28 0.0088 0.0010

Uranus 111383-03-17 14:51 G 42402940.98 42402941.12 42402941.29 0.0142 0.0101

Neptune 111383-10-25 02:22 G 42403162.39 42403162.60 42403162.82 0.0088 0.0019

Uranus 111383-10-30 02:51 G 42403167.50 42403167.62 42403167.74 0.0142 0.0117

Neptune 111384-06-06 15:49 G 42403387.95 42403388.16 42403388.37 0.0088 0.0029

Uranus 111384-06-12 14:22 G 42403394.05 42403394.10 42403394.19 0.0142 0.0134

Neptune 111385-01-18 04:46 G 42403613.51 42403613.70 42403613.91 0.0088 0.0039

Neptune 111385-08-31 17:44 G 42403839.07 42403839.24 42403839.44 0.0088 0.0049

Neptune 111386-04-14 07:25 G 42404064.65 42404064.81 42404064.98 0.0088 0.0058

Mars 111386-05-05 12:13 G 42404085.83 42404086.01 42404086.19 0.1635 0.0051

Neptune 111386-11-25 20:22 G 42404290.23 42404290.35 42404290.51 0.0088 0.0068

Jupiter 111387-06-16 16:18 G 42404493.03 42404493.18 42404493.33 0.0520 0.0353

Neptune 111387-07-09 09:34 G 42404515.82 42404515.90 42404516.03 0.0088 0.0078

Neptune 111388-02-19 23:01 G 42404741.45 42404741.46 42404741.50 0.0088 0.0087

Saturn 111391-10-11 10:46 G 42406070.74 42406070.95 42406071.16 0.0294 0.0040

Jupiter 111393-12-07 12:27 G 42406858.82 42406859.02 42406859.22 0.0510 0.0106

Jupiter 111399-10-14 20:08 G 42408996.20 42408996.34 42408996.49 0.0513 0.0358

Jupiter 111405-08-13 12:56 G 42411124.90 42411125.04 42411125.18 0.0507 0.0357

Saturn 111406-03-29 11:01 G 42411352.76 42411352.96 42411353.16 0.0266 0.0078

Saturn 111406-11-13 09:34 G 42411581.77 42411581.90 42411582.05 0.0266 0.0197

Jupiter 111411-06-20 13:10 G 42413261.85 42413262.05 42413262.26 0.0516 0.0084

Uranus 111414-11-01 05:30 G 42414491.67 42414491.73 42414491.81 0.0138 0.0131

Uranus 111415-06-15 13:39 G 42414717.96 42414718.07 42414718.19 0.0138 0.0116

Uranus 111416-01-27 21:34 G 42414944.25 42414944.40 42414944.55 0.0138 0.0101

Uranus 111416-09-10 05:15 G 42415170.55 42415170.72 42415170.89 0.0138 0.0085

Uranus 111417-04-24 12:42 G 42415396.85 42415397.03 42415397.22 0.0138 0.0070

Uranus 111417-12-06 20:08 G 42415623.14 42415623.34 42415623.54 0.0138 0.0055

Jupiter 111417-12-11 03:49 G 42415627.50 42415627.66 42415627.82 0.0514 0.0312

Uranus 111418-07-21 03:06 G 42415849.43 42415849.63 42415849.85 0.0137 0.0040

Uranus 111419-03-04 10:18 G 42416075.72 42416075.93 42416076.14 0.0137 0.0024

Uranus 111419-10-16 17:15 G 42416302.00 42416302.22 42416302.43 0.0137 0.0009

Uranus 111420-05-29 23:44 G 42416528.28 42416528.49 42416528.71 0.0137 0.0006

Uranus 111421-01-11 06:13 G 42416754.55 42416754.76 42416754.97 0.0137 0.0021

Saturn 111421-04-23 16:03 G 42416856.97 42416857.17 42416857.38 0.0294 0.0088

Uranus 111421-08-25 12:27 G 42416980.81 42416981.02 42416981.23 0.0137 0.0036

Uranus 111422-04-08 18:27 G 42417207.08 42417207.27 42417207.47 0.0137 0.0050

Uranus 111422-11-21 00:42 G 42417433.34 42417433.53 42417433.72 0.0137 0.0065

Jupiter 111423-02-23 07:10 G 42417527.61 42417527.80 42417527.99 0.0519 0.0192

Uranus 111423-07-05 06:13 G 42417659.60 42417659.76 42417659.95 0.0136 0.0079

Uranus 111424-02-16 11:44 G 42417885.85 42417885.99 42417886.16 0.0136 0.0094

Uranus 111424-09-29 17:15 G 42418112.11 42418112.22 42418112.37 0.0136 0.0108

Uranus 111425-05-13 23:01 G 42418338.37 42418338.46 42418338.57 0.0136 0.0120

Uranus 111425-12-26 04:18 G 42418564.66 42418564.68 42418564.73 0.0136 0.0134

Jupiter 111429-08-16 00:13 G 42419893.31 42419893.51 42419893.71 0.0510 0.0042

Jupiter 111434-10-29 00:42 G 42421793.45 42421793.53 42421793.62 0.0522 0.0472

Saturn 111435-10-09 16:46 G 42422138.99 42422139.20 42422139.41 0.0266 0.0032

Saturn 111436-05-25 15:06 G 42422368.05 42422368.13 42422368.22 0.0266 0.0242

Jupiter 111441-04-20 23:30 G 42424159.30 42424159.48 42424159.67 0.0508 0.0214

Pluto 111441-05-22 03:06 G 42424190.45 42424190.63 42424190.84 0.0063 0.0028

Pluto 111442-01-02 06:42 G 42424415.58 42424415.78 42424416.00 0.0064 0.0011

Pluto 111442-08-15 09:49 G 42424640.80 42424640.91 42424641.06 0.0064 0.0050

Jupiter 111447-02-26 05:58 G 42426296.57 42426296.75 42426296.93 0.0515 0.0247

Saturn 111450-03-18 17:44 G 42427413.14 42427413.24 42427413.36 0.0294 0.0250

Saturn 111450-11-03 19:54 G 42427643.14 42427643.33 42427643.52 0.0294 0.0133

Mars 111452-03-02 23:30 G 42428128.30 42428128.48 42428128.65 0.1638 0.0297

Jupiter 111452-12-24 23:44 G 42428425.42 42428425.49 42428425.57 0.0506 0.0464

Jupiter 111453-08-18 15:20 G 42428662.06 42428662.14 42428662.23 0.0515 0.0460

Uranus 111458-03-12 19:25 G 42430329.26 42430329.31 42430329.39 0.0139 0.0133

Uranus 111458-10-25 04:46 G 42430555.60 42430555.70 42430555.83 0.0140 0.0118

Jupiter 111458-11-01 00:27 G 42430562.32 42430562.52 42430562.73 0.0517 0.0026

Uranus 111459-06-08 14:08 G 42430781.95 42430782.09 42430782.25 0.0140 0.0103

Neptune 111459-10-11 02:37 G 42430906.60 42430906.61 42430906.67 0.0090 0.0089

Uranus 111460-01-20 23:44 G 42431008.33 42431008.49 42431008.67 0.0140 0.0087

Neptune 111460-05-23 15:34 G 42431132.07 42431132.15 42431132.28 0.0090 0.0079

Uranus 111460-09-03 09:34 G 42431234.72 42431234.90 42431235.09 0.0140 0.0071

Neptune 111461-01-04 04:32 G 42431357.57 42431357.69 42431357.85 0.0090 0.0069

Uranus 111461-04-17 19:25 G 42431461.12 42431461.31 42431461.52 0.0140 0.0056

Neptune 111461-08-17 17:30 G 42431583.08 42431583.23 42431583.41 0.0090 0.0059

Uranus 111461-11-30 05:30 G 42431687.53 42431687.73 42431687.96 0.0141 0.0040

Neptune 111462-03-31 06:27 G 42431808.60 42431808.77 42431808.97 0.0090 0.0049

Uranus 111462-07-14 16:03 G 42431913.95 42431914.17 42431914.39 0.0141 0.0022

Neptune 111462-11-11 19:25 G 42432034.13 42432034.31 42432034.52 0.0090 0.0039

Uranus 111463-02-26 02:22 G 42432140.38 42432140.60 42432140.83 0.0141 0.0007

Neptune 111463-06-25 08:22 G 42432259.66 42432259.85 42432260.07 0.0090 0.0029

Uranus 111463-10-10 13:10 G 42432366.83 42432367.05 42432367.27 0.0141 0.0011

Neptune 111464-02-05 21:20 G 42432485.19 42432485.39 42432485.61 0.0090 0.0019

Uranus 111464-05-23 23:58 G 42432593.29 42432593.50 42432593.72 0.0141 0.0028

Neptune 111464-09-18 10:18 G 42432710.72 42432710.93 42432711.15 0.0090 0.0009

Uranus 111465-01-05 11:01 G 42432819.75 42432819.96 42432820.17 0.0141 0.0045

Saturn 111465-04-20 15:49 G 42432924.95 42432925.16 42432925.37 0.0266 0.0006

Jupiter 111465-04-23 14:51 G 42432927.94 42432928.12 42432928.31 0.0512 0.0202

Neptune 111465-05-01 23:15 G 42432936.26 42432936.47 42432936.69 0.0090 0.0002

Uranus 111465-08-19 21:49 G 42433046.22 42433046.41 42433046.62 0.0141 0.0062

Neptune 111465-12-13 12:13 G 42433161.80 42433162.01 42433162.23 0.0090 0.0012

Uranus 111466-04-03 09:06 G 42433272.71 42433272.88 42433273.08 0.0142 0.0079

Neptune 111466-07-27 00:56 G 42433387.34 42433387.54 42433387.76 0.0090 0.0022

Uranus 111466-11-15 20:51 G 42433499.21 42433499.37 42433499.53 0.0142 0.0095

Neptune 111467-03-09 13:54 G 42433612.88 42433613.08 42433613.28 0.0090 0.0032

Uranus 111467-06-30 08:08 G 42433725.72 42433725.84 42433725.99 0.0142 0.0112

Neptune 111467-10-21 02:37 G 42433838.43 42433838.61 42433838.81 0.0090 0.0042

Uranus 111468-02-11 20:08 G 42433952.25 42433952.34 42433952.44 0.0142 0.0128

Neptune 111468-06-02 15:20 G 42434063.98 42434064.14 42434064.33 0.0090 0.0052

Neptune 111469-01-14 04:03 G 42434289.53 42434289.67 42434289.84 0.0090 0.0062

Neptune 111469-08-27 16:32 G 42434515.08 42434515.19 42434515.34 0.0090 0.0072

Neptune 111470-04-10 05:15 G 42434740.65 42434740.72 42434740.83 0.0090 0.0082

Jupiter 111470-07-06 16:46 G 42434828.04 42434828.20 42434828.36 0.0520 0.0307

Jupiter 111476-12-27 14:08 G 42437193.89 42437194.09 42437194.29 0.0510 0.0057

Moon 111478-07-19 18:42 G 42437763.24 42437763.28 42437763.32 0.2646 0.2551

Mars 111479-07-21 14:37 G 42438130.03 42438130.11 42438130.20 0.1912 0.1625

Saturn 111479-09-28 22:32 G 42438199.29 42438199.44 42438199.59 0.0294 0.0204

Saturn 111480-05-16 00:56 G 42438429.38 42438429.54 42438429.71 0.0294 0.0180

Jupiter 111482-11-03 20:22 G 42439331.22 42439331.35 42439331.47 0.0514 0.0404

Moon 111486-07-17 12:42 G 42440682.90 42440683.03 42440683.16 0.2652 0.1307

Earth 111486-07-17 14:37 G 42440682.96 42440683.11 42440683.27 0.2645 0.0890 *

Jupiter 111488-09-01 11:30 G 42441459.83 42441459.98 42441460.14 0.0507 0.0319

Saturn 111494-03-16 22:32 G 42443482.34 42443482.44 42443482.54 0.0266 0.0236

Jupiter 111494-07-09 14:37 G 42443596.92 42443597.11 42443597.31 0.0517 0.0132

Saturn 111494-10-31 21:49 G 42443711.21 42443711.41 42443711.62 0.0266 0.0041

Uranus 111498-07-01 13:10 G 42445050.03 42445050.05 42445050.11 0.0139 0.0136

Uranus 111499-02-12 21:34 G 42445276.30 42445276.40 42445276.51 0.0138 0.0121

Uranus 111499-09-27 05:44 G 42445502.61 42445502.74 42445502.88 0.0138 0.0106

Uranus 111500-05-11 13:39 G 42445728.91 42445729.07 42445729.24 0.0138 0.0090

Uranus 111500-12-23 21:06 G 42445955.21 42445955.38 42445955.57 0.0138 0.0075

Jupiter 111500-12-31 01:39 G 42445962.43 42445962.57 42445962.72 0.0513 0.0349

Uranus 111501-08-07 04:32 G 42446181.50 42446181.69 42446181.89 0.0138 0.0060

Uranus 111502-03-21 11:44 G 42446407.80 42446407.99 42446408.21 0.0138 0.0045

Uranus 111502-11-02 19:10 G 42446634.09 42446634.30 42446634.51 0.0137 0.0029

Uranus 111503-06-17 02:08 G 42446860.38 42446860.59 42446860.81 0.0137 0.0014

Uranus 111504-01-29 08:51 G 42447086.65 42447086.87 42447087.08 0.0137 0.0001

Uranus 111504-09-11 15:20 G 42447312.93 42447313.14 42447313.35 0.0137 0.0016

Uranus 111505-04-25 21:49 G 42447539.20 42447539.41 42447539.62 0.0137 0.0031

Uranus 111505-12-08 04:03 G 42447765.47 42447765.67 42447765.87 0.0137 0.0046

Jupiter 111506-03-15 08:51 G 42447862.68 42447862.87 42447863.07 0.0519 0.0144

Uranus 111506-07-22 09:49 G 42447991.73 42447991.91 42447992.11 0.0137 0.0061

Uranus 111507-03-05 15:49 G 42448217.99 42448218.16 42448218.35 0.0136 0.0075

Uranus 111507-10-17 21:34 G 42448444.25 42448444.40 42448444.57 0.0136 0.0089

Uranus 111508-05-31 03:06 G 42448670.51 42448670.63 42448670.79 0.0136 0.0103

Uranus 111509-01-12 08:51 G 42448896.77 42448896.87 42448896.99 0.0136 0.0117

Saturn 111509-04-11 04:18 G 42448985.51 42448985.68 42448985.87 0.0294 0.0153

Uranus 111509-08-26 14:08 G 42449123.05 42449123.09 42449123.17 0.0136 0.0130

Saturn 111509-11-27 06:27 G 42449215.64 42449215.77 42449215.91 0.0294 0.0231

Jupiter 111512-09-05 00:56 G 42450228.34 42450228.54 42450228.74 0.0511 0.0088

Jupiter 111517-11-18 02:51 G 42452128.50 42452128.62 42452128.74 0.0521 0.0421

Mars 111517-12-30 10:18 G 42452170.76 42452170.93 42452171.10 0.1640 0.0558

Saturn 111523-09-27 22:18 G 42454268.31 42454268.43 42454268.57 0.0266 0.0207

Jupiter 111524-05-11 00:56 G 42454494.35 42454494.54 42454494.73 0.0509 0.0167

Saturn 111524-05-13 21:34 G 42454497.20 42454497.40 42454497.61 0.0266 0.0070

Jupiter 111530-03-18 05:30 G 42456631.57 42456631.73 42456631.91 0.0515 0.0292

Pluto 111531-07-07 12:56 G 42457107.82 42457108.04 42457108.26 0.0081 0.0016

Pluto 111532-02-17 23:44 G 42457333.39 42457333.49 42457333.64 0.0080 0.0067

Jupiter 111536-01-15 00:42 G 42458760.42 42458760.53 42458760.65 0.0506 0.0418

Jupiter 111536-09-07 16:18 G 42458997.16 42458997.18 42458997.22 0.0515 0.0509

Saturn 111538-10-22 09:34 G 42459771.70 42459771.90 42459772.10 0.0294 0.0106

Saturn 111539-06-09 11:44 G 42460001.94 42460001.99 42460002.07 0.0294 0.0279

Neptune 111541-04-13 12:27 G 42460676.02 42460676.02 42460676.05 0.0088 0.0088

Uranus 111541-11-11 03:06 G 42460887.62 42460887.63 42460887.69 0.0139 0.0138

Jupiter 111541-11-20 23:30 G 42460897.28 42460897.48 42460897.69 0.0517 0.0019

Neptune 111541-11-25 01:39 G 42460901.48 42460901.57 42460901.68 0.0088 0.0078

Uranus 111542-06-25 12:13 G 42461113.93 42461114.01 42461114.13 0.0139 0.0123

Neptune 111542-07-08 14:37 G 42461126.99 42461127.11 42461127.26 0.0088 0.0069

Uranus 111543-02-06 21:34 G 42461340.27 42461340.40 42461340.55 0.0140 0.0108

Neptune 111543-02-19 03:49 G 42461352.51 42461352.66 42461352.83 0.0088 0.0059

Uranus 111543-09-21 07:10 G 42461566.64 42461566.80 42461566.97 0.0140 0.0092

Neptune 111543-10-02 16:46 G 42461578.03 42461578.20 42461578.40 0.0088 0.0050

Uranus 111544-05-04 17:01 G 42461793.03 42461793.21 42461793.39 0.0140 0.0076

Neptune 111544-05-15 06:13 G 42461803.57 42461803.76 42461803.97 0.0088 0.0040

Uranus 111544-12-17 02:37 G 42462019.42 42462019.61 42462019.82 0.0140 0.0061

Neptune 111544-12-26 19:39 G 42462029.11 42462029.32 42462029.53 0.0088 0.0030

Mars 111545-05-18 18:42 G 42462172.14 42462172.28 42462172.43 0.1908 0.0916

Uranus 111545-07-31 12:27 G 42462245.82 42462246.02 42462246.24 0.0140 0.0045

Neptune 111545-08-09 08:22 G 42462254.64 42462254.85 42462255.08 0.0088 0.0021

Uranus 111546-03-14 22:46 G 42462472.24 42462472.45 42462472.67 0.0141 0.0028

Neptune 111546-03-22 21:49 G 42462480.19 42462480.41 42462480.63 0.0088 0.0011

Uranus 111546-10-27 09:06 G 42462698.67 42462698.88 42462699.11 0.0141 0.0012

Neptune 111546-11-03 11:01 G 42462705.73 42462705.96 42462706.18 0.0088 0.0002

Uranus 111547-06-10 19:39 G 42462925.10 42462925.32 42462925.55 0.0141 0.0006

Neptune 111547-06-16 23:58 G 42462931.28 42462931.50 42462931.73 0.0088 0.0009

Uranus 111548-01-23 06:27 G 42463151.55 42463151.77 42463151.99 0.0141 0.0022

Neptune 111548-01-28 13:10 G 42463156.83 42463157.05 42463157.27 0.0088 0.0018

Jupiter 111548-05-13 12:56 G 42463262.86 42463263.04 42463263.22 0.0512 0.0238

Uranus 111548-09-05 17:01 G 42463378.01 42463378.21 42463378.43 0.0141 0.0040

Neptune 111548-09-10 02:08 G 42463382.39 42463382.59 42463382.81 0.0088 0.0028

Uranus 111549-04-20 04:03 G 42463604.48 42463604.67 42463604.89 0.0141 0.0057

Neptune 111549-04-23 15:20 G 42463607.95 42463608.14 42463608.35 0.0088 0.0038

Uranus 111549-12-02 15:20 G 42463830.96 42463831.14 42463831.34 0.0141 0.0073

Neptune 111549-12-05 04:46 G 42463833.51 42463833.70 42463833.89 0.0088 0.0047

Mars 111549-12-29 07:54 G 42463857.81 42463857.83 42463857.84 0.1631 0.1620

Uranus 111550-07-17 02:37 G 42464057.45 42464057.61 42464057.79 0.0142 0.0090

Neptune 111550-07-18 17:44 G 42464059.08 42464059.24 42464059.42 0.0088 0.0057

Uranus 111551-02-28 13:54 G 42464283.96 42464284.08 42464284.24 0.0142 0.0107

Neptune 111551-03-01 06:42 G 42464284.66 42464284.78 42464284.95 0.0088 0.0067

Neptune 111551-10-12 20:08 G 42464510.24 42464510.34 42464510.46 0.0088 0.0076

Uranus 111551-10-13 01:54 G 42464510.48 42464510.58 42464510.70 0.0142 0.0123

Neptune 111552-05-25 09:20 G 42464735.87 42464735.89 42464735.96 0.0088 0.0086

Uranus 111552-05-26 13:54 G 42464737.05 42464737.08 42464737.13 0.0142 0.0139

Saturn 111553-04-09 04:32 G 42465054.53 42465054.69 42465054.86 0.0267 0.0160

Jupiter 111553-07-26 16:18 G 42465163.01 42465163.18 42465163.36 0.0521 0.0266

Saturn 111553-11-24 03:49 G 42465283.48 42465283.66 42465283.85 0.0267 0.0118

Jupiter 111560-01-17 11:44 G 42467528.78 42467528.99 42467529.19 0.0509 0.0025

Jupiter 111565-11-23 20:37 G 42469666.27 42469666.36 42469666.47 0.0514 0.0448

Saturn 111568-05-03 17:44 G 42470558.03 42470558.24 42470558.45 0.0294 0.0047

Jupiter 111571-09-22 10:46 G 42471794.79 42471794.95 42471795.13 0.0507 0.0279

Jupiter 111577-07-29 15:20 G 42473931.95 42473932.14 42473932.34 0.0516 0.0179

Uranus 111582-10-14 04:46 G 42475834.62 42475834.70 42475834.79 0.0138 0.0126

Saturn 111582-10-20 05:15 G 42475840.54 42475840.72 42475840.91 0.0266 0.0129

Uranus 111583-05-28 12:56 G 42476060.92 42476061.04 42476061.17 0.0138 0.0111

Saturn 111583-06-06 04:32 G 42476069.52 42476069.69 42476069.87 0.0266 0.0148

Mars 111583-10-27 21:06 G 42476213.23 42476213.38 42476213.53 0.1643 0.0822

Uranus 111584-01-09 20:51 G 42476287.22 42476287.37 42476287.53 0.0138 0.0096

Jupiter 111584-01-20 02:08 G 42476297.47 42476297.59 42476297.73 0.0514 0.0395

Uranus 111584-08-23 04:32 G 42476513.52 42476513.69 42476513.87 0.0138 0.0080

Uranus 111585-04-06 12:13 G 42476739.82 42476740.01 42476740.20 0.0138 0.0065

Uranus 111585-11-18 19:39 G 42476966.12 42476966.32 42476966.52 0.0138 0.0050

Uranus 111586-07-03 02:37 G 42477192.41 42477192.61 42477192.83 0.0138 0.0035

Uranus 111587-02-14 09:49 G 42477418.70 42477418.91 42477419.12 0.0137 0.0019

Uranus 111587-09-28 16:46 G 42477644.98 42477645.20 42477645.41 0.0137 0.0004

Uranus 111588-05-11 23:15 G 42477871.26 42477871.47 42477871.69 0.0137 0.0012

Uranus 111588-12-24 05:44 G 42478097.53 42478097.74 42478097.96 0.0137 0.0026

Jupiter 111589-04-03 08:08 G 42478197.64 42478197.84 42478198.04 0.0518 0.0101

Uranus 111589-08-07 11:58 G 42478323.80 42478324.00 42478324.21 0.0137 0.0041

Uranus 111590-03-21 18:13 G 42478550.07 42478550.26 42478550.46 0.0137 0.0056

Uranus 111590-11-03 00:13 G 42478776.34 42478776.51 42478776.70 0.0137 0.0071

Uranus 111591-06-17 06:13 G 42479002.60 42479002.76 42479002.93 0.0136 0.0085

Uranus 111592-01-29 11:58 G 42479228.86 42479229.00 42479229.15 0.0136 0.0099

Uranus 111592-09-11 17:30 G 42479455.12 42479455.23 42479455.36 0.0136 0.0112

Uranus 111593-04-25 22:46 G 42479681.39 42479681.45 42479681.55 0.0136 0.0127

Jupiter 111595-09-25 01:10 G 42480563.36 42480563.55 42480563.75 0.0511 0.0134

Saturn 111597-11-13 22:46 G 42481344.24 42481344.45 42481344.67 0.0294 0.0004

Jupiter 111600-12-07 00:42 G 42482463.40 42482463.53 42482463.67 0.0521 0.0383

Jupiter 111607-05-30 22:46 G 42484829.26 42484829.45 42484829.65 0.0508 0.0132

Moon 111608-01-20 15:34 G 42485063.99 42485064.15 42485064.31 0.2681 0.0901

Earth 111608-01-20 16:18 G 42485064.03 42485064.18 42485064.33 0.2687 0.0746 *

Mars 111611-03-15 23:44 G 42486214.32 42486214.49 42486214.66 0.1904 0.0242

Saturn 111612-05-01 11:58 G 42486626.80 42486627.00 42486627.20 0.0267 0.0080

Saturn 111612-12-16 11:01 G 42486855.83 42486855.96 42486856.11 0.0267 0.0198

Jupiter 111613-04-06 04:03 G 42486966.52 42486966.67 42486966.83 0.0515 0.0330

Mars 111615-10-26 18:42 G 42487900.19 42487900.28 42487900.38 0.1634 0.1372

Jupiter 111619-02-02 22:03 G 42489095.29 42489095.42 42489095.55 0.0506 0.0386

Neptune 111624-01-13 14:22 G 42490901.10 42490901.10 42490901.12 0.0090 0.0089

Neptune 111624-08-26 03:06 G 42491126.55 42491126.63 42491126.74 0.0090 0.0080

Jupiter 111624-12-09 22:32 G 42491232.23 42491232.44 42491232.64 0.0518 0.0057

Neptune 111625-04-08 16:03 G 42491352.05 42491352.17 42491352.32 0.0090 0.0070

Neptune 111625-11-20 05:15 G 42491577.57 42491577.72 42491577.89 0.0090 0.0060

Uranus 111626-02-22 20:37 G 42491672.27 42491672.36 42491672.45 0.0139 0.0127

Neptune 111626-07-03 18:13 G 42491803.09 42491803.26 42491803.45 0.0090 0.0050

Uranus 111626-10-07 05:44 G 42491898.61 42491898.74 42491898.87 0.0140 0.0112

Neptune 111627-02-14 07:10 G 42492028.61 42492028.80 42492028.99 0.0090 0.0040

Uranus 111627-05-21 14:37 G 42492124.97 42492125.11 42492125.28 0.0140 0.0097

Saturn 111627-05-27 08:51 G 42492130.66 42492130.87 42492131.08 0.0293 0.0064

Neptune 111627-09-27 19:54 G 42492254.13 42492254.33 42492254.54 0.0090 0.0030

Uranus 111628-01-03 00:13 G 42492351.34 42492351.51 42492351.70 0.0140 0.0081

Neptune 111628-05-10 08:51 G 42492479.66 42492479.87 42492480.09 0.0090 0.0020

Uranus 111628-08-16 10:03 G 42492577.73 42492577.92 42492578.12 0.0140 0.0065

Neptune 111628-12-21 21:49 G 42492705.20 42492705.41 42492705.63 0.0090 0.0010

Uranus 111629-03-30 19:54 G 42492804.13 42492804.33 42492804.54 0.0140 0.0049

Neptune 111629-08-04 10:46 G 42492930.73 42492930.95 42492931.16 0.0090 0.0002

Uranus 111629-11-12 05:58 G 42493030.54 42493030.75 42493030.97 0.0140 0.0033

Neptune 111630-03-17 23:15 G 42493156.27 42493156.47 42493156.70 0.0090 0.0011

Uranus 111630-06-26 16:03 G 42493256.96 42493257.17 42493257.40 0.0141 0.0017

Neptune 111630-10-29 12:13 G 42493381.81 42493382.01 42493382.23 0.0090 0.0021

Uranus 111631-02-08 02:37 G 42493483.39 42493483.61 42493483.83 0.0141 0.0002

Jupiter 111631-06-02 11:15 G 42493597.80 42493597.97 42493598.14 0.0512 0.0277

Neptune 111631-06-12 00:56 G 42493607.35 42493607.54 42493607.76 0.0090 0.0031

Uranus 111631-09-22 13:10 G 42493709.83 42493710.05 42493710.27 0.0141 0.0017

Neptune 111632-01-23 13:39 G 42493832.90 42493833.07 42493833.28 0.0090 0.0041

Uranus 111632-05-05 23:44 G 42493936.29 42493936.49 42493936.71 0.0141 0.0035

Neptune 111632-09-05 02:51 G 42494058.44 42494058.62 42494058.80 0.0090 0.0050

Uranus 111632-12-18 10:32 G 42494162.75 42494162.94 42494163.16 0.0141 0.0052

Neptune 111633-04-18 15:34 G 42494283.99 42494284.15 42494284.31 0.0090 0.0060

Uranus 111633-08-01 21:49 G 42494389.22 42494389.41 42494389.61 0.0141 0.0068

Neptune 111633-11-30 04:18 G 42494509.56 42494509.68 42494509.83 0.0090 0.0070

Uranus 111634-03-16 09:06 G 42494615.71 42494615.88 42494616.06 0.0141 0.0085

Neptune 111634-07-13 17:01 G 42494735.13 42494735.21 42494735.32 0.0090 0.0080

Uranus 111634-10-28 20:22 G 42494842.21 42494842.35 42494842.51 0.0142 0.0102

Neptune 111635-02-24 05:44 G 42494960.74 42494960.74 42494960.77 0.0090 0.0090

Uranus 111635-06-12 08:08 G 42495068.73 42495068.84 42495068.97 0.0142 0.0118

Uranus 111636-01-24 19:39 G 42495295.27 42495295.32 42495295.41 0.0142 0.0135

Jupiter 111636-08-14 16:18 G 42495498.00 42495498.18 42495498.37 0.0520 0.0221

Saturn 111641-11-11 13:39 G 42497412.86 42497413.07 42497413.28 0.0266 0.0047

Saturn 111642-06-28 12:42 G 42497641.93 42497642.03 42497642.14 0.0266 0.0229

Jupiter 111643-02-05 10:46 G 42497863.74 42497863.95 42497864.15 0.0510 0.0021

Jupiter 111648-04-19 08:22 G 42499763.81 42499763.85 42499763.90 0.0522 0.0505

Jupiter 111648-12-12 18:42 G 42500001.22 42500001.28 42500001.35 0.0513 0.0486

Mars 111649-08-24 07:39 G 42500255.69 42500255.82 42500255.95 0.1646 0.1098

Jupiter 111654-10-11 10:18 G 42502129.75 42502129.93 42502130.11 0.0507 0.0237

Saturn 111656-04-20 12:42 G 42502686.96 42502687.03 42502687.13 0.0294 0.0270

Saturn 111656-12-06 14:22 G 42502916.91 42502917.10 42502917.30 0.0294 0.0113

Jupiter 111660-08-17 12:13 G 42504266.83 42504267.01 42504267.20 0.0516 0.0215

Uranus 111666-06-13 11:58 G 42506392.94 42506393.00 42506393.08 0.0139 0.0131

Jupiter 111666-06-16 09:06 G 42506395.84 42506395.88 42506395.92 0.0504 0.0493

Uranus 111667-01-25 20:22 G 42506619.24 42506619.35 42506619.47 0.0138 0.0116

Jupiter 111667-02-07 23:30 G 42506632.37 42506632.48 42506632.59 0.0513 0.0427

Uranus 111667-09-09 04:18 G 42506845.54 42506845.68 42506845.84 0.0138 0.0101

Uranus 111668-04-22 12:13 G 42507071.85 42507072.01 42507072.19 0.0138 0.0085

Uranus 111668-12-04 19:54 G 42507298.15 42507298.33 42507298.52 0.0138 0.0070

Uranus 111669-07-19 03:20 G 42507524.45 42507524.64 42507524.84 0.0138 0.0055

Uranus 111670-03-02 10:32 G 42507750.74 42507750.94 42507751.16 0.0138 0.0040

Uranus 111670-10-14 17:58 G 42507977.04 42507977.25 42507977.46 0.0137 0.0024

Saturn 111671-05-24 20:37 G 42508199.15 42508199.36 42508199.57 0.0267 0.0005

Uranus 111671-05-29 00:42 G 42508203.32 42508203.53 42508203.75 0.0137 0.0009

Uranus 111672-01-10 07:25 G 42508429.60 42508429.81 42508430.03 0.0137 0.0007

Jupiter 111672-04-22 04:46 G 42508532.49 42508532.70 42508532.90 0.0519 0.0070

Uranus 111672-08-23 13:54 G 42508655.87 42508656.08 42508656.30 0.0137 0.0022

Uranus 111673-04-06 20:22 G 42508882.15 42508882.35 42508882.56 0.0137 0.0037

Uranus 111673-11-19 02:51 G 42509108.42 42509108.62 42509108.82 0.0137 0.0051

Uranus 111674-07-03 08:51 G 42509334.69 42509334.87 42509335.07 0.0137 0.0066

Uranus 111675-02-14 14:37 G 42509560.95 42509561.11 42509561.30 0.0136 0.0081

Uranus 111675-09-28 20:37 G 42509787.22 42509787.36 42509787.52 0.0136 0.0095

Uranus 111676-05-12 02:22 G 42510013.48 42510013.60 42510013.74 0.0136 0.0108

Uranus 111676-12-24 08:08 G 42510239.76 42510239.84 42510239.94 0.0136 0.0122

Mars 111677-01-10 04:03 G 42510256.51 42510256.67 42510256.84 0.1900 0.0449

Uranus 111677-08-07 13:54 G 42510466.07 42510466.08 42510466.10 0.0136 0.0135

Jupiter 111678-10-13 21:34 G 42510898.21 42510898.40 42510898.59 0.0511 0.0164

Mars 111681-08-23 05:44 G 42511942.62 42511942.74 42511942.87 0.1637 0.1122

Jupiter 111683-12-26 21:49 G 42512798.27 42512798.41 42512798.57 0.0521 0.0351

Saturn 111685-11-01 00:13 G 42513473.37 42513473.51 42513473.67 0.0293 0.0201

Saturn 111686-06-19 01:39 G 42513703.41 42513703.57 42513703.75 0.0293 0.0180

Pluto 111687-06-21 09:49 G 42514070.72 42514070.91 42514071.11 0.0063 0.0027

Pluto 111688-02-01 12:56 G 42514295.84 42514296.04 42514296.26 0.0064 0.0012

Pluto 111688-09-13 16:18 G 42514521.06 42514521.18 42514521.32 0.0064 0.0050

Jupiter 111690-06-18 19:39 G 42515164.12 42515164.32 42515164.52 0.0509 0.0099

Jupiter 111696-04-25 03:06 G 42517301.49 42517301.63 42517301.77 0.0514 0.0371

Saturn 111700-04-19 23:01 G 42518756.38 42518756.46 42518756.56 0.0267 0.0241

Saturn 111700-12-04 23:01 G 42518985.25 42518985.46 42518985.67 0.0266 0.0038

Jupiter 111702-02-22 19:25 G 42519430.17 42519430.31 42519430.46 0.0506 0.0351

Neptune 111706-02-27 11:44 G 42520895.93 42520895.99 42520896.11 0.0088 0.0080

Neptune 111706-10-11 01:10 G 42521121.43 42521121.55 42521121.70 0.0088 0.0070

Neptune 111707-05-24 14:08 G 42521346.95 42521347.09 42521347.27 0.0088 0.0061

Jupiter 111707-12-30 19:54 G 42521567.13 42521567.33 42521567.54 0.0517 0.0095

Neptune 111708-01-05 03:34 G 42521572.48 42521572.65 42521572.84 0.0088 0.0051

Neptune 111708-08-17 16:18 G 42521798.01 42521798.18 42521798.40 0.0088 0.0042

Neptune 111709-03-31 05:44 G 42522023.54 42522023.74 42522023.96 0.0088 0.0032

Uranus 111709-10-24 04:18 G 42522230.62 42522230.68 42522230.76 0.0139 0.0132

Neptune 111709-11-11 19:10 G 42522249.08 42522249.30 42522249.52 0.0088 0.0022

Uranus 111710-06-07 13:10 G 42522456.95 42522457.05 42522457.19 0.0139 0.0117

Neptune 111710-06-25 08:08 G 42522474.63 42522474.84 42522475.07 0.0088 0.0013

Uranus 111711-01-19 22:18 G 42522683.30 42522683.43 42522683.60 0.0140 0.0102

Neptune 111711-02-05 21:20 G 42522700.17 42522700.39 42522700.62 0.0088 0.0003

Uranus 111711-09-03 07:54 G 42522909.67 42522909.83 42522910.01 0.0140 0.0086

Neptune 111711-09-19 10:32 G 42522925.72 42522925.94 42522926.16 0.0088 0.0007

Uranus 111712-04-16 17:30 G 42523136.05 42523136.23 42523136.43 0.0140 0.0070

Neptune 111712-05-01 23:44 G 42523151.28 42523151.49 42523151.72 0.0088 0.0017

Uranus 111712-11-29 03:20 G 42523362.44 42523362.64 42523362.85 0.0140 0.0054

Neptune 111712-12-13 12:42 G 42523376.83 42523377.03 42523377.26 0.0088 0.0027

Uranus 111713-07-13 13:25 G 42523588.85 42523589.06 42523589.27 0.0140 0.0038

Neptune 111713-07-27 02:08 G 42523602.39 42523602.59 42523602.80 0.0088 0.0036

Uranus 111714-02-24 23:15 G 42523815.26 42523815.47 42523815.69 0.0141 0.0022

Neptune 111714-03-09 15:06 G 42523827.95 42523828.13 42523828.33 0.0088 0.0046

Jupiter 111714-06-22 10:03 G 42523932.76 42523932.92 42523933.08 0.0513 0.0318

Uranus 111714-10-09 09:34 G 42524041.68 42524041.90 42524042.12 0.0141 0.0005

Neptune 111714-10-21 04:03 G 42524053.52 42524053.67 42524053.86 0.0088 0.0056

Saturn 111715-05-15 05:58 G 42524259.57 42524259.75 42524259.93 0.0294 0.0154

Uranus 111715-05-23 20:08 G 42524268.12 42524268.34 42524268.56 0.0141 0.0012

Neptune 111715-06-03 17:30 G 42524279.10 42524279.23 42524279.39 0.0088 0.0065

Mars 111715-06-22 18:27 G 42524298.18 42524298.27 42524298.37 0.1649 0.1368

Saturn 111715-12-31 07:25 G 42524489.68 42524489.81 42524489.95 0.0294 0.0229

Uranus 111716-01-05 06:42 G 42524494.57 42524494.78 42524495.00 0.0141 0.0029

Neptune 111716-01-15 06:27 G 42524504.68 42524504.77 42524504.91 0.0088 0.0075

Uranus 111716-08-18 17:30 G 42524721.03 42524721.23 42524721.44 0.0141 0.0046

Neptune 111716-08-27 19:54 G 42524730.28 42524730.33 42524730.41 0.0088 0.0084

Uranus 111717-04-02 04:18 G 42524947.50 42524947.68 42524947.89 0.0141 0.0064

Uranus 111717-11-14 15:49 G 42525173.98 42525174.16 42525174.34 0.0141 0.0080

Uranus 111718-06-29 03:06 G 42525400.48 42525400.63 42525400.80 0.0141 0.0097

Uranus 111719-02-10 14:22 G 42525626.99 42525627.10 42525627.25 0.0142 0.0114

Jupiter 111719-09-04 12:27 G 42525832.84 42525833.02 42525833.22 0.0520 0.0188

Uranus 111719-09-25 02:22 G 42525853.52 42525853.60 42525853.69 0.0142 0.0130

Jupiter 111726-02-25 07:54 G 42528198.63 42528198.83 42528199.03 0.0510 0.0051

Earth 111729-07-19 14:37 G 42529438.96 42529439.11 42529439.27 0.2646 0.0949

Moon 111729-07-19 19:54 G 42529439.16 42529439.33 42529439.49 0.2643 0.0065 *

Saturn 111729-10-31 05:44 G 42529542.61 42529542.74 42529542.90 0.0267 0.0193

Saturn 111730-06-17 05:44 G 42529771.55 42529771.74 42529771.94 0.0267 0.0087

Jupiter 111731-05-10 03:34 G 42530098.57 42530098.65 42530098.73 0.0523 0.0479

Jupiter 111737-10-31 06:27 G 42532464.59 42532464.77 42532464.96 0.0507 0.0208

Mars 111742-11-08 09:34 G 42534298.76 42534298.90 42534299.03 0.1895 0.1080

Jupiter 111743-09-07 08:51 G 42534601.69 42534601.87 42534602.05 0.0516 0.0246

Saturn 111744-11-24 18:42 G 42535046.08 42535046.28 42535046.49 0.0293 0.0082

Mars 111747-06-21 17:15 G 42535985.07 42535985.22 42535985.37 0.1639 0.0877

Jupiter 111749-07-06 04:32 G 42536730.62 42536730.69 42536730.77 0.0505 0.0464

Uranus 111750-02-11 19:10 G 42536951.27 42536951.30 42536951.35 0.0139 0.0136

Jupiter 111750-02-27 19:25 G 42536967.22 42536967.31 42536967.40 0.0514 0.0459

Uranus 111750-09-26 03:49 G 42537177.56 42537177.66 42537177.77 0.0138 0.0121

Uranus 111751-05-10 11:58 G 42537403.86 42537404.00 42537404.14 0.0138 0.0106

Uranus 111751-12-22 19:39 G 42537630.17 42537630.32 42537630.49 0.0138 0.0091

Uranus 111752-08-05 03:20 G 42537856.47 42537856.64 42537856.83 0.0138 0.0075

Uranus 111753-03-19 10:46 G 42538082.77 42538082.95 42538083.16 0.0138 0.0060

Uranus 111753-10-31 18:27 G 42538309.07 42538309.27 42538309.48 0.0138 0.0044

Uranus 111754-06-15 01:39 G 42538535.36 42538535.57 42538535.78 0.0138 0.0029

Uranus 111755-01-27 08:37 G 42538761.65 42538761.86 42538762.07 0.0137 0.0014

Jupiter 111755-05-13 03:20 G 42538867.44 42538867.64 42538867.85 0.0518 0.0030

Uranus 111755-09-10 15:20 G 42538987.93 42538988.14 42538988.36 0.0137 0.0002

Uranus 111756-04-23 22:03 G 42539214.21 42539214.42 42539214.63 0.0137 0.0017

Uranus 111756-12-06 04:32 G 42539440.49 42539440.69 42539440.90 0.0137 0.0032

Uranus 111757-07-20 10:46 G 42539666.76 42539666.95 42539667.16 0.0137 0.0047

Uranus 111758-03-03 17:15 G 42539893.03 42539893.22 42539893.41 0.0137 0.0061

Uranus 111758-10-15 23:15 G 42540119.30 42540119.47 42540119.65 0.0137 0.0076

Saturn 111759-05-13 09:34 G 42540328.73 42540328.90 42540329.07 0.0267 0.0154

Uranus 111759-05-30 05:01 G 42540345.56 42540345.71 42540345.88 0.0136 0.0090

Saturn 111759-12-28 09:06 G 42540557.70 42540557.88 42540558.07 0.0266 0.0125

Uranus 111760-01-11 10:46 G 42540571.83 42540571.95 42540572.11 0.0136 0.0105

Uranus 111760-08-24 16:32 G 42540798.10 42540798.19 42540798.31 0.0136 0.0118

Uranus 111761-04-07 22:32 G 42541024.39 42541024.44 42541024.50 0.0136 0.0131

Jupiter 111761-11-02 18:27 G 42541233.09 42541233.27 42541233.46 0.0511 0.0199

Jupiter 111767-01-15 19:39 G 42543133.16 42543133.32 42543133.49 0.0521 0.0312

Jupiter 111773-07-08 17:44 G 42545499.04 42545499.24 42545499.45 0.0509 0.0061

Saturn 111774-06-06 23:44 G 42545832.28 42545832.49 42545832.70 0.0294 0.0035

Pluto 111777-08-05 18:13 G 42546988.04 42546988.26 42546988.48 0.0081 0.0016

Pluto 111778-03-19 05:30 G 42547213.61 42547213.73 42547213.86 0.0081 0.0067

Jupiter 111779-05-15 22:46 G 42547636.33 42547636.45 42547636.58 0.0514 0.0403

Mars 111781-04-19 05:01 G 42548340.70 42548340.71 42548340.72 0.1652 0.1647

Jupiter 111785-03-13 16:46 G 42549765.05 42549765.20 42549765.36 0.0506 0.0318

Saturn 111788-11-22 16:03 G 42551114.98 42551115.17 42551115.37 0.0267 0.0106

Neptune 111788-11-28 14:51 G 42551121.04 42551121.12 42551121.22 0.0090 0.0081

Saturn 111789-07-09 15:34 G 42551344.00 42551344.15 42551344.32 0.0267 0.0174

Neptune 111789-07-12 03:20 G 42551346.53 42551346.64 42551346.80 0.0090 0.0072

Neptune 111790-02-22 16:18 G 42551572.05 42551572.18 42551572.36 0.0090 0.0062

Neptune 111790-10-06 05:30 G 42551797.57 42551797.73 42551797.92 0.0090 0.0052

Jupiter 111791-01-18 14:51 G 42551901.92 42551902.12 42551902.32 0.0517 0.0122

Neptune 111791-05-19 18:27 G 42552023.09 42552023.27 42552023.48 0.0090 0.0042

Neptune 111791-12-31 07:25 G 42552248.62 42552248.81 42552249.02 0.0090 0.0032

Neptune 111792-08-12 20:22 G 42552474.14 42552474.35 42552474.57 0.0090 0.0021

Neptune 111793-03-26 09:20 G 42552699.68 42552699.89 42552700.11 0.0090 0.0011

Uranus 111793-06-23 11:58 G 42552788.98 42552789.00 42552789.06 0.0139 0.0137

Neptune 111793-11-06 22:18 G 42552925.22 42552925.43 42552925.65 0.0090 0.0002

Uranus 111794-02-04 20:51 G 42553015.28 42553015.37 42553015.49 0.0139 0.0122

Neptune 111794-06-20 11:15 G 42553150.75 42553150.97 42553151.18 0.0090 0.0009

Uranus 111794-09-19 05:58 G 42553241.63 42553241.75 42553241.91 0.0140 0.0107

Neptune 111795-01-31 23:58 G 42553376.29 42553376.50 42553376.71 0.0090 0.0019

Uranus 111795-05-03 15:34 G 42553467.99 42553468.15 42553468.32 0.0140 0.0091

Neptune 111795-09-14 12:42 G 42553601.83 42553602.03 42553602.24 0.0090 0.0029

Uranus 111795-12-16 00:56 G 42553694.37 42553694.54 42553694.73 0.0140 0.0075

Neptune 111796-04-27 01:25 G 42553827.37 42553827.56 42553827.76 0.0090 0.0039

Uranus 111796-07-29 10:32 G 42553920.75 42553920.94 42553921.15 0.0140 0.0059

Neptune 111796-12-08 14:22 G 42554052.93 42554053.10 42554053.29 0.0090 0.0049

Uranus 111797-03-12 20:22 G 42554147.15 42554147.35 42554147.57 0.0140 0.0043

Jupiter 111797-07-11 05:44 G 42554267.59 42554267.74 42554267.89 0.0512 0.0347

Neptune 111797-07-22 03:06 G 42554278.48 42554278.63 42554278.81 0.0090 0.0059

Uranus 111797-10-25 06:27 G 42554373.56 42554373.77 42554373.99 0.0140 0.0027

Neptune 111798-03-04 15:34 G 42554504.04 42554504.15 42554504.31 0.0090 0.0069

Uranus 111798-06-08 16:46 G 42554599.98 42554600.20 42554600.42 0.0141 0.0010

Neptune 111798-10-16 04:18 G 42554729.61 42554729.68 42554729.81 0.0090 0.0079

Uranus 111799-01-21 03:06 G 42554826.41 42554826.63 42554826.85 0.0141 0.0007

Neptune 111799-05-29 17:30 G 42554955.20 42554955.23 42554955.28 0.0090 0.0088

Uranus 111799-09-04 13:39 G 42555052.85 42555053.07 42555053.29 0.0141 0.0024

Uranus 111800-04-19 00:27 G 42555279.31 42555279.52 42555279.73 0.0141 0.0041

Uranus 111800-12-01 11:15 G 42555505.78 42555505.97 42555506.18 0.0141 0.0058

Uranus 111801-07-15 22:32 G 42555732.26 42555732.44 42555732.63 0.0141 0.0075

Uranus 111802-02-27 09:49 G 42555958.75 42555958.91 42555959.08 0.0141 0.0092

Jupiter 111802-09-24 08:08 G 42556167.65 42556167.84 42556168.04 0.0520 0.0159

Uranus 111802-10-11 21:06 G 42556185.25 42556185.38 42556185.53 0.0142 0.0109

Uranus 111803-05-26 09:06 G 42556411.78 42556411.88 42556411.99 0.0142 0.0125

Saturn 111803-12-19 12:56 G 42556618.83 42556619.04 42556619.26 0.0293 0.0038

Uranus 111804-01-07 20:37 G 42556638.36 42556638.36 42556638.39 0.0142 0.0142

Mars 111808-09-05 14:22 G 42558341.04 42558341.10 42558341.17 0.1891 0.1728

Jupiter 111809-03-17 02:37 G 42558533.42 42558533.61 42558533.82 0.0510 0.0081

Mars 111813-04-19 03:49 G 42560027.50 42560027.66 42560027.82 0.1642 0.0614

Jupiter 111814-05-30 02:22 G 42560433.49 42560433.60 42560433.71 0.0522 0.0437

Saturn 111818-06-05 20:22 G 42561901.15 42561901.35 42561901.56 0.0266 0.0065

Saturn 111819-01-20 19:39 G 42562130.20 42562130.32 42562130.45 0.0266 0.0213

Jupiter 111820-11-20 02:22 G 42562799.41 42562799.60 42562799.79 0.0508 0.0177

Jupiter 111826-09-27 06:13 G 42564936.60 42564936.76 42564936.94 0.0515 0.0284

Jupiter 111832-07-26 02:37 G 42567065.50 42567065.61 42567065.71 0.0505 0.0428

Jupiter 111833-03-19 17:44 G 42567302.19 42567302.24 42567302.28 0.0514 0.0500

Saturn 111833-06-30 17:44 G 42567405.04 42567405.24 42567405.45 0.0294 0.0084

Uranus 111834-05-27 11:58 G 42567735.92 42567736.00 42567736.09 0.0139 0.0126

Uranus 111835-01-08 20:08 G 42567962.21 42567962.34 42567962.47 0.0138 0.0111

Uranus 111835-08-23 04:03 G 42568188.52 42568188.67 42568188.83 0.0138 0.0095

Uranus 111836-04-05 11:44 G 42568414.82 42568414.99 42568415.17 0.0138 0.0080

Uranus 111836-11-17 19:25 G 42568641.13 42568641.31 42568641.51 0.0138 0.0065

Uranus 111837-07-02 02:51 G 42568867.42 42568867.62 42568867.83 0.0138 0.0050

Uranus 111838-02-13 10:18 G 42569093.72 42569093.93 42569094.14 0.0138 0.0034

Jupiter 111838-06-01 23:15 G 42569202.27 42569202.47 42569202.68 0.0518 0.0011

Uranus 111838-09-27 17:15 G 42569320.01 42569320.22 42569320.44 0.0137 0.0019

Uranus 111839-05-12 00:13 G 42569546.29 42569546.51 42569546.72 0.0137 0.0003

Uranus 111839-12-24 06:56 G 42569772.57 42569772.79 42569773.00 0.0137 0.0012

Uranus 111840-08-06 13:25 G 42569998.85 42569999.06 42569999.27 0.0137 0.0027

Uranus 111841-03-20 19:54 G 42570225.13 42570225.33 42570225.54 0.0137 0.0042

Uranus 111841-11-02 02:08 G 42570451.40 42570451.59 42570451.79 0.0137 0.0057

Uranus 111842-06-16 08:08 G 42570677.67 42570677.84 42570678.04 0.0137 0.0072

Moon 111843-01-24 21:06 G 42570900.29 42570900.38 42570900.47 0.2687 0.2209

Uranus 111843-01-28 14:22 G 42570903.94 42570904.10 42570904.27 0.0136 0.0086

Uranus 111843-09-11 20:08 G 42571130.21 42571130.34 42571130.50 0.0136 0.0100

Uranus 111844-04-25 01:54 G 42571356.48 42571356.58 42571356.71 0.0136 0.0114

Jupiter 111844-11-22 15:49 G 42571567.99 42571568.16 42571568.35 0.0511 0.0234

Uranus 111844-12-07 08:08 G 42571582.77 42571582.84 42571582.91 0.0136 0.0127

Saturn 111847-12-17 02:22 G 42572687.39 42572687.60 42572687.81 0.0267 0.0020

Saturn 111848-08-02 01:39 G 42572916.53 42572916.57 42572916.62 0.0267 0.0259

Jupiter 111850-02-04 14:08 G 42573467.92 42573468.09 42573468.26 0.0521 0.0286

Moon 111851-01-22 14:51 G 42573819.98 42573820.12 42573820.27 0.2691 0.0780

Earth 111851-01-22 18:27 G 42573820.12 42573820.27 42573820.42 0.2687 0.0747 *

Jupiter 111856-07-28 14:08 G 42575833.89 42575834.09 42575834.29 0.0508 0.0028

Saturn 111862-05-26 05:30 G 42577961.61 42577961.73 42577961.88 0.0293 0.0225

Jupiter 111862-06-04 18:42 G 42577971.17 42577971.28 42577971.39 0.0515 0.0434

Saturn 111863-01-11 06:42 G 42578191.61 42578191.78 42578191.97 0.0293 0.0157

Jupiter 111868-04-02 11:15 G 42580099.81 42580099.97 42580100.14 0.0506 0.0292

Neptune 111870-06-01 23:01 G 42580890.40 42580890.46 42580890.57 0.0088 0.0081

Neptune 111871-01-13 12:13 G 42581115.90 42581116.01 42581116.15 0.0088 0.0071

Neptune 111871-08-27 01:10 G 42581341.41 42581341.55 42581341.72 0.0088 0.0062

Neptune 111872-04-08 14:22 G 42581566.94 42581567.10 42581567.29 0.0088 0.0052

Neptune 111872-11-20 03:20 G 42581792.47 42581792.64 42581792.85 0.0088 0.0043

Neptune 111873-07-03 16:32 G 42582018.00 42582018.19 42582018.41 0.0088 0.0033

Jupiter 111874-02-07 13:39 G 42582236.88 42582237.07 42582237.27 0.0517 0.0165

Neptune 111874-02-14 05:58 G 42582243.54 42582243.75 42582243.97 0.0088 0.0023

Neptune 111874-09-27 18:56 G 42582469.08 42582469.29 42582469.52 0.0088 0.0014

Neptune 111875-05-11 08:22 G 42582694.63 42582694.85 42582695.07 0.0088 0.0004

Neptune 111875-12-22 21:34 G 42582920.18 42582920.40 42582920.62 0.0088 0.0006

Neptune 111876-08-04 10:32 G 42583145.73 42583145.94 42583146.17 0.0088 0.0016

Saturn 111876-11-11 07:10 G 42583244.76 42583244.80 42583244.86 0.0267 0.0257

Neptune 111877-03-17 23:44 G 42583371.28 42583371.49 42583371.71 0.0088 0.0025

Saturn 111877-06-28 07:10 G 42583473.59 42583473.80 42583474.01 0.0266 0.0023

Uranus 111877-10-06 04:18 G 42583573.61 42583573.68 42583573.79 0.0139 0.0127

Neptune 111877-10-29 12:42 G 42583596.84 42583597.03 42583597.25 0.0088 0.0035

Uranus 111878-05-20 13:25 G 42583799.94 42583800.06 42583800.20 0.0140 0.0112

Neptune 111878-06-12 01:54 G 42583822.40 42583822.58 42583822.79 0.0088 0.0045

Uranus 111879-01-01 22:46 G 42584026.30 42584026.45 42584026.61 0.0140 0.0096

Neptune 111879-01-23 15:20 G 42584047.97 42584048.14 42584048.32 0.0088 0.0054

Mars 111879-02-14 15:06 G 42584069.96 42584070.13 42584070.30 0.1645 0.0364

Uranus 111879-08-16 07:54 G 42584252.66 42584252.83 42584253.02 0.0140 0.0081

Neptune 111879-09-06 04:03 G 42584273.54 42584273.67 42584273.85 0.0088 0.0064

Uranus 111880-03-29 17:44 G 42584479.05 42584479.24 42584479.44 0.0140 0.0065

Neptune 111880-04-18 17:44 G 42584499.12 42584499.24 42584499.37 0.0088 0.0073

Jupiter 111880-07-31 01:39 G 42584602.44 42584602.57 42584602.71 0.0513 0.0381

Uranus 111880-11-11 03:20 G 42584705.44 42584705.64 42584705.85 0.0140 0.0049

Neptune 111880-11-30 06:27 G 42584724.72 42584724.77 42584724.87 0.0088 0.0083

Uranus 111881-06-25 13:10 G 42584931.84 42584932.05 42584932.27 0.0140 0.0032

Uranus 111882-02-06 23:15 G 42585158.26 42585158.47 42585158.69 0.0141 0.0016

Uranus 111882-09-21 09:34 G 42585384.68 42585384.90 42585385.12 0.0141 0.0002

Uranus 111883-05-05 20:22 G 42585611.13 42585611.35 42585611.56 0.0141 0.0018

Uranus 111883-12-18 06:56 G 42585837.58 42585837.79 42585838.01 0.0141 0.0035

Uranus 111884-07-31 17:44 G 42586064.04 42586064.24 42586064.45 0.0141 0.0052

Uranus 111885-03-15 04:46 G 42586290.51 42586290.70 42586290.90 0.0141 0.0069

Jupiter 111885-10-13 06:56 G 42586502.59 42586502.79 42586502.99 0.0519 0.0117

Uranus 111885-10-27 15:49 G 42586517.00 42586517.16 42586517.35 0.0141 0.0087

Uranus 111886-06-11 03:20 G 42586743.50 42586743.64 42586743.80 0.0142 0.0104

Uranus 111887-01-23 15:06 G 42586970.02 42586970.13 42586970.25 0.0142 0.0120

Uranus 111887-09-07 02:51 G 42587196.57 42587196.62 42587196.68 0.0142 0.0136

Saturn 111891-12-06 09:06 G 42588747.73 42588747.88 42588748.06 0.0294 0.0184

Jupiter 111892-04-05 01:10 G 42588868.35 42588868.55 42588868.75 0.0510 0.0120

Saturn 111892-07-23 10:32 G 42588977.79 42588977.94 42588978.10 0.0294 0.0200

Jupiter 111897-06-17 23:01 G 42590768.34 42590768.46 42590768.60 0.0522 0.0402

Jupiter 111903-12-11 00:42 G 42593134.33 42593134.53 42593134.72 0.0508 0.0139

Saturn 111906-05-25 11:58 G 42594030.89 42594031.00 42594031.13 0.0267 0.0215

Mars 111906-07-04 12:42 G 42594070.92 42594071.03 42594071.14 0.1901 0.1447

Saturn 111907-01-09 11:58 G 42594259.80 42594260.00 42594260.21 0.0267 0.0066

Jupiter 111909-10-17 01:25 G 42595271.40 42595271.56 42595271.72 0.0516 0.0313

Jupiter 111915-08-15 23:30 G 42597400.36 42597400.48 42597400.61 0.0505 0.0394

Uranus 111918-01-25 20:08 G 42598294.28 42598294.34 42598294.41 0.0139 0.0131

Uranus 111918-09-09 04:18 G 42598520.57 42598520.68 42598520.80 0.0138 0.0116

Uranus 111919-04-23 12:27 G 42598746.88 42598747.02 42598747.17 0.0138 0.0101

Uranus 111919-12-05 20:08 G 42598973.18 42598973.34 42598973.52 0.0138 0.0086

Uranus 111920-07-19 03:49 G 42599199.48 42599199.66 42599199.85 0.0138 0.0070

Uranus 111921-03-02 11:15 G 42599425.78 42599425.97 42599426.18 0.0138 0.0055

Saturn 111921-06-18 21:34 G 42599534.21 42599534.40 42599534.61 0.0293 0.0114

Jupiter 111921-06-21 19:25 G 42599537.10 42599537.31 42599537.51 0.0518 0.0038

Uranus 111921-10-14 18:56 G 42599652.08 42599652.29 42599652.49 0.0138 0.0039

Saturn 111922-02-03 23:01 G 42599764.39 42599764.46 42599764.55 0.0293 0.0270

Uranus 111922-05-29 01:54 G 42599878.37 42599878.58 42599878.80 0.0138 0.0024

Uranus 111923-01-10 08:51 G 42600104.66 42600104.87 42600105.09 0.0137 0.0008

Uranus 111923-08-24 15:34 G 42600330.94 42600331.15 42600331.37 0.0137 0.0007

Uranus 111924-04-06 22:18 G 42600557.22 42600557.43 42600557.64 0.0137 0.0022

Uranus 111924-11-19 05:01 G 42600783.50 42600783.71 42600783.92 0.0137 0.0037

Uranus 111925-07-03 11:15 G 42601009.78 42601009.97 42601010.17 0.0137 0.0052

Uranus 111926-02-14 17:15 G 42601236.05 42601236.22 42601236.42 0.0137 0.0067

Uranus 111926-09-28 23:15 G 42601462.32 42601462.47 42601462.66 0.0136 0.0082

Uranus 111927-05-13 05:30 G 42601688.59 42601688.73 42601688.89 0.0136 0.0096

Jupiter 111927-12-13 10:32 G 42601902.77 42601902.94 42601903.11 0.0511 0.0263

Uranus 111927-12-25 11:30 G 42601914.86 42601914.98 42601915.11 0.0136 0.0110

Uranus 111928-08-07 17:15 G 42602141.14 42602141.22 42602141.32 0.0136 0.0123

Pluto 111932-12-09 14:51 G 42603726.05 42603726.12 42603726.24 0.0063 0.0057

Jupiter 111933-02-24 13:54 G 42603802.90 42603803.08 42603803.26 0.0521 0.0240

Pluto 111933-07-22 18:27 G 42603951.07 42603951.27 42603951.48 0.0063 0.0019

Pluto 111934-03-04 21:34 G 42604176.21 42604176.40 42604176.62 0.0064 0.0020

Pluto 111934-10-16 00:27 G 42604401.46 42604401.52 42604401.63 0.0064 0.0059

Saturn 111935-12-05 17:30 G 42604817.08 42604817.23 42604817.40 0.0266 0.0171

Saturn 111936-07-21 17:01 G 42605046.03 42605046.21 42605046.41 0.0266 0.0109

Jupiter 111939-08-18 09:49 G 42606168.71 42606168.91 42606169.11 0.0509 0.0007

Mars 111944-12-13 01:25 G 42608112.39 42608112.56 42608112.74 0.1648 0.0102

Jupiter 111945-06-24 17:44 G 42608306.17 42608306.24 42608306.32 0.0514 0.0477

Saturn 111950-12-30 00:27 G 42610320.32 42610320.52 42610320.73 0.0294 0.0073

Jupiter 111951-04-23 10:03 G 42610434.75 42610434.92 42610435.10 0.0507 0.0251

Neptune 111953-03-04 01:54 G 42611115.51 42611115.58 42611115.68 0.0090 0.0083

Neptune 111953-10-15 15:06 G 42611341.02 42611341.13 42611341.27 0.0090 0.0073

Neptune 111954-05-29 04:03 G 42611566.53 42611566.67 42611566.84 0.0090 0.0063

Neptune 111955-01-09 17:01 G 42611792.05 42611792.21 42611792.40 0.0090 0.0053

Neptune 111955-08-23 05:58 G 42612017.57 42612017.75 42612017.95 0.0090 0.0043

Neptune 111956-04-04 18:56 G 42612243.09 42612243.29 42612243.50 0.0090 0.0033

Neptune 111956-11-16 08:08 G 42612468.63 42612468.84 42612469.05 0.0090 0.0023

Jupiter 111957-02-27 11:01 G 42612571.78 42612571.96 42612572.16 0.0517 0.0203

Neptune 111957-06-29 20:51 G 42612694.16 42612694.37 42612694.59 0.0090 0.0013

Neptune 111958-02-10 09:49 G 42612919.69 42612919.91 42612920.13 0.0090 0.0003

Neptune 111958-09-23 22:32 G 42613145.23 42613145.44 42613145.66 0.0090 0.0007

Neptune 111959-05-07 11:30 G 42613370.77 42613370.98 42613371.19 0.0090 0.0017

Neptune 111959-12-19 00:27 G 42613596.31 42613596.52 42613596.72 0.0090 0.0027

Neptune 111960-07-31 13:10 G 42613821.85 42613822.05 42613822.25 0.0090 0.0037

Neptune 111961-03-14 01:54 G 42614047.40 42614047.58 42614047.77 0.0090 0.0047

Uranus 111961-06-06 11:44 G 42614131.93 42614131.99 42614132.07 0.0139 0.0132

Neptune 111961-10-25 14:37 G 42614272.95 42614273.11 42614273.29 0.0090 0.0057

Uranus 111962-01-18 20:37 G 42614358.25 42614358.36 42614358.48 0.0140 0.0117

Neptune 111962-06-08 03:20 G 42614498.51 42614498.64 42614498.80 0.0090 0.0067

Uranus 111962-09-02 05:30 G 42614584.59 42614584.73 42614584.89 0.0140 0.0102

Jupiter 111962-12-27 10:18 G 42614700.92 42614700.93 42614700.96 0.0504 0.0502

Neptune 111963-01-19 16:03 G 42614724.08 42614724.17 42614724.30 0.0090 0.0077

Uranus 111963-04-16 14:51 G 42614810.96 42614811.12 42614811.30 0.0140 0.0086

Jupiter 111963-08-21 00:42 G 42614937.42 42614937.53 42614937.65 0.0513 0.0422

Neptune 111963-09-02 04:32 G 42614949.66 42614949.69 42614949.77 0.0090 0.0087

Uranus 111963-11-29 00:27 G 42615037.34 42615037.52 42615037.71 0.0140 0.0070

Uranus 111964-07-12 09:49 G 42615263.72 42615263.91 42615264.12 0.0140 0.0055

Moon 111964-07-24 00:13 G 42615275.43 42615275.51 42615275.59 0.2639 0.2328

Uranus 111965-02-23 19:54 G 42615490.12 42615490.33 42615490.54 0.0140 0.0038

Saturn 111965-06-16 21:20 G 42615603.21 42615603.39 42615603.58 0.0267 0.0131

Uranus 111965-10-08 05:44 G 42615716.53 42615716.74 42615716.96 0.0141 0.0021

Saturn 111966-01-31 20:51 G 42615832.20 42615832.37 42615832.55 0.0267 0.0149

Uranus 111966-05-22 16:03 G 42615942.95 42615943.17 42615943.39 0.0141 0.0005

Uranus 111967-01-04 02:37 G 42616169.39 42616169.61 42616169.83 0.0141 0.0012

Uranus 111967-08-18 13:10 G 42616395.83 42616396.05 42616396.26 0.0141 0.0029

Uranus 111968-03-31 23:58 G 42616622.29 42616622.50 42616622.71 0.0141 0.0046

Jupiter 111968-11-02 02:37 G 42616837.41 42616837.61 42616837.81 0.0519 0.0085

Uranus 111968-11-13 11:01 G 42616848.76 42616848.96 42616849.16 0.0141 0.0064

Uranus 111969-06-27 22:03 G 42617075.25 42617075.42 42617075.61 0.0141 0.0081

Uranus 111970-02-09 09:20 G 42617301.74 42617301.89 42617302.06 0.0142 0.0098

Uranus 111970-09-23 20:37 G 42617528.25 42617528.36 42617528.50 0.0142 0.0115

Uranus 111971-05-08 08:22 G 42617754.78 42617754.85 42617754.95 0.0142 0.0131

Mars 111972-04-30 17:30 G 42618113.07 42618113.23 42618113.38 0.1897 0.0768

Moon 111972-07-21 10:03 G 42618194.79 42618194.92 42618195.05 0.2644 0.1586

Earth 111972-07-21 15:06 G 42618194.98 42618195.13 42618195.28 0.2646 0.0953 *

Jupiter 111975-04-25 23:01 G 42619203.26 42619203.46 42619203.65 0.0510 0.0158

Jupiter 111980-07-07 19:39 G 42621103.18 42621103.32 42621103.47 0.0522 0.0368

Saturn 111980-07-11 11:44 G 42621106.78 42621106.99 42621107.21 0.0293 0.0008

Jupiter 111986-12-29 19:25 G 42623469.12 42623469.31 42623469.51 0.0508 0.0111

Jupiter 111992-11-05 01:54 G 42625606.44 42625606.58 42625606.73 0.0515 0.0363

Saturn 111994-12-28 03:06 G 42626389.43 42626389.63 42626389.83 0.0266 0.0086

Saturn 111995-08-14 02:08 G 42626618.45 42626618.59 42626618.74 0.0266 0.0192

Jupiter 111998-09-03 19:39 G 42627735.18 42627735.32 42627735.46 0.0505 0.0363

113TH MILLENNIUM CE

This is a list of transits of Venus in the 113th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 112001-09-25 04:18 G 42628852.64 42628852.68 42628852.72 0.0139 0.0136

Uranus 112002-05-09 12:13 G 42629078.92 42629079.01 42629079.13 0.0139 0.0122

Uranus 112002-12-21 20:51 G 42629305.23 42629305.37 42629305.50 0.0138 0.0106

Uranus 112003-08-05 04:32 G 42629531.53 42629531.69 42629531.86 0.0138 0.0091

Uranus 112004-03-18 12:13 G 42629757.84 42629758.01 42629758.20 0.0138 0.0075

Jupiter 112004-07-10 19:54 G 42629872.13 42629872.33 42629872.54 0.0518 0.0086

Uranus 112004-10-30 19:54 G 42629984.15 42629984.33 42629984.54 0.0138 0.0060

Uranus 112005-06-14 03:20 G 42630210.44 42630210.64 42630210.85 0.0138 0.0045

Uranus 112006-01-26 10:46 G 42630436.74 42630436.95 42630437.16 0.0138 0.0029

Uranus 112006-09-09 17:44 G 42630663.03 42630663.24 42630663.46 0.0137 0.0013

Uranus 112007-04-24 00:42 G 42630889.32 42630889.53 42630889.75 0.0137 0.0002

Uranus 112007-12-06 07:39 G 42631115.60 42631115.82 42631116.03 0.0137 0.0017

Uranus 112008-07-19 14:08 G 42631341.88 42631342.09 42631342.30 0.0137 0.0032

Uranus 112009-03-02 20:22 G 42631568.16 42631568.35 42631568.56 0.0137 0.0048

Uranus 112009-10-15 02:51 G 42631794.44 42631794.62 42631794.82 0.0137 0.0063

Saturn 112010-01-21 13:25 G 42631892.85 42631893.06 42631893.27 0.0294 0.0031

Uranus 112010-05-29 09:06 G 42632020.71 42632020.88 42632021.07 0.0137 0.0077

Mars 112010-10-10 12:13 G 42632154.83 42632155.01 42632155.18 0.1651 0.0182

Jupiter 112011-01-01 10:18 G 42632237.77 42632237.93 42632238.09 0.0512 0.0308

Uranus 112011-01-10 15:06 G 42632246.98 42632247.13 42632247.30 0.0136 0.0092

Uranus 112011-08-24 21:06 G 42632473.26 42632473.38 42632473.52 0.0136 0.0106

Uranus 112012-04-07 02:51 G 42632699.53 42632699.62 42632699.73 0.0136 0.0120

Uranus 112012-11-19 08:37 G 42632925.83 42632925.86 42632925.92 0.0136 0.0133

Jupiter 112016-03-15 12:56 G 42634137.85 42634138.04 42634138.23 0.0520 0.0197

Jupiter 112022-09-06 09:49 G 42636503.71 42636503.91 42636504.12 0.0509 0.0050

Pluto 112023-09-06 02:37 G 42636868.39 42636868.61 42636868.84 0.0081 0.0004

Pluto 112024-04-18 13:25 G 42637094.05 42637094.06 42637094.12 0.0081 0.0080

Saturn 112024-07-09 05:30 G 42637175.53 42637175.73 42637175.94 0.0266 0.0050

Saturn 112025-02-23 04:46 G 42637404.60 42637404.70 42637404.81 0.0266 0.0228

Jupiter 112027-11-19 03:34 G 42638403.59 42638403.65 42638403.73 0.0523 0.0489

Jupiter 112028-07-13 14:22 G 42638641.10 42638641.10 42638641.12 0.0514 0.0513

Jupiter 112034-05-12 09:06 G 42640769.69 42640769.88 42640770.06 0.0507 0.0211

Neptune 112034-09-04 09:49 G 42640884.86 42640884.91 42640885.02 0.0088 0.0082

Neptune 112035-04-17 23:15 G 42641110.36 42641110.47 42641110.61 0.0088 0.0072

Neptune 112035-11-29 12:13 G 42641335.87 42641336.01 42641336.18 0.0088 0.0063

Neptune 112036-07-12 01:25 G 42641561.39 42641561.56 42641561.74 0.0088 0.0053

Neptune 112037-02-22 14:08 G 42641786.91 42641787.09 42641787.30 0.0088 0.0044

Neptune 112037-10-06 03:20 G 42642012.44 42642012.64 42642012.85 0.0088 0.0034

Mars 112038-02-25 22:32 G 42642155.27 42642155.44 42642155.61 0.1893 0.0115

Neptune 112038-05-19 16:32 G 42642237.99 42642238.19 42642238.41 0.0088 0.0025

Saturn 112038-12-16 22:32 G 42642449.41 42642449.44 42642449.48 0.0293 0.0289

Neptune 112038-12-31 05:44 G 42642463.53 42642463.74 42642463.97 0.0088 0.0015

Saturn 112039-08-03 23:44 G 42642679.29 42642679.49 42642679.69 0.0293 0.0093

Neptune 112039-08-13 18:56 G 42642689.07 42642689.29 42642689.52 0.0088 0.0005

Jupiter 112040-03-18 09:06 G 42642906.70 42642906.88 42642907.06 0.0517 0.0242

Neptune 112040-03-26 08:08 G 42642914.62 42642914.84 42642915.06 0.0088 0.0005

Neptune 112040-11-06 21:20 G 42643140.17 42643140.39 42643140.61 0.0088 0.0014

Neptune 112041-06-20 10:32 G 42643365.73 42643365.94 42643366.16 0.0088 0.0024

Neptune 112042-01-31 23:30 G 42643591.29 42643591.48 42643591.70 0.0088 0.0034

Neptune 112042-09-14 12:56 G 42643816.85 42643817.04 42643817.24 0.0088 0.0043

Neptune 112043-04-28 01:54 G 42644042.42 42644042.58 42644042.77 0.0088 0.0053

Neptune 112043-12-09 15:06 G 42644267.99 42644268.13 42644268.30 0.0088 0.0063

Neptune 112044-07-22 04:32 G 42644493.57 42644493.69 42644493.82 0.0088 0.0072

Uranus 112045-02-03 18:56 G 42644690.26 42644690.29 42644690.34 0.0139 0.0137

Neptune 112045-03-04 17:15 G 42644719.17 42644719.22 42644719.33 0.0088 0.0082

Uranus 112045-09-18 03:20 G 42644916.56 42644916.64 42644916.76 0.0139 0.0123

Jupiter 112046-01-15 05:58 G 42645035.69 42645035.75 42645035.83 0.0504 0.0471

Uranus 112046-05-02 12:42 G 42645142.90 42645143.03 42645143.17 0.0140 0.0107

Jupiter 112046-09-08 20:22 G 42645272.26 42645272.35 42645272.44 0.0513 0.0453

Uranus 112046-12-14 21:34 G 42645369.25 42645369.40 42645369.58 0.0140 0.0092

Uranus 112047-07-29 06:56 G 42645595.62 42645595.79 42645595.98 0.0140 0.0076

Uranus 112048-03-11 16:18 G 42645822.00 42645822.18 42645822.39 0.0140 0.0061

Uranus 112048-10-24 02:22 G 42646048.39 42646048.60 42646048.81 0.0140 0.0043

Uranus 112049-06-07 12:13 G 42646274.80 42646275.01 42646275.23 0.0140 0.0027

Uranus 112050-01-19 22:18 G 42646501.22 42646501.43 42646501.65 0.0141 0.0011

Uranus 112050-09-03 08:37 G 42646727.64 42646727.86 42646728.08 0.0141 0.0007

Uranus 112051-04-17 19:10 G 42646954.09 42646954.30 42646954.52 0.0141 0.0024

Jupiter 112051-11-22 04:18 G 42647172.48 42647172.68 42647172.89 0.0519 0.0033

Uranus 112051-11-30 05:58 G 42647180.54 42647180.75 42647180.96 0.0141 0.0041

Uranus 112052-07-13 16:32 G 42647407.00 42647407.19 42647407.41 0.0141 0.0059

Uranus 112053-02-25 03:34 G 42647633.48 42647633.65 42647633.85 0.0141 0.0075

Uranus 112053-10-09 15:06 G 42647859.96 42647860.13 42647860.30 0.0141 0.0092

Saturn 112054-01-19 11:15 G 42647961.76 42647961.97 42647962.18 0.0266 0.0007

Uranus 112054-05-24 02:22 G 42648086.47 42648086.60 42648086.75 0.0142 0.0109

Uranus 112055-01-05 14:08 G 42648312.99 42648313.09 42648313.19 0.0142 0.0125

Uranus 112055-08-20 01:39 G 42648539.57 42648539.57 42648539.59 0.0142 0.0142

Jupiter 112058-05-14 19:39 G 42649538.14 42649538.32 42649538.51 0.0511 0.0193

Jupiter 112063-07-27 21:49 G 42651438.25 42651438.41 42651438.57 0.0522 0.0316

Saturn 112068-06-27 23:30 G 42653235.38 42653235.48 42653235.59 0.0293 0.0254

Saturn 112069-02-13 00:27 G 42653465.33 42653465.52 42653465.71 0.0294 0.0129

Jupiter 112070-01-17 19:54 G 42653804.13 42653804.33 42653804.53 0.0508 0.0065

Jupiter 112075-11-25 01:54 G 42655941.46 42655941.58 42655941.71 0.0515 0.0408

Mars 112076-08-06 22:32 G 42656197.27 42656197.44 42656197.61 0.1654 0.0463

Jupiter 112081-09-22 20:37 G 42658070.20 42658070.36 42658070.52 0.0506 0.0317

Saturn 112082-12-15 12:13 G 42658518.96 42658519.01 42658519.09 0.0267 0.0254

Saturn 112083-08-01 12:27 G 42658747.81 42658748.02 42658748.23 0.0266 0.0027

Uranus 112086-01-06 19:39 G 42659637.24 42659637.32 42659637.41 0.0139 0.0127

Uranus 112086-08-21 03:49 G 42659863.54 42659863.66 42659863.80 0.0138 0.0112

Uranus 112087-04-04 11:44 G 42660089.85 42660089.99 42660090.16 0.0138 0.0097

Jupiter 112087-07-30 17:58 G 42660207.05 42660207.25 42660207.45 0.0518 0.0126

Uranus 112087-11-16 19:39 G 42660316.16 42660316.32 42660316.52 0.0138 0.0082

Uranus 112088-06-30 03:49 G 42660542.47 42660542.66 42660542.85 0.0138 0.0065

Uranus 112089-02-11 11:15 G 42660768.77 42660768.97 42660769.17 0.0138 0.0050

Uranus 112089-09-25 18:42 G 42660995.07 42660995.28 42660995.49 0.0138 0.0034

Uranus 112090-05-10 01:54 G 42661221.37 42661221.58 42661221.80 0.0137 0.0019

Uranus 112090-12-22 09:06 G 42661447.66 42661447.88 42661448.09 0.0137 0.0004

Uranus 112091-08-05 15:49 G 42661673.95 42661674.16 42661674.38 0.0137 0.0012

Uranus 112092-03-18 22:32 G 42661900.23 42661900.44 42661900.65 0.0137 0.0028

Uranus 112092-10-31 05:15 G 42662126.52 42662126.72 42662126.93 0.0137 0.0043

Uranus 112093-06-14 11:30 G 42662352.80 42662352.98 42662353.19 0.0137 0.0058

Jupiter 112094-01-20 10:03 G 42662572.78 42662572.92 42662573.07 0.0512 0.0353

Earth 112094-01-23 20:22 G 42662576.20 42662576.35 42662576.50 0.2686 0.0752

Moon 112094-01-24 01:39 G 42662576.42 42662576.57 42662576.73 0.2687 0.0271 *

Uranus 112094-01-26 17:44 G 42662579.07 42662579.24 42662579.44 0.0137 0.0073

Uranus 112094-09-10 00:13 G 42662805.35 42662805.51 42662805.68 0.0136 0.0087

Uranus 112095-04-24 05:58 G 42663031.62 42663031.75 42663031.91 0.0136 0.0101

Uranus 112095-12-06 11:58 G 42663257.90 42663258.00 42663258.13 0.0136 0.0115

Uranus 112096-07-19 18:13 G 42663484.19 42663484.26 42663484.32 0.0136 0.0129

Saturn 112098-01-08 07:39 G 42664021.67 42664021.82 42664021.98 0.0293 0.0197

Saturn 112098-08-26 09:06 G 42664251.72 42664251.88 42664252.05 0.0294 0.0187

Jupiter 112099-04-04 11:44 G 42664472.79 42664472.99 42664473.19 0.0520 0.0154

Mars 112103-12-25 03:20 G 42666197.48 42666197.64 42666197.80 0.1888 0.0551

Jupiter 112105-09-26 06:13 G 42666838.56 42666838.76 42666838.96 0.0509 0.0082

Jupiter 112110-12-09 05:58 G 42668738.65 42668738.75 42668738.87 0.0523 0.0436

Saturn 112112-06-27 18:27 G 42669305.14 42669305.27 42669305.40 0.0267 0.0208

Saturn 112113-02-11 17:58 G 42669534.05 42669534.25 42669534.46 0.0266 0.0072

Jupiter 112117-06-01 06:13 G 42671104.58 42671104.76 42671104.96 0.0507 0.0175

Neptune 112117-06-06 13:25 G 42671110.00 42671110.06 42671110.15 0.0089 0.0084

Neptune 112118-01-18 02:37 G 42671335.49 42671335.61 42671335.74 0.0090 0.0074

Neptune 112118-08-31 15:34 G 42671561.01 42671561.15 42671561.31 0.0090 0.0064

Neptune 112119-04-14 04:46 G 42671786.53 42671786.70 42671786.87 0.0090 0.0054

Neptune 112119-11-25 17:58 G 42672012.06 42672012.25 42672012.44 0.0090 0.0044

Neptune 112120-07-08 06:56 G 42672237.59 42672237.79 42672237.99 0.0090 0.0034

Neptune 112121-02-18 19:25 G 42672463.12 42672463.31 42672463.53 0.0090 0.0025

Neptune 112121-10-02 08:37 G 42672688.65 42672688.86 42672689.08 0.0090 0.0014

Neptune 112122-05-15 21:34 G 42672914.18 42672914.40 42672914.62 0.0090 0.0004

Neptune 112122-12-27 10:32 G 42673139.72 42673139.94 42673140.16 0.0090 0.0006

Jupiter 112123-04-08 11:58 G 42673241.83 42673242.00 42673242.17 0.0516 0.0297

Neptune 112123-08-09 23:15 G 42673365.26 42673365.47 42673365.69 0.0090 0.0016

Neptune 112124-03-22 11:58 G 42673590.80 42673591.00 42673591.21 0.0090 0.0026

Neptune 112124-11-03 00:56 G 42673816.35 42673816.54 42673816.74 0.0090 0.0036

Neptune 112125-06-16 13:25 G 42674041.89 42674042.06 42674042.26 0.0090 0.0046

Neptune 112126-01-28 02:08 G 42674267.44 42674267.59 42674267.78 0.0090 0.0056

Neptune 112126-09-10 14:51 G 42674492.99 42674493.12 42674493.29 0.0090 0.0066

Neptune 112127-04-24 04:03 G 42674718.56 42674718.67 42674718.79 0.0090 0.0075

Saturn 112127-07-22 08:22 G 42674807.68 42674807.85 42674808.03 0.0293 0.0163

Neptune 112127-12-05 16:46 G 42674944.14 42674944.20 42674944.28 0.0090 0.0085

Saturn 112128-03-08 09:34 G 42675037.77 42675037.90 42675038.05 0.0294 0.0222

Jupiter 112129-02-04 06:56 G 42675370.69 42675370.79 42675370.91 0.0505 0.0426

Uranus 112129-05-19 10:46 G 42675474.88 42675474.95 42675475.05 0.0139 0.0127

Jupiter 112129-09-28 21:49 G 42675607.38 42675607.41 42675607.45 0.0514 0.0505

Uranus 112129-12-31 19:25 G 42675701.20 42675701.31 42675701.46 0.0139 0.0113

Uranus 112130-08-15 04:46 G 42675927.55 42675927.70 42675927.86 0.0140 0.0097

Uranus 112131-03-29 14:08 G 42676153.91 42676154.09 42676154.27 0.0140 0.0081

Uranus 112131-11-10 23:30 G 42676380.29 42676380.48 42676380.68 0.0140 0.0065

Uranus 112132-06-24 08:51 G 42676606.68 42676606.87 42676607.09 0.0140 0.0050

Uranus 112133-02-05 18:56 G 42676833.08 42676833.29 42676833.50 0.0140 0.0032

Uranus 112133-09-20 05:01 G 42677059.49 42677059.71 42677059.93 0.0140 0.0016

Uranus 112134-05-04 15:20 G 42677285.92 42677286.14 42677286.36 0.0141 0.0001

Jupiter 112134-12-12 05:44 G 42677507.53 42677507.74 42677507.94 0.0519 0.0020

Uranus 112134-12-17 01:39 G 42677512.36 42677512.57 42677512.79 0.0141 0.0018

Uranus 112135-07-31 12:13 G 42677738.80 42677739.01 42677739.23 0.0141 0.0035

Uranus 112136-03-13 23:01 G 42677965.26 42677965.46 42677965.67 0.0141 0.0052

Uranus 112136-10-26 09:49 G 42678191.73 42678191.91 42678192.11 0.0141 0.0069

Uranus 112137-06-09 20:51 G 42678418.21 42678418.37 42678418.56 0.0141 0.0087

Uranus 112138-01-22 08:08 G 42678644.70 42678644.84 42678645.00 0.0141 0.0103

Uranus 112138-09-05 19:39 G 42678871.21 42678871.32 42678871.44 0.0142 0.0120

Uranus 112139-04-20 06:56 G 42679097.75 42679097.79 42679097.87 0.0142 0.0137

Jupiter 112141-06-03 21:34 G 42679873.23 42679873.40 42679873.58 0.0511 0.0245

Saturn 112142-01-07 18:27 G 42680091.11 42680091.27 42680091.42 0.0266 0.0179

Mars 112142-06-05 09:06 G 42680239.72 42680239.88 42680240.04 0.1657 0.0744

Saturn 112142-08-24 17:58 G 42680320.06 42680320.25 42680320.45 0.0266 0.0101

Jupiter 112146-08-16 21:06 G 42681773.20 42681773.38 42681773.55 0.0521 0.0272

Jupiter 112153-02-06 20:37 G 42684139.16 42684139.36 42684139.57 0.0508 0.0019

Saturn 112157-01-31 15:34 G 42685593.96 42685594.15 42685594.35 0.0293 0.0109

Saturn 112157-09-18 17:01 G 42685824.15 42685824.21 42685824.29 0.0294 0.0276

Jupiter 112158-12-15 01:39 G 42686276.48 42686276.57 42686276.67 0.0515 0.0454

Jupiter 112164-10-12 17:44 G 42688405.08 42688405.24 42688405.41 0.0506 0.0282

Uranus 112169-09-07 02:37 G 42690195.56 42690195.61 42690195.68 0.0139 0.0132

Mars 112169-10-21 09:06 G 42690239.74 42690239.88 42690240.01 0.1884 0.1161

Uranus 112170-04-21 11:01 G 42690421.86 42690421.96 42690422.09 0.0139 0.0117

Jupiter 112170-08-19 21:06 G 42690542.19 42690542.38 42690542.57 0.0518 0.0182

Uranus 112170-12-03 19:10 G 42690648.17 42690648.30 42690648.46 0.0138 0.0102

Uranus 112171-07-18 03:06 G 42690874.48 42690874.63 42690874.81 0.0138 0.0086

Saturn 112171-07-20 23:58 G 42690877.33 42690877.50 42690877.69 0.0267 0.0134

Uranus 112172-02-29 11:15 G 42691100.78 42691100.97 42691101.16 0.0138 0.0070

Saturn 112172-03-05 23:30 G 42691106.31 42691106.48 42691106.66 0.0266 0.0146

Uranus 112172-10-12 18:56 G 42691327.10 42691327.29 42691327.49 0.0138 0.0055

Uranus 112173-05-27 02:22 G 42691553.40 42691553.60 42691553.81 0.0138 0.0039

Uranus 112174-01-08 09:49 G 42691779.70 42691779.91 42691780.12 0.0138 0.0024

Mars 112174-06-04 08:22 G 42691926.79 42691926.85 42691926.91 0.1647 0.1543

Uranus 112174-08-22 17:01 G 42692005.99 42692006.21 42692006.42 0.0137 0.0008

Uranus 112175-04-05 23:58 G 42692232.29 42692232.50 42692232.72 0.0137 0.0007

Uranus 112175-11-18 06:56 G 42692458.58 42692458.79 42692459.01 0.0137 0.0023

Uranus 112176-07-01 13:39 G 42692684.87 42692685.07 42692685.28 0.0137 0.0038

Jupiter 112177-02-09 07:54 G 42692907.71 42692907.83 42692907.97 0.0512 0.0392

Uranus 112177-02-12 20:08 G 42692911.15 42692911.34 42692911.54 0.0137 0.0053

Uranus 112177-09-27 02:37 G 42693137.43 42693137.61 42693137.80 0.0137 0.0068

Uranus 112178-05-11 08:37 G 42693363.71 42693363.86 42693364.05 0.0137 0.0083

Uranus 112178-12-23 15:06 G 42693589.99 42693590.13 42693590.29 0.0136 0.0097

Pluto 112179-01-08 23:30 G 42693606.36 42693606.48 42693606.64 0.0063 0.0048

Uranus 112179-08-06 20:51 G 42693816.26 42693816.37 42693816.51 0.0136 0.0111

Pluto 112179-08-22 03:06 G 42693831.42 42693831.63 42693831.85 0.0063 0.0010

Uranus 112180-03-20 03:06 G 42694042.55 42694042.63 42694042.71 0.0136 0.0125

Pluto 112180-04-03 06:27 G 42694056.58 42694056.77 42694056.97 0.0064 0.0028

Jupiter 112182-04-24 15:20 G 42694807.94 42694808.14 42694808.35 0.0520 0.0098

Saturn 112186-08-13 16:03 G 42696379.97 42696380.17 42696380.38 0.0293 0.0075

Jupiter 112188-10-15 08:08 G 42697173.65 42697173.84 42697174.04 0.0510 0.0133

Jupiter 112193-12-28 08:37 G 42699073.72 42699073.86 42699074.00 0.0523 0.0382

Neptune 112198-12-07 21:20 G 42700879.34 42700879.39 42700879.48 0.0088 0.0083

Neptune 112199-07-21 10:32 G 42701104.83 42701104.94 42701105.07 0.0088 0.0073

Neptune 112200-03-03 23:15 G 42701330.33 42701330.47 42701330.64 0.0088 0.0064

Jupiter 112200-06-21 08:51 G 42701439.67 42701439.87 42701440.06 0.0507 0.0123

Neptune 112200-10-15 12:27 G 42701555.85 42701556.02 42701556.20 0.0088 0.0054

Saturn 112201-01-30 23:30 G 42701663.29 42701663.48 42701663.67 0.0266 0.0106

Neptune 112201-05-29 01:25 G 42701781.38 42701781.56 42701781.76 0.0088 0.0045

Saturn 112201-09-16 23:01 G 42701892.31 42701892.46 42701892.62 0.0266 0.0173

Neptune 112202-01-09 14:37 G 42702006.91 42702007.11 42702007.32 0.0088 0.0035

Neptune 112202-08-23 03:20 G 42702232.44 42702232.64 42702232.87 0.0088 0.0026

Neptune 112203-04-05 16:46 G 42702457.98 42702458.20 42702458.42 0.0088 0.0016

Neptune 112203-11-17 05:44 G 42702683.52 42702683.74 42702683.97 0.0088 0.0007

Neptune 112204-06-29 18:56 G 42702909.07 42702909.29 42702909.51 0.0088 0.0003

Neptune 112205-02-10 07:54 G 42703134.62 42703134.83 42703135.06 0.0088 0.0013

Neptune 112205-09-23 20:51 G 42703360.17 42703360.37 42703360.60 0.0088 0.0023

Jupiter 112206-04-28 11:58 G 42703576.85 42703577.00 42703577.15 0.0516 0.0343

Neptune 112206-05-07 10:32 G 42703585.73 42703585.94 42703586.15 0.0088 0.0032

Neptune 112206-12-18 23:30 G 42703811.29 42703811.48 42703811.68 0.0088 0.0042

Moon 112207-07-26 20:37 G 42704031.30 42704031.36 42704031.43 0.2650 0.2417

Neptune 112207-08-01 12:27 G 42704036.86 42704037.02 42704037.22 0.0088 0.0052

Neptune 112208-03-14 01:54 G 42704262.43 42704262.58 42704262.75 0.0088 0.0061

Mars 112208-04-02 19:25 G 42704282.17 42704282.31 42704282.44 0.1660 0.1038

Neptune 112208-10-25 14:37 G 42704488.01 42704488.11 42704488.27 0.0088 0.0071

Neptune 112209-06-08 04:18 G 42704713.60 42704713.68 42704713.78 0.0088 0.0080

Jupiter 112212-02-25 08:22 G 42705705.72 42705705.85 42705705.99 0.0505 0.0377

Uranus 112213-01-17 18:13 G 42706033.21 42706033.26 42706033.35 0.0139 0.0132

Uranus 112213-09-01 02:51 G 42706259.53 42706259.62 42706259.76 0.0139 0.0118

Uranus 112214-04-15 12:13 G 42706485.87 42706486.01 42706486.17 0.0140 0.0102

Uranus 112214-11-27 21:34 G 42706712.23 42706712.40 42706712.57 0.0140 0.0086

Uranus 112215-07-12 06:42 G 42706938.60 42706938.78 42706938.97 0.0140 0.0070

Earth 112215-07-24 15:20 G 42706950.99 42706951.14 42706951.29 0.2647 0.0991

Moon 112215-07-24 16:32 G 42706951.05 42706951.19 42706951.32 0.2653 0.1214 *

Uranus 112216-02-23 16:03 G 42707164.98 42707165.17 42707165.38 0.0140 0.0054

Saturn 112216-02-24 22:18 G 42707166.22 42707166.43 42707166.64 0.0293 0.0024

Uranus 112216-10-07 01:39 G 42707391.37 42707391.57 42707391.80 0.0140 0.0039

Uranus 112217-05-21 11:58 G 42707617.79 42707618.00 42707618.22 0.0140 0.0021

Jupiter 112218-01-01 05:58 G 42707842.54 42707842.75 42707842.95 0.0519 0.0066

Uranus 112218-01-02 22:03 G 42707844.20 42707844.42 42707844.64 0.0140 0.0005

Uranus 112218-08-17 08:22 G 42708070.63 42708070.85 42708071.07 0.0141 0.0013

Uranus 112219-03-31 18:56 G 42708297.08 42708297.29 42708297.51 0.0141 0.0030

Uranus 112219-11-13 05:30 G 42708523.53 42708523.73 42708523.94 0.0141 0.0047

Uranus 112220-06-26 16:18 G 42708749.99 42708750.18 42708750.38 0.0141 0.0064

Uranus 112221-02-08 03:06 G 42708976.46 42708976.63 42708976.82 0.0141 0.0082

Uranus 112221-09-22 14:08 G 42709202.95 42709203.09 42709203.27 0.0141 0.0099

Uranus 112222-05-07 01:54 G 42709429.46 42709429.58 42709429.71 0.0142 0.0115

Uranus 112222-12-19 12:56 G 42709655.98 42709656.04 42709656.14 0.0142 0.0132

Jupiter 112224-06-23 19:25 G 42710208.15 42710208.31 42710208.48 0.0511 0.0282

Jupiter 112229-09-06 00:13 G 42712108.32 42712108.51 42712108.69 0.0522 0.0216

Saturn 112230-08-13 05:01 G 42712449.50 42712449.71 42712449.92 0.0267 0.0061

Saturn 112231-03-30 04:18 G 42712678.57 42712678.68 42712678.81 0.0266 0.0218

Mars 112235-08-19 14:22 G 42714282.05 42714282.10 42714282.15 0.1879 0.1783

Jupiter 112236-02-27 19:10 G 42714474.09 42714474.30 42714474.50 0.0508 0.0024

Mars 112240-04-01 18:42 G 42715969.17 42715969.28 42715969.40 0.1650 0.1271

Jupiter 112241-05-11 17:58 G 42716374.19 42716374.25 42716374.31 0.0524 0.0500

Jupiter 112242-01-04 05:30 G 42716611.71 42716611.73 42716611.76 0.0515 0.0510

Saturn 112245-09-05 23:44 G 42717952.27 42717952.49 42717952.70 0.0293 0.0014

Jupiter 112247-11-02 19:39 G 42718740.15 42718740.32 42718740.50 0.0506 0.0233

Uranus 112253-05-08 09:20 G 42720753.89 42720753.89 42720753.94 0.0139 0.0138

Jupiter 112253-09-08 23:44 G 42720877.31 42720877.49 42720877.67 0.0517 0.0237

Uranus 112253-12-20 17:44 G 42720980.16 42720980.24 42720980.36 0.0139 0.0123

Uranus 112254-08-04 02:22 G 42721206.47 42721206.60 42721206.74 0.0138 0.0107

Uranus 112255-03-18 10:32 G 42721432.78 42721432.94 42721433.11 0.0138 0.0091

Uranus 112255-10-30 18:27 G 42721659.10 42721659.27 42721659.46 0.0138 0.0076

Uranus 112256-06-13 02:22 G 42721885.41 42721885.60 42721885.80 0.0138 0.0060

Uranus 112257-01-25 09:49 G 42722111.72 42722111.91 42722112.13 0.0138 0.0045

Uranus 112257-09-08 17:30 G 42722338.02 42722338.23 42722338.44 0.0138 0.0029

Uranus 112258-04-23 00:42 G 42722564.32 42722564.53 42722564.75 0.0137 0.0014

Uranus 112258-12-05 08:08 G 42722790.62 42722790.84 42722791.05 0.0137 0.0003

Jupiter 112259-07-08 20:51 G 42723006.31 42723006.37 42723006.43 0.0504 0.0480

Uranus 112259-07-19 14:51 G 42723016.91 42723017.12 42723017.34 0.0137 0.0018

Saturn 112260-02-23 03:49 G 42723235.45 42723235.66 42723235.87 0.0266 0.0035

Jupiter 112260-03-01 11:01 G 42723242.87 42723242.96 42723243.06 0.0513 0.0447

Uranus 112260-03-01 21:49 G 42723243.20 42723243.41 42723243.62 0.0137 0.0033

Saturn 112260-10-09 03:20 G 42723464.57 42723464.64 42723464.73 0.0266 0.0244

Uranus 112260-10-14 04:32 G 42723469.49 42723469.69 42723469.89 0.0137 0.0048

Uranus 112261-05-28 11:01 G 42723695.77 42723695.96 42723696.15 0.0137 0.0063

Uranus 112262-01-09 17:15 G 42723922.05 42723922.22 42723922.40 0.0137 0.0078

Uranus 112262-08-23 23:15 G 42724148.33 42724148.47 42724148.64 0.0136 0.0093

Uranus 112263-04-07 05:30 G 42724374.60 42724374.73 42724374.87 0.0136 0.0107

Uranus 112263-11-19 11:30 G 42724600.89 42724600.98 42724601.08 0.0136 0.0121

Uranus 112264-07-02 17:01 G 42724827.19 42724827.21 42724827.26 0.0136 0.0135

Jupiter 112265-05-14 16:03 G 42725142.97 42725143.17 42725143.37 0.0520 0.0049

Pluto 112269-02-22 23:44 G 42726523.40 42726523.49 42726523.62 0.0081 0.0071

Pluto 112269-10-06 11:44 G 42726748.77 42726748.99 42726749.21 0.0081 0.0013

Jupiter 112271-11-05 10:03 G 42727508.74 42727508.92 42727509.11 0.0510 0.0185

Mars 112274-01-29 05:44 G 42728324.64 42728324.74 42728324.85 0.1664 0.1332

Saturn 112275-03-19 04:46 G 42728738.49 42728738.70 42728738.91 0.0293 0.0061

Jupiter 112277-01-17 09:06 G 42729408.72 42729408.88 42729409.04 0.0523 0.0334

Neptune 112281-09-09 00:13 G 42731104.47 42731104.51 42731104.60 0.0089 0.0086

Neptune 112282-04-22 13:25 G 42731329.96 42731330.06 42731330.19 0.0090 0.0076

Neptune 112282-12-04 02:37 G 42731555.48 42731555.61 42731555.77 0.0090 0.0066

Jupiter 112283-07-11 07:10 G 42731774.60 42731774.80 42731775.00 0.0507 0.0084

Neptune 112283-07-17 15:34 G 42731781.00 42731781.15 42731781.34 0.0090 0.0056

Neptune 112284-02-28 04:46 G 42732006.52 42732006.70 42732006.90 0.0090 0.0046

Neptune 112284-10-10 17:44 G 42732232.05 42732232.24 42732232.45 0.0090 0.0036

Neptune 112285-05-24 06:56 G 42732457.59 42732457.79 42732458.00 0.0090 0.0026

Neptune 112286-01-04 19:54 G 42732683.12 42732683.33 42732683.55 0.0090 0.0016

Neptune 112286-08-18 08:51 G 42732908.66 42732908.87 42732909.09 0.0090 0.0006

Neptune 112287-03-31 21:49 G 42733134.20 42733134.41 42733134.63 0.0090 0.0005

Neptune 112287-11-12 10:46 G 42733359.74 42733359.95 42733360.17 0.0090 0.0015

Neptune 112288-06-24 23:30 G 42733585.28 42733585.48 42733585.70 0.0090 0.0025

Neptune 112289-02-05 12:13 G 42733810.82 42733811.01 42733811.22 0.0090 0.0035

Jupiter 112289-05-17 15:06 G 42733912.00 42733912.13 42733912.26 0.0516 0.0399

Saturn 112289-09-04 09:34 G 42734021.69 42734021.90 42734022.11 0.0267 0.0011

Neptune 112289-09-19 01:25 G 42734036.37 42734036.56 42734036.74 0.0090 0.0044

Neptune 112290-05-02 13:54 G 42734261.92 42734262.08 42734262.26 0.0090 0.0054

Neptune 112290-12-14 02:51 G 42734487.48 42734487.62 42734487.78 0.0090 0.0064

Neptune 112291-07-27 15:20 G 42734713.04 42734713.14 42734713.28 0.0090 0.0074

Neptune 112292-03-09 04:03 G 42734938.62 42734938.67 42734938.77 0.0090 0.0084

Jupiter 112295-03-16 07:25 G 42736040.66 42736040.81 42736040.96 0.0505 0.0338

Uranus 112296-09-17 01:54 G 42736591.56 42736591.58 42736591.64 0.0139 0.0137

Uranus 112297-05-01 10:32 G 42736817.86 42736817.94 42736818.07 0.0139 0.0123

Uranus 112297-12-13 19:54 G 42737044.19 42737044.33 42737044.47 0.0139 0.0107

Uranus 112298-07-28 04:32 G 42737270.54 42737270.69 42737270.87 0.0140 0.0092

Uranus 112299-03-11 13:54 G 42737496.91 42737497.08 42737497.27 0.0140 0.0076

Uranus 112299-10-23 23:30 G 42737723.29 42737723.48 42737723.68 0.0140 0.0059

Uranus 112300-06-07 09:06 G 42737949.68 42737949.88 42737950.10 0.0140 0.0043

Uranus 112301-01-19 18:56 G 42738176.08 42738176.29 42738176.51 0.0140 0.0027

Jupiter 112301-01-21 09:34 G 42738177.70 42738177.90 42738178.10 0.0519 0.0122

Uranus 112301-09-03 05:15 G 42738402.50 42738402.72 42738402.94 0.0140 0.0010

Uranus 112302-04-17 15:34 G 42738628.93 42738629.15 42738629.37 0.0141 0.0008

Uranus 112302-11-30 01:54 G 42738855.36 42738855.58 42738855.80 0.0141 0.0025

Uranus 112303-07-14 12:13 G 42739081.81 42739082.01 42739082.23 0.0141 0.0042

Saturn 112304-02-12 06:42 G 42739294.72 42739294.78 42739294.85 0.0293 0.0278

Uranus 112304-02-25 22:46 G 42739308.26 42739308.45 42739308.66 0.0141 0.0059

Saturn 112304-09-29 06:56 G 42739524.60 42739524.79 42739524.99 0.0293 0.0102

Uranus 112304-10-09 09:34 G 42739534.73 42739534.90 42739535.10 0.0141 0.0077

Uranus 112305-05-23 21:06 G 42739761.22 42739761.38 42739761.55 0.0141 0.0093

Uranus 112306-01-05 08:08 G 42739987.71 42739987.84 42739987.99 0.0141 0.0110

Mars 112306-01-29 05:44 G 42740011.60 42740011.74 42740011.88 0.1653 0.1009

Uranus 112306-08-19 19:10 G 42740214.22 42740214.30 42740214.42 0.0142 0.0127

Jupiter 112307-07-14 21:34 G 42740543.25 42740543.40 42740543.55 0.0511 0.0334

Jupiter 112312-09-26 03:20 G 42742443.44 42742443.64 42742443.83 0.0521 0.0160

Saturn 112318-08-01 07:25 G 42744578.74 42744578.81 42744578.90 0.0267 0.0246

Saturn 112319-03-18 08:08 G 42744807.63 42744807.84 42744808.05 0.0267 0.0036

Jupiter 112319-03-19 21:49 G 42744809.21 42744809.41 42744809.61 0.0509 0.0076

Jupiter 112324-05-31 18:56 G 42746709.19 42746709.29 42746709.39 0.0524 0.0451

Jupiter 112330-11-22 21:49 G 42749075.22 42749075.41 42749075.60 0.0506 0.0181

Mars 112333-06-16 11:30 G 42750011.86 42750011.98 42750012.10 0.1890 0.1306

Saturn 112333-08-24 11:15 G 42750080.85 42750080.97 42750081.10 0.0293 0.0233

Saturn 112334-04-11 11:58 G 42750310.82 42750311.00 42750311.19 0.0293 0.0149

Jupiter 112336-09-29 00:13 G 42751212.34 42751212.51 42751212.68 0.0517 0.0286

Moon 112337-01-26 18:56 G 42751332.15 42751332.29 42751332.44 0.2679 0.1363

Earth 112337-01-26 22:18 G 42751332.28 42751332.43 42751332.58 0.2685 0.0746 *

Uranus 112337-08-21 01:25 G 42751538.50 42751538.56 42751538.66 0.0139 0.0128

Uranus 112338-04-04 09:49 G 42751764.81 42751764.91 42751765.06 0.0139 0.0113

Uranus 112338-11-16 18:27 G 42751991.12 42751991.27 42751991.43 0.0138 0.0097

Uranus 112339-07-01 02:22 G 42752217.44 42752217.60 42752217.79 0.0138 0.0081

Mars 112339-11-27 15:49 G 42752367.13 42752367.16 42752367.20 0.1667 0.1630

Uranus 112340-02-12 10:32 G 42752443.75 42752443.94 42752444.13 0.0138 0.0065

Uranus 112340-09-25 17:58 G 42752670.06 42752670.25 42752670.46 0.0138 0.0050

Uranus 112341-05-10 01:54 G 42752896.37 42752896.58 42752896.79 0.0138 0.0034

Uranus 112341-12-22 09:06 G 42753122.67 42753122.88 42753123.10 0.0138 0.0018

Jupiter 112342-07-28 19:54 G 42753341.23 42753341.33 42753341.42 0.0503 0.0441

Uranus 112342-08-05 16:32 G 42753348.97 42753349.19 42753349.40 0.0137 0.0004

Uranus 112343-03-19 23:30 G 42753575.26 42753575.48 42753575.70 0.0137 0.0013

Jupiter 112343-03-22 09:20 G 42753577.83 42753577.89 42753577.95 0.0512 0.0485

Uranus 112343-11-01 06:27 G 42753801.56 42753801.77 42753801.98 0.0137 0.0028

Uranus 112344-06-14 13:10 G 42754027.85 42754028.05 42754028.26 0.0137 0.0044

Uranus 112345-01-26 19:39 G 42754254.13 42754254.32 42754254.52 0.0137 0.0059

Uranus 112345-09-10 01:54 G 42754480.41 42754480.58 42754480.77 0.0137 0.0074

Uranus 112346-04-24 08:08 G 42754706.69 42754706.84 42754707.02 0.0137 0.0088

Uranus 112346-12-06 14:22 G 42754932.97 42754933.10 42754933.25 0.0136 0.0103

Uranus 112347-07-20 20:22 G 42755159.25 42755159.35 42755159.47 0.0136 0.0117

Saturn 112348-02-11 13:25 G 42755364.93 42755365.06 42755365.20 0.0267 0.0200

Uranus 112348-03-03 02:08 G 42755385.54 42755385.59 42755385.66 0.0136 0.0130

Jupiter 112348-06-03 18:13 G 42755478.06 42755478.26 42755478.47 0.0520 0.0007

Saturn 112348-09-27 13:54 G 42755593.88 42755594.08 42755594.28 0.0267 0.0083

Jupiter 112354-11-25 08:37 G 42757843.68 42757843.86 42757844.04 0.0510 0.0224

Jupiter 112360-02-07 11:58 G 42759743.83 42759744.00 42759744.18 0.0523 0.0281

Saturn 112363-03-06 15:20 G 42760866.98 42760867.14 42760867.30 0.0292 0.0187

Neptune 112363-03-13 08:08 G 42760873.80 42760873.84 42760873.93 0.0088 0.0084

Saturn 112363-10-22 15:34 G 42761096.99 42761097.15 42761097.31 0.0293 0.0194

Neptune 112363-10-24 21:34 G 42761099.29 42761099.40 42761099.52 0.0088 0.0074

Neptune 112364-06-06 10:18 G 42761324.80 42761324.93 42761325.10 0.0088 0.0065

Neptune 112365-01-17 23:44 G 42761550.32 42761550.49 42761550.66 0.0088 0.0055

Neptune 112365-08-31 12:13 G 42761775.84 42761776.01 42761776.22 0.0088 0.0046

Neptune 112366-04-14 01:39 G 42762001.37 42762001.57 42762001.78 0.0088 0.0036

Jupiter 112366-07-31 08:37 G 42762109.66 42762109.86 42762110.06 0.0508 0.0036

Neptune 112366-11-25 14:37 G 42762226.90 42762227.11 42762227.33 0.0088 0.0027

Neptune 112367-07-09 03:49 G 42762452.44 42762452.66 42762452.88 0.0088 0.0017

Neptune 112368-02-19 16:32 G 42762677.98 42762678.19 42762678.42 0.0088 0.0008

Neptune 112368-10-02 05:44 G 42762903.52 42762903.74 42762903.96 0.0088 0.0002

Neptune 112369-05-15 18:56 G 42763129.07 42763129.29 42763129.51 0.0088 0.0012

Neptune 112369-12-27 07:54 G 42763354.62 42763354.83 42763355.06 0.0088 0.0022

Neptune 112370-08-09 21:06 G 42763580.18 42763580.38 42763580.59 0.0088 0.0031

Neptune 112371-03-23 10:03 G 42763805.73 42763805.92 42763806.13 0.0088 0.0041

Neptune 112371-11-03 23:30 G 42764031.30 42764031.48 42764031.66 0.0088 0.0050

Mars 112371-11-26 15:49 G 42764054.00 42764054.16 42764054.32 0.1656 0.0720

Jupiter 112372-06-06 17:30 G 42764247.14 42764247.23 42764247.33 0.0515 0.0452

Neptune 112372-06-16 12:27 G 42764256.87 42764257.02 42764257.20 0.0088 0.0060

Neptune 112373-01-28 01:25 G 42764482.45 42764482.56 42764482.72 0.0088 0.0070

Neptune 112373-09-10 14:51 G 42764708.04 42764708.12 42764708.23 0.0088 0.0079

Saturn 112377-08-23 12:27 G 42766150.86 42766151.02 42766151.18 0.0267 0.0173

Jupiter 112378-04-05 09:20 G 42766375.72 42766375.89 42766376.06 0.0505 0.0289

Saturn 112378-04-09 12:56 G 42766379.84 42766380.04 42766380.23 0.0267 0.0109

Uranus 112380-12-30 18:13 G 42767376.19 42767376.26 42767376.37 0.0139 0.0128

Uranus 112381-08-14 03:20 G 42767602.51 42767602.64 42767602.77 0.0139 0.0112

Uranus 112382-03-28 12:13 G 42767828.86 42767829.01 42767829.18 0.0140 0.0097

Uranus 112382-11-09 21:20 G 42768055.23 42768055.39 42768055.58 0.0140 0.0081

Uranus 112383-06-24 06:42 G 42768281.60 42768281.78 42768281.99 0.0140 0.0065

Uranus 112384-02-05 16:18 G 42768507.98 42768508.18 42768508.39 0.0140 0.0048

Jupiter 112384-02-10 10:03 G 42768512.73 42768512.92 42768513.12 0.0518 0.0171

Uranus 112384-09-19 02:08 G 42768734.38 42768734.59 42768734.81 0.0140 0.0032

Uranus 112385-05-03 12:13 G 42768960.80 42768961.01 42768961.23 0.0140 0.0015

Uranus 112385-12-15 22:18 G 42769187.22 42769187.43 42769187.65 0.0141 0.0004

Uranus 112386-07-30 08:37 G 42769413.64 42769413.86 42769414.08 0.0141 0.0019

Uranus 112387-03-13 19:10 G 42769640.08 42769640.30 42769640.51 0.0141 0.0036

Uranus 112387-10-26 05:44 G 42769866.54 42769866.74 42769866.94 0.0141 0.0053

Uranus 112388-06-08 16:32 G 42770093.00 42770093.19 42770093.38 0.0141 0.0070

Uranus 112389-01-21 03:20 G 42770319.48 42770319.64 42770319.82 0.0141 0.0088

Uranus 112389-09-04 14:22 G 42770545.96 42770546.10 42770546.26 0.0141 0.0105

Uranus 112390-04-19 01:25 G 42770772.47 42770772.56 42770772.69 0.0142 0.0122

Jupiter 112390-08-02 23:15 G 42770878.34 42770878.47 42770878.60 0.0512 0.0386

Uranus 112390-12-01 12:56 G 42770999.01 42770999.04 42770999.11 0.0142 0.0138

Saturn 112392-09-15 19:25 G 42771653.13 42771653.31 42771653.50 0.0293 0.0143

Saturn 112393-05-03 20:08 G 42771883.23 42771883.34 42771883.47 0.0293 0.0240

Jupiter 112395-10-16 03:20 G 42772778.44 42772778.64 42772778.84 0.0521 0.0113

Mars 112399-04-13 16:32 G 42774054.04 42774054.19 42774054.35 0.1886 0.0653

Jupiter 112402-04-07 20:22 G 42775144.15 42775144.35 42775144.55 0.0508 0.0115

Saturn 112407-03-05 18:13 G 42776937.08 42776937.26 42776937.45 0.0268 0.0127

Jupiter 112407-06-20 19:39 G 42777044.20 42777044.32 42777044.45 0.0524 0.0406

Saturn 112407-10-20 18:56 G 42777166.12 42777166.29 42777166.46 0.0267 0.0157

Jupiter 112413-12-11 20:08 G 42779410.15 42779410.34 42779410.54 0.0506 0.0144

Jupiter 112419-10-19 02:22 G 42781547.44 42781547.60 42781547.75 0.0517 0.0335

Uranus 112421-04-20 09:49 G 42782096.86 42782096.91 42782096.99 0.0139 0.0133

Uranus 112421-12-02 18:13 G 42782323.17 42782323.26 42782323.39 0.0139 0.0118

Saturn 112422-03-29 01:39 G 42782439.37 42782439.57 42782439.77 0.0292 0.0090

Uranus 112422-07-17 02:51 G 42782549.48 42782549.62 42782549.77 0.0138 0.0102

Saturn 112422-11-14 01:54 G 42782669.56 42782669.58 42782669.61 0.0293 0.0291

Uranus 112423-02-28 10:46 G 42782775.79 42782775.95 42782776.13 0.0138 0.0087

Uranus 112423-10-12 19:10 G 42783002.11 42783002.30 42783002.49 0.0138 0.0070

Uranus 112424-05-26 02:51 G 42783228.43 42783228.62 42783228.82 0.0138 0.0055

Uranus 112425-01-07 10:32 G 42783454.73 42783454.94 42783455.15 0.0138 0.0039

Pluto 112425-02-08 10:18 G 42783486.75 42783486.93 42783487.12 0.0063 0.0032

Jupiter 112425-08-16 20:08 G 42783676.22 42783676.34 42783676.47 0.0504 0.0398

Uranus 112425-08-21 17:44 G 42783681.04 42783681.24 42783681.46 0.0138 0.0024

Pluto 112425-09-21 13:39 G 42783711.86 42783712.07 42783712.29 0.0063 0.0006

Uranus 112426-04-05 01:10 G 42783907.34 42783907.55 42783907.77 0.0137 0.0008

Pluto 112426-05-04 16:46 G 42783937.06 42783937.20 42783937.37 0.0064 0.0044

Uranus 112426-11-17 08:37 G 42784133.64 42784133.86 42784134.07 0.0137 0.0008

Uranus 112427-07-01 15:20 G 42784359.93 42784360.14 42784360.36 0.0137 0.0024

Uranus 112428-02-12 22:03 G 42784586.22 42784586.42 42784586.63 0.0137 0.0039

Uranus 112428-09-26 04:32 G 42784812.50 42784812.69 42784812.90 0.0137 0.0054

Uranus 112429-05-10 11:01 G 42785038.78 42785038.96 42785039.15 0.0137 0.0069

Uranus 112429-12-22 17:15 G 42785265.06 42785265.22 42785265.40 0.0137 0.0084

Uranus 112430-08-05 23:15 G 42785491.34 42785491.47 42785491.64 0.0136 0.0099

Uranus 112431-03-20 05:15 G 42785717.62 42785717.72 42785717.86 0.0136 0.0113

Jupiter 112431-06-23 20:37 G 42785813.15 42785813.36 42785813.56 0.0520 0.0058

Uranus 112431-11-01 11:01 G 42785943.90 42785943.96 42785944.06 0.0136 0.0127

Saturn 112436-09-14 17:58 G 42787723.05 42787723.25 42787723.44 0.0267 0.0098

Saturn 112437-05-01 18:13 G 42787952.11 42787952.26 42787952.41 0.0267 0.0184

Mars 112437-09-23 02:08 G 42788096.42 42788096.59 42788096.76 0.1659 0.0438

Jupiter 112437-12-14 10:03 G 42788178.76 42788178.92 42788179.10 0.0510 0.0275

Jupiter 112443-02-26 12:13 G 42790078.84 42790079.01 42790079.20 0.0522 0.0234

Neptune 112445-12-12 11:44 G 42791098.96 42791098.99 42791099.06 0.0090 0.0087

Neptune 112446-07-26 00:56 G 42791324.44 42791324.54 42791324.66 0.0090 0.0077

Neptune 112447-03-08 13:54 G 42791549.95 42791550.08 42791550.24 0.0090 0.0067

Neptune 112447-10-20 03:06 G 42791775.47 42791775.63 42791775.81 0.0090 0.0057

Neptune 112448-06-01 16:18 G 42792001.00 42792001.18 42792001.37 0.0090 0.0047

Neptune 112449-01-13 05:15 G 42792226.53 42792226.72 42792226.92 0.0090 0.0037

Jupiter 112449-08-19 09:49 G 42792444.70 42792444.91 42792445.11 0.0508 0.0015

Neptune 112449-08-26 18:13 G 42792452.06 42792452.26 42792452.47 0.0090 0.0027

Neptune 112450-04-09 07:25 G 42792677.59 42792677.81 42792678.02 0.0090 0.0017

Neptune 112450-11-20 20:22 G 42792903.14 42792903.35 42792903.57 0.0090 0.0007

Neptune 112451-07-04 09:20 G 42793128.68 42793128.89 42793129.11 0.0090 0.0003

Saturn 112451-10-09 05:44 G 42793225.53 42793225.74 42793225.95 0.0293 0.0046

Neptune 112452-02-14 22:18 G 42793354.22 42793354.43 42793354.65 0.0090 0.0013

Neptune 112452-09-27 11:01 G 42793579.76 42793579.96 42793580.18 0.0090 0.0023

Neptune 112453-05-10 23:58 G 42793805.30 42793805.50 42793805.71 0.0090 0.0033

Neptune 112453-12-22 12:42 G 42794030.85 42794031.03 42794031.23 0.0090 0.0043

Neptune 112454-08-05 01:25 G 42794256.40 42794256.56 42794256.75 0.0090 0.0053

Jupiter 112454-11-01 04:32 G 42794344.69 42794344.69 42794344.71 0.0525 0.0524

Neptune 112455-03-18 14:08 G 42794481.95 42794482.09 42794482.26 0.0090 0.0063

Jupiter 112455-06-26 16:46 G 42794582.15 42794582.20 42794582.26 0.0515 0.0497

Neptune 112455-10-30 03:20 G 42794707.52 42794707.64 42794707.77 0.0090 0.0072

Neptune 112456-06-11 15:49 G 42794933.09 42794933.16 42794933.26 0.0090 0.0082

Earth 112458-07-25 16:03 G 42795707.02 42795707.17 42795707.31 0.2648 0.1007

Moon 112458-07-25 19:39 G 42795707.15 42795707.32 42795707.49 0.2642 0.0364 *

Jupiter 112461-04-24 08:08 G 42796710.67 42796710.84 42796711.02 0.0505 0.0251

Uranus 112464-08-30 01:39 G 42797934.52 42797934.57 42797934.65 0.0139 0.0133

Mars 112465-02-07 21:49 G 42798096.24 42798096.41 42798096.58 0.1881 0.0044

Uranus 112465-04-13 10:18 G 42798160.83 42798160.93 42798161.06 0.0139 0.0118

Uranus 112465-11-25 19:39 G 42798387.17 42798387.32 42798387.47 0.0140 0.0102

Saturn 112466-03-27 23:58 G 42798509.30 42798509.50 42798509.71 0.0268 0.0051

Uranus 112466-07-10 04:18 G 42798613.52 42798613.68 42798613.87 0.0140 0.0087

Saturn 112466-11-12 00:42 G 42798738.43 42798738.53 42798738.63 0.0267 0.0233

Uranus 112467-02-21 13:54 G 42798839.89 42798840.08 42798840.27 0.0140 0.0070

Jupiter 112467-03-01 10:03 G 42798847.73 42798847.92 42798848.11 0.0519 0.0215

Uranus 112467-10-05 23:15 G 42799066.27 42799066.47 42799066.68 0.0140 0.0054

Uranus 112468-05-19 09:06 G 42799292.67 42799292.88 42799293.09 0.0140 0.0037

Uranus 112468-12-31 18:56 G 42799519.07 42799519.29 42799519.51 0.0140 0.0021

Uranus 112469-08-15 04:46 G 42799745.49 42799745.70 42799745.92 0.0141 0.0005

Uranus 112470-03-29 15:06 G 42799971.91 42799972.13 42799972.35 0.0141 0.0013

Uranus 112470-11-11 01:25 G 42800198.35 42800198.56 42800198.78 0.0141 0.0030

Uranus 112471-06-25 11:58 G 42800424.80 42800425.00 42800425.21 0.0141 0.0048

Uranus 112472-02-06 22:46 G 42800651.25 42800651.45 42800651.64 0.0141 0.0065

Uranus 112472-09-20 09:20 G 42800877.72 42800877.89 42800878.08 0.0141 0.0082

Jupiter 112472-12-28 08:22 G 42800976.84 42800976.85 42800976.85 0.0502 0.0502

Uranus 112473-05-04 20:37 G 42801104.21 42801104.36 42801104.52 0.0142 0.0099

Jupiter 112473-08-21 20:51 G 42801213.26 42801213.37 42801213.49 0.0511 0.0421

Uranus 112473-12-17 07:39 G 42801330.70 42801330.82 42801330.96 0.0142 0.0116

Uranus 112474-07-31 19:10 G 42801557.22 42801557.30 42801557.38 0.0142 0.0132

Jupiter 112478-11-04 04:03 G 42803113.46 42803113.67 42803113.87 0.0521 0.0069

Saturn 112481-04-20 13:39 G 42804011.86 42804012.07 42804012.28 0.0292 0.0012

Jupiter 112485-04-26 20:08 G 42805479.15 42805479.34 42805479.53 0.0509 0.0158

Jupiter 112490-07-09 21:20 G 42807379.25 42807379.39 42807379.55 0.0524 0.0355

Saturn 112495-10-08 00:27 G 42809295.31 42809295.52 42809295.74 0.0267 0.0021

Saturn 112496-05-24 00:42 G 42809524.50 42809524.53 42809524.57 0.0267 0.0262

Jupiter 112496-12-30 20:22 G 42809745.15 42809745.35 42809745.55 0.0507 0.0099

Jupiter 112502-11-08 01:39 G 42811882.44 42811882.57 42811882.71 0.0517 0.0380

Mars 112503-07-22 12:13 G 42812138.84 42812139.01 42812139.19 0.1662 0.0143

Uranus 112504-12-19 18:13 G 42812655.26 42812655.26 42812655.30 0.0139 0.0138

Uranus 112505-08-03 02:51 G 42812881.54 42812881.62 42812881.73 0.0139 0.0123

Uranus 112506-03-17 11:44 G 42813107.85 42813107.99 42813108.12 0.0138 0.0107

Uranus 112506-10-29 19:54 G 42813334.17 42813334.33 42813334.50 0.0138 0.0091

Uranus 112507-06-13 04:03 G 42813560.49 42813560.67 42813560.85 0.0138 0.0076

Uranus 112508-01-25 11:44 G 42813786.80 42813786.99 42813787.20 0.0138 0.0060

Jupiter 112508-09-05 20:37 G 42814011.22 42814011.36 42814011.51 0.0504 0.0353

Uranus 112508-09-07 19:39 G 42814013.12 42814013.32 42814013.53 0.0138 0.0044

Uranus 112509-04-22 03:06 G 42814239.42 42814239.63 42814239.85 0.0138 0.0028

Uranus 112509-12-04 10:46 G 42814465.73 42814465.95 42814466.16 0.0137 0.0012

Uranus 112510-07-18 17:58 G 42814692.03 42814692.25 42814692.46 0.0137 0.0004

Saturn 112510-11-01 18:13 G 42814798.05 42814798.26 42814798.47 0.0293 0.0058

Uranus 112511-03-02 00:42 G 42814918.32 42814918.53 42814918.75 0.0137 0.0019

Uranus 112511-10-14 07:39 G 42815144.62 42815144.82 42815145.03 0.0137 0.0034

Uranus 112512-05-27 14:22 G 42815370.90 42815371.10 42815371.30 0.0137 0.0049

Uranus 112513-01-08 20:37 G 42815597.18 42815597.36 42815597.56 0.0137 0.0065

Uranus 112513-08-23 02:51 G 42815823.46 42815823.62 42815823.81 0.0137 0.0080

Uranus 112514-04-06 09:06 G 42816049.74 42816049.88 42816050.05 0.0137 0.0094

Jupiter 112514-07-13 18:42 G 42816148.08 42816148.28 42816148.49 0.0519 0.0099

Uranus 112514-11-18 15:34 G 42816276.02 42816276.15 42816276.28 0.0136 0.0108

Pluto 112515-03-26 11:58 G 42816403.83 42816404.00 42816404.22 0.0081 0.0040

Uranus 112515-07-02 20:51 G 42816502.30 42816502.37 42816502.49 0.0136 0.0123

Pluto 112515-11-06 23:30 G 42816629.31 42816629.48 42816629.69 0.0081 0.0044

Uranus 112516-02-14 02:51 G 42816728.61 42816728.62 42816728.65 0.0136 0.0136

Jupiter 112521-01-03 08:08 G 42818513.69 42818513.84 42818514.01 0.0510 0.0310

Saturn 112524-09-03 05:30 G 42819852.68 42819852.73 42819852.79 0.0268 0.0258

Saturn 112525-04-20 06:56 G 42820081.58 42820081.79 42820082.00 0.0268 0.0029

Jupiter 112526-03-18 10:32 G 42820413.75 42820413.94 42820414.13 0.0523 0.0197

Neptune 112527-06-15 18:56 G 42820868.26 42820868.29 42820868.37 0.0088 0.0085

Neptune 112528-01-27 08:22 G 42821093.74 42821093.85 42821093.97 0.0088 0.0075

Neptune 112528-09-08 21:06 G 42821319.25 42821319.38 42821319.54 0.0088 0.0066

Neptune 112529-04-22 10:03 G 42821544.77 42821544.92 42821545.11 0.0088 0.0057

Neptune 112529-12-03 23:15 G 42821770.30 42821770.47 42821770.67 0.0088 0.0047

Neptune 112530-07-17 12:13 G 42821995.82 42821996.01 42821996.22 0.0088 0.0038

Mars 112530-12-07 03:06 G 42822138.47 42822138.63 42822138.79 0.1876 0.0625

Neptune 112531-02-28 01:10 G 42822221.35 42822221.55 42822221.77 0.0088 0.0028

Neptune 112531-10-11 14:08 G 42822446.88 42822447.09 42822447.32 0.0088 0.0019

Neptune 112532-05-24 03:34 G 42822672.43 42822672.65 42822672.87 0.0088 0.0009

Jupiter 112532-09-08 07:10 G 42822779.60 42822779.80 42822780.00 0.0507 0.0047

Neptune 112533-01-04 16:32 G 42822897.97 42822898.19 42822898.42 0.0088 0.0001

Neptune 112533-08-18 05:30 G 42823123.51 42823123.73 42823123.96 0.0088 0.0010

Neptune 112534-03-31 18:27 G 42823349.06 42823349.27 42823349.49 0.0088 0.0020

Neptune 112534-11-12 07:25 G 42823574.61 42823574.81 42823575.03 0.0088 0.0030

Neptune 112535-06-25 20:51 G 42823800.17 42823800.37 42823800.57 0.0088 0.0039

Neptune 112536-02-06 09:34 G 42824025.73 42824025.90 42824026.10 0.0088 0.0049

Neptune 112536-09-18 22:32 G 42824251.30 42824251.44 42824251.63 0.0088 0.0059

Neptune 112537-05-02 11:58 G 42824476.88 42824477.00 42824477.16 0.0088 0.0068

Jupiter 112537-11-21 03:20 G 42824679.58 42824679.64 42824679.72 0.0525 0.0486

Neptune 112537-12-14 00:56 G 42824702.47 42824702.54 42824702.67 0.0088 0.0078

Neptune 112538-07-27 14:22 G 42824928.09 42824928.10 42824928.15 0.0088 0.0087

Saturn 112539-09-27 04:18 G 42825354.59 42825354.68 42825354.79 0.0292 0.0255

Saturn 112540-05-14 04:03 G 42825584.47 42825584.67 42825584.86 0.0292 0.0121

Jupiter 112544-05-14 06:27 G 42827045.58 42827045.77 42827045.95 0.0505 0.0213

Uranus 112548-04-30 09:34 G 42828492.87 42828492.90 42828492.93 0.0139 0.0138

Uranus 112548-12-12 17:58 G 42828719.16 42828719.25 42828719.36 0.0139 0.0123

Uranus 112549-07-27 02:37 G 42828945.48 42828945.61 42828945.76 0.0139 0.0108

Uranus 112550-03-10 11:44 G 42829171.83 42829171.99 42829172.16 0.0140 0.0092

Jupiter 112550-03-21 10:32 G 42829182.76 42829182.94 42829183.12 0.0518 0.0262

Uranus 112550-10-22 20:51 G 42829398.19 42829398.37 42829398.56 0.0140 0.0076

Uranus 112551-06-06 05:58 G 42829624.57 42829624.75 42829624.96 0.0140 0.0060

Uranus 112552-01-18 15:49 G 42829850.95 42829851.16 42829851.37 0.0140 0.0043

Uranus 112552-09-01 01:25 G 42830077.35 42830077.56 42830077.78 0.0140 0.0027

Uranus 112553-04-15 11:30 G 42830303.76 42830303.98 42830304.20 0.0141 0.0010

Uranus 112553-11-27 21:34 G 42830530.18 42830530.40 42830530.62 0.0141 0.0007

Saturn 112554-03-16 06:56 G 42830638.68 42830638.79 42830638.91 0.0268 0.0224

Uranus 112554-07-12 07:39 G 42830756.61 42830756.82 42830757.04 0.0141 0.0025

Saturn 112554-10-31 08:22 G 42830867.65 42830867.85 42830868.06 0.0267 0.0062

Uranus 112555-02-23 17:58 G 42830983.05 42830983.25 42830983.47 0.0141 0.0042

Uranus 112555-10-08 04:18 G 42831209.50 42831209.68 42831209.90 0.0141 0.0059

Jupiter 112556-01-18 06:56 G 42831311.72 42831311.79 42831311.87 0.0503 0.0464

Uranus 112556-05-21 15:34 G 42831435.96 42831436.15 42831436.33 0.0141 0.0076

Jupiter 112556-09-10 20:22 G 42831548.27 42831548.35 42831548.44 0.0512 0.0465

Uranus 112557-01-03 02:22 G 42831662.44 42831662.60 42831662.77 0.0141 0.0093

Uranus 112557-08-17 13:10 G 42831888.93 42831889.05 42831889.20 0.0142 0.0110

Uranus 112558-04-01 00:13 G 42832115.43 42832115.51 42832115.63 0.0142 0.0127

Jupiter 112561-11-24 02:51 G 42833448.42 42833448.62 42833448.83 0.0521 0.0026

Jupiter 112568-05-16 19:54 G 42835814.14 42835814.33 42835814.52 0.0509 0.0203

Saturn 112569-04-08 08:51 G 42836140.73 42836140.87 42836141.02 0.0292 0.0211

Mars 112569-05-18 22:18 G 42836181.25 42836181.43 42836181.61 0.1666 0.0158

Saturn 112569-11-24 08:37 G 42836370.69 42836370.86 42836371.04 0.0293 0.0168

Moon 112572-01-31 03:20 G 42837168.58 42837168.64 42837168.70 0.2689 0.2431

Jupiter 112573-07-29 18:42 G 42837714.13 42837714.28 42837714.45 0.0523 0.0318

Jupiter 112580-01-20 18:27 G 42840080.07 42840080.27 42840080.47 0.0506 0.0063

Moon 112580-01-28 23:15 G 42840088.33 42840088.47 42840088.62 0.2692 0.0523

Earth 112580-01-29 00:13 G 42840088.36 42840088.51 42840088.66 0.2684 0.0757 *

Saturn 112583-09-26 13:39 G 42841424.92 42841425.07 42841425.24 0.0268 0.0175

Saturn 112584-05-12 15:06 G 42841653.94 42841654.13 42841654.32 0.0268 0.0112

Jupiter 112585-11-26 22:46 G 42842217.33 42842217.45 42842217.57 0.0517 0.0415

Uranus 112589-04-02 11:15 G 42843439.90 42843439.97 42843440.06 0.0139 0.0128

Uranus 112589-11-14 19:39 G 42843666.21 42843666.32 42843666.46 0.0139 0.0113

Uranus 112590-06-29 04:18 G 42843892.53 42843892.68 42843892.84 0.0138 0.0097

Uranus 112591-02-10 12:27 G 42844118.85 42844119.02 42844119.20 0.0138 0.0081

Uranus 112591-09-24 20:37 G 42844345.17 42844345.36 42844345.56 0.0138 0.0065

Jupiter 112591-09-25 17:58 G 42844346.09 42844346.25 42844346.41 0.0504 0.0320

Uranus 112592-05-08 04:32 G 42844571.49 42844571.69 42844571.90 0.0138 0.0049

Uranus 112592-12-20 11:58 G 42844797.80 42844798.00 42844798.22 0.0138 0.0034

Uranus 112593-08-03 19:39 G 42845024.11 42845024.32 42845024.54 0.0138 0.0017

Uranus 112594-03-18 02:51 G 42845250.41 42845250.62 42845250.84 0.0137 0.0003

Uranus 112594-10-30 10:03 G 42845476.71 42845476.92 42845477.14 0.0137 0.0014

Uranus 112595-06-13 17:01 G 42845703.00 42845703.21 42845703.42 0.0137 0.0029

Uranus 112596-01-25 23:30 G 42845929.29 42845929.48 42845929.69 0.0137 0.0045

Uranus 112596-09-08 05:58 G 42846155.57 42846155.75 42846155.95 0.0137 0.0060

Mars 112596-10-03 09:06 G 42846180.75 42846180.88 42846181.01 0.1872 0.1214

Uranus 112597-04-22 12:13 G 42846381.85 42846382.01 42846382.21 0.0137 0.0075

Jupiter 112597-08-01 16:32 G 42846482.99 42846483.19 42846483.39 0.0520 0.0133

Uranus 112597-12-04 18:42 G 42846608.13 42846608.28 42846608.45 0.0137 0.0089

Uranus 112598-07-19 00:42 G 42846834.41 42846834.53 42846834.68 0.0136 0.0104

Saturn 112598-10-19 20:08 G 42846927.16 42846927.34 42846927.53 0.0292 0.0143

Uranus 112599-03-02 06:42 G 42847060.69 42847060.78 42847060.90 0.0136 0.0118

Saturn 112599-06-06 19:54 G 42847157.21 42847157.33 42847157.46 0.0292 0.0235

Uranus 112599-10-14 12:27 G 42847286.98 42847287.02 42847287.09 0.0136 0.0132

Jupiter 112604-01-24 05:15 G 42848848.58 42848848.72 42848848.88 0.0510 0.0347

Jupiter 112609-04-07 10:18 G 42850748.74 42850748.93 42850749.13 0.0522 0.0151

Neptune 112610-03-17 23:01 G 42851093.42 42851093.46 42851093.50 0.0089 0.0088

Neptune 112610-10-29 11:44 G 42851318.91 42851318.99 42851319.11 0.0090 0.0079

Neptune 112611-06-12 00:42 G 42851544.41 42851544.53 42851544.69 0.0090 0.0069

Neptune 112612-01-23 13:54 G 42851769.93 42851770.08 42851770.26 0.0090 0.0059

Neptune 112612-09-05 02:51 G 42851995.45 42851995.62 42851995.82 0.0090 0.0049

Saturn 112613-04-08 16:32 G 42852211.01 42852211.19 42852211.37 0.0268 0.0138

Neptune 112613-04-18 16:03 G 42852220.98 42852221.17 42852221.37 0.0090 0.0039

Saturn 112613-11-23 17:30 G 42852440.06 42852440.23 42852440.41 0.0267 0.0147

Neptune 112613-11-30 05:15 G 42852446.52 42852446.72 42852446.93 0.0090 0.0029

Neptune 112614-07-13 18:13 G 42852672.06 42852672.26 42852672.48 0.0090 0.0019

Neptune 112615-02-24 07:25 G 42852897.59 42852897.81 42852898.02 0.0090 0.0009

Jupiter 112615-09-29 05:15 G 42853114.52 42853114.72 42853114.92 0.0508 0.0086

Neptune 112615-10-07 20:22 G 42853123.13 42853123.35 42853123.57 0.0090 0.0001

Neptune 112616-05-20 09:20 G 42853348.68 42853348.89 42853349.11 0.0090 0.0011

Neptune 112616-12-31 22:03 G 42853574.22 42853574.42 42853574.64 0.0090 0.0022

Neptune 112617-08-14 11:01 G 42853799.77 42853799.96 42853800.18 0.0090 0.0032

Neptune 112618-03-27 23:44 G 42854025.32 42854025.49 42854025.70 0.0090 0.0042

Neptune 112618-11-08 13:10 G 42854250.87 42854251.05 42854251.23 0.0090 0.0051

Neptune 112619-06-22 01:54 G 42854476.43 42854476.58 42854476.75 0.0090 0.0061

Neptune 112620-02-02 14:37 G 42854701.99 42854702.11 42854702.25 0.0090 0.0071

Neptune 112620-09-15 03:06 G 42854927.56 42854927.63 42854927.75 0.0090 0.0081

Jupiter 112620-12-11 02:08 G 42855014.49 42855014.59 42855014.70 0.0524 0.0444

Jupiter 112627-06-04 05:15 G 42857380.54 42857380.72 42857380.92 0.0505 0.0173

Saturn 112628-05-02 01:10 G 42857713.35 42857713.55 42857713.75 0.0292 0.0097

Saturn 112628-12-18 00:56 G 42857943.49 42857943.54 42857943.59 0.0293 0.0283

Uranus 112632-08-13 00:56 G 42859277.47 42859277.54 42859277.64 0.0139 0.0128

Uranus 112633-03-27 10:03 G 42859503.79 42859503.92 42859504.04 0.0139 0.0113

Jupiter 112633-04-10 07:10 G 42859517.63 42859517.80 42859517.97 0.0518 0.0298

Uranus 112633-11-08 18:27 G 42859730.13 42859730.27 42859730.44 0.0140 0.0098

Uranus 112634-06-23 03:34 G 42859956.49 42859956.65 42859956.84 0.0140 0.0082

Uranus 112635-02-04 12:41 G 42860182.85 42860183.03 42860183.24 0.0140 0.0066

Mars 112635-03-17 08:22 G 42860223.68 42860223.85 42860224.02 0.1669 0.0462

Uranus 112635-09-18 22:17 G 42860409.23 42860409.43 42860409.64 0.0140 0.0049

Uranus 112636-05-02 08:08 G 42860635.63 42860635.84 42860636.05 0.0140 0.0032

Uranus 112636-12-14 17:58 G 42860862.03 42860862.25 42860862.46 0.0140 0.0016

Uranus 112637-07-29 03:49 G 42861088.44 42861088.66 42861088.88 0.0141 0.0002

Uranus 112638-03-12 13:39 G 42861314.86 42861315.07 42861315.30 0.0141 0.0019

Uranus 112638-10-24 23:58 G 42861541.29 42861541.50 42861541.72 0.0141 0.0036

Jupiter 112639-02-07 05:01 G 42861646.61 42861646.71 42861646.82 0.0503 0.0429

Uranus 112639-06-08 10:32 G 42861767.74 42861767.94 42861768.15 0.0141 0.0053

Jupiter 112639-10-01 17:44 G 42861883.21 42861883.24 42861883.29 0.0511 0.0499

Uranus 112640-01-20 21:20 G 42861994.20 42861994.39 42861994.58 0.0141 0.0070

Uranus 112640-09-03 08:08 G 42862220.67 42862220.84 42862221.01 0.0141 0.0087

Uranus 112641-04-17 18:56 G 42862447.15 42862447.29 42862447.45 0.0142 0.0104

Uranus 112641-11-30 05:58 G 42862673.65 42862673.75 42862673.88 0.0142 0.0121

Uranus 112642-07-14 17:15 G 42862900.19 42862900.22 42862900.29 0.0142 0.0138

Saturn 112642-10-19 23:15 G 42862997.27 42862997.47 42862997.67 0.0268 0.0089

Saturn 112643-06-06 00:13 G 42863226.37 42863226.51 42863226.66 0.0268 0.0197

Jupiter 112644-12-13 22:17 G 42863783.23 42863783.43 42863783.64 0.0521 0.0012

Jupiter 112651-06-06 16:17 G 42866149.00 42866149.18 42866149.36 0.0509 0.0234

Jupiter 112656-08-18 15:05 G 42868048.96 42868049.13 42868049.30 0.0524 0.0286

Saturn 112657-11-12 13:25 G 42868499.85 42868500.06 42868500.28 0.0292 0.0027

Mars 112662-08-01 14:51 G 42870223.08 42870223.12 42870223.15 0.1867 0.1818

Jupiter 112663-02-09 14:22 G 42870414.89 42870415.10 42870415.30 0.0506 0.0033

Jupiter 112668-12-16 21:49 G 42872552.32 42872552.41 42872552.50 0.0517 0.0457

Pluto 112670-07-29 17:15 G 42873142.14 42873142.22 42873142.34 0.0063 0.0056

Pluto 112671-03-11 20:22 G 42873367.16 42873367.35 42873367.58 0.0063 0.0019

Pluto 112671-10-22 23:44 G 42873592.30 42873592.49 42873592.71 0.0064 0.0020

Saturn 112672-05-01 02:51 G 42873783.41 42873783.62 42873783.83 0.0268 0.0050

Pluto 112672-06-04 02:51 G 42873817.56 42873817.62 42873817.72 0.0064 0.0059

Uranus 112672-12-01 19:10 G 42873998.25 42873998.30 42873998.36 0.0139 0.0133

Saturn 112672-12-16 03:49 G 42874012.56 42874012.66 42874012.76 0.0267 0.0235

Uranus 112673-07-16 03:34 G 42874224.55 42874224.65 42874224.78 0.0139 0.0118

Uranus 112674-02-27 12:27 G 42874450.88 42874451.02 42874451.17 0.0138 0.0102

Uranus 112674-10-11 20:37 G 42874677.21 42874677.36 42874677.55 0.0138 0.0087

Jupiter 112674-10-15 14:37 G 42874680.95 42874681.11 42874681.28 0.0504 0.0287

Uranus 112675-05-26 05:01 G 42874903.53 42874903.71 42874903.90 0.0138 0.0070

Uranus 112676-01-07 12:56 G 42875129.85 42875130.04 42875130.24 0.0138 0.0054

Uranus 112676-08-20 20:37 G 42875356.16 42875356.36 42875356.58 0.0138 0.0039

Uranus 112677-04-04 04:17 G 42875582.47 42875582.68 42875582.90 0.0138 0.0023

Uranus 112677-11-16 11:44 G 42875808.78 42875808.99 42875809.21 0.0137 0.0008

Uranus 112678-06-30 18:56 G 42876035.08 42876035.29 42876035.51 0.0137 0.0010

Uranus 112679-02-12 01:53 G 42876261.37 42876261.58 42876261.80 0.0137 0.0025

Uranus 112679-09-26 08:37 G 42876487.66 42876487.86 42876488.07 0.0137 0.0040

Uranus 112680-05-09 15:20 G 42876713.95 42876714.14 42876714.34 0.0137 0.0055

Jupiter 112680-08-21 14:22 G 42876817.91 42876818.10 42876818.30 0.0519 0.0174

Uranus 112680-12-21 22:03 G 42876940.23 42876940.42 42876940.60 0.0137 0.0070

Uranus 112681-08-05 04:03 G 42877166.51 42877166.67 42877166.85 0.0137 0.0085

Uranus 112682-03-19 10:03 G 42877392.79 42877392.92 42877393.09 0.0137 0.0100

Uranus 112682-10-31 16:32 G 42877619.08 42877619.19 42877619.31 0.0136 0.0114

Uranus 112683-06-14 22:17 G 42877845.37 42877845.43 42877845.51 0.0136 0.0128

Jupiter 112687-02-12 03:49 G 42879183.54 42879183.66 42879183.80 0.0511 0.0388

Saturn 112687-05-25 17:58 G 42879286.04 42879286.25 42879286.46 0.0292 0.0019

Neptune 112691-09-18 05:44 G 42880862.72 42880862.74 42880862.81 0.0088 0.0086

Jupiter 112692-04-26 06:41 G 42881083.58 42881083.78 42881083.98 0.0522 0.0116

Neptune 112692-04-30 19:25 G 42881088.20 42881088.31 42881088.42 0.0088 0.0076

Neptune 112692-12-12 08:08 G 42881313.71 42881313.84 42881313.99 0.0088 0.0067

Neptune 112693-07-25 20:51 G 42881539.22 42881539.37 42881539.56 0.0088 0.0058

Moon 112693-07-29 21:34 G 42881543.28 42881543.40 42881543.52 0.2643 0.1816

Neptune 112694-03-08 10:03 G 42881764.74 42881764.92 42881765.11 0.0088 0.0048

Mars 112694-08-01 05:29 G 42881910.70 42881910.73 42881910.77 0.1883 0.1831

Neptune 112694-10-19 22:46 G 42881990.27 42881990.45 42881990.67 0.0088 0.0039

Neptune 112695-06-02 12:13 G 42882215.81 42882216.01 42882216.23 0.0088 0.0029

Neptune 112696-01-14 01:10 G 42882441.34 42882441.55 42882441.77 0.0088 0.0020

Neptune 112696-08-26 14:22 G 42882666.88 42882667.10 42882667.32 0.0088 0.0010

Neptune 112697-04-09 03:20 G 42882892.42 42882892.64 42882892.86 0.0088 0.0001

Neptune 112697-11-20 16:17 G 42883117.96 42883118.18 42883118.41 0.0088 0.0009

Neptune 112698-07-04 05:15 G 42883343.51 42883343.72 42883343.95 0.0088 0.0019

Jupiter 112698-10-18 02:51 G 42883449.42 42883449.62 42883449.82 0.0508 0.0121

Neptune 112699-02-14 18:13 G 42883569.06 42883569.26 42883569.48 0.0088 0.0029

Neptune 112699-09-28 07:25 G 42883794.61 42883794.81 42883795.02 0.0088 0.0038

Neptune 112700-05-11 20:22 G 42884020.18 42884020.35 42884020.55 0.0088 0.0048

Neptune 112700-12-23 09:34 G 42884245.74 42884245.90 42884246.08 0.0088 0.0057

Mars 112701-01-12 18:27 G 42884266.11 42884266.27 42884266.42 0.1672 0.0772

Moon 112701-07-28 10:46 G 42884462.82 42884462.95 42884463.08 0.2651 0.1542

Earth 112701-07-28 16:32 G 42884463.04 42884463.19 42884463.34 0.2648 0.1015 *

Neptune 112701-08-05 22:17 G 42884471.31 42884471.43 42884471.60 0.0088 0.0067

Saturn 112701-11-12 09:20 G 42884569.68 42884569.89 42884570.11 0.0268 0.0006

Neptune 112702-03-19 11:44 G 42884696.89 42884696.99 42884697.11 0.0088 0.0076

Neptune 112702-10-31 00:27 G 42884922.50 42884922.52 42884922.60 0.0088 0.0086

Jupiter 112703-12-31 20:37 G 42885349.24 42885349.36 42885349.48 0.0525 0.0418

Jupiter 112710-06-24 01:53 G 42887715.38 42887715.58 42887715.77 0.0505 0.0140

Uranus 112716-04-13 08:51 G 42889835.83 42889835.87 42889835.95 0.0139 0.0133

Saturn 112716-04-20 08:08 G 42889842.80 42889842.84 42889842.89 0.0291 0.0284

Jupiter 112716-04-30 03:05 G 42889852.47 42889852.63 42889852.79 0.0518 0.0329

Uranus 112716-11-25 17:29 G 42890062.13 42890062.23 42890062.36 0.0139 0.0118

Saturn 112716-12-06 07:10 G 42890072.60 42890072.80 42890073.01 0.0292 0.0092

Uranus 112717-07-10 02:22 G 42890288.46 42890288.60 42890288.75 0.0139 0.0103

Uranus 112718-02-21 11:15 G 42890514.81 42890514.97 42890515.14 0.0140 0.0087

Uranus 112718-10-05 20:08 G 42890741.17 42890741.34 42890741.54 0.0140 0.0071

Uranus 112719-05-20 05:44 G 42890967.54 42890967.74 42890967.94 0.0140 0.0054

Uranus 112720-01-01 15:05 G 42891193.92 42891194.13 42891194.34 0.0140 0.0038

Uranus 112720-08-15 00:41 G 42891420.32 42891420.53 42891420.75 0.0140 0.0021

Uranus 112721-03-29 10:32 G 42891646.72 42891646.94 42891647.16 0.0140 0.0005

Uranus 112721-11-10 20:37 G 42891873.14 42891873.36 42891873.58 0.0141 0.0013

Jupiter 112722-02-26 23:44 G 42891981.38 42891981.49 42891981.62 0.0503 0.0401

Uranus 112722-06-25 06:41 G 42892099.57 42892099.78 42892100.00 0.0141 0.0030

Uranus 112723-02-06 17:01 G 42892326.01 42892326.21 42892326.42 0.0141 0.0047

Uranus 112723-09-21 03:20 G 42892552.46 42892552.64 42892552.85 0.0141 0.0065

Uranus 112724-05-04 14:08 G 42892778.92 42892779.09 42892779.28 0.0141 0.0082

Uranus 112724-12-17 01:10 G 42893005.40 42893005.55 42893005.72 0.0141 0.0098

Uranus 112725-07-31 11:58 G 42893231.89 42893232.00 42893232.15 0.0142 0.0116

Uranus 112726-03-14 23:29 G 42893458.41 42893458.48 42893458.56 0.0142 0.0132

Jupiter 112728-01-03 21:20 G 42894118.19 42894118.39 42894118.59 0.0521 0.0048

Saturn 112730-10-08 12:27 G 42895126.94 42895127.02 42895127.10 0.0268 0.0247

Saturn 112731-05-25 13:53 G 42895355.87 42895356.08 42895356.29 0.0268 0.0040

Mars 112733-01-11 19:10 G 42895953.27 42895953.30 42895953.34 0.1661 0.1621

Jupiter 112734-06-26 12:27 G 42896483.85 42896484.02 42896484.20 0.0509 0.0268

Jupiter 112739-09-08 13:25 G 42898383.89 42898384.06 42898384.25 0.0523 0.0244

Saturn 112745-10-31 12:13 G 42900628.90 42900629.01 42900629.13 0.0292 0.0241

Jupiter 112746-03-01 12:27 G 42900749.82 42900750.02 42900750.22 0.0507 0.0008

Saturn 112746-06-18 11:29 G 42900858.79 42900858.98 42900859.17 0.0292 0.0137

Jupiter 112752-01-06 17:44 G 42902887.19 42902887.24 42902887.31 0.0516 0.0491

Uranus 112756-08-02 02:37 G 42904556.61 42904556.61 42904556.63 0.0139 0.0139

Uranus 112757-03-16 11:29 G 42904782.89 42904782.98 42904783.09 0.0139 0.0123

Uranus 112757-10-28 20:08 G 42905009.22 42905009.34 42905009.49 0.0139 0.0108

Jupiter 112757-11-04 12:27 G 42905015.85 42905016.02 42905016.20 0.0504 0.0251

Uranus 112758-06-12 04:46 G 42905235.54 42905235.70 42905235.87 0.0138 0.0091

Uranus 112759-01-24 12:56 G 42905461.87 42905462.04 42905462.23 0.0138 0.0076

Uranus 112759-09-07 21:05 G 42905688.19 42905688.38 42905688.58 0.0138 0.0059

Saturn 112760-04-19 17:58 G 42905913.12 42905913.25 42905913.40 0.0268 0.0202

Uranus 112760-04-21 04:46 G 42905914.51 42905914.70 42905914.92 0.0138 0.0044

Mars 112760-05-29 10:46 G 42905952.82 42905952.95 42905953.08 0.1878 0.1190

Uranus 112760-12-03 12:41 G 42906140.82 42906141.03 42906141.25 0.0138 0.0028

Saturn 112760-12-04 19:53 G 42906142.13 42906142.33 42906142.53 0.0268 0.0086

Pluto 112761-04-26 00:41 G 42906284.31 42906284.53 42906284.76 0.0081 0.0009

Uranus 112761-07-17 20:08 G 42906367.13 42906367.34 42906367.56 0.0138 0.0012

Pluto 112761-12-07 11:29 G 42906509.92 42906509.98 42906510.10 0.0081 0.0074

Uranus 112762-03-01 03:20 G 42906593.43 42906593.64 42906593.86 0.0137 0.0005

Uranus 112762-10-13 10:32 G 42906819.73 42906819.94 42906820.16 0.0137 0.0020

Uranus 112763-05-27 17:29 G 42907046.02 42907046.23 42907046.44 0.0137 0.0035

Jupiter 112763-09-11 08:51 G 42907152.68 42907152.87 42907153.06 0.0519 0.0201

Uranus 112764-01-09 00:13 G 42907272.31 42907272.51 42907272.71 0.0137 0.0050

Uranus 112764-08-22 06:27 G 42907498.59 42907498.77 42907498.97 0.0137 0.0066

Uranus 112765-04-05 12:56 G 42907724.88 42907725.04 42907725.22 0.0137 0.0081

Uranus 112765-11-17 19:39 G 42907951.16 42907951.32 42907951.47 0.0137 0.0095

Uranus 112766-07-02 01:25 G 42908177.45 42908177.56 42908177.70 0.0136 0.0110

Mars 112766-11-10 04:03 G 42908308.54 42908308.67 42908308.81 0.1676 0.1087

Uranus 112767-02-13 07:25 G 42908403.73 42908403.81 42908403.91 0.0136 0.0124

Jupiter 112770-03-04 00:13 G 42909518.40 42909518.51 42909518.63 0.0510 0.0419

Neptune 112774-06-20 09:49 G 42911087.91 42911087.91 42911087.92 0.0090 0.0089

Neptune 112775-01-31 22:46 G 42911313.36 42911313.45 42911313.56 0.0090 0.0080

Saturn 112775-05-14 01:10 G 42911415.38 42911415.55 42911415.72 0.0292 0.0170

Jupiter 112775-05-17 02:08 G 42911418.38 42911418.59 42911418.79 0.0522 0.0087

Neptune 112775-09-14 11:58 G 42911538.87 42911539.00 42911539.14 0.0090 0.0070

Saturn 112775-12-30 00:13 G 42911645.37 42911645.51 42911645.67 0.0292 0.0209

Neptune 112776-04-27 00:27 G 42911764.39 42911764.52 42911764.71 0.0090 0.0061

Neptune 112776-12-08 13:39 G 42911989.91 42911990.07 42911990.27 0.0090 0.0051

Neptune 112777-07-22 02:51 G 42912215.44 42912215.62 42912215.83 0.0090 0.0041

Neptune 112778-03-04 15:49 G 42912440.97 42912441.16 42912441.38 0.0090 0.0031

Neptune 112778-10-16 05:01 G 42912666.50 42912666.71 42912666.93 0.0090 0.0021

Neptune 112779-05-29 17:58 G 42912892.04 42912892.25 42912892.47 0.0090 0.0011

Neptune 112780-01-10 07:10 G 42913117.58 42913117.80 42913118.02 0.0090 0.0001

Neptune 112780-08-22 19:53 G 42913343.12 42913343.33 42913343.55 0.0090 0.0010

Neptune 112781-04-05 08:51 G 42913568.67 42913568.87 42913569.09 0.0090 0.0020

Jupiter 112781-11-06 21:20 G 42913784.20 42913784.39 42913784.59 0.0508 0.0150

Neptune 112781-11-16 21:49 G 42913794.22 42913794.41 42913794.63 0.0090 0.0030

Neptune 112782-06-30 10:46 G 42914019.77 42914019.95 42914020.16 0.0090 0.0040

Neptune 112783-02-10 23:29 G 42914245.32 42914245.48 42914245.68 0.0090 0.0050

Neptune 112783-09-24 12:41 G 42914470.87 42914471.03 42914471.20 0.0090 0.0059

Neptune 112784-05-07 01:25 G 42914696.44 42914696.56 42914696.71 0.0090 0.0069

Neptune 112784-12-18 14:22 G 42914922.01 42914922.10 42914922.22 0.0090 0.0079

Neptune 112785-08-01 02:51 G 42915147.62 42915147.62 42915147.68 0.0090 0.0089

Jupiter 112787-01-19 19:39 G 42915684.18 42915684.32 42915684.47 0.0525 0.0374

Saturn 112789-10-30 23:58 G 42916699.33 42916699.50 42916699.68 0.0268 0.0157

Saturn 112790-06-17 01:10 G 42916928.37 42916928.55 42916928.74 0.0268 0.0130

Jupiter 112793-07-12 21:20 G 42918050.19 42918050.39 42918050.59 0.0506 0.0109

Mars 112798-11-09 04:46 G 42919995.60 42919995.70 42919995.81 0.1665 0.1318

Jupiter 112799-05-20 01:25 G 42920187.42 42920187.56 42920187.70 0.0518 0.0370

Uranus 112799-12-12 16:46 G 42920394.19 42920394.20 42920394.24 0.0139 0.0138

Uranus 112800-07-26 01:10 G 42920620.46 42920620.55 42920620.66 0.0139 0.0123

Uranus 112801-03-09 09:49 G 42920846.79 42920846.91 42920847.06 0.0139 0.0108

Uranus 112801-10-21 18:56 G 42921073.12 42921073.29 42921073.45 0.0140 0.0092

Uranus 112802-06-05 03:49 G 42921299.48 42921299.66 42921299.84 0.0140 0.0076

Uranus 112803-01-17 12:41 G 42921525.84 42921526.03 42921526.24 0.0140 0.0060

Uranus 112803-08-31 22:17 G 42921752.22 42921752.43 42921752.63 0.0140 0.0043

Uranus 112804-04-14 07:53 G 42921978.61 42921978.83 42921979.04 0.0140 0.0027

Saturn 112804-11-23 04:32 G 42922201.50 42922201.69 42922201.88 0.0292 0.0128

Uranus 112804-11-26 17:29 G 42922205.01 42922205.23 42922205.45 0.0140 0.0010

Jupiter 112805-03-17 21:49 G 42922316.27 42922316.41 42922316.55 0.0503 0.0363

Uranus 112805-07-11 03:20 G 42922431.42 42922431.64 42922431.86 0.0141 0.0007

Saturn 112805-07-11 04:03 G 42922431.57 42922431.67 42922431.78 0.0293 0.0253 *

Uranus 112806-02-22 13:10 G 42922657.84 42922658.05 42922658.27 0.0141 0.0025

Uranus 112806-10-06 23:29 G 42922884.28 42922884.48 42922884.70 0.0141 0.0042

Uranus 112807-05-21 10:03 G 42923110.73 42923110.92 42923111.13 0.0141 0.0059

Uranus 112808-01-02 20:37 G 42923337.19 42923337.36 42923337.56 0.0141 0.0076

Uranus 112808-08-16 07:25 G 42923563.66 42923563.81 42923563.99 0.0141 0.0093

Uranus 112809-03-30 18:13 G 42923790.14 42923790.26 42923790.42 0.0141 0.0111

Uranus 112809-11-12 05:44 G 42924016.65 42924016.74 42924016.84 0.0142 0.0127

Jupiter 112811-01-22 17:58 G 42924453.05 42924453.25 42924453.45 0.0520 0.0084

Jupiter 112817-07-15 10:46 G 42926818.79 42926818.95 42926819.11 0.0509 0.0306

Saturn 112819-05-13 04:46 G 42927485.51 42927485.70 42927485.89 0.0268 0.0114

Saturn 112819-12-28 05:44 G 42927714.59 42927714.74 42927714.91 0.0268 0.0174

Jupiter 112822-09-27 08:08 G 42928718.65 42928718.84 42928719.02 0.0523 0.0216

Earth 112823-01-31 01:53 G 42928844.43 42928844.58 42928844.73 0.2684 0.0770

Moon 112823-01-31 05:58 G 42928844.59 42928844.75 42928844.91 0.2679 0.0372 *

Mars 112826-03-26 16:17 G 42929995.02 42929995.18 42929995.34 0.1874 0.0558

Jupiter 112829-03-20 09:20 G 42931084.69 42931084.89 42931085.09 0.0507 0.0043

Mars 112832-09-06 13:53 G 42932350.98 42932351.08 42932351.17 0.1679 0.1415

Jupiter 112834-06-02 00:13 G 42932984.47 42932984.51 42932984.57 0.0526 0.0509

Saturn 112834-06-05 17:15 G 42932988.01 42932988.22 42932988.43 0.0292 0.0057

Uranus 112840-11-13 19:39 G 42935341.25 42935341.32 42935341.41 0.0139 0.0128

Jupiter 112840-11-23 06:41 G 42935350.60 42935350.78 42935350.97 0.0504 0.0224

Uranus 112841-06-28 04:03 G 42935567.57 42935567.67 42935567.82 0.0139 0.0113

Uranus 112842-02-09 12:56 G 42935793.89 42935794.04 42935794.20 0.0138 0.0096

Uranus 112842-09-23 21:20 G 42936020.22 42936020.39 42936020.57 0.0138 0.0080

Uranus 112843-05-08 05:29 G 42936246.55 42936246.73 42936246.93 0.0138 0.0065

Uranus 112843-12-20 13:39 G 42936472.86 42936473.07 42936473.27 0.0138 0.0048

Uranus 112844-08-02 21:05 G 42936699.18 42936699.38 42936699.60 0.0138 0.0033

Uranus 112845-03-17 04:46 G 42936925.49 42936925.70 42936925.92 0.0138 0.0017

Uranus 112845-10-29 12:13 G 42937151.80 42937152.01 42937152.23 0.0138 0.0003

Uranus 112846-06-12 19:25 G 42937378.10 42937378.31 42937378.53 0.0137 0.0015

Jupiter 112846-09-30 08:22 G 42937487.67 42937487.85 42937488.03 0.0519 0.0248

Uranus 112847-01-25 02:22 G 42937604.39 42937604.60 42937604.81 0.0137 0.0031

Uranus 112847-09-08 09:05 G 42937830.68 42937830.88 42937831.09 0.0137 0.0046

Uranus 112848-04-21 15:49 G 42938056.97 42938057.16 42938057.36 0.0137 0.0061

Saturn 112848-11-22 11:01 G 42938271.76 42938271.96 42938272.17 0.0268 0.0067

Uranus 112848-12-03 22:32 G 42938283.26 42938283.44 42938283.62 0.0137 0.0076

Saturn 112849-07-09 11:44 G 42938500.87 42938500.99 42938501.11 0.0267 0.0218

Uranus 112849-07-18 04:46 G 42938509.55 42938509.70 42938509.87 0.0137 0.0091

Uranus 112850-03-01 10:46 G 42938735.83 42938735.95 42938736.10 0.0136 0.0106

Uranus 112850-10-13 17:01 G 42938962.12 42938962.21 42938962.32 0.0136 0.0120

Uranus 112851-05-27 23:01 G 42939188.43 42939188.46 42939188.51 0.0136 0.0134

Jupiter 112852-07-29 07:10 G 42939616.74 42939616.80 42939616.87 0.0502 0.0475

Jupiter 112853-03-22 19:53 G 42939853.25 42939853.33 42939853.43 0.0511 0.0453

Neptune 112855-12-21 16:32 G 42940857.18 42940857.19 42940857.23 0.0088 0.0087

Neptune 112856-08-03 05:15 G 42941082.64 42941082.72 42941082.84 0.0088 0.0078

Neptune 112857-03-16 17:58 G 42941308.14 42941308.25 42941308.41 0.0088 0.0069

Neptune 112857-10-28 07:10 G 42941533.65 42941533.80 42941533.98 0.0088 0.0059

Jupiter 112858-06-05 01:39 G 42941753.36 42941753.57 42941753.77 0.0522 0.0040

Neptune 112858-06-10 20:08 G 42941759.18 42941759.34 42941759.54 0.0088 0.0050

Neptune 112859-01-22 09:20 G 42941984.70 42941984.89 42941985.10 0.0088 0.0040

Neptune 112859-09-04 22:17 G 42942210.23 42942210.43 42942210.65 0.0088 0.0031

Neptune 112860-04-17 11:29 G 42942435.77 42942435.98 42942436.20 0.0088 0.0021

Neptune 112860-11-29 00:27 G 42942661.31 42942661.52 42942661.75 0.0088 0.0012

Neptune 112861-07-12 13:39 G 42942886.85 42942887.07 42942887.29 0.0088 0.0002

Neptune 112862-02-23 02:37 G 42943112.39 42943112.61 42943112.83 0.0088 0.0008

Neptune 112862-10-06 15:34 G 42943337.94 42943338.15 42943338.37 0.0088 0.0017

Neptune 112863-05-20 04:46 G 42943563.49 42943563.70 42943563.92 0.0088 0.0027

Saturn 112863-12-16 19:39 G 42943774.11 42943774.32 42943774.53 0.0292 0.0018

Neptune 112863-12-31 17:44 G 42943789.05 42943789.24 42943789.45 0.0088 0.0037

Neptune 112864-08-13 06:56 G 42944014.60 42944014.79 42944014.98 0.0088 0.0046

Mars 112864-09-05 15:05 G 42944037.99 42944038.13 42944038.27 0.1668 0.1026

Jupiter 112864-11-25 20:08 G 42944119.15 42944119.34 42944119.53 0.0508 0.0191

Neptune 112865-03-26 19:39 G 42944240.16 42944240.32 42944240.51 0.0088 0.0056

Neptune 112865-11-07 08:51 G 42944465.73 42944465.87 42944466.03 0.0088 0.0065

Neptune 112866-06-20 21:49 G 42944691.32 42944691.41 42944691.55 0.0088 0.0075

Neptune 112867-02-01 11:01 G 42944916.92 42944916.96 42944917.04 0.0088 0.0084

Jupiter 112870-02-07 17:29 G 42946019.08 42946019.23 42946019.39 0.0524 0.0334

Jupiter 112876-07-31 20:08 G 42948385.14 42948385.34 42948385.54 0.0506 0.0069

Saturn 112878-06-04 14:51 G 42949057.91 42949058.12 42949058.33 0.0268 0.0027

Saturn 112879-01-19 15:20 G 42949287.10 42949287.14 42949287.21 0.0268 0.0259

Jupiter 112882-06-07 20:51 G 42950522.24 42950522.37 42950522.50 0.0518 0.0402

Uranus 112884-03-25 09:34 G 42951178.83 42951178.90 42951179.00 0.0139 0.0128

Uranus 112884-11-06 18:13 G 42951405.14 42951405.26 42951405.40 0.0139 0.0113

Uranus 112885-06-21 03:05 G 42951631.47 42951631.63 42951631.78 0.0139 0.0097

Uranus 112886-02-02 11:44 G 42951857.82 42951857.99 42951858.17 0.0140 0.0081

Uranus 112886-09-16 20:37 G 42952084.18 42952084.36 42952084.56 0.0140 0.0065

Uranus 112887-05-01 05:58 G 42952310.55 42952310.75 42952310.96 0.0140 0.0049

Uranus 112887-12-13 15:20 G 42952536.94 42952537.14 42952537.36 0.0140 0.0032

Jupiter 112888-04-05 19:39 G 42952651.17 42952651.32 42952651.47 0.0503 0.0326

Uranus 112888-07-27 00:56 G 42952763.33 42952763.54 42952763.76 0.0140 0.0016

Uranus 112889-03-10 10:46 G 42952989.73 42952989.95 42952990.17 0.0141 0.0002

Uranus 112889-10-22 20:51 G 42953216.15 42953216.37 42953216.58 0.0141 0.0019

Uranus 112890-06-06 06:56 G 42953442.58 42953442.79 42953443.01 0.0141 0.0036

Uranus 112891-01-18 17:01 G 42953669.02 42953669.21 42953669.43 0.0141 0.0054

Uranus 112891-09-02 03:34 G 42953895.48 42953895.65 42953895.85 0.0141 0.0071

Mars 112892-01-21 21:49 G 42954037.24 42954037.41 42954037.58 0.1869 0.0074

Uranus 112892-04-15 14:22 G 42954121.95 42954122.10 42954122.29 0.0141 0.0089

Uranus 112892-11-28 01:25 G 42954348.43 42954348.56 42954348.72 0.0141 0.0105

Saturn 112893-06-28 07:10 G 42954560.59 42954560.80 42954561.01 0.0292 0.0050

Uranus 112893-07-12 12:27 G 42954574.93 42954575.02 42954575.15 0.0142 0.0123

Jupiter 112894-02-10 14:08 G 42954787.89 42954788.09 42954788.29 0.0520 0.0119

Uranus 112894-02-23 23:58 G 42954801.47 42954801.50 42954801.55 0.0142 0.0139

Jupiter 112900-08-04 05:15 G 42957153.57 42957153.72 42957153.88 0.0509 0.0336

Jupiter 112905-10-17 08:22 G 42959053.66 42959053.85 42959054.05 0.0523 0.0167

Saturn 112907-12-16 21:05 G 42959844.17 42959844.38 42959844.59 0.0268 0.0020

Jupiter 112912-04-09 05:01 G 42961419.51 42961419.71 42961419.92 0.0507 0.0076

Pluto 112916-08-29 05:15 G 42963022.56 42963022.72 42963022.92 0.0063 0.0036

Pluto 112917-04-11 09:05 G 42963247.66 42963247.88 42963248.09 0.0063 0.0003

Jupiter 112917-06-22 01:10 G 42963319.46 42963319.55 42963319.65 0.0525 0.0459

Pluto 112917-11-22 11:58 G 42963472.85 42963473.00 42963473.18 0.0064 0.0041

Saturn 112922-05-24 10:03 G 42965116.91 42965116.92 42965116.96 0.0292 0.0290

Saturn 112923-01-09 09:05 G 42965346.68 42965346.88 42965347.09 0.0292 0.0089

Jupiter 112923-12-14 05:58 G 42965685.56 42965685.75 42965685.94 0.0505 0.0182

Uranus 112924-07-15 04:03 G 42965899.62 42965899.67 42965899.74 0.0139 0.0133

Uranus 112925-02-26 12:41 G 42966125.93 42966126.03 42966126.16 0.0139 0.0118

Uranus 112925-10-10 21:34 G 42966352.27 42966352.40 42966352.56 0.0139 0.0102

Uranus 112926-05-25 05:58 G 42966578.59 42966578.75 42966578.93 0.0138 0.0086

Uranus 112927-01-06 14:22 G 42966804.91 42966805.10 42966805.29 0.0138 0.0069

Uranus 112927-08-20 22:17 G 42967031.23 42967031.43 42967031.63 0.0138 0.0053

Uranus 112928-04-03 05:58 G 42967257.55 42967257.75 42967257.97 0.0138 0.0038

Uranus 112928-11-15 13:53 G 42967483.87 42967484.08 42967484.30 0.0138 0.0022

Uranus 112929-06-29 21:20 G 42967710.17 42967710.39 42967710.61 0.0138 0.0006

Jupiter 112929-10-20 06:56 G 42967822.63 42967822.79 42967822.96 0.0519 0.0290

Uranus 112930-02-11 04:32 G 42967936.47 42967936.69 42967936.91 0.0137 0.0010

Mars 112930-07-05 00:56 G 42968080.38 42968080.54 42968080.70 0.1671 0.0715

Uranus 112930-09-25 11:29 G 42968162.77 42968162.98 42968163.20 0.0137 0.0026

Uranus 112931-05-09 18:27 G 42968389.07 42968389.27 42968389.48 0.0137 0.0041

Uranus 112931-12-22 01:10 G 42968615.36 42968615.55 42968615.75 0.0137 0.0057

Uranus 112932-08-04 07:39 G 42968841.65 42968841.82 42968842.02 0.0137 0.0072

Uranus 112933-03-18 14:08 G 42969067.94 42969068.09 42969068.27 0.0137 0.0087

Uranus 112933-10-30 20:22 G 42969294.22 42969294.35 42969294.51 0.0137 0.0102

Uranus 112934-06-14 02:51 G 42969520.51 42969520.62 42969520.74 0.0136 0.0116

Uranus 112935-01-26 08:37 G 42969746.82 42969746.86 42969746.94 0.0136 0.0130

Jupiter 112935-08-19 06:56 G 42969951.69 42969951.79 42969951.89 0.0502 0.0433

Jupiter 112936-04-11 19:39 G 42970188.28 42970188.32 42970188.37 0.0511 0.0498

Earth 112936-08-01 02:37 G 42970299.59 42970299.61 42970299.62 0.2648 0.2631

Saturn 112936-11-10 22:03 G 42970401.32 42970401.42 42970401.52 0.0268 0.0232

Saturn 112937-06-27 23:44 G 42970630.28 42970630.49 42970630.69 0.0268 0.0056

Neptune 112939-05-06 08:51 G 42971307.81 42971307.87 42971307.98 0.0089 0.0082

Neptune 112939-12-17 22:17 G 42971533.31 42971533.43 42971533.57 0.0090 0.0072

Neptune 112940-07-30 11:15 G 42971758.83 42971758.97 42971759.14 0.0090 0.0062

Neptune 112941-03-13 00:27 G 42971984.35 42971984.52 42971984.71 0.0090 0.0052

Jupiter 112941-06-24 22:03 G 42972088.21 42972088.42 42972088.62 0.0521 0.0009

Neptune 112941-10-24 13:39 G 42972209.88 42972210.07 42972210.27 0.0090 0.0042

Neptune 112942-06-07 02:51 G 42972435.42 42972435.62 42972435.82 0.0090 0.0032

Neptune 112943-01-18 15:49 G 42972660.95 42972661.16 42972661.37 0.0090 0.0022

Neptune 112943-09-01 04:46 G 42972886.48 42972886.70 42972886.92 0.0090 0.0012

Neptune 112944-04-13 17:44 G 42973112.02 42973112.24 42973112.46 0.0090 0.0002

Earth 112944-07-29 17:15 G 42973219.07 42973219.22 42973219.37 0.2649 0.1012

Moon 112944-07-29 22:46 G 42973219.30 42973219.45 42973219.60 0.2651 0.0789 *

Neptune 112944-11-25 06:56 G 42973337.57 42973337.79 42973338.00 0.0090 0.0008

Neptune 112945-07-08 19:39 G 42973563.11 42973563.32 42973563.54 0.0090 0.0018

Neptune 112946-02-19 08:37 G 42973788.66 42973788.86 42973789.07 0.0090 0.0028

Neptune 112946-10-02 21:20 G 42974014.20 42974014.39 42974014.60 0.0090 0.0038

Neptune 112947-05-16 10:17 G 42974239.76 42974239.93 42974240.12 0.0090 0.0048

Jupiter 112947-12-16 18:27 G 42974454.10 42974454.27 42974454.45 0.0508 0.0233

Neptune 112947-12-27 23:15 G 42974465.32 42974465.47 42974465.65 0.0090 0.0058

Neptune 112948-08-09 11:58 G 42974690.88 42974691.00 42974691.16 0.0090 0.0068

Neptune 112949-03-23 01:10 G 42974916.45 42974916.55 42974916.67 0.0090 0.0077

Neptune 112949-11-03 13:53 G 42975142.05 42975142.08 42975142.15 0.0090 0.0087

Saturn 112951-12-04 20:08 G 42975903.21 42975903.34 42975903.47 0.0292 0.0228

Saturn 112952-07-21 19:10 G 42976133.13 42976133.30 42976133.49 0.0292 0.0151

Jupiter 112953-02-27 14:37 G 42976353.94 42976354.11 42976354.28 0.0524 0.0297

Mars 112957-11-19 03:34 G 42978079.49 42978079.65 42978079.81 0.1864 0.0664

Jupiter 112959-08-21 15:20 G 42978719.94 42978720.14 42978720.35 0.0506 0.0039

Jupiter 112965-06-27 22:03 G 42980857.33 42980857.42 42980857.52 0.0518 0.0454

Saturn 112966-05-24 04:32 G 42981187.55 42981187.69 42981187.86 0.0268 0.0184

Saturn 112967-01-08 05:58 G 42981416.56 42981416.75 42981416.94 0.0267 0.0103

Uranus 112967-11-24 17:15 G 42981737.18 42981737.22 42981737.30 0.0139 0.0133

Uranus 112968-07-08 01:39 G 42981963.47 42981963.57 42981963.70 0.0139 0.0118

Uranus 112969-02-19 10:17 G 42982189.79 42982189.93 42982190.08 0.0139 0.0103

Uranus 112969-10-03 18:56 G 42982416.13 42982416.29 42982416.47 0.0140 0.0087

Uranus 112970-05-18 04:03 G 42982642.49 42982642.67 42982642.86 0.0140 0.0071

Uranus 112970-12-30 13:10 G 42982868.85 42982869.05 42982869.25 0.0140 0.0054

Jupiter 112971-04-26 15:49 G 42982986.00 42982986.16 42982986.33 0.0503 0.0294

Uranus 112971-08-13 22:17 G 42983095.23 42983095.43 42983095.65 0.0140 0.0038

Uranus 112972-03-27 07:53 G 42983321.62 42983321.83 42983322.05 0.0140 0.0021

Uranus 112972-11-08 17:44 G 42983548.02 42983548.24 42983548.46 0.0141 0.0004

Uranus 112973-06-23 03:34 G 42983774.43 42983774.65 42983774.87 0.0141 0.0013

Uranus 112974-02-04 13:25 G 42984000.86 42984001.06 42984001.29 0.0141 0.0031

Uranus 112974-09-18 23:44 G 42984227.29 42984227.49 42984227.71 0.0141 0.0048

Uranus 112975-05-03 10:32 G 42984453.75 42984453.94 42984454.14 0.0141 0.0065

Uranus 112975-12-15 21:20 G 42984680.21 42984680.39 42984680.57 0.0141 0.0082

Uranus 112976-07-29 08:08 G 42984906.69 42984906.84 42984907.00 0.0141 0.0100

Jupiter 112977-03-02 15:49 G 42985122.97 42985123.16 42985123.35 0.0520 0.0171

Uranus 112977-03-12 19:10 G 42985133.19 42985133.30 42985133.43 0.0142 0.0117

Uranus 112977-10-25 06:13 G 42985359.71 42985359.76 42985359.85 0.0142 0.0134

Saturn 112981-06-15 21:05 G 42986689.23 42986689.38 42986689.55 0.0292 0.0192

Saturn 112982-01-31 20:22 G 42986919.19 42986919.35 42986919.52 0.0292 0.0188

Jupiter 112983-08-24 05:29 G 42987488.60 42987488.73 42987488.86 0.0510 0.0383

Jupiter 112988-11-05 08:37 G 42989388.66 42989388.86 42989389.06 0.0522 0.0119

Jupiter 112995-04-29 05:44 G 42991754.55 42991754.74 42991754.94 0.0507 0.0123

Saturn 112995-12-04 05:58 G 42991973.57 42991973.75 42991973.92 0.0268 0.0151

Mars 112996-05-01 10:32 G 42992122.77 42992122.94 42992123.12 0.1675 0.0407

Saturn 112996-07-20 06:56 G 42992202.62 42992202.79 42992202.98 0.0267 0.0137

Jupiter 113000-07-11 22:46 G 42993654.34 42993654.45 42993654.58 0.0525 0.0421

114TH MILLENNIUM CE

This is a list of transits of Venus in the 114th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Pluto	**113006-10-14 04:03**	**G**	**42995939.51**	**42995939.67**	**42995939.86**	**0.0081**	**0.0050**	
Jupiter	**113007-01-03 05:29**	**G**	**42996020.53**	**42996020.73**	**42996020.92**	**0.0505**	**0.0138**	
Pluto	**113007-05-27 15:49**	**G**	**42996164.96**	**42996165.16**	**42996165.37**	**0.0081**	**0.0033**	
Uranus	**113008-03-15 13:10**	**G**	**42996458.04**	**42996458.05**	**42996458.09**	**0.0139**	**0.0138**	
Uranus	**113008-10-27 22:32**	**G**	**42996684.34**	**42996684.44**	**42996684.54**	**0.0139**	**0.0122**	
Uranus	**113009-06-11 06:56**	**G**	**42996910.66**	**42996910.79**	**42996910.94**	**0.0139**	**0.0107**	
Uranus	**113010-01-23 15:20**	**G**	**42997136.99**	**42997137.14**	**42997137.32**	**0.0138**	**0.0091**	
Uranus	**113010-09-06 23:44**	**G**	**42997363.31**	**42997363.49**	**42997363.68**	**0.0138**	**0.0075**	
Saturn	**113010-12-28 05:58**	**G**	**42997475.56**	**42997475.75**	**42997475.94**	**0.0292**	**0.0134**	
Uranus	**113011-04-21 07:53**	**G**	**42997589.64**	**42997589.83**	**42997590.03**	**0.0138**	**0.0058**	
Saturn	**113011-08-15 05:15**	**G**	**42997705.62**	**42997705.72**	**42997705.84**	**0.0292**	**0.0247**	
Uranus	**113011-12-03 15:49**	**G**	**42997815.96**	**42997816.16**	**42997816.37**	**0.0138**	**0.0042**	
Uranus	**113012-07-16 23:29**	**G**	**42998042.27**	**42998042.48**	**42998042.70**	**0.0138**	**0.0026**	
Jupiter	**113012-11-09 05:15**	**G**	**42998157.57**	**42998157.72**	**42998157.88**	**0.0519**	**0.0332**	
Uranus	**113013-02-28 06:56**	**G**	**42998268.58**	**42998268.79**	**42998269.01**	**0.0138**	**0.0011**	
Uranus	**113013-10-12 14:22**	**G**	**42998494.89**	**42998495.10**	**42998495.32**	**0.0137**	**0.0006**	
Uranus	**113014-05-26 21:34**	**G**	**42998721.19**	**42998721.40**	**42998721.62**	**0.0137**	**0.0021**	
Uranus	**113015-01-08 04:32**	**G**	**42998947.48**	**42998947.69**	**42998947.90**	**0.0137**	**0.0037**	
Uranus	**113015-08-22 11:15**	**G**	**42999173.78**	**42999173.97**	**42999174.18**	**0.0137**	**0.0052**	
Uranus	**113016-04-04 17:44**	**G**	**42999400.07**	**42999400.24**	**42999400.44**	**0.0137**	**0.0068**	
Uranus	**113016-11-17 00:27**	**G**	**42999626.36**	**42999626.52**	**42999626.70**	**0.0137**	**0.0083**	
Uranus	**113017-07-01 06:56**	**G**	**42999852.65**	**42999852.79**	**42999852.95**	**0.0137**	**0.0097**	
Uranus	**113018-02-12 13:25**	**G**	**43000078.94**	**43000079.06**	**43000079.18**	**0.0136**	**0.0112**	
Jupiter	**113018-09-08 03:05**	**G**	**43000286.51**	**43000286.63**	**43000286.75**	**0.0502**	**0.0402**	
Uranus	**113018-09-26 18:56**	**G**	**43000305.23**	**43000305.29**	**43000305.39**	**0.0136**	**0.0127**	

Neptune 113020-11-06 15:49 G 43001077.08 43001077.16 43001077.27 0.0088 0.0079

Neptune 113021-06-20 04:32 G 43001302.58 43001302.69 43001302.85 0.0088 0.0070

Neptune 113022-01-31 17:58 G 43001528.09 43001528.25 43001528.41 0.0088 0.0060

Neptune 113022-09-14 06:27 G 43001753.61 43001753.77 43001753.97 0.0088 0.0051

Neptune 113023-04-27 19:53 G 43001979.14 43001979.33 43001979.53 0.0088 0.0041

Mars 113023-09-17 10:03 G 43002121.79 43002121.92 43002122.05 0.1859 0.1227

Neptune 113023-12-09 08:37 G 43002204.67 43002204.86 43002205.08 0.0088 0.0032

Jupiter 113024-07-14 23:58 G 43002423.29 43002423.50 43002423.70 0.0522 0.0049

Neptune 113024-07-21 21:34 G 43002430.20 43002430.40 43002430.63 0.0088 0.0023

Neptune 113025-03-04 10:46 G 43002655.73 43002655.95 43002656.17 0.0088 0.0013

Saturn 113025-06-16 12:27 G 43002759.83 43002760.02 43002760.22 0.0268 0.0103

Neptune 113025-10-15 23:44 G 43002881.27 43002881.49 43002881.72 0.0088 0.0004

Saturn 113026-01-31 13:10 G 43002988.91 43002989.05 43002989.22 0.0267 0.0184

Neptune 113026-05-29 12:56 G 43003106.82 43003107.04 43003107.26 0.0088 0.0006

Neptune 113027-01-10 01:53 G 43003332.37 43003332.58 43003332.80 0.0088 0.0016

Neptune 113027-08-23 14:51 G 43003557.91 43003558.12 43003558.34 0.0088 0.0026

Neptune 113028-04-05 03:49 G 43003783.47 43003783.66 43003783.87 0.0088 0.0035

Neptune 113028-11-16 16:46 G 43004009.02 43004009.20 43004009.41 0.0088 0.0045

Neptune 113029-06-30 05:58 G 43004234.59 43004234.75 43004234.94 0.0088 0.0054

Neptune 113030-02-10 18:41 G 43004460.15 43004460.28 43004460.46 0.0088 0.0064

Neptune 113030-09-24 07:53 G 43004685.73 43004685.83 43004685.97 0.0088 0.0073

Jupiter 113031-01-05 15:20 G 43004788.98 43004789.14 43004789.32 0.0509 0.0270

Neptune 113031-05-07 20:51 G 43004911.32 43004911.37 43004911.47 0.0088 0.0083

Jupiter 113036-03-19 17:15 G 43006689.05 43006689.22 43006689.41 0.0524 0.0242

Saturn 113040-07-09 06:56 G 43008261.59 43008261.79 43008261.99 0.0292 0.0098

Saturn 113041-02-24 06:13 G 43008491.71 43008491.76 43008491.81 0.0292 0.0283

Jupiter 113042-09-10 16:03 G 43009054.97 43009055.17 43009055.37 0.0506 0.0010

Jupiter 113048-07-17 22:46 G 43011192.41 43011192.45 43011192.50 0.0517 0.0504

Uranus 113051-07-26 01:39 G 43012295.57 43012295.57 43012295.61 0.0139 0.0138

Uranus 113052-03-08 10:03 G 43012521.83 43012521.92 43012522.03 0.0139 0.0123

Uranus 113052-10-20 18:41 G 43012748.14 43012748.28 43012748.41 0.0139 0.0108

Uranus 113053-06-04 02:51 G 43012974.48 43012974.62 43012974.80 0.0140 0.0093

Uranus 113054-01-16 11:58 G 43013200.82 43013201.00 43013201.18 0.0140 0.0076

Jupiter 113054-05-16 17:15 G 43013321.04 43013321.22 43013321.40 0.0504 0.0245

Uranus 113054-08-30 20:51 G 43013427.18 43013427.37 43013427.57 0.0140 0.0060

Saturn 113054-12-27 12:41 G 43013545.82 43013546.03 43013546.23 0.0268 0.0073

Uranus 113055-04-14 06:13 G 43013653.55 43013653.76 43013653.97 0.0140 0.0043

Saturn 113055-08-13 13:25 G 43013774.94 43013775.06 43013775.20 0.0267 0.0214

Uranus 113055-11-26 15:34 G 43013879.94 43013880.15 43013880.37 0.0140 0.0027

Uranus 113056-07-10 01:10 G 43014106.33 43014106.55 43014106.77 0.0140 0.0010

Uranus 113057-02-21 11:01 G 43014332.74 43014332.96 43014333.17 0.0141 0.0008

Uranus 113057-10-05 20:51 G 43014559.16 43014559.37 43014559.59 0.0141 0.0025

Moon 113058-02-04 08:22 G 43014680.84 43014680.85 43014680.86 0.2680 0.2674

Uranus 113058-05-20 07:10 G 43014785.60 43014785.80 43014786.01 0.0141 0.0042

Uranus 113059-01-01 17:44 G 43015012.04 43015012.24 43015012.44 0.0141 0.0059

Uranus 113059-08-16 04:03 G 43015238.50 43015238.67 43015238.87 0.0141 0.0077

Jupiter 113060-03-22 14:37 G 43015457.92 43015458.11 43015458.29 0.0520 0.0215

Uranus 113060-03-29 14:51 G 43015464.97 43015465.12 43015465.29 0.0141 0.0094

Uranus 113060-11-11 01:53 G 43015691.46 43015691.58 43015691.73 0.0141 0.0111

Uranus 113061-06-25 12:56 G 43015917.97 43015918.04 43015918.15 0.0142 0.0129

Mars 113062-02-27 20:37 G 43016165.18 43016165.36 43016165.53 0.1678 0.0095

Jupiter 113066-01-19 17:29 G 43017587.22 43017587.23 43017587.26 0.0501 0.0498

Moon 113066-02-01 22:46 G 43017600.32 43017600.45 43017600.57 0.2685 0.1569

Earth 113066-02-02 03:49 G 43017600.51 43017600.66 43017600.81 0.2683 0.0768 *

Jupiter 113066-09-13 05:44 G 43017823.64 43017823.74 43017823.85 0.0510 0.0431

Saturn 113070-01-19 13:53 G 43019047.87 43019048.08 43019048.29 0.0292 0.0045

Jupiter 113071-11-26 07:39 G 43019723.62 43019723.82 43019724.03 0.0523 0.0075

Jupiter 113078-05-19 02:37 G 43022089.42 43022089.61 43022089.81 0.0507 0.0158

Jupiter 113083-08-01 01:10 G 43023989.41 43023989.55 43023989.70 0.0526 0.0367

Saturn 113084-07-08 18:56 G 43024332.08 43024332.29 43024332.50 0.0268 0.0025

Saturn 113085-02-22 19:25 G 43024561.28 43024561.31 43024561.37 0.0267 0.0261

Mars 113089-07-14 16:03 G 43026164.14 43026164.17 43026164.21 0.1855 0.1804

Jupiter 113090-01-22 03:05 G 43026355.43 43026355.63 43026355.83 0.0505 0.0101

Uranus 113092-06-27 07:10 G 43027242.74 43027242.80 43027242.90 0.0139 0.0128

Uranus 113093-02-08 16:03 G 43027469.06 43027469.17 43027469.31 0.0139 0.0112

Uranus 113093-09-23 00:41 G 43027695.39 43027695.53 43027695.70 0.0139 0.0096

Uranus 113094-05-07 09:20 G 43027921.72 43027921.89 43027922.07 0.0138 0.0080

Uranus 113094-12-19 17:29 G 43028148.04 43028148.23 43028148.43 0.0138 0.0063

Uranus 113095-08-03 01:25 G 43028374.36 43028374.56 43028374.77 0.0138 0.0047

Jupiter 113095-11-29 08:37 G 43028492.73 43028492.86 43028493.00 0.0518 0.0389

Uranus 113096-03-16 09:20 G 43028600.68 43028600.89 43028601.10 0.0138 0.0031

Uranus 113096-10-28 17:01 G 43028827.00 43028827.21 43028827.43 0.0138 0.0015

Uranus 113097-06-12 00:27 G 43029053.31 43029053.52 43029053.74 0.0138 0.0001

Uranus 113098-01-24 07:39 G 43029279.61 43029279.82 43029280.04 0.0137 0.0017

Uranus 113098-09-07 14:37 G 43029505.91 43029506.11 43029506.33 0.0137 0.0032

Uranus 113099-04-21 21:34 G 43029732.20 43029732.40 43029732.61 0.0137 0.0048

Saturn 113099-08-01 15:05 G 43029833.92 43029834.13 43029834.34 0.0292 0.0008

Uranus 113099-12-04 04:32 G 43029958.50 43029958.69 43029958.89 0.0137 0.0063

Uranus 113100-07-18 10:46 G 43030184.79 43030184.95 43030185.15 0.0137 0.0079

Uranus 113101-03-01 17:15 G 43030411.08 43030411.22 43030411.39 0.0137 0.0094

Jupiter 113101-09-28 04:17 G 43030621.53 43030621.68 43030621.82 0.0503 0.0355

Uranus 113101-10-13 23:58 G 43030637.37 43030637.50 43030637.63 0.0136 0.0108

Uranus 113102-05-28 05:58 G 43030863.67 43030863.75 43030863.85 0.0136 0.0122

Neptune 113103-08-09 18:41 G 43031302.23 43031302.28 43031302.38 0.0089 0.0084

Neptune 113104-03-22 08:08 G 43031527.73 43031527.84 43031527.98 0.0089 0.0074

Neptune 113104-11-02 21:20 G 43031753.25 43031753.39 43031753.56 0.0090 0.0064

Neptune 113105-06-16 10:32 G 43031978.78 43031978.94 43031979.12 0.0090 0.0054

Neptune 113106-01-27 23:44 G 43032204.30 43032204.49 43032204.68 0.0090 0.0044

Neptune 113106-09-10 12:41 G 43032429.83 43032430.03 43032430.23 0.0090 0.0034

Neptune 113107-04-24 01:25 G 43032655.37 43032655.56 43032655.79 0.0090 0.0025

Jupiter 113107-08-05 02:08 G 43032758.39 43032758.59 43032758.79 0.0521 0.0103

Neptune 113107-12-05 14:37 G 43032880.91 43032881.11 43032881.34 0.0090 0.0015

Neptune 113108-07-18 03:49 G 43033106.45 43033106.66 43033106.88 0.0090 0.0004

Neptune 113109-02-28 16:46 G 43033331.98 43033332.20 43033332.42 0.0090 0.0006

Neptune 113109-10-12 05:44 G 43033557.53 43033557.74 43033557.96 0.0090 0.0016

Neptune 113110-05-25 18:27 G 43033783.07 43033783.27 43033783.49 0.0090 0.0026

Neptune 113111-01-06 07:25 G 43034008.62 43034008.81 43034009.02 0.0090 0.0036

Neptune 113111-08-19 20:22 G 43034234.17 43034234.35 43034234.55 0.0090 0.0046

Neptune 113112-04-01 09:05 G 43034459.73 43034459.88 43034460.07 0.0090 0.0056

Neptune 113112-11-12 22:32 G 43034685.29 43034685.44 43034685.59 0.0090 0.0065

Neptune 113113-06-26 11:15 G 43034910.86 43034910.97 43034911.10 0.0090 0.0075

Saturn 113114-01-19 18:13 G 43035118.05 43035118.26 43035118.47 0.0268 0.0003

Jupiter 113114-01-25 17:44 G 43035124.08 43035124.24 43035124.40 0.0509 0.0322

Neptune 113114-02-06 23:58 G 43035136.45 43035136.50 43035136.59 0.0090 0.0085

Jupiter 113119-04-09 17:15 G 43037024.03 43037024.22 43037024.41 0.0523 0.0194

Mars 113121-07-15 05:44 G 43037851.68 43037851.74 43037851.79 0.1871 0.1747

Jupiter 113125-09-30 17:15 G 43039390.02 43039390.22 43039390.43 0.0506 0.0060

Mars 113127-12-27 06:13 G 43040207.58 43040207.76 43040207.93 0.1682 0.0229

Saturn 113129-02-11 21:05 G 43040620.17 43040620.38 43040620.59 0.0292 0.0043

Jupiter 113130-12-13 09:34 G 43041289.83 43041289.90 43041289.97 0.0526 0.0489

Uranus 113135-11-07 17:15 G 43043080.16 43043080.22 43043080.32 0.0139 0.0129

Uranus 113136-06-21 01:53 G 43043306.46 43043306.58 43043306.71 0.0139 0.0113

Uranus 113137-02-02 10:03 G 43043532.78 43043532.92 43043533.09 0.0139 0.0098

Jupiter 113137-06-05 15:05 G 43043655.95 43043656.13 43043656.32 0.0503 0.0209

Uranus 113137-09-16 19:10 G 43043759.12 43043759.30 43043759.47 0.0140 0.0082

Uranus 113138-05-01 03:49 G 43043985.48 43043985.66 43043985.86 0.0140 0.0066

Uranus 113138-12-13 13:10 G 43044211.84 43044212.05 43044212.25 0.0140 0.0049

Uranus 113139-07-27 22:17 G 43044438.22 43044438.43 43044438.64 0.0140 0.0033

Uranus 113140-03-10 07:39 G 43044664.61 43044664.82 43044665.04 0.0140 0.0016

Uranus 113140-10-22 17:29 G 43044891.01 43044891.23 43044891.45 0.0140 0.0001

Uranus 113141-06-06 03:34 G 43045117.43 43045117.65 43045117.87 0.0141 0.0019

Uranus 113142-01-18 13:39 G 43045343.86 43045344.07 43045344.28 0.0141 0.0036

Uranus 113142-09-01 23:58 G 43045570.30 43045570.50 43045570.70 0.0141 0.0053

Saturn 113142-12-15 22:17 G 43045675.35 43045675.43 43045675.54 0.0269 0.0240

Jupiter 113143-04-12 17:29 G 43045793.05 43045793.23 43045793.40 0.0520 0.0271

Uranus 113143-04-16 10:17 G 43045796.75 43045796.93 43045797.13 0.0141 0.0071

Saturn 113143-08-02 00:27 G 43045904.31 43045904.52 43045904.72 0.0268 0.0050

Uranus 113143-11-28 21:05 G 43046023.22 43046023.38 43046023.56 0.0141 0.0088

Uranus 113144-07-12 08:08 G 43046249.70 43046249.84 43046249.99 0.0141 0.0106

Uranus 113145-02-23 18:56 G 43046476.20 43046476.29 43046476.41 0.0142 0.0123

Uranus 113145-10-08 06:13 G 43046702.74 43046702.76 43046702.81 0.0142 0.0140

Jupiter 113149-02-08 16:03 G 43047922.09 43047922.17 43047922.25 0.0501 0.0460

Jupiter 113149-10-03 04:03 G 43048158.60 43048158.67 43048158.75 0.0510 0.0470

Jupiter 113154-12-16 11:29 G 43050058.77 43050058.98 43050059.18 0.0522 0.0017

Saturn 113158-08-24 22:32 G 43051406.24 43051406.44 43051406.65 0.0292 0.0082

Jupiter 113161-06-08 04:32 G 43052424.50 43052424.69 43052424.87 0.0508 0.0209

Pluto 113162-02-16 12:41 G 43052677.96 43052678.03 43052678.15 0.0063 0.0056

Pluto 113162-09-29 16:17 G 43052902.98 43052903.18 43052903.39 0.0063 0.0019

Pluto 113163-05-12 19:25 G 43053128.12 43053128.31 43053128.53 0.0063 0.0020

Pluto 113163-12-23 22:32 G 43053353.38 43053353.44 43053353.56 0.0064 0.0058

Jupiter 113166-08-21 04:17 G 43054324.52 43054324.68 43054324.85 0.0525 0.0310

Saturn 113172-06-26 21:05 G 43056461.26 43056461.38 43056461.52 0.0268 0.0213

Saturn 113173-02-10 23:01 G 43056690.26 43056690.46 43056690.67 0.0268 0.0077

Jupiter 113173-02-11 05:29 G 43056690.52 43056690.73 43056690.93 0.0505 0.0050 *

Uranus 113176-02-26 16:03 G 43057801.13 43057801.17 43057801.25 0.0139 0.0133

Uranus 113176-10-10 01:10 G 43058027.45 43058027.55 43058027.68 0.0139 0.0117

Uranus 113177-05-24 10:03 G 43058253.78 43058253.92 43058254.08 0.0139 0.0101

Uranus 113178-01-05 18:27 G 43058480.11 43058480.27 43058480.45 0.0139 0.0085

Uranus 113178-08-20 02:51 G 43058706.44 43058706.62 43058706.81 0.0138 0.0069

Jupiter 113178-12-19 08:51 G 43058827.77 43058827.87 43058827.99 0.0518 0.0438

Uranus 113179-04-03 11:01 G 43058932.76 43058932.96 43058933.16 0.0138 0.0052

Earth 113179-08-04 03:20 G 43059055.62 43059055.64 43059055.66 0.2648 0.2621

Uranus 113179-11-15 19:10 G 43059159.09 43059159.30 43059159.51 0.0138 0.0036

Uranus 113180-06-29 02:51 G 43059385.41 43059385.62 43059385.84 0.0138 0.0020

Uranus 113181-02-10 10:32 G 43059611.72 43059611.94 43059612.15 0.0138 0.0005

Uranus 113181-09-24 17:44 G 43059838.03 43059838.24 43059838.46 0.0137 0.0012

Uranus 113182-05-09 00:56 G 43060064.33 43060064.54 43060064.76 0.0137 0.0028

Uranus 113182-12-21 08:08 G 43060290.64 43060290.84 43060291.05 0.0137 0.0044

Uranus 113183-08-04 14:51 G 43060516.93 43060517.12 43060517.32 0.0137 0.0059

Uranus 113184-03-17 21:49 G 43060743.23 43060743.41 43060743.59 0.0137 0.0074

Jupiter 113184-10-17 05:58 G 43060956.59 43060956.75 43060956.91 0.0503 0.0305

Uranus 113184-10-30 04:03 G 43060969.53 43060969.67 43060969.85 0.0137 0.0090

Neptune 113185-02-09 01:39 G 43061071.51 43061071.57 43061071.68 0.0088 0.0081

Uranus 113185-06-13 10:32 G 43061195.82 43061195.94 43061196.09 0.0137 0.0105

Neptune 113185-09-22 14:51 G 43061297.00 43061297.12 43061297.26 0.0088 0.0071

Uranus 113186-01-25 17:01 G 43061422.11 43061422.21 43061422.32 0.0136 0.0119

Neptune 113186-05-06 03:49 G 43061522.52 43061522.66 43061522.83 0.0088 0.0062

Uranus 113186-09-08 23:15 G 43061648.43 43061648.47 43061648.52 0.0136 0.0133

Neptune 113186-12-17 16:32 G 43061748.03 43061748.19 43061748.39 0.0088 0.0053

Mars 113187-05-12 11:29 G 43061893.85 43061893.98 43061894.11 0.1866 0.1141

Saturn 113187-07-20 04:46 G 43061962.60 43061962.70 43061962.81 0.0291 0.0249

Neptune 113187-07-31 05:44 G 43061973.55 43061973.74 43061973.94 0.0088 0.0043

Moon 113187-08-01 14:08 G 43061974.94 43061975.09 43061975.25 0.2645 0.1097

Earth 113187-08-01 17:58 G 43061975.10 43061975.25 43061975.40 0.2650 0.1028 *

Saturn 113188-03-06 03:34 G 43062192.46 43062192.65 43062192.84 0.0292 0.0128

Neptune 113188-03-12 18:27 G 43062199.08 43062199.27 43062199.49 0.0088 0.0034

Neptune 113188-10-24 07:39 G 43062424.61 43062424.82 43062425.03 0.0088 0.0024

Neptune 113189-06-06 20:37 G 43062650.15 43062650.36 43062650.59 0.0088 0.0015

Neptune 113190-01-18 09:49 G 43062875.69 43062875.91 43062876.13 0.0088 0.0005

Jupiter 113190-08-24 02:22 G 43063093.40 43063093.60 43063093.79 0.0521 0.0152

Neptune 113190-08-31 22:46 G 43063101.23 43063101.45 43063101.67 0.0088 0.0005

Neptune 113191-04-14 11:44 G 43063326.77 43063326.99 43063327.21 0.0088 0.0014

Neptune 113191-11-26 00:41 G 43063552.32 43063552.53 43063552.75 0.0088 0.0024

Neptune 113192-07-08 13:39 G 43063777.88 43063778.07 43063778.29 0.0088 0.0034

Neptune 113193-02-19 02:51 G 43064003.43 43064003.62 43064003.82 0.0088 0.0043

Neptune 113193-10-02 15:34 G 43064228.99 43064229.15 43064229.35 0.0088 0.0053

Mars 113193-10-23 15:49 G 43064249.99 43064250.16 43064250.33 0.1685 0.0555

Neptune 113194-05-16 05:01 G 43064454.57 43064454.71 43064454.88 0.0088 0.0062

Neptune 113194-12-27 17:44 G 43064680.14 43064680.24 43064680.40 0.0088 0.0072

Neptune 113195-08-10 06:56 G 43064905.73 43064905.79 43064905.90 0.0088 0.0081

Jupiter 113197-02-13 15:49 G 43065459.02 43065459.16 43065459.31 0.0509 0.0360

Saturn 113202-01-07 03:20 G 43067247.48 43067247.64 43067247.81 0.0269 0.0165

Jupiter 113202-04-28 19:39 G 43067359.13 43067359.32 43067359.52 0.0524 0.0141

Saturn 113202-08-24 05:01 G 43067476.53 43067476.71 43067476.90 0.0268 0.0125

Jupiter 113208-10-19 16:03 G 43069724.97 43069725.17 43069725.37 0.0506 0.0099

Jupiter 113214-01-01 12:56 G 43071624.93 43071625.04 43071625.16 0.0526 0.0435

Saturn 113217-01-29 07:53 G 43072748.68 43072748.83 43072748.98 0.0291 0.0205

Saturn 113217-09-16 06:13 G 43072978.59 43072978.76 43072978.93 0.0292 0.0171

Uranus 113219-07-08 01:53 G 43073638.54 43073638.58 43073638.66 0.0139 0.0134

Uranus 113220-02-19 10:32 G 43073864.83 43073864.94 43073865.05 0.0139 0.0119

Jupiter 113220-06-24 16:32 G 43073991.00 43073991.19 43073991.39 0.0504 0.0160

Uranus 113220-10-02 18:27 G 43074091.14 43074091.27 43074091.43 0.0139 0.0104

Uranus 113221-05-17 03:05 G 43074317.47 43074317.63 43074317.81 0.0139 0.0088

Uranus 113221-12-29 11:44 G 43074543.82 43074543.99 43074544.19 0.0140 0.0072

Uranus 113222-08-12 20:51 G 43074770.18 43074770.37 43074770.58 0.0140 0.0055

Uranus 113223-03-27 06:13 G 43074996.55 43074996.76 43074996.97 0.0140 0.0038

Uranus 113223-11-08 15:34 G 43075222.94 43075223.15 43075223.37 0.0140 0.0021

Uranus 113224-06-22 01:10 G 43075449.33 43075449.55 43075449.77 0.0140 0.0005

Uranus 113225-02-03 11:01 G 43075675.74 43075675.96 43075676.18 0.0140 0.0013

Uranus 113225-09-17 20:51 G 43075902.16 43075902.37 43075902.59 0.0141 0.0031

Jupiter 113226-05-01 20:37 G 43076128.20 43076128.36 43076128.52 0.0519 0.0328

Uranus 113226-05-02 07:25 G 43076128.60 43076128.81 43076129.02 0.0141 0.0048

Uranus 113226-12-14 17:44 G 43076355.05 43076355.24 43076355.44 0.0141 0.0065

Uranus 113227-07-29 04:03 G 43076581.51 43076581.67 43076581.86 0.0141 0.0083

Uranus 113228-03-11 14:51 G 43076807.98 43076808.12 43076808.29 0.0141 0.0100

Uranus 113228-10-24 01:39 G 43077034.47 43077034.57 43077034.71 0.0141 0.0118

Uranus 113229-06-07 12:56 G 43077260.99 43077261.04 43077261.13 0.0142 0.0135

Saturn 113231-07-20 01:53 G 43078033.40 43078033.58 43078033.76 0.0268 0.0140

Jupiter 113232-02-28 17:58 G 43078257.14 43078257.25 43078257.37 0.0502 0.0411

Saturn 113232-03-05 03:49 G 43078262.48 43078262.66 43078262.83 0.0268 0.0149

Jupiter 113238-01-04 12:13 G 43080393.81 43080394.01 43080394.22 0.0522 0.0035

Jupiter 113244-06-27 06:27 G 43082759.60 43082759.77 43082759.94 0.0508 0.0261

Saturn 113246-08-11 11:44 G 43083534.82 43083534.99 43083535.17 0.0291 0.0163

Saturn 113247-03-29 10:32 G 43083764.80 43083764.94 43083765.09 0.0292 0.0216

Jupiter 113249-09-09 04:46 G 43084659.52 43084659.70 43084659.87 0.0525 0.0261

Pluto 113252-11-12 17:15 G 43085820.01 43085820.22 43085820.45 0.0081 0.0016

Mars 113253-03-08 17:29 G 43085936.06 43085936.23 43085936.39 0.1861 0.0535

Pluto 113253-06-26 04:32 G 43086045.59 43086045.69 43086045.84 0.0081 0.0067

Jupiter 113256-03-02 04:17 G 43087025.48 43087025.68 43087025.88 0.0505 0.0009

Mars 113259-08-21 01:10 G 43088292.40 43088292.55 43088292.71 0.1689 0.0892

Uranus 113259-10-27 00:27 G 43088359.51 43088359.52 43088359.56 0.0139 0.0139

Uranus 113260-06-09 09:34 G 43088585.81 43088585.90 43088586.02 0.0139 0.0122

Uranus 113261-01-21 18:27 G 43088812.14 43088812.27 43088812.42 0.0139 0.0106

Saturn 113261-01-29 07:53 G 43088819.64 43088819.83 43088820.04 0.0269 0.0092

Uranus 113261-09-05 03:20 G 43089038.48 43089038.64 43089038.81 0.0139 0.0090

Saturn 113261-09-15 09:49 G 43089048.77 43089048.91 43089049.05 0.0268 0.0198

Jupiter 113262-01-07 11:15 G 43089162.91 43089162.97 43089163.03 0.0518 0.0491

Uranus 113262-04-19 11:44 G 43089264.81 43089264.99 43089265.18 0.0138 0.0074

Uranus 113262-12-01 20:08 G 43089491.14 43089491.34 43089491.54 0.0138 0.0057

Uranus 113263-07-16 04:03 G 43089717.47 43089717.67 43089717.88 0.0138 0.0041

Uranus 113264-02-27 11:58 G 43089943.79 43089944.00 43089944.22 0.0138 0.0025

Uranus 113264-10-10 19:53 G 43090170.11 43090170.33 43090170.55 0.0138 0.0009

Uranus 113265-05-25 03:20 G 43090396.43 43090396.64 43090396.86 0.0138 0.0008

Uranus 113266-01-06 10:46 G 43090622.74 43090622.95 43090623.16 0.0137 0.0023

Uranus 113266-08-20 17:44 G 43090849.04 43090849.24 43090849.46 0.0137 0.0040

Uranus 113267-04-04 00:41 G 43091075.34 43091075.53 43091075.74 0.0137 0.0055

Jupiter 113267-11-06 05:01 G 43091291.53 43091291.71 43091291.88 0.0502 0.0266

Neptune 113267-11-11 04:17 G 43091296.64 43091296.68 43091296.77 0.0089 0.0086

Uranus 113267-11-16 07:53 G 43091301.65 43091301.83 43091302.02 0.0137 0.0070

Neptune 113268-06-23 17:44 G 43091522.14 43091522.24 43091522.37 0.0089 0.0076

Uranus 113268-06-29 14:22 G 43091527.95 43091528.10 43091528.28 0.0137 0.0086

Neptune 113269-02-04 06:56 G 43091747.66 43091747.79 43091747.95 0.0089 0.0066

Uranus 113269-02-10 20:51 G 43091754.24 43091754.37 43091754.53 0.0137 0.0101

Neptune 113269-09-17 20:08 G 43091973.18 43091973.34 43091973.52 0.0090 0.0056

Uranus 113269-09-25 03:34 G 43091980.54 43091980.65 43091980.77 0.0136 0.0115

Neptune 113270-05-01 09:20 G 43092198.71 43092198.89 43092199.08 0.0090 0.0046

Uranus 113270-05-09 09:20 G 43092206.85 43092206.89 43092206.98 0.0136 0.0130

Neptune 113270-12-12 22:46 G 43092424.25 43092424.45 43092424.65 0.0090 0.0036

Neptune 113271-07-26 11:44 G 43092649.78 43092649.99 43092650.20 0.0090 0.0026

Neptune 113272-03-08 00:27 G 43092875.32 43092875.52 43092875.75 0.0090 0.0017

Neptune 113272-10-19 13:39 G 43093100.86 43093101.07 43093101.29 0.0090 0.0007

Neptune 113273-06-02 02:51 G 43093326.40 43093326.62 43093326.83 0.0090 0.0004

Jupiter 113273-09-12 05:15 G 43093428.54 43093428.72 43093428.91 0.0521 0.0207

Neptune 113274-01-13 15:34 G 43093551.94 43093552.15 43093552.37 0.0090 0.0014

Neptune 113274-08-27 04:32 G 43093777.49 43093777.69 43093777.91 0.0090 0.0024

Neptune 113275-04-09 17:15 G 43094003.03 43094003.22 43094003.44 0.0090 0.0034

Neptune 113275-11-21 06:13 G 43094228.59 43094228.76 43094228.97 0.0090 0.0044

Saturn 113276-02-21 15:49 G 43094320.97 43094321.16 43094321.36 0.0291 0.0116

Neptune 113276-07-03 19:25 G 43094454.14 43094454.31 43094454.49 0.0090 0.0053

Saturn 113276-10-08 14:08 G 43094551.01 43094551.09 43094551.19 0.0291 0.0261

Neptune 113277-02-14 08:08 G 43094679.70 43094679.84 43094680.00 0.0090 0.0063

Neptune 113277-09-27 20:51 G 43094905.26 43094905.37 43094905.51 0.0090 0.0073

Neptune 113278-05-11 09:34 G 43095130.84 43095130.90 43095131.01 0.0090 0.0083

Jupiter 113280-03-04 17:15 G 43095794.11 43095794.22 43095794.34 0.0509 0.0411

Jupiter 113285-05-17 23:01 G 43097694.26 43097694.46 43097694.66 0.0523 0.0083

Saturn 113290-08-11 06:56 G 43099605.58 43099605.79 43099605.99 0.0268 0.0065

Saturn 113291-03-28 08:37 G 43099834.75 43099834.86 43099834.98 0.0268 0.0223

Mars 113291-08-20 03:34 G 43099979.61 43099979.65 43099979.70 0.1677 0.1612

Jupiter 113291-11-08 18:13 G 43100060.06 43100060.26 43100060.45 0.0507 0.0151

Jupiter 113297-01-20 14:08 G 43101959.95 43101960.09 43101960.23 0.0526 0.0383

Uranus 113303-03-08 10:17 G 43104196.93 43104196.93 43104196.95 0.0139 0.0139

Jupiter 113303-07-15 18:27 G 43104326.07 43104326.27 43104326.47 0.0504 0.0109

Uranus 113303-10-20 18:13 G 43104423.18 43104423.26 43104423.37 0.0139 0.0124

Uranus 113304-06-03 02:37 G 43104649.48 43104649.61 43104649.75 0.0139 0.0108

Uranus 113305-01-15 11:01 G 43104875.80 43104875.96 43104876.13 0.0139 0.0093

Uranus 113305-08-29 19:25 G 43105102.14 43105102.31 43105102.50 0.0139 0.0077

Saturn 113305-09-03 19:39 G 43105107.12 43105107.32 43105107.53 0.0291 0.0072

Uranus 113306-04-13 04:17 G 43105328.50 43105328.68 43105328.89 0.0140 0.0061

Uranus 113306-11-25 13:39 G 43105554.87 43105555.07 43105555.28 0.0140 0.0044

Uranus 113307-07-09 22:46 G 43105781.24 43105781.45 43105781.67 0.0140 0.0027

Uranus 113308-02-21 08:22 G 43106007.63 43106007.85 43106008.07 0.0140 0.0010

Uranus 113308-10-04 17:58 G 43106234.04 43106234.25 43106234.47 0.0140 0.0008

Earth 113309-02-04 05:15 G 43106356.57 43106356.72 43106356.87 0.2682 0.0818

Moon 113309-02-04 10:03 G 43106356.77 43106356.92 43106357.08 0.2685 0.0084 *

Uranus 113309-05-19 04:03 G 43106460.46 43106460.67 43106460.89 0.0141 0.0025

Jupiter 113309-05-21 20:37 G 43106463.22 43106463.36 43106463.50 0.0519 0.0375

Uranus 113309-12-31 14:08 G 43106686.89 43106687.09 43106687.30 0.0141 0.0043

Uranus 113310-08-15 00:13 G 43106913.33 43106913.51 43106913.72 0.0141 0.0060

Uranus 113311-03-29 10:46 G 43107139.78 43107139.95 43107140.14 0.0141 0.0077

Uranus 113311-11-10 21:34 G 43107366.24 43107366.40 43107366.57 0.0141 0.0095

Uranus 113312-06-24 08:37 G 43107592.73 43107592.86 43107592.99 0.0141 0.0112

Uranus 113313-02-05 19:25 G 43107819.23 43107819.31 43107819.41 0.0142 0.0129

Jupiter 113315-03-20 17:29 G 43108592.09 43108592.23 43108592.37 0.0501 0.0371

Mars 113319-01-04 23:29 G 43109978.31 43109978.48 43109978.65 0.1856 0.0067

Saturn 113320-02-22 12:56 G 43110391.83 43110392.04 43110392.25 0.0269 0.0017

Jupiter 113321-01-24 13:10 G 43110728.85 43110729.05 43110729.25 0.0522 0.0083

Mars 113325-06-18 11:01 G 43112334.84 43112334.96 43112335.08 0.1693 0.1219

Jupiter 113327-07-18 04:46 G 43113094.54 43113094.70 43113094.87 0.0508 0.0300

Jupiter 113332-09-29 06:41 G 43114994.59 43114994.78 43114994.96 0.0525 0.0211

Saturn 113335-03-17 01:39 G 43115893.36 43115893.57 43115893.78 0.0291 0.0020

Jupiter 113339-03-23 04:46 G 43117360.50 43117360.70 43117360.91 0.0505 0.0039

Uranus 113344-02-08 18:13 G 43119144.18 43119144.26 43119144.35 0.0139 0.0127

Jupiter 113344-06-03 23:29 G 43119260.43 43119260.48 43119260.54 0.0527 0.0506

Uranus 113344-09-22 03:05 G 43119370.51 43119370.63 43119370.77 0.0139 0.0111

Uranus 113345-05-06 11:58 G 43119596.85 43119597.00 43119597.17 0.0139 0.0095

Uranus 113345-12-18 20:37 G 43119823.19 43119823.36 43119823.55 0.0139 0.0079

Uranus 113346-08-02 05:01 G 43120049.52 43120049.71 43120049.91 0.0138 0.0062

Uranus 113347-03-16 13:10 G 43120275.85 43120276.05 43120276.26 0.0138 0.0046

Uranus 113347-10-28 21:20 G 43120502.19 43120502.39 43120502.61 0.0138 0.0030

Uranus 113348-06-11 05:15 G 43120728.51 43120728.72 43120728.94 0.0138 0.0014

Uranus 113349-01-23 12:56 G 43120954.83 43120955.04 43120955.26 0.0138 0.0004

Neptune 113349-05-14 11:58 G 43121065.95 43121066.00 43121066.10 0.0088 0.0082

Saturn 113349-09-03 12:13 G 43121177.80 43121178.01 43121178.22 0.0269 0.0010

Uranus 113349-09-06 20:22 G 43121181.14 43121181.35 43121181.57 0.0137 0.0019

Neptune 113349-12-26 00:41 G 43121291.43 43121291.53 43121291.68 0.0088 0.0073

Uranus 113350-04-21 03:34 G 43121407.45 43121407.65 43121407.87 0.0137 0.0035

Neptune 113350-08-08 14:08 G 43121516.94 43121517.09 43121517.24 0.0088 0.0063

Jupiter 113350-11-26 05:58 G 43121626.57 43121626.75 43121626.94 0.0503 0.0218

Uranus 113350-12-03 10:46 G 43121633.76 43121633.95 43121634.17 0.0137 0.0051

Neptune 113351-03-22 02:37 G 43121742.45 43121742.61 43121742.80 0.0088 0.0054

Uranus 113351-07-17 17:58 G 43121860.07 43121860.25 43121860.44 0.0137 0.0066

Neptune 113351-11-02 15:20 G 43121967.97 43121968.14 43121968.35 0.0088 0.0045

Uranus 113352-02-29 00:27 G 43122086.37 43122086.52 43122086.71 0.0137 0.0082

Neptune 113352-06-15 04:32 G 43122193.49 43122193.69 43122193.90 0.0088 0.0035

Uranus 113352-10-12 07:10 G 43122312.66 43122312.80 43122312.97 0.0137 0.0097

Neptune 113353-01-26 17:15 G 43122419.02 43122419.22 43122419.44 0.0088 0.0026

Uranus 113353-05-26 13:39 G 43122538.96 43122539.07 43122539.21 0.0137 0.0112

Neptune 113353-09-09 06:27 G 43122644.55 43122644.77 43122644.99 0.0088 0.0016

Uranus 113354-01-07 20:08 G 43122765.27 43122765.34 43122765.43 0.0136 0.0126

Neptune 113354-04-22 19:25 G 43122870.09 43122870.31 43122870.53 0.0088 0.0007

Neptune 113354-12-04 08:22 G 43123095.63 43123095.85 43123096.07 0.0088 0.0003

Neptune 113355-07-17 21:05 G 43123321.17 43123321.38 43123321.61 0.0088 0.0013

Neptune 113356-02-28 10:17 G 43123546.72 43123546.93 43123547.15 0.0088 0.0022

Jupiter 113356-10-02 05:44 G 43123763.57 43123763.74 43123763.92 0.0520 0.0256

Neptune 113356-10-10 23:01 G 43123772.27 43123772.46 43123772.68 0.0088 0.0032

Neptune 113357-05-24 12:27 G 43123997.83 43123998.02 43123998.22 0.0088 0.0041

Mars 113357-06-17 13:10 G 43124021.94 43124022.05 43124022.16 0.1680 0.1292

Neptune 113358-01-05 01:10 G 43124223.39 43124223.55 43124223.75 0.0088 0.0051

Neptune 113358-08-18 14:22 G 43124448.95 43124449.10 43124449.27 0.0088 0.0060

Neptune 113359-04-01 03:05 G 43124674.52 43124674.63 43124674.79 0.0088 0.0070

Neptune 113359-11-12 16:17 G 43124900.11 43124900.18 43124900.30 0.0088 0.0079

Jupiter 113362-08-01 06:56 G 43125892.73 43125892.79 43125892.86 0.0501 0.0470

Jupiter 113363-03-25 18:41 G 43126129.20 43126129.28 43126129.37 0.0509 0.0462

Saturn 113364-09-26 05:01 G 43126679.50 43126679.71 43126679.92 0.0291 0.0022

Jupiter 113368-06-06 22:17 G 43128029.23 43128029.43 43128029.64 0.0523 0.0039

Jupiter 113374-11-28 17:01 G 43130395.02 43130395.21 43130395.40 0.0506 0.0190

Saturn 113378-07-30 15:20 G 43131735.05 43131735.14 43131735.26 0.0270 0.0235

Saturn 113379-03-16 18:27 G 43131964.07 43131964.27 43131964.48 0.0269 0.0060

Jupiter 113380-02-10 13:25 G 43132294.91 43132295.06 43132295.22 0.0526 0.0342

Mars 113384-11-01 05:44 G 43134020.58 43134020.74 43134020.90 0.1852 0.0625

Jupiter 113386-08-03 16:46 G 43134661.00 43134661.20 43134661.41 0.0504 0.0072

Uranus 113387-06-20 03:49 G 43134981.59 43134981.66 43134981.75 0.0139 0.0128

Uranus 113388-02-01 11:44 G 43135207.88 43135207.99 43135208.13 0.0139 0.0113

Uranus 113388-09-14 20:08 G 43135434.19 43135434.34 43135434.50 0.0139 0.0097

Uranus 113389-04-29 04:46 G 43135660.53 43135660.70 43135660.88 0.0139 0.0081

Uranus 113389-12-11 13:39 G 43135886.88 43135887.07 43135887.26 0.0140 0.0065

Uranus 113390-07-25 22:17 G 43136113.24 43136113.43 43136113.65 0.0140 0.0049

Uranus 113391-03-09 07:39 G 43136339.61 43136339.82 43136340.04 0.0140 0.0032

Mars 113391-04-15 19:53 G 43136377.27 43136377.33 43136377.40 0.1696 0.1574

Uranus 113391-10-21 17:01 G 43136566.00 43136566.21 43136566.43 0.0140 0.0015

Uranus 113392-06-04 02:51 G 43136792.40 43136792.62 43136792.84 0.0140 0.0003

Jupiter 113392-06-09 21:20 G 43136798.28 43136798.39 43136798.51 0.0519 0.0423

Uranus 113393-01-16 12:27 G 43137018.81 43137019.02 43137019.24 0.0140 0.0020

Uranus 113393-08-30 22:17 G 43137245.23 43137245.43 43137245.65 0.0141 0.0038

Saturn 113394-04-08 12:41 G 43137465.83 43137466.03 43137466.24 0.0291 0.0080

Uranus 113394-04-14 08:37 G 43137471.66 43137471.86 43137472.07 0.0141 0.0055

Uranus 113394-11-26 19:10 G 43137698.11 43137698.30 43137698.49 0.0141 0.0072

Uranus 113395-07-11 05:15 G 43137924.57 43137924.72 43137924.90 0.0141 0.0090

Uranus 113396-02-22 16:03 G 43138151.04 43138151.17 43138151.32 0.0141 0.0107

Uranus 113396-10-06 02:51 G 43138377.53 43138377.62 43138377.74 0.0141 0.0125

Uranus 113397-05-20 14:08 G 43138604.09 43138604.09 43138604.11 0.0142 0.0141

Jupiter 113398-04-08 17:01 G 43138927.05 43138927.21 43138927.36 0.0502 0.0329

Jupiter 113404-02-14 15:05 G 43141063.94 43141064.13 43141064.33 0.0522 0.0137

Saturn 113408-02-10 15:49 G 43142521.02 43142521.16 43142521.30 0.0269 0.0205

Pluto 113408-03-19 01:10 G 43142558.38 43142558.55 43142558.75 0.0063 0.0034

Saturn 113408-09-26 18:27 G 43142750.08 43142750.27 43142750.48 0.0269 0.0089

Pluto 113408-10-30 04:46 G 43142783.48 43142783.70 43142783.91 0.0063 0.0003

Pluto 113409-06-12 07:25 G 43143008.67 43143008.81 43143009.00 0.0064 0.0042

Jupiter 113410-08-07 05:29 G 43143429.59 43143429.73 43143429.88 0.0508 0.0348

Jupiter 113415-10-20 06:56 G 43145329.59 43145329.79 43145329.98 0.0524 0.0163

Jupiter 113422-04-12 05:29 G 43147695.54 43147695.73 43147695.94 0.0506 0.0087

Moon 113422-08-06 01:53 G 43147811.50 43147811.58 43147811.67 0.2655 0.2160

Earth 113422-08-06 04:03 G 43147811.65 43147811.67 43147811.69 0.2649 0.2620 *

Saturn 113423-03-04 18:56 G 43148022.19 43148022.29 43148022.40 0.0290 0.0250

Mars 113423-04-15 22:46 G 43148064.30 43148064.45 43148064.59 0.1684 0.0974

Saturn 113423-10-20 16:32 G 43148252.00 43148252.19 43148252.38 0.0291 0.0124

Jupiter 113427-06-24 22:17 G 43149595.34 43149595.43 43149595.53 0.0527 0.0463

Uranus 113427-10-10 02:51 G 43149702.56 43149702.62 43149702.69 0.0139 0.0132

Uranus 113428-05-23 11:58 G 43149928.89 43149929.00 43149929.13 0.0139 0.0116

Uranus 113429-01-04 20:51 G 43150155.23 43150155.37 43150155.53 0.0139 0.0100

Uranus 113429-08-19 05:29 G 43150381.57 43150381.73 43150381.91 0.0139 0.0084

Uranus 113430-04-02 13:53 G 43150607.90 43150608.08 43150608.28 0.0139 0.0068

Earth 113430-08-03 18:41 G 43150731.14 43150731.28 43150731.43 0.2650 0.1025

Moon 113430-08-03 22:17 G 43150731.29 43150731.43 43150731.58 0.2655 0.0886 *

Uranus 113430-11-14 22:32 G 43150834.25 43150834.44 43150834.65 0.0138 0.0051

Uranus 113431-06-29 06:56 G 43151060.58 43151060.79 43151061.00 0.0138 0.0034

Uranus 113432-02-10 14:51 G 43151286.90 43151287.12 43151287.33 0.0138 0.0018

Neptune 113432-02-14 13:25 G 43151291.03 43151291.06 43151291.11 0.0089 0.0088

Uranus 113432-09-23 22:32 G 43151513.23 43151513.44 43151513.66 0.0138 0.0003

Neptune 113432-09-27 02:08 G 43151516.51 43151516.59 43151516.72 0.0089 0.0079

Uranus 113433-05-08 06:13 G 43151739.55 43151739.76 43151739.98 0.0138 0.0015

Neptune 113433-05-10 15:34 G 43151742.03 43151742.15 43151742.31 0.0089 0.0069

Jupiter 113433-12-16 05:01 G 43151961.52 43151961.71 43151961.90 0.0503 0.0179

Uranus 113433-12-20 13:39 G 43151965.87 43151966.07 43151966.29 0.0137 0.0031

Neptune 113433-12-22 04:46 G 43151967.56 43151967.70 43151967.89 0.0089 0.0059

Uranus 113434-08-03 21:05 G 43152192.18 43152192.38 43152192.58 0.0137 0.0046

Neptune 113434-08-04 17:58 G 43152193.09 43152193.25 43152193.45 0.0090 0.0049

Uranus 113435-03-18 04:03 G 43152418.48 43152418.67 43152418.87 0.0137 0.0062

Neptune 113435-03-18 07:25 G 43152418.62 43152418.81 43152419.01 0.0090 0.0039 *

Neptune 113435-10-29 20:37 G 43152644.16 43152644.36 43152644.57 0.0090 0.0029

Uranus 113435-10-30 10:46 G 43152644.79 43152644.95 43152645.14 0.0137 0.0078

Neptune 113436-06-11 09:49 G 43152869.70 43152869.91 43152870.13 0.0090 0.0019

Uranus 113436-06-12 17:44 G 43152871.09 43152871.24 43152871.40 0.0137 0.0093

Neptune 113437-01-22 22:46 G 43153095.24 43153095.45 43153095.67 0.0090 0.0009

Uranus 113437-01-25 00:13 G 43153097.39 43153097.51 43153097.65 0.0137 0.0108

Saturn 113437-08-22 22:03 G 43153307.25 43153307.42 43153307.60 0.0270 0.0156

Neptune 113437-09-05 11:58 G 43153320.78 43153321.00 43153321.22 0.0090 0.0002

Uranus 113437-09-08 06:27 G 43153323.69 43153323.77 43153323.88 0.0137 0.0122

Saturn 113438-04-09 00:56 G 43153536.36 43153536.54 43153536.72 0.0269 0.0138

Neptune 113438-04-19 00:41 G 43153546.32 43153546.53 43153546.76 0.0090 0.0012

Uranus 113438-04-22 12:56 G 43153550.04 43153550.04 43153550.04 0.0136 0.0136

Neptune 113438-11-30 13:53 G 43153771.88 43153772.08 43153772.30 0.0090 0.0021

Neptune 113439-07-14 03:05 G 43153997.42 43153997.63 43153997.83 0.0090 0.0031

Jupiter 113439-10-23 04:17 G 43154098.51 43154098.68 43154098.85 0.0521 0.0296

Neptune 113440-02-24 15:49 G 43154222.97 43154223.16 43154223.36 0.0090 0.0041

Neptune 113440-10-07 04:32 G 43154448.52 43154448.69 43154448.88 0.0090 0.0051

Neptune 113441-05-20 17:15 G 43154674.08 43154674.22 43154674.40 0.0090 0.0061

Neptune 113442-01-01 06:13 G 43154899.65 43154899.76 43154899.92 0.0090 0.0071

Neptune 113442-08-14 19:25 G 43155125.22 43155125.31 43155125.42 0.0090 0.0080

Neptune 113443-03-28 08:22 G 43155350.85 43155350.85 43155350.86 0.0090 0.0090

Jupiter 113445-08-21 05:15 G 43156227.63 43156227.72 43156227.82 0.0500 0.0433

Jupiter 113446-04-14 16:17 G 43156464.15 43156464.18 43156464.23 0.0509 0.0497

Mars 113450-08-30 12:56 G 43158062.91 43158063.04 43158063.17 0.1847 0.1158

Jupiter 113451-06-27 21:34 G 43158364.20 43158364.40 43158364.61 0.0524 0.0010

Saturn 113452-09-14 04:17 G 43158808.52 43158808.68 43158808.84 0.0290 0.0188

Saturn 113453-05-02 01:53 G 43159038.42 43159038.58 43159038.74 0.0291 0.0185

Jupiter 113457-12-18 15:34 G 43160729.97 43160730.15 43160730.33 0.0507 0.0231

Jupiter 113463-03-02 14:51 G 43162629.95 43162630.12 43162630.29 0.0526 0.0290

Saturn 113467-03-04 23:29 G 43164093.30 43164093.48 43164093.67 0.0269 0.0122

Saturn 113467-10-20 02:08 G 43164322.43 43164322.59 43164322.76 0.0269 0.0171

Jupiter 113469-08-23 16:03 G 43164995.97 43164996.17 43164996.37 0.0504 0.0028

Uranus 113471-02-18 12:27 G 43165539.97 43165540.02 43165540.08 0.0139 0.0133

Uranus 113471-10-02 20:22 G 43165766.25 43165766.35 43165766.47 0.0139 0.0118

Uranus 113472-05-16 04:46 G 43165992.56 43165992.70 43165992.85 0.0139 0.0102

Uranus 113472-12-28 13:10 G 43166218.88 43166219.05 43166219.22 0.0139 0.0087

Uranus 113473-08-11 21:34 G 43166445.23 43166445.40 43166445.60 0.0139 0.0071

Uranus 113474-03-26 06:41 G 43166671.58 43166671.78 43166671.98 0.0140 0.0054

Uranus 113474-11-07 15:49 G 43166897.95 43166898.16 43166898.37 0.0140 0.0037

Uranus 113475-06-22 00:56 G 43167124.33 43167124.54 43167124.76 0.0140 0.0020

Jupiter 113475-06-30 20:37 G 43167133.28 43167133.36 43167133.45 0.0519 0.0467

Uranus 113476-02-03 10:32 G 43167350.72 43167350.94 43167351.16 0.0140 0.0003

Uranus 113476-09-16 20:08 G 43167577.12 43167577.34 43167577.56 0.0140 0.0015

Uranus 113477-05-01 05:58 G 43167803.54 43167803.75 43167803.97 0.0141 0.0032

Uranus 113477-12-13 16:03 G 43168029.97 43168030.17 43168030.38 0.0141 0.0050

Uranus 113478-07-28 02:08 G 43168256.41 43168256.59 43168256.79 0.0141 0.0067

Uranus 113479-03-11 12:41 G 43168482.86 43168483.03 43168483.21 0.0141 0.0084

Uranus 113479-10-23 22:46 G 43168709.32 43168709.45 43168709.62 0.0141 0.0103

Uranus 113480-06-06 09:49 G 43168935.81 43168935.91 43168936.04 0.0141 0.0119

Uranus 113481-01-18 21:05 G 43169162.33 43169162.38 43169162.44 0.0142 0.0136

Jupiter 113481-04-28 16:46 G 43169262.04 43169262.20 43169262.37 0.0502 0.0285

Saturn 113482-03-27 08:08 G 43169594.66 43169594.84 43169595.03 0.0290 0.0145

Saturn 113482-11-12 05:29 G 43169824.62 43169824.73 43169824.87 0.0291 0.0230

Jupiter 113487-03-05 12:56 G 43171398.85 43171399.04 43171399.24 0.0522 0.0177

Mars 113489-02-10 08:37 G 43172106.69 43172106.86 43172107.02 0.1687 0.0652

Jupiter 113493-08-26 03:49 G 43173764.53 43173764.66 43173764.79 0.0508 0.0385

Saturn 113496-09-14 05:58 G 43174879.55 43174879.75 43174879.95 0.0270 0.0073

Saturn 113497-05-01 08:22 G 43175108.74 43175108.85 43175108.98 0.0269 0.0221

Pluto 113498-05-02 20:51 G 43175475.21 43175475.37 43175475.54 0.0081 0.0056

Jupiter 113498-11-08 03:34 G 43175664.45 43175664.65 43175664.85 0.0525 0.0129

Pluto 113498-12-14 08:08 G 43175700.65 43175700.84 43175701.07 0.0081 0.0028

Jupiter 113505-05-02 03:05 G 43178030.43 43178030.63 43178030.83 0.0505 0.0120

Jupiter 113510-07-14 19:53 G 43179930.22 43179930.33 43179930.45 0.0527 0.0427

Uranus 113511-06-10 11:58 G 43180260.99 43180261.00 43180261.05 0.0139 0.0138

Saturn 113511-10-08 19:10 G 43180381.10 43180381.30 43180381.51 0.0290 0.0078

Uranus 113512-01-22 21:20 G 43180487.29 43180487.39 43180487.50 0.0139 0.0121

Uranus 113512-09-05 06:13 G 43180713.63 43180713.76 43180713.92 0.0139 0.0105

Uranus 113513-04-19 15:05 G 43180939.98 43180940.13 43180940.31 0.0139 0.0089

Neptune 113513-08-17 21:34 G 43181060.36 43181060.40 43181060.49 0.0088 0.0084

Uranus 113513-12-02 00:13 G 43181166.32 43181166.51 43181166.69 0.0139 0.0072

Neptune 113514-03-31 10:46 G 43181285.84 43181285.95 43181286.07 0.0088 0.0074

Uranus 113514-07-16 08:37 G 43181392.66 43181392.86 43181393.06 0.0138 0.0056

Neptune 113514-11-11 23:29 G 43181511.35 43181511.48 43181511.64 0.0088 0.0065

Uranus 113515-02-27 16:46 G 43181619.00 43181619.20 43181619.41 0.0138 0.0039

Neptune 113515-06-25 12:13 G 43181736.86 43181737.01 43181737.20 0.0088 0.0056

Uranus 113515-10-12 00:56 G 43181845.33 43181845.54 43181845.76 0.0138 0.0023

Neptune 113516-02-06 01:25 G 43181962.38 43181962.56 43181962.75 0.0088 0.0046

Uranus 113516-05-25 08:51 G 43182071.66 43182071.87 43182072.09 0.0138 0.0007

Mars 113516-06-27 19:25 G 43182105.25 43182105.31 43182105.37 0.1842 0.1706

Neptune 113516-09-18 14:08 G 43182187.90 43182188.09 43182188.30 0.0088 0.0037

Jupiter 113517-01-05 02:08 G 43182296.40 43182296.59 43182296.79 0.0503 0.0143

Uranus 113517-01-06 16:46 G 43182297.98 43182298.20 43182298.41 0.0138 0.0010

Neptune 113517-05-02 03:20 G 43182413.43 43182413.64 43182413.85 0.0088 0.0027

Uranus 113517-08-21 00:13 G 43182524.30 43182524.51 43182524.72 0.0138 0.0026

Neptune 113517-12-13 16:03 G 43182638.96 43182639.17 43182639.39 0.0088 0.0018

Uranus 113518-04-04 07:25 G 43182750.61 43182750.81 43182751.02 0.0137 0.0043

Neptune 113518-07-27 05:01 G 43182864.49 43182864.71 43182864.93 0.0088 0.0008

Uranus 113518-11-16 14:37 G 43182976.93 43182977.11 43182977.32 0.0137 0.0059

Neptune 113519-03-09 17:58 G 43183090.02 43183090.25 43183090.47 0.0088 0.0002

Uranus 113519-06-30 21:34 G 43183203.23 43183203.40 43183203.60 0.0137 0.0074

Neptune 113519-10-21 06:41 G 43183315.56 43183315.78 43183316.01 0.0088 0.0011

Uranus 113520-02-12 04:32 G 43183429.53 43183429.69 43183429.86 0.0137 0.0089

Neptune 113520-06-02 19:53 G 43183541.11 43183541.33 43183541.55 0.0088 0.0020

Uranus 113520-09-25 11:01 G 43183655.83 43183655.96 43183656.11 0.0137 0.0104

Neptune 113521-01-14 08:37 G 43183766.66 43183766.86 43183767.08 0.0088 0.0030

Uranus 113521-05-09 17:15 G 43183882.13 43183882.22 43183882.34 0.0137 0.0119

Neptune 113521-08-27 21:49 G 43183992.21 43183992.41 43183992.61 0.0088 0.0039

Uranus 113521-12-21 23:29 G 43184108.46 43184108.48 43184108.55 0.0136 0.0134

Neptune 113522-04-10 10:32 G 43184217.77 43184217.94 43184218.14 0.0088 0.0049

Jupiter 113522-11-12 04:32 G 43184433.54 43184433.69 43184433.84 0.0520 0.0344

Neptune 113522-11-21 23:58 G 43184443.33 43184443.50 43184443.67 0.0088 0.0058

Neptune 113523-07-05 12:41 G 43184668.91 43184669.03 43184669.19 0.0088 0.0068

Neptune 113524-02-16 01:53 G 43184894.49 43184894.58 43184894.70 0.0088 0.0077

Neptune 113524-09-28 14:37 G 43185120.10 43185120.11 43185120.17 0.0088 0.0087

Saturn 113526-03-28 08:22 G 43185665.65 43185665.85 43185666.07 0.0269 0.0037

Saturn 113526-11-12 10:46 G 43185894.90 43185894.95 43185895.03 0.0269 0.0256

Jupiter 113528-09-10 03:05 G 43186562.51 43186562.63 43186562.75 0.0501 0.0397

Jupiter 113534-07-17 20:37 G 43188699.16 43188699.36 43188699.57 0.0523 0.0049

Jupiter 113541-01-07 14:51 G 43191064.95 43191065.12 43191065.29 0.0507 0.0275

Saturn 113541-04-19 23:15 G 43191167.26 43191167.47 43191167.68 0.0291 0.0035

Moon 113544-02-09 12:27 G 43192192.96 43192193.02 43192193.09 0.2677 0.2424

Jupiter 113546-03-22 12:13 G 43192964.83 43192965.01 43192965.19 0.0526 0.0252

Mars 113548-06-27 07:25 G 43193792.76 43193792.81 43193792.87 0.1858 0.1747

Moon 113552-02-07 01:39 G 43195112.45 43195112.57 43195112.69 0.2682 0.1739

Earth 113552-02-07 06:56 G 43195112.64 43195112.79 43195112.94 0.2682 0.0836 *

Jupiter 113552-09-12 14:22 G 43195330.89 43195331.10 43195331.30 0.0504 0.0010

Uranus 113554-10-19 22:17 G 43196098.42 43196098.43 43196098.45 0.0139 0.0138

Mars 113554-12-09 17:44 G 43196149.07 43196149.24 43196149.42 0.1691 0.0319

Uranus 113555-06-03 05:58 G 43196324.67 43196324.75 43196324.86 0.0139 0.0123

Saturn 113555-10-08 15:05 G 43196451.92 43196452.13 43196452.34 0.0270 0.0013

Uranus 113556-01-15 14:08 G 43196550.96 43196551.09 43196551.24 0.0139 0.0107

Uranus 113556-08-28 22:32 G 43196777.28 43196777.44 43196777.61 0.0139 0.0092

Uranus 113557-04-12 07:10 G 43197003.62 43197003.80 43197003.99 0.0139 0.0075

Uranus 113557-11-24 16:03 G 43197229.97 43197230.17 43197230.37 0.0140 0.0059

Uranus 113558-07-09 00:56 G 43197456.33 43197456.54 43197456.75 0.0140 0.0042

Jupiter 113558-07-20 16:32 G 43197468.14 43197468.19 43197468.25 0.0519 0.0500

Uranus 113559-02-20 10:03 G 43197682.71 43197682.92 43197683.13 0.0140 0.0025

Uranus 113559-10-04 19:25 G 43197909.09 43197909.31 43197909.53 0.0140 0.0008

Uranus 113560-05-18 05:01 G 43198135.49 43198135.71 43198135.93 0.0140 0.0009

Uranus 113560-12-30 14:51 G 43198361.90 43198362.12 43198362.33 0.0141 0.0027

Uranus 113561-08-14 00:27 G 43198588.32 43198588.52 43198588.73 0.0141 0.0044

Uranus 113562-03-28 10:32 G 43198814.75 43198814.94 43198815.14 0.0141 0.0062

Uranus 113562-11-09 20:51 G 43199041.19 43199041.37 43199041.56 0.0141 0.0079

Uranus 113563-06-24 07:25 G 43199267.66 43199267.81 43199267.97 0.0141 0.0097

Uranus 113564-02-05 17:44 G 43199494.13 43199494.24 43199494.38 0.0141 0.0114

Jupiter 113564-05-18 14:08 G 43199596.92 43199597.09 43199597.27 0.0502 0.0250

Uranus 113564-09-19 04:32 G 43199720.63 43199720.69 43199720.79 0.0142 0.0131

Jupiter 113570-03-25 09:49 G 43201733.72 43201733.91 43201734.09 0.0522 0.0211

Saturn 113570-10-31 11:15 G 43201953.76 43201953.97 43201954.18 0.0290 0.0035

Jupiter 113576-09-14 23:58 G 43204099.39 43204099.50 43204099.61 0.0508 0.0419

Jupiter 113581-11-28 03:20 G 43205999.44 43205999.64 43205999.85 0.0524 0.0082

Saturn 113584-09-02 15:05 G 43207009.05 43207009.13 43207009.23 0.0270 0.0244

Saturn 113585-04-19 18:41 G 43207238.07 43207238.28 43207238.49 0.0269 0.0052

Jupiter 113588-05-21 00:13 G 43208365.32 43208365.51 43208365.70 0.0506 0.0157

Jupiter 113593-08-02 18:56 G 43210265.16 43210265.29 43210265.43 0.0527 0.0383

Uranus 113595-09-22 06:56 G 43211045.72 43211045.79 43211045.89 0.0139 0.0127

Uranus 113596-05-05 16:17 G 43211272.06 43211272.18 43211272.32 0.0139 0.0110

Uranus 113596-12-18 01:10 G 43211498.40 43211498.55 43211498.72 0.0139 0.0094

Neptune 113596-12-30 11:15 G 43211510.89 43211510.97 43211511.08 0.0089 0.0081

Uranus 113597-08-01 10:03 G 43211724.75 43211724.92 43211725.11 0.0139 0.0077

Neptune 113597-08-13 00:27 G 43211736.40 43211736.52 43211736.67 0.0089 0.0071

Uranus 113598-03-15 18:41 G 43211951.09 43211951.28 43211951.48 0.0139 0.0061

Neptune 113598-03-26 13:39 G 43211961.92 43211962.07 43211962.24 0.0089 0.0061

Uranus 113598-10-28 03:20 G 43212177.44 43212177.64 43212177.85 0.0138 0.0044

Neptune 113598-11-07 03:05 G 43212187.46 43212187.63 43212187.81 0.0090 0.0051

Uranus 113599-06-11 11:29 G 43212403.77 43212403.98 43212404.20 0.0138 0.0027

Neptune 113599-06-20 15:49 G 43212412.99 43212413.16 43212413.38 0.0090 0.0042

Uranus 113600-01-23 19:39 G 43212630.10 43212630.32 43212630.53 0.0138 0.0011

Jupiter 113600-01-25 00:41 G 43212631.33 43212631.53 43212631.73 0.0503 0.0103

Neptune 113600-02-01 05:01 G 43212638.52 43212638.71 43212638.93 0.0090 0.0032

Saturn 113600-05-12 15:20 G 43212739.94 43212740.14 43212740.34 0.0291 0.0080

Uranus 113600-09-06 03:20 G 43212856.42 43212856.64 43212856.86 0.0138 0.0006

Neptune 113600-09-13 18:13 G 43212864.06 43212864.26 43212864.48 0.0090 0.0022

Uranus 113601-04-20 11:01 G 43213082.75 43213082.96 43213083.18 0.0138 0.0022

Neptune 113601-04-27 07:25 G 43213089.60 43213089.81 43213090.04 0.0090 0.0012

Uranus 113601-12-02 18:27 G 43213309.07 43213309.27 43213309.49 0.0137 0.0038

Neptune 113601-12-08 20:51 G 43213315.15 43213315.37 43213315.59 0.0090 0.0001

Uranus 113602-07-17 01:39 G 43213535.38 43213535.57 43213535.78 0.0137 0.0054

Neptune 113602-07-22 09:49 G 43213540.70 43213540.91 43213541.13 0.0090 0.0009

Uranus 113603-02-28 08:51 G 43213761.69 43213761.87 43213762.06 0.0137 0.0070

Neptune 113603-03-04 22:46 G 43213766.24 43213766.45 43213766.67 0.0090 0.0019

Uranus 113603-10-12 15:34 G 43213987.99 43213988.15 43213988.33 0.0137 0.0085

Neptune 113603-10-16 11:29 G 43213991.79 43213991.98 43213992.20 0.0090 0.0029

Uranus 113604-05-25 22:17 G 43214214.29 43214214.43 43214214.58 0.0137 0.0100

Neptune 113604-05-29 00:27 G 43214217.34 43214217.52 43214217.73 0.0090 0.0039

Uranus 113605-01-07 04:46 G 43214440.59 43214440.70 43214440.82 0.0137 0.0115

Neptune 113605-01-09 13:53 G 43214442.90 43214443.08 43214443.26 0.0090 0.0048

Uranus 113605-08-21 10:46 G 43214666.91 43214666.95 43214667.04 0.0137 0.0130

Neptune 113605-08-23 02:37 G 43214668.45 43214668.61 43214668.78 0.0090 0.0058

Jupiter 113605-12-01 01:10 G 43214768.41 43214768.55 43214768.69 0.0520 0.0381

Neptune 113606-04-05 15:20 G 43214894.01 43214894.14 43214894.29 0.0090 0.0068

Neptune 113606-11-17 04:03 G 43215119.59 43215119.67 43215119.80 0.0090 0.0078

Neptune 113607-06-30 17:15 G 43215345.18 43215345.22 43215345.28 0.0090 0.0087

Jupiter 113611-09-30 01:25 G 43216897.42 43216897.56 43216897.70 0.0501 0.0360

Saturn 113614-03-15 21:34 G 43217795.25 43217795.40 43217795.54 0.0270 0.0196

Mars 113614-04-24 14:08 G 43217834.96 43217835.09 43217835.22 0.1854 0.1175

Saturn 113614-10-31 00:56 G 43218024.35 43218024.54 43218024.74 0.0269 0.0100

Jupiter 113617-08-05 15:20 G 43219033.94 43219034.14 43219034.35 0.0523 0.0078

Mars 113620-10-06 03:20 G 43220191.46 43220191.64 43220191.82 0.1695 0.0020

Jupiter 113624-01-27 11:29 G 43221399.82 43221399.98 43221400.14 0.0507 0.0308

Saturn 113629-04-07 06:56 G 43223296.67 43223296.79 43223296.94 0.0289 0.0221

Jupiter 113629-04-10 07:39 G 43223299.64 43223299.82 43223300.01 0.0526 0.0221

Saturn 113629-11-23 04:03 G 43223526.49 43223526.67 43223526.85 0.0290 0.0151

Jupiter 113635-10-02 09:34 G 43225665.70 43225665.90 43225666.10 0.0504 0.0040

Uranus 113639-01-31 14:51 G 43226883.05 43226883.12 43226883.21 0.0139 0.0128

Uranus 113639-09-14 22:32 G 43227109.34 43227109.44 43227109.58 0.0139 0.0113

Uranus 113640-04-28 06:56 G 43227335.65 43227335.79 43227335.96 0.0139 0.0097

Uranus 113640-12-10 15:20 G 43227561.98 43227562.14 43227562.33 0.0139 0.0081

Jupiter 113640-12-14 00:41 G 43227565.50 43227565.53 43227565.57 0.0528 0.0518

Uranus 113641-07-24 23:58 G 43227788.32 43227788.50 43227788.70 0.0139 0.0065

Uranus 113642-03-08 08:51 G 43228014.67 43228014.87 43228015.08 0.0140 0.0048

Uranus 113642-10-20 17:58 G 43228241.04 43228241.25 43228241.46 0.0140 0.0031

Uranus 113643-06-04 03:05 G 43228467.42 43228467.63 43228467.85 0.0140 0.0014

Saturn 113643-09-26 02:51 G 43228581.44 43228581.62 43228581.79 0.0270 0.0152

Uranus 113644-01-16 12:41 G 43228693.81 43228694.03 43228694.24 0.0140 0.0005

Saturn 113644-05-12 05:29 G 43228810.56 43228810.73 43228810.92 0.0269 0.0143

Uranus 113644-08-29 22:03 G 43228920.21 43228920.42 43228920.64 0.0140 0.0021

Uranus 113645-04-13 07:39 G 43229146.62 43229146.82 43229147.04 0.0141 0.0039

Uranus 113645-11-25 17:44 G 43229373.04 43229373.24 43229373.45 0.0141 0.0056

Uranus 113646-07-10 04:03 G 43229599.48 43229599.67 43229599.85 0.0141 0.0073

Uranus 113647-02-21 13:53 G 43229825.93 43229826.08 43229826.26 0.0141 0.0091

Jupiter 113647-06-07 10:03 G 43229931.74 43229931.92 43229932.11 0.0502 0.0218

Uranus 113647-10-06 00:27 G 43230052.39 43230052.52 43230052.67 0.0141 0.0108

Uranus 113648-05-19 11:15 G 43230278.89 43230278.97 43230279.08 0.0141 0.0126

Jupiter 113653-04-13 08:08 G 43232068.67 43232068.84 43232069.03 0.0521 0.0254

Pluto 113653-09-05 10:17 G 43232213.81 43232213.93 43232214.06 0.0063 0.0051

Pluto 113654-04-18 13:25 G 43232438.85 43232439.06 43232439.28 0.0063 0.0014

Pluto 113654-11-29 16:32 G 43232664.00 43232664.19 43232664.40 0.0063 0.0023

Pluto 113655-07-12 19:25 G 43232889.28 43232889.31 43232889.39 0.0064 0.0062

Saturn 113658-10-18 10:46 G 43234082.78 43234082.95 43234083.11 0.0290 0.0179

Jupiter 113659-02-10 11:15 G 43234197.91 43234197.97 43234198.04 0.0500 0.0471

Saturn 113659-06-05 07:39 G 43234312.67 43234312.82 43234312.99 0.0291 0.0196

Jupiter 113659-10-04 22:17 G 43234434.35 43234434.43 43234434.52 0.0509 0.0461

Jupiter 113664-12-16 23:58 G 43236334.30 43236334.50 43236334.71 0.0524 0.0046

Earth 113665-08-07 04:46 G 43236567.67 43236567.70 43236567.72 0.2650 0.2595

Jupiter 113671-06-09 22:17 G 43238700.24 43238700.43 43238700.61 0.0506 0.0195

Saturn 113673-04-07 08:22 G 43239367.65 43239367.85 43239368.04 0.0270 0.0106

Moon 113673-08-04 14:08 G 43239486.95 43239487.09 43239487.23 0.2650 0.1293

Earth 113673-08-04 19:39 G 43239487.17 43239487.32 43239487.47 0.2651 0.1035 *

Saturn 113673-11-22 11:29 G 43239596.83 43239596.98 43239597.13 0.0269 0.0189

Jupiter 113676-08-21 13:10 G 43240599.90 43240600.05 43240600.20 0.0527 0.0356

Neptune 113677-11-19 07:25 G 43241054.76 43241054.81 43241054.86 0.0088 0.0085

Neptune 113678-07-02 19:53 G 43241280.24 43241280.33 43241280.45 0.0088 0.0076

Neptune 113679-02-13 08:37 G 43241505.74 43241505.86 43241506.02 0.0088 0.0067

Uranus 113679-05-22 16:46 G 43241604.14 43241604.20 43241604.28 0.0139 0.0132

Neptune 113679-09-26 21:20 G 43241731.24 43241731.39 43241731.58 0.0088 0.0058

Uranus 113680-01-04 01:53 G 43241830.47 43241830.58 43241830.72 0.0139 0.0116

Mars 113680-02-19 20:22 G 43241877.19 43241877.35 43241877.51 0.1849 0.0596

Neptune 113680-05-09 10:32 G 43241956.77 43241956.94 43241957.14 0.0088 0.0048

Uranus 113680-08-17 11:01 G 43242056.82 43242056.96 43242057.13 0.0139 0.0099

Neptune 113680-12-20 23:15 G 43242182.29 43242182.47 43242182.69 0.0088 0.0039

Uranus 113681-03-31 20:08 G 43242283.17 43242283.34 43242283.52 0.0139 0.0082

Neptune 113681-08-03 12:27 G 43242407.81 43242408.02 43242408.23 0.0088 0.0029

Uranus 113681-11-13 05:01 G 43242509.53 43242509.71 43242509.91 0.0139 0.0066

Neptune 113682-03-17 01:10 G 43242633.34 43242633.55 43242633.77 0.0088 0.0020

Uranus 113682-06-27 13:39 G 43242735.87 43242736.07 43242736.28 0.0138 0.0049

Neptune 113682-10-28 13:53 G 43242858.87 43242859.08 43242859.31 0.0088 0.0011

Uranus 113683-02-08 22:03 G 43242962.21 43242962.42 43242962.63 0.0138 0.0032

Jupiter 113683-02-12 21:34 G 43242966.20 43242966.40 43242966.60 0.0503 0.0068

Neptune 113683-06-11 03:05 G 43243084.41 43243084.63 43243084.85 0.0088 0.0001

Uranus 113683-09-23 06:13 G 43243188.55 43243188.76 43243188.98 0.0138 0.0015

Neptune 113684-01-22 16:03 G 43243309.95 43243310.17 43243310.39 0.0088 0.0009

Uranus 113684-05-06 14:22 G 43243414.88 43243415.10 43243415.31 0.0138 0.0003

Neptune 113684-09-04 04:46 G 43243535.49 43243535.70 43243535.92 0.0088 0.0018

Uranus 113684-12-18 22:03 G 43243641.21 43243641.42 43243641.64 0.0138 0.0018

Neptune 113685-04-17 17:44 G 43243761.03 43243761.24 43243761.46 0.0088 0.0028

Uranus 113685-08-02 05:29 G 43243867.53 43243867.73 43243867.95 0.0138 0.0034

Neptune 113685-11-29 06:41 G 43243986.58 43243986.78 43243986.99 0.0088 0.0037

Uranus 113686-03-16 12:56 G 43244093.84 43244094.04 43244094.24 0.0137 0.0050

Neptune 113686-07-12 19:25 G 43244212.14 43244212.31 43244212.52 0.0088 0.0047

Mars 113686-08-03 12:41 G 43244233.85 43244234.03 43244234.20 0.1699 0.0365

Uranus 113686-10-28 20:08 G 43244320.15 43244320.34 43244320.53 0.0137 0.0066

Neptune 113687-02-23 08:37 G 43244437.70 43244437.86 43244438.04 0.0088 0.0056

Uranus 113687-06-12 02:51 G 43244546.46 43244546.62 43244546.80 0.0137 0.0081

Neptune 113687-10-06 21:20 G 43244663.27 43244663.39 43244663.56 0.0088 0.0066

Uranus 113688-01-24 09:49 G 43244772.76 43244772.91 43244773.06 0.0137 0.0096

Saturn 113688-04-29 23:29 G 43244869.29 43244869.48 43244869.68 0.0290 0.0107

Neptune 113688-05-19 10:46 G 43244888.85 43244888.95 43244889.08 0.0088 0.0075

Uranus 113688-09-06 16:17 G 43244999.06 43244999.18 43244999.31 0.0137 0.0111

Saturn 113688-12-15 20:37 G 43245099.29 43245099.36 43245099.46 0.0290 0.0268

Jupiter 113688-12-19 20:37 G 43245103.24 43245103.36 43245103.48 0.0520 0.0412

Neptune 113688-12-30 23:29 G 43245114.45 43245114.48 43245114.57 0.0088 0.0085

Uranus 113689-04-20 22:32 G 43245225.37 43245225.44 43245225.53 0.0137 0.0126

Jupiter 113694-10-18 19:53 G 43247232.18 43247232.33 43247232.48 0.0501 0.0332

Jupiter 113700-08-25 14:37 G 43249368.91 43249369.11 43249369.31 0.0523 0.0124

Saturn 113702-10-19 14:37 G 43250153.90 43250154.11 43250154.32 0.0269 0.0059

Saturn 113703-06-05 17:15 G 43250383.12 43250383.22 43250383.32 0.0269 0.0234

Jupiter 113707-02-16 07:10 G 43251734.65 43251734.80 43251734.95 0.0507 0.0342

Jupiter 113712-04-30 06:56 G 43253634.60 43253634.79 43253634.98 0.0525 0.0175

Saturn 113717-11-11 02:51 G 43255655.41 43255655.62 43255655.82 0.0290 0.0065

Jupiter 113718-10-22 07:39 G 43256000.62 43256000.82 43256001.02 0.0505 0.0080

Uranus 113722-10-02 00:41 G 43257441.48 43257441.53 43257441.60 0.0138 0.0133

Uranus 113723-05-16 08:22 G 43257667.76 43257667.85 43257667.98 0.0139 0.0118

Uranus 113723-12-28 16:32 G 43257894.06 43257894.19 43257894.35 0.0139 0.0102

Jupiter 113724-01-03 21:49 G 43257900.34 43257900.41 43257900.50 0.0528 0.0480

Uranus 113724-08-11 00:56 G 43258120.38 43258120.54 43258120.72 0.0139 0.0086

Uranus 113725-03-25 09:34 G 43258346.71 43258346.90 43258347.09 0.0139 0.0069

Uranus 113725-11-06 18:13 G 43258573.06 43258573.26 43258573.46 0.0139 0.0053

Uranus 113726-06-21 03:05 G 43258799.42 43258799.63 43258799.84 0.0140 0.0036

Uranus 113727-02-02 11:58 G 43259025.79 43259026.00 43259026.22 0.0140 0.0019

Uranus 113727-09-16 21:20 G 43259252.17 43259252.39 43259252.61 0.0140 0.0002

Uranus 113728-04-30 06:41 G 43259478.57 43259478.78 43259479.00 0.0140 0.0016

Uranus 113728-12-12 16:17 G 43259704.97 43259705.18 43259705.40 0.0140 0.0033

Uranus 113729-07-27 01:53 G 43259931.39 43259931.58 43259931.80 0.0141 0.0051

Uranus 113730-03-10 11:58 G 43260157.81 43260158.00 43260158.20 0.0141 0.0068

Jupiter 113730-06-27 08:22 G 43260266.66 43260266.85 43260267.04 0.0502 0.0180

Uranus 113730-10-22 22:17 G 43260384.26 43260384.43 43260384.60 0.0141 0.0085

Uranus 113731-06-06 08:22 G 43260610.72 43260610.85 43260611.02 0.0141 0.0103

Uranus 113732-01-18 18:56 G 43260837.19 43260837.29 43260837.42 0.0141 0.0121

Saturn 113732-04-30 19:25 G 43260940.09 43260940.31 43260940.52 0.0270 0.0017

Uranus 113732-09-01 05:44 G 43261063.71 43261063.74 43261063.81 0.0142 0.0137

Jupiter 113736-05-03 02:51 G 43262403.45 43262403.62 43262403.79 0.0521 0.0283

Jupiter 113742-03-02 08:22 G 43264532.76 43264532.85 43264532.95 0.0500 0.0435

Jupiter 113742-10-24 19:10 G 43264769.27 43264769.30 43264769.35 0.0508 0.0496

Pluto 113744-06-02 10:32 G 43265355.73 43265355.94 43265356.17 0.0081 0.0019

Pluto 113745-01-13 21:49 G 43265581.29 43265581.41 43265581.57 0.0081 0.0064

Mars 113745-12-18 03:05 G 43265919.46 43265919.63 43265919.80 0.1844 0.0059

Saturn 113747-05-24 15:20 G 43266441.93 43266442.14 43266442.35 0.0290 0.0006

Jupiter 113748-01-06 19:10 G 43266669.10 43266669.30 43266669.51 0.0524 0.0018

Mars 113752-05-31 22:03 G 43268276.26 43268276.42 43268276.58 0.1702 0.0707

Jupiter 113754-06-29 16:32 G 43269035.01 43269035.19 43269035.37 0.0506 0.0224

Jupiter 113759-09-11 12:27 G 43270934.86 43270935.02 43270935.19 0.0527 0.0310

Saturn 113761-03-26 22:46 G 43271497.41 43271497.45 43271497.49 0.0270 0.0263

Neptune 113761-04-03 19:10 G 43271505.25 43271505.30 43271505.41 0.0089 0.0084

Saturn 113761-11-11 02:22 G 43271726.39 43271726.60 43271726.81 0.0269 0.0034

Neptune 113761-11-15 08:37 G 43271730.76 43271730.86 43271731.01 0.0089 0.0074

Neptune 113762-06-28 22:03 G 43271956.28 43271956.42 43271956.58 0.0089 0.0064

Uranus 113763-01-21 01:25 G 43272162.55 43272162.56 43272162.62 0.0140 0.0138

Neptune 113763-02-09 11:15 G 43272181.80 43272181.97 43272182.15 0.0089 0.0054

Uranus 113763-09-04 11:15 G 43272388.87 43272388.97 43272389.09 0.0139 0.0121

Neptune 113763-09-23 00:27 G 43272407.33 43272407.52 43272407.71 0.0089 0.0044

Uranus 113764-04-17 20:22 G 43272615.22 43272615.35 43272615.51 0.0139 0.0105

Neptune 113764-05-05 13:39 G 43272632.87 43272633.07 43272633.27 0.0090 0.0034

Uranus 113764-11-30 05:44 G 43272841.58 43272841.74 43272841.92 0.0139 0.0087

Neptune 113764-12-17 02:51 G 43272858.41 43272858.62 43272858.83 0.0090 0.0024

Uranus 113765-07-14 14:37 G 43273067.93 43273068.11 43273068.31 0.0139 0.0071

Neptune 113765-07-30 16:03 G 43273083.95 43273084.17 43273084.39 0.0090 0.0014

Uranus 113766-02-25 23:29 G 43273294.28 43273294.48 43273294.69 0.0139 0.0054

Jupiter 113766-03-04 16:46 G 43273301.00 43273301.20 43273301.41 0.0503 0.0039

Neptune 113766-03-13 05:01 G 43273309.50 43273309.71 43273309.93 0.0090 0.0005

Uranus 113766-10-10 08:08 G 43273520.63 43273520.84 43273521.05 0.0138 0.0037

Neptune 113766-10-24 18:13 G 43273535.05   43273535.26   43273535.48 0.0090 0.0006

Uranus   113767-05-24 16:32 G 43273746.97   43273747.19   43273747.40 0.0138 0.0020

Neptune 113767-06-07 07:25 G 43273760.59   43273760.81   43273761.02 0.0090 0.0016

Uranus   113768-01-06 00:41 G 43273973.31   43273973.53   43273973.74 0.0138 0.0004

Neptune 113768-01-18 20:22 G 43273986.15   43273986.35   43273986.56 0.0090 0.0026

Uranus   113768-08-19 08:22 G 43274199.64   43274199.85   43274200.07 0.0138 0.0013

Neptune 113768-08-31 09:20 G 43274211.70   43274211.89   43274212.10 0.0090 0.0036

Uranus   113769-04-02 16:03 G 43274425.96   43274426.17   43274426.39 0.0138 0.0030

Neptune 113769-04-13 22:03 G 43274437.25   43274437.42   43274437.63 0.0090 0.0046

Uranus   113769-11-14 23:29 G 43274652.29   43274652.48   43274652.69 0.0138 0.0046

Neptune 113769-11-25 11:15 G 43274662.81   43274662.97   43274663.15 0.0090 0.0056

Uranus   113770-06-29 06:56 G 43274878.60   43274878.79   43274878.99 0.0137 0.0061

Neptune 113770-07-09 00:27 G 43274888.38   43274888.52   43274888.67 0.0090 0.0065

Uranus   113771-02-10 13:39 G 43275104.91   43275105.07   43275105.26 0.0137 0.0078

Neptune 113771-02-19 13:10 G 43275113.94   43275114.05   43275114.18 0.0090 0.0075

Uranus   113771-09-24 20:51 G 43275331.21   43275331.37   43275331.53 0.0137 0.0092

Neptune 113771-10-03 01:39 G 43275339.53   43275339.57   43275339.67 0.0090 0.0085

Jupiter 113772-01-09 19:53 G 43275438.24   43275438.33   43275438.43 0.0520 0.0458

Uranus   113772-05-08 03:05 G 43275557.52   43275557.63   43275557.78 0.0137 0.0108

Uranus   113772-12-20 09:49 G 43275783.83   43275783.91   43275784.02 0.0137 0.0123

Saturn   113776-12-03 17:44 G 43277228.03   43277228.24   43277228.45 0.0291 0.0045

Jupiter 113777-11-07 17:58 G 43277567.09   43277567.25   43277567.42 0.0501 0.0293

Jupiter 113783-09-14 11:58 G 43279703.81   43279704.00   43279704.20 0.0522 0.0165

Jupiter 113790-03-07 05:58 G 43282069.62   43282069.75   43282069.88 0.0507 0.0383

Saturn   113790-10-07 02:37 G 43282283.49   43282283.61   43282283.73 0.0270 0.0223

Saturn   113791-05-24 05:58 G 43282512.55   43282512.75   43282512.96 0.0269 0.0074

Earth   113795-02-08 08:08 G 43283868.69   43283868.84   43283868.99 0.2681 0.0898

Moon   113795-02-08 12:41 G 43283868.87   43283869.03   43283869.19 0.2678 0.0086 *

Jupiter 113795-05-20 01:53 G 43283969.39   43283969.58   43283969.78 0.0525 0.0144

Jupiter 113801-11-11 05:15 G 43286335.53   43286335.72   43286335.92 0.0505 0.0118

Saturn 113805-10-30 08:08 G 43287784.77 43287784.84 43287784.95 0.0290 0.0261

Uranus 113806-06-02 10:03 G 43287999.91 43287999.92 43287999.95 0.0138 0.0138

Saturn 113806-06-17 05:15 G 43288014.53 43288014.72 43288014.92 0.0290 0.0113

Uranus 113807-01-14 17:44 G 43288226.15 43288226.24 43288226.35 0.0138 0.0122

Jupiter 113807-01-23 17:29 G 43288235.13 43288235.23 43288235.34 0.0528 0.0447

Uranus 113807-08-29 01:39 G 43288452.44 43288452.57 43288452.72 0.0139 0.0107

Uranus 113808-04-11 09:49 G 43288678.76 43288678.91 43288679.08 0.0139 0.0091

Uranus 113808-11-23 17:58 G 43288905.08 43288905.25 43288905.45 0.0139 0.0075

Uranus 113809-07-08 02:37 G 43289131.42 43289131.61 43289131.81 0.0139 0.0058

Uranus 113810-02-19 11:15 G 43289357.77 43289357.97 43289358.18 0.0139 0.0042

Uranus 113810-10-03 20:08 G 43289584.13 43289584.34 43289584.56 0.0140 0.0025

Uranus 113811-05-18 05:15 G 43289810.51 43289810.72 43289810.94 0.0140 0.0008

Mars 113811-10-16 09:34 G 43289961.74 43289961.90 43289962.07 0.1839 0.0511

Uranus 113811-12-30 14:37 G 43290036.89 43290037.11 43290037.33 0.0140 0.0010

Uranus 113812-08-12 23:58 G 43290263.29 43290263.50 43290263.71 0.0140 0.0027

Uranus 113813-03-27 09:34 G 43290489.69 43290489.90 43290490.11 0.0140 0.0045

Jupiter 113813-07-17 02:51 G 43290601.43 43290601.62 43290601.82 0.0502 0.0152

Uranus 113813-11-08 19:10 G 43290716.11 43290716.30 43290716.50 0.0141 0.0062

Uranus 113814-06-23 05:15 G 43290942.55 43290942.72 43290942.91 0.0141 0.0080

Uranus 113815-02-04 15:34 G 43291169.00 43291169.15 43291169.31 0.0141 0.0097

Uranus 113815-09-19 01:53 G 43291395.46 43291395.58 43291395.72 0.0141 0.0115

Uranus 113816-05-02 12:41 G 43291621.96 43291622.03 43291622.11 0.0141 0.0132

Mars 113818-03-30 06:41 G 43292318.65 43292318.78 43292318.92 0.1706 0.1074

Jupiter 113819-05-24 02:51 G 43292738.46 43292738.62 43292738.78 0.0521 0.0332

Saturn 113820-04-19 09:49 G 43293069.75 43293069.91 43293070.08 0.0270 0.0173

Saturn 113820-12-04 12:56 G 43293298.86 43293299.04 43293299.24 0.0269 0.0123

Jupiter 113825-03-22 03:49 G 43294867.54 43294867.66 43294867.78 0.0500 0.0405

Jupiter 113831-01-26 19:39 G 43297004.12 43297004.32 43297004.53 0.0524 0.0039

Saturn 113835-05-12 10:32 G 43298570.81 43298570.94 43298571.08 0.0290 0.0222

Saturn 113835-12-28 07:25 G 43298800.63 43298800.81 43298800.99 0.0291 0.0152

Jupiter 113837-07-19 15:20 G 43299369.98 43299370.14 43299370.32 0.0506 0.0267

Neptune 113842-02-22 16:17 G 43301049.16 43301049.18 43301049.21 0.0088 0.0087

Jupiter 113842-10-01 11:29 G 43301269.80 43301269.98 43301270.16 0.0526 0.0265

Neptune 113842-10-06 04:46 G 43301274.62 43301274.70 43301274.82 0.0088 0.0078

Neptune 113843-05-19 17:44 G 43301500.13 43301500.24 43301500.40 0.0088 0.0069

Neptune 113843-12-31 07:10 G 43301725.64 43301725.80 43301725.96 0.0088 0.0059

Neptune 113844-08-12 19:39 G 43301951.15 43301951.32 43301951.51 0.0088 0.0050

Neptune 113845-03-26 08:22 G 43302176.67 43302176.85 43302177.06 0.0088 0.0041

Neptune 113845-11-06 21:34 G 43302402.19 43302402.40 43302402.61 0.0088 0.0031

Neptune 113846-06-20 10:17 G 43302627.73 43302627.93 43302628.16 0.0088 0.0022

Neptune 113847-01-31 23:29 G 43302853.26 43302853.48 43302853.70 0.0088 0.0012

Uranus 113847-05-05 20:08 G 43302947.25 43302947.34 43302947.44 0.0140 0.0126

Neptune 113847-09-14 12:13 G 43303078.79 43303079.01 43303079.23 0.0088 0.0003

Uranus 113847-12-18 05:29 G 43303173.61 43303173.73 43303173.87 0.0139 0.0109

Neptune 113848-04-27 01:10 G 43303304.33 43303304.55 43303304.77 0.0088 0.0007

Uranus 113848-07-31 14:51 G 43303399.96 43303400.12 43303400.29 0.0139 0.0092

Neptune 113848-12-08 14:08 G 43303529.87 43303530.09 43303530.31 0.0088 0.0016

Uranus 113849-03-14 23:44 G 43303626.32 43303626.49 43303626.69 0.0139 0.0076

Jupiter 113849-03-24 16:17 G 43303635.97 43303636.18 43303636.38 0.0504 0.0008

Neptune 113849-07-22 02:51 G 43303755.41 43303755.62 43303755.84 0.0088 0.0026

Uranus 113849-10-27 08:51 G 43303852.68 43303852.87 43303853.08 0.0139 0.0059

Saturn 113849-10-30 12:27 G 43303855.85 43303856.02 43303856.21 0.0270 0.0136

Neptune 113850-03-04 15:49 G 43303980.96 43303981.16 43303981.37 0.0088 0.0035

Mars 113850-03-29 10:32 G 43304005.87 43304005.94 43304006.01 0.1694 0.1541

Uranus 113850-06-10 17:44 G 43304079.03 43304079.24 43304079.45 0.0139 0.0042

Saturn 113850-06-16 15:49 G 43304084.99 43304085.16 43304085.33 0.0269 0.0160

Neptune 113850-10-16 04:32 G 43304206.51 43304206.69 43304206.89 0.0088 0.0045

Uranus 113851-01-23 02:08 G 43304305.38 43304305.59 43304305.81 0.0138 0.0025

Neptune 113851-05-29 17:44 G 43304432.07 43304432.24 43304432.42 0.0088 0.0054

Uranus 113851-09-06 10:17 G 43304531.71 43304531.93 43304532.15 0.0138 0.0008

Neptune 113852-01-10 06:27 G 43304657.64 43304657.77 43304657.94 0.0088 0.0064

Uranus 113852-04-19 18:13 G 43304758.05 43304758.26 43304758.48 0.0138 0.0009

Neptune 113852-08-22 19:25 G 43304883.21 43304883.31 43304883.45 0.0088 0.0073

Uranus 113852-12-02 02:08 G 43304984.38 43304984.59 43304984.81 0.0138 0.0025

Neptune 113853-04-05 08:37 G 43305108.79 43305108.86 43305108.95 0.0088 0.0082

Uranus 113853-07-16 09:49 G 43305210.71 43305210.91 43305211.12 0.0138 0.0041

Uranus 113854-02-27 17:01 G 43305437.02 43305437.21 43305437.42 0.0138 0.0057

Uranus 113854-10-12 00:13 G 43305663.34 43305663.51 43305663.70 0.0137 0.0073

Jupiter 113855-01-29 15:49 G 43305773.10 43305773.16 43305773.23 0.0520 0.0493

Uranus 113855-05-26 07:25 G 43305889.65 43305889.81 43305889.98 0.0137 0.0089

Uranus 113856-01-07 13:53 G 43306115.96 43306116.08 43306116.24 0.0137 0.0105

Uranus 113856-08-20 20:37 G 43306342.27 43306342.36 43306342.48 0.0137 0.0119

Uranus 113857-04-04 03:05 G 43306568.60 43306568.63 43306568.69 0.0137 0.0134

Jupiter 113860-11-27 16:17 G 43307902.01 43307902.18 43307902.36 0.0501 0.0254

Saturn 113864-11-21 20:08 G 43309357.17 43309357.34 43309357.52 0.0290 0.0161

Saturn 113865-07-09 17:15 G 43309587.09 43309587.22 43309587.38 0.0291 0.0215

Jupiter 113866-10-04 08:37 G 43310038.68 43310038.86 43310039.05 0.0523 0.0202

Jupiter 113873-03-27 00:56 G 43312404.43 43312404.54 43312404.66 0.0507 0.0413

Mars 113877-08-12 17:01 G 43314004.07 43314004.21 43314004.35 0.1835 0.1024

Jupiter 113878-06-09 02:37 G 43314304.41 43314304.61 43314304.81 0.0525 0.0094

Saturn 113879-05-12 20:08 G 43314642.14 43314642.34 43314642.55 0.0270 0.0084

Saturn 113879-12-27 22:46 G 43314871.33 43314871.45 43314871.59 0.0269 0.0211

Mars 113884-01-25 16:03 G 43316361.08 43316361.17 43316361.27 0.1710 0.1429

Jupiter 113884-11-30 01:10 G 43316670.36 43316670.55 43316670.75 0.0505 0.0152

Jupiter 113890-02-11 18:56 G 43318570.16 43318570.29 43318570.43 0.0528 0.0395

Uranus 113890-09-14 04:17 G 43318784.60 43318784.68 43318784.77 0.0138 0.0127

Uranus 113891-04-28 11:58 G 43319010.89 43319011.00 43319011.14 0.0139 0.0112

Uranus 113891-12-10 19:53 G 43319237.19 43319237.33 43319237.50 0.0139 0.0096

Uranus 113892-07-24 04:17 G 43319463.50 43319463.68 43319463.86 0.0139 0.0079

Uranus 113893-03-07 12:13 G 43319689.83 43319690.01 43319690.22 0.0139 0.0064

Uranus 113893-10-19 20:51 G 43319916.17 43319916.37 43319916.58 0.0139 0.0047

Uranus 113894-06-03 05:44 G 43320142.53 43320142.74 43320142.96 0.0140 0.0029

Saturn 113894-06-03 22:03 G 43320143.23 43320143.42 43320143.62 0.0290 0.0122

Uranus 113895-01-15 14:37 G 43320368.90 43320369.11 43320369.33 0.0140 0.0013

Saturn 113895-01-19 19:10 G 43320373.20 43320373.30 43320373.41 0.0291 0.0253

Uranus 113895-08-29 23:44 G 43320595.27 43320595.49 43320595.71 0.0140 0.0005

Uranus 113896-04-12 09:05 G 43320821.66 43320821.88 43320822.10 0.0140 0.0022

Jupiter 113896-08-05 02:08 G 43320936.40 43320936.59 43320936.79 0.0503 0.0109

Uranus 113896-11-24 18:27 G 43321048.07 43321048.27 43321048.49 0.0140 0.0040

Uranus 113897-07-09 04:03 G 43321274.48 43321274.67 43321274.88 0.0141 0.0058

Uranus 113898-02-20 13:53 G 43321500.91 43321501.08 43321501.27 0.0141 0.0075

Uranus 113898-10-05 00:13 G 43321727.35 43321727.51 43321727.68 0.0141 0.0092

Pluto 113899-02-23 20:22 G 43321869.35 43321869.35 43321869.38 0.0063 0.0063

Uranus 113899-05-19 10:17 G 43321953.81 43321953.93 43321954.08 0.0141 0.0110

Pluto 113899-10-06 23:29 G 43322094.30 43322094.48 43322094.70 0.0063 0.0026

Uranus 113899-12-31 20:51 G 43322180.30 43322180.37 43322180.48 0.0141 0.0128

Pluto 113900-05-20 03:05 G 43322319.42 43322319.63 43322319.85 0.0063 0.0012

Pluto 113900-12-31 06:13 G 43322544.64 43322544.76 43322544.91 0.0064 0.0050

Jupiter 113902-06-13 02:22 G 43323073.47 43323073.60 43323073.75 0.0521 0.0379

Jupiter 113908-04-11 03:49 G 43325202.52 43325202.66 43325202.80 0.0500 0.0362

Earth 113908-08-10 05:29 G 43325323.70 43325323.73 43325323.76 0.2650 0.2598

Moon 113908-08-10 07:10 G 43325323.76 43325323.80 43325323.85 0.2656 0.2526 *

Saturn 113908-11-22 21:34 G 43325428.19 43325428.40 43325428.61 0.0269 0.0051

Saturn 113909-07-09 23:58 G 43325657.43 43325657.50 43325657.60 0.0269 0.0244

Jupiter 113914-02-15 17:01 G 43327339.00 43327339.21 43327339.41 0.0524 0.0077

Mars 113916-01-25 19:53 G 43328048.21 43328048.33 43328048.46 0.1697 0.1202

Earth 113916-08-07 20:22 G 43328243.21 43328243.35 43328243.50 0.2652 0.1040

Moon 113916-08-08 01:53 G 43328243.42 43328243.58 43328243.73 0.2653 0.0687 *

Jupiter 113920-08-08 14:37 G 43329704.95 43329705.11 43329705.27 0.0506 0.0311

Saturn 113923-12-16 06:41 G 43330929.57 43330929.78 43330929.99 0.0290 0.0065

Neptune 113925-07-08 04:03 G 43331499.62 43331499.67 43331499.74 0.0089 0.0086

Jupiter 113925-10-21 08:51 G 43331604.69 43331604.87 43331605.06 0.0526 0.0226

Neptune 113926-02-18 16:46 G 43331725.11 43331725.20 43331725.34 0.0089 0.0077

Neptune 113926-10-02 05:58 G 43331950.62 43331950.75 43331950.92 0.0089 0.0067

Neptune 113927-05-15 19:10 G 43332176.15 43332176.30 43332176.49 0.0089 0.0057

Neptune 113927-12-27 08:37 G 43332401.68 43332401.86 43332402.05 0.0089 0.0047

Neptune 113928-08-08 21:49 G 43332627.21 43332627.41 43332627.61 0.0090 0.0037

Neptune 113929-03-22 11:01 G 43332852.75 43332852.96 43332853.17 0.0090 0.0027

Neptune 113929-11-03 00:13 G 43333078.29 43333078.51 43333078.72 0.0090 0.0017

Neptune 113930-06-16 13:10 G 43333303.84 43333304.05 43333304.27 0.0090 0.0007

Uranus 113931-01-04 05:01 G 43333505.64 43333505.71 43333505.78 0.0140 0.0131

Neptune 113931-01-28 02:22 G 43333529.38 43333529.60 43333529.82 0.0090 0.0003

Uranus 113931-08-18 14:22 G 43333731.99 43333732.10 43333732.23 0.0140 0.0115

Neptune 113931-09-10 15:20 G 43333754.93 43333755.14 43333755.36 0.0090 0.0013

Uranus 113932-03-31 23:58 G 43333958.35 43333958.50 43333958.66 0.0139 0.0098

Jupiter 113932-04-13 11:58 G 43333970.80 43333971.00 43333971.21 0.0504 0.0040

Neptune 113932-04-23 04:17 G 43333980.48 43333980.68 43333980.90 0.0090 0.0023

Uranus 113932-11-13 09:05 G 43334184.72 43334184.88 43334185.07 0.0139 0.0081

Neptune 113932-12-04 17:29 G 43334206.03 43334206.23 43334206.44 0.0090 0.0033

Uranus 113933-06-27 18:13 G 43334411.07 43334411.26 43334411.46 0.0139 0.0064

Neptune 113933-07-18 06:27 G 43334431.59 43334431.77 43334431.97 0.0090 0.0043

Uranus 113934-02-09 03:05 G 43334637.43 43334637.63 43334637.84 0.0139 0.0047

Neptune 113934-02-28 19:10 G 43334657.15 43334657.30 43334657.50 0.0090 0.0053

Uranus 113934-09-23 11:44 G 43334863.78 43334863.99 43334864.20 0.0139 0.0030

Neptune 113934-10-12 08:37 G 43334882.71 43334882.86 43334883.02 0.0090 0.0062

Uranus 113935-05-07 19:53 G 43335090.12 43335090.33 43335090.55 0.0138 0.0014

Neptune 113935-05-25 21:20 G 43335108.28 43335108.39 43335108.53 0.0090 0.0072

Uranus 113935-12-20 04:17 G 43335316.46 43335316.68 43335316.90 0.0138 0.0004

Neptune 113936-01-06 10:17 G 43335333.86 43335333.93 43335334.04 0.0090 0.0082

Uranus 113936-08-02 12:13 G 43335542.79 43335543.01 43335543.22 0.0138 0.0021

Uranus 113937-03-16 19:39 G 43335769.12 43335769.32 43335769.54 0.0138 0.0037

Jupiter 113937-06-26 01:39 G 43335870.56 43335870.57 43335870.59 0.0529 0.0527

Uranus 113937-10-29 03:20 G 43335995.44 43335995.64 43335995.84 0.0138 0.0053

Saturn 113938-06-05 05:01 G 43336214.49 43336214.71 43336214.92 0.0269 0.0005

Uranus 113938-06-12 10:46 G 43336221.76 43336221.95 43336222.14 0.0137 0.0069

Uranus 113939-01-24 17:44 G 43336448.08 43336448.24 43336448.41 0.0137 0.0085

Uranus 113939-09-08 00:27 G 43336674.39 43336674.52 43336674.68 0.0137 0.0100

Uranus 113940-04-21 07:25 G 43336900.70 43336900.81 43336900.93 0.0137 0.0115

Uranus 113940-12-03 14:08 G 43337127.04 43337127.09 43337127.16 0.0137 0.0130

Mars 113943-06-10 23:44 G 43338046.41 43338046.49 43338046.58 0.1830 0.1552

Jupiter 113943-12-18 12:56 G 43338236.86 43338237.04 43338237.23 0.0501 0.0219

Jupiter 113949-10-24 11:01 G 43340373.78 43340373.96 43340374.14 0.0522 0.0256

Saturn 113953-06-27 07:53 G 43341715.62 43341715.83 43341716.04 0.0290 0.0028

Jupiter 113955-08-23 14:22 G 43342503.04 43342503.10 43342503.17 0.0499 0.0472

Jupiter 113956-04-16 01:10 G 43342739.47 43342739.55 43342739.64 0.0508 0.0462

Jupiter 113961-06-29 03:34 G 43344639.45 43344639.65 43344639.86 0.0525 0.0042

Saturn 113967-05-01 01:25 G 43346771.53 43346771.56 43346771.59 0.0270 0.0266

Saturn 113967-12-16 05:15 G 43347000.51 43347000.72 43347000.93 0.0269 0.0031

Jupiter 113967-12-21 02:08 G 43347005.41 43347005.59 43347005.78 0.0505 0.0201

Jupiter 113973-03-03 17:29 G 43348905.09 43348905.23 43348905.39 0.0527 0.0351

Uranus 113974-05-15 14:22 G 43349343.05 43349343.10 43349343.18 0.0138 0.0131

Uranus 113974-12-27 21:49 G 43349569.31 43349569.41 43349569.54 0.0138 0.0116

Mars 113975-06-10 10:46 G 43349733.92 43349733.95 43349733.98 0.1846 0.1809

Uranus 113975-08-11 05:29 G 43349795.60 43349795.73 43349795.90 0.0139 0.0101

Uranus 113976-03-24 13:53 G 43350021.91 43350022.08 43350022.25 0.0139 0.0084

Uranus 113976-11-05 21:49 G 43350248.23 43350248.41 43350248.61 0.0139 0.0068

Uranus 113977-06-20 06:13 G 43350474.57 43350474.76 43350474.97 0.0139 0.0051

Uranus 113978-02-01 14:51 G 43350700.91 43350701.12 43350701.33 0.0139 0.0034

Uranus 113978-09-15 23:29 G 43350927.27 43350927.48 43350927.70 0.0140 0.0018

Uranus 113979-04-30 08:37 G 43351153.64 43351153.86 43351154.08 0.0140 0.0000

Jupiter 113979-08-26 02:22 G 43351271.40 43351271.60 43351271.80 0.0503 0.0061

Uranus 113979-12-12 17:44 G 43351380.02 43351380.24 43351380.46 0.0140 0.0017

Uranus 113980-07-26 03:05 G 43351606.42 43351606.63 43351606.84 0.0140 0.0035

Uranus 113981-03-09 12:13 G 43351832.82 43351833.01 43351833.23 0.0140 0.0053

Uranus 113981-10-21 22:03 G 43352059.24 43352059.42 43352059.62 0.0141 0.0070

Mars 113981-11-22 04:46 G 43352090.55 43352090.70 43352090.85 0.1701 0.0848

Uranus 113982-06-05 08:22 G 43352285.68 43352285.85 43352286.02 0.0141 0.0087

Saturn 113983-01-07 15:05 G 43352501.92 43352502.13 43352502.34 0.0290 0.0026

Uranus 113983-01-17 18:13 G 43352512.13 43352512.26 43352512.42 0.0141 0.0105

Uranus 113983-09-01 04:46 G 43352738.60 43352738.70 43352738.82 0.0141 0.0122

Uranus 113984-04-14 15:20 G 43352965.12 43352965.14 43352965.18 0.0141 0.0139

Jupiter 113985-07-02 01:10 G 43353408.43 43353408.55 43353408.66 0.0521 0.0423

Pluto 113989-11-20 16:46 G 43355011.04 43355011.20 43355011.40 0.0081 0.0048

Pluto 113990-07-04 04:46 G 43355236.50 43355236.70 43355236.91 0.0081 0.0035

Jupiter 113991-05-01 00:41 G 43355537.38 43355537.53 43355537.69 0.0500 0.0328

Saturn 113996-11-10 08:37 G 43357557.74 43357557.86 43357557.99 0.0270 0.0216

Jupiter 113997-03-06 18:41 G 43357674.09 43357674.28 43357674.48 0.0524 0.0131

Saturn 113997-06-27 12:13 G 43357786.81 43357787.01 43357787.21 0.0269 0.0082

115TH MILLENNIUM CE

This is a list of transits of Venus in the 115th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 114003-08-28 11:44 G 43360039.85 43360039.99 43360040.14 0.0506 0.0348

Neptune 114007-01-08 13:39 G 43361268.99 43361269.07 43361269.17 0.0088 0.0080

Neptune 114007-08-22 02:22 G 43361494.49 43361494.60 43361494.74 0.0088 0.0071

Neptune 114008-04-03 15:05 G 43361719.99 43361720.13 43361720.31 0.0088 0.0062

Jupiter 114008-11-09 11:58 G 43361939.81 43361940.00 43361940.20 0.0526 0.0169

Neptune 114008-11-15 04:17 G 43361945.51 43361945.68 43361945.86 0.0088 0.0052

Neptune 114009-06-28 17:01 G 43362171.03 43362171.21 43362171.42 0.0088 0.0043

Neptune 114010-02-09 06:13 G 43362396.56 43362396.76 43362396.97 0.0088 0.0033

Neptune 114010-09-22 18:56 G 43362622.08 43362622.29 43362622.51 0.0088 0.0024

Neptune 114011-05-06 07:53 G 43362847.62 43362847.83 43362848.06 0.0088 0.0015

Neptune 114011-12-17 21:05 G 43363073.16 43363073.38 43363073.60 0.0088 0.0005

Saturn 114012-07-19 16:46 G 43363288.00 43363288.20 43363288.41 0.0290 0.0066

Neptune 114012-07-30 09:49 G 43363298.69 43363298.91 43363299.14 0.0088 0.0005

Neptune 114013-03-12 22:46 G 43363524.23 43363524.45 43363524.67 0.0088 0.0014

Neptune 114013-10-24 11:29 G 43363749.77 43363749.98 43363750.20 0.0088 0.0024

Neptune 114014-06-07 00:41 G 43363975.33 43363975.53 43363975.74 0.0088 0.0033

Uranus 114014-09-03 13:10 G 43364064.03 43364064.05 43364064.11 0.0140 0.0137

Neptune 114015-01-18 13:25 G 43364200.88 43364201.06 43364201.27 0.0088 0.0043

Uranus 114015-04-17 23:15 G 43364290.37 43364290.47 43364290.59 0.0140 0.0120

Jupiter 114015-05-03 12:41 G 43364305.83 43364306.03 43364306.23 0.0504 0.0087

Neptune 114015-09-01 02:22 G 43364426.43 43364426.60 43364426.79 0.0088 0.0052

Uranus 114015-11-30 09:05 G 43364516.73 43364516.88 43364517.03 0.0140 0.0103

Neptune 114016-04-13 15:34 G 43364651.99 43364652.15 43364652.31 0.0088 0.0061

Uranus 114016-07-13 17:58 G 43364743.10 43364743.25 43364743.44 0.0139 0.0087

Neptune 114016-11-25 04:03 G 43364877.56 43364877.67 43364877.82 0.0088 0.0071

Uranus 114017-02-25 03:20 G 43364969.46 43364969.64 43364969.84 0.0139 0.0069

Neptune 114017-07-08 17:15 G 43365103.15 43365103.22 43365103.33 0.0088 0.0080

Uranus 114017-10-09 12:13 G 43365195.82 43365196.01 43365196.22 0.0139 0.0052

Uranus 114018-05-23 21:05 G 43365422.17 43365422.38 43365422.60 0.0139 0.0035

Uranus 114019-01-05 05:44 G 43365648.52 43365648.74 43365648.95 0.0139 0.0018

Uranus 114019-08-19 13:53 G 43365874.86 43365875.08 43365875.30 0.0138 0.0001

Uranus 114020-04-01 21:49 G 43366101.20 43366101.41 43366101.63 0.0138 0.0016

Jupiter 114020-07-15 04:17 G 43366205.59 43366205.68 43366205.77 0.0529 0.0471

Uranus 114020-11-14 05:44 G 43366327.54 43366327.74 43366327.96 0.0138 0.0032

Uranus 114021-06-28 13:25 G 43366553.86 43366554.06 43366554.27 0.0138 0.0049

Uranus 114022-02-09 20:51 G 43366780.18 43366780.37 43366780.56 0.0138 0.0065

Uranus 114022-09-24 04:03 G 43367006.50 43367006.67 43367006.85 0.0137 0.0081

Uranus 114023-05-08 11:01 G 43367232.82 43367232.96 43367233.13 0.0137 0.0096

Uranus 114023-12-20 18:13 G 43367459.14 43367459.26 43367459.39 0.0137 0.0111

Uranus 114024-08-03 01:10 G 43367685.47 43367685.55 43367685.63 0.0137 0.0126

Saturn 114026-05-23 07:39 G 43368343.68 43368343.82 43368343.99 0.0270 0.0188

Jupiter 114027-01-06 14:22 G 43368571.91 43368572.10 43368572.29 0.0502 0.0170

Saturn 114027-01-07 11:29 G 43368572.79 43368572.98 43368573.18 0.0269 0.0110

Moon 114030-02-12 13:53 G 43369704.98 43369705.08 43369705.18 0.2677 0.2063

Jupiter 114032-11-12 10:32 G 43370708.77 43370708.94 43370709.10 0.0522 0.0303

Moon 114038-02-10 04:46 G 43372624.58 43372624.70 43372624.81 0.2682 0.1746

Earth 114038-02-10 09:34 G 43372624.75 43372624.90 43372625.05 0.2680 0.0929 *

Jupiter 114038-09-11 15:20 G 43372838.04 43372838.14 43372838.25 0.0499 0.0424

Mars 114041-04-06 17:44 G 43373776.11 43373776.24 43373776.36 0.1841 0.1258

Saturn 114041-06-14 01:39 G 43373844.49 43373844.57 43373844.68 0.0290 0.0258

Saturn 114042-01-29 22:17 G 43374074.24 43374074.43 43374074.63 0.0290 0.0114

Jupiter 114044-07-18 02:51 G 43374974.42 43374974.62 43374974.83 0.0525 0.0012

Mars 114047-09-19 14:08 G 43376132.92 43376133.09 43376133.26 0.1705 0.0499

Jupiter 114051-01-08 23:44 G 43377340.31 43377340.49 43377340.67 0.0505 0.0237

Saturn 114055-12-03 14:51 G 43379129.94 43379130.12 43379130.31 0.0270 0.0137

Jupiter 114056-03-22 19:25 G 43379240.15 43379240.31 43379240.48 0.0528 0.0299

Saturn 114056-07-19 18:13 G 43379359.09 43379359.26 43379359.43 0.0269 0.0160

Uranus 114058-01-13 01:25 G 43379901.52 43379901.56 43379901.59 0.0138 0.0136

Uranus 114058-08-27 08:37 G 43380127.76 43380127.86 43380127.97 0.0138 0.0121

Uranus 114059-04-10 16:17 G 43380354.05 43380354.18 43380354.33 0.0139 0.0105

Uranus 114059-11-23 00:13 G 43380580.35 43380580.51 43380580.68 0.0139 0.0089

Uranus 114060-07-06 08:08 G 43380806.66 43380806.84 43380807.03 0.0139 0.0073

Uranus 114061-02-17 16:17 G 43381032.99 43381033.18 43381033.39 0.0139 0.0056

Uranus 114061-10-02 00:41 G 43381259.33 43381259.53 43381259.74 0.0139 0.0040

Uranus 114062-05-16 09:34 G 43381485.69 43381485.90 43381486.11 0.0140 0.0022

Jupiter 114062-09-14 00:27 G 43381606.31 43381606.52 43381606.72 0.0503 0.0024

Uranus 114062-12-28 18:27 G 43381712.05 43381712.27 43381712.48 0.0140 0.0006

Uranus 114063-08-12 03:20 G 43381938.42 43381938.64 43381938.86 0.0140 0.0012

Uranus 114064-03-25 12:27 G 43382164.81 43382165.02 43382165.24 0.0140 0.0030

Uranus 114064-11-06 21:49 G 43382391.21 43382391.41 43382391.62 0.0140 0.0047

Uranus 114065-06-21 07:39 G 43382617.63 43382617.82 43382618.02 0.0140 0.0065

Uranus 114066-02-02 17:15 G 43382844.06 43382844.22 43382844.41 0.0141 0.0083

Uranus 114066-09-17 03:34 G 43383070.50 43383070.65 43383070.81 0.0141 0.0100

Uranus 114067-05-01 13:39 G 43383296.97 43383297.07 43383297.21 0.0141 0.0118

Uranus 114067-12-14 00:13 G 43383523.47 43383523.51 43383523.59 0.0141 0.0135

Jupiter 114068-07-21 04:17 G 43383743.61 43383743.68 43383743.76 0.0521 0.0481

Saturn 114070-12-25 04:17 G 43384630.55 43384630.68 43384630.82 0.0289 0.0216

Saturn 114071-08-12 00:27 G 43384860.34 43384860.52 43384860.70 0.0290 0.0155

Jupiter 114074-05-20 01:39 G 43385872.41 43385872.57 43385872.74 0.0500 0.0281

Jupiter 114080-03-25 21:34 G 43388009.21 43388009.40 43388009.59 0.0523 0.0188

Saturn 114085-06-14 13:25 G 43389915.88 43389916.06 43389916.26 0.0270 0.0111

Saturn 114086-01-29 16:46 G 43390145.06 43390145.20 43390145.36 0.0269 0.0186

Jupiter 114086-09-16 13:53 G 43390374.96 43390375.08 43390375.21 0.0507 0.0402

Neptune 114089-10-09 11:44 G 43391493.98 43391493.99 43391494.05 0.0089 0.0089

Neptune 114090-05-23 01:10 G 43391719.46 43391719.55 43391719.67 0.0089 0.0079

Neptune 114091-01-03 14:37 G 43391944.98 43391945.11 43391945.26 0.0089 0.0069

Neptune 114091-08-17 03:49 G 43392170.50 43392170.66 43392170.83 0.0089 0.0059

Jupiter 114091-11-29 12:27 G 43392274.83 43392275.02 43392275.22 0.0526 0.0119

Neptune 114092-03-29 16:32 G 43392396.03 43392396.19 43392396.39 0.0089 0.0050

Neptune 114092-11-10 05:58 G 43392621.57 43392621.75 43392621.96 0.0089 0.0040

Neptune 114093-06-23 19:10 G 43392847.10 43392847.30 43392847.52 0.0089 0.0030

Neptune 114094-02-04 08:22 G 43393072.64 43393072.85 43393073.07 0.0090 0.0020

Neptune 114094-09-17 21:20 G 43393298.18 43393298.39 43393298.61 0.0090 0.0010

Neptune 114095-05-01 10:32 G 43393523.72 43393523.94 43393524.16 0.0090 0.0000

Neptune 114095-12-12 23:44 G 43393749.27 43393749.49 43393749.71 0.0090 0.0010

Neptune 114096-07-25 12:27 G 43393974.82 43393975.02 43393975.25 0.0090 0.0021

Neptune 114097-03-08 01:39 G 43394200.37 43394200.57 43394200.78 0.0090 0.0030

Neptune 114097-10-19 14:37 G 43394425.93 43394426.11 43394426.32 0.0090 0.0040

Jupiter 114098-05-22 14:22 G 43394640.90 43394641.10 43394641.29 0.0504 0.0138

Neptune 114098-06-02 03:34 G 43394651.48 43394651.65 43394651.85 0.0090 0.0050

Uranus 114098-12-16 08:51 G 43394848.79 43394848.87 43394848.98 0.0140 0.0125

Neptune 114099-01-13 16:32 G 43394877.05 43394877.19 43394877.37 0.0090 0.0060

Uranus 114099-07-30 18:41 G 43395075.15 43395075.28 43395075.42 0.0140 0.0108

Neptune 114099-08-27 05:58 G 43395102.61 43395102.75 43395102.89 0.0090 0.0069

Uranus 114100-03-14 03:49 G 43395301.51 43395301.66 43395301.84 0.0139 0.0092

Neptune 114100-04-09 18:41 G 43395328.19 43395328.28 43395328.39 0.0090 0.0079

Saturn 114100-07-07 08:22 G 43395416.69 43395416.85 43395417.03 0.0290 0.0172

Uranus 114100-10-26 13:10 G 43395527.88 43395528.05 43395528.25 0.0139 0.0075

Neptune 114100-11-21 07:25 G 43395553.80 43395553.81 43395553.87 0.0090 0.0089

Saturn 114101-02-22 05:01 G 43395646.57 43395646.71 43395646.87 0.0290 0.0202

Uranus 114101-06-09 22:17 G 43395754.24 43395754.43 43395754.64 0.0139 0.0057

Uranus 114102-01-22 07:10 G 43395980.60 43395980.80 43395981.01 0.0139 0.0040

Uranus 114102-09-05 15:49 G 43396206.94 43396207.16 43396207.38 0.0139 0.0023

Uranus 114103-04-20 00:13 G 43396433.29 43396433.51 43396433.73 0.0139 0.0006

Jupiter 114103-08-05 04:03 G 43396540.56 43396540.67 43396540.79 0.0528 0.0424

Uranus 114103-12-02 08:22 G 43396659.64 43396659.85 43396660.07 0.0138 0.0011

Uranus 114104-07-15 16:17 G 43396885.97 43396886.18 43396886.40 0.0138 0.0028

Uranus 114105-02-26 23:58 G 43397112.30 43397112.50 43397112.71 0.0138 0.0044

Uranus 114105-10-11 07:25 G 43397338.63 43397338.81 43397339.01 0.0138 0.0061

Uranus 114106-05-25 14:51 G 43397564.95 43397565.12 43397565.31 0.0138 0.0077

Uranus 114107-01-06 22:03 G 43397791.27 43397791.42 43397791.59 0.0137 0.0092

Mars 114107-02-03 00:13 G 43397818.35 43397818.51 43397818.67 0.1837 0.0691

Uranus 114107-08-21 05:15 G 43398017.59 43398017.72 43398017.86 0.0137 0.0108

Uranus 114108-04-03 11:44 G 43398243.92 43398243.99 43398244.10 0.0137 0.0123

Jupiter 114110-01-26 12:56 G 43398906.85 43398907.04 43398907.24 0.0501 0.0131

Mars 114113-07-17 23:01 G 43400175.28 43400175.46 43400175.63 0.1709 0.0137

Saturn 114114-12-26 20:08 G 43400702.13 43400702.34 43400702.55 0.0270 0.0061

Saturn 114115-08-12 23:15 G 43400931.38 43400931.47 43400931.58 0.0270 0.0236

Jupiter 114115-12-03 12:41 G 43401043.88 43401044.03 43401044.18 0.0522 0.0357

Jupiter 114121-10-01 14:08 G 43403172.97 43403173.09 43403173.22 0.0499 0.0386

Jupiter 114127-08-08 06:13 G 43405309.56 43405309.76 43405309.97 0.0525 0.0062

Saturn 114130-01-17 11:44 G 43406202.81 43406202.99 43406203.19 0.0289 0.0127

Saturn 114130-09-04 08:08 G 43406432.73 43406432.84 43406432.95 0.0290 0.0244

Jupiter 114134-01-29 01:10 G 43407675.38 43407675.55 43407675.71 0.0506 0.0288

Jupiter 114139-04-12 23:01 G 43409575.28 43409575.46 43409575.64 0.0527 0.0239

Uranus 114142-04-27 18:56 G 43410686.21 43410686.29 43410686.39 0.0138 0.0125

Uranus 114142-12-10 02:37 G 43410912.48 43410912.61 43410912.74 0.0138 0.0110

Uranus 114143-07-24 10:17 G 43411138.77 43411138.93 43411139.08 0.0139 0.0094

Uranus 114144-03-06 17:44 G 43411365.07 43411365.24 43411365.43 0.0139 0.0078

Saturn 114144-07-07 18:41 G 43411488.07 43411488.28 43411488.49 0.0270 0.0035

Uranus 114144-10-19 01:39 G 43411591.39 43411591.57 43411591.78 0.0139 0.0062

Saturn 114145-02-21 22:03 G 43411717.37 43411717.42 43411717.47 0.0269 0.0261

Pluto 114145-03-26 08:51 G 43411749.73 43411749.87 43411750.06 0.0063 0.0040

Uranus 114145-06-02 10:03 G 43411817.73 43411817.92 43411818.14 0.0139 0.0046

Jupiter 114145-10-04 02:22 G 43411941.40 43411941.60 43411941.81 0.0503 0.0029

Pluto 114145-11-06 12:27 G 43411974.81 43411975.02 43411975.24 0.0063 0.0003

Uranus 114146-01-14 18:41 G 43412044.07 43412044.28 43412044.50 0.0139 0.0028

Pluto 114146-06-19 15:20 G 43412199.98 43412200.14 43412200.34 0.0063 0.0036

Uranus 114146-08-29 03:20 G 43412270.42 43412270.64 43412270.86 0.0140 0.0011

Uranus 114147-04-12 12:13 G 43412496.80 43412497.01 43412497.23 0.0140 0.0007

Uranus 114147-11-24 21:20 G 43412723.18 43412723.39 43412723.61 0.0140 0.0024

Uranus 114148-07-08 06:27 G 43412949.57 43412949.77 43412949.99 0.0140 0.0042

Uranus 114149-02-19 16:03 G 43413175.98 43413176.17 43413176.37 0.0140 0.0059

Uranus 114149-10-04 01:53 G 43413402.40 43413402.58 43413402.76 0.0140 0.0077

Uranus 114150-05-18 11:44 G 43413628.84 43413628.99 43413629.16 0.0141 0.0095

Uranus 114150-12-30 22:03 G 43413855.30 43413855.42 43413855.56 0.0141 0.0112

Earth 114151-08-12 06:27 G 43414079.74 43414079.77 43414079.80 0.2651 0.2586

Uranus 114151-08-14 08:37 G 43414081.78 43414081.86 43414081.95 0.0141 0.0129

Jupiter 114157-06-09 03:34 G 43416207.47 43416207.65 43416207.83 0.0501 0.0229

Saturn 114159-07-30 15:20 G 43416988.94 43416989.14 43416989.34 0.0289 0.0085

Moon 114159-08-09 16:03 G 43416999.04 43416999.17 43416999.31 0.2653 0.1457

Earth 114159-08-09 21:34 G 43416999.25 43416999.40 43416999.55 0.2653 0.1026 *

Saturn 114160-03-16 11:44 G 43417218.98 43417218.99 43417219.02 0.0290 0.0288

Jupiter 114163-04-15 21:49 G 43418344.23 43418344.41 43418344.59 0.0523 0.0237

Jupiter 114169-02-12 03:05 G 43420473.60 43420473.63 43420473.67 0.0498 0.0490

Jupiter 114169-10-06 12:41 G 43420709.94 43420710.03 43420710.13 0.0506 0.0441

Neptune 114171-04-12 22:17 G 43421263.37 43421263.43 43421263.52 0.0088 0.0082

Neptune 114171-11-24 11:01 G 43421488.86 43421488.96 43421489.10 0.0088 0.0073

Neptune 114172-07-06 23:44 G 43421714.36 43421714.49 43421714.66 0.0088 0.0064

Mars 114172-11-30 07:10 G 43421860.63 43421860.80 43421860.97 0.1832 0.0160

Neptune 114173-02-17 12:56 G 43421939.87 43421940.04 43421940.22 0.0088 0.0054

Neptune 114173-10-01 01:39 G 43422165.39 43422165.57 43422165.77 0.0088 0.0045

Saturn 114174-01-18 00:56 G 43422274.33 43422274.54 43422274.75 0.0270 0.0015

Neptune 114174-05-14 14:22 G 43422390.92 43422391.10 43422391.32 0.0088 0.0036

Jupiter 114174-12-19 13:53 G 43422609.88 43422610.08 43422610.29 0.0526 0.0069

Neptune 114174-12-26 03:34 G 43422616.45 43422616.65 43422616.87 0.0088 0.0026

Neptune 114175-08-08 16:32 G 43422841.98 43422842.19 43422842.41 0.0088 0.0017

Neptune 114176-03-21 05:29 G 43423067.51 43423067.73 43423067.95 0.0088 0.0007

Neptune 114176-11-01 18:27 G 43423293.04 43423293.27 43423293.49 0.0088 0.0003

Neptune 114177-06-15 07:25 G 43423518.59 43423518.81 43423519.03 0.0088 0.0012

Neptune 114178-01-26 20:22 G 43423744.13 43423744.35 43423744.56 0.0088 0.0021

Neptune 114178-09-09 09:05 G 43423969.68 43423969.88 43423970.09 0.0088 0.0031

Neptune 114179-04-22 22:03 G 43424195.23 43424195.42 43424195.62 0.0088 0.0040

Mars 114179-05-15 07:53 G 43424217.65 43424217.83 43424218.00 0.1713 0.0232

Neptune 114179-12-04 10:46 G 43424420.78 43424420.95 43424421.15 0.0088 0.0050

Neptune 114180-07-16 23:58 G 43424646.34 43424646.50 43424646.67 0.0088 0.0059

Neptune 114181-02-27 12:27 G 43424871.91 43424872.02 43424872.18 0.0088 0.0069

Jupiter 114181-06-11 13:10 G 43424975.86 43424976.05 43424976.24 0.0504 0.0178

Neptune 114181-10-11 01:39 G 43425097.49 43425097.57 43425097.69 0.0088 0.0078

Neptune 114182-05-24 14:51 G 43425323.11 43425323.12 43425323.16 0.0088 0.0087

Uranus 114182-08-16 17:58 G 43425407.19 43425407.25 43425407.33 0.0140 0.0131

Uranus 114183-03-31 03:49 G 43425633.54 43425633.66 43425633.79 0.0140 0.0114

Uranus 114183-11-12 13:39 G 43425859.92 43425860.07 43425860.23 0.0140 0.0097

Uranus 114184-06-25 23:01 G 43426086.28 43426086.46 43426086.64 0.0139 0.0080

Uranus 114185-02-07 08:08 G 43426312.65 43426312.84 43426313.04 0.0139 0.0062

Uranus 114185-09-21 17:01 G 43426539.01 43426539.21 43426539.42 0.0139 0.0045

Uranus 114186-05-06 01:39 G 43426765.36 43426765.57 43426765.79 0.0139 0.0028

Jupiter 114186-08-24 06:41 G 43426875.64 43426875.78 43426875.93 0.0529 0.0371

Uranus 114186-12-18 10:17 G 43426991.71 43426991.93 43426992.15 0.0139 0.0011

Uranus 114187-08-01 18:41 G 43427218.06 43427218.28 43427218.49 0.0138 0.0006

Uranus 114188-03-15 02:37 G 43427444.40 43427444.61 43427444.83 0.0138 0.0023

Uranus 114188-10-27 10:32 G 43427670.74 43427670.94 43427671.15 0.0138 0.0040

Saturn 114189-02-08 19:53 G 43427775.12 43427775.33 43427775.54 0.0289 0.0037

Uranus 114189-06-10 18:13 G 43427897.07 43427897.26 43427897.47 0.0138 0.0056

Uranus 114190-01-23 01:53 G 43428123.40 43428123.58 43428123.76 0.0138 0.0072

Uranus 114190-09-06 08:51 G 43428349.72 43428349.87 43428350.05 0.0138 0.0089

Uranus 114191-04-20 16:17 G 43428576.04 43428576.18 43428576.33 0.0137 0.0104

Uranus 114191-12-02 23:15 G 43428802.38 43428802.47 43428802.59 0.0137 0.0119

Uranus 114192-07-16 05:58 G 43429028.73 43429028.75 43429028.81 0.0137 0.0134

Jupiter 114193-02-14 13:53 G 43429241.88 43429242.08 43429242.28 0.0502 0.0083

Jupiter 114198-12-22 15:49 G 43431379.04 43431379.16 43431379.29 0.0522 0.0416

Saturn 114202-12-14 18:41 G 43432831.24 43432831.28 43432831.35 0.0271 0.0261

Saturn 114203-07-31 23:29 G 43433060.28 43433060.48 43433060.70 0.0270 0.0041

Jupiter 114204-10-21 15:49 G 43433508.01 43433508.16 43433508.31 0.0500 0.0337

Jupiter 114210-08-28 07:25 G 43435644.61 43435644.81 43435645.01 0.0524 0.0114

Jupiter 114217-02-18 02:51 G 43438010.47 43438010.62 43438010.77 0.0506 0.0340

Saturn 114218-08-22 23:01 G 43438561.25 43438561.46 43438561.67 0.0289 0.0006

Jupiter 114222-05-02 23:15 G 43439910.28 43439910.47 43439910.66 0.0527 0.0190

Uranus 114225-12-27 05:15 G 43441244.67 43441244.72 43441244.80 0.0138 0.0131

Uranus 114226-08-10 12:27 G 43441470.92 43441471.02 43441471.16 0.0138 0.0115

Uranus 114227-03-24 20:08 G 43441697.20 43441697.34 43441697.50 0.0138 0.0099

Uranus 114227-11-06 04:03 G 43441923.50 43441923.67 43441923.85 0.0139 0.0083

Uranus 114228-06-19 11:44 G 43442149.81 43442149.99 43442150.19 0.0139 0.0067

Jupiter 114228-10-24 01:53 G 43442276.38 43442276.58 43442276.78 0.0503 0.0070

Uranus 114229-01-31 19:53 G 43442376.14 43442376.33 43442376.54 0.0139 0.0050

Uranus 114229-09-15 04:17 G 43442602.47 43442602.68 43442602.90 0.0139 0.0033

Uranus 114230-04-29 12:56 G 43442828.83 43442829.04 43442829.26 0.0139 0.0016

Uranus 114230-12-11 21:49 G 43443055.19 43443055.41 43443055.63 0.0140 0.0001

Uranus 114231-07-26 06:41 G 43443281.57 43443281.78 43443282.00 0.0140 0.0019

Uranus 114232-03-08 15:49 G 43443507.95 43443508.16 43443508.37 0.0140 0.0036

Saturn 114232-06-26 00:56 G 43443617.42 43443617.54 43443617.68 0.0271 0.0213

Uranus 114232-10-21 01:10 G 43443734.35 43443734.55 43443734.76 0.0140 0.0054

Saturn 114233-02-10 05:44 G 43443846.54 43443846.74 43443846.94 0.0271 0.0090

Uranus 114233-06-04 11:01 G 43443960.78 43443960.96 43443961.15 0.0140 0.0072

Jupiter 114234-01-05 13:39 G 43444176.02 43444176.07 43444176.14 0.0530 0.0505

Uranus 114234-01-16 20:37 G 43444187.21 43444187.36 43444187.54 0.0141 0.0090

Uranus 114234-08-31 06:56 G 43444413.65 43444413.79 43444413.94 0.0141 0.0107

Uranus 114235-04-14 17:15 G 43444640.12 43444640.22 43444640.32 0.0141 0.0124

Pluto 114235-12-22 09:20 G 43444891.66 43444891.89 43444892.11 0.0081 0.0002

Pluto 114236-08-03 20:51 G 43445117.37 43445117.37 43445117.38 0.0081 0.0081

Mars 114238-09-28 14:08 G 43445902.93 43445903.09 43445903.26 0.1827 0.0370

Jupiter 114240-06-29 02:37 G 43446542.42 43446542.61 43446542.80 0.0500 0.0190

Mars 114245-03-12 16:17 G 43448260.02 43448260.18 43448260.35 0.1717 0.0615

Jupiter 114246-05-05 23:58 G 43448679.33 43448679.50 43448679.67 0.0523 0.0290

Saturn 114248-03-04 04:46 G 43449347.49 43449347.70 43449347.91 0.0289 0.0057

Jupiter 114252-03-04 03:20 G 43450808.56 43450808.64 43450808.74 0.0498 0.0445

Jupiter 114252-10-26 13:25 G 43451045.02 43451045.06 43451045.11 0.0507 0.0490

Neptune 114254-08-26 09:05 G 43451713.81 43451713.88 43451713.99 0.0089 0.0082

Neptune 114255-04-08 22:32 G 43451939.32 43451939.44 43451939.58 0.0089 0.0072

Neptune 114255-11-20 11:58 G 43452164.85 43452165.00 43452165.17 0.0089 0.0062

Neptune 114256-07-03 01:10 G 43452390.38 43452390.55 43452390.73 0.0089 0.0052

Neptune 114257-02-13 13:53 G 43452615.91 43452616.08 43452616.29 0.0089 0.0043

Neptune 114257-09-27 03:05 G 43452841.44 43452841.63 43452841.85 0.0089 0.0033

Jupiter 114258-01-08 17:15 G 43452945.01 43452945.22 43452945.42 0.0526 0.0014

Neptune 114258-05-10 16:17 G 43453066.98 43453067.18 43453067.40 0.0089 0.0023

Neptune 114258-12-22 05:44 G 43453292.53 43453292.74 43453292.96 0.0089 0.0012

Neptune 114259-08-04 18:56 G 43453518.07 43453518.29 43453518.51 0.0090 0.0003

Neptune 114260-03-17 07:53 G 43453743.61 43453743.83 43453744.05 0.0090 0.0007

Neptune 114260-10-28 20:51 G 43453969.16 43453969.37 43453969.59 0.0090 0.0017

Neptune 114261-06-11 10:03 G 43454194.71 43454194.92 43454195.13 0.0090 0.0027

Saturn 114262-01-06 00:13 G 43454403.37 43454403.51 43454403.68 0.0271 0.0184

Neptune 114262-01-22 23:01 G 43454420.26 43454420.46 43454420.66 0.0090 0.0037

Saturn 114262-08-23 05:01 G 43454632.52 43454632.71 43454632.90 0.0270 0.0117

Neptune 114262-09-05 11:58 G 43454645.82 43454646.00 43454646.19 0.0090 0.0047

Neptune 114263-04-19 00:41 G 43454871.38 43454871.53 43454871.72 0.0090 0.0057

Neptune 114263-11-30 13:39 G 43455096.95 43455097.07 43455097.24 0.0090 0.0067

Jupiter 114264-07-01 14:37 G 43455310.93 43455311.11 43455311.29 0.0505 0.0229

Neptune 114264-07-13 03:05 G 43455322.52 43455322.63 43455322.75 0.0090 0.0076

Neptune 114265-02-23 15:49 G 43455548.12 43455548.16 43455548.24 0.0090 0.0086

Uranus 114266-04-17 03:34 G 43455965.60 43455965.65 43455965.70 0.0140 0.0137

Uranus 114266-11-29 13:39 G 43456191.95 43456192.07 43456192.18 0.0140 0.0119

Uranus 114267-07-13 23:15 G 43456418.32 43456418.47 43456418.62 0.0140 0.0102

Uranus 114268-02-25 08:37 G 43456644.69 43456644.86 43456645.04 0.0140 0.0085

Uranus 114268-10-08 17:58 G 43456871.06 43456871.25 43456871.44 0.0139 0.0068

Uranus 114269-05-23 03:05 G 43457097.43 43457097.63 43457097.83 0.0139 0.0050

Jupiter 114269-09-13 07:53 G 43457210.68 43457210.83 43457211.00 0.0528 0.0318

Uranus 114270-01-04 11:44 G 43457323.79 43457323.99 43457324.21 0.0139 0.0033

Uranus 114270-08-18 20:37 G 43457550.14 43457550.36 43457550.57 0.0139 0.0016

Uranus 114271-04-02 05:01 G 43457776.49 43457776.71 43457776.93 0.0139 0.0002

Uranus 114271-11-14 13:10 G 43458002.84 43458003.05 43458003.27 0.0138 0.0018

Uranus 114272-06-27 21:05 G 43458229.18 43458229.38 43458229.60 0.0138 0.0036

Uranus 114273-02-09 05:15 G 43458455.52 43458455.72 43458455.92 0.0138 0.0051

Earth 114273-02-14 19:10 G 43458461.28 43458461.30 43458461.33 0.2681 0.2628

Uranus 114273-09-23 12:41 G 43458681.85 43458682.03 43458682.22 0.0138 0.0068

Uranus 114274-05-07 20:08 G 43458908.18 43458908.34 43458908.52 0.0138 0.0084

Uranus 114274-12-20 03:34 G 43459134.51 43459134.65 43459134.81 0.0137 0.0100

Uranus 114275-08-03 10:32 G 43459360.84 43459360.94 43459361.07 0.0137 0.0116

Jupiter 114276-03-06 15:20 G 43459576.94 43459577.14 43459577.35 0.0502 0.0033

Uranus 114276-03-16 17:44 G 43459587.18 43459587.24 43459587.31 0.0137 0.0130

Saturn 114277-01-27 12:13 G 43459903.95 43459904.01 43459904.09 0.0289 0.0270

Saturn 114277-09-14 07:39 G 43460133.62 43460133.82 43460134.02 0.0289 0.0098

Earth 114281-02-12 10:46 G 43461380.81 43461380.95 43461381.10 0.2679 0.0992

Moon 114281-02-12 12:56 G 43461380.88 43461381.04 43461381.21 0.2674 0.0439 *

Jupiter 114282-01-11 15:34 G 43461714.06 43461714.15 43461714.24 0.0521 0.0462

Jupiter 114287-11-10 15:34 G 43463842.98 43463843.15 43463843.31 0.0499 0.0295

Saturn 114291-07-19 06:41 G 43465189.60 43465189.78 43465189.97 0.0271 0.0135

Saturn 114292-03-04 11:15 G 43465418.81 43465418.97 43465419.14 0.0271 0.0167

Jupiter 114293-09-16 06:56 G 43465979.60 43465979.79 43465979.99 0.0525 0.0159

Jupiter 114300-03-10 01:25 G 43468345.43 43468345.56 43468345.70 0.0505 0.0379

Mars 114304-07-26 21:49 G 43469945.26 43469945.41 43469945.56 0.1822 0.0869

Jupiter 114305-05-22 23:58 G 43470245.30 43470245.50 43470245.69 0.0527 0.0143

Saturn 114306-08-10 20:08 G 43470690.20 43470690.34 43470690.48 0.0288 0.0212

Saturn 114307-03-28 15:05 G 43470919.96 43470920.13 43470920.31 0.0289 0.0154

Uranus 114309-08-27 15:34 G 43471803.12 43471803.15 43471803.20 0.0138 0.0135

Uranus 114310-04-10 22:46 G 43472029.36 43472029.45 43472029.57 0.0138 0.0120

Uranus 114310-11-23 06:13 G 43472255.63 43472255.76 43472255.91 0.0138 0.0104

Mars 114311-01-09 01:10 G 43472302.40 43472302.55 43472302.69 0.1721 0.0993

Uranus 114311-07-07 13:39 G 43472481.92 43472482.07 43472482.25 0.0138 0.0089

Jupiter 114311-11-14 01:25 G 43472611.37 43472611.56 43472611.76 0.0503 0.0115

Uranus 114312-02-18 21:34 G 43472708.22 43472708.40 43472708.59 0.0139 0.0072

Uranus 114312-10-02 05:29 G 43472934.54 43472934.73 43472934.93 0.0139 0.0056

Uranus 114313-05-16 13:39 G 43473160.87 43473161.07 43473161.29 0.0139 0.0039

Uranus 114313-12-28 22:17 G 43473387.22 43473387.43 43473387.65 0.0139 0.0022

Uranus 114314-08-12 06:56 G 43473613.57 43473613.79 43473614.01 0.0139 0.0004

Uranus 114315-03-26 15:34 G 43473839.94 43473840.15 43473840.37 0.0140 0.0014

Uranus 114315-11-08 00:41 G 43474066.32 43474066.53 43474066.75 0.0140 0.0031

Uranus 114316-06-21 10:03 G 43474292.72 43474292.92 43474293.13 0.0140 0.0048

Jupiter 114317-01-25 16:17 G 43474511.08 43474511.18 43474511.30 0.0530 0.0447

Uranus 114317-02-02 19:25 G 43474519.12 43474519.31 43474519.51 0.0140 0.0066

Uranus 114317-09-17 05:15 G 43474745.55 43474745.72 43474745.90 0.0140 0.0084

Uranus 114318-05-01 14:51 G 43474971.99 43474972.12 43474972.29 0.0141 0.0102

Uranus 114318-12-14 01:10 G 43475198.44 43475198.55 43475198.67 0.0141 0.0119

Uranus 114319-07-28 11:44 G 43475424.94 43475424.99 43475425.04 0.0141 0.0136

Saturn 114321-01-29 06:41 G 43475975.59 43475975.78 43475975.98 0.0271 0.0105

Saturn 114321-09-15 11:01 G 43476204.82 43476204.96 43476205.11 0.0270 0.0196

Jupiter 114323-07-20 02:51 G 43476877.43 43476877.62 43476877.82 0.0501 0.0144

Jupiter 114329-05-26 00:27 G 43479014.37 43479014.52 43479014.67 0.0523 0.0339

Jupiter 114335-03-25 04:17 G 43481143.56 43481143.68 43481143.80 0.0499 0.0398

Neptune 114335-07-17 06:56 G 43481257.75 43481257.79 43481257.87 0.0088 0.0084

Saturn 114336-02-20 22:46 G 43481476.28 43481476.45 43481476.62 0.0289 0.0173

Neptune 114336-02-27 19:39 G 43481483.22 43481483.32 43481483.45 0.0088 0.0075

Saturn 114336-10-07 17:58 G 43481706.10 43481706.25 43481706.41 0.0289 0.0196

Neptune 114336-10-10 08:22 G 43481708.72 43481708.85 43481709.01 0.0088 0.0066

Neptune 114337-05-23 21:05 G 43481934.24 43481934.38 43481934.57 0.0088 0.0057

Neptune 114338-01-04 10:17 G 43482159.75 43482159.93 43482160.12 0.0088 0.0047

Neptune 114338-08-17 23:01 G 43482385.27 43482385.46 43482385.67 0.0088 0.0038

Neptune 114339-03-31 11:58 G 43482610.80 43482611.00 43482611.21 0.0088 0.0028

Neptune 114339-11-12 00:56 G 43482836.33 43482836.54 43482836.76 0.0088 0.0019

Neptune 114340-06-24 13:53 G 43483061.86 43483062.08 43483062.30 0.0088 0.0009

Jupiter 114341-01-28 16:03 G 43483279.97 43483280.17 43483280.38 0.0525 0.0039

Neptune 114341-02-05 02:51 G 43483287.40 43483287.62 43483287.84 0.0088 0.0001

Neptune 114341-09-18 15:48 G 43483512.94 43483513.16 43483513.38 0.0088 0.0010

Neptune 114342-05-02 04:46 G 43483738.49 43483738.70 43483738.92 0.0088 0.0019

Neptune 114342-12-13 17:29 G 43483964.03 43483964.23 43483964.45 0.0088 0.0029

Neptune 114343-07-27 06:41 G 43484189.58 43484189.78 43484189.98 0.0088 0.0038

Neptune 114344-03-08 19:24 G 43484415.14 43484415.31 43484415.51 0.0088 0.0048

Neptune 114344-10-20 08:22 G 43484640.70 43484640.85 43484641.03 0.0088 0.0057

Neptune 114345-06-02 21:20 G 43484866.27 43484866.39 43484866.55 0.0088 0.0067

Neptune 114346-01-14 10:17 G 43485091.84 43485091.93 43485092.06 0.0088 0.0076

Neptune 114346-08-27 23:29 G 43485317.44 43485317.48 43485317.54 0.0088 0.0085

Jupiter 114347-07-22 13:39 G 43485645.90 43485646.07 43485646.24 0.0504 0.0269

Uranus 114350-07-30 21:20 G 43486750.30 43486750.39 43486750.49 0.0140 0.0126

Saturn 114350-08-11 13:10 G 43486761.84 43486762.05 43486762.26 0.0271 0.0055

Uranus 114351-03-14 07:10 G 43486976.67 43486976.80 43486976.94 0.0140 0.0108

Saturn 114351-03-28 17:29 G 43486991.15 43486991.23 43486991.32 0.0271 0.0246

Uranus 114351-10-26 17:00 G 43487203.05 43487203.21 43487203.38 0.0140 0.0091

Uranus 114352-06-09 02:22 G 43487429.42 43487429.60 43487429.79 0.0140 0.0074

Jupiter 114352-10-03 05:58 G 43487545.58 43487545.75 43487545.92 0.0529 0.0279

Uranus 114353-01-21 11:29 G 43487655.79 43487655.98 43487656.19 0.0139 0.0056

Uranus 114353-09-04 20:22 G 43487882.15 43487882.35 43487882.57 0.0139 0.0039

Uranus 114354-04-19 05:15 G 43488108.51 43488108.72 43488108.94 0.0139 0.0022

Uranus 114354-12-01 14:08 G 43488334.88 43488335.09 43488335.31 0.0139 0.0005

Uranus 114355-07-15 22:32 G 43488561.23 43488561.44 43488561.66 0.0139 0.0013

Uranus 114356-02-27 06:56 G 43488787.57 43488787.79 43488788.00 0.0138 0.0030

Uranus 114356-10-10 14:51 G 43489013.92 43489014.12 43489014.33 0.0138 0.0047

Uranus 114357-05-24 22:32 G 43489240.26 43489240.44 43489240.64 0.0138 0.0063

Uranus 114358-01-06 06:12 G 43489466.60 43489466.76 43489466.95 0.0138 0.0080

Uranus 114358-08-20 13:39 G 43489692.93 43489693.07 43489693.24 0.0138 0.0096

Jupiter 114359-03-27 13:53 G 43489911.88 43489912.08 43489912.28 0.0502 0.0006

Uranus 114359-04-03 20:51 G 43489919.26 43489919.37 43489919.51 0.0137 0.0112

Uranus 114359-11-16 04:17 G 43490145.61 43490145.68 43490145.77 0.0137 0.0127

Jupiter 114365-01-31 15:20 G 43492049.09 43492049.14 43492049.18 0.0522 0.0507

Saturn 114365-09-02 07:39 G 43492262.63 43492262.82 43492263.02 0.0288 0.0112

Saturn 114366-04-20 03:05 G 43492492.54 43492492.63 43492492.73 0.0289 0.0257

Mars 114370-05-24 05:00 G 43493987.60 43493987.71 43493987.82 0.1818 0.1376

Jupiter 114370-11-30 13:53 G 43494177.91 43494178.08 43494178.26 0.0500 0.0256

Jupiter 114376-10-06 08:36 G 43496314.68 43496314.86 43496315.05 0.0524 0.0214

Mars 114376-11-05 08:51 G 43496344.77 43496344.87 43496344.97 0.1725 0.1409

Saturn 114380-02-21 14:22 G 43497547.89 43497548.10 43497548.32 0.0271 0.0022

Jupiter 114383-03-30 00:56 G 43498680.44 43498680.54 43498680.65 0.0506 0.0425

Jupiter 114388-06-11 00:12 G 43500580.31 43500580.51 43500580.71 0.0527 0.0093

Pluto 114390-09-13 19:39 G 43501405.22 43501405.32 43501405.48 0.0063 0.0051

Pluto 114391-04-26 23:15 G 43501630.27 43501630.47 43501630.69 0.0063 0.0014

Pluto 114391-12-08 02:36 G 43501855.41 43501855.61 43501855.81 0.0063 0.0024

Pluto 114392-07-20 05:29 G 43502080.70 43502080.73 43502080.80 0.0064 0.0062

Uranus 114393-12-09 09:05 G 43502587.81 43502587.88 43502587.99 0.0138 0.0125

Uranus 114394-07-23 16:32 G 43502814.07 43502814.19 43502814.33 0.0138 0.0109

Earth 114394-08-14 07:39 G 43502835.79 43502835.82 43502835.84 0.2652 0.2602

Jupiter 114394-12-03 01:53 G 43502946.39 43502946.58 43502946.77 0.0504 0.0162

Uranus 114395-03-06 23:58 G 43503040.35 43503040.50 43503040.67 0.0138 0.0093

Saturn 114395-03-15 11:00 G 43503048.75 43503048.96 43503049.16 0.0289 0.0070

Uranus 114395-10-19 07:53 G 43503266.65 43503266.83 43503267.01 0.0138 0.0077

Uranus 114396-06-01 15:34 G 43503492.96 43503493.15 43503493.35 0.0139 0.0060

Uranus 114397-01-13 23:29 G 43503719.29 43503719.48 43503719.70 0.0139 0.0044

Uranus 114397-08-28 07:53 G 43503945.62 43503945.83 43503946.05 0.0139 0.0027

Uranus 114398-04-11 16:32 G 43504171.97 43504172.19 43504172.41 0.0139 0.0009

Uranus 114398-11-24 01:10 G 43504398.34 43504398.55 43504398.77 0.0139 0.0009

Uranus 114399-07-08 10:17 G 43504624.71 43504624.93 43504625.14 0.0140 0.0026

Jupiter 114400-02-14 14:51 G 43504846.00 43504846.12 43504846.26 0.0529 0.0404

Uranus 114400-02-19 19:10 G 43504851.10 43504851.30 43504851.51 0.0140 0.0044

Uranus 114400-10-03 04:32 G 43505077.50 43505077.69 43505077.89 0.0140 0.0061

Uranus 114401-05-17 14:08 G 43505303.92 43505304.09 43505304.28 0.0140 0.0079

Uranus 114401-12-29 23:58 G 43505530.35 43505530.50 43505530.67 0.0140 0.0097

Moon 114402-08-11 22:46 G 43505755.30 43505755.45 43505755.60 0.2647 0.1340

Earth 114402-08-11 22:46 G 43505755.30 43505755.45 43505755.60 0.2654 0.1008 *

Uranus 114402-08-13 10:03 G 43505756.79 43505756.92 43505757.05 0.0141 0.0114

Uranus 114403-03-27 19:39 G 43505983.27 43505983.32 43505983.42 0.0141 0.0132

Jupiter 114406-08-08 01:53 G 43507212.39 43507212.58 43507212.78 0.0501 0.0104

Mars 114408-11-04 14:22 G 43508031.99 43508032.10 43508032.21 0.1712 0.1333

Saturn 114409-09-02 20:36 G 43508334.15 43508334.36 43508334.57 0.0271 0.0027

Jupiter 114412-06-13 21:34 G 43509349.26 43509349.40 43509349.54 0.0523 0.0377

Jupiter 114418-04-13 02:36 G 43511478.47 43511478.61 43511478.75 0.0498 0.0360

Neptune 114418-11-28 17:44 G 43511708.18 43511708.24 43511708.33 0.0089 0.0084

Neptune 114419-07-12 07:10 G 43511933.69 43511933.80 43511933.93 0.0089 0.0074

Neptune 114420-02-22 20:08 G 43512159.21 43512159.34 43512159.51 0.0089 0.0064

Neptune 114420-10-05 09:20 G 43512384.74 43512384.89 43512385.08 0.0089 0.0055

Neptune 114421-05-18 22:46 G 43512610.27 43512610.45 43512610.65 0.0089 0.0045

Neptune 114421-12-30 11:58 G 43512835.81 43512836.00 43512836.21 0.0089 0.0035

Neptune 114422-08-13 01:10 G 43513061.35 43513061.55 43513061.77 0.0089 0.0025

Neptune 114423-03-26 14:22 G 43513286.89 43513287.10 43513287.32 0.0089 0.0015

Neptune 114423-11-07 03:34 G 43513512.43 43513512.65 43513512.87 0.0089 0.0005

Jupiter 114424-02-17 14:08 G 43513614.89 43513615.09 43513615.29 0.0526 0.0077

Neptune 114424-06-19 16:32 G 43513737.97 43513738.19 43513738.41 0.0090 0.0005

Saturn 114424-09-24 21:34 G 43513835.19 43513835.40 43513835.61 0.0288 0.0005

Neptune 114425-01-31 05:29 G 43513963.52 43513963.73 43513963.95 0.0090 0.0015

Neptune 114425-09-13 18:27 G 43514189.07 43514189.27 43514189.49 0.0090 0.0025

Neptune 114426-04-27 07:24 G 43514414.62 43514414.81 43514415.02 0.0090 0.0034

Neptune 114426-12-08 20:22 G 43514640.18 43514640.35 43514640.56 0.0090 0.0045

Neptune 114427-07-22 09:34 G 43514865.73 43514865.90 43514866.08 0.0090 0.0054

Neptune 114428-03-03 22:17 G 43515091.29 43515091.43 43515091.60 0.0090 0.0064

Neptune 114428-10-15 11:00 G 43515316.86 43515316.96 43515317.11 0.0090 0.0074

Neptune 114429-05-29 00:27 G 43515542.45 43515542.52 43515542.61 0.0090 0.0083

Jupiter 114430-08-10 11:15 G 43515980.81 43515980.97 43515981.13 0.0505 0.0308

Uranus 114434-03-30 05:15 G 43517308.66 43517308.72 43517308.81 0.0140 0.0132

Uranus 114434-11-11 15:34 G 43517535.03 43517535.15 43517535.29 0.0140 0.0114

Uranus 114435-06-26 01:10 G 43517761.41 43517761.55 43517761.72 0.0140 0.0097

Jupiter 114435-10-23 07:10 G 43517880.61 43517880.80 43517880.98 0.0528 0.0227

Uranus 114436-02-07 10:46 G 43517987.78 43517987.95 43517988.14 0.0140 0.0080

Uranus 114436-09-20 20:22 G 43518214.16 43518214.35 43518214.55 0.0139 0.0062

Uranus 114437-05-05 05:29 G 43518440.53 43518440.73 43518440.94 0.0139 0.0045

Uranus 114437-12-17 14:36 G 43518666.90 43518667.11 43518667.33 0.0139 0.0027

Saturn 114438-07-29 17:44 G 43518891.15 43518891.24 43518891.35 0.0272 0.0241

Uranus 114438-07-31 23:29 G 43518893.26 43518893.48 43518893.70 0.0139 0.0010

Uranus 114439-03-15 07:53 G 43519119.62 43519119.83 43519120.05 0.0139 0.0008

Saturn 114439-03-15 23:15 G 43519120.26 43519120.47 43519120.68 0.0271 0.0064

Uranus 114439-10-27 16:17 G 43519345.97 43519346.18 43519346.40 0.0138 0.0025

Uranus 114440-06-10 00:27 G 43519572.32 43519572.52 43519572.74 0.0138 0.0042

Uranus 114441-01-22 08:22 G 43519798.67 43519798.85 43519799.06 0.0138 0.0059

Uranus 114441-09-05 16:17 G 43520025.01 43520025.18 43520025.37 0.0138 0.0075

Jupiter 114442-04-15 11:58 G 43520246.80 43520247.00 43520247.21 0.0502 0.0048

Uranus 114442-04-19 23:44 G 43520251.35 43520251.49 43520251.67 0.0138 0.0092

Uranus 114442-12-02 07:24 G 43520477.69 43520477.81 43520477.96 0.0138 0.0108

Uranus 114443-07-16 14:51 G 43520704.03 43520704.12 43520704.22 0.0137 0.0123

Jupiter 114453-12-19 13:24 G 43524512.88 43524513.06 43524513.25 0.0500 0.0212

Saturn 114454-04-07 00:41 G 43524621.32 43524621.53 43524621.74 0.0289 0.0037

Jupiter 114459-10-26 06:12 G 43526649.58 43526649.76 43526649.94 0.0524 0.0254

Jupiter 114465-08-24 14:22 G 43528779.04 43528779.10 43528779.18 0.0497 0.0467

Jupiter 114466-04-17 23:29 G 43529015.41 43529015.48 43529015.56 0.0506 0.0464

Saturn 114468-02-09 00:12 G 43529677.36 43529677.51 43529677.66 0.0272 0.0192

Mars 114468-03-19 21:34 G 43529717.29 43529717.40 43529717.51 0.1829 0.1352

Saturn 114468-09-25 05:29 G 43529906.54 43529906.73 43529906.92 0.0271 0.0113

Jupiter 114471-06-30 19:53 G 43530915.12 43530915.33 43530915.53 0.0527 0.0061

Mars 114474-09-01 23:15 G 43532074.32 43532074.47 43532074.61 0.1715 0.0965

Uranus 114477-08-08 20:08 G 43533146.28 43533146.34 43533146.42 0.0138 0.0129

Jupiter 114477-12-21 23:15 G 43533281.29 43533281.47 43533281.66 0.0503 0.0198

Uranus 114478-03-23 03:05 G 43533372.52 43533372.63 43533372.77 0.0138 0.0114

Uranus 114478-11-04 10:17 G 43533598.80 43533598.93 43533599.10 0.0138 0.0099

Uranus 114479-06-18 18:12 G 43533825.09 43533825.26 43533825.44 0.0138 0.0082

Uranus 114480-01-31 01:39 G 43534051.39 43534051.57 43534051.77 0.0138 0.0066

Uranus 114480-09-13 09:34 G 43534277.71 43534277.90 43534278.11 0.0139 0.0049

Uranus 114481-04-27 17:58 G 43534504.04 43534504.25 43534504.47 0.0139 0.0032

Pluto 114481-06-09 16:03 G 43534546.97 43534547.17 43534547.39 0.0081 0.0027

Uranus 114481-12-10 02:22 G 43534730.39 43534730.60 43534730.82 0.0139 0.0014

Pluto 114482-01-21 03:20 G 43534772.50 43534772.64 43534772.82 0.0081 0.0056

Uranus 114482-07-24 11:00 G 43534956.74 43534956.96 43534957.18 0.0139 0.0003

Saturn 114483-03-02 17:58 G 43535178.17 43535178.25 43535178.34 0.0287 0.0259

Jupiter 114483-03-05 11:15 G 43535180.83 43535180.97 43535181.12 0.0530 0.0370

Uranus 114483-03-07 19:39 G 43535183.11 43535183.32 43535183.54 0.0139 0.0021

Saturn 114483-10-18 12:27 G 43535407.82 43535408.02 43535408.22 0.0288 0.0105

Uranus 114483-10-20 04:32 G 43535409.49 43535409.69 43535409.91 0.0140 0.0038

Uranus 114484-06-02 13:53 G 43535635.88 43535636.08 43535636.28 0.0140 0.0056

Uranus 114485-01-14 23:00 G 43535862.29 43535862.46 43535862.66 0.0140 0.0074

Uranus 114485-08-29 08:36 G 43536088.71 43536088.86 43536089.04 0.0140 0.0092

Uranus 114486-04-12 18:12 G 43536315.14 43536315.26 43536315.42 0.0140 0.0110

Uranus 114486-11-25 04:17 G 43536541.60 43536541.68 43536541.79 0.0141 0.0127

Jupiter 114489-08-26 22:17 G 43537547.23 43537547.43 43537547.63 0.0501 0.0068

Jupiter 114495-07-03 21:34 G 43539684.29 43539684.40 43539684.52 0.0523 0.0426

Saturn 114497-08-21 04:17 G 43540463.51 43540463.68 43540463.86 0.0271 0.0150

Saturn 114498-04-07 09:05 G 43540692.71 43540692.88 43540693.06 0.0271 0.0154

Neptune 114499-10-18 15:48 G 43541252.13 43541252.16 43541252.21 0.0088 0.0086

Neptune 114500-06-01 04:32 G 43541477.60 43541477.69 43541477.81 0.0088 0.0077

Neptune 114501-01-12 17:00 G 43541703.09 43541703.21 43541703.37 0.0088 0.0068

Jupiter 114501-05-02 23:29 G 43541813.33 43541813.48 43541813.64 0.0499 0.0325

Neptune 114501-08-26 05:44 G 43541928.60 43541928.74 43541928.93 0.0088 0.0059

Neptune 114502-04-08 18:56 G 43542154.11 43542154.29 43542154.48 0.0088 0.0049

Neptune 114502-11-20 07:24 G 43542379.63 43542379.81 43542380.02 0.0088 0.0040

Neptune 114503-07-03 20:22 G 43542605.15 43542605.35 43542605.57 0.0088 0.0031

Neptune 114504-02-14 09:20 G 43542830.68 43542830.89 43542831.11 0.0088 0.0021

Neptune 114504-09-26 22:03 G 43543056.21 43543056.42 43543056.65 0.0088 0.0012

Neptune 114505-05-10 11:15 G 43543281.75 43543281.97 43543282.19 0.0088 0.0002

Neptune 114505-12-21 23:58 G 43543507.29 43543507.50 43543507.73 0.0088 0.0008

Neptune 114506-08-04 12:56 G 43543732.83 43543733.04 43543733.26 0.0088 0.0017

Jupiter 114507-03-09 13:24 G 43543949.86 43543950.06 43543950.26 0.0525 0.0123

Neptune 114507-03-18 01:53 G 43543958.37 43543958.58 43543958.80 0.0088 0.0026

Neptune 114507-10-29 14:36 G 43544183.92 43544184.11 43544184.33 0.0088 0.0036

Neptune 114508-06-11 04:03 G 43544409.48 43544409.67 43544409.86 0.0088 0.0045

Neptune 114509-01-22 16:46 G 43544635.04 43544635.20 43544635.39 0.0088 0.0055

Neptune 114509-09-05 05:44 G 43544860.60 43544860.74 43544860.90 0.0088 0.0064

Neptune 114510-04-18 18:27 G 43545086.17 43545086.27 43545086.41 0.0088 0.0074

Neptune 114510-11-30 07:39 G 43545311.77 43545311.82 43545311.91 0.0088 0.0083

Saturn 114512-09-12 21:05 G 43545964.25 43545964.38 43545964.52 0.0288 0.0219

Saturn 114513-04-30 16:03 G 43546193.99 43546194.17 43546194.35 0.0289 0.0148

Jupiter 114513-08-30 10:03 G 43546315.78 43546315.92 43546316.07 0.0505 0.0352

Earth 114516-02-17 20:36 G 43547217.33 43547217.36 43547217.40 0.2680 0.2597

Uranus 114517-11-28 12:41 G 43547867.00 43547867.03 43547867.08 0.0140 0.0138

Uranus 114518-07-12 22:46 G 43548093.35 43548093.45 43548093.57 0.0140 0.0121

Jupiter 114518-11-12 04:32 G 43548215.50 43548215.69 43548215.88 0.0528 0.0187

Uranus 114519-02-24 08:36 G 43548319.72 43548319.86 43548320.02 0.0140 0.0103

Uranus 114519-10-08 18:12 G 43548546.11 43548546.26 43548546.45 0.0140 0.0086

Uranus 114520-05-22 04:03 G 43548772.49 43548772.67 43548772.87 0.0140 0.0068

Uranus 114521-01-03 13:24 G 43548998.86 43548999.06 43548999.27 0.0139 0.0050

Uranus 114521-08-17 22:32 G 43549225.23 43549225.44 43549225.66 0.0139 0.0033

Uranus 114522-04-01 07:39 G 43549451.60 43549451.82 43549452.04 0.0139 0.0015

Uranus 114522-11-13 16:32 G 43549677.97 43549678.19 43549678.41 0.0139 0.0002

Uranus 114523-06-28 01:10 G 43549904.33 43549904.55 43549904.76 0.0139 0.0020

Uranus 114524-02-09 09:20 G 43550130.69 43550130.89 43550131.10 0.0138 0.0037

Earth 114524-02-15 11:58 G 43550136.86 43550137.00 43550137.15 0.2678 0.1049

Moon 114524-02-15 17:00 G 43550137.05 43550137.21 43550137.37 0.2675 0.0406 *

Uranus 114524-09-22 17:29 G 43550357.03 43550357.23 43550357.44 0.0138 0.0054

Jupiter 114525-05-05 10:32 G 43550581.74 43550581.94 43550582.14 0.0502 0.0086

Uranus 114525-05-07 01:24 G 43550583.38 43550583.56 43550583.76 0.0138 0.0070

Uranus 114525-12-19 09:20 G 43550809.73 43550809.89 43550810.07 0.0138 0.0087

Uranus 114526-08-02 17:00 G 43551036.07 43551036.21 43551036.36 0.0138 0.0103

Saturn 114527-03-04 10:03 G 43551249.73 43551249.92 43551250.13 0.0272 0.0104

Uranus 114527-03-17 00:12 G 43551262.42 43551262.51 43551262.63 0.0138 0.0119

Saturn 114527-10-19 15:20 G 43551479.00 43551479.14 43551479.28 0.0271 0.0201

Uranus 114527-10-29 07:10 G 43551488.78 43551488.80 43551488.87 0.0137 0.0135

Jupiter 114530-07-17 16:46 G 43552481.15 43552481.20 43552481.25 0.0531 0.0509

Mars 114534-01-16 04:32 G 43553759.53 43553759.69 43553759.84 0.1824 0.0807

Jupiter 114537-01-08 10:46 G 43554847.76 43554847.95 43554848.14 0.0500 0.0175

Mars 114540-06-30 07:39 G 43556116.65 43556116.82 43556116.99 0.1720 0.0579

Saturn	114542-03-26 09:20 G	43556750.72	43556750.89	43556751.08	0.0288	0.0149
Saturn	114542-11-11 04:03 G	43556980.54	43556980.67	43556980.82	0.0288	0.0218
Jupiter	114542-11-15 02:08 G	43556984.42	43556984.59	43556984.76	0.0524	0.0288
Jupiter	114548-09-13 09:48 G	43559113.82	43559113.91	43559114.01	0.0497	0.0437
Jupiter	114549-05-07 18:56 G	43559350.26	43559350.29	43559350.33	0.0506	0.0496
Jupiter	114554-07-20 19:24 G	43561250.11	43561250.31	43561250.51	0.0527	0.0012
Saturn	114556-09-13 15:48 G	43562035.95	43562036.16	43562036.37	0.0271	0.0057
Saturn	114557-04-30 20:22 G	43562265.27	43562265.35	43562265.44	0.0271	0.0245
Jupiter	114561-01-10 19:39 G	43563616.14	43563616.32	43563616.50	0.0504	0.0234
Uranus	114561-04-09 06:56 G	43563704.75	43563704.79	43563704.85	0.0138	0.0134
Uranus	114561-11-21 14:08 G	43563930.98	43563931.09	43563931.20	0.0138	0.0118
Uranus	114562-07-05 21:20 G	43564157.25	43564157.39	43564157.53	0.0138	0.0102
Uranus	114563-02-17 04:32 G	43564383.53	43564383.69	43564383.86	0.0138	0.0087
Uranus	114563-10-01 11:58 G	43564609.83	43564610.00	43564610.20	0.0138	0.0071
Uranus	114564-05-14 20:08 G	43564836.15	43564836.34	43564836.55	0.0139	0.0053
Uranus	114564-12-27 04:03 G	43565062.47	43565062.67	43565062.89	0.0139	0.0037
Uranus	114565-08-10 12:27 G	43565288.81	43565289.02	43565289.24	0.0139	0.0019
Uranus	114566-03-24 20:51 G	43565515.16	43565515.37	43565515.59	0.0139	0.0003
Jupiter	114566-03-25 10:46 G	43565515.79	43565515.95	43565516.11	0.0529	0.0323
Uranus	114566-11-06 05:29 G	43565741.52	43565741.73	43565741.95	0.0139	0.0016
Uranus	114567-06-20 14:22 G	43565967.89	43565968.10	43565968.32	0.0139	0.0034
Uranus	114568-02-01 23:29 G	43566194.28	43566194.48	43566194.68	0.0140	0.0051
Uranus	114568-09-15 08:36 G	43566420.68	43566420.86	43566421.06	0.0140	0.0069
Uranus	114569-04-29 17:58 G	43566647.09	43566647.25	43566647.43	0.0140	0.0087
Uranus	114569-12-12 03:34 G	43566873.52	43566873.65	43566873.81	0.0140	0.0105
Uranus	114570-07-26 13:39 G	43567099.97	43567100.07	43567100.18	0.0140	0.0122
Uranus	114571-03-09 23:15 G	43567326.46	43567326.47	43567326.52	0.0141	0.0140
Saturn	114571-10-06 12:27 G	43567536.83	43567537.02	43567537.22	0.0288	0.0108
Saturn	114572-05-23 07:24 G	43567766.73	43567766.81	43567766.91	0.0289	0.0261
Jupiter	114572-09-15 20:36 G	43567882.15	43567882.36	43567882.56	0.0501	0.0029

Jupiter 114578-07-23 18:27 G 43570019.18 43570019.27 43570019.36 0.0522 0.0464

Neptune 114583-03-03 01:53 G 43571702.55 43571702.58 43571702.67 0.0089 0.0087

Neptune 114583-10-14 15:20 G 43571928.05 43571928.14 43571928.27 0.0089 0.0077

Jupiter 114584-05-21 21:48 G 43572148.25 43572148.41 43572148.58 0.0499 0.0286

Neptune 114584-05-27 04:46 G 43572153.57 43572153.70 43572153.86 0.0089 0.0067

Neptune 114585-01-07 18:12 G 43572379.10 43572379.26 43572379.44 0.0089 0.0057

Neptune 114585-08-21 07:24 G 43572604.63 43572604.81 43572605.01 0.0089 0.0047

Saturn 114586-03-26 21:05 G 43572822.17 43572822.38 43572822.60 0.0271 0.0013

Neptune 114586-04-03 20:22 G 43572830.17 43572830.35 43572830.57 0.0089 0.0038

Neptune 114586-11-15 09:48 G 43573055.71 43573055.91 43573056.13 0.0089 0.0027

Neptune 114587-06-28 23:00 G 43573281.26 43573281.46 43573281.69 0.0089 0.0018

Neptune 114588-02-09 12:12 G 43573506.80 43573507.01 43573507.23 0.0089 0.0008

Neptune 114588-09-22 01:24 G 43573732.34 43573732.56 43573732.78 0.0089 0.0003

Neptune 114589-05-05 14:22 G 43573957.89 43573958.10 43573958.32 0.0089 0.0013

Neptune 114589-12-17 03:20 G 43574183.44 43574183.64 43574183.87 0.0089 0.0023

Jupiter 114590-03-28 07:39 G 43574284.63 43574284.82 43574285.02 0.0525 0.0153

Neptune 114590-07-30 16:46 G 43574408.99 43574409.20 43574409.40 0.0090 0.0032

Neptune 114591-03-13 05:29 G 43574634.55 43574634.73 43574634.93 0.0090 0.0042

Neptune 114591-10-24 18:27 G 43574860.10 43574860.27 43574860.46 0.0090 0.0052

Neptune 114592-06-06 07:10 G 43575085.66 43575085.80 43575085.98 0.0090 0.0062

Neptune 114593-01-17 20:36 G 43575311.23 43575311.36 43575311.50 0.0090 0.0071

Neptune 114593-08-31 09:20 G 43575536.81 43575536.89 43575537.00 0.0090 0.0081

Jupiter 114596-09-18 06:56 G 43576650.67 43576650.79 43576650.92 0.0505 0.0387

Mars 114599-11-13 11:44 G 43577801.82 43577801.99 43577802.16 0.1819 0.0296

Saturn 114601-04-19 01:10 G 43578323.34 43578323.55 43578323.76 0.0288 0.0038

Jupiter 114601-12-01 23:29 G 43578550.28 43578550.48 43578550.67 0.0528 0.0156

Uranus 114602-03-13 06:56 G 43578651.71 43578651.79 43578651.90 0.0140 0.0127

Uranus 114602-10-25 17:00 G 43578878.09 43578878.21 43578878.37 0.0140 0.0110

Uranus 114603-06-09 03:20 G 43579104.48 43579104.64 43579104.81 0.0140 0.0091

Uranus 114604-01-21 12:41 G 43579330.86 43579331.03 43579331.23 0.0140 0.0074

Uranus 114604-09-03 22:17 G 43579557.24 43579557.43 43579557.64 0.0140 0.0056

Uranus 114605-04-18 07:39 G 43579783.61 43579783.82 43579784.03 0.0139 0.0038

Uranus 114605-11-30 17:00 G 43580009.99 43580010.21 43580010.42 0.0139 0.0021

Mars 114606-04-28 16:03 G 43580159.00 43580159.17 43580159.35 0.1724 0.0200

Uranus 114606-07-15 01:53 G 43580236.36 43580236.58 43580236.80 0.0139 0.0003

Uranus 114607-02-26 10:32 G 43580462.72 43580462.94 43580463.15 0.0139 0.0014

Uranus 114607-10-10 18:56 G 43580689.08 43580689.29 43580689.50 0.0139 0.0032

Uranus 114608-05-24 03:20 G 43580915.44 43580915.64 43580915.84 0.0138 0.0049

Jupiter 114608-05-25 05:15 G 43580916.52 43580916.72 43580916.92 0.0502 0.0116

Uranus 114609-01-05 11:15 G 43581141.79 43581141.97 43581142.17 0.0138 0.0066

Uranus 114609-08-19 19:10 G 43581368.14 43581368.30 43581368.48 0.0138 0.0083

Uranus 114610-04-03 02:51 G 43581594.48 43581594.62 43581594.78 0.0138 0.0099

Uranus 114610-11-15 10:17 G 43581820.83 43581820.93 43581821.07 0.0138 0.0115

Uranus 114611-06-29 17:29 G 43582047.19 43582047.23 43582047.32 0.0138 0.0131

Jupiter 114613-08-06 16:03 G 43582816.08 43582816.17 43582816.27 0.0531 0.0462

Saturn 114615-02-20 22:17 G 43583379.41 43583379.43 43583379.46 0.0272 0.0269

Saturn 114615-10-08 03:48 G 43583608.45 43583608.66 43583608.87 0.0271 0.0037

Jupiter 114620-01-29 06:12 G 43585182.57 43585182.76 43585182.96 0.0500 0.0144

Jupiter 114625-12-05 01:10 G 43587319.40 43587319.55 43587319.71 0.0524 0.0334

Saturn 114630-10-30 04:03 G 43589109.46 43589109.67 43589109.88 0.0288 0.0005

Jupiter 114631-10-04 07:39 G 43589448.70 43589448.82 43589448.94 0.0498 0.0400

Pluto 114636-10-14 08:36 G 43591285.68 43591285.86 43591286.06 0.0063 0.0029

Pluto 114637-05-27 11:44 G 43591510.79 43591510.99 43591511.22 0.0063 0.0008

Jupiter 114637-08-09 16:46 G 43591584.99 43591585.20 43591585.40 0.0526 0.0029

Earth 114637-08-16 08:36 G 43591591.84 43591591.86 43591591.89 0.2653 0.2612

Pluto 114638-01-07 14:51 G 43591735.99 43591736.12 43591736.29 0.0063 0.0046

Jupiter 114644-01-31 17:58 G 43593951.08 43593951.25 43593951.42 0.0504 0.0274

Saturn 114644-09-02 02:36 G 43594165.50 43594165.61 43594165.74 0.0272 0.0226

Saturn 114645-04-19 08:22 G 43594394.65 43594394.85 43594395.06 0.0271 0.0081

Uranus 114645-07-23 00:56 G 43594489.45 43594489.54 43594489.64 0.0138 0.0123

Earth 114645-08-13 23:58 G 43594511.35 43594511.50 43594511.65 0.2655 0.0995

Moon 114645-08-14 03:05 G 43594511.48 43594511.63 43594511.79 0.2649 0.0868 *

Uranus 114646-03-06 07:39 G 43594715.70 43594715.82 43594715.97 0.0138 0.0108

Uranus 114646-10-18 15:20 G 43594941.98 43594942.14 43594942.30 0.0138 0.0091

Uranus 114647-06-01 22:46 G 43595168.28 43595168.45 43595168.64 0.0138 0.0075

Uranus 114648-01-14 06:27 G 43595394.58 43595394.77 43595394.97 0.0138 0.0059

Uranus 114648-08-27 14:22 G 43595620.90 43595621.10 43595621.31 0.0139 0.0042

Uranus 114649-04-10 22:32 G 43595847.23 43595847.44 43595847.66 0.0139 0.0025

Jupiter 114649-04-14 05:15 G 43595850.55 43595850.72 43595850.89 0.0529 0.0293

Uranus 114649-11-23 06:56 G 43596073.58 43596073.79 43596074.01 0.0139 0.0007

Uranus 114650-07-07 15:20 G 43596299.93 43596300.14 43596300.36 0.0139 0.0012

Uranus 114651-02-18 23:58 G 43596526.29 43596526.50 43596526.72 0.0139 0.0029

Uranus 114651-10-03 09:05 G 43596752.67 43596752.88 43596753.08 0.0140 0.0046

Uranus 114652-05-16 17:58 G 43596979.07 43596979.25 43596979.46 0.0140 0.0064

Uranus 114652-12-29 03:34 G 43597205.47 43597205.65 43597205.82 0.0140 0.0081

Uranus 114653-08-12 12:41 G 43597431.89 43597432.03 43597432.19 0.0140 0.0099

Uranus 114654-03-26 22:17 G 43597658.32 43597658.43 43597658.56 0.0140 0.0117

Uranus 114654-11-08 08:22 G 43597884.79 43597884.85 43597884.91 0.0141 0.0134

Jupiter 114655-10-06 17:44 G 43598217.04 43598217.24 43598217.45 0.0501 0.0011

Saturn 114660-05-11 16:17 G 43599895.98 43599896.18 43599896.39 0.0288 0.0073

Jupiter 114661-08-12 13:24 G 43600354.01 43600354.06 43600354.13 0.0523 0.0497

Neptune 114664-09-03 13:10 G 43601471.98 43601472.05 43601472.16 0.0088 0.0079

Neptune 114665-04-17 01:53 G 43601697.47 43601697.58 43601697.74 0.0088 0.0070

Mars 114665-09-10 19:10 G 43601844.13 43601844.30 43601844.47 0.1815 0.0215

Neptune 114665-11-28 15:05 G 43601922.98 43601923.13 43601923.29 0.0088 0.0060

Neptune 114666-07-12 03:48 G 43602148.49 43602148.66 43602148.85 0.0088 0.0051

Neptune 114667-02-22 16:17 G 43602374.00 43602374.18 43602374.39 0.0088 0.0042

Jupiter 114667-06-11 16:17 G 43602483.01 43602483.18 43602483.36 0.0499 0.0258

Neptune 114667-10-06 05:29 G 43602599.53 43602599.73 43602599.94 0.0088 0.0032

Neptune 114668-05-18 18:12 G 43602825.06 43602825.26 43602825.48 0.0088 0.0023

Neptune 114668-12-30 07:10 G 43603050.58 43603050.80 43603051.02 0.0088 0.0014

Neptune 114669-08-12 20:08 G 43603276.12 43603276.34 43603276.56 0.0088 0.0004

Neptune 114670-03-26 08:51 G 43603501.65 43603501.87 43603502.09 0.0088 0.0005

Neptune 114670-11-06 21:34 G 43603727.19 43603727.40 43603727.63 0.0088 0.0015

Neptune 114671-06-20 10:46 G 43603952.74 43603952.95 43603953.16 0.0088 0.0024

Neptune 114672-01-31 23:29 G 43604178.28 43604178.48 43604178.69 0.0088 0.0034

Mars 114672-02-24 00:27 G 43604201.34 43604201.52 43604201.69 0.1728 0.0207

Neptune 114672-09-13 12:27 G 43604403.84 43604404.02 43604404.22 0.0088 0.0043

Jupiter 114673-04-17 07:10 G 43604619.61 43604619.80 43604619.99 0.0525 0.0200

Neptune 114673-04-27 01:10 G 43604629.39 43604629.55 43604629.75 0.0088 0.0053

Neptune 114673-12-08 14:22 G 43604854.96 43604855.10 43604855.27 0.0088 0.0062

Saturn 114674-03-15 10:32 G 43604951.78 43604951.94 43604952.11 0.0272 0.0174

Neptune 114674-07-22 03:48 G 43605080.53 43605080.66 43605080.78 0.0088 0.0071

Saturn 114674-10-30 15:48 G 43605180.98 43605181.16 43605181.35 0.0271 0.0131

Neptune 114675-03-04 16:17 G 43605306.11 43605306.18 43605306.28 0.0088 0.0081

Jupiter 114679-10-09 02:22 G 43606985.49 43606985.60 43606985.71 0.0505 0.0420

Jupiter 114684-12-20 23:29 G 43608885.28 43608885.48 43608885.67 0.0528 0.0108

Uranus 114685-11-10 15:05 G 43609210.06 43609210.13 43609210.20 0.0140 0.0133

Uranus 114686-06-25 01:10 G 43609436.43 43609436.55 43609436.68 0.0140 0.0115

Uranus 114687-02-06 11:00 G 43609662.82 43609662.96 43609663.13 0.0140 0.0098

Uranus 114687-09-20 20:51 G 43609889.20 43609889.37 43609889.56 0.0140 0.0080

Uranus 114688-05-04 06:41 G 43610115.59 43610115.78 43610115.98 0.0140 0.0062

Uranus 114688-12-16 16:03 G 43610341.97 43610342.17 43610342.39 0.0139 0.0045

Saturn 114689-04-06 00:27 G 43610452.43 43610452.52 43610452.63 0.0288 0.0252

Uranus 114689-07-31 01:24 G 43610568.35 43610568.56 43610568.78 0.0139 0.0027

Saturn 114689-11-21 18:56 G 43610682.10 43610682.29 43610682.48 0.0289 0.0114

Uranus 114690-03-14 10:32 G 43610794.72 43610794.94 43610795.16 0.0139 0.0009

Uranus 114690-10-26 19:24 G 43611021.09 43611021.31 43611021.53 0.0139 0.0009

Uranus 114691-06-10 03:48 G 43611247.46 43611247.66 43611247.88 0.0139 0.0027

Jupiter 114691-06-14 03:20 G 43611251.45 43611251.64 43611251.84 0.0503 0.0157

Uranus 114692-01-22 12:12 G 43611473.81 43611474.01 43611474.23 0.0139 0.0044

Uranus 114692-09-04 20:36 G 43611700.17 43611700.36 43611700.56 0.0138 0.0061

Uranus 114693-04-19 04:32 G 43611926.52 43611926.69 43611926.88 0.0138 0.0077

Uranus 114693-12-01 12:12 G 43612152.87 43612153.01 43612153.19 0.0138 0.0094

Uranus 114694-07-15 19:53 G 43612379.22 43612379.33 43612379.47 0.0138 0.0110

Uranus 114695-02-27 03:20 G 43612605.57 43612605.64 43612605.74 0.0138 0.0126

Jupiter 114696-08-25 14:08 G 43613150.97 43613151.09 43613151.21 0.0530 0.0420

Jupiter 114703-02-18 04:46 G 43615517.50 43615517.70 43615517.90 0.0500 0.0103

Saturn 114703-09-26 14:08 G 43615737.91 43615738.09 43615738.28 0.0271 0.0133

Saturn 114704-05-12 19:24 G 43615967.15 43615967.31 43615967.48 0.0271 0.0172

Jupiter 114708-12-24 20:08 G 43617654.20 43617654.34 43617654.49 0.0524 0.0366

Jupiter 114714-10-24 05:29 G 43619783.59 43619783.73 43619783.87 0.0498 0.0361

Saturn 114718-10-18 11:29 G 43621238.82 43621238.98 43621239.14 0.0288 0.0187

Saturn 114719-06-05 06:12 G 43621468.60 43621468.76 43621468.93 0.0289 0.0180

Jupiter 114720-08-29 11:58 G 43621919.80 43621920.00 43621920.20 0.0526 0.0061

Pluto 114726-11-28 19:53 G 43624202.22 43624202.33 43624202.47 0.0081 0.0068

Jupiter 114727-02-20 12:12 G 43624285.85 43624286.01 43624286.18 0.0504 0.0303

Pluto 114727-07-12 07:39 G 43624427.61 43624427.82 43624428.05 0.0081 0.0016

Uranus 114729-03-23 11:00 G 43625047.91 43625047.96 43625048.06 0.0138 0.0129

Uranus 114729-11-04 18:12 G 43625274.15 43625274.26 43625274.40 0.0138 0.0113

Uranus 114730-06-19 01:24 G 43625500.42 43625500.56 43625500.73 0.0138 0.0097

Uranus 114731-01-31 08:51 G 43625726.71 43625726.87 43625727.06 0.0138 0.0081

Mars 114731-07-10 02:51 G 43625886.47 43625886.62 43625886.78 0.1810 0.0696

Uranus 114731-09-14 16:46 G 43625953.01 43625953.20 43625953.39 0.0138 0.0064

Uranus 114732-04-28 00:27 G 43626179.32 43626179.52 43626179.73 0.0138 0.0047

Jupiter 114732-05-04 05:00 G 43626185.53 43626185.71 43626185.89 0.0529 0.0246

Uranus 114732-12-10 08:36 G 43626405.65 43626405.86 43626406.07 0.0139 0.0030

Saturn 114733-04-07 22:17 G 43626524.24 43626524.43 43626524.64 0.0271 0.0080

Uranus 114733-07-24 16:46 G 43626631.98 43626632.20 43626632.42 0.0139 0.0012

Saturn 114733-11-23 03:20 G 43626753.52 43626753.64 43626753.76 0.0271 0.0224

Uranus 114734-03-08 00:56 G 43626858.33 43626858.54 43626858.76 0.0139 0.0006

Uranus 114734-10-20 09:34 G 43627084.69 43627084.90 43627085.12 0.0139 0.0023

Uranus 114735-06-03 18:27 G 43627311.06 43627311.27 43627311.48 0.0139 0.0040

Uranus 114736-01-16 03:05 G 43627537.45 43627537.63 43627537.84 0.0140 0.0059

Uranus 114736-08-29 12:12 G 43627763.84 43627764.01 43627764.20 0.0140 0.0076

Uranus 114737-04-12 21:20 G 43627990.25 43627990.39 43627990.57 0.0140 0.0094

Uranus 114737-11-25 06:56 G 43628216.67 43628216.79 43628216.94 0.0140 0.0112

Mars 114737-12-22 08:36 G 43628243.70 43628243.86 43628244.03 0.1732 0.0605

Uranus 114738-07-09 17:00 G 43628443.13 43628443.21 43628443.30 0.0140 0.0129

Jupiter 114738-10-26 13:10 G 43628551.85 43628552.05 43628552.25 0.0501 0.0040

Neptune 114747-06-06 11:00 G 43631696.95 43631696.96 43631697.02 0.0089 0.0089

Neptune 114748-01-18 00:27 G 43631922.44 43631922.52 43631922.64 0.0089 0.0079

Saturn 114748-04-29 13:39 G 43632024.90 43632025.07 43632025.26 0.0288 0.0148

Neptune 114748-08-30 13:53 G 43632147.95 43632148.08 43632148.23 0.0089 0.0069

Saturn 114748-12-15 08:36 G 43632254.72 43632254.86 43632254.99 0.0289 0.0220

Neptune 114749-04-13 03:20 G 43632373.48 43632373.64 43632373.81 0.0089 0.0059

Neptune 114749-11-24 16:17 G 43632599.01 43632599.18 43632599.38 0.0089 0.0049

Jupiter 114750-07-01 14:36 G 43632817.93 43632818.11 43632818.29 0.0499 0.0219

Neptune 114750-07-08 05:29 G 43632824.55 43632824.73 43632824.94 0.0089 0.0040

Neptune 114751-02-18 18:56 G 43633050.09 43633050.29 43633050.50 0.0089 0.0029

Neptune 114751-10-02 08:08 G 43633275.63 43633275.84 43633276.06 0.0089 0.0019

Neptune 114752-05-14 21:20 G 43633501.17 43633501.39 43633501.61 0.0089 0.0010

Neptune 114752-12-26 10:32 G 43633726.73 43633726.94 43633727.16 0.0089 0.0002

Neptune 114753-08-08 23:44 G 43633952.27 43633952.49 43633952.71 0.0089 0.0010

Neptune 114754-03-22 12:27 G 43634177.82 43634178.02 43634178.25 0.0089 0.0021

Neptune 114754-11-03 01:39 G 43634403.37 43634403.57 43634403.78 0.0089 0.0030

Neptune 114755-06-16 14:36 G 43634628.93 43634629.11 43634629.32 0.0090 0.0040

Neptune 114756-01-28 03:34 G 43634854.48 43634854.65 43634854.85 0.0090 0.0050

Jupiter 114756-05-07 05:44 G 43634954.56 43634954.74 43634954.92 0.0525 0.0245

Neptune 114756-09-09 16:46 G 43635080.04 43635080.20 43635080.37 0.0090 0.0059

Neptune 114757-04-23 05:29 G 43635305.61 43635305.73 43635305.88 0.0090 0.0069

Neptune 114757-12-04 18:27 G 43635531.19 43635531.27 43635531.39 0.0090 0.0079

Neptune 114758-07-18 07:39 G 43635756.79 43635756.82 43635756.87 0.0090 0.0088

Earth 114759-02-19 21:48 G 43635973.37 43635973.41 43635973.46 0.2679 0.2540

Jupiter 114762-03-06 16:32 G 43637084.13 43637084.19 43637084.26 0.0497 0.0471

Saturn 114762-10-19 01:10 G 43637310.34 43637310.55 43637310.76 0.0271 0.0041

Jupiter 114762-10-29 01:39 G 43637320.50 43637320.57 43637320.65 0.0505 0.0464

Saturn 114763-06-05 05:58 G 43637539.70 43637539.75 43637539.80 0.0270 0.0261

Earth 114767-02-17 13:10 G 43638892.91 43638893.05 43638893.20 0.2678 0.1096

Moon 114767-02-17 18:56 G 43638893.14 43638893.29 43638893.44 0.2679 0.0739 *

Jupiter 114768-01-10 19:10 G 43639220.10 43639220.30 43639220.50 0.0527 0.0072

Uranus 114769-07-11 23:29 G 43639768.46 43639768.48 43639768.52 0.0141 0.0139

Uranus 114770-02-23 09:48 G 43639994.81 43639994.91 43639995.02 0.0140 0.0121

Uranus 114770-10-07 20:08 G 43640221.20 43640221.34 43640221.49 0.0140 0.0104

Uranus 114771-05-22 05:58 G 43640447.59 43640447.75 43640447.93 0.0140 0.0086

Uranus 114772-01-03 15:48 G 43640673.97 43640674.16 43640674.36 0.0140 0.0068

Uranus 114772-08-17 01:24 G 43640900.36 43640900.56 43640900.77 0.0140 0.0050

Uranus 114773-03-31 10:46 G 43641126.74 43641126.95 43641127.17 0.0139 0.0032

Uranus 114773-11-12 20:08 G 43641353.12 43641353.34 43641353.56 0.0139 0.0014

Uranus 114774-06-27 05:00 G 43641579.50 43641579.71 43641579.93 0.0139 0.0005

Jupiter 114774-07-04 01:39 G 43641586.38 43641586.57 43641586.76 0.0503 0.0198

Uranus 114775-02-08 13:53 G 43641805.86 43641806.08 43641806.29 0.0139 0.0021

Uranus 114775-09-22 22:17 G 43642032.22 43642032.43 43642032.64 0.0139 0.0038

Uranus 114776-05-06 06:27 G 43642258.58 43642258.77 43642258.98 0.0138 0.0056

Uranus 114776-12-18 14:51 G 43642484.94 43642485.12 43642485.31 0.0138 0.0073

Uranus 114777-08-01 22:32 G 43642711.29 43642711.44 43642711.62 0.0138 0.0089

Saturn 114777-11-09 23:29 G 43642811.28 43642811.48 43642811.68 0.0288 0.0087

Uranus 114778-03-16 06:27 G 43642937.63 43642937.77 43642937.91 0.0138 0.0105

Saturn 114778-06-27 18:27 G 43643041.24 43643041.27 43643041.32 0.0289 0.0283

Uranus 114778-10-28 13:39 G 43643163.99 43643164.07 43643164.19 0.0138 0.0122

Uranus 114779-06-11 21:05 G 43643390.37 43643390.38 43643390.41 0.0138 0.0137

Jupiter 114779-09-15 10:03 G 43643485.78 43643485.92 43643486.06 0.0530 0.0385

Jupiter 114786-03-08 23:44 G 43645852.29 43645852.49 43645852.69 0.0500 0.0074

Jupiter 114792-01-13 20:22 G 43647989.23 43647989.35 43647989.48 0.0524 0.0416

Saturn 114792-04-30 09:20 G 43648096.68 43648096.89 43648097.11 0.0271 0.0013

Mars 114797-05-06 10:32 G 43649928.82 43649928.94 43649929.07 0.1805 0.1179

Jupiter 114797-11-12 01:10 G 43650118.40 43650118.55 43650118.70 0.0498 0.0330

Jupiter 114803-09-18 13:10 G 43652254.85 43652255.05 43652255.25 0.0526 0.0113

Mars 114803-10-19 16:17 G 43652286.03 43652286.18 43652286.32 0.1737 0.1044

Saturn 114807-05-23 01:39 G 43653597.37 43653597.57 43653597.78 0.0288 0.0047

Jupiter 114810-03-11 11:29 G 43654620.83 43654620.98 43654621.12 0.0504 0.0346

Uranus 114812-11-20 21:48 G 43655606.37 43655606.41 43655606.47 0.0137 0.0134

Uranus 114813-07-05 04:46 G 43655832.60 43655832.70 43655832.82 0.0138 0.0118

Uranus 114814-02-16 11:44 G 43656058.86 43656058.99 43656059.15 0.0138 0.0102

Uranus 114814-09-30 18:56 G 43656285.14 43656285.29 43656285.48 0.0138 0.0086

Uranus 114815-05-15 02:51 G 43656511.44 43656511.62 43656511.81 0.0138 0.0069

Jupiter 114815-05-24 05:00 G 43656520.52 43656520.71 43656520.89 0.0529 0.0197

Uranus 114815-12-27 10:32 G 43656737.75 43656737.94 43656738.15 0.0138 0.0052

Uranus 114816-08-09 18:12 G 43656964.06 43656964.26 43656964.48 0.0139 0.0036

Uranus 114817-03-24 02:22 G 43657190.39 43657190.60 43657190.82 0.0139 0.0018

Uranus 114817-11-05 10:46 G 43657416.73 43657416.95 43657417.16 0.0139 0.0002

Uranus 114818-06-19 19:10 G 43657643.08 43657643.30 43657643.51 0.0139 0.0017

Uranus 114819-02-01 03:34 G 43657869.44 43657869.65 43657869.87 0.0139 0.0035

Uranus 114819-09-15 12:12 G 43658095.82 43658096.01 43658096.22 0.0140 0.0053

Uranus 114820-04-28 21:05 G 43658322.21 43658322.38 43658322.58 0.0140 0.0071

Uranus 114820-12-11 06:27 G 43658548.61 43658548.77 43658548.95 0.0140 0.0088

Saturn 114821-03-26 05:00 G 43658653.65 43658653.71 43658653.77 0.0272 0.0260

Uranus 114821-07-25 15:34 G 43658775.02 43658775.15 43658775.31 0.0140 0.0106

Saturn 114821-11-10 11:00 G 43658882.75 43658882.96 43658883.17 0.0271 0.0047

Jupiter 114821-11-14 12:56 G 43658886.84 43658887.04 43658887.24 0.0502 0.0086

Uranus 114822-03-09 01:10 G 43659001.46 43659001.55 43659001.67 0.0140 0.0123

Jupiter 114827-01-26 17:44 G 43660786.20 43660786.24 43660786.29 0.0531 0.0517

Neptune 114828-12-06 22:03 G 43661466.36 43661466.42 43661466.52 0.0088 0.0081

Neptune 114829-07-20 10:46 G 43661691.85 43661691.95 43661692.10 0.0088 0.0072

Neptune 114830-03-02 23:58 G 43661917.35 43661917.50 43661917.66 0.0088 0.0063

Neptune 114830-10-14 12:27 G 43662142.86 43662143.02 43662143.21 0.0088 0.0054

Neptune 114831-05-28 01:24 G 43662368.38 43662368.56 43662368.76 0.0088 0.0044

Neptune 114832-01-08 14:36 G 43662593.90 43662594.11 43662594.31 0.0088 0.0034

Neptune 114832-08-21 03:05 G 43662819.43 43662819.63 43662819.85 0.0088 0.0025

Neptune 114833-04-03 15:48 G 43663044.95 43663045.16 43663045.39 0.0088 0.0016

Jupiter 114833-07-20 13:39 G 43663152.88 43663153.07 43663153.26 0.0499 0.0176

Neptune 114833-11-15 04:46 G 43663270.48 43663270.70 43663270.93 0.0088 0.0006

Neptune 114834-06-28 17:44 G 43663496.02 43663496.24 43663496.46 0.0088 0.0003

Neptune 114835-02-09 06:27 G 43663721.56 43663721.77 43663722.00 0.0088 0.0013

Neptune 114835-09-22 19:24 G 43663947.10 43663947.31 43663947.53 0.0088 0.0022

Neptune 114836-05-05 08:08 G 43664172.65 43664172.84 43664173.06 0.0088 0.0032

Saturn 114836-12-02 10:03 G 43664383.71 43664383.92 43664384.13 0.0288 0.0011

Neptune 114836-12-16 21:05 G 43664398.20 43664398.38 43664398.59 0.0088 0.0041

Neptune 114837-07-30 09:48 G 43664623.75 43664623.91 43664624.11 0.0088 0.0051

Neptune 114838-03-12 23:00 G 43664849.31 43664849.46 43664849.63 0.0088 0.0060

Neptune 114838-10-24 12:12 G 43665074.88 43665075.01 43665075.15 0.0088 0.0069

Jupiter 114839-05-27 02:51 G 43665289.45 43665289.62 43665289.79 0.0525 0.0284

Neptune 114839-06-07 00:56 G 43665300.47 43665300.54 43665300.66 0.0088 0.0079

Jupiter 114845-03-25 12:27 G 43667418.93 43667419.02 43667419.12 0.0497 0.0440

Jupiter 114845-11-16 21:20 G 43667655.35 43667655.39 43667655.43 0.0505 0.0495

Saturn 114850-10-06 13:24 G 43669439.93 43669440.06 43669440.20 0.0272 0.0205

Jupiter 114851-01-29 19:53 G 43669555.12 43669555.33 43669555.53 0.0528 0.0025

Saturn 114851-05-23 18:56 G 43669669.10 43669669.29 43669669.49 0.0271 0.0101

Uranus 114853-10-23 16:46 G 43670553.13 43670553.20 43670553.31 0.0140 0.0129

Uranus 114854-06-07 03:20 G 43670779.52 43670779.64 43670779.78 0.0140 0.0110

Uranus 114855-01-19 13:24 G 43671005.91 43671006.06 43671006.23 0.0140 0.0093

Uranus 114855-09-02 23:15 G 43671232.30 43671232.47 43671232.67 0.0140 0.0075

Uranus 114856-04-16 09:05 G 43671458.69 43671458.88 43671459.09 0.0140 0.0057

Uranus 114856-11-28 18:41 G 43671685.08 43671685.28 43671685.50 0.0140 0.0039

Uranus 114857-07-13 04:17 G 43671911.46 43671911.68 43671911.90 0.0139 0.0020

Jupiter 114857-07-22 21:48 G 43671921.24 43671921.41 43671921.60 0.0503 0.0232

Uranus 114858-02-24 13:24 G 43672137.84 43672138.06 43672138.28 0.0139 0.0003

Uranus 114858-10-08 22:17 G 43672364.21 43672364.43 43672364.65 0.0139 0.0015

Uranus 114859-05-23 06:56 G 43672590.58 43672590.79 43672591.00 0.0139 0.0033

Uranus 114860-01-04 15:34 G 43672816.94 43672817.15 43672817.35 0.0139 0.0050

Uranus 114860-08-17 23:29 G 43673043.30 43673043.48 43673043.68 0.0138 0.0067

Uranus 114861-04-01 07:24 G 43673269.65 43673269.81 43673270.00 0.0138 0.0084

Uranus 114861-11-13 15:34 G 43673496.01 43673496.15 43673496.30 0.0138 0.0100

Uranus 114862-06-27 22:46 G 43673722.36 43673722.45 43673722.59 0.0138 0.0117

Jupiter 114862-10-04 11:58 G 43673820.85 43673821.00 43673821.16 0.0530 0.0331

Uranus 114863-02-09 06:41 G 43673948.72 43673948.78 43673948.84 0.0138 0.0132

Mars 114863-03-03 18:56 G 43673971.22 43673971.29 43673971.36 0.1801 0.1629

Saturn 114866-06-14 11:58 G 43675169.79 43675170.00 43675170.21 0.0288 0.0050

Jupiter 114869-03-27 23:15 G 43676187.27 43676187.47 43676187.67 0.0501 0.0030

Mars 114869-08-16 00:12 G 43676328.42 43676328.51 43676328.60 0.1741 0.1464

Jupiter 114875-02-01 21:05 G 43678324.29 43678324.38 43678324.47 0.0523 0.0467

Saturn 114880-04-17 13:39 G 43680225.92 43680226.07 43680226.24 0.0272 0.0174

Earth 114880-08-17 10:03 G 43680347.90 43680347.92 43680347.93 0.2654 0.2634

Jupiter 114880-12-01 01:24 G 43680453.39 43680453.56 43680453.73 0.0498 0.0285

Saturn 114880-12-02 19:24 G 43680455.13 43680455.31 43680455.50 0.0271 0.0132

Pluto 114882-04-02 18:12 G 43680941.11 43680941.26 43680941.42 0.0063 0.0043

Pluto 114882-11-13 21:34 G 43681166.18 43681166.40 43681166.62 0.0063 0.0007

Pluto 114883-06-27 00:41 G 43681391.35 43681391.53 43681391.73 0.0063 0.0031

Jupiter 114886-10-07 11:15 G 43682589.78 43682589.97 43682590.17 0.0526 0.0157

Earth 114888-08-15 01:24 G 43683267.41 43683267.56 43683267.70 0.2655 0.0974

Moon 114888-08-15 06:12 G 43683267.59 43683267.76 43683267.92 0.2652 0.0373 *

Jupiter 114893-03-30 11:15 G 43684955.85 43684955.97 43684956.10 0.0504 0.0393

Mars 114895-03-03 02:22 G 43685658.51 43685658.60 43685658.70 0.1816 0.1488

Saturn 114895-05-10 00:27 G 43685726.45 43685726.52 43685726.62 0.0288 0.0263

Saturn 114895-12-25 18:41 G 43685956.09 43685956.28 43685956.49 0.0289 0.0104

Uranus 114897-03-04 15:05 G 43686391.04 43686391.13 43686391.23 0.0137 0.0123

Uranus 114897-10-16 22:03 G 43686617.29 43686617.42 43686617.56 0.0138 0.0107

Uranus 114898-05-31 05:15 G 43686843.57 43686843.72 43686843.89 0.0138 0.0091

Jupiter 114898-06-12 02:51 G 43686855.42 43686855.62 43686855.81 0.0529 0.0154

Uranus 114899-01-12 12:41 G 43687069.85 43687070.03 43687070.22 0.0138 0.0074

Uranus 114899-08-26 20:22 G 43687296.15 43687296.35 43687296.54 0.0138 0.0058

Uranus 114900-04-10 04:03 G 43687522.46 43687522.67 43687522.88 0.0138 0.0040

Uranus 114900-11-22 11:44 G 43687748.78 43687748.99 43687749.21 0.0139 0.0024

Uranus 114901-07-06 19:53 G 43687975.12 43687975.33 43687975.55 0.0139 0.0006

Mars 114901-08-16 07:24 G 43688015.70 43688015.81 43688015.91 0.1726 0.1399

Uranus 114902-02-18 04:03 G 43688201.46 43688201.67 43688201.89 0.0139 0.0012

Uranus 114902-10-02 12:27 G 43688427.81 43688428.02 43688428.24 0.0139 0.0030

Uranus 114903-05-16 21:05 G 43688654.19 43688654.38 43688654.60 0.0139 0.0048

Uranus 114903-12-29 05:58 G 43688880.57 43688880.75 43688880.95 0.0140 0.0065

Uranus 114904-08-11 14:51 G 43689106.96 43689107.12 43689107.31 0.0140 0.0083

Jupiter 114904-12-04 09:34 G 43689221.70 43689221.90 43689222.10 0.0501 0.0119

Uranus 114905-03-26 00:12 G 43689333.36 43689333.51 43689333.66 0.0140 0.0100

Uranus 114905-11-07 09:20 G 43689559.79 43689559.89 43689560.02 0.0140 0.0118

Uranus 114906-06-21 19:10 G 43689786.26 43689786.30 43689786.37 0.0140 0.0135

Saturn 114909-10-29 21:48 G 43691012.22 43691012.41 43691012.60 0.0272 0.0120

Jupiter 114910-02-15 18:27 G 43691121.18 43691121.27 43691121.37 0.0532 0.0468

Saturn 114910-06-16 03:05 G 43691241.48 43691241.63 43691241.79 0.0271 0.0185

Neptune 114912-04-21 09:48 G 43691916.84 43691916.91 43691917.03 0.0089 0.0080

Neptune 114912-12-02 23:15 G 43692142.35 43692142.47 43692142.62 0.0089 0.0071

Neptune 114913-07-16 12:41 G 43692367.88 43692368.03 43692368.20 0.0089 0.0061

Neptune 114914-02-27 01:39 G 43692593.41 43692593.57 43692593.77 0.0089 0.0051

Neptune 114914-10-10 14:51 G 43692818.94 43692819.12 43692819.33 0.0089 0.0042

Neptune 114915-05-24 04:17 G 43693044.48 43693044.68 43693044.89 0.0089 0.0031

Neptune 114916-01-04 17:44 G 43693270.03 43693270.24 43693270.46 0.0089 0.0021

Jupiter 114916-08-09 10:46 G 43693487.75 43693487.95 43693488.15 0.0499 0.0140

Neptune 114916-08-17 06:56 G 43693495.57 43693495.79 43693496.01 0.0089 0.0012

Neptune 114917-03-30 20:08 G 43693721.12 43693721.34 43693721.56 0.0089 0.0002

Neptune 114917-11-11 09:20 G 43693946.67 43693946.89 43693947.11 0.0089 0.0008

Neptune 114918-06-24 22:17 G 43694172.22 43694172.43 43694172.65 0.0089 0.0018

Neptune 114919-02-05 11:29 G 43694397.78 43694397.98 43694398.19 0.0089 0.0028

Neptune 114919-09-19 00:27 G 43694623.33 43694623.52 43694623.73 0.0089 0.0038

Neptune 114920-05-01 13:24 G 43694848.89 43694849.06 43694849.26 0.0089 0.0048

Neptune 114920-12-13 02:22 G 43695074.45 43695074.60 43695074.79 0.0090 0.0058

Neptune 114921-07-26 15:34 G 43695300.02 43695300.15 43695300.31 0.0090 0.0067

Neptune 114922-03-09 04:17 G 43695525.59 43695525.68 43695525.81 0.0090 0.0077

Jupiter 114922-06-16 05:29 G 43695624.58 43695624.73 43695624.89 0.0525 0.0340

Neptune 114922-10-20 17:29 G 43695751.18 43695751.23 43695751.30 0.0090 0.0086

Saturn 114924-11-20 02:51 G 43696512.50 43696512.62 43696512.76 0.0287 0.0222

Saturn 114925-07-07 21:05 G 43696742.19 43696742.38 43696742.56 0.0288 0.0144

Jupiter 114928-04-14 12:12 G 43697753.90 43697754.01 43697754.14 0.0497 0.0397

Jupiter 114934-02-18 21:48 G 43699890.21 43699890.41 43699890.61 0.0527 0.0035

Uranus 114937-06-24 00:27 G 43701111.47 43701111.52 43701111.59 0.0141 0.0135

Uranus 114938-02-05 11:00 G 43701337.84 43701337.96 43701338.09 0.0140 0.0117

Uranus 114938-09-19 21:20 G 43701564.24 43701564.39 43701564.55 0.0140 0.0099

Uranus 114939-05-04 07:10 G 43701790.63 43701790.80 43701790.99 0.0140 0.0081

Saturn 114939-05-11 21:20 G 43701798.19 43701798.39 43701798.59 0.0272 0.0091

Uranus 114939-12-16 17:15 G 43702017.03 43702017.22 43702017.42 0.0140 0.0063

Saturn 114939-12-27 02:36 G 43702027.49 43702027.61 43702027.74 0.0271 0.0214

Uranus 114940-07-30 02:51 G 43702243.42 43702243.62 43702243.84 0.0140 0.0045

Jupiter 114940-08-11 23:00 G 43702256.30 43702256.46 43702256.63 0.0503 0.0282

Uranus 114941-03-13 12:27 G 43702469.81 43702470.02 43702470.24 0.0139 0.0026

Uranus 114941-10-25 21:48 G 43702696.19 43702696.41 43702696.63 0.0139 0.0008

Uranus 114942-06-09 06:56 G 43702922.57 43702922.79 43702923.01 0.0139 0.0010

Uranus 114943-01-21 15:48 G 43703148.94 43703149.16 43703149.37 0.0139 0.0027

Uranus 114943-09-05 00:12 G 43703375.31 43703375.51 43703375.72 0.0139 0.0045

Uranus 114944-04-18 08:36 G 43703601.67 43703601.86 43703602.06 0.0139 0.0062

Uranus 114944-11-30 16:32 G 43703828.03 43703828.19 43703828.39 0.0138 0.0080

Uranus 114945-07-15 00:41 G 43704054.38 43704054.53 43704054.70 0.0138 0.0096

Jupiter 114945-10-24 11:29 G 43704155.81 43704155.98 43704156.16 0.0530 0.0283

Uranus 114946-02-26 08:08 G 43704280.74 43704280.84 43704280.99 0.0138 0.0113

Uranus 114946-10-10 15:48 G 43704507.10 43704507.16 43704507.25 0.0138 0.0128

Jupiter 114952-04-16 23:44 G 43706522.29 43706522.49 43706522.70 0.0501 0.0022

Saturn 114954-06-02 07:53 G 43707298.67 43707298.83 43707299.00 0.0288 0.0175

Saturn 114955-01-18 02:22 G 43707528.44 43707528.60 43707528.76 0.0289 0.0192

Jupiter 114958-02-21 19:53 G 43708659.30 43708659.33 43708659.37 0.0523 0.0513

Mars 114960-12-29 09:48 G 43709700.76 43709700.91 43709701.05 0.1812 0.0968

Jupiter 114963-12-21 23:00 G 43710788.29 43710788.46 43710788.64 0.0498 0.0249

Mars 114967-06-13 15:20 G 43712058.00 43712058.14 43712058.29 0.1731 0.0996

Saturn 114968-11-21 05:00 G 43712584.50 43712584.71 43712584.92 0.0272 0.0038

Saturn 114969-07-08 09:48 G 43712813.89 43712813.91 43712813.96 0.0271 0.0267

Jupiter 114969-10-27 12:41 G 43712924.85 43712925.03 43712925.22 0.0526 0.0210

Pluto 114972-12-28 13:10 G 43714082.83 43714083.05 43714083.27 0.0081 0.0018

Pluto 114973-08-11 00:12 G 43714308.40 43714308.51 43714308.67 0.0081 0.0065

Jupiter 114976-04-19 08:51 G 43715290.77 43715290.87 43715290.98 0.0504 0.0431

Uranus 114980-11-03 01:39 G 43716949.50 43716949.57 43716949.65 0.0137 0.0128

Uranus 114981-06-17 08:36 G 43717175.74 43717175.86 43717175.99 0.0138 0.0112

Jupiter 114981-07-02 05:44 G 43717190.54 43717190.74 43717190.94 0.0529 0.0097

Uranus 114982-01-29 15:34 G 43717402.00 43717402.15 43717402.31 0.0138 0.0096

Uranus 114982-09-12 22:32 G 43717628.28 43717628.44 43717628.63 0.0138 0.0080

Uranus 114983-04-27 06:12 G 43717854.58 43717854.76 43717854.96 0.0138 0.0063

Uranus 114983-12-09 13:53 G 43718080.88 43718081.08 43718081.29 0.0138 0.0046

Saturn 114983-12-13 11:00 G 43718084.78 43718084.96 43718085.15 0.0287 0.0131

Uranus 114984-07-22 21:34 G 43718307.19 43718307.40 43718307.61 0.0138 0.0029

Saturn 114984-07-30 05:00 G 43718314.59 43718314.71 43718314.84 0.0288 0.0234

Uranus 114985-03-06 05:29 G 43718533.51 43718533.73 43718533.95 0.0139 0.0011

Uranus 114985-10-18 13:39 G 43718759.85 43718760.07 43718760.28 0.0139 0.0007

Uranus 114986-06-01 21:48 G 43718986.20 43718986.41 43718986.63 0.0139 0.0024

Uranus 114987-01-14 06:27 G 43719212.56 43719212.77 43719212.98 0.0139 0.0042

Uranus 114987-08-28 14:51 G 43719438.93 43719439.12 43719439.33 0.0139 0.0059

Jupiter 114987-12-24 10:17 G 43719556.73 43719556.93 43719557.12 0.0502 0.0168

Uranus 114988-04-10 23:58 G 43719665.32 43719665.50 43719665.68 0.0140 0.0077

Uranus 114988-11-23 08:36 G 43719891.72 43719891.86 43719892.03 0.0140 0.0095

Uranus 114989-07-07 18:12 G 43720118.14 43720118.26 43720118.39 0.0140 0.0112

Uranus 114990-02-19 03:20 G 43720344.58 43720344.64 43720344.74 0.0140 0.0130

Jupiter 114993-03-06 21:48 G 43721456.28 43721456.41 43721456.53 0.0531 0.0408

Neptune 114993-03-11 07:24 G 43721460.76 43721460.81 43721460.90 0.0088 0.0083

Neptune 114993-10-22 20:36 G 43721686.24 43721686.36 43721686.48 0.0088 0.0074

Neptune 114994-06-05 09:20 G 43721911.75 43721911.89 43721912.05 0.0088 0.0064

Neptune 114995-01-16 22:03 G 43722137.26 43722137.42 43722137.60 0.0088 0.0055

Neptune 114995-08-30 10:46 G 43722362.78 43722362.95 43722363.15 0.0088 0.0046

Neptune 114996-04-11 23:44 G 43722588.30 43722588.49 43722588.70 0.0088 0.0036

Neptune 114996-11-23 12:27 G 43722813.82 43722814.02 43722814.24 0.0088 0.0027

Neptune 114997-07-07 01:39 G 43723039.35 43723039.57 43723039.78 0.0088 0.0017

Neptune 114998-02-17 14:22 G 43723264.88 43723265.10 43723265.32 0.0088 0.0008

Saturn 114998-06-03 03:48 G 43723370.44 43723370.66 43723370.87 0.0272 0.0012

Neptune 114998-10-01 03:05 G 43723490.41 43723490.63 43723490.85 0.0088 0.0002

Neptune 114999-05-14 16:03 G 43723715.95 43723716.17 43723716.39 0.0088 0.0011

Jupiter 114999-08-29 11:58 G 43723822.80 43723823.00 43723823.20 0.0500 0.0090

Neptune 114999-12-26 04:46 G 43723941.49 43723941.70 43723941.92 0.0088 0.0020

Neptune 115000-08-08 17:29 G 43724167.03 43724167.23 43724167.45 0.0088 0.0030

116TH MILLENNIUM CE

This is a list of transits of Venus in the 116th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Neptune	**115001-03-22 06:27**	**G**	**43724392.58**	**43724392.77**	**43724392.97**	**0.0088**	**0.0039**	
Neptune	**115001-11-02 18:56**	**G**	**43724618.13**	**43724618.29**	**43724618.50**	**0.0088**	**0.0049**	
Moon	**115002-02-21 22:17**	**G**	**43724729.37**	**43724729.43**	**43724729.49**	**0.2685**	**0.2417**	
Earth	**115002-02-21 23:00**	**G**	**43724729.41**	**43724729.46**	**43724729.52**	**0.2678**	**0.2501**	*
Neptune	**115002-06-16 08:08**	**G**	**43724843.69**	**43724843.84**	**43724844.02**	**0.0088**	**0.0058**	
Neptune	**115003-01-27 21:20**	**G**	**43725069.25**	**43725069.39**	**43725069.54**	**0.0088**	**0.0067**	
Neptune	**115003-09-10 09:48**	**G**	**43725294.83**	**43725294.91**	**43725295.04**	**0.0088**	**0.0077**	
Neptune	**115004-04-22 22:46**	**G**	**43725520.43**	**43725520.45**	**43725520.52**	**0.0088**	**0.0086**	
Jupiter	**115005-07-06 05:29**	**G**	**43725959.60**	**43725959.73**	**43725959.87**	**0.0524**	**0.0390**	
Earth	**115010-02-19 14:22**	**G**	**43727648.95**	**43727649.10**	**43727649.24**	**0.2677**	**0.1165**	
Moon	**115010-02-19 18:56**	**G**	**43727649.15**	**43727649.29**	**43727649.43**	**0.2680**	**0.1040**	*
Jupiter	**115011-05-05 13:24**	**G**	**43728088.92**	**43728089.06**	**43728089.21**	**0.0497**	**0.0348**	
Saturn	**115013-06-25 14:51**	**G**	**43728870.93**	**43728871.12**	**43728871.33**	**0.0288**	**0.0088**	
Saturn	**115014-02-10 09:20**	**G**	**43729100.85**	**43729100.89**	**43729100.94**	**0.0289**	**0.0280**	
Jupiter	**115017-03-10 21:20**	**G**	**43730225.19**	**43730225.39**	**43730225.59**	**0.0527**	**0.0083**	
Uranus	**115021-10-06 17:00**	**G**	**43731896.13**	**43731896.21**	**43731896.33**	**0.0140**	**0.0124**	
Uranus	**115022-05-21 03:34**	**G**	**43732122.52**	**43732122.65**	**43732122.81**	**0.0140**	**0.0106**	
Uranus	**115023-01-02 13:53**	**G**	**43732348.92**	**43732349.08**	**43732349.26**	**0.0140**	**0.0087**	
Uranus	**115023-08-16 23:58**	**G**	**43732575.31**	**43732575.50**	**43732575.69**	**0.0140**	**0.0069**	

Jupiter 115023-09-01 21:05 G 43732591.23 43732591.38 43732591.54 0.0503 0.0321

Uranus 115024-03-30 09:48 G 43732801.71 43732801.91 43732802.12 0.0140 0.0051

Uranus 115024-11-11 19:24 G 43733028.10 43733028.31 43733028.53 0.0140 0.0033

Uranus 115025-06-26 05:00 G 43733254.49 43733254.71 43733254.93 0.0139 0.0015

Uranus 115026-02-07 14:08 G 43733480.87 43733481.09 43733481.31 0.0139 0.0004

Uranus 115026-09-21 23:00 G 43733707.24 43733707.46 43733707.67 0.0139 0.0021

Mars 115026-10-27 17:29 G 43733743.07 43733743.23 43733743.39 0.1807 0.0482

Saturn 115027-04-30 04:03 G 43733927.65 43733927.67 43733927.71 0.0273 0.0269

Uranus 115027-05-06 07:39 G 43733933.61 43733933.82 43733934.03 0.0139 0.0039

Saturn 115027-12-15 10:46 G 43734156.74 43734156.95 43734157.16 0.0272 0.0041

Uranus 115027-12-18 16:17 G 43734159.98 43734160.18 43734160.38 0.0139 0.0056

Uranus 115028-08-01 00:12 G 43734386.34 43734386.51 43734386.71 0.0139 0.0074

Jupiter 115028-11-13 12:41 G 43734490.85 43734491.03 43734491.22 0.0530 0.0233

Uranus 115029-03-15 08:22 G 43734612.70 43734612.85 43734613.03 0.0138 0.0090

Uranus 115029-10-27 16:32 G 43734839.06 43734839.19 43734839.33 0.0138 0.0107

Uranus 115030-06-10 23:58 G 43735065.42 43735065.50 43735065.61 0.0138 0.0123

Mars 115033-04-10 23:44 G 43736100.32 43736100.49 43736100.66 0.1735 0.0599

Jupiter 115035-05-07 22:17 G 43736857.23 43736857.43 43736857.63 0.0500 0.0058

Saturn 115043-01-05 18:27 G 43739657.06 43739657.27 43739657.48 0.0287 0.0043

Jupiter 115047-01-10 23:44 G 43741123.31 43741123.49 43741123.68 0.0498 0.0201

Jupiter 115052-11-16 16:03 G 43743260.00 43743260.17 43743260.35 0.0526 0.0270

Saturn 115056-11-09 02:51 G 43744713.53 43744713.62 43744713.72 0.0273 0.0243

Saturn 115057-06-26 09:20 G 43744942.69 43744942.89 43744943.10 0.0272 0.0068

Jupiter 115058-09-16 01:53 G 43745389.51 43745389.58 43745389.67 0.0496 0.0454

Jupiter 115059-05-10 10:46 G 43745625.90 43745625.95 43745626.01 0.0505 0.0484

Uranus 115064-07-04 11:58 G 43747507.95 43747508.00 43747508.06 0.0137 0.0133

Jupiter 115064-07-22 06:41 G 43747525.58 43747525.78 43747525.99 0.0528 0.0045

Uranus 115065-02-15 18:56 G 43747734.18 43747734.29 43747734.40 0.0137 0.0117

Uranus 115065-09-30 01:39 G 43747960.43 43747960.57 43747960.72 0.0138 0.0101

Uranus 115066-05-14 08:36 G 43748186.71 43748186.86 43748187.05 0.0138 0.0085

Uranus 115066-12-26 16:03 G 43748412.99 43748413.17 43748413.37 0.0138 0.0068

Uranus 115067-08-09 23:29 G 43748639.29 43748639.48 43748639.69 0.0138 0.0051

Uranus 115068-03-23 06:56 G 43748865.59 43748865.79 43748866.01 0.0138 0.0035

Uranus 115068-11-04 14:51 G 43749091.91 43749092.12 43749092.34 0.0139 0.0017

Uranus 115069-06-18 23:00 G 43749318.24 43749318.46 43749318.68 0.0139 0.0001

Uranus 115070-01-31 06:56 G 43749544.58 43749544.79 43749545.01 0.0139 0.0019

Uranus 115070-09-14 15:20 G 43749770.93 43749771.14 43749771.35 0.0139 0.0036

Jupiter 115071-01-13 11:44 G 43749891.81 43749891.99 43749892.18 0.0502 0.0221

Uranus 115071-04-28 23:44 G 43749997.30 43749997.49 43749997.70 0.0139 0.0055

Uranus 115071-12-11 08:36 G 43750223.68 43750223.86 43750224.05 0.0139 0.0072

Saturn 115072-07-17 21:34 G 43750443.19 43750443.40 43750443.61 0.0288 0.0004

Uranus 115072-07-24 17:29 G 43750450.07 43750450.23 43750450.40 0.0140 0.0090

Uranus 115073-03-08 02:51 G 43750676.48 43750676.62 43750676.76 0.0140 0.0107

Uranus 115073-10-20 11:44 G 43750902.91 43750902.99 43750903.10 0.0140 0.0125

Jupiter 115076-03-26 21:34 G 43751791.26 43751791.40 43751791.56 0.0531 0.0360

Neptune 115076-07-24 19:39 G 43751911.26 43751911.32 43751911.43 0.0089 0.0082

Neptune 115077-03-07 08:51 G 43752136.76 43752136.87 43752137.02 0.0089 0.0073

Neptune 115077-10-18 22:17 G 43752362.29 43752362.43 43752362.60 0.0089 0.0063

Neptune 115078-06-01 11:44 G 43752587.82 43752587.99 43752588.17 0.0089 0.0053

Neptune 115079-01-13 00:41 G 43752813.35 43752813.53 43752813.74 0.0089 0.0043

Neptune 115079-08-26 13:53 G 43753038.89 43753039.08 43753039.30 0.0089 0.0034

Neptune 115080-04-08 03:05 G 43753264.43 43753264.63 43753264.85 0.0089 0.0024

Neptune 115080-11-19 16:32 G 43753489.98 43753490.19 43753490.41 0.0089 0.0014

Neptune 115081-07-03 05:44 G 43753715.52 43753715.74 43753715.96 0.0089 0.0004

Neptune 115082-02-13 18:56 G 43753941.07 43753941.29 43753941.51 0.0089 0.0006

Jupiter 115082-09-18 11:15 G 43754157.77 43754157.97 43754158.17 0.0499 0.0049

Neptune 115082-09-27 07:53 G 43754166.62 43754166.83 43754167.05 0.0089 0.0016

Neptune 115083-05-10 21:05 G 43754392.18 43754392.38 43754392.59 0.0089 0.0026

Neptune 115083-12-22 10:17 G 43754617.74 43754617.93 43754618.14 0.0089 0.0036

Neptune 115084-08-03 23:15 G 43754843.30 43754843.47 43754843.67 0.0089 0.0046

Neptune 115085-03-17 12:12 G 43755068.86 43755069.01 43755069.20 0.0089 0.0056

Neptune 115085-10-29 01:24 G 43755294.42 43755294.56 43755294.72 0.0089 0.0065

Saturn 115086-05-22 09:20 G 43755499.75 43755499.89 43755500.05 0.0273 0.0192

Neptune 115086-06-11 14:22 G 43755520.00 43755520.10 43755520.23 0.0090 0.0075

Saturn 115087-01-06 16:03 G 43755728.98 43755729.17 43755729.36 0.0272 0.0118

Neptune 115087-01-23 03:05 G 43755745.59 43755745.63 43755745.73 0.0090 0.0085

Jupiter 115088-07-25 06:56 G 43756294.68 43756294.79 43756294.90 0.0525 0.0442

Mars 115092-08-24 01:24 G 43757785.39 43757785.56 43757785.73 0.1802 0.0011

Jupiter 115094-05-24 12:56 G 43758423.88 43758424.04 43758424.20 0.0497 0.0306

Mars 115099-02-06 07:39 G 43760142.65 43760142.82 43760143.00 0.1739 0.0187

Jupiter 115100-03-30 23:58 G 43760560.30 43760560.50 43760560.70 0.0527 0.0139

Saturn 115102-01-29 02:22 G 43761229.39 43761229.60 43761229.81 0.0287 0.0047

Uranus 115105-06-07 00:27 G 43762454.44 43762454.52 43762454.60 0.0141 0.0130

Uranus 115106-01-19 11:00 G 43762680.83 43762680.96 43762681.09 0.0140 0.0112

Uranus 115106-09-02 21:20 G 43762907.23 43762907.39 43762907.55 0.0140 0.0094

Jupiter 115106-09-21 22:03 G 43762926.29 43762926.42 43762926.56 0.0503 0.0370

Uranus 115107-04-17 07:24 G 43763133.63 43763133.81 43763133.99 0.0140 0.0075

Uranus 115107-11-29 17:29 G 43763360.03 43763360.23 43763360.43 0.0140 0.0057

Uranus 115108-07-13 03:05 G 43763586.42 43763586.63 43763586.84 0.0140 0.0039

Uranus 115109-02-24 12:27 G 43763812.81 43763813.02 43763813.24 0.0140 0.0021

Uranus 115109-10-08 21:48 G 43764039.19 43764039.41 43764039.63 0.0139 0.0003

Uranus 115110-05-23 06:56 G 43764265.57 43764265.79 43764266.01 0.0139 0.0015

Uranus 115111-01-04 15:48 G 43764491.95 43764492.16 43764492.37 0.0139 0.0033

Uranus 115111-08-19 00:12 G 43764718.32 43764718.51 43764718.72 0.0139 0.0051

Jupiter 115111-12-04 16:32 G 43764826.00 43764826.19 43764826.38 0.0530 0.0170

Uranus 115112-04-01 08:36 G 43764944.68 43764944.86 43764945.06 0.0139 0.0068

Uranus 115112-11-13 16:46 G 43765171.04 43765171.20 43765171.39 0.0139 0.0085

Uranus 115113-06-28 01:10 G 43765397.40 43765397.55 43765397.70 0.0138 0.0102

Uranus 115114-02-09 08:36 G 43765623.77 43765623.86 43765623.99 0.0138 0.0118

Uranus 115114-09-23 16:17 G 43765850.15 43765850.18 43765850.24 0.0138 0.0134

Saturn 115115-12-03 08:08 G 43766285.68 43766285.84 43766286.02 0.0273 0.0166

Saturn 115116-07-19 14:51 G 43766514.94 43766515.12 43766515.30 0.0272 0.0144

Jupiter 115118-05-27 23:58 G 43767192.30 43767192.50 43767192.70 0.0501 0.0110

Jupiter 115123-08-09 06:56 G 43769091.71 43769091.79 43769091.87 0.0532 0.0489

Earth 115123-08-21 11:15 G 43769103.97 43769103.97 43769103.98 0.2654 0.2648

Pluto 115127-09-22 02:22 G 43770596.59 43770596.60 43770596.66 0.0063 0.0062

Pluto 115128-05-04 05:58 G 43770821.56 43770821.75 43770821.95 0.0063 0.0025

Pluto 115128-12-15 09:05 G 43771046.67 43771046.88 43771047.10 0.0063 0.0012

Pluto 115129-07-28 12:27 G 43771271.89 43771272.02 43771272.16 0.0063 0.0049

Jupiter 115130-01-31 01:24 G 43771458.37 43771458.56 43771458.76 0.0499 0.0150

Saturn 115130-12-24 11:58 G 43771785.94 43771786.00 43771786.06 0.0287 0.0274

Saturn 115131-08-11 04:46 G 43772015.50 43772015.70 43772015.90 0.0288 0.0087

Earth 115131-08-19 02:36 G 43772023.46 43772023.61 43772023.76 0.2656 0.0966

Moon 115131-08-19 08:08 G 43772023.68 43772023.84 43772024.00 0.2657 0.0028 *

Jupiter 115135-12-07 16:17 G 43773595.02 43773595.18 43773595.34 0.0525 0.0320

Jupiter 115141-10-06 02:08 G 43775724.48 43775724.59 43775724.70 0.0496 0.0411

Saturn 115145-06-14 14:36 G 43777071.92 43777072.11 43777072.31 0.0273 0.0115

Saturn 115146-01-29 21:05 G 43777301.24 43777301.38 43777301.53 0.0272 0.0195

Jupiter 115147-08-12 07:10 G 43777860.59 43777860.80 43777861.00 0.0529 0.0008

Uranus 115148-10-17 04:46 G 43778292.63 43778292.70 43778292.82 0.0137 0.0123

Uranus 115149-05-31 12:12 G 43778518.87 43778519.01 43778519.14 0.0138 0.0106

Uranus 115150-01-12 18:56 G 43778745.14 43778745.29 43778745.46 0.0138 0.0090

Uranus 115150-08-27 02:08 G 43778971.41 43778971.59 43778971.78 0.0138 0.0073

Uranus 115151-04-10 09:34 G 43779197.70 43779197.90 43779198.10 0.0138 0.0056

Uranus 115151-11-22 17:00 G 43779424.01 43779424.21 43779424.42 0.0138 0.0039

Uranus 115152-07-06 00:41 G 43779650.32 43779650.53 43779650.75 0.0138 0.0022

Uranus 115153-02-17 08:22 G 43779876.64 43779876.85 43779877.07 0.0139 0.0006

Uranus 115153-10-01 16:32 G 43780102.97 43780103.19 43780103.41 0.0139 0.0013

Jupiter 115154-02-02 10:46 G 43780226.78 43780226.95 43780227.12 0.0502 0.0261

Uranus 115154-05-16 00:41 G 43780329.33 43780329.53 43780329.75 0.0139 0.0031

Uranus 115154-12-28 09:20 G 43780555.68 43780555.89 43780556.09 0.0139 0.0049

Uranus 115155-08-11 17:44 G 43780782.05 43780782.24 43780782.44 0.0139 0.0066

Uranus 115156-03-25 02:22 G 43781008.44 43781008.60 43781008.78 0.0139 0.0084

Uranus 115156-11-06 11:29 G 43781234.84 43781234.98 43781235.14 0.0140 0.0102

Neptune 115157-06-14 17:29 G 43781455.17 43781455.23 43781455.29 0.0088 0.0085

Uranus 115157-06-20 20:36 G 43781461.27 43781461.36 43781461.49 0.0140 0.0120

Neptune 115158-01-26 05:58 G 43781680.65 43781680.75 43781680.87 0.0088 0.0075

Uranus 115158-02-02 06:27 G 43781687.74 43781687.77 43781687.82 0.0140 0.0137

Mars 115158-06-22 09:34 G 43781827.74 43781827.90 43781828.07 0.1798 0.0460

Neptune 115158-09-08 18:41 G 43781906.15 43781906.28 43781906.44 0.0088 0.0066

Jupiter 115159-04-16 23:15 G 43782126.31 43782126.47 43782126.64 0.0531 0.0308

Neptune 115159-04-22 07:24 G 43782131.66 43782131.81 43782131.99 0.0088 0.0057

Neptune 115159-12-03 20:22 G 43782357.18 43782357.35 43782357.55 0.0088 0.0047

Saturn 115160-07-05 17:58 G 43782572.12 43782572.25 43782572.38 0.0286 0.0221

Neptune 115160-07-16 09:05 G 43782582.70 43782582.88 43782583.09 0.0088 0.0038

Saturn 115161-02-20 10:32 G 43782801.76 43782801.94 43782802.13 0.0287 0.0139

Neptune 115161-02-26 21:48 G 43782808.22 43782808.41 43782808.64 0.0088 0.0029

Neptune 115161-10-10 11:00 G 43783033.75 43783033.96 43783034.18 0.0088 0.0019

Neptune 115162-05-23 23:58 G 43783259.28 43783259.50 43783259.72 0.0088 0.0010

Neptune 115163-01-04 12:56 G 43783484.82 43783485.04 43783485.26 0.0088 0.0001

Neptune 115163-08-18 01:39 G 43783710.35 43783710.57 43783710.79 0.0088 0.0009

Neptune 115164-03-30 14:22 G 43783935.89 43783936.10 43783936.32 0.0088 0.0019

Neptune 115164-11-11 03:05 G 43784161.43 43784161.63 43784161.85 0.0088 0.0028

Mars 115164-12-04 15:34 G 43784184.98 43784185.15 43784185.33 0.1744 0.0236

Neptune 115165-06-24 16:03 G 43784386.98 43784387.17 43784387.38 0.0088 0.0038

Jupiter 115165-10-08 11:29 G 43784492.78 43784492.98 43784493.19 0.0500 0.0010

Neptune 115166-02-05 05:00 G 43784612.53 43784612.71 43784612.91 0.0088 0.0047

Neptune 115166-09-18 17:58 G 43784838.09 43784838.25 43784838.43 0.0088 0.0056

Neptune 115167-05-02 06:27 G 43785063.65 43785063.77 43785063.94 0.0088 0.0066

Neptune 115167-12-13 19:24 G 43785289.22 43785289.31 43785289.45 0.0088 0.0075

Neptune 115168-07-26 08:51 G 43785514.82 43785514.87 43785514.94 0.0088 0.0084

Jupiter 115171-08-15 10:03 G 43786629.87 43786629.92 43786629.98 0.0524 0.0502

Saturn 115174-12-25 13:53 G 43787857.88 43787858.08 43787858.28 0.0273 0.0087

Saturn 115175-08-11 19:53 G 43788087.22 43788087.33 43788087.46 0.0272 0.0222

Jupiter 115177-06-13 13:39 G 43788758.90 43788759.07 43788759.25 0.0498 0.0258

Jupiter 115183-04-20 01:10 G 43790895.37 43790895.55 43790895.75 0.0527 0.0194

Uranus 115189-02-04 06:41 G 43793012.75 43793012.78 43793012.84 0.0141 0.0137

Uranus 115189-09-18 17:29 G 43793239.12 43793239.23 43793239.35 0.0141 0.0119

Jupiter 115189-10-10 23:44 G 43793261.38 43793261.49 43793261.60 0.0504 0.0423

Saturn 115190-01-15 20:08 G 43793358.18 43793358.34 43793358.50 0.0287 0.0184

Uranus 115190-05-03 03:48 G 43793465.52 43793465.66 43793465.82 0.0140 0.0101

Saturn 115190-09-02 13:10 G 43793587.89 43793588.05 43793588.22 0.0288 0.0179

Uranus 115190-12-15 14:08 G 43793691.92 43793692.09 43793692.28 0.0140 0.0082

Uranus 115191-07-29 23:58 G 43793918.32 43793918.50 43793918.71 0.0140 0.0064

Uranus 115192-03-12 09:48 G 43794144.71 43794144.91 43794145.13 0.0140 0.0046

Uranus 115192-10-24 19:24 G 43794371.11 43794371.31 43794371.54 0.0140 0.0028

Uranus 115193-06-08 05:00 G 43794597.49 43794597.71 43794597.93 0.0140 0.0009

Uranus 115194-01-20 14:08 G 43794823.87 43794824.09 43794824.31 0.0139 0.0009

Uranus 115194-09-03 22:46 G 43795050.25 43795050.45 43795050.67 0.0139 0.0028

Jupiter 115194-12-23 16:32 G 43795160.99 43795161.19 43795161.39 0.0529 0.0121

Uranus 115195-04-18 07:24 G 43795276.62 43795276.81 43795277.03 0.0139 0.0045

Uranus 115195-11-30 16:17 G 43795502.99 43795503.18 43795503.38 0.0139 0.0062

Uranus 115196-07-14 00:27 G 43795729.36 43795729.52 43795729.71 0.0139 0.0080

Uranus 115197-02-25 08:22 G 43795955.72 43795955.85 43795956.03 0.0138 0.0097

Uranus 115197-10-09 16:46 G 43796182.08 43796182.20 43796182.33 0.0138 0.0113

Uranus 115198-05-24 00:12 G 43796408.45 43796408.51 43796408.60 0.0138 0.0129

Jupiter 115201-06-15 23:44 G 43797527.29 43797527.49 43797527.68 0.0501 0.0153

Saturn 115204-07-06 20:08 G 43798644.13 43798644.34 43798644.55 0.0273 0.0037

Saturn 115205-02-21 02:08 G 43798873.59 43798873.59 43798873.61 0.0272 0.0272

Jupiter 115206-08-28 05:44 G 43799426.64 43799426.74 43799426.85 0.0532 0.0447

Jupiter 115213-02-19 00:41 G 43801793.33 43801793.53 43801793.73 0.0498 0.0109

Pluto 115218-06-17 14:22 G 43803737.99 43803738.10 43803738.24 0.0081 0.0068

Jupiter 115218-12-26 17:00 G 43803930.07 43803930.21 43803930.36 0.0526 0.0371

Pluto 115219-01-29 02:08 G 43803963.38 43803963.59 43803963.82 0.0081 0.0016

Saturn 115219-07-29 03:34 G 43804144.46 43804144.65 43804144.84 0.0286 0.0127

Saturn 115220-03-14 20:22 G 43804374.23 43804374.35 43804374.48 0.0287 0.0234

Mars 115224-04-18 17:58 G 43805870.10 43805870.25 43805870.39 0.1793 0.0917

Jupiter 115224-10-25 01:39 G 43806059.44 43806059.57 43806059.71 0.0496 0.0367

Jupiter 115230-08-31 10:03 G 43808195.72 43808195.92 43808196.12 0.0528 0.0064

Mars 115230-10-01 23:00 G 43808227.30 43808227.46 43808227.62 0.1748 0.0687

Uranus 115232-06-16 15:05 G 43808851.07 43808851.13 43808851.22 0.0137 0.0128

Uranus 115233-01-28 21:48 G 43809077.30 43809077.41 43809077.55 0.0138 0.0112

Uranus 115233-09-12 04:32 G 43809303.55 43809303.69 43809303.86 0.0138 0.0096

Saturn 115234-01-16 20:08 G 43809430.13 43809430.34 43809430.56 0.0273 0.0008

Uranus 115234-04-26 11:44 G 43809529.83 43809529.99 43809530.18 0.0138 0.0079

Uranus 115234-12-08 19:10 G 43809756.11 43809756.30 43809756.50 0.0138 0.0062

Uranus 115235-07-23 02:22 G 43809982.40 43809982.60 43809982.81 0.0138 0.0045

Uranus 115236-03-05 10:03 G 43810208.71 43810208.92 43810209.13 0.0138 0.0028

Uranus 115236-10-17 17:44 G 43810435.03 43810435.24 43810435.46 0.0139 0.0010

Jupiter 115237-02-21 11:15 G 43810561.81 43810561.97 43810562.13 0.0502 0.0310

Uranus 115237-06-01 01:53 G 43810661.36 43810661.58 43810661.79 0.0139 0.0008

Uranus 115238-01-13 09:48 G 43810887.70 43810887.91 43810888.13 0.0139 0.0025

Uranus 115238-08-27 17:58 G 43811114.05 43811114.25 43811114.46 0.0139 0.0043

Uranus 115239-04-11 02:36 G 43811340.42 43811340.61 43811340.81 0.0139 0.0061

Uranus 115239-11-23 11:15 G 43811566.80 43811566.97 43811567.16 0.0139 0.0079

Uranus 115240-07-06 20:08 G 43811793.20 43811793.34 43811793.51 0.0140 0.0097

Neptune 115240-10-27 05:58 G 43811905.69 43811905.75 43811905.84 0.0089 0.0083

Uranus 115241-02-18 05:29 G 43812019.61 43812019.73 43812019.86 0.0140 0.0114

Neptune 115241-06-09 19:24 G 43812131.20 43812131.31 43812131.44 0.0089 0.0074

Uranus 115241-10-02 14:36 G 43812246.05 43812246.11 43812246.19 0.0140 0.0132

Neptune 115242-01-21 08:22 G 43812356.72 43812356.85 43812357.02 0.0089 0.0064

Jupiter 115242-05-06 00:56 G 43812461.36 43812461.54 43812461.72 0.0530 0.0253

Neptune 115242-09-03 21:34 G 43812582.25 43812582.40 43812582.59 0.0089 0.0055

Neptune 115243-04-17 11:00 G 43812807.78 43812807.96 43812808.16 0.0089 0.0045

Neptune 115243-11-29 00:27 G 43813033.32 43813033.52 43813033.73 0.0089 0.0035

Neptune 115244-07-11 13:24 G 43813258.86 43813259.06 43813259.28 0.0089 0.0025

Neptune 115245-02-22 02:36 G 43813484.40 43813484.61 43813484.84 0.0089 0.0016

Moon 115245-02-22 19:24 G 43813485.18 43813485.31 43813485.43 0.2681 0.1581

Earth 115245-02-23 00:12 G 43813485.44 43813485.51 43813485.57 0.2678 0.2435

Neptune 115245-10-05 16:03 G 43813709.95 43813710.17 43813710.39 0.0089 0.0005

Neptune 115246-05-19 05:00 G 43813935.50 43813935.71 43813935.93 0.0089 0.0005

Neptune 115246-12-30 18:12 G 43814161.05 43814161.26 43814161.48 0.0089 0.0015

Neptune 115247-08-13 07:10 G 43814386.60 43814386.80 43814387.03 0.0089 0.0025

Neptune 115248-03-25 20:36 G 43814612.16 43814612.36 43814612.56 0.0089 0.0034

Jupiter 115248-10-27 12:41 G 43814827.83 43814828.03 43814828.24 0.0500 0.0048

Neptune 115248-11-06 09:34 G 43814837.72 43814837.90 43814838.10 0.0089 0.0044

Saturn 115249-02-07 05:29 G 43814930.53 43814930.73 43814930.93 0.0287 0.0089

Neptune 115249-06-19 22:32 G 43815063.28 43815063.44 43815063.63 0.0089 0.0054

Saturn 115249-09-24 22:46 G 43815160.39 43815160.45 43815160.51 0.0288 0.0274

Neptune 115250-01-31 11:29 G 43815288.85 43815288.98 43815289.15 0.0089 0.0064

Neptune 115250-09-14 00:56 G 43815514.42 43815514.54 43815514.67 0.0090 0.0073

Neptune 115251-04-27 13:39 G 43815740.01 43815740.07 43815740.17 0.0090 0.0083

Earth 115253-02-20 15:20 G 43816405.00 43816405.14 43816405.28 0.2676 0.1232

Moon 115253-02-20 15:20 G 43816405.01 43816405.14 43816405.27 0.2683 0.1327 *

Jupiter 115260-07-02 13:39 G 43819093.89 43819094.07 43819094.26 0.0497 0.0215

Saturn 115262-12-12 18:27 G 43819987.26 43819987.27 43819987.29 0.0274 0.0273

Saturn 115263-07-30 02:22 G 43820216.39 43820216.60 43820216.81 0.0273 0.0042

Jupiter 115266-05-08 23:44 G 43821230.31 43821230.49 43821230.67 0.0527 0.0235

Jupiter 115272-03-07 15:05 G 43823360.07 43823360.13 43823360.20 0.0495 0.0470

Jupiter 115272-10-29 22:17 G 43823596.36 43823596.43 43823596.51 0.0503 0.0462

Uranus 115273-05-19 00:56 G 43823797.46 43823797.54 43823797.65 0.0141 0.0126

Uranus 115273-12-31 11:29 G 43824023.85 43824023.98 43824024.13 0.0140 0.0107

Uranus 115274-08-14 21:34 G 43824250.25 43824250.40 43824250.59 0.0140 0.0090

Uranus 115275-03-29 08:08 G 43824476.65 43824476.84 43824477.03 0.0140 0.0070

Uranus 115275-11-10 17:58 G 43824703.05 43824703.25 43824703.46 0.0140 0.0052

Uranus 115276-06-24 03:34 G 43824929.44 43824929.65 43824929.87 0.0140 0.0034

Uranus 115277-02-05 13:10 G 43825155.83 43825156.05 43825156.27 0.0140 0.0015

Uranus 115277-09-19 22:17 G 43825382.21 43825382.43 43825382.65 0.0139 0.0003

Jupiter 115278-01-11 15:48 G 43825495.96 43825496.16 43825496.36 0.0530 0.0077

Uranus 115278-05-04 07:24 G 43825608.59 43825608.81 43825609.02 0.0139 0.0021

Saturn 115278-08-20 14:36 G 43825716.90 43825717.11 43825717.32 0.0286 0.0029

Uranus 115278-12-16 16:17 G 43825834.97 43825835.18 43825835.39 0.0139 0.0039

Uranus 115279-07-31 00:56 G 43826061.34 43826061.54 43826061.74 0.0139 0.0056

Uranus 115280-03-13 09:05 G 43826287.71 43826287.88 43826288.08 0.0139 0.0074

Uranus 115280-10-25 17:29 G 43826514.07 43826514.23 43826514.40 0.0139 0.0091

Uranus 115281-06-09 01:39 G 43826740.44 43826740.57 43826740.71 0.0138 0.0108

Uranus 115282-01-21 09:20 G 43826966.82 43826966.89 43826967.00 0.0138 0.0125

Jupiter 115284-07-04 22:32 G 43827862.25 43827862.44 43827862.63 0.0501 0.0196

Jupiter 115289-09-16 08:08 G 43829761.71 43829761.84 43829761.98 0.0532 0.0389

Mars 115290-02-14 02:36 G 43829912.50 43829912.61 43829912.72 0.1789 0.1347

Saturn 115292-06-23 20:22 G 43830773.24 43830773.35 43830773.45 0.0274 0.0238

Saturn 115293-02-08 03:34 G 43831002.44 43831002.65 43831002.85 0.0273 0.0076

Jupiter 115296-03-09 23:58 G 43832128.30 43832128.50 43832128.71 0.0499 0.0065

Mars 115296-07-29 06:41 G 43832269.65 43832269.78 43832269.92 0.1753 0.1124

Jupiter 115302-01-15 17:44 G 43834265.12 43834265.24 43834265.36 0.0525 0.0421

Jupiter 115307-11-15 02:08 G 43836394.43 43836394.59 43836394.74 0.0497 0.0321

Saturn 115308-03-02 16:46 G 43836502.99 43836503.20 43836503.41 0.0287 0.0011

Jupiter 115313-09-20 08:51 G 43838530.67 43838530.87 43838531.07 0.0528 0.0110

Uranus 115316-02-16 00:56 G 43839409.51 43839409.54 43839409.61 0.0137 0.0133

Uranus 115316-09-29 07:24 G 43839635.72 43839635.81 43839635.94 0.0137 0.0118

Uranus 115317-05-13 14:51 G 43839861.97 43839862.12 43839862.26 0.0138 0.0101

Uranus 115317-12-25 21:20 G 43840088.24 43840088.39 43840088.58 0.0138 0.0085

Uranus 115318-08-09 04:32 G 43840314.51 43840314.69 43840314.89 0.0138 0.0068

Uranus 115319-03-23 11:44 G 43840540.80 43840540.99 43840541.20 0.0138 0.0051

Uranus 115319-11-04 19:24 G 43840767.10 43840767.31 43840767.52 0.0138 0.0034

Jupiter 115320-03-13 10:32 G 43840896.80 43840896.94 43840897.09 0.0502 0.0352

Uranus 115320-06-18 03:05 G 43840993.41 43840993.63 43840993.84 0.0138 0.0016

Uranus 115321-01-30 10:46 G 43841219.74 43841219.95 43841220.17 0.0139 0.0003

Uranus 115321-09-13 18:56 G 43841446.07 43841446.29 43841446.50 0.0139 0.0019

Neptune 115321-09-17 03:05 G 43841449.61 43841449.63 43841449.70 0.0088 0.0087

Saturn 115322-01-05 01:53 G 43841559.44 43841559.58 43841559.74 0.0274 0.0190

Mars 115322-02-14 08:51 G 43841599.82 43841599.87 43841599.93 0.1804 0.1689

Uranus 115322-04-28 03:05 G 43841672.42 43841672.63 43841672.84 0.0139 0.0037

Neptune 115322-04-30 15:48 G 43841675.08 43841675.16 43841675.29 0.0088 0.0077

Saturn 115322-08-22 09:20 G 43841788.71 43841788.89 43841789.09 0.0273 0.0125

Uranus 115322-12-10 11:15 G 43841898.78 43841898.97 43841899.18 0.0139 0.0055

Neptune 115322-12-12 05:00 G 43841900.58 43841900.71 43841900.85 0.0088 0.0068

Uranus 115323-07-24 20:08 G 43842125.16 43842125.34 43842125.53 0.0139 0.0073

Neptune 115323-07-25 17:29 G 43842126.08 43842126.23 43842126.41 0.0088 0.0058

Uranus 115324-03-07 04:46 G 43842351.55 43842351.70 43842351.87 0.0139 0.0091

Neptune 115324-03-07 06:12 G 43842351.59 43842351.76 43842351.96 0.0088 0.0049 *

Neptune 115324-10-18 18:56 G 43842577.11 43842577.29 43842577.50 0.0088 0.0040

Uranus 115324-10-19 13:39 G 43842577.95 43842578.07 43842578.22 0.0140 0.0109

Jupiter 115325-05-25 21:48 G 43842796.22 43842796.41 43842796.59 0.0531 0.0217

Neptune 115325-06-01 08:08 G 43842802.64 43842802.84 43842803.05 0.0088 0.0030

Uranus 115325-06-02 23:29 G 43842804.39 43842804.48 43842804.57 0.0140 0.0126

Neptune 115326-01-12 20:51 G 43843028.17 43843028.37 43843028.59 0.0088 0.0021

Neptune 115326-08-26 09:48 G 43843253.69 43843253.91 43843254.13 0.0088 0.0011

Neptune 115327-04-08 22:46 G 43843479.22 43843479.45 43843479.67 0.0088 0.0002

Neptune 115327-11-20 11:29 G 43843704.76 43843704.98 43843705.20 0.0088 0.0008

Neptune 115328-07-03 00:27 G 43843930.30 43843930.52 43843930.74 0.0088 0.0017

Neptune 115329-02-13 13:24 G 43844155.85 43844156.06 43844156.27 0.0088 0.0026

Neptune 115329-09-27 01:53 G 43844381.39 43844381.58 43844381.79 0.0088 0.0036

Neptune 115330-05-10 14:51 G 43844606.94 43844607.12 43844607.32 0.0088 0.0045

Neptune 115330-12-22 03:34 G 43844832.49 43844832.65 43844832.84 0.0088 0.0055

Neptune 115331-08-04 16:32 G 43845058.05 43845058.19 43845058.36 0.0088 0.0064

Jupiter 115331-11-17 11:15 G 43845162.77 43845162.97 43845163.17 0.0500 0.0088

Neptune 115332-03-17 05:29 G 43845283.62 43845283.73 43845283.86 0.0088 0.0073

Neptune 115332-10-28 17:58 G 43845509.21 43845509.25 43845509.35 0.0088 0.0083

Saturn 115337-01-26 11:00 G 43847059.94 43847059.96 43847060.00 0.0285 0.0283

Saturn 115337-09-13 03:05 G 43847289.42 43847289.63 43847289.83 0.0286 0.0074

Jupiter 115343-07-23 11:15 G 43849428.78 43849428.97 43849429.17 0.0497 0.0177

Jupiter 115349-05-29 00:56 G 43851565.38 43851565.54 43851565.72 0.0527 0.0291

Saturn 115351-07-18 05:15 G 43852345.54 43852345.72 43852345.89 0.0273 0.0151

Saturn 115352-03-03 11:58 G 43852574.84 43852575.00 43852575.18 0.0272 0.0162

Jupiter 115355-03-28 13:10 G 43853694.95 43853695.05 43853695.15 0.0495 0.0431

Uranus 115357-01-17 07:39 G 43854355.76 43854355.82 43854355.91 0.0141 0.0133

Uranus 115357-08-31 18:12 G 43854582.15 43854582.26 43854582.40 0.0141 0.0115

Uranus 115358-04-15 04:32 G 43854808.55 43854808.69 43854808.87 0.0140 0.0097

Uranus 115358-11-27 15:05 G 43855034.95 43855035.13 43855035.32 0.0140 0.0078

Uranus 115359-07-12 00:56 G 43855261.35 43855261.54 43855261.75 0.0140 0.0059

Uranus 115360-02-23 10:46 G 43855487.74 43855487.95 43855488.16 0.0140 0.0041

Uranus 115360-10-06 20:22 G 43855714.14 43855714.35 43855714.57 0.0140 0.0022

Jupiter 115361-01-31 16:17 G 43855830.98 43855831.18 43855831.38 0.0529 0.0025

Uranus 115361-05-21 05:44 G 43855940.52 43855940.74 43855940.96 0.0140 0.0004

Uranus 115362-01-02 14:51 G 43856166.91 43856167.12 43856167.34 0.0139 0.0015

Mars 115362-05-27 13:53 G 43856312.01 43856312.08 43856312.16 0.1757 0.1589

Uranus 115362-08-16 23:58 G 43856393.29 43856393.50 43856393.71 0.0139 0.0032

Uranus 115363-03-31 08:36 G 43856619.66 43856619.86 43856620.07 0.0139 0.0050

Uranus 115363-11-12 17:15 G 43856846.04 43856846.22 43856846.42 0.0139 0.0068

Uranus 115364-06-26 01:39 G 43857072.41 43857072.57 43857072.75 0.0139 0.0085

Uranus 115365-02-07 09:34 G 43857298.77 43857298.90 43857299.06 0.0138 0.0103

Uranus 115365-09-21 17:58 G 43857525.14 43857525.25 43857525.36 0.0138 0.0119

Uranus 115366-05-06 01:24 G 43857751.54 43857751.56 43857751.62 0.0138 0.0136

Saturn 115366-08-08 13:10 G 43857845.95 43857846.05 43857846.17 0.0286 0.0245

Moon 115366-08-22 08:08 G 43857859.80 43857859.84 43857859.87 0.2660 0.2570

Saturn 115367-03-26 05:29 G 43858075.54 43858075.73 43858075.92 0.0287 0.0115

Jupiter 115367-07-25 22:17 G 43858197.25 43858197.43 43858197.61 0.0501 0.0242

Jupiter 115372-10-06 06:27 G 43860096.62 43860096.77 43860096.93 0.0532 0.0345

Pluto 115373-10-21 14:08 G 43860476.96 43860477.09 43860477.27 0.0063 0.0044

Pluto 115374-06-03 17:44 G 43860702.03 43860702.24 43860702.46 0.0063 0.0007

Earth 115374-08-20 04:03 G 43860779.52 43860779.67 43860779.82 0.2657 0.0926

Moon 115374-08-20 04:46 G 43860779.56 43860779.70 43860779.84 0.2664 0.0805 *

Pluto 115375-01-14 20:36 G 43860927.19 43860927.36 43860927.57 0.0063 0.0031

Jupiter 115379-03-30 23:15 G 43862463.27 43862463.47 43862463.68 0.0499 0.0022

Saturn 115381-01-27 11:00 G 43863131.76 43863131.96 43863132.16 0.0274 0.0103

Saturn 115381-09-13 17:44 G 43863361.12 43863361.24 43863361.39 0.0273 0.0211

Jupiter 115385-02-03 13:39 G 43864599.98 43864600.07 43864600.18 0.0525 0.0457

Mars 115387-12-12 16:46 G 43865642.07 43865642.20 43865642.32 0.1800 0.1201

Jupiter 115390-12-04 00:27 G 43866729.35 43866729.52 43866729.69 0.0496 0.0281

Mars 115394-05-26 22:46 G 43867999.35 43867999.45 43867999.55 0.1742 0.1405

Saturn 115396-02-19 00:41 G 43868632.37 43868632.53 43868632.70 0.0285 0.0178

Saturn 115396-10-05 17:00 G 43868862.05 43868862.21 43868862.37 0.0286 0.0182

Jupiter 115396-10-09 05:29 G 43868865.54 43868865.73 43868865.93 0.0528 0.0148

Uranus 115400-05-30 17:00 G 43870194.14 43870194.21 43870194.32 0.0137 0.0124

Uranus 115401-01-12 00:12 G 43870420.37 43870420.51 43870420.64 0.0138 0.0107

Uranus 115401-08-26 06:41 G 43870646.63 43870646.78 43870646.95 0.0138 0.0091

Uranus 115402-04-09 13:39 G 43870872.90 43870873.07 43870873.26 0.0138 0.0074

Uranus 115402-11-21 20:51 G 43871099.18 43871099.37 43871099.58 0.0138 0.0057

Jupiter 115403-04-03 07:10 G 43871231.68 43871231.80 43871231.93 0.0502 0.0389

Uranus 115403-07-06 04:17 G 43871325.48 43871325.68 43871325.89 0.0138 0.0040

Uranus 115404-02-17 11:44 G 43871551.78 43871551.99 43871552.21 0.0138 0.0023

Uranus 115404-09-30 19:39 G 43871778.10 43871778.32 43871778.53 0.0139 0.0005

Neptune 115405-01-30 15:48 G 43871900.12 43871900.16 43871900.25 0.0089 0.0085

Uranus 115405-05-15 03:34 G 43872004.44 43872004.65 43872004.87 0.0139 0.0013

Neptune 115405-09-13 05:15 G 43872125.62 43872125.72 43872125.86 0.0089 0.0076

Uranus 115405-12-27 11:44 G 43872230.78 43872230.99 43872231.20 0.0139 0.0031

Neptune 115406-04-26 18:41 G 43872351.15 43872351.28 43872351.44 0.0089 0.0066

Uranus 115406-08-10 19:53 G 43872457.13 43872457.33 43872457.54 0.0139 0.0049

Neptune 115406-12-08 08:22 G 43872576.68 43872576.85 43872577.02 0.0089 0.0056

Uranus 115407-03-25 04:17 G 43872683.50 43872683.68 43872683.88 0.0139 0.0067

Neptune 115407-07-21 21:20 G 43872802.22 43872802.39 43872802.59 0.0089 0.0046

Uranus 115407-11-06 13:10 G 43872909.88 43872910.05 43872910.23 0.0139 0.0085

Neptune 115408-03-03 10:32 G 43873027.75 43873027.94 43873028.15 0.0089 0.0037

Jupiter 115408-06-14 22:17 G 43873131.24 43873131.43 43873131.63 0.0531 0.0164

Uranus 115408-06-19 22:03 G 43873136.29 43873136.42 43873136.58 0.0140 0.0103

Neptune 115408-10-14 23:44 G 43873253.29 43873253.49 43873253.71 0.0089 0.0027

Uranus 115409-02-01 07:10 G 43873362.71 43873362.80 43873362.92 0.0140 0.0121

Neptune 115409-05-28 13:10 G 43873478.83 43873479.05 43873479.27 0.0089 0.0017

Uranus 115409-09-15 16:46 G 43873589.17 43873589.20 43873589.23 0.0140 0.0138

Neptune 115410-01-09 02:22 G 43873704.38 43873704.60 43873704.82 0.0089 0.0007

Saturn 115410-08-10 15:20 G 43873917.93 43873918.14 43873918.35 0.0273 0.0060

Neptune 115410-08-22 15:34 G 43873929.93 43873930.15 43873930.37 0.0089 0.0003

Saturn 115411-03-27 21:48 G 43874147.34 43874147.41 43874147.50 0.0272 0.0252

Neptune 115411-04-05 04:46 G 43874155.48 43874155.70 43874155.91 0.0089 0.0013

Neptune 115411-11-16 17:44 G 43874381.04 43874381.24 43874381.46 0.0089 0.0023

Neptune 115412-06-29 06:41 G 43874606.59 43874606.78 43874607.00 0.0089 0.0033

Neptune 115413-02-09 19:53 G 43874832.15 43874832.33 43874832.53 0.0089 0.0042

Neptune 115413-09-23 09:20 G 43875057.71 43875057.89 43875058.06 0.0089 0.0052

Neptune 115414-05-06 22:03 G 43875283.28 43875283.42 43875283.59 0.0089 0.0062

Jupiter 115414-12-07 08:36 G 43875497.66 43875497.86 43875498.06 0.0500 0.0127

Neptune 115414-12-18 11:00 G 43875508.85 43875508.96 43875509.11 0.0089 0.0072

Neptune 115415-08-01 00:27 G 43875734.44 43875734.52 43875734.62 0.0089 0.0081

Jupiter 115420-02-18 13:10 G 43877396.97 43877397.05 43877397.13 0.0533 0.0483

Saturn 115425-09-01 03:05 G 43879418.45 43879418.63 43879418.82 0.0286 0.0139

Saturn 115426-04-18 19:24 G 43879648.19 43879648.31 43879648.45 0.0287 0.0223

Jupiter 115426-08-12 10:17 G 43879763.73 43879763.93 43879764.12 0.0498 0.0134

Jupiter 115432-06-17 22:46 G 43881900.29 43881900.45 43881900.60 0.0526 0.0331

Jupiter 115438-04-17 11:58 G 43884029.88 43884030.00 43884030.13 0.0495 0.0390

Saturn 115440-02-20 21:05 G 43884704.16 43884704.38 43884704.59 0.0273 0.0013

Uranus 115440-09-17 14:22 G 43884914.09 43884914.10 43884914.14 0.0141 0.0140

Uranus 115441-05-02 01:10 G 43885140.45 43885140.55 43885140.67 0.0141 0.0122

Uranus 115441-12-14 11:58 G 43885366.85 43885367.00 43885367.15 0.0140 0.0103

Uranus 115442-07-28 22:03 G 43885593.25 43885593.42 43885593.60 0.0140 0.0085

Uranus 115443-03-12 08:08 G 43885819.65 43885819.84 43885820.04 0.0140 0.0066

Uranus 115443-10-24 18:12 G 43886046.06 43886046.26 43886046.47 0.0140 0.0047

Jupiter 115444-02-21 11:00 G 43886165.76 43886165.96 43886166.17 0.0529 0.0015

Uranus 115444-06-07 03:48 G 43886272.45 43886272.66 43886272.88 0.0140 0.0029

Uranus 115445-01-19 13:24 G 43886498.84 43886499.06 43886499.28 0.0140 0.0010

Uranus 115445-09-02 22:46 G 43886725.23 43886725.45 43886725.67 0.0139 0.0008

Uranus 115446-04-17 07:39 G 43886951.61 43886951.82 43886952.04 0.0139 0.0026

Uranus 115446-11-29 16:46 G 43887178.00 43887178.20 43887178.41 0.0139 0.0044

Uranus 115447-07-14 01:24 G 43887404.37 43887404.56 43887404.76 0.0139 0.0062

Uranus 115448-02-25 09:48 G 43887630.75 43887630.91 43887631.10 0.0139 0.0080

Uranus 115448-10-08 18:12 G 43887857.12 43887857.26 43887857.43 0.0139 0.0097

Uranus 115449-05-23 02:22 G 43888083.49 43888083.60 43888083.74 0.0138 0.0114

Uranus 115450-01-04 10:32 G 43888309.88 43888309.94 43888310.02 0.0138 0.0130

Jupiter 115450-08-14 19:53 G 43888532.16 43888532.33 43888532.50 0.0501 0.0280

Mars 115453-10-10 01:10 G 43889684.39 43889684.55 43889684.70 0.1795 0.0743

Saturn 115455-03-14 14:51 G 43890204.92 43890205.12 43890205.33 0.0286 0.0071

Jupiter 115455-10-27 01:53 G 43890431.42 43890431.58 43890431.75 0.0532 0.0312

Mars 115460-03-24 07:10 G 43892041.65 43892041.80 43892041.94 0.1746 0.0999

Jupiter 115462-04-19 18:56 G 43892798.08 43892798.29 43892798.49 0.0499 0.0012

Pluto 115464-07-18 05:29 G 43893618.53 43893618.73 43893618.96 0.0081 0.0028

Pluto 115465-02-28 17:00 G 43893844.06 43893844.21 43893844.39 0.0081 0.0055

Jupiter 115468-02-24 13:24 G 43894935.02 43894935.06 43894935.12 0.0525 0.0507

Saturn 115469-09-02 02:51 G 43895490.41 43895490.62 43895490.83 0.0273 0.0035

Jupiter 115473-12-23 20:36 G 43897064.18 43897064.36 43897064.54 0.0497 0.0247

Jupiter 115479-10-30 05:15 G 43899200.53 43899200.72 43899200.91 0.0528 0.0196

Uranus 115484-01-29 02:51 G 43900752.55 43900752.62 43900752.69 0.0137 0.0129

Uranus 115484-09-11 09:20 G 43900978.77 43900978.89 43900979.02 0.0137 0.0113

Saturn 115484-09-23 17:44 G 43900991.03 43900991.24 43900991.45 0.0286 0.0030

Uranus 115485-04-25 16:03 G 43901205.03 43901205.17 43901205.33 0.0138 0.0097

Uranus 115485-12-07 23:00 G 43901431.29 43901431.46 43901431.64 0.0138 0.0080

Neptune 115485-12-20 13:53 G 43901444.07 43901444.08 43901444.13 0.0088 0.0087

Jupiter 115486-04-22 05:44 G 43901566.64 43901566.74 43901566.85 0.0503 0.0432

Uranus 115486-07-22 05:58 G 43901657.57 43901657.75 43901657.95 0.0138 0.0063

Neptune 115486-08-03 02:22 G 43901669.53 43901669.60 43901669.73 0.0088 0.0079

Uranus 115487-03-05 13:10 G 43901883.85 43901884.05 43901884.26 0.0138 0.0046

Neptune 115487-03-16 15:05 G 43901895.02 43901895.13 43901895.29 0.0088 0.0069

Uranus 115487-10-17 20:51 G 43902110.16 43902110.37 43902110.58 0.0138 0.0028

Neptune 115487-10-28 04:17 G 43902120.52 43902120.68 43902120.84 0.0088 0.0060

Moon 115488-02-25 20:36 G 43902241.24 43902241.36 43902241.48 0.2672 0.1799

Earth 115488-02-26 00:56 G 43902241.47 43902241.54 43902241.62 0.2677 0.2356 *

Uranus 115488-05-31 04:32 G 43902336.47 43902336.69 43902336.91 0.0138 0.0011

Neptune 115488-06-09 16:46 G 43902346.03 43902346.20 43902346.39 0.0088 0.0051

Uranus 115489-01-12 12:12 G 43902562.80 43902563.01 43902563.23 0.0139 0.0008

Neptune 115489-01-21 05:29 G 43902571.55 43902571.73 43902571.94 0.0088 0.0041

Uranus 115489-08-26 20:22 G 43902789.14 43902789.35 43902789.56 0.0139 0.0025

Neptune 115489-09-03 18:12 G 43902797.07 43902797.26 43902797.48 0.0088 0.0032

Uranus 115490-04-10 04:32 G 43903015.48 43903015.69 43903015.90 0.0139 0.0043

Neptune 115490-04-17 07:10 G 43903022.59 43903022.80 43903023.02 0.0088 0.0022

Uranus 115490-11-22 12:41 G 43903241.85 43903242.03 43903242.24 0.0139 0.0061

Neptune 115490-11-28 20:08 G 43903248.12 43903248.34 43903248.56 0.0088 0.0013

Jupiter 115491-07-04 19:53 G 43903466.13 43903466.33 43903466.53 0.0530 0.0122

Uranus 115491-07-06 21:20 G 43903468.23 43903468.39 43903468.58 0.0139 0.0080

Neptune 115491-07-12 09:05 G 43903473.66 43903473.88 43903474.10 0.0088 0.0003

Uranus 115492-02-18 06:12 G 43903694.62 43903694.76 43903694.93 0.0139 0.0097

Neptune 115492-02-22 21:48 G 43903699.19 43903699.41 43903699.64 0.0088 0.0007

Uranus 115492-10-01 15:20 G 43903921.03 43903921.14 43903921.27 0.0140 0.0115

Neptune 115492-10-05 10:32 G 43903924.73 43903924.94 43903925.17 0.0088 0.0016

Uranus 115493-05-16 00:27 G 43904147.47 43904147.52 43904147.60 0.0140 0.0133

Neptune 115493-05-18 23:44 G 43904150.28 43904150.49 43904150.70 0.0088 0.0025

Neptune 115493-12-30 12:12 G 43904375.82 43904376.01 43904376.23 0.0088 0.0035

Neptune 115494-08-13 01:10 G 43904601.37 43904601.55 43904601.75 0.0088 0.0044

Neptune 115495-03-26 14:08 G 43904826.92 43904827.09 43904827.27 0.0088 0.0053

Neptune 115495-11-07 02:51 G 43905052.48 43905052.62 43905052.79 0.0088 0.0063

Moon 115496-02-23 10:32 G 43905160.81 43905160.94 43905161.06 0.2677 0.1541

Earth 115496-02-23 16:03 G 43905161.03 43905161.17 43905161.31 0.2675 0.1329 *

Neptune 115496-06-19 15:48 G 43905278.05 43905278.16 43905278.30 0.0088 0.0072

Neptune 115497-01-31 05:00 G 43905503.64 43905503.71 43905503.80 0.0088 0.0081

Jupiter 115497-12-26 07:10 G 43905832.61 43905832.80 43905832.99 0.0500 0.0168

Saturn 115498-07-28 23:58 G 43906047.40 43906047.50 43906047.61 0.0274 0.0237

Saturn 115499-03-15 07:53 G 43906276.63 43906276.83 43906277.04 0.0273 0.0080

Jupiter 115503-03-10 07:24 G 43907731.71 43907731.81 43907731.92 0.0533 0.0454

Jupiter 115509-09-01 07:39 G 43910098.62 43910098.82 43910099.02 0.0498 0.0096

Saturn 115514-04-07 05:58 G 43911777.54 43911777.75 43911777.96 0.0286 0.0039

Jupiter 115515-07-08 17:44 G 43912235.10 43912235.24 43912235.39 0.0527 0.0365

Mars 115519-08-08 09:20 G 43913726.72 43913726.89 43913727.06 0.1790 0.0277

Jupiter 115521-05-07 06:56 G 43914364.65 43914364.79 43914364.93 0.0495 0.0361

Uranus 115524-12-31 06:56 G 43915698.72 43915698.79 43915698.90 0.0141 0.0129

Uranus 115525-08-14 17:29 G 43915925.11 43915925.23 43915925.38 0.0141 0.0111

Mars 115526-01-20 14:36 G 43916083.95 43916084.11 43916084.28 0.1750 0.0568

Uranus 115526-03-29 04:03 G 43916151.51 43916151.67 43916151.84 0.0140 0.0092

Uranus 115526-11-10 14:22 G 43916377.92 43916378.10 43916378.30 0.0140 0.0073

Jupiter 115527-03-13 10:32 G 43916500.74 43916500.94 43916501.14 0.0529 0.0056

Uranus 115527-06-25 00:12 G 43916604.32 43916604.51 43916604.73 0.0140 0.0055

Uranus 115528-02-06 10:17 G 43916830.72 43916830.93 43916831.14 0.0140 0.0036

Saturn 115528-02-09 07:53 G 43916833.67 43916833.83 43916833.99 0.0274 0.0184

Uranus 115528-09-19 19:53 G 43917057.11 43917057.33 43917057.55 0.0140 0.0017

Saturn 115528-09-25 14:51 G 43917062.94 43917063.12 43917063.32 0.0273 0.0131

Uranus 115529-05-04 05:15 G 43917283.51 43917283.72 43917283.94 0.0139 0.0003

Uranus 115529-12-16 14:36 G 43917509.90 43917510.11 43917510.33 0.0139 0.0020

Uranus 115530-07-30 23:44 G 43917736.28 43917736.49 43917736.70 0.0139 0.0038

Uranus 115531-03-14 08:22 G 43917962.66 43917962.85 43917963.06 0.0139 0.0056

Uranus 115531-10-26 17:00 G 43918189.04 43918189.21 43918189.41 0.0139 0.0074

Uranus 115532-06-09 01:39 G 43918415.42 43918415.57 43918415.75 0.0139 0.0091

Uranus 115533-01-21 10:17 G 43918641.80 43918641.93 43918642.07 0.0138 0.0108

Jupiter 115533-09-03 15:20 G 43918866.99 43918867.14 43918867.30 0.0501 0.0314

Uranus 115533-09-04 18:27 G 43918868.18 43918868.27 43918868.36 0.0138 0.0125

Jupiter 115538-11-16 01:53 G 43920766.41 43920766.58 43920766.76 0.0531 0.0263

Saturn 115543-03-02 16:32 G 43922334.15 43922334.19 43922334.24 0.0286 0.0278

Saturn 115543-10-18 08:22 G 43922563.65 43922563.85 43922564.06 0.0287 0.0080

Jupiter 115545-05-09 16:46 G 43923133.00 43923133.20 43923133.41 0.0499 0.0052

Jupiter 115557-01-12 18:56 G 43927399.10 43927399.29 43927399.47 0.0497 0.0207

Saturn 115557-08-21 12:12 G 43927619.83 43927620.01 43927620.20 0.0273 0.0141

Saturn 115558-04-07 19:39 G 43927849.16 43927849.32 43927849.49 0.0273 0.0174

Jupiter 115562-11-18 23:29 G 43929535.30 43929535.48 43929535.67 0.0528 0.0227

Uranus 115567-09-29 12:12 G 43931310.98 43931311.01 43931311.06 0.0137 0.0134

Uranus 115568-05-12 18:41 G 43931537.19 43931537.28 43931537.40 0.0137 0.0119

Jupiter 115568-09-17 20:08 G 43931665.27 43931665.34 43931665.40 0.0495 0.0464

Uranus 115568-12-25 01:10 G 43931763.43 43931763.55 43931763.71 0.0137 0.0103

Neptune 115569-05-05 02:22 G 43931894.57 43931894.60 43931894.68 0.0089 0.0087

Jupiter 115569-05-12 03:05 G 43931901.56 43931901.63 43931901.70 0.0502 0.0470

Uranus 115569-08-08 08:08 G 43931989.68 43931989.84 43931990.02 0.0138 0.0086

Neptune 115569-12-16 16:03 G 43932120.07 43932120.17 43932120.30 0.0089 0.0077

Uranus 115570-03-22 15:05 G 43932215.95 43932216.13 43932216.32 0.0138 0.0069

Neptune 115570-07-30 05:15 G 43932345.59 43932345.72 43932345.88 0.0089 0.0067

Uranus 115570-11-03 22:17 G 43932442.24 43932442.43 43932442.64 0.0138 0.0052

Neptune 115571-03-12 18:41 G 43932571.12 43932571.28 43932571.46 0.0089 0.0057

Uranus 115571-06-18 05:44 G 43932668.53 43932668.74 43932668.95 0.0138 0.0034

Neptune 115571-10-24 07:53 G 43932796.66 43932796.83 43932797.03 0.0089 0.0048

Uranus 115572-01-30 13:10 G 43932894.84 43932895.05 43932895.27 0.0138 0.0017

Neptune 115572-06-05 21:20 G 43933022.20 43933022.39 43933022.60 0.0089 0.0038

Saturn 115572-09-12 04:03 G 43933120.54 43933120.67 43933120.82 0.0286 0.0213

Uranus 115572-09-12 21:05 G 43933121.16 43933121.38 43933121.59 0.0138 0.0002

Neptune 115573-01-17 10:46 G 43933247.74 43933247.95 43933248.16 0.0089 0.0028

Uranus 115573-04-27 05:00 G 43933347.50 43933347.71 43933347.93 0.0139 0.0019

Saturn 115573-04-29 20:22 G 43933350.18 43933350.35 43933350.54 0.0287 0.0148

Neptune 115573-08-30 23:44 G 43933473.29 43933473.49 43933473.72 0.0089 0.0018

Uranus 115573-12-09 13:10 G 43933573.84 43933574.05 43933574.26 0.0139 0.0037

Neptune 115574-04-13 12:56 G 43933698.83 43933699.04 43933699.27 0.0089 0.0009

Uranus 115574-07-23 21:20 G 43933800.20 43933800.39 43933800.60 0.0139 0.0055

Jupiter 115574-07-24 14:36 G 43933800.91 43933801.11 43933801.31 0.0530 0.0090

Neptune 115574-11-25 02:22 G 43933924.38 43933924.60 43933924.82 0.0089 0.0002

Uranus 115575-03-07 05:44 G 43934026.57 43934026.74 43934026.93 0.0139 0.0073

Neptune 115575-07-08 15:20 G 43934149.93 43934150.14 43934150.37 0.0089 0.0012

Uranus 115575-10-19 14:22 G 43934252.95 43934253.10 43934253.28 0.0139 0.0092

Neptune 115576-02-19 04:17 G 43934375.48 43934375.68 43934375.91 0.0089 0.0022

Uranus 115576-06-01 23:15 G 43934479.36 43934479.47 43934479.62 0.0139 0.0110

Neptune 115576-10-01 17:44 G 43934601.03 43934601.24 43934601.44 0.0089 0.0031

Uranus 115577-01-14 08:22 G 43934705.78 43934705.85 43934705.95 0.0140 0.0128

Neptune 115577-05-15 06:41 G 43934826.59 43934826.78 43934826.98 0.0089 0.0041

Neptune 115577-12-26 19:39 G 43935052.16 43935052.32 43935052.52 0.0089 0.0051

Neptune 115578-08-09 08:36 G 43935277.72 43935277.86 43935278.04 0.0089 0.0061

Neptune 115579-03-22 21:48 G 43935503.29 43935503.41 43935503.56 0.0089 0.0070

Neptune 115579-11-03 10:46 G 43935728.87 43935728.95 43935729.07 0.0090 0.0080

Neptune 115580-06-15 23:58 G 43935954.49 43935954.50 43935954.53 0.0090 0.0089

Jupiter 115581-01-15 01:39 G 43936167.38 43936167.57 43936167.75 0.0500 0.0197

Mars 115585-06-04 17:58 G 43937769.08 43937769.25 43937769.42 0.1786 0.0159

Jupiter 115586-03-29 06:41 G 43938066.65 43938066.78 43938066.91 0.0533 0.0407

Saturn 115587-03-03 20:36 G 43938406.16 43938406.36 43938406.57 0.0273 0.0086

Saturn 115587-10-19 03:20 G 43938635.54 43938635.64 43938635.77 0.0272 0.0227

Mars 115591-11-17 22:17 G 43940126.25 43940126.43 43940126.61 0.1755 0.0126

Jupiter 115592-09-20 02:51 G 43940433.42 43940433.62 43940433.82 0.0498 0.0065

Jupiter 115598-07-27 17:29 G 43942570.11 43942570.23 43942570.36 0.0526 0.0413

Saturn 115602-03-25 06:41 G 43943906.62 43943906.78 43943906.96 0.0286 0.0172

Saturn 115602-11-09 23:00 G 43944136.31 43944136.46 43944136.62 0.0287 0.0189

Jupiter 115604-05-26 04:46 G 43944699.54 43944699.70 43944699.85 0.0496 0.0323

Uranus 115608-08-30 12:56 G 43946257.00 43946257.04 43946257.11 0.0141 0.0136

Uranus 115609-04-13 23:29 G 43946483.38 43946483.48 43946483.62 0.0141 0.0118

Moon 115609-08-24 09:34 G 43946615.81 43946615.90 43946615.98 0.2652 0.2247

Uranus 115609-11-26 10:32 G 43946709.79 43946709.94 43946710.10 0.0140 0.0099

Jupiter 115610-04-01 08:36 G 43946835.66 43946835.86 43946836.06 0.0529 0.0099

Uranus 115610-07-10 20:36 G 43946936.19 43946936.36 43946936.55 0.0140 0.0081

Uranus 115611-02-22 06:56 G 43947162.59 43947162.79 43947162.99 0.0140 0.0062

Uranus 115611-10-06 16:46 G 43947389.00 43947389.20 43947389.42 0.0140 0.0043

Uranus 115612-05-20 02:36 G 43947615.40 43947615.61 43947615.83 0.0140 0.0024

Uranus 115613-01-01 12:12 G 43947841.80 43947842.01 43947842.23 0.0140 0.0006

Uranus 115613-08-15 21:34 G 43948068.19 43948068.40 43948068.62 0.0139 0.0013

Uranus 115614-03-30 06:56 G 43948294.58 43948294.79 43948295.00 0.0139 0.0031

Uranus 115614-11-11 15:48 G 43948520.97 43948521.16 43948521.37 0.0139 0.0050

Uranus 115615-06-26 00:41 G 43948747.35 43948747.53 43948747.73 0.0139 0.0068

Uranus 115616-02-07 09:34 G 43948973.73 43948973.90 43948974.07 0.0139 0.0085

Saturn 115616-09-13 00:27 G 43949192.31 43949192.52 43949192.73 0.0273 0.0045

Uranus 115616-09-20 17:44 G 43949200.10 43949200.24 43949200.39 0.0139 0.0103

Jupiter 115616-09-22 13:53 G 43949201.94 43949202.08 43949202.23 0.0502 0.0357

Saturn 115617-04-30 07:10 G 43949421.77 43949421.80 43949421.85 0.0272 0.0267

Uranus 115617-05-05 01:53 G 43949426.49 43949426.58 43949426.70 0.0138 0.0120

Moon 115617-08-22 00:56 G 43949535.42 43949535.54 43949535.65 0.2661 0.1747

Earth 115617-08-22 05:29 G 43949535.59 43949535.73 43949535.88 0.2658 0.0903 *

Uranus 115617-12-17 10:03 G 43949652.90 43949652.92 43949652.97 0.0138 0.0136

Pluto 115619-11-22 00:56 G 43950357.37 43950357.54 43950357.75 0.0063 0.0029

Pluto 115620-07-04 04:17 G 43950582.48 43950582.68 43950582.91 0.0063 0.0009

Pluto 115621-02-14 07:24 G 43950807.68 43950807.81 43950807.99 0.0063 0.0045

Jupiter 115621-12-04 20:51 G 43951101.18 43951101.37 43951101.55 0.0531 0.0231

Jupiter 115628-05-28 14:22 G 43953467.90 43953468.10 43953468.31 0.0499 0.0091

Saturn 115631-10-05 17:29 G 43954693.03 43954693.23 43954693.42 0.0286 0.0108

Saturn 115632-05-22 10:03 G 43954922.83 43954922.92 43954923.02 0.0287 0.0254

Jupiter 115640-02-01 13:24 G 43957733.87 43957734.06 43957734.25 0.0497 0.0179

Jupiter 115645-12-07 23:00 G 43959870.29 43959870.46 43959870.64 0.0528 0.0275

Saturn 115646-03-26 09:20 G 43959978.68 43959978.89 43959979.11 0.0273 0.0012

Neptune 115650-11-05 13:24 G 43961663.98 43961664.06 43961664.17 0.0088 0.0079

Mars 115651-04-02 02:36 G 43961811.45 43961811.61 43961811.77 0.1781 0.0597

Neptune 115651-06-19 02:08 G 43961889.47 43961889.59 43961889.74 0.0088 0.0070

Jupiter 115651-10-07 15:05 G 43962000.04 43962000.13 43962000.23 0.0495 0.0435

Uranus 115652-01-11 04:03 G 43962095.60 43962095.67 43962095.77 0.0137 0.0125

Neptune 115652-01-30 14:36 G 43962114.97 43962115.11 43962115.29 0.0088 0.0061

Jupiter 115652-05-30 22:17 G 43962236.42 43962236.43 43962236.44 0.0503 0.0502

Uranus 115652-08-24 10:32 G 43962321.83 43962321.94 43962322.09 0.0137 0.0109

Neptune 115652-09-12 03:48 G 43962340.48 43962340.66 43962340.84 0.0088 0.0052

Uranus 115653-04-07 17:29 G 43962548.08 43962548.23 43962548.40 0.0138 0.0092

Neptune 115653-04-25 16:17 G 43962565.99 43962566.18 43962566.38 0.0088 0.0042

Uranus 115653-11-20 00:27 G 43962774.35 43962774.52 43962774.71 0.0138 0.0075

Neptune 115653-12-07 04:46 G 43962791.51 43962791.70 43962791.92 0.0088 0.0033

Uranus 115654-07-04 07:24 G 43963000.62 43963000.81 43963001.02 0.0138 0.0058

Neptune 115654-07-20 17:58 G 43963017.04 43963017.25 43963017.46 0.0088 0.0023

Uranus 115655-02-15 14:51 G 43963226.91 43963227.12 43963227.33 0.0138 0.0040

Neptune 115655-03-03 06:27 G 43963242.56 43963242.77 43963243.00 0.0088 0.0014

Uranus 115655-09-29 22:17 G 43963453.22 43963453.43 43963453.64 0.0138 0.0023

Neptune 115655-10-14 19:24 G 43963468.09 43963468.31 43963468.53 0.0088 0.0005

Uranus 115656-05-13 06:12 G 43963679.54 43963679.76 43963679.97 0.0138 0.0005

Neptune 115656-05-27 08:22 G 43963693.63 43963693.85 43963694.07 0.0088 0.0005

Uranus 115656-12-25 13:53 G 43963905.87 43963906.08 43963906.30 0.0138 0.0013

Neptune 115657-01-07 21:05 G 43963919.17 43963919.38 43963919.60 0.0088 0.0014

Uranus 115657-08-08 21:48 G 43964132.20 43964132.41 43964132.63 0.0139 0.0031

Jupiter 115657-08-12 15:05 G 43964135.93 43964136.13 43964136.33 0.0530 0.0040

Neptune 115657-08-21 09:48 G 43964144.71 43964144.91 43964145.13 0.0088 0.0024

Mars 115657-09-14 05:29 G 43964168.55 43964168.73 43964168.90 0.1760 0.0344

Uranus 115658-03-23 05:58 G 43964358.55 43964358.75 43964358.96 0.0139 0.0049

Neptune 115658-04-03 22:46 G 43964370.25 43964370.45 43964370.66 0.0088 0.0033

Uranus 115658-11-04 14:08 G 43964584.92 43964585.09 43964585.30 0.0139 0.0068

Neptune 115658-11-15 11:15 G 43964595.80 43964595.97 43964596.18 0.0088 0.0043

Uranus 115659-06-18 23:15 G 43964811.30 43964811.47 43964811.64 0.0139 0.0086

Neptune 115659-06-29 00:27 G 43964821.36 43964821.52 43964821.71 0.0088 0.0052

Uranus 115660-01-31 07:53 G 43965037.69 43965037.83 43965037.98 0.0139 0.0104

Neptune 115660-02-09 13:39 G 43965046.92 43965047.07 43965047.23 0.0088 0.0061

Uranus 115660-09-13 16:32 G 43965264.10 43965264.19 43965264.31 0.0140 0.0122

Neptune 115660-09-22 02:08 G 43965272.48 43965272.59 43965272.74 0.0088 0.0071

Saturn 115661-04-16 20:08 G 43965479.13 43965479.34 43965479.54 0.0286 0.0067

Uranus 115661-04-28 01:53 G 43965490.58 43965490.58 43965490.59 0.0140 0.0140

Neptune 115661-05-05 15:05 G 43965498.06 43965498.13 43965498.24 0.0088 0.0080

Jupiter 115664-02-03 23:44 G 43966502.31 43966502.49 43966502.67 0.0501 0.0238

Jupiter 115669-04-17 05:44 G 43968401.59 43968401.74 43968401.89 0.0532 0.0361

Saturn 115675-02-19 04:03 G 43970535.63 43970535.67 43970535.71 0.0274 0.0267

Saturn 115675-10-06 11:58 G 43970764.79 43970765.00 43970765.21 0.0273 0.0049

Jupiter 115675-10-10 01:39 G 43970768.36 43970768.57 43970768.77 0.0498 0.0023

Jupiter 115681-08-15 12:56 G 43972904.94 43972905.04 43972905.15 0.0526 0.0448

Jupiter 115687-06-15 02:51 G 43975034.45 43975034.62 43975034.79 0.0496 0.0282

Saturn 115690-10-28 05:29 G 43976265.52 43976265.73 43976265.95 0.0286 0.0010

Uranus 115692-12-12 05:29 G 43977041.65 43977041.73 43977041.85 0.0141 0.0125

Jupiter 115693-04-20 04:03 G 43977170.48 43977170.67 43977170.87 0.0529 0.0135

Uranus 115693-07-26 16:03 G 43977268.04 43977268.17 43977268.33 0.0141 0.0107

Uranus 115694-03-10 02:36 G 43977494.45 43977494.61 43977494.79 0.0140 0.0088

Uranus 115694-10-22 12:41 G 43977720.86 43977721.03 43977721.24 0.0140 0.0070

Uranus 115695-06-05 23:00 G 43977947.26 43977947.46 43977947.67 0.0140 0.0050

Uranus 115696-01-18 09:05 G 43978173.66 43978173.88 43978174.09 0.0140 0.0031

Uranus 115696-08-31 18:41 G 43978400.06 43978400.28 43978400.50 0.0140 0.0012

Uranus 115697-04-15 04:17 G 43978626.46 43978626.68 43978626.90 0.0139 0.0007

Uranus 115697-11-27 13:39 G 43978852.86 43978853.07 43978853.29 0.0139 0.0025

Uranus 115698-07-11 22:46 G 43979079.24 43979079.45 43979079.66 0.0139 0.0043

Uranus 115699-02-23 07:39 G 43979305.63 43979305.82 43979306.02 0.0139 0.0061

Uranus 115699-10-07 16:17 G 43979532.01 43979532.18 43979532.37 0.0139 0.0079

Jupiter 115699-10-12 08:36 G 43979536.74 43979536.86 43979537.00 0.0501 0.0386

Uranus 115700-05-22 00:41 G 43979758.39 43979758.53 43979758.70 0.0139 0.0097

Uranus 115701-01-03 09:20 G 43979984.78 43979984.89 43979985.02 0.0138 0.0114

Uranus 115701-08-17 17:29 G 43980211.17 43980211.23 43980211.31 0.0138 0.0131

Saturn 115704-09-01 13:10 G 43981321.92 43981322.05 43981322.19 0.0274 0.0209

Jupiter 115704-12-24 20:22 G 43981436.16 43981436.35 43981436.54 0.0532 0.0183

Saturn 115705-04-18 20:51 G 43981551.18 43981551.37 43981551.57 0.0273 0.0107

Pluto 115710-08-18 17:29 G 43983499.01 43983499.23 43983499.46 0.0081 0.0002

Pluto 115711-04-01 04:32 G 43983724.68 43983724.69 43983724.75 0.0081 0.0080

Jupiter 115711-06-18 10:03 G 43983802.72 43983802.92 43983803.12 0.0499 0.0122

Jupiter 115716-08-29 11:58 G 43985701.94 43985702.00 43985702.07 0.0534 0.0502

Mars 115717-01-28 11:29 G 43985853.85 43985853.98 43985854.12 0.1777 0.1018

Saturn 115720-05-10 08:08 G 43987051.63 43987051.84 43987052.05 0.0286 0.0034

Jupiter 115723-02-21 11:44 G 43988068.80 43988068.99 43988069.19 0.0497 0.0139

Mars 115723-07-13 12:56 G 43988210.88 43988211.04 43988211.19 0.1764 0.0802

Jupiter 115728-12-27 22:46 G 43990205.29 43990205.45 43990205.61 0.0527 0.0324

Earth 115731-02-28 01:39 G 43990997.49 43990997.57 43990997.65 0.2676 0.2250

Neptune 115733-08-07 13:10 G 43991889.02 43991889.05 43991889.10 0.0089 0.0088

Saturn 115734-03-14 14:51 G 43992107.96 43992108.12 43992108.29 0.0274 0.0174

Neptune 115734-03-21 02:08 G 43992114.51 43992114.59 43992114.72 0.0089 0.0079

Jupiter 115734-10-27 14:08 G 43992334.98 43992335.09 43992335.22 0.0495 0.0393

Saturn 115734-10-29 22:32 G 43992337.27 43992337.44 43992337.63 0.0273 0.0142

Neptune 115734-11-01 15:48 G 43992340.03 43992340.16 43992340.31 0.0089 0.0068

Neptune 115735-06-15 05:15 G 43992565.57 43992565.72 43992565.90 0.0089 0.0059

Uranus 115735-09-11 13:24 G 43992654.01 43992654.06 43992654.14 0.0137 0.0130

Neptune 115736-01-26 18:41 G 43992791.10 43992791.28 43992791.47 0.0089 0.0049

Uranus 115736-04-24 19:53 G 43992880.23 43992880.33 43992880.47 0.0137 0.0115

Neptune 115736-09-08 07:53 G 43993016.64 43993016.83 43993017.04 0.0089 0.0039

Uranus 115736-12-07 02:51 G 43993106.48 43993106.62 43993106.78 0.0138 0.0098

Neptune 115737-04-21 21:05 G 43993242.19 43993242.38 43993242.60 0.0089 0.0030

Uranus 115737-07-21 09:34 G 43993332.74 43993332.90 43993333.08 0.0138 0.0081

Neptune 115737-12-03 10:46 G 43993467.74 43993467.95 43993468.17 0.0089 0.0019

Uranus 115738-03-04 16:32 G 43993559.01 43993559.19 43993559.39 0.0138 0.0064

Neptune 115738-07-16 23:58 G 43993693.29 43993693.50 43993693.72 0.0089 0.0010

Uranus 115738-10-16 23:58 G 43993785.30 43993785.50 43993785.70 0.0138 0.0046

Moon 115739-02-25 13:10 G 43993916.92 43993917.05 43993917.18 0.2669 0.1707

Earth 115739-02-25 16:46 G 43993917.07 43993917.20 43993917.34 0.2674 0.1412 *

Neptune 115739-02-27 13:10 G 43993918.83 43993919.05 43993919.27 0.0089 0.0002

Uranus 115739-05-31 07:24 G 43994011.60 43994011.81 43994012.02 0.0138 0.0029

Neptune 115739-10-11 02:22 G 43994144.38 43994144.60 43994144.82 0.0089 0.0010

Uranus 115740-01-12 14:51 G 43994237.91 43994238.12 43994238.34 0.0138 0.0012

Neptune 115740-05-23 15:20 G 43994369.94 43994370.14 43994370.36 0.0089 0.0020

Uranus 115740-08-25 22:46 G 43994464.23 43994464.45 43994464.66 0.0138 0.0007

Jupiter 115740-09-01 11:44 G 43994470.79 43994470.99 43994471.19 0.0530 0.0002

Neptune 115741-01-04 04:46 G 43994595.50 43994595.70 43994595.91 0.0089 0.0030

Uranus 115741-04-09 06:27 G 43994690.57 43994690.77 43994690.99 0.0139 0.0026

Neptune 115741-08-17 17:44 G 43994821.05 43994821.24 43994821.45 0.0089 0.0040

Uranus 115741-11-21 14:36 G 43994916.91 43994917.11 43994917.32 0.0139 0.0044

Neptune 115742-03-31 06:41 G 43995046.61 43995046.78 43995046.98 0.0089 0.0049

Uranus 115742-07-05 22:46 G 43995143.27 43995143.45 43995143.66 0.0139 0.0062

Neptune 115742-11-11 19:53 G 43995272.18 43995272.33 43995272.50 0.0089 0.0059

Uranus 115743-02-17 07:10 G 43995369.64 43995369.80 43995369.99 0.0139 0.0080

Neptune 115743-06-25 08:51 G 43995497.75 43995497.87 43995498.02 0.0089 0.0069

Uranus 115743-10-01 15:48 G 43995596.02 43995596.16 43995596.33 0.0139 0.0098

Neptune 115744-02-05 21:48 G 43995723.33 43995723.41 43995723.54 0.0090 0.0079

Uranus 115744-05-15 00:27 G 43995822.43 43995822.52 43995822.66 0.0139 0.0117

Neptune 115744-09-18 11:00 G 43995948.94 43995948.96 43995949.02 0.0090 0.0088

Uranus 115744-12-27 09:48 G 43996048.86 43996048.91 43996048.98 0.0140 0.0134

Jupiter 115747-02-23 22:32 G 43996837.27 43996837.44 43996837.60 0.0501 0.0282

Saturn 115749-04-05 00:12 G 43997608.45 43997608.51 43997608.59 0.0286 0.0268

Saturn 115749-11-20 16:03 G 43997837.97 43997838.17 43997838.37 0.0287 0.0091

Jupiter 115752-05-07 02:08 G 43998736.43 43998736.59 43998736.75 0.0532 0.0323

Jupiter 115758-10-29 21:20 G 44001103.18 44001103.39 44001103.59 0.0498 0.0010

Saturn 115763-09-24 23:58 G 44002894.31 44002894.50 44002894.70 0.0274 0.0116

Saturn 115764-05-11 07:24 G 44003123.66 44003123.81 44003123.95 0.0273 0.0198

Jupiter 115764-09-04 13:24 G 44003240.00 44003240.06 44003240.12 0.0526 0.0499

Jupiter 115770-07-04 23:00 G 44005369.29 44005369.46 44005369.64 0.0496 0.0250

Jupiter 115776-05-10 05:58 G 44007505.56 44007505.75 44007505.94 0.0529 0.0189

Uranus 115776-08-12 12:12 G 44007599.94 44007600.01 44007600.09 0.0141 0.0132

Uranus 115777-03-26 22:32 G 44007826.33 44007826.44 44007826.59 0.0141 0.0114

Uranus 115777-11-08 09:34 G 44008052.74 44008052.90 44008053.06 0.0140 0.0095

Uranus 115778-06-22 19:39 G 44008279.15 44008279.32 44008279.52 0.0140 0.0076

Saturn 115778-10-16 02:51 G 44008394.50 44008394.62 44008394.76 0.0285 0.0226

Uranus 115779-02-04 05:58 G 44008505.55 44008505.75 44008505.95 0.0140 0.0057

Saturn 115779-06-02 18:41 G 44008624.10 44008624.28 44008624.47 0.0286 0.0133

Uranus 115779-09-18 16:03 G 44008731.96 44008732.17 44008732.38 0.0140 0.0038

Uranus 115780-05-02 01:39 G 44008958.36 44008958.57 44008958.79 0.0140 0.0020

Uranus 115780-12-14 11:29 G 44009184.76 44009184.98 44009185.20 0.0140 0.0002

Uranus 115781-07-28 20:51 G 44009411.16 44009411.37 44009411.59 0.0139 0.0018

Uranus 115782-03-12 06:12 G 44009637.55 44009637.76 44009637.97 0.0139 0.0037

Uranus 115782-10-24 15:05 G 44009863.94 44009864.13 44009864.34 0.0139 0.0055

Jupiter 115782-11-01 07:53 G 44009871.73 44009871.83 44009871.94 0.0502 0.0431

Mars 115782-11-25 20:08 G 44009896.25 44009896.34 44009896.44 0.1772 0.1440

Uranus 115783-06-07 23:58 G 44010090.32 44010090.50 44010090.69 0.0139 0.0073

Uranus 115784-01-20 08:36 G 44010316.71 44010316.86 44010317.04 0.0139 0.0091

Uranus 115784-09-02 16:46 G 44010543.09 44010543.20 44010543.36 0.0139 0.0109

Uranus 115785-04-17 01:10 G 44010769.48 44010769.55 44010769.66 0.0138 0.0126

Jupiter 115788-01-13 21:20 G 44011771.20 44011771.39 44011771.59 0.0531 0.0129

Mars 115789-05-09 19:24 G 44012253.20 44012253.31 44012253.43 0.1769 0.1294

Saturn 115793-04-06 00:27 G 44013680.32 44013680.52 44013680.73 0.0273 0.0084

Saturn 115793-11-21 07:53 G 44013909.72 44013909.83 44013909.95 0.0272 0.0230

Jupiter 115794-07-07 10:03 G 44014137.73 44014137.92 44014138.11 0.0500 0.0169

Jupiter 115799-09-18 10:03 G 44016036.82 44016036.92 44016037.03 0.0533 0.0458

Jupiter 115806-03-13 11:15 G 44018403.77 44018403.97 44018404.17 0.0497 0.0094

Saturn 115808-04-28 09:20 G 44019180.73 44019180.89 44019181.06 0.0286 0.0175

Saturn 115808-12-14 01:24 G 44019410.40 44019410.56 44019410.72 0.0287 0.0185

Jupiter 115812-01-17 20:08 G 44020540.20 44020540.34 44020540.49 0.0527 0.0366

Mars 115814-11-26 00:56 G 44021583.45 44021583.54 44021583.63 0.1788 0.1479

Neptune 115815-02-09 00:41 G 44021658.46 44021658.53 44021658.63 0.0088 0.0080

Neptune 115815-09-22 13:10 G 44021883.94 44021884.05 44021884.20 0.0088 0.0071

Neptune 115816-05-05 02:22 G 44022109.44 44022109.60 44022109.76 0.0088 0.0062

Neptune 115816-12-16 14:51 G 44022334.95 44022335.12 44022335.30 0.0088 0.0052

Neptune 115817-07-30 03:20 G 44022560.46 44022560.64 44022560.85 0.0088 0.0043

Jupiter 115817-11-16 11:00 G 44022669.83 44022669.96 44022670.11 0.0495 0.0360

Neptune 115818-03-12 16:03 G 44022785.98 44022786.17 44022786.39 0.0088 0.0034

Neptune 115818-10-24 05:00 G 44023011.50 44023011.71 44023011.92 0.0088 0.0024

Uranus 115819-05-12 23:00 G 44023212.45 44023212.46 44023212.49 0.0137 0.0136

Neptune 115819-06-06 17:44 G 44023237.03 44023237.24 44023237.46 0.0088 0.0015

Uranus 115819-12-25 05:15 G 44023438.64 44023438.72 44023438.84 0.0137 0.0121

Neptune 115820-01-18 06:27 G 44023462.56 44023462.77 44023463.00 0.0088 0.0006

Uranus 115820-08-07 11:58 G 44023664.87 44023665.00 44023665.15 0.0137 0.0104

Neptune 115820-08-30 19:10 G 44023688.09 44023688.30 44023688.53 0.0088 0.0004

Uranus 115821-03-21 18:56 G 44023891.12 44023891.29 44023891.46 0.0138 0.0087

Neptune 115821-04-13 07:53 G 44023913.62 44023913.83 44023914.05 0.0088 0.0013

Uranus 115821-11-03 01:39 G 44024117.39 44024117.57 44024117.76 0.0138 0.0070

Neptune 115821-11-24 20:36 G 44024139.16 44024139.36 44024139.58 0.0088 0.0023

Uranus 115822-06-17 08:51 G 44024343.68 44024343.87 44024344.08 0.0138 0.0053

Neptune 115822-07-08 09:34 G 44024364.70 44024364.90 44024365.12 0.0088 0.0032

Saturn 115822-10-18 09:05 G 44024466.67 44024466.88 44024467.10 0.0274 0.0028

Uranus 115823-01-29 16:17 G 44024569.97 44024570.18 44024570.39 0.0138 0.0035

Neptune 115823-02-18 22:32 G 44024590.25 44024590.44 44024590.64 0.0088 0.0041

Uranus 115823-09-12 23:44 G 44024796.28 44024796.49 44024796.71 0.0138 0.0017

Jupiter 115823-09-22 12:12 G 44024805.81 44024806.01 44024806.21 0.0530 0.0050

Neptune 115823-10-02 11:00 G 44024815.80 44024815.96 44024816.16 0.0088 0.0051

Uranus 115824-04-26 07:24 G 44025022.60 44025022.81 44025023.03 0.0138 0.0003

Neptune 115824-05-15 00:12 G 44025041.36 44025041.51 44025041.68 0.0088 0.0060

Uranus 115824-12-08 15:20 G 44025248.93 44025249.14 44025249.35 0.0139 0.0019

Neptune 115824-12-26 13:24 G 44025266.92 44025267.06 44025267.19 0.0088 0.0069

Uranus 115825-07-22 23:00 G 44025475.26 44025475.46 44025475.68 0.0139 0.0038

Neptune 115825-08-09 01:53 G 44025492.50 44025492.58 44025492.69 0.0088 0.0079

Uranus 115826-03-06 07:10 G 44025701.61 44025701.80 44025702.01 0.0139 0.0056

Uranus 115826-10-18 15:20 G 44025927.97 44025928.14 44025928.34 0.0139 0.0074

Uranus 115827-06-01 23:58 G 44026154.36 44026154.50 44026154.68 0.0139 0.0092

Uranus 115828-01-14 09:05 G 44026380.75 44026380.88 44026381.01 0.0139 0.0110

Uranus 115828-08-27 17:44 G 44026607.16 44026607.24 44026607.33 0.0140 0.0128

Jupiter 115830-03-15 19:10 G 44027172.15 44027172.30 44027172.46 0.0500 0.0316

Jupiter 115835-05-28 04:17 G 44029071.51 44029071.68 44029071.86 0.0532 0.0269

Saturn 115837-11-08 12:12 G 44029966.82 44029967.01 44029967.19 0.0285 0.0133

Saturn 115838-06-26 03:48 G 44030196.54 44030196.66 44030196.80 0.0286 0.0227

Jupiter 115841-11-18 20:51 G 44031438.17 44031438.37 44031438.58 0.0498 0.0055

Saturn 115852-04-29 08:51 G 44035252.66 44035252.87 44035253.08 0.0273 0.0002

Moon 115852-08-26 16:17 G 44035372.11 44035372.18 44035372.24 0.2651 0.2433

Jupiter 115853-07-24 23:29 G 44035704.29 44035704.48 44035704.66 0.0496 0.0204

Jupiter 115859-05-31 05:00 G 44037840.53 44037840.71 44037840.89 0.0528 0.0236

Uranus 115860-04-12 18:27 G 44038158.26 44038158.27 44038158.31 0.0141 0.0140

Moon 115860-08-24 02:22 G 44038291.47 44038291.60 44038291.73 0.2656 0.1519

Earth 115860-08-24 07:10 G 44038291.65 44038291.80 44038291.95 0.2659 0.0871 *

Uranus 115860-11-25 05:44 G 44038384.63 44038384.74 44038384.85 0.0141 0.0121

Uranus 115861-07-09 16:03 G 44038611.03 44038611.17 44038611.33 0.0140 0.0102

Uranus 115862-02-21 02:36 G 44038837.44 44038837.61 44038837.79 0.0140 0.0083

Uranus 115862-10-05 12:56 G 44039063.85 44039064.04 44039064.24 0.0140 0.0064

Uranus 115863-05-19 23:00 G 44039290.26 44039290.46 44039290.67 0.0140 0.0045

Uranus 115864-01-01 08:51 G 44039516.66 44039516.87 44039517.09 0.0140 0.0027

Uranus 115864-08-14 18:41 G 44039743.06 44039743.28 44039743.50 0.0140 0.0008

Uranus 115865-03-29 04:17 G 44039969.46 44039969.68 44039969.90 0.0139 0.0011

Jupiter 115865-03-30 01:10 G 44039970.48 44039970.55 44039970.63 0.0494 0.0459

Pluto 115865-05-11 08:08 G 44040012.74 44040012.84 44040012.98 0.0063 0.0052

Uranus 115865-11-10 13:39 G 44040195.86 44040196.07 44040196.29 0.0139 0.0030

Jupiter 115865-11-21 08:22 G 44040206.80 44040206.85 44040206.91 0.0502 0.0480

Pluto 115865-12-22 11:44 G 44040237.79 44040237.99 44040238.21 0.0063 0.0015

Uranus 115866-06-24 22:46 G 44040422.25 44040422.45 44040422.66 0.0139 0.0048

Pluto 115866-08-04 14:51 G 44040462.93 44040463.12 44040463.33 0.0063 0.0022

Uranus 115867-02-06 07:24 G 44040648.63 44040648.81 44040649.02 0.0139 0.0067

Pluto 115867-03-17 18:12 G 44040688.19 44040688.26 44040688.35 0.0063 0.0059

Saturn 115867-05-21 17:00 G 44040753.02 44040753.21 44040753.42 0.0286 0.0086

Uranus 115867-09-20 16:03 G 44040875.02 44040875.17 44040875.36 0.0139 0.0085

Saturn 115868-01-06 09:20 G 44040982.84 44040982.89 44040982.95 0.0287 0.0275

Uranus 115868-05-04 00:56 G 44041101.40 44041101.54 44041101.69 0.0139 0.0102

Uranus 115868-12-16 09:05 G 44041327.79 44041327.88 44041328.00 0.0138 0.0120

Uranus 115869-07-30 17:15 G 44041554.20 44041554.22 44041554.27 0.0138 0.0136

Jupiter 115871-02-02 19:53 G 44042106.13 44042106.33 44042106.53 0.0531 0.0084

Jupiter 115877-07-27 07:24 G 44044472.63 44044472.81 44044473.00 0.0499 0.0205

Mars 115880-09-22 09:34 G 44045625.76 44045625.90 44045626.04 0.1783 0.1034

Saturn 115881-03-25 08:08 G 44045809.79 44045809.84 44045809.91 0.0275 0.0262

Saturn 115881-11-09 17:00 G 44046039.00 44046039.21 44046039.42 0.0274 0.0058

Jupiter 115882-10-08 10:32 G 44046371.81 44046371.94 44046372.07 0.0534 0.0410

Mars 115887-03-07 13:24 G 44047982.95 44047983.06 44047983.17 0.1758 0.1364

Jupiter 115889-04-01 09:05 G 44048738.68 44048738.88 44048739.08 0.0497 0.0056

Jupiter 115895-02-05 22:46 G 44050875.34 44050875.45 44050875.58 0.0527 0.0423

Saturn 115896-11-30 20:22 G 44051539.15 44051539.35 44051539.56 0.0285 0.0042

Neptune 115897-11-09 23:44 G 44051883.49 44051883.49 44051883.52 0.0089 0.0089

Neptune 115898-06-23 12:56 G 44052108.96 44052109.04 44052109.16 0.0089 0.0080

Neptune 115899-02-04 02:36 G 44052334.48 44052334.61 44052334.76 0.0089 0.0070

Neptune 115899-09-17 15:34 G 44052560.01 44052560.15 44052560.34 0.0089 0.0060

Neptune 115900-05-01 05:00 G 44052785.55 44052785.71 44052785.91 0.0089 0.0051

Jupiter 115900-12-06 11:15 G 44053004.81 44053004.97 44053005.12 0.0495 0.0315

Neptune 115900-12-12 18:41 G 44053011.09 44053011.28 44053011.49 0.0089 0.0040

Neptune 115901-07-26 08:08 G 44053236.64 44053236.84 44053237.05 0.0089 0.0031

Neptune 115902-03-08 21:34 G 44053462.18 44053462.40 44053462.61 0.0089 0.0021

Neptune 115902-10-20 10:46 G 44053687.73 44053687.95 44053688.17 0.0089 0.0011

Neptune 115903-06-02 23:58 G 44053913.28 44053913.50 44053913.72 0.0089 0.0002

Uranus 115903-08-25 14:22 G 44053997.03 44053997.10 44053997.19 0.0137 0.0127

Neptune 115904-01-14 13:24 G 44054138.84 44054139.06 44054139.28 0.0089 0.0009

Uranus 115904-04-07 20:51 G 44054223.26 44054223.37 44054223.51 0.0137 0.0110

Neptune 115904-08-27 02:36 G 44054364.39 44054364.61 44054364.82 0.0089 0.0019

Uranus 115904-11-20 03:34 G 44054449.51 44054449.65 44054449.82 0.0138 0.0094

Neptune 115905-04-09 15:34 G 44054589.95 44054590.15 44054590.36 0.0089 0.0028

Uranus 115905-07-04 10:32 G 44054675.77 44054675.94 44054676.13 0.0138 0.0077

Neptune 115905-11-21 04:32 G 44054815.51 44054815.69 44054815.90 0.0089 0.0039

Uranus 115906-02-15 17:44 G 44054902.05 44054902.24 44054902.44 0.0138 0.0059

Neptune 115906-07-04 17:58 G 44055041.07 44055041.25 44055041.44 0.0089 0.0048

Uranus 115906-09-30 00:56 G 44055128.34 44055128.54 44055128.75 0.0138 0.0041

Jupiter 115906-10-12 14:51 G 44055140.93 44055141.12 44055141.32 0.0530 0.0111

Neptune 115907-02-15 06:56 G 44055266.63 44055266.79 44055266.97 0.0089 0.0058

Uranus 115907-05-14 08:22 G 44055354.64 44055354.85 44055355.07 0.0138 0.0024

Neptune 115907-09-28 19:39 G 44055492.20 44055492.32 44055492.49 0.0089 0.0068

Uranus 115907-12-26 16:03 G 44055580.95 44055581.17 44055581.39 0.0138 0.0006

Neptune 115908-05-11 09:05 G 44055717.78 44055717.88 44055718.00 0.0090 0.0077

Uranus 115908-08-08 23:44 G 44055807.27 44055807.49 44055807.71 0.0139 0.0012

Neptune 115908-12-22 22:03 G 44055943.38 44055943.42 44055943.49 0.0090 0.0087

Uranus 115909-03-23 07:24 G 44056033.60 44056033.81 44056034.03 0.0139 0.0031

Uranus 115909-11-04 15:20 G 44056259.95 44056260.14 44056260.35 0.0139 0.0049

Uranus 115910-06-18 23:44 G 44056486.31 44056486.49 44056486.69 0.0139 0.0067

Saturn 115910-10-06 07:24 G 44056595.70 44056595.81 44056595.92 0.0274 0.0234

Uranus 115911-01-31 08:08 G 44056712.68 44056712.84 44056713.02 0.0139 0.0086

Saturn 115911-05-23 15:48 G 44056824.96 44056825.16 44056825.37 0.0273 0.0085

Uranus 115911-09-14 16:32 G 44056939.06 44056939.19 44056939.35 0.0139 0.0104

Uranus 115912-04-28 01:24 G 44057165.46 44057165.56 44057165.67 0.0140 0.0122

Uranus 115912-12-10 10:17 G 44057391.93 44057391.93 44057391.95 0.0140 0.0140

Jupiter 115913-04-04 20:22 G 44057507.21 44057507.35 44057507.49 0.0501 0.0368

Jupiter 115918-06-17 04:46 G 44059406.52 44059406.70 44059406.89 0.0532 0.0216

Jupiter 115924-12-08 21:48 G 44061773.21 44061773.41 44061773.61 0.0499 0.0105

Saturn 115926-06-13 23:58 G 44062325.29 44062325.50 44062325.72 0.0286 0.0007

Jupiter 115936-08-13 21:48 G 44066039.22 44066039.41 44066039.61 0.0496 0.0165

Saturn 115940-04-17 14:51 G 44067381.97 44067382.12 44067382.29 0.0275 0.0179

Saturn 115940-12-02 23:29 G 44067611.30 44067611.48 44067611.66 0.0274 0.0139

Jupiter 115942-06-20 05:58 G 44068175.58 44068175.75 44068175.92 0.0529 0.0288

Uranus 115944-07-26 11:58 G 44068942.93 44068943.00 44068943.10 0.0141 0.0129

Uranus 115945-03-09 22:46 G 44069169.32 44069169.45 44069169.60 0.0140 0.0110

Uranus 115945-10-22 09:34 G 44069395.74 44069395.90 44069396.07 0.0140 0.0091

Uranus 115946-06-05 20:08 G 44069622.15 44069622.34 44069622.53 0.0140 0.0072

Mars 115946-07-21 17:58 G 44069668.09 44069668.25 44069668.41 0.1779 0.0582

Uranus 115947-01-18 06:12 G 44069848.56 44069848.76 44069848.97 0.0140 0.0052

Uranus 115947-09-01 16:03 G 44070074.97 44070075.17 44070075.39 0.0140 0.0034

Uranus 115948-04-15 02:08 G 44070301.37 44070301.59 44070301.81 0.0140 0.0014

Jupiter 115948-04-18 23:58 G 44070305.40 44070305.50 44070305.61 0.0494 0.0420

Uranus 115948-11-27 11:58 G 44070527.78 44070528.00 44070528.22 0.0140 0.0005

Uranus 115949-07-11 21:20 G 44070754.18 44070754.39 44070754.61 0.0139 0.0023

Uranus 115950-02-23 06:27 G 44070980.57 44070980.77 44070980.98 0.0139 0.0042

Uranus 115950-10-07 15:34 G 44071206.95 44071207.15 44071207.35 0.0139 0.0060

Uranus 115951-05-22 00:27 G 44071433.34 44071433.52 44071433.70 0.0139 0.0078

Uranus 115952-01-03 09:05 G 44071659.73 44071659.88 44071660.04 0.0139 0.0096

Uranus 115952-08-16 17:15 G 44071886.11 44071886.22 44071886.36 0.0139 0.0114

Mars 115953-01-02 20:22 G 44072025.20 44072025.35 44072025.51 0.1762 0.0903

Uranus 115953-03-31 01:24 G 44072112.50 44072112.56 44072112.64 0.0138 0.0131

Jupiter 115954-02-22 22:17 G 44072441.23 44072441.43 44072441.63 0.0531 0.0028

Saturn 115955-12-25 04:03 G 44073111.46 44073111.67 44073111.88 0.0285 0.0047

Pluto 115956-02-05 18:12 G 44073154.10 44073154.26 44073154.44 0.0081 0.0054

Pluto 115956-09-18 05:44 G 44073379.55 44073379.74 44073379.97 0.0081 0.0029

Jupiter 115960-08-16 07:53 G 44074807.66 44074807.83 44074808.01 0.0500 0.0254

Jupiter 115965-10-28 13:53 G 44076706.94 44076707.08 44076707.24 0.0533 0.0348

Saturn 115969-10-28 13:39 G 44078167.90 44078168.07 44078168.25 0.0274 0.0153

Saturn 115970-06-14 22:03 G 44078397.26 44078397.42 44078397.59 0.0273 0.0166

Jupiter 115972-04-21 10:17 G 44079073.72 44079073.93 44079074.13 0.0498 0.0010

Earth 115974-03-02 02:22 G 44079753.51 44079753.60 44079753.70 0.2675 0.2174

Jupiter 115978-02-25 23:44 G 44081210.40 44081210.49 44081210.57 0.0526 0.0476

Neptune 115979-05-14 11:44 G 44081652.93 44081652.99 44081653.09 0.0088 0.0081

Neptune 115979-12-26 00:12 G 44081878.41 44081878.51 44081878.66 0.0088 0.0073

Neptune 115980-08-07 12:56 G 44082103.91 44082104.04 44082104.22 0.0088 0.0063

Neptune 115981-03-21 01:53 G 44082329.41 44082329.58 44082329.76 0.0088 0.0053

Neptune 115981-11-01 14:22 G 44082554.93 44082555.10 44082555.31 0.0088 0.0045

Earth 115982-02-27 17:29 G 44082673.10 44082673.23 44082673.36 0.2673 0.1518

Moon 115982-02-27 19:10 G 44082673.17 44082673.30 44082673.43 0.2667 0.1640 *

Neptune 115982-06-15 03:20 G 44082780.45 44082780.64 44082780.85 0.0088 0.0035

Neptune 115983-01-26 16:17 G 44083005.97 44083006.18 44083006.39 0.0088 0.0025

Neptune 115983-09-09 04:46 G 44083231.49 44083231.70 44083231.92 0.0088 0.0016

Jupiter 115983-12-26 12:27 G 44083339.85 44083340.02 44083340.19 0.0496 0.0265

Neptune 115984-04-21 17:29 G 44083457.02 44083457.23 44083457.46 0.0088 0.0007

Saturn 115984-11-18 15:48 G 44083668.10 44083668.16 44083668.24 0.0285 0.0267

Neptune 115984-12-03 06:27 G 44083682.55 44083682.77 44083682.99 0.0088 0.0003

Saturn 115985-07-06 06:41 G 44083897.59 44083897.78 44083897.99 0.0286 0.0089

Neptune 115985-07-16 19:10 G 44083908.08 44083908.30 44083908.52 0.0088 0.0012

Neptune 115986-02-27 07:53 G 44084133.62 44084133.83 44084134.05 0.0088 0.0021

Neptune 115986-10-10 20:22 G 44084359.16 44084359.35 44084359.57 0.0088 0.0031

Uranus 115987-04-24 23:15 G 44084555.44 44084555.47 44084555.54 0.0137 0.0133

Neptune 115987-05-24 09:34 G 44084584.70 44084584.90 44084585.10 0.0088 0.0040

Uranus 115987-12-07 05:58 G 44084781.65 44084781.75 44084781.87 0.0137 0.0117

Neptune	115988-01-04 22:03 G	44084810.25	44084810.42	44084810.62	0.0088	0.0050
Uranus	115988-07-20 12:41 G	44085007.89	44085008.03	44085008.18	0.0137	0.0100
Neptune	115988-08-17 11:00 G	44085035.81	44085035.96	44085036.14	0.0088	0.0059
Uranus	115989-03-03 19:24 G	44085234.14	44085234.31	44085234.48	0.0138	0.0083
Neptune	115989-03-30 23:58 G	44085261.37	44085261.50	44085261.65	0.0088	0.0068
Uranus	115989-10-16 02:08 G	44085460.41	44085460.59	44085460.79	0.0138	0.0066
Jupiter	115989-10-31 14:36 G	44085475.92	44085476.11	44085476.31	0.0529	0.0161
Neptune	115989-11-11 12:27 G	44085486.95	44085487.02	44085487.15	0.0088	0.0078
Uranus	115990-05-30 09:34 G	44085686.70	44085686.90	44085687.11	0.0138	0.0048
Neptune	115990-06-25 01:39 G	44085712.56	44085712.57	44085712.62	0.0088	0.0087
Uranus	115991-01-11 17:00 G	44085913.00	44085913.21	44085913.42	0.0138	0.0030
Uranus	115991-08-26 00:12 G	44086139.30	44086139.51	44086139.73	0.0138	0.0013
Uranus	115992-04-08 07:53 G	44086365.61	44086365.83	44086366.05	0.0138	0.0006
Uranus	115992-11-20 15:34 G	44086591.94	44086592.15	44086592.37	0.0139	0.0024
Uranus	115993-07-04 23:29 G	44086818.28	44086818.48	44086818.69	0.0139	0.0043
Uranus	115994-02-16 07:24 G	44087044.63	44087044.81	44087045.02	0.0139	0.0061
Uranus	115994-09-30 15:34 G	44087270.99	44087271.15	44087271.34	0.0139	0.0080
Uranus	115995-05-15 00:12 G	44087497.37	44087497.51	44087497.68	0.0139	0.0098
Uranus	115995-12-27 08:51 G	44087723.76	44087723.87	44087724.00	0.0139	0.0116
Jupiter	115996-04-23 19:10 G	44087842.19	44087842.30	44087842.42	0.0501	0.0409
Uranus	115996-08-09 17:29 G	44087950.19	44087950.23	44087950.31	0.0140	0.0134
Saturn	115999-05-10 20:36 G	44088954.16	44088954.36	44088954.56	0.0275	0.0100
Saturn	115999-12-26 05:00 G	44089183.59	44089183.71	44089183.84	0.0274	0.0218

117TH MILLENNIUM CE

This is a list of transits of Venus in the 117th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**116001-07-06 05:00**	**G**	**44089741.52**	**44089741.71**	**44089741.91**	**0.0532**	**0.0168**	
Jupiter	**116007-12-28 20:51**	**G**	**44092108.18**	**44092108.37**	**44092108.57**	**0.0498**	**0.0145**	
Mars	**116012-05-18 03:05**	**G**	**44093710.46**	**44093710.63**	**44093710.80**	**0.1774**	**0.0166**	
Jupiter	**116013-03-10 20:36**	**G**	**44094007.29**	**44094007.36**	**44094007.45**	**0.0535**	**0.0489**	
Saturn	**116014-05-31 21:05**	**G**	**44094454.25**	**44094454.38**	**44094454.52**	**0.0284**	**0.0217**	
Saturn	**116015-01-16 11:44**	**G**	**44094683.81**	**44094683.99**	**44094684.18**	**0.0285**	**0.0136**	
Mars	**116018-10-31 03:34**	**G**	**44096067.48**	**44096067.65**	**44096067.83**	**0.1767**	**0.0436**	
Jupiter	**116019-09-02 22:17**	**G**	**44096374.23**	**44096374.43**	**44096374.63**	**0.0496**	**0.0117**	
Jupiter	**116025-07-09 09:34**	**G**	**44098510.75**	**44098510.90**	**44098511.05**	**0.0528**	**0.0351**	
Uranus	**116028-03-25 18:12**	**G**	**44099501.22**	**44099501.26**	**44099501.32**	**0.0141**	**0.0136**	
Uranus	**116028-11-07 05:00**	**G**	**44099727.61**	**44099727.71**	**44099727.85**	**0.0141**	**0.0118**	
Saturn	**116028-11-19 19:39**	**G**	**44099740.11**	**44099740.32**	**44099740.53**	**0.0274**	**0.0073**	
Uranus	**116029-06-21 15:48**	**G**	**44099954.02**	**44099954.16**	**44099954.33**	**0.0140**	**0.0098**	
Saturn	**116029-07-07 03:34**	**G**	**44099969.57**	**44099969.65**	**44099969.76**	**0.0273**	**0.0245**	
Uranus	**116030-02-03 02:22**	**G**	**44100180.43**	**44100180.60**	**44100180.79**	**0.0140**	**0.0079**	
Uranus	**116030-09-17 12:41**	**G**	**44100406.84**	**44100407.03**	**44100407.24**	**0.0140**	**0.0060**	
Uranus	**116031-05-01 22:46**	**G**	**44100633.25**	**44100633.45**	**44100633.67**	**0.0140**	**0.0041**	
Jupiter	**116031-05-09 00:56**	**G**	**44100640.41**	**44100640.54**	**44100640.68**	**0.0494**	**0.0371**	
Uranus	**116031-12-14 09:05**	**G**	**44100859.66**	**44100859.88**	**44100860.10**	**0.0140**	**0.0022**	
Uranus	**116032-07-27 18:41**	**G**	**44101086.07**	**44101086.28**	**44101086.50**	**0.0140**	**0.0004**	
Uranus	**116033-03-11 04:17**	**G**	**44101312.46**	**44101312.68**	**44101312.90**	**0.0139**	**0.0016**	
Uranus	**116033-10-23 13:39**	**G**	**44101538.86**	**44101539.07**	**44101539.28**	**0.0139**	**0.0035**	
Uranus	**116034-06-06 22:32**	**G**	**44101765.25**	**44101765.44**	**44101765.65**	**0.0139**	**0.0054**	
Uranus	**116035-01-19 07:39**	**G**	**44101991.64**	**44101991.82**	**44101992.01**	**0.0139**	**0.0072**	
Uranus	**116035-09-02 16:17**	**G**	**44102218.02**	**44102218.18**	**44102218.35**	**0.0139**	**0.0090**	
Uranus	**116036-04-16 00:41**	**G**	**44102444.41**	**44102444.53**	**44102444.68**	**0.0139**	**0.0108**	

Uranus 116036-11-28 09:20 G 44102670.80 44102670.89 44102670.98 0.0138 0.0125

Jupiter 116037-03-13 23:58 G 44102776.30 44102776.50 44102776.70 0.0530 0.0030

Jupiter 116043-09-05 09:34 G 44105142.74 44105142.90 44105143.06 0.0500 0.0307

Saturn 116043-12-11 22:46 G 44105240.29 44105240.45 44105240.61 0.0285 0.0180

Saturn 116044-07-28 13:24 G 44105469.91 44105470.06 44105470.24 0.0286 0.0176

Jupiter 116048-11-16 14:22 G 44107041.93 44107042.10 44107042.27 0.0533 0.0296

Jupiter 116055-05-11 10:03 G 44109408.71 44109408.92 44109409.12 0.0497 0.0038

Saturn 116058-06-02 02:08 G 44110526.38 44110526.59 44110526.80 0.0275 0.0022

Jupiter 116061-03-16 23:44 G 44111545.49 44111545.49 44111545.51 0.0527 0.0526

Neptune 116062-09-25 23:58 G 44112103.42 44112103.50 44112103.61 0.0089 0.0080

Neptune 116063-05-09 13:24 G 44112328.94 44112329.06 44112329.21 0.0089 0.0071

Neptune 116063-12-21 02:36 G 44112554.47 44112554.61 44112554.79 0.0089 0.0062

Neptune 116064-08-02 16:03 G 44112780.01 44112780.17 44112780.37 0.0089 0.0052

Neptune 116065-03-16 05:29 G 44113005.55 44113005.73 44113005.94 0.0089 0.0042

Neptune 116065-10-27 18:56 G 44113231.09 44113231.29 44113231.51 0.0089 0.0032

Neptune 116066-06-10 08:08 G 44113456.64 44113456.84 44113457.07 0.0089 0.0023

Jupiter 116067-01-14 11:58 G 44113674.82 44113675.00 44113675.19 0.0495 0.0221

Neptune 116067-01-21 21:48 G 44113682.19 44113682.41 44113682.63 0.0089 0.0012

Neptune 116067-09-04 11:15 G 44113907.75 44113907.97 44113908.19 0.0089 0.0003

Neptune 116068-04-17 00:27 G 44114133.30 44114133.52 44114133.74 0.0089 0.0008

Neptune 116068-11-28 13:39 G 44114358.86 44114359.07 44114359.29 0.0089 0.0018

Neptune 116069-07-12 02:51 G 44114584.42 44114584.62 44114584.84 0.0089 0.0027

Neptune 116070-02-22 15:48 G 44114809.98 44114810.16 44114810.38 0.0089 0.0038

Neptune 116070-10-06 05:15 G 44115035.54 44115035.72 44115035.91 0.0089 0.0047

Neptune 116071-05-19 18:12 G 44115261.10 44115261.26 44115261.44 0.0089 0.0057

Uranus 116071-08-06 14:36 G 44115340.03 44115340.11 44115340.22 0.0137 0.0123

Neptune 116071-12-31 07:10 G 44115486.68 44115486.80 44115486.97 0.0089 0.0067

Uranus 116072-03-19 21:05 G 44115566.26 44115566.38 44115566.53 0.0137 0.0107

Neptune 116072-08-12 20:36 G 44115712.25 44115712.36 44115712.48 0.0090 0.0076

Uranus 116072-11-01 03:48 G 44115792.51 44115792.66 44115792.84 0.0137 0.0090

Jupiter 116072-11-19 16:17 G 44115811.00 44115811.18 44115811.37 0.0530 0.0215

Neptune 116073-03-26 09:20 G 44115937.85 44115937.89 44115937.97 0.0090 0.0086

Uranus 116073-06-15 11:00 G 44116018.78 44116018.96 44116019.15 0.0138 0.0072

Saturn 116073-06-23 05:00 G 44116026.53 44116026.71 44116026.90 0.0284 0.0128

Uranus 116074-01-27 17:44 G 44116245.06 44116245.24 44116245.45 0.0138 0.0055

Saturn 116074-02-07 19:39 G 44116256.20 44116256.32 44116256.45 0.0285 0.0227

Uranus 116074-09-11 01:10 G 44116471.34 44116471.55 44116471.76 0.0138 0.0037

Uranus 116075-04-25 08:36 G 44116697.65 44116697.86 44116698.07 0.0138 0.0019

Uranus 116075-12-07 16:03 G 44116923.96 44116924.17 44116924.39 0.0138 0.0001

Uranus 116076-07-20 23:44 G 44117150.27 44117150.49 44117150.70 0.0139 0.0018

Uranus 116077-03-04 07:24 G 44117376.60 44117376.81 44117377.02 0.0139 0.0036

Uranus 116077-10-16 15:20 G 44117602.94 44117603.14 44117603.34 0.0139 0.0054

Mars 116078-03-15 11:44 G 44117752.82 44117752.99 44117753.16 0.1770 0.0265

Uranus 116078-05-30 23:44 G 44117829.31 44117829.49 44117829.67 0.0139 0.0072

Jupiter 116078-09-19 13:24 G 44117941.02 44117941.06 44117941.12 0.0493 0.0478

Uranus 116079-01-12 07:39 G 44118055.67 44118055.82 44118056.00 0.0139 0.0091

Jupiter 116079-05-13 19:39 G 44118177.24 44118177.32 44118177.40 0.0501 0.0457

Uranus 116079-08-26 16:03 G 44118282.06 44118282.17 44118282.33 0.0139 0.0110

Uranus 116080-04-09 00:41 G 44118508.47 44118508.53 44118508.64 0.0140 0.0128

Jupiter 116084-07-25 08:51 G 44120076.67 44120076.87 44120077.07 0.0532 0.0103

Mars 116084-08-27 10:17 G 44120109.75 44120109.93 44120110.11 0.1771 0.0059

Saturn 116087-12-13 01:24 G 44121312.35 44121312.56 44121312.77 0.0274 0.0007

Jupiter 116091-01-16 21:48 G 44122443.22 44122443.41 44122443.60 0.0499 0.0196

Jupiter 116096-03-29 23:00 G 44124342.34 44124342.46 44124342.58 0.0534 0.0430

Jupiter 116102-09-22 23:44 G 44126709.29 44126709.49 44126709.70 0.0497 0.0066

Saturn 116103-01-04 06:27 G 44126812.58 44126812.77 44126812.98 0.0285 0.0092

Saturn 116103-08-21 21:20 G 44127042.33 44127042.39 44127042.48 0.0286 0.0266

Moon 116103-08-27 09:05 G 44127047.71 44127047.88 44127048.05 0.2653 0.0483

Earth 116103-08-27 08:51 G 44127047.72 44127047.87 44127048.02 0.2660 0.0849 *

Jupiter 116108-07-29 09:20 G 44128845.77 44128845.89 44128846.03 0.0528 0.0402

Pluto 116111-06-11 17:15 G 44129893.09 44129893.22 44129893.40 0.0063 0.0043

Pluto 116112-01-22 21:05 G 44130118.16 44130118.38 44130118.59 0.0063 0.0006

Uranus 116112-07-08 11:00 G 44130285.88 44130285.96 44130286.08 0.0141 0.0125

Pluto 116112-09-04 00:12 G 44130343.32 44130343.51 44130343.70 0.0063 0.0031

Uranus 116113-02-19 22:03 G 44130512.28 44130512.42 44130512.57 0.0140 0.0106

Uranus 116113-10-04 08:36 G 44130738.70 44130738.86 44130739.04 0.0140 0.0087

Uranus 116114-05-18 19:10 G 44130965.11 44130965.30 44130965.50 0.0140 0.0067

Jupiter 116114-05-29 01:10 G 44130975.41 44130975.55 44130975.71 0.0494 0.0328

Uranus 116114-12-31 05:29 G 44131191.53 44131191.73 44131191.94 0.0140 0.0048

Uranus 116115-08-14 15:34 G 44131417.94 44131418.15 44131418.37 0.0140 0.0029

Uranus 116116-03-28 01:24 G 44131644.34 44131644.56 44131644.78 0.0140 0.0009

Saturn 116116-11-07 21:34 G 44131869.37 44131869.40 44131869.46 0.0276 0.0268

Uranus 116116-11-09 11:15 G 44131870.75 44131870.97 44131871.19 0.0139 0.0010

Uranus 116117-06-23 20:36 G 44132097.15 44132097.36 44132097.58 0.0139 0.0029

Saturn 116117-06-25 07:39 G 44132098.61 44132098.82 44132099.03 0.0275 0.0057

Uranus 116118-02-05 05:44 G 44132323.54 44132323.74 44132323.95 0.0139 0.0047

Uranus 116118-09-19 14:36 G 44132549.93 44132550.11 44132550.31 0.0139 0.0066

Uranus 116119-05-03 23:29 G 44132776.31 44132776.48 44132776.66 0.0139 0.0084

Uranus 116119-12-16 08:08 G 44133002.71 44133002.84 44133003.00 0.0139 0.0102

Jupiter 116120-04-02 23:00 G 44133111.26 44133111.46 44133111.66 0.0531 0.0075

Uranus 116120-07-29 16:46 G 44133229.09 44133229.20 44133229.31 0.0139 0.0119

Uranus 116121-03-13 00:27 G 44133455.51 44133455.52 44133455.58 0.0138 0.0137

Jupiter 116126-09-25 08:36 G 44135477.72 44135477.86 44135478.01 0.0500 0.0350

Jupiter 116131-12-07 14:51 G 44137376.94 44137377.12 44137377.30 0.0533 0.0247

Saturn 116132-07-16 13:53 G 44137598.87 44137599.08 44137599.29 0.0284 0.0036

Jupiter 116138-05-31 09:48 G 44139743.70 44139743.91 44139744.11 0.0497 0.0084

Neptune 116143-08-16 23:00 G 44141647.40 44141647.46 44141647.56 0.0088 0.0082

Mars 116144-01-11 20:51 G 44141795.22 44141795.37 44141795.53 0.1765 0.0674

Neptune 116144-03-29 11:29 G 44141872.89 44141872.98 44141873.13 0.0088 0.0074

Neptune 116144-11-10 00:41 G 44142098.38 44142098.53 44142098.69 0.0088 0.0064

Neptune 116145-06-23 13:24 G 44142323.90 44142324.06 44142324.24 0.0088 0.0054

Neptune 116146-02-04 01:53 G 44142549.41 44142549.58 44142549.78 0.0088 0.0045

Saturn 116146-05-20 22:17 G 44142655.33 44142655.43 44142655.54 0.0275 0.0235

Neptune 116146-09-17 14:36 G 44142774.92 44142775.11 44142775.32 0.0088 0.0036

Saturn 116147-01-05 07:53 G 44142884.63 44142884.83 44142885.03 0.0274 0.0088

Neptune 116147-05-01 03:34 G 44143000.44 44143000.65 44143000.86 0.0088 0.0026

Neptune 116147-12-12 16:03 G 44143225.96 44143226.17 44143226.40 0.0088 0.0017

Neptune 116148-07-25 05:00 G 44143451.49 44143451.71 44143451.93 0.0088 0.0008

Neptune 116149-03-07 17:44 G 44143677.02 44143677.24 44143677.46 0.0088 0.0002

Neptune 116149-10-19 06:27 G 44143902.55 44143902.77 44143902.99 0.0088 0.0011

Jupiter 116150-02-03 11:58 G 44144009.82 44144010.00 44144010.20 0.0496 0.0175

Neptune 116150-06-01 18:56 G 44144128.09 44144128.29 44144128.52 0.0088 0.0021

Mars 116150-06-25 17:00 G 44144152.05 44144152.21 44144152.38 0.1776 0.0549

Neptune 116151-01-13 07:39 G 44144353.63 44144353.82 44144354.04 0.0088 0.0030

Neptune 116151-08-26 20:36 G 44144579.17 44144579.36 44144579.56 0.0088 0.0039

Neptune 116152-04-08 08:51 G 44144804.71 44144804.87 44144805.08 0.0088 0.0049

Neptune 116152-11-19 21:48 G 44145030.26 44145030.41 44145030.59 0.0088 0.0058

Neptune 116153-07-03 11:00 G 44145255.83 44145255.96 44145256.11 0.0088 0.0067

Neptune 116154-02-13 23:58 G 44145481.40 44145481.50 44145481.61 0.0088 0.0076

Neptune 116154-09-27 12:27 G 44145706.99 44145707.02 44145707.09 0.0088 0.0086

Uranus 116155-04-06 23:44 G 44145898.44 44145898.49 44145898.58 0.0137 0.0129

Uranus 116155-11-19 06:12 G 44146124.65 44146124.76 44146124.90 0.0137 0.0113

Jupiter 116155-12-10 18:12 G 44146146.08 44146146.26 44146146.43 0.0529 0.0270

Uranus 116156-07-02 12:56 G 44146350.90 44146351.04 44146351.20 0.0137 0.0096

Uranus 116157-02-13 19:24 G 44146577.15 44146577.31 44146577.50 0.0138 0.0079

Uranus 116157-09-28 02:36 G 44146803.42 44146803.61 44146803.81 0.0138 0.0061

Uranus 116158-05-12 09:48 G 44147029.71 44147029.91 44147030.12 0.0138 0.0043

Uranus 116158-12-24 17:00 G 44147256.00 44147256.21 44147256.43 0.0138 0.0025

Uranus 116159-08-08 00:27 G 44147482.30 44147482.52 44147482.73 0.0138 0.0007

Uranus 116160-03-21 07:53 G 44147708.61 44147708.83 44147709.04 0.0138 0.0011

Uranus 116160-11-02 15:20 G 44147934.94 44147935.14 44147935.36 0.0139 0.0030

Uranus 116161-06-16 23:15 G 44148161.28 44148161.47 44148161.68 0.0139 0.0048

Jupiter 116161-10-09 14:22 G 44148276.01 44148276.10 44148276.21 0.0494 0.0431

Saturn 116162-01-26 15:20 G 44148384.93 44148385.14 44148385.35 0.0285 0.0004

Uranus 116162-01-29 07:24 G 44148387.62 44148387.81 44148388.01 0.0139 0.0066

Uranus 116162-09-12 15:34 G 44148613.98 44148614.15 44148614.33 0.0139 0.0084

Uranus 116163-04-26 23:44 G 44148840.36 44148840.49 44148840.65 0.0139 0.0103

Uranus 116163-12-09 08:22 G 44149066.76 44149066.85 44149066.97 0.0139 0.0121

Uranus 116164-07-22 17:15 G 44149293.22 44149293.22 44149293.25 0.0140 0.0139

Jupiter 116167-08-15 08:36 G 44150411.66 44150411.86 44150412.06 0.0532 0.0053

Jupiter 116174-02-05 21:48 G 44152778.23 44152778.41 44152778.59 0.0499 0.0241

Saturn 116175-12-01 04:17 G 44153441.52 44153441.68 44153441.83 0.0276 0.0187

Saturn 116176-07-17 13:39 G 44153670.89 44153671.07 44153671.26 0.0275 0.0137

Jupiter 116179-04-19 20:51 G 44154677.23 44154677.37 44154677.51 0.0535 0.0390

Jupiter 116185-10-11 23:15 G 44157044.26 44157044.47 44157044.67 0.0496 0.0022

Saturn 116191-08-09 00:12 G 44159171.30 44159171.51 44159171.71 0.0284 0.0060

Jupiter 116191-08-18 09:05 G 44159180.78 44159180.88 44159180.99 0.0528 0.0450

Uranus 116196-03-07 16:46 G 44160844.15 44160844.20 44160844.29 0.0141 0.0133

Uranus 116196-10-20 03:48 G 44161070.55 44161070.66 44161070.80 0.0141 0.0113

Uranus 116197-06-03 14:36 G 44161296.96 44161297.11 44161297.29 0.0140 0.0094

Jupiter 116197-06-17 00:12 G 44161310.35 44161310.51 44161310.68 0.0494 0.0284

Uranus 116198-01-16 01:24 G 44161523.37 44161523.56 44161523.75 0.0140 0.0075

Uranus 116198-08-30 11:29 G 44161749.79 44161749.98 44161750.19 0.0140 0.0056

Uranus 116199-04-13 21:48 G 44161976.20 44161976.41 44161976.63 0.0140 0.0036

Uranus 116199-11-26 07:53 G 44162202.61 44162202.83 44162203.05 0.0140 0.0017

Uranus 116200-07-10 17:44 G 44162429.02 44162429.24 44162429.46 0.0140 0.0003

Uranus 116201-02-22 03:05 G 44162655.42 44162655.63 44162655.85 0.0139 0.0022

Uranus 116201-10-06 12:27 G 44162881.81 44162882.02 44162882.23 0.0139 0.0040

Pluto 116202-03-08 03:20 G 44163034.46 44163034.64 44163034.85 0.0081 0.0040

Uranus 116202-05-20 21:20 G 44163108.20 44163108.39 44163108.60 0.0139 0.0059

Pluto 116202-10-19 15:05 G 44163259.94 44163260.13 44163260.32 0.0081 0.0042

Uranus 116203-01-02 06:27 G 44163334.59 44163334.77 44163334.96 0.0139 0.0077

Jupiter 116203-04-24 01:39 G 44163446.38 44163446.57 44163446.77 0.0531 0.0136

Uranus 116203-08-16 15:20 G 44163560.98 44163561.14 44163561.30 0.0139 0.0095

Uranus 116204-03-29 23:44 G 44163787.37 44163787.49 44163787.62 0.0139 0.0113

Uranus 116204-11-11 07:53 G 44164013.77 44164013.83 44164013.91 0.0138 0.0130

Saturn 116205-06-13 05:58 G 44164227.57 44164227.75 44164227.92 0.0275 0.0152

Saturn 116206-01-28 15:05 G 44164456.96 44164457.13 44164457.29 0.0274 0.0171

Jupiter 116209-10-15 08:22 G 44165812.73 44165812.85 44165812.98 0.0500 0.0396

Mars 116209-11-09 05:44 G 44165837.61 44165837.74 44165837.88 0.1761 0.1085

Jupiter 116214-12-27 16:32 G 44167712.00 44167712.19 44167712.38 0.0533 0.0190

Mars 116216-04-22 23:15 G 44168194.33 44168194.47 44168194.62 0.1781 0.1070

Earth 116217-03-04 03:05 G 44168509.53 44168509.63 44168509.73 0.2674 0.2084

Moon 116217-03-04 06:27 G 44168509.68 44168509.77 44168509.87 0.2679 0.2128 *

Saturn 116220-07-04 11:44 G 44169727.90 44169727.99 44169728.08 0.0284 0.0255

Saturn 116221-02-19 01:24 G 44169957.37 44169957.56 44169957.76 0.0285 0.0097

Jupiter 116221-06-20 10:17 G 44170078.74 44170078.93 44170079.13 0.0498 0.0133

Earth 116225-03-01 18:12 G 44171429.13 44171429.26 44171429.38 0.2672 0.1608

Moon 116225-03-01 23:58 G 44171429.36 44171429.50 44171429.65 0.2671 0.1137 *

Jupiter 116226-09-01 06:12 G 44171977.72 44171977.76 44171977.81 0.0535 0.0519

Neptune 116226-12-30 11:00 G 44172097.88 44172097.96 44172098.06 0.0089 0.0081

Neptune 116227-08-12 23:58 G 44172323.40 44172323.50 44172323.66 0.0089 0.0073

Neptune 116228-03-25 13:24 G 44172548.93 44172549.06 44172549.24 0.0089 0.0063

Neptune 116228-11-06 03:05 G 44172774.46 44172774.63 44172774.82 0.0089 0.0052

Neptune 116229-06-19 16:32 G 44173000.00 44173000.19 44173000.39 0.0089 0.0043

Neptune 116230-01-31 05:58 G 44173225.55 44173225.75 44173225.96 0.0089 0.0033

Neptune 116230-09-13 18:56 G 44173451.09 44173451.29 44173451.52 0.0089 0.0024

Neptune 116231-04-27 08:22 G 44173676.64 44173676.85 44173677.08 0.0089 0.0014

Neptune 116231-12-08 22:03 G 44173902.20 44173902.42 44173902.64 0.0089 0.0003

Neptune 116232-07-21 11:15 G 44174127.75 44174127.97 44174128.19 0.0089 0.0007

Jupiter 116233-02-23 11:58 G 44174344.81 44174345.00 44174345.20 0.0495 0.0131

Neptune 116233-03-04 00:27 G 44174353.31 44174353.52 44174353.74 0.0089 0.0016

Neptune 116233-10-15 13:24 G 44174578.87 44174579.06 44174579.29 0.0089 0.0027

Neptune 116234-05-29 03:05 G 44174804.43 44174804.63 44174804.83 0.0089 0.0036

Saturn 116234-12-24 11:29 G 44175013.79 44175013.98 44175014.18 0.0275 0.0104

Neptune 116235-01-09 16:17 G 44175030.00 44175030.18 44175030.38 0.0089 0.0046

Saturn 116235-08-10 20:36 G 44175243.25 44175243.36 44175243.50 0.0275 0.0220

Neptune 116235-08-23 05:15 G 44175255.57 44175255.72 44175255.91 0.0089 0.0056

Neptune 116236-04-04 18:12 G 44175481.14 44175481.26 44175481.43 0.0089 0.0066

Neptune 116236-11-16 07:39 G 44175706.71 44175706.82 44175706.95 0.0089 0.0075

Neptune 116237-06-29 20:36 G 44175932.31 44175932.36 44175932.45 0.0090 0.0085

Uranus 116238-12-06 08:51 G 44176456.85 44176456.87 44176456.91 0.0137 0.0135

Jupiter 116238-12-30 15:20 G 44176480.98 44176481.14 44176481.31 0.0529 0.0310

Uranus 116239-07-20 15:20 G 44176683.04 44176683.14 44176683.25 0.0137 0.0119

Uranus 116240-03-02 21:48 G 44176909.27 44176909.41 44176909.56 0.0137 0.0102

Uranus 116240-10-15 04:17 G 44177135.52 44177135.68 44177135.86 0.0138 0.0085

Uranus 116241-05-29 11:15 G 44177361.79 44177361.97 44177362.17 0.0138 0.0068

Mars 116241-11-08 09:20 G 44177524.88 44177524.89 44177524.91 0.1776 0.1763

Uranus 116242-01-10 18:12 G 44177588.07 44177588.26 44177588.47 0.0138 0.0050

Uranus 116242-08-25 01:24 G 44177814.35 44177814.56 44177814.77 0.0138 0.0032

Uranus 116243-04-08 08:36 G 44178040.65 44178040.86 44178041.08 0.0138 0.0014

Uranus 116243-11-20 16:03 G 44178266.96 44178267.17 44178267.39 0.0138 0.0005

Uranus 116244-07-03 23:44 G 44178493.28 44178493.49 44178493.70 0.0139 0.0023

Jupiter 116244-10-29 13:53 G 44178610.96 44178611.08 44178611.21 0.0493 0.0387

Uranus 116245-02-15 07:10 G 44178719.61 44178719.80 44178720.02 0.0139 0.0042

Uranus 116245-09-29 15:05 G 44178945.95 44178946.13 44178946.34 0.0139 0.0060

Uranus 116246-05-13 23:29 G 44179172.31 44179172.48 44179172.66 0.0139 0.0078

Uranus 116246-12-26 07:53 G 44179398.68 44179398.83 44179398.99 0.0139 0.0097

Uranus 116247-08-09 16:03 G 44179625.07 44179625.17 44179625.31 0.0139 0.0115

Uranus 116248-03-23 00:41 G 44179851.49 44179851.53 44179851.61 0.0139 0.0134

Saturn 116250-01-14 21:48 G 44180514.26 44180514.41 44180514.56 0.0283 0.0193

Saturn 116250-09-01 11:29 G 44180743.81 44180743.98 44180744.16 0.0284 0.0159

Jupiter 116250-09-04 06:41 G 44180746.58 44180746.78 44180746.98 0.0532 0.0011

Jupiter 116257-02-25 19:39 G 44183113.16 44183113.32 44183113.49 0.0499 0.0283

Jupiter 116262-05-09 22:46 G 44185012.30 44185012.45 44185012.61 0.0534 0.0331

Saturn 116264-07-05 14:36 G 44185799.91 44185800.11 44185800.32 0.0275 0.0064

Saturn 116265-02-19 23:29 G 44186029.41 44186029.48 44186029.55 0.0274 0.0257

Jupiter 116268-10-31 21:48 G 44187379.20 44187379.41 44187379.61 0.0497 0.0023

Jupiter 116274-09-07 09:48 G 44189515.86 44189515.91 44189515.97 0.0527 0.0502

Mars 116275-09-06 15:20 G 44189880.05 44189880.14 44189880.23 0.1757 0.1478

Saturn 116279-07-27 23:15 G 44191300.30 44191300.47 44191300.65 0.0284 0.0156

Uranus 116279-11-06 23:00 G 44191402.45 44191402.46 44191402.50 0.0141 0.0140

Saturn 116280-03-13 13:24 G 44191529.91 44191530.06 44191530.21 0.0285 0.0198

Uranus 116280-06-20 10:03 G 44191628.82 44191628.92 44191629.05 0.0141 0.0121

Jupiter 116280-07-06 23:58 G 44191645.32 44191645.50 44191645.68 0.0495 0.0239

Uranus 116281-02-01 20:51 G 44191855.23 44191855.37 44191855.53 0.0140 0.0102

Uranus 116281-09-16 07:24 G 44192081.64 44192081.81 44192082.00 0.0140 0.0082

Mars 116282-02-18 05:58 G 44192236.67 44192236.75 44192236.83 0.1785 0.1587

Uranus 116282-04-30 17:44 G 44192308.06 44192308.24 44192308.45 0.0140 0.0064

Uranus 116282-12-13 04:17 G 44192534.48 44192534.68 44192534.90 0.0140 0.0043

Uranus 116283-07-27 14:22 G 44192760.89 44192761.10 44192761.32 0.0140 0.0024

Uranus 116284-03-10 00:12 G 44192987.29 44192987.51 44192987.73 0.0140 0.0005

Uranus 116284-10-22 09:48 G 44193213.69 44193213.91 44193214.13 0.0140 0.0015

Uranus 116285-06-05 19:10 G 44193440.09 44193440.30 44193440.52 0.0139 0.0034

Uranus 116286-01-18 04:17 G 44193666.49 44193666.68 44193666.89 0.0139 0.0053

Jupiter 116286-05-13 00:27 G 44193781.33 44193781.52 44193781.71 0.0530 0.0183

Uranus 116286-09-01 13:10 G 44193892.88 44193893.05 44193893.25 0.0139 0.0071

Uranus 116287-04-15 22:03 G 44194119.27 44194119.42 44194119.60 0.0139 0.0089

Uranus 116287-11-28 06:56 G 44194345.66 44194345.79 44194345.94 0.0139 0.0107

Uranus 116288-07-11 15:20 G 44194572.06 44194572.14 44194572.24 0.0139 0.0125

Jupiter 116292-11-03 07:53 G 44196147.74 44196147.83 44196147.93 0.0500 0.0440

Saturn 116294-01-15 20:08 G 44196586.13 44196586.34 44196586.55 0.0275 0.0017

Jupiter 116298-01-15 12:27 G 44198046.82 44198047.02 44198047.21 0.0533 0.0155

Jupiter 116304-07-10 08:51 G 44200413.68 44200413.87 44200414.07 0.0498 0.0175

Mars 116307-09-06 18:27 G 44201567.16 44201567.27 44201567.38 0.1771 0.1332

Neptune 116307-11-20 10:17 G 44201641.88 44201641.93 44201642.02 0.0088 0.0083

Neptune 116308-07-02 22:46 G 44201867.36 44201867.45 44201867.60 0.0088 0.0075

Saturn 116309-02-07 10:03 G 44202086.73 44202086.92 44202087.12 0.0284 0.0091

Neptune 116309-02-13 11:58 G 44202092.86 44202093.00 44202093.16 0.0088 0.0064

Jupiter 116309-09-21 02:36 G 44202312.53 44202312.61 44202312.70 0.0535 0.0483

Saturn 116309-09-25 00:12 G 44202316.44 44202316.51 44202316.59 0.0285 0.0263

Neptune 116309-09-27 00:27 G 44202318.36 44202318.52 44202318.70 0.0088 0.0055

Neptune 116310-05-10 13:10 G 44202543.88 44202544.05 44202544.25 0.0088 0.0046

Neptune 116310-12-22 02:08 G 44202769.40 44202769.59 44202769.79 0.0088 0.0037

Neptune 116311-08-04 14:51 G 44202994.92 44202995.12 44202995.33 0.0088 0.0027

Neptune 116312-03-17 03:20 G 44203220.44 44203220.64 44203220.87 0.0088 0.0019

Neptune 116312-10-28 16:17 G 44203445.96 44203446.18 44203446.40 0.0088 0.0008

Neptune 116313-06-11 05:15 G 44203671.50 44203671.72 44203671.94 0.0088 0.0001

Neptune 116314-01-22 17:58 G 44203897.03 44203897.25 44203897.47 0.0088 0.0010

Mars 116314-02-18 17:58 G 44203924.19 44203924.25 44203924.31 0.1769 0.1658

Neptune 116314-09-05 06:27 G 44204122.56 44204122.77 44204122.99 0.0088 0.0020

Neptune 116315-04-18 19:10 G 44204348.10 44204348.30 44204348.52 0.0088 0.0029

Neptune 116315-11-30 08:08 G 44204573.64 44204573.84 44204574.04 0.0088 0.0038

Jupiter 116316-03-15 09:05 G 44204679.68 44204679.88 44204680.08 0.0495 0.0093

Neptune 116316-07-12 20:36 G 44204799.19 44204799.36 44204799.56 0.0088 0.0048

Neptune 116317-02-23 09:20 G 44205024.74 44205024.89 44205025.08 0.0088 0.0057

Neptune 116317-10-06 22:17 G 44205250.30 44205250.43 44205250.58 0.0088 0.0066

Neptune 116318-05-20 10:46 G 44205475.86 44205475.95 44205476.09 0.0088 0.0076

Neptune 116318-12-31 23:44 G 44205701.45 44205701.49 44205701.57 0.0088 0.0085

Jupiter 116322-01-19 16:17 G 44206816.04 44206816.18 44206816.33 0.0529 0.0365

Uranus 116323-03-21 00:12 G 44207241.44 44207241.51 44207241.61 0.0137 0.0125

Saturn 116323-07-30 00:56 G 44207372.33 44207372.54 44207372.75 0.0275 0.0028

Uranus 116323-11-02 06:41 G 44207467.66 44207467.78 44207467.92 0.0137 0.0109

Uranus 116324-06-15 13:10 G 44207693.91 44207694.05 44207694.23 0.0138 0.0092

Uranus 116325-01-27 20:08 G 44207920.16 44207920.34 44207920.52 0.0138 0.0074

Uranus 116325-09-11 02:51 G 44208146.43 44208146.62 44208146.82 0.0138 0.0057

Uranus 116326-04-25 10:03 G 44208372.71 44208372.92 44208373.13 0.0138 0.0038

Uranus 116326-12-07 17:15 G 44208599.01 44208599.22 44208599.43 0.0138 0.0020

Uranus 116327-07-22 00:27 G 44208825.31 44208825.52 44208825.74 0.0138 0.0003

Jupiter 116327-11-19 11:15 G 44208945.83 44208945.97 44208946.12 0.0494 0.0349

Uranus 116328-03-04 07:53 G 44209051.62 44209051.83 44209052.05 0.0138 0.0016

Uranus 116328-10-16 15:20 G 44209277.94 44209278.14 44209278.36 0.0139 0.0035

Uranus 116329-05-30 23:29 G 44209504.28 44209504.48 44209504.68 0.0139 0.0053

Uranus 116330-01-12 07:10 G 44209730.63 44209730.80 44209731.00 0.0139 0.0072

Uranus 116330-08-26 15:34 G 44209957.00 44209957.15 44209957.32 0.0139 0.0090

Uranus 116331-04-09 23:58 G 44210183.38 44210183.50 44210183.64 0.0139 0.0109

Uranus 116331-11-22 08:51 G 44210409.78 44210409.87 44210409.96 0.0139 0.0127

Jupiter 116333-09-24 07:10 G 44211081.60 44211081.80 44211082.01 0.0531 0.0045

Saturn 116338-08-20 11:58 G 44212872.80 44212873.00 44212873.21 0.0284 0.0053

Jupiter 116340-03-17 18:56 G 44213448.14 44213448.29 44213448.45 0.0499 0.0327

Jupiter 116345-05-29 21:20 G 44215347.22 44215347.39 44215347.56 0.0534 0.0286

Earth 116346-08-29 10:32 G 44215803.79 44215803.94 44215804.09 0.2661 0.0815

Moon 116346-08-29 16:17 G 44215804.01 44215804.18 44215804.34 0.2659 0.0161 *

Jupiter 116351-11-21 20:51 G 44217714.17 44217714.37 44217714.57 0.0497 0.0064

Saturn 116352-06-23 19:39 G 44217929.25 44217929.32 44217929.42 0.0276 0.0253

Saturn 116353-02-08 05:58 G 44218158.55 44218158.75 44218158.96 0.0275 0.0074

Pluto 116357-07-12 01:53 G 44219773.41 44219773.58 44219773.76 0.0063 0.0037

Pluto 116358-02-22 05:15 G 44219998.51 44219998.72 44219998.94 0.0063 0.0001

Pluto 116358-10-05 07:53 G 44220223.68 44220223.83 44220224.04 0.0063 0.0037

Jupiter 116363-07-27 22:17 G 44221980.24 44221980.43 44221980.62 0.0494 0.0198

Uranus 116364-02-19 16:32 G 44222187.12 44222187.19 44222187.29 0.0141 0.0129

Uranus 116364-10-03 03:20 G 44222413.52 44222413.64 44222413.80 0.0141 0.0110

Uranus 116365-05-17 14:22 G 44222639.94 44222640.10 44222640.27 0.0140 0.0090

Uranus 116365-12-30 00:41 G 44222866.35 44222866.53 44222866.73 0.0140 0.0071

Uranus 116366-08-13 11:00 G 44223092.76 44223092.96 44223093.17 0.0140 0.0051

Uranus 116367-03-27 21:20 G 44223319.17 44223319.39 44223319.60 0.0140 0.0031

Uranus 116367-11-09 07:10 G 44223545.58 44223545.80 44223546.02 0.0140 0.0012

Saturn 116368-03-01 23:29 G 44223659.27 44223659.48 44223659.69 0.0284 0.0015

Uranus 116368-06-22 17:00 G 44223771.99 44223772.21 44223772.43 0.0140 0.0008

Uranus 116369-02-04 02:22 G 44223998.38 44223998.60 44223998.82 0.0139 0.0026

Jupiter 116369-06-01 20:22 G 44224116.17 44224116.35 44224116.54 0.0530 0.0219

Uranus 116369-09-18 11:29 G 44224224.78 44224224.98 44224225.19 0.0139 0.0045

Uranus 116370-05-02 20:22 G 44224451.17 44224451.35 44224451.56 0.0139 0.0065

Uranus 116370-12-15 05:44 G 44224677.57 44224677.74 44224677.92 0.0139 0.0082

Uranus 116371-07-29 14:08 G 44224903.96 44224904.09 44224904.26 0.0139 0.0101

Uranus 116372-03-11 22:32 G 44225130.35 44225130.44 44225130.57 0.0139 0.0119

Uranus 116372-10-24 07:10 G 44225356.77 44225356.80 44225356.85 0.0138 0.0136

Mars 116373-07-04 02:51 G 44225609.48 44225609.62 44225609.77 0.1767 0.0892

Jupiter 116375-04-01 22:17 G 44226246.37 44226246.43 44226246.51 0.0493 0.0461

Jupiter 116375-11-24 03:48 G 44226482.61 44226482.66 44226482.73 0.0500 0.0475

Mars 116379-12-17 00:27 G 44227966.39 44227966.52 44227966.66 0.1774 0.1168

Jupiter 116381-02-04 12:27 G 44228381.83 44228382.02 44228382.22 0.0533 0.0103

Saturn 116382-01-04 02:22 G 44228715.47 44228715.60 44228715.75 0.0276 0.0203

Saturn 116382-08-21 12:12 G 44228944.82 44228945.01 44228945.20 0.0275 0.0122

Jupiter 116387-07-30 05:29 G 44230748.55 44230748.73 44230748.92 0.0498 0.0212

Neptune 116391-04-03 21:48 G 44232092.35 44232092.41 44232092.51 0.0089 0.0083

Neptune 116391-11-15 11:44 G 44232317.87 44232317.99 44232318.12 0.0089 0.0073

Neptune 116392-06-28 00:41 G 44232543.39 44232543.53 44232543.71 0.0089 0.0063

Jupiter 116392-10-10 03:20 G 44232647.52 44232647.64 44232647.76 0.0535 0.0430

Neptune 116393-02-08 14:08 G 44232768.93 44232769.09 44232769.28 0.0089 0.0054

Neptune 116393-09-22 03:34 G 44232994.47 44232994.65 44232994.85 0.0089 0.0044

Neptune 116394-05-05 16:46 G 44233220.01 44233220.20 44233220.42 0.0089 0.0034

Neptune 116394-12-17 06:12 G 44233445.56 44233445.76 44233445.99 0.0089 0.0025

Neptune 116395-07-30 19:39 G 44233671.11 44233671.32 44233671.55 0.0089 0.0015

Neptune 116396-03-12 09:05 G 44233896.66 44233896.88 44233897.10 0.0089 0.0004

Neptune 116396-10-23 22:17 G 44234122.21 44234122.43 44234122.65 0.0089 0.0005

Neptune 116397-06-06 11:29 G 44234347.77 44234347.98 44234348.20 0.0089 0.0015

Saturn 116397-09-12 01:39 G 44234445.37 44234445.57 44234445.78 0.0284 0.0054

Neptune 116398-01-18 00:41 G 44234573.33 44234573.53 44234573.75 0.0089 0.0025

Neptune 116398-08-31 14:08 G 44234798.89 44234799.09 44234799.30 0.0089 0.0035

Jupiter 116399-04-04 07:24 G 44235014.61 44235014.81 44235015.01 0.0496 0.0051

Neptune 116399-04-14 03:05 G 44235024.45 44235024.63 44235024.83 0.0089 0.0045

Neptune 116399-11-25 16:17 G 44235250.02 44235250.18 44235250.37 0.0089 0.0055

Neptune 116400-07-08 05:44 G 44235475.60 44235475.74 44235475.90 0.0089 0.0064

Neptune 116401-02-18 18:41 G 44235701.18 44235701.28 44235701.42 0.0089 0.0074

Neptune 116401-10-02 07:39 G 44235926.77 44235926.82 44235926.93 0.0089 0.0084

Jupiter 116405-02-07 13:53 G 44237150.96 44237151.08 44237151.22 0.0529 0.0409

Uranus 116406-11-18 08:51 G 44237799.84 44237799.87 44237799.94 0.0137 0.0133

Uranus 116407-07-02 15:20 G 44238026.04 44238026.14 44238026.27 0.0137 0.0116

Uranus 116408-02-13 21:48 G 44238252.27 44238252.41 44238252.57 0.0138 0.0098

Uranus 116408-09-27 04:32 G 44238478.52 44238478.69 44238478.87 0.0138 0.0081

Uranus 116409-05-11 11:15 G 44238704.79 44238704.97 44238705.17 0.0138 0.0064

Uranus 116409-12-23 18:12 G 44238931.07 44238931.26 44238931.47 0.0138 0.0046

Uranus 116410-08-07 01:24 G 44239157.35 44239157.56 44239157.77 0.0138 0.0028

Jupiter 116410-12-08 10:03 G 44239280.76 44239280.92 44239281.08 0.0494 0.0308

Uranus 116411-03-21 08:36 G 44239383.64 44239383.86 44239384.07 0.0138 0.0009

Saturn 116411-07-17 07:10 G 44239501.63 44239501.80 44239501.98 0.0276 0.0158

Uranus 116411-11-02 16:03 G 44239609.95 44239610.17 44239610.38 0.0138 0.0009

Saturn 116412-03-02 17:00 G 44239731.04 44239731.21 44239731.38 0.0275 0.0167

Uranus 116412-06-15 23:29 G 44239836.28 44239836.48 44239836.70 0.0139 0.0028

Uranus 116413-01-28 07:24 G 44240062.61 44240062.81 44240063.02 0.0139 0.0046

Uranus 116413-09-11 15:05 G 44240288.95 44240289.13 44240289.33 0.0139 0.0065

Uranus 116414-04-25 23:29 G 44240515.31 44240515.48 44240515.66 0.0139 0.0083

Uranus 116414-12-08 07:39 G 44240741.69 44240741.82 44240741.98 0.0139 0.0102

Uranus 116415-07-22 16:17 G 44240968.09 44240968.18 44240968.30 0.0139 0.0121

Uranus 116416-03-05 01:10 G 44241194.54 44241194.55 44241194.58 0.0140 0.0139

Jupiter 116416-10-13 01:53 G 44241416.38 44241416.58 44241416.78 0.0531 0.0075

Jupiter 116423-04-06 16:46 G 44243783.06 44243783.20 44243783.33 0.0499 0.0367

Saturn 116426-08-07 23:29 G 44245002.37 44245002.48 44245002.61 0.0283 0.0232

Saturn 116427-03-25 13:24 G 44245231.87 44245232.06 44245232.25 0.0284 0.0120

Jupiter 116428-06-17 16:03 G 44245682.00 44245682.17 44245682.35 0.0534 0.0254

Jupiter 116434-12-10 16:03 G 44248048.97 44248049.17 44248049.37 0.0497 0.0096

Mars 116439-05-01 12:12 G 44249651.85 44249652.01 44249652.17 0.1762 0.0485

Saturn 116441-01-26 15:20 G 44250287.94 44250288.14 44250288.34 0.0275 0.0103

Saturn 116441-09-13 00:12 G 44250517.40 44250517.51 44250517.65 0.0274 0.0220

Mars 116445-10-13 07:10 G 44252008.64 44252008.80 44252008.97 0.1779 0.0669

Jupiter 116446-08-15 17:58 G 44252315.06 44252315.25 44252315.44 0.0495 0.0165

Uranus 116447-10-19 23:29 G 44252745.43 44252745.48 44252745.54 0.0141 0.0136

Pluto 116448-04-06 11:58 G 44252914.80 44252915.00 44252915.22 0.0081 0.0028

Uranus 116448-06-02 10:32 G 44252971.82 44252971.94 44252972.06 0.0141 0.0117

Pluto 116448-11-17 23:29 G 44253140.32 44253140.48 44253140.66 0.0081 0.0054

Uranus 116449-01-14 21:05 G 44253198.23 44253198.38 44253198.55 0.0140 0.0098

Uranus 116449-08-29 07:24 G 44253424.65 44253424.81 44253425.01 0.0140 0.0079

Uranus 116450-04-12 17:58 G 44253651.06 44253651.25 44253651.46 0.0140 0.0059

Uranus 116450-11-25 04:17 G 44253877.48 44253877.68 44253877.90 0.0140 0.0039

Uranus 116451-07-09 14:22 G 44254103.89 44254104.10 44254104.32 0.0140 0.0019

Uranus 116452-02-21 00:12 G 44254330.29 44254330.51 44254330.73 0.0140 0.0001

Jupiter 116452-06-20 20:22 G 44254451.18 44254451.35 44254451.52 0.0530 0.0269

Uranus 116452-10-04 09:34 G 44254556.69 44254556.90 44254557.12 0.0140 0.0020

Uranus 116453-05-18 18:56 G 44254783.09 44254783.29 44254783.51 0.0139 0.0039

Uranus 116453-12-31 04:17 G 44255009.49 44255009.68 44255009.89 0.0139 0.0057

Uranus 116454-08-14 13:10 G 44255235.88 44255236.05 44255236.25 0.0139 0.0076

Uranus 116455-03-28 22:17 G 44255462.27 44255462.43 44255462.59 0.0139 0.0094

Uranus 116455-11-10 07:10 G 44255688.67 44255688.80 44255688.92 0.0139 0.0112

Saturn 116456-02-18 02:08 G 44255788.44 44255788.59 44255788.75 0.0284 0.0192

Uranus 116456-06-23 15:20 G 44255915.08 44255915.14 44255915.22 0.0138 0.0130

Saturn 116456-10-04 15:48 G 44256017.99 44256018.16 44256018.34 0.0285 0.0161

Jupiter 116458-04-20 20:08 G 44256581.24 44256581.34 44256581.45 0.0493 0.0422

Moon 116460-03-05 00:41 G 44257265.41 44257265.53 44257265.66 0.2679 0.1556

Earth 116460-03-05 04:03 G 44257265.57 44257265.67 44257265.77 0.2673 0.2016 *

Jupiter 116464-02-24 10:32 G 44258716.74 44258716.94 44258717.14 0.0532 0.0058

Earth 116468-03-02 18:41 G 44260185.16 44260185.28 44260185.40 0.2671 0.1717

Moon 116468-03-02 21:05 G 44260185.24 44260185.38 44260185.52 0.2677 0.1111 *

Saturn 116470-08-08 19:39 G 44261074.11 44261074.32 44261074.53 0.0275 0.0060

Jupiter 116470-08-18 03:48 G 44261083.49 44261083.66 44261083.84 0.0498 0.0255

Saturn 116471-03-26 04:46 G 44261303.64 44261303.70 44261303.76 0.0274 0.0262

Neptune 116472-02-21 21:34 G 44261636.37 44261636.40 44261636.50 0.0088 0.0085

Neptune 116472-10-04 10:46 G 44261861.84 44261861.95 44261862.07 0.0088 0.0075

Neptune 116473-05-17 23:15 G 44262087.34 44262087.47 44262087.63 0.0088 0.0066

Neptune 116473-12-29 11:44 G 44262312.84 44262312.99 44262313.18 0.0088 0.0057

Neptune 116474-08-12 00:27 G 44262538.35 44262538.52 44262538.72 0.0088 0.0047

Neptune 116475-03-25 13:24 G 44262763.86 44262764.06 44262764.26 0.0088 0.0038

Jupiter 116475-10-29 21:34 G 44262982.27 44262982.40 44262982.54 0.0535 0.0399

Neptune 116475-11-06 01:53 G 44262989.38 44262989.58 44262989.80 0.0088 0.0028

Neptune 116476-06-18 14:51 G 44263214.91 44263215.12 44263215.34 0.0088 0.0019

Neptune 116477-01-30 03:34 G 44263440.43 44263440.65 44263440.87 0.0088 0.0010

Neptune 116477-09-12 16:17 G 44263665.96 44263666.18 44263666.40 0.0088 0.0001

Neptune 116478-04-26 05:00 G 44263891.49 44263891.71 44263891.93 0.0088 0.0009

Neptune 116478-12-07 17:29 G 44264117.03 44264117.23 44264117.46 0.0088 0.0019

Neptune 116479-07-21 06:27 G 44264342.57 44264342.77 44264342.99 0.0088 0.0028

Neptune 116480-03-02 19:24 G 44264568.11 44264568.31 44264568.51 0.0088 0.0037

Neptune 116480-10-14 07:39 G 44264793.65 44264793.82 44264794.02 0.0088 0.0047

Neptune 116481-05-27 20:36 G 44265019.20 44265019.36 44265019.54 0.0088 0.0056

Neptune 116482-01-08 09:34 G 44265244.76 44265244.90 44265245.05 0.0088 0.0065

Jupiter 116482-04-23 05:00 G 44265349.51 44265349.71 44265349.92 0.0496 0.0011

Neptune 116482-08-21 21:48 G 44265470.32 44265470.41 44265470.55 0.0088 0.0075

Neptune 116483-04-04 10:46 G 44265695.91 44265695.95 44265696.03 0.0088 0.0084

Saturn 116485-08-30 13:10 G 44266574.87 44266575.05 44266575.24 0.0284 0.0127

Saturn 116486-04-17 03:20 G 44266804.52 44266804.64 44266804.77 0.0285 0.0228

Jupiter 116488-02-27 08:36 G 44267485.76 44267485.86 44267485.98 0.0529 0.0442

Uranus 116491-03-01 23:58 G 44268584.42 44268584.50 44268584.61 0.0137 0.0123

Uranus 116491-10-14 06:27 G 44268810.65 44268810.77 44268810.92 0.0137 0.0105

Uranus 116492-05-27 13:24 G 44269036.89 44269037.06 44269037.22 0.0138 0.0088

Uranus 116493-01-08 19:39 G 44269263.15 44269263.32 44269263.52 0.0138 0.0071

Uranus 116493-08-23 02:36 G 44269489.42 44269489.61 44269489.82 0.0138 0.0053

Jupiter 116493-12-27 04:46 G 44269615.53 44269615.70 44269615.87 0.0494 0.0279

Uranus 116494-04-06 09:34 G 44269715.70 44269715.90 44269716.11 0.0138 0.0035

Uranus 116494-11-18 16:46 G 44269941.99 44269942.20 44269942.42 0.0138 0.0017

Uranus 116495-07-03 00:12 G 44270168.30 44270168.51 44270168.73 0.0138 0.0002

Uranus 116496-02-14 07:39 G 44270394.61 44270394.82 44270395.04 0.0139 0.0020

Uranus 116496-09-27 15:20 G 44270620.93 44270621.14 44270621.35 0.0139 0.0039

Uranus 116497-05-11 23:15 G 44270847.28 44270847.47 44270847.67 0.0139 0.0058

Uranus 116497-12-24 07:24 G 44271073.63 44271073.81 44271073.99 0.0139 0.0076

Uranus 116498-08-07 15:34 G 44271300.00 44271300.15 44271300.31 0.0139 0.0095

Uranus 116499-03-22 00:12 G 44271526.39 44271526.51 44271526.63 0.0139 0.0114

Jupiter 116499-11-02 00:56 G 44271751.35 44271751.54 44271751.74 0.0532 0.0124

Uranus 116499-11-03 08:22 G 44271752.81 44271752.85 44271752.94 0.0139 0.0133

Saturn 116500-02-19 04:32 G 44271860.48 44271860.69 44271860.90 0.0275 0.0003

Mars 116505-02-26 21:20 G 44273694.22 44273694.39 44273694.56 0.1758 0.0075

Jupiter 116506-04-26 11:58 G 44274117.88 44274118.00 44274118.12 0.0499 0.0400

Jupiter 116511-07-08 16:17 G 44276017.00 44276017.18 44276017.37 0.0534 0.0203

Mars 116511-08-11 13:24 G 44276050.89 44276051.06 44276051.24 0.1784 0.0153

Saturn 116515-03-13 15:48 G 44277360.96 44277361.16 44277361.36 0.0284 0.0086

Saturn 116515-10-29 05:44 G 44277590.68 44277590.74 44277590.82 0.0285 0.0269

Jupiter 116517-12-30 13:53 G 44278383.88 44278384.08 44278384.28 0.0497 0.0136

Jupiter 116523-03-13 06:12 G 44280282.75 44280282.76 44280282.78 0.0536 0.0533

Saturn 116529-09-01 08:08 G 44282646.63 44282646.84 44282647.05 0.0275 0.0038

Jupiter 116529-09-04 16:17 G 44282649.98 44282650.18 44282650.38 0.0495 0.0124

Uranus 116532-02-01 16:46 G 44283530.12 44283530.20 44283530.32 0.0141 0.0125

Uranus 116532-09-15 03:34 G 44283756.52 44283756.65 44283756.81 0.0140 0.0106

Uranus 116533-04-29 14:36 G 44283982.94 44283983.11 44283983.28 0.0140 0.0086

Uranus 116533-12-12 00:56 G 44284209.36 44284209.54 44284209.74 0.0140 0.0066

Uranus 116534-07-26 11:29 G 44284435.77 44284435.98 44284436.18 0.0140 0.0046

Uranus 116535-03-09 21:20 G 44284662.18 44284662.39 44284662.61 0.0140 0.0027

Jupiter 116535-07-11 14:51 G 44284785.96 44284786.12 44284786.29 0.0530 0.0302

Uranus 116535-10-22 07:24 G 44284888.59 44284888.81 44284889.03 0.0140 0.0007

Uranus 116536-06-04 17:00 G 44285114.99 44285115.21 44285115.43 0.0140 0.0012

Uranus 116537-01-17 02:36 G 44285341.40 44285341.61 44285341.82 0.0139 0.0031

Uranus 116537-08-31 11:44 G 44285567.79 44285567.99 44285568.20 0.0139 0.0051

Uranus 116538-04-14 20:51 G 44285794.19 44285794.37 44285794.57 0.0139 0.0069

Uranus 116538-11-27 05:58 G 44286020.59 44286020.75 44286020.93 0.0139 0.0088

Uranus 116539-07-11 14:51 G 44286246.99 44286247.12 44286247.27 0.0139 0.0106

Uranus 116540-02-22 23:29 G 44286473.39 44286473.48 44286473.58 0.0139 0.0124

Jupiter 116541-05-10 17:44 G 44286916.12 44286916.24 44286916.37 0.0493 0.0383

Saturn 116544-09-23 02:08 G 44288147.38 44288147.59 44288147.80 0.0284 0.0023

Jupiter 116547-03-16 05:15 G 44289051.52 44289051.72 44289051.92 0.0532 0.0025

Jupiter 116553-09-06 22:32 G 44291418.27 44291418.44 44291418.61 0.0498 0.0283

Neptune 116555-07-07 08:51 G 44292086.81 44292086.87 44292086.96 0.0089 0.0083

Neptune 116556-02-17 21:48 G 44292312.32 44292312.41 44292312.56 0.0089 0.0075

Neptune 116556-09-30 11:29 G 44292537.84 44292537.98 44292538.15 0.0089 0.0064

Neptune 116557-05-14 00:56 G 44292763.38 44292763.54 44292763.73 0.0089 0.0055

Neptune 116557-12-25 14:36 G 44292988.93 44292989.11 44292989.31 0.0089 0.0045

Saturn 116558-07-28 07:39 G 44293203.71 44293203.82 44293203.95 0.0276 0.0228

Neptune 116558-08-08 03:48 G 44293214.47 44293214.66 44293214.88 0.0089 0.0035

Jupiter 116558-11-18 20:36 G 44293317.21 44293317.36 44293317.51 0.0535 0.0353

Saturn 116559-03-14 17:29 G 44293433.04 44293433.23 44293433.44 0.0275 0.0098

Neptune 116559-03-21 17:15 G 44293440.02 44293440.22 44293440.44 0.0089 0.0025

Neptune 116559-11-02 06:41 G 44293665.56 44293665.78 44293666.00 0.0089 0.0015

Neptune 116560-06-14 20:08 G 44293891.12 44293891.34 44293891.56 0.0089 0.0006

Neptune 116561-01-26 09:20 G 44294116.67 44294116.89 44294117.11 0.0089 0.0004

Neptune 116561-09-08 22:32 G 44294342.23 44294342.44 44294342.66 0.0089 0.0014

Neptune 116562-04-22 11:58 G 44294567.79 44294568.00 44294568.21 0.0089 0.0024

Neptune 116562-12-04 01:10 G 44294793.35 44294793.55 44294793.76 0.0089 0.0034

Neptune 116563-07-17 14:08 G 44295018.91 44295019.09 44295019.30 0.0089 0.0044

Neptune 116564-02-28 03:20 G 44295244.48 44295244.64 44295244.83 0.0089 0.0053

Neptune 116564-10-10 16:46 G 44295470.05 44295470.20 44295470.36 0.0089 0.0063

Jupiter 116565-05-13 00:12 G 44295684.30 44295684.51 44295684.71 0.0496 0.0020

Neptune 116565-05-24 05:44 G 44295695.63 44295695.74 44295695.89 0.0089 0.0073

Neptune 116566-01-04 18:56 G 44295921.23 44295921.29 44295921.40 0.0089 0.0083

Mars 116570-12-25 06:41 G 44297736.61 44297736.78 44297736.95 0.1754 0.0320

Jupiter 116571-03-19 08:51 G 44297820.81 44297820.87 44297820.95 0.0528 0.0493

Saturn 116574-04-05 05:00 G 44298933.50 44298933.71 44298933.92 0.0284 0.0019

Uranus 116574-10-31 08:22 G 44299142.80 44299142.85 44299142.94 0.0137 0.0130

Uranus 116575-06-14 14:51 G 44299369.01 44299369.12 44299369.25 0.0137 0.0112

Uranus 116576-01-26 21:05 G 44299595.24 44299595.38 44299595.55 0.0137 0.0096

Uranus 116576-09-09 03:48 G 44299821.49 44299821.66 44299821.85 0.0138 0.0078

Jupiter 116577-01-16 02:22 G 44299950.42 44299950.60 44299950.78 0.0494 0.0240

Uranus 116577-04-23 10:46 G 44300047.76 44300047.95 44300048.15 0.0138 0.0060

Mars 116577-06-07 19:39 G 44300093.15 44300093.32 44300093.50 0.1788 0.0369

Uranus 116577-12-05 17:44 G 44300274.04 44300274.24 44300274.45 0.0138 0.0042

Uranus 116578-07-20 00:41 G 44300500.32 44300500.53 44300500.75 0.0138 0.0024

Uranus 116579-03-03 07:53 G 44300726.62 44300726.83 44300727.05 0.0138 0.0006

Uranus 116579-10-15 15:20 G 44300952.93 44300953.14 44300953.36 0.0138 0.0013

Uranus 116580-05-28 23:15 G 44301179.26 44301179.47 44301179.68 0.0139 0.0032

Uranus 116581-01-10 06:56 G 44301405.59 44301405.79 44301406.00 0.0139 0.0051

Uranus 116581-08-24 14:36 G 44301631.94 44301632.11 44301632.31 0.0139 0.0070

Moon 116581-09-01 17:58 G 44301640.23 44301640.25 44301640.28 0.2666 0.2609

Uranus 116582-04-07 23:00 G 44301858.30 44301858.46 44301858.63 0.0139 0.0088

Uranus 116582-11-20 07:10 G 44302084.68 44302084.80 44302084.96 0.0139 0.0108

Jupiter 116582-11-21 23:44 G 44302086.30 44302086.49 44302086.69 0.0531 0.0171

Uranus 116583-07-04 16:03 G 44302311.09 44302311.17 44302311.27 0.0139 0.0126

Saturn 116588-02-07 10:17 G 44303989.79 44303989.93 44303990.09 0.0276 0.0190

Saturn 116588-09-23 20:08 G 44304219.16 44304219.34 44304219.53 0.0275 0.0136

Jupiter 116589-05-15 10:32 G 44304452.86 44304452.94 44304453.04 0.0500 0.0444

Earth 116589-08-30 12:27 G 44304559.87 44304560.02 44304560.18 0.2662 0.0757

Moon 116589-08-30 15:34 G 44304560.01 44304560.15 44304560.29 0.2667 0.0774 *

Jupiter 116594-07-27 11:44 G 44306351.80 44306351.99 44306352.19 0.0533 0.0168

Jupiter 116601-01-19 11:44 G 44308718.80 44308718.99 44308719.19 0.0497 0.0178

Saturn 116603-03-02 00:27 G 44309490.48 44309490.52 44309490.58 0.0284 0.0273

Pluto 116603-08-12 08:22 G 44309653.69 44309653.85 44309654.04 0.0063 0.0037

Saturn 116603-10-17 14:08 G 44309719.89 44309720.09 44309720.29 0.0285 0.0078

Pluto 116604-03-24 11:58 G 44309878.78 44309879.00 44309879.22 0.0063 0.0001

Pluto 116604-11-04 14:36 G 44310103.95 44310104.11 44310104.31 0.0063 0.0036

Jupiter 116606-04-02 01:24 G 44310617.49 44310617.56 44310617.63 0.0536 0.0500

Jupiter 116612-09-24 11:15 G 44312984.77 44312984.97 44312985.17 0.0495 0.0095

Uranus 116615-10-02 23:00 G 44314088.41 44314088.46 44314088.55 0.0141 0.0133

Uranus 116616-05-16 10:17 G 44314314.80 44314314.93 44314315.06 0.0141 0.0113

Uranus 116616-12-28 20:51 G 44314541.22 44314541.37 44314541.55 0.0140 0.0094

Uranus 116617-08-12 07:39 G 44314767.63 44314767.82 44314768.01 0.0140 0.0074

Saturn 116617-08-20 20:36 G 44314776.17 44314776.36 44314776.55 0.0276 0.0128

Uranus 116618-03-26 17:44 G 44314994.05 44314994.24 44314994.46 0.0140 0.0055

Saturn 116618-04-07 05:58 G 44315005.61 44315005.75 44315005.90 0.0275 0.0196

Jupiter 116618-07-31 14:22 G 44315120.95 44315121.10 44315121.25 0.0530 0.0350

Uranus 116618-11-08 04:17 G 44315220.47 44315220.68 44315220.90 0.0140 0.0034

Uranus 116619-06-22 14:22 G 44315446.88 44315447.10 44315447.32 0.0140 0.0015

Uranus 116620-02-04 00:12 G 44315673.29 44315673.51 44315673.73 0.0140 0.0005

Uranus 116620-09-17 09:34 G 44315899.69 44315899.90 44315900.12 0.0139 0.0025

Uranus 116621-05-01 19:10 G 44316126.10 44316126.30 44316126.51 0.0139 0.0044

Uranus 116621-12-14 04:46 G 44316352.50 44316352.70 44316352.89 0.0139 0.0063

Uranus 116622-07-28 13:39 G 44316578.90 44316579.07 44316579.25 0.0139 0.0081

Uranus 116623-03-11 22:32 G 44316805.30 44316805.44 44316805.60 0.0139 0.0100

Uranus 116623-10-24 07:10 G 44317031.70 44317031.80 44317031.93 0.0139 0.0118

Jupiter 116624-05-30 13:24 G 44317250.92 44317251.06 44317251.20 0.0493 0.0353

Uranus 116624-06-06 15:48 G 44317258.13 44317258.16 44317258.21 0.0138 0.0136

Jupiter 116630-04-05 05:58 G 44319386.55 44319386.75 44319386.96 0.0532 0.0029

Saturn 116632-09-11 03:20 G 44320276.53 44320276.64 44320276.77 0.0283 0.0231

Saturn 116633-04-28 16:46 G 44320506.01 44320506.20 44320506.40 0.0284 0.0120

Neptune 116636-05-27 09:48 G 44321630.86 44321630.91 44321630.98 0.0088 0.0084

Jupiter 116636-09-26 20:36 G 44321753.21 44321753.36 44321753.52 0.0498 0.0325

Mars 116636-10-22 16:03 G 44321779.01 44321779.17 44321779.32 0.1749 0.0713

Neptune 116637-01-07 22:17 G 44321856.33 44321856.43 44321856.55 0.0088 0.0075

Neptune 116637-08-21 10:46 G 44322081.82 44322081.95 44322082.11 0.0088 0.0066

Neptune 116638-04-03 23:15 G 44322307.32 44322307.47 44322307.65 0.0088 0.0057

Neptune 116638-11-15 11:44 G 44322532.83 44322532.99 44322533.19 0.0088 0.0048

Neptune 116639-06-29 00:41 G 44322758.34 44322758.53 44322758.74 0.0088 0.0039

Neptune 116640-02-09 13:24 G 44322983.86 44322984.06 44322984.27 0.0088 0.0029

Neptune 116640-09-22 01:53 G 44323209.38 44323209.58 44323209.81 0.0088 0.0020

Neptune 116641-05-05 14:51 G 44323434.90 44323435.12 44323435.34 0.0088 0.0010

Jupiter 116641-12-08 20:36 G 44323652.20 44323652.36 44323652.53 0.0535 0.0302

Neptune 116641-12-17 03:34 G 44323660.43 44323660.65 44323660.87 0.0088 0.0002

Neptune 116642-07-30 16:17 G 44323885.97 44323886.18 44323886.40 0.0088 0.0009

Neptune 116643-03-13 05:00 G 44324111.50 44324111.71 44324111.93 0.0088 0.0018

Mars 116643-04-06 01:39 G 44324135.42 44324135.57 44324135.73 0.1793 0.0913

Neptune 116643-10-24 17:44 G 44324337.04 44324337.24 44324337.46 0.0088 0.0027

Neptune 116644-06-06 06:27 G 44324562.58 44324562.77 44324562.98 0.0088 0.0037

Neptune 116645-01-17 19:10 G 44324788.13 44324788.30 44324788.50 0.0088 0.0046

Neptune 116645-08-31 08:08 G 44325013.67 44325013.84 44325014.02 0.0088 0.0055

Neptune 116646-04-13 20:22 G 44325239.23 44325239.35 44325239.52 0.0088 0.0065

Neptune 116646-11-25 09:05 G 44325464.79 44325464.88 44325465.03 0.0088 0.0074

Saturn 116647-03-02 22:17 G 44325562.23 44325562.43 44325562.64 0.0275 0.0093

Neptune 116647-07-08 22:17 G 44325690.38 44325690.43 44325690.52 0.0088 0.0083

Saturn 116647-10-18 07:39 G 44325791.72 44325791.82 44325791.94 0.0274 0.0231

Jupiter 116648-06-01 23:00 G 44326019.26 44326019.46 44326019.67 0.0496 0.0064

Uranus 116658-07-01 17:44 G 44329701.21 44329701.24 44329701.27 0.0137 0.0136

Uranus 116659-02-12 23:29 G 44329927.39 44329927.48 44329927.60 0.0137 0.0119

Uranus 116659-09-27 06:12 G 44330153.62 44330153.76 44330153.90 0.0137 0.0102

Jupiter 116660-02-06 00:56 G 44330285.35 44330285.54 44330285.73 0.0494 0.0198

Uranus 116660-05-10 12:27 G 44330379.87 44330380.02 44330380.20 0.0138 0.0085

Uranus 116660-12-22 19:10 G 44330606.12 44330606.30 44330606.50 0.0138 0.0067

Uranus 116661-08-06 01:53 G 44330832.39 44330832.58 44330832.79 0.0138 0.0049

Uranus 116662-03-20 08:51 G 44331058.67 44331058.87 44331059.09 0.0138 0.0031

Saturn 116662-03-24 11:00 G 44331062.80 44331062.96 44331063.12 0.0284 0.0177

Uranus 116662-11-01 16:17 G 44331284.96 44331285.18 44331285.39 0.0138 0.0012

Saturn 116662-11-09 00:41 G 44331292.37 44331292.53 44331292.70 0.0285 0.0176

Uranus 116663-06-15 23:44 G 44331511.27 44331511.49 44331511.70 0.0138 0.0006

Uranus 116664-01-28 07:10 G 44331737.59 44331737.80 44331738.01 0.0138 0.0025

Uranus 116664-09-10 14:51 G 44331963.92 44331964.12 44331964.33 0.0139 0.0044

Uranus 116665-04-24 22:46 G 44332190.26 44332190.45 44332190.65 0.0139 0.0063

Uranus 116665-12-07 06:41 G 44332416.62 44332416.78 44332416.97 0.0139 0.0082

Jupiter 116665-12-11 19:53 G 44332421.15 44332421.33 44332421.52 0.0531 0.0208

Uranus 116666-07-21 15:20 G 44332642.99 44332643.14 44332643.29 0.0139 0.0100

Uranus 116667-03-04 23:29 G 44332869.38 44332869.48 44332869.60 0.0139 0.0119

Uranus 116667-10-17 08:08 G 44333095.82 44333095.84 44333095.88 0.0139 0.0138

Jupiter 116671-10-12 00:56 G 44334551.48 44334551.54 44334551.61 0.0492 0.0464

Jupiter 116672-06-04 05:58 G 44334787.69 44334787.75 44334787.82 0.0499 0.0474

Saturn 116676-09-12 08:08 G 44336348.63 44336348.84 44336349.05 0.0275 0.0032

Jupiter 116677-08-16 11:15 G 44336686.77 44336686.97 44336687.17 0.0534 0.0120

Jupiter 116684-02-08 07:39 G 44339053.64 44339053.82 44339054.01 0.0497 0.0210

Jupiter 116689-04-21 02:36 G 44340952.51 44340952.61 44340952.72 0.0536 0.0448

Saturn 116691-10-04 14:08 G 44341848.91 44341849.09 44341849.28 0.0283 0.0134

Saturn 116692-05-21 04:03 G 44342078.53 44342078.67 44342078.80 0.0284 0.0219

Pluto 116694-05-07 16:03 G 44342794.97 44342795.17 44342795.37 0.0081 0.0036

Pluto 116694-12-19 03:05 G 44343020.47 44343020.63 44343020.84 0.0081 0.0046

Jupiter 116695-10-14 09:48 G 44343319.70 44343319.91 44343320.11 0.0495 0.0054

Uranus 116699-06-02 05:29 G 44344646.72 44344646.73 44344646.75 0.0141 0.0140

Uranus 116700-01-14 16:17 G 44344873.08 44344873.18 44344873.30 0.0141 0.0121

Uranus 116700-08-29 02:51 G 44345099.49 44345099.62 44345099.79 0.0141 0.0102

Uranus 116701-04-12 13:39 G 44345325.90 44345326.07 44345326.26 0.0140 0.0082

Jupiter 116701-08-20 14:51 G 44345456.00 44345456.12 44345456.26 0.0529 0.0403

Uranus 116701-11-25 00:27 G 44345552.33 44345552.52 44345552.72 0.0140 0.0062

Uranus 116702-07-09 10:46 G 44345778.74 44345778.95 44345779.17 0.0140 0.0042

Mars 116702-08-21 01:53 G 44345821.44 44345821.58 44345821.71 0.1745 0.1092

Uranus 116703-02-20 21:05 G 44346005.16 44346005.38 44346005.59 0.0140 0.0022

Moon 116703-03-08 23:00 G 44346021.34 44346021.46 44346021.59 0.2669 0.1699

Earth 116703-03-09 04:32 G 44346021.58 44346021.69 44346021.80 0.2672 0.1902 *

Uranus 116703-10-05 06:56 G 44346231.57 44346231.79 44346232.01 0.0140 0.0002

Uranus 116704-05-18 16:32 G 44346457.98 44346458.19 44346458.42 0.0140 0.0018

Uranus 116704-12-31 02:22 G 44346684.39 44346684.60 44346684.82 0.0139 0.0037

Uranus 116705-08-14 11:29 G 44346910.79 44346910.98 44346911.20 0.0139 0.0057

Saturn 116706-03-26 08:51 G 44347134.66 44347134.87 44347135.09 0.0275 0.0002

Uranus 116706-03-28 20:51 G 44347137.20 44347137.37 44347137.56 0.0139 0.0075

Uranus 116706-11-10 05:44 G 44347363.60 44347363.74 44347363.92 0.0139 0.0094

Jupiter 116707-06-20 12:41 G 44347585.87 44347586.03 44347586.19 0.0493 0.0309

Uranus 116707-06-24 14:51 G 44347590.00 44347590.12 44347590.26 0.0139 0.0112

Uranus 116708-02-05 23:29 G 44347816.42 44347816.48 44347816.57 0.0138 0.0130

Mars 116709-02-01 07:53 G 44348177.73 44348177.83 44348177.93 0.1798 0.1453

Moon 116711-03-06 15:20 G 44348941.05 44348941.14 44348941.23 0.2674 0.2156

Earth 116711-03-06 19:24 G 44348941.19 44348941.31 44348941.42 0.2670 0.1797 *

Jupiter 116713-04-25 03:48 G 44349721.46 44349721.66 44349721.86 0.0532 0.0071

Neptune 116719-10-10 19:24 G 44352081.25 44352081.31 44352081.39 0.0089 0.0085

Jupiter 116719-10-17 19:53 G 44352088.20 44352088.33 44352088.47 0.0499 0.0370

Neptune 116720-05-23 08:36 G 44352306.76 44352306.86 44352307.00 0.0089 0.0075

Neptune 116721-01-03 22:17 G 44352532.30 44352532.43 44352532.60 0.0089 0.0066

Saturn 116721-04-16 20:08 G 44352635.14 44352635.34 44352635.54 0.0284 0.0084

Neptune 116721-08-17 11:58 G 44352757.84 44352758.00 44352758.18 0.0089 0.0056

Saturn 116721-12-02 10:03 G 44352864.86 44352864.92 44352864.99 0.0285 0.0270

Neptune 116722-03-31 01:10 G 44352983.38 44352983.55 44352983.75 0.0089 0.0046

Neptune 116722-11-11 14:36 G 44353208.92 44353209.11 44353209.33 0.0089 0.0036

Neptune 116723-06-25 04:03 G 44353434.47 44353434.67 44353434.89 0.0089 0.0027

Neptune 116724-02-05 17:29 G 44353660.02 44353660.23 44353660.45 0.0089 0.0017

Neptune 116724-09-18 06:56 G 44353885.57 44353885.79 44353886.01 0.0089 0.0007

Jupiter 116724-12-28 17:44 G 44353987.07 44353987.24 44353987.42 0.0534 0.0261

Neptune 116725-05-01 20:08 G 44354111.12 44354111.34 44354111.56 0.0089 0.0003

Neptune 116725-12-13 09:34 G 44354336.68 44354336.90 44354337.12 0.0089 0.0013

Neptune 116726-07-26 22:46 G 44354562.24 44354562.45 44354562.67 0.0089 0.0023

Neptune 116727-03-09 11:44 G 44354787.80 44354787.99 44354788.21 0.0089 0.0033

Neptune 116727-10-21 00:56 G 44355013.36 44355013.54 44355013.75 0.0089 0.0042

Neptune 116728-06-02 14:22 G 44355238.93 44355239.10 44355239.28 0.0089 0.0052

Neptune 116729-01-14 03:34 G 44355464.50 44355464.65 44355464.82 0.0089 0.0062

Neptune 116729-08-27 16:32 G 44355690.08 44355690.19 44355690.34 0.0089 0.0072

Neptune 116730-04-10 05:58 G 44355915.67 44355915.75 44355915.85 0.0089 0.0081

Jupiter 116731-06-22 19:39 G 44356354.12 44356354.32 44356354.52 0.0496 0.0097

Mars 116734-08-20 03:48 G 44357508.60 44357508.66 44357508.71 0.1760 0.1652

Saturn 116735-02-19 07:24 G 44357691.77 44357691.81 44357691.88 0.0276 0.0268

Saturn 116735-10-06 18:12 G 44357921.05 44357921.26 44357921.47 0.0275 0.0061

Uranus 116742-10-14 07:53 G 44360485.77 44360485.83 44360485.94 0.0137 0.0127

Jupiter 116743-02-25 21:48 G 44360620.21 44360620.41 44360620.60 0.0494 0.0164

Uranus 116743-05-28 14:36 G 44360711.99 44360712.11 44360712.25 0.0137 0.0109

Uranus 116744-01-09 20:51 G 44360938.23 44360938.37 44360938.54 0.0137 0.0092

Uranus 116744-08-23 03:34 G 44361164.48 44361164.65 44361164.84 0.0138 0.0074

Uranus 116745-04-06 10:17 G 44361390.74 44361390.93 44361391.13 0.0138 0.0056

Uranus 116745-11-18 17:15 G 44361617.02 44361617.22 44361617.43 0.0138 0.0038

Uranus 116746-07-03 00:27 G 44361843.31 44361843.52 44361843.73 0.0138 0.0019

Uranus 116747-02-14 07:39 G 44362069.61 44362069.82 44362070.04 0.0138 0.0002

Uranus 116747-09-28 15:05 G 44362295.92 44362296.13 44362296.35 0.0138 0.0018

Uranus 116748-05-11 22:46 G 44362522.25 44362522.45 44362522.66 0.0139 0.0037

Uranus 116748-12-24 06:41 G 44362748.59 44362748.78 44362748.98 0.0139 0.0056

Jupiter 116748-12-31 21:48 G 44362756.24 44362756.41 44362756.59 0.0531 0.0264

Uranus 116749-08-07 14:36 G 44362974.93 44362975.11 44362975.30 0.0139 0.0075

Uranus 116750-03-21 22:32 G 44363201.30 44363201.44 44363201.61 0.0139 0.0094

Saturn 116750-10-27 23:29 G 44363421.27 44363421.48 44363421.69 0.0283 0.0040

Uranus 116750-11-03 07:10 G 44363427.68 44363427.80 44363427.93 0.0139 0.0113

Uranus 116751-06-17 15:34 G 44363654.09 44363654.15 44363654.23 0.0139 0.0132

Jupiter 116754-10-31 23:58 G 44364886.40 44364886.50 44364886.61 0.0492 0.0421

Jupiter 116760-09-05 13:10 G 44367021.85 44367022.05 44367022.25 0.0533 0.0062

Saturn 116764-08-31 07:24 G 44368477.71 44368477.81 44368477.92 0.0276 0.0237

Saturn 116765-04-17 17:58 G 44368707.05 44368707.25 44368707.46 0.0275 0.0090

Jupiter 116767-02-28 07:53 G 44369388.65 44369388.83 44369389.00 0.0498 0.0258

Mars 116768-06-17 11:15 G 44369863.88 44369863.97 44369864.06 0.1741 0.1470

Jupiter 116772-05-11 01:53 G 44371287.45 44371287.58 44371287.72 0.0535 0.0399

Jupiter 116778-11-03 09:34 G 44373654.70 44373654.90 44373655.11 0.0495 0.0012

Saturn 116780-05-09 04:17 G 44374207.47 44374207.68 44374207.89 0.0284 0.0009

Uranus 116783-09-14 22:17 G 44375431.36 44375431.43 44375431.53 0.0141 0.0129

Uranus 116784-04-28 09:20 G 44375657.76 44375657.89 44375658.04 0.0141 0.0109

Jupiter 116784-09-08 12:56 G 44375790.94 44375791.04 44375791.15 0.0529 0.0447

Uranus 116784-12-10 20:08 G 44375884.18 44375884.34 44375884.52 0.0140 0.0089

Uranus 116785-07-25 06:41 G 44376110.60 44376110.78 44376110.98 0.0140 0.0070

Uranus 116786-03-08 17:15 G 44376337.02 44376337.22 44376337.43 0.0140 0.0050

Uranus 116786-10-21 03:34 G 44376563.44 44376563.65 44376563.87 0.0140 0.0030

Uranus 116787-06-04 13:53 G 44376789.86 44376790.08 44376790.30 0.0140 0.0010

Uranus 116788-01-16 23:44 G 44377016.27 44377016.49 44377016.71 0.0140 0.0010

Uranus 116788-08-30 09:34 G 44377242.68 44377242.90 44377243.11 0.0139 0.0030

Uranus 116789-04-13 18:56 G 44377469.09 44377469.29 44377469.50 0.0139 0.0049

Uranus 116789-11-26 04:17 G 44377695.50 44377695.68 44377695.88 0.0139 0.0069

Jupiter 116790-07-09 10:17 G 44377920.76 44377920.93 44377921.10 0.0493 0.0273

Uranus 116790-07-10 13:39 G 44377921.90 44377922.07 44377922.24 0.0139 0.0087

Uranus 116791-02-21 22:17 G 44378148.31 44378148.43 44378148.59 0.0139 0.0106

Uranus 116791-10-06 07:24 G 44378374.72 44378374.81 44378374.91 0.0139 0.0124

Saturn 116794-03-13 16:03 G 44379264.02 44379264.17 44379264.34 0.0276 0.0180

Saturn 116794-10-29 02:36 G 44379493.44 44379493.61 44379493.79 0.0275 0.0149

Jupiter 116796-05-14 03:48 G 44380056.47 44380056.66 44380056.86 0.0532 0.0121

Mars 116800-06-16 12:41 G 44381550.91 44381551.03 44381551.15 0.1755 0.1234

Neptune 116800-08-29 21:05 G 44381625.34 44381625.38 44381625.45 0.0088 0.0085

Neptune 116801-04-12 09:20 G 44381850.80 44381850.89 44381851.02 0.0088 0.0077

Neptune 116801-11-23 22:03 G 44382076.29 44382076.42 44382076.57 0.0088 0.0067

Neptune 116802-07-07 10:32 G 44382301.80 44382301.94 44382302.12 0.0088 0.0058

Jupiter 116802-11-05 17:15 G 44382423.11 44382423.22 44382423.34 0.0498 0.0407

Neptune 116803-02-17 23:29 G 44382527.30 44382527.48 44382527.67 0.0088 0.0049

Neptune 116803-10-01 11:58 G 44382752.81 44382753.00 44382753.20 0.0088 0.0039

Neptune 116804-05-14 00:27 G 44382978.32 44382978.52 44382978.74 0.0088 0.0030

Neptune 116804-12-25 13:10 G 44383203.84 44383204.05 44383204.27 0.0088 0.0021

Neptune 116805-08-08 01:53 G 44383429.37 44383429.58 44383429.80 0.0088 0.0011

Neptune 116806-03-21 14:36 G 44383654.89 44383655.11 44383655.33 0.0088 0.0002

Neptune 116806-11-02 03:20 G 44383880.42 44383880.64 44383880.86 0.0088 0.0007

Mars 116806-11-29 03:20 G 44383907.53 44383907.64 44383907.75 0.1786 0.1379

Neptune 116807-06-15 16:03 G 44384105.96 44384106.17 44384106.39 0.0088 0.0017

Jupiter 116808-01-17 19:53 G 44384322.14 44384322.33 44384322.51 0.0535 0.0206

Neptune 116808-01-27 04:46 G 44384331.50 44384331.70 44384331.92 0.0088 0.0026

Neptune 116808-09-08 17:15 G 44384557.03 44384557.22 44384557.44 0.0088 0.0036

Neptune 116809-04-22 05:58 G 44384782.58 44384782.75 44384782.96 0.0088 0.0045

Saturn 116809-11-19 07:53 G 44384993.63 44384993.83 44384994.04 0.0283 0.0051

Neptune 116809-12-03 18:56 G 44385008.13 44385008.29 44385008.47 0.0088 0.0054

Neptune 116810-07-17 08:08 G 44385233.69 44385233.84 44385233.99 0.0088 0.0063

Neptune 116811-02-27 20:22 G 44385459.25 44385459.35 44385459.49 0.0088 0.0073

Neptune 116811-10-11 09:05 G 44385684.83 44385684.88 44385684.98 0.0088 0.0082

Jupiter 116814-07-11 19:10 G 44386689.11 44386689.30 44386689.50 0.0496 0.0143

Jupiter 116819-09-22 10:46 G 44388587.94 44388587.95 44388587.97 0.0537 0.0535

Saturn 116823-09-23 15:34 G 44390049.97 44390050.15 44390050.33 0.0276 0.0150

Saturn 116824-05-10 01:53 G 44390279.42 44390279.58 44390279.75 0.0275 0.0176

Moon 116824-09-03 17:29 G 44390396.13 44390396.23 44390396.34 0.2661 0.1973

Jupiter 116826-03-16 22:03 G 44390955.22 44390955.42 44390955.62 0.0494 0.0116

Uranus 116826-06-13 17:29 G 44391044.19 44391044.23 44391044.29 0.0137 0.0133

Uranus 116827-01-25 23:44 G 44391270.38 44391270.49 44391270.61 0.0137 0.0115

Uranus 116827-09-09 05:44 G 44391496.61 44391496.74 44391496.91 0.0137 0.0099

Uranus 116828-04-22 12:27 G 44391722.86 44391723.02 44391723.21 0.0138 0.0081

Uranus 116828-12-04 19:10 G 44391949.12 44391949.30 44391949.50 0.0138 0.0063

Uranus 116829-07-19 02:08 G 44392175.39 44392175.59 44392175.80 0.0138 0.0044

Uranus 116830-03-02 09:05 G 44392401.67 44392401.88 44392402.10 0.0138 0.0026

Uranus 116830-10-14 16:17 G 44392627.97 44392628.18 44392628.40 0.0138 0.0008

Uranus 116831-05-28 23:58 G 44392854.28 44392854.50 44392854.71 0.0138 0.0012

Uranus 116832-01-10 07:24 G 44393080.60 44393080.81 44393081.02 0.0138 0.0030

Jupiter 116832-01-20 21:48 G 44393091.25 44393091.41 44393091.58 0.0530 0.0315

Uranus 116832-08-23 14:51 G 44393306.93 44393307.12 44393307.33 0.0139 0.0050

Moon 116832-09-01 11:44 G 44393315.85 44393315.99 44393316.12 0.2668 0.1106

Earth 116832-09-01 14:22 G 44393315.95 44393316.10 44393316.26 0.2663 0.0716 *

Uranus 116833-04-06 22:32 G 44393533.27 44393533.44 44393533.64 0.0139 0.0069

Uranus 116833-11-19 06:56 G 44393759.62 44393759.79 44393759.96 0.0139 0.0087

Uranus 116834-07-03 15:05 G 44393986.00 44393986.13 44393986.28 0.0139 0.0106

Uranus 116835-02-14 23:15 G 44394212.40 44394212.47 44394212.58 0.0139 0.0126

Jupiter 116837-11-20 00:27 G 44395221.39 44395221.52 44395221.66 0.0493 0.0374

Saturn 116838-10-14 22:32 G 44395550.36 44395550.44 44395550.54 0.0283 0.0255

Saturn 116839-06-01 11:29 G 44395779.78 44395779.98 44395780.18 0.0284 0.0094

Jupiter 116843-09-25 12:12 G 44397356.80 44397357.01 44397357.21 0.0533 0.0018

Pluto 116849-09-10 13:53 G 44399533.92 44399534.08 44399534.24 0.0063 0.0041

Jupiter 116850-03-19 05:58 G 44399723.59 44399723.75 44399723.92 0.0497 0.0296

Pluto 116850-04-23 17:00 G 44399758.99 44399759.21 44399759.43 0.0063 0.0005

Pluto 116850-12-04 19:53 G 44399984.15 44399984.33 44399984.53 0.0063 0.0031

Saturn 116853-04-04 23:29 G 44400836.28 44400836.48 44400836.69 0.0276 0.0095

Saturn 116853-11-20 09:48 G 44401065.80 44401065.91 44401066.03 0.0275 0.0232

Jupiter 116855-05-31 01:53 G 44401622.43 44401622.58 44401622.73 0.0536 0.0352

Jupiter 116861-11-22 08:08 G 44403989.64 44403989.84 44403990.05 0.0495 0.0034

Mars 116866-04-13 22:32 G 44405593.29 44405593.44 44405593.59 0.1751 0.0847

Uranus 116867-05-15 04:32 G 44405989.66 44405989.69 44405989.76 0.0141 0.0137

Jupiter 116867-09-28 15:20 G 44406126.08 44406126.14 44406126.20 0.0530 0.0504

Uranus 116867-12-27 15:48 G 44406216.05 44406216.16 44406216.29 0.0141 0.0117

Saturn 116868-04-26 03:20 G 44406336.50 44406336.64 44406336.79 0.0282 0.0207

Uranus 116868-08-10 02:51 G 44406442.47 44406442.62 44406442.78 0.0141 0.0097

Saturn 116868-12-11 15:48 G 44406565.98 44406566.16 44406566.35 0.0283 0.0141

Uranus 116869-03-24 13:24 G 44406668.89 44406669.06 44406669.25 0.0140 0.0077

Uranus 116869-11-05 23:58 G 44406895.31 44406895.50 44406895.72 0.0140 0.0058

Uranus 116870-06-20 10:32 G 44407121.73 44407121.94 44407122.16 0.0140 0.0037

Uranus 116871-02-01 20:51 G 44407348.15 44407348.37 44407348.59 0.0140 0.0017

Uranus 116871-09-16 06:56 G 44407574.57 44407574.79 44407575.01 0.0140 0.0004

Uranus 116872-04-29 16:46 G 44407800.98 44407801.20 44407801.41 0.0140 0.0023

Mars 116872-09-25 09:48 G 44407949.76 44407949.91 44407950.07 0.1791 0.0868

Uranus 116872-12-12 02:22 G 44408027.40 44408027.60 44408027.82 0.0139 0.0042

Uranus 116873-07-26 11:58 G 44408253.80 44408254.00 44408254.20 0.0139 0.0061

Jupiter 116873-07-28 10:17 G 44408255.75 44408255.93 44408256.11 0.0493 0.0227

Uranus 116874-03-09 20:51 G 44408480.21 44408480.37 44408480.56 0.0139 0.0081

Uranus 116874-10-22 06:12 G 44408706.61 44408706.76 44408706.92 0.0139 0.0099

Uranus 116875-06-05 14:51 G 44408933.02 44408933.12 44408933.25 0.0139 0.0118

Uranus 116876-01-17 23:44 G 44409159.46 44409159.49 44409159.54 0.0139 0.0136

Jupiter 116879-06-03 07:24 G 44410391.62 44410391.81 44410392.00 0.0532 0.0185

Saturn 116882-10-15 22:32 G 44411622.23 44411622.44 44411622.65 0.0276 0.0067

Saturn 116883-06-02 08:22 G 44411851.79 44411851.85 44411851.93 0.0275 0.0259

Neptune 116884-01-12 05:29 G 44412075.70 44412075.73 44412075.81 0.0089 0.0086

Neptune 116884-08-24 19:10 G 44412301.20 44412301.30 44412301.43 0.0089 0.0076

Jupiter 116885-04-02 13:10 G 44412522.02 44412522.05 44412522.10 0.0492 0.0481

Neptune 116885-04-07 08:51 G 44412526.73 44412526.87 44412527.02 0.0089 0.0066

Neptune 116885-11-18 22:32 G 44412752.27 44412752.44 44412752.61 0.0089 0.0057

Jupiter 116885-11-24 18:12 G 44412758.19 44412758.26 44412758.35 0.0499 0.0459

Neptune 116886-07-02 11:44 G 44412977.82 44412977.99 44412978.19 0.0089 0.0047

Neptune 116887-02-13 01:10 G 44413203.36 44413203.55 44413203.76 0.0089 0.0038

Neptune 116887-09-26 14:36 G 44413428.91 44413429.11 44413429.33 0.0089 0.0028

Neptune 116888-05-09 04:17 G 44413654.46 44413654.68 44413654.90 0.0089 0.0018

Neptune 116888-12-20 17:44 G 44413880.02 44413880.24 44413880.46 0.0089 0.0008

Neptune 116889-08-03 07:10 G 44414105.58 44414105.80 44414106.02 0.0089 0.0002

Neptune 116890-03-16 20:22 G 44414331.13 44414331.35 44414331.57 0.0089 0.0012

Neptune 116890-10-28 09:34 G 44414556.69 44414556.90 44414557.12 0.0089 0.0022

Jupiter 116891-02-05 21:05 G 44414657.18 44414657.38 44414657.57 0.0534 0.0150

Neptune 116891-06-10 22:46 G 44414782.25 44414782.45 44414782.66 0.0089 0.0031

Neptune 116892-01-22 11:58 G 44415007.82 44415008.00 44415008.21 0.0089 0.0041

Neptune 116892-09-04 01:24 G 44415233.38 44415233.56 44415233.74 0.0089 0.0051

Neptune 116893-04-17 14:22 G 44415458.95 44415459.10 44415459.27 0.0089 0.0061

Neptune 116893-11-29 04:03 G 44415684.53 44415684.67 44415684.80 0.0089 0.0070

Neptune 116894-07-12 16:46 G 44415910.12 44415910.20 44415910.31 0.0089 0.0080

Neptune 116895-02-23 05:58 G 44416135.75 44416135.75 44416135.78 0.0089 0.0089

Jupiter 116897-07-30 20:22 G 44417024.17 44417024.35 44417024.54 0.0497 0.0194

Saturn 116897-11-06 05:15 G 44417122.56 44417122.72 44417122.89 0.0283 0.0169

Saturn 116898-06-23 18:12 G 44417352.10 44417352.26 44417352.43 0.0284 0.0181

Jupiter 116902-10-12 10:32 G 44418922.86 44418922.94 44418923.03 0.0536 0.0485

Jupiter 116909-04-05 21:20 G 44421290.19 44421290.39 44421290.60 0.0494 0.0075

Uranus 116910-09-26 08:22 G 44421828.77 44421828.85 44421828.96 0.0137 0.0123

Uranus 116911-05-10 14:36 G 44422054.99 44422055.11 44422055.26 0.0137 0.0106

Uranus 116911-12-22 21:20 G 44422281.23 44422281.39 44422281.56 0.0137 0.0088

Saturn 116912-04-28 05:44 G 44422408.53 44422408.74 44422408.96 0.0276 0.0013

Uranus 116912-08-05 03:48 G 44422507.48 44422507.66 44422507.85 0.0138 0.0070

Uranus 116913-03-19 10:32 G 44422733.75 44422733.94 44422734.15 0.0138 0.0052

Uranus 116913-10-31 17:29 G 44422960.03 44422960.23 44422960.45 0.0138 0.0033

Uranus 116914-06-15 00:56 G 44423186.32 44423186.54 44423186.75 0.0138 0.0015

Uranus 116915-01-27 08:08 G 44423412.63 44423412.84 44423413.06 0.0138 0.0004

Jupiter 116915-02-09 22:03 G 44423426.28 44423426.42 44423426.57 0.0531 0.0366

Uranus 116915-09-10 15:20 G 44423638.94 44423639.14 44423639.36 0.0138 0.0024

Uranus 116916-04-23 23:00 G 44423865.26 44423865.46 44423865.67 0.0139 0.0042

Uranus 116916-12-06 06:56 G 44424091.60 44424091.79 44424091.98 0.0139 0.0061

Uranus 116917-07-20 14:51 G 44424317.95 44424318.12 44424318.30 0.0139 0.0080

Uranus 116918-03-03 22:46 G 44424544.31 44424544.45 44424544.61 0.0139 0.0099

Uranus 116918-10-16 06:56 G 44424770.69 44424770.79 44424770.92 0.0139 0.0119

Uranus 116919-05-30 15:20 G 44424997.12 44424997.14 44424997.20 0.0139 0.0138

Jupiter 116920-12-09 23:58 G 44425556.35 44425556.50 44425556.66 0.0492 0.0332

Jupiter 116926-10-15 13:53 G 44427691.88 44427692.08 44427692.28 0.0533 0.0042

Saturn 116927-05-20 10:46 G 44427908.76 44427908.95 44427909.14 0.0282 0.0119

Saturn 116928-01-04 23:15 G 44428138.36 44428138.47 44428138.60 0.0283 0.0229

Mars 116932-02-10 07:53 G 44429635.66 44429635.83 44429635.99 0.1747 0.0446

Jupiter 116933-04-08 06:12 G 44430058.62 44430058.76 44430058.91 0.0498 0.0345

Jupiter 116938-06-20 05:44 G 44431957.57 44431957.74 44431957.91 0.0536 0.0286

Mars 116938-07-24 15:48 G 44431991.99 44431992.16 44431992.34 0.1796 0.0328

Pluto 116940-06-06 18:27 G 44432675.11 44432675.27 44432675.46 0.0081 0.0050

Pluto 116941-01-18 06:27 G 44432900.56 44432900.77 44432900.98 0.0081 0.0033

Saturn 116941-11-08 04:46 G 44433194.49 44433194.70 44433194.92 0.0276 0.0016

Jupiter 116944-12-12 09:05 G 44434324.68 44434324.88 44434325.08 0.0496 0.0085

Earth 116946-03-10 05:00 G 44434777.59 44434777.71 44434777.82 0.2671 0.1807

Moon 116946-03-10 05:58 G 44434777.63 44434777.75 44434777.87 0.2665 0.1888 *

Uranus 116951-08-27 22:46 G 44436774.36 44436774.45 44436774.56 0.0141 0.0125

Uranus 116952-04-10 09:48 G 44437000.78 44437000.91 44437001.07 0.0141 0.0105

Uranus 116952-11-22 20:51 G 44437227.20 44437227.37 44437227.55 0.0140 0.0085

Uranus 116953-07-07 07:39 G 44437453.63 44437453.82 44437454.02 0.0140 0.0065

Uranus 116954-02-18 18:12 G 44437680.05 44437680.26 44437680.47 0.0140 0.0045

Earth 116954-03-07 19:39 G 44437697.21 44437697.32 44437697.43 0.2669 0.1915

Uranus 116954-10-03 04:17 G 44437906.47 44437906.68 44437906.90 0.0140 0.0025

Uranus 116955-05-17 14:36 G 44438132.89 44438133.11 44438133.33 0.0140 0.0004

Uranus 116955-12-30 00:41 G 44438359.31 44438359.53 44438359.75 0.0140 0.0016

Uranus 116956-08-12 10:17 G 44438585.72 44438585.93 44438586.15 0.0139 0.0035

Jupiter 116956-08-17 11:29 G 44438590.79 44438590.98 44438591.18 0.0494 0.0177

Saturn 116956-11-29 12:12 G 44438694.81 44438695.01 44438695.21 0.0283 0.0083

Uranus 116957-03-26 19:39 G 44438812.13 44438812.32 44438812.53 0.0139 0.0055

Saturn 116957-07-17 00:56 G 44438924.48 44438924.54 44438924.62 0.0284 0.0268

Uranus 116957-11-08 05:00 G 44439038.54 44439038.71 44439038.91 0.0139 0.0075

Uranus 116958-06-22 14:22 G 44439264.95 44439265.10 44439265.27 0.0139 0.0093

Uranus 116959-02-03 23:15 G 44439491.35 44439491.47 44439491.61 0.0139 0.0112

Uranus 116959-09-18 08:08 G 44439717.77 44439717.84 44439717.92 0.0139 0.0130

Jupiter 116962-06-23 07:24 G 44440726.63 44440726.81 44440726.99 0.0532 0.0236

Neptune 116964-12-02 08:22 G 44441619.83 44441619.85 44441619.91 0.0088 0.0086

Neptune 116965-07-15 20:51 G 44441845.29 44441845.37 44441845.50 0.0088 0.0077

Neptune 116966-02-26 09:20 G 44442070.78 44442070.89 44442071.05 0.0088 0.0068

Neptune 116966-10-09 22:17 G 44442296.27 44442296.43 44442296.60 0.0088 0.0059

Neptune 116967-05-23 10:46 G 44442521.78 44442521.95 44442522.14 0.0088 0.0050

Neptune 116968-01-03 23:15 G 44442747.29 44442747.47 44442747.68 0.0088 0.0041

Jupiter 116968-04-22 13:24 G 44442856.97 44442857.06 44442857.16 0.0491 0.0436

Neptune 116968-08-16 11:44 G 44442972.80 44442972.99 44442973.21 0.0088 0.0032

Neptune 116969-03-30 00:41 G 44443198.32 44443198.53 44443198.74 0.0088 0.0022

Neptune 116969-11-10 13:10 G 44443423.83 44443424.05 44443424.27 0.0088 0.0012

Neptune 116970-06-24 01:53 G 44443649.36 44443649.58 44443649.80 0.0088 0.0003

Saturn 116970-10-03 23:29 G 44443751.43 44443751.48 44443751.55 0.0277 0.0266

Neptune 116971-02-04 14:36 G 44443874.89 44443875.11 44443875.33 0.0088 0.0006

Saturn 116971-05-21 11:15 G 44443980.77 44443980.97 44443981.18 0.0276 0.0067

Neptune 116971-09-18 03:05 G 44444100.42 44444100.63 44444100.85 0.0088 0.0016

Neptune 116972-04-30 15:34 G 44444325.95 44444326.15 44444326.37 0.0088 0.0025

Neptune 116972-12-12 04:32 G 44444551.49 44444551.69 44444551.89 0.0088 0.0034

Neptune 116973-07-25 17:00 G 44444777.03 44444777.21 44444777.41 0.0088 0.0044

Jupiter 116974-02-25 20:22 G 44444992.15 44444992.35 44444992.55 0.0535 0.0103

Neptune 116974-03-08 05:44 G 44445002.58 44445002.74 44445002.93 0.0088 0.0053

Neptune 116974-10-19 18:41 G 44445228.13 44445228.28 44445228.44 0.0088 0.0062

Neptune 116975-06-02 07:10 G 44445453.70 44445453.80 44445453.95 0.0088 0.0072

Neptune 116976-01-13 19:53 G 44445679.27 44445679.33 44445679.44 0.0088 0.0081

Jupiter 116980-08-19 19:53 G 44447359.15 44447359.33 44447359.51 0.0496 0.0237

Jupiter 116985-10-31 11:29 G 44449257.87 44449257.98 44449258.10 0.0537 0.0433

Saturn 116986-06-11 18:41 G 44449481.07 44449481.28 44449481.49 0.0282 0.0031

Jupiter 116992-04-24 21:34 G 44451625.19 44451625.40 44451625.60 0.0494 0.0028

Uranus 116994-05-26 17:58 G 44452387.19 44452387.25 44452387.33 0.0137 0.0129

Uranus 116995-01-07 23:58 G 44452613.39 44452613.50 44452613.64 0.0137 0.0113

Uranus 116995-08-22 06:27 G 44452839.62 44452839.77 44452839.93 0.0137 0.0095

Uranus 116996-04-04 12:56 G 44453065.87 44453066.04 44453066.23 0.0138 0.0077

Uranus 116996-11-16 19:39 G 44453292.14 44453292.32 44453292.52 0.0138 0.0059

Uranus 116997-07-01 02:36 G 44453518.41 44453518.61 44453518.82 0.0138 0.0040

Mars 116997-12-07 17:44 G 44453678.07 44453678.24 44453678.41 0.1743 0.0081

Uranus 116998-02-12 09:48 G 44453744.70 44453744.91 44453745.12 0.0138 0.0021

Jupiter 116998-03-01 01:53 G 44453761.46 44453761.58 44453761.69 0.0531 0.0431

Uranus 116998-09-26 16:46 G 44453970.99 44453971.20 44453971.42 0.0138 0.0004

Uranus 116999-05-11 00:12 G 44454197.30 44454197.51 44454197.73 0.0138 0.0017

Uranus 116999-12-23 07:39 G 44454423.62 44454423.82 44454424.03 0.0139 0.0036

Saturn 117000-04-15 23:15 G 44454537.36 44454537.47 44454537.58 0.0277 0.0236

Uranus 117000-08-06 15:05 G 44454649.94 44454650.13 44454650.34 0.0139 0.0055

Saturn 117000-12-01 10:46 G 44454766.76 44454766.95 44454767.16 0.0276 0.0096

118TH MILLENNIUM CE

This is a list of transits of Venus in the 118th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 117001-03-20 22:46 G 44454876.28 44454876.45 44454876.65 0.0139 0.0074

Uranus 117001-11-02 07:10 G 44455102.64 44455102.80 44455102.96 0.0139 0.0093

Uranus 117002-06-16 15:20 G 44455329.02 44455329.14 44455329.27 0.0139 0.0112

Uranus 117003-01-28 23:29 G 44455555.42 44455555.48 44455555.57 0.0139 0.0131

Jupiter 117003-12-31 00:27 G 44455891.36 44455891.52 44455891.69 0.0493 0.0283

Mars 117004-05-21 21:48 G 44456034.24 44456034.41 44456034.59 0.1801 0.0214

Jupiter 117009-11-04 16:03 G 44458026.97 44458027.17 44458027.37 0.0533 0.0101

Saturn 117015-12-23 19:39 G 44460267.11 44460267.32 44460267.53 0.0283 0.0008

Jupiter 117016-04-28 07:53 G 44460393.71 44460393.83 44460393.95 0.0498 0.0398

Jupiter 117021-07-10 05:58 G 44462292.57 44462292.75 44462292.94 0.0535 0.0234

Jupiter 117028-01-02 09:20 G 44464659.69 44464659.89 44464660.09 0.0495 0.0130

Saturn 117029-10-27 05:15 G 44465323.57 44465323.72 44465323.89 0.0277 0.0186

Saturn 117030-06-13 16:46 G 44465553.03 44465553.20 44465553.39 0.0276 0.0147

Uranus 117035-04-28 05:44 G 44467332.68 44467332.74 44467332.83 0.0141 0.0133

Uranus 117035-12-10 17:00 G 44467559.09 44467559.21 44467559.35 0.0141 0.0113

Uranus 117036-07-24 04:03 G 44467785.51 44467785.67 44467785.84 0.0141 0.0093

Uranus 117037-03-07 14:51 G 44468011.94 44468012.12 44468012.32 0.0140 0.0073

Uranus 117037-10-20 01:24 G 44468238.37 44468238.56 44468238.78 0.0140 0.0053

Uranus 117038-06-03 11:58 G 44468464.79 44468465.00 44468465.22 0.0140 0.0032

Uranus 117039-01-15 22:17 G 44468691.22 44468691.43 44468691.66 0.0140 0.0012

Uranus 117039-08-30 08:22 G 44468917.63 44468917.85 44468918.07 0.0140 0.0009

Jupiter 117039-09-07 11:29 G 44468925.78 44468925.98 44468926.18 0.0493 0.0131

Uranus 117040-04-12 18:12 G 44469144.05 44469144.26 44469144.48 0.0140 0.0028

Uranus 117040-11-25 03:48 G 44469370.47 44469370.66 44469370.88 0.0139 0.0049

Uranus 117041-07-09 13:24 G 44469596.88 44469597.06 44469597.26 0.0139 0.0068

Uranus 117042-02-20 22:32 G 44469823.28 44469823.44 44469823.62 0.0139 0.0087

Uranus 117042-10-05 07:24 G 44470049.69 44470049.81 44470049.97 0.0139 0.0106

Uranus 117043-05-19 16:32 G 44470276.10 44470276.19 44470276.29 0.0139 0.0124

Saturn 117045-07-05 02:51 G 44471053.42 44471053.62 44471053.83 0.0282 0.0060

Jupiter 117045-07-13 07:53 G 44471061.67 44471061.83 44471062.00 0.0532 0.0289

Neptune 117048-04-16 15:34 G 44472070.13 44472070.15 44472070.21 0.0089 0.0087

Neptune 117048-11-28 05:29 G 44472295.63 44472295.73 44472295.84 0.0089 0.0078

Neptune 117049-07-11 18:41 G 44472521.16 44472521.28 44472521.44 0.0089 0.0068

Neptune 117050-02-22 08:08 G 44472746.69 44472746.84 44472747.02 0.0089 0.0059

Neptune 117050-10-05 21:48 G 44472972.23 44472972.41 44472972.60 0.0089 0.0049

Jupiter 117051-05-13 13:10 G 44473191.93 44473192.05 44473192.18 0.0491 0.0391

Neptune 117051-05-19 11:29 G 44473197.78 44473197.98 44473198.18 0.0089 0.0039

Neptune 117051-12-31 00:41 G 44473423.34 44473423.53 44473423.75 0.0089 0.0029

Neptune 117052-08-12 14:22 G 44473648.89 44473649.10 44473649.32 0.0089 0.0019

Neptune 117053-03-26 03:48 G 44473874.44 44473874.66 44473874.88 0.0089 0.0009

Neptune 117053-11-06 17:15 G 44474100.00 44474100.22 44474100.44 0.0089 0.0001

Neptune 117054-06-20 06:27 G 44474325.56 44474325.77 44474326.00 0.0089 0.0011

Neptune 117055-01-31 19:53 G 44474551.12 44474551.33 44474551.55 0.0089 0.0020

Neptune 117055-09-14 09:20 G 44474776.68 44474776.89 44474777.10 0.0089 0.0030

Neptune 117056-04-26 22:17 G 44475002.25 44475002.43 44475002.64 0.0089 0.0040

Neptune 117056-12-08 11:29 G 44475227.82 44475227.98 44475228.18 0.0089 0.0050

Jupiter 117057-03-17 23:58 G 44475327.30 44475327.50 44475327.70 0.0534 0.0037

Neptune 117057-07-22 01:10 G 44475453.39 44475453.55 44475453.71 0.0089 0.0059

Neptune 117058-03-04 14:08 G 44475678.96 44475679.09 44475679.24 0.0089 0.0069

Neptune 117058-10-16 03:05 G 44475904.55 44475904.63 44475904.75 0.0089 0.0079

Saturn 117059-05-09 05:58 G 44476109.58 44476109.75 44476109.93 0.0277 0.0154

Neptune 117059-05-29 16:32 G 44476130.16 44476130.19 44476130.24 0.0089 0.0088

Saturn 117059-12-24 17:29 G 44476339.06 44476339.23 44476339.39 0.0276 0.0177

Jupiter 117063-09-09 20:08 G 44477694.18 44477694.34 44477694.51 0.0497 0.0288

Mars 117063-10-06 03:34 G 44477720.48 44477720.65 44477720.82 0.1738 0.0297

Jupiter 117068-11-20 14:08 G 44479592.95 44479593.09 44479593.23 0.0536 0.0372

Mars 117070-03-19 03:34 G 44480076.50 44480076.65 44480076.81 0.1805 0.0781

Saturn 117074-05-30 16:03 G 44481610.08 44481610.17 44481610.27 0.0282 0.0250

Saturn 117075-01-15 03:48 G 44481839.46 44481839.66 44481839.86 0.0283 0.0095

Jupiter 117075-05-15 22:32 G 44481960.24 44481960.44 44481960.65 0.0495 0.0025

Moon 117075-09-04 11:29 G 44482071.82 44482071.98 44482072.13 0.2661 0.0825

Earth 117075-09-04 16:32 G 44482072.03 44482072.19 44482072.34 0.2664 0.0672 *

Uranus 117078-01-25 02:51 G 44482945.60 44482945.62 44482945.63 0.0137 0.0136

Uranus 117078-09-08 08:51 G 44483171.77 44483171.87 44483171.98 0.0137 0.0119

Uranus 117079-04-22 15:20 G 44483398.00 44483398.14 44483398.28 0.0137 0.0102

Uranus 117079-12-04 21:48 G 44483624.24 44483624.41 44483624.58 0.0137 0.0084

Uranus 117080-07-18 04:17 G 44483850.50 44483850.68 44483850.87 0.0138 0.0066

Uranus 117081-03-01 10:46 G 44484076.76 44484076.95 44484077.16 0.0138 0.0048

Jupiter 117081-03-21 01:39 G 44484096.49 44484096.57 44484096.66 0.0530 0.0482

Uranus 117081-10-13 17:58 G 44484303.04 44484303.25 44484303.46 0.0138 0.0029

Uranus 117082-05-28 01:10 G 44484529.34 44484529.55 44484529.77 0.0138 0.0010

Uranus 117083-01-09 08:22 G 44484755.64 44484755.85 44484756.07 0.0138 0.0009

Uranus 117083-08-23 15:34 G 44484981.94 44484982.15 44484982.37 0.0138 0.0028

Uranus 117084-04-05 23:15 G 44485208.26 44485208.47 44485208.67 0.0139 0.0047

Uranus 117084-11-18 06:41 G 44485434.60 44485434.78 44485434.98 0.0139 0.0066

Uranus 117085-07-02 14:51 G 44485660.95 44485661.12 44485661.29 0.0139 0.0085

Uranus 117086-02-13 22:46 G 44485887.31 44485887.45 44485887.60 0.0139 0.0104

Uranus 117086-09-28 06:41 G 44486113.70 44486113.78 44486113.90 0.0139 0.0124

Jupiter 117087-01-19 00:56 G 44486226.36 44486226.54 44486226.72 0.0492 0.0237

Saturn 117088-11-18 11:29 G 44486895.79 44486895.98 44486896.18 0.0277 0.0106

Saturn 117089-07-05 22:46 G 44487125.34 44487125.45 44487125.58 0.0276 0.0227

Jupiter 117092-11-23 14:08 G 44488361.90 44488362.09 44488362.29 0.0533 0.0145

Pluto 117095-10-11 18:27 G 44489414.14 44489414.27 44489414.42 0.0063 0.0048

Pluto 117096-05-23 21:48 G 44489639.19 44489639.41 44489639.62 0.0063 0.0012

Pluto 117097-01-04 00:27 G 44489864.34 44489864.52 44489864.74 0.0063 0.0024

Pluto 117097-08-17 03:48 G 44490089.61 44490089.66 44490089.73 0.0063 0.0061

Jupiter 117099-05-18 07:10 G 44490728.72 44490728.80 44490728.90 0.0497 0.0443

Saturn 117103-12-12 00:41 G 44492396.38 44492396.53 44492396.68 0.0281 0.0192

Saturn 117104-07-28 11:58 G 44492625.84 44492626.00 44492626.19 0.0282 0.0154

Jupiter 117104-07-30 05:15 G 44492627.53 44492627.72 44492627.91 0.0536 0.0186

Jupiter 117111-01-22 08:22 G 44494994.66 44494994.85 44494995.04 0.0495 0.0176

Jupiter 117116-04-03 20:36 G 44496893.31 44496893.36 44496893.42 0.0538 0.0516

Saturn 117118-06-01 13:24 G 44497681.86 44497682.06 44497682.27 0.0277 0.0069

Uranus 117118-12-27 12:56 G 44497891.04 44497891.04 44497891.07 0.0141 0.0141

Saturn 117119-01-17 00:27 G 44497911.46 44497911.52 44497911.59 0.0276 0.0261

Uranus 117119-08-11 00:12 G 44498117.41 44498117.51 44498117.63 0.0141 0.0121

Uranus 117120-03-24 11:15 G 44498343.83 44498343.97 44498344.14 0.0141 0.0101

Uranus 117120-11-05 22:17 G 44498570.26 44498570.43 44498570.62 0.0140 0.0080

Uranus 117121-06-20 09:20 G 44498796.69 44498796.89 44498797.09 0.0140 0.0060

Uranus 117122-02-01 19:53 G 44499023.12 44499023.33 44499023.54 0.0140 0.0039

Uranus 117122-09-16 06:12 G 44499249.54 44499249.76 44499249.98 0.0140 0.0019

Jupiter 117122-09-27 10:46 G 44499260.75 44499260.95 44499261.16 0.0494 0.0086

Uranus 117123-04-30 16:17 G 44499475.96 44499476.18 44499476.41 0.0140 0.0003

Uranus 117123-12-13 02:22 G 44499702.39 44499702.60 44499702.82 0.0140 0.0022

Uranus 117124-07-26 12:12 G 44499928.80 44499929.01 44499929.22 0.0139 0.0041

Uranus 117125-03-09 21:34 G 44500155.21 44500155.40 44500155.61 0.0139 0.0061

Uranus 117125-10-22 06:56 G 44500381.62 44500381.79 44500381.98 0.0139 0.0080

Uranus 117126-06-05 16:17 G 44500608.03 44500608.18 44500608.33 0.0139 0.0099

Uranus 117127-01-18 01:10 G 44500834.45 44500834.55 44500834.67 0.0139 0.0118

Uranus 117127-09-01 10:03 G 44501060.88 44501060.92 44501060.96 0.0139 0.0136

Jupiter 117128-08-02 09:48 G 44501396.76 44501396.91 44501397.06 0.0531 0.0347

Neptune 117129-03-07 19:24 G 44501614.30 44501614.31 44501614.36 0.0088 0.0087

Mars 117129-08-03 13:39 G 44501762.91 44501763.07 44501763.23 0.1735 0.0660

Neptune 117129-10-19 07:53 G 44501839.75 44501839.83 44501839.95 0.0088 0.0078

Neptune 117130-06-01 20:22 G 44502065.24 44502065.35 44502065.51 0.0088 0.0070

Neptune 117131-01-13 09:34 G 44502290.74 44502290.90 44502291.06 0.0088 0.0060

Neptune 117131-08-26 21:48 G 44502516.24 44502516.41 44502516.60 0.0088 0.0051

Neptune 117132-04-08 10:17 G 44502741.75 44502741.93 44502742.13 0.0088 0.0041

Neptune 117132-11-19 22:46 G 44502967.26 44502967.45 44502967.67 0.0088 0.0032

Saturn 117133-06-23 01:10 G 44503182.38 44503182.55 44503182.73 0.0282 0.0158

Neptune 117133-07-03 11:29 G 44503192.78 44503192.98 44503193.20 0.0088 0.0023

Saturn 117134-02-07 13:10 G 44503411.90 44503412.05 44503412.21 0.0283 0.0188

Neptune 117134-02-14 00:27 G 44503418.30 44503418.52 44503418.73 0.0088 0.0013

Jupiter 117134-06-02 13:39 G 44503526.93 44503527.07 44503527.22 0.0492 0.0343

Neptune 117134-09-27 12:56 G 44503643.82 44503644.04 44503644.26 0.0088 0.0004

Neptune 117135-05-11 01:24 G 44503869.34 44503869.56 44503869.78 0.0088 0.0006

Neptune 117135-12-22 13:53 G 44504094.87 44504095.08 44504095.31 0.0088 0.0015

Mars 117136-01-15 09:20 G 44504118.78 44504118.89 44504119.01 0.1810 0.1344

Neptune 117136-08-04 02:36 G 44504320.41 44504320.61 44504320.83 0.0088 0.0024

Neptune 117137-03-17 15:20 G 44504545.94 44504546.14 44504546.35 0.0088 0.0033

Neptune 117137-10-29 03:34 G 44504771.48 44504771.65 44504771.86 0.0088 0.0043

Neptune 117138-06-11 16:32 G 44504997.03 44504997.19 44504997.38 0.0088 0.0052

Neptune 117139-01-23 05:29 G 44505222.58 44505222.73 44505222.89 0.0088 0.0061

Neptune 117139-09-05 17:44 G 44505448.14 44505448.24 44505448.40 0.0088 0.0071

Jupiter 117140-04-06 23:44 G 44505662.29 44505662.49 44505662.69 0.0534 0.0015

Neptune 117140-04-18 06:41 G 44505673.71 44505673.78 44505673.89 0.0088 0.0080

Jupiter 117146-09-29 20:08 G 44508029.20 44508029.34 44508029.50 0.0497 0.0334

Saturn 117147-12-12 18:56 G 44508468.08 44508468.29 44508468.51 0.0277 0.0022

Jupiter 117151-12-11 11:00 G 44509927.81 44509927.96 44509928.12 0.0537 0.0333

Jupiter 117158-06-04 22:03 G 44512295.22 44512295.42 44512295.62 0.0494 0.0070

Uranus 117162-05-09 18:12 G 44513730.19 44513730.26 44513730.36 0.0137 0.0126

Uranus 117162-12-22 00:41 G 44513956.40 44513956.53 44513956.66 0.0137 0.0108

Saturn 117163-01-03 11:00 G 44513968.76 44513968.96 44513969.16 0.0282 0.0097

Uranus 117163-08-05 06:56 G 44514182.64 44514182.79 44514182.96 0.0137 0.0091

Saturn 117163-08-20 22:46 G 44514198.36 44514198.45 44514198.55 0.0283 0.0250

Uranus 117164-03-18 13:24 G 44514408.88 44514409.06 44514409.25 0.0137 0.0073

Jupiter 117164-04-10 00:12 G 44514431.49 44514431.51 44514431.52 0.0531 0.0528

Uranus 117164-10-30 19:53 G 44514635.14 44514635.33 44514635.54 0.0138 0.0055

Uranus 117165-06-14 02:51 G 44514861.42 44514861.62 44514861.84 0.0138 0.0036

Uranus 117166-01-26 10:03 G 44515087.70 44515087.92 44515088.13 0.0138 0.0017

Uranus 117166-09-09 17:00 G 44515314.00 44515314.21 44515314.43 0.0138 0.0002

Uranus 117167-04-24 00:12 G 44515540.30 44515540.51 44515540.73 0.0138 0.0021

Uranus 117167-12-06 07:24 G 44515766.62 44515766.81 44515767.03 0.0139 0.0041

Uranus 117168-07-19 15:05 G 44515992.94 44515993.13 44515993.33 0.0139 0.0060

Uranus 117169-03-02 22:46 G 44516219.28 44516219.45 44516219.64 0.0139 0.0079

Uranus 117169-10-15 06:56 G 44516445.64 44516445.79 44516445.94 0.0139 0.0097

Jupiter 117170-02-07 23:15 G 44516561.28 44516561.47 44516561.66 0.0492 0.0195

Uranus 117170-05-29 15:05 G 44516672.02 44516672.13 44516672.25 0.0139 0.0117

Uranus 117171-01-10 23:15 G 44516898.43 44516898.47 44516898.53 0.0139 0.0136

Jupiter 117175-12-14 16:17 G 44518697.00 44518697.18 44518697.37 0.0533 0.0206

Saturn 117177-06-23 22:17 G 44519254.21 44519254.43 44519254.64 0.0277 0.0020

Jupiter 117181-10-14 01:53 G 44520827.50 44520827.58 44520827.66 0.0491 0.0450

Jupiter 117182-06-07 05:58 G 44521063.72 44521063.75 44521063.79 0.0498 0.0488

Pluto 117186-07-07 17:44 G 44522555.19 44522555.24 44522555.35 0.0082 0.0077

Pluto 117187-02-18 05:58 G 44522780.53 44522780.75 44522780.98 0.0081 0.0006

Jupiter 117187-08-19 06:56 G 44522962.60 44522962.79 44522962.99 0.0535 0.0127

Earth 117189-03-12 05:00 G 44523533.59 44523533.71 44523533.84 0.2670 0.1679

Moon 117189-03-12 11:00 G 44523533.85 44523533.96 44523534.07 0.2670 0.1909

Saturn 117192-07-15 11:58 G 44524754.80 44524755.00 44524755.21 0.0282 0.0062

Jupiter 117194-02-10 08:22 G 44525329.67 44525329.85 44525330.03 0.0496 0.0224

Mars 117195-05-31 23:44 G 44525805.35 44525805.49 44525805.62 0.1730 0.1018

Earth 117197-03-09 19:53 G 44526453.23 44526453.33 44526453.43 0.2668 0.2044

Moon 117197-03-09 22:17 G 44526453.30 44526453.43 44526453.56 0.2661 0.1711 *

Jupiter 117199-04-23 20:22 G 44527228.26 44527228.35 44527228.45 0.0537 0.0466

Uranus 117203-04-10 07:10 G 44528675.72 44528675.80 44528675.89 0.0141 0.0128

Uranus 117203-11-22 18:27 G 44528902.14 44528902.27 44528902.42 0.0141 0.0108

Uranus 117204-07-06 05:29 G 44529128.57 44529128.73 44529128.91 0.0141 0.0088

Uranus 117205-02-17 16:17 G 44529355.00 44529355.18 44529355.38 0.0140 0.0067

Uranus 117205-10-02 02:51 G 44529581.43 44529581.62 44529581.84 0.0140 0.0047

Jupiter 117205-10-16 10:46 G 44529595.75 44529595.95 44529596.15 0.0494 0.0039

Uranus 117206-05-16 13:39 G 44529807.85 44529808.07 44529808.29 0.0140 0.0026

Saturn 117206-05-19 14:51 G 44529811.08 44529811.12 44529811.17 0.0278 0.0270

Uranus 117206-12-28 23:58 G 44530034.28 44530034.50 44530034.73 0.0140 0.0007

Saturn 117207-01-04 03:20 G 44530040.43 44530040.64 44530040.85 0.0277 0.0065

Uranus 117207-08-12 10:03 G 44530260.71 44530260.92 44530261.14 0.0140 0.0015

Uranus 117208-03-25 19:53 G 44530487.12 44530487.33 44530487.55 0.0140 0.0035

Uranus 117208-11-07 05:29 G 44530713.54 44530713.73 44530713.94 0.0139 0.0055

Uranus 117209-06-21 14:51 G 44530939.95 44530940.12 44530940.32 0.0139 0.0074

Uranus 117210-02-03 00:12 G 44531166.36 44531166.51 44531166.68 0.0139 0.0093

Uranus 117210-09-17 09:05 G 44531392.77 44531392.88 44531393.03 0.0139 0.0112

Uranus 117211-05-01 17:44 G 44531619.19 44531619.24 44531619.34 0.0139 0.0131

Jupiter 117211-08-22 05:58 G 44531731.62 44531731.75 44531731.89 0.0532 0.0385

Neptune 117212-07-20 01:53 G 44532064.57 44532064.58 44532064.61 0.0089 0.0089

Neptune 117213-03-02 15:05 G 44532290.05 44532290.13 44532290.25 0.0089 0.0079

Neptune 117213-10-14 04:46 G 44532515.57 44532515.70 44532515.85 0.0089 0.0069

Neptune 117214-05-27 18:27 G 44532741.11 44532741.27 44532741.43 0.0089 0.0060

Neptune 117215-01-08 07:39 G 44532966.65 44532966.82 44532967.02 0.0089 0.0050

Neptune 117215-08-21 21:05 G 44533192.20 44533192.38 44533192.59 0.0089 0.0041

Neptune 117216-04-03 10:46 G 44533417.75 44533417.95 44533418.16 0.0089 0.0030

Neptune 117216-11-15 00:27 G 44533643.30 44533643.52 44533643.73 0.0089 0.0021

Jupiter 117217-06-21 12:56 G 44533861.88 44533862.04 44533862.21 0.0492 0.0299

Neptune 117217-06-28 13:39 G 44533868.86 44533869.07 44533869.30 0.0089 0.0011

Neptune 117218-02-09 03:20 G 44534094.42 44534094.64 44534094.86 0.0089 0.0001

Neptune 117218-09-22 16:32 G 44534319.98 44534320.19 44534320.42 0.0089 0.0009

Neptune 117219-05-06 05:58 G 44534545.54 44534545.75 44534545.97 0.0089 0.0019

Neptune 117219-12-17 19:24 G 44534771.11 44534771.31 44534771.52 0.0089 0.0028

Neptune 117220-07-30 08:36 G 44534996.67 44534996.86 44534997.07 0.0089 0.0038

Neptune 117221-03-12 22:03 G 44535222.24 44535222.42 44535222.61 0.0089 0.0048

Neptune 117221-10-24 11:00 G 44535447.81 44535447.96 44535448.14 0.0089 0.0058

Saturn 117222-01-25 22:17 G 44535541.22 44535541.43 44535541.64 0.0282 0.0001

Neptune 117222-06-07 00:12 G 44535673.38 44535673.51 44535673.67 0.0089 0.0067

Neptune 117223-01-18 13:39 G 44535898.97 44535899.07 44535899.19 0.0089 0.0077

Jupiter 117223-04-26 20:36 G 44535997.16 44535997.36 44535997.56 0.0534 0.0055

Neptune 117223-09-01 02:36 G 44536124.58 44536124.61 44536124.69 0.0089 0.0087

Mars 117227-05-31 00:12 G 44537492.45 44537492.51 44537492.57 0.1744 0.1632

Jupiter 117229-10-18 17:29 G 44538364.10 44538364.23 44538364.36 0.0497 0.0373

Mars 117233-11-11 05:58 G 44539848.67 44539848.75 44539848.84 0.1799 0.1577

Jupiter 117234-12-30 12:27 G 44540262.85 44540263.02 44540263.19 0.0536 0.0276

Saturn 117235-11-29 20:22 G 44540597.23 44540597.35 44540597.49 0.0278 0.0223

Saturn 117236-07-16 08:22 G 44540826.66 44540826.85 44540827.05 0.0277 0.0111

Jupiter 117241-06-23 19:53 G 44542630.13 44542630.33 44542630.52 0.0495 0.0111

Uranus 117246-01-07 03:05 G 44544288.60 44544288.63 44544288.70 0.0137 0.0133

Uranus 117246-08-21 09:34 G 44544514.79 44544514.90 44544515.02 0.0137 0.0115

Uranus 117247-04-04 15:48 G 44544741.02 44544741.16 44544741.31 0.0137 0.0098

Uranus 117247-11-16 22:17 G 44544967.26 44544967.43 44544967.60 0.0137 0.0080

Uranus 117248-06-30 04:32 G 44545193.51 44545193.69 44545193.90 0.0138 0.0062

Uranus 117249-02-11 11:29 G 44545419.78 44545419.98 44545420.18 0.0138 0.0043

Uranus 117249-09-25 18:12 G 44545646.05 44545646.26 44545646.47 0.0138 0.0024

Uranus 117250-05-10 01:10 G 44545872.34 44545872.55 44545872.77 0.0138 0.0006

Uranus 117250-12-22 08:22 G 44546098.64 44546098.85 44546099.07 0.0138 0.0014

Uranus 117251-08-05 15:34 G 44546324.94 44546325.15 44546325.36 0.0138 0.0033

Saturn 117251-08-07 23:44 G 44546327.28 44546327.49 44546327.70 0.0282 0.0038

Uranus 117252-03-18 22:46 G 44546551.26 44546551.45 44546551.66 0.0139 0.0053

Uranus 117252-10-31 06:41 G 44546777.59 44546777.78 44546777.96 0.0139 0.0071

Jupiter 117253-02-26 22:17 G 44546896.23 44546896.43 44546896.63 0.0493 0.0151

Uranus 117253-06-14 14:36 G 44547003.95 44547004.11 44547004.27 0.0139 0.0090

Uranus 117254-01-26 22:32 G 44547230.31 44547230.44 44547230.58 0.0139 0.0110

Uranus 117254-09-10 06:41 G 44547456.70 44547456.78 44547456.86 0.0139 0.0129

Jupiter 117259-01-02 15:05 G 44549031.96 44549032.13 44549032.31 0.0532 0.0254

Mars 117261-03-28 09:48 G 44549847.81 44549847.91 44549848.01 0.1727 0.1374

Jupiter 117264-11-02 01:10 G 44551162.44 44551162.55 44551162.67 0.0491 0.0407

Saturn 117265-06-11 00:56 G 44551383.39 44551383.54 44551383.71 0.0277 0.0178

Saturn 117266-01-26 13:10 G 44551612.87 44551613.05 44551613.22 0.0277 0.0156

Jupiter 117270-09-07 02:22 G 44553297.40 44553297.60 44553297.79 0.0535 0.0094

Jupiter 117277-03-01 06:56 G 44555664.62 44555664.79 44555664.96 0.0496 0.0267

Saturn 117280-07-02 23:29 G 44556884.38 44556884.48 44556884.59 0.0281 0.0241

Saturn 117281-02-17 10:46 G 44557113.76 44557113.95 44557114.15 0.0282 0.0103

Jupiter 117282-05-12 16:03 G 44557563.05 44557563.17 44557563.29 0.0537 0.0430

Uranus 117286-12-08 14:08 G 44559234.04 44559234.09 44559234.15 0.0141 0.0136

Uranus 117287-07-23 01:24 G 44559460.45 44559460.56 44559460.69 0.0141 0.0116

Uranus 117288-03-05 12:27 G 44559686.87 44559687.02 44559687.20 0.0141 0.0096

Uranus 117288-10-17 23:44 G 44559913.31 44559913.49 44559913.68 0.0140 0.0075

Jupiter 117288-11-04 07:10 G 44559930.59 44559930.80 44559931.00 0.0494 0.0004

Uranus 117289-06-01 10:17 G 44560139.74 44560139.93 44560140.15 0.0140 0.0055

Uranus 117290-01-13 21:20 G 44560366.17 44560366.39 44560366.60 0.0140 0.0033

Uranus 117290-08-28 07:39 G 44560592.60 44560592.82 44560593.04 0.0140 0.0013

Uranus 117291-04-11 17:44 G 44560819.02 44560819.24 44560819.46 0.0140 0.0008

Uranus 117291-11-24 03:48 G 44561045.45 44561045.66 44561045.88 0.0140 0.0028

Uranus 117292-07-07 13:39 G 44561271.87 44561272.07 44561272.28 0.0139 0.0048

Uranus 117293-02-18 23:00 G 44561498.28 44561498.46 44561498.66 0.0139 0.0068

Mars 117293-03-27 10:17 G 44561534.81 44561534.93 44561535.04 0.1740 0.1261

Uranus 117293-10-03 08:08 G 44561724.69 44561724.84 44561725.03 0.0139 0.0087

Neptune 117294-01-20 18:56 G 44561834.21 44561834.29 44561834.40 0.0088 0.0079

Uranus 117294-05-17 17:15 G 44561951.10 44561951.22 44561951.38 0.0139 0.0106

Neptune 117294-09-03 07:24 G 44562059.70 44562059.81 44562059.96 0.0088 0.0070

Jupiter 117294-09-10 06:27 G 44562066.66 44562066.77 44562066.88 0.0532 0.0439

Saturn 117294-12-22 08:08 G 44562169.66 44562169.84 44562170.04 0.0277 0.0126

Uranus 117294-12-30 02:22 G 44562177.53 44562177.60 44562177.71 0.0139 0.0125

Neptune 117295-04-16 19:53 G 44562285.19 44562285.33 44562285.51 0.0088 0.0061

Saturn 117295-08-08 19:24 G 44562399.18 44562399.31 44562399.46 0.0276 0.0206

Neptune 117295-11-28 08:51 G 44562510.69 44562510.87 44562511.05 0.0088 0.0052

Neptune 117296-07-10 21:20 G 44562736.21 44562736.39 44562736.59 0.0088 0.0042

Neptune 117297-02-21 09:48 G 44562961.72 44562961.91 44562962.12 0.0088 0.0033

Neptune 117297-10-04 22:17 G 44563187.23 44563187.43 44563187.65 0.0088 0.0024

Neptune 117298-05-18 11:15 G 44563412.75 44563412.97 44563413.18 0.0088 0.0015

Neptune 117298-12-29 23:44 G 44563638.27   44563638.49   44563638.71 0.0088 0.0005

Neptune 117299-08-12 12:27 G 44563863.80   44563864.02   44563864.23 0.0088 0.0005

Mars   117299-09-08 12:12 G 44563890.87   44563891.01   44563891.16 0.1803 0.1049

Neptune 117300-03-26 00:56 G 44564089.32   44564089.54   44564089.76 0.0088 0.0013

Jupiter 117300-07-11 09:34 G 44564196.73   44564196.90   44564197.08 0.0492 0.0263

Neptune 117300-11-06 13:10 G 44564314.85   44564315.05   44564315.27 0.0088 0.0023

Neptune 117301-06-20 01:53 G 44564540.39   44564540.58   44564540.80 0.0088 0.0032

Neptune 117302-01-31 14:36 G 44564765.92   44564766.11   44564766.31 0.0088 0.0041

Neptune 117302-09-14 02:51 G 44564991.46   44564991.62   44564991.82 0.0088 0.0051

Neptune 117303-04-27 15:34 G 44565217.01   44565217.15   44565217.33 0.0088 0.0060

Neptune 117303-12-09 04:17 G 44565442.56   44565442.68   44565442.83 0.0088 0.0069

Neptune 117304-07-21 17:15 G 44565668.14   44565668.22   44565668.33 0.0088 0.0078

Neptune 117305-03-04 06:12 G 44565893.75   44565893.76   44565893.79 0.0088 0.0087

Jupiter 117306-05-16 21:20 G 44566332.20   44566332.39   44566332.59 0.0534 0.0110

Saturn   117310-01-14 01:10 G 44567670.41   44567670.55   44567670.70 0.0282 0.0204

Saturn   117310-08-31 12:27 G 44567899.84   44567900.02   44567900.21 0.0283 0.0141

Jupiter 117312-11-07 16:17 G 44568699.07   44568699.18   44568699.29 0.0497 0.0418

Jupiter 117318-01-19 11:15 G 44570597.78   44570597.97   44570598.15 0.0536 0.0228

Earth   117318-09-06 18:12 G 44570828.11   44570828.26   44570828.42 0.2665 0.0643

Moon   117318-09-06 21:20 G 44570828.23   44570828.39   44570828.56 0.2659 0.0501 *

Saturn   117324-07-04 12:41 G 44572955.83   44572956.03   44572956.24 0.0277 0.0082

Jupiter 117324-07-13 18:41 G 44572965.09   44572965.28   44572965.48 0.0495 0.0155

Saturn   117325-02-18 23:58 G 44573185.43   44573185.50   44573185.60 0.0276 0.0251

Uranus   117330-04-21 19:24 G 44575073.23   44575073.31   44575073.42 0.0137 0.0122

Uranus   117330-12-04 01:39 G 44575299.44   44575299.57   44575299.72 0.0137 0.0104

Uranus   117331-07-18 07:53 G 44575525.67   44575525.83   44575526.00 0.0137 0.0086

Uranus   117332-02-29 14:22 G 44575751.92   44575752.10   44575752.29 0.0137 0.0068

Uranus   117332-10-12 20:51 G 44575978.18   44575978.37   44575978.58 0.0138 0.0050

Uranus   117333-05-27 03:48 G 44576204.45   44576204.66   44576204.87 0.0138 0.0031

Uranus   117334-01-08 10:32 G 44576430.73   44576430.94   44576431.16 0.0138 0.0012

Uranus 117334-08-22 17:29 G 44576657.02 44576657.23 44576657.45 0.0138 0.0007

Uranus 117335-04-06 00:27 G 44576883.32 44576883.52 44576883.74 0.0138 0.0027

Uranus 117335-11-18 07:53 G 44577109.63 44577109.83 44577110.04 0.0138 0.0045

Jupiter 117336-03-18 20:22 G 44577231.15 44577231.35 44577231.56 0.0493 0.0110

Uranus 117336-07-01 15:20 G 44577335.96 44577336.14 44577336.34 0.0139 0.0065

Uranus 117337-02-12 23:00 G 44577562.30 44577562.46 44577562.64 0.0139 0.0084

Uranus 117337-09-27 06:56 G 44577788.66 44577788.79 44577788.94 0.0139 0.0103

Uranus 117338-05-11 15:05 G 44578015.04 44578015.13 44578015.24 0.0139 0.0122

Saturn 117339-07-27 11:58 G 44578456.82 44578457.00 44578457.18 0.0282 0.0140

Saturn 117340-03-12 23:44 G 44578686.35 44578686.49 44578686.63 0.0283 0.0207

Pluto 117341-11-10 21:34 G 44579294.36 44579294.40 44579294.49 0.0063 0.0060

Jupiter 117342-01-22 10:17 G 44579366.76 44579366.93 44579367.10 0.0533 0.0289

Pluto 117342-06-24 00:56 G 44579519.35 44579519.54 44579519.75 0.0063 0.0024

Pluto 117343-02-04 04:17 G 44579744.48 44579744.68 44579744.90 0.0063 0.0012

Pluto 117343-09-17 07:24 G 44579969.68 44579969.81 44579969.96 0.0063 0.0049

Jupiter 117347-11-22 20:51 G 44581497.25 44581497.37 44581497.51 0.0491 0.0375

Jupiter 117353-09-27 01:53 G 44583632.38 44583632.58 44583632.78 0.0535 0.0042

Saturn 117354-01-14 21:05 G 44583742.17 44583742.38 44583742.59 0.0277 0.0026

Mars 117359-01-23 19:53 G 44585577.18 44585577.33 44585577.47 0.1736 0.0875

Jupiter 117360-03-21 02:36 G 44585999.46 44585999.61 44585999.78 0.0496 0.0302

Jupiter 117365-06-01 16:32 G 44587898.05 44587898.19 44587898.34 0.0537 0.0377

Mars 117365-07-06 17:44 G 44587933.07 44587933.24 44587933.42 0.1808 0.0485

Saturn 117369-02-05 14:22 G 44589242.91 44589243.10 44589243.30 0.0282 0.0100

Saturn 117369-09-23 02:08 G 44589472.49 44589472.59 44589472.69 0.0283 0.0247

Uranus 117371-03-23 08:08 G 44590018.75 44590018.84 44590018.96 0.0141 0.0124

Uranus 117371-11-04 19:39 G 44590245.18 44590245.32 44590245.48 0.0141 0.0103

Jupiter 117371-11-25 05:00 G 44590265.51 44590265.71 44590265.92 0.0494 0.0039

Uranus 117372-06-18 06:41 G 44590471.61 44590471.78 44590471.97 0.0141 0.0083

Uranus 117373-01-30 17:44 G 44590698.05 44590698.24 44590698.44 0.0140 0.0062

Uranus 117373-09-14 04:17 G 44590924.48 44590924.68 44590924.90 0.0140 0.0041

Uranus 117374-04-28 15:05 G 44591150.91 44591151.13 44591151.35 0.0140 0.0020

Uranus 117374-12-11 01:24 G 44591377.34 44591377.56 44591377.78 0.0140 0.0001

Uranus 117375-07-25 11:29 G 44591603.76 44591603.98 44591604.20 0.0140 0.0021

Uranus 117376-03-07 21:20 G 44591830.18 44591830.39 44591830.60 0.0140 0.0041

Uranus 117376-10-20 06:56 G 44592056.60 44592056.79 44592056.99 0.0139 0.0061

Uranus 117377-06-03 16:17 G 44592283.01 44592283.18 44592283.37 0.0139 0.0080

Neptune 117377-06-05 00:12 G 44592284.44 44592284.51 44592284.63 0.0089 0.0081

Jupiter 117377-09-30 04:46 G 44592401.62 44592401.70 44592401.78 0.0531 0.0484

Uranus 117378-01-16 01:53 G 44592509.43 44592509.58 44592509.73 0.0139 0.0099

Neptune 117378-01-16 13:53 G 44592509.97 44592510.08 44592510.23 0.0089 0.0072

Neptune 117378-08-30 03:34 G 44592735.50 44592735.65 44592735.82 0.0089 0.0062

Uranus 117378-08-30 11:00 G 44592735.85 44592735.96 44592736.07 0.0139 0.0118

Neptune 117379-04-12 16:46 G 44592961.04 44592961.20 44592961.40 0.0089 0.0052

Uranus 117379-04-13 19:39 G 44592962.30 44592962.32 44592962.36 0.0139 0.0137

Neptune 117379-11-24 06:27 G 44593186.59 44593186.77 44593186.98 0.0089 0.0042

Neptune 117380-07-06 20:08 G 44593412.14 44593412.34 44593412.55 0.0089 0.0032

Neptune 117381-02-17 09:34 G 44593637.69 44593637.90 44593638.12 0.0089 0.0023

Neptune 117381-09-30 23:15 G 44593863.25 44593863.47 44593863.68 0.0089 0.0013

Neptune 117382-05-14 12:27 G 44594088.80 44594089.02 44594089.25 0.0089 0.0003

Neptune 117382-12-26 02:08 G 44594314.37 44594314.59 44594314.81 0.0089 0.0007

Saturn 117383-07-28 01:10 G 44594528.34 44594528.55 44594528.77 0.0277 0.0017

Jupiter 117383-07-31 08:08 G 44594531.66 44594531.84 44594532.02 0.0492 0.0221

Neptune 117383-08-08 15:34 G 44594539.93 44594540.15 44594540.37 0.0089 0.0017

Neptune 117384-03-21 04:46 G 44594765.50 44594765.70 44594765.92 0.0089 0.0027

Neptune 117384-11-01 17:58 G 44594991.06 44594991.25 44594991.46 0.0089 0.0037

Neptune 117385-06-15 07:10 G 44595216.63 44595216.80 44595217.01 0.0089 0.0047

Neptune 117386-01-26 21:05 G 44595442.21 44595442.38 44595442.55 0.0089 0.0056

Neptune 117386-09-09 10:03 G 44595667.79 44595667.92 44595668.08 0.0089 0.0066

Neptune 117387-04-22 23:00 G 44595893.37 44595893.46 44595893.61 0.0089 0.0076

Neptune 117387-12-04 12:41 G 44596118.97 44596119.03 44596119.11 0.0089 0.0085

Jupiter 117389-06-04 16:03 G 44596666.97 44596667.17 44596667.36 0.0534 0.0143

Jupiter 117395-04-05 10:03 G 44598797.89 44598797.92 44598797.97 0.0490 0.0479

Jupiter 117395-11-27 13:53 G 44599034.01 44599034.08 44599034.16 0.0497 0.0459

Saturn 117398-08-19 00:41 G 44600029.33 44600029.53 44600029.74 0.0282 0.0038

Jupiter 117401-02-08 05:29 G 44600932.55 44600932.73 44600932.92 0.0536 0.0196

Jupiter 117407-08-03 13:39 G 44603299.88 44603300.07 44603300.26 0.0495 0.0186

Saturn 117412-06-22 22:17 G 44605085.37 44605085.43 44605085.52 0.0278 0.0259

Jupiter 117412-10-13 20:22 G 44605198.33 44605198.35 44605198.38 0.0538 0.0532

Saturn 117413-02-07 10:32 G 44605314.74 44605314.94 44605315.15 0.0277 0.0077

Uranus 117413-12-21 04:46 G 44605631.65 44605631.70 44605631.79 0.0137 0.0129

Uranus 117414-08-04 10:46 G 44605857.85 44605857.95 44605858.09 0.0137 0.0112

Uranus 117415-03-18 17:00 G 44606084.07 44606084.21 44606084.38 0.0137 0.0093

Uranus 117415-10-30 23:15 G 44606310.30 44606310.47 44606310.66 0.0137 0.0075

Uranus 117416-06-13 05:58 G 44606536.56 44606536.75 44606536.95 0.0138 0.0057

Uranus 117417-01-25 12:41 G 44606762.82 44606763.03 44606763.23 0.0138 0.0038

Uranus 117417-09-08 19:24 G 44606989.09 44606989.31 44606989.52 0.0138 0.0019

Uranus 117418-04-23 02:08 G 44607215.38 44607215.59 44607215.81 0.0138 0.0001

Uranus 117418-12-05 09:05 G 44607441.67 44607441.88 44607442.10 0.0138 0.0019

Jupiter 117419-04-08 15:48 G 44607565.96 44607566.16 44607566.37 0.0493 0.0077

Uranus 117419-07-19 16:17 G 44607667.98 44607668.18 44607668.39 0.0138 0.0039

Uranus 117420-03-01 23:44 G 44607894.30 44607894.49 44607894.69 0.0139 0.0058

Uranus 117420-10-14 07:10 G 44608120.63 44608120.80 44608120.99 0.0139 0.0077

Uranus 117421-05-28 15:05 G 44608346.98 44608347.13 44608347.29 0.0139 0.0096

Uranus 117422-01-09 23:15 G 44608573.35 44608573.47 44608573.59 0.0139 0.0115

Uranus 117422-08-24 07:24 G 44608799.76 44608799.81 44608799.86 0.0139 0.0135

Mars 117424-11-21 06:12 G 44609619.59 44609619.76 44609619.92 0.1732 0.0524

Jupiter 117425-02-11 10:32 G 44609701.79 44609701.94 44609702.10 0.0532 0.0340

Saturn 117428-03-01 03:34 G 44610815.44 44610815.65 44610815.86 0.0282 0.0006

Jupiter 117430-12-12 18:12 G 44611832.12 44611832.26 44611832.42 0.0491 0.0338

Mars 117431-05-04 23:44 G 44611975.31 44611975.49 44611975.66 0.1813 0.0093

Earth 117432-03-14 05:29 G 44612289.60 44612289.73 44612289.86 0.2668 0.1562

Moon 117432-03-14 05:29 G 44612289.62 44612289.73 44612289.84 0.2676 0.1792 *

Pluto 117433-03-20 05:44 G 44612660.53 44612660.74 44612660.97 0.0081 0.0022

Pluto 117433-10-31 17:00 G 44612886.08 44612886.21 44612886.38 0.0081 0.0059

Jupiter 117436-10-17 00:27 G 44613967.32 44613967.52 44613967.72 0.0535 0.0009

Earth 117440-03-11 19:53 G 44615209.24 44615209.33 44615209.42 0.2667 0.2193

Moon 117440-03-12 00:56 G 44615209.41 44615209.54 44615209.68 0.2671 0.1348 *

Saturn 117442-01-03 01:53 G 44615871.46 44615871.58 44615871.72 0.0277 0.0218

Saturn 117442-08-20 14:08 G 44616100.90 44616101.09 44616101.28 0.0277 0.0117

Jupiter 117443-04-11 01:10 G 44616334.41 44616334.55 44616334.70 0.0496 0.0344

Jupiter 117448-06-21 11:29 G 44618232.83 44618232.98 44618233.14 0.0537 0.0344

Uranus 117454-11-21 15:48 G 44620577.10 44620577.16 44620577.25 0.0141 0.0132

Jupiter 117454-12-15 02:51 G 44620600.42 44620600.62 44620600.83 0.0494 0.0079

Uranus 117455-07-06 03:05 G 44620803.51 44620803.63 44620803.78 0.0141 0.0111

Uranus 117456-02-17 14:22 G 44621029.94 44621030.10 44621030.28 0.0141 0.0090

Uranus 117456-10-01 01:10 G 44621256.38 44621256.55 44621256.76 0.0141 0.0070

Saturn 117457-01-25 02:08 G 44621372.57 44621372.59 44621372.63 0.0282 0.0278

Uranus 117457-05-15 12:12 G 44621482.81 44621483.01 44621483.23 0.0140 0.0049

Saturn 117457-09-11 13:24 G 44621601.86 44621602.06 44621602.27 0.0283 0.0066

Uranus 117457-12-27 23:00 G 44621709.25 44621709.46 44621709.68 0.0140 0.0028

Neptune 117458-04-26 05:29 G 44621828.66 44621828.73 44621828.83 0.0088 0.0081

Uranus 117458-08-11 09:20 G 44621935.67 44621935.89 44621936.12 0.0140 0.0008

Neptune 117458-12-07 17:58 G 44622054.14 44622054.25 44622054.39 0.0088 0.0072

Uranus 117459-03-25 19:24 G 44622162.10 44622162.31 44622162.54 0.0140 0.0014

Neptune 117459-07-21 06:27 G 44622279.64 44622279.77 44622279.94 0.0088 0.0063

Uranus 117459-11-07 05:29 G 44622388.52 44622388.73 44622388.95 0.0140 0.0034

Neptune 117460-03-02 18:56 G 44622505.14 44622505.29 44622505.49 0.0088 0.0054

Uranus 117460-06-20 15:20 G 44622614.94 44622615.14 44622615.35 0.0140 0.0054

Neptune 117460-10-14 07:39 G 44622730.65 44622730.82 44622731.03 0.0088 0.0044

Jupiter 117460-10-19 23:00 G 44622736.43 44622736.46 44622736.51 0.0531 0.0518

Uranus 117461-02-02 00:56 G 44622841.36 44622841.54 44622841.73 0.0139 0.0074

Neptune 117461-05-27 20:36 G 44622956.16 44622956.36 44622956.56 0.0088 0.0034

Uranus 117461-09-16 10:03 G 44623067.77 44623067.92 44623068.10 0.0139 0.0094

Neptune 117462-01-08 09:05 G 44623181.68 44623181.88 44623182.10 0.0088 0.0025

Uranus 117462-04-30 19:24 G 44623294.19 44623294.31 44623294.45 0.0139 0.0112

Neptune 117462-08-21 21:34 G 44623407.19 44623407.40 44623407.63 0.0088 0.0016

Uranus 117462-12-13 04:32 G 44623520.63 44623520.69 44623520.77 0.0139 0.0131

Neptune 117463-04-04 10:17 G 44623632.71 44623632.93 44623633.15 0.0088 0.0006

Neptune 117463-11-15 23:00 G 44623858.24 44623858.46 44623858.68 0.0088 0.0003

Neptune 117464-06-28 11:44 G 44624083.77 44624083.99 44624084.21 0.0088 0.0012

Neptune 117465-02-08 23:58 G 44624309.30 44624309.50 44624309.73 0.0088 0.0022

Neptune 117465-09-22 12:27 G 44624534.83 44624535.02 44624535.24 0.0088 0.0031

Neptune 117466-05-06 01:10 G 44624760.36 44624760.55 44624760.75 0.0088 0.0040

Jupiter 117466-08-20 03:05 G 44624866.44 44624866.63 44624866.82 0.0492 0.0192

Neptune 117466-12-17 13:53 G 44624985.90 44624986.08 44624986.27 0.0088 0.0049

Neptune 117467-07-31 02:08 G 44625211.45 44625211.59 44625211.78 0.0088 0.0059

Neptune 117468-03-12 14:51 G 44625437.00 44625437.12 44625437.28 0.0088 0.0068

Neptune 117468-10-24 03:34 G 44625662.56 44625662.65 44625662.77 0.0088 0.0077

Neptune 117469-06-06 16:32 G 44625888.16 44625888.19 44625888.24 0.0088 0.0086

Saturn 117471-07-16 12:27 G 44626657.84 44626658.02 44626658.20 0.0277 0.0155

Saturn 117472-03-01 23:58 G 44626887.34 44626887.50 44626887.67 0.0277 0.0179

Jupiter 117472-06-24 14:51 G 44627001.93 44627002.12 44627002.31 0.0534 0.0190

Jupiter 117478-04-25 05:15 G 44629132.65 44629132.72 44629132.81 0.0490 0.0450

Jupiter 117478-12-17 09:05 G 44629368.86 44629368.88 44629368.92 0.0497 0.0490

Jupiter 117484-02-28 05:58 G 44631267.55 44631267.75 44631267.94 0.0536 0.0144

Saturn 117486-08-07 05:15 G 44632158.61 44632158.72 44632158.83 0.0281 0.0236

Saturn 117487-03-24 16:17 G 44632387.99 44632388.18 44632388.38 0.0282 0.0108

Jupiter 117490-08-22 11:15 G 44633634.79 44633634.97 44633635.15 0.0495 0.0225

Mars 117490-09-18 16:17 G 44633662.01 44633662.18 44633662.35 0.1728 0.0161

Jupiter 117495-11-02 19:39 G 44635533.24 44635533.32 44635533.41 0.0538 0.0483

Mars 117497-03-01 05:00 G 44636017.55 44636017.71 44636017.88 0.1818 0.0673

Uranus 117497-08-20 15:34 G 44636190.13 44636190.15 44636190.19 0.0137 0.0135

Uranus 117498-04-03 21:05 G 44636416.29 44636416.38 44636416.51 0.0137 0.0118

Uranus 117498-11-16 03:20 G 44636642.51 44636642.64 44636642.80 0.0137 0.0100

Uranus 117499-06-30 09:48 G 44636868.74 44636868.91 44636869.08 0.0137 0.0082

Uranus 117500-02-11 15:48 G 44637094.98 44637095.16 44637095.36 0.0137 0.0064

Uranus 117500-09-25 22:32 G 44637321.24 44637321.44 44637321.64 0.0138 0.0045

Saturn 117501-01-26 15:05 G 44637443.94 44637444.13 44637444.33 0.0277 0.0116

Uranus 117501-05-10 05:15 G 44637547.51 44637547.72 44637547.93 0.0138 0.0026

Saturn 117501-09-13 02:51 G 44637673.49 44637673.62 44637673.75 0.0276 0.0217

Uranus 117501-12-22 11:58 G 44637773.79 44637774.00 44637774.22 0.0138 0.0007

Jupiter 117502-04-28 14:08 G 44637900.88 44637901.09 44637901.29 0.0493 0.0036

Uranus 117502-08-05 18:56 G 44638000.07 44638000.29 44638000.50 0.0138 0.0012

Uranus 117503-03-20 01:53 G 44638226.37 44638226.58 44638226.79 0.0138 0.0031

Uranus 117503-11-01 09:05 G 44638452.69 44638452.88 44638453.09 0.0138 0.0051

Uranus 117504-06-14 16:46 G 44638679.02 44638679.20 44638679.39 0.0139 0.0070

Uranus 117505-01-27 00:12 G 44638905.36 44638905.51 44638905.69 0.0139 0.0090

Uranus 117505-09-10 08:08 G 44639131.72 44639131.84 44639131.98 0.0139 0.0109

Uranus 117506-04-24 16:03 G 44639358.11 44639358.17 44639358.27 0.0139 0.0129

Jupiter 117508-03-03 05:44 G 44640036.60 44640036.74 44640036.89 0.0532 0.0376

Jupiter 117514-01-01 16:17 G 44642167.02 44642167.18 44642167.34 0.0491 0.0297

Saturn 117516-02-18 13:39 G 44642944.91 44642945.07 44642945.23 0.0282 0.0179

Saturn 117516-10-05 01:10 G 44643174.38 44643174.55 44643174.72 0.0283 0.0167

Jupiter 117519-11-06 19:24 G 44644302.11 44644302.31 44644302.51 0.0535 0.0040

Jupiter 117526-04-30 19:53 G 44646669.21 44646669.33 44646669.47 0.0496 0.0374

Saturn 117530-08-09 01:53 G 44648230.37 44648230.58 44648230.79 0.0277 0.0052

Jupiter 117531-07-12 10:03 G 44648567.76 44648567.92 44648568.09 0.0537 0.0299

Jupiter 117538-01-03 22:17 G 44650935.23 44650935.43 44650935.63 0.0494 0.0110

Uranus 117538-07-22 23:29 G 44651135.46 44651135.48 44651135.52 0.0141 0.0139

Uranus 117539-03-06 10:46 G 44651361.84 44651361.95 44651362.08 0.0141 0.0119

Uranus 117539-10-18 22:03 G 44651588.28 44651588.42 44651588.59 0.0141 0.0098

Uranus 117540-06-01 09:20 G 44651814.71 44651814.89 44651815.08 0.0141 0.0077

Uranus 117541-01-13 20:22 G 44652041.15 44652041.35 44652041.55 0.0141 0.0056

Uranus 117541-08-28 06:56 G 44652267.58 44652267.79 44652268.01 0.0140 0.0035

Neptune 117541-09-08 09:48 G 44652278.84 44652278.91 44652279.00 0.0089 0.0082

Uranus 117542-04-11 17:29 G 44652494.01 44652494.23 44652494.45 0.0140 0.0014

Neptune 117542-04-21 23:00 G 44652504.36 44652504.46 44652504.61 0.0089 0.0073

Uranus 117542-11-24 03:48 G 44652720.44 44652720.66 44652720.89 0.0140 0.0007

Neptune 117542-12-03 12:41 G 44652729.89 44652730.03 44652730.20 0.0089 0.0064

Uranus 117543-07-08 13:53 G 44652946.87 44652947.08 44652947.30 0.0140 0.0027

Neptune 117543-07-17 02:22 G 44652955.43 44652955.60 44652955.79 0.0089 0.0054

Uranus 117544-02-19 23:58 G 44653173.29 44653173.50 44653173.70 0.0140 0.0047

Neptune 117544-02-27 15:34 G 44653180.98 44653181.15 44653181.36 0.0089 0.0044

Uranus 117544-10-03 09:34 G 44653399.71 44653399.90 44653400.09 0.0140 0.0067

Neptune 117544-10-10 05:00 G 44653406.52 44653406.71 44653406.93 0.0089 0.0035

Uranus 117545-05-17 18:56 G 44653626.13 44653626.29 44653626.47 0.0139 0.0087

Neptune 117545-05-23 18:41 G 44653632.07 44653632.28 44653632.50 0.0089 0.0024

Saturn 117545-08-30 17:00 G 44653731.03 44653731.21 44653731.39 0.0282 0.0136

Uranus 117545-12-30 04:17 G 44653852.55 44653852.68 44653852.83 0.0139 0.0106

Neptune 117546-01-04 08:22 G 44653857.63 44653857.85 44653858.07 0.0089 0.0015

Saturn 117546-04-17 04:17 G 44653960.55 44653960.68 44653960.82 0.0283 0.0210

Uranus 117546-08-13 13:24 G 44654078.98 44654079.06 44654079.17 0.0139 0.0125

Neptune 117546-08-17 21:48 G 44654083.19 44654083.41 44654083.63 0.0089 0.0005

Neptune 117547-03-31 11:00 G 44654308.75 44654308.96 44654309.19 0.0089 0.0006

Neptune 117547-11-12 00:27 G 44654534.31 44654534.52 44654534.74 0.0089 0.0015

Neptune 117548-06-24 13:53 G 44654759.87 44654760.08 44654760.30 0.0089 0.0025

Neptune 117549-02-05 03:05 G 44654985.44 44654985.63 44654985.85 0.0089 0.0035

Jupiter 117549-09-09 00:27 G 44655201.33 44655201.52 44655201.72 0.0492 0.0153

Neptune 117549-09-18 16:17 G 44655211.01 44655211.18 44655211.39 0.0089 0.0045

Neptune 117550-05-02 05:58 G 44655436.58 44655436.75 44655436.93 0.0089 0.0054

Neptune 117550-12-13 19:10 G 44655662.16 44655662.30 44655662.47 0.0089 0.0064

Neptune 117551-07-27 08:22 G 44655887.75 44655887.85 44655888.00 0.0089 0.0074

Neptune 117552-03-08 21:48 G 44656113.35 44656113.41 44656113.51 0.0089 0.0083

Moon 117553-09-11 03:48 G 44656664.64 44656664.66 44656664.69 0.2671 0.2633

Jupiter 117555-07-15 14:36 G 44657336.93 44657337.11 44657337.29 0.0533 0.0241

Mars 117556-07-17 02:36 G 44657704.44 44657704.61 44657704.78 0.1724 0.0194

Saturn 117560-02-19 03:34 G 44659016.44 44659016.65 44659016.87 0.0277 0.0017

Jupiter 117561-05-15 03:34 G 44659467.54 44659467.65 44659467.77 0.0491 0.0409

Earth 117561-09-08 20:22 G 44659584.19 44659584.35 44659584.50 0.2666 0.0606

Moon 117561-09-09 00:41 G 44659584.38 44659584.53 44659584.69 0.2670 0.0359 *

Mars 117562-12-28 10:17 G 44660059.80 44660059.93 44660060.06 0.1823 0.1268

Jupiter 117567-03-20 02:22 G 44661602.40 44661602.60 44661602.80 0.0535 0.0104

Jupiter 117573-09-11 09:34 G 44663969.73 44663969.90 44663970.07 0.0495 0.0268

Saturn 117575-03-12 23:58 G 44664517.31 44664517.50 44664517.71 0.0282 0.0083

Saturn 117575-10-28 11:58 G 44664746.93 44664747.00 44664747.07 0.0283 0.0266

Jupiter 117578-11-22 15:34 G 44665868.04 44665868.15 44665868.26 0.0538 0.0447

Uranus 117581-12-03 06:56 G 44666974.72 44666974.79 44666974.89 0.0137 0.0125

Uranus 117582-07-17 12:56 G 44667200.92 44667201.04 44667201.18 0.0137 0.0107

Uranus 117583-02-28 18:56 G 44667427.14 44667427.29 44667427.46 0.0137 0.0089

Uranus 117583-10-13 01:10 G 44667653.38 44667653.55 44667653.74 0.0137 0.0071

Uranus 117584-05-26 07:53 G 44667879.63 44667879.83 44667880.03 0.0138 0.0052

Uranus 117585-01-07 14:08 G 44668105.89 44668106.09 44668106.31 0.0138 0.0034

Jupiter 117585-05-17 09:34 G 44668235.70 44668235.90 44668236.11 0.0493 0.0013

Uranus 117585-08-21 20:51 G 44668332.16 44668332.37 44668332.59 0.0138 0.0014

Uranus 117586-04-05 03:48 G 44668558.44 44668558.66 44668558.87 0.0138 0.0006

Uranus 117586-11-17 10:32 G 44668784.74 44668784.94 44668785.16 0.0138 0.0024

Uranus 117587-07-01 17:58 G 44669011.05 44669011.25 44669011.46 0.0138 0.0043

Uranus 117588-02-13 01:24 G 44669237.37 44669237.56 44669237.75 0.0139 0.0063

Pluto 117588-07-24 03:05 G 44669399.48 44669399.63 44669399.82 0.0063 0.0039

Uranus 117588-09-26 08:36 G 44669463.70 44669463.86 44669464.05 0.0139 0.0083

Pluto 117589-03-06 06:56 G 44669624.57 44669624.79 44669625.01 0.0063 0.0003

Uranus 117589-05-10 16:32 G 44669690.05 44669690.19 44669690.35 0.0139 0.0102

Saturn 117589-08-31 14:08 G 44669802.88 44669803.09 44669803.30 0.0277 0.0048

Pluto 117589-10-17 10:03 G 44669849.74 44669849.92 44669850.11 0.0063 0.0034

Uranus 117589-12-23 00:27 G 44669916.43 44669916.52 44669916.64 0.0139 0.0121

Jupiter 117591-03-23 04:46 G 44670371.58 44670371.70 44670371.83 0.0532 0.0424

Jupiter 117597-01-20 12:12 G 44672501.84 44672502.01 44672502.19 0.0491 0.0265

Jupiter 117602-11-25 20:22 G 44674637.15 44674637.35 44674637.55 0.0535 0.0094

Saturn 117604-09-22 03:48 G 44675303.45 44675303.66 44675303.86 0.0282 0.0039

Jupiter 117609-05-19 18:12 G 44677004.16 44677004.26 44677004.37 0.0496 0.0416

Jupiter 117614-07-31 11:00 G 44678902.78 44678902.96 44678903.14 0.0537 0.0243

Saturn 117618-07-27 02:08 G 44680359.52 44680359.59 44680359.69 0.0278 0.0256

Saturn 117619-03-13 15:05 G 44680588.92 44680589.13 44680589.33 0.0277 0.0081

Jupiter 117621-01-22 21:20 G 44681270.19 44681270.39 44681270.58 0.0494 0.0155

Mars 117622-05-14 12:56 G 44681746.88 44681747.04 44681747.20 0.1720 0.0536

Neptune 117622-07-29 15:34 G 44681823.10 44681823.15 44681823.26 0.0088 0.0083

Uranus 117622-11-03 18:56 G 44681920.19 44681920.29 44681920.39 0.0141 0.0127

Neptune 117623-03-12 04:03 G 44682048.57 44682048.67 44682048.82 0.0088 0.0073

Uranus 117623-06-18 05:58 G 44682146.62 44682146.75 44682146.91 0.0141 0.0106

Neptune 117623-10-23 17:00 G 44682274.06 44682274.21 44682274.36 0.0088 0.0064

Uranus 117624-01-30 17:15 G 44682373.05 44682373.22 44682373.41 0.0141 0.0085

Neptune 117624-06-05 05:29 G 44682499.57 44682499.73 44682499.91 0.0088 0.0054

Uranus 117624-09-13 04:17 G 44682599.49 44682599.68 44682599.88 0.0141 0.0064

Neptune 117625-01-16 17:58 G 44682725.07 44682725.25 44682725.45 0.0088 0.0045

Uranus 117625-04-27 15:05 G 44682825.93 44682826.13 44682826.35 0.0141 0.0043

Neptune 117625-08-30 06:27 G 44682950.58 44682950.77 44682950.98 0.0088 0.0036

Uranus 117625-12-10 01:53 G 44683052.37 44683052.58 44683052.80 0.0140 0.0022

Neptune 117626-04-12 18:56 G 44683176.09 44683176.29 44683176.51 0.0088 0.0027

Uranus 117626-07-24 12:27 G 44683278.80 44683279.02 44683279.24 0.0140 0.0001

Neptune 117626-11-24 07:39 G 44683401.61 44683401.82 44683402.04 0.0088 0.0017

Uranus 117627-03-07 22:32 G 44683505.23 44683505.44 44683505.66 0.0140 0.0020

Neptune 117627-07-07 20:22 G 44683627.14 44683627.35 44683627.58 0.0088 0.0008

Uranus 117627-10-20 08:36 G 44683731.65 44683731.86 44683732.07 0.0140 0.0040

Neptune 117628-02-18 09:05 G 44683852.66 44683852.88 44683853.10 0.0088 0.0001

Uranus 117628-06-02 18:12 G 44683958.08 44683958.26 44683958.47 0.0140 0.0061

Neptune 117628-09-30 21:34 G 44684078.19 44684078.40 44684078.62 0.0088 0.0011

Uranus 117629-01-15 04:03 G 44684184.50 44684184.67 44684184.86 0.0139 0.0081

Neptune 117629-05-14 10:03 G 44684303.71 44684303.92 44684304.14 0.0088 0.0020

Uranus 117629-08-29 13:24 G 44684410.93 44684411.06 44684411.23 0.0139 0.0100

Neptune 117629-12-25 22:46 G 44684529.25 44684529.45 44684529.66 0.0088 0.0029

Uranus 117630-04-12 22:46 G 44684637.35 44684637.45 44684637.57 0.0139 0.0119

Neptune 117630-08-08 11:15 G 44684754.79 44684754.97 44684755.18 0.0088 0.0039

Uranus 117630-11-25 08:08 G 44684863.83 44684863.84 44684863.86 0.0139 0.0138

Neptune 117631-03-21 23:44 G 44684980.32 44684980.49 44684980.69 0.0088 0.0048

Neptune 117631-11-02 12:27 G 44685205.87 44685206.02 44685206.20 0.0088 0.0057

Neptune 117632-06-15 01:24 G 44685431.42 44685431.56 44685431.71 0.0088 0.0066

Jupiter 117632-09-27 23:29 G 44685536.28 44685536.48 44685536.68 0.0492 0.0109

Neptune 117633-01-26 13:39 G 44685656.98 44685657.07 44685657.20 0.0088 0.0076

Neptune 117633-09-09 02:08 G 44685882.56 44685882.59 44685882.67 0.0088 0.0085

Saturn 117634-04-04 09:20 G 44686089.69 44686089.89 44686090.10 0.0282 0.0013

Jupiter 117638-08-03 11:15 G 44687671.80 44687671.97 44687672.14 0.0533 0.0282

Jupiter 117644-06-03 00:12 G 44689802.39 44689802.51 44689802.65 0.0490 0.0376

Saturn 117648-02-06 12:27 G 44691145.87 44691146.02 44691146.18 0.0278 0.0193

Saturn 117648-09-23 00:56 G 44691375.36 44691375.54 44691375.73 0.0277 0.0143

Jupiter 117650-04-08 01:24 G 44691937.36 44691937.56 44691937.76 0.0536 0.0058

Jupiter 117656-09-30 05:58 G 44694304.59 44694304.75 44694304.92 0.0495 0.0303

Mars 117660-10-24 07:39 G 44695789.77 44695789.82 44695789.87 0.1811 0.1732

Jupiter 117661-12-11 16:32 G 44696203.06 44696203.19 44696203.33 0.0538 0.0394

Saturn 117663-10-15 13:24 G 44696875.85 44696876.06 44696876.26 0.0282 0.0057

Uranus 117665-08-02 17:44 G 44697533.19 44697533.24 44697533.30 0.0137 0.0131

Uranus 117666-03-16 23:15 G 44697759.37 44697759.47 44697759.60 0.0137 0.0114

Uranus 117666-10-29 05:15 G 44697985.58 44697985.72 44697985.88 0.0137 0.0096

Uranus 117667-06-12 11:29 G 44698211.81 44698211.98 44698212.17 0.0137 0.0078

Uranus 117668-01-24 17:44 G 44698438.06 44698438.24 44698438.44 0.0137 0.0059

Jupiter 117668-06-05 08:22 G 44698570.64 44698570.85 44698571.05 0.0493 0.0038

Uranus 117668-09-07 00:12 G 44698664.31 44698664.51 44698664.72 0.0138 0.0040

Uranus 117669-04-21 06:41 G 44698890.58 44698890.78 44698891.00 0.0138 0.0022

Uranus 117669-12-03 13:39 G 44699116.85 44699117.07 44699117.28 0.0138 0.0002

Uranus 117670-07-17 20:36 G 44699343.14 44699343.36 44699343.57 0.0138 0.0017

Uranus 117671-03-01 03:34 G 44699569.45 44699569.65 44699569.86 0.0138 0.0037

Uranus 117671-10-13 10:46 G 44699795.76 44699795.95 44699796.15 0.0138 0.0056

Uranus 117672-05-26 18:27 G 44700022.09 44700022.27 44700022.45 0.0139 0.0076

Uranus 117673-01-08 01:53 G 44700248.44 44700248.58 44700248.75 0.0139 0.0096

Uranus 117673-08-22 09:48 G 44700474.80 44700474.91 44700475.04 0.0139 0.0115

Uranus 117674-04-05 17:58 G 44700701.21 44700701.25 44700701.31 0.0139 0.0134

Jupiter 117674-04-11 06:12 G 44700706.68 44700706.76 44700706.85 0.0532 0.0482

Moon 117675-03-15 23:44 G 44701045.35 44701045.49 44701045.64 0.2668 0.1056

Earth 117675-03-16 05:44 G 44701045.61 44701045.74 44701045.87 0.2668 0.1438 *

Saturn 117677-08-18 12:41 G 44701931.86 44701932.03 44701932.20 0.0278 0.0162

Saturn 117678-04-05 00:41 G 44702161.38 44702161.53 44702161.71 0.0277 0.0174

Pluto 117679-04-19 02:08 G 44702540.47 44702540.59 44702540.75 0.0082 0.0064

Pluto 117679-11-30 14:08 G 44702765.88 44702766.09 44702766.32 0.0081 0.0018

Jupiter 117680-02-09 11:29 G 44702836.80 44702836.98 44702837.17 0.0492 0.0220

Earth 117683-03-13 20:08 G 44703965.27 44703965.34 44703965.42 0.2665 0.2298

Jupiter 117685-12-14 19:10 G 44704972.11 44704972.30 44704972.50 0.0534 0.0142

Mars 117688-03-10 23:15 G 44705789.32 44705789.47 44705789.62 0.1717 0.0883

Jupiter 117691-10-15 14:08 G 44707103.05 44707103.09 44707103.14 0.0490 0.0478

Jupiter 117692-06-07 17:58 G 44707339.18 44707339.25 44707339.32 0.0497 0.0463

Saturn 117692-09-09 06:56 G 44707432.69 44707432.79 44707432.90 0.0281 0.0240

Saturn 117693-04-26 17:44 G 44707662.05 44707662.24 44707662.44 0.0282 0.0103

Jupiter 117697-08-19 08:36 G 44709237.68 44709237.86 44709238.05 0.0536 0.0200

Jupiter 117704-02-12 18:27 G 44711605.09 44711605.27 44711605.46 0.0494 0.0191

Neptune 117705-12-11 18:27 G 44712273.21 44712273.27 44712273.35 0.0089 0.0084

Uranus 117706-07-05 02:22 G 44712478.54 44712478.60 44712478.67 0.0141 0.0135

Neptune 117706-07-25 07:39 G 44712498.73 44712498.82 44712498.96 0.0089 0.0075

Uranus 117707-02-16 13:24 G 44712704.95 44712705.06 44712705.21 0.0141 0.0114

Saturn 117707-03-01 22:03 G 44712718.22 44712718.42 44712718.62 0.0278 0.0101

Neptune 117707-03-07 21:20 G 44712724.26 44712724.39 44712724.56 0.0089 0.0065

Uranus 117707-10-01 00:41 G 44712931.38 44712931.53 44712931.71 0.0141 0.0093

Saturn 117707-10-17 10:03 G 44712947.82 44712947.92 44712948.04 0.0277 0.0234

Neptune 117707-10-19 11:00 G 44712949.79 44712949.96 44712950.14 0.0089 0.0056

Uranus 117708-05-14 11:58 G 44713157.82 44713158.00 44713158.20 0.0141 0.0072

Neptune 117708-06-01 00:12 G 44713175.34 44713175.51 44713175.72 0.0089 0.0046

Uranus 117708-12-26 23:00 G 44713384.27 44713384.46 44713384.68 0.0141 0.0051

Neptune 117709-01-12 13:53 G 44713400.89 44713401.08 44713401.30 0.0089 0.0037

Uranus 117709-08-10 09:48 G 44713610.70 44713610.91 44713611.14 0.0140 0.0030

Neptune 117709-08-26 03:34 G 44713626.44 44713626.65 44713626.87 0.0089 0.0026

Uranus 117710-03-24 20:36 G 44713837.14 44713837.36 44713837.58 0.0140 0.0009

Neptune 117710-04-08 17:00 G 44713852.00 44713852.21 44713852.43 0.0089 0.0017

Uranus 117710-11-06 06:56 G 44714063.57 44714063.79 44714064.01 0.0140 0.0013

Neptune 117710-11-20 06:27 G 44714077.55 44714077.77 44714077.99 0.0089 0.0007

Uranus 117711-06-20 17:15 G 44714290.00 44714290.22 44714290.43 0.0140 0.0033

Neptune 117711-07-03 19:53 G 44714303.11 44714303.33 44714303.55 0.0089 0.0003

Uranus 117712-02-02 03:05 G 44714516.43 44714516.63 44714516.84 0.0140 0.0054

Neptune 117712-02-14 09:20 G 44714528.68 44714528.89 44714529.11 0.0089 0.0013

Uranus 117712-09-15 12:56 G 44714742.86 44714743.04 44714743.23 0.0140 0.0074

Neptune 117712-09-26 22:46 G 44714754.24 44714754.45 44714754.66 0.0089 0.0023

Uranus 117713-04-29 22:46 G 44714969.29 44714969.45 44714969.61 0.0139 0.0094

Neptune 117713-05-10 11:58 G 44714979.80 44714980.00 44714980.21 0.0089 0.0032

Uranus 117713-12-12 08:08 G 44715195.72 44715195.84 44715195.97 0.0139 0.0113

Neptune 117713-12-22 01:10 G 44715205.38 44715205.55 44715205.76 0.0089 0.0043

Uranus 117714-07-26 17:29 G 44715422.17 44715422.23 44715422.30 0.0139 0.0132

Neptune 117714-08-04 14:51 G 44715430.95 44715431.12 44715431.31 0.0089 0.0052

Neptune 117715-03-18 04:03 G 44715656.52 44715656.67 44715656.84 0.0089 0.0062

Jupiter 117715-10-18 21:05 G 44715871.17 44715871.38 44715871.58 0.0492 0.0072

Neptune 117715-10-29 17:00 G 44715882.11 44715882.21 44715882.37 0.0089 0.0072

Neptune 117716-06-11 06:41 G 44716107.70 44716107.78 44716107.89 0.0089 0.0081

Mars 117720-03-10 22:46 G 44717476.42 44717476.45 44717476.48 0.1730 0.1696

Jupiter 117721-08-23 12:56 G 44718006.88 44718007.04 44718007.19 0.0533 0.0338

Saturn 117722-03-23 11:15 G 44718218.82 44718218.97 44718219.12 0.0281 0.0194

Saturn 117722-11-07 21:48 G 44718448.24 44718448.41 44718448.59 0.0282 0.0148

Mars 117726-08-22 13:39 G 44719831.94 44719832.07 44719832.20 0.1816 0.1173

Jupiter 117727-06-23 23:29 G 44720137.33 44720137.48 44720137.63 0.0490 0.0332

Jupiter 117733-04-28 04:03 G 44722272.47 44722272.67 44722272.87 0.0536 0.0005

Saturn 117736-09-10 21:34 G 44723504.20 44723504.40 44723504.61 0.0278 0.0072

Saturn 117737-04-28 09:34 G 44723733.85 44723733.90 44723733.98 0.0277 0.0263

Jupiter 117739-10-21 06:12 G 44724639.62 44724639.76 44724639.90 0.0496 0.0351

Jupiter 117744-12-31 17:00 G 44726538.06 44726538.21 44726538.37 0.0537 0.0340

Uranus 117749-11-15 09:05 G 44728317.80 44728317.88 44728318.00 0.0137 0.0121

Uranus 117750-06-29 14:51 G 44728544.00 44728544.12 44728544.28 0.0137 0.0103

Uranus 117751-02-10 21:05 G 44728770.22 44728770.38 44728770.56 0.0137 0.0085

Jupiter 117751-06-26 08:36 G 44728905.66 44728905.86 44728906.06 0.0494 0.0087

Uranus 117751-09-25 03:05 G 44728996.46 44728996.63 44728996.83 0.0137 0.0066

Saturn 117751-10-03 14:08 G 44729004.92 44729005.09 44729005.27 0.0281 0.0153

Uranus 117752-05-08 09:34 G 44729222.71 44729222.90 44729223.11 0.0137 0.0047

Saturn 117752-05-20 01:10 G 44729234.40 44729234.55 44729234.71 0.0282 0.0191

Uranus 117752-12-20 16:03 G 44729448.97 44729449.17 44729449.39 0.0138 0.0029

Uranus 117753-08-03 22:46 G 44729675.24 44729675.45 44729675.67 0.0138 0.0009

Mars 117754-01-07 09:34 G 44729831.78 44729831.90 44729832.02 0.1712 0.1223

Uranus 117754-03-18 05:29 G 44729901.52 44729901.73 44729901.95 0.0138 0.0010

Uranus 117754-10-30 12:27 G 44730127.81 44730128.02 44730128.23 0.0138 0.0030

Uranus 117755-06-13 19:39 G 44730354.13 44730354.32 44730354.53 0.0138 0.0050

Uranus 117756-01-26 03:05 G 44730580.45 44730580.63 44730580.83 0.0138 0.0069

Uranus 117756-09-08 10:32 G 44730806.79 44730806.94 44730807.12 0.0139 0.0089

Uranus 117757-04-22 18:12 G 44731033.14 44731033.26 44731033.41 0.0139 0.0108

Jupiter 117757-05-01 05:00 G 44731041.69 44731041.71 44731041.73 0.0532 0.0528

Uranus 117757-12-05 02:22 G 44731259.52 44731259.60 44731259.69 0.0139 0.0127

Jupiter 117763-03-01 10:03 G 44733171.73 44733171.92 44733172.11 0.0491 0.0181

Saturn 117766-03-24 05:58 G 44734290.54 44734290.75 44734290.97 0.0278 0.0014

Jupiter 117769-01-03 18:55 G 44735307.10 44735307.29 44735307.48 0.0535 0.0191

Jupiter 117774-11-04 12:55 G 44737437.96 44737438.04 44737438.14 0.0489 0.0438

Jupiter 117780-09-08 10:17 G 44739572.73 44739572.93 44739573.12 0.0537 0.0144

Saturn 117781-04-14 19:10 G 44739791.11 44739791.30 44739791.50 0.0281 0.0105

Saturn 117781-11-30 05:43 G 44740020.64 44740020.74 44740020.86 0.0282 0.0238

Mars 117786-01-06 08:36 G 44741518.75 44741518.86 44741518.96 0.1726 0.1322

Neptune 117786-11-01 01:53 G 44741817.53 44741817.58 44741817.67 0.0088 0.0084

Jupiter 117787-03-03 18:12 G 44741940.08 44741940.26 44741940.44 0.0494 0.0238

Neptune 117787-06-14 14:36 G 44742043.01 44742043.11 44742043.24 0.0088 0.0074

Neptune 117788-01-26 03:05 G 44742268.50 44742268.63 44742268.79 0.0088 0.0065

Neptune 117788-09-07 15:19 G 44742493.99 44742494.14 44742494.33 0.0088 0.0056

Neptune 117789-04-21 04:17 G 44742719.49 44742719.68 44742719.86 0.0088 0.0047

Neptune 117789-12-02 16:31 G 44742945.00 44742945.19 44742945.40 0.0088 0.0038

Neptune 117790-07-16 05:15 G 44743170.52 44743170.72 44743170.93 0.0088 0.0028

Uranus 117790-10-16 21:05 G 44743263.27 44743263.38 44743263.50 0.0141 0.0122

Neptune 117791-02-26 17:43 G 44743396.03 44743396.24 44743396.46 0.0088 0.0019

Uranus 117791-05-31 08:36 G 44743489.71 44743489.86 44743490.02 0.0141 0.0100

Neptune 117791-10-10 06:27 G 44743621.55 44743621.77 44743621.99 0.0088 0.0010

Uranus 117792-01-12 19:53 G 44743716.15 44743716.33 44743716.52 0.0141 0.0079

Jupiter 117792-05-14 01:10 G 44743838.47 44743838.55 44743838.64 0.0539 0.0481

Neptune 117792-05-22 18:55 G 44743847.08 44743847.29 44743847.51 0.0088 0.0002

Mars 117792-06-18 18:41 G 44743874.11 44743874.28 44743874.44 0.1820 0.0575

Uranus 117792-08-26 06:55 G 44743942.59 44743942.79 44743942.99 0.0141 0.0058

Neptune 117793-01-03 07:39 G 44744072.60 44744072.82 44744073.04 0.0088 0.0009

Uranus 117793-04-09 17:58 G 44744169.03 44744169.25 44744169.46 0.0141 0.0037

Neptune 117793-08-16 20:07 G 44744298.13 44744298.34 44744298.56 0.0088 0.0019

Uranus 117793-11-22 04:46 G 44744395.48 44744395.70 44744395.92 0.0140 0.0016

Neptune 117794-03-30 08:36 G 44744523.66 44744523.86 44744524.08 0.0088 0.0028

Uranus 117794-07-06 15:19 G 44744621.92 44744622.14 44744622.36 0.0140 0.0005

Neptune 117794-11-10 21:19 G 44744749.20 44744749.39 44744749.59 0.0088 0.0037

Uranus 117795-02-18 01:39 G 44744848.35 44744848.57 44744848.79 0.0140 0.0026

Neptune 117795-06-24 10:03 G 44744974.74 44744974.92 44744975.11 0.0088 0.0046

Uranus 117795-10-02 11:43 G 44745074.78 44745074.99 44745075.20 0.0140 0.0047

Saturn 117795-10-04 05:15 G 44745076.50 44745076.72 44745076.93 0.0278 0.0015

Neptune 117796-02-04 22:17 G 44745200.28 44745200.43 44745200.62 0.0088 0.0056

Uranus 117796-05-15 21:34 G 44745301.22 44745301.40 44745301.60 0.0140 0.0068

Moon 117796-09-12 01:24 G 44745420.48 44745420.56 44745420.64 0.2666 0.2275

Neptune 117796-09-17 11:00 G 44745425.83 44745425.96 44745426.13 0.0088 0.0065

Uranus 117796-12-28 07:39 G 44745527.65 44745527.82 44745527.99 0.0139 0.0088

Neptune 117797-04-30 23:43 G 44745651.39 44745651.49 44745651.62 0.0088 0.0074

Uranus 117797-08-11 17:00 G 44745754.09 44745754.21 44745754.36 0.0139 0.0108

Neptune 117797-12-12 12:12 G 44745876.96 44745877.01 44745877.10 0.0088 0.0083

Uranus 117798-03-26 02:22 G 44745980.53 44745980.60 44745980.70 0.0139 0.0127

Jupiter 117798-11-06 21:19 G 44746206.18 44746206.39 44746206.59 0.0493 0.0023

Moon 117804-09-10 21:05 G 44748340.23 44748340.38 44748340.53 0.2673 0.0430

Earth 117804-09-10 22:31 G 44748340.29 44748340.44 44748340.60 0.2667 0.0552 *

Jupiter 117804-09-12 13:53 G 44748341.95 44748342.08 44748342.22 0.0533 0.0393

Jupiter 117810-07-14 00:12 G 44750472.35 44750472.51 44750472.68 0.0491 0.0283

Saturn 117810-10-26 20:51 G 44750577.17 44750577.37 44750577.58 0.0281 0.0068

Saturn 117811-06-13 07:53 G 44750806.80 44750806.83 44750806.87 0.0282 0.0277

Jupiter 117816-05-18 03:34 G 44752607.45 44752607.65 44752607.85 0.0535 0.0056

Mars 117819-11-05 19:53 G 44753874.26 44753874.33 44753874.39 0.1709 0.1565

Jupiter 117822-11-10 05:15 G 44754974.60 44754974.72 44754974.84 0.0495 0.0393

Saturn 117824-08-29 23:00 G 44755633.43 44755633.46 44755633.52 0.0279 0.0271

Saturn 117825-04-16 12:55 G 44755862.83 44755863.04 44755863.25 0.0278 0.0070

Jupiter 117828-01-21 16:17 G 44756873.01 44756873.18 44756873.35 0.0538 0.0294

Uranus 117833-07-16 20:07 G 44758876.28 44758876.34 44758876.43 0.0137 0.0127

Uranus 117834-02-28 01:53 G 44759102.46 44759102.58 44759102.72 0.0137 0.0109

Jupiter 117834-07-16 07:53 G 44759240.63 44759240.83 44759241.03 0.0493 0.0130

Pluto 117834-08-24 03:19 G 44759279.62 44759279.64 44759279.73 0.0063 0.0061

Uranus 117834-10-12 07:39 G 44759328.68 44759328.82 44759328.99 0.0137 0.0091

Pluto 117835-04-06 06:55 G 44759504.61 44759504.79 44759505.00 0.0063 0.0025

Uranus 117835-05-26 14:07 G 44759554.91 44759555.09 44759555.27 0.0137 0.0072

Pluto 117835-11-17 10:17 G 44759729.72 44759729.93 44759730.15 0.0063 0.0011

Uranus 117836-01-07 20:22 G 44759781.15 44759781.35 44759781.55 0.0137 0.0054

Pluto 117836-06-29 13:10 G 44759954.93 44759955.05 44759955.21 0.0063 0.0047

Uranus 117836-08-21 02:36 G 44760007.41 44760007.61 44760007.82 0.0137 0.0035

Uranus 117837-04-04 09:05 G 44760233.67 44760233.88 44760234.10 0.0138 0.0016

Uranus 117837-11-16 15:48 G 44760459.95 44760460.16 44760460.38 0.0138 0.0004

Uranus 117838-06-30 22:46 G 44760686.24 44760686.45 44760686.67 0.0138 0.0023

Uranus 117839-02-12 05:43 G 44760912.55 44760912.74 44760912.95 0.0138 0.0043

Uranus 117839-09-26 12:55 G 44761138.86 44761139.04 44761139.24 0.0138 0.0063

Saturn 117840-05-08 02:36 G 44761363.41 44761363.61 44761363.82 0.0281 0.0019

Uranus 117840-05-09 20:22 G 44761365.19 44761365.35 44761365.54 0.0138 0.0082

Uranus 117840-12-22 04:03 G 44761591.54 44761591.67 44761591.83 0.0139 0.0102

Uranus 117841-08-05 12:12 G 44761817.91 44761818.01 44761818.11 0.0139 0.0121

Jupiter 117846-03-21 10:03 G 44763506.72 44763506.92 44763507.12 0.0491 0.0133

Mars 117851-11-04 18:55 G 44765561.16 44765561.29 44765561.43 0.1722 0.0979

Jupiter 117852-01-24 22:31 G 44765642.27 44765642.44 44765642.62 0.0534 0.0258

Saturn 117854-03-11 22:31 G 44766419.34 44766419.44 44766419.55 0.0279 0.0242

Saturn 117854-10-27 11:58 G 44766648.80 44766649.00 44766649.20 0.0278 0.0098

Jupiter 117857-11-24 13:24 G 44767772.94 44767773.06 44767773.18 0.0490 0.0389

Mars 117858-04-16 23:58 G 44767916.32 44767916.50 44767916.68 0.1825 0.0024

Jupiter 117863-09-29 12:12 G 44769907.81 44769908.01 44769908.21 0.0536 0.0085

Saturn 117869-11-18 03:48 G 44772149.45 44772149.66 44772149.87 0.0281 0.0018

Neptune 117870-03-16 02:07 G 44772267.57 44772267.59 44772267.66 0.0089 0.0087

Jupiter 117870-03-23 19:24 G 44772275.15 44772275.31 44772275.48 0.0495 0.0290

Neptune 117870-10-27 15:48 G 44772493.07 44772493.16 44772493.29 0.0089 0.0077

Neptune 117871-06-10 05:43 G 44772718.60 44772718.74 44772718.89 0.0089 0.0067

Neptune 117872-01-21 18:55 G 44772944.15 44772944.29 44772944.48 0.0089 0.0058

Neptune 117872-09-03 08:36 G 44773169.69 44773169.86 44773170.06 0.0089 0.0048

Neptune 117873-04-16 22:17 G 44773395.24 44773395.43 44773395.64 0.0089 0.0038

Neptune 117873-11-28 11:58 G 44773620.79 44773621.00 44773621.21 0.0089 0.0029

Uranus 117874-06-17 04:17 G 44773821.60 44773821.68 44773821.78 0.0141 0.0130

Neptune 117874-07-12 01:10 G 44773846.34 44773846.55 44773846.78 0.0089 0.0019

Uranus 117875-01-29 15:48 G 44774048.03 44774048.16 44774048.31 0.0141 0.0108

Neptune 117875-02-22 14:51 G 44774071.90 44774072.12 44774072.34 0.0089 0.0009

Jupiter 117875-06-04 01:39 G 44774173.45 44774173.57 44774173.69 0.0538 0.0428

Uranus 117875-09-13 03:05 G 44774274.47 44774274.63 44774274.81 0.0141 0.0087

Neptune 117875-10-06 04:17 G 44774297.46 44774297.68 44774297.90 0.0089 0.0001

Uranus 117876-04-26 14:22 G 44774500.91 44774501.10 44774501.30 0.0141 0.0066

Neptune 117876-05-18 17:29 G 44774523.02 44774523.23 44774523.46 0.0089 0.0011

Uranus 117876-12-09 01:39 G 44774727.37 44774727.57 44774727.78 0.0141 0.0045

Neptune 117876-12-30 06:55 G 44774748.58 44774748.79 44774749.01 0.0089 0.0020

Uranus 117877-07-23 12:27 G 44774953.81 44774954.02 44774954.25 0.0141 0.0024

Neptune 117877-08-12 20:07 G 44774974.15 44774974.34 44774974.56 0.0089 0.0031

Uranus 117878-03-06 23:15 G 44775180.25 44775180.47 44775180.69 0.0140 0.0002

Neptune 117878-03-26 09:34 G 44775199.71 44775199.90 44775200.11 0.0089 0.0040

Uranus 117878-10-19 09:48 G 44775406.69 44775406.91 44775407.13 0.0140 0.0019

Neptune 117878-11-06 22:46 G 44775425.28 44775425.45 44775425.65 0.0089 0.0050

Uranus 117879-06-02 20:07 G 44775633.13 44775633.34 44775633.55 0.0140 0.0040

Neptune 117879-06-20 11:58 G 44775650.86 44775651.00 44775651.19 0.0089 0.0060

Uranus 117880-01-15 06:12 G 44775859.57 44775859.76 44775859.97 0.0140 0.0061

Neptune 117880-02-01 01:53 G 44775876.45 44775876.58 44775876.72 0.0089 0.0069

Uranus 117880-08-28 16:03 G 44776086.00 44776086.17 44776086.36 0.0140 0.0082

Neptune 117880-09-13 14:51 G 44776102.04 44776102.12 44776102.24 0.0089 0.0079

Uranus 117881-04-12 01:53 G 44776312.44 44776312.58 44776312.74 0.0139 0.0101

Neptune 117881-04-27 04:31 G 44776327.66 44776327.69 44776327.73 0.0089 0.0088

Uranus 117881-11-24 11:15 G 44776538.88 44776538.97 44776539.10 0.0139 0.0122

Jupiter 117881-11-26 21:19 G 44776541.19 44776541.39 44776541.60 0.0492 0.0023

Saturn 117883-09-22 05:00 G 44777205.56 44777205.71 44777205.88 0.0279 0.0190

Saturn 117884-05-08 18:41 G 44777435.10 44777435.28 44777435.46 0.0278 0.0151

Jupiter 117887-10-02 13:10 G 44778676.95 44778677.05 44778677.17 0.0533 0.0443

Jupiter 117893-08-02 00:12 G 44780807.33 44780807.51 44780807.69 0.0490 0.0238

Saturn 117898-10-14 00:27 G 44782706.47 44782706.52 44782706.58 0.0280 0.0268

Saturn 117899-05-31 10:17 G 44782935.72 44782935.93 44782936.13 0.0281 0.0070

Jupiter 117899-06-07 04:46 G 44782942.50 44782942.70 44782942.89 0.0536 0.0111

Jupiter 117905-11-30 05:15 G 44785309.63 44785309.72 44785309.81 0.0495 0.0442

Jupiter 117911-02-10 20:07 G 44787208.16 44787208.34 44787208.52 0.0538 0.0226

Saturn 117913-04-04 05:15 G 44787991.55 44787991.72 44787991.90 0.0279 0.0159

Saturn 117913-11-19 18:27 G 44788221.12 44788221.27 44788221.44 0.0278 0.0181

Uranus 117917-03-17 06:27 G 44789434.75 44789434.77 44789434.84 0.0137 0.0134

Jupiter 117917-08-05 08:22 G 44789575.66 44789575.85 44789576.04 0.0494 0.0180

Mars 117917-09-02 05:15 G 44789603.56 44789603.72 44789603.88 0.1718 0.0623

Uranus 117917-10-29 12:12 G 44789660.92 44789661.01 44789661.14 0.0137 0.0116

Moon 117918-03-19 03:19 G 44789801.47 44789801.64 44789801.80 0.2661 0.0787

Earth 117918-03-19 05:43 G 44789801.61 44789801.74 44789801.88 0.2666 0.1322 *

Uranus 117918-06-12 18:12 G 44789887.12 44789887.26 44789887.42 0.0137 0.0098

Uranus 117919-01-25 00:12 G 44790113.35 44790113.51 44790113.69 0.0137 0.0079

Uranus 117919-09-08 06:27 G 44790339.58 44790339.77 44790339.96 0.0137 0.0060

Uranus 117920-04-21 12:41 G 44790565.83 44790566.03 44790566.24 0.0137 0.0042

Uranus 117920-12-03 19:10 G 44790792.09 44790792.30 44790792.51 0.0137 0.0022

Uranus 117921-07-18 01:53 G 44791018.36 44791018.58 44791018.79 0.0138 0.0004

Uranus 117922-03-01 08:22 G 44791244.64 44791244.85 44791245.07 0.0138 0.0017

Uranus 117922-10-13 15:19 G 44791470.94 44791471.14 44791471.36 0.0138 0.0036

Uranus 117923-05-27 22:31 G 44791697.25 44791697.44 44791697.65 0.0138 0.0056

Uranus 117924-01-09 05:58 G 44791923.57 44791923.75 44791923.93 0.0138 0.0075

Mars 117924-02-13 04:46 G 44791958.53 44791958.70 44791958.86 0.1830 0.0653

Uranus 117924-08-22 13:10 G 44792149.91 44792150.05 44792150.22 0.0138 0.0095

Uranus 117925-04-05 20:51 G 44792376.26 44792376.37 44792376.50 0.0139 0.0115

Uranus 117925-11-18 04:46 G 44792602.65 44792602.70 44792602.76 0.0139 0.0134

Pluto 117925-12-31 07:53 G 44792645.64 44792645.83 44792646.05 0.0081 0.0034

Earth 117926-03-16 20:07 G 44792721.28 44792721.34 44792721.41 0.2664 0.2439

Pluto 117926-08-13 19:39 G 44792871.15 44792871.32 44792871.52 0.0081 0.0048

Saturn 117928-04-26 00:41 G 44793492.43 44793492.53 44793492.66 0.0280 0.0236

Saturn 117928-12-11 10:46 G 44793721.75 44793721.95 44793722.14 0.0281 0.0104

Jupiter 117929-04-10 11:15 G 44793841.76 44793841.97 44793842.17 0.0492 0.0083

Jupiter 117935-02-13 23:00 G 44795977.30 44795977.46 44795977.62 0.0534 0.0312

Jupiter 117940-12-14 13:53 G 44798107.94 44798108.08 44798108.23 0.0490 0.0343

Saturn 117942-10-15 11:00 G 44798777.77 44798777.96 44798778.16 0.0279 0.0110

Saturn 117943-06-02 00:27 G 44799007.40 44799007.52 44799007.64 0.0278 0.0230

Jupiter 117946-10-19 10:46 G 44800242.75 44800242.95 44800243.15 0.0537 0.0038

Neptune 117951-02-04 11:43 G 44801811.96 44801811.99 44801812.07 0.0088 0.0085

Neptune 117951-09-17 23:58 G 44802037.42 44802037.50 44802037.64 0.0088 0.0077

Neptune 117952-04-30 12:27 G 44802262.90 44802263.02 44802263.18 0.0088 0.0067

Neptune 117952-12-12 01:24 G 44802488.40 44802488.56 44802488.73 0.0088 0.0058

Jupiter 117953-04-12 19:10 G 44802610.16 44802610.30 44802610.46 0.0494 0.0336

Neptune 117953-07-25 13:53 G 44802713.90 44802714.08 44802714.27 0.0088 0.0048

Neptune 117954-03-08 02:07 G 44802939.41 44802939.59 44802939.80 0.0088 0.0040

Neptune 117954-10-19 14:36 G 44803164.92 44803165.11 44803165.33 0.0088 0.0030

Neptune 117955-06-02 03:05 G 44803390.43 44803390.63 44803390.86 0.0088 0.0021

Neptune 117956-01-13 16:03 G 44803615.95 44803616.17 44803616.38 0.0088 0.0011

Neptune 117956-08-26 04:31 G 44803841.47 44803841.69 44803841.91 0.0088 0.0002

Neptune 117957-04-08 17:00 G 44804066.99 44804067.21 44804067.43 0.0088 0.0007

Saturn 117957-11-06 08:22 G 44804278.70 44804278.85 44804279.01 0.0280 0.0180

Neptune 117957-11-20 05:29 G 44804292.52 44804292.73 44804292.95 0.0088 0.0017

Uranus 117958-02-15 11:15 G 44804379.94 44804379.97 44804380.03 0.0142 0.0138

Saturn 117958-06-23 18:12 G 44804508.09 44804508.26 44804508.44 0.0281 0.0159

Jupiter 117958-06-24 01:24 G 44804508.42 44804508.56 44804508.71 0.0539 0.0378 *

Neptune 117958-07-03 18:12 G 44804518.06 44804518.26 44804518.48 0.0088 0.0026

Uranus 117958-09-29 23:00 G 44804606.35 44804606.46 44804606.59 0.0141 0.0117

Neptune 117959-02-14 06:55 G 44804743.59 44804743.79 44804743.99 0.0088 0.0035

Uranus 117959-05-14 10:31 G 44804832.79 44804832.94 44804833.11 0.0141 0.0095

Neptune 117959-09-27 19:10 G 44804969.13 44804969.30 44804969.51 0.0088 0.0045

Uranus 117959-12-26 21:48 G 44805059.24 44805059.41 44805059.62 0.0141 0.0075

Neptune 117960-05-10 07:53 G 44805194.67 44805194.83 44805195.02 0.0088 0.0054

Uranus 117960-08-09 09:19 G 44805285.69 44805285.89 44805286.10 0.0141 0.0052

Neptune 117960-12-21 20:36 G 44805420.22 44805420.36 44805420.52 0.0088 0.0063

Uranus 117961-03-23 20:22 G 44805512.14 44805512.35 44805512.57 0.0141 0.0031

Neptune 117961-08-04 09:34 G 44805645.78 44805645.90 44805646.03 0.0088 0.0072

Uranus 117961-11-05 07:24 G 44805738.59 44805738.81 44805739.03 0.0141 0.0009

Neptune 117962-03-17 22:17 G 44805871.35 44805871.43 44805871.51 0.0088 0.0081

Uranus 117962-06-19 17:58 G 44805965.03 44805965.25 44805965.47 0.0140 0.0012

Uranus 117963-02-01 04:31 G 44806191.48 44806191.69 44806191.91 0.0140 0.0033

Uranus 117963-09-15 14:36 G 44806417.92 44806418.11 44806418.32 0.0140 0.0054

Uranus 117964-04-29 00:41 G 44806644.36 44806644.53 44806644.73 0.0140 0.0075

Uranus 117964-12-11 11:00 G 44806870.80 44806870.96 44806871.12 0.0140 0.0095

Jupiter 117964-12-16 21:05 G 44806876.18 44806876.38 44806876.59 0.0492 0.0070

Uranus 117965-07-25 20:22 G 44807097.24 44807097.35 44807097.49 0.0139 0.0115

Uranus 117966-03-09 05:58 G 44807323.71 44807323.75 44807323.81 0.0139 0.0135

Jupiter 117970-10-22 16:46 G 44809012.15 44809012.20 44809012.26 0.0533 0.0509

Saturn 117972-04-26 11:58 G 44809563.80 44809564.00 44809564.21 0.0279 0.0076

Saturn 117972-12-12 00:55 G 44809793.48 44809793.54 44809793.62 0.0278 0.0263

Jupiter 117976-08-22 00:12 G 44811142.32 44811142.51 44811142.70 0.0491 0.0190

Jupiter 117982-06-27 07:10 G 44813277.61 44813277.80 44813278.00 0.0535 0.0173

Mars 117983-06-30 15:48 G 44813645.99 44813646.16 44813646.33 0.1714 0.0283

Saturn 117987-05-19 08:36 G 44815064.69 44815064.86 44815065.04 0.0280 0.0148

Saturn 117988-01-03 18:27 G 44815294.12 44815294.27 44815294.43 0.0281 0.0193

Jupiter 117988-04-27 03:05 G 44815408.56 44815408.63 44815408.72 0.0489 0.0448

Jupiter 117988-12-19 06:41 G 44815644.77 44815644.78 44815644.79 0.0496 0.0495

Mars 117989-12-10 09:19 G 44816000.77 44816000.89 44816001.02 0.1835 0.1285

Jupiter 117994-03-01 20:36 G 44817543.18 44817543.36 44817543.56 0.0537 0.0172

Jupiter 118000-08-24 08:51 G 44819910.69 44819910.87 44819911.05 0.0493 0.0229

119TH MILLENNIUM CE

This is a list of transits of Venus in the 119th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 118001-06-28 23:58 G 44820219.42 44820219.50 44820219.60 0.0137 0.0122

Saturn 118001-11-06 17:29 G 44820350.02 44820350.23 44820350.44 0.0279 0.0028

Uranus 118002-02-10 05:29 G 44820445.61 44820445.73 44820445.88 0.0137 0.0104

Uranus 118002-09-24 11:15 G 44820671.82 44820671.97 44820672.15 0.0137 0.0086

Uranus 118003-05-08 17:29 G 44820898.06 44820898.23 44820898.43 0.0137 0.0067

Uranus 118003-12-20 23:43 G 44821124.30 44821124.49 44821124.70 0.0137 0.0048

Uranus 118004-08-03 06:12 G 44821350.55 44821350.76 44821350.97 0.0137 0.0029

Uranus 118005-03-17 12:41 G 44821576.82 44821577.03 44821577.25 0.0137 0.0009

Uranus 118005-10-29 19:24 G 44821803.10 44821803.31 44821803.52 0.0138 0.0010

Jupiter 118005-11-04 07:24 G 44821808.77 44821808.81 44821808.85 0.0540 0.0527

Uranus 118006-06-13 02:22 G 44822029.39 44822029.60 44822029.81 0.0138 0.0030

Uranus 118007-01-25 09:19 G 44822255.69 44822255.89 44822256.09 0.0138 0.0049

Uranus 118007-09-08 16:17 G 44822482.00 44822482.18 44822482.38 0.0138 0.0069

Uranus 118008-04-21 23:43 G 44822708.33 44822708.49 44822708.66 0.0138 0.0089

Uranus 118008-12-04 06:55 G 44822934.67 44822934.79 44822934.94 0.0139 0.0109

Uranus 118009-07-18 15:05 G 44823161.05 44823161.13 44823161.21 0.0139 0.0128

Jupiter 118012-04-29 11:29 G 44824176.77 44824176.98 44824177.18 0.0491 0.0036

Saturn 118016-11-28 16:46 G 44825851.01 44825851.20 44825851.40 0.0280 0.0091

Saturn 118017-07-16 02:51 G 44826080.53 44826080.62 44826080.72 0.0281 0.0249

Jupiter 118018-03-04 22:17 G 44826312.29 44826312.43 44826312.58 0.0534 0.0362

Jupiter 118024-01-03 13:10 G 44828442.89 44828443.05 44828443.22 0.0490 0.0297

Jupiter 118029-11-07 13:53 G 44830577.88 44830578.08 44830578.29 0.0537 0.0032

Saturn 118031-05-19 19:24 G 44831136.10 44831136.31 44831136.53 0.0279 0.0011

Neptune 118034-06-18 10:31 G 44832261.94 44832261.94 44832261.95 0.0089 0.0089

Neptune 118035-01-29 23:58 G 44832487.41 44832487.50 44832487.61 0.0089 0.0079

Neptune 118035-09-12 13:10 G 44832712.94 44832713.05 44832713.21 0.0089 0.0070

Neptune 118036-04-25 02:51 G 44832938.48 44832938.62 44832938.80 0.0089 0.0061

Jupiter 118036-05-01 18:41 G 44832945.16 44832945.28 44832945.42 0.0495 0.0385

Neptune 118036-12-06 16:46 G 44833164.03 44833164.20 44833164.39 0.0089 0.0050

Neptune 118037-07-20 06:27 G 44833389.58 44833389.77 44833389.97 0.0089 0.0041

Neptune 118038-03-02 19:39 G 44833615.13 44833615.32 44833615.55 0.0089 0.0032

Neptune 118038-10-14 09:19 G 44833840.68 44833840.89 44833841.11 0.0089 0.0021

Neptune 118039-05-27 23:00 G 44834066.24 44834066.46 44834066.68 0.0089 0.0011

Neptune 118040-01-08 12:41 G 44834291.81 44834292.03 44834292.25 0.0089 0.0002

Neptune 118040-08-21 01:53 G 44834517.37 44834517.58 44834517.81 0.0089 0.0009

Neptune 118041-04-03 15:05 G 44834742.93 44834743.13 44834743.36 0.0089 0.0019

Jupiter 118041-07-13 04:17 G 44834843.52 44834843.68 44834843.84 0.0538 0.0315

Neptune 118041-11-15 04:46 G 44834968.49 44834968.70 44834968.91 0.0089 0.0028

Uranus 118042-05-30 06:55 G 44835164.70 44835164.79 44835164.90 0.0142 0.0125

Neptune 118042-06-28 17:58 G 44835194.06 44835194.25 44835194.46 0.0089 0.0037

Uranus 118043-01-11 18:27 G 44835391.13 44835391.27 44835391.43 0.0141 0.0104

Neptune 118043-02-09 07:10 G 44835419.63 44835419.80 44835420.00 0.0089 0.0048

Uranus 118043-08-26 06:12 G 44835617.58 44835617.76 44835617.94 0.0141 0.0082

Neptune 118043-09-22 20:51 G 44835645.20 44835645.37 44835645.54 0.0089 0.0057

Uranus 118044-04-08 17:29 G 44835844.03 44835844.23 44835844.43 0.0141 0.0060

Neptune 118044-05-05 09:48 G 44835870.78 44835870.91 44835871.07 0.0089 0.0067

Uranus 118044-11-21 04:31 G 44836070.49 44836070.69 44836070.92 0.0141 0.0039

Neptune 118044-12-16 23:00 G 44836096.37 44836096.46 44836096.60 0.0089 0.0077

Uranus 118045-07-05 15:48 G 44836296.94 44836297.16 44836297.38 0.0141 0.0017

Neptune 118045-07-30 12:27 G 44836321.98 44836322.02 44836322.10 0.0089 0.0086

Uranus 118046-02-17 02:36 G 44836523.39 44836523.61 44836523.83 0.0140 0.0005

Saturn 118046-06-10 17:15 G 44836637.02 44836637.22 44836637.43 0.0280 0.0058

Uranus 118046-10-01 13:10 G 44836749.83 44836750.05 44836750.27 0.0140 0.0026

Uranus 118047-05-15 23:29 G 44836976.28 44836976.48 44836976.69 0.0140 0.0047

Moon 118047-09-12 19:39 G 44837096.17 44837096.32 44837096.46 0.2671 0.0768

Earth 118047-09-13 00:55 G 44837096.38 44837096.54 44837096.69 0.2668 0.0500 *

Uranus 118047-12-28 09:48 G 44837202.73 44837202.91 44837203.11 0.0140 0.0068

Jupiter 118048-01-05 21:48 G 44837211.21 44837211.41 44837211.61 0.0493 0.0121

Uranus 118048-08-10 19:39 G 44837429.17 44837429.32 44837429.51 0.0140 0.0089

Uranus 118049-03-25 05:43 G 44837655.61 44837655.74 44837655.88 0.0140 0.0109

Mars 118049-04-27 02:07 G 44837688.42 44837688.59 44837688.77 0.1710 0.0072

Uranus 118049-11-06 15:19 G 44837882.06 44837882.14 44837882.23 0.0139 0.0129

Jupiter 118059-09-11 00:41 G 44841477.34 44841477.53 44841477.73 0.0491 0.0141

Saturn 118060-11-29 00:27 G 44841922.31 44841922.52 44841922.73 0.0279 0.0056

Jupiter 118065-07-16 04:31 G 44843612.50 44843612.69 44843612.87 0.0535 0.0215

Jupiter 118071-05-17 03:34 G 44845743.53 44845743.65 44845743.77 0.0489 0.0399

Saturn 118075-12-22 02:22 G 44847423.39 44847423.60 44847423.81 0.0280 0.0004

Jupiter 118077-03-20 18:41 G 44847878.08 44847878.28 44847878.47 0.0538 0.0126

Pluto 118081-05-05 05:43 G 44849384.64 44849384.74 44849384.88 0.0063 0.0052

Pluto 118081-12-16 09:19 G 44849609.68 44849609.89 44849610.10 0.0063 0.0016

Pluto 118082-07-29 11:58 G 44849834.81 44849835.00 44849835.23 0.0063 0.0020

Pluto 118083-03-11 15:05 G 44850060.06 44850060.13 44850060.26 0.0063 0.0056

Jupiter 118083-09-13 07:10 G 44850245.64 44850245.80 44850245.98 0.0493 0.0273

Uranus 118085-02-26 11:00 G 44850777.90 44850777.96 44850778.04 0.0136 0.0129

Uranus 118085-10-10 16:31 G 44851004.08 44851004.19 44851004.33 0.0137 0.0111

Uranus 118086-05-24 22:46 G 44851230.30 44851230.45 44851230.61 0.0137 0.0092

Uranus 118087-01-06 04:31 G 44851456.52 44851456.69 44851456.88 0.0137 0.0074

Uranus 118087-08-20 10:31 G 44851682.75 44851682.94 44851683.15 0.0137 0.0055

Mars 118087-10-07 07:39 G 44851730.79 44851730.82 44851730.84 0.1823 0.1796

Uranus 118088-04-02 16:46 G 44851909.00 44851909.20 44851909.41 0.0137 0.0036

Uranus 118088-11-14 23:15 G 44852135.26 44852135.47 44852135.69 0.0137 0.0016

Jupiter 118088-11-23 09:48 G 44852143.81 44852143.91 44852144.01 0.0540 0.0465

Uranus 118089-06-29 05:58 G 44852361.54 44852361.75 44852361.96 0.0138 0.0003

Saturn 118089-10-24 13:53 G 44852478.99 44852479.08 44852479.19 0.0279 0.0245

Uranus 118090-02-10 12:41 G 44852587.82 44852588.03 44852588.24 0.0138 0.0023

Saturn 118090-06-11 04:03 G 44852708.47 44852708.67 44852708.87 0.0278 0.0098

Uranus 118090-09-24 19:10 G 44852814.11 44852814.30 44852814.52 0.0138 0.0043

Uranus 118091-05-09 02:22 G 44853040.41 44853040.60 44853040.80 0.0138 0.0062

Uranus 118091-12-21 09:19 G 44853266.73 44853266.89 44853267.08 0.0138 0.0082

Uranus 118092-08-03 17:00 G 44853493.07 44853493.21 44853493.36 0.0138 0.0102

Uranus 118093-03-18 00:12 G 44853719.42 44853719.51 44853719.63 0.0139 0.0122

Jupiter 118095-05-19 10:03 G 44854511.72 44854511.92 44854512.13 0.0492 0.0011

Jupiter 118101-03-25 00:27 G 44856647.39 44856647.52 44856647.64 0.0534 0.0422

Saturn 118105-07-04 03:05 G 44858209.42 44858209.63 44858209.84 0.0281 0.0036

Jupiter 118107-01-23 13:10 G 44858777.87 44858778.05 44858778.23 0.0490 0.0250

Jupiter 118112-11-27 13:53 G 44860912.88 44860913.08 44860913.28 0.0536 0.0082

Mars 118115-02-23 12:41 G 44861730.87 44861731.03 44861731.20 0.1707 0.0403

Neptune 118115-05-09 21:34 G 44861806.37 44861806.40 44861806.45 0.0088 0.0087

Neptune 118115-12-21 10:03 G 44862031.83 44862031.92 44862032.03 0.0088 0.0078

Neptune 118116-08-02 22:17 G 44862257.31 44862257.43 44862257.58 0.0088 0.0069

Neptune 118117-03-16 10:46 G 44862482.80 44862482.95 44862483.12 0.0088 0.0060

Neptune 118117-10-27 23:15 G 44862708.30 44862708.47 44862708.66 0.0088 0.0050

Neptune 118118-06-10 11:43 G 44862933.81 44862933.99 44862934.20 0.0088 0.0041

Neptune 118119-01-22 00:12 G 44863159.32 44863159.51 44863159.73 0.0088 0.0032

Saturn 118119-05-07 18:27 G 44863265.13 44863265.27 44863265.42 0.0279 0.0200

Jupiter 118119-05-22 18:55 G 44863280.20 44863280.29 44863280.39 0.0495 0.0433

Neptune 118119-09-04 12:55 G 44863384.83 44863385.04 44863385.25 0.0088 0.0022

Saturn 118119-12-23 08:36 G 44863494.68 44863494.86 44863495.05 0.0278 0.0143

Neptune 118120-04-17 01:10 G 44863610.34 44863610.55 44863610.77 0.0088 0.0013

Neptune 118120-11-28 13:53 G 44863835.86 44863836.08 44863836.30 0.0088 0.0004

Neptune 118121-07-12 02:22 G 44864061.39 44864061.60 44864061.82 0.0088 0.0006

Neptune 118122-02-22 14:51 G 44864286.91 44864287.12 44864287.34 0.0088 0.0015

Neptune 118122-10-06 03:19 G 44864512.44 44864512.64 44864512.86 0.0088 0.0024

Neptune 118123-05-19 16:03 G 44864737.97 44864738.17 44864738.37 0.0088 0.0033

Neptune 118123-12-31 04:17 G 44864963.51 44864963.68 44864963.89 0.0088 0.0043

Jupiter 118124-08-02 00:27 G 44865178.35 44865178.52 44865178.69 0.0538 0.0276

Neptune 118124-08-12 17:00 G 44865189.05 44865189.21 44865189.40 0.0088 0.0052

Neptune 118125-03-26 05:43 G 44865414.60 44865414.74 44865414.91 0.0088 0.0061

Neptune 118125-11-06 18:27 G 44865640.15 44865640.27 44865640.41 0.0088 0.0070

Uranus 118126-01-28 14:07 G 44865723.04 44865723.09 44865723.18 0.0142 0.0134

Neptune 118126-06-20 06:41 G 44865865.72 44865865.78 44865865.90 0.0088 0.0080

Uranus 118126-09-12 02:07 G 44865949.46 44865949.59 44865949.73 0.0141 0.0112

Uranus 118127-04-26 13:39 G 44866175.91 44866176.07 44866176.25 0.0141 0.0091

Uranus 118127-12-09 01:24 G 44866402.38 44866402.56 44866402.76 0.0141 0.0069

Uranus 118128-07-22 12:55 G 44866628.83 44866629.04 44866629.25 0.0141 0.0046

Uranus 118129-03-05 23:58 G 44866855.29 44866855.50 44866855.72 0.0141 0.0025

Uranus 118129-10-18 11:00 G 44867081.74 44867081.96 44867082.18 0.0141 0.0003

Uranus 118130-06-01 21:48 G 44867308.19 44867308.41 44867308.63 0.0140 0.0019

Uranus 118131-01-14 08:22 G 44867534.64 44867534.85 44867535.07 0.0140 0.0040

Jupiter 118131-01-25 21:19 G 44867546.20 44867546.39 44867546.58 0.0493 0.0167

Uranus 118131-08-28 18:41 G 44867761.09 44867761.28 44867761.49 0.0140 0.0061

Uranus 118132-04-11 04:46 G 44867987.53 44867987.70 44867987.89 0.0140 0.0082

Uranus 118132-11-23 14:36 G 44868213.98 44868214.11 44868214.28 0.0140 0.0103

Uranus 118133-07-08 00:27 G 44868440.43 44868440.52 44868440.64 0.0140 0.0123

Saturn 118134-05-30 03:34 G 44868766.55 44868766.65 44868766.76 0.0280 0.0240

Saturn 118135-01-14 12:55 G 44868995.85 44868996.04 44868996.24 0.0280 0.0097

Jupiter 118142-09-30 22:17 G 44871812.23 44871812.43 44871812.63 0.0491 0.0101

Jupiter 118148-08-05 05:58 G 44873947.58 44873947.75 44873947.92 0.0535 0.0275

Saturn 118148-11-17 00:12 G 44874051.34 44874051.51 44874051.70 0.0279 0.0152

Saturn 118149-07-04 13:53 G 44874280.93 44874281.08 44874281.24 0.0278 0.0189

Mars 118153-08-04 12:55 G 44875772.91 44875773.04 44875773.17 0.1828 0.1204

Jupiter 118154-06-06 01:10 G 44876078.42 44876078.55 44876078.70 0.0489 0.0360

Jupiter 118160-04-09 20:22 G 44878213.15 44878213.35 44878213.55 0.0537 0.0066

Earth 118161-03-20 05:58 G 44878557.60 44878557.75 44878557.89 0.2665 0.1187

Moon 118161-03-20 08:22 G 44878557.70 44878557.85 44878558.00 0.2659 0.1145 *

Saturn 118163-12-10 04:31 G 44879552.56 44879552.69 44879552.84 0.0280 0.0205

Saturn 118164-07-26 13:53 G 44879781.90 44879782.08 44879782.27 0.0281 0.0134

Jupiter 118166-10-03 06:41 G 44880580.63 44880580.78 44880580.94 0.0494 0.0320

Uranus 118168-10-27 22:31 G 44881336.43 44881336.44 44881336.49 0.0136 0.0135

Earth 118169-03-17 20:22 G 44881477.31 44881477.35 44881477.39 0.2663 0.2564

Uranus 118169-06-11 04:17 G 44881562.59 44881562.68 44881562.80 0.0136 0.0117

Uranus 118170-01-23 10:03 G 44881788.79 44881788.92 44881789.08 0.0137 0.0099

Uranus 118170-09-06 16:03 G 44882015.00 44882015.17 44882015.35 0.0137 0.0080

Uranus 118171-04-20 22:03 G 44882241.23 44882241.42 44882241.62 0.0137 0.0061

Uranus 118171-12-03 04:17 G 44882467.48 44882467.68 44882467.88 0.0137 0.0042

Jupiter 118171-12-14 09:34 G 44882478.78 44882478.90 44882479.03 0.0539 0.0413

Uranus 118172-07-16 10:31 G 44882693.73 44882693.94 44882694.16 0.0137 0.0023

Pluto 118172-09-11 10:03 G 44882750.71 44882750.92 44882751.14 0.0081 0.0021

Uranus 118173-02-27 17:00 G 44882920.00 44882920.21 44882920.43 0.0137 0.0003

Pluto 118173-04-24 21:19 G 44882976.26 44882976.39 44882976.56 0.0081 0.0060

Uranus 118173-10-11 23:29 G 44883146.27 44883146.48 44883146.70 0.0138 0.0016

Uranus 118174-05-26 06:27 G 44883372.56 44883372.77 44883372.98 0.0138 0.0036

Uranus 118175-01-07 13:10 G 44883598.86 44883599.05 44883599.25 0.0138 0.0056

Uranus 118175-08-21 20:22 G 44883825.17 44883825.35 44883825.53 0.0138 0.0076

Uranus 118176-04-04 03:19 G 44884051.49 44884051.64 44884051.80 0.0138 0.0095

Uranus 118176-11-16 10:31 G 44884277.84 44884277.94 44884278.07 0.0139 0.0115

Uranus 118177-06-30 18:12 G 44884504.23 44884504.26 44884504.32 0.0139 0.0135

Saturn 118178-05-30 04:31 G 44884837.49 44884837.69 44884837.89 0.0279 0.0108

Jupiter 118178-06-08 09:48 G 44884846.70 44884846.91 44884847.11 0.0492 0.0058

Saturn 118179-01-14 18:12 G 44885067.15 44885067.26 44885067.38 0.0278 0.0233

Mars 118180-12-20 23:15 G 44885773.31 44885773.47 44885773.62 0.1703 0.0734

Jupiter 118184-04-12 19:53 G 44886982.23 44886982.33 44886982.43 0.0534 0.0459

Jupiter 118190-02-11 12:12 G 44889112.83 44889113.01 44889113.20 0.0490 0.0205

Saturn 118193-06-21 14:51 G 44890338.94 44890339.12 44890339.30 0.0280 0.0143

Saturn 118194-02-06 00:12 G 44890568.37 44890568.51 44890568.67 0.0281 0.0197

Jupiter 118195-12-17 09:48 G 44891247.71 44891247.91 44891248.11 0.0536 0.0120

Neptune 118199-05-04 07:10 G 44892481.74 44892481.80 44892481.91 0.0089 0.0082

Neptune 118199-12-15 21:05 G 44892707.27 44892707.38 44892707.52 0.0089 0.0072

Neptune 118200-07-29 11:00 G 44892932.80 44892932.96 44892933.12 0.0089 0.0062

Neptune 118201-03-12 00:12 G 44893158.35 44893158.51 44893158.70 0.0089 0.0053

Jupiter 118201-10-18 13:10 G 44893379.01 44893379.05 44893379.11 0.0488 0.0470

Neptune 118201-10-23 13:53 G 44893383.89 44893384.08 44893384.28 0.0089 0.0043

Neptune 118202-06-06 03:34 G 44893609.45 44893609.65 44893609.86 0.0089 0.0033

Jupiter 118202-06-11 15:34 G 44893615.09 44893615.15 44893615.22 0.0495 0.0470

Neptune 118203-01-17 17:15 G 44893835.01 44893835.22 44893835.44 0.0089 0.0024

Neptune 118203-08-31 06:41 G 44894060.57 44894060.78 44894061.00 0.0089 0.0014

Neptune 118204-04-12 20:07 G 44894286.12 44894286.34 44894286.57 0.0089 0.0005

Neptune 118204-11-24 09:34 G 44894511.69 44894511.90 44894512.13 0.0089 0.0007

Neptune 118205-07-07 23:15 G 44894737.25 44894737.47 44894737.69 0.0089 0.0015

Neptune 118206-02-18 12:27 G 44894962.82 44894963.02 44894963.24 0.0089 0.0026

Neptune 118206-10-02 01:39 G 44895188.38 44895188.57 44895188.79 0.0089 0.0036

Neptune 118207-05-15 15:19 G 44895413.95 44895414.14 44895414.33 0.0089 0.0045

Jupiter 118207-08-23 00:55 G 44895513.36 44895513.54 44895513.73 0.0538 0.0221

Saturn 118207-12-11 11:58 G 44895623.79 44895624.00 44895624.22 0.0279 0.0054

Neptune 118207-12-27 04:31 G 44895639.53 44895639.69 44895639.88 0.0089 0.0055

Neptune 118208-08-08 17:43 G 44895865.11 44895865.24 44895865.41 0.0089 0.0064

Neptune 118209-03-22 07:10 G 44896090.69 44896090.80 44896090.94 0.0089 0.0074

Uranus 118209-09-28 22:17 G 44896281.43 44896281.43 44896281.44 0.0142 0.0142

Neptune 118209-11-02 20:07 G 44896316.29 44896316.34 44896316.45 0.0089 0.0084

Uranus 118210-05-13 10:17 G 44896507.82 44896507.93 44896508.05 0.0142 0.0120

Uranus 118210-12-25 22:03 G 44896734.27 44896734.42 44896734.59 0.0141 0.0098

Uranus 118211-08-09 09:48 G 44896960.73 44896960.91 44896961.10 0.0141 0.0076

Uranus 118212-03-22 21:19 G 44897187.19 44897187.39 44897187.59 0.0141 0.0054

Uranus 118212-11-04 08:36 G 44897413.65 44897413.86 44897414.08 0.0141 0.0032

Uranus 118213-06-18 19:53 G 44897640.11 44897640.33 44897640.55 0.0141 0.0011

Uranus 118214-01-31 06:41 G 44897866.56 44897866.78 44897867.00 0.0141 0.0012

Jupiter 118214-02-14 18:12 G 44897881.07 44897881.26 44897881.45 0.0493 0.0206

Uranus 118214-09-14 17:15 G 44898093.01 44898093.22 44898093.44 0.0140 0.0033

Uranus 118215-04-29 03:48 G 44898319.46 44898319.66 44898319.87 0.0140 0.0054

Uranus 118215-12-11 14:22 G 44898545.91 44898546.10 44898546.28 0.0140 0.0075

Uranus 118216-07-25 00:12 G 44898772.36 44898772.51 44898772.68 0.0140 0.0096

Uranus 118217-03-08 09:48 G 44898998.81 44898998.91 44898999.05 0.0140 0.0117

Uranus 118217-10-20 19:24 G 44899225.28 44899225.31 44899225.37 0.0139 0.0137

Mars 118219-06-02 17:15 G 44899815.05 44899815.22 44899815.39 0.1833 0.0566

Saturn 118223-01-02 16:17 G 44901124.99 44901125.18 44901125.37 0.0280 0.0106

Saturn 118223-08-20 01:53 G 44901354.47 44901354.58 44901354.70 0.0281 0.0234

Jupiter 118225-10-20 20:51 G 44902147.17 44902147.37 44902147.58 0.0491 0.0058

Jupiter 118231-08-26 05:00 G 44904282.55 44904282.71 44904282.87 0.0535 0.0325

Saturn 118237-06-22 16:17 G 44906409.96 44906410.18 44906410.39 0.0279 0.0012

Jupiter 118237-06-26 00:12 G 44906413.36 44906413.51 44906413.67 0.0489 0.0316

Jupiter 118243-04-30 15:19 G 44908547.94 44908548.14 44908548.35 0.0537 0.0033

Mars 118246-10-19 09:48 G 44909815.78 44909815.91 44909816.04 0.1699 0.1067

Jupiter 118249-10-23 05:00 G 44910915.58 44910915.71 44910915.85 0.0494 0.0364

Saturn 118252-07-15 02:36 G 44911911.40 44911911.61 44911911.82 0.0280 0.0044

Uranus 118253-02-09 15:48 G 44912121.08 44912121.16 44912121.25 0.0136 0.0124

Uranus 118253-09-23 21:19 G 44912347.27 44912347.39 44912347.53 0.0136 0.0105

Uranus 118254-05-08 03:19 G 44912573.48 44912573.64 44912573.81 0.0137 0.0087

Uranus 118254-12-20 09:05 G 44912799.70 44912799.88 44912800.07 0.0137 0.0068

Jupiter 118255-01-03 04:31 G 44912813.55 44912813.69 44912813.84 0.0539 0.0379

Uranus 118255-08-03 15:05 G 44913025.94 44913026.13 44913026.34 0.0137 0.0049

Uranus 118256-03-16 21:19 G 44913252.18 44913252.39 44913252.60 0.0137 0.0030

Uranus 118256-10-29 03:34 G 44913478.44 44913478.65 44913478.87 0.0137 0.0011

Uranus 118257-06-12 10:17 G 44913704.71 44913704.93 44913705.14 0.0137 0.0009

Uranus 118258-01-24 16:46 G 44913930.99 44913931.20 44913931.41 0.0138 0.0029

Uranus 118258-09-07 23:29 G 44914157.28 44914157.48 44914157.68 0.0138 0.0049

Uranus 118259-04-22 05:58 G 44914383.58 44914383.75 44914383.95 0.0138 0.0069

Uranus 118259-12-04 13:24 G 44914609.90 44914610.06 44914610.23 0.0138 0.0088

Uranus 118260-07-17 20:22 G 44914836.23 44914836.35 44914836.50 0.0138 0.0109

Uranus 118261-03-01 04:03 G 44915062.60 44915062.67 44915062.76 0.0139 0.0128

Jupiter 118261-06-28 05:43 G 44915181.54 44915181.74 44915181.94 0.0492 0.0091

Saturn 118267-01-03 00:55 G 44917196.33 44917196.54 44917196.75 0.0279 0.0047

Jupiter 118267-05-03 19:39 G 44917317.27 44917317.32 44917317.38 0.0534 0.0512

Jupiter 118273-03-03 08:22 G 44919447.66 44919447.85 44919448.04 0.0490 0.0170

Mars 118278-10-18 08:07 G 44921502.75 44921502.84 44921502.93 0.1712 0.1427

Jupiter 118279-01-06 10:31 G 44921582.75 44921582.94 44921583.14 0.0536 0.0176

Neptune 118280-03-24 18:55 G 44922026.21 44922026.29 44922026.39 0.0088 0.0080

Neptune 118280-11-05 07:24 G 44922251.69 44922251.81 44922251.95 0.0088 0.0071

Neptune 118281-06-18 19:53 G 44922477.19 44922477.33 44922477.50 0.0088 0.0062

Saturn 118282-01-25 04:46 G 44922697.49 44922697.70 44922697.91 0.0280 0.0005

Neptune 118282-01-30 08:22 G 44922702.69 44922702.85 44922703.04 0.0088 0.0052

Neptune 118282-09-12 20:51 G 44922928.19 44922928.37 44922928.57 0.0088 0.0043

Neptune 118283-04-26 09:34 G 44923153.70 44923153.90 44923154.10 0.0088 0.0034

Neptune 118283-12-07 21:48 G 44923379.21 44923379.41 44923379.63 0.0088 0.0025

Neptune 118284-07-20 10:31 G 44923604.73 44923604.94 44923605.16 0.0088 0.0015

Jupiter 118284-11-06 11:00 G 44923713.87 44923713.96 44923714.06 0.0489 0.0430

Neptune 118285-03-02 23:00 G 44923830.25 44923830.46 44923830.68 0.0088 0.0006

Mars 118285-03-29 22:17 G 44923857.26 44923857.43 44923857.61 0.1838 0.0068

Neptune 118285-10-14 11:29 G 44924055.77 44924055.98 44924056.20 0.0088 0.0004

Neptune 118286-05-27 23:58 G 44924281.29 44924281.50 44924281.72 0.0088 0.0013

Neptune 118287-01-08 12:27 G 44924506.82 44924507.02 44924507.24 0.0088 0.0022

Neptune 118287-08-22 01:10 G 44924732.35 44924732.55 44924732.76 0.0088 0.0031

Neptune 118288-04-03 13:24 G 44924957.88 44924958.06 44924958.27 0.0088 0.0041

Neptune 118288-11-15 02:07 G 44925183.42 44925183.59 44925183.78 0.0088 0.0050

Neptune 118289-06-28 14:51 G 44925408.97 44925409.12 44925409.29 0.0088 0.0059

Neptune 118290-02-09 03:48 G 44925634.52 44925634.66 44925634.80 0.0088 0.0068

Jupiter 118290-09-11 00:12 G 44925848.32 44925848.51 44925848.70 0.0538 0.0171

Moon 118290-09-14 23:00 G 44925852.31 44925852.46 44925852.60 0.2665 0.1091

Earth 118290-09-15 03:05 G 44925852.48 44925852.63 44925852.79 0.2669 0.0436 *

Neptune 118290-09-22 15:48 G 44925860.08 44925860.16 44925860.29 0.0088 0.0078

Neptune 118291-05-06 04:31 G 44926085.68 44926085.69 44926085.74 0.0088 0.0087

Uranus 118294-01-10 17:15 G 44927066.14 44927066.22 44927066.32 0.0142 0.0129

Uranus 118294-08-25 05:15 G 44927292.58 44927292.72 44927292.87 0.0142 0.0107

Uranus 118295-04-08 17:00 G 44927519.04 44927519.21 44927519.40 0.0141 0.0085

Uranus 118295-11-21 04:46 G 44927745.51 44927745.70 44927745.91 0.0141 0.0063

Saturn 118295-11-28 14:22 G 44927753.02 44927753.10 44927753.19 0.0279 0.0254

Uranus 118296-07-04 16:31 G 44927971.97 44927972.19 44927972.40 0.0141 0.0040

Saturn 118296-07-15 04:46 G 44927982.50 44927982.70 44927982.91 0.0278 0.0089

Uranus 118297-02-16 03:34 G 44928198.43 44928198.65 44928198.87 0.0141 0.0018

Jupiter 118297-03-05 16:46 G 44928216.03 44928216.20 44928216.38 0.0493 0.0251

Uranus 118297-09-30 14:36 G 44928424.89 44928425.11 44928425.33 0.0141 0.0004

Uranus 118298-05-15 01:24 G 44928651.35 44928651.56 44928651.78 0.0141 0.0026

Uranus 118298-12-27 12:12 G 44928877.81 44928878.01 44928878.22 0.0140 0.0047

Uranus 118299-08-10 22:31 G 44929104.26 44929104.44 44929104.64 0.0140 0.0068

Uranus 118300-03-25 08:51 G 44929330.70 44929330.87 44929331.04 0.0140 0.0089

Uranus 118300-11-06 18:41 G 44929557.16 44929557.28 44929557.42 0.0140 0.0110

Uranus 118301-06-21 04:31 G 44929783.62 44929783.69 44929783.78 0.0140 0.0130

Jupiter 118302-05-17 10:17 G 44930113.90 44930113.93 44930113.97 0.0540 0.0530

Jupiter 118308-11-09 18:55 G 44932482.09 44932482.29 44932482.50 0.0491 0.0016

Saturn 118311-08-08 14:36 G 44933483.91 44933484.11 44933484.32 0.0281 0.0057

Mars 118312-08-16 20:36 G 44933858.26 44933858.36 44933858.46 0.1696 0.1379

Jupiter 118314-09-14 23:29 G 44934617.33 44934617.48 44934617.63 0.0535 0.0358

Jupiter 118320-07-15 19:53 G 44936748.16 44936748.33 44936748.50 0.0489 0.0284

Saturn 118325-06-11 00:27 G 44938539.38 44938539.52 44938539.69 0.0279 0.0193

Saturn 118326-01-26 14:36 G 44938768.93 44938769.11 44938769.29 0.0278 0.0151

Jupiter 118326-05-20 14:36 G 44938882.90 44938883.11 44938883.31 0.0537 0.0021

Pluto 118328-01-17 05:43 G 44939489.62 44939489.74 44939489.86 0.0063 0.0052

Pluto 118328-08-29 08:36 G 44939714.66 44939714.86 44939715.08 0.0063 0.0017

Pluto 118329-04-11 11:43 G 44939939.80 44939939.99 44939940.21 0.0063 0.0019

Pluto 118329-11-22 14:36 G 44940165.03 44940165.11 44940165.24 0.0063 0.0055

Jupiter 118332-11-12 00:41 G 44941250.41 44941250.53 44941250.65 0.0494 0.0396

Uranus 118336-10-11 03:34 G 44942679.59 44942679.65 44942679.72 0.0136 0.0130

Uranus 118337-05-25 09:05 G 44942905.77 44942905.88 44942906.01 0.0136 0.0112

Uranus 118338-01-06 14:36 G 44943131.97 44943132.11 44943132.28 0.0136 0.0094

Jupiter 118338-01-23 05:15 G 44943148.56 44943148.72 44943148.88 0.0539 0.0325

Uranus 118338-08-20 20:22 G 44943358.19 44943358.35 44943358.55 0.0137 0.0075

Uranus 118339-04-04 02:36 G 44943584.42 44943584.61 44943584.81 0.0137 0.0055

Uranus 118339-11-16 08:36 G 44943810.66 44943810.86 44943811.07 0.0137 0.0036

Uranus 118340-06-29 14:51 G 44944036.91 44944037.12 44944037.34 0.0137 0.0017

Saturn 118340-07-03 08:22 G 44944040.74 44944040.85 44944040.96 0.0280 0.0239

Uranus 118341-02-10 21:05 G 44944263.17 44944263.38 44944263.60 0.0137 0.0005

Saturn 118341-02-17 17:15 G 44944270.03 44944270.22 44944270.43 0.0281 0.0099

Uranus 118341-09-25 03:34 G 44944489.44 44944489.65 44944489.86 0.0137 0.0023

Uranus 118342-05-09 10:03 G 44944715.72 44944715.92 44944716.13 0.0138 0.0043

Uranus 118342-12-21 17:00 G 44944942.02 44944942.21 44944942.40 0.0138 0.0062

Uranus 118343-08-04 23:43 G 44945168.33 44945168.49 44945168.67 0.0138 0.0082

Uranus 118344-03-18 06:41 G 44945394.65 44945394.78 44945394.94 0.0138 0.0102

Jupiter 118344-07-18 03:05 G 44945516.44 44945516.63 44945516.83 0.0492 0.0132

Mars 118344-08-15 18:27 G 44945545.13 44945545.27 44945545.40 0.1708 0.1079

Uranus 118344-10-30 14:07 G 44945621.00 44945621.09 44945621.20 0.0138 0.0122

Mars 118351-01-26 02:36 G 44947899.44 44947899.61 44947899.77 0.1842 0.0728

Saturn 118354-12-22 04:03 G 44949325.49 44949325.67 44949325.85 0.0279 0.0151

Saturn 118355-08-08 17:58 G 44949555.10 44949555.25 44949555.41 0.0278 0.0190

Jupiter 118356-03-23 06:27 G 44949782.57 44949782.77 44949782.97 0.0491 0.0129

Jupiter 118362-01-26 05:29 G 44951917.55 44951917.73 44951917.92 0.0536 0.0210

Neptune 118363-08-07 15:19 G 44952476.09 44952476.14 44952476.23 0.0089 0.0084

Neptune 118364-03-20 05:15 G 44952701.60 44952701.72 44952701.84 0.0089 0.0074

Neptune 118364-10-31 18:27 G 44952927.14 44952927.27 44952927.44 0.0089 0.0065

Neptune 118365-06-14 08:07 G 44953152.68 44953152.84 44953153.03 0.0089 0.0055

Neptune 118366-01-25 21:48 G 44953378.23 44953378.41 44953378.61 0.0089 0.0046

Neptune 118366-09-08 11:15 G 44953603.78 44953603.97 44953604.19 0.0089 0.0036

Neptune 118367-04-22 00:55 G 44953829.33 44953829.54 44953829.76 0.0089 0.0026

Jupiter 118367-11-27 08:51 G 44954048.76 44954048.87 44954049.00 0.0489 0.0390

Neptune 118367-12-03 14:36 G 44954054.89 44954055.11 44954055.33 0.0089 0.0016

Neptune 118368-07-16 04:17 G 44954280.45 44954280.68 44954280.90 0.0089 0.0007

Neptune 118369-02-26 17:43 G 44954506.02 44954506.24 44954506.46 0.0089 0.0003

Neptune 118369-10-10 06:55 G 44954731.58 44954731.79 44954732.02 0.0089 0.0014

Saturn 118370-01-13 17:29 G 44954827.07 44954827.23 44954827.38 0.0280 0.0181

Neptune 118370-05-23 20:22 G 44954957.15 44954957.35 44954957.57 0.0089 0.0023

Saturn 118370-08-31 02:51 G 44955056.45 44955056.62 44955056.79 0.0281 0.0159

Neptune 118371-01-04 10:03 G 44955182.72 44955182.92 44955183.13 0.0089 0.0033

Neptune 118371-08-17 23:15 G 44955408.29 44955408.47 44955408.68 0.0089 0.0043

Neptune 118372-03-30 12:27 G 44955633.86 44955634.02 44955634.22 0.0089 0.0052

Neptune 118372-11-11 01:53 G 44955859.43 44955859.58 44955859.75 0.0089 0.0062

Neptune 118373-06-24 15:05 G 44956085.02 44956085.13 44956085.28 0.0089 0.0072

Jupiter 118373-09-30 18:27 G 44956183.08 44956183.27 44956183.47 0.0538 0.0138

Neptune 118374-02-05 04:46 G 44956310.62 44956310.70 44956310.80 0.0089 0.0081

Uranus 118377-09-11 00:41 G 44957624.49 44957624.53 44957624.60 0.0142 0.0137

Uranus 118378-04-25 12:55 G 44957850.92 44957851.04 44957851.18 0.0142 0.0115

Uranus 118378-12-08 00:55 G 44958077.38 44958077.54 44958077.72 0.0141 0.0093

Uranus 118379-07-22 12:41 G 44958303.85 44958304.03 44958304.23 0.0141 0.0071

Uranus 118380-03-05 00:12 G 44958530.31 44958530.51 44958530.73 0.0141 0.0049

Jupiter 118380-03-25 11:43 G 44958550.83 44958550.99 44958551.16 0.0493 0.0280

Uranus 118380-10-17 11:43 G 44958756.78 44958756.99 44958757.21 0.0141 0.0026

Uranus 118381-05-31 23:00 G 44958983.24 44958983.46 44958983.68 0.0141 0.0004

Uranus 118382-01-13 10:03 G 44959209.70 44959209.92 44959210.14 0.0141 0.0018

Uranus 118382-08-27 20:51 G 44959436.16 44959436.37 44959436.58 0.0140 0.0040

Uranus 118383-04-11 07:10 G 44959662.61 44959662.80 44959663.00 0.0140 0.0062

Uranus 118383-11-23 17:15 G 44959889.06 44959889.22 44959889.42 0.0140 0.0083

Saturn 118384-07-03 15:05 G 44960111.93 44960112.13 44960112.34 0.0279 0.0086

Uranus 118384-07-07 03:48 G 44960115.51 44960115.66 44960115.81 0.0140 0.0103

Saturn 118385-02-18 04:31 G 44960341.61 44960341.69 44960341.78 0.0278 0.0254

Uranus 118385-02-18 13:24 G 44960341.97 44960342.06 44960342.17 0.0140 0.0124

Jupiter 118385-06-05 08:36 G 44960448.78 44960448.86 44960448.95 0.0540 0.0485

Jupiter 118391-11-29 14:22 G 44962816.89 44962817.10 44962817.31 0.0491 0.0016

Jupiter 118397-10-03 23:43 G 44964952.37 44964952.49 44964952.63 0.0535 0.0412

Saturn 118399-07-26 20:22 G 44965613.17 44965613.35 44965613.53 0.0280 0.0139

Saturn 118400-03-12 05:43 G 44965842.60 44965842.74 44965842.89 0.0281 0.0201

Jupiter 118403-08-04 17:00 G 44967083.03 44967083.21 44967083.39 0.0490 0.0246

Moon 118404-03-22 03:05 G 44967313.46 44967313.63 44967313.79 0.2659 0.0394

Earth 118404-03-22 06:12 G 44967313.61 44967313.76 44967313.90 0.2664 0.1075 *

Jupiter 118409-06-08 13:53 G 44969217.88 44969218.08 44969218.28 0.0537 0.0070

Mars 118410-06-13 05:15 G 44969587.56 44969587.72 44969587.87 0.1704 0.0751

Saturn 118414-01-13 17:58 G 44970898.04 44970898.25 44970898.46 0.0279 0.0047

Jupiter 118415-12-01 23:00 G 44971585.37 44971585.46 44971585.55 0.0494 0.0440

Mars 118416-11-22 06:41 G 44971941.67 44971941.78 44971941.90 0.1847 0.1402

Pluto 118419-05-25 08:22 G 44972855.64 44972855.85 44972856.07 0.0081 0.0024

Pluto 118420-01-05 19:24 G 44973081.17 44973081.31 44973081.49 0.0081 0.0057

Uranus 118420-06-10 15:34 G 44973238.15 44973238.15 44973238.17 0.0136 0.0136

Uranus 118421-01-22 20:36 G 44973464.28 44973464.36 44973464.49 0.0136 0.0119

Jupiter 118421-02-11 00:55 G 44973483.37 44973483.54 44973483.71 0.0538 0.0288

Uranus 118421-09-06 02:22 G 44973690.47 44973690.60 44973690.76 0.0136 0.0100

Uranus 118422-04-20 08:07 G 44973916.68 44973916.84 44973917.02 0.0136 0.0081

Uranus 118422-12-02 13:53 G 44974142.90 44974143.08 44974143.28 0.0137 0.0062

Uranus 118423-07-16 19:53 G 44974369.13 44974369.33 44974369.54 0.0137 0.0043

Uranus 118424-02-28 01:53 G 44974595.37 44974595.58 44974595.80 0.0137 0.0023

Uranus 118424-10-11 08:07 G 44974821.63 44974821.84 44974822.05 0.0137 0.0004

Uranus 118425-05-25 14:22 G 44975047.89 44975048.10 44975048.32 0.0137 0.0017

Uranus 118426-01-06 21:05 G 44975274.17 44975274.38 44975274.58 0.0137 0.0036

Uranus 118426-08-21 03:19 G 44975500.45 44975500.64 44975500.85 0.0138 0.0056

Uranus 118427-04-04 10:03 G 44975726.75 44975726.92 44975727.11 0.0138 0.0076

Jupiter 118427-08-07 01:10 G 44975851.36 44975851.55 44975851.74 0.0492 0.0173

Uranus 118427-11-16 17:15 G 44975953.07 44975953.22 44975953.38 0.0138 0.0095

Uranus 118428-06-30 00:12 G 44976179.41 44976179.51 44976179.64 0.0138 0.0116

Saturn 118429-02-05 04:31 G 44976399.49 44976399.69 44976399.89 0.0280 0.0082

Uranus 118429-02-11 07:53 G 44976405.79 44976405.83 44976405.88 0.0138 0.0135

Saturn 118429-09-22 14:07 G 44976629.03 44976629.09 44976629.19 0.0281 0.0260

Jupiter 118439-04-12 01:39 G 44980117.37 44980117.57 44980117.78 0.0490 0.0100

Saturn 118443-07-27 05:00 G 44981684.50 44981684.71 44981684.93 0.0279 0.0019

Neptune 118444-06-27 04:03 G 44982020.60 44982020.67 44982020.76 0.0088 0.0082

Neptune 118445-02-07 16:31 G 44982246.07 44982246.19 44982246.32 0.0088 0.0073

Jupiter 118445-02-14 04:03 G 44982252.49 44982252.67 44982252.85 0.0536 0.0256

Neptune 118445-09-21 04:46 G 44982471.56 44982471.70 44982471.86 0.0088 0.0064

Neptune 118446-05-04 17:15 G 44982697.06 44982697.22 44982697.40 0.0088 0.0054

Neptune 118446-12-16 05:43 G 44982922.56 44982922.74 44982922.94 0.0088 0.0045

Neptune 118447-07-29 18:12 G 44983148.08 44983148.26 44983148.47 0.0088 0.0036

Neptune 118448-03-11 06:55 G 44983373.59 44983373.79 44983374.00 0.0088 0.0027

Neptune 118448-10-22 19:24 G 44983599.10 44983599.31 44983599.53 0.0088 0.0017

Neptune 118449-06-05 07:53 G 44983824.62 44983824.83 44983825.05 0.0088 0.0008

Neptune 118450-01-16 20:36 G 44984050.14 44984050.36 44984050.58 0.0088 0.0002

Neptune 118450-08-30 08:51 G 44984275.66 44984275.87 44984276.09 0.0088 0.0011

Jupiter 118450-12-16 04:31 G 44984383.56 44984383.69 44984383.84 0.0489 0.0359

Neptune 118451-04-12 21:19 G 44984501.18 44984501.39 44984501.61 0.0088 0.0020

Neptune 118451-11-24 09:48 G 44984726.71 44984726.91 44984727.12 0.0088 0.0029

Neptune 118452-07-06 22:46 G 44984952.25 44984952.45 44984952.64 0.0088 0.0039

Neptune 118453-02-17 10:46 G 44985177.79 44985177.95 44985178.15 0.0088 0.0048

Neptune 118453-09-30 23:29 G 44985403.33 44985403.48 44985403.66 0.0088 0.0057

Neptune 118454-05-14 11:58 G 44985628.87 44985629.00 44985629.16 0.0088 0.0066

Neptune 118454-12-26 00:55 G 44985854.43 44985854.54 44985854.65 0.0088 0.0075

Neptune 118455-08-08 13:10 G 44986080.02 44986080.05 44986080.13 0.0088 0.0085

Jupiter 118456-10-19 18:55 G 44986518.09 44986518.29 44986518.49 0.0538 0.0086

Saturn 118458-08-18 08:22 G 44987185.64 44987185.85 44987186.05 0.0280 0.0038

Uranus 118461-12-23 19:24 G 44988409.22 44988409.31 44988409.43 0.0142 0.0124

Uranus 118462-08-07 07:24 G 44988635.67 44988635.81 44988635.98 0.0142 0.0102

Uranus 118463-03-21 19:10 G 44988862.14 44988862.30 44988862.50 0.0142 0.0080

Jupiter 118463-04-14 09:19 G 44988885.74 44988885.89 44988886.05 0.0493 0.0320

Uranus 118463-11-03 07:24 G 44989088.61 44989088.81 44989089.01 0.0141 0.0057

Uranus 118464-06-16 18:55 G 44989315.07 44989315.29 44989315.50 0.0141 0.0034

Uranus 118465-01-29 06:12 G 44989541.54 44989541.76 44989541.98 0.0141 0.0012

Uranus 118465-09-12 17:15 G 44989768.00 44989768.22 44989768.44 0.0141 0.0010

Uranus 118466-04-27 04:03 G 44989994.46 44989994.67 44989994.89 0.0141 0.0032

Uranus 118466-12-09 15:05 G 44990220.92 44990221.13 44990221.33 0.0141 0.0054

Uranus 118467-07-24 01:10 G 44990447.38 44990447.55 44990447.75 0.0140 0.0076

Uranus 118468-03-06 11:29 G 44990673.83 44990673.98 44990674.15 0.0140 0.0096

Jupiter 118468-06-24 08:51 G 44990783.75 44990783.87 44990783.99 0.0540 0.0432

Uranus 118468-10-18 21:19 G 44990900.29 44990900.39 44990900.52 0.0140 0.0117

Uranus 118469-06-02 07:24 G 44991126.78 44991126.81 44991126.86 0.0140 0.0137

Saturn 118473-02-05 06:55 G 44992470.58 44992470.79 44992471.00 0.0279 0.0056

Jupiter 118474-12-18 12:27 G 44993151.82 44993152.02 44993152.23 0.0492 0.0060

Mars 118476-04-09 16:03 G 44993630.00 44993630.17 44993630.33 0.1701 0.0425

Jupiter 118480-10-22 19:53 G 44995287.23 44995287.33 44995287.45 0.0534 0.0451

Jupiter 118486-08-23 15:05 G 44997417.94 44997418.13 44997418.32 0.0490 0.0205

Saturn 118488-02-28 15:05 G 44997971.92 44997972.13 44997972.34 0.0281 0.0015

Jupiter 118492-06-27 09:19 G 44999552.69 44999552.89 44999553.09 0.0536 0.0105

Jupiter 118498-04-28 16:17 G 45001684.13 45001684.18 45001684.23 0.0488 0.0471

Jupiter 118498-12-20 18:27 G 45001920.21 45001920.27 45001920.33 0.0494 0.0470

Saturn 118502-01-02 03:34 G 45003027.53 45003027.65 45003027.79 0.0280 0.0223

Saturn 118502-08-19 17:58 G 45003257.07 45003257.25 45003257.45 0.0279 0.0122

Jupiter 118504-03-02 23:00 G 45003818.28 45003818.46 45003818.64 0.0539 0.0245

Uranus 118504-09-23 08:36 G 45004022.79 45004022.86 45004022.96 0.0136 0.0124

Uranus 118505-05-07 14:22 G 45004248.98 45004249.10 45004249.24 0.0136 0.0106

Uranus 118505-12-19 20:07 G 45004475.18 45004475.34 45004475.50 0.0136 0.0087

Uranus 118506-08-03 01:39 G 45004701.39 45004701.57 45004701.76 0.0137 0.0068

Uranus 118507-03-17 07:24 G 45004927.61 45004927.81 45004928.01 0.0137 0.0049

Uranus 118507-10-29 13:10 G 45005153.85 45005154.05 45005154.27 0.0137 0.0030

Uranus 118508-06-11 19:39 G 45005380.10 45005380.32 45005380.53 0.0137 0.0010

Uranus 118509-01-24 01:39 G 45005606.36 45005606.57 45005606.79 0.0137 0.0010

Uranus 118509-09-07 07:53 G 45005832.63 45005832.83 45005833.05 0.0137 0.0030

Uranus 118510-04-21 14:22 G 45006058.91 45006059.10 45006059.31 0.0138 0.0049

Jupiter 118510-08-26 20:51 G 45006186.19 45006186.37 45006186.56 0.0492 0.0205

Uranus 118510-12-03 21:05 G 45006285.20 45006285.38 45006285.57 0.0138 0.0069

Uranus 118511-07-18 04:03 G 45006511.51 45006511.67 45006511.84 0.0138 0.0089

Uranus 118512-02-29 10:46 G 45006737.84 45006737.95 45006738.10 0.0138 0.0109

Uranus 118512-10-12 18:27 G 45006964.19 45006964.27 45006964.34 0.0138 0.0129

Mars 118514-09-20 05:58 G 45007671.71 45007671.75 45007671.79 0.1836 0.1781

Saturn 118517-01-24 10:17 G 45008528.91 45008528.93 45008528.97 0.0279 0.0276

Saturn 118517-09-10 18:55 G 45008758.09 45008758.29 45008758.50 0.0280 0.0060

Jupiter 118522-05-01 23:29 G 45010452.27 45010452.48 45010452.68 0.0490 0.0059

Neptune 118527-11-09 23:15 G 45012470.43 45012470.47 45012470.54 0.0089 0.0086

Jupiter 118528-03-06 04:31 G 45012587.53 45012587.69 45012587.86 0.0535 0.0312

Neptune 118528-06-22 12:41 G 45012695.94 45012696.03 45012696.16 0.0089 0.0077

Neptune 118529-02-03 02:22 G 45012921.47 45012921.60 45012921.76 0.0089 0.0067

Neptune 118529-09-16 16:17 G 45013147.01 45013147.18 45013147.35 0.0089 0.0057

Neptune 118530-04-30 05:29 G 45013372.56 45013372.73 45013372.93 0.0089 0.0048

Neptune 118530-12-11 19:10 G 45013598.11 45013598.30 45013598.51 0.0089 0.0038

Saturn 118531-07-15 04:46 G 45013813.55 45013813.70 45013813.86 0.0279 0.0189

Neptune 118531-07-25 08:51 G 45013823.67 45013823.87 45013824.09 0.0089 0.0028

Saturn 118532-02-29 18:55 G 45014043.12 45014043.29 45014043.48 0.0278 0.0156

Neptune 118532-03-06 22:31 G 45014049.22 45014049.44 45014049.66 0.0089 0.0018

Neptune 118532-10-18 11:43 G 45014274.78 45014274.99 45014275.22 0.0089 0.0009

Neptune 118533-06-01 01:24 G 45014500.34 45014500.56 45014500.78 0.0089 0.0001

Earth 118533-09-17 05:29 G 45014608.57 45014608.73 45014608.88 0.2670 0.0394

Moon 118533-09-17 09:48 G 45014608.76 45014608.91 45014609.07 0.2675 0.0399 *

Jupiter 118534-01-05 02:51 G 45014718.47 45014718.62 45014718.78 0.0489 0.0318

Neptune 118534-01-12 15:05 G 45014725.91 45014726.13 45014726.35 0.0089 0.0011

Neptune 118534-08-26 04:31 G 45014951.48 45014951.69 45014951.91 0.0089 0.0021

Neptune 118535-04-08 17:58 G 45015177.04 45015177.25 45015177.46 0.0089 0.0030

Neptune 118535-11-20 07:10 G 45015402.62 45015402.80 45015403.01 0.0089 0.0040

Neptune 118536-07-02 20:51 G 45015628.19 45015628.37 45015628.56 0.0089 0.0050

Neptune 118537-02-13 10:17 G 45015853.77 45015853.93 45015854.10 0.0089 0.0059

Neptune 118537-09-26 23:15 G 45016079.36 45016079.47 45016079.63 0.0089 0.0070

Neptune 118538-05-10 12:55 G 45016304.95 45016305.04 45016305.15 0.0089 0.0079

Neptune 118538-12-22 01:53 G 45016530.58 45016530.58 45016530.64 0.0089 0.0089

Jupiter 118539-11-09 16:31 G 45016852.99 45016853.19 45016853.39 0.0537 0.0042

Mars 118542-02-06 02:36 G 45017672.44 45017672.61 45017672.78 0.1697 0.0087

Uranus 118545-08-24 03:05 G 45018967.56 45018967.63 45018967.72 0.0142 0.0132

Uranus 118546-04-07 15:05 G 45019194.01 45019194.13 45019194.29 0.0142 0.0110

Jupiter 118546-05-04 07:53 G 45019220.70 45019220.83 45019220.97 0.0494 0.0365

Saturn 118546-08-06 15:34 G 45019315.04 45019315.15 45019315.28 0.0280 0.0228

Uranus 118546-11-20 03:05 G 45019420.47 45019420.63 45019420.82 0.0142 0.0088

Saturn 118547-03-24 00:41 G 45019544.34 45019544.53 45019544.72 0.0281 0.0110

Uranus 118547-07-04 15:05 G 45019646.94 45019647.13 45019647.34 0.0141 0.0065

Uranus 118548-02-16 02:36 G 45019873.41 45019873.61 45019873.83 0.0141 0.0043

Uranus 118548-09-29 14:07 G 45020099.87 45020100.09 45020100.31 0.0141 0.0020

Uranus 118549-05-14 01:24 G 45020326.34 45020326.56 45020326.78 0.0141 0.0003

Uranus 118549-12-26 12:27 G 45020552.80 45020553.02 45020553.24 0.0141 0.0025

Uranus 118550-08-09 23:00 G 45020779.26 45020779.46 45020779.68 0.0141 0.0047

Uranus 118551-03-24 09:34 G 45021005.72 45021005.90 45021006.10 0.0140 0.0068

Jupiter 118551-07-15 05:15 G 45021118.59 45021118.72 45021118.86 0.0539 0.0393

Uranus 118551-11-05 19:53 G 45021232.17 45021232.33 45021232.51 0.0140 0.0090

Uranus 118552-06-19 06:12 G 45021458.63 45021458.76 45021458.90 0.0140 0.0110

Uranus 118553-01-31 16:03 G 45021685.11 45021685.17 45021685.26 0.0140 0.0131

Jupiter 118558-01-07 08:51 G 45023486.67 45023486.87 45023487.08 0.0491 0.0092

Saturn 118561-01-24 15:34 G 45024599.96 45024600.15 45024600.34 0.0279 0.0124

Saturn 118561-09-11 05:29 G 45024829.61 45024829.73 45024829.87 0.0279 0.0220

Jupiter 118563-11-12 18:41 G 45025622.22 45025622.28 45025622.36 0.0535 0.0498

Jupiter 118569-09-12 11:43 G 45027752.80 45027752.99 45027753.19 0.0489 0.0171

Pluto 118574-09-28 04:03 G 45029594.59 45029594.67 45029594.76 0.0062 0.0057

Pluto 118575-05-11 07:10 G 45029819.60 45029819.80 45029820.00 0.0063 0.0022

Jupiter 118575-07-18 10:03 G 45029887.73 45029887.92 45029888.12 0.0537 0.0160

Pluto 118575-12-22 10:03 G 45030044.72 45030044.92 45030045.14 0.0063 0.0014

Saturn 118576-02-16 20:07 G 45030101.19 45030101.34 45030101.50 0.0279 0.0182

Pluto 118576-08-03 12:55 G 45030269.93 45030270.04 45030270.20 0.0063 0.0049

Saturn 118576-10-03 05:00 G 45030330.53 45030330.71 45030330.88 0.0280 0.0154

Mars 118580-07-17 11:00 G 45031713.82 45031713.96 45031714.09 0.1840 0.1160

Jupiter 118581-05-18 14:22 G 45032019.01 45032019.10 45032019.20 0.0488 0.0430

Jupiter 118587-03-23 00:27 G 45034153.34 45034153.52 45034153.72 0.0539 0.0185

Uranus 118588-05-23 21:05 G 45034581.33 45034581.38 45034581.45 0.0136 0.0130

Uranus 118589-01-05 02:22 G 45034807.49 45034807.60 45034807.73 0.0136 0.0112

Uranus 118589-08-19 07:53 G 45035033.68 45035033.83 45035033.99 0.0136 0.0093

Uranus 118590-04-02 13:24 G 45035259.89 45035260.06 45035260.24 0.0136 0.0075

Saturn 118590-08-06 16:03 G 45035385.96 45035386.17 45035386.37 0.0279 0.0091

Uranus 118590-11-14 18:55 G 45035486.11 45035486.29 45035486.50 0.0137 0.0056

Saturn 118591-03-24 05:58 G 45035615.66 45035615.75 45035615.85 0.0278 0.0251

Uranus 118591-06-29 01:10 G 45035712.34 45035712.55 45035712.75 0.0137 0.0036

Uranus 118592-02-10 06:55 G 45035938.58 45035938.79 45035939.00 0.0137 0.0017

Uranus 118592-09-23 12:55 G 45036164.83 45036165.04 45036165.26 0.0137 0.0004

Uranus 118593-05-07 19:10 G 45036391.09 45036391.30 45036391.52 0.0137 0.0023

Jupiter 118593-09-14 19:53 G 45036521.16 45036521.33 45036521.51 0.0493 0.0251

Uranus 118593-12-20 01:39 G 45036617.37 45036617.57 45036617.77 0.0137 0.0043

Uranus 118594-08-03 08:07 G 45036843.65 45036843.84 45036844.03 0.0138 0.0063

Uranus 118595-03-17 14:36 G 45037069.95 45037070.11 45037070.29 0.0138 0.0083

Uranus 118595-10-29 21:48 G 45037296.27 45037296.41 45037296.55 0.0138 0.0102

Uranus 118596-06-12 04:46 G 45037522.61 45037522.70 45037522.81 0.0138 0.0123

Jupiter 118598-11-25 12:41 G 45038419.03 45038419.03 45038419.04 0.0540 0.0539

Jupiter 118605-05-21 22:31 G 45040787.24 45040787.44 45040787.65 0.0491 0.0015

Saturn 118605-08-29 23:58 G 45040887.32 45040887.50 45040887.68 0.0280 0.0138

Saturn 118606-04-16 09:05 G 45041116.74 45041116.88 45041117.03 0.0281 0.0201

Mars 118607-12-05 13:24 G 45041714.89 45041715.06 45041715.23 0.1693 0.0228

Neptune 118608-09-30 12:55 G 45042014.98 45042015.04 45042015.11 0.0088 0.0084

Neptune 118609-05-14 01:10 G 45042240.45 45042240.55 45042240.67 0.0088 0.0075

Neptune 118609-12-25 13:39 G 45042465.94 45042466.07 45042466.22 0.0088 0.0066

Neptune 118610-08-08 02:07 G 45042691.44 45042691.59 45042691.77 0.0088 0.0056

Neptune 118611-03-21 14:36 G 45042916.94 45042917.11 45042917.31 0.0088 0.0047

Jupiter 118611-03-27 01:53 G 45042922.43 45042922.58 45042922.73 0.0535 0.0355

Neptune 118611-11-02 03:19 G 45043142.45 45043142.64 45043142.84 0.0088 0.0038

Neptune 118612-06-14 15:48 G 45043367.96 45043368.16 45043368.38 0.0088 0.0029

Neptune 118613-01-26 04:17 G 45043593.48 45043593.68 45043593.90 0.0088 0.0020

Neptune 118613-09-08 16:46 G 45043818.99 45043819.20 45043819.43 0.0088 0.0011

Neptune 118614-04-22 05:29 G 45044044.51 45044044.73 45044044.95 0.0088 0.0001

Neptune 118614-12-03 17:58 G 45044270.03 45044270.25 45044270.47 0.0088 0.0009

Neptune 118615-07-17 06:27 G 45044495.56 45044495.77 45044495.99 0.0088 0.0018

Neptune 118616-02-27 19:10 G 45044721.09 45044721.30 45044721.51 0.0088 0.0027

Neptune 118616-10-10 07:39 G 45044946.62 45044946.82 45044947.02 0.0088 0.0037

Jupiter 118617-01-25 00:27 G 45045053.35 45045053.52 45045053.69 0.0489 0.0281

Neptune 118617-05-23 19:53 G 45045172.16 45045172.33 45045172.53 0.0088 0.0046

Neptune 118618-01-04 08:22 G 45045397.69 45045397.85 45045398.04 0.0088 0.0055

Neptune 118618-08-17 21:05 G 45045623.24 45045623.38 45045623.54 0.0088 0.0064

Neptune 118619-03-31 09:48 G 45045848.80 45045848.91 45045849.03 0.0088 0.0074

Neptune 118619-11-11 21:48 G 45046074.37 45046074.41 45046074.51 0.0088 0.0083

Saturn 118620-02-18 01:53 G 45046172.36 45046172.58 45046172.79 0.0279 0.0029

Jupiter 118622-11-29 15:05 G 45047187.93 45047188.13 45047188.33 0.0538 0.0006

Uranus 118629-04-24 09:34 G 45049525.89 45049525.90 45049525.94 0.0142 0.0141

Jupiter 118629-05-24 05:15 G 45049555.60 45049555.72 45049555.84 0.0493 0.0401

Uranus 118629-12-06 22:03 G 45049752.31 45049752.42 45049752.55 0.0142 0.0119

Uranus 118630-07-21 09:48 G 45049978.77 45049978.91 45049979.09 0.0142 0.0097

Uranus 118631-03-04 22:03 G 45050205.23 45050205.42 45050205.61 0.0142 0.0074

Uranus 118631-10-17 09:34 G 45050431.70 45050431.90 45050432.12 0.0141 0.0051

Uranus 118632-05-30 21:19 G 45050658.17 45050658.39 45050658.61 0.0141 0.0029

Uranus 118633-01-12 08:36 G 45050884.64 45050884.86 45050885.08 0.0141 0.0006

Uranus 118633-08-26 19:39 G 45051111.10 45051111.32 45051111.54 0.0141 0.0016

Uranus 118634-04-10 06:41 G 45051337.57 45051337.78 45051337.99 0.0141 0.0038

Jupiter 118634-08-04 05:58 G 45051453.59 45051453.75 45051453.91 0.0540 0.0340

Uranus 118634-11-22 17:00 G 45051564.03 45051564.21 45051564.43 0.0141 0.0061

Saturn 118635-03-12 05:00 G 45051673.51 45051673.71 45051673.91 0.0279 0.0090

Uranus 118635-07-07 03:48 G 45051790.49 45051790.66 45051790.85 0.0140 0.0082

Saturn 118635-10-27 13:39 G 45051902.99 45051903.07 45051903.18 0.0280 0.0247

Uranus 118636-02-18 13:53 G 45052016.95 45052017.08 45052017.25 0.0140 0.0104

Uranus 118636-10-01 23:58 G 45052243.42 45052243.50 45052243.62 0.0140 0.0124

Jupiter 118641-01-27 07:39 G 45053821.63 45053821.82 45053822.02 0.0491 0.0137

Mars 118646-05-15 15:05 G 45055755.96 45055756.13 45055756.30 0.1845 0.0496

Earth 118647-03-25 05:58 G 45056069.60 45056069.75 45056069.90 0.2663 0.0917

Moon 118647-03-25 09:05 G 45056069.76 45056069.88 45056070.01 0.2668 0.1601 *

Saturn 118649-08-30 01:39 G 45056958.35 45056958.57 45056958.78 0.0279 0.0003

Jupiter 118652-10-02 11:00 G 45058087.77 45058087.96 45058088.16 0.0490 0.0125

Moon 118655-03-23 01:39 G 45058989.49 45058989.57 45058989.64 0.2659 0.2364

Jupiter 118658-08-07 10:03 G 45060222.74 45060222.92 45060223.11 0.0536 0.0213

Jupiter 118664-06-07 14:07 G 45062353.97 45062354.09 45062354.22 0.0489 0.0386

Saturn 118664-09-21 07:39 G 45062459.61 45062459.82 45062460.03 0.0280 0.0050

Pluto 118666-02-04 02:07 G 45062960.42 45062960.59 45062960.80 0.0081 0.0045

Pluto 118666-09-17 14:07 G 45063185.90 45063186.09 45063186.30 0.0081 0.0037

Jupiter 118670-04-11 23:00 G 45064488.27 45064488.46 45064488.66 0.0538 0.0138

Uranus 118672-09-05 14:07 G 45065366.00 45065366.09 45065366.21 0.0136 0.0119

Uranus 118673-04-19 19:24 G 45065592.18 45065592.31 45065592.47 0.0136 0.0101

Mars 118673-10-02 00:27 G 45065757.35 45065757.52 45065757.68 0.1690 0.0552

Uranus 118673-12-02 00:55 G 45065818.38 45065818.54 45065818.73 0.0136 0.0082

Uranus 118674-07-16 06:41 G 45066044.60 45066044.78 45066044.98 0.0137 0.0062

Uranus 118675-02-27 12:27 G 45066270.82 45066271.02 45066271.23 0.0137 0.0043

Uranus 118675-10-11 18:12 G 45066497.06 45066497.26 45066497.48 0.0137 0.0024

Uranus 118676-05-25 00:27 G 45066723.31 45066723.52 45066723.74 0.0137 0.0004

Jupiter 118676-10-04 18:12 G 45066856.09 45066856.26 45066856.42 0.0492 0.0291

Uranus 118677-01-06 06:27 G 45066949.56 45066949.77 45066949.99 0.0137 0.0017

Uranus 118677-08-20 12:41 G 45067175.83 45067176.03 45067176.24 0.0137 0.0036

Uranus 118678-04-03 19:10 G 45067402.11 45067402.30 45067402.50 0.0137 0.0056

Uranus 118678-11-16 01:53 G 45067628.40 45067628.58 45067628.76 0.0138 0.0076

Saturn 118679-03-12 10:17 G 45067744.73 45067744.93 45067745.14 0.0279 0.0061

Uranus 118679-06-30 08:36 G 45067854.72 45067854.86 45067855.02 0.0138 0.0096

Uranus 118680-02-11 15:34 G 45068081.05 45068081.15 45068081.28 0.0138 0.0116

Uranus 118680-09-24 22:31 G 45068307.43 45068307.44 45068307.50 0.0138 0.0137

Jupiter 118681-12-15 11:00 G 45068753.89 45068753.96 45068754.05 0.0541 0.0496

Jupiter 118688-06-09 21:05 G 45071122.17 45071122.38 45071122.58 0.0490 0.0027

Neptune 118692-02-12 07:39 G 45072464.81 45072464.82 45072464.86 0.0089 0.0088

Neptune 118692-09-24 20:51 G 45072690.30 45072690.37 45072690.50 0.0089 0.0079

Neptune 118693-05-08 10:46 G 45072915.82 45072915.95 45072916.10 0.0089 0.0069

Neptune 118693-12-20 00:41 G 45073141.37 45073141.53 45073141.70 0.0089 0.0059

Saturn 118694-04-03 12:55 G 45073245.83 45073246.04 45073246.25 0.0279 0.0001

Jupiter 118694-04-15 03:05 G 45073257.51 45073257.63 45073257.76 0.0536 0.0412

Neptune 118694-08-02 13:53 G 45073366.91 45073367.08 45073367.28 0.0089 0.0050

Neptune 118695-03-16 03:19 G 45073592.46 45073592.64 45073592.85 0.0089 0.0040

Neptune 118695-10-27 17:00 G 45073818.01 45073818.21 45073818.42 0.0089 0.0030

Neptune 118696-06-09 06:27 G 45074043.56 45074043.77 45074043.99 0.0089 0.0021

Neptune 118697-01-20 20:07 G 45074269.12 45074269.34 45074269.56 0.0089 0.0011

Neptune 118697-09-03 09:34 G 45074494.68 45074494.90 45074495.13 0.0089 0.0003

Neptune 118698-04-16 23:00 G 45074720.24 45074720.46 45074720.69 0.0089 0.0009

Neptune 118698-11-28 12:27 G 45074945.81 45074946.02 45074946.24 0.0089 0.0018

Neptune 118699-07-12 01:53 G 45075171.38 45075171.58 45075171.80 0.0089 0.0028

Jupiter 118700-02-13 23:43 G 45075388.31 45075388.49 45075388.67 0.0489 0.0235

Neptune 118700-02-22 15:19 G 45075396.95 45075397.14 45075397.35 0.0089 0.0038

Neptune 118700-10-06 04:46 G 45075622.52 45075622.70 45075622.90 0.0089 0.0048

Neptune 118701-05-19 17:58 G 45075848.10 45075848.25 45075848.44 0.0089 0.0058

Neptune 118701-12-31 07:53 G 45076073.69 45076073.83 45076073.98 0.0089 0.0067

Neptune 118702-08-13 21:05 G 45076299.28 45076299.38 45076299.50 0.0089 0.0076

Neptune 118703-03-27 10:03 G 45076524.89 45076524.92 45076525.01 0.0089 0.0087

Jupiter 118705-12-19 18:12 G 45077523.06 45077523.26 45077523.46 0.0538 0.0072

Saturn 118708-02-05 18:27 G 45078301.20 45078301.27 45078301.37 0.0280 0.0257

Saturn 118708-09-22 10:03 G 45078530.71 45078530.92 45078531.12 0.0279 0.0091

Mars 118712-03-12 19:53 G 45079798.15 45079798.33 45079798.50 0.1850 0.0165

Jupiter 118712-06-13 05:15 G 45079890.64 45079890.72 45079890.80 0.0494 0.0451

Uranus 118713-08-07 05:29 G 45080310.65 45080310.73 45080310.84 0.0142 0.0128

Uranus 118714-03-21 17:43 G 45080537.11 45080537.24 45080537.40 0.0142 0.0105

Uranus 118714-11-03 05:43 G 45080763.57 45080763.74 45080763.93 0.0142 0.0083

Uranus 118715-06-17 17:43 G 45080990.04 45080990.24 45080990.45 0.0142 0.0060

Uranus 118716-01-30 05:29 G 45081216.51 45081216.73 45081216.94 0.0141 0.0037

Uranus 118716-09-12 16:46 G 45081442.98 45081443.20 45081443.42 0.0141 0.0014

Uranus 118717-04-27 04:03 G 45081669.45 45081669.67 45081669.89 0.0141 0.0008

Jupiter 118717-08-24 07:24 G 45081788.64 45081788.81 45081788.98 0.0539 0.0281

Uranus 118717-12-09 15:05 G 45081895.92 45081896.13 45081896.35 0.0141 0.0031

Uranus 118718-07-24 01:53 G 45082122.38 45082122.58 45082122.79 0.0141 0.0053

Uranus 118719-03-07 12:27 G 45082348.84 45082349.02 45082349.21 0.0141 0.0075

Uranus 118719-10-19 23:00 G 45082575.30 45082575.46 45082575.62 0.0140 0.0096

Uranus 118720-06-02 09:05 G 45082801.77 45082801.88 45082802.01 0.0140 0.0117

Uranus 118721-01-14 19:10 G 45083028.28 45083028.30 45083028.36 0.0140 0.0138

Saturn 118723-10-15 14:22 G 45084031.90 45084032.10 45084032.31 0.0280 0.0037

Jupiter 118724-02-17 08:07 G 45084156.66 45084156.84 45084157.04 0.0492 0.0187

Jupiter 118735-10-23 10:31 G 45088422.73 45088422.94 45088423.14 0.0490 0.0082

Saturn 118737-08-18 02:22 G 45089087.46 45089087.60 45089087.75 0.0280 0.0202

Saturn 118738-04-04 17:29 G 45089317.06 45089317.23 45089317.42 0.0279 0.0147

Mars 118739-07-31 11:15 G 45089799.83 45089799.97 45089800.12 0.1686 0.0855

Jupiter 118741-08-27 09:05 G 45090557.71 45090557.88 45090558.06 0.0537 0.0262

Jupiter 118747-06-28 13:53 G 45092688.93 45092689.08 45092689.22 0.0488 0.0341

Saturn 118752-09-09 12:41 G 45094588.93 45094589.03 45094589.12 0.0278 0.0246

Saturn 118753-04-26 20:22 G 45094818.16 45094818.35 45094818.55 0.0279 0.0086

Jupiter 118753-05-01 23:58 G 45094823.30 45094823.50 45094823.70 0.0539 0.0083

Uranus 118756-05-07 02:07 G 45095924.52 45095924.59 45095924.68 0.0136 0.0125

Uranus 118756-12-19 07:10 G 45096150.69 45096150.80 45096150.95 0.0136 0.0108

Uranus 118757-08-02 12:41 G 45096376.88 45096377.03 45096377.21 0.0136 0.0088

Uranus 118758-03-16 18:12 G 45096603.09 45096603.26 45096603.45 0.0136 0.0069

Uranus 118758-10-28 23:58 G 45096829.31 45096829.50 45096829.70 0.0137 0.0050

Uranus 118759-06-12 05:43 G 45097055.54 45097055.74 45097055.96 0.0137 0.0031

Jupiter 118759-10-25 17:43 G 45097191.10 45097191.24 45097191.39 0.0492 0.0339

Uranus 118760-01-24 11:43 G 45097281.78 45097281.99 45097282.21 0.0137 0.0011

Uranus 118760-09-06 17:43 G 45097508.03 45097508.24 45097508.46 0.0137 0.0010

Uranus 118761-04-20 23:58 G 45097734.29 45097734.50 45097734.71 0.0137 0.0029

Uranus 118761-12-03 06:12 G 45097960.57 45097960.76 45097960.97 0.0137 0.0049

Uranus 118762-07-17 12:41 G 45098186.86 45098187.03 45098187.23 0.0137 0.0070

Uranus 118763-02-28 19:24 G 45098413.16 45098413.31 45098413.49 0.0138 0.0090

Uranus 118763-10-13 02:36 G 45098639.48 45098639.61 45098639.74 0.0138 0.0109

Uranus 118764-05-26 09:48 G 45098865.84 45098865.91 45098865.98 0.0138 0.0129

Jupiter 118765-01-04 15:05 G 45099089.01 45099089.13 45099089.25 0.0541 0.0427

Saturn 118767-02-28 02:07 G 45099873.43 45099873.59 45099873.76 0.0280 0.0171

Saturn 118767-10-15 17:00 G 45100103.05 45100103.21 45100103.38 0.0279 0.0176

Jupiter 118771-06-30 21:05 G 45101457.18 45101457.38 45101457.59 0.0491 0.0078

Mars 118771-07-30 08:22 G 45101486.79 45101486.85 45101486.92 0.1698 0.1564

Neptune 118773-01-02 21:19 G 45102009.36 45102009.39 45102009.46 0.0088 0.0086

Neptune 118773-08-16 10:17 G 45102234.82 45102234.93 45102235.03 0.0088 0.0077

Neptune 118774-03-29 22:31 G 45102460.31 45102460.44 45102460.58 0.0088 0.0068

Neptune 118774-11-10 10:46 G 45102685.80 45102685.95 45102686.12 0.0088 0.0059

Neptune 118775-06-23 23:15 G 45102911.31 45102911.47 45102911.67 0.0088 0.0050

Neptune 118776-02-04 11:43 G 45103136.81 45103136.99 45103137.20 0.0088 0.0041

Neptune 118776-09-17 00:41 G 45103362.32 45103362.53 45103362.73 0.0088 0.0031

Moon 118776-09-19 02:51 G 45103364.48 45103364.62 45103364.77 0.2668 0.1195

Earth 118776-09-19 07:53 G 45103364.67 45103364.83 45103364.98 0.2672 0.0331 *

Neptune 118777-04-30 12:55 G 45103587.84 45103588.04 45103588.26 0.0088 0.0022

Jupiter 118777-05-05 05:00 G 45103592.62 45103592.71 45103592.81 0.0535 0.0471

Neptune 118777-12-12 01:24 G 45103813.35 45103813.56 45103813.79 0.0088 0.0013

Mars 118778-01-07 23:29 G 45103840.33 45103840.48 45103840.64 0.1855 0.0854

Neptune 118778-07-25 14:22 G 45104038.88 45104039.10 45104039.32 0.0088 0.0003

Neptune 118779-03-08 02:51 G 45104264.40 45104264.62 45104264.84 0.0088 0.0007

Neptune 118779-10-19 15:05 G 45104489.93 45104490.13 45104490.36 0.0088 0.0016

Neptune 118780-06-01 03:48 G 45104715.45 45104715.66 45104715.87 0.0088 0.0025

Neptune 118781-01-12 16:31 G 45104940.99 45104941.19 45104941.39 0.0088 0.0035

Neptune 118781-08-26 04:46 G 45105166.52 45105166.70 45105166.90 0.0088 0.0044

Saturn 118782-03-22 12:55 G 45105374.91 45105375.04 45105375.18 0.0279 0.0213

Neptune 118782-04-08 17:15 G 45105392.06 45105392.22 45105392.41 0.0088 0.0053

Saturn 118782-11-06 21:05 G 45105604.20 45105604.38 45105604.57 0.0280 0.0122

Neptune 118782-11-20 05:58 G 45105617.60 45105617.75 45105617.91 0.0088 0.0062

Jupiter 118783-03-06 00:27 G 45105723.33 45105723.52 45105723.71 0.0489 0.0186

Neptune 118783-07-03 18:12 G 45105843.16 45105843.26 45105843.41 0.0088 0.0072

Neptune 118784-02-14 06:55 G 45106068.73 45106068.79 45106068.90 0.0088 0.0081

Jupiter 118789-01-07 18:27 G 45107858.08 45107858.27 45107858.47 0.0537 0.0125

Jupiter 118794-11-09 03:19 G 45109989.57 45109989.64 45109989.73 0.0487 0.0446

Saturn 118796-09-09 08:51 G 45110659.68 45110659.87 45110660.07 0.0280 0.0118

Uranus 118797-04-06 11:43 G 45110868.95 45110868.99 45110869.06 0.0142 0.0137

Saturn 118797-04-26 23:58 G 45110889.38 45110889.50 45110889.63 0.0279 0.0229

Uranus 118797-11-19 00:27 G 45111095.39 45111095.52 45111095.65 0.0142 0.0114

Uranus 118798-07-03 12:12 G 45111321.85 45111322.01 45111322.19 0.0142 0.0092

Uranus 118799-02-15 00:12 G 45111548.32 45111548.51 45111548.71 0.0142 0.0069

Uranus 118799-09-29 11:43 G 45111774.79 45111774.99 45111775.21 0.0142 0.0047

Uranus 118800-05-12 23:29 G 45112001.26 45112001.48 45112001.70 0.0141 0.0023

Jupiter 118800-09-12 05:58 G 45112123.57 45112123.75 45112123.93 0.0540 0.0235

Uranus 118800-12-25 11:00 G 45112227.74 45112227.96 45112228.18 0.0141 0.0001

Uranus 118801-08-08 22:03 G 45112454.21 45112454.42 45112454.64 0.0141 0.0022

Uranus 118802-03-23 09:05 G 45112680.67 45112680.88 45112681.09 0.0141 0.0044

Uranus 118802-11-04 19:39 G 45112907.14 45112907.32 45112907.53 0.0141 0.0067

Uranus 118803-06-19 06:41 G 45113133.61 45113133.78 45113133.95 0.0140 0.0088

Uranus 118804-01-31 17:00 G 45113360.08 45113360.21 45113360.35 0.0140 0.0109

Uranus 118804-09-14 03:19 G 45113586.57 45113586.64 45113586.72 0.0140 0.0130

Mars 118805-05-27 22:31 G 45113842.31 45113842.44 45113842.56 0.1683 0.1161

Jupiter 118807-03-08 07:53 G 45114491.65 45114491.83 45114492.02 0.0491 0.0233

Saturn 118811-10-02 19:24 G 45116161.15 45116161.31 45116161.49 0.0278 0.0162

Saturn 118812-05-19 03:34 G 45116390.49 45116390.65 45116390.82 0.0279 0.0173

Jupiter 118818-11-11 10:17 G 45118757.72 45118757.93 45118758.14 0.0490 0.0033

Pluto 118822-01-21 02:07 G 45119924.43 45119924.59 45119924.78 0.0063 0.0037

Pluto 118822-09-03 05:29 G 45120149.52 45120149.73 45120149.95 0.0063 0.0002

Pluto 118823-04-16 08:22 G 45120374.69 45120374.85 45120375.05 0.0063 0.0034

Jupiter 118824-09-15 12:55 G 45120892.88 45120893.04 45120893.20 0.0537 0.0331

Saturn 118826-03-22 09:19 G 45121445.69 45121445.89 45121446.10 0.0280 0.0086

Saturn 118826-11-07 00:12 G 45121675.43 45121675.51 45121675.58 0.0279 0.0260

Jupiter 118830-07-17 13:53 G 45123023.92 45123024.08 45123024.25 0.0488 0.0292

Jupiter 118836-05-21 02:51 G 45125158.42 45125158.62 45125158.82 0.0538 0.0020

Mars 118837-05-26 19:39 G 45125529.21 45125529.32 45125529.44 0.1695 0.1253

Uranus 118840-01-05 13:39 G 45126483.04 45126483.07 45126483.14 0.0136 0.0132

Uranus 118840-08-18 19:10 G 45126709.19 45126709.30 45126709.42 0.0136 0.0113

Uranus 118841-04-01 23:58 G 45126935.37 45126935.50 45126935.67 0.0136 0.0096

Saturn 118841-04-13 19:39 G 45126947.14 45126947.32 45126947.51 0.0279 0.0129

Uranus 118841-11-14 05:29 G 45127161.57 45127161.73 45127161.92 0.0136 0.0076

Saturn 118841-11-29 03:48 G 45127176.53 45127176.66 45127176.81 0.0280 0.0207

Uranus 118842-06-28 11:15 G 45127387.79 45127387.97 45127388.17 0.0136 0.0057

Jupiter 118842-11-13 18:55 G 45127526.17 45127526.29 45127526.42 0.0493 0.0391

Uranus 118843-02-09 17:00 G 45127614.01 45127614.21 45127614.42 0.0137 0.0037

Uranus 118843-09-23 22:46 G 45127840.24 45127840.45 45127840.67 0.0137 0.0018

Mars 118843-11-05 03:34 G 45127882.55 45127882.65 45127882.74 0.1859 0.1556

Uranus 118844-05-07 05:00 G 45128066.49 45128066.71 45128066.92 0.0137 0.0003

Uranus 118844-12-19 11:00 G 45128292.75 45128292.96 45128293.17 0.0137 0.0022

Uranus 118845-08-02 17:15 G 45128519.02 45128519.22 45128519.43 0.0137 0.0043

Uranus 118846-03-16 23:43 G 45128745.30 45128745.49 45128745.68 0.0137 0.0063

Uranus 118846-10-29 06:12 G 45128971.60 45128971.76 45128971.94 0.0138 0.0083

Uranus 118847-06-12 13:10 G 45129197.92 45129198.05 45129198.20 0.0138 0.0103

Jupiter 118848-01-24 15:48 G 45129424.02 45129424.16 45129424.31 0.0540 0.0371

Uranus 118848-01-24 20:07 G 45129424.26 45129424.34 45129424.45 0.0138 0.0123 *

Jupiter 118854-07-19 21:48 G 45131792.21 45131792.41 45131792.61 0.0491 0.0125

Saturn 118855-10-02 14:51 G 45132231.91 45132232.12 45132232.34 0.0280 0.0037

Neptune 118856-12-28 05:29 G 45132684.66 45132684.73 45132684.85 0.0089 0.0081

Neptune 118857-08-10 19:10 G 45132910.19 45132910.30 45132910.46 0.0089 0.0071

Neptune 118858-03-24 09:05 G 45133135.73 45133135.88 45133136.05 0.0089 0.0061

Neptune 118858-11-04 22:17 G 45133361.27 45133361.43 45133361.63 0.0089 0.0052

Neptune 118859-06-18 11:58 G 45133586.82 45133587.00 45133587.21 0.0089 0.0042

Neptune 118860-01-30 01:39 G 45133812.37 45133812.57 45133812.79 0.0089 0.0032

Jupiter 118860-05-24 03:48 G 45133927.61 45133927.66 45133927.70 0.0535 0.0520

Neptune 118860-09-11 15:05 G 45134037.93 45134038.13 45134038.36 0.0089 0.0023

Neptune 118861-04-25 04:46 G 45134263.48 45134263.70 45134263.92 0.0089 0.0013

Neptune 118861-12-06 18:12 G 45134489.04 45134489.26 45134489.49 0.0089 0.0004

Neptune 118862-07-20 07:39 G 45134714.61 45134714.82 45134715.05 0.0089 0.0007

Neptune 118863-03-02 21:19 G 45134940.17 45134940.39 45134940.61 0.0089 0.0016

Neptune 118863-10-14 10:31 G 45135165.74 45135165.94 45135166.16 0.0089 0.0026

Neptune 118864-05-26 23:43 G 45135391.31 45135391.49 45135391.71 0.0089 0.0036

Neptune 118865-01-07 13:39 G 45135616.88 45135617.07 45135617.26 0.0089 0.0046

Neptune 118865-08-21 02:51 G 45135842.46 45135842.62 45135842.81 0.0089 0.0055

Jupiter 118866-03-25 00:55 G 45136058.34 45136058.54 45136058.74 0.0489 0.0137

Neptune 118866-04-03 16:03 G 45136068.04 45136068.17 45136068.34 0.0089 0.0065

Neptune 118866-11-15 05:29 G 45136293.63 45136293.73 45136293.87 0.0089 0.0075

Neptune 118867-06-28 18:41 G 45136519.24 45136519.28 45136519.38 0.0089 0.0085

Saturn 118870-10-25 03:05 G 45137733.43 45137733.63 45137733.84 0.0278 0.0075

Mars 118871-03-25 10:03 G 45137884.83 45137884.92 45137885.00 0.1680 0.1442

Saturn 118871-06-11 11:15 G 45137962.91 45137962.97 45137963.05 0.0279 0.0260

Jupiter 118872-01-27 18:27 G 45138193.08 45138193.27 45138193.46 0.0538 0.0179

Jupiter 118877-11-28 03:19 G 45140324.52 45140324.64 45140324.76 0.0487 0.0398

Uranus 118881-07-19 07:24 G 45141653.71 45141653.81 45141653.93 0.0142 0.0123

Uranus 118882-03-02 19:39 G 45141880.17 45141880.32 45141880.48 0.0142 0.0100

Uranus 118882-10-15 07:24 G 45142106.63 45142106.81 45142107.01 0.0142 0.0078

Uranus 118883-05-29 19:24 G 45142333.11 45142333.31 45142333.52 0.0142 0.0055

Jupiter 118883-10-02 09:48 G 45142458.72 45142458.91 45142459.10 0.0540 0.0166

Uranus 118884-01-11 07:10 G 45142559.58 45142559.80 45142560.02 0.0141 0.0032

Uranus 118884-08-24 18:41 G 45142786.06 45142786.28 45142786.50 0.0141 0.0009

Uranus 118885-04-08 05:43 G 45143012.53 45143012.74 45143012.97 0.0141 0.0015

Saturn 118885-04-13 16:17 G 45143017.97 45143018.18 45143018.40 0.0280 0.0002

Uranus 118885-11-20 17:00 G 45143239.00 45143239.21 45143239.43 0.0141 0.0036

Uranus 118886-07-05 03:48 G 45143465.47 45143465.66 45143465.87 0.0141 0.0059

Uranus 118887-02-16 14:51 G 45143691.94 45143692.12 45143692.30 0.0141 0.0081

Uranus 118887-10-01 01:10 G 45143918.41 45143918.55 45143918.71 0.0140 0.0103

Uranus 118888-05-14 11:43 G 45144144.90 45144144.99 45144145.10 0.0140 0.0124

Moon 118890-03-26 02:07 G 45144825.43 45144825.59 45144825.76 0.2656 0.0130

Earth 118890-03-26 05:58 G 45144825.60 45144825.75 45144825.90 0.2662 0.0799 *

Jupiter 118890-03-27 07:53 G 45144826.67 45144826.83 45144827.01 0.0492 0.0283

Jupiter 118895-06-06 23:29 G 45146724.43 45146724.48 45146724.55 0.0541 0.0516

Saturn 118900-05-07 02:51 G 45148519.41 45148519.62 45148519.83 0.0279 0.0043

Jupiter 118901-12-01 11:15 G 45149092.76 45149092.97 45149093.18 0.0490 0.0019

Mars 118903-03-25 06:41 G 45149571.64 45149571.78 45149571.93 0.1691 0.0938

Jupiter 118907-10-06 13:39 G 45151227.93 45151228.07 45151228.21 0.0536 0.0387

Pluto 118912-10-16 17:15 G 45153065.21 45153065.22 45153065.25 0.0082 0.0081

Pluto 118913-05-30 05:00 G 45153290.49 45153290.71 45153290.94 0.0081 0.0002

Jupiter 118913-08-06 14:51 G 45153358.94 45153359.12 45153359.29 0.0488 0.0243

Pluto 118914-01-10 16:03 G 45153516.16 45153516.17 45153516.23 0.0081 0.0080

Saturn 118914-10-25 21:19 G 45153804.18 45153804.39 45153804.61 0.0280 0.0046

Jupiter 118919-06-11 00:41 G 45155493.33 45155493.53 45155493.73 0.0539 0.0028

Uranus 118924-04-19 06:41 G 45157267.69 45157267.78 45157267.89 0.0136 0.0120

Uranus 118924-12-01 11:58 G 45157493.86 45157494.00 45157494.15 0.0136 0.0101

Uranus 118925-07-15 17:15 G 45157720.06 45157720.22 45157720.40 0.0136 0.0083

Jupiter 118925-12-03 19:10 G 45157861.21 45157861.30 45157861.39 0.0492 0.0440

Uranus 118926-02-26 22:46 G 45157946.27 45157946.45 45157946.64 0.0136 0.0063

Uranus 118926-10-11 04:31 G 45158172.48 45158172.69 45158172.89 0.0136 0.0044

Uranus 118927-05-25 10:17 G 45158398.72 45158398.93 45158399.14 0.0137 0.0024

Uranus 118928-01-06 16:17 G 45158624.96 45158625.18 45158625.39 0.0137 0.0005

Uranus 118928-08-19 22:03 G 45158851.21 45158851.42 45158851.64 0.0137 0.0016

Uranus 118929-04-03 04:17 G 45159077.48 45159077.68 45159077.89 0.0137 0.0036

Uranus 118929-11-15 10:31 G 45159303.75 45159303.94 45159304.15 0.0137 0.0056

Saturn 118929-11-17 11:00 G 45159305.75 45159305.96 45159306.17 0.0279 0.0013

Uranus 118930-06-29 17:15 G 45159530.05 45159530.22 45159530.41 0.0137 0.0076

Uranus 118931-02-10 23:58 G 45159756.36 45159756.50 45159756.66 0.0138 0.0096

Jupiter 118931-02-13 14:36 G 45159758.95 45159759.11 45159759.27 0.0541 0.0322

Uranus 118931-09-25 06:41 G 45159982.68 45159982.78 45159982.91 0.0138 0.0117

Uranus 118932-05-08 13:39 G 45160209.06 45160209.07 45160209.11 0.0138 0.0137

Neptune 118937-04-07 06:55 G 45162003.78 45162003.79 45162003.82 0.0089 0.0088

Jupiter 118937-08-08 21:05 G 45162127.19 45162127.38 45162127.57 0.0491 0.0173

Neptune 118937-11-18 19:24 G 45162229.22 45162229.31 45162229.41 0.0088 0.0079

Neptune 118938-07-02 07:53 G 45162454.71 45162454.83 45162454.97 0.0088 0.0070

Neptune 118939-02-12 20:07 G 45162680.20 45162680.34 45162680.51 0.0088 0.0061

Neptune 118939-09-26 08:22 G 45162905.69 45162905.85 45162906.05 0.0088 0.0052

Neptune 118940-05-08 20:51 G 45163131.20   45163131.37   45163131.58 0.0088 0.0043

Neptune 118940-12-20 09:34 G 45163356.70   45163356.90   45163357.11 0.0088 0.0033

Neptune 118941-08-02 22:03 G 45163582.22   45163582.42   45163582.64 0.0088 0.0024

Mars   118941-09-02 04:03 G 45163612.61   45163612.67   45163612.72 0.1848 0.1732

Neptune 118942-03-16 10:31 G 45163807.74   45163807.94   45163808.17 0.0088 0.0015

Neptune 118942-10-27 23:15 G 45164033.25   45164033.47   45164033.69 0.0088 0.0005

Neptune 118943-06-10 11:43 G 45164258.78   45164258.99   45164259.21 0.0088 0.0005

Saturn   118943-09-20 07:39 G 45164360.77   45164360.82   45164360.90 0.0281 0.0267

Neptune 118944-01-22 00:12 G 45164484.30   45164484.51   45164484.74 0.0088 0.0015

Saturn   118944-05-06 23:43 G 45164590.28   45164590.49   45164590.69 0.0280 0.0084

Neptune 118944-09-03 12:55 G 45164709.83   45164710.04   45164710.25 0.0088 0.0023

Neptune 118945-04-17 01:24 G 45164935.36   45164935.56   45164935.77 0.0088 0.0033

Neptune 118945-11-28 13:39 G 45165160.89   45165161.07   45165161.28 0.0088 0.0042

Neptune 118946-07-12 02:22 G 45165386.44   45165386.60   45165386.79 0.0088 0.0052

Neptune 118947-02-22 15:05 G 45165611.98   45165612.13   45165612.30 0.0088 0.0061

Neptune 118947-10-06 03:48 G 45165837.53   45165837.66   45165837.79 0.0088 0.0070

Neptune 118948-05-18 15:48 G 45166063.09   45166063.16   45166063.28 0.0088 0.0079

Neptune 118948-12-30 04:46 G 45166288.70   45166288.70   45166288.72 0.0088 0.0088

Jupiter 118949-04-14 00:27 G 45166393.32   45166393.52   45166393.72 0.0489 0.0089

Jupiter 118955-02-16 21:19 G 45168528.22   45168528.39   45168528.57 0.0537 0.0244

Saturn   118959-05-30 11:00 G 45170091.76   45170091.96   45170092.17 0.0279 0.0046

Jupiter 118960-12-18 03:48 G 45170659.52   45170659.66   45170659.80 0.0488 0.0350

Uranus   118965-03-19 13:10 G 45172211.97   45172212.05   45172212.13 0.0142 0.0133

Uranus   118965-11-01 01:10 G 45172438.42   45172438.55   45172438.70 0.0142 0.0110

Uranus   118966-06-15 13:24 G 45172664.89   45172665.06   45172665.24 0.0142 0.0087

Jupiter 118966-10-22 10:31 G 45172793.74   45172793.94   45172794.14 0.0539 0.0108

Uranus   118967-01-28 01:24 G 45172891.36   45172891.56   45172891.76 0.0142 0.0064

Uranus   118967-09-11 13:10 G 45173117.84   45173118.05   45173118.26 0.0142 0.0041

Uranus   118968-04-25 00:41 G 45173344.31   45173344.53   45173344.75 0.0141 0.0018

Uranus   118968-12-07 12:27 G 45173570.79   45173571.02   45173571.24 0.0141 0.0006

Mars	**118969-01-19 17:43**	**G**	**45173614.08**	**45173614.24**	**45173614.40**	**0.1688**	**0.0616**	
Uranus	**118969-07-21 23:29**	**G**	**45173797.27**	**45173797.48**	**45173797.70**	**0.0141**	**0.0028**	
Uranus	**118970-03-05 10:46**	**G**	**45174023.74**	**45174023.95**	**45174024.15**	**0.0141**	**0.0050**	
Uranus	**118970-10-17 21:19**	**G**	**45174250.21**	**45174250.39**	**45174250.59**	**0.0141**	**0.0073**	
Uranus	**118971-06-01 08:07**	**G**	**45174476.69**	**45174476.84**	**45174477.01**	**0.0140**	**0.0095**	
Uranus	**118972-01-13 18:41**	**G**	**45174703.18**	**45174703.28**	**45174703.42**	**0.0140**	**0.0117**	
Uranus	**118972-08-27 05:15**	**G**	**45174929.69**	**45174929.72**	**45174929.77**	**0.0140**	**0.0137**	
Saturn	**118973-04-01 12:12**	**G**	**45175146.89**	**45175147.01**	**45175147.15**	**0.0281**	**0.0222**	
Jupiter	**118973-04-16 08:36**	**G**	**45175161.71**	**45175161.86**	**45175162.01**	**0.0492**	**0.0333**	
Saturn	**118973-11-17 04:17**	**G**	**45175376.49**	**45175376.68**	**45175376.87**	**0.0280**	**0.0129**	
Jupiter	**118978-06-26 20:36**	**G**	**45177059.27**	**45177059.36**	**45177059.46**	**0.0541**	**0.0474**	
Jupiter	**118984-12-20 11:43**	**G**	**45179427.78**	**45179427.99**	**45179428.19**	**0.0490**	**0.0069**	
Saturn	**118988-04-24 11:58**	**G**	**45180648.90**	**45180649.00**	**45180649.13**	**0.0278**	**0.0229**	
Saturn	**118988-12-09 19:39**	**G**	**45180878.13**	**45180878.32**	**45180878.52**	**0.0279**	**0.0103**	
Jupiter	**118990-10-25 11:58**	**G**	**45181562.88**	**45181563.00**	**45181563.11**	**0.0536**	**0.0435**	
Jupiter	**118996-08-25 13:24**	**G**	**45183693.88**	**45183694.06**	**45183694.25**	**0.0488**	**0.0198**	

120TH MILLENNIUM CE

This is a list of transits of Venus in the 120th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	**119002-07-01 03:19**	**G**	**45185828.44**	**45185828.64**	**45185828.84**	**0.0539**	**0.0093**	
Saturn	**119002-10-13 16:46**	**G**	**45185933.03**	**45185933.20**	**45185933.37**	**0.0281**	**0.0177**	
Saturn	**119003-05-31 08:07**	**G**	**45186162.68**	**45186162.84**	**45186163.01**	**0.0280**	**0.0172**	

Mars 119007-07-01 08:36 G 45187654.72 45187654.86 45187655.00 0.1852 0.1084

Uranus 119007-12-19 17:58 G 45187826.19 45187826.25 45187826.34 0.0136 0.0127

Jupiter 119008-05-01 16:46 G 45187960.13 45187960.20 45187960.27 0.0487 0.0456

Uranus 119008-08-01 23:15 G 45188052.35 45188052.47 45188052.61 0.0136 0.0108

Jupiter 119008-12-23 18:12 G 45188196.24 45188196.26 45188196.29 0.0493 0.0487

Uranus 119009-03-16 04:31 G 45188278.54 45188278.69 45188278.86 0.0136 0.0089

Uranus 119009-10-28 09:48 G 45188504.74 45188504.91 45188505.11 0.0136 0.0070

Uranus 119010-06-11 15:48 G 45188730.96 45188731.16 45188731.36 0.0136 0.0051

Uranus 119011-01-23 21:34 G 45188957.19 45188957.40 45188957.60 0.0137 0.0031

Uranus 119011-09-07 03:05 G 45189183.42 45189183.63 45189183.85 0.0137 0.0012

Uranus 119012-04-20 09:05 G 45189409.67 45189409.88 45189410.10 0.0137 0.0009

Uranus 119012-12-02 15:19 G 45189635.93 45189636.14 45189636.35 0.0137 0.0029

Uranus 119013-07-16 21:34 G 45189862.21 45189862.40 45189862.61 0.0137 0.0049

Uranus 119014-02-28 04:03 G 45190088.49 45190088.67 45190088.86 0.0137 0.0070

Jupiter 119014-03-05 17:29 G 45190094.06 45190094.23 45190094.41 0.0540 0.0257

Uranus 119014-10-12 10:46 G 45190314.79 45190314.95 45190315.11 0.0137 0.0090

Uranus 119015-05-26 17:15 G 45190541.11 45190541.22 45190541.36 0.0138 0.0110

Uranus 119016-01-08 00:27 G 45190767.46 45190767.52 45190767.59 0.0138 0.0130

Saturn 119017-11-05 12:12 G 45191434.87 45191435.01 45191435.17 0.0278 0.0197

Saturn 119018-06-22 20:07 G 45191664.16 45191664.34 45191664.52 0.0279 0.0136

Earth 119019-09-22 10:17 G 45192120.77 45192120.93 45192121.08 0.2673 0.0298

Moon 119019-09-22 14:51 G 45192120.97 45192121.12 45192121.27 0.2677 0.0562 *

Jupiter 119020-08-28 21:19 G 45192462.21 45192462.39 45192462.57 0.0491 0.0222

Neptune 119021-04-02 13:53 G 45192679.03 45192679.08 45192679.19 0.0089 0.0083

Neptune 119021-11-14 03:48 G 45192904.55 45192904.66 45192904.80 0.0089 0.0073

Neptune 119022-06-27 17:43 G 45193130.09 45193130.24 45193130.40 0.0089 0.0063

Neptune 119023-02-08 06:55 G 45193355.64 45193355.79 45193355.99 0.0089 0.0054

Neptune 119023-09-21 20:51 G 45193581.19 45193581.37 45193581.57 0.0089 0.0044

Neptune 119024-05-04 10:31 G 45193806.74 45193806.94 45193807.15 0.0089 0.0034

Neptune 119024-12-16 00:12 G 45194032.29 45194032.51 45194032.72 0.0089 0.0024

Neptune 119025-07-29 13:24 G 45194257.85 45194258.06 45194258.29 0.0089 0.0015

Neptune 119026-03-12 03:05 G 45194483.41 45194483.63 45194483.85 0.0089 0.0005

Neptune 119026-10-23 16:31 G 45194708.97 45194709.19 45194709.41 0.0089 0.0005

Neptune 119027-06-06 05:58 G 45194934.53 45194934.75 45194934.97 0.0089 0.0014

Neptune 119028-01-17 19:24 G 45195160.10 45195160.31 45195160.53 0.0089 0.0024

Neptune 119028-08-30 08:36 G 45195385.67 45195385.86 45195386.08 0.0089 0.0034

Neptune 119029-04-12 22:17 G 45195611.24 45195611.43 45195611.63 0.0089 0.0043

Neptune 119029-11-24 11:29 G 45195836.82 45195836.98 45195837.17 0.0089 0.0053

Neptune 119030-07-08 00:41 G 45196062.40 45196062.53 45196062.71 0.0089 0.0063

Neptune 119031-02-18 14:36 G 45196287.99 45196288.11 45196288.24 0.0089 0.0072

Neptune 119031-10-02 03:34 G 45196513.59 45196513.65 45196513.76 0.0089 0.0083

Saturn 119032-04-24 20:36 G 45196719.18 45196719.36 45196719.56 0.0280 0.0134

Jupiter 119032-05-04 00:41 G 45196728.33 45196728.53 45196728.74 0.0489 0.0040

Saturn 119032-12-10 12:27 G 45196948.89 45196949.02 45196949.16 0.0280 0.0216

Mars 119034-11-18 05:00 G 45197656.54 45197656.71 45197656.88 0.1685 0.0317

Jupiter 119038-03-08 17:58 G 45198863.08 45198863.25 45198863.42 0.0537 0.0285

Jupiter 119044-01-08 03:48 G 45200994.50 45200994.66 45200994.83 0.0488 0.0301

Saturn 119047-05-18 21:34 G 45202221.23 45202221.40 45202221.59 0.0278 0.0137

Saturn 119048-01-03 05:29 G 45202450.59 45202450.73 45202450.88 0.0279 0.0196

Uranus 119048-11-17 19:39 G 45202770.31 45202770.32 45202770.35 0.0142 0.0142

Uranus 119049-07-02 07:39 G 45202996.72 45202996.82 45202996.96 0.0142 0.0120

Jupiter 119049-11-11 07:24 G 45203128.61 45203128.81 45203129.01 0.0539 0.0065

Uranus 119050-02-13 19:53 G 45203223.18 45203223.33 45203223.51 0.0142 0.0096

Uranus 119050-09-28 07:53 G 45203449.65 45203449.83 45203450.03 0.0142 0.0073

Uranus 119051-05-12 19:53 G 45203676.13 45203676.33 45203676.55 0.0142 0.0050

Uranus 119051-12-25 07:53 G 45203902.61 45203902.83 45203903.05 0.0141 0.0027

Uranus 119052-08-07 19:24 G 45204129.09 45204129.31 45204129.54 0.0141 0.0004

Uranus 119053-03-22 06:55 G 45204355.57 45204355.79 45204356.01 0.0141 0.0019

Uranus 119053-11-03 17:58 G 45204582.05 45204582.25 45204582.47 0.0141 0.0042

Uranus 119054-06-18 05:00 G 45204808.52 45204808.71 45204808.91 0.0141 0.0065

Uranus	119055-01-30 16:03 G	45205035.00	45205035.17	45205035.35	0.0141	0.0087
Uranus	119055-09-14 02:51 G	45205261.48	45205261.62	45205261.76	0.0140	0.0109
Uranus	119056-04-27 12:55 G	45205487.98	45205488.04	45205488.14	0.0140	0.0131
Jupiter	119056-05-06 06:27 G	45205496.65	45205496.77	45205496.91	0.0492	0.0375
Jupiter	119061-07-16 22:17 G	45207394.31	45207394.43	45207394.56	0.0541	0.0414
Saturn	119061-11-05 02:36 G	45207505.41	45207505.61	45207505.82	0.0280	0.0084
Saturn	119062-06-22 17:43 G	45207735.18	45207735.24	45207735.32	0.0280	0.0264
Jupiter	119068-01-10 09:48 G	45209762.71	45209762.91	45209763.11	0.0490	0.0112
Pluto	119068-10-02 19:53 G	45210029.26	45210029.33	45210029.46	0.0062	0.0056
Pluto	119069-05-15 23:29 G	45210254.28	45210254.48	45210254.69	0.0063	0.0021
Pluto	119069-12-27 02:36 G	45210479.41	45210479.61	45210479.83	0.0063	0.0015
Pluto	119070-08-09 05:43 G	45210704.63	45210704.74	45210704.88	0.0063	0.0050
Mars	119073-04-27 12:41 G	45211696.85	45211697.03	45211697.20	0.1857	0.0398
Jupiter	119073-11-14 13:53 G	45211898.01	45211898.08	45211898.16	0.0536	0.0496
Saturn	119076-11-27 22:17 G	45213007.24	45213007.43	45213007.63	0.0278	0.0103
Saturn	119077-07-15 06:12 G	45213236.65	45213236.76	45213236.88	0.0279	0.0231
Jupiter	119079-09-15 12:41 G	45214028.84	45214029.03	45214029.23	0.0489	0.0152
Jupiter	119085-07-20 03:19 G	45216163.45	45216163.64	45216163.84	0.0538	0.0148
Saturn	119091-05-18 06:41 G	45218291.57	45218291.78	45218291.99	0.0280	0.0041
Jupiter	119091-05-21 16:31 G	45218295.08	45218295.19	45218295.30	0.0487	0.0409
Uranus	119091-08-19 05:29 G	45218384.72	45218384.73	45218384.79	0.0136	0.0134
Uranus	119092-04-01 10:46 G	45218610.85	45218610.95	45218611.08	0.0136	0.0115
Uranus	119092-11-13 16:03 G	45218837.03	45218837.17	45218837.33	0.0136	0.0096
Uranus	119093-06-27 21:19 G	45219063.23	45219063.39	45219063.58	0.0136	0.0078
Uranus	119094-02-09 03:05 G	45219289.44	45219289.63	45219289.83	0.0136	0.0058
Uranus	119094-09-23 08:51 G	45219515.66	45219515.87	45219516.07	0.0136	0.0038
Uranus	119095-05-07 14:36 G	45219741.90	45219742.11	45219742.32	0.0137	0.0018
Uranus	119095-12-19 20:22 G	45219968.14	45219968.35	45219968.57	0.0137	0.0004
Uranus	119096-08-02 02:22 G	45220194.40	45220194.60	45220194.82	0.0137	0.0023
Uranus	119097-03-16 08:36 G	45220420.66	45220420.86	45220421.07	0.0137	0.0043

Jupiter 119097-03-24 13:10 G 45220428.87 45220429.05 45220429.24 0.0540 0.0219

Uranus 119097-10-28 14:51 G 45220646.94 45220647.12 45220647.32 0.0137 0.0063

Uranus 119098-06-11 21:34 G 45220873.24 45220873.40 45220873.58 0.0137 0.0083

Uranus 119099-01-24 04:03 G 45221099.54 45221099.67 45221099.82 0.0138 0.0104

Uranus 119099-09-07 10:46 G 45221325.87 45221325.95 45221326.06 0.0138 0.0124

Mars 119100-09-15 16:03 G 45221699.00 45221699.17 45221699.34 0.1681 0.0016

Neptune 119102-02-22 04:46 G 45222223.63 45222223.70 45222223.80 0.0089 0.0081

Neptune 119102-10-05 17:00 G 45222449.10 45222449.21 45222449.35 0.0088 0.0072

Neptune 119103-05-19 05:29 G 45222674.59 45222674.73 45222674.90 0.0088 0.0063

Jupiter 119103-09-18 20:36 G 45222797.19 45222797.36 45222797.53 0.0491 0.0270

Neptune 119103-12-30 17:43 G 45222900.09 45222900.24 45222900.43 0.0088 0.0054

Neptune 119104-08-12 06:41 G 45223125.59 45223125.78 45223125.97 0.0088 0.0044

Neptune 119105-03-25 18:55 G 45223351.10 45223351.29 45223351.50 0.0088 0.0035

Neptune 119105-11-06 07:24 G 45223576.61 45223576.81 45223577.02 0.0088 0.0025

Saturn 119106-06-11 08:07 G 45223793.63 45223793.84 45223794.04 0.0279 0.0043

Neptune 119106-06-19 19:53 G 45223802.12 45223802.33 45223802.55 0.0088 0.0016

Neptune 119107-01-31 08:36 G 45224027.64 45224027.86 45224028.08 0.0088 0.0007

Neptune 119107-09-13 21:05 G 45224253.16 45224253.38 45224253.60 0.0088 0.0003

Neptune 119108-04-26 09:19 G 45224478.68 45224478.89 45224479.12 0.0088 0.0013

Neptune 119108-12-07 22:03 G 45224704.21 45224704.42 45224704.63 0.0088 0.0021

Neptune 119109-07-21 10:31 G 45224929.75 45224929.94 45224930.16 0.0088 0.0031

Neptune 119110-03-03 23:00 G 45225155.28 45225155.46 45225155.67 0.0088 0.0041

Neptune 119110-10-15 11:43 G 45225380.82 45225380.99 45225381.18 0.0088 0.0049

Neptune 119111-05-29 00:27 G 45225606.36 45225606.52 45225606.69 0.0088 0.0059

Neptune 119112-01-09 12:41 G 45225831.91 45225832.03 45225832.19 0.0088 0.0068

Neptune 119112-08-22 01:24 G 45226057.47 45226057.56 45226057.68 0.0088 0.0077

Neptune 119113-04-04 14:07 G 45226283.06 45226283.09 45226283.14 0.0088 0.0086

Jupiter 119115-05-24 21:48 G 45227063.21 45227063.41 45227063.62 0.0489 0.0006

Saturn 119120-11-28 14:07 G 45229077.88 45229078.09 45229078.31 0.0280 0.0015

Jupiter 119121-03-28 18:41 G 45229198.13 45229198.28 45229198.44 0.0537 0.0343

Jupiter 119127-01-28 00:55 G 45231329.37 45231329.54 45231329.72 0.0488 0.0263

Jupiter 119132-12-01 09:05 G 45233463.68 45233463.88 45233464.08 0.0539 0.0005

Uranus 119133-03-02 13:10 G 45233554.98 45233555.05 45233555.17 0.0142 0.0130

Earth 119133-03-29 05:43 G 45233581.58 45233581.74 45233581.89 0.2660 0.0635

Moon 119133-03-29 05:43 G 45233581.60 45233581.74 45233581.89 0.2667 0.0587 *

Uranus 119133-10-15 01:39 G 45233781.44 45233781.57 45233781.73 0.0142 0.0106

Uranus 119134-05-29 13:39 G 45234007.91 45234008.07 45234008.27 0.0142 0.0083

Uranus 119135-01-11 01:53 G 45234234.39 45234234.58 45234234.79 0.0142 0.0060

Uranus 119135-08-25 13:53 G 45234460.87 45234461.08 45234461.30 0.0142 0.0036

Saturn 119135-12-22 09:19 G 45234579.68 45234579.89 45234580.10 0.0279 0.0008

Uranus 119136-04-08 01:24 G 45234687.35 45234687.56 45234687.79 0.0141 0.0014

Uranus 119136-11-20 13:10 G 45234913.83 45234914.05 45234914.27 0.0141 0.0010

Uranus 119137-07-05 00:27 G 45235140.31 45235140.52 45235140.74 0.0141 0.0033

Uranus 119138-02-16 11:43 G 45235366.79 45235366.99 45235367.19 0.0141 0.0056

Uranus 119138-09-30 22:31 G 45235593.26 45235593.44 45235593.63 0.0141 0.0079

Mars 119139-02-23 17:00 G 45235739.03 45235739.21 45235739.38 0.1862 0.0283

Uranus 119139-05-15 09:19 G 45235819.75 45235819.89 45235820.05 0.0141 0.0101

Jupiter 119139-05-27 05:29 G 45235831.62 45235831.73 45235831.83 0.0492 0.0420

Uranus 119139-12-27 19:53 G 45236046.24 45236046.33 45236046.45 0.0140 0.0123

Jupiter 119144-08-05 22:17 G 45237729.28 45237729.43 45237729.58 0.0541 0.0360

Saturn 119150-06-10 17:58 G 45239864.04 45239864.25 45239864.46 0.0280 0.0056

Jupiter 119151-01-30 08:51 G 45240097.68 45240097.87 45240098.07 0.0490 0.0158

Jupiter 119156-12-04 09:05 G 45242232.87 45242232.88 45242232.90 0.0536 0.0533

Pluto 119160-02-09 15:34 G 45243394.99 45243395.15 45243395.34 0.0081 0.0052

Pluto 119160-09-22 03:34 G 45243620.45 45243620.65 45243620.87 0.0081 0.0029

Jupiter 119162-10-05 11:43 G 45244363.79 45244363.99 45244364.19 0.0489 0.0107

Saturn 119164-11-16 11:29 G 45245136.97 45245136.98 45245137.01 0.0278 0.0277

Saturn 119165-07-03 19:10 G 45245366.09 45245366.30 45245366.50 0.0279 0.0055

Mars 119166-07-14 03:19 G 45245741.48 45245741.64 45245741.81 0.1678 0.0290

Jupiter 119168-08-08 22:31 G 45246498.25 45246498.44 45246498.63 0.0538 0.0185

Jupiter 119174-06-10 12:55 G 45248629.91 45248630.04 45248630.18 0.0487 0.0375

Uranus 119175-12-01 22:17 G 45249169.35 45249169.43 45249169.53 0.0136 0.0122

Uranus 119176-07-15 03:34 G 45249395.52 45249395.65 45249395.80 0.0136 0.0103

Uranus 119177-02-26 08:51 G 45249621.71 45249621.87 45249622.05 0.0136 0.0084

Uranus 119177-10-10 14:22 G 45249847.92 45249848.10 45249848.29 0.0136 0.0065

Uranus 119178-05-24 20:07 G 45250074.14 45250074.34 45250074.54 0.0136 0.0045

Uranus 119179-01-06 01:53 G 45250300.37 45250300.58 45250300.79 0.0137 0.0025

Saturn 119179-05-06 11:00 G 45250420.85 45250420.96 45250421.08 0.0281 0.0235

Uranus 119179-08-20 07:39 G 45250526.61 45250526.82 45250527.03 0.0137 0.0005

Saturn 119179-12-22 03:05 G 45250650.43 45250650.63 45250650.83 0.0280 0.0115

Uranus 119180-04-02 13:24 G 45250752.85 45250753.06 45250753.28 0.0137 0.0016

Jupiter 119180-04-13 12:55 G 45250763.85 45250764.04 45250764.23 0.0540 0.0166

Uranus 119180-11-14 19:24 G 45250979.11 45250979.31 45250979.53 0.0137 0.0036

Uranus 119181-06-29 01:53 G 45251205.39 45251205.58 45251205.78 0.0137 0.0056

Uranus 119182-02-10 08:22 G 45251431.68 45251431.85 45251432.03 0.0137 0.0076

Uranus 119182-09-24 14:51 G 45251657.97 45251658.12 45251658.27 0.0137 0.0097

Uranus 119183-05-08 21:34 G 45251884.29 45251884.40 45251884.51 0.0138 0.0117

Uranus 119183-12-21 04:17 G 45252110.67 45252110.68 45252110.70 0.0138 0.0137

Neptune 119185-07-05 23:15 G 45252673.42 45252673.47 45252673.56 0.0089 0.0084

Neptune 119186-02-16 13:24 G 45252898.94 45252899.06 45252899.18 0.0089 0.0074

Neptune 119186-09-30 02:36 G 45253124.47 45253124.61 45253124.78 0.0089 0.0065

Jupiter 119186-10-07 17:00 G 45253132.05 45253132.21 45253132.37 0.0491 0.0306

Neptune 119187-05-13 16:17 G 45253350.02 45253350.18 45253350.37 0.0089 0.0055

Neptune 119187-12-25 05:58 G 45253575.57 45253575.75 45253575.96 0.0089 0.0046

Neptune 119188-08-06 19:39 G 45253801.13 45253801.32 45253801.53 0.0089 0.0036

Neptune 119189-03-20 09:19 G 45254026.68 45254026.89 45254027.11 0.0089 0.0026

Neptune 119189-10-31 23:00 G 45254252.24 45254252.46 45254252.68 0.0089 0.0016

Neptune 119190-06-14 12:27 G 45254477.80 45254478.02 45254478.24 0.0089 0.0007

Neptune 119191-01-26 02:07 G 45254703.37 45254703.59 45254703.81 0.0089 0.0003

Neptune 119191-09-08 15:19 G 45254928.93 45254929.14 45254929.37 0.0089 0.0013

Jupiter 119191-12-18 03:19 G 45255029.58 45255029.64 45255029.70 0.0542 0.0517

Neptune 119192-04-21 05:00 G 45255154.49 45255154.71 45255154.92 0.0089 0.0023

Neptune 119192-12-02 18:12 G 45255380.06 45255380.26 45255380.47 0.0089 0.0032

Neptune 119193-07-16 07:24 G 45255605.63 45255605.81 45255606.02 0.0089 0.0042

Neptune 119194-02-26 21:05 G 45255831.21 45255831.38 45255831.57 0.0089 0.0052

Saturn 119194-05-29 13:39 G 45255922.97 45255923.07 45255923.18 0.0278 0.0238

Neptune 119194-10-10 10:17 G 45256056.79 45256056.93 45256057.10 0.0089 0.0061

Saturn 119195-01-13 21:05 G 45256152.19 45256152.38 45256152.58 0.0279 0.0093

Neptune 119195-05-23 23:29 G 45256282.37 45256282.48 45256282.64 0.0089 0.0071

Neptune 119196-01-04 13:10 G 45256507.97 45256508.05 45256508.16 0.0089 0.0080

Jupiter 119198-06-12 19:53 G 45257398.12 45257398.33 45257398.53 0.0490 0.0042

Jupiter 119204-04-16 17:58 G 45259533.11 45259533.25 45259533.38 0.0537 0.0395

Mars 119204-12-20 20:36 G 45259781.21 45259781.36 45259781.51 0.1866 0.1005

Saturn 119208-11-15 14:36 G 45261206.96 45261207.11 45261207.27 0.0280 0.0193

Saturn 119209-07-03 06:27 G 45261436.60 45261436.77 45261436.95 0.0280 0.0156

Jupiter 119210-02-15 23:29 G 45261664.30 45261664.48 45261664.67 0.0488 0.0219

Jupiter 119215-12-21 04:03 G 45263798.47 45263798.67 45263798.88 0.0539 0.0033

Uranus 119216-10-30 20:07 G 45264113.31 45264113.34 45264113.40 0.0142 0.0138

Uranus 119217-06-14 08:36 G 45264339.74 45264339.86 45264340.00 0.0142 0.0115

Uranus 119218-01-26 20:51 G 45264566.21 45264566.37 45264566.55 0.0142 0.0092

Uranus 119218-09-10 08:51 G 45264792.68 45264792.87 45264793.07 0.0142 0.0069

Uranus 119219-04-24 20:36 G 45265019.16 45265019.36 45265019.59 0.0142 0.0046

Uranus 119219-12-07 08:51 G 45265245.65 45265245.87 45265246.09 0.0141 0.0022

Uranus 119220-07-20 20:36 G 45265472.13 45265472.36 45265472.58 0.0141 0.0003

Uranus 119221-03-04 07:53 G 45265698.61 45265698.83 45265699.05 0.0141 0.0025

Uranus 119221-10-16 18:55 G 45265925.09 45265925.29 45265925.51 0.0141 0.0048

Jupiter 119221-10-22 02:22 G 45265930.57 45265930.60 45265930.63 0.0487 0.0480

Uranus 119222-05-31 05:58 G 45266151.57 45266151.75 45266151.96 0.0141 0.0071

Jupiter 119222-06-15 03:34 G 45266166.59 45266166.65 45266166.72 0.0492 0.0465

Uranus 119223-01-12 17:15 G 45266378.06 45266378.22 45266378.39 0.0141 0.0093

Uranus 119223-08-27 03:48 G 45266604.55 45266604.66 45266604.80 0.0141 0.0115

Saturn 119223-12-09 22:31 G 45266709.29 45266709.44 45266709.61 0.0279 0.0180

Uranus 119224-04-09 14:07 G 45266831.06 45266831.09 45266831.16 0.0140 0.0137

Saturn 119224-07-26 06:27 G 45266938.61 45266938.77 45266938.95 0.0279 0.0155

Jupiter 119227-08-25 16:46 G 45268064.04 45268064.20 45268064.36 0.0541 0.0326

Mars 119232-05-10 14:51 G 45269783.96 45269784.12 45269784.28 0.1675 0.0587

Jupiter 119234-02-18 04:31 G 45270432.50 45270432.69 45270432.88 0.0490 0.0191

Saturn 119238-05-29 01:10 G 45271993.36 45271993.55 45271993.74 0.0280 0.0129

Saturn 119239-01-13 16:46 G 45272223.07 45272223.20 45272223.33 0.0280 0.0219

Jupiter 119245-10-24 07:24 G 45274698.61 45274698.81 45274699.02 0.0489 0.0073

Jupiter 119251-08-28 23:00 G 45276833.28 45276833.46 45276833.64 0.0538 0.0240

Saturn 119253-06-21 01:39 G 45277495.39 45277495.57 45277495.76 0.0278 0.0138

Saturn 119254-02-05 09:19 G 45277724.75 45277724.89 45277725.04 0.0279 0.0195

Jupiter 119257-06-29 10:17 G 45278964.78 45278964.93 45278965.08 0.0487 0.0336

Uranus 119259-08-01 10:03 G 45279727.86 45279727.92 45279727.98 0.0136 0.0129

Uranus 119260-03-14 15:05 G 45279954.01 45279954.13 45279954.25 0.0136 0.0110

Uranus 119260-10-26 20:07 G 45280180.19 45280180.34 45280180.51 0.0136 0.0091

Uranus 119261-06-10 01:39 G 45280406.40 45280406.57 45280406.76 0.0136 0.0072

Uranus 119262-01-22 07:10 G 45280632.62 45280632.80 45280633.01 0.0136 0.0053

Uranus 119262-09-05 12:55 G 45280858.84 45280859.04 45280859.25 0.0136 0.0032

Earth 119262-09-23 12:27 G 45280876.87 45280877.02 45280877.18 0.2674 0.0258

Moon 119262-09-23 14:22 G 45280876.93 45280877.10 45280877.26 0.2667 0.0068 *

Uranus 119263-04-19 18:41 G 45281085.07 45281085.28 45281085.50 0.0137 0.0012

Jupiter 119263-05-03 12:27 G 45281098.82 45281099.02 45281099.22 0.0540 0.0113

Uranus 119263-12-02 00:41 G 45281311.32 45281311.53 45281311.74 0.0137 0.0008

Uranus 119264-07-15 06:41 G 45281537.58 45281537.78 45281537.99 0.0137 0.0029

Uranus 119265-02-26 12:41 G 45281763.84 45281764.03 45281764.24 0.0137 0.0049

Uranus 119265-10-10 18:55 G 45281990.12 45281990.29 45281990.49 0.0137 0.0070

Uranus 119266-05-25 01:39 G 45282216.41 45282216.57 45282216.73 0.0137 0.0090

Neptune 119266-05-26 14:36 G 45282218.05 45282218.11 45282218.21 0.0089 0.0083

Uranus 119267-01-06 07:53 G 45282442.72 45282442.83 45282442.97 0.0138 0.0110

Neptune 119267-01-07 02:51 G 45282443.53 45282443.62 45282443.77 0.0089 0.0074

Neptune 119267-08-20 15:48 G 45282669.01 45282669.16 45282669.31 0.0088 0.0064

Uranus 119267-08-20 14:36 G 45282669.06 45282669.11 45282669.19 0.0138 0.0131 *

Saturn 119267-12-09 04:17 G 45282779.48 45282779.68 45282779.89 0.0280 0.0089

Neptune 119268-04-02 04:03 G 45282894.51 45282894.67 45282894.85 0.0088 0.0055

Saturn 119268-07-25 19:53 G 45283009.26 45283009.33 45283009.41 0.0279 0.0259

Neptune 119268-11-13 16:17 G 45283120.01 45283120.18 45283120.38 0.0088 0.0046

Neptune 119269-06-27 04:46 G 45283345.52 45283345.70 45283345.91 0.0088 0.0037

Jupiter 119269-10-26 15:05 G 45283467.00 45283467.13 45283467.28 0.0491 0.0351

Neptune 119270-02-07 17:15 G 45283571.02 45283571.22 45283571.44 0.0088 0.0027

Neptune 119270-09-21 05:29 G 45283796.53 45283796.73 45283796.96 0.0088 0.0019

Mars 119270-10-17 23:58 G 45283823.44 45283823.50 45283823.56 0.1871 0.1740

Neptune 119271-05-04 18:12 G 45284022.04 45284022.26 45284022.48 0.0088 0.0008

Neptune 119271-12-16 06:41 G 45284247.56 45284247.78 45284248.00 0.0088 0.0001

Neptune 119272-07-28 19:10 G 45284473.09 45284473.30 45284473.52 0.0088 0.0010

Neptune 119273-03-11 07:39 G 45284698.61 45284698.82 45284699.04 0.0088 0.0020

Neptune 119273-10-22 19:53 G 45284924.14 45284924.33 45284924.55 0.0088 0.0029

Neptune 119274-06-05 08:36 G 45285149.67 45285149.86 45285150.06 0.0088 0.0038

Jupiter 119275-01-05 22:46 G 45285364.36 45285364.45 45285364.54 0.0541 0.0480

Neptune 119275-01-16 21:05 G 45285375.21 45285375.38 45285375.58 0.0088 0.0048

Neptune 119275-08-30 09:34 G 45285600.75 45285600.90 45285601.09 0.0088 0.0057

Neptune 119276-04-11 22:03 G 45285826.30 45285826.42 45285826.59 0.0088 0.0067

Neptune 119276-11-23 10:46 G 45286051.86 45286051.95 45286052.08 0.0088 0.0075

Neptune 119277-07-06 23:43 G 45286277.44 45286277.49 45286277.56 0.0088 0.0084

Jupiter 119281-07-01 17:43 G 45287733.04 45287733.24 45287733.45 0.0490 0.0084

Saturn 119283-01-01 10:17 G 45288281.73 45288281.93 45288282.13 0.0279 0.0081

Saturn 119283-08-18 18:12 G 45288511.18 45288511.26 45288511.35 0.0280 0.0254

Jupiter 119287-05-06 12:12 G 45289867.89 45289868.01 45289868.13 0.0537 0.0428

Jupiter 119293-03-06 18:55 G 45291999.10 45291999.29 45291999.48 0.0488 0.0188

Saturn 119297-06-20 15:48 G 45293565.95 45293566.16 45293566.38 0.0280 0.0022

Mars 119298-03-08 02:36 G 45293826.46 45293826.61 45293826.75 0.1672 0.0863

Jupiter 119299-01-09 02:36 G 45294133.41 45294133.61 45294133.81 0.0539 0.0078

Uranus 119301-02-12 14:22 G 45294898.01 45294898.10 45294898.21 0.0142 0.0125

Uranus 119301-09-27 02:36 G 45295124.47 45295124.61 45295124.77 0.0142 0.0102

Uranus 119302-05-11 14:36 G 45295350.94 45295351.11 45295351.31 0.0142 0.0079

Uranus 119302-12-24 03:05 G 45295577.43 45295577.63 45295577.84 0.0142 0.0055

Uranus 119303-08-07 14:51 G 45295803.91 45295804.12 45295804.34 0.0142 0.0032

Uranus 119304-03-21 02:36 G 45296030.39 45296030.61 45296030.84 0.0141 0.0008

Uranus 119304-11-02 14:22 G 45296256.88 45296257.10 45296257.32 0.0141 0.0016

Jupiter 119304-11-10 21:48 G 45296265.34 45296265.41 45296265.50 0.0487 0.0449

Uranus 119305-06-17 01:39 G 45296483.36 45296483.57 45296483.78 0.0141 0.0039

Uranus 119306-01-29 12:41 G 45296709.84 45296710.03 45296710.24 0.0141 0.0062

Uranus 119306-09-12 23:58 G 45296936.32 45296936.50 45296936.68 0.0141 0.0084

Uranus 119307-04-27 10:31 G 45297162.81 45297162.94 45297163.09 0.0141 0.0107

Uranus 119307-12-09 21:05 G 45297389.31 45297389.38 45297389.48 0.0140 0.0129

Jupiter 119310-09-14 17:00 G 45298399.04 45298399.21 45298399.39 0.0541 0.0274

Saturn 119312-07-14 13:39 G 45299067.86 45299068.07 45299068.28 0.0279 0.0038

Pluto 119316-01-26 14:51 G 45300359.00 45300359.12 45300359.27 0.0062 0.0049

Pluto 119316-09-07 18:12 G 45300584.05 45300584.26 45300584.48 0.0063 0.0014

Jupiter 119317-03-10 01:53 G 45300767.40 45300767.58 45300767.76 0.0491 0.0231

Pluto 119317-04-20 21:05 G 45300809.19 45300809.38 45300809.60 0.0063 0.0022

Pluto 119317-12-02 00:12 G 45301034.44 45301034.51 45301034.62 0.0063 0.0057

Saturn 119327-01-01 18:41 G 45304352.06 45304352.28 45304352.49 0.0280 0.0017

Jupiter 119328-11-13 05:15 G 45305033.51 45305033.72 45305033.93 0.0489 0.0032

Mars 119330-03-07 22:31 G 45305513.36 45305513.44 45305513.52 0.1683 0.1482

Jupiter 119334-09-17 18:27 G 45307168.10 45307168.27 45307168.45 0.0537 0.0278

Jupiter 119340-07-19 08:07 G 45309299.68 45309299.84 45309300.00 0.0488 0.0296

Saturn 119342-01-24 21:19 G 45309854.19 45309854.39 45309854.60 0.0279 0.0018

Uranus 119343-11-14 01:53 G 45310512.49 45310512.58 45310512.70 0.0136 0.0118

Uranus 119344-06-27 07:10 G 45310738.67 45310738.80 45310738.96 0.0136 0.0099

Uranus 119345-02-08 12:41 G 45310964.87 45310965.03 45310965.21 0.0136 0.0079

Uranus 119345-09-22 18:12 G 45311191.07 45311191.26 45311191.46 0.0136 0.0060

Uranus 119346-05-06 23:43 G 45311417.29 45311417.49 45311417.70 0.0136 0.0040

Jupiter 119346-05-23 07:10 G 45311433.60 45311433.80 45311434.00 0.0539 0.0080

Uranus 119346-12-19 05:29 G 45311643.52 45311643.73 45311643.95 0.0136 0.0020

Uranus 119347-08-02 11:29 G 45311869.76 45311869.98 45311870.19 0.0137 0.0001

Uranus 119348-03-15 17:15 G 45312096.01 45312096.22 45312096.44 0.0137 0.0021

Uranus 119348-10-27 23:15 G 45312322.27 45312322.47 45312322.68 0.0137 0.0042

Uranus 119349-06-11 05:29 G 45312548.55 45312548.73 45312548.93 0.0137 0.0062

Neptune 119349-10-08 08:07 G 45312667.81 45312667.84 45312667.92 0.0089 0.0086

Uranus 119350-01-23 11:58 G 45312774.83 45312775.00 45312775.17 0.0137 0.0083

Neptune 119350-05-21 22:03 G 45312893.32 45312893.42 45312893.55 0.0089 0.0076

Uranus 119350-09-06 17:58 G 45313001.13 45313001.25 45313001.41 0.0137 0.0104

Neptune 119351-01-02 11:29 G 45313118.86 45313118.98 45313119.15 0.0089 0.0067

Uranus 119351-04-21 00:41 G 45313227.45 45313227.53 45313227.63 0.0138 0.0124

Neptune 119351-08-16 01:24 G 45313344.40 45313344.56 45313344.75 0.0089 0.0057

Neptune 119352-03-28 15:19 G 45313569.95 45313570.14 45313570.33 0.0089 0.0047

Neptune 119352-11-09 04:31 G 45313795.51 45313795.69 45313795.91 0.0089 0.0038

Jupiter 119352-11-15 10:17 G 45313801.81 45313801.93 45313802.07 0.0491 0.0380

Neptune 119353-06-22 18:12 G 45314021.06 45314021.26 45314021.49 0.0089 0.0028

Neptune 119354-02-03 08:07 G 45314246.63 45314246.84 45314247.06 0.0089 0.0018

Neptune 119354-09-16 21:48 G 45314472.19 45314472.41 45314472.63 0.0089 0.0008

Neptune 119355-04-30 11:15 G 45314697.75 45314697.97 45314698.20 0.0089 0.0002

Saturn 119355-11-27 13:53 G 45314909.02 45314909.08 45314909.15 0.0281 0.0266

Neptune 119355-12-12 00:55 G 45314923.32 45314923.54 45314923.76 0.0089 0.0011

Saturn 119356-07-14 06:12 G 45315138.56 45315138.76 45315138.97 0.0280 0.0085

Neptune 119356-07-24 14:22 G 45315148.89 45315149.10 45315149.32 0.0089 0.0021

Neptune 119357-03-07 03:34 G 45315374.46 45315374.65 45315374.87 0.0089 0.0031

Neptune 119357-10-18 17:15 G 45315600.03 45315600.22 45315600.42 0.0089 0.0040

Jupiter 119358-01-25 20:22 G 45315699.24 45315699.35 45315699.47 0.0542 0.0438

Neptune 119358-06-01 06:27 G 45315825.60 45315825.77 45315825.97 0.0089 0.0050

Neptune 119359-01-12 19:53 G 45316051.19 45316051.33 45316051.51 0.0089 0.0060

Neptune 119359-08-26 09:19 G 45316276.77 45316276.89 45316277.05 0.0089 0.0070

Neptune 119360-04-07 22:31 G 45316502.36 45316502.44 45316502.56 0.0089 0.0079

Neptune 119360-11-19 11:58 G 45316727.99 45316728.00 45316728.05 0.0089 0.0089

Mars 119364-01-04 13:39 G 45317868.95 45317869.07 45317869.20 0.1668 0.1154

Jupiter 119364-07-21 13:24 G 45318067.86 45318068.06 45318068.26 0.0489 0.0115

Mars 119368-08-15 01:24 G 45319553.48 45319553.56 45319553.64 0.1860 0.1643

Jupiter 119370-05-26 12:27 G 45320202.94 45320203.02 45320203.11 0.0537 0.0482

Saturn 119370-12-20 18:12 G 45320411.21 45320411.26 45320411.31 0.0278 0.0268

Saturn 119371-08-07 01:10 G 45320640.35 45320640.55 45320640.76 0.0279 0.0062

Jupiter 119376-03-26 16:03 G 45322333.98 45322334.17 45322334.37 0.0488 0.0150

Earth 119376-03-30 05:15 G 45322337.56 45322337.72 45322337.88 0.2659 0.0473

Moon 119376-03-30 11:15 G 45322337.83 45322337.97 45322338.10 0.2658 0.1441 *

Jupiter 119382-01-29 02:36 G 45324468.42 45324468.61 45324468.81 0.0539 0.0132

Uranus 119384-10-12 20:22 G 45325456.31 45325456.35 45325456.44 0.0142 0.0135

Uranus 119385-05-27 08:51 G 45325682.75 45325682.87 45325683.03 0.0142 0.0112

Saturn 119385-06-08 15:48 G 45325695.05 45325695.16 45325695.29 0.0281 0.0229

Uranus 119386-01-08 21:19 G 45325909.23 45325909.39 45325909.58 0.0142 0.0088

Saturn 119386-01-24 08:07 G 45325924.66 45325924.84 45325925.04 0.0280 0.0122

Uranus 119386-08-23 09:34 G 45326135.71 45326135.90 45326136.10 0.0142 0.0064

Uranus 119387-04-06 21:34 G 45326362.19 45326362.40 45326362.62 0.0142 0.0041

Uranus 119387-11-19 09:34 G 45326588.68 45326588.90 45326589.12 0.0141 0.0017

Jupiter 119387-11-30 19:39 G 45326600.21 45326600.32 45326600.44 0.0487 0.0409

Uranus 119388-07-02 21:19 G 45326815.17 45326815.39 45326815.61 0.0141 0.0007

Uranus 119389-02-14 08:36 G 45327041.65 45327041.86 45327042.08 0.0141 0.0030

Uranus 119389-09-28 19:53 G 45327268.13 45327268.33 45327268.54 0.0141 0.0053

Uranus 119390-05-13 06:55 G 45327494.61 45327494.79 45327494.99 0.0141 0.0076

Uranus 119390-12-25 17:58 G 45327721.10 45327721.25 45327721.42 0.0141 0.0099

Uranus 119391-08-09 04:31 G 45327947.60 45327947.69 45327947.82 0.0141 0.0121

Jupiter 119393-10-03 13:39 G 45328733.89 45328734.07 45328734.25 0.0540 0.0233

Mars 119396-01-03 09:48 G 45329555.78 45329555.91 45329556.03 0.1680 0.1173

Jupiter 119400-03-29 23:43 G 45331102.32 45331102.49 45331102.66 0.0491 0.0273

Saturn 119400-07-03 00:12 G 45331197.39 45331197.51 45331197.64 0.0279 0.0218

Saturn 119401-02-17 07:39 G 45331426.64 45331426.82 45331427.02 0.0279 0.0115

Pluto 119407-06-04 10:46 G 45333724.77 45333724.95 45333725.17 0.0081 0.0038

Pluto 119408-01-15 22:17 G 45333950.26 45333950.43 45333950.64 0.0081 0.0043

Jupiter 119411-12-04 01:10 G 45335368.34 45335368.55 45335368.75 0.0489 0.0008

Saturn 119414-12-21 03:48 G 45336481.50 45336481.66 45336481.85 0.0281 0.0161

Saturn 119415-08-07 19:53 G 45336711.18 45336711.33 45336711.49 0.0280 0.0190

Jupiter 119417-10-07 16:31 G 45337503.03 45337503.19 45337503.35 0.0538 0.0322

Jupiter 119423-08-09 04:17 G 45339634.51 45339634.68 45339634.85 0.0487 0.0263

Uranus 119427-07-15 12:55 G 45341070.97 45341071.04 45341071.13 0.0136 0.0125

Uranus 119428-02-26 18:12 G 45341297.14 45341297.26 45341297.40 0.0136 0.0106

Uranus 119428-10-09 23:43 G 45341523.33 45341523.49 45341523.65 0.0136 0.0086

Uranus 119429-05-24 05:00 G 45341749.54 45341749.71 45341749.91 0.0136 0.0067

Jupiter 119429-06-12 07:10 G 45341768.60 45341768.80 45341769.01 0.0540 0.0030

Mars 119429-11-02 01:39 G 45341911.49 45341911.57 45341911.66 0.1665 0.1422

Uranus 119430-01-05 10:31 G 45341975.75 45341975.94 45341976.15 0.0136 0.0047

Saturn 119430-01-13 04:46 G 45341983.54 45341983.70 45341983.87 0.0278 0.0172

Uranus 119430-08-19 16:17 G 45342201.97 45342202.18 45342202.39 0.0136 0.0027

Neptune 119430-08-30 01:10 G 45342212.49 45342212.55 45342212.62 0.0089 0.0084

Saturn 119430-08-30 11:58 G 45342212.84 45342213.00 45342213.18 0.0279 0.0160

Uranus 119431-04-02 22:03 G 45342428.20 45342428.42 45342428.63 0.0137 0.0007

Neptune 119431-04-12 13:24 G 45342437.96 45342438.06 45342438.18 0.0088 0.0075

Uranus 119431-11-15 03:48 G 45342654.45 45342654.66 45342654.87 0.0137 0.0014

Neptune 119431-11-24 01:39 G 45342663.44 45342663.57 45342663.73 0.0088 0.0066

Uranus 119432-06-28 09:48 G 45342880.71 45342880.91 45342881.12 0.0137 0.0035

Neptune 119432-07-06 14:07 G 45342888.94 45342889.09 45342889.28 0.0088 0.0057

Uranus 119433-02-09 15:48 G 45343106.97 45343107.16 45343107.36 0.0137 0.0055

Neptune 119433-02-17 02:36 G 45343114.44 45343114.61 45343114.81 0.0088 0.0047

Uranus 119433-09-23 22:03 G 45343333.25 45343333.42 45343333.60 0.0137 0.0076

Neptune 119433-09-30 15:19 G 45343339.94 45343340.14 45343340.34 0.0088 0.0038

Uranus 119434-05-08 04:03 G 45343559.54 45343559.67 45343559.84 0.0137 0.0097

Neptune 119434-05-14 03:34 G 45343565.45 45343565.65 45343565.86 0.0088 0.0029

Mars 119434-06-13 05:29 G 45343595.58 45343595.73 45343595.88 0.1864 0.0963

Uranus 119434-12-20 10:46 G 45343785.85 45343785.95 45343786.07 0.0137 0.0117

Neptune 119434-12-25 15:48 G 45343790.96 45343791.16 45343791.39 0.0088 0.0020

Uranus 119435-08-03 17:29 G 45344012.22 45344012.23 45344012.26 0.0138 0.0137

Neptune 119435-08-08 04:31 G 45344016.48 45344016.69 45344016.91 0.0088 0.0010

Jupiter 119435-12-06 08:07 G 45344136.73 45344136.84 45344136.94 0.0491 0.0421

Neptune 119436-03-20 17:00 G 45344241.99 45344242.21 45344242.43 0.0088 0.0001

Neptune 119436-11-01 05:29 G 45344467.51 45344467.73 45344467.95 0.0088 0.0009

Neptune 119437-06-14 17:43 G 45344693.04 45344693.24 45344693.46 0.0088 0.0018

Neptune 119438-01-26 06:12 G 45344918.56 45344918.76 45344918.98 0.0088 0.0028

Neptune 119438-09-08 18:55 G 45345144.09 45345144.29 45345144.49 0.0088 0.0037

Neptune 119439-04-22 06:55 G 45345369.62 45345369.79 45345370.00 0.0088 0.0047

Neptune 119439-12-03 19:39 G 45345595.16 45345595.32 45345595.50 0.0088 0.0055

Neptune 119440-07-16 08:36 G 45345820.72 45345820.86 45345821.01 0.0088 0.0064

Jupiter 119441-02-14 21:05 G 45346034.25 45346034.38 45346034.53 0.0541 0.0382

Neptune 119441-02-26 20:36 G 45346046.27 45346046.36 45346046.51 0.0088 0.0075

Neptune 119441-10-10 09:19 G 45346271.84 45346271.89 45346271.98 0.0088 0.0083

Saturn 119444-07-02 05:00 G 45347267.53 45347267.71 45347267.91 0.0281 0.0126

Saturn 119445-02-16 20:51 G 45347497.26 45347497.37 45347497.51 0.0280 0.0224

Jupiter 119447-08-11 11:29 G 45348402.79 45348402.98 45348403.18 0.0490 0.0158

Jupiter 119453-06-15 10:03 G 45350537.88 45350537.92 45350537.96 0.0536 0.0524

Jupiter 119459-04-16 14:22 G 45352668.90 45352669.10 45352669.30 0.0488 0.0108

Saturn 119459-07-26 09:48 G 45352769.73 45352769.91 45352770.10 0.0279 0.0125

Saturn 119460-03-11 17:29 G 45352999.10 45352999.23 45352999.37 0.0279 0.0209

Mars 119461-10-31 21:19 G 45353598.24 45353598.39 45353598.53 0.1676 0.0879

Jupiter 119465-02-17 22:46 G 45354803.26 45354803.45 45354803.64 0.0538 0.0171

Uranus 119469-01-25 14:36 G 45356241.01 45356241.11 45356241.24 0.0142 0.0121

Uranus 119469-09-09 02:51 G 45356467.48 45356467.62 45356467.80 0.0142 0.0098

Uranus 119470-04-23 15:19 G 45356693.95 45356694.14 45356694.33 0.0142 0.0074

Uranus 119470-12-06 03:19 G 45356920.44 45356920.64 45356920.86 0.0142 0.0051

Jupiter 119470-12-20 16:17 G 45356935.05 45356935.18 45356935.32 0.0487 0.0375

Uranus 119471-07-20 15:19 G 45357146.93 45357147.14 45357147.37 0.0141 0.0027

Uranus 119472-03-03 03:05 G 45357373.41 45357373.63 45357373.86 0.0141 0.0004

Uranus 119472-10-15 14:36 G 45357599.89 45357600.11 45357600.33 0.0141 0.0021

Uranus 119473-05-30 01:53 G 45357826.38 45357826.58 45357826.80 0.0141 0.0044

Uranus 119474-01-11 13:10 G 45358052.87 45358053.05 45358053.25 0.0141 0.0067

Saturn 119474-01-12 16:31 G 45358053.98 45358054.19 45358054.40 0.0281 0.0059

Uranus 119474-08-26 00:12 G 45358279.35 45358279.51 45358279.69 0.0141 0.0090

Uranus 119475-04-09 11:14 G 45358505.83 45358505.97 45358506.10 0.0141 0.0112

Uranus 119475-11-21 21:19 G 45358732.35 45358732.39 45358732.47 0.0140 0.0134

Jupiter 119476-10-23 11:29 G 45359068.79 45359068.98 45359069.16 0.0541 0.0190

Jupiter 119483-04-18 20:07 G 45361437.19 45361437.34 45361437.50 0.0490 0.0307

Jupiter 119488-06-28 01:53 G 45363334.57 45363334.58 45363334.59 0.0542 0.0542

Saturn 119489-02-04 14:36 G 45363555.92 45363556.11 45363556.32 0.0278 0.0078

Saturn 119489-09-21 21:48 G 45363785.34 45363785.41 45363785.51 0.0279 0.0255

Jupiter 119494-12-22 23:00 G 45365703.25 45365703.46 45365703.67 0.0489 0.0041

Mars 119500-04-10 09:19 G 45367637.71 45367637.89 45367638.07 0.1869 0.0242

Jupiter 119500-10-27 17:58 G 45367838.11 45367838.25 45367838.39 0.0538 0.0382

Saturn 119503-07-26 17:14 G 45368840.01 45368840.22 45368840.44 0.0280 0.0026

Moon 119505-09-26 10:17 G 45369632.78 45369632.93 45369633.08 0.2673 0.0954

Earth 119505-09-26 15:05 G 45369632.98 45369633.13 45369633.29 0.2675 0.0188 *

Jupiter 119506-08-29 02:36 G 45369969.43 45369969.61 45369969.80 0.0488 0.0220

Uranus 119511-03-15 23:58 G 45371629.46 45371629.50 45371629.55 0.0136 0.0132

Uranus 119511-10-28 05:00 G 45371855.60 45371855.71 45371855.83 0.0136 0.0113

Uranus 119512-06-10 10:17 G 45372081.79 45372081.93 45372082.09 0.0136 0.0094

Jupiter 119512-07-02 06:12 G 45372103.56 45372103.76 45372103.96 0.0539 0.0023

Uranus 119513-01-22 15:48 G 45372307.99 45372308.16 45372308.34 0.0136 0.0074

Uranus 119513-09-05 21:05 G 45372534.19 45372534.38 45372534.58 0.0136 0.0054

Neptune 119514-01-11 18:12 G 45372662.23 45372662.26 45372662.31 0.0089 0.0087

Uranus 119514-04-20 02:36 G 45372760.41 45372760.61 45372760.82 0.0136 0.0034

Neptune 119514-08-25 07:38 G 45372887.73 45372887.82 45372887.95 0.0089 0.0078

Uranus 119514-12-02 08:22 G 45372986.64 45372986.85 45372987.06 0.0137 0.0014

Neptune 119515-04-07 21:19 G 45373113.26 45373113.39 45373113.55 0.0089 0.0068

Uranus 119515-07-16 14:07 G 45373212.88 45373213.09 45373213.31 0.0137 0.0007

Neptune 119515-11-19 11:14 G 45373338.81 45373338.97 45373339.14 0.0089 0.0058

Uranus 119516-02-27 20:07 G 45373439.13 45373439.34 45373439.55 0.0137 0.0027

Neptune 119516-07-02 00:26 G 45373564.36 45373564.52 45373564.73 0.0089 0.0049

Uranus 119516-10-11 01:53 G 45373665.39 45373665.58 45373665.79 0.0137 0.0048

Neptune 119517-02-12 14:22 G 45373789.91 45373790.10 45373790.31 0.0089 0.0039

Uranus 119517-05-25 08:07 G 45373891.66 45373891.84 45373892.03 0.0137 0.0068

Neptune 119517-09-26 04:02 G 45374015.47 45374015.67 45374015.89 0.0089 0.0029

Uranus 119518-01-06 14:07 G 45374117.94 45374118.09 45374118.27 0.0137 0.0089

Jupiter 119518-05-04 05:29 G 45374235.71 45374235.73 45374235.76 0.0487 0.0482

Neptune 119518-05-09 17:29 G 45374241.03 45374241.23 45374241.46 0.0089 0.0020

Saturn 119518-08-18 18:26 G 45374342.07 45374342.27 45374342.48 0.0279 0.0034

Uranus 119518-08-20 20:36 G 45374344.24 45374344.36 45374344.50 0.0137 0.0110

Neptune 119518-12-21 07:24 G 45374466.59 45374466.81 45374467.03 0.0089 0.0010

Jupiter 119518-12-26 06:55 G 45374471.74 45374471.79 45374471.86 0.0492 0.0467

Uranus 119519-04-04 03:05 G 45374570.58 45374570.63 45374570.71 0.0138 0.0130

Neptune 119519-08-03 21:05 G 45374692.16 45374692.38 45374692.60 0.0089 0.0000

Neptune 119520-03-16 10:31 G 45374917.72 45374917.94 45374918.17 0.0089 0.0010

Neptune 119520-10-27 23:58 G 45375143.29 45375143.50 45375143.72 0.0089 0.0020

Neptune 119521-06-10 13:24 G 45375368.86 45375369.06 45375369.28 0.0089 0.0029

Neptune 119522-01-22 02:50 G 45375594.44 45375594.62 45375594.84 0.0089 0.0040

Neptune 119522-09-04 16:46 G 45375820.01 45375820.20 45375820.38 0.0089 0.0049

Neptune 119523-04-18 05:43 G 45376045.59 45376045.74 45376045.92 0.0089 0.0059

Neptune 119523-11-29 18:55 G 45376271.17 45376271.29 45376271.46 0.0089 0.0068

Jupiter 119524-03-06 18:41 G 45376369.12 45376369.28 45376369.43 0.0541 0.0338

Neptune 119524-07-12 08:36 G 45376496.77 45376496.86 45376496.98 0.0089 0.0077

Neptune 119525-02-22 21:48 G 45376722.39 45376722.41 45376722.48 0.0089 0.0087

Mars 119527-08-30 08:22 G 45377640.69 45377640.85 45377641.01 0.1673 0.0572

Jupiter 119530-08-31 08:36 G 45378737.68 45378737.86 45378738.06 0.0490 0.0195

Saturn 119533-02-05 03:34 G 45379626.43 45379626.65 45379626.86 0.0281 0.0038

Jupiter 119542-05-06 11:58 G 45383003.79 45383004.00 45383004.20 0.0488 0.0070

Saturn 119548-02-28 23:58 G 45385128.29 45385128.50 45385128.71 0.0278 0.0015

Jupiter 119548-03-09 23:14 G 45385138.29 45385138.47 45385138.65 0.0539 0.0226

Uranus 119552-09-25 20:22 G 45386799.28 45386799.35 45386799.45 0.0142 0.0131

Uranus 119553-05-10 09:05 G 45387025.74 45387025.88 45387026.03 0.0142 0.0107

Uranus 119553-12-22 21:19 G 45387252.22 45387252.39 45387252.58 0.0142 0.0084

Jupiter 119554-01-09 14:36 G 45387269.97 45387270.11 45387270.27 0.0487 0.0333

Uranus 119554-08-06 09:34 G 45387478.70 45387478.90 45387479.10 0.0142 0.0060

Uranus 119555-03-20 21:34 G 45387705.19 45387705.40 45387705.62 0.0142 0.0036

Uranus 119555-11-02 09:19 G 45387931.67 45387931.89 45387932.11 0.0141 0.0012

Uranus 119556-06-15 21:05 G 45388158.16 45388158.38 45388158.60 0.0141 0.0012

Uranus 119557-01-28 08:22 G 45388384.64 45388384.85 45388385.07 0.0141 0.0036

Uranus 119557-09-11 19:53 G 45388611.13 45388611.33 45388611.53 0.0141 0.0058

Uranus 119558-04-26 06:55 G 45388837.61 45388837.79 45388837.97 0.0141 0.0081

Uranus 119558-12-08 17:43 G 45389064.10 45389064.24 45389064.39 0.0141 0.0104

Uranus 119559-07-23 04:02 G 45389290.60 45389290.67 45389290.79 0.0141 0.0127

Jupiter 119559-11-13 13:38 G 45389403.88 45389404.07 45389404.27 0.0541 0.0126

Saturn 119562-08-18 03:48 G 45390412.45 45390412.66 45390412.87 0.0280 0.0070

Pluto 119563-05-21 08:07 G 45390688.72 45390688.84 45390689.01 0.0062 0.0046

Pluto 119564-01-01 11:43 G 45390913.78 45390913.99 45390914.21 0.0063 0.0011

Pluto 119564-08-13 14:22 G 45391138.92 45391139.10 45391139.32 0.0063 0.0025

Pluto 119565-03-26 17:29 G 45391364.20 45391364.23 45391364.32 0.0063 0.0060

Mars 119566-02-05 13:10 G 45391679.87 45391680.05 45391680.22 0.1873 0.0477

Jupiter 119566-05-08 19:10 G 45391772.17 45391772.30 45391772.45 0.0491 0.0354

Jupiter 119571-07-19 02:22 G 45393669.52 45393669.60 45393669.69 0.0542 0.0486

Saturn 119577-01-23 19:24 G 45395685.29 45395685.31 45395685.35 0.0278 0.0275

Saturn 119577-09-10 02:07 G 45395914.39 45395914.59 45395914.80 0.0279 0.0055

Jupiter 119578-01-11 22:31 G 45396038.24 45396038.44 45396038.64 0.0489 0.0088

Jupiter 119583-11-16 16:02 G 45398173.06 45398173.17 45398173.29 0.0537 0.0429

Jupiter 119589-09-17 00:55 G 45400304.35 45400304.54 45400304.73 0.0487 0.0180

Saturn 119591-07-13 20:07 G 45400969.21 45400969.34 45400969.47 0.0281 0.0224

Saturn 119592-02-28 12:55 G 45401198.85 45401199.04 45401199.23 0.0281 0.0130

Mars 119593-06-26 19:53 G 45401683.17 45401683.33 45401683.50 0.1670 0.0289

Neptune 119594-12-02 11:14 G 45402206.93 45402206.97 45402207.04 0.0089 0.0086

Uranus 119595-06-27 15:48 G 45402414.08 45402414.16 45402414.27 0.0136 0.0121

Neptune 119595-07-15 23:43 G 45402432.40 45402432.49 45402432.62 0.0089 0.0077

Jupiter 119595-07-22 04:17 G 45402438.48 45402438.68 45402438.88 0.0540 0.0069

Uranus 119596-02-08 21:05 G 45402640.25 45402640.38 45402640.53 0.0136 0.0101

Neptune 119596-02-26 11:58 G 45402657.89 45402658.00 45402658.17 0.0088 0.0068

Uranus 119596-09-22 02:07 G 45402866.44 45402866.59 45402866.78 0.0136 0.0082

Neptune 119596-10-09 00:55 G 45402883.38 45402883.54 45402883.70 0.0088 0.0058

Uranus 119597-05-06 07:53 G 45403092.64 45403092.83 45403093.02 0.0136 0.0062

Neptune 119597-05-22 13:10 G 45403108.88 45403109.05 45403109.24 0.0088 0.0049

Uranus 119597-12-18 13:10 G 45403318.85 45403319.05 45403319.26 0.0136 0.0042

Neptune 119598-01-03 01:24 G 45403334.38 45403334.56 45403334.77 0.0088 0.0040

Uranus 119598-08-01 18:41 G 45403545.08 45403545.28 45403545.50 0.0136 0.0022

Neptune 119598-08-16 13:53 G 45403559.89 45403560.08 45403560.30 0.0088 0.0031

Uranus 119599-03-16 00:26 G 45403771.31 45403771.52 45403771.74 0.0137 0.0002

Neptune 119599-03-30 02:36 G 45403785.40 45403785.61 45403785.82 0.0088 0.0021

Uranus 119599-10-28 06:12 G 45403997.55 45403997.76 45403997.97 0.0137 0.0020

Neptune 119599-11-10 14:50 G 45404010.91 45404011.12 45404011.34 0.0088 0.0012

Uranus 119600-06-10 12:12 G 45404223.81 45404224.01 45404224.22 0.0137 0.0040

Neptune 119600-06-23 03:34 G 45404236.43 45404236.65 45404236.87 0.0088 0.0002

Uranus 119601-01-22 17:58 G 45404450.07 45404450.25 45404450.46 0.0137 0.0062

Neptune 119601-02-03 15:48 G 45404461.95 45404462.16 45404462.38 0.0088 0.0008

Jupiter 119601-05-23 04:17 G 45404570.60 45404570.68 45404570.77 0.0486 0.0439

Uranus 119601-09-06 00:26 G 45404676.35 45404676.52 45404676.69 0.0137 0.0081

Neptune 119601-09-17 04:17 G 45404687.47 45404687.68 45404687.90 0.0088 0.0017

Uranus 119602-04-20 06:26 G 45404902.64 45404902.77 45404902.92 0.0137 0.0102

Neptune 119602-04-30 16:31 G 45404912.99 45404913.19 45404913.41 0.0088 0.0026

Uranus 119602-12-02 12:55 G 45405128.96 45405129.04 45405129.15 0.0137 0.0123

Neptune 119602-12-12 05:00 G 45405138.52 45405138.71 45405138.92 0.0088 0.0035

Neptune 119603-07-25 17:43 G 45405364.06 45405364.24 45405364.43 0.0088 0.0044

Neptune 119604-03-07 05:43 G 45405589.59 45405589.74 45405589.94 0.0088 0.0055

Neptune 119604-10-18 18:12 G 45405815.13 45405815.26 45405815.44 0.0088 0.0064

Neptune 119605-06-01 06:55 G 45406040.68 45406040.79 45406040.93 0.0088 0.0072

Neptune 119606-01-12 19:38 G 45406266.25 45406266.32 45406266.41 0.0088 0.0081

Saturn 119606-08-06 01:24 G 45406471.45 45406471.56 45406471.69 0.0277 0.0224

Saturn 119607-03-23 07:53 G 45406700.64 45406700.83 45406701.03 0.0278 0.0104

Jupiter 119607-03-26 18:41 G 45406704.11 45406704.28 45406704.45 0.0542 0.0285

Jupiter 119613-09-19 07:38 G 45409072.65 45409072.82 45409073.00 0.0490 0.0240

Moon 119619-04-02 03:05 G 45411093.46 45411093.63 45411093.80 0.2652 0.0341

Earth 119619-04-02 05:00 G 45411093.55 45411093.71 45411093.87 0.2658 0.0329 *

Saturn 119621-01-22 20:07 G 45411755.19 45411755.34 45411755.50 0.0281 0.0192

Saturn 119621-09-09 12:55 G 45411984.86 45411985.04 45411985.21 0.0280 0.0161

Jupiter 119625-05-25 11:14 G 45413338.77 45413338.97 45413339.18 0.0488 0.0023

Jupiter 119631-03-30 00:26 G 45415473.35 45415473.52 45415473.69 0.0538 0.0284

Mars 119631-12-03 16:02 G 45415722.04 45415722.17 45415722.30 0.1878 0.1245

Saturn 119636-02-16 02:36 G 45417257.47 45417257.61 45417257.77 0.0278 0.0189

Uranus 119636-05-26 01:53 G 45417357.57 45417357.58 45417357.62 0.0142 0.0141

Saturn 119636-10-02 09:34 G 45417486.72 45417486.90 45417487.08 0.0279 0.0141

Uranus 119637-01-07 14:36 G 45417583.99 45417584.11 45417584.24 0.0142 0.0117

Jupiter 119637-01-28 14:36 G 45417604.95 45417605.11 45417605.28 0.0487 0.0286

Uranus 119637-08-22 02:36 G 45417810.46 45417810.61 45417810.79 0.0142 0.0094

Uranus 119638-04-05 14:50 G 45418036.94 45418037.12 45418037.32 0.0142 0.0070

Uranus 119638-11-18 03:05 G 45418263.42 45418263.63 45418263.84 0.0142 0.0046

Uranus 119639-07-02 15:05 G 45418489.91 45418490.13 45418490.35 0.0142 0.0022

Uranus 119640-02-14 02:36 G 45418716.39 45418716.61 45418716.84 0.0141 0.0003

Uranus 119640-09-27 14:07 G 45418942.87 45418943.09 45418943.31 0.0141 0.0026

Uranus 119641-05-12 01:24 G 45419169.36 45419169.56 45419169.77 0.0141 0.0049

Uranus 119641-12-24 12:41 G 45419395.84 45419396.03 45419396.22 0.0141 0.0072

Uranus 119642-08-07 23:29 G 45419622.33 45419622.48 45419622.65 0.0141 0.0095

Jupiter 119642-12-02 12:55 G 45419738.85 45419739.04 45419739.24 0.0540 0.0075

Uranus 119643-03-22 10:02 G 45419848.82 45419848.92 45419849.06 0.0141 0.0118

Uranus 119643-11-03 20:50 G 45420075.36 45420075.37 45420075.40 0.0140 0.0140

Jupiter 119649-05-27 18:26 G 45422107.15 45422107.27 45422107.39 0.0491 0.0397

Saturn 119650-08-05 04:02 G 45422541.48 45422541.67 45422541.86 0.0281 0.0136

Saturn 119651-03-22 20:50 G 45422771.23 45422771.37 45422771.50 0.0281 0.0217

Jupiter 119654-08-07 00:12 G 45424004.40 45424004.51 45424004.63 0.0542 0.0442

Pluto 119654-09-26 03:05 G 45424054.43 45424054.63 45424054.83 0.0081 0.0038

Pluto 119655-05-09 14:36 G 45424279.93 45424280.11 45424280.31 0.0081 0.0042

Mars 119659-04-24 07:24 G 45425725.64 45425725.81 45425725.98 0.1667 0.0007

Jupiter 119661-01-30 21:48 G 45426373.21 45426373.41 45426373.61 0.0489 0.0133

Saturn 119665-08-28 08:50 G 45428043.70 45428043.87 45428044.06 0.0277 0.0138

Saturn 119666-04-14 15:34 G 45428273.00 45428273.15 45428273.31 0.0278 0.0191

Jupiter 119666-12-05 16:31 G 45428508.12 45428508.19 45428508.28 0.0538 0.0486

Jupiter 119672-10-06 00:26 G 45430639.32 45430639.52 45430639.72 0.0487 0.0132

Neptune 119678-04-15 03:48 G 45432656.66 45432656.66 45432656.69 0.0089 0.0089

Jupiter 119678-08-10 07:53 G 45432773.64 45432773.83 45432774.02 0.0540 0.0138

Neptune 119678-11-26 17:29 G 45432882.14 45432882.23 45432882.34 0.0089 0.0079

Uranus 119679-02-25 02:36 G 45432972.55 45432972.61 45432972.68 0.0136 0.0128

Neptune 119679-07-10 06:55 G 45433107.67 45433107.79 45433107.95 0.0089 0.0070

Uranus 119679-10-09 07:24 G 45433198.70 45433198.81 45433198.95 0.0136 0.0109

Saturn 119680-02-15 04:31 G 45433327.49 45433327.69 45433327.89 0.0281 0.0104

Neptune 119680-02-20 20:36 G 45433333.22 45433333.36 45433333.55 0.0089 0.0060

Uranus 119680-05-22 12:55 G 45433424.89 45433425.04 45433425.21 0.0136 0.0089

Saturn 119680-10-01 20:50 G 45433557.28 45433557.37 45433557.47 0.0280 0.0249

Neptune 119680-10-03 10:31 G 45433558.76 45433558.94 45433559.13 0.0089 0.0050

Uranus 119681-01-03 18:12 G 45433651.08 45433651.26 45433651.45 0.0136 0.0069

Neptune 119681-05-17 00:12 G 45433784.32 45433784.51 45433784.71 0.0089 0.0040

Uranus 119681-08-17 23:29 G 45433877.29 45433877.48 45433877.69 0.0136 0.0050

Neptune 119681-12-28 13:38 G 45434009.88 45434010.07 45434010.30 0.0089 0.0031

Uranus 119682-04-01 05:00 G 45434103.51 45434103.71 45434103.92 0.0136 0.0029

Neptune 119682-08-11 03:34 G 45434235.44 45434235.65 45434235.87 0.0089 0.0021

Uranus 119682-11-13 10:46 G 45434329.73 45434329.95 45434330.16 0.0137 0.0009

Neptune 119683-03-24 17:14 G 45434461.00 45434461.22 45434461.44 0.0089 0.0011

Uranus 119683-06-27 16:31 G 45434555.98 45434556.19 45434556.40 0.0137 0.0012

Neptune 119683-11-05 06:55 G 45434686.56 45434686.79 45434687.01 0.0089 0.0002

Uranus 119684-02-08 22:02 G 45434782.22 45434782.42 45434782.64 0.0137 0.0033

Jupiter 119684-06-11 04:02 G 45434905.55 45434905.67 45434905.80 0.0486 0.0392

Neptune 119684-06-17 20:22 G 45434912.13 45434912.35 45434912.57 0.0089 0.0008

Uranus 119684-09-22 04:02 G 45435008.48 45435008.67 45435008.87 0.0137 0.0053

Neptune 119685-01-29 10:02 G 45435137.71 45435137.92 45435138.14 0.0089 0.0018

Uranus 119685-05-06 10:02 G 45435234.75 45435234.92 45435235.11 0.0137 0.0074

Neptune 119685-09-11 23:29 G 45435363.28 45435363.48 45435363.70 0.0089 0.0028

Uranus 119685-12-18 16:17 G 45435461.04 45435461.18 45435461.34 0.0137 0.0095

Neptune 119686-04-25 12:55 G 45435588.85 45435589.04 45435589.25 0.0089 0.0038

Uranus 119686-08-01 22:46 G 45435687.35 45435687.45 45435687.58 0.0137 0.0115

Neptune 119686-12-07 02:36 G 45435814.43 45435814.61 45435814.80 0.0089 0.0047

Uranus 119687-03-16 05:14 G 45435913.70 45435913.72 45435913.77 0.0138 0.0136

Neptune 119687-07-20 16:02 G 45436040.01 45436040.17 45436040.35 0.0089 0.0057

Neptune 119688-03-02 05:14 G 45436265.60 45436265.72 45436265.89 0.0089 0.0067

Neptune 119688-10-13 18:55 G 45436491.19 45436491.29 45436491.42 0.0089 0.0077

Neptune 119689-05-27 08:07 G 45436716.81 45436716.84 45436716.92 0.0089 0.0086

Jupiter 119690-04-14 21:05 G 45437039.20 45437039.38 45437039.57 0.0541 0.0221

Saturn 119695-03-10 09:19 G 45438829.70 45438829.89 45438830.08 0.0278 0.0105

Saturn 119695-10-25 16:02 G 45439059.06 45439059.17 45439059.30 0.0279 0.0226

Jupiter 119696-10-08 08:22 G 45439407.68 45439407.85 45439408.01 0.0490 0.0291

Jupiter 119708-06-14 11:14 G 45443673.77 45443673.97 45443674.18 0.0488 0.0025

Saturn 119709-08-28 11:00 G 45444113.75 45444113.96 45444114.17 0.0281 0.0052

Jupiter 119714-04-18 22:46 G 45445808.29 45445808.45 45445808.61 0.0539 0.0333

Jupiter 119720-02-18 14:50 G 45447939.95 45447940.12 45447940.31 0.0487 0.0237

Uranus 119720-09-07 20:22 G 45448142.26 45448142.35 45448142.45 0.0142 0.0128

Uranus 119721-04-22 08:22 G 45448368.72 45448368.85 45448369.02 0.0142 0.0104

Uranus 119721-12-04 20:50 G 45448595.20 45448595.37 45448595.56 0.0142 0.0080

Uranus 119722-07-19 09:05 G 45448821.68 45448821.88 45448822.09 0.0142 0.0056

Uranus 119723-03-02 20:50 G 45449048.16 45449048.37 45449048.59 0.0142 0.0032

Uranus 119723-10-15 08:36 G 45449274.64 45449274.86 45449275.09 0.0141 0.0008

Uranus 119724-05-28 20:07 G 45449501.13 45449501.34 45449501.57 0.0141 0.0017

Saturn 119724-09-20 16:17 G 45449615.98 45449616.18 45449616.39 0.0277 0.0053

Uranus 119725-01-10 07:53 G 45449727.61 45449727.83 45449728.04 0.0141 0.0040

Mars 119725-02-19 19:10 G 45449768.13 45449768.30 45449768.47 0.1664 0.0284

Saturn 119725-05-07 22:46 G 45449845.45 45449845.45 45449845.48 0.0278 0.0277

Uranus 119725-08-24 18:55 G 45449954.10 45449954.29 45449954.49 0.0141 0.0063

Jupiter 119725-12-22 12:55 G 45450073.84 45450074.04 45450074.24 0.0541 0.0021

Uranus 119726-04-08 05:58 G 45450180.58 45450180.75 45450180.93 0.0141 0.0086

Uranus 119726-11-20 16:46 G 45450407.07 45450407.20 45450407.35 0.0141 0.0109

Uranus 119727-07-05 03:48 G 45450633.58 45450633.66 45450633.73 0.0141 0.0131

Jupiter 119732-06-16 17:58 G 45452442.17 45452442.25 45452442.34 0.0491 0.0446

Jupiter 119737-08-27 04:02 G 45454339.52 45454339.67 45454339.81 0.0542 0.0372

Saturn 119739-03-10 11:43 G 45454899.78 45454899.99 45454900.21 0.0281 0.0018

Jupiter 119744-02-20 21:48 G 45456708.22 45456708.41 45456708.60 0.0489 0.0183

Moon 119748-09-27 15:19 G 45458389.00 45458389.14 45458389.28 0.2683 0.0729

Earth 119748-09-27 17:29 G 45458389.08 45458389.23 45458389.39 0.2676 0.0160 *

Saturn 119754-04-02 16:02 G 45460401.96 45460402.17 45460402.38 0.0278 0.0021

Jupiter 119755-10-27 01:10 G 45460974.34 45460974.55 45460974.75 0.0488 0.0082

Neptune 119759-03-06 22:17 G 45462201.41 45462201.43 45462201.49 0.0089 0.0087

Neptune 119759-10-18 10:31 G 45462426.86 45462426.94 45462427.06 0.0089 0.0078

Neptune 119760-05-30 23:00 G 45462652.34 45462652.46 45462652.62 0.0089 0.0069

Neptune 119761-01-11 11:14 G 45462877.84 45462877.97 45462878.16 0.0088 0.0060

Neptune 119761-08-25 00:12 G 45463103.34 45463103.51 45463103.69 0.0088 0.0050

Jupiter 119761-08-30 08:36 G 45463108.67 45463108.86 45463109.05 0.0539 0.0196

Neptune 119762-04-07 12:26 G 45463328.84 45463329.02 45463329.22 0.0088 0.0041

Neptune 119762-11-19 00:55 G 45463554.35 45463554.54 45463554.75 0.0088 0.0031

Uranus 119763-06-09 18:12 G 45463757.17 45463757.26 45463757.38 0.0136 0.0117

Neptune 119763-07-02 13:38 G 45463779.86 45463780.07 45463780.28 0.0088 0.0022

Uranus 119764-01-21 23:29 G 45463983.34 45463983.48 45463983.63 0.0136 0.0097

Neptune 119764-02-13 02:07 G 45464005.37 45464005.59 45464005.81 0.0088 0.0012

Uranus 119764-09-04 04:46 G 45464209.53 45464209.70 45464209.88 0.0136 0.0077

Neptune 119764-09-25 14:36 G 45464230.89 45464231.11 45464231.32 0.0088 0.0004

Uranus 119765-04-18 09:48 G 45464435.73 45464435.91 45464436.11 0.0136 0.0058

Neptune 119765-05-09 02:50 G 45464456.40 45464456.62 45464456.84 0.0088 0.0006

Uranus 119765-11-30 15:19 G 45464661.94 45464662.14 45464662.35 0.0136 0.0037

Neptune 119765-12-20 15:19 G 45464681.92 45464682.14 45464682.35 0.0088 0.0015

Uranus 119766-07-14 21:05 G 45464888.17 45464888.38 45464888.59 0.0137 0.0017

Neptune 119766-08-03 03:48 G 45464907.45 45464907.66 45464907.87 0.0088 0.0025

Uranus 119767-02-26 02:36 G 45465114.40 45465114.61 45465114.83 0.0137 0.0004

Neptune 119767-03-16 16:02 G 45465132.98 45465133.17 45465133.38 0.0088 0.0034

Jupiter 119767-07-02 04:31 G 45465240.55 45465240.69 45465240.84 0.0486 0.0344

Uranus 119767-10-10 08:22 G 45465340.64 45465340.85 45465341.06 0.0137 0.0025

Neptune 119767-10-28 04:31 G 45465358.51 45465358.69 45465358.89 0.0088 0.0043

Uranus 119768-05-23 14:22 G 45465566.90 45465567.10 45465567.30 0.0137 0.0045

Neptune 119768-06-09 17:00 G 45465584.04 45465584.21 45465584.39 0.0088 0.0053

Saturn 119768-09-19 17:14 G 45465686.01 45465686.22 45465686.44 0.0281 0.0032

Uranus 119769-01-04 20:07 G 45465793.16 45465793.34 45465793.54 0.0137 0.0066

Neptune 119769-01-21 05:00 G 45465809.58 45465809.71 45465809.89 0.0088 0.0063

Uranus 119769-08-19 02:07 G 45466019.44 45466019.59 45466019.77 0.0137 0.0088

Neptune 119769-09-03 17:43 G 45466035.13 45466035.24 45466035.39 0.0088 0.0071

Uranus 119770-04-02 08:36 G 45466245.74 45466245.86 45466246.00 0.0137 0.0108

Neptune 119770-04-17 06:12 G 45466260.69 45466260.76 45466260.87 0.0088 0.0080

Uranus 119770-11-14 14:50 G 45466472.07 45466472.12 45466472.21 0.0137 0.0129

Jupiter 119773-05-04 19:10 G 45467374.11 45467374.30 45467374.49 0.0541 0.0175

Jupiter 119779-10-29 08:36 G 45469742.72 45469742.86 45469743.01 0.0490 0.0341

Saturn 119783-10-13 23:29 G 45471188.27 45471188.48 45471188.69 0.0277 0.0033

Jupiter 119785-01-07 08:50 G 45471639.84 45471639.87 45471639.91 0.0543 0.0531

Mars 119790-12-18 06:26 G 45473810.61 45473810.77 45473810.93 0.1661 0.0572

Jupiter 119791-07-04 11:00 G 45474008.76 45474008.96 45474009.17 0.0488 0.0074

Mars 119795-07-28 21:05 G 45475494.27 45475494.38 45475494.49 0.1871 0.1453

Jupiter 119797-05-08 02:22 G 45476143.47 45476143.60 45476143.74 0.0539 0.0404

Saturn 119798-04-01 18:55 G 45476472.08 45476472.29 45476472.50 0.0281 0.0068

Jupiter 119803-03-10 14:50 G 45478274.93 45478275.12 45478275.31 0.0487 0.0188

Uranus 119804-05-09 01:38 G 45478700.54 45478700.57 45478700.64 0.0142 0.0138

Uranus 119804-12-21 14:22 G 45478926.98 45478927.10 45478927.24 0.0142 0.0114

Uranus 119805-08-05 02:36 G 45479153.45 45479153.61 45479153.79 0.0142 0.0090

Uranus 119806-03-19 14:50 G 45479379.92 45479380.12 45479380.31 0.0142 0.0066

Uranus 119806-11-01 02:22 G 45479606.40 45479606.60 45479606.83 0.0142 0.0043

Uranus 119807-06-15 14:22 G 45479832.89 45479833.10 45479833.33 0.0142 0.0018

Uranus 119808-01-28 02:07 G 45480059.37 45480059.59 45480059.82 0.0141 0.0007

Uranus 119808-09-10 13:24 G 45480285.85 45480286.06 45480286.29 0.0141 0.0031

Jupiter 119809-01-11 16:31 G 45480408.99 45480409.19 45480409.39 0.0540 0.0049

Uranus 119809-04-25 00:55 G 45480512.34 45480512.54 45480512.75 0.0141 0.0053

Uranus 119809-12-07 11:58 G 45480738.82 45480739.00 45480739.20 0.0141 0.0077

Uranus 119810-07-21 23:00 G 45480965.31 45480965.46 45480965.62 0.0141 0.0100

Pluto 119810-09-12 23:14 G 45481018.36 45481018.47 45481018.60 0.0062 0.0052

Uranus 119811-03-05 09:34 G 45481191.81 45481191.90 45481192.03 0.0141 0.0123

Pluto 119811-04-26 02:22 G 45481243.41 45481243.60 45481243.82 0.0062 0.0018

Pluto 119811-12-07 05:29 G 45481468.54 45481468.73 45481468.95 0.0063 0.0018

Pluto 119812-07-19 08:22 G 45481693.76 45481693.85 45481693.99 0.0063 0.0053

Saturn 119812-09-08 16:46 G 45481745.15 45481745.20 45481745.27 0.0277 0.0263

Saturn 119813-04-25 23:00 G 45481974.25 45481974.46 45481974.66 0.0278 0.0064

Jupiter 119814-11-13 18:12 G 45482541.19 45482541.26 45482541.34 0.0486 0.0449

Jupiter 119820-09-16 05:14 G 45484674.56 45484674.72 45484674.89 0.0542 0.0312

Saturn 119827-02-26 05:58 G 45487028.65 45487028.75 45487028.87 0.0282 0.0243

Jupiter 119827-03-12 22:31 G 45487043.26 45487043.44 45487043.62 0.0489 0.0234

Saturn 119827-10-13 23:43 G 45487258.29 45487258.49 45487258.69 0.0281 0.0114

Jupiter 119838-11-16 01:53 G 45491309.37 45491309.58 45491309.79 0.0488 0.0030

Saturn 119842-03-22 00:41 G 45492531.40 45492531.53 45492531.68 0.0277 0.0208

Saturn 119842-11-06 06:55 G 45492760.60 45492760.79 45492760.98 0.0277 0.0119

Neptune 119843-03-02 03:34 G 45492876.57 45492876.65 45492876.76 0.0089 0.0080

Neptune 119843-10-13 17:00 G 45493102.10 45493102.21 45493102.37 0.0089 0.0071

Neptune 119844-05-26 06:41 G 45493327.64 45493327.78 45493327.96 0.0089 0.0061

Jupiter 119844-09-19 07:24 G 45493443.64 45493443.81 45493443.99 0.0540 0.0247

Neptune 119845-01-06 20:50 G 45493553.19 45493553.37 45493553.55 0.0089 0.0051

Neptune 119845-08-20 10:02 G 45493778.74 45493778.92 45493779.13 0.0089 0.0042

Neptune 119846-04-02 23:43 G 45494004.29 45494004.49 45494004.71 0.0089 0.0032

Neptune 119846-11-14 13:24 G 45494229.85 45494230.06 45494230.28 0.0089 0.0022

Uranus 119847-02-08 04:31 G 45494315.61 45494315.69 45494315.77 0.0136 0.0125

Neptune 119847-06-28 03:05 G 45494455.41 45494455.63 45494455.85 0.0089 0.0013

Uranus 119847-09-22 09:19 G 45494541.77 45494541.89 45494542.04 0.0136 0.0106

Neptune 119848-02-08 16:46 G 45494680.98 45494681.20 45494681.43 0.0089 0.0003

Uranus 119848-05-05 14:36 G 45494767.96 45494768.11 45494768.29 0.0136 0.0086

Neptune 119848-09-21 06:26 G 45494906.55 45494906.77 45494906.99 0.0089 0.0007

Uranus 119848-12-17 20:07 G 45494994.16 45494994.34 45494994.53 0.0136 0.0066

Neptune 119849-05-04 19:53 G 45495132.12 45495132.33 45495132.55 0.0089 0.0017

Uranus 119849-08-01 01:24 G 45495220.36 45495220.56 45495220.77 0.0136 0.0045

Neptune 119849-12-16 09:34 G 45495357.69 45495357.90 45495358.11 0.0089 0.0027

Uranus 119850-03-15 06:55 G 45495446.58 45495446.79 45495447.00 0.0137 0.0025

Jupiter 119850-07-22 04:17 G 45495575.52 45495575.68 45495575.85 0.0486 0.0295

Neptune 119850-07-29 23:00 G 45495583.27 45495583.46 45495583.67 0.0089 0.0036

Uranus 119850-10-27 12:26 G 45495672.81 45495673.02 45495673.24 0.0137 0.0005

Neptune 119851-03-12 12:26 G 45495808.85 45495809.02 45495809.22 0.0089 0.0046

Uranus 119851-06-10 18:12 G 45495899.05 45495899.26 45495899.48 0.0137 0.0017

Neptune 119851-10-24 01:53 G 45496034.43 45496034.58 45496034.77 0.0089 0.0056

Uranus 119852-01-23 00:12 G 45496125.30 45496125.51 45496125.72 0.0137 0.0037

Neptune 119852-06-05 15:34 G 45496260.01 45496260.15 45496260.31 0.0089 0.0065

Uranus 119852-09-05 05:58 G 45496351.56 45496351.75 45496351.95 0.0137 0.0058

Neptune 119853-01-17 05:00 G 45496485.61 45496485.71 45496485.85 0.0089 0.0075

Uranus 119853-04-19 11:58 G 45496577.84 45496578.00 45496578.19 0.0137 0.0079

Neptune 119853-08-30 18:41 G 45496711.22 45496711.28 45496711.36 0.0089 0.0085

Uranus 119853-12-01 18:12 G 45496804.13 45496804.26 45496804.42 0.0137 0.0100

Uranus 119854-07-16 00:55 G 45497030.45 45497030.54 45497030.65 0.0137 0.0121

Jupiter 119856-05-24 22:31 G 45497709.24 45497709.44 45497709.64 0.0541 0.0105

Saturn 119856-09-07 09:05 G 45497814.74 45497814.88 45497815.04 0.0282 0.0202

Mars 119856-10-15 18:26 G 45497853.13 45497853.27 45497853.42 0.1658 0.0840

Saturn 119857-04-25 02:22 G 45498044.42 45498044.60 45498044.78 0.0281 0.0153

Mars 119861-05-26 00:41 G 45499536.37 45499536.53 45499536.70 0.1876 0.0735

Moon 119862-04-04 02:07 G 45499849.44 45499849.59 45499849.74 0.2662 0.0406

Earth 119862-04-04 04:46 G 45499849.54 45499849.70 45499849.86 0.2656 0.0189 *

Jupiter 119862-11-18 08:07 G 45500077.72 45500077.84 45500077.97 0.0490 0.0390

Jupiter 119868-01-28 12:41 G 45501974.93 45501975.03 45501975.13 0.0542 0.0463

Saturn 119871-10-02 00:12 G 45503317.36 45503317.51 45503317.68 0.0277 0.0178

Saturn 119872-05-18 06:26 G 45503546.60 45503546.77 45503546.95 0.0278 0.0150

Jupiter 119874-07-24 11:43 G 45504343.79 45504343.99 45504344.19 0.0489 0.0125

Jupiter 119880-05-28 03:19 G 45506478.55 45506478.64 45506478.75 0.0538 0.0462

Saturn 119886-03-20 13:24 G 45508600.88 45508601.06 45508601.24 0.0282 0.0158

Jupiter 119886-03-29 15:34 G 45508609.95 45508610.15 45508610.35 0.0487 0.0137

Saturn 119886-11-05 06:41 G 45508830.63 45508830.78 45508830.93 0.0281 0.0197

Uranus 119888-08-20 19:38 G 45509485.24 45509485.32 45509485.45 0.0142 0.0125

Mars 119888-10-14 13:24 G 45509539.98 45509540.06 45509540.15 0.1668 0.1429

Uranus 119889-04-04 08:07 G 45509711.70 45509711.84 45509712.01 0.0142 0.0101

Uranus 119889-11-16 20:22 G 45509938.17 45509938.35 45509938.55 0.0142 0.0077

Uranus 119890-07-01 08:22 G 45510164.65 45510164.85 45510165.07 0.0142 0.0053

Uranus 119891-02-12 20:22 G 45510391.14 45510391.35 45510391.57 0.0142 0.0028

Uranus 119891-09-27 08:07 G 45510617.62 45510617.84 45510618.06 0.0141 0.0004

Jupiter 119892-01-31 13:38 G 45510743.88 45510744.07 45510744.27 0.0540 0.0094

Uranus 119892-05-10 19:38 G 45510844.10 45510844.32 45510844.54 0.0141 0.0020

Uranus 119892-12-23 07:10 G 45511070.60 45511070.80 45511071.02 0.0141 0.0044

Uranus 119893-08-06 18:26 G 45511297.08 45511297.27 45511297.47 0.0141 0.0067

Uranus 119894-03-21 05:14 G 45511523.57 45511523.72 45511523.91 0.0141 0.0091

Uranus 119894-11-02 16:17 G 45511750.06 45511750.18 45511750.32 0.0141 0.0114

Uranus 119895-06-17 03:19 G 45511976.59 45511976.64 45511976.70 0.0140 0.0136

Jupiter 119897-12-02 19:10 G 45512876.18 45512876.30 45512876.42 0.0486 0.0397

Saturn 119901-04-14 08:36 G 45514103.67 45514103.86 45514104.05 0.0277 0.0121

Saturn 119901-11-29 14:50 G 45514332.99 45514333.12 45514333.26 0.0278 0.0207

Pluto 119902-01-19 14:50 G 45514383.97 45514384.12 45514384.31 0.0082 0.0054

Pluto 119902-09-02 02:36 G 45514609.41 45514609.61 45514609.84 0.0081 0.0027

Jupiter 119903-10-07 03:05 G 45515009.46 45515009.63 45515009.80 0.0542 0.0266

Jupiter 119910-04-01 21:34 G 45517378.23 45517378.40 45517378.56 0.0489 0.0280

Saturn 119915-10-01 17:43 G 45519387.05 45519387.24 45519387.45 0.0282 0.0113

Saturn 119916-05-18 10:31 G 45519616.85 45519616.94 45519617.06 0.0281 0.0242

Jupiter 119921-12-06 00:55 G 45521644.33 45521644.54 45521644.75 0.0488 0.0017

Mars 119922-08-14 05:58 G 45521895.63 45521895.75 45521895.88 0.1655 0.1118

Neptune 119923-06-10 09:34 G 45522195.89 45522195.90 45522195.94 0.0089 0.0088

Neptune 119924-01-21 21:48 G 45522421.33 45522421.41 45522421.52 0.0089 0.0079

Neptune 119924-09-03 10:02 G 45522646.81 45522646.92 45522647.07 0.0089 0.0070

Neptune 119925-04-16 22:17 G 45522872.29 45522872.43 45522872.61 0.0089 0.0061

Neptune 119925-11-28 10:46 G 45523097.79 45523097.95 45523098.14 0.0088 0.0052

Neptune 119926-07-11 23:43 G 45523323.30 45523323.49 45523323.68 0.0088 0.0042

Neptune 119927-02-22 11:58 G 45523548.81 45523549.00 45523549.21 0.0088 0.0033

Mars 119927-03-24 04:02 G 45523578.49 45523578.67 45523578.85 0.1880 0.0025

Neptune 119927-10-06 00:26 G 45523774.32 45523774.52 45523774.74 0.0088 0.0023

Jupiter 119927-10-10 10:31 G 45523778.78 45523778.94 45523779.11 0.0539 0.0314

Neptune 119928-05-18 12:55 G 45523999.83 45524000.04 45524000.26 0.0088 0.0014

Neptune 119928-12-30 01:24 G 45524225.34 45524225.56 45524225.78 0.0088 0.0004

Neptune 119929-08-12 13:53 G 45524450.87 45524451.08 45524451.30 0.0088 0.0005

Neptune 119930-03-26 02:22 G 45524676.39 45524676.60 45524676.82 0.0088 0.0014

Uranus 119930-10-09 14:36 G 45524874.08 45524874.11 45524874.15 0.0136 0.0133

Saturn 119930-10-25 08:36 G 45524889.66 45524889.86 45524890.06 0.0277 0.0090

Neptune 119930-11-06 14:50 G 45524901.91 45524902.12 45524902.33 0.0088 0.0024

Uranus 119931-05-23 19:24 G 45525100.21 45525100.31 45525100.44 0.0136 0.0114

Saturn 119931-06-11 15:05 G 45525119.03 45525119.13 45525119.23 0.0278 0.0239

Neptune 119931-06-20 03:05 G 45525127.44 45525127.63 45525127.84 0.0088 0.0033

Uranus 119932-01-05 00:41 G 45525326.39 45525326.53 45525326.69 0.0136 0.0094

Neptune 119932-01-31 15:34 G 45525352.97 45525353.15 45525353.35 0.0088 0.0042

Uranus 119932-08-18 05:58 G 45525552.58 45525552.75 45525552.94 0.0136 0.0074

Neptune 119932-09-13 04:02 G 45525578.50 45525578.67 45525578.86 0.0088 0.0052

Uranus 119933-04-01 11:29 G 45525778.78 45525778.98 45525779.17 0.0136 0.0054

Neptune 119933-04-26 16:17 G 45525804.04 45525804.18 45525804.36 0.0088 0.0061

Jupiter 119933-08-11 04:17 G 45525910.51 45525910.68 45525910.86 0.0487 0.0247

Uranus 119933-11-13 16:46 G 45526005.00 45526005.20 45526005.41 0.0136 0.0033

Neptune 119933-12-08 04:46 G 45526029.59 45526029.70 45526029.85 0.0088 0.0070

Uranus 119934-06-27 22:31 G 45526231.23 45526231.44 45526231.65 0.0137 0.0013

Neptune 119934-07-21 17:29 G 45526255.15 45526255.23 45526255.34 0.0088 0.0079

Uranus 119935-02-09 04:02 G 45526457.46 45526457.67 45526457.89 0.0137 0.0009

Uranus 119935-09-23 09:48 G 45526683.71 45526683.91 45526684.12 0.0137 0.0029

Uranus 119936-05-06 15:48 G 45526909.96 45526910.16 45526910.36 0.0137 0.0050

Uranus 119936-12-18 21:48 G 45527136.23 45527136.41 45527136.60 0.0137 0.0071

Uranus 119937-08-02 04:02 G 45527362.52 45527362.67 45527362.84 0.0137 0.0092

Uranus 119938-03-16 10:17 G 45527588.83 45527588.93 45527589.07 0.0137 0.0113

Uranus 119938-10-28 17:00 G 45527815.17 45527815.21 45527815.26 0.0137 0.0134

Jupiter 119939-06-14 23:43 G 45528044.29 45528044.49 45528044.69 0.0541 0.0046

Saturn 119945-04-12 21:34 G 45530173.19 45530173.40 45530173.61 0.0281 0.0070

Jupiter 119945-12-08 08:50 G 45530412.78 45530412.87 45530412.96 0.0490 0.0441

Jupiter 119951-02-17 09:19 G 45532309.77 45532309.89 45532310.01 0.0542 0.0421

Mars 119954-08-13 00:41 G 45533582.40 45533582.53 45533582.65 0.1665 0.1126

Jupiter 119957-08-13 11:58 G 45534678.81 45534679.00 45534679.20 0.0488 0.0176

Saturn 119960-05-06 17:29 G 45535676.02 45535676.23 45535676.43 0.0277 0.0032

Jupiter 119963-06-18 00:41 G 45536813.47 45536813.53 45536813.59 0.0538 0.0507

Jupiter 119969-04-18 13:53 G 45538944.88 45538945.08 45538945.29 0.0487 0.0094

Uranus 119972-04-21 01:10 G 45540043.50 45540043.55 45540043.63 0.0142 0.0135

Uranus 119972-12-03 13:38 G 45540269.95 45540270.07 45540270.22 0.0142 0.0111

Uranus 119973-07-18 01:53 G 45540496.42 45540496.58 45540496.77 0.0142 0.0087

Uranus 119974-03-01 13:53 G 45540722.89 45540723.08 45540723.29 0.0142 0.0063

Uranus 119974-10-14 01:53 G 45540949.37 45540949.58 45540949.80 0.0142 0.0039

Saturn 119974-10-24 03:48 G 45540959.44 45540959.66 45540959.87 0.0281 0.0020

Jupiter 119975-02-20 15:34 G 45541078.96 45541079.15 45541079.35 0.0540 0.0157

Uranus 119975-05-28 13:53 G 45541175.86 45541176.08 45541176.30 0.0141 0.0014

Uranus 119976-01-10 01:38 G 45541402.35 45541402.57 45541402.79 0.0141 0.0010

Uranus 119976-08-23 12:55 G 45541628.83 45541629.04 45541629.26 0.0141 0.0034

Uranus 119977-04-07 00:12 G 45541855.32 45541855.51 45541855.72 0.0141 0.0058

Uranus 119977-11-19 11:43 G 45542081.81 45542081.99 45542082.17 0.0141 0.0081

Uranus 119978-07-03 22:17 G 45542308.30 45542308.43 45542308.60 0.0141 0.0105

Uranus 119979-02-15 09:19 G 45542534.82 45542534.89 45542535.00 0.0141 0.0128

Jupiter 119980-12-22 17:29 G 45543211.09 45543211.23 45543211.37 0.0486 0.0354

Jupiter 119986-10-26 05:43 G 45545344.56 45545344.74 45545344.93 0.0542 0.0201

Mars 119988-06-10 17:58 G 45545938.16 45545938.25 45545938.34 0.1652 0.1387

Saturn 119989-11-16 17:43 G 45546462.03 45546462.24 45546462.45 0.0277 0.0001

Moon 119991-09-30 18:26 G 45547145.10 45547145.27 45547145.43 0.2671 0.0058

Earth 119991-09-30 20:07 G 45547145.19 45547145.34 45547145.50 0.2678 0.0115 *

Mars 119993-01-18 07:10 G 45547620.64 45547620.80 45547620.96 0.1885 0.0784

Jupiter 119993-04-20 20:50 G 45547713.23 45547713.37 45547713.53 0.0490 0.0329

121ST MILLENNIUM CE

This is a list of transits of Venus in the 121st millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Saturn 120004-05-05 07:24 G 45551745.59 45551745.81 45551746.02 0.0281 0.0022

Jupiter 120004-12-25 00:55 G 45551979.34 45551979.54 45551979.75 0.0488 0.0066

Neptune 120007-06-04 13:53 G 45552871.00 45552871.08 45552871.18 0.0089 0.0081

Neptune 120008-01-16 03:19 G 45553096.53 45553096.64 45553096.80 0.0089 0.0072

Neptune 120008-08-28 17:14 G 45553322.08 45553322.22 45553322.39 0.0089 0.0062

Neptune 120009-04-11 07:10 G 45553547.62 45553547.80 45553547.98 0.0089 0.0052

Neptune 120009-11-22 20:22 G 45553773.17 45553773.35 45553773.56 0.0089 0.0043

Neptune 120010-07-06 10:17 G 45553998.73 45553998.93 45553999.14 0.0089 0.0033

Jupiter 120010-10-29 06:41 G 45554113.63 45554113.78 45554113.93 0.0539 0.0354

Neptune 120011-02-16 23:58 G 45554224.29 45554224.50 45554224.72 0.0089 0.0023

Neptune 120011-09-30 13:24 G 45554449.85 45554450.06 45554450.29 0.0089 0.0014

Neptune 120012-05-13 03:19 G 45554675.41 45554675.64 45554675.86 0.0089 0.0004

Neptune 120012-12-24 16:46 G 45554900.98 45554901.20 45554901.43 0.0089 0.0006

Neptune 120013-08-07 06:12 G 45555126.55 45555126.76 45555126.99 0.0089 0.0016

Neptune 120014-03-20 20:07 G 45555352.12 45555352.34 45555352.55 0.0089 0.0026

Neptune 120014-11-01 09:19 G 45555577.70 45555577.89 45555578.10 0.0089 0.0035

Uranus 120015-01-21 05:14 G 45555658.64 45555658.72 45555658.83 0.0136 0.0122

Neptune 120015-06-14 22:46 G 45555803.27 45555803.45 45555803.66 0.0089 0.0045

Uranus 120015-09-04 10:31 G 45555884.81 45555884.94 45555885.08 0.0136 0.0102

Neptune 120016-01-26 12:12 G 45556028.86 45556029.01 45556029.21 0.0089 0.0056

Uranus 120016-04-17 15:34 G 45556110.99 45556111.15 45556111.33 0.0136 0.0083

Jupiter 120016-08-30 04:17 G 45556245.49 45556245.68 45556245.87 0.0487 0.0198

Neptune 120016-09-08 02:07 G 45556254.45 45556254.59 45556254.75 0.0089 0.0064

Uranus 120016-11-29 20:50 G 45556337.19 45556337.37 45556337.57 0.0136 0.0062

Neptune 120017-04-21 15:19 G 45556480.04 45556480.14 45556480.29 0.0089 0.0074

Uranus 120017-07-14 02:22 G 45556563.40 45556563.60 45556563.81 0.0136 0.0042

Neptune 120017-12-03 05:00 G 45556705.65 45556705.71 45556705.80 0.0089 0.0084

Uranus 120018-02-25 07:53 G 45556789.62 45556789.83 45556790.05 0.0136 0.0021

Uranus 120018-10-09 13:38 G 45557015.85 45557016.07 45557016.28 0.0137 0.0001

Saturn 120018-10-12 20:50 G 45557019.32 45557019.37 45557019.43 0.0277 0.0266

Uranus 120019-05-23 19:24 G 45557242.10 45557242.31 45557242.52 0.0137 0.0021

Saturn 120019-05-30 02:50 G 45557248.42 45557248.62 45557248.83 0.0278 0.0060

Uranus 120020-01-05 01:10 G 45557468.35 45557468.55 45557468.76 0.0137 0.0042

Mars 120020-06-09 12:26 G 45557624.87 45557625.02 45557625.17 0.1662 0.0845

Uranus 120020-08-18 07:10 G 45557694.62 45557694.80 45557695.00 0.0137 0.0063

Uranus 120021-04-01 13:24 G 45557920.90 45557921.06 45557921.23 0.0137 0.0084

Uranus 120021-11-13 19:38 G 45558147.19 45558147.32 45558147.47 0.0137 0.0105

Uranus 120022-06-28 02:07 G 45558373.52 45558373.59 45558373.69 0.0137 0.0127

Jupiter 120022-07-03 19:38 G 45558379.12 45558379.32 45558379.52 0.0541 0.0005

Jupiter 120028-05-05 06:12 G 45560511.70 45560511.76 45560511.81 0.0485 0.0465

Jupiter 120028-12-27 06:12 G 45560747.73 45560747.76 45560747.80 0.0490 0.0482

Saturn 120033-03-30 21:19 G 45562302.37 45562302.39 45562302.42 0.0282 0.0279

Saturn 120033-11-15 14:50 G 45562531.92 45562532.12 45562532.33 0.0281 0.0078

Jupiter 120034-03-08 10:02 G 45562644.77 45562644.92 45562645.07 0.0543 0.0364

Jupiter 120040-09-01 09:34 G 45565013.71 45565013.90 45565014.08 0.0489 0.0217

Saturn 120048-04-23 21:48 G 45567805.31 45567805.41 45567805.54 0.0277 0.0231

Saturn 120048-12-09 04:02 G 45568034.47 45568034.67 45568034.87 0.0278 0.0096

Jupiter 120052-05-07 12:41 G 45569279.82 45569280.03 45569280.23 0.0487 0.0049

Mars 120054-04-08 05:58 G 45569980.75 45569980.75 45569980.76 0.1649 0.1648

Uranus 120056-08-02 19:10 G 45570828.19 45570828.30 45570828.42 0.0142 0.0121

Uranus 120057-03-17 07:24 G 45571054.66 45571054.81 45571054.98 0.0142 0.0097

Uranus 120057-10-29 19:24 G 45571281.13 45571281.31 45571281.51 0.0142 0.0073

Jupiter 120058-03-11 15:48 G 45571413.98 45571414.16 45571414.35 0.0540 0.0213

Uranus 120058-06-13 07:24 G 45571507.61 45571507.81 45571508.03 0.0142 0.0049

Pluto 120058-08-17 15:34 G 45571572.97 45571573.15 45571573.36 0.0062 0.0028

Mars 120058-11-15 09:34 G 45571662.81 45571662.90 45571663.00 0.1889 0.1600

Uranus 120059-01-25 19:24 G 45571734.10 45571734.31 45571734.54 0.0141 0.0025

Pluto 120059-03-30 18:55 G 45571798.08 45571798.29 45571798.51 0.0063 0.0007

Uranus 120059-09-09 07:24 G 45571960.59 45571960.81 45571961.03 0.0141 0.0001

Pluto 120059-11-10 22:17 G 45572023.27 45572023.43 45572023.59 0.0063 0.0041

Uranus 120060-04-22 18:55 G 45572187.07 45572187.29 45572187.51 0.0141 0.0024

Uranus 120060-12-05 06:26 G 45572413.57 45572413.77 45572413.98 0.0141 0.0048

Uranus 120061-07-19 17:43 G 45572640.06 45572640.24 45572640.44 0.0141 0.0072

Uranus 120062-03-03 04:46 G 45572866.55 45572866.70 45572866.87 0.0141 0.0096

Saturn 120062-10-11 00:41 G 45573088.42 45573088.53 45573088.65 0.0282 0.0238

Uranus 120062-10-15 15:48 G 45573093.05 45573093.16 45573093.29 0.0141 0.0119

Saturn 120063-05-28 18:12 G 45573318.07 45573318.26 45573318.46 0.0281 0.0119

Jupiter 120064-01-11 16:31 G 45573546.04 45573546.19 45573546.36 0.0486 0.0309

Jupiter 120069-11-14 01:24 G 45575679.37 45575679.56 45575679.76 0.0541 0.0162

Jupiter 120076-05-09 20:07 G 45578048.21 45578048.34 45578048.47 0.0490 0.0376

Saturn 120077-11-04 06:41 G 45578591.62 45578591.78 45578591.95 0.0277 0.0173

Saturn 120078-06-21 13:10 G 45578820.88 45578821.05 45578821.22 0.0278 0.0155

Jupiter 120081-07-19 13:53 G 45579945.04 45579945.08 45579945.13 0.0543 0.0526

Mars 120086-04-06 23:58 G 45581667.34 45581667.50 45581667.66 0.1659 0.0558

Jupiter 120088-01-13 21:48 G 45582314.21 45582314.41 45582314.61 0.0488 0.0104

Neptune 120088-04-24 09:19 G 45582415.82 45582415.89 45582416.00 0.0089 0.0080

Neptune 120088-12-05 21:34 G 45582641.29 45582641.40 45582641.55 0.0089 0.0071

Neptune 120089-07-19 10:02 G 45582866.78 45582866.92 45582867.10 0.0089 0.0062

Neptune 120090-03-01 22:17 G 45583092.28 45583092.43 45583092.63 0.0089 0.0053

Neptune 120090-10-13 11:00 G 45583317.78 45583317.96 45583318.16 0.0088 0.0043

Neptune 120091-05-26 23:14 G 45583543.28 45583543.47 45583543.68 0.0088 0.0034

Neptune 120092-01-07 11:43 G 45583768.79 45583768.99 45583769.21 0.0088 0.0024

Saturn 120092-04-22 10:31 G 45583874.77 45583874.94 45583875.11 0.0282 0.0176

Neptune 120092-08-20 00:26 G 45583994.30 45583994.52 45583994.73 0.0088 0.0015

Saturn 120092-12-08 03:34 G 45584104.49 45584104.65 45584104.82 0.0281 0.0180

Neptune 120093-04-02 12:41 G 45584219.82 45584220.03 45584220.25 0.0088 0.0006

Neptune 120093-11-14 01:10 G 45584445.33 45584445.55 45584445.77 0.0088 0.0004

Jupiter 120093-11-17 06:41 G 45584448.65 45584448.78 45584448.91 0.0539 0.0410

Neptune 120094-06-27 13:38 G 45584670.86 45584671.07 45584671.29 0.0088 0.0013

Neptune 120095-02-08 02:07 G 45584896.38 45584896.59 45584896.80 0.0088 0.0023

Neptune 120095-09-21 14:22 G 45585121.91 45585122.10 45585122.31 0.0088 0.0032

Neptune 120096-05-04 02:50 G 45585347.44 45585347.62 45585347.82 0.0088 0.0041

Neptune 120096-12-15 15:19 G 45585572.97 45585573.14 45585573.33 0.0088 0.0051

Neptune 120097-07-29 04:02 G 45585798.51 45585798.67 45585798.83 0.0088 0.0060

Neptune 120098-03-11 16:02 G 45586024.06 45586024.17 45586024.33 0.0088 0.0069

Uranus 120098-09-20 15:19 G 45586217.09 45586217.14 45586217.20 0.0136 0.0130

Neptune 120098-10-23 04:31 G 45586249.61 45586249.69 45586249.81 0.0088 0.0078

Uranus 120099-05-04 20:07 G 45586443.23 45586443.34 45586443.48 0.0136 0.0111

Neptune 120099-06-05 17:00 G 45586475.20 45586475.21 45586475.26 0.0088 0.0088

Jupiter 120099-09-19 00:55 G 45586580.35 45586580.54 45586580.74 0.0487 0.0161

Uranus 120099-12-17 01:10 G 45586669.41 45586669.55 45586669.73 0.0136 0.0091

Uranus 120100-07-31 06:41 G 45586895.61 45586895.78 45586895.97 0.0136 0.0070

Uranus 120101-03-14 11:58 G 45587121.81 45587122.00 45587122.21 0.0136 0.0050

Uranus 120101-10-26 17:29 G 45587348.03 45587348.23 45587348.44 0.0136 0.0029

Uranus 120102-06-09 23:14 G 45587574.26 45587574.47 45587574.69 0.0137 0.0009

Uranus 120103-01-22 05:00 G 45587800.50 45587800.71 45587800.92 0.0137 0.0013

Uranus 120103-09-05 10:46 G 45588026.75 45588026.95 45588027.16 0.0137 0.0034

Uranus 120104-04-18 16:46 G 45588253.01 45588253.20 45588253.40 0.0137 0.0055

Uranus 120104-11-30 22:46 G 45588479.28 45588479.45 45588479.63 0.0137 0.0076

Moon 120105-04-05 23:43 G 45588605.32 45588605.49 45588605.66 0.2651 0.0203

Earth 120105-04-06 04:31 G 45588605.53 45588605.69 45588605.85 0.2655 0.0048 *

Uranus 120105-07-15 05:14 G 45588705.57 45588705.72 45588705.87 0.0137 0.0097

Jupiter 120105-07-23 21:05 G 45588714.18 45588714.38 45588714.58 0.0541 0.0055

Uranus 120106-02-26 11:29 G 45588931.89 45588931.98 45588932.10 0.0137 0.0119

Saturn 120107-05-18 08:50 G 45589377.69 45589377.87 45589378.06 0.0277 0.0135

Saturn 120108-01-02 15:05 G 45589606.98 45589607.13 45589607.28 0.0278 0.0193

Jupiter 120111-05-26 03:48 G 45590846.57 45590846.66 45590846.77 0.0486 0.0424

Jupiter 120117-03-28 10:02 G 45592979.76 45592979.92 45592980.09 0.0542 0.0308

Saturn 120121-11-03 13:38 G 45594660.88 45594661.07 45594661.25 0.0281 0.0136

Saturn 120122-06-21 06:41 G 45594890.65 45594890.78 45594890.92 0.0281 0.0219

Jupiter 120123-09-22 08:07 G 45595348.67 45595348.84 45595349.02 0.0489 0.0263

Jupiter 120135-05-28 11:14 G 45599614.76 45599614.97 45599615.17 0.0487 0.0008

Saturn 120136-11-27 17:29 G 45600164.03 45600164.23 45600164.43 0.0278 0.0077

Saturn 120137-07-14 23:58 G 45600393.43 45600393.50 45600393.60 0.0278 0.0254

Uranus 120140-04-03 00:12 G 45601386.44 45601386.51 45601386.60 0.0142 0.0132

Uranus 120140-11-15 12:26 G 45601612.89 45601613.02 45601613.18 0.0142 0.0108

Jupiter 120141-03-31 10:31 G 45601748.76 45601748.94 45601749.12 0.0540 0.0248

Uranus 120141-06-30 00:41 G 45601839.37 45601839.53 45601839.73 0.0142 0.0084

Uranus 120142-02-11 12:55 G 45602065.85 45602066.04 45602066.25 0.0142 0.0059

Uranus 120142-09-26 00:55 G 45602292.33 45602292.54 45602292.76 0.0142 0.0034

Uranus 120143-05-10 12:55 G 45602518.82 45602519.04 45602519.26 0.0141 0.0010

Uranus 120143-12-23 00:41 G 45602745.31 45602745.53 45602745.75 0.0141 0.0014

Uranus 120144-08-05 11:58 G 45602971.80 45602972.00 45602972.23 0.0141 0.0039

Uranus 120145-03-19 23:29 G 45603198.29 45603198.48 45603198.69 0.0141 0.0063

Uranus 120145-11-01 10:46 G 45603424.78 45603424.95 45603425.13 0.0141 0.0086

Uranus 120146-06-15 21:48 G 45603651.28 45603651.41 45603651.56 0.0141 0.0110

Uranus 120147-01-28 08:50 G 45603877.81 45603877.87 45603877.95 0.0140 0.0133

Jupiter 120147-01-31 12:55 G 45603880.87 45603881.04 45603881.21 0.0486 0.0275

Pluto 120149-12-24 11:43 G 45604938.76 45604938.99 45604939.21 0.0081 0.0006

Pluto 120150-08-06 23:00 G 45605164.37 45605164.46 45605164.56 0.0081 0.0073

Saturn 120151-05-17 00:26 G 45605447.31 45605447.52 45605447.73 0.0281 0.0070

Mars 120152-02-03 11:43 G 45605709.82 45605709.99 45605710.16 0.1656 0.0280

Jupiter 120152-12-04 00:12 G 45606014.32 45606014.51 45606014.71 0.0542 0.0113

Jupiter 120159-05-30 16:02 G 45608383.07 45608383.17 45608383.29 0.0489 0.0411

Jupiter 120164-08-08 14:36 G 45610280.02 45610280.11 45610280.21 0.0543 0.0470

Saturn 120166-06-09 20:22 G 45610950.14 45610950.35 45610950.56 0.0277 0.0037

Jupiter 120171-02-02 19:10 G 45612649.11 45612649.30 45612649.50 0.0488 0.0144

Neptune 120171-09-06 23:43 G 45612865.43 45612865.49 45612865.59 0.0089 0.0083

Neptune 120172-04-19 13:38 G 45613090.96 45613091.07 45613091.21 0.0089 0.0073

Neptune 120172-12-01 03:34 G 45613316.50 45613316.65 45613316.81 0.0089 0.0063

Neptune 120173-07-14 17:00 G 45613542.05 45613542.21 45613542.40 0.0089 0.0054

Neptune 120174-02-25 06:41 G 45613767.60 45613767.78 45613767.99 0.0089 0.0044

Neptune 120174-10-08 20:36 G 45613993.16 45613993.36 45613993.57 0.0089 0.0034

Neptune 120175-05-22 10:17 G 45614218.72 45614218.93 45614219.15 0.0089 0.0024

Neptune 120176-01-02 23:58 G 45614444.29 45614444.50 45614444.72 0.0089 0.0015

Neptune 120176-08-15 13:38 G 45614669.85 45614670.07 45614670.29 0.0089 0.0005

Jupiter 120176-12-07 05:58 G 45614783.66 45614783.75 45614783.86 0.0539 0.0464

Neptune 120177-03-29 03:05 G 45614895.41 45614895.63 45614895.86 0.0089 0.0005

Neptune 120177-11-09 16:31 G 45615120.98 45615121.19 45615121.42 0.0089 0.0015

Neptune 120178-06-23 06:12 G 45615346.55 45615346.76 45615346.98 0.0089 0.0024

Neptune 120179-02-03 19:53 G 45615572.13 45615572.33 45615572.54 0.0089 0.0034

Neptune 120179-09-17 09:05 G 45615797.71 45615797.88 45615798.09 0.0089 0.0045

Neptune 120180-04-29 23:00 G 45616023.29 45616023.46 45616023.64 0.0089 0.0053

Saturn 120180-11-26 03:34 G 45616233.43 45616233.65 45616233.86 0.0281 0.0030

Neptune 120180-12-11 12:12 G 45616248.87 45616249.01 45616249.18 0.0089 0.0064

Neptune 120181-07-25 01:38 G 45616474.47 45616474.57 45616474.72 0.0089 0.0073

Neptune 120182-03-07 15:34 G 45616700.08 45616700.15 45616700.24 0.0089 0.0083

Jupiter 120182-10-08 23:00 G 45616915.26 45616915.46 45616915.66 0.0487 0.0118

Uranus 120183-01-03 05:58 G 45617001.66 45617001.75 45617001.86 0.0136 0.0119

Uranus 120183-08-17 11:00 G 45617227.82 45617227.96 45617228.11 0.0136 0.0099

Uranus 120184-03-30 16:02 G 45617454.01 45617454.17 45617454.36 0.0136 0.0079

Uranus 120184-11-11 21:34 G 45617680.21 45617680.40 45617680.60 0.0136 0.0059

Uranus 120185-06-26 03:19 G 45617906.43 45617906.64 45617906.84 0.0136 0.0038

Uranus 120186-02-07 08:50 G 45618132.66 45618132.87 45618133.08 0.0137 0.0017

Uranus 120186-09-21 14:22 G 45618358.89 45618359.10 45618359.32 0.0137 0.0005

Uranus 120187-05-05 20:07 G 45618585.13 45618585.34 45618585.55 0.0137 0.0026

Uranus 120187-12-18 01:53 G 45618811.39 45618811.58 45618811.79 0.0137 0.0047

Uranus 120188-07-31 08:07 G 45619037.66 45619037.84 45619038.03 0.0137 0.0068

Jupiter 120188-08-11 16:31 G 45619048.99 45619049.19 45619049.39 0.0540 0.0092

Uranus 120189-03-14 14:22 G 45619263.94 45619264.10 45619264.27 0.0137 0.0089

Uranus 120189-10-26 20:36 G 45619490.24 45619490.36 45619490.49 0.0137 0.0111

Uranus 120190-06-10 03:05 G 45619716.58 45619716.63 45619716.70 0.0137 0.0132

Jupiter 120194-06-14 01:53 G 45621181.46 45621181.58 45621181.71 0.0486 0.0383

Saturn 120195-12-21 04:31 G 45621736.48 45621736.69 45621736.90 0.0278 0.0020

Jupiter 120200-04-17 04:31 G 45623314.52 45623314.69 45623314.87 0.0542 0.0274

Jupiter 120206-10-12 03:48 G 45625683.50 45625683.66 45625683.82 0.0489 0.0295

Saturn 120210-06-09 15:05 G 45627019.92 45627020.13 45627020.35 0.0281 0.0038

Mars 120217-12-01 23:14 G 45629752.30 45629752.47 45629752.65 0.1653 0.0031

Jupiter 120218-06-17 06:55 G 45629949.58 45629949.79 45629949.99 0.0487 0.0029

Mars 120222-07-11 15:05 G 45631434.99 45631435.13 45631435.26 0.1883 0.1152

Jupiter 120224-04-20 10:46 G 45632083.79 45632083.95 45632084.12 0.0540 0.0304

Uranus 120224-07-16 17:58 G 45632171.14 45632171.25 45632171.38 0.0142 0.0118

Saturn 120224-11-16 01:53 G 45632293.53 45632293.58 45632293.66 0.0277 0.0263

Uranus 120225-02-28 06:12 G 45632397.60 45632397.76 45632397.93 0.0142 0.0094

Saturn 120225-07-03 08:07 G 45632522.64 45632522.84 45632523.05 0.0277 0.0063

Uranus 120225-10-12 18:12 G 45632624.08 45632624.26 45632624.47 0.0142 0.0070

Uranus 120226-05-27 06:26 G 45632850.56 45632850.77 45632850.99 0.0142 0.0045

Uranus 120227-01-08 18:26 G 45633077.06 45633077.27 45633077.50 0.0141 0.0021

Uranus 120227-08-23 06:26 G 45633303.54 45633303.77 45633303.99 0.0141 0.0005

Uranus 120228-04-05 17:58 G 45633530.03 45633530.25 45633530.47 0.0141 0.0029

Uranus 120228-11-18 05:14 G 45633756.53 45633756.72 45633756.94 0.0141 0.0053

Uranus 120229-07-02 16:46 G 45633983.02 45633983.20 45633983.39 0.0141 0.0077

Uranus 120230-02-14 03:48 G 45634209.52 45634209.66 45634209.83 0.0141 0.0101

Jupiter 120230-02-20 09:48 G 45634215.74 45634215.91 45634216.10 0.0486 0.0236

Uranus 120230-09-28 14:50 G 45634436.03 45634436.12 45634436.24 0.0141 0.0124

Earth 120234-10-02 22:46 G 45635901.30 45635901.45 45635901.61 0.2679 0.0072

Moon 120234-10-03 04:02 G 45635901.52 45635901.67 45635901.82 0.2680 0.0413 *

Jupiter 120235-12-25 00:12 G 45636349.31 45636349.51 45636349.71 0.0541 0.0057

Saturn 120239-05-04 23:29 G 45637576.48 45637576.48 45637576.51 0.0282 0.0281

Saturn 120239-12-20 17:43 G 45637806.03 45637806.24 45637806.45 0.0281 0.0076

Jupiter 120242-06-19 14:07 G 45638718.01 45638718.09 45638718.16 0.0490 0.0454

Jupiter 120247-08-29 10:46 G 45640614.84 45640614.95 45640615.08 0.0542 0.0431

Neptune 120252-07-28 21:05 G 45642410.31 45642410.38 45642410.49 0.0089 0.0081

Neptune 120253-03-11 09:19 G 45642635.79 45642635.89 45642636.04 0.0089 0.0072

Neptune 120253-10-22 21:34 G 45642861.27 45642861.40 45642861.58 0.0089 0.0063

Jupiter 120254-02-22 17:00 G 45642984.02 45642984.21 45642984.40 0.0488 0.0186

Saturn 120254-05-29 09:05 G 45643079.75 45643079.88 45643080.02 0.0278 0.0210

Neptune 120254-06-05 10:17 G 45643086.76 45643086.93 45643087.11 0.0089 0.0053

Saturn 120255-01-13 15:19 G 45643308.96 45643309.14 45643309.33 0.0278 0.0118

Neptune 120255-01-16 22:31 G 45643312.26 45643312.44 45643312.64 0.0088 0.0044

Neptune 120255-08-30 10:46 G 45643537.77 45643537.95 45643538.17 0.0088 0.0035

Neptune 120256-04-11 23:14 G 45643763.27 45643763.47 45643763.69 0.0088 0.0025

Neptune 120256-11-23 11:43 G 45643988.78 45643988.99 45643989.21 0.0088 0.0016

Neptune 120257-07-07 00:12 G 45644214.30 45644214.51 45644214.73 0.0088 0.0007

Neptune 120258-02-17 12:41 G 45644439.82 45644440.03 45644440.25 0.0088 0.0003

Neptune 120258-10-01 01:10 G 45644665.33 45644665.55 45644665.76 0.0088 0.0012

Neptune 120259-05-14 13:24 G 45644890.86 45644891.06 45644891.28 0.0088 0.0022

Neptune 120259-12-26 01:38 G 45645116.38 45645116.57 45645116.79 0.0088 0.0032

Jupiter 120259-12-28 00:41 G 45645118.46 45645118.53 45645118.61 0.0538 0.0497

Neptune 120260-08-07 14:22 G 45645341.92 45645342.10 45645342.31 0.0088 0.0041

Neptune 120261-03-21 03:05 G 45645567.45 45645567.63 45645567.81 0.0088 0.0050

Neptune 120261-11-01 15:05 G 45645792.99 45645793.13 45645793.31 0.0088 0.0059

Neptune 120262-06-15 03:34 G 45646018.53 45646018.65 45646018.81 0.0088 0.0069

Neptune 120263-01-26 16:17 G 45646244.09 45646244.18 45646244.30 0.0088 0.0077

Neptune 120263-09-09 05:00 G 45646469.68 45646469.71 45646469.75 0.0088 0.0087

Jupiter 120265-10-28 18:26 G 45647250.07 45647250.27 45647250.48 0.0487 0.0088

Uranus 120266-09-03 15:34 G 45647560.10 45647560.15 45647560.24 0.0136 0.0128

Uranus 120267-04-17 20:36 G 45647786.25 45647786.36 45647786.51 0.0136 0.0109

Uranus 120267-11-30 02:07 G 45648012.43 45648012.59 45648012.76 0.0136 0.0088

Uranus 120268-07-13 07:24 G 45648238.63 45648238.81 45648239.00 0.0136 0.0067

Saturn 120268-11-14 12:12 G 45648362.87 45648363.01 45648363.16 0.0282 0.0210

Uranus 120269-02-24 12:55 G 45648464.84 45648465.04 45648465.24 0.0136 0.0046

Saturn 120269-07-02 05:43 G 45648592.56 45648592.74 45648592.93 0.0281 0.0146

Uranus 120269-10-08 18:26 G 45648691.06 45648691.27 45648691.48 0.0136 0.0025

Uranus 120270-05-23 00:12 G 45648917.29 45648917.51 45648917.72 0.0137 0.0005

Uranus 120271-01-04 05:58 G 45649143.53 45649143.75 45649143.96 0.0137 0.0017

Uranus 120271-08-18 11:29 G 45649369.79 45649369.98 45649370.20 0.0137 0.0039

Jupiter 120271-09-01 14:07 G 45649383.90 45649384.09 45649384.29 0.0541 0.0137

Uranus 120272-03-31 17:29 G 45649596.05 45649596.23 45649596.43 0.0137 0.0060

Uranus 120272-11-12 23:29 G 45649822.32 45649822.48 45649822.66 0.0137 0.0081

Uranus 120273-06-27 05:58 G 45650048.62 45650048.75 45650048.90 0.0137 0.0103

Uranus 120274-02-08 12:26 G 45650274.93 45650275.02 45650275.11 0.0137 0.0124

Jupiter 120277-07-03 21:48 G 45651516.27 45651516.41 45651516.56 0.0486 0.0350

Jupiter 120283-05-07 04:17 G 45653649.50 45653649.68 45653649.87 0.0542 0.0222

Mars 120283-09-29 11:29 G 45653794.81 45653794.98 45653795.15 0.1651 0.0260

Saturn 120283-12-09 13:24 G 45653865.90 45653866.06 45653866.23 0.0277 0.0165

Saturn 120284-07-25 19:24 G 45654095.15 45654095.31 45654095.49 0.0277 0.0163

Mars 120288-05-07 18:41 G 45655477.10 45655477.28 45655477.45 0.1887 0.0406

Jupiter 120289-10-31 00:41 G 45656018.39 45656018.53 45656018.69 0.0489 0.0335

Saturn 120298-05-27 14:22 G 45659148.93 45659149.10 45659149.27 0.0282 0.0173

Saturn 120299-01-12 07:53 G 45659378.67 45659378.83 45659379.00 0.0281 0.0183

Jupiter 120301-07-07 04:31 G 45660284.49 45660284.69 45660284.89 0.0488 0.0070

Pluto 120305-12-11 02:22 G 45661902.47 45661902.60 45661902.74 0.0062 0.0049

Pluto 120306-07-24 05:29 G 45662127.52 45662127.73 45662127.94 0.0062 0.0015

Pluto 120307-03-06 08:36 G 45662352.66 45662352.86 45662353.07 0.0063 0.0020

Jupiter 120307-05-11 07:10 G 45662418.65 45662418.80 45662418.96 0.0539 0.0344

Pluto 120307-10-17 11:29 G 45662577.89 45662577.98 45662578.10 0.0063 0.0055

Uranus 120308-03-16 23:29 G 45662729.40 45662729.48 45662729.58 0.0142 0.0129

Uranus 120308-10-29 11:43 G 45662955.85 45662955.99 45662956.15 0.0142 0.0105

Uranus 120309-06-13 00:12 G 45663182.32 45663182.51 45663182.69 0.0142 0.0080

Uranus 120310-01-25 12:12 G 45663408.81 45663409.01 45663409.22 0.0142 0.0056

Uranus 120310-09-09 00:12 G 45663635.30 45663635.51 45663635.73 0.0141 0.0031

Uranus 120311-04-23 12:12 G 45663861.78 45663862.01 45663862.23 0.0141 0.0006

Uranus 120311-12-05 23:58 G 45664088.28 45664088.50 45664088.72 0.0141 0.0019

Uranus 120312-07-19 11:29 G 45664314.77 45664314.98 45664315.19 0.0141 0.0043

Uranus 120313-03-02 22:46 G 45664541.26 45664541.45 45664541.65 0.0141 0.0067

Jupiter 120313-03-12 07:24 G 45664550.63 45664550.81 45664551.01 0.0487 0.0197

Saturn 120313-06-21 19:38 G 45664652.13 45664652.32 45664652.51 0.0278 0.0114

Uranus 120313-10-15 10:02 G 45664767.76 45664767.92 45664768.09 0.0141 0.0091

Saturn 120314-02-06 01:53 G 45664881.46 45664881.58 45664881.72 0.0278 0.0215

Uranus 120314-05-29 20:50 G 45664994.26 45664994.37 45664994.52 0.0141 0.0115

Uranus 120315-01-11 08:07 G 45665220.81 45665220.84 45665220.89 0.0141 0.0138

Jupiter 120319-01-13 19:24 G 45666684.11 45666684.31 45666684.51 0.0541 0.0022

Jupiter 120324-11-15 09:34 G 45668816.85 45668816.90 45668816.96 0.0485 0.0464

Jupiter 120325-07-09 09:34 G 45669052.88 45669052.90 45669052.93 0.0490 0.0485

Saturn 120327-12-09 02:36 G 45669935.41 45669935.61 45669935.82 0.0282 0.0103

Saturn 120328-07-25 19:53 G 45670165.24 45670165.33 45670165.43 0.0281 0.0252

Jupiter 120330-09-18 07:53 G 45670949.69 45670949.83 45670949.97 0.0543 0.0390

Neptune 120335-12-11 10:02 G 45672859.87 45672859.92 45672860.02 0.0089 0.0084

Neptune 120336-07-23 23:58 G 45673085.40 45673085.50 45673085.64 0.0089 0.0074

Neptune 120337-03-06 13:53 G 45673310.94 45673311.08 45673311.25 0.0089 0.0064

Jupiter 120337-03-14 12:55 G 45673318.86 45673319.04 45673319.22 0.0488 0.0219

Neptune 120337-10-18 03:19 G 45673536.49 45673536.64 45673536.84 0.0089 0.0055

Neptune 120338-05-31 17:14 G 45673762.04 45673762.22 45673762.43 0.0089 0.0045

Neptune 120339-01-12 07:10 G 45673987.61 45673987.80 45673988.02 0.0089 0.0035

Neptune 120339-08-25 21:05 G 45674213.17 45674213.38 45674213.59 0.0089 0.0025

Neptune 120340-04-07 10:31 G 45674438.73 45674438.94 45674439.17 0.0089 0.0016

Neptune 120340-11-19 00:12 G 45674664.29 45674664.51 45674664.74 0.0089 0.0006

Neptune 120341-07-02 13:53 G 45674889.86 45674890.08 45674890.30 0.0089 0.0004

Neptune 120342-02-13 03:34 G 45675115.43 45675115.65 45675115.87 0.0089 0.0014

Neptune 120342-09-26 17:14 G 45675341.00 45675341.22 45675341.43 0.0089 0.0023

Saturn 120343-01-02 00:26 G 45675438.32 45675438.52 45675438.72 0.0277 0.0067

Neptune 120343-05-10 06:26 G 45675566.57 45675566.77 45675566.99 0.0089 0.0033

Saturn 120343-08-19 06:26 G 45675667.71 45675667.77 45675667.85 0.0278 0.0261

Neptune 120343-12-21 19:53 G 45675792.15 45675792.33 45675792.54 0.0089 0.0043

Neptune 120344-08-03 09:48 G 45676017.73 45676017.91 45676018.09 0.0089 0.0052

Neptune 120345-03-16 23:00 G 45676243.32 45676243.46 45676243.63 0.0089 0.0062

Neptune 120345-10-28 12:12 G 45676468.91 45676469.01 45676469.17 0.0089 0.0073

Neptune 120346-06-11 02:07 G 45676694.51 45676694.59 45676694.69 0.0089 0.0081

Earth 120348-04-08 04:02 G 45677361.51 45677361.67 45677361.83 0.2654 0.0126

Moon 120348-04-08 09:48 G 45677361.75 45677361.91 45677362.07 0.2655 0.0207 *

Jupiter 120348-11-17 15:34 G 45677584.95 45677585.15 45677585.36 0.0487 0.0049

Mars 120349-07-27 23:14 G 45677837.30 45677837.47 45677837.63 0.1648 0.0535

Uranus 120350-12-17 06:26 G 45678344.67 45678344.77 45678344.89 0.0136 0.0117

Uranus 120351-07-31 11:43 G 45678570.85 45678570.99 45678571.15 0.0136 0.0097

Uranus 120352-03-13 16:46 G 45678797.04 45678797.20 45678797.39 0.0136 0.0077

Uranus 120352-10-25 22:17 G 45679023.24 45679023.43 45679023.63 0.0136 0.0055

Uranus 120353-06-09 04:02 G 45679249.47 45679249.67 45679249.88 0.0136 0.0034

Uranus 120354-01-21 09:34 G 45679475.69 45679475.90 45679476.12 0.0137 0.0013

Mars 120354-03-05 21:19 G 45679519.22 45679519.39 45679519.56 0.1891 0.0387

Uranus 120354-09-04 15:19 G 45679701.93 45679702.14 45679702.35 0.0137 0.0008

Jupiter 120354-09-21 14:50 G 45679718.93 45679719.12 45679719.31 0.0540 0.0195

Uranus 120355-04-18 21:05 G 45679928.17 45679928.38 45679928.59 0.0137 0.0030

Uranus 120355-12-01 02:50 G 45680154.43 45680154.62 45680154.82 0.0137 0.0051

Uranus 120356-07-14 08:50 G 45680380.70 45680380.87 45680381.06 0.0137 0.0073

Uranus 120357-02-25 14:50 G 45680606.98 45680607.12 45680607.29 0.0137 0.0095

Saturn 120357-06-20 04:02 G 45680721.47 45680721.67 45680721.88 0.0282 0.0068

Uranus 120357-10-09 21:05 G 45680833.28 45680833.38 45680833.51 0.0137 0.0116

Uranus 120358-05-24 03:34 G 45681059.64 45681059.65 45681059.68 0.0138 0.0137

Jupiter 120360-07-23 19:24 G 45681851.16 45681851.31 45681851.47 0.0486 0.0310

Jupiter 120366-05-27 02:07 G 45683984.41 45683984.59 45683984.79 0.0542 0.0177

Saturn 120372-07-14 05:29 G 45686224.52 45686224.73 45686224.93 0.0278 0.0021

Jupiter 120372-11-19 22:46 G 45686353.33 45686353.45 45686353.59 0.0489 0.0378

Jupiter 120384-07-26 00:55 G 45690619.34 45690619.54 45690619.74 0.0487 0.0104

Saturn 120386-12-31 16:02 G 45691507.95 45691508.17 45691508.38 0.0282 0.0002

Jupiter 120390-05-30 04:46 G 45692753.56 45692753.70 45692753.84 0.0540 0.0388

Uranus 120391-11-15 04:46 G 45693287.68 45693287.70 45693287.75 0.0142 0.0140

Uranus 120392-06-28 17:14 G 45693514.10 45693514.22 45693514.36 0.0142 0.0116

Uranus 120393-02-10 05:43 G 45693740.57 45693740.74 45693740.91 0.0142 0.0091

Uranus 120393-09-24 17:43 G 45693967.05 45693967.24 45693967.45 0.0142 0.0066

Uranus 120394-05-09 05:58 G 45694193.54 45694193.75 45694193.97 0.0141 0.0041

Uranus 120394-12-21 18:12 G 45694420.04 45694420.26 45694420.48 0.0141 0.0017

Uranus 120395-08-05 05:58 G 45694646.53 45694646.75 45694646.97 0.0141 0.0008

Uranus 120396-03-18 17:29 G 45694873.02 45694873.23 45694873.45 0.0141 0.0033

Jupiter 120396-03-31 04:17 G 45694885.49 45694885.68 45694885.88 0.0486 0.0160

Uranus 120396-10-31 05:00 G 45695099.51 45695099.71 45695099.91 0.0141 0.0057

Pluto 120397-04-17 16:02 G 45695268.01 45695268.17 45695268.34 0.0082 0.0054

Uranus 120397-06-14 16:17 G 45695326.01 45695326.18 45695326.37 0.0141 0.0081

Pluto 120397-11-29 03:48 G 45695493.44 45695493.66 45695493.87 0.0081 0.0026

Uranus 120398-01-27 03:34 G 45695552.51 45695552.65 45695552.80 0.0141 0.0105

Uranus 120398-09-10 14:22 G 45695779.03 45695779.10 45695779.20 0.0141 0.0129

Saturn 120402-01-24 10:46 G 45697010.74 45697010.95 45697011.16 0.0277 0.0028

Jupiter 120402-02-01 19:10 G 45697019.10 45697019.30 45697019.50 0.0542 0.0032

Jupiter 120407-12-05 07:10 G 45699151.71 45699151.80 45699151.90 0.0485 0.0424

Jupiter 120413-10-07 09:19 G 45701284.73 45701284.89 45701285.05 0.0543 0.0329

Mars 120415-05-25 11:14 G 45701879.82 45701879.97 45701880.13 0.1645 0.0797

Saturn 120416-07-12 17:00 G 45702293.99 45702294.21 45702294.42 0.0281 0.0035

Neptune 120416-10-31 08:50 G 45702404.81 45702404.87 45702404.98 0.0089 0.0082

Neptune 120417-06-13 21:05 G 45702630.28 45702630.38 45702630.53 0.0089 0.0073

Neptune 120418-01-25 10:02 G 45702855.77 45702855.92 45702856.07 0.0089 0.0063

Neptune 120418-09-07 22:02 G 45703081.26 45703081.42 45703081.60 0.0089 0.0054

Neptune 120419-04-21 10:17 G 45703306.76 45703306.93 45703307.13 0.0089 0.0045

Neptune 120419-12-02 22:31 G 45703532.26 45703532.44 45703532.65 0.0089 0.0036

Mars 120420-01-01 00:12 G 45703561.38 45703561.51 45703561.65 0.1895 0.1175

Jupiter 120420-04-02 11:00 G 45703653.79 45703653.96 45703654.14 0.0488 0.0263

Neptune 120420-07-15 11:00 G 45703757.77 45703757.96 45703758.18 0.0088 0.0026

Neptune 120421-02-25 23:29 G 45703983.27 45703983.48 45703983.70 0.0088 0.0017

Neptune 120421-10-09 11:58 G 45704208.78 45704209.00 45704209.21 0.0088 0.0007

Neptune 120422-05-23 00:12 G 45704434.29 45704434.51 45704434.73 0.0088 0.0002

Neptune 120423-01-03 12:26 G 45704659.81 45704660.02 45704660.24 0.0088 0.0012

Neptune 120423-08-17 00:55 G 45704885.34 45704885.54 45704885.76 0.0088 0.0021

Neptune 120424-03-29 13:10 G 45705110.86 45705111.05 45705111.27 0.0088 0.0031

Neptune 120424-11-10 01:38 G 45705336.39 45705336.57 45705336.78 0.0088 0.0040

Neptune 120425-06-23 14:22 G 45705561.92 45705562.10 45705562.29 0.0088 0.0049

Neptune 120426-02-04 02:22 G 45705787.46 45705787.60 45705787.79 0.0088 0.0059

Neptune 120426-09-17 15:05 G 45706013.01 45706013.13 45706013.29 0.0088 0.0067

Neptune 120427-05-01 03:34 G 45706238.56 45706238.65 45706238.77 0.0088 0.0077

Neptune 120427-12-12 16:17 G 45706464.14 45706464.18 45706464.24 0.0088 0.0086

Saturn 120430-12-20 08:22 G 45707567.78 45707567.85 45707567.94 0.0277 0.0255

Saturn 120431-08-06 14:07 G 45707796.90 45707797.09 45707797.30 0.0278 0.0072

Jupiter 120431-12-07 14:07 G 45707919.89 45707920.09 45707920.30 0.0487 0.0008

Uranus 120434-08-16 16:02 G 45708903.11 45708903.17 45708903.27 0.0136 0.0126

Uranus 120435-03-30 21:34 G 45709129.27 45709129.40 45709129.53 0.0136 0.0105

Uranus 120435-11-12 02:36 G 45709355.45 45709355.61 45709355.79 0.0136 0.0085

Uranus 120436-06-25 08:07 G 45709581.66 45709581.84 45709582.04 0.0136 0.0064

Uranus 120437-02-06 13:38 G 45709807.87 45709808.07 45709808.28 0.0136 0.0043

Uranus 120437-09-20 19:10 G 45710034.09 45710034.30 45710034.51 0.0136 0.0022

Jupiter 120437-10-10 11:43 G 45710053.81 45710053.99 45710054.17 0.0540 0.0238

Uranus 120438-05-05 00:55 G 45710260.32 45710260.54 45710260.75 0.0137 0.0002

Uranus 120438-12-17 06:26 G 45710486.56 45710486.77 45710486.99 0.0137 0.0021

Uranus 120439-07-31 12:12 G 45710712.82 45710713.01 45710713.22 0.0137 0.0043

Uranus 120440-03-13 18:12 G 45710939.08 45710939.26 45710939.46 0.0137 0.0064

Uranus 120440-10-26 00:12 G 45711165.35 45711165.51 45711165.68 0.0137 0.0086

Uranus 120441-06-09 06:12 G 45711391.65 45711391.76 45711391.91 0.0137 0.0108

Uranus 120442-01-21 12:41 G 45711617.97 45711618.03 45711618.11 0.0137 0.0129

Jupiter 120443-08-12 16:46 G 45712186.03 45712186.20 45712186.37 0.0486 0.0273

Saturn 120445-06-07 09:05 G 45712850.80 45712850.88 45712850.97 0.0282 0.0258

Saturn 120446-01-23 03:34 G 45713080.45 45713080.65 45713080.85 0.0282 0.0100

Mars 120447-05-24 05:14 G 45713566.63 45713566.72 45713566.81 0.1655 0.1411

Jupiter 120449-06-14 23:29 G 45714319.29 45714319.48 45714319.68 0.0542 0.0133

Jupiter 120455-12-09 20:07 G 45716688.24 45716688.34 45716688.45 0.0489 0.0415

Saturn 120460-07-01 14:36 G 45718353.98 45718354.11 45718354.25 0.0276 0.0204

Saturn 120461-02-15 20:07 G 45718583.15 45718583.34 45718583.53 0.0277 0.0120

Jupiter 120461-02-17 13:38 G 45718584.99 45718585.07 45718585.16 0.0544 0.0494

Jupiter 120467-08-14 23:00 G 45720954.27 45720954.46 45720954.66 0.0488 0.0148

Jupiter 120473-06-18 06:41 G 45723088.68 45723088.78 45723088.89 0.0540 0.0453

Saturn 120474-12-18 10:02 G 45723636.80 45723636.92 45723637.06 0.0282 0.0224

Saturn 120475-08-05 04:17 G 45723866.49 45723866.68 45723866.87 0.0281 0.0133

Uranus 120476-02-26 22:46 G 45724072.36 45724072.45 45724072.56 0.0142 0.0127

Uranus 120476-10-10 11:14 G 45724298.82 45724298.97 45724299.13 0.0142 0.0102

Uranus 120477-05-24 23:43 G 45724525.30 45724525.49 45724525.67 0.0142 0.0077

Moon 120477-10-04 00:26 G 45724657.35 45724657.52 45724657.68 0.2673 0.0236

Earth 120477-10-04 01:38 G 45724657.41 45724657.57 45724657.72 0.2680 0.0040 *

Uranus 120478-01-06 11:43 G 45724751.79 45724751.99 45724752.21 0.0141 0.0052

Uranus 120478-08-20 23:43 G 45724978.28 45724978.49 45724978.72 0.0141 0.0028

Uranus 120479-04-04 11:43 G 45725204.77 45725204.99 45725205.21 0.0141 0.0003

Jupiter 120479-04-20 02:50 G 45725220.42 45725220.62 45725220.82 0.0486 0.0116

Uranus 120479-11-16 23:29 G 45725431.26 45725431.48 45725431.70 0.0141 0.0023

Uranus 120480-06-30 11:00 G 45725657.76 45725657.96 45725658.18 0.0141 0.0047

Uranus 120481-02-11 22:17 G 45725884.25 45725884.43 45725884.63 0.0141 0.0072

Mars 120481-03-21 23:29 G 45725922.35 45725922.48 45725922.61 0.1643 0.1052

Uranus 120481-09-26 09:34 G 45726110.75 45726110.90 45726111.07 0.0141 0.0096

Uranus 120482-05-10 20:22 G 45726337.26 45726337.35 45726337.49 0.0141 0.0120

Jupiter 120485-02-20 19:24 G 45727354.11 45727354.31 45727354.51 0.0541 0.0087

Saturn 120490-01-11 16:31 G 45729140.03 45729140.19 45729140.36 0.0277 0.0167

Saturn 120490-08-28 22:17 G 45729369.26 45729369.43 45729369.60 0.0278 0.0160

Jupiter 120490-12-24 06:12 G 45729486.63 45729486.76 45729486.89 0.0486 0.0381

Jupiter 120496-10-26 07:38 G 45731619.65 45731619.82 45731619.99 0.0542 0.0282

Neptune 120500-03-14 20:07 G 45732854.30 45732854.34 45732854.43 0.0089 0.0085

Neptune 120500-10-26 10:02 G 45733079.82 45733079.92 45733080.06 0.0089 0.0075

Neptune 120501-06-09 00:12 G 45733305.36 45733305.51 45733305.66 0.0089 0.0065

Neptune 120502-01-20 13:38 G 45733530.92 45733531.07 45733531.27 0.0089 0.0056

Neptune 120502-09-03 03:34 G 45733756.47 45733756.65 45733756.86 0.0089 0.0046

Neptune 120503-04-16 17:29 G 45733982.03 45733982.23 45733982.44 0.0089 0.0036

Jupiter 120503-04-23 09:05 G 45733988.72 45733988.88 45733989.04 0.0488 0.0303

Neptune 120503-11-28 07:24 G 45734207.59 45734207.81 45734208.02 0.0089 0.0026

Saturn 120504-06-30 19:24 G 45734423.14 45734423.31 45734423.49 0.0282 0.0164

Neptune 120504-07-10 20:50 G 45734433.16 45734433.37 45734433.60 0.0089 0.0017

Saturn 120505-02-15 13:38 G 45734652.92 45734653.07 45734653.23 0.0282 0.0194

Neptune 120505-02-21 10:46 G 45734658.73 45734658.95 45734659.18 0.0089 0.0007

Neptune 120505-10-05 00:26 G 45734884.30 45734884.52 45734884.75 0.0089 0.0003

Neptune 120506-05-18 13:53 G 45735109.87 45735110.08 45735110.31 0.0089 0.0013

Neptune 120506-12-30 03:34 G 45735335.45 45735335.65 45735335.88 0.0089 0.0023

Neptune 120507-08-12 17:14 G 45735561.02 45735561.22 45735561.44 0.0089 0.0033

Neptune 120508-03-25 06:41 G 45735786.60 45735786.78 45735786.99 0.0089 0.0042

Neptune 120508-11-05 20:07 G 45736012.18 45736012.34 45736012.54 0.0089 0.0052

Neptune 120509-06-19 09:48 G 45736237.76 45736237.91 45736238.08 0.0089 0.0062

Neptune 120510-01-30 23:14 G 45736463.36 45736463.47 45736463.63 0.0089 0.0071

Neptune 120510-09-13 13:10 G 45736688.96 45736689.05 45736689.15 0.0089 0.0081

Mars 120513-03-21 17:00 G 45737609.09 45737609.21 45737609.33 0.1652 0.1129

Jupiter 120514-12-27 12:41 G 45738254.82 45738255.03 45738255.24 0.0487 0.0039

Uranus 120518-04-17 01:24 G 45739461.55 45739461.56 45739461.60 0.0136 0.0135

Uranus 120518-11-29 06:55 G 45739687.68 45739687.79 45739687.90 0.0136 0.0115

Uranus 120519-07-13 11:58 G 45739913.86 45739914.00 45739914.16 0.0136 0.0094

Saturn 120519-07-25 23:00 G 45739926.27 45739926.46 45739926.65 0.0276 0.0115

Uranus 120520-02-24 17:14 G 45740140.05 45740140.22 45740140.41 0.0136 0.0074

Saturn 120520-03-11 04:17 G 45740155.56 45740155.68 45740155.83 0.0277 0.0210

Uranus 120520-10-07 22:46 G 45740366.26 45740366.45 45740366.65 0.0136 0.0052

Jupiter 120520-10-30 11:43 G 45740388.82 45740388.99 45740389.16 0.0541 0.0292

Uranus 120521-05-22 04:17 G 45740592.48 45740592.68 45740592.89 0.0136 0.0031

Uranus 120522-01-03 10:02 G 45740818.71 45740818.92 45740819.13 0.0137 0.0010

Uranus 120522-08-17 15:34 G 45741044.94 45741045.15 45741045.37 0.0137 0.0012

Uranus 120523-03-31 21:19 G 45741271.18 45741271.39 45741271.60 0.0137 0.0034

Uranus 120523-11-13 03:05 G 45741497.44 45741497.63 45741497.83 0.0137 0.0055

Uranus 120524-06-26 09:05 G 45741723.71 45741723.88 45741724.07 0.0137 0.0077

Uranus 120525-02-07 15:05 G 45741950.00 45741950.13 45741950.29 0.0137 0.0099

Uranus 120525-09-21 21:34 G 45742176.30 45742176.40 45742176.50 0.0137 0.0120

Jupiter 120526-09-01 15:34 G 45742520.97 45742521.15 45742521.34 0.0486 0.0228

Jupiter 120532-07-05 02:22 G 45744654.40 45744654.60 45744654.80 0.0542 0.0066

Saturn 120534-01-10 20:22 G 45745209.16 45745209.35 45745209.54 0.0282 0.0131

Saturn 120534-08-28 13:53 G 45745438.96 45745439.08 45745439.22 0.0281 0.0227

Jupiter 120538-12-29 19:24 G 45747023.25 45747023.31 45747023.38 0.0489 0.0463

Jupiter 120544-03-09 15:19 G 45748920.02 45748920.14 45748920.26 0.0543 0.0433

Mars 120547-01-18 11:14 G 45749964.87 45749964.97 45749965.07 0.1640 0.1323

Saturn 120549-02-03 23:58 G 45750712.30 45750712.50 45750712.70 0.0277 0.0080

Saturn 120549-09-21 05:29 G 45750941.65 45750941.73 45750941.84 0.0278 0.0247

Jupiter 120550-09-03 22:46 G 45751289.26 45751289.45 45751289.64 0.0488 0.0196

Pluto 120553-11-14 14:07 G 45752456.94 45752457.09 45752457.27 0.0062 0.0041

Pluto 120554-06-27 17:14 G 45752682.01 45752682.22 45752682.44 0.0062 0.0007

Pluto 120555-02-07 20:07 G 45752907.16 45752907.34 45752907.55 0.0063 0.0029

Jupiter 120556-07-08 05:58 G 45753423.68 45753423.75 45753423.82 0.0539 0.0503

Uranus 120559-10-28 04:31 G 45754630.64 45754630.69 45754630.75 0.0142 0.0137

Uranus 120560-06-10 16:46 G 45754857.08 45754857.20 45754857.35 0.0142 0.0113

Uranus 120561-01-23 05:14 G 45755083.55 45755083.72 45755083.90 0.0142 0.0088

Uranus 120561-09-06 17:29 G 45755310.03 45755310.23 45755310.43 0.0142 0.0063

Uranus 120562-04-21 05:29 G 45755536.52 45755536.73 45755536.95 0.0141 0.0038

Jupiter 120562-05-10 01:53 G 45755555.38 45755555.58 45755555.79 0.0486 0.0072

Uranus 120562-12-03 17:43 G 45755763.02 45755763.24 45755763.46 0.0141 0.0013

Uranus 120563-07-18 05:29 G 45755989.51 45755989.73 45755989.95 0.0141 0.0012

Saturn 120563-07-24 04:17 G 45755995.47 45755995.68 45755995.89 0.0282 0.0074

Uranus 120564-02-29 17:00 G 45756216.00 45756216.21 45756216.43 0.0141 0.0037

Uranus 120564-10-13 04:17 G 45756442.49 45756442.68 45756442.89 0.0141 0.0062

Uranus 120565-05-27 15:48 G 45756668.99 45756669.16 45756669.34 0.0141 0.0086

Uranus 120566-01-09 03:05 G 45756895.50 45756895.63 45756895.77 0.0141 0.0110

Uranus 120566-08-23 13:38 G 45757122.02 45757122.07 45757122.16 0.0141 0.0134

Jupiter 120568-03-12 17:00 G 45757689.02 45757689.21 45757689.41 0.0541 0.0134

Jupiter 120574-01-13 05:43 G 45759821.59 45759821.74 45759821.89 0.0485 0.0334

Saturn 120578-08-17 06:41 G 45761498.57 45761498.78 45761498.98 0.0276 0.0029

Mars 120579-01-17 05:00 G 45761651.56 45761651.71 45761651.85 0.1649 0.0863

Jupiter 120579-11-16 06:55 G 45761954.61 45761954.79 45761954.98 0.0543 0.0229

Neptune 120581-02-02 21:19 G 45762399.31 45762399.39 45762399.47 0.0089 0.0082

Neptune 120581-09-16 09:34 G 45762624.78 45762624.90 45762625.03 0.0089 0.0073

Neptune 120582-04-29 21:34 G 45762850.27 45762850.40 45762850.56 0.0089 0.0064

Neptune 120582-12-11 09:48 G 45763075.76 45763075.91 45763076.10 0.0089 0.0055

Neptune 120583-07-24 22:17 G 45763301.26 45763301.43 45763301.63 0.0089 0.0046

Mars 120583-08-26 05:43 G 45763333.65 45763333.74 45763333.84 0.1889 0.1600

Neptune 120584-03-06 11:00 G 45763526.76 45763526.96 45763527.16 0.0089 0.0036

Neptune 120584-10-17 23:14 G 45763752.26 45763752.47 45763752.68 0.0088 0.0027

Neptune 120585-05-31 11:29 G 45763977.77 45763977.98 45763978.20 0.0088 0.0017

Neptune 120586-01-11 23:43 G 45764203.28 45764203.49 45764203.71 0.0088 0.0008

Jupiter 120586-05-12 08:22 G 45764323.70 45764323.85 45764323.99 0.0488 0.0351

Neptune 120586-08-25 12:12 G 45764428.80 45764429.01 45764429.23 0.0088 0.0002

Neptune 120587-04-08 00:41 G 45764654.31 45764654.53 45764654.74 0.0088 0.0011

Neptune 120587-11-19 12:41 G 45764879.83 45764880.03 45764880.25 0.0088 0.0020

Neptune 120588-07-02 01:10 G 45765105.35 45765105.55 45765105.76 0.0088 0.0029

Neptune 120589-02-12 13:38 G 45765330.88 45765331.07 45765331.27 0.0088 0.0039

Neptune 120589-09-26 01:38 G 45765556.41 45765556.57 45765556.77 0.0088 0.0049

Neptune 120590-05-09 14:07 G 45765781.94 45765782.09 45765782.27 0.0088 0.0058

Neptune 120590-12-21 02:36 G 45766007.49 45766007.61 45766007.77 0.0088 0.0067

Earth 120591-04-10 03:34 G 45766117.49 45766117.65 45766117.81 0.2652 0.0275

Moon 120591-04-10 08:50 G 45766117.70 45766117.87 45766118.04 0.2650 0.0039 *

Neptune 120591-08-03 15:34 G 45766233.04 45766233.15 45766233.26 0.0088 0.0076

Neptune 120592-03-16 04:17 G 45766458.62 45766458.68 45766458.73 0.0088 0.0085

Saturn 120593-02-02 05:14 G 45766781.50 45766781.72 45766781.93 0.0282 0.0040

Jupiter 120598-01-15 12:12 G 45768589.81 45768590.01 45768590.21 0.0487 0.0087

Uranus 120602-07-30 16:17 G 45770246.11 45770246.18 45770246.28 0.0136 0.0123

Uranus 120603-03-13 21:19 G 45770472.27 45770472.39 45770472.55 0.0136 0.0103

Uranus 120603-10-26 02:36 G 45770698.46 45770698.61 45770698.80 0.0136 0.0083

Jupiter 120603-11-20 13:53 G 45770723.93 45770724.08 45770724.23 0.0540 0.0356

Uranus 120604-06-08 08:07 G 45770924.66 45770924.84 45770925.04 0.0136 0.0061

Uranus 120605-01-20 13:53 G 45771150.88 45771151.08 45771151.28 0.0136 0.0040

Uranus 120605-09-03 19:10 G 45771377.09 45771377.30 45771377.52 0.0137 0.0019

Uranus 120606-04-18 00:41 G 45771603.32 45771603.53 45771603.75 0.0137 0.0005

Uranus 120606-11-30 06:26 G 45771829.56 45771829.77 45771829.98 0.0137 0.0025

Uranus 120607-07-14 12:12 G 45772055.82 45772056.01 45772056.22 0.0137 0.0047

Uranus 120608-02-25 18:12 G 45772282.08 45772282.26 45772282.45 0.0137 0.0068

Saturn 120608-02-28 06:55 G 45772284.58 45772284.79 45772285.00 0.0277 0.0005

Uranus 120608-10-09 00:12 G 45772508.35 45772508.51 45772508.67 0.0137 0.0090

Uranus 120609-05-23 05:58 G 45772734.64 45772734.75 45772734.89 0.0137 0.0112

Jupiter 120609-09-21 15:34 G 45772855.96 45772856.15 45772856.35 0.0486 0.0179

Uranus 120610-01-04 12:26 G 45772960.98 45772961.02 45772961.08 0.0137 0.0133

Mars 120612-11-15 23:43 G 45774007.44 45774007.49 45774007.54 0.1638 0.1566

Jupiter 120615-07-26 02:36 G 45774989.41 45774989.61 45774989.81 0.0542 0.0011

Jupiter 120621-05-27 19:10 G 45777122.22 45777122.30 45777122.39 0.0485 0.0441

Saturn 120622-08-16 11:43 G 45777567.77 45777567.99 45777568.20 0.0282 0.0012

Jupiter 120627-03-30 12:55 G 45779254.90 45779255.04 45779255.18 0.0543 0.0387

Jupiter 120633-09-23 22:46 G 45781624.27 45781624.45 45781624.63 0.0487 0.0245

Saturn 120637-01-23 08:50 G 45782841.83 45782841.87 45782841.93 0.0276 0.0266

Saturn 120637-09-09 13:53 G 45783070.88 45783071.08 45783071.29 0.0276 0.0056

Uranus 120644-02-09 22:31 G 45785415.33 45785415.44 45785415.55 0.0142 0.0123

Uranus 120644-09-23 10:31 G 45785641.80 45785641.94 45785642.12 0.0142 0.0099

Mars 120644-11-14 17:00 G 45785694.05 45785694.21 45785694.37 0.1646 0.0595

Pluto 120645-03-23 03:19 G 45785822.46 45785822.64 45785822.85 0.0081 0.0043

Uranus 120645-05-07 22:46 G 45785868.28 45785868.45 45785868.66 0.0142 0.0074

Jupiter 120645-05-30 01:24 G 45785890.36 45785890.56 45785890.77 0.0486 0.0026

Pluto 120645-11-03 15:05 G 45786047.95 45786048.13 45786048.34 0.0081 0.0037

Uranus 120645-12-20 11:29 G 45786094.77 45786094.98 45786095.19 0.0141 0.0048

Uranus 120646-08-03 23:29 G 45786321.26 45786321.48 45786321.70 0.0141 0.0023

Uranus 120647-03-18 11:14 G 45786547.75 45786547.97 45786548.20 0.0141 0.0003

Uranus 120647-10-30 23:00 G 45786774.24 45786774.46 45786774.68 0.0141 0.0027

Uranus 120648-06-13 10:17 G 45787000.73 45787000.93 45787001.15 0.0141 0.0052

Uranus 120649-01-25 21:34 G 45787227.23 45787227.40 45787227.61 0.0141 0.0077

Mars 120649-06-23 08:22 G 45787375.69 45787375.85 45787376.01 0.1893 0.0804

Uranus 120649-09-09 08:50 G 45787453.73 45787453.87 45787454.04 0.0141 0.0101

Uranus 120650-04-23 19:38 G 45787680.24 45787680.32 45787680.44 0.0141 0.0125

Jupiter 120651-04-02 20:50 G 45788024.18 45788024.37 45788024.55 0.0541 0.0205

Saturn 120652-02-26 12:55 G 45788353.83 45788354.04 45788354.25 0.0282 0.0047

Jupiter 120657-02-02 05:29 G 45790156.57 45790156.73 45790156.90 0.0485 0.0285

Jupiter 120662-12-06 10:17 G 45792289.74 45792289.93 45792290.12 0.0542 0.0160

Neptune 120664-06-17 06:41 G 45792848.75 45792848.78 45792848.86 0.0089 0.0086

Neptune 120665-01-28 20:50 G 45793074.27 45793074.37 45793074.50 0.0089 0.0076

Neptune 120665-09-11 10:46 G 45793299.81 45793299.95 45793300.10 0.0089 0.0066

Neptune 120666-04-25 00:12 G 45793525.35 45793525.51 45793525.70 0.0089 0.0057

Saturn 120666-08-05 08:07 G 45793627.75 45793627.84 45793627.96 0.0276 0.0237

Neptune 120666-12-06 13:53 G 45793750.91 45793751.08 45793751.29 0.0089 0.0047

Saturn 120667-03-22 13:24 G 45793856.86 45793857.06 45793857.26 0.0277 0.0087

Neptune 120667-07-20 03:48 G 45793976.47 45793976.66 45793976.87 0.0089 0.0037

Neptune 120668-03-01 17:29 G 45794202.03 45794202.23 45794202.46 0.0089 0.0028

Neptune 120668-10-13 07:24 G 45794427.60 45794427.81 45794428.03 0.0089 0.0018

Neptune 120669-05-26 21:05 G 45794653.16 45794653.38 45794653.61 0.0089 0.0008

Jupiter 120669-06-01 08:50 G 45794658.76 45794658.87 45794658.99 0.0489 0.0403

Neptune 120670-01-07 11:00 G 45794878.74 45794878.96 45794879.18 0.0089 0.0002

Neptune 120670-08-21 00:41 G 45795104.31 45795104.53 45795104.75 0.0089 0.0012

Neptune 120671-04-03 14:07 G 45795329.88 45795330.09 45795330.32 0.0089 0.0022

Neptune 120671-11-15 03:48 G 45795555.46 45795555.66 45795555.87 0.0089 0.0031

Neptune 120672-06-27 17:14 G 45795781.04 45795781.22 45795781.43 0.0089 0.0041

Neptune 120673-02-08 06:55 G 45796006.62 45796006.79 45796006.99 0.0089 0.0051

Neptune 120673-09-21 20:36 G 45796232.21 45796232.36 45796232.53 0.0089 0.0061

Neptune 120674-05-05 09:48 G 45796457.80 45796457.91 45796458.07 0.0089 0.0071

Jupiter 120674-08-10 23:00 G 45796555.42 45796555.46 45796555.51 0.0544 0.0527

Neptune 120674-12-16 23:43 G 45796683.40 45796683.49 45796683.59 0.0089 0.0080

Neptune 120675-07-30 13:10 G 45796909.05 45796909.05 45796909.07 0.0089 0.0089

Saturn 120681-01-20 23:29 G 45798910.42 45798910.48 45798910.56 0.0283 0.0265

Jupiter 120681-02-04 12:41 G 45798924.83 45798925.03 45798925.23 0.0487 0.0137

Saturn 120681-09-07 18:26 G 45799140.07 45799140.27 45799140.48 0.0282 0.0095

Uranus 120686-03-30 01:38 G 45800804.53 45800804.57 45800804.63 0.0136 0.0132

Uranus 120686-11-11 06:26 G 45801030.67 45801030.77 45801030.91 0.0136 0.0113

Jupiter 120686-12-09 11:43 G 45801058.86 45801058.99 45801059.13 0.0540 0.0405

Uranus 120687-06-25 11:58 G 45801256.86 45801257.00 45801257.17 0.0136 0.0091

Uranus 120688-02-06 17:14 G 45801483.05 45801483.22 45801483.42 0.0136 0.0070

Uranus 120688-09-19 22:46 G 45801709.25 45801709.45 45801709.65 0.0136 0.0049

Uranus 120689-05-04 04:02 G 45801935.47 45801935.67 45801935.89 0.0136 0.0028

Uranus 120689-12-16 09:48 G 45802161.69 45802161.91 45802162.12 0.0137 0.0006

Uranus 120690-07-30 15:19 G 45802387.93 45802388.14 45802388.36 0.0137 0.0016

Uranus 120691-03-13 20:50 G 45802614.17 45802614.37 45802614.59 0.0137 0.0038

Uranus 120691-10-26 02:50 G 45802840.43 45802840.62 45802840.81 0.0137 0.0059

Uranus 120692-06-08 08:36 G 45803066.70 45803066.86 45803067.04 0.0137 0.0081

Jupiter 120692-10-10 16:17 G 45803190.99 45803191.18 45803191.39 0.0486 0.0127

Uranus 120693-01-20 14:50 G 45803292.98 45803293.12 45803293.27 0.0137 0.0103

Uranus 120693-09-03 20:50 G 45803519.29 45803519.37 45803519.47 0.0137 0.0124

Saturn 120696-02-15 15:48 G 45804414.01 45804414.16 45804414.32 0.0276 0.0183

Saturn 120696-10-01 20:50 G 45804643.19 45804643.37 45804643.55 0.0276 0.0140

Jupiter 120698-08-14 01:38 G 45805324.37 45805324.57 45805324.77 0.0542 0.0044

Jupiter 120704-06-16 18:55 G 45807457.18 45807457.29 45807457.42 0.0485 0.0393

Jupiter 120710-04-19 16:31 G 45809590.02 45809590.19 45809590.35 0.0544 0.0317

Saturn 120710-08-04 01:53 G 45809696.46 45809696.58 45809696.71 0.0283 0.0227

Mars 120710-09-13 05:14 G 45809736.55 45809736.72 45809736.89 0.1644 0.0340

Saturn 120711-03-21 20:22 G 45809926.16 45809926.35 45809926.54 0.0282 0.0133

Mars 120715-04-21 11:58 G 45811417.82 45811418.00 45811418.18 0.1897 0.0032

Jupiter 120716-10-13 22:31 G 45811959.28 45811959.44 45811959.61 0.0488 0.0295

Moon 120720-10-06 23:00 G 45813413.30 45813413.46 45813413.62 0.2680 0.0146

Earth 120720-10-07 04:17 G 45813413.52 45813413.68 45813413.84 0.2681 0.0062 *

Saturn 120725-08-28 15:19 G 45815199.96 45815200.14 45815200.31 0.0276 0.0153

Saturn 120726-04-14 20:07 G 45815429.18 45815429.34 45815429.51 0.0277 0.0171

Uranus 120727-10-11 03:48 G 45815973.60 45815973.66 45815973.74 0.0142 0.0134

Uranus 120728-05-24 16:17 G 45816200.05 45816200.18 45816200.33 0.0142 0.0109

Jupiter 120728-06-19 02:07 G 45816225.38 45816225.59 45816225.80 0.0487 0.0029

Uranus 120729-01-06 04:46 G 45816426.53 45816426.70 45816426.88 0.0142 0.0084

Uranus 120729-08-20 17:00 G 45816653.01 45816653.21 45816653.42 0.0142 0.0059

Uranus 120730-04-04 05:00 G 45816879.50 45816879.71 45816879.93 0.0141 0.0033

Uranus 120730-11-16 17:00 G 45817105.99 45817106.21 45817106.43 0.0141 0.0008

Uranus 120731-07-01 04:46 G 45817332.48 45817332.70 45817332.92 0.0141 0.0017

Uranus 120732-02-12 16:17 G 45817558.97 45817559.18 45817559.40 0.0141 0.0042

Uranus 120732-09-26 03:34 G 45817785.47 45817785.65 45817785.86 0.0141 0.0067

Uranus 120733-05-10 14:50 G 45818011.96 45818012.12 45818012.30 0.0141 0.0091

Uranus 120733-12-23 02:07 G 45818238.47 45818238.59 45818238.72 0.0141 0.0115

Jupiter 120734-04-22 22:02 G 45818359.24 45818359.42 45818359.59 0.0541 0.0266

Uranus 120734-08-06 12:55 G 45818465.02 45818465.04 45818465.09 0.0141 0.0139

Saturn 120740-02-14 05:58 G 45820482.60 45820482.75 45820482.93 0.0282 0.0183

Jupiter 120740-02-23 06:12 G 45820491.58 45820491.76 45820491.94 0.0485 0.0234

Saturn 120740-10-01 00:41 G 45820712.37 45820712.53 45820712.71 0.0282 0.0178

Neptune 120745-05-09 08:50 G 45822393.80 45822393.87 45822393.95 0.0089 0.0083

Neptune 120745-12-20 21:05 G 45822619.27 45822619.38 45822619.51 0.0089 0.0074

Jupiter 120745-12-26 07:53 G 45822624.63 45822624.83 45822625.02 0.0543 0.0114

Neptune 120746-08-03 09:34 G 45822844.76 45822844.90 45822845.05 0.0089 0.0065

Neptune 120747-03-16 21:48 G 45823070.25 45823070.41 45823070.59 0.0089 0.0056

Neptune 120747-10-28 10:02 G 45823295.75 45823295.92 45823296.12 0.0089 0.0046

Neptune 120748-06-09 22:31 G 45823521.25 45823521.44 45823521.64 0.0089 0.0037

Neptune 120749-01-21 10:46 G 45823746.75 45823746.95 45823747.17 0.0088 0.0028

Neptune 120749-09-03 23:14 G 45823972.26 45823972.47 45823972.69 0.0088 0.0018

Neptune 120750-04-17 11:43 G 45824197.77 45824197.99 45824198.20 0.0088 0.0009

Neptune 120750-11-28 23:58 G 45824423.28 45824423.50 45824423.72 0.0088 0.0000

Neptune 120751-07-12 12:26 G 45824648.80 45824649.02 45824649.23 0.0088 0.0010

Neptune 120752-02-23 00:26 G 45824874.32 45824874.52 45824874.75 0.0088 0.0020

Jupiter 120752-06-21 09:34 G 45824993.83 45824993.90 45824993.98 0.0488 0.0456

Neptune 120752-10-05 12:55 G 45825099.84 45825100.04 45825100.25 0.0088 0.0028

Neptune 120753-05-19 01:10 G 45825325.36 45825325.55 45825325.75 0.0088 0.0038

Neptune 120753-12-30 13:24 G 45825550.89 45825551.06 45825551.26 0.0088 0.0047

Neptune 120754-08-13 01:53 G 45825776.43 45825776.58 45825776.76 0.0088 0.0057

Saturn 120755-03-10 22:46 G 45825986.26 45825986.45 45825986.65 0.0276 0.0099

Neptune 120755-03-26 14:22 G 45826001.97 45826002.10 45826002.26 0.0088 0.0066

Saturn 120755-10-26 04:02 G 45826215.55 45826215.67 45826215.79 0.0277 0.0225

Neptune 120755-11-07 02:50 G 45826227.52 45826227.62 45826227.74 0.0088 0.0075

Neptune 120756-06-19 14:50 G 45826453.08 45826453.12 45826453.21 0.0088 0.0085

Jupiter 120757-08-30 21:05 G 45826890.29 45826890.38 45826890.48 0.0544 0.0479

Jupiter 120764-02-25 12:12 G 45829259.82 45829260.01 45829260.20 0.0487 0.0186

Saturn 120769-08-26 09:48 G 45831268.72 45831268.91 45831269.10 0.0283 0.0139

Jupiter 120769-12-29 15:05 G 45831394.04 45831394.13 45831394.23 0.0540 0.0475

Saturn 120770-04-13 04:02 G 45831498.54 45831498.67 45831498.80 0.0282 0.0219

Uranus 120770-07-12 16:46 G 45831589.11 45831589.20 45831589.30 0.0136 0.0121

Uranus 120771-02-23 21:34 G 45831815.27 45831815.40 45831815.56 0.0136 0.0100

Uranus 120771-10-08 02:50 G 45832041.46 45832041.62 45832041.80 0.0136 0.0079

Uranus 120772-05-21 08:22 G 45832267.66 45832267.85 45832268.04 0.0136 0.0058

Uranus 120773-01-02 13:38 G 45832493.87 45832494.07 45832494.28 0.0136 0.0036

Uranus 120773-08-16 19:10 G 45832720.09 45832720.30 45832720.51 0.0137 0.0015

Uranus 120774-03-31 00:26 G 45832946.31 45832946.52 45832946.74 0.0137 0.0008

Uranus 120774-11-12 05:58 G 45833172.55 45833172.75 45833172.97 0.0137 0.0029

Uranus 120775-06-26 11:58 G 45833398.81 45833399.00 45833399.20 0.0137 0.0050

Jupiter 120775-10-31 16:02 G 45833525.96 45833526.17 45833526.37 0.0486 0.0078

Uranus 120776-02-07 17:43 G 45833625.07 45833625.24 45833625.43 0.0137 0.0072

Mars 120776-07-10 17:14 G 45833779.05 45833779.22 45833779.39 0.1641 0.0077

Uranus 120776-09-20 23:29 G 45833851.34 45833851.48 45833851.65 0.0137 0.0094

Uranus 120777-05-05 05:43 G 45834077.64 45834077.74 45834077.86 0.0137 0.0116

Uranus 120777-12-17 11:58 G 45834304.00 45834304.00 45834304.02 0.0137 0.0137

Mars 120781-02-15 14:22 G 45835459.94 45835460.10 45835460.27 0.1901 0.0785

Jupiter 120781-09-03 05:29 G 45835659.53 45835659.73 45835659.92 0.0542 0.0115

Saturn 120784-09-19 22:17 G 45836772.23 45836772.43 45836772.63 0.0276 0.0069

Saturn 120785-05-07 03:05 G 45837001.57 45837001.63 45837001.72 0.0277 0.0256

Jupiter 120787-07-06 19:24 G 45837792.17 45837792.31 45837792.46 0.0485 0.0343

Jupiter 120793-05-08 18:12 G 45839925.08 45839925.26 45839925.43 0.0543 0.0254

Saturn 120799-03-08 13:24 G 45842054.86 45842055.06 45842055.26 0.0282 0.0097

Saturn 120799-10-24 07:38 G 45842284.75 45842284.82 45842284.90 0.0282 0.0262

Jupiter 120799-11-02 23:29 G 45842294.33 45842294.48 45842294.62 0.0488 0.0348

Pluto 120801-10-19 23:14 G 45843011.33 45843011.47 45843011.66 0.0062 0.0041

Pluto 120802-06-02 02:36 G 45843236.40 45843236.61 45843236.84 0.0062 0.0007

Pluto 120803-01-13 05:29 G 45843461.56 45843461.73 45843461.94 0.0063 0.0029

Jupiter 120811-07-09 03:05 G 45846560.42 45846560.63 45846560.83 0.0486 0.0083

Uranus 120812-01-22 21:48 G 45846758.31 45846758.41 45846758.54 0.0142 0.0120

Uranus 120812-09-05 10:17 G 45846984.77 45846984.93 45846985.10 0.0142 0.0095

Uranus 120813-04-19 22:17 G 45847211.25 45847211.43 45847211.64 0.0142 0.0070

Uranus 120813-12-02 10:31 G 45847437.74 45847437.94 45847438.17 0.0142 0.0045

Saturn 120814-04-02 06:26 G 45847558.56 45847558.77 45847558.98 0.0276 0.0013

Uranus 120814-07-16 22:46 G 45847664.23 45847664.45 45847664.67 0.0141 0.0019

Uranus 120815-02-28 10:31 G 45847890.72 45847890.94 45847891.17 0.0141 0.0007

Uranus 120815-10-12 22:17 G 45848117.21 45848117.43 45848117.64 0.0141 0.0032

Uranus 120816-05-26 09:48 G 45848343.70 45848343.91 45848344.11 0.0141 0.0057

Uranus 120817-01-07 21:05 G 45848570.20 45848570.38 45848570.57 0.0141 0.0081

Jupiter 120817-05-11 19:53 G 45848694.17 45848694.33 45848694.49 0.0541 0.0315

Uranus 120817-08-22 08:22 G 45848796.71 45848796.85 45848797.00 0.0141 0.0105

Uranus 120818-04-05 19:24 G 45849023.23 45849023.31 45849023.40 0.0141 0.0129

Jupiter 120823-03-14 05:43 G 45850826.55 45850826.74 45850826.93 0.0485 0.0186

Saturn 120828-09-17 18:12 G 45852841.05 45852841.26 45852841.47 0.0282 0.0051

Neptune 120828-09-19 17:00 G 45852843.19 45852843.21 45852843.29 0.0089 0.0087

Jupiter 120829-01-14 10:31 G 45852959.74 45852959.94 45852960.14 0.0543 0.0047

Neptune 120829-05-03 07:10 G 45853068.70 45853068.80 45853068.92 0.0089 0.0077

Neptune 120829-12-14 21:05 G 45853294.24 45853294.38 45853294.53 0.0089 0.0067

Neptune 120830-07-28 10:31 G 45853519.79 45853519.94 45853520.13 0.0089 0.0058

Neptune 120831-03-11 00:26 G 45853745.34 45853745.52 45853745.72 0.0089 0.0048

Neptune 120831-10-22 14:22 G 45853970.90 45853971.10 45853971.30 0.0089 0.0038

Neptune 120832-06-04 03:48 G 45854196.46 45854196.66 45854196.89 0.0089 0.0029

Neptune 120833-01-15 17:43 G 45854422.03 45854422.24 45854422.47 0.0089 0.0019

Neptune 120833-08-29 07:38 G 45854647.60 45854647.82 45854648.05 0.0089 0.0009

Neptune 120834-04-11 21:19 G 45854873.17 45854873.39 45854873.62 0.0089 0.0002

Earth 120834-04-12 03:05 G 45854873.47 45854873.63 45854873.79 0.2651 0.0439 *

Moon 120834-04-12 07:38 G 45854873.66 45854873.82 45854873.99 0.2647 0.0247 *

Jupiter 120834-11-17 09:05 G 45855092.81 45855092.88 45855092.97 0.0484 0.0449

Neptune 120834-11-23 11:00 G 45855098.74 45855098.96 45855099.18 0.0089 0.0011

Neptune 120835-07-07 00:26 G 45855324.32 45855324.52 45855324.75 0.0089 0.0021

Neptune 120836-02-17 14:36 G 45855549.90 45855550.11 45855550.32 0.0089 0.0030

Neptune 120836-09-30 04:02 G 45855775.48 45855775.67 45855775.88 0.0089 0.0040

Neptune 120837-05-13 17:29 G 45856001.06 45856001.23 45856001.43 0.0089 0.0050

Neptune 120837-12-25 06:55 G 45856226.65 45856226.79 45856226.98 0.0089 0.0060

Neptune 120838-08-07 20:50 G 45856452.25 45856452.37 45856452.52 0.0089 0.0069

Neptune 120839-03-21 10:17 G 45856677.85 45856677.93 45856678.05 0.0089 0.0079

Neptune 120839-11-01 23:58 G 45856903.49 45856903.50 45856903.54 0.0089 0.0089

Jupiter 120840-09-19 00:55 G 45857225.41 45857225.54 45857225.67 0.0544 0.0409

Mars 120842-05-08 05:43 G 45857821.57 45857821.74 45857821.91 0.1639 0.0175

Saturn 120843-10-13 05:58 G 45858344.55 45858344.75 45858344.96 0.0276 0.0019

Mars 120846-12-13 17:14 G 45859502.13 45859502.22 45859502.32 0.1905 0.1598

Jupiter 120847-03-16 12:12 G 45859594.84 45859595.01 45859595.20 0.0487 0.0238

Jupiter 120853-01-17 16:31 G 45861729.17 45861729.19 45861729.21 0.0540 0.0536

Uranus 120854-03-12 01:38 G 45862147.53 45862147.57 45862147.65 0.0136 0.0131

Uranus 120854-10-24 06:55 G 45862373.68 45862373.79 45862373.93 0.0136 0.0109

Uranus 120855-06-07 12:12 G 45862599.86 45862600.01 45862600.18 0.0136 0.0088

Uranus 120856-01-19 17:14 G 45862826.05 45862826.22 45862826.42 0.0136 0.0068

Uranus 120856-09-01 22:46 G 45863052.25 45863052.45 45863052.65 0.0136 0.0046

Uranus 120857-04-16 04:02 G 45863278.46 45863278.67 45863278.88 0.0137 0.0024

Uranus 120857-11-28 09:34 G 45863504.69 45863504.90 45863505.11 0.0137 0.0003

Saturn 120858-03-30 21:34 G 45863627.18 45863627.40 45863627.62 0.0282 0.0009

Uranus 120858-07-12 15:19 G 45863730.93 45863731.14 45863731.35 0.0137 0.0019

Jupiter 120858-11-19 16:31 G 45863860.98 45863861.19 45863861.40 0.0486 0.0026

Uranus 120859-02-23 20:50 G 45863957.17 45863957.37 45863957.58 0.0137 0.0041

Uranus 120859-10-08 02:22 G 45864183.42 45864183.60 45864183.80 0.0137 0.0063

Uranus 120860-05-21 08:07 G 45864409.69 45864409.84 45864410.03 0.0137 0.0086

Uranus 120861-01-02 14:36 G 45864635.98 45864636.11 45864636.25 0.0137 0.0107

Uranus 120861-08-16 20:36 G 45864862.30 45864862.36 45864862.45 0.0137 0.0129

Jupiter 120864-09-22 02:07 G 45865994.40 45865994.59 45865994.79 0.0542 0.0160

Jupiter 120870-07-25 20:07 G 45868127.18 45868127.34 45868127.51 0.0485 0.0290

Saturn 120872-09-07 09:34 G 45868901.82 45868901.90 45868901.99 0.0276 0.0248

Saturn 120873-04-24 14:22 G 45869130.90 45869131.10 45869131.30 0.0277 0.0075

Jupiter 120876-05-27 15:05 G 45870259.94 45870260.13 45870260.31 0.0543 0.0210

Jupiter 120882-11-21 21:48 G 45872629.30 45872629.41 45872629.54 0.0488 0.0393

Saturn 120887-10-11 03:48 G 45874413.45 45874413.66 45874413.87 0.0282 0.0042

Pluto 120893-02-24 11:58 G 45876376.82 45876377.00 45876377.20 0.0082 0.0044

Pluto 120893-10-07 23:43 G 45876602.30 45876602.49 45876602.70 0.0081 0.0036

Jupiter 120894-07-28 01:38 G 45876895.37 45876895.57 45876895.77 0.0486 0.0127

Uranus 120895-09-22 03:34 G 45877316.58 45877316.65 45877316.74 0.0142 0.0131

Uranus 120896-05-05 15:48 G 45877543.03 45877543.16 45877543.32 0.0142 0.0106

Uranus 120896-12-18 04:17 G 45877769.51 45877769.68 45877769.87 0.0142 0.0081

Uranus 120897-08-01 16:46 G 45877995.99 45877996.20 45877996.40 0.0142 0.0055

Uranus 120898-03-16 04:31 G 45878222.48 45878222.69 45878222.91 0.0142 0.0030

Uranus 120898-10-28 16:31 G 45878448.97 45878449.19 45878449.41 0.0141 0.0004

Uranus 120899-06-12 04:02 G 45878675.46 45878675.67 45878675.90 0.0141 0.0021

Uranus 120900-01-24 15:48 G 45878901.95 45878902.16 45878902.37 0.0141 0.0046

Jupiter 120900-05-31 22:46 G 45879029.32 45879029.45 45879029.60 0.0541 0.0383

Uranus 120900-09-08 03:05 G 45879128.45 45879128.63 45879128.83 0.0141 0.0071

Uranus 120901-04-22 14:07 G 45879354.95 45879355.09 45879355.27 0.0141 0.0096

Uranus 120901-12-05 01:24 G 45879581.46 45879581.56 45879581.69 0.0141 0.0120

Saturn 120902-03-21 09:48 G 45879687.79 45879687.91 45879688.05 0.0276 0.0215

Saturn 120902-11-05 14:36 G 45879916.92 45879917.11 45879917.31 0.0277 0.0108

Jupiter 120906-04-03 05:00 G 45881161.51 45881161.71 45881161.91 0.0486 0.0139

Mars 120908-03-05 17:58 G 45881864.09 45881864.25 45881864.42 0.1636 0.0428

Neptune 120909-08-11 20:36 G 45882388.31 45882388.36 45882388.44 0.0089 0.0084

Neptune 120910-03-25 08:50 G 45882613.77 45882613.87 45882614.00 0.0089 0.0075

Neptune 120910-11-05 21:05 G 45882839.26 45882839.38 45882839.54 0.0089 0.0066

Neptune 120911-06-19 09:34 G 45883064.75 45883064.90 45883065.08 0.0089 0.0057

Neptune 120912-01-30 22:17 G 45883290.25 45883290.43 45883290.61 0.0089 0.0047

Jupiter 120912-02-04 11:58 G 45883294.80 45883295.00 45883295.20 0.0542 0.0016

Neptune 120912-09-12 10:17 G 45883515.75 45883515.93 45883516.14 0.0089 0.0038

Neptune 120913-04-25 22:31 G 45883741.25 45883741.44 45883741.66 0.0088 0.0029

Neptune 120913-12-07 11:14 G 45883966.76 45883966.97 45883967.18 0.0088 0.0019

Neptune 120914-07-20 23:43 G 45884192.27 45884192.49 45884192.70 0.0088 0.0010

Neptune 120915-03-03 11:58 G 45884417.78 45884418.00 45884418.22 0.0088 0.0001

Neptune 120915-10-15 00:12 G 45884643.30 45884643.51 45884643.73 0.0088 0.0009

Neptune 120916-05-27 12:26 G 45884868.81 45884869.02 45884869.24 0.0088 0.0018

Saturn 120916-09-05 11:43 G 45884969.97 45884969.99 45884970.03 0.0282 0.0279

Neptune 120917-01-08 00:41 G 45885094.33 45885094.53 45885094.75 0.0088 0.0028

Saturn 120917-04-23 06:55 G 45885199.58 45885199.79 45885199.99 0.0282 0.0082

Neptune 120917-08-21 12:55 G 45885319.86 45885320.04 45885320.26 0.0088 0.0038

Jupiter 120917-12-07 09:05 G 45885427.77 45885427.88 45885428.00 0.0485 0.0400

Neptune 120918-04-04 01:24 G 45885545.39 45885545.56 45885545.76 0.0088 0.0046

Neptune 120918-11-15 13:38 G 45885770.92 45885771.07 45885771.25 0.0088 0.0056

Neptune 120919-06-29 02:22 G 45885996.45 45885996.60 45885996.75 0.0088 0.0065

Neptune 120920-02-09 14:07 G 45886222.00 45886222.09 45886222.23 0.0088 0.0075

Neptune 120920-09-22 02:36 G 45886447.56 45886447.61 45886447.70 0.0088 0.0084

Jupiter 120923-10-09 21:19 G 45887560.25 45887560.39 45887560.54 0.0543 0.0367

Jupiter 120930-04-05 12:26 G 45889929.86 45889930.02 45889930.19 0.0487 0.0288

Saturn 120931-10-01 18:12 G 45890474.09 45890474.26 45890474.43 0.0277 0.0159

Saturn 120932-05-17 23:14 G 45890703.31 45890703.47 45890703.64 0.0277 0.0165

Uranus 120938-06-24 17:00 G 45892932.11 45892932.21 45892932.32 0.0136 0.0118

Uranus 120939-02-05 22:02 G 45893158.28 45893158.42 45893158.57 0.0136 0.0098

Uranus 120939-09-20 03:05 G 45893384.46 45893384.63 45893384.82 0.0136 0.0077

Uranus 120940-05-03 08:07 G 45893610.66 45893610.84 45893611.05 0.0136 0.0056

Uranus 120940-12-15 13:38 G 45893836.87 45893837.07 45893837.28 0.0136 0.0034

Uranus 120941-07-29 19:10 G 45894063.09 45894063.30 45894063.52 0.0137 0.0012

Jupiter 120941-12-09 14:36 G 45894195.90 45894196.11 45894196.31 0.0486 0.0018

Uranus 120942-03-13 00:41 G 45894289.32 45894289.53 45894289.74 0.0137 0.0010

Uranus 120942-10-25 06:12 G 45894515.56 45894515.76 45894515.97 0.0137 0.0032

Uranus 120943-06-08 11:58 G 45894741.81 45894742.00 45894742.20 0.0137 0.0054

Uranus 120944-01-20 17:43 G 45894968.07 45894968.24 45894968.43 0.0137 0.0076

Uranus 120944-09-02 23:43 G 45895194.35 45895194.49 45895194.65 0.0137 0.0098

Uranus 120945-04-17 05:58 G 45895420.65 45895420.75 45895420.86 0.0137 0.0120

Saturn 120946-03-18 19:53 G 45895756.21 45895756.33 45895756.47 0.0283 0.0221

Saturn 120946-11-03 14:36 G 45895985.92 45895986.11 45895986.30 0.0282 0.0138

Jupiter 120947-10-13 03:19 G 45896329.45 45896329.64 45896329.82 0.0542 0.0219

Jupiter 120953-08-14 18:12 G 45898462.08 45898462.26 45898462.44 0.0485 0.0249

Jupiter 120959-06-17 17:29 G 45900595.04 45900595.23 45900595.43 0.0543 0.0144

Saturn 120961-04-12 19:10 G 45901260.12 45901260.30 45901260.49 0.0276 0.0124

Saturn 120961-11-28 00:12 G 45901489.37 45901489.51 45901489.66 0.0277 0.0200

Earth 120963-10-09 06:55 G 45902169.63 45902169.79 45902169.94 0.2683 0.0118

Moon 120963-10-09 09:19 G 45902169.73 45902169.89 45902170.06 0.2676 0.0294 *

Jupiter 120965-12-11 20:50 G 45902964.29 45902964.37 45902964.46 0.0488 0.0440

Jupiter 120971-02-20 06:41 G 45904860.72 45904860.78 45904860.85 0.0544 0.0512

Mars 120974-01-01 05:58 G 45905906.60 45905906.75 45905906.91 0.1634 0.0688

Saturn 120975-09-28 23:00 G 45906542.30 45906542.46 45906542.63 0.0282 0.0181

Saturn 120976-05-15 17:43 G 45906772.07 45906772.24 45906772.41 0.0282 0.0178

Jupiter 120977-08-17 01:10 G 45907230.36 45907230.55 45907230.74 0.0487 0.0176

Uranus 120980-01-04 21:48 G 45908101.29 45908101.41 45908101.54 0.0142 0.0117

Uranus 120980-08-18 10:02 G 45908327.76 45908327.92 45908328.10 0.0142 0.0092

Uranus 120981-04-01 22:02 G 45908554.24 45908554.42 45908554.63 0.0142 0.0067

Uranus 120981-11-14 10:17 G 45908780.72 45908780.93 45908781.15 0.0142 0.0041

Uranus 120982-06-28 22:17 G 45909007.21 45909007.43 45909007.66 0.0141 0.0015

Uranus 120983-02-10 10:17 G 45909233.71 45909233.93 45909234.15 0.0141 0.0010

Jupiter 120983-06-20 18:41 G 45909364.17 45909364.28 45909364.41 0.0540 0.0424

Uranus 120983-09-24 21:48 G 45909460.20 45909460.41 45909460.63 0.0141 0.0036

Uranus 120984-05-08 09:05 G 45909686.70 45909686.88 45909687.10 0.0141 0.0061

Uranus 120984-12-20 20:36 G 45909913.20 45909913.36 45909913.55 0.0141 0.0086

Uranus 120985-08-04 08:07 G 45910139.71 45910139.84 45910139.98 0.0141 0.0110

Uranus 120986-03-18 19:10 G 45910366.25 45910366.30 45910366.37 0.0141 0.0134

Jupiter 120989-04-22 04:31 G 45911496.49 45911496.69 45911496.89 0.0486 0.0091

Saturn 120990-10-24 03:34 G 45912046.45 45912046.65 45912046.85 0.0277 0.0067

Saturn 120991-06-10 08:50 G 45912275.80 45912275.87 45912275.95 0.0277 0.0258

Neptune 120992-12-23 03:19 G 45912837.64 45912837.64 45912837.71 0.0089 0.0088

Neptune 120993-08-05 17:29 G 45913063.14 45913063.23 45913063.35 0.0089 0.0078

Neptune 120994-03-19 07:24 G 45913288.67 45913288.81 45913288.96 0.0089 0.0068

Neptune 120994-10-30 20:50 G 45913514.22 45913514.37 45913514.55 0.0089 0.0059

Jupiter 120995-02-23 07:24 G 45913629.61 45913629.81 45913630.01 0.0542 0.0055

Neptune 120995-06-13 10:31 G 45913739.77 45913739.94 45913740.14 0.0089 0.0049

Neptune 120996-01-25 00:41 G 45913965.33 45913965.53 45913965.73 0.0089 0.0039

Neptune 120996-09-06 14:07 G 45914190.89 45914191.09 45914191.31 0.0089 0.0030

Neptune 120997-04-20 03:48 G 45914416.45 45914416.66 45914416.89 0.0089 0.0020

Neptune 120997-12-01 17:43 G 45914642.02 45914642.24 45914642.46 0.0089 0.0010

Neptune 120998-07-15 07:24 G 45914867.59 45914867.81 45914868.04 0.0089 0.0002

Neptune 120999-02-25 21:05 G 45915093.17 45915093.38 45915093.61 0.0089 0.0010

Neptune 120999-10-09 11:00 G 45915318.74 45915318.96 45915319.18 0.0089 0.0019

Neptune 121000-05-23 00:26 G 45915544.32 45915544.52 45915544.74 0.0089 0.0029

Jupiter 121000-12-27 06:26 G 45915762.64 45915762.77 45915762.92 0.0485 0.0362

122ND MILLENNIUM CE

This is a list of transits of Venus in the 122nd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Neptune 121001-01-03 14:07 G 45915769.90 45915770.09 45915770.30 0.0089 0.0039

Neptune 121001-08-17 03:34 G 45915995.49 45915995.65 45915995.86 0.0089 0.0050

Neptune 121002-03-30 17:43 G 45916221.08 45916221.24 45916221.41 0.0089 0.0058

Neptune 121002-11-11 07:10 G 45916446.67 45916446.80 45916446.95 0.0089 0.0068

Neptune 121003-06-24 20:22 G 45916672.27 45916672.35 45916672.48 0.0089 0.0079

Neptune 121004-02-05 10:31 G 45916897.91 45916897.94 45916897.99 0.0089 0.0087

Saturn 121005-04-11 08:36 G 45917328.67 45917328.86 45917329.06 0.0282 0.0120

Saturn 121005-11-27 02:50 G 45917558.52 45917558.62 45917558.74 0.0282 0.0239

Mars 121005-12-31 23:14 G 45917593.39 45917593.47 45917593.54 0.1642 0.1475

Jupiter 121006-10-29 21:05 G 45917895.22 45917895.38 45917895.55 0.0544 0.0314

Mars 121010-08-08 23:29 G 45919274.35 45919274.48 45919274.61 0.1899 0.1251

Jupiter 121013-04-25 09:34 G 45920264.74 45920264.90 45920265.05 0.0487 0.0327

Saturn 121020-05-06 05:29 G 45922832.53 45922832.73 45922832.94 0.0276 0.0030

Uranus 121022-02-23 01:53 G 45923490.53 45923490.58 45923490.67 0.0136 0.0128

Uranus 121022-10-07 07:10 G 45923716.68 45923716.80 45923716.94 0.0136 0.0107

Uranus 121023-05-21 12:12 G 45923942.86 45923943.01 45923943.19 0.0136 0.0086

Uranus 121024-01-02 17:29 G 45924169.05 45924169.23 45924169.42 0.0136 0.0065

Uranus 121024-08-15 22:46 G 45924395.25 45924395.45 45924395.66 0.0136 0.0043

Jupiter 121024-12-29 12:41 G 45924530.82 45924531.03 45924531.24 0.0486 0.0059

Uranus 121025-03-30 04:02 G 45924621.47 45924621.67 45924621.89 0.0137 0.0022

Uranus 121025-11-11 09:34 G 45924847.69 45924847.90 45924848.12 0.0137 0.0003

Uranus 121026-06-25 15:19 G 45925073.93 45925074.14 45925074.35 0.0137 0.0023

Uranus 121027-02-06 20:50 G 45925300.18 45925300.37 45925300.58 0.0137 0.0045

Uranus 121027-09-21 02:36 G 45925526.43 45925526.61 45925526.81 0.0137 0.0067

Uranus 121028-05-04 08:22 G 45925752.70 45925752.85 45925753.03 0.0137 0.0089

Uranus 121028-12-16 14:50 G 45925979.00 45925979.12 45925979.25 0.0137 0.0111

Uranus 121029-07-30 21:05 G 45926205.34 45926205.38 45926205.44 0.0137 0.0133

Jupiter 121030-11-02 03:34 G 45926664.48 45926664.65 45926664.83 0.0541 0.0277

Saturn 121034-10-22 11:29 G 45928114.77 45928114.98 45928115.19 0.0282 0.0080

Saturn 121035-06-09 05:43 G 45928344.72 45928344.74 45928344.78 0.0282 0.0278

Jupiter 121036-09-03 16:46 G 45928797.01 45928797.20 45928797.39 0.0485 0.0204

Mars 121039-10-30 18:41 G 45929949.14 45929949.28 45929949.42 0.1632 0.0928

Jupiter 121042-07-07 13:24 G 45930929.87 45930930.06 45930930.26 0.0543 0.0105

Jupiter 121048-05-09 19:53 G 45933063.28 45933063.33 45933063.38 0.0485 0.0469

Jupiter 121048-12-31 19:38 G 45933299.31 45933299.32 45933299.34 0.0488 0.0487

Pluto 121049-09-24 07:53 G 45933565.69 45933565.83 45933566.00 0.0062 0.0044

Saturn 121049-11-16 13:38 G 45933618.86 45933619.07 45933619.28 0.0277 0.0027

Pluto 121050-05-07 11:14 G 45933790.76 45933790.97 45933791.19 0.0062 0.0010

Pluto 121050-12-18 14:07 G 45934015.91 45934016.09 45934016.31 0.0063 0.0025

Pluto 121051-07-31 17:29 G 45934241.17 45934241.23 45934241.31 0.0063 0.0059

Jupiter 121054-03-12 01:38 G 45935195.48 45935195.57 45935195.66 0.0544 0.0477

Jupiter 121060-09-05 21:34 G 45937565.22 45937565.40 45937565.59 0.0487 0.0212

Uranus 121063-09-05 03:19 G 45938659.56 45938659.64 45938659.74 0.0142 0.0128

Uranus 121064-04-18 15:34 G 45938886.01 45938886.15 45938886.32 0.0142 0.0103

Saturn 121064-05-03 22:46 G 45938901.23 45938901.45 45938901.66 0.0282 0.0014

Uranus 121064-12-01 04:17 G 45939112.49 45939112.68 45939112.87 0.0142 0.0077

Uranus 121065-07-15 16:17 G 45939338.98 45939339.18 45939339.39 0.0142 0.0052

Uranus 121066-02-27 04:31 G 45939565.47 45939565.69 45939565.91 0.0141 0.0026

Jupiter 121066-07-10 17:58 G 45939699.16 45939699.25 45939699.35 0.0541 0.0475

Uranus 121066-10-11 16:17 G 45939791.96 45939792.18 45939792.40 0.0141 0.0000

Uranus 121067-05-26 04:02 G 45940018.45 45940018.67 45940018.89 0.0141 0.0025

Uranus 121068-01-07 15:48 G 45940244.96 45940245.16 45940245.37 0.0141 0.0050

Uranus 121068-08-21 03:19 G 45940471.46 45940471.64 45940471.83 0.0141 0.0075

Uranus 121069-04-04 14:36 G 45940697.96 45940698.11 45940698.27 0.0141 0.0100

Moon 121069-04-16 08:36 G 45940709.80 45940709.86 45940709.93 0.2656 0.2395

Uranus 121069-11-17 01:38 G 45940924.48 45940924.57 45940924.68 0.0141 0.0125

Mars 121071-10-29 11:29 G 45941635.86 45941635.98 45941636.09 0.1640 0.1213

Jupiter 121072-05-12 00:55 G 45941831.33 45941831.54 45941831.75 0.0485 0.0055

Neptune 121073-11-14 08:22 G 45942382.80 45942382.85 45942382.92 0.0089 0.0085

Neptune 121074-06-27 20:36 G 45942608.26 45942608.36 45942608.49 0.0089 0.0076

Neptune 121075-02-08 08:50 G 45942833.74 45942833.87 45942834.03 0.0089 0.0067

Neptune 121075-09-21 21:05 G 45943059.23 45943059.38 45943059.56 0.0089 0.0058

Neptune 121076-05-04 09:34 G 45943284.73 45943284.90 45943285.09 0.0089 0.0048

Mars 121076-06-05 01:53 G 45943316.41 45943316.58 45943316.75 0.1903 0.0427

Neptune 121076-12-15 21:48 G 45943510.23 45943510.41 45943510.61 0.0089 0.0039

Earth 121077-04-14 02:36 G 45943629.45 45943629.61 45943629.77 0.2649 0.0593

Moon 121077-04-14 04:02 G 45943629.52 45943629.67 45943629.82 0.2656 0.0407 *

Neptune 121077-07-29 10:17 G 45943735.74 45943735.93 45943736.15 0.0088 0.0030

Neptune 121078-03-11 22:31 G 45943961.24 45943961.44 45943961.67 0.0088 0.0021

Jupiter 121078-03-15 08:22 G 45943964.65 45943964.85 45943965.04 0.0542 0.0113

Saturn 121078-10-12 11:29 G 45944175.91 45944175.98 45944176.06 0.0276 0.0255

Neptune 121078-10-23 11:14 G 45944186.75 45944186.97 45944187.18 0.0088 0.0011

Saturn 121079-05-29 16:17 G 45944404.98 45944405.18 45944405.39 0.0277 0.0067

Neptune 121079-06-05 23:29 G 45944412.26 45944412.48 45944412.70 0.0088 0.0001

Neptune 121080-01-17 11:43 G 45944637.78 45944637.99 45944638.21 0.0088 0.0009

Neptune 121080-08-30 00:12 G 45944863.30 45944863.51 45944863.73 0.0088 0.0018

Neptune 121081-04-12 12:41 G 45945088.82 45945089.03 45945089.24 0.0088 0.0027

Neptune 121081-11-24 00:41 G 45945314.34 45945314.53 45945314.74 0.0088 0.0036

Neptune 121082-07-07 13:10 G 45945539.87 45945540.05 45945540.25 0.0088 0.0046

Neptune 121083-02-18 01:38 G 45945765.41 45945765.57 45945765.75 0.0088 0.0055

Neptune 121083-10-01 13:38 G 45945990.94 45945991.07 45945991.24 0.0088 0.0064

Jupiter 121084-01-16 04:02 G 45946097.52 45946097.67 45946097.83 0.0485 0.0321

Neptune 121084-05-14 01:53 G 45946216.48 45946216.58 45946216.72 0.0088 0.0074

Neptune 121084-12-25 14:22 G 45946442.04 45946442.10 45946442.19 0.0088 0.0083

Jupiter 121089-11-17 21:34 G 45948230.22 45948230.40 45948230.57 0.0543 0.0255

Saturn 121093-11-14 01:24 G 45949687.34 45949687.56 45949687.77 0.0282 0.0026

Jupiter 121096-05-14 07:38 G 45950599.69 45950599.82 45950599.95 0.0488 0.0371

Mars 121105-08-28 06:41 G 45953991.67 45953991.78 45953991.90 0.1629 0.1185

Uranus 121106-06-07 17:00 G 45954275.11 45954275.21 45954275.33 0.0136 0.0116

Uranus 121107-01-19 22:02 G 45954501.28 45954501.42 45954501.58 0.0136 0.0095

Uranus 121107-09-03 03:19 G 45954727.46 45954727.64 45954727.82 0.0136 0.0074

Jupiter 121108-01-19 10:46 G 45954865.75 45954865.95 45954866.16 0.0486 0.0104

Uranus 121108-04-16 08:22 G 45954953.66 45954953.85 45954954.05 0.0136 0.0052

Saturn 121108-04-24 18:55 G 45954962.15 45954962.29 45954962.43 0.0277 0.0201

Uranus 121108-11-28 13:38 G 45955179.87 45955180.07 45955180.28 0.0136 0.0031

Saturn 121108-12-09 23:58 G 45955191.32 45955191.50 45955191.69 0.0277 0.0124

Uranus 121109-07-12 19:24 G 45955406.09 45955406.31 45955406.52 0.0137 0.0009

Uranus 121110-02-24 00:41 G 45955632.32 45955632.53 45955632.75 0.0137 0.0014

Uranus 121110-10-08 06:12 G 45955858.56 45955858.76 45955858.98 0.0137 0.0036

Uranus 121111-05-22 11:58 G 45956084.82 45956085.00 45956085.20 0.0137 0.0058

Uranus 121112-01-03 17:58 G 45956311.08 45956311.25 45956311.43 0.0137 0.0080

Uranus 121112-08-16 23:58 G 45956537.37 45956537.50 45956537.65 0.0137 0.0102

Uranus 121113-03-31 06:12 G 45956763.68 45956763.76 45956763.86 0.0137 0.0124

Jupiter 121113-11-21 22:17 G 45956999.26 45956999.43 45956999.59 0.0541 0.0312

Jupiter 121119-09-24 12:41 G 45959131.84 45959132.03 45959132.23 0.0485 0.0172

Saturn 121122-10-10 18:12 G 45960244.20 45960244.26 45960244.34 0.0282 0.0266

Saturn 121123-05-28 13:10 G 45960473.85 45960474.05 45960474.26 0.0282 0.0094

Jupiter 121125-07-27 11:29 G 45961264.78 45961264.98 45961265.18 0.0543 0.0058

Jupiter 121131-05-30 16:02 G 45963398.09 45963398.17 45963398.27 0.0484 0.0435

Jupiter 121137-04-01 01:38 G 45965530.45 45965530.57 45965530.69 0.0544 0.0423

Mars 121137-08-26 23:43 G 45965678.35 45965678.49 45965678.63 0.1638 0.0962

Saturn 121137-11-04 22:46 G 45965748.28 45965748.45 45965748.62 0.0276 0.0158

Saturn 121138-06-22 03:48 G 45965977.50 45965977.66 45965977.83 0.0277 0.0166

Pluto 121141-01-30 16:17 G 45966931.06 45966931.18 45966931.35 0.0082 0.0062

Pluto 121141-09-13 04:17 G 45967156.48 45967156.68 45967156.91 0.0081 0.0019

Mars 121142-04-03 05:14 G 45967358.55 45967358.72 45967358.89 0.1907 0.0368

Jupiter 121143-09-26 18:41 G 45967900.11 45967900.28 45967900.46 0.0487 0.0252

Uranus 121147-05-06 08:50 G 45969217.84 45969217.87 45969217.93 0.0142 0.0139

Uranus 121147-12-18 21:19 G 45969444.28 45969444.39 45969444.54 0.0142 0.0114

Uranus 121148-08-01 10:02 G 45969670.75 45969670.92 45969671.10 0.0142 0.0088

Uranus 121149-03-15 22:02 G 45969897.23 45969897.42 45969897.63 0.0142 0.0063

Jupiter 121149-07-30 17:58 G 45970034.22 45970034.25 45970034.29 0.0540 0.0531

Uranus 121149-10-28 10:17 G 45970123.72 45970123.93 45970124.15 0.0142 0.0037

Uranus 121150-06-11 22:17 G 45970350.21 45970350.43 45970350.65 0.0141 0.0011

Uranus 121151-01-24 10:17 G 45970576.71 45970576.93 45970577.15 0.0141 0.0015

Uranus 121151-09-07 22:02 G 45970803.21 45970803.42 45970803.64 0.0141 0.0040

Uranus 121152-04-21 09:34 G 45971029.71 45971029.90 45971030.10 0.0141 0.0065

Saturn 121152-04-21 20:50 G 45971030.25 45971030.37 45971030.50 0.0282 0.0227

Uranus 121152-12-03 20:50 G 45971256.22 45971256.37 45971256.56 0.0141 0.0091

Saturn 121152-12-07 15:48 G 45971259.97 45971260.16 45971260.35 0.0282 0.0132

Uranus 121153-07-18 08:36 G 45971482.73 45971482.86 45971482.99 0.0141 0.0115

Uranus 121154-03-01 19:24 G 45971709.30 45971709.31 45971709.35 0.0141 0.0140

Jupiter 121155-06-01 22:31 G 45972166.23 45972166.44 45972166.65 0.0486 0.0013

Neptune 121157-03-28 13:53 G 45972832.08 45972832.08 45972832.11 0.0089 0.0088

Neptune 121157-11-09 03:34 G 45973057.56 45973057.65 45973057.76 0.0089 0.0079

Neptune 121158-06-22 17:43 G 45973283.10 45973283.24 45973283.38 0.0089 0.0069

Neptune 121159-02-03 07:10 G 45973508.65 45973508.80 45973508.98 0.0089 0.0060

Neptune 121159-09-16 21:05 G 45973734.20 45973734.38 45973734.57 0.0089 0.0050

Neptune 121160-04-29 11:00 G 45973959.76 45973959.96 45973960.16 0.0089 0.0040

Neptune 121160-12-11 00:26 G 45974185.32 45974185.52 45974185.74 0.0089 0.0031

Jupiter 121161-04-04 04:31 G 45974299.50 45974299.69 45974299.88 0.0542 0.0153

Neptune 121161-07-24 14:07 G 45974410.88 45974411.09 45974411.32 0.0089 0.0021

Neptune 121162-03-07 04:02 G 45974636.45 45974636.67 45974636.90 0.0089 0.0011

Neptune 121162-10-18 17:43 G 45974862.02 45974862.24 45974862.47 0.0089 0.0002

Neptune 121163-06-01 07:24 G 45975087.59 45975087.81 45975088.04 0.0089 0.0009

Neptune 121164-01-12 21:19 G 45975313.17 45975313.39 45975313.61 0.0089 0.0018

Neptune 121164-08-25 10:46 G 45975538.75 45975538.95 45975539.17 0.0089 0.0028

Neptune 121165-04-08 00:26 G 45975764.33 45975764.52 45975764.73 0.0089 0.0038

Neptune 121165-11-19 13:53 G 45975989.91 45975990.08 45975990.28 0.0089 0.0048

Neptune 121166-07-03 03:48 G 45976215.50 45976215.66 45976215.83 0.0089 0.0057

Jupiter 121167-02-05 01:38 G 45976432.41 45976432.57 45976432.74 0.0485 0.0281

Neptune 121167-02-13 17:14 G 45976441.10 45976441.22 45976441.39 0.0089 0.0067

Saturn 121167-05-18 05:14 G 45976534.53 45976534.72 45976534.91 0.0277 0.0106

Neptune 121167-09-27 06:41 G 45976666.70 45976666.78 45976666.92 0.0089 0.0077

Saturn 121168-01-02 10:31 G 45976763.82 45976763.94 45976764.07 0.0277 0.0220

Neptune 121168-05-09 20:36 G 45976892.32 45976892.36 45976892.43 0.0089 0.0086

Mars 121171-06-25 19:24 G 45978034.23 45978034.31 45978034.39 0.1627 0.1419

Jupiter 121172-12-07 16:17 G 45978565.00 45978565.18 45978565.36 0.0543 0.0221

Jupiter 121179-06-04 03:19 G 45980934.53 45980934.64 45980934.76 0.0487 0.0404

Saturn 121181-11-02 09:48 G 45981816.73 45981816.91 45981817.09 0.0282 0.0156

Saturn 121182-06-20 04:17 G 45982046.53 45982046.68 45982046.83 0.0282 0.0203

Uranus 121190-02-05 02:21 G 45984833.53 45984833.60 45984833.68 0.0136 0.0125

Uranus 121190-09-19 07:09 G 45985059.68 45985059.80 45985059.95 0.0136 0.0105

Jupiter 121191-02-07 06:41 G 45985200.59 45985200.78 45985200.98 0.0486 0.0137

Uranus 121191-05-03 12:12 G 45985285.85 45985286.01 45985286.19 0.0136 0.0083

Uranus 121191-12-15 17:29 G 45985512.05 45985512.23 45985512.42 0.0136 0.0062

Uranus 121192-07-28 22:45 G 45985738.25 45985738.45 45985738.66 0.0136 0.0040

Uranus 121193-03-12 04:17 G 45985964.47 45985964.68 45985964.89 0.0136 0.0018

Uranus 121193-10-24 09:48 G 45986190.69 45986190.91 45986191.12 0.0137 0.0004

Uranus 121194-06-07 15:19 G 45986416.93 45986417.14 45986417.35 0.0137 0.0026

Uranus 121195-01-19 20:50 G 45986643.18 45986643.37 45986643.58 0.0137 0.0049

Uranus 121195-09-03 02:50 G 45986869.44 45986869.62 45986869.81 0.0137 0.0071

Uranus 121196-04-16 08:36 G 45987095.72 45987095.86 45987096.03 0.0137 0.0094

Saturn 121196-11-27 09:48 G 45987320.71 45987320.91 45987321.12 0.0276 0.0061

Uranus 121196-11-28 14:50 G 45987322.02 45987322.12 45987322.24 0.0137 0.0115

Jupiter 121196-12-10 22:02 G 45987334.27 45987334.42 45987334.57 0.0541 0.0366

Saturn 121197-07-14 15:05 G 45987550.08 45987550.13 45987550.20 0.0277 0.0264

Jupiter 121202-10-13 09:33 G 45989466.71 45989466.90 45989467.10 0.0485 0.0132

Mars 121203-06-24 11:57 G 45989720.85 45989721.00 45989721.16 0.1635 0.0707

Earth 121206-10-11 09:19 G 45990925.74 45990925.89 45990926.05 0.2684 0.0138

Moon 121206-10-11 12:41 G 45990925.88 45990926.03 45990926.18 0.2690 0.0288 *

Mars 121208-01-29 07:24 G 45991400.68 45991400.81 45991400.95 0.1911 0.1212

Jupiter 121208-08-15 11:43 G 45991599.79 45991599.99 45991600.19 0.0543 0.0003

Saturn 121211-05-15 11:29 G 45992602.79 45992602.98 45992603.18 0.0282 0.0119

Saturn 121211-12-31 05:57 G 45992832.65 45992832.75 45992832.88 0.0282 0.0240

Jupiter 121214-06-18 13:09 G 45993732.94 45993733.05 45993733.18 0.0485 0.0396

Moon 121214-10-09 07:24 G 45993845.75 45993845.81 45993845.87 0.2686 0.2469

Jupiter 121220-04-19 22:45 G 45995865.31 45995865.45 45995865.59 0.0543 0.0379

Saturn 121226-06-09 15:48 G 45998106.95 45998107.16 45998107.37 0.0277 0.0010

Jupiter 121226-10-15 16:17 G 45998235.02 45998235.18 45998235.35 0.0487 0.0294

Uranus 121231-08-18 03:05 G 46000002.55 46000002.63 46000002.76 0.0142 0.0125

Uranus 121232-03-31 15:48 G 46000229.01 46000229.16 46000229.32 0.0142 0.0099

Uranus 121232-11-13 04:17 G 46000455.49 46000455.68 46000455.87 0.0142 0.0073

Uranus 121233-06-27 16:17 G 46000681.98 46000682.18 46000682.40 0.0142 0.0048

Uranus 121234-02-09 04:31 G 46000908.47 46000908.69 46000908.91 0.0142 0.0022

Uranus 121234-09-23 16:31 G 46001134.97 46001135.19 46001135.42 0.0141 0.0005

Uranus 121235-05-08 04:17 G 46001361.47 46001361.68 46001361.90 0.0141 0.0030

Uranus 121235-12-20 16:02 G 46001587.98 46001588.17 46001588.38 0.0141 0.0056

Uranus 121236-08-03 03:33 G 46001814.48 46001814.65 46001814.85 0.0141 0.0081

Uranus 121237-03-17 15:05 G 46002041.00 46002041.13 46002041.29 0.0141 0.0106

Uranus 121237-10-30 02:07 G 46002267.53 46002267.59 46002267.69 0.0141 0.0131

Neptune 121238-02-16 20:07 G 46002377.31 46002377.34 46002377.41 0.0089 0.0086

Jupiter 121238-06-20 18:26 G 46002501.06 46002501.27 46002501.48 0.0486 0.0020

Neptune 121238-09-30 08:21 G 46002602.76 46002602.85 46002602.97 0.0089 0.0077

Neptune 121239-05-13 20:21 G 46002828.24 46002828.35 46002828.51 0.0089 0.0068

Neptune 121239-12-25 08:36 G 46003053.72 46003053.86 46003054.05 0.0089 0.0059

Neptune 121240-08-06 21:33 G 46003279.22 46003279.40 46003279.58 0.0089 0.0049

Saturn 121240-11-25 00:12 G 46003389.30 46003389.51 46003389.73 0.0282 0.0048

Neptune 121241-03-20 09:33 G 46003504.72 46003504.90 46003505.10 0.0089 0.0040

Neptune 121241-10-31 21:48 G 46003730.22 46003730.41 46003730.62 0.0089 0.0031

Neptune 121242-06-14 10:02 G 46003955.72 46003955.92 46003956.14 0.0088 0.0022

Neptune 121243-01-25 22:31 G 46004181.23 46004181.44 46004181.66 0.0088 0.0012

Neptune 121243-09-08 11:00 G 46004406.74 46004406.96 46004407.18 0.0088 0.0002

Neptune 121244-04-20 23:14 G 46004632.26 46004632.47 46004632.69 0.0088 0.0007

Jupiter 121244-04-23 01:24 G 46004634.38 46004634.56 46004634.75 0.0542 0.0197

Neptune 121244-12-02 11:29 G 46004857.78 46004857.98 46004858.20 0.0088 0.0017

Neptune 121245-07-16 00:12 G 46005083.30 46005083.51 46005083.72 0.0088 0.0026

Neptune 121246-02-26 12:12 G 46005308.82 46005309.01 46005309.22 0.0088 0.0035

Neptune 121246-10-10 00:41 G 46005534.35 46005534.53 46005534.72 0.0088 0.0044

Neptune 121247-05-23 12:55 G 46005759.88 46005760.04 46005760.22 0.0088 0.0054

Neptune 121248-01-04 00:55 G 46005985.41 46005985.54 46005985.71 0.0088 0.0064

Neptune 121248-08-16 13:24 G 46006210.96 46006211.06 46006211.21 0.0088 0.0073

Neptune 121249-03-30 01:53 G 46006436.52 46006436.58 46006436.68 0.0088 0.0082

Jupiter 121250-02-23 22:02 G 46006767.24 46006767.42 46006767.60 0.0485 0.0246

Saturn 121255-12-20 20:50 G 46008893.16 46008893.37 46008893.58 0.0276 0.0037

Jupiter 121255-12-27 15:19 G 46008899.96 46008900.14 46008900.34 0.0544 0.0171

Jupiter 121262-06-23 00:12 G 46011269.43 46011269.51 46011269.60 0.0488 0.0444

Jupiter 121267-09-01 05:29 G 46013165.70 46013165.73 46013165.76 0.0544 0.0536

Mars 121269-04-21 00:41 G 46013763.36 46013763.53 46013763.69 0.1633 0.0460

Saturn 121270-06-07 02:07 G 46014175.37 46014175.59 46014175.80 0.0282 0.0011

Uranus 121273-10-05 12:12 G 46015391.99 46015392.01 46015392.05 0.0136 0.0134

Jupiter 121274-02-26 04:17 G 46015535.49 46015535.68 46015535.87 0.0486 0.0178

Uranus 121274-05-19 17:14 G 46015618.11 46015618.22 46015618.34 0.0136 0.0113

Uranus 121274-12-31 22:17 G 46015844.28 46015844.43 46015844.59 0.0136 0.0092

Uranus 121275-08-15 03:33 G 46016070.47 46016070.65 46016070.83 0.0136 0.0070

Uranus 121276-03-28 08:21 G 46016296.67 46016296.85 46016297.06 0.0136 0.0050

Uranus 121276-11-09 13:53 G 46016522.88 46016523.08 46016523.30 0.0136 0.0027

Uranus 121277-06-23 19:38 G 46016749.11 46016749.32 46016749.53 0.0136 0.0005

Uranus 121278-02-05 01:09 G 46016975.34 46016975.55 46016975.76 0.0137 0.0017

Uranus 121278-09-19 06:41 G 46017201.58 46017201.78 46017201.99 0.0137 0.0040

Uranus 121279-05-03 12:26 G 46017427.83 46017428.02 46017428.21 0.0137 0.0062

Uranus 121279-12-15 18:26 G 46017654.10 46017654.27 46017654.44 0.0137 0.0084

Jupiter 121279-12-30 19:24 G 46017669.19 46017669.31 46017669.45 0.0541 0.0412

Uranus 121280-07-29 00:12 G 46017880.39 46017880.51 46017880.66 0.0137 0.0107

Uranus 121281-03-12 06:12 G 46018106.71 46018106.76 46018106.85 0.0137 0.0130

Saturn 121284-11-14 20:21 G 46019450.26 46019450.35 46019450.46 0.0277 0.0240

Saturn 121285-07-02 01:24 G 46019679.37 46019679.56 46019679.77 0.0277 0.0085

Jupiter 121285-11-01 07:24 G 46019801.60 46019801.81 46019802.01 0.0486 0.0091

Jupiter 121291-09-04 07:38 G 46021934.62 46021934.82 46021935.02 0.0542 0.0039

Jupiter 121297-07-07 09:48 G 46024067.78 46024067.91 46024068.05 0.0484 0.0361

Pluto 121297-08-28 14:50 G 46024120.02 46024120.12 46024120.26 0.0062 0.0051

Pluto 121298-04-10 18:26 G 46024345.07 46024345.27 46024345.48 0.0062 0.0017

Pluto 121298-11-21 21:33 G 46024570.19 46024570.40 46024570.61 0.0062 0.0017

Pluto 121299-07-05 00:26 G 46024795.41 46024795.52 46024795.66 0.0063 0.0051

Saturn 121299-12-18 13:53 G 46024961.87 46024962.08 46024962.30 0.0282 0.0058

Jupiter 121303-05-10 19:09 G 46026200.15 46026200.30 46026200.46 0.0544 0.0340

Jupiter 121309-11-04 12:55 G 46028569.89 46028570.04 46028570.19 0.0487 0.0330

Saturn 121314-05-29 02:50 G 46030236.47 46030236.62 46030236.77 0.0276 0.0189

Saturn 121315-01-13 07:24 G 46030465.63 46030465.81 46030465.99 0.0276 0.0132

Uranus 121315-04-18 08:50 G 46030560.82 46030560.87 46030560.95 0.0142 0.0136

Uranus 121315-11-30 21:33 G 46030787.27 46030787.40 46030787.55 0.0142 0.0110

Uranus 121316-07-14 10:02 G 46031013.75 46031013.92 46031014.10 0.0142 0.0084

Uranus 121317-02-25 22:31 G 46031240.23 46031240.44 46031240.64 0.0142 0.0058

Uranus 121317-10-10 10:31 G 46031466.73 46031466.94 46031467.16 0.0142 0.0032

Uranus 121318-05-24 22:45 G 46031693.22 46031693.45 46031693.67 0.0141 0.0006

Uranus 121319-01-06 10:45 G 46031919.73 46031919.95 46031920.17 0.0141 0.0020

Uranus 121319-08-20 22:45 G 46032146.24 46032146.45 46032146.66 0.0141 0.0046

Uranus 121320-04-03 10:02 G 46032372.74 46032372.92 46032373.12 0.0141 0.0071

Moon 121320-04-15 19:53 G 46032385.18 46032385.33 46032385.47 0.2647 0.1134

Earth 121320-04-16 01:53 G 46032385.43 46032385.58 46032385.74 0.2648 0.0761 *

Uranus 121320-11-15 21:48 G 46032599.25 46032599.41 46032599.57 0.0141 0.0096

Uranus 121321-06-30 09:05 G 46032825.78 46032825.88 46032826.00 0.0141 0.0121

Jupiter 121321-07-10 15:48 G 46032835.95 46032836.16 46032836.37 0.0486 0.0061

Neptune 121322-02-11 12:55 G 46033051.97 46033052.04 46033052.16 0.0089 0.0081

Neptune 121322-09-25 02:50 G 46033277.51 46033277.62 46033277.77 0.0089 0.0071

Neptune 121323-05-08 17:00 G 46033503.05 46033503.21 46033503.38 0.0089 0.0061

Neptune 121323-12-20 06:55 G 46033728.61 46033728.79 46033728.97 0.0089 0.0051

Neptune 121324-08-01 20:21 G 46033954.17 46033954.35 46033954.56 0.0089 0.0042

Neptune 121325-03-15 10:17 G 46034179.73 46034179.93 46034180.15 0.0089 0.0032

Neptune 121325-10-26 23:57 G 46034405.29 46034405.50 46034405.73 0.0089 0.0022

Neptune 121326-06-09 13:53 G 46034630.86 46034631.08 46034631.30 0.0089 0.0012

Neptune 121327-01-21 03:33 G 46034856.43 46034856.65 46034856.88 0.0089 0.0003

Jupiter 121327-05-14 02:36 G 46034969.43 46034969.61 46034969.78 0.0542 0.0258

Neptune 121327-09-03 17:29 G 46035082.00 46035082.23 46035082.45 0.0089 0.0007

Neptune 121328-04-16 06:55 G 46035307.58 46035307.79 46035308.01 0.0089 0.0017

Saturn 121328-11-12 19:53 G 46035518.28 46035518.33 46035518.41 0.0283 0.0269

Neptune 121328-11-27 20:21 G 46035533.15 46035533.35 46035533.58 0.0089 0.0027

Saturn 121329-06-30 15:19 G 46035747.94 46035748.14 46035748.34 0.0282 0.0092

Neptune 121329-07-11 10:02 G 46035758.73 46035758.92 46035759.14 0.0089 0.0037

Neptune 121330-02-21 23:57 G 46035984.32 46035984.50 46035984.70 0.0089 0.0046

Neptune 121330-10-05 13:24 G 46036209.91 46036210.06 46036210.25 0.0089 0.0056

Neptune 121331-05-19 02:50 G 46036435.50 46036435.62 46036435.79 0.0089 0.0066

Neptune 121331-12-30 17:00 G 46036661.10 46036661.21 46036661.33 0.0089 0.0075

Neptune 121332-08-12 06:26 G 46036886.72 46036886.77 46036886.85 0.0089 0.0085

Jupiter 121333-03-15 19:38 G 46037102.13 46037102.32 46037102.51 0.0485 0.0204

Mars 121335-02-17 12:55 G 46037805.87 46037806.04 46037806.21 0.1630 0.0208

Jupiter 121339-01-16 14:36 G 46039234.91 46039235.11 46039235.30 0.0543 0.0118

Saturn 121343-12-09 05:43 G 46041022.57 46041022.74 46041022.92 0.0277 0.0148

Saturn 121344-07-25 10:31 G 46041251.79 46041251.94 46041252.11 0.0277 0.0176

Jupiter 121344-11-18 22:45 G 46041368.40 46041368.45 46041368.49 0.0484 0.0472

Jupiter 121345-07-12 22:31 G 46041604.44 46041604.44 46041604.46 0.0488 0.0487

Jupiter 121350-09-21 02:36 G 46043500.53 46043500.61 46043500.70 0.0544 0.0492

Jupiter 121357-03-18 01:24 G 46045870.37 46045870.56 46045870.74 0.0486 0.0216

Uranus 121358-01-18 02:36 G 46046176.54 46046176.61 46046176.72 0.0136 0.0123

Saturn 121358-05-26 07:09 G 46046304.65 46046304.80 46046304.95 0.0283 0.0203

Uranus 121358-09-01 07:53 G 46046402.69 46046402.83 46046402.98 0.0136 0.0101

Saturn 121359-01-11 02:21 G 46046534.43 46046534.60 46046534.78 0.0282 0.0158

Uranus 121359-04-15 12:41 G 46046628.87 46046629.03 46046629.22 0.0136 0.0080

Uranus 121359-11-27 17:57 G 46046855.07 46046855.25 46046855.45 0.0136 0.0058

Uranus 121360-07-10 23:29 G 46047081.28 46047081.48 46047081.69 0.0136 0.0036

Uranus 121361-02-22 04:45 G 46047307.50 46047307.70 46047307.92 0.0136 0.0015

Uranus 121361-10-06 10:17 G 46047533.72 46047533.93 46047534.15 0.0137 0.0008

Uranus 121362-05-20 15:48 G 46047759.96 46047760.16 46047760.37 0.0137 0.0031

Uranus 121363-01-01 21:33 G 46047986.21 46047986.40 46047986.60 0.0137 0.0053

Jupiter 121363-01-19 16:31 G 46048004.09 46048004.19 46048004.30 0.0541 0.0456

Uranus 121363-08-16 03:33 G 46048212.47 46048212.65 46048212.83 0.0137 0.0075

Uranus 121364-03-29 09:05 G 46048438.75 46048438.88 46048439.04 0.0137 0.0098

Uranus 121364-11-10 15:05 G 46048665.05 46048665.13 46048665.25 0.0137 0.0120

Jupiter 121368-11-21 04:45 G 46050136.50 46050136.70 46050136.91 0.0485 0.0052

Mars 121371-09-23 13:24 G 46051172.97 46051173.06 46051173.15 0.1906 0.1636

Saturn 121373-06-20 12:12 G 46051808.82 46051809.01 46051809.21 0.0276 0.0097

Saturn 121374-02-04 17:00 G 46052038.09 46052038.21 46052038.33 0.0276 0.0225

Jupiter 121374-09-24 06:41 G 46052269.59 46052269.78 46052269.98 0.0543 0.0092

Jupiter 121380-07-27 07:53 G 46054402.68 46054402.83 46054402.99 0.0484 0.0318

Jupiter 121386-05-29 21:05 G 46056535.21 46056535.38 46056535.55 0.0544 0.0276

Saturn 121387-12-06 08:21 G 46057090.68 46057090.85 46057091.03 0.0283 0.0168

Saturn 121388-07-23 03:19 G 46057320.49 46057320.64 46057320.80 0.0282 0.0192

Pluto 121389-01-03 20:50 G 46057485.37 46057485.37 46057485.40 0.0082 0.0082

Pluto 121389-08-17 08:50 G 46057710.65 46057710.87 46057711.10 0.0081 0.0003

Pluto 121390-03-30 20:07 G 46057936.28 46057936.34 46057936.43 0.0081 0.0076

Jupiter 121392-11-23 11:14 G 46058904.84 46058904.97 46058905.10 0.0487 0.0375

Uranus 121399-07-31 03:48 G 46061345.55 46061345.66 46061345.78 0.0142 0.0121

Uranus 121400-03-14 16:17 G 46061572.02 46061572.18 46061572.35 0.0142 0.0095

Uranus 121400-10-27 04:45 G 46061798.50 46061798.70 46061798.89 0.0142 0.0069

Mars 121400-12-16 01:09 G 46061848.38 46061848.55 46061848.72 0.1628 0.0047

Uranus 121401-06-10 17:00 G 46062025.00 46062025.21 46062025.42 0.0142 0.0043

Uranus 121402-01-23 05:14 G 46062251.50 46062251.72 46062251.95 0.0142 0.0017

Neptune 121402-05-23 07:38 G 46062371.80 46062371.82 46062371.88 0.0089 0.0087

Uranus 121402-09-06 17:29 G 46062478.00 46062478.23 46062478.45 0.0141 0.0010

Saturn 121403-01-01 14:07 G 46062594.89 46062595.09 46062595.30 0.0277 0.0059

Neptune 121403-01-03 19:53 G 46062597.25 46062597.33 46062597.45 0.0089 0.0078

Uranus 121403-04-21 05:14 G 46062704.51 46062704.72 46062704.94 0.0141 0.0035

Neptune 121403-08-17 08:07 G 46062822.73 46062822.84 46062823.00 0.0089 0.0069

Saturn 121403-08-18 19:09 G 46062824.25 46062824.30 46062824.36 0.0277 0.0265

Uranus 121403-12-03 17:00 G 46062931.02 46062931.21 46062931.42 0.0141 0.0061

Neptune 121404-03-29 20:21 G 46063048.21 46063048.35 46063048.53 0.0089 0.0060

Uranus 121404-07-17 04:31 G 46063157.53 46063157.69 46063157.88 0.0141 0.0087

Jupiter 121404-07-30 14:36 G 46063170.90 46063171.11 46063171.31 0.0486 0.0106

Neptune 121404-11-10 08:50 G 46063273.70 46063273.87 46063274.06 0.0089 0.0050

Uranus 121405-02-28 16:02 G 46063384.05 46063384.17 46063384.32 0.0141 0.0112

Neptune 121405-06-23 21:05 G 46063499.20 46063499.38 46063499.58 0.0089 0.0041

Uranus 121405-10-13 03:19 G 46063610.60 46063610.64 46063610.70 0.0141 0.0137

Neptune 121406-02-04 09:19 G 46063724.70 46063724.89 46063725.10 0.0089 0.0032

Neptune 121406-09-17 21:48 G 46063950.20 46063950.41 46063950.62 0.0089 0.0022

Neptune 121407-05-01 10:02 G 46064175.71 46064175.92 46064176.14 0.0088 0.0013

Neptune 121407-12-12 22:17 G 46064401.22 46064401.43 46064401.65 0.0088 0.0004

Neptune 121408-07-25 10:45 G 46064626.74 46064626.95 46064627.17 0.0088 0.0006

Neptune 121409-03-07 23:00 G 46064852.25 46064852.46 46064852.68 0.0088 0.0016

Neptune 121409-10-19 11:29 G 46065077.77 46065077.98 46065078.19 0.0088 0.0025

Neptune 121410-06-01 23:29 G 46065303.29 46065303.48 46065303.69 0.0088 0.0034

Jupiter 121410-06-03 00:26 G 46065304.36 46065304.52 46065304.69 0.0542 0.0305

Neptune 121411-01-13 11:57 G 46065528.82 46065529.00 46065529.20 0.0088 0.0044

Neptune 121411-08-27 00:41 G 46065754.36 46065754.53 46065754.70 0.0088 0.0053

Neptune 121412-04-08 12:26 G 46065979.89 46065980.02 46065980.20 0.0088 0.0063

Neptune 121412-11-20 00:55 G 46066205.43 46066205.54 46066205.69 0.0088 0.0072

Neptune 121413-07-03 13:24 G 46066430.99 46066431.06 46066431.16 0.0088 0.0081

Jupiter 121416-04-04 17:43 G 46067437.04 46067437.24 46067437.43 0.0485 0.0164

Saturn 121417-06-18 17:43 G 46067877.05 46067877.24 46067877.45 0.0283 0.0108

Saturn 121418-02-03 12:55 G 46068106.95 46068107.04 46068107.14 0.0282 0.0253

Jupiter 121422-02-05 11:29 G 46069569.78 46069569.98 46069570.18 0.0544 0.0075

Jupiter 121427-12-09 21:19 G 46071703.30 46071703.39 46071703.49 0.0484 0.0427

Saturn 121432-07-13 21:05 G 46073381.17 46073381.38 46073381.59 0.0276 0.0008

Jupiter 121433-10-11 01:09 G 46073835.44 46073835.55 46073835.67 0.0545 0.0444

Mars 121437-07-21 16:17 G 46075215.02 46075215.18 46075215.34 0.1909 0.0824

Jupiter 121440-04-06 23:43 G 46076205.32 46076205.49 46076205.67 0.0486 0.0261

Uranus 121441-09-18 13:09 G 46076735.02 46076735.05 46076735.12 0.0136 0.0132

Uranus 121442-05-02 18:26 G 46076961.15 46076961.27 46076961.39 0.0136 0.0110

Uranus 121442-12-14 23:14 G 46077187.32 46077187.47 46077187.64 0.0136 0.0089

Uranus 121443-07-29 04:31 G 46077413.51 46077413.69 46077413.88 0.0136 0.0067

Uranus 121444-03-11 09:48 G 46077639.72 46077639.91 46077640.12 0.0136 0.0045

Uranus 121444-10-23 15:05 G 46077865.93 46077866.13 46077866.35 0.0136 0.0024

Uranus 121445-06-06 20:36 G 46078092.15 46078092.36 46078092.58 0.0136 0.0003

Uranus 121446-01-19 02:07 G 46078318.38 46078318.59 46078318.80 0.0137 0.0022

Jupiter 121446-02-08 19:09 G 46078339.25 46078339.30 46078339.35 0.0541 0.0523

Uranus 121446-09-02 07:53 G 46078544.63 46078544.83 46078545.03 0.0137 0.0044

Saturn 121446-12-29 19:09 G 46078663.10 46078663.30 46078663.51 0.0283 0.0072

Uranus 121447-04-16 13:09 G 46078770.88 46078771.05 46078771.25 0.0137 0.0067

Uranus 121447-11-28 19:09 G 46078997.14 46078997.30 46078997.47 0.0137 0.0089

Uranus 121448-07-12 01:09 G 46079223.44 46079223.55 46079223.68 0.0137 0.0112

Uranus 121449-02-23 07:24 G 46079449.77 46079449.81 46079449.85 0.0137 0.0134

Moon 121449-10-13 07:09 G 46079681.65 46079681.80 46079681.96 0.2688 0.0068

Earth 121449-10-13 12:12 G 46079681.86 46079682.01 46079682.17 0.2686 0.0199 *

Jupiter 121451-12-12 03:33 G 46080471.45 46080471.65 46080471.86 0.0485 0.0008

Jupiter 121457-10-14 08:07 G 46082604.65 46082604.84 46082605.03 0.0542 0.0152

Saturn 121462-01-23 21:48 G 46084167.21 46084167.41 46084167.62 0.0277 0.0029

Jupiter 121463-08-17 06:55 G 46084737.62 46084737.79 46084737.96 0.0485 0.0273

Mars 121466-10-13 13:53 G 46085890.91 46085891.08 46085891.25 0.1626 0.0291

Jupiter 121469-06-18 20:21 G 46086870.17 46086870.35 46086870.54 0.0543 0.0223

Jupiter 121475-12-14 09:48 G 46089239.81 46089239.91 46089240.02 0.0487 0.0419

Saturn 121476-07-11 03:19 G 46089449.42 46089449.64 46089449.85 0.0283 0.0017

Uranus 121483-03-31 09:19 G 46091903.84 46091903.89 46091903.99 0.0142 0.0134

Uranus 121483-11-12 22:02 G 46092130.29 46092130.42 46092130.58 0.0142 0.0107

Uranus 121484-06-26 10:31 G 46092356.78 46092356.94 46092357.14 0.0142 0.0081

Uranus 121485-02-07 23:14 G 46092583.27 46092583.47 46092583.68 0.0142 0.0054

Uranus 121485-09-22 11:29 G 46092809.77 46092809.98 46092810.21 0.0142 0.0028

Uranus 121486-05-06 23:43 G 46093036.27 46093036.49 46093036.72 0.0142 0.0003

Neptune 121486-05-16 22:31 G 46093046.37 46093046.44 46093046.54 0.0089 0.0082

Uranus 121486-12-19 11:57 G 46093262.78 46093263.00 46093263.22 0.0141 0.0025

Neptune 121486-12-28 12:41 G 46093271.91 46093272.03 46093272.16 0.0089 0.0072

Uranus 121487-08-02 23:43 G 46093489.29 46093489.49 46093489.70 0.0141 0.0051

Neptune 121487-08-11 02:07 G 46093497.45 46093497.59 46093497.77 0.0089 0.0063

Jupiter 121487-08-19 13:53 G 46093505.88 46093506.08 46093506.27 0.0486 0.0153

Uranus 121488-03-16 11:14 G 46093715.80 46093715.97 46093716.17 0.0141 0.0077

Neptune 121488-03-23 16:02 G 46093723.01 46093723.17 46093723.37 0.0089 0.0053

Uranus 121488-10-28 23:00 G 46093942.31 46093942.46 46093942.62 0.0141 0.0102

Neptune 121488-11-04 05:57 G 46093948.56 46093948.75 46093948.95 0.0089 0.0043

Uranus 121489-06-12 10:17 G 46094168.85 46094168.93 46094169.03 0.0141 0.0127

Neptune 121489-06-17 19:53 G 46094174.13 46094174.33 46094174.54 0.0089 0.0033

Neptune 121490-01-29 09:33 G 46094399.70 46094399.90 46094400.13 0.0089 0.0024

Neptune 121490-09-11 23:29 G 46094625.26 46094625.48 46094625.71 0.0089 0.0014

Saturn 121490-12-20 00:41 G 46094724.43 46094724.53 46094724.63 0.0276 0.0240

Neptune 121491-04-25 13:09 G 46094850.83 46094851.05 46094851.28 0.0089 0.0004

Saturn 121491-08-06 05:00 G 46094953.51 46094953.71 46094953.91 0.0276 0.0080

Neptune 121491-12-07 02:50 G 46095076.40 46095076.62 46095076.85 0.0089 0.0006

Neptune 121492-07-19 16:31 G 46095301.98 46095302.19 46095302.42 0.0089 0.0016

Neptune 121493-03-02 06:26 G 46095527.56 46095527.77 46095527.98 0.0089 0.0025

Jupiter 121493-06-21 23:43 G 46095639.35 46095639.49 46095639.64 0.0542 0.0360

Neptune 121493-10-13 19:53 G 46095753.13 46095753.33 46095753.54 0.0089 0.0035

Neptune 121494-05-27 09:19 G 46095978.71 46095978.89 46095979.10 0.0089 0.0045

Neptune 121495-01-07 23:00 G 46096204.30 46096204.46 46096204.65 0.0089 0.0055

Neptune 121495-08-21 12:41 G 46096429.89 46096430.03 46096430.20 0.0089 0.0065

Neptune 121496-04-03 02:07 G 46096655.49 46096655.59 46096655.74 0.0089 0.0075

Neptune 121496-11-14 16:17 G 46096881.11 46096881.18 46096881.25 0.0089 0.0084

Jupiter 121499-04-24 16:45 G 46097772.00 46097772.20 46097772.40 0.0485 0.0116

Mars 121503-05-19 18:26 G 46099257.09 46099257.27 46099257.44 0.1913 0.0038

Jupiter 121505-02-25 14:36 G 46099904.91 46099905.11 46099905.31 0.0544 0.0007

Saturn 121506-01-22 04:45 G 46100235.48 46100235.70 46100235.91 0.0283 0.0021

Jupiter 121510-12-29 20:36 G 46102038.24 46102038.36 46102038.49 0.0484 0.0380

Jupiter 121516-10-31 04:02 G 46104170.53 46104170.67 46104170.81 0.0544 0.0377

Saturn 121520-07-02 00:41 G 46105510.40 46105510.53 46105510.67 0.0276 0.0208

Saturn 121521-02-16 05:00 G 46105739.52 46105739.71 46105739.90 0.0276 0.0113

Jupiter 121523-04-27 23:29 G 46106540.33 46106540.48 46106540.64 0.0487 0.0310

Uranus 121526-01-01 04:17 G 46107519.59 46107519.68 46107519.79 0.0136 0.0120

Uranus 121526-08-15 09:33 G 46107745.75 46107745.90 46107746.04 0.0136 0.0098

Uranus 121527-03-29 14:21 G 46107971.93 46107972.10 46107972.28 0.0136 0.0077

Uranus 121527-11-10 19:24 G 46108198.13 46108198.31 46108198.52 0.0136 0.0055

Uranus 121528-06-24 01:09 G 46108424.34 46108424.55 46108424.76 0.0136 0.0033

Uranus 121529-02-05 06:26 G 46108650.56 46108650.77 46108650.98 0.0136 0.0010

Uranus 121529-09-19 11:43 G 46108876.78 46108876.99 46108877.21 0.0136 0.0013

Uranus 121530-05-03 17:14 G 46109103.02 46109103.22 46109103.43 0.0137 0.0035

Uranus 121530-12-15 23:00 G 46109329.26 46109329.46 46109329.65 0.0137 0.0057

Uranus 121531-07-30 04:31 G 46109555.53 46109555.69 46109555.87 0.0137 0.0080

Uranus 121532-03-12 10:31 G 46109781.80 46109781.94 46109782.08 0.0137 0.0102

Mars 121532-08-11 01:53 G 46109933.42 46109933.58 46109933.74 0.1624 0.0547

Uranus 121532-10-24 16:31 G 46110008.10 46110008.19 46110008.28 0.0137 0.0125

Jupiter 121535-01-01 03:19 G 46110806.43 46110806.64 46110806.85 0.0485 0.0043

Saturn 121535-08-04 11:00 G 46111021.76 46111021.96 46111022.18 0.0283 0.0072

Jupiter 121540-11-03 05:29 G 46112939.55 46112939.73 46112939.92 0.0543 0.0200

Pluto 121545-08-03 21:19 G 46114674.38 46114674.39 46114674.47 0.0062 0.0061

Pluto 121546-03-17 00:55 G 46114899.36 46114899.54 46114899.75 0.0062 0.0027

Jupiter 121546-09-06 07:24 G 46115072.63 46115072.81 46115072.99 0.0484 0.0222

Pluto 121546-10-28 04:17 G 46115124.46 46115124.68 46115124.90 0.0062 0.0007

Pluto 121547-06-10 07:09 G 46115349.65 46115349.80 46115349.98 0.0063 0.0041

Saturn 121550-01-12 07:53 G 46116296.67 46116296.83 46116297.01 0.0276 0.0156

Saturn 121550-08-29 12:12 G 46116525.85 46116526.01 46116526.18 0.0276 0.0165

Jupiter 121552-07-08 19:09 G 46117205.11 46117205.30 46117205.49 0.0544 0.0171

Jupiter 121559-01-03 09:19 G 46119574.84 46119574.89 46119574.95 0.0487 0.0467

Earth 121563-04-19 01:24 G 46121141.41 46121141.56 46121141.71 0.2647 0.0911

Moon 121563-04-19 04:02 G 46121141.51 46121141.67 46121141.83 0.2641 0.0990 *

Jupiter 121564-03-13 10:02 G 46121470.89 46121470.92 46121470.95 0.0545 0.0536

Saturn 121564-06-28 17:29 G 46121578.14 46121578.23 46121578.32 0.0283 0.0253

Mars 121564-08-09 18:26 G 46121620.23 46121620.27 46121620.31 0.1632 0.1580

Saturn 121565-02-13 12:55 G 46121807.84 46121808.04 46121808.24 0.0283 0.0109

Neptune 121566-08-25 19:09 G 46122366.29 46122366.30 46122366.34 0.0089 0.0088

Neptune 121567-04-08 07:24 G 46122591.73 46122591.81 46122591.92 0.0089 0.0079

Uranus 121567-07-14 04:31 G 46122688.58 46122688.69 46122688.83 0.0142 0.0118

Neptune 121567-11-19 19:24 G 46122817.20 46122817.31 46122817.46 0.0089 0.0070

Uranus 121568-02-25 17:00 G 46122915.06 46122915.21 46122915.40 0.0142 0.0092

Neptune 121568-07-02 07:38 G 46123042.69 46123042.82 46123043.00 0.0089 0.0061

Uranus 121568-10-09 05:43 G 46123141.55 46123141.74 46123141.94 0.0142 0.0065

Neptune 121569-02-12 19:53 G 46123268.18 46123268.33 46123268.53 0.0089 0.0052

Mars 121569-03-15 21:05 G 46123299.23 46123299.38 46123299.54 0.1916 0.0866

Uranus 121569-05-23 18:12 G 46123368.05 46123368.26 46123368.48 0.0142 0.0039

Neptune 121569-09-26 08:21 G 46123493.67 46123493.85 46123494.05 0.0089 0.0042

Uranus 121570-01-05 06:41 G 46123594.56 46123594.78 46123595.00 0.0142 0.0012

Neptune 121570-05-09 20:36 G 46123719.17 46123719.36 46123719.57 0.0089 0.0033

Uranus 121570-08-19 18:41 G 46123821.06 46123821.28 46123821.51 0.0141 0.0015

Jupiter 121570-09-08 13:24 G 46123840.87 46123841.06 46123841.25 0.0486 0.0202

Neptune 121570-12-21 08:50 G 46123944.67 46123944.87 46123945.08 0.0089 0.0023

Uranus 121571-04-03 06:41 G 46124047.57 46124047.78 46124048.00 0.0141 0.0041

Neptune 121571-08-03 21:19 G 46124170.18 46124170.39 46124170.61 0.0089 0.0014

Uranus 121571-11-15 18:26 G 46124274.08 46124274.27 46124274.47 0.0141 0.0067

Neptune 121572-03-16 09:33 G 46124395.68 46124395.90 46124396.12 0.0088 0.0005

Uranus 121572-06-29 06:12 G 46124500.60 46124500.76 46124500.93 0.0141 0.0092

Neptune 121572-10-27 21:48 G 46124621.19 46124621.41 46124621.63 0.0088 0.0005

Uranus 121573-02-10 17:29 G 46124727.13 46124727.23 46124727.37 0.0141 0.0118

Neptune 121573-06-10 09:48 G 46124846.71 46124846.91 46124847.13 0.0088 0.0015

Neptune 121574-01-21 22:17 G 46125072.22 46125072.43 46125072.64 0.0088 0.0023

Neptune 121574-09-04 10:45 G 46125297.75 46125297.95 46125298.15 0.0088 0.0033

Neptune 121575-04-17 22:45 G 46125523.27 46125523.45 46125523.65 0.0088 0.0042

Neptune 121575-11-29 11:14 G 46125748.80 46125748.97 46125749.15 0.0088 0.0051

Neptune 121576-07-11 23:43 G 46125974.34 46125974.49 46125974.65 0.0088 0.0061

Jupiter 121576-07-12 02:50 G 46125974.51 46125974.62 46125974.75 0.0542 0.0429 *

Neptune 121577-02-22 11:43 G 46126199.88 46126199.99 46126200.14 0.0088 0.0071

Neptune 121577-10-06 00:12 G 46126425.44 46126425.51 46126425.62 0.0088 0.0080

Saturn 121579-07-25 07:24 G 46127082.63 46127082.81 46127083.00 0.0276 0.0126

Saturn 121580-03-10 11:43 G 46127311.85 46127311.99 46127312.14 0.0276 0.0196

Jupiter 121582-05-14 17:00 G 46128107.00 46128107.21 46128107.41 0.0485 0.0067

Jupiter 121588-03-16 15:33 G 46130239.95 46130240.15 46130240.35 0.0543 0.0057

Saturn 121594-01-08 22:31 G 46132364.30 46132364.44 46132364.59 0.0283 0.0207

Jupiter 121594-01-17 20:50 G 46132373.23 46132373.37 46132373.53 0.0484 0.0330

Saturn 121594-08-26 18:12 G 46132594.09 46132594.26 46132594.44 0.0283 0.0156

Mars 121598-06-08 14:36 G 46133975.96 46133976.11 46133976.26 0.1622 0.0781

Jupiter 121599-11-20 01:24 G 46134505.40 46134505.56 46134505.72 0.0544 0.0331

Jupiter 121606-05-17 00:12 G 46136875.37 46136875.51 46136875.65 0.0486 0.0363

Saturn 121609-02-03 15:05 G 46137868.93 46137869.13 46137869.33 0.0276 0.0072

Uranus 121609-08-31 15:05 G 46138078.08 46138078.13 46138078.20 0.0136 0.0129

Saturn 121609-09-20 18:55 G 46138098.22 46138098.29 46138098.39 0.0276 0.0249

Uranus 121610-04-14 20:07 G 46138304.22 46138304.34 46138304.47 0.0136 0.0107

Uranus 121610-11-27 00:55 G 46138530.39 46138530.54 46138530.72 0.0136 0.0086

Uranus 121611-07-11 06:12 G 46138756.59 46138756.76 46138756.96 0.0136 0.0064

Uranus 121612-02-22 11:43 G 46138982.79 46138982.99 46138983.19 0.0136 0.0042

Uranus 121612-10-05 17:00 G 46139209.00 46139209.21 46139209.42 0.0136 0.0019

Uranus 121613-05-19 22:17 G 46139435.22 46139435.43 46139435.64 0.0136 0.0003

Uranus 121614-01-01 03:48 G 46139661.45 46139661.66 46139661.87 0.0137 0.0026

Uranus 121614-08-15 09:05 G 46139887.69 46139887.88 46139888.09 0.0137 0.0049

Uranus 121615-03-29 14:50 G 46140113.94 46140114.12 46140114.31 0.0137 0.0071

Uranus 121615-11-10 20:21 G 46140340.21 46140340.35 46140340.52 0.0137 0.0094

Uranus 121616-06-24 02:21 G 46140566.50 46140566.60 46140566.72 0.0137 0.0116

Jupiter 121618-01-20 03:05 G 46141141.43 46141141.63 46141141.84 0.0485 0.0093

Saturn 121623-07-22 01:09 G 46143150.38 46143150.55 46143150.73 0.0283 0.0167

Jupiter 121623-11-23 09:05 G 46143274.71 46143274.88 46143275.05 0.0543 0.0271

Saturn 121624-03-07 20:21 G 46143380.21 46143380.35 46143380.52 0.0283 0.0196

Jupiter 121629-09-25 07:09 G 46145407.60 46145407.80 46145407.99 0.0484 0.0173

Mars 121630-06-07 06:41 G 46145662.69 46145662.78 46145662.88 0.1629 0.1325

Mars 121635-01-10 23:00 G 46147341.39 46147341.46 46147341.53 0.1920 0.1747

Jupiter 121635-07-28 23:14 G 46147540.27 46147540.47 46147540.66 0.0544 0.0099

Pluto 121637-07-22 10:31 G 46148264.74 46148264.94 46148265.15 0.0081 0.0033

Pluto 121638-03-04 22:02 G 46148490.24 46148490.42 46148490.61 0.0081 0.0046

Saturn 121638-08-16 14:07 G 46148654.89 46148655.09 46148655.30 0.0276 0.0043

Jupiter 121641-05-31 10:17 G 46149673.85 46149673.93 46149674.02 0.0484 0.0439

Jupiter 121647-04-02 11:57 G 46151805.90 46151806.00 46151806.09 0.0544 0.0472

Neptune 121650-08-19 07:09 G 46153040.75 46153040.80 46153040.90 0.0089 0.0084

Uranus 121651-03-13 10:45 G 46153246.87 46153246.95 46153247.06 0.0142 0.0129

Neptune 121651-04-01 21:05 G 46153266.28 46153266.38 46153266.52 0.0089 0.0074

Uranus 121651-10-25 23:14 G 46153473.34 46153473.47 46153473.64 0.0142 0.0103

Neptune 121651-11-13 11:14 G 46153491.82 46153491.97 46153492.13 0.0089 0.0064

Uranus 121652-06-08 12:12 G 46153699.83 46153700.01 46153700.20 0.0142 0.0076

Neptune 121652-06-26 00:41 G 46153717.37 46153717.53 46153717.73 0.0089 0.0055

Uranus 121653-01-21 00:41 G 46153926.33 46153926.53 46153926.75 0.0142 0.0050

Saturn 121653-01-31 05:29 G 46153936.54 46153936.73 46153936.93 0.0283 0.0123

Neptune 121653-02-06 14:50 G 46153942.94 46153943.12 46153943.33 0.0089 0.0045

Uranus 121653-09-04 13:09 G 46154152.83 46154153.05 46154153.27 0.0142 0.0023

Saturn 121653-09-18 01:09 G 46154166.43 46154166.55 46154166.66 0.0283 0.0239

Neptune 121653-09-20 04:45 G 46154168.50 46154168.70 46154168.91 0.0089 0.0035

Jupiter 121653-09-27 14:07 G 46154175.91 46154176.09 46154176.27 0.0486 0.0255

Uranus 121654-04-19 01:24 G 46154379.34 46154379.56 46154379.78 0.0142 0.0004

Neptune 121654-05-03 18:41 G 46154394.07 46154394.28 46154394.50 0.0089 0.0025

Uranus 121654-12-01 13:24 G 46154605.85 46154606.06 46154606.28 0.0141 0.0030

Neptune 121654-12-15 08:21 G 46154619.64 46154619.85 46154620.08 0.0089 0.0016

Uranus 121655-07-16 01:24 G 46154832.36 46154832.56 46154832.77 0.0141 0.0056

Neptune 121655-07-28 22:17 G 46154845.21 46154845.43 46154845.66 0.0089 0.0006

Uranus 121656-02-27 13:09 G 46155058.87 46155059.05 46155059.23 0.0141 0.0082

Neptune 121656-03-10 12:12 G 46155070.79 46155071.01 46155071.23 0.0089 0.0004

Uranus 121656-10-11 00:26 G 46155285.39 46155285.52 46155285.68 0.0141 0.0108

Neptune 121656-10-22 01:53 G 46155296.36 46155296.58 46155296.80 0.0089 0.0014

Uranus 121657-05-25 11:57 G 46155511.94 46155512.00 46155512.08 0.0141 0.0133

Neptune 121657-06-04 15:19 G 46155521.94 46155522.14 46155522.37 0.0089 0.0024

Neptune 121658-01-16 05:00 G 46155747.52 46155747.71 46155747.93 0.0089 0.0034

Neptune 121658-08-29 18:41 G 46155973.10 46155973.28 46155973.49 0.0089 0.0044

Neptune 121659-04-12 08:36 G 46156198.69 46156198.86 46156199.04 0.0089 0.0053

Jupiter 121659-08-01 00:41 G 46156309.44 46156309.53 46156309.62 0.0542 0.0477

Neptune 121659-11-23 21:48 G 46156424.28 46156424.41 46156424.59 0.0089 0.0064

Neptune 121660-07-06 11:57 G 46156649.87 46156650.00 46156650.13 0.0089 0.0073

Neptune 121661-02-17 01:24 G 46156875.49 46156875.56 46156875.66 0.0089 0.0082

Mars 121664-04-05 03:05 G 46158018.49 46158018.63 46158018.76 0.1620 0.1026

Jupiter 121665-06-02 17:57 G 46158442.05 46158442.25 46158442.46 0.0485 0.0013

Saturn 121668-02-26 21:33 G 46159441.20 46159441.40 46159441.61 0.0276 0.0013

Jupiter 121671-04-05 13:53 G 46160574.88 46160575.08 46160575.28 0.0543 0.0107

Jupiter 121677-02-05 20:50 G 46162708.21 46162708.37 46162708.55 0.0484 0.0281

Saturn 121682-08-13 09:19 G 46164722.69 46164722.89 46164723.10 0.0283 0.0079

Jupiter 121682-12-09 04:31 G 46164840.51 46164840.69 46164840.86 0.0545 0.0261

Saturn 121683-03-31 04:17 G 46164952.68 46164952.68 46164952.70 0.0283 0.0282

Jupiter 121689-06-04 23:43 G 46167210.39 46167210.49 46167210.60 0.0486 0.0413

Moon 121692-10-14 13:38 G 46168437.91 46168438.07 46168438.24 0.2681 0.0112

Earth 121692-10-14 14:50 G 46168437.97 46168438.12 46168438.28 0.2687 0.0224 *

Uranus 121693-12-13 05:57 G 46168862.67 46168862.75 46168862.88 0.0136 0.0117

Uranus 121694-07-27 11:14 G 46169088.83 46169088.97 46169089.14 0.0136 0.0095

Uranus 121695-03-10 16:17 G 46169315.01 46169315.18 46169315.37 0.0136 0.0073

Uranus 121695-10-22 21:19 G 46169541.21 46169541.39 46169541.60 0.0136 0.0051

Mars 121696-04-03 19:24 G 46169705.18 46169705.31 46169705.44 0.1627 0.1078

Uranus 121696-06-05 02:50 G 46169767.41 46169767.62 46169767.83 0.0136 0.0028

Uranus 121697-01-17 08:07 G 46169993.63 46169993.84 46169994.05 0.0136 0.0006

Uranus 121697-08-31 13:24 G 46170219.85 46170220.06 46170220.27 0.0136 0.0017

Saturn 121697-09-07 20:50 G 46170227.17 46170227.37 46170227.58 0.0276 0.0041

Uranus 121698-04-14 18:41 G 46170446.08 46170446.28 46170446.49 0.0137 0.0040

Uranus 121698-11-27 00:12 G 46170672.33 46170672.51 46170672.71 0.0137 0.0062

Uranus 121699-07-11 05:43 G 46170898.59 46170898.74 46170898.92 0.0137 0.0085

Uranus 121700-02-22 11:43 G 46171124.87 46171124.99 46171125.13 0.0137 0.0107

Uranus 121700-10-06 17:43 G 46171351.17 46171351.24 46171351.31 0.0137 0.0130

Jupiter 121701-02-09 03:33 G 46171476.45 46171476.65 46171476.85 0.0486 0.0145

Jupiter 121706-12-13 10:45 G 46173609.80 46173609.95 46173610.11 0.0542 0.0336

Saturn 121712-02-24 12:41 G 46175508.81 46175509.03 46175509.24 0.0283 0.0038

Jupiter 121712-10-15 07:53 G 46175742.62 46175742.83 46175743.03 0.0485 0.0120

Jupiter 121718-08-17 20:21 G 46177875.15 46177875.35 46177875.55 0.0544 0.0052

Jupiter 121724-06-20 11:43 G 46180008.86 46180008.99 46180009.11 0.0484 0.0384

Saturn 121726-08-05 00:41 G 46180784.42 46180784.53 46180784.66 0.0276 0.0224

Saturn 121727-03-22 04:45 G 46181013.51 46181013.70 46181013.90 0.0276 0.0096

Mars 121730-02-01 15:33 G 46182061.04 46182061.15 46182061.25 0.1618 0.1262

Jupiter 121730-04-22 09:19 G 46182140.77 46182140.89 46182141.01 0.0545 0.0425

Neptune 121731-07-11 18:41 G 46182586.20 46182586.28 46182586.38 0.0089 0.0080

Neptune 121732-02-22 06:55 G 46182811.67 46182811.79 46182811.93 0.0089 0.0071

Neptune 121732-10-04 18:55 G 46183037.15 46183037.29 46183037.46 0.0089 0.0062

Neptune 121733-05-18 07:09 G 46183262.64 46183262.80 46183262.99 0.0089 0.0053

Neptune 121733-12-29 19:38 G 46183488.13 46183488.32 46183488.51 0.0089 0.0043

Neptune 121734-08-12 07:53 G 46183713.64 46183713.83 46183714.04 0.0089 0.0034

Uranus 121734-11-11 17:14 G 46183805.20 46183805.22 46183805.27 0.0142 0.0140

Neptune 121735-03-25 20:07 G 46183939.14 46183939.34 46183939.55 0.0089 0.0025

Uranus 121735-06-26 06:12 G 46184031.63 46184031.76 46184031.90 0.0142 0.0114

Neptune 121735-11-06 08:21 G 46184164.64 46184164.85 46184165.07 0.0089 0.0015

Uranus 121736-02-07 18:41 G 46184258.12 46184258.28 46184258.47 0.0142 0.0087

Neptune 121736-06-18 20:36 G 46184390.15 46184390.36 46184390.58 0.0089 0.0006

Uranus 121736-09-21 07:24 G 46184484.61 46184484.81 46184485.02 0.0142 0.0060

Jupiter 121736-10-17 13:24 G 46184510.91 46184511.06 46184511.23 0.0486 0.0304

Neptune 121737-01-30 08:50 G 46184615.66 46184615.87 46184616.09 0.0088 0.0004

Uranus 121737-05-05 19:53 G 46184711.12 46184711.33 46184711.55 0.0142 0.0033

Neptune 121737-09-12 21:05 G 46184841.17 46184841.38 46184841.60 0.0088 0.0013

Uranus 121737-12-18 08:21 G 46184937.63 46184937.85 46184938.07 0.0142 0.0007

Neptune 121738-04-26 09:19 G 46185066.69 46185066.89 46185067.11 0.0088 0.0022

Uranus 121738-08-01 20:21 G 46185164.14 46185164.35 46185164.58 0.0142 0.0021

Neptune 121738-12-07 21:33 G 46185292.20 46185292.40 46185292.61 0.0088 0.0032

Uranus 121739-03-16 08:21 G 46185390.65 46185390.85 46185391.07 0.0141 0.0047

Neptune 121739-07-21 09:33 G 46185517.73 46185517.90 46185518.11 0.0088 0.0042

Uranus 121739-10-28 20:21 G 46185617.16 46185617.35 46185617.54 0.0141 0.0073

Neptune 121740-03-02 22:02 G 46185743.26 46185743.42 46185743.61 0.0088 0.0050

Uranus 121740-06-11 07:53 G 46185843.68 46185843.83 46185843.99 0.0141 0.0099

Neptune 121740-10-14 10:17 G 46185968.79 46185968.93 46185969.11 0.0088 0.0060

Uranus 121741-01-23 19:24 G 46186070.22 46186070.31 46186070.43 0.0141 0.0124

Neptune 121741-05-27 22:45 G 46186194.32 46186194.45 46186194.59 0.0088 0.0069

Saturn 121741-09-05 17:43 G 46186295.02 46186295.24 46186295.45 0.0283 0.0010

Neptune 121742-01-08 10:45 G 46186419.87 46186419.95 46186420.07 0.0088 0.0078

Neptune 121742-08-21 23:14 G 46186645.47 46186645.47 46186645.53 0.0088 0.0088

Jupiter 121748-06-22 17:14 G 46188777.02 46188777.22 46188777.43 0.0485 0.0039

Jupiter 121754-04-25 17:43 G 46190910.05 46190910.24 46190910.43 0.0543 0.0180

Saturn 121756-02-14 23:57 G 46191570.37 46191570.50 46191570.66 0.0276 0.0195

Saturn 121756-10-01 04:17 G 46191799.49 46191799.68 46191799.86 0.0276 0.0125

Jupiter 121760-02-26 20:50 G 46193043.19 46193043.37 46193043.56 0.0484 0.0231

Mars 121762-01-31 07:38 G 46193747.67 46193747.82 46193747.96 0.1625 0.0824

Jupiter 121765-12-29 06:26 G 46195175.59 46195175.77 46195175.96 0.0544 0.0195

Saturn 121771-03-18 20:36 G 46197081.15 46197081.36 46197081.58 0.0283 0.0050

Jupiter 121772-06-25 00:26 G 46197545.47 46197545.52 46197545.58 0.0487 0.0466

Uranus 121777-08-13 17:14 G 46199421.15 46199421.22 46199421.31 0.0136 0.0125

Uranus 121778-03-27 22:31 G 46199647.30 46199647.44 46199647.57 0.0136 0.0103

Uranus 121778-11-09 03:05 G 46199873.47 46199873.63 46199873.81 0.0136 0.0082

Uranus 121779-06-23 08:36 G 46200099.67 46200099.86 46200100.05 0.0136 0.0059

Uranus 121780-02-04 13:24 G 46200325.87 46200326.06 46200326.28 0.0136 0.0038

Uranus 121780-09-17 18:41 G 46200552.07 46200552.28 46200552.50 0.0136 0.0015

Uranus 121781-05-01 23:57 G 46200778.29 46200778.50 46200778.71 0.0136 0.0008

Uranus 121781-12-14 05:14 G 46201004.52 46201004.72 46201004.93 0.0136 0.0031

Uranus 121782-07-28 10:45 G 46201230.76 46201230.95 46201231.15 0.0137 0.0053

Uranus 121783-03-11 16:17 G 46201457.01 46201457.18 46201457.36 0.0137 0.0076

Uranus 121783-10-23 21:48 G 46201683.27 46201683.41 46201683.57 0.0137 0.0099

Jupiter 121784-02-29 04:17 G 46201811.50 46201811.68 46201811.87 0.0486 0.0200

Uranus 121784-06-06 03:33 G 46201909.57 46201909.65 46201909.76 0.0137 0.0121

Saturn 121785-08-27 08:07 G 46202356.66 46202356.84 46202357.02 0.0276 0.0139

Saturn 121786-04-13 12:12 G 46202585.86 46202586.01 46202586.17 0.0276 0.0181

Jupiter 121790-01-01 07:53 G 46203944.69 46203944.83 46203944.97 0.0542 0.0383

Pluto 121794-02-18 06:26 G 46205453.63 46205453.77 46205453.97 0.0062 0.0040

Pluto 121794-10-01 10:02 G 46205678.71 46205678.92 46205679.14 0.0062 0.0006

Pluto 121795-05-14 13:24 G 46205903.87 46205904.06 46205904.25 0.0063 0.0028

Jupiter 121795-11-04 06:55 G 46206077.58 46206077.79 46206077.99 0.0484 0.0073

Mars 121795-11-30 04:02 G 46206103.61 46206103.67 46206103.73 0.1616 0.1501

Pluto 121795-12-25 16:02 G 46206129.17 46206129.17 46206129.21 0.0063 0.0063

Mars 121798-09-05 04:45 G 46207113.56 46207113.70 46207113.85 0.1915 0.1132

Saturn 121800-02-11 07:24 G 46207637.73 46207637.81 46207637.89 0.0283 0.0261

Saturn 121800-09-29 02:50 G 46207867.42 46207867.62 46207867.82 0.0283 0.0101

Jupiter 121801-09-06 22:17 G 46208210.23 46208210.43 46208210.64 0.0544 0.0019

Earth 121806-04-21 00:41 G 46209897.38 46209897.53 46209897.68 0.2645 0.1076

Moon 121806-04-21 06:12 G 46209897.60 46209897.76 46209897.92 0.2643 0.0613 *

Jupiter 121807-07-11 10:31 G 46210343.80 46210343.94 46210344.09 0.0484 0.0339

Jupiter 121813-05-12 12:41 G 46212475.88 46212476.03 46212476.18 0.0545 0.0355

Neptune 121814-11-22 15:33 G 46213035.12 46213035.15 46213035.24 0.0089 0.0086

Saturn 121815-03-10 08:07 G 46213142.66 46213142.84 46213143.04 0.0276 0.0108

Neptune 121815-07-06 05:43 G 46213260.64 46213260.74 46213260.87 0.0089 0.0076

Saturn 121815-10-25 12:26 G 46213371.89 46213372.02 46213372.15 0.0276 0.0213

Neptune 121816-02-16 19:53 G 46213486.19 46213486.33 46213486.48 0.0089 0.0066

Neptune 121816-09-29 09:19 G 46213711.74 46213711.89 46213712.08 0.0089 0.0057

Neptune 121817-05-12 23:14 G 46213937.29 46213937.47 46213937.67 0.0089 0.0047

Neptune 121817-12-24 13:09 G 46214162.86 46214163.05 46214163.26 0.0089 0.0037

Neptune 121818-08-07 03:05 G 46214388.42 46214388.63 46214388.85 0.0089 0.0027

Uranus 121819-02-24 12:41 G 46214589.93 46214590.03 46214590.14 0.0142 0.0124

Neptune 121819-03-20 17:00 G 46214613.99 46214614.21 46214614.43 0.0089 0.0017

Uranus 121819-10-09 01:09 G 46214816.40 46214816.55 46214816.73 0.0142 0.0098

Neptune 121819-11-01 06:41 G 46214839.56 46214839.78 46214840.01 0.0089 0.0008

Jupiter 121819-11-07 13:09 G 46214845.91 46214846.05 46214846.19 0.0486 0.0353

Uranus 121820-05-22 13:53 G 46215042.90 46215043.08 46215043.28 0.0142 0.0071

Neptune 121820-06-13 20:36 G 46215065.14 46215065.36 46215065.58 0.0089 0.0002

Uranus 121821-01-04 02:36 G 46215269.40 46215269.61 46215269.83 0.0142 0.0044

Neptune 121821-01-25 10:31 G 46215290.72 46215290.94 46215291.16 0.0089 0.0012

Uranus 121821-08-18 15:05 G 46215495.91 46215496.13 46215496.35 0.0142 0.0017

Neptune 121821-09-08 00:12 G 46215516.30 46215516.51 46215516.73 0.0089 0.0022

Uranus 121822-04-02 03:19 G 46215722.42 46215722.64 46215722.86 0.0142 0.0010

Neptune 121822-04-21 13:38 G 46215741.88 46215742.07 46215742.29 0.0089 0.0032

Uranus 121822-11-14 15:19 G 46215948.93 46215949.14 46215949.36 0.0142 0.0036

Neptune 121822-12-03 03:19 G 46215967.46 46215967.64 46215967.85 0.0089 0.0042

Uranus 121823-06-29 03:19 G 46216175.44 46216175.64 46216175.84 0.0141 0.0063

Neptune 121823-07-16 17:14 G 46216193.04 46216193.22 46216193.41 0.0089 0.0051

Uranus 121824-02-10 14:50 G 46216401.96 46216402.12 46216402.31 0.0141 0.0089

Neptune 121824-02-27 06:55 G 46216418.64 46216418.79 46216418.96 0.0089 0.0061

Uranus 121824-09-24 02:36 G 46216628.49 46216628.61 46216628.74 0.0141 0.0115

Neptune 121824-10-09 20:21 G 46216644.24 46216644.35 46216644.50 0.0089 0.0071

Uranus 121825-05-08 13:38 G 46216855.07 46216855.07 46216855.12 0.0141 0.0140

Neptune 121825-05-23 10:02 G 46216869.84 46216869.92 46216870.03 0.0089 0.0081

Mars 121827-11-29 19:53 G 46217790.17 46217790.33 46217790.50 0.1623 0.0574

Saturn 121829-08-24 09:48 G 46218423.79 46218423.91 46218424.05 0.0283 0.0223

Saturn 121830-04-11 05:29 G 46218653.55 46218653.73 46218653.92 0.0283 0.0140

Jupiter 121831-07-13 17:29 G 46219112.03 46219112.23 46219112.43 0.0485 0.0088

Jupiter 121837-05-15 14:21 G 46221244.92 46221245.10 46221245.28 0.0543 0.0224

Jupiter 121843-03-18 21:19 G 46223378.20 46223378.39 46223378.58 0.0484 0.0179

Saturn 121844-09-19 16:02 G 46223928.97 46223929.17 46223929.38 0.0276 0.0052

Saturn 121845-05-06 20:21 G 46224158.31 46224158.35 46224158.40 0.0276 0.0269

Jupiter 121849-01-18 02:50 G 46225510.43 46225510.62 46225510.81 0.0544 0.0153

Jupiter 121854-11-21 23:43 G 46227644.42 46227644.49 46227644.56 0.0484 0.0450

Saturn 121859-03-06 18:12 G 46229210.09 46229210.26 46229210.44 0.0283 0.0165

Saturn 121859-10-22 13:24 G 46229439.92 46229440.06 46229440.22 0.0283 0.0197

Jupiter 121860-09-22 16:45 G 46229776.15 46229776.20 46229776.26 0.0545 0.0524

Uranus 121861-04-14 03:48 G 46229979.64 46229979.66 46229979.71 0.0136 0.0134

Uranus 121861-11-26 09:05 G 46230205.76 46230205.88 46230206.00 0.0136 0.0112

Uranus 121862-07-10 13:38 G 46230431.93 46230432.07 46230432.24 0.0136 0.0091

Uranus 121863-02-21 18:55 G 46230658.11 46230658.29 46230658.47 0.0136 0.0068

Uranus 121863-10-05 23:43 G 46230884.30 46230884.49 46230884.70 0.0136 0.0046

Uranus 121864-05-19 04:45 G 46231110.50 46231110.70 46231110.92 0.0136 0.0024

Mars 121864-07-03 07:09 G 46231155.63 46231155.80 46231155.98 0.1918 0.0281

Uranus 121864-12-31 10:02 G 46231336.71 46231336.92 46231337.13 0.0136 0.0001

Uranus 121865-08-14 15:19 G 46231562.93 46231563.14 46231563.35 0.0136 0.0022

Uranus 121866-03-28 20:21 G 46231789.16 46231789.35 46231789.56 0.0137 0.0045

Uranus 121866-11-10 02:07 G 46232015.40 46232015.59 46232015.77 0.0137 0.0067

Jupiter 121867-03-21 02:36 G 46232146.43 46232146.61 46232146.79 0.0485 0.0243

Uranus 121867-06-24 07:24 G 46232241.66 46232241.81 46232241.98 0.0137 0.0090

Uranus 121868-02-05 13:24 G 46232467.94 46232468.06 46232468.18 0.0137 0.0112

Uranus 121868-09-18 18:55 G 46232694.27 46232694.29 46232694.34 0.0137 0.0135

Jupiter 121873-01-21 10:31 G 46234279.84 46234279.94 46234280.06 0.0542 0.0450

Saturn 121874-04-01 17:00 G 46234715.01 46234715.21 46234715.42 0.0276 0.0018

Jupiter 121878-11-24 05:43 G 46236412.53 46236412.74 46236412.95 0.0485 0.0027

Jupiter 121884-09-25 23:43 G 46238545.29 46238545.49 46238545.69 0.0543 0.0078

Pluto 121885-06-26 12:55 G 46238818.90 46238819.04 46238819.20 0.0082 0.0061

Pluto 121886-02-07 00:26 G 46239044.32 46239044.52 46239044.75 0.0081 0.0019

Saturn 121888-09-15 20:36 G 46239996.17 46239996.36 46239996.55 0.0283 0.0127

Saturn 121889-05-03 16:02 G 46240226.05 46240226.17 46240226.29 0.0282 0.0234

Jupiter 121890-07-30 09:48 G 46240678.75 46240678.91 46240679.08 0.0484 0.0291

Mars 121893-09-26 08:36 G 46241832.69 46241832.86 46241833.03 0.1621 0.0331

Neptune 121895-10-14 04:45 G 46242580.64 46242580.70 46242580.80 0.0089 0.0082

Neptune 121896-05-26 17:00 G 46242806.11 46242806.21 46242806.35 0.0089 0.0073

Jupiter 121896-05-31 09:19 G 46242810.73 46242810.89 46242811.05 0.0544 0.0312

Neptune 121897-01-07 05:14 G 46243031.59 46243031.72 46243031.89 0.0089 0.0064

Neptune 121897-08-20 17:57 G 46243257.08 46243257.25 46243257.42 0.0089 0.0054

Neptune 121898-04-03 05:57 G 46243482.58 46243482.75 46243482.95 0.0089 0.0045

Neptune 121898-11-14 18:12 G 46243708.08 46243708.26 46243708.47 0.0089 0.0036

Neptune 121899-06-28 06:41 G 46243933.58 46243933.78 46243933.99 0.0089 0.0026

Neptune 121900-02-08 18:55 G 46244159.08 46244159.29 46244159.51 0.0089 0.0017

Neptune 121900-09-22 07:09 G 46244384.59 46244384.80 46244385.02 0.0089 0.0008

Neptune 121901-05-05 19:24 G 46244610.10 46244610.31 46244610.53 0.0088 0.0003

Neptune 121901-12-17 07:38 G 46244835.61 46244835.82 46244836.04 0.0088 0.0012

Neptune 121902-07-30 20:07 G 46245061.13 46245061.34 46245061.55 0.0088 0.0021

Uranus 121902-10-25 19:09 G 46245148.24 46245148.30 46245148.37 0.0142 0.0136

Jupiter 121902-11-27 12:55 G 46245180.93 46245181.04 46245181.15 0.0486 0.0404

Neptune 121903-03-13 08:07 G 46245286.65 46245286.84 46245287.05 0.0088 0.0030

Uranus 121903-06-09 07:38 G 46245374.70 46245374.82 46245374.98 0.0142 0.0110

Saturn 121903-10-14 00:55 G 46245501.34 46245501.54 46245501.75 0.0276 0.0039

Neptune 121903-10-24 20:21 G 46245512.17 46245512.35 46245512.55 0.0088 0.0040

Uranus 121904-01-21 20:36 G 46245601.19 46245601.36 46245601.55 0.0142 0.0082

Neptune 121904-06-06 08:36 G 46245737.69 46245737.86 46245738.05 0.0088 0.0049

Uranus 121904-09-04 09:19 G 46245827.69 46245827.89 46245828.10 0.0142 0.0055

Neptune 121905-01-17 20:36 G 46245963.22 46245963.36 46245963.54 0.0088 0.0059

Uranus 121905-04-18 21:48 G 46246054.19 46246054.41 46246054.63 0.0142 0.0028

Neptune 121905-08-31 09:05 G 46246188.76 46246188.88 46246189.04 0.0088 0.0068

Uranus 121905-12-01 10:17 G 46246280.70 46246280.93 46246281.15 0.0142 0.0003

Neptune 121906-04-13 21:33 G 46246414.31 46246414.40 46246414.52 0.0088 0.0077

Uranus 121906-07-15 22:17 G 46246507.21 46246507.43 46246507.65 0.0142 0.0026

Neptune 121906-11-25 10:02 G 46246639.88 46246639.92 46246639.98 0.0088 0.0086

Uranus 121907-02-27 10:17 G 46246733.73 46246733.93 46246734.14 0.0142 0.0053

Uranus 121907-10-11 21:48 G 46246960.24 46246960.41 46246960.61 0.0141 0.0080

Uranus 121908-05-25 09:33 G 46247186.77 46247186.90 46247187.06 0.0141 0.0106

Uranus 121909-01-06 21:05 G 46247413.32 46247413.38 46247413.49 0.0141 0.0131

Jupiter 121914-08-02 15:05 G 46249446.93 46249447.13 46249447.33 0.0485 0.0129

Saturn 121918-03-30 06:26 G 46250782.56 46250782.77 46250782.98 0.0283 0.0064

Jupiter 121920-06-04 14:21 G 46251579.93 46251580.10 46251580.27 0.0543 0.0281

Jupiter 121926-04-07 18:41 G 46253713.09 46253713.28 46253713.48 0.0484 0.0139

Mars 121930-05-01 09:05 G 46255197.71 46255197.88 46255198.05 0.1921 0.0612

Jupiter 121932-02-08 04:45 G 46255845.50 46255845.70 46255845.90 0.0544 0.0089

Saturn 121932-09-07 22:31 G 46256058.36 46256058.44 46256058.55 0.0276 0.0244

Saturn 121933-04-25 02:36 G 46256287.42 46256287.61 46256287.82 0.0276 0.0076

Moon 121935-10-18 17:00 G 46257194.05 46257194.21 46257194.38 0.2681 0.0154

Earth 121935-10-18 17:43 G 46257194.09 46257194.24 46257194.40 0.2688 0.0276 *

Jupiter 121937-12-11 21:48 G 46257979.30 46257979.41 46257979.52 0.0484 0.0407

Jupiter 121943-10-13 17:57 G 46260111.15 46260111.25 46260111.36 0.0545 0.0462

Uranus 121945-07-27 20:21 G 46260764.26 46260764.35 46260764.45 0.0136 0.0121

Uranus 121946-03-11 01:09 G 46260990.41 46260990.55 46260990.70 0.0136 0.0099

Uranus 121946-10-23 05:57 G 46261216.58 46261216.75 46261216.93 0.0136 0.0077

Uranus 121947-06-06 11:00 G 46261442.77 46261442.96 46261443.16 0.0136 0.0055

Saturn 121947-10-10 08:50 G 46261568.65 46261568.87 46261569.08 0.0283 0.0026

Uranus 121948-01-18 16:02 G 46261668.97 46261669.17 46261669.38 0.0136 0.0032

Uranus 121948-08-31 21:05 G 46261895.17 46261895.38 46261895.60 0.0136 0.0010

Uranus 121949-04-15 02:07 G 46262121.38 46262121.59 46262121.81 0.0136 0.0013

Uranus 121949-11-27 07:24 G 46262347.61 46262347.81 46262348.02 0.0136 0.0036

Jupiter 121950-04-10 01:24 G 46262481.39 46262481.56 46262481.72 0.0486 0.0290

Uranus 121950-07-11 12:41 G 46262573.85 46262574.03 46262574.24 0.0137 0.0059

Uranus 121951-02-22 18:26 G 46262800.10 46262800.27 46262800.44 0.0137 0.0081

Uranus 121951-10-06 23:43 G 46263026.37 46263026.49 46263026.64 0.0137 0.0104

Uranus 121952-05-20 05:14 G 46263252.66 46263252.72 46263252.82 0.0137 0.0127

Jupiter 121956-02-11 06:41 G 46264614.70 46264614.78 46264614.87 0.0542 0.0491

Mars 121959-07-25 20:36 G 46265875.19 46265875.36 46265875.54 0.1619 0.0088

Jupiter 121961-12-14 04:45 G 46266747.49 46266747.70 46266747.91 0.0485 0.0020

Saturn 121962-03-21 05:57 G 46266844.61 46266844.75 46266844.91 0.0277 0.0190

Saturn 121962-11-05 10:31 G 46267073.76 46267073.94 46267074.12 0.0277 0.0131

Jupiter 121967-10-16 18:55 G 46268880.09 46268880.29 46268880.48 0.0543 0.0115

Jupiter 121973-08-19 06:55 G 46271013.62 46271013.79 46271013.97 0.0484 0.0254

Saturn 121977-04-21 19:53 G 46272355.12 46272355.33 46272355.55 0.0283 0.0041

Neptune 121979-02-25 00:41 G 46273029.50 46273029.53 46273029.57 0.0089 0.0087

Jupiter 121979-06-21 08:07 G 46273145.66 46273145.84 46273146.01 0.0545 0.0262

Neptune 121979-10-08 14:07 G 46273255.00 46273255.09 46273255.21 0.0089 0.0078

Neptune 121980-05-21 04:02 G 46273480.54 46273480.67 46273480.82 0.0089 0.0068

Neptune 121981-01-01 18:12 G 46273706.09 46273706.26 46273706.43 0.0089 0.0058

Neptune 121981-08-15 07:38 G 46273931.65 46273931.82 46273932.02 0.0089 0.0049

Neptune 121982-03-28 21:33 G 46274157.21 46274157.40 46274157.61 0.0089 0.0039

Neptune 121982-11-09 11:14 G 46274382.77 46274382.97 46274383.19 0.0089 0.0029

Neptune 121983-06-23 01:24 G 46274608.34 46274608.56 46274608.77 0.0089 0.0019

Neptune 121984-02-03 15:05 G 46274833.91 46274834.13 46274834.36 0.0089 0.0010

Neptune 121984-09-16 05:00 G 46275059.49 46275059.71 46275059.94 0.0089 0.0001

Neptune 121985-04-29 18:41 G 46275285.06 46275285.28 46275285.51 0.0089 0.0010

Neptune 121985-12-11 08:21 G 46275510.64 46275510.85 46275511.07 0.0089 0.0020

Jupiter 121985-12-16 09:33 G 46275515.82 46275515.90 46275515.99 0.0486 0.0441

Neptune 121986-07-24 22:02 G 46275736.22 46275736.42 46275736.64 0.0089 0.0030

Uranus 121987-02-06 14:21 G 46275933.00 46275933.10 46275933.24 0.0142 0.0121

Neptune 121987-03-07 11:57 G 46275961.81 46275962.00 46275962.21 0.0089 0.0040

Uranus 121987-09-21 03:19 G 46276159.48 46276159.64 46276159.82 0.0142 0.0093

Neptune 121987-10-19 01:24 G 46276187.40 46276187.56 46276187.77 0.0089 0.0050

Uranus 121988-05-04 15:48 G 46276385.98 46276386.16 46276386.37 0.0142 0.0067

Neptune 121988-05-31 15:19 G 46276412.99 46276413.14 46276413.32 0.0089 0.0059

Uranus 121988-12-17 04:31 G 46276612.49 46276612.69 46276612.91 0.0142 0.0039

Neptune 121989-01-12 05:00 G 46276638.59 46276638.71 46276638.86 0.0089 0.0069

Uranus 121989-07-31 17:00 G 46276838.99 46276839.21 46276839.44 0.0142 0.0012

Neptune 121989-08-25 18:26 G 46276864.19 46276864.27 46276864.40 0.0089 0.0079

Uranus 121990-03-15 05:14 G 46277065.50 46277065.72 46277065.95 0.0142 0.0016

Neptune 121990-04-08 08:21 G 46277089.84 46277089.85 46277089.89 0.0089 0.0088

Uranus 121990-10-27 17:14 G 46277292.01 46277292.22 46277292.44 0.0142 0.0042

Uranus 121991-06-11 05:14 G 46277518.53 46277518.72 46277518.92 0.0142 0.0069

Saturn 121991-10-01 09:05 G 46277630.71 46277630.88 46277631.06 0.0276 0.0149

Uranus 121992-01-23 17:00 G 46277745.06 46277745.21 46277745.39 0.0141 0.0096

Saturn 121992-05-17 13:09 G 46277859.90 46277860.05 46277860.22 0.0276 0.0171

Uranus 121992-09-06 04:31 G 46277971.60 46277971.69 46277971.82 0.0141 0.0122

Mars 121996-02-26 11:29 G 46279239.87 46279239.98 46279240.09 0.1925 0.1473

Jupiter 121997-08-21 12:41 G 46279781.84 46279782.03 46279782.23 0.0485 0.0172

123RD MILLENNIUM CE

This is a list of transits of Venus in the 123rd millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 122003-06-24 14:50 G 46281914.97 46281915.12 46281915.28 0.0543 0.0341

Saturn 122006-11-01 22:17 G 46283141.22 46283141.43 46283141.64 0.0283 0.0078

Jupiter 122009-04-26 16:45 G 46284048.00 46284048.20 46284048.41 0.0485 0.0095

Jupiter 122015-02-27 01:09 G 46286180.35 46286180.55 46286180.75 0.0543 0.0047

Jupiter 122020-12-30 19:53 G 46288314.20 46288314.33 46288314.47 0.0484 0.0365

Saturn 122021-04-12 16:02 G 46288416.97 46288417.17 46288417.36 0.0277 0.0096

Saturn 122021-11-27 20:36 G 46288646.24 46288646.36 46288646.48 0.0277 0.0226

Mars 122025-05-22 09:33 G 46289917.73 46289917.90 46289918.07 0.1617 0.0157

Jupiter 122026-11-01 12:55 G 46290445.92 46290446.04 46290446.17 0.0544 0.0428

Uranus 122029-03-27 07:24 G 46291322.77 46291322.81 46291322.88 0.0136 0.0130

Uranus 122029-11-08 12:12 G 46291548.89 46291549.01 46291549.15 0.0136 0.0108

Uranus 122030-06-22 17:14 G 46291775.06 46291775.22 46291775.39 0.0136 0.0086

Uranus 122031-02-03 22:02 G 46292001.24 46292001.42 46292001.61 0.0136 0.0064

Uranus 122031-09-18 02:50 G 46292227.42 46292227.62 46292227.83 0.0136 0.0042

Uranus 122032-05-01 07:53 G 46292453.62 46292453.83 46292454.04 0.0136 0.0019

Uranus 122032-12-13 12:55 G 46292679.83 46292680.04 46292680.25 0.0136 0.0004

Jupiter 122033-04-28 21:33 G 46292816.25 46292816.40 46292816.56 0.0486 0.0325

Uranus 122033-07-27 18:12 G 46292906.05 46292906.26 46292906.47 0.0136 0.0027

Uranus 122034-03-10 23:14 G 46293132.28 46293132.47 46293132.68 0.0136 0.0050

Uranus 122034-10-23 04:31 G 46293358.52 46293358.69 46293358.89 0.0137 0.0073

Uranus 122035-06-06 10:17 G 46293584.78 46293584.93 46293585.09 0.0137 0.0095

Saturn 122035-09-27 14:50 G 46293697.99 46293698.12 46293698.27 0.0283 0.0213

Uranus 122036-01-18 15:48 G 46293811.07 46293811.16 46293811.28 0.0137 0.0118

Saturn 122036-05-14 10:17 G 46293927.75 46293927.93 46293928.12 0.0283 0.0148

Jupiter 122039-03-02 04:45 G 46294949.70 46294949.70 46294949.73 0.0542 0.0541

Earth 122041-04-24 10:31 G 46295733.90 46295733.94 46295733.97 0.2646 0.2555

Moon 122041-04-24 13:24 G 46295734.01 46295734.06 46295734.10 0.2652 0.2522

Pluto 122042-01-23 11:29 G 46296007.91 46296007.98 46296008.11 0.0062 0.0055

Pluto 122042-09-05 15:05 G 46296232.94 46296233.13 46296233.34 0.0062 0.0021

Pluto 122043-04-18 18:12 G 46296458.06 46296458.26 46296458.49 0.0062 0.0013

Pluto 122043-11-29 21:05 G 46296683.26 46296683.38 46296683.55 0.0063 0.0047

Jupiter 122045-01-02 01:09 G 46297082.34 46297082.55 46297082.76 0.0485 0.0056

Earth 122049-04-22 00:12 G 46298653.37 46298653.51 46298653.66 0.2644 0.1219

Moon 122049-04-22 06:26 G 46298653.61 46298653.77 46298653.93 0.2644 0.0427 *

Saturn 122050-10-23 20:07 G 46299203.13 46299203.34 46299203.54 0.0276 0.0053

Jupiter 122050-11-04 19:09 G 46299215.11 46299215.30 46299215.49 0.0544 0.0171

Saturn 122051-06-10 00:26 G 46299432.47 46299432.52 46299432.57 0.0276 0.0267

Jupiter 122056-09-07 04:02 G 46301348.49 46301348.67 46301348.86 0.0484 0.0214

Neptune 122060-01-16 14:50 G 46302575.08 46302575.12 46302575.22 0.0089 0.0084

Neptune 122060-08-29 03:05 G 46302800.54 46302800.63 46302800.77 0.0089 0.0075

Neptune 122061-04-11 15:48 G 46303026.02 46303026.16 46303026.31 0.0089 0.0065

Neptune 122061-11-23 04:02 G 46303251.51 46303251.67 46303251.85 0.0089 0.0056

Neptune 122062-07-06 16:17 G 46303477.01 46303477.18 46303477.38 0.0089 0.0047

Jupiter 122062-07-10 08:36 G 46303480.68 46303480.86 46303481.05 0.0544 0.0203

Neptune 122063-02-17 04:45 G 46303702.51 46303702.70 46303702.90 0.0089 0.0037

Neptune 122063-09-30 17:00 G 46303928.01 46303928.21 46303928.42 0.0089 0.0028

Neptune 122064-05-13 05:14 G 46304153.51 46304153.72 46304153.94 0.0089 0.0018

Neptune 122064-12-24 17:29 G 46304379.02 46304379.23 46304379.45 0.0089 0.0009

Saturn 122065-04-08 17:00 G 46304484.05 46304484.21 46304484.39 0.0283 0.0176

Neptune 122065-08-07 05:57 G 46304604.53 46304604.75 46304604.97 0.0089 0.0001

Saturn 122065-11-24 12:26 G 46304713.87 46304714.02 46304714.19 0.0282 0.0186

Neptune 122066-03-20 18:12 G 46304830.05 46304830.26 46304830.48 0.0089 0.0010

Neptune 122066-11-01 06:12 G 46305055.56 46305055.76 46305055.98 0.0088 0.0020

Neptune 122067-06-14 18:26 G 46305281.07 46305281.27 46305281.48 0.0088 0.0029

Neptune 122068-01-26 06:55 G 46305506.59 46305506.79 46305506.98 0.0088 0.0038

Jupiter 122068-05-13 07:38 G 46305614.80 46305614.82 46305614.85 0.0484 0.0480

Neptune 122068-09-07 18:55 G 46305732.12 46305732.29 46305732.49 0.0088 0.0047

Jupiter 122069-01-04 07:09 G 46305850.80 46305850.80 46305850.83 0.0487 0.0485

Neptune 122069-04-21 07:09 G 46305957.65 46305957.80 46305957.98 0.0088 0.0057

Neptune 122069-12-02 19:24 G 46306183.18 46306183.31 46306183.47 0.0088 0.0066

Neptune 122070-07-16 07:24 G 46306408.72 46306408.81 46306408.95 0.0088 0.0076

Uranus 122070-10-06 21:05 G 46306491.30 46306491.38 46306491.46 0.0143 0.0132

Neptune 122071-02-26 19:53 G 46306634.29 46306634.33 46306634.41 0.0088 0.0084

Uranus 122071-05-21 09:48 G 46306717.76 46306717.91 46306718.06 0.0142 0.0105

Uranus 122072-01-02 22:31 G 46306944.26 46306944.44 46306944.64 0.0142 0.0078

Uranus 122072-08-16 11:14 G 46307170.77 46307170.97 46307171.18 0.0142 0.0050

Uranus 122073-03-30 23:43 G 46307397.27 46307397.49 46307397.71 0.0142 0.0023

Uranus 122073-11-12 12:12 G 46307623.78 46307624.01 46307624.23 0.0142 0.0005

Uranus 122074-06-27 00:12 G 46307850.30 46307850.51 46307850.73 0.0142 0.0032

Uranus 122075-02-08 12:12 G 46308076.82 46308077.01 46308077.23 0.0142 0.0059

Uranus 122075-09-23 00:26 G 46308303.35 46308303.52 46308303.70 0.0142 0.0085

Uranus 122076-05-06 11:57 G 46308529.88 46308530.00 46308530.15 0.0141 0.0111

Uranus 122076-12-18 23:43 G 46308756.46 46308756.49 46308756.56 0.0141 0.0137

Saturn 122080-05-05 02:07 G 46309989.38 46309989.59 46309989.80 0.0277 0.0003

Jupiter 122080-09-09 10:45 G 46310116.76 46310116.95 46310117.13 0.0486 0.0214

Jupiter 122086-07-13 09:48 G 46312249.77 46312249.91 46312250.05 0.0542 0.0376

Mars 122091-03-19 22:02 G 46313960.25 46313960.42 46313960.58 0.1615 0.0403

Jupiter 122092-05-15 12:55 G 46314382.83 46314383.04 46314383.24 0.0484 0.0062

Saturn 122094-10-20 05:57 G 46315270.55 46315270.75 46315270.96 0.0283 0.0104

Saturn 122095-06-07 01:24 G 46315500.47 46315500.56 46315500.65 0.0282 0.0256

Jupiter 122098-03-17 22:17 G 46316515.23 46316515.43 46316515.63 0.0544 0.0004

Jupiter 122104-01-20 16:17 G 46318649.04 46318649.18 46318649.34 0.0484 0.0329

Saturn 122109-04-01 03:05 G 46320546.61 46320546.63 46320546.65 0.0276 0.0274

Saturn 122109-11-16 07:09 G 46320775.59 46320775.80 46320776.00 0.0276 0.0045

Jupiter 122109-11-21 12:12 G 46320780.87 46320781.01 46320781.16 0.0545 0.0376

Uranus 122113-07-09 23:57 G 46322107.41 46322107.50 46322107.62 0.0136 0.0117

Uranus 122114-02-21 04:45 G 46322333.56 46322333.70 46322333.86 0.0136 0.0095

Uranus 122114-10-05 09:33 G 46322559.73 46322559.90 46322560.09 0.0136 0.0073

Uranus 122115-05-19 14:36 G 46322785.91 46322786.11 46322786.31 0.0136 0.0050

Uranus 122115-12-31 19:24 G 46323012.11 46323012.31 46323012.52 0.0136 0.0028

Jupiter 122116-05-18 18:26 G 46323151.14 46323151.27 46323151.41 0.0486 0.0365

Uranus 122116-08-14 00:26 G 46323238.31 46323238.52 46323238.74 0.0136 0.0006

Uranus 122117-03-28 05:29 G 46323464.53 46323464.73 46323464.95 0.0136 0.0018

Uranus 122117-11-09 10:45 G 46323690.75 46323690.95 46323691.16 0.0136 0.0041

Uranus 122118-06-23 16:17 G 46323916.99 46323917.18 46323917.37 0.0136 0.0064

Uranus 122119-02-04 21:33 G 46324143.25 46324143.40 46324143.57 0.0137 0.0087

Uranus 122119-09-19 03:05 G 46324369.52 46324369.63 46324369.77 0.0137 0.0110

Uranus 122120-05-02 09:05 G 46324595.83 46324595.88 46324595.93 0.0137 0.0132

Saturn 122124-05-02 08:07 G 46326056.63 46326056.84 46326057.05 0.0283 0.0067

Jupiter 122128-01-22 22:31 G 46327417.24 46327417.44 46327417.64 0.0485 0.0098

Jupiter 122133-11-24 16:02 G 46329549.99 46329550.17 46329550.36 0.0543 0.0216

Pluto 122134-01-11 23:57 G 46329598.29 46329598.50 46329598.72 0.0081 0.0023

Pluto 122134-08-25 11:43 G 46329823.82 46329823.99 46329824.15 0.0081 0.0055

Saturn 122138-10-12 07:53 G 46331332.73 46331332.83 46331332.96 0.0277 0.0228

Saturn 122139-05-29 12:26 G 46331561.83 46331562.02 46331562.22 0.0277 0.0094

Jupiter 122139-09-28 01:38 G 46331683.37 46331683.57 46331683.76 0.0484 0.0175

Neptune 122144-01-10 22:02 G 46333249.34 46333249.42 46333249.54 0.0089 0.0080

Neptune 122144-08-23 12:12 G 46333474.88 46333475.01 46333475.15 0.0089 0.0070

Neptune 122145-04-06 01:38 G 46333700.42 46333700.57 46333700.75 0.0089 0.0061

Jupiter 122145-07-30 04:02 G 46333815.48 46333815.67 46333815.86 0.0544 0.0166

Neptune 122145-11-17 15:19 G 46333925.98 46333926.14 46333926.34 0.0089 0.0051

Neptune 122146-07-01 05:29 G 46334151.53 46334151.73 46334151.93 0.0089 0.0041

Neptune 122147-02-11 19:24 G 46334377.10 46334377.31 46334377.52 0.0089 0.0031

Neptune 122147-09-25 08:50 G 46334602.67 46334602.87 46334603.10 0.0089 0.0022

Neptune 122148-05-07 22:45 G 46334828.23 46334828.45 46334828.68 0.0089 0.0012

Neptune 122148-12-19 12:41 G 46335053.81 46335054.03 46335054.25 0.0089 0.0002

Neptune 122149-08-02 02:21 G 46335279.38 46335279.60 46335279.83 0.0089 0.0008

Neptune 122150-03-15 16:17 G 46335504.96 46335505.18 46335505.40 0.0089 0.0018

Neptune 122150-10-27 05:43 G 46335730.54 46335730.74 46335730.97 0.0089 0.0028

Jupiter 122151-06-03 04:02 G 46335949.59 46335949.67 46335949.74 0.0484 0.0446

Neptune 122151-06-09 19:24 G 46335956.13 46335956.31 46335956.53 0.0089 0.0038

Neptune 122152-01-21 09:33 G 46336181.72 46336181.90 46336182.09 0.0089 0.0047

Neptune 122152-09-02 23:14 G 46336407.31 46336407.47 46336407.65 0.0089 0.0057

Neptune 122153-04-16 12:41 G 46336632.91 46336633.03 46336633.20 0.0089 0.0067

Saturn 122153-11-12 21:05 G 46336843.16 46336843.38 46336843.59 0.0283 0.0005

Neptune 122153-11-28 02:50 G 46336858.51 46336858.62 46336858.73 0.0089 0.0076

Neptune 122154-07-11 16:17 G 46337084.14 46337084.18 46337084.25 0.0089 0.0086

Uranus 122155-01-19 16:17 G 46337276.07 46337276.18 46337276.32 0.0142 0.0117

Uranus 122155-09-03 05:00 G 46337502.56 46337502.71 46337502.90 0.0142 0.0090

Uranus 122156-04-16 17:57 G 46337729.05 46337729.25 46337729.46 0.0142 0.0062

Uranus 122156-11-29 06:26 G 46337955.56 46337955.77 46337956.00 0.0142 0.0035

Mars 122157-01-15 10:31 G 46338002.78 46338002.94 46338003.10 0.1613 0.0636

Uranus 122157-07-13 19:09 G 46338182.08 46338182.30 46338182.52 0.0142 0.0007

Uranus 122158-02-25 07:24 G 46338408.59 46338408.81 46338409.04 0.0142 0.0021

Uranus 122158-10-09 19:38 G 46338635.11 46338635.32 46338635.53 0.0142 0.0048

Uranus 122159-05-24 07:38 G 46338861.64 46338861.82 46338862.01 0.0142 0.0075

Mars 122159-10-21 17:29 G 46339012.11 46339012.23 46339012.34 0.1920 0.1435

Uranus 122160-01-05 19:38 G 46339088.18 46339088.32 46339088.48 0.0141 0.0101

Uranus 122160-08-19 07:24 G 46339314.73 46339314.81 46339314.92 0.0141 0.0128

Jupiter 122163-09-30 06:55 G 46340451.61 46340451.79 46340451.97 0.0485 0.0249

Saturn 122168-04-23 13:53 G 46342118.92 46342119.08 46342119.24 0.0276 0.0178

Saturn 122168-12-08 17:57 G 46342348.08 46342348.25 46342348.43 0.0276 0.0141

Jupiter 122169-08-02 09:05 G 46342584.76 46342584.88 46342585.00 0.0543 0.0429

Jupiter 122175-06-05 09:48 G 46344717.70 46344717.91 46344718.12 0.0484 0.0022

Earth 122178-10-19 20:36 G 46345950.20 46345950.36 46345950.51 0.2690 0.0298

Moon 122178-10-19 22:31 G 46345950.28 46345950.44 46345950.61 0.2683 0.0225 *

Jupiter 122181-04-06 22:45 G 46346850.25 46346850.45 46346850.65 0.0544 0.0057

Saturn 122183-05-25 23:00 G 46347629.25 46347629.46 46347629.67 0.0283 0.0042

Jupiter 122187-02-08 13:38 G 46348983.90 46348984.07 46348984.23 0.0484 0.0289

Mars 122189-01-14 02:21 G 46349689.52 46349689.60 46349689.68 0.1620 0.1437

Jupiter 122192-12-10 10:31 G 46351115.78 46351115.94 46351116.10 0.0544 0.0327

Uranus 122197-03-09 11:29 G 46352665.91 46352665.98 46352666.07 0.0135 0.0126

Uranus 122197-10-21 16:02 G 46352892.05 46352892.17 46352892.32 0.0136 0.0104

Saturn 122197-11-03 17:57 G 46352905.07 46352905.25 46352905.43 0.0277 0.0134

Uranus 122198-06-04 20:50 G 46353118.21 46353118.37 46353118.55 0.0136 0.0082

Saturn 122198-06-20 22:31 G 46353134.29 46353134.44 46353134.59 0.0277 0.0188

Uranus 122199-01-17 01:53 G 46353344.39 46353344.58 46353344.77 0.0136 0.0059

Jupiter 122199-06-07 16:02 G 46353486.06 46353486.17 46353486.29 0.0486 0.0406

Uranus 122199-08-31 06:41 G 46353570.58 46353570.78 46353570.99 0.0136 0.0037

Uranus 122200-04-14 11:43 G 46353796.78 46353796.99 46353797.20 0.0136 0.0014

Uranus 122200-11-26 16:45 G 46354022.99 46354023.20 46354023.41 0.0136 0.0009

Uranus 122201-07-10 21:48 G 46354249.21 46354249.41 46354249.63 0.0136 0.0032

Uranus 122202-02-22 03:05 G 46354475.44 46354475.63 46354475.83 0.0136 0.0055

Uranus 122202-10-06 08:36 G 46354701.69 46354701.86 46354702.04 0.0136 0.0078

Uranus 122203-05-20 13:53 G 46354927.95 46354928.08 46354928.23 0.0137 0.0101

Uranus 122204-01-01 19:24 G 46355154.24 46355154.31 46355154.42 0.0137 0.0124

Jupiter 122211-02-11 18:41 G 46357752.09 46357752.28 46357752.49 0.0485 0.0133

Saturn 122212-04-20 15:05 G 46358186.04 46358186.13 46358186.24 0.0283 0.0252

Saturn 122212-12-06 11:00 G 46358415.77 46358415.96 46358416.16 0.0283 0.0110

Jupiter 122216-12-14 12:26 G 46359884.85 46359885.02 46359885.20 0.0543 0.0258

Jupiter 122222-10-17 22:17 G 46362018.24 46362018.43 46362018.63 0.0484 0.0136

Mars 122222-11-13 23:14 G 46362045.33 46362045.47 46362045.62 0.1611 0.0871

Neptune 122224-04-21 00:41 G 46362569.50 46362569.53 46362569.61 0.0089 0.0086

Neptune 122224-12-02 12:55 G 46362794.96 46362795.04 46362795.17 0.0089 0.0077

Neptune 122225-07-16 01:38 G 46363020.44 46363020.57 46363020.72 0.0089 0.0067

Mars 122225-08-18 19:09 G 46363054.13 46363054.30 46363054.47 0.1923 0.0543

Neptune 122226-02-26 13:38 G 46363245.92 46363246.07 46363246.25 0.0089 0.0058

Neptune 122226-10-10 01:53 G 46363471.42 46363471.58 46363471.78 0.0089 0.0049

Saturn 122227-05-18 00:26 G 46363691.33 46363691.52 46363691.72 0.0276 0.0083

Neptune 122227-05-23 14:21 G 46363696.91 46363697.10 46363697.30 0.0089 0.0039

Saturn 122228-01-02 04:31 G 46363920.59 46363920.69 46363920.80 0.0276 0.0237

Neptune 122228-01-04 02:36 G 46363922.41 46363922.61 46363922.82 0.0089 0.0030

Neptune 122228-08-16 15:05 G 46364147.93 46364148.13 46364148.35 0.0089 0.0020

Jupiter 122228-08-19 02:36 G 46364150.41 46364150.61 46364150.80 0.0545 0.0116

Neptune 122229-03-30 03:33 G 46364373.43 46364373.65 46364373.86 0.0089 0.0011

Neptune 122229-11-10 15:48 G 46364598.94 46364599.16 46364599.38 0.0089 0.0001

Neptune 122230-06-24 04:02 G 46364824.46 46364824.67 46364824.89 0.0089 0.0008

Neptune 122231-02-04 16:17 G 46365049.97 46365050.18 46365050.40 0.0088 0.0017

Neptune 122231-09-18 04:45 G 46365275.49 46365275.70 46365275.90 0.0088 0.0027

Neptune 122232-04-30 16:31 G 46365501.01 46365501.19 46365501.40 0.0088 0.0037

Neptune 122232-12-12 05:00 G 46365726.53 46365726.71 46365726.90 0.0088 0.0046

Neptune 122233-07-25 17:29 G 46365952.06 46365952.23 46365952.40 0.0088 0.0055

Neptune 122234-03-08 05:14 G 46366177.60 46366177.72 46366177.89 0.0088 0.0065

Jupiter 122234-06-23 01:09 G 46366284.44 46366284.55 46366284.66 0.0483 0.0405

Neptune 122234-10-19 17:43 G 46366403.14 46366403.24 46366403.37 0.0088 0.0074

Neptune 122235-06-02 05:57 G 46366628.69 46366628.75 46366628.84 0.0088 0.0083

Uranus 122238-09-19 22:45 G 46367834.36 46367834.45 46367834.55 0.0143 0.0128

Uranus 122239-05-04 11:29 G 46368060.83 46368060.98 46368061.15 0.0143 0.0101

Uranus 122239-12-17 00:12 G 46368287.33 46368287.51 46368287.72 0.0142 0.0074

Jupiter 122240-04-23 16:31 G 46368416.11 46368416.19 46368416.28 0.0545 0.0488

Uranus 122240-07-30 13:09 G 46368513.84 46368514.05 46368514.26 0.0142 0.0045

Uranus 122241-03-14 01:38 G 46368740.35 46368740.57 46368740.80 0.0142 0.0018

Uranus 122241-10-26 14:07 G 46368966.87 46368967.09 46368967.32 0.0142 0.0010

Saturn 122241-10-31 17:14 G 46368972.08 46368972.22 46368972.36 0.0283 0.0214

Uranus 122242-06-10 02:21 G 46369193.39 46369193.60 46369193.82 0.0142 0.0037

Saturn 122242-06-18 12:41 G 46369201.86 46369202.03 46369202.23 0.0283 0.0148

Uranus 122243-01-22 14:36 G 46369419.93 46369420.11 46369420.32 0.0142 0.0065

Uranus 122243-09-06 03:05 G 46369646.46 46369646.63 46369646.80 0.0142 0.0091

Uranus 122244-04-19 14:50 G 46369873.01 46369873.12 46369873.25 0.0141 0.0118

Jupiter 122246-10-20 04:17 G 46370786.52 46370786.68 46370786.85 0.0485 0.0292

Jupiter 122252-08-22 07:53 G 46372919.74 46372919.83 46372919.92 0.0542 0.0479

Mars 122254-11-12 15:05 G 46373732.01 46373732.13 46373732.24 0.1618 0.1191

Saturn 122256-11-27 03:19 G 46374477.43 46374477.64 46374477.85 0.0277 0.0042

Jupiter 122258-06-25 07:24 G 46375052.60 46375052.81 46375053.02 0.0485 0.0020

Jupiter 122264-04-26 19:38 G 46377185.13 46377185.32 46377185.52 0.0543 0.0100

Jupiter 122270-02-28 10:31 G 46379318.77 46379318.94 46379319.12 0.0484 0.0252

Saturn 122271-05-14 04:17 G 46379758.50 46379758.68 46379758.87 0.0283 0.0149

Saturn 122271-12-29 23:57 G 46379988.37 46379988.50 46379988.65 0.0283 0.0213

Jupiter 122275-12-31 06:26 G 46381450.61 46381450.77 46381450.94 0.0545 0.0287

Uranus 122280-11-07 23:29 G 46383224.46 46383224.48 46383224.52 0.0135 0.0134

Uranus 122281-06-22 04:17 G 46383450.57 46383450.68 46383450.80 0.0135 0.0112

Uranus 122282-02-03 08:50 G 46383676.72 46383676.87 46383677.04 0.0136 0.0090

Jupiter 122282-06-27 13:09 G 46383820.98 46383821.05 46383821.14 0.0486 0.0446

Uranus 122282-09-17 13:24 G 46383902.89 46383903.06 46383903.26 0.0136 0.0068

Uranus 122283-05-01 18:26 G 46384129.07 46384129.27 46384129.47 0.0136 0.0045

Uranus 122283-12-13 23:14 G 46384355.27 46384355.47 46384355.69 0.0136 0.0023

Earth 122284-04-26 09:48 G 46384489.85 46384489.91 46384489.98 0.2644 0.2408

Moon 122284-04-26 15:19 G 46384490.12 46384490.14 46384490.16 0.2646 0.2617

Uranus 122284-07-27 04:31 G 46384581.48 46384581.69 46384581.90 0.0136 0.0001

Uranus 122285-03-10 09:33 G 46384807.69 46384807.90 46384808.11 0.0136 0.0024

Uranus 122285-10-22 14:50 G 46385033.92 46385034.12 46385034.32 0.0136 0.0046

Uranus 122286-06-05 20:07 G 46385260.16 46385260.34 46385260.53 0.0136 0.0070

Saturn 122286-06-09 10:17 G 46385263.72 46385263.93 46385264.14 0.0276 0.0010

Uranus 122287-01-18 01:38 G 46385486.42 46385486.57 46385486.73 0.0136 0.0093

Uranus 122287-09-01 07:09 G 46385712.70 46385712.80 46385712.92 0.0137 0.0116

Mars 122288-09-10 11:57 G 46386087.88 46386088.00 46386088.13 0.1610 0.1101

Pluto 122290-08-10 19:24 G 46386787.16 46386787.31 46386787.50 0.0062 0.0039

Pluto 122291-03-23 23:00 G 46387012.24 46387012.46 46387012.68 0.0062 0.0005

Mars 122291-06-15 21:33 G 46387096.22 46387096.40 46387096.57 0.1926 0.0332

Pluto 122291-11-04 01:38 G 46387237.40 46387237.57 46387237.78 0.0063 0.0029

Earth 122292-04-23 23:43 G 46387409.35 46387409.49 46387409.63 0.2642 0.1371

Moon 122292-04-24 02:50 G 46387409.47 46387409.62 46387409.78 0.2637 0.1085 *

Pluto 122292-06-16 05:14 G 46387462.72 46387462.72 46387462.73 0.0063 0.0063

Jupiter 122294-03-02 16:31 G 46388087.00 46388087.19 46388087.38 0.0485 0.0175

Jupiter 122300-01-03 13:53 G 46390219.93 46390220.08 46390220.25 0.0543 0.0322

Saturn 122300-11-24 05:57 G 46390544.56 46390544.75 46390544.95 0.0283 0.0113

Saturn 122301-07-12 01:38 G 46390774.47 46390774.57 46390774.67 0.0283 0.0248

Jupiter 122305-11-06 20:07 G 46392353.14 46392353.34 46392353.55 0.0484 0.0093

Neptune 122308-04-15 05:57 G 46393243.69 46393243.75 46393243.86 0.0089 0.0082

Neptune 122308-11-26 20:07 G 46393469.21 46393469.34 46393469.47 0.0089 0.0072

Neptune 122309-07-10 09:33 G 46393694.76 46393694.90 46393695.08 0.0089 0.0063

Neptune 122310-02-20 23:29 G 46393920.32 46393920.48 46393920.68 0.0089 0.0053

Neptune 122310-10-04 13:24 G 46394145.87 46394146.06 46394146.27 0.0089 0.0043

Neptune 122311-05-18 03:05 G 46394371.43 46394371.63 46394371.85 0.0089 0.0033

Jupiter 122311-09-09 02:50 G 46394485.42 46394485.62 46394485.82 0.0544 0.0058

Neptune 122311-12-29 16:45 G 46394597.00 46394597.20 46394597.43 0.0089 0.0024

Neptune 122312-08-11 06:41 G 46394822.57 46394822.78 46394823.01 0.0089 0.0014

Neptune 122313-03-24 20:36 G 46395048.14 46395048.36 46395048.59 0.0089 0.0004

Neptune 122313-11-05 10:17 G 46395273.71 46395273.93 46395274.16 0.0089 0.0006

Neptune 122314-06-18 23:57 G 46395499.28 46395499.50 46395499.73 0.0089 0.0016

Neptune 122315-01-30 13:38 G 46395724.87 46395725.07 46395725.30 0.0089 0.0026

Saturn 122315-05-06 08:07 G 46395820.81 46395820.84 46395820.88 0.0276 0.0272

Neptune 122315-09-13 03:48 G 46395950.45 46395950.66 46395950.86 0.0089 0.0035

Saturn 122315-12-21 12:12 G 46396049.81 46396050.01 46396050.21 0.0276 0.0048

Neptune 122316-04-25 17:14 G 46396176.04 46396176.22 46396176.42 0.0089 0.0045

Neptune 122316-12-07 06:41 G 46396401.62 46396401.78 46396401.97 0.0089 0.0055

Jupiter 122317-07-12 23:14 G 46396619.33 46396619.47 46396619.60 0.0484 0.0364

Neptune 122317-07-20 20:21 G 46396627.22 46396627.35 46396627.52 0.0089 0.0065

Neptune 122318-03-03 10:31 G 46396852.83 46396852.94 46396853.07 0.0089 0.0074

Neptune 122318-10-14 23:57 G 46397078.45 46397078.50 46397078.59 0.0089 0.0084

Mars 122320-09-10 03:33 G 46397774.51 46397774.65 46397774.79 0.1616 0.0951

Uranus 122322-05-21 05:29 G 46398392.69 46398392.73 46398392.79 0.0143 0.0139

Uranus 122323-01-02 18:26 G 46398619.15 46398619.27 46398619.42 0.0143 0.0112

Jupiter 122323-05-14 14:50 G 46398751.01 46398751.12 46398751.24 0.0545 0.0439

Uranus 122323-08-17 07:09 G 46398845.64 46398845.80 46398846.00 0.0142 0.0085

Uranus 122324-03-30 20:07 G 46399072.14 46399072.34 46399072.55 0.0142 0.0057

Uranus 122324-11-12 08:50 G 46399298.66 46399298.87 46399299.09 0.0142 0.0029

Uranus 122325-06-26 21:33 G 46399525.18 46399525.40 46399525.62 0.0142 0.0001

Uranus 122326-02-08 10:02 G 46399751.70 46399751.92 46399752.14 0.0142 0.0027

Uranus 122326-09-22 22:17 G 46399978.23 46399978.43 46399978.64 0.0142 0.0054

Uranus 122327-05-07 10:17 G 46400204.76 46400204.93 46400205.13 0.0142 0.0082

Uranus 122327-12-19 22:17 G 46400431.31 46400431.43 46400431.59 0.0142 0.0109

Uranus 122328-08-02 10:31 G 46400657.89 46400657.94 46400658.02 0.0141 0.0135

Jupiter 122329-11-09 01:53 G 46401121.44 46401121.58 46401121.74 0.0485 0.0333

Saturn 122330-06-06 15:48 G 46401330.94 46401331.16 46401331.37 0.0283 0.0052

Jupiter 122335-09-12 04:31 G 46403254.64 46403254.69 46403254.74 0.0543 0.0524

Jupiter 122341-07-15 05:43 G 46405387.54 46405387.74 46405387.95 0.0484 0.0065

Saturn 122344-11-15 15:19 G 46406607.02 46406607.14 46406607.27 0.0276 0.0219

Saturn 122345-07-02 19:09 G 46406836.11 46406836.30 46406836.50 0.0276 0.0100

Jupiter 122347-05-17 18:12 G 46407520.07 46407520.26 46407520.45 0.0544 0.0152

Jupiter 122353-03-20 08:50 G 46409653.69 46409653.87 46409654.06 0.0484 0.0206

Mars 122354-07-10 00:41 G 46410130.44 46410130.53 46410130.63 0.1608 0.1334

Mars 122357-04-12 23:14 G 46411138.34 46411138.47 46411138.60 0.1929 0.1241

Jupiter 122359-01-20 08:36 G 46411785.68 46411785.86 46411786.04 0.0545 0.0221

Saturn 122359-12-17 17:43 G 46412117.02 46412117.24 46412117.45 0.0283 0.0015

Jupiter 122364-11-23 12:26 G 46413919.99 46413920.02 46413920.07 0.0483 0.0473

Uranus 122365-02-20 15:48 G 46414009.08 46414009.16 46414009.27 0.0135 0.0121

Uranus 122365-10-04 20:21 G 46414235.22 46414235.35 46414235.51 0.0135 0.0099

Uranus 122366-05-19 01:09 G 46414461.38 46414461.55 46414461.73 0.0136 0.0076

Uranus 122366-12-31 05:57 G 46414687.56 46414687.75 46414687.95 0.0136 0.0054

Uranus 122367-08-14 11:00 G 46414913.76 46414913.96 46414914.17 0.0136 0.0031

Uranus 122368-03-27 16:02 G 46415139.96 46415140.17 46415140.38 0.0136 0.0008

Uranus 122368-11-08 21:05 G 46415366.17 46415366.38 46415366.59 0.0136 0.0015

Uranus 122369-06-23 02:07 G 46415592.39 46415592.59 46415592.80 0.0136 0.0038

Uranus 122370-02-04 07:24 G 46415818.63 46415818.81 46415819.01 0.0136 0.0061

Uranus 122370-09-18 12:41 G 46416044.87 46416045.03 46416045.21 0.0136 0.0085

Uranus 122371-05-02 18:12 G 46416271.14 46416271.26 46416271.40 0.0136 0.0108

Uranus 122371-12-14 23:29 G 46416497.44 46416497.48 46416497.56 0.0137 0.0131

Saturn 122374-05-28 16:02 G 46417393.03 46417393.17 46417393.33 0.0276 0.0185

Saturn 122375-01-12 20:07 G 46417622.16 46417622.34 46417622.52 0.0276 0.0135

Jupiter 122377-03-22 15:19 G 46418421.96 46418422.14 46418422.32 0.0485 0.0222

Pluto 122381-12-16 23:57 G 46420152.36 46420152.50 46420152.65 0.0082 0.0062

Pluto 122382-07-30 11:43 G 46420377.77 46420377.99 46420378.21 0.0081 0.0016

Jupiter 122383-01-23 13:09 G 46420554.90 46420555.05 46420555.19 0.0543 0.0374

Mars 122386-07-08 16:02 G 46421817.01 46421817.17 46421817.32 0.1614 0.0705

Neptune 122388-07-24 10:31 G 46422563.93 46422563.94 46422564.00 0.0089 0.0088

Jupiter 122388-11-25 18:41 G 46422688.08 46422688.28 46422688.49 0.0484 0.0049

Neptune 122389-03-06 23:14 G 46422789.37 46422789.47 46422789.57 0.0089 0.0078

Saturn 122389-06-29 01:24 G 46422903.35 46422903.56 46422903.78 0.0283 0.0041

Neptune 122389-10-18 11:14 G 46423014.84 46423014.97 46423015.11 0.0089 0.0069

Neptune 122390-05-31 23:14 G 46423240.32 46423240.47 46423240.64 0.0089 0.0060

Neptune 122391-01-12 11:14 G 46423465.81 46423465.97 46423466.17 0.0089 0.0051

Neptune 122391-08-25 23:57 G 46423691.31 46423691.50 46423691.70 0.0089 0.0041

Neptune 122392-04-07 12:12 G 46423916.81 46423917.01 46423917.22 0.0089 0.0032

Neptune 122392-11-19 00:12 G 46424142.31 46424142.51 46424142.73 0.0089 0.0023

Neptune 122393-07-02 12:41 G 46424367.82 46424368.03 46424368.25 0.0089 0.0013

Neptune 122394-02-13 01:09 G 46424593.33 46424593.55 46424593.76 0.0089 0.0004

Neptune 122394-09-26 13:24 G 46424818.85 46424819.06 46424819.28 0.0089 0.0006

Jupiter 122394-09-27 23:29 G 46424820.28 46424820.48 46424820.68 0.0544 0.0016

Neptune 122395-05-10 01:38 G 46425044.36 46425044.57 46425044.79 0.0089 0.0015

Neptune 122395-12-21 13:53 G 46425269.88 46425270.08 46425270.29 0.0089 0.0025

Neptune 122396-08-03 02:07 G 46425495.40 46425495.59 46425495.80 0.0088 0.0035

Neptune 122397-03-16 14:21 G 46425720.93 46425721.10 46425721.30 0.0088 0.0044

Neptune 122397-10-28 02:50 G 46425946.45 46425946.62 46425946.80 0.0088 0.0053

Neptune 122398-06-10 14:36 G 46426171.98 46426172.11 46426172.29 0.0088 0.0063

Neptune 122399-01-22 03:05 G 46426397.52 46426397.63 46426397.77 0.0088 0.0072

Neptune 122399-09-04 15:33 G 46426623.08 46426623.15 46426623.25 0.0088 0.0081

Jupiter 122400-07-31 22:45 G 46426954.30 46426954.45 46426954.61 0.0483 0.0315

Saturn 122403-12-08 23:43 G 46428179.31 46428179.49 46428179.68 0.0276 0.0131

Saturn 122404-07-25 03:33 G 46428408.51 46428408.65 46428408.81 0.0276 0.0187

Jupiter 122406-06-02 12:55 G 46429085.90 46429086.04 46429086.18 0.0545 0.0390

Uranus 122406-09-02 00:26 G 46429177.43 46429177.52 46429177.65 0.0143 0.0124

Uranus 122407-04-16 13:38 G 46429403.91 46429404.07 46429404.24 0.0143 0.0096

Uranus 122407-11-29 02:36 G 46429630.42 46429630.61 46429630.81 0.0143 0.0068

Uranus 122408-07-12 15:19 G 46429856.93 46429857.14 46429857.36 0.0142 0.0040

Uranus 122409-02-24 04:02 G 46430083.45 46430083.67 46430083.90 0.0142 0.0012

Uranus 122409-10-08 16:31 G 46430309.98 46430310.19 46430310.42 0.0142 0.0017

Uranus 122410-05-23 05:14 G 46430536.51 46430536.72 46430536.93 0.0142 0.0043

Uranus 122411-01-04 17:29 G 46430763.05 46430763.23 46430763.43 0.0142 0.0071

Uranus 122411-08-19 05:57 G 46430989.59 46430989.75 46430989.91 0.0142 0.0098

Uranus 122412-04-01 17:43 G 46431216.15 46431216.24 46431216.35 0.0142 0.0125

Jupiter 122412-11-28 00:41 G 46431456.41 46431456.53 46431456.66 0.0485 0.0380

Saturn 122419-01-09 03:33 G 46433689.44 46433689.65 46433689.86 0.0283 0.0078

Mars 122420-05-06 13:38 G 46434173.03 46434173.07 46434173.11 0.1607 0.1560

Moon 122421-10-21 18:12 G 46434706.11 46434706.26 46434706.41 0.2693 0.0312

Earth 122421-10-21 23:29 G 46434706.32 46434706.48 46434706.63 0.2691 0.0339 *

Jupiter 122424-08-03 04:45 G 46435722.50 46435722.70 46435722.90 0.0484 0.0112

Jupiter 122430-06-05 20:36 G 46437855.17 46437855.36 46437855.54 0.0544 0.0219

Saturn 122433-06-19 23:43 G 46438965.30 46438965.49 46438965.69 0.0276 0.0100

Saturn 122434-02-04 03:19 G 46439194.53 46439194.64 46439194.78 0.0276 0.0220

Jupiter 122436-04-08 08:07 G 46439988.65 46439988.84 46439989.04 0.0484 0.0159

Jupiter 122442-02-08 09:05 G 46442120.69 46442120.88 46442121.07 0.0544 0.0162

Saturn 122447-12-04 13:38 G 46444245.96 46444246.07 46444246.20 0.0283 0.0234

Jupiter 122447-12-13 11:57 G 46444254.90 46444255.00 46444255.10 0.0483 0.0426

Saturn 122448-07-21 10:02 G 46444475.73 46444475.92 46444476.12 0.0283 0.0129

Uranus 122448-10-21 03:48 G 46444567.62 46444567.66 46444567.74 0.0135 0.0129

Uranus 122449-06-04 08:50 G 46444793.74 46444793.87 46444794.00 0.0135 0.0107

Uranus 122450-01-16 13:24 G 46445019.90 46445020.06 46445020.23 0.0135 0.0085

Uranus 122450-08-30 18:12 G 46445246.07 46445246.26 46445246.45 0.0136 0.0062

Uranus 122451-04-13 22:45 G 46445472.26 46445472.45 46445472.66 0.0136 0.0040

Uranus 122451-11-26 03:48 G 46445698.45 46445698.66 46445698.88 0.0136 0.0017

Mars 122452-05-05 05:00 G 46445859.55 46445859.71 46445859.88 0.1612 0.0480

Uranus 122452-07-09 09:05 G 46445924.67 46445924.88 46445925.09 0.0136 0.0007

Uranus 122453-02-20 14:07 G 46446150.88 46446151.09 46446151.30 0.0136 0.0030

Uranus 122453-10-04 19:09 G 46446377.11 46446377.30 46446377.50 0.0136 0.0053

Uranus 122454-05-19 00:26 G 46446603.35 46446603.52 46446603.70 0.0136 0.0076

Uranus 122454-12-31 05:43 G 46446829.61 46446829.74 46446829.89 0.0136 0.0100

Uranus 122455-08-14 11:14 G 46447055.89 46447055.97 46447056.08 0.0136 0.0123

Jupiter 122460-04-10 15:19 G 46448756.97 46448757.14 46448757.31 0.0485 0.0273

Saturn 122462-12-31 07:09 G 46449751.60 46449751.80 46449752.01 0.0276 0.0047

Saturn 122463-08-17 11:14 G 46449980.94 46449980.97 46449981.00 0.0276 0.0272

Jupiter 122466-02-11 11:43 G 46450889.87 46450889.99 46450890.11 0.0543 0.0428

Jupiter 122471-12-15 18:12 G 46453023.06 46453023.26 46453023.47 0.0484 0.0009

Neptune 122472-07-17 13:38 G 46453238.01 46453238.07 46453238.15 0.0088 0.0084

Neptune 122473-02-28 03:19 G 46453463.54 46453463.64 46453463.78 0.0088 0.0075

Neptune 122473-10-11 17:14 G 46453689.08 46453689.22 46453689.39 0.0089 0.0065

Neptune 122474-05-25 07:09 G 46453914.63 46453914.80 46453914.98 0.0089 0.0055

Neptune 122475-01-05 20:50 G 46454140.19 46454140.37 46454140.58 0.0089 0.0046

Neptune 122475-08-19 10:45 G 46454365.76 46454365.95 46454366.17 0.0089 0.0036

Neptune 122476-04-01 00:41 G 46454591.32 46454591.53 46454591.75 0.0089 0.0026

Neptune 122476-11-12 14:21 G 46454816.89 46454817.10 46454817.33 0.0089 0.0016

Saturn 122477-06-15 16:17 G 46455032.03 46455032.18 46455032.34 0.0283 0.0195

Neptune 122477-06-26 04:17 G 46455042.46 46455042.68 46455042.90 0.0089 0.0006

Jupiter 122477-10-17 02:21 G 46455155.40 46455155.60 46455155.80 0.0545 0.0057

Saturn 122478-01-31 12:12 G 46455261.84 46455262.01 46455262.19 0.0283 0.0168

Neptune 122478-02-06 18:12 G 46455268.03 46455268.26 46455268.48 0.0089 0.0004

Neptune 122478-09-20 07:38 G 46455493.61 46455493.82 46455494.05 0.0089 0.0014

Neptune 122479-05-03 21:33 G 46455719.18 46455719.40 46455719.62 0.0089 0.0023

Neptune 122479-12-15 11:00 G 46455944.76 46455944.96 46455945.18 0.0089 0.0033

Neptune 122480-07-28 00:41 G 46456170.35 46456170.53 46456170.74 0.0089 0.0043

Neptune 122481-03-10 14:21 G 46456395.94 46456396.10 46456396.30 0.0089 0.0053

Neptune 122481-10-22 04:31 G 46456621.53 46456621.69 46456621.85 0.0089 0.0062

Neptune 122482-06-04 17:57 G 46456847.13 46456847.25 46456847.39 0.0089 0.0072

Neptune 122483-01-16 07:24 G 46457072.75 46457072.81 46457072.92 0.0089 0.0082

Jupiter 122483-08-20 22:17 G 46457289.26 46457289.43 46457289.60 0.0483 0.0266

Jupiter 122489-06-21 16:17 G 46459421.02 46459421.18 46459421.35 0.0545 0.0319

Uranus 122490-05-02 07:38 G 46459735.76 46459735.82 46459735.90 0.0143 0.0135

Uranus 122490-12-14 20:50 G 46459962.23 46459962.37 46459962.52 0.0143 0.0107

Uranus 122491-07-29 10:02 G 46460188.73 46460188.92 46460189.10 0.0143 0.0079

Uranus 122492-03-11 22:45 G 46460415.24 46460415.45 46460415.66 0.0142 0.0051

Saturn 122492-07-12 06:55 G 46460537.58 46460537.79 46460538.00 0.0276 0.0016

Uranus 122492-10-24 11:29 G 46460641.76 46460641.98 46460642.20 0.0142 0.0023

Uranus 122493-06-08 00:12 G 46460868.29 46460868.51 46460868.73 0.0142 0.0005

Uranus 122494-01-20 12:41 G 46461094.82 46461095.03 46461095.26 0.0142 0.0034

Uranus 122494-09-04 01:09 G 46461321.36 46461321.55 46461321.76 0.0142 0.0061

Uranus 122495-04-18 13:24 G 46461547.90 46461548.06 46461548.24 0.0142 0.0088

Uranus 122495-12-01 01:24 G 46461774.45 46461774.56 46461774.70 0.0142 0.0116

Jupiter 122495-12-18 00:41 G 46461791.44 46461791.53 46461791.63 0.0486 0.0430

Saturn 122506-12-27 21:19 G 46465818.21 46465818.39 46465818.58 0.0283 0.0149

Saturn 122507-08-14 17:14 G 46466048.09 46466048.22 46466048.37 0.0283 0.0214

Jupiter 122507-08-24 04:45 G 46466057.51 46466057.70 46466057.90 0.0485 0.0164

Jupiter 122513-06-25 17:43 G 46468190.07 46468190.24 46468190.42 0.0544 0.0267

Mars 122518-03-03 17:29 G 46469902.06 46469902.23 46469902.40 0.1611 0.0239

Jupiter 122519-04-29 09:05 G 46470323.68 46470323.88 46470324.08 0.0484 0.0104

Mars 122520-12-06 06:26 G 46470910.70 46470910.77 46470910.84 0.1925 0.1755

Saturn 122522-01-23 14:21 G 46471323.89 46471324.10 46471324.31 0.0276 0.0038

Jupiter 122525-02-28 07:09 G 46472455.61 46472455.80 46472456.00 0.0545 0.0111

Moon 122527-04-29 07:38 G 46473245.72 46473245.82 46473245.92 0.2636 0.2129

Earth 122527-04-29 09:19 G 46473245.81 46473245.89 46473245.97 0.2643 0.2246 *

Jupiter 122531-01-02 11:57 G 46474589.88 46474590.00 46474590.13 0.0483 0.0375

Uranus 122533-02-02 21:05 G 46475352.28 46475352.38 46475352.50 0.0135 0.0115

Uranus 122533-09-17 01:24 G 46475578.42 46475578.56 46475578.73 0.0135 0.0094

Uranus 122534-05-01 06:12 G 46475804.59 46475804.76 46475804.95 0.0135 0.0071

Uranus 122534-12-13 11:14 G 46476030.77 46476030.97 46476031.17 0.0136 0.0048

Moon 122535-04-26 17:29 G 46476165.17 46476165.23 46476165.29 0.2640 0.2427

Earth 122535-04-26 23:14 G 46476165.33 46476165.47 46476165.60 0.2641 0.1499

Uranus 122535-07-27 16:17 G 46476256.97 46476257.18 46476257.38 0.0136 0.0025

Uranus 122536-03-09 21:05 G 46476483.17 46476483.38 46476483.59 0.0136 0.0002

Saturn 122536-07-09 00:26 G 46476604.33 46476604.52 46476604.73 0.0283 0.0107

Uranus 122536-10-22 02:07 G 46476709.38 46476709.59 46476709.80 0.0136 0.0021

Jupiter 122536-11-02 21:48 G 46476721.32 46476721.41 46476721.50 0.0546 0.0484

Saturn 122537-02-23 20:21 G 46476834.26 46476834.35 46476834.45 0.0283 0.0255

Uranus 122537-06-05 06:55 G 46476935.60 46476935.79 46476936.00 0.0136 0.0045

Uranus 122538-01-17 11:57 G 46477161.83 46477162.00 46477162.20 0.0136 0.0068

Pluto 122538-07-15 22:31 G 46477341.41 46477341.44 46477341.52 0.0062 0.0060

Uranus 122538-08-31 17:14 G 46477388.08 46477388.22 46477388.39 0.0136 0.0092

Pluto 122539-02-26 01:38 G 46477566.39 46477566.57 46477566.78 0.0062 0.0027

Uranus 122539-04-14 22:45 G 46477614.35 46477614.45 46477614.57 0.0136 0.0114

Pluto 122539-10-09 05:00 G 46477791.50 46477791.71 46477791.93 0.0062 0.0007

Pluto 122540-05-21 07:53 G 46478016.69 46478016.83 46478017.02 0.0063 0.0041

Jupiter 122543-05-01 14:50 G 46479091.97 46479092.12 46479092.28 0.0485 0.0323

Jupiter 122549-03-03 15:33 G 46481225.08 46481225.15 46481225.22 0.0543 0.0500

Saturn 122550-12-19 09:48 G 46481880.83 46481880.91 46481881.00 0.0276 0.0251

Saturn 122551-08-05 13:38 G 46482109.87 46482110.07 46482110.27 0.0276 0.0067

Neptune 122553-06-09 07:53 G 46482783.77 46482783.83 46482783.95 0.0089 0.0081

Neptune 122554-01-20 20:36 G 46483009.24 46483009.36 46483009.49 0.0089 0.0071

Neptune 122554-09-03 08:36 G 46483234.72 46483234.86 46483235.03 0.0089 0.0062

Jupiter 122555-01-04 18:26 G 46483358.06 46483358.27 46483358.48 0.0484 0.0053

Neptune 122555-04-16 20:50 G 46483460.21 46483460.37 46483460.56 0.0089 0.0053

Neptune 122555-11-28 09:19 G 46483685.71 46483685.89 46483686.08 0.0089 0.0043

Neptune 122556-07-10 21:33 G 46483911.21 46483911.40 46483911.61 0.0089 0.0034

Neptune 122557-02-21 09:33 G 46484136.71 46484136.90 46484137.12 0.0089 0.0025

Neptune 122557-10-04 22:02 G 46484362.21 46484362.42 46484362.64 0.0089 0.0015

Neptune 122558-05-18 10:17 G 46484587.72 46484587.93 46484588.15 0.0089 0.0006

Neptune 122558-12-29 22:31 G 46484813.23 46484813.44 46484813.66 0.0089 0.0004

Neptune 122559-08-12 11:00 G 46485038.75 46485038.96 46485039.18 0.0089 0.0013

Neptune 122560-03-24 23:14 G 46485264.27 46485264.47 46485264.69 0.0089 0.0023

Neptune 122560-11-05 11:14 G 46485489.79 46485489.97 46485490.19 0.0089 0.0033

Jupiter 122560-11-06 04:17 G 46485490.48 46485490.68 46485490.87 0.0544 0.0122

Neptune 122561-06-18 23:43 G 46485715.31 46485715.49 46485715.69 0.0088 0.0042

Neptune 122562-01-30 12:12 G 46485940.84 46485941.01 46485941.19 0.0088 0.0051

Neptune 122562-09-13 00:12 G 46486166.37 46486166.51 46486166.69 0.0088 0.0061

Neptune 122563-04-26 12:41 G 46486391.91 46486392.03 46486392.18 0.0088 0.0070

Neptune 122563-12-08 01:09 G 46486617.46 46486617.55 46486617.65 0.0088 0.0079

Neptune 122564-07-20 13:09 G 46486843.05 46486843.05 46486843.09 0.0088 0.0088

Saturn 122566-01-19 04:31 G 46487390.48 46487390.69 46487390.90 0.0283 0.0064

Jupiter 122566-09-09 22:45 G 46487624.26 46487624.45 46487624.64 0.0484 0.0214

Jupiter 122572-07-11 13:38 G 46489755.90 46489756.07 46489756.25 0.0545 0.0272

Uranus 122574-08-15 02:36 G 46490520.51 46490520.61 46490520.75 0.0143 0.0120

Uranus 122575-03-29 15:33 G 46490747.00 46490747.15 46490747.34 0.0143 0.0092

Uranus 122575-11-11 04:31 G 46490973.51 46490973.69 46490973.91 0.0143 0.0064

Uranus 122576-06-24 17:43 G 46491200.03 46491200.24 46491200.46 0.0142 0.0035

Uranus 122577-02-06 06:41 G 46491426.56 46491426.78 46491427.00 0.0142 0.0007

Uranus 122577-09-20 19:24 G 46491653.09 46491653.31 46491653.53 0.0142 0.0021

Uranus 122578-05-05 07:53 G 46491879.62 46491879.83 46491880.04 0.0142 0.0049

Jupiter 122578-05-16 02:36 G 46491890.60 46491890.61 46491890.63 0.0483 0.0480

Uranus 122578-12-17 20:21 G 46492106.17 46492106.35 46492106.54 0.0142 0.0077

Uranus 122579-08-01 08:21 G 46492332.72 46492332.85 46492333.01 0.0142 0.0105

Uranus 122580-03-14 20:36 G 46492559.29 46492559.36 46492559.45 0.0142 0.0132

Saturn 122580-06-30 17:29 G 46492667.09 46492667.23 46492667.38 0.0276 0.0197

Saturn 122581-02-14 21:05 G 46492896.20 46492896.38 46492896.57 0.0276 0.0121

Mars 122583-12-30 06:26 G 46493944.59 46493944.77 46493944.94 0.1609 0.0023

Mars 122586-10-03 08:21 G 46494952.69 46494952.85 46494953.00 0.1928 0.0850

Jupiter 122590-09-12 05:00 G 46496392.52 46496392.71 46496392.89 0.0484 0.0214

Saturn 122595-08-01 08:21 G 46498176.64 46498176.85 46498177.07 0.0283 0.0021

Jupiter 122596-07-14 21:05 G 46498525.22 46498525.38 46498525.53 0.0544 0.0338

Jupiter 122602-05-19 08:50 G 46500658.66 46500658.87 46500659.07 0.0484 0.0055

Jupiter 122608-03-20 11:14 G 46502790.77 46502790.97 46502791.17 0.0545 0.0038

Saturn 122610-01-11 16:31 G 46503453.03 46503453.19 46503453.36 0.0276 0.0168

Saturn 122610-08-28 20:21 G 46503682.18 46503682.35 46503682.52 0.0276 0.0150

Jupiter 122614-01-22 12:12 G 46504924.85 46504925.01 46504925.16 0.0483 0.0325

Uranus 122616-10-04 09:19 G 46505910.82 46505910.89 46505910.99 0.0135 0.0124

Uranus 122617-05-18 14:07 G 46506136.96 46506137.09 46506137.24 0.0135 0.0102

Uranus 122617-12-30 18:41 G 46506363.12 46506363.28 46506363.46 0.0135 0.0079

Uranus 122618-08-13 23:29 G 46506589.30 46506589.48 46506589.68 0.0135 0.0057

Uranus 122619-03-28 04:31 G 46506815.49 46506815.69 46506815.90 0.0136 0.0033

Uranus 122619-11-09 09:19 G 46507041.68 46507041.89 46507042.11 0.0136 0.0011

Jupiter 122619-11-24 00:26 G 46507056.39 46507056.52 46507056.64 0.0545 0.0416

Uranus 122620-06-22 14:21 G 46507267.89 46507268.10 46507268.31 0.0136 0.0013

Uranus 122621-02-03 19:24 G 46507494.11 46507494.31 46507494.52 0.0136 0.0036

Uranus 122621-09-18 00:12 G 46507720.33 46507720.51 46507720.71 0.0136 0.0060

Uranus 122622-05-02 05:14 G 46507946.57 46507946.72 46507946.91 0.0136 0.0084

Uranus 122622-12-14 10:31 G 46508172.82 46508172.94 46508173.09 0.0136 0.0107

Uranus 122623-07-28 16:02 G 46508399.12 46508399.17 46508399.25 0.0136 0.0130

Saturn 122625-02-11 11:43 G 46508962.77 46508962.99 46508963.20 0.0283 0.0021

Jupiter 122626-05-21 15:33 G 46509427.03 46509427.15 46509427.28 0.0485 0.0377

Pluto 122630-07-04 07:38 G 46510931.64 46510931.82 46510932.04 0.0081 0.0039

Pluto 122631-02-14 19:24 G 46511157.12 46511157.31 46511157.52 0.0081 0.0039

Neptune 122636-10-20 21:33 G 46513232.35 46513232.40 46513232.45 0.0088 0.0086

Neptune 122637-06-03 11:00 G 46513457.87 46513457.96 46513458.09 0.0088 0.0077

Neptune 122638-01-15 01:09 G 46513683.41 46513683.55 46513683.71 0.0088 0.0067

Jupiter 122638-01-24 19:53 G 46513693.12 46513693.33 46513693.53 0.0484 0.0109

Neptune 122638-08-28 14:36 G 46513908.96 46513909.11 46513909.31 0.0089 0.0058

Neptune 122639-04-11 04:31 G 46514134.52 46514134.69 46514134.90 0.0089 0.0048

Saturn 122639-07-25 00:12 G 46514239.33 46514239.51 46514239.71 0.0276 0.0114

Neptune 122639-11-22 18:26 G 46514360.08 46514360.27 46514360.49 0.0089 0.0038

Saturn 122640-03-10 04:02 G 46514468.53 46514468.67 46514468.81 0.0276 0.0204

Neptune 122640-07-05 08:21 G 46514585.64 46514585.85 46514586.07 0.0089 0.0028

Neptune 122641-02-15 22:31 G 46514811.22 46514811.44 46514811.66 0.0089 0.0018

Neptune 122641-09-29 11:57 G 46515036.79 46515037.00 46515037.23 0.0089 0.0009

Neptune 122642-05-13 01:53 G 46515262.35 46515262.58 46515262.80 0.0089 0.0002

Neptune 122642-12-24 15:19 G 46515487.93 46515488.14 46515488.37 0.0089 0.0012

Neptune 122643-08-07 05:14 G 46515713.50 46515713.72 46515713.94 0.0089 0.0021

Jupiter 122643-11-27 01:53 G 46515825.39 46515825.58 46515825.77 0.0544 0.0172

Neptune 122644-03-19 18:55 G 46515939.09 46515939.29 46515939.51 0.0089 0.0031

Neptune 122644-10-31 08:21 G 46516164.67 46516164.85 46516165.06 0.0089 0.0041

Neptune 122645-06-13 22:31 G 46516390.25 46516390.44 46516390.62 0.0089 0.0050

Neptune 122646-01-25 11:57 G 46516615.85 46516616.00 46516616.17 0.0089 0.0060

Neptune 122646-09-08 01:24 G 46516841.44 46516841.56 46516841.72 0.0089 0.0070

Neptune 122647-04-21 14:50 G 46517067.05 46517067.12 46517067.25 0.0089 0.0080

Jupiter 122649-09-29 22:45 G 46517959.25 46517959.45 46517959.64 0.0483 0.0165

Mars 122649-10-27 19:09 G 46517987.13 46517987.30 46517987.47 0.1607 0.0221

Mars 122652-07-31 09:48 G 46518994.74 46518994.91 46518995.09 0.1931 0.0073

Saturn 122654-08-24 16:45 G 46519748.99 46519749.20 46519749.41 0.0283 0.0069

Jupiter 122655-08-01 16:17 G 46520091.00 46520091.18 46520091.37 0.0545 0.0204

Uranus 122658-04-15 09:48 G 46521078.83 46521078.91 46521079.00 0.0143 0.0131

Uranus 122658-11-27 23:00 G 46521305.31 46521305.46 46521305.61 0.0143 0.0103

Uranus 122659-07-12 11:57 G 46521531.82 46521532.00 46521532.20 0.0143 0.0075

Uranus 122660-02-24 00:55 G 46521758.34 46521758.54 46521758.76 0.0143 0.0047

Uranus 122660-10-07 13:53 G 46521984.86 46521985.08 46521985.30 0.0142 0.0018

Uranus 122661-05-22 02:36 G 46522211.39 46522211.61 46522211.84 0.0142 0.0011

Jupiter 122661-06-05 02:21 G 46522225.51 46522225.60 46522225.69 0.0483 0.0432

Uranus 122662-01-03 15:19 G 46522437.93 46522438.14 46522438.36 0.0142 0.0039

Uranus 122662-08-18 03:48 G 46522664.47 46522664.66 46522664.87 0.0142 0.0067

Uranus 122663-04-01 16:17 G 46522891.02 46522891.18 46522891.35 0.0142 0.0094

Uranus 122663-11-14 04:17 G 46523117.58 46523117.68 46523117.80 0.0142 0.0122

Earth 122664-10-24 02:07 G 46523462.43 46523462.59 46523462.74 0.2692 0.0344

Moon 122664-10-24 05:57 G 46523462.62 46523462.75 46523462.89 0.2697 0.1136 *

Saturn 122669-02-02 23:43 G 46525025.29 46525025.49 46525025.69 0.0276 0.0084

Saturn 122669-09-20 03:19 G 46525254.54 46525254.64 46525254.75 0.0276 0.0234

Moon 122672-10-21 23:57 G 46526382.48 46526382.50 46526382.51 0.2692 0.2668

Jupiter 122673-10-02 04:45 G 46526727.54 46526727.70 46526727.88 0.0485 0.0266

Jupiter 122679-08-04 23:14 G 46528860.34 46528860.47 46528860.60 0.0543 0.0406

Saturn 122683-07-19 23:00 G 46530305.37 46530305.46 46530305.55 0.0283 0.0256

Saturn 122684-03-05 19:09 G 46530535.11 46530535.30 46530535.51 0.0283 0.0107

Jupiter 122685-06-07 09:19 G 46530993.68 46530993.89 46530994.10 0.0484 0.0007

Jupiter 122691-04-09 08:36 G 46533125.66 46533125.86 46533126.06 0.0544 0.0014

Jupiter 122697-02-10 13:09 G 46535259.88 46535260.05 46535260.23 0.0484 0.0270

Saturn 122698-08-16 07:24 G 46535811.60 46535811.81 46535812.01 0.0276 0.0030

Uranus 122700-06-04 22:17 G 46536469.39 46536469.43 46536469.47 0.0135 0.0132

Uranus 122701-01-17 02:36 G 46536695.50 46536695.61 46536695.74 0.0135 0.0110

Uranus 122701-08-31 07:24 G 46536921.65 46536921.81 46536921.98 0.0135 0.0088

Uranus 122702-04-14 11:57 G 46537147.82 46537148.00 46537148.20 0.0135 0.0065

Uranus 122702-11-26 16:45 G 46537374.01 46537374.20 46537374.41 0.0135 0.0042

Jupiter 122702-12-13 21:19 G 46537391.24 46537391.39 46537391.53 0.0545 0.0370

Uranus 122703-07-10 21:48 G 46537600.20 46537600.41 46537600.62 0.0136 0.0019

Uranus 122704-02-22 02:50 G 46537826.40 46537826.62 46537826.83 0.0136 0.0005

Uranus 122704-10-05 07:38 G 46538052.61 46538052.82 46538053.03 0.0136 0.0028

Uranus 122705-05-19 12:26 G 46538278.83 46538279.02 46538279.22 0.0136 0.0051

Uranus 122705-12-31 17:43 G 46538505.06 46538505.24 46538505.42 0.0136 0.0074

Uranus 122706-08-14 22:31 G 46538731.31 46538731.44 46538731.61 0.0136 0.0099

Uranus 122707-03-29 03:48 G 46538957.58 46538957.66 46538957.77 0.0136 0.0122

Jupiter 122709-06-10 14:50 G 46539762.03 46539762.12 46539762.22 0.0485 0.0425

Saturn 122713-01-30 05:43 G 46541091.60 46541091.74 46541091.90 0.0283 0.0203

Saturn 122713-09-17 01:38 G 46541321.40 46541321.57 46541321.75 0.0283 0.0159

Mars 122715-08-26 08:07 G 46542029.67 46542029.84 46542030.00 0.1606 0.0446

Neptune 122717-09-12 17:14 G 46542778.16 46542778.22 46542778.31 0.0089 0.0083

Neptune 122718-04-26 05:14 G 46543003.63 46543003.72 46543003.86 0.0089 0.0074

Mars 122718-05-29 12:12 G 46543036.86 46543037.01 46543037.17 0.1933 0.0949

Neptune 122718-12-07 17:57 G 46543229.11 46543229.25 46543229.40 0.0089 0.0064

Neptune 122719-07-21 05:57 G 46543454.60 46543454.75 46543454.94 0.0089 0.0055

Neptune 122720-03-02 18:12 G 46543680.09 46543680.26 46543680.46 0.0089 0.0046

Neptune 122720-10-14 06:41 G 46543905.58 46543905.78 46543905.98 0.0089 0.0036

Jupiter 122721-02-13 18:55 G 46544028.09 46544028.29 46544028.49 0.0484 0.0156

Neptune 122721-05-27 18:41 G 46544131.08 46544131.28 46544131.49 0.0089 0.0027

Neptune 122722-01-08 06:55 G 46544356.59 46544356.79 46544357.01 0.0089 0.0018

Neptune 122722-08-21 19:24 G 46544582.10 46544582.31 46544582.53 0.0089 0.0008

Neptune 122723-04-04 07:38 G 46544807.61 46544807.82 46544808.04 0.0089 0.0002

Neptune 122723-11-15 19:53 G 46545033.12 46545033.33 46545033.55 0.0089 0.0011

Neptune 122724-06-28 07:53 G 46545258.63 46545258.83 46545259.05 0.0089 0.0021

Neptune 122725-02-08 20:21 G 46545484.15 46545484.35 46545484.56 0.0089 0.0030

Neptune 122725-09-22 08:36 G 46545709.68 46545709.86 46545710.06 0.0089 0.0039

Neptune 122726-05-05 20:50 G 46545935.20 46545935.37 46545935.56 0.0088 0.0049

Jupiter 122726-12-17 05:29 G 46546160.55 46546160.73 46546160.90 0.0544 0.0244

Neptune 122726-12-17 08:50 G 46546160.73 46546160.87 46546161.06 0.0088 0.0059 *

Neptune 122727-07-30 21:33 G 46546386.28 46546386.40 46546386.55 0.0088 0.0068

Saturn 122728-02-27 07:24 G 46546597.60 46546597.81 46546598.02 0.0276 0.0002

Neptune 122728-03-12 10:02 G 46546611.82 46546611.92 46546612.04 0.0088 0.0077

Neptune 122728-10-23 22:31 G 46546837.40 46546837.44 46546837.49 0.0088 0.0086

Jupiter 122732-10-19 22:17 G 46548294.22 46548294.43 46548294.63 0.0484 0.0115

Jupiter 122738-08-21 18:41 G 46550426.09 46550426.28 46550426.47 0.0545 0.0135

Uranus 122742-07-29 04:31 G 46551863.58 46551863.69 46551863.83 0.0143 0.0116

Saturn 122742-08-12 07:53 G 46551877.66 46551877.83 46551878.01 0.0283 0.0166

Uranus 122743-03-12 17:57 G 46552090.07 46552090.25 46552090.43 0.0143 0.0087

Saturn 122743-03-30 04:02 G 46552107.52 46552107.67 46552107.83 0.0283 0.0196

Uranus 122743-10-25 06:41 G 46552316.59 46552316.78 46552316.99 0.0143 0.0059

Uranus 122744-06-07 19:38 G 46552543.11 46552543.32 46552543.55 0.0142 0.0031

Jupiter 122744-06-25 02:07 G 46552560.47 46552560.59 46552560.72 0.0483 0.0381

Uranus 122745-01-20 08:50 G 46552769.65 46552769.87 46552770.10 0.0142 0.0002

Uranus 122745-09-03 21:33 G 46552996.18 46552996.40 46552996.62 0.0142 0.0027

Uranus 122746-04-18 10:02 G 46553222.72 46553222.92 46553223.13 0.0142 0.0055

Uranus 122746-11-30 22:31 G 46553449.27 46553449.44 46553449.63 0.0142 0.0083

Uranus 122747-07-15 10:31 G 46553675.82 46553675.94 46553676.10 0.0142 0.0111

Mars 122747-08-24 23:29 G 46553716.46 46553716.48 46553716.50 0.1612 0.1599

Uranus 122748-02-26 23:00 G 46553902.42 46553902.46 46553902.52 0.0142 0.0138

Jupiter 122750-04-26 04:17 G 46554691.64 46554691.68 46554691.73 0.0545 0.0529

Jupiter 122756-10-22 05:29 G 46557062.58 46557062.73 46557062.89 0.0485 0.0319

Saturn 122757-01-22 10:45 G 46557154.90 46557154.95 46557155.02 0.0276 0.0262

Saturn 122757-09-08 14:50 G 46557383.91 46557384.12 46557384.32 0.0276 0.0056

Jupiter 122762-08-24 19:53 G 46559195.22 46559195.33 46559195.44 0.0543 0.0450

Jupiter 122768-06-27 08:07 G 46561328.63 46561328.84 46561329.05 0.0484 0.0044

Moon 122770-05-01 03:48 G 46562001.56 46562001.66 46562001.76 0.2645 0.1981

Earth 122770-05-01 08:36 G 46562001.77 46562001.86 46562001.96 0.2641 0.2098

Saturn 122772-02-22 16:17 G 46562663.98 46562664.18 46562664.38 0.0283 0.0108

Saturn 122772-10-09 11:57 G 46562893.91 46562894.00 46562894.10 0.0283 0.0253

Jupiter 122774-04-29 09:33 G 46563460.71 46563460.90 46563461.10 0.0545 0.0074

Earth 122778-04-28 22:17 G 46564921.31 46564921.43 46564921.55 0.2639 0.1682

Moon 122778-04-28 23:29 G 46564921.36 46564921.48 46564921.61 0.2646 0.1488 *

Jupiter 122780-03-02 11:57 G 46565594.81 46565595.00 46565595.18 0.0483 0.0225

Mars 122781-06-22 21:05 G 46566072.22 46566072.38 46566072.54 0.1604 0.0672

Mars 122784-03-25 13:53 G 46567079.04 46567079.08 46567079.12 0.1936 0.1874

Uranus 122784-09-16 15:19 G 46567254.04 46567254.14 46567254.24 0.0135 0.0119

Uranus 122785-04-30 19:38 G 46567480.19 46567480.32 46567480.48 0.0135 0.0096

Uranus 122785-12-13 00:26 G 46567706.35 46567706.52 46567706.71 0.0135 0.0073

Jupiter 122786-01-01 23:57 G 46567726.34 46567726.50 46567726.67 0.0545 0.0302

Uranus 122786-07-27 05:14 G 46567932.53 46567932.72 46567932.93 0.0135 0.0051

Saturn 122786-08-04 11:57 G 46567940.89 46567941.00 46567941.12 0.0276 0.0228

Pluto 122787-01-31 04:31 G 46568120.59 46568120.69 46568120.84 0.0062 0.0050

Uranus 122787-03-10 10:02 G 46568158.72 46568158.92 46568159.14 0.0135 0.0028

Saturn 122787-03-21 15:33 G 46568169.96 46568170.15 46568170.35 0.0276 0.0090

Pluto 122787-09-13 07:38 G 46568345.63 46568345.82 46568346.05 0.0062 0.0018

Uranus 122787-10-22 15:05 G 46568384.91 46568385.13 46568385.34 0.0136 0.0005

Pluto 122788-04-25 11:00 G 46568570.76 46568570.96 46568571.18 0.0062 0.0017

Uranus 122788-06-04 19:38 G 46568611.12 46568611.32 46568611.54 0.0136 0.0020

Pluto 122788-12-06 13:53 G 46568795.98 46568796.08 46568796.23 0.0063 0.0051

Uranus 122789-01-17 00:41 G 46568837.33 46568837.53 46568837.74 0.0136 0.0043

Uranus 122789-08-31 05:43 G 46569063.56 46569063.74 46569063.93 0.0136 0.0066

Uranus 122790-04-14 10:31 G 46569289.80 46569289.94 46569290.12 0.0136 0.0090

Uranus 122790-11-26 15:48 G 46569516.06 46569516.16 46569516.29 0.0136 0.0113

Uranus 122791-07-10 21:19 G 46569742.39 46569742.39 46569742.40 0.0136 0.0136

Jupiter 122792-06-29 14:07 G 46570097.05 46570097.09 46570097.13 0.0485 0.0473

Neptune 122801-01-23 05:00 G 46573226.71 46573226.71 46573226.74 0.0088 0.0088

Saturn 122801-09-03 18:12 G 46573450.05 46573450.26 46573450.47 0.0283 0.0072

Neptune 122801-09-05 18:55 G 46573452.20 46573452.29 46573452.40 0.0088 0.0079

Neptune 122802-04-19 08:50 G 46573677.74 46573677.87 46573678.02 0.0088 0.0069

Neptune 122802-11-30 22:17 G 46573903.29 46573903.43 46573903.62 0.0088 0.0060

Neptune 122803-07-14 12:26 G 46574128.84 46574129.02 46574129.21 0.0088 0.0050

Neptune 122804-02-25 02:21 G 46574354.41 46574354.60 46574354.81 0.0089 0.0040

Jupiter 122804-03-04 18:26 G 46574363.09 46574363.27 46574363.46 0.0484 0.0207

Neptune 122804-10-07 16:17 G 46574579.97 46574580.18 46574580.40 0.0089 0.0030

Neptune 122805-05-21 05:57 G 46574805.54 46574805.75 46574805.98 0.0089 0.0021

Neptune 122806-01-01 19:53 G 46575031.11 46575031.33 46575031.56 0.0089 0.0011

Neptune 122806-08-15 09:48 G 46575256.69 46575256.91 46575257.14 0.0089 0.0001

Neptune 122807-03-28 23:29 G 46575482.26 46575482.48 46575482.71 0.0089 0.0010

Neptune 122807-11-09 13:24 G 46575707.84 46575708.06 46575708.28 0.0089 0.0019

Neptune 122808-06-22 02:50 G 46575933.42 46575933.62 46575933.84 0.0089 0.0029

Neptune 122809-02-02 16:31 G 46576159.00 46576159.19 46576159.41 0.0089 0.0039

Neptune 122809-09-16 06:12 G 46576384.59 46576384.76 46576384.96 0.0089 0.0049

Jupiter 122810-01-05 02:07 G 46576495.43 46576495.59 46576495.76 0.0544 0.0290

Neptune 122810-04-29 20:07 G 46576610.18 46576610.34 46576610.51 0.0089 0.0058

Neptune 122810-12-11 09:33 G 46576835.77 46576835.90 46576836.06 0.0089 0.0068

Neptune 122811-07-24 23:00 G 46577061.38 46577061.46 46577061.59 0.0089 0.0078

Neptune 122812-03-06 12:55 G 46577287.02 46577287.04 46577287.10 0.0089 0.0087

Mars 122813-06-21 12:12 G 46577758.92 46577759.01 46577759.10 0.1610 0.1358

Jupiter 122815-11-08 22:02 G 46578629.22 46578629.42 46578629.63 0.0484 0.0064

Saturn 122816-02-14 18:55 G 46578727.14 46578727.29 46578727.46 0.0276 0.0175

Saturn 122816-09-30 22:45 G 46578956.29 46578956.45 46578956.64 0.0276 0.0146

Jupiter 122821-09-09 14:36 G 46580760.91 46580761.11 46580761.31 0.0545 0.0095

Uranus 122826-03-28 11:43 G 46582421.90 46582421.99 46582422.10 0.0143 0.0127

Uranus 122826-11-10 00:41 G 46582648.39 46582648.53 46582648.71 0.0143 0.0099

Uranus 122827-06-24 14:07 G 46582874.90 46582875.09 46582875.29 0.0143 0.0070

Jupiter 122827-07-15 00:26 G 46582895.38 46582895.52 46582895.67 0.0483 0.0339

Uranus 122828-02-06 03:05 G 46583101.42 46583101.63 46583101.85 0.0143 0.0041

Uranus 122828-09-19 16:02 G 46583327.95 46583328.17 46583328.40 0.0142 0.0013

Uranus 122829-05-04 04:45 G 46583554.48 46583554.70 46583554.93 0.0142 0.0016

Uranus 122829-12-16 17:29 G 46583781.02 46583781.23 46583781.45 0.0142 0.0045

Uranus 122830-07-31 05:43 G 46584007.57 46584007.74 46584007.95 0.0142 0.0074

Uranus 122831-03-14 18:12 G 46584234.12 46584234.26 46584234.43 0.0142 0.0101

Saturn 122831-03-17 04:02 G 46584236.46 46584236.67 46584236.89 0.0283 0.0010

Uranus 122831-10-27 06:26 G 46584460.69 46584460.77 46584460.87 0.0142 0.0128

Jupiter 122833-05-15 04:02 G 46585026.57 46585026.67 46585026.76 0.0545 0.0475

Jupiter 122839-11-11 03:19 G 46587397.50 46587397.64 46587397.78 0.0485 0.0361

Saturn 122845-08-26 20:50 G 46589513.20 46589513.37 46589513.55 0.0276 0.0138

Jupiter 122845-09-12 21:48 G 46589530.36 46589530.41 46589530.47 0.0544 0.0516

Saturn 122846-04-13 00:26 G 46589742.38 46589742.52 46589742.69 0.0276 0.0181

Mars 122847-04-20 10:02 G 46590114.78 46590114.92 46590115.06 0.1603 0.0896

Jupiter 122851-07-17 06:26 G 46591663.57 46591663.77 46591663.98 0.0484 0.0090

Jupiter 122857-05-18 11:00 G 46593795.77 46593795.96 46593796.16 0.0544 0.0139

Saturn 122860-09-26 06:12 G 46595022.54 46595022.76 46595022.97 0.0283 0.0028

Jupiter 122863-03-22 10:31 G 46595929.75 46595929.94 46595930.14 0.0484 0.0179

Uranus 122868-05-17 03:33 G 46597812.59 46597812.65 46597812.73 0.0135 0.0127

Uranus 122868-12-29 08:21 G 46598038.72 46598038.85 46598038.99 0.0135 0.0104

Jupiter 122869-01-20 21:05 G 46598061.21 46598061.38 46598061.56 0.0545 0.0257

Uranus 122869-08-12 13:09 G 46598264.88 46598265.05 46598265.22 0.0135 0.0082

Uranus 122870-03-26 17:43 G 46598491.05 46598491.24 46598491.43 0.0135 0.0059

Uranus 122870-11-07 22:17 G 46598717.23 46598717.43 46598717.64 0.0135 0.0036

Uranus 122871-06-22 03:19 G 46598943.43 46598943.64 46598943.85 0.0136 0.0012

Uranus 122872-02-03 08:07 G 46599169.63 46599169.84 46599170.05 0.0136 0.0011

Uranus 122872-09-16 12:41 G 46599395.83 46599396.03 46599396.25 0.0136 0.0035

Uranus 122873-04-30 17:43 G 46599622.05 46599622.24 46599622.44 0.0136 0.0058

Uranus 122873-12-12 22:45 G 46599848.28 46599848.45 46599848.62 0.0136 0.0081

Uranus 122874-07-27 03:48 G 46600074.54 46600074.66 46600074.81 0.0136 0.0105

Jupiter 122874-11-25 13:38 G 46600196.00 46600196.07 46600196.15 0.0484 0.0450

Saturn 122875-03-09 03:48 G 46600299.47 46600299.66 46600299.86 0.0277 0.0085

Uranus 122875-03-10 08:50 G 46600300.82 46600300.87 46600300.96 0.0136 0.0129

Saturn 122875-10-24 07:38 G 46600528.73 46600528.82 46600528.94 0.0277 0.0236

Pluto 122879-01-18 16:17 G 46601710.96 46601711.18 46601711.41 0.0081 0.0013

Mars 122879-04-19 01:09 G 46601801.43 46601801.55 46601801.68 0.1608 0.1137

Pluto 122879-09-01 03:19 G 46601936.53 46601936.64 46601936.80 0.0081 0.0065

Neptune 122881-12-15 02:21 G 46602772.56 46602772.60 46602772.68 0.0089 0.0085

Neptune 122882-07-28 14:36 G 46602998.02 46602998.11 46602998.24 0.0089 0.0076

Neptune 122883-03-11 03:19 G 46603223.50 46603223.64 46603223.78 0.0089 0.0066

Neptune 122883-10-22 15:19 G 46603448.99 46603449.14 46603449.31 0.0089 0.0057

Neptune 122884-06-04 03:19 G 46603674.48 46603674.64 46603674.84 0.0089 0.0048

Neptune 122885-01-15 16:02 G 46603899.97 46603900.17 46603900.36 0.0089 0.0038

Neptune 122885-08-29 04:02 G 46604125.48 46604125.67 46604125.88 0.0089 0.0029

Neptune 122886-04-11 16:17 G 46604350.98 46604351.18 46604351.40 0.0089 0.0020

Neptune 122886-11-23 04:45 G 46604576.48 46604576.70 46604576.91 0.0089 0.0010

Jupiter 122887-03-24 15:48 G 46604697.98 46604698.16 46604698.34 0.0484 0.0246

Neptune 122887-07-06 17:00 G 46604801.99 46604802.21 46604802.42 0.0089 0.0001

Neptune 122888-02-17 05:14 G 46605027.50 46605027.72 46605027.93 0.0089 0.0009

Neptune 122888-09-29 17:14 G 46605253.01 46605253.22 46605253.44 0.0089 0.0018

Neptune 122889-05-13 05:29 G 46605478.53 46605478.73 46605478.94 0.0089 0.0028

Saturn 122889-08-21 21:05 G 46605579.32 46605579.38 46605579.46 0.0283 0.0267

Neptune 122889-12-24 17:29 G 46605704.05 46605704.23 46605704.44 0.0089 0.0038

Saturn 122890-04-08 17:00 G 46605809.01 46605809.21 46605809.42 0.0283 0.0094

Neptune 122890-08-07 05:57 G 46605929.58 46605929.75 46605929.95 0.0089 0.0047

Neptune 122891-03-20 18:26 G 46606155.11 46606155.27 46606155.44 0.0089 0.0056

Neptune 122891-11-01 06:12 G 46606380.64 46606380.76 46606380.93 0.0088 0.0066

Neptune 122892-06-13 18:41 G 46606606.18 46606606.28 46606606.41 0.0088 0.0075

Jupiter 122893-01-24 01:09 G 46606830.40 46606830.55 46606830.71 0.0544 0.0342

Neptune 122893-01-25 07:09 G 46606831.74 46606831.80 46606831.88 0.0088 0.0084

Jupiter 122898-11-27 19:24 G 46608964.10 46608964.31 46608964.51 0.0484 0.0025

Saturn 122904-09-19 06:55 G 46611085.59 46611085.79 46611086.00 0.0276 0.0044

Jupiter 122904-09-29 15:33 G 46611095.95 46611096.15 46611096.35 0.0545 0.0033

Saturn 122905-05-06 10:45 G 46611314.94 46611314.95 46611314.98 0.0276 0.0274

Earth 122907-10-27 04:45 G 46612218.55 46612218.70 46612218.85 0.2694 0.0366

Moon 122907-10-27 07:24 G 46612218.65 46612218.81 46612218.96 0.2688 0.0754 *

Uranus 122909-11-26 17:29 G 46612980.19 46612980.23 46612980.29 0.0143 0.0139

Uranus 122910-07-11 06:41 G 46613206.65 46613206.78 46613206.93 0.0143 0.0111

Jupiter 122910-08-03 22:17 G 46613230.27 46613230.43 46613230.59 0.0483 0.0297

Uranus 122911-02-22 19:53 G 46613433.16 46613433.33 46613433.52 0.0143 0.0082

Uranus 122911-10-07 08:50 G 46613659.67 46613659.87 46613660.09 0.0143 0.0054

Uranus 122912-05-20 22:02 G 46613886.20 46613886.42 46613886.64 0.0143 0.0024

Uranus 122913-01-02 11:00 G 46614112.74 46614112.96 46614113.18 0.0142 0.0004

Mars 122913-02-15 23:00 G 46614157.34 46614157.46 46614157.58 0.1602 0.1120

Uranus 122913-08-16 23:29 G 46614339.27 46614339.48 46614339.71 0.0142 0.0034

Uranus 122914-03-31 12:12 G 46614565.81 46614566.01 46614566.21 0.0142 0.0061

Uranus 122914-11-13 00:41 G 46614792.36 46614792.53 46614792.70 0.0142 0.0090

Uranus 122915-06-27 12:41 G 46615018.92 46615019.03 46615019.17 0.0142 0.0117

Jupiter 122916-06-04 05:00 G 46615361.59 46615361.71 46615361.85 0.0545 0.0413

Saturn 122919-03-04 23:00 G 46616365.34 46616365.46 46616365.59 0.0283 0.0230

Saturn 122919-10-20 18:55 G 46616595.11 46616595.29 46616595.49 0.0283 0.0131

Jupiter 122922-12-01 01:38 G 46617732.46 46617732.57 46617732.68 0.0485 0.0407

Saturn 122934-04-01 13:09 G 46621871.85 46621872.05 46621872.26 0.0277 0.0010

Jupiter 122934-08-06 04:45 G 46621998.51 46621998.70 46621998.91 0.0484 0.0135

Jupiter 122940-06-07 06:12 G 46624130.57 46624130.76 46624130.95 0.0544 0.0175

Mars 122945-02-14 13:38 G 46625843.93 46625844.07 46625844.22 0.1607 0.0897

Jupiter 122946-04-11 07:24 G 46626264.61 46626264.81 46626265.01 0.0484 0.0142

Mars 122947-11-18 21:33 G 46626851.26 46626851.40 46626851.54 0.1932 0.1171

Saturn 122948-09-14 11:29 G 46627151.81 46627151.98 46627152.17 0.0282 0.0161

Saturn 122949-05-02 07:24 G 46627381.66 46627381.81 46627381.96 0.0283 0.0200

Jupiter 122952-02-10 18:55 G 46628396.11 46628396.29 46628396.47 0.0545 0.0210

Uranus 122952-08-29 20:21 G 46628597.26 46628597.35 46628597.49 0.0135 0.0114

Uranus 122953-04-13 01:09 G 46628823.40 46628823.55 46628823.72 0.0135 0.0090

Uranus 122953-11-25 05:43 G 46629049.57 46629049.74 46629049.93 0.0135 0.0067

Uranus 122954-07-09 10:31 G 46629275.75 46629275.94 46629276.15 0.0135 0.0044

Uranus 122955-02-20 15:19 G 46629501.93 46629502.14 46629502.35 0.0136 0.0021

Uranus 122955-10-04 20:07 G 46629728.12 46629728.34 46629728.55 0.0136 0.0003

Uranus 122956-05-18 00:41 G 46629954.33 46629954.53 46629954.74 0.0136 0.0026

Uranus 122956-12-30 05:29 G 46630180.54 46630180.73 46630180.94 0.0136 0.0050

Uranus 122957-08-13 10:31 G 46630406.77 46630406.94 46630407.13 0.0136 0.0073

Jupiter 122957-12-15 10:31 G 46630530.84 46630530.94 46630531.06 0.0483 0.0412

Uranus 122958-03-27 15:48 G 46630633.01 46630633.16 46630633.31 0.0136 0.0097

Uranus 122958-11-08 20:36 G 46630859.28 46630859.36 46630859.47 0.0136 0.0120

Saturn 122963-02-25 13:24 G 46632429.02 46632429.06 46632429.12 0.0276 0.0267

Saturn 122963-10-12 17:29 G 46632658.02 46632658.23 46632658.43 0.0276 0.0051

Neptune 122965-12-09 02:50 G 46633446.54 46633446.62 46633446.72 0.0088 0.0081

Neptune 122966-07-22 16:17 G 46633672.07 46633672.18 46633672.34 0.0088 0.0072

Neptune 122967-03-05 06:26 G 46633897.62 46633897.77 46633897.95 0.0088 0.0062

Neptune 122967-10-16 20:21 G 46634123.18 46634123.35 46634123.54 0.0088 0.0052

Neptune 122968-05-29 10:17 G 46634348.74 46634348.93 46634349.13 0.0088 0.0042

Neptune 122969-01-09 23:57 G 46634574.30 46634574.50 46634574.72 0.0089 0.0032

Neptune 122969-08-23 13:53 G 46634799.87 46634800.08 46634800.31 0.0089 0.0022

Neptune 122970-04-06 03:48 G 46635025.44 46635025.66 46635025.89 0.0089 0.0013

Jupiter 122970-04-13 12:55 G 46635032.88 46635033.04 46635033.21 0.0484 0.0288

Neptune 122970-11-17 17:43 G 46635251.01 46635251.24 46635251.46 0.0089 0.0003

Neptune 122971-07-01 07:24 G 46635476.59 46635476.81 46635477.03 0.0089 0.0007

Neptune 122972-02-11 21:19 G 46635702.17 46635702.39 46635702.61 0.0089 0.0017

Neptune 122972-09-24 11:00 G 46635927.75 46635927.96 46635928.18 0.0089 0.0027

Neptune 122973-05-08 00:26 G 46636153.33 46636153.52 46636153.74 0.0089 0.0037

Neptune 122973-12-19 14:07 G 46636378.92 46636379.09 46636379.30 0.0089 0.0047

Neptune 122974-08-02 04:02 G 46636604.51 46636604.67 46636604.85 0.0089 0.0056

Neptune 122975-03-15 17:43 G 46636830.10 46636830.24 46636830.40 0.0089 0.0066

Neptune 122975-10-27 07:09 G 46637055.71 46637055.80 46637055.94 0.0089 0.0076

Jupiter 122976-02-14 01:53 G 46637165.45 46637165.58 46637165.71 0.0544 0.0403

Neptune 122976-06-08 21:05 G 46637281.33 46637281.38 46637281.45 0.0089 0.0085

Saturn 122978-03-27 13:24 G 46637937.87 46637938.06 46637938.26 0.0283 0.0124

Saturn 122978-11-12 09:05 G 46638167.77 46638167.88 46638168.01 0.0283 0.0236

Mars 122978-12-14 11:43 G 46638199.90 46638199.99 46638200.08 0.1600 0.1349

Jupiter 122981-12-17 17:00 G 46639299.00 46639299.21 46639299.41 0.0484 0.0021

Jupiter 122987-10-19 12:41 G 46641430.83 46641431.03 46641431.23 0.0544 0.0012

Saturn 122992-09-06 19:09 G 46643215.17 46643215.30 46643215.43 0.0277 0.0218

Saturn 122993-04-23 23:14 G 46643444.28 46643444.47 46643444.66 0.0277 0.0102

Jupiter 122993-08-22 19:53 G 46643565.16 46643565.33 46643565.51 0.0484 0.0256

Uranus 122994-03-10 13:53 G 46643764.97 46643765.08 46643765.20 0.0143 0.0122

Uranus 122994-10-23 02:36 G 46643991.46 46643991.61 46643991.80 0.0143 0.0094

Uranus 122995-06-06 15:48 G 46644217.98 46644218.16 46644218.37 0.0143 0.0065

Uranus 122996-01-19 05:14 G 46644444.50 46644444.72 46644444.94 0.0143 0.0036

Uranus 122996-09-01 17:57 G 46644671.03 46644671.25 46644671.48 0.0143 0.0008

Uranus 122997-04-16 06:41 G 46644897.57 46644897.78 46644898.01 0.0142 0.0022

Uranus 122997-11-28 19:24 G 46645124.10 46645124.31 46645124.52 0.0142 0.0051

Uranus 122998-07-13 07:38 G 46645350.65 46645350.82 46645351.02 0.0142 0.0079

Uranus 122999-02-24 20:07 G 46645577.21 46645577.34 46645577.50 0.0142 0.0107

Jupiter 122999-06-24 00:26 G 46645696.38 46645696.52 46645696.67 0.0545 0.0376

Uranus 122999-10-09 08:36 G 46645803.79 46645803.86 46645803.93 0.0142 0.0134

124TH MILLENNIUM CE

This is a list of transits of Venus in the 124th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Jupiter 123005-12-20 21:33 G 46648067.33 46648067.40 46648067.49 0.0485 0.0442

Saturn 123007-10-09 02:21 G 46648724.39 46648724.60 46648724.82 0.0282 0.0053

Mars 123010-12-14 02:50 G 46649886.46 46649886.62 46649886.78 0.1605 0.0677

Earth 123013-05-03 07:53 G 46650757.72 46650757.83 46650757.94 0.2640 0.1919

Moon 123013-05-03 12:41 G 46650757.97 46650758.03 46650758.09 0.2644 0.2428

Mars 123013-09-15 23:14 G 46650893.30 46650893.47 46650893.64 0.1934 0.0243

Jupiter 123017-08-26 01:24 G 46652333.37 46652333.56 46652333.75 0.0484 0.0171

Earth 123021-04-30 21:33 G 46653677.29 46653677.40 46653677.52 0.2638 0.1831

Moon 123021-05-01 02:50 G 46653677.46 46653677.62 46653677.78 0.2634 0.0895 *

Saturn 123022-03-21 00:26 G 46654001.36 46654001.52 46654001.69 0.0276 0.0171

Saturn 123022-11-05 04:31 G 46654230.51 46654230.69 46654230.86 0.0276 0.0147

Jupiter 123023-06-28 05:29 G 46654465.55 46654465.73 46654465.92 0.0544 0.0230

Jupiter 123029-05-01 04:17 G 46656599.48 46656599.68 46656599.88 0.0484 0.0102

Jupiter 123035-03-02 19:24 G 46658731.12 46658731.31 46658731.51 0.0545 0.0150

Pluto 123035-08-18 09:05 G 46658899.74 46658899.88 46658900.04 0.0062 0.0045

Pluto 123036-03-30 12:12 G 46659124.81 46659125.01 46659125.23 0.0062 0.0012

Uranus 123036-04-30 09:05 G 46659155.79 46659155.88 46659155.98 0.0135 0.0122

Pluto 123036-11-10 15:05 G 46659349.95 46659350.13 46659350.35 0.0062 0.0023

Uranus 123036-12-12 13:24 G 46659381.93 46659382.06 46659382.22 0.0135 0.0099

Saturn 123037-04-20 04:45 G 46659510.48 46659510.70 46659510.91 0.0283 0.0016

Pluto 123037-06-23 18:26 G 46659575.19 46659575.27 46659575.38 0.0063 0.0056

Uranus 123037-07-26 18:26 G 46659608.09 46659608.27 46659608.44 0.0135 0.0076

Uranus 123038-03-09 22:45 G 46659834.26 46659834.45 46659834.65 0.0135 0.0053

Uranus 123038-10-22 03:19 G 46660060.44 46660060.64 46660060.86 0.0135 0.0030

Uranus 123039-06-05 08:07 G 46660286.63 46660286.84 46660287.05 0.0136 0.0006

Uranus 123040-01-17 12:55 G 46660512.83 46660513.04 46660513.25 0.0136 0.0018

Uranus 123040-08-30 17:43 G 46660739.04 46660739.24 46660739.44 0.0136 0.0041

Jupiter 123041-01-04 07:53 G 46660865.70 46660865.83 46660865.96 0.0483 0.0372

Uranus 123041-04-13 22:17 G 46660965.26 46660965.43 46660965.63 0.0136 0.0065

Uranus 123041-11-26 03:19 G 46661191.49 46661191.64 46661191.81 0.0136 0.0088

Uranus 123042-07-10 08:21 G 46661417.75 46661417.85 46661417.99 0.0136 0.0112

Uranus 123043-02-21 13:38 G 46661644.06 46661644.07 46661644.11 0.0136 0.0135

Mars 123044-10-12 00:55 G 46662242.51 46662242.54 46662242.57 0.1599 0.1566

Neptune 123046-03-20 11:14 G 46662766.96 46662766.97 46662767.03 0.0089 0.0088

Neptune 123046-10-31 23:43 G 46662992.40 46662992.49 46662992.60 0.0089 0.0078

Jupiter 123046-11-05 07:09 G 46662996.78 46662996.80 46662996.83 0.0545 0.0538

Neptune 123047-06-14 11:57 G 46663217.88 46663218.00 46663218.15 0.0089 0.0069

Neptune 123048-01-26 00:12 G 46663443.37 46663443.51 46663443.68 0.0089 0.0060

Neptune 123048-09-07 12:41 G 46663668.86 46663669.03 46663669.22 0.0089 0.0050

Neptune 123049-04-21 00:55 G 46663894.36 46663894.54 46663894.74 0.0089 0.0041

Neptune 123049-12-02 13:24 G 46664119.86 46664120.06 46664120.26 0.0089 0.0031

Neptune 123050-07-16 01:24 G 46664345.36 46664345.56 46664345.78 0.0089 0.0022

Neptune 123051-02-26 13:53 G 46664570.87 46664571.08 46664571.30 0.0089 0.0012

Saturn 123051-10-01 05:14 G 46664787.54 46664787.72 46664787.90 0.0277 0.0124

Neptune 123051-10-10 02:07 G 46664796.37 46664796.59 46664796.81 0.0089 0.0003

Saturn 123052-05-17 09:19 G 46665016.75 46665016.89 46665017.04 0.0277 0.0196

Neptune 123052-05-22 14:21 G 46665021.88 46665022.10 46665022.31 0.0089 0.0007

Neptune 123053-01-03 02:36 G 46665247.40 46665247.61 46665247.82 0.0089 0.0016

Jupiter 123053-05-03 10:31 G 46665367.79 46665367.94 46665368.09 0.0485 0.0329

Neptune 123053-08-16 14:36 G 46665472.92 46665473.11 46665473.33 0.0089 0.0026

Neptune 123054-03-30 03:05 G 46665698.44 46665698.63 46665698.83 0.0089 0.0035

Neptune 123054-11-10 15:05 G 46665923.96 46665924.13 46665924.33 0.0089 0.0045

Neptune 123055-06-24 03:19 G 46666149.48 46666149.64 46666149.82 0.0089 0.0054

Neptune 123056-02-04 15:48 G 46666375.01 46666375.16 46666375.31 0.0089 0.0063

Neptune 123056-09-17 03:48 G 46666600.56 46666600.66 46666600.80 0.0089 0.0073

Neptune 123057-04-30 16:17 G 46666826.11 46666826.18 46666826.27 0.0088 0.0082

Jupiter 123059-03-05 21:05 G 46667500.27 46667500.38 46667500.50 0.0543 0.0441

Jupiter 123065-01-06 13:09 G 46669633.84 46669634.05 46669634.25 0.0484 0.0054

Saturn 123066-10-31 17:14 G 46670297.01 46670297.22 46670297.44 0.0283 0.0056

Jupiter 123070-11-08 09:05 G 46671765.68 46671765.88 46671766.07 0.0545 0.0054

Jupiter 123076-09-11 16:31 G 46673900.01 46673900.19 46673900.38 0.0483 0.0219

Mars 123076-10-10 15:33 G 46673928.99 46673929.15 46673929.32 0.1604 0.0445

Uranus 123077-11-08 19:09 G 46674323.25 46674323.30 46674323.39 0.0143 0.0135

Uranus 123078-06-23 08:36 G 46674549.72 46674549.86 46674550.02 0.0143 0.0106

Uranus 123079-02-04 21:48 G 46674776.23 46674776.41 46674776.60 0.0143 0.0077

Mars 123079-07-14 00:41 G 46674935.36 46674935.53 46674935.69 0.1937 0.0694

Uranus 123079-09-19 11:00 G 46675002.75 46675002.96 46675003.17 0.0143 0.0048

Uranus 123080-05-02 23:43 G 46675229.27 46675229.49 46675229.71 0.0143 0.0019

Uranus 123080-12-15 12:41 G 46675455.80 46675456.03 46675456.25 0.0143 0.0010

Saturn 123081-04-12 11:29 G 46675573.79 46675573.98 46675574.18 0.0276 0.0075

Uranus 123081-07-30 01:09 G 46675682.34 46675682.55 46675682.77 0.0142 0.0039

Saturn 123081-11-27 15:19 G 46675803.05 46675803.14 46675803.24 0.0276 0.0244

Uranus 123082-03-13 13:38 G 46675908.89 46675909.07 46675909.28 0.0142 0.0068

Jupiter 123082-07-13 23:00 G 46676031.30 46676031.46 46676031.62 0.0545 0.0326

Uranus 123082-10-26 02:07 G 46676135.43 46676135.59 46676135.76 0.0142 0.0096

Uranus 123083-06-09 14:21 G 46676362.00 46676362.10 46676362.22 0.0142 0.0123

Jupiter 123089-01-08 18:26 G 46678402.26 46678402.27 46678402.30 0.0485 0.0482

Saturn 123095-09-25 23:14 G 46680853.42 46680853.47 46680853.55 0.0282 0.0268

Saturn 123096-05-12 19:24 G 46681083.11 46681083.31 46681083.52 0.0283 0.0093

Jupiter 123100-09-14 22:31 G 46682668.26 46682668.44 46682668.63 0.0484 0.0213

Jupiter 123106-07-18 03:48 G 46684800.49 46684800.66 46684800.83 0.0544 0.0278

Saturn 123110-10-24 15:19 G 46686359.94 46686360.14 46686360.35 0.0277 0.0031

Jupiter 123112-05-21 01:24 G 46686934.36 46686934.56 46686934.77 0.0484 0.0063

Jupiter 123118-03-22 15:33 G 46689065.96 46689066.15 46689066.35 0.0544 0.0110

Uranus 123119-12-30 21:19 G 46689714.35 46689714.39 46689714.45 0.0135 0.0130

Uranus 123120-08-13 01:53 G 46689940.46 46689940.58 46689940.71 0.0135 0.0108

Uranus 123121-03-27 06:26 G 46690166.61 46690166.77 46690166.94 0.0135 0.0085

Uranus 123121-11-08 10:45 G 46690392.77 46690392.95 46690393.15 0.0135 0.0062

Uranus 123122-06-22 15:33 G 46690618.95 46690619.15 46690619.36 0.0135 0.0038

Uranus 123123-02-03 20:21 G 46690845.13 46690845.35 46690845.56 0.0136 0.0015

Uranus 123123-09-18 00:55 G 46691071.33 46691071.54 46691071.75 0.0136 0.0009

Jupiter 123124-01-25 04:17 G 46691200.53 46691200.68 46691200.83 0.0483 0.0336

Uranus 123124-05-01 05:29 G 46691297.53 46691297.73 46691297.94 0.0136 0.0033

Uranus 123124-12-13 10:17 G 46691523.74 46691523.93 46691524.13 0.0136 0.0056

Saturn 123125-04-08 11:29 G 46691639.84 46691639.98 46691640.15 0.0282 0.0200

Uranus 123125-07-27 15:19 G 46691749.98 46691750.14 46691750.32 0.0136 0.0080

Saturn 123125-11-24 07:38 G 46691869.65 46691869.82 46691870.00 0.0283 0.0162

Uranus 123126-03-10 20:21 G 46691976.22 46691976.35 46691976.50 0.0136 0.0103

Uranus 123126-10-23 01:38 G 46692202.50 46692202.57 46692202.65 0.0136 0.0127

Pluto 123126-12-24 09:05 G 46692264.88 46692264.88 46692264.91 0.0082 0.0081

Pluto 123127-08-06 21:05 G 46692490.15 46692490.38 46692490.60 0.0081 0.0004

Pluto 123128-03-19 08:21 G 46692715.76 46692715.85 46692715.95 0.0081 0.0073

Jupiter 123129-11-25 02:36 G 46693331.54 46693331.61 46693331.69 0.0545 0.0500

Neptune 123130-03-14 11:00 G 46693440.91 46693440.96 46693441.06 0.0088 0.0083

Neptune 123130-10-26 01:09 G 46693666.43 46693666.55 46693666.68 0.0088 0.0073

Neptune 123131-06-08 14:36 G 46693891.97 46693892.11 46693892.29 0.0088 0.0064

Neptune 123132-01-20 04:31 G 46694117.53 46694117.69 46694117.89 0.0088 0.0054

Neptune 123132-09-01 18:41 G 46694343.09 46694343.28 46694343.48 0.0088 0.0044

Neptune 123133-04-15 08:36 G 46694568.65 46694568.86 46694569.07 0.0088 0.0034

Neptune 123133-11-26 22:02 G 46694794.21 46694794.42 46694794.65 0.0089 0.0025

Neptune 123134-07-10 11:57 G 46695019.78 46695020.00 46695020.23 0.0089 0.0015

Neptune 123135-02-21 02:07 G 46695245.36 46695245.59 46695245.81 0.0089 0.0005

Neptune 123135-10-04 15:48 G 46695470.94 46695471.16 46695471.39 0.0089 0.0005

Neptune 123136-05-17 05:29 G 46695696.51 46695696.73 46695696.96 0.0089 0.0015

Jupiter 123136-05-23 07:09 G 46695702.67 46695702.80 46695702.94 0.0484 0.0367

Neptune 123136-12-28 19:24 G 46695922.09 46695922.31 46695922.52 0.0089 0.0025

Neptune 123137-08-11 08:50 G 46696147.68 46696147.87 46696148.09 0.0089 0.0035

Neptune 123138-03-24 22:45 G 46696373.27 46696373.45 46696373.65 0.0089 0.0045

Neptune 123138-11-05 12:12 G 46696598.86 46696599.01 46696599.21 0.0089 0.0055

Neptune 123139-06-19 02:07 G 46696824.45 46696824.59 46696824.76 0.0089 0.0064

Neptune 123140-01-30 15:48 G 46697050.06 46697050.16 46697050.30 0.0089 0.0074

Saturn 123140-05-05 22:17 G 46697146.22 46697146.43 46697146.64 0.0276 0.0021

Neptune 123140-09-12 05:14 G 46697275.68 46697275.72 46697275.82 0.0089 0.0084

Jupiter 123142-03-25 19:38 G 46697835.24 46697835.32 46697835.41 0.0544 0.0493

Mars 123142-08-09 04:31 G 46697971.52 46697971.69 46697971.86 0.1602 0.0221

Mars 123145-05-11 02:50 G 46698977.53 46698977.62 46698977.72 0.1939 0.1598

Jupiter 123148-01-27 10:17 G 46699968.72 46699968.93 46699969.13 0.0484 0.0094

Moon 123150-10-29 03:05 G 46700974.47 46700974.63 46700974.79 0.2692 0.0345

Earth 123150-10-29 07:24 G 46700974.66 46700974.81 46700974.97 0.2695 0.0392 *

Jupiter 123153-11-28 09:48 G 46702100.71 46702100.91 46702101.10 0.0545 0.0115

Saturn 123154-10-19 14:07 G 46702425.91 46702426.09 46702426.27 0.0283 0.0161

Saturn 123155-06-06 09:33 G 46702655.76 46702655.90 46702656.07 0.0283 0.0200

Jupiter 123159-10-02 13:53 G 46704234.89 46704235.08 46704235.27 0.0483 0.0177

Uranus 123162-02-21 15:19 G 46705108.02 46705108.14 46705108.27 0.0143 0.0118

Uranus 123162-10-06 04:02 G 46705334.52 46705334.67 46705334.86 0.0143 0.0090

Uranus 123163-05-20 17:14 G 46705561.03 46705561.22 46705561.43 0.0143 0.0061

Uranus 123164-01-02 06:26 G 46705787.56 46705787.77 46705787.99 0.0143 0.0031

Uranus 123164-08-15 19:24 G 46706014.09 46706014.31 46706014.53 0.0143 0.0002

Uranus 123165-03-30 08:07 G 46706240.62 46706240.84 46706241.06 0.0143 0.0027

Jupiter 123165-08-02 22:17 G 46706366.26 46706366.43 46706366.61 0.0545 0.0272

Uranus 123165-11-11 20:36 G 46706467.16 46706467.36 46706467.57 0.0142 0.0056

Uranus 123166-06-26 09:05 G 46706693.71 46706693.88 46706694.07 0.0142 0.0084

Uranus 123167-02-07 21:33 G 46706920.28 46706920.40 46706920.55 0.0142 0.0113

Uranus 123167-09-22 09:48 G 46707146.89 46707146.91 46707146.96 0.0142 0.0140

Saturn 123169-03-31 21:05 G 46707703.31 46707703.38 46707703.46 0.0277 0.0257

Saturn 123169-11-16 00:55 G 46707932.35 46707932.54 46707932.75 0.0277 0.0063

Jupiter 123171-06-07 16:17 G 46708501.11 46708501.18 46708501.26 0.0484 0.0452

Jupiter 123183-10-04 19:24 G 46713003.13 46713003.31 46713003.48 0.0484 0.0251

Saturn 123184-05-01 01:09 G 46713212.35 46713212.55 46713212.75 0.0283 0.0097

Saturn 123184-12-16 20:50 G 46713442.31 46713442.37 46713442.46 0.0283 0.0264

Jupiter 123189-08-05 23:43 G 46715135.33 46715135.49 46715135.65 0.0544 0.0320

Jupiter 123195-06-09 23:00 G 46717269.25 46717269.46 46717269.67 0.0484 0.0020

Saturn 123198-10-12 04:31 G 46718489.56 46718489.69 46718489.84 0.0276 0.0203

Saturn 123199-05-29 08:21 G 46718718.66 46718718.85 46718719.04 0.0276 0.0115

Jupiter 123201-04-10 13:24 G 46719400.86 46719401.06 46719401.26 0.0545 0.0060

Uranus 123204-04-12 14:07 G 46720498.99 46720499.09 46720499.20 0.0135 0.0117

Uranus 123204-11-24 18:41 G 46720725.13 46720725.28 46720725.43 0.0135 0.0094

Uranus 123205-07-08 23:14 G 46720951.29 46720951.47 46720951.65 0.0135 0.0071

Uranus 123206-02-20 03:33 G 46721177.46 46721177.65 46721177.86 0.0135 0.0048

Uranus 123206-10-04 08:21 G 46721403.64 46721403.85 46721404.06 0.0135 0.0024

Jupiter 123207-02-13 01:53 G 46721535.42 46721535.58 46721535.75 0.0483 0.0294

Uranus 123207-05-18 12:55 G 46721629.83 46721630.04 46721630.26 0.0136 0.0002

Uranus 123207-12-30 17:43 G 46721856.03 46721856.24 46721856.45 0.0136 0.0023

Mars 123208-06-05 17:29 G 46722014.06 46722014.23 46722014.41 0.1601 0.0020

Uranus 123208-08-12 22:45 G 46722082.25 46722082.45 46722082.65 0.0136 0.0047

Uranus 123209-03-27 03:19 G 46722308.47 46722308.64 46722308.83 0.0136 0.0071

Uranus 123209-11-08 08:07 G 46722534.71 46722534.84 46722535.01 0.0136 0.0095

Uranus 123210-06-22 13:24 G 46722760.97 46722761.06 46722761.17 0.0136 0.0118

Neptune 123211-02-03 09:19 G 46722986.81 46722986.89 46722986.99 0.0089 0.0080

Neptune 123211-09-16 21:19 G 46723212.28 46723212.39 46723212.54 0.0089 0.0071

Neptune 123212-04-29 09:33 G 46723437.76 46723437.90 46723438.07 0.0089 0.0062

Neptune 123212-12-10 22:02 G 46723663.26 46723663.42 46723663.60 0.0089 0.0052

Jupiter 123212-12-14 03:48 G 46723666.55 46723666.66 46723666.78 0.0545 0.0437

Neptune 123213-07-24 10:17 G 46723888.76 46723888.93 46723889.13 0.0089 0.0043

Saturn 123213-11-11 03:19 G 46723998.43 46723998.64 46723998.86 0.0283 0.0058

Neptune 123214-03-06 22:31 G 46724114.26 46724114.44 46724114.65 0.0089 0.0034

Neptune 123214-10-18 11:00 G 46724339.76 46724339.96 46724340.17 0.0089 0.0024

Neptune 123215-05-31 23:00 G 46724565.26 46724565.46 46724565.68 0.0089 0.0015

Neptune 123216-01-12 11:29 G 46724790.77 46724790.98 46724791.20 0.0089 0.0005

Neptune 123216-08-24 23:57 G 46725016.28 46725016.50 46725016.71 0.0089 0.0005

Neptune 123217-04-07 12:12 G 46725241.79   46725242.01   46725242.22 0.0089 0.0014

Neptune 123217-11-18 23:57 G 46725467.31   46725467.50   46725467.72 0.0089 0.0024

Neptune 123218-07-02 12:26 G 46725692.82   46725693.02   46725693.22 0.0089 0.0033

Neptune 123219-02-13 00:26 G 46725918.34   46725918.52   46725918.72 0.0089 0.0043

Jupiter 123219-06-12 04:45 G 46726037.60   46726037.70   46726037.81 0.0485 0.0410

Neptune 123219-09-26 12:41 G 46726143.87   46726144.03   46726144.22 0.0089 0.0052

Neptune 123220-05-09 01:09 G 46726369.40   46726369.55   46726369.71 0.0089 0.0061

Neptune 123220-12-20 12:55 G 46726594.93   46726595.04   46726595.19 0.0089 0.0071

Neptune 123221-08-03 01:24 G 46726820.49   46726820.56   46726820.67 0.0089 0.0080

Saturn   123228-04-23 06:12 G 46729275.61   46729275.76   46729275.93 0.0276 0.0167

Saturn   123228-12-08 10:17 G 46729504.76   46729504.93   46729505.10 0.0276 0.0153

Jupiter 123231-02-15 07:53 G 46730303.64   46730303.83   46730304.04 0.0484 0.0138

Jupiter 123236-12-17 07:38 G 46732435.63   46732435.82   46732436.01 0.0544 0.0164

Jupiter 123242-10-21 11:14 G 46734569.77   46734569.97   46734570.17 0.0483 0.0136

Saturn   123243-05-24 13:09 G 46734784.83   46734785.05   46734785.26 0.0283 0.0004

Uranus   123245-10-21 20:36 G 46735666.28   46735666.36   46735666.45 0.0143 0.0131

Uranus   123246-06-05 09:19 G 46735892.75   46735892.89   46735893.06 0.0143 0.0103

Uranus   123247-01-17 22:31 G 46736119.27   46736119.44   46736119.65 0.0143 0.0074

Uranus   123247-09-01 11:43 G 46736345.78   46736345.99   46736346.21 0.0143 0.0044

Uranus   123248-04-15 00:41 G 46736572.31   46736572.53   46736572.75 0.0143 0.0015

Jupiter 123248-08-21 18:12 G 46736701.08   46736701.26   46736701.44 0.0545 0.0231

Uranus   123248-11-27 13:24 G 46736798.84   46736799.06   46736799.29 0.0143 0.0014

Uranus   123249-07-12 02:07 G 46737025.38   46737025.59   46737025.81 0.0142 0.0043

Uranus   123250-02-23 14:36 G 46737251.93   46737252.11   46737252.32 0.0142 0.0072

Uranus   123250-10-08 03:19 G 46737478.49   46737478.64   46737478.80 0.0142 0.0100

Uranus   123251-05-22 15:48 G 46737705.07   46737705.16   46737705.26 0.0142 0.0128

Jupiter 123254-06-26 15:05 G 46738836.02   46738836.13   46738836.24 0.0483 0.0405

Earth   123256-05-04 07:09 G 46739513.69   46739513.80   46739513.92 0.2638 0.1788

Moon   123256-05-04 12:12 G 46739513.90   46739514.01   46739514.11 0.2635 0.2048 *

Saturn   123257-11-03 14:07 G 46740061.90   46740062.09   46740062.28 0.0276 0.0112

Saturn 123258-06-20 17:43 G 46740291.11 46740291.24 46740291.38 0.0276 0.0205

Moon 123264-05-01 19:09 G 46742433.19 46742433.30 46742433.41 0.2630 0.1978

Earth 123264-05-01 20:50 G 46742433.27 46742433.37 46742433.48 0.2636 0.1982 *

Jupiter 123266-10-23 17:14 G 46743338.06 46743338.22 46743338.39 0.0484 0.0295

Jupiter 123272-08-25 01:38 G 46745470.43 46745470.57 46745470.71 0.0544 0.0387

Saturn 123272-12-03 15:19 G 46745570.93 46745571.14 46745571.36 0.0283 0.0041

Mars 123274-04-03 06:41 G 46746056.60 46746056.78 46746056.95 0.1600 0.0235

Jupiter 123278-06-28 21:05 G 46747604.17 46747604.38 46747604.59 0.0484 0.0026

Pluto 123284-03-03 13:24 G 46749678.91 46749679.06 46749679.25 0.0062 0.0040

Jupiter 123284-04-29 14:50 G 46749735.92 46749736.12 46749736.32 0.0545 0.0005

Pluto 123284-10-14 16:45 G 46749903.99 46749904.20 46749904.42 0.0062 0.0006

Pluto 123285-05-27 19:38 G 46750129.15 46750129.32 46750129.54 0.0062 0.0028

Pluto 123286-01-07 23:00 G 46750354.43 46750354.46 46750354.52 0.0063 0.0061

Saturn 123287-05-16 14:50 G 46750847.93 46750848.12 46750848.32 0.0276 0.0078

Uranus 123287-12-12 01:38 G 46751057.51 46751057.57 46751057.66 0.0135 0.0126

Saturn 123287-12-31 18:41 G 46751077.18 46751077.28 46751077.38 0.0276 0.0240

Uranus 123288-07-25 06:12 G 46751283.64 46751283.76 46751283.92 0.0135 0.0104

Uranus 123289-03-08 11:14 G 46751509.80 46751509.97 46751510.14 0.0135 0.0080

Uranus 123289-10-20 15:33 G 46751735.96 46751736.15 46751736.35 0.0135 0.0056

Jupiter 123290-03-04 00:12 G 46751870.33 46751870.51 46751870.69 0.0484 0.0250

Uranus 123290-06-03 20:07 G 46751962.14 46751962.34 46751962.55 0.0135 0.0033

Uranus 123291-01-16 00:55 G 46752188.33 46752188.54 46752188.75 0.0135 0.0009

Uranus 123291-08-30 05:43 G 46752414.53 46752414.74 46752414.95 0.0136 0.0015

Uranus 123292-04-12 10:17 G 46752640.73 46752640.93 46752641.14 0.0136 0.0038

Uranus 123292-11-24 15:05 G 46752866.95 46752867.13 46752867.33 0.0136 0.0062

Uranus 123293-07-08 20:07 G 46753093.19 46753093.34 46753093.51 0.0136 0.0086

Uranus 123294-02-20 00:55 G 46753319.44 46753319.54 46753319.69 0.0136 0.0110

Neptune 123294-06-15 19:24 G 46753435.27 46753435.31 46753435.40 0.0088 0.0085

Uranus 123294-10-04 06:26 G 46753545.74 46753545.77 46753545.82 0.0136 0.0133

Neptune 123295-01-27 09:33 G 46753660.79 46753660.90 46753661.03 0.0088 0.0075

Neptune 123295-09-09 23:00 G 46753886.34 46753886.46 46753886.64 0.0088 0.0066

Jupiter 123296-01-03 03:05 G 46754001.49 46754001.63 46754001.77 0.0545 0.0382

Neptune 123296-04-22 12:55 G 46754111.88 46754112.04 46754112.23 0.0088 0.0056

Neptune 123296-12-04 02:50 G 46754337.44 46754337.62 46754337.82 0.0088 0.0046

Neptune 123297-07-17 16:45 G 46754563.00 46754563.20 46754563.41 0.0088 0.0036

Neptune 123298-02-28 06:26 G 46754788.57 46754788.77 46754789.00 0.0089 0.0027

Neptune 123298-10-11 20:21 G 46755014.14 46755014.35 46755014.58 0.0089 0.0017

Neptune 123299-05-25 10:17 G 46755239.71 46755239.93 46755240.16 0.0089 0.0007

Neptune 123300-01-06 00:12 G 46755465.28 46755465.51 46755465.73 0.0089 0.0004

Neptune 123300-08-19 13:53 G 46755690.86 46755691.08 46755691.31 0.0089 0.0013

Neptune 123301-04-02 03:48 G 46755916.44 46755916.66 46755916.88 0.0089 0.0023

Saturn 123301-10-30 02:50 G 46756127.56 46756127.62 46756127.70 0.0283 0.0266

Neptune 123301-11-13 17:29 G 46756142.03 46756142.23 46756142.44 0.0089 0.0033

Saturn 123302-06-16 23:14 G 46756357.27 46756357.47 46756357.68 0.0283 0.0096

Neptune 123302-06-27 07:09 G 46756367.61 46756367.80 46756368.00 0.0089 0.0043

Jupiter 123302-07-02 03:05 G 46756372.56 46756372.63 46756372.70 0.0485 0.0455

Neptune 123303-02-07 20:50 G 46756593.21 46756593.37 46756593.57 0.0089 0.0053

Neptune 123303-09-21 10:31 G 46756818.80 46756818.94 46756819.12 0.0089 0.0063

Neptune 123304-05-04 00:26 G 46757044.41 46757044.52 46757044.66 0.0089 0.0072

Neptune 123304-12-15 13:53 G 46757270.02 46757270.08 46757270.19 0.0089 0.0082

Mars 123309-01-03 10:31 G 46758749.82 46758749.94 46758750.05 0.1936 0.1458

Jupiter 123314-03-07 07:09 G 46760638.61 46760638.80 46760639.00 0.0484 0.0186

Saturn 123316-11-26 22:45 G 46761634.25 46761634.45 46761634.66 0.0276 0.0024

Jupiter 123320-01-07 05:29 G 46762770.55 46762770.73 46762770.92 0.0545 0.0215

Jupiter 123325-11-10 10:02 G 46764904.72 46764904.92 46764905.13 0.0483 0.0089

Uranus 123330-02-03 15:48 G 46766451.04 46766451.16 46766451.30 0.0143 0.0115

Uranus 123330-09-18 04:45 G 46766677.54 46766677.70 46766677.89 0.0143 0.0086

Uranus 123331-05-02 17:57 G 46766904.05 46766904.25 46766904.46 0.0143 0.0057

Saturn 123331-05-12 05:43 G 46766913.62 46766913.74 46766913.88 0.0283 0.0226

Jupiter 123331-09-11 20:21 G 46767036.16 46767036.35 46767036.54 0.0545 0.0163

Uranus 123331-12-15 06:55 G 46767130.57 46767130.79 46767131.01 0.0143 0.0027

Saturn 123331-12-28 02:07 G 46767143.40 46767143.59 46767143.78 0.0283 0.0135

Uranus 123332-07-28 19:53 G 46767357.11 46767357.33 46767357.55 0.0143 0.0002

Uranus 123333-03-12 08:36 G 46767583.65 46767583.86 46767584.08 0.0142 0.0031

Uranus 123333-10-24 21:05 G 46767810.19 46767810.38 46767810.59 0.0142 0.0061

Uranus 123334-06-08 09:33 G 46768036.75 46768036.90 46768037.09 0.0142 0.0090

Uranus 123335-01-20 22:31 G 46768263.32 46768263.44 46768263.57 0.0142 0.0117

Jupiter 123337-07-16 13:38 G 46769170.94 46769171.07 46769171.21 0.0483 0.0359

Mars 123340-01-30 19:24 G 46770099.14 46770099.31 46770099.47 0.1598 0.0461

Jupiter 123343-05-17 10:17 G 46771301.92 46771301.93 46771301.95 0.0545 0.0542

Saturn 123346-06-08 22:45 G 46772420.24 46772420.45 46772420.65 0.0276 0.0009

Jupiter 123349-11-12 16:17 G 46773673.04 46773673.18 46773673.33 0.0484 0.0344

Jupiter 123355-09-15 01:38 G 46775805.46 46775805.57 46775805.68 0.0544 0.0445

Saturn 123360-11-21 12:12 G 46777699.85 46777700.01 46777700.18 0.0283 0.0176

Saturn 123361-07-09 08:21 G 46777929.70 46777929.85 46777930.02 0.0283 0.0185

Jupiter 123361-07-18 20:07 G 46777939.14 46777939.34 46777939.55 0.0484 0.0073

Jupiter 123367-05-20 11:14 G 46780070.77 46780070.97 46780071.17 0.0545 0.0050

Uranus 123371-08-12 13:53 G 46781616.08 46781616.08 46781616.09 0.0135 0.0135

Mars 123372-01-29 09:48 G 46781785.87 46781785.91 46781785.96 0.1603 0.1547

Uranus 123372-03-25 18:12 G 46781842.15 46781842.26 46781842.39 0.0135 0.0112

Uranus 123372-11-06 22:31 G 46782068.30 46782068.44 46782068.62 0.0135 0.0090

Jupiter 123373-03-24 00:12 G 46782205.33 46782205.51 46782205.71 0.0483 0.0197

Uranus 123373-06-21 03:19 G 46782294.46 46782294.64 46782294.83 0.0135 0.0066

Uranus 123374-02-02 07:53 G 46782520.64 46782520.83 46782521.04 0.0135 0.0042

Uranus 123374-09-16 12:41 G 46782746.82 46782747.03 46782747.24 0.0135 0.0018

Mars 123374-10-31 11:43 G 46782791.82 46782791.99 46782792.16 0.1938 0.0508

Uranus 123375-04-30 17:29 G 46782973.01 46782973.23 46782973.44 0.0135 0.0006

Saturn 123375-05-05 02:50 G 46782977.55 46782977.62 46782977.71 0.0276 0.0255

Neptune 123375-05-08 18:26 G 46782981.22 46782981.27 46782981.38 0.0089 0.0083

Pluto 123375-07-10 14:21 G 46783044.00 46783044.10 46783044.25 0.0082 0.0068

Uranus 123375-12-12 22:02 G 46783199.22 46783199.42 46783199.63 0.0136 0.0030

Saturn 123375-12-20 06:26 G 46783206.57 46783206.77 46783206.98 0.0276 0.0062

Neptune 123375-12-20 07:09 G 46783206.69 46783206.80 46783206.93 0.0089 0.0073 *

Pluto 123376-02-21 02:36 G 46783269.39 46783269.61 46783269.83 0.0081 0.0010

Uranus 123376-07-26 02:50 G 46783425.44 46783425.62 46783425.83 0.0136 0.0054

Neptune 123376-08-01 19:24 G 46783432.18 46783432.31 46783432.47 0.0089 0.0064

Uranus 123377-03-09 08:07 G 46783651.67 46783651.84 46783652.02 0.0136 0.0077

Neptune 123377-03-15 07:53 G 46783657.66 46783657.83 46783658.00 0.0089 0.0054

Uranus 123377-10-21 12:55 G 46783877.91 46783878.04 46783878.19 0.0136 0.0101

Neptune 123377-10-26 19:53 G 46783883.16 46783883.33 46783883.53 0.0089 0.0045

Uranus 123378-06-04 17:57 G 46784104.18 46784104.25 46784104.35 0.0136 0.0125

Neptune 123378-06-09 08:07 G 46784108.66 46784108.84 46784109.05 0.0089 0.0036

Neptune 123379-01-20 20:36 G 46784334.16 46784334.36 46784334.57 0.0089 0.0026

Jupiter 123379-01-23 00:41 G 46784336.38 46784336.53 46784336.69 0.0546 0.0334

Neptune 123379-09-03 08:50 G 46784559.67 46784559.87 46784560.09 0.0089 0.0017

Neptune 123380-04-15 21:19 G 46784785.18 46784785.39 46784785.61 0.0089 0.0007

Neptune 123380-11-27 09:33 G 46785010.69 46785010.90 46785011.12 0.0089 0.0003

Neptune 123381-07-10 21:48 G 46785236.20 46785236.41 46785236.63 0.0089 0.0012

Neptune 123382-02-21 10:02 G 46785461.72 46785461.92 46785462.13 0.0089 0.0022

Neptune 123382-10-04 22:31 G 46785687.23 46785687.44 46785687.64 0.0089 0.0031

Neptune 123383-05-18 10:17 G 46785912.75 46785912.93 46785913.14 0.0089 0.0041

Neptune 123383-12-29 22:45 G 46786138.28 46786138.45 46786138.63 0.0089 0.0050

Neptune 123384-08-11 10:45 G 46786363.81 46786363.95 46786364.13 0.0089 0.0060

Jupiter 123384-11-27 03:05 G 46786471.59 46786471.63 46786471.68 0.0483 0.0470

Neptune 123385-03-24 23:00 G 46786589.34 46786589.46 46786589.61 0.0089 0.0069

Neptune 123385-11-05 11:29 G 46786814.89 46786814.98 46786815.09 0.0089 0.0078

Neptune 123386-06-18 23:14 G 46787040.46 46787040.47 46787040.53 0.0089 0.0088

Saturn 123390-06-03 15:05 G 46788485.94 46788486.13 46788486.32 0.0283 0.0135

Saturn 123391-01-19 11:14 G 46788715.84 46788715.97 46788716.10 0.0283 0.0225

Moon 123393-10-30 05:14 G 46789730.57 46789730.72 46789730.87 0.2700 0.0494

Earth 123393-10-30 10:17 G 46789730.78 46789730.93 46789731.09 0.2697 0.0414 *

Jupiter 123397-03-26 06:26 G 46790973.59 46790973.77 46790973.95 0.0484 0.0234

Jupiter 123403-01-27 08:50 G 46793105.70 46793105.87 46793106.04 0.0544 0.0287

Saturn 123404-11-15 02:36 G 46793763.49 46793763.61 46793763.73 0.0276 0.0225

Saturn 123405-07-02 05:57 G 46793992.56 46793992.75 46793992.95 0.0276 0.0092

Mars 123405-11-28 08:21 G 46794141.69 46794141.85 46794142.00 0.1597 0.0691

Jupiter 123408-11-30 09:33 G 46795239.69 46795239.90 46795240.11 0.0484 0.0039

Uranus 123413-10-04 21:05 G 46797009.30 46797009.38 46797009.49 0.0143 0.0128

Uranus 123414-05-19 10:02 G 46797235.78 46797235.92 46797236.10 0.0143 0.0099

Jupiter 123414-10-01 21:33 G 46797371.20 46797371.40 46797371.60 0.0545 0.0099

Uranus 123414-12-31 23:14 G 46797462.29 46797462.47 46797462.68 0.0143 0.0070

Uranus 123415-08-15 12:26 G 46797688.81 46797689.02 46797689.24 0.0143 0.0040

Uranus 123416-03-29 01:24 G 46797915.34 46797915.56 46797915.78 0.0143 0.0011

Uranus 123416-11-10 14:07 G 46798141.87 46798142.09 46798142.31 0.0142 0.0019

Uranus 123417-06-25 02:36 G 46798368.42 46798368.61 46798368.84 0.0142 0.0049

Uranus 123418-02-06 15:33 G 46798594.97 46798595.15 46798595.35 0.0142 0.0077

Uranus 123418-09-21 04:02 G 46798821.54 46798821.67 46798821.83 0.0142 0.0106

Uranus 123419-05-05 16:31 G 46799048.13 46799048.19 46799048.27 0.0142 0.0134

Saturn 123419-12-15 20:07 G 46799272.14 46799272.34 46799272.55 0.0283 0.0090

Saturn 123420-08-01 16:02 G 46799502.13 46799502.17 46799502.25 0.0283 0.0271

Jupiter 123420-08-05 13:24 G 46799505.91 46799506.06 46799506.22 0.0483 0.0309

Jupiter 123426-06-06 07:09 G 46801636.72 46801636.80 46801636.88 0.0545 0.0497

Jupiter 123432-12-02 17:00 G 46804008.09 46804008.21 46804008.33 0.0484 0.0398

Saturn 123434-05-28 10:02 G 46804549.76 46804549.92 46804550.09 0.0276 0.0171

Saturn 123435-01-12 13:24 G 46804778.89 46804779.06 46804779.24 0.0276 0.0146

Mars 123437-11-26 23:00 G 46805828.37 46805828.46 46805828.56 0.1602 0.1328

Jupiter 123438-10-04 23:29 G 46806140.41 46806140.48 46806140.56 0.0544 0.0498

Mars 123440-08-28 13:09 G 46806833.88 46806834.05 46806834.22 0.1940 0.0444

Jupiter 123444-08-07 20:07 G 46808274.14 46808274.34 46808274.54 0.0483 0.0124

Saturn 123449-06-26 23:43 G 46810058.28 46810058.49 46810058.70 0.0283 0.0047

Jupiter 123450-06-09 14:07 G 46810405.90 46810406.09 46810406.28 0.0545 0.0120

Uranus 123455-11-25 05:29 G 46812400.66 46812400.73 46812400.84 0.0135 0.0122

Jupiter 123456-04-12 23:57 G 46812540.30 46812540.50 46812540.70 0.0483 0.0147

Uranus 123456-07-08 10:17 G 46812626.79 46812626.93 46812627.08 0.0135 0.0098

Uranus 123457-02-19 15:05 G 46812852.95 46812853.13 46812853.30 0.0135 0.0075

Uranus 123457-10-03 19:24 G 46813079.12 46813079.31 46813079.51 0.0135 0.0051

Uranus 123458-05-17 23:57 G 46813305.30 46813305.50 46813305.72 0.0135 0.0028

Neptune 123458-09-19 05:00 G 46813429.66 46813429.71 46813429.76 0.0088 0.0086

Uranus 123458-12-30 04:45 G 46813531.49 46813531.70 46813531.92 0.0135 0.0004

Neptune 123459-05-02 18:12 G 46813655.17 46813655.26 46813655.40 0.0088 0.0077

Uranus 123459-08-13 09:33 G 46813757.70 46813757.90 46813758.12 0.0136 0.0021

Neptune 123459-12-14 08:21 G 46813880.71 46813880.85 46813881.00 0.0088 0.0067

Uranus 123460-03-26 14:21 G 46813983.91 46813984.10 46813984.31 0.0136 0.0045

Neptune 123460-07-26 21:48 G 46814106.26 46814106.41 46814106.60 0.0088 0.0058

Uranus 123460-11-07 19:09 G 46814210.13 46814210.30 46814210.50 0.0136 0.0069

Neptune 123461-03-09 11:43 G 46814331.82 46814331.99 46814332.20 0.0088 0.0048

Uranus 123461-06-22 00:12 G 46814436.37 46814436.51 46814436.68 0.0136 0.0093

Neptune 123461-10-21 01:38 G 46814557.38 46814557.57 46814557.79 0.0088 0.0038

Uranus 123462-02-03 05:29 G 46814662.63 46814662.73 46814662.85 0.0136 0.0116

Jupiter 123462-02-12 04:31 G 46814671.52 46814671.69 46814671.87 0.0545 0.0260

Neptune 123462-06-03 15:33 G 46814782.94 46814783.15 46814783.37 0.0089 0.0028

Neptune 123463-01-15 05:29 G 46815008.51 46815008.73 46815008.95 0.0089 0.0018

Neptune 123463-08-28 19:09 G 46815234.08 46815234.30 46815234.53 0.0089 0.0008

Saturn 123463-12-08 09:05 G 46815335.71 46815335.88 46815336.07 0.0276 0.0143

Neptune 123464-04-10 09:05 G 46815459.65 46815459.88 46815460.10 0.0089 0.0002

Saturn 123464-07-24 12:41 G 46815564.88 46815565.03 46815565.20 0.0276 0.0175

Neptune 123464-11-21 22:31 G 46815685.23 46815685.44 46815685.67 0.0089 0.0012

Neptune 123465-07-05 12:12 G 46815910.81 46815911.01 46815911.24 0.0089 0.0022

Neptune 123466-02-16 02:07 G 46816136.39 46816136.59 46816136.81 0.0089 0.0032

Neptune 123466-09-29 16:02 G 46816361.98 46816362.17 46816362.38 0.0089 0.0041

Neptune 123467-05-13 05:43 G 46816587.57   46816587.74   46816587.93 0.0089 0.0051

Jupiter 123467-12-18 02:50 G 46816806.52   46816806.62   46816806.72 0.0483 0.0421

Neptune 123467-12-24 19:09 G 46816813.16   46816813.30   46816813.49 0.0089 0.0061

Neptune 123468-08-06 09:19 G 46817038.76   46817038.89   46817039.03 0.0089 0.0070

Neptune 123469-03-19 23:00 G 46817264.38   46817264.46   46817264.57 0.0089 0.0080

Mars   123471-09-25 21:19 G 46818184.24   46818184.39   46818184.53 0.1596 0.0912

Saturn   123479-01-07 03:19 G 46820844.43   46820844.64   46820844.86 0.0283 0.0007

Jupiter 123480-04-15 06:41 G 46821308.62   46821308.78   46821308.95 0.0484 0.0288

Jupiter 123486-02-15 05:57 G 46823440.60   46823440.75   46823440.91 0.0544 0.0335

Jupiter 123491-12-20 10:45 G 46825574.74   46825574.95   46825575.16 0.0483 0.0018

Saturn   123493-06-19 17:00 G 46826122.01   46826122.21   46826122.41 0.0276 0.0088

Saturn   123494-02-03 20:21 G 46826351.24   46826351.35   46826351.47 0.0276 0.0228

Uranus   123497-06-04 03:19 G 46827567.61   46827567.64   46827567.69 0.0143 0.0140

Jupiter 123497-10-20 19:09 G 46827706.10   46827706.30   46827706.50 0.0545 0.0049

Uranus   123498-01-16 16:31 G 46827794.06   46827794.19   46827794.34 0.0143 0.0111

Uranus   123498-08-31 05:29 G 46828020.56   46828020.73   46828020.92 0.0143 0.0082

Uranus   123499-04-14 18:26 G 46828247.07   46828247.27   46828247.49 0.0143 0.0053

Earth   123499-05-07 06:41 G 46828269.65   46828269.78   46828269.90 0.2637 0.1633

Moon   123499-05-07 07:24 G 46828269.66   46828269.81   46828269.96 0.2630 0.1356 *

Uranus   123499-11-27 07:38 G 46828473.60   46828473.82   46828474.04 0.0143 0.0023

Uranus   123500-07-11 20:36 G 46828700.14   46828700.36   46828700.58 0.0142 0.0007

Uranus   123501-02-23 09:19 G 46828926.68   46828926.89   46828927.11 0.0142 0.0036

Uranus   123501-10-07 22:02 G 46829153.23   46829153.42   46829153.63 0.0142 0.0066

Uranus   123502-05-22 10:45 G 46829379.79   46829379.95   46829380.12 0.0142 0.0094

Uranus   123503-01-03 23:14 G 46829606.37   46829606.47   46829606.59 0.0142 0.0123

Jupiter 123503-08-26 13:53 G 46829840.90   46829841.08   46829841.25 0.0483 0.0257

Mars   123503-09-25 11:43 G 46829870.86   46829870.99   46829871.12 0.1601 0.1090

Mars   123506-06-26 14:21 G 46830875.98   46830876.10   46830876.22 0.1942 0.1404

Moon   123507-05-05 15:19 G 46831189.10   46831189.14   46831189.18 0.2631 0.2560

Earth   123507-05-05 20:36 G 46831189.26   46831189.36   46831189.46 0.2635 0.2094

Saturn 123508-07-20 07:38 G 46831630.61 46831630.82 46831631.03 0.0283 0.0039

Jupiter 123509-06-26 09:48 G 46831971.79 46831971.91 46831972.03 0.0546 0.0428

Jupiter 123515-12-23 16:31 G 46834343.12 46834343.19 46834343.27 0.0484 0.0448

Saturn 123522-12-31 16:02 G 46836907.97 46836908.17 46836908.37 0.0276 0.0060

Saturn 123523-08-17 19:24 G 46837137.25 46837137.31 46837137.39 0.0276 0.0257

Jupiter 123527-08-28 20:07 G 46838609.15 46838609.34 46838609.54 0.0484 0.0176

Pluto 123532-09-19 16:31 G 46840458.03 46840458.19 46840458.37 0.0062 0.0038

Pluto 123533-05-02 19:53 G 46840683.12 46840683.33 46840683.55 0.0062 0.0006

Jupiter 123533-06-29 16:31 G 46840741.01 46840741.19 46840741.38 0.0545 0.0190

Pluto 123533-12-13 22:31 G 46840908.27 46840908.44 46840908.66 0.0062 0.0029

Pluto 123534-07-27 01:38 G 46841133.56 46841133.57 46841133.63 0.0063 0.0062

Saturn 123537-06-14 13:53 G 46842187.08 46842187.08 46842187.09 0.0283 0.0283

Mars 123537-07-24 09:48 G 46842226.79 46842226.91 46842227.03 0.1595 0.1146

Saturn 123538-01-30 10:31 G 46842416.74 46842416.94 46842417.15 0.0283 0.0078

Jupiter 123539-05-04 00:26 G 46842875.32 46842875.52 46842875.72 0.0483 0.0093

Uranus 123539-07-26 17:00 G 46842959.18 46842959.21 46842959.28 0.0135 0.0131

Neptune 123539-08-12 05:29 G 46842975.67 46842975.73 46842975.79 0.0089 0.0084

Uranus 123540-03-08 21:48 G 46843185.29 46843185.41 46843185.54 0.0135 0.0108

Neptune 123540-03-24 17:14 G 46843201.12 46843201.22 46843201.35 0.0089 0.0075

Uranus 123540-10-21 02:07 G 46843411.44 46843411.59 46843411.77 0.0135 0.0085

Neptune 123540-11-05 05:14 G 46843426.60 46843426.72 46843426.89 0.0089 0.0066

Uranus 123541-06-04 06:55 G 46843637.61 46843637.79 46843637.98 0.0135 0.0061

Neptune 123541-06-18 17:57 G 46843652.08 46843652.25 46843652.42 0.0089 0.0056

Uranus 123542-01-16 11:43 G 46843863.78 46843863.99 46843864.19 0.0135 0.0037

Neptune 123542-01-30 05:57 G 46843877.58 46843877.75 46843877.94 0.0089 0.0047

Uranus 123542-08-30 16:17 G 46844089.97 46844090.18 46844090.40 0.0135 0.0013

Neptune 123542-09-12 18:12 G 46844103.08 46844103.26 46844103.47 0.0089 0.0038

Uranus 123543-04-13 21:05 G 46844316.17 46844316.38 46844316.60 0.0136 0.0011

Neptune 123543-04-26 06:26 G 46844328.58 46844328.77 46844328.98 0.0089 0.0028

Uranus 123543-11-26 01:53 G 46844542.38 46844542.58 46844542.79 0.0136 0.0035

Neptune 123543-12-07 18:41 G 46844554.08 46844554.28 46844554.50 0.0089 0.0019

Uranus 123544-07-09 06:41 G 46844768.60 46844768.78 46844768.98 0.0136 0.0060

Neptune 123544-07-20 07:09 G 46844779.59 46844779.80 46844780.02 0.0089 0.0009

Uranus 123545-02-20 11:43 G 46844994.83 46844994.99 46844995.17 0.0136 0.0084

Neptune 123545-03-02 19:24 G 46845005.10 46845005.31 46845005.53 0.0089 0.0002

Jupiter 123545-03-04 02:07 G 46845006.41 46845006.59 46845006.78 0.0545 0.0211

Uranus 123545-10-04 16:31 G 46845221.08 46845221.19 46845221.34 0.0136 0.0108

Neptune 123545-10-14 07:38 G 46845230.61 46845230.82 46845231.04 0.0089 0.0010

Uranus 123546-05-18 21:33 G 46845447.37 46845447.40 46845447.47 0.0136 0.0132

Neptune 123546-05-27 19:53 G 46845456.13 46845456.33 46845456.55 0.0089 0.0020

Neptune 123547-01-08 08:21 G 46845681.64 46845681.85 46845682.05 0.0089 0.0029

Neptune 123547-08-21 20:21 G 46845907.17 46845907.35 46845907.56 0.0089 0.0039

Neptune 123548-04-03 08:50 G 46846132.69 46846132.87 46846133.06 0.0089 0.0048

Neptune 123548-11-14 20:36 G 46846358.22 46846358.36 46846358.55 0.0089 0.0058

Neptune 123549-06-28 09:05 G 46846583.75 46846583.88 46846584.03 0.0089 0.0067

Neptune 123550-02-08 21:33 G 46846809.29 46846809.40 46846809.51 0.0089 0.0076

Neptune 123550-09-22 09:33 G 46847034.86 46847034.90 46847034.97 0.0089 0.0086

Jupiter 123551-01-07 04:17 G 46847141.55 46847141.68 46847141.82 0.0483 0.0364

Saturn 123552-07-12 23:29 G 46847694.28 46847694.48 46847694.69 0.0276 0.0007

Jupiter 123563-05-06 06:26 G 46851643.63 46851643.77 46851643.93 0.0484 0.0339

Saturn 123566-12-25 19:24 G 46852973.20 46852973.31 46852973.44 0.0283 0.0234

Saturn 123567-08-12 15:33 G 46853202.96 46853203.15 46853203.35 0.0283 0.0127

Jupiter 123569-03-07 08:36 G 46853775.73 46853775.86 46853776.00 0.0545 0.0405

Mars 123569-07-23 00:41 G 46853913.39 46853913.53 46853913.68 0.1599 0.0866

Jupiter 123575-01-09 10:31 G 46855909.73 46855909.94 46855910.15 0.0483 0.0067

Jupiter 123580-11-09 23:14 G 46858041.27 46858041.47 46858041.67 0.0545 0.0027

Uranus 123581-09-16 22:02 G 46858352.32 46858352.42 46858352.54 0.0143 0.0124

Saturn 123582-01-22 23:00 G 46858480.25 46858480.46 46858480.67 0.0276 0.0023

Uranus 123582-05-01 11:00 G 46858578.80 46858578.96 46858579.14 0.0143 0.0095

Uranus 123582-12-14 00:12 G 46858805.32 46858805.51 46858805.71 0.0143 0.0065

Uranus 123583-07-28 13:09 G 46859031.84 46859032.05 46859032.27 0.0143 0.0036

Uranus 123584-03-11 02:07 G 46859258.37 46859258.59 46859258.82 0.0142 0.0006

Uranus 123584-10-23 15:05 G 46859484.91 46859485.13 46859485.35 0.0142 0.0024

Uranus 123585-06-07 03:33 G 46859711.45 46859711.65 46859711.87 0.0142 0.0054

Uranus 123586-01-19 16:31 G 46859938.01 46859938.19 46859938.38 0.0142 0.0082

Uranus 123586-09-03 05:00 G 46860164.58 46860164.71 46860164.86 0.0142 0.0111

Jupiter 123586-09-14 13:38 G 46860175.89 46860176.07 46860176.26 0.0483 0.0206

Uranus 123587-04-17 17:14 G 46860391.20 46860391.22 46860391.27 0.0142 0.0140

Jupiter 123592-07-15 12:41 G 46862306.88 46862307.03 46862307.18 0.0545 0.0357

Saturn 123596-07-06 21:19 G 46863759.24 46863759.39 46863759.55 0.0283 0.0198

Saturn 123597-02-21 17:43 G 46863989.07 46863989.24 46863989.42 0.0283 0.0163

Jupiter 123598-05-20 17:43 G 46864442.20 46864442.24 46864442.27 0.0483 0.0476

Mars 123603-05-21 23:00 G 46866269.38 46866269.46 46866269.55 0.1594 0.1360

Jupiter 123610-09-16 21:19 G 46868944.21 46868944.39 46868944.58 0.0484 0.0233

Saturn 123610-12-19 02:21 G 46869037.51 46869037.60 46869037.71 0.0277 0.0240

Saturn 123611-08-05 06:12 G 46869266.57 46869266.76 46869266.97 0.0276 0.0078

Jupiter 123616-07-18 13:38 G 46871075.89 46871076.07 46871076.25 0.0545 0.0237

Jupiter 123622-05-23 00:12 G 46873210.30 46873210.51 46873210.72 0.0483 0.0044

Neptune 123622-12-22 13:24 G 46873424.05 46873424.06 46873424.10 0.0088 0.0088

Neptune 123623-08-05 03:05 G 46873649.55 46873649.63 46873649.75 0.0088 0.0078

Uranus 123623-11-07 08:50 G 46873743.78 46873743.87 46873743.98 0.0135 0.0118

Pluto 123624-01-25 16:31 G 46873823.10 46873823.19 46873823.34 0.0082 0.0069

Neptune 123624-03-17 17:00 G 46873875.09 46873875.21 46873875.37 0.0088 0.0069

Uranus 123624-06-20 13:24 G 46873969.92 46873970.06 46873970.23 0.0135 0.0094

Pluto 123624-09-07 04:31 G 46874048.47 46874048.69 46874048.92 0.0081 0.0009

Neptune 123624-10-29 06:55 G 46874100.64 46874100.79 46874100.97 0.0088 0.0059

Uranus 123625-02-01 17:57 G 46874196.08 46874196.25 46874196.45 0.0135 0.0071

Neptune 123625-06-11 21:05 G 46874326.19 46874326.38 46874326.57 0.0088 0.0049

Uranus 123625-09-15 22:45 G 46874422.26 46874422.45 46874422.66 0.0135 0.0047

Saturn 123626-01-17 04:31 G 46874545.51 46874545.69 46874545.88 0.0283 0.0144

Neptune 123626-01-23 10:31 G 46874551.76 46874551.94 46874552.16 0.0088 0.0040

Uranus 123626-04-30 03:33 G 46874648.44 46874648.65 46874648.86 0.0135 0.0022

Saturn 123626-09-04 00:26 G 46874775.39 46874775.52 46874775.67 0.0283 0.0216

Neptune 123626-09-06 00:26 G 46874777.32 46874777.52 46874777.75 0.0088 0.0030

Uranus 123626-12-12 08:21 G 46874874.64 46874874.85 46874875.06 0.0136 0.0002

Neptune 123627-04-19 14:21 G 46875002.89 46875003.10 46875003.33 0.0089 0.0020

Uranus 123627-07-26 13:24 G 46875100.85 46875101.06 46875101.26 0.0136 0.0026

Neptune 123627-12-01 04:17 G 46875228.46 46875228.68 46875228.90 0.0089 0.0010

Uranus 123628-03-08 18:12 G 46875327.06 46875327.26 46875327.46 0.0136 0.0050

Jupiter 123628-03-23 04:02 G 46875341.48 46875341.67 46875341.86 0.0546 0.0146

Neptune 123628-07-13 17:57 G 46875454.03 46875454.25 46875454.48 0.0089 0.0002

Uranus 123628-10-20 22:45 G 46875553.28 46875553.45 46875553.64 0.0136 0.0075

Neptune 123629-02-24 07:53 G 46875679.61 46875679.83 46875680.06 0.0089 0.0010

Uranus 123629-06-04 03:33 G 46875779.52 46875779.65 46875779.81 0.0136 0.0099

Neptune 123629-10-07 21:33 G 46875905.19 46875905.40 46875905.63 0.0089 0.0020

Uranus 123630-01-16 08:36 G 46876005.79 46876005.86 46876005.97 0.0136 0.0123

Neptune 123630-05-21 11:14 G 46876130.77 46876130.97 46876131.19 0.0089 0.0030

Neptune 123631-01-02 00:55 G 46876356.35 46876356.54 46876356.76 0.0089 0.0040

Neptune 123631-08-15 14:36 G 46876581.94 46876582.11 46876582.32 0.0089 0.0050

Neptune 123632-03-28 04:45 G 46876807.54 46876807.70 46876807.87 0.0089 0.0059

Neptune 123632-11-08 18:26 G 46877033.14 46877033.27 46877033.42 0.0089 0.0069

Neptune 123633-06-22 07:53 G 46877258.75 46877258.83 46877258.96 0.0089 0.0079

Jupiter 123634-01-26 03:48 G 46877476.51 46877476.66 46877476.82 0.0483 0.0316

Neptune 123634-02-02 22:17 G 46877484.41 46877484.43 46877484.45 0.0089 0.0088

Mars 123635-05-20 13:38 G 46877955.91 46877956.07 46877956.23 0.1598 0.0640

Moon 123636-11-01 11:57 G 46878486.86 46878487.00 46878487.15 0.2705 0.0043

Earth 123636-11-01 12:55 G 46878486.89 46878487.04 46878487.20 0.2698 0.0413 *

Jupiter 123639-11-26 18:55 G 46879607.24 46879607.29 46879607.34 0.0546 0.0523

Saturn 123640-06-30 02:36 G 46879823.48 46879823.61 46879823.75 0.0276 0.0208

Saturn 123641-02-14 06:12 G 46880052.57 46880052.76 46880052.96 0.0276 0.0108

Jupiter 123646-05-25 06:12 G 46881978.65 46881978.76 46881978.89 0.0484 0.0390

Jupiter 123652-03-26 11:14 G 46884110.88 46884110.97 46884111.07 0.0544 0.0475

Saturn 123655-07-30 05:43 G 46885331.55 46885331.74 46885331.95 0.0283 0.0110

Saturn 123656-03-16 02:07 G 46885561.50 46885561.59 46885561.69 0.0283 0.0251

Jupiter 123658-01-28 10:45 G 46886244.75 46886244.95 46886245.15 0.0484 0.0121

Jupiter 123663-11-29 20:50 G 46888376.17 46888376.37 46888376.57 0.0545 0.0075

Uranus 123665-05-17 03:48 G 46888910.61 46888910.66 46888910.73 0.0143 0.0137

Uranus 123665-12-29 17:00 G 46889137.08 46889137.21 46889137.37 0.0143 0.0108

Uranus 123666-08-13 06:12 G 46889363.58 46889363.76 46889363.95 0.0143 0.0078

Uranus 123667-03-27 19:09 G 46889590.10 46889590.30 46889590.52 0.0143 0.0048

Uranus 123667-11-09 08:07 G 46889816.62 46889816.84 46889817.07 0.0143 0.0019

Uranus 123668-06-22 21:05 G 46890043.16 46890043.38 46890043.61 0.0142 0.0011

Uranus 123669-02-04 10:02 G 46890269.71 46890269.92 46890270.14 0.0142 0.0041

Mars 123669-03-18 11:57 G 46890311.99 46890312.00 46890312.01 0.1593 0.1589

Uranus 123669-09-18 22:45 G 46890496.26 46890496.45 46890496.65 0.0142 0.0070

Jupiter 123669-10-03 14:36 G 46890510.91 46890511.11 46890511.30 0.0483 0.0153

Saturn 123670-01-10 09:19 G 46890609.73 46890609.89 46890610.07 0.0277 0.0156

Mars 123670-02-17 22:31 G 46890648.36 46890648.44 46890648.53 0.1939 0.1705

Uranus 123670-05-03 11:29 G 46890722.82 46890722.98 46890723.14 0.0142 0.0100

Saturn 123670-08-27 13:24 G 46890838.90 46890839.06 46890839.23 0.0276 0.0163

Uranus 123670-12-15 23:43 G 46890949.41 46890949.49 46890949.59 0.0142 0.0129

Jupiter 123675-08-04 09:19 G 46892641.73 46892641.89 46892642.06 0.0545 0.0313

Jupiter 123681-06-08 17:00 G 46894777.12 46894777.21 46894777.31 0.0483 0.0429

Saturn 123685-02-08 14:21 G 46896117.89 46896118.10 46896118.32 0.0282 0.0051

Jupiter 123693-10-05 20:21 G 46899279.18 46899279.35 46899279.52 0.0484 0.0279

Saturn 123699-07-23 10:45 G 46901395.76 46901395.95 46901396.13 0.0276 0.0121

Jupiter 123699-08-07 16:45 G 46901411.04 46901411.20 46901411.37 0.0545 0.0309

Saturn 123700-03-09 14:07 G 46901624.96 46901625.09 46901625.25 0.0276 0.0196

Mars 123701-03-18 02:36 G 46901998.44 46901998.61 46901998.78 0.1597 0.0410

Neptune 123703-11-14 15:48 G 46902970.12 46902970.16 46902970.22 0.0089 0.0086

Neptune 123704-06-27 03:48 G 46903195.57 46903195.66 46903195.79 0.0089 0.0077

Neptune 123705-02-07 16:17 G 46903421.05 46903421.18 46903421.33 0.0089 0.0067

Jupiter 123705-06-11 23:29 G 46903545.27 46903545.48 46903545.68 0.0483 0.0011

Neptune 123705-09-21 04:17 G 46903646.54 46903646.68 46903646.86 0.0089 0.0058

Neptune 123706-05-04 16:31 G 46903872.02 46903872.19 46903872.38 0.0089 0.0049

Neptune 123706-12-16 04:45 G 46904097.52 46904097.70 46904097.90 0.0089 0.0039

Uranus 123707-07-08 20:21 G 46904302.29 46904302.35 46904302.43 0.0135 0.0127

Neptune 123707-07-29 17:00 G 46904323.02 46904323.21 46904323.43 0.0089 0.0030

Uranus 123708-02-20 00:41 G 46904528.41 46904528.53 46904528.68 0.0135 0.0104

Neptune 123708-03-11 05:29 G 46904548.52 46904548.73 46904548.94 0.0089 0.0020

Uranus 123708-10-03 05:29 G 46904754.57 46904754.73 46904754.91 0.0135 0.0080

Neptune 123708-10-22 17:43 G 46904774.03 46904774.24 46904774.45 0.0089 0.0011

Uranus 123709-05-17 10:02 G 46904980.74 46904980.92 46904981.12 0.0135 0.0057

Neptune 123709-06-05 05:57 G 46904999.53 46904999.75 46904999.96 0.0089 0.0001

Uranus 123709-12-29 14:50 G 46905206.92 46905207.12 46905207.33 0.0135 0.0032

Neptune 123710-01-16 17:57 G 46905225.04 46905225.25 46905225.47 0.0089 0.0009

Uranus 123710-08-12 19:53 G 46905433.12 46905433.33 46905433.54 0.0135 0.0008

Neptune 123710-08-30 06:26 G 46905450.57 46905450.77 46905450.99 0.0089 0.0018

Uranus 123711-03-27 00:26 G 46905659.32 46905659.52 46905659.74 0.0136 0.0017

Neptune 123711-04-12 18:41 G 46905676.08 46905676.28 46905676.49 0.0089 0.0028

Jupiter 123711-04-13 06:26 G 46905676.57 46905676.77 46905676.97 0.0545 0.0076

Uranus 123711-11-08 05:14 G 46905885.52 46905885.72 46905885.93 0.0136 0.0041

Neptune 123711-11-24 06:55 G 46905901.60 46905901.79 46905901.99 0.0089 0.0037

Uranus 123712-06-21 10:17 G 46906111.74 46906111.93 46906112.12 0.0136 0.0065

Neptune 123712-07-06 18:55 G 46906127.12 46906127.29 46906127.49 0.0089 0.0047

Uranus 123713-02-02 15:05 G 46906337.98 46906338.13 46906338.30 0.0136 0.0089

Neptune 123713-02-17 07:24 G 46906352.65 46906352.81 46906352.99 0.0089 0.0056

Uranus 123713-09-16 19:53 G 46906564.23 46906564.33 46906564.46 0.0136 0.0114

Neptune 123713-09-30 19:24 G 46906578.19 46906578.31 46906578.48 0.0089 0.0066

Neptune 123714-05-14 07:53 G 46906803.73 46906803.83 46906803.96 0.0089 0.0075

Saturn 123714-08-22 15:48 G 46906903.94 46906904.16 46906904.38 0.0282 0.0016

Neptune 123714-12-25 20:07 G 46907029.29 46907029.34 46907029.42 0.0089 0.0084

Jupiter 123717-02-15 03:19 G 46907811.47 46907811.64 46907811.82 0.0483 0.0266

Jupiter 123722-12-16 16:45 G 46909942.10 46909942.20 46909942.29 0.0545 0.0474

Saturn 123729-02-02 17:14 G 46912182.02 46912182.22 46912182.42 0.0277 0.0069

Jupiter 123729-06-14 06:41 G 46912313.69 46912313.78 46912313.86 0.0484 0.0442

Saturn 123729-09-19 21:05 G 46912411.30 46912411.38 46912411.48 0.0277 0.0250

Jupiter 123735-04-16 07:09 G 46914445.75 46914445.80 46914445.87 0.0544 0.0518

Mars 123735-12-16 23:29 G 46914690.32 46914690.48 46914690.64 0.1941 0.0718

Jupiter 123741-02-17 09:19 G 46916579.70 46916579.89 46916580.09 0.0484 0.0165

Moon 123742-05-09 00:26 G 46917025.36 46917025.52 46917025.68 0.2634 0.0642

Earth 123742-05-09 06:12 G 46917025.63 46917025.76 46917025.90 0.2635 0.1523 *

Saturn 123744-03-04 01:38 G 46917690.36 46917690.57 46917690.79 0.0282 0.0046

Jupiter 123746-12-19 20:50 G 46918711.18 46918711.37 46918711.56 0.0545 0.0133

Uranus 123749-08-29 22:31 G 46919695.33 46919695.44 46919695.56 0.0143 0.0121

Uranus 123750-04-13 11:14 G 46919921.82 46919921.97 46919922.16 0.0143 0.0092

Earth 123750-05-06 19:53 G 46919945.25 46919945.33 46919945.41 0.2633 0.2236

Uranus 123750-11-26 00:26 G 46920148.33 46920148.52 46920148.73 0.0143 0.0062

Uranus 123751-07-10 13:38 G 46920374.85 46920375.07 46920375.29 0.0143 0.0032

Uranus 123752-02-22 02:36 G 46920601.39 46920601.61 46920601.83 0.0142 0.0002

Uranus 123752-10-05 15:19 G 46920827.93 46920828.14 46920828.37 0.0142 0.0028

Jupiter 123752-10-23 12:55 G 46920845.84 46920846.04 46920846.24 0.0483 0.0108

Uranus 123753-05-20 04:02 G 46921054.47 46921054.67 46921054.88 0.0142 0.0058

Uranus 123754-01-01 16:45 G 46921281.03 46921281.20 46921281.38 0.0142 0.0087

Uranus 123754-08-16 05:14 G 46921507.61 46921507.72 46921507.86 0.0142 0.0116

Saturn 123758-08-15 19:24 G 46922968.10 46922968.31 46922968.52 0.0276 0.0032

Jupiter 123758-08-24 11:29 G 46922976.80 46922976.98 46922977.16 0.0546 0.0247

Jupiter 123764-06-28 15:19 G 46925112.03 46925112.14 46925112.28 0.0483 0.0384

Mars 123767-01-13 15:19 G 46926040.97 46926041.14 46926041.32 0.1596 0.0184

Saturn 123773-01-27 06:55 G 46928246.76 46928246.79 46928246.83 0.0282 0.0277

Saturn 123773-09-14 03:05 G 46928476.43 46928476.63 46928476.84 0.0282 0.0081

Jupiter 123776-10-25 19:09 G 46929614.16 46929614.30 46929614.46 0.0484 0.0328

Pluto 123781-04-05 19:53 G 46931237.18 46931237.33 46931237.53 0.0062 0.0037

Pluto 123781-11-16 23:29 G 46931462.27 46931462.48 46931462.70 0.0062 0.0003

Pluto 123782-06-30 02:21 G 46931687.43 46931687.60 46931687.81 0.0062 0.0031

Jupiter 123782-08-27 14:07 G 46931745.94 46931746.09 46931746.24 0.0544 0.0355

Neptune 123787-11-07 12:26 G 46933643.94 46933644.02 46933644.13 0.0088 0.0080

Saturn 123788-02-26 01:38 G 46933754.37 46933754.57 46933754.78 0.0277 0.0021

Neptune 123788-06-20 01:53 G 46933869.47 46933869.58 46933869.74 0.0088 0.0071

Jupiter 123788-06-30 22:45 G 46933880.24 46933880.45 46933880.65 0.0484 0.0054

Neptune 123789-01-31 16:02 G 46934095.03 46934095.17 46934095.35 0.0088 0.0061

Neptune 123789-09-14 06:12 G 46934320.58 46934320.76 46934320.95 0.0088 0.0051

Neptune 123790-04-27 20:07 G 46934546.14 46934546.34 46934546.54 0.0088 0.0041

Neptune 123790-12-09 10:02 G 46934771.71 46934771.92 46934772.13 0.0088 0.0031

Neptune 123791-07-22 23:29 G 46934997.27 46934997.48 46934997.71 0.0089 0.0022

Uranus 123791-10-20 11:43 G 46935086.89 46935086.99 46935087.12 0.0135 0.0114

Neptune 123792-03-04 13:38 G 46935222.85 46935223.07 46935223.30 0.0089 0.0011

Uranus 123792-06-02 16:31 G 46935313.04 46935313.19 46935313.35 0.0135 0.0090

Neptune 123792-10-16 03:33 G 46935448.42 46935448.65 46935448.87 0.0089 0.0002

Uranus 123793-01-14 21:05 G 46935539.21 46935539.38 46935539.58 0.0135 0.0067

Neptune 123793-05-29 17:14 G 46935674.00 46935674.22 46935674.44 0.0089 0.0008

Uranus 123793-08-29 01:53 G 46935765.39 46935765.58 46935765.79 0.0135 0.0043

Neptune 123794-01-10 06:41 G 46935899.57 46935899.78 46935900.01 0.0089 0.0019

Uranus 123794-04-12 06:41 G 46935991.58 46935991.78 46935992.00 0.0135 0.0018

Jupiter 123794-05-02 02:07 G 46936011.40 46936011.59 46936011.79 0.0545 0.0038

Neptune 123794-08-23 20:50 G 46936125.16 46936125.37 46936125.58 0.0089 0.0028

Uranus 123794-11-24 11:29 G 46936217.77 46936217.98 46936218.20 0.0136 0.0007

Neptune 123795-04-06 10:31 G 46936350.74 46936350.94 46936351.15 0.0089 0.0038

Uranus 123795-07-08 16:31 G 46936443.98 46936444.19 46936444.40 0.0136 0.0031

Neptune 123795-11-17 23:57 G 46936576.33 46936576.50 46936576.70 0.0089 0.0048

Uranus 123796-02-19 21:05 G 46936670.20 46936670.38 46936670.58 0.0136 0.0056

Neptune 123796-06-30 13:38 G 46936801.92 46936802.07 46936802.26 0.0089 0.0058

Uranus 123796-10-03 01:53 G 46936896.42 46936896.58 46936896.76 0.0136 0.0080

Neptune 123797-02-11 03:19 G 46937027.52 46937027.64 46937027.81 0.0089 0.0068

Uranus 123797-05-17 06:55 G 46937122.66 46937122.79 46937122.93 0.0136 0.0104

Neptune 123797-09-24 17:29 G 46937253.13 46937253.23 46937253.35 0.0089 0.0077

Uranus 123797-12-29 11:43 G 46937348.94 46937348.99 46937349.07 0.0136 0.0128

Neptune 123798-05-08 06:55 G 46937478.77 46937478.79 46937478.86 0.0089 0.0087

Jupiter 123800-03-07 01:09 G 46938146.37 46938146.55 46938146.74 0.0483 0.0225

Mars 123801-10-14 00:55 G 46938732.36 46938732.54 46938732.71 0.1943 0.0249

Saturn 123802-08-10 18:12 G 46939033.13 46939033.26 46939033.41 0.0282 0.0211

Saturn 123803-03-28 14:21 G 46939262.91 46939263.10 46939263.28 0.0282 0.0147

Jupiter 123806-01-05 15:19 G 46940277.01 46940277.14 46940277.26 0.0545 0.0424

Jupiter 123812-07-04 03:48 G 46942648.66 46942648.66 46942648.68 0.0484 0.0483

Saturn 123817-01-22 00:41 G 46944311.47 46944311.53 46944311.62 0.0276 0.0258

Saturn 123817-09-08 05:00 G 46944540.51 46944540.71 46944540.91 0.0276 0.0060

Jupiter 123824-03-09 07:09 G 46946914.62 46946914.80 46946914.99 0.0484 0.0209

Jupiter 123830-01-08 22:17 G 46949046.24 46949046.43 46949046.61 0.0545 0.0199

Saturn 123832-02-20 20:07 G 46949819.17 46949819.34 46949819.51 0.0282 0.0175

Saturn 123832-10-07 15:48 G 46950049.00 46950049.16 46950049.33 0.0282 0.0183

Mars 123832-11-11 04:17 G 46950083.51 46950083.68 46950083.86 0.1595 0.0053

Uranus 123833-04-30 03:33 G 46950253.59 46950253.65 46950253.74 0.0143 0.0135

Uranus 123833-12-12 17:00 G 46950480.06 46950480.21 46950480.36 0.0143 0.0105

Uranus 123834-07-27 05:43 G 46950706.57 46950706.74 46950706.95 0.0143 0.0076

Uranus 123835-03-10 18:55 G 46950933.09 46950933.29 46950933.51 0.0143 0.0045

Uranus 123835-10-23 08:07 G 46951159.62 46951159.84 46951160.06 0.0142 0.0015

Jupiter 123835-11-13 11:00 G 46951180.75 46951180.96 46951181.17 0.0483 0.0063

Uranus 123836-06-05 20:50 G 46951386.15 46951386.37 46951386.60 0.0142 0.0015

Uranus 123837-01-18 09:48 G 46951612.70 46951612.91 46951613.13 0.0142 0.0045

Uranus 123837-09-01 22:31 G 46951839.26 46951839.44 46951839.64 0.0142 0.0075

Uranus 123838-04-16 10:45 G 46952065.82 46952065.95 46952066.12 0.0142 0.0105

Uranus 123838-11-28 23:14 G 46952292.41 46952292.47 46952292.56 0.0142 0.0133

Jupiter 123841-09-13 09:05 G 46953311.70 46953311.88 46953312.07 0.0545 0.0200

Saturn 123846-08-04 06:26 G 46955097.64 46955097.77 46955097.91 0.0277 0.0209

Saturn 123847-03-21 10:45 G 46955326.76 46955326.95 46955327.14 0.0277 0.0111

Jupiter 123847-07-19 13:53 G 46955446.93 46955447.08 46955447.23 0.0484 0.0340

Jupiter 123859-11-15 16:02 G 46959949.05 46959949.17 46959949.32 0.0484 0.0367

Saturn 123861-09-02 08:21 G 46960605.65 46960605.85 46960606.05 0.0282 0.0107

Saturn 123862-04-20 04:02 G 46960835.58 46960835.67 46960835.77 0.0282 0.0251

Jupiter 123865-09-16 11:57 G 46962080.87 46962081.00 46962081.14 0.0545 0.0405

Mars 123867-08-11 01:53 G 46962774.45 46962774.58 46962774.72 0.1945 0.1218

Neptune 123868-02-17 02:21 G 46962964.59 46962964.60 46962964.66 0.0089 0.0088

Neptune 123868-09-29 14:50 G 46963190.03 46963190.12 46963190.23 0.0089 0.0078

Neptune 123869-05-13 02:50 G 46963415.51 46963415.62 46963415.77 0.0089 0.0069

Neptune 123869-12-24 15:05 G 46963640.99 46963641.13 46963641.31 0.0089 0.0060

Neptune 123870-08-07 03:33 G 46963866.48 46963866.65 46963866.84 0.0089 0.0050

Neptune 123871-03-20 15:33 G 46964091.98 46964092.15 46964092.36 0.0089 0.0041

Jupiter 123871-07-21 19:53 G 46964215.12 46964215.33 46964215.53 0.0483 0.0094

Neptune 123871-11-01 04:02 G 46964317.47 46964317.67 46964317.87 0.0089 0.0031

Neptune 123872-06-13 16:02 G 46964542.97 46964543.17 46964543.39 0.0089 0.0022

Pluto 123872-08-11 20:36 G 46964602.23 46964602.36 46964602.53 0.0082 0.0062

Neptune 123873-01-25 04:17 G 46964768.47 46964768.68 46964768.90 0.0089 0.0012

Pluto 123873-03-25 08:36 G 46964827.64 46964827.86 46964828.08 0.0081 0.0016

Neptune 123873-09-07 16:45 G 46964993.98 46964994.20 46964994.42 0.0089 0.0003

Neptune 123874-04-21 05:00 G 46965219.49 46965219.71 46965219.92 0.0089 0.0007

Neptune 123874-12-02 17:00 G 46965445.00 46965445.21 46965445.43 0.0089 0.0016

Uranus 123875-06-20 22:45 G 46965645.39 46965645.45 46965645.55 0.0135 0.0125

Neptune 123875-07-16 05:14 G 46965670.52 46965670.72 46965670.93 0.0089 0.0026

Uranus 123876-02-02 03:33 G 46965871.52 46965871.65 46965871.80 0.0135 0.0101

Saturn 123876-02-14 11:00 G 46965883.80 46965883.96 46965884.14 0.0276 0.0164

Neptune 123876-02-26 17:14 G 46965896.04 46965896.22 46965896.44 0.0089 0.0036

Uranus 123876-09-15 08:21 G 46966097.68 46966097.85 46966098.03 0.0135 0.0076

Saturn 123876-09-30 15:05 G 46966112.96 46966113.13 46966113.30 0.0276 0.0154

Neptune 123876-10-09 05:43 G 46966121.57 46966121.74 46966121.94 0.0089 0.0045

Uranus 123877-04-29 12:55 G 46966323.85 46966324.04 46966324.24 0.0135 0.0052

Jupiter 123877-05-22 02:07 G 46966346.39 46966346.59 46966346.79 0.0545 0.0025

Neptune 123877-05-22 17:43 G 46966347.09 46966347.24 46966347.43 0.0089 0.0055

Uranus 123877-12-11 17:43 G 46966550.04 46966550.24 46966550.45 0.0135 0.0028

Neptune 123878-01-03 06:12 G 46966572.63 46966572.76 46966572.92 0.0089 0.0064

Uranus 123878-07-25 22:45 G 46966776.24 46966776.45 46966776.66 0.0136 0.0004

Neptune 123878-08-16 18:26 G 46966798.17 46966798.27 46966798.41 0.0089 0.0074

Uranus 123879-03-09 03:19 G 46967002.44 46967002.64 46967002.86 0.0136 0.0021

Neptune 123879-03-30 06:41 G 46967023.73 46967023.78 46967023.88 0.0089 0.0083

Uranus 123879-10-21 08:07 G 46967228.64 46967228.84 46967229.04 0.0136 0.0046

Earth 123879-11-04 15:48 G 46967243.01 46967243.16 46967243.31 0.2700 0.0428

Moon 123879-11-04 20:50 G 46967243.23 46967243.37 46967243.51 0.2702 0.0881 *

Uranus 123880-06-03 12:55 G 46967454.86 46967455.04 46967455.23 0.0136 0.0070

Uranus 123881-01-15 17:57 G 46967681.10 46967681.25 46967681.40 0.0136 0.0094

Uranus 123881-08-29 22:31 G 46967907.36 46967907.44 46967907.56 0.0136 0.0119

Jupiter 123883-03-26 22:31 G 46968481.25 46968481.44 46968481.64 0.0483 0.0183

Jupiter 123889-01-24 16:17 G 46970612.03 46970612.18 46970612.33 0.0545 0.0361

Saturn 123891-03-15 10:02 G 46971391.71 46971391.92 46971392.13 0.0282 0.0071

Jupiter 123894-11-30 01:53 G 46972747.52 46972747.58 46972747.65 0.0483 0.0456

Mars 123898-09-08 17:14 G 46974126.05 46974126.22 46974126.39 0.1594 0.0273

Saturn 123905-08-27 16:17 G 46976669.99 46976670.18 46976670.37 0.0277 0.0116

Saturn 123906-04-13 20:21 G 46976899.22 46976899.35 46976899.50 0.0277 0.0204

Jupiter 123907-03-30 05:00 G 46977249.54 46977249.71 46977249.89 0.0484 0.0252

Jupiter 123913-01-28 17:29 G 46979381.05 46979381.23 46979381.41 0.0544 0.0236

Uranus 123917-08-12 22:31 G 46981038.31 46981038.44 46981038.56 0.0143 0.0118

Uranus 123918-03-27 11:14 G 46981264.80 46981264.97 46981265.15 0.0143 0.0088

Uranus 123918-11-09 00:12 G 46981491.31 46981491.51 46981491.72 0.0142 0.0059

Jupiter 123918-12-03 07:38 G 46981515.61 46981515.82 46981516.02 0.0483 0.0028

Uranus 123919-06-23 13:09 G 46981717.84 46981718.05 46981718.28 0.0142 0.0029

Uranus 123920-02-05 02:21 G 46981944.38 46981944.60 46981944.82 0.0142 0.0002

Uranus 123920-09-18 15:05 G 46982170.92 46982171.13 46982171.35 0.0142 0.0032

Saturn 123920-09-25 23:00 G 46982178.25 46982178.46 46982178.68 0.0282 0.0004

Uranus 123921-05-03 03:48 G 46982397.46 46982397.66 46982397.86 0.0142 0.0062

Uranus 123921-12-15 16:17 G 46982624.01 46982624.18 46982624.36 0.0142 0.0091

Uranus 123922-07-30 04:45 G 46982850.59 46982850.70 46982850.82 0.0142 0.0120

Jupiter 123924-10-03 05:43 G 46983646.55 46983646.74 46983646.93 0.0545 0.0156

Jupiter 123930-08-08 10:45 G 46985781.79 46985781.95 46985782.12 0.0483 0.0300

Saturn 123935-03-09 21:48 G 46987456.21 46987456.41 46987456.61 0.0276 0.0068

Saturn 123935-10-25 01:38 G 46987685.49 46987685.57 46987685.67 0.0276 0.0249

Jupiter 123936-06-07 19:53 G 46987912.30 46987912.33 46987912.37 0.0545 0.0537

Jupiter 123942-12-05 13:09 G 46990283.94 46990284.05 46990284.16 0.0484 0.0408

Jupiter 123948-10-06 12:41 G 46992415.93 46992416.03 46992416.13 0.0545 0.0466

Saturn 123950-04-08 01:09 G 46992964.34 46992964.55 46992964.77 0.0282 0.0038

Neptune 123952-02-10 21:33 G 46993638.34 46993638.40 46993638.51 0.0088 0.0082

Neptune 123952-09-23 11:43 G 46993863.87 46993863.99 46993864.13 0.0088 0.0072

Neptune 123953-05-07 01:38 G 46994089.42 46994089.57 46994089.74 0.0088 0.0062

Neptune 123953-12-18 15:48 G 46994314.97 46994315.16 46994315.34 0.0088 0.0052

Neptune 123954-08-01 05:14 G 46994540.54 46994540.72 46994540.93 0.0088 0.0042

Jupiter 123954-08-10 17:00 G 46994550.01 46994550.21 46994550.41 0.0484 0.0135

Neptune 123955-03-14 19:09 G 46994766.11 46994766.30 46994766.53 0.0088 0.0033

Neptune 123955-10-26 09:19 G 46994991.68 46994991.89 46994992.11 0.0088 0.0022

Neptune 123956-06-07 23:14 G 46995217.25 46995217.47 46995217.69 0.0089 0.0013

Neptune 123957-01-19 13:09 G 46995442.83 46995443.05 46995443.28 0.0089 0.0003

Neptune 123957-09-02 02:50 G 46995668.40 46995668.62 46995668.85 0.0089 0.0008

Neptune 123958-04-15 16:31 G 46995893.98 46995894.19 46995894.42 0.0089 0.0018

Neptune 123958-11-27 06:26 G 46996119.56 46996119.77 46996119.99 0.0089 0.0027

Uranus 123959-02-19 09:33 G 46996203.89 46996203.90 46996203.93 0.0135 0.0134

Neptune 123959-07-10 20:07 G 46996345.15 46996345.34 46996345.55 0.0089 0.0037

Uranus 123959-10-03 14:21 G 46996429.98 46996430.10 46996430.22 0.0135 0.0111

Neptune 123960-02-21 10:02 G 46996570.74 46996570.92 46996571.12 0.0089 0.0047

Uranus 123960-05-16 18:55 G 46996656.13 46996656.29 46996656.46 0.0135 0.0087

Jupiter 123960-06-11 00:12 G 46996681.31 46996681.51 46996681.71 0.0544 0.0071

Neptune 123960-10-03 23:29 G 46996796.33 46996796.48 46996796.67 0.0089 0.0057

Uranus 123960-12-28 23:29 G 46996882.30 46996882.48 46996882.68 0.0135 0.0063

Neptune 123961-05-17 13:38 G 46997021.93 46997022.07 46997022.22 0.0089 0.0066

Uranus 123961-08-12 04:17 G 46997108.49 46997108.68 46997108.90 0.0135 0.0039

Neptune 123961-12-29 03:05 G 46997247.53 46997247.63 46997247.76 0.0089 0.0076

Uranus 123962-03-26 09:19 G 46997334.68 46997334.89 46997335.10 0.0136 0.0014

Neptune 123962-08-11 16:31 G 46997473.16 46997473.19 46997473.28 0.0089 0.0086

Uranus 123962-11-07 13:53 G 46997560.87 46997561.08 46997561.30 0.0136 0.0011

Uranus 123963-06-21 18:41 G 46997787.08 46997787.28 46997787.49 0.0136 0.0036

Uranus 123964-02-02 23:29 G 46998013.29 46998013.48 46998013.67 0.0136 0.0060

Mars 123964-07-07 05:57 G 46998168.59 46998168.75 46998168.92 0.1593 0.0505

Uranus 123964-09-16 04:17 G 46998239.52 46998239.68 46998239.85 0.0136 0.0085

Saturn 123964-09-19 02:21 G 46998242.39 46998242.60 46998242.80 0.0277 0.0023

Uranus 123965-04-30 09:19 G 46998465.77 46998465.89 46998466.02 0.0136 0.0109

Uranus 123965-12-12 14:21 G 46998692.06 46998692.10 46998692.14 0.0136 0.0133

Jupiter 123966-04-15 19:38 G 46998816.13 46998816.32 46998816.52 0.0484 0.0144

Jupiter 123972-02-14 12:12 G 47000946.85 47000947.01 47000947.17 0.0545 0.0321

Jupiter 123977-12-19 22:17 G 47003082.33 47003082.43 47003082.53 0.0483 0.0421

Saturn 123979-03-03 17:43 G 47003521.16 47003521.24 47003521.35 0.0282 0.0251

Saturn 123979-10-19 13:53 G 47003750.88 47003751.08 47003751.28 0.0282 0.0106

Moon 123985-05-11 04:02 G 47005781.54 47005781.67 47005781.81 0.2640 0.1317

Earth 123985-05-11 05:29 G 47005781.60 47005781.73 47005781.87 0.2634 0.1368 *

Jupiter 123990-04-18 01:38 G 47007584.41 47007584.57 47007584.74 0.0484 0.0291

Earth 123993-05-08 19:24 G 47008701.24 47008701.31 47008701.38 0.2632 0.2357

Moon 123993-05-09 00:12 G 47008701.43 47008701.51 47008701.60 0.2635 0.2186

Saturn 123994-04-01 09:05 G 47009028.67 47009028.88 47009029.08 0.0276 0.0028

Jupiter 123996-02-17 16:02 G 47009716.00 47009716.17 47009716.34 0.0545 0.0289

Mars 123996-07-05 20:36 G 47009855.31 47009855.36 47009855.42 0.1597 0.1503

125TH MILLENNIUM CE

This is a list of transits of Venus in the 125th millennium CE.

FROM	MAX-TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S

Uranus 124001-04-12 03:33 G 47011596.58 47011596.65 47011596.75 0.0143 0.0132

Uranus 124001-11-24 16:45 G 47011823.05 47011823.20 47011823.36 0.0143 0.0102

Jupiter 124001-12-22 04:31 G 47011850.48 47011850.69 47011850.89 0.0483 0.0017

Uranus 124002-07-09 05:43 G 47012049.56 47012049.74 47012049.94 0.0142 0.0072

Uranus 124003-02-20 18:55 G 47012276.08 47012276.29 47012276.51 0.0142 0.0041

Uranus 124003-10-05 07:53 G 47012502.61 47012502.83 47012503.05 0.0142 0.0011

Uranus 124004-05-18 20:36 G 47012729.14 47012729.36 47012729.58 0.0142 0.0019

Uranus 124004-12-31 09:19 G 47012955.69 47012955.89 47012956.10 0.0142 0.0049

Uranus 124005-08-14 21:48 G 47013182.24 47013182.41 47013182.61 0.0142 0.0079

Uranus 124006-03-29 10:31 G 47013408.80 47013408.94 47013409.09 0.0142 0.0108

Uranus 124006-11-10 23:00 G 47013635.41 47013635.46 47013635.51 0.0142 0.0137

Jupiter 124007-10-23 06:12 G 47013981.57 47013981.76 47013981.96 0.0545 0.0095

Saturn 124008-09-12 20:21 G 47014307.22 47014307.35 47014307.50 0.0282 0.0212

Saturn 124009-04-30 16:17 G 47014537.00 47014537.18 47014537.37 0.0282 0.0145

Jupiter 124013-08-27 07:53 G 47016116.66 47016116.83 47016117.01 0.0483 0.0260

Jupiter 124019-06-27 18:55 G 47018247.20 47018247.29 47018247.38 0.0545 0.0485

Saturn 124023-02-25 08:07 G 47019585.76 47019585.84 47019585.93 0.0277 0.0248

Saturn 124023-10-12 12:26 G 47019814.82 47019815.02 47019815.22 0.0277 0.0071

Jupiter 124025-12-24 10:17 G 47020618.86 47020618.93 47020619.01 0.0484 0.0448

Pluto 124029-10-21 22:31 G 47022016.28 47022016.44 47022016.63 0.0062 0.0037

Mars 124030-05-04 19:09 G 47022211.15 47022211.30 47022211.46 0.1592 0.0719

Pluto 124030-06-04 02:07 G 47022241.37 47022241.59 47022241.81 0.0062 0.0004

Pluto 124031-01-15 05:14 G 47022466.53 47022466.72 47022466.91 0.0062 0.0029

Mars 124031-04-05 10:02 G 47022546.88 47022546.92 47022546.95 0.1942 0.1885

Pluto 124031-08-28 08:07 G 47022691.84 47022691.84 47022691.87 0.0063 0.0062

Jupiter 124031-10-26 08:36 G 47022750.79 47022750.86 47022750.93 0.0544 0.0506

Neptune 124033-01-02 01:53 G 47023184.51 47023184.58 47023184.70 0.0089 0.0080

Neptune 124033-08-15 14:36 G 47023409.99 47023410.11 47023410.25 0.0089 0.0070

Neptune 124034-03-29 02:36 G 47023635.47 47023635.61 47023635.78 0.0089 0.0061

Neptune 124034-11-09 15:05 G 47023860.96 47023861.13 47023861.31 0.0089 0.0051

Neptune 124035-06-23 03:05 G 47024086.45 47024086.63 47024086.83 0.0089 0.0042

Neptune 124036-02-03 15:05 G 47024311.95 47024312.13 47024312.35 0.0089 0.0033

Neptune 124036-09-16 03:33 G 47024537.45 47024537.65 47024537.86 0.0089 0.0023

Neptune 124037-04-29 15:48 G 47024762.95 47024763.16 47024763.38 0.0089 0.0014

Jupiter 124037-08-29 13:24 G 47024884.86 47024885.06 47024885.25 0.0484 0.0172

Neptune 124037-12-11 04:02 G 47024988.45 47024988.67 47024988.88 0.0089 0.0004

Saturn 124038-03-26 08:36 G 47025093.68 47025093.86 47025094.05 0.0282 0.0145

Neptune 124038-07-24 16:17 G 47025213.96 47025214.18 47025214.39 0.0089 0.0006

Saturn 124038-11-11 04:31 G 47025323.55 47025323.69 47025323.83 0.0282 0.0212

Neptune 124039-03-07 04:17 G 47025439.47 47025439.68 47025439.90 0.0089 0.0015

Neptune 124039-10-18 16:17 G 47025664.99 47025665.18 47025665.40 0.0089 0.0025

Neptune 124040-05-31 04:31 G 47025890.50 47025890.69 47025890.90 0.0089 0.0034

Neptune 124041-01-11 16:31 G 47026116.02 47026116.19 47026116.40 0.0089 0.0044

Neptune 124041-08-25 05:14 G 47026341.55 47026341.72 47026341.90 0.0089 0.0053

Neptune 124042-04-07 17:00 G 47026567.08 47026567.21 47026567.39 0.0089 0.0063

Neptune 124042-11-19 05:29 G 47026792.62 47026792.73 47026792.87 0.0089 0.0072

Uranus 124043-06-03 01:09 G 47026988.45 47026988.55 47026988.64 0.0135 0.0121

Jupiter 124043-06-30 19:38 G 47027016.13 47027016.32 47027016.52 0.0545 0.0112

Neptune 124043-07-02 17:57 G 47027018.17 47027018.25 47027018.34 0.0089 0.0081

Uranus 124044-01-15 05:43 G 47027214.59 47027214.74 47027214.89 0.0135 0.0097

Uranus 124044-08-28 10:17 G 47027440.76 47027440.93 47027441.12 0.0135 0.0073

Uranus 124045-04-11 14:50 G 47027666.93 47027667.12 47027667.33 0.0135 0.0049

Uranus 124045-11-23 19:38 G 47027893.12 47027893.32 47027893.53 0.0136 0.0024

Uranus 124046-07-08 00:26 G 47028119.31 47028119.52 47028119.74 0.0136 0.0003

Uranus 124047-02-19 05:14 G 47028345.51 47028345.72 47028345.93 0.0136 0.0026

Uranus 124047-10-03 09:48 G 47028571.72 47028571.91 47028572.12 0.0136 0.0051

Uranus 124048-05-16 14:36 G 47028797.94 47028798.11 47028798.30 0.0136 0.0075

Uranus 124048-12-28 19:38 G 47029024.18 47029024.32 47029024.47 0.0136 0.0099

Jupiter 124049-05-04 17:00 G 47029151.00 47029151.21 47029151.41 0.0483 0.0103

Uranus 124049-08-12 00:26 G 47029250.45 47029250.52 47029250.62 0.0136 0.0124

Saturn 124052-09-06 15:48 G 47030372.02 47030372.16 47030372.31 0.0277 0.0195

Saturn 124053-04-23 19:38 G 47030601.14 47030601.32 47030601.51 0.0276 0.0123

Jupiter 124055-03-05 09:33 G 47031281.73 47031281.90 47031282.08 0.0545 0.0274

Jupiter 124061-01-07 19:24 G 47033417.18 47033417.31 47033417.44 0.0483 0.0379

Mars 124062-05-03 09:48 G 47033897.80 47033897.91 47033898.01 0.1595 0.1277

Saturn 124067-10-06 11:14 G 47035879.77 47035879.97 47035880.17 0.0282 0.0106

Saturn 124068-05-23 06:41 G 47036109.69 47036109.78 47036109.89 0.0282 0.0251

Jupiter 124073-05-06 22:45 G 47037919.30 47037919.45 47037919.60 0.0484 0.0333

Jupiter 124079-03-08 15:19 G 47040050.98 47040051.14 47040051.29 0.0544 0.0343

Saturn 124082-03-19 18:26 G 47041158.10 47041158.27 47041158.44 0.0277 0.0155

Saturn 124082-11-03 22:31 G 47041387.28 47041387.44 47041387.61 0.0277 0.0164

Jupiter 124085-01-10 01:24 G 47042185.36 47042185.56 47042185.77 0.0484 0.0055

Uranus 124085-07-24 22:17 G 47042381.31 47042381.43 47042381.57 0.0143 0.0115

Uranus 124086-03-08 11:14 G 47042607.80 47042607.97 47042608.16 0.0143 0.0085

Uranus 124086-10-21 00:12 G 47042834.31 47042834.51 47042834.72 0.0142 0.0055

Uranus 124087-06-04 13:09 G 47043060.83 47043061.05 47043061.27 0.0142 0.0024

Uranus 124088-01-17 02:07 G 47043287.37 47043287.59 47043287.82 0.0142 0.0006

Uranus 124088-08-30 14:50 G 47043513.91 47043514.12 47043514.34 0.0142 0.0036

Uranus 124089-04-14 03:19 G 47043740.45 47043740.64 47043740.84 0.0142 0.0066

Uranus 124089-11-26 15:33 G 47043967.00 47043967.15 47043967.33 0.0142 0.0096

Uranus 124090-07-11 04:02 G 47044193.58 47044193.67 47044193.79 0.0142 0.0125

Jupiter 124090-11-11 03:19 G 47044316.44 47044316.64 47044316.84 0.0545 0.0049

Mars 124096-03-01 07:53 G 47046253.69 47046253.83 47046253.97 0.1591 0.0949

Jupiter 124096-09-15 04:31 G 47046451.51 47046451.69 47046451.88 0.0483 0.0222

Mars 124097-01-30 11:43 G 47046588.83 47046588.99 47046589.14 0.1944 0.0946

Saturn 124097-04-17 22:17 G 47046666.22 47046666.43 47046666.65 0.0282 0.0043

Jupiter 124102-07-17 14:07 G 47048581.98 47048582.09 47048582.20 0.0545 0.0447

Saturn 124111-10-01 02:21 G 47051944.41 47051944.60 47051944.79 0.0277 0.0101

Saturn 124112-05-17 06:12 G 47052173.63 47052173.76 47052173.89 0.0276 0.0217

Neptune 124116-05-15 07:09 G 47053632.74 47053632.80 47053632.89 0.0088 0.0083

Neptune 124116-12-26 20:50 G 47053858.27 47053858.37 47053858.52 0.0088 0.0073

Neptune 124117-08-09 10:45 G 47054083.82 47054083.95 47054084.13 0.0088 0.0064

Neptune 124118-03-23 00:55 G 47054309.37 47054309.54 47054309.73 0.0088 0.0054

Neptune 124118-11-03 14:50 G 47054534.93 47054535.12 47054535.32 0.0088 0.0044

Neptune 124119-06-17 04:45 G 47054760.50 47054760.70 47054760.91 0.0088 0.0034

Neptune 124120-01-28 18:55 G 47054986.07 47054986.29 47054986.51 0.0088 0.0024

Neptune 124120-09-10 08:36 G 47055211.65 47055211.86 47055212.09 0.0089 0.0014

Jupiter 124120-09-18 10:45 G 47055219.76 47055219.95 47055220.14 0.0483 0.0214

Pluto 124121-02-26 21:48 G 47055381.30 47055381.41 47055381.56 0.0082 0.0067

Neptune 124121-04-23 22:31 G 47055437.22 47055437.44 47055437.67 0.0089 0.0005

Pluto 124121-10-10 09:48 G 47055606.69 47055606.91 47055607.14 0.0081 0.0010

Neptune 124121-12-05 12:26 G 47055662.80 47055663.02 47055663.25 0.0089 0.0006

Neptune 124122-07-19 02:07 G 47055888.38 47055888.59 47055888.82 0.0089 0.0016

Earth 124122-11-06 18:26 G 47055999.12 47055999.27 47055999.43 0.2701 0.0425

Moon 124122-11-06 20:07 G 47055999.19 47055999.34 47055999.50 0.2694 0.0873 *

Neptune 124123-03-01 16:02 G 47056113.97 47056114.17 47056114.40 0.0089 0.0026

Neptune 124123-10-13 05:57 G 47056339.55 47056339.75 47056339.96 0.0089 0.0036

Neptune 124124-05-25 19:24 G 47056565.14 47056565.31 47056565.52 0.0089 0.0046

Neptune 124125-01-06 09:33 G 47056790.73 47056790.90 47056791.08 0.0089 0.0055

Neptune 124125-08-19 23:14 G 47057016.33 47057016.47 47057016.63 0.0089 0.0065

Neptune 124126-04-02 12:55 G 47057241.94 47057242.04 47057242.18 0.0089 0.0075

Jupiter 124126-07-20 20:36 G 47057351.18 47057351.36 47057351.55 0.0545 0.0176

Saturn 124126-10-30 01:09 G 47057452.33 47057452.55 47057452.77 0.0282 0.0003

Neptune 124126-11-14 02:21 G 47057467.56 47057467.60 47057467.70 0.0089 0.0085

Uranus 124127-02-01 11:00 G 47057546.93 47057546.96 47057547.02 0.0135 0.0132

Uranus 124127-09-15 15:33 G 47057773.04 47057773.15 47057773.29 0.0135 0.0108

Mars 124128-02-29 22:31 G 47057940.31 47057940.44 47057940.57 0.1595 0.1049

Uranus 124128-04-28 20:07 G 47057999.19 47057999.34 47057999.53 0.0135 0.0084

Uranus 124128-12-11 01:09 G 47058225.36 47058225.55 47058225.74 0.0136 0.0059

Uranus 124129-07-25 05:43 G 47058451.55 47058451.74 47058451.96 0.0136 0.0035

Uranus 124130-03-08 10:45 G 47058677.73 47058677.95 47058678.16 0.0136 0.0010

Uranus 124130-10-20 15:19 G 47058903.93 47058904.14 47058904.35 0.0136 0.0015

Uranus 124131-06-03 19:53 G 47059130.14 47059130.33 47059130.54 0.0136 0.0040

Uranus 124132-01-16 00:41 G 47059356.35 47059356.53 47059356.73 0.0136 0.0065

Jupiter 124132-05-24 14:21 G 47059485.89 47059486.10 47059486.30 0.0483 0.0060

Uranus 124132-08-29 05:43 G 47059582.59 47059582.74 47059582.91 0.0136 0.0089

Uranus 124133-04-12 10:31 G 47059808.84 47059808.94 47059809.07 0.0136 0.0114

Jupiter 124138-03-25 10:02 G 47061616.74 47061616.92 47061617.11 0.0545 0.0214

Saturn 124141-04-12 04:02 G 47062730.47 47062730.67 47062730.87 0.0277 0.0064

Saturn 124141-11-27 07:53 G 47062959.76 47062959.83 47062959.92 0.0277 0.0255

Jupiter 124144-01-28 16:45 G 47063752.05 47063752.20 47063752.34 0.0483 0.0339

Saturn 124156-05-11 10:31 G 47068238.73 47068238.94 47068239.16 0.0282 0.0056

Jupiter 124156-05-26 19:53 G 47068254.20 47068254.33 47068254.46 0.0484 0.0374

Mars 124161-12-28 21:05 G 47070296.26 47070296.38 47070296.50 0.1590 0.1164

Jupiter 124162-03-28 11:00 G 47070385.82 47070385.96 47070386.10 0.0545 0.0385

Mars 124162-11-28 12:26 G 47070630.84 47070631.02 47070631.19 0.1945 0.0064

Jupiter 124168-01-30 23:57 G 47072520.29 47072520.50 47072520.70 0.0483 0.0102

Uranus 124169-03-25 04:02 G 47072939.58 47072939.67 47072939.77 0.0143 0.0128

Uranus 124169-11-06 17:00 G 47073166.05 47073166.21 47073166.37 0.0143 0.0098

Uranus 124170-06-21 05:43 G 47073392.55 47073392.74 47073392.94 0.0143 0.0068

Saturn 124170-10-23 12:12 G 47073516.81 47073517.01 47073517.22 0.0276 0.0011

Uranus 124171-02-02 18:41 G 47073619.07 47073619.28 47073619.50 0.0142 0.0038

Uranus 124171-09-17 07:38 G 47073845.60 47073845.82 47073846.04 0.0142 0.0007

Uranus 124172-04-30 20:07 G 47074072.13 47074072.34 47074072.57 0.0142 0.0024

Uranus 124172-12-13 08:50 G 47074298.67 47074298.87 47074299.08 0.0142 0.0053

Uranus 124173-07-27 21:19 G 47074525.22 47074525.39 47074525.58 0.0142 0.0083

Jupiter 124173-12-01 00:26 G 47074651.32 47074651.52 47074651.72 0.0545 0.0002

Uranus 124174-03-11 09:33 G 47074751.79 47074751.90 47074752.05 0.0142 0.0114

Uranus 124174-10-23 22:17 G 47074978.43 47074978.43 47074978.44 0.0142 0.0142

Jupiter 124179-10-06 02:36 G 47076786.42 47076786.61 47076786.81 0.0483 0.0177

Saturn 124185-04-05 17:43 G 47078795.16 47078795.24 47078795.32 0.0282 0.0260

Jupiter 124185-08-05 15:19 G 47078917.00 47078917.14 47078917.28 0.0546 0.0383

Saturn 124185-11-21 13:24 G 47079024.86 47079025.06 47079025.27 0.0282 0.0096

Jupiter 124191-06-11 05:43 G 47081052.68 47081052.74 47081052.82 0.0483 0.0451

Mars 124193-12-27 11:43 G 47081982.84 47081982.99 47081983.14 0.1593 0.0829

Neptune 124197-04-06 13:38 G 47083178.99 47083179.07 47083179.16 0.0089 0.0081

Neptune 124197-11-18 01:38 G 47083404.46 47083404.57 47083404.71 0.0089 0.0072

Neptune 124198-07-01 14:07 G 47083629.95 47083630.09 47083630.25 0.0089 0.0062

Neptune 124199-02-12 02:07 G 47083855.44 47083855.59 47083855.78 0.0089 0.0053

Neptune 124199-09-25 14:36 G 47084080.93 47084081.11 47084081.31 0.0089 0.0043

Saturn 124200-05-05 13:09 G 47084302.84 47084303.05 47084303.26 0.0277 0.0026

Neptune 124200-05-09 02:36 G 47084306.43 47084306.61 47084306.82 0.0089 0.0034

Neptune 124200-12-20 15:05 G 47084531.93 47084532.13 47084532.34 0.0089 0.0024

Neptune 124201-08-03 03:19 G 47084757.43 47084757.64 47084757.86 0.0089 0.0015

Neptune 124202-03-16 15:33 G 47084982.94 47084983.15 47084983.37 0.0089 0.0005

Neptune 124202-10-28 03:48 G 47085208.44 47085208.66 47085208.87 0.0089 0.0004

Neptune 124203-06-10 15:48 G 47085433.95 47085434.16 47085434.38 0.0089 0.0014

Jupiter 124203-10-09 08:50 G 47085554.69 47085554.87 47085555.04 0.0484 0.0259

Neptune 124204-01-22 03:48 G 47085659.46 47085659.66 47085659.88 0.0089 0.0024

Neptune 124204-09-03 16:17 G 47085884.99 47085885.18 47085885.39 0.0089 0.0033

Neptune 124205-04-17 04:17 G 47086110.50 47086110.68 47086110.88 0.0089 0.0043

Neptune 124205-11-28 16:31 G 47086336.03 47086336.19 47086336.37 0.0089 0.0052

Neptune 124206-07-12 04:31 G 47086561.55 47086561.69 47086561.86 0.0089 0.0062

Neptune 124207-02-22 16:45 G 47086787.09 47086787.20 47086787.35 0.0089 0.0071

Neptune 124207-10-06 05:14 G 47087012.64 47087012.72 47087012.82 0.0089 0.0080

Jupiter 124209-08-09 19:38 G 47087686.15 47087686.32 47087686.51 0.0545 0.0231

Uranus 124211-05-17 01:53 G 47088331.50 47088331.58 47088331.70 0.0135 0.0119

Uranus 124211-12-29 06:55 G 47088557.64 47088557.79 47088557.94 0.0135 0.0094

Uranus 124212-08-11 11:29 G 47088783.81 47088783.98 47088784.17 0.0136 0.0070

Uranus 124213-03-25 16:17 G 47089009.98 47089010.18 47089010.38 0.0136 0.0045

Uranus 124213-11-06 20:50 G 47089236.16 47089236.37 47089236.58 0.0136 0.0020

Uranus 124214-06-21 01:38 G 47089462.36 47089462.57 47089462.78 0.0136 0.0005

Saturn 124214-10-18 01:24 G 47089581.42 47089581.56 47089581.71 0.0282 0.0207

Uranus 124215-02-02 06:12 G 47089688.56 47089688.76 47089688.98 0.0136 0.0030

Saturn 124215-06-04 21:33 G 47089811.22 47089811.40 47089811.59 0.0282 0.0150

Jupiter 124215-06-14 12:12 G 47089820.80 47089821.01 47089821.22 0.0483 0.0016

Uranus 124215-09-16 11:14 G 47089914.77 47089914.97 47089915.16 0.0136 0.0054

Uranus 124216-04-29 15:48 G 47090141.00 47090141.16 47090141.34 0.0136 0.0079

Uranus 124216-12-11 20:36 G 47090367.24 47090367.36 47090367.51 0.0136 0.0104

Uranus 124217-07-26 01:53 G 47090593.52 47090593.58 47090593.66 0.0136 0.0128

Jupiter 124221-04-14 05:57 G 47091951.56 47091951.75 47091951.93 0.0545 0.0172

Jupiter 124227-02-17 16:02 G 47094087.00 47094087.17 47094087.34 0.0483 0.0289

Mars 124227-10-27 10:02 G 47094338.84 47094338.92 47094339.01 0.1590 0.1388

Earth 124228-05-13 05:00 G 47094537.57 47094537.71 47094537.86 0.2632 0.1235

Moon 124228-05-13 10:17 G 47094537.84 47094537.93 47094538.02 0.2636 0.2137 *

Mars 124228-09-25 13:53 G 47094672.93 47094673.08 47094673.23 0.1947 0.1018

Saturn 124229-03-31 17:43 G 47094860.13 47094860.24 47094860.35 0.0277 0.0236

Saturn 124229-11-15 21:19 G 47095089.20 47095089.39 47095089.59 0.0276 0.0081

Earth 124236-05-10 18:41 G 47097457.24 47097457.28 47097457.33 0.2630 0.2495

Moon 124236-05-10 23:00 G 47097457.36 47097457.46 47097457.56 0.2626 0.2138

Jupiter 124239-06-16 18:26 G 47098589.17 47098589.27 47098589.37 0.0484 0.0420

Saturn 124244-04-29 04:31 G 47100367.53 47100367.69 47100367.88 0.0282 0.0166

Saturn 124244-12-15 00:26 G 47100597.37 47100597.52 47100597.68 0.0282 0.0191

Jupiter 124245-04-17 12:41 G 47100720.93 47100721.03 47100721.15 0.0545 0.0453

Jupiter 124251-02-19 22:17 G 47102855.24 47102855.43 47102855.63 0.0483 0.0148

Uranus 124252-11-23 09:19 G 47103497.88 47103497.89 47103497.92 0.0143 0.0142

Uranus 124253-07-07 22:17 G 47103724.30 47103724.43 47103724.57 0.0143 0.0112

Uranus 124254-02-19 11:00 G 47103950.79 47103950.96 47103951.16 0.0143 0.0082

Uranus 124254-10-03 23:57 G 47104177.30 47104177.50 47104177.72 0.0142 0.0051

Uranus 124255-05-18 12:55 G 47104403.82 47104404.04 47104404.26 0.0142 0.0021

Uranus 124255-12-31 01:38 G 47104630.35 47104630.57 47104630.79 0.0142 0.0010

Uranus 124256-08-13 14:07 G 47104856.89 47104857.09 47104857.31 0.0142 0.0040

Jupiter 124256-12-21 02:36 G 47104986.42 47104986.61 47104986.81 0.0545 0.0068

Uranus 124257-03-28 02:36 G 47105083.43 47105083.61 47105083.82 0.0142 0.0071

Uranus 124257-11-09 15:05 G 47105309.99 47105310.13 47105310.30 0.0142 0.0100

Uranus 124258-06-24 03:48 G 47105536.57 47105536.66 47105536.75 0.0142 0.0129

Saturn 124258-10-11 17:29 G 47105646.10 47105646.23 47105646.38 0.0277 0.0205

Saturn 124259-05-28 21:33 G 47105875.21 47105875.40 47105875.59 0.0276 0.0113

Mars 124259-10-26 00:41 G 47106025.37 47106025.53 47106025.69 0.1593 0.0599

Jupiter 124262-10-26 01:09 G 47107121.35 47107121.55 47107121.75 0.0483 0.0131

Jupiter 124268-08-25 15:33 G 47109252.00 47109252.15 47109252.32 0.0545 0.0323

Saturn 124273-11-09 11:00 G 47111153.76 47111153.96 47111154.15 0.0282 0.0117

Saturn 124274-06-27 06:55 G 47111383.68 47111383.79 47111383.91 0.0282 0.0240

Jupiter 124274-07-01 04:17 G 47111387.58 47111387.68 47111387.80 0.0483 0.0404

Pluto 124278-05-09 02:07 G 47112795.42 47112795.59 47112795.78 0.0062 0.0035

Pluto 124278-12-20 05:29 G 47113020.51 47113020.73 47113020.95 0.0062 0.0003

Pluto 124279-08-02 08:21 G 47113245.67 47113245.85 47113246.05 0.0062 0.0031

Neptune 124280-08-17 17:14 G 47113627.17 47113627.22 47113627.30 0.0088 0.0084

Neptune 124281-03-31 06:55 G 47113852.69 47113852.79 47113852.93 0.0088 0.0074

Neptune 124281-11-11 20:50 G 47114078.23 47114078.37 47114078.54 0.0088 0.0065

Neptune 124282-06-25 10:45 G 47114303.79 47114303.95 47114304.14 0.0088 0.0055

Neptune 124283-02-06 00:55 G 47114529.35 47114529.54 47114529.74 0.0088 0.0045

Neptune 124283-09-19 14:50 G 47114754.92 47114755.12 47114755.33 0.0088 0.0035

Neptune 124284-05-02 04:31 G 47114980.48 47114980.69 47114980.92 0.0088 0.0025

Neptune 124284-12-13 18:26 G 47115206.05 47115206.27 47115206.50 0.0088 0.0015

Neptune 124285-07-27 08:21 G 47115431.63 47115431.85 47115432.08 0.0089 0.0006

Neptune 124286-03-09 22:31 G 47115657.21 47115657.44 47115657.66 0.0089 0.0005

Neptune 124286-10-21 12:12 G 47115882.79 47115883.01 47115883.24 0.0089 0.0015

Jupiter 124286-10-28 08:36 G 47115889.70 47115889.86 47115890.02 0.0483 0.0311

Neptune 124287-06-04 01:53 G 47116108.38 47116108.58 47116108.81 0.0089 0.0025

Neptune 124288-01-15 15:48 G 47116333.96 47116334.16 47116334.38 0.0089 0.0035

Saturn 124288-04-23 01:53 G 47116432.41 47116432.58 47116432.76 0.0277 0.0149

Neptune 124288-08-28 05:29 G 47116559.55 47116559.73 47116559.94 0.0089 0.0045

Saturn 124288-12-08 05:29 G 47116661.57 47116661.73 47116661.90 0.0276 0.0168

Neptune 124289-04-10 19:38 G 47116785.15 47116785.32 47116785.50 0.0089 0.0054

Neptune 124289-11-22 09:19 G 47117010.75 47117010.89 47117011.06 0.0089 0.0064

Neptune 124290-07-05 23:00 G 47117236.35 47117236.46 47117236.60 0.0089 0.0074

Neptune 124291-02-16 12:41 G 47117461.98 47117462.03 47117462.13 0.0089 0.0084

Jupiter 124292-08-28 17:14 G 47118021.05 47118021.22 47118021.39 0.0545 0.0280

Uranus 124295-01-14 12:12 G 47118889.96 47118890.01 47118890.08 0.0135 0.0130

Uranus 124295-08-28 16:45 G 47119116.08 47119116.20 47119116.35 0.0135 0.0105

Uranus 124296-04-10 21:33 G 47119342.24 47119342.40 47119342.58 0.0136 0.0081

Uranus 124296-11-23 02:21 G 47119568.40 47119568.60 47119568.79 0.0136 0.0056

Uranus 124297-07-07 06:55 G 47119794.59 47119794.79 47119795.00 0.0136 0.0031

Uranus 124298-02-18 11:43 G 47120020.78 47120020.99 47120021.20 0.0136 0.0006

Jupiter 124298-07-03 11:29 G 47120155.78 47120155.98 47120156.19 0.0483 0.0035

Uranus 124298-10-02 16:17 G 47120246.98 47120247.18 47120247.40 0.0136 0.0019

Uranus 124299-05-16 20:50 G 47120473.18 47120473.37 47120473.59 0.0136 0.0044

Uranus 124299-12-29 01:53 G 47120699.40 47120699.58 47120699.77 0.0136 0.0068

Uranus 124300-08-12 06:55 G 47120925.64 47120925.79 47120925.95 0.0136 0.0093

Uranus 124301-03-26 11:43 G 47121151.90 47121151.99 47121152.11 0.0136 0.0118

Saturn 124303-05-23 14:21 G 47121939.89 47121940.10 47121940.31 0.0282 0.0075

Saturn 124304-01-08 10:17 G 47122169.92 47122169.93 47122169.94 0.0283 0.0282

Jupiter 124304-05-04 07:53 G 47122286.64 47122286.83 47122287.03 0.0546 0.0104

Jupiter 124310-03-09 15:05 G 47124421.96 47124422.13 47124422.32 0.0483 0.0240

Jupiter 124316-01-07 22:31 G 47126552.36 47126552.44 47126552.53 0.0545 0.0485

Saturn 124317-11-04 01:24 G 47127218.38 47127218.56 47127218.75 0.0276 0.0119

Saturn 124318-06-21 05:00 G 47127447.57 47127447.71 47127447.86 0.0276 0.0198

Jupiter 124322-07-06 17:43 G 47128924.19 47128924.24 47128924.29 0.0484 0.0470

Mars 124325-08-23 13:38 G 47130067.90 47130068.07 47130068.24 0.1592 0.0379

Jupiter 124328-05-07 13:53 G 47131056.02 47131056.08 47131056.14 0.0544 0.0516

Saturn 124332-12-02 19:09 G 47132726.09 47132726.30 47132726.52 0.0282 0.0031

Jupiter 124334-03-11 21:48 G 47133190.22 47133190.41 47133190.60 0.0483 0.0199

Uranus 124337-03-08 03:19 G 47134282.54 47134282.64 47134282.75 0.0143 0.0126

Uranus 124337-10-20 16:02 G 47134509.01 47134509.17 47134509.34 0.0143 0.0096

Uranus 124338-06-04 04:45 G 47134735.52 47134735.70 47134735.91 0.0142 0.0066

Uranus 124339-01-16 17:57 G 47134962.04 47134962.25 47134962.47 0.0142 0.0035

Uranus 124339-08-31 06:41 G 47135188.56 47135188.78 47135189.01 0.0142 0.0005

Jupiter 124340-01-10 23:29 G 47135321.28 47135321.48 47135321.67 0.0545 0.0114

Uranus 124340-04-13 19:24 G 47135415.09 47135415.31 47135415.53 0.0142 0.0026

Uranus 124340-11-26 07:53 G 47135641.63 47135641.83 47135642.04 0.0142 0.0057

Uranus 124341-07-10 20:36 G 47135868.19 47135868.36 47135868.54 0.0142 0.0087

Uranus 124342-02-22 09:05 G 47136094.76 47136094.88 47136095.01 0.0142 0.0116

Jupiter 124345-11-15 01:53 G 47137456.37 47137456.58 47137456.78 0.0483 0.0075

Saturn 124347-05-17 09:19 G 47138004.69 47138004.89 47138005.09 0.0277 0.0064

Saturn 124348-01-01 12:41 G 47138233.96 47138234.03 47138234.13 0.0276 0.0253

Jupiter 124351-09-15 12:55 G 47139586.87 47139587.04 47139587.21 0.0545 0.0275

Jupiter 124357-07-21 04:31 G 47141722.55 47141722.69 47141722.84 0.0483 0.0353

Neptune 124361-07-11 01:24 G 47143173.49 47143173.56 47143173.64 0.0089 0.0082

Neptune 124362-02-21 13:24 G 47143398.95 47143399.06 47143399.19 0.0089 0.0073

Saturn 124362-06-14 23:00 G 47143512.25 47143512.46 47143512.68 0.0282 0.0014

Neptune 124362-10-05 01:24 G 47143624.43 47143624.56 47143624.73 0.0089 0.0064

Neptune 124363-05-18 13:53 G 47143849.92 47143850.08 47143850.26 0.0089 0.0054

Neptune 124363-12-30 01:53 G 47144075.42 47144075.58 47144075.79 0.0089 0.0045

Neptune 124364-08-11 14:36 G 47144300.92 47144301.11 47144301.31 0.0089 0.0035

Neptune 124365-03-25 02:36 G 47144526.42 47144526.61 47144526.83 0.0089 0.0026

Neptune 124365-11-05 14:50 G 47144751.92 47144752.12 47144752.34 0.0089 0.0016

Moon 124365-11-08 15:48 G 47144755.00 47144755.16 47144755.32 0.2703 0.0109

Earth 124365-11-08 21:19 G 47144755.24 47144755.39 47144755.54 0.2703 0.0433 *

Neptune 124366-06-19 03:05 G 47144977.42 47144977.63 47144977.85 0.0089 0.0007

Neptune 124367-01-30 15:19 G 47145202.93 47145203.14 47145203.36 0.0089 0.0003

Neptune 124367-09-13 03:33 G 47145428.44 47145428.65 47145428.87 0.0089 0.0013

Neptune 124368-04-25 15:48 G 47145653.95 47145654.16 47145654.37 0.0089 0.0022

Neptune 124368-12-07 03:48 G 47145879.47 47145879.66 47145879.87 0.0089 0.0032

Neptune 124369-07-20 15:48 G 47146104.98 47146105.16 47146105.37 0.0089 0.0042

Pluto 124369-09-14 01:53 G 47146160.44 47146160.58 47146160.74 0.0082 0.0061

Jupiter 124369-11-17 08:07 G 47146224.70 47146224.84 47146224.98 0.0483 0.0361

Neptune 124370-03-03 04:02 G 47146330.51 47146330.67 47146330.86 0.0089 0.0051

Pluto 124370-04-27 13:38 G 47146385.86 47146386.07 47146386.30 0.0081 0.0016

Neptune 124370-10-14 16:31 G 47146556.03 47146556.19 47146556.35 0.0089 0.0060

Neptune 124371-05-28 04:17 G 47146781.57 47146781.68 47146781.83 0.0089 0.0070

Neptune 124372-01-08 16:31 G 47147007.11 47147007.19 47147007.30 0.0089 0.0079

Neptune 124372-08-21 04:45 G 47147232.70 47147232.70 47147232.74 0.0089 0.0088

Jupiter 124375-09-18 20:50 G 47148356.22 47148356.37 47148356.52 0.0545 0.0355

Saturn 124376-11-26 08:36 G 47148790.66 47148790.86 47148791.07 0.0276 0.0036

Uranus 124379-04-29 02:50 G 47149674.53 47149674.62 47149674.74 0.0135 0.0117

Uranus 124379-12-11 07:38 G 47149900.67 47149900.82 47149900.98 0.0135 0.0092

Uranus 124380-07-24 12:12 G 47150126.84 47150127.01 47150127.21 0.0136 0.0068

Uranus 124381-03-07 17:00 G 47150353.02 47150353.21 47150353.42 0.0136 0.0043

Jupiter 124381-07-23 11:00 G 47150490.76 47150490.96 47150491.17 0.0483 0.0086

Uranus 124381-10-19 21:48 G 47150579.20 47150579.41 47150579.63 0.0136 0.0018

Uranus 124382-06-03 02:36 G 47150805.40 47150805.61 47150805.82 0.0136 0.0008

Uranus 124383-01-15 07:09 G 47151031.60 47151031.80 47151032.02 0.0136 0.0033

Uranus 124383-08-29 12:12 G 47151257.82 47151258.01 47151258.21 0.0136 0.0058

Uranus 124384-04-11 17:00 G 47151484.05 47151484.21 47151484.39 0.0136 0.0083

Uranus 124384-11-23 22:17 G 47151710.30 47151710.43 47151710.56 0.0136 0.0107

Uranus 124385-07-08 03:05 G 47151936.59 47151936.63 47151936.69 0.0136 0.0132

Jupiter 124387-05-24 10:02 G 47152621.72 47152621.92 47152622.12 0.0545 0.0035

Mars 124391-06-21 02:36 G 47154110.43 47154110.61 47154110.78 0.1591 0.0152

Saturn 124391-12-26 02:21 G 47154298.39 47154298.60 47154298.82 0.0282 0.0053

Jupiter 124393-03-28 15:05 G 47154756.94 47154757.13 47154757.32 0.0483 0.0188

Jupiter 124399-01-26 19:53 G 47156887.21 47156887.33 47156887.45 0.0545 0.0438

Jupiter 124404-12-01 18:41 G 47159023.23 47159023.28 47159023.34 0.0483 0.0462

Saturn 124406-06-08 16:17 G 47159576.97 47159577.18 47159577.38 0.0277 0.0019

Jupiter 124417-03-30 22:02 G 47163525.24 47163525.42 47163525.60 0.0483 0.0251

Uranus 124420-11-05 08:07 G 47164840.81 47164840.84 47164840.89 0.0142 0.0140

Saturn 124420-11-19 11:14 G 47164854.89 47164854.97 47164855.06 0.0282 0.0256

Uranus 124421-06-19 21:05 G 47165067.25 47165067.38 47165067.53 0.0142 0.0110

Saturn 124421-07-07 07:09 G 47165084.60 47165084.80 47165085.00 0.0282 0.0100

Uranus 124422-02-01 10:02 G 47165293.74 47165293.92 47165294.11 0.0142 0.0079

Uranus 124422-09-15 23:00 G 47165520.25 47165520.46 47165520.67 0.0142 0.0049

Jupiter 124423-01-30 01:53 G 47165656.39 47165656.58 47165656.77 0.0546 0.0184

Uranus 124423-04-30 11:43 G 47165746.77 47165746.99 47165747.21 0.0142 0.0018

Uranus 124423-12-13 00:26 G 47165973.30 47165973.52 47165973.74 0.0142 0.0012

Uranus 124424-07-26 12:55 G 47166199.84 47166200.04 47166200.26 0.0142 0.0043

Uranus 124425-03-10 01:38 G 47166426.39 47166426.57 47166426.77 0.0142 0.0073

Uranus 124425-10-22 14:07 G 47166652.95 47166653.09 47166653.25 0.0142 0.0103

Uranus 124426-06-06 02:36 G 47166879.55 47166879.61 47166879.70 0.0142 0.0133

Jupiter 124428-12-04 01:38 G 47167791.36 47167791.57 47167791.78 0.0483 0.0024

Jupiter 124434-10-04 17:00 G 47169922.02 47169922.21 47169922.39 0.0545 0.0199

Saturn 124435-05-04 11:14 G 47170133.94 47170133.97 47170134.03 0.0277 0.0270

Saturn 124435-12-19 15:19 G 47170362.94 47170363.14 47170363.34 0.0276 0.0047

Jupiter 124440-08-09 04:17 G 47172057.52 47172057.68 47172057.85 0.0483 0.0301

Neptune 124444-11-20 03:33 G 47173621.59 47173621.65 47173621.71 0.0088 0.0085

Neptune 124445-07-03 16:45 G 47173847.11 47173847.20 47173847.34 0.0088 0.0076

Neptune 124446-02-14 06:55 G 47174072.66 47174072.79 47174072.96 0.0088 0.0066

Neptune 124446-09-27 21:05 G 47174298.21 47174298.38 47174298.56 0.0088 0.0056

Neptune 124447-05-11 10:31 G 47174523.77 47174523.94 47174524.15 0.0088 0.0046

Neptune 124447-12-23 00:26 G 47174749.33 47174749.52 47174749.74 0.0088 0.0036

Neptune 124448-08-04 14:21 G 47174974.90 47174975.10 47174975.33 0.0088 0.0027

Neptune 124449-03-18 04:31 G 47175200.47 47175200.69 47175200.91 0.0088 0.0016

Neptune 124449-10-29 18:26 G 47175426.05 47175426.27 47175426.49 0.0089 0.0007

Saturn 124450-06-01 13:24 G 47175640.93 47175641.06 47175641.20 0.0282 0.0220

Neptune 124450-06-12 08:21 G 47175651.62 47175651.85 47175652.07 0.0089 0.0004

Saturn 124451-01-17 09:33 G 47175870.71 47175870.90 47175871.09 0.0282 0.0137

Neptune 124451-01-23 22:02 G 47175877.21 47175877.42 47175877.65 0.0089 0.0014

Neptune 124451-09-06 11:57 G 47176102.79 47176103.00 47176103.22 0.0089 0.0023

Neptune 124452-04-19 01:38 G 47176328.38 47176328.57 47176328.80 0.0089 0.0034

Neptune 124452-11-30 15:19 G 47176553.97 47176554.14 47176554.36 0.0089 0.0044

Jupiter 124452-12-06 08:21 G 47176559.75 47176559.85 47176559.96 0.0484 0.0417

Neptune 124453-07-14 05:43 G 47176779.56 47176779.74 47176779.92 0.0089 0.0053

Neptune 124454-02-24 19:24 G 47177005.17 47177005.31 47177005.48 0.0089 0.0063

Neptune 124454-10-08 09:19 G 47177230.78 47177230.89 47177231.03 0.0089 0.0073

Neptune 124455-05-21 22:45 G 47177456.40 47177456.45 47177456.56 0.0089 0.0083

Mars 124457-04-17 16:02 G 47178152.99 47178153.17 47178153.34 0.1590 0.0072

Mars 124458-03-17 23:29 G 47178487.34 47178487.48 47178487.62 0.1946 0.1144

Jupiter 124458-10-07 18:26 G 47178691.14 47178691.27 47178691.40 0.0545 0.0405

Uranus 124462-12-27 12:41 G 47180232.98 47180233.03 47180233.11 0.0135 0.0128

Uranus 124463-08-10 17:14 G 47180459.11 47180459.22 47180459.38 0.0136 0.0104

Uranus 124464-03-23 22:02 G 47180685.26 47180685.42 47180685.61 0.0136 0.0079

Jupiter 124464-08-11 12:26 G 47180825.83 47180826.02 47180826.22 0.0483 0.0144

Uranus 124464-11-05 02:50 G 47180911.43 47180911.62 47180911.82 0.0136 0.0054

Saturn 124464-11-13 18:41 G 47180920.16 47180920.28 47180920.41 0.0277 0.0216

Uranus 124465-06-19 07:38 G 47181137.62 47181137.82 47181138.03 0.0136 0.0029

Saturn 124465-06-30 22:31 G 47181149.26 47181149.44 47181149.64 0.0277 0.0102

Uranus 124466-01-31 12:26 G 47181363.81 47181364.02 47181364.23 0.0136 0.0004

Uranus 124466-09-14 17:14 G 47181590.01 47181590.22 47181590.43 0.0136 0.0022

Uranus 124467-04-28 22:02 G 47181816.22 47181816.42 47181816.62 0.0136 0.0047

Uranus 124467-12-11 02:50 G 47182042.45 47182042.62 47182042.81 0.0136 0.0072

Uranus 124468-07-24 07:53 G 47182268.69 47182268.83 47182268.99 0.0136 0.0097

Uranus 124469-03-07 12:55 G 47182494.96 47182495.04 47182495.15 0.0136 0.0122

Jupiter 124470-06-12 07:24 G 47182956.61 47182956.81 47182957.00 0.0545 0.0019

Moon 124471-05-15 02:21 G 47183293.44 47183293.60 47183293.76 0.2624 0.0863

Earth 124471-05-15 04:31 G 47183293.54 47183293.69 47183293.84 0.2631 0.1109 *

Jupiter 124476-04-16 15:33 G 47185091.95 47185092.15 47185092.35 0.0483 0.0135

Earth 124479-05-12 18:26 G 47186213.25 47186213.27 47186213.29 0.2629 0.2603

Saturn 124479-12-12 19:09 G 47186427.13 47186427.30 47186427.48 0.0282 0.0170

Saturn 124480-07-29 14:50 G 47186656.97 47186657.12 47186657.29 0.0282 0.0186

Jupiter 124482-02-14 21:48 G 47187222.27 47187222.41 47187222.56 0.0546 0.0371

Jupiter 124487-12-21 18:55 G 47189358.18 47189358.29 47189358.40 0.0483 0.0410

Saturn 124494-05-26 18:12 G 47191706.12 47191706.26 47191706.42 0.0277 0.0187

Saturn 124495-01-10 22:02 G 47191935.24 47191935.42 47191935.61 0.0276 0.0130

Jupiter 124500-04-19 21:48 G 47193860.25 47193860.41 47193860.58 0.0483 0.0304

Uranus 124505-02-18 02:07 G 47195625.49 47195625.59 47195625.71 0.0142 0.0124

Uranus 124505-10-02 14:50 G 47195851.97 47195852.12 47195852.30 0.0142 0.0094

Jupiter 124506-02-19 04:45 G 47195991.53 47195991.70 47195991.88 0.0545 0.0257

Uranus 124506-05-17 04:02 G 47196078.47 47196078.67 47196078.87 0.0142 0.0063

Uranus 124506-12-29 16:45 G 47196304.98 47196305.20 47196305.42 0.0142 0.0032

Uranus 124507-08-13 05:29 G 47196531.51 47196531.73 47196531.96 0.0142 0.0004

Uranus 124508-03-26 18:12 G 47196758.05 47196758.26 47196758.48 0.0142 0.0030

Uranus 124508-11-08 06:41 G 47196984.59 47196984.78 47196984.99 0.0142 0.0060

Uranus 124509-06-22 19:24 G 47197211.15 47197211.31 47197211.49 0.0142 0.0090

Saturn 124509-06-24 20:36 G 47197213.18 47197213.36 47197213.55 0.0282 0.0136

Uranus 124510-02-04 08:07 G 47197437.73 47197437.84 47197437.96 0.0142 0.0120

Saturn 124510-02-09 16:45 G 47197443.07 47197443.20 47197443.34 0.0282 0.0220

Jupiter 124511-12-25 01:53 G 47198126.38 47198126.58 47198126.79 0.0483 0.0033

Jupiter 124517-10-24 14:50 G 47200256.93 47200257.12 47200257.31 0.0545 0.0148

Mars 124523-02-14 04:45 G 47202195.52 47202195.70 47202195.87 0.1590 0.0292

Jupiter 124523-08-30 05:43 G 47202392.56 47202392.74 47202392.92 0.0483 0.0245

Saturn 124523-12-08 00:55 G 47202492.37 47202492.54 47202492.73 0.0277 0.0134

Mars 124524-01-14 01:24 G 47202529.39 47202529.56 47202529.73 0.1947 0.0199

Saturn 124524-07-24 05:00 G 47202721.56 47202721.71 47202721.87 0.0277 0.0184

Neptune 124525-10-13 13:24 G 47203167.99 47203168.06 47203168.13 0.0089 0.0083

Neptune 124526-05-27 01:09 G 47203393.45 47203393.55 47203393.68 0.0089 0.0074

Pluto 124526-11-24 04:45 G 47203574.54 47203574.70 47203574.89 0.0062 0.0036

Neptune 124527-01-07 13:09 G 47203618.93 47203619.05 47203619.22 0.0089 0.0065

Pluto 124527-07-07 08:21 G 47203799.63 47203799.85 47203800.07 0.0062 0.0003

Neptune 124527-08-21 01:53 G 47203844.42 47203844.58 47203844.76 0.0089 0.0055

Pluto 124528-02-17 11:14 G 47204024.79 47204024.97 47204025.17 0.0062 0.0030

Neptune 124528-04-02 13:53 G 47204069.91 47204070.08 47204070.28 0.0089 0.0046

Neptune 124528-11-14 02:21 G 47204295.41 47204295.60 47204295.80 0.0089 0.0036

Neptune 124529-06-27 14:21 G 47204520.91 47204521.10 47204521.32 0.0089 0.0027

Jupiter 124529-06-29 03:48 G 47204522.64 47204522.66 47204522.70 0.0545 0.0537

Neptune 124530-02-08 02:50 G 47204746.41 47204746.62 47204746.84 0.0089 0.0017

Neptune 124530-09-21 15:05 G 47204971.92 47204972.13 47204972.35 0.0089 0.0008

Neptune 124531-05-05 03:33 G 47205197.43 47205197.65 47205197.86 0.0089 0.0003

Neptune 124531-12-16 15:33 G 47205422.94 47205423.15 47205423.37 0.0089 0.0012

Neptune 124532-07-29 03:33 G 47205648.45 47205648.65 47205648.87 0.0089 0.0022

Neptune 124533-03-11 15:48 G 47205873.97 47205874.16 47205874.37 0.0089 0.0031

Neptune 124533-10-23 03:48 G 47206099.49 47206099.66 47206099.87 0.0089 0.0041

Neptune 124534-06-05 16:17 G 47206325.01 47206325.18 47206325.36 0.0089 0.0050

Neptune 124535-01-17 04:02 G 47206550.53 47206550.67 47206550.85 0.0089 0.0060

Neptune 124535-08-30 16:31 G 47206776.07 47206776.19 47206776.34 0.0089 0.0069

Jupiter 124535-12-27 08:21 G 47206894.80 47206894.85 47206894.90 0.0483 0.0467

Neptune 124536-04-12 05:00 G 47207001.61 47207001.71 47207001.81 0.0089 0.0078

Neptune 124536-11-23 16:31 G 47207227.18 47207227.19 47207227.25 0.0089 0.0088

Saturn   124539-01-05 03:48 G 47207999.46 47207999.66 47207999.87 0.0282 0.0082

Saturn   124539-08-22 23:29 G 47208229.44 47208229.48 47208229.54 0.0282 0.0273

Jupiter 124541-10-27 20:21 G 47209026.25 47209026.35 47209026.44 0.0545 0.0473

Uranus   124547-04-11 03:19 G 47211017.54 47211017.64 47211017.77 0.0136 0.0114

Jupiter 124547-09-01 12:12 G 47211160.82 47211161.01 47211161.20 0.0483 0.0193

Uranus   124547-11-23 08:07 G 47211243.69 47211243.84 47211244.01 0.0136 0.0090

Uranus   124548-07-06 12:55 G 47211469.86 47211470.04 47211470.23 0.0136 0.0065

Uranus   124549-02-17 17:43 G 47211696.04 47211696.24 47211696.45 0.0136 0.0040

Uranus   124549-10-01 22:31 G 47211922.23 47211922.44 47211922.65 0.0136 0.0014

Uranus   124550-05-16 03:19 G 47212148.43 47212148.64 47212148.85 0.0136 0.0011

Uranus   124550-12-28 08:07 G 47212374.64 47212374.84 47212375.05 0.0136 0.0036

Uranus   124551-08-11 13:09 G 47212600.86 47212601.05 47212601.24 0.0136 0.0061

Uranus   124552-03-24 17:43 G 47212827.10 47212827.24 47212827.42 0.0136 0.0087

Uranus   124552-11-05 22:45 G 47213053.35 47213053.45 47213053.59 0.0136 0.0112

Saturn   124553-06-19 01:09 G 47213278.36 47213278.55 47213278.75 0.0277 0.0103

Jupiter 124553-07-02 11:00 G 47213291.77 47213291.96 47213292.16 0.0546 0.0090

Saturn   124554-02-03 05:00 G 47213507.59 47213507.71 47213507.85 0.0276 0.0214

Jupiter 124559-05-07 15:19 G 47215426.93 47215427.14 47215427.34 0.0483 0.0084

Jupiter 124565-03-07 00:55 G 47217557.38 47217557.54 47217557.71 0.0545 0.0298

Saturn 124568-07-17 04:45 G 47218785.48 47218785.70 47218785.91 0.0282 0.0050

Jupiter 124571-01-10 18:41 G 47219693.15 47219693.28 47219693.43 0.0483 0.0359

Saturn 124582-12-30 07:53 G 47224064.63 47224064.83 47224065.03 0.0277 0.0050

Jupiter 124583-05-09 22:45 G 47224195.32 47224195.45 47224195.59 0.0484 0.0359

Saturn 124583-08-16 11:57 G 47224293.96 47224294.00 47224294.06 0.0277 0.0267

Uranus 124588-10-18 07:09 G 47226183.76 47226183.80 47226183.88 0.0142 0.0138

Mars 124588-12-11 17:57 G 47226238.09 47226238.25 47226238.42 0.1589 0.0501

Jupiter 124589-03-10 01:38 G 47226326.41 47226326.57 47226326.74 0.0545 0.0303

Uranus 124589-06-01 20:07 G 47226410.21 47226410.34 47226410.50 0.0142 0.0107

Mars 124589-11-10 02:21 G 47226571.44 47226571.60 47226571.76 0.1948 0.0800

Uranus 124590-01-14 09:19 G 47226636.71 47226636.89 47226637.08 0.0142 0.0076

Uranus 124590-08-28 22:17 G 47226863.22 47226863.43 47226863.64 0.0142 0.0046

Uranus 124591-04-12 11:00 G 47227089.74 47227089.96 47227090.18 0.0142 0.0015

Uranus 124591-11-24 23:43 G 47227316.27 47227316.49 47227316.71 0.0142 0.0016

Uranus 124592-07-08 12:12 G 47227542.81 47227543.01 47227543.23 0.0142 0.0047

Uranus 124593-02-20 01:09 G 47227769.37 47227769.55 47227769.74 0.0142 0.0077

Uranus 124593-10-04 13:53 G 47227995.94 47227996.08 47227996.22 0.0142 0.0107

Uranus 124594-05-19 02:21 G 47228222.55 47228222.60 47228222.65 0.0142 0.0137

Jupiter 124595-01-13 01:38 G 47228461.37 47228461.57 47228461.78 0.0483 0.0080

Saturn 124598-01-27 13:24 G 47229571.84 47229572.06 47229572.27 0.0282 0.0009

Jupiter 124600-11-13 15:48 G 47230591.96 47230592.16 47230592.35 0.0546 0.0087

Jupiter 124606-09-19 05:14 G 47232727.53 47232727.72 47232727.91 0.0483 0.0196

Earth 124608-11-10 23:43 G 47233511.34 47233511.49 47233511.65 0.2704 0.0404

Moon 124608-11-11 05:14 G 47233511.57 47233511.72 47233511.87 0.2702 0.0657 *

Neptune 124609-02-23 13:09 G 47233616.03 47233616.05 47233616.13 0.0088 0.0087

Neptune 124609-10-07 03:19 G 47233841.55 47233841.64 47233841.77 0.0088 0.0077

Neptune 124610-05-20 17:14 G 47234067.09 47234067.22 47234067.38 0.0088 0.0067

Neptune 124611-01-01 07:09 G 47234292.64 47234292.80 47234292.98 0.0088 0.0057

Neptune 124611-08-14 20:50 G 47234518.20 47234518.37 47234518.58 0.0088 0.0047

Neptune 124612-03-27 10:45 G 47234743.76 47234743.95 47234744.17 0.0088 0.0038

Saturn 124612-07-12 08:50 G 47234850.66 47234850.87 47234851.08 0.0277 0.0017

Jupiter 124612-07-19 06:40 G 47234857.69 47234857.78 47234857.89 0.0545 0.0468

Neptune 124612-11-08 00:40 G 47234969.33 47234969.53 47234969.75 0.0088 0.0028

Neptune 124613-06-21 14:36 G 47235194.89 47235195.11 47235195.34 0.0089 0.0018

Neptune 124614-02-02 04:31 G 47235420.47 47235420.69 47235420.92 0.0089 0.0008

Neptune 124614-09-15 18:26 G 47235646.05 47235646.27 47235646.50 0.0089 0.0003

Neptune 124615-04-29 08:07 G 47235871.63 47235871.84 47235872.07 0.0089 0.0013

Neptune 124615-12-10 21:48 G 47236097.21 47236097.41 47236097.64 0.0089 0.0023

Neptune 124616-07-23 11:57 G 47236322.79 47236323.00 47236323.21 0.0089 0.0032

Neptune 124617-03-06 01:52 G 47236548.39 47236548.58 47236548.78 0.0089 0.0042

Neptune 124617-10-17 15:33 G 47236773.98 47236774.15 47236774.35 0.0089 0.0052

Pluto 124618-04-01 03:19 G 47236939.52 47236939.64 47236939.80 0.0082 0.0064

Jupiter 124618-05-25 07:38 G 47236993.79 47236993.82 47236993.86 0.0483 0.0474

Neptune 124618-05-31 05:14 G 47236999.58 47236999.72 47236999.90 0.0089 0.0062

Pluto 124618-11-12 15:33 G 47237164.93 47237165.15 47237165.38 0.0081 0.0013

Neptune 124619-01-11 19:09 G 47237225.19 47237225.30 47237225.45 0.0089 0.0072

Neptune 124619-08-25 08:50 G 47237450.81 47237450.87 47237450.98 0.0089 0.0082

Mars 124620-12-11 08:36 G 47237924.80 47237924.86 47237924.92 0.1592 0.1492

Jupiter 124624-11-16 23:00 G 47239361.45 47239361.46 47239361.47 0.0545 0.0544

Saturn 124627-08-10 14:07 G 47240357.88 47240358.09 47240358.31 0.0282 0.0041

Jupiter 124630-09-21 11:57 G 47241495.82 47241496.00 47241496.18 0.0483 0.0246

Uranus 124630-12-10 12:40 G 47241575.97 47241576.03 47241576.12 0.0136 0.0126

Uranus 124631-07-24 17:43 G 47241802.11 47241802.24 47241802.39 0.0136 0.0101

Uranus 124632-03-06 22:16 G 47242028.27 47242028.43 47242028.62 0.0136 0.0076

Uranus 124632-10-19 03:19 G 47242254.44 47242254.64 47242254.83 0.0136 0.0051

Uranus 124633-06-02 07:52 G 47242480.63 47242480.83 47242481.04 0.0136 0.0026

Uranus 124634-01-14 12:40 G 47242706.82 47242707.03 47242707.25 0.0136 0.0003

Uranus 124634-08-28 17:43 G 47242933.03 47242933.24 47242933.45 0.0136 0.0025

Uranus 124635-04-11 22:45 G 47243159.25 47243159.45 47243159.64 0.0136 0.0050

Uranus 124635-11-24 03:19 G 47243385.48 47243385.64 47243385.83 0.0136 0.0076

Uranus 124636-07-07 08:21 G 47243611.72 47243611.85 47243612.01 0.0136 0.0101

Jupiter 124636-07-22 09:04 G 47243626.69 47243626.88 47243627.07 0.0545 0.0140

Uranus 124637-02-18 13:38 G 47243838.00 47243838.07 47243838.15 0.0136 0.0126

Saturn 124642-01-22 14:50 G 47245636.92 47245637.12 47245637.33 0.0277 0.0035

Jupiter 124642-05-27 15:19 G 47245761.94 47245762.14 47245762.35 0.0484 0.0034

Jupiter 124648-03-26 21:48 G 47247892.23 47247892.41 47247892.59 0.0545 0.0254

Jupiter 124654-01-30 17:57 G 47250028.09 47250028.25 47250028.41 0.0483 0.0312

Mars 124654-10-10 06:55 G 47250280.64 47250280.79 47250280.95 0.1588 0.0725

Mars 124655-09-08 03:48 G 47250613.59 47250613.66 47250613.74 0.1950 0.1760

Saturn 124656-07-05 04:02 G 47250914.58 47250914.67 47250914.77 0.0281 0.0251

Saturn 124657-02-19 23:57 G 47251144.30 47251144.50 47251144.70 0.0282 0.0102

Jupiter 124666-05-29 21:33 G 47254530.29 47254530.40 47254530.51 0.0483 0.0405

Saturn 124670-12-18 12:55 G 47256193.95 47256194.04 47256194.13 0.0277 0.0246

Saturn 124671-08-04 17:14 G 47256423.02 47256423.22 47256423.42 0.0277 0.0071

Jupiter 124672-03-30 04:02 G 47256661.53 47256661.67 47256661.82 0.0545 0.0373

Uranus 124673-01-31 01:52 G 47256968.47 47256968.58 47256968.70 0.0142 0.0121

Uranus 124673-09-14 14:36 G 47257194.95 47257195.11 47257195.29 0.0142 0.0090

Uranus 124674-04-29 03:33 G 47257421.45 47257421.65 47257421.86 0.0142 0.0059

Uranus 124674-12-11 16:31 G 47257647.97 47257648.19 47257648.41 0.0142 0.0029

Uranus 124675-07-26 05:14 G 47257874.50 47257874.72 47257874.94 0.0142 0.0002

Uranus 124676-03-08 17:57 G 47258101.04 47258101.25 47258101.47 0.0142 0.0034

Uranus 124676-10-21 06:40 G 47258327.58 47258327.78 47258327.98 0.0142 0.0064

Uranus 124677-06-04 18:55 G 47258554.14 47258554.29 47258554.47 0.0142 0.0095

Uranus 124678-01-17 07:38 G 47258780.73 47258780.82 47258780.94 0.0142 0.0125

Jupiter 124678-02-02 00:26 G 47258796.32 47258796.52 47258796.72 0.0483 0.0128

Jupiter 124683-12-03 18:12 G 47260927.06 47260927.26 47260927.45 0.0545 0.0020

Saturn 124686-01-15 05:00 G 47261700.58 47261700.71 47261700.85 0.0281 0.0218

Saturn 124686-09-02 00:55 G 47261930.35 47261930.54 47261930.73 0.0282 0.0135

Mars 124686-10-08 21:19 G 47261967.29 47261967.39 47261967.50 0.1591 0.1263

Jupiter 124689-10-08 04:16 G 47263062.48 47263062.68 47263062.88 0.0483 0.0147

Neptune 124690-01-16 00:40 G 47263162.50   47263162.53   47263162.62 0.0089 0.0085

Neptune 124690-08-29 13:24 G 47263387.96   47263388.06   47263388.18 0.0089 0.0075

Neptune 124691-04-12 01:24 G 47263613.43   47263613.56   47263613.72 0.0089 0.0066

Neptune 124691-11-23 13:52 G 47263838.92   47263839.08   47263839.25 0.0089 0.0056

Neptune 124692-07-06 01:38 G 47264064.41   47264064.57   47264064.77 0.0089 0.0047

Neptune 124693-02-16 14:07 G 47264289.90   47264290.09   47264290.29 0.0089 0.0037

Neptune 124693-09-30 02:21 G 47264515.40   47264515.60   47264515.81 0.0089 0.0028

Neptune 124694-05-13 14:36 G 47264740.90   47264741.11   47264741.33 0.0089 0.0018

Neptune 124694-12-25 02:50 G 47264966.41   47264966.62   47264966.84 0.0089 0.0009

Neptune 124695-08-07 15:19 G 47265191.92   47265192.14   47265192.35 0.0089 0.0002

Jupiter 124695-08-08 05:14 G 47265192.60   47265192.72   47265192.85 0.0545 0.0416

Neptune 124696-03-20 03:19 G 47265417.43   47265417.64   47265417.86 0.0089 0.0011

Neptune 124696-10-31 15:19 G 47265642.94   47265643.14   47265643.36 0.0089 0.0021

Neptune 124697-06-14 03:33 G 47265868.46   47265868.65   47265868.86 0.0089 0.0030

Neptune 124698-01-25 15:33 G 47266093.98   47266094.15   47266094.36 0.0089 0.0040

Neptune 124698-09-08 04:02 G 47266319.51   47266319.67   47266319.86 0.0089 0.0049

Neptune 124699-04-21 16:02 G 47266545.03   47266545.17   47266545.35 0.0089 0.0059

Neptune 124699-12-03 04:16 G 47266770.56   47266770.68   47266770.84 0.0089 0.0068

Saturn   124700-06-30 18:12 G 47266980.13   47266980.26   47266980.41 0.0278 0.0198

Neptune 124700-07-16 16:16 G 47266996.10   47266996.18   47266996.31 0.0089 0.0078

Saturn   124701-02-14 23:00 G 47267209.27   47267209.46   47267209.64 0.0278 0.0122

Neptune 124701-02-27 04:31 G 47267221.67   47267221.69   47267221.76 0.0089 0.0087

Jupiter 124701-06-14 06:55 G 47267328.69   47267328.79   47267328.88 0.0484 0.0428

Jupiter 124713-10-11 10:16 G 47271830.76   47271830.93   47271831.09 0.0483 0.0289

Earth   124714-05-18 03:48 G 47272049.51   47272049.66   47272049.81 0.2629 0.0969

Moon   124714-05-18 08:50 G 47272049.74   47272049.87   47272050.00 0.2633 0.1589 *

Uranus   124715-03-25 03:19 G 47272360.54   47272360.64   47272360.77 0.0136 0.0113

Saturn   124715-07-29 16:16 G 47272487.00   47272487.18   47272487.36 0.0281 0.0153

Uranus   124715-11-06 08:07 G 47272586.69   47272586.84   47272587.01 0.0136 0.0088

Saturn   124716-03-15 11:57 G 47272716.85   47272717.00   47272717.15 0.0282 0.0200

Uranus 124716-06-19 12:55 G 47272812.86 47272813.04 47272813.24 0.0136 0.0063

Uranus 124717-01-31 17:57 G 47273039.04 47273039.25 47273039.45 0.0136 0.0037

Uranus 124717-09-14 22:45 G 47273265.24 47273265.45 47273265.66 0.0136 0.0012

Uranus 124718-04-29 03:33 G 47273491.44 47273491.65 47273491.86 0.0136 0.0014

Uranus 124718-12-11 08:21 G 47273717.65 47273717.85 47273718.06 0.0136 0.0039

Uranus 124719-07-25 13:24 G 47273943.88 47273944.06 47273944.25 0.0136 0.0065

Jupiter 124719-08-12 08:07 G 47273961.65 47273961.84 47273962.03 0.0545 0.0194

Uranus 124720-03-07 18:26 G 47274170.12 47274170.27 47274170.43 0.0136 0.0090

Mars 124720-08-07 20:07 G 47274323.20 47274323.34 47274323.48 0.1588 0.0944

Uranus 124720-10-19 23:00 G 47274396.37 47274396.46 47274396.59 0.0136 0.0116

Moon 124722-05-15 22:16 G 47274969.40 47274969.43 47274969.45 0.2624 0.2592

Jupiter 124725-06-16 13:38 G 47276096.86 47276097.07 47276097.28 0.0483 0.0013

Saturn 124730-01-10 22:02 G 47277766.25 47277766.42 47277766.59 0.0277 0.0156

Saturn 124730-08-28 02:07 G 47277995.43 47277995.59 47277995.77 0.0277 0.0162

Jupiter 124731-04-16 22:45 G 47278227.27 47278227.45 47278227.64 0.0545 0.0191

Jupiter 124737-02-19 16:02 G 47280363.00 47280363.17 47280363.35 0.0483 0.0268

Saturn 124745-02-07 17:28 G 47283273.04 47283273.23 47283273.43 0.0281 0.0119

Saturn 124745-09-25 12:55 G 47283502.93 47283503.04 47283503.17 0.0282 0.0234

Jupiter 124749-06-18 19:52 G 47284865.26 47284865.33 47284865.41 0.0484 0.0452

Mars 124752-08-06 10:31 G 47286009.82 47286009.94 47286010.08 0.1590 0.1050

Jupiter 124755-04-20 02:07 G 47286996.46 47286996.59 47286996.71 0.0544 0.0421

Uranus 124756-10-01 07:24 G 47287526.75 47287526.81 47287526.88 0.0142 0.0135

Uranus 124757-05-15 19:52 G 47287753.20 47287753.33 47287753.50 0.0142 0.0105

Uranus 124757-12-28 09:04 G 47287979.70 47287979.88 47287980.08 0.0142 0.0073

Uranus 124758-08-11 22:02 G 47288206.21 47288206.42 47288206.64 0.0142 0.0042

Uranus 124759-03-26 11:00 G 47288432.73 47288432.96 47288433.18 0.0142 0.0011

Saturn 124759-07-24 03:04 G 47288552.45 47288552.63 47288552.83 0.0278 0.0108

Uranus 124759-11-07 23:28 G 47288659.27 47288659.48 47288659.71 0.0142 0.0020

Saturn 124760-03-09 07:38 G 47288781.69 47288781.82 47288781.96 0.0278 0.0212

Uranus 124760-06-21 12:12 G 47288885.81 47288886.01 47288886.23 0.0142 0.0051

Uranus 124761-02-03 00:55 G 47289112.37 47289112.54 47289112.73 0.0142 0.0082

Jupiter 124761-02-21 23:14 G 47289131.27 47289131.47 47289131.66 0.0484 0.0174

Uranus 124761-09-17 13:24 G 47289338.94 47289339.06 47289339.21 0.0142 0.0112

Jupiter 124766-12-23 14:07 G 47291261.89 47291262.09 47291262.29 0.0545 0.0025

Jupiter 124772-10-28 01:38 G 47293397.37 47293397.57 47293397.77 0.0483 0.0107

Neptune 124773-05-28 23:14 G 47293610.46 47293610.47 47293610.53 0.0088 0.0088

Neptune 124774-01-09 13:24 G 47293835.97 47293836.06 47293836.18 0.0088 0.0078

Saturn 124774-08-21 05:28 G 47294059.52 47294059.73 47294059.95 0.0281 0.0052

Neptune 124774-08-23 03:33 G 47294061.51 47294061.65 47294061.80 0.0088 0.0068

Neptune 124775-04-05 17:28 G 47294287.07 47294287.23 47294287.41 0.0088 0.0058

Pluto 124775-06-11 08:36 G 47294353.70 47294353.86 47294354.07 0.0062 0.0033

Neptune 124775-11-17 06:55 G 47294512.62 47294512.79 47294513.00 0.0088 0.0049

Pluto 124776-01-22 12:12 G 47294578.79 47294579.01 47294579.23 0.0062 0.0000

Neptune 124776-06-29 21:04 G 47294738.19 47294738.38 47294738.59 0.0088 0.0038

Pluto 124776-09-03 14:50 G 47294803.96 47294804.12 47294804.33 0.0063 0.0034

Neptune 124777-02-10 11:00 G 47294963.76 47294963.96 47294964.19 0.0088 0.0029

Neptune 124777-09-24 00:55 G 47295189.33 47295189.54 47295189.77 0.0088 0.0019

Neptune 124778-05-07 14:50 G 47295414.90 47295415.12 47295415.35 0.0089 0.0009

Jupiter 124778-08-28 02:50 G 47295527.48 47295527.62 47295527.77 0.0545 0.0369

Neptune 124778-12-19 04:45 G 47295640.48 47295640.70 47295640.93 0.0089 0.0002

Neptune 124779-08-01 18:26 G 47295866.05 47295866.27 47295866.50 0.0089 0.0012

Neptune 124780-03-14 08:21 G 47296091.64 47296091.85 47296092.08 0.0089 0.0022

Neptune 124780-10-25 22:02 G 47296317.23 47296317.42 47296317.65 0.0089 0.0032

Neptune 124781-06-08 12:12 G 47296542.81 47296543.01 47296543.21 0.0089 0.0041

Neptune 124782-01-20 01:52 G 47296768.41 47296768.58 47296768.77 0.0089 0.0051

Neptune 124782-09-02 15:48 G 47296994.01 47296994.16 47296994.33 0.0089 0.0061

Neptune 124783-04-16 05:28 G 47297219.62 47297219.73 47297219.88 0.0089 0.0071

Neptune 124783-11-27 19:09 G 47297445.24 47297445.30 47297445.42 0.0089 0.0081

Jupiter 124784-07-03 04:31 G 47297663.57 47297663.69 47297663.82 0.0483 0.0385

Mars 124786-06-05 09:19 G 47298365.77 47298365.89 47298366.01 0.1587 0.1161

Saturn 124789-02-02 07:52 G 47299338.63 47299338.83 47299339.03 0.0277 0.0064

Saturn 124789-09-19 12:12 G 47299567.94 47299568.01 47299568.09 0.0277 0.0254

Jupiter 124796-10-30 07:38 G 47302165.68 47302165.82 47302165.98 0.0483 0.0333

Uranus 124798-11-22 12:40 G 47302918.97 47302919.03 47302919.13 0.0136 0.0125

Uranus 124799-07-06 17:28 G 47303145.11 47303145.23 47303145.39 0.0136 0.0100

Uranus 124800-02-17 22:45 G 47303371.27 47303371.45 47303371.63 0.0136 0.0074

Uranus 124800-10-01 03:19 G 47303597.45 47303597.64 47303597.84 0.0136 0.0049

Uranus 124801-05-15 08:07 G 47303823.64 47303823.84 47303824.05 0.0136 0.0023

Uranus 124801-12-27 13:09 G 47304049.83 47304050.05 47304050.26 0.0136 0.0003

Uranus 124802-08-10 17:57 G 47304276.05 47304276.25 47304276.46 0.0136 0.0028

Jupiter 124802-08-31 09:19 G 47304296.72 47304296.89 47304297.07 0.0545 0.0260

Uranus 124803-03-24 22:45 G 47304502.26 47304502.45 47304502.65 0.0136 0.0054

Uranus 124803-11-06 03:33 G 47304728.49 47304728.65 47304728.84 0.0136 0.0079

Saturn 124804-03-02 07:24 G 47304845.59 47304845.81 47304846.02 0.0281 0.0016

Uranus 124804-06-19 08:50 G 47304954.73 47304954.87 47304955.00 0.0136 0.0104

Uranus 124805-01-31 13:24 G 47305181.02 47305181.06 47305181.14 0.0136 0.0130

Jupiter 124808-07-05 11:14 G 47306431.77 47306431.97 47306432.18 0.0483 0.0057

Jupiter 124814-05-05 21:04 G 47308562.19 47308562.38 47308562.57 0.0545 0.0141

Mars 124818-06-03 23:43 G 47310052.34 47310052.49 47310052.63 0.1590 0.0824

Saturn 124818-08-15 12:40 G 47310124.82 47310125.03 47310125.24 0.0278 0.0017

Mars 124819-05-03 12:26 G 47310385.90 47310386.02 47310386.14 0.1947 0.1385

Jupiter 124820-03-10 13:52 G 47310697.89 47310698.08 47310698.26 0.0484 0.0226

Jupiter 124826-01-08 09:33 G 47312827.87 47312827.90 47312827.94 0.0544 0.0533

Saturn 124833-09-12 19:52 G 47315632.12 47315632.33 47315632.54 0.0281 0.0052

Jupiter 124838-05-08 23:00 G 47317331.36 47317331.46 47317331.56 0.0545 0.0467

Uranus 124841-01-13 01:24 G 47318311.45 47318311.56 47318311.69 0.0142 0.0119

Uranus 124841-08-27 14:21 G 47318537.94 47318538.10 47318538.29 0.0142 0.0088

Uranus 124842-04-11 03:19 G 47318764.44 47318764.64 47318764.85 0.0142 0.0057

Uranus 124842-11-23 16:02 G 47318990.96 47318991.17 47318991.40 0.0142 0.0026

Uranus 124843-07-08 05:00 G 47319217.49 47319217.71 47319217.93 0.0142 0.0006

Uranus 124844-02-19 17:43 G 47319444.03 47319444.24 47319444.46 0.0142 0.0037

Jupiter 124844-03-12 20:07 G 47319466.16 47319466.34 47319466.53 0.0483 0.0216

Uranus 124844-10-03 06:26 G 47319670.58 47319670.77 47319670.97 0.0142 0.0068

Uranus 124845-05-17 18:55 G 47319897.14 47319897.29 47319897.46 0.0142 0.0099

Uranus 124845-12-30 07:24 G 47320123.73 47320123.81 47320123.91 0.0142 0.0129

Saturn 124848-02-25 18:26 G 47320911.07 47320911.27 47320911.48 0.0277 0.0032

Jupiter 124850-01-11 12:55 G 47321596.85 47321597.04 47321597.24 0.0545 0.0081

Moon 124851-11-12 22:31 G 47322267.29 47322267.44 47322267.59 0.2711 0.0271

Earth 124851-11-13 02:36 G 47322267.45 47322267.61 47322267.76 0.2705 0.0399 *

Mars 124852-04-01 22:16 G 47322408.35 47322408.43 47322408.52 0.1587 0.1385

Neptune 124854-04-20 13:52 G 47323157.02 47323157.08 47323157.13 0.0089 0.0086

Neptune 124854-12-02 01:38 G 47323382.47 47323382.57 47323382.69 0.0089 0.0076

Neptune 124855-07-15 13:38 G 47323607.95 47323608.07 47323608.23 0.0089 0.0067

Jupiter 124855-11-16 22:45 G 47323732.25 47323732.45 47323732.66 0.0483 0.0065

Neptune 124856-02-26 02:07 G 47323833.43 47323833.59 47323833.76 0.0089 0.0057

Neptune 124856-10-08 13:52 G 47324058.92 47324059.08 47324059.28 0.0089 0.0048

Neptune 124857-05-22 02:21 G 47324284.41 47324284.60 47324284.80 0.0089 0.0038

Neptune 124858-01-02 14:21 G 47324509.91 47324510.10 47324510.32 0.0089 0.0029

Neptune 124858-08-16 02:50 G 47324735.41 47324735.62 47324735.83 0.0089 0.0019

Neptune 124859-03-29 15:04 G 47324960.92 47324961.13 47324961.35 0.0089 0.0009

Neptune 124859-11-10 03:19 G 47325186.42 47325186.64 47325186.85 0.0089 0.0001

Moon 124859-11-10 20:50 G 47325187.37 47325187.37 47325187.38 0.2714 0.2710

Neptune 124860-06-22 15:19 G 47325411.93 47325412.14 47325412.36 0.0089 0.0010

Neptune 124861-02-03 03:19 G 47325637.44 47325637.64 47325637.86 0.0089 0.0020

Jupiter 124861-09-16 03:33 G 47325862.49 47325862.65 47325862.82 0.0545 0.0307

Neptune 124861-09-16 15:48 G 47325862.96 47325863.16 47325863.37 0.0089 0.0029

Neptune 124862-04-30 03:48 G 47326088.48 47326088.66 47326088.87 0.0089 0.0039

Saturn 124862-08-08 02:21 G 47326188.54 47326188.60 47326188.69 0.0281 0.0262

Neptune 124862-12-11 16:02 G 47326314.00 47326314.17 47326314.36 0.0089 0.0048

Saturn 124863-03-25 22:02 G 47326418.21 47326418.42 47326418.62 0.0281 0.0090

Neptune 124863-07-25 04:02 G 47326539.53 47326539.67 47326539.86 0.0089 0.0058

Neptune 124864-03-06 16:31 G 47326765.06 47326765.19 47326765.34 0.0089 0.0067

Neptune 124864-10-18 04:31 G 47326990.60 47326990.69 47326990.82 0.0089 0.0077

Neptune 124865-05-31 16:45 G 47327216.17 47327216.20 47327216.27 0.0089 0.0086

Pluto 124866-10-16 08:36 G 47327718.71 47327718.86 47327719.04 0.0081 0.0054

Pluto 124867-05-29 20:36 G 47327944.15 47327944.36 47327944.58 0.0081 0.0022

Jupiter 124867-07-23 01:52 G 47327998.43 47327998.58 47327998.72 0.0484 0.0343

Saturn 124877-01-20 17:43 G 47331468.15 47331468.24 47331468.34 0.0278 0.0244

Saturn 124877-09-06 22:45 G 47331697.25 47331697.45 47331697.65 0.0278 0.0077

Jupiter 124879-11-19 05:00 G 47332500.58 47332500.71 47332500.84 0.0484 0.0374

Uranus 124883-03-06 03:48 G 47333703.55 47333703.66 47333703.79 0.0135 0.0111

Uranus 124883-10-18 08:36 G 47333929.70 47333929.86 47333930.03 0.0136 0.0086

Mars 124884-03-31 12:55 G 47334094.88 47334095.04 47334095.20 0.1589 0.0610

Uranus 124884-05-31 13:09 G 47334155.87 47334156.05 47334156.25 0.0136 0.0061

Uranus 124885-01-12 18:12 G 47334382.06 47334382.26 47334382.47 0.0136 0.0035

Mars 124885-02-27 13:52 G 47334427.91 47334428.08 47334428.25 0.1948 0.0420

Uranus 124885-08-26 23:14 G 47334608.26 47334608.47 47334608.68 0.0136 0.0009

Jupiter 124885-09-19 05:14 G 47334631.56 47334631.72 47334631.89 0.0544 0.0300

Uranus 124886-04-10 04:02 G 47334834.46 47334834.67 47334834.88 0.0136 0.0016

Uranus 124886-11-22 08:50 G 47335060.67 47335060.87 47335061.07 0.0136 0.0042

Uranus 124887-07-06 13:38 G 47335286.89 47335287.07 47335287.26 0.0136 0.0068

Uranus 124888-02-17 18:12 G 47335513.13 47335513.26 47335513.43 0.0136 0.0094

Uranus 124888-09-30 23:28 G 47335739.39 47335739.48 47335739.59 0.0136 0.0119

Jupiter 124891-07-25 07:38 G 47336766.62 47336766.82 47336767.02 0.0483 0.0094

Saturn 124892-02-18 15:04 G 47336974.98 47336975.13 47336975.29 0.0281 0.0195

Saturn 124892-10-05 10:31 G 47337204.76 47337204.94 47337205.12 0.0281 0.0157

Jupiter 124897-05-24 16:45 G 47338897.01 47338897.20 47338897.40 0.0545 0.0100

Jupiter 124903-03-31 11:00 G 47341032.77 47341032.96 47341033.15 0.0483 0.0184

Saturn 124906-08-04 01:09 G 47342254.40 47342254.55 47342254.70 0.0278 0.0192

Saturn 124907-03-21 05:28 G 47342483.55 47342483.73 47342483.92 0.0277 0.0127

Jupiter 124909-01-28 07:09 G 47343162.71 47343162.80 47343162.89 0.0545 0.0485

Jupiter 124914-12-04 12:55 G 47345298.99 47345299.04 47345299.10 0.0484 0.0465

Jupiter 124921-05-28 23:28 G 47347666.44 47347666.48 47347666.52 0.0545 0.0530

Saturn 124921-08-31 17:57 G 47347761.07 47347761.25 47347761.43 0.0281 0.0155

Saturn 124922-04-18 12:55 G 47347990.90 47347991.04 47347991.21 0.0282 0.0197

Uranus 124924-09-13 06:12 G 47348869.71 47348869.76 47348869.86 0.0142 0.0134

Uranus 124925-04-27 19:09 G 47349096.16 47349096.30 47349096.47 0.0142 0.0103

Uranus 124925-12-10 08:07 G 47349322.66 47349322.84 47349323.05 0.0142 0.0072

Uranus 124926-07-24 21:04 G 47349549.18 47349549.38 47349549.61 0.0142 0.0040

Uranus 124927-03-08 10:16 G 47349775.71 47349775.93 47349776.15 0.0142 0.0008

Jupiter 124927-04-02 17:14 G 47349801.05 47349801.22 47349801.40 0.0483 0.0257

Uranus 124927-10-20 23:00 G 47350002.24 47350002.46 47350002.68 0.0142 0.0023

Uranus 124928-06-03 11:28 G 47350228.78 47350228.98 47350229.20 0.0142 0.0054

Uranus 124929-01-16 00:12 G 47350455.34 47350455.51 47350455.70 0.0142 0.0085

Uranus 124929-08-30 12:40 G 47350681.92 47350682.03 47350682.17 0.0142 0.0116

Jupiter 124933-01-31 11:43 G 47351931.80 47351931.99 47351932.19 0.0545 0.0134

Saturn 124936-02-14 04:16 G 47353040.50 47353040.68 47353040.85 0.0278 0.0151

Saturn 124936-09-30 08:50 G 47353269.71 47353269.87 47353270.04 0.0278 0.0170

Neptune 124937-08-31 09:48 G 47353604.91 47353604.91 47353604.92 0.0088 0.0088

Neptune 124938-04-13 23:28 G 47353830.40 47353830.48 47353830.60 0.0088 0.0079

Neptune 124938-11-25 13:38 G 47354055.93 47354056.07 47354056.21 0.0088 0.0069

Jupiter 124938-12-06 19:24 G 47354067.11 47354067.31 47354067.52 0.0484 0.0027

Neptune 124939-07-09 03:04 G 47354281.49 47354281.63 47354281.82 0.0088 0.0060

Neptune 124940-02-19 17:14 G 47354507.05 47354507.22 47354507.43 0.0088 0.0050

Neptune 124940-10-02 07:09 G 47354732.62 47354732.80 47354733.02 0.0088 0.0040

Neptune 124941-05-15 21:19 G 47354958.18 47354958.39 47354958.61 0.0088 0.0029

Neptune 124941-12-27 11:00 G 47355183.75 47355183.96 47355184.19 0.0088 0.0020

Neptune 124942-08-10 01:09 G 47355409.33 47355409.55 47355409.77 0.0088 0.0010

Neptune 124943-03-23 15:04 G 47355634.91 47355635.13 47355635.36 0.0089 0.0001

Neptune 124943-11-04 04:45 G 47355860.48 47355860.70 47355860.93 0.0089 0.0011

Neptune 124944-06-16 18:26 G 47356086.06 47356086.27 47356086.50 0.0089 0.0021

Jupiter 124944-10-06 00:12 G 47356197.34 47356197.51 47356197.69 0.0544 0.0262

Neptune 124945-01-28 08:21 G 47356311.65 47356311.85 47356312.07 0.0089 0.0030

Neptune 124945-09-10 22:16 G 47356537.24 47356537.43 47356537.64 0.0089 0.0040

Neptune 124946-04-24 12:12 G 47356762.83 47356763.01 47356763.20 0.0089 0.0050

Neptune 124946-12-06 01:52 G 47356988.43 47356988.58 47356988.76 0.0089 0.0060

Neptune 124947-07-19 15:33 G 47357214.03 47357214.15 47357214.31 0.0089 0.0070

Neptune 124948-03-01 05:28 G 47357439.65 47357439.73 47357439.85 0.0089 0.0080

Mars 124950-01-28 01:38 G 47358137.40 47358137.57 47358137.74 0.1588 0.0380

Jupiter 124950-08-11 21:48 G 47358333.26 47358333.41 47358333.58 0.0484 0.0307

Mars 124950-12-26 15:33 G 47358469.98 47358470.15 47358470.31 0.1950 0.0549

Saturn 124951-03-14 05:57 G 47358547.54 47358547.75 47358547.95 0.0281 0.0091

Saturn 124951-10-30 01:09 G 47358777.48 47358777.55 47358777.63 0.0282 0.0262

Moon 124957-05-18 21:33 G 47360805.24 47360805.40 47360805.56 0.2628 0.0095

Earth 124957-05-19 03:33 G 47360805.49 47360805.65 47360805.80 0.2628 0.0865 *

Jupiter 124962-12-09 01:52 G 47362835.48 47362835.58 47362835.69 0.0483 0.0415

Saturn 124965-08-26 12:26 G 47363826.82 47363827.02 47363827.21 0.0278 0.0096

Saturn 124966-04-12 16:45 G 47364056.08 47364056.20 47364056.32 0.0277 0.0222

Uranus 124966-11-04 13:24 G 47364261.98 47364262.06 47364262.15 0.0135 0.0123

Uranus 124967-06-18 17:57 G 47364488.12 47364488.25 47364488.41 0.0135 0.0098

Uranus 124968-01-30 22:45 G 47364714.28 47364714.45 47364714.64 0.0136 0.0073

Uranus 124968-09-13 03:48 G 47364940.47 47364940.66 47364940.86 0.0136 0.0047

Jupiter 124968-10-09 02:50 G 47364966.47 47364966.62 47364966.77 0.0545 0.0350

Uranus 124969-04-27 08:36 G 47365166.65 47365166.86 47365167.07 0.0136 0.0021

Uranus 124969-12-09 13:24 G 47365392.85 47365393.06 47365393.28 0.0136 0.0005

Uranus 124970-07-23 18:12 G 47365619.06 47365619.26 47365619.48 0.0136 0.0031

Uranus 124971-03-06 23:00 G 47365845.28 47365845.46 47365845.66 0.0136 0.0057

Uranus 124971-10-19 04:02 G 47366071.50 47366071.67 47366071.84 0.0136 0.0082

Uranus 124972-06-01 08:36 G 47366297.75 47366297.86 47366298.00 0.0136 0.0108

Uranus 124973-01-13 13:38 G 47366524.04 47366524.07 47366524.12 0.0136 0.0133

Jupiter 124974-08-14 04:31 G 47367101.50 47367101.69 47367101.90 0.0483 0.0136

Jupiter 124980-06-13 17:14 G 47369232.02 47369232.22 47369232.42 0.0545 0.0037

Saturn 124980-09-23 08:50 G 47369333.66 47369333.87 47369334.09 0.0281 0.0050

Jupiter 124986-04-19 07:52 G 47371367.63 47371367.83 47371368.03 0.0483 0.0142

Jupiter 124992-02-17 06:55 G 47373497.67 47373497.79 47373497.91 0.0544 0.0428

Saturn 124995-03-08 14:50 G 47374612.92 47374613.12 47374613.32 0.0278 0.0056

Saturn 124995-10-23 19:24 G 47374842.25 47374842.31 47374842.37 0.0278 0.0263

Jupiter 124997-12-23 09:33 G 47375633.81 47375633.90 47375634.00 0.0484 0.0427